

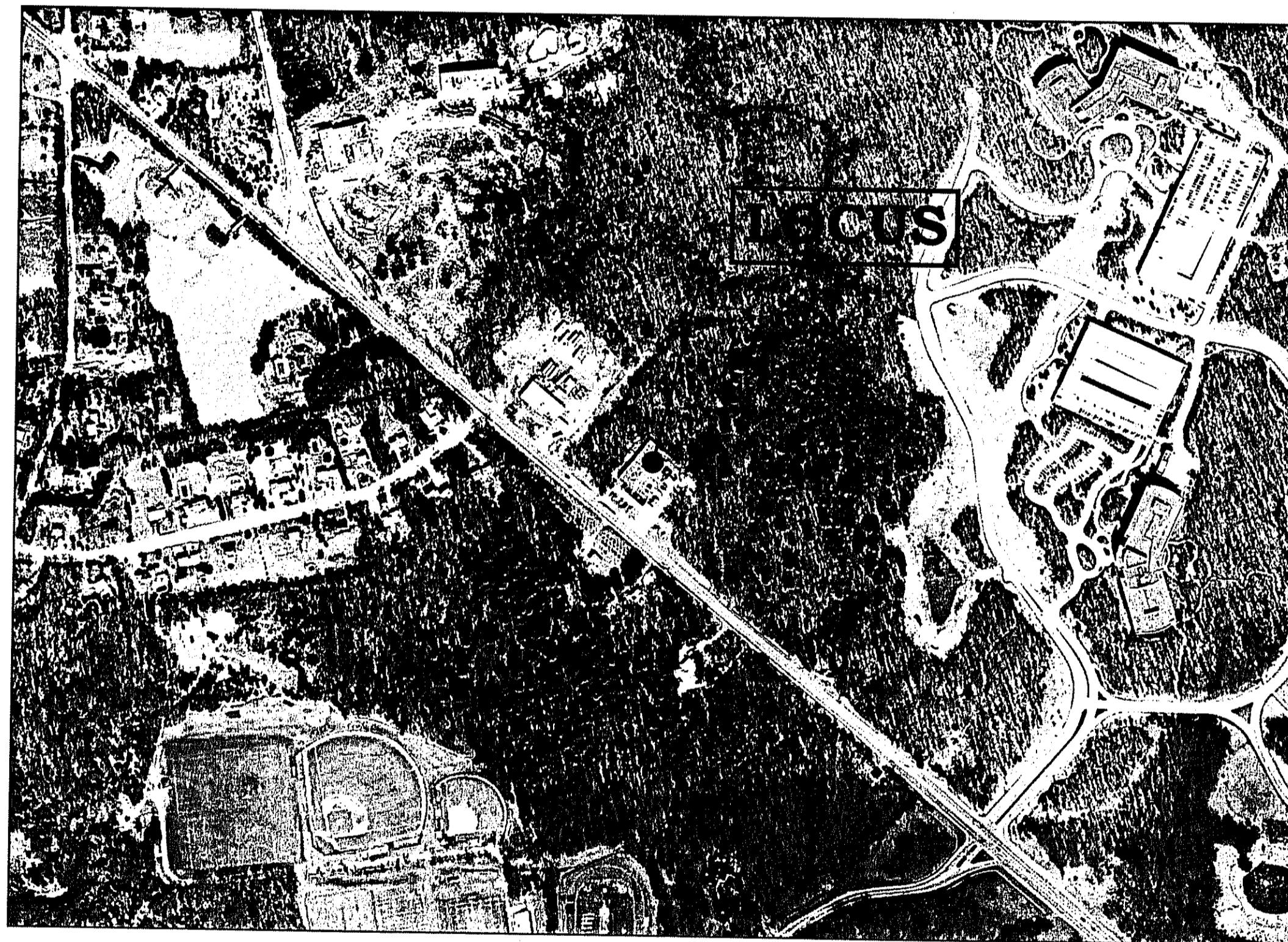
1201 DOUGLAS PIKE IN SMITHFIELD, RHODE ISLAND (Providence County)

OWNER/APPLICANT

PJS Properties, LLC
621 Pound Hill Road, Suite 114
North Smithfield, Rhode Island 02896

CIVIL ENGINEER/SURVEYOR AND LANDSCAPE ARCHITECT

Beals and Thomas, Inc.
32 Court Street
Plymouth, Massachusetts 02360



Locus Map

Scale: 1" = 400'



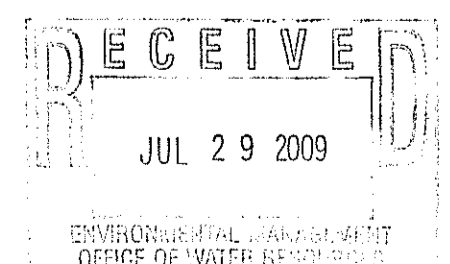
Permit Plan Set - April 22, 2009
Revised Per DEM Comments - July 20, 2009

SHEET INDEX

- 1 Cover Sheet
- 2 Topographic Plan
- 3 Site Preparation and Erosion Control Plan
- 4 Layout and Materials Plan
- 5 Grading, Drainage and Utilities Plan
- 6 Landscape Plan
- 7-10 Site Details
- 11 Site Details and Operation and Maintenance Plan

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 03 2009 FILE # 04-0109
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Ernestine D. Weneck



Job No.: 2158.00
Plan No.: 2158P005B-001
Sheet 1 of 11

PREPARED FOR:

PJS PROPERTIES, LLC

621 POUND HILL ROAD
SUITE 114
NORTH SMITHFIELD,
RHODE ISLAND

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PREPARED BY:

BEALS AND THOMAS, INC.

Civil Engineers-Landscape Architects
Land Surveyors-Planners-Wetland Scientists
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1	07/20/2009 NO CHANGE
0	04/22/2009 PERMIT PLAN SET
	ISSUE DATE DESCRIPTION
KEA/ATL	KEA KCC KCC
FIELD BY	DWN CHK'D APP'D

PROJECT:

1201 DOUGLAS PIKE

ASSESSOR'S PLAT 49, LOT 67A
SMITHFIELD, RHODE ISLAND

SCALE: 1" = 30' DATE: APRIL 22, 2009

METERS 0 5 10 25 30
FEET 0 15 30 60 90

TOPOGRAPHIC PLAN

BTI JOB NO. 2158.00

BTI PLAN NO. 2158P003B-001

SHEET 2 OF 11

LEGEND

- | | | | |
|--|------------------------------|--|-----------------------------------|
| | SEWER LINE/MANHOLE | | 50' PERIMETER WETLAND |
| | DRAIN LINE/MANHOLE | | 100' RIVERBANK WETLAND |
| | CATCH BASIN | | MINOR CONTOUR |
| | GAS LINE/GATE | | MAJOR CONTOUR |
| | WATER LINE/GATE | | SPOT ELEVATION |
| | HYDRANT | | CENTERLINE OF INTERMITTENT STREAM |
| | OVERHEAD WIRE | | BITUMINOUS CONCRETE |
| | UTILITY POLE | | BENCHMARK |
| | GUY WIRE | | CONCRETE |
| | SIGN | | DOOR |
| | BOLLARD POST | | ELECTRIC METER |
| | GUARDRAIL/GUIDERAIL | | EDGE OF PAVEMENT |
| | BITUMINOUS CONCRETE BERM | | GAS METER |
| | TREE | | LOADING DOCK |
| | TREE LINE | | ELECTRIC TRANSFORMER |
| | BUILDING | | STONE BOUND/DRILL HOLE |
| | BOUNDARY OF FORESTED WETLAND | | FOUND |

ZONING CLASSIFICATION-PC

BENCHMARK DATA

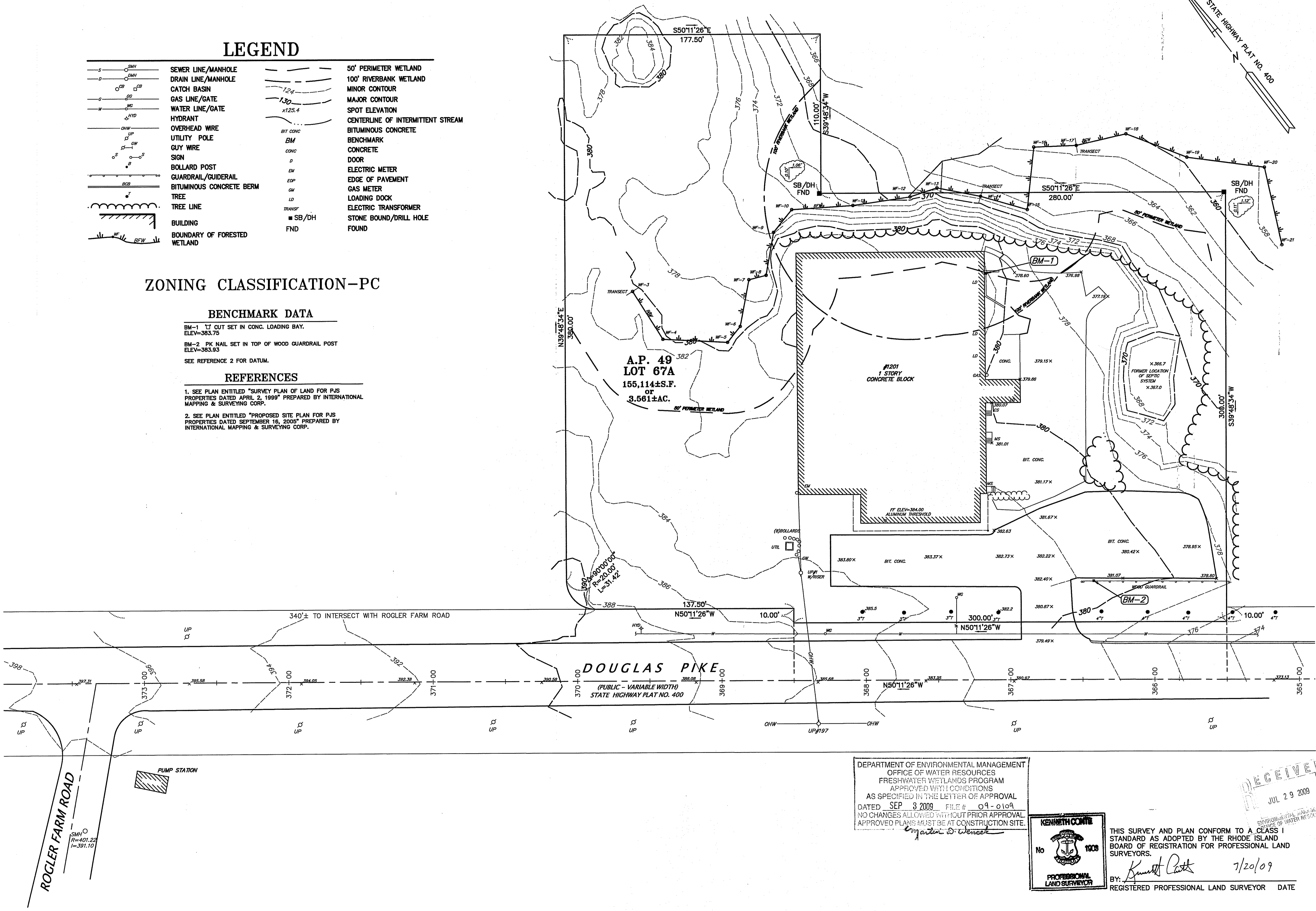
BM-1 CUT SET IN CONC. LOADING BAY.
ELEV=383.75

BM-2 PK NAIL SET IN TOP OF WOOD GUARDRAIL POST
ELEV=383.93

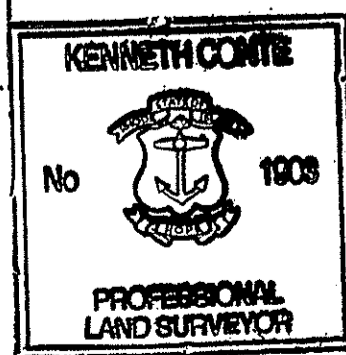
SEE REFERENCE 2 FOR DATUM.

REFERENCES

- SEE PLAN ENTITLED "SURVEY PLAN OF LAND FOR PJS PROPERTIES DATED APRIL 2, 1999" PREPARED BY INTERNATIONAL MAPPING & SURVEYING CORP.
- SEE PLAN ENTITLED "PROPOSED SITE PLAN FOR PJS PROPERTIES DATED SEPTEMBER 16, 2005" PREPARED BY INTERNATIONAL MAPPING & SURVEYING CORP.

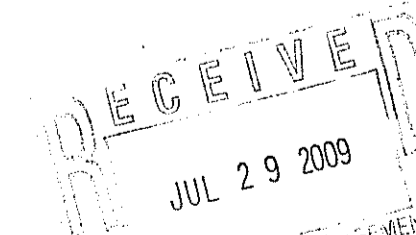


DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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THIS SURVEY AND PLAN CONFORM TO A CLASS I STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: *Kenneth C. Pette* 7/20/09
REGISTERED PROFESSIONAL LAND SURVEYOR DATE



LAYOUT AND MATERIALS NOTES

ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.

COORDINATE THE LOCATION OF ALL SITE LIGHT STANDARDS WITH IMPROVEMENTS SHOWN ON THESE DRAWINGS.

CONTRACTOR SHALL REPORT SIGNIFICANT CONFLICTS TO THE OWNER AND THE ENGINEER FOR RESOLUTION.

DIMENSIONS OF PARKING SPACES AND DRIVEWAYS ARE FROM FACE OF CURB TO FACE OF CURB.

DIMENSIONS FROM BUILDING ARE FROM FACE OF BUILDING TO FACE OF CURB. CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN SITE PLAN DIMENSIONS AND BUILDING PLANS BEFORE PROCEEDING WITH ANY PORTION OF SITE WORK WHICH MAY BE AFFECTED SO THAT PROPER ADJUSTMENTS TO THE SITE LAYOUT CAN BE MADE IF NECESSARY.

SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND ALL DETAIL CONTIGUOUS TO THE BUILDING, LIGHTING, ENTRANCE PATIO, DOORWAY PADS, LOADING DOCK DETAILS, ETC.

EACH HANDICAP PARKING SPACE SHALL BE IDENTIFIED BY A SIGN SIX (6) FEET IN HEIGHT LOCATED AT THE FACE OF THE CURBLINE. THE SIGN SHALL CONTAIN THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AS DESCRIBED IN THE AMERICANS WITH DISABILITIES ACT, PUBLIC LAW 101-336, (SEE DETAIL).

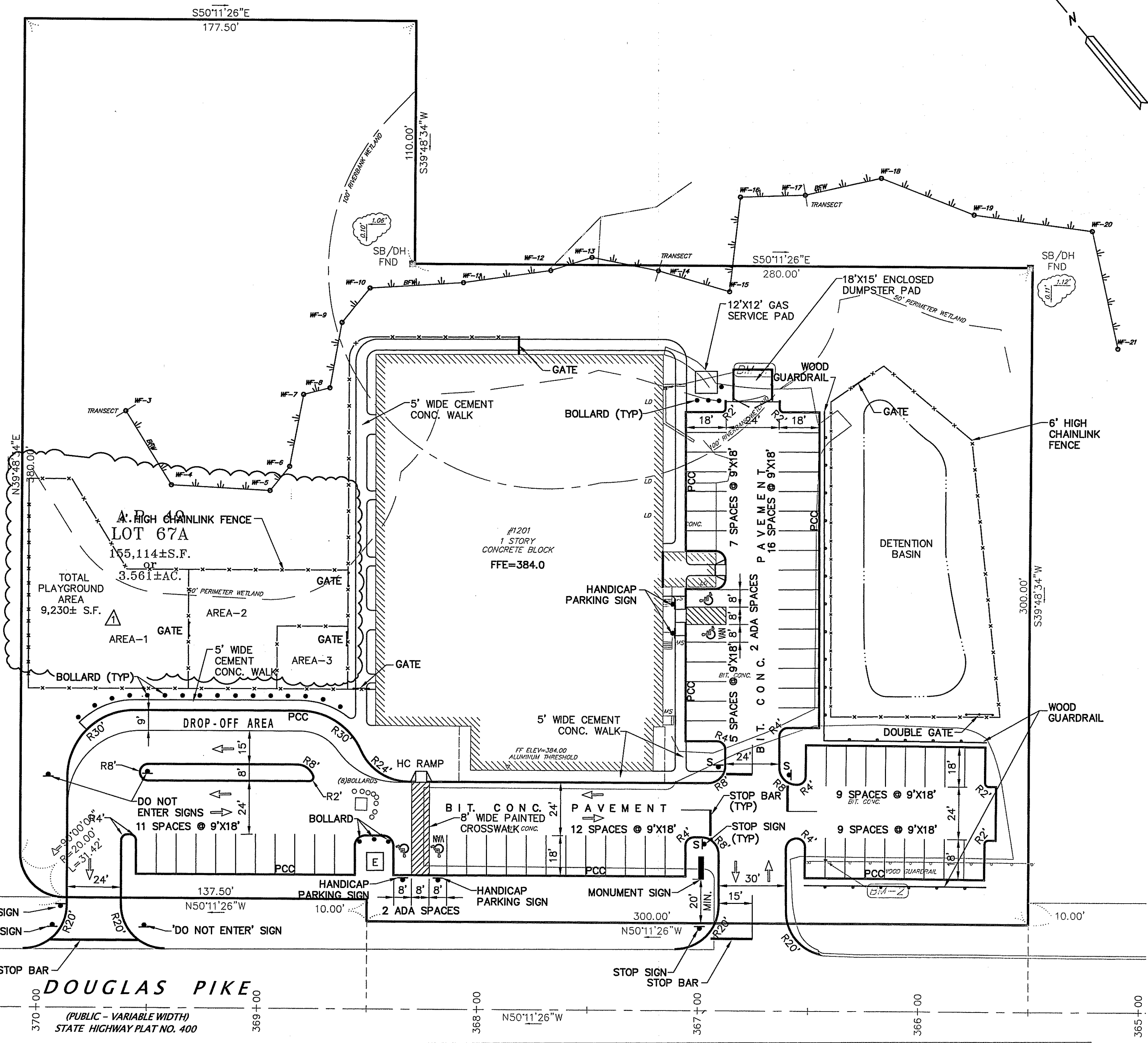
PROTECT EXISTING PROPERTY MONUMENTS AND ABUTTING PROPERTIES DURING CONSTRUCTION ACTIVITIES.

ZONING TABLE			
ZONING CLASSIFICATION	PLANNED CORPORATE DISTRICT (PCD)		
ASSESSORS' PLAT AND LOT	49/67A		
	REQUIRED/ALLOWED	EXISTING	PROPOSED
LOT AREA (ACRES)	3.00	3.56	
FRONTAGE AND WIDTH	150'	447.5 / 457.5	
FRONT YARD SETBACK	150'	68.9'	
SIDE YARD SETBACK	50'	142.6'	
REAR YARD SETBACK	50'	40.8'	
BUILDING HEIGHT	48'	<48'	
BUILDING STORIES	3	1	
FLOOR AREA RATIO	0.5	0.15	
LOT COVERAGE	35%	15.5%	
TOTAL IMPERVIOUS AREA	65%	31.1%	39.5%
PARKING SPACES *			
GENERAL OFFICE (12,000 S.F.)	48		48
DAYCARE (12,000 S.F.)	24		27
TOTAL PARKING SPACES	72		73

* NOTE:

GENERAL OFFICE PARKING SPACES REQUIREMENT; 4 SPACES/1,000 S.F. OF GROSS FLOOR AREA.

DAY CARE PARKING SPACES REQUIREMENT; 1 SPACE/500 S.F. OF INDOOR PLAY OR INSTRUCTION SPACE, WHICHEVER IS GREATER.



PREPARED FOR:

PJS PROPERTIES, LLC

621 POUND HILL ROAD
SUITE 114
NORTH SMITHFIELD,
RHODE ISLAND

GEORGE G. PREBLE
No. 8691
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

DAVID LAWRENCE
NO. 230

NOT ISSUED FOR CONSTRUCTION

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Civil Engineers-Landscape Architects
Land Surveyors-Planners-Wetland Scientists
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SMITHFIELD, RHODE ISLAND

SCALE: 1" = 30' DATE: APRIL 22, 2009

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0 15 30 60 90

LAYOUT AND MATERIALS PLAN

BTL JOB NO. 2158.00

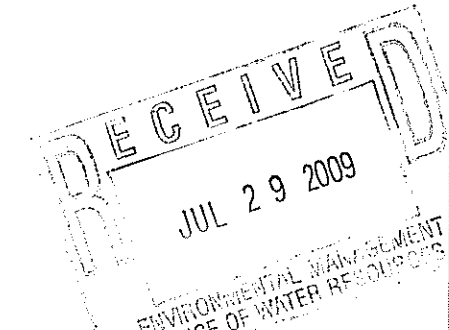
BTL PLAN NO. 2158P006B-002

SHEET 4 OF 11

4

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Ernest D. Wenzel



SEE SHEET 3 FOR LEGEND.

BEALS AND THOMAS, INC. SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, OR PROCEDURES UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTORS EMPLOYEES; OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

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GRADING, DRAINAGE AND UTILITY NOTES

UNDERGROUND UTILITIES WERE COMPILED FROM AVAILABLE RECORD PLANS OF UTILITY COMPANIES AND PUBLIC AGENCIES ARE APPROXIMATE AND ASSUMED. BEFORE COMMENCING SITE WORK IN ANY AREA, CONTACT "DIG SAFE" AT 1-888-344-7233 TO ACCURATELY LOCATE UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO EXCAVATION SHALL BE DONE UNTIL UTILITY COMPANIES ARE PROPERLY NOTIFIED IN ADVANCE.

ALL WORK PERFORMED AND ALL MATERIALS FURNISHED SHALL CONFORM WITH THE LINES, GRADES AND OTHER SPECIFIC REQUIREMENTS OR SPECIFICATIONS OF THE TOWN OF SMITHFIELD DPW.

AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT, CURBS AND EARTHWORK SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS. PITCH EVENLY BETWEEN SPOT GRADES. GRADE ALL AREAS TO DRAIN.

THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER AND ENGINEER FOR RESOLUTION.

ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE PAVEMENT FINISH GRADE UNLESS OTHERWISE NOTED. RIM ELEVATIONS OF DRAINAGE STRUCTURES AND SANITARY SEWER MANHOLES ARE APPROXIMATE.

INSTALL ALL UTILITIES (INCLUDING CONCRETE PADS) PER UTILITY COMPANY AND TOWN OF SMITHFIELD STANDARDS.

AN EROSION CONTROL BARRIER SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT AS SHOWN ON THE PLAN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS.

ALL DRAINAGE PIPES SHALL BE SMOOTH WALLED CORRUGATED POLYETHYLENE PIPE (ADS N-12 OR APPROVED EQUAL) EXCEPT WHERE NOTED OTHERWISE.

THE FORCE MAIN SANITARY PIPE IS SHOWN SCHEMATICALLY. PIPE SIZE AND MATERIAL TO BE DETERMINED.

WATER LINE SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON.

INSULATE SANITARY PIPES WHERE INVERT DEPTH IS LESS THAN FOUR (4) FEET BELOW FINISHED GRADE.

CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS WILL BE RESTORED TO ORIGINAL CONDITION.

