

| | ND | TES: |
|----|-----|---|
| | 1. | EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS. CONTRACTOR IS REQUESTED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING. |
| | 2. | CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY. |
| | 3, | PROPOSED SITING DETAILS FOR THIS PROPOSED BUILDING WERE TAKEN FROM THE SITE PLAN PREPARED BY "AZUL DESIGNS". |
| | 4. | EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING SITE BENCHMARK, ROAD ELEVATION, SEWER INVERT ELEVATIONS AND THE TOPOGRAPHICAL INFORMATION OF THE LOT SHOWN WERE PROVIDED BY 'ANNIS,O'SULLIVAN & VOLLEBEKK" AND ARCH-NOVA DESIGN INC. IS NOT RESPONSIBLE FOR THE SURVEY PROVIDED. |
| | 5. | ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA. |
| | 6, | ALL GRADES SH⊡WN ARE METRIC. EXISTING AND PR⊡P⊡SED GRADES SH⊡WN ⊡N THIS DRAWING ARE BASED ⊡N A GE⊡DETIC BENCHMARK PR⊡VIDED BY "AZUL DESIGNS." AS SH⊡WN ⊡N THEIR SITE PLAN. |
| | 7. | ALL WILL BE CONSTRUCTED TO CITY OF OTAWA'S LATTEST REVISED STANDARDS ON APPROVAL BY THE CITY. USE SADDLE CONNECTIONS WITH CORP STOPS FOR THE 50 MM WATER SERVICES. |
| | 8. | CONSTRUCT ALL SANITARY PIPES IN ACCORDANCE WITH CITY DF DTTAWA'S LATEST RE∨ISED STANDARDS DTHERWISE AS PER DPSS AND DPSD SPECIFICATIONS. |
| | 9, | ALL WORKS CONSTRUCTED BY THE CONTRACTOR SHALL MEET CITY OF OTTAWA'S CURRENT ENGINEERS' STANDARDS AND PER CITY'S REQUIREMENTS. |
| | 10. | THE CONTRACTOR SHALL CONSTRUCT AND ENSURE THAT THE 50 mm WATER SERVICES ON THIS LOT SHALL HAVE A MINIMUM OF 2.4m OF GROUND COVER; OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY SPECIFICATIONS W 21, W 22 AND W 23. THE WATER SERVICE INSTALLATION SHALL BE STEEL PIPE AND CONSTRUCTED IN ACCORDANCE WITH STD DWG W26. |
| 2. | 11. | IF WATER SER∨ICE IS LESS THAN 2.4m FR⊡M SEWER, MANH⊡LE ⊡R CATCH BASIN, C⊡NTRACT⊡R IS REQUESTED T⊡ INSULATE BETWEEN THEM WITH S/M RIGID INSULATI⊡N (AS PER CITY DETAIL W-23). |
| | 12. | ALL WATERMAIN SER∨ICE AND FITTINGS SHALL CONFORM TO APPRO∨ED AWWA AND OR CSA STANDARDS. |
| | 13. | THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS TO COMPLETE THE WORKS. |
