

March 25, 2021

RESIDENT ENGINEER SERVICES FOR BURLINGTON GREENWAY REHABILITATION PHASE 3B SOUTH AND OAKLEDGE FOR ALL UNIVERSAL ACCESS PROJECT

Addendum 2

Questions:

1) Please advise whether proposing consultants should include construction oversight services for the playground project, and if so, please advise us on when that project might start and how many weeks of inspection we should include in our cost proposals for the playground.

The playground project is not moving forward yet this season and should not be included in the RE proposal.

2) Is there a separate set of drawings for the Oakledge for All Project, and will your RE be responsible for overseeing that project in addition to Greenway Phase 3b South?

See answer 1 above. The playground project is not moving to construction yet and is no longer part of this RE RFP.

3) Please confirm that consultants should assemble their RE proposals assuming that the entire Greenway reconstruction project will take place in 2021.

The Greenway reconstruction project will be divided and the RE proposals should account for both Sections.

Section 1 of the Greenway reconstruction project for 2021 will consist of the Flynn Avenue intersection/ Oval/ Beach Access and the Gateway at Austin Drive. From approximately STA 121+96.11 to STA. 127+00.00 on the north end (See Sheets 15 +16) and STA 100+15.27 and STA.100+15.27 (See Sheet 12).

Section 2 of the Greenway reconstruction project, which is anticipated to be bid as an ad/alternate at this time, will consist of the remainder of the Greenway: from STA. 110+15.27 to STA. 121+96.11.

1) What is the probable schedule for construction of the project(s)?

The expected start date for the construction project is late-May and needs to be completed by November 2021.

BPRW's estimate of timeframe for the Phase 3b South

Pre-Construction Phase Construction Phase		Closeout
25 hours	Both Sections: 30 weeks	25 hours

4) How will BPRW handle the approval of Off-Site waste, borrow and staging areas? Will this process be handled by BPRW in-house, or will the VTrans Environmental Unit get involved, as indicated in your RFP?

Task 2: Construction Inspection. Point 3. Reword to:

"Inspect and approve material sources and waste, borrow and staging areas, with due regard to approval/disapproval from the CPM."

6) Will you be issuing one Invitation for Bids to cover both the Greenway Project and the Oakledge for All Playground Project, or will you be procuring two separate construction contracts for the two projects? Depending on the level of construction activity, two separate contracts may necessitate two separate construction inspectors.

The Greenway Project and the Oakledge for All Project will be procured separately. However, we would like to understand how, if needed, how would two REs work together?

7) Your RFP indicates that the Resident Engineer should "coordinate and maintain a schedule with specified milestone dates for the project." Will BPRW be providing the RE with the milestones and their respective dates?

Yes.

8) Why must the CPM review each Daily Work Report before it is distributed? This will delay the distribution of information.

We are flexible and often adjust to particular RE's style.

9) Under Task 2: Construction Inspection, Item #4 asks the RE to geo-locate any and all underground utilities that are encountered during construction and to maintain a set of red-line plans in the BPRW GIS system. Are you looking for digital coordinates for all these utilities? Our experience is that most, if not all, general contractors have GIS technology and use it regularly for layout and construction work. On the other hand, RE consultants typically do not own GIS technology. Would you be amenable to making the contractor(s) responsible for taking GIS "shots" on these utilities? The RE could certainly obtain data from the contractor(s) for plotting those utilities in the as-built drawings.

Yes. We would be amenable to an alternative approach to this as long as the results are the same: geolocation of all underground utilities encountered.

		PROJECT LOCATION:
		PROJECT DESCRIPTION:
		LENGTH OF PROJECT:
		AUSTIN DRIVE
		X
CONSTRUCTION IS TO BE		
VTRANS STANDARD SPEC	IFICATIONS FOR CONSTRUCTION DATED 2018, INCLUDING ALL	
AS ARE INCORPORATED I	N THIS CONTRACT.	
SURVEYED BY :		
	ALDRICH + ELLIOT, PC	
	CROSS CONSULTING ENGINEERS	
SURVEYED DATE :	AUGUST 2013, AUG. 2015, SEPTEMBER 2018	
DATUM		
VERTICAL	NAVD 88	
HORIZONTAL	NAD 83 (07)	

CITY OF BURLINGTON



PROPOSED IMPROVEMENT

BURLINGTON BIKE PATH REHABILITATION PROJECT PHASE 3B (SOUTH)

CITY OF BURLINGTON COUNTY OF CHITTENDEN

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

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.

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



 SCALE
 IN
 FEET

 600
 0
 600



<u>INDEX OF SHEETS</u>

I	TITLE SHEET
2	INDEX OF SHEETS
3	CONVENTIONAL SYMBOLOGY LEGEND
4	PROJECT NOTES
5-6	TYPICAL SECTIONS
7-8	DETAIL SHEETS
9-10	QUANTITY SUMMARY SHEET
	ALIGNMENT POINTS SHEET
12-16	PLAN AND PROFILE SHEETS
17-19	LANDSCAPE LAYOUT PLAN
20	GRADING PLAN
21 - 24	
21 21	DI ANTINO DI ANS
27-21	PLANTING PLANS
28	PLANTING DETAILS
29	IRAFFIC SIGN SUMMARY SHEET
30	SIGN DETAIL SHEET
31-37	CROSS SECTION SHEETS
38-39	EPSC NARRATIVE
40	EPSC DETAILS
41-45	EPSC PLANS
46-48	TRAFFIC CONTROL PLANS
46-48	IRAFFIC CONIROL PLANS

