CITY OF SOUTH BURLINGTON, VERMONT
CONTRACT DRAWINGS FOR
BURLINGTON COUNTRY CLUB
GRAVEL WETLAND

MARCH, 2021

CITY COUNCIL

HELEN RIEHLE, CHAIR

MEAGHAN EMERY, VICE CHAIR

TIM BARRITT, CLERK

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CITY MANAGER

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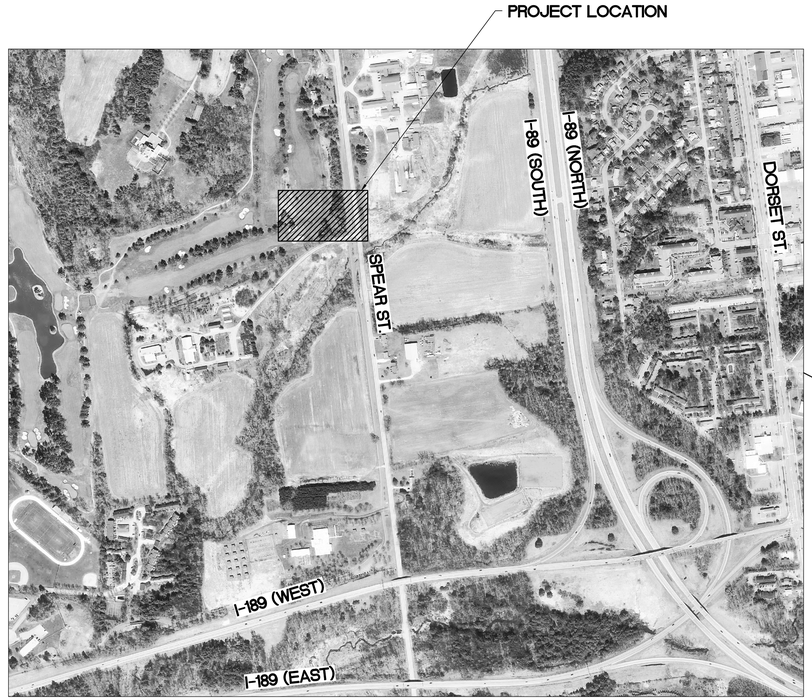
PUBLIC WORK DIRECTOR / CITY ENGINEER

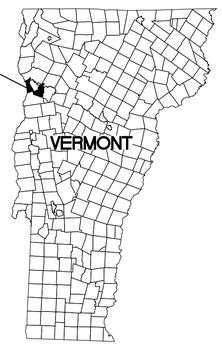
JUSTIN RABIDOUX

ENVIRONMENTAL SERVICES DIRECTOR

TOM DiPIETRO



LOCATION MAP
SCALE: 1"=500'



DRAWING No.	DRAWING TITLE
T	TITLE SHEET AND INDEX OF DRAWINGS
1	GENERAL NOTES AND LEGEND
2A	EXISTING SITE PLAN
2	PROPOSED SITE PLAN
3	PROPOSED PROFILES
4	PLANTING PLAN
5	STORMWATER DETAILS
6	SITE, ROADWAY, AND EROSION CONTROL DETAILS AND NOTES
7	EROSION CONTROL DETAILS

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Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

STATE OF VERMONT
JASON R. BOOTH
No. 9235
Civil
LICENSED PROFESSIONAL ENGINEER

VATERSHED CONSULTING ASSOCIATES, LLC

No.	DATE	DESCRIPTION	CHECKED
1	6-15-21	SHEET 2A ADDED TO SET	JAB

CITY OF SOUTH BURLINGTON, VERMONT

BURLINGTON COUNTRY CLUB GRAVEL WETLAND

TITLE SHEET AND INDEX OF DRAWINGS

DESIGNED	PROJECT NO.
JSK	20018
DRAWN: JEN	DRAWING: T
CHECKED: JAB	
DATE: MARCH, 2021	

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LEGEND

EXISTING

PLAN

- PROPERTY LINE ——PL——
- RIGHT–OF–WAY ——ROW——
- CONTOUR ——360——
- WATERLINE ——W——
- TELEPHONE CONDUIT (UNDERGROUND) ——UGT——
- ELECTRICAL CONDUIT (UNDERGROUND) ——UGE——
- OVERHEAD POWER ——OHP——
- SANITARY SEWER ——S——
- STORMDRAIN ——SD——
- FENCE — x — x — x — x —
- TREE/BRUSH LINE
- GRAVEL ROAD OR DRIVE
- BITUMINOUS PAVEMENT
- BODY OF WATER
- WETLAND
- UTILITY POLE
- LIGHT POLE
- GUY WIRE
- MANHOLE
- CATCH BASIN
- HYDRANT
- VALVE
- SIGN
- DECIDUOUS TREE
- CONIFEROUS TREE
- SURVEY POINT SET
- BENCHMARK (BM)
- ELECTRICAL PEDESTAL

PROFILE

- GROUND SURFACE
- PIPE CROSSING

PROPOSED

PLAN

- CONTOUR ——360——
- STORMDRAIN ——SD——
- CATCH BASIN
- MANHOLE
- TEST PIT (BY CONTRACTOR)
- TEST PIT (BY ENGINEER)

PROFILE

- PIPELINE
- INSULATION OVER PIPE

GENERAL CONSTRUCTION NOTES

1. **SAFETY**

   A. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF EMPLOYEES ON THE PROJECT AND SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF FEDERAL, STATE AND LOCAL SAFETY LAWS AND BUILDING CODES TO PREVENT ACCIDENTS OR INJURY. THE CONTRACTOR SHALL ERECT AND PROPERLY MAINTAIN AT ALL TIMES ALL NECESSARY SAFEGUARDS AND BARRICADES FOR THE PROTECTION OF EMPLOYEES ON THE WORK AND SAFETY OF OTHERS EMPLOYED NEAR THE WORK AND THE PUBLIC. FURTHER, THE CONTRACTOR SHALL POST DANGER SIGNS AND OTHER WARNING DEVICES TO PROTECT INDIVIDUALS FROM BEING INJURED IN THE VICINITY OF THE WORK.

   B. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE V.O.S.H.A. SAFETY REQUIREMENTS. THE CONTRACTOR SHALL INSURE ALL WORK PROCEEDS IN ACCORDANCE WITH V.O.S.H.A. REQUIREMENTS FOR SAFETY TRENCHING, EXCAVATION, AND CONFINED SPACE ENTRY PROCEDURES.

   C. THE CONTRACTOR SHALL PROVIDE ADEQUATE EQUIPMENT AND FACILITIES AS ARE NECESSARY AND REQUIRED TO PROVIDE EMERGENCY FIRST AID TO ANY PERSON WHO MAY BE INJURED IN THE PROSECUTION OF THE WORK UNDER THIS CONTRACT.

   D. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY TRAFFIC CONTROL SIGNS AND DEVICES BEFORE COMMENCING WORK ON THE PROJECT IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

2. **EASEMENTS**

   A. THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN TEMPORARY CONSTRUCTION EASEMENT LIMITS AND/OR RIGHTS–OF–WAY AS SHOWN ON THE PLANS.

   B. WHERE NO TEMPORARY CONSTRUCTION EASEMENT IS SHOWN ON CONTRACT DRAWINGS, THE CONTRACTOR SHALL STAY WITHIN THE PERMANENT EASEMENT LIMITS, AND/OR RIGHTS–OF–WAY DURING CONSTRUCTION, AS SHOWN ON THE PLANS.

3. **PROTECTION OF WORK**

   A. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF ALL BUILDINGS, STRUCTURES AND UTILITIES (BOTH PUBLIC AND PRIVATE), INCLUDING POWER POLES, SIGNS, UTILITY SERVICES, WATER MAINS, HYDRANTS, SEWERS, STORM DRAINS, BURIED ELECTRICAL OR CONTROL WIRES, GAS LINES, AND TELEPHONE CABLES WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS.

   B. THE CONTRACTOR SHALL CAREFULLY SUPPORT AND PROTECT ANY UTILITIES, STRUCTURES, PIPE LINES, AND CONDUITS WHICH MAY BE ENCOUNTERED DURING COMPLETION OF THE WORK. ANY DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY HIM TO THE SATISFACTION OF THE ENGINEER AT CONTRACTOR'S EXPENSE.

4. **MAINTENANCE OF FLOWS**

   A. THE CONTRACTOR SHALL AT HIS OWN COST, MAKE PROVISIONS FOR MAINTAINING FLOW THROUGH EXISTING FORCE MAINS, SEWER LINES, WATERLINES, STORM DRAINS, STORMWATER PRACTICES, AND WATER COURSES WHICH MUST BE INTERRUPTED DURING THE PROGRESS OF THE WORK. UPON COMPLETION OF THE WORK, ALL TEMPORARY FLOW DIVERSIONS, STRUCTURES, AND PIPING SHALL BE REMOVED FROM THE SITE.

5. **BURIED UTILITIES**

   A. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE ONLY. THOSE SHOWN ON THE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MEET WITH THE ENGINEER, OWNER, REPRESENTATIVES OF THE TELEPHONE COMPANY, ELECTRICITY COMPANY, GAS COMPANY, CABLE COMPANY, AND ANY OTHER UTILITY COMPANIES INVOLVED WITH THE CONSTRUCTION OF THIS PROJECT TO COORDINATE THE MARKING, AND TIMING OF DISRUPTIONS OF THE VARIOUS UTILITIES, IF ANY.

   B. THE CONTRACTOR SHALL EXCAVATE TEST PITS AS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER. THESE SHALL BE EXCAVATED TO LOCATE BURIED UTILITIES AND TO DETERMINE SIZE, LOCATIONS AND/OR MATERIALS OF EXISTING UTILITIES. SOME HAND EXCAVATING MAY BE NECESSARY TO PROTECT UTILITIES. TEST PITS SHALL BE EXCAVATED AT LEAST TWO (2) WEEKS PRIOR TO CONSTRUCTION SO THAT DESIGN REVISIONS MAY BE MADE IF REQUIRED. TEST PITS INDICATED ON DRAWINGS OR BY WRITTEN DIRECTION FROM THE ENGINEER WILL BE CONSIDERED INCIDENTAL TO THE LUMP SUM PRICES FOR EACH POND.

   C. EXISTING UTILITIES SHALL BE PROTECTED OR REMOVAL AND REPLACEMENT SHALL BE COORDINATED WITH THE APPROPRIATE COMPANY. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR REPAIR OF ANY SUCH DAMAGE AS QUICKLY AS POSSIBLE AT HIS OWN EXPENSE. ALL UTILITIES WHICH MAY BE BROKEN OR DAMAGED SHALL BE REPAIRED TO AS GOOD OR BETTER CONDITION AND RECONNECTED FOR SERVICE. SUBMIT ALL REPAIR METHODS TO THE ENGINEER FOR APPROVAL. NO REPAIR SHALL BE BACKFILLED PRIOR TO INSPECTION BY THE ENGINEER IN THE FIELD. CONTRACTOR SHALL TAKE MEASUREMENTS TO DOCUMENT WHERE ALL SERVICE REPAIRS ARE MADE. RECORDS SHALL BE MADE AVAILABLE TO THE ENGINEER AND OWNER UPON REQUEST AND PRIOR TO THE END OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN A SUPPLY OF REPAIR MATERIALS AND PIPE ON THE JOB SITE AT ALL TIMES IN ORDER TO MINIMIZE THE INCONVENIENCE CAUSED BY SUCH DAMAGE.

