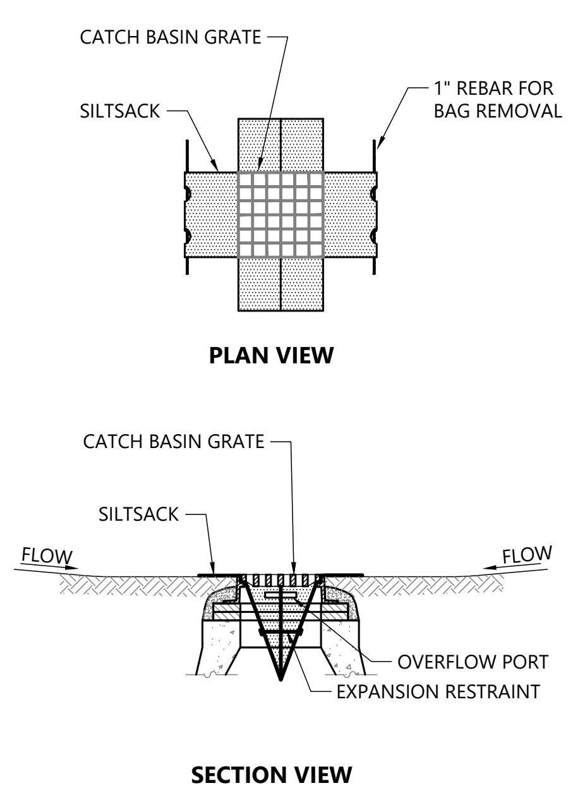
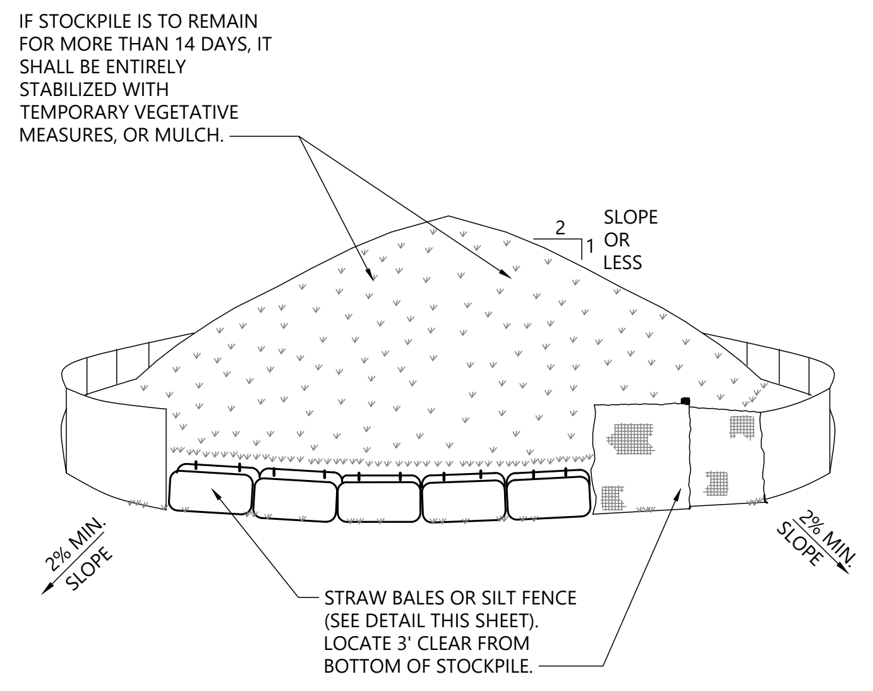


NOTES

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND STRAW BALES HAVE BEEN REMOVED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

Siltsack Sediment Trap

1/20
N.T.S. Source: VHB LD_674

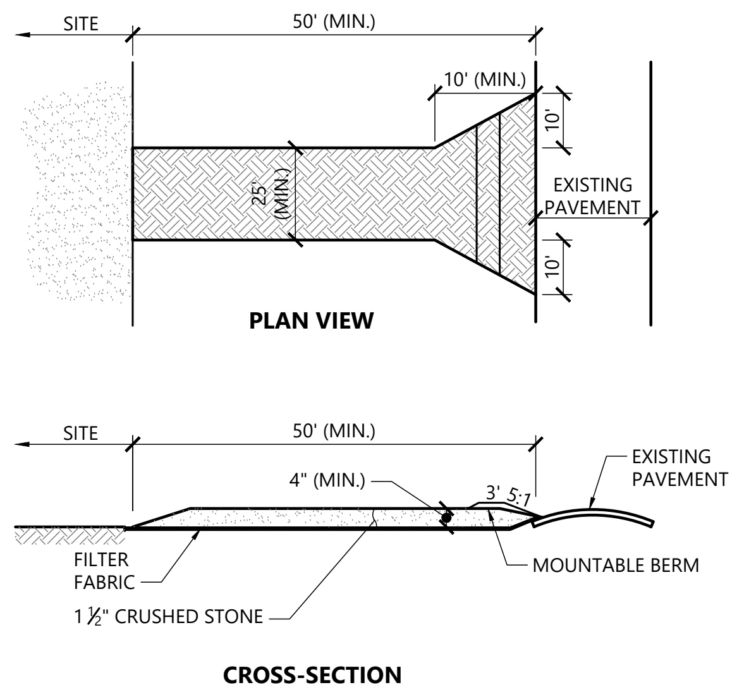

IF STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE ENTIRELY STABILIZED WITH TEMPORARY VEGETATIVE MEASURES, OR MULCH.
2
1
SLOPE OR LESS
2% MIN. SLOPE
2% MIN. SLOPE
STRAW BALES OR SILT FENCE (SEE DETAIL THIS SHEET). LOCATE 3' CLEAR FROM BOTTOM OF STOCKPILE.

NOTES

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAW BALES.
4. CONTRACTOR SHALL INSPECT INSTALLATIONS EVERY 7 DAYS MINIMUM AND/OR AS REQUIRED AND AFTER ANY RAINFALL EVENT OF 1/2" OR GREATER AND MAKE NECESSARY REPAIRS AS NEEDED.

Material Stockpile Area Detail

N.T.S.

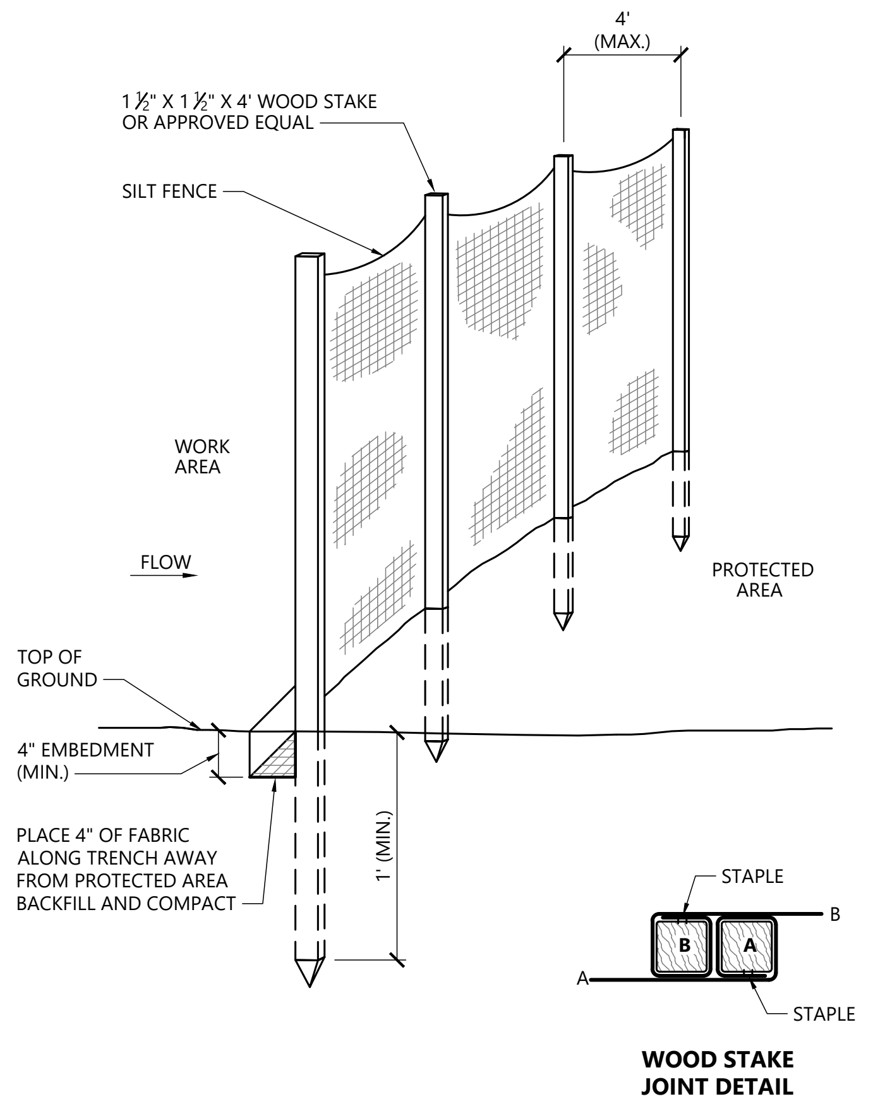


NOTES

1. EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

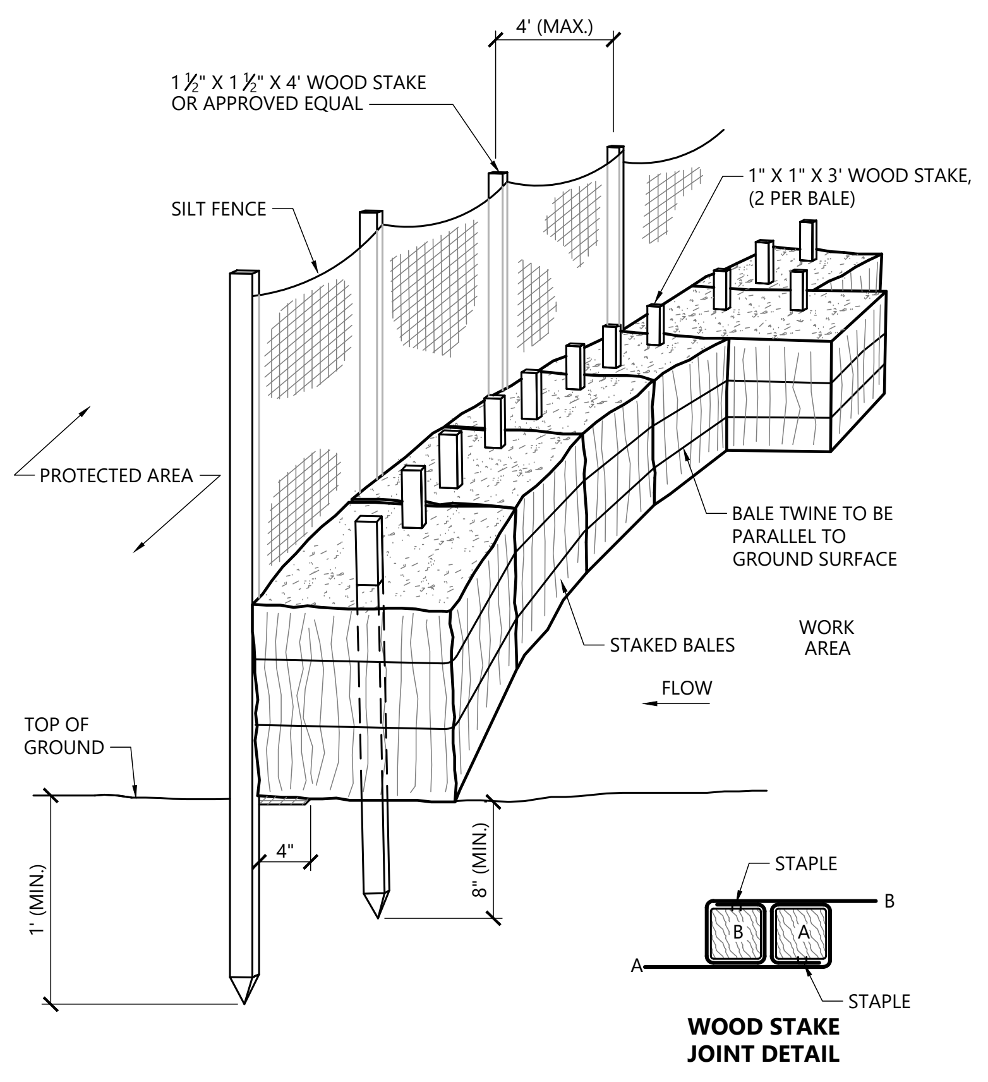
Stabilized Construction Exit

1/16
N.T.S. Source: VHB LD_682



Silt Fence Barrier

1/16
N.T.S. Source: VHB LD_650

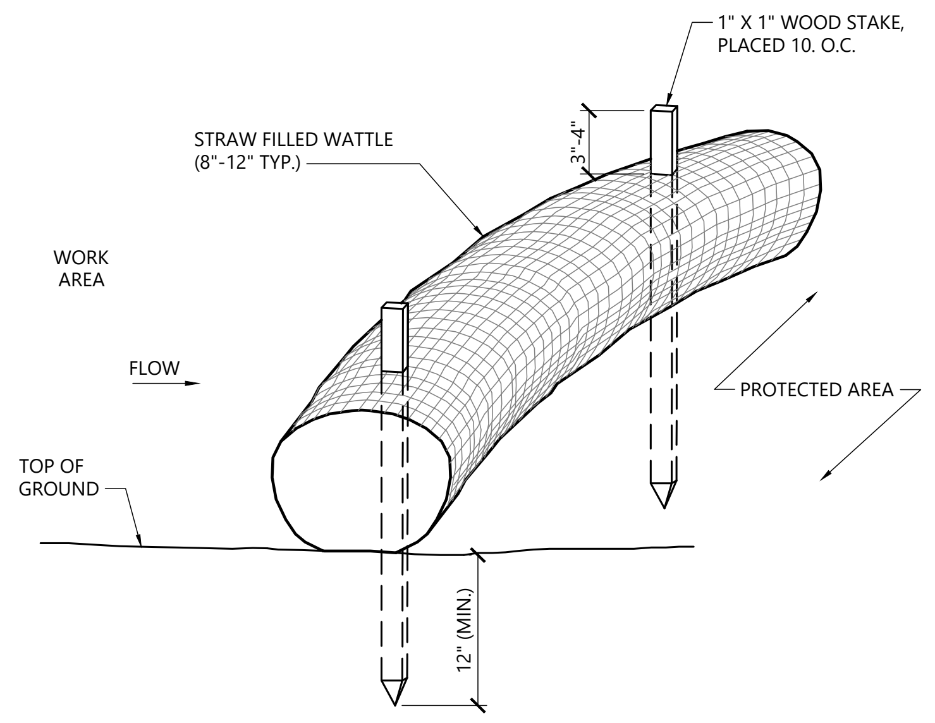


NOTES

PLACE ONE BALE PERPENDICULAR ALONG BALE BARRIER (100' O.C.).

Silt Fence / Straw Bale Barrier

1/16
N.T.S. Source: VHB LD_657

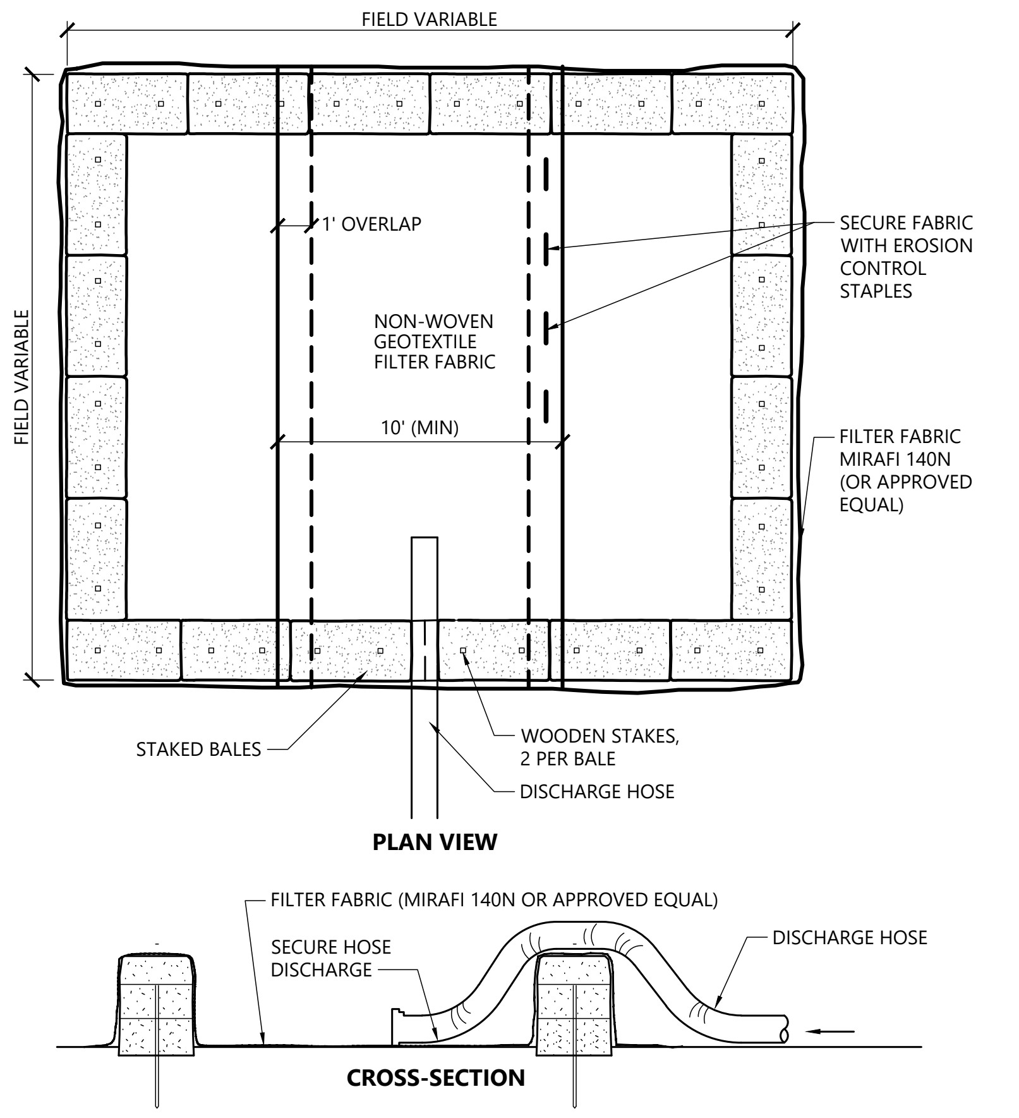

1" X 1" WOOD STAKE, PLACED 10. O.C.
3"-4"
STRAW FILLED WATTLE (8"-12" TYP.)
WORK AREA
FLOW
PROTECTED AREA
TOP OF GROUND
12" (MIN.)

NOTES

1. STRAW WATTLE SHALL BE AS MANUFACTURED BY EARTHSAVER OR APPROVED EQUAL.
2. STRAW WATTLES SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. STRAW WATTLE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. TEMPORARY STRAW WATTLES TO BE REMOVED BY CONTRACTOR. ALL OTHERS TO REMAIN IN PLACE UNLESS DIRECTED OTHERWISE BY ENGINEER.
5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Straw Wattle - Erosion Control Barrier

1/20
N.T.S. Source: VHB LD_659

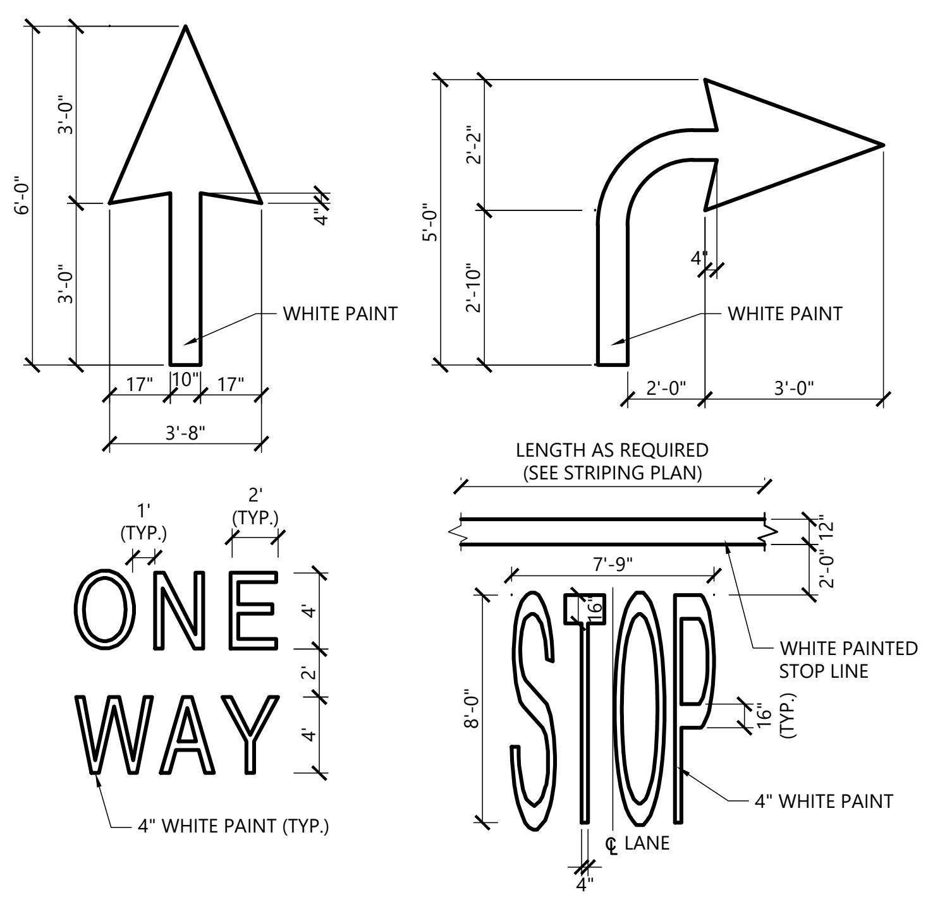

FIELD VARIABLE
FIELD VARIABLE
1' OVERLAP
NON-WOVEN GEOTEXTILE FILTER FABRIC
10' (MIN)
SECURE FABRIC WITH EROSION CONTROL STAPLES
FILTER FABRIC MIRAFI 140N (OR APPROVED EQUAL)
STAKED BALES
WOODEN STAKES, 2 PER BALE
DISCHARGE HOSE
PLAN VIEW
FILTER FABRIC (MIRAFI 140N OR APPROVED EQUAL)
SECURE HOSE DISCHARGE
DISCHARGE HOSE
CROSS-SECTION

NOTES

1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
2. THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.

Dewatering Straw Bale Basin

1/16
N.T.S. Source: VHB LD_690

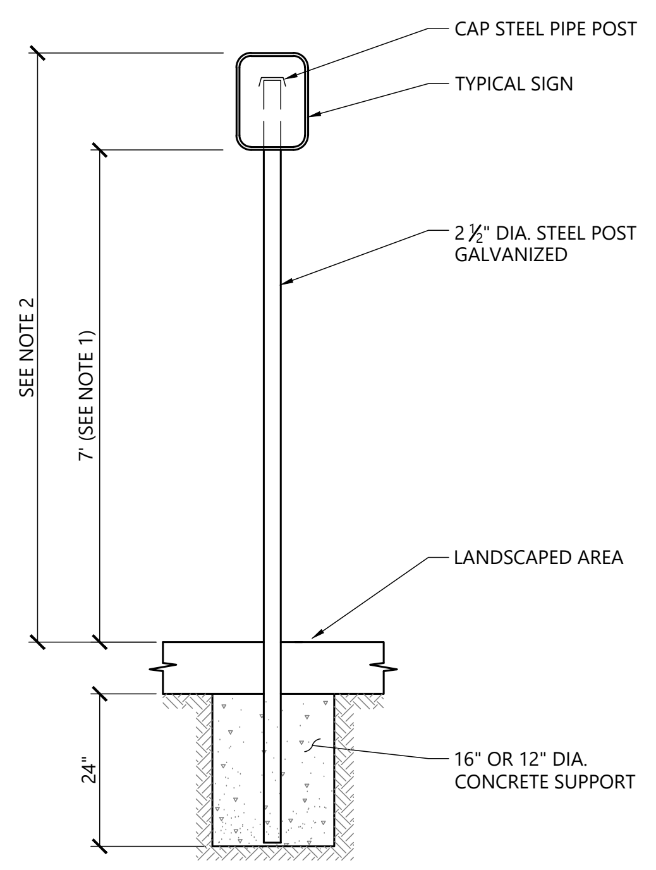


NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED FOR ON SITE WORK IN LOCATIONS SHOWN.

