CITY OF SOUTH BURLINGTON, VERMONT O'DELL PARKWAY EASTWOOD COMMONS CITY'S EDGE CONDOMINIUMS STORMWATER IMPROVEMENTS

PROJECT LOCATION: THE PROPOSED PROJECT IS LOCATED TO THE SOUTH OF THE O'DELL APARTMENTS AND NORTH OF INTERSTATE 189

W IN SOUTH BURLINGTON, VERMONT.

PROJECT DESCRIPTION: INSTALLATION OF NEW CLOSED DRAINAGE INFRASTRUCTURE AND GRAVEL WETLAND PRACTICE W/ FOREBAY TO AID IN STORMWATER TREATMENT.

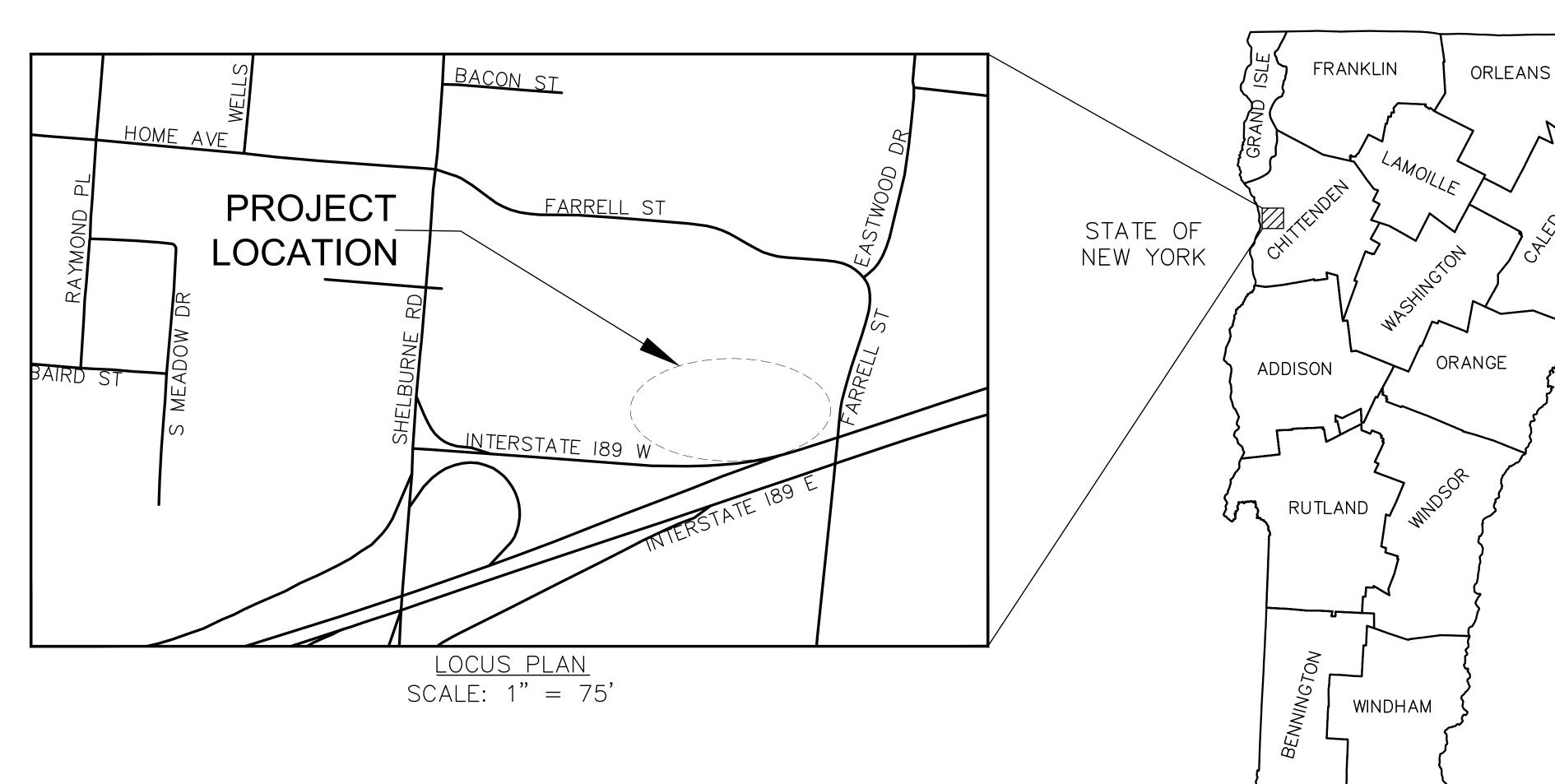
CANADA

ESSEX

STATE OF

NEW HAMPSHIRE





OWNER:

CITY OF SOUTH BURLINGTON
180 MARKET ST, SOUTH BURLINGTON, VERMONT 05403

ENGINEER OF RECORD:

HOYLE, TANNER & ASSOCIATES, INC 125 COLLEGE STREET, BURLINGTON, VERMONT 05401

SURVEYOR:

VERMONT SURVEY AND ENGINEERING, INC 79 RIVER STREET, #201, MONTPELIER, VERMONT 05602

DECEMBER 2023

PREPARED BY:



125 COLLEGE STREET - 4TH FLOOR BURLINGTON, VERMONT 05401



COMMONWEALTH OF MASSACHUSETTS

100% DESIGN
SUBMITTAL
FOR REVIEW ONLY

GENERAL NOTES:

- 1. THESE GENERAL NOTES SHALL APPLY TO ALL DRAWINGS IN THIS CONTRACT AND TO THE WORK THEY CONVEY.
- 2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018. AND ITS LATEST REVISIONS.
- 3. LOCATION OF EXISTING BURIED UTILITIES, STRUCTURES, PIPING AND OTHER ITEMS AS SHOWN ON THESE DRAWINGS HAVE BEEN TAKEN FROM AS-BUILT RECORD DRAWINGS OBTAINED FROM THE CITY OF SOUTH BURLINGTON AND FROM THE SURVEY COMPLETED BY VERMONT SURVEY AND ENGINEERING ON 12/22/2021. LOCATION OF THESE ITEMS SHALL BE CONSIDERED APPROXIMATE AND THE CONTRACTOR SHALL DIG TEST PITS AS REQUIRED TO VERIFY LOCATIONS. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY EXCAVATION. THERE MAY BE OTHER BELOW-GRADE STRUCTURES NOT SHOWN WHICH WILL REQUIRE DEMOLITION AND/OR RELOCATING IN ORDER TO COMPLETE THE WORK OF THIS CONTRACT. THEREFORE, THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING STRUCTURES, AND OTHER FEATURES AFFECTING THE WORK PRIOR TO CONSTRUCTION "PAID AS ITEM 204.22 TRENCH EXCAVATION OF EARTH, EXPLORATORY (NABI)". CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND SUPPORT OF ALL EXISTING UTILITIES LOCATED WITHIN THE LIMITS OF WORK.
- 4. CONTRACTOR SHALL REMOVE OR ABANDON ALL EXISTING STRUCTURES, PIPING, AND OTHER ITEMS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT AS SHOWN ON THE CONTRACT DRAWINGS. PAYMENT FOR REMOVAL OR ABANDONMENT OF EXISTING STRUCTURES, PIPING, AND OTHER ITEMS IS CONSIDERED INCIDENTAL TO THE WORK AND THERE SHALL BE NO ADDITIONAL PAYMENT.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS FOR ANCHORING, SUPPORTING, AND/OR RELOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICES BID. IN THE CASE OF DAMAGE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ALL REPAIRS."
- 6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF THE EXISTING FEATURES AND STRUCTURES WITHIN AND ADJACENT TO THE WORK. IN THE CASE OF DAMAGE, THE REPAIRS OR REPLACEMENT SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AS APPROVED BY THE ENGINEER. THIS INCLUDES BUT NOT LIMITED TO, THE REPLACEMENT/REPAIR OF EXISTING SIDEWALKS, PAVEMENT AND CURBING AND LANDSCAPING.
- 7. ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES, REGULATIONS AND STANDARDS. THE MORE STRINGENT SHALL APPLY.
- 8. ANY DISCREPANCY BETWEEN THESE DRAWINGS AND EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE PROCEEDING WITH THE WORK.
- 9. THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SITE SAFETY SHALL SOLELY BE THE CONTRACTOR'S RESPONSIBILITY.
- 10. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL WASTE BUILDING MATERIAL, CONCRETE, MASONRY, TREES, SHRUBS, DEBRIS, EXCESS EXCAVATED MATERIAL AND OTHER MATERIALS NECESSARY FOR THE SATISFACTORY COMPLETION OF THE CONTRACT WORK AND AS REQUIRED BY THE OWNER. CONSTRUCTION DEBRIS SHALL BE DISPOSED OF IN STRICT ACCORDANCE WITH VERMONT LAW. ALL TREE STUMPS SHALL BE DISPOSED OF AT AN APPROVED OFFSITE LOCATION ACCOMPANIED BY A STATE-ISSUED INSIGNIFICANT WASTE MANAGEMENT EVENT APPROVAL. THE OWNER SHALL MAINTAIN OWNERSHIP OF ALL EXCESS TOPSOIL AND CLEAN EXCAVATED MATERIALS. ALL COSTS ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF CONSTRUCTION DEBRIS INCLUDING HAULING SHALL BE INCIDENTAL TO THE WORK AND SHALL NOT BE PAID FOR SEPARATELY.
- 11. ALL AREAS DISTURBED BY THE CONTRACTOR DETERMINED NOT TO BE WITHIN THE LIMITS OF THE PROJECT, OR DETERMINED TO BE EXCESSIVE DISTURBANCE OF THE AREA FOR THE PROPOSED WORK SHALL BE RESTORED AT NO ADDITIONAL COST TO THE OWNER.
- 12. BASED ON THE ANTICIPATED AREA OF DISTURBANCE (GREATER THAN 1 ACRE) THE PROJECT IS CONSIDERED JURISDICTIONAL FOR THE CONSTRUCTION GENERAL PERMIT. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING MEASURES FOR EROSION PREVENTION AND SEDIMENTATION CONTROL (EPSC) IN ACCORDANCE WITH THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S "LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL".
- 13. ALL DISTURBED AREAS SHALL BE LANDSCAPED AS REQUIRED BY THE ENGINEER/OWNER AND THE VERMONT STORMWATER MANAGEMENT MANUAL, VERMONT AGENCY OF NATURAL RESOURCES, LATEST EDITION.
- 14. ALL DRAINAGE OUTLETS SHALL BE LOCATED AND CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES INSTALLED AS REQUIRED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL SUBMIT AN EROSION PREVENTION AND SEDIMENTATION CONTROL PLAN AS REQUIRED PRIOR TO BEGINNING OF WORK. ALL DEWATERING AND OPERATIONS SHALL CONFORM TO ALL APPROPRIATE AGENCY REGULATIONS.

- 15. ALL STORMWATER TREATMENT PRACTICES AND PROCEDURES ARE REFERENCED FROM THE VERMONT STORMWATER MANAGEMENT MANUAL. ENVIRONMENTAL PROTECTION RULE CHAPTER 36. STORMWATER TREATMENT STANDARDS, BY THE VERMONT AGENCY OF NATURAL RESOURCES, DATED JULY 1, 2017.
- 16. THE CONTRACTOR SHALL PROVIDE FLOW DIVERSIONS TO EXISTING OUTFALLS DURING CONSTRUCTION, UNTIL SUCH TIME AS THE COLLECTION SYSTEM OR INFILTRATION CHAMBER IS COMPLETE AND READY TO ACCEPT FLOW. THERE WILL BE NO SEPARATE PAYMENT FOR BYPASS PUMPING AND DIVERSION OF FLOWS.
- 17. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL, ALL BUOYANCY CALCULATIONS FOR UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NEED AND SIZE OF ANY ANCHORS OR OTHER MEANS OF ANCHORING TO PREVENT FLOATATION AND SHALL PROVIDE APPROVED ANCHORS IF REQUIRED. THE CONTRACTOR SHALL DESIGN AND PROVIDE THE REINFORCING STEEL REQUIRED IN CONCRETE ANCHORS. THE CONTRACTOR SHALL DESIGN THE STRUCTURAL CONNECTION BETWEEN STRUCTURES AND ANCHORS TO PREVENT FLOATATION. SHOP DRAWINGS SHALL BE STAMPED BY A VERMONT REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW.
- 18. ALL WORK BEING PERFORMED SHALL BE WITHIN LIMITS IDENTIFIED IN THE PLANS, WORK OUTSIDE OF THE LIMITS MUST BE APPROVED BY PROPERTY OWNERS AND PERMITS AMENDED AS NECESSARY. IF ADDITIONAL WORK IS REQUIRED OUTSIDE OF THE PAY LIMITS SHOWN ON THE PLANS TO COMPLETE THIS PROJECT, THIS WORK WILL NOT BE PAID SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO ALL OTHER PAY ITEMS. THIS WORK INCLUDES BUT IS NOT LIMITED TO EXCAVATION, BACKFILL, UTILITIES, SUBBASE, PAVEMENT, CURB, SIDEWALK, TURF ESTABLISHMENT, AND LANDSCAPING.
- 19. CONTRACTOR SHALL TAKE MEASURES TO PREVENT THE SPREAD OF INVASIVE SPECIES, INCLUDING SELECTING WEED-FREE MATERIALS TO USE ONSITE.