| | 14. | WATER SERVICES CONNECTION ON ROSEVIEW AVENUE SHALL BE DONE BY THE CITY. EXCAVATION, BACKFILLING AND REINSTATEMENTS BY CONTRACTOR. |
| | 15. | THE DWNER AND/DR HIS CONTRACTOR SHALL CONTACT ALL THE UTILITY COMPANIES REGARDING RELOCATION REQUIREMENTS FOR THE EXISTING DVERHEAD UTILITY POLE. |
| | 16. | WATER SERVICE AND WATERMAIN TRENCH DETAILS AS PER CITY W-17 DETAIL. |
| | 17. | SANITARY SERVICES LATERAL PROPOSED SHALL BE PVC-SDR28 OR EQUIVALENT AND CONNECTION TO THE EXISTING SEWER SHALL BE AS PER CITY OF OTTAWA DWG. S11. SEWER TRENCH DETAILS AS PER STD DWG S6 & S7. CONNECT TO CITY SEWER PIPES USING SADDLE SEWER TRENCH DETAILS AS PERR STD DWG S6 & S7. SADDLE CONNECTIONS (MAX 300 MM), MANUFACTURED "T" CONNECTIONS OR FOR LARGE DIAMETERS NEW MANHOLES. |
| | 18. | SANITARY AND ST⊡RM SEWER SER∨ICES BENDS AND RISERS USED MUST BE C⊡NSTRUCTED T⊡ THE CITY'S SATISFACTI⊡N. |
| | 19. | DETAILS OF THE EXISTING SEWERS AND WATERMAIN SHOWN ON ROSEVIEW AVENUE FROM THE CITY MAY NOT BE CURRENT. THE CONTRACTOR SHALL REFER TO THE CITY'S SEWER AND WATERMAIN DRAWINGS FOR DETAILS. THE CONTRACTOR IS ADVISED TO EXCAVATE AND INVESTIGATE THE SEWER ELEVATIONS IN FRONT OF THIS PROPERTY FIRST TO ENSURE THAT 1.5% (MIN.) PIPE SLOPE OF THE SANITARY LATERAL CAN BE ACHIEVED USING THE PROPOSED UNDERSIDE OF CONCRETE FOOTINGS ELEVATIONS. IF 1.5% (MIN.) SLOPE IS NOT POSSIBLE FROM THE HOUSE TO THE SEWER THEN THE CONTRACTOR SHOULD INFORM THE DWNER'S PROJECT MANAGER AND THE CITY ACCORDINGLY FOR FURTHER DIRECTION. |
| | 20. | FOR DEVELOPMENT OF THIS LOT, THE CONTRACTOR MUST CONSTRUCT THE UNDERGROUND SANITARY AND WATER SERVICES FROM SEWER AND WATERMAIN TO THE PROPERTY FIRSTLY, PRIOR TO HOUSE CONCRETE FOUNDATION POURING. |
| | 21. | IF THE DEPTH FROM UNDERSIDE OF HOUSE CONCRETE FOOTING TO PROPOSED FINISHED GROUND ELEVATION IS LESS THAN 1.50 M IT IS RECOMMENDED THAT INSULATION (500 mm TICK) MINIMUM BE INSTALLED AT THE BUILDING FOOTING AND FOUNDATION OF THE HOUSE TO PROVIDE SUFFICIENT ERDST COVER FOR THE FOUNDATION STRUCTURES. THE FOOTINGS WILL NEED TO BE REVIEWED. |

