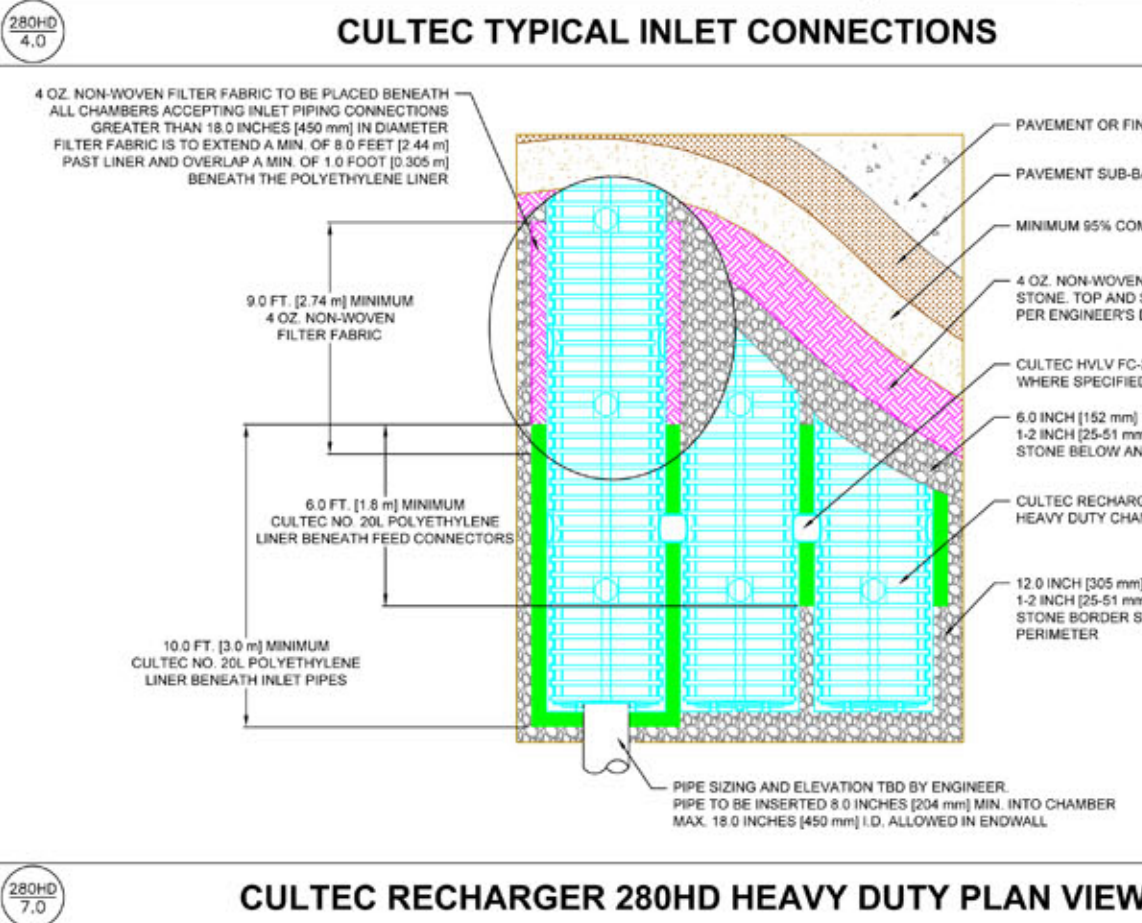
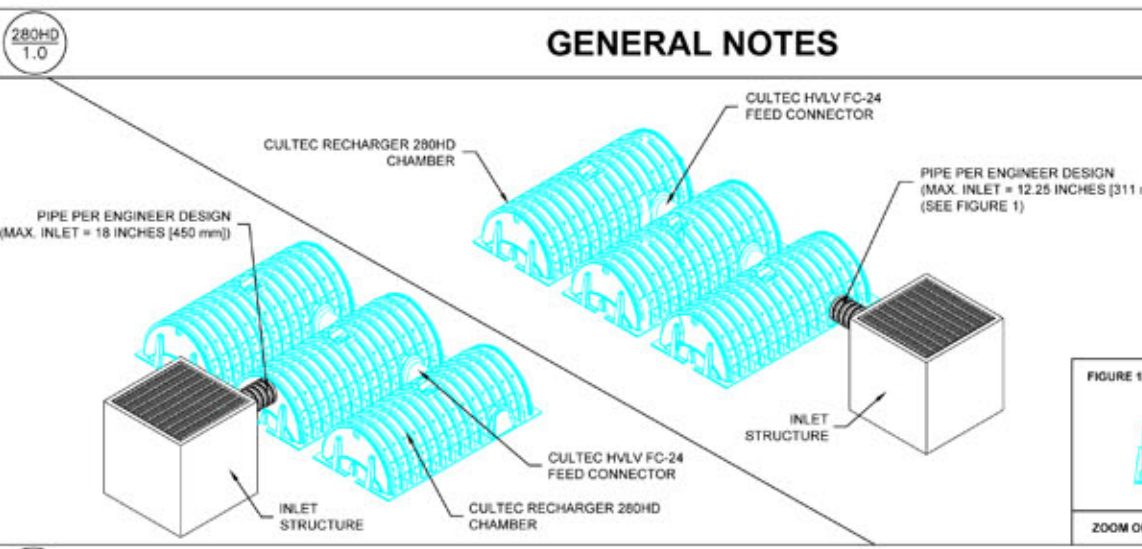


CULTEC RECHARGER® 280HD SPECIFICATIONS

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.

CHAMBER PARAMETERS

1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5532)
2. THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK POLYETHYLENE.
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 END WALL IS 18 INCHES (450 mm).
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" (293 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 INCHES (614 mm) LONG.
10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 280HD CHAMBER WILL BE 6.079 FT³ (173 m³) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 280HD SHALL BE 42.53 FT³ UNIT (1.208 m³) - WITHOUT STONE.
11. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR WILL BE 0.913 FT³ (0.026 m³) - WITHOUT STONE.
12. THE RECHARGER 280HD CHAMBER WILL HAVE EIGHTY-TWO DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNITS 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 280HD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER 280HD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 mm) HIGH X 35 INCHES (889 mm) WIDE.
17. THE RECHARGER 280HD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 mm) HIGH X 35 INCHES (889 mm) WIDE.
18. THE RECHARGER 280HD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL END WALL 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 RIBS BETWEEN THE RIBS.
21. HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
22. THE CHAMBER WILL HAVE A RAISED INTEGRAL CAP LOCATED ON TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION POINT OR CLEAN-OUT.
23. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
24. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2009 CERTIFIED FACILITY.
25. THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S INSTALLATION INSTRUCTIONS.
26. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 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