UTILITY COORDINATION NOTES:

- 1. THE CONTRACTOR SHALL PROPERLY SAFEGUARD ALL EXISTING UTILITIES AND SHALL RESTORE AND REPAIR ANY SUCH ITEMS OR FACILITIES DAMAGED BY HIS/HER OPERATIONS. RESTORATION AND REPAIR OF DAMAGED ITEMS SHALL BE DONE SOLELY AT THE CONTRACTOR'S OWN EXPENSE.
- 2. SHOULD THE CONTRACTOR DAMAGE ANY UTILITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THE UTILITY AND THE ENGINEER. ANY REPAIRS OR MODIFICATIONS TO EXISTING UTILITIES SHALL BE MADE WITH THE APPROVAL OF THE UTILITY OWNER AND SHALL BE INSPECTED BY THE UTILITY OWNER PRIOR TO BACKFILL
- 3. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES TO RELOCATE UTILITIES CONFLICTING WITH THE PROPOSED WORK. THE UTILITIES ANTICIPATED IN THE AREA INCLUDE, BUT ARE NOT LIMITED TO GREEN MOUNTAIN POWER, CHAMPLAIN WATER DISTRICT, SOUTH BURLINGTON SEWER, AND VERMONT GAS SYSTEMS. CONTACT INFORMATION PROVIDED FOR CONTRACTOR'S CONVENIENCE AND ACCURACY CANNOT BE GUARANTEED.

GREEN MOUNTAIN POWER: EMAIL: PHONE:

FAIRPOINT: NAME: MELISSA RUDNICK EMAIL: MRUDNICK@FAIRPOINT.COM PHONE: 802-951-1561

COMCAST: NAME: JEREMY COTA EMAIL: JEREMY COTA@COMCAST.COM PHONE: 802-881-9160

DIG SAFA

ME-NH-R

CHAMPLAIN WATER DISTRICT: NAME: MAXWELL MURRAY EMAIL: MAX.MURRAY@CHAMPLAINWATER.ORG PHONE: 802-864-7454

VERMONT GAS SYSTEMS: NAME: MATT ANDERSON PHONE: 802-951-0327

SOUTH BURLINGTON SEWER: NAME: THOMAS DIPIETRO EMAIL: TDIPIETRO@SBURL.COM PHONE: 802-658-7961 EXT. 6101

SURVEY DATA



VERMONT SURVEY AND ENGINEERING, INC 79 RIVER STREET, #201 MONTPELIER, VERMONT, 05602

HORIZONTAL DATUM:

STATE OF VERMONT

NAD 83 (2011) SPC (4400 VT) sFT

VERTICAL DATUM:

STATE OF VERMONT NAVD 88 FT

DRAWING INDEX

DWG# SI	HEET#	DWG NAME
	1	COVER
G-0.1	2	GENERAL NOTES AND DRAWING INDEX
G-0.2	3	CONSTRUCTION NOTES AND QUANTITY SHEET
C-1.1	4	EXISTING CONDITIONS PLAN
C-1.2	5	PROPOSED SITE PLAN
C-1.3	6	PROPOSED PROFILES
C-2.1	7	GRAVEL WETLANDS DETAILS
C-2.2	8	DRAINAGE DETAILS
C-2.3	9	GENERAL DETAILS
C-2.4	10	EROSION AND SEDIMENT CONTROL DETAILS

LEGEND

EXISTING	
	210'
APPROXIMATE PROPERTY LINE	
APPROXIMATE ROW LINE	
EDGE OF PAVEMENT	
DRAINAGE INLET STRUCTURE	D
DRAINAGE MANHOLE	(D)
STORM DRAIN LINE	
DIRECTION OF FLOW	\Rightarrow
SANITARY MANHOLE	(\$)
SANITARY SEWER LINE	sss
UNDERGROUND COMMUNICATIONS	
WATER GATE VALVE	w w
GAS LINE	v v
SOIL BORING	SB2
CONTROL POINT	
STONE FILL	
GUARDRAIL	. 0 0 0 0 0 0 0
FENCE LINE	
BOLLARD	OB
DECIDUOUS TREE	
	ω
<u>PROPOSED</u>	
CONTOUR	
LIMITS OF WORK	
STORMDRAIN	
STORMDRAIN MANHOLE	
CATCH BASIN	

NOT FOR CONSTRUCTION

THIS DOCUMENT IS PREPARED AS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF	HOYLE, TANNER. IT MAY NOT BE USED, REPRODUCED, DISSEMINATED	OR TRANSFERRED IN ANY MANNER, INCLUDING ELECTRONICALLY, FOR ANY OTHER PURPOSE THAN THIS
1177	125 College St, 4th Floor Burlington, VT 05408	(802) 860-1331 www.hoyletanner.com
		(TANNER
CITY OF SOUTH BURLINGTON	SOUTH BURLINGTON, VT 05403	

GENERAL NOTES AND **DRAWING INDEX**

PROJECT NO. 107881

SHEET 2 OF 10

STOCKPILED MATERIAL NOTES:

- 1. ALL STOCKPILES SHALL BE COVERED PRIOR TO INCLEMENT WEATHER, GRADED TO SHED WATER, AND COVERED AT THE END OF EACH WORKDAY WITH A MINIMUM OF 20-MIL BLACK POLYETHYLENE. THE COVER SHALL BE WEIGHTED AND WILL BE MAINTAINED THROUGHOUT THE STOCKPILE PERIOD.
- 2. STOCKPILE AREAS WILL BE GRADED SUCH THAT STORMWATER IS DIVERTED FROM STOCKPILED MATERIALS. SILT FENCE WILL SURROUND ALL STOCKPILES. SLOPES ON STOCKPILES SHALL NOT BE STEEPER THAN 1:1.

LAYOUT OF WORK NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT AND CONSTRUCTING THE WORK TO THE LINES AND GRADES INDICATED AND SPECIFIED. ALL LAYOUT AND SURVEY WORK SHALL BE DONE BY A COMPETENT AGENT OR EMPLOYEE OF THE CONTRACTOR AND SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL DO ALL LAYOUTS FROM ESTABLISHED POINTS TO PROPERLY COMPLETE THE CONTRACT WORK.
- 2. THE ENGINEER WILL FURNISH TO THE CONTRACTOR BASIC SURVEYS NECESSARY FOR THE LAYOUT OF THE WORK. THESE SURVEYS SHALL ESTABLISH CERTAIN REFERENCE POINTS AND BENCHMARKS IN THE IMMEDIATE VICINITY OF THE WORK AREAS. THE CONTRACTOR SHALL LAYOUT ALL ADDITIONAL LINES AND GRADES AND OTHERWISE DO ALL LAYOUT AND MEASUREMENT NECESSARY FOR THE PROPER COMPLETION OF THE WORK.
- 3. THE CONTRACTOR SHALL FURNISH ASSISTANCE TO THE ENGINEER AS REQUESTED TO CHECK THE LAYOUT OR OTHERWISE CONTROL THE WORK. SUCH ASSISTANCE SHALL BE UNDERSTOOD TO INCLUDE THE PROVISION OF SUITABLE MANPOWER TO ASSIST THE ENGINEER IN TAPING MEASUREMENTS, HOLDING A SURVEY ROD FOR CHECKING GRADES, AND THE LIKE.
- 4. THE ENGINEER RESERVES THE RIGHT TO INSPECT OR CHECK ANY OF THIS WORK, AND THE CONTRACTOR SHALL NOT CLAIM ADDED COMPENSATION FOR ANY DELAY OCCASIONED BY THE ENGINEER EXERCISING THIS RIGHT, NOR FOR ANY CORRECTIVE WORK WHICH IS REQUIRED AS A RESULT OF THE ENGINEER'S INSPECTIONS.

TOPSOIL AND SEEDING NOTES:

1. ALL AREAS OF EXPOSED SOIL SHALL GET TOPSOIL AND SEED. ROLLED EROSION CONTROL PRODUCT SHALL BE USED IN AREAS WITH GREATER THAN 3:1 SLOPES. NO ADDITIONAL PAYMENT WILL BE MADE FOR REPAIRING EXPOSED SOIL OUTSIDE THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS.

CONSTRUCTION GUIDANCE

SEED MIX: VERMONT CONSERVATION SHADE SEED MIX SHALL NOT BE USED WITHIN ANY WATERS OF THE STATE OF VERMONT.

SEED MIX: VERMONT CONSERVATION SHADE SEED MIX SHALL BE USED IN ALL AREAS DISTURBED DURING CONSTRUCTION.

SEED MIX: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

STRAW MULCH: TO BE PLACED AT CREST OF SLOPE AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER. FOR SLOPÉS STEEPER THAN 3:1, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

TOPSOIL: MIN. 4" TOPSOIL WITH SEED WHERE TURF IS TO BE RE-ESTABLISHED, OR AS DIRECTED BY THE ENGINEER.

TURF ESTABLISHMENT: PLACING SEED AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

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

OSHA & VOSHA REQUIREMENT NOTES:

1. THE CONTRACTOR IS OBLIGATED TO MEET ALL OSHA AND VOSHA REQUIREMENTS FOR SAFE TRENCHING AND EXCAVATION PROCEDURES. THE CONTRACTOR IS HEREBY REFERRED TO THE LATEST REVISED OSHA STANDARDS AS PUBLISHED IN TITLE 29 OF THE CODE OF FEDERAL REGULATIONS (29 CFR), PART 1926 AND AS PUBLISHED IN THE FEDERAL REGISTER ON TUESDAY, OCTOBER 31, 1989. IN ADDITION, THE CONTRACTOR IS HEREBY REFERRED TO THE LATEST REVISED VOSHA STANDARDS AS PUBLISHED IN VERMONT STATUTE TITLE 21 -LABOR. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE LATEST OSHA AND VOSHA STANDARDS FOR WORK ON THIS PROJECT.

