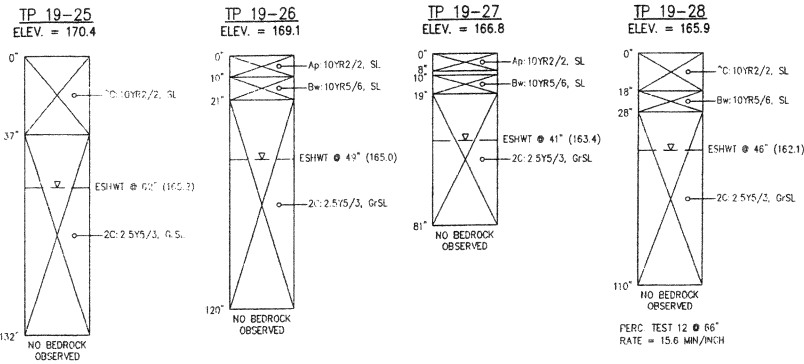


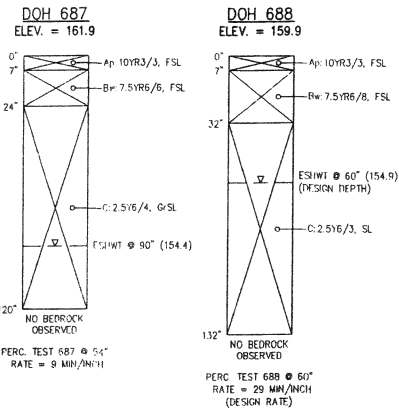
SOIL LOGS

DATE PERFORMED: 11/25/2019
 PERFORMED BY: ALEXANDER F. PARKER, SE #1848
 WITNESSED BY: MRS. KRISTIN ESPOSITO MCRAE, RS (TOWN OF LYNNFIELD BOARD OF HEALTH DIRECTOR)



SOIL LOGS

DATE PERFORMED: 12/09/2016, 7/31/2017, 8/15/2017
 PERFORMED BY: GORDON ROGERSON SE #2074
 BOARD OF HEALTH: LEO F. FORMER & KRISTIN MCRAE, RS



SITE NOTES:

- RECORD OWNER: JAIPAL & MONIKA GHANDI, 2 SAGAMORE PLACE, LYNNFIELD, MA 01940, DEED BOOK 569, PAGE 93506
- RECORD PLANS: SOUTHERN ESSEX REGISTRY OF DEEDS, PLAN BOOK #72 PLAN #30, DATED APRIL 15, 1910
- WETLANDS: THERE ARE NO WETLANDS OR RIVERFRONT RESOURCE AREAS LOCATED ON THE PROPERTY.
- WATER SUPPLY: THIS PROPERTY IS LOCATED WITHIN THE DRINKING WATER SUPPLY ZONE II (I.E. A NITROGEN SENSITIVE AREA).
- FLOOD PLAIN: THE AREA OF WORK ON THE PROPERTY IS SITUATED IN A ZONE 'X' AS ILLUSTRATED ON THE MOST RECENT FLOOD INSURANCE RATE MAP PANEL 25009C-0383-F WITH EFFECTIVE DATE OF JULY 3, 2012.
- DATUM: ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- EXISTING CONDITIONS: EXISTING CONDITIONS INFORMATION SHOWN HEREON ARE FROM A PRECISE FIELD SURVEY BY THE MORIN-CAMERON GROUP, INC. ON APRIL, 2023.
- ZONING DISTRICT: SINGLE RESIDENCE D (RD) GROUNDWATER PROTECTION DISTRICT

SINGLE RESIDENCE D:
 AREA (MIN) = 60,000 SQ. FT.
 FRONTAGE (MIN) = 210 FT.
 FRONT SETBACK (MIN) = 40 FT.
 SIDE SETBACK (MIN) = 30 FT.
 REAR SETBACK (MIN) = 20 FT.

SEPTIC SYSTEM LEACH TRENCH CALCULATION

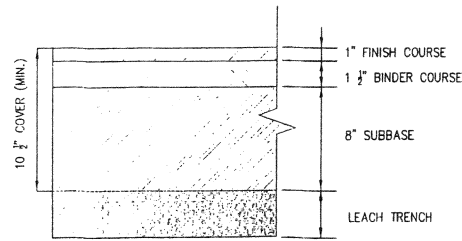
TRENCH	INV. END	INV. START	MIN. FINISH GRADE	MAX. FINISH GRADE	PROP. FINISH GRADE
TRENCH 1	162.74	163.50	165.00	167.00	165
TRENCH 2	161.99	162.62	164.12	166.12	164.9
TRENCH 3	161.18	161.69	163.19	165.19	164.8