FROST COVER FUR THE FOUNDATION STRUCTURES. THE FOOTINGS WILL NEED TO BE REVIEWED FOR INSULATION BY THE OWNER'S SOILS ENGINEER. EXACT INSULATION REQUIREMENTS SHALL BE AS PER ARCHITECT'S INSULATION DETAILS AS SHOWN ON THEIR ARCHITECTURAL DRAWINGS AND CONFIRMED BY THE OWNER'S SITE SOILS ENGINEER. 22. CONCRETE BARRIER CURB AND DEPRESSED CURB DETAILS AS PER CITY OF OTTAWA STANDARDS (DWG, # SC−1.1 REV.MARCH 2014). CONCRETE CURB AND CONCRETE SIDEWALK CONSTRUCTION AND

REINSTATEMENT SC-1.4 REV.MARCH 2014). CONCRETE CURB AND CONCRETE SIDEWALK CONSTRUCTION AND REINSTATEMENT SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA, AND IN ACCORDANCE WITH THE LATEST REVISED CITY ENGINEERING STANDARDS. 23. WATER SERVICE LINES AS PER STD.DWG W26.

24, WATER SERVICE INSTALLATION AND CROSSINGS AS PER STD.DWG W 25 AND W 25.2.

25. BLANK WATER SERVICES AT CITY WATERMAIN BY CITY FURCES.

26. EXISTING SEWERS TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF CITY'S SEWER OPERATIONS 27. BACKWATER VALVES WILL BE USED DN SERVICES PER SC14, SC14.1 AND SC14.2

28. ASPHALT AND GRAVEL SURFACES TO BE CLEARED AND REPLACED WITH SOFT LANDSCAPING AS SHOWN ON ARCHITECTURAL AND LANDSCAPING PLANS.

29. ALL SER∨ICE LATERALS UNDER THE BUILDING FOOTINGS TO BE SLEEVED AS THE PIPE IS LESS THAN 0.3 M BELOW THE FOOTING.

| (P1)&Set | <u>56.63</u> | PROPOSED ELEVATION EXISTING ELEVATION | |
|--------------------------|-----------------------|--|---|
| | U/S FOOTING | PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION | 1 - 5 + 1 a - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - |
| | v s DR | PROPOSED WATER SERVICES COPPER TYPE "K" PROPOSED PVC SANITARY LATERAL SERVICES PROPOSED PVC STORM SEWER PROPOSED FOUNDATION DRAIN (WEEPING TILES) | |
| | | EXISTING CATCH BASIN | · · · · · · · · · · · · · · · · · · · |
| | 8 | NEW CATCH BASIN EXISTING STORM MANHOLE | 817 Roseview Avenue KEY MAP |
| | ⊗ ○ | EXISTING SANITARY MANHOLE EXISTING WATER VALVE | |
| | | EXISTING FIRE HYDRANT EXISTING UTILITY POLE | 4 |
| | ● | PROPOSED CURB STOP & SERVICE POST PROPOSED METER & REMOTE METER | |
| 200mmø | D3)\$(. | ROOF DRAIN PROPERTY LINE | |
| | | | |
| / Pipe_200mr s | 0 1 2 | 345 10 m | |

LEGEND

ARCH-NOVA Design In 45 Banner Road NEPEAN ON K2H 8X5 613-702-3403 contact@archnova.ca

| Drawn by: Z.N Checked by | | | Services & Gr | ading Plan |
|-------------------------------|---------------|---------------------|-----------------------------------|-------------|
| Approved by Z.M Rev 1 Date | . Description | Location | 817 ROSEVIEW AVENUE OTTAWA, ON | BOFESS/ON |
| | | Owner | OWNER, ADDRESS | 06.09.2021 |
| Rev 2 Date | Description | Project No | CW-04-21 | Si Z. MRDJA |
| Rev 3 Date | Description | Date | SEPTEMBER 2021 | Suchting |
| | | Drawing No Scale | W-01 1:100 | INCE OF ON |

PROJECT INFORMATION

| ENGINEERED PRODUCT MANAGER | |
|-------------------------------|--|
| ADS SALES REP | |
| PROJECT NO. | |



817 ROSEVIEW NEPEAN, CANADA

SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740. 1.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE 2. COPOLYMERS.
- CHAMBERS SHALL BE CERTIFIED TO CSA B184, "POLYMERIC SUB-SURFACE STORMWATER MANAGEMENT STRUCTURES", AND MEET 3. THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD Δ IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE CSA S6 CL-625 TRUCK AND THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, 6 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION: 7
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 50 mm (2")
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 23° C / 73° F), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN 8. ENGINEER OR OWNER. THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY. 9

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A 1 PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- 2.
- 3 CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS. 4.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE. 5.
- MAINTAIN MINIMUM 150 mm (6") SPACING BETWEEN THE CHAMBER ROWS. 6.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 20-50 mm (3/4-2"). 7.
- 8 THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE 9. STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- 1.
- 2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- 3. FULL 900 mm (36") OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.