   D. THE CONTRACTOR SHALL PERMANENTLY PLUG ALL EXISTING STORMWATER LINES WHICH ARE REPLACED BY NEW ONES AT THE POINT WHERE THEY ARE DISCONNECTED UNLESS THEY ARE TO REMAIN IN SERVICE.

6. **CONSTRUCTION**

   A. THE CONTRACTOR SHALL USE ONLY DESIGNATED BENCH MARKS FOR REFERENCE ELEVATIONS.

   B. CONTRACTOR SHALL ANTICIPATE ENCOUNTERING GROUNDWATER. CONTRACTOR IS REQUIRED TO MANAGE ANY GROUNDWATER AND MAINTAIN STABILIZED SLOPES DURING EXCAVATION AND CONSTRUCTION OF UPGRADES AND UNTIL SLOPES AND GROUND VEGETATION ARE ESTABLISHED AND DO NOT REQUIRE SUPPORT.

   C. EXISTING WATER MAINS ARE UNDER PRESSURE. THE CONTRACTOR IS ADVISED TO TAKE PRECAUTIONS TO AVOID "BLOWING OUT" OF EXISTING WATER MAINS FROM THE SIDES OF TRENCHES DURING CONSTRUCTION. TEMPORARY SHEETING AND BRACING MAY BE REQUIRED. CONTRACTOR SHALL NOTIFY THE CHAMPLAIN WATER DISTRICT A MINIMUM OF TWO (2) WEEKS PRIOR TO ANY EXCAVATION THAT MAY IMPACT OR EXPOSE THE EXISTING WATERMAIN.

   D. THE CONTRACTOR SHALL INSTALL A MECHANICAL PLUG IN THE END OF ALL PIPE WORK AT THE COMPLETION OF EACH WORK DAY TO SEAL IT FROM WATER AND SOIL.

   E. EROSION CONTROL, AS NECESSARY, SHALL BE PROVIDED BY THE CONTRACTOR, IN ACCORDANCE WITH CONTRACT DOCUMENTS. EROSION CONTROLS SHALL BE IN PLACE DOWNSTREAM OF THE AREA OF CONSTRUCTION PRIOR TO THE START OF ANY EARTH DISTURBANCE. ALL DISTURBED AREAS ARE TO BE IMMEDIATELY STABILIZED.

   F. CONTRACTOR SHALL LIMIT DISTURBANCE OF ROADWAY AND PAVED PATH. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ANY SECTION OR SECTIONS OF EACH THAT ARE DISTURBED DURING THE COURSE OF WORK. ALL REPLACEMENT OF ROADWAY AND PATH REQUIRED BY THE CONTRACTOR SHALL BE IN ACCORDANCE WITH CITY STANDARDS.

7. **SITEWORK**

   A. THE CONTRACTOR IS RESPONSIBLE FOR RECORDING PRECONSTRUCTION CONDITIONS BY USE OF PHOTOGRAPHS, VIDEO TAPES, AND OTHER METHODS. EXISTING FENCES, GUARDRAILS, SIGNS, CATCH BASINS, CULVERTS, HEADWALLS, ETC. REMOVED BY THE CONTRACTOR SHALL BE REPLACED TO AT LEAST THEIR ORIGINAL CONDITION. THE COST OF THIS PRECONSTRUCTION DOCUMENTATION AND RECONSTRUCTION SHALL BE INCLUDED IN THE LUMP SUM PRICES FOR EACH POND.

   B. ALL EXCESS MATERIAL SHALL BE LEGALLY DISPOSED OF OFF SITE UNLESS OTHERWISE APPROVED BY THE OWNER. A COPY OF A WRITTEN AGREEMENT BETWEEN THE CONTRACTOR AND THE SITE OWNER AND ANY APPLICABLE PERMITS SHALL BE SUBMITTED TO THE ENGINEER BEFORE ANY MATERIAL IS DEPOSITED ON ANY SITE. DISPOSAL OF EXCESS MATERIAL OFF–SITE SHALL BE PERFORMED IN ACCORDANCE WITH SOLID WASTE MANAGEMENT DIVISION REGULATIONS AND SHALL INCLUDE OBTAINING ANY REQUIRED PERMITS.

   C. CONTRACTOR SHALL REMOVE FROM SITE AND DISPOSE OF ALL SOILS/LEDGE/BOULDERS, PIPES, CONCRETE, ETC. NECESSARY FOR THE COMPLETION OF EACH NEW STORMWATER PRACTICE.

   D. CONTRACTOR IS RESPONSIBLE FOR RESTORING GRAVEL SHOULDERS, PAVED SHOULDERS, ROADWAY SURFACES, DRIVEWAYS, AND CULVERTS TO THE SAME OR BETTER CONDITION AT PROJECT COMPLETION. THE COST OF RESTORATION SHALL BE INCLUDED IN THE APPROPRIATE LUMP SUM BID ITEM.

8. **RECORD DOCUMENTS**

   A. ALL BURIED UTILITIES ENCOUNTERED SHALL BE DOCUMENTED WITH DEPTH AND THREE (3) TIES AND SHOWN BY THE CONTRACTOR ON RECORD DRAWINGS.

9. **DIGSAFE**

   A. CONTRACTOR WILL BE REQUIRED TO SUBMIT AN EXCAVATION APPLICATION TO THE CITY OF SOUTH BURLINGTON PRIOR TO COMMENCING WORK.

   B. CONTRACTOR SHALL NOTIFY DIG SAFE TWO (2) WEEKS PRIOR TO ANY ANTICIPATED EXCAVATIONS. CONTRACTOR SHALL NOT EXCAVATE IN ANY AREAS UNTIL DIG SAFE HAS BEEN TO THE SITE AND HAS MARKED UTILITIES. (DIG SAFE: 1–888–344–7233)

   C. CITY OF SOUTH BURLINGTON ASSISTANT STORMWATER SUPERINTENDENT SHALL BE NOTIFIED (2) TWO WEEKS PRIOR TO ANY ANTICIPATED EXCAVATION AT (802) 658–7976 X6113.

   D. C. IN THE EVENT OF A SEWER, WATER, OR STORMWATER EMERGENCY, CONTACT DEPARTMENT OF PUBLIC WORKS AT (802) 658–7961 OR POLICE DISPATCH AT (802) 846–4111.

10. **SURVEY**

    A. TOPOGRAPHIC SURVEY DATUM IS BASED ON THE NATIONAL GEODETIC SURVEY USING NAD 83 (1996) HORIZONTAL DATUM AND NAVD 88 VERTICAL DATUM.

    B. PROPERTY AND RIGHT OF WAY (ROW) LINES SHOWN ON THESE DRAWINGS WERE OBTAINED FROM VERMONT CENTER FOR GEOGRAPHIC INFORMATION (VCGI). THEY SHOW AN APPROXIMATION OF PROPERTY AND ROW LINES AS THEY RELATE TO THE PROJECT DETAILS BASED ON THE SOURCE REFERENCE INFORMATION. A+E DOES NOT WARRANT THE ACCURACY OF THIS INFORMATION. THESE DRAWINGS SHALL NOT BE CONSTRUED AS A PROPERTY PLAT AND DO NOT DEFINE LEGAL RIGHTS OR MEET LEGAL REQUIREMENTS FOR A LAND SURVEY AS DESCRIBED IN 26 V.S.A. 2502(4).

Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

STATE OF VERMONT
JASON R. BOOTH
No. 9235
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LICENSED
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CITY OF SOUTH BURLINGTON, VERMONT

BURLINGTON COUNTRY CLUB GRAVEL WETLAND

GENERAL NOTES AND LEGEND

DESIGNED	PROJECT NO.
JSK	20018
DRAWN: JEN	DRAWING: 1
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DATE: MARCH, 2021	

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CONTRACTOR SHALL CONTINUE FENCING ALL AROUND NORTHERN STOCKPILE AND MAINTAIN THROUGHOUT CONSTRUCTION

PROJECT DEMARCATION FENCE (TYP.)

20' WIDE CONSTRUCTION ACCESS DRIVE

CITY OF BURLINGTON
CITY OF SOUTH BURLINGTON

1 EXISTING IRRIGATION LINE TO BE REOMVED (SEE SHEET 2A)

CLEARING LIMITS (TYP.)

APPROXIMATE TEE BOX

6 FOOT WIDE TRAIL

SPEAR STREET - UNIT PRICE BID ITEMS

30" PE INV=290.25'
PROVIDE FLARED END SECTION

SILT FENCE (TYP.)

GRAVEL WETLANDS TYPE II STONE INLET

REMOVE EXISTING 24" PE

GRADING TO BE COMPLETED AROUND EXISTING CATCH BASIN. (SEE NOTE 1) (SITE ACCESS FOR GRADING TO BE COORDINATED AND APPROVED BY THE BURLINGTON COUNTRY CLUB)

EXISTING CB
RIM=300.17'
4" PE INV. IN=298.67'
24" PE INV. OUT=297.54'

GRAVEL WETLANDS TYPE II STONE INLET

CUT EXISTING 24" PE PIPE AND PROVIDE FLARED END SECTION

TEMPORARY INLET PROTECTION (TYP.)

PROVIDE TOPSOIL, SEED, AND MULCH

24" PE INV=293.22'

PROFILE A

15" PE INV=290.79'
(CAP AND ABANDON IN PLACE)

24" PE INV=289.80'

50' WETLAND BUFFER

TOP OF BERM ELEV.=291.00'

IRRIGATION LATERALS

PROPOSED TEE BOX. CONTRACTOR TO GRADE, PROVIDE TOP SOIL SEED AND MULCH. FINAL COMPLETION OF THE PROPOSED TEE BOXES TO BE PERFORMED BY THE BURLINGTON COUNTRY CLUB (TYP.)

BOTTOM OF WETLAND ELEV.=290.0'
BOTTOM OF WETLAND AREA=21,670 SF

TRANSITION TO SOLID PVC UNDERDRAIN

1 EXISTING IRRIGATION MAINLINE

CLASS III WETLAND

24" PE INV=289.20'
PROVIDE FLARED END SECTION

PROFILE B

PROFILE C

PROVIDE EROSION CONTROL BLANKETS ON ALL SLOPES AFTER FINE PLACEMENT OF TOP SOIL, SEED, AND MULCH

1 CONTRACTOR TO PROVIDE STEEL PLATES FOR PROTECTION OF THE EXISTING IRRIGATION MAIN UNDER THE 20' ACCESS DRIVE DURING CONSTRUCTION. EXISTING IRRIGATION MAIN IS BURIED 24" BELOW GRADE AND SHALL REMAININ SERVICE DURING CONSTRUCTION. (TYP. 2 LOCATIONS)

APPROXIMATE TEE BOX

12" PVC (SOLID) STAND PIPE (TYP.)

REC. PATH

6' CHAINLINK FENCE (TYP.)

HYDROSEPARATOR (5'ø)
RIM=297.34'
30" PE INV. IN=290.54'
30" PE INV. OUT=290.50'

SDMH #1 WITH GRATE & AGRIDRAIN WEIRWALL (5'ø)
RIM=295.29'
24" CMP INV. IN=290.73' (N)
24" CMP INV. OUT=291.00' (S)
30" PE INV. OUT=290.63' (W)

INSTALL CURED IN PLACE LINER FOR 24" CMP STORMDRAIN

15" PE INV=289.89'
(CAP AND ABANDON IN PLACE)

TEMPORARY STONE CHECK DAM (TYP.)

