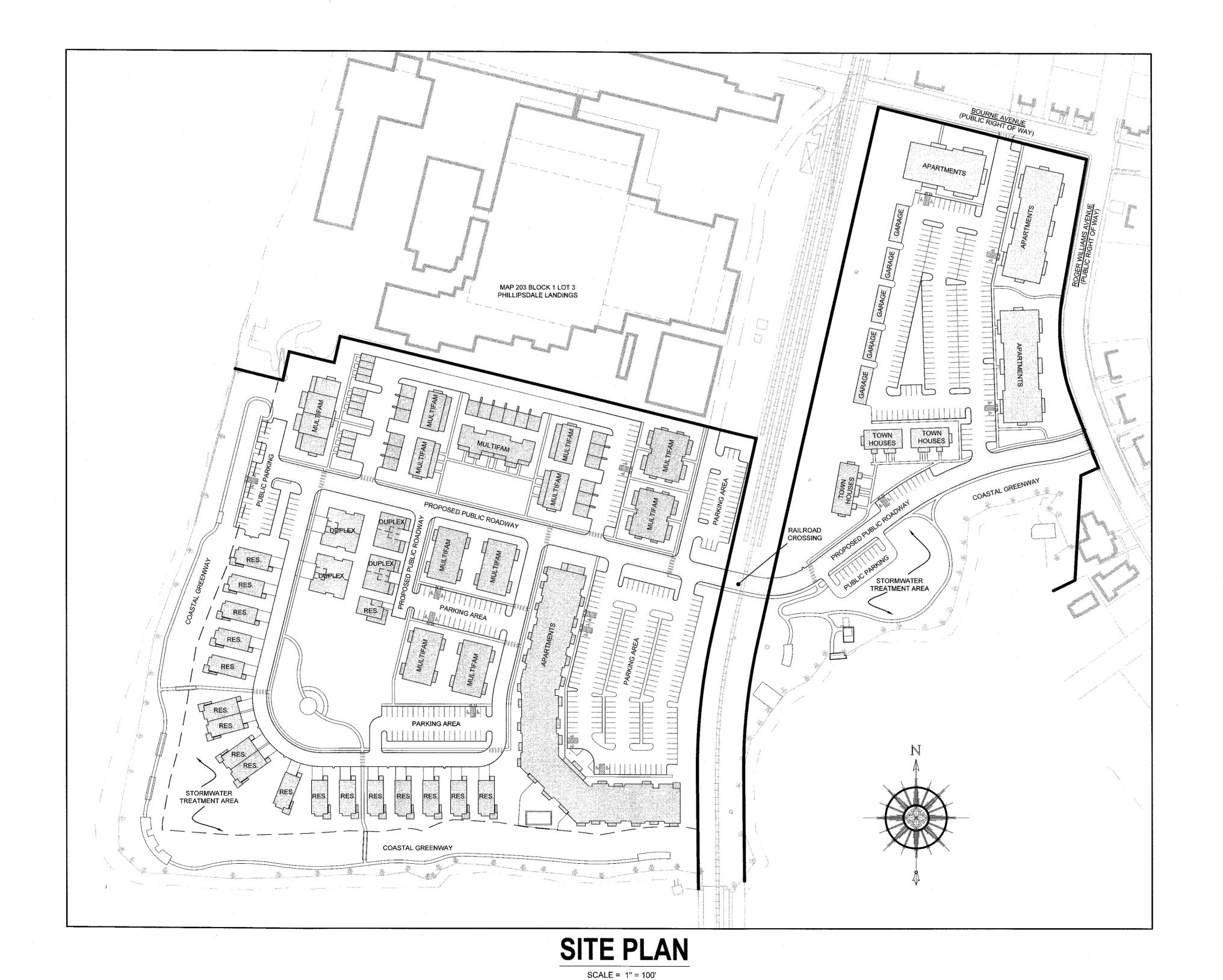
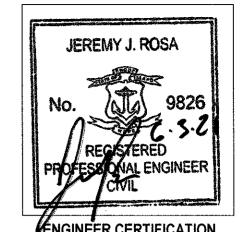
# EAST POINT MULTIFAMILY DEVELOPMENT

FORMER OCEAN STATE STEEL SITE MAP 203 BLOCK 1 LOT 4 AND MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE AND BOURNE AVENUE EAST PROVIDENCE, RHODE ISLAND







CLIENT:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

LANDSCAPE ARCHITECT:

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ARCHITECT:

**UNION STUDIO** 140 UNION STREET PROVIDENCE, RI 02903

# JUNE 3, 2021 PERMIT SET

# **PLAN INDEX**

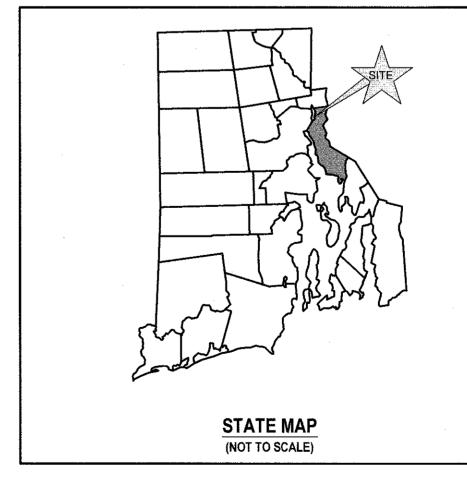
## SITE/CIVIL ENGINEERING PLANS

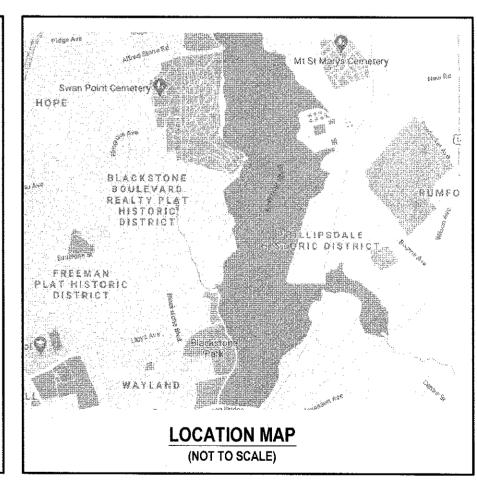
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## **ADDENDUMS**

PLAN OF LAND (BY OTHERS) LANDSCAPING PLANS

SHEET 1 SHEETS L1-L5





SUBMISSION AND REVISION SUMMARY

AGENCY OR REVISION	DATE:	COMMENTS:
WATERFRONT COMMISSION WATERFRONT COMMISSION CRMC	APR 23, 2021 MAY 21, 2021 JUNE 3, 2021	
		<b>RECEIVED</b> 6/17/2021
		COASTAL RESOURCES MANAGEMENT COUNC

#### **GENERAL NOTES**

- PROPERTY LINE INFORMATION REFERENCED FROM PLAN ENTITLED "BOUNDARY SURVEY PLAN MAP 205 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVE & BOURNE AVE. - EAST PROVIDENCE, RI" PREPARED FOR GEONOVA DEVELOPMENT COMPANY, PREPARED BY WATERMAN ENGINEERING CO., SHEET 1 OF 1, DATED SEPT. 23, 2002, THROUGH REVISION 2 DATED 8-12-03, STAMPED AND SIGNED BY RICHARD S. LIPSITZ ON 8-15-03.
- TOPOGRAPHY AND PLANIMETRICS OBTAINED BY BOTH ON-GROUND SURVEY PERFORMED BY NE&C IN 2005 THROUGH MULTIPLE DATA COLLECTIONS AND EXISTING CONDITIONS AERIAL PHOTOGRAMMETRY PROVIDED BY WATERMAN ENGINEERING CO. EXISTING SURVEY CONDITIONS DATA IS CURRENT AND ACCURATE AS OF DECEMBER 2005. EXISTING GROUND FEATURES UPDATED IN JANUARY 2021 BASED ON AERIAL PHOTOGRAPHY, DATUM IS NGVD29.
- 3. SUBJECT PROPERTIES ARE ZONED WATERFRONT DISTRICT / PHILLIPSDALE LANDING.
- 4. NORTH ARROW TAKEN FROM REFERENCE PLAN IN NOTE 1 ABOVE.
- FRESHWATER WETLAND FLAGGING WAS PERFORMED BY NATURAL RESOURCE SERVICES IN OCTOBER 2020 AND FIELD LOCATED BY NE&C. COASTAL FLAGGING PERFORMED BY MASON & ASSOCIATES, INC. IN NOVEMBER 2020 AND FIELD LOCATED BY NE&C.
- PROPERTY IS LOCATED WITH IN A FEMA ZONE "VE" (EL. 15), ZONE "VE" (EL. 13), ZONE "AE" (EL 13), AND ZONE "X" PER FEMA FIRM 44007C0328J, MAP EFFECTIVE OCTOBER 2, 2015.
- THE UNDERGROUND UTILITIES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AFFECTED UTILITY COMPANY AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. WHEREVER CONNECTION OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES. (PLEASE CALL DIG SAFE PRIOR TO CONSTRUCTION AT 1-888-DIG-SAFE AND ALL LOCAL UTILITY COMPANIES.)
- 9. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT AND DETAILS WITH THEIR RELATIONSHIP TO THE EXISTING SITE SURVEY. CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING WORK
- 10. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATIONS OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
- 11. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PRESERVE STREET MONUMENTS.
- 13. STREET MONUMENTS THAT ARE DISTURBED SHALL BE RESTORED UNDER THE LICENSED LAND SURVEYOR'S DIRECTION. ANY NEW DATA SUCH AS ELEVATIONS SHALL BE CERTIFIED BY THE SURVEYOR, AND SUBMITTED TO THE CITY OF EAST PROVIDENCE.
- 14. DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE PROJECT ENGINEER, APPROPRIATE AGENCY AND
- 15. RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND BE COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO
- 16. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- 17. CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR PROJECT ENGINEER,"
- 18. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION INCLUDING ALL REVISIONS.
- 19. PROJECT REQUIRES APPROVAL BY THE COASTAL RESOURCES MANAGEMENT COUNCIL
- 20. BORING LOCATIONS SHOWN ON PLANS WERE PERFORMED IN MARCH OF 2004.

THE RELOCATION REQUIRED PRIOR TO THE START OF CONSTRUCTION.

#### **GRADING NOTES**

- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE.
- 2. ALL GRADED AREAS SHALL BE SODDED OR PLANTED IMMEDIATELY AFTER THE GRUBBING WORK HAS BEEN COMPLETED.
- THE CITY SHALL BE INFORMED OF THE LOCATION OF THE DISPOSAL SITE, IF ANY, FOR THE PROJECT.
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE MUNICIPALITY, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS.
- THE LIMITS OF DISTURBANCE SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- 6. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE MUNICIPALITY.
- WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE GRADING WORK IS
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- 9. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND
- FEDERAL REQUIREMENTS. NONCOMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE
- IMMEDIATELY, ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR, FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

#### **UTILITY NOTES**

- 1. THE PROPOSED WATER SYSTEM AND ALL SERVICES REQUIRE THE REVIEW AND APPROVAL OF THE EAST PROVIDENCE WATER UTILITIES DIVISION AND THE
- 2. ALL WATER PIPES AND FITTINGS SHALL BE DUCTILE IRON CLASS 52, CEMENT LINED OR EQUAL WATER PIPE OF THE CLASS, QUALITY AND SIZE SPECIFIED AND REQUIRED BY THE CITY ENGINEER.
- 3. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 4.5 FEET TO FINAL GRADE.
- 4. ALL VALVES SHALL BE OF A TYPE APPROVED BY THE CITY ENGINEER.
- 5. ALL HYDRANTS SHALL BE OF AN APPROVED TYPE AND INSTALLED IN LOCATIONS SPECIFIED BY THE CITY ENGINEER AND APPROVED BY THE FIRE CHIEF HYDRANT LOCATIONS SHOWN ON THESE PLANS ARE PRELIMINARY.

#### ELECTRICAL AND COMMUNICATIONS;

- 6. NEW ELECTRIC, TELEPHONE AND CABLE SERVICES SHALL BE INSTALLED UNDERGROUND.
- 7. THE LOCATIONS OF PROPOSED ELECTRICAL CONNECTIONS TO THE EXISTING OVERHEAD SERVICES ARE PRELIMINARY. FINAL DESIGN OF THE ELECTRICAL SERVICES IS SUBJECT TO DESIGN REVIEW AND APPROVAL OF NATIONAL GRID.

- 8. THE PROPOSED SEWER SERVICES AND CONNECTIONS TO EXISTING MAINS IN ROGER WILLIAMS AVENUE AND BOURNE AVENUE SUBJECT TO REVIEW AND APPROVAL BY THE EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS AND THE CITY ENGINEER.
- 9. ALL GRAVITY SEWER MAINS AND SERVICES SHALL BE PVC, ASTM DESIGNATION D3034-SDR 35. WATERTIGHT PIPE AND FITTINGS SHALL BE USED IN ALL
- 10. ALL GRAVITY MAINS SHALL HAVE A MINIMUM OF 3 FEET OF COVER.
- 11. ALL PRESSURIZED SEWER MAINS SHALL BE CLASS 200 SDR 21. ALL PUMPED LINES SHALL NOT DRAIN BACK TO PUMP STATIONS AND SHALL BE INSTALLED 4 FT BELOW GRADE, PROPER COMPACTION AN FORCE MAIN INSTALLATION SHALL BE PERFORMED TO ENSURE THAT NO LOW POINTS ARE CREATED, AIR RELIEF VALVES SHALL BE INSTALLED AS NEEDED AT ANY INTENDED HIGH POINTS IN THE SYSTEM.
- 12. PROPOSED PUMP STATIONS SUBJECT TO FURTHER DESIGN AND APPROVAL

- 13. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS HE/SHE MAY MAKE OR DERIVE FROM THE SUBSURFACE INFORMATION OR DATA FURNISHED ON THE PLANS. THE CONTRACTOR MUST SATISFY HIMSELF/HERSELF THROUGH HIS/HER OWN INVESTIGATIONS AS TO WHAT SUBSURFACE CONDITIONS ARE TO BE ENCOUNTERED.
- 14. IF THE CONTRACTOR ELECTS NOT TO EXPOSE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES AT CROSSINGS PRIOR TO PIPELINE EXCAVATION, HE/SHE FORFEITS HIS/HER RIGHTS FOR ANY CLAIMS FOR COMPENSATION CAUSED BY ANY CONFLICTS WITH EXISTING UTILITIES AND STRUCTURES.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EFFLUENT ASSOCIATED WITH THE CONSTRUCTION ACTIVITY AND THE DISINFECTION AND HYDROTESTING OPERATIONS TO SAFEGUARD PUBLIC HEALTH AND SAFETY IN ACCORDANCE WITH APPLICABLE DEPARTMENT OF HEALTH REQUIREMENTS. ALL PERMITS AND LICENSES FOR CONSTRUCTION WATER DISPOSAL, INCLUDING ALL APPLICATIONS, CHARGES, FEES, AND TAXES, ARE THE RESPONSIBILITY OF THE CONTRACTOR

#### SOIL EROSION AND SEDIMENT CONTROL NOTES

#### 1. CONSTRUCTION SEQUENCE

- A. DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
- B. ALL CONSTRUCTION VEHICLES SHALL ENTER AND LEAVE THE SITE VIA A PAVED ACCESS POINT OR A CONSTRUCTION ENTRANCE CONFORMING TO THE DETAIL PROVIDED.
- C. INSTALL SILT FENCES, SILT SACKS, AND/OR FILTER SOCKS AS INDICATED ON THE DRAWINGS TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION OF DOWNSTREAM AREAS PRIOR TO ANY EARTH MOVING ACTIVITIES
- D. CONTRACTOR TO FIELD DELINEATE ALL ELUR AREAS USING EXISTING RECORDED DOCUMENTS. CONTRACTOR TO LOCATE AND DELINEATE EXISTING SEWER
- FORCE MAINS TO ENSURE THAT THEY ARE NOT DISTURBED DURING GRADING OPERATIONS. E. DEMOLISH EXISTING EXISTING PAVEMENT AND IMPROVEMENTS WITH THE EXCEPTION OF OVERHEAD ELECTRICAL LINES TO REMAIN AND SEWER FORCE MAINS. SECTIONS OF EXISTING RAIL TO BE REMOVED SHALL BE COORDINATED WITH THE APPROPRIATE ENTITY. REFER TO RAILWAY CROSSING PLANS BY
- F. ANY UTILITY POLES TO BE RELOCATED SHALL BE COORDINATED WITH NATIONAL GRID.
- G. ROUGH GRADE SITE PER CONSTRUCTION GRADING PLAN. REFER TO EARTHWORK NOTES THIS SHEET.
- H. BEGIN CONSTRUCTION OF DRAINAGE SYSTEM. MEDIA SHALL NOT BE PLACED IN FILTERING SYSTEM EXCAVATIONS UNTIL SITE GRADING IS COMPLETE, UNTIL THIS TIME, THESE EXCAVATIONS SHALL BE USED AS TEMPORARY SEDIMENT BASINS. CONVEYANCE SYSTEMS SHALL BE CONSTRUCTED FROM THE DOWNSTREAM ENDS OF THE PIPE LINES. TEMPORARY EROSION BLANKETS SHALL BE USED WHERE NECESSARY TO STABILIZE DRAINAGE SWALES.
- I. CONSTRUCT SEWER AND WATER CONVEYANCE SYSTEMS, COORDINATE INSTALLATIONS WITH EAST PROVIDENCE PUBLIC WORKS AND THE CITY ENGINEER. CONTRACTOR TO COMPLETE ALL NECESSARY TESTING OF SEWER AND WATER SYSTEMS IN CONFORMANCE WITH CITY STANDARDS.
- J. CONSTRUCT UNDERGROUND ELECTRICAL AND COMMUNICATION DISTRIBUTION SYSTEM IN COORDINATION WITH NATIONAL GRID AND OTHER SERVICE K. FINAL GRADE SITE AND INSTALL BINDER PAVEMENT COURSE, SET CURBING PER DETAILS PROVIDED. BUILDING PADS SHALL BE LEVELED, COMPACTED AND
- STABILIZED FOR DEVELOPMENT BUILDOUT. L. REMOVE CONSTRUCTION SEDIMENTS FROM DRAINAGE SYSTEM AND PLACE FILTER MEDIAS.
- M. INSTALL COASTAL AND DRAINAGE SYSTEM PLANTINGS ACCORDING TO APPROVED LANDSCAPING PLANS.
- N. INSTALL TOP PAVEMENT COURSE AND MAINTAIN SITE IN ACCORDANCE WITH THE MAINTENANCE NOTES

#### 2. EARTHWORK NOTES:

- A. DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED. AS NOTED. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
- B. AREA OF PROPOSED DRAINAGE SYSTEM SHALL NOT BE USED FOR STOCKPILES OR STORAGE OF MATERIALS OR EQUIPMENT
- C. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE STABILIZED WITHIN FOURTEEN DAYS IN ACCORDANCE WITH TEMPORARY MEASURES IN THE VEGETATIVE PRACTICE NOTES.

D. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOP SOIL TO REMOVE VEGETATION, ROOTS, AND ANY OTHER OBJECTIONABLE

- E. ALL FILL SHALL BE COMPACTED TO 95% MAX. DENSITY TO REDUCE EROSION, SLIPPAGE, SETTLEMENT SUBSIDENCE, OR OTHER RELATED PROBLEMS.
- F. FILL INTENDED TO SUPPORT BUILDING STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL CODES AND
- G. ALL FILL SHALL BE PLACED AND COMPACTED TO 95% MAX. DENSITY IN LAYERS NOT TO EXCEED 12" IN THICKNESS FILLS.
- H. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.
- J. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION SUBGRADE.
- K. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER
- L. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF FINISH GRADING IN ACCORDANCE WITH THE VEGETATIVE PRACTICE NOTES.
- M. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED AND VEGETATED AREAS HAVE RECEIVED TWO MOWINGS

#### 3. VEGETATIVE PRACTICE:

#### PERMANENT MEASURES:

- A. SLOPES SHALL NOT BE STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL UNLESS OTHERWISE SPECIFIED. B. LOAM AND SEED REQUIREMENTS ARE SPECIFIED IN RIDOT L.01 & L.02
- C. A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2 INCHES SHALL BE REMOVED.

## TEMPORARY MEASURES (FOR TEMPORARY PROTECTION OF DISTURBED AREAS)

- D. LIMESTONE AND FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE: LIMESTONE: 3 TONS/ACRE
- FERTILIZER: (10-10-10); 600 LBS/ACRE SEED SHALL BE APPLIED AT THE FOLLOWING RATE:
- WINTER RYE: 100 LB/ACRE STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.

#### 4. MAINTENANCE

#### DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED, THE EROSION CONTROL MEASURES SHALL BE INSPECTED.

- A. AT A MINIMUM THE SILT FENCING, STRAW BALES AND FILTER SOCK BARRIERS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REGRADED ON THE SITE.
- B. EROSION CONTROL BLANKETS SHALL BE INSPECTED ON A WEEKLY BASIS.
- C. SILT SACKS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. DURING HEAVY RAIN EVENT, IT MAY BE NECESSARY TO TEMPORARILY REMOVE SACKS IN ORDER TO PREVENT FLOODING. SEDIMENT TRAPPED WITHIN SACKS SHALL BE DISPOSED OF OFF SITE AT A LICENSED FACILITY OR REGRADED ON THE SITE.
- D. STONE RIPRAP SHALL BE INSPECTED MONTHLY FOR EXCESSIVE ACCUMULATION OF SEDIMENT. IT MAY BE NECESSARY TO REMOVE STONES, EXCAVATE SEDIMENT, AND REPLACE STONES.
- E. THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE REMOVED PRIOR TO PAVING DURING CONSTRUCTION THE ENTRANCE SHALL BE INSPECTED WEEKLY, AND RE-ESTABLISHED AS NECESSARY
- F. SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE ESTABLISHMENT OF A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF

### DRAINAGE NOTES

- 1. ALL DRAIN PIPES ON SITE SHALL BE ADS-N12 TYPE IB OR SCH40 PVC UNLESS OTHERWISE NOTED ON THESE PLANS. CLASS IV RCP REQUIRED IN AREAS WITH LESS THAN 2 FEET OF COVER OVER DRAIN PIPES
- 2. ALL DRAIN STRUCTURES SHALL BE PRECAST CONCRETE AS INDICATED ON THE DETAIL SHEETS UNLESS OTHERWISE NOTED ON THESE PLANS.
- 3. ALL PRECAST CONCRETE CATCH BASINS SHALL HAVE 3-FOOT SUMPS UNLESS OTHERWISE NOTED AS DEEP SUMP ON THE PLANS OR PROFILES IN WHICH CASE THE STRUCTURE SHALL HAVE A 4-FOOT SUMP.

#### PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES

- 1. CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- 2. THE CONTRACTOR AT HIS/HER EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES...
- 3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SILT OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES. STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS AS NECESSARY.
- 4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.

#### STORMWATER MAINTENANCE NOTES

1. REFER TO OPERATIONS AND MAINTENANCE DOCUMENT FOR COMPLETE DESCRIPTION OF POST CONSTRUCTION STORMWATER MAINTENANCE. A BASIC OUTLINE OF REQUIRED MAINTENANCE IS PROVIDED BELOW.

