# APPENDIX C.2 CASE 10-T-0139 SITE PLANS AND CONSTRUCTION DRAWINGS SITE PLAN - DRAINAGE PACKAGE ASTORIA HVDC CONVERTER STATION - SEGMENT 22

# **ASTORIA HVDC CONVERTER STATION** SITE DRAINAGE PACKAGE

# SCOPE OF WORK

THE SITE DRAINAGE SCOPE OF WORK INCLUDES THE FOLLOWING:

1. SITE DRAINAGE

2. EROSION AND SEDIMENT CONTROL 3. STORMWATER MANAGEMENT



OVERALL SITE VIEW 1 T-001.00 / N.T.S.



# FLOOD ZONE DESIGN CERTIFICATION:

THE EXISTING PROPERTY IS IN THE SPECIAL FLOOD HAZARD AREA (SFHA), ZONE AE PER EFFECTIVE 2015 FLOOD INSURANCE RATE MAP(FIRM). THIS IS TO CONFIRM THAT THE PROPOSED INSTALLATION IS IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN APPENDIX Q OF THE NYC BUILDING CODE.

# NYC ENERGY CODE COMPLIANCE:

STATEMENT: TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE NEW YORK CITY ENERGY CONSERVATION CODE. PROPOSED WORK MEETS THE GUIDELINES AND INSTRUCTIONS OUTLINED IN THE 2020 NYC ECC CHAPTER 4.



