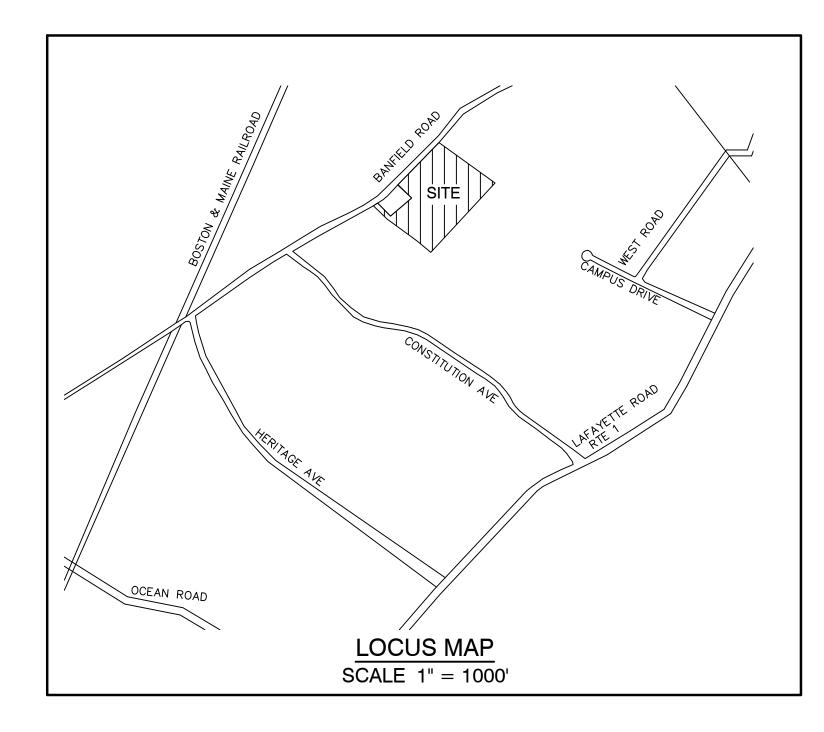
GENERAL LEGEND JNDERGROUND ELECTRIC THRUST BLOCK IRON PIPE/IRON ROD DRILL HOLE IRON ROD/DRILL HOLE STONE/GRANITE BOUND PAVEMENT SPOT GRADE CURB SPOT GRADE DOUBLE POST SIGN SINGLE POST SIGN FAILED TEST PIT MONITORING WELL PERC TEST PHOTO LOCATION TREES AND BUSHES UTILITY POLE LIGHT POLES DRAIN MANHOLE SEWER MANHOLE WATER GATE WATER SHUT OFF SINGLE GRATE CATCH BASIN DOUBLE GRATE CATCH BASIN CULVERT W/WINGWALLS CULVERT W/FLARED END SECTION CULVERT W/STRAIGHT HEADWALL STONE CHECK DAM DRAINAGE FLOW DIRECTION 4K SEPTIC AREA WETLAND IMPACT VEGETATED FILTER STRIP RIPRAP OPEN WATER <u>गीर</u> गीर गीर FRESHWATER WETLANDS ******** TIDAL WETLANDS STABILIZED CONSTRUCTION ENTRANCE CONCRETE GRAVEL SNOW STORAGE RETAINING WALL

COMMERCIAL SITE PLAN "INDUSTRIAL WAREHOUSE" TAX MAP 266, LOT 7 375 BANFIELD ROAD, PORTSMOUTH, NH



SHEET INDEX

CS COVER SHEET

C1 EXISTING CONDITIONS PLAN

DM1 DEMOLITION PLAN

C2 SITE PLAN

C3 GRADING AND DRAINAGE PLAN

C4 UTILITY PLAN

.1 LANDSCAPE PLAN

2 LIGHTING PLAN

D1-D6 DETAIL SHEETS

E1 EROSION AND SEDIMENT CONTROL DETAILS

CIVIL ENGINEER / SURVEYOR

JONES & BEACH ENGINEERS, INC. 85 PORTSMOUTH AVENUE PO BOX 219 STRATHAM, NH 03885 (603) 772-4746 CONTACT: JOSEPH CORONATI JCORONATI@JONESANDBEACH.COM

WETLAND AND SOIL CONSULTANT

GOVE ENVIRONMENTAL SERVICES, INC.

8 CONTINENTAL DRIVE BUILDING 2 UNIT H
EXETER, NH 03833
(603) 778-0644
CONTACT: JAMES GOVE
JGOVE@GESINC.BIZ

LANDSCAPE DESIGNER

LM LAND DESIGN
11 SOUTH ROAD
BRENTWOOD, NH 03833
CONTACT: LISE MCNAUGHTON
(603) 770-7728
LMLANDDESIGN@GMAIL.COM

74 OLD DOVER ROAD ROCHESTER, NH 03867 CONTACT: NICHOLAI KOSKO (603) 555-5334

EVERSOURCE ENERGY

<u>TELEPHONE</u>

ELECTRIC

FAIRPOINT COMMUNICATIONS 1575 GREENLAND ROAD GREENLAND, NH 03840 CONTACT: JOE CONSIDINE (603) 427-5525

CABLE TV

COMCAST COMMUNICATION CORPORATION 334-B CALEF HIGHWAY EPPING, NH 03402-2325 (603) 679-5695 PROJECT PARCEL
CITY OF PORTSMOUTH
TAX MAP 266, LOT 7

TOTAL LOT AREA 651,747 S.F.

14.96 ACRES

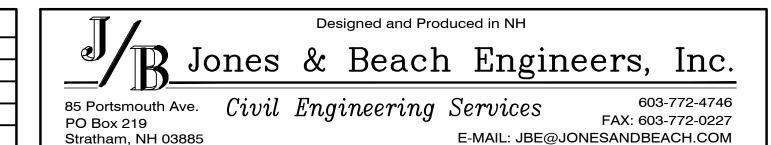
APPROVED — PORTSMOUTH, NH PLANNING BOARD

TF·

DATE:

Design: JAC Draft: DJM Date: 04/21/20
Checked: JAC Scale: AS NOTED Project No.: 19190.2
Drawing Name: 19190-PLAN.dwg
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN
PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE).
ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE
AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

3	11/3/20	ISSUED TO TECHNICAL ADVISORY COMMITTEE	DJM			
2	10/21/20	MEETING WITH CITY PLANNER				
1	10/8/20	REVISED DRAINAGE, REISSUED TO CLIENT	DJM			
0	9/14/20	ISSUED TO CLIENT	DJM			
REV.	DATE	REVISION	BY			

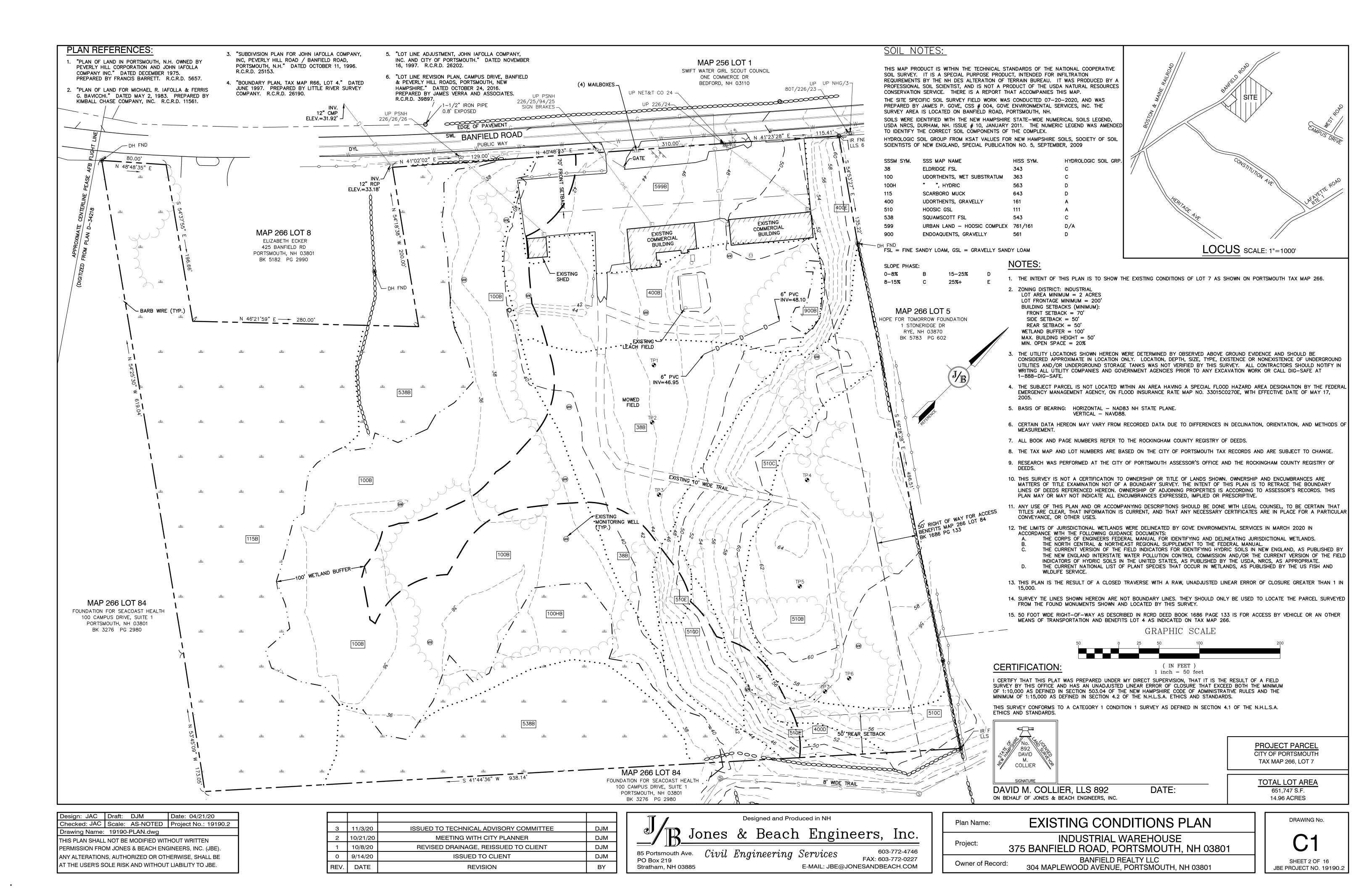


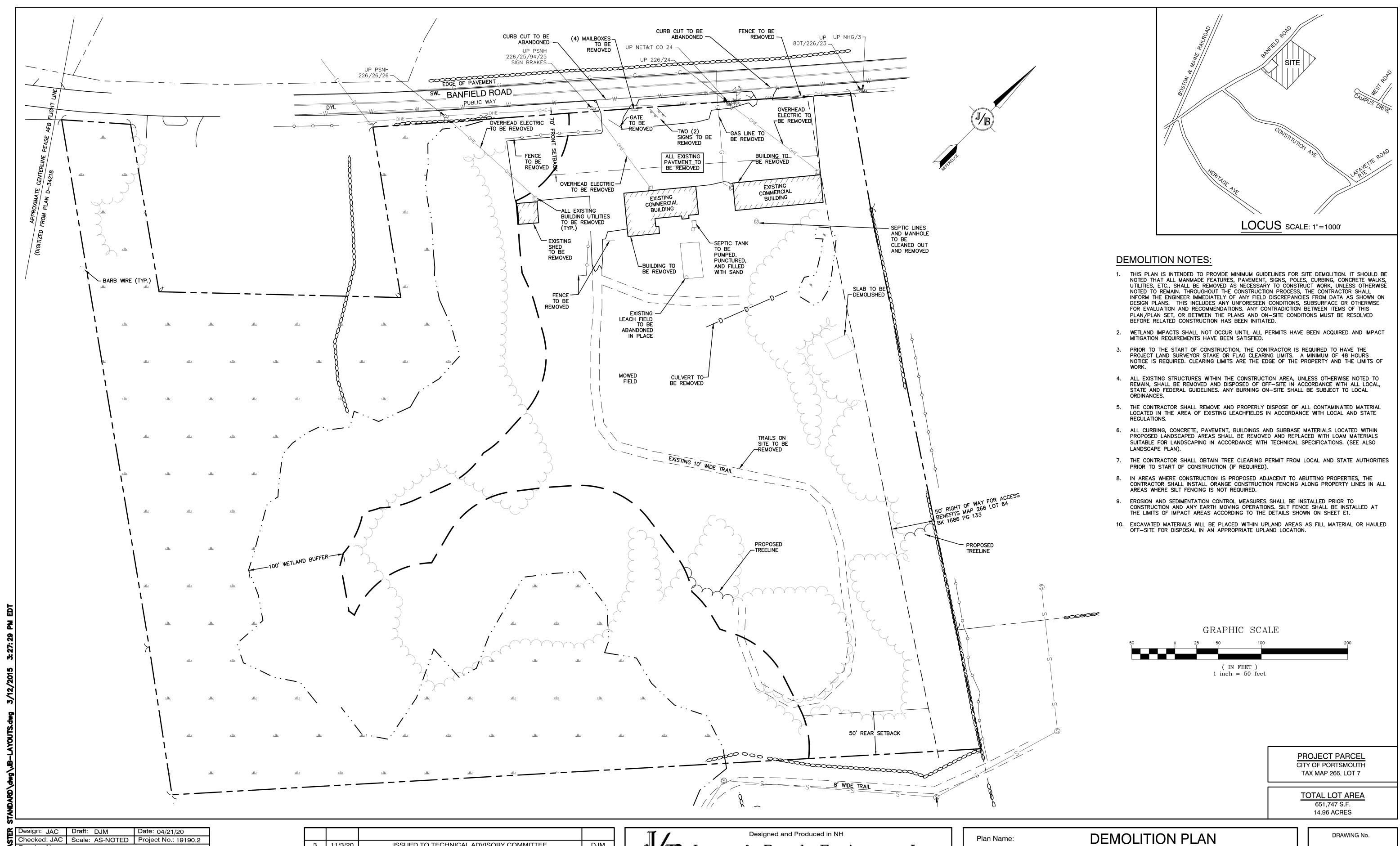
an Name:	COVER SHEET	
oject:	INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801	
wner of Record	BANFIELD REALTY LLC 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801	

DRAWING No.

CS

SHEET 1 OF 16
JBE PROJECT NO. 19190.2





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REV.	DATE	REVISION	BY		

Jones & Beach Engineers, Inc.