IMPERVIOUS AREAS CALCULATION

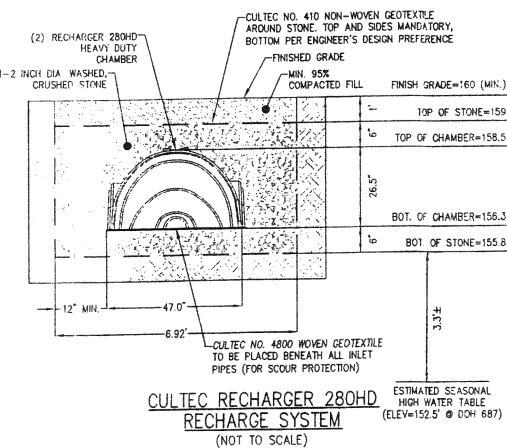
IMPERVIOUS AREAS	GOES TO ROADWAY, ROAD INFILTRATION SYSTEM	GOES TO ON-SITE INFILTRATION SYSTEM	OVERLAND TO WOODS, ROAD INFILTRATION SYSTEM
DRIVEWAY	4,112		
ROOF		4,209	
WALKWAYS & HOUSE ENTRANCE	429		101
PATIO			995
POOL			648
POOL PATIO			1,867
TENNIS COURT			2,350
TOTAL	4,541 S.F. (7.5%)	4,209 S.F. (7%)	5,961 S.F. (9.9%)

GROUNDWATER RECHARGE CALCULATION:

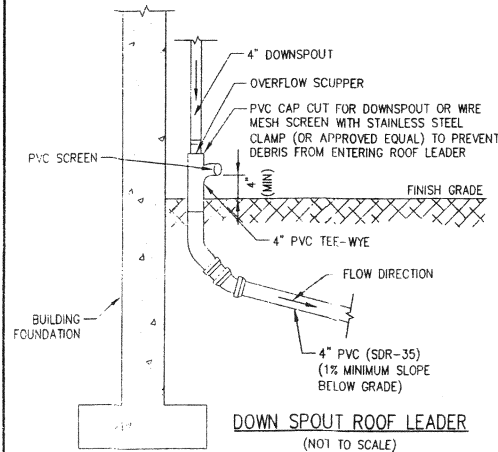
- LOT AREA = 60,243 SF
- EXISTING IMPERVIOUS AREA (BUILDING & DRIVEWAY) = 8,230 S.F. (13.7%)
- PROPOSED NEW IMPERVIOUS AREA (POOL AREA, PATIO, COURT, DRIVEWAY EXTENSION) = 6,481 SF
- PROPOSED TOTAL IMPERVIOUS AREA (BUILDING, DRIVEWAY, POOL AREA, PATIO, COURT) = 14,711 SF (24.4%)
- 15% OF LOT AREA = 9,037 SF
- GROUNDWATER RECHARGE REQUIRED:
- REQUIRED RECHARGE AREA = 14,711 SF - 9,037 SF = 5,674 SF
- REQUIRED RECHARGE VOLUME = 0.25" X IMPERVIOUS AREA (HSG C SOILS) (AS PER STANDARD #3 FROM THE MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS).
- GROUNDWATER RECHARGE REQUIRED = (0.25") X (1' / 12") X (5,674 SF) = 119 CF (ROOF AREA TO BE CAPTURED)
- VOLUME OF STORAGE PROVIDED IN CULTEC SYSTEM = 149 CF