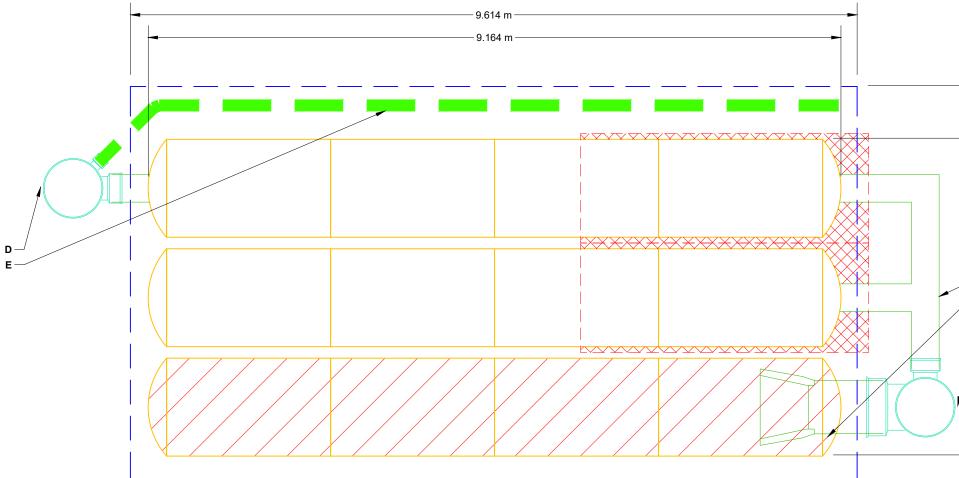
STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".

STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".

NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE

WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".

| | PROPOSED LAYOUT | CONCEPTUAL ELEVATIONS | | | | |
|------------------|--|---|-------|-------------------------|--------|--|
| 12 | STORMTECH SC-740 CHAMBERS | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED): | 3.353 | PART TYPE | | DESCRIPTION |
| 6 | STORMTECH SC-740 END CAPS | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC): | 1.524 | | LAYOUT | L 600 mm BOTTOM PREFABRICATED END CAP, PART#: SC740EPE24B |
| 152 | STONE ABOVE (mm) | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC): | | PREFABRICATED END CAP | | ISOLATOR ROW PLUS CONNECTIONS |
| <u>152</u> 40 | STONE BELOW (mm) STONE VOID | MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT): MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT): | 1.372 | MANIFOLD | | 300 mm x 300 mm TOP MANIFOLD, ADS N-12 |
| 40 | INSTALLED SYSTEM VOLUME (m ³) | TOP OF STONE: | 1.067 | NYLOPLAST (INLET W/ ISO | C | 750 mm DIAMETER (610 mm SUMP MIN) |
| 30.8 | (PERIMETER STONE INCLUDED) | TOP OF SC-740 CHAMBER: | 0.044 | | - | |
| 50.0 | (COVER STONE INCLUDED) | 300 mm x 300 mm TOP MANIFOLD INVERT: | | NYLOPLAST (OUTLET) | | |
| 50.3 | (BASE STONE INCLUDED) SYSTEM AREA (m [°]) | 300 mm BOTTOM CONNECTION INVERT: 600 mm ISOLATOR ROW PLUS INVERT: | 0.100 | UNDERDRAIN | | 150 mm ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN |
| 29.7 | SYSTEM PERIMETER (m) | BOTTOM OF SC-740 CHAMBER: | 0.155 | | | |
| | | UNDERDRAIN INVERT: | 0.000 | | | |
| | | BOTTOM OF STONE: | 0.000 |] | | |
| | | | | | | |





PLACE MINIMUM 3.810 m OF ADSPLUS125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

 MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
 DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AN COMPONENTS IN THE FIELD.
 THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQ.
 THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DETERMINING THIS CHAMBER STSTEM WAS DESIGNED WITHOUT ONE OF EAL OF MALL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED (PROVIDED.
 NOT FOR CONSTRUCTION: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORA

- BED LIMITS

| *INVERT ABC | VF BAS | E OF CHAMBER | | | | | |
|---|----------|--------------|--------------|----------------|----------------|----------------------------------|---|
| | NVERT* | MAX FLOW | | | | | LTIMATI |
| 4BR / TYP OF ALL 600 mm | 3 mm | | | | | A | THE UI |
| 4 | 318 mm | | > | ∢ | MZ | N. | N. IT IS |
| | | 130 L/s IN | /IEV | NAD | DRAWN: ZM | CHECKED: N/A | NCTIO |
| | | 57 L/s OUT | SE/ | CAI | DRA | В | ONSTR |
| | | | 817 ROSEVIEW | NEPEAN, CANADA | DATE: | PROJECT #: | L REVIEW THIS DRAWING PRIOR TO C |
| | | | DESCRIPTION | | | | IVE. THE SITE DESIGN ENGINEER SHAL |
| | | | CHK | | | | REPRESENTAT |
| A | | | DRW | | | | R PROJECT |
| A B A C A 101 m B 101 m B 2 C B 101 m | | | REV | StormTech® | Chamber System | 888-892-2694 WWW.STORMTECH.COM | THE STEP BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE |
| ND COUPLE ADDITIONAL PIPE TO S | | | | 1-800-733-7473 | - - | SCALE = 1 : 50 | S DRAWING HAS BEEN PREPARED BASED ON INFORMATION PRC |
| QUIREMENTS ARE MET. E DESIGN ENGINEER IS RESPONSI | | | | | HEE1 | r | I III |
| OR DECREASED ONCE THIS INFOR | IVIATION | 10 | | | ЭF | 6 | |

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

| | MATERIAL LOCATION | DESCRIPTION | AASHTO MATERIAL CLASSIFICATIONS | COMPA |
|---|--|--|---|---|
| D | FINAL FILL : FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER. | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | N/A | PREPAR INSTALL |
| с | INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | BEGIN COM THE CHAMBE 6" (150 mm) WELL GRA PROCES VEHICLE W |
| В | EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57 | |
| А | FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57 | PLATE CO |

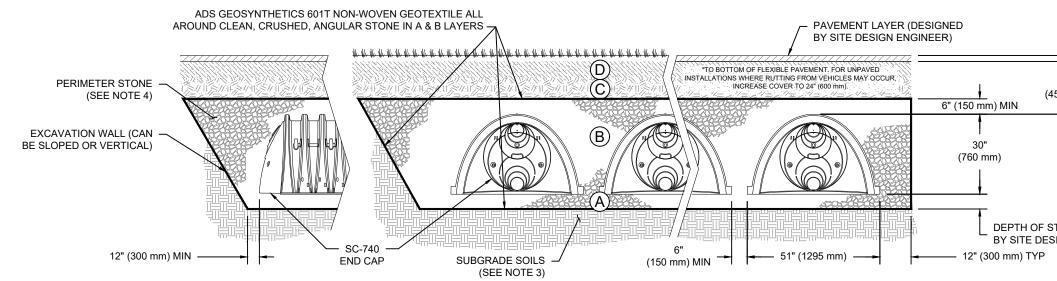
PLEASE NOTE:

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".

2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.

3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

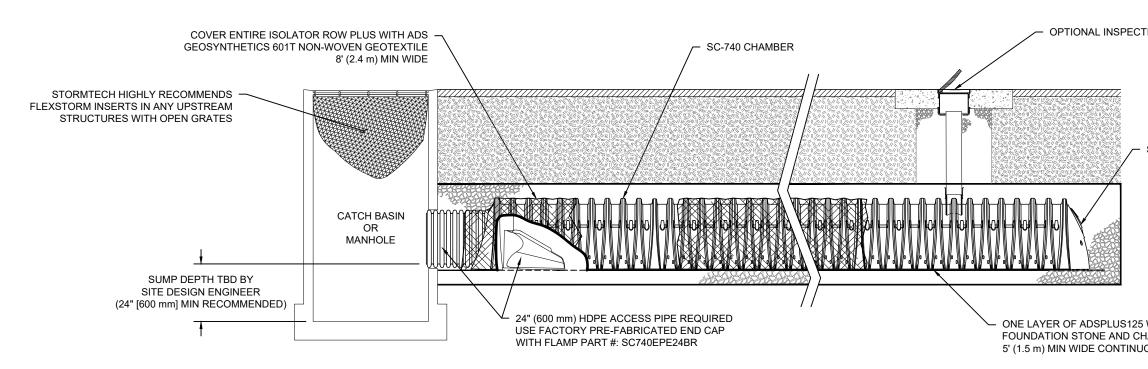
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- 1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- 4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- 5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

