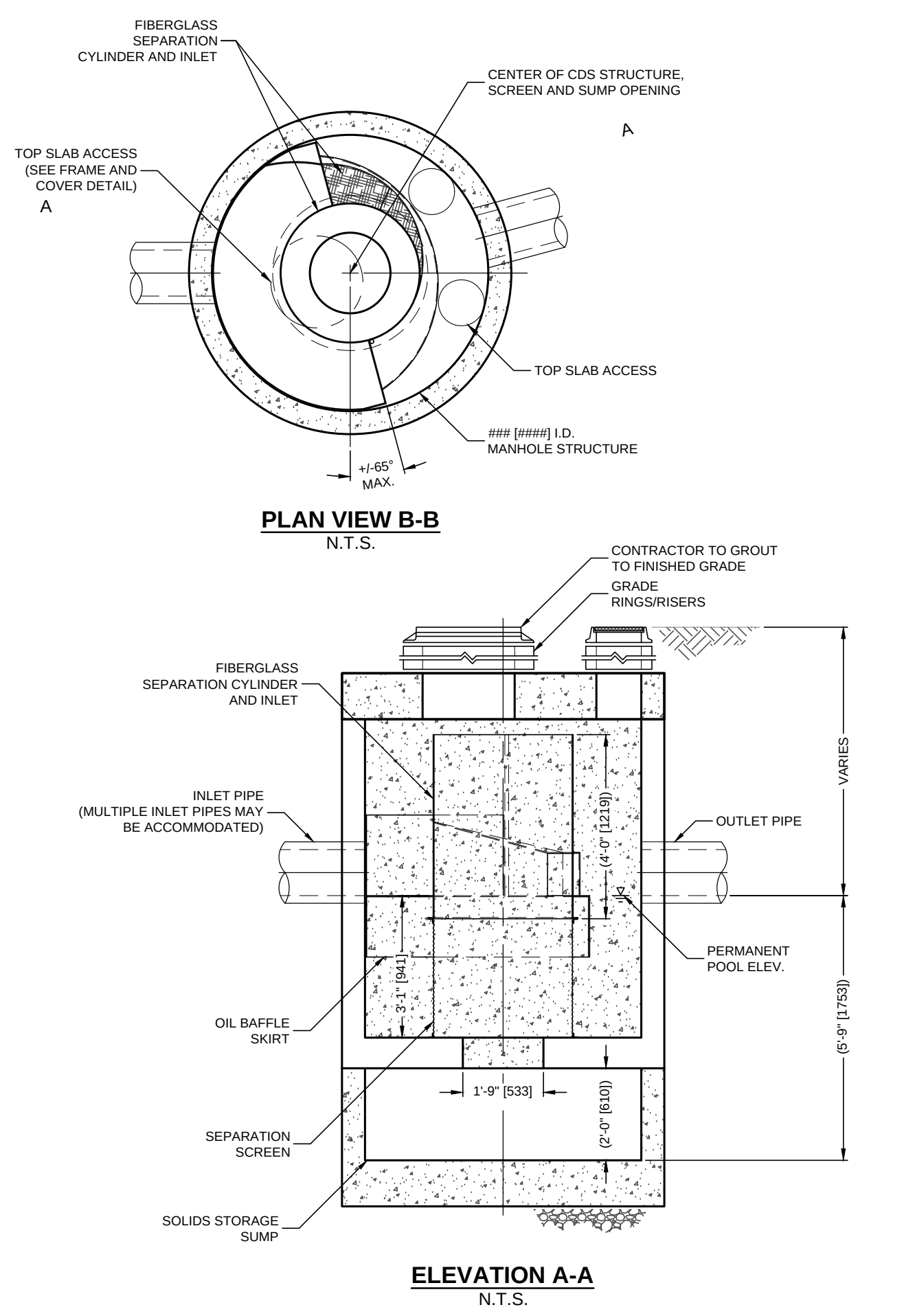
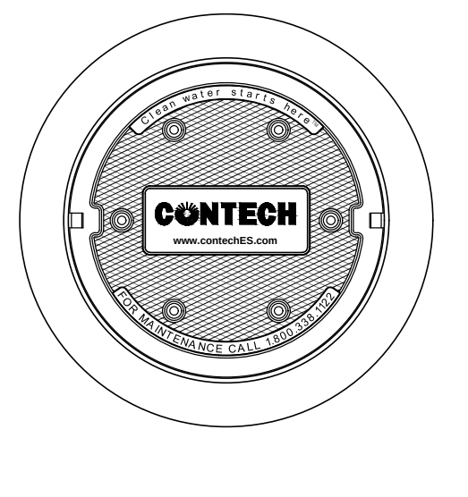

FIBERGLASS SEPARATION CYLINDER AND INLET
CENTER OF CDS STRUCTURE, SCREEN AND SUMP OPENING
TOP SLAB ACCESS (SEE FRAME AND COVER DETAIL)
TOP SLAB ACCESS
MANHOLE STRUCTURE
PLAN VIEW B-B
N.T.S.
CONTRACTOR TO GROUT TO FINISHED GRADE
GRADE RINGS/RISERS
FIBERGLASS SEPARATION CYLINDER AND INLET
INLET PIPE (MULTIPLE INLET PIPES MAY BE ACCOMMODATED)
OUTLET PIPE
PERMANENT POOL ELEV.
OIL BAFFLE SKIRT
SEPARATION SCREEN
SOLIDS STORAGE SUMP
VARIES
ELEVATION A-A
N.T.S.



GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

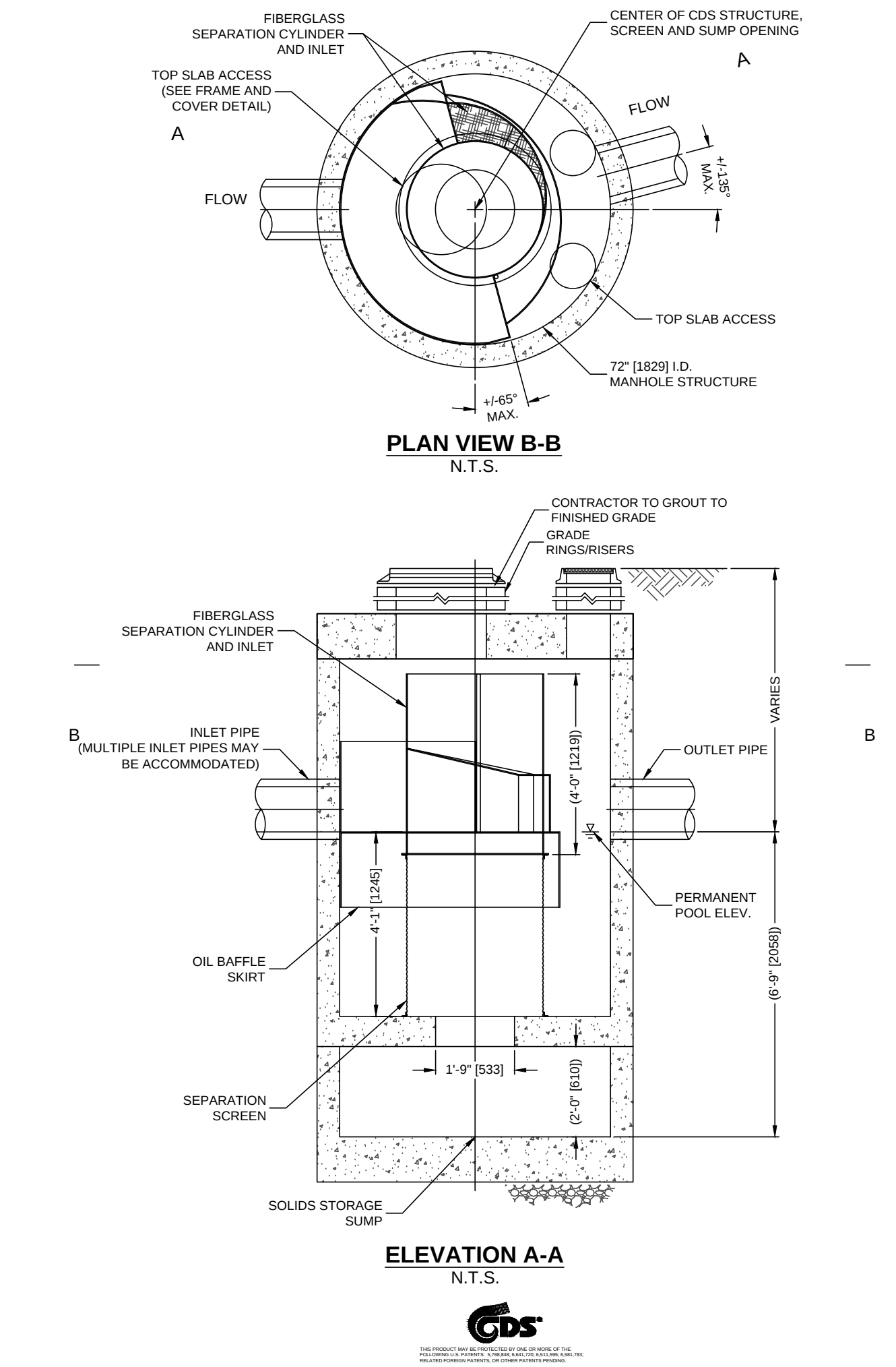
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

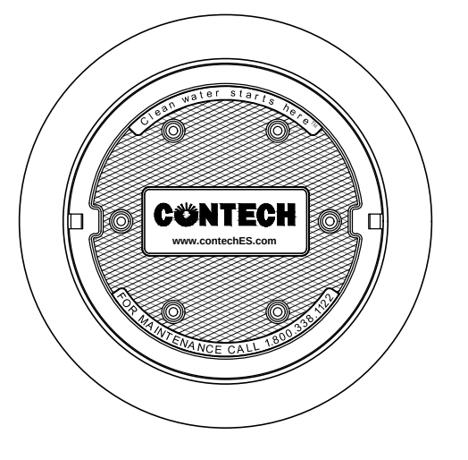
CONTECH ENGINEERED SOLUTIONS LLC
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS3025-6-C
INLINE CDS
STANDARD DETAIL

WATER QUALITY CONTROL STRUCTURE CONTECH CDS3025-6-C
(WQS B-2-2-2, WQS F-7, WQS F-6-1 LBP)

91


FIBERGLASS SEPARATION CYLINDER AND INLET
CENTER OF CDS STRUCTURE, SCREEN AND SUMP OPENING
TOP SLAB ACCESS (SEE FRAME AND COVER DETAIL)
FLOW
TOP SLAB ACCESS
72" (1829) I.D. MANHOLE STRUCTURE
PLAN VIEW B-B
N.T.S.
CONTRACTOR TO GROUT TO FINISHED GRADE
GRADE RINGS/RISERS
FIBERGLASS SEPARATION CYLINDER AND INLET
INLET PIPE (MULTIPLE INLET PIPES MAY BE ACCOMMODATED)
OUTLET PIPE
PERMANENT POOL ELEV.
OIL BAFFLE SKIRT
SEPARATION SCREEN
SOLIDS STORAGE SUMP
VARIES
ELEVATION A-A
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

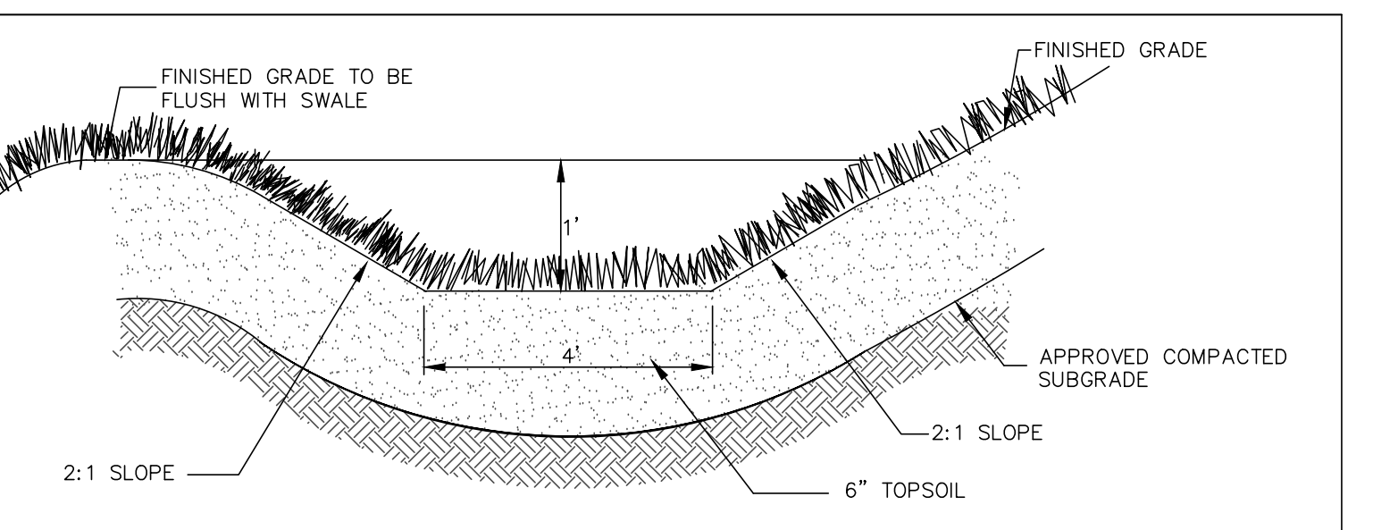
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com

