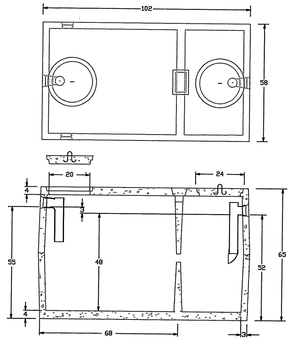
1000 GALLON TWO COMPARTMENT SEPTIC TANK



DESIGN NOTES

1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT
2) ALL INLETS AND OUTLETS HAVE STATE-APPROVED SEALS
3) AVAILABLE WITH 8" TEE
4) MEETS ASTM C 1227-97A
5) CONCRETE STRENGTH 5000 PSI MIN. 28 DAYS

JOLLEY PRECAST, INC.
860-774-9066

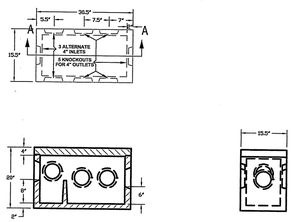
Distribution Box - 5

CONCRETE PRODUCTS
Terry Lane
Gloucester, RI 02814
(401) 568-8874

PRODUCT CODE
CPDB-5

DESIGN NOTES:

- Inlet baffle cast in place.
- Concrete is 6000 psi at 28 days.



SECTION A-A

Pre-cast Bulkheads, Steps, and Septic Tanks

DISTRIBUTION BOX NOTE:

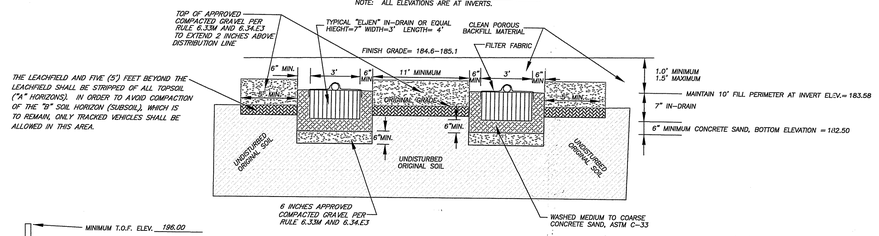
ALL DISTRIBUTION BOXES WILL COMPLY WITH RULE 6.32 OF THE RULES ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION DESIGN CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS, DATED NOVEMBER 25, 2018.

SEPTIC TANK NOTES:

ALL SEPTIC TANKS WILL COMPLY WITH RULE 6.27 OF THE RULES ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION DESIGN CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS, DATED NOVEMBER 25, 2018.

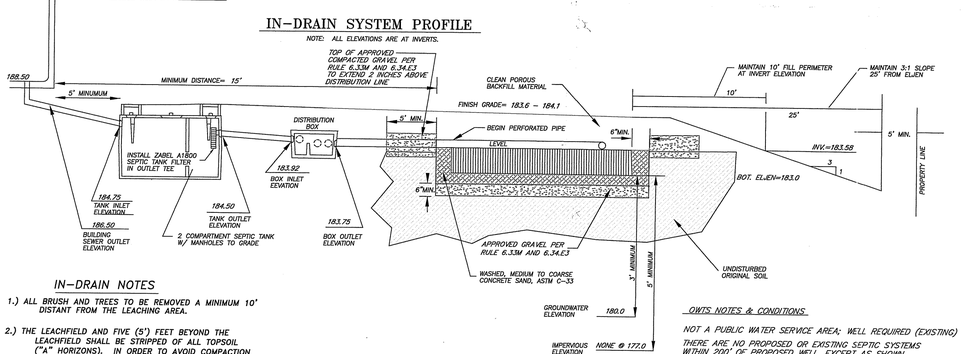
TYPICAL CROSS SECTION

NOTE: ALL ELEVATIONS ARE AT INVERTS.



IN-DRAIN SYSTEM PROFILE

NOTE: ALL ELEVATIONS ARE AT INVERTS.



IN-DRAIN NOTES

1.) ALL BRUSH AND TREES TO BE REMOVED A MINIMUM 10' DISTANT FROM THE LEACHING AREA.

