

SOIL EROSION & SEDIMENTATION CONTROL (SESC) PLAN:

PROJECT DESCRIPTION

- THE APPLICANT IS PROPOSING A 23-LOT RESIDENTIAL RESUBDIVISION LOCATED AT 47 SHARP HILL ROAD IN MONTVILLE. THE PARCEL WAS CREATED AS PART A SUBDIVISION APPROVED IN OCTOBER 2025 AS PART OF THE RESUBDIVISION, THE ROADWAY, ASSOCIATED ROADWAY DRAINAGE SYSTEM, STORMWATER MANAGEMENT IMPROVEMENTS, AND COMMON UTILITIES (SANITARY SEWER, ELECTRICAL, TELEPHONE, CABLE) WILL BE INSTALLED. THE RESIDENCES, DRIVEWAYS, INDIVIDUAL LOT GRADING, AND DRILLED WELLS SHOWN ON THE PLANS FOR THE NEW BUILDING LOTS ARE SHOWN FOR CONCEPTUAL PURPOSES ONLY. NO LOT DEVELOPMENT IS PROPOSED AT THIS TIME. PRIOR TO ANY INDIVIDUAL LOT DEVELOPMENT, A SITE PLAN SHALL BE PREPARED IN CONFORMANCE WITH ALL APPLICABLE LOCAL REGULATIONS, AND REVIEWED AND APPROVED BY THE ZONING ENFORCEMENT OFFICER. THE DEVELOPMENT OF INDIVIDUAL LOTS SHALL NOT ADVERSELY AFFECT THE DEVELOPMENT OF NEWLY CREATED LOTS OR EXISTING ADJUTTING PROPERTIES.
- CONSTRUCTION IS ANTICIPATED TO COMMENCE IN FALL 2025. CONSTRUCTION WILL OCCUR IN TWO PHASES. PHASE ONE WILL INCLUDE THE CONSTRUCTION OF THE ROADWAY, ASSOCIATED ROADWAY DRAINAGE SYSTEM, STORMWATER MANAGEMENT IMPROVEMENTS, AND COMMON UTILITIES. PHASE ONE IS ANTICIPATED TO START FALL 2025 AND END BY FALL 2026 (1-YEAR DURATION). PHASE TWO WILL INCLUDE THE CONSTRUCTION AND BUILD OUT OF EACH BUILDING LOT WITH A HOUSE WHICH WILL OCCUR AS EACH LOT IS SOLD. PHASE TWO IS ANTICIPATED TO START FALL 2026 AND END WINTER 2030 (-5 YEAR DURATION). IT SHOULD BE NOTED PHASE TWO IS NOT PART OF THE SCOPE OF THIS PROJECT AND NO LOT DEVELOPMENT IS PROPOSED AT THIS TIME (SEE NOTE #1 ABOVE). THE EXACT START AND END DATES OF PHASE TWO MAY VARY DUE TO VARIOUS FACTORS SUCH AS THE HOUSING MARKET, INTEREST RATES, ETC.
- EXISTING TOPOGRAPHY ACROSS THE SITE IS MODERATE TO STEEP WITH ELEVATIONS RANGING FROM 416± ALONG THE WESTERN PROPERTY LINE, TO 326± AT THE WETLAND IN THE SOUTHEAST CORNER. PER NRCS SOIL MAPPING, THE UNDERLYING SOIL ACROSS MOST OF THE SITE CONSISTS OF WOODBRIDGE FINE SANDY LOAM HYDROLOGIC SOIL GROUP (C/D). RUNOFF FROM THE SITE EVENTUALLY FLOWS TO ROCKLAND POND LOCATED APPROXIMATELY 0.2 MILES EAST/NORTHEAST OF THE SITE.
- APPROXIMATELY 4.85± ACRES OF THE 19.5± ACRE PARCEL WILL BE DISTURBED BY EARTHWORK ACTIVITIES FOR THE CONSTRUCTION OF THE ROAD AND STORMWATER MANAGEMENT IMPROVEMENTS. THE PROJECT DEVELOPMENT WILL REQUIRE DEMOLITION, CLEARING AND EARTHWORK TO PREPARE THE SITE. EARTHWORK ACTIVITIES WILL EXPOSE SOILS TO EROSION DURING RAINFALL EVENTS.
- THE INTENT OF THIS SESC PLAN IS TO ESTABLISH STORMWATER MANAGEMENT CONTROLS DURING CONSTRUCTION TO PREVENT THE DISCHARGE OF SEDIMENT LADEN RUNOFF FROM ENTERING STORM DRAIN SYSTEMS OR ADJACENT PROPERTIES.
- REFER TO INLAND WETLAND REPORT (UNDER SEPARATE COVER), STORMWATER MANAGEMENT REPORT (UNDER SEPARATE COVER), TEST HOLE LOGS (SHEET 16 OF 16), PERMEABILITY TEST RESULTS (SHEET 16 OF 16), AND STORMWATER MANAGEMENT IMPROVEMENTS AND DETAILS (SHEET 7 AND 16 OF 16). LOW-IMPACT DEVELOPMENT FEATURES INCLUDE MULTIPLE STORMWATER MANAGEMENT BASINS, AN INFILTRATION TRENCH FOR WATER, VEGETATED SWALES, AND DISCONNECTED IMPERVIOUS AREAS.

GENERAL SESC REQUIREMENTS

- THE SITE CONTRACTOR MUST FOLLOW ALL GUIDELINES SET FORTH IN THE MANUAL ENTITLED "CONNECTICUT GUIDELINES FOR SOIL EROSION & SEDIMENT CONTROL," EFFECTIVE DATE: MARCH 30, 2024, PUBLISHED BY THE COUNCIL ON SOIL AND WATER CONSERVATION IN COLLABORATION WITH CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION.
- SESC MEASURES INTENDED TO MINIMIZE SOIL EROSION AND TO CONTROL SEDIMENTATION DURING CONSTRUCTION INCLUDE:
 - THE INSTALLATION OF SILT FENCE ALONG THE DOWNGRADE LIMIT OF DISTURBANCE.
 - THE IMMEDIATE STABILIZATION OF DISTURBED AREAS THROUGH THE PLACEMENT OF TEMPORARY SEED AND MULCH OR FINAL TOPSOIL, SEED AND MULCH.
 - CONSTRUCTION OF A TEMPORARY SEDIMENT TRAP.
 - THE USE OF EROSION CONTROL BLANKETS TO STABILIZED CUT AND FILL SLOPES GRADED AT 3H:1V OR STEEPER. EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN ROLLMAX BIONET C1228N AS MANUFACTURED BY NORTH AMERICAN GREEN, LOCATED AT 4609 E. BOONVILLE-NEW HARMONY ROAD, EVANSVILLE, INDIANA, 47725.
 - DEVELOPMENT OF A CONSTRUCTION OPERATIONS PLAN IN CONSIDERATION OF BASIC CONSTRUCTION SEQUENCING OUTLINED HEREIN.
- ALL ADJACENT PROPERTIES SHALL BE ADEQUATELY PROTECTED FROM SOIL EROSION AND SEDIMENTATION BOTH DURING AND AFTER CONSTRUCTION.
- CONSTRUCTION ENTRANCE SHALL BE INSTALLED BEFORE CONSTRUCTION TRAFFIC INTO AND OUT OF THE SITE BEGINS.
- THE CONTRACTOR SHALL INSTALL SILT FENCING PRIOR TO INITIATING CONSTRUCTION ACTIVITIES AND SHALL BE MAINTAINED/REPAIRED UNTIL FINAL STABILIZATION OF ALL DISTURBED AREAS.
- ALL AREAS SHALL REMAIN UNDISTURBED UNTIL IMMEDIATELY PRIOR TO SITE DEVELOPMENT.
- ALL EXISTING VEGETATION OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL BE PROTECTED. EXISTING VEGETATION SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL SESC BEFORE, DURING AND AFTER CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED.
- ALL SESC SHALL BE INSPECTED WEEKLY AND AFTER ALL RAINFALL EVENTS. ALL SESC SHALL BE REPAIRED OR REPLACED AS NECESSARY WITHIN 24 HOURS THROUGHOUT THE CONSTRUCTION DURATION. INSPECTION REPORTS SHALL BE SENT TO THE ROCKY HILL PLANNING & ZONING DEPARTMENT.

CONSTRUCTION SEQUENCE - ROADWAY, DRAINAGE AND ASSOCIATED EARTHWORK (FALL 2025-FALL 2026)

- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 800-922-4455 TO MARK OUT ALL UNDERGROUND UTILITIES A MINIMUM OF 3 BUSINESS DAYS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY (-5 DAYS).
- ENSURE ALL LAND USE PERMITS HAVE BEEN SECURED. OBTAIN ALL NECESSARY PERMITS (-30 DAYS).
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND SEDIMENT FENCE AS SHOWN ON THE SESC PLAN (-10 DAYS).
- CONSTRUCT TEMPORARY SEDIMENT TRAP (-10 DAYS).
- REMOVE ALL TREES, BRUSH AND STUMPS WITHIN LIMIT OF DISTURBANCE AS NECESSARY. THERE SHALL BE NO BURIAL OF CONSTRUCTION DEBRIS, STUMPS, BRUSH OR UNSUITABLE MATERIAL ON SITE (-45 DAYS).
- REMOVE AND STOCKPILE ALL TOPSOIL ON SITE AND PROVIDE A SEDIMENT FENCE ON THE DOWNSLOPE SIDE. SEED STOCKPILE WITH PERENNIAL RYEGRASS AT A RATE OF 40 POUNDS PER ACRE AND MULCH WITH HAY OR STRAW. IF OUTSIDE THESE GROWING SEASON AREAS SHALL BE STABILIZED WITH STRAW OR HAY MULCHING AT A RATE OF 90 POUNDS PER 1,000 SQUARE FEET (-10 DAYS).
- EXCAVATE AND/OR FILL WORK SITE TO SUBGRADE LEVEL (-45 DAYS).
 - NO ROCK CRUSHING AND/OR BLASTING IS PROPOSED. IF BLASTING IS REQUIRED FOR ROCK REMOVAL, A PRE-BLAST SURVEY SHALL BE PERFORMED. IF BLASTING AND ROCK CRUSHING ARE REQUIRED THEN APPROVAL OF THE PLANNING & ZONING COMMISSION MAY BE REQUIRED.
 - FILL WILL BE PLACED AND COMPACTED IN 8 INCH LIFTS AND SHALL BE FREE OF BRUSH, RUBBISH, LOGS, BUILDING DEBRIS, OR ANY OTHER OBJECTIONABLE MATERIAL. CONSTRUCT RETAINING WALLS AS REQUIRED.
 - MOISTEN SOIL SURFACE PERIODICALLY WITH WATER TO MINIMIZE DUST.
- INSTALL STORMWATER MANAGEMENT IMPROVEMENTS AND DRAINAGE STRUCTURES STARTING FROM THE MOST DOWNGRADE IMPROVEMENTS. INSTALL FILTER FABRIC AND/OR HAY BALES AT CATCH BASINS IMMEDIATELY AFTER CATCH BASIN INSTALLATION (-60 DAYS).
- INSTALL SANITARY SEWER LINES & STRUCTURES, TRANSFORMERS, AND ELECTRICAL, TELEPHONE, CABLE CONDUITS (-60 DAYS).
- PLACE AND COMPACT BASE MATERIAL TO FINAL GRADE. INSTALL PAVEMENT BASE COURSE, CURB, ETC (-30 DAYS).
- ALL DISTURBED AREAS NOT COVERED BY PAVEMENT, ETC., SHALL BE GRADED AND STABILIZED (-10 DAYS) AS FOLLOWS:
 - PLACE MINIMUM 4 INCHES OF TOPSOIL IN ALL AREAS.
 - APPLY RECOMMENDED SEED MIXTURE AT RECOMMENDED RATE.
 - APPLY STRAW OR HAY MULCH ON ALL SEED AREAS. ALL GRADED AREAS WITH SLOPES GRADED AT 3H:1V OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS.
- INSTALL FINAL PAVEMENT COURSE (-10 DAYS).
- FINAL GRADE AND PLACE TOPSOIL, SEED AND MULCH (-30 DAYS).
- WHEN ALL GRADED AREAS ARE PERMANENTLY STABILIZED, REMOVE ALL EROSION AND SEDIMENT CONTROLS. REMOVE TRAPPED SEDIMENTS (-10 DAYS).

CONSTRUCTION SEQUENCE - INDIVIDUAL LOTS (TIMING OF CONSTRUCTION TBD)

- THE CONSTRUCTION OF INDIVIDUAL BUILDINGS WILL BE COMPLETED AS LOTS ARE SOLD. DURING THE CONSTRUCTION OF EACH BUILDING, THE CONTRACTOR SHALL FOLLOW THE FOLLOWING SESC INSTALLATION PROCEDURES:
 - THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 800-922-4455 TO MARK OUT ALL UNDERGROUND UTILITIES A MINIMUM OF 3 BUSINESS DAYS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY.
 - ENSURE ALL LAND USE PERMITS HAVE BEEN SECURED. OBTAIN ALL NECESSARY PERMITS.
 - INSTALL SEDIMENT FENCE ON THE DOWNGRADE EDGE OF PROPOSED DISTURBANCE.
 - REMOVE AND STOCKPILE TOPSOIL ON SITE AND PROVIDE A SEDIMENT FENCE ON THE DOWNSLOPE SIDE. SEED STOCKPILE WITH PERENNIAL RYEGRASS AT A RATE OF 40 POUNDS PER ACRE AND MULCH WITH HAY OR STRAW. IF OUTSIDE THESE GROWING SEASON AREAS SHALL BE STABILIZED WITH STRAW OR HAY MULCHING AT A RATE OF 90 POUNDS PER 1,000 SQUARE FEET.
 - BEGIN CONSTRUCTION OF BUILDING AND INSTALL UTILITIES. ADD EROSION CONTROL DEVICES AS NEEDED.
 - PLACE AND COMPACT BASE MATERIAL TO FINAL GRADE. INSTALL PAVEMENT BASE COURSE, CURB, SIDEWALKS, STEPS, ETC.
 - ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PARKING, SIDEWALKS, ETC., SHALL BE GRADED AND STABILIZED AS FOLLOWS:
 - PLACE MINIMUM 4 INCHES OF TOPSOIL IN ALL AREAS.
 - APPLY RECOMMENDED SEED MIXTURE AT RECOMMENDED RATE.
 - APPLY STRAW OR HAY MULCH ON ALL SEED AREAS. ALL GRADED AREAS WITH SLOPES GRADED AT 3H:1V OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS.
 - INSTALL FINAL PAVEMENT COURSE.
 - FINAL GRADE AND PLACE TOPSOIL, SEED AND MULCH.
 - WHEN ALL GRADED AREAS ARE PERMANENTLY STABILIZED, REMOVE ALL EROSION AND SEDIMENT CONTROLS. REMOVE TRAPPED SEDIMENTS.