#### 2. SAND FILTER MAINTENANCE:

- a GRASSES AND/OR SPECIFIED VEGETATION SHALL BE PLANTED AROUND AND WITHIN THE SAND FILTER IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE SLOPES AND PREVENT EROSION.
- b. THE FILTER SHOULD BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ANNUALLY AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT (2.8 INCHES).
- c. THE FOLLOWING SHALL ALSO BE COMPLETED ON AN ANNUAL BASIS:
- i. THE SLOPES OF THE FILTER SHOULD BE INSPECTED FOR EROSION AND GULLYING.
- ii. REINFORCE ANY EXISTING RIPRAP IF IT IS FOUND TO BE DEFICIENT, EROSION IS PRESENT AT THE OUTLET STRUCTURES, OR ANY EXISTING RIPRAP HAS BEEN COMPROMISED.
- iv. ANY AREAS WITHIN THE EXTENTS OF THE FILTER THAT ARE SUBJECT TO EROSION OR GULLYING SHOULD BE REPLENISHED WITH THE ORIGINAL DESIGN MATERIAL AND RE-VEGETATED ACCORDING TO DESIGN DRAWINGS. SLOPE PROTECTION MATERIAL SHOULD BE PLACED IN AREAS PRONE TO EROSION. EMBANKMENT STABILITY SHOULD BE INSPECTED FOR SEEPAGE AND BURROWING ANIMALS
- iv.MOW THE GRASS AROUND THE PERIMETER OF AND WITHIN THE FILTER, SEED BARE AREAS, AND REMOVE LITTER AND DEBRIS AT LEAST THREE TIMES PER GROWING SEASON TO MAINTAIN MAXIMUM GRASS HEIGHTS LESS THAN TWELVE INCHES. REMOVE ANY INVASIVE VEGETATION WITHIN THE EXTENTS OF THE FILTER. ANY INVASIVE VEGETATION ENCROACHING UPON THE PERIMETER OF THE FILTER SHOULD BE PRUNED OR REMOVED IF IT IS PROHIBITING ACCESS TO THE FILTERS, COMPROMISING SIGHT VISIBILITY, AND/OR COMPROMISING THE ORIGINAL DESIGN INTENT, IF DEAD OR DYING GRASS ON THE BOTTOM IS OBSERVED, CHECK TO ENSURE THAT WATER INFILTRATES WITHIN TWO DAYS FOLLOWING STORMS.
- v. SILT/SEDIMENT SHOULD BE REMOVED FROM THE FILTER BEDS ANNUALLY, WHEN ACCUMULATION EXCEEDS 1 INCH, OR WHEN THE FILTERING CAPACITY DIMINISHES SUBSTANTIALLY. IF STANDING WATER IS OBSERVED MORE THAN 48 HOURS AFTER A STORM EVENT, THEN THE TOP 6 INCHES OF MEDIA SHOULD BE REMOVED AND REPLACED. IF DISCOLORED OR CONTAMINATED MATERIAL IS FOUND BELOW THIS REMOVED SURFACE THEN THAT MATERIAL SHOULD ALSO BE REMOVED AND REPLACED UNTIL ALI CONTAMINATED SAND HAS BEEN REMOVED FROM THE FILTER MEDIA. THE SAND SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. THE FILTER SURFACE SHALL BE REPLANTED ACCORDING TO THE ORIGINAL DESIGN DOCUMENTS.

#### CONVEYANCE STRUCTURE MAINTENANCE:

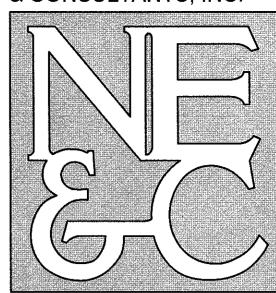
- 3.1. ALL STRUCTURE INLET / OUTFLOW PIPES ARE TO BE INSPECTED AT LEAST THREE TIMES IN THE FIRST SIX MONTHS OF OPERATION. EVIDENCE OF CLOGGING; OR RAPID RELEASE OF FLOW SHALL BE REPORTED TO THE PROJECT ENGINEER AND REMEDIED IMMEDIATELY
- 3.2. CONVEYANCE STRUCTURES SHOULD BE INSPECTED QUARTERLY. ANY STRUCTURAL FAULTS SHOULD BE REPAIRED AS NECESSARY FOR PROPER FUNCTION OF THE STRUCTURE. CATCH BASIN SUMPS SHALL BE VACUUMED OUT BIANNUALLY OR EACH TIME 50% OF THE AVAILABLE STORAGE HAS BEEN DEPLETED.
- 3.3. ROOF RUNOFF STRUCTURES SUCH AS GUTTERS AND DOWNSPOUTS SHOULD BE CLEAN AND FREE OF OBSTRUCTIONS THAT REDUCE FLOW. A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF NECESSARY TO DETERMINE WHETHER A STRUCTURE HAS BEEN COMPROMISED
- 4. ALL PARKING LOTS AND ROADWAYS RE TO BE SWEPT USING A VACUUM TRUCK TWICE A YEAR.
- 5. UPON COMPLETION OF THE CONSTRUCTION, MAINTENANCE OF THE STORMWATER SYSTEM SHALL BECOME THE RESPONSIBILITY OF THE OWNER. REFER TO THE STORMWATER OPERATIONS AND MAINTENANCE DOCUMENT.
- 6. MAINTENANCE OF THE STORMWATER SYSTEM DURING CONSTRUCTION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

#### **ABBREVIATIONS**

AC	ASPHALT PAVEMENT
ADJ	ADJACENT
AP	ASSESSOR'S PLAT
ACCESS	ACCESSIBLE
ARCH	ARCHITECT
BC	BOTTOM OF CURB
- ·	
ВН	BORING HOLE
BIT	BITUMINOUS
BOW	BOTTOM OF WALL
CLR	CLEARANCE
CMP	CORRUGATED METAL PIPE
	* - · · · · - · · · · · · · · · · · · ·
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONN	CONNECT
COTG	CLEAN OUT TO GRADE
CF	CUBIC FOOT
DEMO	DEMOLISH
DI	DRAIN INLET
DIA	DIAMETER
DMH	DRAIN MANHOLE
dp	DROP PIPE
DS	DOWN SPOUT
DWG	DRAWING
E	ELECTRIC
ELEV/EL	ELEVATION
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EQ	EQUAL
EXIST	EXISTING
EXP	EXPANSION
FFE	FINISH FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FT	FEET
G	GAS
GAL	<del></del>
	GALLON
GV	GATE VALVE
INV	INVERT
JT	JOINT
L	LENGTH
LAND	LANDSCAPE
NTS	NOT TO SCALE
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
PAV'T	PAVEMENT
PVC	POLYVYNILCHLORIDE
R	RADIUS
RC	REINFORCED CONCRETE
RECONN	RECONNECT
RIHB	RHODE ISLAND HIGHWAY BOUND
RIDOT	RHODE ISLAND DEPARTMENT OF TRANSPORTATION
ROW	RIGHT OF WAY
S	SLOPE, SEWER
SF	SQUARE FEET
SHT	SHEET
SMH	SEWER MANHOLE
STA	STATION
STRUCT	STRUCTURAL
TC	TOP OF CURB
TOP	TOP OF SURFACE
TOW	TOP OF WALL
UGT	UNDERGROUND TELEPHONE
TYP	TYPICAL
W	WATER
W/	WITH
LABABA	MICH DED MIDE MECH

WELDED WIRE MESH

#### NORTHEAST ENGINEERS & CONSULTANTS, INC.



WATERFRONT SURVEYING **GEOTECHNICAL** ENVIRONMENTAL TRANSPORTATION

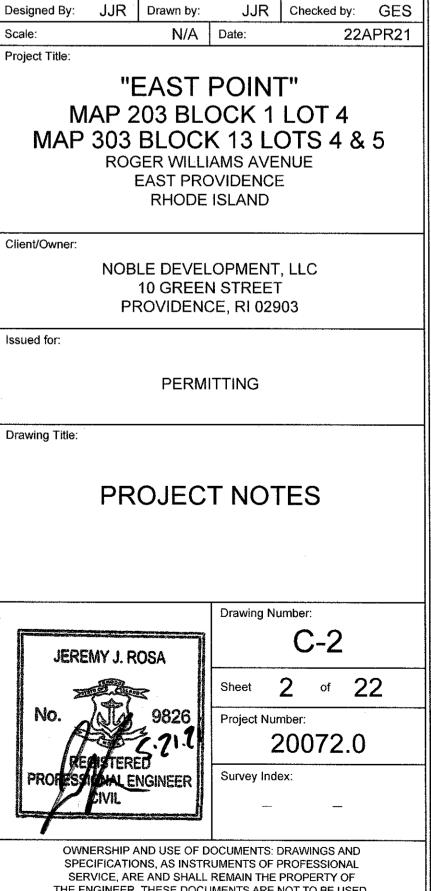
SITE/CIVIL

LAND PLANNING

STRUCTURAL

A KNOWLEDGE CORPORATION

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SUBMISSION REVISIONS

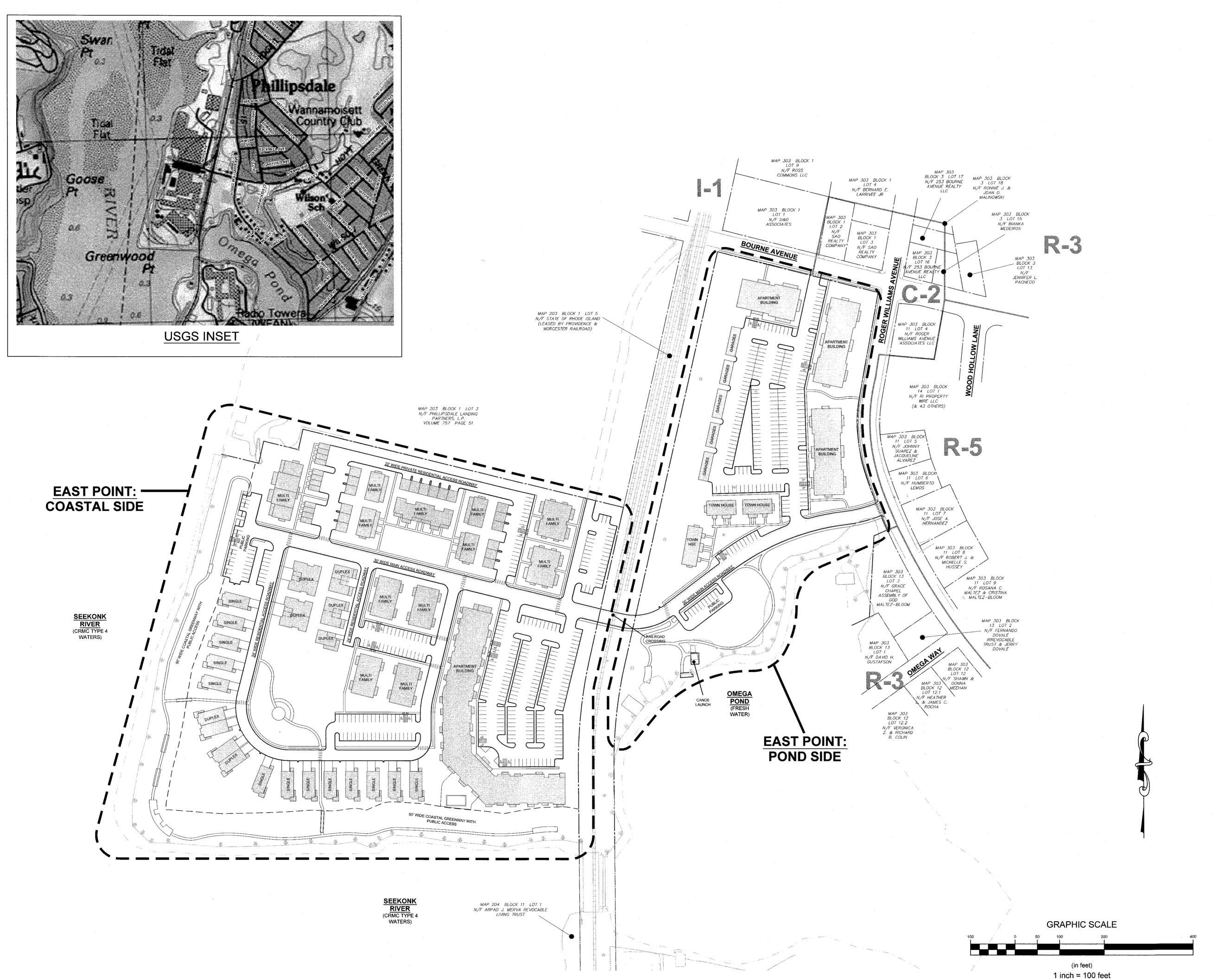
21MAY21

Date

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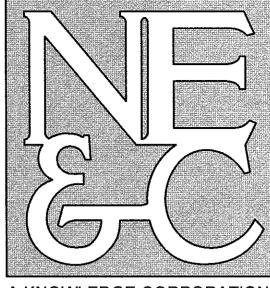
THE EXPRESS AUTHORIZATION OF THE ENGINEER

P:\PROJECTS\2020\20072.0 EAST POINT\DRAWINGS\CURRENT\CITY PERMITTING\20072\_N1.DWG



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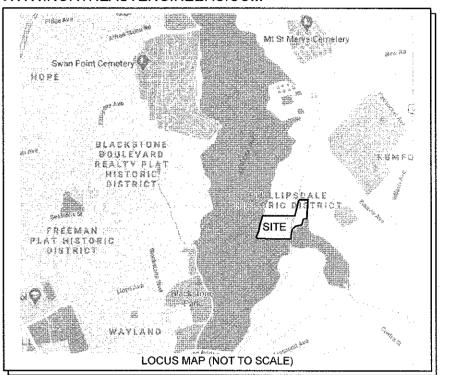
# NORTHEAST ENGINEERS & CONSULTANTS, INC.



SITE/CIVIL
LAND PLANNING
WATERFRONT
SURVEYING
GEOTECHNICAL
ENVIRONMENTAL
TRANSPORTATION
STRUCTURAL

A KNOWLEDGE CORPORATION

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6/17/2021
COASTAL RESOURCES
MANAGEMENT COUNCIL

1		SUBN	IISSION REVIS	SIONS		21MAY21	
No.			Revision			Date	Арр.
Design	ed By:	JJR	Drawn by:	JJR	Ch	ecked by:	GES
Scale:			1"=100'	Date:		22	APR21
Project	Title:						
"EAST POINT"  MAP 203 BLOCK 1 LOT 4  MAP 303 BLOCK 13 LOTS 4 & 5  ROGER WILLIAMS AVENUE							

Client/Owner:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

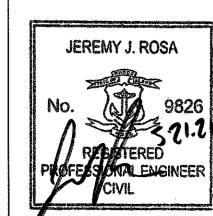
EAST PROVIDENCE RHODE ISLAND

Issued for:

PERMITTING

Drawing Title:

INDEX PLAN (SHOWING 200' ABUTTERS)

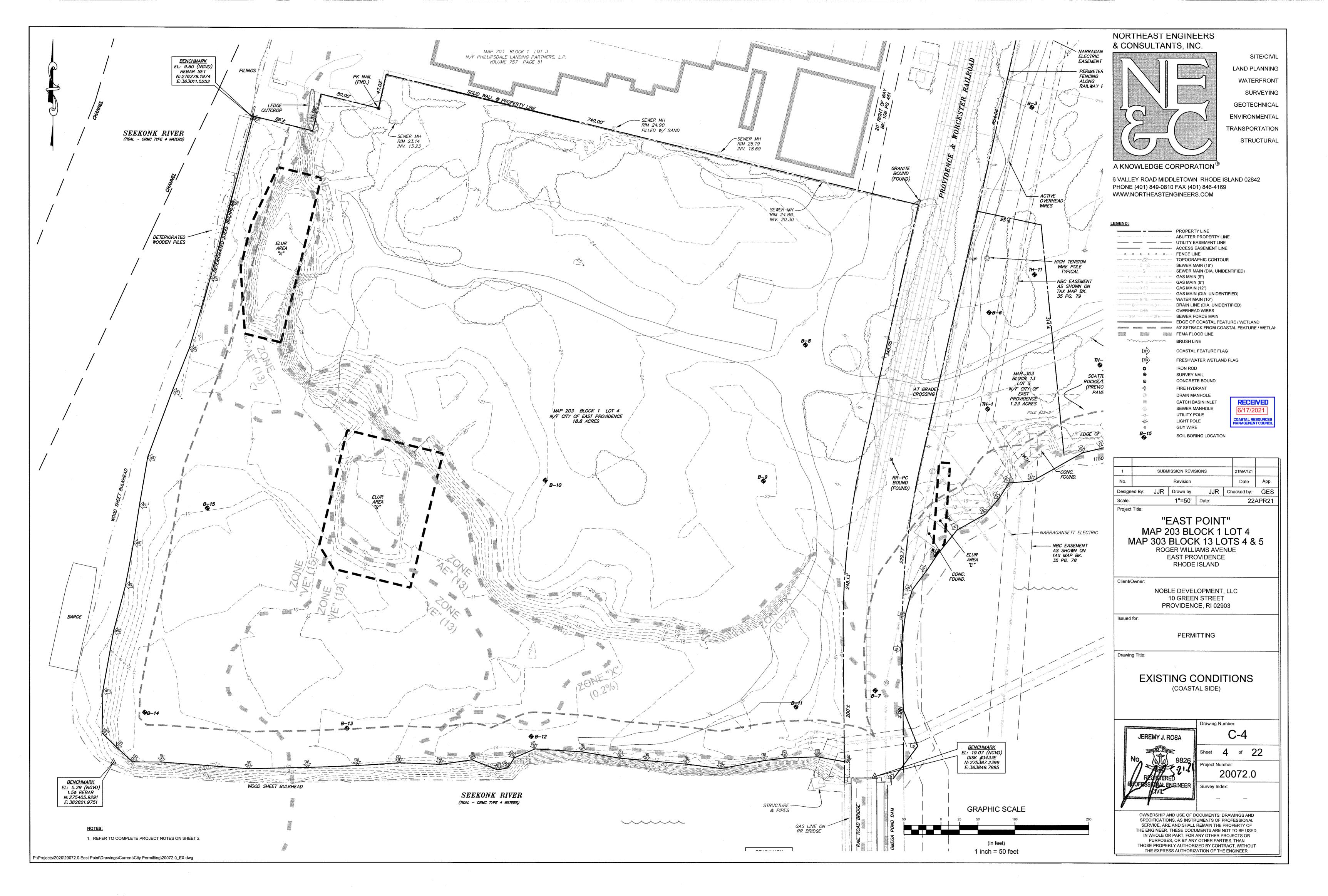


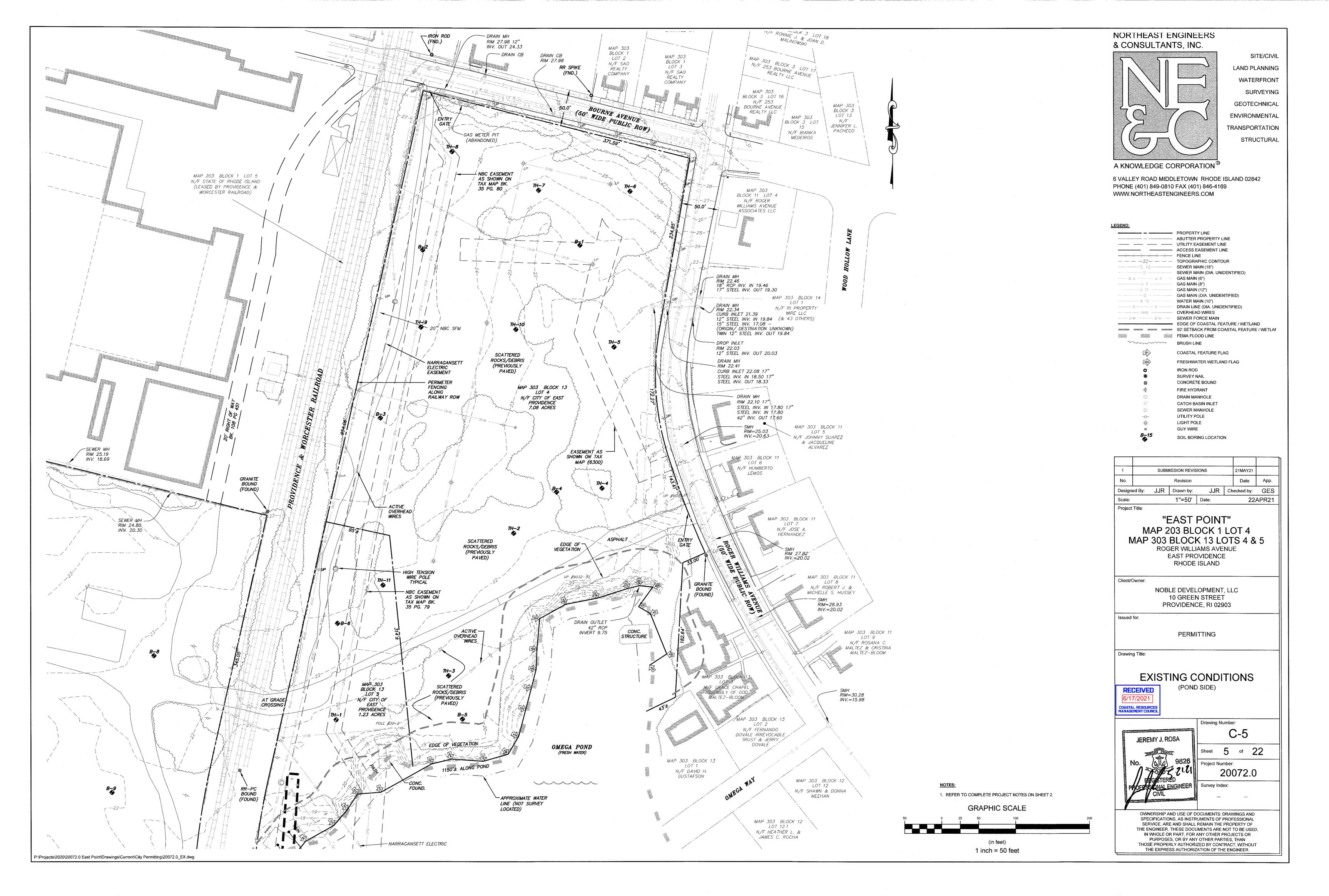
Sheet 3 of 22
Project Number:
20072.0
Survey Index:

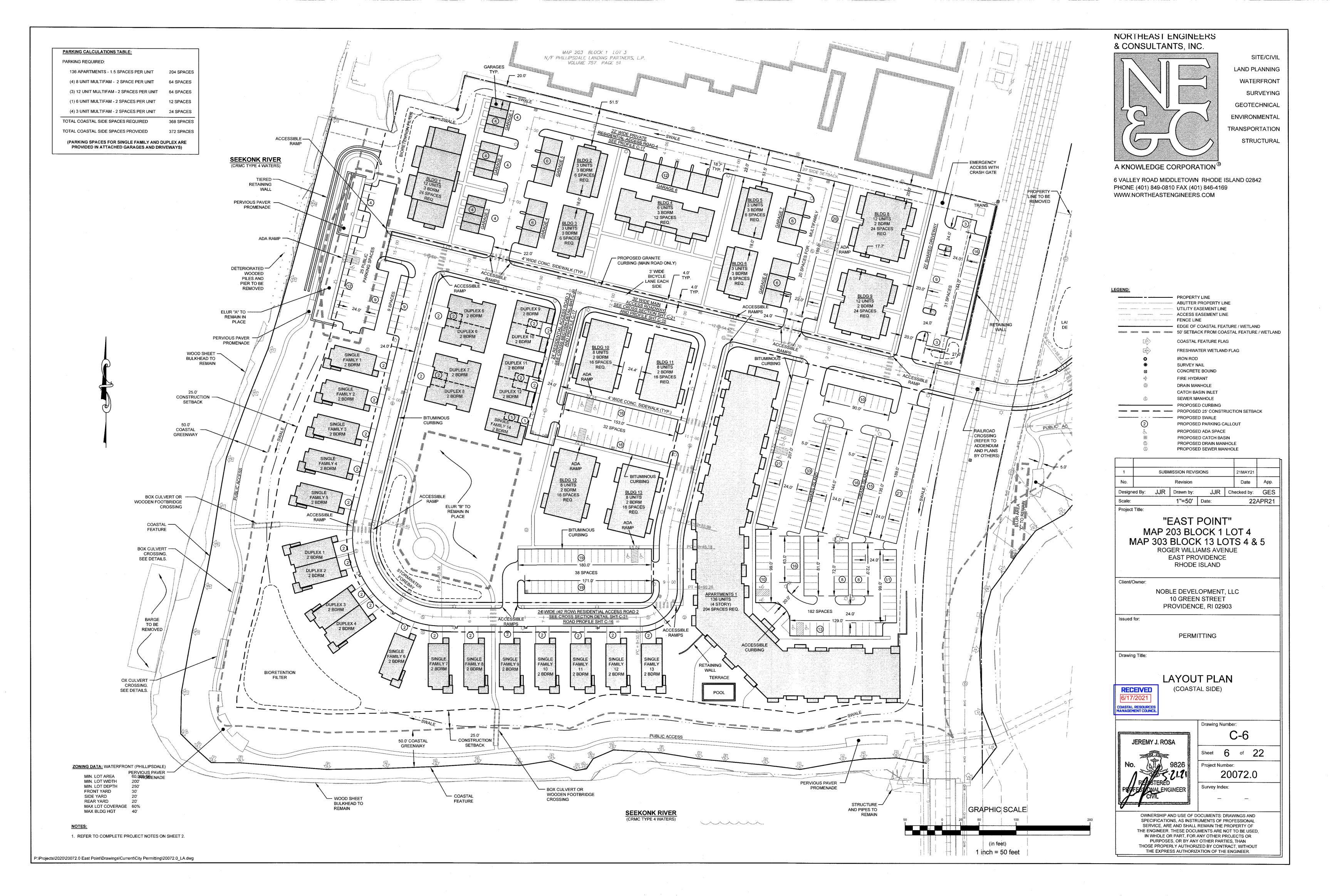
C-3

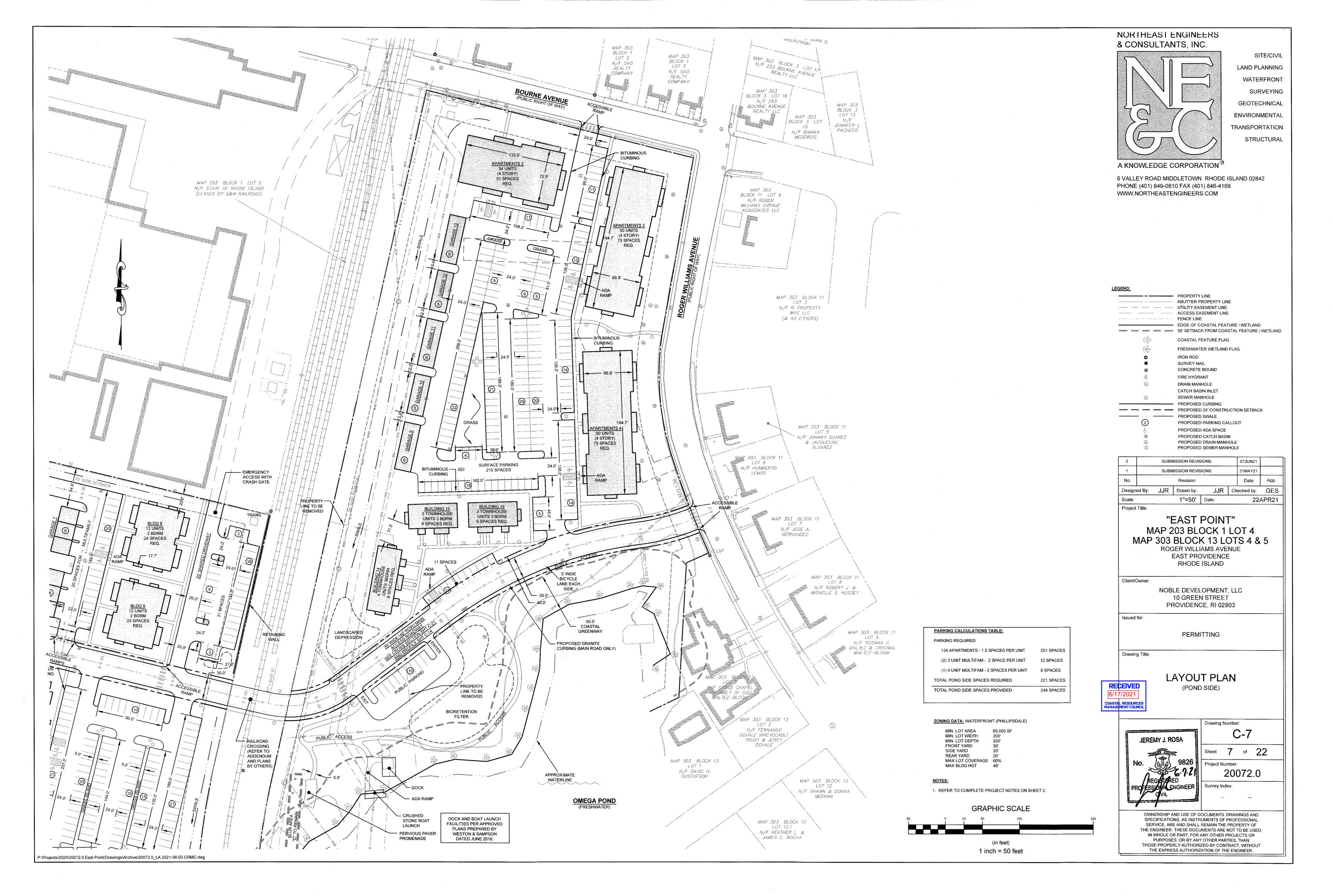
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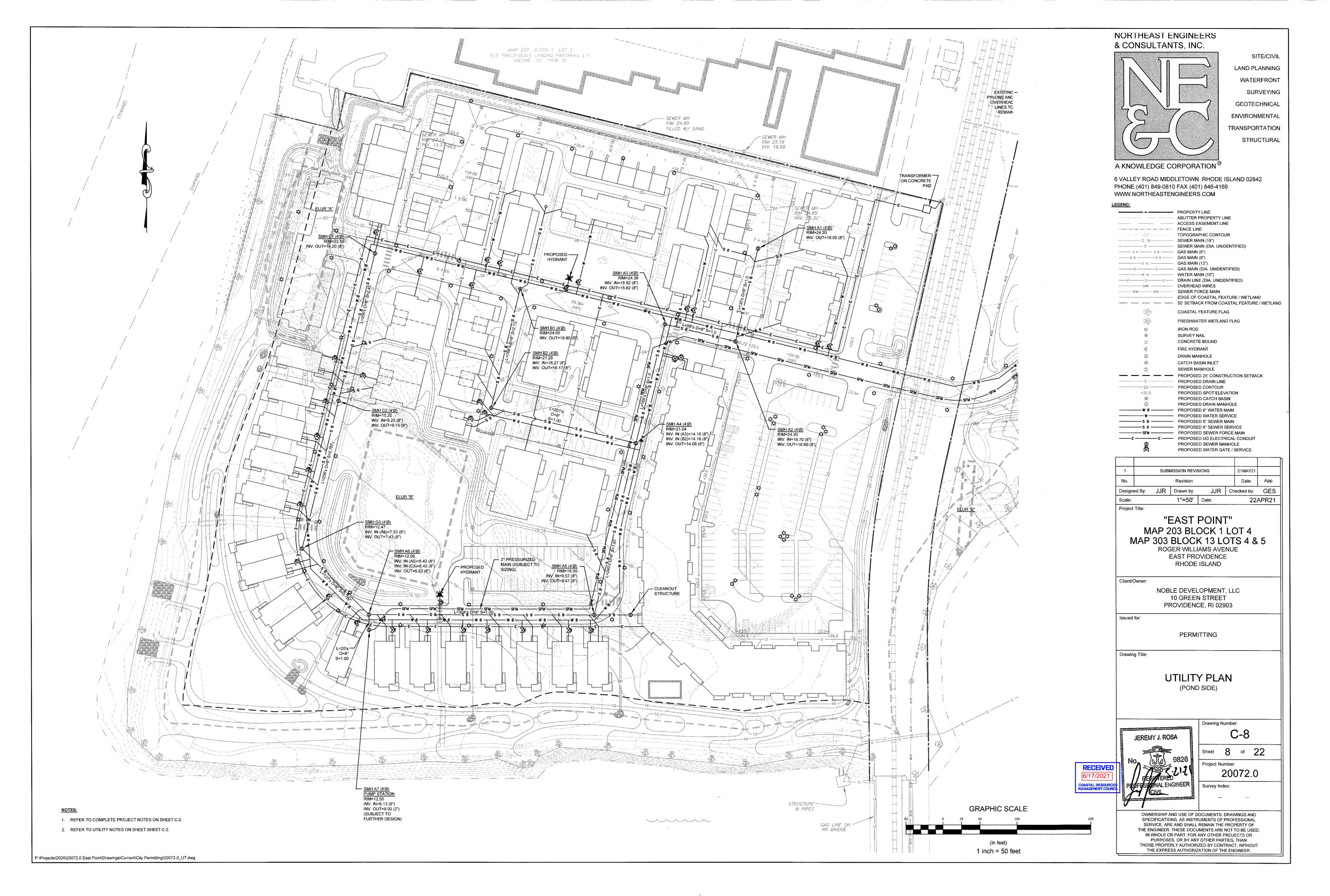
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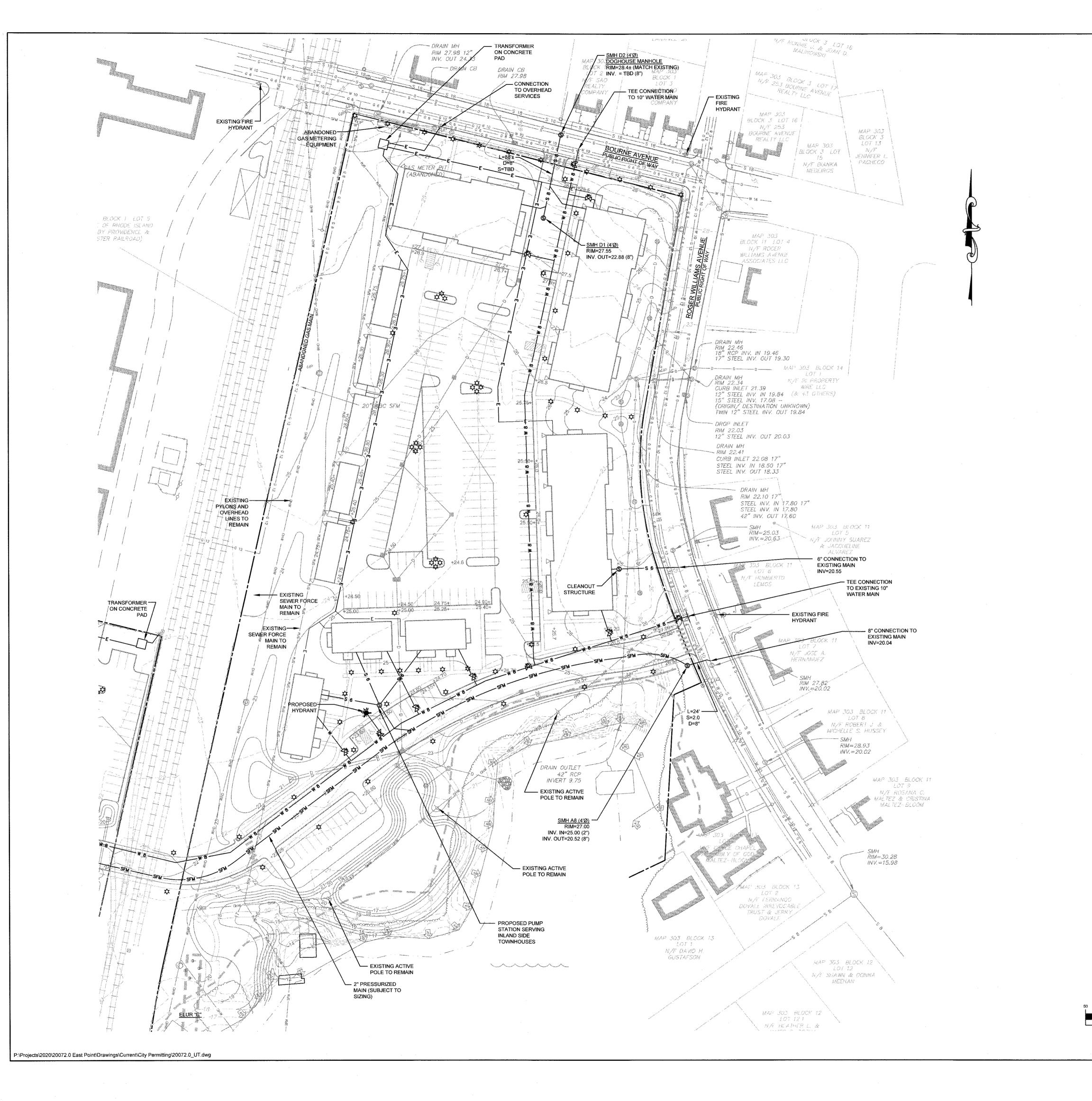


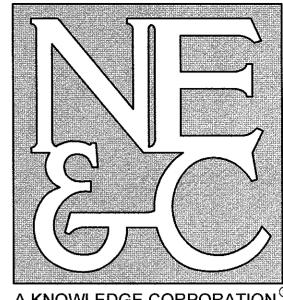












LAND PLANNING WATERFRONT SURVEYING GEOTECHNICAL **ENVIRONMENTAL** TRANSPORTATION

STRUCTURAL

SITE/CIVIL

A KNOWLEDGE CORPORATION

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 PHONE (401) 849-0810 FAX (401) 846-4169 WWW.NORTHEASTENGINEERS.COM

#### LEGEND:

DDODERTY I INC
PROPERTY LINE ABUTTER PROPERTY LINE
ACCESS EASEMENT LINE
FENCE LINE
TOPOGRAPHIC CONTOUR
SEWER MAIN (18")
SEWER MAIN (16 ) SEWER MAIN (DIA. UNIDENTIFIED)
GAS MAIN (6")
GAS MAIN (8")
GAS MAIN (12")
GAS MAIN (DIA. UNIDENTIFIED)
WATER MAIN (10")
DRAIN LINE (DIA. UNIDENTIFIED)
OVERHEAD WIRES
SEWER FORCE MAIN
EDGE OF COASTAL FEATURE / WETLAND
50' SETBACK FROM COASTAL FEATURE / WETL
COACTAL FEATURE FLAC
COASTAL FEATURE FLAG
FRESHWATER WETLAND FLAG
IRON ROD
SURVEY NAIL
CONCRETE BOUND
FIRE HYDRANT
DRAIN MANHOLE
CATCH BASIN INLET
SEWER MANHOLE
PROPOSED 25' CONSTRUCTION SETBACK
PROPOSED DRAIN LINE
PROPOSED CONTOUR
PROPOSED SPOT ELEVATION
PROPOSED CATCH BASIN
PROPOSED DRAIN MANHOLE
PROPOSED 8" WATER MAIN
PROPOSED WATER SERVICE
PROPOSED 8" SEWER MAIN
PROPOSED 6" SEWER SERVICE
PROPOSED SEWER FORCE MAIN
PROPOSED UG ELECTRICAL CONDUIT
PROPOSED SEWER MANHOLE
PROPOSED WATER GATE / SERVICE

1		SUBM	IISSION REVIS	SIONS		21MAY21	
No.			Revision			Date	Арр.
Design	ed By:	JJR	Drawn by:	JJR	Checked by:		GES
Scale:			1"=50'	Date:	22APR21		
<u> </u>	77744						

Project Title:

"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5

ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND

Client/Owner:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

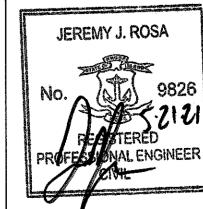
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Drawing Title:

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**UTILITY PLAN** (POND SIDE)



Drawing Number:

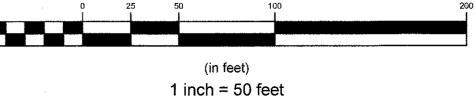
C-9

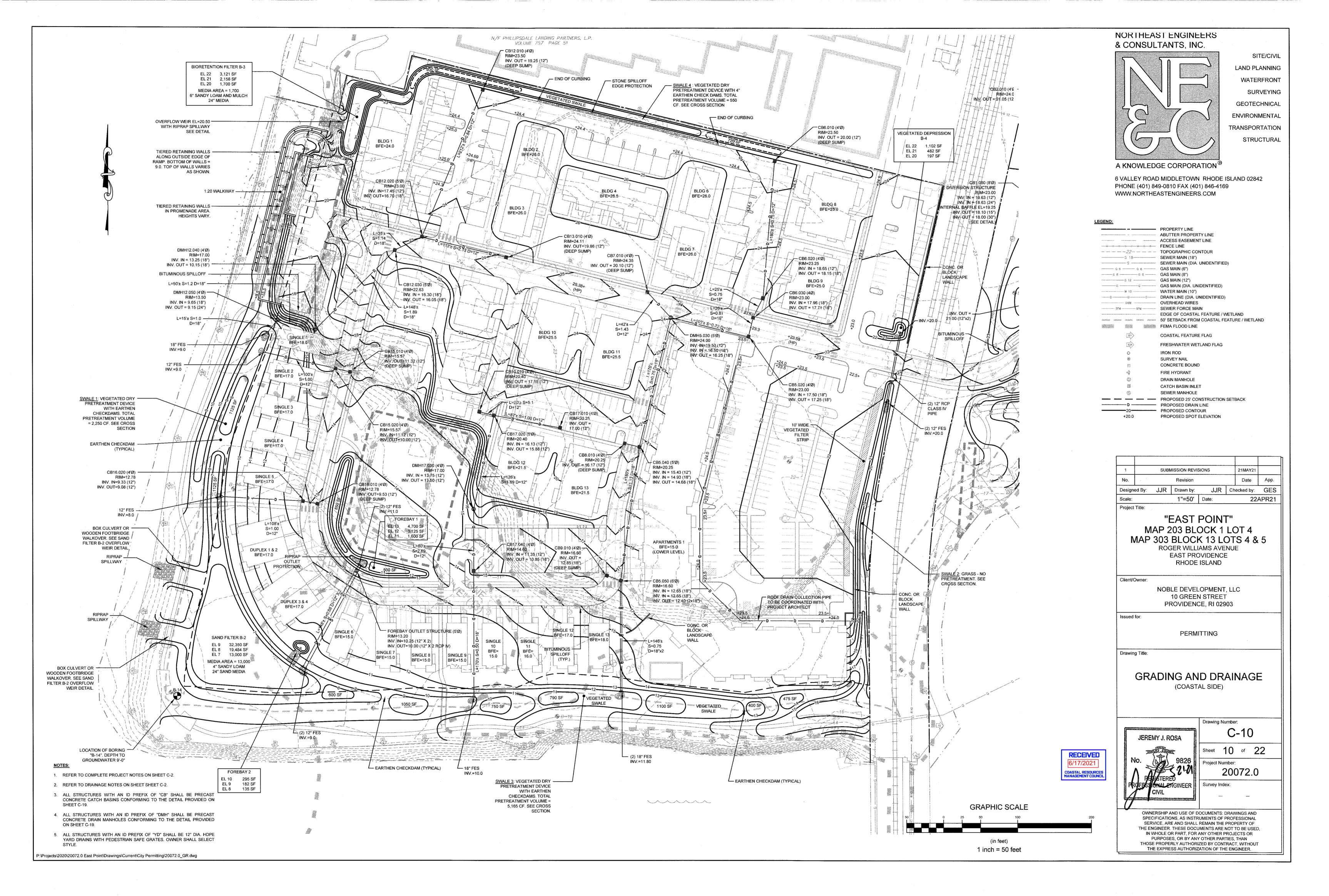
9 of 22

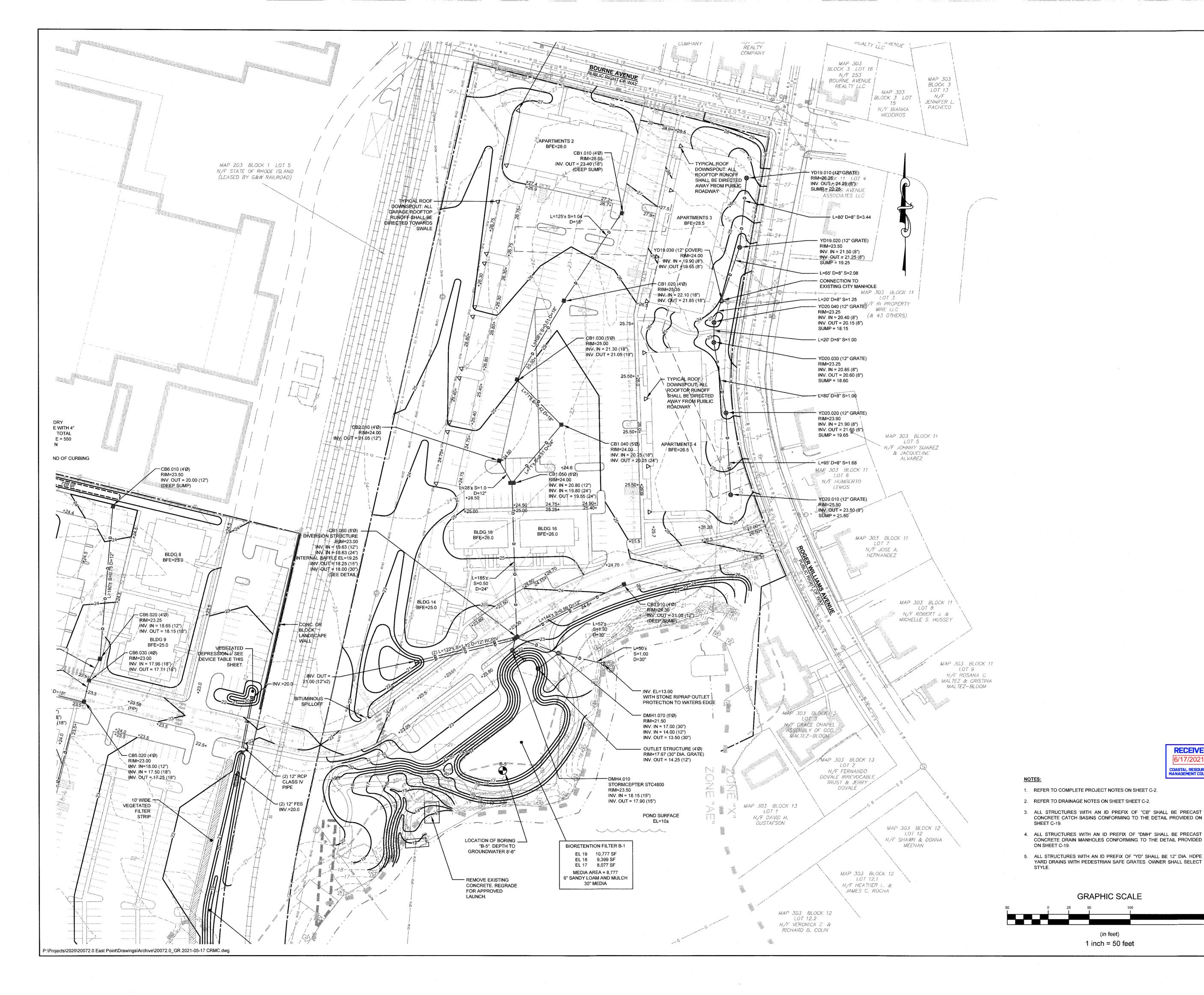
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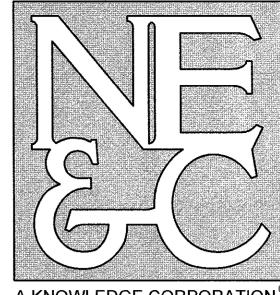
- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.
- 2. REFER TO UTILITY NOTES ON SHEET SHEET C-2.