2.) THE LEACHFIELD AND FIVE (5') FEET BEYOND THE LEACHFIELD SHALL BE STRIPPED OF ALL TOPSOIL ("A" HORIZONS). IN ORDER TO AVOID COMPACTION OF THE "B" SOIL HORIZON (SUBSOIL), WHICH IS TO REMAIN, ONLY TRACKED VEHICLES SHALL BE ALLOWED IN THIS AREA. PROPERLY COMPACTED GRAVEL THAT MEETS THE REQUIREMENTS OF RULE 6.33M AND 6.34.E3 SHALL BE PLACED THROUGHOUT THE EXCAVATION TO AN ELEVATION THAT WILL BE 2 INCHES ABOVE THE TOP OF THE DISTRIBUTION LINES. DISPERSAL TRENCHES SHALL BE EXCAVATED OUT OF THE COMPACTED GRAVEL. THERE SHALL BE A MINIMUM SIX (6) INCH GRAVEL BASE MEETING THE REQUIREMENTS OF RULE 6.33M AND 6.34.E3 BELOW THE SAND.

3.) PLACE A 6" MINIMUM LEVEL RAKED CONCRETE SAND BED OVER APPROVED GRAVEL BACKFILL TO ELEVATION 182.00

4.) PLACE IN-DRAINS, STRIPE SIDE UP, END TO END ON THE LEVEL RAKED SAND BED.

5.) PLACE 4" PERFORATED PIPE OVER STRIPE ON IN-DRAINS. CONNECT MID-POINTS ON ROWS 30' OR LONGER.

6.) SECURE PIPE WITH ONE ELJEN CLAMP PER IN-DRAIN. FORCE CLAMP THROUGH IN-DRAIN AND INTO THE SAND BED.

7.) INSTALL ELJEN COVER FABRIC (FILTER FABRIC) OVER ROWS OF IN-DRAINS. DRAPE FABRIC STRAIGHT DOWN OVER PIPE AND SIDES OF IN-DRAINS. SECURE WITH HAND SHOVELED SAND. DO NOT BLOCK HOLES IN PERFORATED PIPE.

8.) PLACE CONCRETE SAND A MINIMUM OF 6 INCHES AROUND THE SIDES OF THE IN-DRAINS.

9.) BACKFILL WITH CLEAN MATERIAL DEVOID OF LARGE ROCKS TO A MINIMUM OF 1.5" AND MAXIMUM OF 2.5" ABOVE INVERT.

10.) MAINTAIN INVERT ELEVATION 10 FEET DISTANT TO LEACHING AREA IN ALL DIRECTIONS TO EL. 182.58 MINIMUM UNLESS NOTED.

11.) INSTALL ZABEL A1800 RESIDENTIAL SEPTIC TANK EFFLUENT FILTER (OR EQUAL) INSIDE SEPTIC TANK OUTLET TEE.

CONSTRUCTION NOTES:

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH RIDEM RULES AND REGULATIONS OF NOVEMBER 25, 2018, AS AMENDED.

HEAVY EQUIPTMENT SHALL NOT PASS OVER OWTS AREA. PAVEMENT, PARKING AND VEHICULAR TRAFFIC ARE PROHIBITED OVER OWTS UNLESS SPECIFIED BY DESIGN.

NO TRACKED VEHICLES ALLOWED OVER SYSTEM AREA.

SEPTIC TANK NOTE:

2 COMPARTMENT SEPTIC TANK TO BE PLACED ON STABLE, LEVEL BASE WITH INLET & OUTLET TEES WITH MANHOLES PLACED TO GRADE.

WELL TO SEPTIC TANK MINIMUM SEPARATION 75 FEET
WATERLINE TO SEPTIC TANK MINIMUM SEPARATION 25 FEET.

DISTRIBUTION BOX NOTES:

H-20 WHEEL LOADING DISTRIBUTION BOX WITH BAFFLE TO BE PLACED ON STABLE, LEVEL BASE WITH ACCESS COVER TO GRADE. 3 S.F. MINIMUM BOTTOM AREA REQUIRED.

WELL TO DISTRIBUTION BOX MIN. SEPARATION 75 FEET.
WATERLINE TO DISTRIBUTION BOX. MIN. SEPARATION 25 FEET.

PIPING TO BE SOLID 4" SDR 35 PVC 2' MINIMUM TO OWTS.

