II. Suggested Notice of Intent (NOI) Form

1. General facility information. Please provide the following information about the facility.

a) Name of facility: Glencliff Home, NH Department of Health & Human Services	**Mailing Address for the Facility:** PO Box 76; 393 High Street Glencliff, NH 03238	
b) Location Address of the Facility (if different from mailing address):	**Facility Location** **longitude:** 71d52'50.40"W **latitude:** 44d0'8.21"N	**Type of Business:** Licensed Health Care Facility **Facility SIC codes:** 8052

c) Name of facility owner: L. Todd Bickford, Administrator **Owner's email:** ltoddbickford@dhhs.state.nh.us

Owner's Tel #: 603-989-3111 **Owner's Fax #:** 603-989-3040

Address of owner (if different from facility address)

Owner is (check one): 1. Federal____ 2. State _✔_ 3.Tribal_____ 4. Private_____ 4. Other _____(Describe)

Legal name of Operator, if not owner: _____

Operator Contact Name: _____

Operator Tel Number: _____ **Fax Number:** _____

Operator's email: _____

Operator Address (if different from owner)

d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? _✔_

e) Check Yes or No for the following:

1. **Has a prior NPDES permit been granted for the discharge? Yes ____ No_✔_ If Yes, Permit Number:** _____
2. **Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes_✔_ No_____**
3. **Is the facility covered by an individual NPDES permit? Yes_____ No_✔_ If Yes, Permit Number ____**
4. **Is there a pending application on file with EPA for this discharge? Yes_____ No _✔_ If Yes, date of submittal:**

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

a) Name of receiving water into which discharge will occur: Unnamed Intermittent Tributary to Slide Brook
State Water Quality Classification: _____ **Freshwater:** yes **Marine Water:** _____

b) Describe the discharge activities for which the owner/applicant is seeking coverage:
1. **Construction dewatering of groundwater intrusion and/or storm water accumulation.** - Temp. dewatering for UST excavation
2. **Short-term or long-term dewatering of foundation sumps.**
3. **Other.**

c) Number of outfalls 1

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 1000 **GPD**
Average Monthly Flow <50 **GPD**

e) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 7 **Min pH** 7

f) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit. Groundwater & surface water from UST excavation hole.

g) What treatment does the wastewater receive prior to discharge? Dewatering discharge through silt bag to CB with inlet erosion protection

h) Is the discharge continuous? Yes _____ **No** ✔ **If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B)** (I)
If (P), number of days or months per year of the discharge _____ **and the specific months of discharge** _____;
If (I), number of days/year there is a discharge Estimate - 60
Is the discharge temporary? Yes ✔ **No** _____
If yes, approximate start date of dewatering September 1 **approximate end date of dewatering** December 1

i) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. 71d52'50.40"W **lat.** 44d0'8.21"N;
Outfall 2: long._____ **lat.**_____; **Outfall 3: long.**_____ **lat.**_____.

j) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations_____ **cfs**
(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

k) Does the discharge occur in an ACEC? Yes _____ No _____
If yes, provide the name of the ACEC: _____

3. Contaminant Information

a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC_{50} in percent for aquatic organism(s)). None

b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge. None

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendices III and IV. In addition, respond to the following questions.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes____ No_✔_
b) Has any consultation with the federal services been completed ? Yes___ No_✔
c) Is consultation underway? Yes ____ No_✔_
d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one): a "no jeopardy" opinion _____or written concurrence____ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat.
e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D,or E) have you met? _____
f) Please attach a copy of the most current federal listing of endangered and threatened species, found at USF&W website.

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes _____ No _✔_
b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No _✔_ If yes, attach the results of the consultation(s).
c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 o3) have you met? _____

6. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or

dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e.stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: Glencliff Home, NH Department of Health & Human Services

Operator signature:

Title: Administrator

Date: 6/12/12

Federal regulations require this application to be signed as follows:

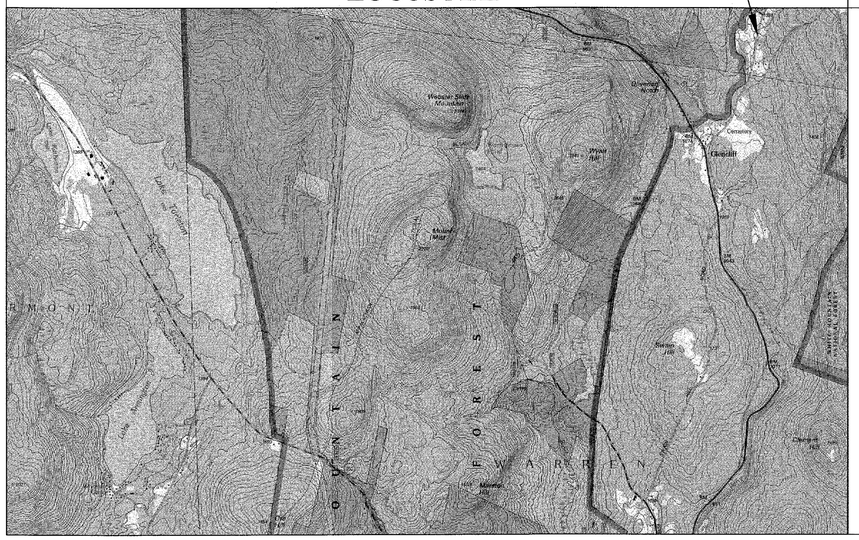
1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES
BUREAU OF PUBLIC WORKS

DEMOLITION OF (3) AST'S & INSTALL 5,000 GALLON DIESEL UST

PROJECT NUMBER 80655, CONTRACT B
GLENCLIFF HOME
GLENCLIFF, NEW HAMPSHIRE 03238
DEPARTMENT OF ADMINISTRATIVE SERVICES

LOCUS MAP


Project Site

DRAWING LIST

T-1	COVER SHEET
C0.1	CIVIL NOTES, LEGEND & PROJECT AREA PLAN
C0.2	CONCRETE NOTES
C1.1	CIVIL SITE AND GRADING PLAN
C1.2	EROSION CONTROL PLAN
C2.1	DIESEL FUEL TANK DETAILS
C2.2	EROSION CONTROL DETAILS
M0.1	MECHANICAL LEGEND & GENERAL NOTES
M1.1	BOILER BUILDING EXISTING AST REMOVAL PLAN
M2.1	NEW DIESEL FUEL OIL TANK PART PLAN
M2.2	DIESEL FUEL TANK PIPING DETAILS
M2.3	DIESEL FUEL TANK PIPING SCHEMATIC & SCHEDULES
E1.1	ELECTRICAL PART PLAN & GENERAL NOTES

WILBUR H. HORTON JR. No. 13801
5-25-12

MICHAEL A. SPANYK No. 8913

JEFFREY W. TUCKER No. 8322
[illegible]

APPROVED DATE:
GLENCLIFF HOME
RECOMMENDED DATE:
APPROVED DATE:

APPROVED DATE:
COMMISSIONER, DEPARTMENT OF ADMINISTRATIVE SERVICES
RECOMMENDED DATE:
ADMINISTRATOR – BUREAU OF PUBLIC WORKS
APPROVED DATE:
NH STATE FIRE MARSHAL

STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES
BUREAU OF PUBLIC WORKS DESIGN & CONSTRUCTION

JOHN O. MORTON BUILDING
7 HAZEN DRIVE BOX 483 ROOM 250
CONCORD, NEW HAMPSHIRE 03302-0483
(603) 271-3516 FAX(603) 271-3515

ENGINEER/ARCHITECT:	DESIGNED BY:	APPROVED BY:	CHECKED BY:
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REVISIONS

DATE	DESCRIPTION	BY
6/21/2012	RELEASED FOR CONSTRUCTION	RJF

DEMOLITION OF (3) AST'S & INSTALL 5,000 GALLON DIESEL UST
GLENCLIFF, NH
DEPARTMENT OF ADMINISTRATIVE SERVICES

COVER SHEET

PROJECT No. 80655
CONTRACT: B

DRAWN BY:	SCALE:	DATE:
---	NONE	JUNE 21, 2012

T-1
SHEET: 1 OF 13

CIVIL GENERAL NOTES:

A. EXISTING INFORMATION

LANDOWNER: STATE OF NEW HAMPSHIRE

1. TOPOGRAPHIC SURVEY BASED ON 2012 SURVEY DATA BY DUBOIS & KING, INC.
2. UTILITIES BASED ON AS-BUILT DRAWINGS PROVIDED BY THE OWNER AND UTILITY LOCATING PERFORMED BY UTILITY LOCATING SERVICES OF SUNAPEE, NH.
3. THE LOCATION AND EXTENT OF UNDERGROUND UTILITIES SHOWN ON THE SITE DRAWINGS ARE BASED ON RECORDS AND PLANS MADE AVAILABLE BY THE OWNER AND UTILITY COMPANIES. DUBOIS & KING, INC INCLUDES INFORMATION WITHOUT WARRANTING ITS ACCURACY IN ANY WAY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION SHALL BE DETERMINED AND AGREED UPON BY THE ENGINEER BEFORE PROCEEDING WITH WORK.
4. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN WRITING FOR CLARIFICATIONS.
5. THE CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS OF THE SITE AND SURROUNDINGS PRIOR TO THE START OF ANY CONSTRUCTION.
6. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
7. TO LIMIT INADVERTENT DAMAGE TO AND UNAUTHORIZED REMOVAL OF TREES ADJACENT TO THE WORK AREA, CONTRACTOR SHALL COORDINATE WITH OWNER AND OBTAIN APPROVAL PRIOR TO ANY CUTTING OR TRIMMING OF TREES WITHIN AND ADJACENT TO THE WORK AREA.
8. IF EASEMENTS, RIGHTS OF WAY, AND RELATED PERMISSION FROM LANDOWNERS HAVE BEEN OBTAINED BY OWNER. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL REVIEW CONDITIONS OF ENTRY AND ABIDE BY THEM.
9. CONTRACTOR SHALL INSTALL CONSTRUCTION LIMITS FENCE PRIOR TO START OF CONSTRUCTION, AND THERE SHALL BE NO DISTURBANCE BEYOND THE LIMITS OF FENCE.
10. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE, AT 1-888-DIG-SAFE, AT LEAST 72 HOURS BEFORE DIGGING.
11. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC AND PEDESTRIAN CONTROL DEVICES AS NECESSARY AND IN A MANNER CONSISTENT WITH THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. MAINTENANCE OF CONTROLS IS REQUIRED 24 HOURS PER DAY, 7 DAYS PER WEEK.

B. CODES & PERMITS

1. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK IN STRICT ACCORDANCE WITH ALL MUNICIPAL, STATE, & FEDERAL ORDINANCES, CODES, RULES, AND LAWS HAVING JURISDICTION. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK WHICH MAY NOT COMPLY COMPLETELY WITH MUNICIPAL, STATE, & FEDERAL ORDINANCES, CODES, RULES, AND LAWS HAVING JURISDICTION. THESE INCLUDE, BUT ARE NOT LIMITED TO:
   A. THE AMERICAN WITH DISABILITIES ACT
   B. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
   C. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
   D. OTHER STATE OR LOCAL PERMITS

C. SEQUENCING OF WORK

1. COORDINATE SCHEDULE WITH OWNER. SEE SPECIFICATION SUMMARY 01100, 1.4.

D. TESTING

1. COMPACTION TESTING IS REQUIRED ON BACKFILL AREAS. COMPACTION SHALL BE TO 95% MODIFIED PROCTOR (ASTM D-1557). TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING COMPANY APPROVED BY THE OWNER OR ENGINEER.
2. FIELD DENSITY TEST SHALL BE PERFORMED WITH THE FOLLOWING AVERAGE FREQUENCY:
   A. UNDER STRUCTURES – ONE TEST FOR EVERY 400 SQUARE FOOT AREA OF EACH LAYER OF COMPACTED FILL.
   B. TRENCHES – ONE TEST FOR EACH FOOT OF BACKFILL AT INTERVALS OF APPROXIMATELY 200 FEET ALONG THE TRENCH.
   C. OUTSIDE STRUCTURE – ONE TEST FOR EACH FOOT OF BACKFILL AT INTERVALS OF APPROXIMATELY 50 FEET AROUND STRUCTURE.

E. GRADING

1. FINISH GRADES AROUND BUILDINGS SHALL BE 6 INCHES LOWER THAN FINISH FLOOR ELEVATIONS, UNLESS OTHERWISE NOTED.
2. FINISH GRADES SHALL BE SLOPED 2% AWAY FROM BUILDINGS FOR A DISTANCE OF 10 FEET FROM THE EXTERIOR WALL OF SUCH BUILDING, UNLESS OTHERWISE NOTED.

F. EROSION CONTROL

1. CONTRACTOR SHALL CONSTRUCT TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL FACILITIES PRIOR TO THE COMMENCEMENT OF EARTHWORK OPERATIONS.
2. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENTATION CONTROL DEVICES THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION. THE CONTRACTOR SHALL (DAILY OR AS REQUIRED BASIS) INSPECT AND RECORD FINDINGS OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES TO ENSURE THAT ALL ITEMS ARE IN STABLE CONDITION. IN THE EVENT THAT SAID ITEMS ARE DETERMINED TO BE IN UNSATISFACTORY CONDITION, THE CONTRACTOR SHALL RECORD THE UNSATISFACTORY ISSUE, THE DATE OF THE UNSATISFACTORY FINDING, THE APPROPRIATE CORRECTIVE MEASURE AND THE DATE THE CORRECTIVE MEASURE WAS COMPLETED.
3. ALL DISTURBED AREAS SHALL NOT BE LEFT BARE FOR MORE THAN 30 DAYS. SHALL BE STABILIZED IN A MANNER TO MITIGATE EROSION OR SEDIMENTATION FROM EXITING THE LIMIT OF WORK AND SHALL BE RESTORED IN-KIND UPON COMPLETION OF THE PROJECT. THE MAXIMUM AREA ALLOWED TO BE DISTURBED AND LEFT UNSTABILIZED IS TWO ACRES PER DRAINAGE AREA.
4. ALL SLOPES GREATER THAN 1V:3H SHALL BE PROTECTED FROM EROSION WITH APPROPRIATE SLOPE STABILIZATION CONTROL MEASURES PRIOR TO LOAMING, SEEDING AND MULCHING WITHIN 72 HOURS OF COMPLETION. CONTRACTOR SHALL MAINTAIN EROSION CONTROL PROTECTION UNTIL VEGETATION GROWTH HAS BEEN ESTABLISHED. ALL SLOPE STABILIZATION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND NEW HAMPSHIRE BEST MANAGEMENT PRACTICES.
5. ALL SWALES AND DITCHES WITH SLOPES EXCEEDING 5% SLOPE SHALL BE PROTECTED FROM EROSION WITH MATTING. ALL MATTING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. ALL SWALES AND DITCHES SHALL BE PROPERLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
6. THE CONTRACTOR SHALL NOT PLACE PERMANENT PLANTING AND SEEDING PRIOR TO MAY 1st AND AFTER SEPTEMBER 1st. TEMPORARY SEEDING SUCH AS WINTER RYE MAY BE USED OUTSIDE OF THIS PERIOD.
7. ALL WORK MUST BE DONE IN A MANNER WHICH MINIMIZES THE POTENTIAL FOR THE DISCHARGE OF SEDIMENT-LADEN WATER. CONTRACTOR IS RESPONSIBLE FOR DIVERTING, PUMPING, OR OTHERWISE CONTROLLING WATER AS NECESSARY.
8. ALL EXISTING STORM DRAINAGE INLETS WITHIN THE WORK AREA OR THAT MAY BE AFFECTED BY THE WORK SHALL BE PROTECTED BY CATCH BASIN FILTER BASKETS, OR OTHER BMP TO PREVENT ENTRY OF SEDIMENT FROM RUNOFF WATERS INTO THE STORM DRAIN SYSTEM.
9. IF DEWATERING IS REQUIRED, THE DEWATERING SHALL NOT BE ALLOWED TO DISCHARGE DIRECTLY TO EXISTING CATCH BASINS, SWALES OR GRASS AREAS. ALL DEWATERING OUTLETS SHALL BE TREATED UTILIZING FILTER BAGS OR OTHER APPROVED BMP PRIOR TO DISCHARGE. DEWATERING ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH ALL REQUIREMENTS ASSOCIATED WITH THE N.H. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMITS FOR DEWATERING ACTIVITY DISCHARGE. (PERMIT No. NHG070000). EACH OUTFALL SHALL BE LIMITED AND MONITORED IN ACCORDANCE WITH PART 2, SECTION 2.