SESC PLAN (CONTINUED):

TRENCH EXCAVATION AND BACKFILL

- THE CONTRACTOR SHALL PROPERLY MAINTAIN ALL BACKFILLED EXCAVATIONS. ANY DEPRESSIONS DUE TO SETTLING IN THESE AREAS SHALL BE FILLED AND RESEDED AS NECESSARY.
- THE WIDTH OF ALL EXCAVATED TRENCHES SHALL BE KEPT AS NARROW AS PRACTICABLE TO ACCOMMODATE THE WORK. ALL MATERIALS EXCAVATED FROM TRENCHES SHALL BE STOCKPILED AND USED AS TRENCH BACKFILL. MATERIAL UNLESS IT IS DETERMINED TO BE UNSUITABLE BY THE ENGINEER. EXCESS MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

VEGETATIVE TURF ESTABLISHMENT PROCEDURE

- SCARIFY ALL AREAS TO BE TOPSOILED AND SEEDED. APPLY A MINIMUM OF 4 INCHES OF TOPSOIL ON ALL AREAS TO BE SEEDED. APPLY GRASS SEED, LIME, FERTILIZER AND MULCH ACCORDING TO THE FOLLOWING SCHEDULE:

CREeping RED FESCUE	0.45 LBS. PER 1,000 SQ. FT.
REDTOP	0.05
TALL FESCUE	0.45
TOTAL	0.95

- FERTILIZER: 10-10-10 APPLY AT 7.5 LBS. PER 1,000 SQ. FT.
- LIMESTONE: 15-20-10 APPLY AT 150 LBS. PER 1,000 SQ. FT.
- MULCHING: SPREAD HAY OR STRAW OVER ALL AREAS AFTER SEEDING. USE 1 1/2 TO 2 BALES PER 1,000 SQ. FT. TARGET FOR 100% COVERAGE. ANCHOR BY USING NETTING OR TRACKING AS NECESSARY.

- TEMPORARY EROSION CONTROL BLANKETS: USE TEMPORARY EROSION CONTROL BLANKETS ON ALL SEEDED SLOPES GRADED AT 3H:1V OR STEEPER AND/OR AS DIRECTED BY THE DESIGN ENGINEER.
- SEEDING DATES: SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1. SEED GERMINATION NORMALLY CANNOT BE EXPECTED FROM NOVEMBER THROUGH FEBRUARY. IF ADEQUATE SEED GERMINATION IS NOT POSSIBLE DUE TO TIME OF YEAR CONSTRAINTS, MULCHING SHALL BE ADEQUATELY PROVIDED TO PROTECT THE SEED FROM WIND AND SURFACE EROSION UNTIL THE WEATHER IMPROVES AND THE SEEDING BECOMES WELL ESTABLISHED.

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MAINTENANCE OF EROSION CONTROL DEVICES:

HAYBALE BARRIERS/GEOTEXTILE SILT FENCES:

- INSPECT HAY BALE BARRIERS/GEOTEXTILE SILT FENCE AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER THE END OF A STORM WITH A RAINFALL AMOUNT OF 1/2" OR GREATER TO DETERMINE MAINTENANCE NEEDS.
- REMOVE SEDIMENT DEPOSITS OR INSTALL A SECONDARY BARRIER/FENCE WHEN SEDIMENT DEPOSITS REACH APPROXIMATELY ONE HALF HEIGHT OF THE BARRIER/FENCE.
- REPLACE OR REPAIR THE BARRIER/FENCE WITHIN 24 HOURS OF OBSERVED FAILURE. IF REPETITIVE FAILURE OCCURS, CONSULT 2002 GUIDELINES FOR TROUBLESHOOTING FAILURES.
- MAINTAIN THE HAY BALE BARRIER/SILT FENCE UNTIL THE CONTRIBUTING AREA IS STABILIZED.
- AFTER UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE STAKES FROM HAY BALES. PULL UP FENCE SUPPORT POSTS AND CUT OFF GEOTEXTILE AT GROUND. UNLESS OTHERWISE REQUIRED, HAY BALES MAY BE LEFT IN PLACE OR BROKEN UP FOR GROUND COVER. IF ACCUMULATED SEDIMENT EXCEEDS 6 INCHES, RE-GRADE OR REMOVE SEDIMENT. STABILIZE ANY DISTURBED SOILS.

CONSTRUCTION ENTRANCES AND ROADWAYS:

- MAINTAIN THE ENTRANCE IN A CONDITION WHICH WILL PREVENT TRACKING AND WASHING OF SEDIMENTS ONTO PAVED SURFACES.
- PROVIDE PERIODIC TOP DRESSING AND ADDITIONAL STONE OR LENGTH AS NECESSARY.
- IMMEDIATELY REMOVE ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVED SURFACES. ROADS ADJACENT TO THE CONSTRUCTION SITE SHALL BE LEFT CLEAN EVERY DAY.

TEMPORARY SEDIMENT TRAP:

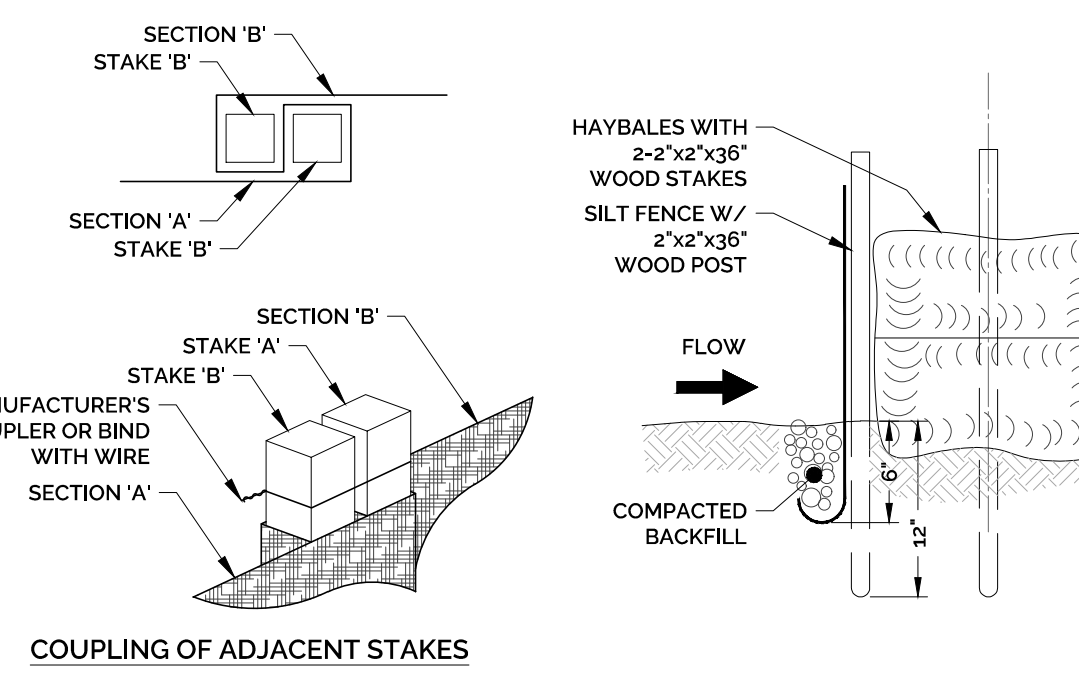
- INSPECTIONS SHALL BE AT SAME INTERVALS AS THE HAYBALE BARRIER/SILT FENCE INSPECTION SCHEDULE.
- OUTLET SHALL BE CHECKED FOR INTEGRITY. HEIGHT OF THE STONE OUTLET SHALL BE MAINTAINED AT ONE FOOT BELOW CREST OF EMBANKMENT. SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE SHOULD BE OBSERVED.
- WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF OF THE MINIMUM REQUIRED STORAGE VOLUME, DE-WATER BASIN, REMOVE SEDIMENTS, RESTORE TRAP TO ORIGINAL DIMENSIONS AND DISPOSE OF SEDIMENT AT A LOCATION AND MANNER THAT WILL NOT RESULT IN EROSION OR SEDIMENTATION.
- AFTER CONTRIBUTING AREA IS STABILIZED, REMOVE BASIN, AND RE-GRADE AND STABILIZE AREA.

TEMPORARY CHECK DAMS:

- INSPECT CHECK DAMS AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER THE END OF A STORM WITH A RAINFALL AMOUNT OF 1/2" OR GREATER TO DETERMINE MAINTENANCE NEEDS.
- REMOVE THE SEDIMENT DEPOSITS WHEN DEPOSITS REACH APPROXIMATELY HALF THE HEIGHT OF THE CHECK DAM.
- REPLACE OR REPAIR THE CHECK DAM WITHIN 24 HOURS OF OBSERVED FAILURE. FAILURE OF THE CHECK DAM HAS OCCURRED WHEN SEDIMENT FAILS TO BE RETAINED BECAUSE ONE OR MORE OF THE FOLLOWING:
 - STONE OR FIBER ROLLS HAVE MOVED
 - SOIL HAS ERODED AROUND OR UNDER THE CHECK DAM REDUCING ITS FUNCTIONAL CAPACITY
 - TRAPPED SEDIMENTS ARE OVERTOPPING THE CHECK DAM
- WHEN REPETITIVE FAILURES OCCUR AT THE SAME LOCATION, REVIEW CONDITIONS AND LIMITATIONS FOR USE AND DETERMINE IF ADDITIONAL CONTROLS (E.G., TEMPORARY STABILIZATION OF CONTRIBUTING AREA, DIVERSIONS, CHECK DAMS) ARE NEEDED TO REDUCE FAILURE RATE.
- MAINTAIN THE CHECK DAM UNTIL THE CONTRIBUTING AREA IS STABILIZED.
- AFTER THE CONTRIBUTING AREA IS STABILIZED, REMOVE ACCUMULATED SEDIMENT AND REMOVAL ALL STONE. STABILIZE (SEED AND MULCH) ANY DISTURBED SOIL THAT REMAINS FROM CHECK DAM REMOVAL OPERATIONS IMMEDIATELY FOLLOWING THEIR REMOVAL.

TEMPORARY DIVERSION DITCHES/SWALES:

- WHEN THE TEMPORARY DIVERSION IS LOCATED IN CLOSE PROXIMITY TO ONGOING CONSTRUCTION ACTIVITIES, INSPECT AT THE END OF EACH DAY AND IMMEDIATELY REPAIR DAMAGES, OTHERWISE, INSPECT ON SAME INTERVAL AS THE TEMPORARY SEDIMENT TRAP.
- REPAIR THE DIVERSION WITHIN 24 HOURS OF ANY OBSERVED FAILURE. FAILURE HAS OCCURRED WHEN THE DIVERSION HAS BEEN DAMAGED SUCH THAT IT NO LONGER MEETS THE SPECIFICATIONS IN THE 2002 GUIDELINES.
- IF REPETITIVE FAILURES OCCUR, REVIEW CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES OR AN ALTERNATIVE MEASURE IS NECESSARY.