LEACHFIELD AREA CALCULATIONS

TOTAL # OF BEDROOMS = 3
3 x 115 GAL./BEDROOM = 345 TOTAL GAL./DAY

SOIL CATEGORY 5 = LOADING RATE: 0.52
345 / 0.52 = 664 S.F. REQUIRED

TOTAL L.F. OF IN-DRAIN = 96 X 7 S.F./FT. = 672 S.F.

OWTS NOTES & CONDITIONS

NOT A PUBLIC WATER SERVICE AREA; WELL REQUIRED (EXISTING)

THERE ARE NO PROPOSED OR EXISTING SEPTIC SYSTEMS WITHIN 200' OF PROPOSED WELL, EXCEPT AS SHOWN.

THERE ARE NO PROPOSED OR EXISTING WELLS, FOR HUMAN CONSUMPTION, WITHIN 200 FEET OF PROPOSED SEPTIC SYSTEM UNLESS SHOWN HEREON.

THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500 FEET OF THIS PROPOSED SEPTIC SYSTEM.

ALL PROPOSED AND EXISTING DRAINS WITHIN 200 FEET OF PROPOSED TRENCHES ARE SHOWN.

THERE ARE NO EXISTING OR PROPOSED DRAINS WITHIN 25 FEET OF PROPOSED TRENCHES.

ALL PIPING TO BE SCHEDULE 35, UNLESS OTHERWISE NOTED.

1000 GALLON SEPTIC TANK, MANHOLES (2) PLACED TO GRADE.

DISTRIBUTION BOX H-20 WHEEL LOADING, ACCESS COVER TO GRADE.

REFER TO PROFILE AND TYPICALS FOR ADDITIONAL DATA.

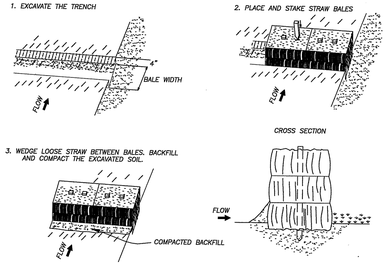
THIS DESIGNER IN NO WAY GUARANTEES SOIL CONDITIONS BEYOND THE LOCATION OF SHOWN TESTING. ANY SOIL CHANGES, FILL, LEDGE OR DISCREPANCIES IN REPORTED DATA SHALL BE FORWARDED TO THIS DESIGNER AND THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT ISDS DIVISION, IN WRITING, PRIOR TO COMMENCING CONSTRUCTION OF THE SHOWN SYSTEM.

THE INSTALLER SHALL NOTIFY DESIGNER OF RECORD TO (TEN) DAYS PRIOR TO INSTALLATION OF THIS SYSTEM IF ITEM E. OF ISDS APPLICATION IS CIRCLED. HE SHALL NOTIFY DESIGNER 24 HOURS PRIOR TO REQUIRED INDIVIDUAL INSPECTIONS.

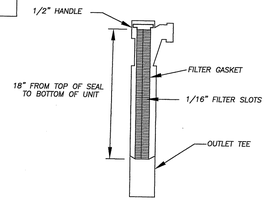
THE INSTALLER SHALL REMIT ALL DEM ISDS INSPECTOR REQUESTS (INSPECTION REPORTS) TO DESIGNER OF RECORD WITHIN 24 HOURS OF RECEIPT. HE SHALL NOT COVER SYSTEM UNTIL AN AGENT OF DESIGNER HAS GIVEN COVER ORDER.

THE OWNER SHALL BE RESPONSIBLE FOR PAYMENT OF ALL INSPECTIONS, AS-BUILT WORK AND AS-BUILT SUBMISSIONS.

STAKED BALED HAY EROSION CHECK DETAIL



ZABEL A1800 RESIDENTIAL SEPTIC TANK EFFLUENT FILTER

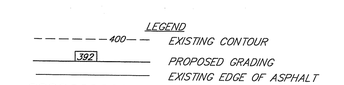


EFFLUENT FILTER TO BE PLACED IN OUTLET TEE. SEE NOTES FOR MAINTENANCE, REPLACE AS REQUIRED.

