

SOIL TEST DATA

TEST PITS WERE PERFORMED ON JANUARY 22, 2022 BY CHRISTOPHER S. BROYLES (CERTIFIED SOIL EVALUATOR #13780) AND WITNESS BY DAN JOHNSON (DOMESTIC SEPTIC DESIGN, INC.) ON BEHALF OF THE TOWN OF HAMILTON BOARD OF HEALTH

TEST PITS

TP-1 (EG=62.04) (DESIGN ESHGW=57.44)
 0-17" Ap SL
 17-50" Bw SL
 50-55" C1 SL FINE SANDY LOAM
 55-120" C2 SL
 REDOX @ 55", WEEPING @ 72", ESHGW @ 55"

TP-2 (EG=62.44) (DESIGN ESHGW=52.44)
 0-12" Ap SL
 12-24" Bw SL
 24-60" C1 S GRAVELLY MEDIUM SAND
 60-120" C2 S FINE SAND
 NO ESHGW OBSERVED

TP-3 (EG=64.64) (DESIGN ESHGW=61.64)
 0-12" Ap SL
 12-33" Bw SL FINE SANDY LOAM
 33-104" C SL FINE SANDY LOAM
 REDOX @ 36", WEEPING @ 60", ESHGW @ 36"

TP-4 (EG=60.94) (DESIGN ESHGW=55.74)
 0-13" Ap SL
 13-32" Bw SL
 32-42" C1 S GRAVELLY MEDIUM SAND
 42-50" C2 LS
 50-63" C3 S GRAVELLY MEDIUM SAND
 63-86" C4 LS
 86-120" C5 SCL
 REDOX @ 63", WEEPING @ 80", ESHGW @ 63"

TP-5 (EG=61.44) (DESIGN ESHGW=52.94)
 0-12" Ap SL
 12-26" Bw SL
 26-72" C1 S GRAVELLY MEDIUM SAND
 72-91" C2 LS FINE LOAMY SAND
 91-120" C3 LS
 NO REDOX, WEEPING @ 102", ESHGW @ 102"

TP-6 (EG=61.94) (DESIGN ESHGW=51.94)
 0-11" Ap SL
 11-21" Bw SL
 21-74" C1 S GRAVELLY MEDIUM SAND
 74-120" C2 S FINE SAND
 NO ESHGW OBSERVED

TP-7 (EG=61.44) (DESIGN ESHGW=51.44)
 0-12" Ap SL
 12-28" Bw SL
 28-60" C1 S GRAVELLY MEDIUM SAND
 60-90" C2 S FINE SAND
 90-120" C3 LS
 NO ESHGW OBSERVED

PERCOLATION TESTS

P-1
 DEPTH = 55" BELOW EXISTING GRADE IN TP-1
 "ABANDONED DUE TO GROUNDWATER INTERFERENCE"

P-2
 DEPTH = 42" BELOW EXISTING GRADE IN TP-2
 PERC RATE = < 2 MPI

P-3
 DEPTH = 48" BELOW EXISTING GRADE IN TP-3
 PERC RATE = 8 MPI

P-5
 DEPTH = 59" BELOW EXISTING GRADE 25' SW FROM TP-5
 PERC RATE = 43 MPI

P-6
 DEPTH = 42" BELOW EXISTING GRADE IN TP-6
 PERC RATE = < 2 MPI

P-7
 DEPTH = 48" BELOW EXISTING GRADE IN TP-7
 PERC RATE = < 2 MPI

TEST PITS WERE PERFORMED ON FEBRUARY 4, 2020 BY CHRISTOPHER S. BROYLES (CERTIFIED SOIL EVALUATOR #13780) AND WITNESS BY DAN JOHNSON (DOMESTIC SEPTIC DESIGN, INC.) ON BEHALF OF THE TOWN OF HAMILTON BOARD OF HEALTH

TEST PITS

TP-8 (EG=60.94) (DESIGN ESHGW=52.94)
 0-10" Ap SL
 10-28" Bw SL
 28-48" C1 S GRAVELLY MEDIUM SAND
 48-84" C2 LS FINE LOAMY SAND
 84-120" C3 LS
 REDOX @ 96", WEEPING @ 118", ESHGW @ 96"

TP-9 (EG=63.74) (DESIGN ESHGW=58.74)
 0-10" Ap SL
 10-34" Bw SL
 34-48" C1 S GRAVELLY MEDIUM SAND
 48-120" C2 LS FINE LOAMY SAND
 REDOX @ 48", WEEPING @ 57", STANDING @ 113", ESHGW @ 96"