TEMPORARY HAY DAM (TYP.)

24" CMP INV=289.40'

EXISTING SDMH (REMOVE)
RIM=291.70'
24" CMP INV. IN=287.94'
24" CMP INV. IN=288.10'
24" CMP INV. OUT=288.06'

INSTALL SDMH #2 (3'ø NYLOPLAST) AFTER LINING IS COMPLETE
RIM=292.24'
24" CMP INV. IN=288.06' (N)
24" PE INV. IN=288.75' (W)
24" CMP INV. OUT=288.06' (S)
24" CMP INV. OUT=288.06' (S)

EXISTING 24" CMP INLET TO BE REMOVED. SWALE TO BE LENGTHENED IN THE SOUTHERLY DIRECTION TO ALLOW FOR A 90 DEGREE PENETRATION OF NEW 24" PE INLET INTO SDMH #3

INSTALL SDMH #3 (3'ø NYLOPLAST) AFTER LINING IS COMPLETE
RIM=292.27'
24" PE INV. IN=287.45'
24" CMP INV. IN=287.23'
24" CMP INV. OUT=287.23'

FILL DEPRESSION TO PROVIDE 2' OF COVER OVER NEW 24" PE

GRAVEL WETLAND OUTLET STRUCTURE (4'ø)
RIM=296.25'
12" PVC INV. IN=288.25'
CUT OUTS=294.00'
24" PE INV. OUT=289.50'

INSTALL CURED IN PLACE LINER FOR EXISTING 24" CMP STORMDRAIN SOUTH OF PROJECT AREA TO THE EXISTING OUTFALL (VIF EXISTING OUTFALL LOCATION)

STORM DRAIN REHABILITATION SCHEDULE

Storm Drain Segment Information						Bid Item A-3	
						24" Cured In Place	
Location	Downstream DMH/CB	Upstream DMH/CB	Approximate Distance from Upstream DMH/CB	Pipe Size	Pipe Material	Unit	Quantity
Spear Street	Outlet to Potash Brook	CB Spear 1	48'	24"	CMP	LF	306

NEW STORM DRAIN STRUCTURE SCHEDULE

Storm Drain Structure Information							
Location	Structure ID	Type	Size	Cover Type	Cover Marking	Remove Existing Structure (Y/N)	Bid Item No.
Spear Street	SDMH #1 with Agridrain Weirwall	Precast	5'	GRATE	STORM	N	B-2
Rec Path	Hydroseparator	Precast	5'	DI SOLID	STORM	N	B-1, B-2
Gravel Wetland	Gravel Wetland Outlet Structure	Precast	4'	DI SOLID	STORM	N	B-2
Spear Street	SDMH #2	Nyloplast	3'	DI SOLID	STORM	Y	B-3, B-4
Spear Street	SDMH #3	Nyloplast	3'	DI SOLID	STORM	N	B-4

PLAN
SCALE: 1"=20"

GRAPHIC SCALE
0 20 30 40
(IN FEET)

NOTES:

1. SITE ACCESS FOR IDENTIFIED WORK OUTSIDE THE PROJECT DEMARCATION FENCE TO BE COORDINATED AND APPROVED BY THE BURLINGTON COUNTRY CLUB. CONTRACTOR MUST PROVIDE CONTINUOUS PEDESTRIAN ACCESS BETWEEN HOLES #5 AND #6 TO ALLOW CONTINUED PLAY ON COURSE DURING CONSTRUCTION. OWNER TO ESTABLISH TEMPORARY TEE BOX FOR PLAY DURING CONSTRUCTION.

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BURLINGTON COUNTRY CLUB GRAVEL WETLAND

PROPOSED SITE PLAN

DESIGNED	PROJECT NO.
JSK	20018
DRAWN JEN	DRAWING 2
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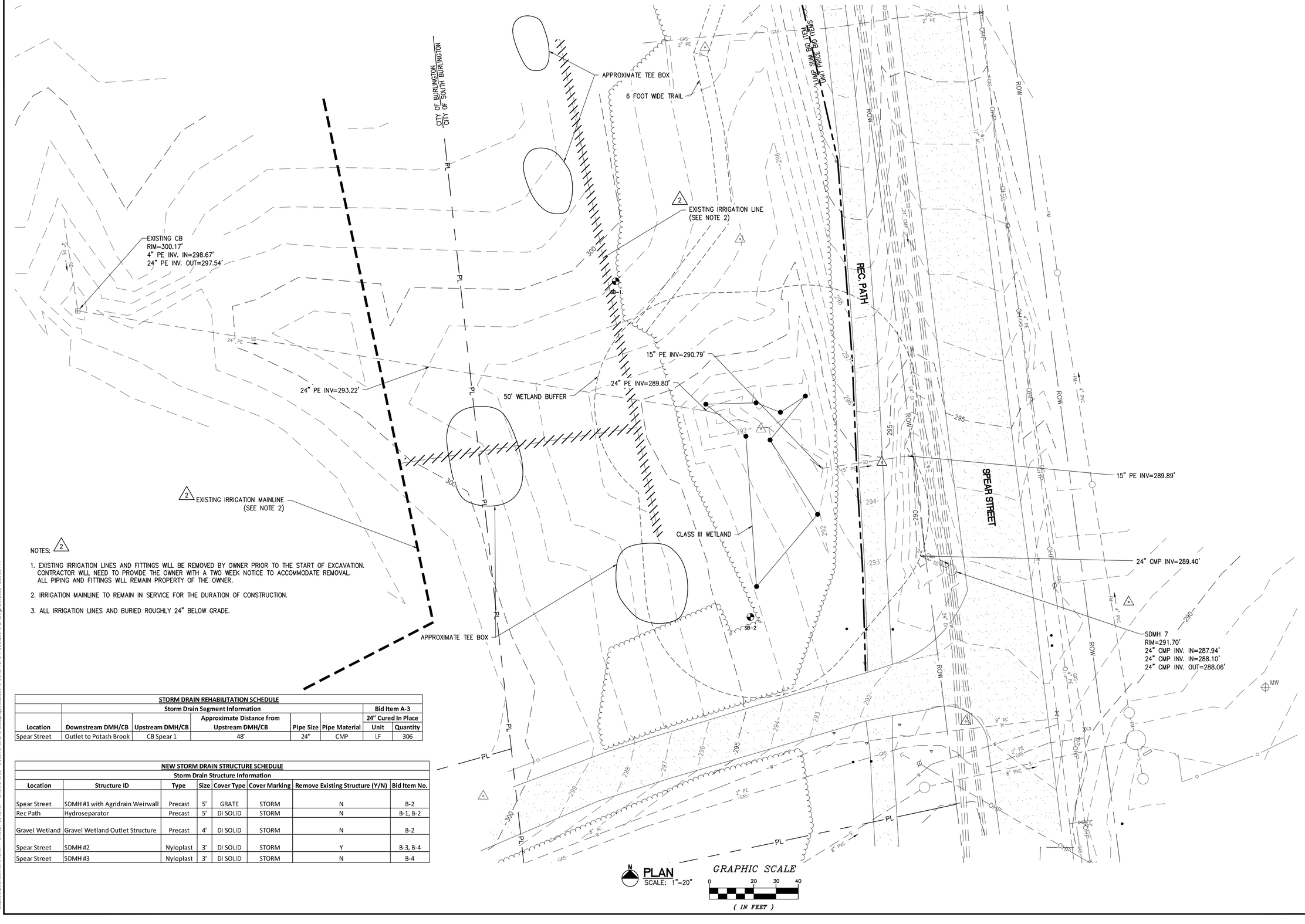

NOTES: (2)

1. EXISTING IRRIGATION LINES AND FITTINGS WILL BE REMOVED BY OWNER PRIOR TO THE START OF EXCAVATION. CONTRACTOR WILL NEED TO PROVIDE THE OWNER WITH A TWO WEEK NOTICE TO ACCOMMODATE REMOVAL. ALL PIPING AND FITTINGS WILL REMAIN PROPERTY OF THE OWNER.
2. IRRIGATION MAINLINE TO REMAIN IN SERVICE FOR THE DURATION OF CONSTRUCTION.
3. ALL IRRIGATION LINES AND BURIED ROUGHLY 24" BELOW GRADE.

STORM DRAIN REHABILITATION SCHEDULE

Storm Drain Segment Information						Bid Item A-3	
						24" Cured In Place	
Location	Downstream DMH/CB	Upstream DMH/CB	Approximate Distance from Upstream DMH/CB	Pipe Size	Pipe Material	Unit	Quantity
Spear Street	Outlet to Potash Brook	CB Spear 1	48'	24"	CMP	LF	306

NEW STORM DRAIN STRUCTURE SCHEDULE

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Rec Path	Hydroseparator	Precast	5'	DI SOLID	STORM	N	B-1, B-2
Gravel Wetland	Gravel Wetland Outlet Structure	Precast	4'	DI SOLID	STORM	N	B-2
Spear Street	SDMH #2	Nyloplast	3'	DI SOLID	STORM	Y	B-3, B-4
Spear Street	SDMH #3	Nyloplast	3'	DI SOLID	STORM	N	B-4

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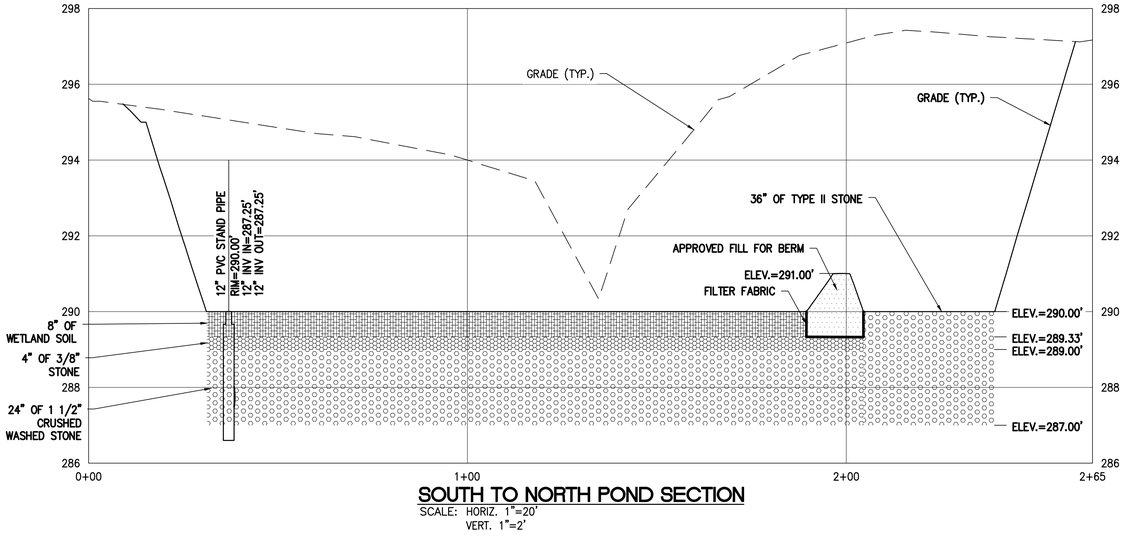
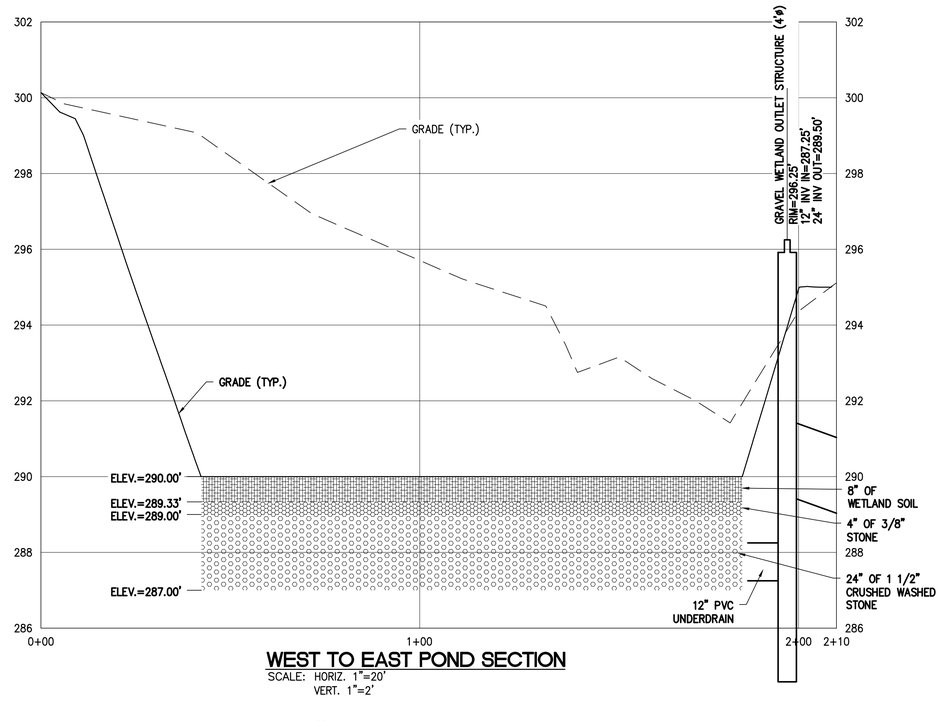