85 Portsmouth Ave. Civil Engineering Services 603-772-4746 FAX: 603-772-0227 PO Box 219 E-MAIL: JBE@JONESANDBEACH.COM Stratham, NH 03885

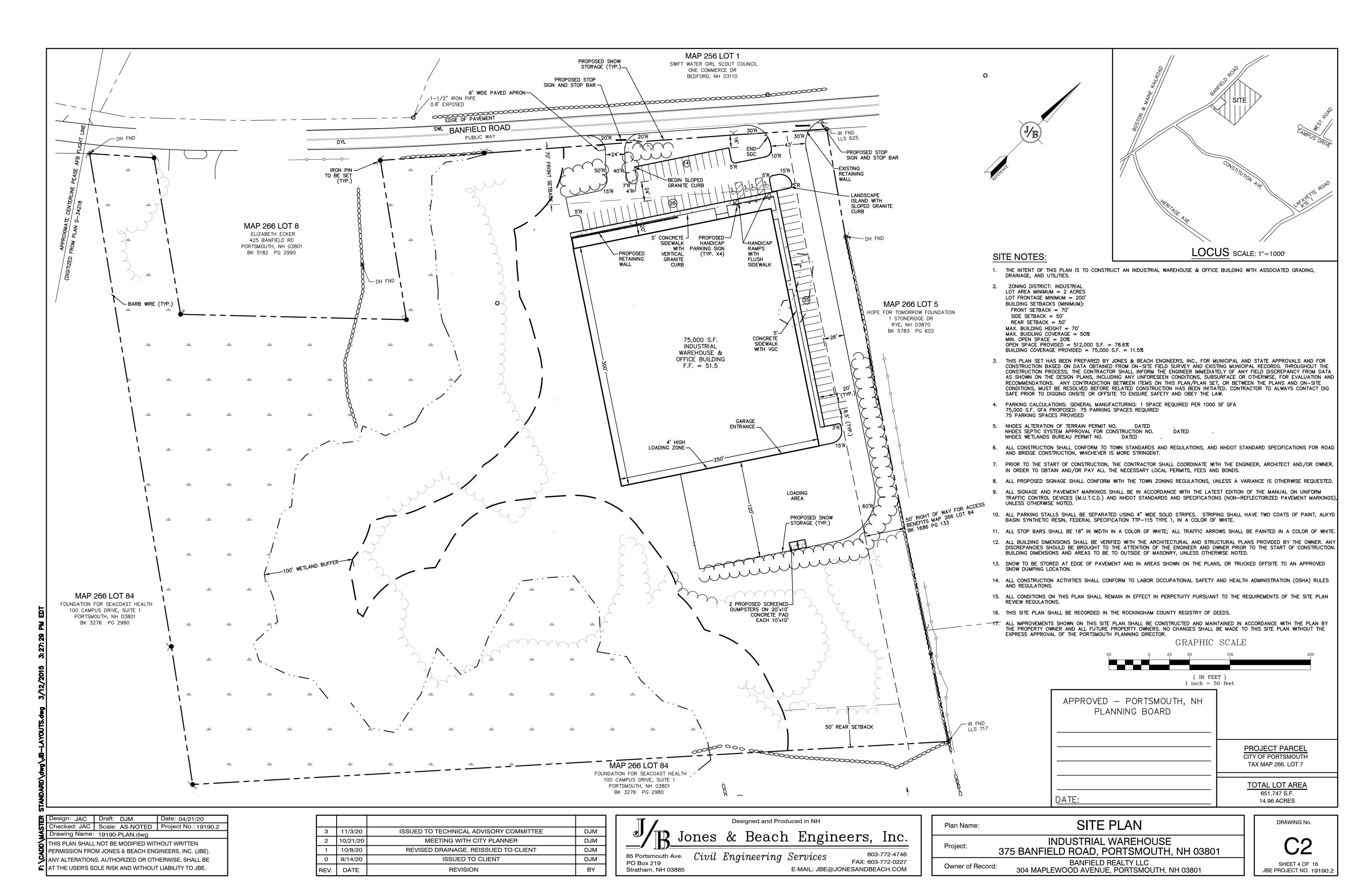
n Name:	DEMOLITION PLAN

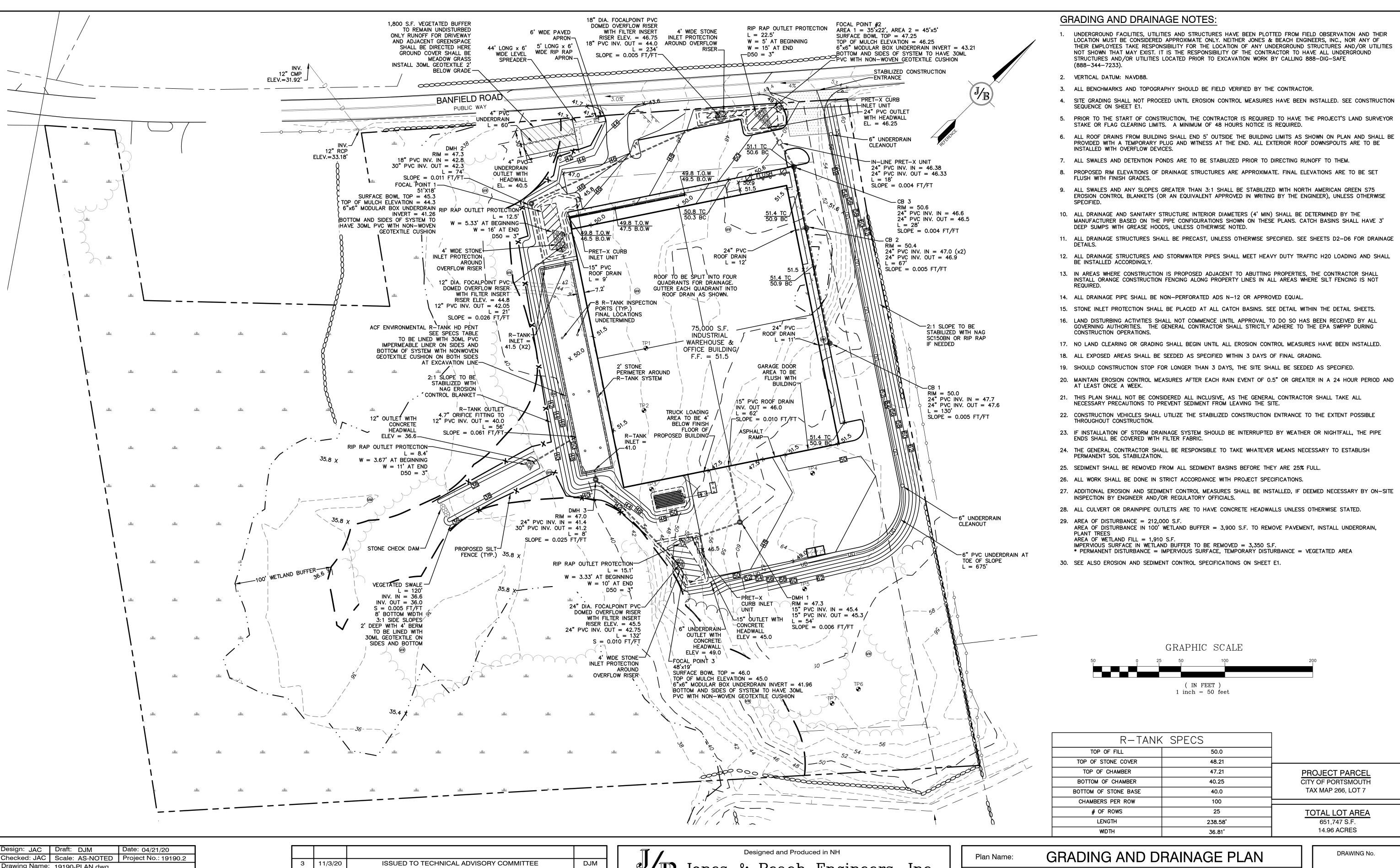
Owner of Record:

INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801

BANFIELD REALTY LLC 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801

JBE PROJECT NO. 19190.2





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DJM 10/21/20 MEETING WITH CITY PLANNER REVISED DRAINAGE, REISSUED TO CLIENT DJM 10/8/20 DJM **ISSUED TO CLIENT** 9/14/20 **REVISION** DATE BY

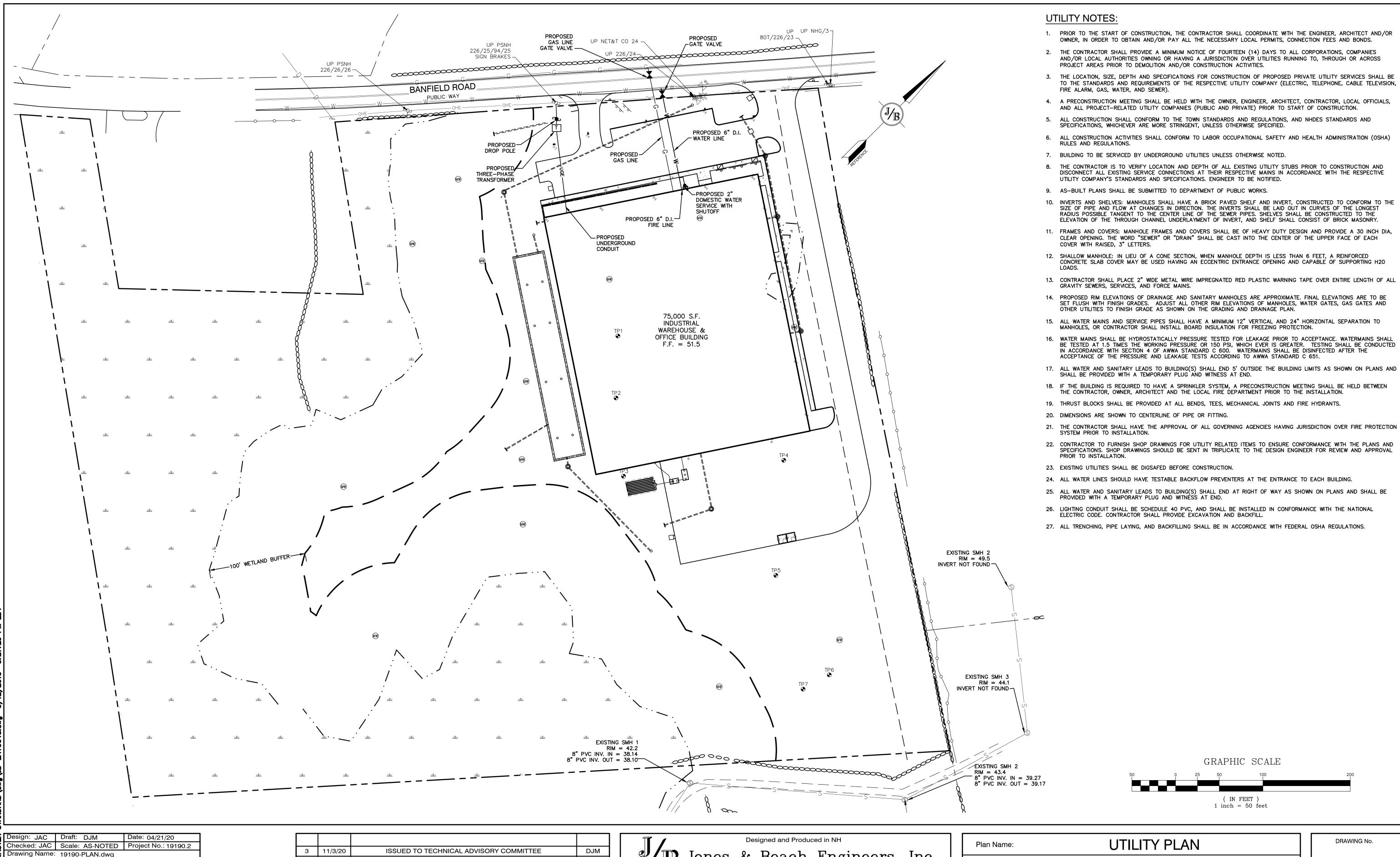
603-772-4746 85 Portsmouth Ave. Civil Engineering Services FAX: 603-772-0227 PO Box 219 E-MAIL: JBE@JONESANDBEACH.COM Stratham, NH 03885

INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801

Project:

Owner of Record:

BANFIELD REALTY LLC SHEET 5 OF 16 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801 JBE PROJECT NO. 19190.2



PO Box 219

Stratham, NH 03885

3 | 11/3/20 ISSUED TO TECHNICAL ADVISORY COMMITTEE DJM DJM 10/21/20 MEETING WITH CITY PLANNER REVISED DRAINAGE, REISSUED TO CLIENT DJM 10/8/20 DJM ISSUED TO CLIENT 9/14/20 **REVISION** DATE BY

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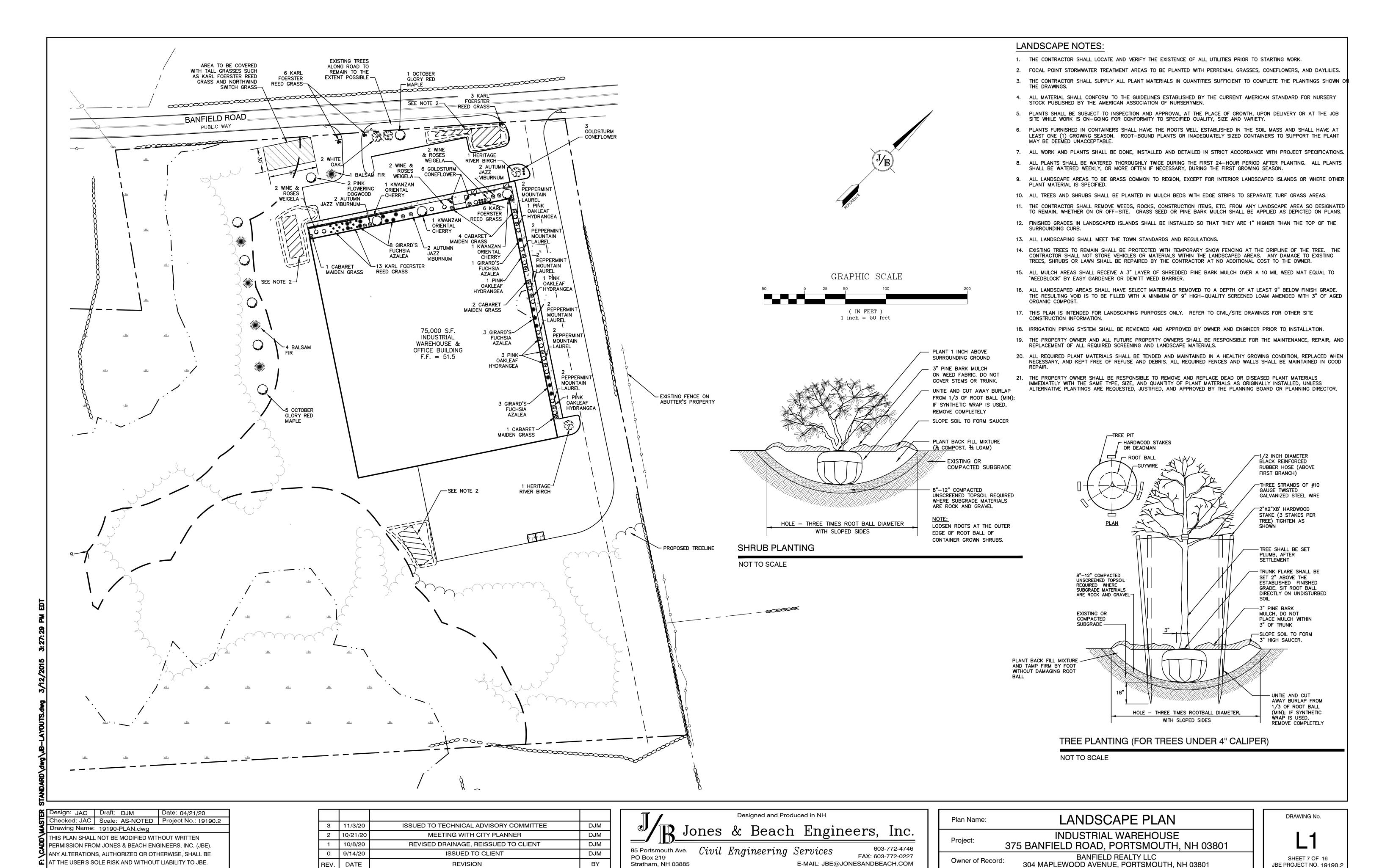
FAX: 603-772-0227