#### **GENERAL NOTES:**

- 1. THE PLANS SHOW SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES, AND/OR UTILITIES FROM FIELD LOCATION AND RECORD MAPPING, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES, AND/OR UTILITIES IN THE AREA MAY BE DIFFERENT FROM THAT SHOWN OR MAY NOT BE SHOWN, AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL, OR BLAST, CALL UNDERGROUND FACILITIES PROTECTION ORGANIZATION (UFPO) 1-(800)-962-7962 TOLL FREE.
- 2. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- 3. THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL PUBLIC AND PRIVATE PROPERTY, INCLUDING ALL EXISTING VEGETATION, EXISTING LANDSCAPE FEATURES, AND MONUMENTS WITHIN, ALONG, AND ADJACENT TO THE PROPERTY. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO A PLEASING AND ACCEPTABLE CONDITION.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC. AND SHALL COMPLY WITH ALL REQUIRED PERMITS.
- ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS.
- 6. ALL PROPOSED UTILITIES AND APPURTENANCES SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE LOCAL MUNICIPALITIES' CODES AND REGULATIONS GOVERNING THE INSTALLATION OF SUCH UTILITIES.
- THE ENGINEER RESERVES THE RIGHT TO EXAMINE ANY WORK DONE ON THIS PROJECT AT ANY TIME TO DETERMINE THE CONFORMANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OF THIS PROJECT.
- 8. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
- 9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND COORDINATE WORK WITH ALL OTHER CONTRACTS FOR THE SITE.
- 10. THE CONTRACTOR SHALL:
  - 10.A. VERIFY ALL CONDITIONS IN THE FIELD PRIOR TO COMMENCEMENT OF WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
  - 10.B. EXAMINE THE SITE AND INCLUDE IN HIS WORK THE EFFECT OF ALL EXISTING CONDITIONS ON THE WORK.
  - 10.C. PROVIDE AND INSTALL ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH GOOD STANDARD PRACTICE.
- 11. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF NEW YORK CITY BUILDING CODE CHAPTER 33 AND OSHA REGULATIONS FOR CONSTRUCTION. SHEET PILING SHALL BE DESIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTINE DEWATERING RELATED TO THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK. CONTRACTOR SHALL MAINTAIN EXISTING SITE DRAINAGE PATTERNS THROUGHOUT CONSTRUCTION UNLESS OTHERWISE SHOWN ON THE PLANS. DEWATERING FOR MAJOR CONSTRUCTION ITEMS IS NOT THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED BY TDI.
- 13. CONTRACTOR SHALL NOT DISRUPT SERVICE TO ANY UTILITIES WITHOUT PRIOR COORDINATION WITH UTILITY OWNER.
- 14. ALL FRAMES/COVERS WITHIN PAVED AREAS SHALL HAVE THE TOPS SET FLUSH WITH THE FINAL PAVEMENT GRADE. IN LANDSCAPED AREAS, ALL FRAMES SHALL BE 0.1' ABOVE GRADE.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING TIE-IN AND CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES, AND INVERTS. AS-BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES, AND INVERTS. AS-BUILT PLANS SHOWING ALL UNDERGROUND UTILITIES INSTALLED OR ENCOUNTERED SHALL BE SUBMITTED TO THE OWNER AND HIS REPRESENTATIVES.
- 16. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC IN ALL AREAS (INCLUDING THE ADJACENT ROADWAYS TO THE SITE AND CONSTRUCTION VEHICLE ENTRANCE AND EXIT TO THE SITE) AS PER COORDINATION WITH ADJACENT PROPERTY OWNERS.
- 17. ALL EXCAVATIONS SHALL BE PROTECTED AT THE END OF EACH WORK DAY.
- 18. CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING UTILITIES. DAMAGED UTILITIES SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. IF DURING EXCAVATION PREVIOUSLY DAMAGED UTILITIES ARE UNCOVERED, CONTRACTOR SHALL DOCUMENT THE DAMAGE AND REPORT DAMAGE TO THE APPROPRIATE OWNER.
- 19. THE CONTRACTOR MUST COORDINATE HIS SCHEDULE OF OPERATIONS WITH THE VARIOUS UTILITY OWNERS INVOLVED WITH THE PROJECT AND SHALL VERIFY UTILITY INFORMATION FOUND IN THE CONTRACT DOCUMENTS.
- 20. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, TDI SHALL COORDINATE WITH ALL THE KNOWN PUBLIC AND PRIVATE UTILITY COMPANIES THAT MAY HAVE POTENTIAL IMPACT TO OVERHEAD AND UNDERGROUND UTILITIES FROM THE CONTRACTORS WORK. THE CONTRACTOR SHALL, AT THIS MEETING, INFORM THE UTILITY COMPANIES OF HIS SCHEDULE OF OPERATIONS SO THAT UTILITY COMPANIES PLAN AND SCHEDULE THEIR ACTIVITIES ACCORDINGLY.
- 21. THE CONTRACTOR IS GOVERNED BY AND MUST ADHERE TO THE PROVISIONS OF THE 16 NYCRR PART 753, "PROTECTION OF UNDERGROUND FACILITIES." AND ALL ITS AMENDMENTS; I.E. CALL 811 DIG SAFE PRIOR TO BREAKING GROUND.
- 22. THE CONTRACTOR SHALL CONDUCT ALL OPERATIONS IN ACCORDANCE WITH ALL OSHA RULES AND REGULATIONS AND IN ACCORDANCE WITH NEW YORK STATE LABOR LAW, SECTION 202-H, "THE HIGH VOLTAGE PROXIMITY ACT."
- 23. REFER TO FLOOD INSURANCE RATE MAP (FIRM) NUMBER 3604970092G FOR THE PROJECT SITE. THE SPECIAL FLOOD HAZARD AREA TYPE IS ZONE AE AND X. BASE FLOOD ELEVATION IS 13' AND DESIGN FLOOD ELEVATION IS 15'.
- 24. EXISTING IMPERVIOUS SURFACE AREA WITHIN THE PROPERTY LIMITS TOTALS 4.36 ACRES, WHILE PROPOSED IMPERVIOUS SURFACE AREA TOTALS 7.77 ACRES.

## LIST OF SPECIFICATIONS:

#### 31 - EARTHWORK 31 - EARTHWORK

31 - EARTHWORK

33 - UTILITIES

310001 312319 312500 334000

GENERAL PROVISIONS DEWATERING EROSION AND SEDIMENTATION CONTROLS STORMWATER UTILITIES

# LIST OF SPECIAL INSPECTION:

INSPECTION AND TEST	COD	E / SECTION
CONCRETE - PRECAST	BC	1704.4
SUBGRADE INSPECTION	BC	1704.7.1
EXCAVATIONS - SHEETING, SHORING AND BRACING	BC	1704.20.2
SOIL PERCOLATION TEST	BC	1704 21 1 2

## FL FLOOD

- FL-1. THE SITE IS DEFINED AS A ZONE (NON-COASTAL).
- FL-2. BASE FLOOD ELEVATION, BFE, = 13 FEET NAVD 88.
- FL-3. RECOMMENDED FREE BOARD BY THE 2022 NYCBC-APPENDIX G IS 2.0 FEET.
- FL-4. RECOMMENDED DESIGN FLOOD ELEVATION, DFE = 15 FEET NAVD 88.
- FL-5. THE STRUCTURE IS NOT SUBJECTED TO HYDRODYNAMIC LOADS.