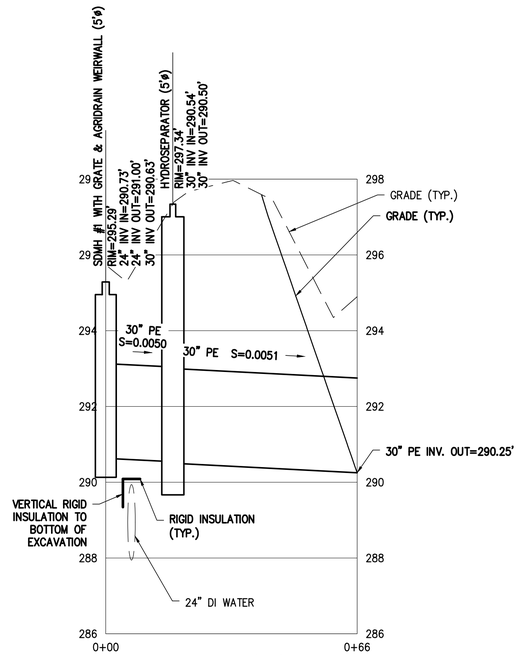
SOUTH TO NORTH POND SECTION

SCALE: HORIZ. 1"=20'
VERT. 1"=2'



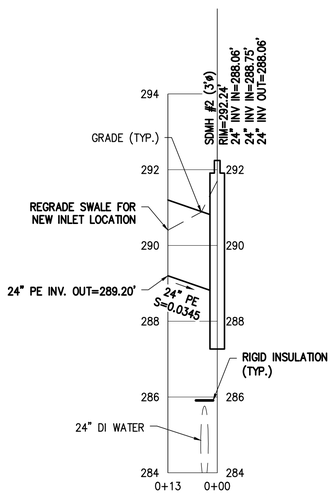
WEST TO EAST POND SECTION

SCALE: HORIZ. 1"=20'
VERT. 1"=2'



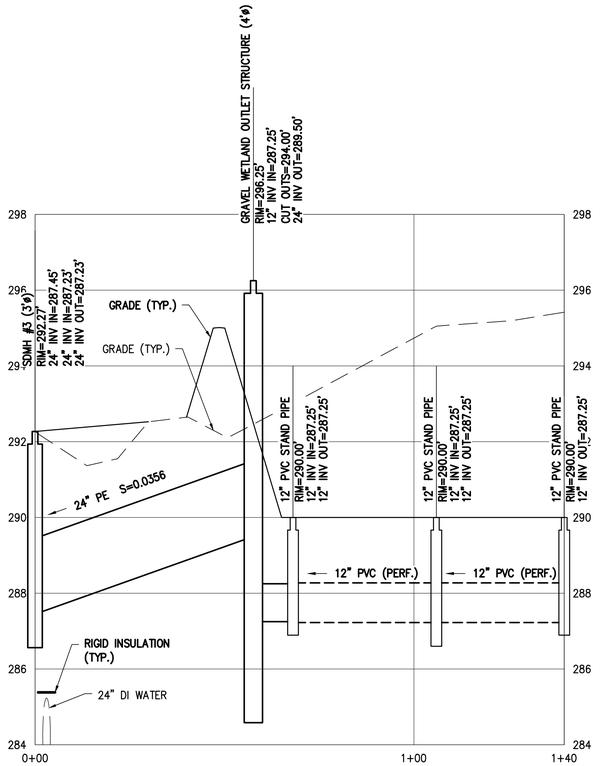
INLET PIPING PROFILE A

SCALE: HORIZ. 1"=20'
VERT. 1"=2'



STORMDRAIN PIPING PROFILE B

SCALE: HORIZ. 1"=20'
VERT. 1"=2'



OUTLET PIPING PROFILE C

SCALE: HORIZ. 1"=20'
VERT. 1"=2'

Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

STATE OF VERMONT
JASON R. BOOTH
No. 9235
Civil
LICENSED PROFESSIONAL ENGINEER

WATERSHED CONSULTING ASSOCIATES, LLC

No.	DATE	DESCRIPTION	CHECKED

CITY OF SOUTH BURLINGTON, VERMONT

BURLINGTON COUNTRY CLUB GRAVEL WETLAND

PROPOSED PROFILES

DESIGNED	PROJECT NO.
JSK	20018
DRAWN: JEN	DRAWING
CHECKED: JAB	3
DATE: MARCH, 2021	

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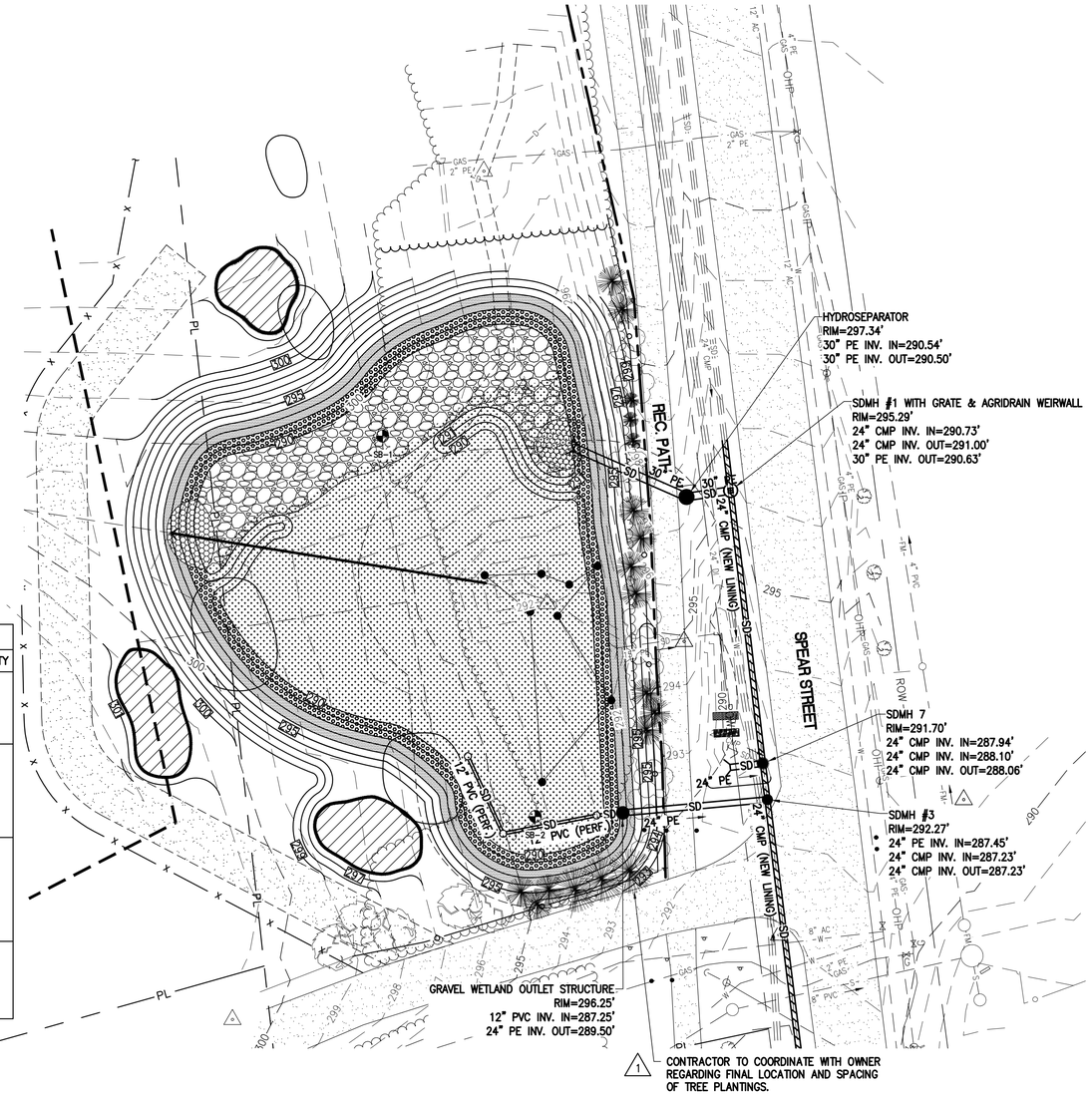

1

TREE PLANTING SCHEDULE PLAN			
SPECIES NAME	SYMBOL	PLANTING PLAN	QUANTITY
ARBORVITAE		8'–10'	9
EASTERN RED CEDAR		8'–10'	13
WHITE SPRUCE		8'–10'	9
CRABAPPLE		2"–2.5"	5

LEGEND

- ZONE 2/3 – BENCH/SHORELINE . . . .
- ZONE 4 – RIPARIAN . . . . . .
- ZONE 5 – FLOODPLAIN . . . . . .
- ZONE 6 – UPLAND . . . . . .
- ZONE 7 – TEE BOXES . . . . . .

PLAN
SCALE: 1"=20'

GRAPHIC SCALE
0 20 30 40
(IN FEET)

PLANTING SCHEDULE FOR GRAVEL WETLAND:

ZONES 2/3 BENCH/SHORELINE (FLAT BOTTOM: APPROX. 17,688 SF)

1. PLANT MATERIALS: VERMONT WETLAND PLANT SUPPLY'S MARSH, SWAMP, AND BOG MIX OR EQUAL APPLIED AT 18LBS PER ACRE OR AS RECOMMENDED BY SEED VENDOR.

   WETLAND SEED MIX SHALL BE FORMULATED BY THE APPROVED VENDOR (SEE BELOW AND SPECIFICATIONS).

