

# RI DEM SUBMISSION

for

## ALTAMONTE RIDGE A.P. 10D, LOT 46

on

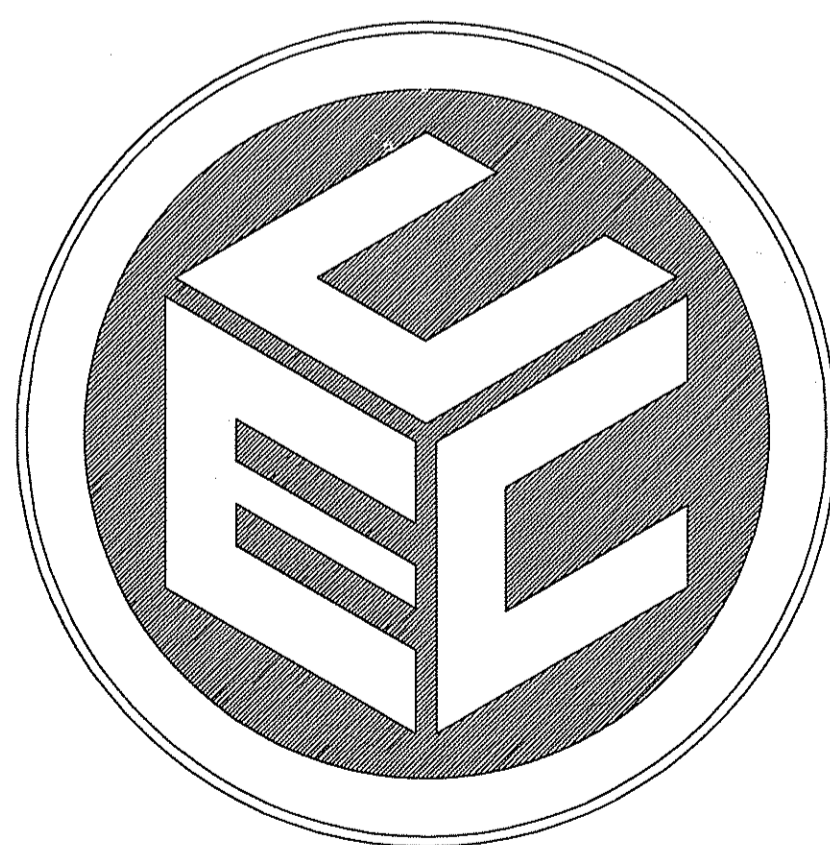
### SHANNOCK VILLAGE ROAD (MAIN STREET)

in

### RICHMOND, RHODE ISLAND

#### OWNER/APPLICANT

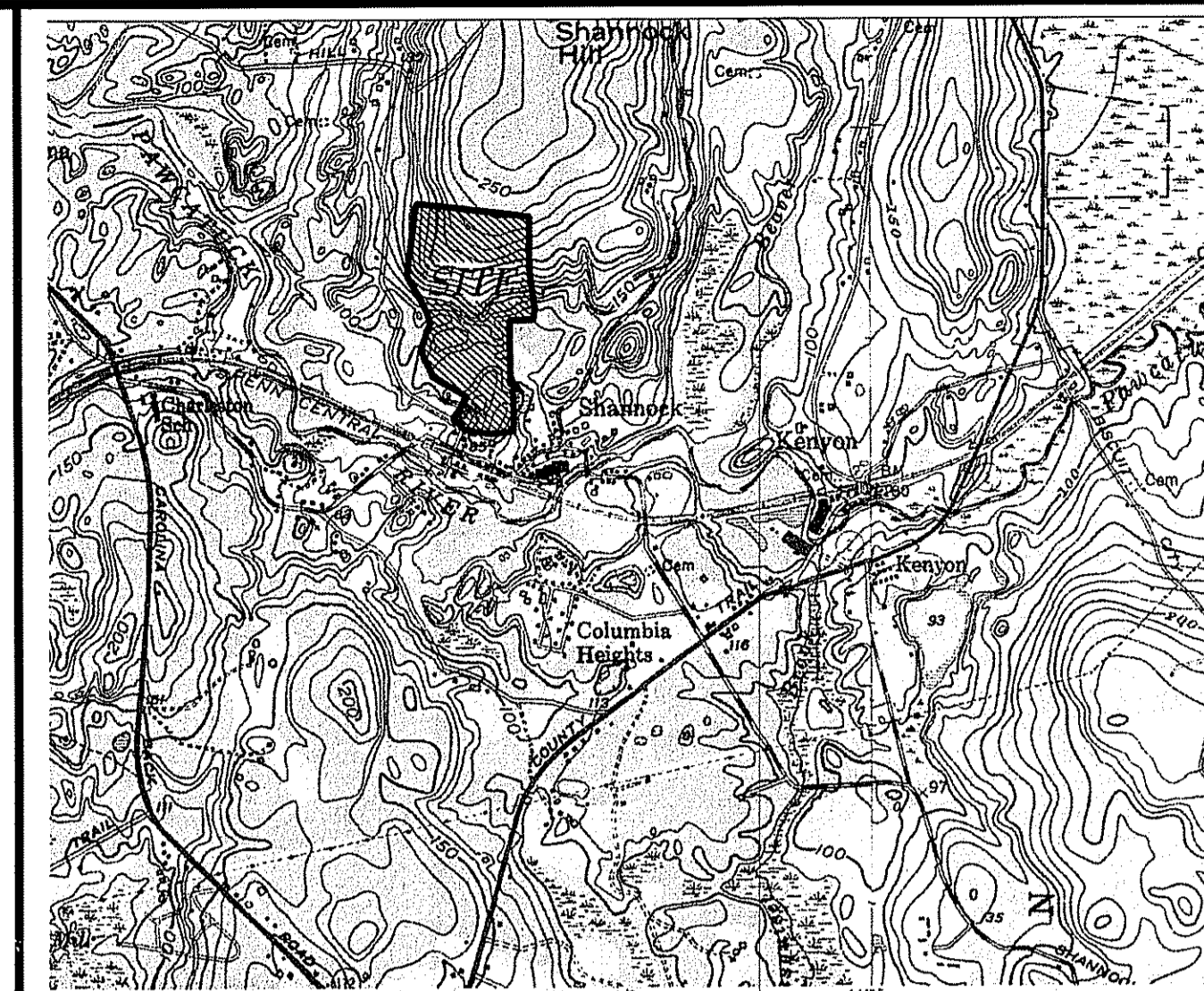
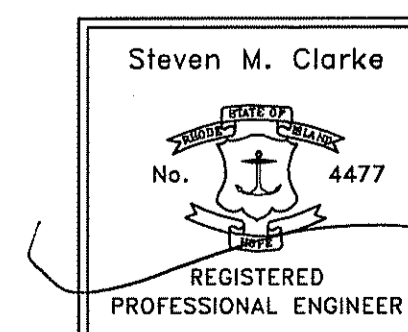
ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907



**COMMONWEALTH**  
ENGINEERS & CONSULTANTS, INC.

400 SMITH STREET  
PROVIDENCE, RI 02908  
(401) 273-6600

AUGUST 29, 2007  
REVISED: JANUARY 14, 2008



LOCUS MAP  
SCALE: 1"=2,000'

#### LIST OF DRAWINGS

- 1 TITLE SHEET
- 2 EXISTING CONDITIONS & SOILS
- 3 KEY PLAN
- 4 SITE IMPROVEMENT PLAN - 1
- 5 SITE IMPROVEMENT PLAN - 2
- 6 SITE IMPROVEMENT PLAN - 3
- 7 UTILITIES & DRAINAGE PLAN - 1
- 8 UTILITIES & DRAINAGE PLAN - 2
- 9 UTILITIES & DRAINAGE PLAN - 3
- 10 GRADING PLAN - 1
- 11 GRADING PLAN - 2
- 12 GRADING PLAN - 3
- 13 EROSION CONTROL PLAN - 1
- 14 EROSION CONTROL PLAN - 2
- 15 EROSION CONTROL PLAN - 3
- 16 PLAN AND PROFILE - 1
- 17 PLAN AND PROFILE - 2
- 18 PLAN AND PROFILE - 3
- 19 CONSTRUCTION DETAILS - 1
- 20 CONSTRUCTION DETAILS - 2
- 21 CONSTRUCTION DETAILS - 3
- 22 CONSTRUCTION DETAILS - 4
- 23 CONSTRUCTION DETAILS - 5
- 24 CONSTRUCTION DETAILS - 6

JAN 29 2008

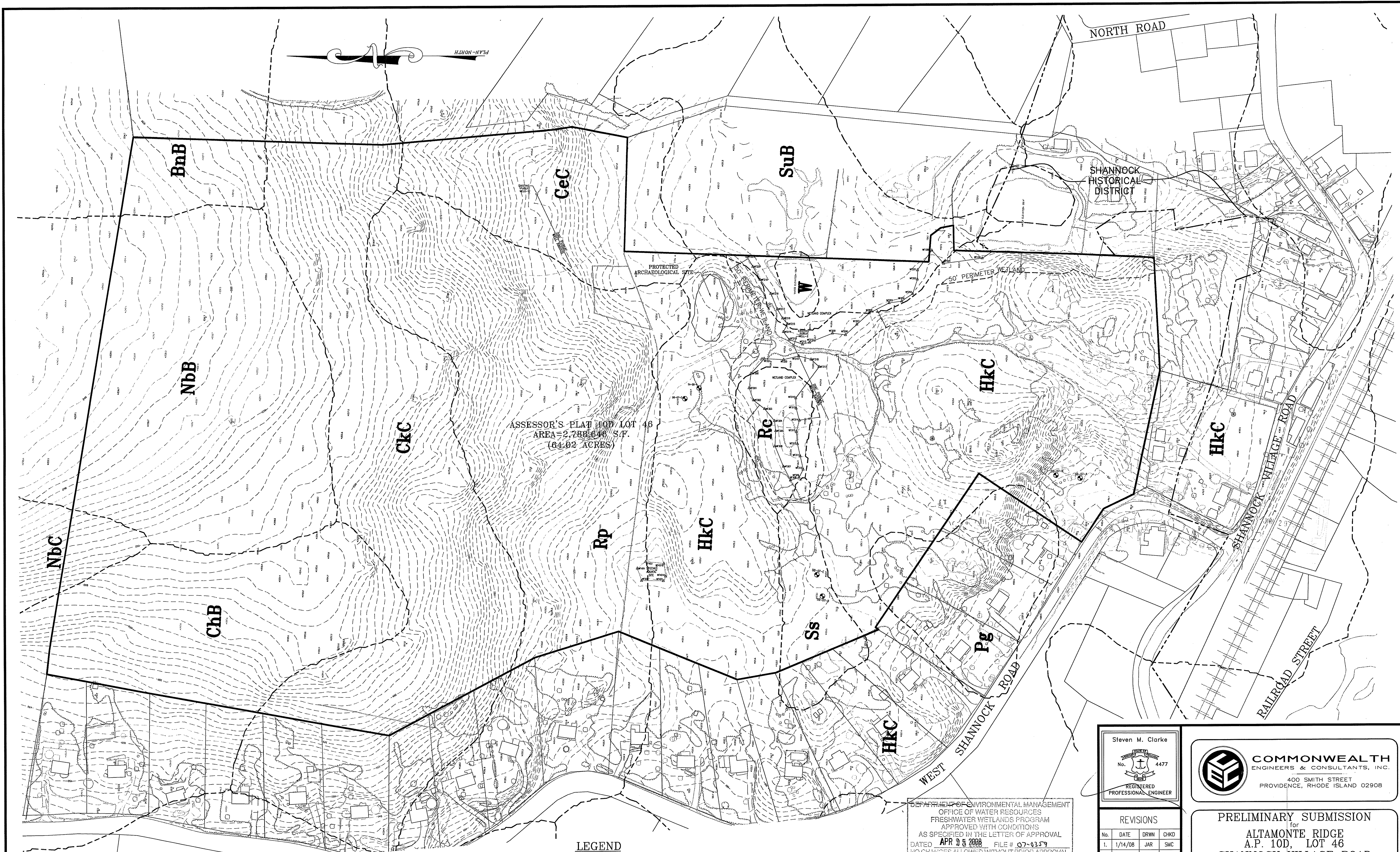
#### PROJECT DATA

ASSESSOR'S PLAT 10D LOT 46  
PARCEL AREA=2,788,648 S.F. (64.02 ACRES)  
ZONING CLASSIFICATION: R-2 - RESIDENTIAL  
PROPOSED ROADWAY LENGTH  
ROAD A (ALTAMONTE RIDGE ROAD) = 2,201.98 LINEAR FEET  
ROAD B (BEND TRAIL LANE) = 374.45 LINEAR FEET  
ROAD C (STUBTAIL LANE) = 602.63 LINEAR FEET

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 25 2008 FILE # 07-0359  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*Stephen D. Wenzel*

PROJECT NO. 04145.00



ASSESSOR'S PLAT 10D / LOT 46  
 AREA = 2,788,648 S.F.  
 (64.02 ACRES)

NORTH ROAD

SHANNOCK HISTORICAL DISTRICT

SHANNOCK VILLAGE ROAD

RAILROAD STREET

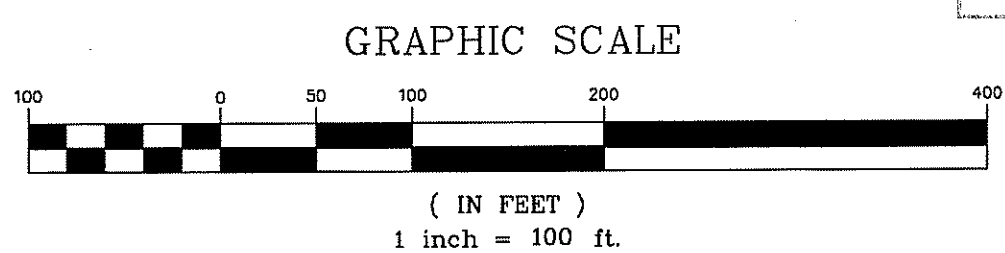
WEST SHANNOCK ROAD

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

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**LEGEND**

- EXISTING PROPERTY LINE
- EXISTING CONTOURS
- EXISTING STREAM
- EXISTING STONE WALL
- ABUTTING LINE
- EXISTING TREE LINE
- 50' WETLAND BUFFER
- TEST HOLES
- WETLAND FLAG
- SOIL BOUNDARY
- SOIL TYPE



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*Matthew D. Wenzel*

**OWNER/APPLICANT**  
 ALTAMONTE RIDGE, LLC  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907

Steven M. Clarke  
 No. 4477  
 REGISTERED PROFESSIONAL ENGINEER

**COMMONWEALTH**  
 ENGINEERS & CONSULTANTS, INC.  
 400 SMITH STREET  
 PROVIDENCE, RHODE ISLAND 02908

**REVISIONS**

No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

**PRELIMINARY SUBMISSION**  
 for  
**ALTAMONTE RIDGE**  
 A.P. 10D, LOT 46  
 SHANNOCK VILLAGE ROAD  
 (MAIN STREET)  
 in  
 RICHMOND, RHODE ISLAND  
**EXISTING CONDITIONS & SOILS**

SCALE: 1"=100' SHEET NO: 2 of 24  
 DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
 DATE: 8/29/07 PROJECT NO.: 04145.00



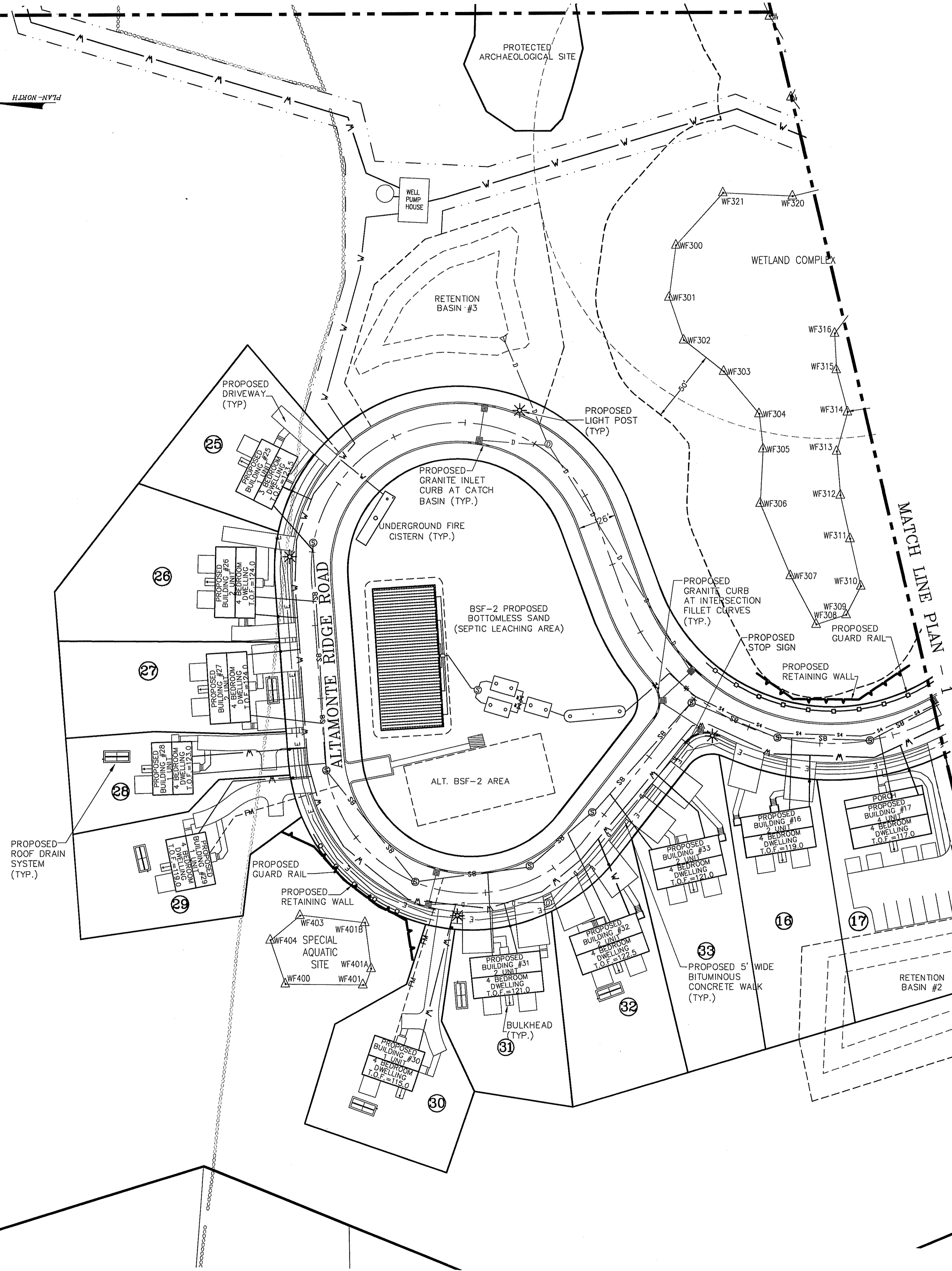




**LEGEND**

- |                                   |       |                             |              |
|-----------------------------------|-------|-----------------------------|--------------|
| EXISTING PROPERTY LINE            | ----- | PROPOSED GRANITE CURBING    | =====        |
| EXISTING STONE WALL               | ----- | PROPOSED ROADWAY BERM       | -----        |
| ABUTTING LINE                     | ----- | PROPOSED WATER LINE         | -----W-----  |
| 50' WETLAND BUFFER                | ----- | PROPOSED SEWER LINE         | -----S-----  |
| WETLAND FLAG                      | WF314 | PROPOSED SEWER FORCE MAIN   | -----FM----- |
| PROPOSED SEWER MANHOLE            | ⊙     | PROPOSED DRAIN LINE         | -----D-----  |
| PROPOSED DRAIN MANHOLE            | ⊙     | PROPOSED RETAINING WALL     | =====        |
| PROPOSED CATCH BASIN              | ⊙     | PROPOSED UNDERGROUND WIRES  | -----E-----  |
| PROPOSED WATER SERVICE SHUT OFF   | •     | PROPOSED CONDO LINE         | -----        |
| PROPOSED LIGHT POLE               | *     | PROPOSED ROADWAY CENTERLINE | -----        |
| PROPOSED SIGN                     | ⊙     | PROPOSED GUARDRAIL          | -----        |
| PROPOSED ROOF INFILTRATION SYSTEM | ⊙     | PROPOSED WATERLINE EASEMENT | -----        |
| PROPOSED UNDERGROUND FIRE CISTERN | ⊙     | PROPOSED DRAINAGE EASEMENT  | -----        |

OPEN SPACE  
PARCEL A

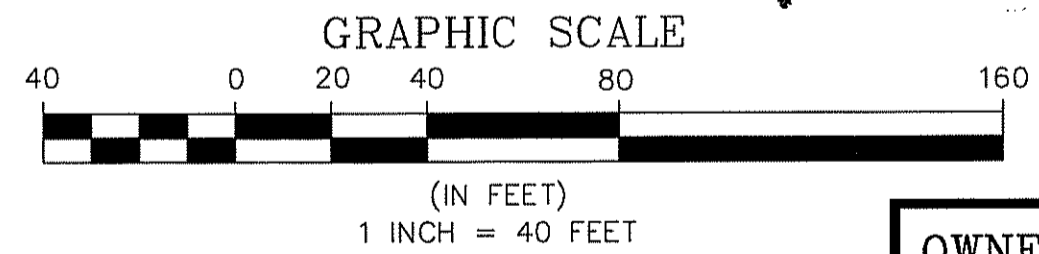


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JAN 29 2008

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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DATED APR 25 2008 FILE # 07-025-9  
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*Steven M. Clarke*



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861A BROAD STREET  
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Steven M. Clarke  
No. 4477  
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PROVIDENCE, RHODE ISLAND 02908

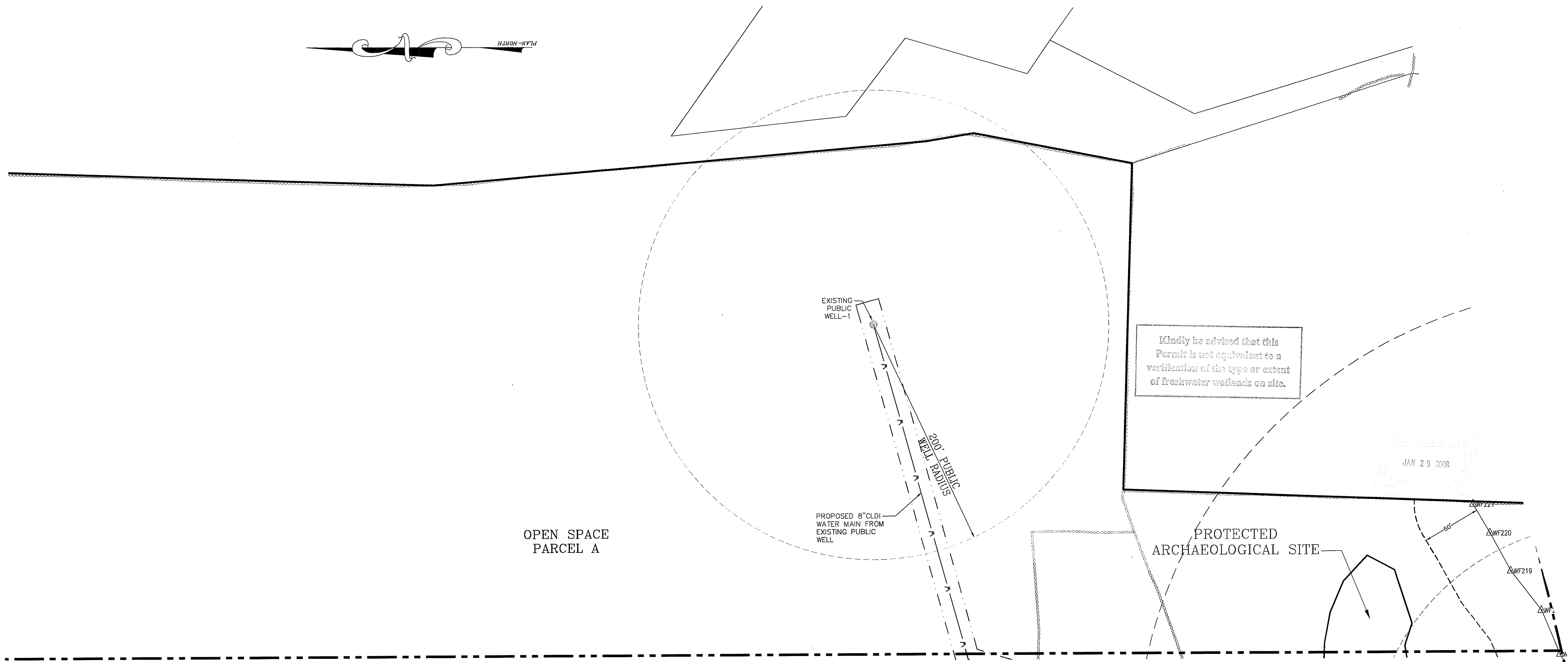
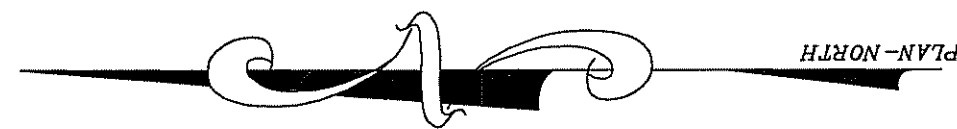
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PRELIMINARY SUBMISSION  
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**ALTAMONTE RIDGE**  
A.P. 10D, LOT 46  
SHANNOCK VILLAGE ROAD  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
**SITE IMPROVEMENT PLAN - 2**

SCALE: 1"=40' SHEET NO: 5 of 24  
DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
DATE: 8/29/07 PROJECT NO.: 04145.00

P:\0000\04145\07\10D\10D\_46\_Site\_Improvement\_Plan\_Sheet\_05.dwg, 8/29/07 10:58:00 AM, 10/2008 10:58:00 AM



OPEN SPACE  
PARCEL A

MATCH LINE PLAN - 2

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JAN 29 2008

PROTECTED  
ARCHAEOLOGICAL SITE

**LEGEND**

- |                                   |        |                             |      |
|-----------------------------------|--------|-----------------------------|------|
| EXISTING PROPERTY LINE            | —      | PROPOSED GRANITE CURBING    | —    |
| EXISTING STONE WALL               | —      | PROPOSED ROADWAY BERM       | —    |
| ABUTTING LINE                     | —      | PROPOSED WATER LINE         | —W—  |
| 50' WETLAND BUFFER                | —      | PROPOSED SEWER LINE         | —S—  |
| WETLAND FLAG                      | △WF314 | PROPOSED SEWER FORCE MAIN   | —FM— |
| PROPOSED SEWER MANHOLE            | ⊙      | PROPOSED DRAIN LINE         | —D—  |
| PROPOSED DRAIN MANHOLE            | ⊙      | PROPOSED RETAINING WALL     | —    |
| PROPOSED CATCH BASIN              | ⊙      | PROPOSED UNDERGROUND WIRES  | —E—  |
| PROPOSED WATER SERVICE SHUT OFF   | ●      | PROPOSED CONDO LINE         | —    |
| PROPOSED LIGHT POLE               | *      | PROPOSED ROADWAY CENTERLINE | —    |
| PROPOSED SIGN                     | —      | PROPOSED GUARDRAIL          | —    |
| PROPOSED ROOF INFILTRATION SYSTEM | —      | PROPOSED WATERLINE EASEMENT | —    |
| PROPOSED UNDERGROUND FIRE CISTERN | —      | PROPOSED DRAINAGE EASEMENT  | —    |

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*Signature of D. Wencel*

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881A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

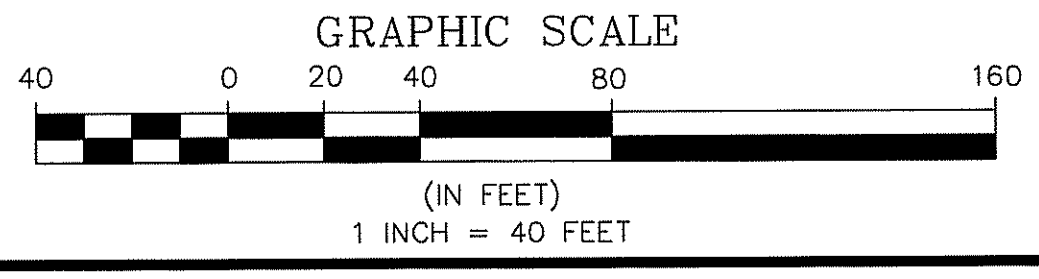
Steven M. Clarke  
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PROFESSIONAL ENGINEER

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PROVIDENCE, RHODE ISLAND 02908

REVISIONS

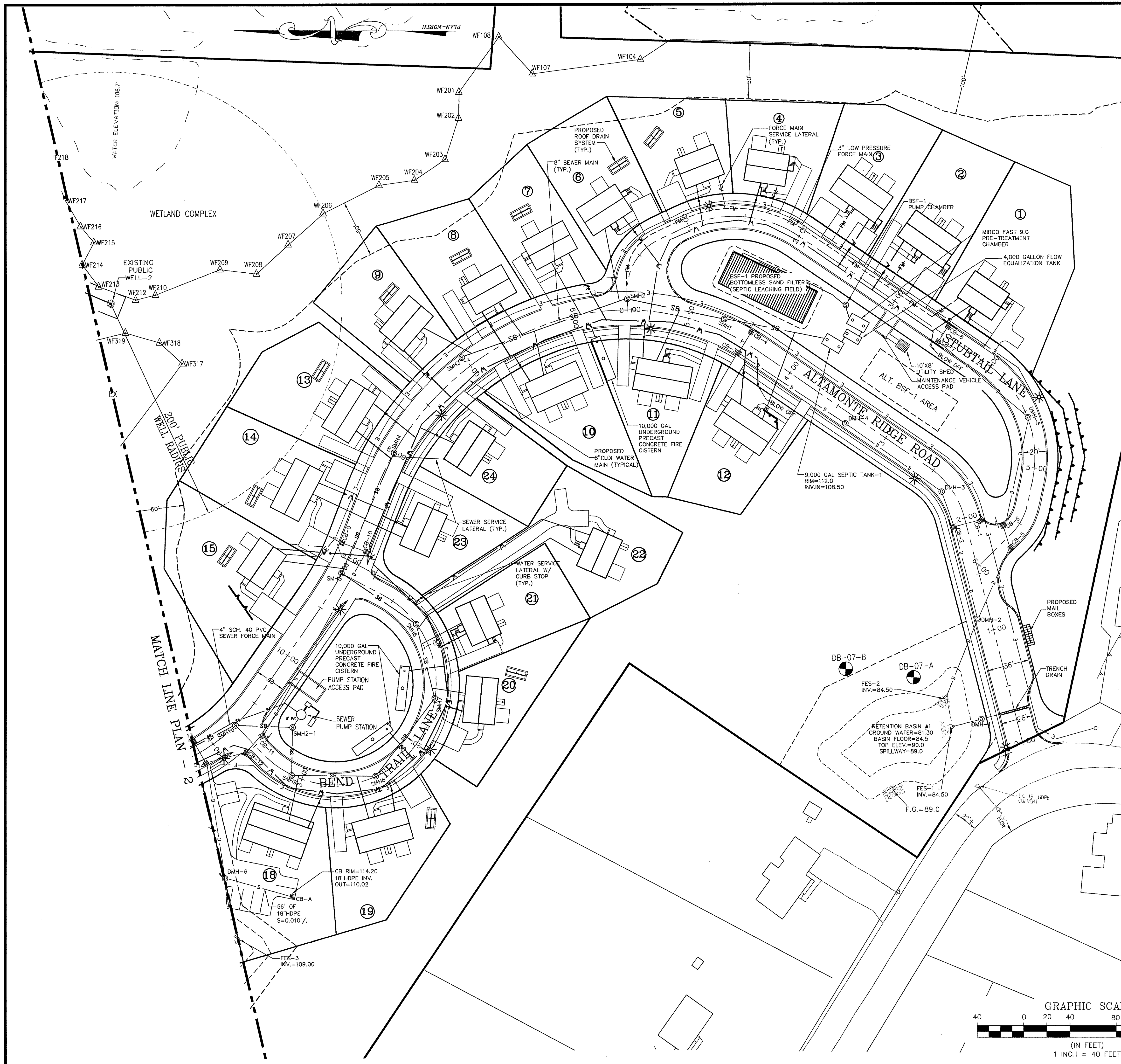
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PRELIMINARY SUBMISSION  
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**ALTAMONTE RIDGE**  
A.P. 10D, LOT 46  
SHANNOCK VILLAGE ROAD  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
**SITE IMPROVEMENT PLAN - 3**



SCALE: 1"=40' SHEET NO: 6 of 24  
DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
DATE: 8/29/07 PROJECT NO.: 04145.00

P:\0000\04145000\04145000.dwg Plot Date: 1/14/08 10:46:46 AM Plotter: HP DesignJet 5000 Plot Style: HP-DesignJet5000.ctb



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**LEGEND**

EXISTING PROPERTY LINE	PROPOSED GRANITE CURBING
EXISTING STONE WALL	PROPOSED ROADWAY BERM
ABUTTING LINE	PROPOSED WATER LINE
50' WETLAND BUFFER	PROPOSED SEWER LINE
WETLAND FLAG	PROPOSED SEWER FORCE MAIN
PROPOSED SEWER MANHOLE	PROPOSED DRAIN LINE
PROPOSED DRAIN MANHOLE	PROPOSED RETAINING WALL
PROPOSED CATCH BASIN	PROPOSED UNDERGROUND WIRES
PROPOSED WATER SERVICE SHUT OFF	PROPOSED CONDO LINE
PROPOSED LIGHT POLE	PROPOSED ROADWAY CENTERLINE
PROPOSED SIGN	PROPOSED GUARDRAIL
PROPOSED ROOF INFILTRATION SYSTEM	PROPOSED WATERLINE EASEMENT
PROPOSED UNDERGROUND FIRE CISTERN	PROPOSED DRAINAGE EASEMENT

- GENERAL NOTES:**
1. THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSING OF PROPOSED UTILITIES AND EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES RELATIVE TO THE LOCATION AND ELEVATION OF THESE FACILITIES AND ANY DISCREPANCIES IN THE LOCATION OF ANY UTILITY SHOWN OR ENCOUNTERED DURING CONSTRUCTION SHALL BE REPORTED TO COMMONWEALTH ENGINEERS & CONSULTANTS, INC. 400 SMITH STREET, PROVIDENCE, RHODE ISLAND 02908; (401) 273-6600.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING "DIG-SAFE" AT 1-888-344-7233 TO COMPLY WITH STATE LAW PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITY.
  3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH ANY APPLICABLE LOCAL, STATE AND FEDERAL LAWS GOVERNING HIS INTENDED ACTIVITIES.
  4. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.
  5. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE APPROPRIATE STATE AND MUNICIPALITY PRIOR TO COMMENCING ANY WORK.
  6. IF CEMENT CONCRETE MIX TRUCKS ARE TO BE WASHED OUT ON SITE, THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING A WASH OUT AREA WITH APPROPRIATE PROTECTION CONTROLS.
  7. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING COLLECTION AND STORAGE LOCATIONS ON-SITE FOR ALL CONSTRUCTION DEBRIS AND TRASH SO THAT SHIT MATERIAL DOES NOT BECOME A NEIGHBORHOOD NUISANCE.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
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DATED FILE # 07-0359  
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*Martin D. Weneck*

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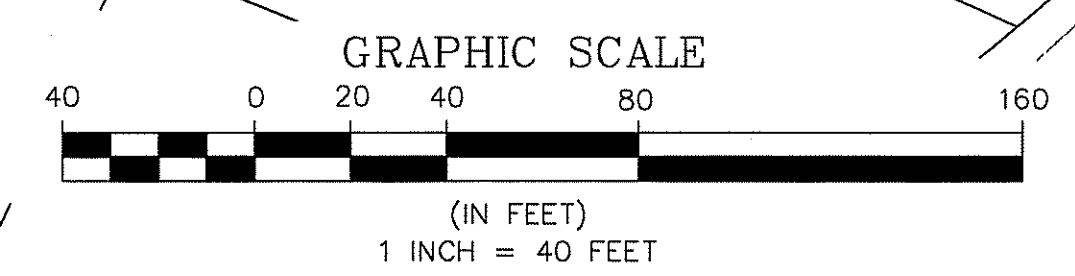
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REGISTERED PROFESSIONAL ENGINEER

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400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908

**REVISIONS**

No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

**PRELIMINARY SUBMISSION**  
for  
**ALTAMONTE RIDGE**  
A.P. 10D, LOT 46  
**SHANNOCK VILLAGE ROAD**  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
**UTILITIES & DRAINAGE PLAN - 1**

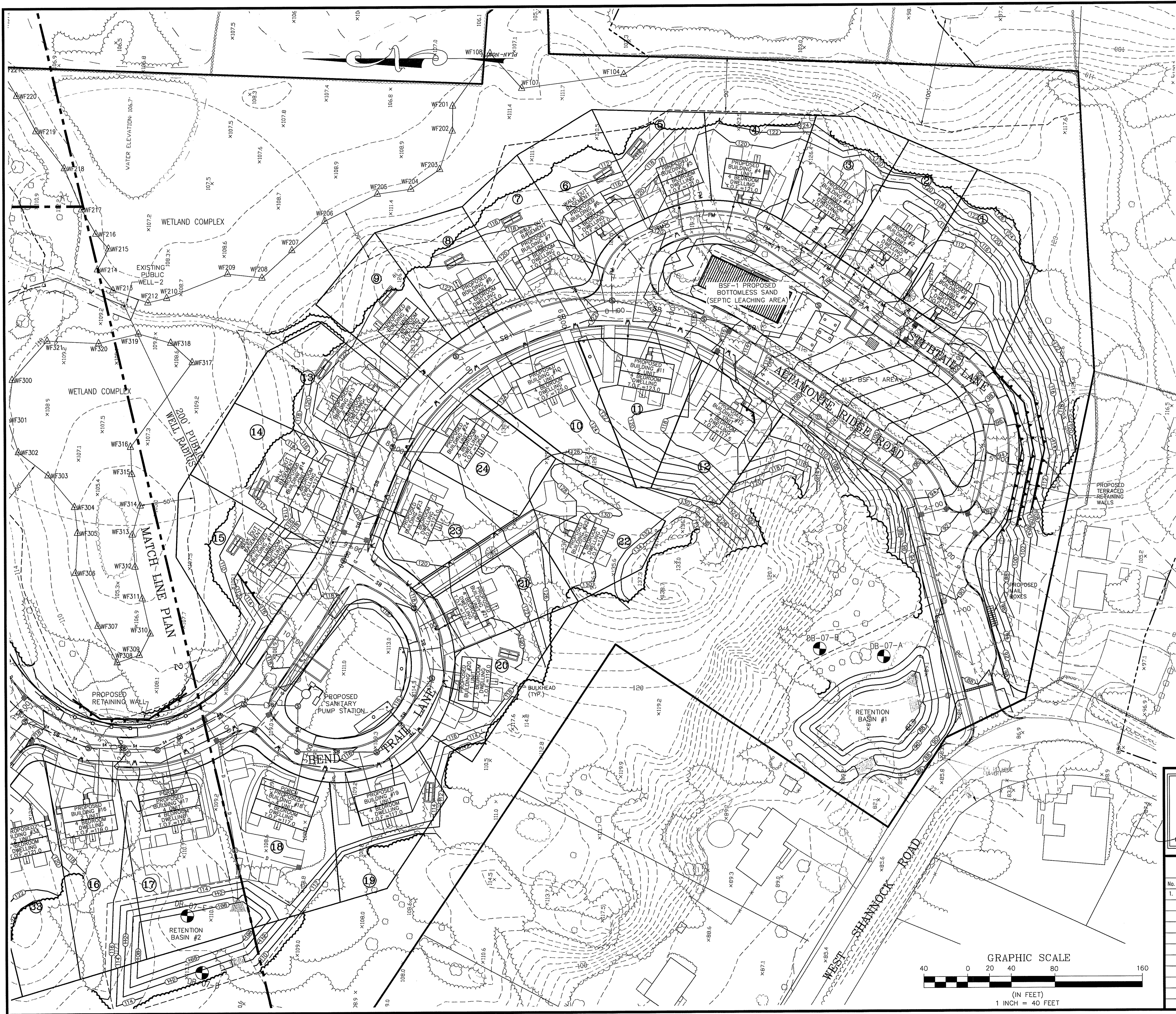


SCALE: 1"=40'	SHEET NO: 7 of 24
DRAWN BY: DMS	DESIGN BY: TJP
DATE: 8/29/07	CHECKED BY: SMC
	PROJECT NO.: 04145.00

P:\0000\04145\07\08\Shannock\_Village\_Road\_Plan\_10D\_Lot\_46.dwg, 10/20/07, 10:30:28 AM, SMC