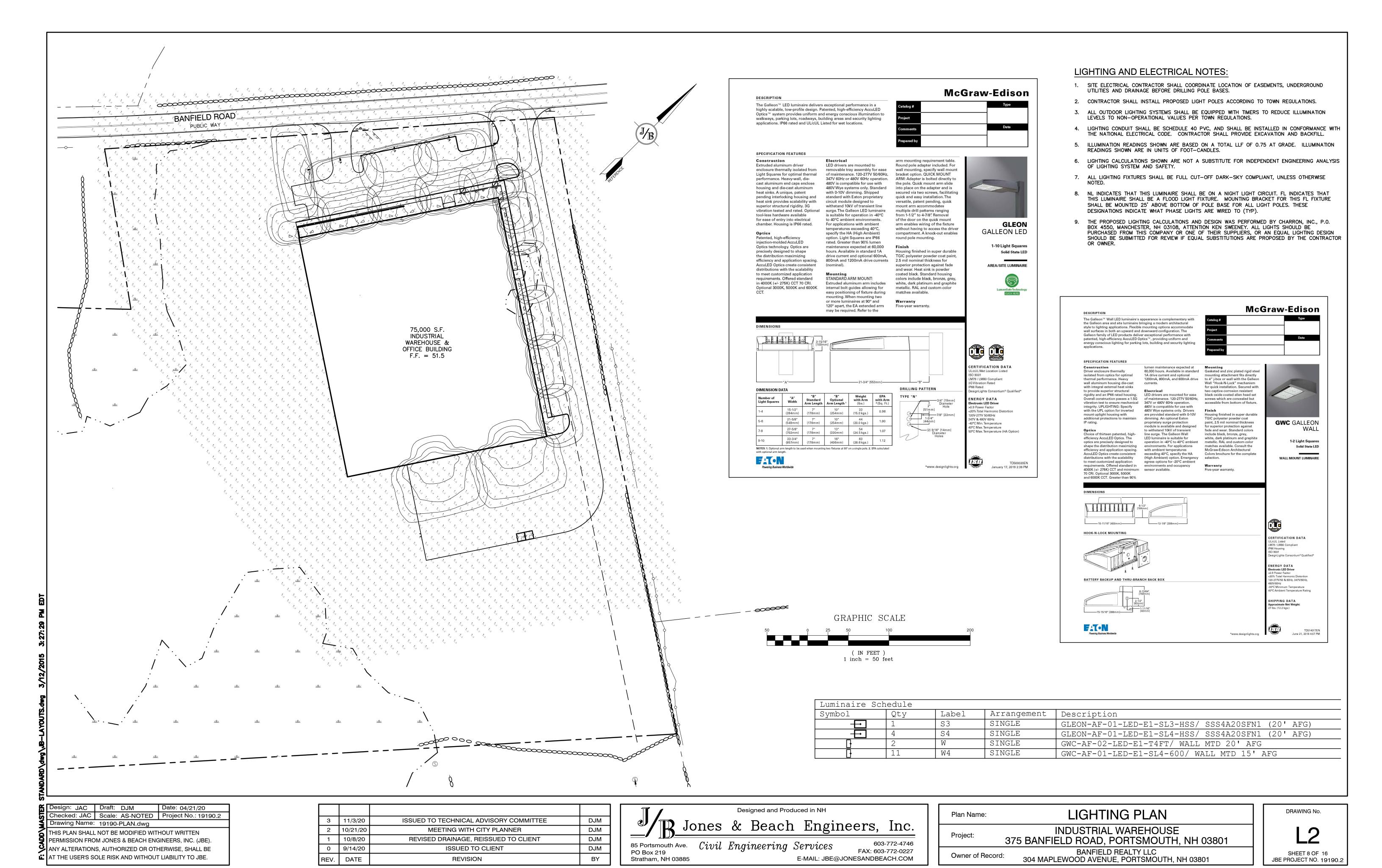
E-MAIL: JBE@JONESANDBEACH.COM

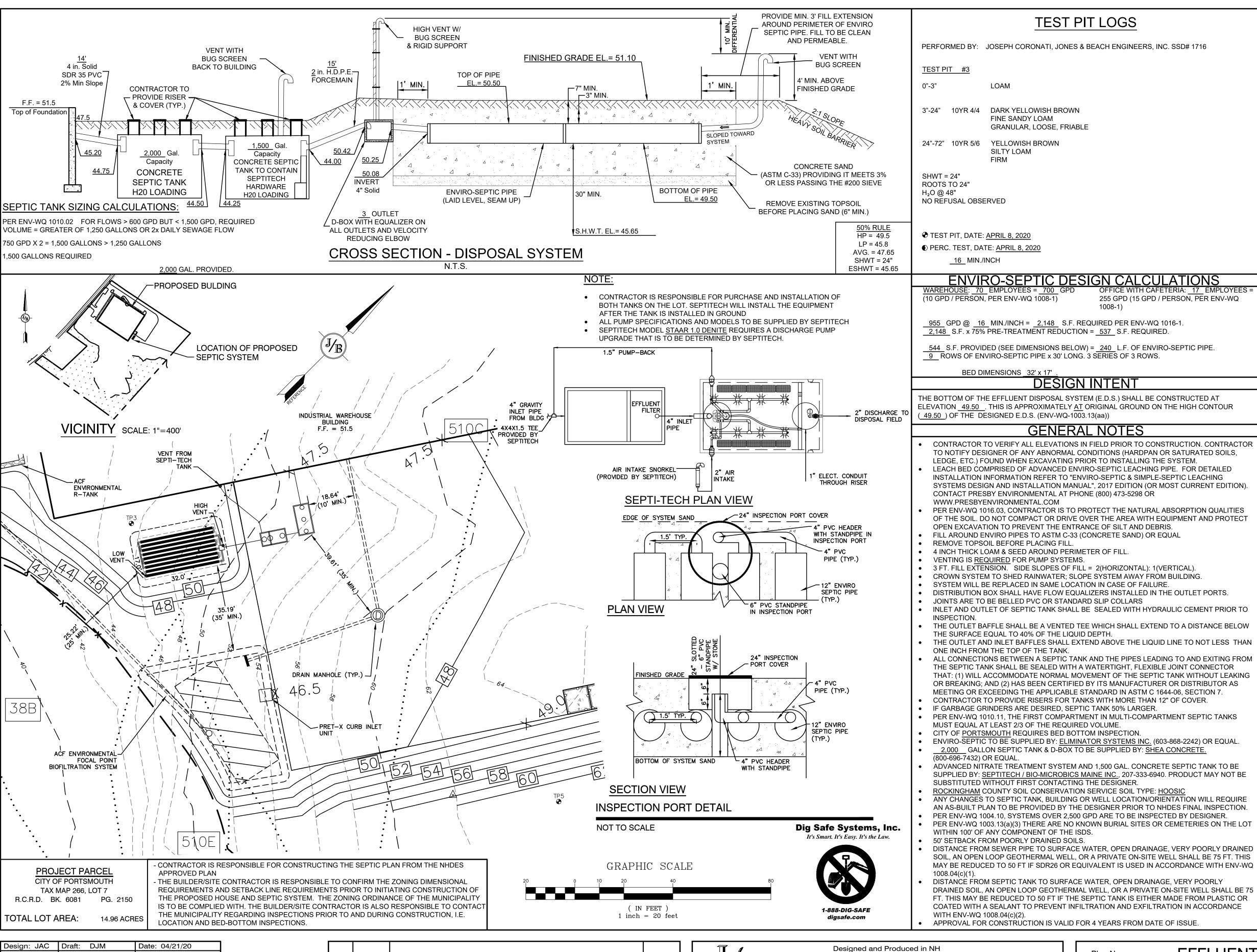
INDUSTRIAL WAREHOUSE Project: 375 BANFIELD ROAD, PORTSMOUTH, NH 03801 **BANFIELD REALTY LLC** Owner of Record:

304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801

JBE PROJECT NO. 19190.2







TEST PIT LOGS

ENVIRO-SEPTIC DESIGN CALCULATIONS

DESIGN INTENT

GENERAL NOTES

TO NOTIFY DESIGNER OF ANY ABNORMAL CONDITIONS (HARDPAN OR SATURATED SOILS,

INSTALLATION INFORMATION REFER TO "ENVIRO-SEPTIC & SIMPLE-SEPTIC LEACHING

LEDGE, ETC.) FOUND WHEN EXCAVATING PRIOR TO INSTALLING THE SYSTEM

255 GPD (15 GPD / PERSON, PER ENV-WQ

PERFORMED BY: JOSEPH CORONATI, JONES & BEACH ENGINEERS, INC. SSD# 1716

TEST PIT #3

10YR 4/4 DARK YELLOWISH BROWN

FINE SANDY LOAM GRANULAR, LOOSE, FRIABLE

24"-72" 10YR 5/6 YELLOWISH BROWN SILTY LOAM

ROOTS TO 24"

H₂O @ 48" NO REFUSAL OBSERVED

TEST PIT, DATE: APRIL 8, 2020

BED DIMENSIONS 32' x 17'

WWW.PRESBYENVIRONMENTAL.COM

(800-696-7432) OR EQUAL

PERC. TEST, DATE: APRIL 8, 2020

<u>16</u> MIN./INCH

REFERENCES APPROVAL FOR CONSTRUCTION IS VALID FOR 4 YEARS FROM DATE OF ISSUE

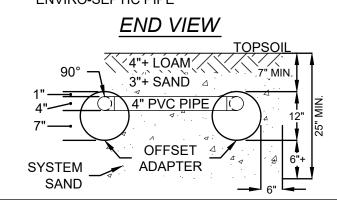
LOCUS SCALE: 1"=1000"

PREV. CONSTRUCTION APPROVAL #CA1998009388 ISSUED: 06/03/1998. SUBDIVISION APPROVAL: LARGER THAN 5 ACRES

TYPICAL PLAN VIEW CONCRETE SAND PRESBY OFFESET (ASTM C-33) PROVIDING PRESBY COUPLING ADAPTER (TYP.) IT MEETS 3% OR LESS (EVERY 10' AS -PASSING THE #200 SIEVE NECESSARY) 4" SDR 35 PVC Pipe CONTRACTOR TO VERIFY ALL ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION. CONTRACTOR Solid 4" SDR 35 PVC Pipe 1.5' MIN. **ENVIRO-**SEPTIC TYP. CTUAL SYSTEM UTILIZES 9 ROWS (3 SECTIONS) OF 12" ENVIRO-SEPTIC PIPE

SEE PLAN VIEW (LEFT) FOR ACTUAL LAYOUT/CONFIGURATION OF SYSTEM.

TYPICAL CONSTRUCTION DETAILS SIDE VIEW DROP - Θ Θ Θ D-BOX OFFSET ADAPTER <u>DO NOT</u> INSERT PVC PIPE MORE _ THAN 4" INTO OFFSET ADAPTER **ENVIRO-SEPTIC PIPE -**END VIEW



WETLAND DELINEATION

WETLANDS ON-SITE WERE DELINEATED BY:

GOVE ENVIRONMENTAL SERVICES, INC. 8 CONTINENTAL DRIVE, UNIT H EXETER, NH 03833

DATE: SPRING, 2020

OWNER NOTES

- KNOW THE LOCATION OF YOUR SEPTIC TANK AND LEACHING AREA. INSPECT YOUR SEPTIC TANK YEARLY. HAVE THE SEPTIC TANK PUMPED AS NEEDED
- BUT AT LEAST ONCE EVERY THREE YEARS. DO NOT FLUSH BULKY ITEMS SUCH AS DIAPERS, SANITARY PADS OR BABY WIPES.
- DO NOT FLUSH TOXIC CHEMICALS SUCH AS PAINT THINNERS, DRANO, PESTICIDES
- OR CHLORINE, AS THEY MAY KILL THE NECESSARY BACTERIA IN THE SEPTIC TANK. REPAIR LEAKING FIXTURES IN THE BUILDING PROMPTLY
- BE CONSERVATIVE WITH WATER USE, SPREAD OUT USE OVER TIME, AND USE WATER-REDUCING FIXTURES WHENEVER AND WHEREVER POSSIBLE. TOO MUCH
- USE IN A SHORT TIME CAN OVERLOAD THE SYSTEM, WHICH MAY LEAD TO FAILURE MOW YOUR LEACHING AREA REGULARLY. PREVENT DEEP-ROOTED TREES AND
- SHRUBS FROM GROWING ON AND ADJACENT TO YOUR LEACHING AREA.
- NO VEHICULAR TRAVEL, LIVESTOCK TRAVEL, OR SNOW REMOVAL IN AREA OF SYSTEM, UNLESS SPECIFICALLY DESIGNED FOR H20 LOADING.

APPROVAL FOR CONSTRUCTION IS VALID FOR 4 YEARS FROM DATE OF ISSUE

2,000 GALLON SEPTIC TANK & D-BOX TO BE SUPPLIED BY: SHEA CONCRETE

EFFLUENT DISPOSAL DESIGN Plan Name:

Project:

INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801

S1 SHEET 9 OF 16

DRAWING No.

JBE PROJECT NO. 19190.2

Design: JAC Draft: DJM Date: 04/21/20 Checked: JAC | Scale: 1" = 20' Project No.: 19190.2 Drawing Name: 19190-PLAN.DWG THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE

11/3/20 ISSUED TO TECHNICAL ADVISORY COMMITTEE DJM DJM 2 10/21/20 MEETING WITH CITY PLANNER DJM 10/8/20 REVISED DRAINAGE, REISSUED TO CLIENT DJM 9/14/20 **ISSUED TO CLIENT** DATE REVISION BY

Jones & Beach Engineers, Inc.

