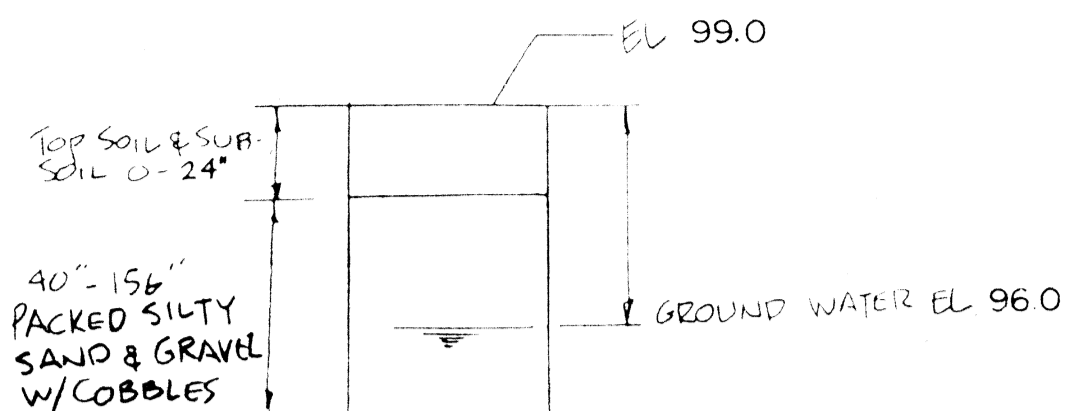


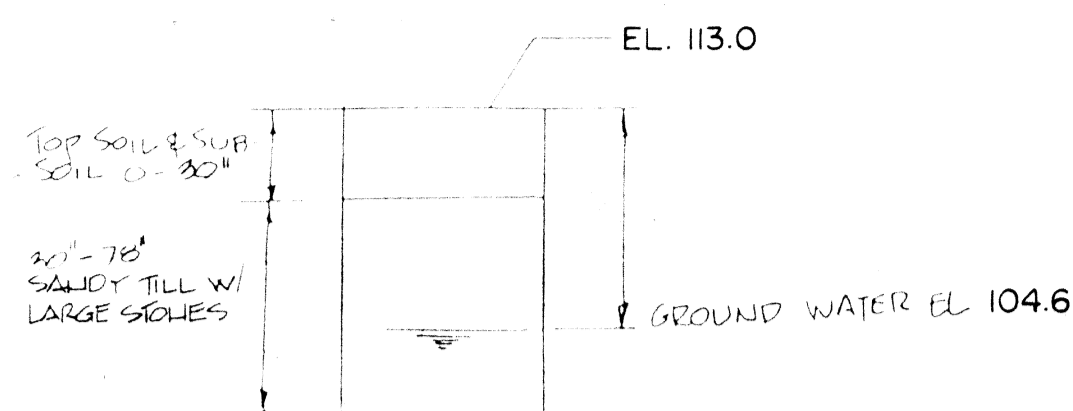
TEST PIT 94-14



WATER TABLE DATA

DATE DUG 2/3/94
 DATE READ 2/10/94
 WT. DEPTH 36"
 PERC RATE 3 MPI (USE 5 MPI)
 PERC DEPTH 32" TO 50"
 WITNESS: H. CHENEVERT, JR.