ADDITIONAL SYMBOLS

		A-78
EXIST.STREET LIGHT	$-\bigcirc$ \bigcirc	A-79
EXISTING SURVEY CONTROL POINTS	\bigtriangleup	B-5
PROP.ORNAMENTAL STREET LIGHT	* * *	C-3A
		E-10
FIRE CALL BOX	⊠ FB	E-15
PROPOSED TREE	× *	E-121
X	and and	E-193
PROPOSED TREE	ANN AND AND AND AND AND AND AND AND AND	T-I
	and the second	T-2
PROPOSED SHRUB	\$	T-10
OR TREE LOCATION) ×	T-28
PROPOSED BRICK PAVERS		T-30
E		T-45
EXIST.STORM DRAIN =======		
EXIST.SEWER s		
EXIST.WATER w		
EXIST.GAS G -		
EXIST. UNDERGROUND UT _ TELEPHONE		
PROPOSED DRAINAGE		
FIRE HYDRANT	X	
PROPOSED PULL BOX PB		
PROPOSED CONDUIT		
PROPOSED CONDUIT		
PROPOSED WATER LINE PW	- <i>PW</i>	
PROPOSED SEWER LINE PS	PS	
PROPOSED ROOF DRAIN RD	RD	
PROPOSED STORMWATER TREATMENT PLANTER		
PROPOSED BANNER POLE		
BORING LOCATION		
PROPOSED WAYFINDING SIGN		

<u>vaot standards</u>

4-7-2020	SHARED USE PATH TYPICAL
4-7-2020	RAIL TRAIL TYPICAL
6-01-1994	SLOPE GRADING, EMBANKMENTS, MUCK
4-7-2020	SIDEWALK RAMPS
4-7-2020	ROLLED EROSION CONTROL PRODUCT, TYPE I
4-7-2020	SILT FENCE
8-8-1995	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD
8-18-1995	PAVEMENT MARKING DETAILS
6-9-2008	SHARED USE PATH PAVEMENT MARKINGS AND SIGN DETAILS
4-25-2016	TRAFFIC CONTROL GENERAL NOTES
4-7-2020	TRAFFIC SIGN GENERAL NOTES
8-6-2012	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING
8-6-2012	CONSTRUCTION SIGN DETAILS
8-6-2012	CONSTRUCTION SIGN DETAILS
1-2-2013	SQUARE TUBE SIGN POST AND ANCHOR



<u>GENERAL INFO</u>	RMATION		N TOPOG	RAPHIC POINT SYMBOLS
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POINT CODE	DESCRIPTION	PA PA	W30	WAIER SHUT OFF
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DRIVE EC	DRIVEWAY EASEMENT EROSION CONTROL	PROPOS	SED GEO	METRY CODES
HWY	HIGHWAY EASEMENT			
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UTILITY SYMBOLOGY

UNDERGROUND UTILI	TIES
	UTILITY (GENERIC-UNKNOWN)
— UT — · · _ · · _ ·	TELEPHONE
— UE — · · — · · — · ·	ELECTRIC
— UC — · · – · · – ·	CABLE (TV)

- UEC · · · · · ELECTRIC+CABLE - UET - · · - · · - · · ELECTRIC+TELEPHONE - UCT - · · - · · - · · CABLE+TELEPHONE - c - \cdots - \cdots - GAS LINE — w — ·· – ·· – · WATER LINE $-s - \cdots - \cdots - \cdots - \cdots$ 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

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PROJECT CONSTRUCTION FEATURES

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CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES
TOWN LINE
COUNTY LINE
STATE LINE
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6f 6f
4f 4f
HA7 HA7 HA7 .

TOWN BOUNDARY LINE COUNTY BOUNDARY LINE STATE BOUNDARY LINE PROPOSED STATE R.O.W. (LIMITED ACCESS) PROPOSED STATE R.O.W. STATE ROW (LIMITED ACCESS) STATE ROW TOWN ROW PERMANENT EASEMENT LINE (P) TEMPORARY EASEMENT LINE (T) SURVEY LINE PROPERTY LINE (P/L)

SLOPE RIGHTS 6F PROPERTY BOUNDARY 4F PROPERTY BOUNDARY - HAZARDOUS WASTE



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SEE	EPSC DETAIL SHEET	S FOR ADDITIONAL SYMBOLOGY	
ΕN	VIRONMENTAL RES	SOURCES	
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-	RIPAI	RIAN BUFFER ZONE	
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-	<i>T&E</i> THRE	ATENED & ENDANGERED SPECIES	
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-	AG AGRI	CULTURAL LAND	
_	— <i>flood plain</i> — FISH	& WILDLIFE HABITAT	
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<u>C01</u>	NVENTIONAL TOP	DGRAPHIC SYMBOLOGY	7
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_		ROAD EDGE GRAVEL	
_		DITCH	
_		FOUNDATION	
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	PROJECT NAME: BL	JRLINGION BIKE PATH PHASE	3B
	PROJECT NUMBER: 58	3109.01	
_	FILE NAME: 58109legenc	.dgn PLOT DATE: 2/19/2021	
h	PROJECT LEADER: E.P. (	DETRICK DRAWN BY: VTRANS	<
	CONVENTIONAL SYMBOL	OGY LEGEND SHEET SHEET 3 OF 48	`
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## **PROJECT NOTES**

### **GENERAL**

- 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.
- 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.

### **UTILITY**

- 20. 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.
- 21. 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.
- 22. 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.
- 23. 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)

- 24. 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
- 25. 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.
- 26. ALL CONNECTIONS BETWEEN PRECAST DRAINAGE STRUCTURES AND NEW DRAINAGE PIPES SHALL BE A BOOTED CONNECTION.
- 27. 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.