ALL WATER WORKS SHALL CONFORM TO SMITHFIELD DPW, WATER DIVISION SPECIFICATIONS, DETAILS, RULES AND REGULATIONS AND HAVE FIVE (5) FEET OF MINIMUM COVER. GAS, ELECTRIC, TELEPHONE AND FIRE ALARM CONNECTION LOCATIONS AND ROUTING ARE SUBJECT TO REVIEW AND APPROVAL BY APPROPRIATE UTILITY COMPANIES AND FIRE DEPARTMENT.

ABANDON EXISTING UTILITY SERVICES ON SITE ACCORDING TO UTILITY COMPANY AND TOWN OF SMITHFIELD REQUIREMENTS.

THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL BARRIERS AFTER REVEGETATION OF DISTURBED AREAS AND AFTER APPROVAL OF THE CONSERVATION COMMISSION AND WETLAND SPECIALIST.

ALL WATER UTILITY IMPROVEMENTS SHALL COMPLY WITH THE AMERICAN WATERWORKS ASSOCIATION STANDARDS AND THE TOWN OF SMITHFIELD WATER DEPARTMENT SPECIFICATIONS.

RIP RAP APRONS SHALL BE INSTALLED AT THE OUTLETS FOR ALL CULVERTS.

WETLANDS ARE TO REMAIN UNDISTURBED. NO ENROACHMENT PERMITTED.

REFER TO DRAINAGE CALCULATIONS FOR PIPE SLOPES.

EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.

STOCKPILED TOPSOIL SHALL BE PLACED NEATLY IN AN AREA INDICATED BY THE OWNER AND PROTECTED BY A PERIMETER OF EROSION CONTROL.

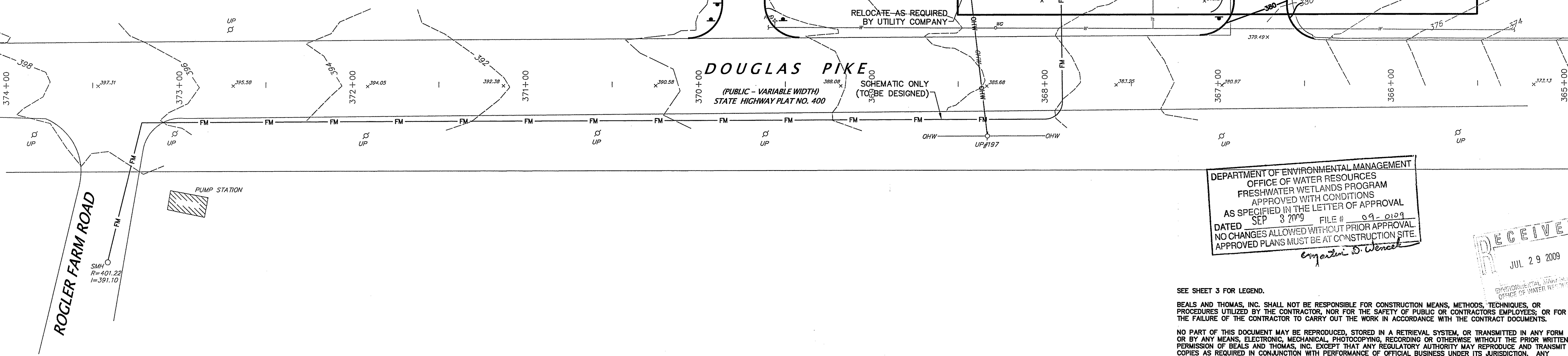
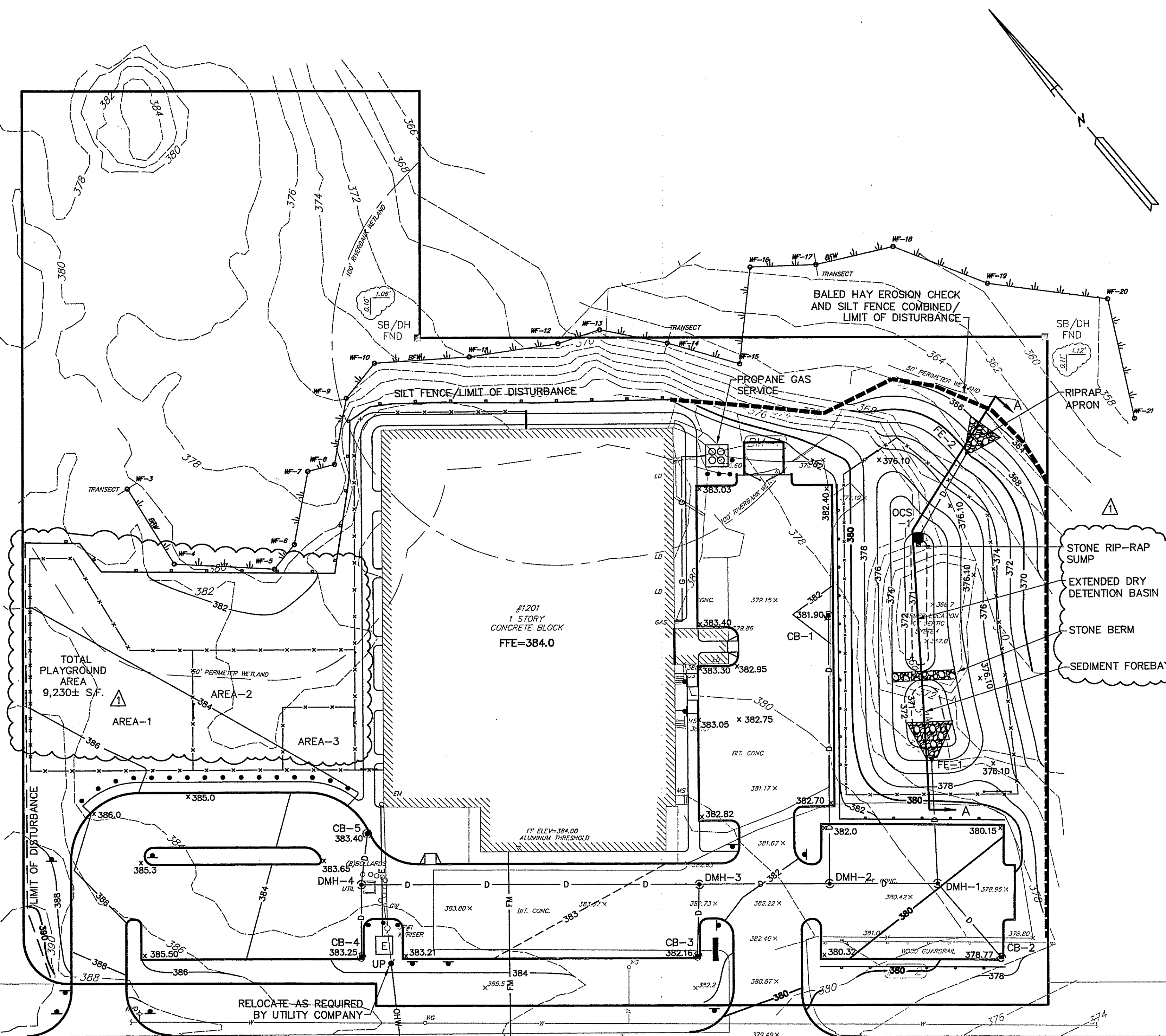
PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM OF 1/8" PER FOOT UNLESS SPECIFIED. ANY DISCREPANCIES NOT ALLOWING THIS MINIMUM PITCH SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.

THE CONTRACTOR SHALL SCHEDULE HIS WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PUDDING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF THE FINISH SUBGRADE AND/OR SURFACE PAVING. PROVIDE TEMPORARY POSITIVE DRAINAGE AS REQUIRED.

UNLESS OTHERWISE INDICATED, ABANDONED EXISTING UTILITY LINES SHALL BE CAPPED AND ABANDONED IN PLACE UNLESS THEY CONFLICT WITH PROPOSED IMPROVEMENTS. CAP REMAINING PORTIONS WHERE PARTIALLY REMOVED.

RIM AND INVERT SCHEDULE

Structure	Rim Elev	Invert Elev	Size	Material	Connection
CB-1	R=381.90	I=377.60	12"	HDPE	TO DMH-2
CB-2	R=378.77	I=374.56	12"	HDPE	TO DMH-1
CB-3	R=382.16	I=377.86	12"	HDPE	TO DMH-3
CB-4	R=383.25	I=378.95	12"	HDPE	TO DMH-4
CB-5	R=383.40	I=378.95	12"	HDPE	TO DMH-4
DMH-1	R=380.05	I=374.20 I=374.70 I=374.10	12" 15" 18"	HDPE	FROM CB-2 FROM DMH-2 TO FE-1
DMH-2	R=381.25	I=375.40 I=375.40 I=375.30	12" 12" 15"	HDPE	FROM CB-1 FROM DMH-3 TO DMH-1
DMH-3	R=382.45	I=376.52 I=376.41 I=376.31	12" 12" 12"	HDPE	FROM CB-3 FROM DMH-4 TO DMH-2
DMH-4	R=383.61	I=378.47 I=378.47 I=378.37	12" 12" 12"	HDPE	FROM CB-4 FROM CB-5 TO DMH-3
FE-1		I=373.70	18"	HDPE	FROM DMH-1
FE-2		I=370.00	15"	HDPE	FROM OCS-1
OCS-1	R=375.14	I=370.50	15"	HDPE	TO FE-2



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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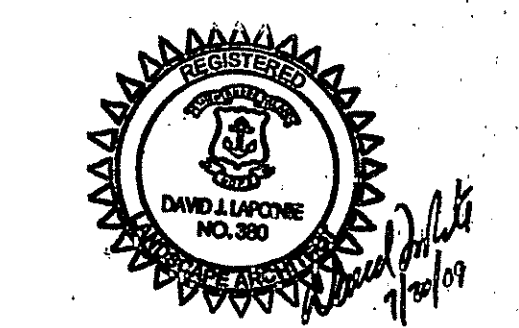
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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES

SEE SHEET 3 FOR LEGEND.

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GEORGE G. PREBLE
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REGISTERED PROFESSIONAL ENGINEER (CIVIL)



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	DES	DWN	CHK'D
			APP'D

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1201 DOUGLAS PIKE
ASSESSOR'S PLAT 49, LOT 67A
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SCALE: 1" = 30'
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FEET
0 15 30 60 90

GRADING, DRAINAGE AND UTILITIES PLAN

BTI JOB NO. 2158.00
BTI PLAN NO. 2158P006B-003
SHEET 5 OF 11

PLANTING NOTES

ALL PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.

ANY PROPOSED SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITH MATERIAL EQUIVALENT TO THE DESIRED MATERIAL IN OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE. PROPOSED SUBSTITUTIONS WILL ONLY BE CONSIDERED IF SUBMITTED WITH ENUMERATED REASONS WHY SUBSTITUTIONS ARE PROPOSED.

ALL PLANTING BEDS TO BE FILLED WITH SOIL AND CROWNED ABOVE ADJACENT LAWN OR IMPROVED AREAS. ALL PLANTING BEDS TO BE MULCHED WITH AGED PINE BARK MULCH TO A DEPTH OF THREE (3) INCHES.

CAUTION SHALL BE USED NOT TO EXTEND MULCH LAYER ABOVE SOIL LEVEL AT TRUNKS/STEMS OF INSTALLED PLANT MATERIAL.

PROVIDE FIVE (5) FOOT DIAMETER MULCH CIRCLE AROUND ALL INDIVIDUAL TREE PLANTINGS AND CONTINUOUS MULCH BED AROUND SHRUB PLANTINGS.

VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT ANY CONFLICTS TO THE OWNER OR HIS REPRESENTATIVE.

NO PLANT SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING.

PLANT MATERIALS SHALL BEAR SAME RELATIONSHIP TO GRADE AS THEY BORE TO GRADE IN THE NURSERY.

ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.

LOAM AND SEED ALL DISTURBED AREAS UNLESS OTHERWISE INDICATED.

REGRADE STOCKPILE AREA AFTER REMOVAL OF SURPLUS MATERIALS (SEE SITE WORK SPECIFICATIONS). LOAM AND SEED THE DISTURBED AREA.

TOPSOIL STRIPPED FROM THE SITE AND PROPERLY STOCKPILED PRIOR TO APPLICATION MAY, UPON APPROVAL OF THE ENGINEER, BE USED FOR PREPARATION OF LAWNS AND PLANTING BEDS. IT SHOULD BE FREE OF LARGE (ONE (1) INCH OR GREATER) COBBLES, ROOTS, OLD SOD, TRASH, WOOD OR OTHER CONTAMINANTS AND BE OF A FRIABLE CONSISTENCY AND SUITABLE FOR PLANT GROWTH.

THE LANDSCAPE CONTRACTOR SHALL FURNISH TOPSOIL. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL AND PRODUCTIVE TOPSOIL OF GOOD CLAY-LOAM TYPE. IT SHALL BE FREE OF WEED SEEDS. TOPSOIL SHALL BE WITHOUT ADMIXTURE OF SUBSOIL AND SHALL BE REASONABLY FREE OF STONES, LUMPS, ROOTS, STICKS AND OTHER FOREIGN MATTER. TOPSOIL SHALL NOT BE WORKED OR APPLIED IN A MUDDY OR WET CONDITION.

TOPSOIL SHALL BE SPREAD TO A MINIMUM DEPTH OF FOUR (4) INCHES AFTER SETTING ON ALL STRIPPED PLANTED AREAS INCLUDING SLOPE STABILIZATION, LAWN AREAS AND PLANTING BEDS AFTER FILLS ARE PROPERLY SETTLED AND SUBGRADE HAS BEEN APPROVED BY THE OWNER. THE SETTLED TOPSOIL SHALL BE UP TO THE FINISHED GRADE AS CALLED FOR ON THE DRAWINGS. SCARIFY SUBGRADE TO A DEPTH OF TWO (2) INCHES BEFORE PLACING TOPSOIL.

REMOVE ALL ROCKS AND DEBRIS FROM SOIL SURFACE AND GRADE TO AN EVEN SURFACE.

PLANTING SEED SHALL BE SOWN IN SEASONAL CONDITIONS AS APPROPRIATE FOR GOOD SEED SURVIVAL, OR AT SUCH TIMES AS APPROVED BY THE OWNER. PROVIDE SUFFICIENT HOSE AND SPRINKLER HEADS FOR ADEQUATE WATERING TO MAINTAIN A MOIST SEED BED AT ALL TIMES.

WATER, MULCH AND SEED BED THOROUGHLY AND IMMEDIATELY AFTER COMPLETION OF MULCHING. SOIL SHALL BE MOISTENED TO A DEPTH OF FOUR (4) INCHES. CONTRACTOR SHALL INSTRUCT OWNERS REPRESENTATIVE ON APPROPRIATE WATERING PROCEDURES DURING INITIAL ESTABLISHMENT.

IF CERTAIN OF THE LAWN AREAS DO NOT SHOW A PROMPT "CATCH", THESE SHALL BE RESEED AT THE SAME RATE AND IN THE SAME MANNER AS BEFORE IN INTERVALS OF TEN (10) DAYS, WHICH PROCESS SHALL CONTINUE UNTIL A GROWTH OF GRASS IS ESTABLISHED OVER THE ENTIRE AREA.

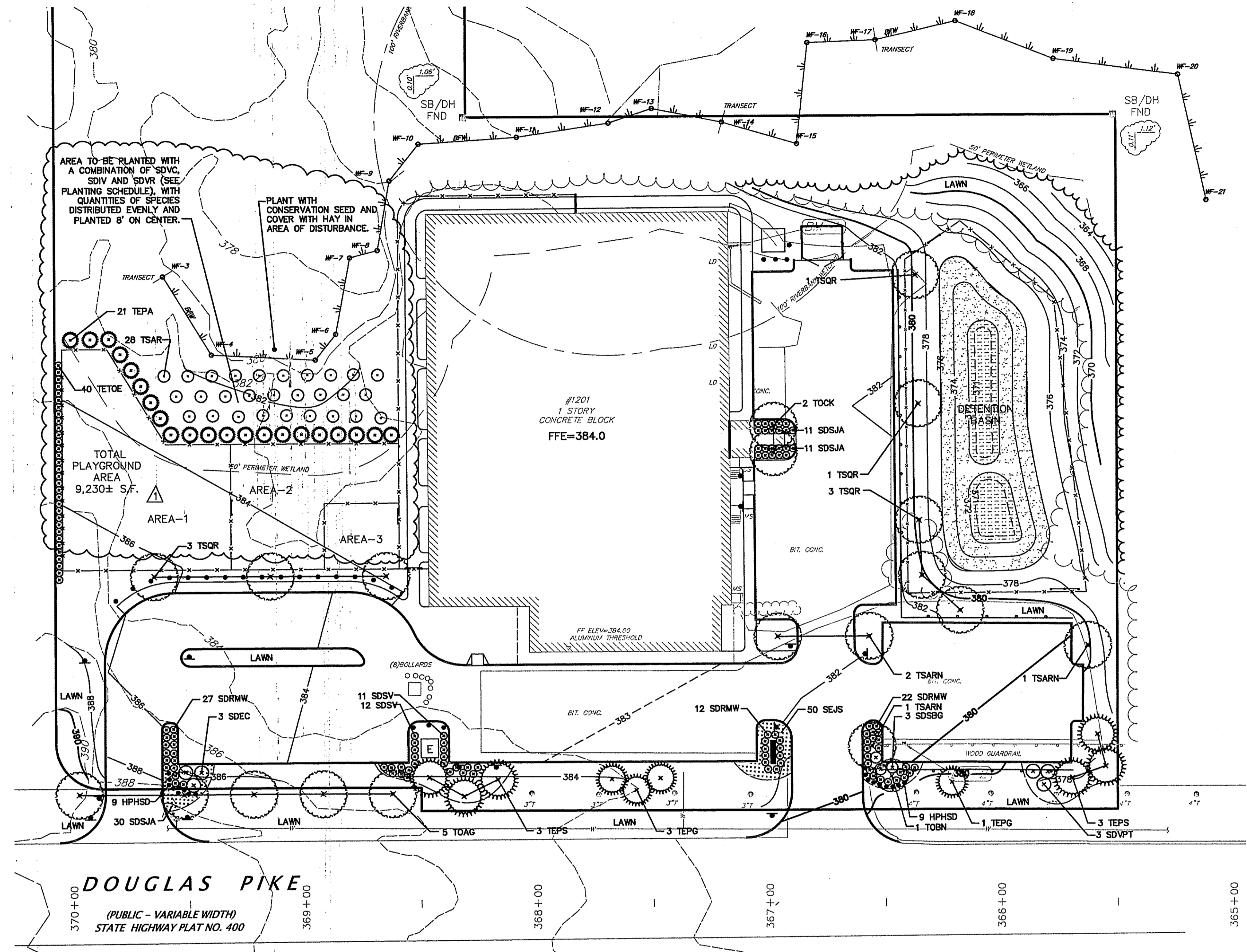
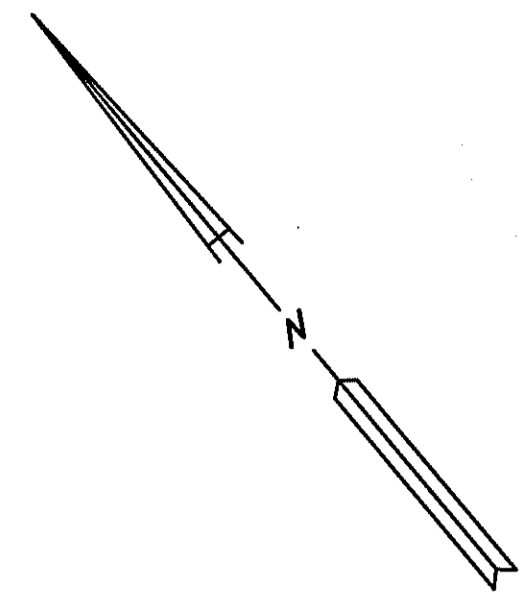
PROTECT NEWLY TOPSOILED, GRADED AND/OR SEEDS AREAS FROM TRAFFIC AND EROSION. KEEP AREAS FREE OF TRASH AND DEBRIS RESULTING FROM LANDSCAPE CONTRACTOR OPERATIONS.

PLACE WARNING SIGNS IN SEEDS AREAS AND ERECT NECESSARY BARRICADES TO PREVENT DAMAGE BY PERSONS OR MACHINES AND MAINTAIN THESE FOR AT LEAST THIRTY (30) DAYS.

REPAIR AND RE-ESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO THE SPECIFIED GRADE AND TOLERANCES.

THE LANDSCAPE CONTRACTOR IS TO CLEAN UP AND REMOVE ANY DEBRIS FROM THE SITE CAUSED BY THE LANDSCAPE CONTRACTOR.

PLANT MATERIAL IS TO BE MAINTAINED BY THE LANDSCAPE CONTRACTOR WHILE THE PROJECT IS UNDERWAY.



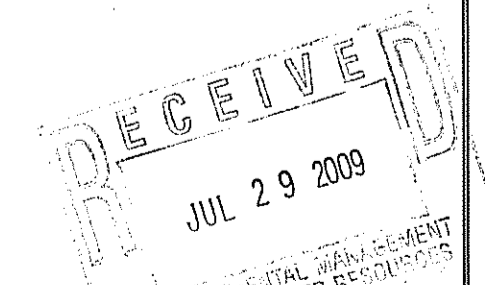
PLANTING SCHEDULE									
KEY	BOTANICAL NAME	COMMON NAME	INITIAL SIZE	MIN. SIZE	MATURE SIZE	SPACING	COMMENTS	CONDITION	
TREES: DECIDUOUS SHADE (TS)									
TSARN	ACER RUBRUM 'NORTHWOOD'	NORTHWOOD RED MAPLE	2 1/2" - 3" CAL	12'	50'	AS SHOWN	FALL COLOR: ORANGE-RED	B&B	
TSAR	ACER RUBRUM	RED MAPLE	4" - 6" HT.	4'	50'	AS SHOWN	FALL COLOR: ORANGE-RED	B&B	
TSQR	QUERCUS RUBRA	RED OAK	2 1/2" - 3" CAL		75'	AS SHOWN	FALL COLOR: RED	B&B	
TREES: DECIDUOUS ORNAMENTAL (TO)									
TOAG	ACER GRISSUM	PAPERBARK MAPLE	2 1/2" - 3" CAL		50'	AS SHOWN	FALL COLOR: RED	B&B	
TOBN	BETULA NIGRA 'HERITAGE CLUMP'	HERITAGE RIVER BIRCH 'MULTISTEM CLUMP'	10" - 12" HT.	12" HT.	50'	AS SHOWN	WHITE BARK CLUMP FORM	B&B	
TOCS	CORNUS KOUSA	KOUSA DOORWOOD	2-2 1/2" CAL	12" HT.	20'	AS SHOWN	WHITE FLOWER IN JUNE, RED FRUIT	B&B	
TOSS	SOPHORA JAPONICA	SCHOLARTREE (PAGODA TREE)	2-2 1/2" CAL	12" HT.	30'	AS SHOWN	WHITE FLOWER IN AUGUST	B&B	
TREES: EVERGREEN (TE)									
TEPA	PICEA PLUNGENS	COLORADO SPRUCE	6-7" HT		60'	AS SHOWN	BRIGHT GREEN	B&B	
TEPS	PICEA GLAUCA	WHITE SPRUCE	6-7" HT		60'	AS SHOWN	NATIVE BLUE/GREEN NEEDLES	B&B	
TEPS	PINUS STROBUS	WHITE PINE	6-7" HT		80'	AS SHOWN	NATIVE, FAST GROWING	B&B	
TETOE	THUJA OCCIDENTALIS 'EMERALD'	EMERALD COLUMNAR ARBORVITAE	5-6" HT		20'	AS SHOWN	SLOW GROWING	B&B	
SHRUBS: EVERGREEN (SE)									
SEIS	JUNIPERUS CHINENSIS 'SARGENTII'	SARGENT JUNIPER	#2 POT		1'	AS SHOWN	BRIGHT GREEN	CONT.	
SETO	TAXUS CUSPIDATA 'GREENWAVE'	GREENWAVE YEW	#2 POT		2'	AS SHOWN	DARK GREEN	CONT.	
SHRUBS: DECIDUOUS (SD)									
SDS	ERIGONANTHUS CAMPANULATUS	REDVEIN ERIGONANTHUS	3-4" HT		15'	AS SHOWN	WHITE FLOWER MAY-JUNE, FALL: RED	CONT.	
SDRH	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	#2 POT		30"	AS SHOWN	FALL: RED	CONT.	
SDRW	ROSA 'WHITE MEDLAND'	WHITE MEDLAND ROSE	#2 POT		2'	AS SHOWN	WHITE FLOWER JUNE-PROST	CONT.	
SDSRA	ROSA 'SUNLIT'	SUNLIT ROSE	#2 POT		2'	AS SHOWN	CRIMSON FLOWER, FALL: RED-ORANGE	CONT.	
SDSRA	SPYRAEA 'JAPONICA' 'ALPINA'	DAPHNE SPIRAEA	#2 POT		15'	AS SHOWN	PINK FLOWER JUNE-JULY	CONT.	
SDSY	STYNGIA VILGARIS	COMMON LILAC	3-4" HT		15'	AS SHOWN	LAVENDER FLOWER LATE MAY	CONT.	
SDVPT	VIBURNUM PFLICATUM 'MENTOSUM'	DOUBLE FILE VIBURNUM	3-4" HT		8'	AS SHOWN	WHITE FLOWER JUNE	CONT.	
SDV	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	4-6" HT		8'	B.O.C.		B&B	
SDV	VLEX VERTICILLATA	WINTERBERRY	4-6" HT		10'	B.O.C.		B&B	
SDV	VIBURNUM COCCINUM	NORTHERN ARROWWOOD	4-6" HT		8'	B.O.C.		B&B	
HERBACEOUS PERENNIALS									
HPHSD	HEMEROCALLIS 'STELLA D'ORO'	STELLA D'ORO DAYLILY	#2 POT				YELLOW FLOWER SUMMER	CONT.	