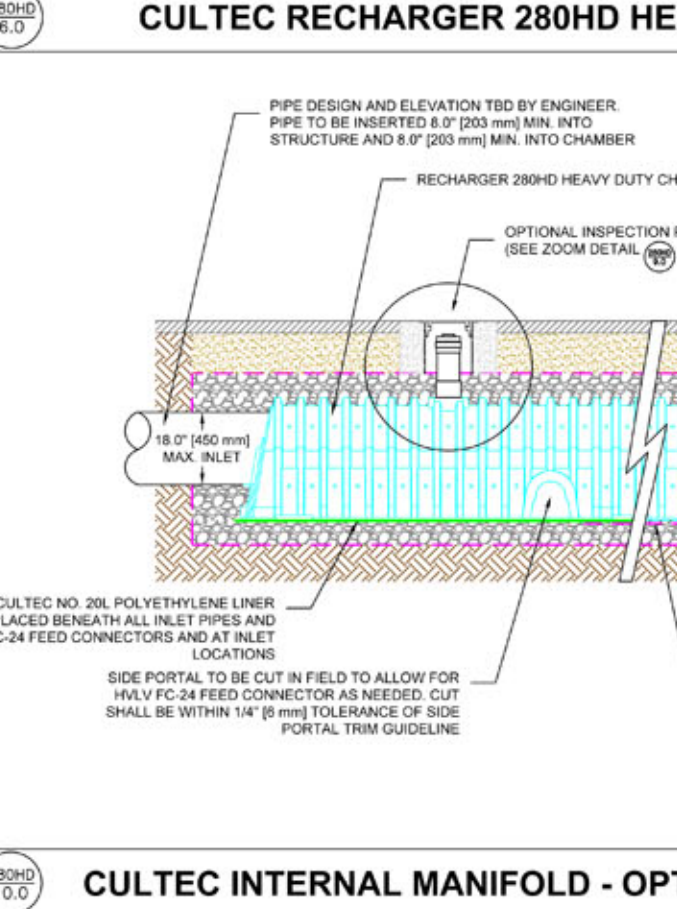
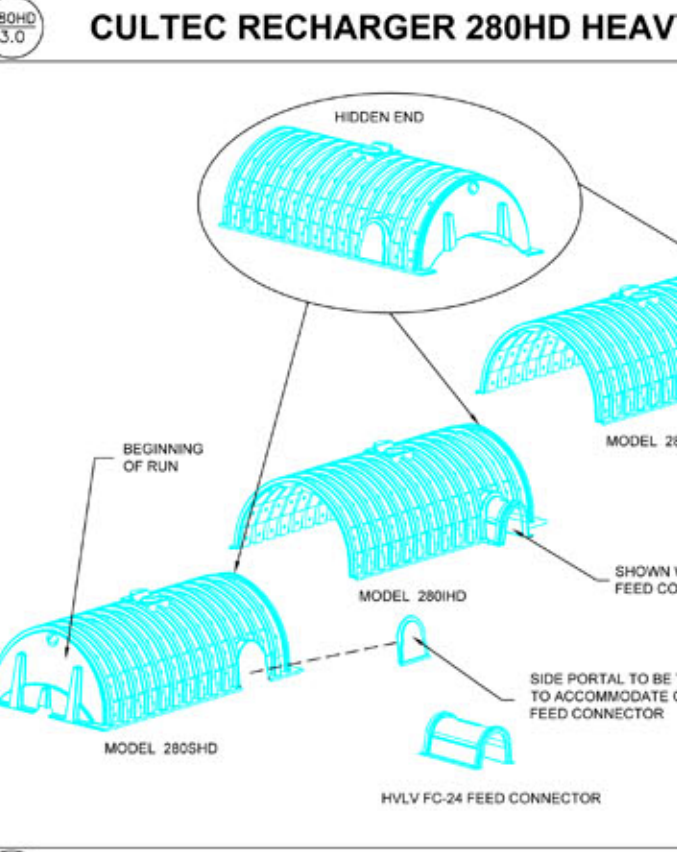
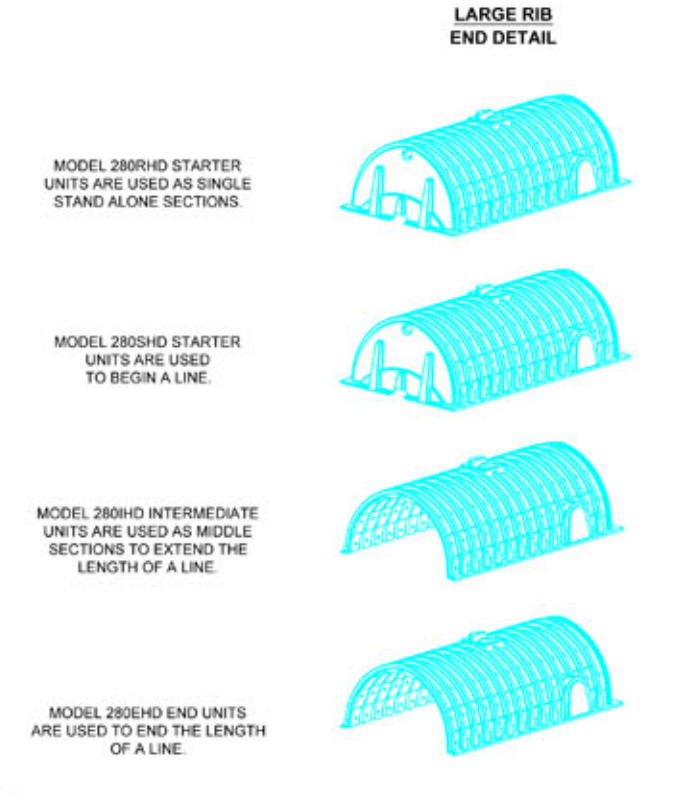
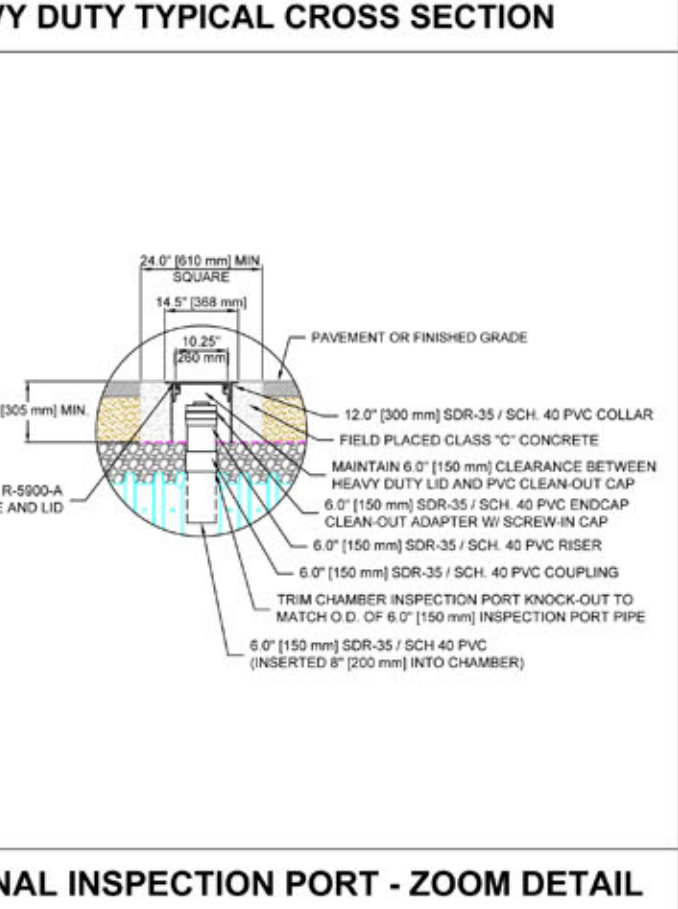
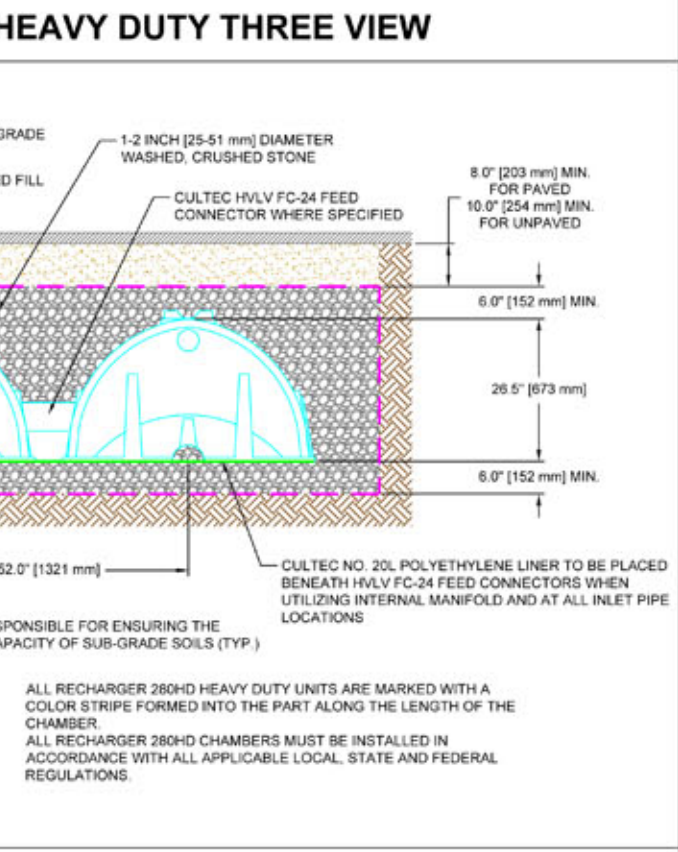
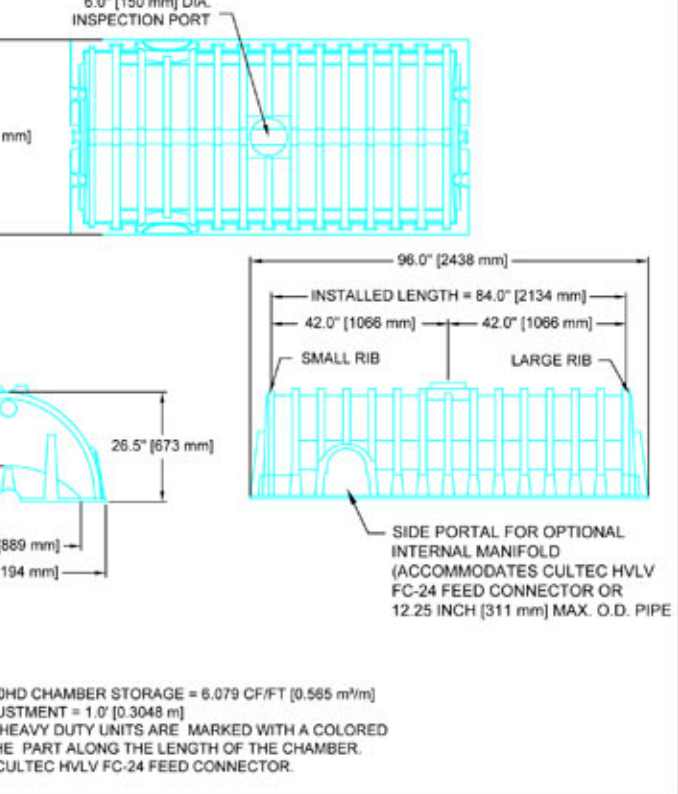
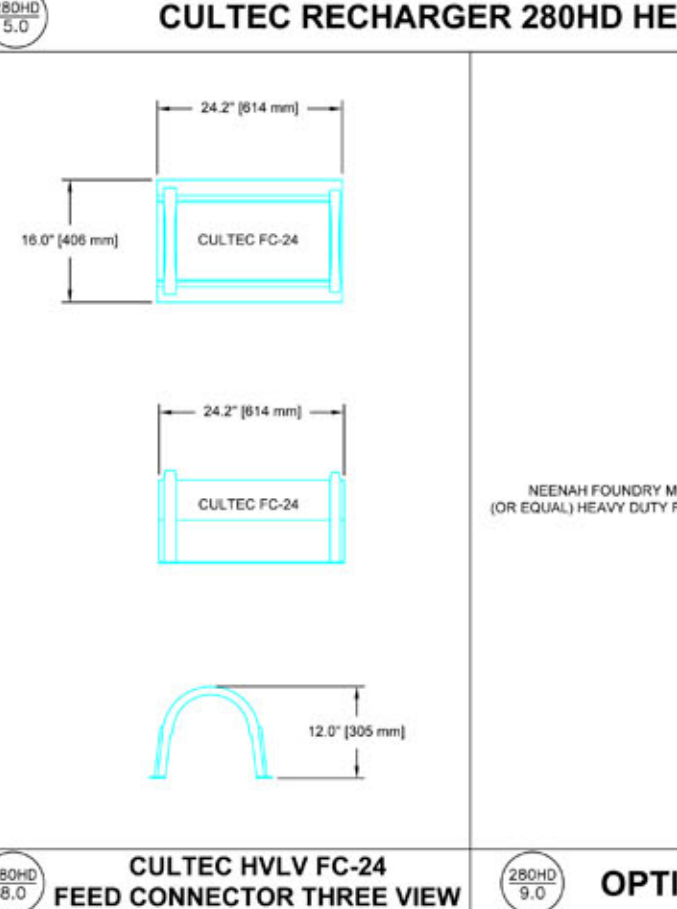
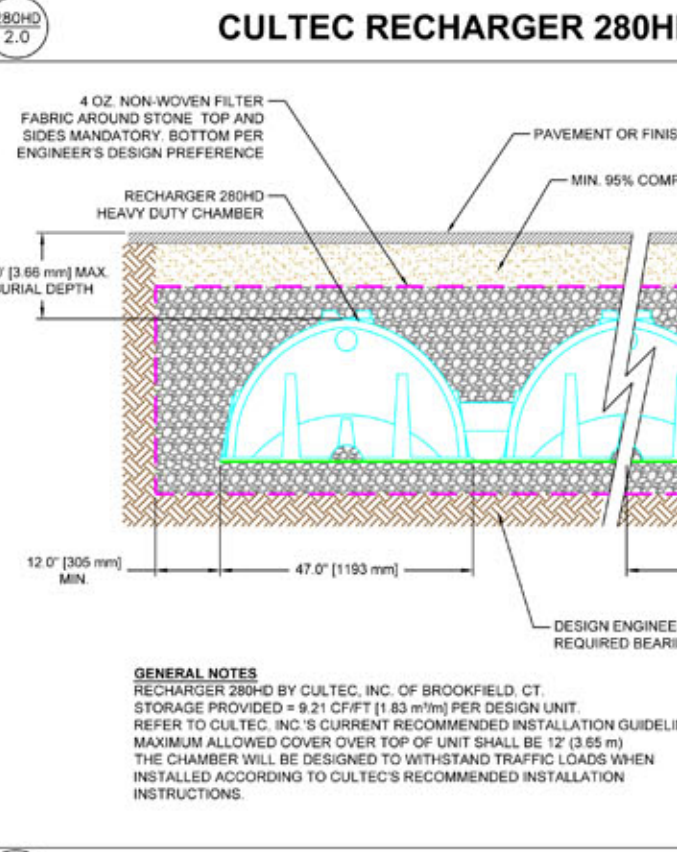
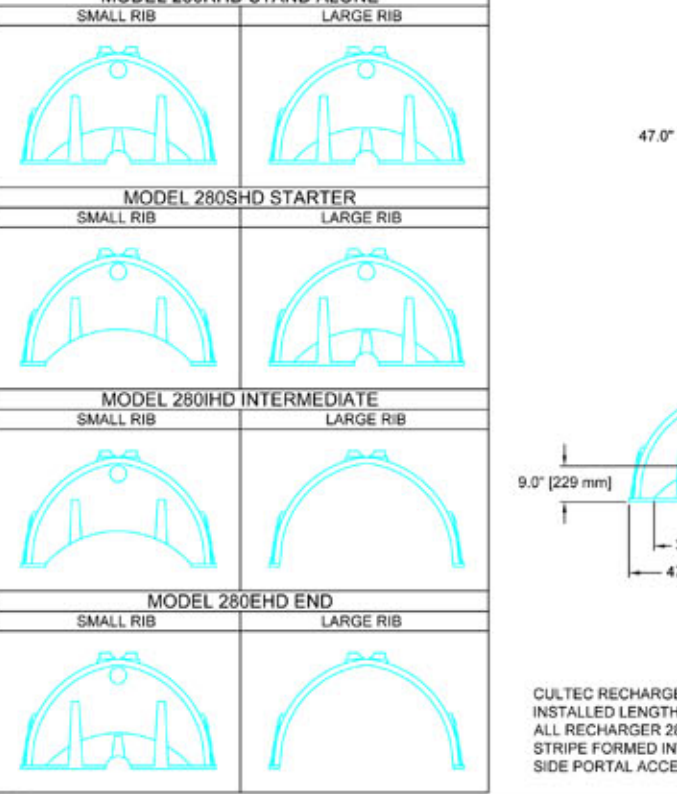
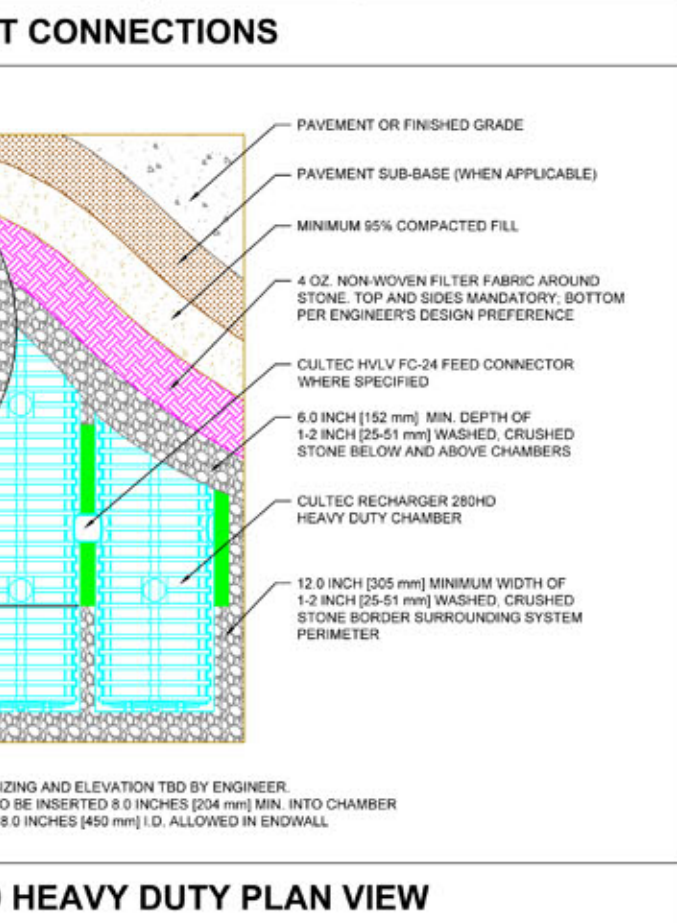
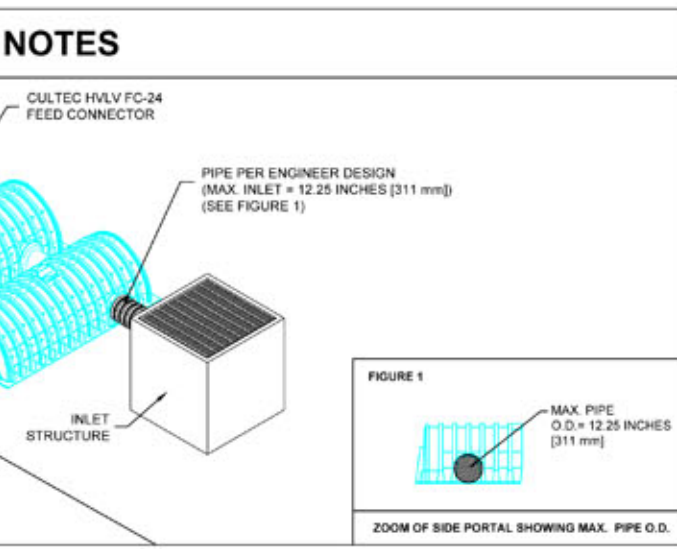
1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5532)
2. THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK HIGH-MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMHDPE).
3. THE CHAMBER WILL BE ARCHED IN SHAPE.
4. THE CHAMBER WILL BE OPEN-BOTTOMED.
5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24 INCHES (614 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR WILL BE 0.913 FT³ (0.026 m³) - 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 9001:2009 CERTIFIED FACILITY.

