

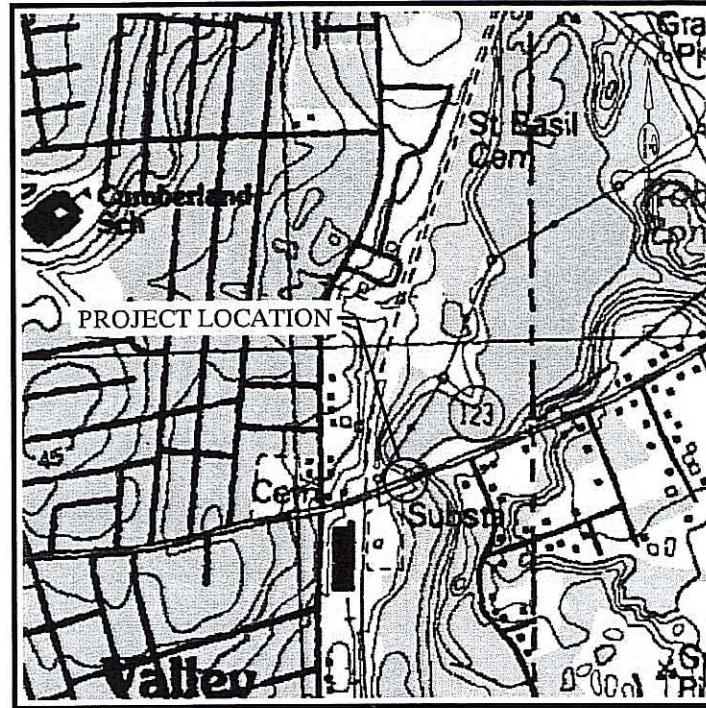
RI DEM Preliminary Determination ROBIN HOLLOW POND DAM REHABILITATION AERATION SYSTEM

DEXTER STREET, CUMBERLAND, RHODE ISLAND
A.P. 6 / LOT 13
FEBRUARY 2010

Prepared by:
PARE CORPORATION
Lincoln, Rhode Island



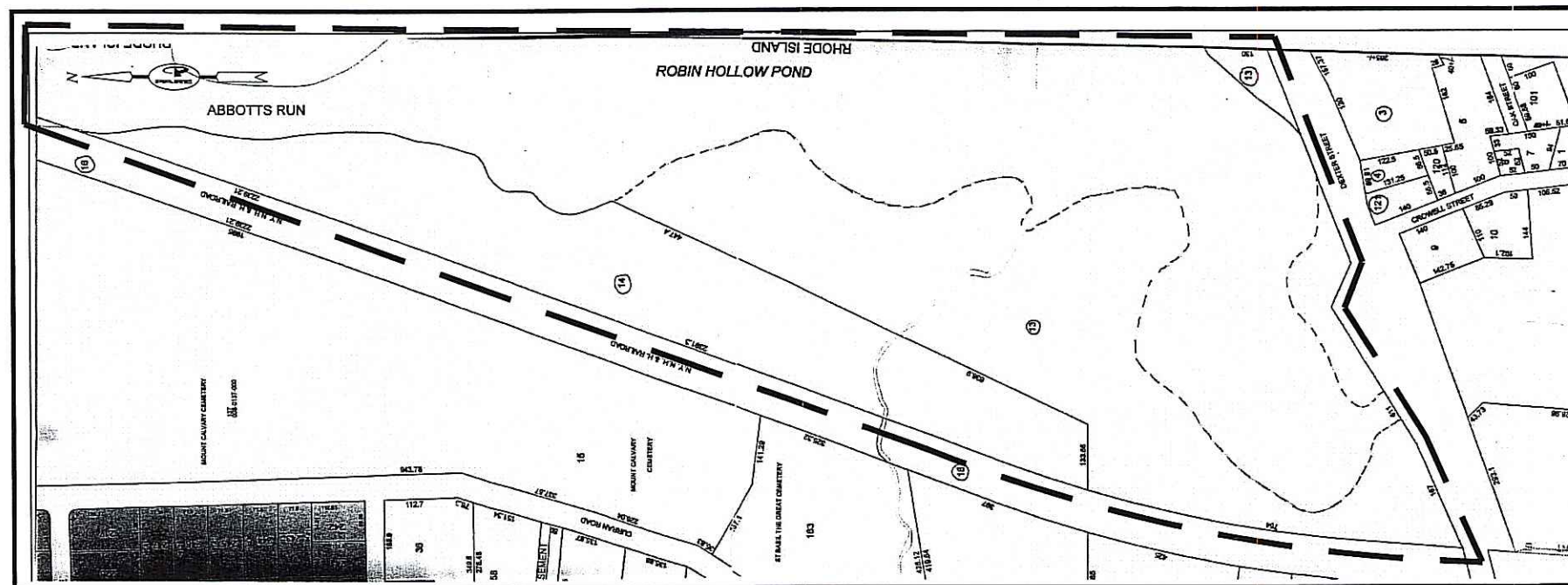
Prepared for the:
**PAWTUCKET WATER
SUPPLY BOARD**
85 Branch Street, Pawtucket, RI