**LEGEND**

- EXISTING PROPERTY LINE
- EXISTING STONE WALL
- ABUTTING LINE
- 50' WETLAND BUFFER
- WETLAND FLAG
- EXISTING CONTOURS
- EXISTING TREE LINE
- TEST HOLES
- PROPOSED SEWER MANHOLE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED WATER SERVICE SHUT OFF
- PROPOSED LIGHT POLE
- PROPOSED SIGN
- PROPOSED ROOF INFILTRATION SYSTEM
- PROPOSED UNDERGROUND FIRE CISTERN
- PROPOSED GRANITE CURBING
- PROPOSED ROADWAY BERM
- PROPOSED WATER LINE
- PROPOSED SEWER LINE
- PROPOSED SEWER FORCE MAIN
- PROPOSED DRAIN LINE
- PROPOSED RETAINING WALL
- PROPOSED UNDERGROUND WIRES
- PROPOSED CONDO LINE
- PROPOSED ROADWAY CENTERLINE
- PROPOSED GUARDRAIL
- PROPOSED WATERLINE EASEMENT
- PROPOSED DRAINAGE EASEMENT
- PROPOSED CONTOURS
- PROPOSED FINISH GRADE
- PROPOSED LIMIT OF CLEARING

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*Stephen D. Wencel*

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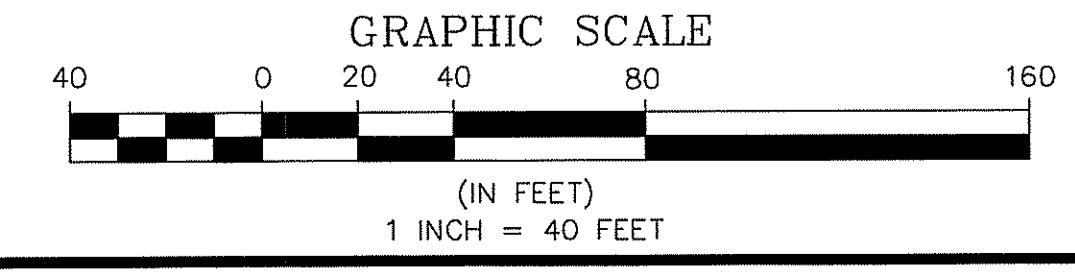
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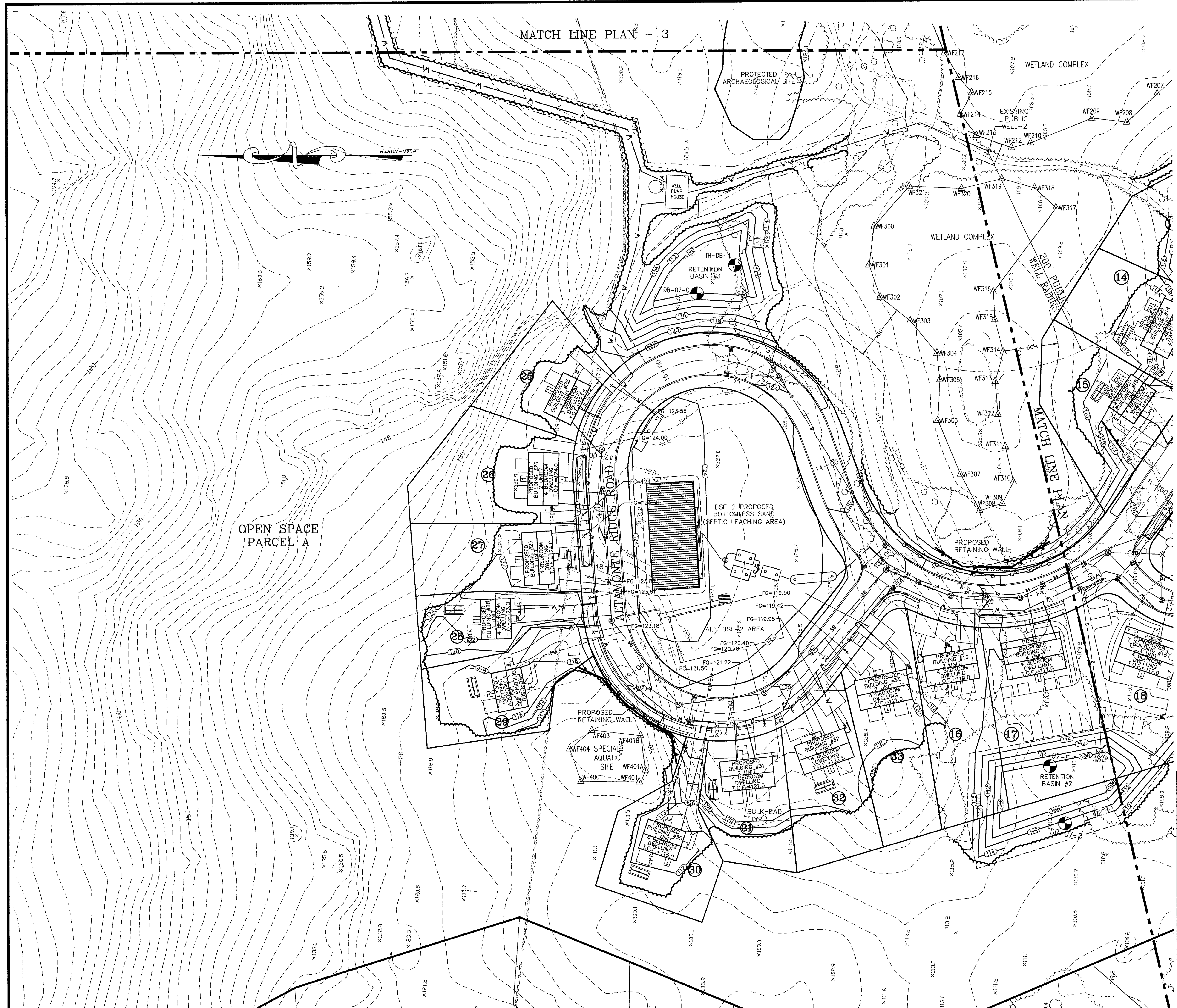
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**GRADING PLAN - 1**



SCALE: 1"=40' SHEET NO: 10 of 24  
 DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
 DATE: 8/29/07 PROJECT NO.: 04145.00



MATCH LINE PLAN - 3

OPEN SPACE  
PARCEL A

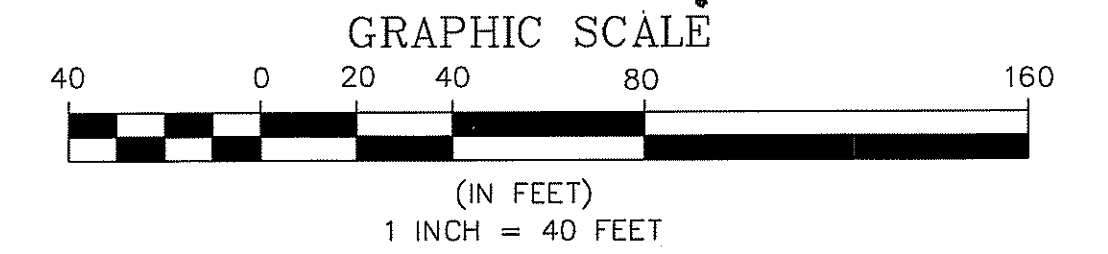
LEGEND

- |                                   |                             |                                   |
|-----------------------------------|-----------------------------|-----------------------------------|
| EXISTING PROPERTY LINE            | PROPOSED GRANITE CURBING    | PROPOSED UNDERGROUND FIRE CISTERN |
| EXISTING STONE WALL               | PROPOSED ROADWAY BERM       |                                   |
| ABUTTING LINE                     | PROPOSED WATER LINE         |                                   |
| 50' WETLAND BUFFER                | PROPOSED SEWER LINE         |                                   |
| WETLAND FLAG                      | PROPOSED SEWER FORCE MAIN   |                                   |
| EXISTING CONTOURS                 | PROPOSED DRAIN LINE         |                                   |
| EXISTING TREE LINE                | PROPOSED RETAINING WALL     |                                   |
| TEST HOLES                        | PROPOSED UNDERGROUND WIRES  |                                   |
| PROPOSED SEWER MANHOLE            | PROPOSED CONDO LINE         |                                   |
| PROPOSED DRAIN MANHOLE            | PROPOSED ROADWAY CENTERLINE |                                   |
| PROPOSED CATCH BASIN              | PROPOSED GUARDRAIL          |                                   |
| PROPOSED WATER SERVICE SHUT OFF   | PROPOSED WATERLINE EASEMENT |                                   |
| PROPOSED LIGHT POLE               | PROPOSED DRAINAGE EASEMENT  |                                   |
| PROPOSED SIGN                     | PROPOSED CONTOURS           |                                   |
| PROPOSED ROOF INFILTRATION SYSTEM | PROPOSED FINISH GRADE       |                                   |
|                                   | PROPOSED LIMIT OF CLEARING  |                                   |

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*Matthew D. Wenczek*



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SHANNOCK VILLAGE ROAD  
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in  
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GRADING PLAN - 2

SCALE: 1"=40'  
DRAWN BY: DMS  
DATE: 8/29/07  
SHEET NO: 11 of 24  
DESIGN BY: TJP  
CHECKED BY: SJC  
PROJECT NO.: 04145.00

P:\0000\04145\00 - 1st Shannock Road Plan\08\_10\_08\_04145\_ShanShannock\_Rd\_Plan.dwg, 8/29/08, 11:44:00 AM, 1:10, 274,425 bytes





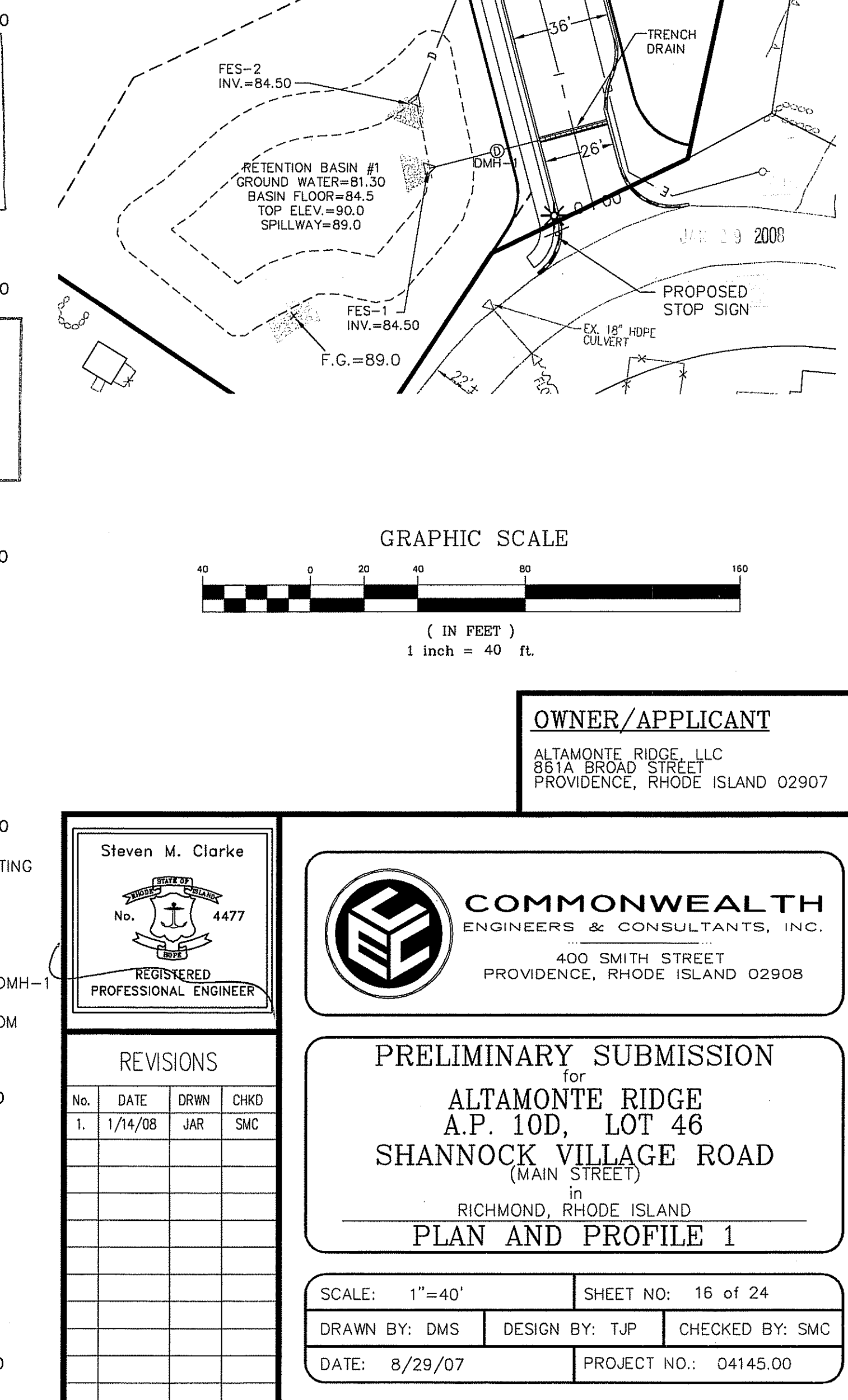
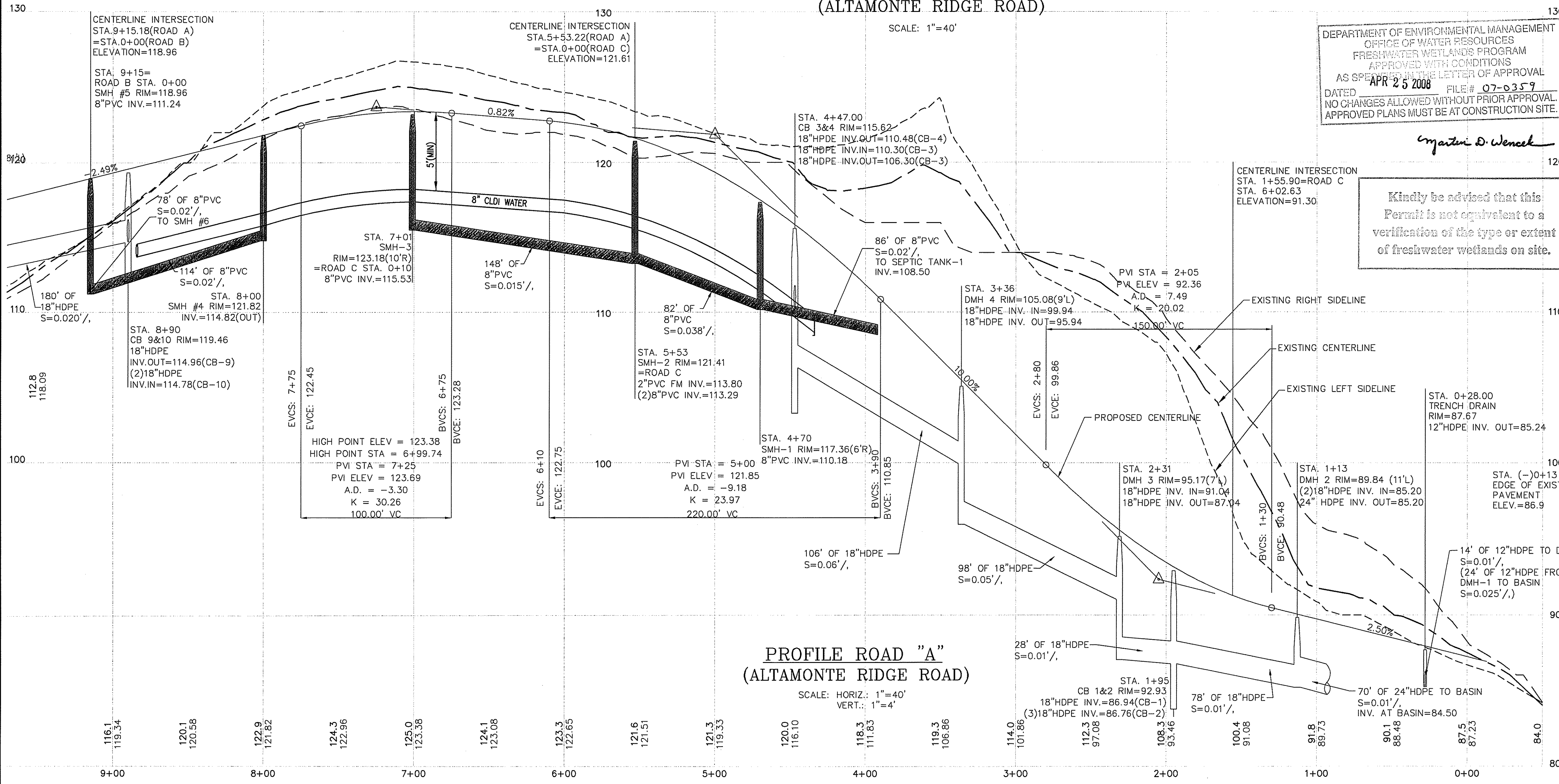
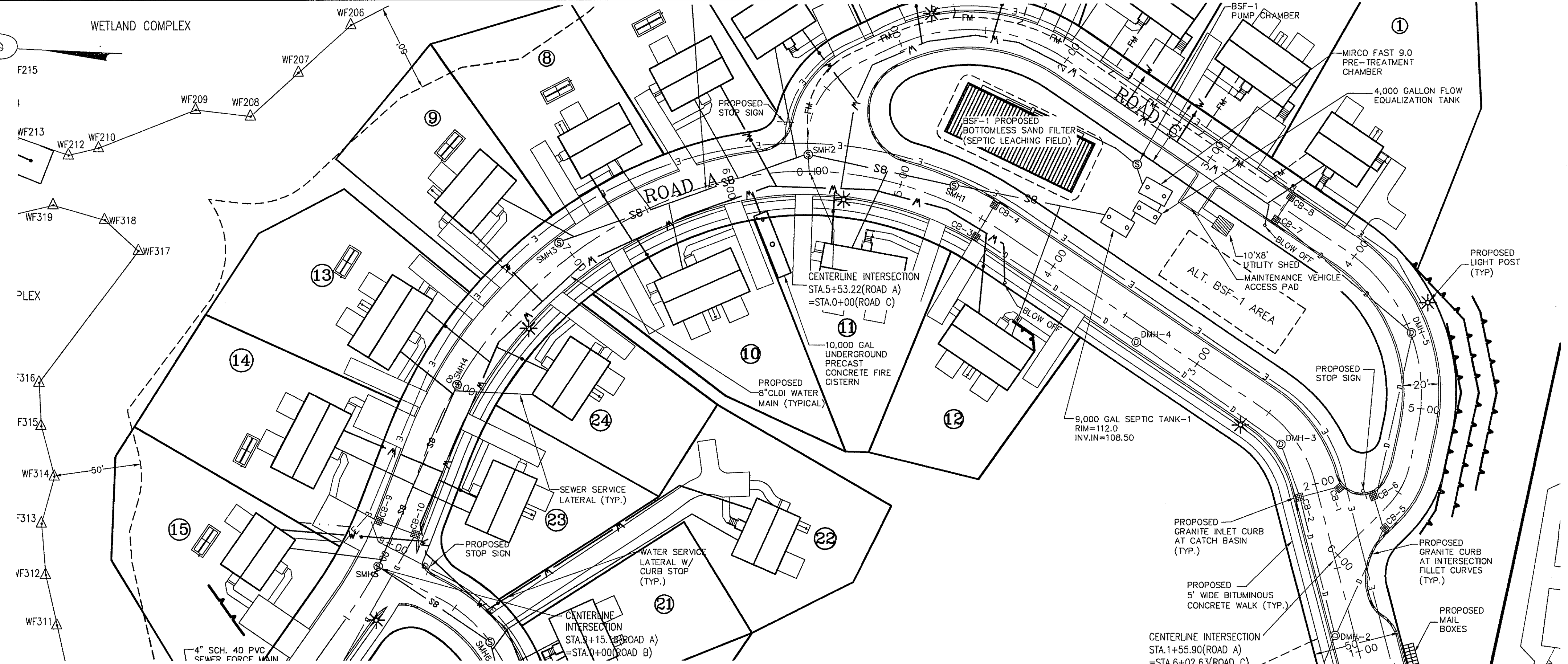


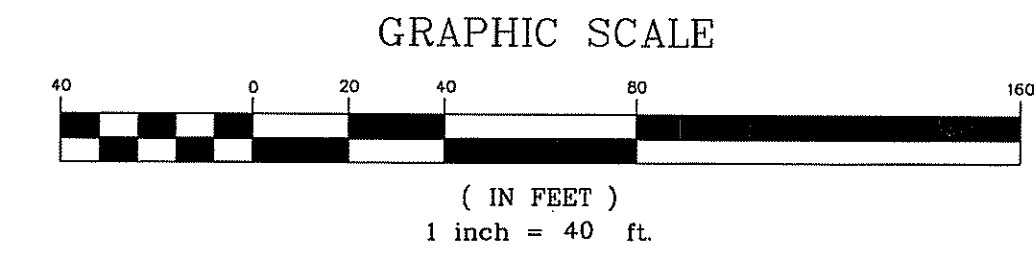


**NOTE:**  
CATCH BASINS 1,2,3,4,5 & 6 REQUIRE HIGH CAPACITY BICYCLE SAFE GRATES (RI STD. 6.3.4), SEE CONSTRUCTION DETAILS #3 SHEET 21 OF 24.

**LEGEND**

- |                                   |                             |                                   |
|-----------------------------------|-----------------------------|-----------------------------------|
| EXISTING PROPERTY LINE            | PROPOSED GRANITE CURBING    | PROPOSED UNDERGROUND FIRE CISTERN |
| EXISTING STONE WALL               | PROPOSED ROADWAY BERM       |                                   |
| ABUTTING LINE                     | PROPOSED WATER LINE         |                                   |
| 50' WETLAND BUFFER                | PROPOSED SEWER LINE         |                                   |
| WETLAND FLAG                      | PROPOSED SEWER FORCE MAIN   |                                   |
| PROPOSED SEWER MANHOLE            | PROPOSED DRAIN LINE         |                                   |
| PROPOSED DRAIN MANHOLE            | PROPOSED RETAINING WALL     |                                   |
| PROPOSED CATCH BASIN              | PROPOSED UNDERGROUND WIRES  |                                   |
| PROPOSED WATER SERVICE SHUT OFF   | PROPOSED CONDO LINE         |                                   |
| PROPOSED LIGHT POLE               | PROPOSED ROADWAY CENTERLINE |                                   |
| PROPOSED SIGN                     | PROPOSED GUARDRAIL          |                                   |
| PROPOSED ROOF INFILTRATION SYSTEM | PROPOSED WATERLINE EASEMENT |                                   |
|                                   | PROPOSED DRAINAGE EASEMENT  |                                   |





DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 25 2008 FILE # 07-0359  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

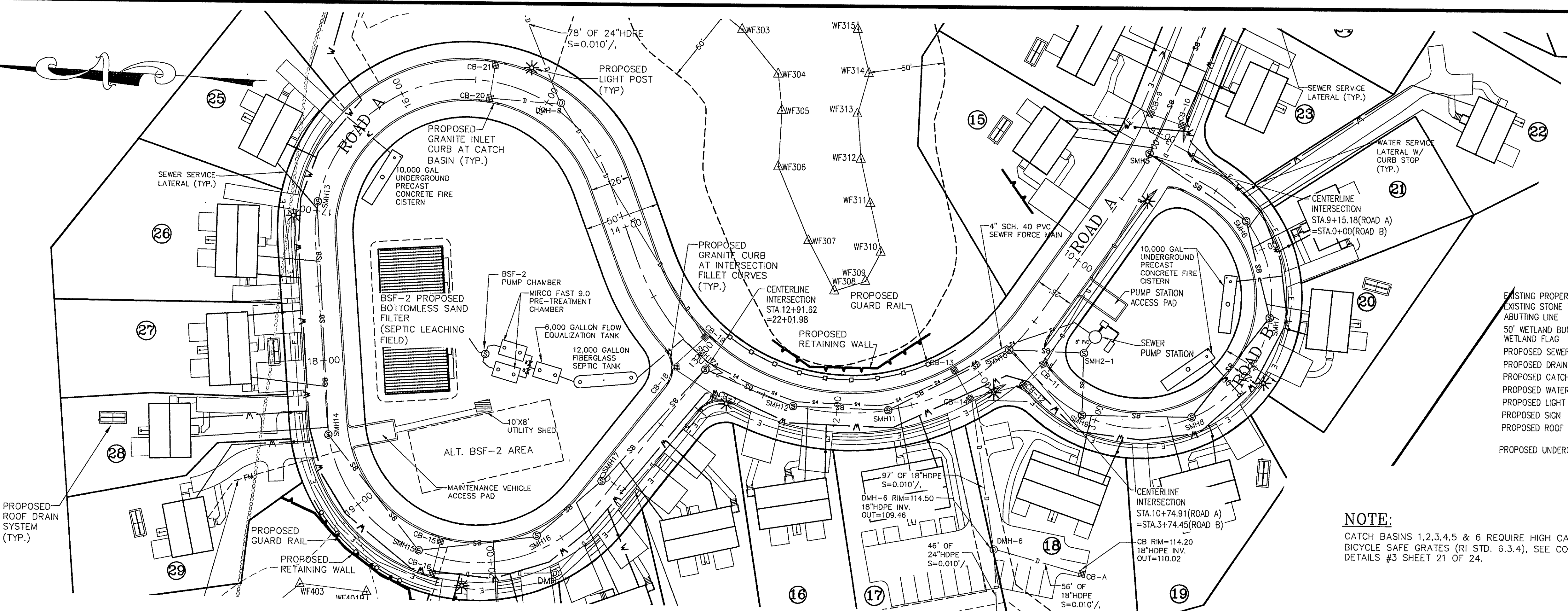
*Jonathan D. Wencel*

**LEGEND**

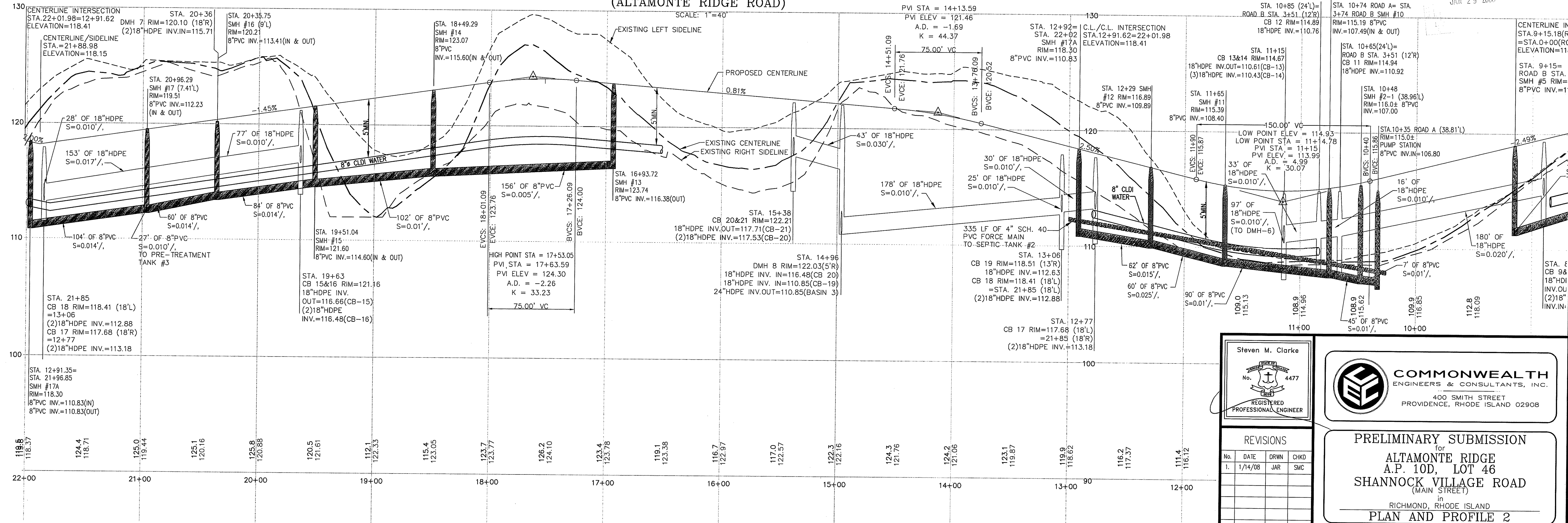
EXISTING PROPERTY LINE	PROPOSED GRANITE CURBING	PROPOSED UNDERGROUND FIRE CISTERN
EXISTING STONE WALL	PROPOSED ROADWAY BERM	PROPOSED WATER LINE
ABUTTING LINE	PROPOSED SEWER LINE	PROPOSED SEWER FORCE MAIN
50' WETLAND BUFFER	PROPOSED DRAIN LINE	PROPOSED RETAINING WALL
WETLAND FLAG	PROPOSED CATCH BASIN	PROPOSED UNDERGROUND WIRES
PROPOSED SEWER MANHOLE	PROPOSED WATER SERVICE SHUT OFF	PROPOSED CONDO LINE
PROPOSED DRAIN MANHOLE	PROPOSED LIGHT POLE	PROPOSED ROADWAY CENTERLINE
PROPOSED CATCH BASIN	PROPOSED SIGN	PROPOSED GUARDRAIL
PROPOSED WATER SERVICE SHUT OFF	PROPOSED ROOF INFILTRATION SYSTEM	PROPOSED WATERLINE EASEMENT
PROPOSED LIGHT POLE		PROPOSED DRAINAGE EASEMENT
PROPOSED SIGN		
PROPOSED ROOF INFILTRATION SYSTEM		

**NOTE:**  
 CATCH BASINS 1,2,3,4,5 & 6 REQUIRE HIGH CAPACITY BICYCLE SAFE GRATES (RI STD. 6.3.4), SEE CONSTRUCTION DETAILS #3 SHEET 21 OF 24.

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



**PLAN - ROAD "A"**  
 (ALTAMONTE RIDGE ROAD)



**PROFILE ROAD "A"**  
 (ALTAMONTE RIDGE ROAD)  
 SCALE: HORIZ.: 1"=40'  
 VERT.: 1"=4'

Steven M. Clarke  
 No. 4477  
 REGISTERED PROFESSIONAL ENGINEER

**COMMONWEALTH**  
 ENGINEERS & CONSULTANTS, INC.  
 400 SMITH STREET  
 PROVIDENCE, RHODE ISLAND 02908

**REVISIONS**

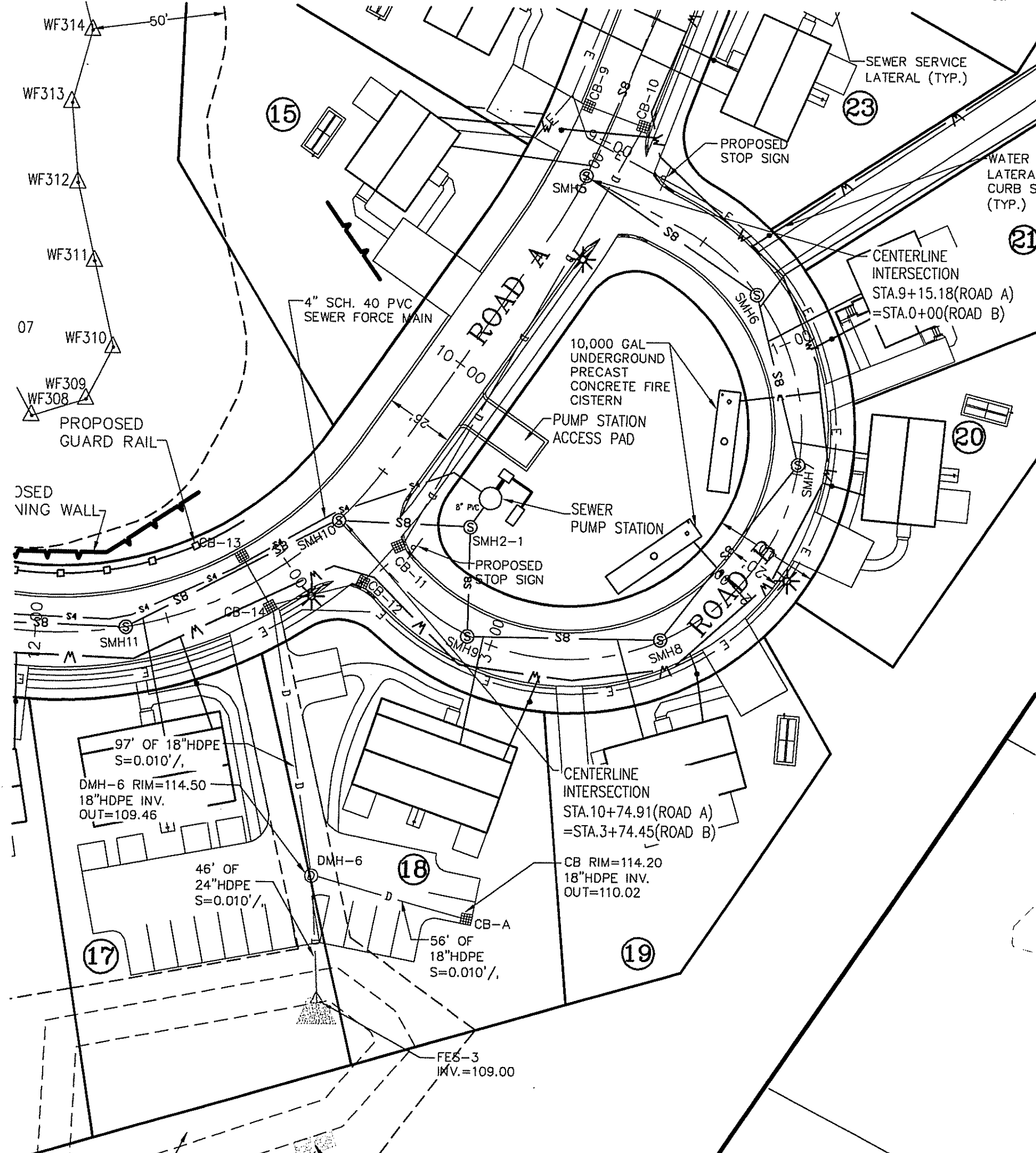
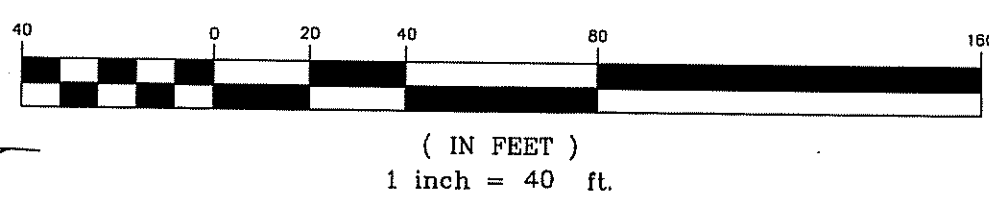
No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

PRELIMINARY SUBMISSION  
 for  
**ALTAMONTE RIDGE**  
 A.P. 10D, LOT 46  
**SHANNOCK VILLAGE ROAD**  
 (MAIN STREET)  
 in  
 RICHMOND, RHODE ISLAND  
**PLAN AND PROFILE 2**

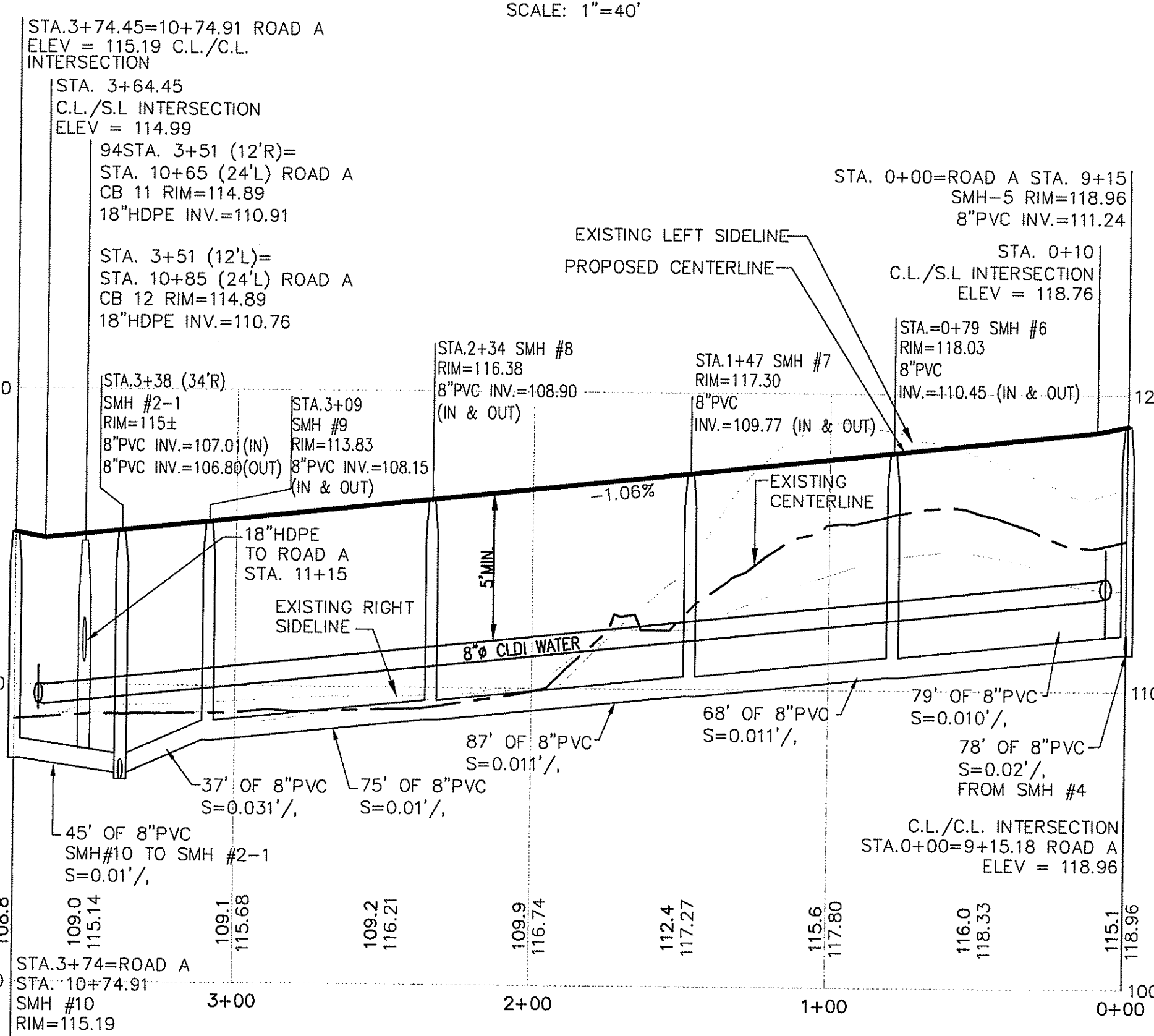
**OWNER/APPLICANT**  
 ALTAMONTE RIDGE, LLC  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907