## GRAPHIC SCALE









SURVEYING GEOTECHNICAL **ENVIRONMENTAL** TRANSPORTATION STRUCTURAL

SITE/CIVIL

LAND PLANNING

WATERFRONT

A KNOWLEDGE CORPORATION

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 PHONE (401) 849-0810 FAX (401) 846-4169 WWW.NORTHEASTENGINEERS.COM

#### LEGEND:

The state of the s	
	<ul> <li>PROPERTY LINE</li> </ul>
MATERIAL STATE OF CONTROL OF CONT	ADOTTENTOPENTERINE
	ACCESS EASEMENT LINE
COMMENDATION OF THE PROPERTY O	, 2,192 2,112
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	,
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	3.13.11.11.11.12.11.11.12.27
	· · · · · · · · · · · · · · · · · · ·
37.60	OEFFER TO THOSE WORLD
WINDOW HATHER SHEARN ARRIVE EERIGE	
4	I LWATEOOD LINE
( an	COASTAL FEATURE FLAG
(424)	FRESHWATER WETLAND FLAG
0	IRON ROD
•	SURVEY NAIL
The state of the s	CONCRETE BOUND
u.g	FIRE HYDRANT
<b>O</b> .	DRAIN MANHOLE
	CATCH BASIN INLET
<b>S</b>	SEWER MANHOLE
	PROPOSED 25' CONSTRUCTION SETBACK
	- PROPOSED DRAIN LINE
20	<ul> <li>PROPOSED CONTOUR</li> </ul>
+20.0	PROPOSED SPOT ELEVATION

2 SUBMISSION REVISIONS					07JUN21		
1		SUBI	MISSION REVI	SIONS		21MAY21	
No.	Revision			Date	Арр.		
Designe	Designed By:		Drawn by:	JJR	Ch	ecked by:	GES
Scale:			1"=50'	Date:	22APR21		
Project	Title:						
	R.A	_	EAST		_	¬T 4	
	MAP 203 BLOCK 1 LOT 4						

#### MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE

RHODE ISLAND

Client/Owner:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

Issued for:

(in feet)

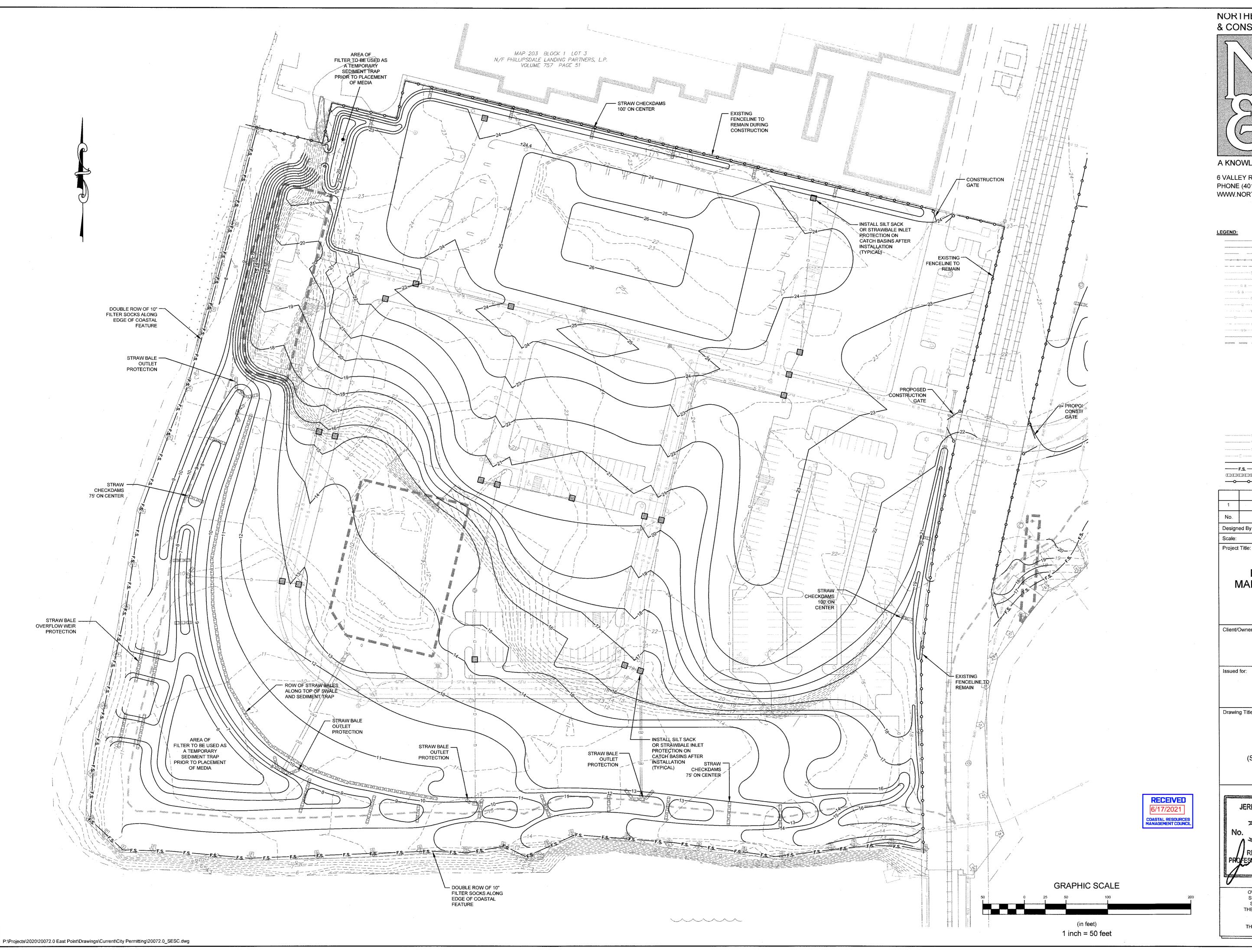
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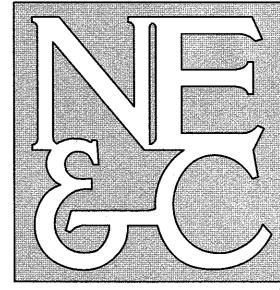
Drawing Title:

**GRADING AND DRAINAGE** 

(POND SIDE)

Drawing Number: C-11 11 of 22 Project Number: 20072.0





SITE/CIVIL LAND PLANNING WATERFRONT SURVEYING GEOTECHNICAL ENVIRONMENTAL TRANSPORTATION STRUCTURAL

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22 \$ 15 \$ 2 5 \$ 3 5 5 \$ 6 3 6 7 8 \$ 6 12 \$ 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	PROPERTY LINE ABUTTER PROPERTY LINE ACCESS EASEMENT LINE FENCE LINE TOPOGRAPHIC CONTOUR SEWER MAIN (18") SEWER MAIN (DIA. UNIDENTIFIED) GAS MAIN (6") GAS MAIN (6") GAS MAIN (12") GAS MAIN (DIA. UNIDENTIFIED) WATER MAIN (10") DRAIN LINE (DIA. UNIDENTIFIED) OVERHEAD WIRES SEWER FORCE MAIN EDGE OF COASTAL FEATURE / WETLAND 50' SETBACK FROM COASTAL FEATURE / WETLAND
(Cr)	COASTAL FEATURE FLAG
423	FRESHWATER WETLAND FLAG
0	IRON ROD
<b>®</b>	SURVEY NAIL
Œ	CONCRETE BOUND
<b>♦</b>	FIRE HYDRANT
<b>Ø</b>	DRAIN MANHOLE
3350 2007	CATCH BASIN INLET
	SEWER MANHOLE
H H	PROPOSED CATCH BASIN
0	PROPOSED DRAIN MANHOLE
	PROPOSED 8" WATER MAIN
	PROPOSED 8" SEWER MAIN
	PROPOSED SEWER FORCE MAIN
	PROPOSED CONSTRUCTION CRADING
	PROPOSED CONSTRUCTION GRADING PROPOSED EROSION CONTROL BARRIER
	PROPOSED STRAW BALE ROW
	PROPOSED CONSTRUCTION FENCING

				4			
1		SUBN	MISSION REVIS	SIONS		21MAY21	
No.			Revision			Date	Арр.
Design	ed By:	JJR	Drawn by:	JJR	Ch	ecked by:	GES
Scale:			1"=50'	Date:		22/	APR21

"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND

Client/Owner:

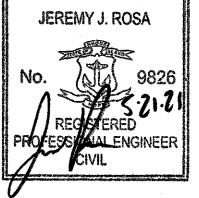
NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

Issued for:

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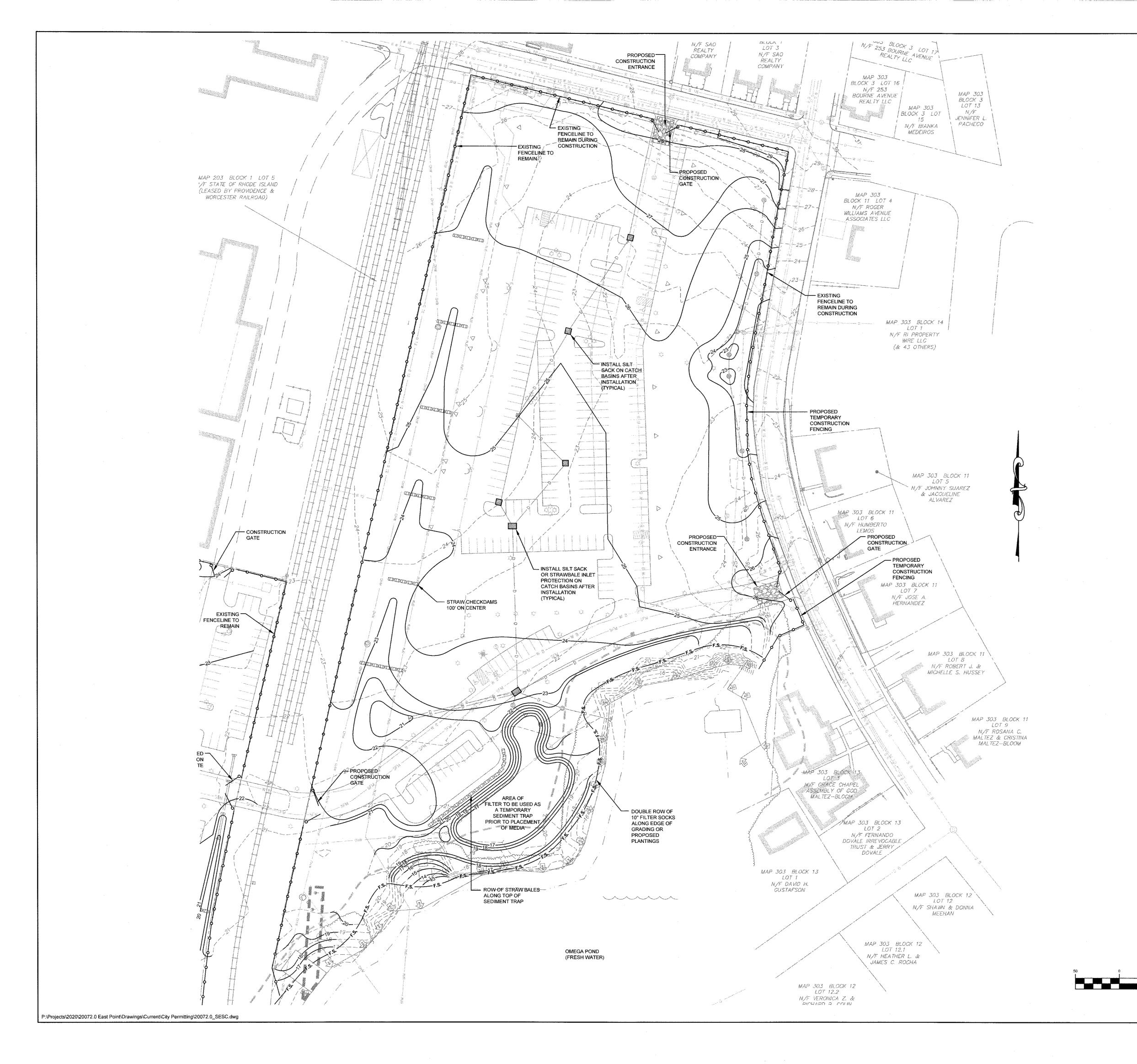
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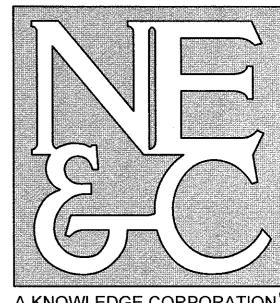
SOIL EROSION AND SEDIMENT CONTROL (SHOWING CONSTRUCTION GRADING)



12 of 22

Drawing Number:





LAND PLANNING WATERFRONT SURVEYING GEOTECHNICAL **ENVIRONMENTAL** TRANSPORTATION

STRUCTURAL

SITE/CIVIL

A KNOWLEDGE CORPORATION

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#### LEGEND:

5 15 mm	
	COASTAL FEATURE FLAG
[A24	FRESHWATER WETLAND FLAG
	IRON ROD
•	SURVEY NAIL
	CONCRETE BOUND
46	FIRE HYDRANT
	DRAIN MANHOLE
26 1 1 4 2 4 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4	CATCH BASIN INLET
· · · · · · · · · · · · · · · · · · ·	SEWER MANHOLE
	PROPOSED CATCH BASIN
<b>©</b>	PROPOSED DRAIN MANHOLE
	PROPOSED 8" WATER MAIN PROPOSED 8" SEWER MAIN
	PROPOSED SEWER FORCE MAIN
	PROPOSED UG ELECTRICAL CONDUIT
20	PROPOSED CONSTRUCTION GRADING
	PROPOSED EROSION CONTROL BARRIER
	PROPOSED STRAW BALE ROW
<del></del>	PROPOSED CONSTRUCTION FENCING

1		SUBN	ISSION REVI	SIONS		21MAY21	
No.			Revision			Date	Арр.
Design	ed By:	JJR	Drawn by:	JJR	Checked by:		GES
Scale:			1"=50'	Date:	22APR21		
Project	Title:						

#### "EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5

ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND

Client/Owner:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

Issued for:

**GRAPHIC SCALE** 

(in feet)

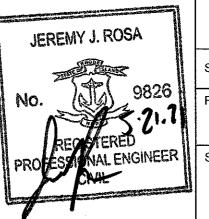
1 inch = 50 feet

PERMITTING

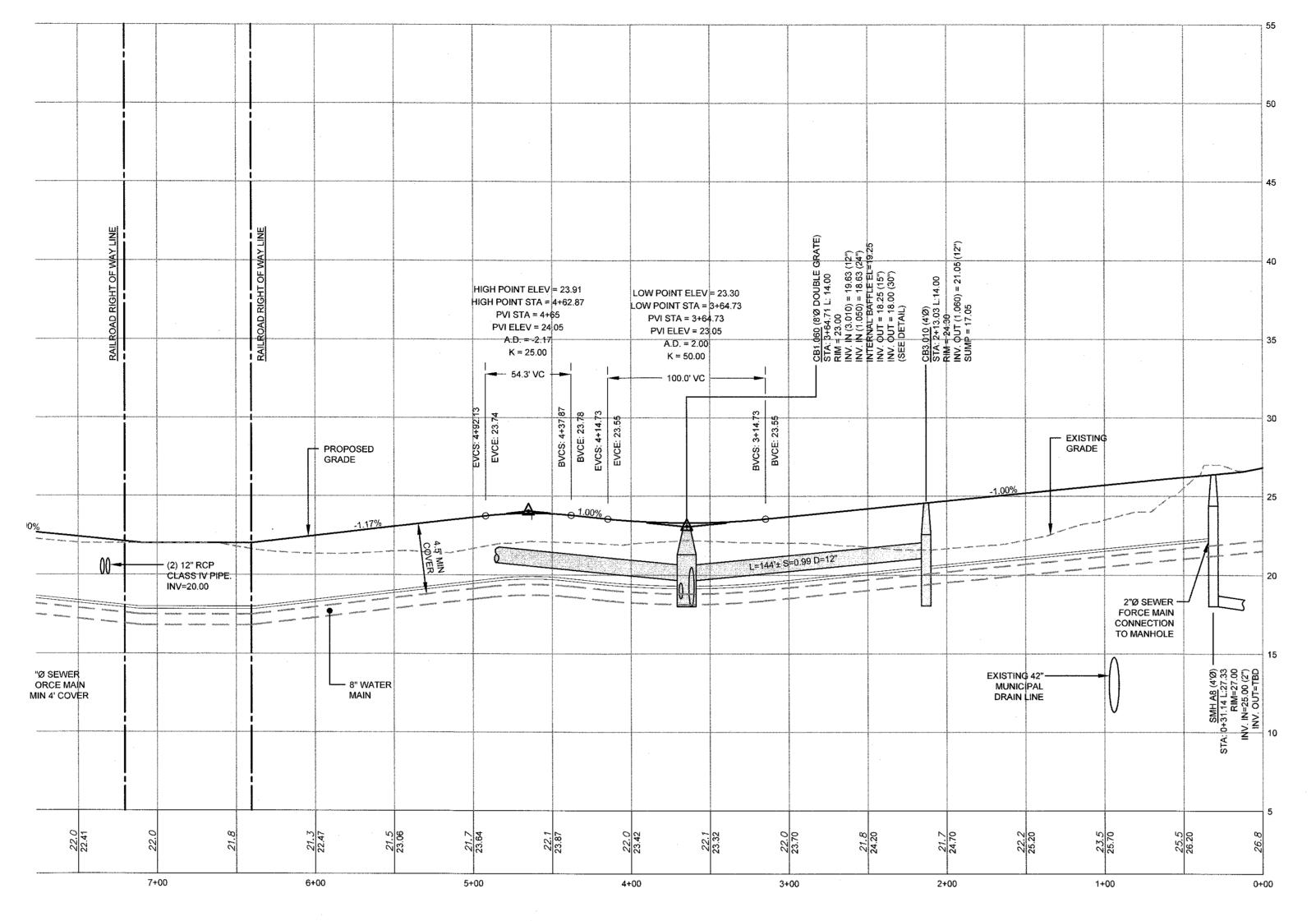
Drawing Title:

#### SOIL EROSION AND SEDIMENT CONTROL (SHOWING CONSTRUCTION GRADING)

Drawing Number:



Sheet 13 of 22 Survey Index:



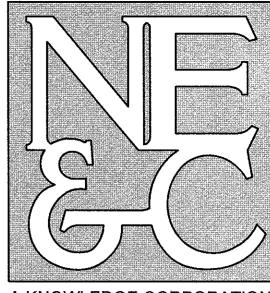
#### MAIN ACCESS ROAD 1 PROFILE (POND SIDE) HORIZONTAL SCALE: 1" = 50'

VERTICAL SCALE: 1" = 5" MAP 303 BLOCK 11 LOT 7 N/F JOSE A. HERNANDEZ - CROSSING MAP 303 BLOCK 1 LOT 8 N/F ROBERT J. & MICHELLE S. HUSSE" M/F GRACE CHAPEL ASSEMBLY OF GOD MALTEZ-BLOOM BIORETENTION PMAP 303 BLOCK 13 N/F FERNANDO DOVALE IRREVOCABLE / TRUST & JERRY DOVALE /

MAIN ACCESS ROAD 1 PLAN (POND SIDE)

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NORTHEAST ENGINEERS & CONSULTANTS, INC.