DETENTION BASIN SCHEDULE			
KEY	ELEVATION/LOCATION	ZONE	RATE
[Pattern]	<372'	NEW ENGLAND WET MIX 1	BROADCAST AT 2,500 SF/1 LB
[Pattern]	372'-376'	NEW ENGLAND EROSION 1 CONTROL/RESTORATION MIX	BROADCAST AT 1245 SF/1 LB

1 AVAILABLE THROUGH NEW ENGLAND WETLAND PLANTS, INC., AMHERST, MA, (413) 548-8000

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 03 2009 FILE # 04-009
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

Emmett D. Wenzel



SEE SHEET 3 FOR LEGEND.

BEALS AND THOMAS, INC. SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, OR PROCEDURES UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTORS EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC, MECHANICAL, PHOTOCOPIING, RECORDING OR OTHERWISE WITHOUT THE PRIOR WRITTEN PERMISSION OF BEALS AND THOMAS, INC. EXCEPT THAT ANY REGULATORY AUTHORITY MAY REPRODUCE AND TRANSMIT COPIES AS REQUIRED IN CONNECTION WITH PERFORMANCE OF OFFICIAL BUSINESS UNDER ITS JURISDICTION. ANY MODIFICATIONS TO THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF BEALS AND THOMAS, INC. SHALL RENDER IT INVALID AND UNUSABLE.

PREPARED FOR:

PJS PROPERTIES, LLC

621 POUND HILL ROAD
SUITE 114
NORTH SMITHFIELD,
RHODE ISLAND

REGISTERED PROFESSIONAL ENGINEER
DANIEL W. BEALS
NO. 382

NOT ISSUED FOR CONSTRUCTION

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PREPARED BY:

BEALS AND THOMAS, INC.

Civil Engineers-Landscape Architects
Land Surveyors-Planners-Wetland Scientists
32 Court Street
Plymouth, Massachusetts 02360
Tel.: 508-746-3288
Fax: 508-746-6407
(email) mail@btweb.com
(website) http://www.btweb.com

5	
4	
3	
2	
1	07/20/2009 REVISED PER DEM COMMENTS
0	04/22/2009 PERMIT PLAN SET
	ISSUE DATE DESCRIPTION
	KRJ KRJ DJL DJL
	DES DWN CHK'D APP'D

PROJECT:

1201 DOUGLAS PIKE

ASSESSOR'S PLAT 49, LOT 67A
SMITHFIELD, RHODE ISLAND

SCALE: 1" = 30' DATE: APRIL 22, 2009

METERS 0 5 10 25
FEET 15 30 60 90

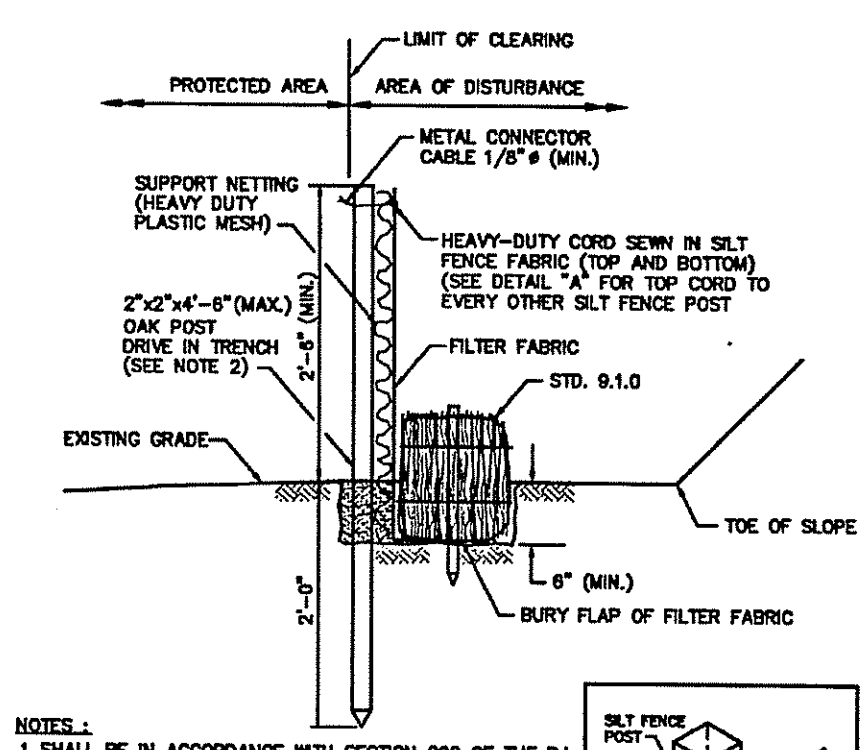
LANDSCAPE PLAN

BTI JOB NO. 2158.00

BTI PLAN NO. 2158P006B-004

SHEET 6 OF 11

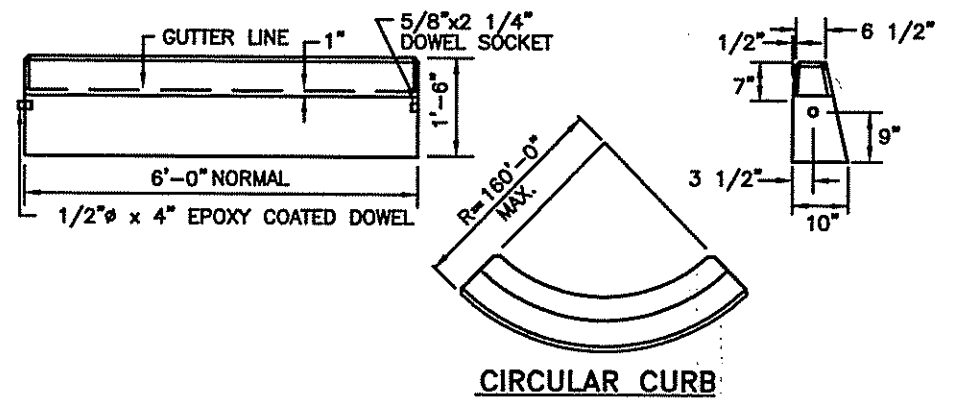
6



- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 2. STD. 8.1.0 IS INSTALLED "TIGHT" AGAINST SILT FENCE. THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO TRENCH AFTER INSTALLATION OF GRASS CONTROL DEVICE. SILT FENCE FABRIC SHALL NOT BE SLIT. STD. 8.1.0 POST SHALL BE DRIVEN THROUGH SILT FENCE FABRIC. 2"x2"x4"-8" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAINFOREST GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 3. 1"x4"-8" (MAX.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE AND DALED HAY SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

BALED HAY EROSION CHECK AND SILT FENCE COMBINED

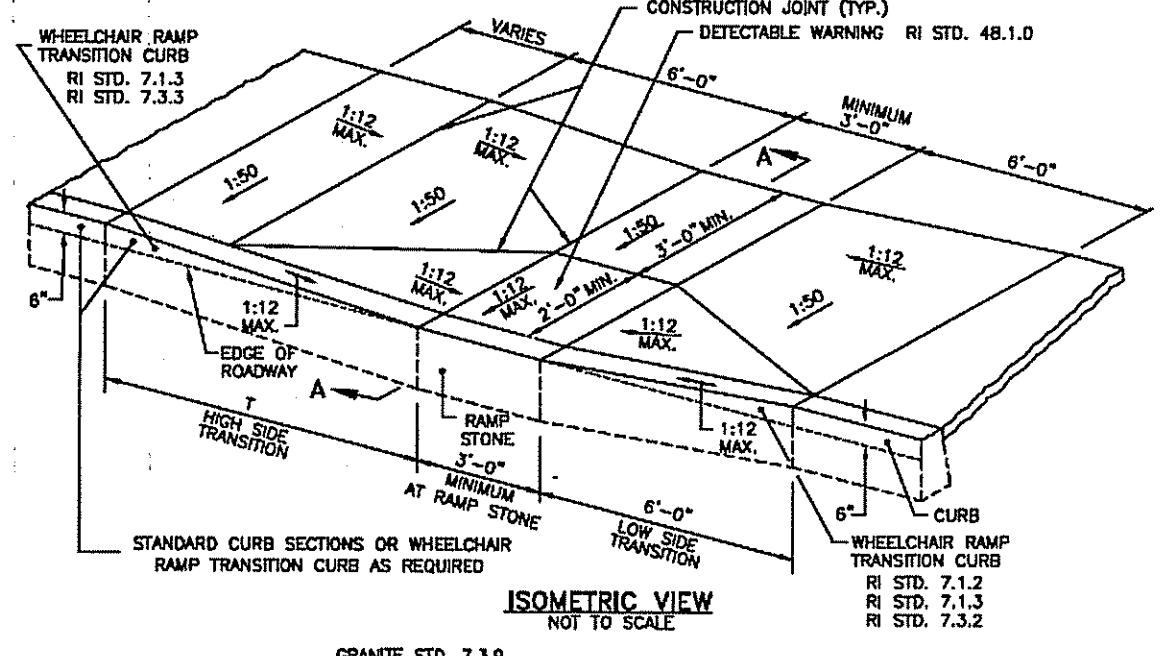
R.I. STANDARD 9.3.0



- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
 3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
 4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADIUS OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
 5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

PRECAST CONCRETE CURB

R.I. STANDARD 7.1.0

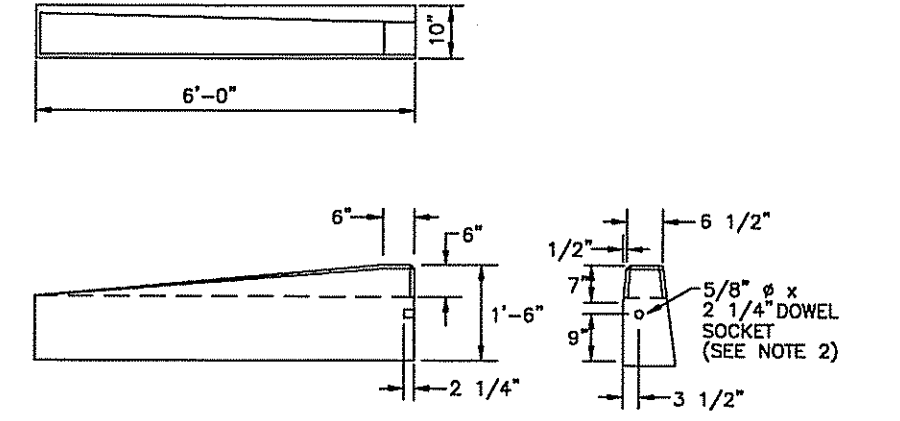


ROADWAY PROFILE GRADE (FT.)	RAMP GRADE (FT.)
0.00	6.0
0.01	7.0
0.02	8.0
0.03	9.5
0.04	11.5
0.05	15.0

- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
 2. WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, THE WHEELCHAIR RAMP WILL BE PLACED SUCH THAT THE OBSTRUCTION FALLS OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
 3. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
 4. DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF ALL WHEELCHAIR RAMPS.
 5. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
 6. IN NO INSTANCE SHALL THE SIDEWALK CROSS SLOPE EXCEED 1:50 EXCEPT WITHIN THE RAMP AREA.
 7. AN UNSTRUCTURED PART OF TRAVEL WITH A MINIMUM WIDTH OF 3'-0" SHALL BE MAINTAINED.
 8. THE WHEELCHAIR RAMP SLOPE AND SIDE SLOPES (TRANSITIONS), MUST NOT EXCEED 1:12. HOWEVER, THESE SLOPES MAY BE FLATTER THAN 1:12 WHEN WARRANTED BY SURROUNDING CONDITIONS.
 9. WHERE THE ROAD PROFILE EXCEEDS SIX THE HIGH SIDE TRANSITION LENGTH (C) SHALL BE EIGHTEEN FEET (18'-0").
 10. IN NO CASE, WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED BEHIND THE STOP LINE.
 11. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE SIDEWALK.
 12. THE WHEELCHAIR RAMP SHALL BE CENTERED PARALLEL, OPPOSITE THE ROAD POINT WHEN POSSIBLE.
 13. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
 14. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
 15. DETECTABLE WARNINGS TO BE PAID FOR UNDER SECTION 942 OF THE R.I. STANDARD SPECIFICATIONS.
 16. IF CONCRETE DEPTH FOR WALKER WHEELCHAIR RAMPS ONLY, USE 4" DEPTH FOR TANGENT (WALK-BLOCK) LOCATIONS.

WHEELCHAIR RAMP

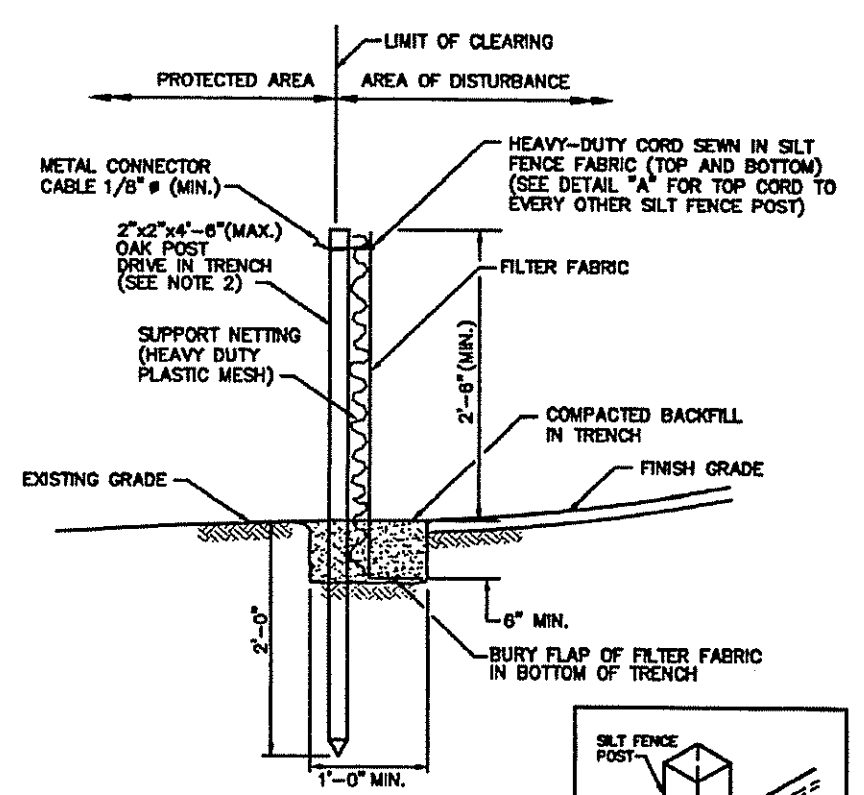
R.I. STANDARD 4.3.3.0



- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" x 4" EPOXY COATED DOWEL.
 3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
 4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

6'-0" PRECAST CONCRETE TRANSITION CURB

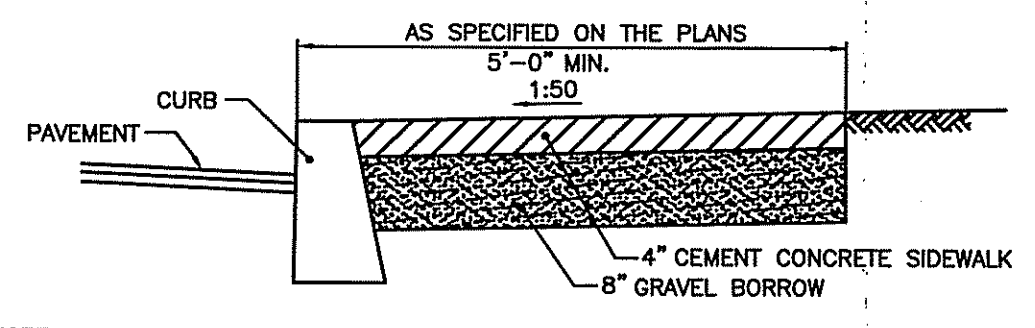
R.I. STANDARD 7.1.2



- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 2. 2"x2"x4"-8" (MAX.) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAINFOREST GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 3. 1"x4"-8" (MAX.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 4. SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

SILT FENCE

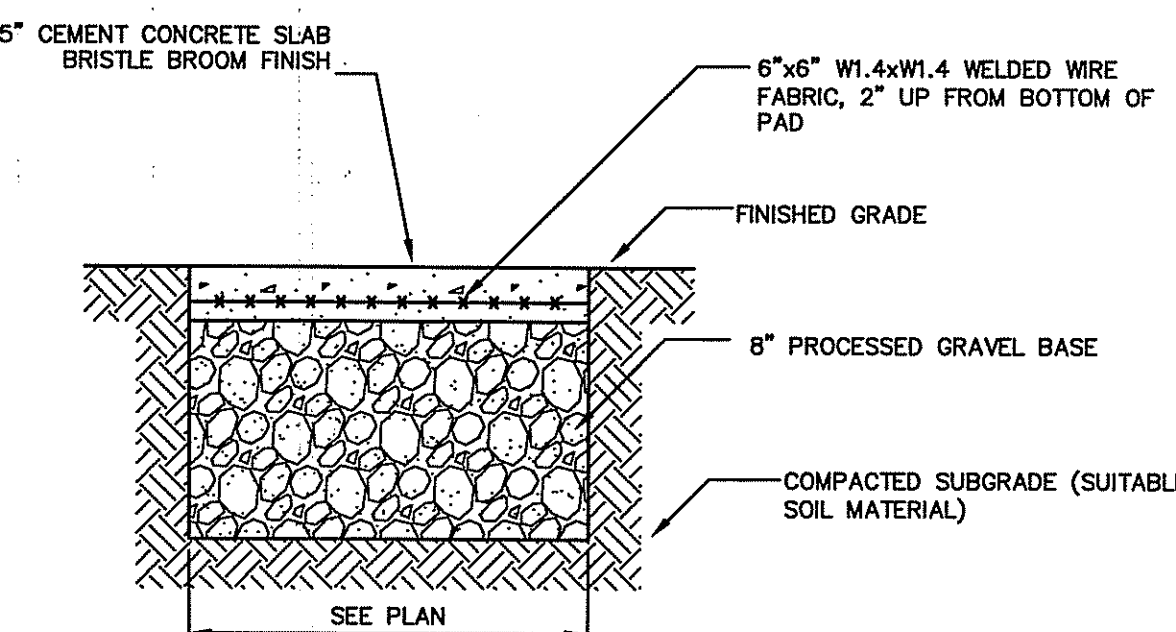
R.I. STANDARD 9.2.0



- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
 2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.