G. UTILITIES

1. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE DEMOLITION PLAN. AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR SHALL REPAIR OR COORDINATE WITH THE RESPECTIVE UTILITY FOR DAMAGE TO UTILITIES.
2. REFER TO SPECIFICATIONS SECTION 01300.

H. COMPACTION & FILL

1. STRUCTURAL FILL FOR USE UNDER BUILDINGS AND PAVEMENTS SHOULD CONSIST OF DURABLE SOILS CONFORMING TO NHDOT SPECIFICATION ITEM NO. 304.3 CRUSHED GRANULAR BACKFILL GRAVEL.
2. FILL MATERIALS SHOULD BE BROUGHT TO THE OPTIMUM MOISTURE CONTENT, PLACED IN THIN LIFTS (NOT EXCEEDING 8"), TO 95% MODIFIED PROCTOR (ASTM D-1557).
3. SPECIAL CARE SHALL BE TAKEN WHEN INSTALLING BACKFILL ALONG THE BOTTOM SIDES OF THE TANK TO ENSURE THAT THE TANK IS NOT DAMAGED AND IS FULLY AND EVENLY SUPPORTED AROUND THE BOTTOM QUADRANT.
4. THE BACKFILL MATERIAL SHALL BE CAREFULLY PLACED AND CONSOLIDATED ALONG THE BOTTOM, UNDER THE TANK SHELL, BY MANUALLY SHOVELING AND TARPING. LIGHT HAND OPERATED COMPACTION EQUIPMENT IS RECOMMENDED.

I. SITE REVIEW NOTES

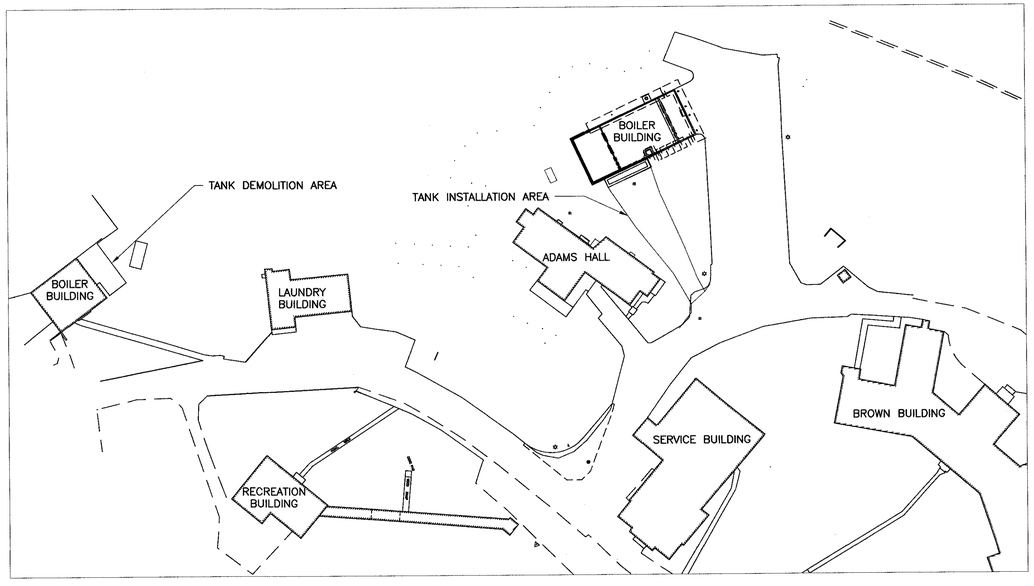
1. THE CONTRACTOR SHALL PROVIDE 10 DAYS NOTICE TO THE ENGINEER OF RECORD FOR A SITE REVIEW OF THE TANK AND BURIED PIPE INSTALLATIONS PRIOR TO NOTIFYING NHDES (ENV-WM 1401.28.Y). UPON COMPLETION AND ACCEPTANCE OF THE ENGINEER OF RECORD SITE REVIEW, NHDES (ENV-WM 1401.28.Y) WILL BE NOTIFIED TO SCHEDULE THEIR SITE REVIEW.
2. THE CONTRACTOR SHALL NOT BACKFILL THE TANK UNTIL THE ENGINEER OF RECORD AND THE NHDES HAVE REVIEWED AND ACCEPTED THE INSTALLATION.
3. THE CONTRACTOR SHALL NOT BACKFILL THE BURIED PIPE TRENCHES UNTIL THE ENGINEER OF RECORD AND THE NHDES HAVE REVIEWED AND ACCEPTED THE INSTALLATION.
4. THE CONTRACTOR SHALL PROTECT THE OPEN TANK AREA AND OPEN PIPE TRENCHES FROM WATER ENTRANCE AND/OR DAMAGE UNTIL THE SYSTEMS ARE REVIEWED AND ACCEPTED BY THE ENGINEER OF RECORD AND NHDES. THE CONTRACTOR SHALL DEWATER AS NECESSARY PRIOR TO BACKFILLING THE WORK UP TO A MAXIMUM OF 90 DAYS FROM THE ENGINEER OF RECORD SITE REVIEW AND ACCEPTANCE.
5. THE CONTRACTOR SHALL MAKE THE REQUIRED REVISIONS PER THE NHDES SITE REVIEW AND REPORT AT NO ADDITIONAL COST TO THE OWNER.
6. THE CONTRACTOR SHALL PROVIDE 10 DAYS NOTICE TO THE ENGINEER OF RECORD FOR A FINAL SITE REVIEW OF THE INSTALLATIONS.

TYPICAL ABBREVIATIONS:

AASHTO = AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
AC = ACRE(S), OR AIR CONDITIONING
ACP = ASBESTOS CEMENT PIPE
AWWA = AMERICAN WATER WORKS ASSOCIATION
B = BORING
BIT = BITUMINOUS
BM = BENCH MARK
BMP = BEST MANAGEMENT PRACTICE
CB = CATCH BASIN
CF = CUBIC FEET, OR CONSTRUCTION FENCE
CFS = CUBIC FEET PER SECOND
CI = CAST IRON
CL = CLASS, OR CENTER LINE
CMP = CORRUGATED METAL PIPE
CU = COPPER
CY = CUBIC YARD
DES = DEPARTMENT OF ENVIRONMENTAL SERVICES
DI = DUCTILE IRON
DMH = DRAIN MANHOLE
DWL = DOWEL
ELEV = ELEVATION
EW = EACH WAY
EX = EXISTING
FE = FLANGED END
FFE = FINISHED FLOOR ELEVATION
FOB = FACE OF BUILDING
FT = FOOT, FEET
G = GAS
GCMP = GALVANIZED CORRUGATED METAL PIPE
GPD = GALLONS PER DAY
GPM = GALLONS PER MINUTE
GV = GATE VALVE
HC = HANDICAPPED
HDPE = HIGH DENSITY POLYETHYLENE
HP = HORSE POWER
HVAC = HEATING, VENTILATION, AIR CONDITIONING
HYD = HYDRANT
ID = INSIDE DIAMETER
IN = INCH
INV = INVERT
LF = LINEAR FEET, LINEAL FEET
MAX = MAXIMUM
MIN = MINIMUM
MJ = MECHANICAL JOINT
MSE = MECHANICALLY STABILIZED EARTH
MUTCD = MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
N/F = NOW OR FORMERLY
NTS = NOT TO SCALE
OC = ON CENTER
OD = OUTSIDE DIAMETER
OHT&P = OVERHEAD TELEPHONE & POWER
PCA = PORTLAND CEMENT ASSOCIATION
PCC = PORTLAND CEMENT CONCRETE
PL = PROPERTY LINE
PSI = POUNDS PER SQUARE INCH
PVC = POLYVINYLCHLORIDE
RD = ROOF DRAIN
ROW = RIGHT-OF-WAY
RPC = REINFORCED CONCRETE PIPE
S = SEWER
SCH = SCHEDULE
SDR = STANDARD DIMENSION RATIO
SF = SQUARE FEET, OR SILT FENCE
SD = STORM DRAIN
SMH = SEWER MANHOLE
SRW = SEGMENTAL RETAINING WALL
SY = SQUARE YARDS
T = TELEPHONE
TBM = TEMPORARY BENCHMARK
TP = TEST PIT, OR TURNING POINT
TYP = TYPICAL
UGT&P = UNDERGROUND TELEPHONE & POWER
UP = UTILITY POLE
VCT = VITRIFIED CLAY TILE
W = WATER
WIR = WATER IRRIGATION
WSO = WATER SHUT OFF

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	BUILDING	
1648	1' CONTOURS	1648
1650	5' CONTOURS	1650
	GRAVEL ROAD	
	PAVED ROAD	
	TREE LINE	
S	SEWER MANHOLE	
S	SEWER LINE	
	CATCH BASIN	
	FENCE	
UD	UNDERDRAIN	
W	WATER	
SD	STORM DRAIN	
UGE	UNDERGROUND ELECTRIC	
	LIGHT POLE	
	STONE	
	SILT FENCE	SF SF



PROJECT AREA PLAN

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
34 BLAIR PARK RD. SUITE 10
WILLISTON, VT 05495
TEL: (802) 878-7661
FAX: (802) 878-2907
www.dubois-king.com
RANDOLPH, VT
SPRINGFIELD, VT
BEDFORD, NH

PROFESSIONAL SEAL
JEFFREY W. TUCKER No. 8324 STATE OF NEW HAMPSHIRE PROFESSIONAL ENGINEER
5/24/12

NO.	DATE	DESCRIPTION	BY	CK'D
1	06-21-2012	RELEASED FOR CONSTRUCTION	RF	

DEPARTMENT OF ADMINISTRATIVE SERVICES
BUREAU OF PUBLIC WORKS DESIGN & CONSTRUCTION
JOHN O MORTON BUILDING ROOM 250
7 HAZEN DRIVE, POB 483
CONCORD NH 03302-0483
PHONE: 603.271.1639
FAX: 603.271.3515

NH DHHS
GLENCLIFF HOME
393 HIGH STREET
GLENCLIFF NH 03238

DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE
FUEL TANK LOCATION

CIVIL NOTES, LEGEND AND PROJECT AREA PLAN

DRAWN BY	DATE
JWP	06-21-2012
CHECKED BY	D&K PROJECT #
LDC	521560
PROJ. ENG.	D&K ARCHIVE #
LDC	521560

SHEET NUMBER
C0.1

SHEET 2 OF 13

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CONCRETE NOTES

GENERAL
1. ALL WORK AND MATERIALS SHALL CONFORM TO INTERNATIONAL BUILDING CODE, 2009 EDITION (IBC 2009) AND NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2010 (OR LATEST EDITION)

STRUCTURAL MATERIALS
1. CONCRETE (CIP): NORMAL WEIGHT CLASS A CONCRETE WITH MINIMUM COMPRESSIVE STRENGTH (F'C) = 4000 PSI AT 28 DAYS; TYPICAL UNLESS OTHERWISE NOTED.

- PORTLAND CEMENT: ASTM C150, TYPE II, MINIMUM 611 LBS PER CUBIC YARD FOR CLASS A CONCRETE (540 LBS PER CUBIC YARD FOR CLASS B CONCRETE)
- AGGREGATE: ASTM C33, NO. 67, TYPICAL (USE MAXIMUM 3/8" AGGREGATE FOR CONCRETE IN STEEL PAN STAIRS)
- WATER: POTABLE WITH A MAXIMUM WATER CEMENT RATIO OF 0.50, TYPICAL
- SLUMP: 3" TO 4"
- ADMIXTURES: USE AIR ENTRAINING AGENT CONFORMING TO ASTM C260 WITH 4–6% TOTAL AIR. USE WATER REDUCING AGENT CONFORMING TO ASTM C494, TYPE A IN ALL CONCRETE. CALCIUM CHLORIDE MAY NOT BE USED TO ACCELERATE THE SETTING TIME. NO AIR ENTRAINING AGENT TO BE USED IN CONCRETE FOR INTERIOR SLABS.

2. REINFORCEMENT STEEL
- BARS: ASTM A615, GRADE 60 (DEFORMED)

CODES AND STANDARDS
DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISION (UNLESS OTHERWISE INDICATED) OF APPLICABLE CODES AND STANDARDS, INCLUDING THE FOLLOWING:

1. BUILDING CODE: 2009 IBC WITH NH STATE SUPPLEMENT

2. CONCRETE: AMERICAN CONCRETE INSTITUTE (ACI), CONCRETE REINFORCING STEEL INSTITUTE (CRSI), OR AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- ACI 301 – SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
- ACI 302 – CONCRETE FLOOR AND SLAB CONSTRUCTION
- ACI 304 – MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE
- ACI 305 – HOT WEATHER CONCRETING
- ACI 306 – COLD WEATHER CONCRETING
- ACI 315 – DETAILS AND DETAILING OF CONCRETE REINFORCEMENT
- ACI 318 – BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- ACI SP–15 – FIELD REFERENCE MANUAL
- ACI SP–66 – ACI DETAILING MANUAL
- CRSI – MANUAL OF STANDARD PRACTICE
- ASTM C94 – STANDARD SPECIFICATION FOR READY MIX CONCRETE

COLD WEATHER CONSTRUCTION PROCEDURES
1. CONTRACTOR SHALL CONTINUOUSLY PROTECT SOILS, CONCRETE, MASONRY AND OTHER BUILDING MATERIALS FROM DAMAGE DUE TO COLD TEMPERATURES, UNTIL THE PROJECT HAS BEEN TURNED OVER TO THE OWNER. PROTECTION MAY INCLUDE TEMPORARY ENCLOSURES, INSULATED BLANKETS AND TEMPORARY HEATING.

2. CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED OR DEFECTIVE WORK, IN A MANNER APPROVED BY THE ENGINEER. ALL PROTECTIVE AND CORRECTIVE WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

STRUCTURAL AND CRUSHED STONE FILL
1. PRIOR TO PLACING GRANULAR OR CRUSHED STONE FILL REMOVE ALL ORGANIC MATERIAL, DEBRIS AND ANY OTHER DELETERIOUS MATERIAL.

2. STRUCTURAL FILL SHALL BE PLACED IN MAXIMUM 8" LIFTS (UNCOMPACTED DEPTH) AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557, MODIFIED PROCTOR.

3. CRUSHED STONE FILL SHALL BE PLACED IN 8" (MAX) LIFTS AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557, MODIFIED PROCTOR.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, FROM A TESTING FIRM APPROVED BY THE ENGINEER, A SIEVE ANALYSIS AND A LABORATORY MOISTURE–DENSITY CURVE FOR THE PROPOSED GRANULAR FILL AND FOR THE SUB–GRADE AT EACH SOIL STRATA WHERE FOOTINGS OR A GRADE SLAB IS INTENDED TO BEAR DIRECTLY ON NATIVE MATERIAL. THE RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. WHERE MATERIAL IS PROPOSED FOR GRANULAR FILL, THE SUBMITTAL PROCEDURE SHALL BE REPEATED UNTIL A MATERIAL MEETING THE SPECIFICATIONS IS PROVIDED.

5. THE CONTRACTOR SHALL TAKE FIELD DENSITY TESTS ON COMPACTED FILL AND SUBGRADE AS INDICATED HEREIN.

DEWATERING
1. THE CONTRACTOR SHALL PROVIDE THE NECESSARY EQUIPMENT TO CONTINUOUSLY DEWATER THE SITE TO FACILITATE CONSTRUCTION AND SAFE WORKING CONDITIONS. (SEE EROSION CONTROL NOTES ON SHEET C0.1).

CONCRETE
1. ALL BAR REINFORCEMENT SHALL BE DEFORMED BARS. REINFORCEMENT SHALL BE SECURELY TIED IN ITS PROPER PLACE BEFORE AND DURING PLACING OPERATIONS. USE APPROVED CHAIRS AND SPACERS AS REQUIRED. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD WITHOUT THE APPROVAL OF THE ENGINEER. USE PLASTIC TIPPED ACCESSORIES IN CONCRETE EXPOSED TO WEATHER, WATER OR VIEW.