CDS3035-6-C
INLINE CDS
STANDARD DETAIL

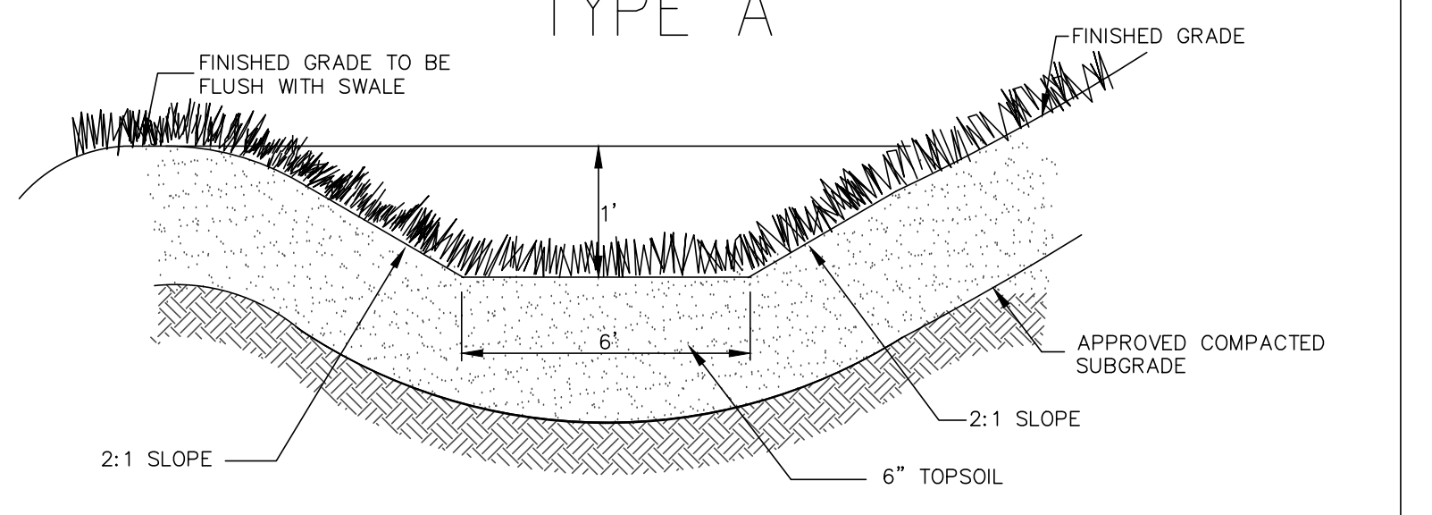
WATER QUALITY CONTROL STRUCTURE CONTECH CDS3035-6-C
(WQS B-6-4)

92


FINISHED GRADE TO BE FLUSH WITH SWALE
FINISHED GRADE
1'
4'
APPROVED COMPACTED SUBGRADE
2:1 SLOPE
2:1 SLOPE
6" TOPSOIL

TYPE OF TREATMENT	CHANNEL GRADE (%)	FLOW CHANNEL
1	0.5–3.0	SEED & STRAW MULCH
2	3.1–5.0	SEED & STRAW MULCH
3	5.1–8.0	SEED & COVER WITH RECP, SOD, OR LINE WITH PLASTIC OR 2 IN. STONE
4	8.1–20	LINE WITH 4–8 IN. STONE OR RECYCLED CONCRETE EQUIVALENT OR GEOTEXTILE

TYPE A


FINISHED GRADE TO BE FLUSH WITH SWALE
FINISHED GRADE
1'
6'
APPROVED COMPACTED SUBGRADE
2:1 SLOPE
2:1 SLOPE
6" TOPSOIL

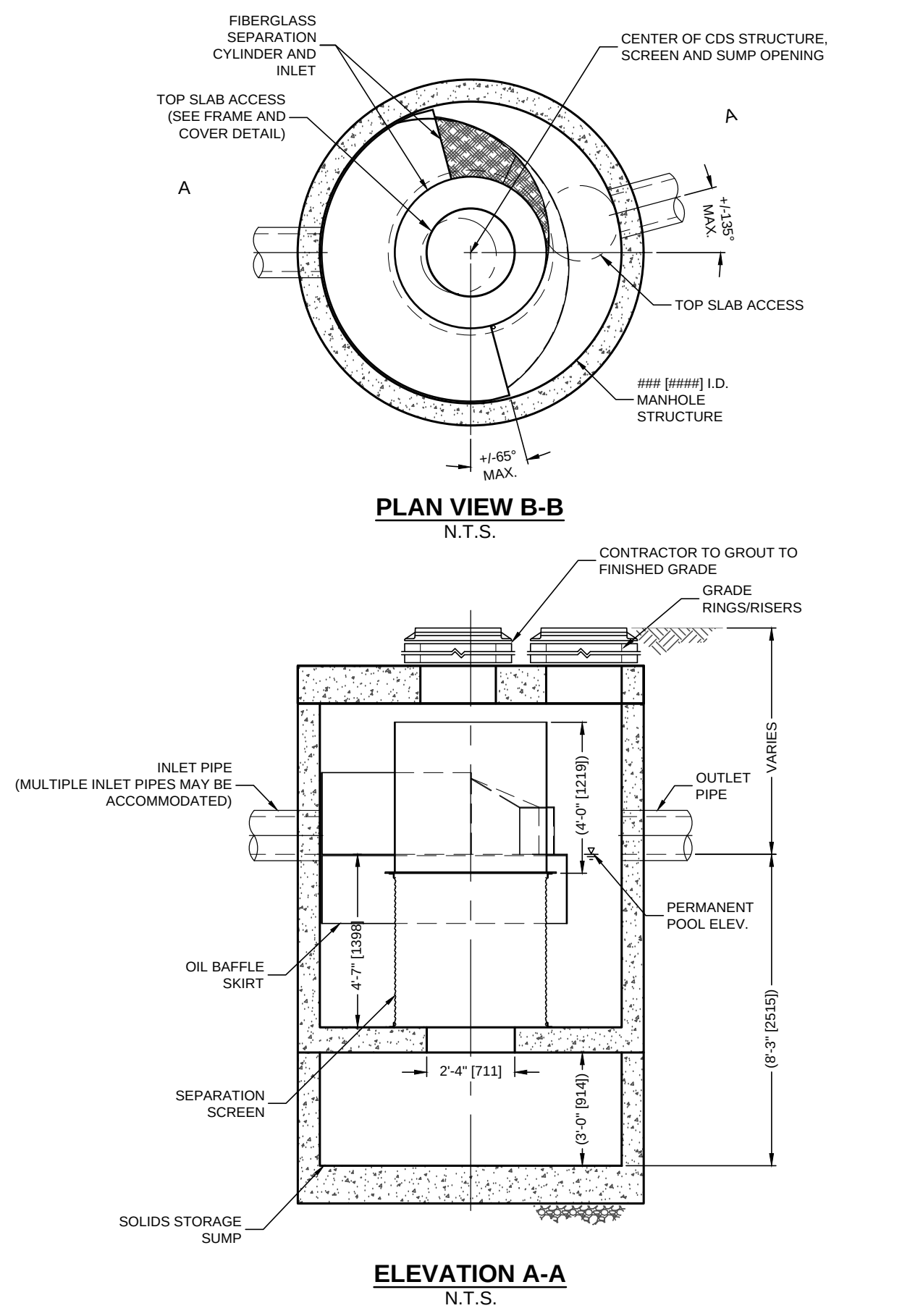
TYPE OF TREATMENT	CHANNEL GRADE (%)	FLOW CHANNEL
1	0.5–3.0	SEED & STRAW MULCH
2	3.1–5.0	SEED & COVER WITH RECP, SOD, OR LINED WITH PLASTIC OR 2 IN. STONE
3	5.1–8.0	LINE WITH 4–8 IN. STONE OR RECYCLED CONCRETE EQUIVALENT OR GEOTEXTILE
4	8.1–20	SITE SPECIFIC ENGINEERING DESIGN