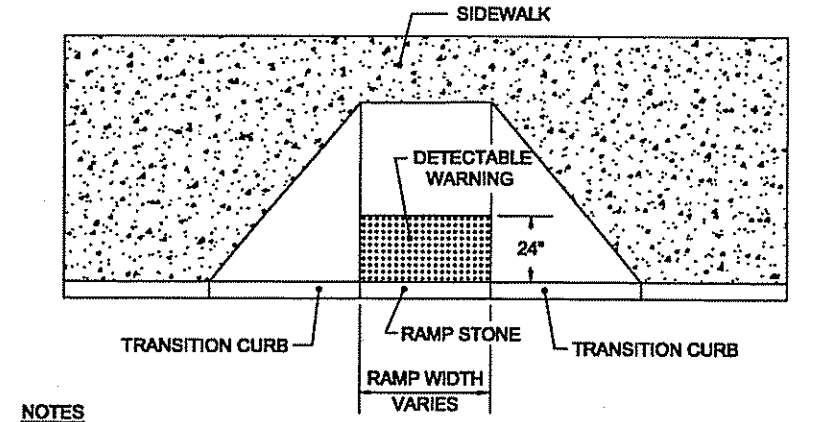
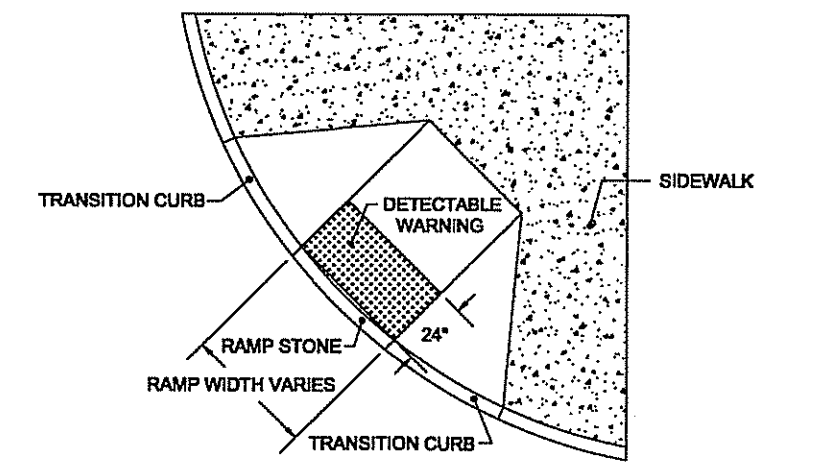
CEMENT CONCRETE SIDEWALK

R.I. STANDARD 4.3.1.0



CEMENT CONCRETE DUMPSTER AND GAS SERVICE PAD

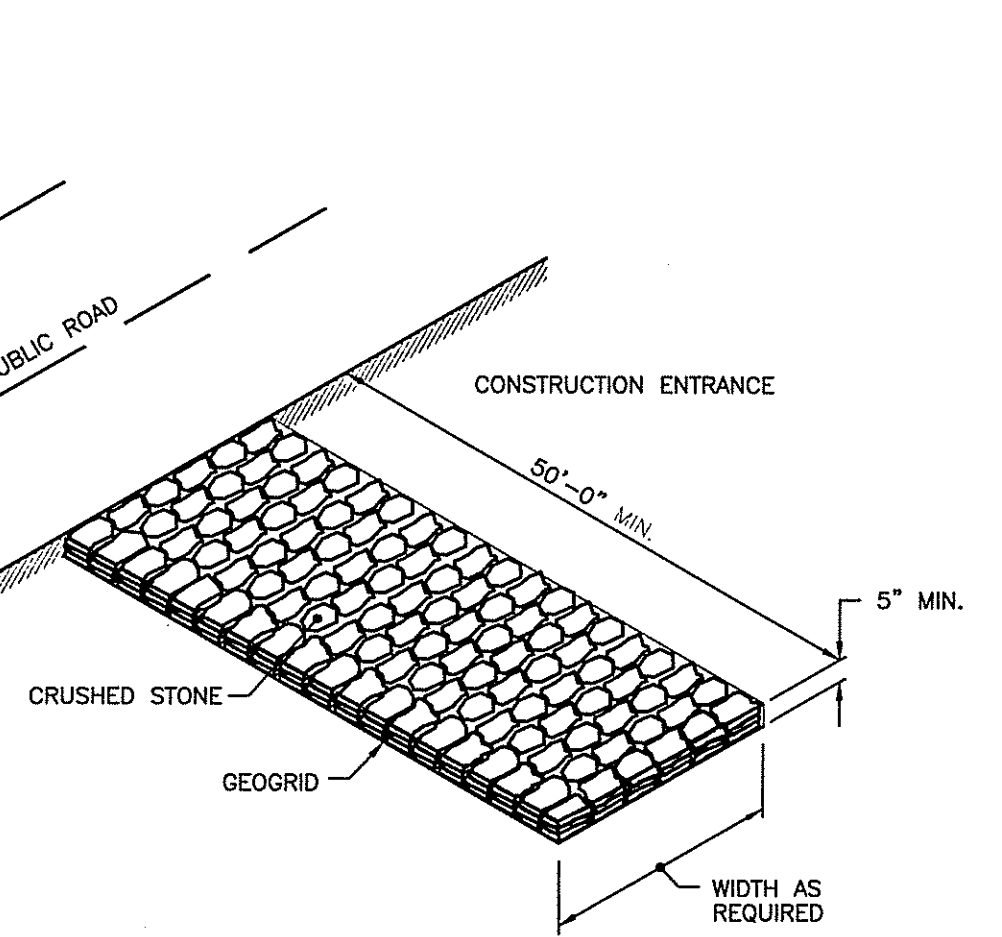
NOT TO SCALE



- NOTES:**
1. DETECTABLE WARNING SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE R.I. STANDARD SPECIFICATIONS.

DETECTABLE WARNING STRIP

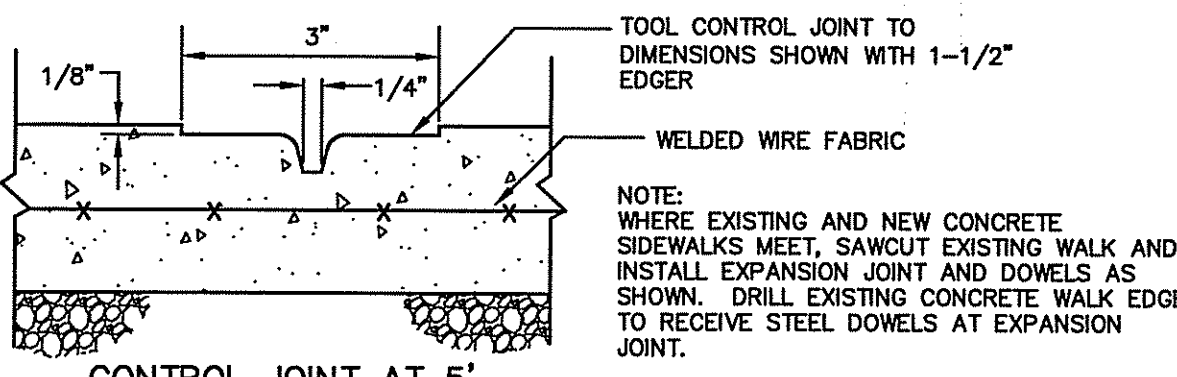
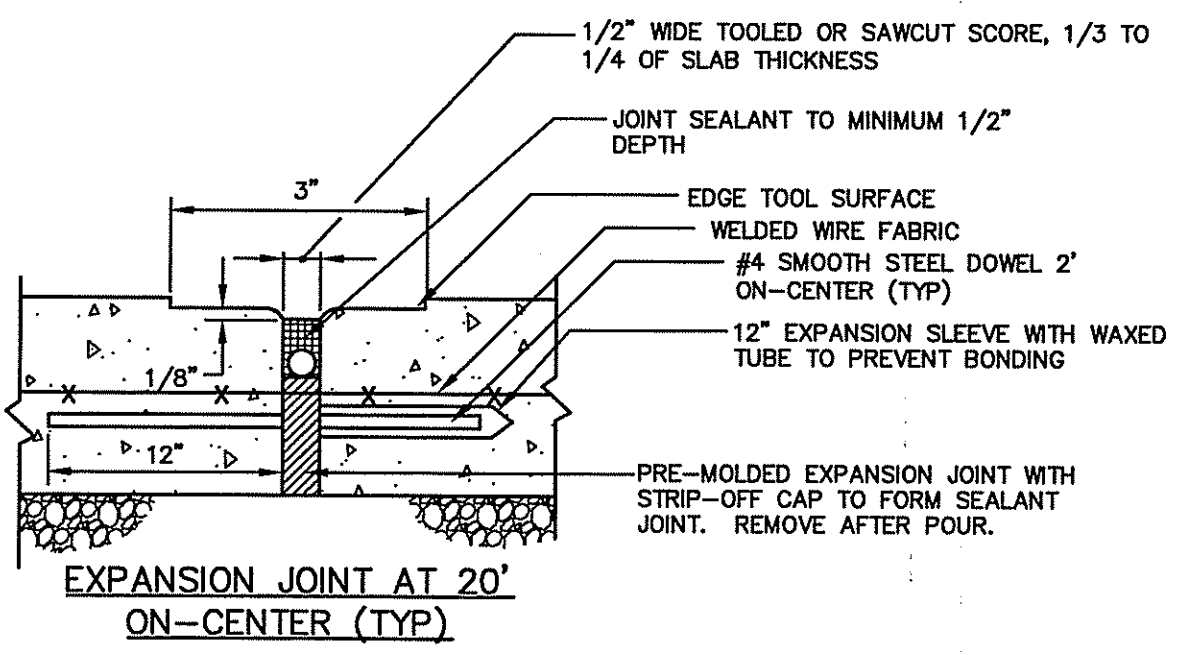
R.I. STANDARD 48.1.1



- NOTE:** SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

CONSTRUCTION ACCESS

R.I. STANDARD 9.9.0

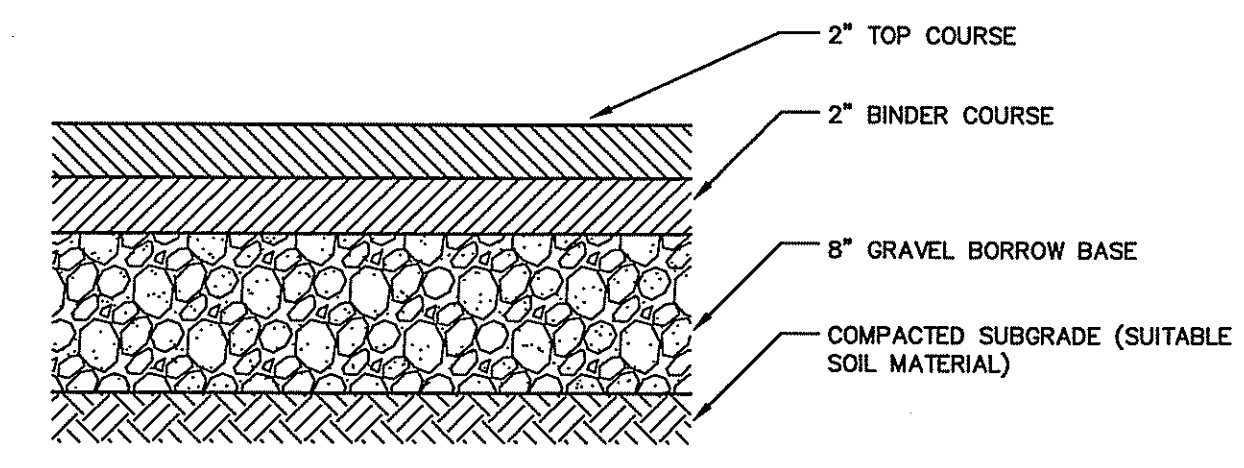


- NOTE:** WHERE EXISTING AND NEW CONCRETE SIDEWALKS MEET, SAWCUT EXISTING WALK AND INSTALL EXPANSION JOINT AND DOWELS AS SHOWN. DRILL EXISTING CONCRETE WALK EDGE TO RECEIVE STEEL DOWELS AT EXPANSION JOINT.

EXPANSION AND CONTROL JOINTS

NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 03 2009 FILE # 09-0109
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

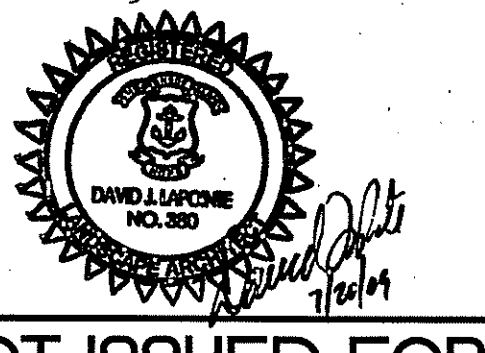


BITUMINOUS CONCRETE PAVEMENT

NOT TO SCALE

PREPARED FOR:
PJS PROPERTIES, LLC
621 POUND HILL ROAD
SUITE 114
NORTH SMITHFIELD,
RHODE ISLAND

GEORGE G. PREBLE
No. 8691
REGISTERED
PROFESSIONAL ENGINEER
(CIVIL)



NOT ISSUED FOR CONSTRUCTION

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PREPARED BY:
BEALS AND THOMAS, INC.
Civil Engineers-Landscape Architects
Land Surveyors-Planners-Wetland Scientists
32 Court Street
Plymouth, Massachusetts 02360
Tel.: 508-746-3288
Fax: 508-746-6407
(email) mail@btweb.com
(website) http://www.btweb.com

5	
4	
3	
2	
1	07/20/2009 NO CHANGE
0	04/22/2009 PERMIT PLAN SET
	ISSUE DATE DESCRIPTION
FDW	FDW DJL GGP
DES	DWN CHK'D APP'D

PROJECT:
1201 DOUGLAS PIKE
ASSESSOR'S PLAT 49, LOT 67A
SMITHFIELD, RHODE ISLAND

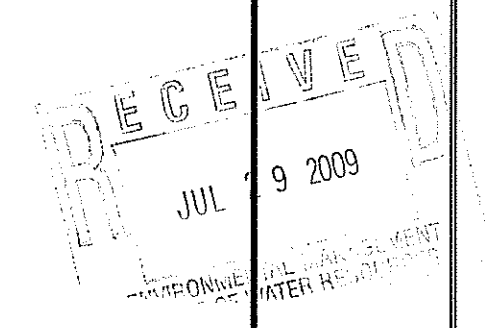
SCALE: AS NOTED DATE: APRIL 22, 2009
METERS 0 5 10 25
FEET 0 15 30 60 90

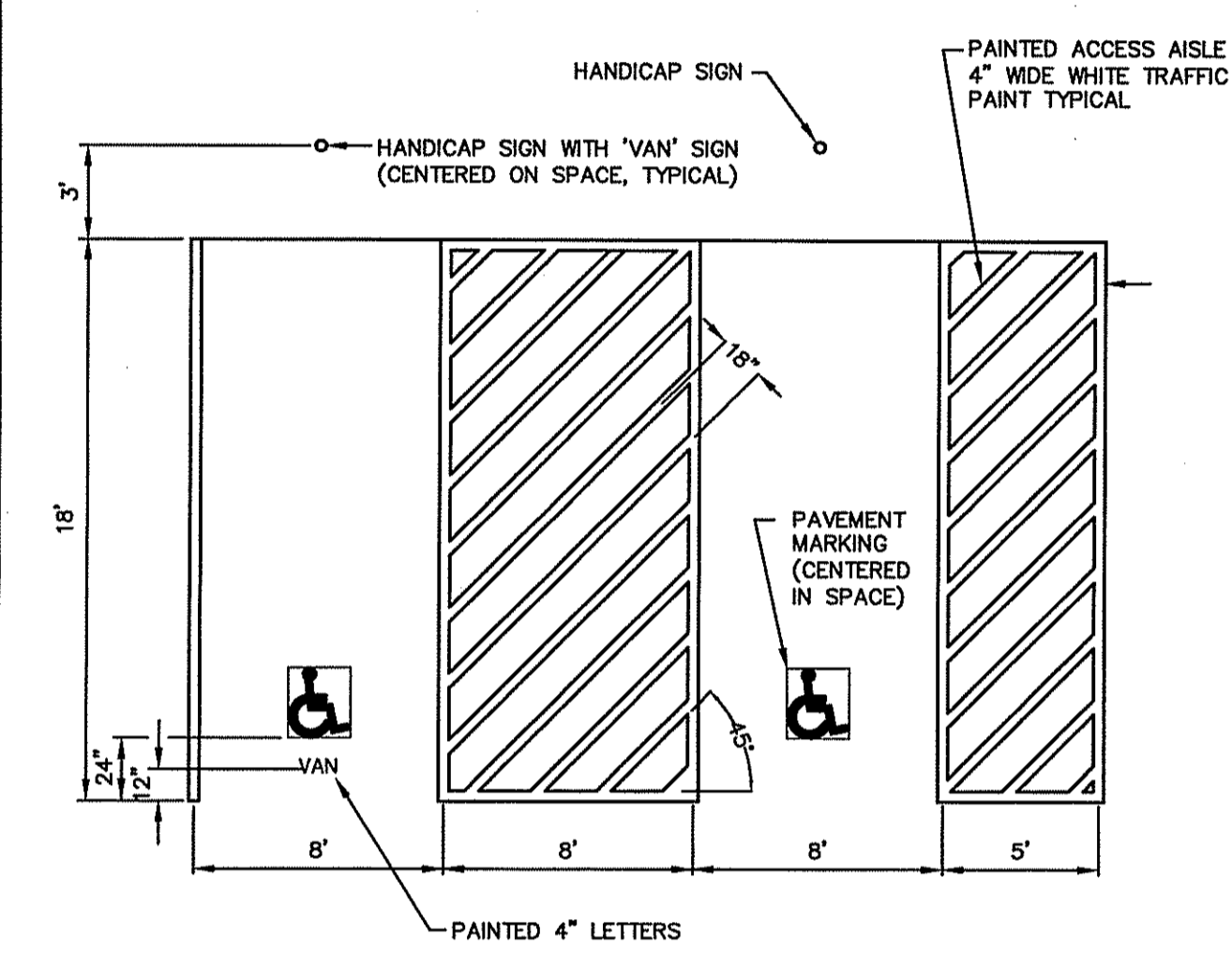
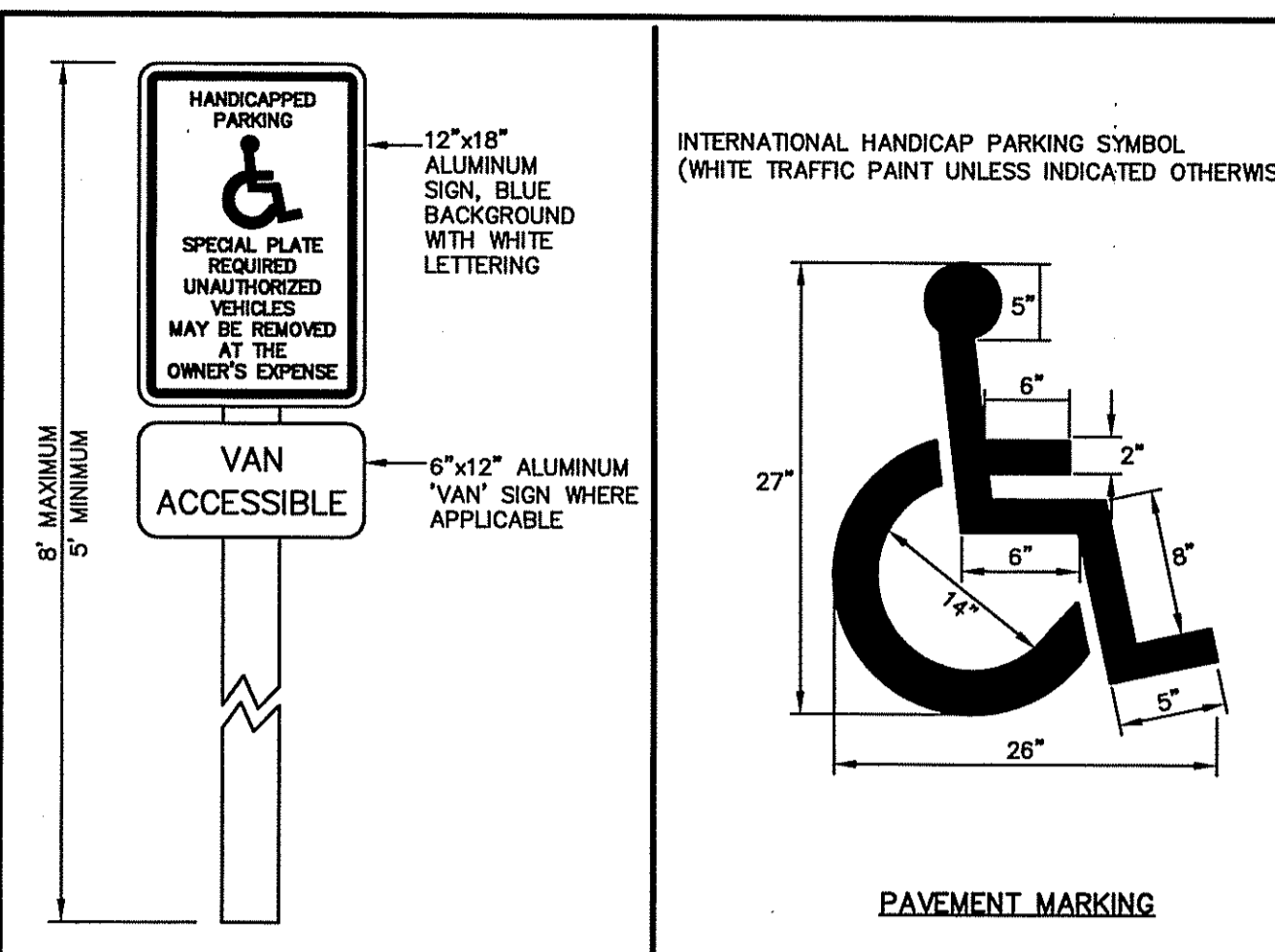
SITE DETAILS

B71 JOB NO. 2158.00
B71 PLAN NO. 2158P007B-001
SHEET 7 OF 11

7

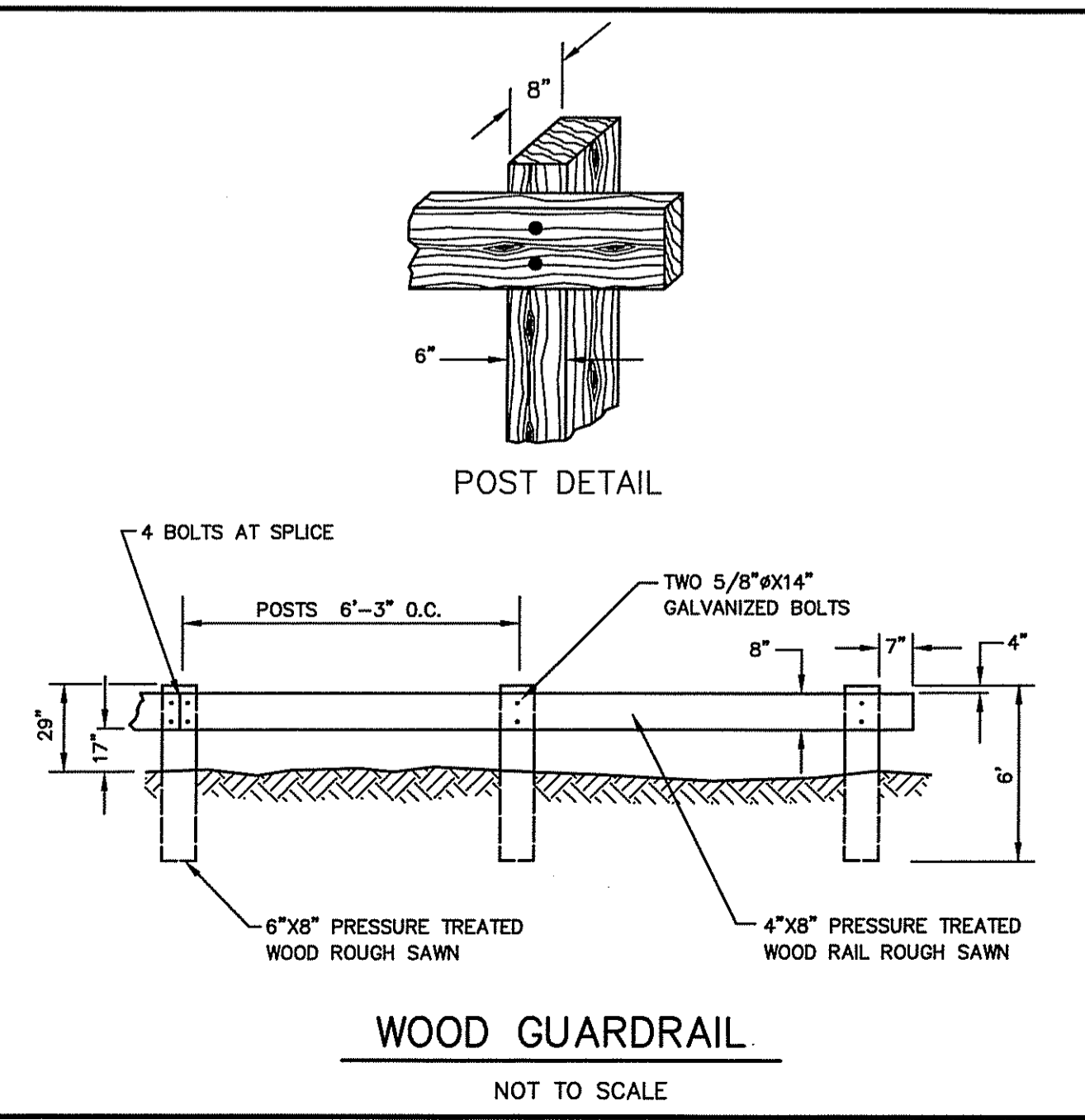
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NOTES:
 1. ALL HANDICAP PARKING AND SIGNAGE SHALL BE IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD.
 2. SIGN(S) SHALL BE LOCATED AS SHOWN UNLESS INDICATED OTHERWISE IN THE SITE PLAN.
 3. VEHICLE STANDING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES.
 4. ONE IN EVERY EIGHT ACCESSIBLE SPACES (ONE MINIMUM) SHALL BE VAN ACCESSIBLE, WITH AN 8 FOOT WIDE ACCESS AISLE.
 5. THE LENGTH OF ACCESSIBLE SPACES SHOULD BE AT LEAST THE SAME AS FOR PARKING SPACES GENERALLY IN ACCORDANCE WITH THE LOCAL ZONING REQUIREMENTS, OR 18 FOOT, WHATEVER GREATER.
 6. PARKED VEHICLES SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE ROUTE BY OVER RANGING OR PROTRUDING INTO IT.