2. WHERE CONTINUOUS BARS ARE INDICATED TO BE RUN CONTINUOUSLY AROUND CORNERS, DOWEL INTO INTERSECTING WALLS AND LAP AT SPLICE LOCATIONS.

3. LAP ALL BARS 50 DIAMETERS MINIMUM AT SPLICE LOCATIONS UNLESS INDICATED OTHERWISE ON THE DRAWINGS. SPLICES ARE TO BE STAGGERED WHEREVER POSSIBLE.

4. WHERE SPECIFIED OR REQUIRED, BEND REINFORCEMENT IN THE SHOP ONLY. ONLY COLD BENDING WILL BE PERMITTED.

5. CONCRETE COVER OVER REINFORCEMENT SHALL BE 2 INCHES CLEAR, EXCEPT FOR THE FOLLOWING, OR UNLESS OTHERWISE NOTED.

6. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4", UNLESS OTHERWISE NOTED.

7. WHERE CONCRETE IS TO BE PLACED BY PUMPING, ALL WORK MUST CONFORM TO ACI 304.2. WHEN PLACING CONCRETE AT TEMPERATURES ABOVE 90°F OR BELOW 40°F, STRICTLY ADHERE TO THE PROCEDURES AND RECOMMENDATIONS IN ACI 305 (HOT WEATHER CONCRETE) AND ACI 306 (COLD WEATHER CONCRETE).

8. PROPER VIBRATION OF ALL CONCRETE IS ESSENTIAL. THE CONTRACTOR SHALL MAKE PROVISIONS FOR BACK–UP VIBRATION EQUIPMENT.

9. THE CONCRETE CONTRACTOR SHALL INSTALL (OR GIVE OTHER TRADES AMPLE OPPORTUNITY TO INSTALL) ALL ANCHORS, BOLTS, PLATES, NAILERS, SLOTS, CHASES, PIPE SLEEVES, ETC., AS REQUIRED BY OTHER TRADES. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE SETTING SCREEDS AND FORMS.

10. CONCRETE TEMPERATURE DURING THE FIRST SEVEN DAYS SHALL BE MAINTAINED BETWEEN 50F AND 90 F. RAPID DRYING MUST BE PREVENTED.

11. CURING:

- HORIZONTAL SURFACES SHALL BE KEPT CONTINUOUSLY MOIST FOR A MINIMUM OF SEVEN DAYS.
- VERTICAL SURFACES SHALL RECEIVE 2 COATS (ONE AT TIME OF STRIPPING AND ANOTHER 3 DAYS LATER) OF AN APPROVED NON–TOXIC CURING COMPOUND.

12. SUBMIT A CURRENT (WITHIN 6 MONTHS) DESIGN MIX, WITH 28–DAY COMPRESSIVE STRENGTH TEST RESULTS, TO ENGINEER FOR APPROVAL A MINIMUM OF 15 DAYS PRIOR TO BEGINNING CONSTRUCTION. THE MIX DESIGN SHALL CONTAIN, AS A MINIMUM; AGGREGATE GRADATION, ADMIXTURES TO BE USED, SOURCE OF CEMENT AND TYPE, BATCH QUANTITIES, AND DATE OF MIX DESIGN AND TEST RESULTS.

13. SUBMIT STEEL REINFORCEMENT SHOP DRAWINGS (ONE REPRODUCIBLE PRINT AND TWO COPIES), PREPARED BY THE CONTRACTOR IN ACCORDANCE WITH ACI STANDARDS, TO THE ENGINEER PRIOR TO FABRICATION. REPRODUCTION OF THE ENGINEER'S DRAWINGS IS NOT ACCEPTABLE.

14. THE CONTRACTOR SHALL EMPLOY A QUALIFIED MATERIALS TESTING/INSPECTION AGENCY TO PERFORM STANDARD FIELD TESTS FOR CONCRETE WORK.

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PROFESSIONAL SEAL
STATE OF NEW HAMPSHIRE
JEFFREY W. TUCKER
No. 9862
CIVIL
PROFESSIONAL ENGINEER
6/29/12

NO.	DATE	DESCRIPTION	BY	CK'D
1	06-21-2012	RELEASED FOR CONSTRUCITON	RF	

DEPARTMENT OF ADMINISTRATIVE SERVICES
BUREAU OF PUBLIC WORKS DESIGN & CONSTRUCTION
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CONCORD NH 03302-0483
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NH DHHS
GLENCLIFF HOME
393 HIGH STREET
GLENCLIFF NH 03238

DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE
FUEL TANK LOCATION

CONCRETE NOTES

DRAWN BY	DATE
JWP	06-21-2012
CHECKED BY	D&K PROJECT #
LDC	521560
PROJ. ENG.	D&K ARCHIVE #
LDC	521560

SHEET NUMBER
C0.2

SHEET 3 OF 13

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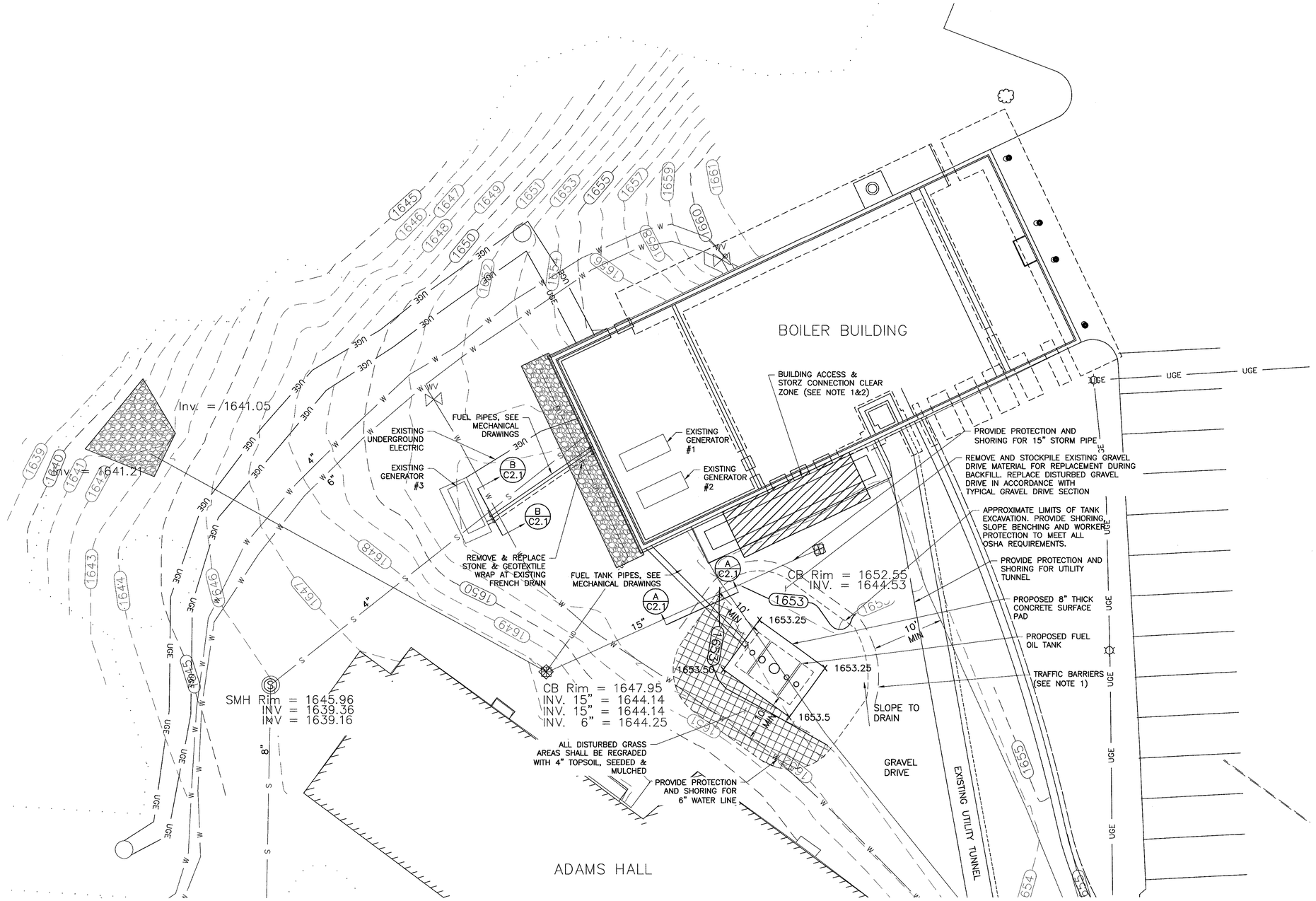

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

1 inch = 10 ft.

NOTES:

1. ACCESS TO BUILDING LOADING DOCKS FOR TRUCK TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. COORDINATE THE LOCATION OF THE ACCESS WITH GLENCLIFF HOME. PROVIDE CONCRETE JERSEY BARRIERS ADJACENT TO THIS ACCESS WHEN ADJACENT TO OPEN EXCAVATION.

2. ACCESS TO BUILDING LOADING DOCKS AND STORZ CONNECTION FOR FIRE DEPARTMENT USE SHALL BE MAINTAINED AT ALL TIMES. NO VEHICLES, EQUIPMENT, OR MATERIALS SHALL BE PLACED, STORED, OR OPERATED WITHIN IDENTIFIED CLEAR ZONE AT ANYTIME.

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PROFESSIONAL SEAL

STATE OF NEW HAMPSHIRE — JEFFREY W. TUCKER No. 9822 — PROFESSIONAL ENGINEER — LICENSED

NO.	DATE	DESCRIPTION	BY	CK'D
1	06-21-2012	RELEASED FOR CONSTRUCITON	RJF	

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GLENCLIFF NH 03238

DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE

FUEL TANK LOCATION

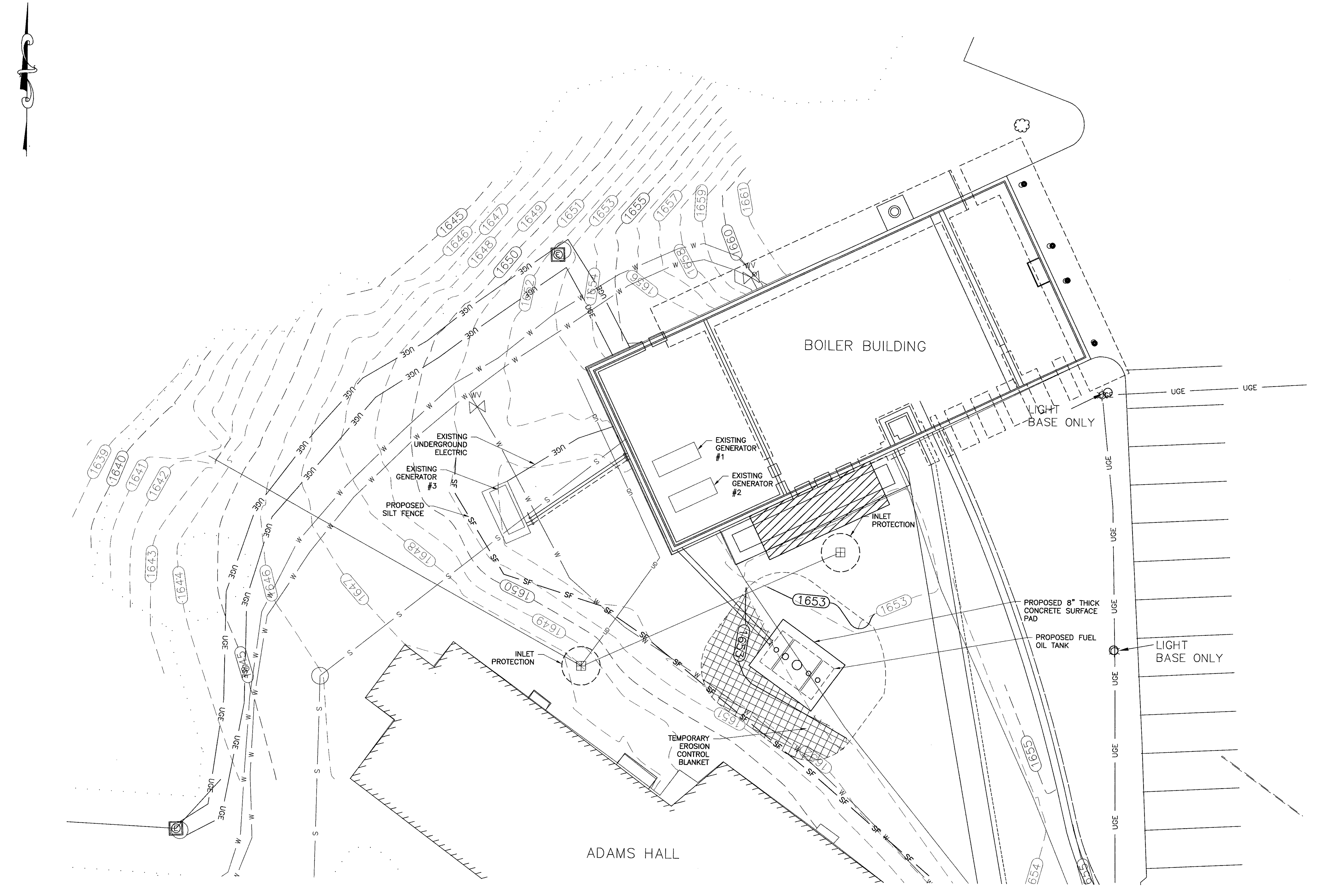
CIVIL SITE AND GRADING PLAN

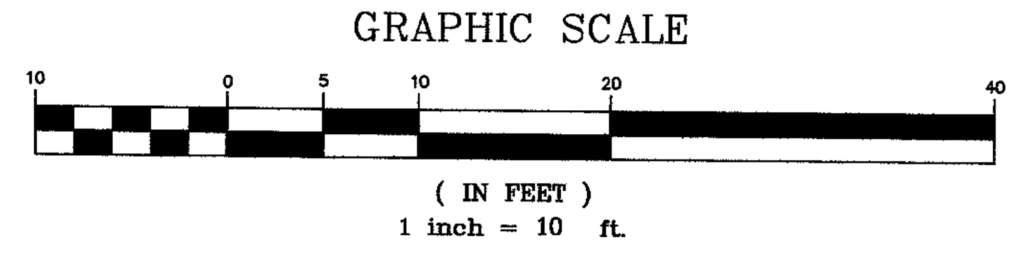
DRAWN BY	DATE
JWP	06-21-2012
CHECKED BY	D&K PROJECT #
LDC	521560
PROJ. ENG.	D&K ARCHIVE #
LDC	521560

SHEET NUMBER

C1.1

SHEET 4 OF 13





NOTES:

1. EXCAVATED MATERIAL SHALL BE STOCKPILED IN ADJACENT ON-SITE GRAVEL PIT LOCATED APPROXIMATELY 0.3 MILES FROM TANK INSTALLATION LOCATION. COORDINATE MATERIAL STOCKPILING WITH NHDHHS GLENCLIFF HOME. EXCESS MATERIAL NOT UTILIZED FOR BACKFILL SHALL REMAIN THE PROPERTY OF NHDHHS GLENCLIFF HOME. STOCKPILE AND SOIL SHALL BE PROTECTED FROM EROSION IN ACCORDANCE WITH EROSION CONTROL NOTES ON SHEET C0.1 AND STOCKPILE AREA ISOLATION DETAIL ON SHEET C2.2. PROVIDE PROTECTIVE PLASTIC SHEET UNDER STOCKPILE TO PROTECT EXISTING GRAVEL PIT FROM SPOIL.