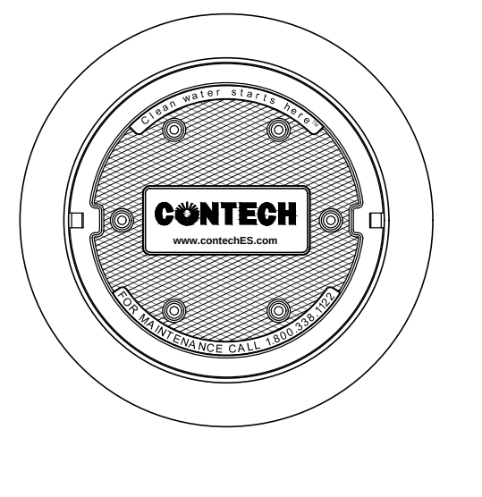
TYPE B

NOTES:
1. IMMEDIATELY AFTER GRADING OPERATIONS, THE GRASS SWALE SHALL BE STABILIZED WITH SEED MIX AND MULCHED.
2. FOR SWALE SLOPES EXCEEDING 8%, JUTE MESH SHALL BE UTILIZED TO STABILIZE THE SWALE BASE.
3. AREA ADJACENT TO SWALE TO BE BROUGHT TO FINISHED GRADE IMMEDIATELY AS REQUIRED, TOPSOILED, SEEDED AND MAINTAINED FOR EROSION CONTROL.
4. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT

CONSTRUCTION DITCH

93


FIBERGLASS SEPARATION CYLINDER AND INLET
CENTER OF CDS STRUCTURE, SCREEN AND SUMP OPENING
TOP SLAB ACCESS (SEE FRAME AND COVER DETAIL)
TOP SLAB ACCESS
MANHOLE STRUCTURE
PLAN VIEW B-B
N.T.S.
CONTRACTOR TO GROUT TO FINISHED GRADE
GRADE RINGS/RISERS
INLET PIPE (MULTIPLE INLET PIPES MAY BE ACCOMMODATED)
OUTLET PIPE
PERMANENT POOL ELEV.
OIL BAFFLE SKIRT
SEPARATION SCREEN
SOLIDS STORAGE SUMP
VARIES
ELEVATION A-A
N.T.S.



GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

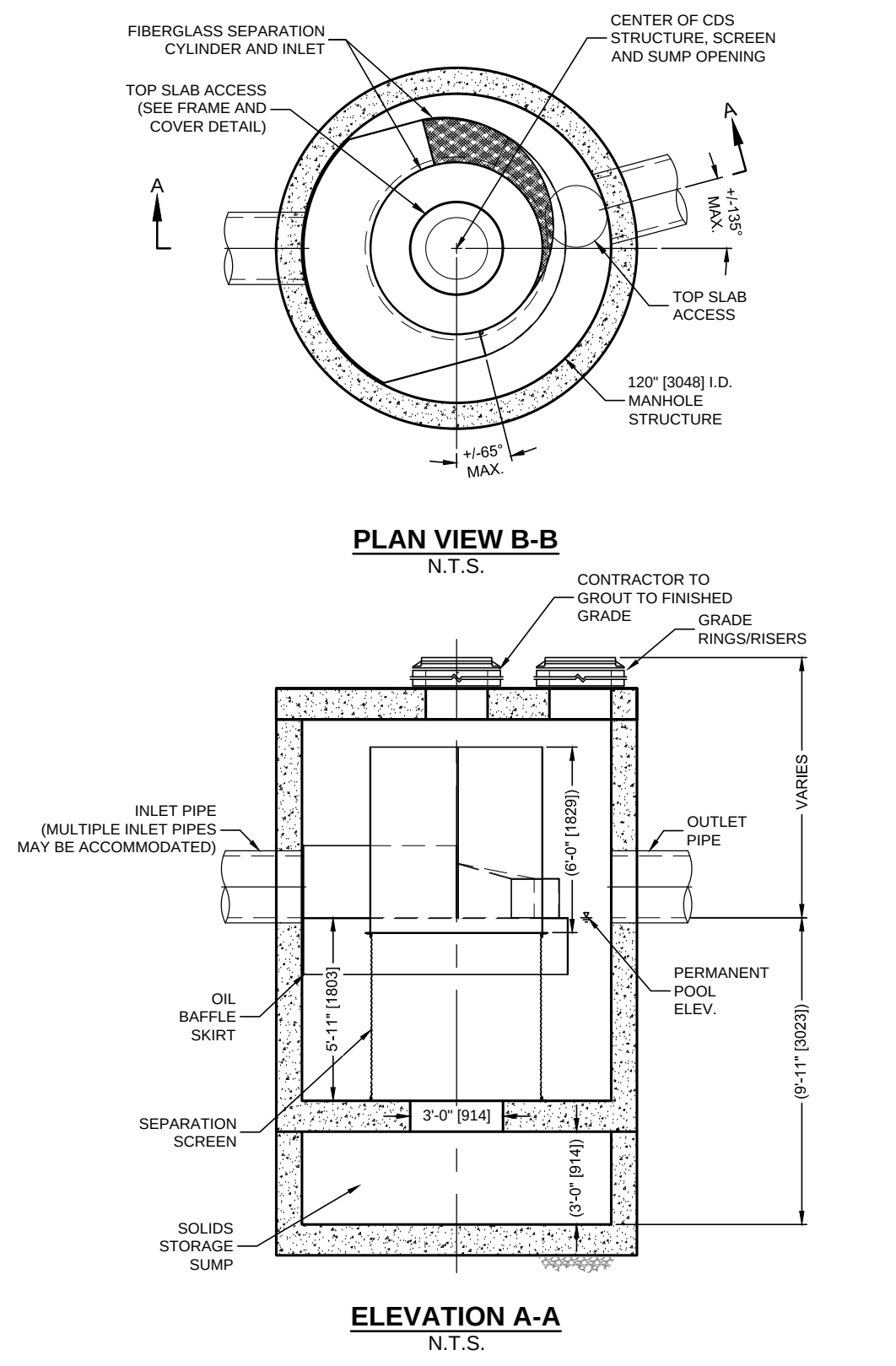
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