85 Portsmouth Ave. Civil Engineering Services PO Box 219 E-MAIL: JBE@JONESANDBEACH.COM Stratham, NH 03885

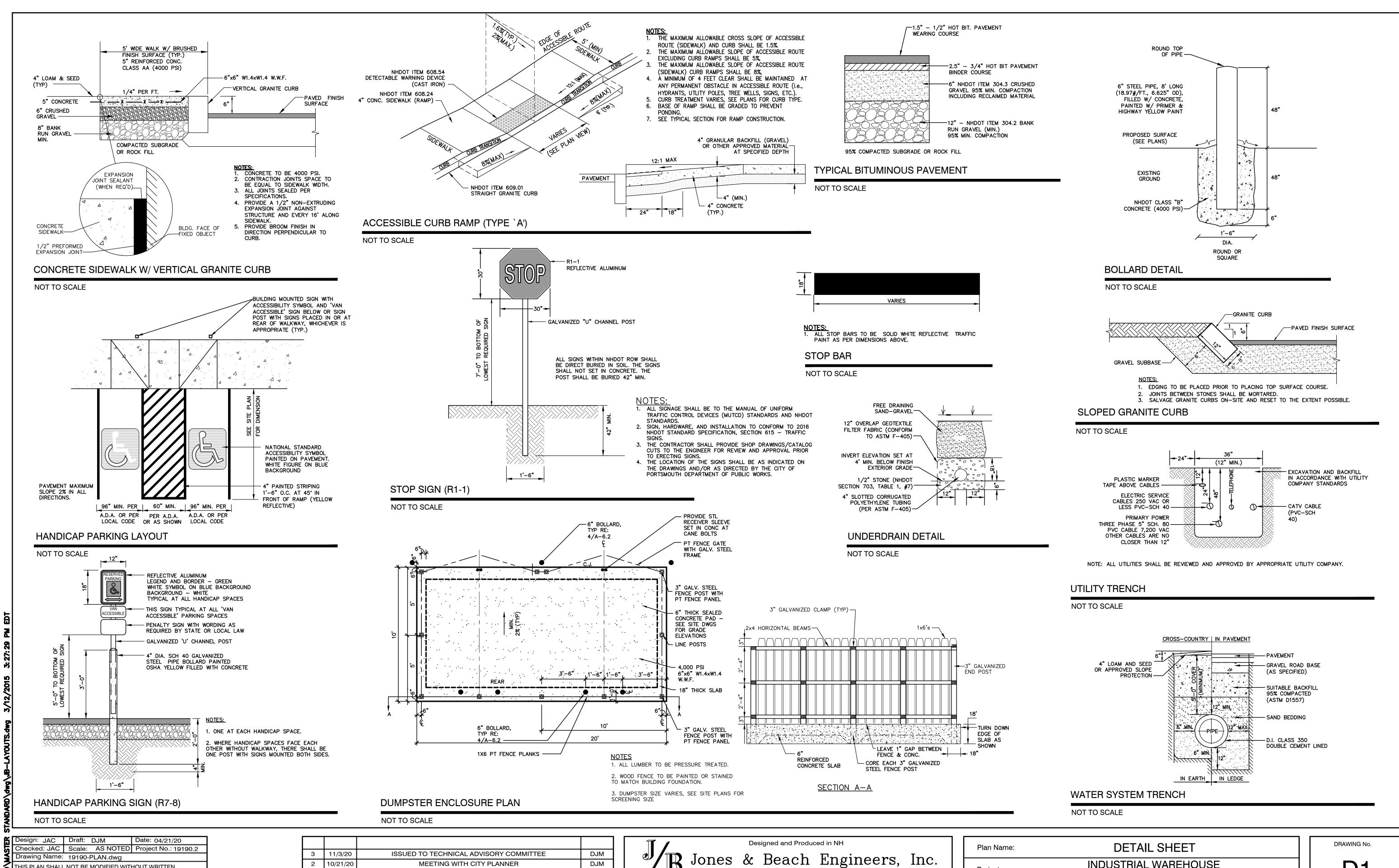
603-772-4746

FAX: 603-772-0227

WITHIN 100' OF ANY COMPONENT OF THE ISDS.

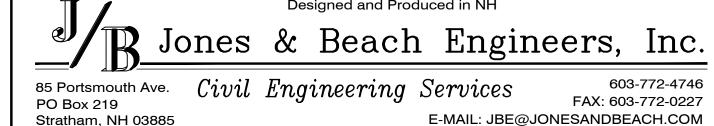
Owner of Record:

BANFIELD REALTY LLC 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801



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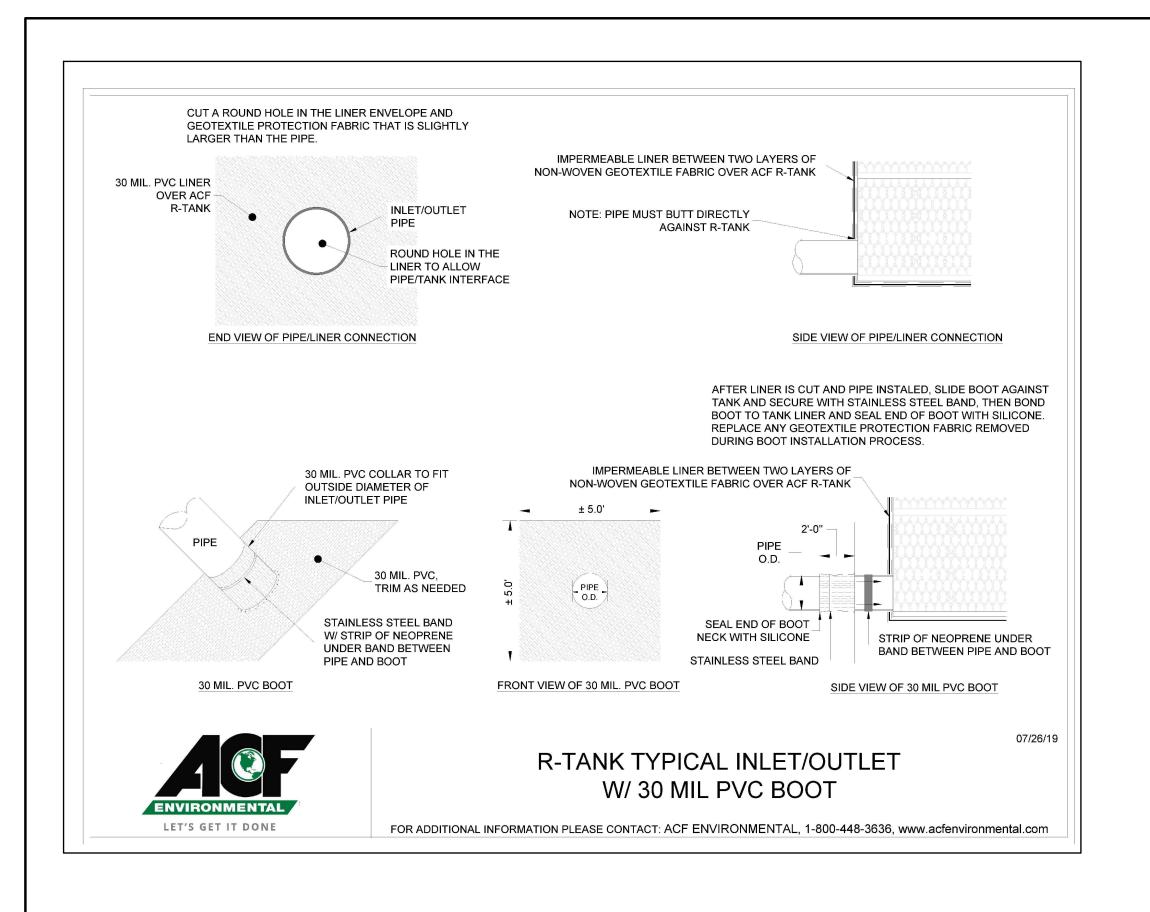
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	0	9/14/20	ISSUED TO CLIENT	DJM
	REV.	DATE	REVISION	BY

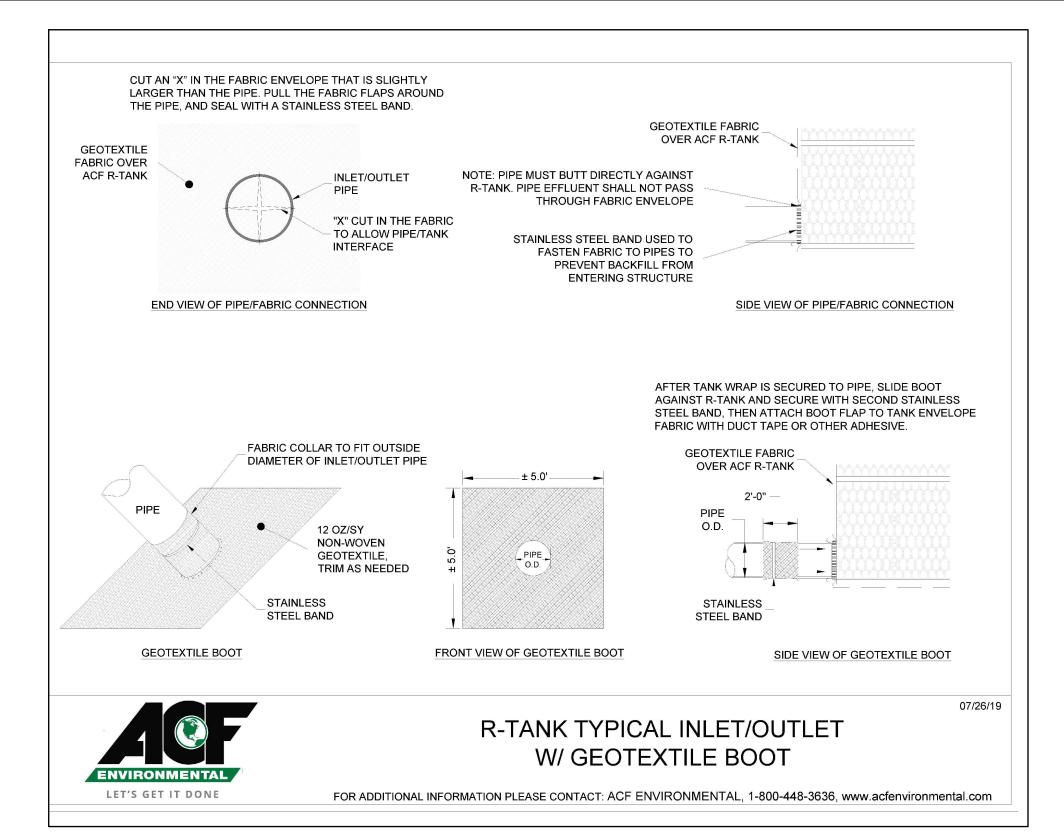


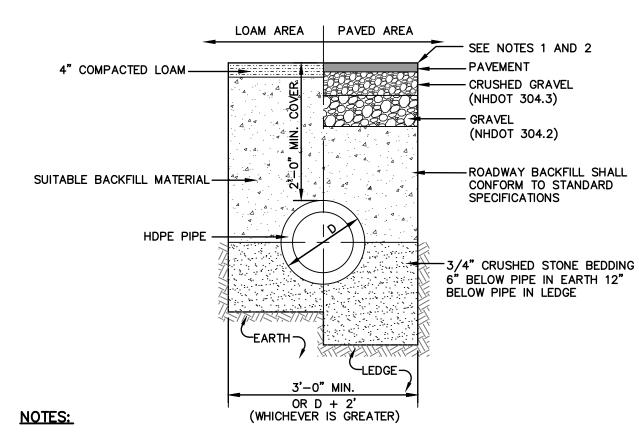
Stratham, NH 03885



SHEET 10 OF 16 JBE PROJECT NO. 19190.2





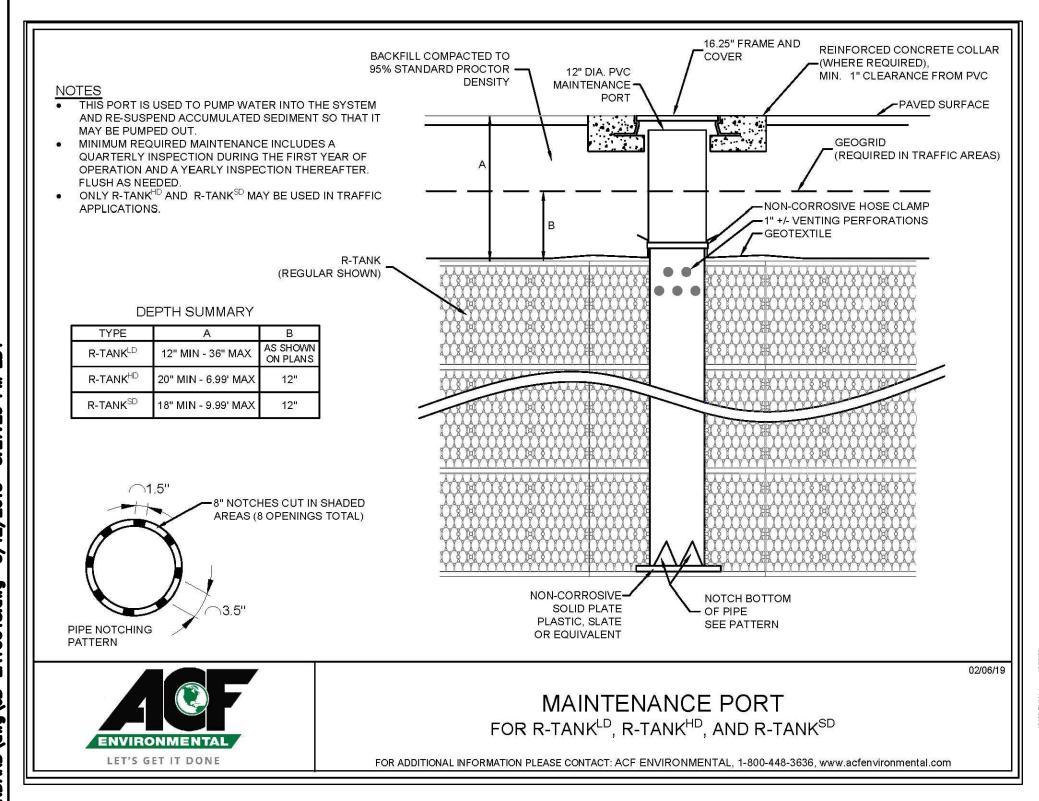


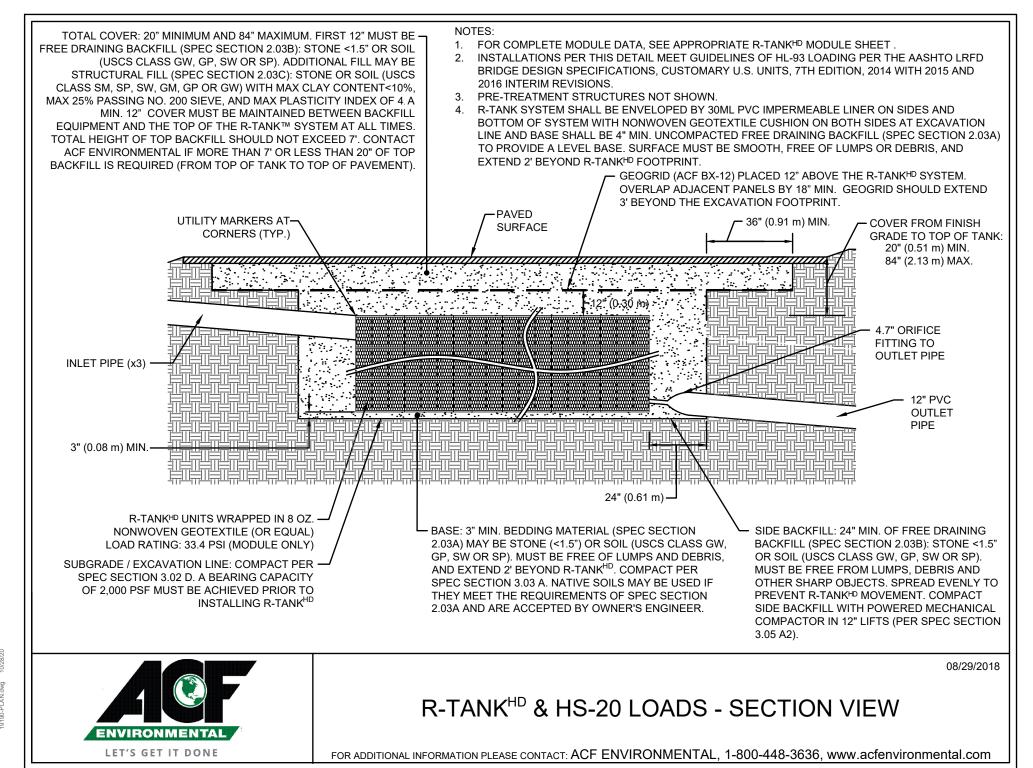
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.