Painted Pavement Markings - On Site

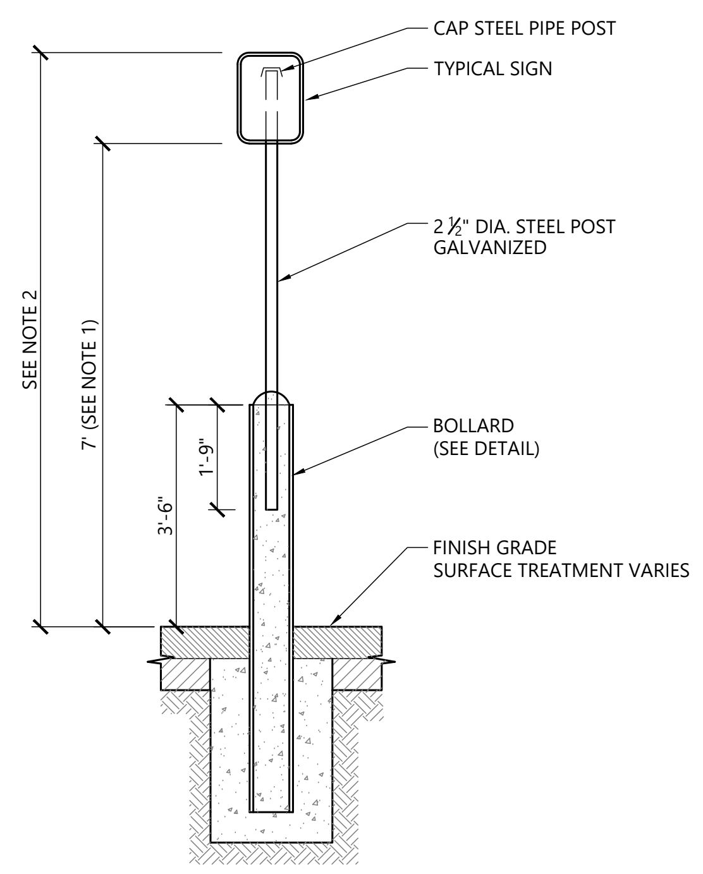
1/16
N.T.S. Source: VHB LD_554



1. THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR ACCESSIBLE SIGNAGE.
2. THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE

Sign Post - Type 'A'

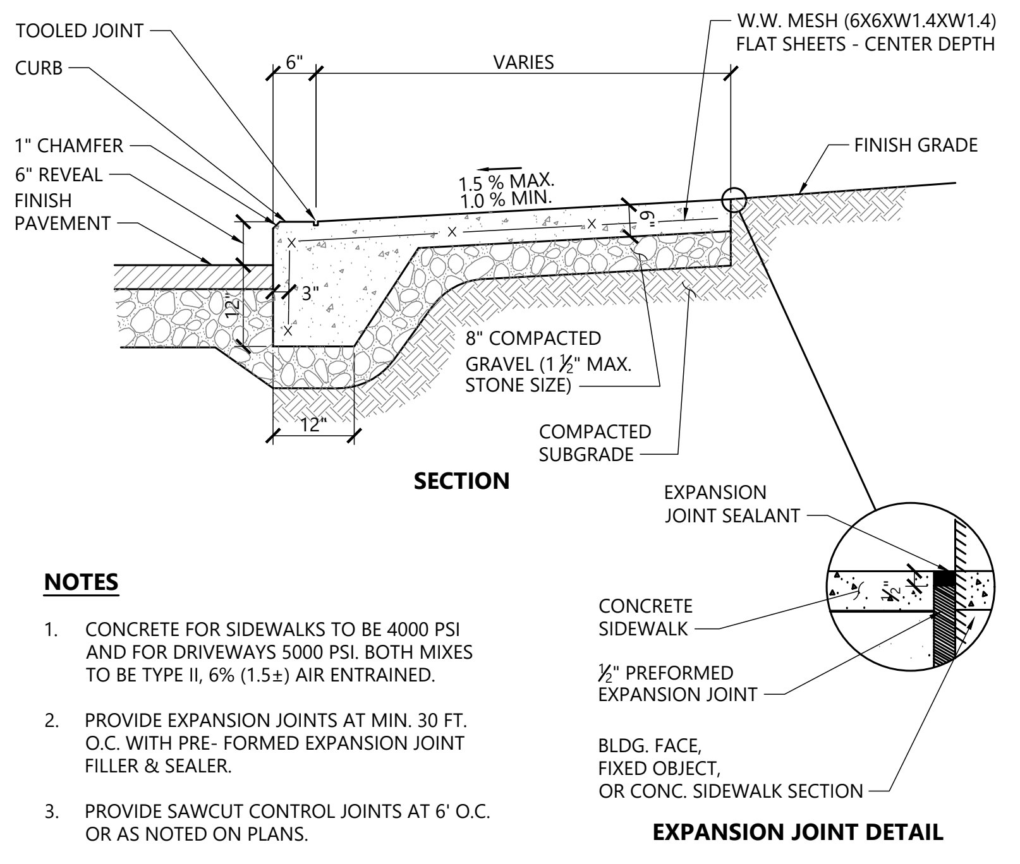
3/19
N.T.S. Source: VHB REV LD_701



1. THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR ACCESSIBLE SIGNAGE.
2. THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE

Bollard Mounted Sign

2/20
N.T.S. Source: VHB REV LD_703

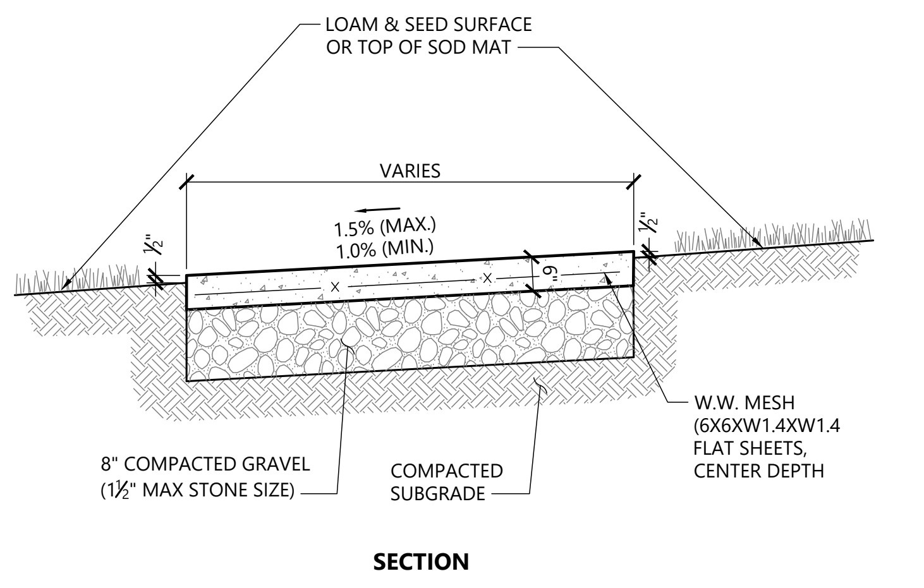


NOTES

1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES TO BE TYPE II, 6% (1.5±) AIR ENTRAINED.
2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT FILLER & SEALER.
3. PROVIDE SAWCUT CONTROL JOINTS AT 6' O.C. OR AS NOTED ON PLANS.
4. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE PRODUCT.

Monolithic Concrete Curb (MCC) & Sidewalk

3/20
N.T.S. Source: VHB LD 421

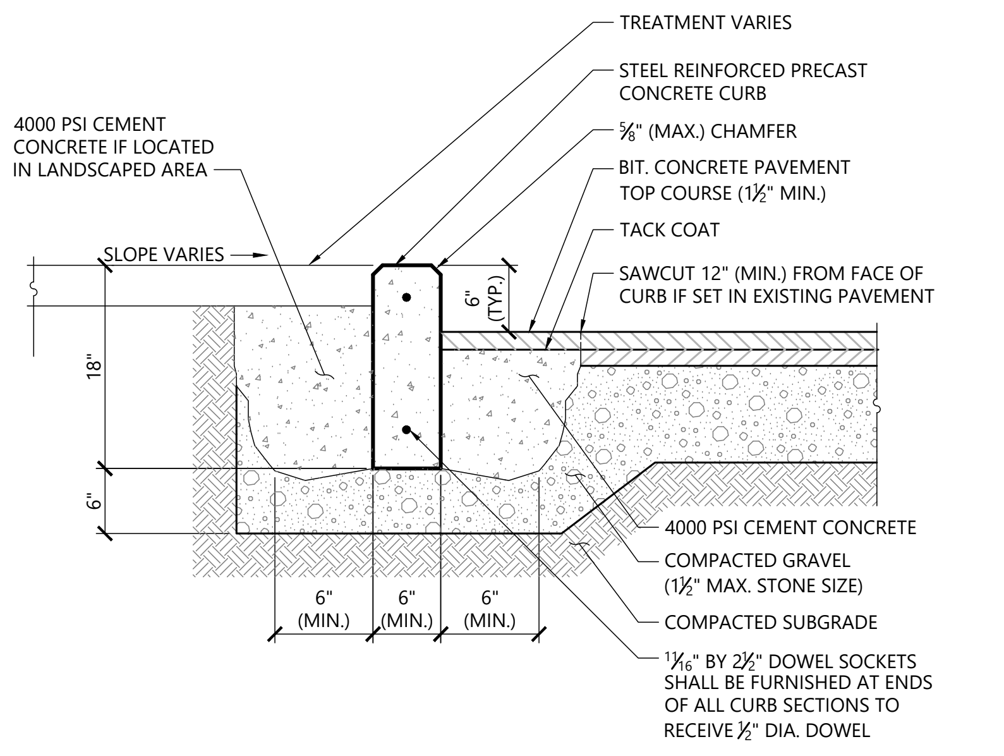

LOAM & SEED SURFACE OR TOP OF SOD MAT
VARIES
1.5% (MAX.)
1.0% (MIN.)
½"
½"
6"
W.W. MESH (6X6XW1.4XW1.4 FLAT SHEETS, CENTER DEPTH
8" COMPACTED GRAVEL (1½" MAX STONE SIZE)
COMPACTED SUBGRADE
SECTION

NOTES

1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES TO BE TYPE II, 6% (1.5±) AIR ENTRAINED.
2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT FILLER & SEALER.
3. PROVIDE SAWCUT CONTROL JOINTS AT 6' O.C. OR AS NOTED ON PLANS.
4. PROVIDE MEDIUM BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE PRODUCT.

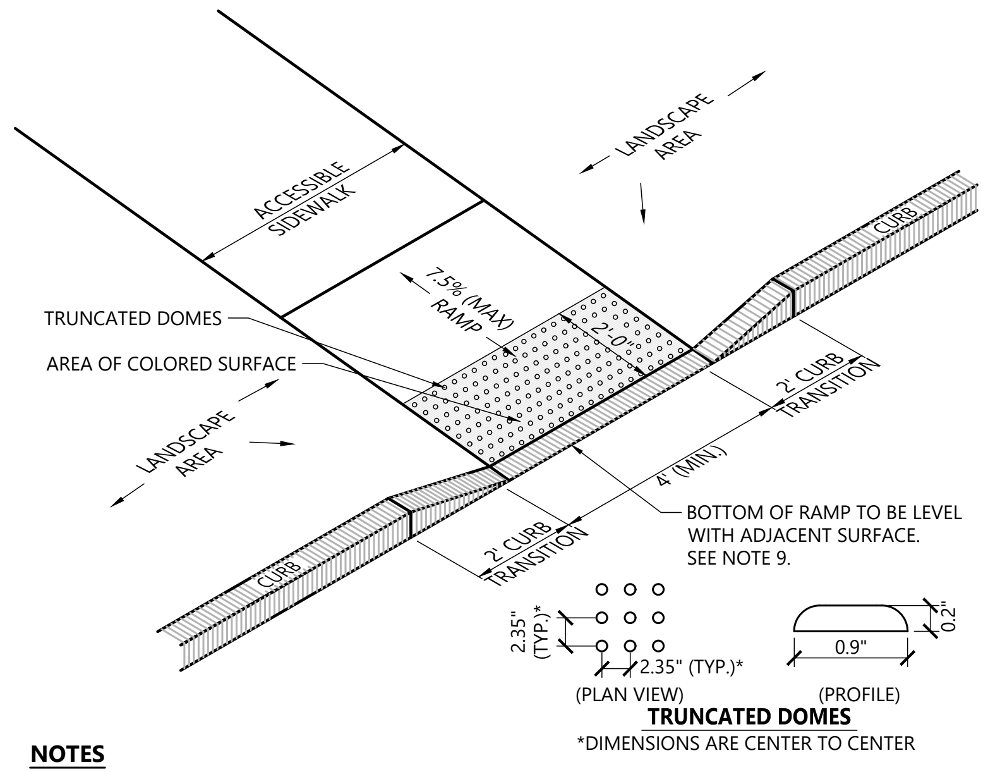
Concrete Sidewalk in Landscape Area

3/21
N.T.S. Source: VHB LD_426


TREATMENT VARIES
STEEL REINFORCED PRECAST CONCRETE CURB
⅝" (MAX.) CHAMFER
BIT. CONCRETE PAVEMENT TOP COURSE (1½" MIN.)
TACK COAT
SAWCUT 12" (MIN.) FROM FACE OF CURB IF SET IN EXISTING PAVEMENT
4000 PSI CEMENT CONCRETE IF LOCATED IN LANDSCAPED AREA
SLOPE VARIES
6" (TYP.)
18"
6"
4000 PSI CEMENT CONCRETE
COMPACTED GRAVEL (1½" MAX. STONE SIZE)
COMPACTED SUBGRADE
6" (MIN.)
6" (MIN.)
6" (MIN.)
$1\frac{1}{16}$" BY 2½" DOWEL SOCKETS SHALL BE FURNISHED AT ENDS OF ALL CURB SECTIONS TO RECEIVE ½" DIA. DOWEL

Precast Concrete Curb (PCC)

3/20
N.T.S. Source: VHB LD 404

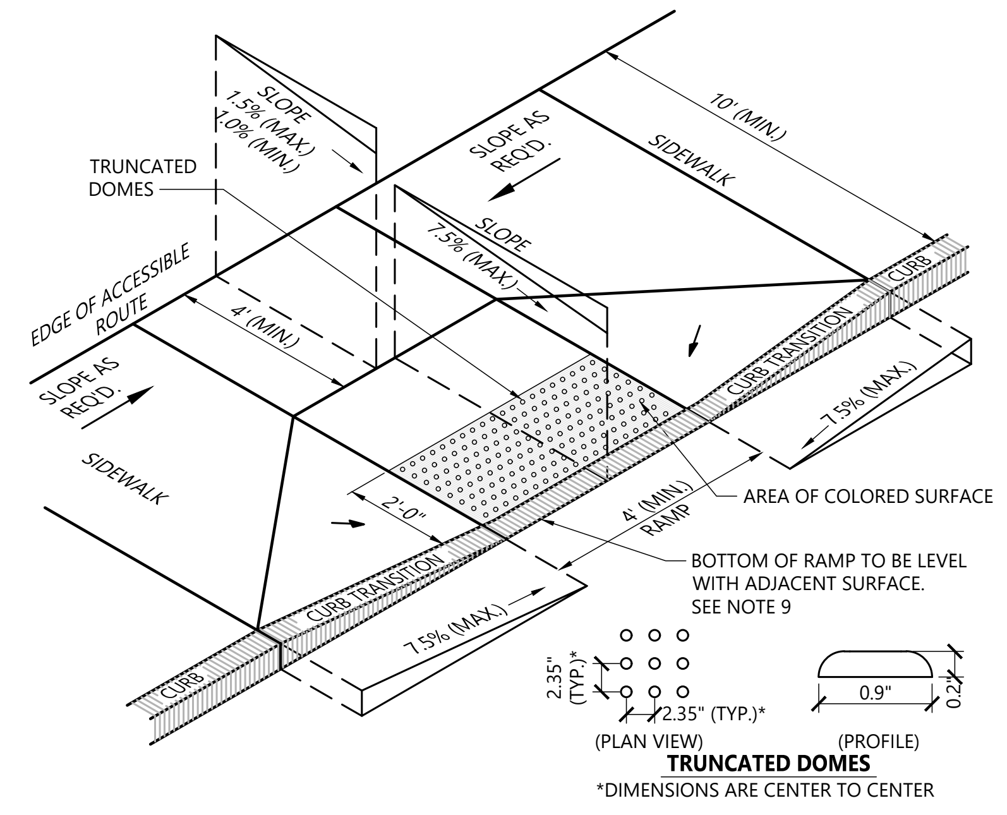


NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAYS.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'M-D'

12/20
N.T.S. Source: VHB LD 512



NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'D-D'

12/20
N.T.S. Source: VHB LD 503

vhb.com
vhb
100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

21-23 River Rd Redevelopment

21 River Road
Wilton, Connecticut

No.	Revision	Date	Appvd.

Designed by NP/KE
Checked by MRG
Issued for Local Approvals
Date April 23, 2024

Not Approved for Construction

Drawing Title
Site Details 1

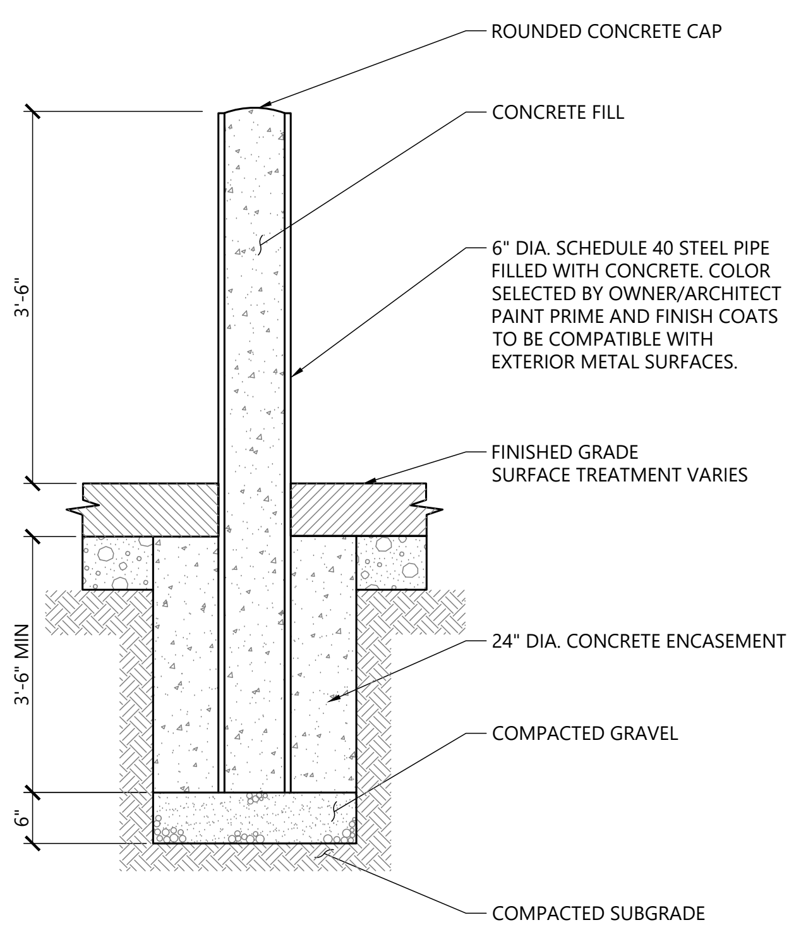
Drawing Number
C-6.0

MARK R. GROCKI
No. 27233

Sheet 08 of 11

Project Number
20849.00

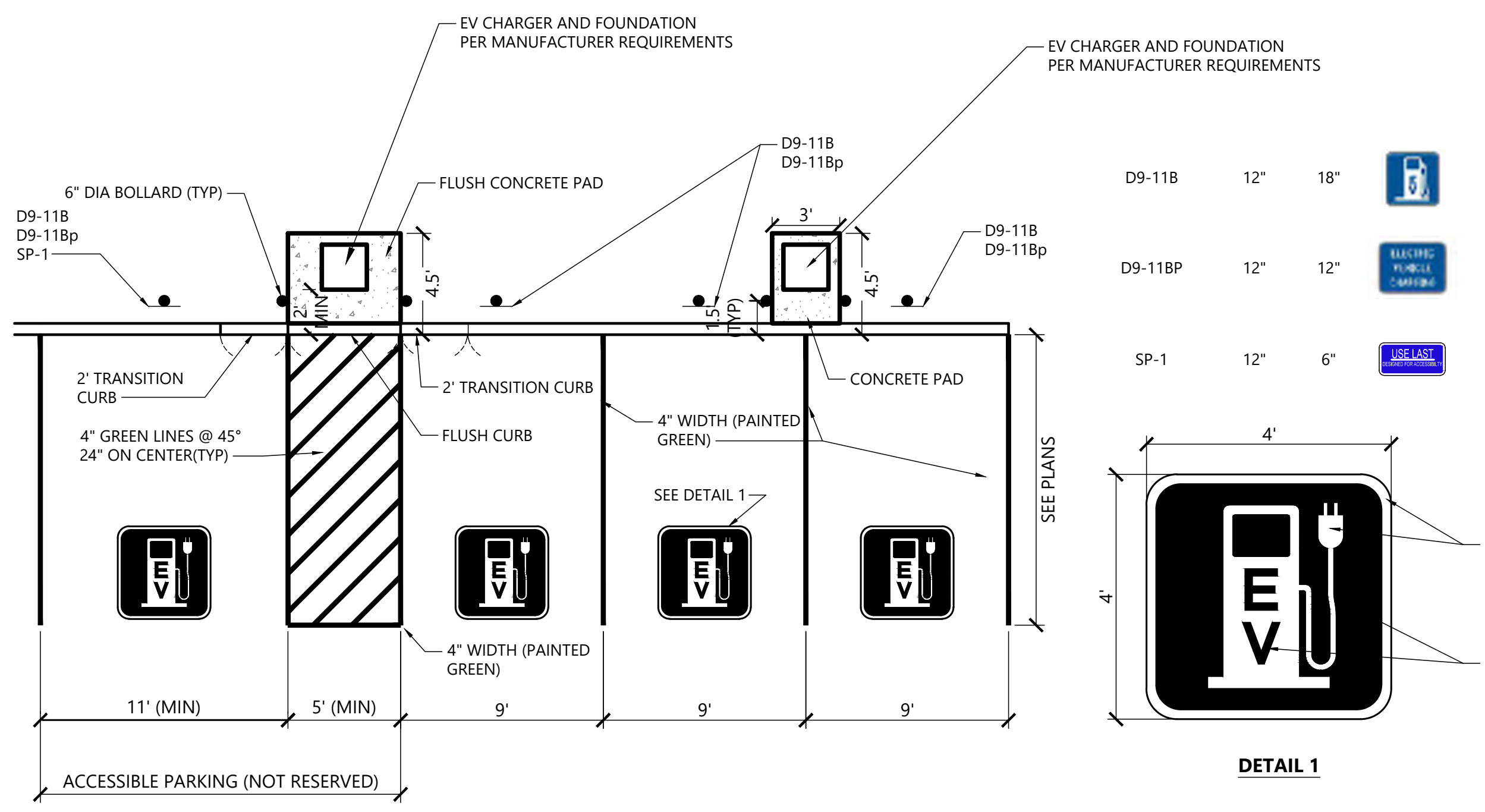
\\vhb.com\gbl\proj\WhitePlains\20849.00 Wilton Cntr Redevelop\cad\ld\Planset\06_20849.00DT.dwg


ROUNDED CONCRETE CAP
CONCRETE FILL
6" DIA. SCHEDULE 40 STEEL PIPE FILLED WITH CONCRETE. COLOR SELECTED BY OWNER/ARCHITECT PAINT PRIME AND FINISH COATS TO BE COMPATIBLE WITH EXTERIOR METAL SURFACES.
FINISHED GRADE SURFACE TREATMENT VARIES
24" DIA. CONCRETE ENCASEMENT
COMPACTED GRAVEL
COMPACTED SUBGRADE
3'-6"
3'-6" MIN
6"

Bollard

12/19

N.T.S. Source: VHB LD_700



D9-11B	12"	18"
D9-11BP	12"	12"
SP-1	12"	6"

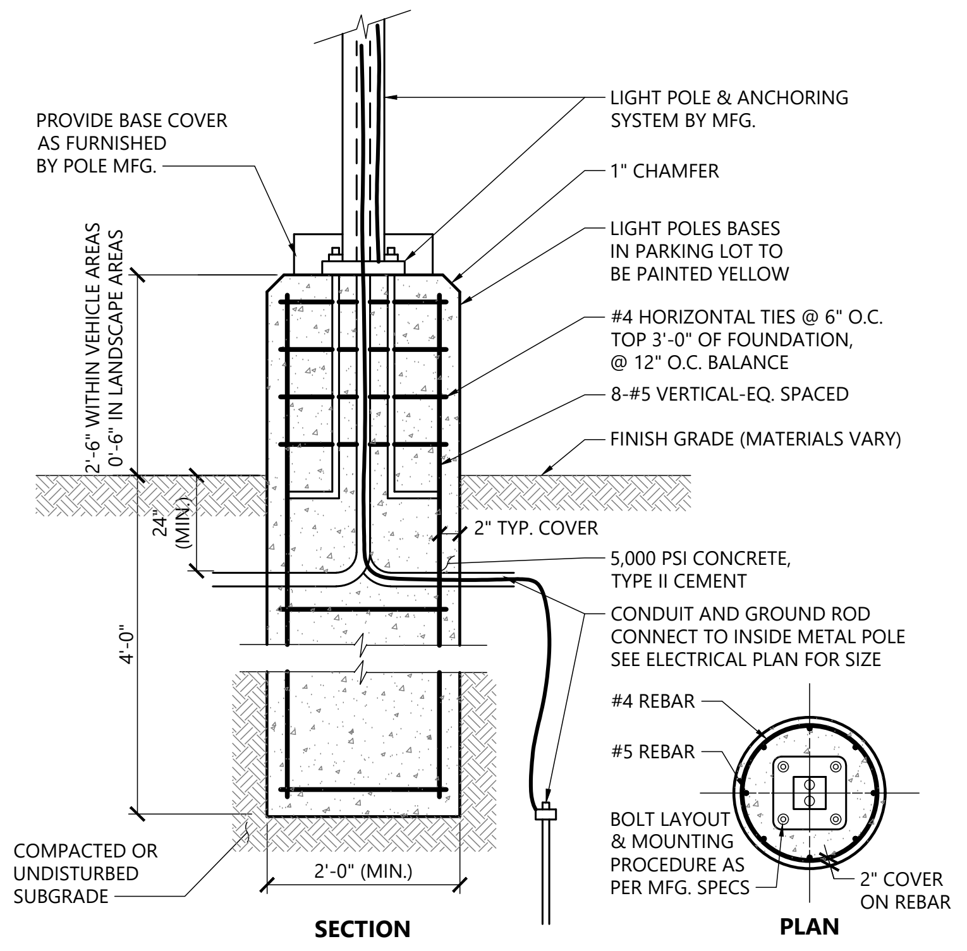
NOTES

1. ALL DIMENSION TO CENTER OF STRIPING.
2. ALL SLOPES THROUGH OUT THE ACCESSIBLE PARKING AND AISLE SHALL NOT EXCEED 1.5%

ELECTRIC VEHICLE CHARGING SPACES

11/22

N.T.S. Source: VHB REV LD_


PROVIDE BASE COVER AS FURNISHED BY POLE MFG.
LIGHT POLE & ANCHORING SYSTEM BY MFG.
1" CHAMFER
LIGHT POLES BASES IN PARKING LOT TO BE PAINTED YELLOW
#4 HORIZONTAL TIES @ 6" O.C. TOP 3'-0" OF FOUNDATION, @ 12" O.C. BALANCE
8-#5 VERTICAL-EQ. SPACED
FINISH GRADE (MATERIALS VARY)
2'-6" WITHIN VEHICLE AREAS
0'-6" IN LANDSCAPE AREAS
24" (MIN.)
2" TYP. COVER
5,000 PSI CONCRETE, TYPE II CEMENT
CONDUIT AND GROUND ROD CONNECT TO INSIDE METAL POLE SEE ELECTRICAL PLAN FOR SIZE
4'-0"
#4 REBAR
#5 REBAR
BOLT LAYOUT & MOUNTING PROCEDURE AS PER MFG. SPECS
2" COVER ON REBAR
COMPACTED OR UNDISTURBED SUBGRADE
2'-0" (MIN.)
SECTION
PLAN

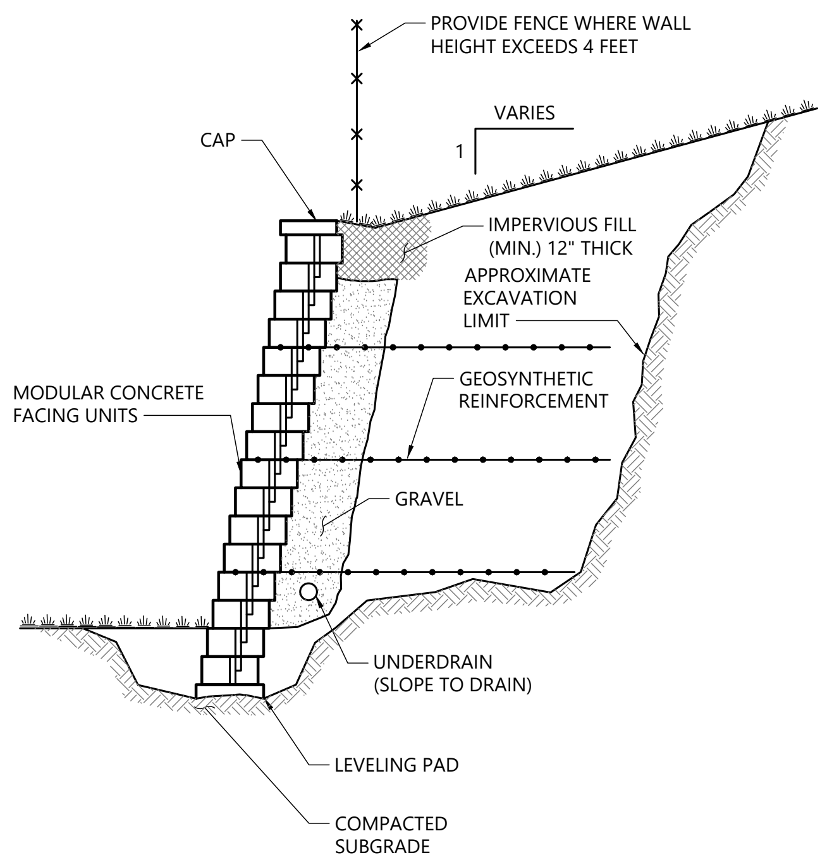
NOTES

LIGHT POLE FOUNDATION DESIGN IS SUBJECT TO CHANGE BASED ON FINAL POLE AND FIXTURE SELECTION AND GEOTECHNICAL SITE INVESTIGATION.