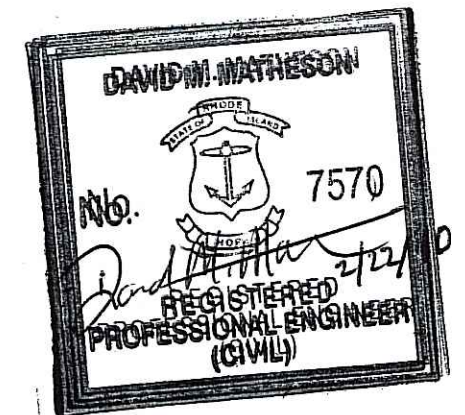
LOCUS MAP

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED APR 26 2010 FILE #
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.



ASSESSOR'S MAP



90% SUBMISSION
ISSUED FOR PERMITS

GENERAL NOTES

- 1- DETAILS ARE PROVIDED BY THE AIR DIFFUSION SYSTEM (ADS). ADS CONTROLLED AERATION SYSTEM EQUIPMENT OR APPROVED EQUAL SHALL BE USED.
- 2- THE BATHYMETRICS SURVEY WAS GENERATED BY FIELD WORK PERFORMED BY GZA ENVIRONMENTAL, INC. (DATED AUGUST, 2001). CONTRACTOR SHALL VERIFY WATER DEPTHS.

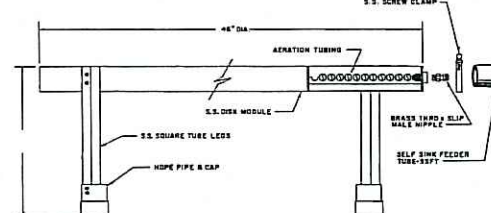
- LEGEND:**
- SELF SINK FEEDER TUBING
 - AERATION DISK MODULE LOCATION
 - 12-INCH CONDUIT
 - PROPOSED [18-INCH DEEP] TRENCH
 - LOD
 - LIMITS OF DISTURBANCE
 - S.F.
 - SILT FENCE
 - WETLAND FLAGS

AERATION SYSTEM SITE PREPARATION AND INSTALLATION NOTES:

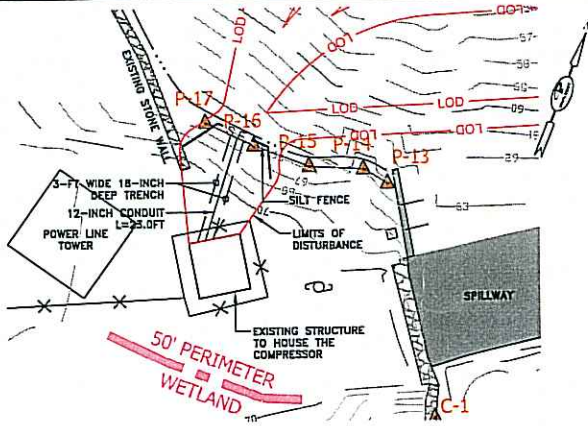
- 1- NORTHERN AND EASTERN COORDINATES IN R.I. STATE PLANE COORDINATE SYSTEM ARE PROVIDED FOR THE PROPOSED AERATING DISK LOCATIONS. ALL SEVEN AERATING DISCS ARE TO BE PLACED WITHIN A 20-FOOT RADIUS OF THE COORDINATES PROVIDED.
- 2- ALL DISK LOCATIONS WERE SELECTED BASED ON THE WATER DEPTH AND SEDIMENT THICKNESS PROVIDED AND GENERATED FROM FIELD WORK PERFORMED BY GZA ENVIRONMENTAL, INC. (DATED AUGUST, 2001). CONTRACTOR SHALL VERIFY DEPTHS AND SEDIMENT THICKNESS AT THE DISK LOCATIONS.
- 3- ONE (1) 12" DIA. CONDUIT CONSISTING OF SMOOTH WALLED CORRUGATED SDR 11 HDPE OR PVC SCHEDULE 80 PIPE SHALL BE INSTALLED FROM THE CHOSEN COMPRESSOR LOCATION (WITHIN THE INTERIOR OF THE BUILDING) TO THE WATERS EDGE AT AN ELEVATION OF 64.91, ONE FOOT HIGHER THAN THE SEASONAL HIGH WATER SURFACE ELEVATION OF THE POND. A GENERAL LAYOUT IS SHOWN WITHIN THE PLAN VIEW PROVIDED.

AERATION SYSTEM SITE PREPARATION AND INSTALLATION NOTES:

- (CONTINUED)
- 4- THE 12-INCH PIPE CONDUIT SHALL BE INSTALLED IN AN 18-INCH DEEP 36-INCH WIDE TRENCH FROM THE BUILDING TO THE WATERS EDGE AND BURIED PRIOR TO THE AERATION SYSTEM SUBCONTRACTOR ARRIVAL ON SITE. COORDINATION OF ALL WORK IS REQUIRED BY THE CONTRACTOR.
 - 5- THE 12-INCH PIPE CONDUIT SHALL ENTER THE CONTROL HOUSE STRUCTURE VIA A PREDRILLED HOLE IN THE FOUNDATION WALL AND SEALED AROUND THE PERIMETER WITH A NON-SHRINK GROUT.
 - 6- THE AERATION SYSTEM SUBCONTRACTOR IS RESPONSIBLE FOR THE COMPLETE AND PROPER SUPPLY OF AND INSTALLATION OF ALL PLUMBING SUPPLIES ASSOCIATED WITH THE AERATION SYSTEM.
 - 7- THE COMPRESSOR CHARGING THE AERATION SYSTEM SHALL BE A BUSCH MM 1104 BP NON-LUBRICATED 5-HP AIR COMPRESSOR OR EQUIVALENT. A TOTAL OXYGEN TRANSFER RATE OF 42-SCFM OF FILTERED AIR AT 10-PSI SHALL BE PROVIDED TO THE AERATION SYSTEM AND ELECTRICAL.
 - 8- A TOTAL OF SEVEN (7) STAINLESS STEEL (ADS) DISK MODULES SHALL BE INSTALLED AT THE INDICATED LOCATIONS.
 - 9- EACH DISK MODULE SHALL BE COMPOSED OF A TOTAL OF 100-FOOT OF UNWEIGHTED LOW DENSITY POLYETHYLENE (LDPE) TRIPLE CUT AERATION TUBING WITH 2400 AIR-CUTS AT A WIDTH OF APPROX. 25 MICRONS.
 - 10- A 3-INCH BLACK HIGH DENSITY POLYVINYL CHLORIDE (HDPVC) WEIGHTED SELF SINK FEEDER TUBING SHALL BE USED TO SUPPLY ALL SEVEN DISK MODULES FROM THE COMPRESSOR TO EACH DISK MODULE. THE WEIGHT TUBE SHALL BE COMPRISED OF LOW DENSITY POLYETHYLENE COPOLYMER COMPOUND WITH ULTRAVIOLET STABILIZATION.

