# Preliminary Plan of I'E.200 PROPERTY''

Providence, Rhode Island 02909

DATE: January 18, 2022

#### INDEX OF DRAWINGS

#### SHEET NUMBER DESCRIPTION

- I. COVER SHEET
- 2. Existing Conditions
- 3. LAYOUT PLAN
- 4. GRADING, DRAINAGE, & UTILITY PLAN
- 5. EROSION & SEDIMENT CONTROL PLAN
- 6. DETAIL SHEET (I OF 3)
- 7. DETAIL SHEET (2 OF 3)
- . DETAIL SHEET (3 OF 3)
- 9. PRE WATERSHED ANALYSIS
- 0. POST WATERSHED ANALYSIS

#### GENERAL NOTES:

I. LOT SHOWN IS DESIGNATED AS LOTS 232, 233, 234, & 235 ON PROVIDENCE ASSESSORS MAP II3

- 2. ZONING DISTRICT: COMMERCIAL "C-2"
- 3. OWNER OF RECORD: E.2000 REALTY, LLC
  BOOK 6024 PAGE 124 & 125
- 4. SITE IS NOT LOCATED IN A FEMA FLOOD ZONE (ZONE X) (AREA OF MINIMAL FLOOD HAZARD) AS SHOWN ON FIRM PANEL 445406 0304 J EFFECTIVE ON OCTOBER 2, 2015

#### DIMENSIONAL ZONING REQUIREMENTS:

#### COMMERCIAL "C-2" ZONING DISTRICT

MINIMUM AREA

FRONT YARD SETBACK
INTERIOR SIDE YARD SETBACK
CORNER SIDE YARD SETBACK
REAR YARD SETBACK

- NONEBUILT-TO PERCENTAGE IS 60% OF THE FRONT LOT LINE.'NONE UNLESS ABUTTING A RESIDENTIAL DISTRICT, THEN 10'
- = BUILD-TO PERCENTAGE IS 40% OF THE CORNER SIDE LOT LINE. = NONE UNLESS ABUTTING A RESIDENTIAL DISTRICT, THEN 20'
- MAX. PERCENT OF COVERAGE = NONE

	MAP II3 LOT 230  MAP II3 LOT 237  MAP II3 LOT 236  P II3  LOT 233  MAP II3  LOT 234  MAP II3  LOT 235  MAP II3  LOT 235	MAP II3 LOT 278  MAP II3 LOT 279  MAP II3 LOT 280
MAP II2 LOT 382	SITE MAP  SCALE 1"= 250'	MAP II2 LOT 403

SUBJECT TO A COVENANT DULY EXECUTED DATED THE \_\_\_\_\_ DAY OF \_\_\_\_, \_\_\_, RUNNING WITH THE LAND, TO BE DULY RECORDED BY OR FOR THE OWNER OF RECORD. THIS PLAN IS SUBJECT TO ALL CONDITIONS OF THE PROVIDENCE PLANNING BOARD CERTIFICATE OF ACTION DATED \_\_\_\_\_ FILED WITH THE PROVIDENCE TOWN CLERK ON \_\_\_\_\_ AND HEREWITH RECORDED AS A PART OF THIS PLAN.

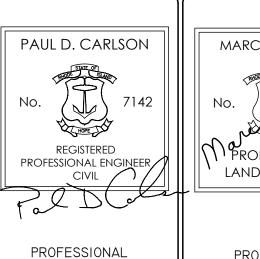
**LOCATION MAP** 

SCALE 1"= 1000'

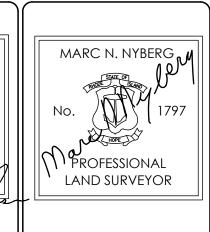
I HEREBY CERTIFY THAT THERE HAS BEEN NO APPEAL TAKEN TO THIS PLANNING BOARD ACTION DURING THE 20 DAY STATUTORY APPEAL PERIOD.

DATE:\_\_\_\_\_ TOWN CLERK, CITY OF PROVIDENCE \_\_\_\_\_

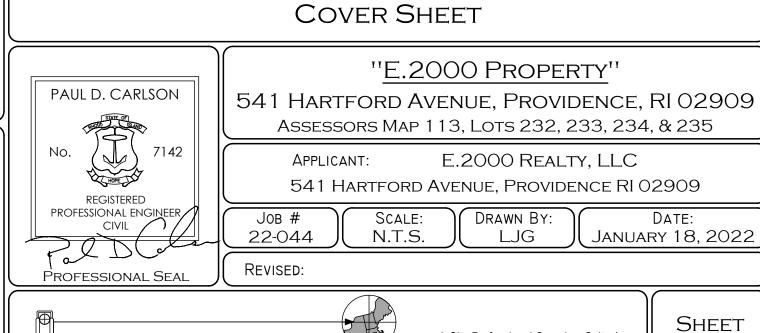
### PROVIDENCE PLANNING BOARD APPROVED UNDER SUBDIVISION CONTROL LAW



**ENGINEER** 







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-044 541 Hartford Avenue Providence R.I. - E2000\CADD\222-044