DESIGN ELEVATION / DEPTH	FEET IN NAVD 88
DESIGN BASE FLOOD ELEVATION	13.0
FINISH FLOOR ELEVATION	15.0
SEA LEVEL RISE	NOT CONSIDERED

#### FEMA FIRM PANEL 3604970092:

#### FLOOD INSURANCE RATE MAP 2007 ELEVATIONS IN NAVD 88



FLOOD INSURANCE RATE MAP 2015 ELEVATIONS IN NAVD 88 FIRM IS PRELIMINARY



SITE DRAINAGE AND EROSION AND SEDIMENT CONTROL SHEET INDEX		
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## LEGENDS & SYMBOLS

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EXISTING PROPERTY LINE EXISTING CATCH BASIN EXISTING ELECTRIC EXISTING OVERHEAD ELECTRIC EXISTING HIGH VOLTAGE ELECTRIC EXISTING ELECTRIC VAULT EXISTING POTABLE WATER LINE EXISTING HYDRANT PROPOSED FENCE PROPOSED GUIDE RAIL PROPOSED RETAINING WALL PROPOSED SECURITY GATE PROPOSED SPOT ELEVATION PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR PROPOSED LIGHT POLE PROPOSED STORM DRAIN PROPOSED UNDERDRAIN PROPOSED FLARED END SECTION PROPOSED CATCH BASIN PROPOSED DRAINAGE MANHOLE PROPOSED CLEANOUT PROPOSED RIPRAP SURFACE WATER FLOW PROPOSED CHECK DAM PROPOSED CONSTRUCTION ENTRANCE PROPOSED EROSION MAT PROPOSED INLET PROTECTION PROPOSED SILT FENCE

#### ABBREVIATIONS

AC = ALTERNATING CURRENT
AD = TANGENT OFFSET AT PVI
APPROX = APPROXIMATE
ASCE = AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM = AMERICAN SOCIETY OF TESTING AND MATERIALS
BVCE = BEGINING OF VERTICAL CURVE ELEVATION
BVCS = BEGINING OF VERTICAL CURVE STATION
CB = CATCH BASIN
CIP = CAST IN PLACE
CONC = CONCRETE
DIA = DIAMETER
DIP = DUCTILE IRON PIPE
DGA = DENSE GRADED AGGREGATE
E = EPOXY COATED REBAR
ELEV = ELEVATION
EVCE = END OF VERTICAL CURVE ELEVATION
EVCS = END OF VERTICAL CURVE STATION
EXIST = EXISTING
FF = FRONT FACE
FDNY = NEW YORK CITY FIRE DEPARTMENT
FFE = FINISHED FLOOR ELEVATION
HDPE = HIGH DENSITY POLYETHYLENE
HPBO = HEAVY POST BLOCK OUT
HVAC = HEATING, VENTILATION AND AIR CONDITIONING
HVE = HIGH VOLTAGE ELECTRIC
ID = INNER DIAMETER
IPS = IRON PIPE SIZE
LBS = POUNDS
LF = LINEAR FEET
LVC = LENGTH OF VERTICAL CURVE
MAX = MAXIMUM
MH = MANHOLE
MIN = MINIMUM
MPT = MAINTENANCE AND PROTECTION OF TRAFFIC
MTS = MANUAL TRANSFER SWITCH
MVS = MEDIUM VOLTAGE SWITCHGEAR
N/A = NOT APPLICABLE
NTS = NOT TO SCALE
NYC = NEW YORK CITY
NYCDOT = NEW YORK CITY DEPARTMENT OF TRANSPORTATION
NYCDEP = NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
NYCRR = NEW YORK CITY CODES, RULES AND REGULATIONS
NYSDOT = NEW YORK STATE DEPARTMENT OF TRANSPORTATION