HANDICAP SIGN AND PAVEMENT MARKING
NOT TO SCALE

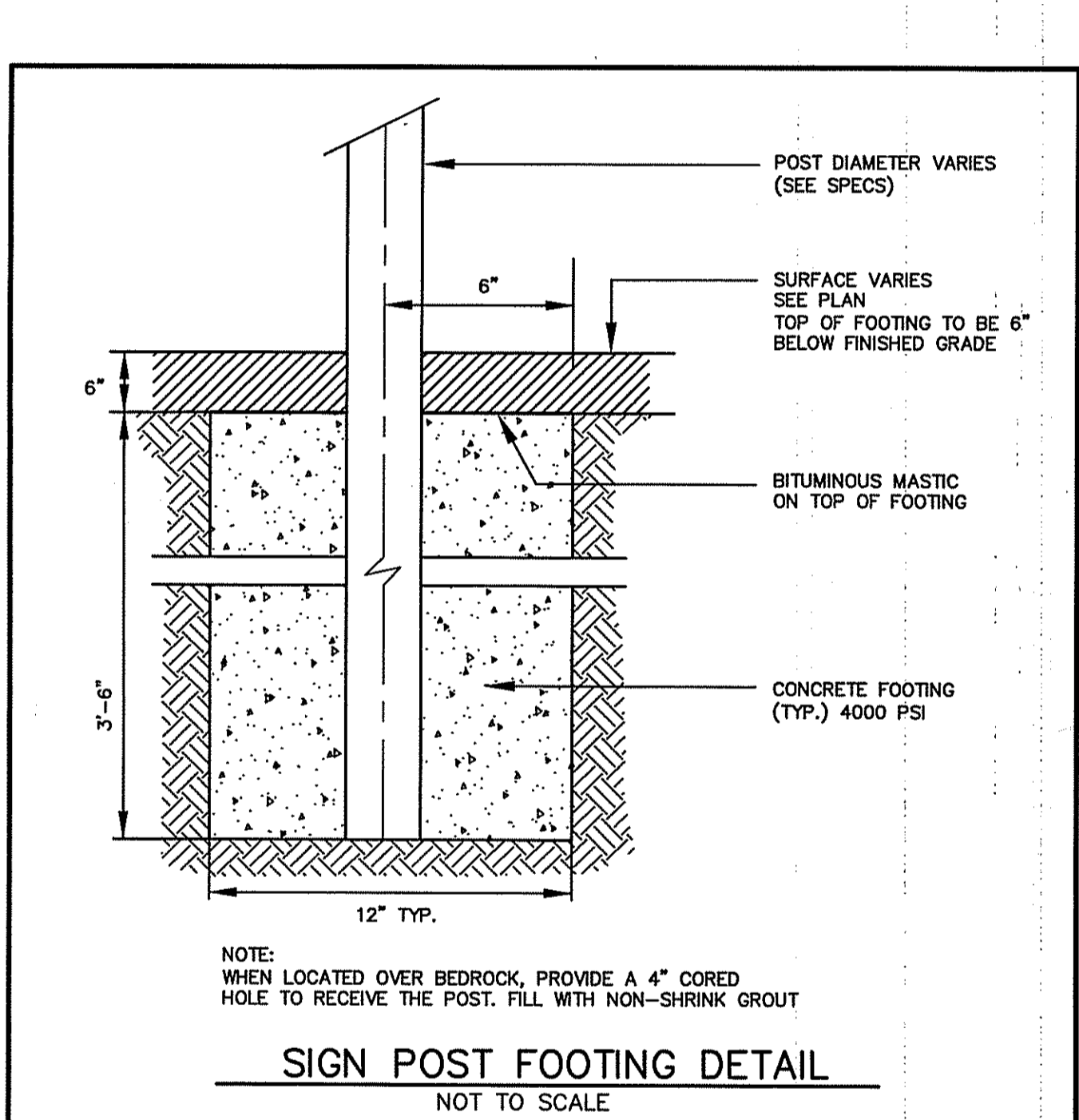


WOOD GUARDRAIL
NOT TO SCALE

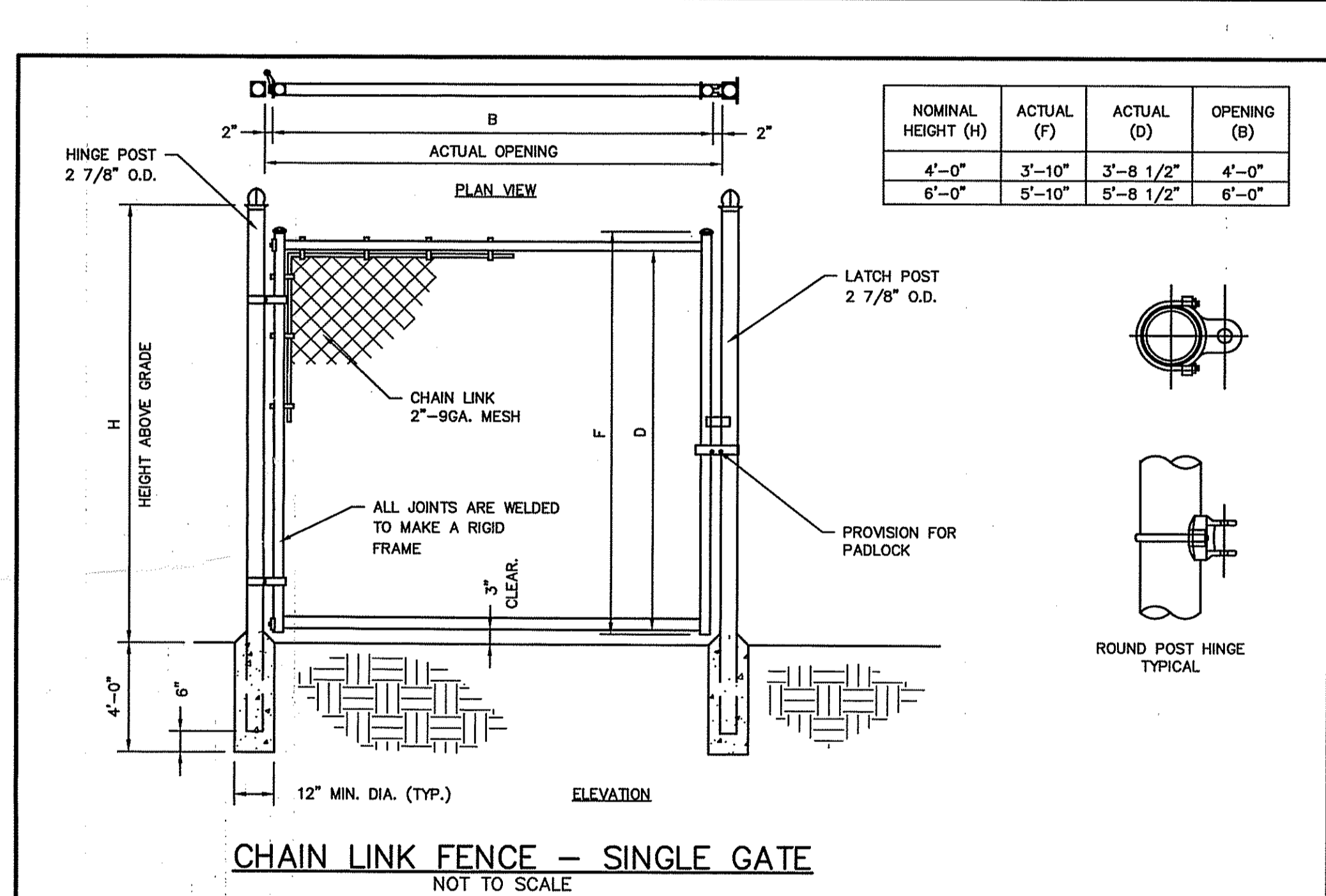
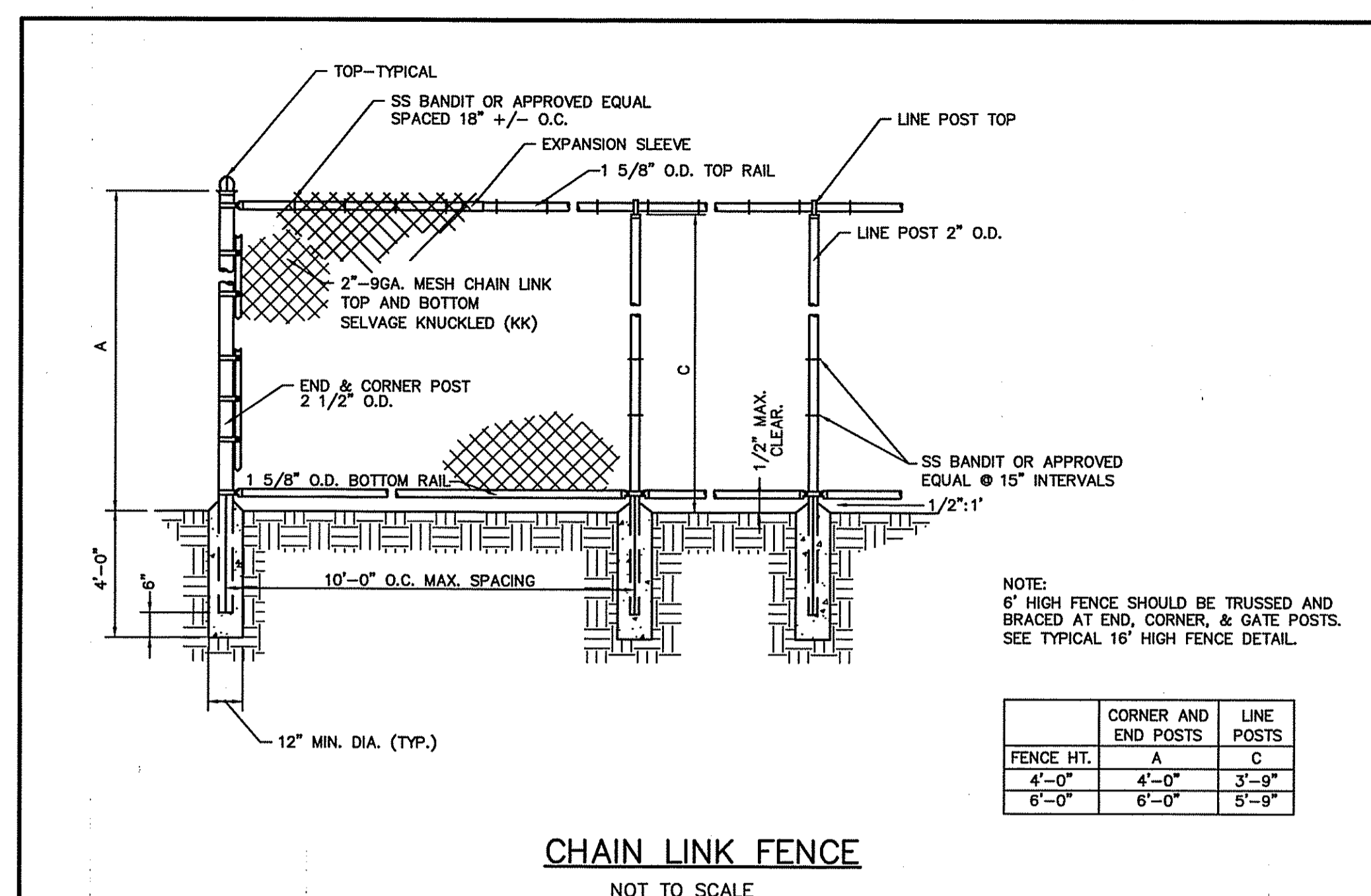
SIGN NUMBER		RS-1	RE-1 (R OR L)
LEGEND			
COLOR	BACKGROUND	RED	BLACK-ARROW WHITE
	COPY	WHITE	BLACK
SIGN DIMENSION	WIDTH	30" 36" 48"	36"
	HEIGHT	30" 36" 48"	12"

SIGN NUMBER		R1-1	R7-1
LEGEND			
COLOR	BACKGROUND	RED	WHITE
	COPY	WHITE	RED
SIGN DIMENSION	WIDTH	24" 30" 36" 48"	12"
	HEIGHT	24" 30" 36" 48"	18"

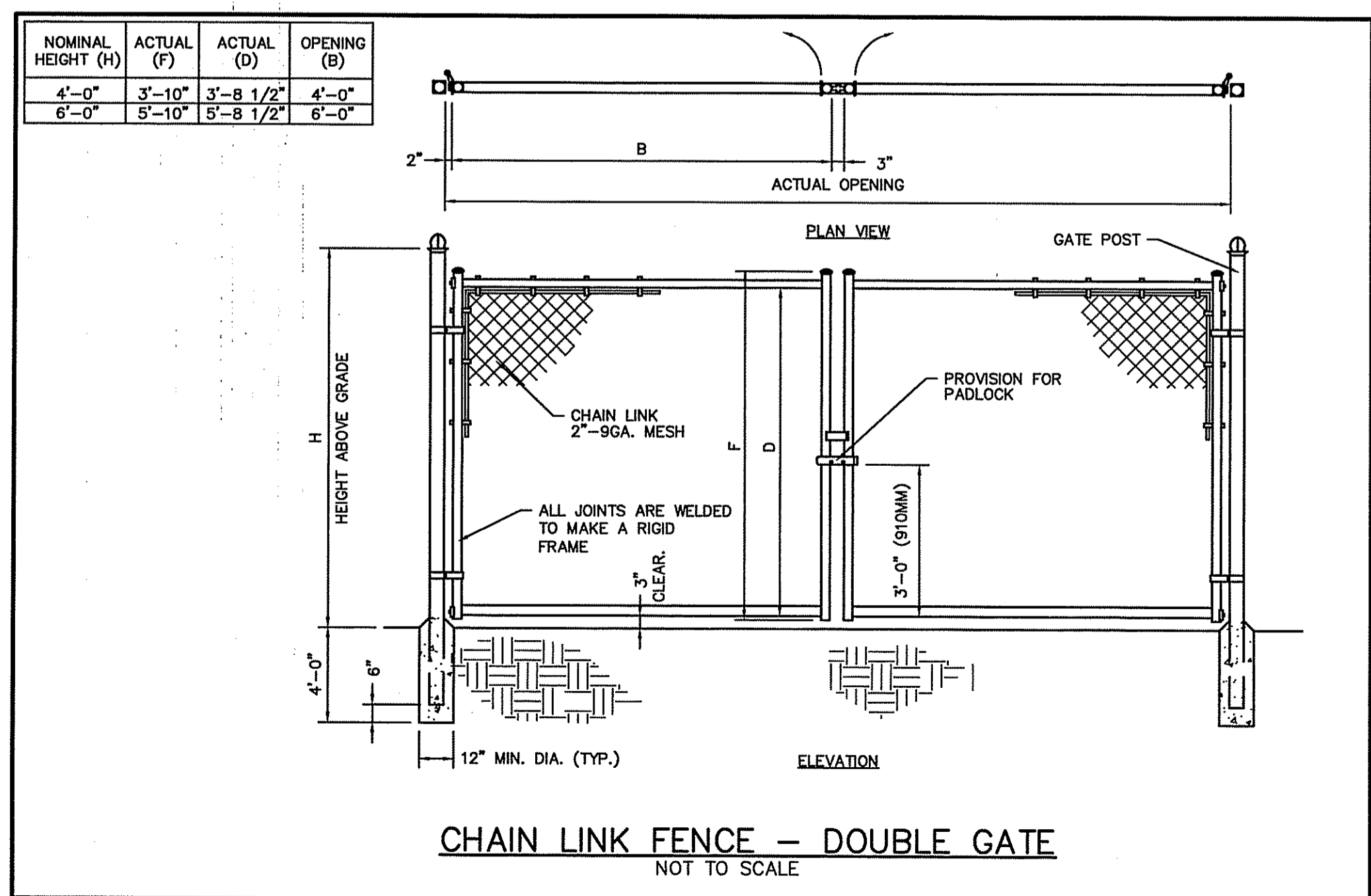
NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE R.I. STANDARD SPECIFICATIONS.
 2. DENOTES TYPE GRADE SHEETING.
 3. REGULATORY SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH STD. 24.1.0, 24.2.0 OR 24.6.0.
 4. THICKNESS OF ALUMINUM SIGN PLATES: LESS THAN 10 SQ. FT. - 0.081 IN. TO 10 SQ. FT. - 0.102 IN. GREATER THAN 36 SQ. FT. - 0.125 IN.
 5. FOR ADDITIONAL SIGNS SEE THE MUTCD.



SIGN POST FOOTING DETAIL
NOT TO SCALE



CHAIN LINK FENCE - SINGLE GATE
NOT TO SCALE



CHAIN LINK FENCE - DOUBLE GATE
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
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 DATED SEP 03 2009 FILE # 09-0109
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PJS PROPERTIES, LLC
 621 POUND HILL ROAD
 SUITE 114
 NORTH SMITHFIELD,
 RHODE ISLAND

GEORGE G. PREBLE
 No. 8691
 REGISTERED PROFESSIONAL ENGINEER (CIVIL)
 DAVID L. LAPOINTE
 No. 382
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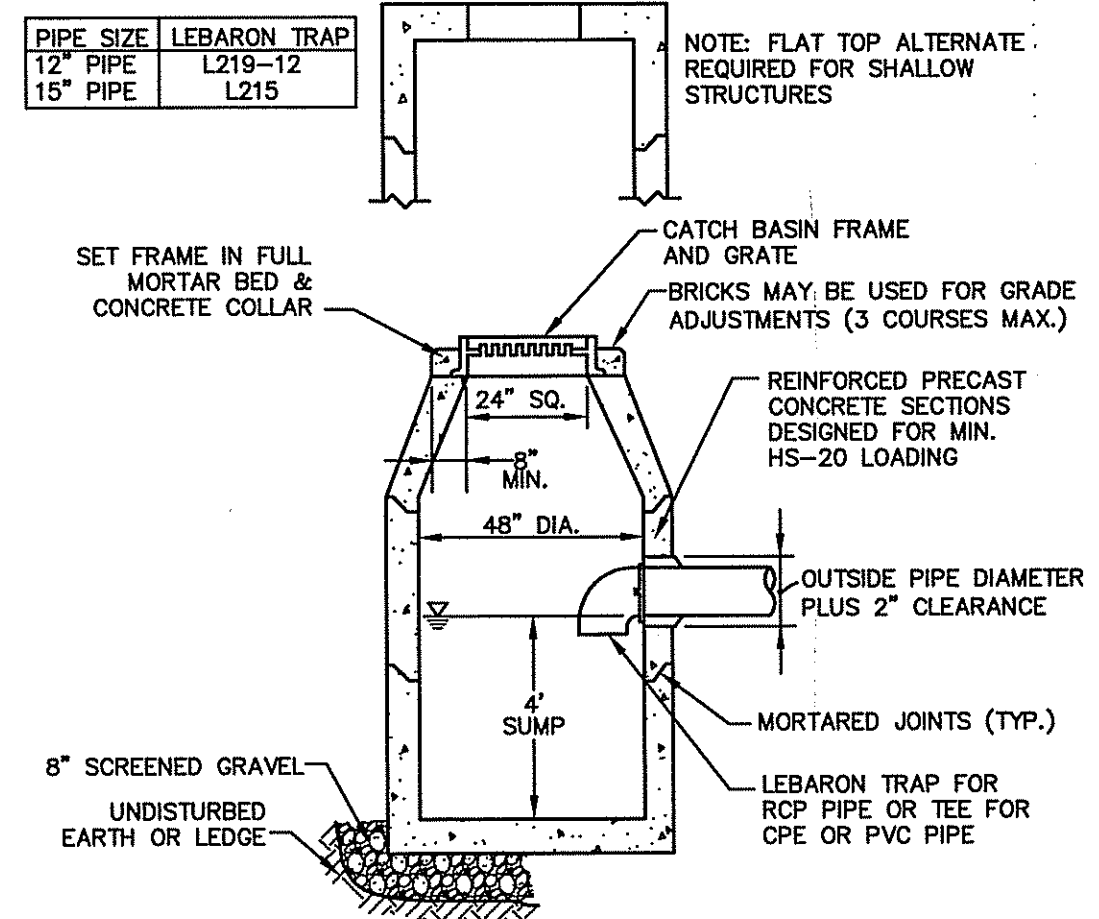
PREPARED BY:
BEALS AND THOMAS, INC.
 Civil Engineers-Landscape Architects
 Land Surveyors-Planners-Wetland Scientists
 32 Court Street
 Plymouth, Massachusetts 02360
 Tel.: 508-746-3288
 Fax: 508-746-6407
 (email) mail@btweb.com
 (website) http://www.btweb.com

ISSUE DATE	DESCRIPTION
07/20/2009	NO CHANGE
04/22/2009	PERMIT PLAN SET

PROJECT:
1201 DOUGLAS PIKE
 ASSESSOR'S PLAT 49, LOT 67A
 SMITHFIELD, RHODE ISLAND

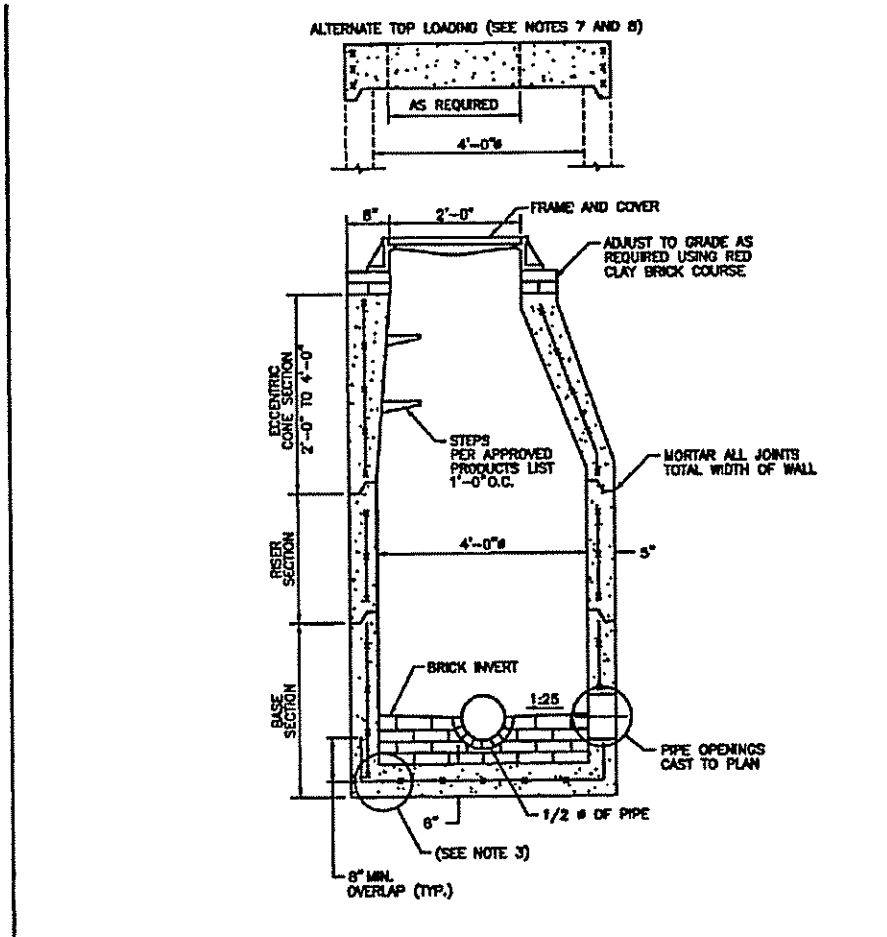
SCALE: AS NOTED DATE: APRIL 22, 2009
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SITE DETAILS
 BTI JOB NO. 2158.00
 BTI PLAN NO. 2158P007B-002
 SHEET 8 OF 11

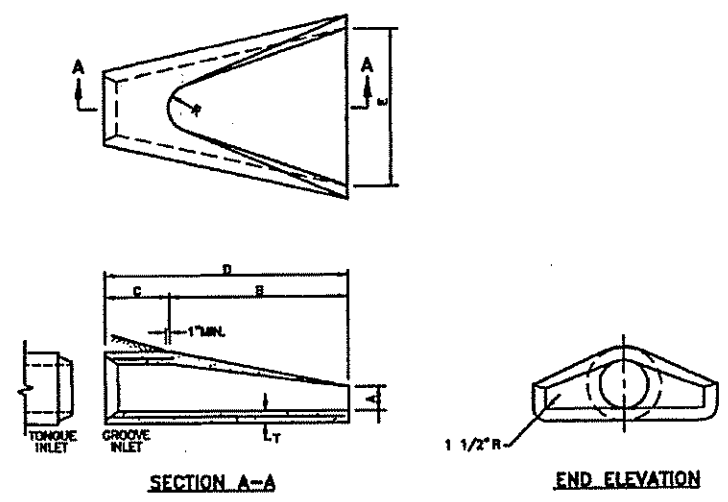


NOTE: 1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS, AND ASSOCIATED REQUIREMENTS.