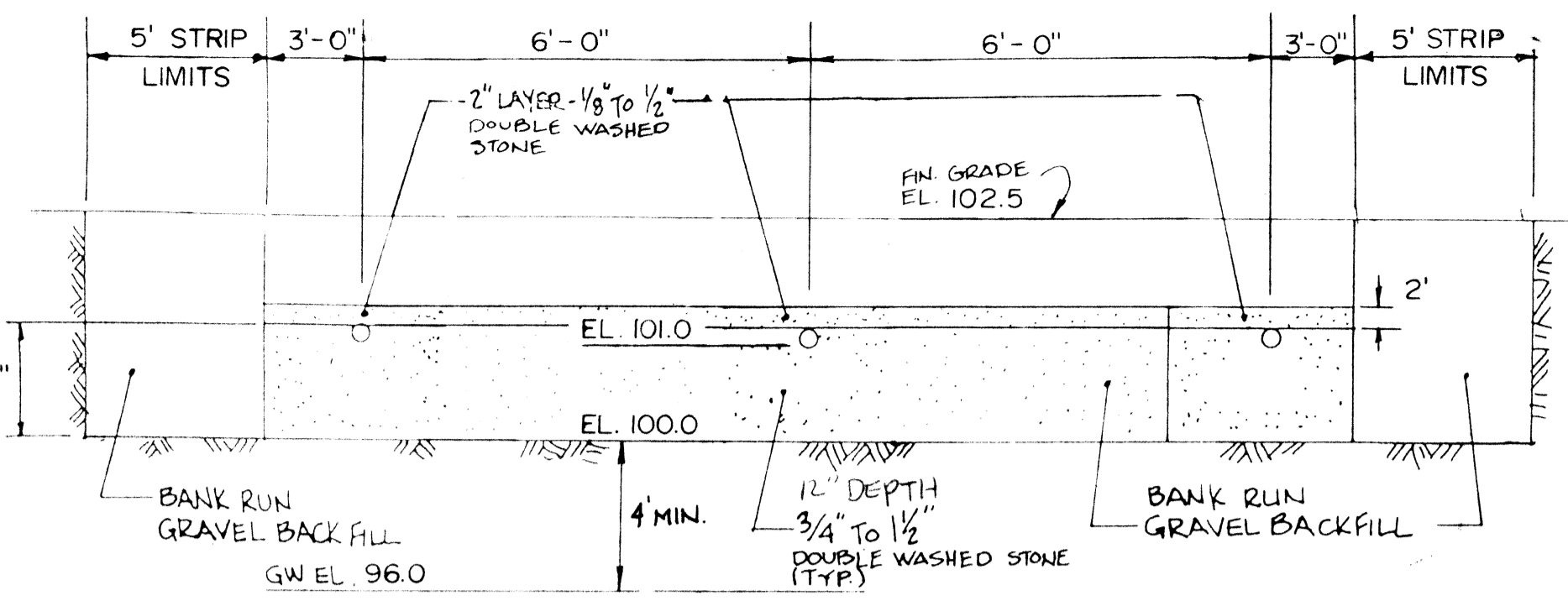
TEST PIT 11A



WATER TABLE DATA

DATE DUG 2/3/94
 DATE READ 2/10/94
 WT. DEPTH 1.00"
 *PERC RATE NON
 PERC DEPTH NONE
 WITNESS: H. CHENEVERT, JR.