PROJECT NAME:	BURLINGTON	BIKE	PATH	PHASE	3B
PROJECT NUMBER:	58109.01				
FILE NAME: 58109nd	tes.dgn	PL(	DT DATE:	2/19/2021	
PROJECT LEADER: [	E.P. DETRICK	DRA	AWN BY:	C.K.FORD	
DESIGNED BY:	B.M.ROBERTS	СНЕ	ECKED BY:	E.P. DETRICK	•
PROJECT NOTES		SHE	EET 4	OF 48	





![](_page_7_Figure_4.jpeg)

![](_page_7_Figure_5.jpeg)

![](_page_7_Figure_9.jpeg)

CENTERLINE PATH

<u>GRAVEL SIDE PATH TYPICAL PLAN</u>

![](_page_7_Picture_12.jpeg)

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: 2/19/2021 DRAWN BY: C.K.FORD CHECKED BY: E.P. DETRICK SHEET 6 OF 48

![](_page_8_Figure_0.jpeg)

![](_page_9_Figure_0.jpeg)

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".

### SOIL DEPTH AND QUALITY STANDARD

TREATMENT PRACTICE, OR ENGINEERED AS STRUCTURAL FILL ONCE DEVELOPMENT IS COMPLETE. AREAS. ANY AREAS NOT DESCRIBED ABOVE WHICH ARE DISTURBED OR COMPACTED DURING CONSTRUCTION SHALL ALSO BE SUBJECT TO THESE REQUIREMENTS.

IT. THERE ARE THREE METHODS THAT MAY BE USED TO SATISFY THESE REQUIREMENTS.

- I. 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 I 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.

![](_page_9_Figure_15.jpeg)

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.

- 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 FOR THIS PROJECT THESE AREAS INCLUDE THE DISCONNECTION AREAS DISTURBED DURING PATH CONSTRUCTION. A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER TURF
- ALTERNATIVELY, TO LEAVING EXISTING TOPSOIL IN PLACE WITHOUT DISTURBING OR COMPACTING
- 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.

I. THE MAXIMUM CONTRIBUTING FLOW PATH LENGTH ACROSS THE CONTRIBUTING IMPERVIOUS AREA TO A DISCHARGE

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.

	PROJECT NAME:	BURLINGTON	BIKE	PATH	PHASE	3A
	PROJECT NUMBER:	58109.00				
, hb	FILE NAME: 58109de PROJECT LEADER: E DESIGNED BY: E DETAIL SHEET (2 0	t.dgn E.P. DETRICK 3.M.ROBERTS F 2)	PLO DRA CHE SHEI	T DATE: WN BY: CKED BY: ET 8	2/19/2021 B.M. ROBERT E.P. DETRICK OF 48	S

				6	<b>LUA</b>				
SUMMARY OF ESTIMATE	D QUANTITIES				тот	ALS		DESCRIPTIONS	
	FLYNN AVE PAUSE PLACE	BIKE/TRANSP ORTATION PATH	AUSTIN DRIVE GATEWAY	OAKLEDGE PARK PARKING LOT	GRAND TOTAL	FINAL	UNIT	ITEMS	
		1			1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10
		9			9		EACH	REMOVING MEDIUM TREES	201.15
	440	1600	50		2090		CY	COMMON EXCAVATION	203.15
		240			240		CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28
Image:		10			10		CY	EARTH BORROW	203.30
Image:	60	410	15	20	505		CY	SAND BORROW	203.31
	35	40			75		CY	TRENCH EXCAVATION OF EARTH	204.20
	40				40		CY	STRUCTURE EXCAVATION	204.25
	30				30		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30
		30			30		SY	COARSE-MILLING, BITUMINOUS PAVEMENT	210.10
	140				140		СҮ	SUBBASE OF DENSE GRADED CRUSHED STONE (PERMEABLE SUBBASE)	301.35
	130	1200	25	19	1374		СҮ	SUBBASE OF DENSE GRADED CRUSHED STONE	301 35
			5		5				401 10
		15			15				404.65
		580			580				406.25
	700				700				507.11
	190				190				
					15				541.25
		45			45				601.260
		2			2		EACH	12" CPEPES	601.700
		25			25		LF	RE-LAYING PIPE CULVERTS (12" CPEP(SL))	601.99
	166				166		LF	UNDERDRAIN PIPE, 6 INCHES	605.10
		180			180		MGAL	DUST CONTROL WITH WATER	609.10
		220			220		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.28
	160	140	10	80	390		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	618.10
		28			28		SF	DETECTABLE WARNING SURFACE	618.30
		1			1		LS	MOBILIZATION/DEMOBILIZATION	635.11
		1			1		LS	TRAFFIC CONTROL	641.10
		700			700		LF	4 INCH YELLOW LINE, WATERBORNE PAINT	646.21
		2860			2860		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		СҮ	TOPSOIL	651.35
		8			8		TON	HAYMULCH	653.10
		520			520		SY	ROLLED EROSION CONTROL PRODUCT. TYPE I	653.20
		50			50		LF		653 47
		1120			1120		L F		653.47
		1330			1330			BARRIER FENCE	653.50
		3620			3620				653.50
		3000			3000				
				б	6		EACH		656.30

# **MILANITIV CLEET 4**

![](_page_10_Picture_2.jpeg)

						DETAILF		IARY	OF QUA		5		
	ROUND		QUANTI	ITIES	UNIT				ITEMS				
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		PR	OJECT	NAN	NE:	BURL	INGT	NC	BIKE	PATH	1 PF	IASE	-
		PR	OJECT	NUN	/BER:	58109	9.01						
		FIL PR	.E NAM OJECT	IE: 58 Lea	8109qs: DER: F	s.dgn .P.DETRI	СК		PL( DR/	DT DATE AWN BY:	: 2/19 C.K.	1/2021 FORD	
ĺ	<b>10</b>	DE	SIGNED	BY:	- : C	.K.FORD			CHE	ECKED B	Y: E.P.	DETRICK	