CULTEC NO. 20L™ POLYETHYLENE LINER

GENERAL
 CULTEC NO. 20L™ POLYETHYLENE LINER IS DESIGNED AS AN IMPERVIOUS UNDERLAYMENT TO PREVENT SCOURING OF THE STONE BASE CAUSED BY WATER MOVEMENT WITHIN THE CULTEC SYSTEM. CULTEC NO. 20L™ POLYETHYLENE LINER IS TO BE PLACED BENEATH HVLV FC-24 FEED CONNECTORS WHEN UTILIZING INTERNAL MANIFOLD AND BENEATH ALL INLET PIPES.

LINER PARAMETERS

1. THE LINER WILL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5532)
2. THE LINER WILL BE BLACK IN APPEARANCE.
3. THE LINER WILL HAVE A NOMINAL THICKNESS OF 20 MIL (0.51 mm)
4. THE LINER WILL HAVE A WEIGHT OF 93 LBS/M² (453 g/m²)
5. THE LINER WILL HAVE A TENSILE STRENGTH @ BREAK 1" (2.54 cm) OF 75 LBS (34 kN) PER ASTM D6693 TESTING METHOD
6. THE LINER WILL HAVE AN ELONGATION AT BREAK OF 800% PER ASTM D6693 TESTING METHOD.
7. THE LINER WILL HAVE A TEAR RESISTANCE OF 11 LBF (49 N) PER ASTM D1004 TESTING METHOD.
8. THE LINER WILL HAVE A HYDROSTATIC RESISTANCE OF 100 PSI (689 kPa) PER ASTM D751 TESTING METHOD.
9. THE LINER WILL HAVE A PUNCTURE RESISTANCE OF 30 LBF (133 N) PER ASTM D4833 TESTING METHOD.
10. THE LINER WILL HAVE A VOLATILE LOSS OF <1% PER ASTM D1203 TESTING METHOD.
11. THE LINER WILL HAVE A DIMENSIONAL STABILITY OF <2% PER ASTM D1004 TESTING METHOD.
12. THE LINER WILL HAVE A MAXIMUM USE TEMPERATURE OF 180° F (82° C).
13. THE LINER WILL HAVE A MINIMUM USE TEMPERATURE OF -70° F (-57° C).
14. THE LINER WILL HAVE A PERM RATING OF 0.041 U.S. PERMS (0.027 METRIC PERMS) PER ASTM E96 METHOD.
15. THE LINER WILL CONSIST OF A BLENDED LINEAR POLYETHYLENE.
16. THE LINER WILL NOT CONTAIN PLASTICIZERS.



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.