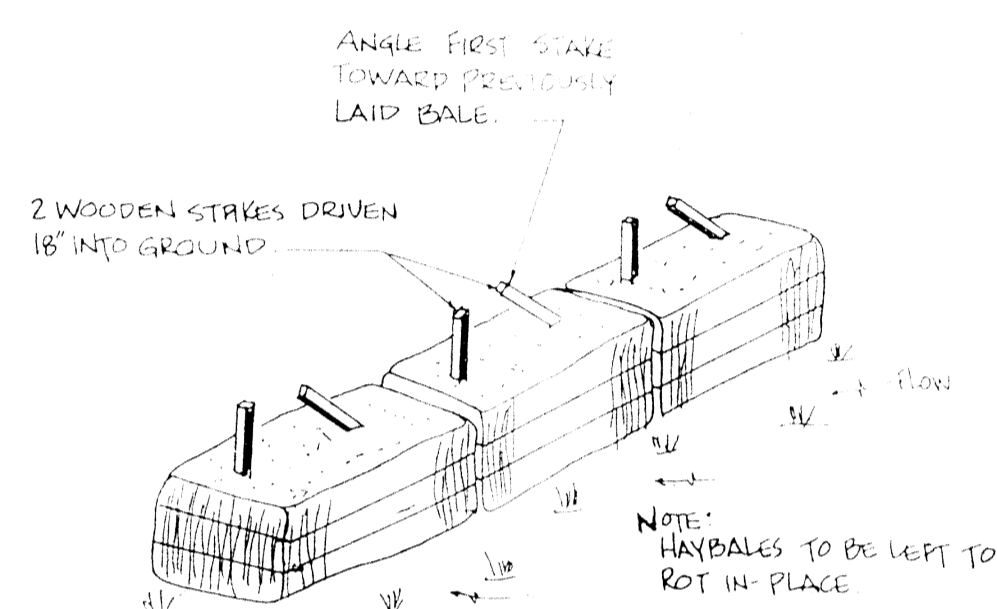
*USED FOR GROUNDWATER LEVEL DETERMINATION PURPOSES TO SET BUILDING FOUNDATION



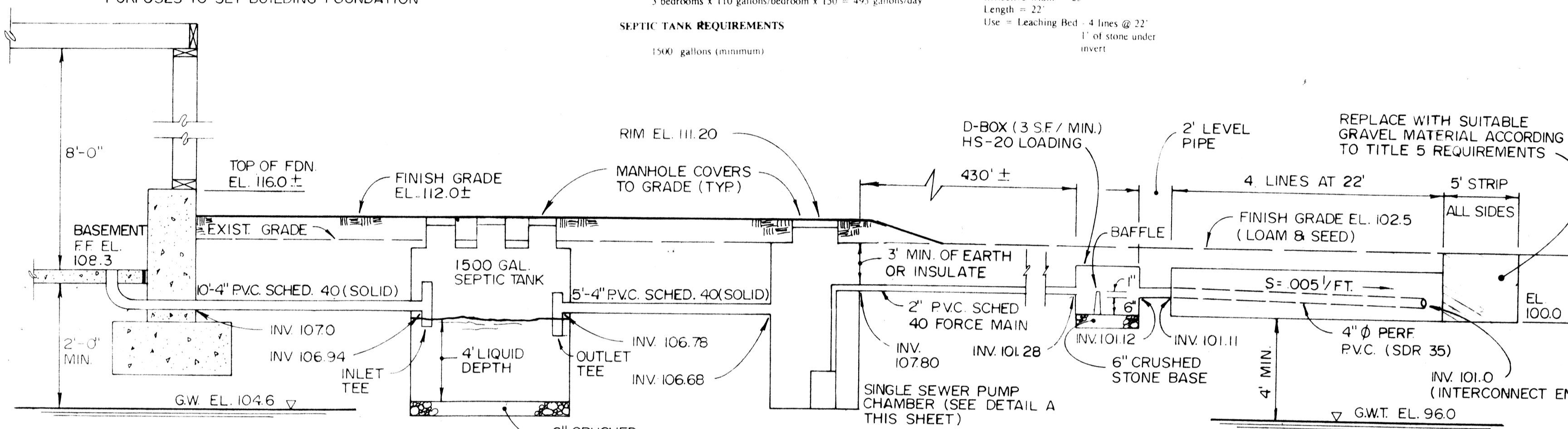
LEACHING BED SECTION
N.T.S.

DESIGN DATA
 DAILY SEWAGE FLOW
 3 bedrooms x 110 gallons/bedroom x 150 = 495 gallons/day
 SEPTIC TANK REQUIREMENTS
 1500 gallons (minimum)

LEACHING AREA REQUIREMENTS
 Class I soil, 74 GPD/SF
 495 GPD x 1.74 GPD/SF = 670 SF
 Effective width = 25'
 Length = 22'
 Use = Leaching Bed - 4 lines @ 22'
 1" of stone under invert