   USE THE FOLLOWING MIX OF HERBACEOUS SPECIES OR EQUIVALENT OBLIGATE OR FACULTATIVE WET SPECIES SUITABLE FOR WETLAND ZONES 2 AND 3. THE VENDOR SHALL RECOMMEND AN APPROPRIATE MIX OR SUBSTITUTION OF SPECIES BASED ON AVAILABILITY AND TIME OF PLANTING. AGGRESSIVE SPECIES SUCH AS CATTAIL (TYPHA SP.) SHOULD BE AVOIDED.

SCIENTIFIC NAME	COMMON NAME
SAGITTARIA LATIFOLIA	BROADLEAF ARROWHEAD
SCIRPUS VALIDUS	SOFTSTEM BULRUSH
PONTEDERIA CORDATA	PICKERELWEED
PONTAMOGETON NODOSUS	LONGLEAF PONDWEED
CAREX VULPINOIDEA	SEDGE FOX
ACORUS CALMUS	SWEETFLAG
IRIS VERSICOLOR	BLUEFLAG IRIS

2. BROADCAST SEED MIX OVER FLAT MUCK SOILS IN BOTTOM OF WETLAND. SCRATCH INTO SOIL SURFACE. DO NOT ADD CHEMICAL FERTILIZER. LIGHTLY ROLL.

ZONE 4 RIPARIAN FRINGE (SLOPED PERIMETER OF WETLAND: APPROX. 3,577 SF)

1. PLANT MATERIALS: VERMONT WETLAND PLANT SUPPLY'S VERMONT WETLAND HUMMOCK MIX OR EQUAL APPLIED AT 15LBS PER ACRE OR AS RECOMMENDED BY SEED VENDOR.

   USE THE FOLLOWING MIX OF HERBACEOUS SPECIES OR EQUIVALENT OBLIGATE OR FACULTATIVE WET SPECIES FOR WETLAND ZONES 3 AND 4. THE VENDOR SHALL RECOMMEND AN APPROPRIATE MIX OR SUBSTITUTION OF SPECIES BASED ON AVAILABILITY AND TIME OF PLANTING.

SCIENTIFIC NAME	COMMON NAME
ASCLEPIAS INCARNATE	SWAMP MILKWEED
EUPATORIADELPHUS MACULATES	SPOTTED JOE–PYE WEED
JUNCUS EFFUSES	COMMON RUSH
LYSIMACHIA CILIATE	FRINGED LOOSESTRIFE
SCIRPUS CYPERINUS	WOOLGRASS
VERBENA HASTATE	BLUE VERVAIN
IRIS VERSICOLOR	BLUEFLAG IRIS

2. MECHANICALLY LOOSEN THE TOP FOUR INCHES OF THE NATIVE SOILS AND MIX IN 2 INCHES OF MUCK SOILS. DO NOT ADD CHEMICAL FERTILIZER.

3. BROADCAST SEED MIX OVER SLOPED SOILS IN WETLAND. SCRATCH INTO SOIL SURFACE. SPREAD AND SECURE MULCH BLANKET OVER SEEDED SOILS, SUCH AS NORTH AMERICAN GREEN SC150 (NATURAL BLANKET MATERIALS ONLY – NO PLASTICS). LIGHTLY ROLL.

ZONE 5 FLOODPLAIN (SLOPED PERIMETER OF WETLAND: APPROX. 3,879 SF)

1. PLANT MATERIALS: VERMONT WETLAND PLANT SUPPLY'S VERMONT NATIVE WILDFLOWER & GRASS MIX OR EQUAL APPLIED AT 18LBS PER ACRE OR AS RECOMMENDED BY SEED VENDOR.

   WETLAND SEED MIX SHALL BE FORMULATED BY THE APPROVED VENDOR (SEE BELOW).

SCIENTIFIC NAME	COMMON NAME
SCIRPUS ATROVIRENS	GREEN BULRUSH
JUNCUS EFFUSES	SOFT RUSH
CAREX VULPINOIDEA	FOX SEDGE
LEERSIA ORYZOIDES	RICE CUTGRASS
CAREX COMOSA	LONG–HAIR SEDGE
CAREX CRINITE	NODDING SEDGE
CAREX LURIDA	SHALLOW SEDGE
CAREX STRICTA	TUSSOCK SEDGE
ONOCLEA SENSIBILIS	SENSITIVE FERN
ASCLEPIAS INCARNATA	SWAMP MILKWEED
LOBELIA CARDINALIS	CARDINAL FLOWER
SCHOENOPLECTUS TABERNAEMONTANI	SOFTSTEM BULRUSH

2. MECHANICALLY LOOSEN THE TOP FOUR INCHES OF THE NATIVE SOILS AND MIX IN 2 INCHES OF MUCK SOILS. DO NOT ADD CHEMICAL FERTILIZER.

3. MIX AND BROADCAST SEED MIX OVER SLOPED SOILS IN BASIN. SCRATCH INTO SOIL SURFACE. SPREAD AND SECURE MULCH BLANKET OVER SEEDED SOILS, SUCH AS NORTH AMERICAN GREEN SC150. LIGHTLY ROLL.

ZONE 6 UPLAND SLOPES + FLATS (ALL OTHER DISTURBED SOILS–EXCEPT TEE BOXES)

1. PLANT MATERIALS: REFER TO SPECIFICATIONS.

2. MECHANICALLY LOOSEN THE TOP FOUR INCHES OF NATIVE SOILS (DO NOT MIX WITH MUCK SOILS). DO NOT ADD CHEMICAL FERTILIZER.

3. BROADCAST THE GRASS SEED MIX OVER THE SAME AREA. SCRATCH LIGHTLY INTO THE SOIL SURFACE. SPREAD AND SECURE MULCH BLANKET OVER THE SEEDED SOILS ON STEEP SLOPES, SUCH AS NORTH AMERICAN GREEN SC150. MULCH OTHER SOILS WITH STERILE STRAW MULCH. LIGHTLY ROLL.

ZONE 7 (TEE BOXES)

1. PLANT MATERIALS: REFER TO SPECIFICATIONS.

ALL ZONES

1. ALL WETLAND SEED MIX LISTED ABOVE SHALL BE SUPPLIED FROM VERMONT WETLAND PLANT SUPPLY, P.O. BOX 153, ORWELL, VT 05760, TEL. 802–948–2553, CELL 802–989–5931, OR EQUAL APPROVED BY THE ENGINEER.

Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
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STATE OF VERMONT
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WATERSHED CONSULTING ASSOCIATES, LLC

No.	DATE	DESCRIPTION
1	5/3/22	BURLINGTON CC COMMENTS

CHECKED JAB

CITY OF SOUTH BURLINGTON, VERMONT

BURLINGTON COUNTRY CLUB GRAVEL WETLAND

PLANTING PLAN

DESIGNED	PROJECT NO.
JSK	20018
DRAWN JEN	DRAWING 4
CHECKED JAB	
DATE MARCH, 2021	

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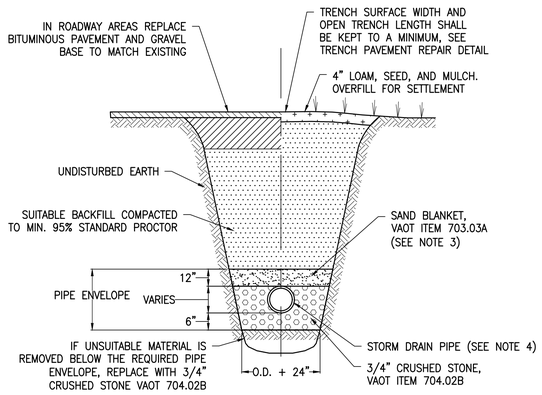
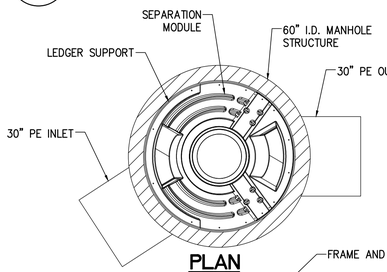


NOTES:

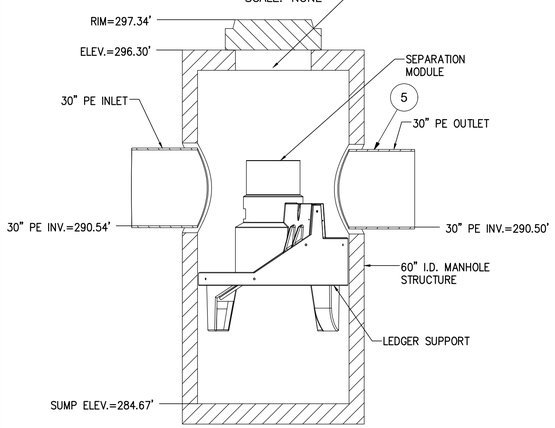
1. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PVC PIPE TO ENSURE PIPE IS NOT DAMAGED.
2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
3. IN LIEU OF SAND BLANKET CONTRACTOR MAY USE 3/4" CRUSHED STONE OR SAND BORROW.
4. FOR TWIN 36" PIPES, RUN PIPE PARALLEL AND AT SAME ELEVATION WITH MINIMUM SEPARATION OF 3' TO ENSURE ADEQUATE STONE BEDDING CAN BE PLACED.

A/5 TYPICAL STORM DRAIN PIPE TRENCH DETAIL

SCALE: NONE



PLAN
SCALE: NONE



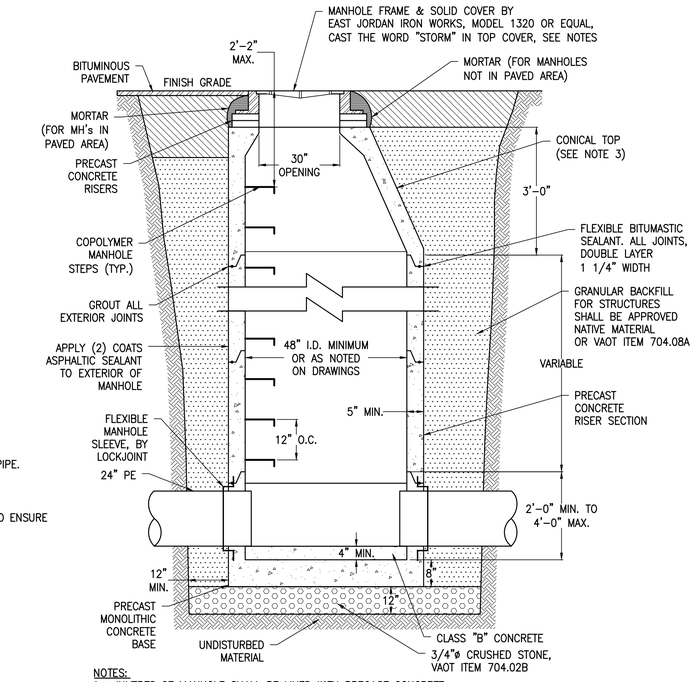
SECTION
SCALE: NONE

NOTES:

1. HYDRO SEPARATOR SHALL BE ABLE TO SAFELY PASS FLOWS IN ACCORDANCE WITH SPECIFICATION SECTION 03710.
2. PROVIDE FRAME AND SOLID COVER MARKED "STORM" IN TOP COVER, BY EAST JORDAN IRON WORKS NEENAH, OR APPROVED EQUAL.
3. BACKFILL REQUIREMENTS TO MATCH THAT OF GRAVEL WETLAND OUTLET STRUCTURE.