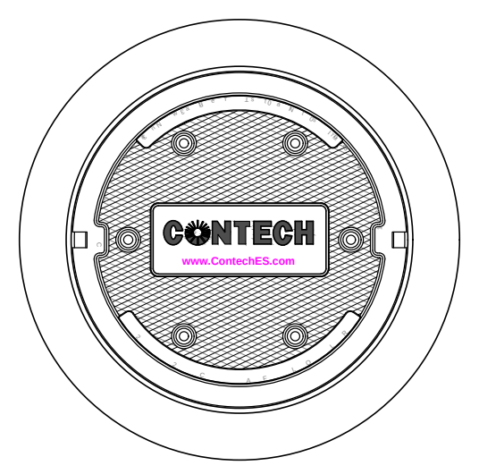
CONTECH ENGINEERED SOLUTIONS LLC
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS4040-8-C
INLINE CDS
STANDARD DETAIL

WATER QUALITY CONTROL STRUCTURE CONTECH CDS4040-8-C
(WQS G-6-1, WQS H-9-3, WQS B-5)

94


FIBERGLASS SEPARATION CYLINDER AND INLET
CENTER OF CDS STRUCTURE, SCREEN AND SUMP OPENING
TOP SLAB ACCESS (SEE FRAME AND COVER DETAIL)
TOP SLAB ACCESS
120" (3048) I.D. MANHOLE STRUCTURE
PLAN VIEW B-B
N.T.S.
CONTRACTOR TO GROUT TO FINISHED GRADE
GRADE RINGS/RISERS
INLET PIPE (MULTIPLE INLET PIPES MAY BE ACCOMMODATED)
OUTLET PIPE
PERMANENT POOL ELEV.
OIL BAFFLE SKIRT
SEPARATION SCREEN
SOLIDS STORAGE SUMP
VARIES
ELEVATION A-A
N.T.S.



GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechEScom
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET HS20 (AASHTO M 306) AND BE CAST WITH THE CONTECH LOGO.
6. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

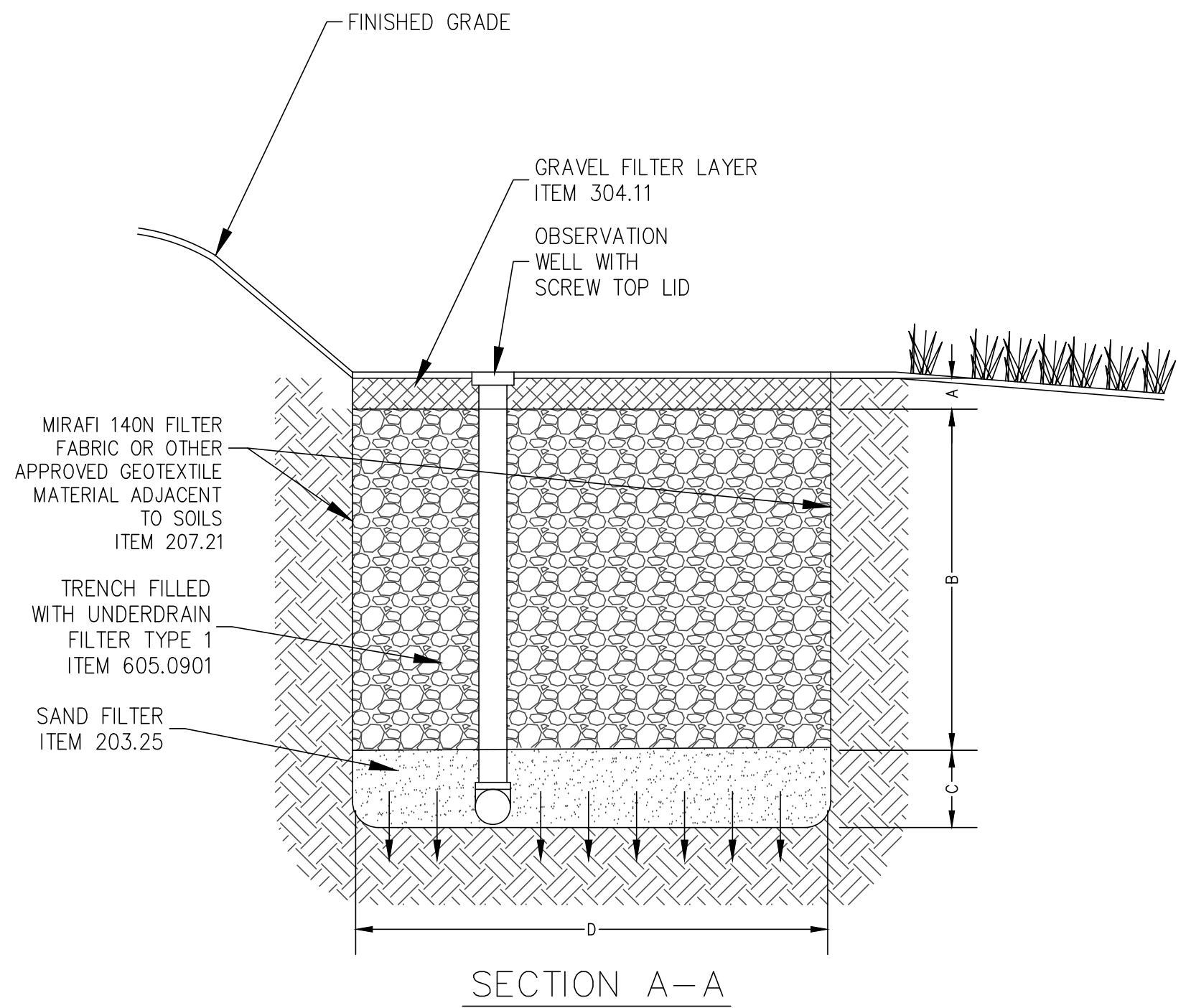
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS5653-10-C
INLINE CDS
STANDARD DETAIL

WATER QUALITY CONTROL STRUCTURE CONTECH CDS5653-10-C
(WQS H-10, WQS O-3, WQS A-12-1, WQS E-9-1, WQS E-11)