CHAMBER PARAMETERS

- THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5632)
- THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK POLYETHYLENE.
- THE CHAMBER WILL BE ARCHED IN SHAPE.
- THE CHAMBER WILL BE OPEN-BOTTOMED.
- 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.
- 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).
- MAXIMUM INLET OPENING ON THE CHAMBER END WALL IS 18 INCHES (450 mm).
- THE RECHARGER 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" (293 mm). THE SIDE PORTAL CAN ACCEPT A MAXIMUM OUTER DIAMETER (O.D.) PIPE SIZE OF 12.25 INCHES (311 mm).
- 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 INCHES (614 mm) LONG.
- THE NOMINAL STORAGE VOLUME OF THE RECHARGER 280HD CHAMBER WILL BE 6.079 CF/FT (0.965 m³/m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 280HD SHALL BE 42.563 CF/UNIT (1.208 m³/UNIT) - WITHOUT STONE.
- THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR WILL BE 9.913 FT³/FT (0.685 m³/m) - WITHOUT STONE.
- THE RECHARGER 280HD CHAMBER WILL HAVE EIGHTY-TWO DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNITS TO PROMOTE LATERAL CONVEYANCE OF WATER.
- THE RECHARGER 280HD CHAMBER SHALL HAVE 15 CORRUGATIONS.
- 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.
- THE RECHARGER 280HD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
- THE RECHARGER 280HD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 mm) HIGH X 35 INCHES (889 mm) WIDE.
- THE RECHARGER 280HD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 mm) HIGH X 35 INCHES (889 mm) WIDE.
- THE RECHARGER 280HD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL END WALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
- 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.
- CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
- HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
- THE CHAMBER WILL HAVE A RAISED INTEGRAL CAP LOCATED ON TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
- THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
- THE CHAMBER SHALL BE MANUFACTURED IN AN IN AN ISO 9001:2009 CERTIFIED FACILITY.
- THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S INSTALLATION INSTRUCTIONS.
- MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 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

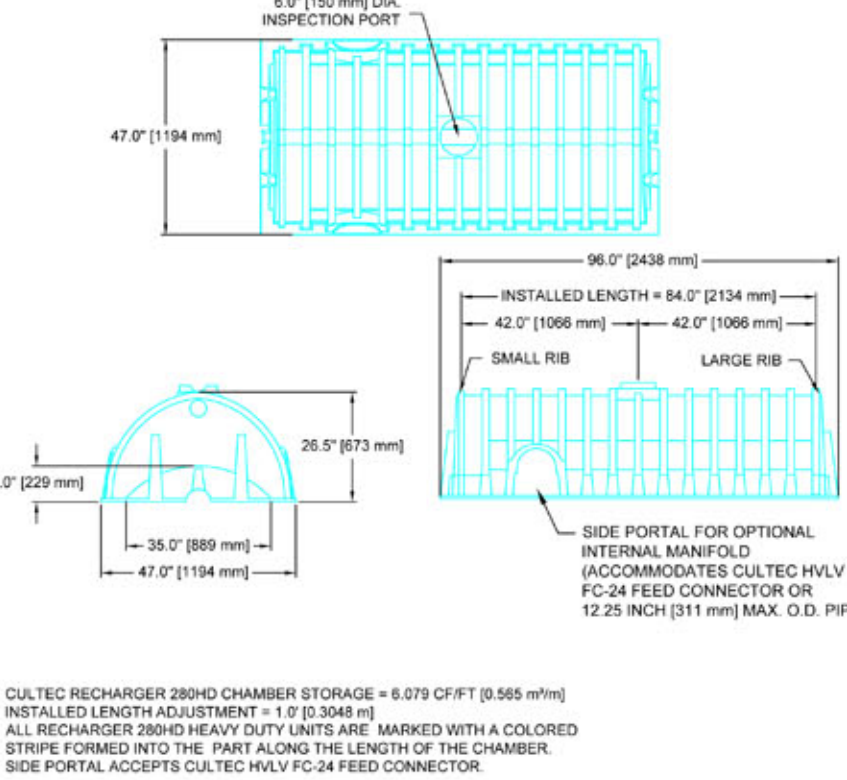
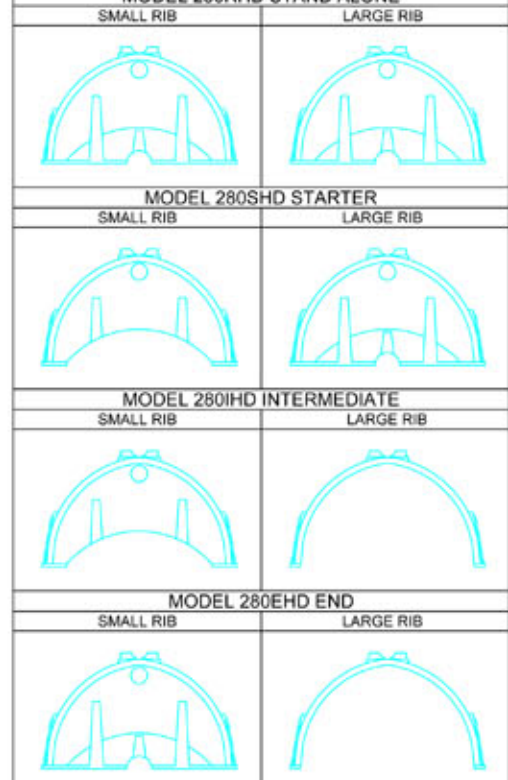
- THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5632)
- THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK HIGH-MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).
- THE CHAMBER WILL BE ARCHED IN SHAPE.
- THE CHAMBER WILL BE OPEN-BOTTOMED.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24 INCHES (614 mm) LONG.
- THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR WILL BE 9.913 FT³/FT (0.685 m³/m) - WITHOUT STONE.
- THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
- 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.
- THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2009 CERTIFIED FACILITY.

CULTEC NO. 20L™ POLYETHYLENE LINER

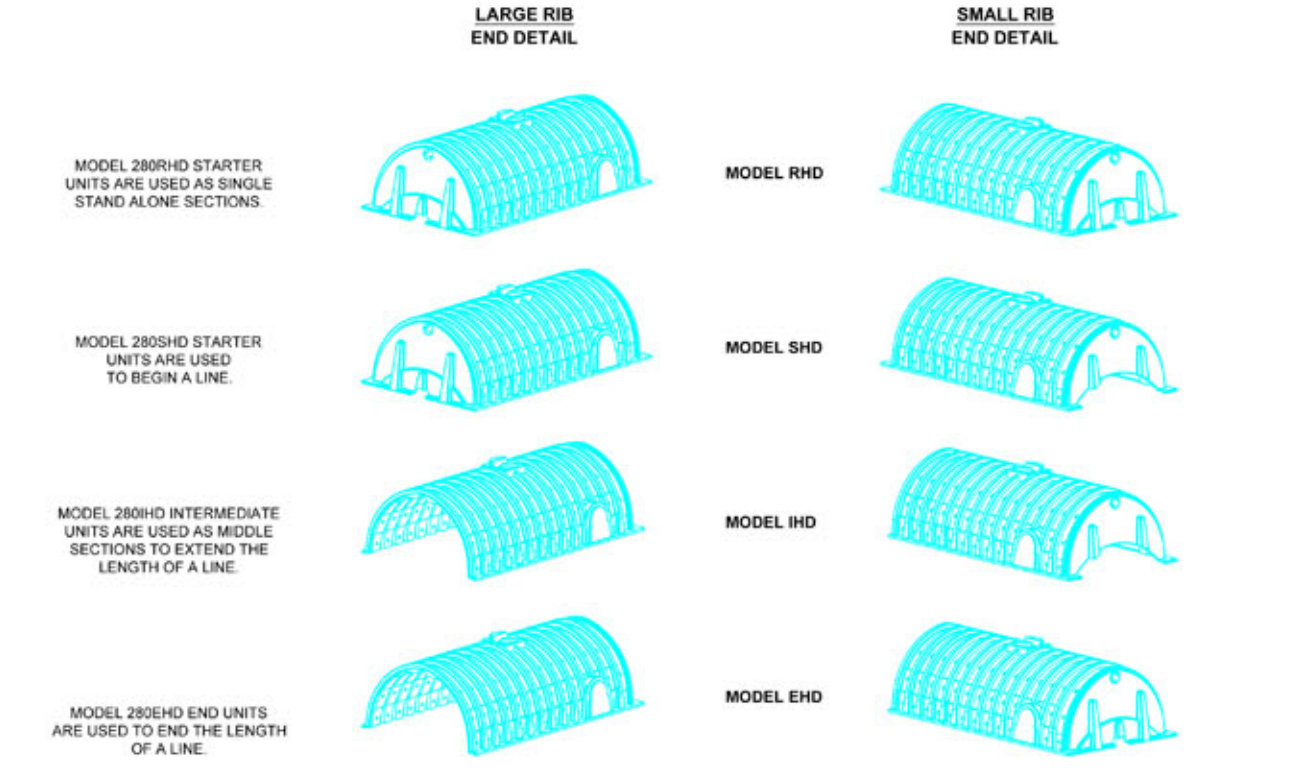
GENERAL
CULTEC NO. 20L™ POLYETHYLENE LINER IS DESIGNED AS AN IMPERVIOUS UNDERLAYMENT TO PREVENT SOAKING OF THE STONE BASE CAUSED BY WATER MOVEMENT WITHIN THE CULTEC SYSTEM. CULTEC NO. 20L POLYETHYLENE LINER IS TO BE PLACED BENEATH HVLV FC-24 FEED CONNECTORS WHEN UTILIZING INTERNAL MANIFOLD AND BENEATH ALL INLET PIPES.