PERCOLATION TESTS

P-8
 DEPTH = 49" BELOW EXISTING GRADE IN TP-8
 PERC RATE = 49 MPI

P-1A
 DEPTH = 56" BELOW EXISTING GRADE IN TP-1
 PERC RATE = 60 MPI

TEST PITS WERE PERFORMED ON JUNE 25, 2020 BY CHRISTOPHER S. BROYLES (CERTIFIED SOIL EVALUATOR #13780) AND WITNESS BY DAN JOHNSON (DOMESTIC SEPTIC DESIGN, INC.) ON BEHALF OF THE TOWN OF HAMILTON BOARD OF HEALTH

TEST PITS

TP-10 (EG=66.34) (DESIGN ESHGW=60.34)
 0-14" Ap SL
 14-25" Bw SL
 25-33" C1 S GRAVELLY MEDIUM SAND
 33-72" C2 SL
 72-120" C3 SL
 REDOX @ 72", STANDING @ 119", ESHGW @ 72"

TP-11 (EG=64.04) (DESIGN ESHGW=61.34)
 0-10" Ap SL
 10-32" Bw SL
 32-45" C1 SL FINE SANDY LOAM
 45-79" C2 S
 79-120" C3 SL
 REDOX @ 32", STANDING @ 119", ESHGW @ 32"

TP-12 (EG=59.44) (DESIGN ESHGW=52.24)
 0-14" Ap SL
 14-25" Bw SL
 25-33" C1 S GRAVELLY SANDY LOAM
 33-72" C2 S
 72-120" C3 S GRAVELLY MEDIUM SAND
 120-120" C4 SL GRAVELLY SANDY LOAM
 REDOX @ 72", STANDING @ 119", ESHGW @ 72"

TP-13 (EG=57.04) (DESIGN ESHGW=45.34)
 0-13" Ap SL
 13-26" Bw SL
 26-41" C1 SL
 41-75" C2 S MEDIUM SAND
 75-110" C3 SL FINE SANDY LOAM
 110-141" C4 SL GRAVELLY SANDY LOAM
 NO ESHGW OBSERVED

PERCOLATION TESTS

P-10
 DEPTH = 55" BELOW EXISTING GRADE IN TP-10
 PERC RATE = 20 MPI

P-11
 DEPTH = 45" BELOW EXISTING GRADE IN TP-11
 PERC RATE = 7 MPI

P-13
 DEPTH = 41" BELOW EXISTING GRADE IN TP-13
 PERC RATE = < 2 MPI

THE FOLLOWING TEST PITS WERE PERFORMED ON JUNE 25, 2020 BY CHRISTOPHER S. BROYLES (CERTIFIED SOIL EVALUATOR #13780) AND ARE UNOFFICIAL

TP-2022-1 (EG=61.94) (DESIGN ESHGW=49.94)
 0-15" Ap SL
 15-24" Bw SL
 24-144" C1 S SAND
 NO ESHGW OBSERVED

TP-2022-2 (EG=62.64) (DESIGN ESHGW=51.14)
 0-12" Ap SL
 12-16" Bw SL
 16-138" C S GRAVELLY SAND
 NO ESHGW OBSERVED

TP-2022-3 (EG=59.14) (DESIGN ESHGW=51.94)
 0-13" Ap SL
 13-26" Bw SL
 26-41" C1 SL
 41-75" C2 S MEDIUM SAND
 75-110" C3 SL FINE SANDY LOAM
 110-141" C4 SL GRAVELLY SANDY LOAM
 REDOX @ 86"

TP-2022-4 (EG=62.64) (DESIGN ESHGW=50.64)
 0-12" Ap SL
 12-16" Bw SL
 16-144" C1 S GRAVELLY SAND
 NO ESHGW OBSERVED

TP-2022-5 (EG=62.74) (DESIGN ESHGW=60.74)
 0-12" Ap SL
 12-16" Bw SL
 16-144" C1 S GRAVELLY SAND
 NO ESHGW OBSERVED

TP-2022-6 (EG=63.24) (DESIGN ESHGW=63.74)
 0-18" Ap SL
 18-96" C1 S GRAVELLY SAND
 96-138" C2 SL
 REDOX @ 66"

TP-2022-7 (EG=56.24) (DESIGN ESHGW=44.24)
 0-12" Ap SL
 12-28" C1 SL GRAVELLY SANDY LOAM
 28-33" C2 SL FINE SANDY LOAM
 33-72" C3 S SAND
 72-120" C4 S GRAVELLY SAND, FRAIL LEDGE
 NO REDOX

TP-2022-8 (EG=55.04) (DESIGN ESHGW=47.34)
 0-16" Ap SL
 16-32" Bw SL
 32-68" C1 S
 68-92" C2 SL FRAIL LEDGE, BOULDERS
 NO REDOX