SCALE: 1"=40'	SHEET NO: 17 of 24
DRAWN BY: DMS	DESIGN BY: TJP
DATE: 8/29/07	CHECKED BY: SMC
	PROJECT NO.: 04145.00

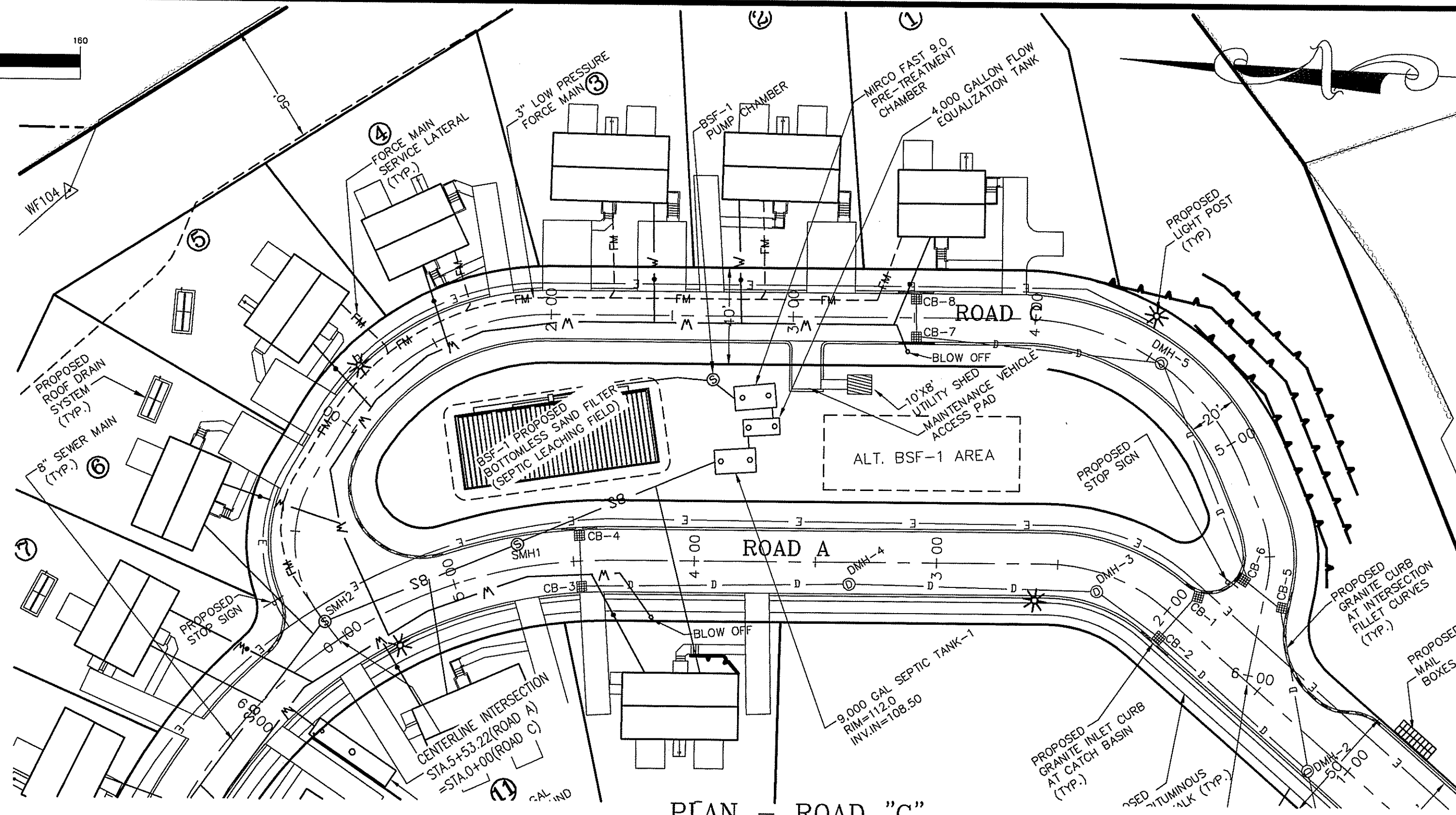
GRAPHIC SCALE



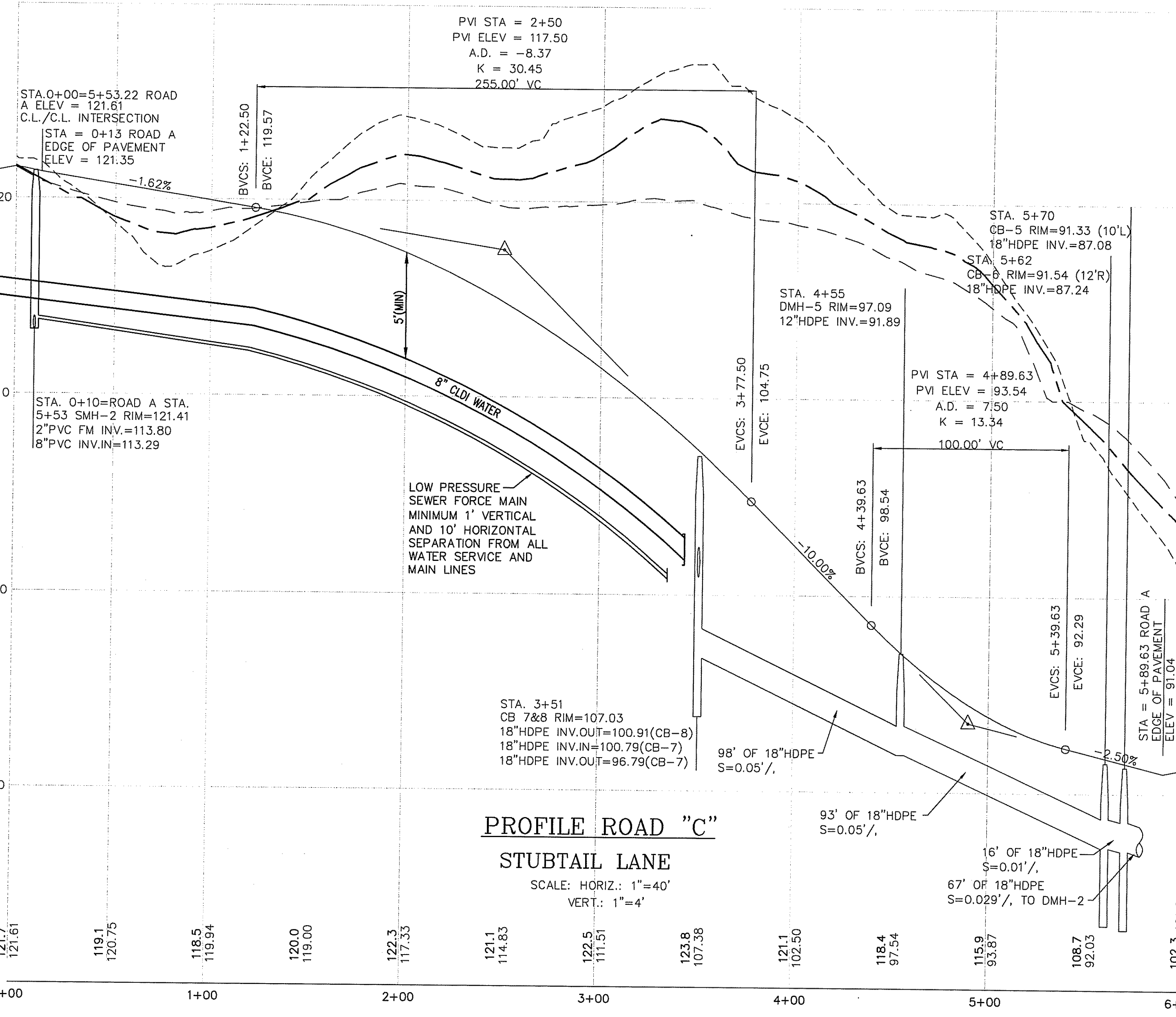
PLAN - ROAD "B"  
BEND TRAIL LANE  
SCALE: 1"=40'



PROFILE ROAD "B"  
BEND TRAIL LANE  
SCALE: HORIZ.: 1"=40'  
VERT.: 1"=4'



PLAN - ROAD "C"  
STUBTAIL LANE  
SCALE: 1"=40'



PROFILE ROAD "C"  
STUBTAIL LANE  
SCALE: HORIZ.: 1"=40'  
VERT.: 1"=4'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING STONE WALL
- EXISTING ABUTTING LINE
- 50' WETLAND BUFFER
- PROPOSED SEWER MANHOLE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED WATER SERVICE SHUT OFF
- PROPOSED LIGHT POLE
- PROPOSED SIGN
- PROPOSED ROOF INFILTRATION SYSTEM
- PROPOSED UNDERGROUND FIRE CISTERN
- PROPOSED GRANITE CURBING
- PROPOSED ROADWAY BERM
- PROPOSED WATER LINE
- PROPOSED SEWER LINE
- PROPOSED SEWER FORCE MAIN
- PROPOSED DRAIN LINE
- PROPOSED RETAINING WALL
- PROPOSED UNDERGROUND WIRES
- PROPOSED CONDO LINE
- PROPOSED ROADWAY CENTERLINE
- PROPOSED GUARDRAIL
- PROPOSED WATERLINE EASEMENT
- PROPOSED DRAINAGE EASEMENT

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

NOTE:  
CATCH BASINS 1,2,3,4,5 & 6 REQUIRE HIGH CAPACITY BICYCLE SAFE GRATES (RI STD. 6.3.4), SEE CONSTRUCTION DETAILS #3 SHEET 21 OF 24.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 25 2008 FILE # 07-0359  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

OWNER/APPLICANT  
ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

Steven M. Clarke  
REGISTERED PROFESSIONAL ENGINEER  
No. 4477

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908

REVISIONS

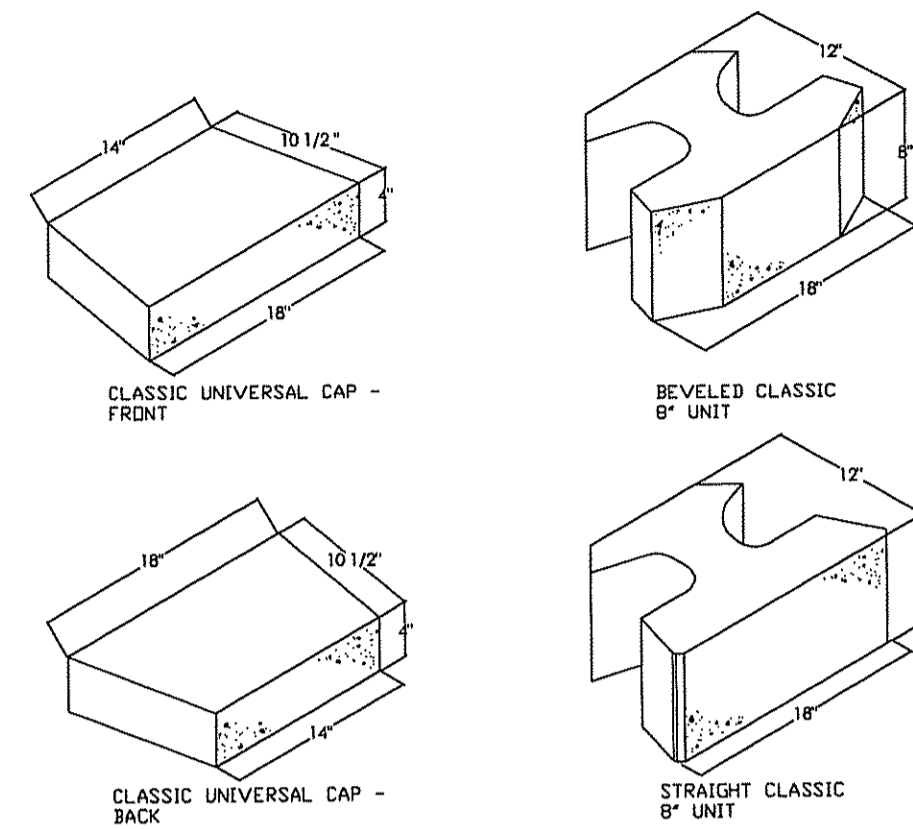
No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

PRELIMINARY SUBMISSION  
for  
ALTAMONTE RIDGE  
A.P. 10D, LOT 46  
SHANNOCK VILLAGE ROAD  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
PLAN AND PROFILE 3

SCALE: 1"=40' SHEET NO: 18 of 24  
DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
DATE: 8/29/07 PROJECT NO.: 04145.00

NOTE:  
SAMPLE SUBMITTAL REQUIRED  
FOR OWNER SELECTION OF  
FACE PATTERN AND STONE COLOR.

**ROCKWOOD OR APPROVED EQUAL  
VERTICAL BLOCK RETAINING WALL**



**GENERAL INFORMATION**

ABSORPTION... MEETS OR EXCEEDS ASTM C90-75 STANDARDS  
COMPRESSIVE STRENGTH... 3000 PSI APPROXIMATE MINIMUM (UNLESS OTHERWISE SPECIFIED)  
COMPOSITION... HIGH STRENGTH, HIGH DENSITY, 10" SLUMP CONCRETE

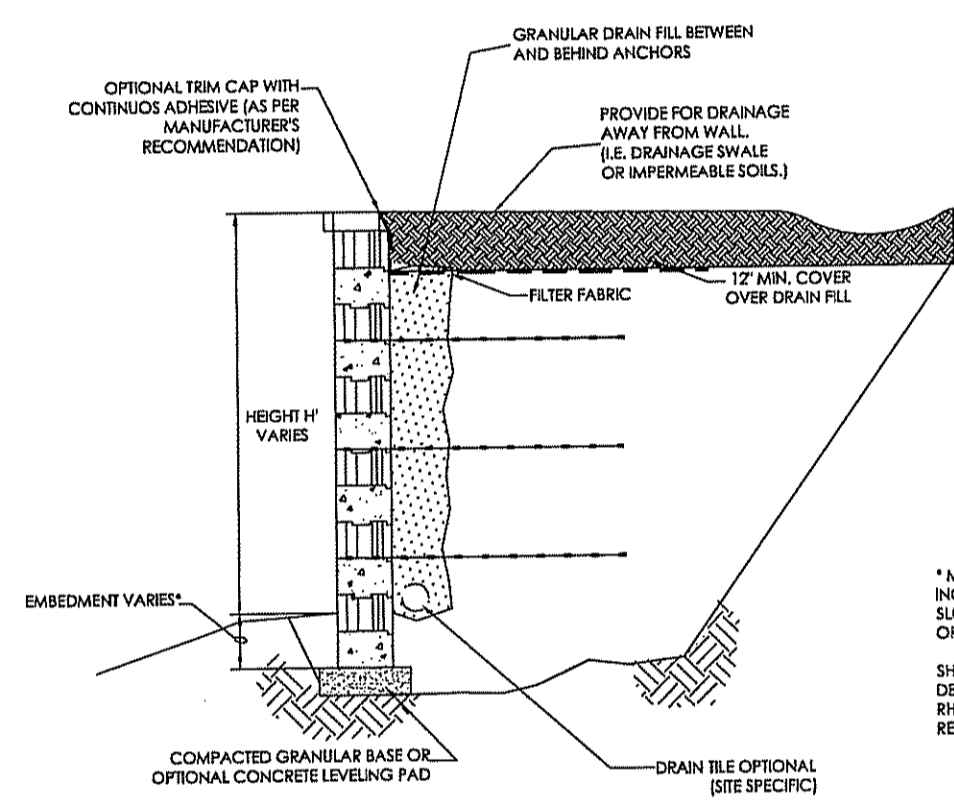
**UNIT INFORMATION**

BEVELED CLASSIC UNIT:  
18" BEVELED SPLIT FACE . . . . . 8" H X 18" W, 78 LBS. APPROX. . . . . 1.00 SQ. FT. FACE  
STRAIGHT CLASSIC UNIT:  
18" STRAIGHT SPLIT FACE . . . . . 8" H X 18" W, 80 LBS. APPROX. . . . . 1.00 SQ. FT. FACE  
UNIVERSAL CAP STRAIGHT SPLIT FACE . . . . . 4" H X 18" W FRONT AND 4" H X 14" W BACK, 54 LBS. APPROX.  
. . . . . 0.50 SQ. FT. FRONT, 0.39 SQ. FT. BACK  
. . . . . AVERAGE RUNNING LENGTH IS 16" (SEE INSTALLATION MANUAL)

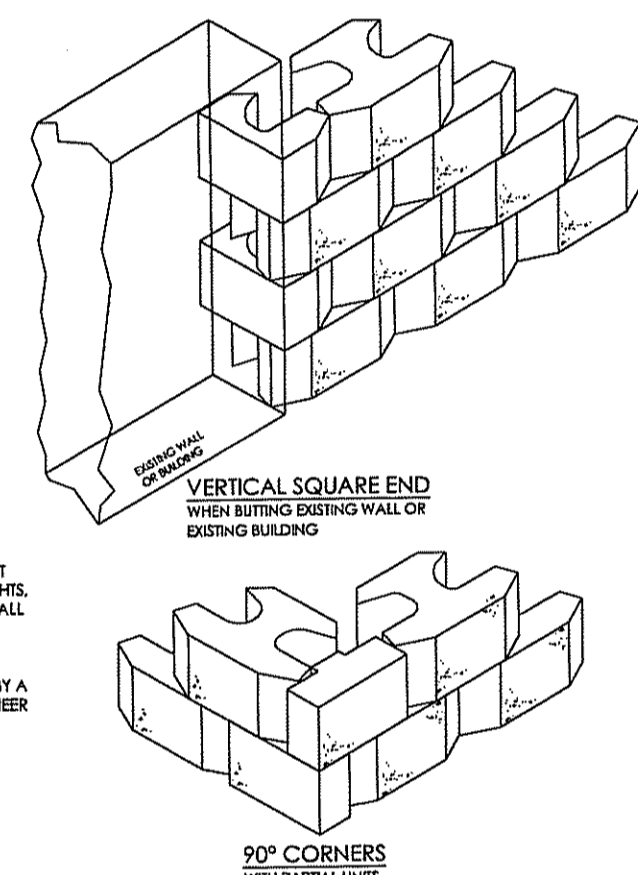
**FACE OPTIONS**

FACE PATTERNS . . . . . BEVELED SPLIT FACE  
STRAIGHT SPLIT FACE  
RUSTIC FACE

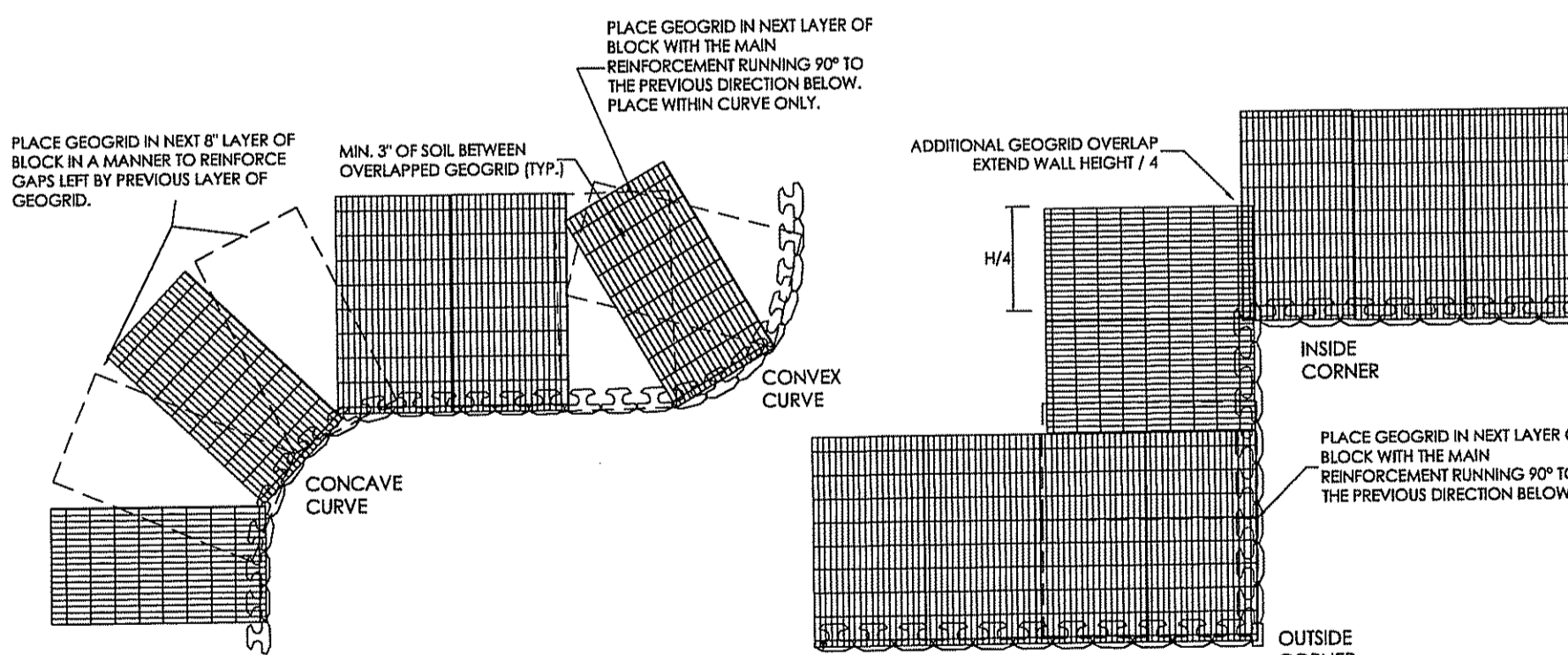
**ROCKWOOD CLASSIC 8' VERTICAL**  
NOT TO SCALE



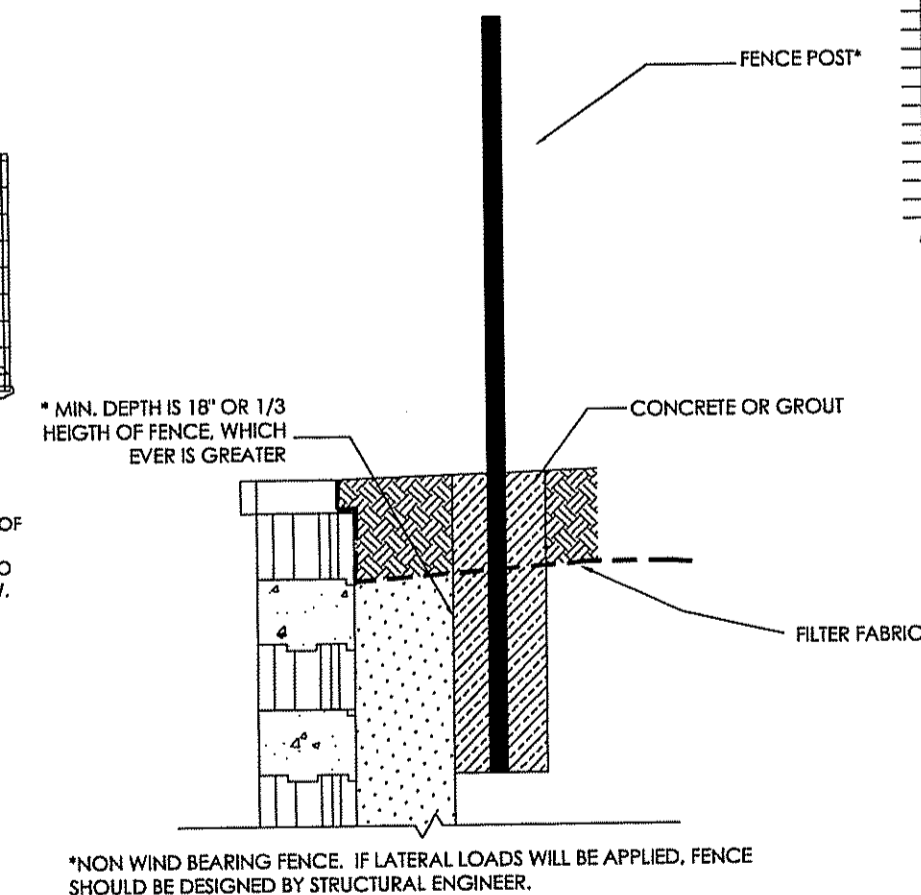
**ROCKWOOD TYPICAL SECTION**  
NOT TO SCALE



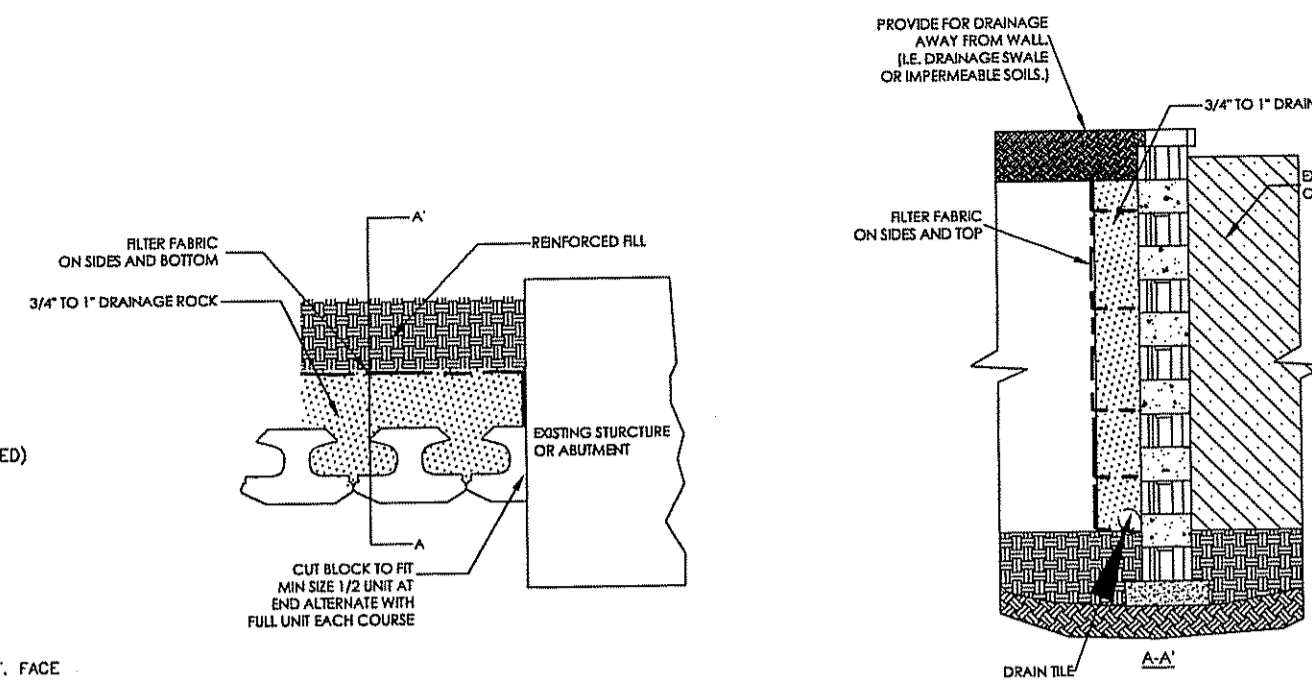
**ROCKWOOD STEPS AND CORNERS**  
NOT TO SCALE



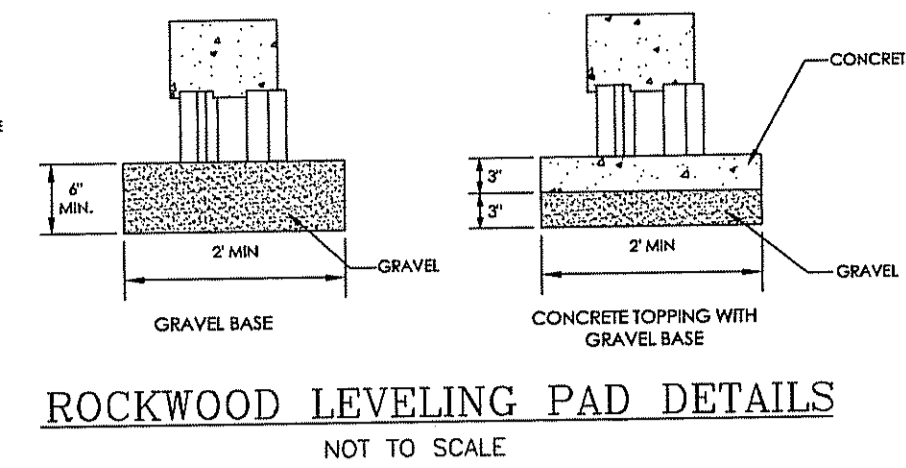
**ROCKWOOD GEOGRID DETAILS**  
NOT TO SCALE



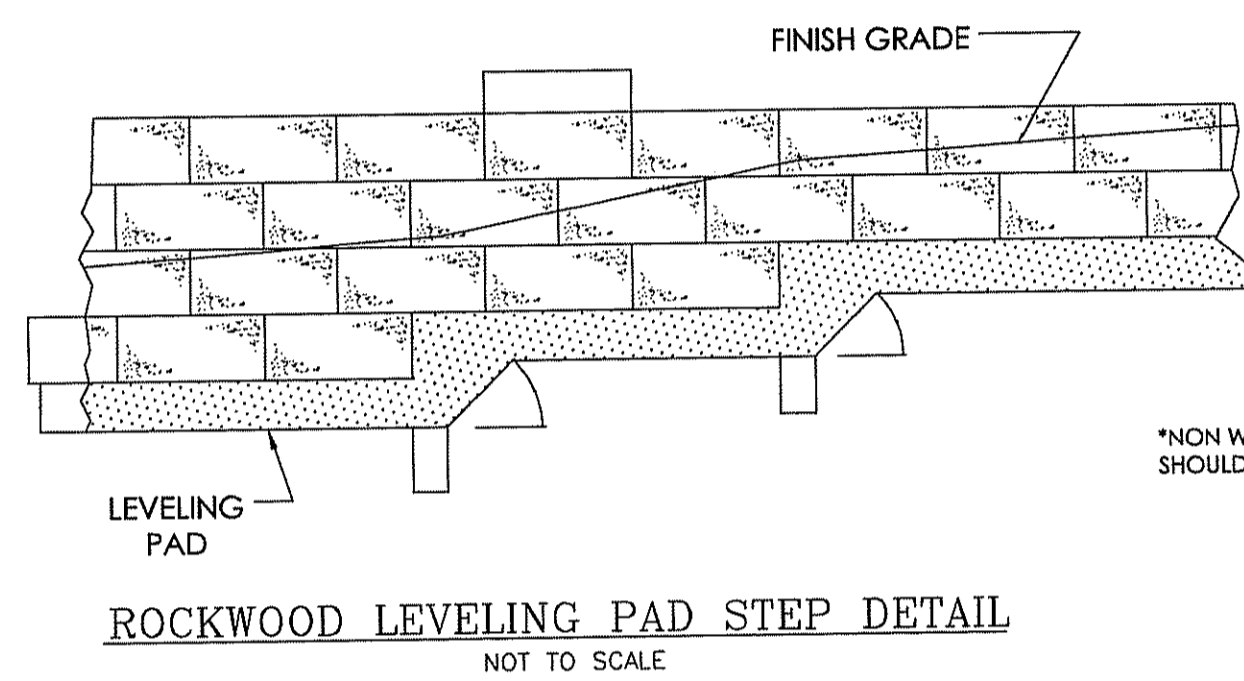
**ROCKWOOD FENCE NEAR WALL DETAIL**  
NOT TO SCALE



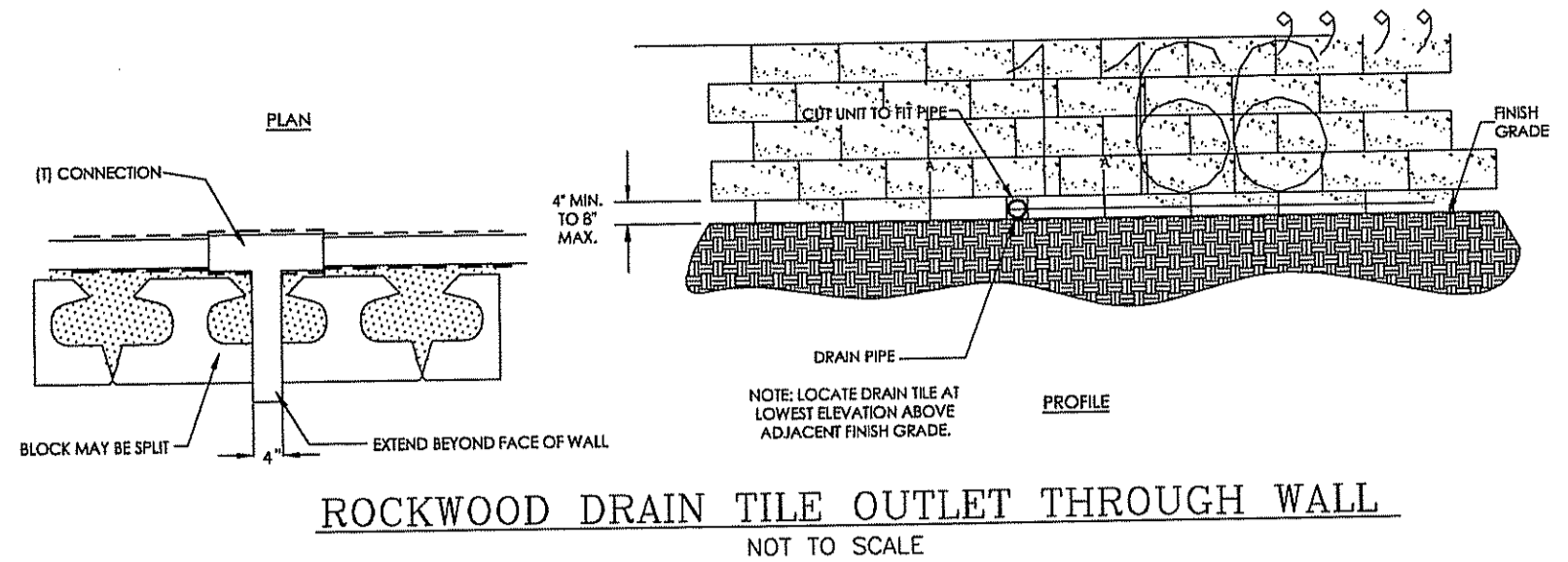
**ROCKWOOD WALL ABUTMENT DETAIL**  
NOT TO SCALE



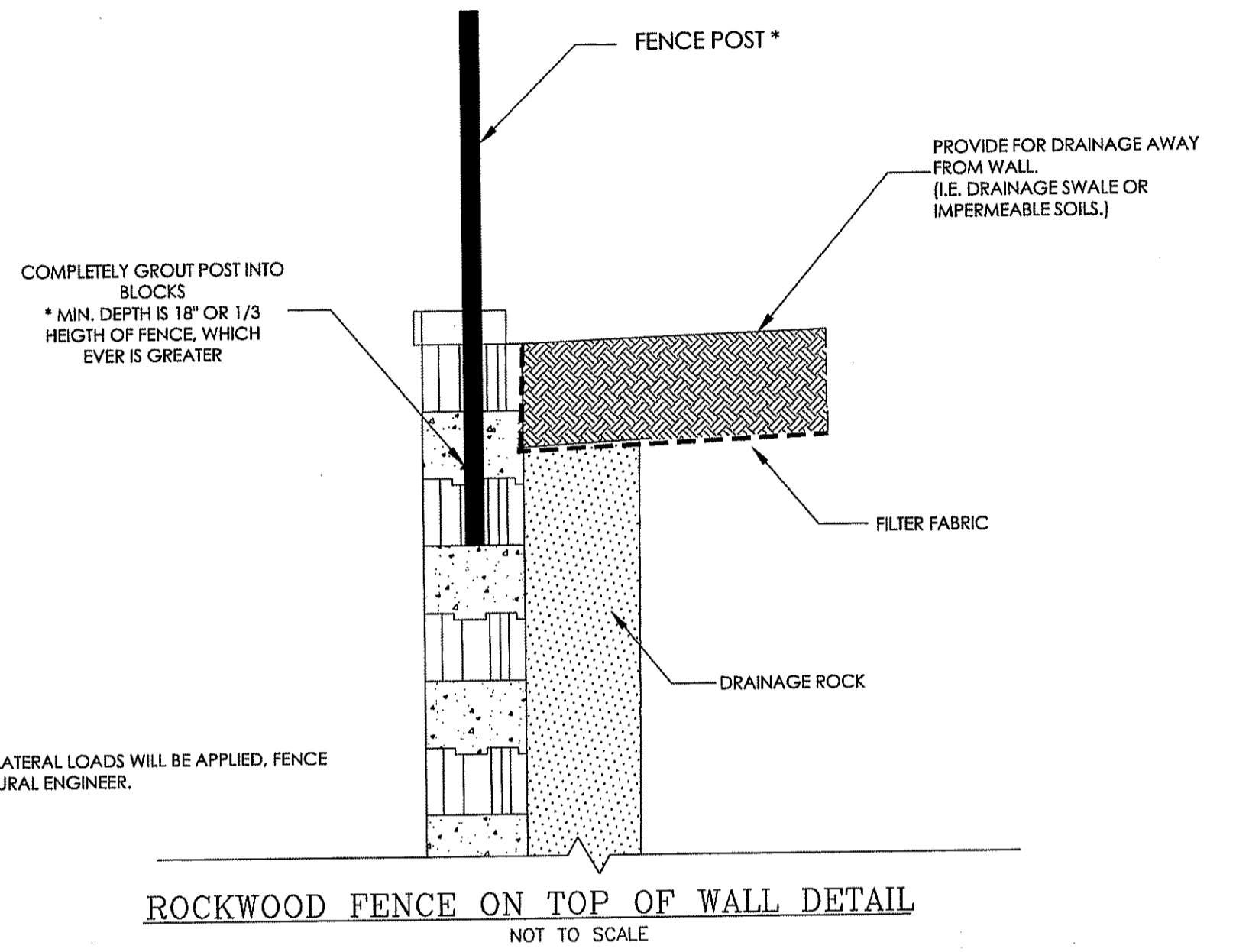
**ROCKWOOD LEVELING PAD DETAILS**  
NOT TO SCALE



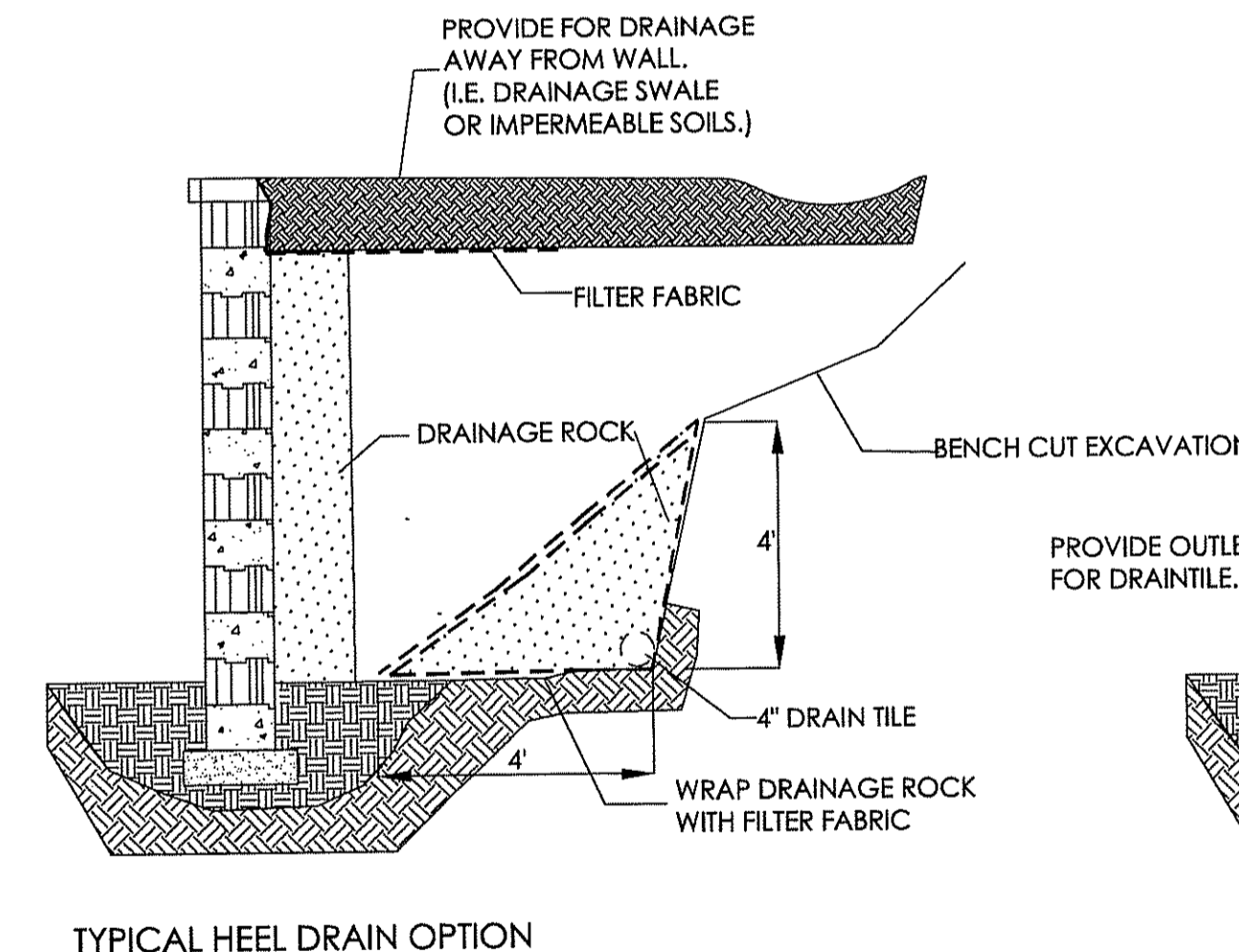
**ROCKWOOD LEVELING PAD STEP DETAIL**  
NOT TO SCALE



