



NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "C"	TYPICAL SIDE WALL "X"	MIN. H (NON-TRAFFIC)	MIN. H (TRAFFIC)	MAX. H*
36" (900 mm)	42" (1067 mm)	63" (1600 mm)	18" (457 mm)	12" (305 mm)	12" (305 mm)	8' (2.4 m)
48" (1200 mm)	54" (1372 mm)	78.5" (1994 mm)	18" (457 mm)	12" (305 mm)	24" (610 mm)	8' (2.4 m)
60" (1500 mm)	67" (1702 mm)	90" (2286 mm)	18" (457 mm)	12" (305 mm)	24" (610 mm)	8' (2.4 m)

\* MAXIMUM FILL HEIGHTS OVER MANIFOLD FITTINGS. CONTACT MANUFACTURER'S REPRESENTATIVE FOR INSTALLATION CONSIDERATIONS WHEN COVER EXCEEDS 8 FT (2.4 m).

**NOTES:**

1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
4. FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.
5. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL, AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
6. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (102 mm) FOR 4'-24" (100-600 mm); 6" (152 mm) FOR 30'-60" (750-1500 mm).
7. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" (152 mm) ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
8. COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (305 mm) FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATAION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" (305 mm) UP TO 36" (900 mm) DIAMETER PIPE AND 24" (610 mm) OF COVER FOR 42-60" (1067-1500 mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. MAXIMUM FILL HEIGHT LIMITED TO 8 FT (2.4 m) OVER FITTINGS FOR STANDARD INSTALLATIONS. CONTACT A SALES REPRESENTATIVE WHEN MAXIMUM FILL HEIGHTS EXCEED 8 FT (2.4 m) FOR INSTALLATION CONSIDERATIONS.

**RANDALL NOE SUBARU**  
ROCKWALL, TX  
DATE: 04/18/19 DRAWN: BEW  
PROJECT #: S88020 CHECKED: AD

**DESCRIPTION**  
36" 48" & 60" STIB SOLID  
DETENTION SYSTEM  
HDPE N-12

**OWNER**  
4640 TRUENAN BLVD  
HILLIARD, OH 43026

**DESIGNER**  
F.C. CUNY CORPORATION  
#2 Horizon Court • Ste. 300 • Heath, Texas 75032  
Phone: 469-402-7700  
Fax: 469-402-0700  
Texas Registered Engineering Firm F-7449

**DATE**  
09/18

**PROJECT**  
SHEET 9 OF 9

Revision	Date	Description

**Owner:**  
Rockwall Rental Properties  
PO Box 818 • Terrell, Texas 75060

**RANDALL NOE**  
**SUBARU**  
I-30 ROCKWALL, TX

~ Civil Engineer ~  
**F.C. CUNY CORPORATION**  
#2 Horizon Court • Ste. 300 • Heath, Texas 75032  
Phone: 469-402-7700  
Fax: 469-402-0700  
Texas Registered Engineering Firm F-7449



12/5/2019

Drawn By: F.C. CUNY  
Checked By: F.C. CUNY  
Date: 09/18  
Project No.: -  
Sheet Title: Detention Pond Details  
Scale: -  
Sheet No.: 10F of 11