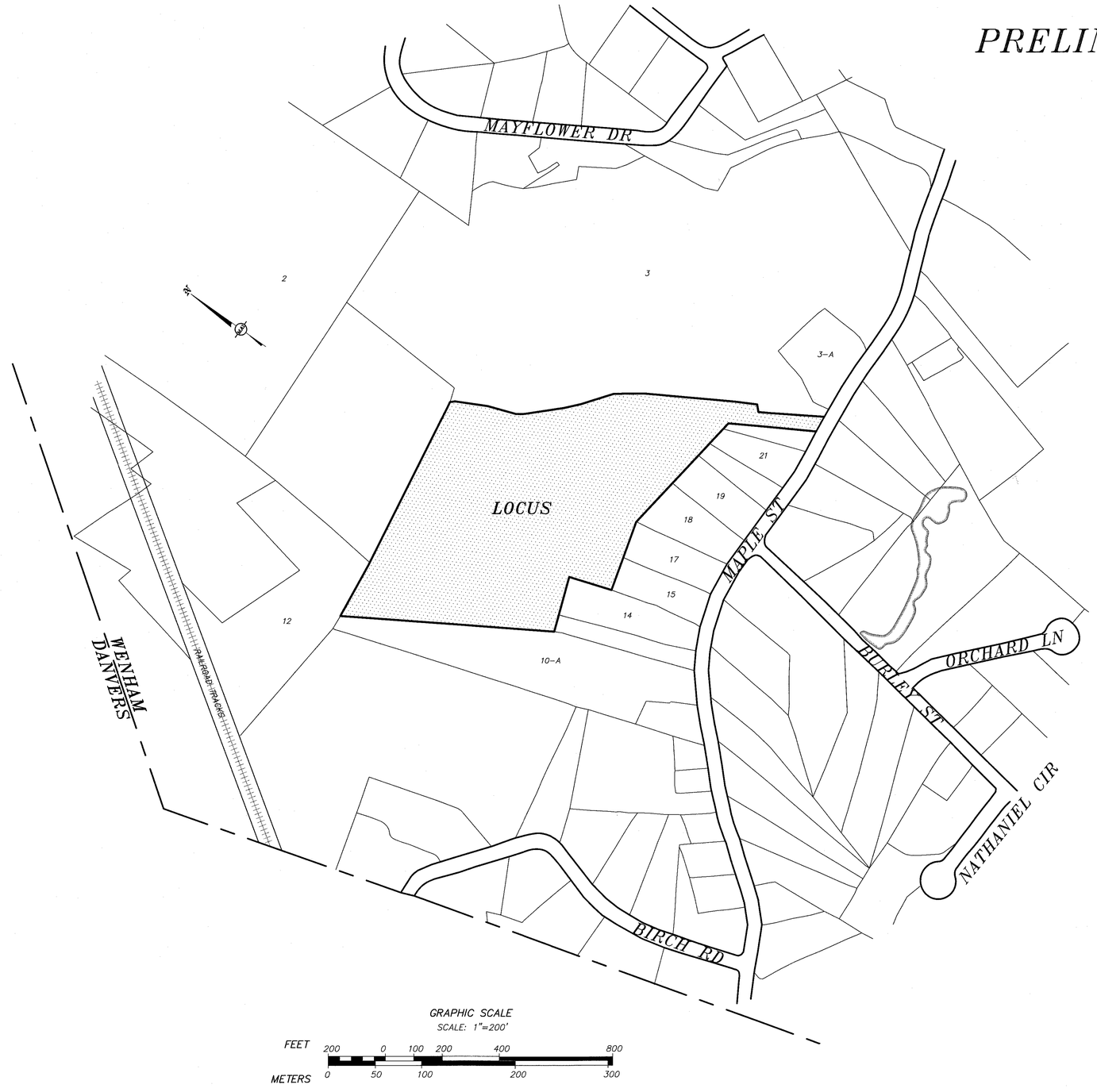


MAPLE WOODS
PRELIMINARY COMPREHENSIVE PERMIT PLANS

(TO ACCOMPANY A COMPREHENSIVE PERMIT APPLICATION)

FOR

62 MAPLE STREET

LOCATED IN

WENHAM, MASSACHUSETTS

DATE: OCTOBER 7, 2014
REVISED: JANUARY 23, 2015

APPLICANT:

MAPLE WOODS HOUSING, LLC
283 ELLIOTT STREET P.O. BOX 507
BEVERLY, MA 01915

OWNER:

ROBERT N. BURNETT, TRS
CEDAR REALITY TRUST
62 MAPLE STREET
WENHAM, MA 01984

PREPARED BY:

MERIDIAN ASSOCIATES

500 CUMMINGS CENTER, SUITE 5950
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 299-0447

69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7030

WWW.MERIDIANASSOC.COM

DRAWING INDEX

SHEET 1	COVER SHEET
SHEET 2	RECORD CONDITIONS PLAN
SHEET 3	PERMIT GRADING & LAYOUT
SHEET 4	PERMIT UTILITY PLAN

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER E. HUSTIS
CIVIL
No. 37879
REGISTERED PROFESSIONAL ENGINEER
1/23/15

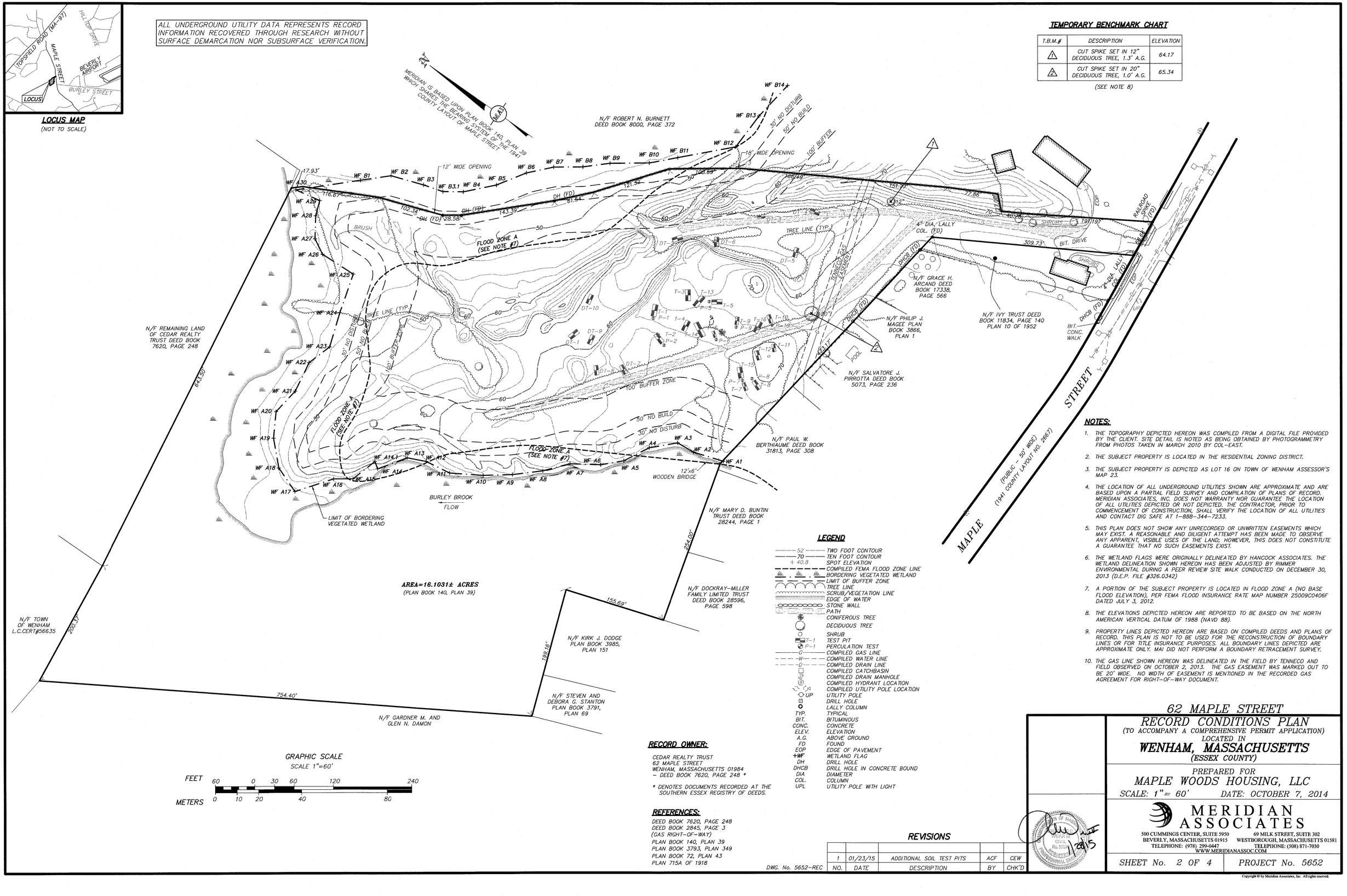
LOCUS MAP
(NOT TO SCALE)

ALL UNDERGROUND UTILITY DATA REPRESENTS RECORD INFORMATION RECOVERED THROUGH RESEARCH WITHOUT SURFACE DEMARCATION NOR SUBSURFACE VERIFICATION.