Light Pole Foundation Detail (Up to 15' Pole)

5/23

N.T.S. Source: VHB LD_310A


PROVIDE FENCE WHERE WALL HEIGHT EXCEEDS 4 FEET
VARIES
1
CAP
IMPERVIOUS FILL (MIN.) 12" THICK
APPROXIMATE EXCAVATION LIMIT
MODULAR CONCRETE FACING UNITS
GEOSYNTHETIC REINFORCEMENT
GRAVEL
UNDERDRAIN (SLOPE TO DRAIN)
LEVELING PAD
COMPACTED SUBGRADE

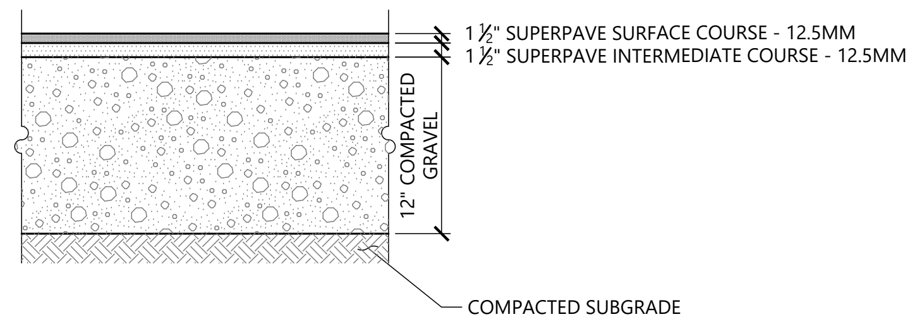
NOTES

DETAIL PROVIDED FOR GENERAL INFORMATION ONLY. STAMPED FINAL DESIGN OF MODULAR WALL SYSTEM TO BE PROVIDED BY CONTRACTOR BASED ON GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

Modular Retaining Wall

10/20

N.T.S. Source: VHB LD_750


1½" SUPERPAVE SURFACE COURSE - 12.5MM
1½" SUPERPAVE INTERMEDIATE COURSE - 12.5MM
12" COMPACTED GRAVEL
COMPACTED SUBGRADE

STANDARD DUTY FLEXIBLE PAVEMENT

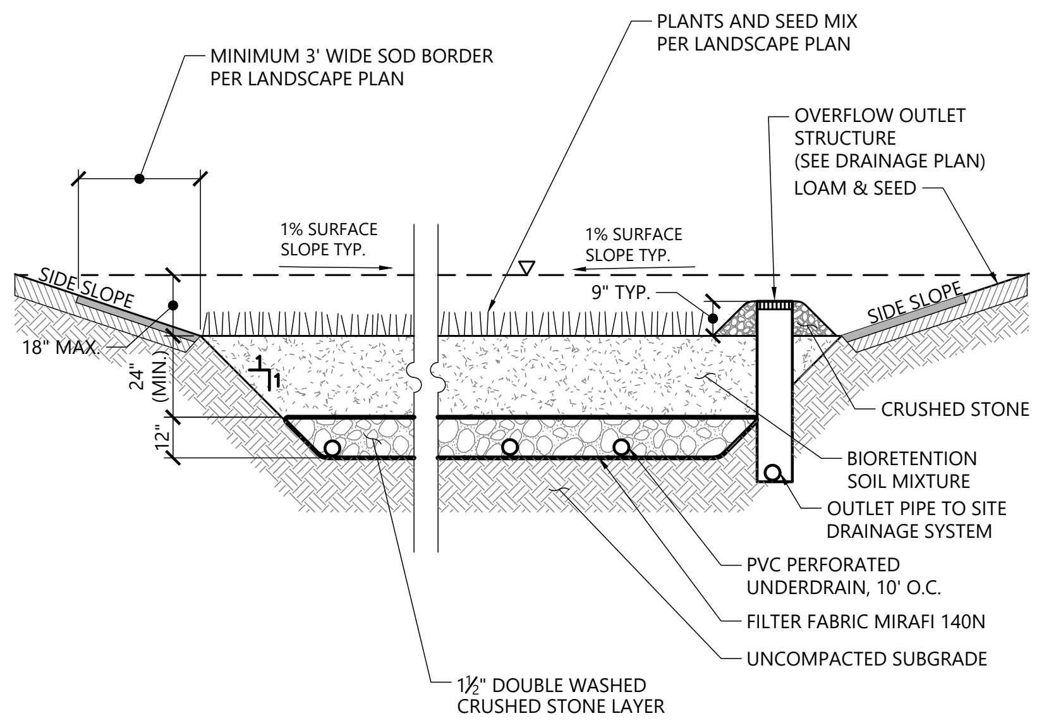
NOTES

PAVEMENT SECTIONS ARE SUBJECT TO CHANGE AND WILL BE BASED ON THE RESULTS OF FURTHER GEOTECHNICAL INVESTIGATIONS.

Bituminous Concrete Pavement Sections

7/22

N.T.S. Source: VHB REV LD_430


MINIMUM 3' WIDE SOD BORDER PER LANDSCAPE PLAN
PLANTS AND SEED MIX PER LANDSCAPE PLAN
OVERFLOW OUTLET STRUCTURE (SEE DRAINAGE PLAN)
LOAM & SEED
1% SURFACE SLOPE TYP.
1% SURFACE SLOPE TYP.
9" TYP.
SIDE SLOPE
SIDE SLOPE
18" MAX.
24" (MIN.)
12"
1
1
CRUSHED STONE
BIORETENTION SOIL MIXTURE
OUTLET PIPE TO SITE DRAINAGE SYSTEM
PVC PERFORATED UNDERDRAIN, 10' O.C.
FILTER FABRIC MIRAFI 140N
UNCOMPACTED SUBGRADE
1½" DOUBLE WASHED CRUSHED STONE LAYER

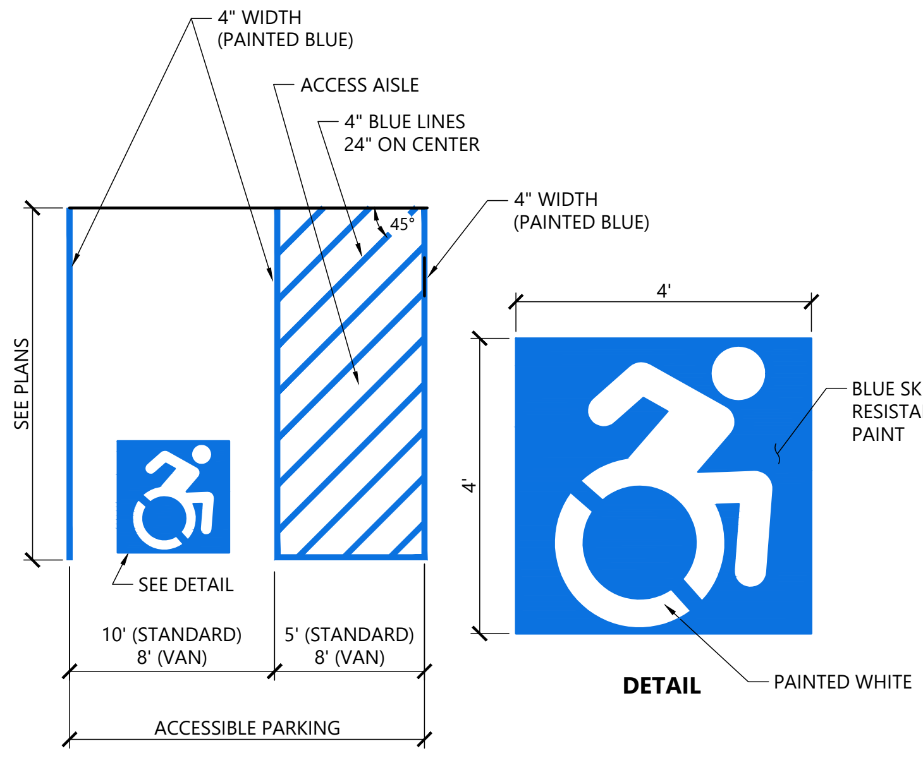
NOTES

1. INSTALL UNDERDRAINS AT 10 FEET ON CENTER. CONNECT TO DRAINS PER PLAN.
2. SIDE SLOPES SHALL BE 3:1 MAX. 2% MIN.

Rain Garden

3/20

N.T.S. Source: VHB REV LD_199



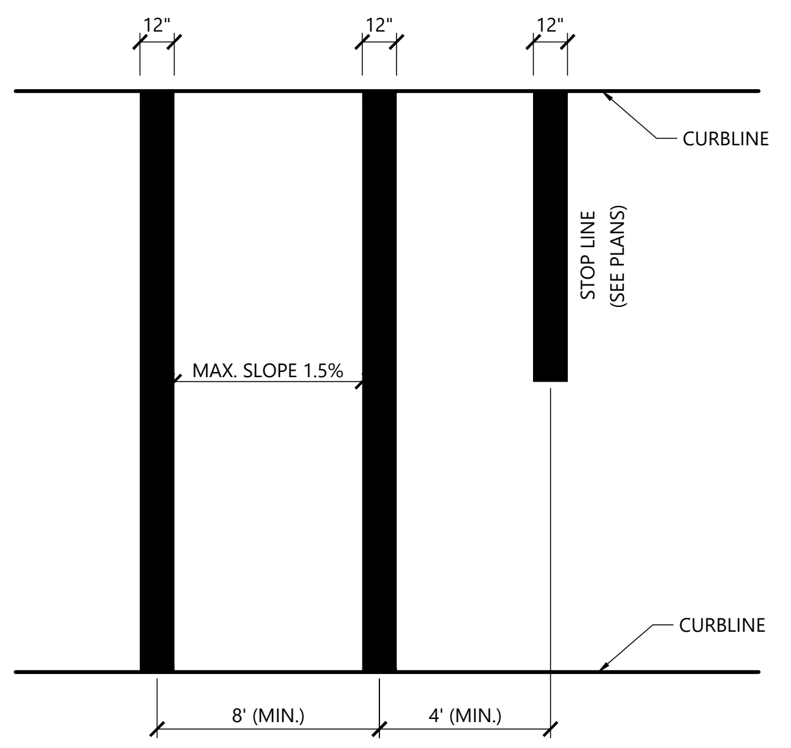
NOTES

1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.
2. 8' STALL WIDTH REFERS TO 8' CLEAR BETWEEN INSIDE EDGES OF PAVEMENT MARKINGS.
3. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.5%.
4. THE ACCESSIBLE SYMBOL DEPICTED ABOVE DOES NOT COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND IS SHOWN FOR COMPLIANCE WITH STATE AND LOCAL REGULATIONS ONLY.

Accessible Parking Space

12/19

N.T.S. Source: VHB REV LD_552D



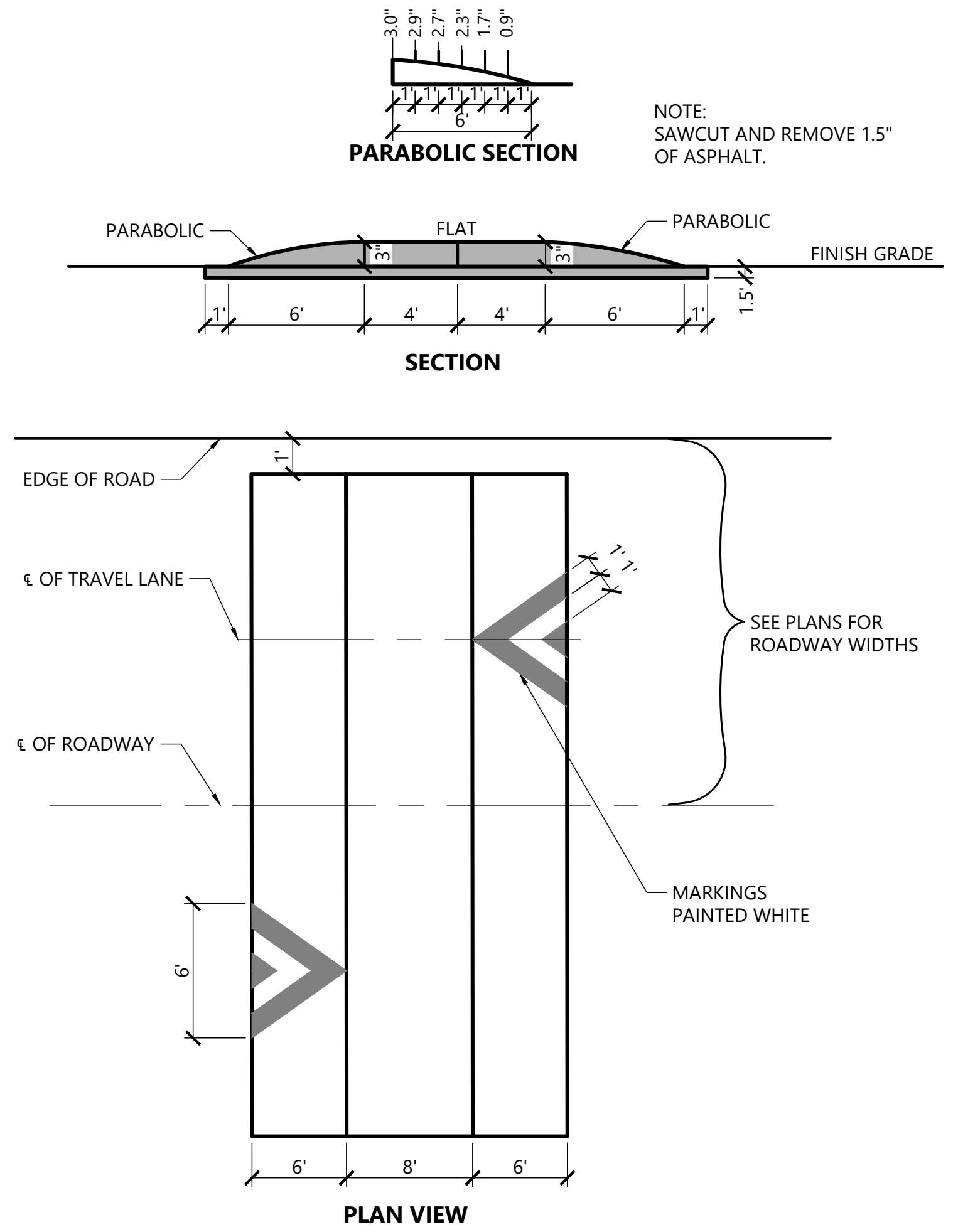
NOTES

1. TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6 INCH LINES) WILL BE ACCEPTED.
2. CROSS WALK SIDESLOPE SHALL NOT EXCEED 1.5%.

Crosswalk

12/19

N.T.S. Source: VHB LD_553B

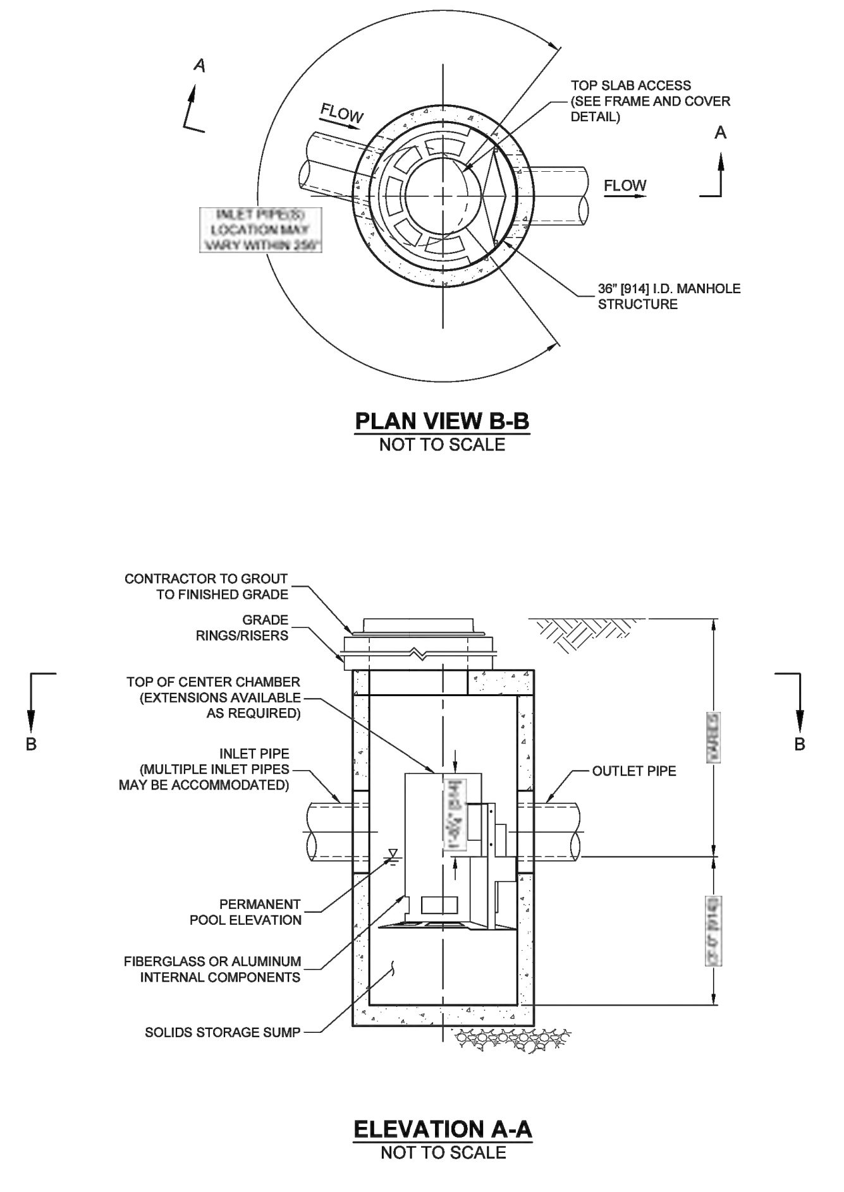


NOTE:
SAWCUT AND REMOVE 1.5" OF ASPHALT.

Speed Table

12/19

N.T.S. Source: VHB LD_705


A
A
FLOW
FLOW
TOP SLAB ACCESS (SEE FRAME AND COVER DETAIL)
INLET PIPE(S) LOCATION MAY VARY WITHIN 250°
36" [914] I.D. MANHOLE STRUCTURE
B
B
CONTRACTOR TO GROUT TO FINISHED GRADE
GRADE RINGS/RISERS
TOP OF CENTER CHAMBER (EXTENSIONS AVAILABLE AS REQUIRED)
INLET PIPE (MULTIPLE INLET PIPES MAY BE ACCOMMODATED)
OUTLET PIPE
VARIES
PERMANENT POOL ELEVATION
FIBERGLASS OR ALUMINUM INTERNAL COMPONENTS
SOLIDS STORAGE SUMP

PLAN VIEW B-B
NOT TO SCALE

ELEVATION A-A
NOT TO SCALE

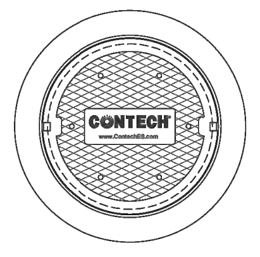
CASCADE
separator™

C:\USERS\JSTACKHOUSE\ONEDRIVE - CONTECH ENGINEERED SOLUTIONS\DESKTOP\DESKTOP FILES\STATES\MASSACHUSETTS\1_STANDARD DETAILS\CASCADE\CS-3-DTL.DWG 9/9/2020 9:09 PM

CASCADE SEPARATOR DESIGN NOTES

CS-3 RATED TREATMENT CAPACITY IS 1.01 CFS, OR PER LOCAL REGULATIONS.
THE STANDARD CS-3 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
NOTES / SPECIAL REQUIREMENTS:			

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 LLC REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR 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. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

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 CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
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.

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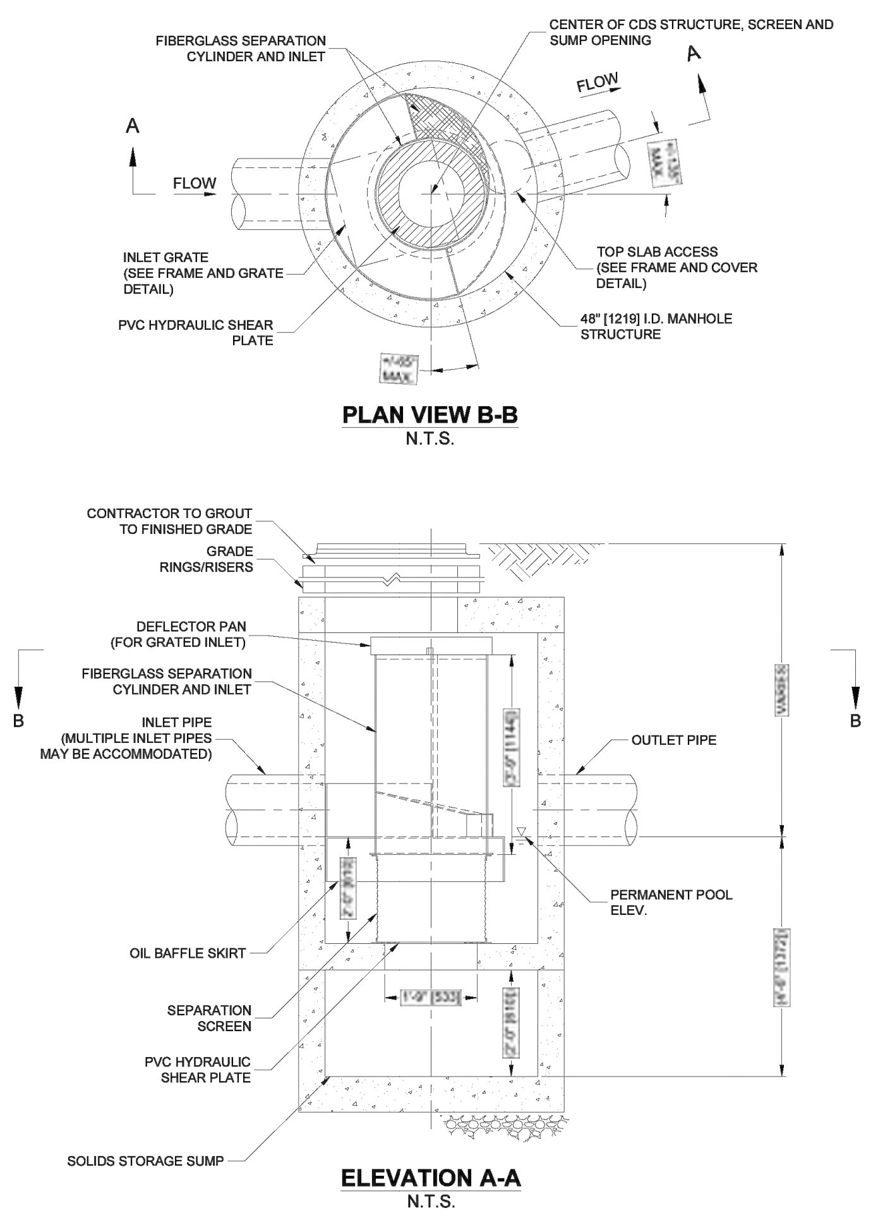
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CS-3
CASCADE SEPARATOR
STANDARD DETAIL


FIBERGLASS SEPARATION CYLINDER AND INLET
CENTER OF CDS STRUCTURE, SCREEN AND SUMP OPENING
A
A
FLOW
FLOW
+/-135° MAX.
INLET GRATE (SEE FRAME AND GRATE DETAIL)
TOP SLAB ACCESS (SEE FRAME AND COVER DETAIL)
PVC HYDRAULIC SHEAR PLATE
48" [1219] I.D. MANHOLE STRUCTURE
+/-65° MAX.
CONTRACTOR TO GROUT TO FINISHED GRADE
GRADE RINGS/RISERS
DEFLECTOR PAN (FOR GRATED INLET)
FIBERGLASS SEPARATION CYLINDER AND INLET
B
B
INLET PIPE (MULTIPLE INLET PIPES MAY BE ACCOMMODATED)
OUTLET PIPE
VARIES
3'-9" [1143]
2'-0" [610]
PERMANENT POOL ELEV.
OIL BAFFLE SKIRT
SEPARATION SCREEN
1'-9" [533]
2'-0" [610]
4'-4" [1321]
PVC HYDRAULIC SHEAR PLATE
SOLIDS STORAGE SUMP

PLAN VIEW B-B
N.T.S.

ELEVATION A-A
N.T.S.

CDS
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,788,848; 6,641,720; 6,511,595; 6,581,783; RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

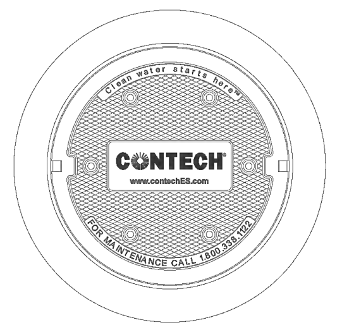
\AD.CONTECH-CPI.COM\ROOT\STORMWATER\JURISDICTIONS\USA\MA_SDE DESIGN TOOLS_STANDARD DETAILS\CDS2015-4G-DTL.DWG 8/6/2018 4:23 PM

CDS2015-4G DESIGN NOTES

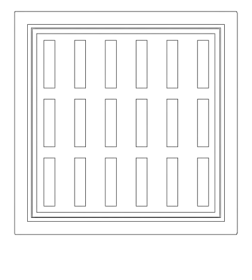
CDS2015-4G RATED TREATMENT CAPACITY IS 1.4 CFS, OR PER LOCAL REGULATIONS.

THE STANDARD CDS2015-4G CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES



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



FRAME AND GRATE
(24" SQUARE)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)	*		
PEAK FLOW RATE (CFS OR L/s)	*		
RETURN PERIOD OF PEAK FLOW (YRS)	*		
SCREEN APERTURE (2400 OR 4700)	*		
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
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 LLC REPRESENTATIVE. www.ContechES.com
3. CDS 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 HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO..
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

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.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
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.

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800-338-1122 513-645-7000 513-645-7993 FAX

CDS2015-4G
ONLINE CDS
STANDARD DETAIL

vhb.com
vhb
100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

21-23 River Rd Redevelopment

21 River Road
Wilton, Connecticut

No.	Revision	Date	Appvd.