TRAFFIC CONTROL NOTES:

1. CONTRACTOR SHALL ESTABLISH AND MAINTAIN TRAFFIC CONTROL MEASURES TO PROTECT THE TRAVELING PUBLIC (INCLUDING BICYCLISTS AND PEDESTRIANS), CONSTRUCTION

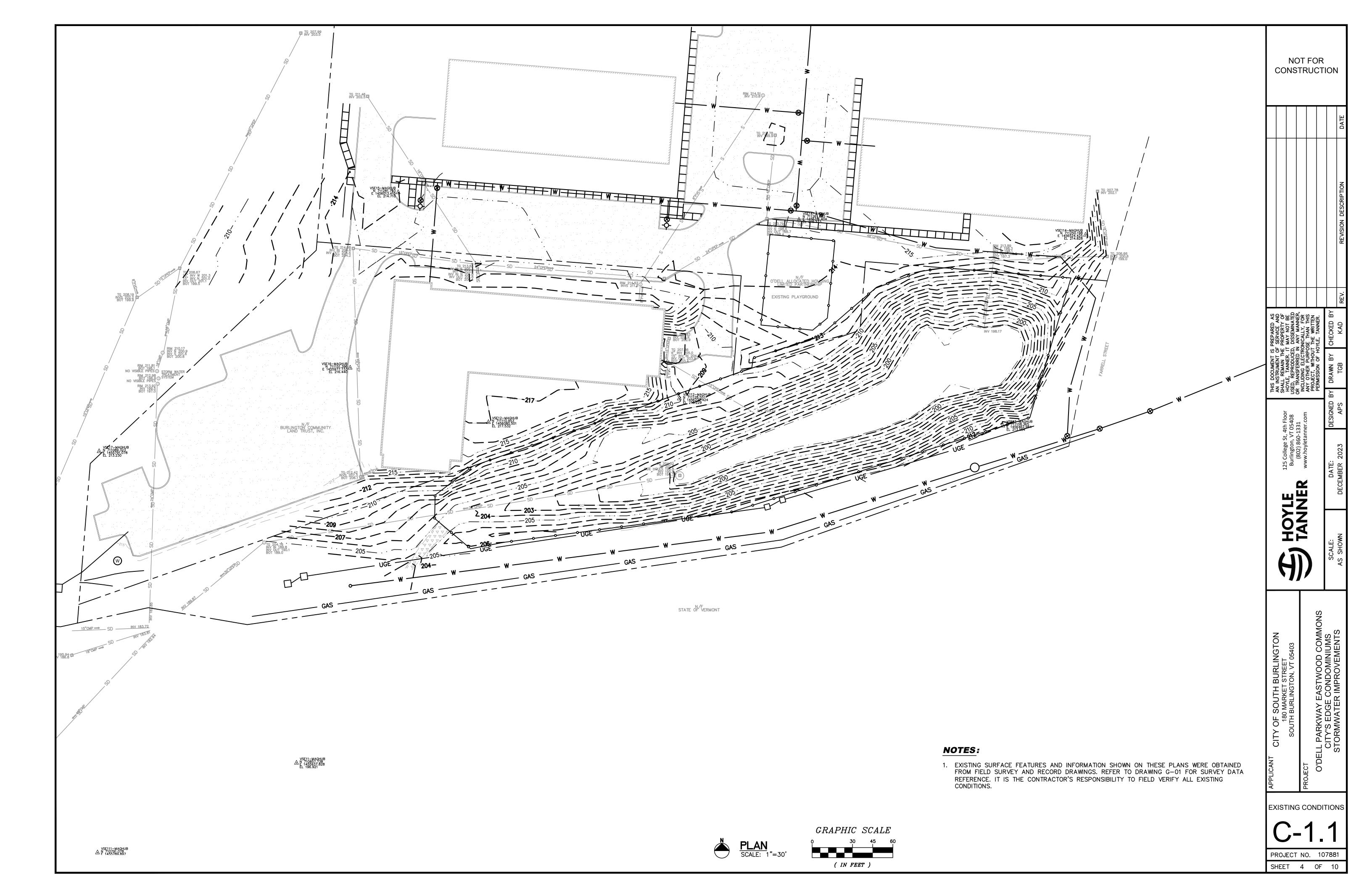
OPERATIONS. AND ACCESS TO PROJECT SITE.

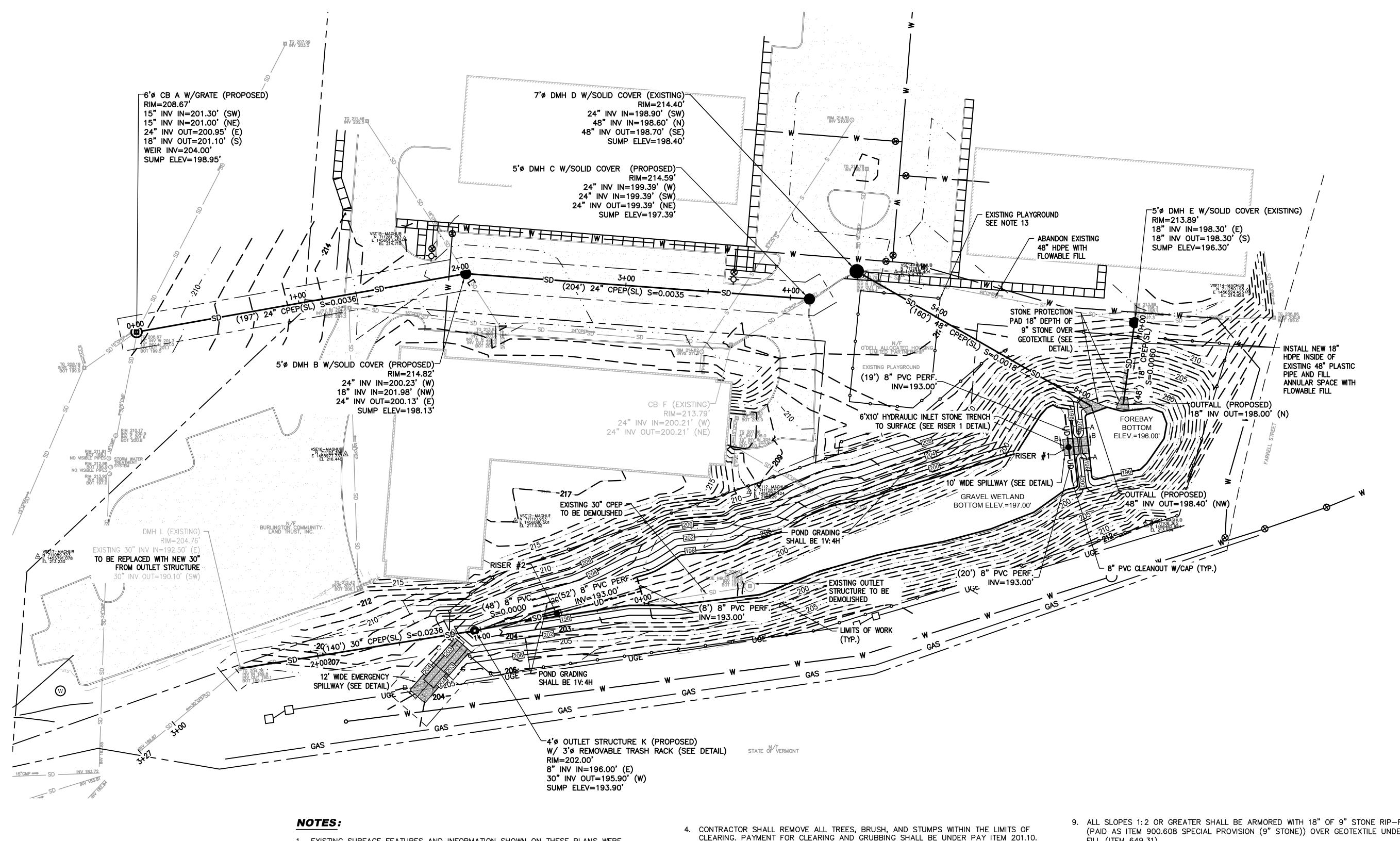
- 2. TRAFFIC CONTROL MEASURES SHALL CONFORM TO VTRANS SPECIFICATION SECTION 641 AND LATEST EDITION OF MUTCD.
- 3. CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO COMMENCING WORK. TRAFFIC CONTROL PLAN SHALL BE PAID FOR UNDER PAY ITEM 641.10.
- 4. CARE SHOULD BE GIVEN TO MINIMIZE THE IMPACTS TO TRAFFIC FLOW DURING PEAK HOURS DUE TO CONSTRUCTION OF THE PROJECT.
- 5. CARE SHOULD BE GIVEN TO RESIDENTS AND BUSINESSES IMPACTED BY THE PROJECT AND ACCOMMODATIONS MUST BE MADE TO MAINTAIN ACCESS TO SUCH PLACES.
- 6. FLAGGERS AND UNIFORM TRAFFIC OFFICERS: ONLY CERTIFIED FLAGGERS WILL BE ALLOWED ON THIS PROJECT. FLAGGERS AND UNIFORM TRAFFIC OFFICERS WILL BE REQUIRED TO WEAR SAFETY APPAREL MEETING THE REQUIREMENTS OF THE AMERICAN NATIONAL STANDARD OF HIGH-VISIBILITY APPAREL.

VTrans Item #	Item Description	Total Quantity	Unit
201.10	Clearing and Grubbing, Including Individual	4	1.6
202.45	Trees and Stumps	1 172	LS
	Common Excavation	1,172	CY
	Muck Excavation	1,172	CY
	Earth Borrow Fill	334	CY
	Trench Excavation of Earth	795	CY
	Subbase of crushed gravel, coarse graded	78	CY
	Bituminous Concrete	66	TON
	24" CPEP Pipe	401	LF
601.2625	30" CPEP Pipe	140	LF
604.20	Precast Concrete Manhole - 4' Diameter (Grate Cover)	1	EACH
604.21	Precast Concrete Manhole - 5' Diameter		
	(Cast Iron Cover)	2	EACH
	Underdrain Pipe, 8 Inch PVC Perforated	91	LF
	Underdrain Pipe, 8 Inch PVC Solid	48	LF
	Stone Fill, Type I	19	CY
	Bituminous Concrete Sidewalk	4	TON
620.50	Remove and Reset Fence	227	LF
641.10	Traffic Control	1	LS
649.31	Geotextile Under Stone Fill	163	SY
649.41	Geotextile For Underdrain Trench Lining	1,501	SY
651.15	Seed (Outside Wetland)	2	LB
651.35	Topsoil	125	CY
653.01	Erosion Protection & Sediment Control Plan	1	LS
653.03	Maintenance of EPSC (N.A.B.I.)	1	LU
653.12	Straw Mulch	4	TON
	Temporary Erosion Matting	1,120	SY
	Filter Bag	4	EACH
	Silt Fence, Type II	392	LF
	Barrier Fence	1,144	 LF
	Coarse Aggregate (3/4" Gravel)	1,311	CY
	Wetland Soil	302	CY
	Pea Stone - Choker Layer - 3/8" stone	94	CY
	9" Stone	68	CY
	24" HDPE Risers	2	EACH
900.620	Precast Concrete Drainage Structure - 6'		
000 620	Diameter w/ weir Precast Concrete Manhole - 8' Diameter	1	EACH
900.620	(Cast Iron Cover)	1	EACH
900.620	Seepage Collars	3	EACH
900.620	Removable Trash Rack	1	EACH
900.635	Wetland Seed - March/Swamp/Bog Mix	50	LB
900.640	Magnetic Locating Tape	589	LF
900.645	Dewatering	1	LS
	Landscaping	1	LS
900 645	Remove and Reset Playground	1 1	LS

NOT FOR CONSTRUCTION THIS DOCUMENT IS PAN INSTRUMENT OF SHALL REMAIN THE PHOYLE, TANNER. IT NUSED, REPRODUCED, I OR TRANSFERRED IN INCLUDING ELECTRON ANY OTHER PURPOSE PROJECT, WITHOUT INCLUDING ELECTRON ANTHOUT INCLUDING ELECTRON OF INCLUDING ELECTRON ANTHOUT E 125 College St, 4th F Burlington, VT 054 (802) 860-1331 www.hoyletanner.c

CITY OF SOUTH BURLINGTON 180 MARKET STREET CONSTRUCTION NOTES **QUANTITY SHEET** PROJECT NO. 107881 SHEET 3 OF 10





- 1. EXISTING SURFACE FEATURES AND INFORMATION SHOWN ON THESE PLANS WERE OBTAINED FROM FIELD SURVEY. REFER TO DRAWING G-0.1 FOR SURVEY DATA REFERENCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND SUPPORT OF ALL EXISTING UTILITIES LOCATED WITHIN THE LIMITS OF WORK, INCLUDING UTILITY POLES.
- 3. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES INVOLVED AND VERIFY IN THE FIELD THE EXACT LOCATION OF MAINS AND SERVICES TO PREVENT DAMAGE; LOSS OF SERVICE DURING CONSTRUCTION; AND FOR REPLACEMENT OF SERVICES. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IDENTIFICATION AND LOCATION OF ALL UTILITIES PRIOR TO THE START OF WORK. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICT BETWEEN THE PROPOSED WORK AND AN EXISTING UTILITY SUCH AS WATER, SEWER, GAS, ELECTRICAL OR TELECOMMUNICATIONS. CONTRACTOR SHALL RELOCATE CONFLICTING UTILITIES AS NEEDED. THERE SHALL BE NO SEPARATE PAYMENT
- 5. CONTRACTOR SHALL CONFINE CONSTRUCTION ACTIVITIES TO AREAS OWNED BY THE PROPERTY OWNER(S) AND AS SHOWN ON THE DRAWINGS.
- 6. CONTRACTOR SHALL SECURE WORK AREA WITH FENCING. PAID AS ITEM 653.50 BARRIER
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF TRAFFIC AND TRAFFIC
- WHERE ADJACENT GROUND OUTSIDE OF THE LIMITS OF WORK IS DISTURBED OR DAMAGED DUE TO CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL RESTORE TO ORIGINAL STATE, INCLUDING, BUT NOT LIMITED TO SIDEWALKS, PAVEMENT, GRASS AND LANDSCAPING, AT NO ADDITIONAL COST TO THE OWNER.
- 9. ALL SLOPES 1:2 OR GREATER SHALL BE ARMORED WITH 18" OF 9" STONE RIP-RAP FILL (PAID AS ITEM 900.608 SPECIAL PROVISION (9" STONE)) OVER GEOTEXTILE UNDER STONE FILL (ITEM 649.31)
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIVERSION OF STORMWATER FLOWS AND BYPASSING EXISTING POND DURING CONSTRUCTION UNTIL NEW GRAVEL WETLAND IS COMPLETE AND READY TO ACCEPT FLOW. (SUBSIDIARY)
- 11. SEE SPECIAL PROVISION SPECIFICATION 900.645 (GRAVEL WETLAND FACILITY) FOR GRAVEL WETLAND PLANTS, SOIL AND MATERIAL REQUIREMENTS.
- 12. SEE DRAWING NO. C-2.1 FOR POND GRAVEL WETLAND DETAILS.
- 13. CONTRACTOR SHALL REMOVE AND RESET EXISTING PLAYGROUND EQUIPMENT AND FENCE AS NECESSARY FOR CONSTRUCTION OF WORK. REMOVAL AND RESETTING OF FENCE SHALL BE PAID FOR AS ITEM 620.50. REMOVAL AND RESETTING PLAYGROUND EQUIPMENT SHALL BE PAID FOR AS ITEM 900.645 - SPECIAL PROVISION (REMOVE AND RESET PLAYGROUND EQUIPMENT)

SOUTH

≥

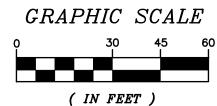
PP.