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PROFESSIONAL SEAL

JEFFREY W. TUCKER No. 8322

NO.	DATE	DESCRIPTION	BY	CK'D
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DEPARTMENT OF
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BUREAU OF PUBLIC WORKS
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393 HIGH STREET
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DEMOLITION OF (3)
AST's & INSTALL 5,000
GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE

FUEL TANK
LOCATION

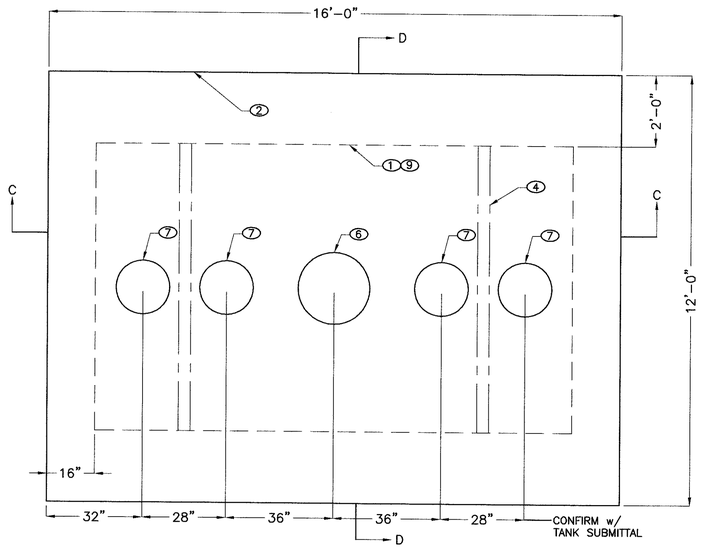
EROSION
CONTROL
PLAN

DRAWN BY JWP	DATE 06-21-2012
CHECKED BY LDC	D&K PROJECT # 521560
PROJ. ENG. LDC	D&K ARCHIVE # 521560

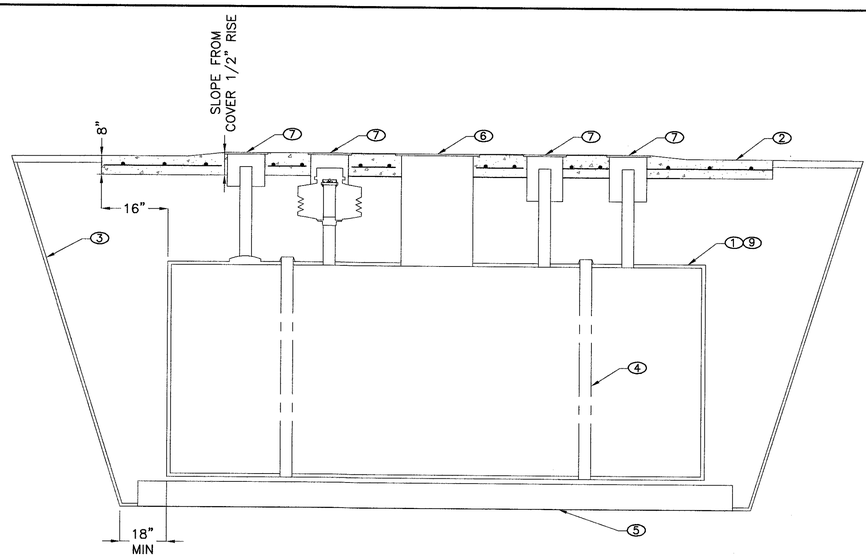
SHEET NUMBER

C1.2

SHEET 5 OF 13



FUEL TANK PLAN VIEW
NOT TO SCALE



FUEL TANK SIDE VIEW (SECTION C-C)
NOT TO SCALE

FUEL TANK NOTES:

① PROPOSED 5,000 GALLON (96"ø x 13'-4") DOUBLE WALL UNDERGROUND DIESEL STORAGE TANK, (SEE MECHANICAL DRAWINGS).

② 8" 4,000 PSI CONCRETE PAD (H-20 LOADING) REINFORCED WITH #6 BARS @ 10" O/C EACH WAY CENTER DEPTH. MINIMUM 2 BARS BETWEEN MANHOLES

③ TYPAR GEOTEXTILES STYLE #3601 FILTER FABRIC.

④ (2) HOLD DOWN STRAPS (SEE MECHANICAL DRAWINGS).

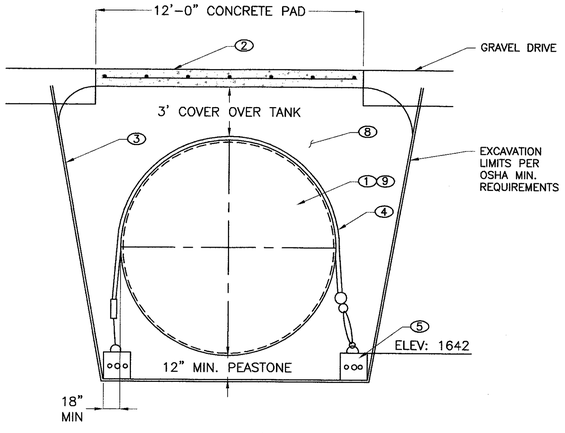
⑤ CONCRETE DEADMAN, (SEE MECHANICAL DRAWINGS).

⑥ 36" DIAMETER MANHOLE AND COVER, (SEE MECHANICAL DRAWINGS).

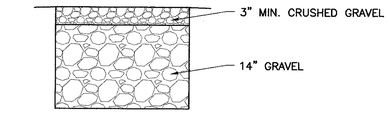
⑦ 12" DIAMETER MANHOLE, (SEE MECHANICAL DRAWINGS).

⑧ PEA GRAVEL BACKFILL AROUND TANK 1/8" MIN. DIAMETER AND 3/4" MAX. DIAMETER.

⑨ CONFIRM ALL INSTALLATION DETAILS WITH TANK MANUFACTURER'S REQUIREMENTS.



FUEL TANK DETAIL (SECTION D-D)
NOT TO SCALE



TYPICAL GRAVEL DRIVE REPLACEMENT SECTION
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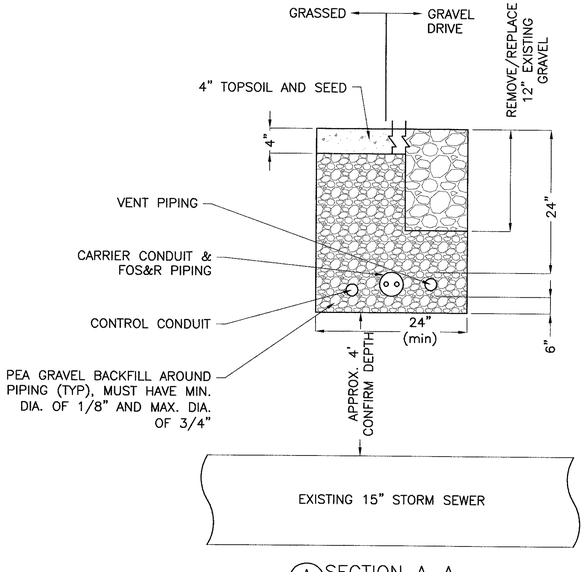
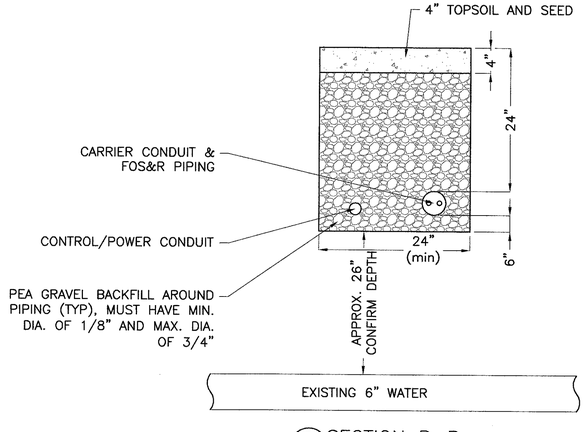


A C1.1 SECTION A-A
NOT TO SCALE



B C1.1 SECTION B-B
NOT TO SCALE

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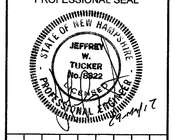

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DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE

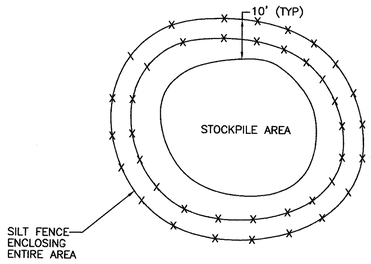
FUEL TANK LOCATION

FUEL TANK DETAILS

DRAWN BY	DATE
JWP	06-21-2012
CHECKED BY	D&K PROJECT #
LDC	521560
PROJ. ENG.	D&K ARCHIVE #
LDC	521560

SHEET NUMBER

C2.1



STOCKPILE AREA ISOLATION DETAIL

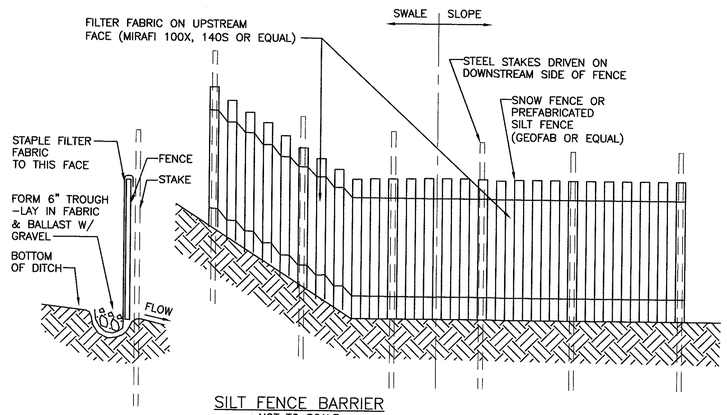
NOT TO SCALE

NOTE:

ALL AREAS NOT TO BE WORKED FOR 14 DAYS OR MORE SHALL BE TEMPORARILY STABILIZED WITH MULCH, MATTING, OR OTHER MEASURES SUITABLE TO THE LOCATION.

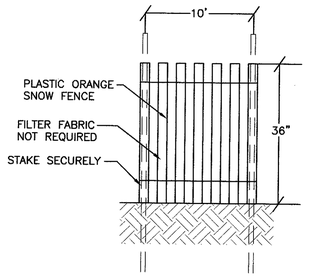
ALL AREAS NOT TO BE WORKED FOR 30 OR MORE DAYS SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH, MATTING, OR OTHER MEASURES SUITABLE TO THE LOCATION.

ALL AREAS SHALL GENERALLY RECEIVE FINAL STABILIZATION WITHIN 48 HOURS OF REACHING FINAL GRADE.



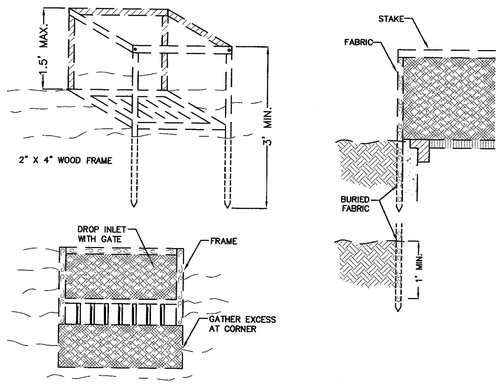
SILT FENCE BARRIER

NOT TO SCALE



ISOLATION FENCE

NOT TO SCALE



FILTER FABRIC DROP INLET PROTECTION

NOTE:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"X4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND THE INLET 3 FEET APART AND DRIVE A MINIMUM OF 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"X4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRES

EROSION CONTROL SCHEDULE

FOR SITE CONDITIONS	USE TYPE
AREAS FLATTER THAN 1:5 (20%)	HAY AND STRAW MULCH
AREAS 1:5 (20%) OR STEEPER	MATTING/BLANKETS
ALL DISTURBED AREAS	SEED AND MULCH
ACROSS SLOPES AROUND CATCH BASINS AROUND STOCK PILE AND BORROW AREAS TOES OF SLOPE ALONG STREAMS AND WATER BODIES AS SHOWN ON DRAWINGS	SILT FENCES
ACROSS SLOPES AROUND CATCH BASINS IN DRAINAGE DITCHES 9% SLOPE OR LESS – PLACE 100 FT. APART 10% TO 19% – PLACE 50 FT. APART 20% OR GREATER – PLACE 25 FT. APART AS SHOWN ON DRAWINGS	CHECK DAMS
IN DITCHES PRIOR TO DISCHARGE TO BODIES OF WATER AS SHOWN ON DRAWINGS	SEDIMENT BASINS
STABILIZED CONST. ENTRANCE AS SHOWN ON DRAWINGS	STABILIZED CONST. ENTRANCE

DEWATERING PROCEDURE

DEWATERING WILL BE ACCOMPLISHED BY PLACEMENT OF CRUSHED STONE FILLED SUMPS IN LOW AREAS OF THE EXCAVATION. WATER WILL BE PUMPED FROM THESE SUMPS THROUGH A SEDIMENTATION DEVICE AND DISCHARGE INTO THE SUBSURFACE STORMWATER SYSTEM. THE DETAILS OF DEWATERING, INCLUDING THE NUMBER AND LOCATION OF SUMPS; THE TYPE, NUMBER AND LOCATION OF THE SEDIMENTATION DEVICE(S) AND THE ASSOCIATED DISCHARGE POINTS AND OPERATING PROCEDURES WILL DEPEND ON THE CONDITIONS ENCOUNTERED DURING CONSTRUCTION, AS WELL AS THE SEASONAL WEATHER CONDITIONS. A PLAN WHICH DETAILS THE DEWATERING SYSTEM AND PROCEDURES WILL BE PROVIDED FOR REVIEW AND APPROVAL BY THE ON-SITE COORDINATOR PRIOR TO ITS IMPLEMENTATION.

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PROFESSIONAL SEAL

STATE OF NEW HAMPSHIRE · JEFFREY W. TUCKER No. 9826 · LICENSED PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION	BY	CK'D
1	06-21-2012	RELEASED FOR CONSTRUCTION	RJF	

DEPARTMENT OF ADMINISTRATIVE SERVICES
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DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE
FUEL TANK LOCATION

EROSION CONTROL DETAILS

DRAWN BY	DATE
JWP	06-21-2012
CHECKED BY	D&K PROJECT #
LDC	521560
PROJ. ENG.	D&K ARCHIVE #
LDC	521560

SHEET NUMBER

C2.2

SHEET 7 OF 13

MECHANICAL GENERAL NOTES

A. QUALITY OF WORK

1. CONTRACT DOCUMENTS ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY SCOPE & ARRANGEMENT OF WORK. CONSULT ELECTRICAL AND STRUCTURAL CONSTRUCTION DRAWINGS & EXISTING CONDITIONS FOR FAMILIARITY WITH CONDITIONS AFFECTING WORK. VERIFY ALL SPACES IN WHICH WORK WILL BE PERFORMED BY ON-SITE MEASUREMENTS. DO NOT SCALE DRAWINGS.
2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AS THERE MAY BE VARIOUS CONDITIONS AT THE SITE WHICH DO NOT SHOW ON THE ACCOMPANYING DRAWINGS, OR WHICH ARE AT VARIANCE WITH THE CONDITIONS INDICATED ON THE DRAWINGS. IT IS IMPORTANT THAT EACH BIDDER VISIT THE SITE TO BECOME ACQUAINTED WITH THE EXISTING CONDITIONS, AND TO TAKE THESE CONDITIONS INTO CONSIDERATION WHEN PREPARING THEIR PROPOSAL. EACH BIDDER SHALL OBTAIN ANY INFORMATION OR MAKE ANY MEASUREMENT DESIRED. LACK OF KNOWLEDGE RELATIVE TO THE EXISTING SITE CONDITIONS WILL NOT BE ALLOWED AS A BASIS FOR EXTRA COMPENSATION.
3. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE SYSTEM AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
4. THE LOCATION OF EXISTING UTILITIES IS ONLY SHOWN IN AN APPROXIMATE WAY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PAY FOR AND REPAIR ALL DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES UNLESS OTHERWISE INDICATED.
5. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS IN STRAIGHT SECTIONS OF PIPE AS RECOMMENDED BY THE MANUFACTURER.
6. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.
7. ALL WORKSMANSHIP, MATERIALS, AND EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER.

B. CODES/PERMITS

1. WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH NFPA, ASHRAE, UNDERWRITERS LABORATORIES ASME AND ALL MUNICIPAL, STATE AND OTHER AUTHORITIES, PUBLIC AND PRIVATE, HAVING JURISDICTION. REPORT ALL DISCREPANCIES WITH SUCH REGULATIONS TO ENGINEER AND DO NOT PROCEED WITH ANY WORK UNTIL WRITTEN AUTHORIZATION IS RECEIVED FROM THE ENGINEER.