TRANSPORTATION STRUCTURAL

SITE/CIVIL

LAND PLANNING

WATERFRONT

GEOTECHNICAL

**ENVIRONMENTAL** 

SURVEYING

A KNOWLEDGE CORPORATION

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 PHONE (401) 849-0810 FAX (401) 846-4169 WWW.NORTHEASTENGINEERS.COM

NOTES:

1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

SUBMISSION REVISIONS 21MAY21 Date JJR Checked by: GES Designed By: JJR Drawn by: 22APR21 1"=50' Date: Project Title:

"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND

Client/Owner:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

Issued for:

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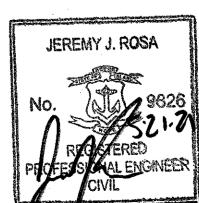
Drawing Title:

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COASTAL RESOURCE MANAGEMENT COUNC

**ROAD PROFILE** 

(MAIN ACCESS ROAD POND SIDE)



Drawing Number:

14 of 22

Survey Index:

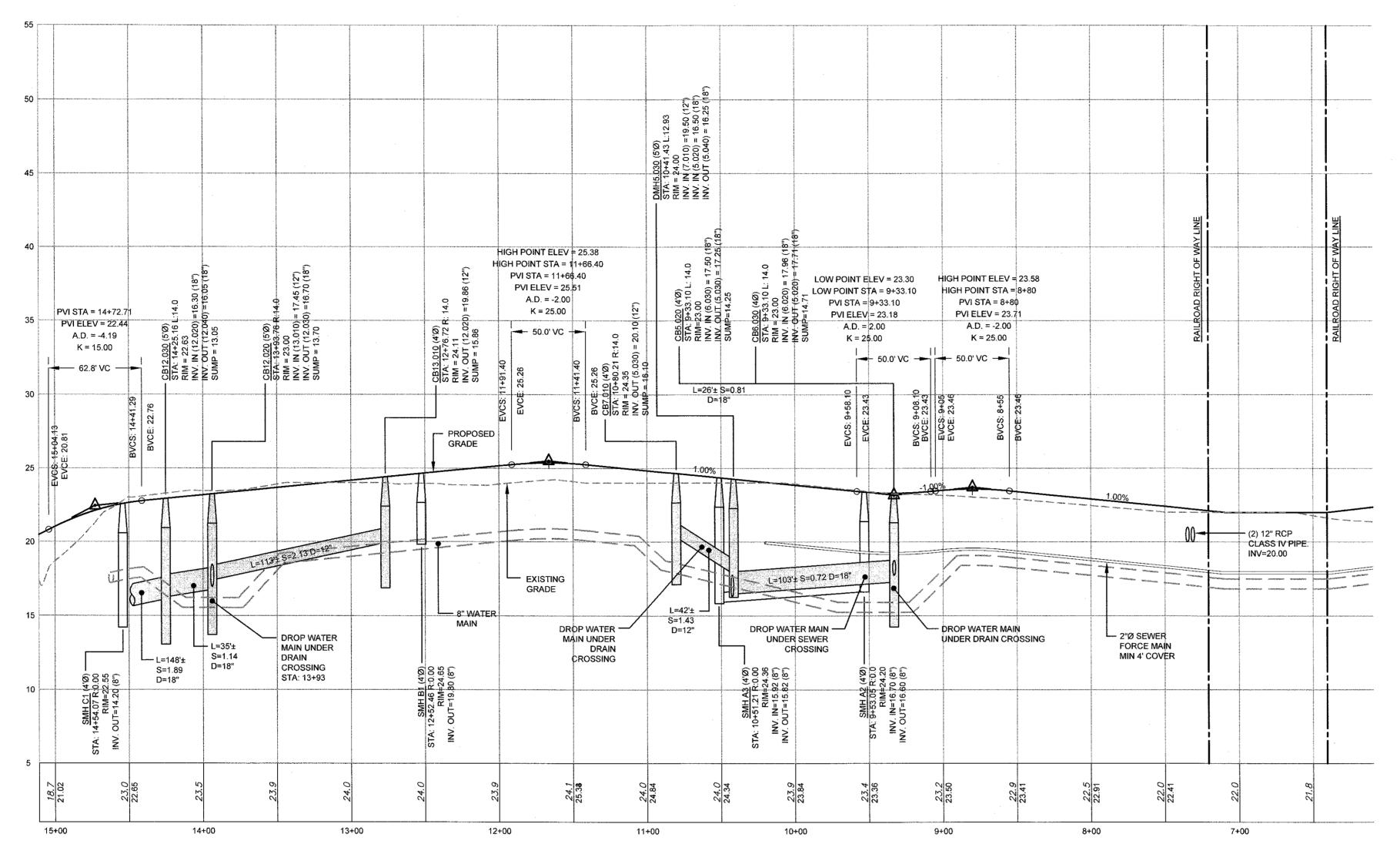
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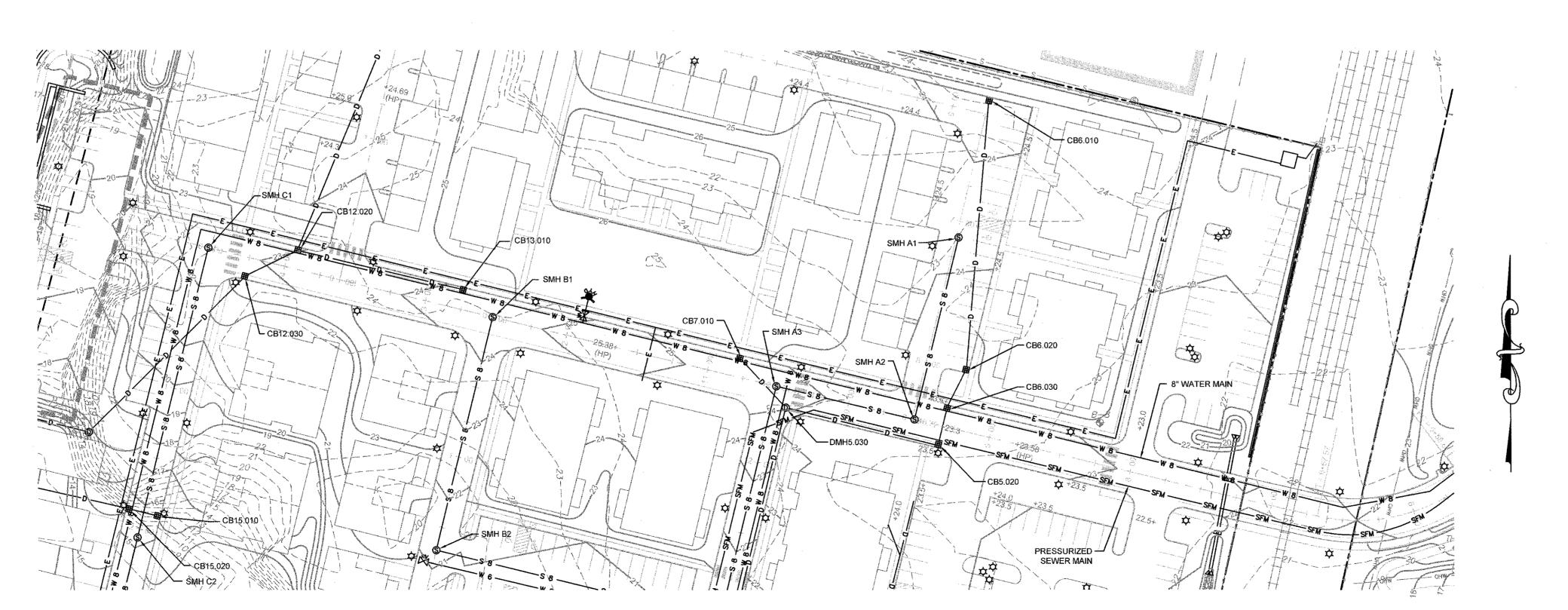
THE EXPRESS AUTHORIZATION OF THE ENGINEER.

(in feet) 1 inch = 50 feet

**GRAPHIC SCALE** 

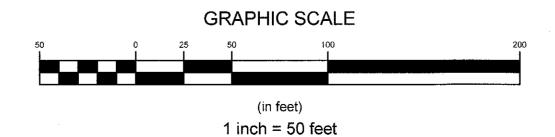


MAIN ACCESS ROAD 1 PROFILE (COASTAL SIDE) HORIZONTAL SCALE: 1" = 50" VERTICAL SCALE: 1" = 5'

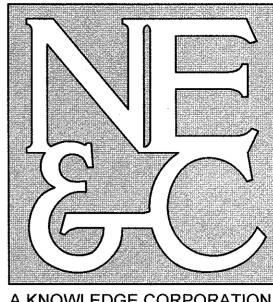


MAIN ACCESS ROAD 1 PLAN (COASTAL SIDE) SCALE: 1" = 50'

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SITE/CIVIL

LAND PLANNING

WATERFRONT

GEOTECHNICAL

**ENVIRONMENTAL** 

TRANSPORTATION

STRUCTURAL

SURVEYING

NOTES:

1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

1		SUBN	IISSION REVI	SIONS		21MAY21	
No.			Revision	"		Date	Арр
Design	ed By:	JJR	Drawn by:	JJR	Ch	ecked by:	GE
Scale:			1"=50'	Date:		22/	APR2
Duning	T'11 -			•			

Project Title:

"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE

RHODE ISLAND

Client/Owner:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

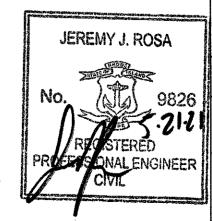
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Drawing Title:

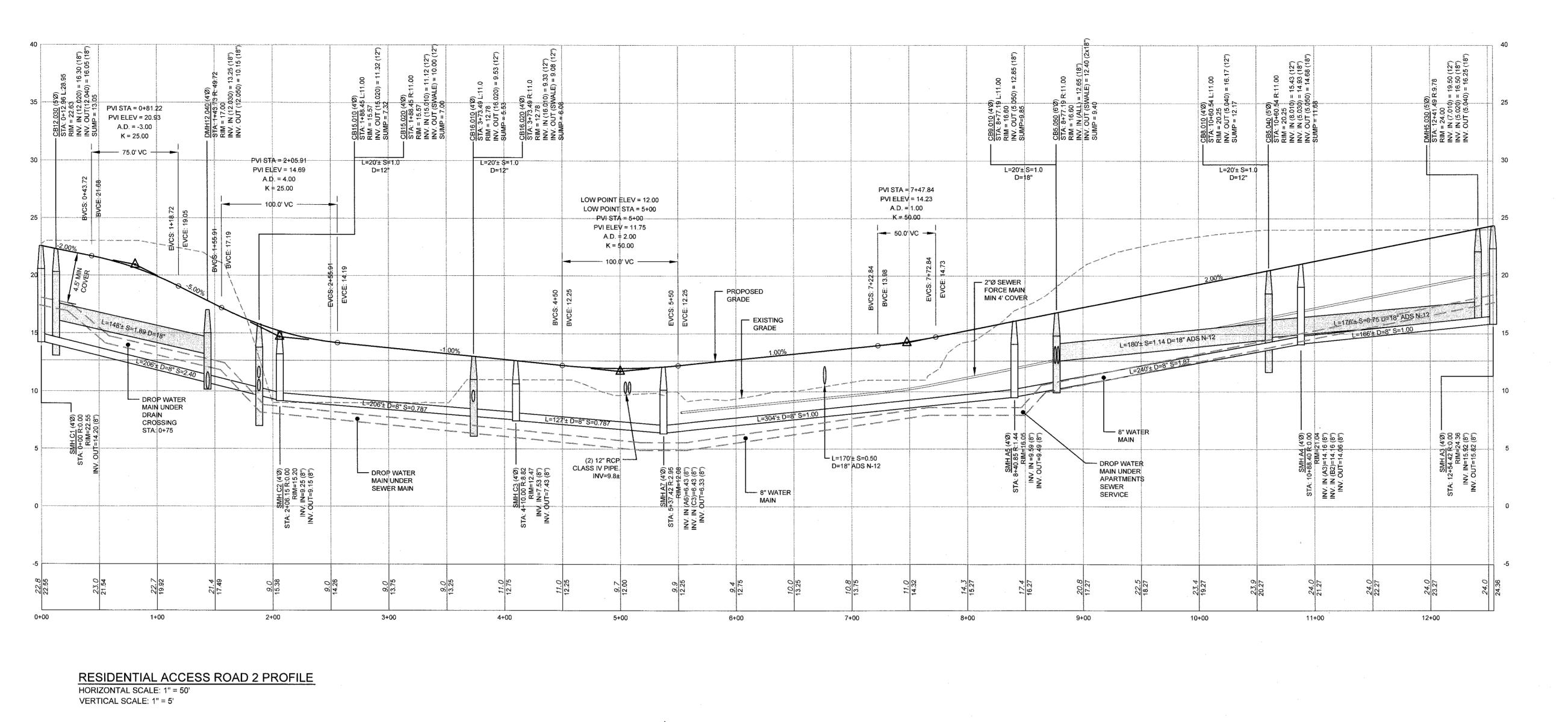
ROAD PROFILE SHEET 2 (MAIN ACCESS ROAD COASTAL SIDE)

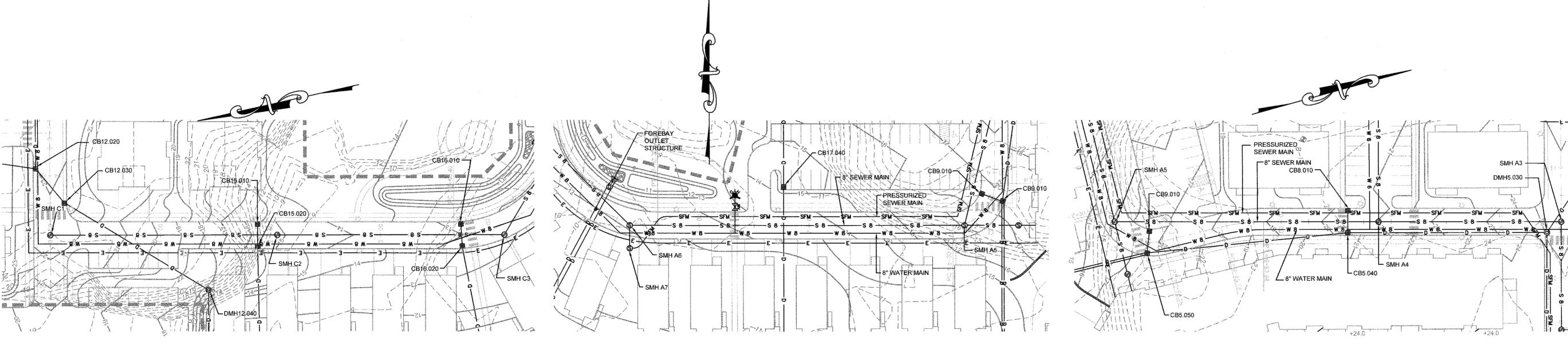


Sheet 15 of 22 Project Number:

Drawing Number:

20072.0



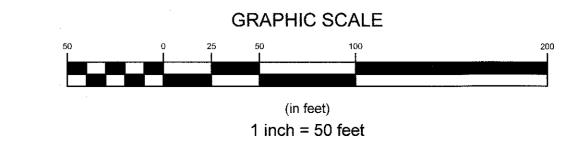


RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 1)

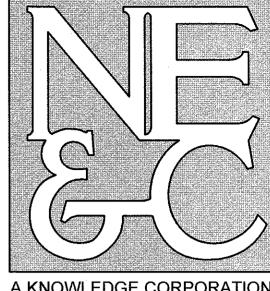
SCALE: 1" = 50'

RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 2)

**RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 3)** 



#### NORTHEAST ENGINEERS & CONSULTANTS, INC.



LAND PLANNING WATERFRONT SURVEYING GEOTECHNICAL **ENVIRONMENTAL** TRANSPORTATION STRUCTURAL

SITE/CIVIL

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 PHONE (401) 849-0810 FAX (401) 846-4169 WWW.NORTHEASTENGINEERS.COM

**RECEIVED** 

1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

		:					
1		SUBMISSION REVISIONS					
No.	Revision					Date	App.
Design	ed By:	JJR	Drawn by:	JJR	Ch	ecked by:	GES
Scale:			1"=50'	Date:		22/	APR21
Project	Title:						

#### "EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE

EAST PROVIDENCE RHODE ISLAND

Client/Owner:

NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

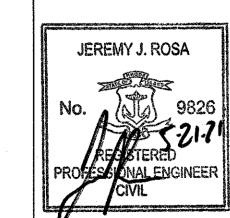
Issued for:

PERMITTING

Drawing Title:

## ROAD PROFILE

SHEET 3 (RESIDENTIAL ACCESS ROAD 2)



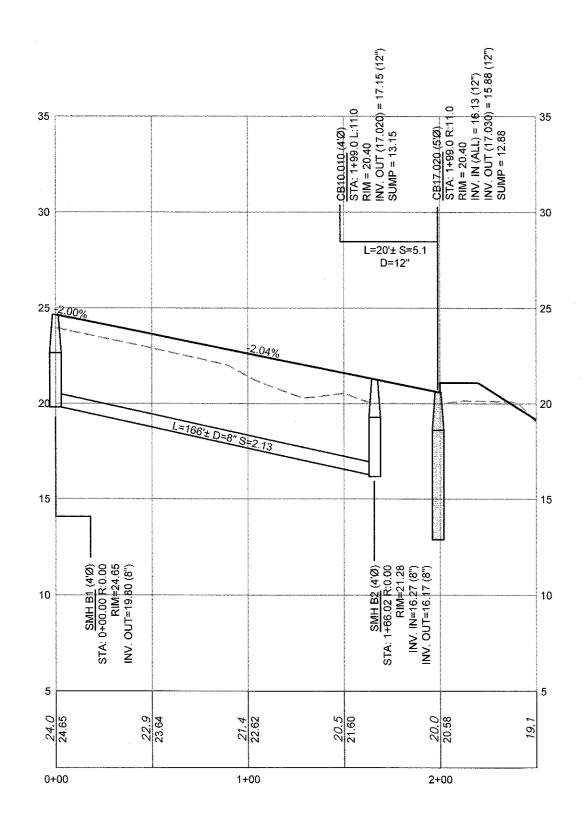
Drawing Number: C-16

Sheet 16 of 22

Survey Index:

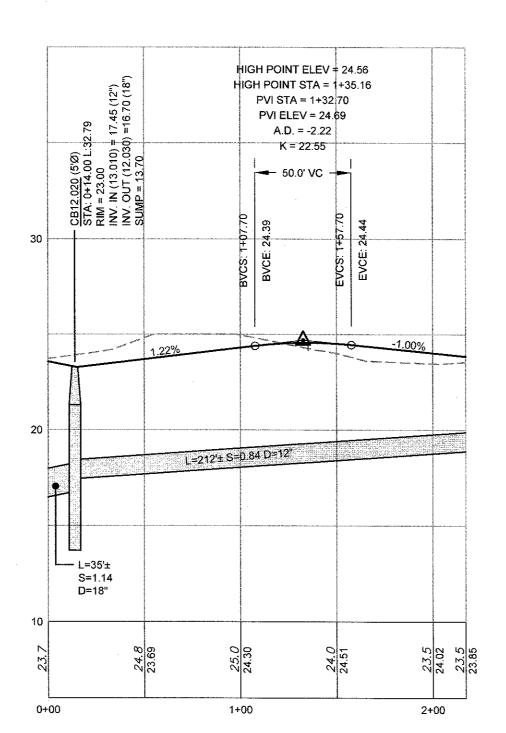
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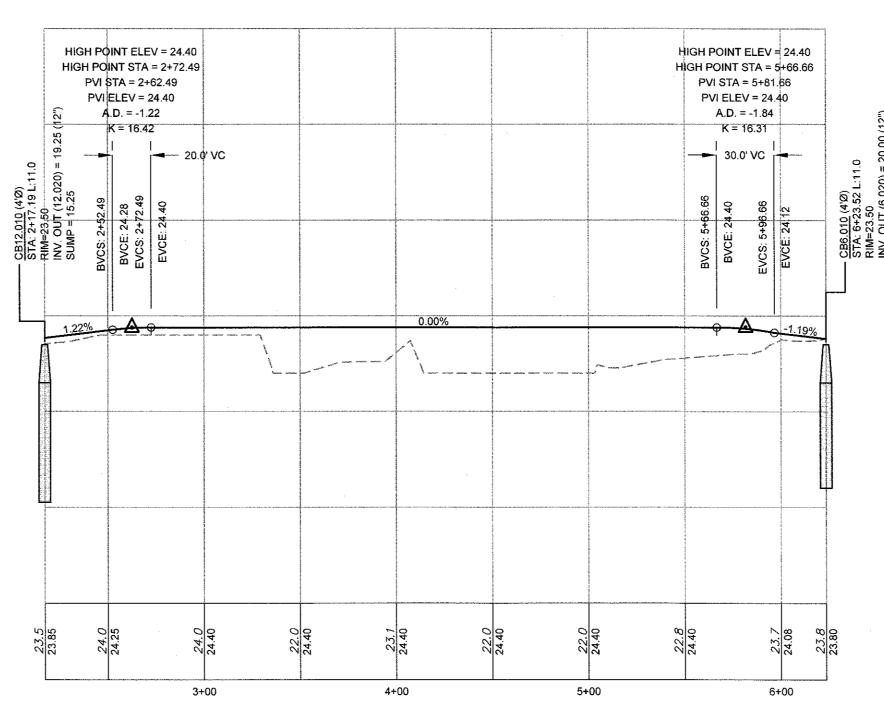


RESIDENTIAL ACCESS ROAD 3 PROFILE

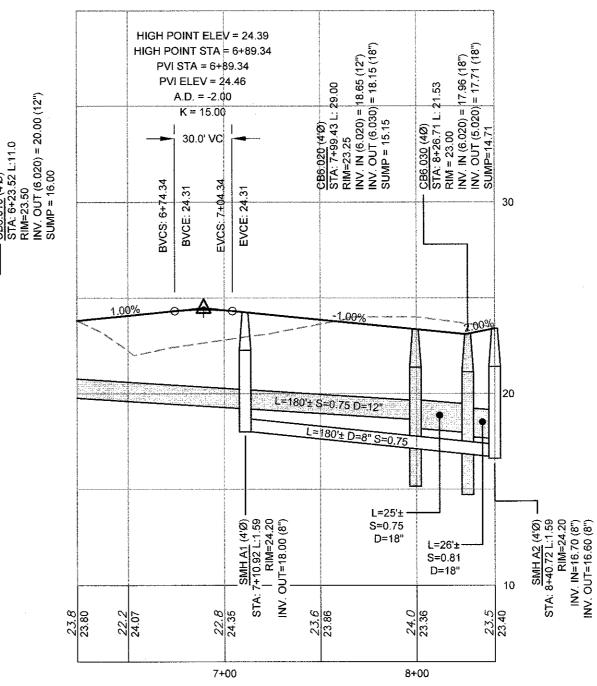
HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5'



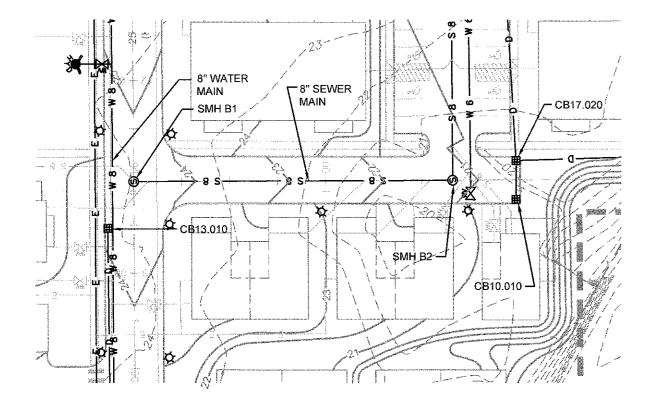
RESIDENTIAL ACCESS ROAD 4 (SEC 1) PROFILE HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5'



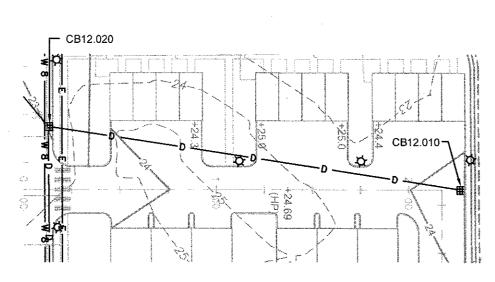
RESIDENTIAL ACCESS ROAD 4 (SEC 2) PROFILE HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5'



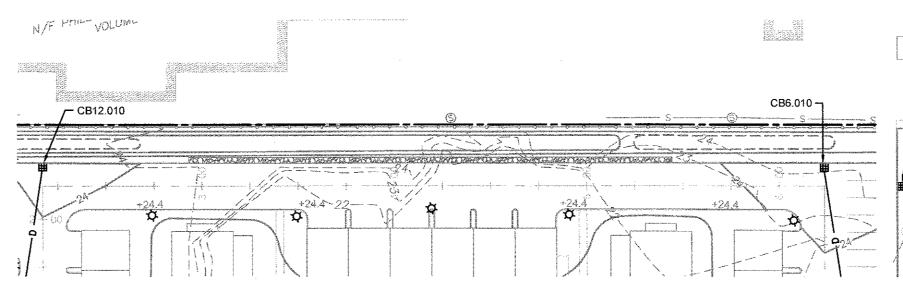
RESIDENTIAL ACCESS ROAD 4 (SEC 3) PROFILE HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5'



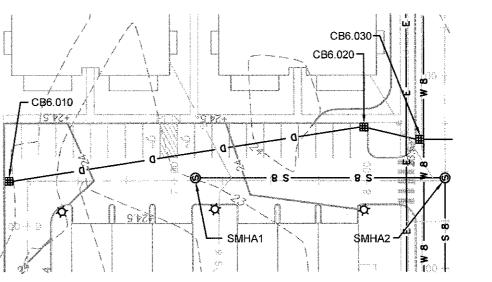
RESIDENTIAL ACCESS ROAD 3 PLAN
SCALE: 1" = 50'



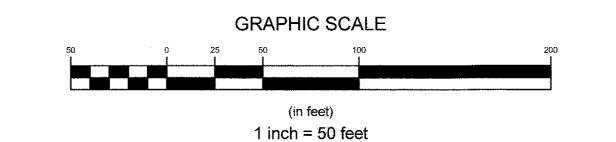
RESIDENTIAL ACCESS ROAD 4 (SEC 1) PLAN
(PRIVATE)
SCALE: 1" = 50'



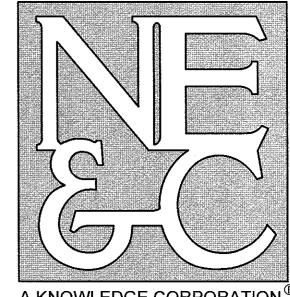
RESIDENTIAL ACCESS ROAD 4 (SEC 2) PLAN (PRIVATE) SCALE: 1" = 50'



RESIDENTIAL ACCESS ROAD 4 (SEC 3) PLAN
(PRIVATE)
SCALE: 1" = 50'



NORTHEAST ENGINEERS & CONSULTANTS, INC.