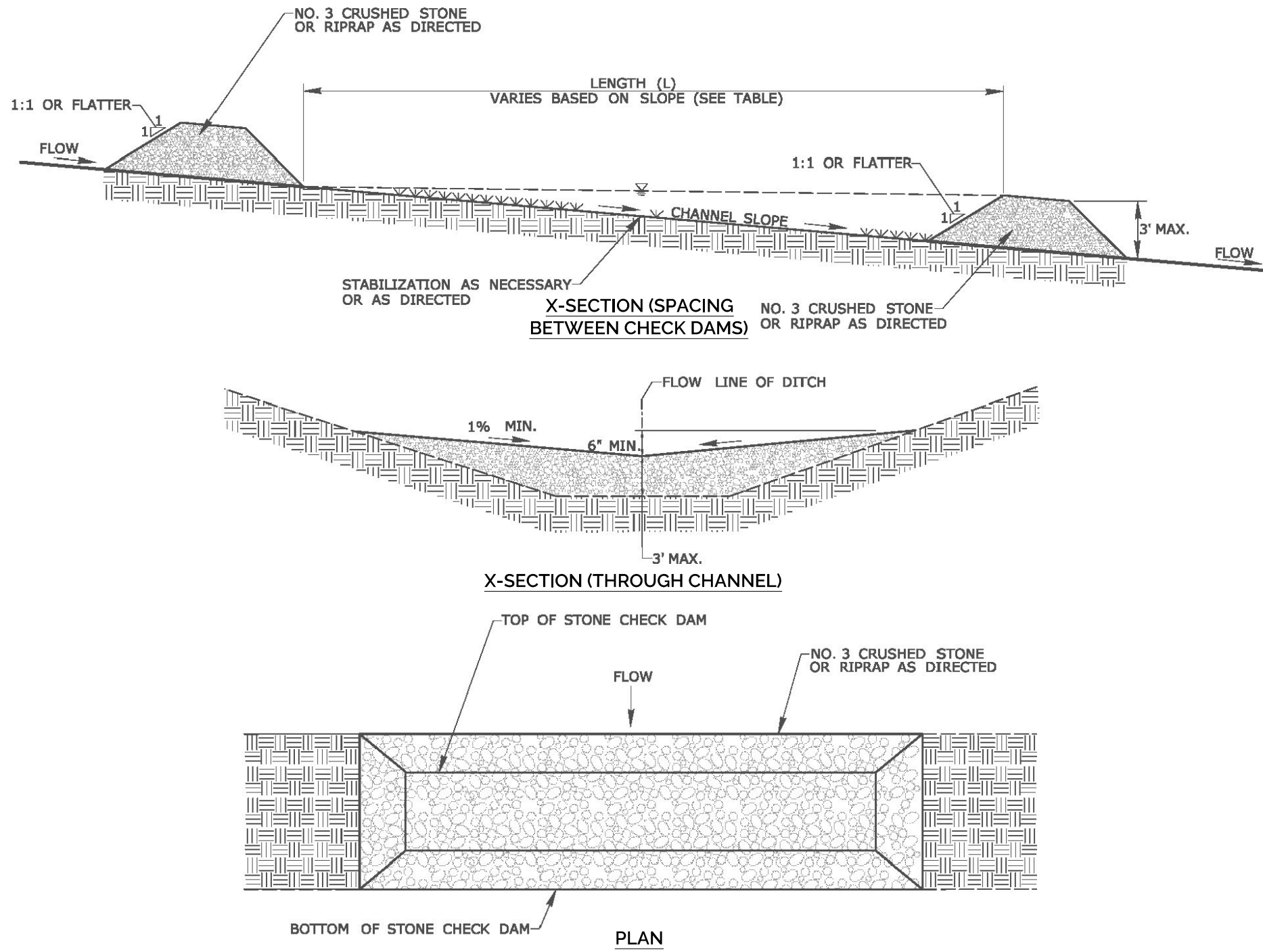


- INSTALLATION NOTES FOR SILT FENCE/HAYBALES**
- PLACE HAY BALES ON CONTOUR AND WITH LAST HAY BALES UPSLOPE TO THAT TOP OF LAST SEVERAL HAY BALES ARE HIGHER THAN LINE OF HAY BALES.
 - EXCAVATE TRENCH 4" MIN AND PLACE FILL UPSLOPE OF TRENCH
 - PLACE HAY BALE AND STAKE FIRST STAKE AT ANGLE TOWARDS FIRST BAKE. STAKES ARE 18" MIN. INTO GROUND.
 - WEDGE LOOSE HAY BETWEEN BALES.
 - BACKFILL & COMPACT EXCAVATED FILL ALONG UPHILL SIDE OF HAY BALE.

TYPICAL HAYBALE BACKED SEDIMENT FENCE DETAIL
NOT TO SCALE

MAXIMUM SPACING BETWEEN CHECK DAMS FOR A 3' CHECK DAM HEIGHT

CHANNEL SLOPE	LENGTH
1% TO 3%	100'
4%	75'
5%	60'
6%	50'
7%	43'
8%	38'

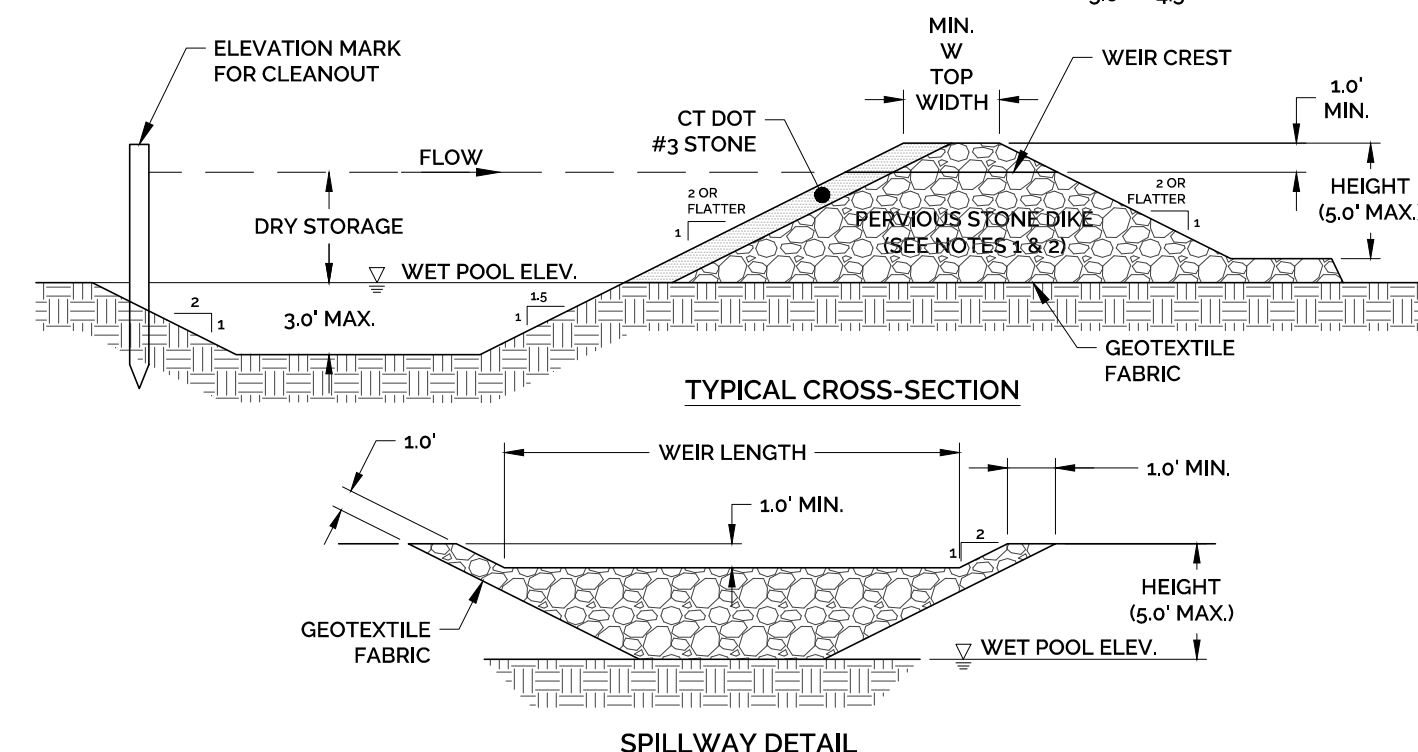


SUMMARY OF TEMPORARY SEDIMENT TRAP SIZING CALCULATIONS

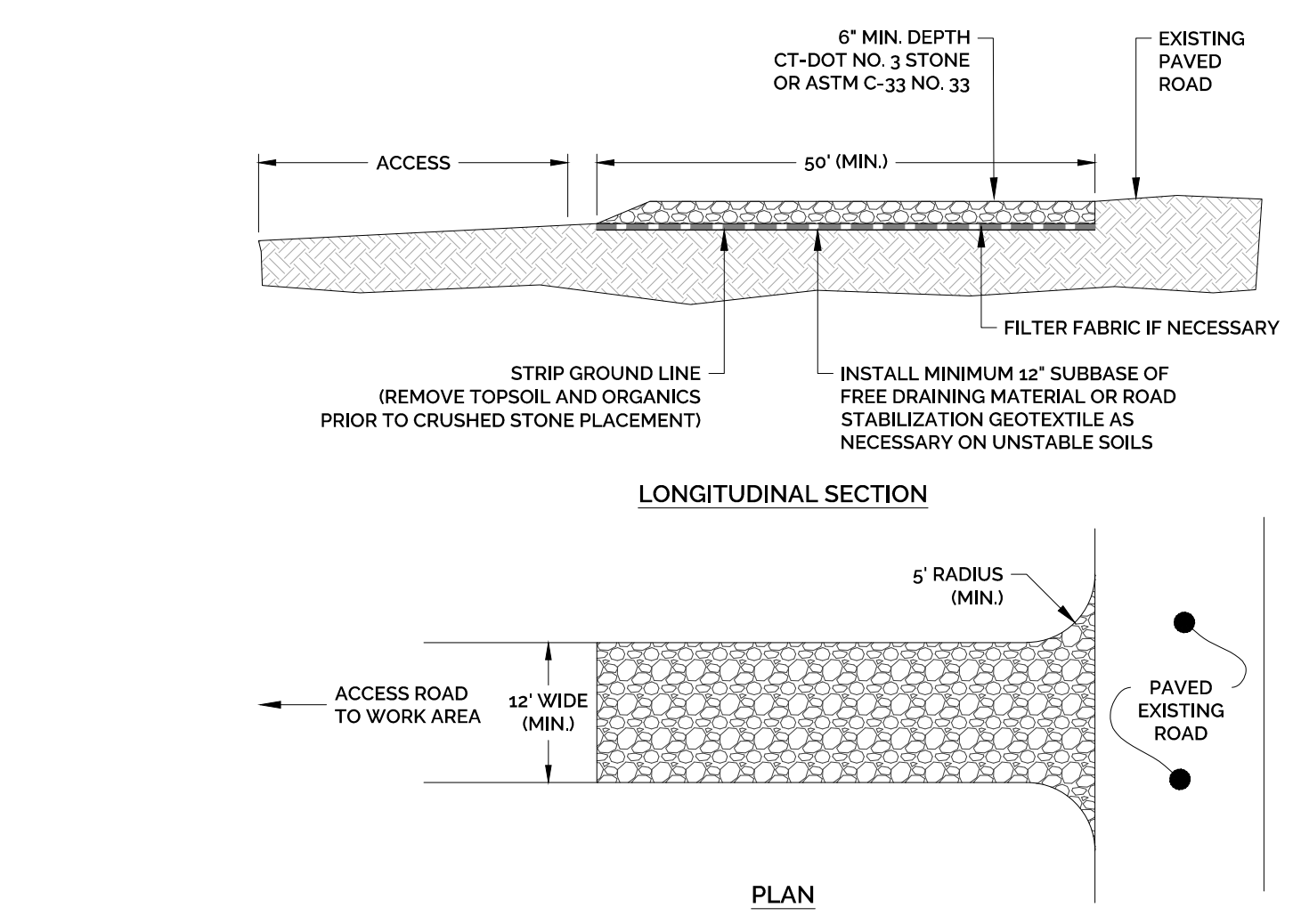
ITEM	TEMPORARY SEDIMENT TRAP 'A'
DRAINAGE AREA (ACRES)	4.55±
TOTAL STORAGE VOLUME REQUIRED (CF)	16,462
WET STORAGE VOLUME REQUIRED (CF)	8,231
DRY STORAGE VOLUME REQUIRED (CF)	8,231

TOP WIDTH VS. HEIGHT

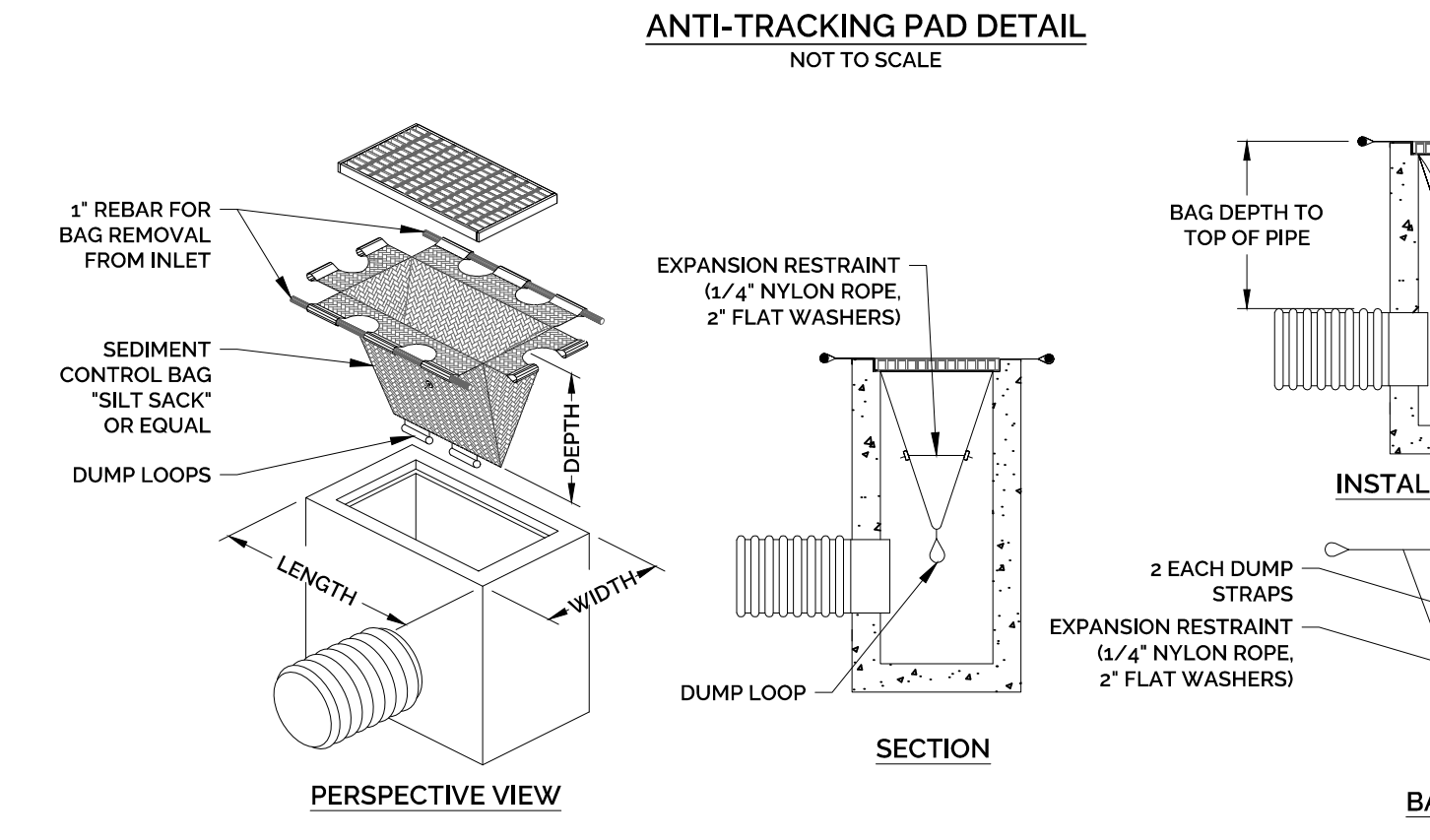
H - HEIGHT OF EMBANKMENT	W - MIN. TOP WIDTH OF EMBANKMENT
1.5	2.0
2.0	2.0
2.5	2.5
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5