MASTER PLAN SUBMISSION

PRELIMINARY PLAN SUBMISSION

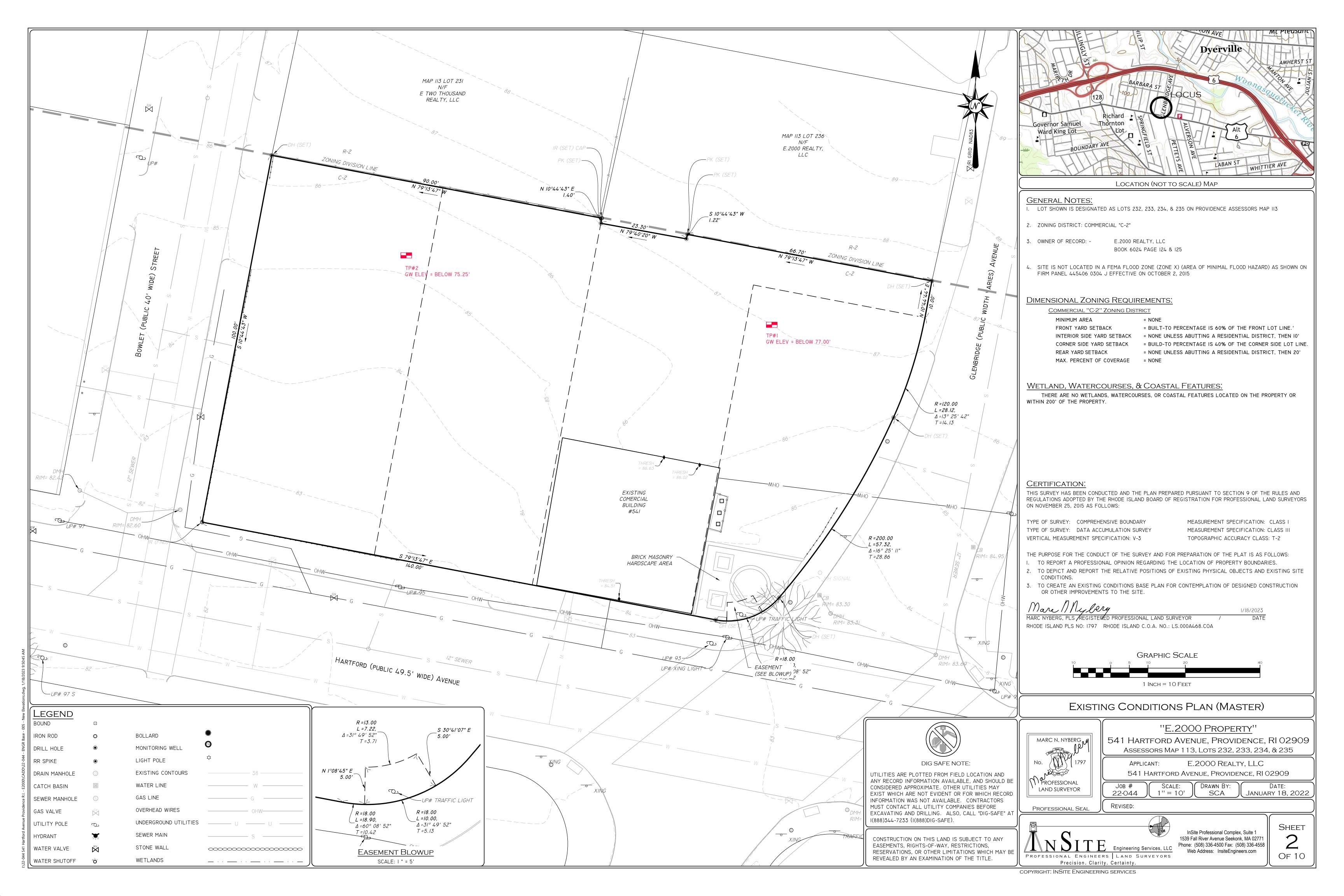
COMMENTS

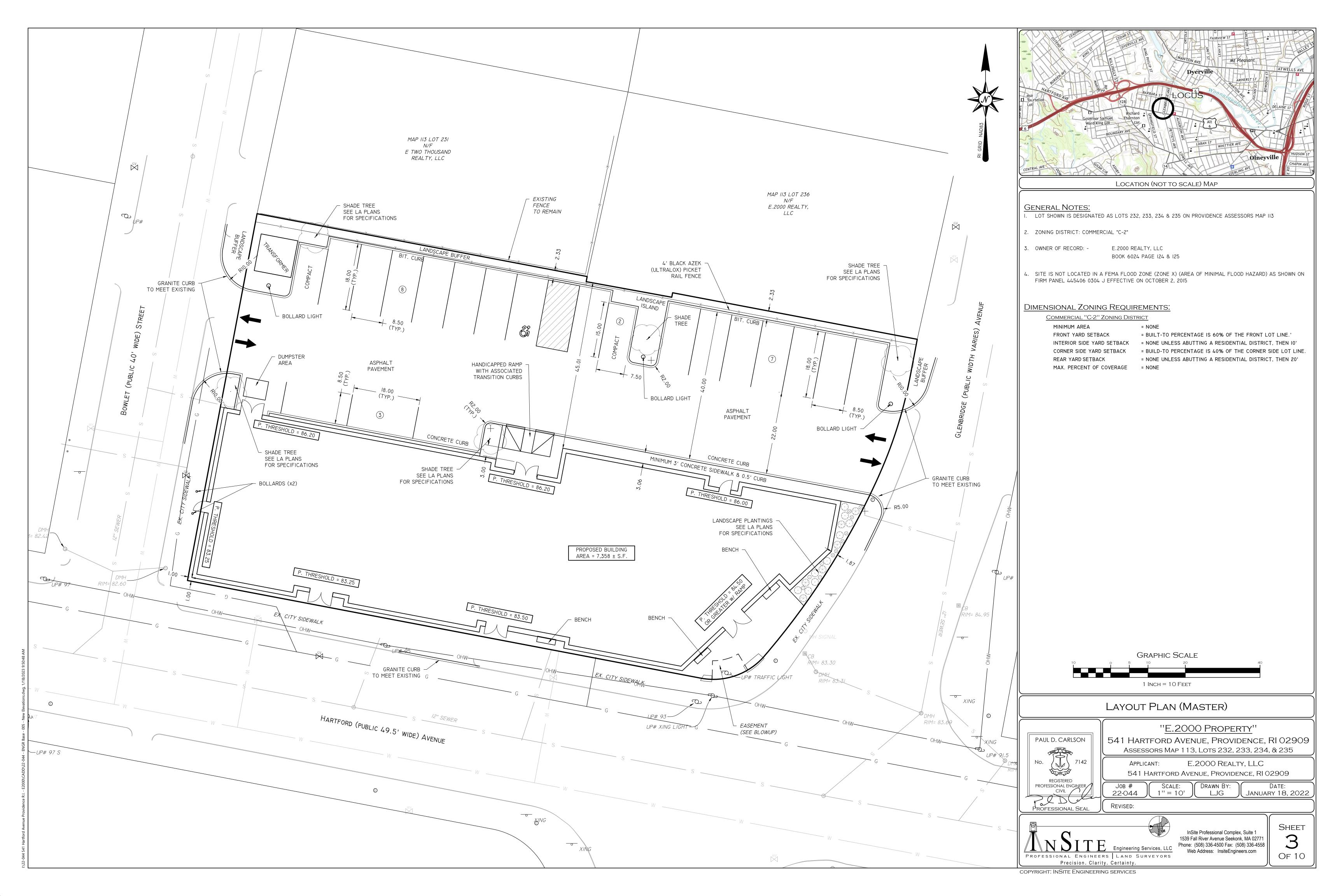
DATE

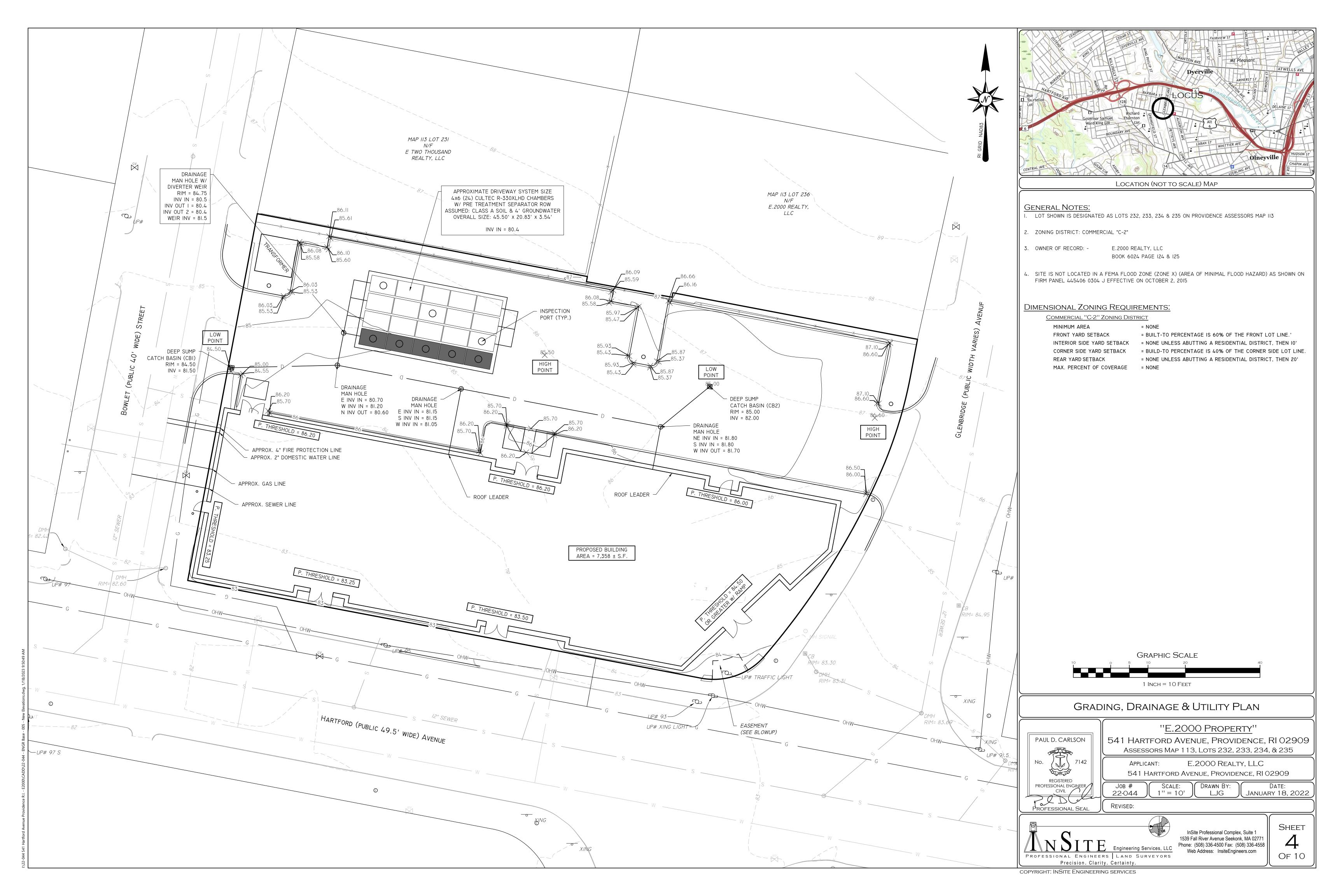
Nov. 15, 2022

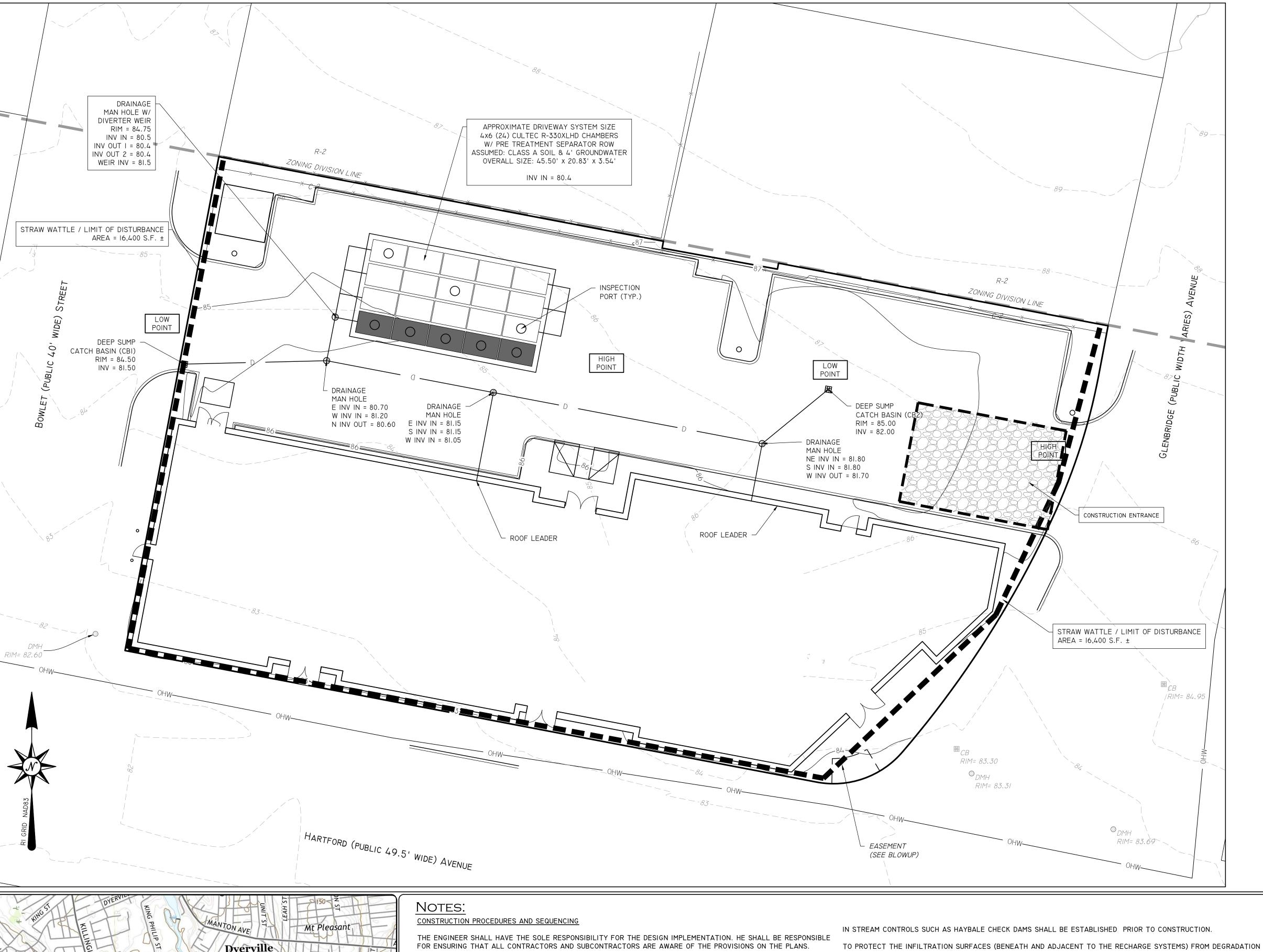
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#### **EROSION & SEDIMENT CONTROL NOTES**