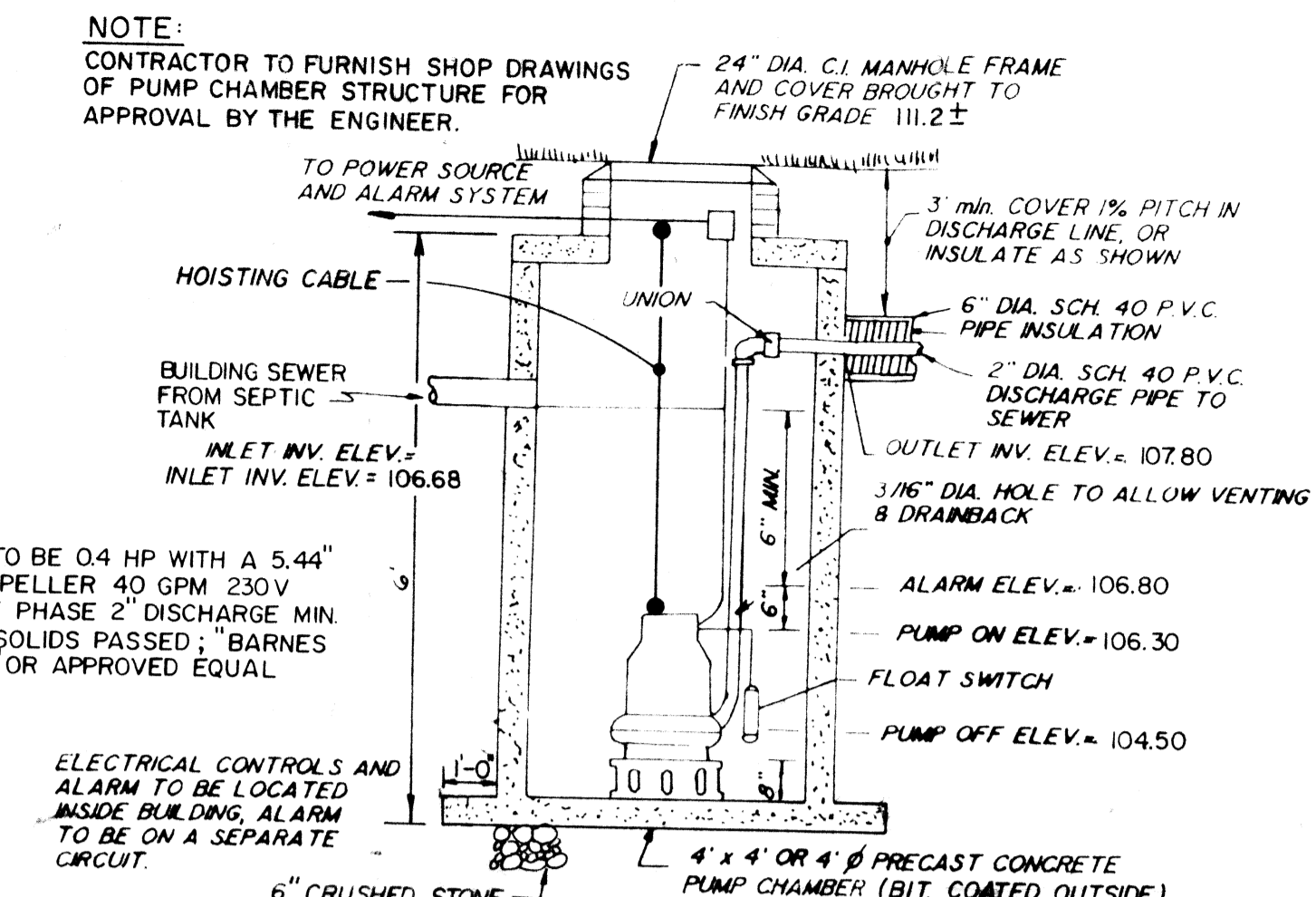


HAY BALE EROSION CHECK
(NOT TO SCALE)



SYSTEM PROFILE
N.T.S.