- 2. NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND TOWN SPECIFICATIONS.
- 3. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

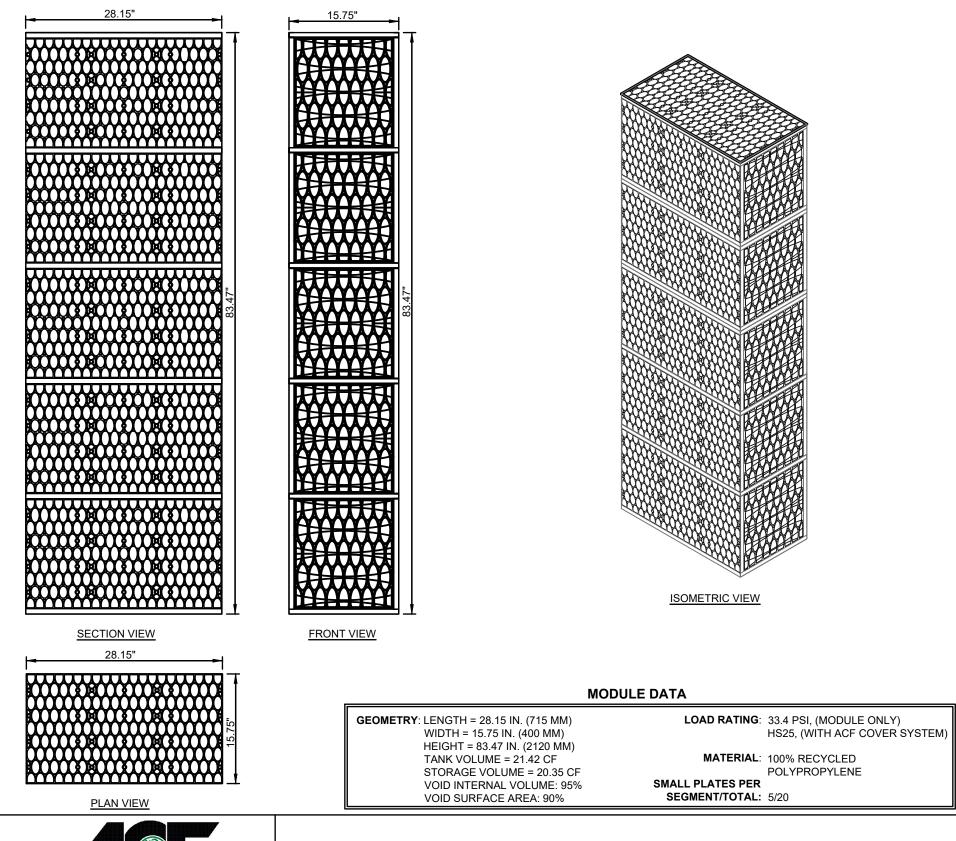
DRAINAGE TRENCH

NOT TO SCALE





Stratham, NH 03885



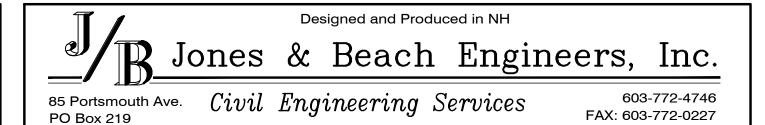


R-TANKHD - PENT MODULE

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

••								
品	Design: JAC	Draft:	DJM	Date: 04/21/20				
S	Checked: JAC	Scale:	AS NOTED	Project No.: 19190.2				
Drawing Name: 19190-PLAN.dwg THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN								
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9	ANY ALTERATION	IERWISE, SHALL BE						
ij.	AT THE USER'S S	OLE RISK	AND WITHOUT	LIABILITY TO JBE.				

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0	0 9/14/20 ISSUED TO CLIENT		DJM	
REV.	DATE	REVISION	BY	



E-MAIL: JBE@JONESANDBEACH.COM

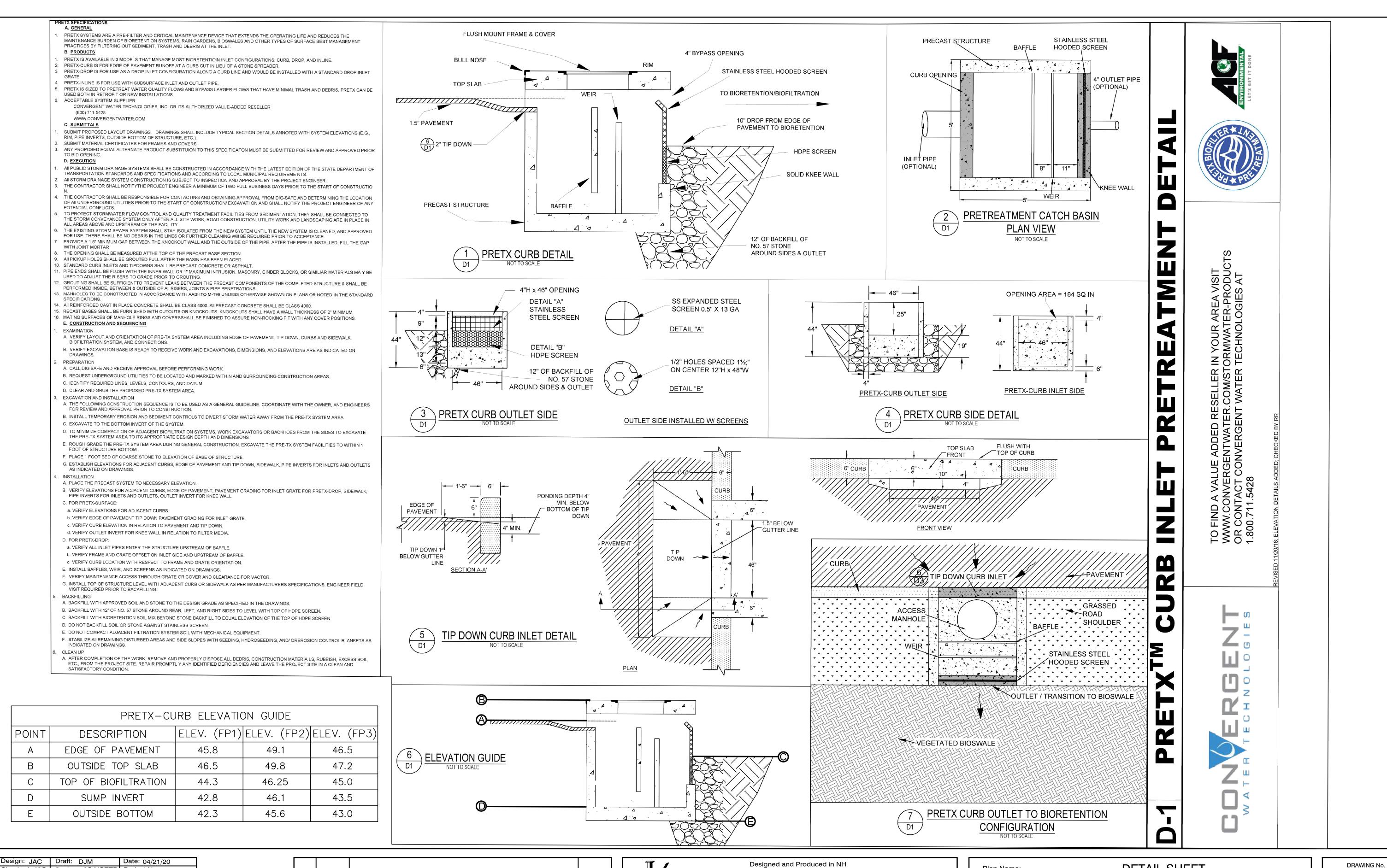
Plan Name:	DETAIL SHEET
Project:	INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801
Owner of Record:	BANFIELD REALTY LLC 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801

DRAWING No.

D2

SHEET 11 OF 16

JBE PROJECT NO. 19190.2



Checked: JAC | Dratt: DJM | Date: 04/21/20 |
Checked: JAC | Scale: AS NOTED | Project No.: 19190.2 |
Drawing Name: 19190-PLAN.dwg

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0	9/14/20	ISSUED TO CLIENT	DJM
REV.	DATE	REVISION	BY

Book & Beach Engineers, Inc.

85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885

Designed and Produced in NH

Beach Engineers, Inc.

603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:

DETAIL SHEET

INDUSTRIAL WAREHOUSE
375 BANFIELD ROAD, PORTSMOUTH, NH 03801

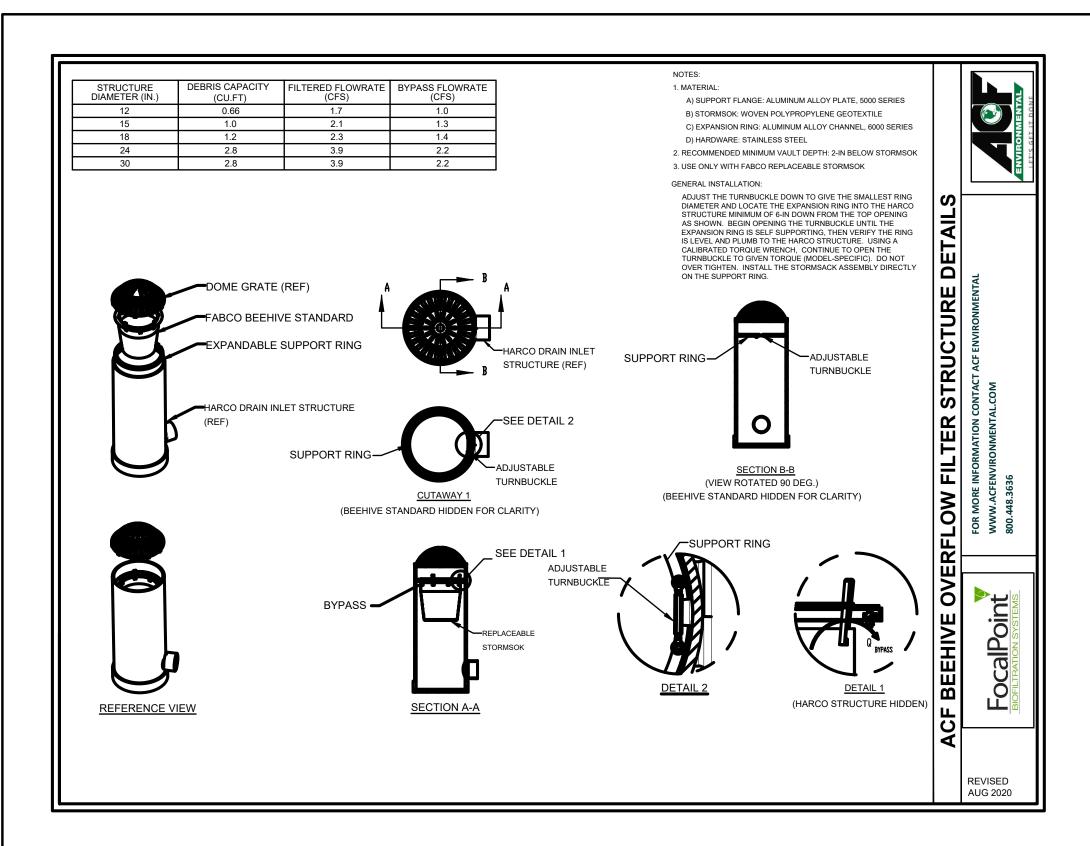
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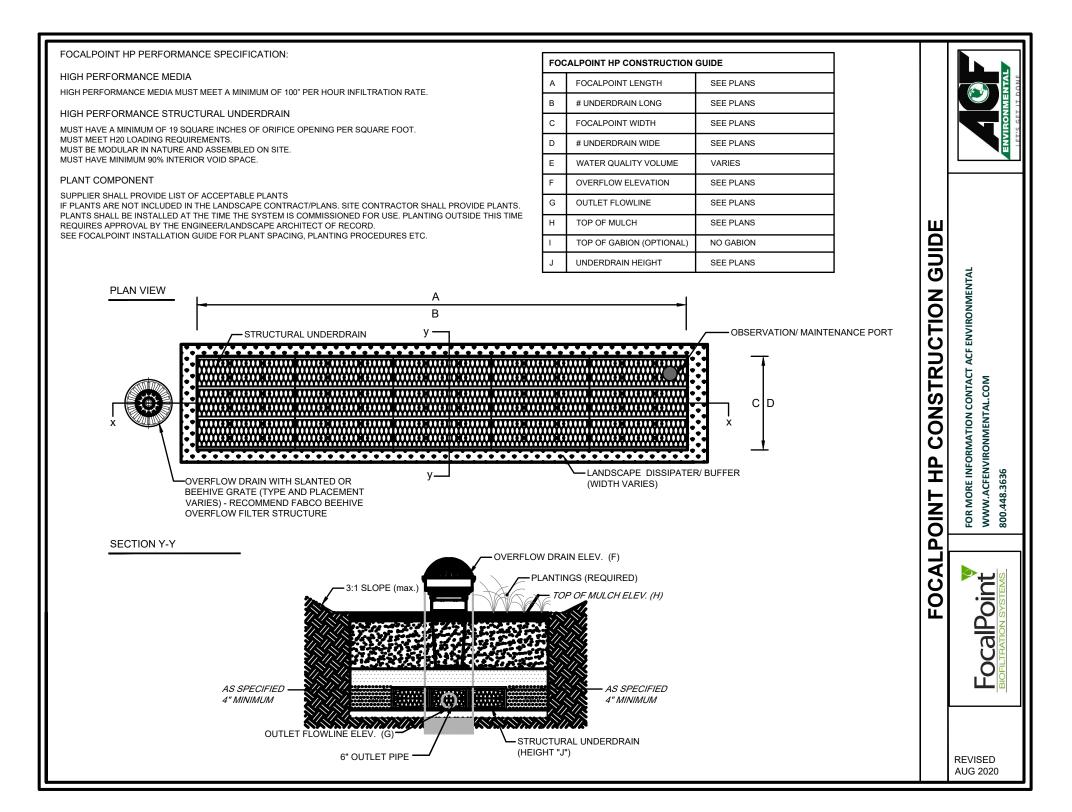
BANFIELD REALTY LLC
304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801