RESTRICTIONS & MAINTENANCE NOTE:
GARBAGE DISPOSALS SHALL NOT BE PERMITTED BY THIS DESIGN. OWNER IS REQUIRED TO INSPECT SEPTIC SYSTEM QUARTERLY, WITH 2 YEAR MINIMUM PUMPING INTERVAL.

EFFLUENT FILTER SHALL BE INSPECTED AND CLEANED AT MINIMUM BIANNUAL INTERVALS.

VEGETATED SWALE - CROSS SECTION



LEGEND

- 400 — EXISTING CONTOUR
- 392 PROPOSED GRADING
- EXISTING EDGE OF ASPHALT
- EXISTING EDGE OF WOODS
- CENTERLINE OF STREAM
- LESS THAN 10' WIDE
- A100 B100 C100 100' RIVERBANK WETLAND
- FLAGGED WETLAND EDGE
- ASSF100 ASSF107 50' PERIMETER WETLAND
- FLAGGED ASSF
- W PROPOSED WATERLINE
- BALED HAY OR SILT FENCE EROSION CHECK
- LIMITS OF DISTURBANCE
- P-8 EXISTING UTILITY POLE
- SC3 EXISTING TESTHOLE

CLASS II DESIGNER REQUIREMENTS

A. THE APPLICANT IS REQUIRED TO NOTIFY THIS DESIGNER OF INTENTION TO START CONSTRUCTION OR GRADING OF THIS SITE 10 DAYS PRIOR TO START OF SITE WORK. THE CONTRACTORS TELEPHONE & INSTALLER NUMBER SHALL BE FURNISHED TO THIS DESIGNER FOR COORDINATION OF PROPOSED WORK. THE FOLLOWING MINIMUM REQUIRED ITEMS ARE AS FOLLOWS:

1. 24 HOUR NOTICE OF START OF CONSTRUCTION.
2. NOTICE FOR INSPECTION OF OWTS BOTTOM LEACHING AREA PRIOR TO 12 NOON THE DAY BEFORE DESIRED DESIGNER/DEM INSPECTION.
3. NOTICE FOR INSPECTION OF COMPONENTS & PERIMETER GRADING PRIOR TO 12 NOON THE DAY BEFORE DESIRED DESIGNER/DEM INSPECTION.
4. ALL DEM INSPECTION SHEETS ARE TO BE FAXED TO THIS DESIGNER WITHIN 24 HOURS OF RECEIPT.

B. SITE LAYOUT AND REQUIRED INSPECTIONS TO BE MADE BY THIS DESIGNER FOR THE FOLLOWING WORK ITEMS:

1. FOUNDATION & OWTS LOCATION AND ELEVATION.
2. INSPECTION OF OWTS BOTTOM LEACHING AREA.
3. INSPECTION OF OWTS COMPONENTS & FILL PERIMETERS.
4. FINAL COVER & WELL LOCATION INSPECTION.

C. THE APPLICANT SHALL BE RESPONSIBLE FOR ANY CHANGES IN THE SHOWN DESIGN AND INCLUDE ANY OF THE FOLLOWING:

1. NEW APPLICATIONS AS REQUIRED BY DEM GUIDELINES.
2. AS-BUILT LOCATIONS AND REQUIRED PLANS.
3. COMMUNICATIONS OR COORDINATION WITH DEM STAFF.
4. CHANGES IN INSTALLATION NOT MEETING DEM REQUIRED GUIDELINES.

D. THE APPLICANT SHALL PROVIDE DESIGNER WITH MATERIALS RECEIPTS FOR ALL CONSTRUCTION MATERIALS PRIOR TO DESIGNER ISSUING CERTIFICATE OF CONSTRUCTION.

E. THE OWNER SHALL FURNISH ORIGINAL APPLICATION (PINK COPY) AND ACCOMPANYING PLAN APPROVAL TO INSTALLER PRIOR TO START OF CONSTRUCTION. SAID INFORMATION SHALL REMAIN ON SITE DURING ENTIRE CONSTRUCTION PERIOD AND RETURNED TO THE OWNER UPON COMPLETION OF OWTS INSTALLATION.