   THE CONTRACTOR IS REQUIRED TO COMPLY WITH THE FOLLOWING CODES FOR THE DEMOLITION AND NEW WORK: NFPA 30, NFPA 31, NFPA 37, ASME B.31, INTERNATIONAL MECHANICAL CODE (2009), NATIONAL ELECTRICAL CODE (2009), AND THE STATE OF NH CODE OF ADMINISTRATIVE RULES FOR ABOVE GROUND AND BELOW GROUND PETROLEUM STORAGE FACILITIES.
2. ALL NECESSARY FEES, PERMITS, AND APPROVALS AS REQUIRED BY THE WORK OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE OBTAINED AND PAID FOR BY THIS CONTRACTOR.
3. NOTHING CONTAINED IN THE SPECIFICATIONS OR INDICATED ON THESE DRAWINGS SHALL BE CONSTRUED TO CONFLICT WITH APPLICABLE PORTIONS OF ANY LAWS, ORDINANCES, REGULATIONS, OR CODES. THE CONTRACTOR SHALL MAKE THE NECESSARY MODIFICATIONS TO THE DRAWINGS FOR COMPLETE CODE COMPLIANCE REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.

C. COORDINATION OF WORK

1. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND ELECTRICAL WORK – NEW OR EXISTING.
2. WHEN MECHANICAL WORK (HVAC, PLUMBING, FIRE PROTECTION, ETC.) IS SUBCONTRACTED, IT SHALL BE THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE SUBCONTRACTORS AND THE ASSOCIATED CONTRACTS. WHEN DISCREPANCIES ARISE PERTAINING TO WHICH CONTRACTOR PROVIDES A PARTICULAR ITEM OF THE MECHANICAL CONTRACT OR WHICH CONTRACTOR PROVIDES FINAL CONNECTIONS FOR A PARTICULAR ITEM OF THE MECHANICAL CONTRACT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE MECHANICAL CONTRACTOR, WHOSE DECISION SHALL BE FINAL.
3. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS ARE APPROXIMATE AND NOT DEFINITELY FIXED BY DIMENSIONS. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE THE DRAWINGS.
4. PROVIDE LOCATIONS OF REQUIRED ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE VALVES, DAMPERS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. CONTRACTOR SHALL FURNISH & INSTALL ACCESS PANELS.
5. COORDINATE LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS WITH ALL OTHER TRADES INVOLVED AND EXISTING CONDITIONS. ALL OPENINGS IN FIRE WALLS FOR PIPING, CONDUIT, ETC., SHALL BE FIRE STOPPED. ALL PENETRATIONS OF EXTERIOR WALLS SHALL BE SLEEVED AND FULLY SEALED AGAINST WATER INTRUSION AND AIR LEAKAGE.

D. PIPING

1. TAKE ALL NECESSARY MEASUREMENTS AT THE BUILDING AND FABRICATE THE PIPING ON THE SITE, IF REQUIRED, TO ENSURE AN APPROVABLE INSTALLATION.
2. PROVIDE AIR VENT AT THE HIGH POINT OF EACH DROP IN CLOSED WATER PIPING SYSTEMS. ALL PIPING SHALL SLOPE TO LOW POINTS. PROVIDE HOSE AND DRAIN VALVES AT THE BOTTOM OF ALL RISERS AND AT LOW POINTS.
3. UNLESS OTHERWISE NOTED, ALL PIPING IS OVERHEAD, TIGHT TO UNDERSIDE OF STRUCTURE OR SLAB, WITH SPACE FOR INSULATION.
4. INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE. ALL VALVES SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION.
5. ALL VALVES (EXCEPT CONTROL VALVES) AND STRAINERS SHALL BE FULL SIZE OF PIPE BEFORE REDUCING SIZE TO MAKE CONNECTIONS TO EQUIPMENT.
6. UNIONS AND/OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF MECHANICAL EQUIPMENT, AT CONTROL VALVES, IN BYPASSES, AND IN LONG PIPING RUNS (100 FEET OR MORE) TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.
7. INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
8. ALL PIPING SHALL CLEAR DOORS AND WINDOWS.
9. COORDINATE ALL PIPING WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

D. SUBMITTAL REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SUBMITTALS PRIOR TO STARTING THE WORK:

1.1. FUEL OIL PUMP SET, CONTROLS, FLOATS, AND ALL ACCESSORIES
1.2. VEEDER-ROOT SYSTEM AND ALL ACCESSORIES
1.3. CONTAINMENT PIPING SYSTEM AND ALL ACCESSORIES
1.4. CONCRETE DEADMEN AND BUOYANCY CALCULATIONS
1.5. SPECIALTY ITEMS (SUMPS, MANHOLES, MANWAYS, VENTING, ETC)
1.6. ABOVE GRADE PIPING SYSTEMS (PIPE, VALVES, FITTINGS, ETC)

MECHANICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
ARCH	ARCHITECT
ARI	AMERICAN REFRIGERATION INSTITUTE
AS	AIR SEPARATOR
ATC	AUTOMATIC TEMPERATURE CONTROL
AWT	AVERAGE WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER, BOILER HP
BOD	BOTTOM OF DUCTWORK (ELEVATION)
BTUH	BTU PER HOUR
C	COMMON
CAP	CAPACITY
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
COMP	COMPRESSOR
CONN.	CONNECTION
COP	COEFFICIENT OF PERFORMANCE
CP	CONTROL PANEL
DB	DRY BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL
DI	DIGITAL INPUT
DIA.	DIAMETER
DN	DOWN
DO	DIGITAL OUTPUT
DPS	DIFFERENTIAL PRESSURE SENSOR
DWG	DRAWING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ECON	ECONOMIZER
EDB	ENTERING DRY BULB
EER	ENERGY EFFICIENCY RATIO
EFF	EFFICIENCY
EG	EXHAUST AIR GRILLE
ETR	EXISTING TO REMAIN
ESP	EXTERIOR STATIC PRESSURE
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
EXG	EXISTING
EXH	EXHAUST
F	DEGREES FAHRENHEIT
FA	FREE AREA
FBO	FURNISHED BY OTHERS
FCU	FAN COIL UNIT
FLA	FULL LOAD AMPS
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FT	FEET
FD	FIRE DAMPER, FLOOR DRAIN
FD/AD	FIRE DAMPER W/ACCESS DOOR
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FS	FLOW SWITCH
FVNR	FULL VOLTAGE NON-REVERSING
GAL	GALLON
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER, HEAT PUMP
ID	INSIDE DIAMETER
KW	KILOWATT
LAT	LEAVING AIR TEMPERTURE
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LRA	LOCKED ROTOR AMPS
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSANDS OF BTUs PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MER	MECHANICAL EQUIPMENT ROOM
MMBH	MILLIONS OF BTUs PER HOUR
MOCP	MAXIMUM OVERCURRENT PROTECTION
MOD	MOTOR OPERATED DAMPER
MTD	MOUNTED
MU	MAKE-UP (WATER OR AIR)
NC	NORMALLY CLOSED, NOISE CRITERIA
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OBD	OPPOSED BLADE DAMPER
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
PD	PRESSURE DROP
PRV	PRESSURE RELIEF VALVE
PSI	POUNDS PER SQUARE INCH
RA	RETURN AIR
RAD	RADIATOR
RE	REMOVE EXISTING
RPM	REVOLUTIONS PER MINUTE
RR	RETURN AIR REGISTER
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
SD	SUPPLY AIR DIFFUSER, SMOKE DAMPER
SF	SQUARE FEET
SP	STATIC PRESSURE
SR	SUPPLY AIR REGISTER
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UD	UNDERCUT DOOR
UH	UNIT HEATER
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
WB	WET BULB TEMPERATURE
WC	WATER COLUMN
WSHP	WATER SOURCE HEAT PUMP

MECHANICAL LEGEND

NOTE: NOT ALL SYMBOLS LISTED BELOW MAY BE USED ON THIS SET OF DRAWINGS.

PIPING

SYMBOL	DESCRIPTION
----C----	STEAM CONDENSATE (GRAVITY)
----PC----	PUMPED STEAM CONDENSATE
——CD——	CONDENSATE DRAIN LINE
----RL----	REFRIGERANT LIQUID
——RS——	REFRIGERANT SUCTION
----CR----	CONDENSER WATER RETURN
——CS——	CONDENSER WATER SUPPLY
----HWR----	HOT WATER RETURN
——HWS——	HOT WATER SUPPLY
——LPS——	LOW PRESSURE STEAM
——MPS——	MEDIUM PRESSURE STEAM
——HPS——	HIGH PRESSURE STEAM
——MU——	MAKE-UP WATER
---- FOS ----	FUEL OIL SUPPLY
——FOR——	FUEL OIL RETURN

PIPING VALVES AND FITTINGS

SYMBOL	DESCRIPTION
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
	BALL VALVE
	ANGLE GATE VALVE
	RELIEF OR SAFETY VALVE
	BUTTERFLY VALVE
M	ELECTRIC MOTOR ACTUATED 2 WAY VALVE
	VALVE ACTUATOR
M	ELECTRIC MOTOR ACTUATED 3 WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
	UNION
	Y STAINER
	STAINER WITH DRAIN
	PIPE ANCHOR
	FLEXIBLE PIPE CONNECTOR
	ELBOW UP
	ELBOW DOWN
	TEE TOP TAKE-OFF
	TEE BOTTOM TAKE-OFF
	THERMOMETER
	PRESSURE GAGE WITH VALVE
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	FLOAT & THERMOSTATIC TRAP
	PUMP (PLAN)
	PUMP (SCHEMATIC)
R	PIPING RISE
D	PIPING DROP
	CONTROL WIRING

GENERAL SYMBOLS

SYMBOL	DESCRIPTION
ø	PHASE OR ROUND DIAMETER
- - - - -	HEAVY DASHED LINES DENOTE EQUIPMENT TO BE REMOVED (DEMO DRAWINGS)
———	LIGHT LINES DENOTE EXISTING EQUIPMENT TO REMAIN (DEMO DRAWINGS)
1	REVISION CLOUD WITH REVISION NUMBER
	CONNECT NEW TO EXISTING AT THIS POINT – VIF ACTUAL POINT
	REMOVE EXISTING UP TO THIS POINT – VIF ACTUAL POINT
AHU 1	MOTORIZED EQUIPMENT ABBREVIATION / MOTORIZED EQUIPMENT NUMBER
ET 1	NON-MOTORIZED EQUIPMENT ABBREVIATION / NON-MOTORIZED EQUIPMENT NUMBER
1 / M-2	DETAIL NUMBER / DRAWING NUMBER
A / M-2	SECTION LETTER / SHEET NO. WHERE SECTION VIEW IS SHOWN

PROJECT NOTES

1. THE STATE OF NEW HAMPSHIRE SHALL PRE-PURCHASE THE FUEL OIL TANK. THE CONTRACTOR SHALL RECEIVE, RIG, STORE, AND WARRANTY THE TANK AS PART OF THIS WORK SCOPE. THE FACTORY VACUUM ON THE INTERSTITIAL SPACE SHALL BE MAINTAINED AT ALL TIMES DURING STORAGE, RIGGING, AND INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TANK DAMAGE OR LOSS OF VACUUM.
2. ALL WORK SHALL COMPLY WITH THE STATE OF NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES FOR ABOVE GROUND STORAGE FACILITIES, PART ENV-WM-1402, RULES FOR UNDERGROUND STORAGE FACILITIES, PART ENV-WM-1401, AND ADDITIONAL APPLICABLE NH-DES REGULATIONS.
3. MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL ALSO COMPLY WITH NFPA 30, NFPA 31, NFPA 37, ASME B.31, AND CURRENT LOCAL, STATE, AND FEDERAL REGULATIONS FOR THIS SCOPE OF WORK.
4. THE MECHANICAL CONTRACTOR SHALL BE THE PRIME CONTRACTOR OF THIS PROJECT AND SHALL MANAGE THE PROJECT IN ITS ENTIRETY.
5. THE PRIME CONTRACTOR SHALL FULLY MANAGE THE PROJECT FOR A COMPLETE TURN-KEY PROJECT TO REMOVE EXISTING TANKS AND PIPING, INSTALL A NEW UNDERGROUND TANK, A NEW PUMP PACKAGE, AND ASSOCIATED PIPING AND CONTROLS. THE CONTRACTOR SHALL HIRE OR SELF-PERFORM THE DEMOLITION WORK, RIGGING, EXCAVATION, BEDDING, AND BACK-FILL, CONCRETE WORK, CUTTING & PATCHING, PAINTING, ELECTRICAL WORK, AND ALL PIPING WORK.
6. ALL NEW PIPING AND EQUIPMENT SHALL BE TESTED IN COMPLIANCE WITH ENV-WM-1401. ALL SYSTEM TESTS SHALL BE OBSERVED BY THE OWNER OR ITS ASSIGNED REPRESENTATIVE. THE CONTRACTOR SHALL SUBMIT ALL NECESSARY REPORTS TO THE OWNER AND NHDES AT THE TIME OF THE BACKFILL SITE REVIEW BY NHDES.
7. CONTRACTOR IS RESPONSIBLE FOR A COMPLETE CODE COMPLIANT INSTALLATION. NOT ALL CODE REQUIREMENTS FOR DEMOLITION, INSTALLATION, INSPECTIONS, AND PAPERWORK ARE REFERENCED OR DELINEATED IN THE DOCUMENTS. COMPLY AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
8. ALL ELECTRICAL WORK SHALL BE PERFORMED BY AN ELECTRICIAN LICENSED FOR WORK IN THE STATE OF NEW HAMPSHIRE. SEE ELECTRICAL DRAWINGS.