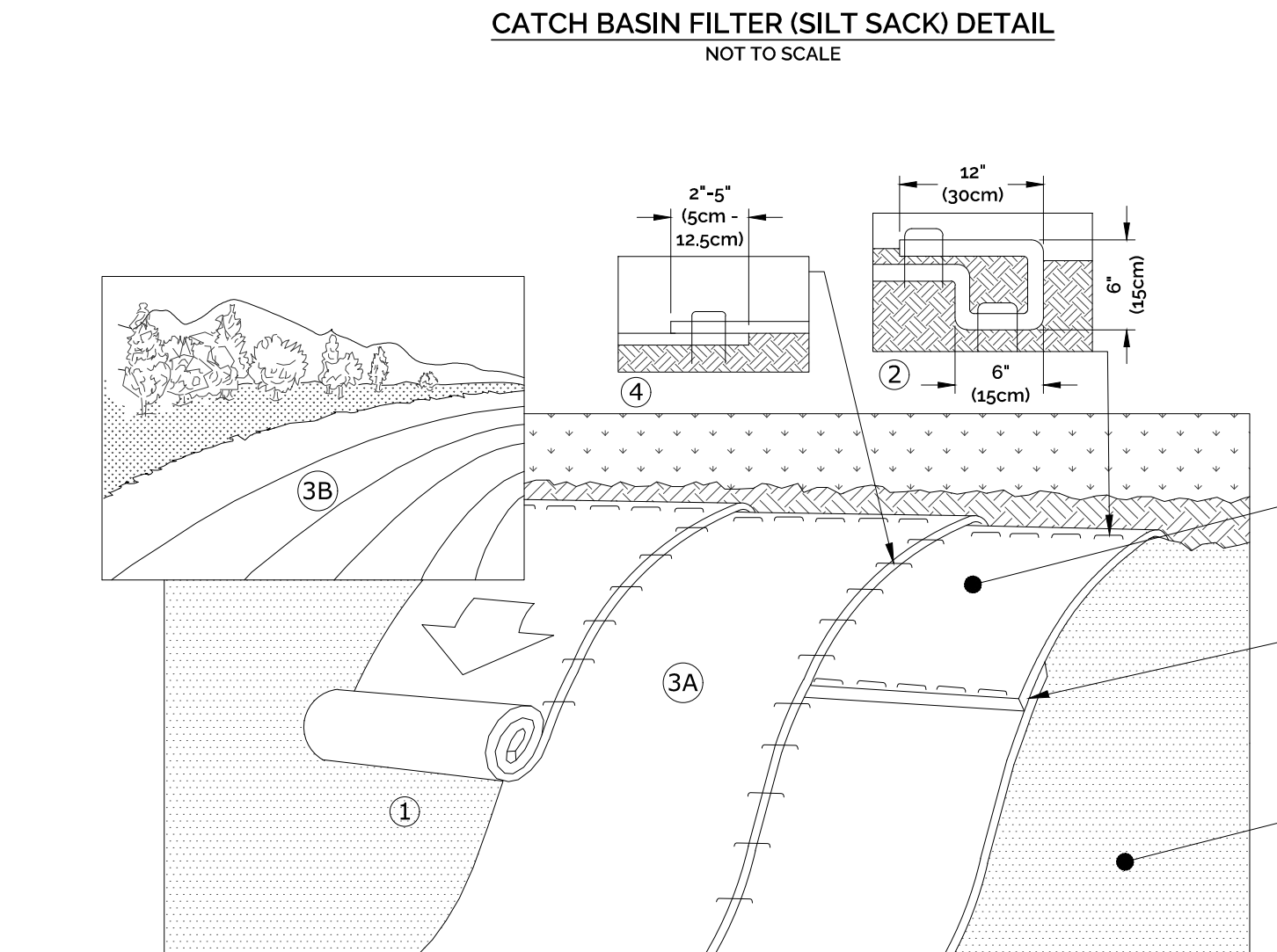
TEMPORARY SEDIMENT TRAP DETAIL
NOT TO SCALE



NOTE: ALL ANTI-TRACKING PADS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH 2002 CT GUIDELINES FOR SOIL EROSION & SEDIMENT CONTROL, AS AMENDED. REFERENCE: 2002 CT GUIDELINES FOR EROSION AND SEDIMENT CONTROL, DEEP BULLETIN 34, FIGURE CE-2, ERRATA DATA 3/17/06, PAGE 6-12 & 4' STONE NOW 6' STONE.



- NOTES:**
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CORRECT SIZE DEVICE FOR EACH INLET. FOR NON-STANDARD CATCH BASINS AND INLETS, THE CONTRACTOR SHALL MEASURE DIMENSIONS IN THE FIELD AND ORDER THE APPROPRIATE SIZES.
 - THE INLET SEDIMENT CONTROL DEVICE SHALL BE OF HIGH FLOW DESIGN (200 GAL/MIN/FT), AS PER THE MANUFACTURER'S SPECS.
 - THE SEDIMENT CONTROL DEVICE SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND CLEANED AND MAINTAINED A MINIMUM ONCE PER MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT. THE FILTER SHALL BE REPLACED OR CLEANED WHEN THE BAG BECOMES HALF FULL. THE FILTER SHALL BE CLEANED IN A MANNER WHICH ENSURES THAT ALL SEDIMENT REMAINS ON SITE.
 - SUBSTITUTION OF A SHEET OF FILTER FABRIC PLACED OVER THE OPENING OF THE INLET IS NOT APPROVED.
 - RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER INLET SACK TO BE DETERMINED BY MANUFACTURER.
 - THE FILTER DEVICE SHALL BE MANUFACTURED BY ACF ENVIRONMENTAL OR APPROVED EQUAL.



- NOTES:**
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
 - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP x 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
 - ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
 - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH™ ON THE PREVIOUSLY INSTALLED BLANKET.
 - CONSECUTIVE BLANKETS SHOULD BE STAPLED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

EROSION CONTROL BLANKET DETAIL
NOT TO SCALE

REVISIONS IN RESPONSE TO REVIEW COMMENTS	DESCRIPTION OF REVISION	DATE	APPR.
1		8/15/2025	SM

SOIL EROSION & SEDIMENT CONTROL NARRATIVE AND DETAILS
23-Lot Residential Resubdivision
PROPERTY ADDRESS:
47 SHARP HILL ROAD, MONTVILLE, CT 06382
PREPARED FOR:
MT KINEO BUILDERS, LLC
P.O. BOX 246, WEST MYSTIC, CT 06388

PROJECT NO. 2025-0197	SCALE AS NOTED
DRAWN BY: SM	DATE: 7/10/2025
CHECKED BY: SM	DATE: 7/10/2025

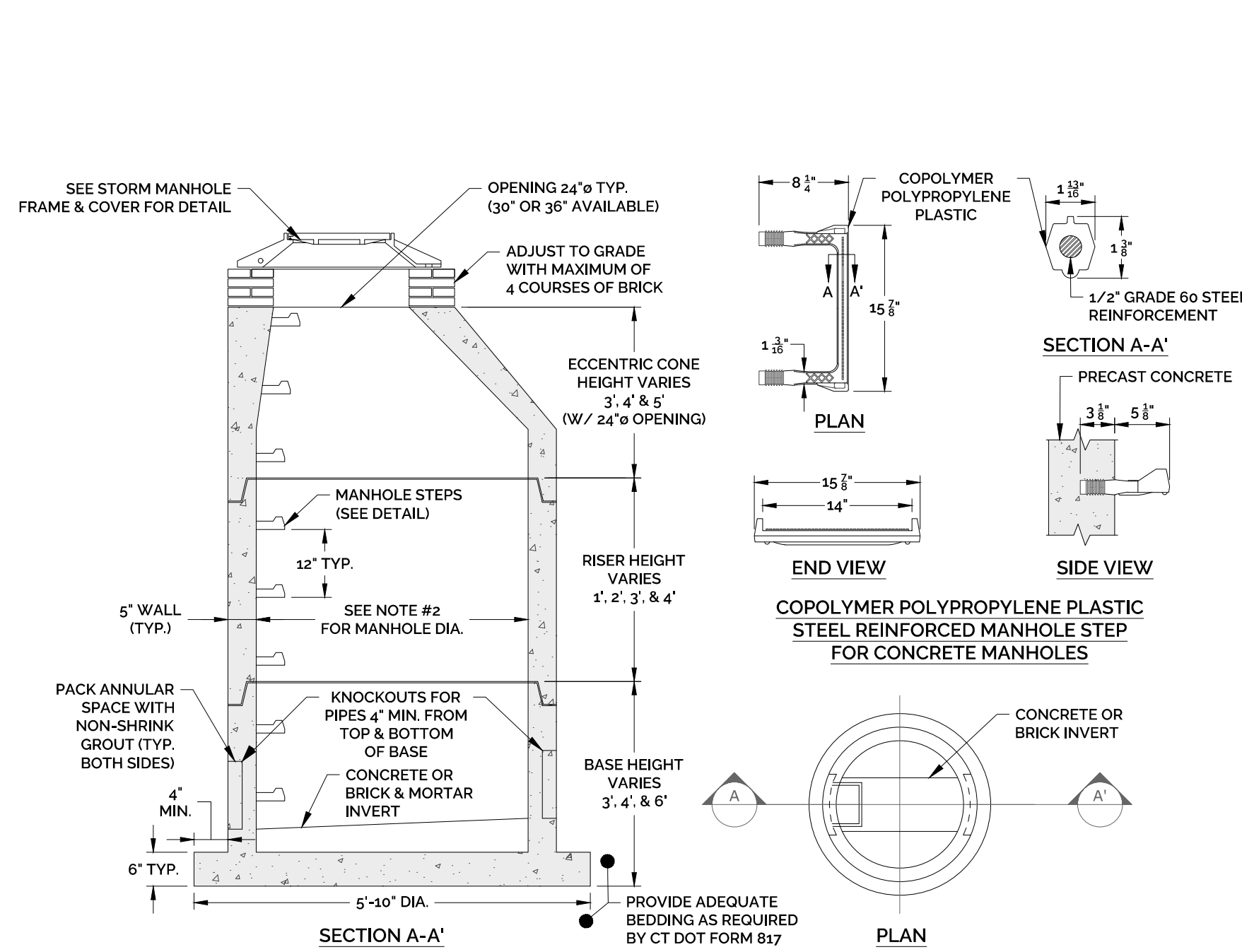
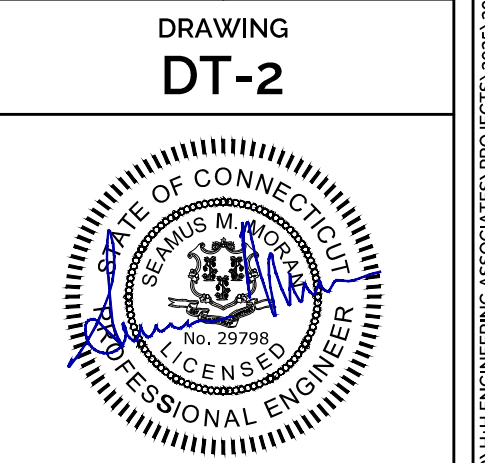
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REV.	DATE	DESCRIPTION
1	8/15/2025	RESPONSE TO REVIEW COMMENTS