**ROCKWOOD DRAIN TILE OUTLET THROUGH WALL**  
NOT TO SCALE



**ROCKWOOD FENCE ON TOP OF WALL DETAIL**  
NOT TO SCALE



**ROCKWOOD DRAINAGE OPTIONS TO REMEDIATE BACK CUT SEEPAGE**  
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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DATED APR 25 2008 FILE # 07-0359  
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*Martin D. Wencel*

Steven M. Clarke  
No. 4477  
REGISTERED PROFESSIONAL ENGINEER

**COMMONWEALTH**  
ENGINEERS & CONSULTANTS, INC.  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908

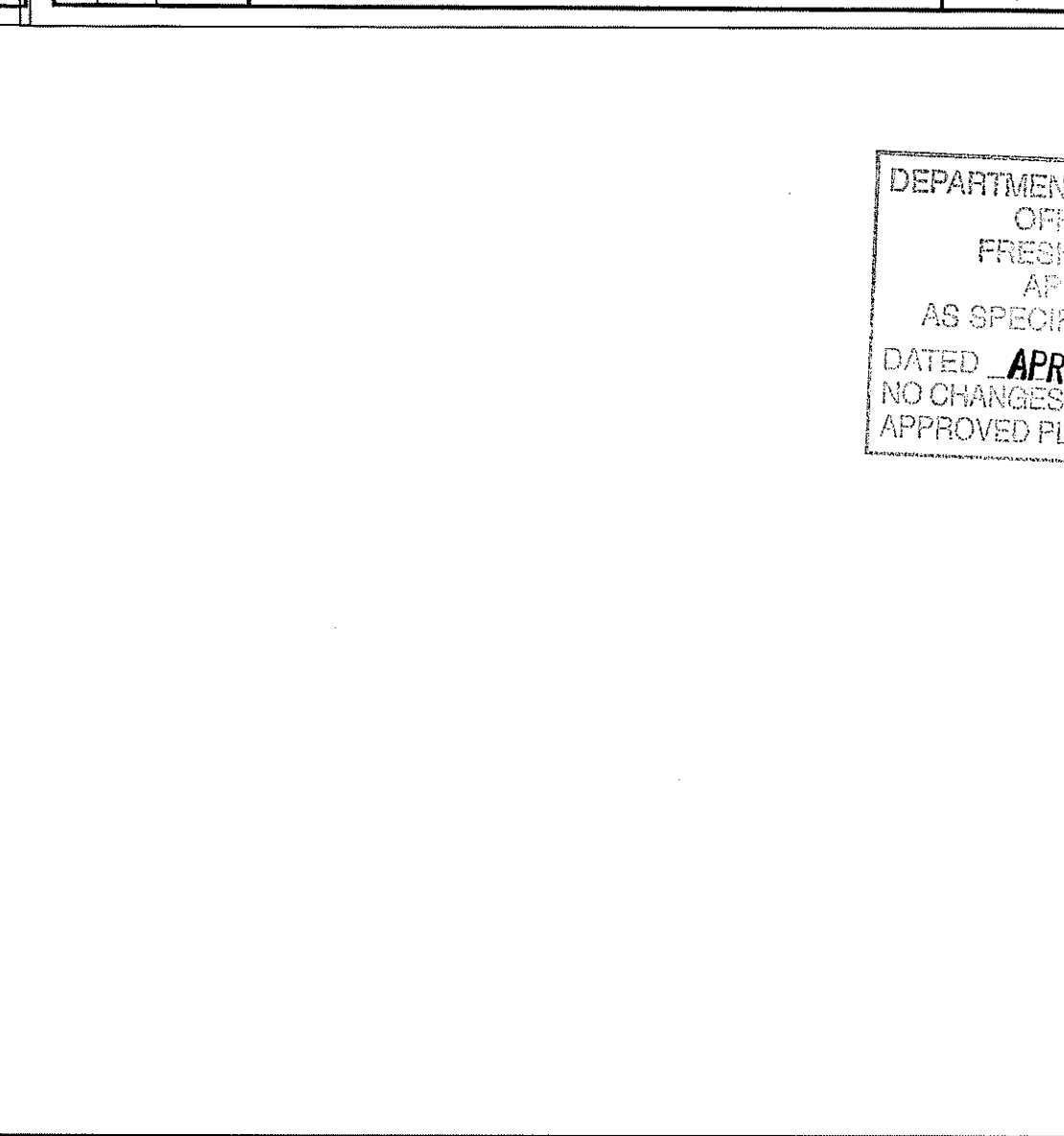
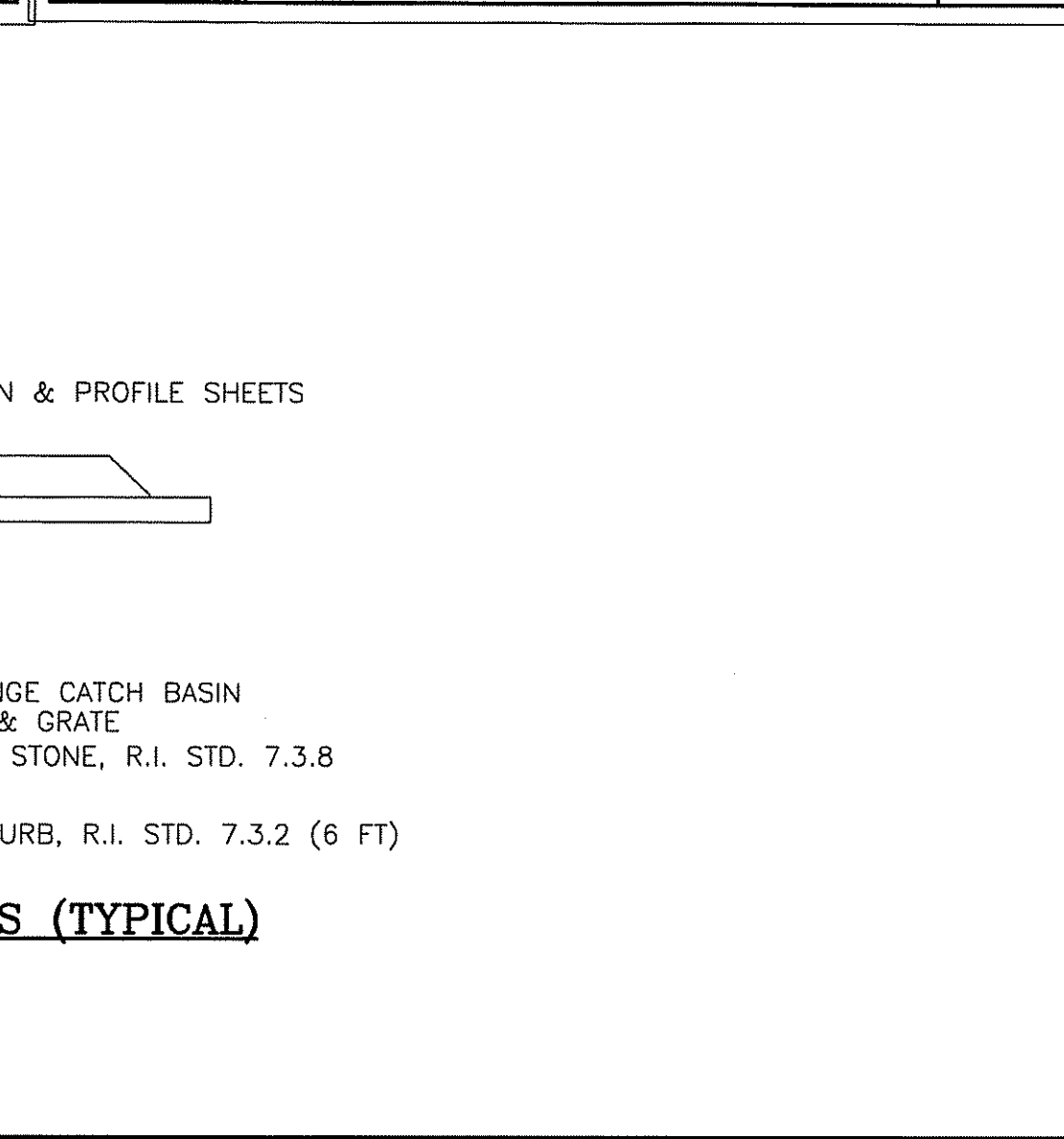
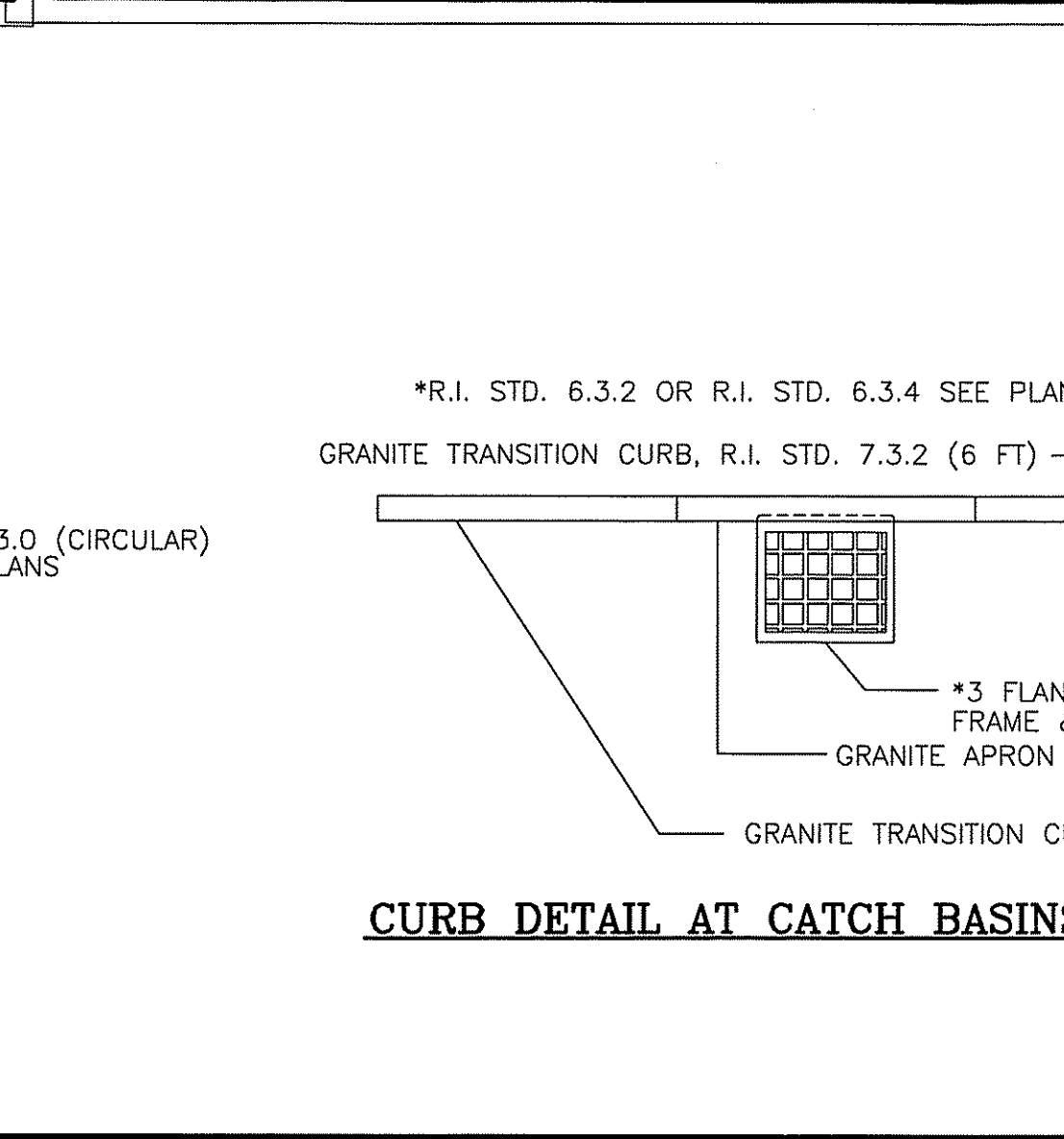
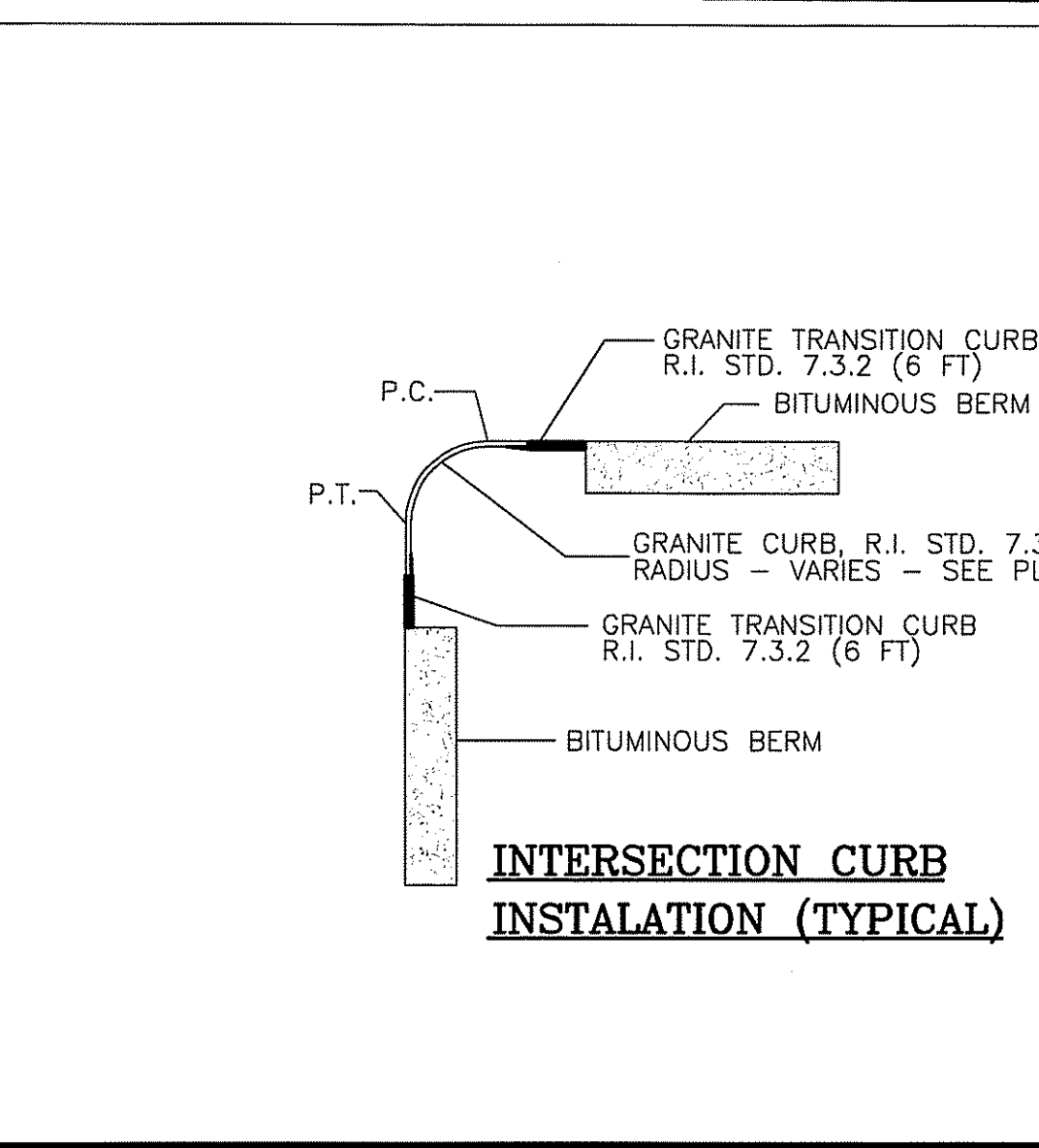
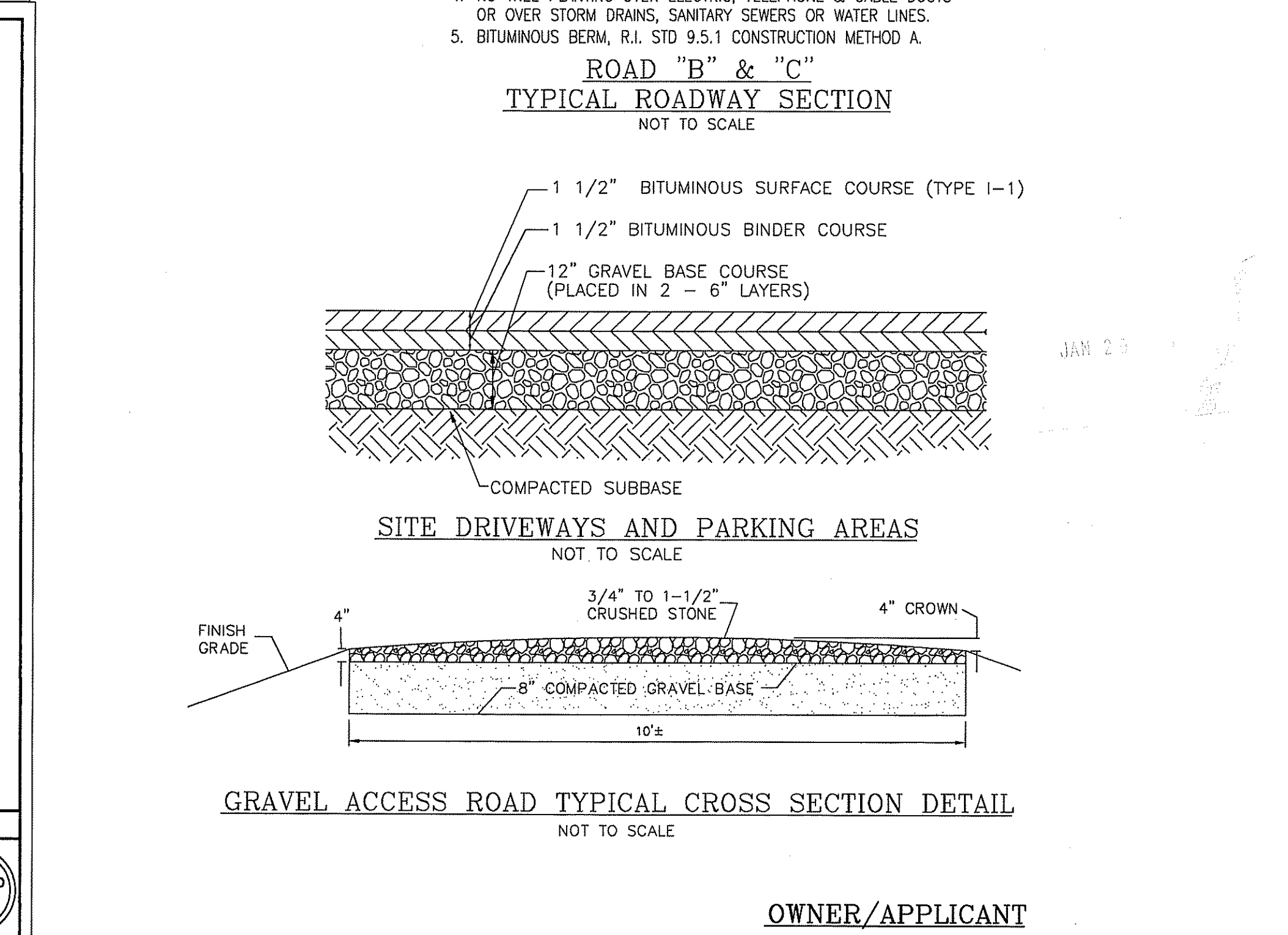
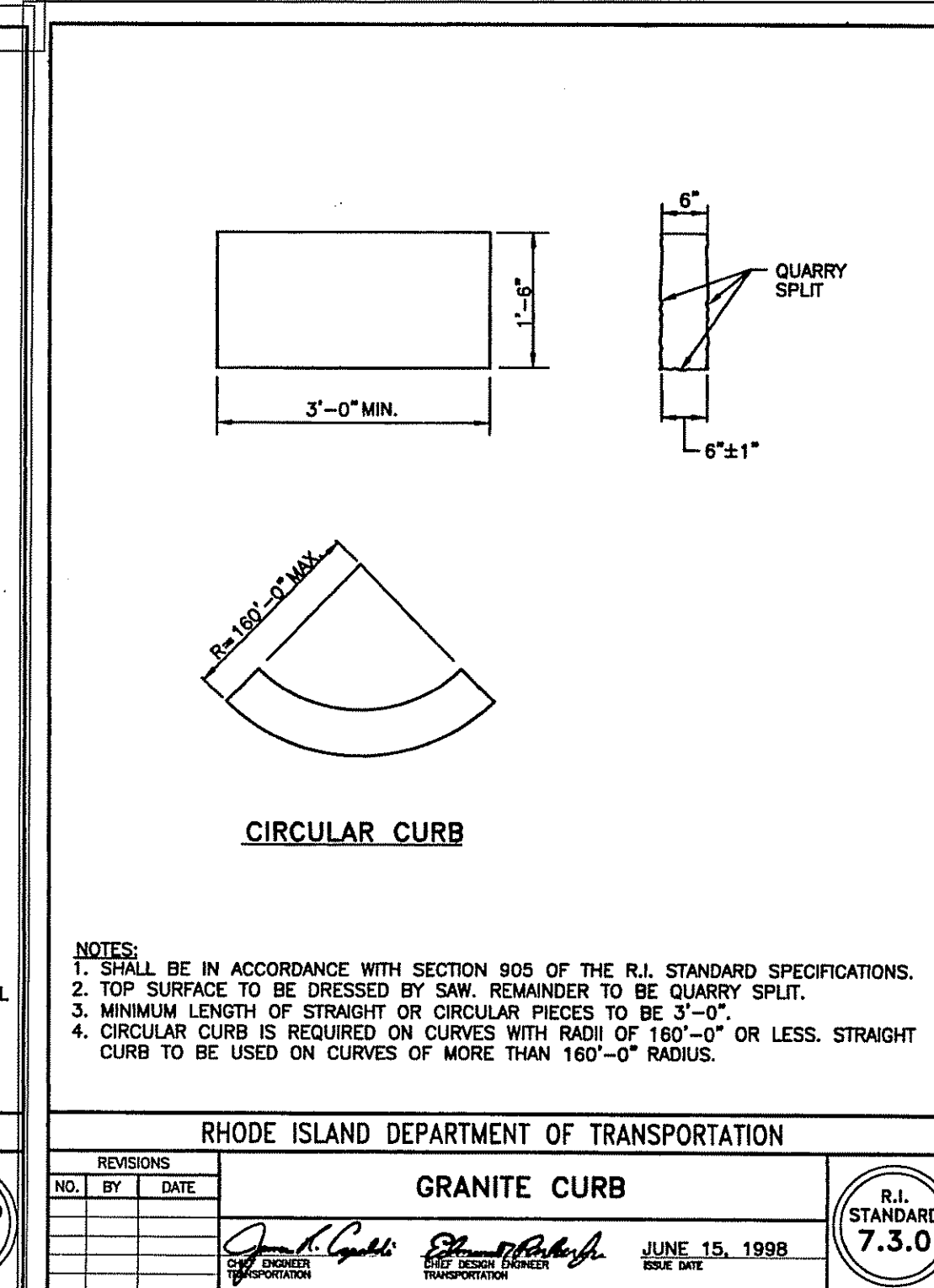
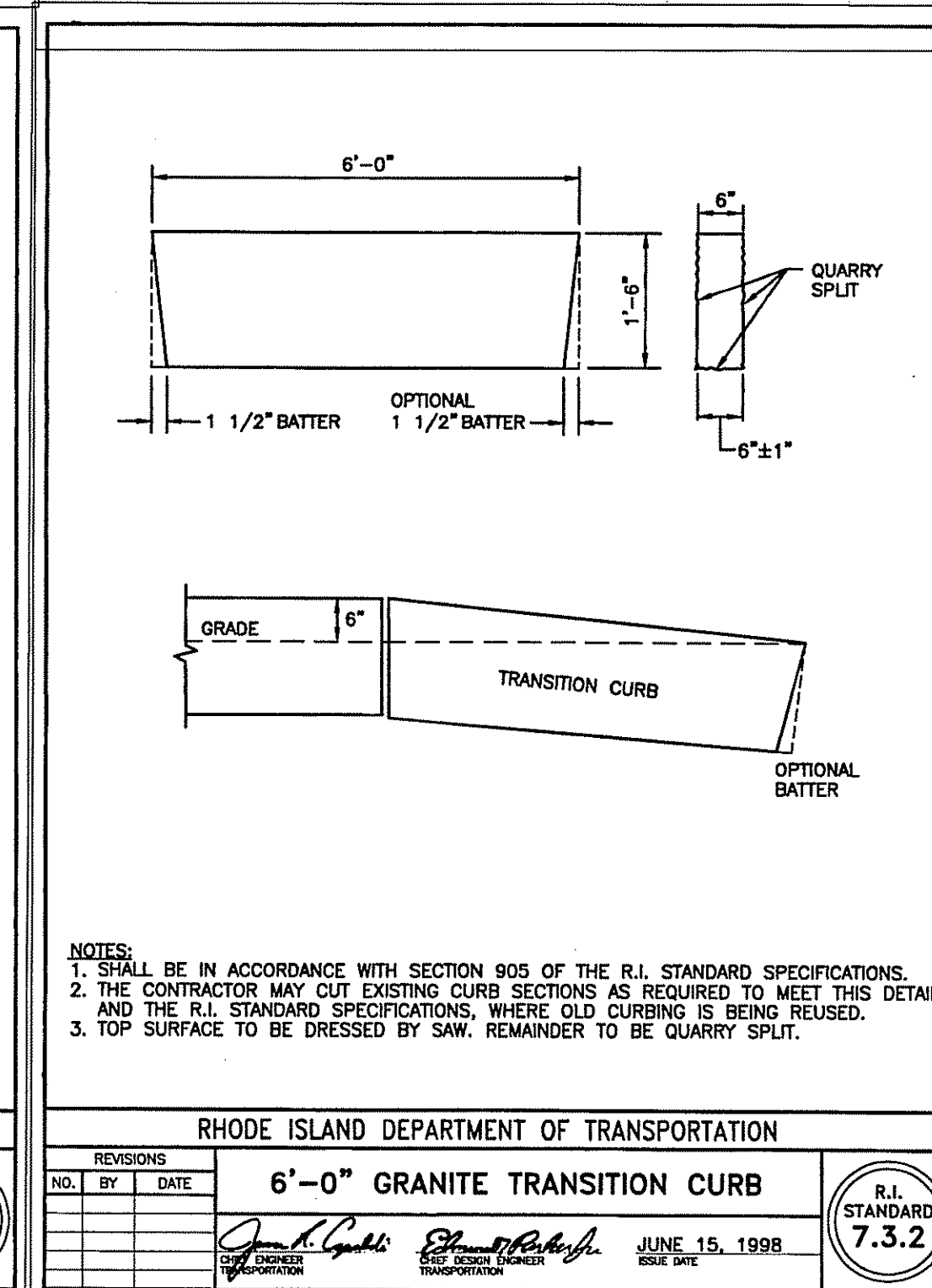
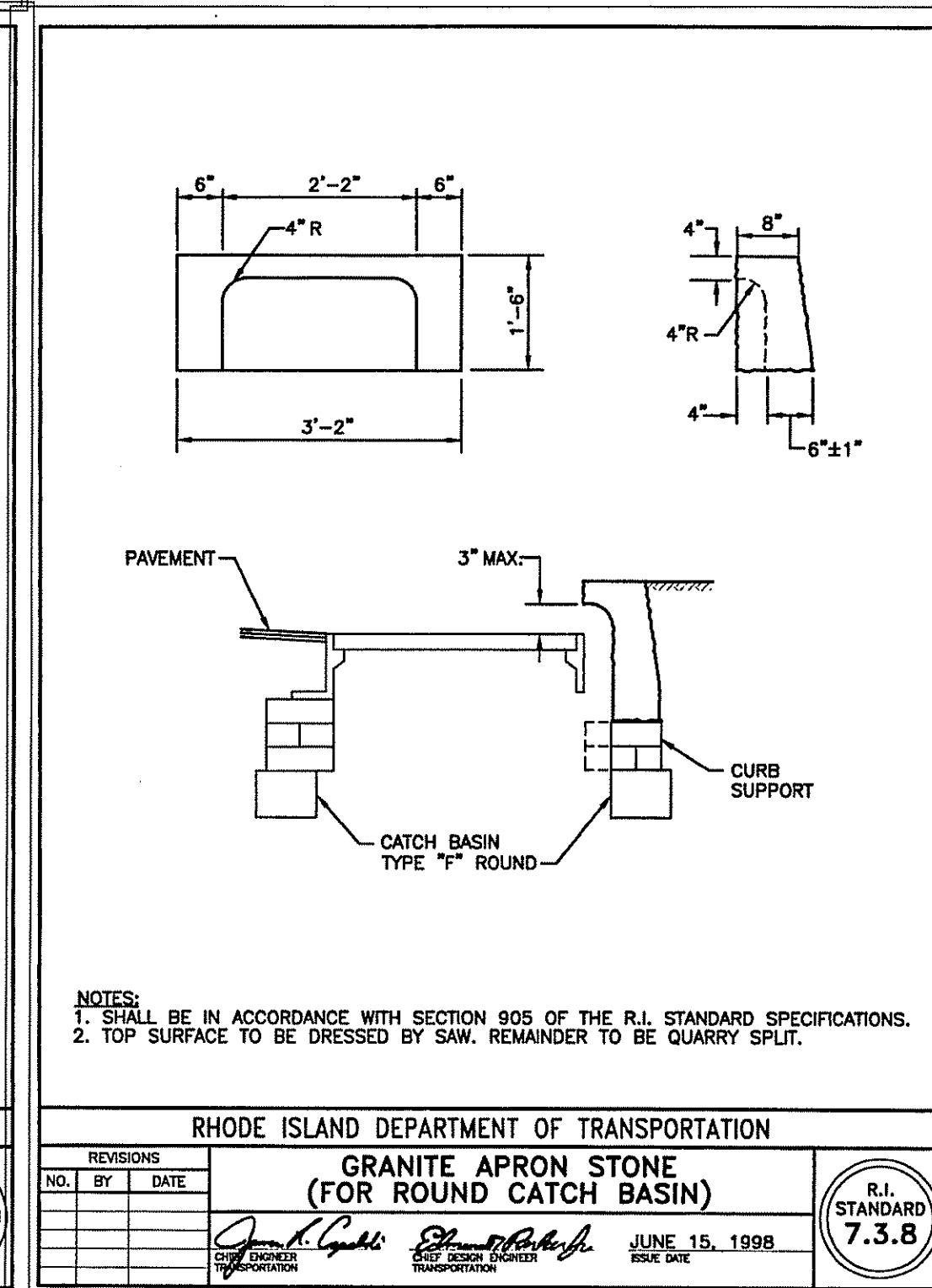
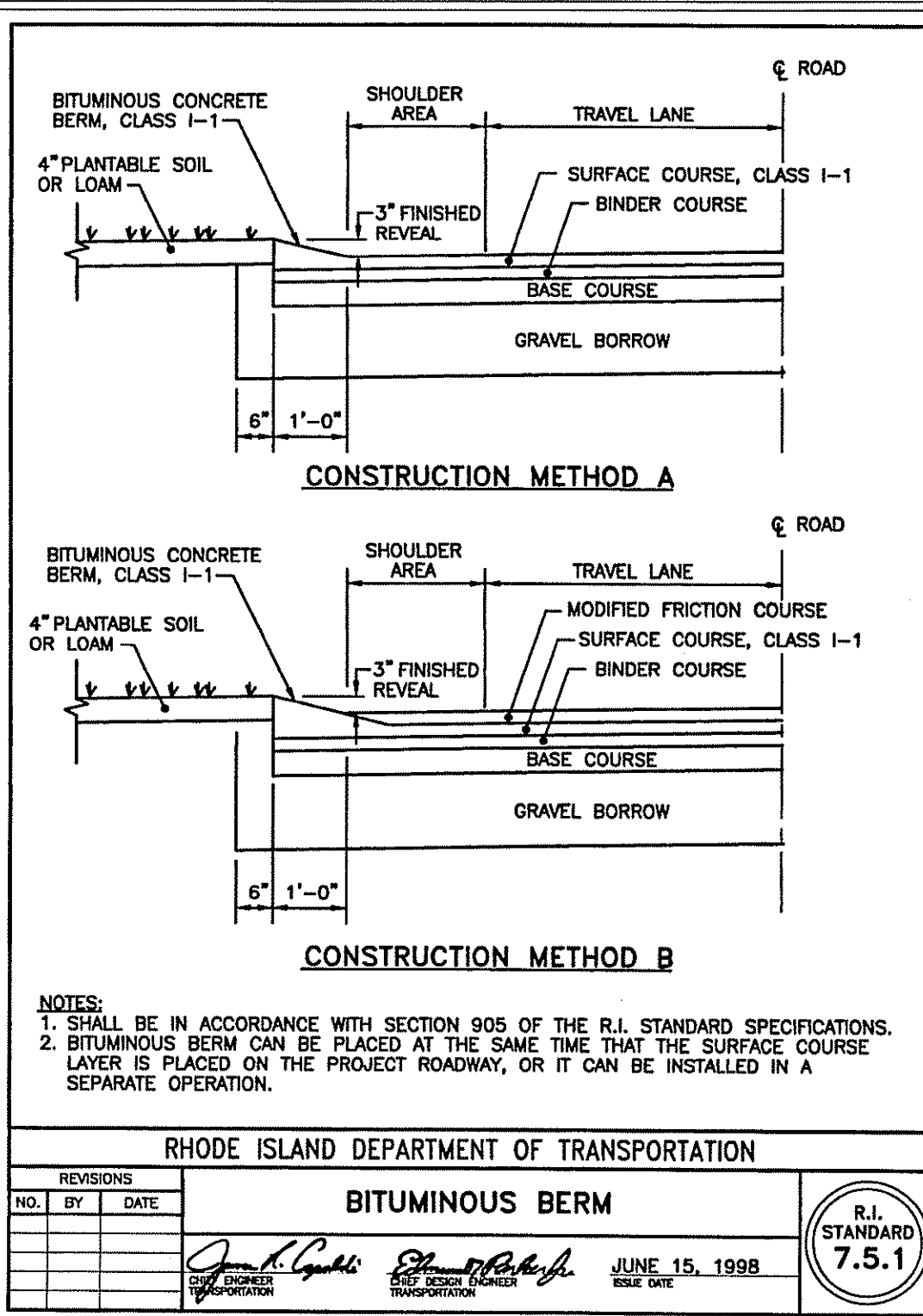
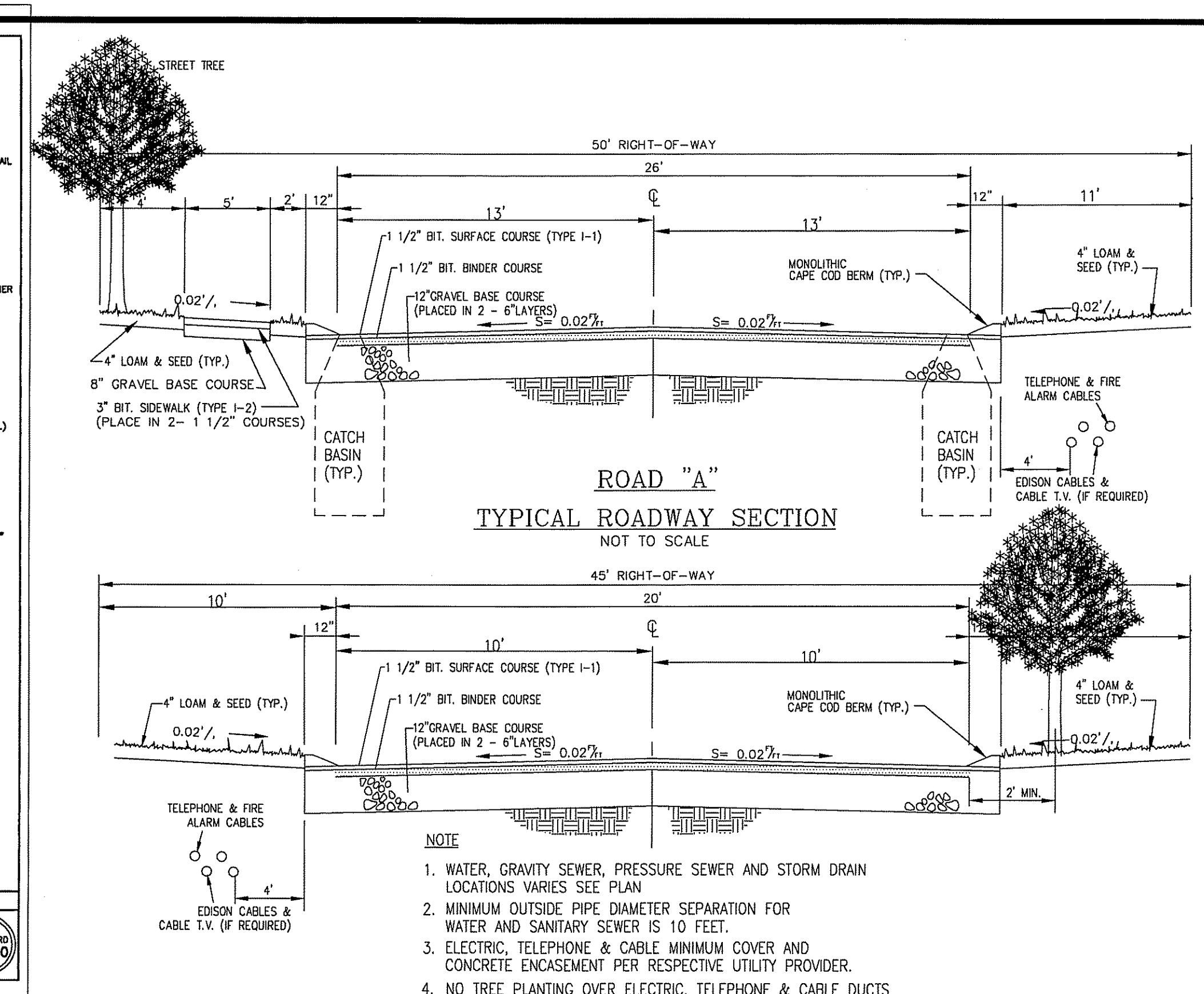
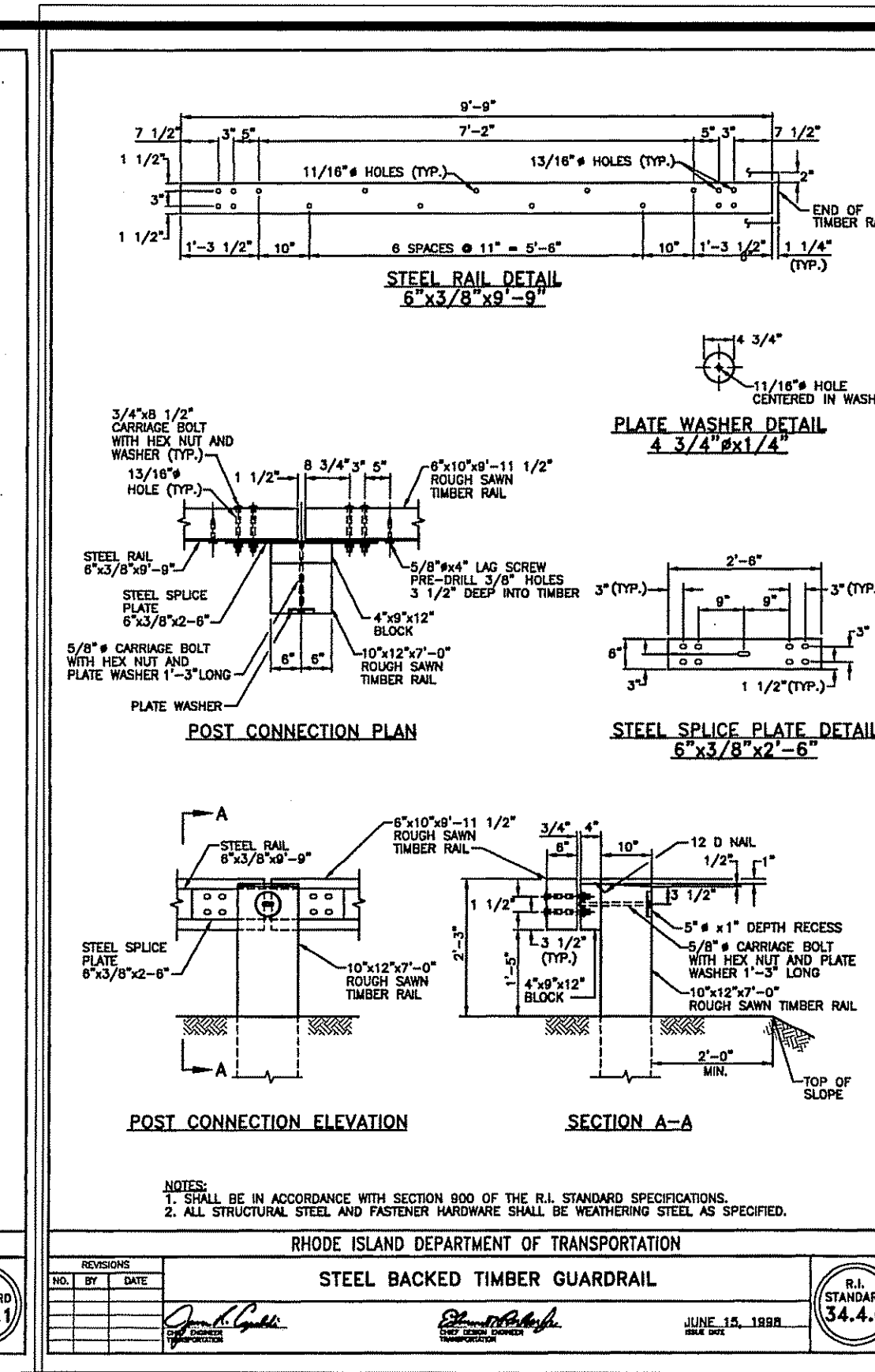
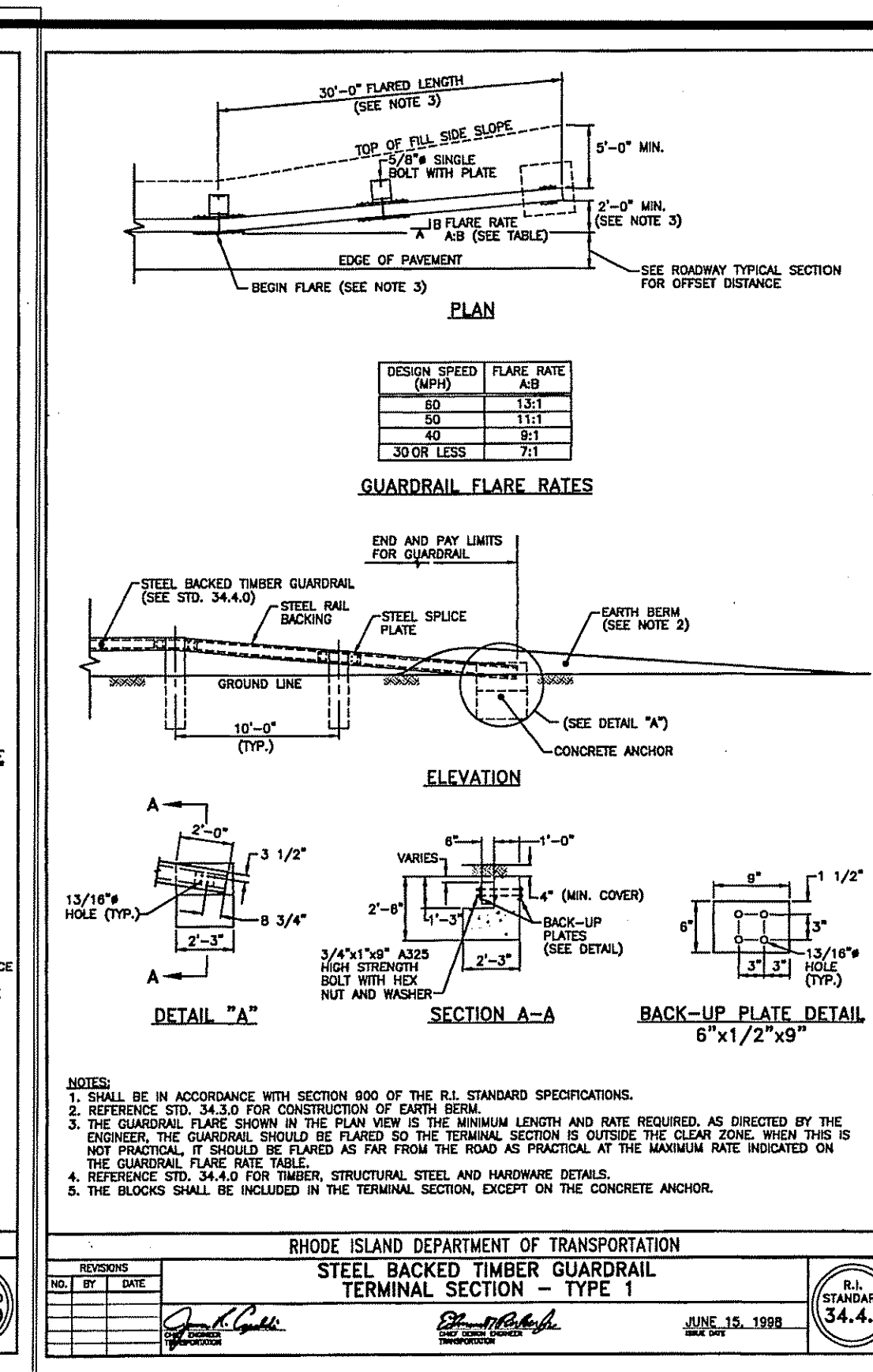
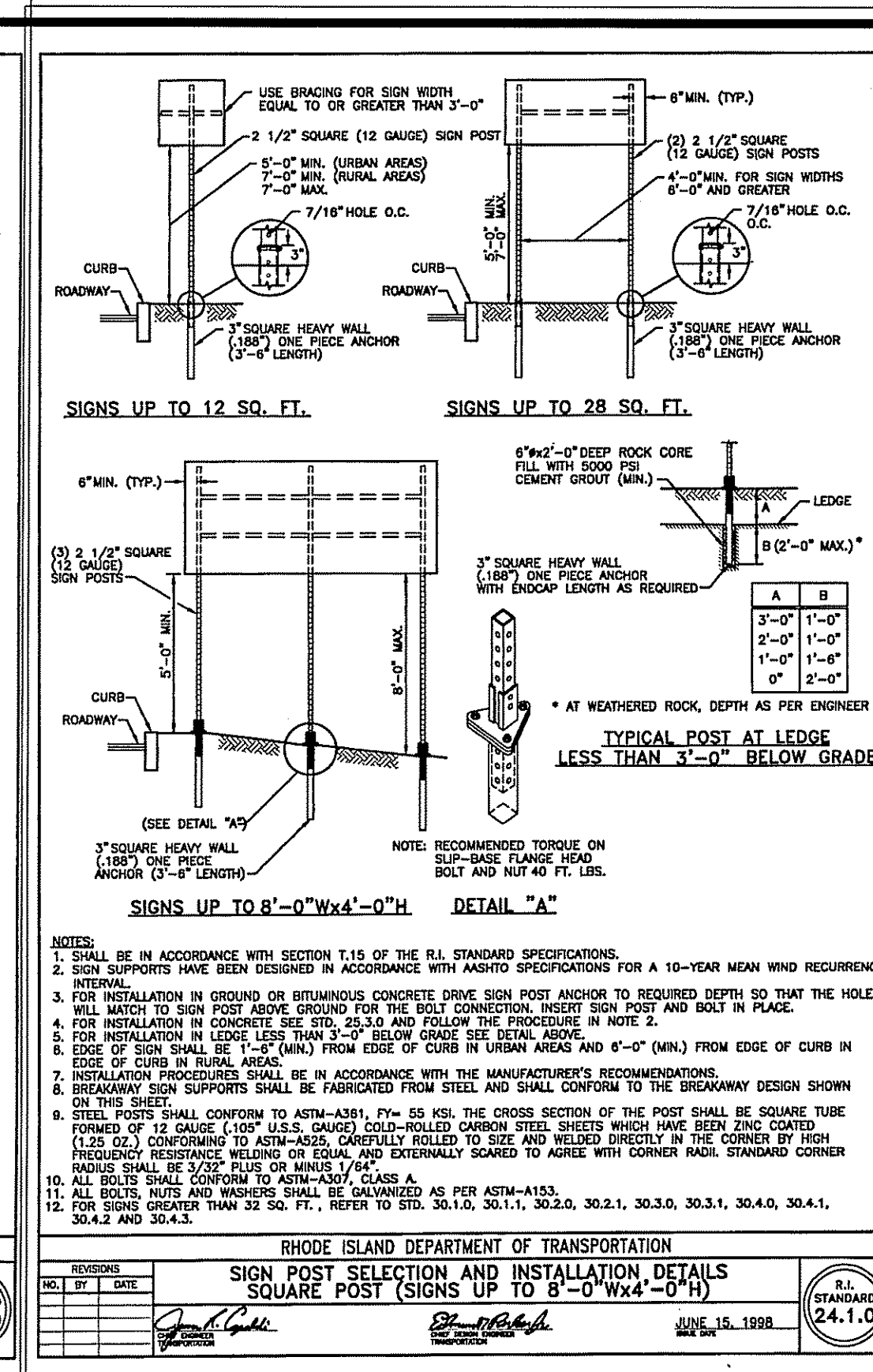
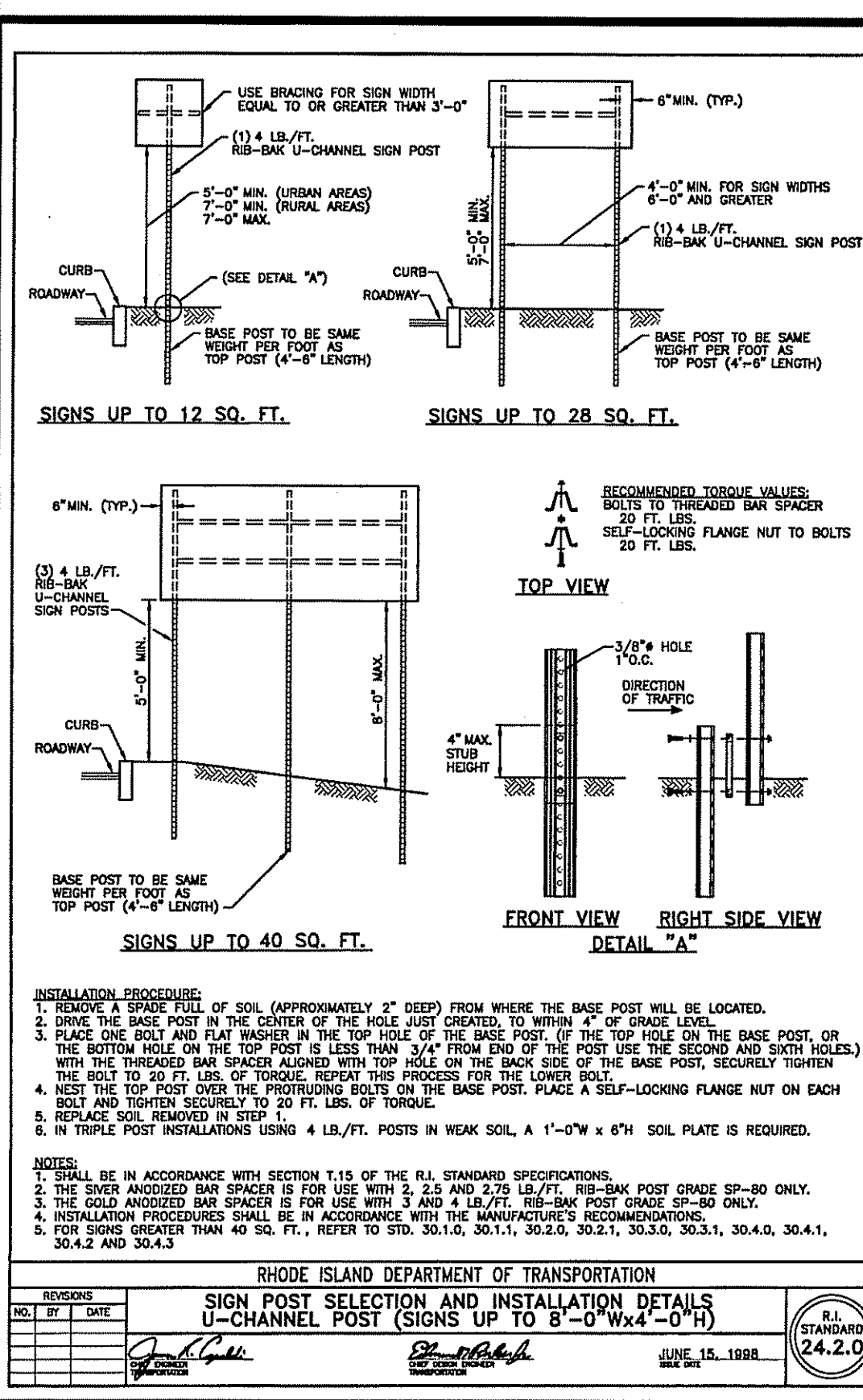
REVISIONS