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PROFESSIONAL SEAL
STATE OF NEW HAMPSHIRE – MICHAEL A. SPIRITO – NO. 9313 – LICENSED PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION	BY	CK'D
1	06-21-2012	RELEASED FOR CONSTRUCTION	RJF	

DEPARTMENT OF ADMINISTRATIVE SERVICES
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NH DHHS
GLENCLIFF HOME
393 HIGH STREET
GLENCLIFF NH 03238

DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE
MECHANICAL LEGEND & GENERAL NOTES

DRAWN BY	DATE
RJF	06-21-2012
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RJF	521560
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MAS	521560

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M0.1

SHEET 8 OF 13

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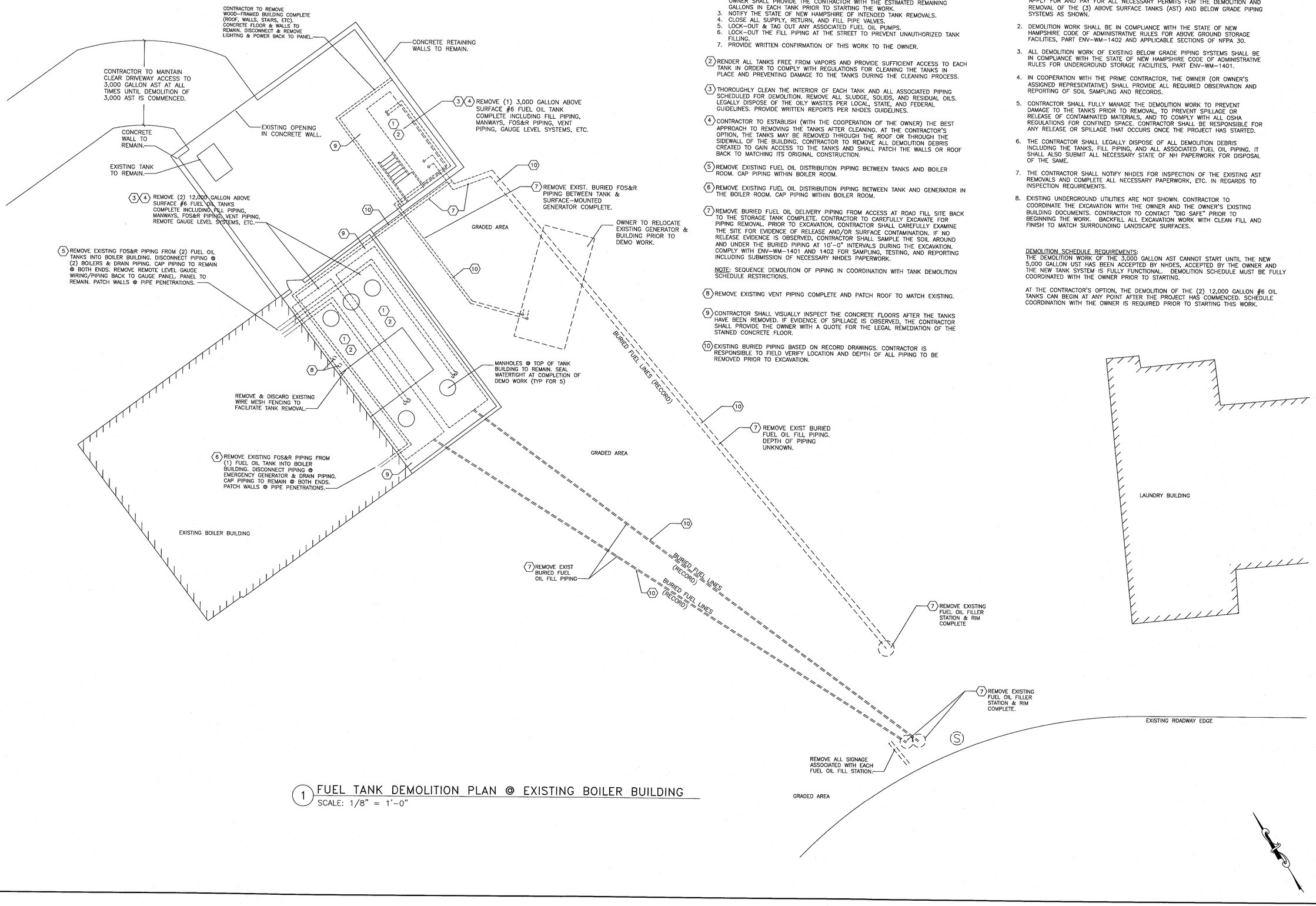

1 FUEL TANK DEMOLITION PLAN @ EXISTING BOILER BUILDING
SCALE: 1/8" = 1'-0"

KEYED NOTES

1. PRIOR TO THE START OF DEMOLITION, THE CONTRACTOR SHALL:
   1. THE OWNER SHALL PROVIDE AN ESTIMATE OF #6 OIL THAT REMAINS IN EACH TANK PRIOR TO REMOVAL.
   2. PUMP DOWN & REMOVE ALL REMAINING #6 FUEL OIL IN EACH TANK. THE OWNER SHALL PROVIDE THE CONTRACTOR WITH THE ESTIMATED REMAINING GALLONS IN EACH TANK PRIOR TO STARTING THE WORK.
   3. NOTIFY THE STATE OF NEW HAMPSHIRE OF INTENDED TANK REMOVALS.
   4. CLOSE ALL SUPPLY, RETURN, AND FILL PIPE VALVES.
   5. LOCK-OUT & TAG OUT ANY ASSOCIATED FUEL OIL PUMPS.
   6. LOCK-OUT THE FILL PIPING AT THE STREET TO PREVENT UNAUTHORIZED TANK FILLING.
   7. PROVIDE WRITTEN CONFIRMATION OF THIS WORK TO THE OWNER.
2. RENDER ALL TANKS FREE FROM VAPORS AND PROVIDE SUFFICIENT ACCESS TO EACH TANK IN ORDER TO COMPLY WITH REGULATIONS FOR CLEANING THE TANKS IN PLACE AND PREVENTING DAMAGE TO THE TANKS DURING THE CLEANING PROCESS.
3. THOROUGHLY CLEAN THE INTERIOR OF EACH TANK AND ALL ASSOCIATED PIPING SCHEDULED FOR DEMOLITION. REMOVE ALL SLUDGE, SOLIDS, AND RESIDUAL OILS. LEGALLY DISPOSE OF THE OILY WASTES PER LOCAL, STATE, AND FEDERAL GUIDELINES. PROVIDE WRITTEN REPORTS PER NHDES GUIDELINES.
4. CONTRACTOR TO ESTABLISH (WITH THE COOPERATION OF THE OWNER) THE BEST APPROACH TO REMOVING THE TANKS AFTER CLEANING. AT THE CONTRACTOR'S OPTION, THE TANKS MAY BE REMOVED THROUGH THE ROOF OR THROUGH THE SIDEWALL OF THE BUILDING. CONTRACTOR TO REMOVE ALL DEMOLITION DEBRIS CREATED TO GAIN ACCESS TO THE TANKS AND SHALL PATCH THE WALLS OR ROOF BACK TO MATCHING ITS ORIGINAL CONSTRUCTION.
5. REMOVE EXISTING FUEL OIL DISTRIBUTION PIPING BETWEEN TANKS AND BOILER ROOM. CAP PIPING WITHIN BOILER ROOM.
6. REMOVE EXISTING FUEL OIL DISTRIBUTION PIPING BETWEEN TANK AND GENERATOR IN THE BOILER ROOM. CAP PIPING WITHIN BOILER ROOM.
7. REMOVE BURIED FUEL OIL DELIVERY PIPING FROM ACCESS AT ROAD FILL SITE BACK TO THE STORAGE TANK COMPLETE. CONTRACTOR TO CAREFULLY EXCAVATE FOR PIPING REMOVAL. PRIOR TO EXCAVATION, CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE FOR EVIDENCE OF RELEASE AND/OR SURFACE CONTAMINATION. IF NO RELEASE EVIDENCE IS OBSERVED, CONTRACTOR SHALL SAMPLE THE SOIL AROUND AND UNDER THE BURIED PIPING AT 10'-0" INTERVALS DURING THE EXCAVATION. COMPLY WITH ENV-WM-1401 AND 1402 FOR SAMPLING, TESTING, AND REPORTING INCLUDING SUBMISSION OF NECESSARY NHDES PAPERWORK.

   NOTE: SEQUENCE DEMOLITION OF PIPING IN COORDINATION WITH TANK DEMOLITION SCHEDULE RESTRICTIONS.
8. REMOVE EXISTING VENT PIPING COMPLETE AND PATCH ROOF TO MATCH EXISTING.
9. CONTRACTOR SHALL VISUALLY INSPECT THE CONCRETE FLOORS AFTER THE TANKS HAVE BEEN REMOVED. IF EVIDENCE OF SPILLAGE IS OBSERVED, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A QUOTE FOR THE LEGAL REMEDIATION OF THE STAINED CONCRETE FLOOR.
10. EXISTING BURIED PIPING BASED ON RECORD DRAWINGS. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY LOCATION AND DEPTH OF ALL PIPING TO BE REMOVED PRIOR TO EXCAVATION.

PROJECT NOTES

1. ALL DEMOLITION WORK SHALL BE PERFORMED BY A CONTRACTOR LICENSED AND CERTIFIED BY THE STATE OF NEW HAMPSHIRE AND/OR THE INTERNATIONAL CODE COUNCIL (ICC) FOR THIS TYPE OF WORK. THE CONTRACTOR SHALL APPLY FOR AND PAY FOR ALL NECESSARY PERMITS FOR THE DEMOLITION AND REMOVAL OF THE (3) ABOVE SURFACE TANKS (AST) AND BELOW GRADE PIPING SYSTEMS AS SHOWN.
2. DEMOLITION WORK SHALL BE IN COMPLIANCE WITH THE STATE OF NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES FOR ABOVE GROUND STORAGE FACILITIES, PART ENV-WM-1402 AND APPLICABLE SECTIONS OF NFPA 30.
3. ALL DEMOLITION WORK OF EXISTING BELOW GRADE PIPING SYSTEMS SHALL BE IN COMPLIANCE WITH THE STATE OF NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES FOR UNDERGROUND STORAGE FACILITIES, PART ENV-WM-1401.
4. IN COOPERATION WITH THE PRIME CONTRACTOR, THE OWNER (OR OWNER'S ASSIGNED REPRESENTATIVE) SHALL PROVIDE ALL REQUIRED OBSERVATION AND REPORTING OF SOIL SAMPLING AND RECORDS.
5. CONTRACTOR SHALL FULLY MANAGE THE DEMOLITION WORK TO PREVENT DAMAGE TO THE TANKS PRIOR TO REMOVAL, TO PREVENT SPILLAGE OR RELEASE OF CONTAMINATED MATERIALS, AND TO COMPLY WITH ALL OSHA REGULATIONS FOR CONFINED SPACE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RELEASE OR SPILLAGE THAT OCCURS ONCE THE PROJECT HAS STARTED.
6. THE CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS INCLUDING THE TANKS, FILL PIPING, AND ALL ASSOCIATED FUEL OIL PIPING. IT SHALL ALSO SUBMIT ALL NECESSARY STATE OF NH PAPERWORK FOR DISPOSAL OF THE SAME.
7. THE CONTRACTOR SHALL NOTIFY NHDES FOR INSPECTION OF THE EXISTING AST REMOVALS AND COMPLETE ALL NECESSARY PAPERWORK, ETC. IN REGARDS TO INSPECTION REQUIREMENTS.
8. EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN. CONTRACTOR TO COORDINATE THE EXCAVATION WITH THE OWNER AND THE OWNER'S EXISTING BUILDING DOCUMENTS. CONTRACTOR TO CONTACT "DIG SAFE" PRIOR TO BEGINNING THE WORK. BACKFILL ALL EXCAVATION WORK WITH CLEAN FILL AND FINISH TO MATCH SURROUNDING LANDSCAPE SURFACES.

DEMOLITION SCHEDULE REQUIREMENTS:
THE DEMOLITION WORK OF THE 3,000 GALLON AST CANNOT START UNTIL THE NEW 5,000 GALLON UST HAS BEEN ACCEPTED BY NHDES, ACCEPTED BY THE OWNER AND THE NEW TANK SYSTEM IS FULLY FUNCTIONAL. DEMOLITION SCHEDULE MUST BE FULLY COORDINATED WITH THE OWNER PRIOR TO STARTING.

AT THE CONTRACTOR'S OPTION, THE DEMOLITION OF THE (2) 12,000 GALLON #6 OIL TANKS CAN BEGIN AT ANY POINT AFTER THE PROJECT HAS COMMENCED. SCHEDULE COORDINATION WITH THE OWNER IS REQUIRED PRIOR TO STARTING THIS WORK.

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STATE OF NEW HAMPSHIRE · MICHAEL A. SPATH · No. 9913 · LICENSED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY	CK'D
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DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE
BOILER BUILDING EXISTING AST REMOVAL PLAN

DRAWN BY	DATE
RJF	06-21-2012
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MAS	521560

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SHEET 9 OF 13

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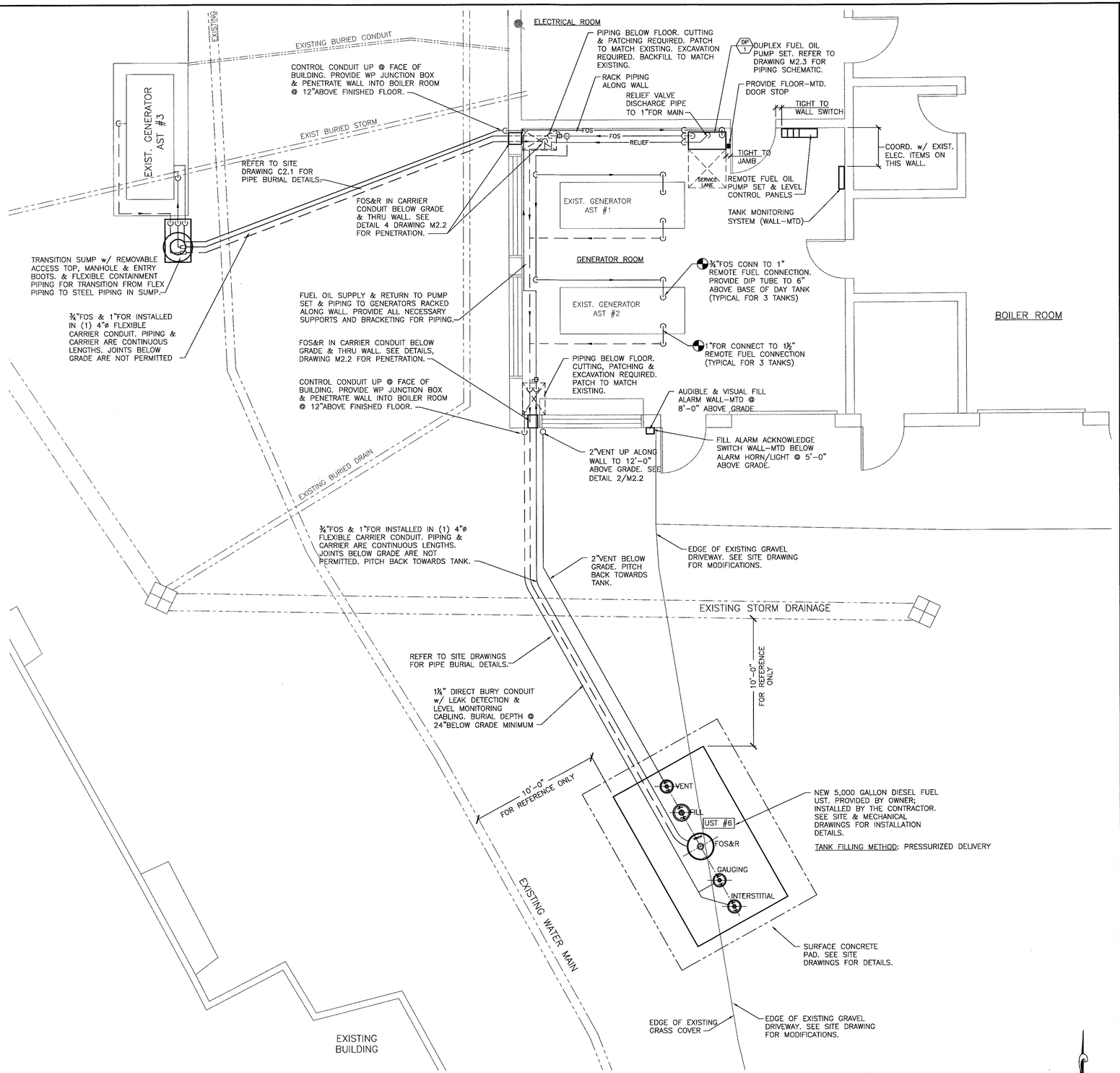
EQUIPMENT SCHEDULE