NOTE:
 NO BUOYANCY COMPENSATION REQUIRED FOR SYSTEM COMPONENT STRUCTURES

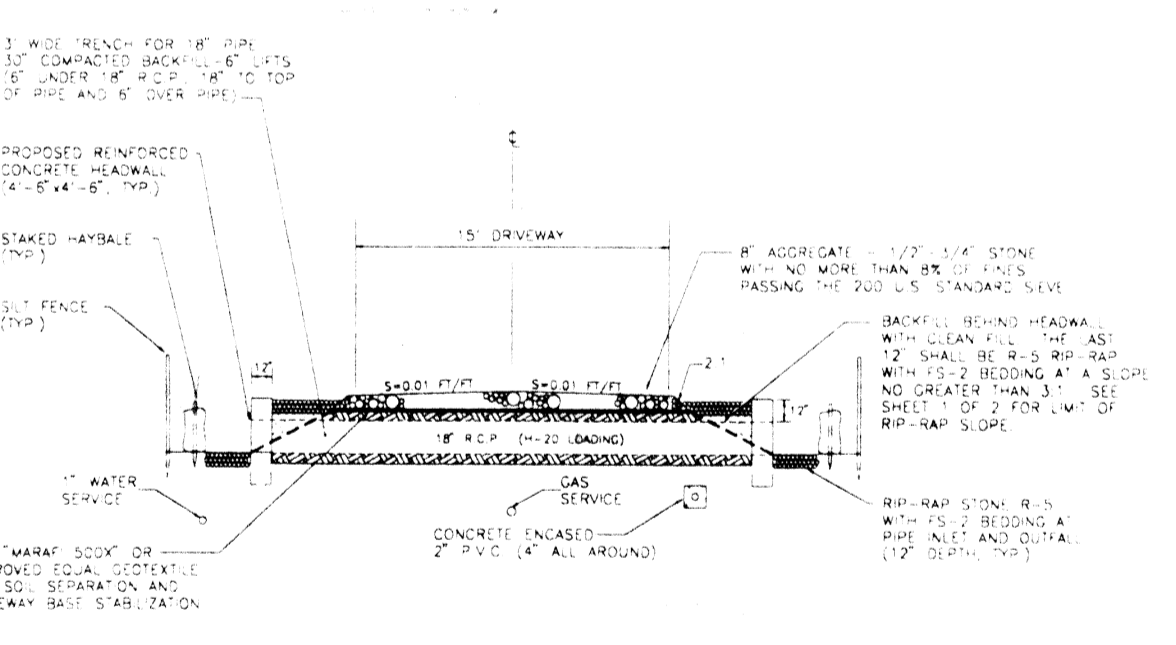


DETAIL A
SINGLE SEWAGE PUMP CHAMBER
N.T.S.

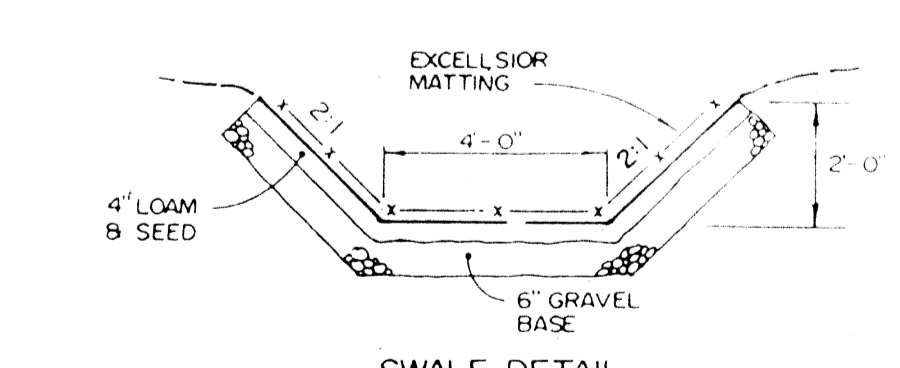
NOTE:
 CONTRACTOR TO FURNISH SHOP DRAWINGS OF PUMP CHAMBER STRUCTURE FOR APPROVAL BY THE ENGINEER.

PUMP TO BE 0.4 HP WITH A 5.44" DIA. IMPELLER 40 GPM 230V SINGLE PHASE 2" DISCHARGE MIN. 1 1/4" SOLIDS PASSED, BARNES SE421 OR APPROVED EQUAL

ELECTRICAL CONTROLS AND ALARM TO BE LOCATED INSIDE BUILDING, ALARM TO BE ON A SEPARATE CIRCUIT.



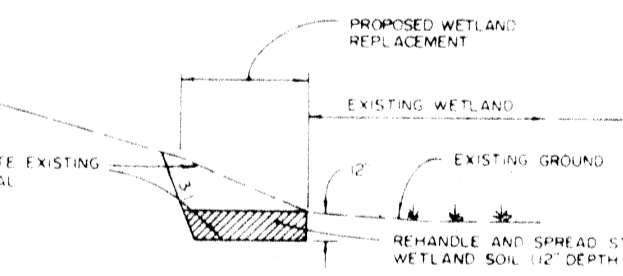
DRIVEWAY SECTION "A-A"
N.T.S.