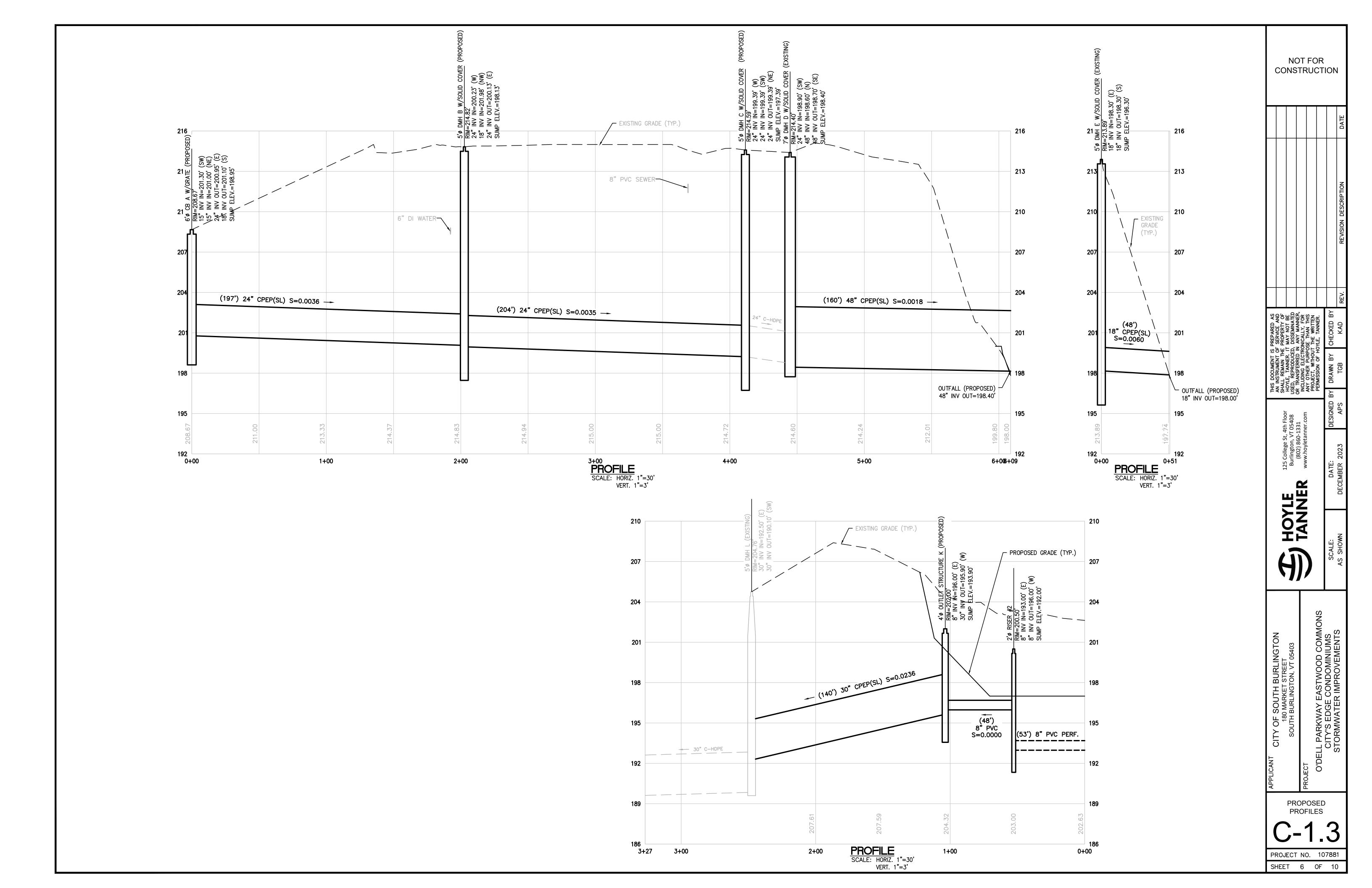
125 College St, 4th Floor Burlington, VT 05408 (802) 860-1331

NOT FOR CONSTRUCTION

PROPOSED SITE PLAN

PROJECT NO. 107881 SHEET 5 OF 10





GRAVEL WETLAND FOREBAY EXTENT OF ITEM 24" HDPE RISER W/ GRATE (SEE NOTE 10.) — NO.649.41 TOP OF FOREBAY EL: 199.00' GEOTEXTILE BERM EL. 200.00 FABRIC ITEM-NO. 649.41 TOP OF SPILLWAY 198.00 (SEE BERM & SPILLWAY DETAILS) 9" STONE 18" MIN. DEPTH 3" PEA STONE -ON SIDE SLOPES (TYP.) 9" WETLAND GEOTEXTILE FABRIC UNDER FILL ITEM NO. 649.31 EL: 197.00' WETLAND SOIL COMPACTED NATIVE SOIL 3/4" GRAVEL DO NOT USE GRANULAR BACKFILL IN BERM EL: 192.50' — GEOTEXTILE FABRIC BELOW EXTENT OF ITEM UNDERDRAIN ITEM NO. 649.41 NO. 649.31 36" X 36" X 12" H CONCRETE COMPACTED EARTHEN FOOTER BOTTOM EL: 191.50' SUBGRADE SUMP EL. 192.00 HYDRAULIC INLET 8" PERF. PVC PIPE COMPACTED EARTHEN 6' X 10' LONG STONE (TYPE I) TRENCH INV. EL: 193.00' SUBGRADE TO SURFACE WRAPPED IN GEOTEXTILE — 6'-0" —— FABRIC (ITEM NO. 649.41) BOT. EL. 192.50' TOP EL. 197.00'

RISER #1 DETAIL

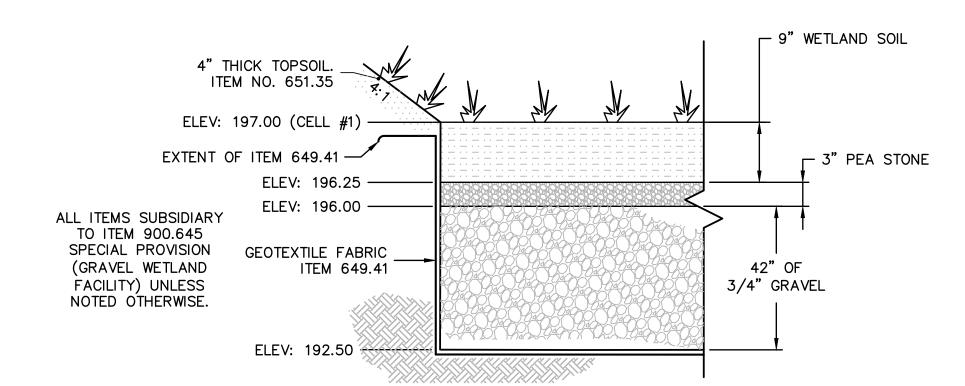
SCALE: NOT TO SCALE

→ OUTSIDE OF BASIN, ABOVE EL. 206.00 → 36" REMOVABLE TRASH RACK WETLAND BASIN/LIMITS FOR WETLAND PLANT (SEE DETAIL) PRECAST COVER WITH MATERIALS INSIDE BASIN AT EL: 264.00' 36" OPENING CENTERED TOP OF OUTLET - STRUCTURE EL: 202.00' **GRAVEL WETLAND** SUMP EL: 193.90' 4" THICK TOPSOIL. ITEM NO. 651.35 - EXTENT OF ITEM 649.41 4" THICK TOPSOIL 8" STUB W/ CAP W/ 1.2" ORIFICE @ ITEM NO. 651.35 INV. EL: 196.00' RISER #2 SEE JOINING DETAILS -24" PVC RISER (SOLID WALLED) W/ SOLID COVER COMPACTED NATIVE EL: 199.00' SOIL _ 3" PEA STONE |*************** 9" WETLAND 28'-0" 8" PVC INV. __2" RIGID SOIL (MIN.) EL: 196.00' INSULATION (-EL: 197.00' o" DIA. HDPE OUTFALL 8" PVC INV. IN EL: 195.90' 42" 3/4" GRAVEL 24"SUMP B" HDPE INV._ TO EXISTING DMH EL: 196.00<u>,</u> **---'**-EL: 192.05' SEE PIPE TO CATCH BASIN (SEE DETAILS) 36" X 36" X 12" H GEOTEXTILE FABRIC BELOW ANTI-SEEP CONCRETE FOOTER 48" I.D. PRECAST MANHOLE UNDERDRAIN ITEM 649.41 COLLARS (TYP.) BOTTOM EL: 191.50' (ITEM 900.620 SPECIAL SUMP EL. 192.00' (SEE DETAIL) ITEM 541.25 BEDDING OF 12" MIN. PROVISION (PRECAST - COMPACTED EARTHEN SUBGRADE DRAINAGE, DIVERSION & CRUSHED GRAVEL-ANTI-SEEP COLLARS 8" PERF PVC PIPE OUTLET CONTROL-ITEM 301.26 SEE DETAIL, DWG. NO. C-3.2 L (SEE NOTE 11) STRUCTURES). BASE INV. EL: 193.00' SECTION: COAT EXTERIOR

WITH 2 COATS WATER PROOFING SEALANT

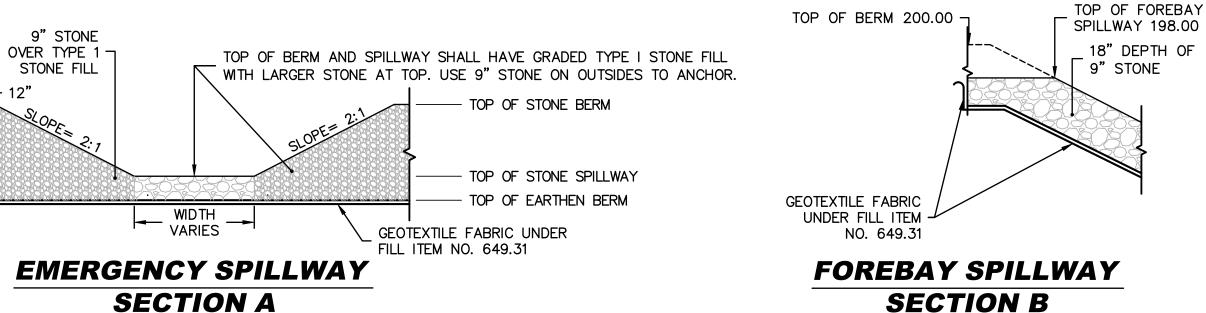
RISER #2 AND OUTLET STRUCTURE DETAIL

SCALE: NOT TO SCALE



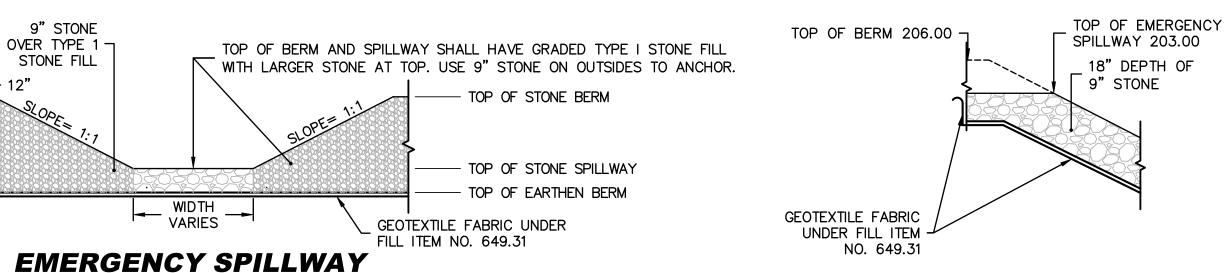
GRAVEL WETLAND DETAIL

SCALE: NOT TO SCALE



SECTION A

SCALE: NOT TO SCALE



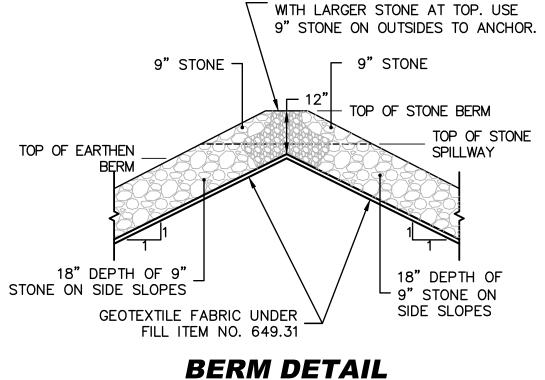
EMERGENCY SPILLWAY SECTION C SECTION D SCALE: NOT TO SCALE