ITEM	MANUFACTURER AND MODEL NUMBER	DIMENSIONS	REMARKS
UST #6 DIESEL FUEL TANK SEE NOTE #1	HIGHLAND "TITAN" TANK	5,000 GALLONS 8'-0" DIAMETER x 13'-4" LONG	TANK PROVIDED BY OWNER; INSTALLED BY PRIME CONTRACTOR. INCLUDES (7) 4" NPT & (1) 2" NPT TANK FITTINGS. (2) POLYESTER HOLD DOWN STRAP KITS AND (1) 24" DIA. MANWAY MOUNTING FLANGE KIT.
CONCRETE DEADMEN	HIGHLAND TANK	18"x36"x120"	#HT-CDA-45 (CONFIRM w/ TANK MFG)
SUMP	OPW	36" DIA	#MBS-3645H
MANHOLE	OPW	39.5" DIA	#39CD-PL10
ENTRY BOOT	OPW	4"	#EBF-0400
ENTRY BOOT	OPW	4"	#DEB-0400
TANK FITTING	OPW	4"X1"X1"	#PDT-411
MANHOLE	OPW	12" DIA	#65-1212-WC
SPILL BUCKET	OPW	5 GALLON	#1SC-2105
DOUBLE-WALL FLEX PIPE	OPW	3/4"	#C075A-250 (SEE NOTE 2)
DOUBLE-WALL FLEX PIPE	OPW	1"	#C075A-250 (SEE NOTE 2)
LINED ACCESS PIPE	OPW	4"	#AXP40-250
RIGID BOOT ASSEMBLY	OPW	4"	#TBA-4175 & #PTA-4175
PIPE JOINING KIT	OPW	4"X1"X1"	#PJK-4175
TEST BOOT	OPW	3/4"	#TBA-0075
TEST BOOT	OPW	1"	#TBA-0100
DROP TUBE	UNIVERSAL	4"	#723-4012
S.S. FLEX	HOSE MASTER.	2"X24"	FSMS-240200
VENT FITTING	OPW	4x4x2	#233-4420
TANK VENT	OPW	2"	#23-0033
TRANSITION SUMP	OPW	24"X40"X39"	#PSTF-4630
ADAPTOR CAP	MORRISON BROS.	2"	#303XPA 2400-AK
ADAPTOR CAP	MORRISON BROS.	4"	#305XPA 1200-AK
MANHOLE	OPW	30" DIA	#6110-30WT
SOLENOID VALVE	-	3/4"	#OPT080-B
STRAINER	HAYWARD	(SEE DWG)	#72 (SINGLE); #53BTX (DUPLEX)
CHECK VALVE	BOSTON VALVE	(SEE DWG)	CHV-4100 SERIES
BELL ADAPTER	AMERON	2"	#22850203
SLEEVE COUPLING	AMERON	2"	#22850707
90 DEG ELBOW	AMERON	2"	#20372108
VENT PIPING	AMERON	2"	#22854386
FILL CONNECTOR	SCULLY FITTING	4"X2"	PER FUEL DELIVERY REQUIREMENTS
ENTRY BOOT	OPW	2"	#EBF-0200F (RIGID PIPE)
ENTRY BOOT	OPW	½" THRU 1"	#EBF-0751 (CONDUIT BOOT)

NOTES:

1. TANK SPECIFICATION: DOUBLE WALL 360° TYPE II, MILD CARBON STEEL, HEADS: ¼"THICK, SHELL: 7 GA. LAP WEL;D CONSTRUCTION. EXTERIOR CORROSION PROTECTION: HIGHLAND GREEN "TITAN" WRAP. 5PSIG INNER TEST; FULL VACUUM OUTER. UL-58 & UL-1746 PART III.
2. ADDITIONAL PRIMARY SYSTEM COMPONENTS ARE NOT LISTED. CONTRACTOR TO PROVIDE ADDITIONAL NECESSARY FITTINGS, COUPLINGS, VALVES, ETC. FOR A COMPLETE PROJECT AT NOT ADDITIONAL COST TO THE OWNER.
3. MATERIAL AND EQUIPMENT QUANTITIES ARE NOT LISTED. CONTRACTOR RESPONSIBLE TO PROVIDE NECESSARY QUANTITIES OF ALL ITEMS FOR A COMPLETE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
4. ADDITIONAL ACCEPTED MANUFACTURERS. SUBSTITUTIONS MUST COMPLY WITH ALL REGULATIONS.
   - 4.1. TANK: GENERAL INDUSTRIES, MODERN WELDING CO.
   - 4.2. FUEL OIL SYSTEM: PREFERRED UTILITIES, BECKETT, OR EQUAL
   - 4.3. VALVES & ACCESSORIES: UNIVERSAL VALVE CO., APOLLO, NIBCO, OR EQUAL



1 TANK LOCATION SITE PART PLAN
SCALE: 1/4" = 1'-0"

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PROFESSIONAL SEAL
STATE OF NEW HAMPSHIRE - MICHAEL A. SHASYK NO. 8913 LICENSED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY	CK'D
1	RELEASED FOR CONSTRUCTION	06-21-2012	RJF	

DEPARTMENT OF ADMINISTRATIVE SERVICES
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CONCORD NH 03302-0483
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GLENCLIFF NH 03238

DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE

NEW DIESEL FUEL OIL TANK PART PLAN

DRAWN BY	DATE
RJF	06-21-2012
CHECKED BY	D&K PROJECT #
RJF	521560
PROJ. ENG.	D&K ARCHIVE #
MAS	521560

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SHEET 10 OF 13

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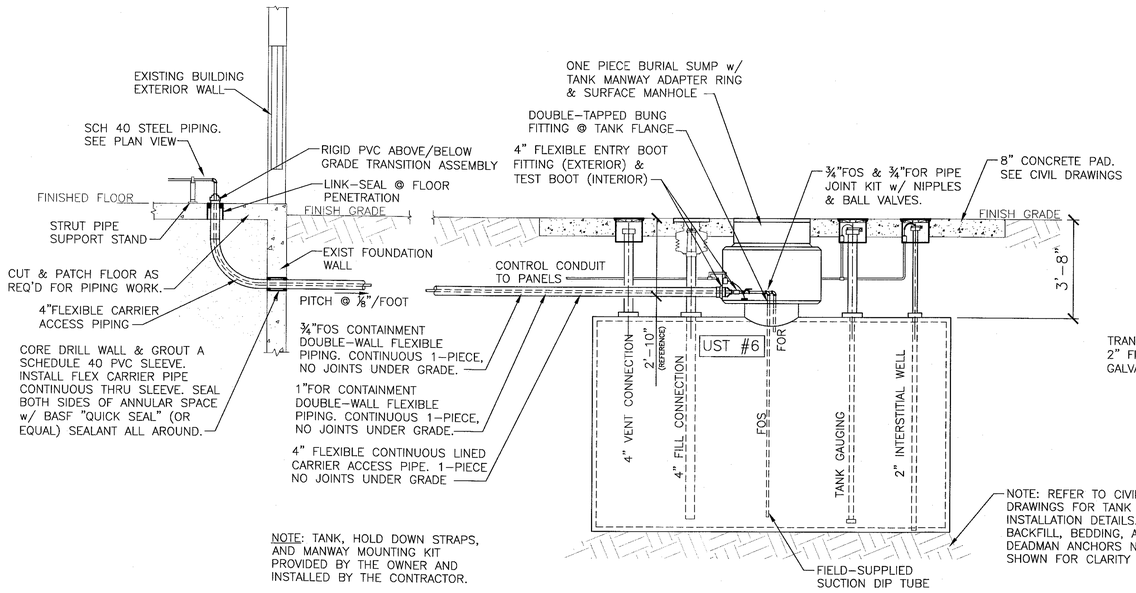
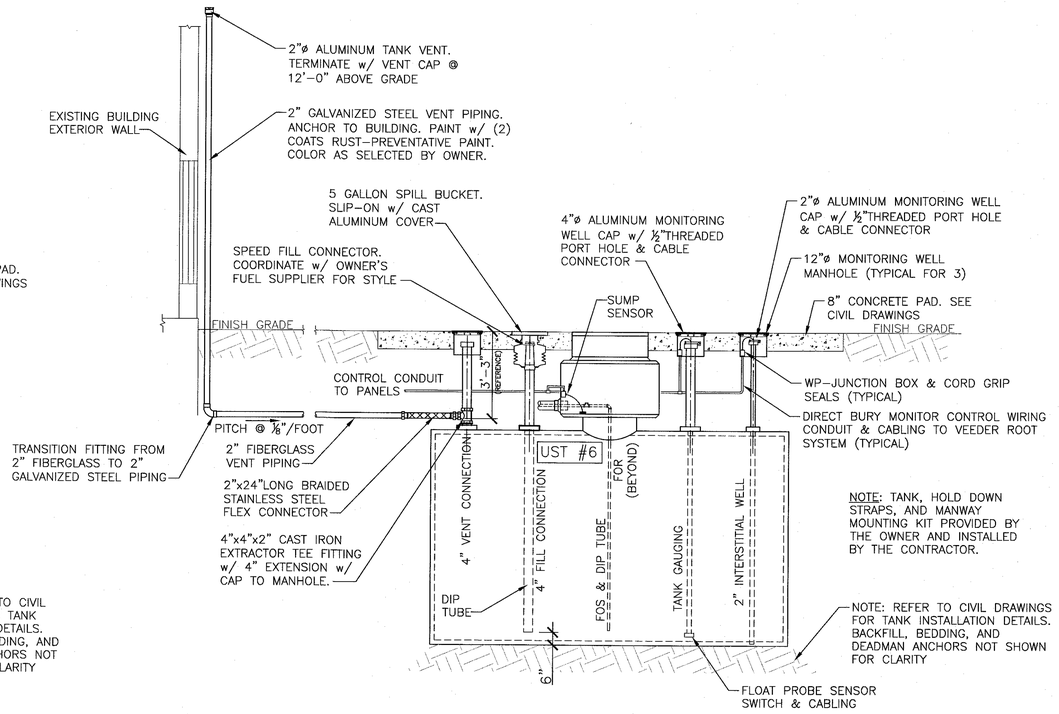
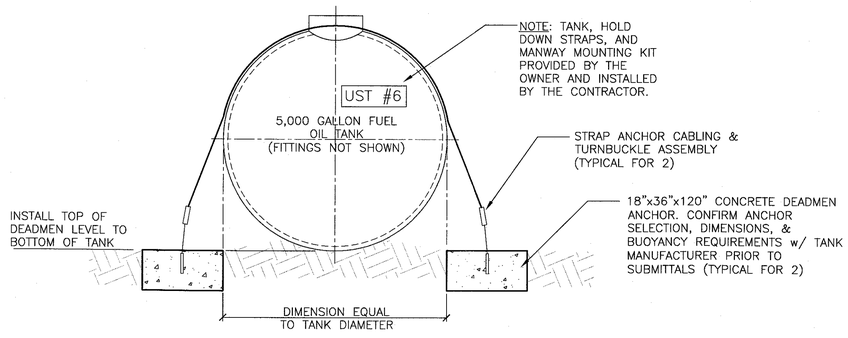


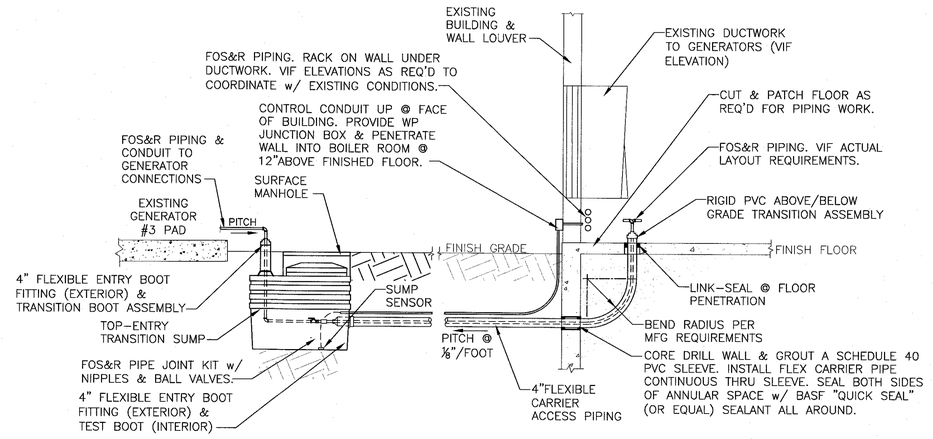
1 TANK PIPING DETAILS – FUEL OIL PIPING
SCALE: 3/8" = 1'-0"



2 TANK PIPING DETAILS – VENT, FILL, & MONITORING
SCALE: 3/8" = 1'-0"



3 TANK PIPING DETAILS – FUEL OIL PIPING
SCALE: 3/8" = 1'-0"



4 TANK PIPING DETAILS @ EXTERIOR GENERATOR
SCALE: 3/8" = 1'-0"

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PROJECT #80655
CONTRACT B

SHEET TITLE

DIESEL FUEL TANK PIPING DETAILS

DRAWN BY	DATE
RJF	06-21-2012
CHECKED BY	D&K PROJECT #
RJF	521560
PROJ. ENG.	D&K ARCHIVE #
MAS	521560

SHEET NUMBER

M2.2

SHEET 11 OF 13

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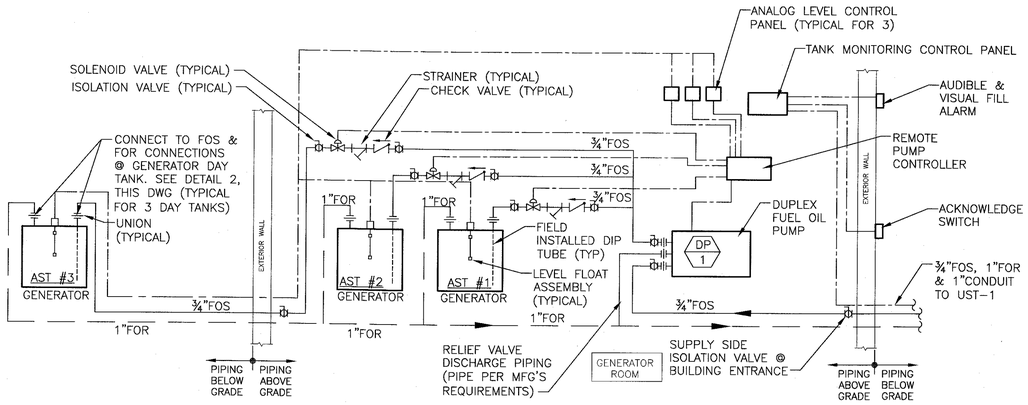
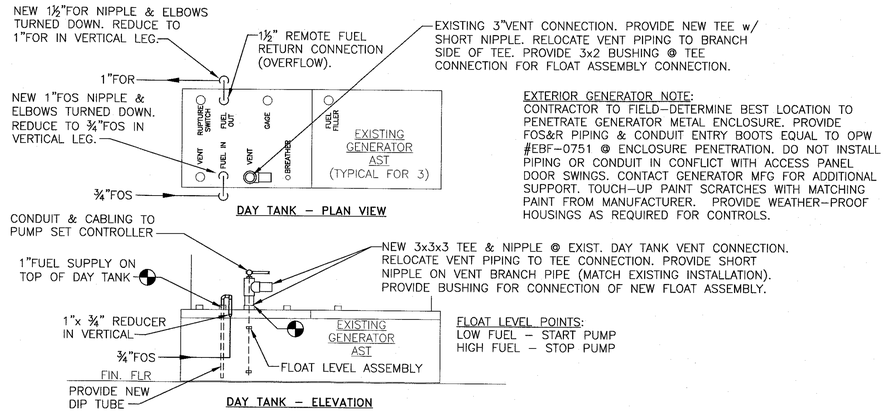


1 TANK PIPING SCHEMATIC
NOT TO SCALE



2 DAY TANK PIPING SCHEMATIC
NOT TO SCALE TYPICAL FOR (3) DAY TANKS

TANK MONITORING SYSTEM

VEEDER-ROOT #TLS-300C TANK MONITORING SYSTEM #848590-521 CONFIGURABLE CONSOLE w/ INTEGRAL PRINTER AND:
- STATIC IN-TANK SOFTWARE ENHANCEMENT MODULE, #846390-107
- MAG-PLUS PROBE w/ INSTALLATION KIT & FLOAT
- EXTERIOR WALL-MOUNTED AUDIBLE/VISUAL OVERFILL ALARM w/ ACKNOWLEDGMENT SWITCH
- SUMP SENSORS
- INTERFACE MODULES (AS REQUIRED)

IN-TANK ALARM ACTIVATIONS:
- LEAK
- OVERFILL
- LOW PRODUCT
- SUDDEN LOSS
- HIGH WATER
- DELIVERY REQUIRED
- TANK TEST

INTERSTITIAL & SUMP ALARM ACTIVATIONS:
- LOW LIQUID
- HIGH LIQUID

INSTALLING CONTRACTOR MUST COMPLY WITH VEEDER-ROOT'S CONTRACTOR CERTIFICATION MINIMUM REQUIREMENTS FOR INSTALLATION AND PROGRAMMING. PROVIDE ADDITIONAL MONITORING DEVICES FOR COMPLIANCE WITH NHDES REGULATIONS.

CONTRACTOR TO WALL-MOUNT UNIT AND WIRE TO ALL MONITORING POINTS PER MANUFACTURER'S INSTRUCTIONS.

FURNISH AND INSTALL REQUIRED POWER REQUIREMENTS FROM LOCAL PANEL TO MONITORING SYSTEM. SEE ELECTRICAL DRAWING.

CONTRACTOR TO TEST ALL EQUIPMENT AND SUBMIT RESULTS OF THE TEST TO NHDES (ENV-WM 1401.28.AF).