AASHTO = AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

OD = OUTER DIAMETER OSHA = OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PCC = PORTLAND CEMENT CONCRETE PCD = PRECAST CONCRETE DUCTS PVI = POINT OF VERTICAL INTERSECTION PVMT = PAVEMENT STA = STATIONTYP = TYPICALRCP = REINFORCED CONCRETE PIPE RD = ROADREQ'D = REQUIREDREV = REVISION RF = REAR FACEWM = WATER MAIN WT = WEIGHTWWF = WELDED WIRE FABRIC WZTC = WORK ZONE TRAFFIC CONTROL

YR = YEAR

OC = ON CENTER



STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE DETAILS			
S-1	RIM = 14.100			
CATCH BASIN	P-1 INV OUT = 11.500			
S-2	RIM = 14.360			
CATCH BASIN	P-1 INV IN = 11.380 P-2 INV OUT = 11.380			
6.2	RIM = 14.200			
4' DIA MANHOLE	P-2 INV IN = 10.630 P-3 INV OUT = 10.630			
S-4	RIM = 13.950			
CATCH BASIN	P-12 INV OUT = 10.550			
S-5	RIM = 14.050			
4' DIA MANHOLE	P-3 INV IN = 10.500 P-12 INV IN = 10.500			
0.0	RIM = 13.820			
5' DIA MANHOLE	P-7 INV IN = 9.700 P-9 INV OUT = 9.400			
S-7	RIM = 13.000			
CATCH BASIN	P-7 INV OUT = 10.500			
S-8 FLARED END SECTION W/ 6" DIA FIELDSTONE COBBLE AND GEOFABRIC LINER INSTALLED PER ROCK OUTFALL DETAIL	RIM = 10.612			
S-0	RIM = 13.000			
CATCH BASIN	P-10 INV OUT = 10.000			
S-10 FLARED END SECTION W/ 6" DIA FIELDSTONE COBBLE AND GEOFABRIC LINER INSTALLED PER ROCK OUTFALL DETAIL	RIM = 10.076			
S-11 FLARED END SECTION W/ 6" DIA FIELDSTONE COBBLE AND GEOFABRIC LINER INSTALLED PER ROCK OUTFALL DETAIL	RIM = 12.462			
	RIM = 14.460			
(SEE DETAIL)	P-4 INV OUT = 10.500			
S 12	RIM = 14.410			
5' DIA MANHOLE	P-4 INV IN = 10.343 P-5 INV OUT = 10.343			
S-14 FLARED END SECTION W/ 6" DIA FIELDSTONE COBBLE AND GEOFABRIC LINER INSTALLED PER ROCK OUTFALL DETAIL	RIM = 14.550			
0.45	RIM = 14.020			
4' DIA MANHOLE	P-6 INV IN = 10.500 P-8 INV IN = 11.000			
S-16	RIM = 14.310			
4' DIA MANHOLE	P-8 INV OUT = 11.500			
S-17	RIM = 13.500			
CATCH BASIN	P-6 INV OUT = 10.950			

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PIPE TABLE						
PIPE NAME	SIZE	LENGTH	SLOPE	MATERIAL		
P-1	12.000	38.092	0.32%	DIP		
P-2	16.000	300.594	0.25%	DIP		
P-3	16.000	47.050	0.28%	DIP		
P-4	21.000	15.747	1.00%	RCP		
P-5	21.000	26.329	1.00%	RCP		
P-6	12.000	72.688	0.62%	DIP		
P-7	12.000	52.703	1.52%	DIP		
P-8	6.000	24.834	2.01%	DIP		
P-9	18.000	52.618	0.76%	RCP		
P-10	12.000	161.495	0.62%	DIP		
P-11	18.000	7.274	2.06%	RCP		
P-12	16.000	8.269	0.60%	DIP		

## NOTES:

- OF THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP).
- 3. PROPOSED DRAINAGE PIPES LESS THAN 18" DIAMETER SHALL BE DIP. ALL PROPOSED DRAINAGE PIPES GREATER THAN 18" SHALL BE RCP.
- 5. ALL RCP SHALL BE CLASS III UNLESS OTHERWISE INDICATED.
- 7. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED UP PLANS
- (AS-BUILTS) SHOWING ANY CHANGE DURING CONSTRUCTION.
- COVERS.