No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

PRELIMINARY SUBMISSION  
for  
ALTAMONTE RIDGE  
A.P. 10D, LOT 46  
SHANNOCK VILLAGE ROAD  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
CONSTRUCTION DETAILS #1

SCALE: AS NOTED SHEET NO: 19 of 24  
DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
DATE: 8/29/07 PROJECT NO.: 04145.00

P:\0400\04145.00 - final\Shannock Road Pad 10D Lot 46 - Drawings - 08 - 04145 - 08 - 08.dwg, 1/14/08, 1:14, 10:00 AM, 1/14/08



OWNER/APPLICANT  
ALAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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DATED APR 25 2008 FILE # 07-03579  
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Steven M. Clarke  
No. 4477  
REGISTERED PROFESSIONAL ENGINEER

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908

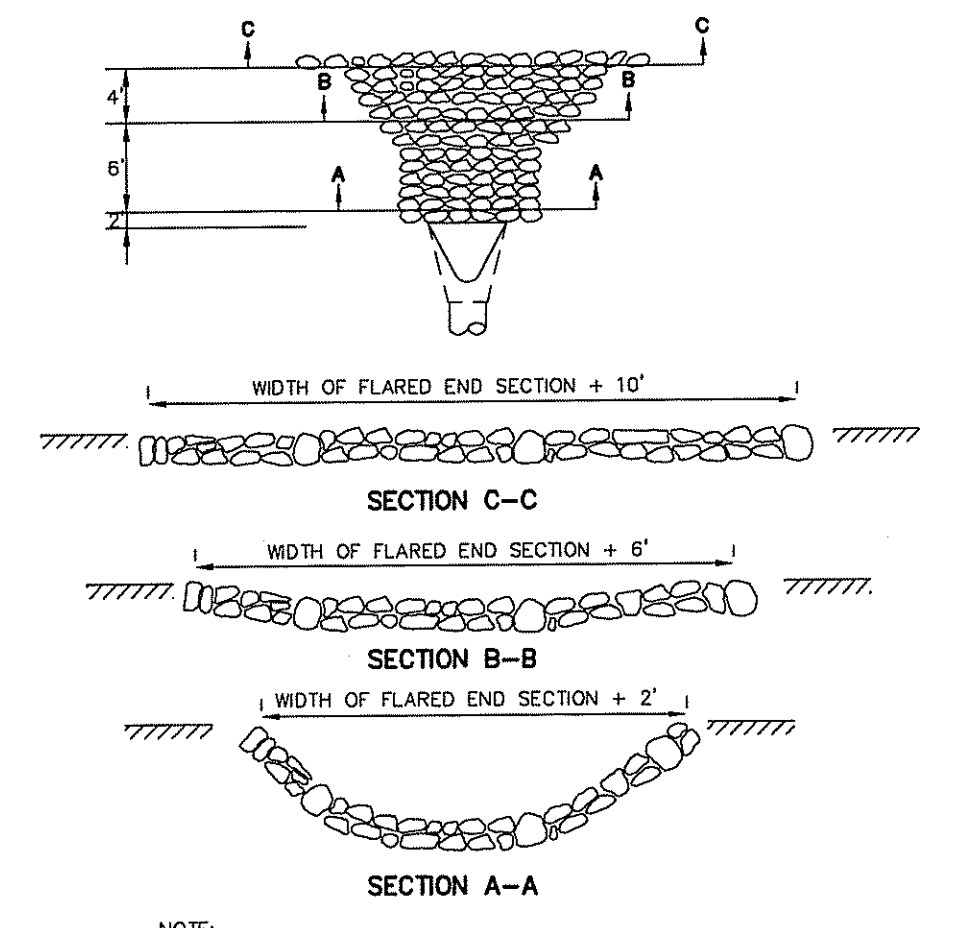
PRELIMINARY SUBMISSION  
for  
ALTAMONTE RIDGE  
A.P. 10D, LOT 46  
SHANNOCK VILLAGE ROAD  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
CONSTRUCTION DETAILS #2

SCALE: AS NOTED SHEET NO: 20 of 24  
DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
DATE: 8/29/07 PROJECT NO.: 04145.00

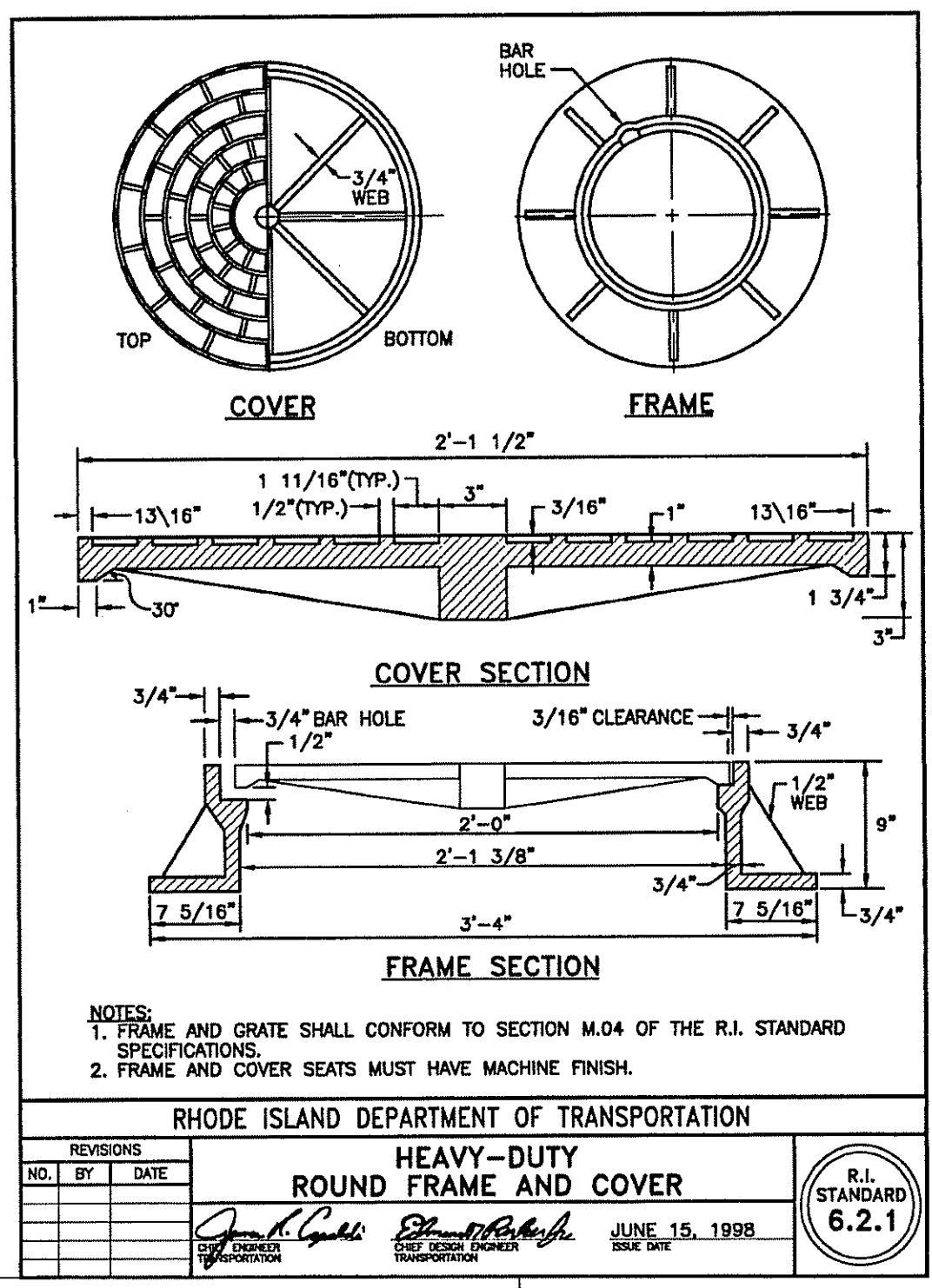
REVISIONS

No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

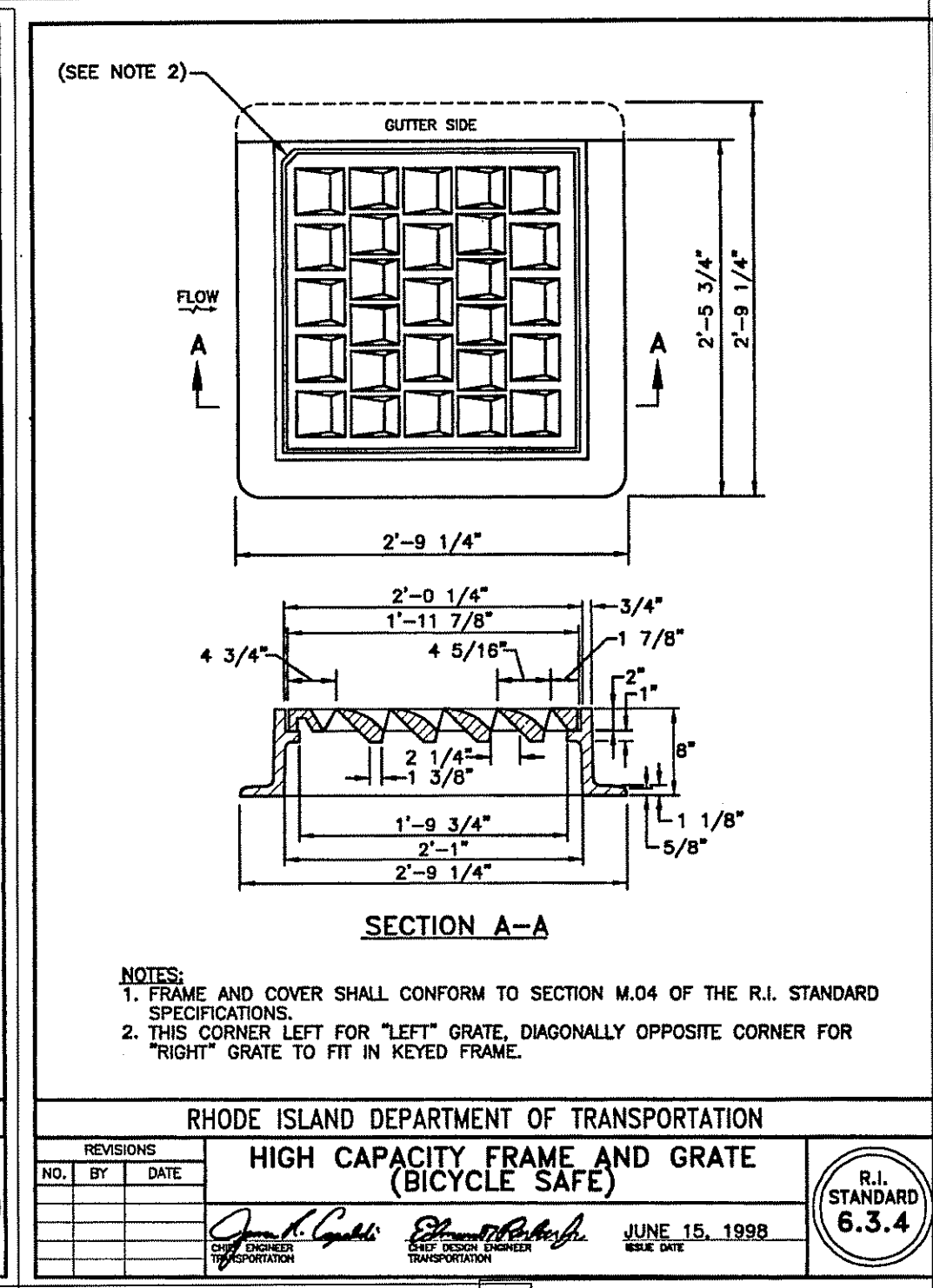
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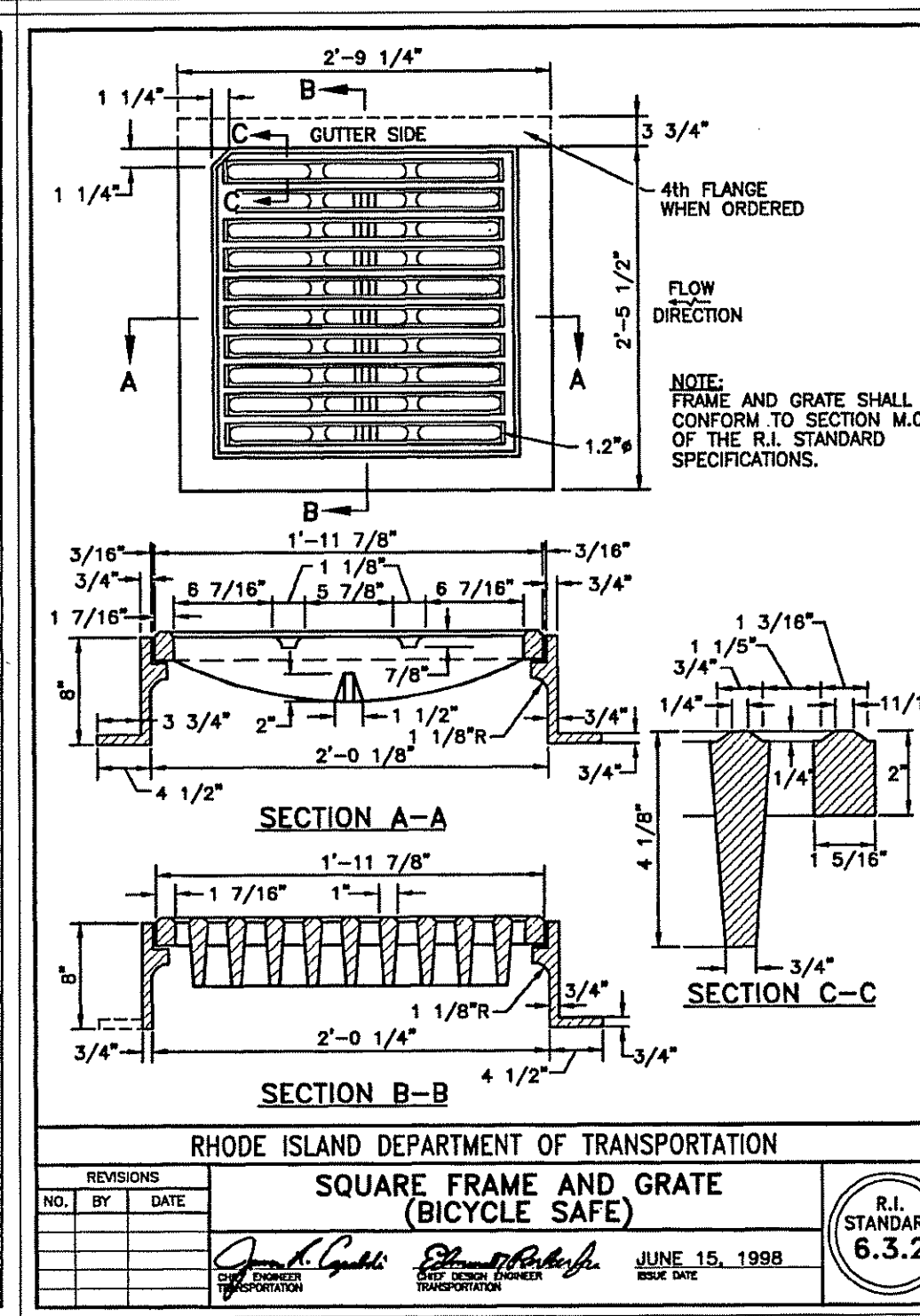
NOTE:  
 1. CLASS OF RIP-RAP AND BEDDING TO BE SPECIFIED IN CONTRACT DOCUMENTS.  
 2. DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS.  
 3. UNLESS OTHERWISE SPECIFIED, DUMPED RIP-RAP SHALL BE USED.



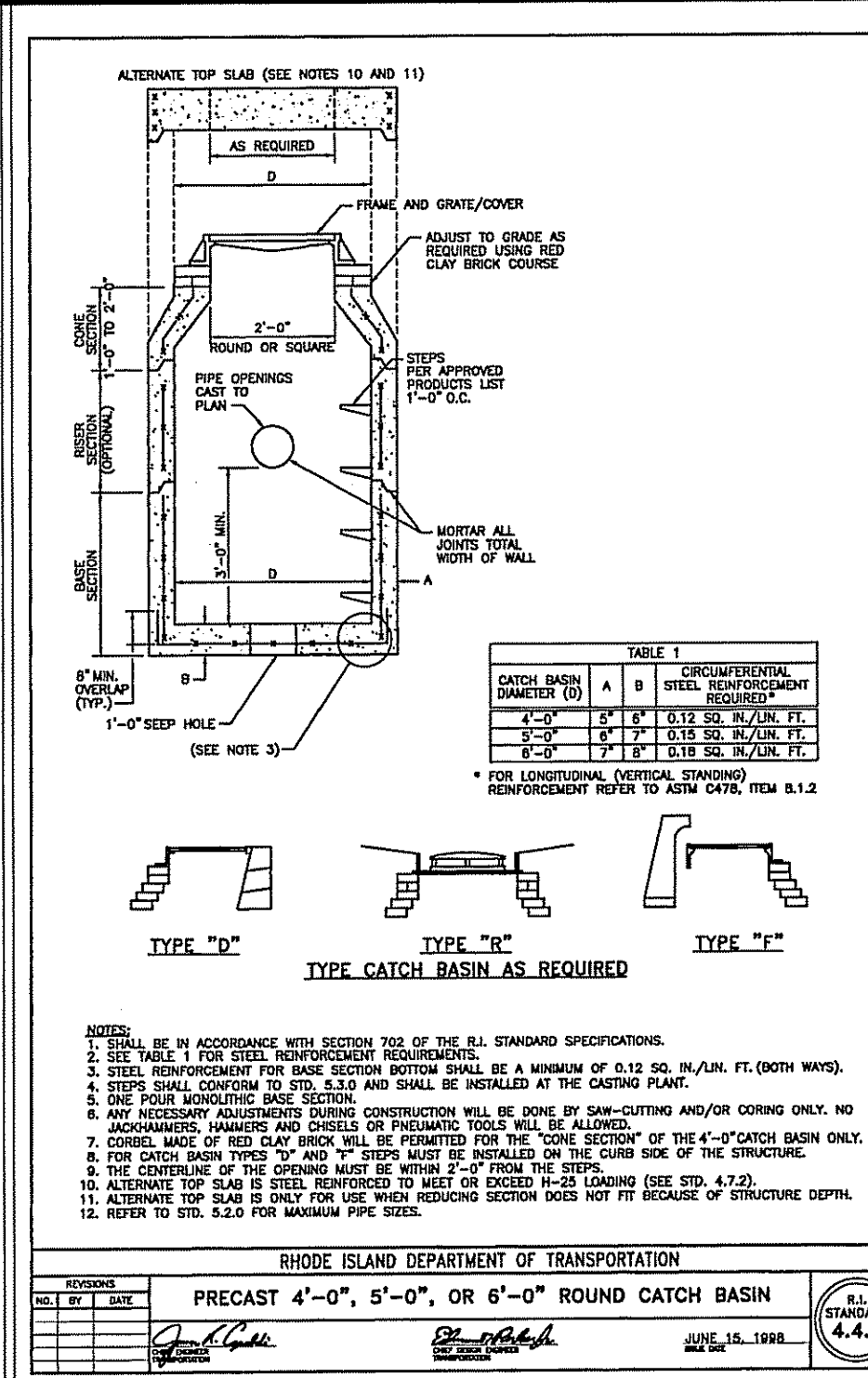
NOTE:  
 1. FRAME AND GRATE SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.  
 2. FRAME AND COVER SEATS MUST HAVE MACHINE FINISH.



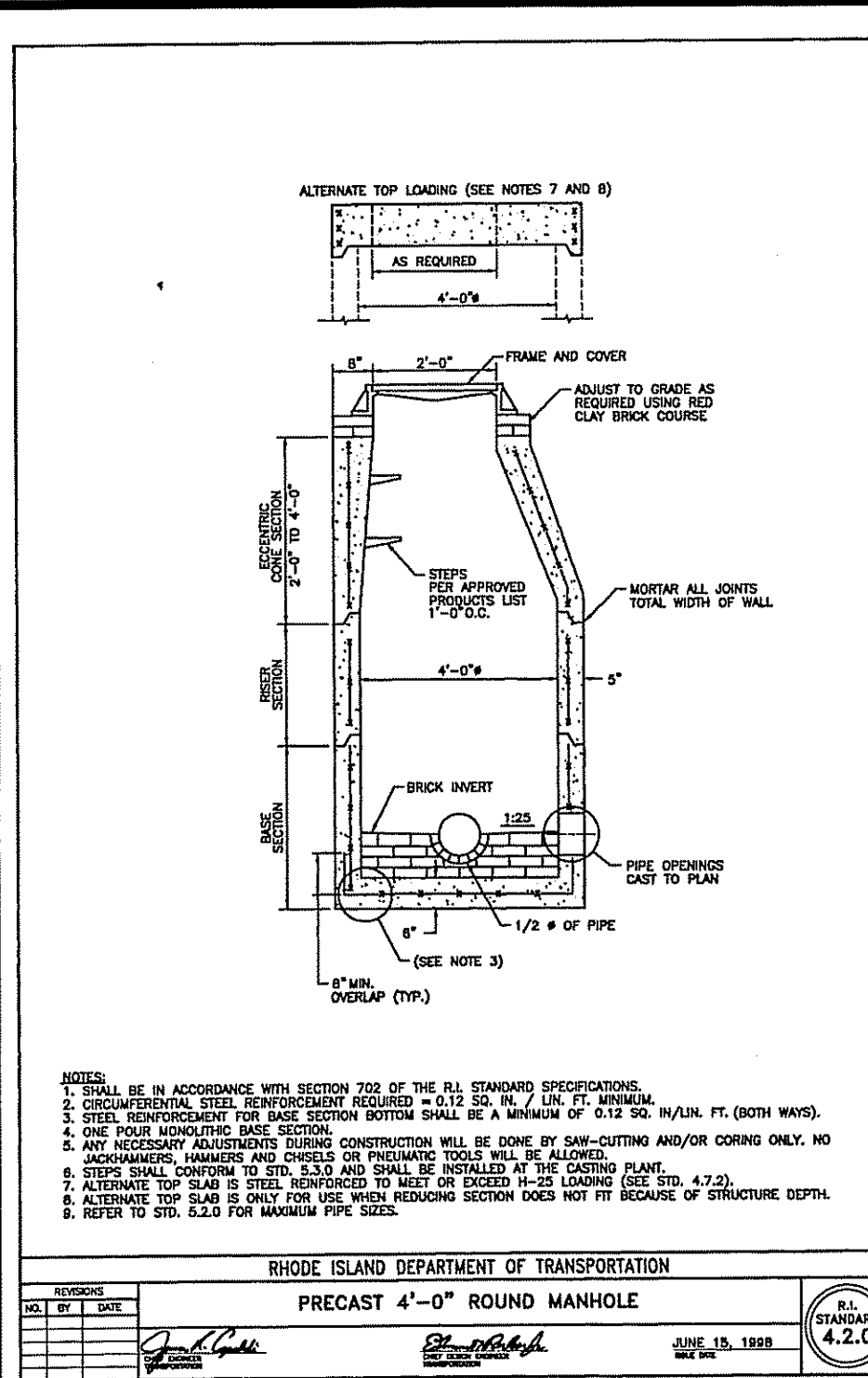
NOTE:  
 1. FRAME AND COVER SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.  
 2. THIS CORNER LEFT FOR "LEFT" GRATE, DIAGONALLY OPPOSITE CORNER FOR "RIGHT" GRATE TO FIT IN KEVED FRAME.



RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 SQUARE FRAME AND GRATE  
 (BICYCLE SAFE)  
 R.I. STANDARD 6.3.2



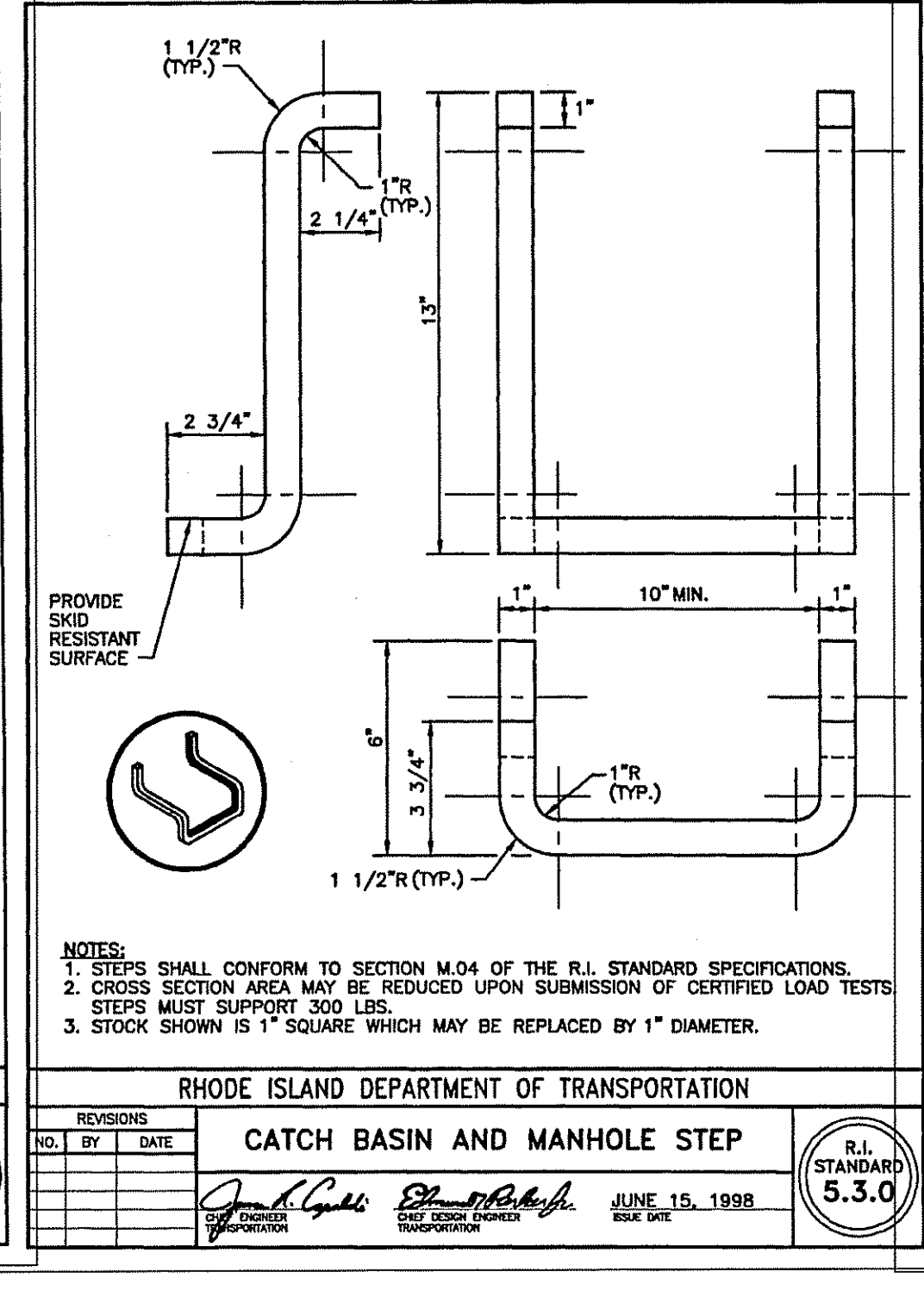
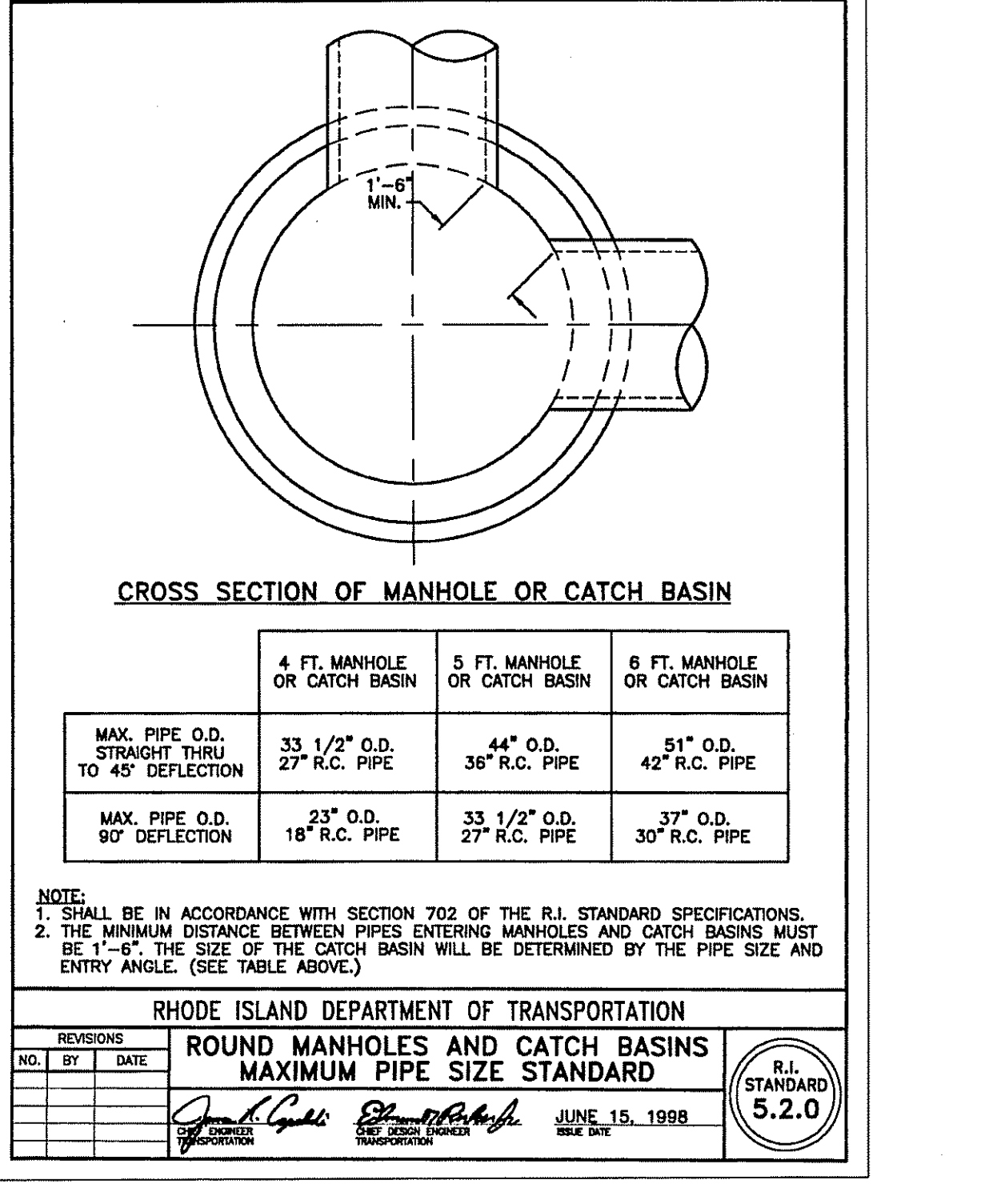
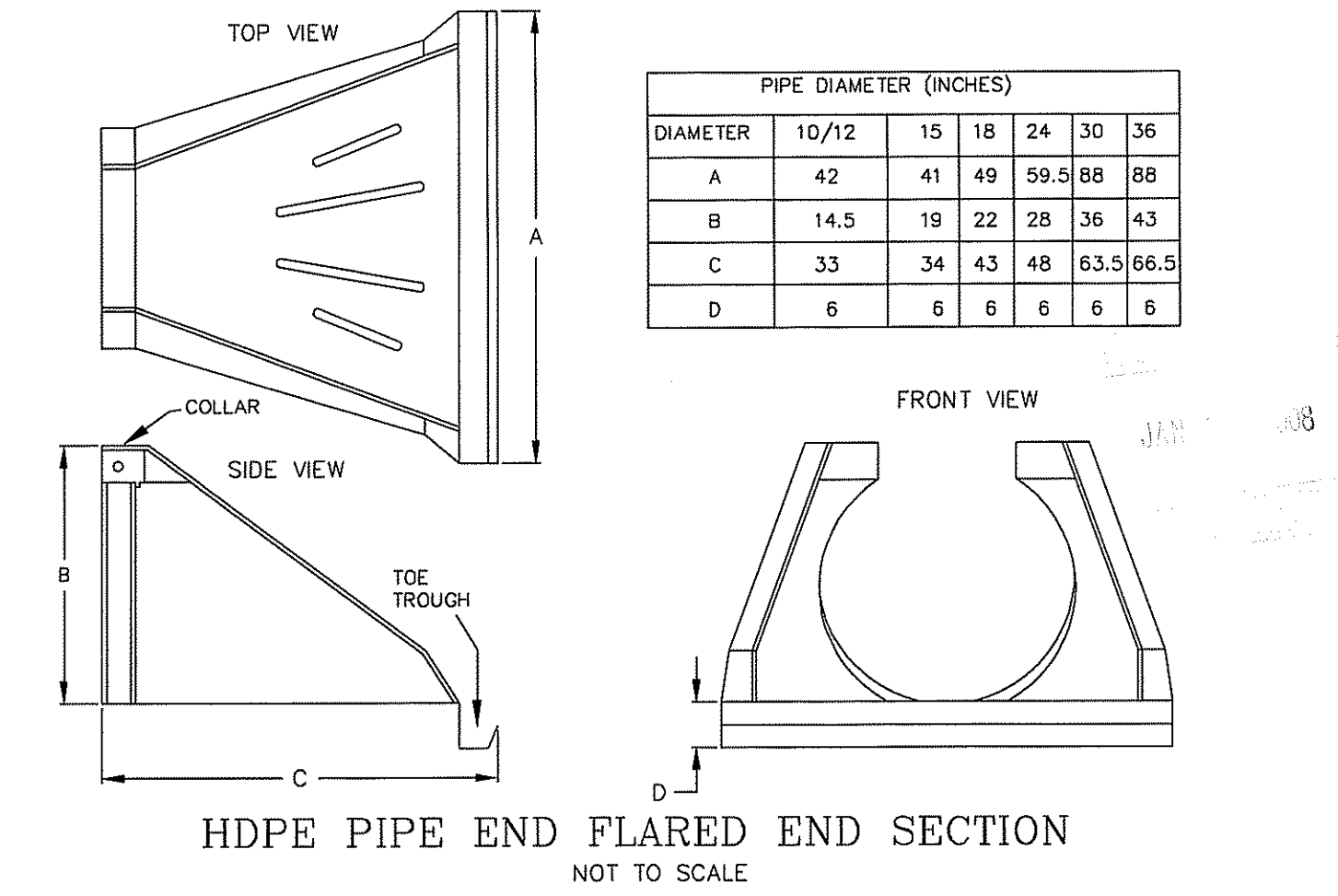
RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 PRECAST 4'-0" ROUND CATCH BASIN  
 R.I. STANDARD 4.4.0



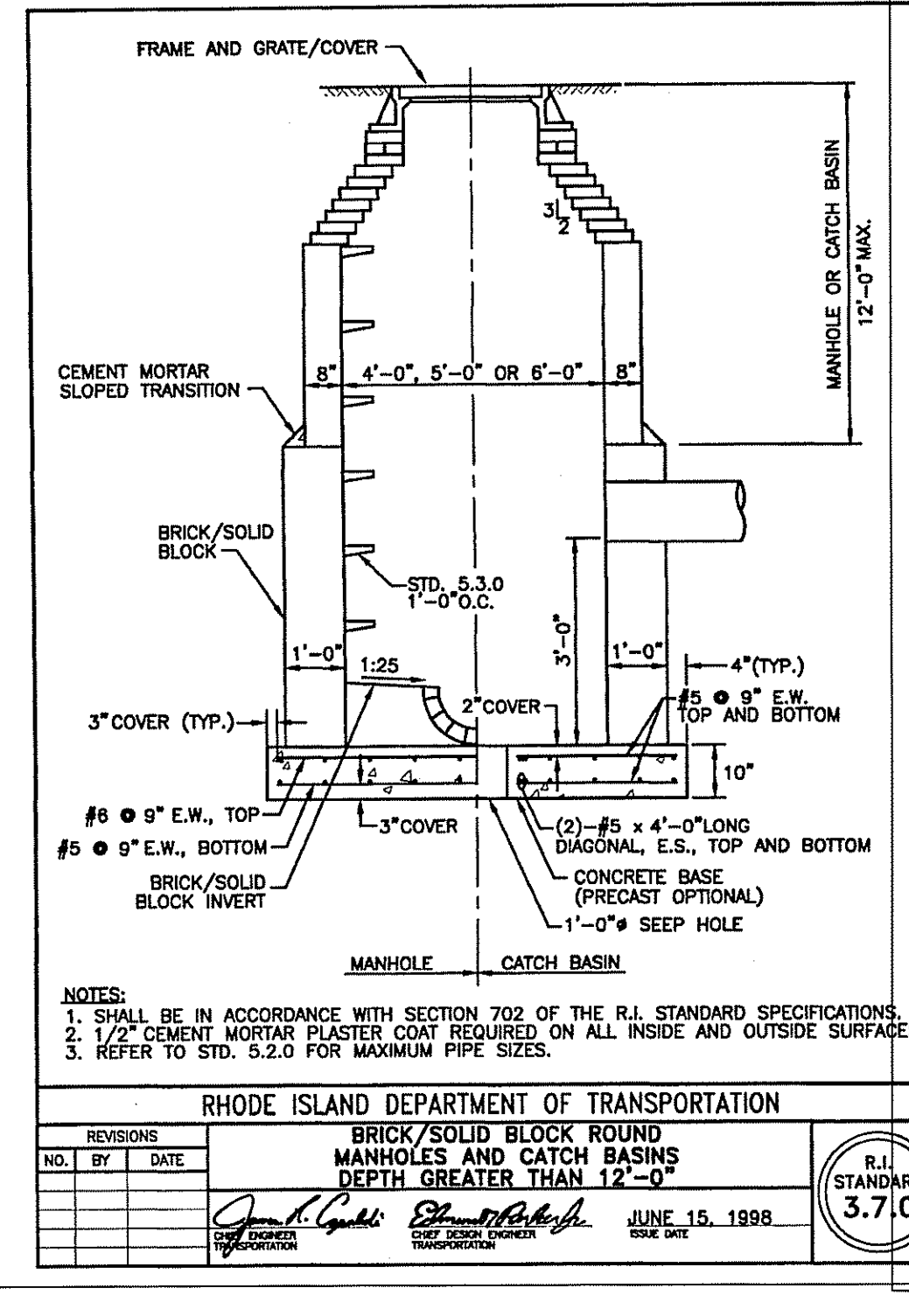
RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 PRECAST 4'-0" ROUND MANHOLE  
 R.I. STANDARD 4.2.0

**RIP-RAP & BEDDING SPECIFICATIONS**

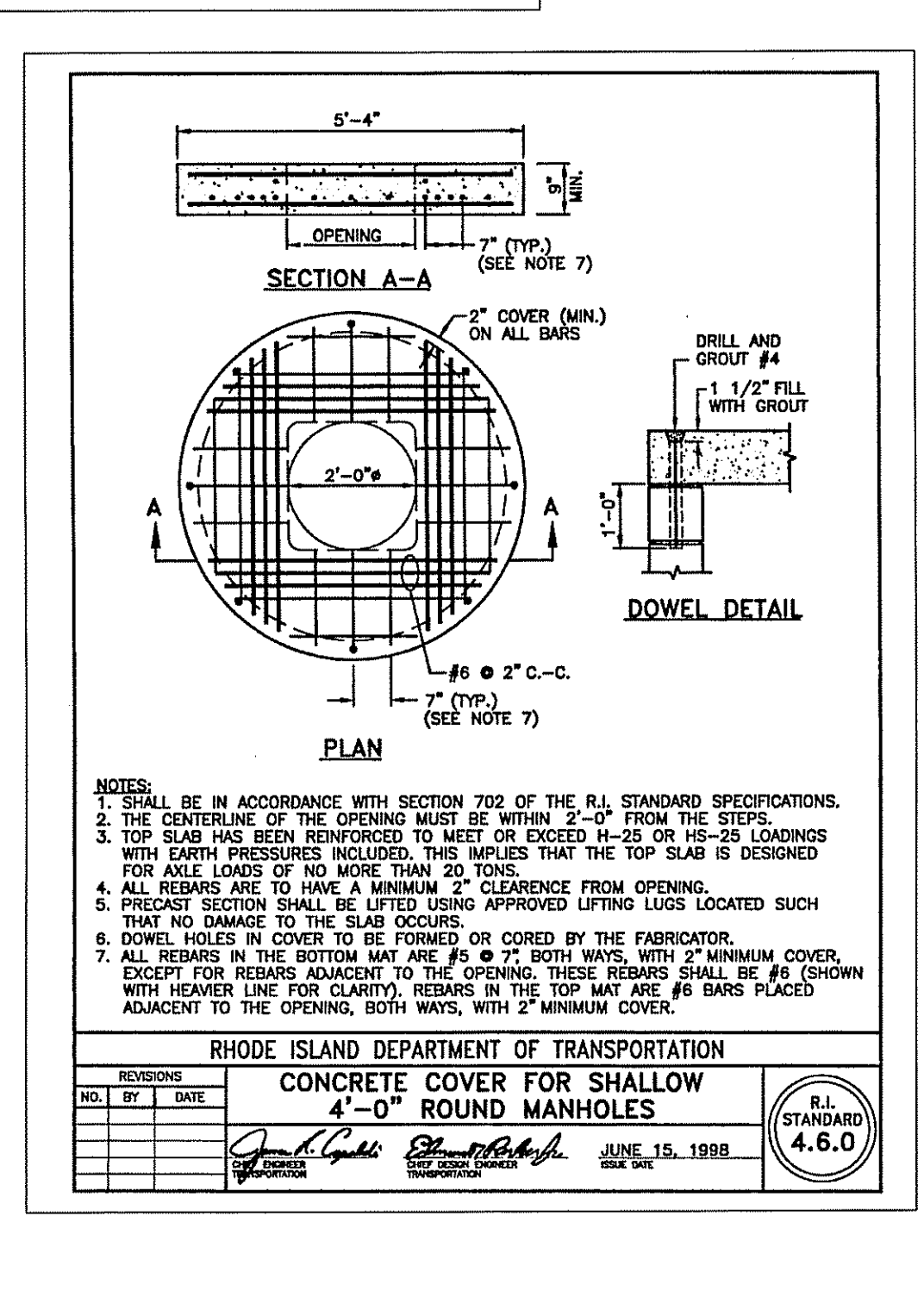
LOCATION	NSA SIZE MODIFIED NO.(RIP-RAP, BEDDING)	DEPTH(RIP-RAP, BEDDING)
FES INLETS (1,2,3&4)	R-3, FS-2	12", 6"
EMERGENCY SPILLWAYS (BASIN 1,2&3)	R-2, FS-1	6", 3"



RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 CATCH BASIN AND MANHOLE STEP  
 R.I. STANDARD 5.3.0

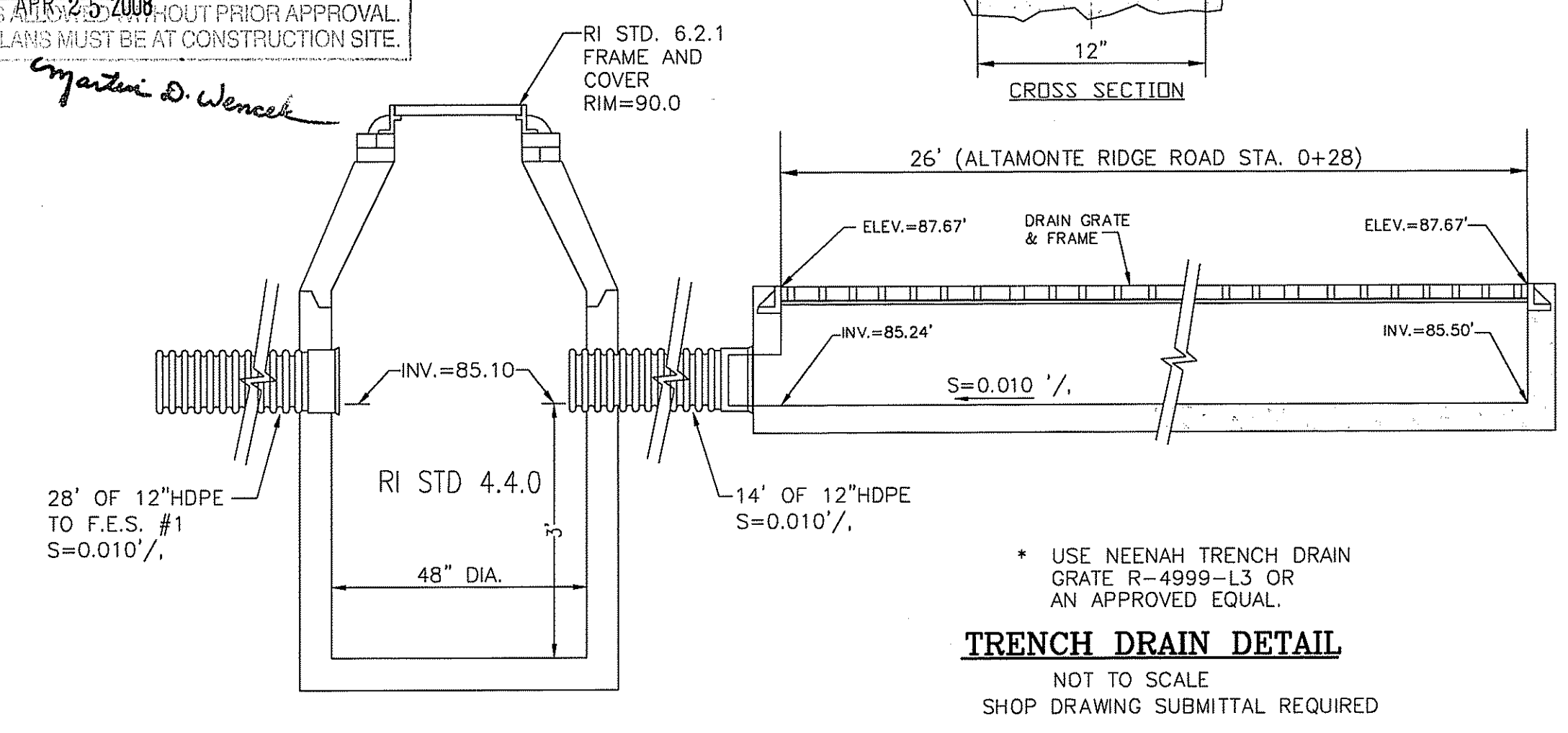


RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 BRICK/SOLID BLOCK ROUND MANHOLES AND CATCH BASINS DEPTH GREATER THAN 12'-0"  
 R.I. STANDARD 3.7.0



RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 CONCRETE COVER FOR SHALLOW 4'-0" ROUND MANHOLES  
 R.I. STANDARD 4.6.0

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 25 2008 FILE # 07-0359  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.



TRENCH DRAIN DETAIL  
 NOT TO SCALE  
 SHOP DRAWING SUBMITTAL REQUIRED

Steven M. Clarke  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 4477

REVISIONS

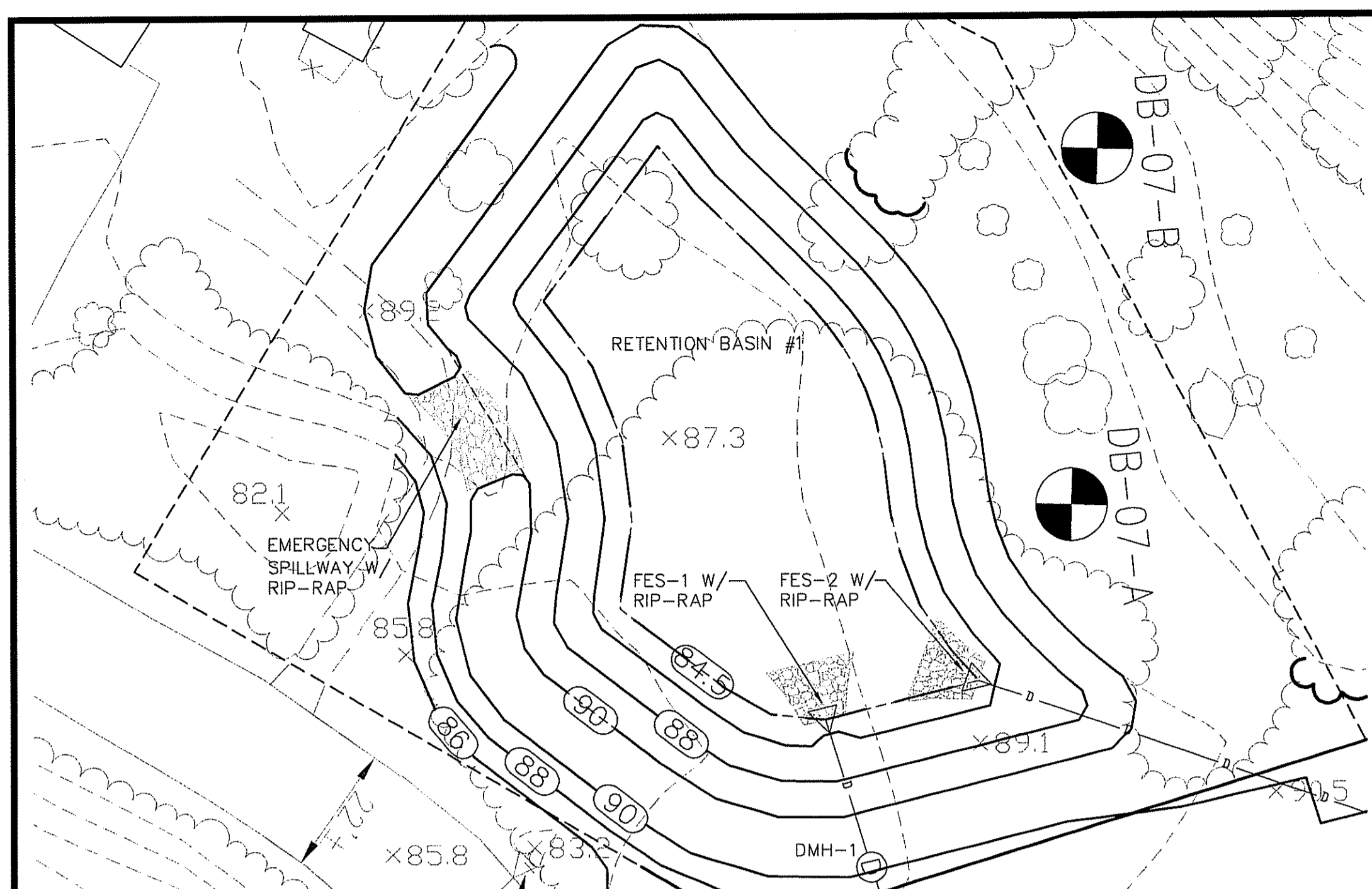
No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

**COMMONWEALTH**  
 ENGINEERS & CONSULTANTS, INC.  
 400 SMITH STREET  
 PROVIDENCE, RHODE ISLAND 02908

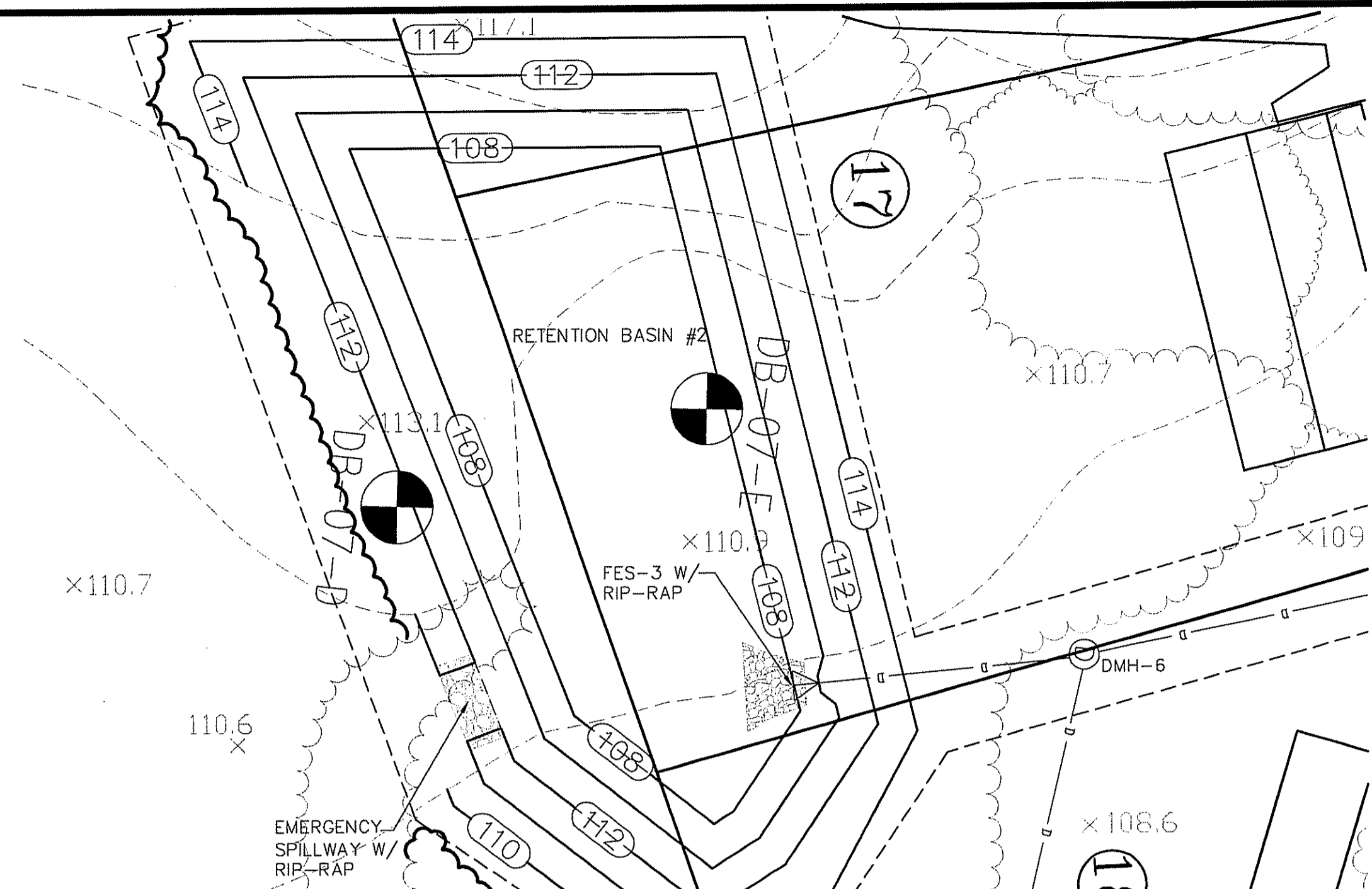
PRELIMINARY SUBMISSION  
 for  
 ALTAMONTE RIDGE  
 A.P. 10D, LOT 46  
 SHANNOCK VILLAGE ROAD  
 (MAIN STREET)  
 in  
 RICHMOND, RHODE ISLAND  
**CONSTRUCTION DETAILS #3**

SCALE: AS NOTED SHEET NO: 21 of 24  
 DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
 DATE: 8/29/07 PROJECT NO.: 04145.00

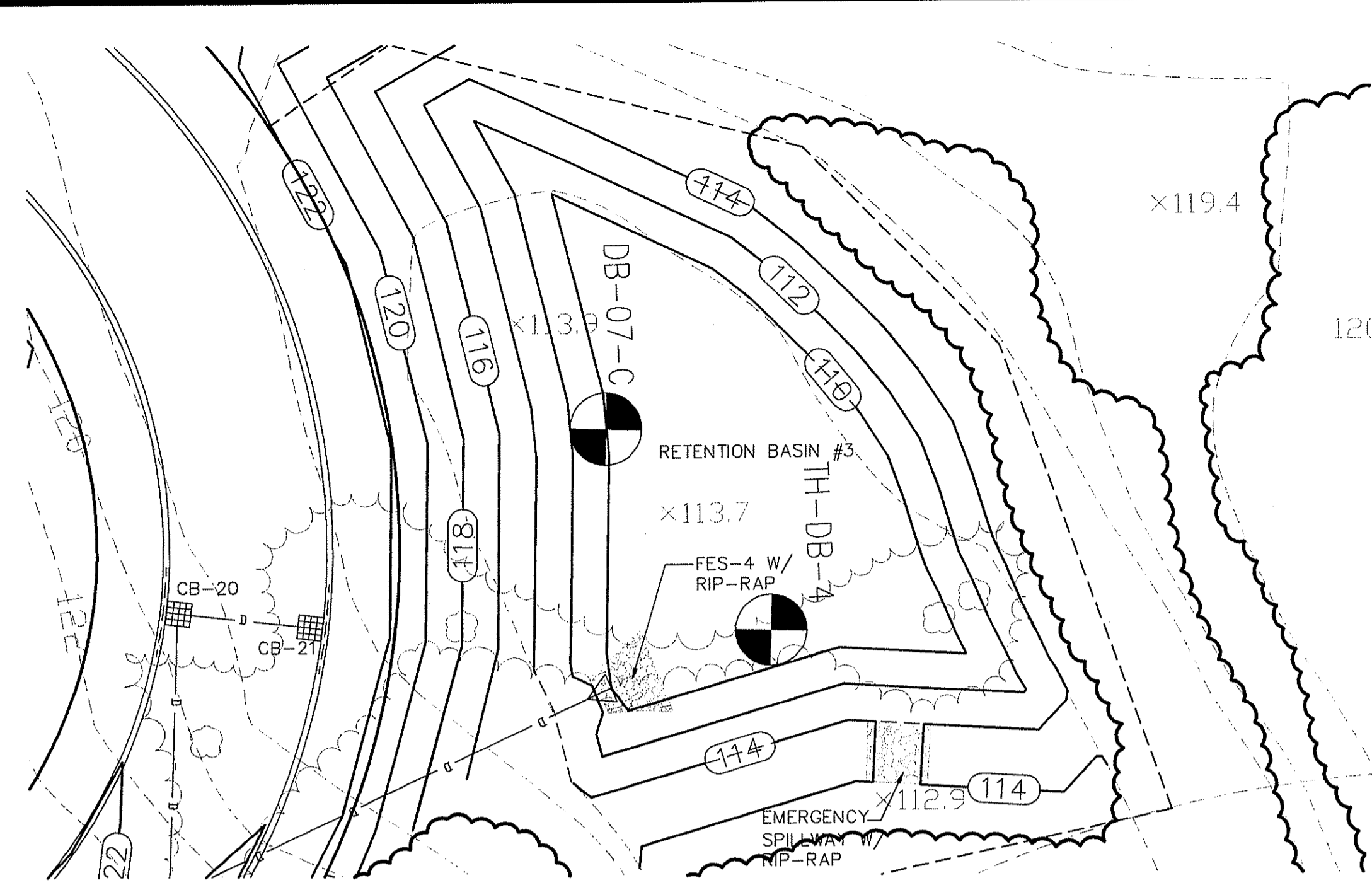
OWNER/APPLICANT  
 ALTAMONTE RIDGE, LLC  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907



**RETENTION BASIN #1 PLAN VIEW**  
SCALE 1"=20'



**RETENTION BASIN #2 PLAN VIEW**  
SCALE 1"=20'

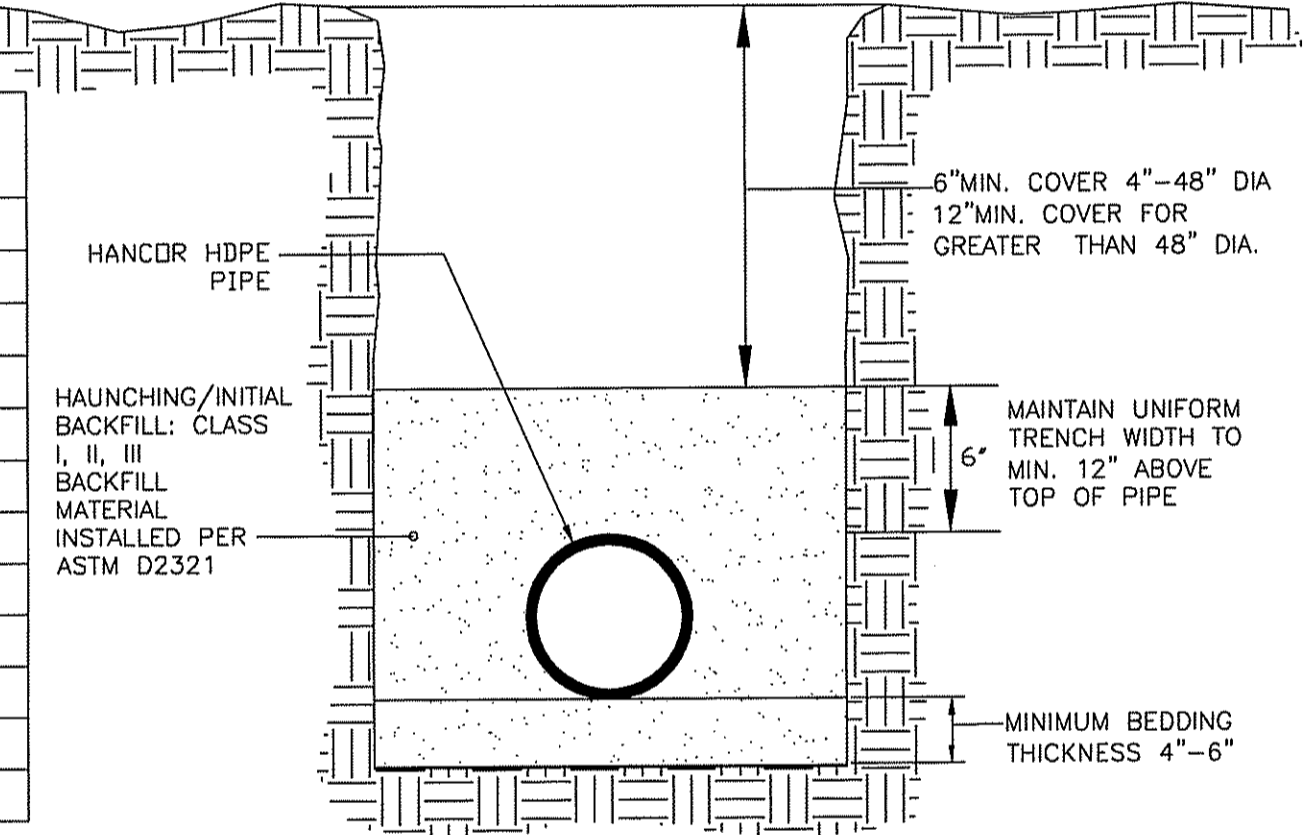


**RETENTION BASIN #3 PLAN VIEW**  
SCALE 1"=20'

NOTE: METALLIC WARNING TAPE SHALL BE INSTALLED 12" ABOVE ALL STORM DRAIN LINES.

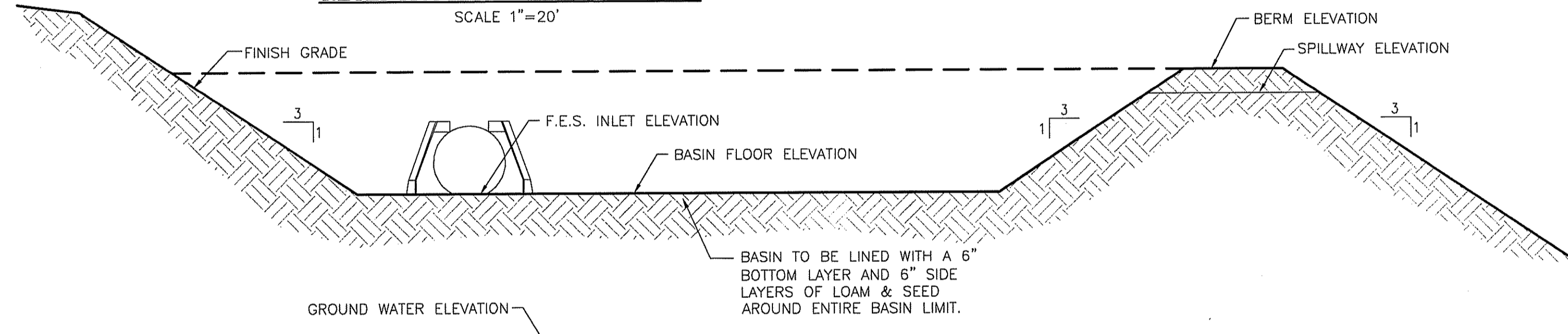
PIPE DIAMETER IN. (MM)	TRENCH WIDTH IN. (M)
4 - 8 (100-200)	*
10 (250)	24 (0.6)
12 (300)	28 (0.7)
15 (375)	35 (0.9)
18 (450)	43 (1.1)
24 (600)	56 (1.4)
30 (750)	60 (1.5)
36 (900)	65 (1.7)
42 (1050)	84 (2.1)
48 (1200)	91 (2.3)
54 (1350)	97 (2.5)
60 (1500)	103 (2.6)

\* USUALLY BASED ON SMALLEST BUCKET SIZE AVAILABLE



REFERENCE ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS."