Designed by NP/KE
Checked by MRG

Issued for Local Approvals
Date April 23, 2024

Not Approved for Construction

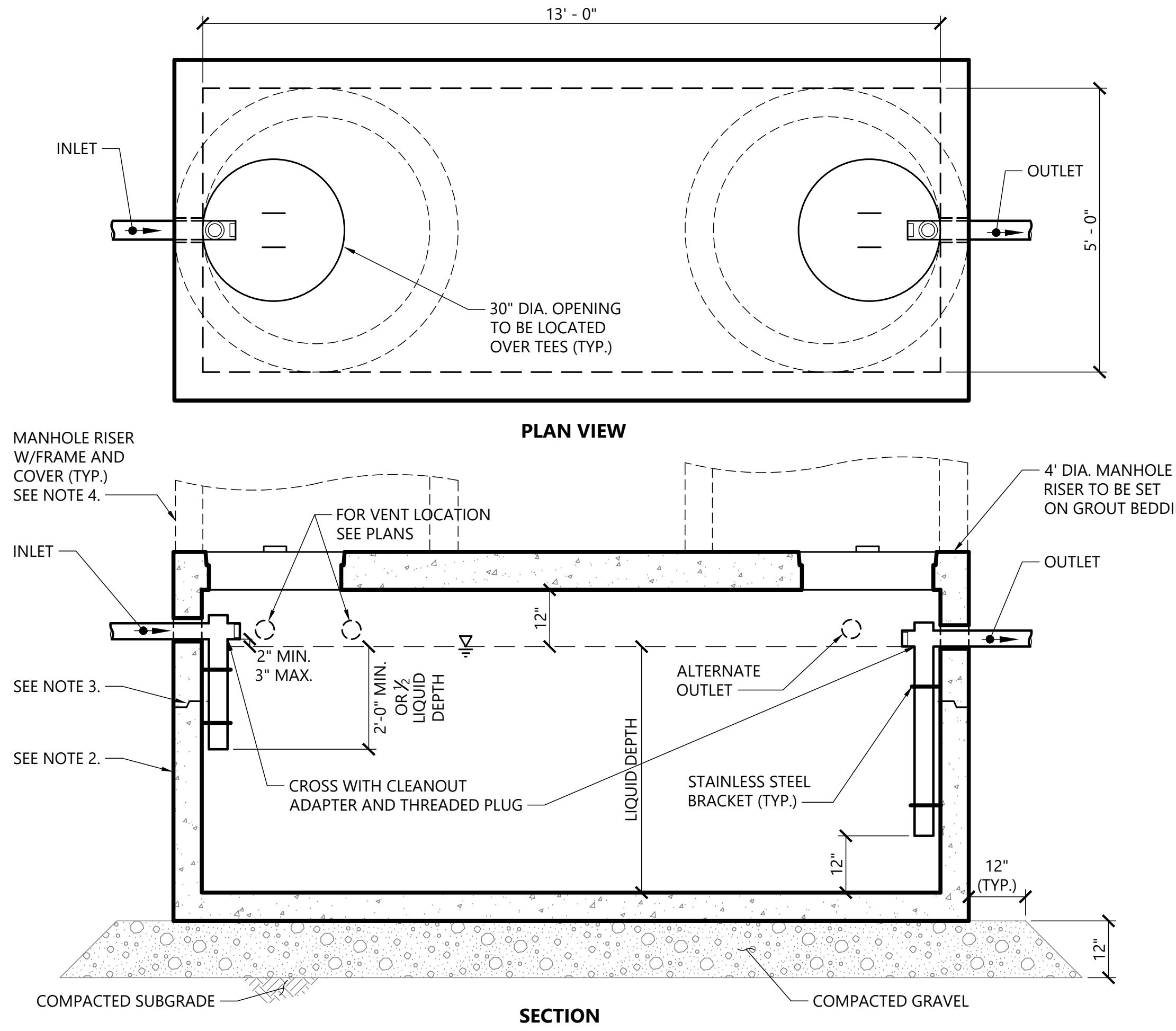
Drawing Title
Site Details 2

Drawing Number
C-6.1

No. 27233

Sheet 09 of 11

Project Number
20849.00


13' - 0"
INLET
OUTLET
5' - 0"
30" DIA. OPENING TO BE LOCATED OVER TEES (TYP.)
PLAN VIEW
MANHOLE RISER W/FRAME AND COVER (TYP.) SEE NOTE 4.
FOR VENT LOCATION SEE PLANS
4' DIA. MANHOLE RISER TO BE SET ON GROUT BEDDING
INLET
OUTLET
12"
2" MIN. 3" MAX.
2'-0" MIN. OR ½ LIQUID DEPTH
ALTERNATE OUTLET
SEE NOTE 3.
SEE NOTE 2.
LIQUID DEPTH
CROSS WITH CLEANOUT ADAPTER AND THREADED PLUG
STAINLESS STEEL BRACKET (TYP.)
12"
12" (TYP.)
12"
COMPACTED SUBGRADE
COMPACTED GRAVEL
SECTION

GREASE TRAP

SIZE (GAL.)	LIQUID DEPTH
2,000	4'-4"
2,500	5'-4"
3,000	6'-5"
3,500	7'-6"

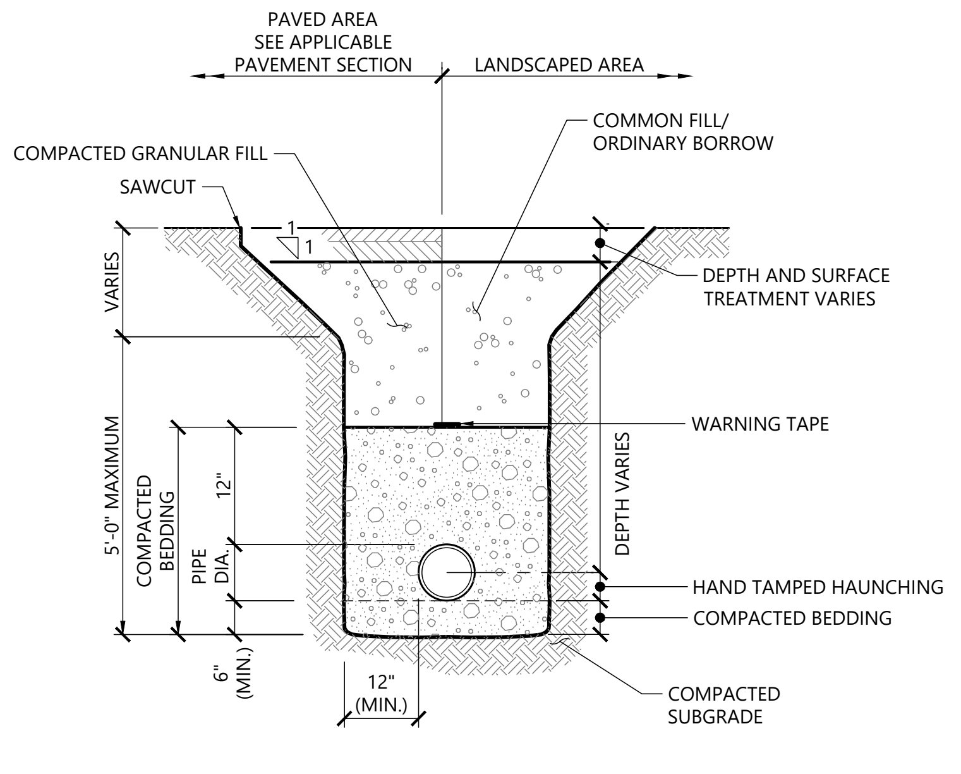
NOTES

1. STRUCTURE SHALL BE DESIGNED FOR HS-20 LOADING.
2. EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. STANDARD 30-INCH SEWER MANHOLE FRAME AND COVER SHALL BE LOCATED OVER CROSSES AND SET IN FULL MORTAR BED. ADJUST TO GRADE WITH SEWER BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)
5. PIPING SHALL BE SCH 40 PVC WITH SOLVENT WELDED JOINTS. INTERNAL PIPE DIAMETER SHALL BE SAME SIZE AS OUTLET PIPE.
6. FINAL DESIGN OF GREASE TRAP TO BE BY PLUMBING ENGINEER.
7. THE INSTALLATION OF GREASE TRAP, THE PIPING TO AND 10 FEET BEYOND IS BY PLUMBER.

Precast Concrete Grease Trap (GT)

12/19

N.T.S. Source: VHB LD_210



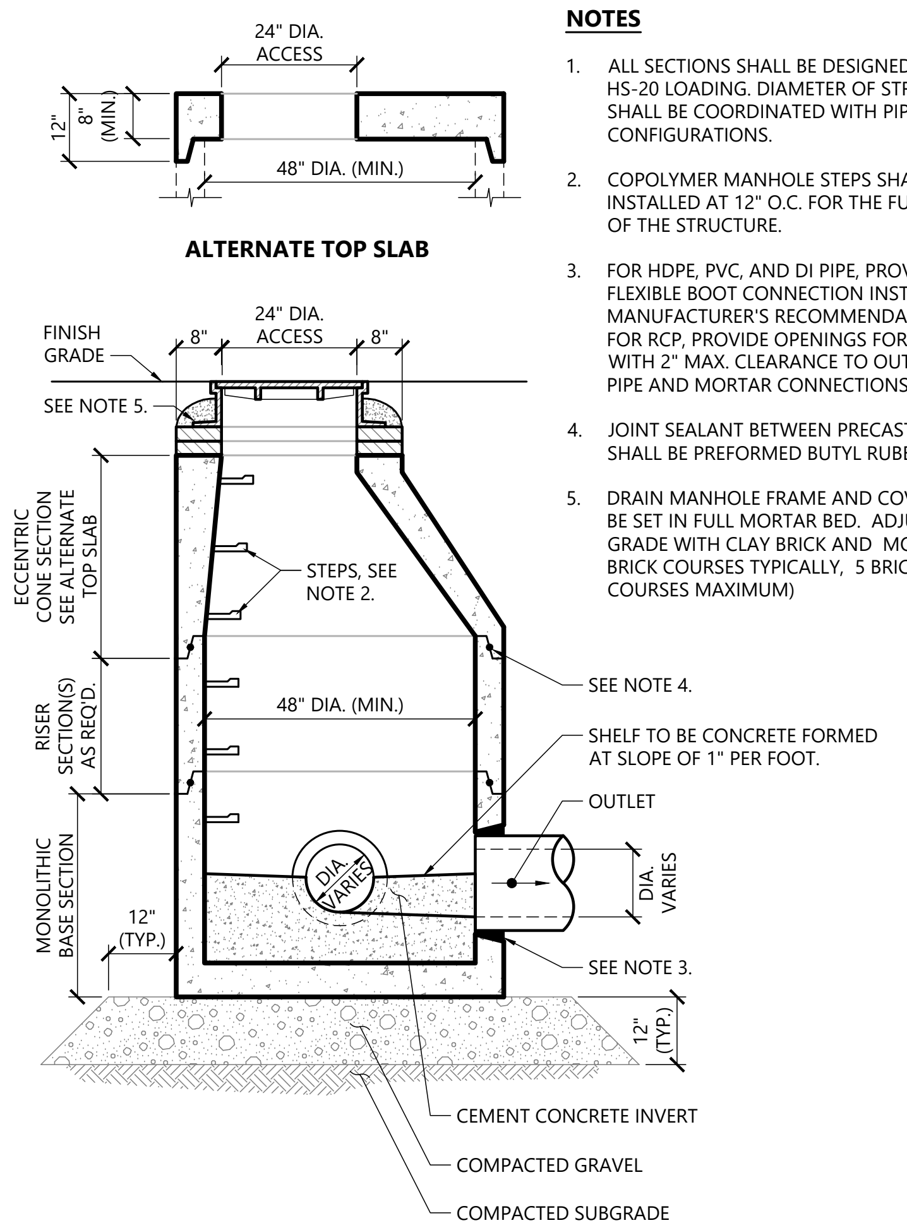
NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
3. COMPACTED GRANULAR FILL MAY CONSIST OF GRAVEL, CRUSHED STONE, SAND, OR OTHER MATERIAL AS APPROVED BY ENGINEER.

Utility Trench

11/19

N.T.S. Source: VHB LD_300



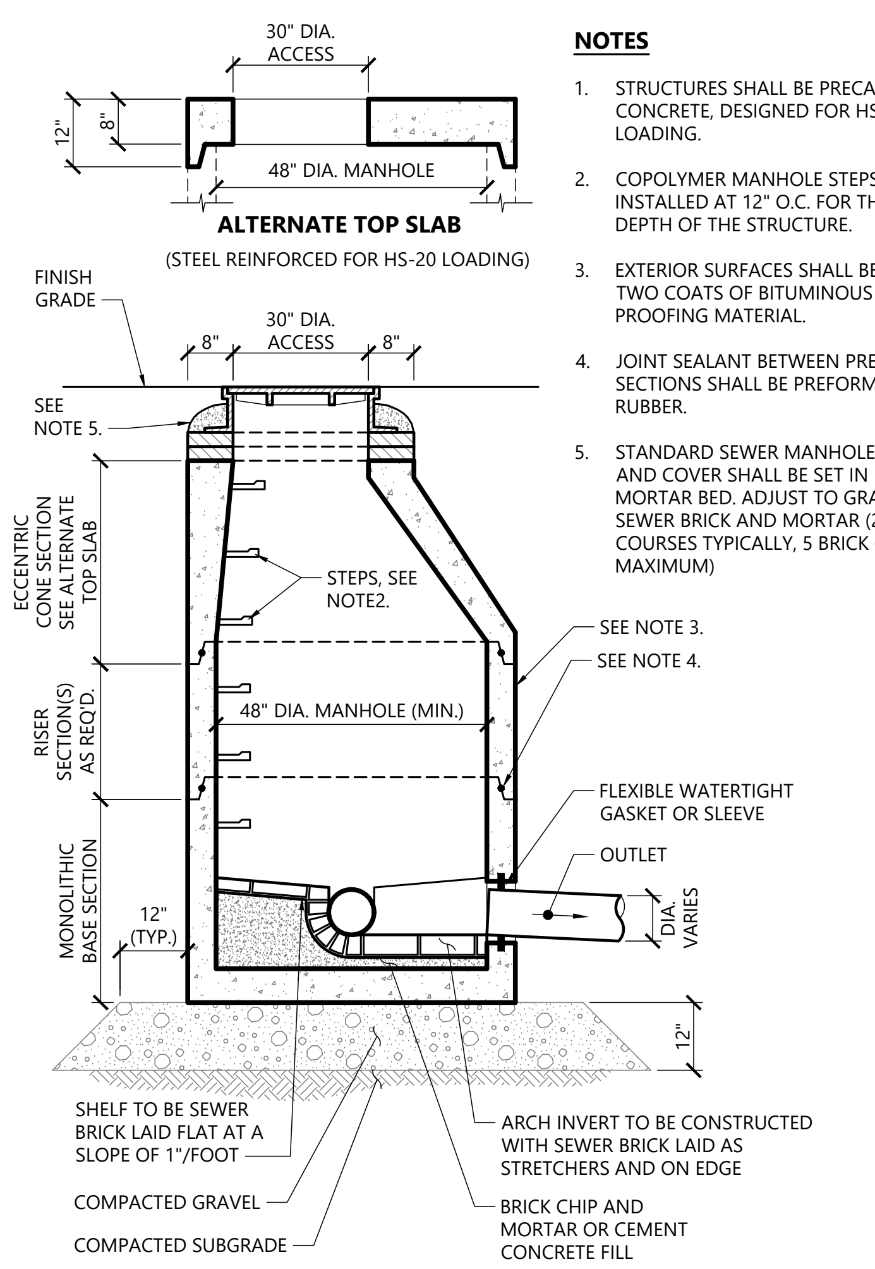
NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

Drain Manhole (DMH)

11/19

N.T.S. Source: VHB LD_115


30" DIA. ACCESS
12"
8"
48" DIA. MANHOLE
ALTERNATE TOP SLAB
(STEEL REINFORCED FOR HS-20 LOADING)
FINISH GRADE
8"
30" DIA. ACCESS
8"
SEE NOTE 5.
ECCENTRIC CONE SECTION SEE ALTERNATE TOP SLAB
STEPS, SEE NOTE2.
SEE NOTE 3.
SEE NOTE 4.
RISER SECTION(S) AS REQ'D.
48" DIA. MANHOLE (MIN.)
FLEXIBLE WATERTIGHT GASKET OR SLEEVE
OUTLET
MONOLITHIC BASE SECTION
12" (TYP.)
DIA. VARIES
12"
SHELF TO BE SEWER BRICK LAID FLAT AT A SLOPE OF 1"/FOOT
COMPACTED GRAVEL
COMPACTED SUBGRADE
ARCH INVERT TO BE CONSTRUCTED WITH SEWER BRICK LAID AS STRETCHERS AND ON EDGE
BRICK CHIP AND MORTAR OR CEMENT CONCRETE FILL

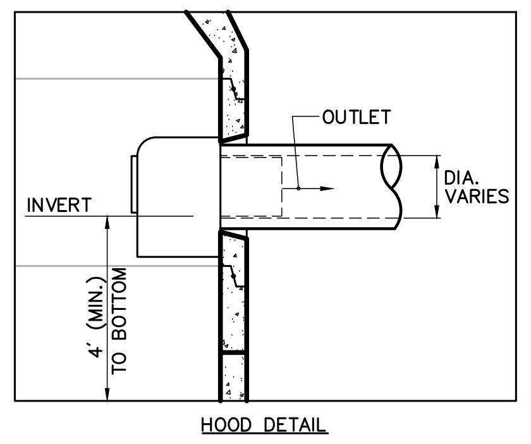
NOTES

1. STRUCTURES SHALL BE PRECAST CONCRETE, DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH SEWER BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

Sanitary Sewer Manhole (SMH)

1/16

N.T.S. Source: VHB LD_200

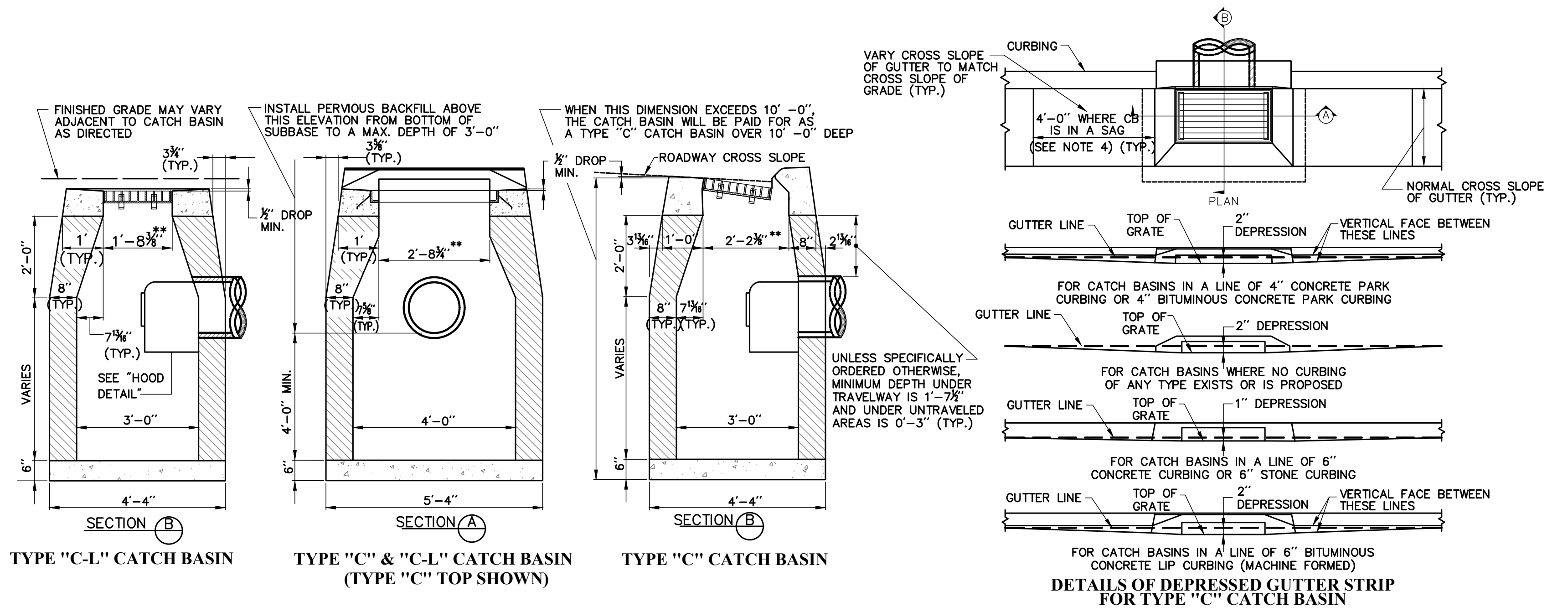


HOOD DETAIL

NOTE:
HOODS TO BE INSTALLED ON OUTLET PIPE ONLY. STRUCTURES WITH MULTIPLE INLETS TO HAVE HOOD ON OUTLET PIPE ONLY.

Notes:

1. USE APPROPRIATE CONCRETE TOP FOR CURBING SHOWN ON PLANS. IF CURBING IS NOT SPECIFIED ON THE PLANS, IT SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
2. USE 6'–0" ON UPGRADE SIDE OF CONTINUOUS GRADE AND 1'–0" ON DOWNGRADE SIDE OF CONTINUOUS GRADE OR AS DIRECTED.
3. UNLESS OTHERWISE APPROVED, PRECAST UNITS SHALL BE USED.
4. IF MASONRY UNITS ARE REQUIRED, THE BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE OVER ALL DIMENSIONS SHOWN HERE AND SECTION 5.07 OF THE STATE OF CONNECTICUT'S STANDARD SPECIFICATIONS. CORBELLING SHALL BE PERMITTED TO A MAXIMUM OF 3". NO PROJECTION SHALL EXTEND INSIDE THE LIMITS NOTED BY **.
5. WALL THICKNESS OF ALL CB'S OVER 10' DEEP SHALL BE INCREASED TO 12" THICK. INSIDE DIMENSION SHALL REMAIN THE SAME. (12" THICKNESS WILL START AFTER THE FIRST 10').
6. TO CONVEY SUBSURFACE DRAINAGE, OPENINGS SHALL BE FORMED IN THE FOUR WALLS AT OR IMMEDIATELY ABOVE THE BOTTOM OF THE PERVIOUS BACKFILL.
7. MINIMUM CONCRETE COMPRESSIVE STRENGTH OF F'c = 4000 PSI SHALL BE OBTAINED PRIOR TO SHIPPING.
8. LATEST STATE OF CONNECTICUT'S STANDARD SPECIFICATIONS AND SUPPLEMENTALS SHALL GOVERN.


FINISHED GRADE MAY VARY ADJACENT TO CATCH BASIN AS DIRECTED
INSTALL PERVIOUS BACKFILL ABOVE THIS ELEVATION FROM BOTTOM OF SUBBASE TO A MAX. DEPTH OF 3'–0"
WHEN THIS DIMENSION EXCEEDS 10' –0", THE CATCH BASIN WILL BE PAID FOR AS A TYPE "C" CATCH BASIN OVER 10' –0" DEEP
3¾" (TYP.)
½" DROP MIN.
3⅝" (TYP.)
½" DROP MIN.
ROADWAY CROSS SLOPE
1' (TYP.)
1'–8⅜"**
2'–8¾"**
3
3¹³⁄₁₆"
1'–0
2'–2⅜"**
8"
2¹³⁄₁₆"
8" (TYP.)
7¹³⁄₁₆" (TYP.)
7⅝" (TYP.)
SEE "HOOD DETAIL"
2'–0"
VARIES
4'–0" MIN.
3'–0"
4'–0"
6"
4'–4"
5'–4"
4'–4"
UNLESS SPECIFICALLY ORDERED OTHERWISE, MINIMUM DEPTH UNDER TRAVELWAY IS 1'–7½" AND UNDER UNTRAVELED AREAS IS 0'–3" (TYP.)
SECTION B
SECTION A
SECTION B
VARY CROSS SLOPE OF GUTTER TO MATCH CROSS SLOPE OF GRADE (TYP.)
CURBING
4'–0" WHERE CB IS IN A SAG (SEE NOTE 4) (TYP.)
B
A
PLAN
NORMAL CROSS SLOPE OF GUTTER (TYP.)
GUTTER LINE
TOP OF GRATE
2" DEPRESSION
VERTICAL FACE BETWEEN THESE LINES
FOR CATCH BASINS IN A LINE OF 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING
GUTTER LINE
TOP OF GRATE
2" DEPRESSION
FOR CATCH BASINS WHERE NO CURBING OF ANY TYPE EXISTS OR IS PROPOSED
GUTTER LINE
TOP OF GRATE
1" DEPRESSION
FOR CATCH BASINS IN A LINE OF 6" CONCRETE CURBING OR 6" STONE CURBING
GUTTER LINE
TOP OF GRATE
2" DEPRESSION
VERTICAL FACE BETWEEN THESE LINES
FOR CATCH BASINS IN A LINE OF 6" BITUMINOUS CONCRETE LIP CURBING (MACHINE FORMED)

TYPE "C-L" CATCH BASIN

TYPE "C" & "C-L" CATCH BASIN (TYPE "C" TOP SHOWN)

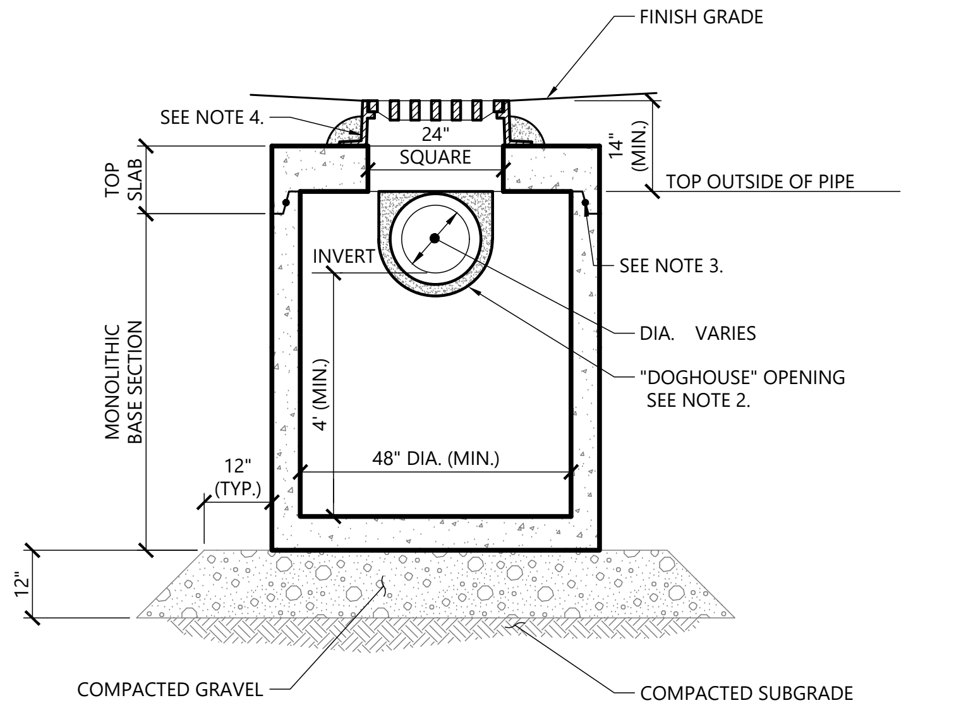
TYPE "C" CATCH BASIN

DETAILS OF DEPRESSED GUTTER STRIP FOR TYPE "C" CATCH BASIN

ROADWAY CROSS SLOPE

Miscellaneous Connecticut Detail Type "C" & "C-L" Catch Basins

N.T.S.