D/5 HYDRO SEPARATOR DETAIL

SCALE: NONE

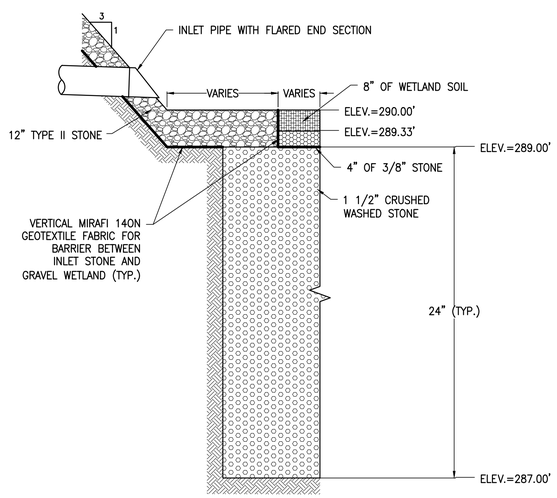


NOTES:

1. INVERTS OF MANHOLE SHALL BE LINED WITH PRECAST CONCRETE.
2. PROVIDE SMOOTH SWEEPING TRANSITIONS BETWEEN INVERTS OF INTERSECTING PIPE.
3. IF DEPTH OF MANHOLE IS 7 FEET OR LESS FROM RIM TO CENTERLINE INVERT THEN A FLAT TOP SHALL BE INSTALLED IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 FEET THEN A CONICAL TOP SHALL BE INSTALLED.
4. SDMH #1 SHALL HAVE A 32" ROUND FRAME AND GRATE, NEENAH R-2580-A TYPE "G" GRATE OR EQUAL

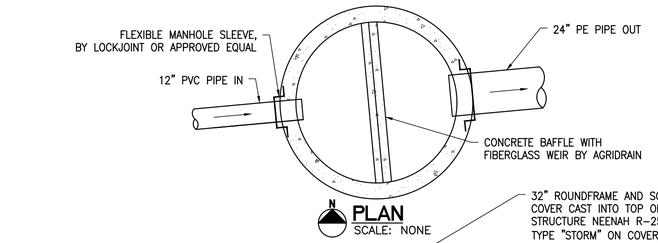
B/5 TYPICAL STORM DRAIN MANHOLE DETAIL

SCALE: NONE

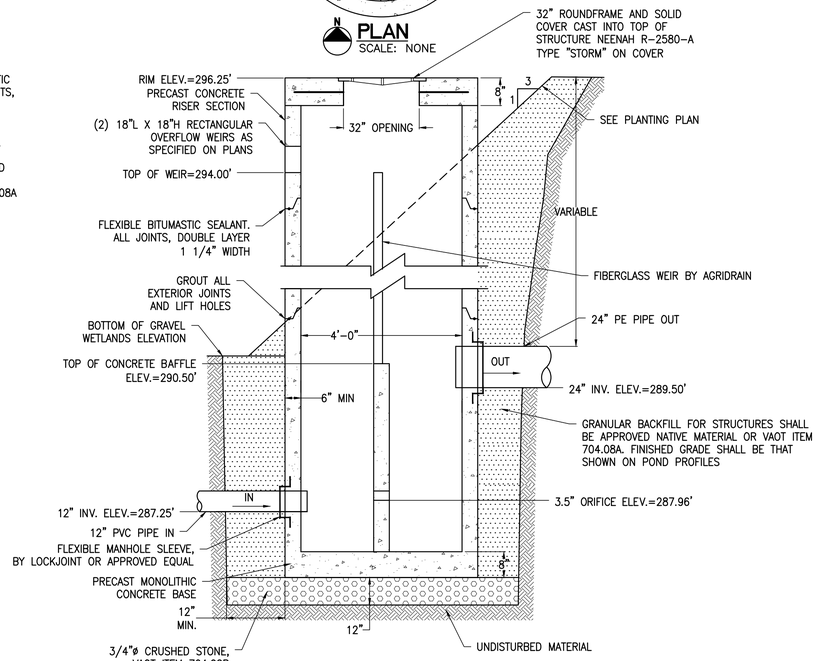


E/5 GRAVEL WETLANDS INLET DETAIL

SCALE: NONE

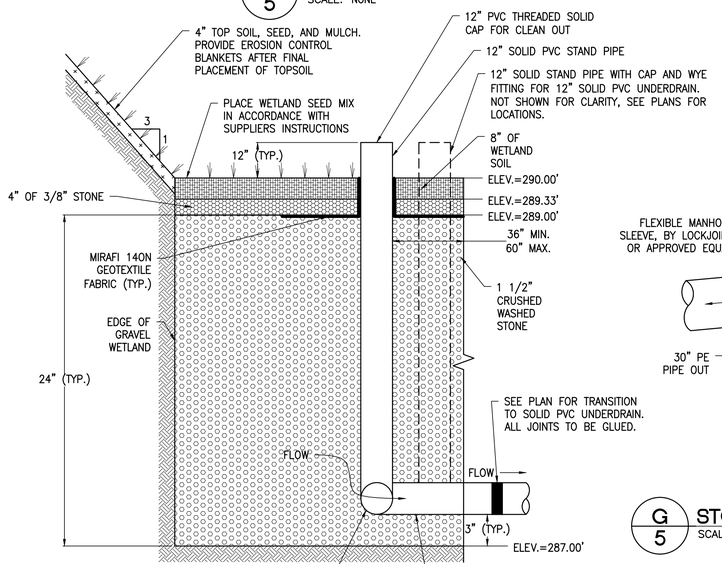


PLAN
SCALE: NONE



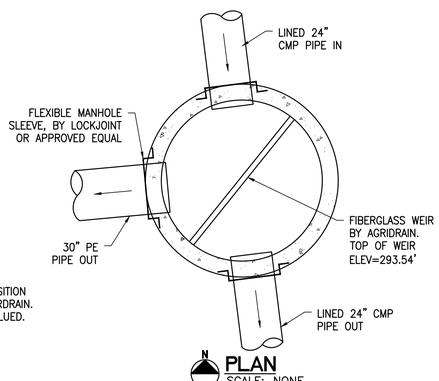
C/5 GRAVEL WETLAND OUTLET STRUCTURE DETAIL

SCALE: NONE



F/5 TYPICAL GRAVEL WETLANDS OUTLET STAND PIPE DETAIL

SCALE: NONE



PLAN
SCALE: NONE

G/5 STORMDRAIN MANHOLE #1 WIER DETAIL

SCALE: NONE

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WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

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WATERSHED CONSULTING ASSOCIATES, LLC

No.	DATE	DESCRIPTION

CHECKED

CITY OF SOUTH BURLINGTON, VERMONT

BURLINGTON COUNTRY CLUB GRAVEL WETLAND

STORMWATER DETAILS

DESIGNED	PROJECT NO.
JSK	20018
DRAWN: JEN	DRAWING: 5
CHECKED: JAB	
DATE: MARCH, 2021	

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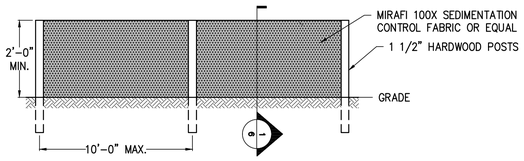
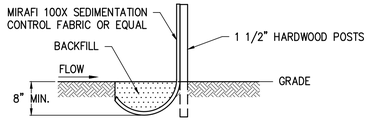
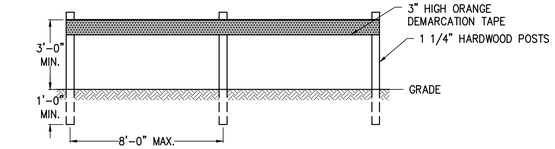




1/6 SECTION
SCALE: NONE

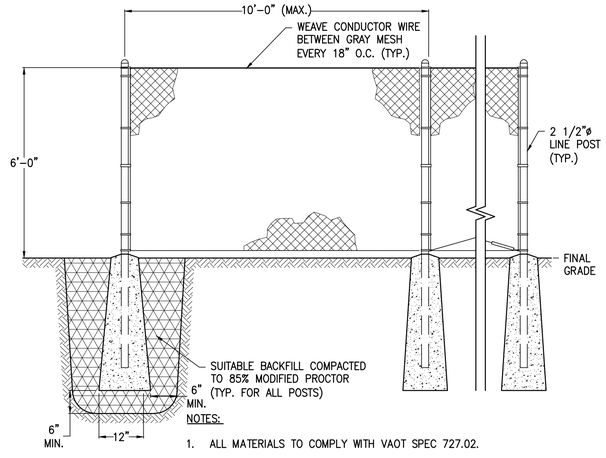
NOTES:
1. SILT FENCE SHALL BE PRE-FABRICATED EROSION CONTROL FENCE BY MIRAFI OR APPROVED EQUAL.
2. INSTALL WHERE SHOWN ON PLANS. THE FENCE SHALL BE INSTALLED PARALLEL TO CONTOURS WHERE POSSIBLE. THE ENDS OF THE FENCE SHOULD BE CURVED UPHILL TO PREVENT FLOW AROUND THE ENDS.
3. SECTIONS OF THE SILT FENCE SHALL BE JOINED TO OVERLAP BY FOLDING FABRIC AROUND EACH POST ONE FULL TURN. DRIVE POSTS TIGHTLY TOGETHER AND SECURE TOPS OF POSTS BY TYING OFF WITH CORD OR WIRE TO PREVENT FLOW-THROUGH OR BUILT-UP SEDIMENT AT JOINT.
4. INSPECT ALL SILT FENCE AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER EACH RAINFALL. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND SEDIMENT REMOVED WHEN SEDIMENT REACHES 1/3 HEIGHT OF THE SILT FENCE.
5. UPON FINAL STABILIZATION OF THE AREA UPHILL OF THE FABRIC, THE FABRIC SHALL BE REMOVED WITH THE APPROVAL OF THE ENGINEER.

A/6 TYPICAL TEMPORARY SILT FENCE DETAIL
SCALE: NONE



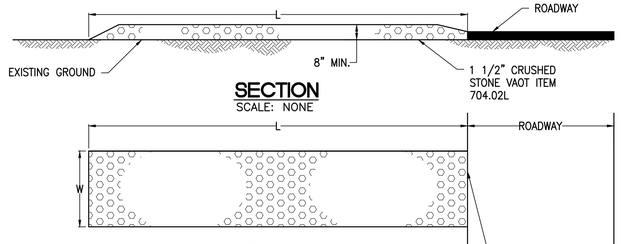
NOTES:
1. ONE (1) WEEK PRIOR TO ANY CONSTRUCTION, CONTRACTOR MUST INSTALL PROJECT DEMARCATION FENCE AT THE LIMIT OF DISTURBANCE AS SHOWN ON THE CONTRACT PLANS.

D/6 TYPICAL PROJECT DEMARCATION FENCE DETAIL
SCALE: NONE



NOTES:
1. ALL MATERIALS TO COMPLY WITH VAOT SPEC 727.02.