LAND PLANNING WATERFRONT SURVEYING GEOTECHNICAL **ENVIRONMENTAL** TRANSPORTATION STRUCTURAL

SITE/CIVIL

A KNOWLEDGE CORPORATION

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 PHONE (401) 849-0810 FAX (401) 846-4169 WWW.NORTHEASTENGINEERS.COM



NOTES:

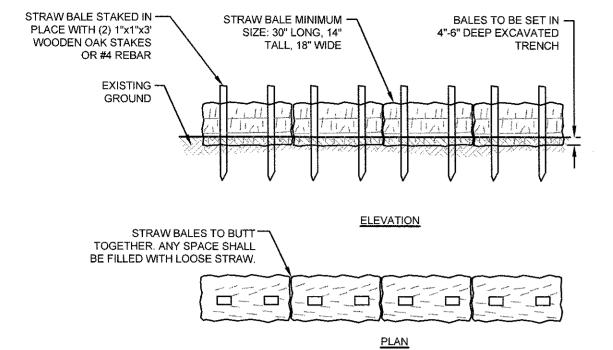
REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

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1	SUBMISSION REVISIONS					21MAY21		
No.	Revision				Date	Арр.		
Design	ed By:	ed By: JJR Drawn by: JJR Chi			ecked by:	GES		
Scale:	1"=50' Date:					22APR21		
Project Title:								
MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND  Client/Owner:  NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903								
Issued			PERM	ITTING				
Drawin	g Title:							
		RO	DAD P	ROFIL	_E			

SHEET 4 (RESIDENTIAL ACCESS ROADS 3 & 4)

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Drawing Number:

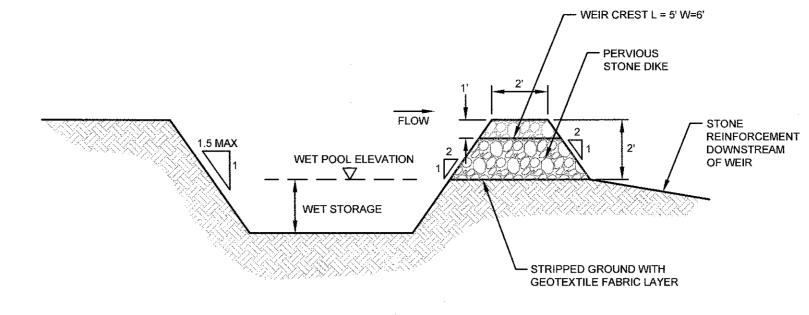


1. BALE WEIGHT SHALL NOT BE LESS THAN 50 LBS AND SHALL BE BOUND WITH NO LESS THAN TWO STRINGS OR WIRES CONTAINING A MINIMUM OF FIVE (5) CUBIC FEET OF MATERIAL. MINIMUM DIMENSIONS SHOWN IN DETAIL...

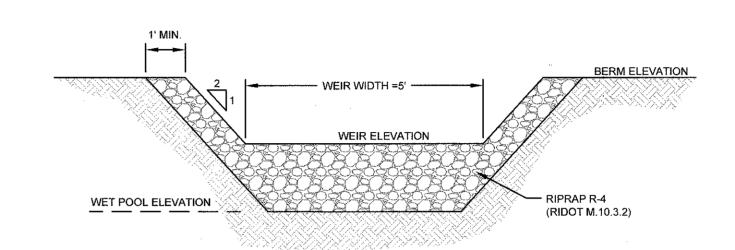
- 2. STRAW BALES SHALL BE CERTIFIED AS BEING NOXIOUS WEED-FREE BALES, TO BE "CERTIFIED" MEANS THAT THE PRODUCT IS FREE OF ANY NOXIOUS WEEDS.
- 3. STAKES SHALL BE DRIVEN THROUGH STAKES AT A SLIGHT UPSTREAM ANGLE TO PREVENT BALE
- 4. LOOSE STRAW SHALL BE WEDGED BETWEEN BALES AFTER INSTALLATION.
- 5. MATERIAL EXCAVATED FROM TRENCH SHALL BE BACKFILLED, COMPACTED, AND STABILIZED.

BALED STRAW EROSION CONTROL BARRIER
SCALE: NOT TO SCALE

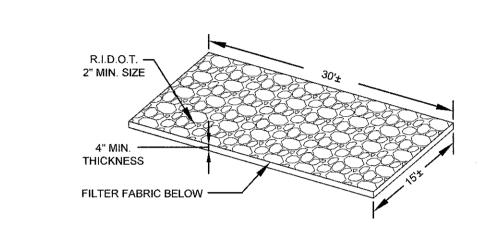
TYPICAL CHAIN LINK FENCE DETAIL SCALE: NOT TO SCALE



PROFILE SECTION



TYPICAL SEDIMENT TRAP DETAILS SCALE: NOT TO SCALE



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SITE/CIVIL

LAND PLANNING

WATERFRONT

GEOTECHNICAL

ENVIRONMENTAL

TRANSPORTATION

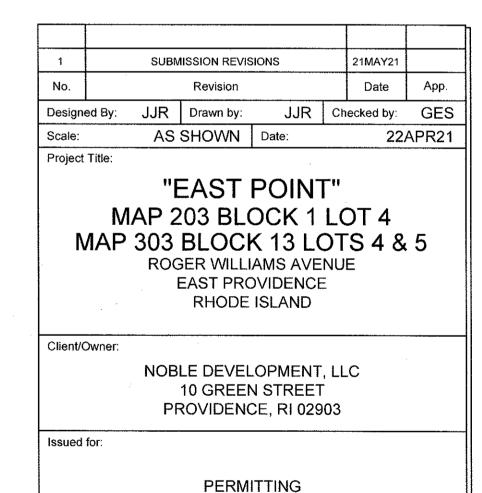
STRUCTURAL

SURVEYING

& CONSULTANTS, INC.

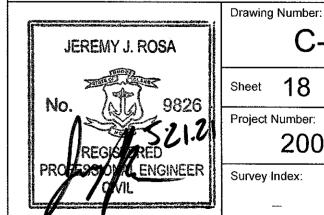
NOTE: ALL CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE CONTRACTORS DISCRETION PER DETAIL PROVIDED.

#### **CONSTRUCTION ENTRANCE** SCALE:NOT TO SCALE



Drawing Title:

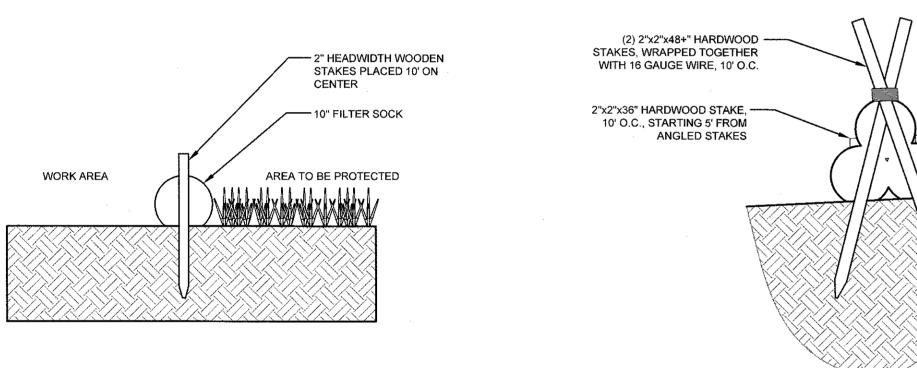
**PROPOSED DETAIL SHEET 1** 



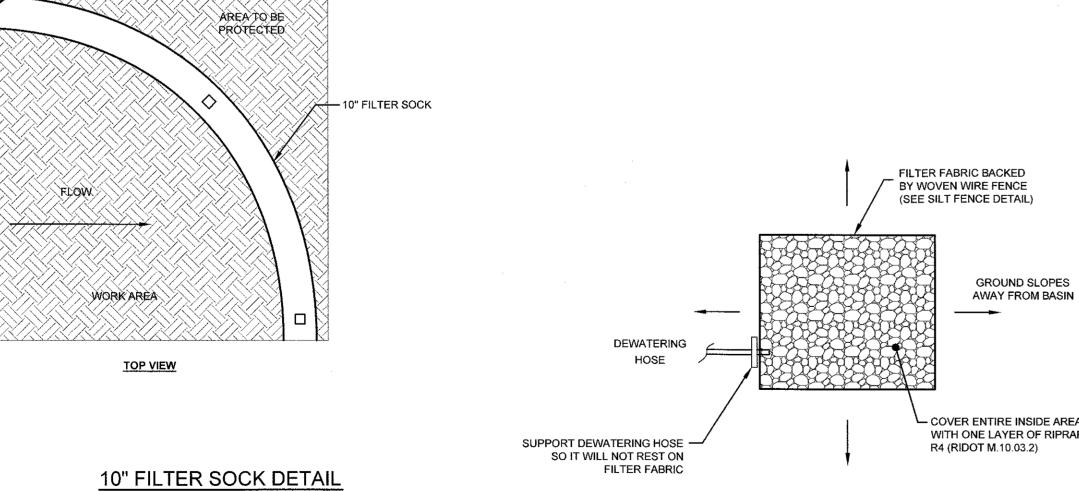
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SCALE: NOT TO SCALE



DEWATERING BASIN SCALE: NOT TO SCALE

STRAW BALE INLET PROTECTION SCALE: NOT TO SCALE

CROSS SECTION

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.

LEROSION CONTROL BLANKET

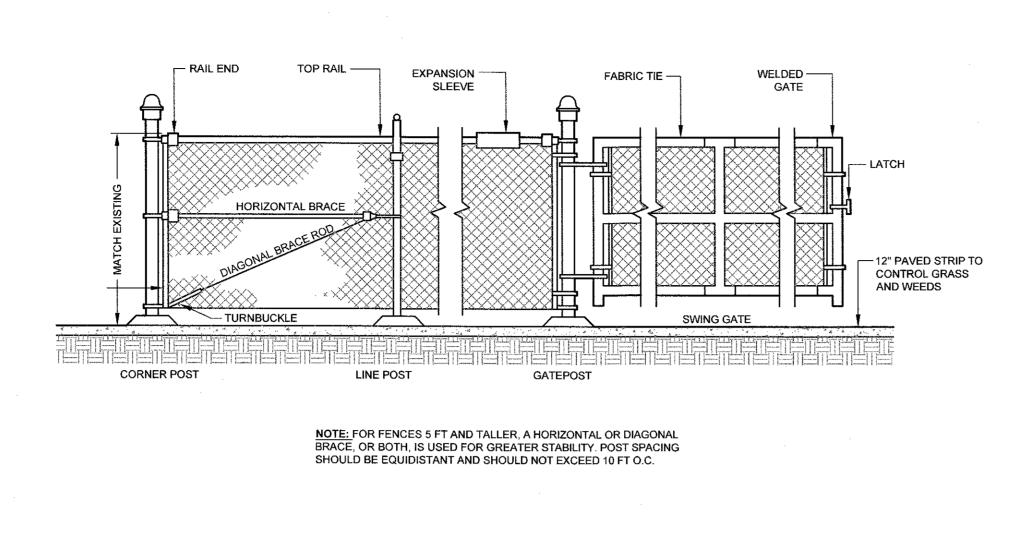
BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.

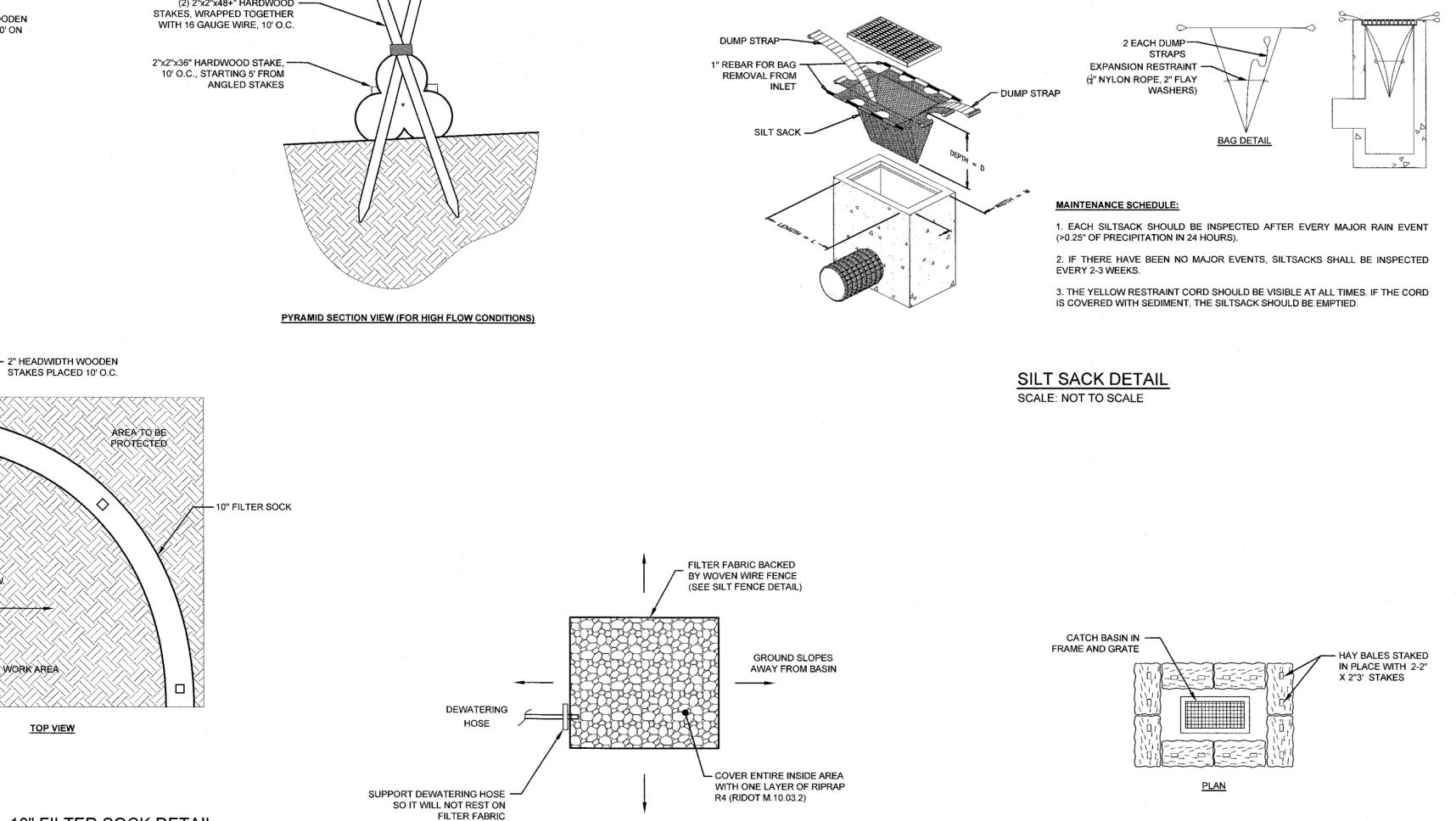
2. ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.

5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"

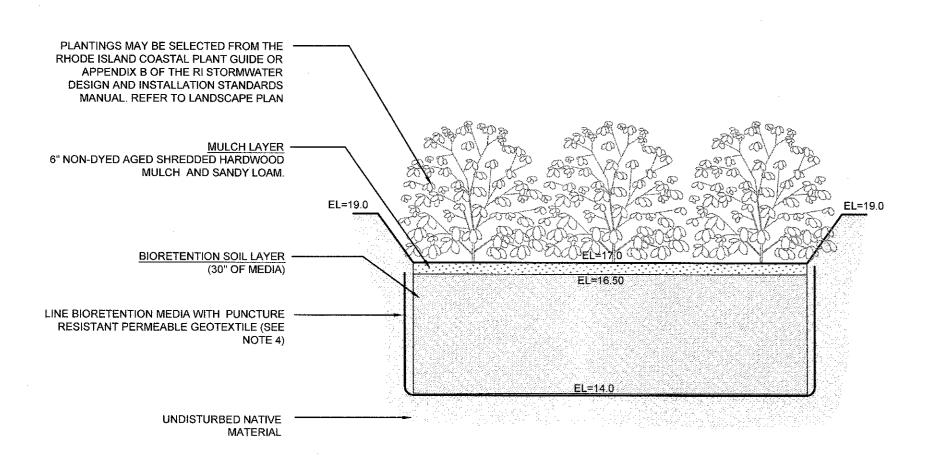
> **EROSION CONTROL BLANKET** SCALE: NOT TO SCALE



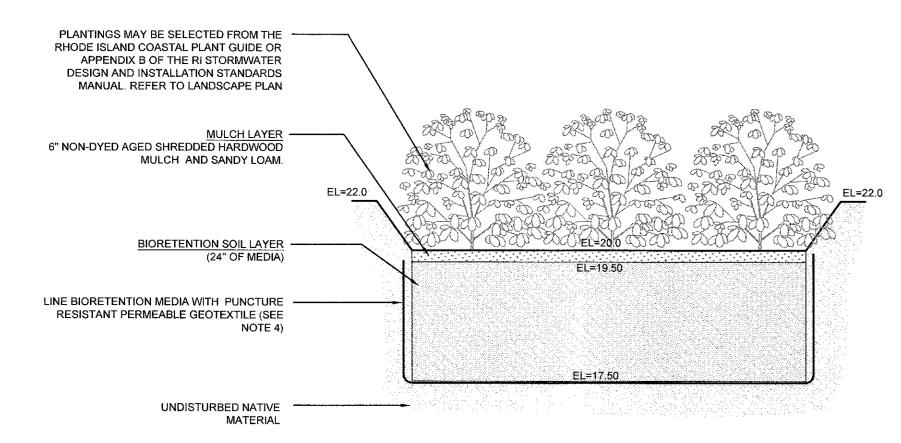


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SECTION VIEW



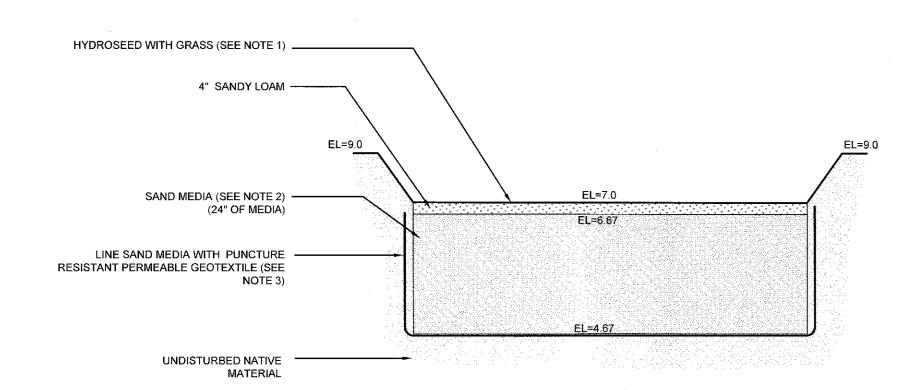
#### BIORETENTION FILTER B-1



#### **BIORETENTION FILTER B-3**

- 1. BIORETENTION FILTER PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL. REFER TO LANDSCAPE
- 2. PLANTINGS MUST BE DENSE AND COVER THE ENTIRETY OF THE FILTER SURFACE.
- 3. BIORETENTION SOIL SHALL CONSIST OF USDA LOAMY SAND AND MEET THE FOLLOWING GRADATIONS; SAND 85-88% SILT 8-12%, CLAY 0-2%, AND ORGANIC MATTER (LEAF COMPOST) 3-5%.
- 4. PERMEABLE GEOTEXTILE FABRIC SHALL HAVE A PUNCTURE STRENGTH OF 125 LBS, A BURST STRENGTH OF 400 PSI (ASTM D 1117) AND A TENSILE STRENGTH OF 300 LBS (ASTM D 1682). FABRIC SHALL BE MIN 0.08" THINK WITH AN EQUIVALENT OPENING SIZE OF #80 SIEVE AND A MINIMUM FLOW RATE OF 125 GPM PER SQUARE FOOT.

#### **BIORETENTION FILTER SECTIONS** SCALE: NOT TO SCALE



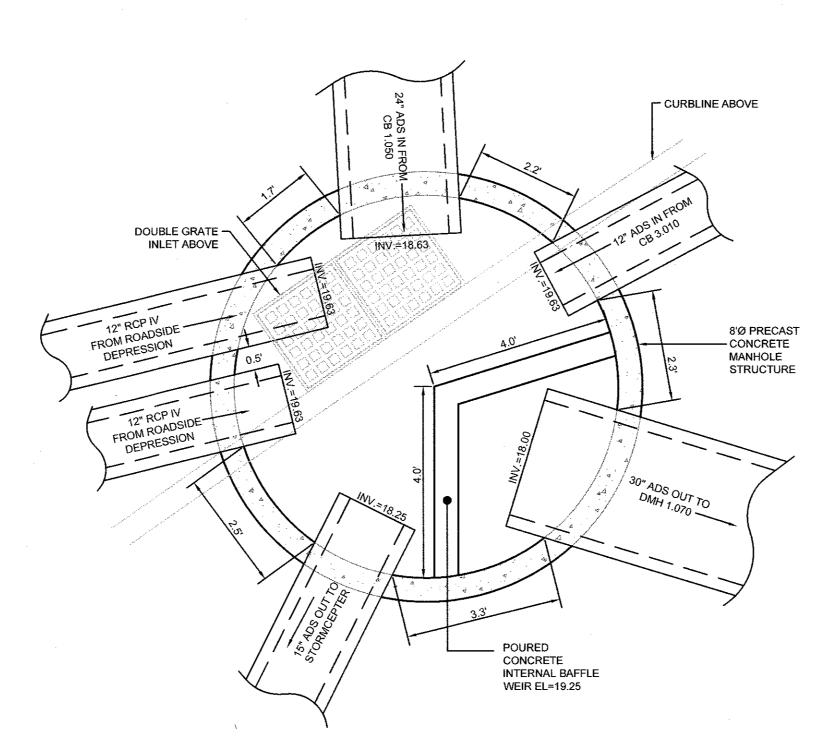
#### SAND FILTER B-2

### SAND FILTER NOTES:

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- 1. SAND FILTER SHALL BE PLANTED WITH NEW ENGLAND WETMIX (WETLAND SEED MIX) BY NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL.
- 2. SAND FILTER SAND TO BE CLEAN AASHTO M-6 OR ASTM C-33 CONCRETE SAND (0.02" TO 0.04"). SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO ROCK DUST CAN BE USED AS SAND.
- 3. PERMEABLE GEOTEXTILE FABRIC SHALL HAVE A PUNCTURE STRENGTH OF 125 LBS, A BURST STRENGTH OF 400 PSI (ASTM D 1117) AND A TENSILE STRENGTH OF 300 LBS (ASTM D 1682). FABRIC SHALL BE MIN 0.08" THINK WITH AN EQUIVALENT OPENING SIZE OF #80 SIEVE AND A MINIMUM FLOW RATE OF 125 GPM PER SQUARE FOOT.