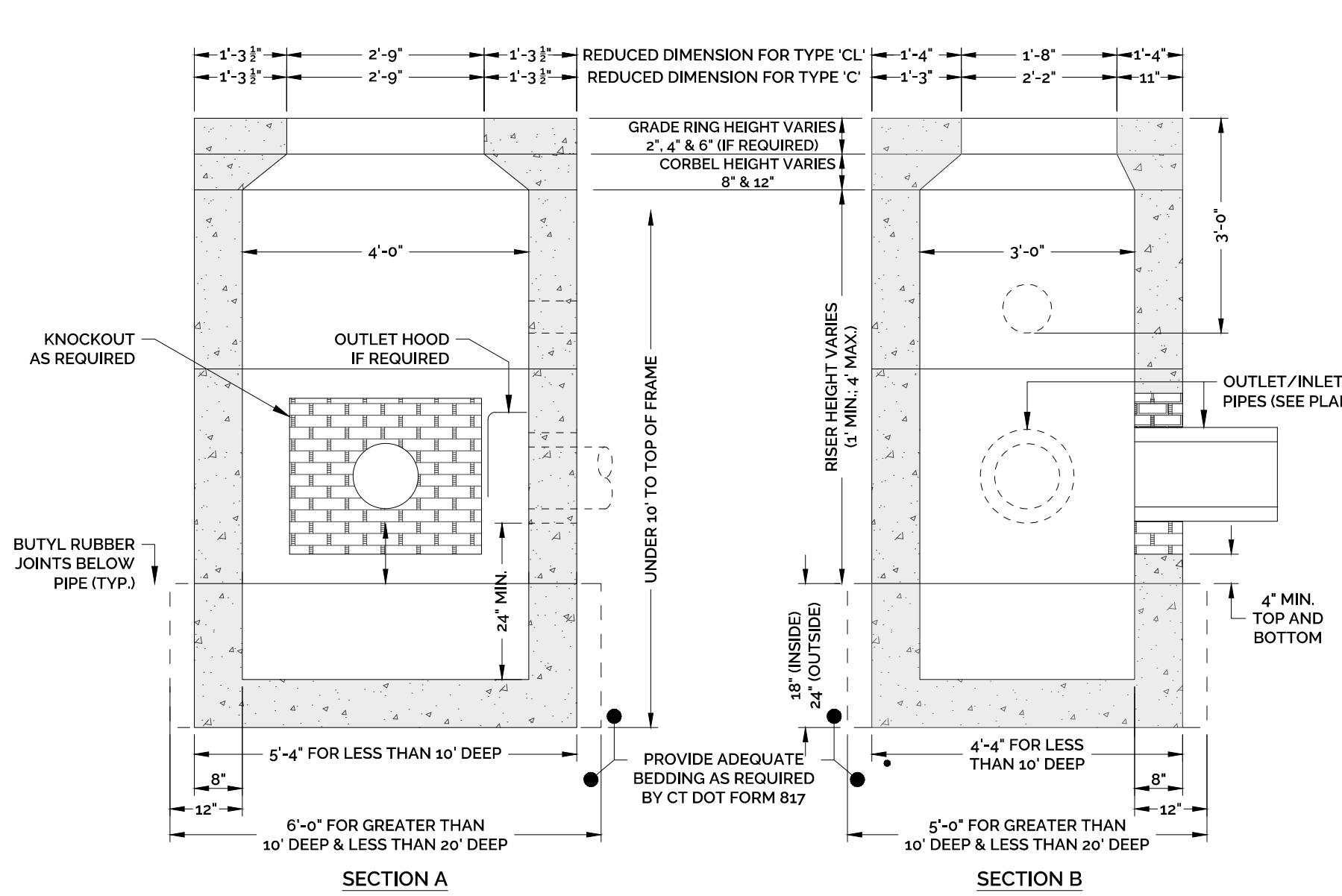
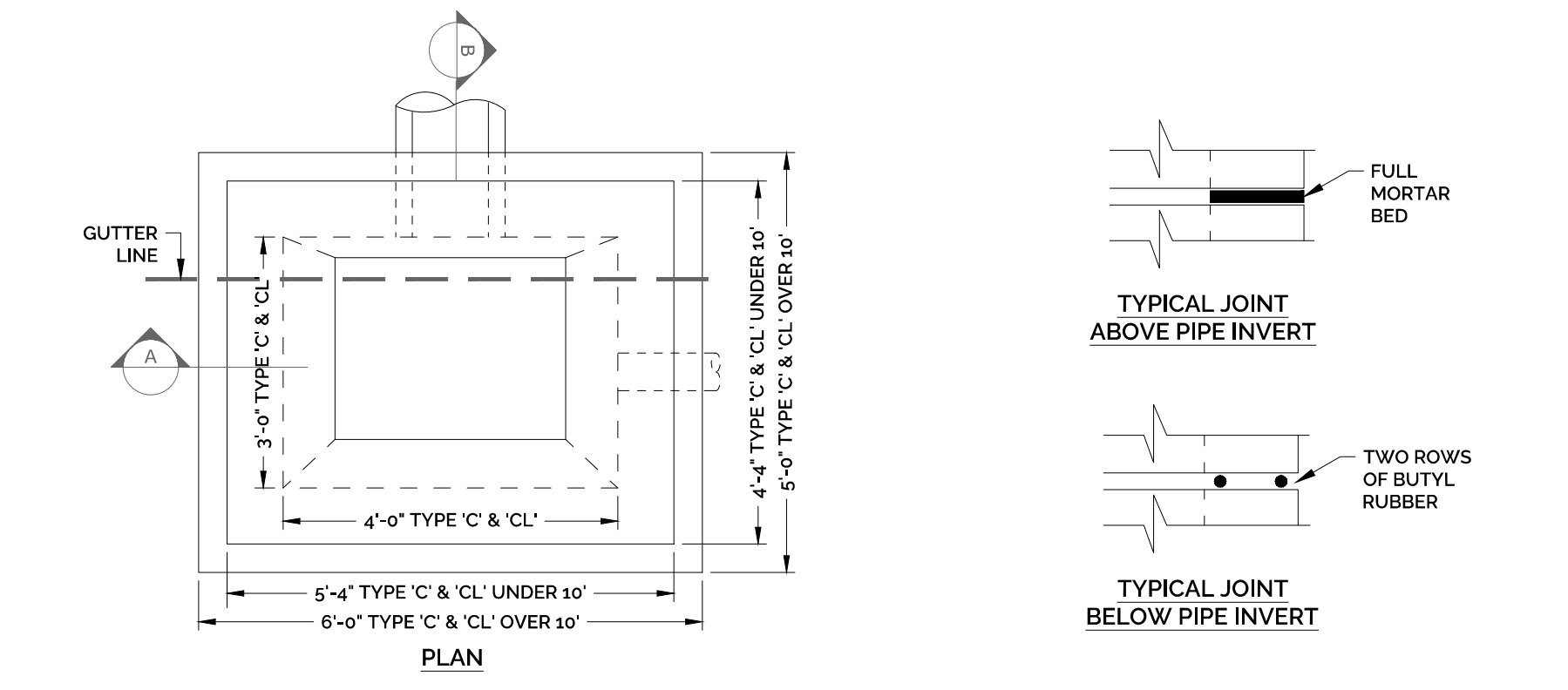
DRAINAGE DETAILS
 23-Lot Residential Resubdivision
 PROPERTY ADDRESS:
 47 SHARP HILL ROAD, MONTVILLE, CT 06382
 PREPARED FOR:
 MT KINEO BUILDERS, LLC
 P.O. BOX 246, WEST MYSTIC, CT 06388

PROJECT NO. 2025-0197	SCALE AS NOTED
DRAWN BY: SMM	DATE 7/10/2025
CHECKED BY: SMM	DATE 7/10/2025

DRAWING
DT-2

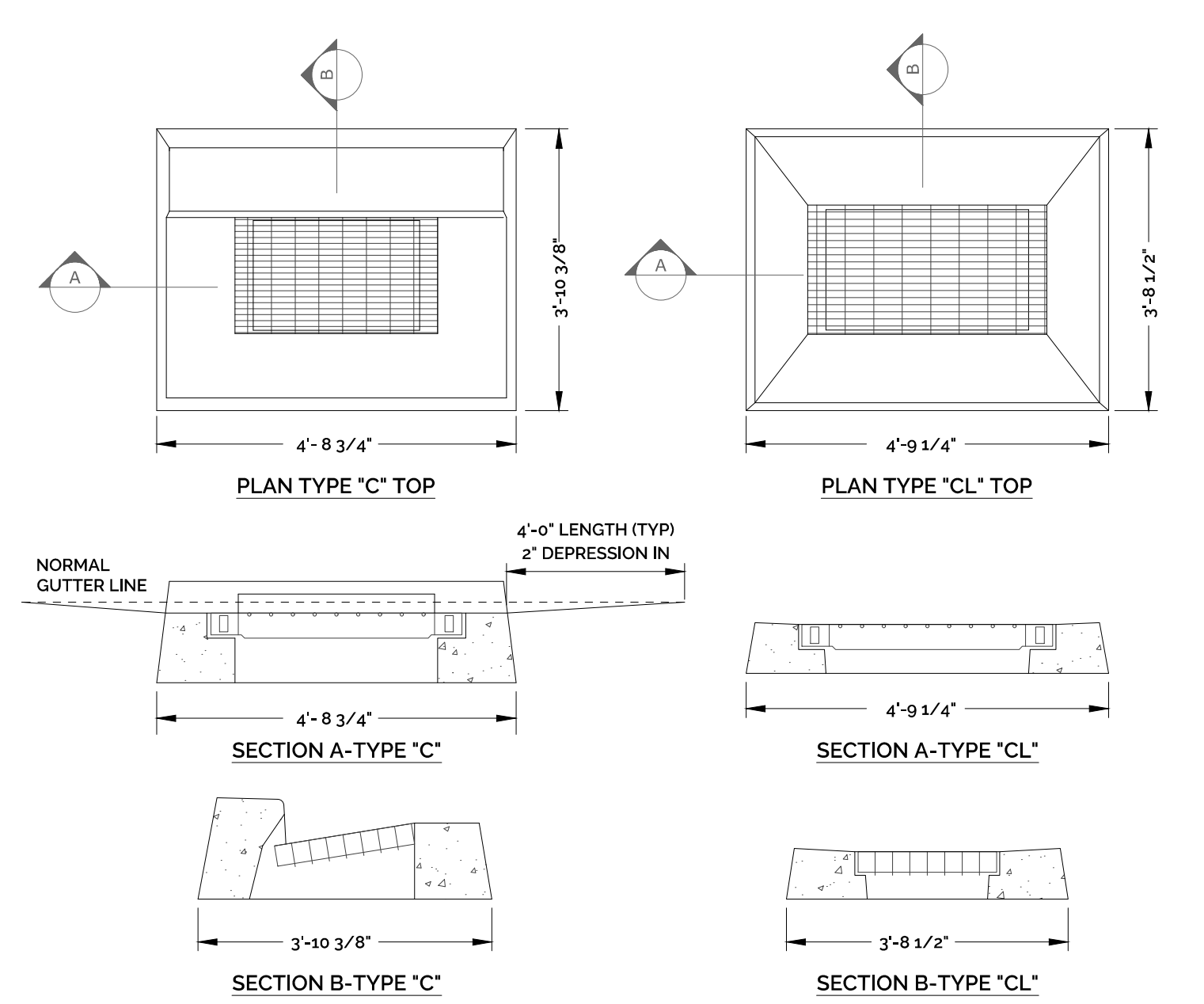


- NOTES:
- PRECAST CONCRETE MANHOLE COMPONENTS SHALL CONFORM TO CTDOT STANDARD SHEET HW-507.10 AS AMENDED.
 - 4", 5" OR 6" PRECAST CONCRETE BASE DIAMETERS MAY BE USED WHEN REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5" AND 6" BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS SHALL INCREASE 1" FOR EACH 1" OF INSIDE DIAMETER INCREASE.
 - JOINT SEALANT SHALL BE BUTYL RUBBER MASTIC TYPE SEAL THAT CONFORMS TO LATEST AASHTO SPECIFICATION M-198 & MEETS FEDERAL SPECIFICATION SS-5-0021210-A).
 - REINFORCING STEEL DEFORMED BARS ARE NOT SHOWN AND SHALL CONFORM TO LATEST CTDOT STANDARDS & SUPPLEMENTALS AND ASTM SPECIFICATION A615, GRADE 60, MINIMUM COVER 2", UNLESS OTHERWISE NOTED.
 - ALL PIPE OPENINGS SHALL BE CLOSED USING MATERIALS WHICH CONFORM TO STATE OF CT STANDARD SPECIFICATIONS SECTION M.08.02.
 - REINFORCING STEEL WELDED WIRE FABRIC SHALL CONFORM TO LATEST ASTM SPECIFICATION A186.
 - CONCRETE COMPRESSIVE STRENGTH SHALL BE MINIMUM 4000 PSI AT 28 DAYS, SELF COMPACTING CONCRETE MIX.
 - MANHOLE STEPS SHALL MEET LATEST OSHA REGULATIONS, (29 CFR 1910.27), SECTION 16 OF ASTM SPECIFICATION C478 AND SECTION 10 OF ASTM SPECIFICATION C497.
 - WHEN SPECIFIED, MANHOLES ARE TO BE COATED WITH BAY OIL, "EBONY".
 - METHOD OF MANUFACTURE SHALL BE WET CAST.
 - BASE SECTION IS MONOLITHIC.
 - MANHOLE INTERIOR DIAMETER:
 4'-0" FOR 8" TO 36" PIPE DIAMETERS
 5'-0" FOR 42" PIPE DIAMETER
 6'-0" FOR 48" PIPE DIAMETER
- REFERENCE: CT DOT HIGHWAY STANDARDS, SHEET HW-507.04 & HW-507.10, CT DOT FORM 817 AND (MANHOLE STEPS) THE METROPOLITAN DISTRICT SEWER STANDARD DETAILS FIG. 5-34, DATED JAN. 2017.

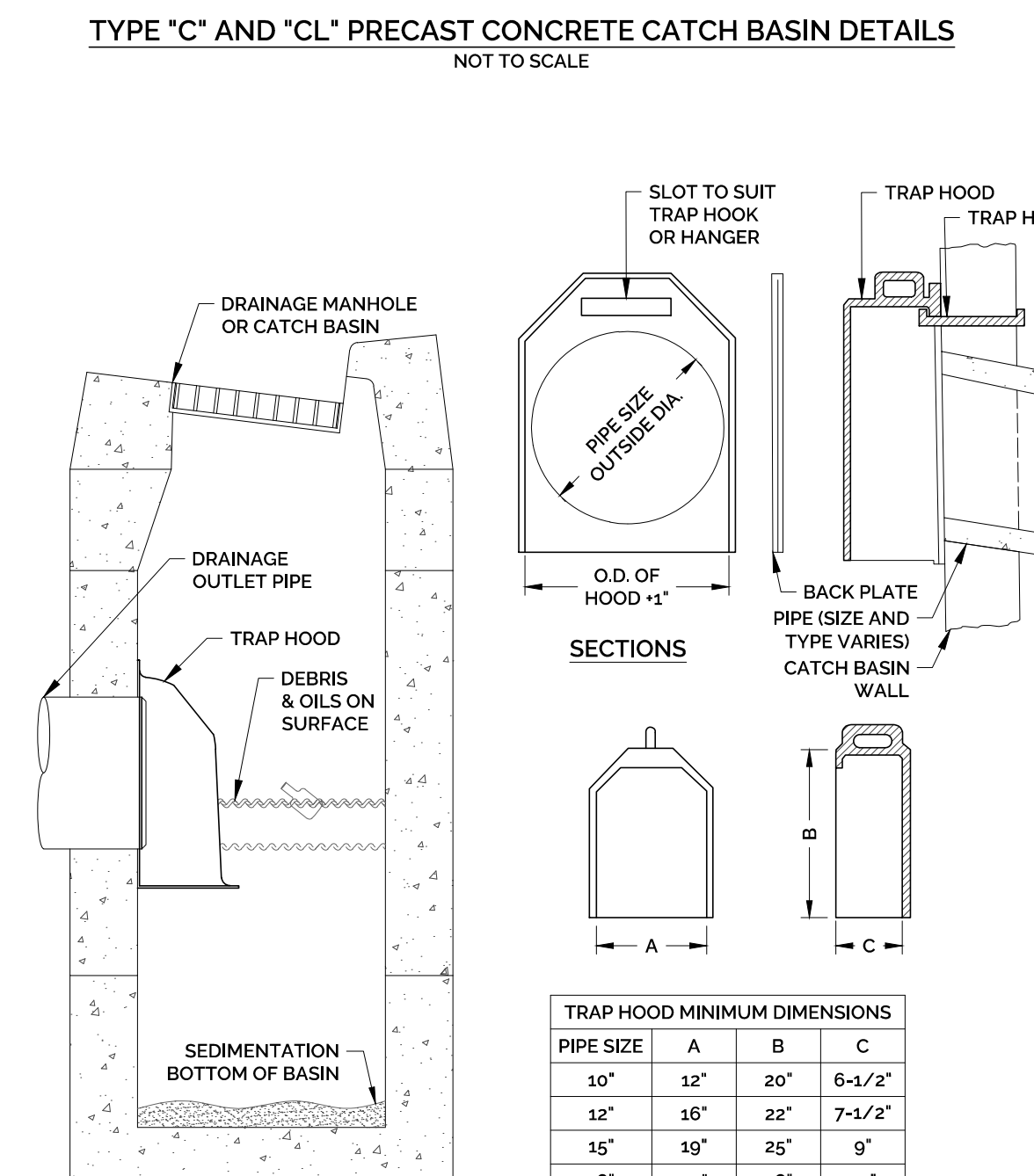


- NOTES:
- REINFORCING STEEL WELDED WIRE FABRIC CONFORMS TO LATEST ASTM SPECIFICATION A186.
 - REINFORCING STEEL DEFORMED BARS CONFORM TO LATEST ASTM SPECIFICATION A615.
 - CONCRETE COMPRESSIVE STRENGTH - 4000 PSI AT 28 DAYS.
 - METHOD OF MANUFACTURE: WET CAST.
 - SECTION IS MONOLITHIC.
 - DESIGN LOAD: AASHTO H-20