## 1. ALL DRAINAGE CONSTRUCTION SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS

2. ALL SITE DRAINAGE SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.

4. ALL DUCTILE IRON SEWER PIPE SHALL BE CLASS 56 WITH EPOXY LINING < INSTALLED ON BROKEN STONE.

6. SEE ARCHITECTURAL PLANS (FILED UNDER A SEPARATE APPLICATION) FOR EXACT BUILDING & FOUNDATION DETAILS AN

8. GRASS SWALE AND INFILTRATION BASIN IS PENDING COORDINATION AND MAY CHANGE IN FINAL DESIGN.

9. GROUND ALL METALLIC COVERS IN THE SITE BY CONNECTING THEM TO THE STATION GROUNDING GRID WITH MINIMUM 4/0 AWG GROUNDING WIRE AND PROVIDING MINIMUM OF 2 FEET OF SLACK FOR LARGER COVERS SO THAT THE COVERS CAN BE MOVED ASIDE, IF REQUIRED, WITHOUT NEED FOR UNBOLTING THE GROUNDING



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- NO OVERFALL





#### **CULTEC RECHARGER® 280HD SPECIFICATIONS**

#### GENERAL

CULTEC RECHARGER 280HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CONTACT CULTEC AT LEAST THIRTY DAYS PRIOR TO SYSTEM INSTALLATION TO ARRANGE FOR A PRE-CONSTRUCTION MEETING.

#### CHAMBER PARAMETERS

- 1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- 2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
- 3. THE CHAMBER WILL BE ARCHED IN SHAPE.
- 4. THE CHAMBER WILL BE OPEN-BOTTOMED.
- 5. THE CHAMBER WILL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.
- 6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 280HD SHALL BE 26.5 INCHES (673 mm) TALL, 47 INCHES (1194 mm) WIDE AND 8 FEET (2.44 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 280HD SHALL BE 7 FEET (2.13 m).
- 7. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 21 INCHES (525 mm) HDPE.
- 8. THE CHAMBER WILL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. NOMINAL INSIDE DIMENSIONS OF THE SIDE PORTAL SHALL HAVE A WIDTH OF 11.25" [286 mm] AND HEIGHT OF 11.5" [292 mm]. THE SIDE PORTAL CAN ACCEPT A MAXIMUM OUTER DIAMETER (O.D.) PIPE SIZE OF 12.25 INCHES [311 mm].
- 9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV® FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
- 10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 280HD CHAMBER WILL BE 6.079 FT3 / FT (0.565 m<sup>3</sup> / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 280HD SHALL BE 42.553 FT<sup>3</sup> / UNIT (1.205 m<sup>3</sup> / UNIT) - WITHOUT STONE.
- 11. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR WILL BE 0.913 FT<sup>3</sup> / FT (0.085 m<sup>3</sup> / m) - WITHOUT STONE.
- 12. THE RECHARGER 280HD CHAMBER WILL SEVENTY-TWO DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
- 13. THE RECHARGER 280HD CHAMBER SHALL HAVE 15 CORRUGATIONS.
- 14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, WILL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
- 15. THE RECHARGER 280RHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
- 16. THE RECHARGER 280SHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 mm) HIGH X 35 INCHES (889 mm) WIDE.
- 17. THE RECHARGER 280IHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 mm) HIGH X 35 INCHES (889 mm) WIDE.
- 18. THE RECHARGER 280EHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
- 19. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE RECHARGER 280HD AND ACT AS CROSS FEED CONNECTIONS.
- 20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
- 21. THE CHAMBER WILL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
- 22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
- 23. THE CHAMBER SHALL BE MANUFACTURED IN AN IN AN ISO 9001:2015 CERTIFIED FACILITY
- 24. THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S INSTALLATION INSTRUCTIONS.
- 25. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
- 26. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.65 m).

## **CULTEC HVLV® FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS**

#### GENERAL

CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER 280HD STORMWATER CHAMBERS.