TEMPORARY BENCHMARK CHART

T.B.M.#	DESCRIPTION	ELEVATION
1	CUT SPIKE SET IN 12" DECIDUOUS TREE, 1.3' A.G.	64.17
2	CUT SPIKE SET IN 20" DECIDUOUS TREE, 1.0' A.G.	65.34

(SEE NOTE 8)



LEGEND

52	TWO FOOT CONTOUR
70	TEN FOOT CONTOUR
+ 40.8	SPOT ELEVATION
	COMPILED FEMA FLOOD ZONE LINE
	BORDERING VEGETATED WETLAND
	LIMIT OF BUFFER ZONE
	TREE LINE
	SCRUB/VEGETATION LINE
	EDGE OF WATER
	STONE WALL
	PATH
	CONIFEROUS TREE
	DECIDUOUS TREE
	SHRUB
T-1	TEST PIT
P-1	PERCULATION TEST
-G-	COMPILED GAS LINE
-W-	COMPILED WATER LINE
-D-	COMPILED DRAIN LINE
	COMPILED CATCHBASIN
	COMPILED DRAIN MANHOLE
	COMPILED HYDRANT LOCATION
	COMPILED UTILITY POLE LOCATION
UP	UTILITY POLE
	DRILL HOLE
	LALLY COLUMN
TYP.	TYPICAL
BIT.	BITUMINOUS
CONC.	CONCRETE
ELEV.	ELEVATION
A.G.	ABOVE GROUND
FD	FOUND
EOP	EDGE OF PAVEMENT
WF	WETLAND FLAG
DH	DRILL HOLE
DHCB	DRILL HOLE IN CONCRETE BOUND
DIA	DIAMETER
COL.	COLUMN
UPL	UTILITY POLE WITH LIGHT

GRAPHIC SCALE
SCALE 1"=60'

FEET 60 0 30 60 120 240
METERS 0 10 20 40 80

NOTES:

1. THE TOPOGRAPHY DEPICTED HEREON WAS COMPILED FROM A DIGITAL FILE PROVIDED BY THE CLIENT. SITE DETAIL IS NOTED AS BEING OBTAINED BY PHOTOGRAMMETRY FROM PHOTOS TAKEN IN MARCH 2010 BY COL-EAST.
2. THE SUBJECT PROPERTY IS LOCATED IN THE RESIDENTIAL ZONING DISTRICT.
3. THE SUBJECT PROPERTY IS DEPICTED AS LOT 16 ON TOWN OF WENHAM ASSESSOR'S MAP 23.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION OF PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANTY NOR 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 1-888-344-7233.
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. THE WETLAND FLAGS WERE ORIGINALLY DELINEATED BY HANCOCK ASSOCIATES. THE WETLAND DELINEATION SHOWN HEREON HAS BEEN ADJUSTED BY RIMMER ENVIRONMENTAL DURING A PEER REVIEW SITE WALK CONDUCTED ON DECEMBER 30, 2013 (D.E.P. FILE #326.0342)
7. A PORTION OF THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE A (NO BASE FLOOD ELEVATION), PER FEMA FLOOD INSURANCE RATE MAP NUMBER 25009C0406F DATED JULY 3, 2012.
8. THE ELEVATIONS DEPICTED HEREON ARE REPORTED TO BE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
9. 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 FOR TITLE INSURANCE PURPOSES. ALL BOUNDARY LINES DEPICTED ARE APPROXIMATE ONLY. MAI DID NOT PERFORM A BOUNDARY RETRACEMENT SURVEY.
10. THE GAS LINE SHOWN HEREON WAS DELINEATED IN THE FIELD BY TENNECO AND FIELD OBSERVED ON OCTOBER 2, 2013. THE GAS EASEMENT WAS MARKED OUT TO BE 20' WIDE. NO WIDTH OF EASEMENT IS MENTIONED IN THE RECORDED GAS AGREEMENT FOR RIGHT-OF-WAY DOCUMENT.