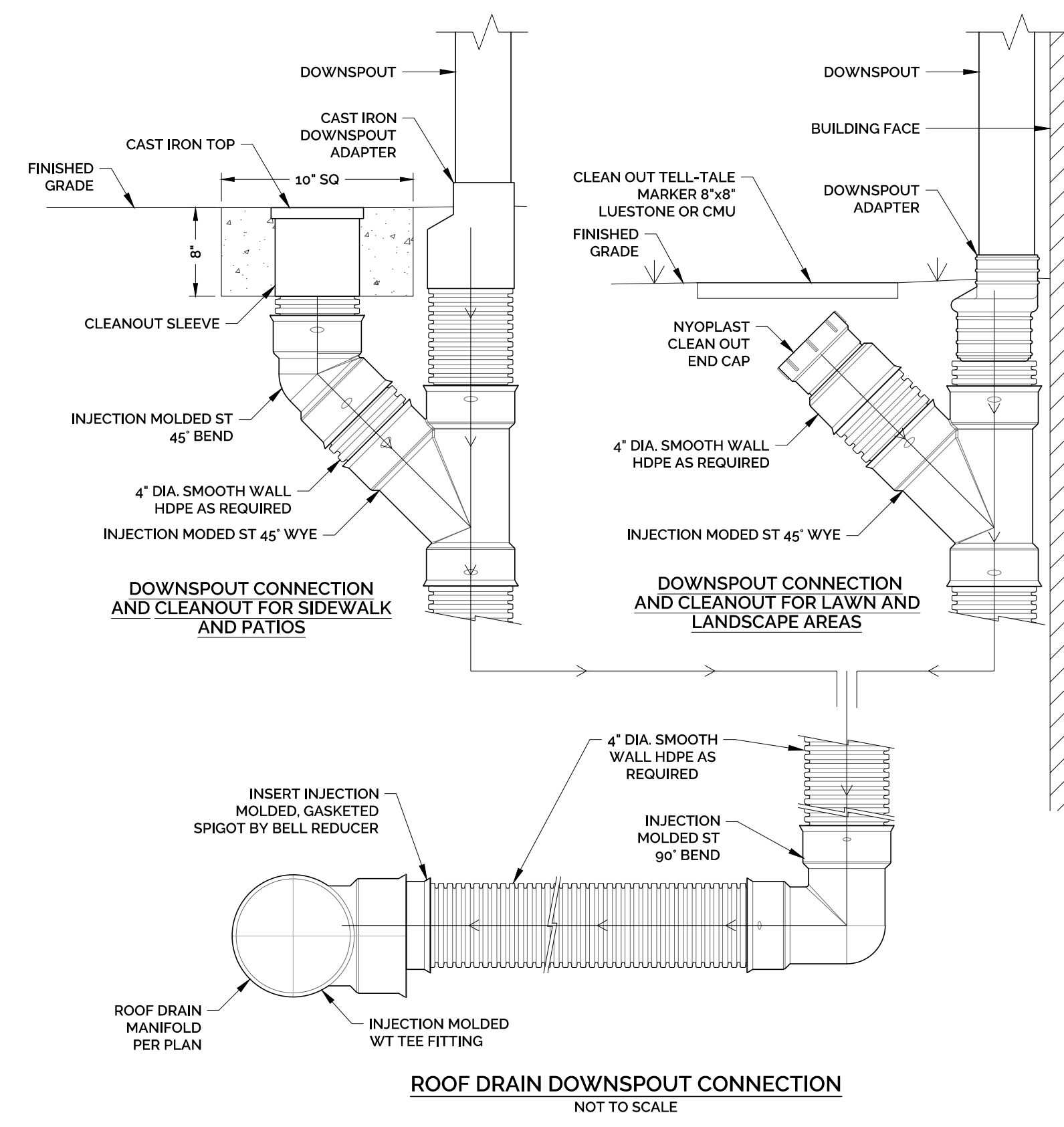
- NOTES:
- STORM MANHOLE FRAMES AND COVERS SHALL CONFORM TO CTDOT FORM 817 STANDARD SPECIFICATION FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION AND CTDOT HIGHWAY STANDARD SHEETS HW-507.10, AS AMENDED.
 - CHANNELS MAY BE SHAPED IN CONCRETE BASE OF MANHOLE OR FORMED USING BRICK OR MASONRY, UNLESS OTHERWISE DIRECTED.
 - A FRAME OF 3'-3" WITH 4" FLANGE SHALL BE USED WHEN THE TOP DIAMETER OF A PRECAST CONE IS LESS THAN 3'-6". ALL OTHER FRAME DIMENSIONS SHALL REMAIN THE SAME.
 - ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.
- REFERENCE: CT DOT HIGHWAY STANDARDS, SHEET HW-507.04 & HW-507.10, CT DOT FORM 817.



- NOTES:
- CATCH BASIN TOPS, CURBS AND GRATE COMPONENTS SHALL CONFORM TO CTDOT FORM 817 STANDARD SPECIFICATION FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION AND CTDOT HIGHWAY STANDARD SHEETS HW-507.07 AND HW-507.08, AS AMENDED.
 - REINFORCING STEEL DEFORMED BARS ARE NOT SHOWN AND SHALL CONFORM TO LATEST CTDOT STANDARDS & SUPPLEMENTALS AND ASTM SPECIFICATION A615, GRADE 60, MINIMUM COVER 2" UNLESS OTHERWISE NOTED.
 - ALL STEEL, EXCEPT REINFORCING BARS, SHALL BE GALVANIZED IN CONFORMANCE WITH SECTION M6.03 OF CONNECTICUT STANDARD SPECIFICATIONS.
 - TYPE "C" CATCH BASIN DEPRESSED GUTTER STRIPS SHALL CONFORM TO CTDOT STANDARD SHEET HW-507.01, AS AMENDED.
- REFERENCE: CT DOT HIGHWAY STANDARDS, SHEET HW-507.04, HW-507.07 & HW-507.08, CT DOT FORM 817, AND UNITED CONCRETE PRODUCTS, AUGUST 2015.



- NOTES:
- TRAP HOODS SHALL BE CAST IRON FOR 10", 12", 15" AND 18" PIPE SIZES AND FABRICATED ALUMINUM FOR 21" OR GREATER.
 - ALL TRAP HOODS SHALL INCLUDE STAINLESS STEEL HOOKS OR HANGERS FOR MOUNTING TO THE CATCH BASIN WALL. BACK PLATES SHALL BE FURNISHED ONLY WHEN REQUESTED.
 - TRAP HOODS SHALL BE FROM CAMPBELL FOUNDRY, NEEHAW FOUNDRY, EAST JORDAN IRON WORKS OR APPROVED EQUAL. DIMENSIONS AND MODEL NUMBERS VARY BASED ON DISCHARGE PIPE SIZE AND MANUFACTURER.
 - SEE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.



- NOTES:
- TRAP HOODS SHALL BE CAST IRON FOR 10", 12", 15" AND 18" PIPE SIZES AND FABRICATED ALUMINUM FOR 21" OR GREATER.
 - ALL TRAP HOODS SHALL INCLUDE STAINLESS STEEL HOOKS OR HANGERS FOR MOUNTING TO THE CATCH BASIN WALL. BACK PLATES SHALL BE FURNISHED ONLY WHEN REQUESTED.
 - TRAP HOODS SHALL BE FROM CAMPBELL FOUNDRY, NEEHAW FOUNDRY, EAST JORDAN IRON WORKS OR APPROVED EQUAL. DIMENSIONS AND MODEL NUMBERS VARY BASED ON DISCHARGE PIPE SIZE AND MANUFACTURER.
 - SEE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.

TEST PIT RESULTS
DATE: MARCH 27, 2025
RECORDED BY: SEAMUS MORAN, P.E.
(H-H ENGINEERING ASSOCIATES, LLC)

TEST HOLE 101	
0'-11"	TOPSOIL
11'-28"	ORANGE-BROWN FINE SANDY LOAM
28'-40"	MEDIUM SAND W/ COBBLES
40'-48"	BROWN VERY FINE SAND W/ SILT
48'-75"	TAN FINE-MEDIUM SAND
NO MOTTLING NO GROUNDWATER NO LEDGE	

TEST HOLE 102	
0'-11"	TOPSOIL
11'-30"	ORANGE-BROWN FINE SANDY LOAM
30'-53"	GRAY VERY FINE SAND W/ SILT
53'-65"	BROWN VERY FINE SAND
65'-73"	TAN FINE SAND
73'-93"	BROWN-GRAY COARSE SAND & GRAVEL
MOTTLING @ 38" (PERCHED GROUNDWATER) NO GROUNDWATER NO LEDGE	

TEST HOLE 103	
0'-18"	TOPSOIL
18'-30"	BROWN VERY FINE SAND W/ SILT
30'-35"	GRAY VERY FINE SAND W/ SILT, MOTTLED
55'-80"	ORANGE-BROWN COARSE SAND & GRAVEL
MOTTLING @ 36" (POSSIBLY PERCHED GROUNDWATER) NO GROUNDWATER NO LEDGE ROOTS TO 61"	

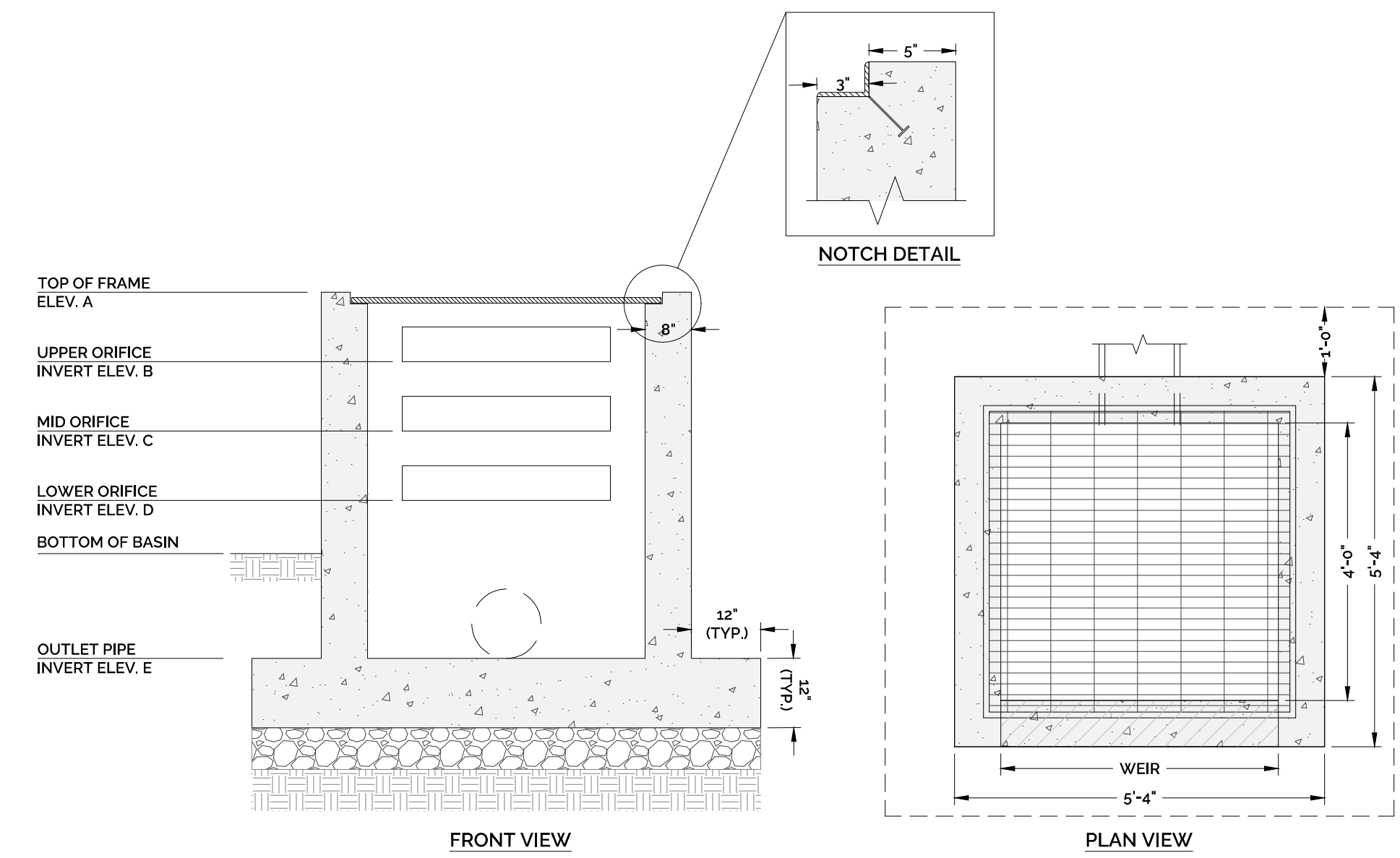
TEST HOLE 104	
0'-8"	TOPSOIL
8'-28"	ORANGE-BROWN FINE SANDY LOAM
28'-33"	GRAY VERY FINE SAND W/ SILT
33'-55"	ORANGE MEDIUM-COARSE SAND W/ FRAGMENTED ROCK
55'-90"	DARK GRAY/BROWN COARSE SAND
MOTTLING @ 31" (PERCHED GROUNDWATER) NO GROUNDWATER NO LEDGE ROOTS TO 61"	