#### CHAMBER PARAMETERS

- 1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- 2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
- 3. THE CHAMBER WILL BE ARCHED IN SHAPE.
- 4. THE CHAMBER WILL BE OPEN-BOTTOMED.
- 5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
- 6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR WILL BE 0.913 FT<sup>3</sup> / FT (0.085 m<sup>3</sup> / m) - WITHOUT STONE.
- 7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
- 8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
- 9. THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- 10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
- CULTEC NO. 410<sup>™</sup> NON-WOVEN GEOTEXTILE

CULTEC NO. 410<sup>™</sup> NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

#### GEOTEXTILE PARAMETERS

- 1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE
- THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M). 4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM
- D4632 TESTING METHOD.
- 5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM
- D3786 TESTING METHOD. 7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM
- D4833 TESTING METHOD. 8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241
- TESTING METHOD.
- 9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
- 10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751
- TESTING METHOD. 11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
- 12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4491 TESTING METHOD. 13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355

CULTEC NO. 4800™ WOVEN GEOTEXTILE

CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

GEOTEXTILE PARAMETERS

TESTING METHOD.

- THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832) THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
- THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
- 4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT 5. (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
- 6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1.096 LBS/FT
- (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X
- 2, 740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X
- 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER
- ASTM D6241 TESTING METHOD. 10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801
- N) PER ASTM D4533 TESTING METHOD. 11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM)
- PER ASTM D4751 TESTING METHOD. 12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491
- TESTING METHOD. 13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER
- ASTM D4491 TESTING METHOD.

14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

GENERAL NOTES







**CULTEC RECHARGER 280HD HEAVY DUTY END DETAIL INFORMATION** 

6.0" [150 mm] DIA.

33.1" [840 mm]

# UNDERGROUND INFILTRATION SYSTEM (CULTEC RECHARGER 280HD)

UNITS ARE USED

TO BEGIN A LINE.

OF A LINE.







## GENERAL EROSION CONTROL NOTES

- 1. THE PROJECT WILL USE NYSDEC STANDARD EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT THE ENTIRE SITE AND THE SURROUNDING ENVIRONMENT FROM SILTATION AND RUNOFF DURING THE ENTIRE CONSTRUCTION PROJECT.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE USED TO ADDRESS CONDITIONS THAT ARE PRESENTED IN THE FIELD DUE TO TEMPORARY CONSTRUCTION CONDITIONS. DAILY OBSERVATION OF EROSION CONTROL MEASURES BY THE CONTRACTOR PERFORMING CONSTRUCTION ACTIVITIES IS REQUIRED. THE OWNER/APPLICANT IS OBLIGATED TO PERFORM INSPECTIONS AND REPORTING AS OUTLINED IN THE CURRENT EDITION OF THE SPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES, VARIANCES TO THE CONSTRUCTION PRACTICES SHOWN ON THIS EROSION CONTROL PLAN IDENTIFIED DURING THESE INSPECTIONS MUST BE ADDRESSED AT THE EARLIEST OPPORTUNITY.
- 3. PLANNED EROSION CONTROL MEASURES INCLUDE BUT MAY NOT BE LIMITED TO THE FOLLOWING:
- A. SILT FENCE: SILT FENCE SHALL BE INSTALLED AND LOCATED ALONG THE PROPOSED LIMIT OF DISTURBANCE, AROUND STOCKPILE AREA AND AS DIRECTED BY THE CONSULTANT ENGINEER.
- B. SURFACE STABILIZATION: ROADWAY AND BUILDING BASE COURSES WILL BE INSTALLED AS SOON AS FINISHED GRADE IS REACHED.
- C. INLET PROTECTION: INLET PROTECTION SHALL BE INSTALLED AT ALL STORMWATER INLETS RECEIVING RUNOFF FROM DISTURBED AREAS OF THE SITE.
- D. SEDIMENT TRAPS: SEDIMENT TRAPS SHALL BE INSTALLED TO INTERCEPT SEDIMENT-LADEN RUNOFF AND REDUCE THE AMOUNT OF SEDIMENT LEAVING THE DISTURBED AREA.
- E. GEOTEXTILE FILTER BAGS: GEOTEXTILE FILTER BAGS SHALL BE INSTALLED TO TRAP AND RETAIN SEDIMENT PRIOR TO LEAVING THE DISTURBED AREA.
- F. STABILIZED CONSTRUCTION ENTRANCE/EXIT: A TEMPORARY STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED FOR ACCESS TO AND FROM THE CONSTRUCTION SITE. WASH-DOWN WATER AND RUNOFF FROM THE CONSTRUCTION ENTRANCE SHALL BE DIRECTED TO APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- G. STAGING AND LAYDOWN AREAS: STAGING AND LAYDOWN AREAS FOR VEHICLES AND EQUIPMENT SHALL BE LOCATED ON STABILIZED PORTION OF THE SITE. VEHICLES AND EQUIPMENT SHALL BE WASHED DOWN IN STABILIZED ARES PRIOR TO EXISTING THE SITE.
- H. SOIL STOCKPILE: SOIL STOCKPILES AND EXPOSED SOIL SHALL BE STABILIZED BY SEED, MULCH, OR OTHER APPROPRIATE MEASURES, WHEN ACTIVITIES TEMPORARILY CEASE DURING CONSTRUCTION FOR 7 DAYS OR MORE IN ACCORDANCE WITH NYSDEC REQUIREMENTS.
- I. DUST CONTROL: SHOULD EXCESSIVE DUST BE GENERATED, IT SHALL BE CONTROLLED BY SPRINKLING WATER.
- J. DEWATERING: TEMPORARY DEWATERING PRACTICES SHALL BE USED TO PREVENT PONDING OF RAINWATER OR GROUNDWATER DURING CONSTRUCTION OF EXCAVATED AREAS.
- 4. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND REPAIRED AS NEEDED AFTER EACH RAINFALL EVENT BY THE CONTRACTOR. NO ADDITIONAL ALLOWANCES WILL BE MADE TO THE CONTRACTOR FOR REPAIRS TO SOIL EROSION AND SEDIMENT CONTROL DEVICES THROUGHOUT THE TERM OF CONSTRUCTION FOR THIS PROJECT.