LINER PARAMETERS

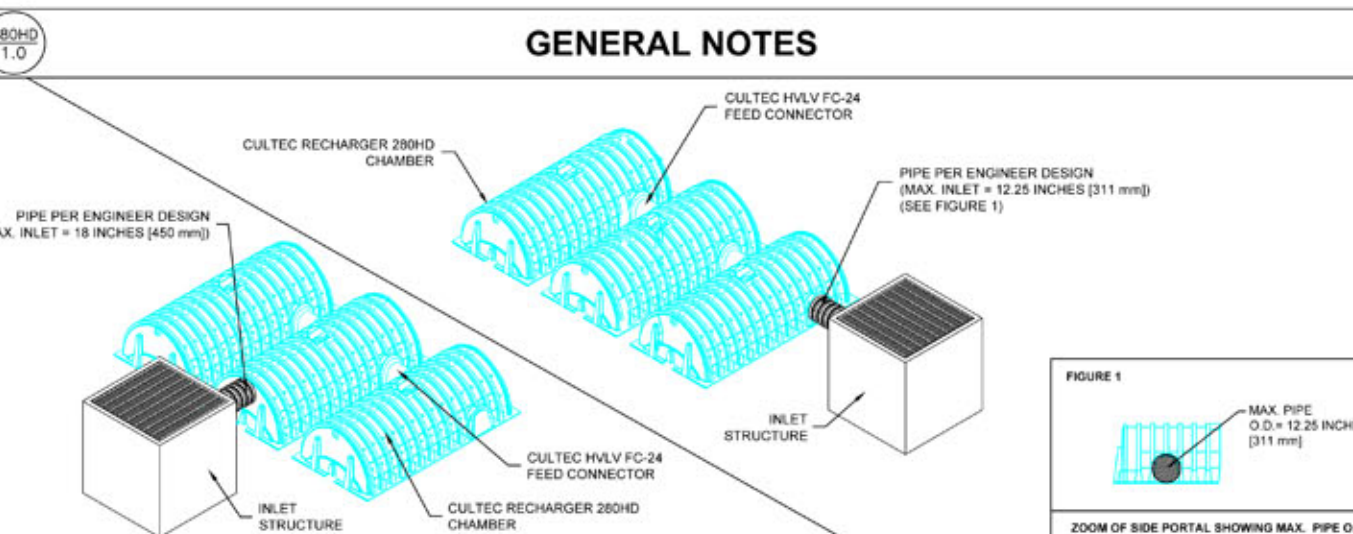
- THE LINER WILL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5632)
- THE LINER WILL BE BLACK IN APPEARANCE.
- THE LINER WILL HAVE A NOMINAL THICKNESS OF 20 MIL (0.51 mm)
- THE LINER WILL HAVE A WEIGHT OF 93 LBS/MSF (453 g/m²)
- THE LINER WILL HAVE A TENSILE STRENGTH @ BREAK 1" (2.54 cm) OF 75 LBS (334 N) PER ASTM D6953 TESTING METHOD.
- THE LINER WILL HAVE AN ELONGATION AT BREAK OF 800% PER ASTM D6953 TESTING METHOD.
- THE LINER WILL HAVE A TEAR RESISTANCE OF 11 LBF (49 N) PER ASTM D1004 TESTING METHOD.
- THE LINER WILL HAVE A HYDROSTATIC RESISTANCE OF 130 PSI (895 kPa) PER ASTM D751 TESTING METHOD.
- THE LINER WILL HAVE A PUNCTURE RESISTANCE OF 30 LBF (133 N) PER ASTM D4833 TESTING METHOD.
- THE LINER WILL HAVE A VOLATILE LOSS OF <1% PER ASTM D1203 TESTING METHOD.
- THE LINER WILL HAVE A DIMENSIONAL STABILITY OF <2% PER ASTM D1204 TESTING METHOD.
- THE LINER WILL HAVE A MAXIMUM USE TEMPERATURE OF 180° F (82° C).
- THE LINER WILL HAVE A MINIMUM USE TEMPERATURE OF 70° F (5° C).
- THE LINER WILL HAVE A PERM RATING OF 0.041 U.S. PERMS (5.027 METRIC PERMS) PER ASTM E99 METHOD.
- THE LINER WILL CONSIST OF A BLENDED LINEAR POLYETHYLENE.
- THE LINER WILL NOT CONTAIN PLASTICIZERS.



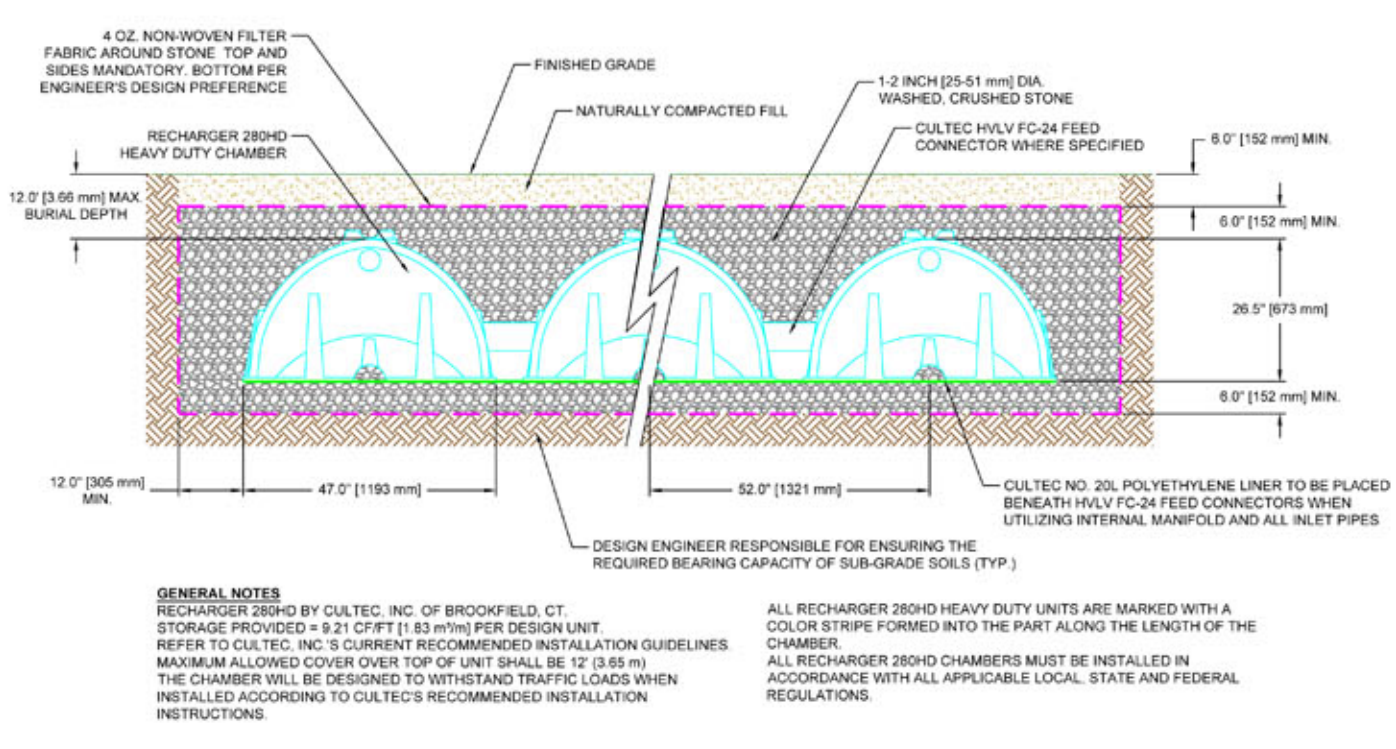
CULTEC RECHARGER 280HD HEAVY DUTY THREE VIEW