SWALE DETAIL
N.T.S.

- NOTES:
- All work shall conform to the 310 CM 15.00 State Environmental Code Title 5 "Rules and Regulations" and the "Rules and Regulations" of the local Board of Health.
 - Strip all top soil, sub-soil and any other impervious soil in the area of the system and 5' beyond in all directions where required.
 - All piping to be 4" PVC sched. 40 unless otherwise noted.
 - The cellar floor elevation shown has been set as a minimum based upon observed groundwater conditions. Since groundwater levels fluctuate annually, no warranty of a dry cellar is expressed or implied.
 - If conditions encountered during construction differ substantially from those shown on the plan, the contractor shall notify SCE Corporation before proceeding with construction.
 - No domestic garbage grinder is allowed for this system.
 - Top of foundation elevation set at 116.0' based on assumed groundwater table elevation or 104.6' of the building site.
 - Inlet and outlet tees shall be 4" PVC sched. 40.
 - There is public water supply in this area.
 - All components for pump chamber including pump floats, alarms, contractors, level controls shall be as manufactured by "Barnes" or approved equal.
 - No thrust blocks are needed for the sewer force main.

- EROSION CONTROL NOTES:
- All erosion prone soils and areas exposed for extended periods of time shall be protected with a spread hay mulch and sown netting (or excruciating matting or equal).
 - Prior to the completion of the project, all disturbed areas, unless specified otherwise on plan, shall be treated with plantable soil and permanently stabilized through the application of an appropriate seed mix.
 - All temporary soil stockpiles shall be protected with a continuous row of staked haybales. If they are to be left exposed for long periods of time, they shall also be covered with a spread hay mulch and sown netting.
 - Stockpiles shall be placed in an appropriate upland location, outside all regulated wetland areas.



WETLAND REPLACEMENT DETAIL
N.T.S.

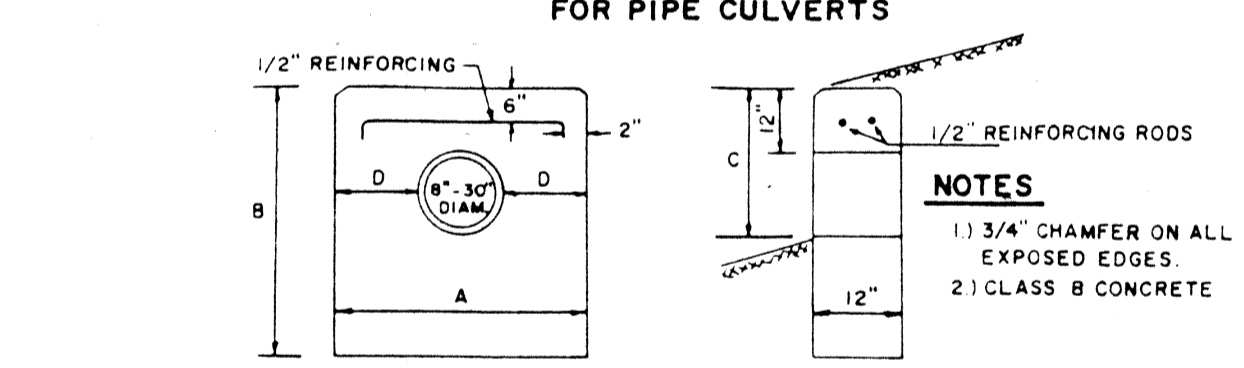
- NOTES FOR CONSTRUCTION OF WETLAND REPLACEMENT AREA:
- Soils in the adjacent wetland shall be removed to an elevation of 2" below that of the adjacent wetland. Care shall be exercised to ensure that the maximum amount of existing vegetation within the surrounding area is safeguarded and that the existing depth of the water table is preserved.
 - Wetland soils excavated from the adjacent wetland area shall be placed in the construction area and spread evenly to an area from the adjacent wetland and not available for additional use. If hydraulic soils are required, wetland soils shall be created by mixing loam with good humus to meet the need.
 - Wetland trees and shrubs shall be planted in the replacement area as indicated on the plan. Wetland species to be used include Swamp Red Maple, 4' to 6' high, 8" to 10" DBH; American Hornbeam, 2' to 3' high, 8" to 10" DBH; American Corymbosum, and wintergreen. No high water table vegetation shall be planted. No unauthorized substitutions shall be permitted. A minimum of 100 plants per acre shall be planted in each replacement area. The remaining space shall be planted in each replacement area with a mixture of seed canopy grass and annual ryegrass. If available, the seed canopy grass will be planted using rootstocks.
 - All planted areas will be covered with a 3" layer of mulch within 72 hours after planting. The entire replacement area shall be mulched with straw to appropriate depth to reduce soil erosion and preserve the moisture content of the soil.
 - If conditions warrant, the replacement area shall be watered within 48 hours after planting. At each watering, the soil shall be thoroughly saturated around each plant. The soil replace plants are established. The area shall be watered periodically during the dry season to promote survival and growth of the new vegetation.
 - All plant species of the replacement area shall be re-established with a diverse wetland plant species within two growing seasons. If the re-establishment of wetland plant species has not occurred within two growing seasons, further plantings will be initiated.