- I. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. GRAVEL CONSTRUCTION ENTRANCE WILL BE INSTALLED BEFORE CONSTRUCTION TRAFFIC INTO AND OUT OF PROJECT AREA BEGINS. STABILIZATION OF ALL REGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
- 2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF PROVIDENCE REGULATIONS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION.
- 3. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE ENGINEER OR
- 4. SEED TO APPLIED AT A RATE OF 10 LBS / 1000 S.F. FERTILIZER SHALL BE APPLIED AT A RATE OF 10 LBS / 1000 S.F. PLANTING SEASON SHALL BE APRIL I TO OCTOBER I5. AFTER OCTOBER I5 AREAS NOT SEEDED SHALL BE STABILIZED WITH HAY BALE CHECK, FILTER FABRIC OF WOODEN MULCH AS REQUIRED TO CONTROL EROSION.
- 5. AREAS LEFT BARE BEFORE FINISH GRADING AND SEEDING IS ACHIEVED, SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYE GRASS APPLIED TO A RATE OF 10 LBS / 1000 S.F. AT A DEPTH OF 1/2". LIMESTONE (EQUIVALENT TO BE 50 % CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF IIO LBS / 1000 S.F.. WHERE GRASS PREDOMINATES, FERTILIZE ACCORDING TO A SOIL TEST AT A MINIMUM APPLICATION RATE OF I LB OF NITROGEN PER 1000 S.F. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COURSE MATTER, TREATED WITH 12 LBS NITROGEN PER TON, APPLIED AT A RATE OF 185-275 LBS / 1000 S.F.
- 6. CONTRACTOR SHALL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFY THE PROPER TOWN AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLY FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
- 7. THE CONTRACTOR SHALL REQUEST THE APPROVING AUTHORITY TO INSPECT AND APPROVE THE INSTALLATION OF ALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION. PERIODIC INSPECTIONS OF EROSION CONTROL MEASURES MAY BE PERFORMED BY THE AGENT, THE CONTRACTOR SHALL REPAIR, UPGRADE OR REPAIR ANY MEASURES THE AGENT MAY FEEL ARE IN NEED
- 8. LOAM SHALL BE STOCKPILED IN DESIGNATED AREAS FOR DURATION OF PROJECT. ALL LOAM MATERIAL SHALL BE REUSED ON SITE UPON FINAL GRADING OF SITE. SIX INCHES (6") OF LOAM SHALL BE USED THROUGHOUT THE SITE.
- 9. STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN FIFTEEN (15) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH. IF STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF HAY BALES. SIDE SLOPES SHALL NOT EXCEED 2: I. STOCKPILES SHALL BE LOCATED AT LEAST 100' FROM REGULATED WETLAND RESOURCE AREAS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC ON ADJACENT ROADWAYS.
- II. SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF THE STRAW WATTLE OR HAY BALE
- 12. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.
- 13. ALL CONSTRUCTION SEDIMENTATION SHALL BE REMOVED FROM TEMPORARY AND PERMANENT SEDIMENTATION BASINS PRIOR TO COMPLETION OF PROJECT AND ESTABLISHMENT OF ALL SLOPES. BASINS SHALL BE GRADED AND SHAPED TO DESIGN PARAMETERS.
- 14. SURFACE STONE OF THE ACCESS ROAD SHALL BE SCARIFIED ONCE A YEAR TO PREVENT COMPACTION.

#### NOTES:

THE ENGINEER SHALL PERFORM FREQUENT INSPECTION OF THE STORMWATER SYSTEM DURING CONSTRUCTION, WITH CLEANING AND MAINTENANCE AS WARRANTED. DURING ACTIVE CONSTRUCTION PERIODS, WEEKLY INSPECTION IS REQUIRED.

IF CONSTRUCTION IS SUSPENDED (E.G., OVER THE WINTER), THEN MONTHLY INSPECTIONS ARE REQUIRED. IN ADDITION, THE SYSTEM SHOULD BE CHECKED AFTER ANY SIGNIFICANT RAINFALL, TO INSURE IT IS FUNCTIONING CORRECTLY AND TO MONITOR SEDIMENT ACCUMULATION FROM THE DISTURBED AREAS OF THE SITE.

#### ROUGH GRADING

SYSTEMS FUNCTION AS DESIGNED.

DURING GRADING, THE POTENTIAL FOR EROSION IS HIGH. DURING GRADING OPERATIONS, DISTURBED SLOPES WILL BE MULCHED AND VEGETATION ESTABLISHED TO PREVENT SEDIMENT EROSION TO THE SATISFACTION OF THE ENGINEER.

#### OPERATION & MAINTENANCE PLAN

THE MAINTENANCE AND UPKEEP ON THE EXISTING ROADWAY WILL INCLUDE THE FOLLOWING ELEMENTS:

CONSTRUCTION VEHICLES SHALL BE LIMITED TO ONE ACCESS POINT ON EACH LOT WHERE A CRUSHED-STONE CONSTRUCTION PAD ENTRANCE SHALL BE INSTALLED IN THE AREA OF THE PERMANENT DRIVEWAY TO ENSURE THAT MUD AND DEBRIS ARE NOT TRACKED ONTO THE ROADWAY. IF MUD IS INADVERTENTLY TRACKED ONTO THE ROAD, IT SHOULD BE REMOVED PROMPTLY.

GENERAL MAINTENANCE OF EROSION CONTROL ELEMENTS INCLUDING REGRADING, REVEGETATION, REPLACING RIPRAP, ETC., ON AN AS NEEDED BASIS.

INFILTRATION FACILITY AND CATCH BASINS WILL BE INSPECTED SEMI-ANNUALLY BY THE OWNER AND WILL BE MAINTAINED AS REQUIRED.

BUILD UP OF SEDIMENTATION AND DEBRIS SHALL BE MONITORED AND REMOVED ON A SEMI-ANNUALLY BASIS IN ORDER TO KEEP THE DISCHARGES AND FLOWS INTO THE INFILTRATION FACILITY FUNCTIONING PROPERLY.

ALL STORMWATER MANAGEMENT SYSTEMS MUST HAVE AN OPERATION AND MAINTENANCE PLAN TO ENSURE THAT

THE OWNER WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM AND ALL OF ITS APPURTENANCES. THE FOLLOWING MAINTENANCE PROGRAM SHALL BE IMPLEMENTED:

THE OWNER SHALL KEEP A WRITTEN RECORD OF INSPECTION DATES AND FINDINGS, MAINTENANCE OPERATIONS, AND ALL REPAIRS. AN INSPECTION/MAINTENANCE CHECKLIST SHALL BE USED IN THE SPECIFIED INSPECTIONS. RECORDS OF INSPECTIONS AND MAINTENANCE SHALL BE KEPT FOR AT LEAST THREE YEARS, AND AVAILABLE ON REASONABLE NOTICE FOR INSPECTION BY THE APPROPRIATE TOWN AGENCY.

# LOCATION (NOT TO SCALE) MAP

THE CONTRACTOR SHALL ORGANIZE SITE CONSTRUCTION IN A MANNER WHICH WILL ENSURE THE IMMEDIATE STABILIZATION OF SURFACES. PERIMETER CONTROLS EQUAL APPROVED PROJECT LIMITS.

PRIOR TO ANY CONSTRUCTION ON SITE, THE CONTRACTOR SHALL SETUP PRE-CONSTRUCTION MEETING WITH OWNER, ENGINEER, TOWN PLANNING AND DPW PERSONAL.

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, A LINE OF STAKED STRAW WATTLE AND OR HAYBALES, WILL BE PLACED AT ALL CONSTRUCTION TOE OF SLOPES IN THE AREA OF ROADWAY, PONDS, LANDSCAPED AREAS, AND ALONG PERIMETER OF PROJECT LIMIT OF DISTURBANCE WHERE INDICATED ON PROJECT PLANS.

RESERVE EROSION CONTROL DEVICES SHALL BE STOCKPILED ON SITE IN THE EVENT OF EMERGENCIES AND SHALL BE LOCATED 100' FROM REGULATED WETLAND RESOURCE AREAS.

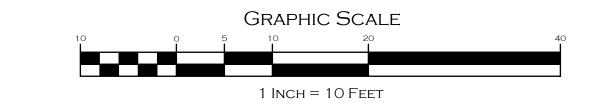
THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS FOR THE PROPER STORAGE AND/OR REMOVAL OF DEBRIS

ON SITE TO AVOID UNNECESSARY ACCUMULATION ON SITE. DRAINAGE STRUCTURES SHALL BE CONSTRUCTED FROM DOWNSTREAM UP AND CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF STONE AT THE FLARED PIPE ENDS AND OUTLET STRUCTURE INLETS AND OUTLETS AS SHOWN ON

PROJECT PLANS.

BY CONSTRUCTION ACTIVITIES INCLUDE:

- PREVENTION OF CONTAMINATION OF THE EXPOSED SUBGRADE BY CONSTRUCTION VEHICLES.
- 2. PREVENTION OF EXCESSIVE COMPACTION BY CONSTRUCTION VEHICLES.
- 3. PREVENTION OF THE DISCHARGE OF WATER FROM CONSTRUCTION DEWATERING ACTIVITES INTO THESE FACILITIES.
- PREVENTION OF DISCHARGE OF STORMWATER INTO THESE FACILITIES UNTIL THE CONTRIBUTING AREAS ARE STABILIZED, UNLESS SPECIFIC MEASURES ARE PROVIDED FOR PROTECTING AND RESTORING THE INFILTRATION SURFACE.