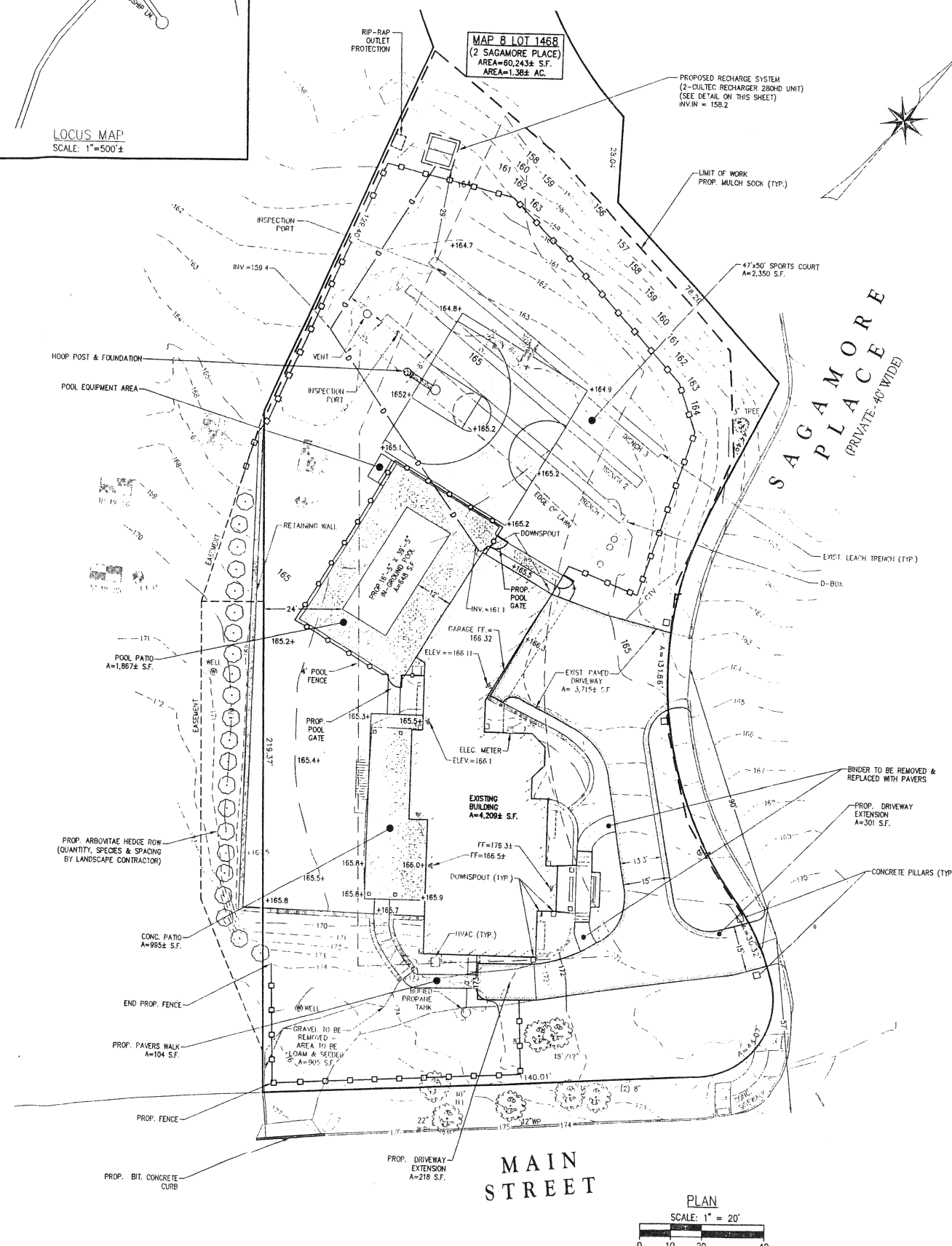
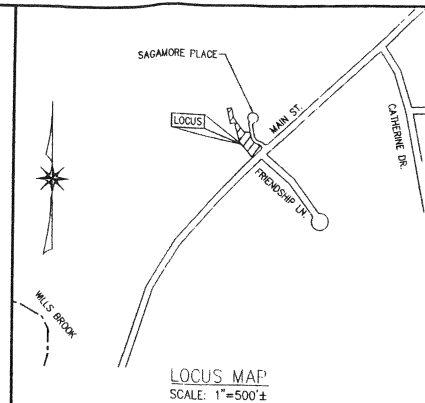
SPORTS COURT CROSS-SECTION
(NOT TO SCALE)



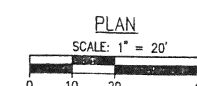
CULTEC RECHARGER 280HD RECHARGE SYSTEM
(NOT TO SCALE)



DOWN SPOUT ROOF LEADER
(NOT TO SCALE)



MAIN STREET



The Morin-Cameron GROUP, INC.
 CIVIL ENGINEERS / ENVIRONMENTAL CONSULTANTS
 LAND SURVEYORS
 25 KENZO AVENUE, HAVERHILL, MASSACHUSETTS, U.S.A.
 P. 978-373-3310, W. WWW.MORIN-CAMERON.COM



SURVEY BY: MCG
 DRAFTED BY: LHO
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: 1" = 20'
 DATE: 05/02/2023

NO.	DESCRIPTION	DATE

SITE PLAN OF LAND
 IN
LYNNFIELD, MASSACHUSETTS
 2 SAGAMORE PLACE
 (ASSESSOR'S MAP 8, LOT 146B)
 PREPARED FOR:
MONIKA GHANDI

SITE PLAN
 DRAWING NO:
1 OF 1