## SOIL RESTORATION NOTES:

- 1. SOIL RESTORATION SHALL BE COMPLETED IN THE AREA OF THE PROPOSED PREVIOUS SURFACES ONCE FINAL GRADE HAS BEEN ACHIEVED IN THESE AREAS.
- 2. THE TYPE OF SOIL RESTORATION WILL DEPEND ON THE TYPE OF SOIL DISTURBANCE AND THE TYPE OF HYDROLOGIC SOIL GROUP. CONTRACTOR WILL BE REQUIRED TO COMPLETE SOIL RESTORATION IN CONFORMANCE WITH THE VARIOUS METHODS OUTLINED IN TABLE 5.3 OF NYS STOMRWATER MANAGEMENT DESIGN MANUAL.

#### CONSTRUCTION NOTES:

- 1. DISTURBED AREAS, CONSTRUCTION ROADS AND ENTRANCES SHALL BE STABILIZED IN ACCORDANCE WITH THE DESIGN CRITERIA OUTLINED IN THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (2005). DISTURBED AND EXPOSED SOIL AREAS SHALL BE PROMPTLY STABILIZED WITH MULCH AND SEED AND SUPPLEMENTED WITH A SILT FENCE AT THE LIMITS OF DISTURBANCE.
- 2. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROVIDED ALONG THE CONSTRUCTION ACCESS WAYS AND IN THE STAGING AREAS AS NECESSARY TO AVOID ON-SITE OR OFF-SITE EROSION AND SEDIMENTATION PROBLEMS.
- 3. THE SCOPE OF WORK FOR THIS PROJECT SHALL BE BROKEN INTO TWO PHASES TO ENSURE NO MORE THAN 5 ACRES OF LAND WILL BE DISTURBED AT ANY GIVEN TIME DURING THE CONSTRUCTION DURATION.
- 4. DISTURBANCE AREA FOR PHASE 1 (EAST AREA AND ACCESS POINTS) = 3.92 ACRES

#### PRE-CONSTRUCTION ESC ACTIVITIES:

- 1. ESTABLISH WORK AREA AND CONTRACTOR STAGING AREAS.
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
- 3. IDENTIFY ALL NATURAL RESOURCES AND MARK UP AND PROTECT THEM AS NECESSARY INCLUDING TREES, EXISTING POINT OF DISCHARGE OFF-SITE, ETC..
- 4. INSTALL PERIMETER SEDIMENT CONTROL SUCH AS SILT FENCES AND CONSTRUCTION FENCE AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLANS.