CHECKED: N/A DRAWN: ZM PACTION / DENSITY REQUIREMENT NEPEAN, CANADA ROSEVIEW ARE PER SITE DESIGN ENGINEER'S PLANS. PAVED LLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS. 817 MPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER BERS IS REACHED. COMPACT ADDITIONAL LAYERS IN n) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR # RADED MATERIAL AND 95% RELATIVE DENSITY FOR PROJECT ESSED AGGREGATE MATERIALS. ROLLER GROSS DATE: WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN). NO COMPACTION REQUIRED. DESCRIPTION COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.^{2,3} ¥ Ċ DRW REV 8' 18' (2.4 m) (450 mm) MIN* MAX StormTech[®] Chamber System DEPTH OF STONE TO BE DETERMINED BY SITE DESIGN ENGINEER 6" (150 mm) MIN 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473 SHEET 3 OF 6



SC-740 ISOLATOR ROW PLUS DETAIL

NTS

INSPECTION & MAINTENANCE

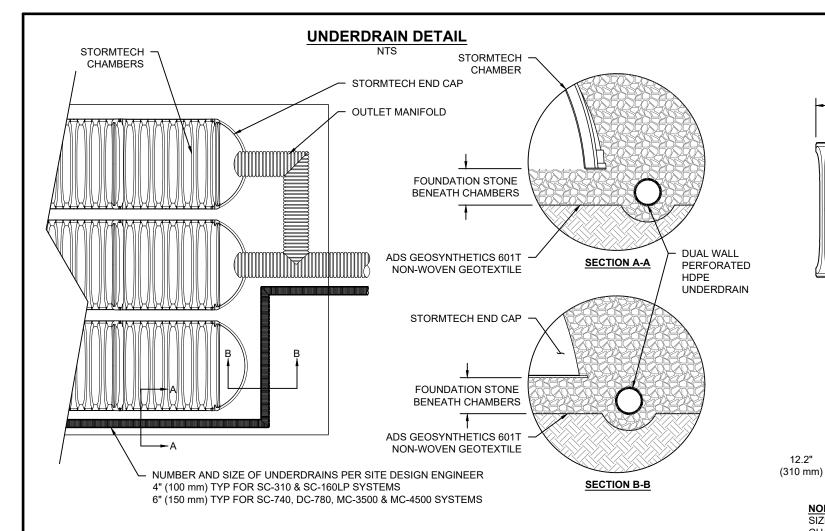
INSPECT ISOLATOR ROW PLUS FOR SEDIMENT STEP 1)

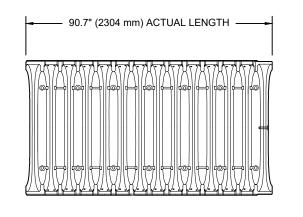
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL) A.3.
 - A.4.
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE B.2.
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B.3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
 - A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN Β.
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

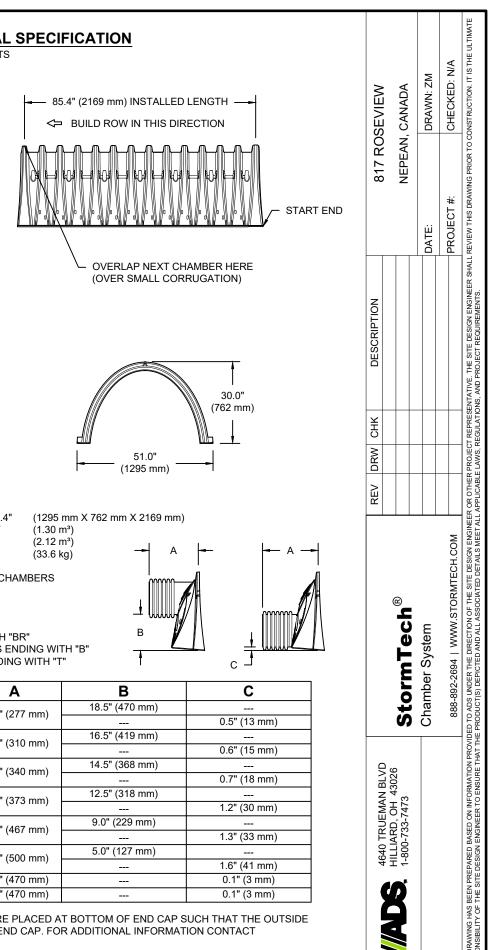
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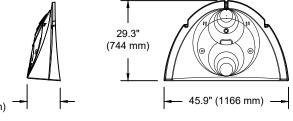
- 1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