"E.2000 PROPERTY" 541 HARTFORD AVENUE, PROVIDENCE, RI 02909 ASSESSORS MAP 113, LOTS 232, 233, 234, & 335 E.2000 REALTY, LLC APPLICANT:

541 HARTFORD AVENUE, PROVIDENCE, RI 02909 Drawn By: 1'' = 10'JANUARY 18, 2022

REVISED:

InSite Professional Complex, Suite 1 Web Address: InsiteEngineers.com

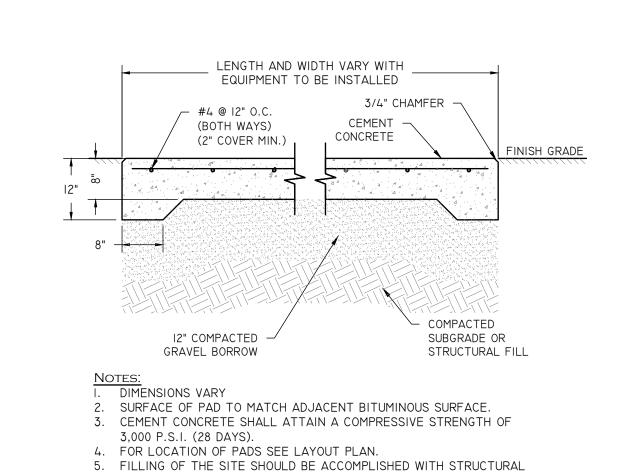
1539 Fall River Avenue Seekonk, MA 02771 Phone: (508) 336-4500 Fax: (508) 336-4558 SHEET

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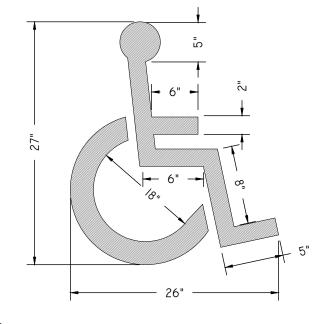


NOT TO SCALE

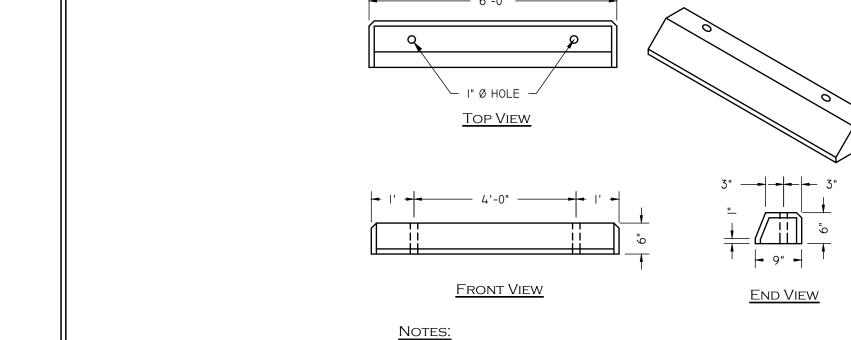
I. ALL HANDICAP PARKING AND SIGNALS SHALL BE IN CONFORMANCE WITH THE RULES AND REGULATIONS OF

THE ARCHITECTURAL BARRIERS BOARD

HANDICAP PAVEMENT MARKING NOT TO SCALE



CEMENT CONCRETE PAD



SAW CUT EDGES TO OBTAIN CLEAN -

EXISTING BASE AND REMOVE OLD

PAVEMENT TO PROVIDE STRAIGHT

EDGE - TACK COAT EDGES W/ ASTM

FULL THICK BUTT JOINT ON

D977 EMULSIFIED ASPHALT

THE TOP AND ALL EXPOSED FACE SURFACES TO I" BELOW GUTTER LINE SHALL HAVE A SPONGE FLOAT SURFACE

2. ALL EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER 3. PRECAST CONCRETE CAR STOPS INCLUDE FURNISHING AND DRIVING 3/4"x 18" STEEL RODS.

PRECAST CEMENT CONCRETE CAR STOPS

COMPACTED

APPROVED

BACKFILL

UNDISTURBED

EARTH SURFACE WATER

TYPICAL WATER MAIN / GAS MAIN TRENCH DETAIL

NOT TO SCALE

8" CRUSHED GRAVEL

TO MATCH EXISTING

OR PAVEMENT MATERIAL

OR 4" MINIMUM THICKNESS

LOAM & SEED TO

OR AS SPECIFIED

6" MIN

COMPACTED

BACKFILL

6" MIN

UNDISTURBED

ROCK SURFACE

- EXCAVATION - EARTH OR ROCK ALL ROCK EXCAVATION AND STONES LARGER THAN 6" SHALL BE DISPOSED OF AND REPLACED WITH APPROVED EXCAVATED

CAREFULLY

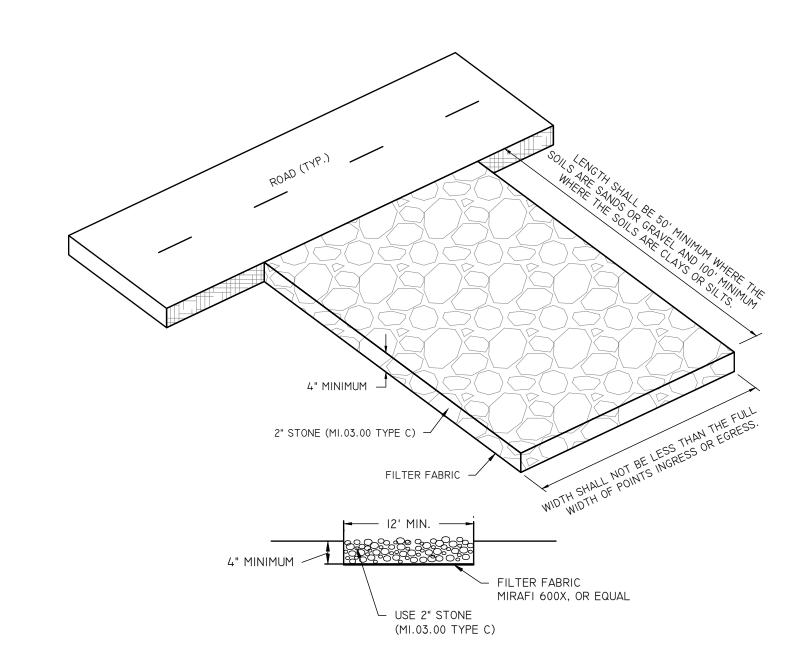
COMPACTED TYPE B

GRAVEL BORROW

MATERIAL/GRAVEL BORROW

MATCH EXISTING

NOT TO SCALE



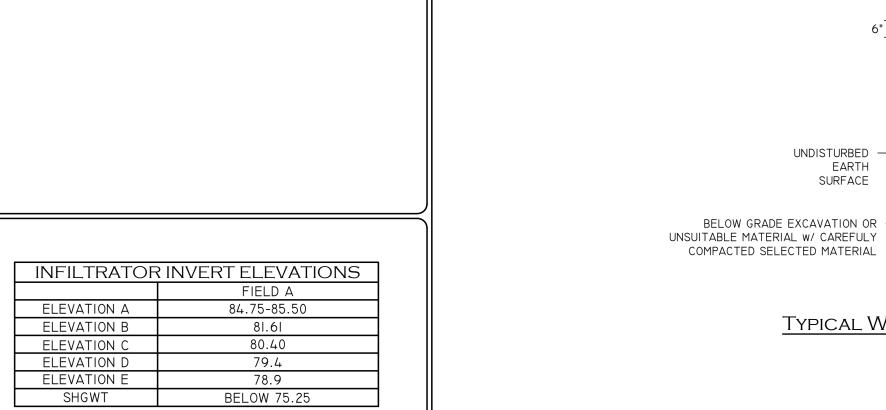
THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS,

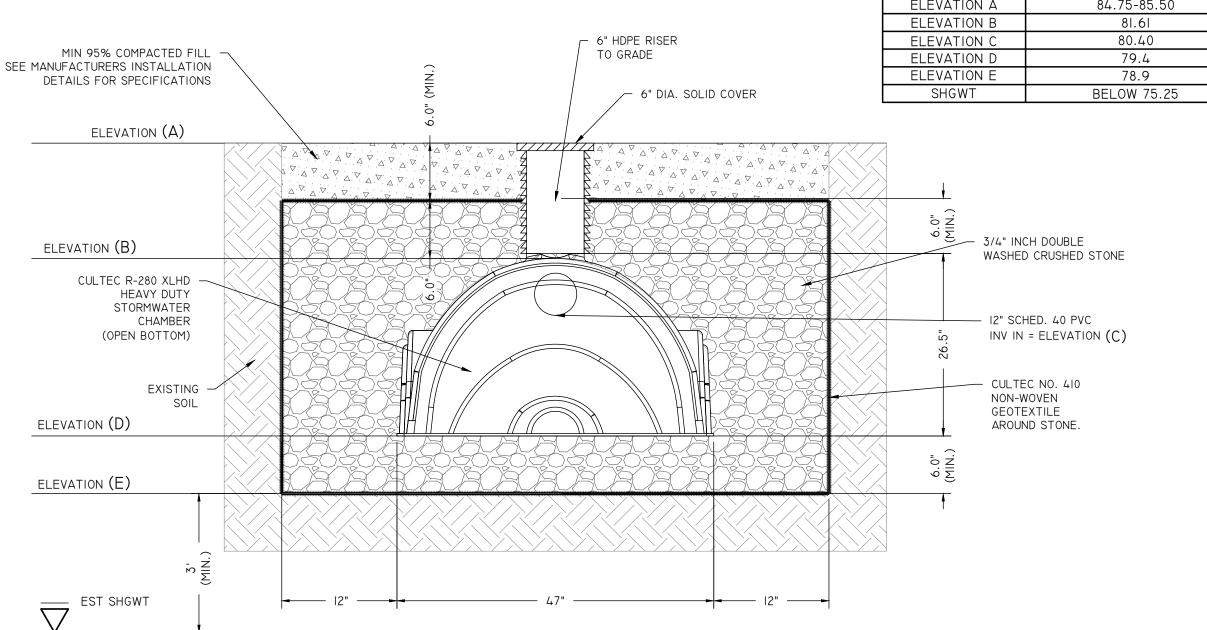
AND OTHER OBJECTIONABLE MATERIAL, THE STONE SHALL BE PLACED TO THE SPECIFIED DIMENSIONS, AS NOTED ABOVE.

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENTS ONTO PUBLIC RIGHT- OF-WAYS THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE, OR ADDITIONAL LENGTH, AS CONDITIONS DEMAND, AND REPAIR, AND / OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.

LOCATION: SEE OVERALL SHEET FOR LOCATION OF CONSTRUCTION ENTRANCE.

CONSTRUCTION ENTRANCE DETAIL NOT TO SCALE





CULTC R-280-HD HEAVY DUTY

INFILTRATION SYSTEM CROSS SECTION

NOT TO SCALE

GRASS SEED -SEE NOTES AND/OR - PROVIDE 6" MAX. GOOD SPECS FOR SEED MIX TYPE QUALITY FERTILE LOAM OR REUSE EXISTING AND PROVIDE ADDITIONAL LOAM AS REQUIRED FOR MINIMUM DEPTH, REFER TO SPECIFICATIONS FOR ATHLETIC FIELDS 6" COMPACTED SAND GRAVEL BASE - COMMON BORROW AS REQUIRED TO RAISE GRADE OR EXISTING SUBSOIL COMPACTED GEOTEXTILE MATERIAL; INSTALL AS DIRECTED BY A PROFESSIONAL ENGINEER LOAM AND SEED DETAIL NOT TO SCALE

LOAM MOVED SHALL BE RETAINED AND DISTRIBUTED ON THE SITE IN ACCORDANCE WITH THE PLANS. STOCKPILED LOAM SHALL NOT BE MIXED WITH ANY SUBSOIL OR UNSUITABLE MATERIALS. NEW LOAM IF REQUIRED SHALL BE FERTILE, FRIABLE MEDIUM TEXTURED SANDY LOAM FREE OF STUMPS, STONES, ROOTS AND OTHER MATTER ONE INCH (I") OR GREATER IN DIAMETER. THE PH SHALL BE BETWEEN 5.5 AND 7.5.