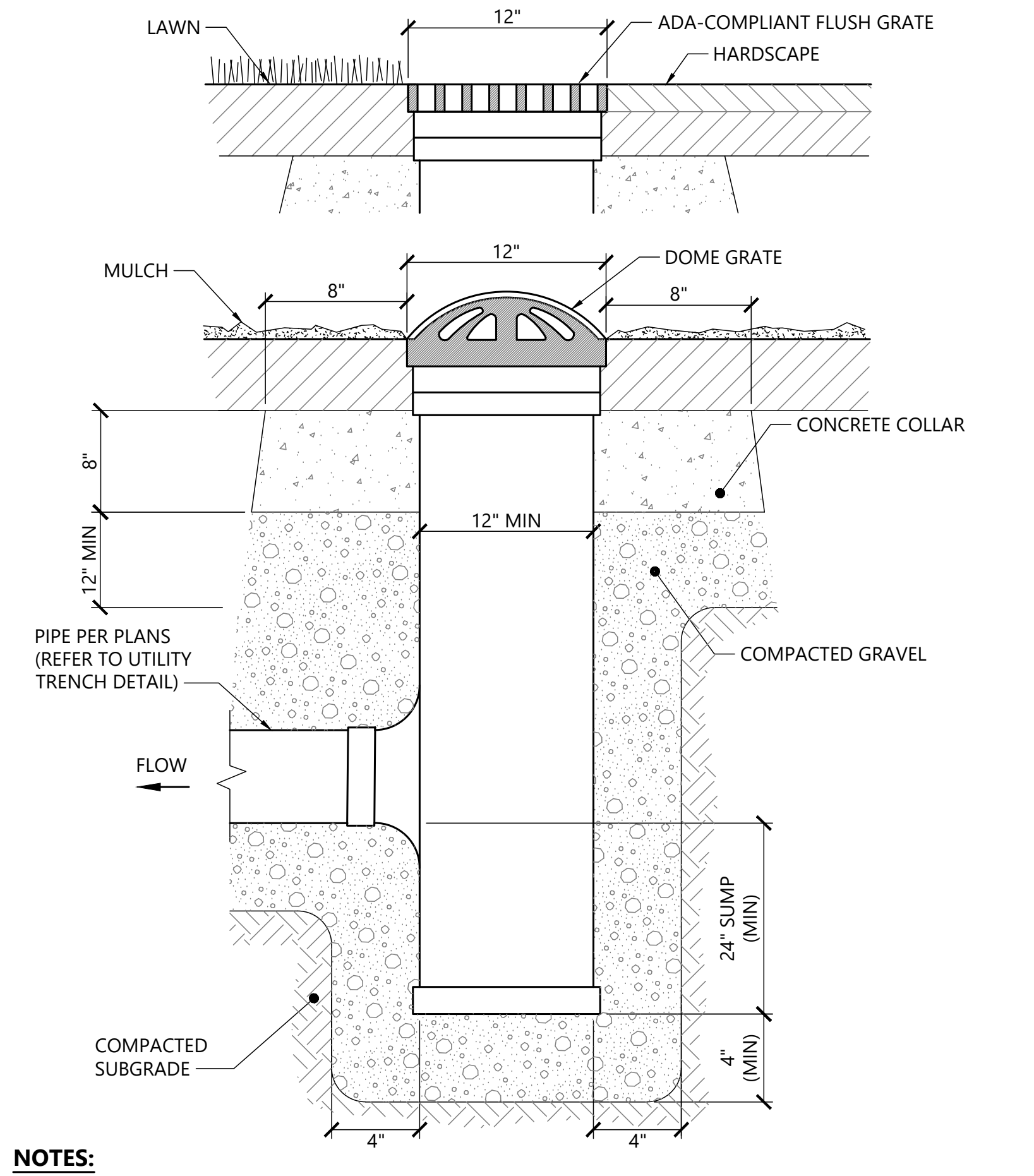
NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE DOGHOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHALL NOT REST DIRECTLY ON PIPE. GROUT ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE (4"DEPTH) SHALL BE SET IN FULL MORTAR BED.
5. ADJUST TO FINISH GRADE WITH CLAY BRICK AND MORTAR AS REQUIRED.

Catch Basin (CB) Shallow Cover

1/16

N.T.S. Source: BY OTHERS Source: VHB LD_104



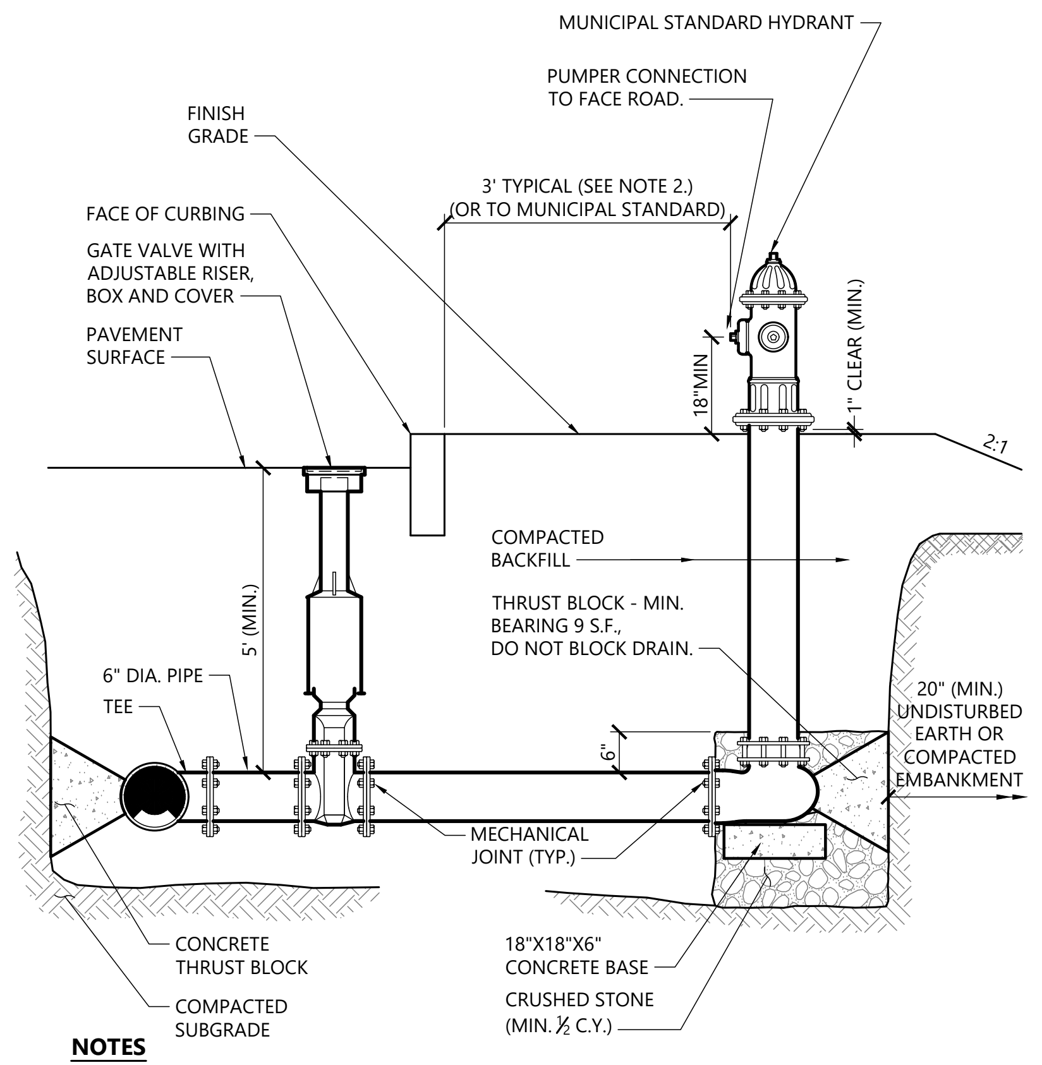
NOTES:

1. AREA DRAINS SHALL BE NYLOPLAST 12" DIAMETER DRAIN BASIN, OR APPROVED EQUAL.
2. GRATES SHALL BE NYLOPLAST 12" PEDESTRIAN MODEL 1299CGP OR 12" DOME GRATE MODEL 1299CGD (OR APPROVED EQUAL).

Area Drain (AD) Type 1

12/19

N.T.S. Source: VHB LD_193


MUNICIPAL STANDARD HYDRANT
PUMPER CONNECTION TO FACE ROAD.
FINISH GRADE
3' TYPICAL (SEE NOTE 2.) (OR TO MUNICIPAL STANDARD)
FACE OF CURBING
GATE VALVE WITH ADJUSTABLE RISER, BOX AND COVER
PAVEMENT SURFACE
18"MIN
1" CLEAR (MIN.)
2:1
COMPACTED BACKFILL
THRUST BLOCK - MIN. BEARING 9 S.F., DO NOT BLOCK DRAIN.
5' (MIN.)
6" DIA. PIPE
TEE
6"
20" (MIN.) UNDISTURBED EARTH OR COMPACTED EMBANKMENT
MECHANICAL JOINT (TYP.)
CONCRETE THRUST BLOCK
COMPACTED SUBGRADE
18"X18"X6" CONCRETE BASE
CRUSHED STONE (MIN. ½ C.Y.)

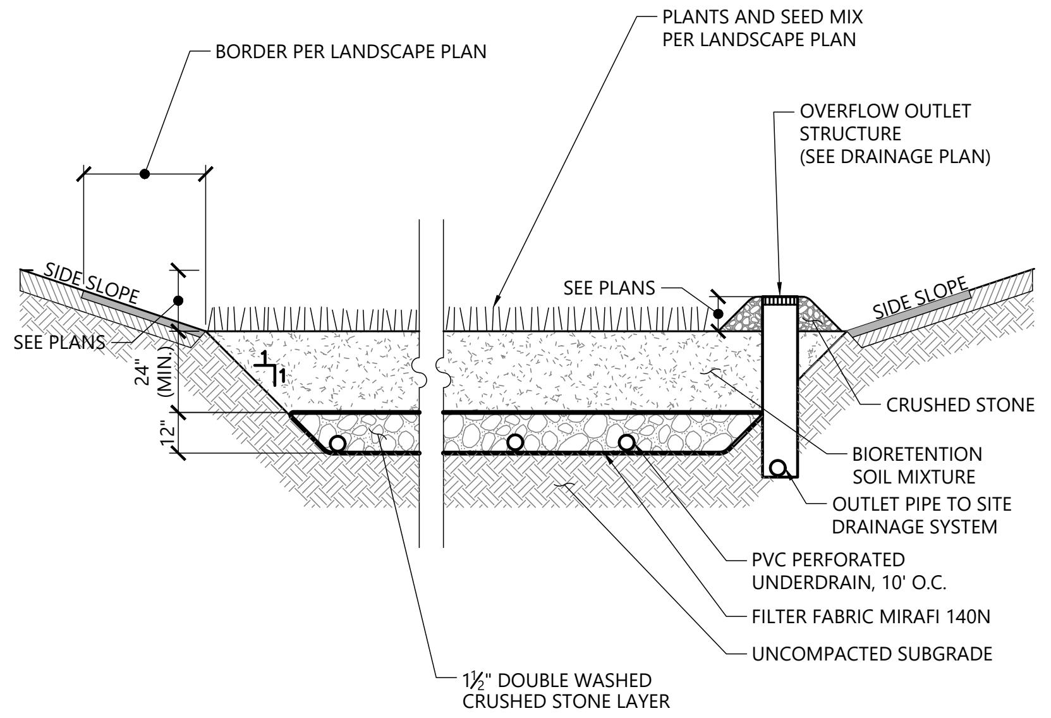
NOTES

1. CONCRETE THRUST BLOCKS TO BE USED ONLY WHERE THEY CAN BEAR ON UNDISTURBED EARTH AS SHOWN. USE CLAMPS AND TIE RODS OR OTHER ACCEPTABLE METHOD OF JOINT RESTRAINT WHERE SOIL CONDITIONS PROHIBIT THE USE OF THRUST BLOCKS.
2. HYDRANT IN SIDEWALK AREAS TO BE LOCATED TO PROVIDE MINIMUM CLEAR SIDEWALK PASSAGE WIDTH OF 3 FEET AT HYDRANT.
3. A 36-INCH CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT UNLESS OTHERWISE APPROVED BY AUTHORITY HAVING JURISDICTION.

Hydrant Construction

12/19

N.T.S. Source: VHB LD_250


BORDER PER LANDSCAPE PLAN
PLANTS AND SEED MIX PER LANDSCAPE PLAN
OVERFLOW OUTLET STRUCTURE (SEE DRAINAGE PLAN)
SIDE SLOPE
SEE PLANS
SEE PLANS
SIDE SLOPE
24" (MIN.)
12"
1
1
CRUSHED STONE
BIORETENTION SOIL MIXTURE
OUTLET PIPE TO SITE DRAINAGE SYSTEM
PVC PERFORATED UNDERDRAIN, 10' O.C.
FILTER FABRIC MIRAFI 140N
UNCOMPACTED SUBGRADE
1½" DOUBLE WASHED CRUSHED STONE LAYER

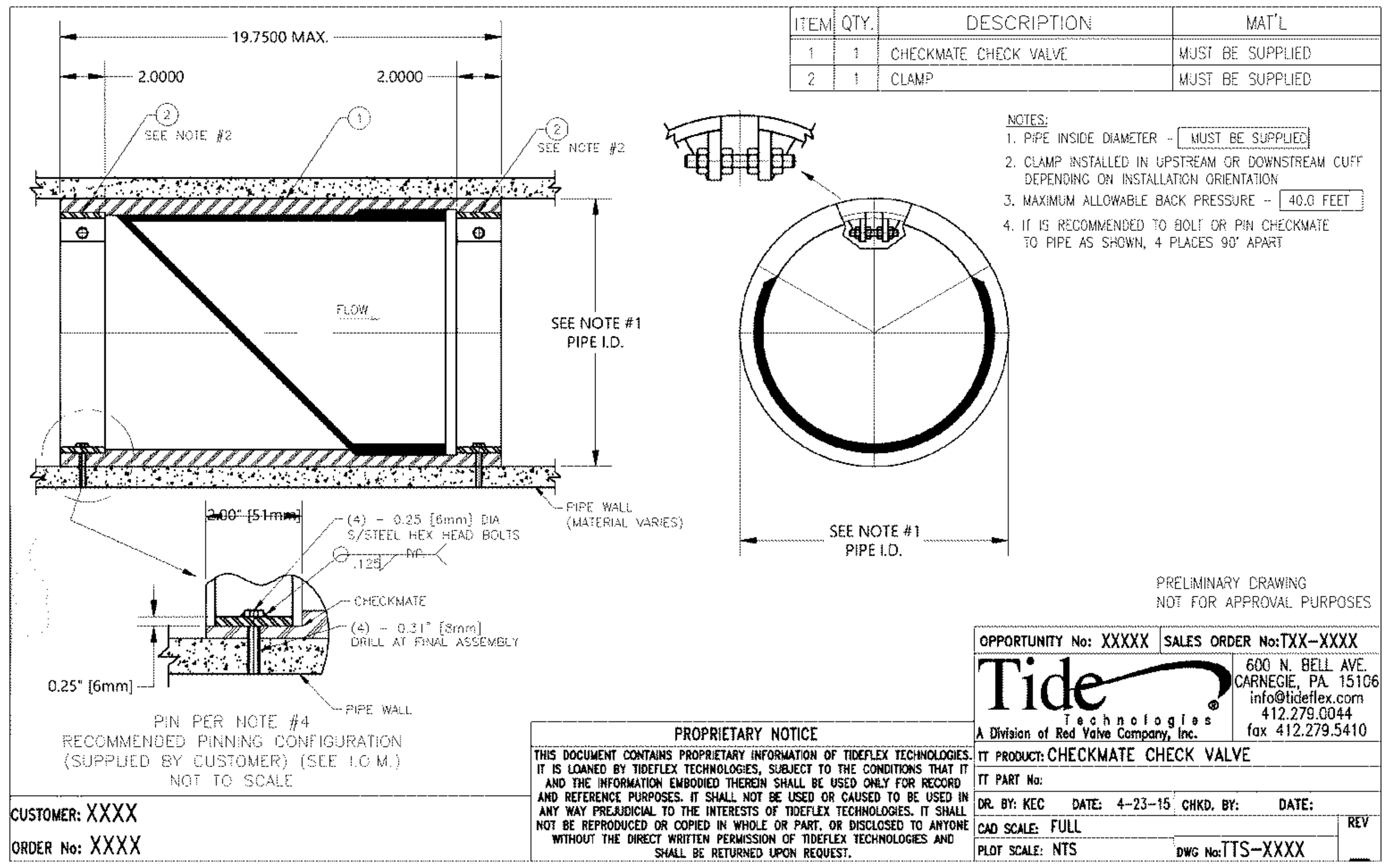
NOTES

1. INSTALL UNDERDRAINS AT 10 FEET ON CENTER. CONNECT TO DRAINS PER PLAN.
2. SIDE SLOPES SHALL BE 3:1 MAX. 2% MIN.

Rain Garden

3/20

N.T.S. Source: VHB LD_199



ITEM	QTY.	DESCRIPTION	MAT'L
1	1	CHECKMATE CHECK VALVE	MUST BE SUPPLIED
2	1	CLAMP	MUST BE SUPPLIED

NOTES:
1. PIPE INSIDE DIAMETER – MUST BE SUPPLIED
2. CLAMP INSTALLED IN UPSTREAM OR DOWNSTREAM CUFF DEPENDING ON INSTALLATION ORIENTATION
3. MAXIMUM ALLOWABLE BACK PRESSURE – 40.0 FEET
4. IT IS RECOMMENDED TO BOLT OR PIN CHECKMATE TO PIPE AS SHOWN, 4 PLACES 90° APART

PIN PER NOTE #4
RECOMMENDED PINNING CONFIGURATION
(SUPPLIED BY CUSTOMER) (SEE I.O.M.)
NOT TO SCALE

PRELIMINARY DRAWING
NOT FOR APPROVAL PURPOSES

CUSTOMER: XXXX
ORDER No: XXXX

PROPRIETARY NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF TIDEFLEX TECHNOLOGIES. IT IS LOANED BY TIDEFLEX TECHNOLOGIES, SUBJECT TO THE CONDITIONS THAT IT AND THE INFORMATION EMBODIED THEREIN SHALL BE USED ONLY FOR RECORD AND REFERENCE PURPOSES. IT SHALL NOT BE USED OR CAUSED TO BE USED IN ANY WAY PREJUDICIAL TO THE INTERESTS OF TIDEFLEX TECHNOLOGIES. IT SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR PART, OR DISCLOSED TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF TIDEFLEX TECHNOLOGIES AND SHALL BE RETURNED UPON REQUEST.

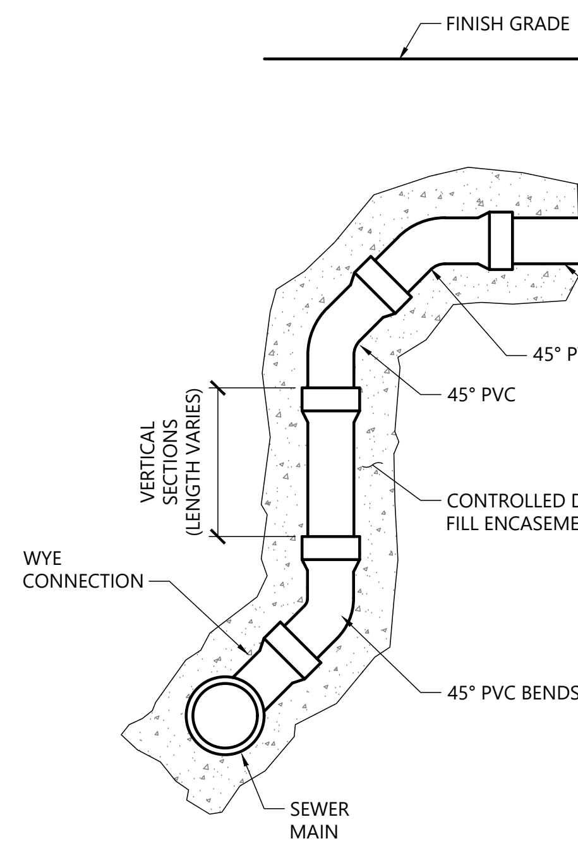
OPPORTUNITY No: XXXXX
SALES ORDER No: TXX–XXXX

Tide Technologies
A Division of Red Valve Company, Inc.
600 N. BELL AVE.
CARNEGIE, PA. 15106
info@tideflex.com
412.279.0044
fax 412.279.5410

TT PRODUCT: CHECKMATE CHECK VALVE
TT PART No:
DR. BY: KEC DATE: 4-23-15 CHKD. BY: DATE:
CAD SCALE: FULL
PLOT SCALE: NTS DWG No: TTS–XXXX REV

Tide Checkmate Check Valve

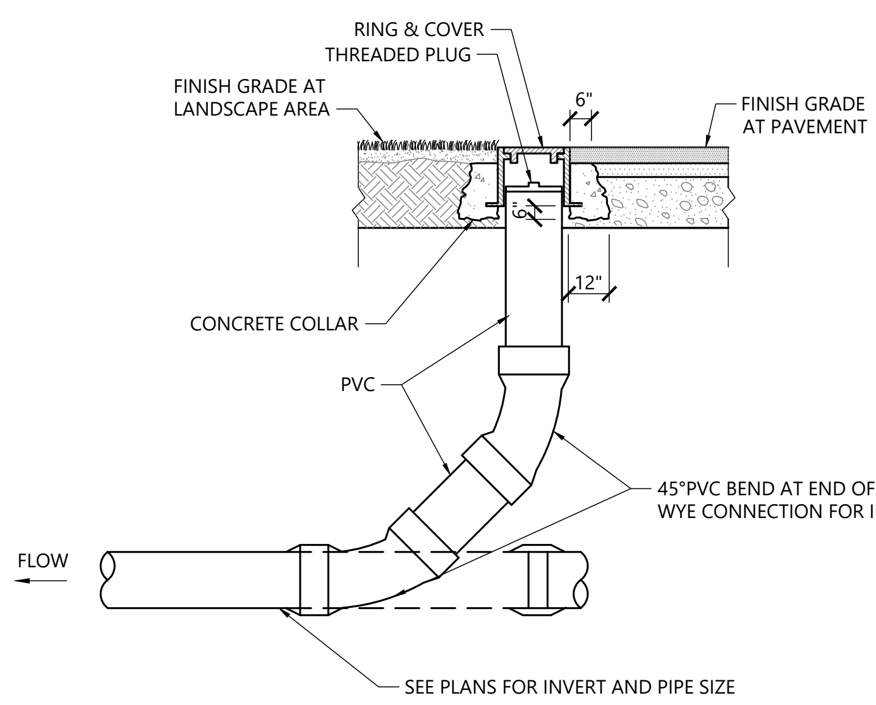
N.T.S. Source: Tide Technologies


FINISH GRADE
DEPTH VARIES 4' MINIMUM AT STREET R.O.W. LINE (SEE PLAN)
INVERT (IN)
45° PVC (SDR 35) BEND
45° PVC
VERTICAL SECTIONS (LENGTH VARIES)
CONTROLLED DENSITY FILL ENCASEMENT
WYE CONNECTION
45° PVC BENDS
SEWER MAIN

Sewer Service Chimney

12/19

N.T.S. Source: VHB LD 221


RING & COVER
THREADED PLUG
FINISH GRADE AT LANDSCAPE AREA
6"
FINISH GRADE AT PAVEMENT
6"
12"
CONCRETE COLLAR
PVC
45°PVC BEND AT END OF LINE WYE CONNECTION FOR IN-LINE
FLOW
SEE PLANS FOR INVERT AND PIPE SIZE

Cleanout (CO)

12/19

N.T.S. Source: VHB LD 303

vhb.com

vhb

100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

21-23 River Rd Redevelopment

21 River Road
Wilton, Connecticut

No.	Revision	Date	Appvd.

Designed by NP/KE
Checked by MRG
Issued for Local Approvals
Date April 23, 2024

Not Approved for Construction

Drawing Title
Site Details 3

Drawing Number
C-6.2

MARK R. GROCKI
No. 27233

Sheet 10 of 11

Project Number
20849.00

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STRUCTURAL DESIGN LOADING CRITERIA

LIVE LOADING:	**AASHTO HS-20 HIGHWAY LOADING**
GROUND WATER TABLE:	BELOW INVERT OF SYSTEM
SOIL BEARING PRESSURE:	4000PSF
SOIL DENSITY:	120 PCF
EQUIVALENT UNSATURATED LATERAL ACTIVE EARTH PRESSURE:	35 PSF / FT.
EQUIVALENT SATURATED LATERAL ACTIVE EARTH PRESSURE:	80 PSF/FT. (IF WATER TABLE PRESENT)
APPLICABLE CODES:	ASTM C857 ACI-318
BACKFILL TYPE:	SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION

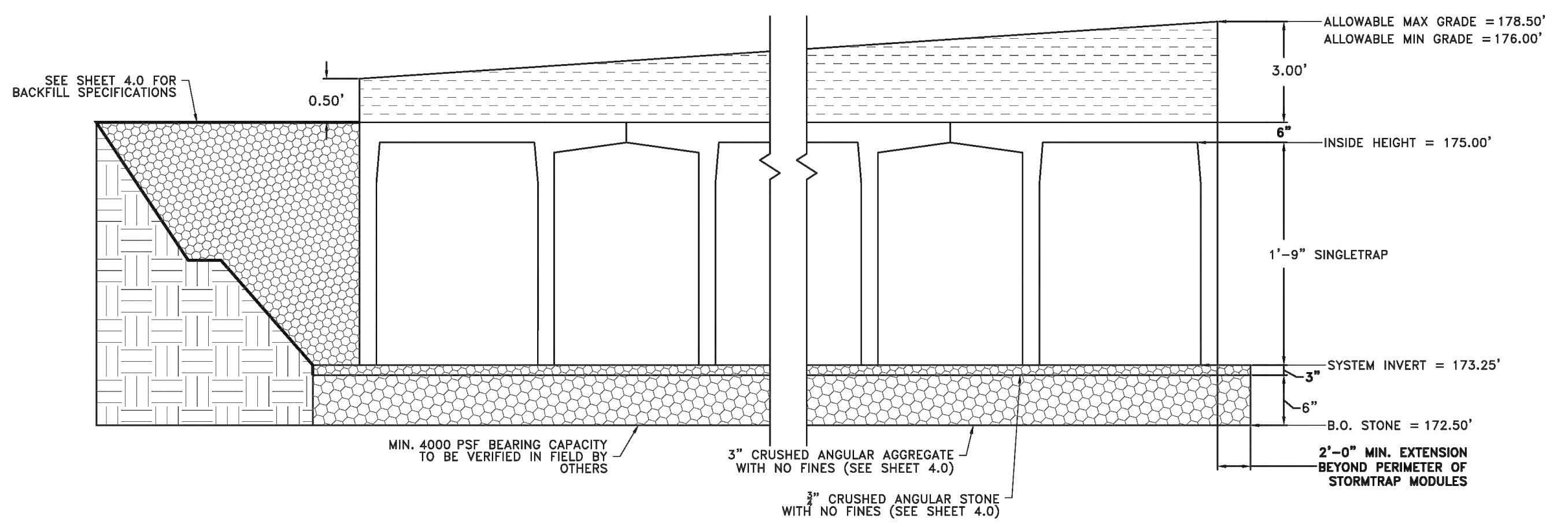
UNIT HEADROOM:	1'-9" SINGLETRAP	
TOTAL STORAGE PROV:	1,727.62	CUBIC FEET
STORMTRAP SYSTEM STORAGE PROV:	1,224.90	CUBIC FEET
STONE BASE STORAGE PROV:	324.33	CUBIC FEET
STONE ENVELOPE STORAGE PROV:	178.39	CUBIC FEET

STAGE STORAGE

STORAGE HEIGHT	STAGE STORAGE ELEVATION	TOTAL STORAGE PROVIDED	STORAGE IN UNITS
0.00	173.25	324.33	0
0.25	173.50	524.80	174.99
0.50	173.75	725.27	349.97
0.75	174.00	925.74	524.96
1.00	174.25	1,126.21	699.94
1.25	174.50	1,326.68	874.93
1.50	174.75	1,527.15	1,049.91
1.75	175.00	1,727.62	1,224.90

SITE SPECIFIC DESIGN CRITERIA

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. COVER RANGE: MIN. 0.50' MAX. 3.00' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.