| - | | | | | | EN GEOTEXTILE BETWEEN ERS FABRIC WITHOUT SEAMS | | '40 END CAP | PORT | |
|------------|--------------------------|---|---|-----|-----|--|-------------|-------------|----------------|--------------|
| 4 | 4640 TRUE HILLIARD, (| 4640 TRUEMAN BLVD HILLIARD, OH 43026 | © 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 | REV | DRW | CHK | DESCRIPTION | 81 ME | 817 ROSEVIEW | N. C |
| | | 7473 | Storm I ech | | | | | NE | NEPEAN, CANADA | DA |
| IEET DF | | | Chamber System | | | | | DATE: | DRAWN: ZM | N: ZM |
| 6 | | | 888-892-2694 WWW.STORMTECH.COM | | | | | PROJECT #: | CHECK | CHECKED: N/A |









NOMINAL CHAMBER SPECIFICATIONS

| 51.0" X 30.0" X 85.4" | (1 |
|-----------------------|------------------------------------|
| 45.9 CUBIC FEET | (1 |
| 74.9 CUBIC FEET | (2 |
| 75.0 lbs. | (3 |
| | 45.9 CUBIC FEET 74.9 CUBIC FEET |

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR" PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T" PRE-CORED END CAPS END WITH "PC"

| PART # | STUB | Α | |
|-----------------------------|--------------|------------------|--|
| SC740EPE06T / SC740EPE06TPC | 6" (150 mm) | 10.9" (277 mm) | |
| SC740EPE06B / SC740EPE06BPC | 0 (100 mm) | 10.5 (277 1111) | |
| SC740EPE08T /SC740EPE08TPC | 8" (200 mm) | 12.2" (310 mm) | |
| SC740EPE08B / SC740EPE08BPC | | 12.2 (310 1111) | |
| SC740EPE10T / SC740EPE10TPC | 10" (250 mm) | 13.4" (340 mm) | |
| SC740EPE10B / SC740EPE10BPC | | 13.4 (340 1111) | |
| SC740EPE12T / SC740EPE12TPC | 12" (300 mm) | 14.7" (373 mm) | |
| SC740EPE12B / SC740EPE12BPC | 12 (300 mm) | 14.7 (373 1111) | |
| SC740EPE15T / SC740EPE15TPC | 15" (375 mm) | 18.4" (467 mm) | |
| SC740EPE15B / SC740EPE15BPC | | 10.4 (407 11111) | |
| SC740EPE18T / SC740EPE18TPC | 18" (450 mm) | 19.7" (500 mm) | |
| SC740EPE18B / SC740EPE18BPC | 10 (400 mm) | 19.7 (500 mm) | |
| SC740EPE24B* | 24" (600 mm) | 18.5" (470 mm) | |
| SC740EPE24BR* | 24" (600 mm) | 18.5" (470 mm) | |
| | | | |