LAWN PREPARATION: ALL DEBRIS AND INORGANIC MATERIAL SHALL BE REMOVED FROM THE SUBGRADE. PRIOR TO THE SPREADING OF ANY LOAM, AREAS SHALL BE RESHAPED AND DRESSED WITH CLEAN LOAM AS REQUIRED TO OBTAIN A SMOOTH SURFACE. SUBGRADE TO BE SCARIFIED AND LOOSEN IN AREAS WHERE COMPACTION HAS OCCURRED. LOAM TO BE SPREAD TO A DEPTH OF SIX INCHES (6"). A STARTER FERTILIZER (10-20-10) AT A RATE OF 20LBS. PER 1000 SQUARE FEET AND LIME AT A RATE OF 40LBS. PER 1000 SQUARE FEET. THE LOAM SHALL BE ROLLED TO CREATE A SMOOTH SURFACE.

3. SEEDING SHALL TAKE PLACE BETWEEN MARCH IS AND MAY 31 OR AUGUST IS AND OCTOBER 15. SEED SHALL BE PURE, LIVE, FRESH SEED FROM COMMERCIAL SOURCES AND LABELED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS. THE SEED MIXTURE SHALL BE:

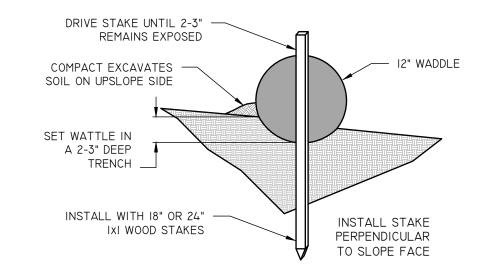
PRODUCTION TYPE HENREYS HARD FESCUE AZURE SHEEPS FESCUE AMBROSE CHEWINGS FESCUE CREEPING RED FESCUE

WEIGHT 24.78% 24.78% 24.67% 24.63%

\*INERT MATERIAL TO BE LESS THAN 2.5% MAX.

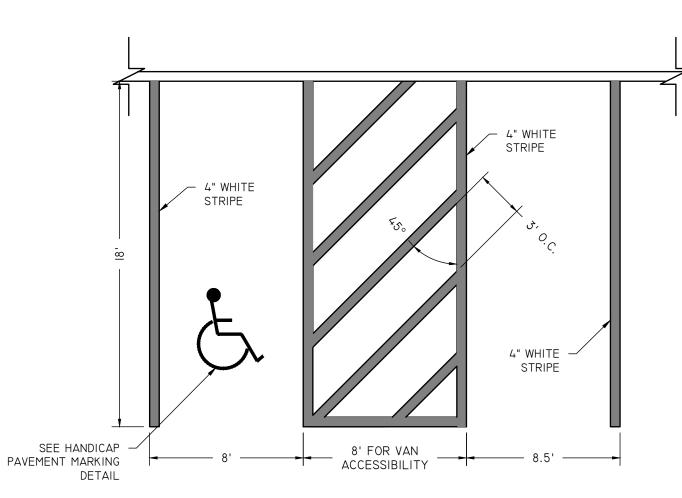
#### **EROSION & SEDIMENTATION CONTROL:**

- I. BEGIN AT THE LOCATION WHERE WATTLE IS TO BE INSTALLED BY EXCAVATING 2-3" DEEP x 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP SLOPE FROM THE ANCHOR TRENCH.
- 2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
- 3. SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
- 4. CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF STRAW WATTLE FOR DURATION OF
- 5. EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS STABILIZE.
- 6. LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM & SEED UNTIL GERMINATION AND STABILIZATION OCCURS.



STRAW WATTLE (OR SILT SOCK) DETAIL

NOT TO SCALE



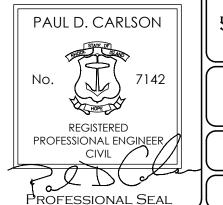
NOTES:

I. WHERE STALLS ABUT SIDEWALK, PARKING SIGNS SHOULD BE PLACED AT BACK EDGE OF SIDEWALK.

HANDICAP PARKING AND STANDARD STALLS

NOT TO SCALE





"E.2000 PROPERTY" 541 HARTFORD AVENUE, PROVIDENCE, RI 02909 ASSESSORS MAP 113, LOTS 232, 233, 234, & 335

E. 2000 REALTY, LLC APPLICANT: 541 HARTFORD AVENUE, PROVIDENCE, RI 02909 DRAWN BY:

22-044 N.T.S. JANUARY 18, 2022 REVISED:



InSite Professional Complex, Suite 1 1539 Fall River Avenue Seekonk, MA 02771 Phone: (508) 336-4500 Fax: (508) 336-4558 Web Address: InsiteEngineers.com

SHEET

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I. CULTEC'S SEPARATOR ROW IS USED AS AN INEXPENSIVE MEANS OF REMOVING TOTAL SUSPENDED SOLIDS FROM THE CHAMBER SYSTEM, AS WELL AS PROVIDING EASIER ACCESS FOR INSPECTION AND MAINTENANCE.

2. THE SEPARATOR ROW PERFORMANCE SHALL BE TESTED AND VERIFIED TO THE PROTOCOLS AND PROCEDURES AS DEFINED BY ENVIRONMENTAL TECHNOLOGY VERIFICATION (ETV) CANADA TO ACHIEVE 80% TSS REMOVAL.

#### Installation Instructions

A SEPARATOR ROW IS INSTALLED ON A 1-2 INCH [25-51 MM] WASHED, CRUSHED STONE BASE. TYPICALLY, THE CULTEC CHAMBER MODEL USED FOR THE SEPARATOR ROW IS THE SAME CHAMBER USED THROUGHOUT THE ENTIRE CHAMBER BED.

STORMWATER IS DISTRIBUTED TO THE SEPARATOR ROW BY A PRIMARY FEED SYSTEM THAT DIVERTS FLOW TO THE SEPARATOR ROW AND A SECONDARY BYPASS FEED SYSTEM THAT DIVERTS THE FLOW OF CLEAN WATER TO THE OTHER PARTS OF THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM. THE DISTRIBUTION SYSTEM MAY BE BY PIPES SET AT A LOWER ELEVATION THAT PERMIT THE FIRST FLUSH TO THE SEPARATOR ROW VERSUS OTHER PARTS OF THE UNDERGROUND STORMWATER SYSTEM. THIS INITIAL FLOW MAY BE MANAGED BY A BAFFLE OR WEIR. THE SIZING OF THE PIPE(S) THAT PROVIDE STORM WATER TO THE SEPARATOR ROW IS TO BE DETERMINED BY THE DESIGN ENGINEER AND IS BASED UPON THE REQUIREMENT TO ACCOMMODATE THE DESIGN FLOW AND SERVICE CONVENIENCE.

THE CHAMBERS UTILIZED IN THE SEPARATOR ROW ARE TO BE COMPLETELY WRAPPED WITH CULTEC NO. 410 NON-WOVEN GEOTEXTILE. THIS CREATES A PASS-THROUGH FILTER ARRANGEMENT TO SEPARATE TOTAL SUSPENDED SOLIDS IN THE TRANSFER OF STORM WATER TO OTHER CHAMBERS THROUGHOUT THE UNDERGROUND STORMWATER MANAGEMENT

ONCE WRAPPED, THE SEPARATOR ROW IS TO THEN PLACED ENTIRELY OVER I LAYER OF CULTEC No. 4800 WOVEN GEOTEXTILE. THIS WOVEN GEOTEXTILE PROVIDES A DURABLE SURFACE WITHIN THE ROW FOR MAINTENANCE PROCEDURES AS WELL AS TO PREVENT ANY SCOURING OF THE STONE BASE DURING HIGH PRESSURE JETTING.

THE RECOMMENDED INSTALLATION OF SEPARATOR ROW CHAMBERS, IN REGARD TO STONE SEPARATION AND STONE ABOVE THE UNIT, ALONG WITH OTHER MINIMUM BURIAL, MATERIALS AND METHOD SPECIFICATIONS DETAILED FOR THE PROPER INSTALLATION, IS THE SAME AS CULTEC S REQUIREMENT DETAILED IN THE COMPANY S INSTALLATION GUIDELINES WITH THE EXCEPTION OF THE PLACEMENT OF THE REQUIRED FILTERING FABRICS. PLEASE REFER TO CULTEC S CURRENT INSTALLATION INSTRUCTIONS FOR STORMWATER CHAMBERS AS A GUIDE.

CULTEC RECOMMENDS INSPECTIONS OF THE SEPARATOR ROW TO BE PERFORMED EVERY SIX MONTHS FOR THE FIRST YEAR. THE FREQUENCY OF INSPECTION CAN THEN BE ADJUSTED BASED UPON PREVIOUS OBSERVATION OF SEDIMENT DEPOSITION.

WHILE CLEANING IS POSSIBLE FROM A SINGLE MANHOLE IN SHORTER LINES, A CLEAN-OUT OPTION FROM EITHER END OF A LINE IS PREFERABLE, PARTICULARLY FOR LONGER RUNS. CLEANING INVOLVES FLUSHING SEDIMENT FROM THE BASE FABRIC OF THE SEPARATOR ROW.

ACCESS WILL BE PROVIDED VIA A MANHOLE(S) LOCATED AT THE END(S) OF THE ROW FOR CLEAN OUT.

MAINTENANCE OF THE SEPARATOR ROW IS TO BE ACCOMPLISHED WITH A JETVAC PROCESS.

THE JETVAC IS TO BE SENT DOWN THE ENTIRE LENGTH OF THE SEPARATOR ROW. AS THE HIGH PRESSURE WATER NOZZLE IS RETRIEVED, THE CAPTURED SEDIMENTS ARE PUSHED BACK INTO THE MANHOLE FOR VACUUMING.