						6	<b>LOAN</b>		IJNELIZ	
	SUN	IMARY OF ESTIMATED QUAI	NTITIES				TOTALS		DESCRIPTIONS	
			FLYNN AVE PAUSE PLACE	BIKE/TRANSP ORTATION PATH	AUSTIN DRIVE GATEWAY	OAKLEDGE PARK PARKING LOT	GRAND TOTAL FINAL	UNIT	ITEMS	ITEM NUMBER
			38		9		47	EACH	DECIDUOUS SHRUBS	656.35
				27			27	MGAL	LANDSCAPE WATERING	656.65
			60		25	30	115	СҮ	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
				8			8	EACH	REMOVING SIGNS	675.50
				6			6	EACH	RESETTING SIGNS	675.60
				20			20	CY	SPECIAL PROVISION (CONTAMINATED MEDIA)	900.608
				675			675	СҮ	SPECIAL PROVISION (DISPOSAL OF CLASS I SOILS)	900.608
				1215			1215	СҮ	SPECIAL PROVISION (DISPOSAL OF CLASS II SOILS)	900.608
			50		15		65	СҮ	SPECIAL PROVISION (EXPOSED AGGREGATE CONCRETE)	900.608
				130			130	CY	SPECIAL PROVISION (MANAGEMENT OF CLASS I SOILS)	900.608
				205			205	СҮ	SPECIAL PROVISION (MANAGEMENT OF CLASS II SOILS)	900.608
				150			150	СҮ	SPECIAL PROVISION (STONE SCREENINGS)	900.608
			15			14	29	EACH	SPECIAL PROVISION (BIKE RACK)	900.620
						1	1	EACH	SPECIAL PROVISION (BIKE TUNING STATION)	900.620
			1				1	EACH	SPECIAL PROVISION (BOAT RACK)	900.620
			2		1		3	EACH	SPECIAL PROVISION (BURLINGTON GREENWAY SIGN - IDENTIFICATION SIGN)	900.620
					1		1	EACH	SPECIAL PROVISION (LANDSCAPE BENCH)	900.620
			74		3	3	80	EACH	SPECIAL PROVISION (LANDSCAPE BOULDER)	900.620
			156		54	33	243	EACH	SPECIAL PROVISION (ORNAMENTAL GRASSES)	900.620
			22				22	LF	SPECIAL PROVISION (HAND RAILING)	900.640
			1				1	LS	SPECIAL PROVISION (BPRW LOGO)	900.645
				1			1	LS	SPECIAL PROVISION (ROOT PRUNING AND TREE PROTECTION)	900.645
			1900				1900	SF	SPECIAL PROVISION (PERMEABLE PAVERS)	900.670
				500			500	SF	SPECIAL PROVISION (RETAINING WALL)	900.670
								<u> </u>		

# **OUANTITY CLEET 2**

![](_page_11_Picture_2.jpeg)

					DETAILED SUMMAR	Y OF QUANTITIES	
UMBER	ROUND		QUANTITIES	UNIT		ITEMS	
35							
65							
80							
20							
341		_					
50		_					
60							
608							
608							
608							
608							
608							
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		PR	OJECT NAM	E:	BURI INGTON	ΒΙΚΕ ΡΔΤΗ ΡΗΔςε	-
		PR	OJECT NUM	BER:	58109.01		
		FIL	E NAME: 58	ll09qs	s.dgn	PLOT DATE: 2/19/2021	
	hh		OJECT LEA	DER: E	.P.DETRICK	DRAWN BY: C.K.FORD	K
VI			ANTITY SUN	UMARY	SHEET (2 OF 2)	SHEET IO OF 48	

![](_page_12_Picture_0.jpeg)

## <u>SEGMENT 1</u>

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

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

![](_page_12_Picture_4.jpeg)

	PROJECT NAME: PROJECT NUMBER:	BURLINGTON 58109.01	BIKE	PATH	PHASE	3B
hb	FILE NAME: 58109ali PROJECT LEADER: E DESIGNED BY: E ALIGNMENT POINTS	_pt.dgn E.P.DETRICK B.M.ROBERTS SHEET	PLO DRAN CHEC SHEE	T DATE: WN BY: CKED BY: ET II	2/I9/202I C.K.FORD E.P.DETRICK OF 48	

BASELINE	STATIONING	IS NOT CONTINUOUS.
EQUALITIE BASELINE	S HAVE BEEN	INCORPORATED INTO THE
EQUALITY	INFORMATION	AND CURVE DATA.

NOTES:

POB	POINT	OF	BEGINNING ALIGNMENT
POE	POINT	OF	END ALIGNMENT

<u>legend</u>

![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_0.jpeg)

![](_page_15_Figure_0.jpeg)

![](_page_16_Figure_0.jpeg)

![](_page_17_Figure_0.jpeg)

![](_page_18_Figure_0.jpeg)

![](_page_19_Figure_0.jpeg)

![](_page_20_Figure_0.jpeg)