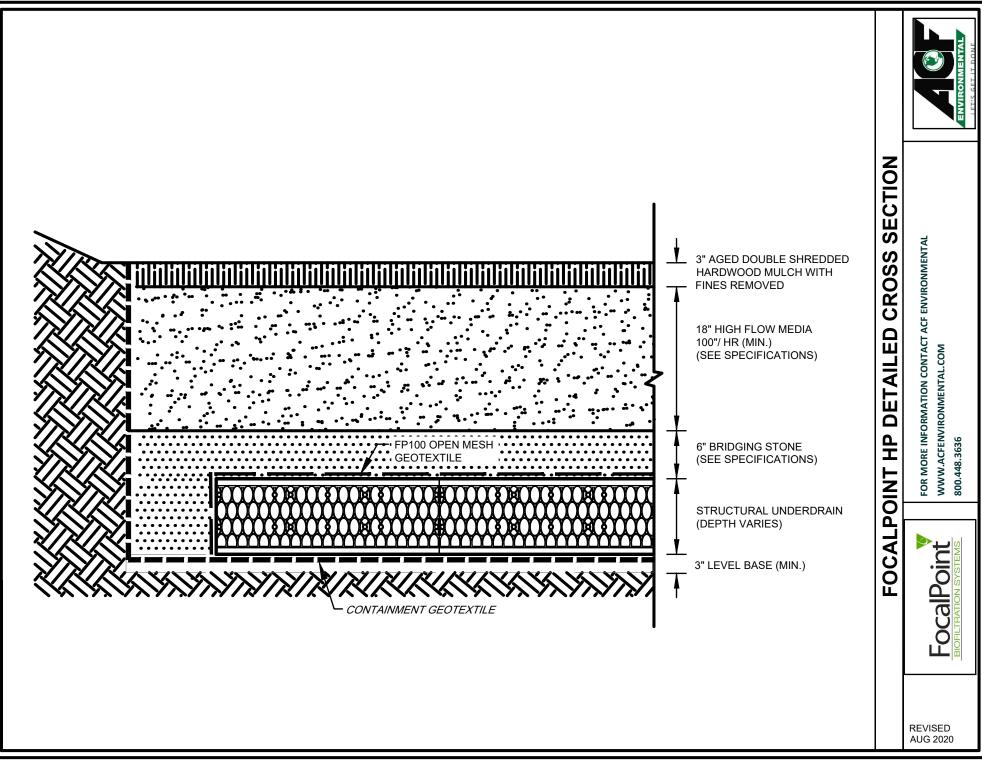
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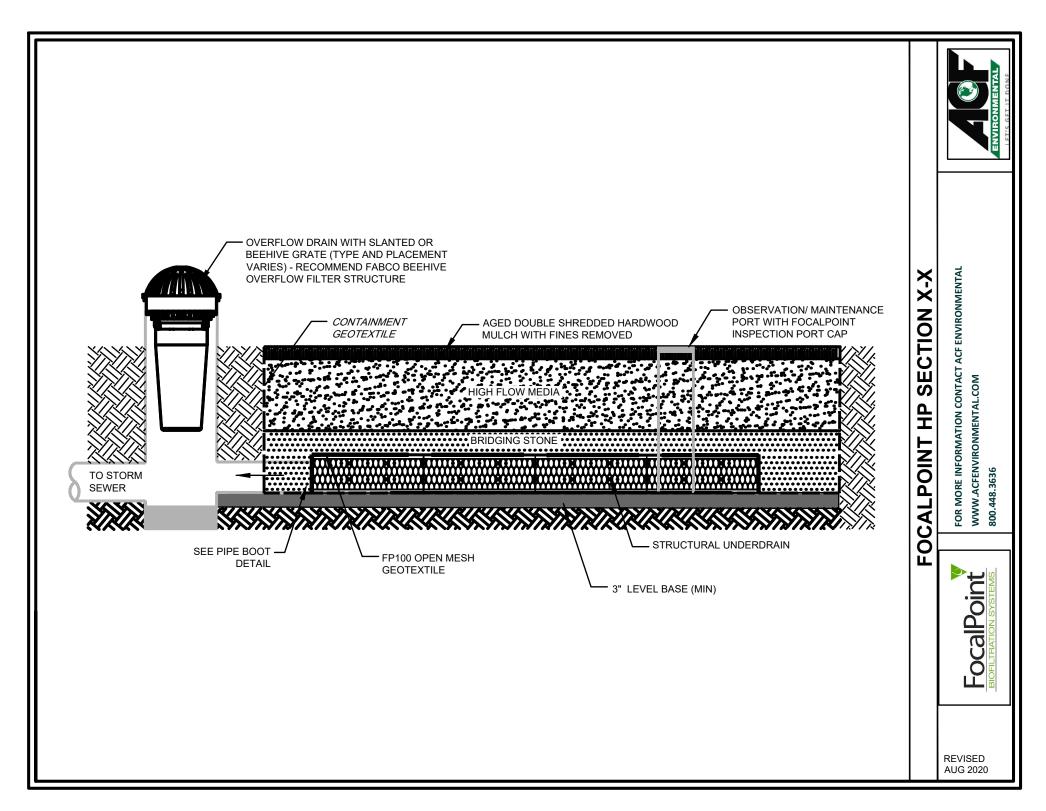
SHEET 12 OF 16

JBE PROJECT NO. 19190.2









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品	Design: JAC	Draft: DJM	Date: 04/21/20			
S	Checked: JAC	Scale: AS NOT	ED Project No.: 19190.2			
₹	Drawing Name:	19190-PLAN.dwg				
Z	THIS PLAN SHALL	NOT BE MODIFIED \	WITHOUT WRITTEN			
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REV.	DATE	REVISION	BY

1 /		Des	signed and Pro	duce	ed in NH		
B Jo	nes	&	Beach	1	Engine	ers,	Inc.
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885	Civil	Eng	ineering		<i>TVİCES</i> MAIL: JBE@JON	FAX: 603	-772-4746 -772-0227 ACH.COM

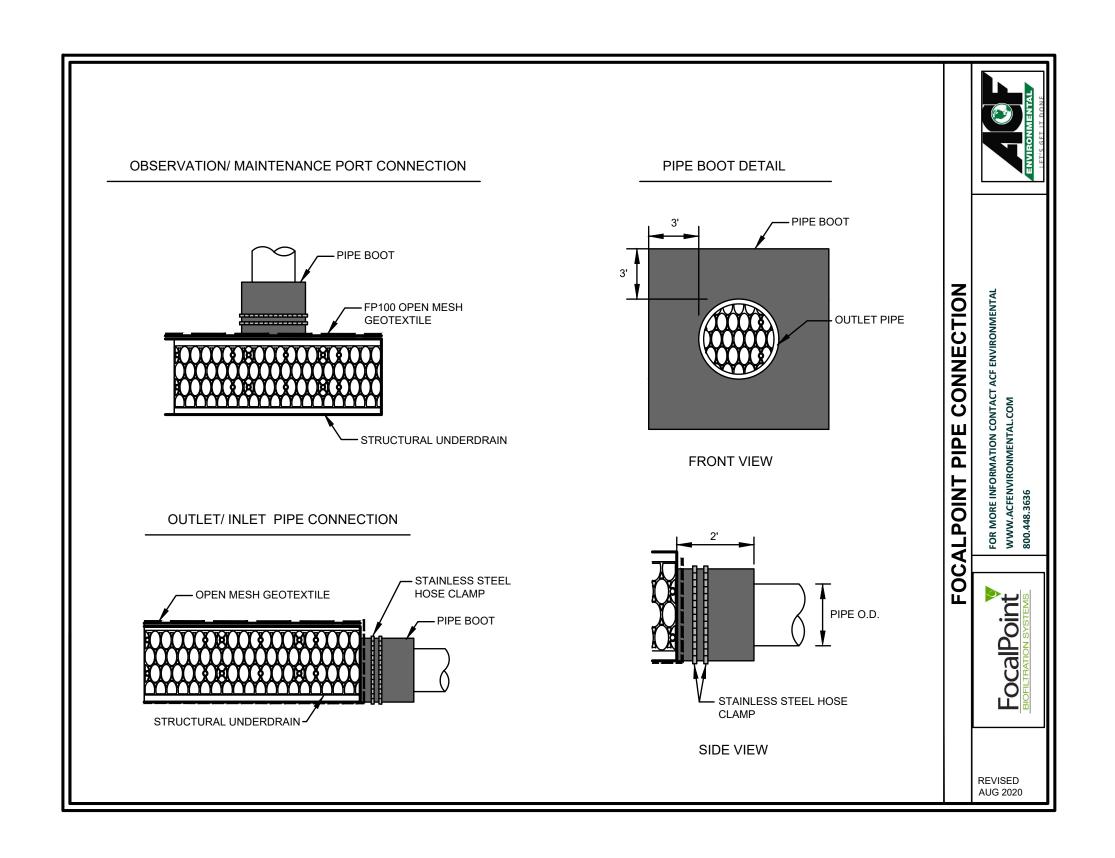
Plan Name:	DETAIL SHEET	
Project:	INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801	
Owner of Record	BANFIELD REALTY LLC 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801	

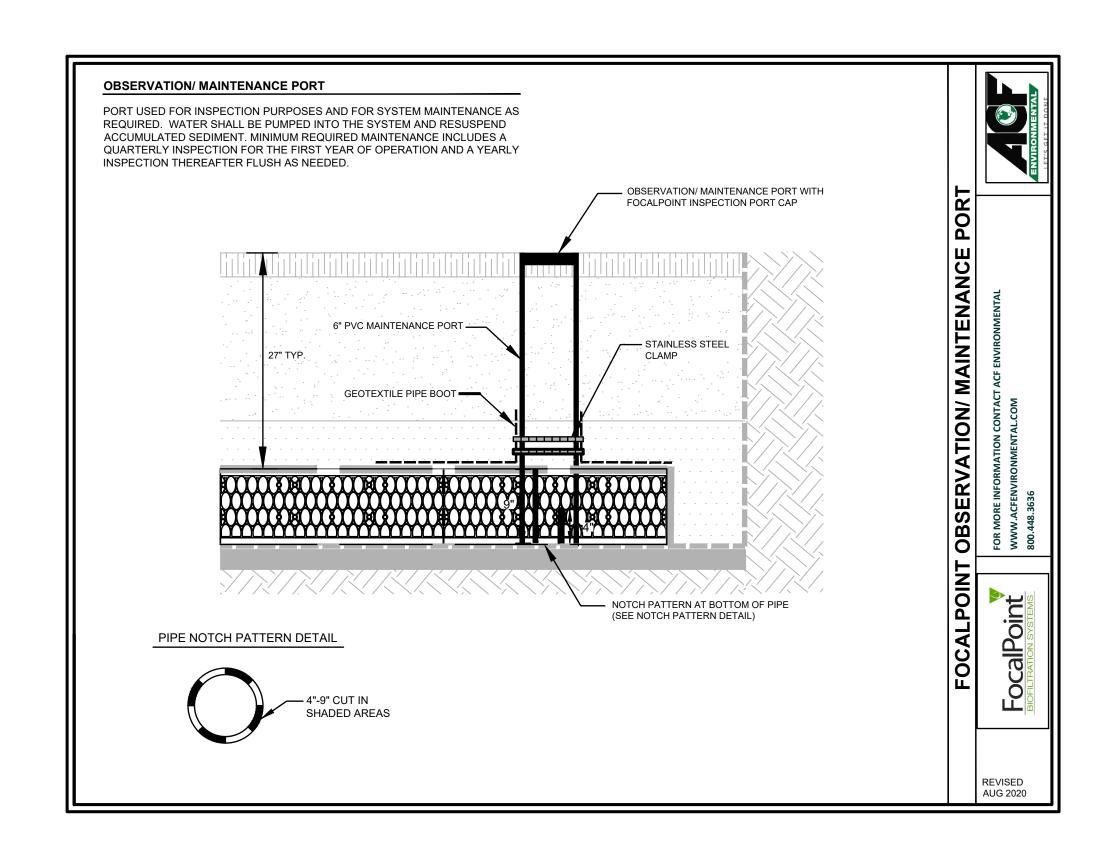
DRAWING No.

D4

SHEET 13 OF 16

JBE PROJECT NO. 19190.2





品	Design: JAC	Draft: DJM	Date: 04/21/20						
ST	Checked: JAC	Scale: AS NOTED	Project No.: 19190.2						
¥	Drawing Name: 19190-PLAN.dwg								
3	THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN								
8		M JONES & BEACH ENG	• • • • • • • • • • • • • • • • • • • •						
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0	9/14/20	ISSUED TO CLIENT	DJM
REV.	DATE	REVISION	BY

Designed and Produced in NH

Jones & Beach Engineers, Inc.

85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885

Designed and Produced in NH

Engineering Services

603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801
Owner of Record:	BANFIELD REALTY LLC 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801

DRAWING No.

D5

SHEET 14 OF 16

JBE PROJECT NO. 19190.2

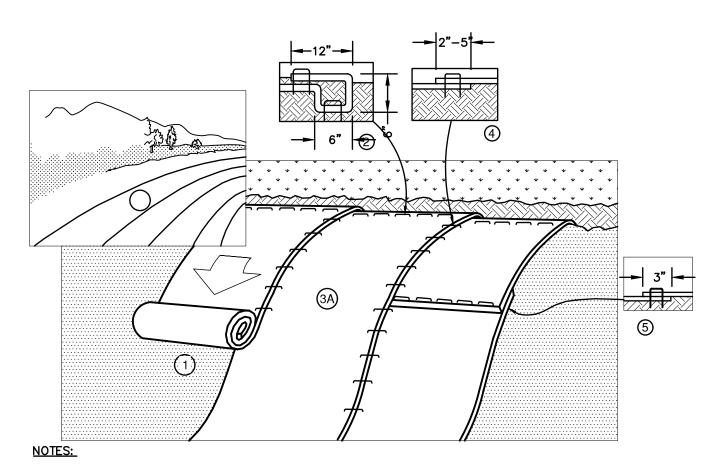
1. CONSTRUCT LEVEL SPREADER LIP ON ZERO PERCENT GRADE TO ENSURE UNIFORM SPREADING OF RUNOFF.