B/6 TYPICAL CHAINLINK FENCE DETAIL
SCALE: NONE

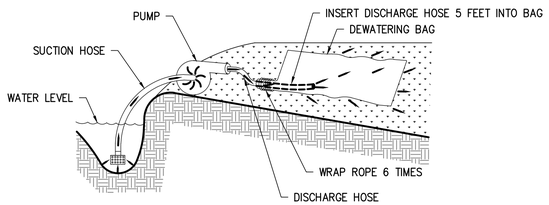


SECTION
SCALE: NONE

PLAN
SCALE: NONE

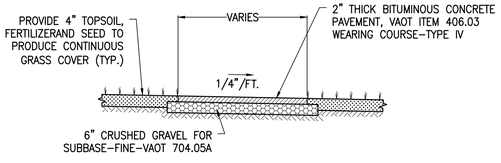
NOTES:
1. LENGTH (L) SHALL BE 50' MINIMUM WHERE SUFFICIENT SPACE IS AVAILABLE.
2. WIDTH (W) SHALL NOT BE LESS FULL WIDTH OF ALL POINTS OF INGRESS AND EGRESS.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE, WHICH DRAINS INTO APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF METHODS AS APPROVED BY THE ENGINEER.
4. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, OR WASHED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

E/6 TYPICAL STABLIZED CONSTRUCTION ENTRANCE DETAIL
SCALE: NONE



NOTES:
1. PLACE DEWATERING BAG/TUBE ON THE GROUND OR ON A TRAILER OVER A RELATIVELY LEVEL, STABILIZED AREA.
2. INSERT DISCHARGE PIPE A MINIMUM OF 5FT. INSIDE DEWATERING BAG/TUBE AND SECURE WITH A ROPE WRAPPED 6 TIMES AROUND THE SNOUT OVER A 6 INCH WIDTH OF THE BAG. TO CLOSE OPEN END OF THE DEWATERING TUBE : OVERLAP THE TUBE 2 FT. FROM THE END. GATHER THE CENTER OF THE DOUBLED-UP PORTION FORMING A BOW TIE. SECURE WITH A ROPE WRAPPED MULTIPLE TIMES.
3. REPLACE DEWATERING BAG WHEN HALF FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL AMOUNT, OR; EMPTY SEDIMENT TUBE WHEN HALF FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL RATE.
4. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AWAY FROM WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS. SLIT OPEN DEWATERING BAG AND REMOVE ACCUMULATED SEDIMENT. DISPOSE OF BAG AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY, OR: OPEN BOTH ENDS OF THE DEWATERING TUBE, PICK IT UP IN THE CENTER AND DUMP ACCUMULATED SEDIMENT OUT OF BOTH ENDS. ALLOW TO DRY AND STORE FOR RE-USE,
5. OR; AS DIRECTED BY ENGINEER OR INSPECTOR.

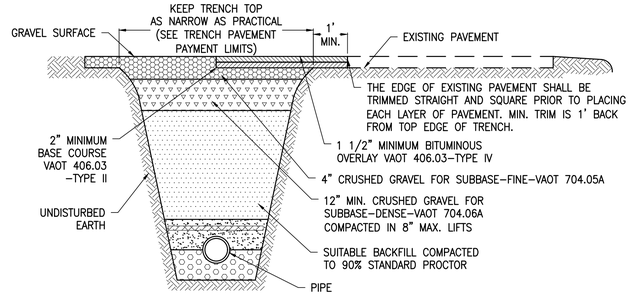
C/6 TYPICAL DEWATERING BAG DETAIL
SCALE: NONE



NOTES:
1. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH VAOT STANDARDS, SECTION 618.
2. SIDEWALK SHALL SLOPE TO THE ROADWAY WHEREVER POSSIBLE AND WHERE GRADE ALLOWS.
3. COMPACT BITUMINOUS PAVEMENT IN CONFORMANCE WITH VAOT STANDARDS.

F/6 TYPICAL BITUMINOUS SIDEWALK DETAIL
SCALE: NONE

EROSION CONTROL NOTES:
1. EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO PERFORMING ANY EARTHWORK DOWNSTREAM OF THE DISTURBED AREA AND AS DIRECTED BY THE ENGINEER. THE MEASURES SHALL BE MAINTAINED UNTIL THE UPSTREAM DISTURBED AREA HAS BEEN PERMANENTLY STABILIZED AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL MEASURES DETERMINED NECESSARY IN THE FIELD.
2. SILT FENCE SHALL BE INSTALLED, AS SHOWN ON THE CONTRACT DRAWINGS PRIOR TO ANY EARTHWORK DOWNSTREAM OF THE DISTURBED AREA AND AS DIRECTED BY THE ENGINEER. THE SILT FENCE SHALL BE MAINTAINED AND CLEANED UNTIL THE UPSTREAM DISTURBED AREA HAS BEEN PERMANENTLY STABILIZED AND AS DIRECTED BY THE ENGINEER. WHERE POSSIBLE NATURAL DRAINAGE WAYS SHALL BE UTILIZED AND LEFT OPEN TO REMOVE EXCESS SURFACE WATER.
3. PROPER EROSION CONTROLS SHALL BE PROVIDED AROUND STOCKPILED EXCAVATED MATERIALS. THESE CONTROLS MAY INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING METHODS OF EROSION PREVENTION AND SEDIMENT CONTROL: PERIMETER SILT FENCE; INTERCEPTOR DRAINAGE DITCHES; VELOCITY REDUCTION DAMS IN DRAINAGE DITCHES; MATTING, OR ARTIFICIAL COVERING; SPECIAL STOCKPILING METHODS; AND WATER BARS.
4. THE CONTRACTOR SHALL PROVIDE A MECHANICAL SWEEPER AND SHALL SWEEP CLEAN THE ROADS IN THE CONSTRUCTION AREAS AS REQUIRED TO REMOVE ACCUMULATED SEDIMENT AND PREVENT SEDIMENT RUNOFF INTO RECEIVING WATERS AND AS DIRECTED BY THE ENGINEER.
5. TEMPORARY EROSION CONTROL MEASURES SHALL BE UTILIZED BY THE CONTRACTOR AS REQUIRED TO PREVENT ANY SEDIMENTATION FROM RUNNING INTO RECEIVING WATERS. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE ANY IMPACT OF THE ON-SITE SURFACE RUNOFF ON THE QUALITY OF THE RECEIVING WATERS.
6. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE DISTURBED AT ANY ONE TIME DURING CONSTRUCTION. WHEN LAND IS DISTURBED DURING CONSTRUCTION, THE DISTURBANCE SHALL BE KEPT TO THE SHORTEST PRACTICAL DURATION AS APPROVED BY THE ENGINEER. LAND SHALL NOT BE LEFT DISTURBED DURING THE WINTER MONTHS AND OVERWINTER STABILIZATION MEASURES SHALL BE INSTALLED PRIOR TO OCTOBER 15TH.
7. ALL DISTURBED AREAS AND SIDE SLOPES WHICH ARE FINISH GRADED WITH NO FURTHER CONSTRUCTION TO TAKE PLACE SHALL BE LOAMED, LIMED, FERTILIZED, SEEDED, AND MULCHED WITHIN 48 HOURS OF FINAL GRADING. A MINIMUM OF 4 INCHES OF LOAM SHALL BE PLACED. SEED, LIME, FERTILIZER, AND MULCH SHALL CONFORM TO SPECIFICATION SECTION 02930.
8. NO DISTURBED AREAS SHALL BE LEFT UNSEEDED AND UNMULCHED FOR MORE THAN SEVEN (7) DAYS. DISTURBED AREAS WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION. STRAW MULCH SHALL BE APPLIED TO ALL FRESHLY SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE. BALES SHALL BE UNSPOILED, AIR DRIED, AND FREE FROM WEED, SEEDS, AND ANY COARSE MATERIAL. CONTRACTOR MAY ALSO USE EROSION MATTING OR OTHER APPROVED METHODS OF TEMPORARY COVER.
9. ALL EROSION PREVENTION AND SEDIMENT CONTROL STRUCTURES AND MEASURES SHALL BE INSPECTED BY OR UNDER THE DIRECTION OF THE ON-SITE COORDINATOR AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND AS SOON AS POSSIBLE BUT NO LATER THAN 24 HOURS AFTER ANY STORM EVENT WHICH GENERATES A DISCHARGE OF STORMWATER RUNOFF FROM THE CONSTRUCTION SITE.
10. AFTER ALL UPSTREAM DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED AND AS DIRECTED BY THE ENGINEER, THE DOWNSTREAM TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE ACCUMULATED SEDIMENT PROPERLY DISPOSED OF. THE AREA DISTURBED BY THE REMOVAL OF TEMPORARY MEASURES SHALL BE PREPARED, SEEDED, AND MULCHED.
11. TOTAL SITE DISTURBANCE IS ANTICIPATED TO BE LESS THAN 1 (ONE) ACRE. IF MORE THAN 1 (ONE) ACRE OF DISTURBANCE ACCURS, THE CONTRACTOR SHALL OBTAIN A VERMONT STORMWATER CONSTRUCTION GENERAL PERMIT AND MEET ALL ITS CONDITIONS AT NO ADDITIONAL COST.



NOTES:
1. FINAL PAVEMENT SHALL BE SAME WIDTH AS PAVEMENT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO BEGINNING WORK.
2. ALL PAVEMENT SHALL HAVE THE MINIMUM COMPACTED THICKNESS AS SHOWN.
3. ALL EXISTING PAVEMENT MARKINGS SHALL BE REPAINTED AS NECESSARY.
4. IT IS INTENDED THAT CONTRACTOR AVOID ANY DAMAGE TO EXISTING ROADWAY OR SHOULDER PAVEMENT. HOWEVER WHERE PIPE MUST BE INSTALLED WITHIN 3'-0" OF PAVED SURFACE, BITUMINOUS PAVEMENT REPAIR SHALL BE PAID IN ACCORDANCE WITH "TRENCH PAVEMENT PAYMENT LIMITS" AND UNIT PRICE BID. PAVEMENT REPAIR OUTSIDE APPROVED LIMITS SHALL BE AT CONTRACTOR'S EXPENSE.
5. REFER TO STANDARD DETAIL FOR PIPE BEDDING MATERIAL

G/6 TYPICAL EDGE OF PAVEMENT TRENCH REPAIR DETAIL
SCALE: NONE

Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

STATE OF VERMONT
JASON R. BOOTH
No. 9235
Civil
LICENSED PROFESSIONAL ENGINEER

WATERSHED CONSULTING ASSOCIATES, LLC

No.	DATE	DESCRIPTION

CHECKED

CITY OF SOUTH BURLINGTON, VERMONT

BURLINGTON COUNTRY CLUB GRAVEL WETLAND

SITE, ROADWAY, AND EROSION CONTROL DETAILS AND NOTES

DESIGNED	PROJECT NO.
JSK	20018
DRAWN: JEN	DRAWING: 6
CHECKED: JAB	
DATE: MARCH, 2021	

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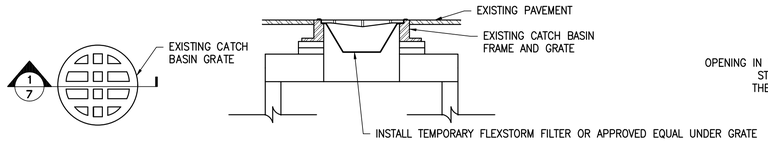
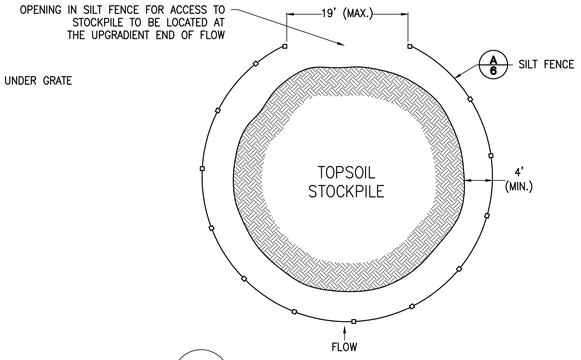