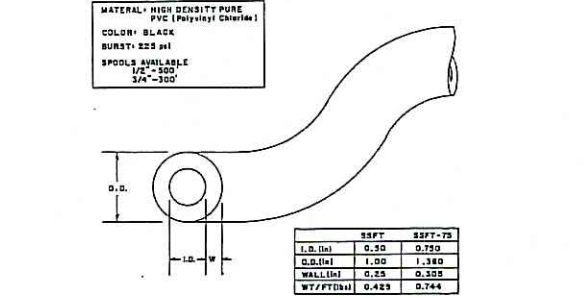


STAINLESS STEEL ADS DISK MODULE WITH LEGS
- NOT TO SCALE -

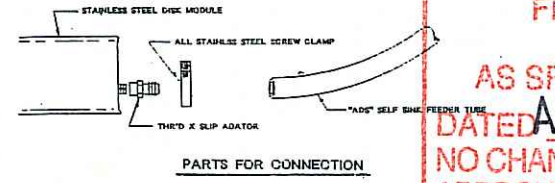


TRENCH DETAIL
SCALE: 1"=20"

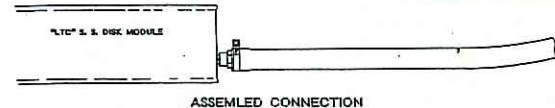
SELF SINK FEEDER TUBE
SCALE: 1"=20"



