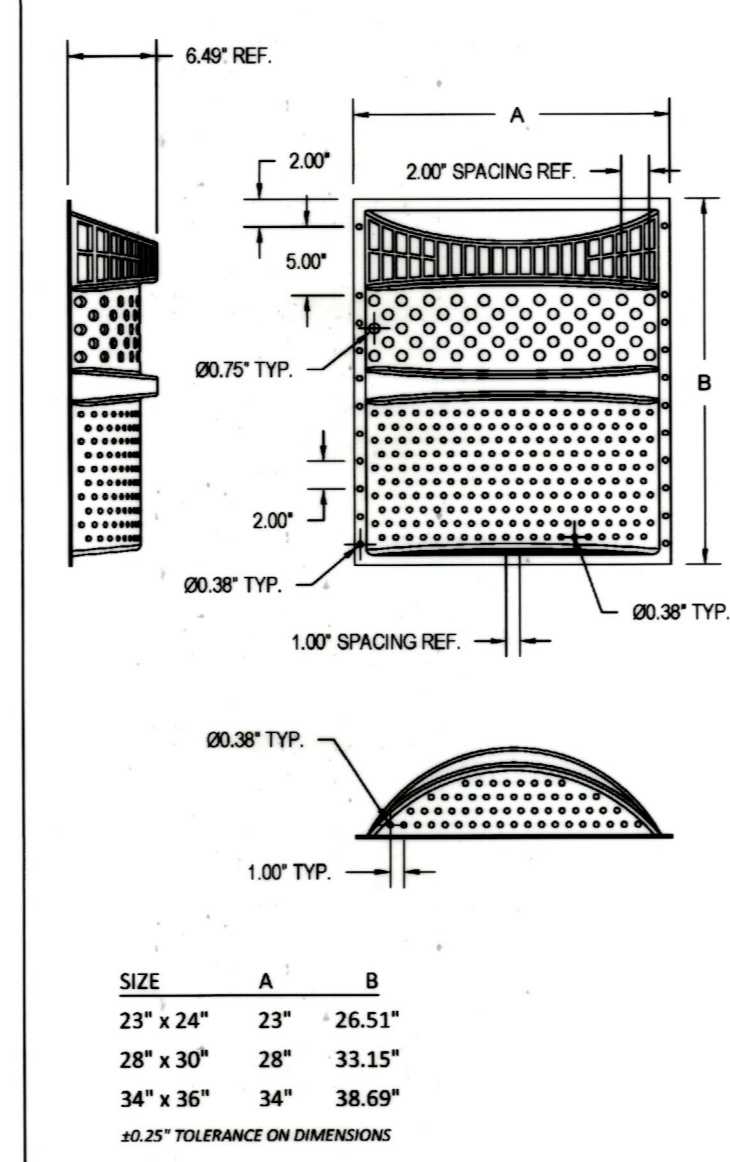
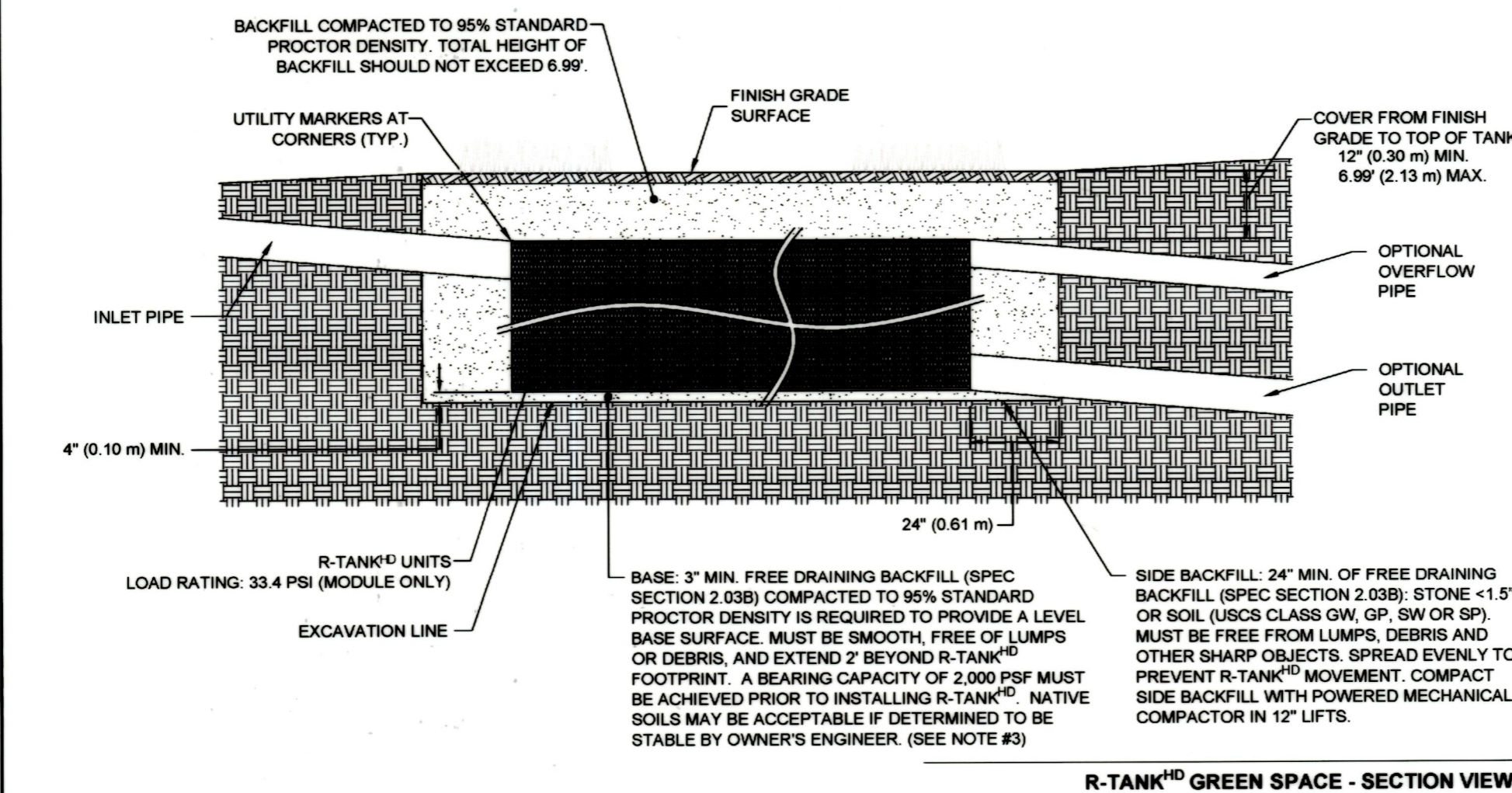