RECORD OWNER:

CEDAR REALTY TRUST
62 MAPLE STREET
WENHAM, MASSACHUSETTS 01984
- DEED BOOK 7620, PAGE 248 *

* DENOTES DOCUMENTS RECORDED AT THE SOUTHERN ESSEX REGISTRY OF DEEDS.

REFERENCES:

DEED BOOK 7620, PAGE 248
DEED BOOK 2845, PAGE 3
(GAS RIGHT-OF-WAY)
PLAN BOOK 140, PLAN 39
PLAN BOOK 3793, PLAN 349
PLAN BOOK 72, PLAN 43
PLAN 715A OF 1918

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
1	01/23/15	ADDITIONAL SOIL TEST PITS	ACF	CEW

DWG. No. 5652-REC

62 MAPLE STREET
RECORD CONDITIONS PLAN
(TO ACCOMPANY A COMPREHENSIVE PERMIT APPLICATION)
LOCATED IN
WENHAM, MASSACHUSETTS
(ESSEX COUNTY)

PREPARED FOR
MAPLE WOODS HOUSING, LLC

SCALE: 1"= 60' DATE: OCTOBER 7, 2014

MERIDIAN ASSOCIATES
500 CUMMINGS CENTER, SUITE 5950
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 299-0447
69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7030
WWW.MERIDIANASSOC.COM

SHEET No. 2 OF 4 PROJECT No. 5652

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PARKING TABLE

PRINCIPAL USE: SENIOR HOUSING FACILITY
SPACE REQUIREMENT: 1 SPACE PER 2 ROOMS

NUMBER OF ROOMS: 120
NUMBER OF SPACES REQUIRED: $^{120}/_{2}$ = 60 SPACES

SPACES PROVIDED: 66 TOTAL (INCLUDES 3 HANDICAP SPACES)

MERIDIAN IS BASED UPON PLAN BOOK 140, PLAN 39 WHICH SHARES THE BEARING SYSTEM OF THE 1941 COUNTY LAYOUT OF MAPLE STREET

N/F ROBERT N. BURNETT
DEED BOOK 8000, PAGE 372

WF B14
WF B13
WF B12
WF B11
WF B10
WF B9
WF B8
WF B7
WF B6
WF B5
WF B4
WF B3.1
WF B3
WF B2

50' NO DISTURB
50' NO BUILD
100' BUFFER
18' WIDE OPENING
12' WIDE OPENING
DH (FD)
102.34'
143.39'
28.58'
121.32'
106.59'
61.54'
166.49'

PROPOSED 6' HIGH CHAIN LINK FENCING

PROPOSED ACCESS AND GRADING EASEMENT AREA

TRANSITION POINT TO 4' HIGH CHAIN LINK FENCING

PROP LOW STONE WALL (SEE LANDSCAPE PLANS)

PROPOSED 4' HIGH SPLIT RAIL WITH CHAIN LINK FENCE

PROVIDE SILT SAC INLET PROTECTION DURING CONSTRUCTION ACTIVITIES

PROPOSED DRIVEWAY

PVGC

PSGC

RAILROAD SPIKE (TYP)

PROP SIGN

BIT. DRIVE

GATE

SHRUBS

UPL

EOP

CB RIM=65.4

CS RIM=65.5

(EMERGENCY OVERFLOW) PYD#10 R=61.0

PCB#1&2 R=62.0

62.2 LP

PSTC#3 R=62.3

PROPOSED SUBSURFACE INFILTRATION FACILITY #1

PROPOSED 6' WIDE CONCRETE SIDEWALK (TYP)

PROPOSED 4' HIGH CHAIN LINK FENCING

4' DIA. LALLY COL. (TYP)

DHCB (FD)

FLOOD ZONE A

(EMERGENCY OVERFLOW) PYD#11 R=62.0

FIRE ACCESS (GRASSPAVE2)

PDMH#9 R=64.2

PDMH#7 R=64.2

PDCB#4&5 R=63.9

PYD#8 R=62.4

PSTC#6 R=64.1

PROPOSED RETAINING WALL (DBO)

PROPOSED EROSION CONTROL SOCK (TYP)

PROPOSED PRIMARY LEACH FIELD AREA (TYP OF 4)

PROVIDE OPENING IN CURB

PROPOSED PERMEABLE PAVER WALKING PATH (SEE LANDSCAPE PLAN)