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

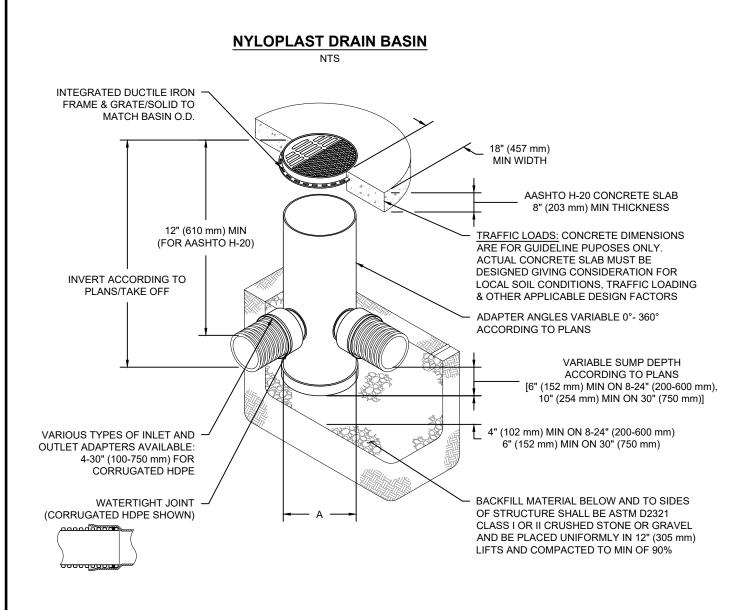
* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

SC-740 TECHNICAL SPECIFICATION

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SHEET 5 OF 6



NOTES

- 1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
 DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 4.
- FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC 5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WWW.NYLOPLAST-US.COM
- 6. TO ORDER CALL: 800-821-6710

| Α | PART # | GRATE/S | SOLID COVER (| OPTIONS |
|-----------------|--------|--------------------------|------------------------|------------------|
| 8" (200 mm) | 2808AG | PEDESTRIAN LIGHT DUTY | STANDARD LIGHT DUTY | SOLID LIGHT DUTY |
| 10" (250 mm) | 2810AG | PEDESTRIAN LIGHT DUTY | STANDARD LIGHT DUTY | SOLID LIGHT DUTY |
| 12" | 2812AG | PEDESTRIAN | STANDARD AASHTO | SOLID |
| (300 mm) | | AASHTO H-10 | H-20 | AASHTO H-20 |
| 15" | 2815AG | PEDESTRIAN | STANDARD AASHTO | SOLID |
| (375 mm) | | AASHTO H-10 | H-20 | AASHTO H-20 |
| 18" | 2818AG | PEDESTRIAN | STANDARD AASHTO | SOLID |
| (450 mm) | | AASHTO H-10 | H-20 | AASHTO H-20 |
| 24" | 2824AG | PEDESTRIAN | STANDARD AASHTO | SOLID |
| (600 mm) | | AASHTO H-10 | H-20 | AASHTO H-20 |
| 30" | 2830AG | PEDESTRIAN | STANDARD AASHTO | SOLID |
| (750 mm) | | AASHTO H-20 | H-20 | AASHTO H-20 |

| | | | | REV I | REV DRW CHK | ¥ | DESCRIPTION | 817 RC | 817 ROSEVIEW |
|---|--|---|---|---------------|---------------------------|------------------------------|---|----------------------------------|---------------------------------|
| 6 | | HILLARD OH 43076 | Q | | | | |) | |
| 6 | 1-800-733-7473 | -800-733-7473 | Nvloblast | | | | | NEPEAN | NEPEAN, CANADA |
| | | | | | | | | | |
| | | | | | | | | DATE: | DRAWN: ZM |
| | | | | | | | | | |
| | | | | | | | | | |
| 6 | | | 770-932-2443 WWW.NYLOPLAST-US.COM | | | | | | |
| | THIS DRAWING HAS BEEN PREPA RESPONSIBILITY OF THE SITE DE | ARED BASED ON INFORMATION PROV SIGN ENGINEER TO ENSURE THAT TH | HIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS. | ER OR OTHER I | PROJECT REI LAWS, REGU | PRESENTATIVE LATIONS, AND | SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL ED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS. | L REVIEW THIS DRAWING PRIOR TO (| CONSTRUCTION. IT IS THE ULTIMAT |
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