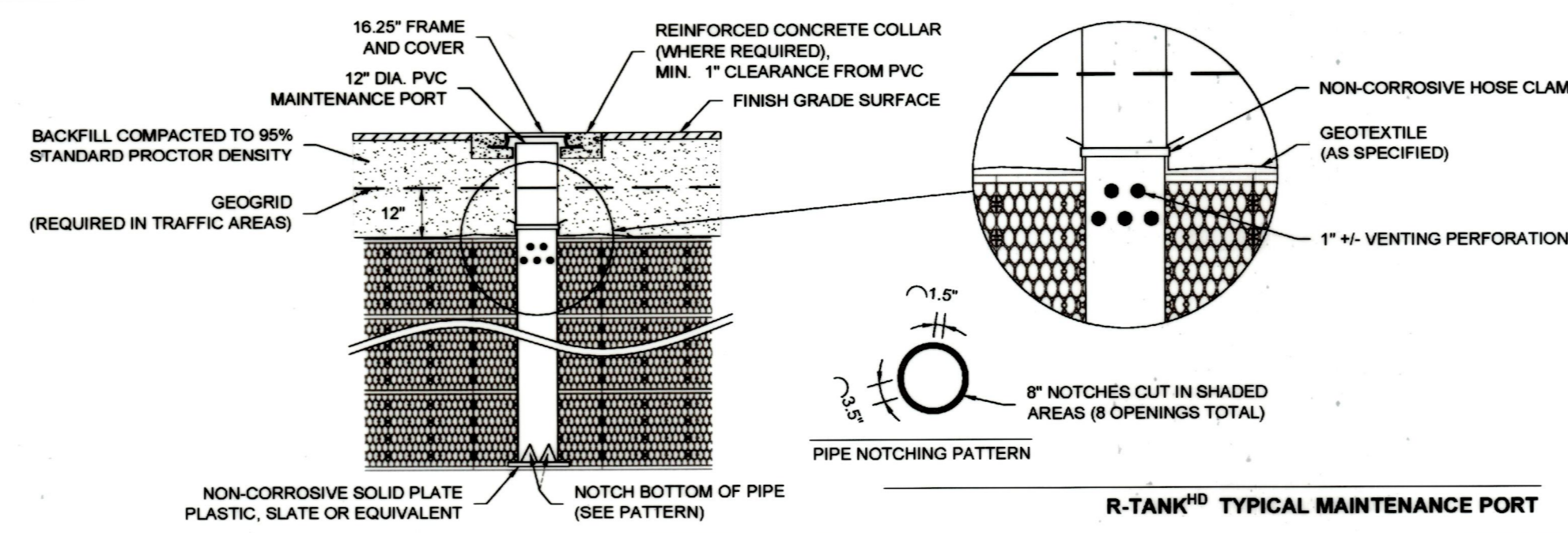