F. OWNER / APPLICANT'S SIGNING OF APPLICATION SHALL BE CONSIDERED PERMISSION TO INSPECT THE ABOVE SITE AT ANY TIME AFTER START OF CONSTRUCTION BEGINS TO ENSURE PROPER INSTALLATION PROCEDURES & FUNCTIONING OF OWTS SYSTEM.

G. THE ABOVE INFORMATION ARE MINIMUM REQUIREMENTS AND SHALL BE REVISED AS THE DESIGNER DEEMS NECESSARY FOR PROPER FUNCTIONING OF THE SHOWN OWTS DESIGN.

AREA ANALYSIS

PROPOSED RESIDENCE/PORCH/SHED 3,600 S.F.
PROPOSED GRAVEL DRIVE NO TREATMENT PROPOSED

STORMWATER MANAGEMENT INFORMATION

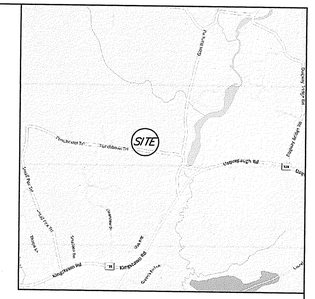
SILTY SOILS (TILL SOILS)
USE 8" DEEP, 8' WIDE VEGETATED SWALE
600 S.F VEGITATED SWALES PROVIDED-REFER TO PLAN

VEGETATED SWALE NOTES:

REFER TO PLAN FOR LOCATATIONS OF VEGETATED SWALES
GRADE TO DRAIN FROM ROOF LEADERS TO RAIN-GARDENS. S=0.01'/FT. MIN. (0.1' APPROX.)

VEGETATED SWALE MAINTENANCE

1. VEGETATED SWALE SHALL BE INSPECTED ANNUALLY AND SHOULD BE INSPECTED AFTER LARGE STORM EVENTS
2. ERODED SIDE SLOPES AND CHANNEL BOTTOMS SHALL BE STABILIZED AS NECESSARY.
3. IF THE SURFACE OF THE DRY SWALE BECOMES CLOGGED TO THE POINT THAT STANDING WATER IS OBSERVED ON THE SURFACE 48 HOURS AFTER PRECIPITATION EVENTS, THE BOTTOM SHALL BE ROTO-TILLED OR CULTIVATED TO BREAK UP ANY HARD PACKED SEDIMENT, AND THEN RESEEDED.
4. VEGETATION IN DRY SWALES SHALL BE MOWED AS REQUIRED TO MAINTAIN MINIMUM GRASS HEIGHTS IN THE 4-6 INCH RANGE.
5. EVERY FIVE YEARS, THE CHANNEL BOTTOM OF DRY SWALES SHOULD BE SCRAPED TO REMOVE SEDIMENT AND TO RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE, AND SHOULD BE SEEDED TO RESTORE GROUND COVER, WHERE NECESSARY.