SAND FILTER SECTION SCALE: NOT TO SCALE



CB1.060 DIVERSION STRUCTURE PLAN VIEW DETAIL SCALE: 1"=2"

# 33 ¾" ----4TH FLANGE WHEN ORDERED <u>PLAN</u>

**SQUARE FRAME AND GRATE (RIDOT 6.3.0)** 

**SECTION A-A** 

SCALE: NOT TO SCALE

# & CONSULTANTS, INC. A KNOWLEDGE CORPORATION

SITE/CIVIL

LAND PLANNING

WATERFRONT

**GEOTECHNICAL** 

**ENVIRONMENTAL** 

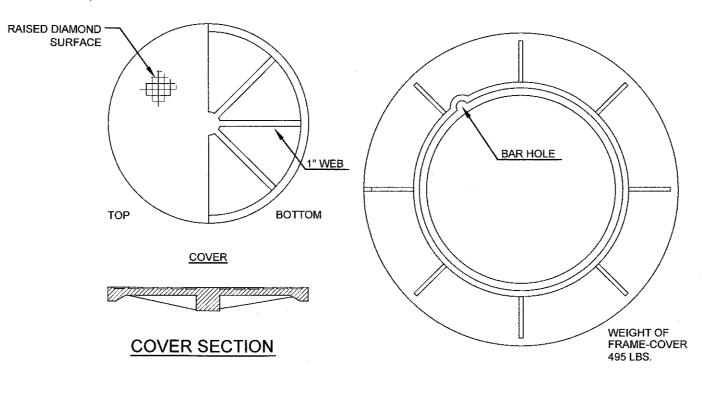
TRANSPORTATION

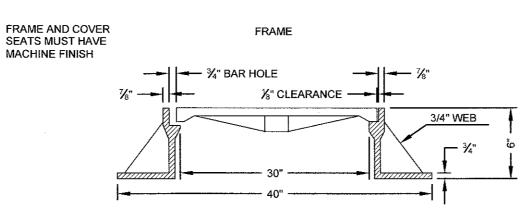
STRUCTURAL

SURVEYING

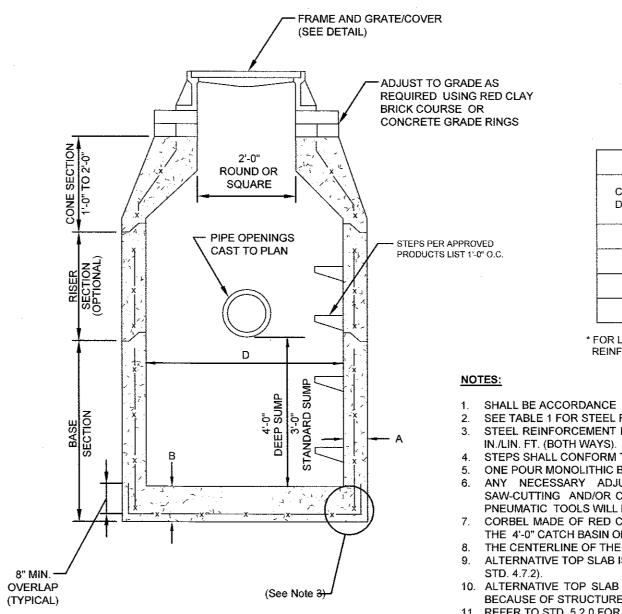
NORTHEAST ENGINEERS

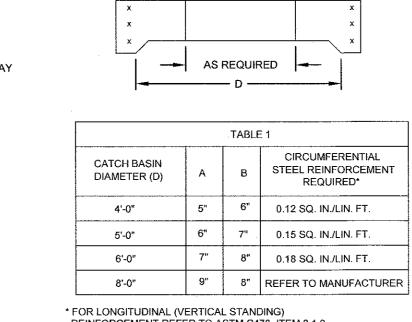
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 PHONE (401) 849-0810 FAX (401) 846-4169 WWW.NORTHEASTENGINEERS.COM





ROUND FRAME AND COVER SCALE: NOT TO SCALE





ALTERNATIVE TOP SLAB

(See Notes 9 & 10)

REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

1. SHALL BE ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATION. 2. SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS. 3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ.

4. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT. 5. ONE POUR MONOLITHIC BASE SECTION. 6. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.

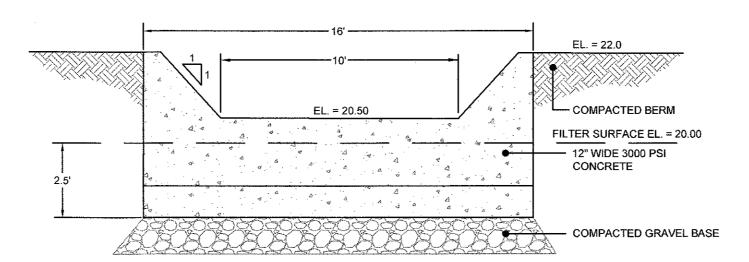
7. CORBEL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CONE SECTION" OF THE 4'-0" CATCH BASIN ONLY. 8. THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.

9. ALTERNATIVE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE 10. ALTERNATIVE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.

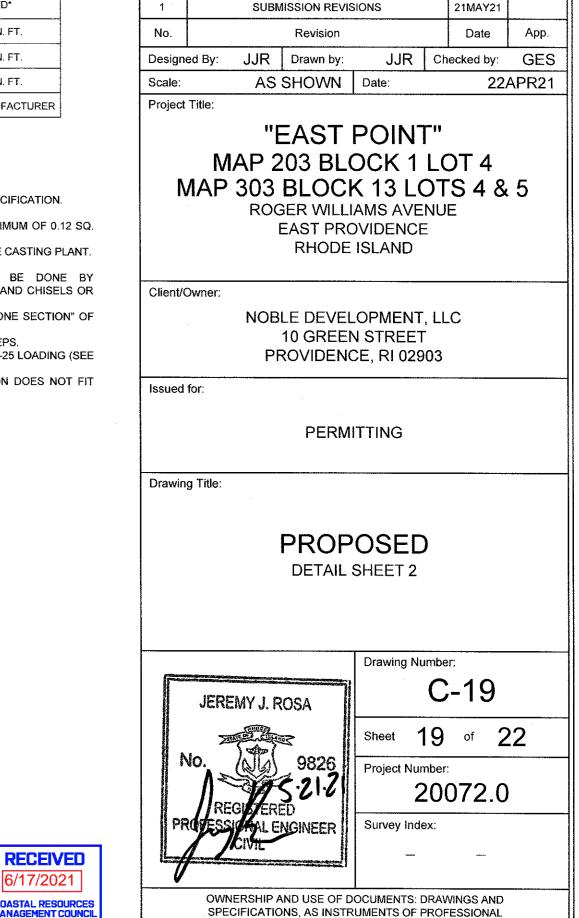
6/17/2021

11. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

PRECAST ROUND CATCH BASIN & DRAIN MANHOLE (RIDOT 4.4.0) SCALE: NOT TO SCALE



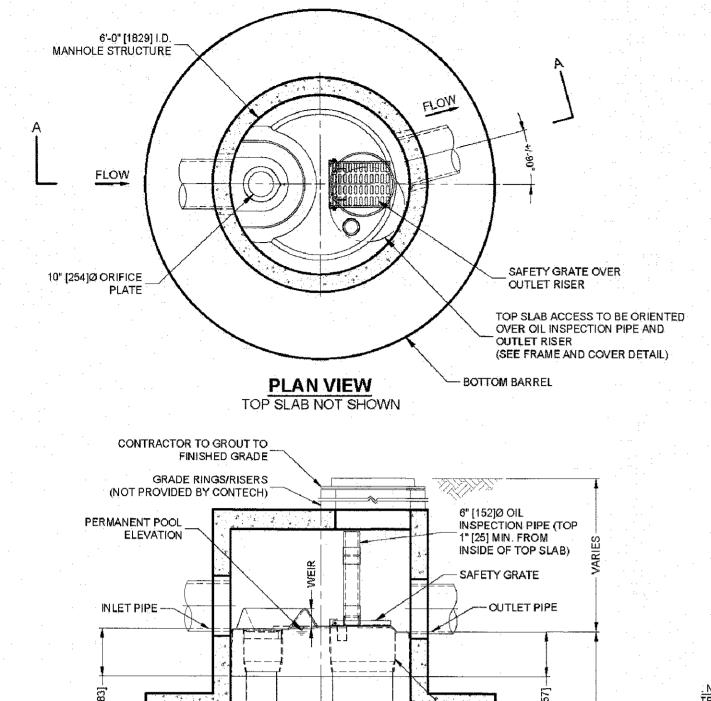
BIORETENTION B-3 CONCRETE OUTLET WEIR DETAIL SCALE: NOT TO SCALE

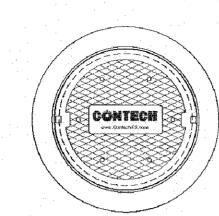


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#### FRAME AND COVER (MAY VARY) NOT TO SCALE

TECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE. SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED UTIONS LLC REPRESENTATIVE. www.ContechES.com RMCEPTOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS WING, CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT. >RMCEPTOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER -VATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. STINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.

ORMCEPTOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM 0478 AND AASHTO LOAD FACTOR DESIGN METHOD. TERNATE UNITS ARE SHOWN IN MILLIMETERS [mm]. NY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE PECIFIED BY ENGINEER OF RECORD.

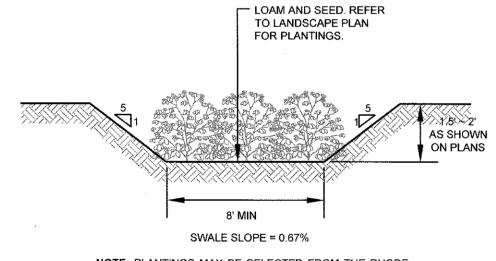
ONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE

CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE. 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. 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.

#### STORMCEPTER STC4800 STANDARD DETAIL (BIORETENTION B-1 PRETREATMENT) SCALE: NOT TO SCALE

24" [610]Ø

-OUTLET

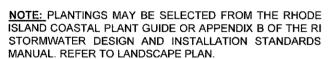


-- 10'-0" [3048] ----

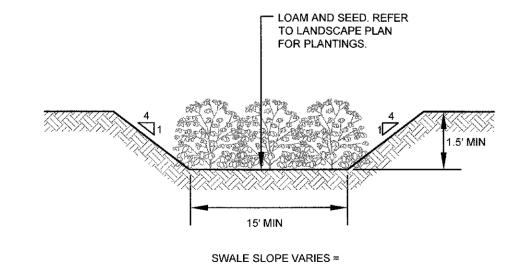
**SECTION A-A** 

12" [305]Ø DROP TEE -

SOLIDS STORAGE SUMP -



#### SWALE 1: (VEGETATED DRY) CROSS SECTION SCALE: NOT TO SCALE

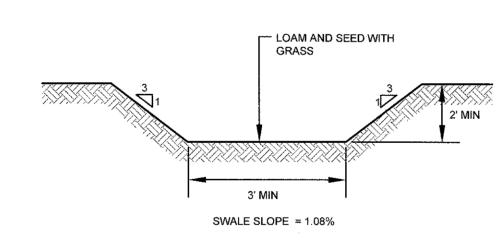


1%~1.3% PER PLAN NOTE: PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI

STORMWATER DESIGN AND INSTALLATION STANDARDS

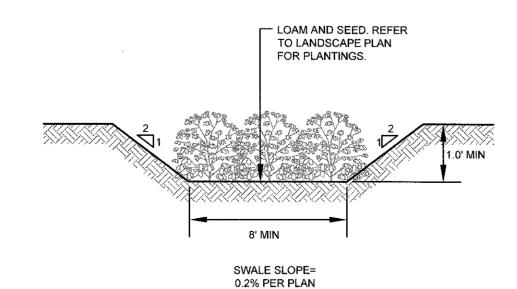
MANUAL. REFER TO LANDSCAPE PLAN.

SWALE 3: (VEGETATED DRY) CROSS SECTION SCALE: NOT TO SCALE



# SWALE 2: (GRASS) CROSS SECTION

SCALE: NOT TO SCALE



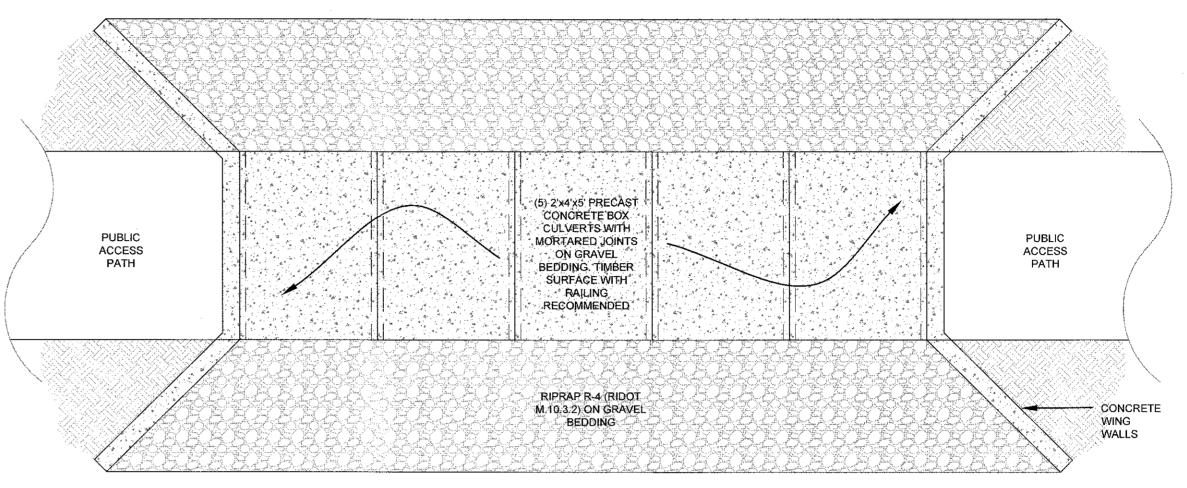
NOTE: PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL. REFER TO LANDSCAPE PLAN.

#### SWALE 4: (VEGETATED DRY) CROSS SECTION

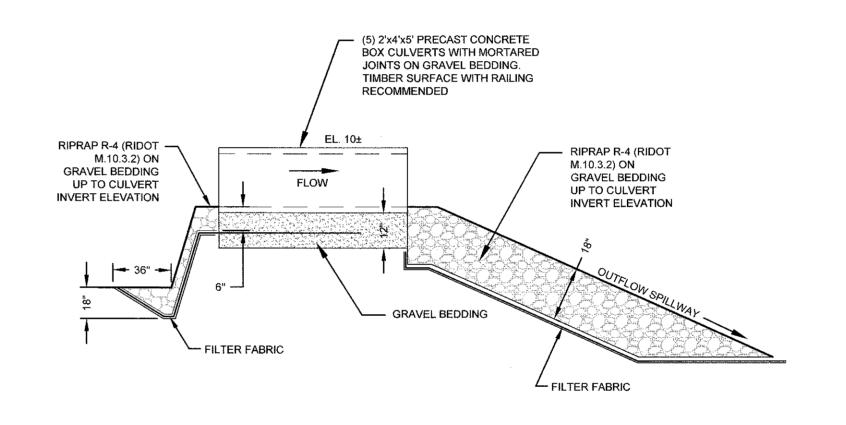
SCALE: NOT TO SCALE

#### (5) 2'x4'x5' PRECAST CONCRETE BOX CULVERTS WITH MORTARED JOINTS ON GRAVEL BEDDING. CONCRETE WING WALLS TIMBER SURFACE WITH RAILING RECOMMENDED TOP OF BERM EL. 9.00 FILTER SURFACE EL. 7.00 RIPRAP R-4 (RIDOT M.10.3.2) ON GRAVEL CULVERT INVERT = 7.50

#### PROFILE VIEW



TOP VIEW

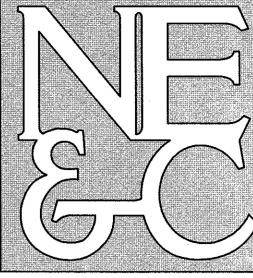


#### SECTION VIEW

#### SAND FILTER B-2 OVERFLOW WEIR DETAILS SCALE: NOT TO SCALE



#### NORTHEAST ENGINEERS & CONSULTANTS, INC.



SITE/CIVIL LAND PLANNING WATERFRONT SURVEYING GEOTECHNICAL **ENVIRONMENTAL** TRANSPORTATION STRUCTURAL

A KNOWLEDGE CORPORATION

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1		SUBN	IISSION REVI	SIONS		21MAY21	
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Scale:		AS	SHOWN	Date:	22APR2		
Project	Title:	,					

#### "EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE

RHODE ISLAND

Client/Owner:

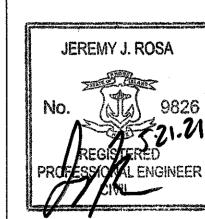
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Drawing Title:

**PROPOSED DETAIL SHEET 3** 



Survey Index: OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND

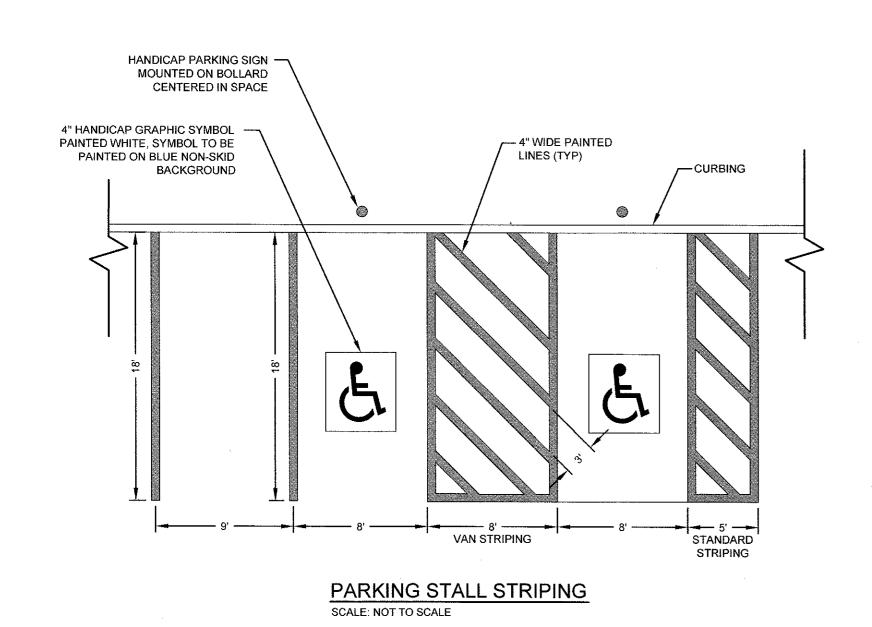
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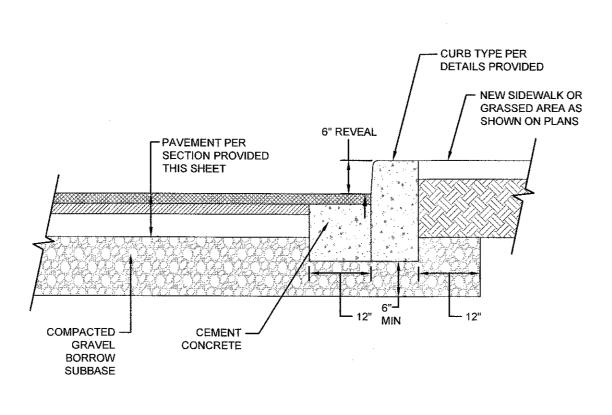
20 of 22

Drawing Number:

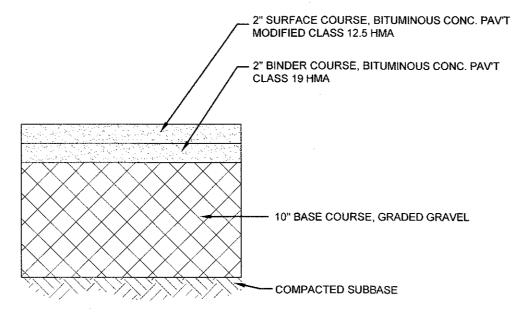
SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.

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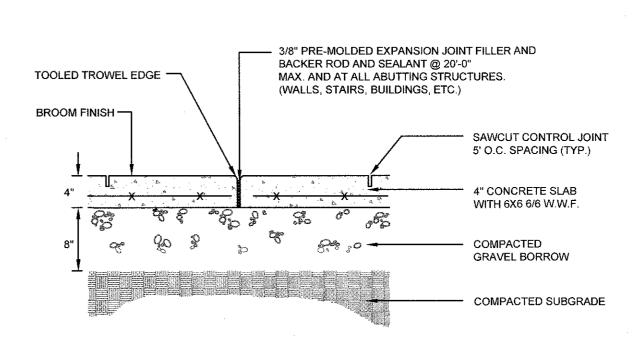


CURB SETTING DETAIL
SCALE: NOT TO SCALE



GRADED GRAVEL SPECIFICATIONS					
SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING				
2 INCH	100				
1.5 INCH					
1 INCH	55-85				
3/4 INCH	50-80				
NO. 4	30-60				
NO. 40	10-30				
NO. 200	3-10				
CLAY (FINES)	0-3				

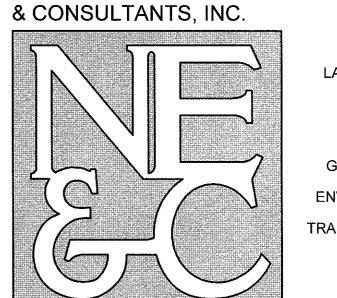
TYPICAL BITUMINOUS PAVEMENT SECTION
SCALE: NOT TO SCALE



NOTE: LANDSCAPE ARCHITECT MAY SPECIFY ALTERNATE CONCRETE WALKWAY SECTION FOR INTERNAL WALKWAYS.

SCALE: NOT TO SCALE

CONCRETE WALKWAY SECTION



LAND PLANNING
WATERFRONT
SURVEYING
GEOTECHNICAL
ENVIRONMENTAL
TRANSPORTATION
STRUCTURAL

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1/2" CHAMFER
1/2"
QUARR' SPLIT

3'-0" MIN.

6"±1"

NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.

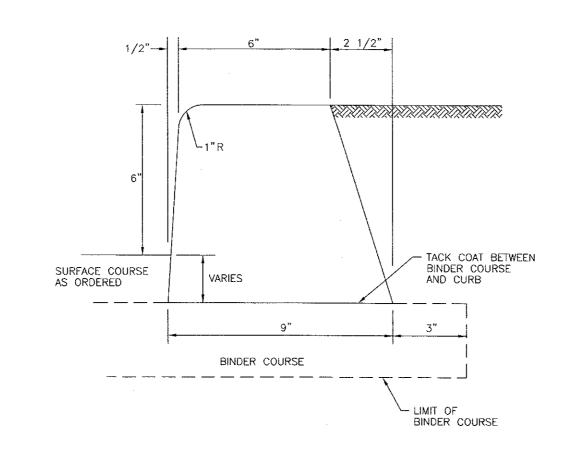
2. TOP SURFACE TO BE DRESSED BY SAW. REMAINDER MAY BE QUARRY SPLIT.

3. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR PIECES TO BE 3'-0".

4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.