CULTEC CHAMBER MODEL										
	DESCRIPTION	CONTACTOR 100HD	RECHARGER 150XLHD	RECHARGER 280HD	RECHARGER 330XLHD	RECHARGER 902HD				
A <sup>1</sup>	MIN. DEPTH OF STONE BASE	6" 152 mm	6" 152 mm	6" 152 mm	6" 152 mm	9" 229 mm				
В	CHAMBER HEIGHT	12.5" 318 mm	18.5" 470 mm	26.5" 673 mm	30.5" 775 mm	48" 1219 mm				
C¹	MIN. DEPTH OF STONE REQUIRED ABOVE UNITS FOR TRAFFIC APPLICATIONS	6" 152 mm	6" 152 mm	6" 152 mm	6" 152 mm	12" 305 mm				
D	MIN. DEPTH REQUIRED OF 95% COMPACTED FILL FOR PAVED TRAFFIC	8" 203 mm	8" 203 mm	8" 203 mm	10" 254 mm	12" 305 mm				
Е	MAX. DEPTH OF COVER ALLOWED ABOVE CROWN OF CHAMBER	12' 3.65 m	12' 3.65 m	12' 3.65 m	12' 3.65 m	8.3' 2.53 m				
	MAX. PIPE SIZE TO CHAMBER ENDWALL/ENDCAP	10" 250 mm	12" 300 mm	18" 450 mm	24" 600 mm	24" 600 mm				

NOTE1: STONE ABOVE AND BELOW UNITS MAY VARY PER SYSTEM. SEE SYSTEM LAYOUT FOR STONE REQUIREMENTS



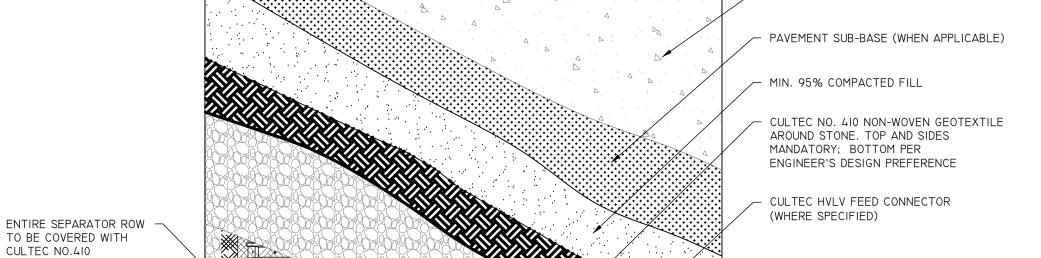
**CROSS SECTION TABLE REFERENCE** 

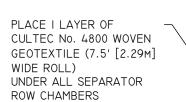
PAVEMENT OR FINISHED GRADE

I-2 INCH [25-51 MM]

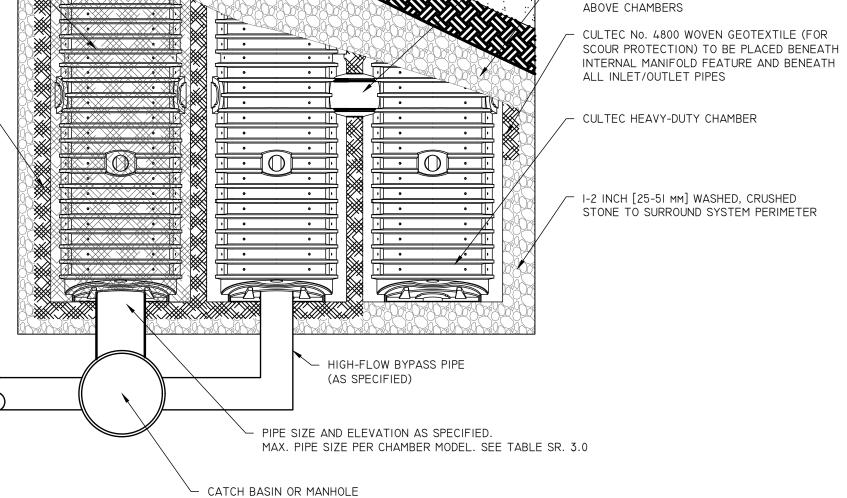
WASHED, CRUSHED

STONE BENEATH AND

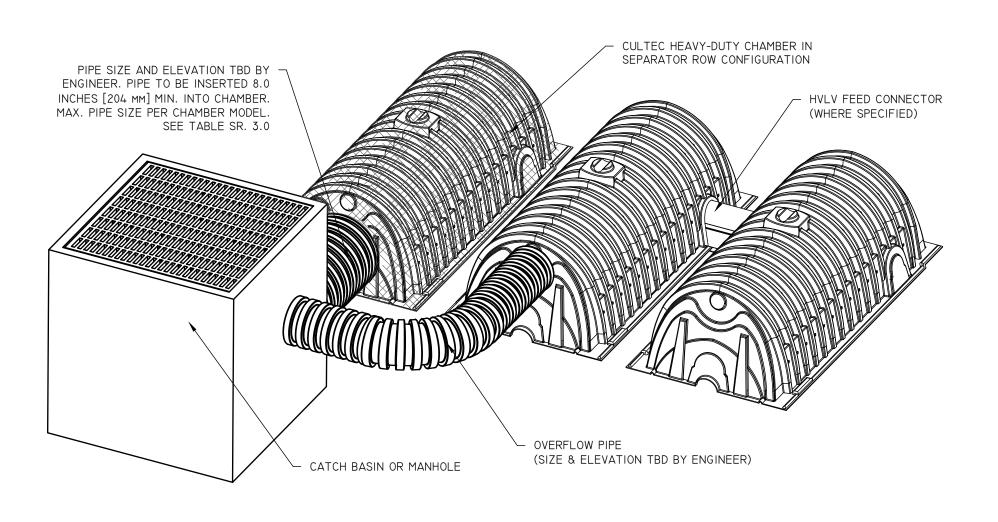




NON-WOVEN GEOTEXTILE



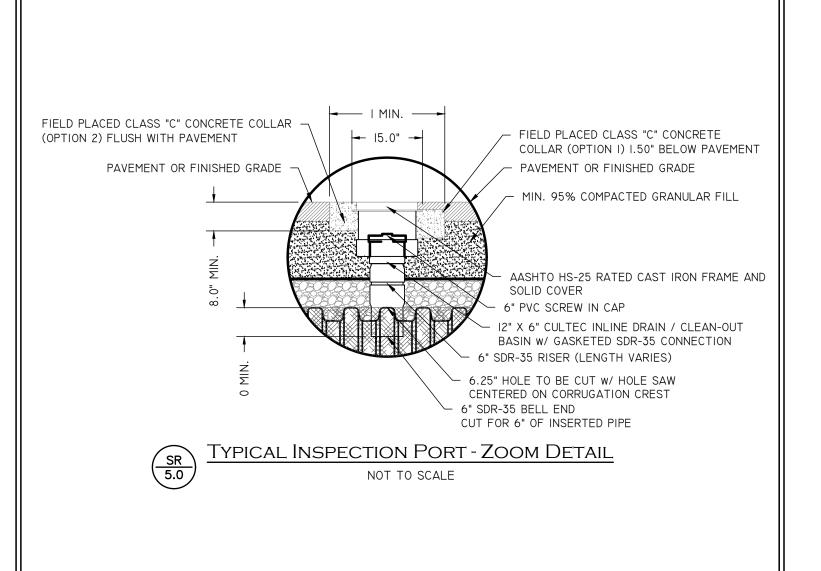


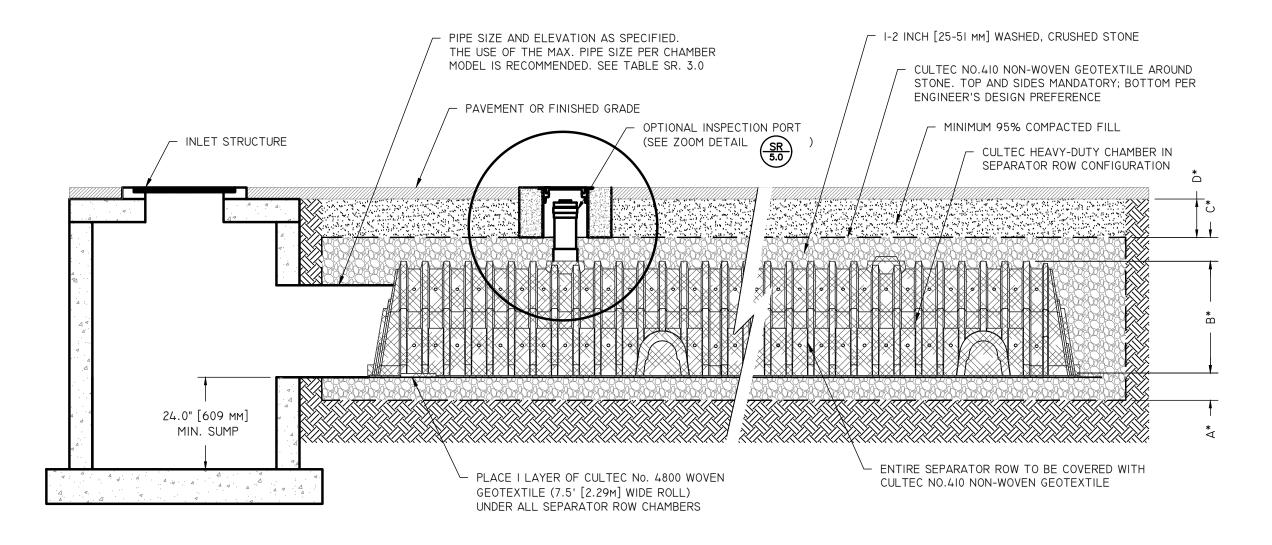




#### Typical Separator Row Configuration INLET CONNECTION DETAIL

NOT TO SCALE





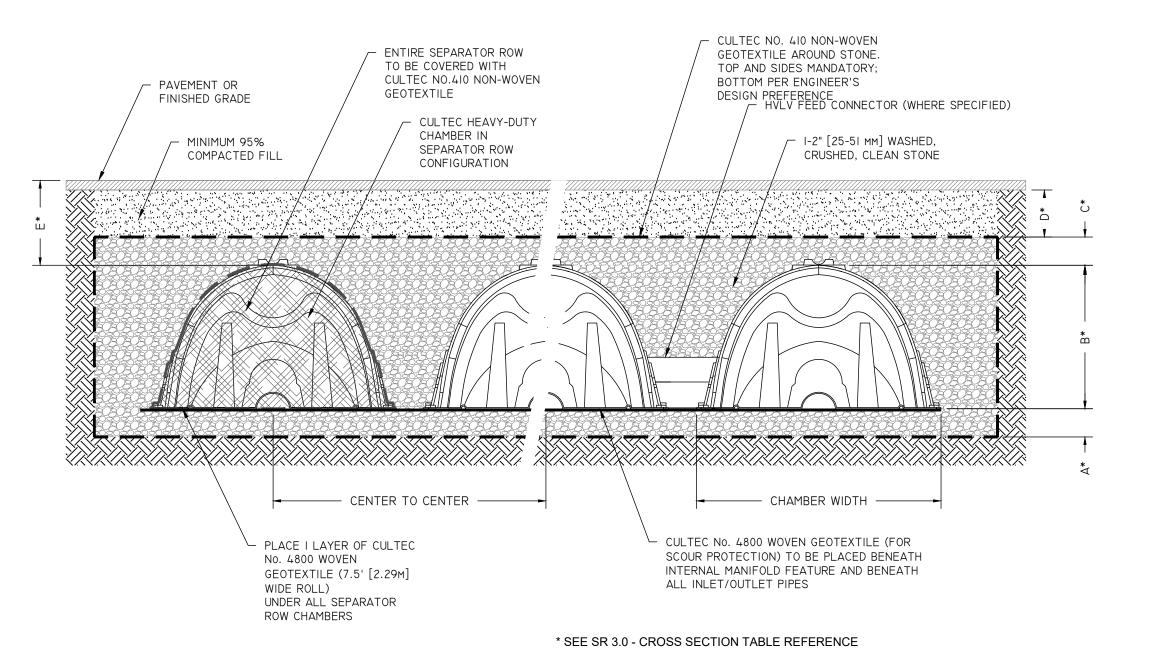
#### \* SEE SR 3.0 - CROSS SECTION TABLE REFERENCE