DISTURBANCE AREA FOR PHASE 2 (WEST AREA AND BUILDING) = 3.85 ACRES

#### CONSTRUCTION SEQUENCING: (TWO PHASES, REFER TO THE ESC PLANS FOR PHASE LIMITS)

- 1. INSTALL ALL TEMPORARY ESC ACTIVITIES FOR THE PHASE INCLUDING SILT FENCE, INLET PROTECTION, SEDIMENT TRAP AND GEOTEXTILE FILTER BAGS.
- 2. ONCE ALL TEMPORARY ESC ACTIVITIES ARE ESTABLISHED, PERFORM EXCAVATION AND TRENCHING AND INSTALL ALL UTILITIES WITHIN THE PHASE.
- 3. BEGIN ROUGH GRADING OF THE INFILTRATION BASIN AND CONTROL STRUCTURE IN THE BASIN. TEMPORARILY SEED/STABILIZE. PROTECT THE BASIN AREA WITH CONSTRUCTION FENCING TO PREVENT CONSTRUCTION TRAFFIC IN THE AREA. THIS AREA WILL BE USED AS A SEDIMENT TRAP DURING CONSTRUCTION (SEE DETAILS). AFTER FINAL SITE GRADING/STABILIZATION THE INFILTRATION SECTIONS WILL BE INSTALLED.
- 4. PLACE GEO-FABRIC AND ROCK AT OUTFALLS AS INDICATED ON PLANS.
- 5. STRIP TOPSOIL FROM REMAINDER OF SITE WITHIN THE PHASE (WHERE PROPOSED IMPROVEMENTS OR GRADING IS SHOWN ONLY). TOPSOIL STOCKPILES(S) REMAINING FOR MORE THAN SEVEN DAYS SHALL BE STABILIZED WITH VEGETATIVE COVER, MULCH, TARPS OR OTHER APPROVED PRACTICE. EROSION FROM TOPSOIL PILES LEFT FOR LESS THAN SEVEN DAYS SHALL BE CONTROLLED WITH SILT FENCE OR OTHER APPROVED METHODS. ANY TOPSOIL STOCKPILE WITHIN 25' OF A ROADWAY OR DRAINAGE DITCH SHALL BE COVERED WITH TARPS OR OTHER APPROVED METHODS. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS IS TO BE STABILIZED BY SEED, SOD, MULCH, OR OTHER APPROVED METHODS.
- 6. REDISTRIBUTE TOPSOIL FROM STOCKPILES(S) TO A DEPTH OF 6 INCHES. SURPLUS TOPSOIL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR. FINAL GRADE THE SITE.
- 7. INSTALL AGGREGATE BASE COURSE IN AREAS TO BE ASPHALT AND/OR CONCRETE PAVED.
- 8. REMOVE ACCUMULATED SEDIMENT IN THE INFILTRATION SYSTEMS AND STONE LAYER AS SPECIFIED IN THE DETAILS. MINIMIZE COMPACTION AND CONSTRUCTION TRAFFIC IN THESE AREAS.
- 9. UPON SITE STABILIZATION, REMOVE TEMPORARY EROSION CONTROL PRACTICES, CLEAN STRUCTURES OF ANY SEDIMENT AND/OR CONSTRUCTION DEBRIS AND REMOVE CONSTRUCTION DEBRIS AND ACCUMULATED SEDIMENT FROM THE INFILTRATION BASIN AND PROCEED TO THE NEXT PHASE.





ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAIL.Y. DAMAGED OR LEAKING FACILITATES SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHALL BE PUMPED

- 2. ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT

- 5. INSPECT THE PROJECT SITE FREQUENTLY TO ENSURE THAT NO
- 6. LOCATION(S) TO BE DETERMINED IN THE FIELD BY THE OWNER'S

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD. 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN FENCE WITH TIES SPACED EVERY
- 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 GAUGE, 6" MAXIMUM MESH OPENING. 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE
- OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- 4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT. 5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BLUGES" DEVELOP IN THE SILT FENCE.







**TEMPORARY SOIL STOCKPILE DETAIL** 

SCALE: N.T.S.

FINISHED GRADE

SECTION A-A





PROJECT

# Astoria HVDC **Converter Station**

31-45 20<sup>th</sup> Avenue, Astoria, Queens NY 11105 Block #850 - Lot #310 - BIN #4624437

# **EROSION AND SEDIMENT CONTROL DETAILS 2**