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LEGEND		
LEGEND EXISTING CONTOURS		
LEGEND EXISTING CONTOURS		
LEGEND EXISTING CONTOURS PROPOSED CONTOURS		
LEGEND EXISTING CONTOURS PROPOSED CONTOURS SWALE		
LEGEND EXISTING CONTOURS PROPOSED CONTOURS SWALE		
LEGEND EXISTING CONTOURS PROPOSED CONTOURS SWALE (430.50) + EXIST. SPOT GRADE		
LEGEND EXISTING CONTOURS PROPOSED CONTOURS SWALE (430.50) + EXIST. SPOT GRADE 430.50 + SPOT GRADE		
LEGEND EXISTING CONTOURS PROPOSED CONTOURS SWALE (430.50) + EXIST. SPOT GRADE 430.50 + SPOT GRADE TS + TOP OF STEP		
LEGEND         EXISTING CONTOURS         PROPOSED CONTOURS         SWALE         (430.50) +         EXIST. SPOT GRADE         430.50 +         SPOT GRADE         TS +         TOP OF STEP         PS +         POTTOM OF STEP		
LEGEND         EXISTING CONTOURS         PROPOSED CONTOURS         SWALE         (430.50) +         EXIST. SPOT GRADE         430.50 +         SPOT GRADE         TS +         TOP OF STEP         BS +         BOTTOM OF STEP		
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		
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 +		
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		
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		
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         EC +         EUISH CUEP		
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		
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		
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		
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 CURB         BC +         BOTTOM OF CURB         FC +         FLUSH CURB         TR +         TOP OF RAMP         BR +         BOTTOM OF RAMP		
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		
LEGENDEXISTING CONTOURSPROPOSED CONTOURSSWALE(430.50) +EXIST. SPOT GRADE430.50 +SPOT GRADETS +TOP OF STEPBS +BOTTOM OF STEPTW +TOP OF WALLBW +BOTTOM OF WALLTC +TOP OF CURBBC +BOTTOM OF CURBFC +FLUSH CURBTR +TOP OF RAMPBR +BOTTOM OF RAMPHP +HIGH POINTLP +LOW POINT		
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		
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		
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		
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 FURB         BC +       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		
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		
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		

![](_page_21_Figure_1.jpeg)

![](_page_22_Figure_0.jpeg)

![](_page_22_Picture_1.jpeg)

 $(\mathsf{D})$ 

![](_page_22_Picture_2.jpeg)

![](_page_22_Picture_3.jpeg)

vhb

![](_page_22_Picture_4.jpeg)

![](_page_22_Picture_5.jpeg)

PLAN

 $\rightarrow$ . A Þ

![](_page_22_Picture_6.jpeg)

-

CONCRETE SIDEWALK

SECTION

SCALE 1" = 1'-0"

B

Ε

JOINT  $\frac{1}{4}$  OF SLAB DEPTH MINIMUM

![](_page_22_Figure_8.jpeg)

- CONCRETE SIDEWALK

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

NOTES:

- 6" SAND BORROW

	NOTES: 1. CONSTRUCT SUBBASE BASED ON "PATH TYPICAL SECTION", REFER TO TYPICAL SECTIONS
	SPECIAL PROVISION (PORTLAND CEMENT CONCRETE SIDEWALK, EXPOSED AGGREGATE SURFACE)
	SAWCUT JOINT $\frac{3}{16}$ " WIDTH JOINT $\frac{1}{4}$ OF SLAB DEPTH MINIMUM
	- SAWCUT JOINT $ m 3_{16}$ " WIDTH JOINT $ m 1_4$ OF SLAB DEPTH MINIMUM
	SPECIAL PROVISION (PORTLAND CEMENT CONCRETE SIDEWALK, EXPOSED AGGREGATE SURFACE) 9" SUBBASE OF DENSE GRADED CRUSHED STONE
>	- 6" SAND BORROW

![](_page_22_Figure_14.jpeg)

		FILE NAME: PROJECT LEADER: E.P.DETRICK	PL DR	OT DATE: AWN BY:	02/18/2021 M.K.WILLARD	)
		PROJECT NUMBER: 58109.01				
		PROJECT NAME: BURLINGTON F	BIKE	PATH	PHASE	
IDING	<b>j</b>					
	GRA	DED CRUSHED STONE				
	SUB	BASE OF DENSE				
·	- CON W/ #	ICRETE LANDING 4 12" O.C. EACHWAY				
<b></b> i		TO ISOLATION JOINT DETAIL.				
	2.	DOWEL EACH LANDING TO THE NEIGHBORING STAIR FOUNDATION OR CONCRETE WALK, REFER				
	NOT 1.	ES: REFER TO LAYOUT PLANS FOR LOCATION AND				

DESIGNED BY: M.K.WILLARD

LANDSCAPE DETAILS

3B

CHECKED BY: E.P.DETRICK

SHEET 21 OF 48

![](_page_23_Figure_0.jpeg)

![](_page_23_Figure_1.jpeg)

![](_page_23_Picture_6.jpeg)

PROJECT NAME: BURLINGTON PROJECT NUMBER: 58109.01	BIKE PATH PHASE 3B
FILE NAME: PROJECT LEADER: E.P.DETRICK DESIGNED BY: M.K.WILLARD LANDSCAPE DETAILS	PLOT DATE: 02/18/2021 DRAWN BY: M.K.WILLARD CHECKED BY:E.P.DETRICK SHEET 22 OF 48

![](_page_24_Figure_0.jpeg)

	PROJECT NAME:	BURLINGTON	BIKE	PATH	PHASE	3B
	PROJECT NUMBER	R: 58109.01				
	FILE NAME:		PL	OT DATE:	02/18/2021	
	PROJECT LEADER	: E.P.DETRICK	DF	RAWN BY:	M.K.WILLARD	
טו	DESIGNED BY:	M.K.WILLARD	CH	HECKED B	Y: E.P.DETRICK	
- •	LANDSCAPE DETA	NLS	SH	HEET 23	OF 48	

![](_page_25_Figure_0.jpeg)

![](_page_25_Figure_5.jpeg)

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 BLACK MONUMENT PAINT. CONTRACTOR SHALL PROVIDE SUBMITTAL FOR **REVIEW AND APPROVAL.**

![](_page_25_Picture_10.jpeg)

1/4" X 1 1/2" STL BAR (27 REQ'D FOR 6') (36 REQ'D FOR 8')				
<u>STH OPTIONS</u> 6' BENCH 8' BENCH				
H RIES SHEET 1 OF 2	NOTES: 1. BENCH LE 2. COLOR T 3. REFER TO 4. INSTALL E	ENGTH TO BE 6 FEET O BE BLACK POWDER CO O LANDSCAPE PLANS FO BENCH PER MANUFACTU	OAT OR LOCATION JRER'S RECOMMENDAT	ONS.