- NOTES:
- FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK<sup>®</sup> SHEET (MINI MODULE, SINGLE MODULE, DOUBLE MODULE, TRIPLE MODULE, QUAD MODULE, OR PENTA MODULE).
  - PRE-TREATMENT STRUCTURES NOT SHOWN.
  - FOR INFILTRATION APPLICATIONS, GEOTEXTILE ENVELOPING R-TANK SHALL BE ACF M200 (PER SPEC SECTION 2.02A) AND BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK<sup>®</sup> FOOTPRINT.



- NOTES:
- THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPEND ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT.
  - MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER, FLUSH AS NEEDED.
  - ONLY R-TANK<sup>®</sup> AND R-TANK<sup>®</sup> MAY BE USED IN TRAFFIC APPLICATIONS.
  - SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS.



**FocalPoint**  
BIOPILTRATION SYSTEMS

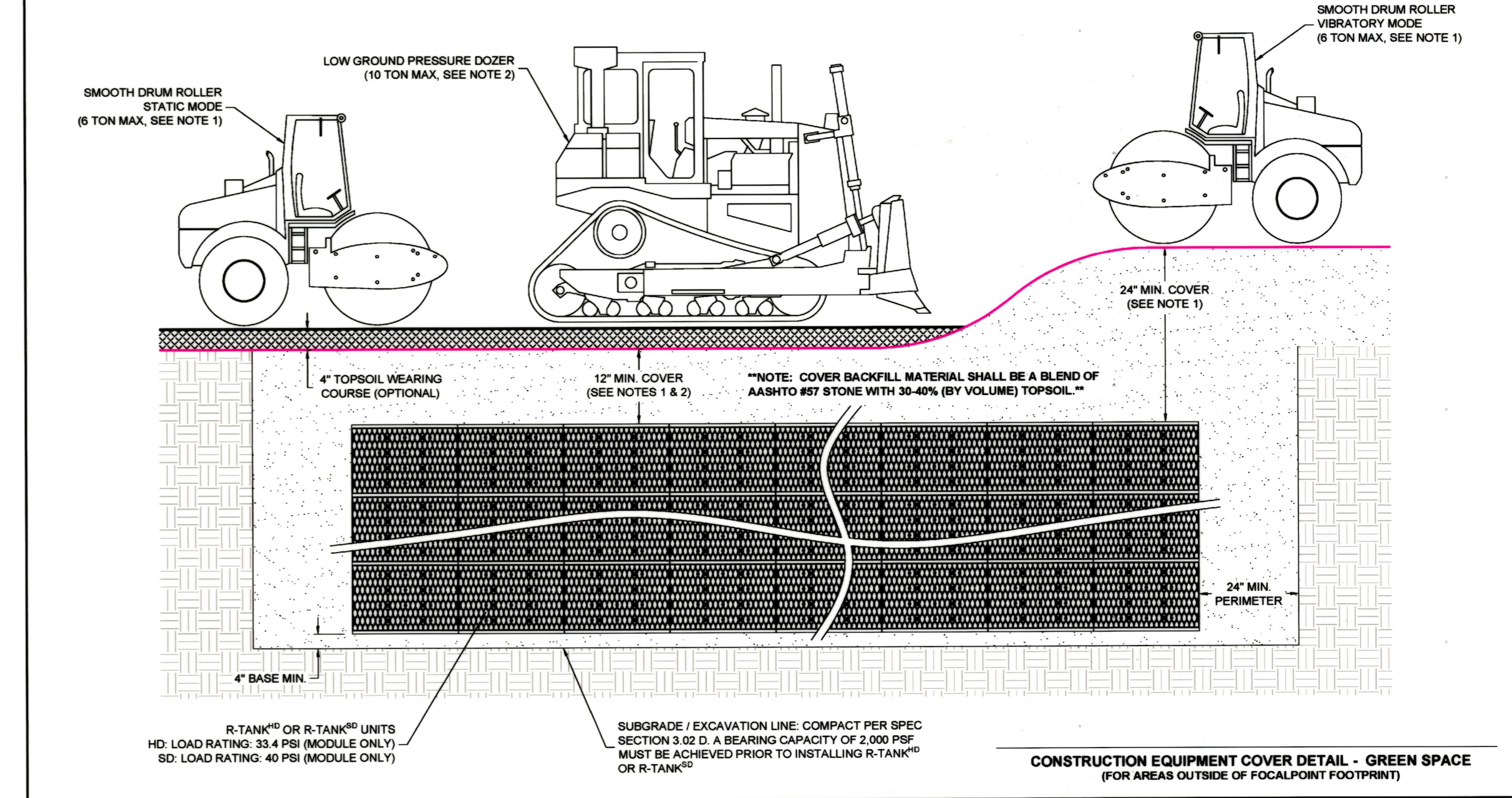
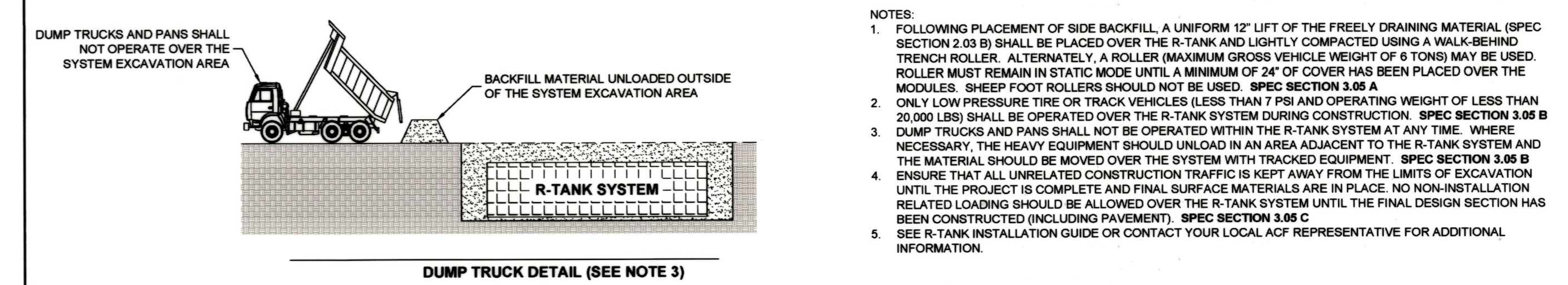
ENGINEER OF RECORD TO REVIEW, APPROVE AND ENDORSE FINAL SITE SPECIFIC DESIGN.

ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

FOCALPOINT SYSTEM DETAILS  
THE AGAPE CHRISTIAN CHURCH  
TIMONIUM, MD  
SITE DESIGNATION: ESD FACILITY #1

EDQ  
08/19/21

4 of 8



**FocalPoint**  
BIOPILTRATION SYSTEMS

ENGINEER OF RECORD TO REVIEW, APPROVE AND ENDORSE FINAL SITE SPECIFIC DESIGN.

ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

R-TANK CONSTRUCTION EQUIPMENT COVER DETAIL  
THE AGAPE CHRISTIAN CHURCH  
TIMONIUM, MD  
SITE DESIGNATION: ESD FACILITY #1

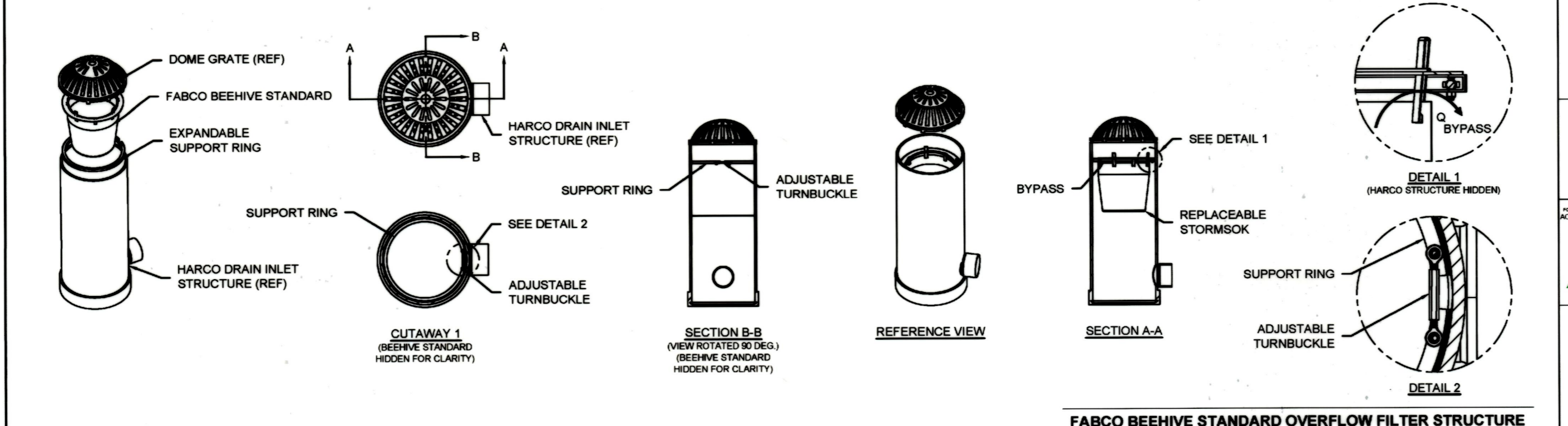
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6 of 8

- NOTES:
- MATERIAL:
    - SUPPORT FLANGE: ALUMINUM ALLOY PLATE, 5000 SERIES
    - STORMSOCK: WOVEN POLYPROPYLENE GEOTEXTILE
    - EXPANSION RING: ALUMINUM ALLOY CHANNEL, 6000 SERIES
    - HARDWARE: STAINLESS STEEL
  - RECOMMENDED MINIMUM VAULT DEPTH: 2-IN BELOW STORMSOCK
  - USE ONLY WITH FABCO REPLACEABLE STORMSOCK