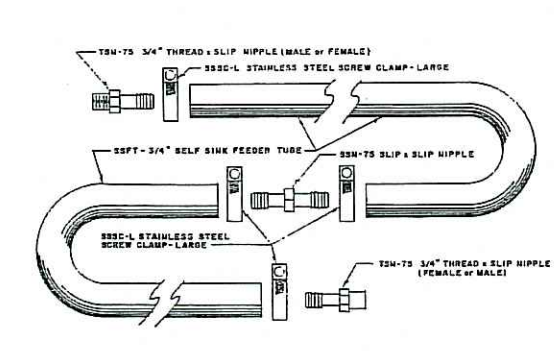
- NOT TO SCALE -



PARTS FOR CONNECTION



ASSEMBLED CONNECTION
S.S. DISK TO SELF SINK TUBE CONNECTION DETAIL
- NOT TO SCALE -



3/4" SELF SINK TUBING CONNECTIONS
DETAIL - SSSC-75
- NOT TO SCALE -

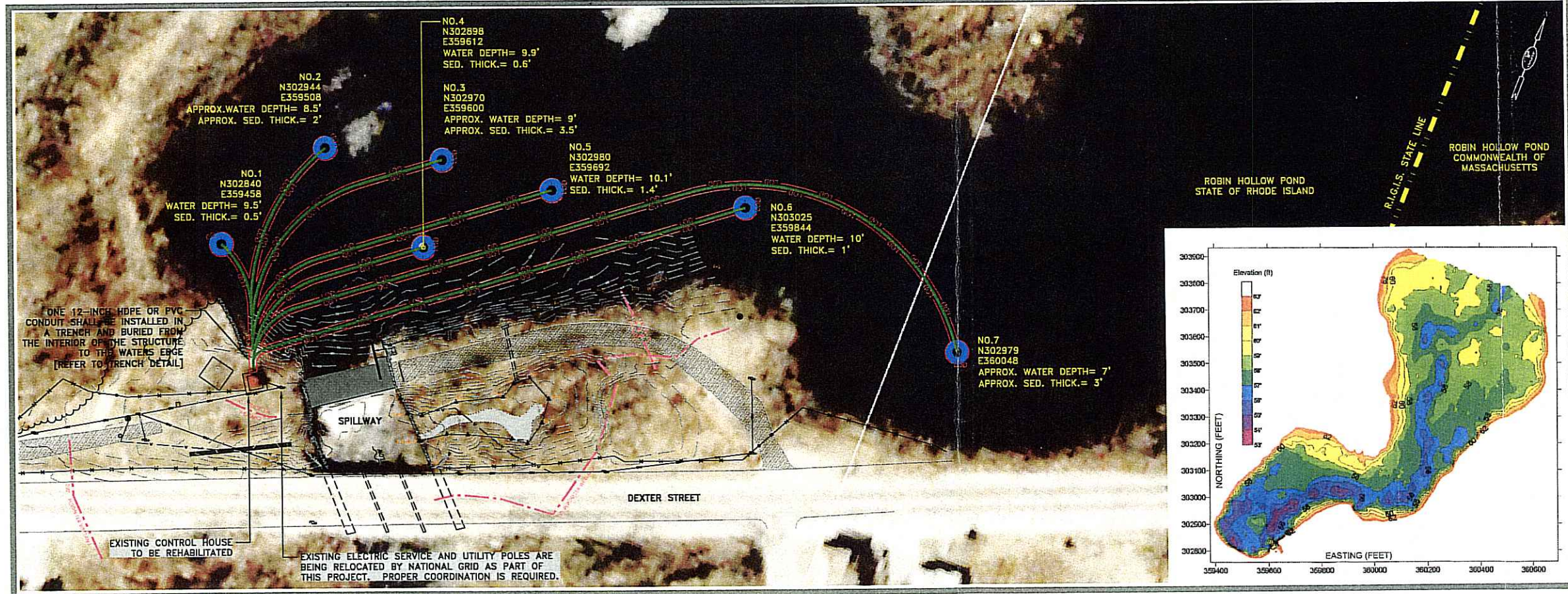
AERATION SYSTEM DETAILS
SCALE: AS NOTED

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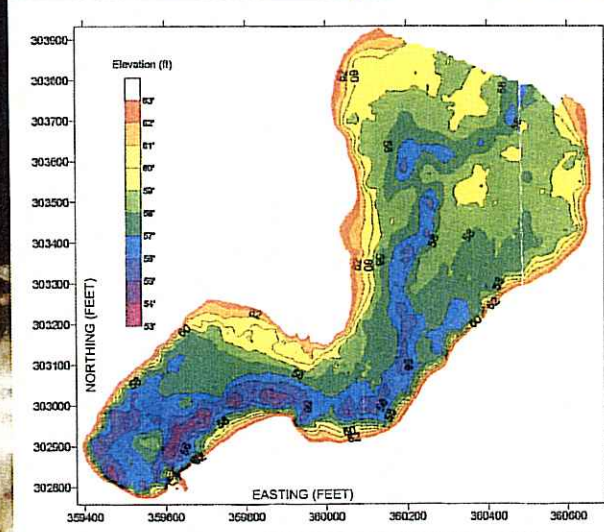


PAWBUCKET WATER SUPPLY BOARD
ROBIN HOLLOW POND DAM REHABILITATION
AERATION SYSTEM
CUMBERLAND, RHODE ISLAND

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AERATION SYSTEM PLAN VIEW
SCALE: 1"=50'



DAVID M. MATHESON
No. 7570
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 2/22/10

90% SUBMISSION
ISSUED FOR PERMITS

REVISIONS:

NO.	DESCRIPTION

PROJECT NO.: 08229.00
DATE: FEBRUARY 2010
SCALE: 1"=50'
DESIGNED BY: MTZ
CHECKED BY: DMM
DRAWN BY: MTZ
APPROVED BY: JMB

AERATION SYSTEM PLAN, NOTES & DETAILS
DRAWING NO.:
SHEET NO. 2 OF 2