SURVEY NOTES

1. THE TOPOGRAPHY, SITE DETAIL, & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. (MAI) BETWEEN JUNE 5-11, 2019 AND VERIFIED BY HANCOCK ASSOCIATES IN JULY-SEPTEMBER OF 2022.
2. THE SURVEYED PREMISES IS LOCATED IN THE SINGLE RESIDENTIAL (R-1B) ZONING DISTRICT AND THE GROUNDWATER PROTECTION OVERLAY DISTRICT.
3. THE SURVEYED PREMISES IS A PORTION OF LOT 11 ON TOWN OF HAMILTON ASSESSOR'S MAP 20.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION OF PLANS OF RECORD. THE LAND SURVEYOR OF RECORD DOES NOT WARRANT OR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION, SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT DIG SAFE AT 811.
5. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
6. PROPERTY LINES DEPICTED HEREON ARE BASED ON COMPILED DEEDS AND PLANS OF RECORD. THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR TITLE INSURANCE PURPOSES. ALL BOUNDARY LINES ARE APPROXIMATE ONLY.
7. THE SURVEYED PREMISES IS LOCATED IN FLOOD ZONE X (UNSHADED). AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 25080C0269F DATED JULY 2, 2012.
8. FOR PROPOSED PROPERTY LINE INFORMATION SEE PLAN ENTITLED CONCEPTUAL SUBDIVISION PLAN IN HAMILTON, MA BY HANCOCK ASSOCIATES DATED 10/25/22.

GENERAL NOTES

1. THE INTENT OF THIS PLAN IS TO DEPICT THE PRELIMINARY SITE DESIGN FOR A 45-UNIT MULTIFAMILY RESIDENTIAL DEVELOPMENT IN HAMILTON, MA IN SUPPORT FOR A 40B APPLICATION. THIS PLAN IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2. ALL PROPOSED UTILITIES SHOWN ON THIS PLAN ARE PRELIMINARY AND MUST BE COORDINATED WITH THE RESPONSIBLE PARTIES.
3. STORMWATER MANAGEMENT PRACTICES SHOWN ON THIS PLAN ARE PRELIMINARY AND ARE INTENDED TO SHOW COMPLIANCE TO THE MASSACHUSETTS STORMWATER STANDARDS. FINAL STORMWATER DESIGN SHALL BE COORDINATED PRIOR TO PERMITTING AND CONSTRUCTION.
4. THE PROPOSED SEPTIC PRIMARY AND RESERVE AREAS SHOWN ON THIS PLAN ARE PRELIMINARY. FINAL SEPTIC DESIGN SHALL BE COORDINATED PRIOR TO PERMITTING AND CONSTRUCTION.

LEGEND

EXISTING

- W WATER MAIN AND VALVE
- G NATURAL GAS LINE AND VALVE
- RD ROOF DRAIN AND DOWNSPOUT
- 12" RCP
- 8" CI
- 96.8 12" M
- 96.8 18" P
- TP-1
- PT6
- 92.6
- 92

PROPOSED

- W WATER MAIN AND VALVE
- G NATURAL GAS LINE AND VALVE
- RD ROOF DRAIN AND DOWNSPOUT
- DMH DRAINLINE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION, CATCH BASIN, MANHOLE & ROUND CATCH BASIN
- SMH SEWER LINE AND MANHOLE SIZE MATERIAL & FLOW DIRECTION
- SS
- SSMH
- VGC
- 96.8 12" M
- 96.8 18" P
- TP-1
- PT6
- 93.3
- 92

ZONING

SINGLE RESIDENTIAL DISTRICT (R-1B)