**HDPE TRENCH INSTALLATION DETAIL**  
NOT TO SCALE

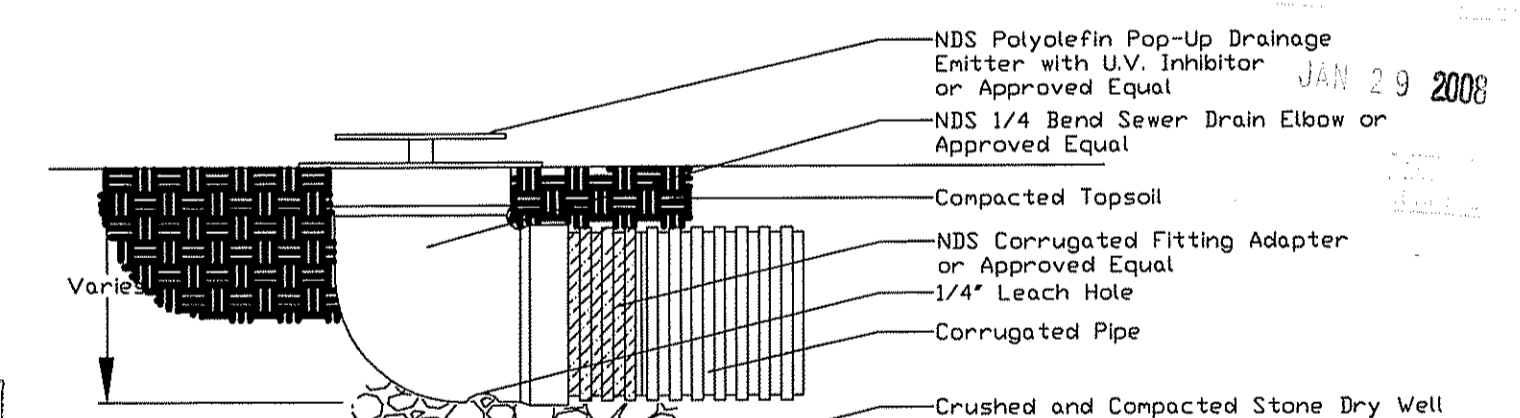


**TYPICAL RETENTION BASIN CROSS SECTION DETAIL**  
NOT TO SCALE

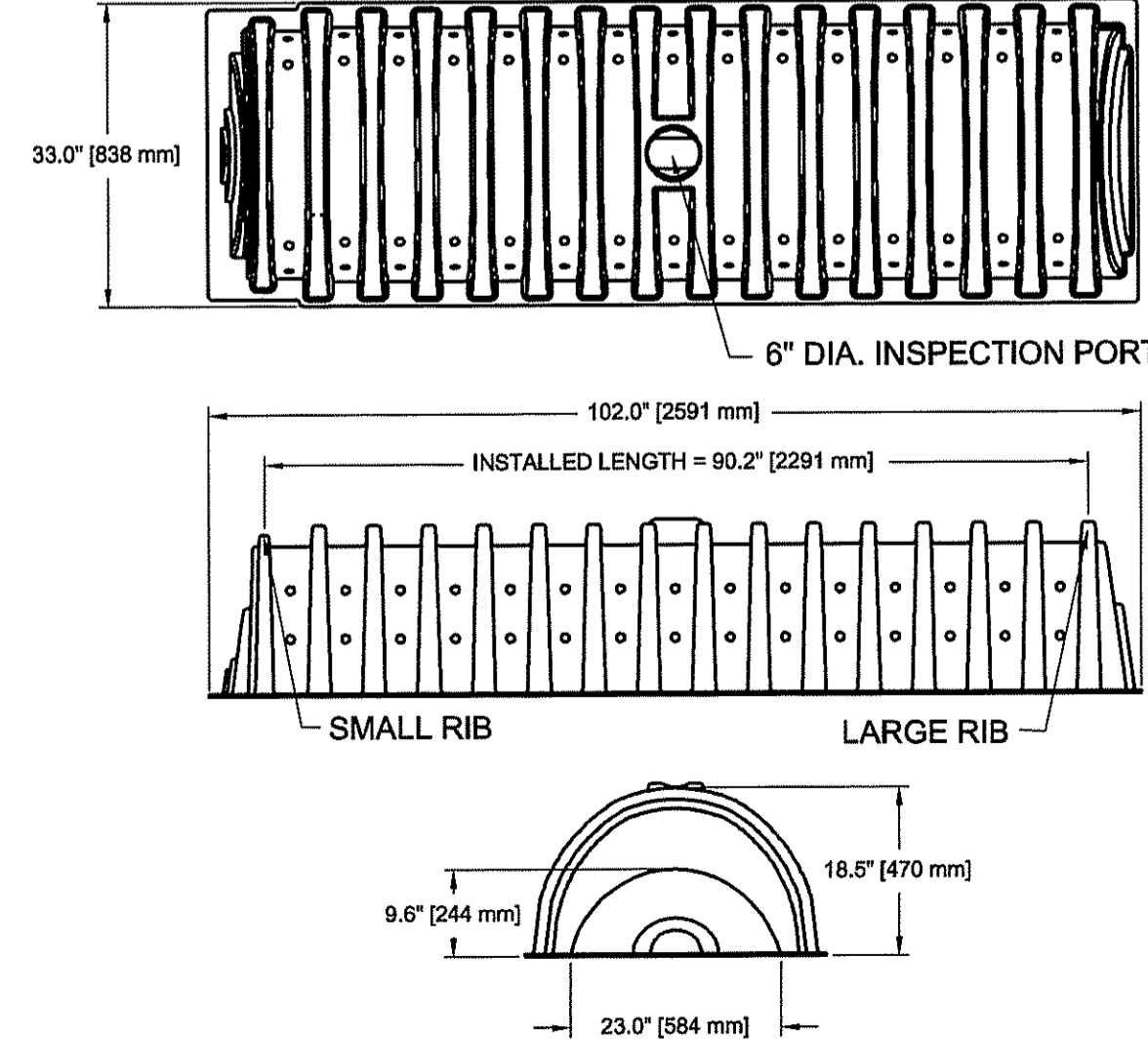
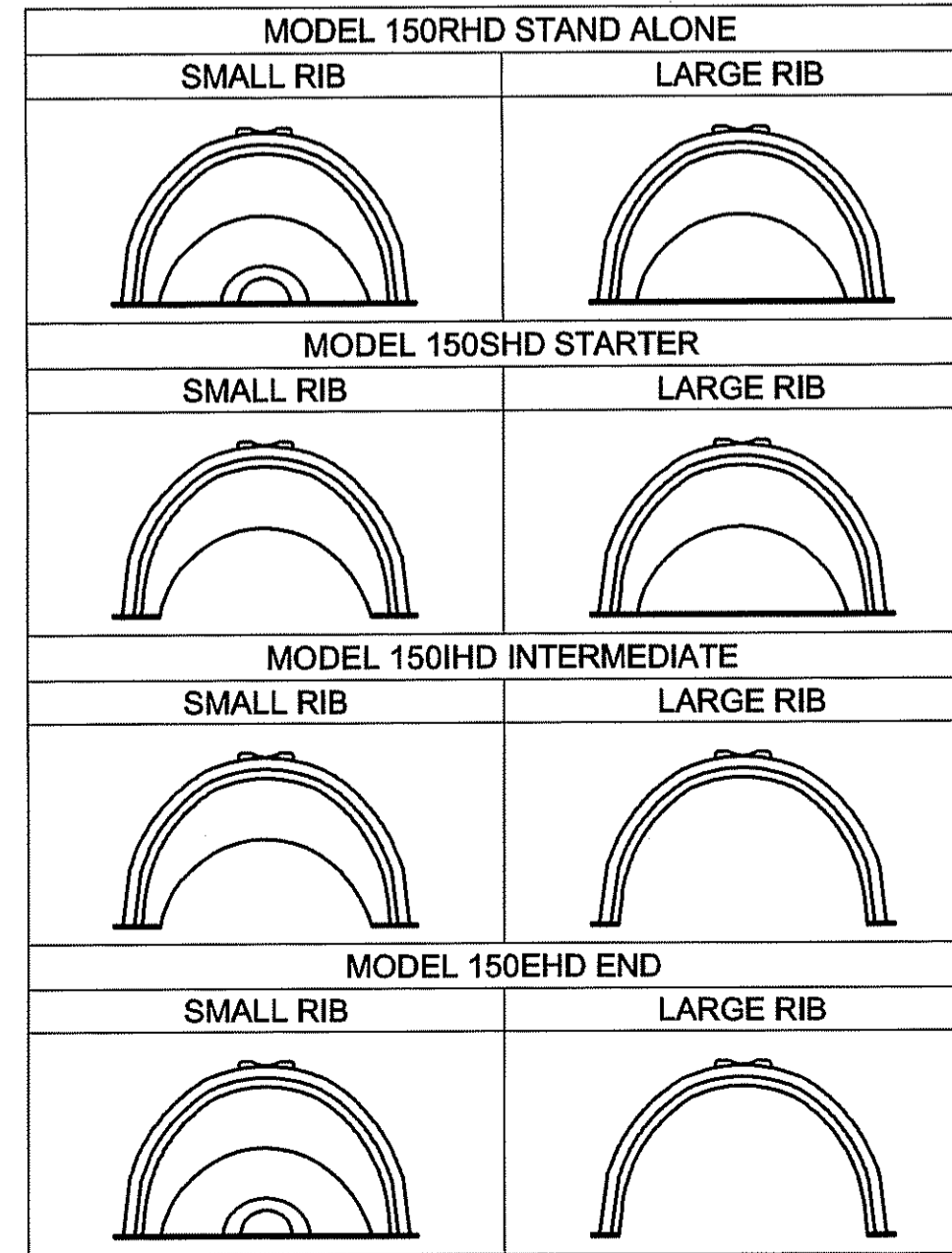
	BASIN 1	BASIN 2	BASIN 3
GROUND WATER ELEVATION	81.3	105.7	106.3
BASIN FLOOR ELEVATION	84.5	109.0	110.0
F.E.S. INLET ELEVATION	84.50 (FES1)	109.00 (FES3)	110.00 (FES4)
	84.50 (FES2)		
SPILLWAY ELEVATION	89.0	111.0	113.5
BERM ELEVATION	90.0	112.0	114.0
2 YEAR STORM ELEVATION	84.58	108.20	110.10
10 YEAR STORM ELEVATION	85.51	109.10	111.13
25 YEAR STORM ELEVATION	86.23	109.65	111.83
100 YEAR STORM ELEVATION	87.56	110.65	113.06

**RIP-RAP & BEDDING SPECIFICATIONS**

LOCATION	NSA SIZE MODIFIED NO.(RIP-RAP, BEDDING)	DEPTH(RIP-RAP, BEDDING)
FES INLETS (1,2,3&4)	R-3, FS-2	12", 6"
EMERGENCY SPILLWAYS (BASIN 1,2&3)	R-2, FS-1	6", 3"

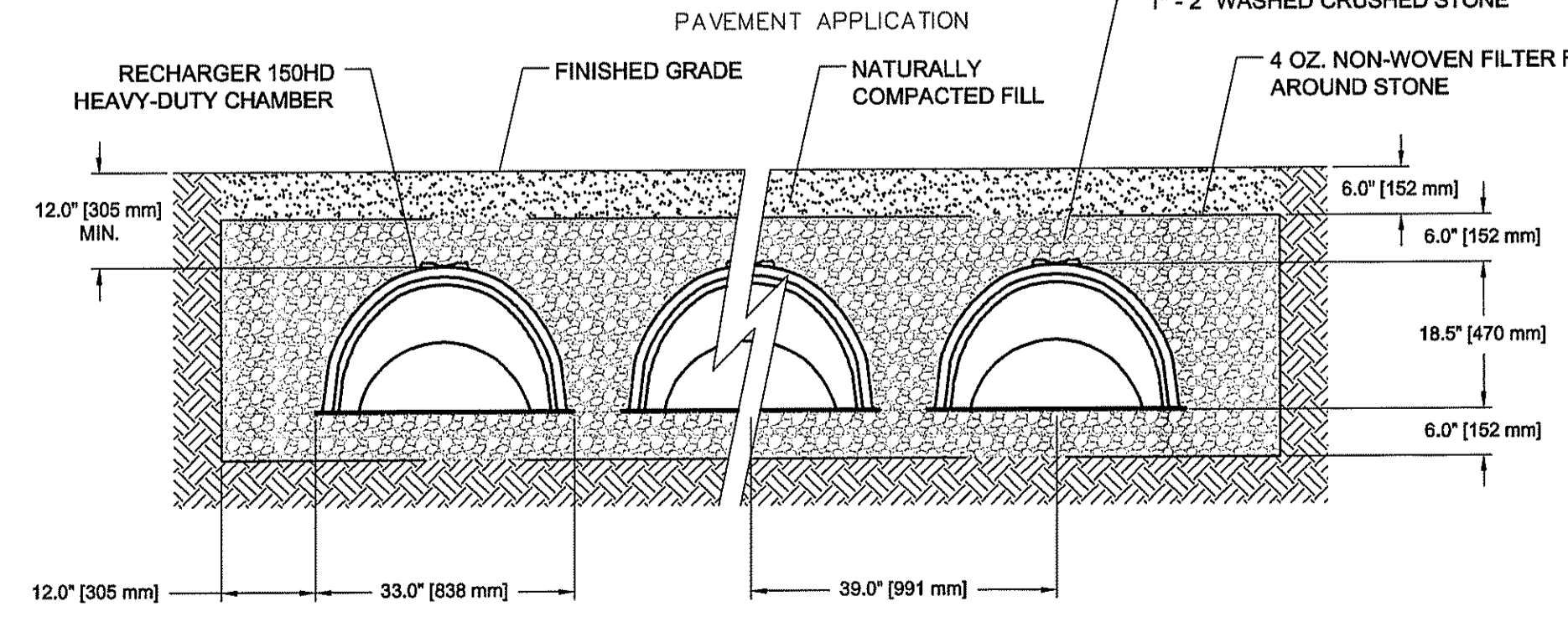
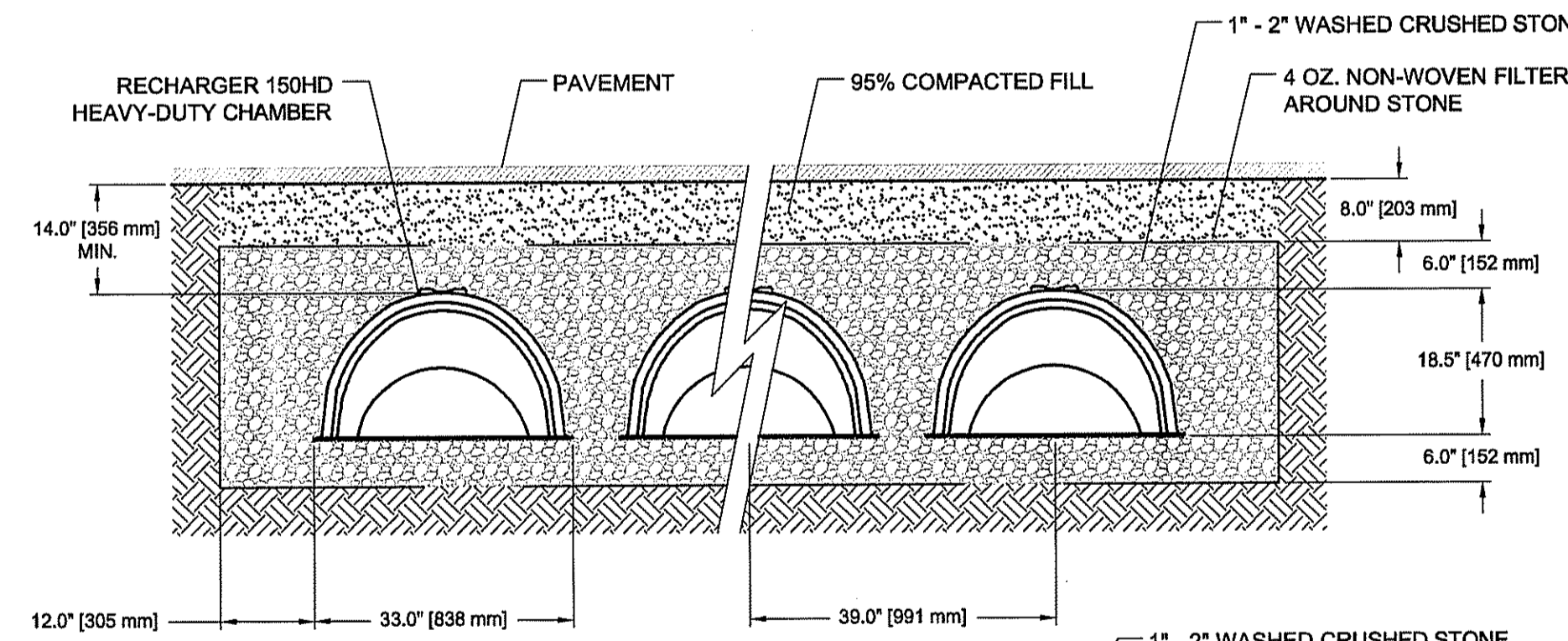


**NDS POP-UP DRAINAGE EMITTER**  
NOT TO SCALE



CULTEC RECHARGER 150HD CHAMBER STORAGE = 2.65 CF/FT  
INSTALLED LENGTH ADJUSTMENT = 1.0'  
ALL RECHARGER 150HD HEAVY-DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.

**TYPICAL ROOF DRAIN INFILTRATION SYSTEM DETAIL**  
NOT TO SCALE



**GENERAL NOTES**  
RECHARGER 150HD BY CULTEC, INC. OF BROOKFIELD, CT. STORAGE PROVIDED = 4.89 CF/FT PER DESIGN UNIT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.  
USE RECHARGER 150HD HEAVY-DUTY FOR TRAFFIC AND/OR H2O APPLICATIONS.

ALL RECHARGER 150HD HEAVY-DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.  
ALL RECHARGER 150 CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

**LAWN APPLICATION**

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 9 5 2008 FILE # 07-0359  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*Matthew D. Wencel*

**ROOF DRAIN NOTE:**  
(4) CULTEC RECHARGER 150 UNITS ARE REQUIRED FOR THE INDIVIDUALLY SELECTED ROOF DRAIN SYSTEMS. IF ROOF AREA EXCEEDS 1,600 S.F. A SITE SPECIFIC DESIGN IS REQUIRED.

**OWNER/APPLICANT**

ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

Steven M. Clarke  
No. 4477  
REGISTERED PROFESSIONAL ENGINEER

**REVISIONS**

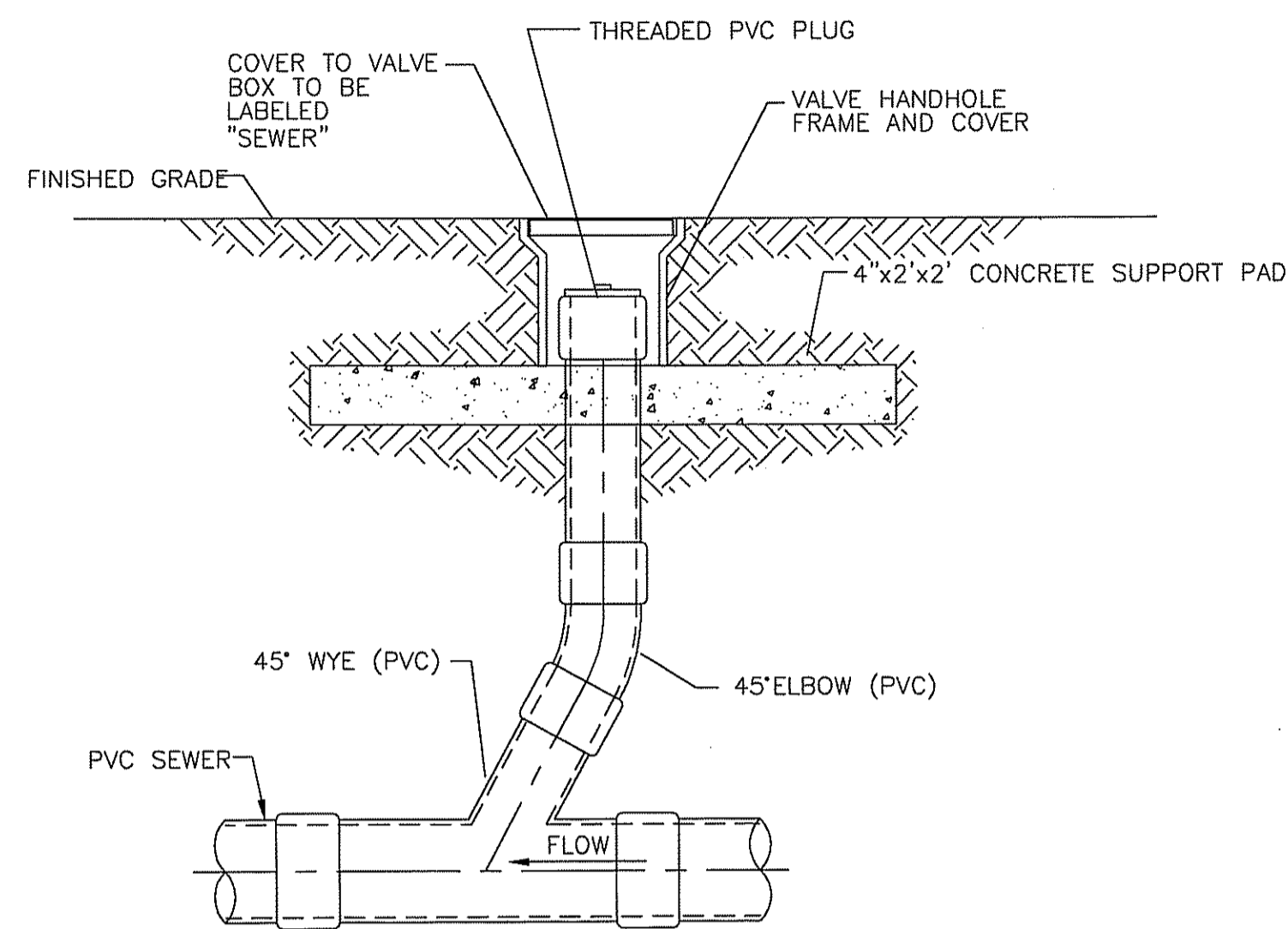
No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

**COMMONWEALTH ENGINEERS & CONSULTANTS, INC.**  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908

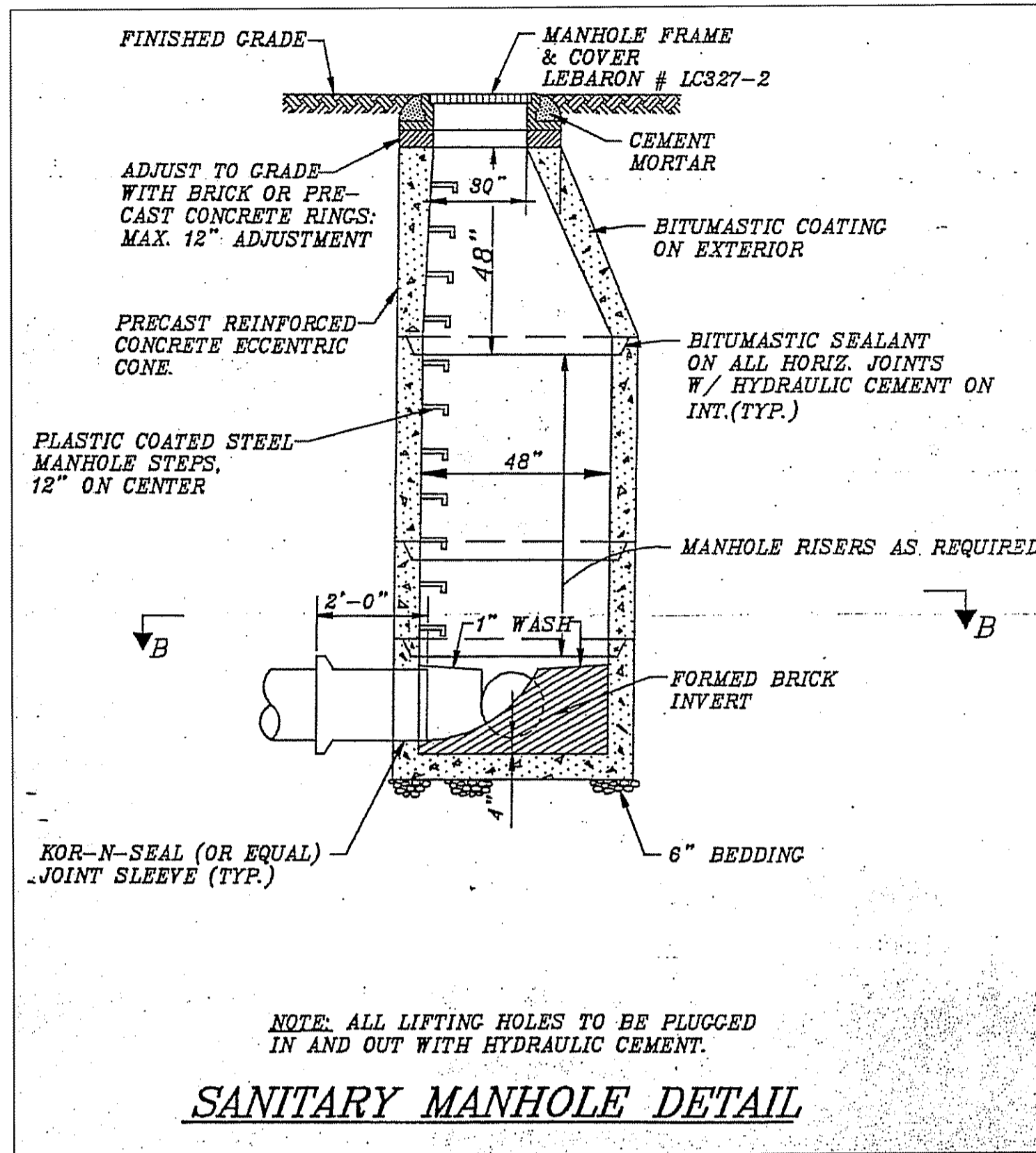
**PRELIMINARY SUBMISSION**  
for  
**ALTAMONTE RIDGE**  
A.P. 10D, LOT 46  
**SHANNOCK VILLAGE ROAD**  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
**CONSTRUCTION DETAILS #4**

SCALE: AS NOTED SHEET NO: 22 of 24

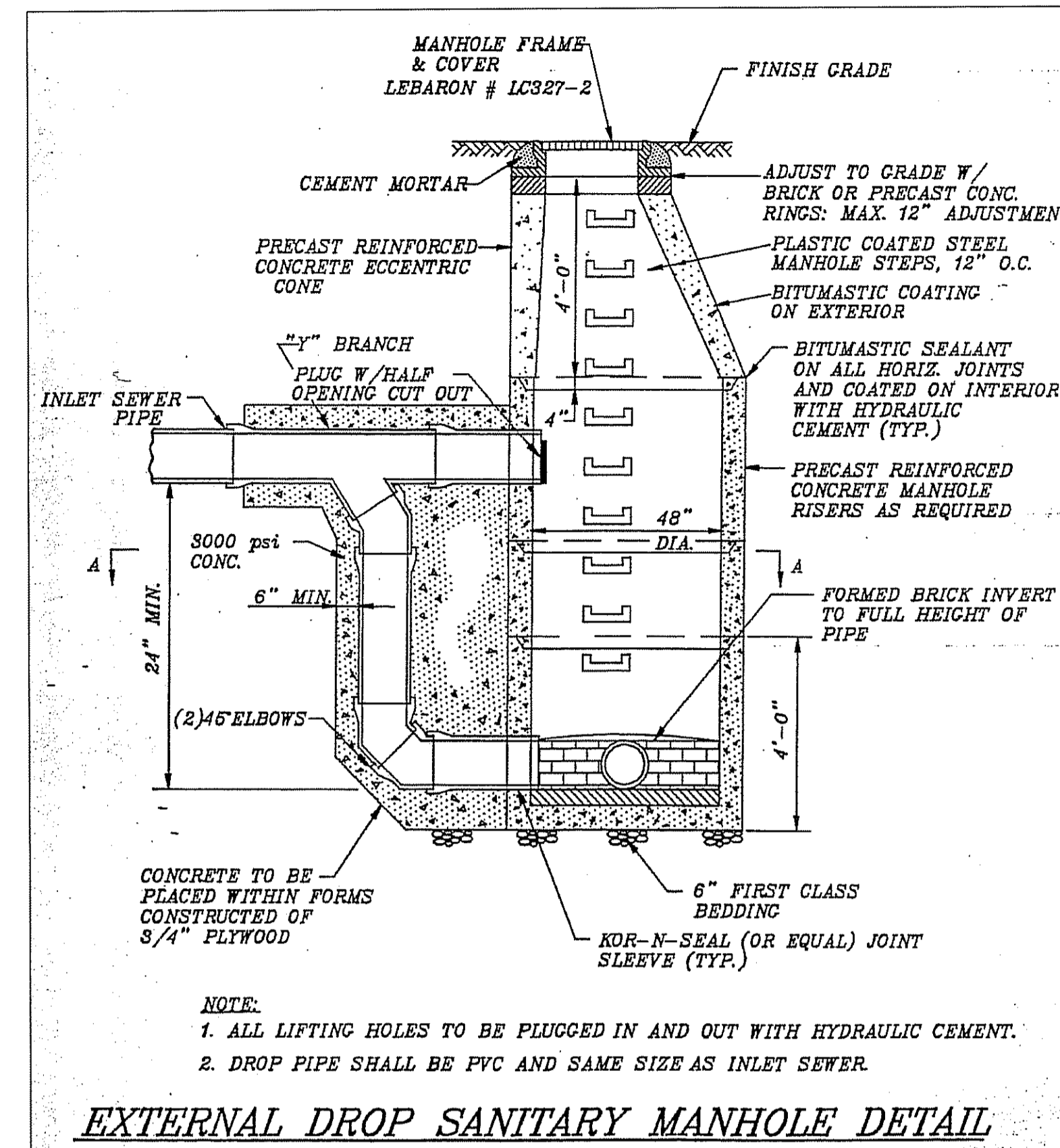
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DATE: 8/29/07	PROJECT NO.: 04145.00	



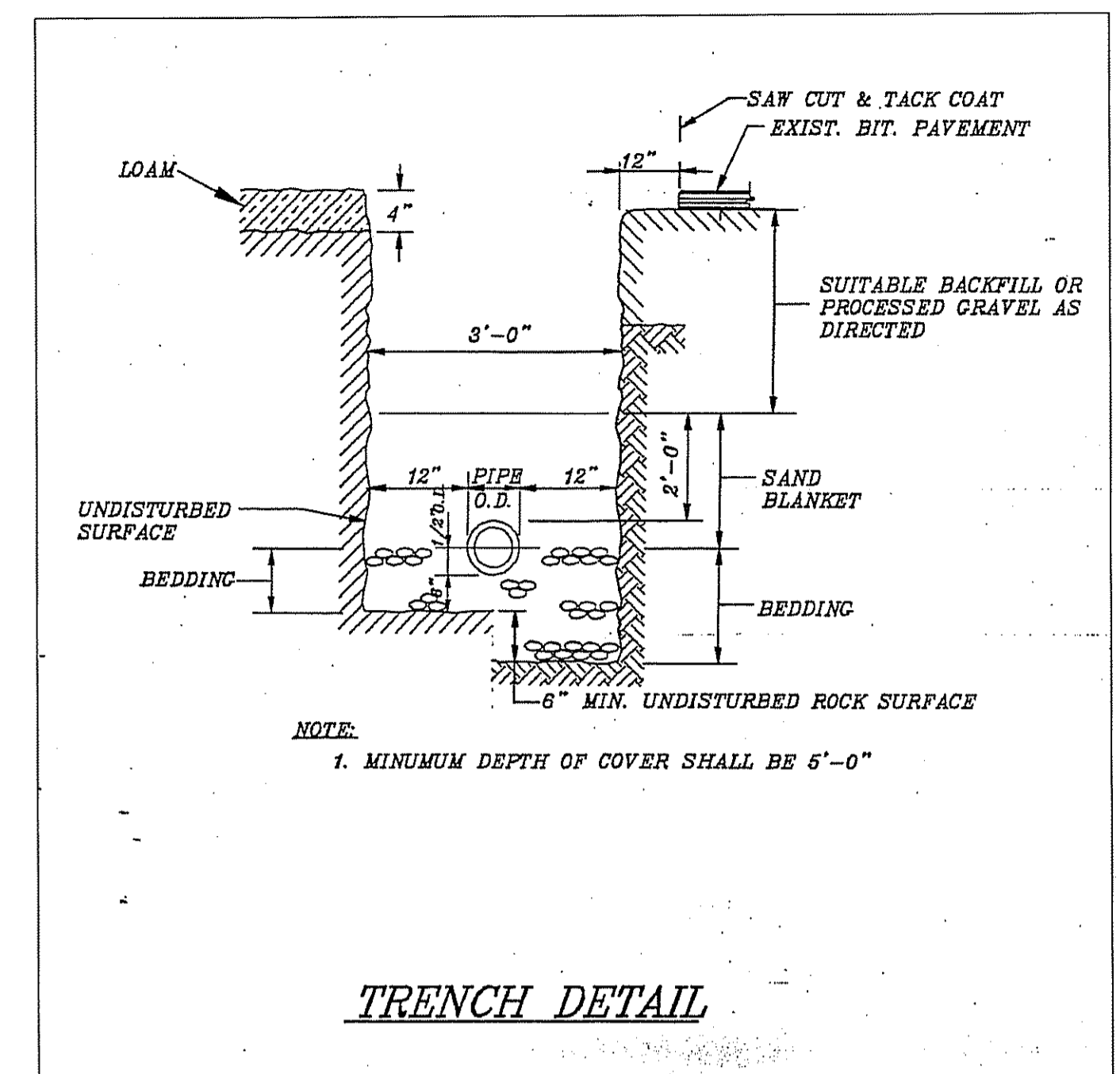
**CLEANOUT DETAIL**  
NOT TO SCALE



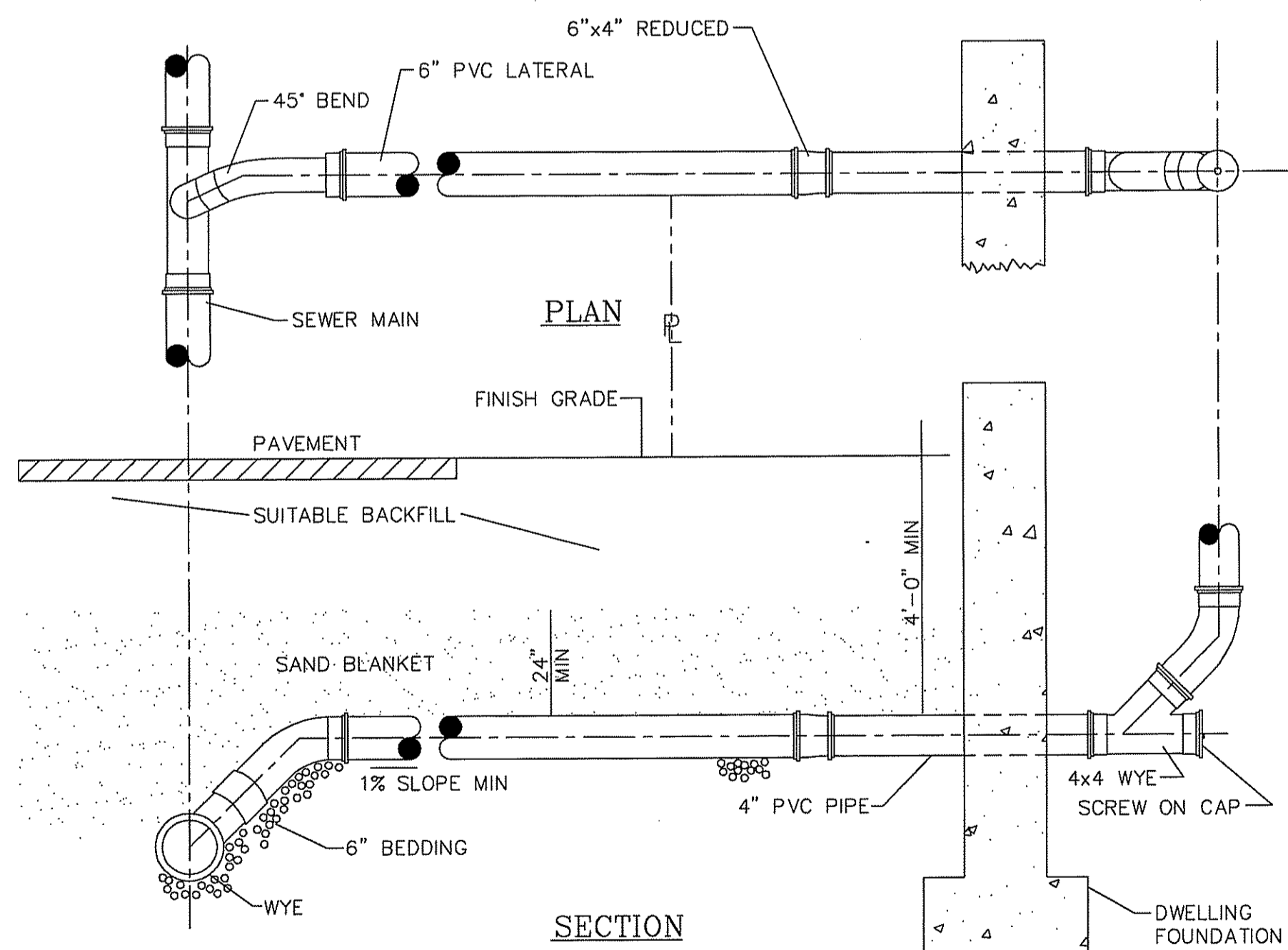
**SANITARY MANHOLE DETAIL**



**EXTERNAL DROP SANITARY MANHOLE DETAIL**

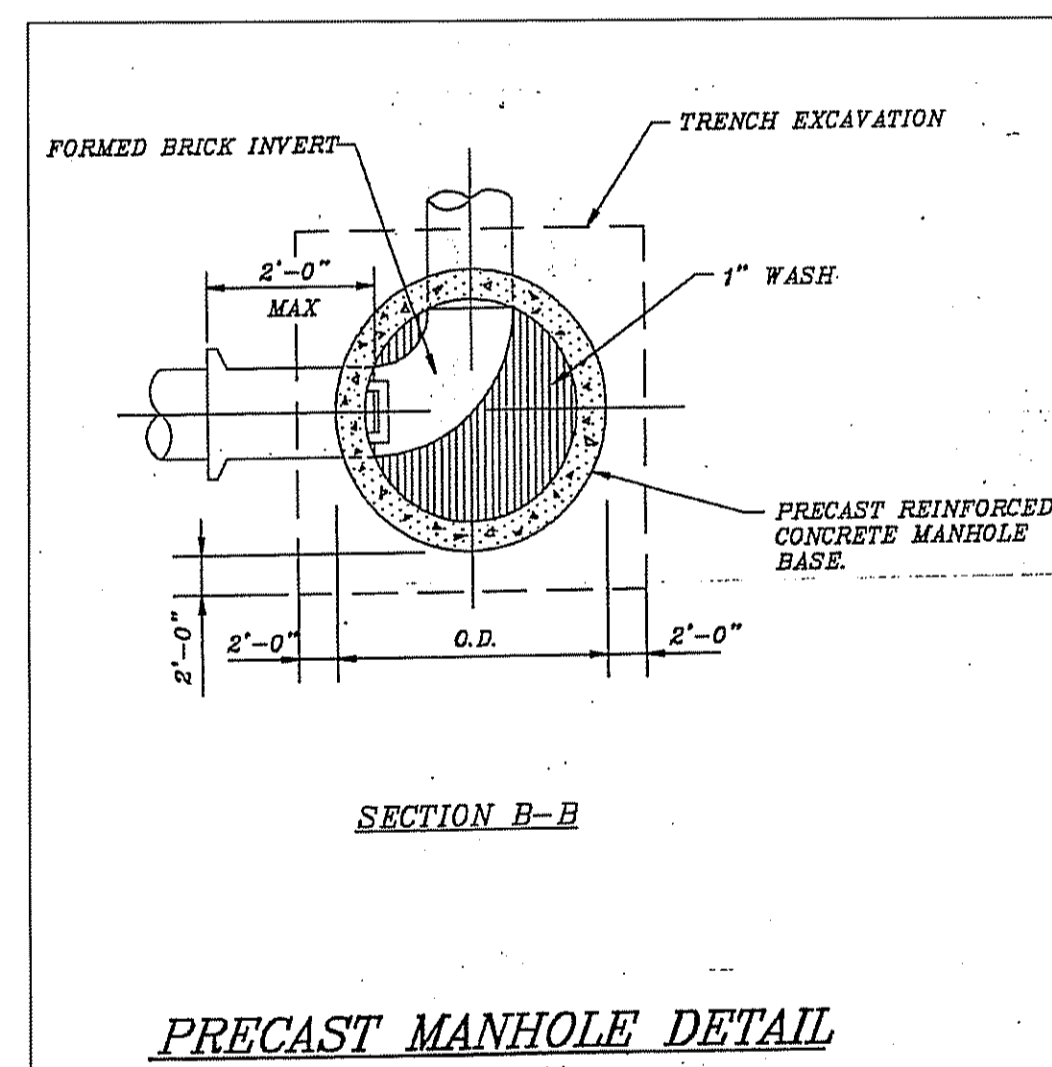


**TRENCH DETAIL**

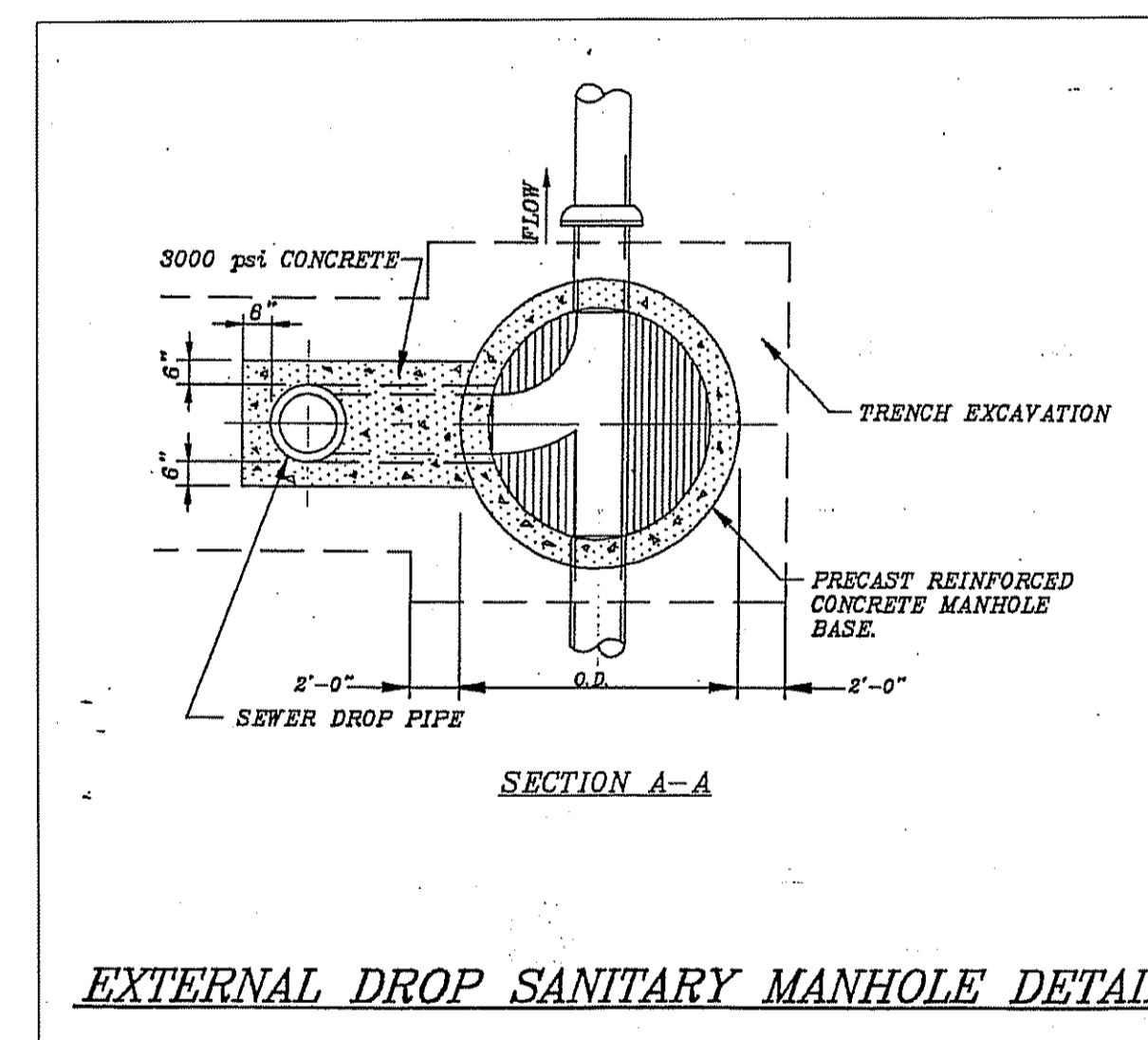


**STANDARD HOUSE CONNECTION DETAIL**  
NOT TO SCALE

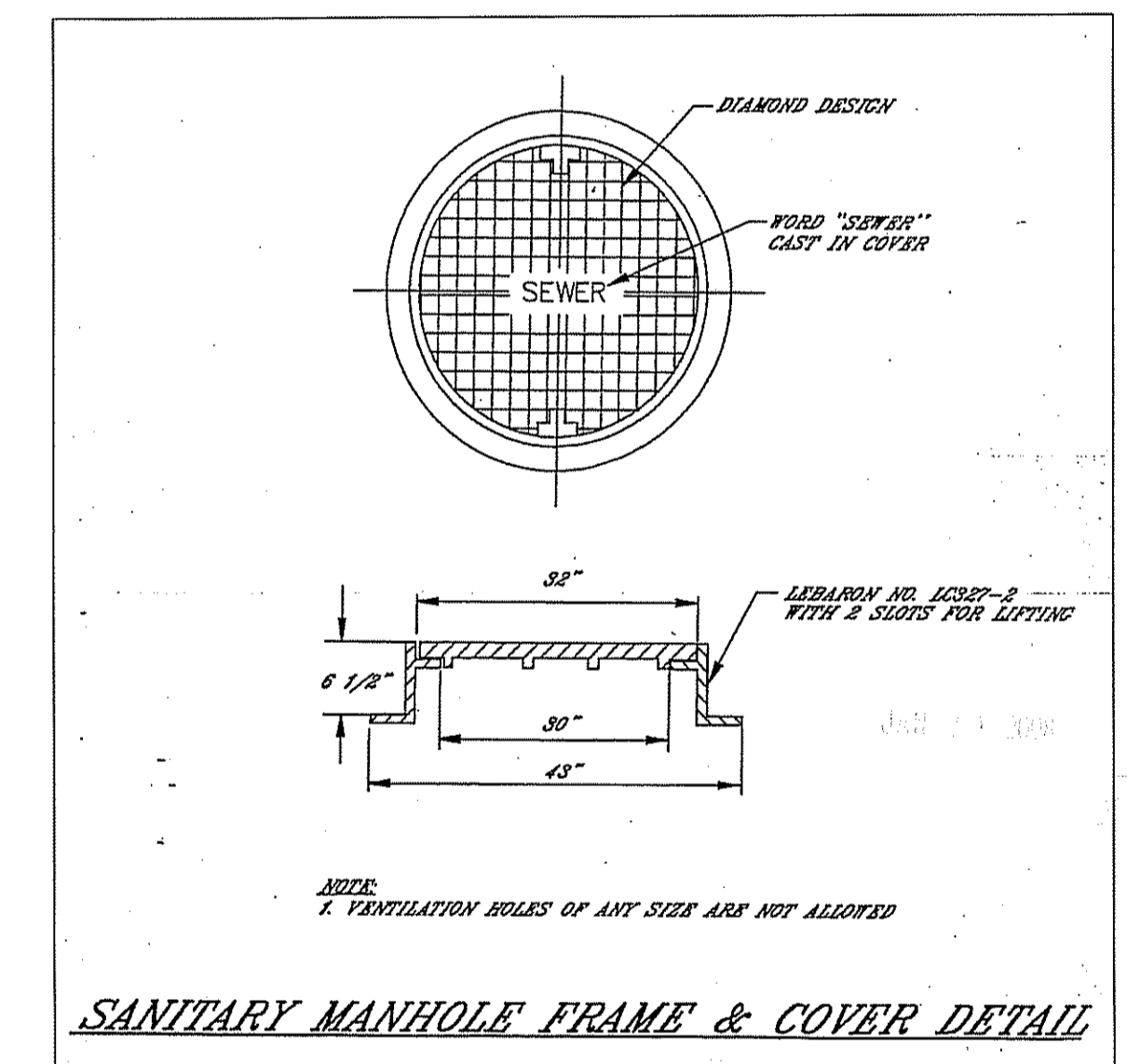
NOTE: FOR AN EXISTING SEWER MAIN THAT DOES NOT HAVE A WYE INSTALLED, THE CONTRACTOR SHALL INSTALL A PIPE SADDLE.