CATCH BASIN WITH TRAP
NOT TO SCALE



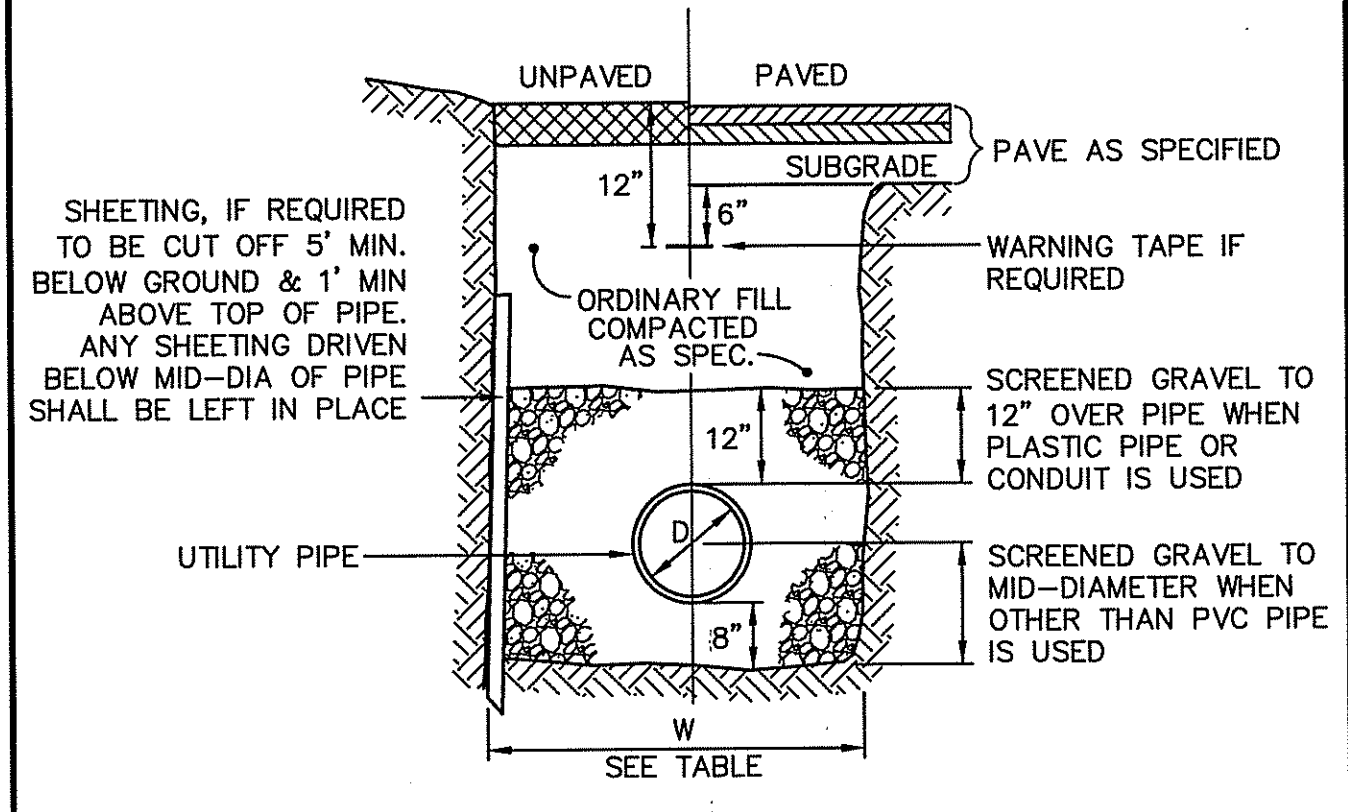
PRECAST 4'-0" ROUND MANHOLE
NOT TO SCALE



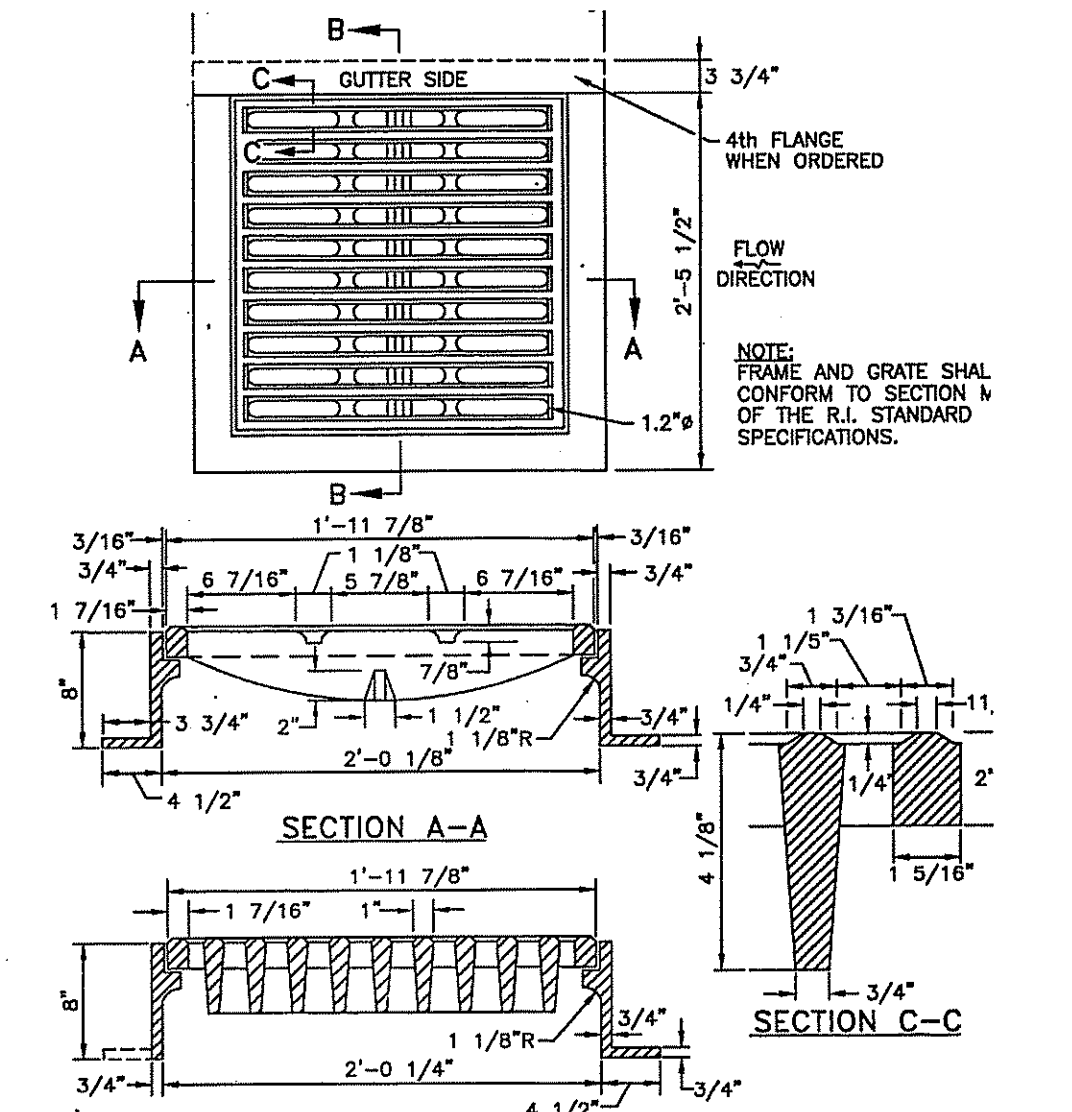
DIMENSIONS									
FE#	D ₀	L	W	W ₂	D ₅₀	REINFORCEMENT	PER FEET OF PIPE	REINFORCEMENT	PER FEET OF PIPE
1	1.5'	16'	5'	20'	6"	3/8"	0.006	3/8"	0.006
2	1.25'	13'	4'	17'	6"	3/8"	0.006	3/8"	0.006

CORRUGATED POLYETHYLENE FLARED END SECTION
NOT TO SCALE

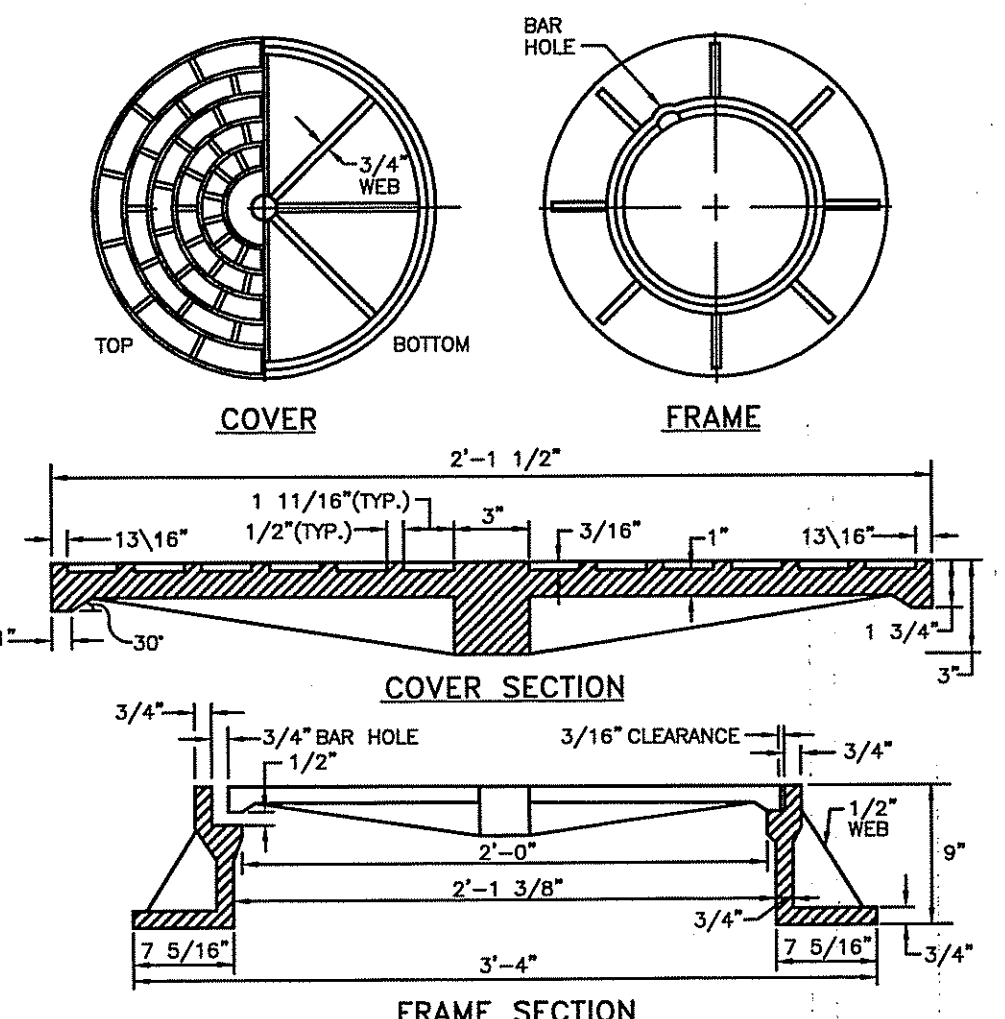
TRENCH WIDTH (W)		
D	W	W
DIAMETER OF PIPE	UNSHEETED	SHEETED
TO 12"	3'	4'
14" TO 24"	4'	5'
30" TO 36"	5'	6'



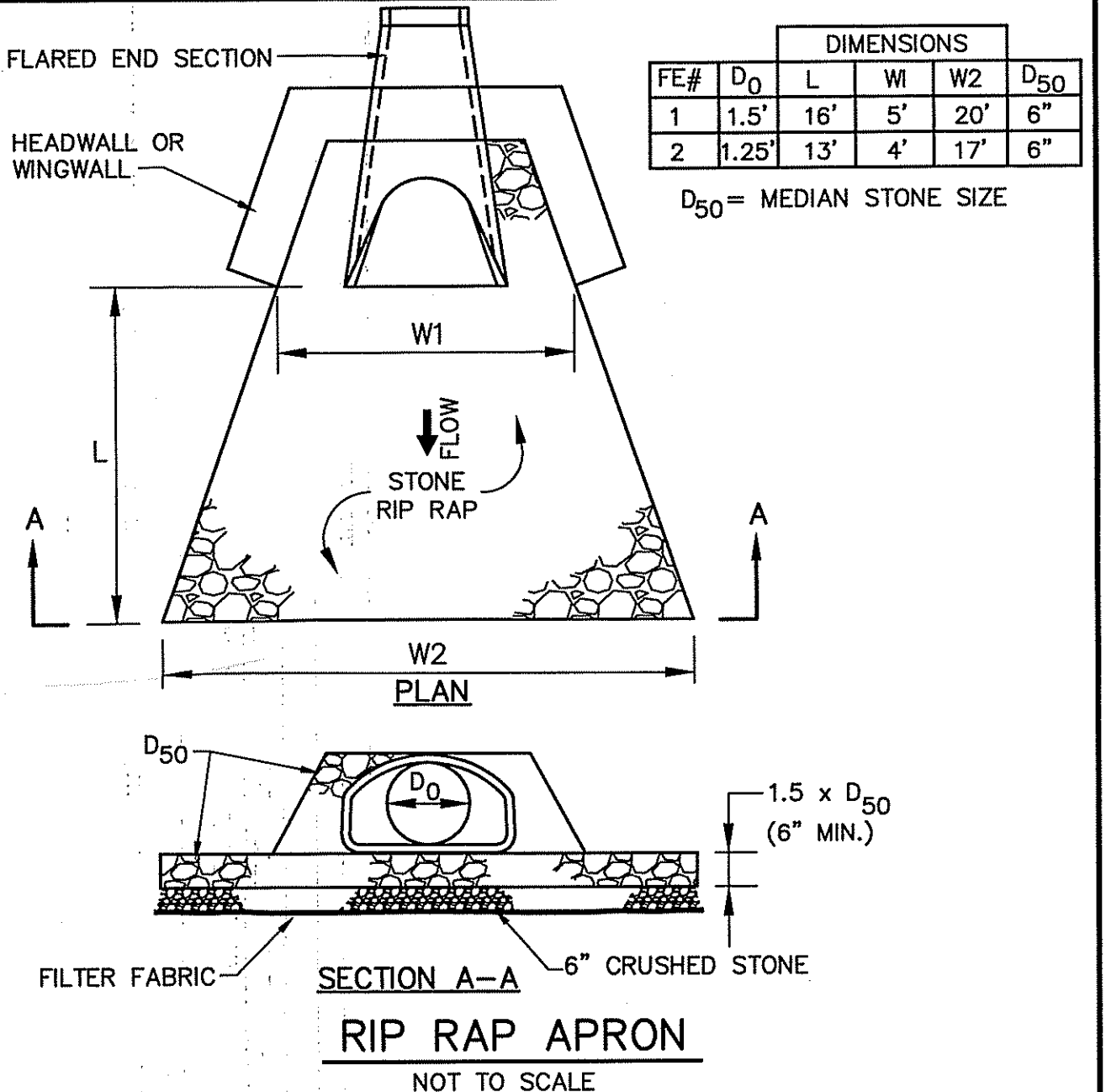
UTILITY TRENCH
NOT TO SCALE



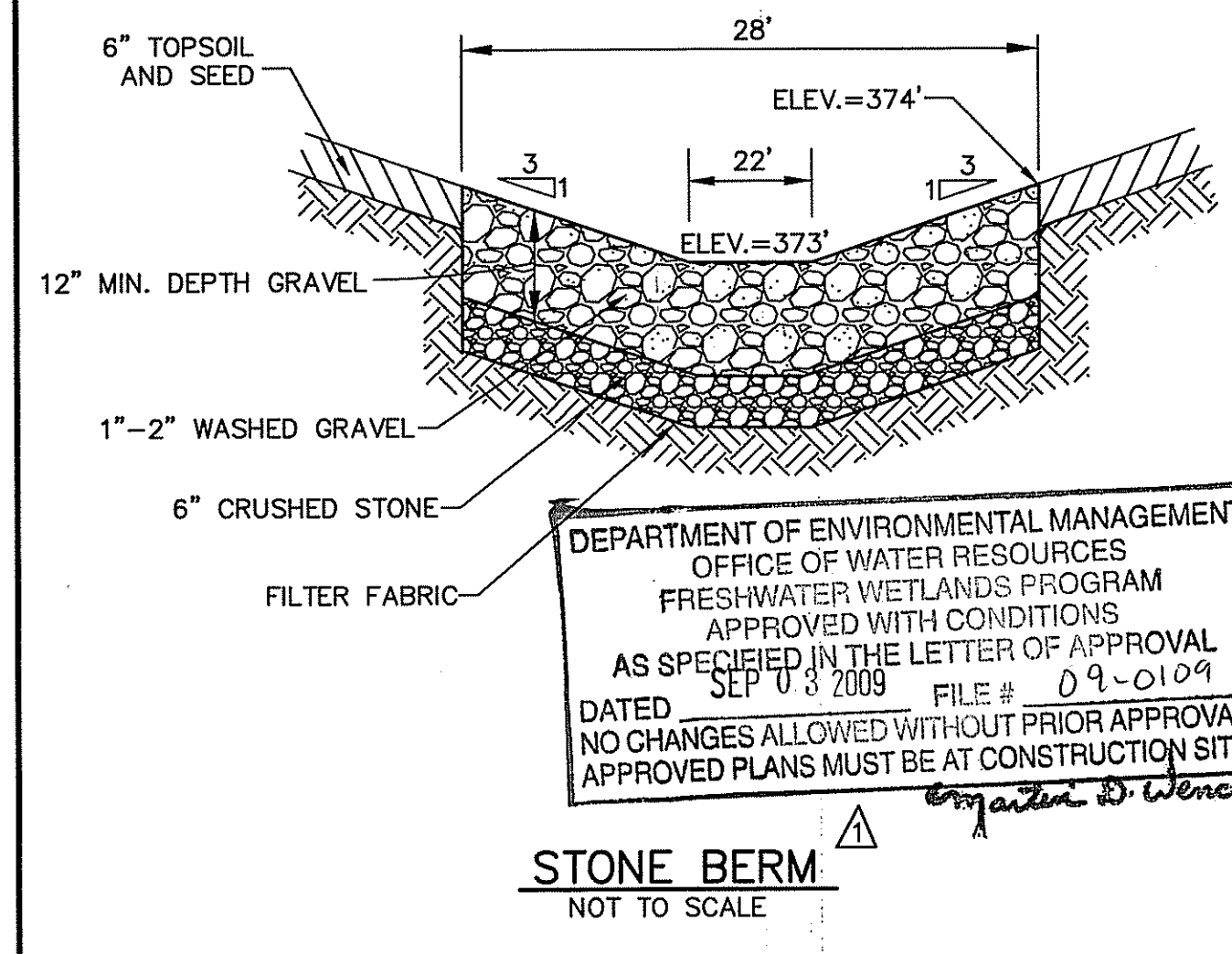
SQUARE FRAME AND GRATE (BICYCLE SAFE)
NOT TO SCALE