TEST HOLE 105	
0'-16"	TOPSOIL
16'-50"	ORANGE-BROWN FINE-MEDIUM SAND
50'-68"	BROWN VERY FINE SANDY LOAM W/ SILT
68'-92"	BROWN FINE SAND
NO MOTTLING GROUNDWATER @ 88" NO LEDGE ROOTS TO 61"	

PERMEABILITY RESULTS
DATE: MARCH 27, 2025
COLLECTED BY: SEAMUS MORAN, P.E.
(H-H ENGINEERING ASSOCIATES, LLC)
TESTED BY: CLA ENGINEERS
TESTING METHOD: FALLING HEAD PERMEABILITY TEST

TEST HOLE	SAMPLE DEPTH (INCHES)	PERMEABILITY (FT/DAY)
101	30	13.0
102	27	0.1
104	33	3.8
105	30	8.2

OUTLET CONTROL STRUCTURE ELEVATION SUMMARY TABLE					
STRUCTURE ID	TOP OF FRAME ELEV. A	UPPER ORIFICE INVERT ELEV. B	MIDDLE ORIFICE INVERT ELEV. C	LOWER ORIFICE INVERT ELEV. D	OUTLET PIPE INVERT ELEV. E
OCS-1	358.25	--	--	356.75 (48"W) x 6"(H)	345.00 (24")
OCS-2	348.75	--	--	346.25 (48"W) x 6"(H)	339.00 (24")
OCS-3	342.00	--	340.90 (48"W) x 6"(H)	339.15 (48"W) x 6"(H)	335.00 (21")
OCS-4	391.25	390.75 (24"W) x 6"(H)	390.00 (18"W) x 48"(H)	339.15 (6"W) x 48"(H)	385.50 (15")



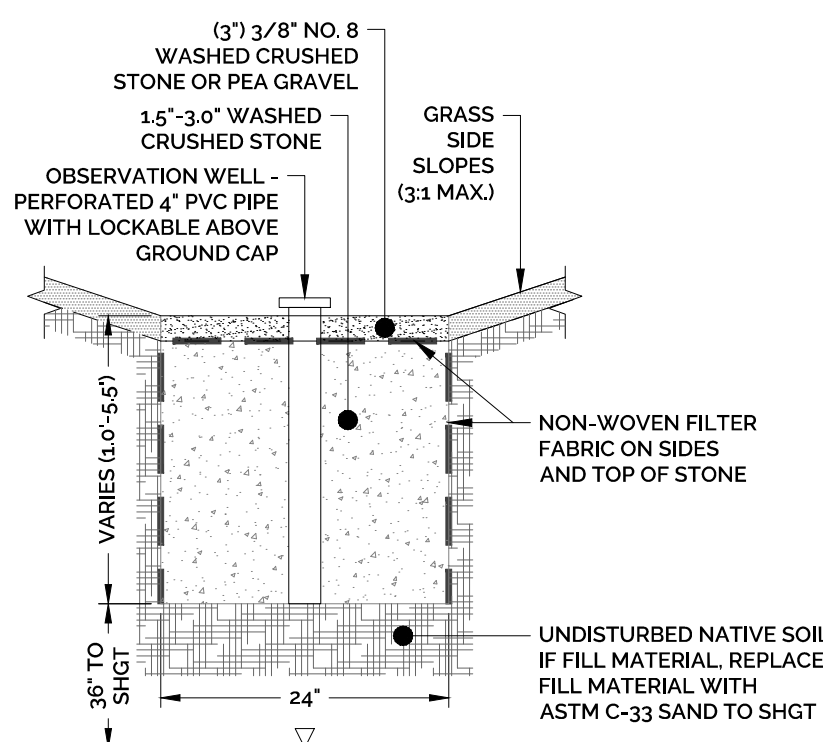
BASIN OUTLET CONTROL STRUCTURE
NOT TO SCALE

INFILTRATION TRENCH CONSTRUCTION SEQUENCE:

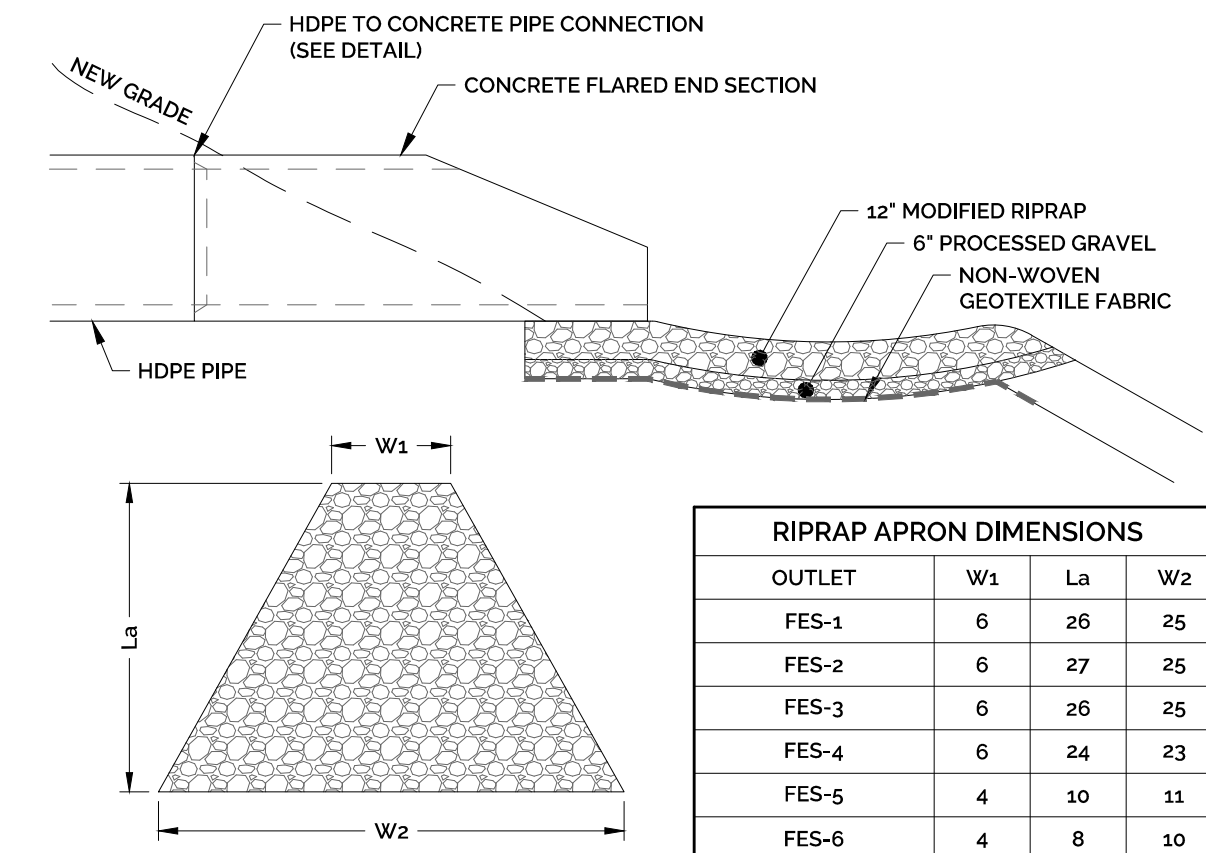
- EXCAVATE TRENCH TO ELEVATION 360.0.
- INSTALL OBSERVATION WELL IN TRENCH. BOTTOM OF OBSERVATION WELL SHALL BE PLACED AT BOTTOM OF TRENCH.
- BACKFILL SAND & STONE IN 6"-9" LIFTS. INSTALL SAND & STONE USING LIGHT EQUIPMENT THAT WILL NOT RESULT IN THE COMPACTION OF THE SOIL WITHIN THE TRENCH.
- DESIGN ENGINEER SHALL INSPECT THE INSTALLATION OF THE INFILTRATION TRENCH DURING THE FOLLOWING STAGES OF CONSTRUCTION:
 - AFTER EXCAVATION OF THE TRENCH AND SCARIFICATION OF BOTTOM AND SIDEWALLS OF EXCAVATION.
 - AFTER INSTALLATION OF THE OBSERVATION WELL AND SAND.
 - AFTER PLACEMENT AND LEVELING OF WASHED STONE LAYER.
 - AFTER PEA GRAVEL SURFACE COVER HAVE BEEN INSTALLED.
- DESIGN ENGINEER SHALL CERTIFY THAT THE SYSTEM WAS INSTALLED IN ACCORDANCE WITH THE DESIGN PLANS.

INFILTRATION TRENCH MAINTENANCE PLAN:

- THE INFILTRATION TRENCH SHALL BE CLEANED AT THE END OF CONSTRUCTION ONCE THE CONTRIBUTING AREAS ARE FULLY STABILIZED.
- FOR THE FIRST 6 MONTHS AFTER CONSTRUCTION, THE INFILTRATION TRENCH SHALL BE INSPECTED AFTER MAJOR STORMS (1" OR MORE OF PRECIPITATION).
- AFTER THE FIRST 6 MONTHS OF OPERATION, THE INFILTRATION TRENCH SHALL BE INSPECTED ANNUALLY, AND AN INSPECTION REPORT SHALL BE COMPLETED AND FILED WITH MANAGEMENT STAFF.
- TYPICAL MAINTENANCE SHALL INCLUDE THE FOLLOWING:
- REMOVE TRASH AND ORGANIC DEBRIS (LEAVES).
 - REMOVE SEDIMENT FROM THE INFILTRATION TRENCH SURFACE WHEN THE SEDIMENT ACCUMULATION EXCEEDS 2" OR WHEN DRAWDOWN TIME EXCEEDS 48 HOURS AFTER THE END OF A STORM EVENT, INDICATING THAT THE SOIL MEDIA IS CLOGGED.
 - WEED AS NECESSARY.
 - MOW GRASS WITHIN PROXIMITY OF THE INFILTRATION TRENCH TO A HEIGHT OF 4" TO 6".
 - PERIODICALLY REMOVE GRASS CLIPPINGS TO PREVENT CLOGGING OF THE SURFACE OF THE INFILTRATION TRENCH.

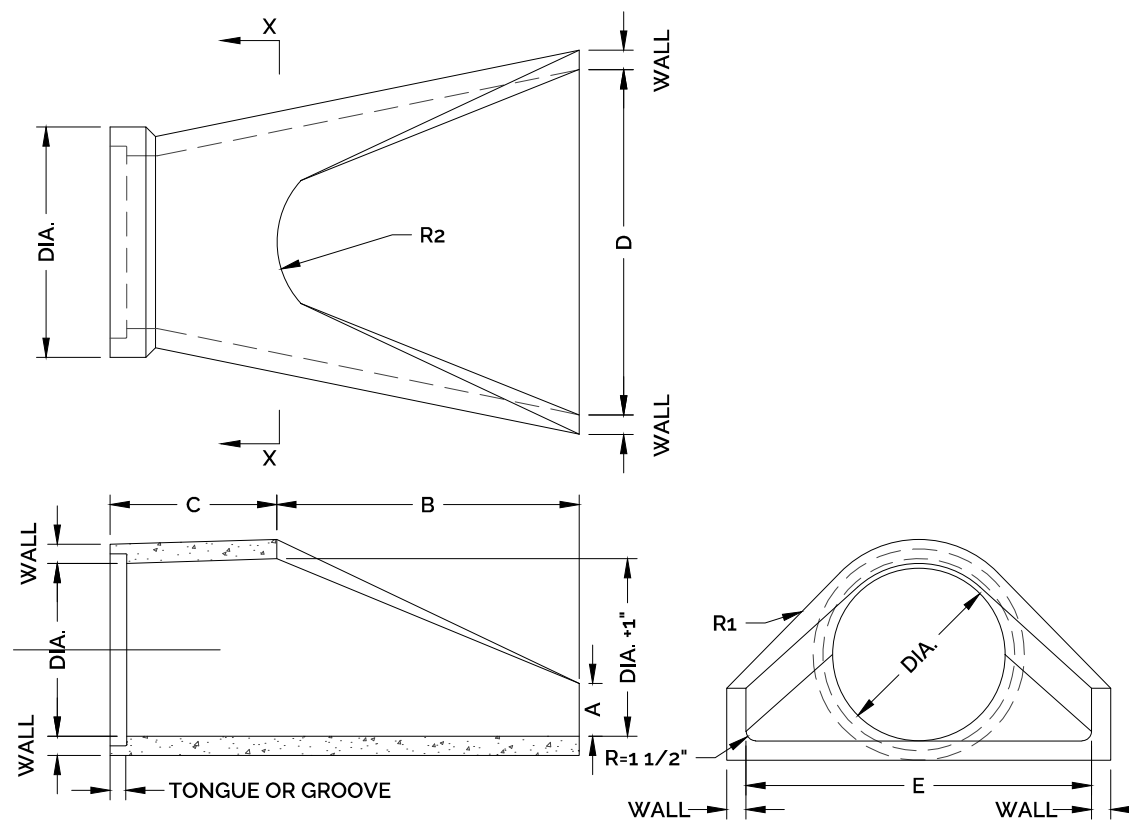


INFILTRATION TRENCH X-SECTION
NOT TO SCALE



NOTE: IN ACCORDANCE WITH CT DOT DRAINAGE MANUAL SECTION 11.13 - OUTLET PROTECTION, THE APRON STONE FOR FES-1, 2, 3, AND 4 SHALL BE STANDARD RIPRAP (DISCHARGE VELOCITIES 10-14 FT/S), AND THE APRON STONE FOR FES-5 AND 6 SHALL BE MODIFIED RIPRAP (DISCHARGE VELOCITIES 0-8 FT/S).