- LEGEND
- Proposed Utility Pole
 - Existing Utility Pole
 - Proposed Property Line
 - Existing Property Line
 - Proposed Catch basin
 - Existing Catch basin
 - Proposed Waterline
 - Existing Waterline
 - Proposed Contour
 - Existing Contour
 - Proposed Spot Grade
 - Existing Spot Grade
 - Proposed Hay bale line (limit of disturbance)
 - Existing Hay bale line (limit of disturbance)
 - Proposed Sanitary Force Main
 - Existing Sanitary Force Main
 - Proposed Silt Fence
 - Existing Silt Fence
 - Test Pit
 - Perc Test & Groundwater Observation Pipe
 - Proposed Tree Line and Permanent Limit of Disturbance (Northern White Cedar, 4'-5' High)
 - Wetland Flag
 - Grade to Drain

I hereby certify that I have contacted all abutters to this property and there are no wells within 200' of the proposed septic system except as shown.

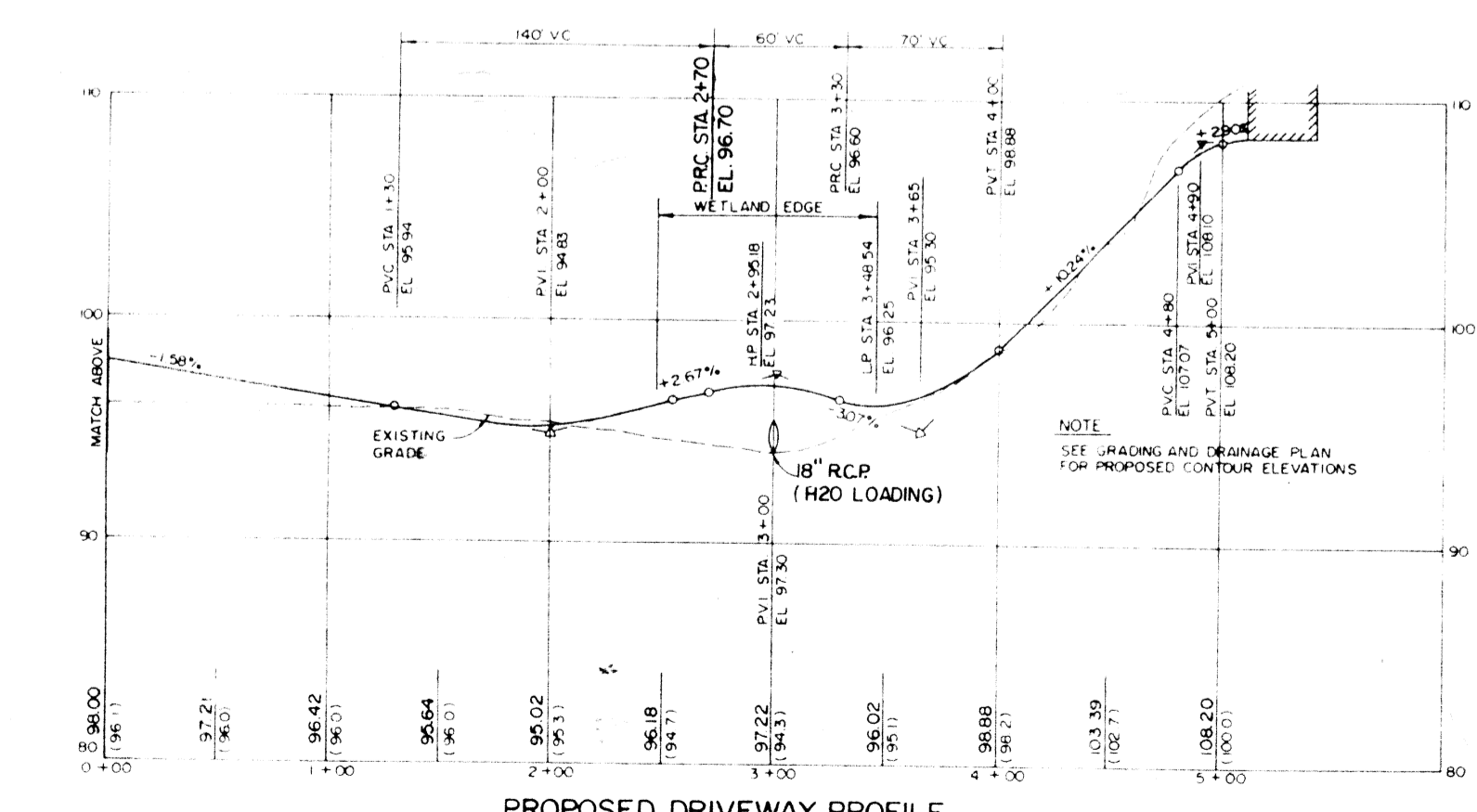
Michael P. Sousa
 Michael P. Sousa

CONCRETE HEADWALLS FOR PIPE CULVERTS



NOTES:
 1) 3/4" CHAMFER ON ALL EXPOSED EDGES.
 2) CLASS B CONCRETE

SPAN OF PIPE	A	B	C	D	E	LENGTH OF HEADWALL	WEIGHT OF CONCRETE	COST PER CU. YD.
12"	3'-0"	4'-0"	2'-2"	1'-0"	2'-8"	3.56	11.22	
18"	3'-9"	4'-3"	2'-5"	1'-3"	3'-6"	4.56	14.71	
24"	4'-6"	4'-6"	2'-8"	1'-6"	4'-2"	5.56	18.49	
24"	6'-0"	5'-0"	3'-2"	1'-9"	4'-11"	6.56	22.68	
27"	6'-9"	5'-3"	3'-2"	2'-0"	6'-5"	7.56	26.86	
30"	7'-6"	5'-6"	3'-9"	2'-6"	7'-2"	9.56	36.64	



PROPOSED DRIVEWAY PROFILE
SCALE: HORIZONTAL 1"=60' VERTICAL 1"=8'

300 Eddy Street
 Providence, RI 02903
 Tel: (401) 453-1800
 Fax: (401) 453-1811

SCE CORPORATION
 ENGINEERS DESIGNERS MANAGEMENT CONSULTANTS

PROJECT
 WINDHAM SHIRE DEVELOPMENT
 PROPOSED LOT 12
 COUNTY STREET SEEKONK, MA.

CLIENT
 BRIGHAM SHIRE LTD.
 1375 WAMPANOAG TRAIL
 EAST PROVIDENCE, R.I.

DRAWING TITLE
 TYPICAL SECTION, DETAILS
 & NOTES

REVISIONS
 PUMP CHART

DATE
 11/13/94

PROJECT NO:
 DATE: 5/10/95
 SCALE: AS SHOWN
 DRAWN BY:
 CHECKED BY: LL
 DRAWING NUMBER
 ISDS-2
 SHEET 2 OF 2