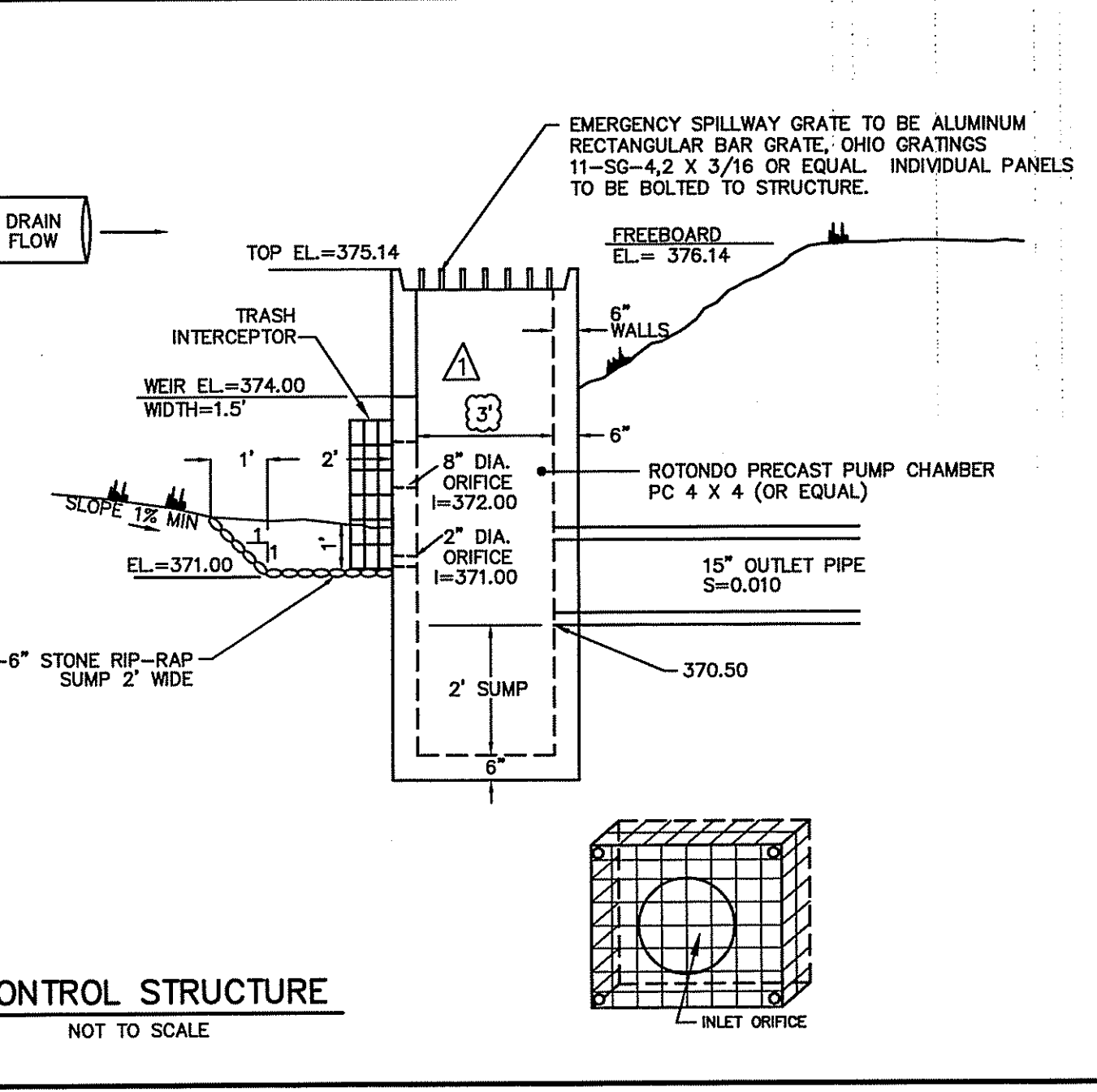
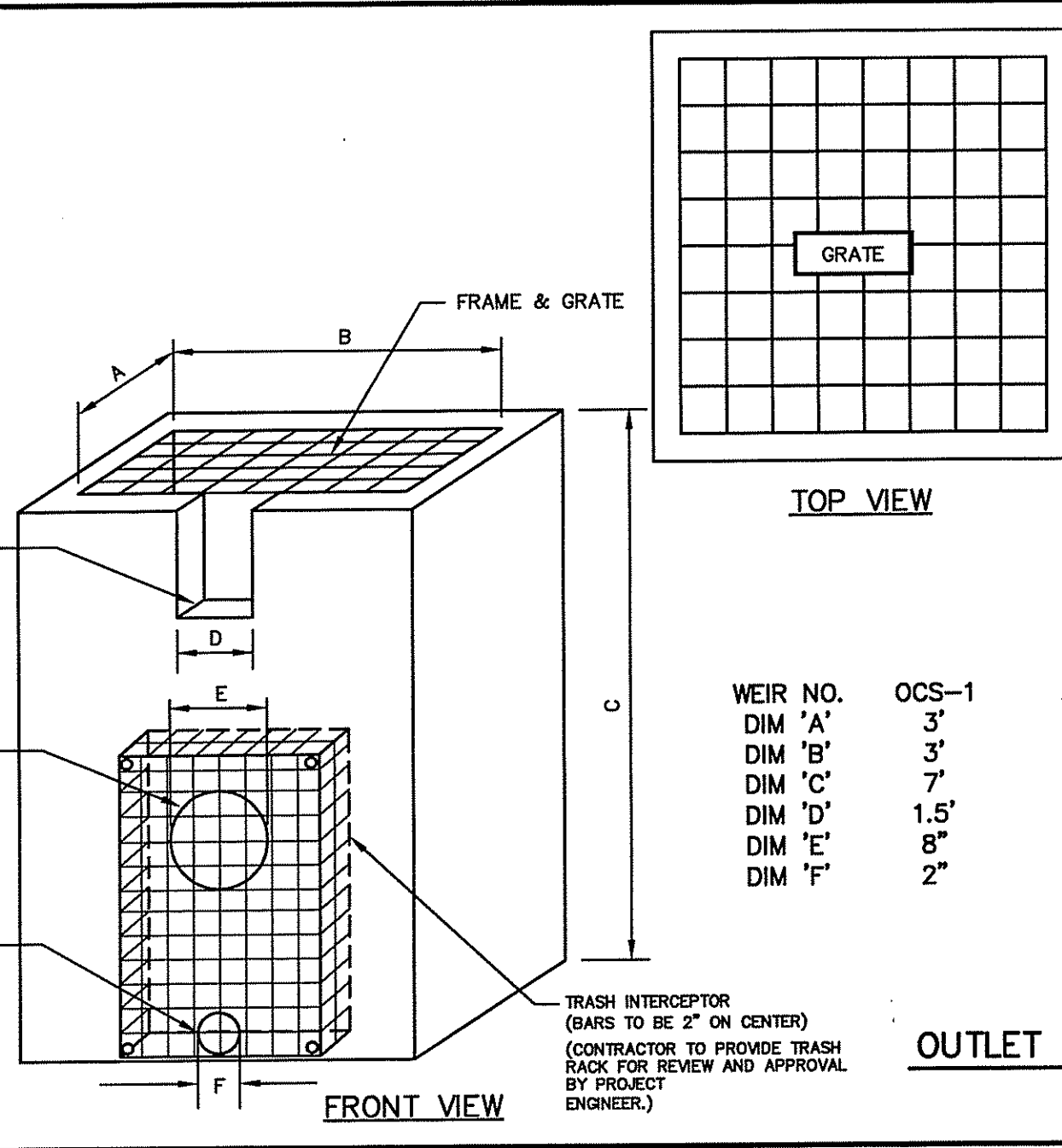
HEAVY-DUTY ROUND FRAME AND COVER
NOT TO SCALE



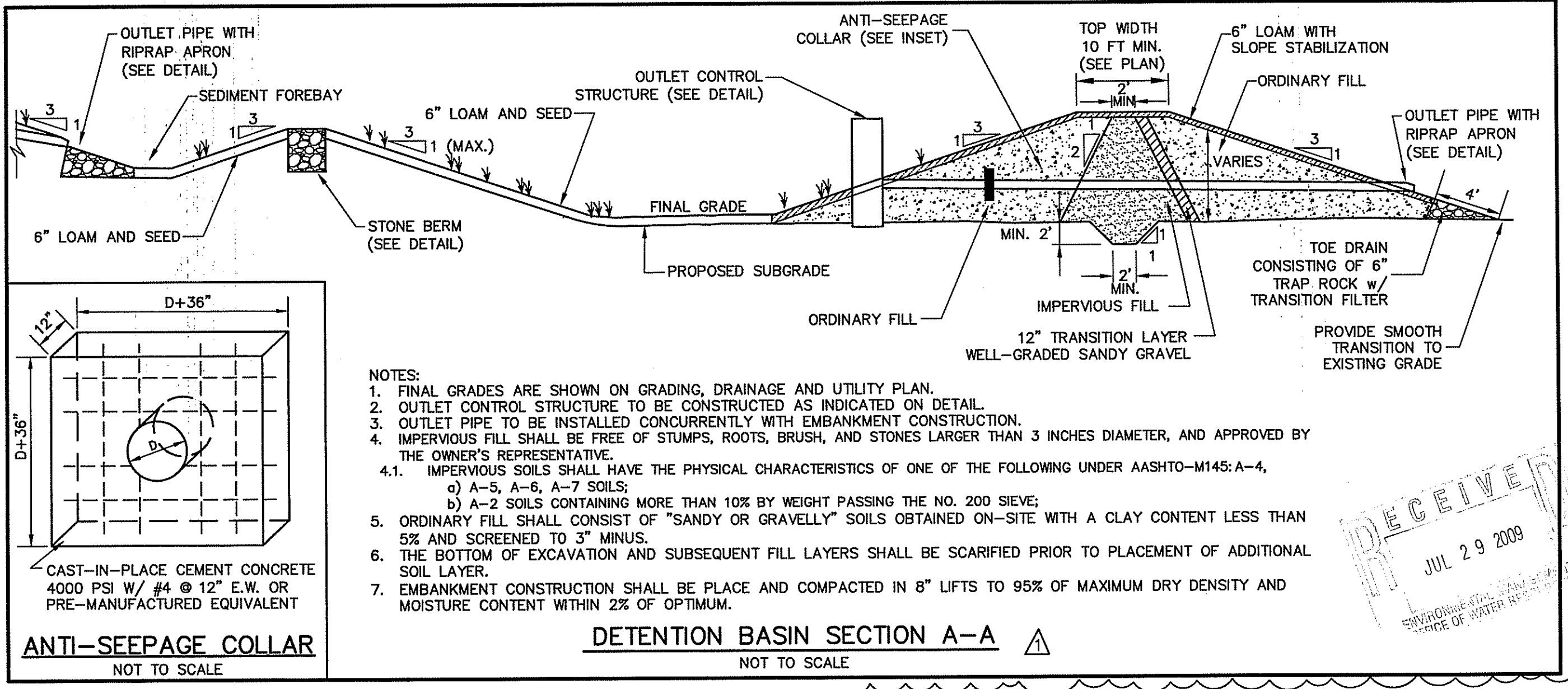
RIP RAP APRON
NOT TO SCALE



STONE BERM
NOT TO SCALE

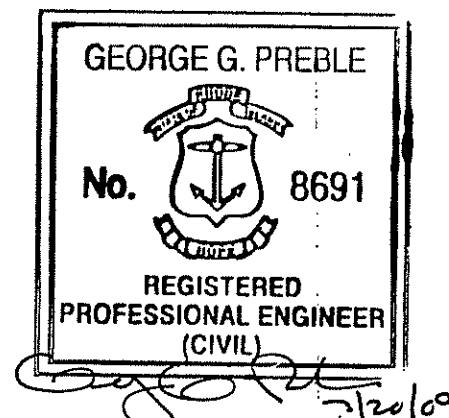


OUTLET CONTROL STRUCTURE
NOT TO SCALE



DETENTION BASIN SECTION A-A
NOT TO SCALE

PREPARED FOR:
PJS PROPERTIES, LLC
621 POUND HILL ROAD
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NORTH SMITHFIELD,
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1	07/20/2009 REVISED PER DEM COMMENTS
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	ISSUE DATE DESCRIPTION
	FDW FDW DJL GGP
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PROJECT:
1201 DOUGLAS PIKE
ASSESSOR'S PLAT 49, LOT 67A
SMITHFIELD, RHODE ISLAND

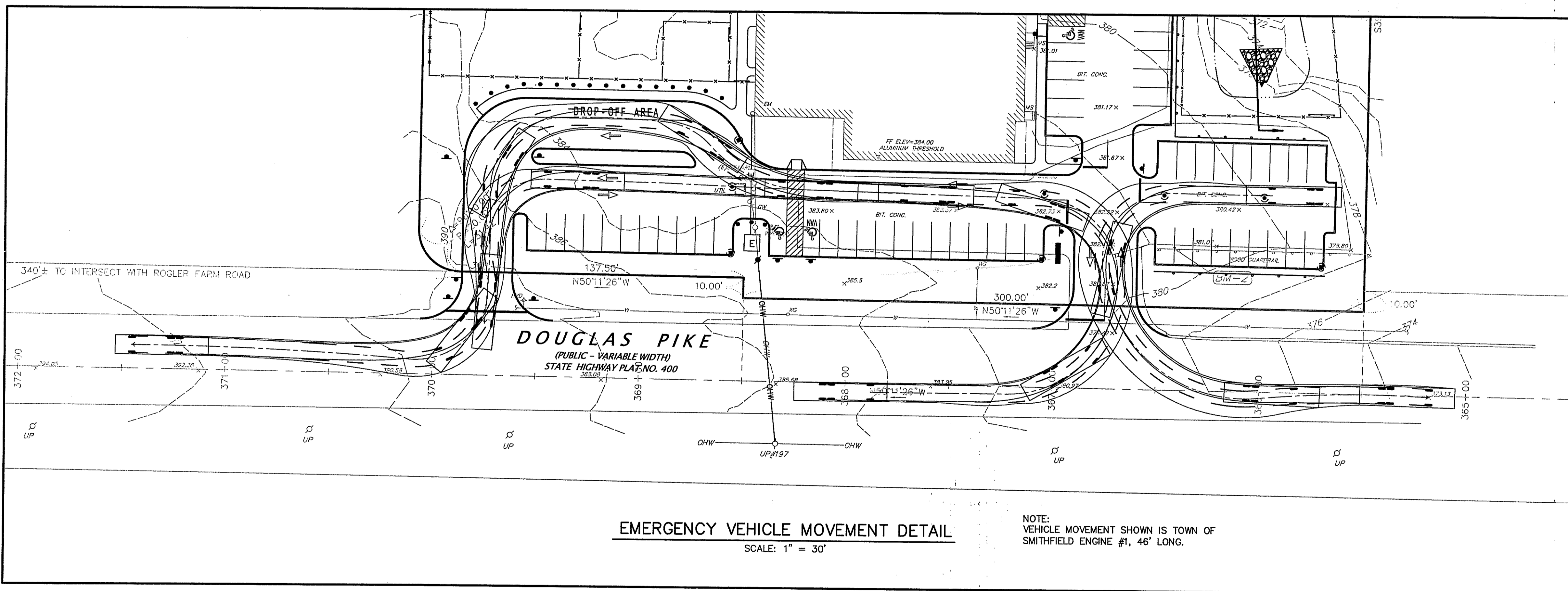
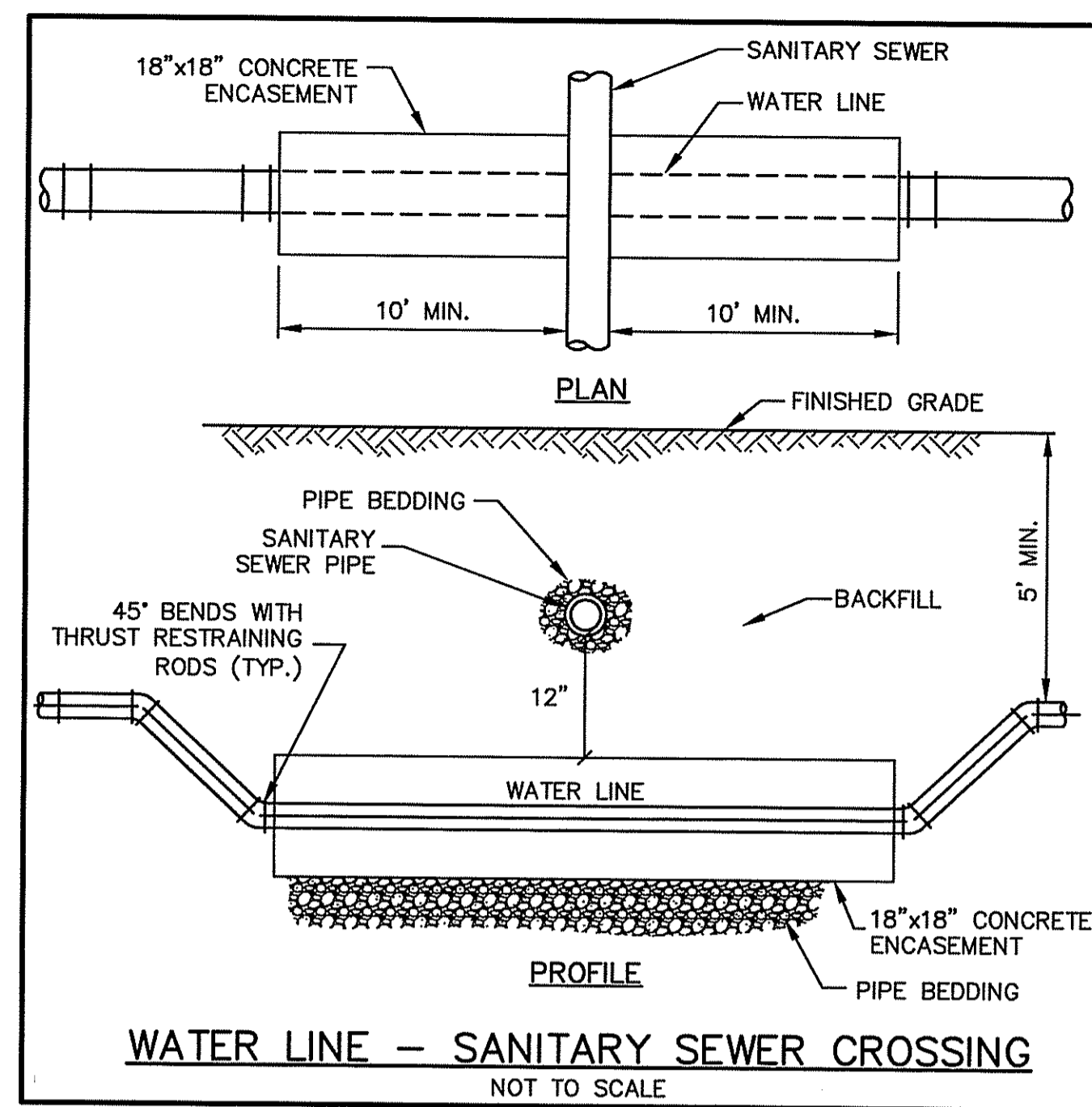
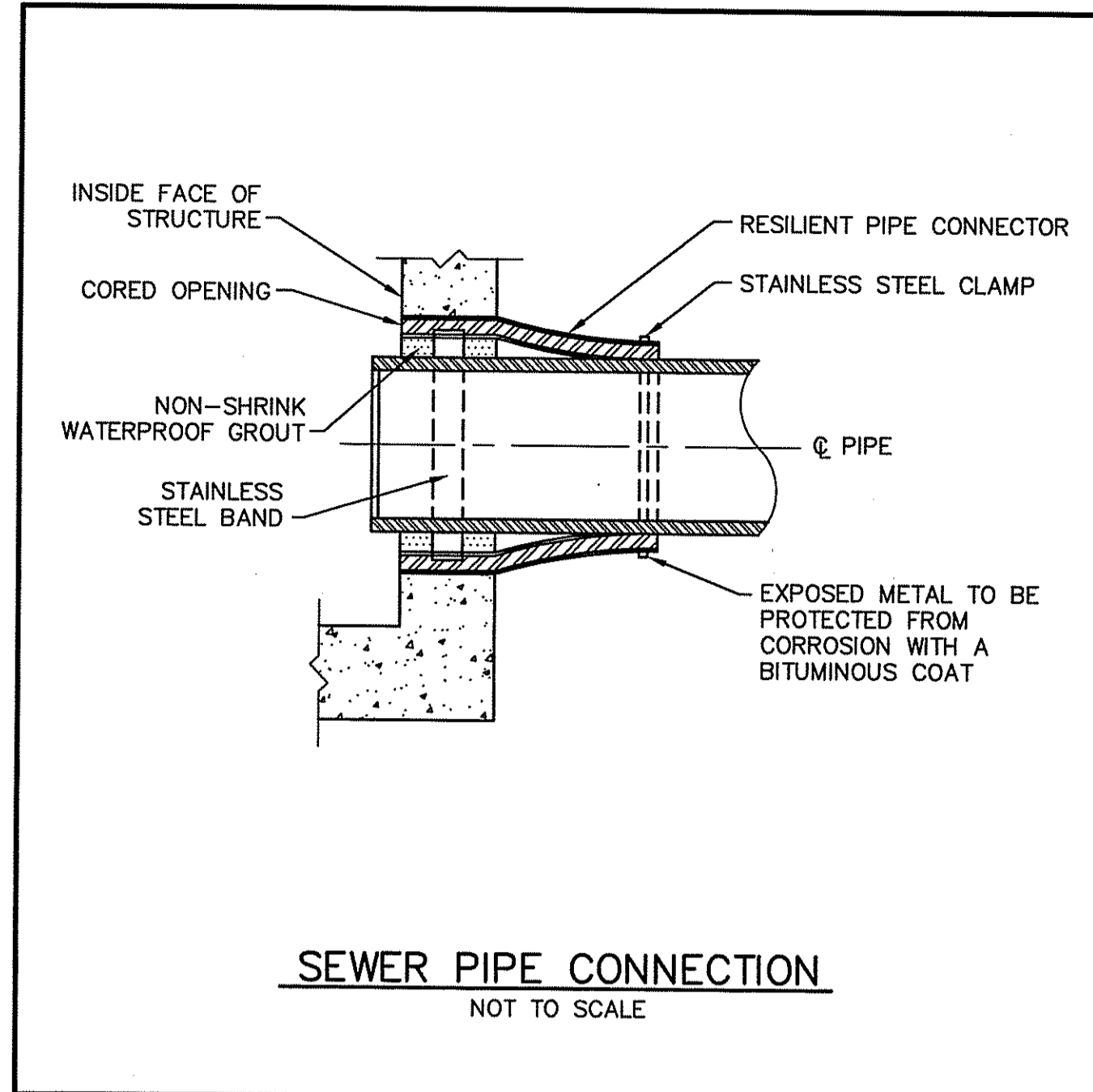
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SITE DETAILS

BTH JOB NO. 2158.00
BTH PLAN NO. 2158P007B-003
SHEET 9 OF 11

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OFFICE OF WATER RESOURCES
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Stephen D. Wencel

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SUITE 114
NORTH SMITHFIELD,
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FDW	FDW DJL GGP
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PROJECT:
1201 DOUGLAS PIKE
ASSESSOR'S PLAT 49, LOT 67A
SMITHFIELD, RHODE ISLAND

