NOTES:

1.0 WEIGHT ESTIMATE:
- 1.1 COVER: 6,100 - LB (3.1 TONS)
- 1.2 BASE: 23,000 - LB (11.5 TONS)

2.0 VAULT:
- 2.1 REINFORCEMENT STEEL: NYSDOT 709.04 GRADE 60, ASTM A-615 OR EQUIVALENT.
- 2.2 CONCRETE MATERIALS: NYSDOT STANDARD SPECIFICATION SECTION 704-03 PRECAST CONCRETE GENERAL, EXCEPT THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 28 MPA AT THE END OF 28 DAYS.
- 2.3 ACCESS MANHOLES: ASTM-A-48, CLASS 35B GRAY IRON OR ASTM A536, GRADE 80-55-06 DUCTILE IRON.
- 2.4 FILTER HOUSING: HDPE CORRUGATED PIPE, 30-IN DIA.
- 2.5 HELICAL FILTER ELEMENTS: CRS WIRE FRAME WITH TREATED T20 FOAM COVERS.

3.0 CONCRETE STRUCTURE DESIGNED TO MEET OR EXCEED H-20 LOAD RATING

4.0 PERFORMANCE CHARACTERISTICS (REF):
- 4.1 TREATED FLOW RATE: 3 CFS (1350 GPM)
- 4.2 BYPASS FLOW RATE: 13 CFS (5800 GPM)

5.0 ACCESS MANHOLES ARE SUPPLIED SEPARATELY WITH THE HELIX VAULT. EAST JORDAN IRON WORKS, EJIW #1581 & EJIW #1480 CASTINGS ARE RECOMMENDED FOR REPEATED VEHICULAR TRAFFIC AND CONFORM TO AASHTO M306 STANDARDS. FINAL MANHOLE CASTING INSTALLATION, AND ADJUSTMENT TO GRADE, SHALL BE PERFORMED BY QUALIFIED PERSONNEL. GRADE RINGS ARE NOT SUPPLIED AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.

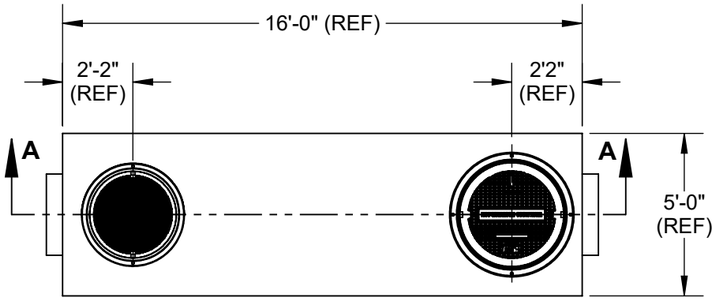
6.0 OFFLOADING, EXCAVATION, DEWATERING, DRAINAGE FILL, AND BACKFILL OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH OSHA AND LOCAL REGULATIONS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUB-BASE AND BACK-FILL DEPTH ARE SITE SPECIFIC AND SHALL BE SPECIFIED BY THE ENGINEER OF RECORD.

7.0 THE CONTRACTOR SHALL VERIFY THAT THE UNIT IS VERTICALLY AND HORIZONTALLY PLUMB AND STABLE, WITH MINIMUM VOIDS AND MINIMUM UN-COMPACTED SOIL AFTER BACK FILL OPERATION.

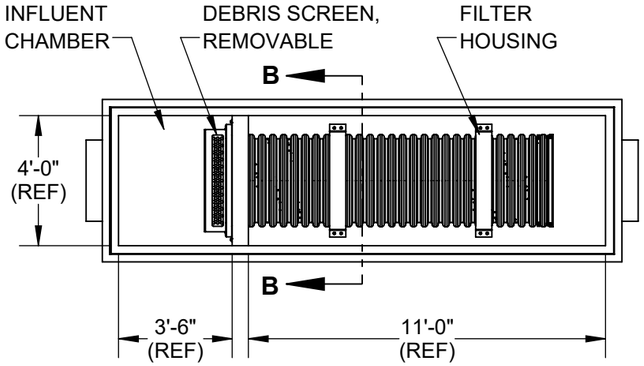
8.0 IF REQUIRED, REMOVE SKIN-KNOCKOUT FROM VAULT, CONNECT THE EXISTING PIPE TO THE VAULT INLET AND OUTLET PORTS WITH APPROVED NON-SHRINKING GROUT-FILL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. HELIX VAULT "INLET" AND "OUTLET" PORTS ARE CLEARLY LABELED WITH BLACK PAINT. EXISTING INLET/OUTLET PIPE TO BE ALIGNED FLUSH WITH RESPECTIVE INTERIOR VAULT WALLS.