SEE SHEET 4.0 FOR BACKFILL SPECIFICATIONS
0.50'
ALLOWABLE MAX GRADE = 178.50'
ALLOWABLE MIN GRADE = 176.00'
3.00'
6"
INSIDE HEIGHT = 175.00'
1'-9" SINGLETRAP
SYSTEM INVERT = 173.25'
3"
6"
B.O. STONE = 172.50'
2'-0" MIN. EXTENSION BEYOND PERIMETER OF STORMTRAP MODULES
MIN. 4000 PSF BEARING CAPACITY TO BE VERIFIED IN FIELD BY OTHERS
3" CRUSHED ANGULAR AGGREGATE WITH NO FINES (SEE SHEET 4.0)
¾" CRUSHED ANGULAR STONE WITH NO FINES (SEE SHEET 4.0)

1'-9" SINGLETRAP

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:
VHB
100 Great Meadow Road
Suite 200
Wethersfield, CT
860-807-4300

PROJECT INFORMATION:
21-23 River Road
West Basin
Wilton, CT

CURRENT ISSUE DATE:
04/18/2024

ISSUED FOR:
PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
2	04/18/2024	PRELIMINARY	SG
1	04/11/2024	PRELIMINARY	LR

SCALE:
NTS

SHEET TITLE:
SINGLETRAP DESIGN CRITERIA

SHEET NUMBER:
1.1

STRUCTURAL DESIGN LOADING CRITERIA

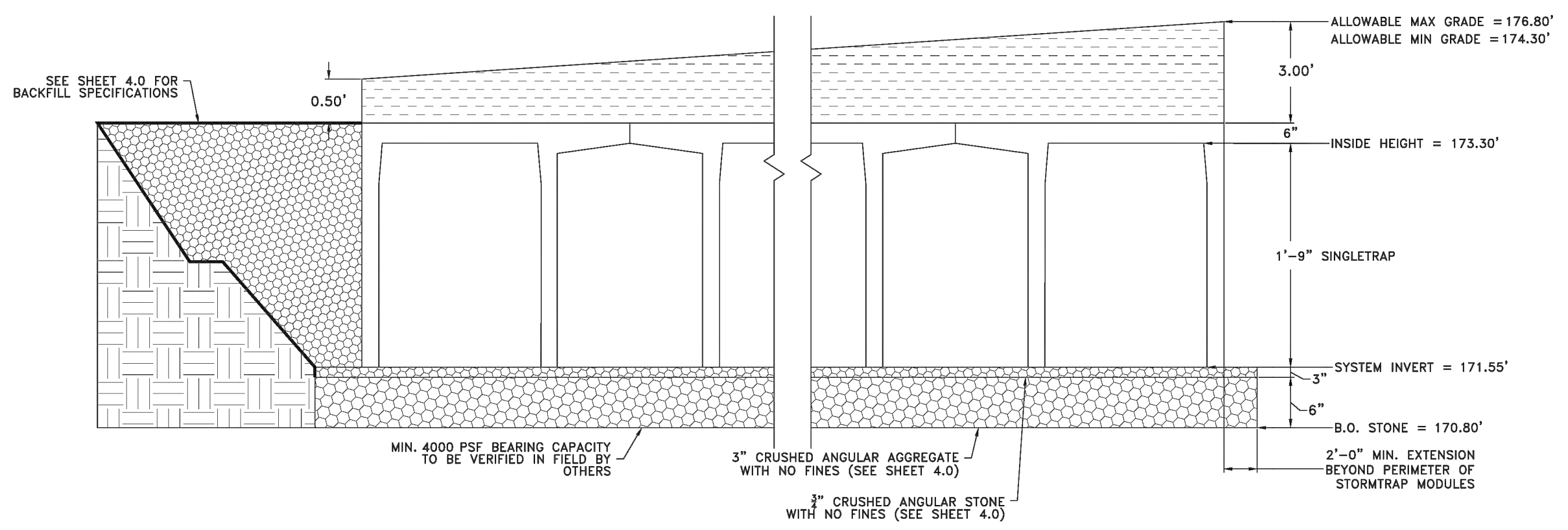
LIVE LOADING:	AASHTO HS-20 HIGHWAY LOADING
GROUND WATER TABLE:	BELOW INVERT OF SYSTEM
SOIL BEARING PRESSURE:	4000PSF
SOIL DENSITY:	120 PCF
EQUIVALENT UNSATURATED LATERAL ACTIVE EARTH PRESSURE:	35 PSF / FT.
EQUIVALENT SATURATED LATERAL ACTIVE EARTH PRESSURE:	80 PSF/FT. (IF WATER TABLE PRESENT)
APPLICABLE CODES:	ASTM C857 ACI-318
BACKFILL TYPE:	SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION

UNIT HEADROOM:	1'-9" SINGLETRAP	
TOTAL STORAGE PROV:	6,275.49	CUBIC FEET
STORMTRAP SYSTEM STORAGE PROV:	4,426.31	CUBIC FEET
STONE BASE STORAGE PROV:	1,177.25	CUBIC FEET
STONE ENVELOPE STORAGE PROV:	671.93	CUBIC FEET

SITE SPECIFIC DESIGN CRITERIA

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. COVER RANGE: MIN. 0.50' MAX. 3.00' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.


SEE SHEET 4.0 FOR BACKFILL SPECIFICATIONS
0.50'
ALLOWABLE MAX GRADE = 176.80'
ALLOWABLE MIN GRADE = 174.30'
3.00'
6"
INSIDE HEIGHT = 173.30'
1'-9" SINGLETRAP
SYSTEM INVERT = 171.55'
3"
6"
B.O. STONE = 170.80'
2'-0" MIN. EXTENSION BEYOND PERIMETER OF STORMTRAP MODULES
MIN. 4000 PSF BEARING CAPACITY TO BE VERIFIED IN FIELD BY OTHERS
3" CRUSHED ANGULAR AGGREGATE WITH NO FINES (SEE SHEET 4.0)
¾" CRUSHED ANGULAR STONE WITH NO FINES (SEE SHEET 4.0)

1'-9" SINGLETRAP

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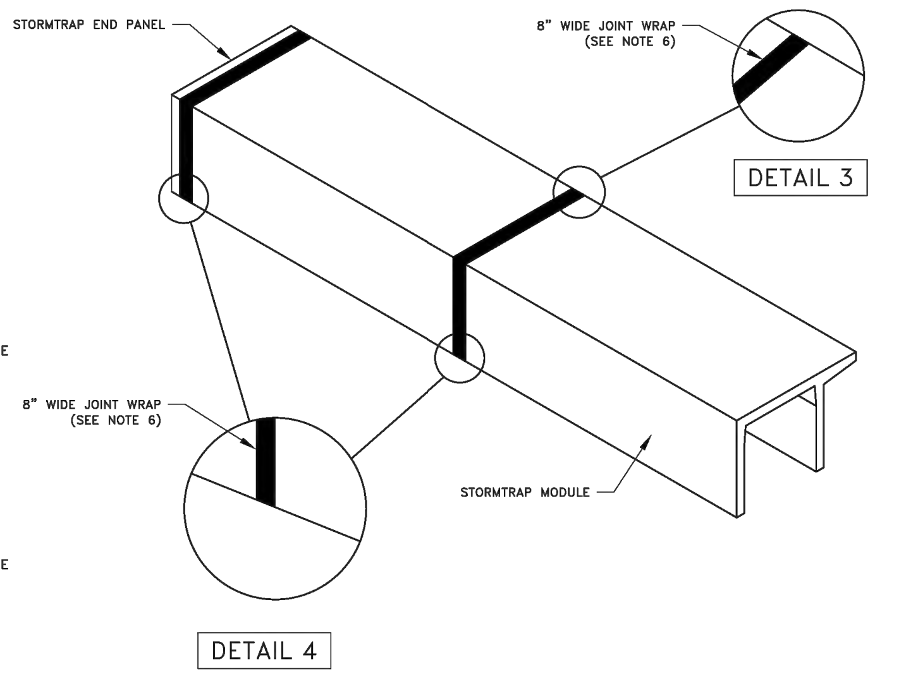
NTS

SHEET TITLE:
SINGLETRAP DESIGN CRITERIA

SHEET NUMBER:
1.1

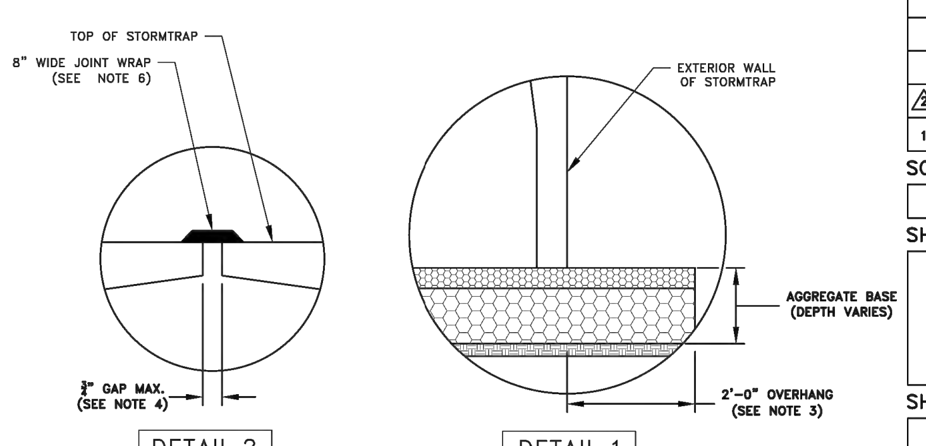
STORMTRAP INSTALLATION SPECIFICATION

1. STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C891 (STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES). THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS ARE PROVIDED FOR EMPHASIS. THE MENTION OF THESE ITEMS DOES NOT PRECLUDE THE INSTALLING CONTRACTOR FROM FOLLOWING ASTM C891 IN ITS ENTIRETY AND IMPLEMENTING ALL APPROPRIATE MEASURES. THE INSTALLING CONTRACTOR OWNS AND IS RESPONSIBLE FOR THE STORMTRAP SYSTEM UPON REMOVAL OF THE MODULES FROM THE DELIVERY TRUCK THROUGH 'FINAL CONSTRUCTION'. FINAL CONSTRUCTION IS ACHIEVED WHEN ALL MODULES ARE SET, FULLY BACKFILLED, AND WHEN FINAL FINISHED GRADES ARE REACHED. THE CONTRACTOR IS RESPONSIBLE FOR ANY COUNTERMEASURES NECESSARY TO RESIST UPLIFT/BUOYANCY BEFORE 'FINAL CONSTRUCTION' IS ACHIEVED.
2. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THAT PROPER/ADEQUATE EQUIPMENT IS USED TO SET/INSTALL THE MODULES.
3. THE AGGREGATE FOUNDATION HAS BEEN DESIGNED BASED ON THE FOLLOWING ASSUMPTIONS. THESE ASSUMPTIONS WILL NEED TO BE VERIFIED BY A GEOTECHNICAL ENGINEER WHICH WILL NEED TO BE EMPLOYED BY THE OWNER.
   - 3.1. A QUALIFIED GEOTECHNICAL ENGINEER WILL BE EMPLOYED, BY OWNER, TO PROVIDE ASSISTANCE IN EVALUATING THE EXISTING SOIL CONDITIONS BELOW THE PROPOSED ENGINEERED STONE FOUNDATION. IF A STONE FOUNDATION DESIGN IS TO BE USED, THE BEARING PRESSURE OF THE SOILS BELOW THE STONE WILL NEED TO MEET OR EXCEED ALLOWABLE CAPACITY. IF THIS IS NOT POSSIBLE, THE STONE FOUNDATION MAY NOT BE AN OPTION FOR THIS LOCATION.
   - 3.2. A QUALIFIED GEOTECHNICAL ENGINEER WILL BE EMPLOYED, BY OWNER, TO EVALUATE A SOURCE OF STONE AGGREGATES THAT WILL BE PLACED ON PROPERLY COMPACTED SOILS (SEE SHEET 1.1 FOR SOIL BEARING CAPACITY REQUIREMENTS). THE AGGREGATE BASE COURSE FOR WHICH THE STORMTRAP SYSTEM WILL BEAR DIRECTLY ON SHALL CONSIST OF A 3" THICK BED OF ¾" DIAMETER ANGULAR STONE, WELL COMPACTED AND SEATED, WITH NO FINES. AND A 6" THICK BED OF 3" ANGULAR AGGREGATE (SEE SHEET 4.0 FOR FURTHER DESCRIPTION/EXPLANATION). PLEASE NOTE THAT THESE ARE ONLY MINIMUM RECOMMENDATIONS AND A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE USED TO DETERMINE THE EXACT REQUIREMENTS FOR THE LOCATIONS THAT THE STORMTRAP SYSTEM IS TO BE LOCATED.
   - 3.3. THE CONTRACTOR SHALL REMOVE ANY AND ALL EXPANDABLE OR COLLAPSIBLE SOILS AT THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER.
   - 3.4. THE AGGREGATE FOUNDATION SHALL BE INSTALLED SUCH THAT THE AGGREGATE EXTENDS A MINIMUM OF 2'-0" PAST THE OUTSIDE OF THE SYSTEM (SEE DETAIL 1).
   - 3.5. THE ¾" AGGREGATE SHALL BE COMPACTED USING A VIBRATING ROLLER WITH ITS' FULL DYNAMIC FORCE APPLIED TO ACHIEVE A FLAT SURFACE.
   - 3.6. DISK, DRY AND COMPACT THE TOP 8" OF THE SUBGRADE SOILS TO 95% OF THE STANDARD DRY DENSITY AND 110% OPTIMUM MOISTURE CONTENT.
   - 3.7. AGGREGATE SHALL BE GRADED WITHIN +/- ¼" OF THE GRADE SHOWN ON THE PLANS.
   - 3.8. MINIMUM SOIL BEARING CAPACITY LISTED ON SHEET 1.1 SHALL BE VERIFIED IN FIELD BY OTHERS.
4. THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED ¾" (SEE DETAIL 2). IF THE SPACE EXCEEDS ¾", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO LINE AND GRADE TO BRING THE SPACE INTO SPECIFICATION.
5. STORMTRAP MODULES ARE NOT WATERTIGHT. IF A WATERTIGHT SOLUTION IS REQUIRED, CONTACT STORMTRAP FOR RECOMMENDATIONS. THE WATERTIGHT APPLICATION IS TO BE PROVIDED AND IMPLEMENTED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SELECTED WATERTIGHT SOLUTION PERFORMS AS SPECIFIED BY THE MANUFACTURER.
6. ALL EXTERIOR ROOF AND EXTERIOR VERTICAL WALL JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH 8" WIDE PRE-FORMED, COLD-APPLIED, SELF-ADHERING ELASTOMERIC RESIN, BONDED TO A WOVEN , HIGHLY PUNCTURE RESISTANT POLYMER WRAP, CONFORMING TO ASTM C891 AND SHALL BE INTEGRATED WITH PRIMER SEALANT AS APPROVED BY STORMTRAP (SEE DETAILS 2, 3, & 4). THE JOINT WRAP DOES NOT PROVIDE A WATERTIGHT SEAL. THE SOLE PURPOSE OF THE JOINT WRAP IS TO PROVIDE A SILT AND SOIL TIGHT SYSTEM. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:
   - 6.1. USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE THE JOINT WRAP IS TO BE APPLIED.
   - 6.2. A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (ADHESIVE SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.
7. IF THE CONTRACTOR NEEDS TO CANCEL ANY SHIPMENTS, THEY MUST DO SO 48 HOURS PRIOR TO THEIR SCHEDULED ARRIVAL AT THE JOB SITE. IF CANCELED AFTER THAT TIME, PLEASE CONTACT THE PROJECT MANAGER.
8. IF THE STORMTRAP MODULE(S) IS DAMAGED IN ANY WAY PRIOR, DURING, OR AFTER INSTALL, STORMTRAP, MUST BE CONTACTED IMMEDIATELY TO ASSESS THE DAMAGE AND TO DETERMINE WHETHER OR NOT THE MODULE(S) WILL NEED TO BE REPLACED. IF ANY MODULE ARRIVES AT THE JOBSITE DAMAGED DO NOT UNLOAD IT; CONTACT STORMTRAP, IMMEDIATELY. ANY DAMAGE NOT REPORTED BEFORE THE TRUCK IS UNLOADED WILL BE THE CONTRACTOR'S RESPONSIBILITY.
9. STORMTRAP MODULES CANNOT BE ALTERED IN ANY WAY AFTER MANUFACTURING WITHOUT WRITTEN CONSENT FROM STORMTRAP.


STORMTRAP END PANEL
8" WIDE JOINT WRAP (SEE NOTE 6)
8" WIDE JOINT WRAP (SEE NOTE 6)
STORMTRAP MODULE

DETAIL 3

DETAIL 4


TOP OF STORMTRAP
8" WIDE JOINT WRAP (SEE NOTE 6)
¾" GAP MAX. (SEE NOTE 4)
EXTERIOR WALL OF STORMTRAP
AGGREGATE BASE (DEPTH VARIES)
2'-0" OVERHANG (SEE NOTE 3)

DETAIL 2

DETAIL 1

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SCALE:
NTS

SHEET TITLE:
SINGLETRAP INSTALLATION SPECIFICATION

SHEET NUMBER:
3.0

ZONE CHART

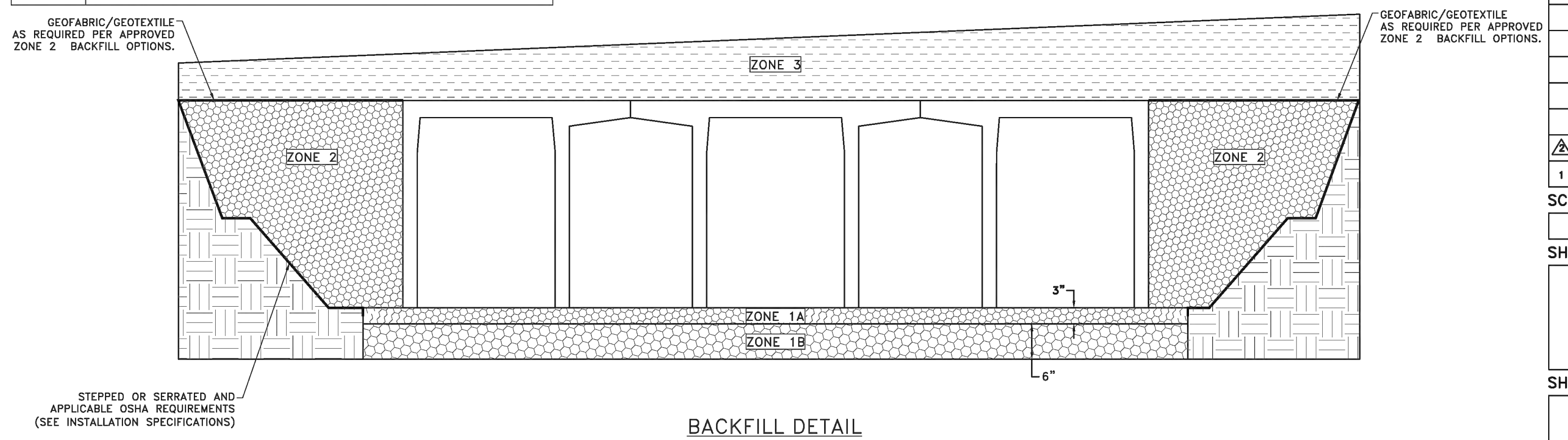
ZONES	ZONE DESCRIPTIONS	REMARKS
ZONE 1A	FOUNDATION AGGREGATE	#5 (¾") STONE ANGULAR AGGREGATE (SEE NOTE 4 FOR DESCRIPTION)
ZONE 1B	FOUNDATION AGGREGATE (INFILTRATION NOT ALLOWED)	3" RECYCLED CRUSHED CONCRETE (SEE NOTES 5 & 6 FOR DESCRIPTION)
	FOUNDATION AGGREGATE (INFILTRATION ALLOWED)	3" STONE AGGREGATE (SEE NOTE 5)
ZONE 2	BACKFILL	UNIFIED SOILS CLASSIFICATION (GW, GP, SW, SP) OR SEE BELOW FOR APPROVED BACKFILL OPTIONS
ZONE 3	FINAL COVER OVERTOP	MATERIALS NOT TO EXCEED 120 PCF

APPROVED ZONE 2 BACKFILL OPTIONS

OPTION	REMARKS
¾" STONE AGGREGATE	THE STONE AGGREGATE SHALL CONSIST OF CLEAN AND FREE DRAINING ANGULAR MATERIAL. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL (ASTM SIZE #57) AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
SAND	IMPORTED PURE SAND IS PERMITTED TO BE USED AS BACKFILL IF IT IS CLEAN AND FREE DRAINING. THE SAND USED FOR BACKFILLING SHALL HAVE LESS THAN 40% PASSING #40 SIEVE AND LESS THAN 5% PASSING #200 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE SAND BACKFILL.
CRUSHED CONCRETE AGGREGATE	CLEAN, FREE DRAINING CRUSHED CONCRETE AGGREGATE MATERIAL CAN BE USED AS BACKFILL FOR STORMTRAP'S MODULES. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL.
ROAD PACK	STONE AGGREGATE 100% PASSING THE 1-1/2" SIEVE WITH LESS THAN 12% PASSING THE #200 SIEVE (ASTM SIZE #467). GEOFABRIC AS PER GEOTECHNICAL ENGINEER RECOMMENDATION.

STORMTRAP ZONE INSTALLATION SPECIFICATION/PROCEDURE

1. THE FILL PLACED AROUND THE STORMTRAP MODULES MUST BE DEPOSITED ON BOTH SIDES AT THE SAME TIME AND TO APPROXIMATELY THE SAME ELEVATION. AT NO TIME SHALL THE FILL BEHIND ONE SIDE WALL BE MORE THAN 2'-0" HIGHER THAN THE FILL ON THE OPPOSITE SIDE. BACKFILL SHALL EITHER BE COMPACTED AND/OR VIBRATED TO ENSURE THAT BACKFILL AGGREGATE/STONE MATERIAL IS WELL SEATED AND PROPERLY INTER LOCKED. CARE SHALL BE TAKEN TO PREVENT ANY WEDGING ACTION AGAINST THE STRUCTURE, AND ALL SLOPES WITHIN THE AREA TO BE BACKFILLED MUST BE STEPPED OR SERRATED TO PREVENT WEDGING ACTION. CARE SHALL ALSO BE TAKEN AS NOT TO DISRUPT THE JOINT WRAP FROM THE JOINT DURING THE BACKFILL PROCESS. BACKFILL MUST BE FREE-DRAINING MATERIAL. SEE ZONE 2 BACKFILL CHART ON THIS PAGE FOR APPROVED BACKFILL OPTIONS. IF NATIVE EARTH IS SUSCEPTIBLE TO MIGRATION, CONFIRM WITH GEOTECHNICAL ENGINEER AND PROVIDE PROTECTION AS REQUIRED (PROVIDED BY OTHERS). ALL MODULES MUST BE SET AND ALL SIDES MUST BE FULLY BACKFILLED BEFORE TRAVEL OVERTOP THE SYSTEM IS PERMITTED. SEE NOTE 2 FOR EXCEPTIONS AND LIMITATIONS.
2. THE FILL PLACED OVERTOP THE SYSTEM SHALL BE PLACED IN MINIMUM 6" LIFTS. AT NO TIME SHALL MACHINERY OR VEHICLES GREATER THAN THE DESIGN LIVE LOAD LISTED ON SHEET 1.0 TRAVEL OVERTOP THE SYSTEM. IF TRAVEL OVER THE SYSTEM OCCURS BEFORE THE MINIMUM DESIGN COVER IS ACHIEVED, IT MAY BE NECESSARY TO REDUCE THE ULTIMATE LOAD/BURDEN OF THE OPERATING MACHINERY SO AS TO NOT EXCEED THE DESIGN CAPACITY OF THE SYSTEM. VEHICLES AND MACHINERY USED TO PLACE FILL MATERIAL ON TOP OF THE SYSTEM SHALL TRAVEL PARALLEL TO THE LONGITUDINAL AXIS OF THE STORMTRAP MODULES WHENEVER POSSIBLE.
3. THE VIBRATORY FUNCTION OF ANY ROLLER, COMPACTOR, VEHICLE, ETC. SHALL NOT BE USED OVERTOP THE SYSTEM WITHOUT PRIOR APPROVAL FROM STORMTRAP. IN SOME CASES, HAND COMPACTION MAY BE NECESSARY TO ENSURE THAT THE ALLOWABLE DESIGN LOADING IS NOT EXCEEDED.
4. FREE DRAINING ANGULAR AGGREGATE – 80% AGGREGATE RETAINED ON ½" SIEVE MAJORITY OF AGGREGATE SIZE BETWEEN ½" AND 1" ONLY 5% OF MATERIAL PASSING #⅜ SIEVE.
5. FREE DRAINING, NO FINES, 3" ANGULAR AGGREGATE – MAJORITY OF STONE SIZE IN BETWEEN 1½" AND 3" – VERY SIMILAR TO AASHTO (#1, #2, #3, & #24) STONE AGGREGATE GRADATION.
6. CRUSHED CONCRETE AGGREGATE IS KNOWN TO REACT WITH WATER AND CAN INCREASE THE PH VALUE OF THE GROUND WATER. PRIOR TO USING CRUSHED CONCRETE AGGREGATE IN ZONE 1B IT IS IMPERATIVE THAT THE USE OF SUCH MATERIAL SHALL BE VERIFIED BY THE EOR AND/OR THE PROJECT GEOTECHNICAL ENGINEER.


GEOFABRIC/GEOTEXTILE AS REQUIRED PER APPROVED ZONE 2 BACKFILL OPTIONS.
GEOFABRIC/GEOTEXTILE AS REQUIRED PER APPROVED ZONE 2 BACKFILL OPTIONS.
ZONE 3
ZONE 2
ZONE 2
ZONE 1A
ZONE 1B
3"
6"
STEPPED OR SERRATED AND APPLICABLE OSHA REQUIREMENTS (SEE INSTALLATION SPECIFICATIONS)

BACKFILL DETAIL

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:
VHB
100 Great Meadow Road
Suite 200
Wethersfield, CT
860-807-4300

PROJECT INFORMATION:
21-23 River Road
Wilton, CT

CURRENT ISSUE DATE:
04/18/2024

ISSUED FOR:
PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
2	04/18/2024	PRELIMINARY	SG
1	04/11/2024	PRELIMINARY	LR

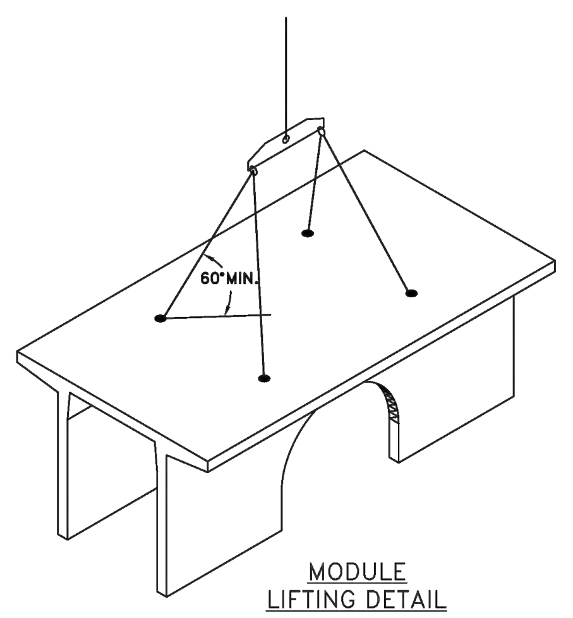
SCALE:
NTS

SHEET TITLE:
SINGLETRAP BACKFILL SPECIFICATION

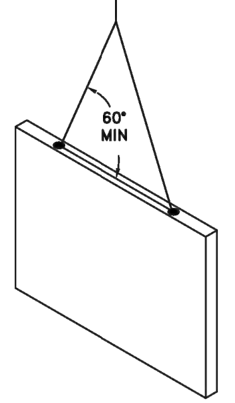
SHEET NUMBER:
4.0

STORMTRAP MODULE LIFTING SPECIFICATION

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL (4) CHAINS/CABLES ARE SECURED PROPERLY TO THE LIFTING ANCHORS AND IN EQUAL TENSION WHEN LIFTING THE STORMTRAP MODULE.
2. MINIMUM 7'-0" CHAIN/CABLE LENGTH TO BE USED TO LIFT STORMTRAP MODULES (SUPPLIED BY CONTRACTOR).
3. CONTRACTOR TO ENSURE MINIMUM LIFTING ANGLE IS 60° FROM TOP SURFACE OF STORMTRAP MODULE. SEE DETAIL.
4. IT IS UNDERSTOOD AND AGREED THAT AT ALL TIMES DURING WHICH HOISTING AND RIGGING EQUIPMENT IS BEING SUPPLIED TO THE PURCHASER, OPERATOR OF SUCH EQUIPMENT SHALL BE IN CHARGE OF HIS ENTIRE EQUIPMENT AND SHALL AT ALL TIMES BE THE JUDGE OF THE SAFETY AND PROPERTY OF ANY SUGGESTION TO HIM FROM THE SELLER, ITS AGENTS OR EMPLOYEES. PURCHASER AGREES TO SAVE, INDEMNIFY AND HOLD HARMLESS SELLER FROM ALL LOSS, CLAIMS, DEMANDS OR CAUSES OF ACTION, WHICH MAY ARISE FROM THE EXISTENCE OR OPERATION OF SAID EQUIPMENT.