ASSESSORS

PORTION OF MAP 20, LOT 11

REFERENCES

DEED BOOK 34313, PAGE 385
 PLAN BOOK 285, PLAN 89

RECORD OWNER

BRITTON FAMILY LLC

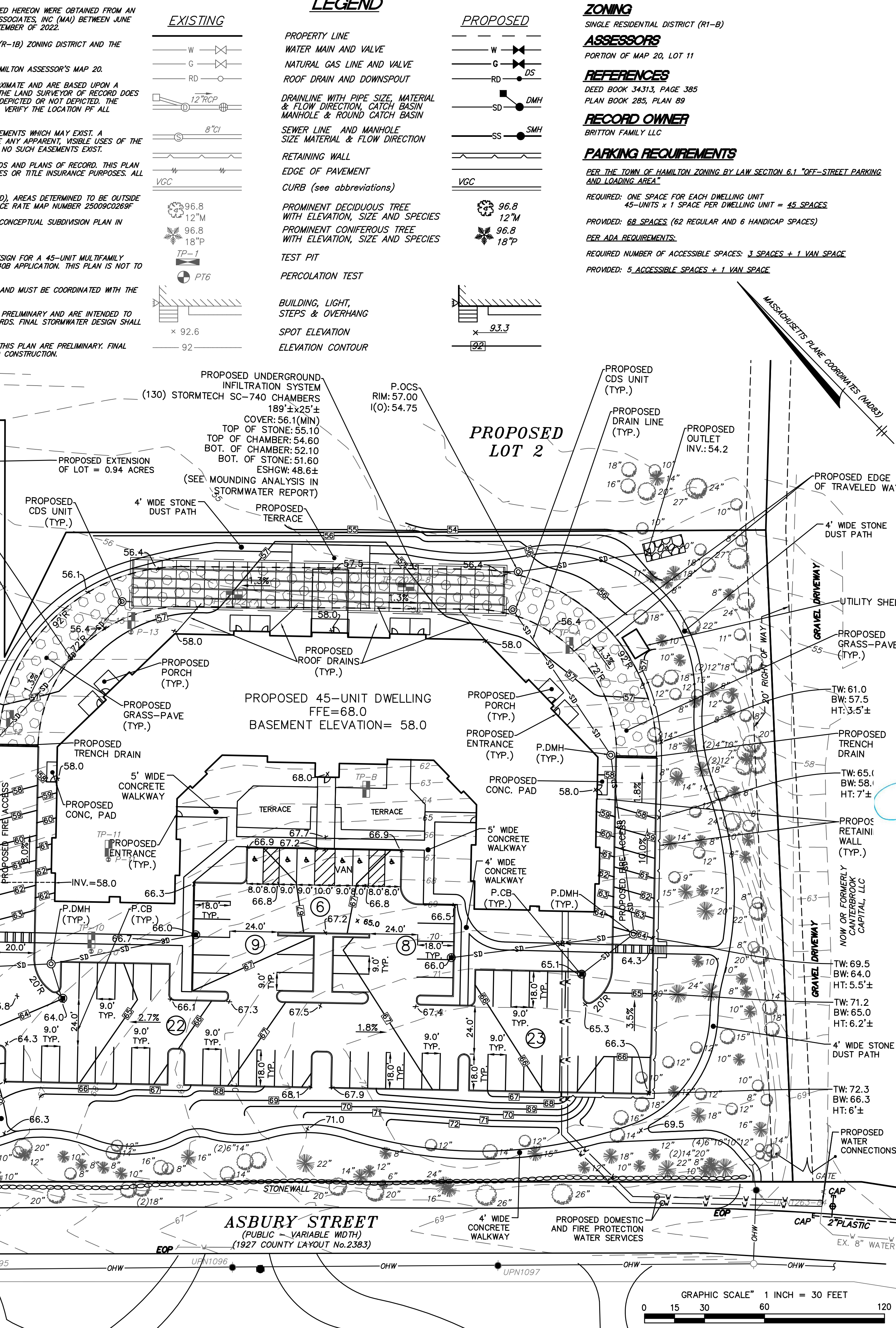
PARKING REQUIREMENTS

PER THE TOWN OF HAMILTON ZONING BY LAW SECTION 6.1 "OFF-STREET PARKING AND LOADING AREA"

REQUIRED: ONE SPACE FOR EACH DWELLING UNIT
 45-UNITS x 1 SPACE PER DWELLING UNIT = 45 SPACES

PROVIDED: 62 SPACES (62 REGULAR AND 6 HANDICAP SPACES)

PER ADA REQUIREMENTS:
 REQUIRED NUMBER OF ACCESSIBLE SPACES: 3 SPACES + 1 VAN SPACE
 PROVIDED: 5 ACCESSIBLE SPACES + 1 VAN SPACE



HCP ASBURY

466 Highland Street
 Hamilton, Massachusetts 01982

ASSESSORS

MAP 19 LOT 11

PREPARED FOR:

HARBORLIGHT COMMUNITY PARTNERS

283 Elliot Street
 Beverly, Massachusetts 01915

HANCOCK ASSOCIATES

Civil Engineers
 Land Surveyors
 Wetland Scientists

185 CENTRE STREET, DANVERS, MA 01923
 VOICE (978) 777-3050, FAX (978) 774-7816
 WWW.HANCOCKASSOCIATES.COM

PROFESSIONAL ENGINEER

CHARLES E. BROYLES III
 No. 37876
 PROFESSIONAL ENGINEER

1 RT CEW 10/25/22 SEPTIC DESIGN COMPLETE

NO. BY APP DATE ISSUE/REVISION DESCRIPTION

PROGRESS: 2/18/22 DESIGN BY: RT
 SCALE: 1" = 30' DRAWN BY: RT
 APPROV. BY: CEW CHECK BY: CEW

PRELIMINARY SITE & UTILITY PLAN

PROJECT NO.: 24819

DWG: 24819-PrelimSite-r1.dwg

LAYOUT: PRELIM

SHEET: 1 OF 1

GRAPHIC SCALE 1 INCH = 30 FEET

0 15 30 60 120