	PROJECT NAME:	BURLINGTON	BIKE	PATH	PHASE	3B
	PROJECT NUMBER	2: 58109.01				
	FILE NAME:		Pl	_OT DATE:	02/18/2021	
	PROJECT LEADER:	: E.P.DETRICK	DF	RAWN BY:	M.K.WILLARD	
	DESIGNED BY:	M.K.WILLARD	Cł	HECKED BY	:E.P.DETRICK	
-	LANDSCAPE DETA	ILS	Sł	HEET 24	OF 48	

GRASSES CA PVS	<u>QTY</u> 41 30	<u>BOTANICAL NAME</u> Calamagrostis x acutiflora `Karl Foerster` Panicum virgatum `Shenandoah` Sporobolus botorolopic	<u>COMMON NAME</u> Karl Foerster Feather Reed Grass Shenendoah Switch Grass Prairie Dropseed	<u>SIZE</u> 2 GAL. 2 GAL. 2 GAL.	
SHRUBS CA2 PN2	<u>QTY</u> 28 8	BOTANICAL NAME Cornus stolonifera `Arctic Fire` Physocarpus opulifolius	COMMON NAME Arctic Fire Dogwood Ninebark	<u>SIZE</u> 18 - 24" SPD 18 - 24" SPD	
		DULE			
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			ASH A HA HA AL		
			120		
	\				1
			<u>```</u>	<b>~</b>	$\backslash$

![](_page_26_Picture_1.jpeg)

![](_page_27_Figure_0.jpeg)

![](_page_27_Picture_1.jpeg)

![](_page_28_Figure_0.jpeg)

![](_page_28_Picture_1.jpeg)

DESIGNED BY: M.K.WILLARD

PLANTING PLAN

CHECKED BY: E.P.DETRICK

SHEET 27 OF 48

![](_page_29_Picture_0.jpeg)

![](_page_29_Figure_1.jpeg)

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

PLANT SPACING	
D C C C C C C C C C C C C C C C C C C C	SURROUNDING SOIL SHOULD NOT EXCEED 80% COMPACTION, DRAINAGE WILL BE REQUIRED IF COMPACTED SOILS ARE PRESENT
ALL EQUAL OR AS SHOWN ON PLANTING PLAN	NYLON STRAP WITH 3/4" GROMMETS, REFER TO SPECIFICATIONS INCIDENTAL TO DECIDUOUS TREES, ITEM 65
$\frac{\text{SPACING "D"}}{5' \text{ O.C.}} = \frac{\text{ROW "A"}}{5' \text{ O.C.}} = \frac{1.96}{0.04}$	FASTEN WIRE BELOW POINT OF MAJOR BRANCHING OR TO MAJOR OUTSIDE TRUNK.
4' O.C.       41.52"       0.07         36" O.C.       31.20"       0.12         30" O.C.       26.00"       0.18         24" O.C.       20.76"       0.28	2 ¹ / ₂ " HARDWOOD STAKES. ALIGN STAKES PARALLEL W/ ROAD/ WALKS OR PARALLEL W/ DIRECTION OF PREVAILING WIND, REFER TO TREE STAKING DETAIL
DECIDUOUS SHRUB	TEMPORARY WATERING BASIN MADE FROM SOIL
BARK MULCH, REFER TO SPECIFICATIONS SHRUB ROOTBALL	W/ SHOVEL AND BLEND PLANT MIX W/ EXISTING SOIL TO PROVIDE TRANSITION TO UNDISTURBED GRADE
CONTINUOUS PLANTING PIT LANDSCAPE BACKFILL REFER TO SPECIFICATIONS	UNDISTURBED GRADE
SUB GRADE	A TREE PLANTING
	V JOALE 1/4 - 1-0

![](_page_29_Figure_5.jpeg)

A. TREE STAKING ALONG ROAD OR WALKS

![](_page_29_Figure_7.jpeg)

B. TREE STAKING IN OPEN SPACES

![](_page_29_Figure_9.jpeg)

C. TREE GUYING

TREE STAKING LAYOUT B NO SCALE

![](_page_29_Picture_12.jpeg)

PLANT CENTER

- PLANT SPACING

- SET AT ORIGINAL PLANTING DEPTH - PERENNIALS

- BARK MULCH, REFER TO VTrans SPECIFICATION 755.10 (c) CONTINUOUS PLANTING PIT LANDSCAPE BACKFILL, REFER TO SPECIFICATIONS

– SUB GRADE

- NOTES:
- 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
- 1. REFER TO PLANTING PLAN FOR
- PREPARATION SPECIFICATION.

![](_page_29_Picture_26.jpeg)

## ALIGN STAKES PARALLEL W/ ROAD OR WALKS

EDGE OF WALK OR CURB

![](_page_29_Picture_31.jpeg)

**3" CALIPER TREES** OR LARGER -ALIGN 2 STAKES PARALLEL W/ ROAD OR WALKS - EDGE OF WALK OR CURB

![](_page_29_Picture_33.jpeg)

	PROJECT NAME:	BURLINGTON	BIKE PATH	PHASE 3	3B
	PROJECT NUMBER	R: 58109.01			
vhb	FILE NAME: PROJECT LEADER DESIGNED BY:	: E.P.DETRICK M.K.WILLARD	PLOT DATE: DRAWN BY: CHECKED BY	02/18/2021 M.K.WILLARD ſ:E.P.DETRICK	
	PLANTING DETAIL	S	SHEET 28	OF 48	