SCALE: NOT TO SCALE

TOP OF BERM AND SPILLWAY SHALL HAVE GRADED TYPE I STONE FILL

SCALE: NOT TO SCALE

SPILLWAY & BERM **SCHEDULE** EMERGENCY **FOREBAY** SPILLWAY BOTTOM 10'-0" 12**'**-0" WIDTH TOP ELEV. OF 198.00 BERM STONE TOP ELEV. OF 200.00 206.00 EARTHEN BERM TOP ELEV. OF 197.50 203.00 SPILLWAY STONE



SCALE: NOT TO SCALE

NOTES:

- 1. THE WETLAND BASIN AREA SHALL BE CLEARED OF ALL TREES, ROOTS, STUMPS, BOULDERS AND SOD TO A DEPTH OF 2' BELOW FINAL GRADE.
- 2. CONSTRUCT BERM USING EMBANKMENT MATERIAL FREE OF SOD, ROOTS, FROZEN MATERIAL. NO STONES LARGER THAN 6 INCHES OR OTHER OBJECTIONABLE MATERIAL. COMPACT AS PER SPECIFICATIONS.
- 3. OUTLET CONTROL STRUCTURE TO BE PRECAST WITH DIMENSIONS AS SHOWN. PAID AS ITEM 900.620 SPECIAL PROVISION (PRECAST DRAINAGE, DIVERSION & OUTLET CONTROL STRUCTURES).
- 4. TOPSOIL AND SEED ALL EARTH SLOPES AS SOON AS POSSIBLE. STABILIZE OUTFALL AREAS WITH REQUIRED EROSION CONTROL.
- 5. REMOVE ACCUMULATED SEDIMENT FROM BMP AT COMPLETION OF PROJECT (SUBSIDIARY).
- 6. ANTI-SEEP COLLARS SHALL BE INSTALLED AS SHOWN TO RESIST FLOW ALONG THE OUTSIDE OF THE PIPE. COLLARS SHOULD BE PLACED A MINIMUM OF 5 FT. FROM THE PIPE. MAXIMUM SPACING OF COLLARS IS 28 FT. PAID AS ITEM 900.620 SPECIAL PROVISION (ANTI-SEEP COLLARS).
- 7. ALL PIPE CONNECTIONS SHALL HAVE FLEXIBLE WATERTIGHT GASKETS CONFORMING TO THE SPECIFICATIONS. PIPE TO OUTLET STRUCTURE CONNECTION SHALL BE WATERTIGHT WITH AN EMBEDDED FLEXIBLE RUBBER BOOT. SUBSIDIARY TO ITEM 900.620 SPECIAL PROVISION (PRECAST DRAINAGE, DIVERSION & OUTLET CONTROL STRUCTURES).
- 8. FOR RISERS, SEE SPECIAL PROVISIONS SPECIFICATION 900.620 (24" RISERS) SEE SPECIAL PROVISIONS SPECIFICATION 900.645 (GRAVEL WETLAND FACILITY) FOR WETLAND PLANTS, SOIL AND MATERIALS INSIDE
- 9. PROVIDE 8" SOLID-WALLED PVC (ITEM 605.11) CLEAN OUTS WITH CAP TO 1 FOOT ABOVE GRADE FOR ALL 8" PERF. PVC UNDERDRAIN PIPING.

IP BURLINGTON T STREET SOUTH E PARKWAY E ITY'S EDGE TORMWATER OF, ≥

GRAVEL WETLANDS

DETAILS

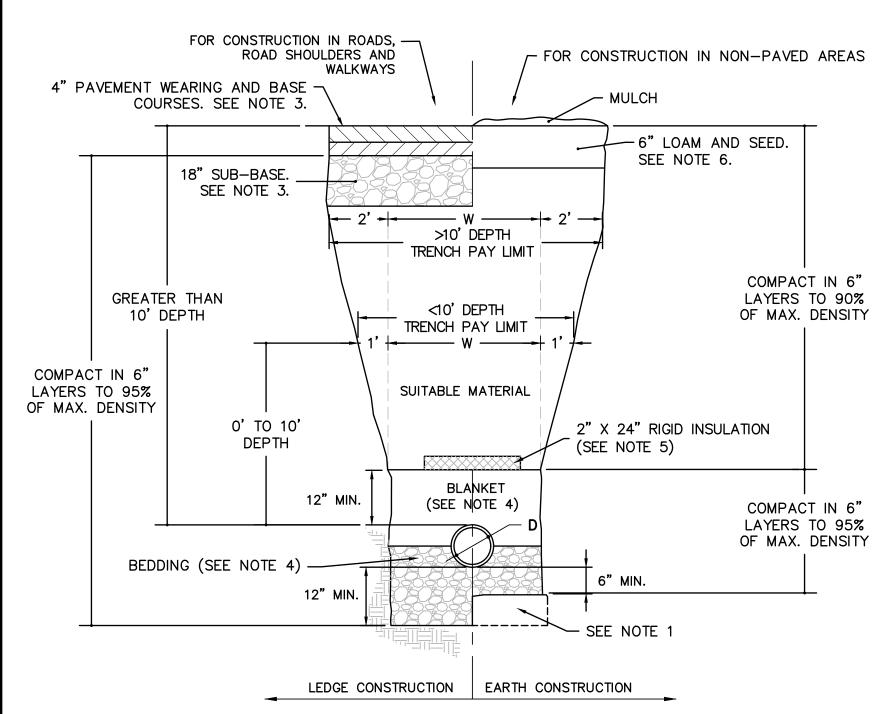
PROJECT NO. 107881

SHEET 7 OF 10

25 College S Burlington, (802) 86(

NOT FOR

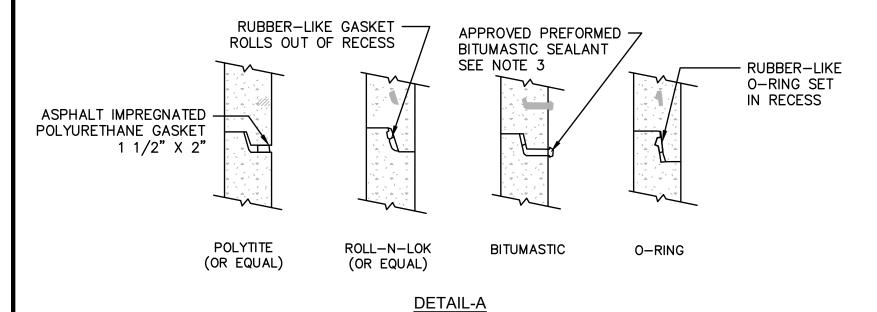
CONSTRUCTION



- 1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. SEE ALSO NOTE 2.
- 2. W=MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. W=D+2', OR 3', WHICHEVER IS GREATER. D = NOMINAL PIPE DIAMETER.
- 3. SEE SPECIFICATION SECTION 02230 FOR SUB-BASE MATERIAL REQUIREMENTS AND SECTION 02500 FOR PAVEMENT AND BASE-COURSE REQUIREMENTS.
- 4. BEDDING AND BLANKET MATERIAL FOR DUCTILE IRON PIPE SHALL BE COMPACTED (95%) SAND (ITEM 203.31) BEDDING AND BLANKET MATERIAL FOR PVC AND HDPE PIPE SHALL BE 3/4" CRUSHED STONE (ITEM 629.54).
- 5. PROVIDE INSULATION WHEN DEPTH IS LESS THAN 4 FEET, CROSSING OTHER UTILITIES, OR DIRECTED BY THE ENGINEER (ITEM 622.10).
- 6. FOR TRENCH CONSTRUCTION THAT IS NOT IN THE ROADS, ROAD SHOULDERS AND WALKWAYS, CONTRACTOR SHALL RESTORE TO GRADE WITH LOAM, SEED, FERTILIZER AND MULCH.

STANDARD WATER, SEWER, AND STORM DRAIN TRENCH SECTION CONSTRUCTION AND PAY LIMITS DETAIL

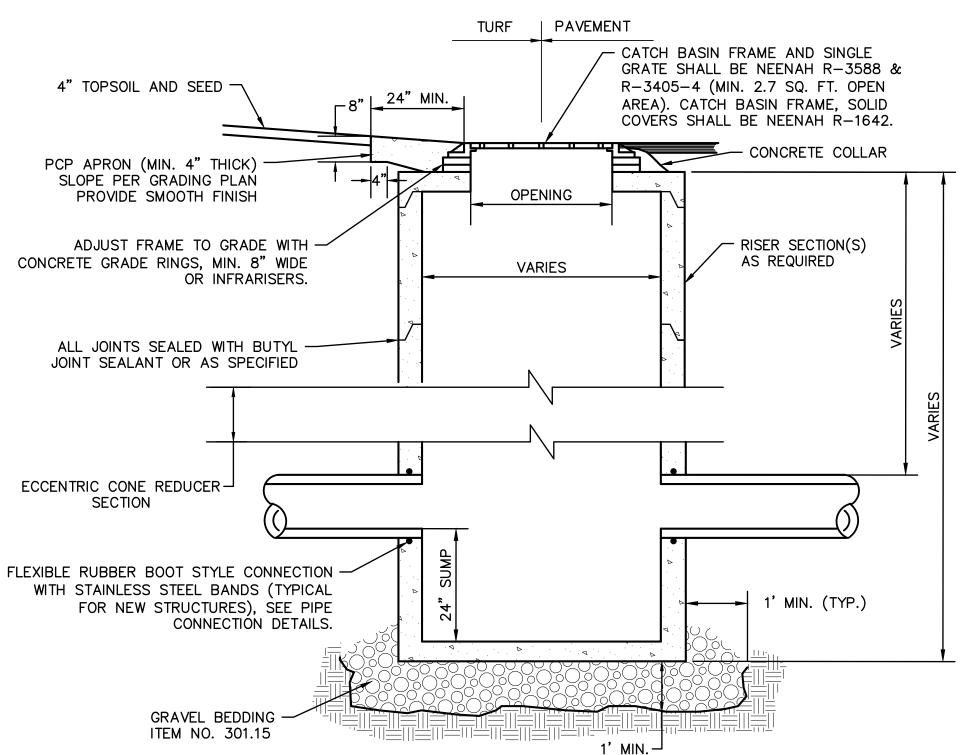
SCALE: NOT TO SCALE



- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET.
- 2. PIPE TO BASIN JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON ELASTOMERIC SEALANT.
- 3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
- 4. NON-SHRINKING MORTAR SHALL ONLY BE USED WHERE SPECIFICALLY APPROVED BY THE ENGINEER.
- 5. ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN

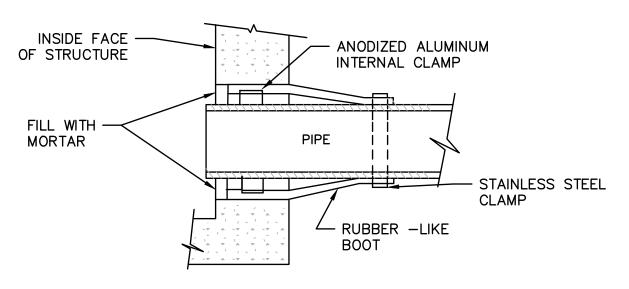
PRECAST CONCRETE STRUCTURE JOINT DETAILS

SCALE: NOT TO SCALE

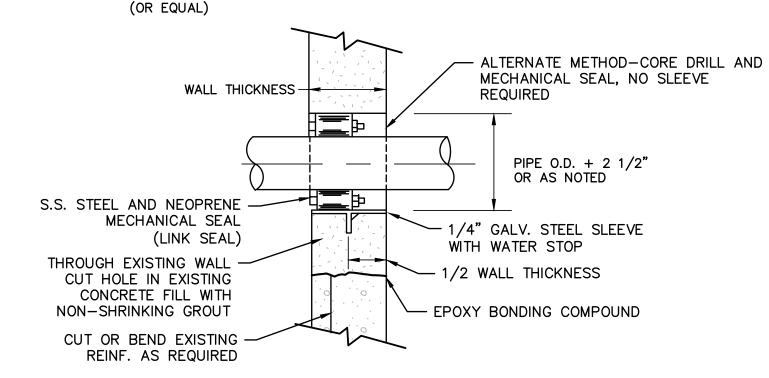


- 1. ALL PREFABRICATED REINFORCED CONCRETE CATCH BASINS AND FRAMES AND GRATES OR COVERS SHALL BE DESIGNED AND CONSTRUCTED TO CONFORM TO THE CITY OF SOUTH BURLINGTON STANDARDS. THE CONTRACTOR IS REQUIRED TO SUPPLY SHOP DRAWINGS AND MANUFACTURERS' CERTIFICATIONS TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- 2. STORM DRAINS ARE TO BE LABELED WITH A MARKER STATING "NO DUMPING. DRAINS TO STREAM".
- 3. SEE SPECIAL PROVISIONS SECTION 900.620-02750 FOR REQUIREMENTS.