GENERAL INSTALLATION:  
ADJUST THE TURNBUCKLE DOWN TO GIVE THE SMALLEST RING DIAMETER AND LOCATE THE EXPANSION RING INTO THE HARCO STRUCTURE MINIMUM OF 6-IN DOWN FROM THE TOP OPENING AS SHOWN. BEGIN OPENING THE TURNBUCKLE UNTIL THE EXPANSION RING IS SELF SUPPORTING, THEN VERIFY THE RING IS LEVEL AND PLUMB TO THE HARCO STRUCTURE. USING A CALIBRATED TORQUE WRENCH, CONTINUE TO OPEN THE TURNBUCKLE TO GIVEN TORQUE (MODEL-SPECIFIC). DO NOT OVER TIGHTEN. INSTALL THE STORMSOCK ASSEMBLY DIRECTLY ON THE SUPPORT RING.

STRUCTURE DIA. (IN.)	DEBRIS CAPACITY (CU. FT.)	FILTERED FLOWRATE (CFS)	BYPASS FLOWRATE (CFS)
12	0.66	1.70	1.00
15	1.00	2.10	1.30
18	1.20	2.30	1.40
24	2.80	3.90	2.20
30	2.80	3.90	2.22



**FocalPoint**  
BIOPILTRATION SYSTEMS

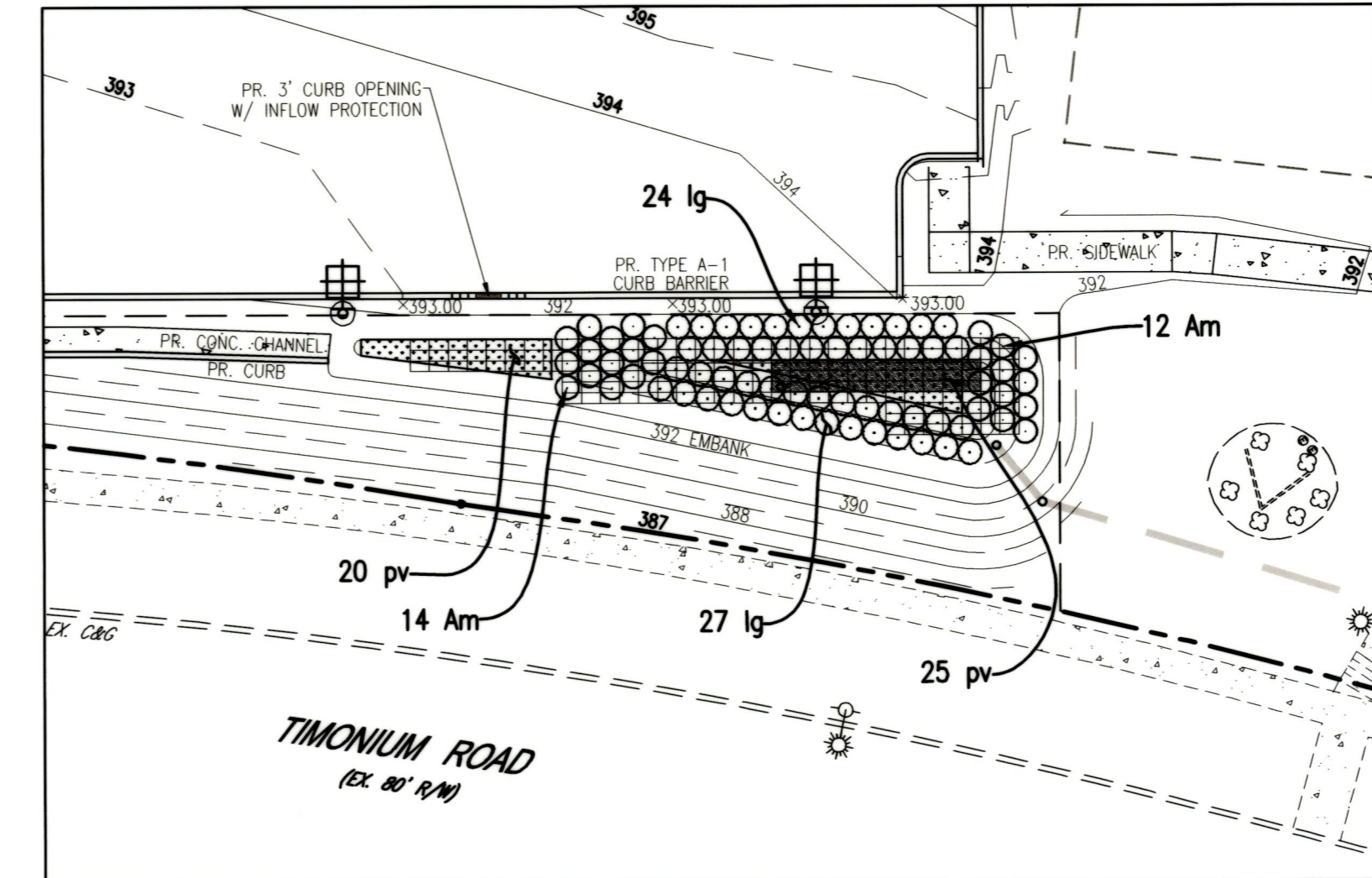
ENGINEER OF RECORD TO REVIEW, APPROVE AND ENDORSE FINAL SITE SPECIFIC DESIGN.

ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

FOCALPOINT OVERFLOW STRUCTURE DETAILS  
THE AGAPE CHRISTIAN CHURCH  
TIMONIUM, MD  
SITE DESIGNATION: ESD FACILITY #1

EDQ  
08/19/21

5 of 8



DESIGN AND DRAWINGS ARE BASED ON MARYLAND COORDINATE SYSTEM (MCS):  
HORIZONTAL - NAD 83/(2011),  
VERTICAL - NAVD 88.

APPROVED: \_\_\_\_\_ Chief  
STORMWATER MANAGEMENT DIVISION  
BALTO. CO. DEPT. OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

KEYSHEET: SHE 54 NW 2  
POSITION SHEET: 3  
COUNCILMANIC DISTRICT: 8  
ELECTION DISTRICT: 8

STORMWATER MANAGEMENT PLANTING SCHEDULE

KEY	QUANTITY	BOTANICAL NAME COMMON NAME	SIZE	NOTES
lg	52	Ilex glabra 'Shamrock' INKBERRY	30"-36" HT.	B&B/CG
Am	26	Aronia melanocarpa BLACK CHOKEBERRY	48"-72" HT.	B&B/CG
pv	45	Panicum virgatum 'Shenandoah' SHENANDOAH SWITCH GRASS	GAL.	18" O.C.

OWNER / DEVELOPER  
THE AGAPE CHRISTIAN CHURCH INC.  
100 E TIMONIUM ROAD  
TIMONIUM, MARYLAND 21093  
CONTACT: CHINA UGAI  
PHONE: (410) 252-4255  
EMAIL: CHURCH@AGAPE.COM

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 46563, EXPIRATION DATE: 06-11-2023.

10-4-2021

**Richardson Engineering, LLC**

7 Deneison Street  
Timonium, Maryland 21093  
Phone: 410-560-1502 Fax: 443-901-1208  
MARK@RICHARDSONENGINEERING.NET

FINAL STORMWATER MANAGEMENT ENVIRONMENTAL SITE DESIGN  
MANUFACTURER SPECIFICATIONS, NOTES & DETAILS 2

100 E TIMONIUM ROAD

TIMONIUM, MARYLAND 21093

BALTIMORE COUNTY 8TH ELECTION DISTRICT  
MARYLAND 3RD COUNCILMANIC DISTRICT

REVISIONS	DRAWN BY:	CHECKED BY:	SCALE:
	MAV	PCR	AS SHOWN
	DATE:	JOB NO.:	SHEET NO.:
	10-6-2021	19213	8 OF 9