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				NEW &	SALVA	GED SIGNS	EXIST POST NO	. FLAN	GED CHA		SQUARE	STEEL		N TUBUL	EW SIGN AR ALU	POSTS MINUM					W-SHA	PE STEEL		R		SIGN	DETAIL
STATION, OR SIGN NUMBER	SIGN LEGEND		HEIGHT (IN)	"A"	"B"	SALV SAL SIGN TIS	R S OF E L P E L O A A S I G S	1,12	LB/FT 2.0	3.0	(IN 1.75 2.0 LB/ 1.88 2.4	) 2.5 FT 2 3.35	- A N C H O R	S L E S V E I.3	0 (IN) 4.0 LB/FT I.7	4.0 MOD CC		TYPE I	TYPE 2	FTG. 5	5IZE 30"	IEIGHT POS	ST G		REMARKS	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
									0	PTION I	TEMS								1								
100+21, LT	STOP	1 18	18	2.25			I				x		x												RI-I MOUNTED ON NEW POST		SHSM
AUSTIN DRIVE	Burlington Greenway	I 30	14	2.92			I				X+		x												MOUNTED ON NEW POST WOG	TH I S SHEE T	
FINAL POST LEI IN THE FIELD. F BASED ON INFO STANDARD SHEE SAFETY DIVISION	NGTHS ARE TO BE DETERMINED POST SIZES ARE COMPUTED RMATION FURNISHED ON THE ETS AND THE ROADWAY, TRAFFIC N'S "SIGN POST DESIGN GUIDELINE	& ." <b>TO</b>	TALS	SF 5.17	SF	EA. SF		FT	FT	FT	FT   FT   25	FT 25	E				EA.	TYPE I	OSTS (FT)	EA.	EA.	LB		BOY = BOW = GOW = ROW = WOB = WOG = FYG = SHSM	<ul> <li>BLACK LEGEND ON YELLOW BACKGROUND -</li> <li>BLACK LEGEND ON WHITE BACKGROUND - P</li> <li>GREEN LEGEND ON WHITE BACKGROUND - PLA</li> <li>WHITE LEGEND ON BLUE BACKGROUND - PLA</li> <li>WHITE LEGEND ON GREEN BACKGROUND - PL</li> <li>WHITE LEGEND ON FLUORESCENT YELLOW-G</li> <li>FHWA STANDARD HIGHWAY SIGNS AND MAR (WITH 2012 SUPPLEMENT)</li> </ul>	PLAQUE LAQUE QUE AQUE REEN BACK KINGS BOO	GROUND K

POST LENGTH WITH '+' AVERAGES 15 FEET

![](_page_30_Figure_2.jpeg)

![](_page_30_Picture_4.jpeg)

	PROJECT NAME:	BURLINGTON	BIKE	PATH	PHASE	3B				
	PROJECT NUMBER:	58109.01								
	FILE NAME: 58109†s	s.dgn	PLOT DATE: 2/19/2021							
	PROJECT LEADER: E	E.P. DETRICK	DR	AWN BY:	C.K.FORD					
	DESIGNED BY: (	C.K. FORD	CHE	ECKED BY:	E.P. DETRICK	,				
-	TRAFFIC SIGN SUMM	IARY SHEET	SH	EET 29	OF 48					

![](_page_31_Figure_0.jpeg)

![](_page_32_Figure_0.jpeg)

![](_page_32_Figure_1.jpeg)

![](_page_33_Figure_0.jpeg)

![](_page_34_Figure_0.jpeg)

![](_page_34_Figure_1.jpeg)

![](_page_34_Picture_5.jpeg)

![](_page_35_Figure_0.jpeg)

| | 4 + 0 0

![](_page_35_Figure_2.jpeg)

||3+75

![](_page_35_Figure_4.jpeg)

||3+50

![](_page_35_Figure_6.jpeg)

![](_page_36_Figure_0.jpeg)

![](_page_36_Figure_1.jpeg)

![](_page_36_Figure_2.jpeg)

![](_page_37_Figure_0.jpeg)

![](_page_37_Figure_1.jpeg)

![](_page_37_Figure_2.jpeg)

122+50

![](_page_37_Figure_4.jpeg)

|22+00

![](_page_37_Figure_6.jpeg)

![](_page_38_Figure_0.jpeg)

![](_page_38_Figure_1.jpeg)

![](_page_38_Picture_3.jpeg)

### **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: AND THE CONSTRUCTION OF STORMWATER DISCONNECTION TREATMENT AREAS.

### 2. AREA OF TOTAL DISTURBANCE

AS SHOWN ON THE ATTACHED EPSC PLAN THE TOTAL PROJECT AREA OF DISTURBANCE IS APPROXIMATELY 2.98 ACRES.

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.

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 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 THROUGHOUT THE SITE SHALL BE LIMITED TO **2 ACRES** OR LESS. ALL EARTH DISTURBANCE SHALL BE TEMPORARILY STABILIZED WITHIN **7 CALENDAR DAYS**. IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

### 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 7 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)
	FARMINGTON EXTREMELY ROCKY LOAM, 5-20% SLOPES	0.28	1.661
1	COVINGTON SILTY CLAY	0.49	0.112
1	VERGENNES CLAY, 2-6% SLOPES	0.49	0.890
	ALLUVIAL LAND	0.10	0.311
	WATER	-	0.003

### 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.

- 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.

- AND WATER RESOURCES.
- AREAS.
- INFORMATION.

- COORDINATOR (OSPC)
- - - TAPE.
  - - TAPE.