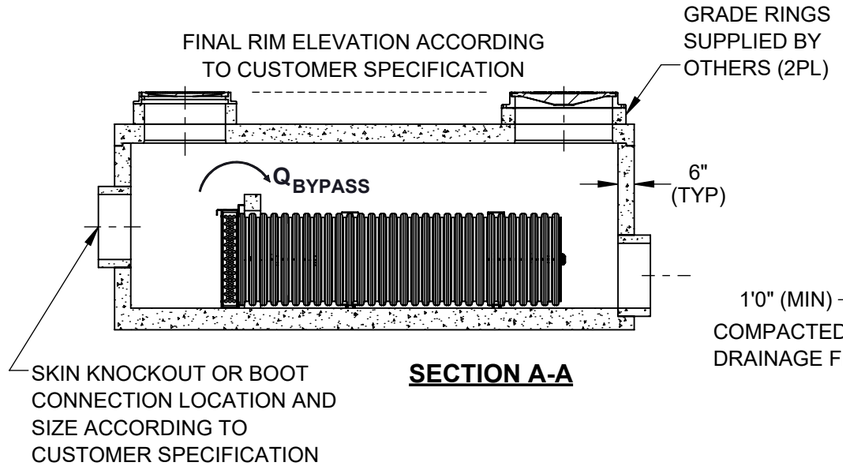
9.0 MAINTENANCE AND HELICAL FILTER REPLACEMENT INSTRUCTIONS ARE PROVIDED SEPARATELY AND ARE SITE SPECIFIC.

10.0 HELICAL FILTER REPLACEMENT (IN GENERAL):
FOR BEST PERFORMANCE REPLACE HELICAL FILTERS IAW FABCO RECOMMENDATIONS. HIGH CONTAMINANT LOCATIONS MAY REQUIRE MORE FREQUENT FILTER REPLACEMENT. REMOVE ANY DEBRIS OR HEAVY SEDIMENT FROM THE INFLUENT CHAMBER. REMOVE THE INLET DIFFUSER AND SLIDE EACH HELICAL FILTER SEGMENT OUT OF THE FILTER HOUSING. INSERT THE REPLACEMENT HELICAL FILTERS. EACH HOUSING REQUIRES FIVE (5) HELICAL FILTER SEGMENTS, DISPOSE OF USED FILTER MEDIA IN ACCORDANCE WITH LOCAL REGULATION.

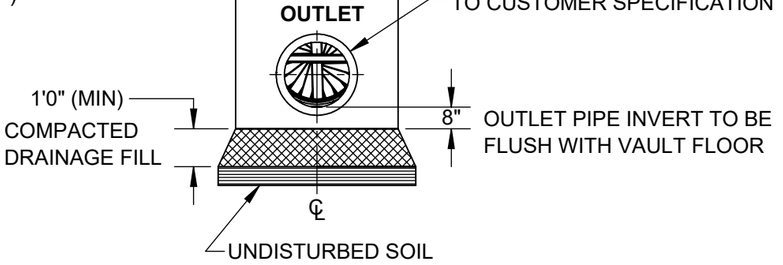


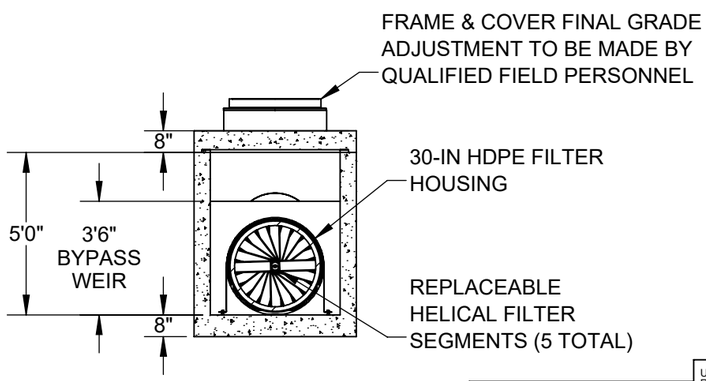
TOP VIEW



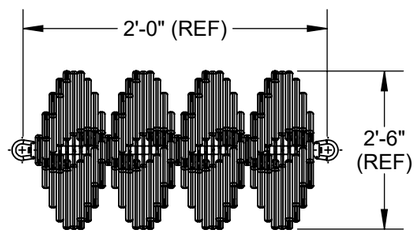


SECTION A-A





SECTION B-B



30" HELIX FILTER

UNLESS OTHERWISE SPECIFIED
REMOVE ALL BURRS
BREAK SHARP EDGES .002 - .020
FILLETS .020 MAX
DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES

TOLERANCES:
DEC .00 ± .01
DEC .000 ± .005
FRACT ± 1/16
ANGLE ± 2°

PROJECT

MATERIAL

	APPROVAL	DATE
DWN	J.P.	12/21/2023
CHKR		
ENGR	J.P.	12/21/2023
UPD		

FABCO INDUSTRIES, INC.
24 CENTRAL DRIVE
FARMINGDALE, NY 11735

WWW.FABCO-INDUSTRIES.COM

HELIX BACTERIA VAULT
SINGLE TUBE

SIZE	DWG. NO.	REV
B	VHB30-1-000	B

SCALE: NONE SHEET 1 OF 1