Typical Separator Row Configuration Cross Section With

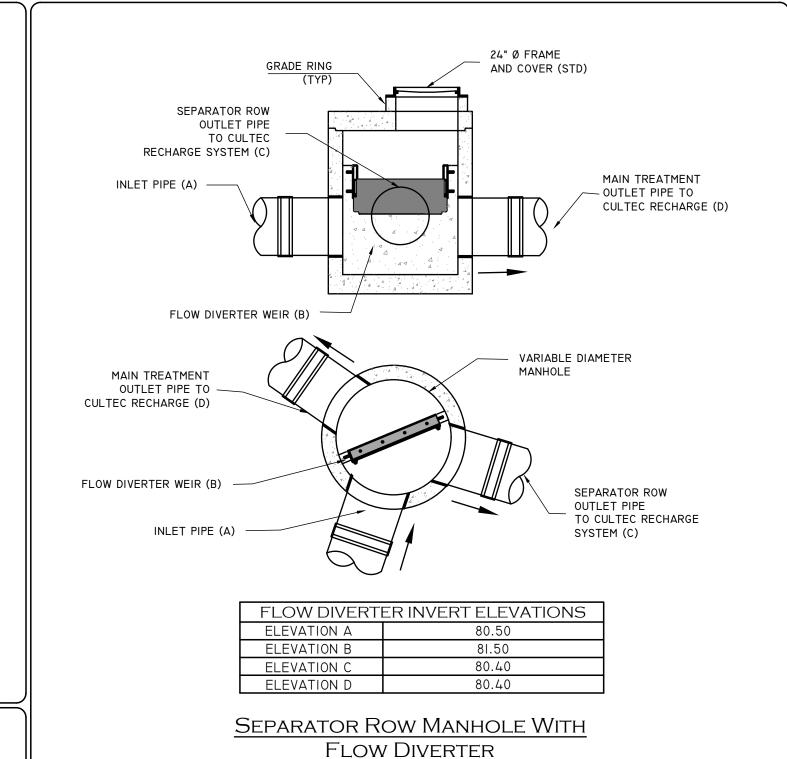
INSPECTION PORT DETAIL

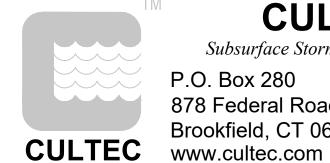
NOT TO SCALE





YPICAL SEPARATOR ROW CONFIGURATION CROSS SECTION NOT TO SCALE





#### CULTEC, Inc.

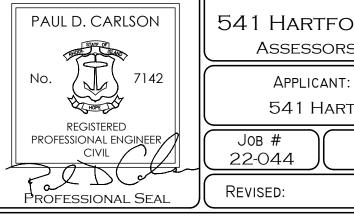
Subsurface Stormwater Management Systems

P.O. Box 280 878 Federal Road Brookfield, CT 06804

PH: (203) 775-4416 PH: (800) 4-CULTEC FX: (203) 775-1462 tech@cultec.com

#### DETAIL SHEET (2 OF 3)

NOT TO SCALE



"E.2000 PROPERTY" 541 HARTFORD AVENUE, PROVIDENCE, RI 02909 ASSESSORS MAP 113, LOTS 232, 233, 234, & 335

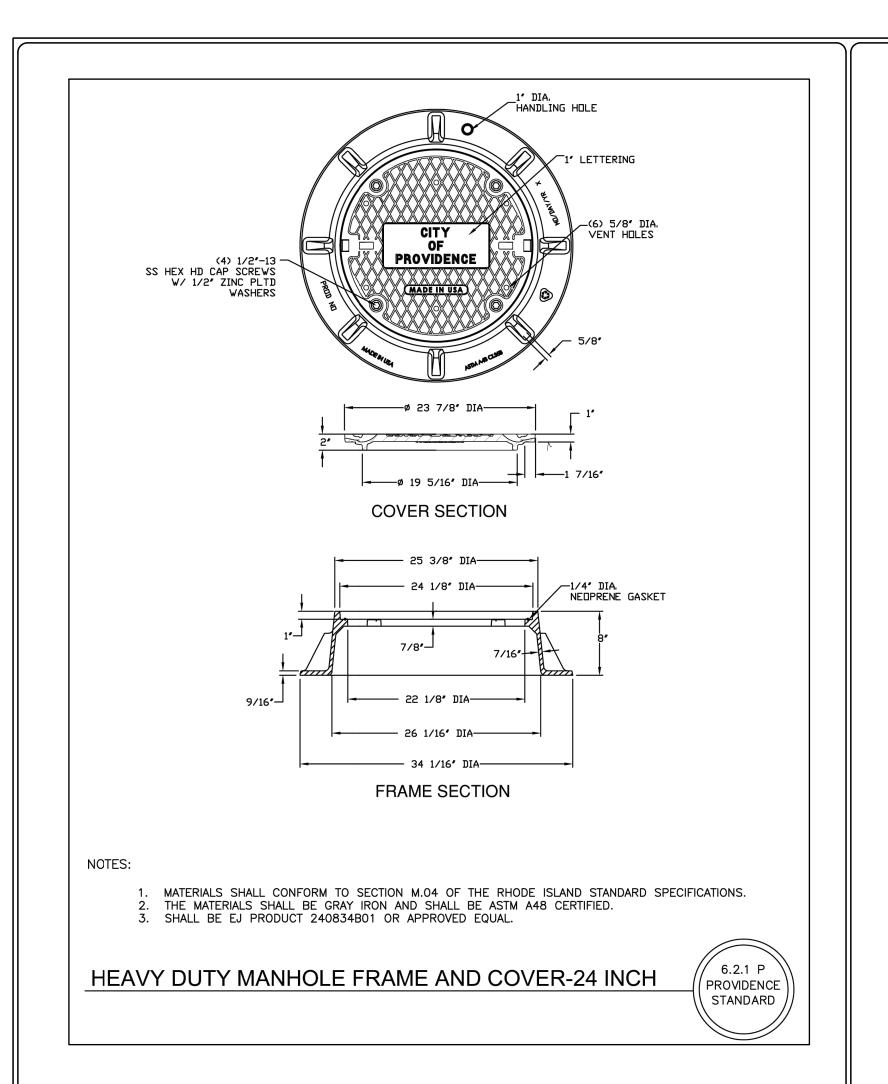
E. 2000 REALTY, LLC 541 HARTFORD AVENUE, PROVIDENCE, RI 02909 DRAWN BY: N.T.S. January 18, 2022

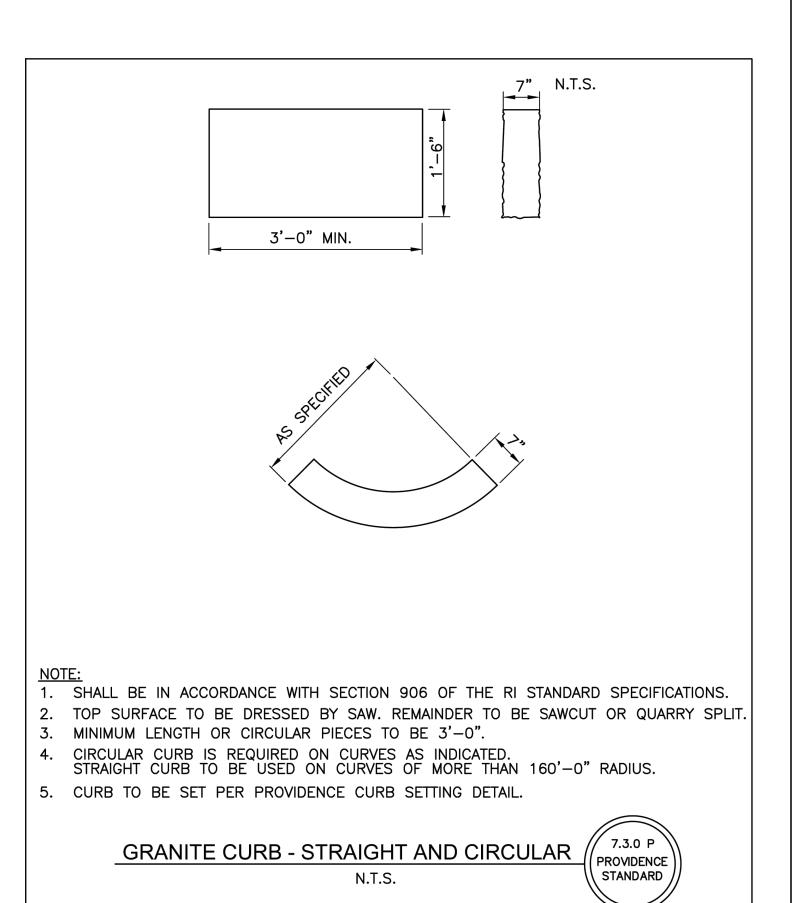
InSite Professional Complex, Suite 1 1539 Fall River Avenue Seekonk, MA 02771 Phone: (508) 336-4500 Fax: (508) 336-4558 Web Address: InsiteEngineers.com