![](_page_39_Picture_80.jpeg)

• 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

 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

• RESOURCE AREAS (E.G. STREAMS) WITHIN THE PROJECT AREA SHALL BE FLAGGED PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES OCCURRING WITHIN CLOSE PROXIMITY TO THOSE

 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

 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

 CONSTRUCTION DEMARCATION SHALL COMPLY WITH THE FOLLOWING: a. CONSTRUCTION DEMARCATION TO BE INSTALLED ALONG PERIMETER OF LIMITS OF DISTURBANCE PER THE EPSC PLANS WITHIN 100 FEET OF RESOURCE AREA DEMARCATION MUST INCLUDE: i. 2 TO 3 ROWS OF STAKED (OR STAPLED) 3-INCH (MIN.) ORANGE BARRIER MESH 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

EPSC NARRATIVE (SHEET 1 OF 2)

ii. ORANGE CONSTRUCTION FENCE, OR iii. ORANGE SNOW FENCE

> BURLINGTON BIKE PATH PHASE 3B PROJECT NAME: PROJECT NUMBER: 5809.01 PLOT DATE: 2/19/2021 FILE NAME: 58109epsc_nar.dan PROJECT LEADER: E.P.DETRICK DRAWN BY: C.K.FORD DESIGNED BY: C.K.FORD CHECKED BY: E.P.DETRICK

> > SHEET 38 OF 48

• 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),
  - O BE DIRECTLY RESPONSIBLE FOR ON-SITE IMPLEMENTATION OF THE EPSC PLAN,
  - BE KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EPSC,
  - O 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.

![](_page_40_Picture_32.jpeg)

PROJECT NAME: PROJECT NUMBER:	BURLINGTON 58109.01	BIKE	PATH	PHASE	3B
FILE NAME: 58109ep PROJECT LEADER: E	sc_nar.dgn E.P.DETRICK	PL( DR/	DT DATE: Awn by:	2/19/2021 C.K.FORD	
DESIGNED BY: ( EPSC NARRATIVE (S	C.K.FORD WHEET 2 OF 2)	CHE SHE	ECKED BY: EET 39	E.P.DETRICK OF 48	

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	BURLING	TON URBAN AREA	MIX	
	LBS	S/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		•	<u>.</u>

	SOIL AMENDMENT GUIDANCE								
	FE	RTILIZER	LIME						
	BROADCAST	HYDROSEED	BROADCAST	HYDROSEED					
	10-20-10	FOLLOW	PELLETIZED	FOLLOW					
1000	LBS/AC	MANUFACTURER	XTONS/AC	MANUFACTURER					
		-	4						

CONSTRUCTION GUIDANCE

I.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

![](_page_41_Figure_14.jpeg)

![](_page_41_Picture_15.jpeg)

![](_page_42_Figure_0.jpeg)

![](_page_43_Figure_0.jpeg)

![](_page_44_Picture_0.jpeg)

![](_page_45_Picture_0.jpeg)

![](_page_46_Figure_0.jpeg)

### <u>GENERAL</u>

I. 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".

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

![](_page_47_Picture_12.jpeg)

![](_page_47_Picture_16.jpeg)

![](_page_48_Figure_0.jpeg)

	SIZE O	FSIGN			
IDENTIFICATION NUMBER	WIDTH (IN)	HEIGHT (IN)	ТЕХТ	SIGNS REQ'D	REMARKS
M4-9AL	30	24	がわ 大 DETOUR ◆	8	MOUNT BELOW THE SP-5
M4-9AR	30	24	DETOUR	8	MOUNT BELOW THE SP-5
SP-1	30	24	が DETOUR	17	MOUNT BELOW THE SP-5
SP-2	36	36	P A TH WORK A HE AD	2	MOUNT ON SINGLE POST
SP-4	36	36	P A T H DETOUR A H E A D	2	MOUNT ON SINGLE POST
SP-5	30	18	Burlington Bike Path	33	MOUNT ON SINGLE POST
SP-6	48	36	PATH CLOSED	7	MOUNT ON TYPE III BARRICADE
SP-7	30	24	PATH CLOSED FROM AUSTIN DR TO BLANCHARD BEACH FOLLOW DETOUR	I	MOUNT ON SINGLE POST
SP-7	30	24	PATH CLOSED FROM BLANCHARD BEACH TO AUSTIN DR FOLLOW DETOUR	Ι	MOUNT ON SINGLE POST
SP-7	30	24	PATH CLOSED FROM AUSTIN DR TO BLANCHARD BEACH DETOUR ON ROAD	Ι	MOUNT ON SINGLE POST
DII-la	36	6	Path Detour 1 MI	2	MOUNT BELOW THE SP-7
M3-1	24	12	NORTH	I	MOUNT BELOW THE SP-I
M3-3	24	12	SOUTH	Ι	MOUNT BELOW THE SP-I
M4-10	48	18	DETOUR	I	MOUNT BELOW THE SP-6
M4-10	48	18	DETOUR	4	MOUNT BELOW THE SP-6

![](_page_49_Figure_1.jpeg)

![](_page_49_Figure_2.jpeg)

-25.82''—

-38'

48'

SP-6

![](_page_49_Figure_3.jpeg)

![](_page_49_Figure_4.jpeg)

4'' 36''

8''D

┝┥

5''

![](_page_49_Figure_6.jpeg)

2''D

SIGN	DIMENSIONS (INCHES)										
	Α	В	С	D	E	F	G	Н	J	К	L
STD.	30	24	1/2	3⁄4	2	71/2	1 I	5D	6¾	2	5 <u></u> %
	М	Ν	Ρ	Q	R	S	Т				
	31/4	9	8 ¹ /2	12 ¹ /8	5 ¹ /2	2	17⁄8				

![](_page_49_Figure_8.jpeg)

I. COLORS FOR ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.

2. COLORS FOR THE SP-I 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.

	PROJECT NAME:	BURLINGTON	BIKE PATH	PHASE 3	3B
	PROJECT NUMBER:	58109.01			
	FILE NAME: 58109+c	p.dgn	PLOT DATE:	2/19/2021	
	PROJECT LEADER: E	E.P. DETRICK	DRAWN BY:	C.K.FORD	
10	DESIGNED BY: (	C.K.FORD	CHECKED BY:	E.P. DETRICK	
- •	TRAFFIC CONTROL F	PLAN (3 OF 3)	SHEET 48	OF 48	