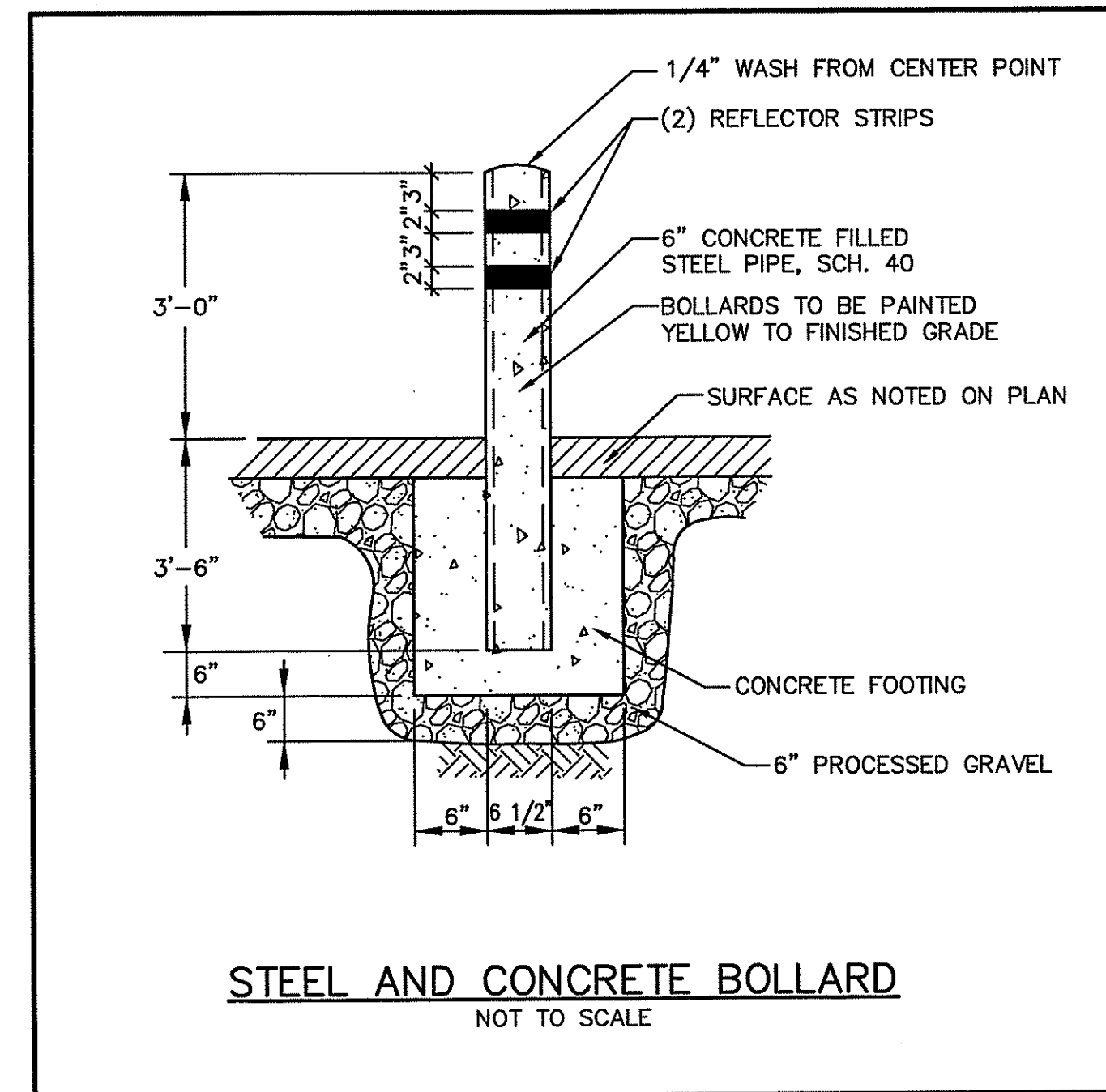
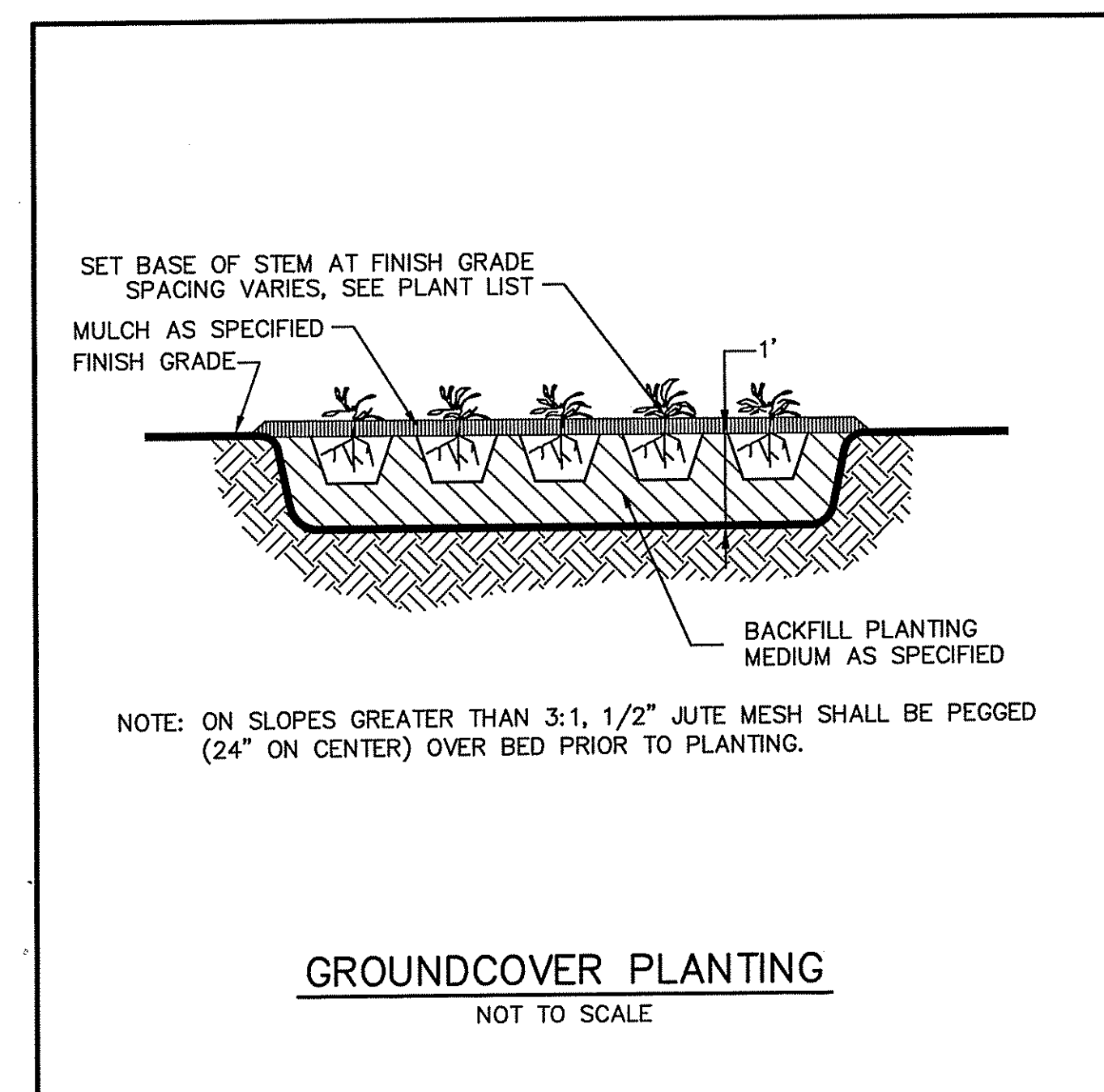
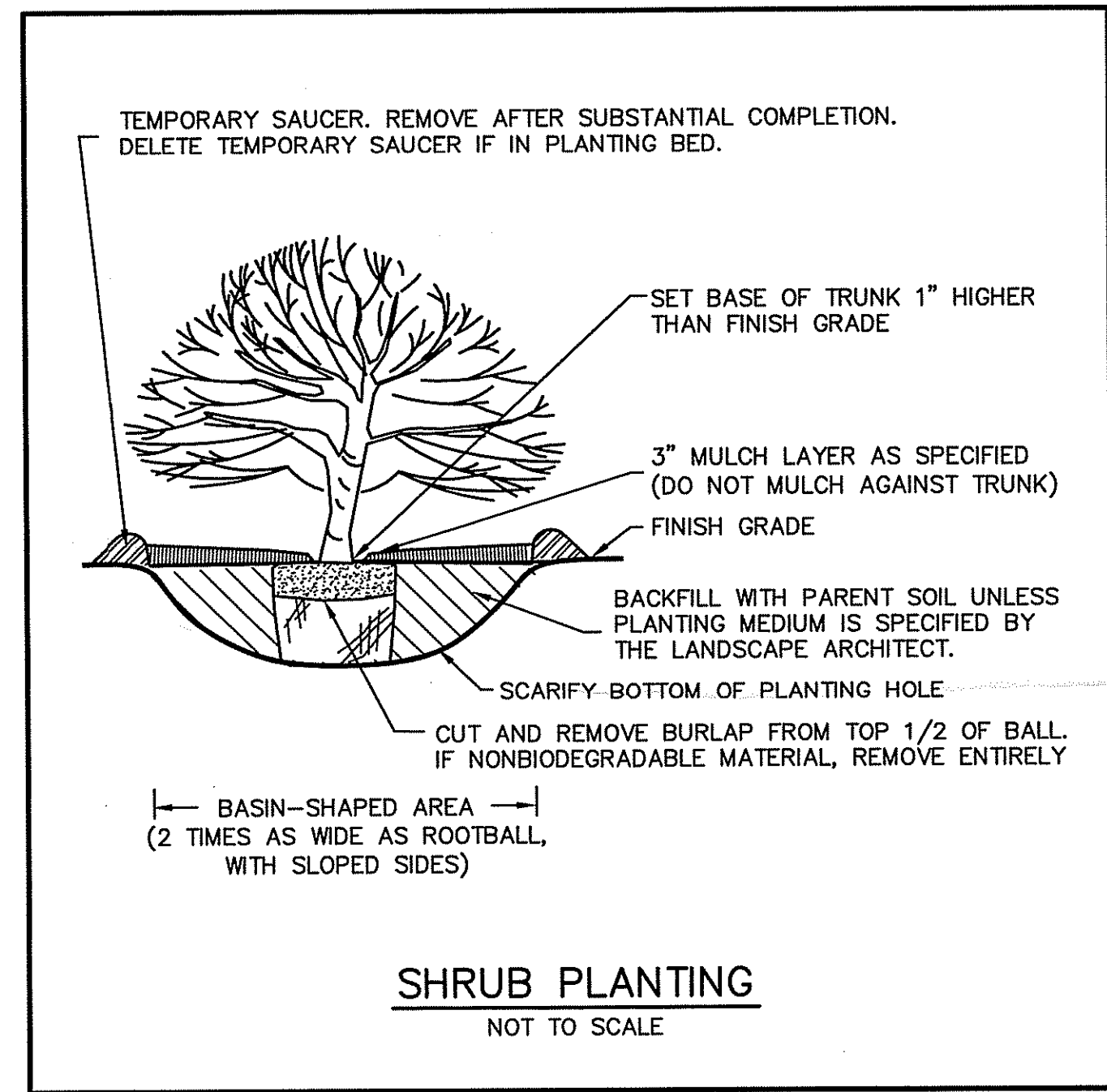
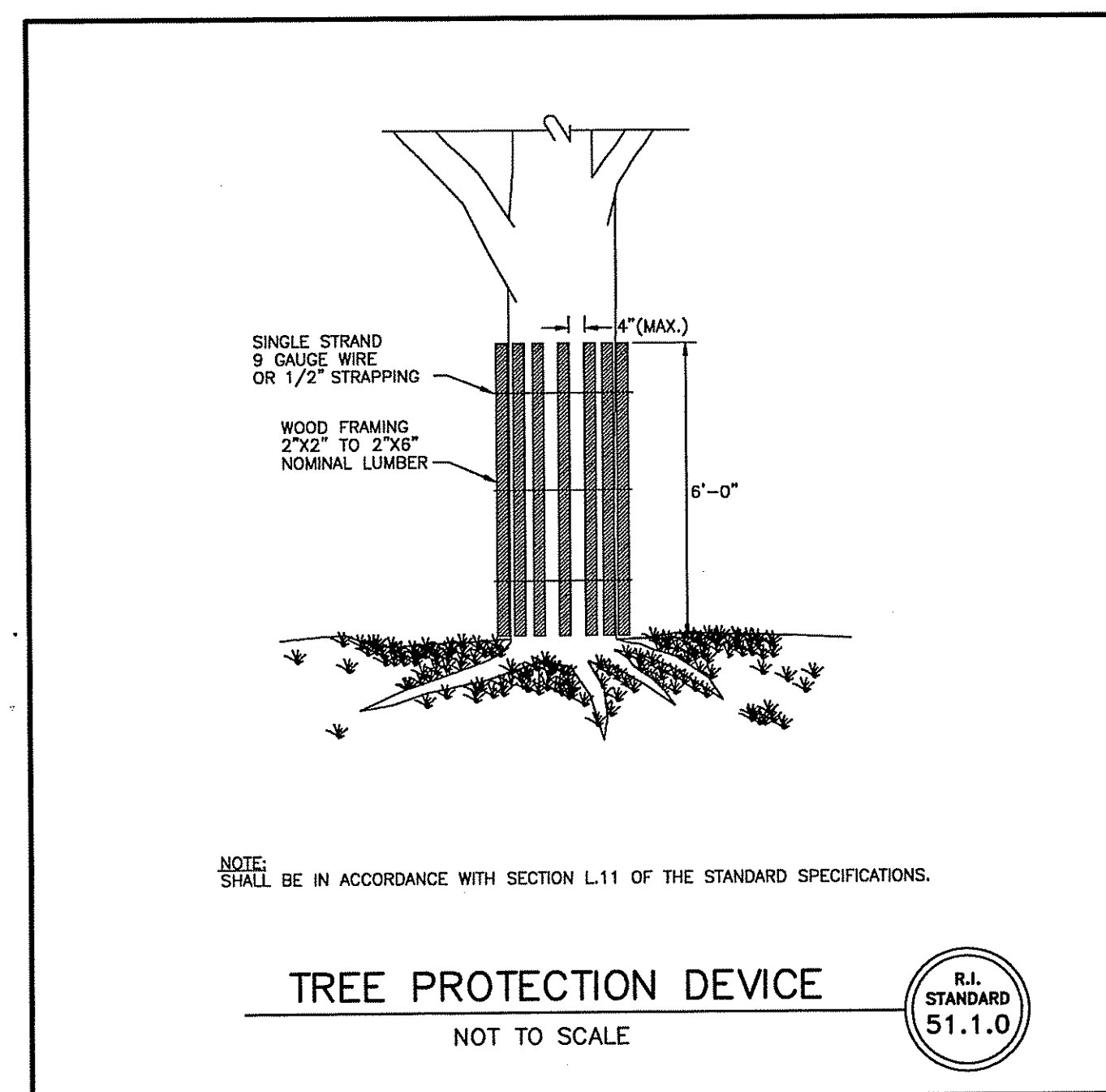
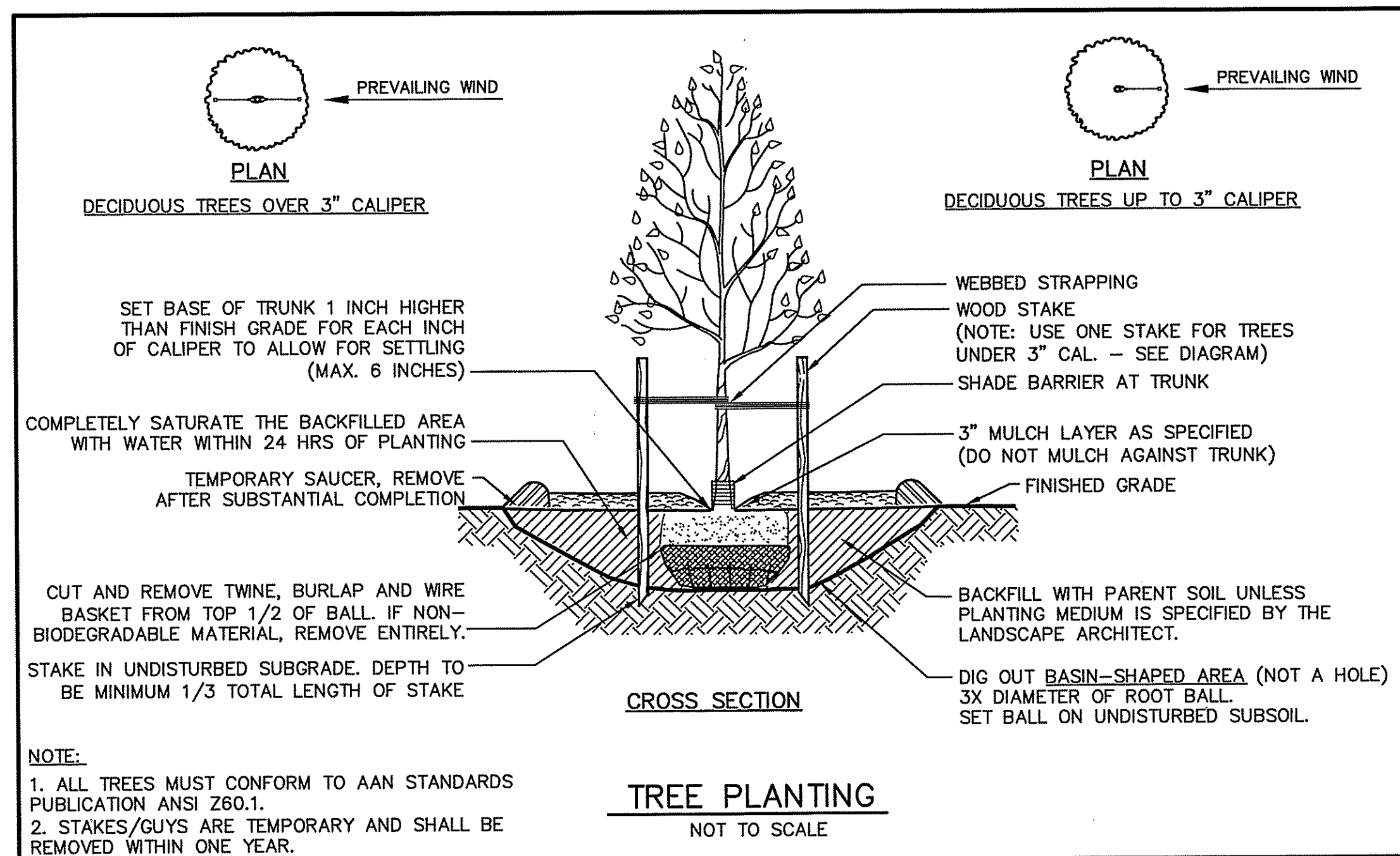
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FEET: 0 15 30 60 90

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SHEET 10 OF 11

10

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Post-Construction Operation and Maintenance Plan

1. Stormwater Management System Components

The following table outlines the type and quantity of the BMPs and their general location. Please reference the site plan(s) provided in the Figures section for exact location. The forebay and extended dry detention basin are accessible for maintenance from the parking area lot.

BMP Type	Quantity	Location
Catch Basins	5	Throughout paved parking area.
Sediment Forebay	1	Southeast of the paved parking area on the east side of the property.
Extended Dry Detention Basin	1	Southeast of the paved parking area on the east side of the property.
Stormwater Outfalls	2	One within sediment forebay and one east of basin.

2. Inspection and Maintenance Schedules

Repairs or replacement of inlet/outlet structures, riprap channels, fences, or other elements of the stormwater management system should be done within 30 days of deficiency reports. If an emergency situation is imminent the repair/replacement must be done immediately to avert failure or danger to nearby residents.

2.1 Deep Sump and Hooded Catch Basins

Catch basins shall be inspected two times per year (after the foliage season and after the snowmelt and discontinuation of seasonal sanding operations). Other inspection and maintenance requirements include:

- Units shall be cleaned (organic material, sediment and hydrocarbons removed) as needed, whenever the depth of deposits is greater than or equal to one half the depth from the bottom of the invert of the lowest pipe in the basin.
 - Cleanout shall always occur after street sweeping.
- If any evidence of hydrocarbons is found during inspection, the material shall be immediately removed using absorbent pads or other suitable measures and disposed of legally.
- Remove other accumulated debris as necessary.
- Transport and disposal of accumulated sediment off-site shall be in accordance with applicable local, state and federal guidelines and regulations.

2.2 Sediment Forebay

The sediment forebay shall be fully stabilized once construction is complete. During the first six-months of operation it shall be inspected several times to check for clogging, or conversely for too rapid of a release. Thereafter, the forebay shall be inspected at least twice a year (after the foliage season and after the snowmelt and discontinuation of seasonal sanding operations) and cleaned out when sediment depth is 2 feet, or at a minimum of once every ten years. Other inspection and maintenance requirements include:

- Vegetation shall be maintained at a height between 3 and 6 inches.
- Any erosion observed shall be repaired as needed.
- After maintenance, the forebay floor and sidewalls shall be stabilized to prevent the discharge of sediment.
- Damaged vegetation shall be replaced by either reseeding or sodding.
 - If reseeding, hydroseeding with a tackifier or blanket (or similar practice) shall be employed to prevent scour within the forebay.

2.3 Extended Dry Detention Basin

The extended detention basin shall be fully stabilized once construction is complete. During the first six-months of operation the basin shall be inspected several times to check for clogging, or conversely for too rapid of a release. Thereafter, the basin shall be inspected at least twice per year (after the foliage season and after the snowmelt and discontinuation of seasonal sanding operations) to ensure it is operating as intended, and during and after major storm events (rainfall totals greater than 2.5 inches in 24 hours) to determine if each basin is meeting expected detention times. Inspections shall include observations of the following:

- Outlet structures and for evidence of clogging.
- Subsidence, erosion, cracking or tree growth within the basin and on the embankments.
- Damage to the emergency spillway.
- Sediment accumulation around the outlet.
- Changes in the condition of the low-flow channel.
- Adequacy of the inlet/outlet channel erosion control measures.

During inspections, changes to the basin or contributing watershed shall be noted as these may affect basin performance. Maintenance activities shall include:

- Mowing the upper-stage, side slopes, embankment, and emergency spillway at least once per year, preferably after August 15.
- Removing trash and debris at least twice per year, preferably in the spring and fall.
- Removing accumulated sediment from the basin during the first year of operation, thereafter remove sediment as necessary, and at least once every 10 years.
- Reseed eroded areas and stabilize slopes as needed.

Pools of stagnant water in the detention basin indicates failure. This deficiency should be corrected immediately to prevent a nuisance habitat for insects, especially mosquitoes. If blockage of a basin outlet structure occurs it may be necessary to dewater the pond for access to the blockage. The dewatering flow must be adequately filtered prior to discharge into a receiving water body to remove suspended solids.

2.4 Stormwater Outfalls

Flared end sections and associated riprap spillways shall be inspected at least twice per year (after the foliage season and after the snowmelt and discontinuation of seasonal sanding operations) and after major storm events (rainfall totals greater than 2.5 inches in 24 hours) to ensure that the stability of the outlet area is maintained. The outfall area shall be kept clear of debris such as trash, branches, and sediment. Repairs shall be made immediately if riprap displacement or downstream channel scour is observed.

2.5 Freshwater Wetland Vegetation

All restored/replanted freshwater wetlands shall be allowed to revegetate naturally, without being subjected to mowing or manicuring. Any planting that does not survive for one full growing season shall be replaced.

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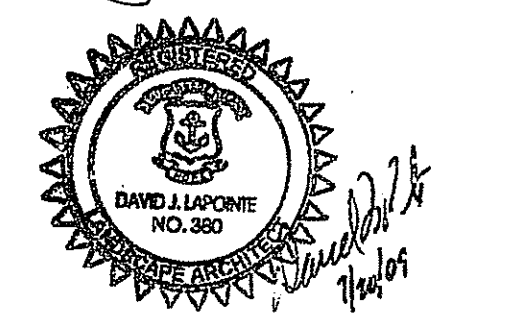
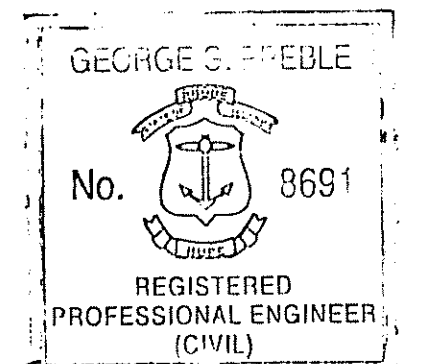
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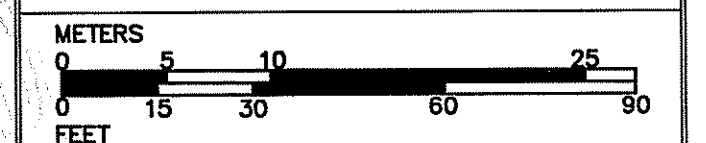
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ASSESSOR'S PLAT 49, LOT 67A
SMITHFIELD, RHODE ISLAND

SCALE: AS NOTED DATE: APRIL 22, 2009



SITE DETAILS AND OPERATION AND MAINTENANCE PLAN

BTI JOB NO. 2158.00

BTI PLAN NO. 2158P007B-005

SHEET 11 OF 11

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