**PRECAST MANHOLE DETAIL**



**EXTERNAL DROP SANITARY MANHOLE DETAIL**



**SANITARY MANHOLE FRAME & COVER DETAIL**

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
PROVIDENCE WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
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DATED APR 25 2008 FILE# 07-0359  
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*Stephen D. Wenzel*

**OWNER/APPLICANT**

ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

Steven M. Clarke  
No. 4477  
REGISTERED PROFESSIONAL ENGINEER

**COMMONWEALTH**  
ENGINEERS & CONSULTANTS, INC.  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908

REVISIONS

No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

PRELIMINARY SUBMISSION  
for  
ALTAMONTE RIDGE  
A.P. 10D, LOT 46  
SHANNOCK VILLAGE ROAD  
(MAIN STREET)  
in  
RICHMOND, RHODE ISLAND  
CONSTRUCTION DETAILS #5

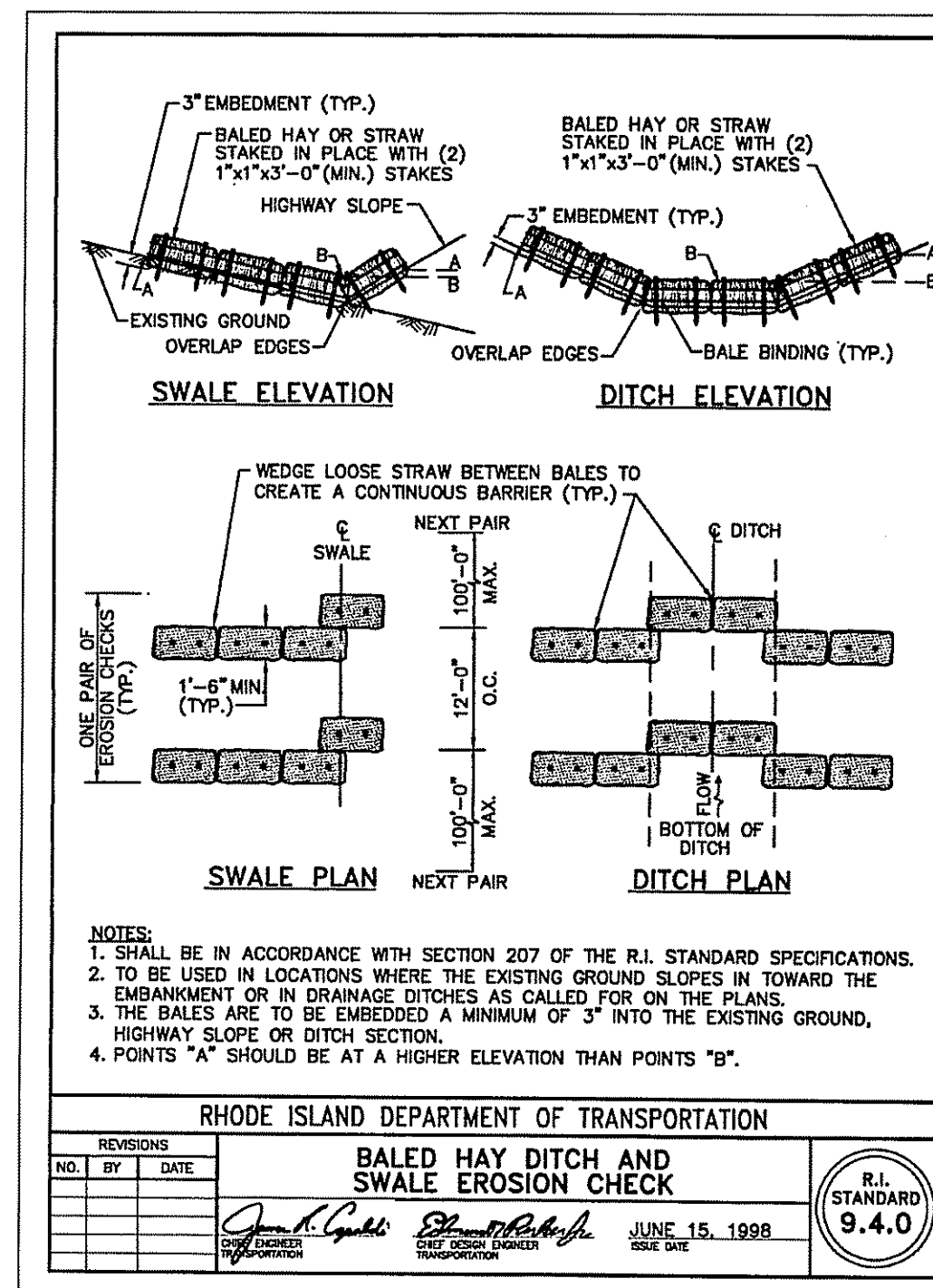
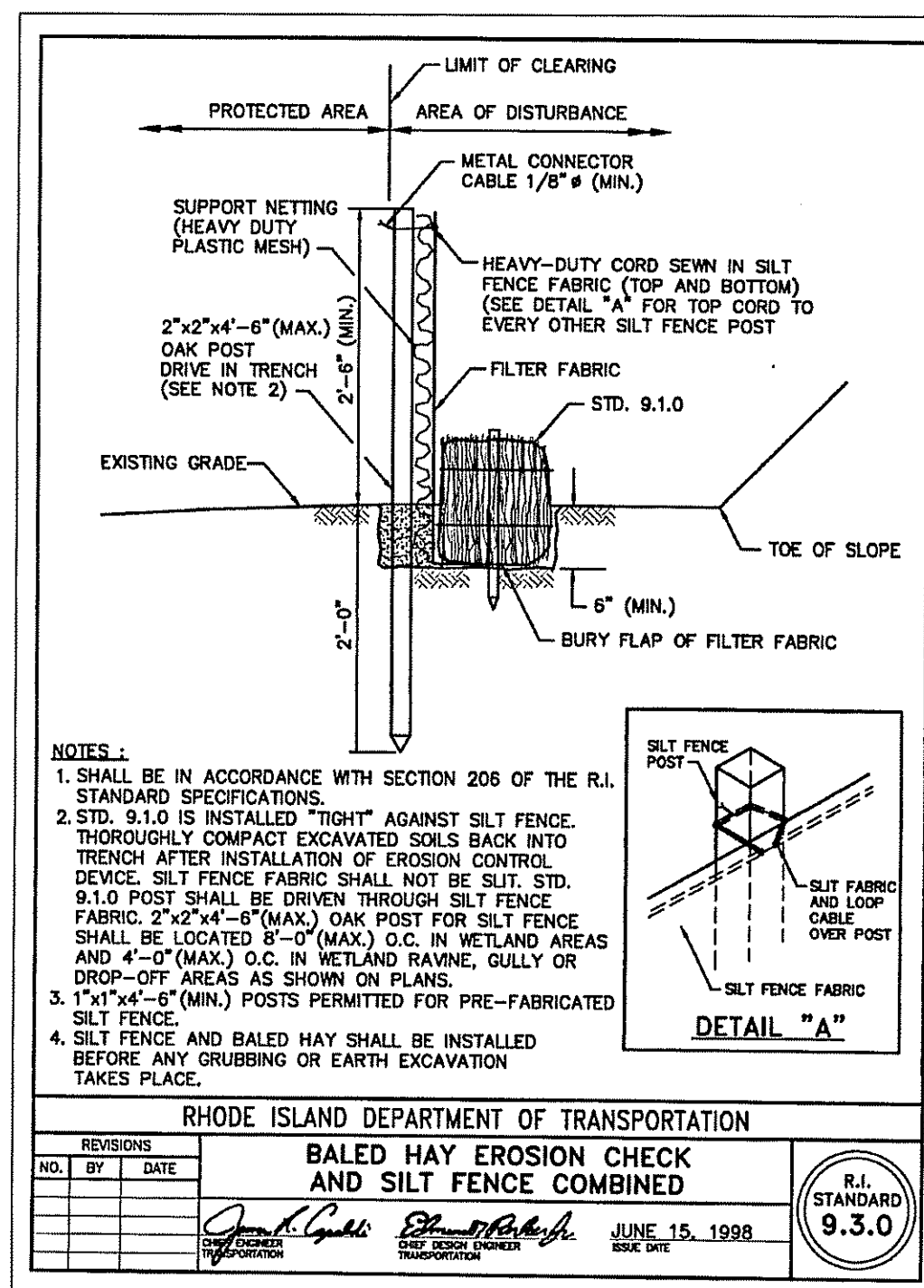
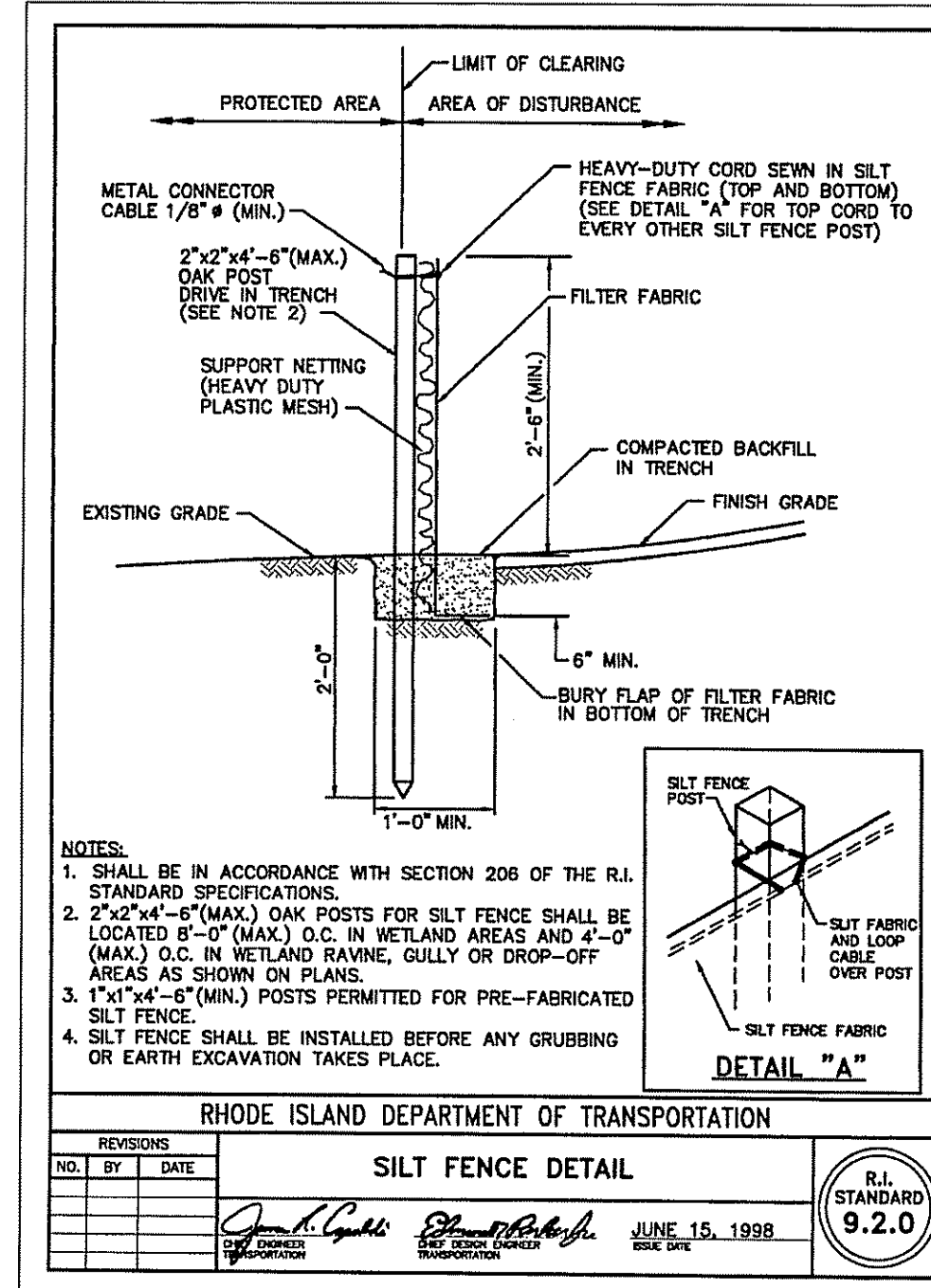
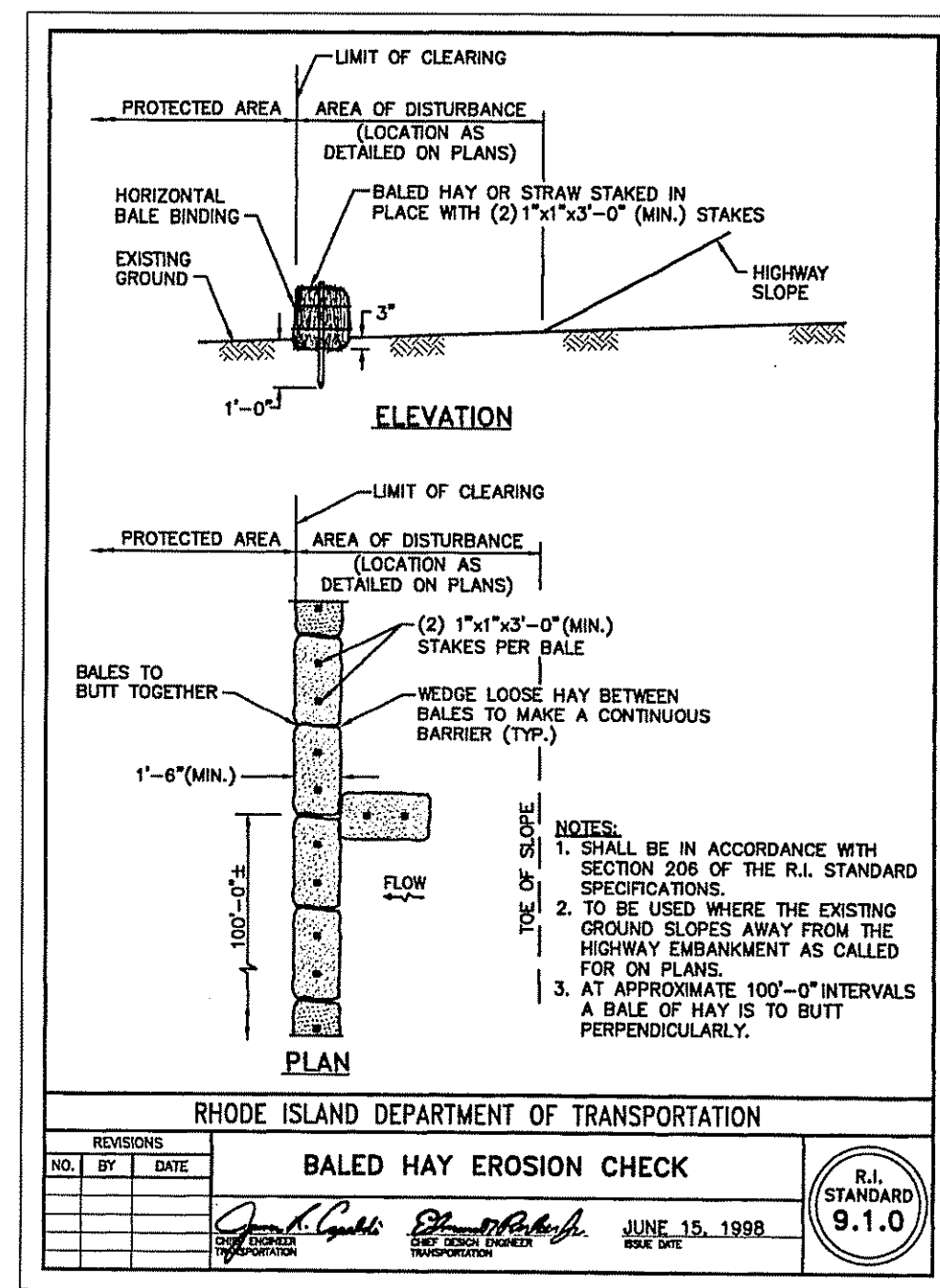
SCALE: AS NOTED SHEET NO: 23 of 24  
DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
DATE: 8/29/07 PROJECT NO.: 04145.00

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**EROSION CONTROL, SOIL STABILIZATION AND SEDIMENT CONTROL PROGRAM:**

- PRIOR TO THE COMMENCEMENT OF ANY CLEARING, GRUBBING, DEMOLITION OR EARTHWORK ACTIVITY, TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE PLANS ARE TO BE INSTALLED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERIODIC INSPECTION, MAINTENANCE, REPAIR AND REPLACEMENT OF EROSION, SOIL STABILIZATION AND SEDIMENT CONTROL DEVICES UNTIL AN ACCEPTABLE PERMANENT VEGETATIVE GROWTH IS ESTABLISHED. THE CONTRACTOR SHALL MAINTAIN A DOCUMENTATION LOG OF ALL EROSION CONTROL MEASURE INSPECTIONS AND CORRECTIVE ACTIONS THROUGHOUT THE COURSE OF PROJECT CONSTRUCTION.
- TEMPORARY TREATMENTS SHALL CONSIST OF HAY, STRAW, FIBER MULCH, RIP-RAP OR PROTECTIVE COVER SUCH AS MAT OR FIBER LINING (BURLAP, JUTE FIBERGLASS NETTING AND EXCELSIOR). THESE AND OTHER ACCEPTABLE MEASURES SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY ENGINEER.
- CONSTRUCTION SITES ARE DYNAMIC. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND OR MOVEMENT OF EROSION, SOIL AND SEDIMENT CONTROL MEASURES AS NEEDED TO MAXIMIZE THE INTENT OF THE PROGRAM FOR ALL SITE CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD.
- HAY OR STRAW APPLICATION SHOULD BE IN THE AMOUNT OF 2000 LBS./ACRE.
- EROSION CONTROL MEASURES ARE TO BE REMOVED AT THE COMPLETION OF CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
- STOCKPILES OF TOPSOIL AND EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLANDS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%). STOCK PILES SHALL BE SURROUNDED ON THE DOWN GRADIENT OF THE GROUND SURFACE BY HAY BALES OR SILT FENCE AND THE STOCK PILE SHALL ALSO BE SEEDED AND/OR STABILIZED IN SOME MANNER TO PREVENT SOIL EROSION.
- DENUDED SLOPES SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME, SUCH AS INACTIVE WINTER PERIODS.
- EXPOSED STEEP OR LONG SLOPES SHOULD BE TREATED WITH "CRIMPING" OR "TRACKING" TO REDUCE EROSION AND TO TACK DOWN SEEDING OR MULCH APPLICATIONS.
- TEMPORARY SEEDING SHOULD BE DONE WITHIN ONE (1) MONTH AFTER DISTURBANCE.
- ALL DISTURBED AREAS MUST BE SEED OR PLANTED WITHIN THE CONSTRUCTION SEASON. STABILIZATION OF ONE FORM OR ANOTHER SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
- TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE, RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS. TOPSOIL SHALL CONFORM WITH RHODE ISLAND SPECIFICATION M 20.01.
- THE NORMAL ACCEPTABLE SEASONABLE SEEDING DATES AREA APRIL 1ST THROUGH OCTOBER 31ST.
- SEED MIX SHALL BE INOCULATED WITHIN 24-HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULATION FOR EACH SEED VARIETY.
- THE DESIGN SEED MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEED SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	% BY WEIGHT	SEEDING DATE
CREEING RED FESCUE	70	APRIL 1 - JUNE 15
ASTORIA BENTGRASS	5	AUG 15 - OCT 15
BIRDFOOT TREEFOIL	15	
PERENNIAL RYEGRASS	10	
APPLICATION RATE	100LBS-ACRES	
- IN TOPSOIL SEEDING AREAS, THE CONTRACTOR WILL LIME AND/OR FERTILIZE AS REQUIRED TO COMPLIMENT OR UPGRADE EXISTING SOIL CONDITIONS.
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN A PERIOD OF ONE (1) YEAR. REPAIR AND RESEED SHALL BE DONE AT NO ADDITIONAL COST.
- TREES OR SHRUBS TO BE RETAINED SHALL BE FENCED OR ROPED OFF TO PROTECT THEM FORM CONSTRUCTION EQUIPMENT.
- ALL PROPOSED PLANTINGS MUST BE ACCOMPLISHED AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION, AND AT LEAST PRIOR TO ANY ON-SITE OCCUPANCY.
- SHOULD ANY OF THE PROPOSED PLANTS FAIL TO SURVIVE AT LEAST ONE (1) FULL GROWING SEASON FROM THE TIME THEY HAVE BEEN PLANTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT AND MAINTAINING THE SAME PLANT SPECIES FOR ONE (1) ADDITIONAL YEAR.

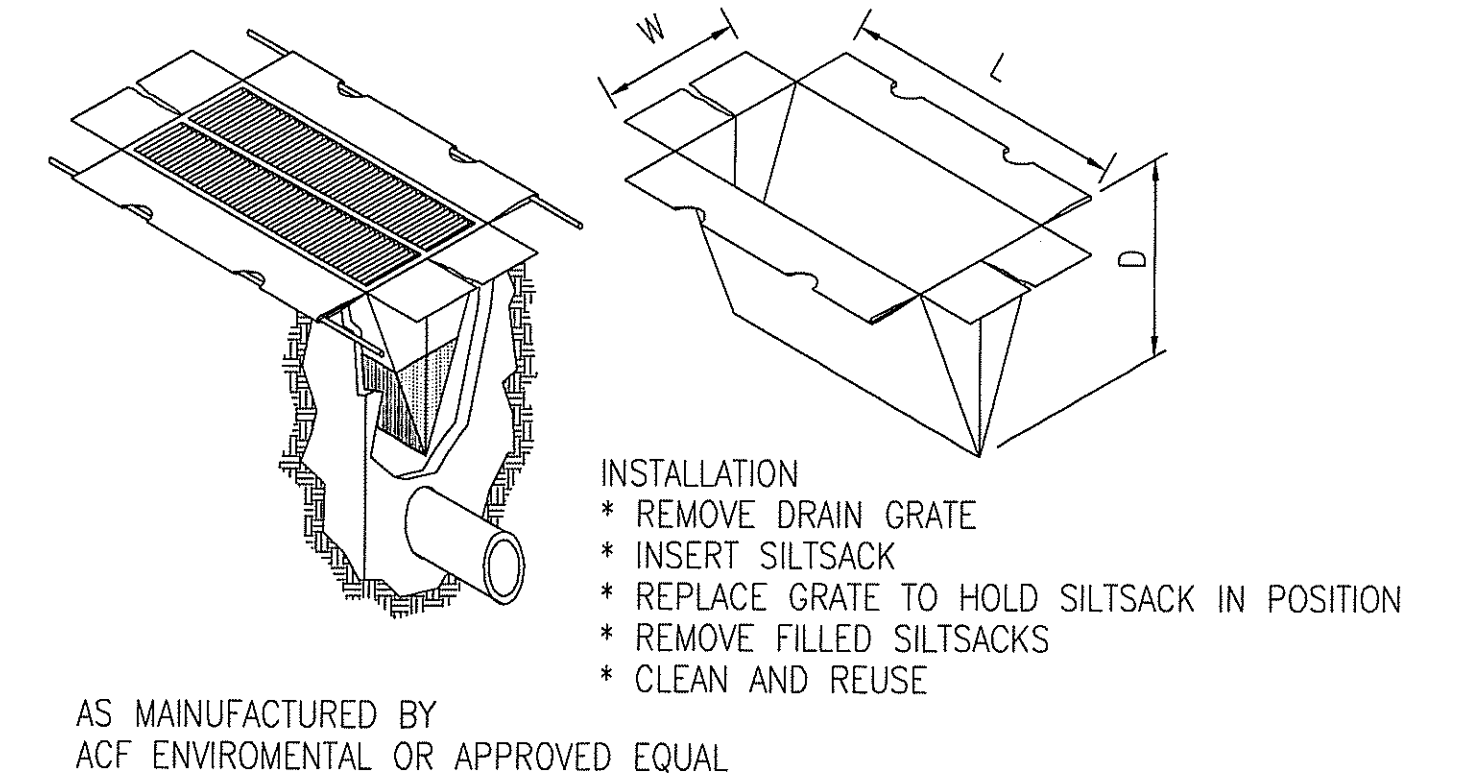
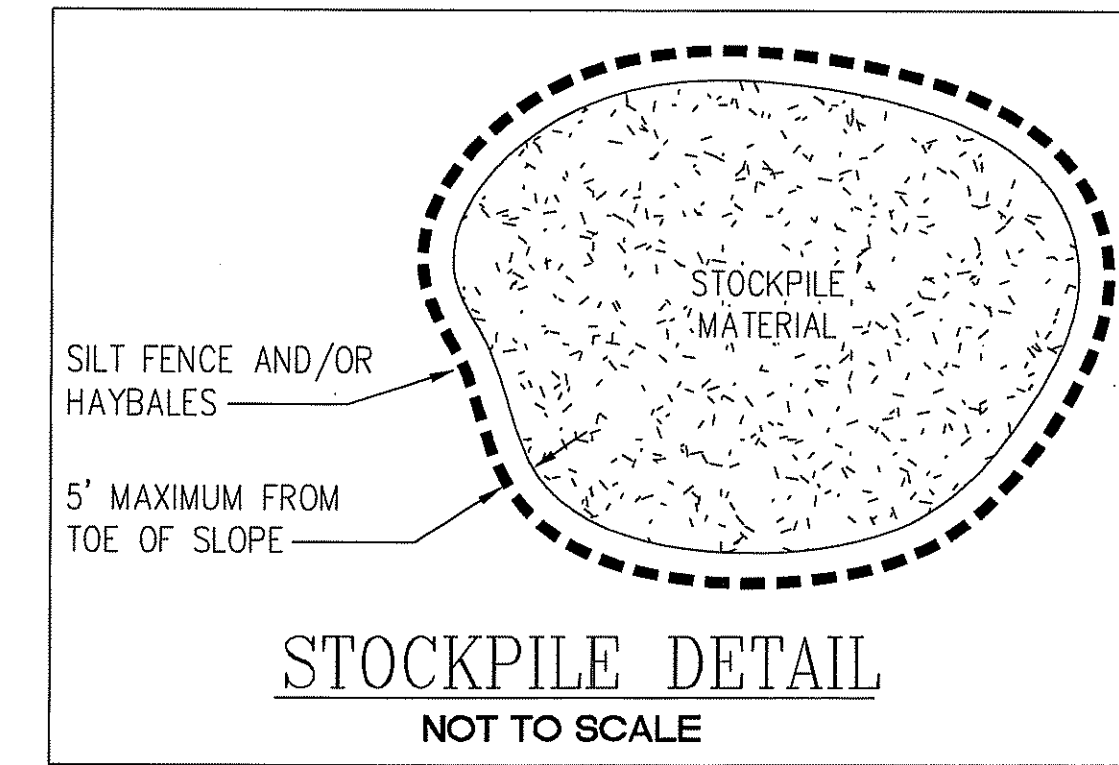
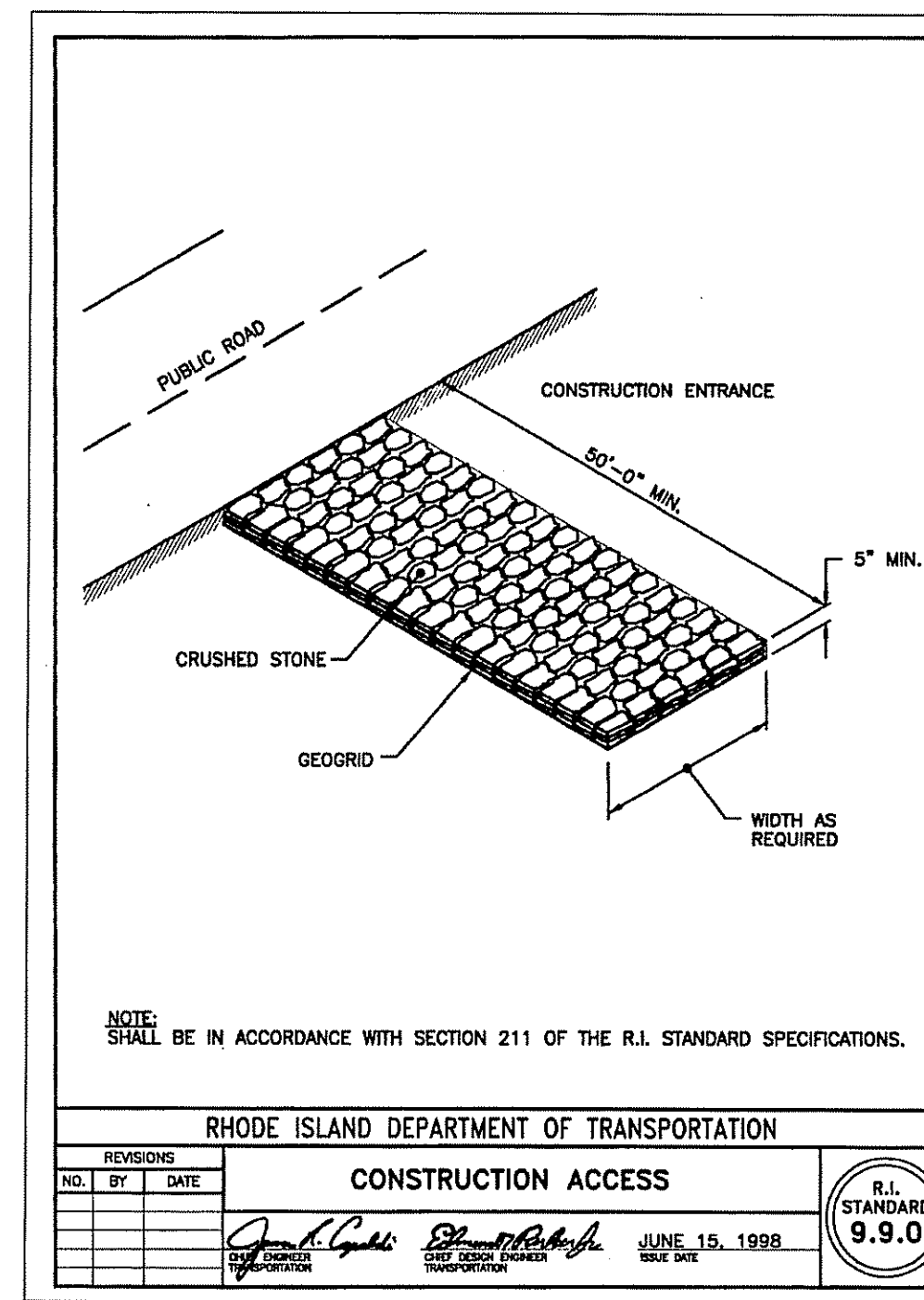


**TRENCH DRAIN AND CLOSED DRAINAGE SYSTEM MAINTENANCE:**

- INSPECTION OF ALL DRAINAGE STRUCTURES SHALL BE PERFORMED AT LEAST TWICE PER YEAR, PREFERABLY DURING A STORM EVENT, TO INSPECT FOR PROPER FUNCTIONING OF THE FACILITY.
- SEDIMENTS SHALL BE REMOVED FROM THE TRENCH DURING THE FIRST (INITIAL) YEAR OF OPERATION AND EVERY YEAR THEREAFTER.
- INSPECTIONS SHALL BE ACCOMPLISHED SEVERAL TIMES DURING THE FIRST SIX (6) MONTHS OF OPERATION, ESPECIALLY AFTER RAINFALL EVENTS, TO CHECK FOR CLOGGING.
- A HOMEOWNER'S ASSOCIATION WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE TRENCH DRAIN.
- THE CLOSED DRAINAGE SYSTEM SHALL BE FLUSHED, CLEANED AND CLEARED OF ALL SEDIMENT AND DEBRIS FOLLOWING COMPLETION OF CONSTRUCTION BY THE CONTRACTOR, AND THE ENTIRE DRAINAGE SYSTEM MUST BE ACCEPTED BY THE ENGINEER AND THE TOWN OF RICHMOND FOLLOWING COMPLETION AND BEFORE OCCUPANCY.

**INFILTRATION BASIN MAINTENANCE:**

- INSPECTION OF THE BASIN SHALL BE PERFORMED AT LEAST TWICE PER YEAR, PREFERABLY DURING A STORM EVENT, TO INSPECT FOR PROPER FUNCTIONING OF THE FACILITY.
- SEDIMENTS SHALL BE REMOVED FROM THE BASIN DURING THE FIRST (INITIAL) YEAR OF OPERATION AND EVERY YEAR THEREAFTER.
- THE GRASSED AREAS OF THE BASIN SHALL BE INSPECTED AT LEAST TWICE PER YEAR TO CHECK FOR EROSION PROBLEMS. AS PART OF EACH BASIN INSPECTION, THE DRAINAGE DISCHARGE POINTS (FLARED END SECTIONS, RIPRAP AREAS, ETC.) SHALL BE INSPECTED AND IF FOUND TO BE DAMAGED, BLOCKED BY TRASH/DEBRIS/SEDIMENT, ERODED, ETC. THEY SHALL BE REPAIRED IMMEDIATELY. THE BASIN SHALL ALSO BE MOWED AT LEAST ONCE PER GROWING SEASON.
- IN ORDER TO RE-ESTABLISH THE INFILTRATION RATE FOR THE BASIN, THE BASIN SHALL BE DEEP TILLED, FOLLOWED BY RE-GRADING AND LEVELING, EVERY 5 TO 10 YEARS, BASED UPON BASIN INSPECTION OF THE INFILTRATION RATES ON A YEARLY BASIS. SAND OR ORGANIC MATTER MAY ALSO BE TILLED INTO THE BASIN SOILS TO AID INFILTRATION.
- IF STANDING WATER IS FOUND IN ANY OF THE BASINS ON THIS SITE MORE THAN THREE (3) DAYS AFTER A RAINFALL EVENT, THE BASIN(S) SHALL BE DETERMINED TO BE FAILED AND THE OWNER SHALL BE RESPONSIBLE TO HAVE THE BASIN(S) INSPECTED BY A REGISTERED R.I. PROFESSIONAL ENGINEER AND REPLACED IMMEDIATELY.
- A HOMEOWNER'S ASSOCIATION WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE INFILTRATION BASINS.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS DIVISION  
 AS SPECIFIED IN THE PERMIT  
 DATED APR 25 2008 FILE # 07-0359  
 NO CHARGES ALLOWED WITHOUT THE ORIGINAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Myra D. Wencel*

**OWNER/APPLICANT**

ALTAMONTE RIDGE, LLC  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907

Steven M. Clarke  
 No. 4477  
 REGISTERED PROFESSIONAL ENGINEER

**COMMONWEALTH**  
 ENGINEERS & CONSULTANTS, INC.  
 400 SMITH STREET  
 PROVIDENCE, RHODE ISLAND 02908

REVISIONS

No.	DATE	DRWN	CHKD
1.	1/14/08	JAR	SMC

PRELIMINARY SUBMISSION  
 for  
**ALTAMONTE RIDGE**  
 A.P. 10D, LOT 46  
**SHANNOCK VILLAGE ROAD**  
 (MAIN STREET)  
 in  
 RICHMOND, RHODE ISLAND  
**CONSTRUCTION DETAILS #6**

SCALE: AS NOTED SHEET NO: 24 of 24  
 DRAWN BY: DMS DESIGN BY: TJP CHECKED BY: SMC  
 DATE: 8/29/07 PROJECT NO.: 04145.00