TYPICAL CATCH BASIN AND DRAINAGE BASIN DETAIL SCALE: NOT TO SCALE



BOOT STYLE PIPE CONNECTION TO CATCH BASINS



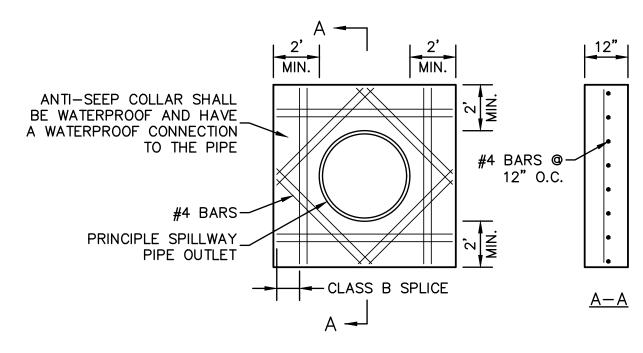
WALL SLEEVE DETAIL FOR PIPE CONNECTION TO EXISTING CATCH BASINS

NOTES:

1. INSTALL SEALS FROM DRY SIDE OF PENETRATION. WET SIDE FILLED WITH WATERPROOF GROUT.

PIPE CONNECTION TO CATCH BASIN DETAILS (SUBSIDIARY TO CATCH BASIN)

SCALE: NOT TO SCALE

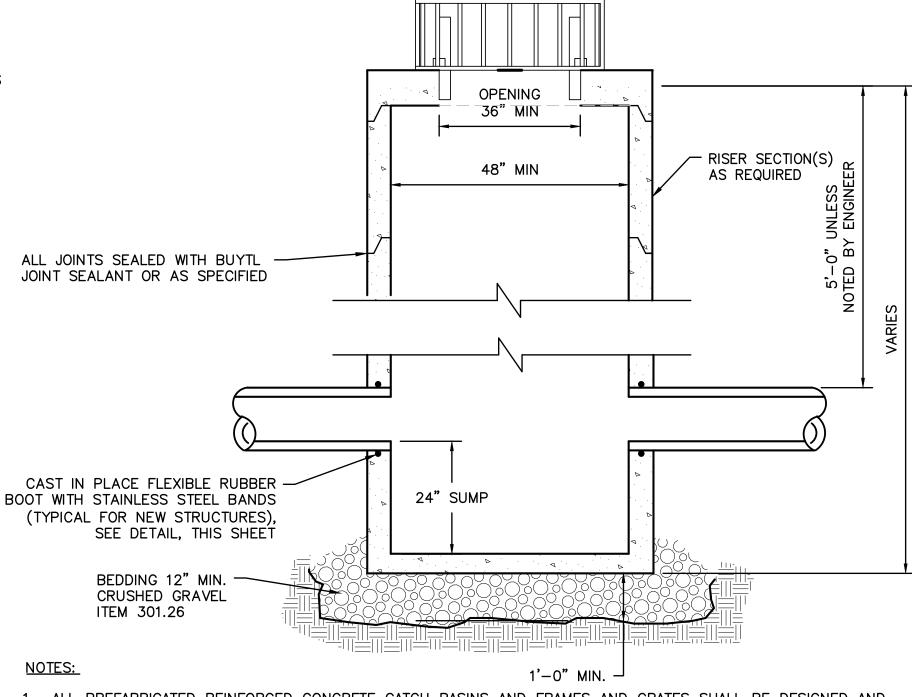


ANTI-SEEP COLLAR NOTES:

- 1. SPACING BETWEEN ADJACENT COLLARS SHALL BE A MINIMUM OF 5 FEET, AND A MAXIMUM OF 28 FEET WITH THE FIRST COLLAR BEING A MINIMUM OF 5 FEET FROM THE INLET.
- 2. FURNISH A MINIMUM OF 2 COLLARS PER CONDUIT.
- 3. PROVIDE A 4,000 PSI (MIN.) CONCRETE MIX.
- 4. RUBBER ANTI-SEEP COLLARS MAY BE USED IN LIEU OF CONCRETE ANTI-SEEP COLLARS. FOR 8" PIPES, ANTI-SEEP COLLAR SHALL BE ASCO3 3' X 3' AND FOR 24" PIPE, ANTI-SEEP COLLAR SHALL BE ASCO4 4' X
- 5. ANTI-SEEP COLLARS SHALL BE PAID UNDER PAY ITEM 900.620 SPECIAL PROVISIONS (ANTI-SEEP COLLARS)

ANTI-SEEP COLLAR

SCALE: NOT TO SCALE



- 1. ALL PREFABRICATED REINFORCED CONCRETE CATCH BASINS AND FRAMES AND GRATES SHALL BE DESIGNED AND CONSTRUCTED TO CONFORM TO THE CITY OF SOUTH BURLINGTON STANDARDS. THE CONTRACTOR IS REQUIRED TO SUPPLY SHOP DRAWINGS AND MANUFACTURERS' CERTIFICATIONS TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- 2. PAID AS ITEM 900.620 SPECIAL PROVISION (CATCH BASINS AND DRAINAGE STRUCTURES)
- 3. DS#B SHALL BE PROVIDED WITH A 3'-DIAMETER REMOVABLE TRASH RACK, SEE DETAIL.

OUTLET STRUCTURE K DETAIL

SCALE: NOT TO SCALE

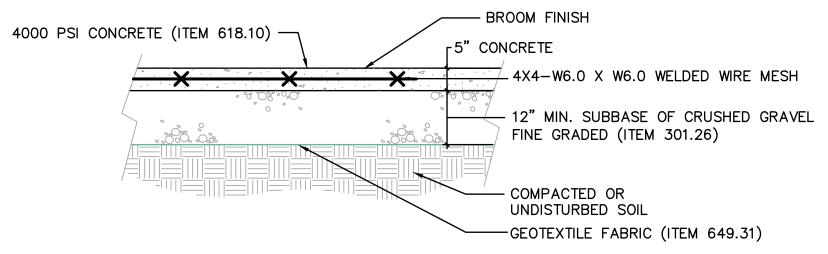
Burlington, (802) 86(CITY OF SOUTH BURLINGTON 180 MARKET STREET PROJECT NO. 107881

NOT FOR

CONSTRUCTION

DRAINAGE DETAILS

SHEET 8 OF 10



NOTES:

- 1. PROVIDE EXPANSION JOINT EVERY 25'
- 2. PROVIDE CONTROL JOINTS EVERY 5', 1/4 1/3 THICKNESS OF SLAB
- 3. DO NOT USE CALCIUM CHLORIDE OR OTHER MATERIALS CONTAINING ANTIFREEZE OR CHEMICAL
- 4. AIR CONTENT: 5-7% AIR ENTRAINMENT
- 5. MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO: 0.50
- 6. SLUMP LIMIT: 3-4" PRIOR TO ANY WATER REDUCING ADDITIVE
- 7. DOWEL AND EPOXY TO EXISTING SIDEWALK.

CONCRETE SIDEWALK DETAIL

SCALE: NOT TO SCALE

TRENCH PAVEMENT RESTORATION SECTION AND PAY LIMIT NOTES:

18" MIN

NEW PIPE

PE THREADED ROD W/

WING NUTS AND SPACERS

WATER/STORM

OTHER CROSSINGS

MIN. 2' WIDE X 4" THICK

MIN. 2' WIDE X 4" THICK

INSULATION BOARD (USE 2-2"

INSULATION BOARD (USE 2-2" -

OTHER CROSSINGS

WATER/STORM CROSSINGS

TOP VIEW

PIPE SIZE

30**"**

12" MIN. AT

THICK BOARDS)

THICK BOARDS)

18" MIN.

12" MIN.

SECTION

SAWCUT (INCIDENTAL TO ITEM 406.25) — > | -

COURSE, TYPE IV

1.5" PAVEMENT WEARING

BITUMINOUS CONCRETE

PAVEMENT ITEM 406.25

FINE GRADED ITEM 301.26

6" CRUSHED GRAVEL SUB-BASE,

TRENCH WIDTH, PAY LIMIT, SUB-BASE

AND BACKFILL MATERIALS AS PER STANDARD STORM DRAIN TRENCH

- PAVEMENT STANDARDS ARE FOR 1.5 INCH WEARING COURSE AND 2.5 INCH BASE COURSE, HOWEVER, CONTRACTOR SHALL MATCH EXISTING DEPTH OF BASE COURSE TO REPLACE ASPHALT TO EXISTING SURFACE.
- 2. ALL EXPOSED BITUMINOUS SURFACES SHALL BE COATED WITH EMULSIFIED ASPHALT PRIOR TO PLACEMENT OF NEW BITUMINOUS PAVEMENT.

TRENCH PAVEMENT RESTORATION

SECTION AND PAY LIMITS DETAIL

SCALE: NOT TO SCALE

EXISTING PIPE

EXISTING PIPE

TYPICAL PIPE CROSSINGS

TYPICAL PIPE CROSSING DETAILS

SCALE: NOT TO SCALE

RIGHT SIDE VIEW

SCALE: NOT TO SCALE

8.6"

B(MAX)

22"

7.5"

/ NEW PIPE

PERMANENT

RESTORATION PAY LIMIT

TRENCH PAY _____

LIMIT

TRENCH PAVEMENT -- SAWCUT (INCIDENTAL TO ITEM 406.25)

TYPE II

2.5" PAVEMENT BASE COURSE,

12" CRUSHED GRAVEL SUB-BASE,

- EXIST. PIPE

EXIST. PIPE

COMPACTED 3/4-INCH

COMPACTED 3/4-INCH

(NO. 67) STONE.

(NO. 67) STONE.

(MATCH EXISTING DEPTH)

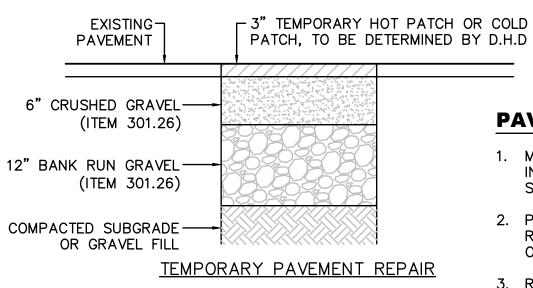
FINE GRADED ITEM 301.26

--| |- 1' (MIN.)