VERTICAL GRANITE CURB

- 2. VERTICAL GRANITE CURB SHALL BE PLACED A MINIMUM OF SIX INCHES DEEP AND EXTEND ENTIRE LENGTH
- 3. THE RIP RAP APRON PRIOR TO THE LEVEL SPREADER SHALL NOT EXCEED A 0 PERCENT GRADE.
- 4. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER MUST NOT RECONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- 5. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.
- 6. MAINTENANCE: LEVEL SPREADER SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE SPREADER HAS BEEN DAMAGED. SEDIMENT DEEPER THAN FOUR INCHES ACCUMULATION SHOULD BE REMOVED. IF RILLING HAS TAKEN PLACE ON LIP, THEN DAMAGE SHOULD BE REPAIRED AND REVEGETATED. VEGETATION SHOULD BE MOWED OCCASIONALLY TO CONTROL WEEDS AND ENCROACHMENT OF WOODY VEGETATION. CLIPPINGS SHOULD BE REMOVED AND DISPOSED OF OUTSIDE SPREADER AND AWAY FROM OUTLET AREA. FERTILIZATION SHOULD BE DONE AS NECESSARY TO KEEP VEGETATION HEALTHY AND DENSE.

LEVEL SPREADER

NOT TO SCALE



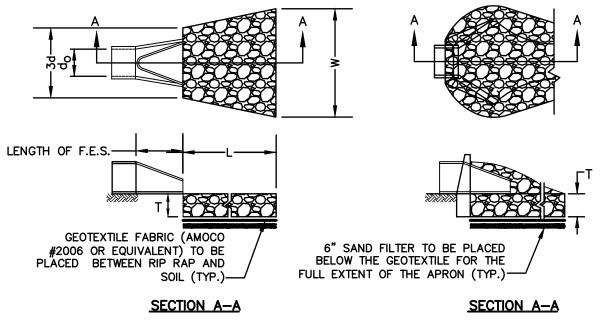
- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY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



NORTH AMERICAN GREEN 14649 HIGHWAY 41 NORTH EVANSVILLE, INDIANA 47725 1-800-772-2040

EROSION CONTROL BLANKET SLOPE INSTALLATION (North American Green)

NOT TO SCALE



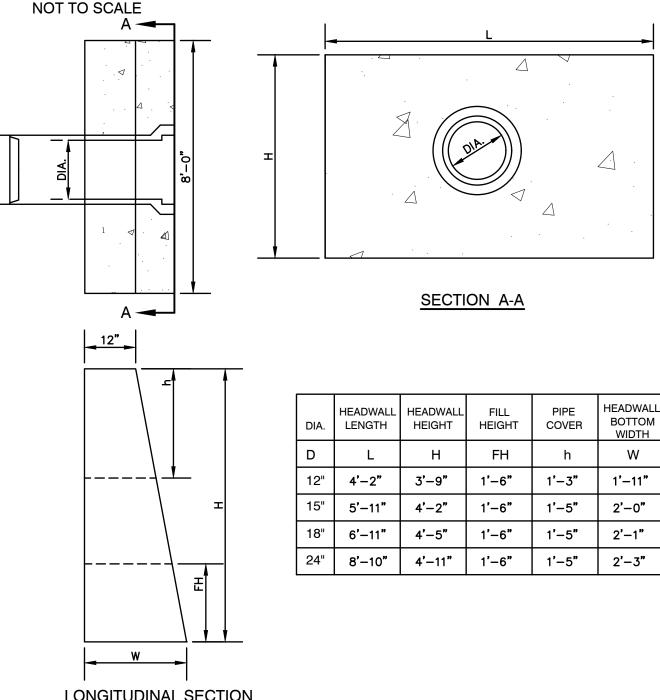
PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

PIPE OUTLET TO WELL-DEFINED CHANNEL

TABLE 7 04 DECOMMENDED		ATION DANOEC
TABLE 7-24RECOMMENDED	RIP RAP GRAD	MITON RANGES
THICKNESS OF RIP RAP = 1.5	FEET	
d50 SIZE= 0.50	FEET (6 INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF S FROM	TONE (INCHES) TO
100%	9	12
85%	8	11
50%	6	9
15%	2	3

- 1. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
- 2. THE RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
- 4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
- 5. OUTLETS TO A DEFINED CHANNEL SHALL HAVE 2:1 OR FLATTER SIDE SLOPES AND SHOULD BEGIN AT THE TOP OF THE CULVERT AND TAPER DOWN TO THE CHANNEL BOTTOM THROUGH THE LENGTH OF THE APRON.
- 6. MAINTENANCE: THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.

RIP RAP OUTLET PROTECTION APRON

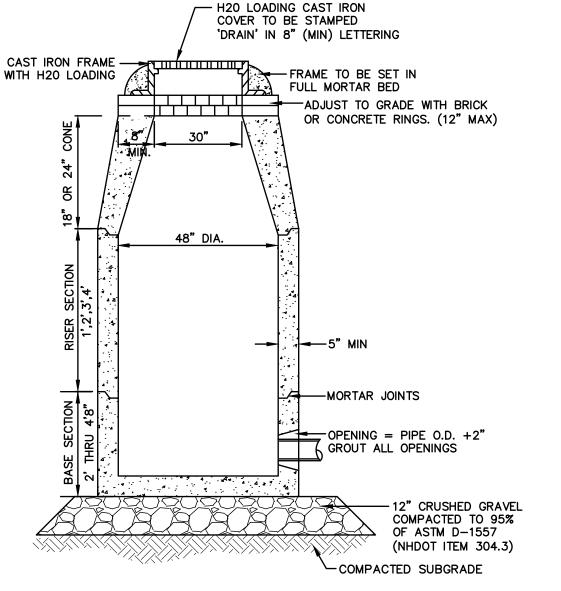


LONGITUDINAL SECTION

- ALL DIMENSIONS GIVEN IN FEET & INCHES.
- 2. PROVIDE BELL END AT INLET HEADWALL, AND SPIGOT END AT OUTLET END HEADWALL. 5. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS. CEMENT TO BE TYPE III PER ASTM
- C-150. REINFORCING TO MEET OR EXCEED ASTM A-615 GRADE 60 DEFORMED BARS. 4. 1" THREADED INSERTS PROVED FOR FINAL ATTACHMENT IN FIELD BY OTHERS.

PRECAST CONCRETE HEADWALL

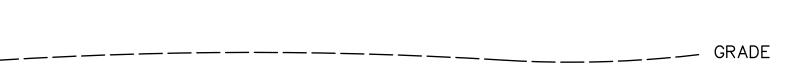
NOT TO SCALE



- 1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
- 2. ALL SECTIONS SHALL BE DESIGNED FOR H20 LOADING.
- 3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
- 4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H20 LOADING.
- 5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
- 6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
- 7. ALL DRAIN MANHOLE FRAMES AND GRATES SHALL BE NHDOT TYPE MH-1, OR NEENAH R-1798 OR APPROVED
- 8. STANDARD FRAME(S) AND GRATE(S) SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"), OR PRECAST CONCRETE 'DONUTS'.

DRAIN MANHOLE

NOT TO SCALE



COMPACTED SUBGRADE -

CAST IRON FRAME AND GRATE

WITH H20 LOADING (TYPE B.

NEEENAH MODEL R-3570)

- 1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
- 2. ALL SECTIONS SHALL BE DESIGNED FOR H20 LOADING.
- 3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT

ALT. SLAB TOP REINFORCED TO MEET OR

FRAME TO BE SET IN FULL MORTAR BED

CONCRETE RINGS

(12" MAX.)

-ADJUST TO GRADE WITH

KENT SEAL ALL

FLEXIBLE BOOT CONFORMING ASTM

SPEC. C-443 CAST-IN-PLACE OR

FIELD INSTALLED

MIN .12 SQ. IN. STEEL PER VERTICAL FOOT

PLACED ACCORDING TO

AASHTODESIGNATION

JOINTS

- 6" OF 3/4" CRUSHED STONE COMPACTED

TO 95% OF ASTM -1557

(NHDOT ITEM 304.3)

BRICK OR PRE-CAST

EXCEED REQUIREMENTS OF H20 LOADING

SQUARE

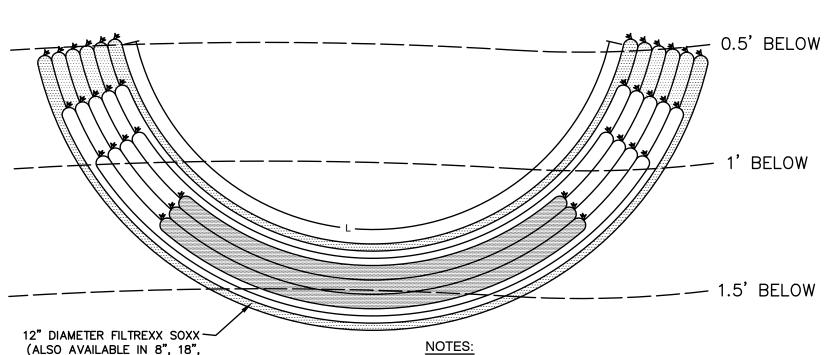
OPENING

5" MIN

- 4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H20 LOADING
- 5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
- 6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
- 7. ALL CATCH BASIN FRAMES AND GRATES SHALL BE NHDOT CATCH BASIN TYPE ALTERNATE 1 OR NEENAH R-3570 OR APPROVED EQUAL (24"x24" TYPICAL).
- 8. STANDARD CATCH BASIN FRAME AND GRATE(S) SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"), OR PRECAST CONCRETE 'DONUTS'.

CATCH BASIN

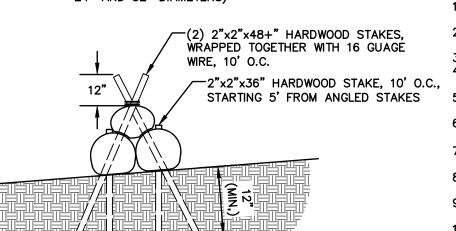
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FAX: 603-772-0227

E-MAIL: JBE@JONESANDBEACH.COM

(ALSO AVAILABLE IN 8", 18", 24" AND 32" DIAMETERS)



1. FILTREXX SEDIMENT TRAP MUST BE INSTALLED BY FILTREXX CERTIFIED INSTALLER. 2. FILTREXX SEDIMENT TRAP MUST BE COMPLY WITH ALL FILTREXX STANDARD SPECIFICATIONS.

- . FILTREXX SEDIMENT TRAP MUST USE FILTREXX FILTERMEDIA. 4. FILTREXX SEDIMENT TRAP BARRIER FACE SIZING SHALL USE Q/0.98CFM(PER SF OF AREA FACE) = A (Q=5L/SEC/SQ.M)STARTING 5' FROM ANGLED STAKES 5. FILTREXX SEDIMENT TRAP BARRIER FACE SHALL BE MEASURED AS
 - 6. FILTREXX SEDIMENT TRAP SHALL BE CONSTRUCTED SO THAT THE MINIMUM BASE WIDTH IS EQUIVALENT TO THE HEIGHT (1H:1V). 7. SEDIMENT ACCUMULATION SHALL NOT EXCEED 1/2 THE HEIGHT OF THE
 - 8. FILTREXX SEDIMENT TRAP SHALL BE INSPECTED AND MAINTAINED AFTER STORM EVENTS.
 - 9. SOXX SHALL BE OF LARGER DIAMETER AT THE BASE OF THE SEDIMENT TRAP AND DECREASE IN DIAMETER FOR SUCCESSIVE LAYERS. 10. ENDS OF THE SEDIMENT TRAP SHALL BE A MINIMUM 1 FT (30 CM) HIGHER IN ELEVATION THAN THE MID-SECTION, WHICH SHALL BE AT
 - THE LOWEST ELEVATION. 11. BOTTOM LAYER OF SOXX SHALL BE STAKED WITH 2X2X36" WOODEN STAKES. SUCCESSIVE LAYERS SHALL BE STAKED WITH 1/2" REBAR AT A

Plan Name:

GENERAL NOTES:

- 1. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE.
- 2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHALL BE LESS THAN 5 ACRES.
- 3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
- 4. THE SIDE SLOPES OF THE TRAP SHALL BE 3:1 OR FLATTER, AND
- SHALL BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION. 5. THE OUTLET OF THE TRAP SHALL BE A MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP AND SHALL DISCHARGE TO A
- 6. THE TRAP SHALL BE CLEANED WHEN 50% OF THE ORIGINAL VOLUME IS FILLED.
- THE MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY

DISPOSED OFF AND STABILIZED.

NOT TO SCALE

Stratham, NH 03885

FILTREXX SEDIMENT TRAP DETAIL

PO Box 219

Designed and Produced in NH 85 Portsmouth Ave. Civil Engineering Services 603-772-4746

INDUSTRIAL WAREHOUSE 375 BANFIELD ROAD, PORTSMOUTH, NH 03801 BANFIELD REALTY LLC Owner of Record:

DETAIL SHEET

304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801

JBE PROJECT NO. 19190.2

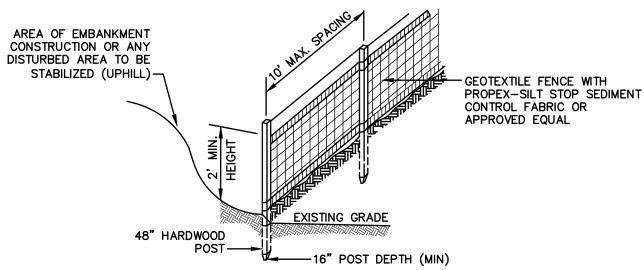
DRAWING No.