DUPLEX FUEL OIL PUMP SCHEDULE

SYMBOL DP #	MANUFACTURER AND MODEL NUMBER	SERVICE	PUMP TYPE	GPM	HEAD (PSI)	MOTOR HP	MOTOR RPM	MOTOR VOLTS/ø	LOCATION	REMARKS
DP-1	SIMPLEX INC SPS-25-ED	GENERATOR FUEL SUPPLY	DIRECT DRIVE	17	50	⅓	1725	208/3	GENERATOR ROOM	ALL NOTES

NOTES

PROVIDE THE PUMP PACKAGE COMPLETE WITH THE FOLLOWING COMPONENTS:

1. FULLY ENCLOSED FREE STANDING ENCLOSURE
2. REMOTE CONTROL PANELS AND ELECTRICAL COMPARTMENT
3. DRIP PAN CONTAINMENT ENCLOSURE w/ LEAK DETECTION
4. FACTORY STARTER AND INTERLOCKED DOOR-MOUNTED DISCONNECT SWITCH
5. PRESSURE RELIEF VALVES AT EACH PUMP SET AT 60PSI (ADJUSTABLE)
6. EACH PUMP: ISOLATION VALVES, CHECK VALVE, CANISTER-TYPE STRAINER
7. (1) ANTI-SIPHON VALVE – FIELD INSTALLATION REQUIRED
8. PUMP CONNECTIONS: 1"NPT
9. FACTORY (2) YEAR WARRANTY

10. PROVIDE WITH (3) SIMPLEX ANALOG MULTI-FUNCTION LIQUID LEVEL CONTROLLERS FOR DUPLEX PUMP CONTROL. SIMPLEX #SST-LC345
10.1. PROVIDE (1) CONTROL PANEL PER DAY TANK.
10.1. DUPLEX PUMP CONTROLLER – TANK FILL CONTROL WITH AUTOMATIC ALTERNATING LEAD/LAG PUMP CONTROL.
10.2. PROVIDE WITH SIMPLEX LC300 TANK LEVEL CONTROL 2-POINT FLOAT ASSEMBLY (1 PER DAY TANK).
10.3. REQUIRED FLOAT SIGNALS:
PUMP START – LOW FUEL LEVEL
PUMP STOP – HIGH FUEL LEVEL

11. CONTRACTOR TO WALL-MOUNT PANELS AND WIRE TO EACH FLOAT ASSEMBLY PER MANUFACTURER'S INSTRUCTIONS.

12. FURNISH AND INSTALL REQUIRED POWER REQUIREMENTS FROM LOCAL PANEL TO CONTROLLERS. SEE ELECTRICAL DRAWING.

13. CONFIRM ELECTRICAL CHARACTERISTICS WITH THE EXISTING BUILDING SERVICES PRIOR TO SUBMITTALS.

14. PROVIDE ALL NECESSARY CONDUIT & CABLING BETWEEN REMOTE PANELS, PUMP ENCLOSURE, FLOATS, ETC AS REQUIRED.

15. INSTALL ALL ITEMS PER MANUFACTURER'S INSTALLATION GUIDELINES AND REQUIREMENTS.

16. PROVIDE WITH FACTORY CHECK, TEST, AND START-UP SERVICE.

SEQUENCE NOTES:
PUMP ENERGIZE: FLOAT LOW LEVEL POINT SIGNALS: (1) SOLENOID TO OPEN; AND (2) PUMP TO ENERGIZE
PUMP DE-ENERGIZE:FLOAT HIGH LEVEL POINT SIGNALS (1) PUMP TO DE-ENERGIZE; AND (2) SOLENOID TO CLOSE.
PUMP/SOLENOID/FLOAT ASSEMBLIES ARE INDEPENDENT OF THE EXISTING CAT DIESEL GENERATOR LEVEL CONTROLS AND ALARM SYSTEMS.

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DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE
DIESEL FUEL TANK PIPING SCHEMATIC & SCHEDULES

DRAWN BY	DATE
RJF	06-21-2012
CHECKED BY	D&K PROJECT #
RJF	521560
PROJ. ENG.	D&K ARCHIVE #
MAS	521560

SHEET NUMBER
M2.3

SHEET 12 OF 13

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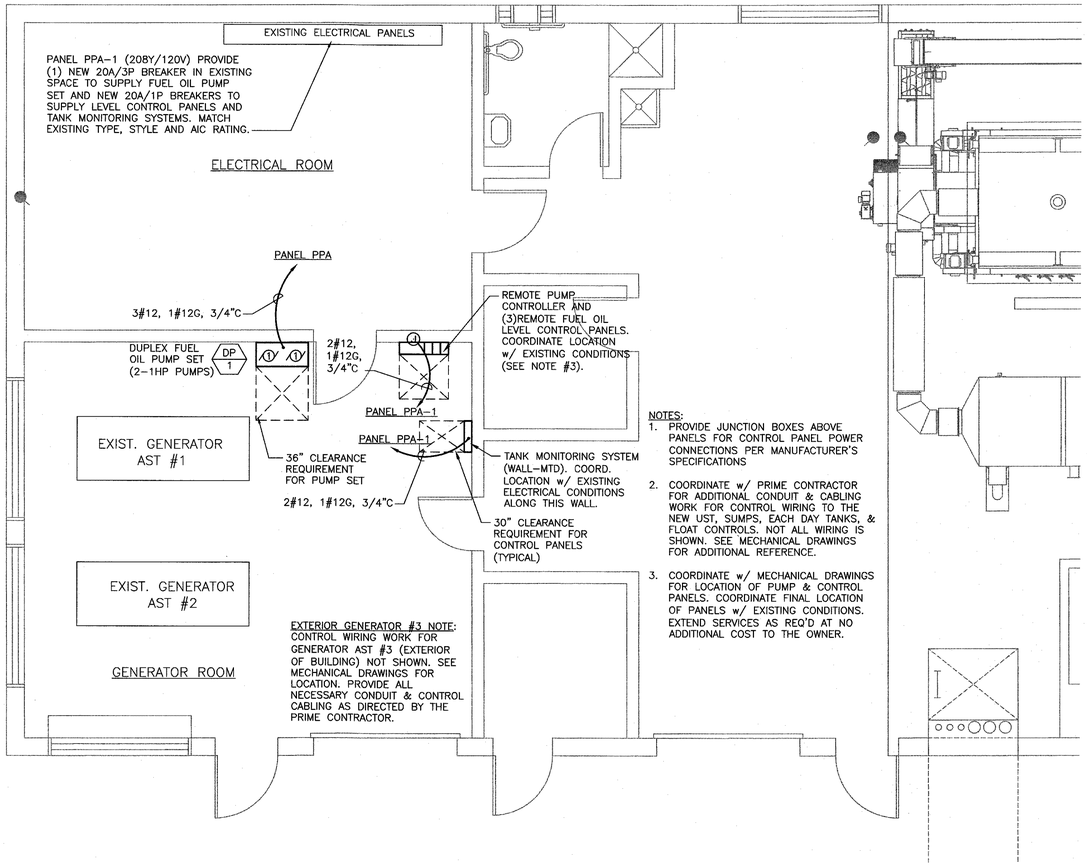
ELECTRICAL GENERAL NOTES:

1. FURNISH ALL LABOR, MATERIALS, TOOLS, ACCESSORIES, ETC. REQUIRED FOR A COMPLETE WORKING ELECTRICAL SYSTEM.
2. ALL WORK IS PERFORMED BY A STATE OF NEW HAMPSHIRE LICENSED ELECTRICAL CONTRACTOR.
3. ALL ELECTRICAL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, COUNTY AND LOCAL CODES AND ORDINANCES, AS WELL AS ALL CURRENT STANDARDS, CODES AND PRACTICES AS REQUIRED BY NEC, NEMA, ANSI, NFPA, UBC, UL, IEEE AND UTILITY COMPANY STANDARDS.
4. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. ALL EQUIPMENT, MATERIALS AND WORK SHOWN IS NEW UNLESS SPECIFICALLY NOTED AS EXISTING OR NOTED OTHERWISE ON OTHER SHEETS.
6. ALL LIGHTING AND POWER WIRING SHALL BE MC CABLE EXCEPT FOR FEEDERS TO PANELS WHICH SHALL BE IN CONDUIT. ALL RACEWAYS SHALL BE EMT (ELECTRICAL METALLIC TUBING). . REFER TO PANEL SCHEDULES, TYPICAL. ALL CONDUCTORS SHALL BE COPPER, WIRE SIZE NO. 8 AWG AND SMALLER BE TYPE THHN/THWN INSULATION. SIZES LARGER THEN NO. 8 SHALL HAVE TYPE "THHN/THWN" INSULATION UNLESS OTHERWISE NOTES. ALL WIRING SHALL BE STRANDED.
7. LIMIT 20A, 120V BRANCH CIRCUITS TO A MAXIMUM 1920VA LOAD AND 15A, 120V BRANCH CIRCUIT TO A MAXIMUM 1440VA LOAD.
8. CONDUITS, RACEWAYS AND CABLES SHALL BE PROPERLY AND SECURELY ATTACHED TO BUILDING STRUCTURAL COMPONENTS AS REQUIRED BY NEC ALL FASTENERS AND HARDWARE SHALL BE APPROVED FOR THE INSTALLATION AND THE CONDITIONS ENCOUNTERED.
9. EACH OUTLET OR JUNCTION IN ANY OF THE WIRING SYSTEMS SHALL BE MADE IN AN APPROVED, METALLIC JUNCTION BOX. SUCH BOX SHALL BE SUITABLE FOR THE SIZE AND NUMBER OF CONDUCTORS AND DEVICES TO BE INSTALLED, AS WELL AS THE CONDITION ENCOUNTERED. ALL SPLICES SHALL BE MADE WITH APPROVED, ELECTRICAL CONNECTORS.
10. VERIFY ALL STRUCTURAL, ARCHITECTURAL AND ELECTRICAL CONDITIONS (DUCT CLEARANCES, COUNTER HEIGHTS, DOOR SWINGS, ETC.) PRIOR TO ROUGH IN FOR ELECTRICAL WIRING EQUIPMENT.
11. DUE TO THE REQUIREMENTS TO INTERFACE WITH EXISTING FACILITIES AND UTILITIES, IT IS MANDATORY THAT THE CONTRACTOR VISIT THE SITE TO DETERMINE EXISTING CONDITIONS PRIOR TO BID.
12. PRIOR TO PURCHASE OF ANY PROTECTIVE DEVICES, SWITCH, STARTER, CONDUIT, WIRE, ETC., TO FEED ANY PIECE OF OPERATING EQUIPMENT VERIFY THE VOLTAGE, PHASE, & LOAD OF THAT ITEM IN THE FIELD AND/OR WITH THE PARTICULAR ENTITY INVOLVED IN FURNISHING THE ITEM SUCH THAT THE PROPER SIZE & RATING OF THE MATERIALS ARE PURCHASED. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO COMPLY. THIS APPLIES TO ALL EQUIPMENT UNDER OTHER SECTIONS & BY THE OWNER.
13. ALL ELECTRICAL WORK SHALL BE CAREFULLY COORDINATED WITH THE WORK OF OTHER TRADES AND ON-SITE CONDITIONS. WHERE CUTTING, DRILLING OR ALTERATION TO THE WORK OF OTHERS IS NECESSARY, FOR THE PROPER INSTALLATION OF ELECTRICAL EQUIPMENT, SUCH WORK SHALL BE PLANNED IN ADVANCE WITH THE GENERAL CONTRACTOR AND SHALL BE CAREFULLY DONE. ANY DAMAGE TO THE BUILDINGS OR EQUIPMENT SHALL BE REPAIRED BY PROPERLY TRAINED PERSONNEL, TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER.
14. DURING ROUGH IN AND FINISHED STAGES OF CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND KEEP CLEAN ALL ELECTRICAL EQUIPMENT, PANELS, FIXTURES AND DEVICES.
15. THE CONTRACTOR SHALL PROVIDE ALL INFORMATION ABOUT EQUIPMENT WHICH IS BEING FURNISHED TO THE GENERAL CONTRACTOR FOR COORDINATION PURPOSES. THE CONTRACTOR SHALL PROVIDE ALL INSTALLATION DETAILS AND SUPPORT COMPONENTS TO THE GENERAL CONTRACTOR SO THAT THESE MAY BE BUILT INTO THE CONSTRUCTION IN A TIMELY MANNER.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE FINAL LOCATIONS OF ELECTRICAL, HVAC AND OWNER'S EQUIPMENT AND POWER CONNECTION DETAILS SO THAT THE ASSOCIATED ELECTRICAL WORK WILL BE PROPERLY COORDINATED AND INSTALLED.
17. APPEARANCE AND WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND STANDARDS
18. UPDATE ALL PANEL BOARD CIRCUIT DIRECTORY CARDS TO REFLECT AS-BUILT CONDITIONS.
19. ELECTRICAL CONTRACTOR SHALL GUARANTEE THE ELECTRICAL WORK TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER.
20. VERIFY THE EXACT LOCATION AND ELEVATION OF ALL ELECTRICAL EQUIPMENT PRIOR TO ROUGH-IN. FINAL CONNECTIONS OF EQUIPMENT SHALL BE PER MANUFACTURERS APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
21. ORDER AND/OR RELEASE ORDERED MATERIALS PROMPTLY AFTER SUBMITTAL APPROVAL. NO SUBSTITUTIONS OR ALTERNATE METHODS OF INSTALLATION WILL BE ACCEPTED FOR FAILURE TO ORDER MATERIALS IN A TIMELY FASHION.
22. OBTAIN WRITTEN ACCEPTANCE FROM THE ENGINEER OF ALL SHOP DRAWINGS AND MANUFACTURERS DATA FOR EQUIPMENT, ETC. BEFORE RELEASING ORDERED MATERIALS. SUBMITTAL DATA SHALL INDICATE THAT THE CONTRACTOR HAS REVIEWED THE INFORMATION THEREIN AND THAT THE PROPOSED EQUIPMENT WILL MEET THE PHYSICAL CONSTRAINTS AT THE JOB SITE.
23. CONDUIT / CONDUCTOR ROUTES SHOWN ARE DIAGRAMMATICAL ONLY. THE BEST FINAL CONDUIT ROUTING SHALL BE AS DETERMINED BY THE CONTRACTOR AT TIME OF CONSTRUCTION AND FULLY COORDINATED IN THE FIELD.
24. ELECTRICAL INSTALLATION CONTRACTOR SHALL CLEARLY IDENTIFY ALL INCOMING CONDUCTORS BY CIRCUIT NUMBER DURING INSTALLATION IN THE DISTRIBUTION PANELS (E.G. CABLE MARKERS #1, #11 ETC).
25. ALL WIRE SHALL BE COPPER.
26. DUE TO THE OPERATIONS WITHIN THIS FACILITY, CONTRACTOR IS REQUIRED TO SCHEDULE ANY AND ALL SHUT-DOWNS OF EQUIPMENT WITH THE OWNER A MINIMUM OF 14 CALENDAR DAYS IN ADVANCE. ALL REQUESTS FOR SCHEDULED SHUT-DOWNS MUST BE WRITING AND APPROVED BY THE OWNER.
27. PROVIDE ADDITIONAL CIRCUITS, JUNCTION BOXES, AND TRANSFORMERS AS REQUIRED FOR PUMP, MONITORING, OR ALARM OPERATION WORK. COORDINATE WITH PRIME CONTRACTOR FOR REQUIREMENTS.
28. PROVIDE RECORD DRAWINGS TO THE PRIME CONTRACTOR AT THE COMPLETION OF THE PROJECT.



1 ELECTRICAL PART PLAN
SCALE: 1/4" = 1'-0"

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DEMOLITION OF (3) AST's & INSTALL 5,000 GALLON DIESEL UST

PROJECT #80655
CONTRACT B

SHEET TITLE
ELECTRICAL PART PLAN & GENERAL NOTES

DRAWN BY	DATE
EJD	06-21-2012
CHECKED BY	D&K PROJECT #
RFK	521560
PROJ. ENG.	D&K ARCHIVE #
WHH	521560

SHEET NUMBER
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SHEET 13 OF 13