WITH 4" MINIMUM {2" WEARING COURSE WHICHEVER IS GREATER {2" BASE COURSE -6" CRUSHED GRAVEL (ITEM 301.26) MIN. CUTBACK AT TOP OF TRENCH WALL OVER ---12" BANK RUN GRAVEL UNDISTURBED MATERIAL. (ITEM 301.26) - COMPACTED SUBGRADE OR GRAVEL FILL PERMANENT PAVEMENT REPAIR -3" TEMPORARY HOT PATCH OR COLD

BITUMINOUS PAVEMENT, DEPTH EQUAL

TO EXISTING PAVEMENT THICKNESS OR



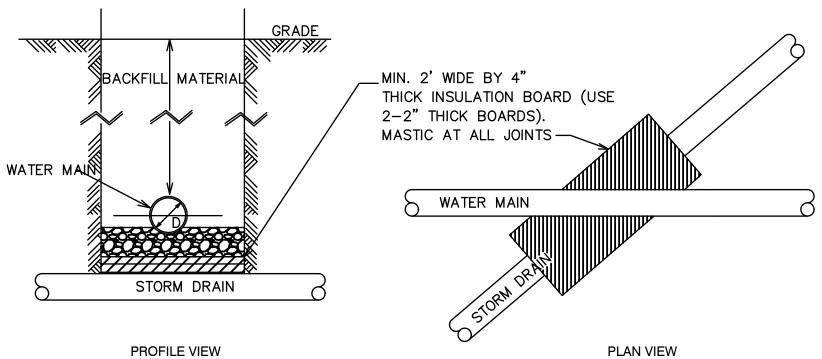
PAVEMENT REPAIR NOTES:

- 1. MATERIALS SHOULD BE REPLACED IN-KIND. WITH MINIMUM THICKNESS AS
- 2. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REQUIREMENTS.
- 3. ROADWAY CONSTRUCTION SHALL CONFORM TO VTRANS STANDARD SPECIFICATIONS.
- 4. NOT FOR WINTER CONSTRUCTION

TYPICAL PAVEMENT REPAIR DETAILS

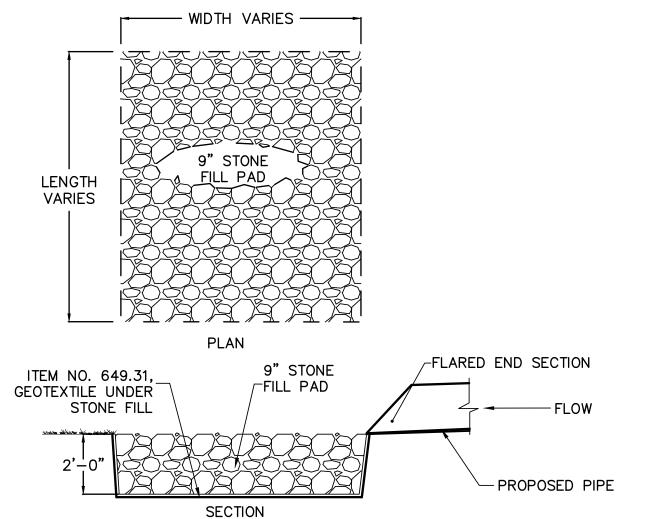
SCALE: NOT TO SCALE

PROVIDE INSULATION WHEN WATER MAIN CROSSES ABOVE OR BELOW STORM DRAIN





SCALE: NOT TO SCALE



STONE PAD PROTECTION DETAIL

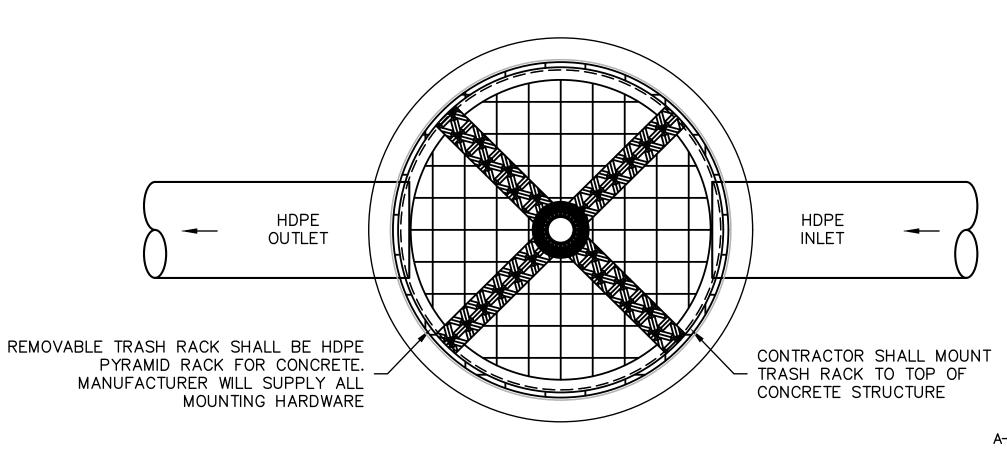
SCALE: NOT TO SCALE

- 1. WHEN CONCRETE SIDEWALK IS CONSTRUCTED ADJACENT TO CONCRETE CURB, ASPHALT TREATED FELT SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB FOR THE TOTAL DEPTH OF THE SIDEWALK. A MONOLITHIC CURB AND SIDEWALK WILL NOT BE ACCEPTED.
- 2. CAST-IN-PLACE CEMENT CONCRETE CURB SHALL BE CONSTRUCTED IN CONFORMANCE TO THE REQUIREMENTS OF SECTION 616.06 OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS.
- 3. ALL CAST-IN-PLACE CONCRETE FOR CURBING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 541 OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONCRETE, CLASS B. THERE SHALL BE A MINERAL ADMIXTURE SUBSTITUTION FOR PORTLAND CEMENT OF 20% FLY ASH OR 25% GGBFS. CONCRETE WILL BE SUBJECT TO INSPECTION AND TESTS FOR COMPLIANCE WITH QUALITY REQUIREMENTS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT AND SUB-BASE IN FRONT OF CURB AS PER PAVEMENT REPLACEMENT DETAIL.

12" MIN. CUTBACK OF TOP COURSE PVM'T SURFACE 12" MIN. CRUSHED GRAVEL SUBBASE 24" PAVEMENT REPLACEMENT IN FRONT OF CURB. SEE NOTE 4. - 12" MIN. CRUSHED GRAVEL SUBBASE

CAST-IN-PLACE CONCRETE CURB TYPE B DETAIL

SCALE: NOT TO SCALE

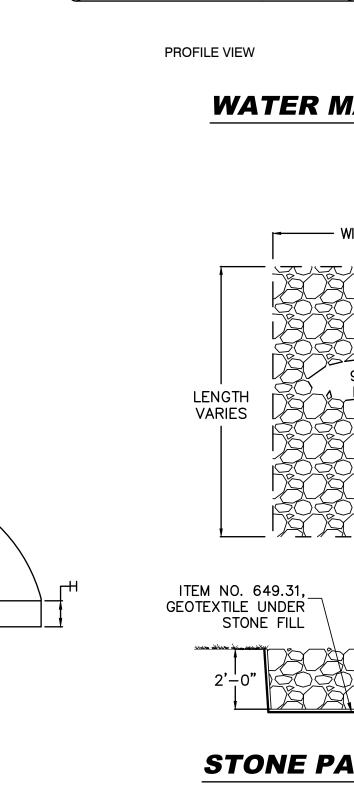


NOTES:

1. PAID AS ITEM 900.620 SPECIAL PROVISION (REMOVABLE TRASH RACK). SEE SPECIAL PROVISION FOR REQUIREMENTS.

REMOVABLE TRASH RACK DETAIL

SCALE: NOT TO SCALE



FLARED END SECTION DETAIL

58"

FRONT VIEW

PROJECT NO. 107881

NOT FOR

CONSTRUCTION

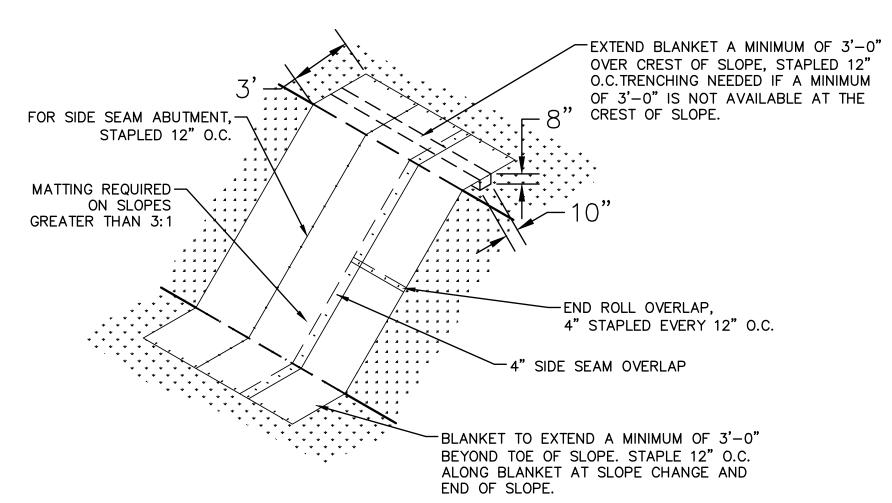
THIS DOCUMENT IS PAIN INSTRUMENT OF SHALL REMAIN THE PHOYLE, TANNER. IT NUSED, REPRODUCED, OR TRANSFERRED IN INCLUDING ELECTRONANY OTHER PURPOSE PROJECT. WITHOUT I

.25 College S Burlington, (802) 86

GENERAL DETAILS

CITY OF

SHEET 9 OF 10

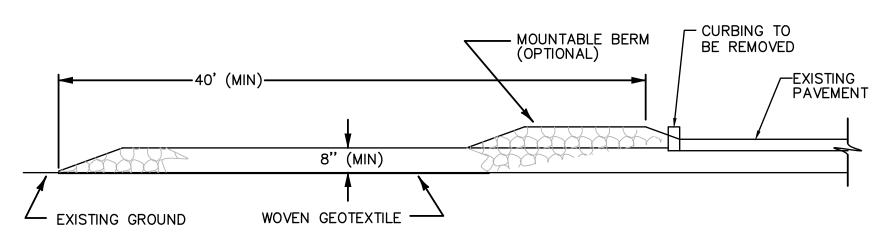


NOTES:

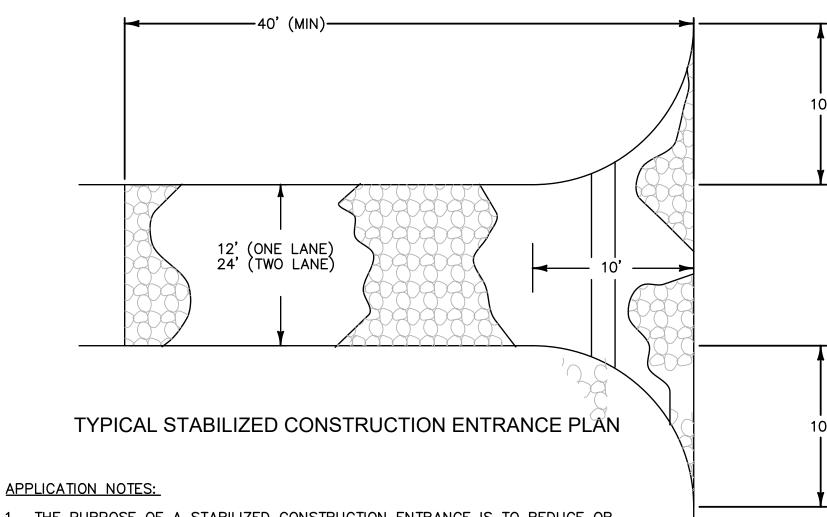
- 1. MATTING TO BE USED SHALL BE CURLEX $^{(\!R\!)}$ O1 MANUFACTURED BY AMERICAN EXCELSIOR COMPANY, OR APPROVED EQUAL
- 2. STAPLE PATTERNS ARE DEPENDENT ON SITE CONDITIONS. SEE CURLEX[®] STAPLE PATTERN GUIDE FOR DETAILS.

EROSION CONTROL MATTING SLOPE DETAIL

SCALE: NOT TO SCALE



TYPICAL CONSTRUCTION ENTRANCE PROFILE



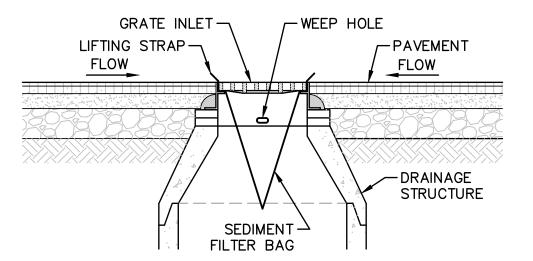
1. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY OR STREETS

GENERAL NOTES:

- 1. STONE SIZE USE CLEAN STONE WITH GRADATION BETWEEN 1 INCHES AND 4 INCHES.
- 2. LENGTH 40 FEET (MIN)
- 3. THICKNESS 18 INCHES (MIN)
- 4. WIDTH 12 FEET (MIN)
- 5. GEOTEXTILE UNDER STONE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. WHEN WASHING OF VEHICLE IS NECESSARY, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 7. THE ENTRANCE SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT.
- 8. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 9. AT THE TIME OF REMOVAL OF THE STABILIZED CONSTRUCTION ENTRANCE THE DISTURBED AREA SHALL BE REPAIRED AND STABILIZED.