95


FINISHED GRADE
GRAVEL FILTER LAYER ITEM 304.11
OBSERVATION WELL WITH SCREW TOP LID
MIRAFI 140N FILTER FABRIC OR OTHER APPROVED GEOTEXTILE MATERIAL ADJACENT TO SOILS ITEM 207.21
TRENCH FILLED WITH UNDERDRAIN FILTER TYPE 1 ITEM 605.0901
SAND FILTER ITEM 203.25
A
B
C
D
SECTION A–A

TRENCH No.	PEA GRAVEL ITEM 304.11 A	STONE ITEM 605.0901 B	SAND ITEM 203.25 C	TRENCH WIDTH D
	in.	FT.	in.	FT.
1	9"	5' 9"	6"	VARIES SEE HP-12 & HP-13

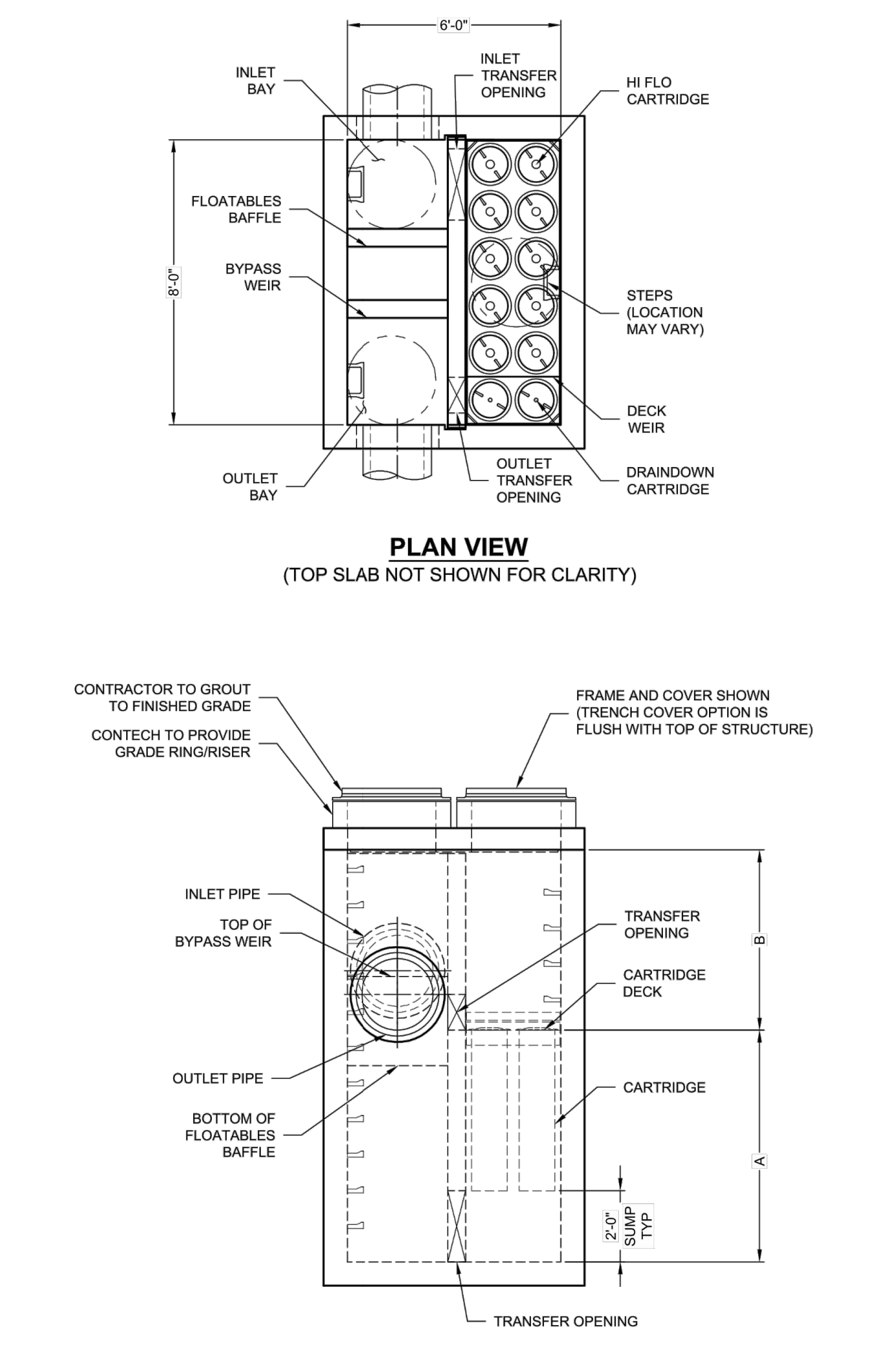
NOTES:

MATERIAL AND MIX/ITEM NUMBERS REFER TO:

NEW YORK STATE
DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS

INFILTRATION TRENCH

96

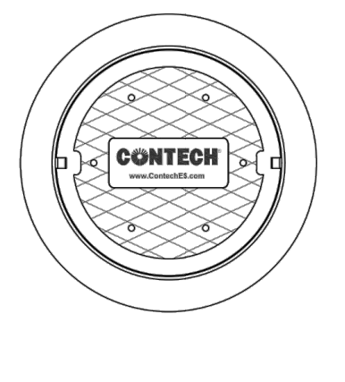

INLET BAY
INLET TRANSFER OPENING
HI FLO CARTRIDGE
FLOATABLES BAFFLE
BYPASS WEIR
STEPS (LOCATION MAY VARY)
DECK WEIR
OUTLET BAY
OUTLET TRANSFER OPENING
DRAINDOWN CARTRIDGE
PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)
CONTRACTOR TO GROUT TO FINISHED GRADE
CONTECH TO PROVIDE GRADE RING/RISER
FRAME AND COVER SHOWN (TRENCH COVER OPTION IS FLUSH WITH TOP OF STRUCTURE)
INLET PIPE OR BYPASS WEIR
TRANSFER OPENING
CARTRIDGE DECK
OUTLET PIPE
BOTTOM OF FLOATABLES BAFFLE
CARTRIDGE
TRANSFER OPENING
ELEVATION VIEW

JELLYFISH DESIGN NOTES

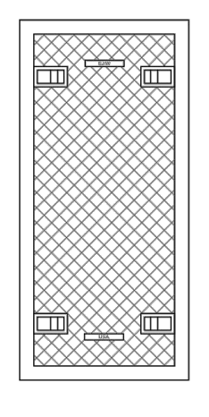
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	1.96	1.47	0.98	0.54
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24"
TRENCH COVER
(LENGTH VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*				
WATER QUALITY FLOW RATE (cfs)	*				
PEAK FLOW RATE (cfs)	*				
RETURN PERIOD OF PEAK FLOW (yrs)	*				
# OF CARTRIDGES REQUIRED (HF / DD)	*				
CARTRIDGE LENGTH	*				
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*
SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.					
RIM ELEVATION	*				
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT			
	*	*			
NOTES/SPECIAL REQUIREMENTS:					