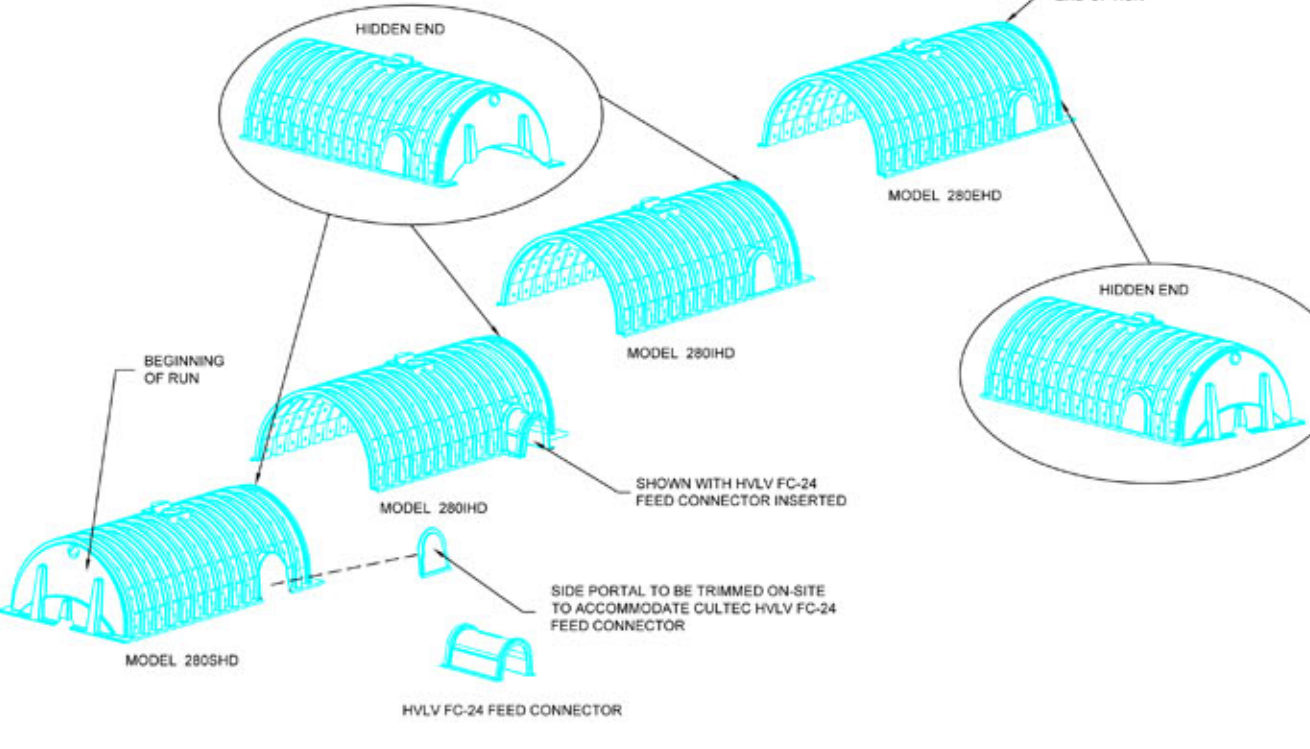
CULTEC RECHARGER 280HD HEAVY DUTY END DETAIL INFORMATION