Design: JAC | Draft: DJM Date: 04/21/20 Checked: JAC | Scale: AS NOTED | Project No.: 19190.2 Drawing Name: 19190-PLAN.dwg THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

3 11/3/20 ISSUED TO TECHNICAL ADVISORY COMMITTEE					
2	2 10/21/20 MEETING WITH CITY PLANNER				
1	10/8/20	REVISED DRAINAGE, REISSUED TO CLIENT	DJM		
0	9/14/20	ISSUED TO CLIENT	DJM		
REV.	DATE	REVISION	BY		

TEMPORARY EROSION CONTROL NOTES

- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. AT NO TIME SHALL AN AREA IN EXCESS OF 5 ACRES BE EXPOSED AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
- ALL DISTURBED AREAS (INCLUDING POND AREAS BELOW THE PROPOSED WATERLINE) SHALL BE RETURNED TO PROPOSED GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 6" OF SCREENED ORGANIC LOAM AND SEEDED WITH SEED MIXTURE 'C' AT A RATE NOT LESS THAN 1.10 POUNDS OF SEED PER 1,000 S.F. OF AREA (48 LBS. / ACRE).
- SILT FENCES AND OTHER BARRIERS SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5" OR GREATER. ALL DAMAGED AREAS SHALL BE REPAIRED, AND SEDIMENT DEPOSITS SHALL
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
- AREAS MUST BE SEEDED AND MULCHED OR OTHERWISE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 14 DAYS OF THE INITIAL DISTURBANCE OF SOIL. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER) ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER OCTOBER 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - a. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - b. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - c. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED; OR
 - d. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- FUGITIVE DUST CONTROL IS REQUIRED TO BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000, AND THE PROJECT IS TO THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR'S NAME, ADDRESS, AND PHONE NUMBER SHALL BE SUBMITTED TO DES VIA EMAIL (SEE BELOW).
- PRIOR TO CONSTRUCTION, A PHASING PLAN THAT DELINEATES EACH PHASE OF THE PROJECT SHALL BE SUBMITTED. ALL TEMPORARY SEDIMENT BASINS THAT WILL BE NEEDED FOR DEWATERING WORK AREAS SHALL BE LOCATED AND IDENTIFIED
- IN ORDER TO ENSURE THE STABILITY OF THE SITE AND EFFECTIVE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES SPECIFIED IN THE PLANS FOR THE DURATION OF CONSTRUCTION, THE CONTRACTOR SHALL BE IN STRICT COMPLIANCE WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS IN ADDITION TO THOSE CALLED
 - a. A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE START OF ALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE SITE SPECIFIC PERMIT
 - b. DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY 1/2 INCH OR GREATER RAIN EVENT (I.E. 1/2 INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
 - c. THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATIONS TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485 A:17 AND ALL APPLICABLE DES PERMIT CONDITIONS.
 - d. WITHIN 24 HOURS OF EACH INSPECTION, THE MONITOR SHALL SUBMIT A REPORT TO DES VIA EMAIL (RIDGELY MAUCK AT: RIDGELY.MAUCK@DES.NH.GOV).
 - e. THE MONITOR SHALL MEET WITH DES TO DECIDE UPON A REPORT FORMAT. THE REPORT FORMAT SHALL BE REVIEWED AND APPROVED BY DES PRIOR TO THE START OF CONSTRUCTION.



CONSTRUCTION SPECIFICATIONS:

- WOVEN FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP, MID AND BOTTOM AND EMBEDDED IN THE GROUND A MINIMUM OF 8" AND THEN COVERED WITH SOIL.
- . THE FENCE POSTS SHALL BE A MINIMUM OF 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
- . WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED 6", FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.

Date: 04/21/20

- 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED AND PROPERLY DISPOSED OF WHEN IT IS 6" DEEP OR VISIBLE 'BULGES' DEVELOP IN THE SILT FENCE.
- 5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
- SILT FENCE SHALL REMAIN IN PLACE FOR 24 MONTHS.

Checked: JAC | Scale: AS NOTED | Project No.: 19190.2

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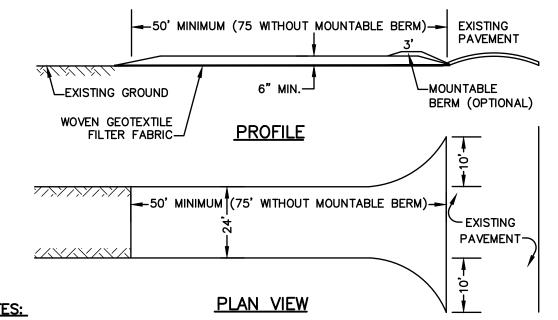
T THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

SILT FENCE

NOT TO SCALE

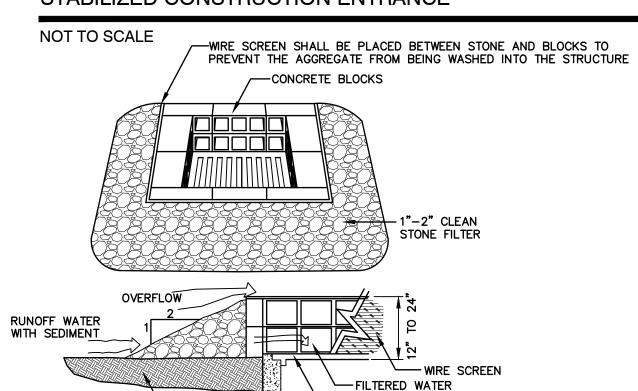
Design: JAC | Draft: DJM

Drawing Name: 19190-PLAN.dwg



- 1. STONE FOR STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR
- RECYCLED CONCRETE EQUIVALENT. 2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, 75' WITHOUT A MOUNTABLE BERM, AND EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH
- 3. THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES. 4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE
- INGRESS OR EGRESS OCCURS, OR 10 FEET, WHICHEVER IS GREATER. 5. GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER FABRIC IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL LOT.
- 6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A STONE BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE

STABILIZED CONSTRUCTION ENTRANCE

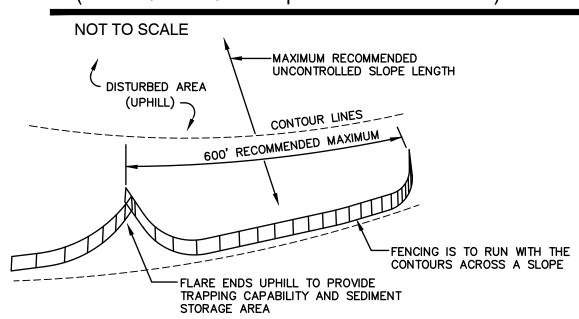


MAINTENANCE NOTE:

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINFALL AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A SUITABLE UPLAND AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

─ DROP INLET WITH GRATE

TEMPORARY CATCH BASIN INLET PROTECTION (Block and Gravel Drop Inlet Sediment Filter)



7. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND REVEGETATED.

MAINTENANCE:

- 1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE DONE IMMEDIATELY.
- 2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- 3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
- 4. SEDIMENT DEPOSITS THAT ARE REMOVED, OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SEEDING SPECIFICATIONS

- 1. GRADING AND SHAPING
 - A. SLOPES SHALL NOT BE STEEPER THAN 2:1 WITHOUT APPROPRIATE EROSION CONTROL MEASURES AS SPECIFIED ON THE PLANS (3:1 SLOPES OR FLATTER ARE PREFERRED).

B. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

- A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
- B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND FERTILIZER AND LIME MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

3. ESTABLISHING A STAND

- A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. TYPES AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE
- AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ.FT. NITROGEN(N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ.FT. PHOSPHATE(P205), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.

POTASH(K20), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.

- (NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10.)
- B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
- C. REFER TO THE 'SEEDING GUIDE' AND 'SEEDING RATES' TABLES ON THIS SHEET FOR APPROPRIATE SEED MIXTURES AND RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT, TREFOIL AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT PRIOR TO THEIR INTRODUCTION TO THE SITE.
- WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20th OR FROM AUGUST 10th TO SEPTEMBER 1st.

- A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING. B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 S.F.
- 5. MAINTENANCE TO ESTABLISH A STAND
- A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED
- B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED.
- C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, ANNUAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C	FAIR POOR POOR	GOOD GOOD GOOD	GOOD FAIR EXCELLENT	FAIR FAIR GOOD
	D	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENC'S SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	r A C	GOOD GOOD	GOOD EXCELLENT	GOOD EXCELLENT	FAIR FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A B C	GOOD GOOD GOOD	GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT	FAIR POOR FAIR
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E F	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT	<u>2/</u> 2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

/ REFER TO SEEDING MIXTURES AND RATES IN TABLE BELOW. $\overline{27}$ poorly drained soils are not desirable for use as playing area and athletic fields.

NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 15th, IF PERMANENT SEEDING NOT

SEEDING GUIDE

	MIXTURE	POUNDS PER ACRE	POUNDS PER 1.000 Sq. Ft.	
	A. TALL FESCUE CREEPING RED FESCUE RED TOP TOTAL	20 20 2 42	0.45 0.45 <u>0.05</u> 0.95	
	B. TALL FESCUE CREEPING RED FESCUE CROWN VETCH OR	15 10 15	0.35 0.25 0.35	
	FLAT PEA TOTAL	30 40 OR 55	0.75 0.95 OR 1.35	
*	C. TALL FESCUE CREEPING RED FESCUE BIRDS FOOT TREFOIL TOTAL	20 20 <u>8</u> 48	0.45 0.45 <u>0.20</u> 1.10	
	D. TALL FESCUE FLAT PEA TOTAL	20 <u>30</u> 50	0.45 <u>0.75</u> 1.20	
	E. CREEPING RED FESCUE 1/ KENTUCKY BLUEGRASS 1/ TOTAL	50 <u>50</u> 100	1.15 1.15 2.30	
	F. TALL FESCUE 1	150	3.60	
	1/FOR HEAVY USE ATHLETIC FIELD NEW HAMPSHIRE COOPERATIVE EXTECURRENT VARIETIES AND SEEDING F	ENSION TURF SPE		

SEEDING RATES

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WOODEN STAKES -SILT FENCE (2 PER BALE) – (SEE DETAIL) —STAKED AND ENTRENCHED STRAW/HAY BALE BINDING WIRE OR TWINE--SOIL COMPACTED TO PREVENT PIPING FILTERED RUNOFF--SEDIMENT-LADEN RUNOFF THE WANTER AND THE WANTER OF T HAYBALE DETAIL NOT TO SCALE BOTTOM OF SWALE (L= DISTANCE SUCH THAT POINTS 'A' & 'B' ARE OF EQUAL ELEVATION)

MAINTENANCE NOTE:

1. STONE CHECK DAMS SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.

STONE CHECK DAM

NOT TO SCALE

CONSTRUCTION SEQUENCE

- PRIOR TO THE START OF ANY ACTIVITY, IT IS THE RESPONSIBILITY OF THE SITE'S SITE DEVELOPER (OR OWNER) TO FILE A NOTICE OF INTENT (NOI) FORM WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) IN ORDER TO GAIN COVERAGE UNDER THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. A PRE CONSTRUCTION MEETING IS TO BE HELD WITH ALL DEPARTMENT HEADS PRIOR TO THE START OF
- WETLAND BOUNDARIES ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION. AT LEAST A TEMPORARY CULVERT OR ROADBED TO BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.
- 3. CUT AND REMOVE TREES IN CONSTRUCTION AREA AS REQUIRED OR DIRECTED.
- 4. INSTALL SILT FENCING, HAY BALES AND CONSTRUCTION ENTRANCES PRIOR TO THE START OF CONSTRUCTION. THESE ARE TO BE MAINTAINED UNTIL THE FINAL PAVEMENT SURFACING AND LANDSCAPING AREAS ARE ESTABLISHED.
- CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. THIS INCLUDES ANY REQUIRED DEMOLITION OF EXISTING STRUCTURES, UTILITIES.
- CONSTRUCT AND/OR INSTALL TEMPORARY OR PERMANENT SEDIMENT AND/OR DETENTION BASIN(S) AS REQUIRED. THESE FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO DIRECTING RUN-OFF TO THEM. STRIP LOAM AND PAVEMENT, OR RECLAIM EXISTING PAVEMENT WITHIN LIMITS OF WORK PER THE RECOMMENDATIONS OF THE PROJECT ENGINEER AND
- STOCKPILE EXCESS MATERIAL. STABILIZE STOCKPILE AS NECESSARY.
- 8. PERFORM PRELIMINARY SITE GRADING IN ACCORDANCE WITH THE PLANS, INCLUDING THE CONSTRUCTION OF ANY RETAINING WALLS AND SOUND WALLS.
- 9. PREPARE BUILDING PAD(S) TO ENABLE BUILDING CONSTRUCTION TO BEGIN.
- 10. INSTALL THE SEWER AND DRAINAGE SYSTEMS FIRST, THEN ANY OTHER UTILITIES IN ACCORDANCE WITH THE PLAN AND DETAILS. ANY CONFLICTS BETWEEN UTILITIES ARE TO BE RESOLVED WITH THE INVOLVEMENT AND APPROVAL OF THE ENGINEER.
- 11. INSTALL INLET PROTECTION AT ALL CATCH BASINS AS THEY ARE CONSTRUCTED IN ACCORDANCE WITH DETAILS.
- 12. ALL SWALES AND DRAINAGE STRUCTURES ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
- 13. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE DITCHES, CHECK DAMS, SEDIMENT TRAPS, ETC., TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS AND/OR PROPERTY.
- 14. PERFORM FINAL FINE GRADING, INCLUDING PLACEMENT OF 'SELECT' SUBGRADE MATERIALS.
- 15. PAVE ALL PARKING LOTS AND ROADWAYS WITH INITIAL 'BASE COURSE'.
- 16. PERFORM ALL REMAINING SITE CONSTRUCTION (i.e. BUILDING, CURBING, UTILITY CONNECTIONS, ETC.)
- 17. LOAM AND SEED ALL DISTURBED AREAS AND INSTALL ANY REQUIRED SEDIMENT AND EROSION CONTROL FACILITIES (i.e. RIP RAP, EROSION CONTROL BLANKETS, ETC.).
- 18. FINISH PAVING ALL ROADWAYS AND PARKING AREAS WITH 'FINISH' COURSE.
- 19. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 20. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE
- 21. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 22. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE BEEN 75%-85% ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND RE-VEGETATE ALL DISTURBED AREAS.
- 23. CLEAN SITE AND ALL DRAINAGE STRUCTURES, PIPES AND SUMPS OF ALL SILT AND DEBRIS.
- 24. INSTALL ALL PAINTED PAVEMENT MARKINGS AND SIGNAGE PER THE PLANS AND DETAILS.
- 25. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
- 26. UPON COMPLETION OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ANY RELEVANT PERMITTING AGENCIES THAT THE CONSTRUCTION HAS BEEN FINISHED IN A SATISFACTORY MANNER.

DRAWING No.

11/3/20 ISSUED TO TECHNICAL ADVISORY COMMITTEE DJM 10/21/20 MEETING WITH CITY PLANNER DJM 10/8/20 REVISED DRAINAGE, REISSUED TO CLIENT DJM DJM 9/14/20 **ISSUED TO CLIENT REVISION** BY DATE

Designed and Produced in NH 85 Portsmouth Ave. Civil Engineering Services 603-772-4746

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EROSION AND SEDIMENT CONTROL DETAILS INDUSTRIAL WAREHOUSE

Project: 375 BANFIELD ROAD, PORTSMOUTH, NH 03801 BANFIELD REALTY LLC Owner of Record: 304 MAPLEWOOD AVENUE, PORTSMOUTH, NH 03801

SHEET 16 OF 16 JBE PROJECT NO. 19190.2