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 10', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

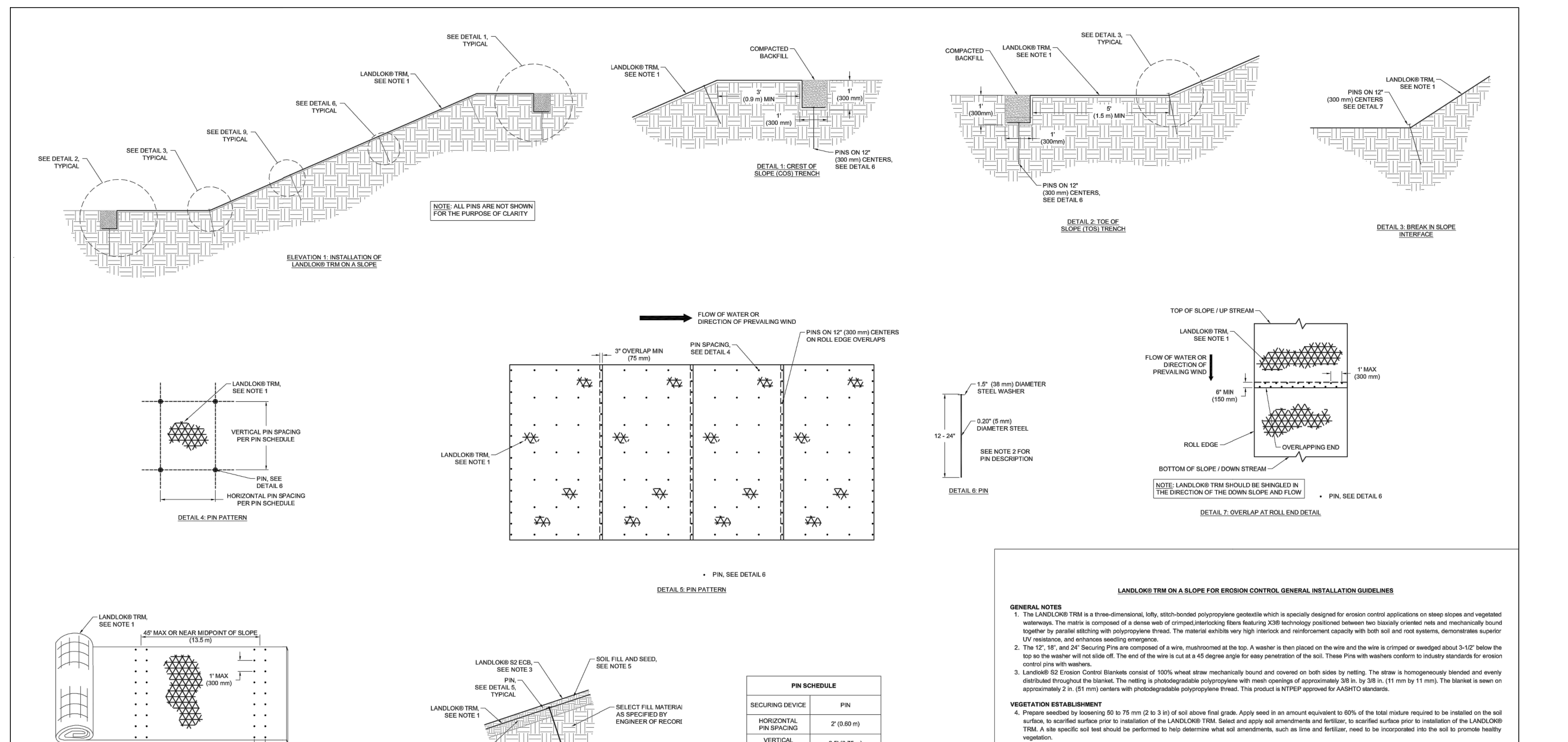
Jellyfish® Filter

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JFPD0806
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION

WATER QUALITY STRUCTURE B-2-7 CONTECH JELLYFISH

97


LANDLOK® S2 ECB, SEE NOTE 3
PIN, SEE DETAIL 5, TYPICAL
LANDLOK® TRM, SEE NOTE 1
PREPARED SEEDBED, SEE NOTE 4
SOIL FILL AND SEED, SEE NOTE 5
SELECT FILL MATERIAL AS SPECIFIED BY ENGINEER OF RECORD
1' MAX (300 mm)
PIN, SEE DETAIL 6
DETAIL 6: PIN
DETAIL 7: OVERLAP AT ROLL END DETAIL
NOTE: LANDLOK® TRM SHOULD BE SHINGLED IN THE DIRECTION OF THE DOWN SLOPE AND FLOW
BOTTOM OF SLOPE / DOWN STREAM
DETAIL 8: SIMULATED CHECK SLOT DETAIL
DETAIL 9: VEGETATION ESTABLISHMENT

PIN SCHEDULE

SECURING DEVICE	PIN
HORIZONTAL PIN SPACING	2' (0.60 m)
VERTICAL PIN SPACING	2.5' (0.75 m)
EMBEDMENT DEPTH	PER MANUFACTURES DESIGN

LANDLOK® TRM ON A SLOPE FOR EROSION CONTROL GENERAL INSTALLATION GUIDELINES

GENERAL NOTES
1. The LANDLOK® TRM is a three-dimensional, lofty, stitch-bonded polypropylene geotextile which is specially designed for erosion control applications on steep slopes and vegetated waterways. The matrix is composed of a dense web of crimped,interlocking fibers featuring X3® technology positioned between two biaxially oriented nets and mechanically bound together by parallel stitching with polypropylene thread. The material exhibits very high interlock and reinforcement capacity with both soil and root systems, demonstrates superior UV resistance, and enhances seedling emergence.
2. The 12", 18", and 24" Securing Pins are composed of a wire, mushroomed at the top. A washer is then placed on the wire and the wire is crimped or swedged about 3-1/2" below the top so the washer will not slide off. The end of the wire is cut at a 45 degree angle for easy penetration of the soil. These Pins with washers conform to industry standards for erosion control pins with washers.
3. Landlok® S2 Erosion Control Blankets consist of 100% wheat straw mechanically bound and covered on both sides by netting. The straw is homogeneously blended and evenly distributed throughout the blanket. The netting is photodegradable polypropylene with mesh openings of approximately 3/8 in. by 3/8 in. (11 mm by 11 mm). The blanket is sewn on approximately 2 in. (51 mm) centers with photodegradable polypropylene thread. This product is NTPEP approved for AASHTO standards.