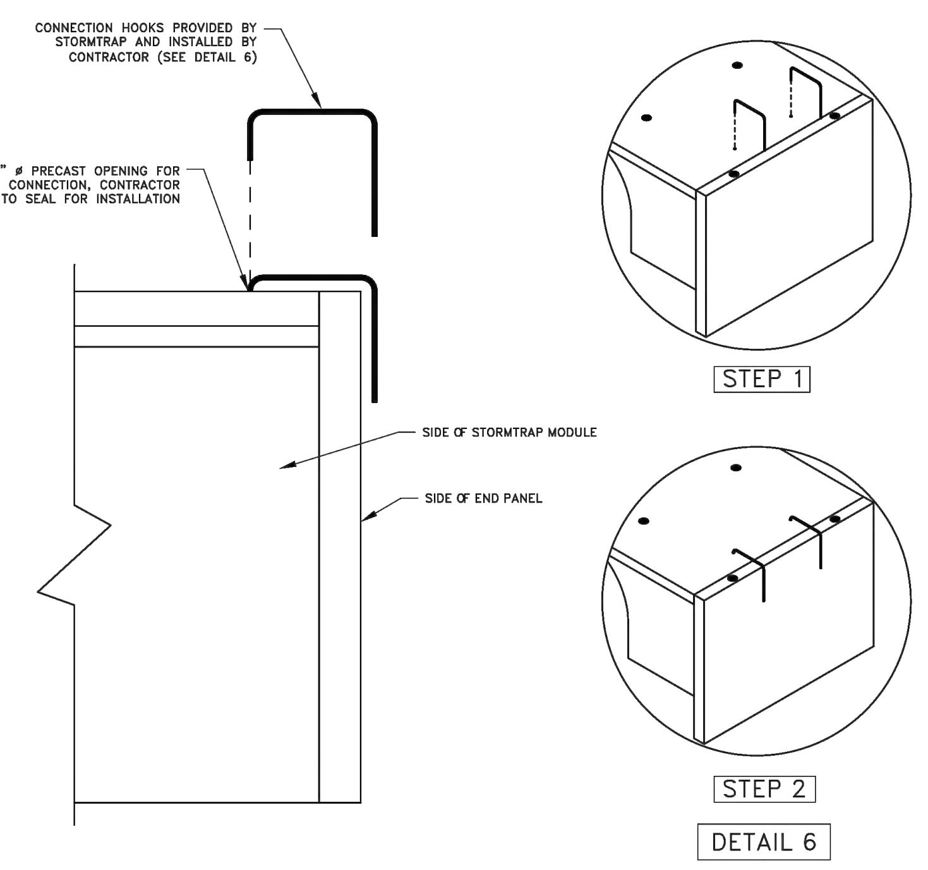
MODULE LIFTING DETAIL



END PANEL LIFTING DETAIL

END PANEL ERECTION/INSTALLATION SPECIFICATION

1. END PANELS WILL BE SUPPLIED TO CLOSE OFF OPEN ENDS OF ROWS.
2. PANELS SHALL BE INSTALLED IN A TILT UP FASHION DIRECTLY ADJACENT TO OPEN END OF MODULE (REFER TO SHEET 2.0 FOR END PANEL LOCATIONS).
3. CONNECTION HOOKS WILL BE SUPPLIED WITH END PANELS TO SECURELY CONNECT PANEL TO ADJACENT STORMTRAP MODULE (SEE PANEL CONNECTION ELEVATION VIEW).
4. ONCE CONNECTION HOOK IS ATTACHED, LIFTING CLUTCHES MAY BE REMOVED.
5. JOINT WRAP SHALL BE PLACED AROUND PERIMETER JOINT PANEL (SEE SHEET 3.0).


CONNECTION HOOKS PROVIDED BY STORMTRAP AND INSTALLED BY CONTRACTOR (SEE DETAIL 6)
1" ø PRECAST OPENING FOR HOOK CONNECTION, CONTRACTOR TO SEAL FOR INSTALLATION
SIDE OF STORMTRAP MODULE
SIDE OF END PANEL
STEP 1
STEP 2
DETAIL 6

PANEL CONNECTION ELEVATION VIEW

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SCALE:
NTS

SHEET TITLE:
SINGLETRAP INSTALLATION SPECIFICATION

SHEET NUMBER:
3.1

ACCESS OPENING SPECIFICATION

1. A TYPICAL ACCESS OPENING FOR THE STORMTRAP SYSTEM ARE 2'-0" IN DIAMETER. ACCESS OPENINGS LARGER THAN 4'-0" IN DIAMETER NEED TO BE APPROVED BY STORMTRAP. ALL OPENINGS MUST RETAIN AT LEAST 2'-0" OF CLEARANCE FROM THE END OF THE STORMTRAP MODULE UNLESS NOTED OTHERWISE. ALL ACCESS OPENINGS TO BE LOCATED ON INSIDE LEG UNLESS OTHERWISE SPECIFIED. SEE SHEET 2.0 FOR SIZES AND LOCATIONS.
2. UNLESS OTHERWISE SPECIFIED, PLASTIC COATED STEEL STEPS PRODUCED BY M.A. INDUSTRIES PART #PS3-PFC OR APPROVED EQUAL (SEE STEP DETAIL) ARE PROVIDED INSIDE ANY MODULE WHERE DEEMED NECESSARY. THE HIGHEST STEP IN THE MODULE IS TO BE PLACED A DISTANCE OF 1'-0" FROM THE INSIDE EDGE OF THE STORMTRAP MODULES. ALL ENSUING STEPS SHALL BE PLACED AT A DISTANCE BETWEEN 10" MIN AND 14" MAX BETWEEN THEM. STEPS MAY BE MOVED OR ALTERED TO AVOID OPENINGS OR OTHER IRREGULARITIES IN THE MODULE.
3. STORMTRAP LIFTING INSERTS MAY BE RELOCATED TO AVOID INTERFERENCE WITH ACCESS OPENINGS OR THE CENTER OF GRAVITY OF THE MODULE AS NEEDED.
4. STORMTRAP ACCESS OPENINGS MAY BE RELOCATED TO AVOID INTERFERENCE WITH INLET AND/OR OUTLET PIPE OPENINGS SO PLACEMENT OF STEPS IS ATTAINABLE.
5. ACCESS OPENINGS SHOULD BE LOCATED IN ORDER TO MEET THE APPROPRIATE MUNICIPAL REQUIREMENTS. STORMTRAP RECOMMENDS AT LEAST TWO ACCESS OPENINGS PER SYSTEM FOR ACCESS AND INSPECTION.
6. USE PRECAST ADJUSTING RINGS AS NEEDED TO MEET GRADE. STORMTRAP RECOMMENDS FOR COVER OVER 2' TO USE PRECAST BARREL OR CONE SECTIONS. (PROVIDED BY OTHERS)

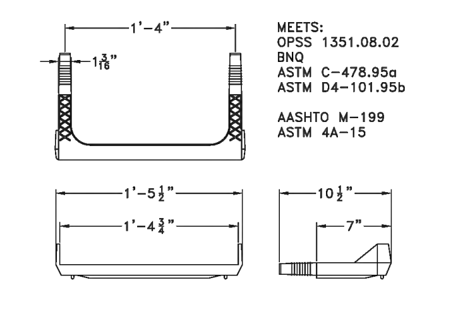
PIPE OPENING SPECIFICATION

1. MINIMUM EDGE DISTANCE FOR AN OPENING ON THE OUTSIDE WALL SHALL BE NO LESS THAN 1'-0".
2. CONNECTING PIPES MAY BE INSTALLED WITH A 1'-0" CONCRETE COLLAR AND AN AGGREGATE CRADLE (AS REQUIRED) FOR AT LEAST ONE PIPE LENGTH (SEE PIPE CONNECTION DETAIL). A STRUCTURAL GRADE CONCRETE OR HIGH STRENGTH, NON-SHRINK GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI MAY BE USED.
3. THE ANNULAR SPACE BETWEEN THE PIPE AND THE HOLE SHALL BE FILLED WITH HIGH STRENGTH NON-SHRINK GROUT.

PIPE INSTALLATION INSTRUCTIONS

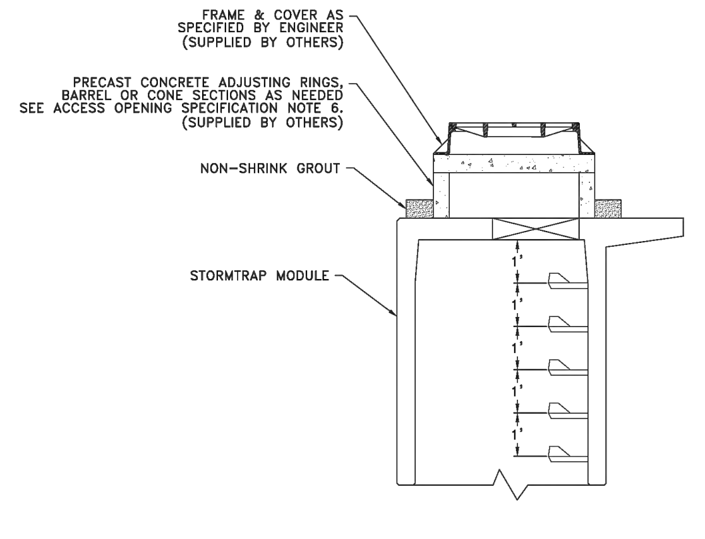
1. CLEAN AND LIGHTLY LUBRICATE ALL OF THE PIPE TO BE INSERTED INTO STORMTRAP.
2. IF PIPE IS CUT, CARE SHOULD BE TAKEN TO ALLOW NO SHARP EDGES. BEVEL AND LUBRICATE LEAD END OF PIPE.
3. ALIGN CENTER OF PIPE TO CORRECT ELEVATION AND INSERT INTO OPENING.

NOTE: ALL ANCILLARY PRODUCTS/SPECIFICATIONS RECOMMENDED AND SHOWN ON THIS SHEET INCLUDING BUT NOT LIMITED TO CONCRETE COLLARS, AGGREGATE CRADLES, GRADE RINGS, RISER SECTIONS, ETC., ARE RECOMMENDATIONS ONLY AND SUBJECT TO CHANGE PER THE INSTALLING CONTRACTOR AND/OR PER LOCAL MUNICIPAL CODE/REQUIREMENTS.

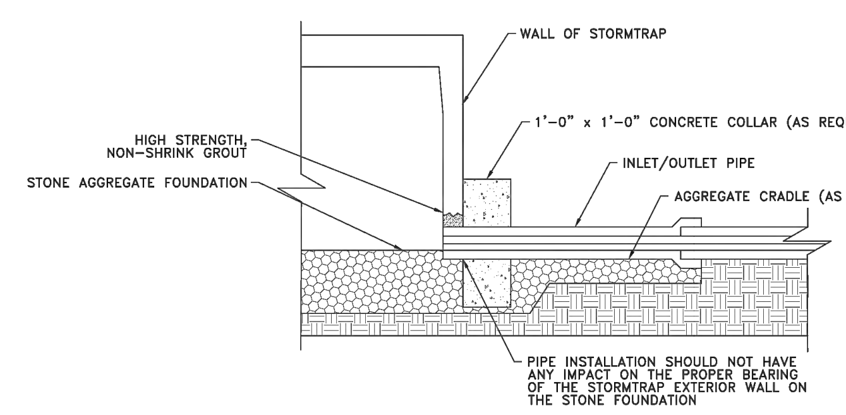


STEP DETAIL

*** NOTICE *** 03-25-2022
DUE TO CURRENT INCONSISTENCIES IN THE 16" STEP SUPPLY, STORMTRAP MAY SUBSTITUTE THE 16" STEP WITH THE CLOSEST ALTERNATIVE LENGTH STEP UNTIL THE SUPPLY CHAIN ISSUE IS RESOLVED.


FRAME & COVER AS SPECIFIED BY ENGINEER (SUPPLIED BY OTHERS)
PRECAST CONCRETE ADJUSTING RINGS, BARREL OR CONE SECTIONS AS NEEDED SEE ACCESS OPENING SPECIFICATION NOTE 6. (SUPPLIED BY OTHERS)
NON-SHRINK GROUT
STORMTRAP MODULE
1'
1'
1'
1'
1'

RISER/STAIR DETAIL


WALL OF STORMTRAP
1'-0" x 1'-0" CONCRETE COLLAR (AS REQUIRED)
INLET/OUTLET PIPE
AGGREGATE CRADLE (AS REQUIRED)
HIGH STRENGTH, NON-SHRINK GROUT
STONE AGGREGATE FOUNDATION
PIPE INSTALLATION SHOULD NOT HAVE ANY IMPACT ON THE PROPER BEARING OF THE STORMTRAP EXTERIOR WALL ON THE STONE FOUNDATION

PIPE CONNECTION DETAIL WHEN PIPE INVERT IS AT INVERT OF STORMTRAP SYSTEM

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SCALE:
NTS

SHEET TITLE:
PIPE / ACCESS OPENING SPECIFICATION

SHEET NUMBER:
5.0

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vhb.com

vhb

100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

21-23 River Rd Redevelopment

21 River Road
Wilton, Connecticut

No.	Revision	Date	Appvd.

Designed by NP/KE
Checked by MRG

Issued for
Local Approvals

Date
April 23, 2024

Not Approved for Construction

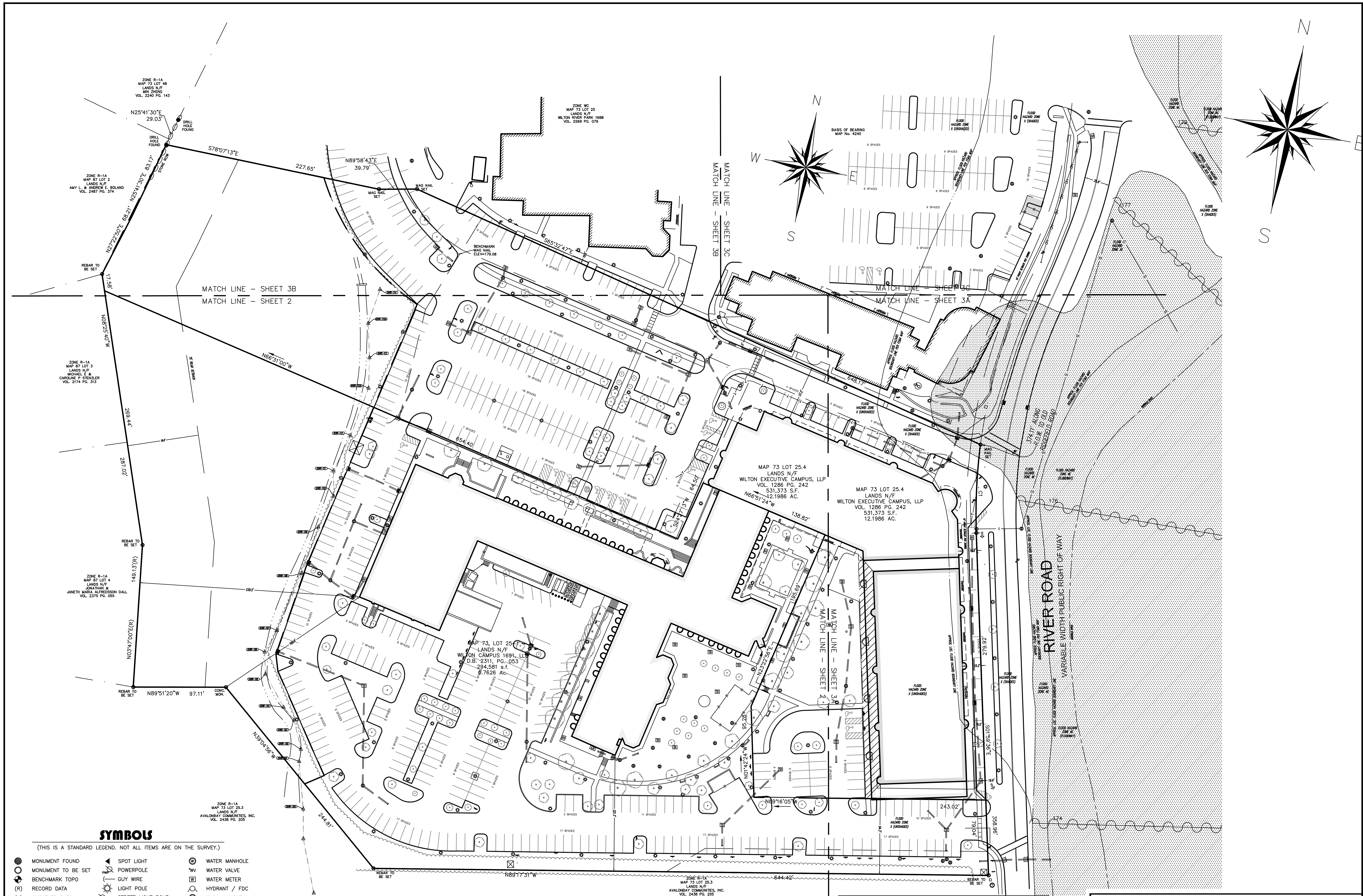
Drawing Title
Site Details 4

Drawing Number
C-6.3

MARK R. GROCKI
No. 27233

Sheet 11 of 11

Project Number
20849.00


MATCH LINE – SHEET 3B
MATCH LINE – SHEET 2
MATCH LINE – SHEET 3C
MATCH LINE – SHEET 3A
MATCH LINE – SHEET 3
RIVER ROAD
VARIABLE WIDTH PUBLIC RIGHT OF WAY
N
S
W
E
BASIS OF BEARING MAP No. 4240
MAP 73 LOT 25.4 LANDS N/F WILTON EXECUTIVE CAMPUS, LLP VOL. 1286 PG. 242 531,373 S.F. 12.1986 AC.
MAP 73, LOT 25.1 LANDS N/F WILTON CAMPUS 1691, LLC D.B. 2311, PG. 053 294,581 s.f. 6.7626 Ac.
ZONE R-1A MAP 73 LOT 48 LANDS N/F MIN ZHENG VOL. 2240 PG. 143
ZONE R-1A MAP 87 LOT 2 LANDS N/F AMY L. & ANDREW E. BOLAND VOL. 2487 PG. 374
ZONE R-1A MAP 87 LOT 3 LANDS N/F MICHAEL E. & CAROLINE P. STENZLER VOL. 2174 PG. 313
ZONE R-1A MAP 87 LOT 4 LANDS N/F JONATHAN & JANETH MARIA ALFREDSSON DALL VOL. 2375 PG. 055
ZONE R-1A MAP 73 LOT 25.3 LANDS N/F AVALONBAY COMMUNITIES, INC. VOL. 2438 PG. 205
ZONE WC MAP 73 LOT 25 LANDS N/F WILTON RIVER PARK 1688 VOL. 2269 PG. 079
N25°41'30"E 29.03'
S78°07'13"E 227.65'
N89°58'43"E 39.79'
S65°32'47"E
N66°31'00"W 654.40'
N66°51'24"W 135.82'
N89°16'05"W 243.02'
N89°17'31"W 644.42'
N89°51'20"W 97.11'
N39°04'56"W 244.81'
N03°47'00"E(R)
149.13'(R)
287.02'
269.44'
17.58'
83.17'
N27°22'50"E 66.21'
N23°22'56"E 195.69'
N01°42'24"W 95.28'
279.92'
358.96'
348.17'
REBAR TO BE SET
CONC. MON.
MAG NAIL SET
DRILL HOLE FOUND
BENCHMARK MAG NAIL ELEV=179.08
FLOOD HAZARD ZONE X (UNSHADED)
FLOOD HAZARD ZONE X (SHADED)
17 SPACES
C1

Curve No.	Radius	Length	Tangent	Ch Brg	Ch Dist.	Delta
C1	560.00'	92.79'	46.50'	S02°45'13"W	92.69'	09°29'38"

SYMBOLS

(THIS IS A STANDARD LEGEND. NOT ALL ITEMS ARE ON THE SURVEY.)

●	MONUMENT FOUND		SPOT LIGHT	Ⓦ	WATER MANHOLE
○	MONUMENT TO BE SET	PWP	POWERPOLE	WV	WATER VALVE
⊕	BENCHMARK TOPO		GUY WIRE	W	WATER METER
(R)	RECORD DATA		LIGHT POLE		HYDRANT / FDC
(S)	SURVEYED DATA		STREET LIGHT POLE	Ⓖ	GAS MANHOLE
R/W	RIGHT OF WAY	☒	ELEC. TRANSFORMER	GV	GAS VALVE
SBL	SET BACK LINE	A/C	AIR CONDITIONER	G	GAS METER
RCP	REINFORCED CONC PIPE	Ⓔ	ELEC. MANHOLE	UG	UNDERGROUND GAS MARKER
CMP	CORRUGATED METAL PIPE	E	ELECTRIC METER	Ⓣ	TELEPHONE MANHOLE
PVC	PLASTIC PIPE	C	CABLE BOX	A	PAY PHONE
HDPE	HIGH DENSITY POLYETHYLENE PIPE	UC	UNDERGROUND CABLE MARKER	T	TELEPHONE BOX
CIP	CAST IRON PIPE	TS	TRAFFIC POLES	UT	UNDERGROUND TELEPHONE MARKER
DIP	DUCTILE IRON PIPE		TRAFFIC SIGNAL	F.P.	FLAG POLE
L/S	LANDSCAPING	Ⓛ	TRAFFIC MANHOLE	●	BOLLARD
	DECIDUOUS TREE	T-S	TRAFFIC SIGNAL BOX	B.H.	BORE HOLE
✳	EVERGREEN TREE	Ⓢ	SEWER MANHOLE	MW	MONITORING WELL
U.G.	UNDER GROUND	C/O	CLEAN OUT	MB	MAIL BOX
— C —	CABLE TELEVISION LINE	Ⓓ	STORM DRAIN MANHOLE		SIGN
— E —	ELECTRICAL LINE	SI	STORM INLET	MC	METAL TANK COVER
— G —	GAS LINE		CURB INLET	Ⓐ	AIR COMPRESSOR
— T —	TELEPHONE LINE	SI	ROUND STORM INLET	○○○	STONE ROW
— W —	WATER LINE	Ⓤ	UNKNOWN MANHOLE		
— OH —	OVERHEAD ELECTRIC WIRE				

VICINITY MAP NOT TO SCALE

SITE DATA

1. PROPERTY IS KNOWN AS MAP #73, LOT 25.1 & MAP #73, LOT 25.4 IN THE TOWN OF WILTON, FAIRFIELD COUNTY, CONNECTICUT.

2. LOT AREA 25.1 = 236,792 S.F. OR 5.4360 AC.
   LOT AREA 25.4 = 294,581 S.F. OR 6.7627 AC.

3. NO CHANGES IN STREET RIGHT OF WAY LINES EITHER COMPLETED OR PROPOSED KNOWN TO THIS SURVEYOR. NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

4. VERTICAL DATUM = NAVD 88. BENCHMARK – MAG NAIL, ELEV.=179.08

5. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK–OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS–BUILT PLANS AND UTILITY MARK–OUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.

6. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. THIS PROPERTY MAY BE SUBJECT TO RESTRICTIONS, COVENANTS AND/OR EASEMENTS, WRITTEN OR IMPLIED.

7. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THIS SURVEY.

8. TOPOGRAPHIC INFORMATION SHOWN HEREON TAKEN FROM GROUND SURVEY PERFORMED BY VALLEY LAND SERVICES, LLC. DATE OF FIELD SURVEY = 7–5–2022.

9. THIS PLAN IS VALID ONLY WHEN SIGNED IN COLORED INK AND EMBOSSED WITH A RAISED IMPRESSION SEAL AND WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARD OF ACCURACY OF THE STATE IN WHICH THE PROJECT IS LOCATED.

10. THE WORD "CERTIFY" OR "CERTIFICATE" AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THIS SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.

11. COPYRIGHT ©2022, VALLEY LAND SERVICES, LLC. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED, OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE SURVEYOR. COPIES OF THIS PLAN WITHOUT A RAISED IMPRESSION SEAL ARE NOT VALID.

12. PARKING PROVIDED –
    –REGULAR = 480 SPACES
    –UNDERGROUND = 17 SPACES
    –HANDICAP = 10 SPACES
    TOTAL SPACES PROVIDED = 507

13. THIS SURVEY CONFORMS TO A CLASS A–2 SURVEY AND HAS BEEN PREPARED IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC., ON OCTOBER 26, 2018.

14. THE TYPE OF SURVEY PERFORMED IS A PROPERTY SURVEY.

15. BOUNDARY DETERMINATION IS BASED UPON A DEPENDENT RESURVEY AND THIS SURVEY IS SUBJECT TO SUCH FACTS AS AN INDEPENDENT RESURVEY MAY DISCLOSE.

16. WETLANDS AS SHOWN ARE BASED ON DATA SUPPLIED BY VHB ENGINEERS UTILIZING A TRIMBLE R1 MODEL 99133 GPS UNIT RECORDED ON 9–1–2022.

FLOOD NOTE

BY GRAPHICAL REPRESENTATION ONLY THIS PROPERTY IS LOCATED IN FLOOD HAZARD ZONES X (UNSHADED AND SHADED) AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL No. 090020 0383 F WHICH HAS AN EFFECTIVE DATE OF JUNE 18, 2010, MAP No. 09001C0383F AND IS AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. FIELD SURVEYING WAS NOT PERFORMED TO DETERMINE THIS ZONE. AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR AN AMENDMENT FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY. (NAVD 88)

TYPE OF SURVEY: BOUNDARY & TOPOGRAPHIC SURVEY

VALLEY LAND SERVICES, LLC
4383 HECKTOWN ROAD
BETHLEHEM, PA 18020
Phone (610) 365–2907 Fax (610) 365–2958
NJ Certificate of Authorization: 24GA28154900

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY HAS BEEN PERFORMED IN THE FIELD UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION, THAT THIS SURVEY HAS BEEN PERFORMED IN ACCORDANCE WITH CURRENTLY ACCEPTED ACCURACY STANDARDS. THAT THE PROPERTY LINES AND RELATIONSHIP OF BUILDINGS AND OTHER STRUCTURES TO THE PROPERTY LINES AND THE LAND INDICATED HEREON IS CORRECT, AND THAT THERE ARE NO ENCROACHMENTS OF BUILDINGS OR STRUCTURES ONTO SAID LAND EXCEPT AS SHOWN.

THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

JACK W. SHOEMAKER No. 70323

DIGITALLY SIGNED BY:
JACK W. SHOEMAKER
DATE: 02/29/2024

NOT VALID UNTIL SEALED

JACK W. SHOEMAKER DATE

CONNECTICUT PROFESSIONAL LAND SURVEYOR 70323

THIS CERTIFICATION IS MADE TO ONLY NAMED PARTIES FOR PURCHASE AND/OR MORTGAGE OF HEREIN DELINEATED PROPERTY BY THE NAMED PURCHASER. NO RESPONSIBILITY OR LIABILITY IS ASSUMED BY SURVEYOR FOR THE USE OF SURVEY FOR ANY OTHER PURPOSE INCLUDING, BUT NOT LIMITED TO, USE OF SURVEY AFFIDAVIT, RESALE OF PROPERTY, OR TO ANY OTHER PERSON NOT LISTED IN CERTIFICATION, EITHER DIRECTLY OR INDIRECTLY.