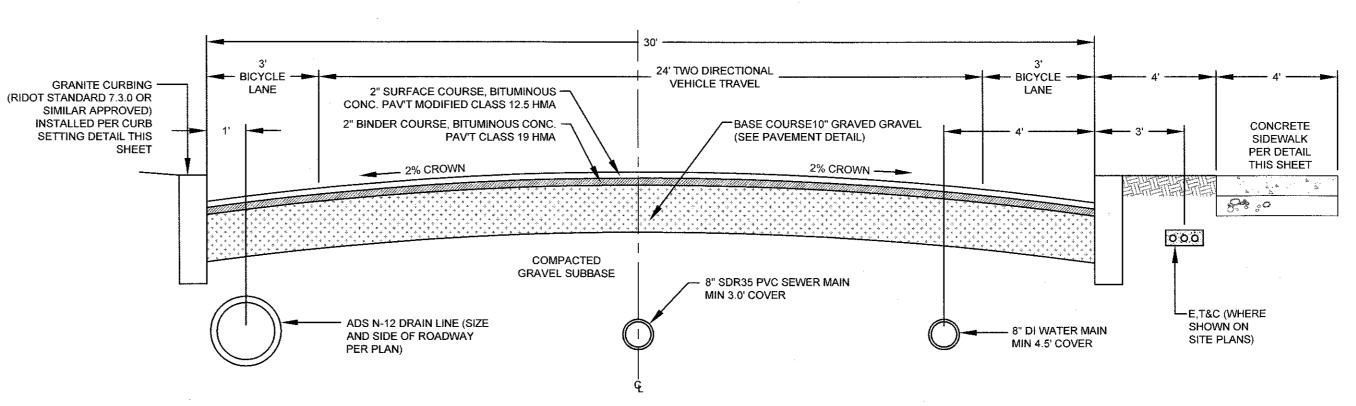
CIRCULAR CURB

GRANITE CURB (MAIN ROAD ONLY) RIDOT STD 7.3.0
SCALE: NOT TO SCALE

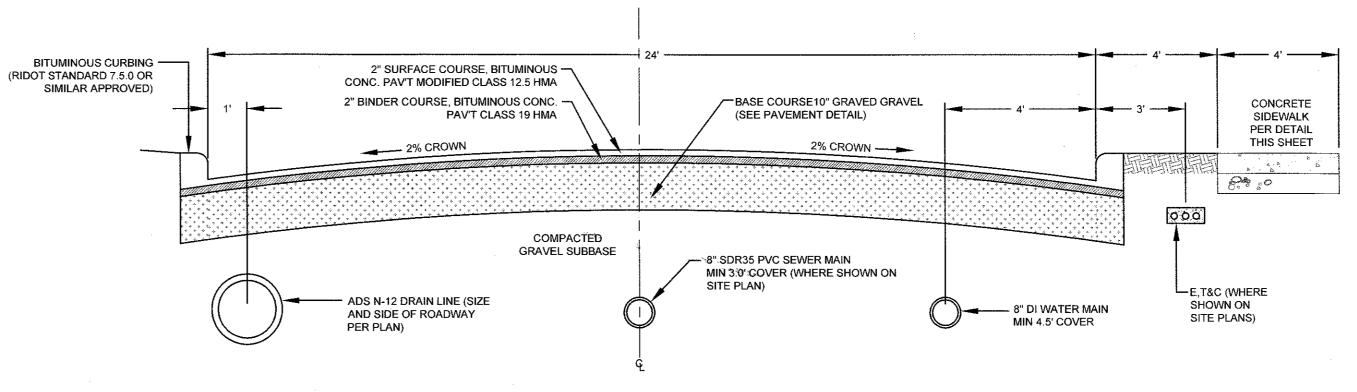


NOTE: SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.

GRANITE CURB (RESIDENTIAL ACCESS ROADS) RIDOT STD 7.5.0



ROAD SECTION (30' WIDE MAIN ROAD)
SCALE: NOT TO SCALE



ROAD SECTION (24' RESIDENTIAL ACCESS ROADS 2 & 3)
SCALE: NOT TO SCALE

No.	Revision				Date	Арр.			
Designed I	By: JJR	Drawn by:	JJR	Checked by:		GES			
Scale: AS		SHOWN Date:		22APR21		APR21			
Project Title:									
"EAST POINT"  MAP 203 BLOCK 1 LOT 4  MAP 303 BLOCK 13 LOTS 4 & 5  ROGER WILLIAMS AVENUE  EAST PROVIDENCE  RHODE ISLAND									

SUBMISSION REVISIONS

21MAY21

Client/Owner:

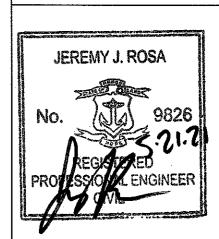
NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903

Issued for:

PERMITTING

Drawing Title:

PROPOSED
DETAIL SHEET 4



C-21

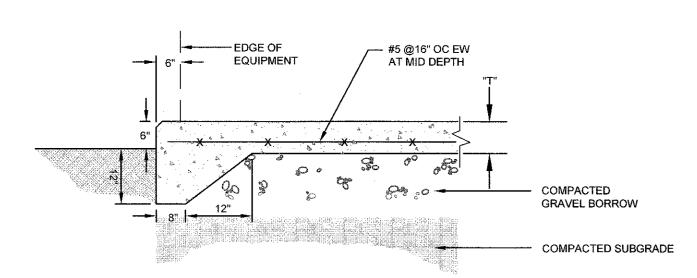
Sheet 21 of 22

Project Number: 20072.0

Survey Index:

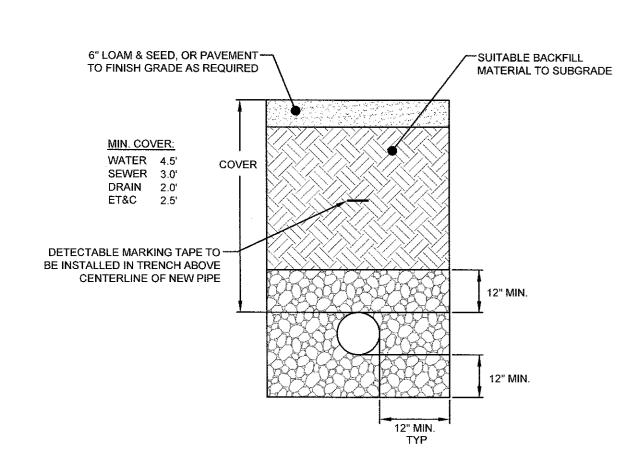
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NOTE: IF LENGTH OR WIDTH EXCEEDS 8'-0" THEN "T" = 8", OTHERWISE "T" = 6"

TYPICAL EXTERIOR EQUIPMENT PAD SECTION SCALE: NOT TO SCALE



#### UTILITY TRENCH DETAIL SCALE:NOT TO SCALE

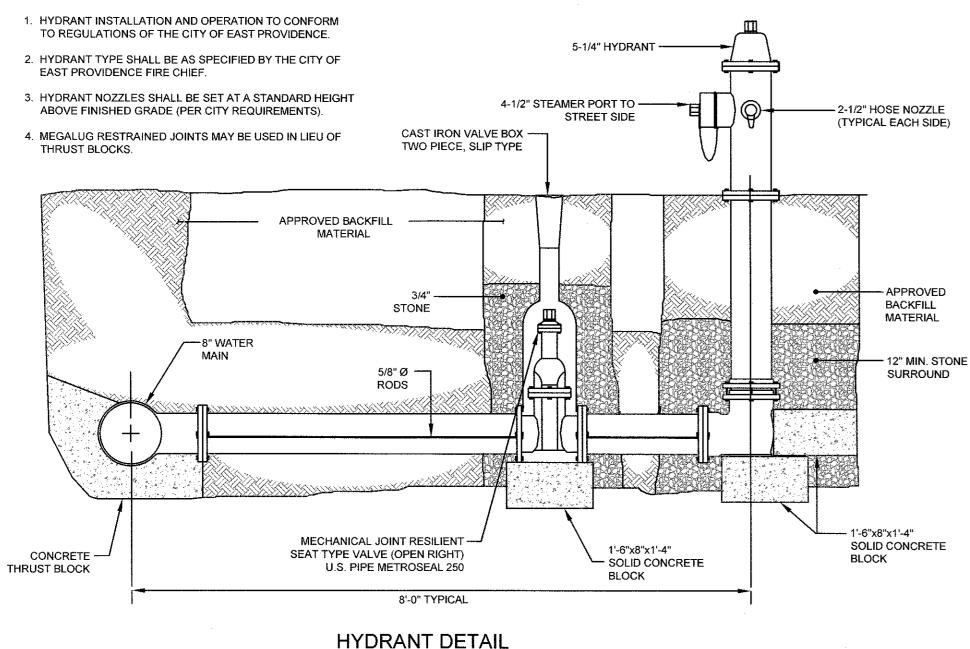
#### NOTES:

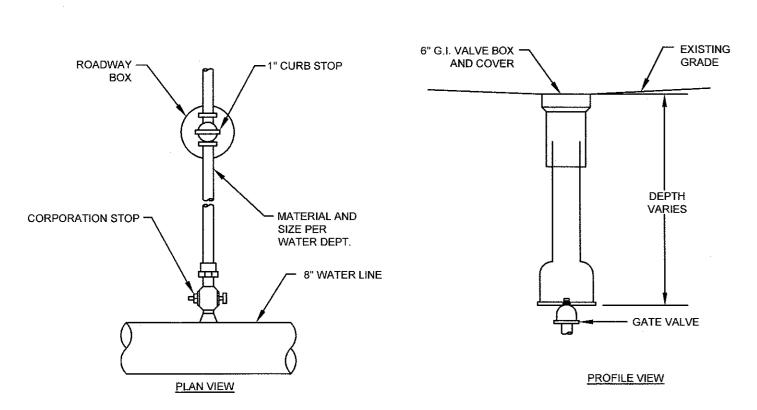
- 1. UNSUITABLE MATERIAL SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 12-INCHES BELOW
- 2. TRENCH PROTECTION SHALL BE REQUIRED IN ACCORDANCE WITH OSHA REGULATIONS, AND AS OTHERWISE REQUIRED TO PROTECT UTILITIES, ROADWAYS, AND ADJACENT STRUCTURES.
- 3. SEWER AND DRAIN PIPES SHALL BE LAID BEGINNING AT THE DOWNSTREAM END OF THE PIPE LINE.
- 4. ALL PVC SEWER PIPES SHALL BE IPEX RING-TITE SDR 35, OR SIMILAR APPROVED.
- 5. ALL DRAIN PIPES SHALL BE ADS N-12 TYPE IB (SOILTIGHT) UNLESS OTHERWISE INDICATED.
- 6. ALL SEWER PIPE AND GASKETS SHALL CONFORM TO ASTM 3034 AND ASTM F679. 7. ALL NEW SEWER MANHOLES SHALL HAVE KOR-N-SEAL CONNECTIONS, TYPICAL OR EQUAL.
- 8. BACKFILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED 12" IN HEIGHT WHEN INSTALLED UNDER LANDSCAPED AREAS ONLY, INSTALLATIONS UNDER PAVEMENT REQUIRE BACKFILL MATERIAL TO BE PLACED IN LAYERS NOT TO EXCEED 6" IN HEIGHT. THESE LAYERS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY (AASHTO T180). SUITABLE BACKFILL SHALL

BE FREE OF LOAM, CLAY, ORGANIC MATTER AND PARTICLES LARGER THAN 2 INCHES IN

- 8. SEWER AND DRAINAGE PIPE TRENCHES SHALL BE BEDDED WITH CRUSHED STONE OR SCREENED GRAVEL, THESE MATERIALS MUST CONFORM TO RIDOT STANDARD M.01.09 TYPE II
- 9. WATER PIPE TRENCHES MUST BE BEDDED WITH SAND CONTAINING NO PARTICLES LARGER THAT 3/8". THIS MATERIAL MUST CONFORM TO AASHTO M6 REQUIREMENTS.
- 10. UTILITY INSTALLATIONS SHALL CONFORM TO ALL REQUIREMENTS OF THE CITY OF EAST PROVIDENCE PUBLIC WORKS DEPARTMENT AND THE CITY ENGINEER.
- 11. WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT THEM FROM DAMAGE.

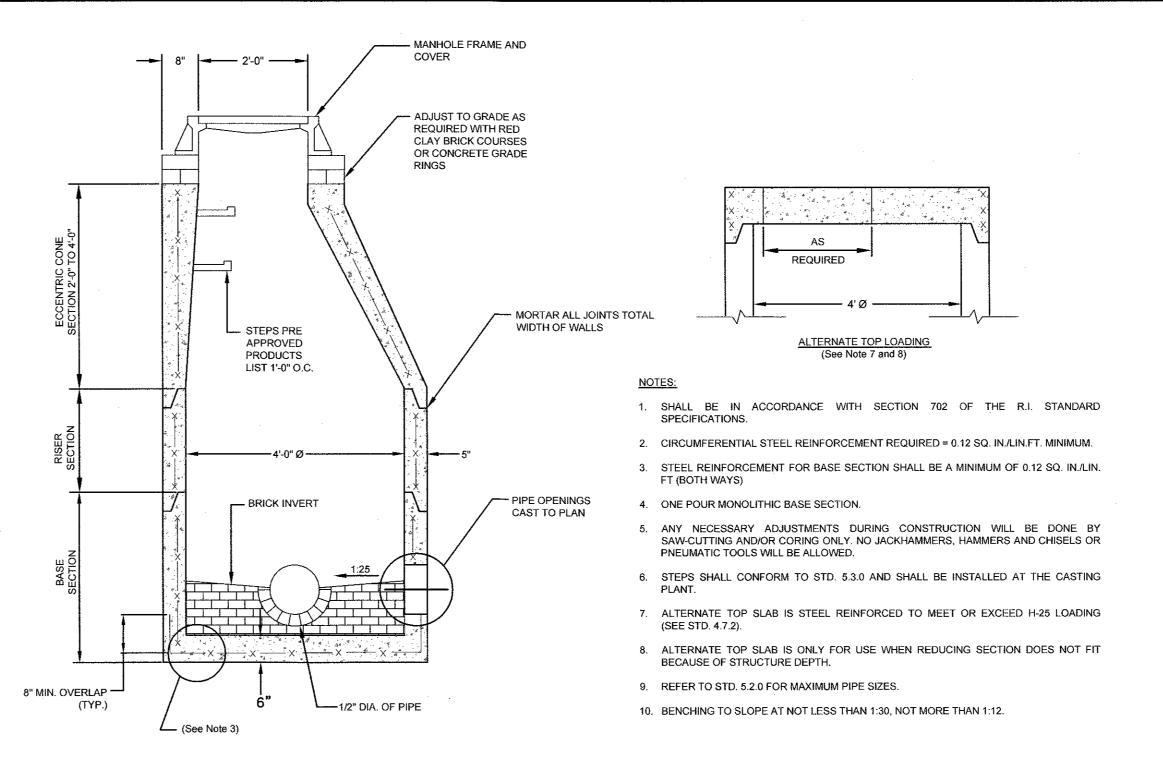
#### HYDRANT NOTES



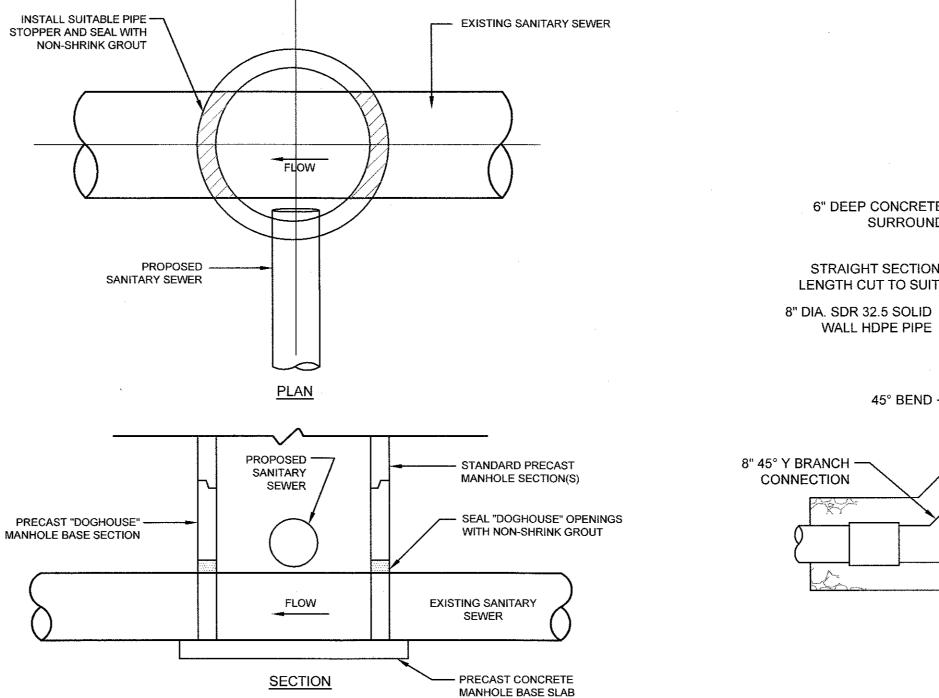


SCALE: NOT TO SCALE

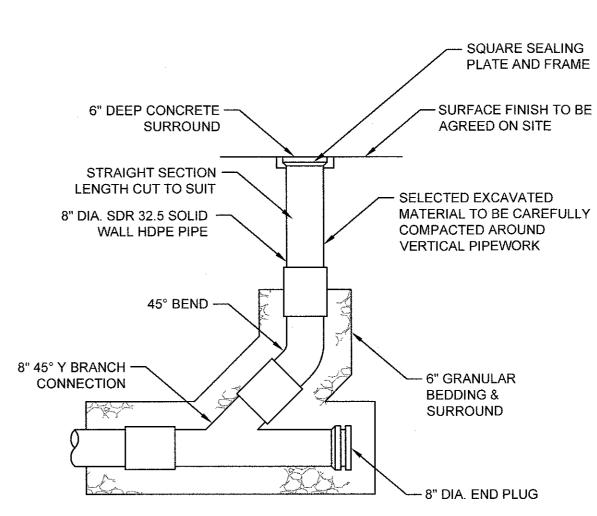
WATER GATE VALVE/SERVICE CURB STOP SCALE: NOT TO SCALE



PRECAST SEWER MANHOLE DETAIL (RIDOT 4.2.0) SCALE: NOT TO SCALE

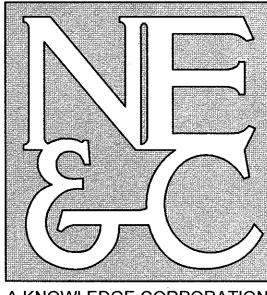


DOGHOUSE MANHOLE SCALE: NOT TO SCALE



SEWER CLEANOUT DETAIL SCALE: NOT TO SCALE

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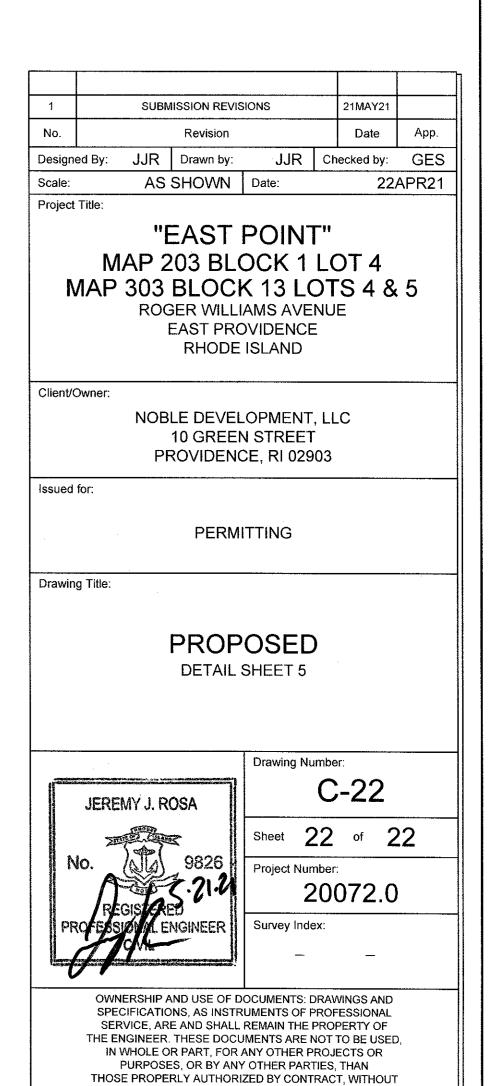
GEOTECHNICAL

ENVIRONMENTAL

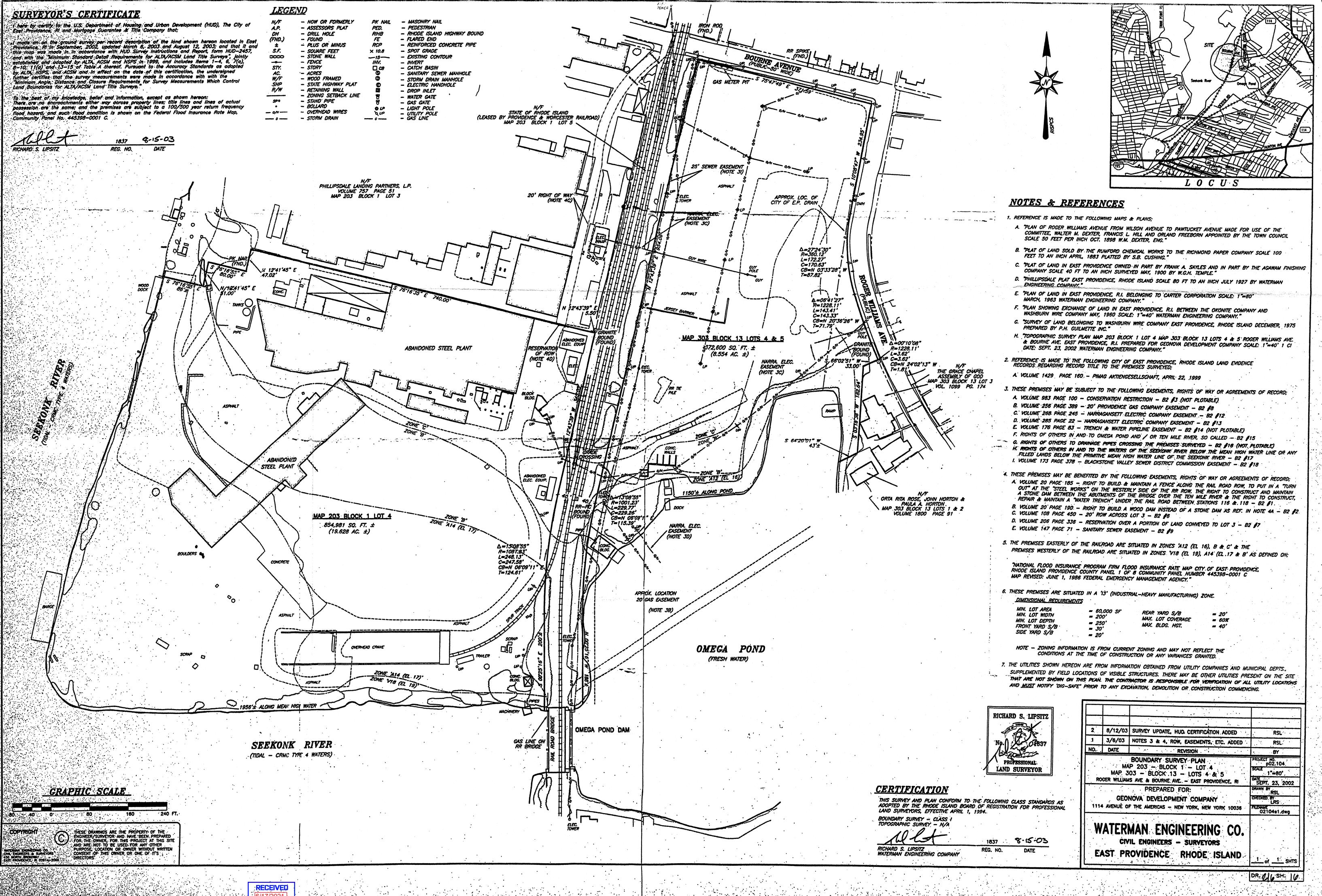
TRANSPORTATION

STRUCTURAL

SURVEYING



THE EXPRESS AUTHORIZATION OF THE ENGINEER.



MANAGERS ALEND