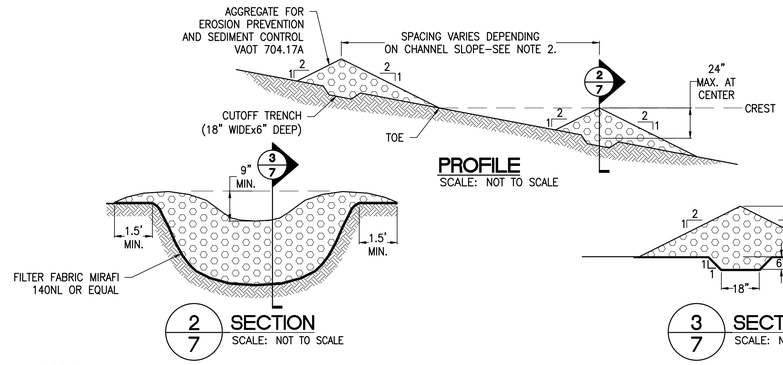
1/7 SECTION
SCALE: NONE

NOTES:
1. UNDERGRATE INLET PROTECTION SHALL ONLY BE USED WHERE SHOWN ON PLANS. IT SHOULD ONLY BE USED FOR EXISTING CATCH BASINS IN EXISTING PAVED AREAS FOR LINEAR PIPELINE PROJECTS WHERE AMOUNT OF SEDIMENT RUN OFF IS MINIMAL AND DURATION OF CONSTRUCTION IS SHORT.
2. LIFT THE GRATE AND INSTALL FILTER FABRIC (ADS FLEXSTORM CATCH-IT LITE OR APPROVED EQUAL) OVER THE FRAME, AND THEN SET GRATE BACK IN PLACE.
3. INSPECT EACH INLET AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER EVERY RAINFALL. REPAIR AND REPLACEMENT OF INLET PROTECTION SHALL BE MADE AT TIME OF INSPECTION.
4. UPON STABILIZATION OF THE AREA UPSTREAM FROM THE INLET, THE PROTECTION SHALL BE REMOVED WITH THE APPROVAL OF THE ENGINEER.

A/7 TYPICAL TEMPORARY INLET PROTECTION DETAIL
SCALE: NONE

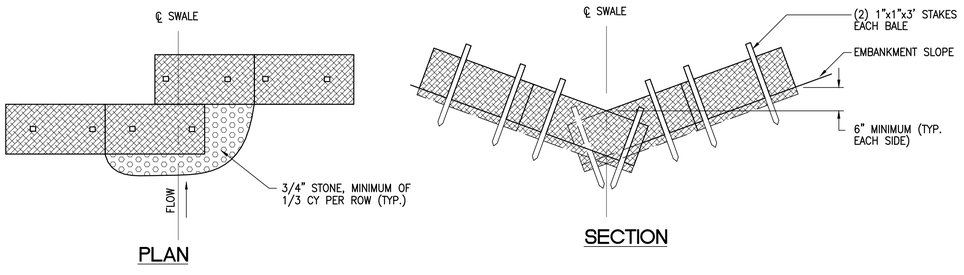


D/7 TYPICAL TOPSOIL STOCKPILE DETAIL
SCALE: NONE



NOTES:
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION AT ALL LOCATIONS SHOWN ON THE PLANS.
2. SET SPACING OF THE CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT THE FLOW OF WATER AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT THE CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.
6. INSPECT ALL CHECK DAMS AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER WACH RAINFALL. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN SEDIMENT REACHES 1/3 HEIGHT OF CHECK DAM.
7. UPON STABILIZATION OF THE AREA UPSTREAM OF THE STONE CHECK DAM, THE CHECK DAM SHALL BE REMOVED WITH THE APPROVAL OF THE ENGINEER. THE AREA UNDER THE STONE CHECK DAM SHALL BE SEEDED AND MULCHED UPON REMOVAL.

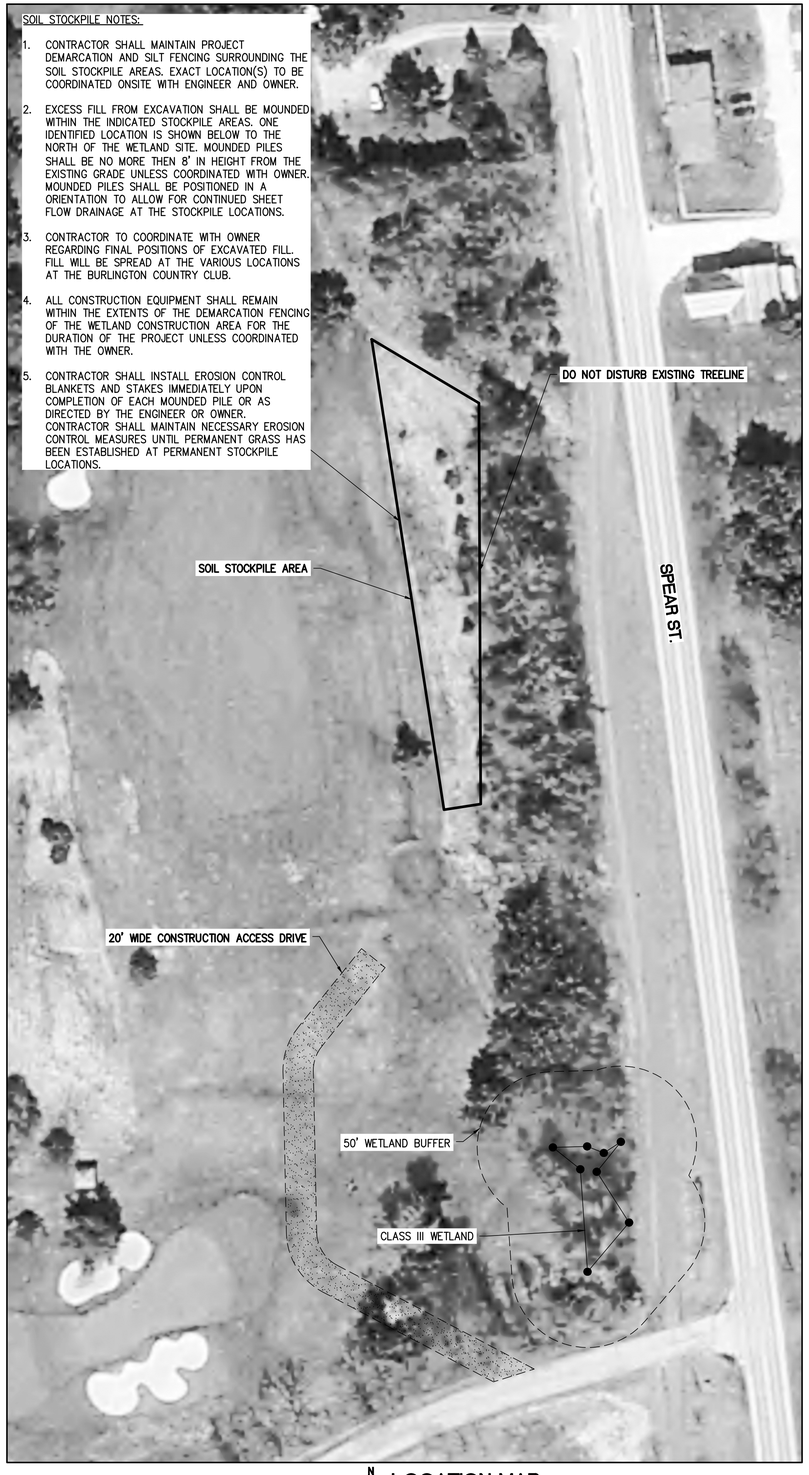
B/7 TYPICAL TEMPORARY STONE CHECK DAM DETAIL
SCALE: NONE



NOTES:
1. BALES SHALL BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING ADJACENT BALES. TWO ROWS IF REQUIRED BY ENGINEER.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR PINS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE, TO FORCE BALES TOGETHER.
4. THE END HAY BALES MUST BE A MINIMUM OF 6 INCHES HIGHER THAN THE LOWEST BALE.
5. PLACE A MINIMUM OF 1/3 CY OF 3/4" STONE IN EACH ROW OF BALES UPSTREAM.
6. INSPECTION SHALL BE FREQUENT (MINIMUM ONCE A WEEK AND AFTER EVERY RAINFALL) AND REPAIR AND REPLACEMENT SHALL BE MADE PROMPTLY (WITHIN THE SAME DAY) AS NEEDED.
7. UPON STABILIZATION OF THE AREA UPSTREAM FROM THE BALES, THE BALES SHALL BE REMOVED WITH THE APPROVAL OF THE ENGINEER.

C/7 TYPICAL HAYBALE DAM DETAIL
SCALE: NONE

SOIL STOCKPILE NOTES:
1. CONTRACTOR SHALL MAINTAIN PROJECT DEMARCATION AND SILT FENCING SURROUNDING THE SOIL STOCKPILE AREAS. EXACT LOCATION(S) TO BE COORDINATED ONSITE WITH ENGINEER AND OWNER.
2. EXCESS FILL FROM EXCAVATION SHALL BE MOUNDED WITHIN THE INDICATED STOCKPILE AREAS. ONE IDENTIFIED LOCATION IS SHOWN BELOW TO THE NORTH OF THE WETLAND SITE. MOUNDED PILES SHALL BE NO MORE THEN 8' IN HEIGHT FROM THE EXISTING GRADE UNLESS COORDINATED WITH OWNER. MOUNDED PILES SHALL BE POSITIONED IN A ORIENTATION TO ALLOW FOR CONTINUED SHEET FLOW DRAINAGE AT THE STOCKPILE LOCATIONS.
3. CONTRACTOR TO COORDINATE WITH OWNER REGARDING FINAL POSITIONS OF EXCAVATED FILL. FILL WILL BE SPREAD AT THE VARIOUS LOCATIONS AT THE BURLINGTON COUNTRY CLUB.
4. ALL CONSTRUCTION EQUIPMENT SHALL REMAIN WITHIN THE EXTENTS OF THE DEMARCATION FENCING OF THE WETLAND CONSTRUCTION AREA FOR THE DURATION OF THE PROJECT UNLESS COORDINATED WITH THE OWNER.
5. CONTRACTOR SHALL INSTALL EROSION CONTROL BLANKETS AND STAKES IMMEDIATELY UPON COMPLETION OF EACH MOUNDED PILE OR AS DIRECTED BY THE ENGINEER OR OWNER. CONTRACTOR SHALL MAINTAIN NECESSARY EROSION CONTROL MEASURES UNTIL PERMANENT GRASS HAS BEEN ESTABLISHED AT PERMANENT STOCKPILE LOCATIONS.



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LOCATION MAP
SCALE: 1"=50'

Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

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No.	DATE	DESCRIPTION	CHECKED

CITY OF SOUTH BURLINGTON, VERMONT

BURLINGTON COUNTRY CLUB GRAVEL WETLAND

EROSION CONTROL DETAILS

DESIGNED JSK	PROJECT NO. 20018
DRAWN JEN	DRAWING 7
CHECKED JAB	
DATE MARCH, 2021	

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