



LEGEND

- 104 — PROPERTY LINE
- 104 — EXISTING CONTOUR
- 104 — PROPOSED CONTOUR
- OHP — EXISTING OVERHEAD UTILITIES
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- W — PROPOSED WATER LINE
- G — PROPOSED GAS LINE
- UGE/T — PROPOSED UNDERGROUND POWER/TELECOMM
- X — X — X — PROPOSED FENCE
- TP-1 — LOCATION OF TEST PIT/PERC TEST
- 99.76 X — EXISTING SPOT ELEVATION
- QFH — EXISTING FIRE HYDRANT
- UP-O — EXISTING UTILITY POLE
- CB — EXISTING CATCH BASIN
- BH — BULKHEAD
- 101.50 — PROPOSED SPOT GRADE SHOWING NATURAL GRADE



SITE INFORMATION

ADDRESS: 958 ROUTE 39, HARWICH
ASSESSORS MAP/LOT: 51/59
DEED BOOK/PG: 30893/039
PLAN BOOK/PG: 692/44

DESIGN CALCULATIONS

DESIGN FLOW
110 GALLONS/DAY/BEDROOM X 4 BEDROOMS = 440 GALLONS/DAY

TANK CAPACITY
200% DAILY FLOW = 880 GALLONS; USE 1,500 GALLON TANK

REQUIRED LEACHING CAPACITY
DESIGN PERC RATE = < 2 MIN/INCH
440 GPD / 0.74 GALLONS PER DAY PER SQ. FT. = 594.59 SQ. FT.

PROVIDED LEACHING CAPACITY
BOTTOM AREA = 12.83' X 33.50' = 429.80 SQ. FT.
SIDE AREA = 92.66' X 2.00' = 185.32 SQ. FT.
615.12 SQ. FT.

PROVIDED FLOW CAPACITY
= **455.18 GPD**

ZONING REQUIREMENTS

ZONING DISTRICT: RR	REQUIRED	PROVIDED
MINIMUM LOT AREA	40,000 SF	62,999 SF
MINIMUM FRONTAGE	150'	154.81'
MINIMUM FRONT YARD SETBACK	25'	68.5'±
MINIMUM SIDE YARD SETBACK	20'	(R)37.5'±/(L)37.4'±
MINIMUM REAR YARD SETBACK	20'	352.7'±
MAXIMUM PERCENT TOTAL BLDG COVERAGE	15%	2.5%±
MAXIMUM SITE COVERAGE	25%	8.5%±
MAXIMUM BUILDING HEIGHT	30'	29.08'

UNSATURABLE A & B HORIZONS ALL TEST PITS	TP-1	TP-2	TP-3	TP-4
0"	98.89	97.09	100.36	99.83
2"	98.72	96.84	100.19	96.84
4"	98.22	96.26	99.77	96.26
8"	96.89	94.92	98.52	94.92
24"	96.22	93.92	97.19	93.92
32"	91.55	90.09		
88"				
123"	88.64	87.09	89.94	87.09

SOIL PROFILES
NOT TO SCALE

EXISTING GRADE PLANE CALCULATION

99.30 + 100.10	= 99.70
2	
AVERAGE NATURAL GRADE (A.N.G.) = ELEV. 99.70'	
TOP OF PROPOSED DWELLING = ELEV. 128.78'	
HEIGHT OF PROPOSED BUILDING ABOVE A.N.G. = 29.08'	

GENERAL NOTES:

- NONE OF THE SUBJECT PROPERTY IS WITHIN THE LIMITS OF A FEMA FLOOD HAZARD ZONE AS SHOWN ON PANEL NO. 250100080, EFFECTIVE DATE JULY 16, 2014.
- THERE ARE NO STREAMS OR WETLANDS WITHIN 100- FEET OF THE PROPOSED WORK.
- THE SITE IS LOCATED WITHIN A ZONE II AREA.
- VERTICAL DATUM IS ASSUMED
- ALL WORK SHALL CONFORM TO THE TOWN OF HARWICH AND THE COMMONWEALTH OF MASSACHUSETTS CONSTRUCTION STANDARDS AND REGULATIONS. ANY REQUIRED SHORING OR BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- ALL JOINTS IN THE SEPTIC TANK AND DISTRIBUTION BOX SHALL BE MADE WATERTIGHT THROUGH THE USE OF ASPHALT OR SYNTHETIC POLYMER SEALERS OR HYDRAULIC CEMENT.
- ALL UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY AND SHALL BE FIELD VERIFIED. DIGSAFE AND LOCAL UTILITY COMPANIES SHALL BE CONTACTED PRIOR TO ANY EXCAVATION OCCURRING.
- THE SEPTIC SYSTEM INSTALLER SHALL NOTIFY THE DESIGN ENGINEER 2 DAYS PRIOR TO BEGINNING INSTALLATION OF THE SEPTIC SYSTEM TO ALLOW FOR SCHEDULING OF INSPECTIONS
- WHERE APPLICABLE UNSUITABLE MATERIAL (A, B AND C HORIZONS OR FILL) ENCOUNTERED BELOW THE INVERT OF THE INLET TO THE SOIL ABSORPTION SYSTEM, SHALL BE REMOVED TO A DISTANCE 5' AROUND THE SYSTEM AND BROUGHT BACK TO THE APPROPRIATE ELEVATION WITH CLEAN SAND PER MASSACHUSETTS 310 CMR 15.00 REGULATIONS.
- NO PRIVATE WATER SUPPLY WELLS EXIST WITHIN 100' OF THE PROPOSED SEPTIC SYSTEM.
- NO GRAVEL PACKED PUBLIC WATER SUPPLY WELLS OR SURFACE WATER SUPPLY EXIST WITHIN 400' OF THE PROPOSED SUBSURFACE SEWAGE DISPOSAL SYSTEM.
- THIS DESIGN DOES NOT ALLOW FOR THE USE OF A GARBAGE GRINDER
- ELECTRIC SERVICE INSTALLATION SHALL BE COORDINATED WITH EVERSOURCE AND OWNER OR THE OWNER'S CONTRACTOR.
- TELEPHONE AND CABLE SERVICE LOCATION AND CONNECTION DETAILS SHALL BE COORDINATED WITH VERIZON, COMCAST AND THE OWNER OR OWNER'S CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL UTILITY SEPARATION MEET CODE AND THE REQUIREMENTS OF THOSE UTILITY COMPANIES HAVING JURISDICTION.
- WATER SERVICE CONNECTIONS SHALL BE COORDINATED BETWEEN THE TOWN OF HARWICH WATER DEPARTMENT AND THE OWNER OR CONTRACTOR.
- ALL GRADING AROUND THE DWELLING SHALL SLOPE AWAY FROM THE FOUNDATION AT A 2.0% MINIMUM SLOPE.
- EXISTING CONDITIONS SURVEY PERFORMED BY PAUL E. SWEETSER, SEPTEMBER 2022

AJM SITE DESIGN, LLC
Residential Site Design and Permitting
4 CRESTVIEW DRIVE
EAST SANDWICH, MA 02537
PHONE: (508) 400-2365

LOCATION: 958 ROUTE 39
HARWICH, MA 02645

CLIENT: DAVENPORT REALTY TRUST
20 NORTH MAIN STREET
SOUTH YARMOUTH, MA 02664

DRAWING TITLE: SUBSURFACE SEWAGE DISPOSAL SYSTEM
SITE PLAN AND PROFILE

SCALE: 1"=20' **DATE:** 11/12/2022 **DRAWING NO.:** 1 OF 1

REVISIONS

NO.	DATE	DESCRIPTION
1	5/9/2023	ADDED PLANTINGS PER PLANNING BOARD HEARING