RIPRAP APRON
NOT TO SCALE

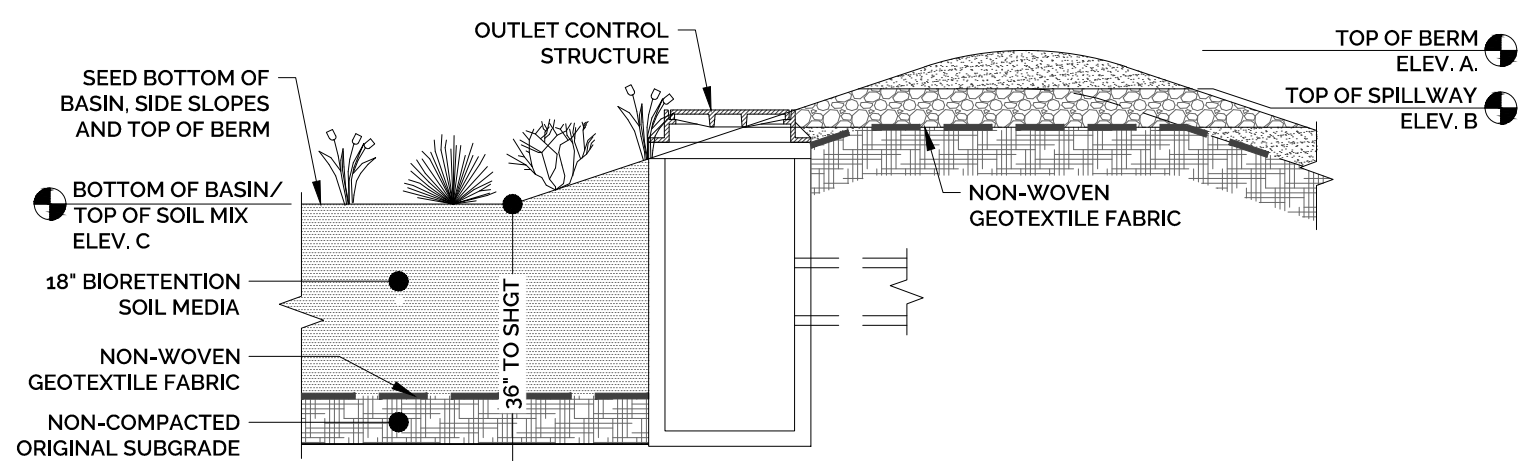
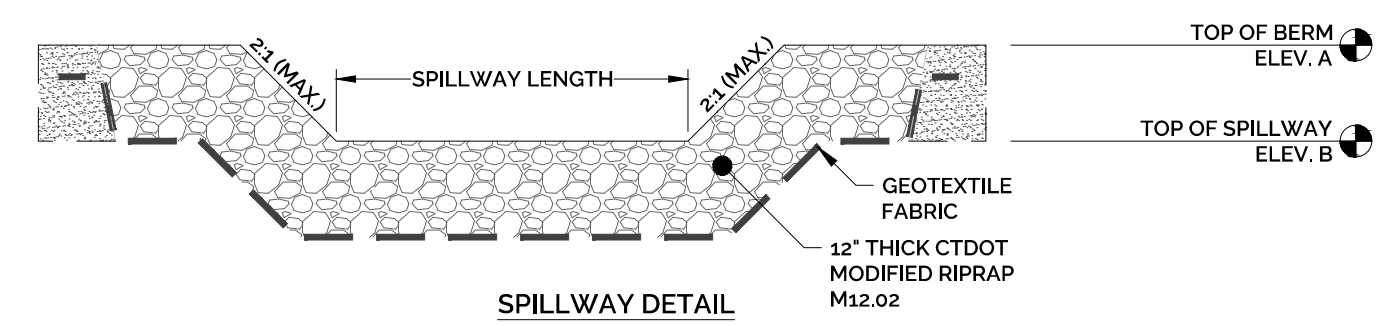


DIA.	A	B	C	D	E	R1	R2
12"	4"	24"	48 7/8"	24"	3"	10 1/4"	9"
15"	6"	27"	46"	30"	3"	12 1/2"	11"
18"	9"	27"	45"	36"	3"	15 1/2"	12"
24"	9 1/2"	43 1/2"	30"	48"	3"	16 13/16"	14"
30"	12"	54"	19-3/4"	60"	3 1/2"	18 1/2"	15"
36"	15"	63"	34-3/4"	72"	4"	24 5/16"	20"
42"	21"	63"	36"	78"	4 1/2"	27 1/2"	22"
48"	24"	72"	26"	84"	5	28 1/2"	22"
54"	27"	66"	35"	90"	5 1/2"	33 1/8"	24"
60"	30"	60"	39"	96"	6"	36 11/16"	24"

- REINFORCED CONCRETE PIPE CONFORMS TO ASTM C-76, ASTM-C-443, ASHTO M-170, AND ASHTO M-198.
- NOTES:
- ALL PRECAST CONCRETE PRODUCTS MUST HAVE THE CASTING DATE CLEARLY LABELED AND SHALL NOT BE DELIVERED WITHIN 7 DAYS OF THE CASTING DATE.
 - JOINT SHALL BE TONGUE AND GROOVE OR BELL AND SPIGOT AS REQUIRED TO CONFORM TO PIPE INSTALLATION.
 - WALL THICKNESS SHALL CONFORM TO PIPE THICKNESS.

REINFORCED CONCRETE FLARED END SECTION
NOT TO SCALE

BASIN ELEVATIONS			
BASIN ID	TOP OF BERM ELEV. A	TOP OF SPILLWAY ELEV. B	BOT. OF BASIN ELEV. C
WATER QUALITY BASIN	357.00	356.50	354.00
BASIN 'A'	347.50	347.00	343.50
BASIN 'B'	344.00	343.00	338.00
BASIN 'C'	392.00	391.50	388.00



BIORETENTION BASIN CONSTRUCTION SEQUENCE:

- REMOVE EXISTING TOPSOIL, SURFACE LEAF LITTER, ETC. FROM BIORETENTION BASIN AREA AND STOCKPILE FOR REUSE.
- AVOID COMPACTION OF NATURAL SOILS WITHIN BOTTOM AREA OF BIORETENTION BASIN BY CONSTRUCTION EQUIPMENT. THE AREA OF THE BIORETENTION BASIN SHALL BE MARKED OFF BY APPROPRIATE FENCING TO PREVENT THE MOVEMENT OF CONSTRUCTION VEHICLES OVER AND THE POSSIBLE COMPACTION OF THE NATURAL SOILS.
- SCARIFY NATURAL SOILS WITHIN THE BOTTOM OF BASIN PRIOR TO PLACING SOIL MEDIA.
- MIX BIORETENTION SOIL MEDIA. SOIL MEDIA SHALL CONSIST OF THE FOLLOWING:
 - 60-85% ASTM C-33 SAND
 - 15-25% TOPSOIL. TOPSOIL SHOULD CONTAIN 5-20% ORGANIC MATERIAL, HAVE LESS THAN 5% CLAY, BE A SANDY LOAM, LOAMY SAND OR LOAM, AND HAVE A pH RANGE OF 5.5-7.0.
 - 3-8% ORGANIC MATTER. ORGANIC MATTER SHALL CONSIST OF PARTIALLY DECOMPOSED PEAT MOSS (100% PASSING THE 1/2" SIEVE) OR WOOD DERIVATIVES (SHREDDED WOOD, WOOD CHIPS, GROUND BARK).
- SOIL MEDIA PROVIDE FOR A MINIMUM INFILTRATION RATE OF 1.0 INCHES/HOUR. CONTRACTOR SHALL HAVE THE SOIL MEDIA TESTED PRIOR TO PLACEMENT. THE DESIGN ENGINEER SHALL REVIEW AND CERTIFY THAT THE SOIL MEDIA MEETS THE SOIL MEDIA SPECIFICATIONS.
- PLACE SOIL MEDIA IN THE BASIN IN 6"-12" LIFTS USING LIGHT EQUIPMENT. ALLOW SOIL TO SETTLE NATURALLY THROUGH RAIN EVENTS OR PRESOAK AFTER PLACEMENT.
- SIDE SLOPES AND ALL AREAS DISTURBED OUTSIDE THE BASIN SHALL BE FINE GRADED WITH 6" TOPSOIL, RAKED, SEED, AND MULCHED.
- SEED BOTTOM OF BASIN WITH NEW ENGLAND WETLAND PLANTS, INC. ROADSIDE SEED MIX AT 1 LB/1,250 S.F. OR EQUIVALENT. SEEDING SHALL BE QUICKLY ESTABLISHED AND MAINTAINED TO PREVENT ANY SILT ACCUMULATION ALONG THE BOTTOM OF THE BASIN. MINIMUM VEGETATIVE COVERAGE OF 90% SHALL BE TARGETED AND MAINTAINED.
- BIORETENTION BASIN SHALL NEVER BE USED FOR SEDIMENT CONTROL DURING AN ACTIVE CONSTRUCTION PERIOD.
- DURING CONSTRUCTION, SEDIMENT SHALL BE PREVENTED FROM ENTERING THE AREA OF THE BASIN. THE CONTRACTOR SHALL ENSURE THAT THE AREAS DRAINING TO THE BIORETENTION BASIN ARE STABILIZED IN A TIMELY MANNER AND MAINTAINED OVER THE ENTIRE AREA DRAINING TO THE BASIN.
- DESIGN ENGINEER SHALL INSPECT THE INSTALLATION OF THE BIORETENTION BASIN DURING THE FOLLOWING STAGES OF CONSTRUCTION:
 - AFTER EXCAVATION OF THE BASIN AND SCARIFICATION OF BOTTOM AND SIDEWALLS OF EXCAVATION.
 - AFTER PLACEMENT OF BIORETENTION SOIL MEDIA.
- A LICENSED LAND SURVEYOR SHALL PROVIDE AN AS-BUILT OF THE DETENTION BASIN/SAND FILTER. DESIGN ENGINEER SHALL CERTIFY THAT THE SYSTEM WAS INSTALLED IN ACCORDANCE WITH THE DESIGN PLANS.

BIORETENTION BASIN MAINTENANCE PLAN:

- IN THE FIRST 6 MONTHS FOLLOWING CONSTRUCTION, THE BIORETENTION BASIN SHALL BE INSPECTED AFTER STORM EVENTS OF 1" OR GREATER. FOLLOWING THE FIRST 6 MONTHS, THE BASIN SHALL BE INSPECTED EVERY 6 MONTHS (SPRING AND FALL) AND/OR AFTER STORM EVENTS OF 2" OR GREATER. INSPECTIONS SHALL INCLUDE THE FOLLOWING:
 - INSPECT SOIL MEDIA FOR STANDING WATER OR OTHER EVIDENCE OF CLOGGING.
 - CHECK FOR SEDIMENT ACCUMULATION, TRASH AND DEBRIS.
 - CHECK FOR BLOCKAGES, STRUCTURAL INTEGRITY, AND EVIDENCE OF EROSION AT INLETS/OUTLETS.
- REGULAR MAINTENANCE INCLUDES THE FOLLOWING:
 - REMOVE SEDIMENT, TRASH AND DEBRIS.
 - REMOVE ACCUMULATED SEDIMENT FROM THE BASIN WHEN THE SEDIMENT ACCUMULATION EXCEEDS 1" OR WHEN DRAWDOWN TIME EXCEEDS 48 HOURS AFTER THE END OF A STORM EVENT. REPLACE WITH FRESH BIORETENTION SOIL MEDIA THAT CONFORMS TO THE SPECIFICATIONS IN THIS SECTION.
 - MAINTAIN VEGETATED FILTER STRIPS OR GRASSED SIDE SLOPES OF BIORETENTION SYSTEM.
 - MOW THE BASIN IN THE FALL AFTER THE FIRST KILLING FROST TO REMOVE SAPLINGS AND WOODY BRUSH AND SUBSEQUENT PERIODIC MOVING FOR MAINTENANCE. MOVING SHOULD NOT BE PERFORMED WHEN THE GROUND IS SOFT TO AVOID THE CREATION OF RUTS AND COMPACTION, WHICH CAN REDUCE INFILTRATION.
 - PERIODICALLY REMOVE GRASS CLIPPINGS TO PREVENT CLOGGING OF THE SURFACE OF THE BIORETENTION SYSTEM.
 - REMOVE ANY INVASIVE SPECIES (INCLUDING ROOTS) THAT HAVE BECOME ESTABLISHED WITHIN THE BASIN AND EMBANKMENTS.
- BIORETENTION BASIN REQUIRES OTHER SEASONAL LANDSCAPE MAINTENANCE INCLUDING:
 - WATERING PLANTS AS NECESSARY DURING FIRST GROWING SEASON.
 - WATERING AS NECESSARY DURING DRY PERIODS.
 - REPLACING DEAD OR DYING PLANTS, OR PRUNING PLANTS, AS NECESSARY.
 - INSPECTION OF SOIL AND REPAIRING ERODED AREAS.

REV.	DESCRIPTION OF REVISION	DATE	BY	APPR.
1	REVISIONS IN RESPONSE TO REVIEW COMMENTS	8/15/2025		

STORMWATER MANAGEMENT DETAILS

23-Lot Residential Resubdivision
PROPERTY ADDRESS:
47 SHARP HILL ROAD, MONTVILLE, CT 06382
PREPARED FOR:
MT KINEO BUILDERS, LLC
P.O. BOX 246, WEST MYSTIC, CT 06388

PROJECT NO. 2025-0197	SCALE AS NOTED
DRAWN BY: SM	DATE 7/10/2025
CHECKED BY: SM	DATE 7/10/2025

DRAWING
DT-4