CONSTRUCTION ENTRANCE DETAIL

SCALE: NOT TO SCALE

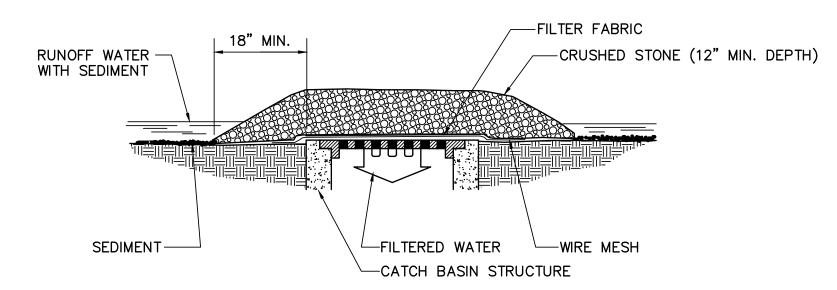


INLET PROTECTION NOTES:

- 1. REMOVE DRAINAGE INLET GRATE AND PLACE SEDIMENT FILTER BAG AROUND THE FRAME, REPLACE GRATE AND SEDIMENT FILTER BAG IN POSITION OR FOLLOW MANUFACTURER'S RECOMMENDATIONS. LIFTING STRAPS SHALL BE EXPOSED AND READY FOR MAINTENANCE PROCEDURES.
- 2. INSPECT SEDIMENT FILTER BAG WEEKLY AND AFTER EVERY RAINFALL EVENT.
- REPLACE, CLEAN OR REMOVE SEDIMENT FILTER BAG AS DIRECTED.
- 4. INLET PROTECTION SHALL BE PROVIDED FOR ALL CATCHBASINS THAT WILL RECEIVE RUNOFF FROM DISTURBED

SEDIMENTATION CONTROL AT CATCH BASIN

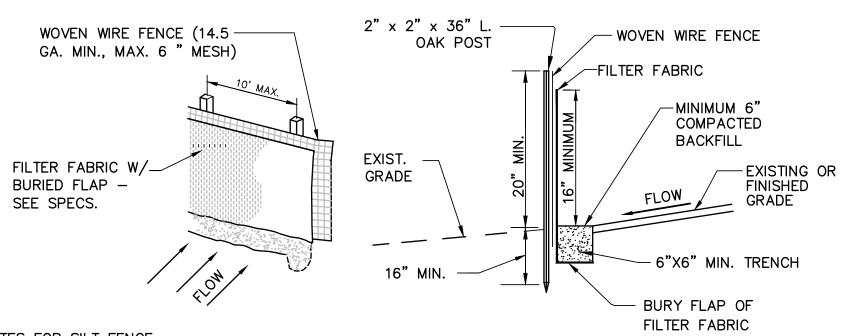
SCALE: NOT TO SCALE



- 1. A WIRE MESH SHALL BE PLACED OVER THE DROP INLET OR CURB OPENING SO THAT THE ENTIRE OPENING AND A MINIMUM OF 12 INCHES AROUND THE OPENING ARE COVERED BY THE MESH. THE MESH MAY BE ORDINARY HARDWARE CLOTH OR WIRE MESH WITH OPENINGS UP TO 1/4 INCH.
- 2. THE WIRE MESH SHALL BE COVERED WITH CLEAN COARSE AGGREGATE SUCH AS CRUSHED STONE FOR A MINIMUM DEPTH OF 12 INCHES. CRUSHED STONE SHALL BE BEDDING STONE FOR SEWERS (ASTM STONE SIZE NO. 67). SEE SPECIFICATIONS.
- 3. THE COARSE AGGREGATE SHALL EXTEND AT LEAST 18 INCHES BEYOND ALL SIDES OF THE CATCH BASIN/DRAIN
- 4. THIS SEDIMENTATION CONTROL SHALL BE UTILIZED AT ALL CATCH BASINS ENCOUNTERED

SEDIMENTATION CONTROL AT CATCH BASIN

SCALE: NOT TO SCALE



NOTES FOR SILT FENCE:

- 1. SPACING OF WOOD FENCE POSTS NOT TO EXCEED 10'-0".
- 2. SILT FENCE SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE
- 3. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES AT TOP. MIDPOINT AND BOTTOM.
- 4. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE.
- 5. OVERLAP BY 6", FOLD AND STAPLE ADJOINING SECTIONS OF FILTER FABRIC.
- 6. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT MATERIAL NEAR WETLANDS OR WATERCOURSES.
- 7. FILTER FABRIC SHALL BE ENTRENCHED 6" MIN. BELOW EXISTING OR FINISHED GRADE.

SILT FENCE DETAIL

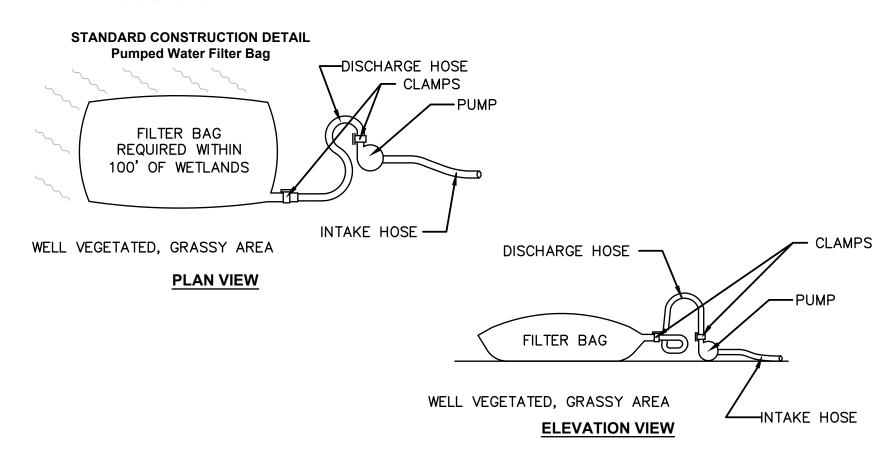
SCALE: NOT TO SCALE

CONSTRUCTION DEWATERING NOTES:

- 1. THE CONTRACTOR WILL PROVIDE DEWATERING EQUIPMENT (I.E. PUMPS, HOSES, ETC.,) CAPABLE OF CONTROLLING GROUNDWATER ENCOUNTERED IN THE EXCAVATIONS SUCH THAT ALL CAN BE PERFORMED "IN THE DRY." SEE SPECIAL PROVISION SPECIFICATION SECTION 900.645-02140 (DEWATERING)
- 2. AS NEEDED, CONSTRUCTION DEWATERING DISCHARGED TO THE SUBSURFACE OR TO SURFACE WATER BODY/DRAINAGE SYSTEM SHALL BE PRETREATED FOR SEDIMENT REMOVAL BY RESIDING IN A FILTER BAG OR FRACTIONATION/SEDIMENTATION TANK PRIOR TO DISCHARGE. UNDER NO CIRCUMSTANCES IS WATER FROM THE SEDIMENTATION TANK TO BE DISCHARGED DIRECTLY TO A WETLAND RESOURCE AREA. WATER FROM THE SEDIMENTATION TANK MUST BE DISCHARGED THROUGH A CATCH BASIN WITH AN ADEQUATE AND FUNCTIONING SUMP OR THROUGH A SEDIMENTATION TRAP PRIOR TO ENTERING A WETLAND RESOURCE AREA OR RECEIVING WATER. THE OUTLET MUST BE INSPECTED DURING OPERATION TO CONFIRM THAT SEDIMENT IS NOT BEING DISCHARGED TO A WETLAND RESOURCE AREA.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PROPER PERMITTING FOR CONSTRUCTION DEWATERING ACTIVITIES.

EROSION CONTROL NOTES:

- 1. ALL DRAINAGE OUTLETS SHALL BE LOCATED AND CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES INSTALLED AS REQUIRED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL SUBMIT A NOTICE OF INTENT (NOI) AND AN EROSION PREVENTION AND SEDIMENTATION CONTROL PLAN PRIOR TO BEGINNING OF WORK. ALL DEWATERING AND OPERATIONS SHALL CONFORM TO ALL APPROPRIATE AGENCY REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED DISCHARGE SAMPLING AND TESTING AND SHALL BE INCIDENTAL TO THE DEWATERING OPERATIONS.
- 2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROVIDE EROSION PREVENTION AND SEDIMENT CONTROL.
- THE CONTRACTOR SHALL FULLY COMPLY WITH ALL LOCAL AND STATE REGULATIONS.
- 4. THE CONTRACTOR SHALL FURNISH, INSTALL AND PERFORM ALL NECESSARY REQUIREMENTS TO COMPLY WITH THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL AND THESE PLANS AND SPECIFICATIONS. THE MORE STRINGENT SHALL APPLY.
- 5. THE CONTRACTOR SHALL PHASE CONSTRUCTION ACTIVITIES TO MINIMIZE THE TIME THAT SOIL IS LEFT
- 6. PROPERLY ENTRENCHED SILTATION FENCE SHALL BE INSTALLED IMMEDIATELY OUTSIDE OF THE PAVEMENT OR AS SHOWN ON THE PLANS.
- 7. SILT FENCE INSTALLATIONS SHALL BE INSPECTED FOR THE FOLLOWING:
 - VISIBLE DAMAGE TO SILT FENCE INSTALLATIONS.
 - SEDIMENT ACCUMULATION: SEDIMENT REMOVAL SHALL OCCUR WHEN SEDIMENT HAS ACCUMULATED TO NO MORE THAN ONE THIRD THE HEIGHT OF THE FENCE.
 - SIGNS OF CHANNEL OR GULLY EROSION FORMATION PARALLEL TO THE FENCE.
 - SIGNS OF DETERIORATED OR CLOGGED GEOTEXTILE; REPLACE AS NEEDED.
 - SIGNS OF UNDER CUTTING OR PIPING.
 - STAKES SHALL BE SECURED TO THE GROUND.
- 8. INSPECTIONS OF THE PROJECT SITE AND ALL EROSION CONTROL BARRIERS BY THE CONTRACTOR SHALL OCCUR DAILY AND AFTER EVERY SIGNIFICANT PRECIPITATION EVENT (EXCEEDING 1/2-INCH PRECIPITATION).
- 9. IN ADDITION LIME SHALL BE ADDED TO THE TOPSOIL IN AMOUNTS AS NECESSARY TO ACHIEVE THE REQUIRED PH AS SPECIFIED.
- 10. SHOULD SEASONAL LIMITATIONS MAKE ESTABLISHMENT OF GRASS ON AREAS TOPSOILED, SEEDED, AND MULCHED UNREALISTIC, SUCH AREAS SHALL BE TREATED WITH BONDED FIBER MULCH.
- 11. ALL AREAS DISTURBED SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- 12. ALL CUT & FILL SLOPES SHALL BE LOAMED AND SEEDED WITHIN 72 HOURS OF ESTABLISHING FINISHED GRADE.
- 13. IF THE PROJECT CONTINUES INTO THE WINTER THE FOLLOWING CRITERIA SHALL BE MET:
 - ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES STEEPER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
 - ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.



FILTER BAG DISCHARGE DETAIL

SCALE: NOT TO SCALE

NOT FOR CONSTRUCTION

	THIS DOCUMENT IS	PREPARED AS		
th Floor	AN INSTRUMENT OF SHALL REMAIN THE	SERVICE AND PROPERTY OF		
. ~	HOYLE, TANNER. IT MAY NOT BE USED, REPRODUCED, DISSEMINATED	MAY NOT BE DISSEMINATED		
331 Jer.com	OR TRANSFERRED IN INCLUDING ELECTRO	ONICALLY, FOR		
	ANY OTHER PURPO PROJECT, WITHOUT	THE WRITTEN		
	PERMISSION OF HC	YLE, IANNER.		
DESIGNED E	DESIGNED BY DRAWN BY	CHECKED BY		

25 College : Burlington, (802) 86

IP

BURLINGTON STREET SOUTH PP. ≽

EROSION AND SEDIMENT CONTROL DETAILS

SHEET 10 OF 10

PROJECT NO. 107881