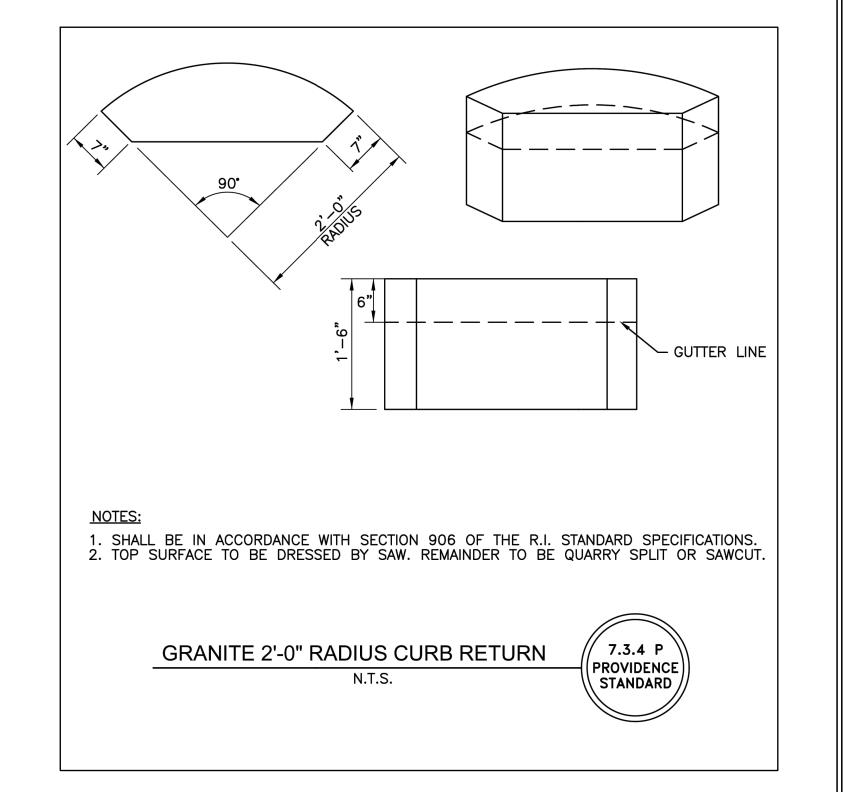
SHEET OF 10

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PROFESSIONAL ENGINEERS | LAND SURVEYORS Precision. Clarity. Certainty







6"x6"-W4xW4

~3" MIN. CLASS 9.5 HMA

PROVIDENCE) STANDARD /

5'-10'

2"(TYP.) -

GRANITE 2' RADIUS CURB RETURN

1:50 MAX.

1:12 MAX.

CUT AND MATCH EXISTING DRIVEWAY

(IF NECESARRY)

1:50 MAX.

2' MIN. 1:7 MAX.

SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE RIDOT STANDARD SPECIFICATIONS.

4. RESIDENTIAL CURB CUTS SHALL BE NO WIDER THAN 12' FROM INSIDE OF CURB RETURNS.

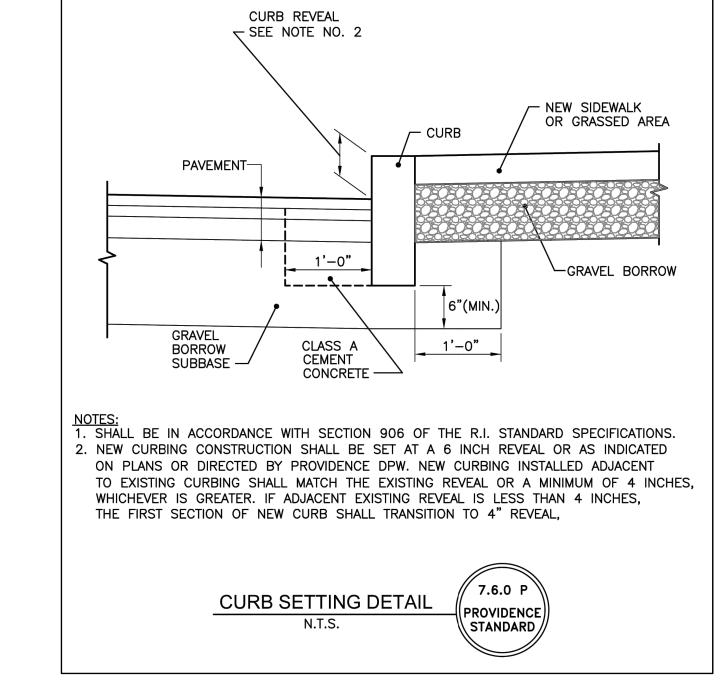
CEMENT CONCRETE DRIVEWAYS

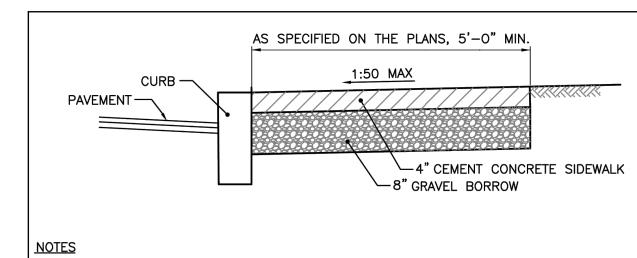
3. 4' MINIMUM ACCESSIBLE PATH SHALL BE INSTALLED WITH CROSS SLOPE NOT EXCEEDING 2% (1:50)

2. RUNNING SLOPE OF SIDEWALK/DRIVEWAY SHALL NOT EXCEED 8.3% (1:12)

REPLACE IN KIND -

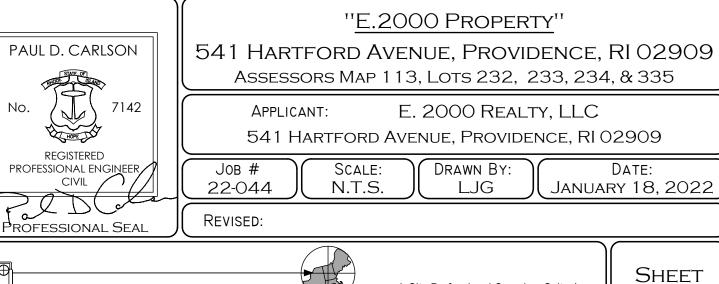
ISSUE DATE: 1/6/17, REVISED 10/6/17





#### WELDED WIRE MESH 3" BELOW SURFACE WIDTH VARIES **TRANSITION** 5'-10' 8" CONCRETE DEPTH . SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS. . SEE CURB SETTING DETAIL WHERE APPLICABLE. 4" CONCRETE SIDEWALK . RUNNING SLOPE OF SIDEWALK SHALL NOT EXCEED 8.3% (1:12). TYPICALLY, RUNNING SLOPE SHALL MATCH ROAD SLOPE. CROSS SLOPE OF SIDEWALK SHALL NOT EXCEED 2% (1:50). 5. SIDEWALK MAY BE SUBJECT TO GRASS STRIP INSTALLATION. CONSULT WITH DPW ENGINEERING GRAVEL BORROW BASE SHALL COMPACT TO ACHEIVE SOIL DENSITY VALUES OF 95% MODIFIED PROCTOR DENSITY (AASHTO T180). SIDEWALK REPAIRS TWENTY FEET OR LONGER ARE SUBJECT TO REQUIREMENTS HEREIN. SIDEWALK REPAIRS SHORTER THAN TWENTY FEET SHALL MAKE EVERY EFFORT TO MEET REQUIRED SLOPES. 3. CONTROLL JOINTS SHALL BE INSTALLED EVERY 5 FEET IN EACH DIRECTION. EXPANSION JOINTS SHALL BE INSTALLED EVERY 20 FEET IN EACH DIRECTION AT -7"GRANITE FOUNDATIONS AND WALLS AND IN A SQUARE PATTERN AROUND MANHOLE COVERS, -WELDED WIRE MESH (6"x6"-W4xW4) HYDRANTS, SIGN POSTS AND UTILITY POLES. THE EXPANSION JOINT SHALL BE THE FULL DEPTH OF THE SIDEWALK AND FILLED WITH AN APPROVED TYPE OF PREMOLDED EXPANSION JOINT FILLER. 8" PCC **GRAVEL BORROW** // 43.1.0 F CEMENT CONCRETE SIDEWALK **PROVIDENCE** N.T.S. STANDARD DRIVEWAY SECTION -SAWCUT (IF NECESARRY)

## SIDEWALK DETAIL SHEET (3 OF 3) 1:50 MAX. 1:12 MAX. PAUL D. CARLSON APPLICANT:





InSite Professional Complex, Suite 1 1539 Fall River Avenue Seekonk, MA 02771 Phone: (508) 336-4500 Fax: (508) 336-4558

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OF 10

Web Address: InsiteEngineers.com

#### 541 HARTFORD AVE

OBSERVATION HOLE #1												
HORIZON [	NEDTH	HORIZON BOUND SOIL			OLORS RE-DOX			<	TEXTURE	STRUCTURE	CONCICT	<u>SOIL</u>
	<u>DEPTH</u>	DIST.	TOPO	MATRIX	RE-DOX	AB.	S.	CONT.	<u>IEATURE</u>	SIRUCIURE	<u>CONSIST.</u>	CATEGORY
FILL	0-70											
FILL	70-120			10YR4/6					LCOS	O-M	FRI	6
SOIL CLASS TOTAL DEP PERC. TEST	GW SEEF	MPERVIOUS/LIMITING LAYER DEPTH: NONE W SEEPAGE DEPTH: NONE HWT > 120" ( > 50" OG)						DATE:12-20-2022 BY: MARC NYBERG LICENSE NUMBER: D4043				

OBSERVATION HOLE #2													
<u>HORIZON</u>	<u>DEPTH</u>	HORIZON BOUND		SOIL COLORS		RE-DOX			TEXTURE	STRUCTURE	CONSIST.	<u>SOIL</u>	
		DIST.	TOPO	MATRIX	RE-DOX	AB.	S.	CONT.	ILATURL	SINUCTURL	<u>CONSIST.</u>	<u>CATEGORY</u>	
FILL	0-72												
FILL	72-120			2.5Y5/4					COS	0-S.G	LOOSE		
SOIL CLASS: OUTWASH TOTAL DEPTH: 120" PERC. TEST NOT PERFORMED						IMPERVIOUS/LIMITING LAYER DEPTH: NONE GW SEEPAGE DEPTH: NONE SHWT > 120" ( > 48" OG)						DATE:12-20-2022 BY: MARC NYBERG LICENSE NUMBER: D4043	