VEGETATION ESTABLISHMENT
4. Prepare seedbed by loosening 50 to 75 mm (2 to 3 in) of soil above final grade. Apply seed in an amount equivalent to 60% of the total mixture required to be installed on the soil surface, to scarified surface prior to installation of the LANDLOK® TRM. Select and apply soil amendments and fertilizer, to scarified surface prior to installation of the LANDLOK® TRM. A site specific soil test should be performed to help determine what soil amendments, such as lime and fertilizer, need to be incorporated into the soil to promote healthy vegetation.
5. The installed LANDLOK® TRM shall be soil filled and seeded with the remaining 40% of the seed mixture. Do not place excessive soil above material. Once soil fill and additional seed is in place, surficial protection should be accomplished by installing LANDLOK® S2 Erosion Control Blanket (ECB) atop the seed layer. LANDLOK® S2 ECB is to be secured using 6" U-shaped staples with a frequency of 2.0 staples per square meter (1.7 staples per square yard).
6. Irrigate as necessary to establish and maintain vegetation until 75% of vegetation has established and has reached a height of 2 inches. Frequent, light irrigation will need to be applied to seeded areas if natural rain events have not occurred within two weeks of seeding.

BEFORE INSTALLATION BEGINS
7. Coordinate with a Propex Representative: A pre-construction meeting is suggested with the construction team and a representative from Propex. This meeting should be scheduled by the contractor with at least a two week notice.
8. Gather the Tools Needed: Tools that you will need to install the LANDLOK® TRM include a pair of industrial shears to cut the LANDLOK® TRM and tape measure.
9. Determine how to Establish Vegetation: The method of vegetation establishment should be determined prior to the start of installation. Different vegetation establishment methods require different orders of installation. Refer to Establish Vegetation for further guidance.
10. Please consult the Propex Website for the most up to date installation guidelines.

Propex GEOSOLUTIONS

© 2017 Propex Operating Company, LLC

EROSION CONTROL INSTALLATION DETAILS

Please note that the information presented herein is general information only. It is for conceptual use only and not intended to be used for construction. While every effort has been made to ensure its accuracy, this information should not be used for a specific application without independent professional examination and verification of its suitability, applicability, and accuracy. This engineering drawing is protected by the Copyright Act, 17 U.S.C. §101 et seq. and may be used ONLY with the express written permission of Propex in connection with Propex products. Any copying, distributing, and/or creation of a derivative work without permission of Propex is prohibited and is subject of actual damages, statutory damages and attorney's fees under the Copyright Act.

Rev	1 of 1	LANDLOK®	TURF REINFORCEMENT MAT (TRM) LANDLOK® TRM INSTALLATION DETAILS FOR SLOPES
Date: 02/10/2017	Drawn By: J.HILL	Scale: NTS	*ALL DIMENSIONS ARE TO BE VERIFIED BY ENGINEER OF RECORD

LANDLOK®

Product Data
LANDLOK® S2 ECB

LANDLOK® S2 erosion control blanket (ECB) consist of 100% wheat straw mechanically bound and covered on both sides by netting. The straw is homogeneously blended and evenly distributed throughout the blanket. The netting is photodegradable polypropylene with mesh openings of approximately 3/8 in by 3/8 in (11 mm by 11 mm). The blanket is sewn on approximately 2 in (51 mm) centers with photodegradable polypropylene thread.

LANDLOK® S2 conforms to the property values listed below[1].

PROPERTY	TEST METHOD	ENGLISH	METRIC
PHYSICAL			
Mass/Unit Area [2]	ASTM D-6475	8.0 oz/yd²	271 g/m²
Thickness [2]	ASTM D-6525	335 mils	8.5 mm
MECHANICAL			
Tensile Strength [2]	ASTM D-6818	194 x 116 lbs/ft	2.8 x 1.7 kN/m
Elongation [2]	ASTM D-6818	25%	25%
ENDURANCE			
Functional Longevity [2]	Observed	Up to 12 months	
ROLL SIZES		8 ft x 112.5 ft	2.45 m x 34.29 m

NOTES:
1. The property values listed above are effective 03/09/2018 and are subject to change without notice.
2. Values represent testing at time of manufacture and are shown as typical values.

Propex GEOSOLUTIONS

ENGINEERED EARTH SOLUTIONS™
www.propexglobal.com

Propex Operating Company, LLC · 4019 Industry Drive · Chattanooga, TN 37416 · ph 800 621 1273 · ph 423 855 1466

ARMORMAX®, PYRAMAT®, LANDLOK®, X3®, PYRAWALL™, SCOURLOK™, GEOTEX®, PETROMAT®, PETROTAC®, REFLECTEX®, and GRIDPRO™ are registered trademarks of Propex Operating Company, LLC.

This publication should not be construed as engineering advice. While information contained in this publication is accurate to the best of our knowledge, Propex does not warrant its accuracy or completeness. The ultimate customer and user of the products should assume sole responsibility for the final determination of the suitability of the information and the products for the contemplated and actual use. The only warranty made by Propex for its products is set forth in our product data sheets for the product, or such other written warranty as may be agreed by Propex and individual customers. Propex specifically disclaims all other warranties, express or implied, including without limitation, warranties of merchantability or fitness for a particular purpose, or arising from provision of samples, a course of dealing or usage of trade.

© 2018 Propex Operating Company, LLC

EROSION CONTROL MATTING

98

Date	Description	No.
12/16/2022	REV. PER WATERSHED INSPECTOR GENERAL COMMENTS	5
12/05/2022	REV. SITE GRADING	4
10/14/2022	REV. FOR NYCDEP SUBMISSION	3
03/25/2022	REV. PER TOWN COMMENTS	2

Revisions

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, LAND SURVEYOR OR GEOLOGIST, TO ALTER THIS ITEM IN ANY WAY.

081473

12/16/2022
Signature Date
MICHAEL J. FINAN, PE, LEED–AP
PROFESSIONAL ENGINEER NY Lic. No. 081473

LANGAN
Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology, D.P.C.
One North Broadway, Suite 910
White Plains, NY 10601
T: 914.323.7400 F: 914.323.7401 www.langan.com

Project
LINCOLN LOGISTICS
BREWSTER
TOWN OF SOUTHEAST
PUTNAM COUNTY NEW YORK

Drawing Title
DETAIL SHEET
(8 OF 11)

Project No. 190065201
Date 1/28/2022
Drawn By JM/SK
Checked By CZ/MF

Drawing No.
C-907
Sheet 94 of 97

LANGAN
Project No. 190065201

© 2020 Langan

Date: 12/16/2022 Time: 13:09 User: jmacalintal Style Table: Langan.stb Layout: CS505 Document Code: 190065201-0501-CS501-0107