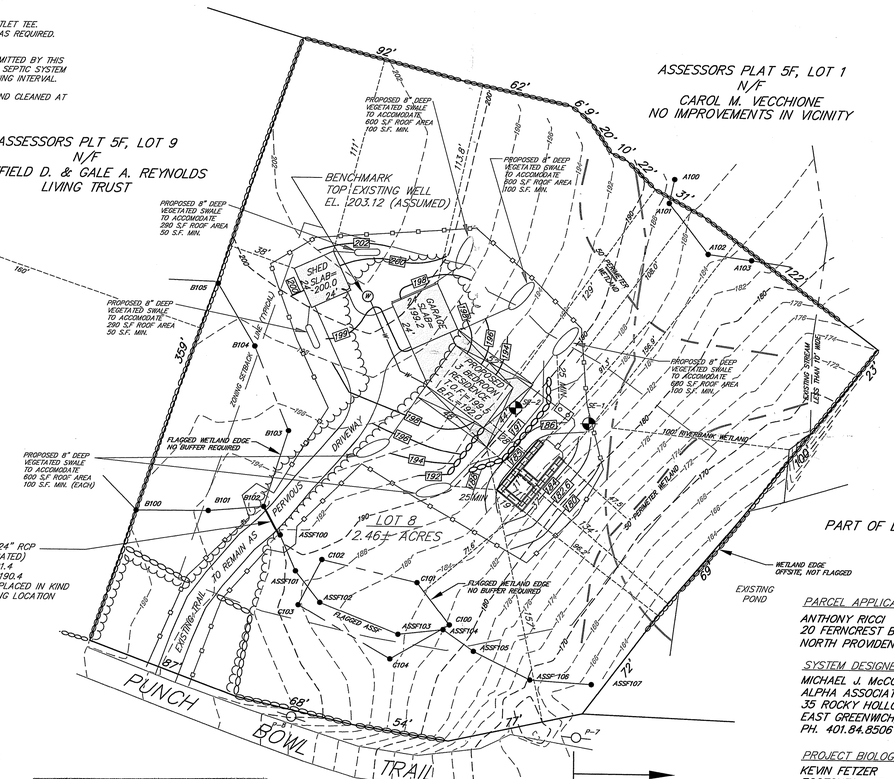


LOCUS NO SCALE

ASSESSORS PLAT 5F, LOT 1
N/F
CAROL M. VECCHIONE
NO IMPROVEMENTS IN VICINITY

ASSESSORS PLT 5F, LOT 9
N/F
SHEFFIELD D. & GALE A. REYNOLDS
LIVING TRUST

APPROVED LOCATION FOR EXISTING WELL



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
OWTS & FRESHWATER WETLANDS
JOINT PERMIT APPROVAL
OWTS# 1929-1572 FWW# 20-0075
APPROVED DATE 4/24/20
No Changes Allowed Without RIDEM Approval
Approved Plans/Permit Must Be Kept at Construction Site

CERTIFICATION:

THIS PLAN, AND UNDERLYING SURVEY PRODUCT, WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS, OR ENTITY NAMES IN THIS CERTIFICATION. SAID CERTIFICATION DOES NOT EXTEND TO ANY UN-NAMED PERSON, PERSONS, OR ENTITY WITHOUT AN EXPRESS RE-CERTIFICATION BY THE SURVEYOR OF RECORD NAMING SAID PERSON, PERSONS, OR ENTITY.

TO ANTHONY RICCI, IT IS HEREBY CERTIFIED THAT THIS SURVEY AND BEEN CONDUCTED AND THIS PLAN HAS BEEN PREPARED PURSUANT TO 4.35-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015, AS FOLLOWS:

THIS IS NOT A BOUNDARY SURVEY
TOPOGRAPHIC SURVEY T-3

FURTHER, THE INFORMATION DEPICTED ON HEREON WAS OBTAINED FROM FIELD OBSERVATIONS MADE ON THE SITE IN FOR THE PURPOSE OF THE CONDUCT OF A SURVEY FOR THE PREPARATION OF AN O.W.T.S DESIGN

MICHAEL J. McCORMICK, No. 1972
COA: LS-A101

MICHAEL J. McCORMICK
No. 1972
PROFESSIONAL LAND SURVEYOR

D-2100

NOTE

REFERENCE PREVIOUSLY APPROVED ISDS 8629-65R
REFERENCE PREVIOUSLY WETLAND PERMIT 86-436D

PARCEL APPLICANT/OWNER

ANTHONY RICCI
20 FERNCREST BLVD
NORTH PROVIDENCE 02911

SYSTEM DESIGNER

MICHAEL J. McCORMICK, PLS
ALPHA ASSOCIATES, LTD.
35 ROCKY HOLLOW ROAD
EAST GREENWICH, RI 02818
PH. 401.84.8506 / F.401.884.7747

PROJECT BIOLOGIST

KEVIN FETZER
ECOTONES, INC.
P.O. BOX 1131
EAST GREENWICH, RI 02818
PH. 401.256.5199

PARCEL ZONING

ZONE R-2
FRONT YARD 50'
SIDE YARD 35'
REAR YARD 100'

40 0 40 80
SCALE IN FEET

PROPOSED OWTS

ASSESSORS PLAT 5F LOT 8
RICHMOND, RHODE ISLAND
POLE 8, PUNCH BOWL TRAIL
prepared for: ANTHONY RICCI
prepared by: ALPHA ASSOCIATES, LTD.
35 ROCKY HOLLOW ROAD
EAST GREENWICH, RHODE ISLAND
T.401.884.8506 F.401.884.7747

SCALE 1"=40' JANUARY, 2020 SHEET 1 OF 1

MAR 19 2020