SITE ADDRESS: 11, 15, 21 RIVER ROAD
TOWN OF WILTON
FAIRFIELD COUNTY, CONNECTICUT

CLIENT: KIMCO REALTY

JOB NO: V220183
DRAWN BY: CVT
APPROVED BY: CCB

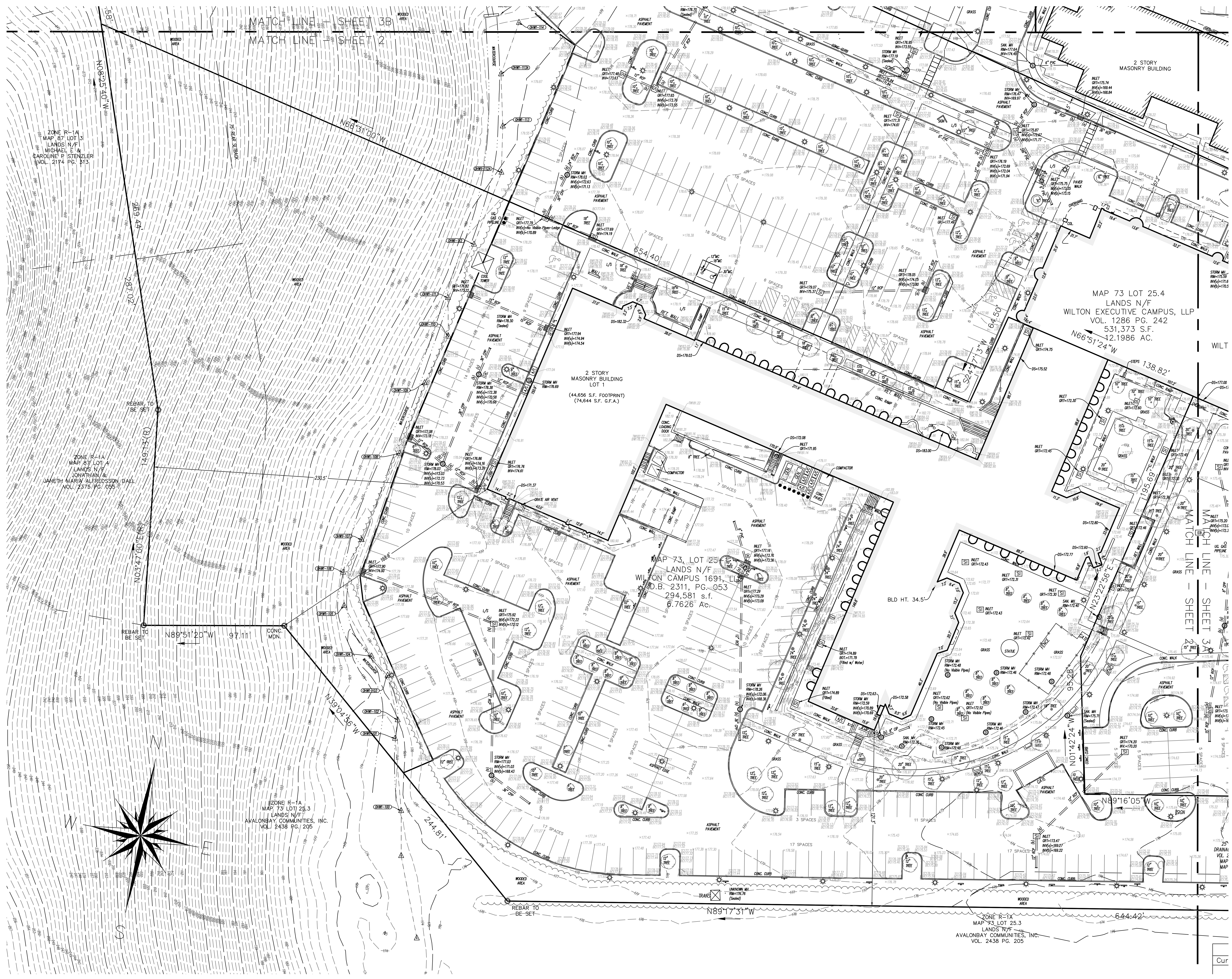
DATE: **JULY 12, 2022**

REVISIONS:

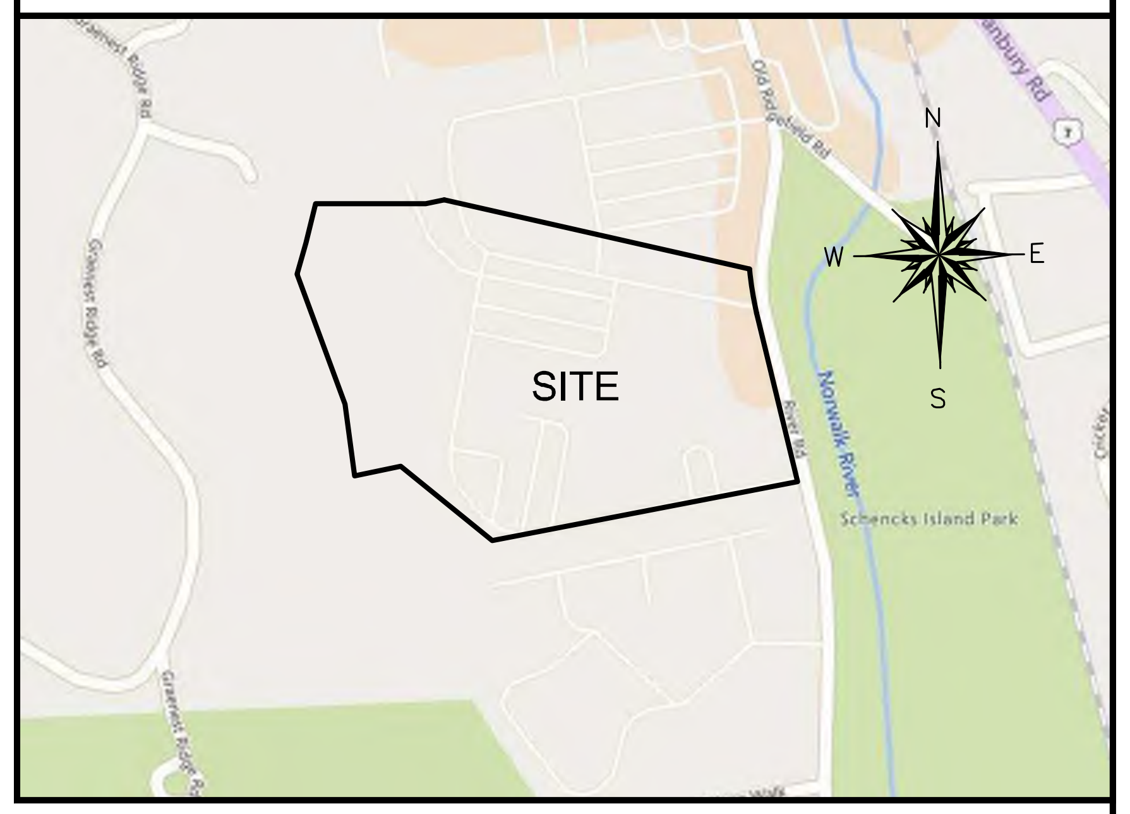
No.	DATE	DESCRIPTION
1	10-04-23	ADDED WETLANDS

0' 50' 100' 150'
SCALE: 1" = 50'

SHEET 1 OF 3



VICINITY MAP NOT TO SCALE



SYMBOLS

(THIS IS A STANDARD LEGEND. NOT ALL ITEMS ARE ON THE SURVEY.)

●	MONUMENT FOUND
○	MONUMENT TO BE SET
⊕	BENCHMARK TOPO
(R)	RECORD DATA
(S)	SURVEYED DATA
R/W	RIGHT OF WAY
SBL	SET BACK LINE
RCP	REINFORCED CONC PIPE
CMP	CORRUGATED METAL PIPE
PVC	PLASTIC PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
CIP	CAST IRON PIPE
DIP	DUCTILE IRON PIPE
L/S	LANDSCAPING
✿	DECIDUOUS TREE
✳	EVERGREEN TREE
U.G.	UNDER GROUND
— C —	CABLE TELEVISION LINE
— E —	ELECTRICAL LINE
— G —	GAS LINE
— T —	TELEPHONE LINE
— W —	WATER LINE
—OH—	OVERHEAD ELECTRIC WIRE
◀	SPOT LIGHT
PWP	POWERPOLE
(——	GUY WIRE
☼	LIGHT POLE
⊗	STREET LIGHT POLE
⊠	ELEC. TRANSFORMER
A/C	AIR CONDITIONER
Ⓔ	ELEC. MANHOLE
E	ELECTRIC METER
C	CABLE BOX
UC	UNDERGROUND CABLE MARKER
TS	TRAFFIC POLES
⁝	TRAFFIC SIGNAL
Ⓛ	TRAFFIC MANHOLE
T–S	TRAFFIC SIGNAL BOX
Ⓢ	SEWER MANHOLE
C/O	CLEAN OUT
Ⓓ	STORM DRAIN MANHOLE
SI	STORM INLET
▤	CURB INLET
(SI)	ROUND STORM INLET
Ⓤ	UNKNOWN MANHOLE
Ⓦ	WATER MANHOLE
°WV	WATER VALVE
W	WATER METER
⌒	HYDRANT / FDC
Ⓖ	GAS MANHOLE
°GV	GAS VALVE
G	GAS METER
UG	UNDERGROUND GAS MARKER
Ⓣ	TELEPHONE MANHOLE
A	PAY PHONE
T	TELEPHONE BOX
UT	UNDERGROUND TELEPHONE MARKER
F.P.○	FLAG POLE
●	BOLLARD
B.H.○	BORE HOLE
MW○	MONITORING WELL
MB	MAIL BOX
┤	SIGN
MC○	METAL TANK COVER
Ⓐ	AIR COMPRESSOR
○○○	STONE ROW

FLOOD NOTE

BY GRAPHICAL REPRESENTATION ONLY THIS PROPERTY IS LOCATED IN FLOOD HAZARD ZONES X (UNSHADED AND SHADED) AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL No. 090020 0383 F WHICH HAS AN EFFECTIVE DATE OF JUNE 18, 2010, MAP No. 09001C0383F AND IS AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. FIELD SURVEYING WAS NOT PERFORMED TO DETERMINE THIS ZONE. AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR AN AMENDMENT FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY. (NAVD 88)

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY HAS BEEN PERFORMED IN THE FIELD UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION, THAT THIS SURVEY HAS BEEN PERFORMED IN ACCORDANCE WITH CURRENTLY ACCEPTED ACCURACY STANDARDS. THAT THE PROPERTY LINES AND RELATIONSHIP OF BUILDINGS AND OTHER STRUCTURES TO THE PROPERTY LINES AND THE LAND INDICATED HEREON IS CORRECT, AND THAT THERE ARE NO ENCROACHMENTS OF BUILDINGS OR STRUCTURES ONTO SAID LAND EXCEPT AS SHOWN.

THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

JACK W. SHOEMAKER No. 70323

DIGITALLY SIGNED BY:
JACK W. SHOEMAKER
DATE: 02/29/2024

NOT VALID UNTIL SEALED

JACK W. SHOEMAKER DATE

CONNECTICUT PROFESSIONAL LAND SURVEYOR 70323

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TYPE OF SURVEY: BOUNDARY & TOPOGRAPHIC SURVEY

VALLEY LAND SERVICES, LLC
4383 HECKTOWN ROAD
BETHLEHEM, PA 18020
Phone (610) 365–2907 Fax (610) 365–2958
NJ Certificate of Authorization: 24GA28154900

SITE ADDRESS: 11, 15, 21 RIVER ROAD
TOWN OF WILTON
FAIRFIELD COUNTY, CONNECTICUT

CLIENT: KIMCO REALTY

JOB NO: V220183 DRAWN BY: CVT APPROVED BY: CCB

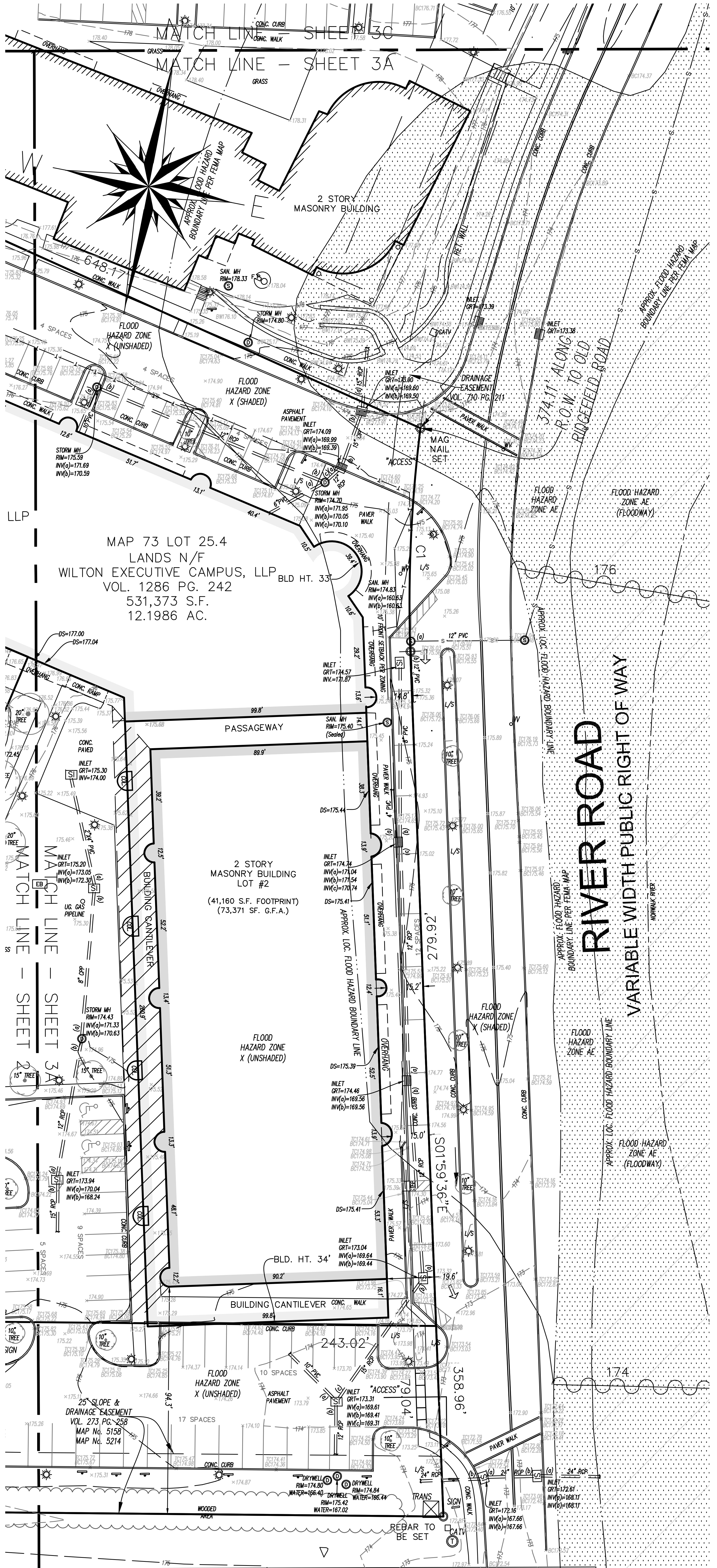
DATE: JULY 12, 2022
REVISIONS:

No.	DATE	DESCRIPTION
1	10-04-23	ADDED WETLANDS

0' 30' 60' 90'
SCALE: 1" = 30'

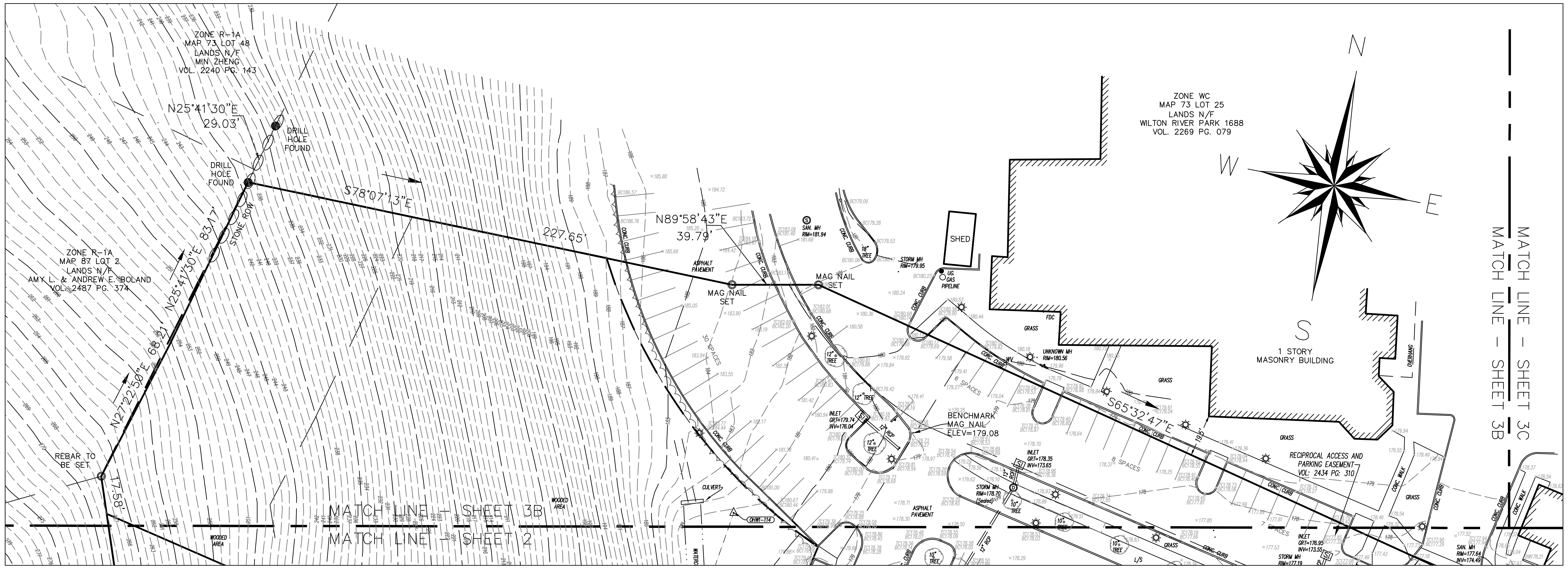
SHEET 2 OF 3

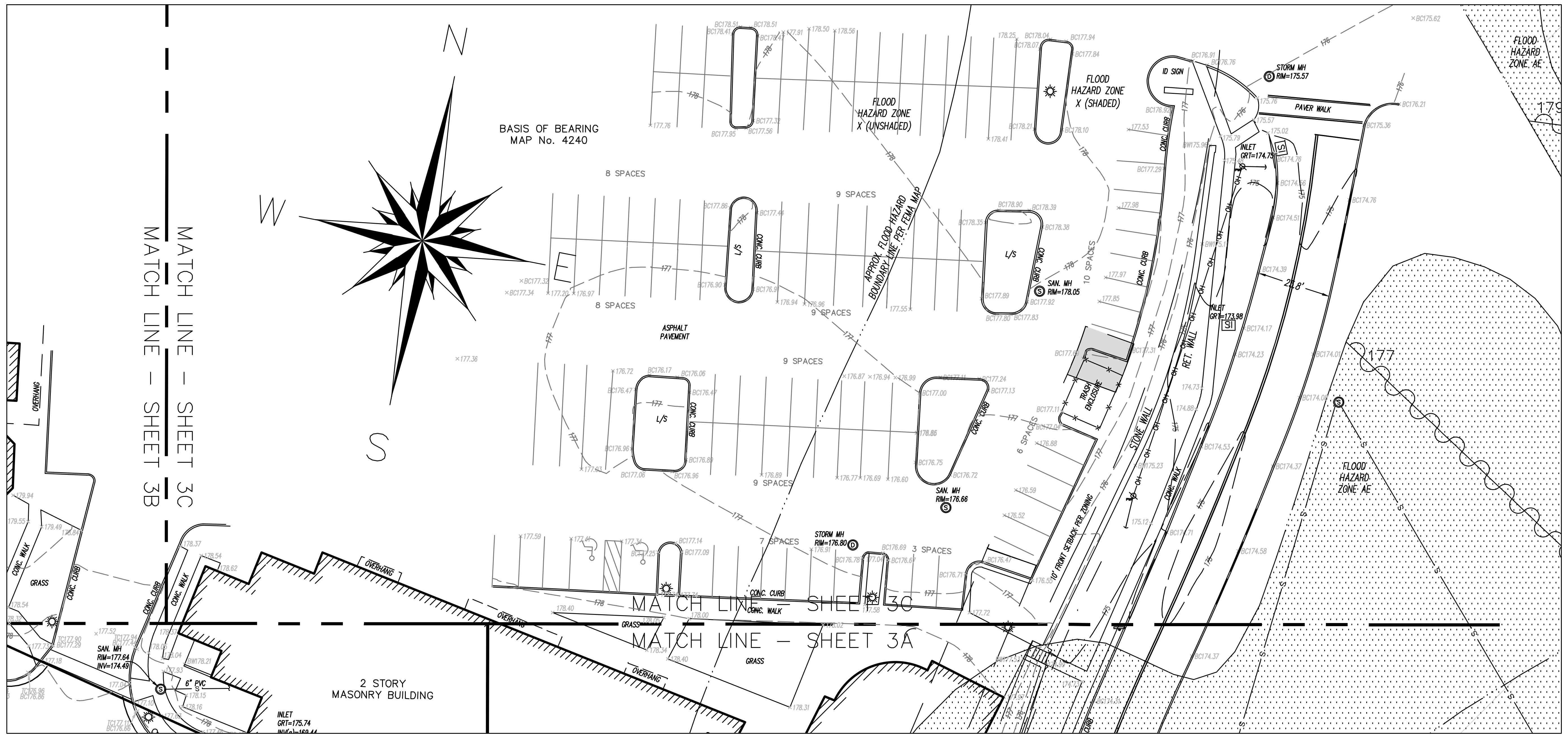
2



CURVE TABLE

Curve No.	Radius	Length	Tangent	Ch Brg	Ch Dist.	Delta
C1	560.00'	92.79'	46.50'	S02°45'13"W	92.69'	09°29'38"





SYMBOLS

(THIS IS A STANDARD LEGEND. NOT ALL ITEMS ARE ON THE SURVEY.)

●	MONUMENT FOUND	◀	SPOT LIGHT	Ⓦ	WATER MANHOLE
○	MONUMENT TO BE SET	PWP	POWERPOLE	°WV	WATER VALVE
⊕	BENCHMARK TOPO	(——	GUY WIRE	W	WATER METER
(R)	RECORD DATA	☼	LIGHT POLE		HYDRANT / FDC
(S)	SURVEYED DATA		STREET LIGHT POLE	Ⓖ	GAS MANHOLE
R/W	RIGHT OF WAY	☒	ELEC. TRANSFORMER	°GV	GAS VALVE
SBL	SET BACK LINE	A/C	AIR CONDITIONER	G	GAS METER
RCP	REINFORCED CONC PIPE	Ⓔ	ELEC. MANHOLE	UG	UNDERGROUND GAS MARKER
CMP	CORRUGATED METAL PIPE	E	ELECTRIC METER	Ⓣ	TELEPHONE MANHOLE
PVC	PLASTIC PIPE	C	CABLE BOX		PAY PHONE
HDPE	HIGH DENSITY POLYETHYLENE PIPE	UC	UNDERGROUND CABLE MARKER	T	TELEPHONE BOX
CIP	CAST IRON PIPE	TS	TRAFFIC POLES	UT	UNDERGROUND TELEPHONE MARKER
DIP	DUCTILE IRON PIPE		TRAFFIC SIGNAL	F.P.	FLAG POLE
L/S	LANDSCAPING	Ⓛ	TRAFFIC MANHOLE	●	BOLLARD
	DECIDUOUS TREE	T-S	TRAFFIC SIGNAL BOX	B.H.	BORE HOLE
✳	EVERGREEN TREE	Ⓢ	SEWER MANHOLE	MW	MONITORING WELL
U.G.	UNDER GROUND	C/O	CLEAN OUT	MB	MAIL BOX
— C —	CABLE TELEVISION LINE	Ⓓ	STORM DRAIN MANHOLE		SIGN
— E —	ELECTRICAL LINE	SI	STORM INLET	MC	METAL TANK COVER
— G —	GAS LINE		CURB INLET	Ⓐ	AIR COMPRESSOR
— T —	TELEPHONE LINE	(SI)	ROUND STORM INLET	○○○	STONE ROW
— W —	WATER LINE	Ⓤ	UNKNOWN MANHOLE		
—OH—	OVERHEAD ELECTRIC WIRE				

FLOOD NOTE

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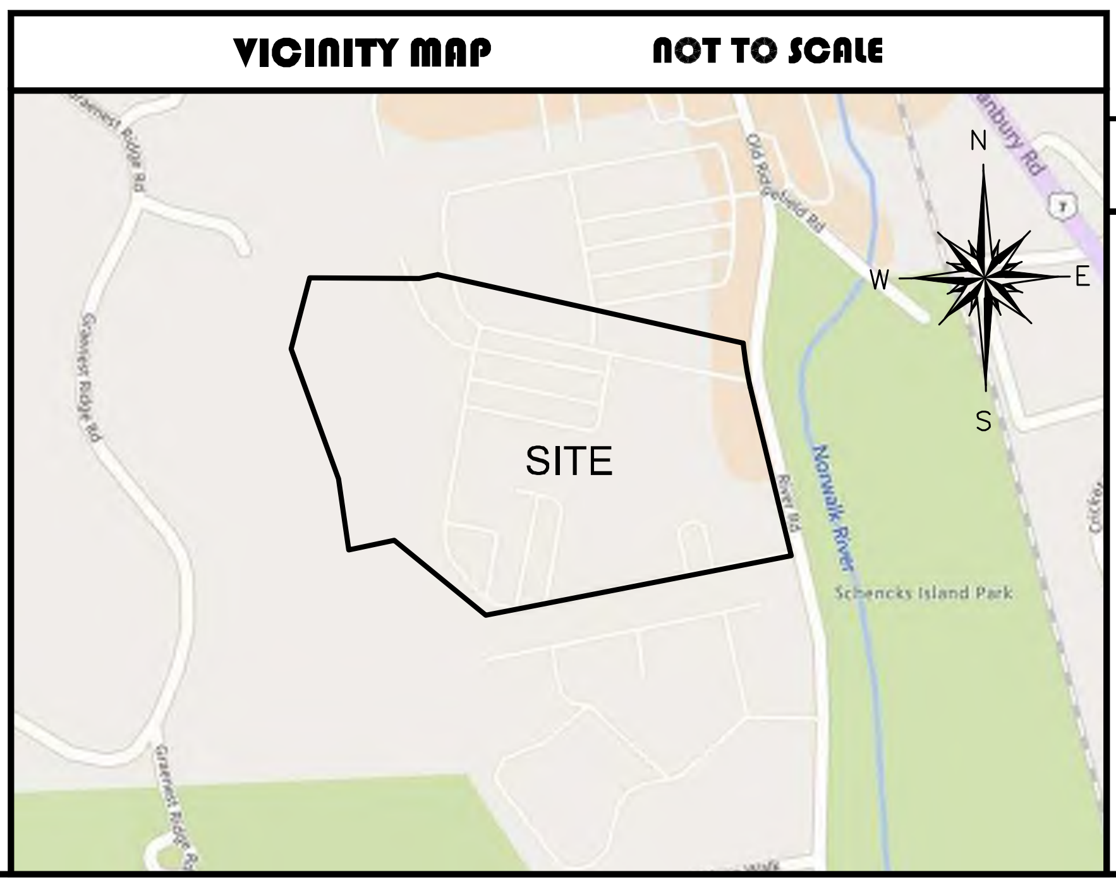
VICINITY MAP

NOT TO SCALE



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