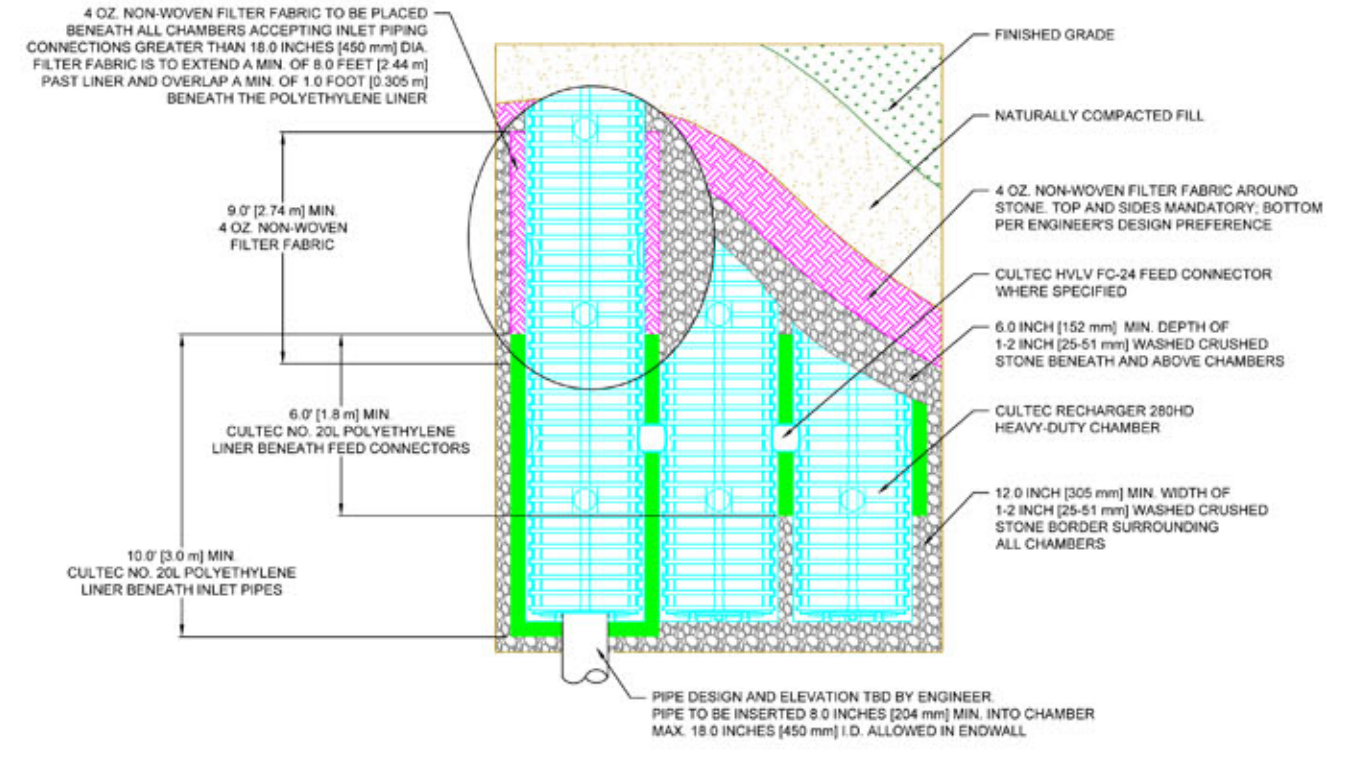
GENERAL NOTES



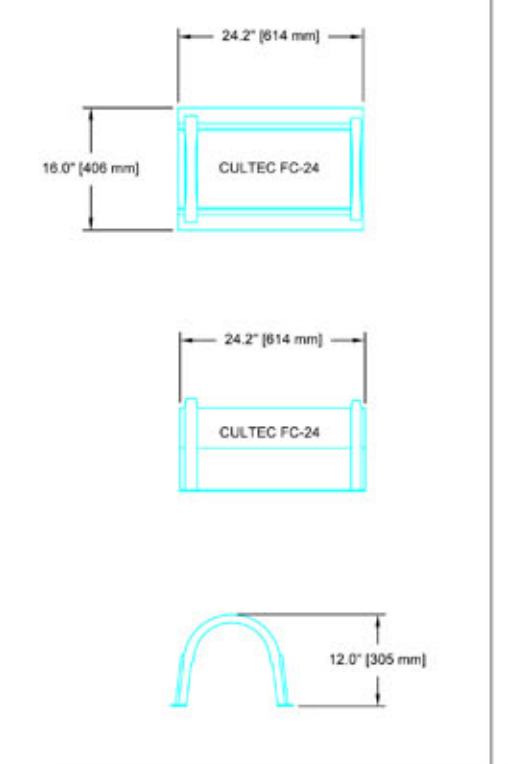
CULTEC RECHARGER 280HD HEAVY DUTY TYPICAL CROSS SECTION



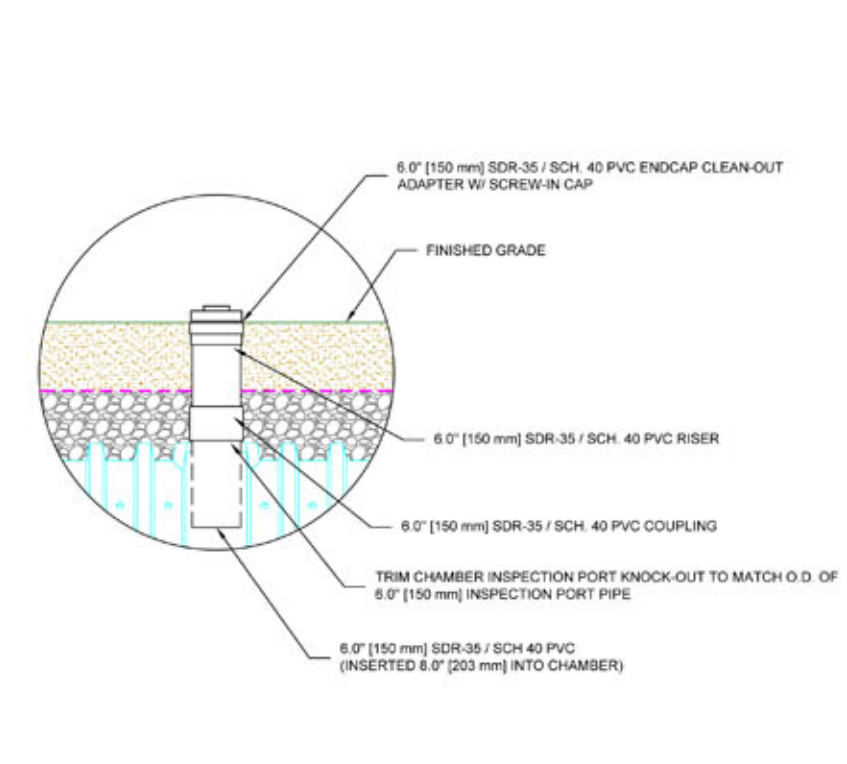
CULTEC RECHARGER 280HD HEAVY DUTY TYPICAL INTERLOCK



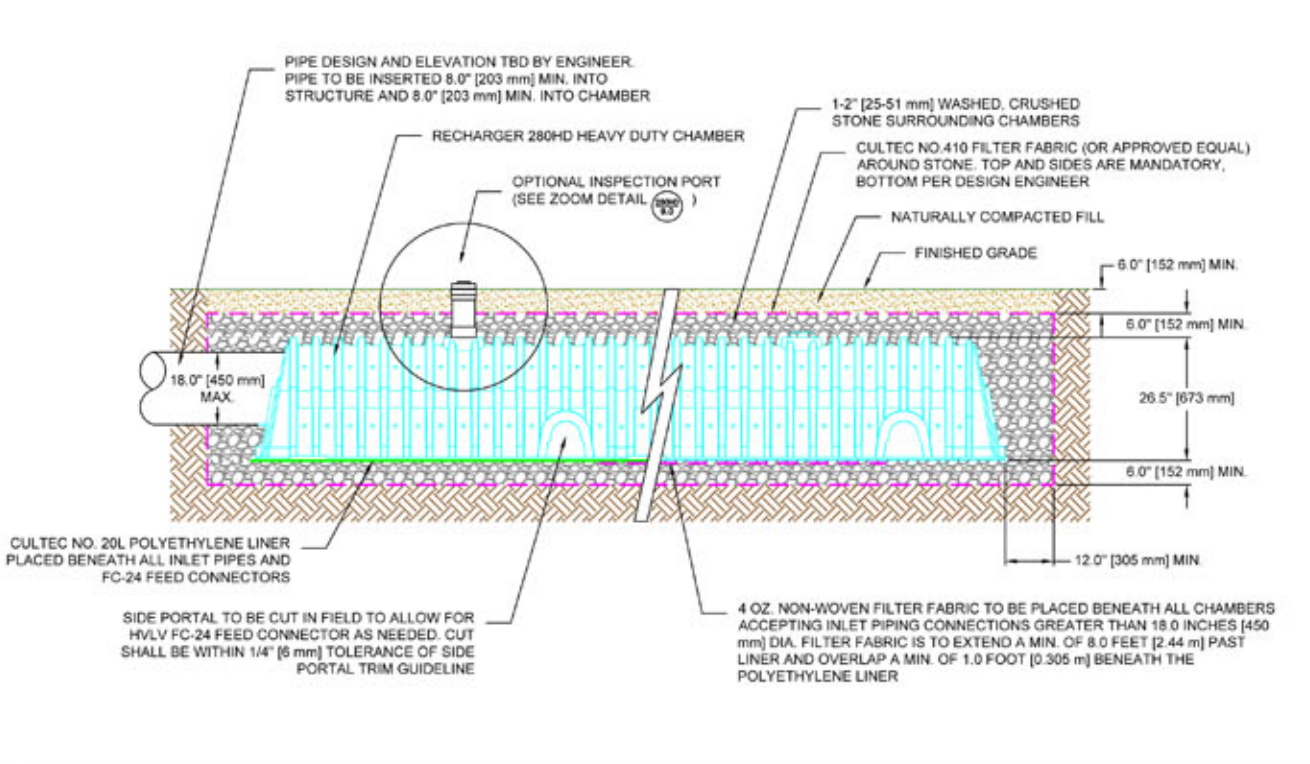
CULTEC RECHARGER 280HD HEAVY DUTY PLAN VIEW



CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW



OPTIONAL INSPECTION PORT - ZOOM DETAIL



CULTEC INTERNAL MANIFOLD - OPTIONAL INSPECTION PORT DETAIL