N/F GRACE H. ARCAND
DEED BOOK 17338, PAGE 566

N/F IVY TRUST
DEED BOOK 11834, PAGE 140
PLAN 10 OF 1952

N/F PHILIP J. MAGEE
PLAN BOOK 3866, PLAN 1

N/F SALVATORE J. PIRROTTA
DEED BOOK 5073, PAGE 236

POOL

PROPOSED APARTMENT BUILDING
FFF=67.5

PROPOSED LOT AREA = 3.48± ACRES

100' BUFFER ZONE

50' NO BUILD

30' NO DISTURB

PROPOSED SUBSURFACE INFILTRATION FACILITY #2

30' WIDE FIRE ACCESS (GRASSPAVE2)

PROPOSED 6' HIGH CHAIN LINK FENCING

PROPOSED RETAINING WALL (DBO)

PROPOSED 6' HIGH STOCKADE FENCE

N/F PAUL W. BERTHIAUME
DEED BOOK 31813, PAGE 308

PROPOSED PROPERTY LINE (TYP)

PROPOSED 6"x6"x36" CONCRETE BOUNDARY MARKER (SET 6" ABOVE GRADE) (TYP)

12'x6' WOODEN BRIDGE

FLOOD ZONE A

BURLEY BROOK
FLOW

N/F MARY D. BUNTIN TRUST
DEED BOOK 28244, PAGE 1

254.00'

N/F DOCKRAY-MILLER FAMILY LIMITED TRUST
DEED BOOK 28596, PAGE 598

155.69'

MAPLE STREET
(PUBLIC - 50' WIDE)
(1941 COUNTY LAYOUT NO. 2857)

SEE RECORD CONDITIONS PLAN FOR EXISTING NOTES & LEGEND

LEGEND

- PROPOSED TWO FOOT CONTOUR
- PROPOSED ONE FOOT CONTOUR
- 64x6 64.7 PROPOSED SPOT ELEVATION
- PROPOSED GRADE DIRECTION
- PCB PROPOSED CATCHBASIN
- PDCB PROPOSED DOUBLE CATCHBASIN
- PDMH PROPOSED 4'ø DRAIN MANHOLE
- STC PROPOSED STORMCEPTOR UNIT
- PROPOSED SLOPED GRANITE CURB
- PROPOSED VERTICAL GRANITE CURB
- PROPOSED STOCKADE FENCE
- PROPOSED CHAIN LINK FENCE
- R= RIM ELEVATION
- PROPOSED WALL
- PROPOSED EROSION CONTROL SOCK
- PROP PROPOSED
- PVGC PROPOSED VERTICAL GRANITE CURB
- PSGC PROPOSED SLOPED GRANITE CURB
- (TYP) TYPICAL
- (DBO) DESIGNED BY OTHERS
- PYD PROPOSED YARD DRAIN
- (BC) BOTTOM OF CURB
- (TC) TOP OF CURB
- PROPOSED LIGHT FIXTURES
- HYD PROPOSED HYDRANT
- (9) PROPOSED PARKING SPACE COUNT
- PROPOSED INFILTRATION FACILITY

PROPOSED GRADING NOTES:

1. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
2. THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM OF 1/8" PER FOOT UNLESS SPECIFIED. ANY DISCREPANCIES NOT ALLOWING THIS MINIMUM PITCH SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
4. CONTRACTOR TO PROVIDE AND MAINTAIN APPROPRIATE EROSION CONTROL UNTIL ALL SITE WORK IS COMPLETED AND THE SITE IS FULLY VEGETATED AND/OR STABILIZED.
5. PROPOSED LIGHTING SHOWN FOR SCHEMATIC PURPOSE ONLY. SEE PLANS PREPARED BY UBLA FOR COMPLETE LANDSCAPE DESIGN AND DETAIL.

AREA=16.1031± ACRES
(PLAN BOOK 140, PLAN 39)

GRAPHIC SCALE
SCALE: 1"=40'

FEET 40 0 20 40 80 160
METERS 0 10 20 40 60

DWG. No. 5652-SITE
(XREF: 5652-REC)

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
1	01/23/15	ADD INFIL SYSTEM #2/PEER REVIEW	ACF	CEW

62 MAPLE STREET
PERMIT SITE GRADING PLAN
(TO ACCOMPANY A COMPREHENSIVE PERMIT APPLICATION)
LOCATED IN
WENHAM, MASSACHUSETTS
(ESSEX COUNTY)

PREPARED FOR
MAPLE WOODS HOUSING, LLC

SCALE: 1"= 40' DATE: OCTOBER 7, 2014

MERIDIAN ASSOCIATES
500 CUMMINGS CENTER, SUITE 5950
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 299-0447
69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7030
WWW.MERIDIANASSOC.COM

SHEET No. 3 OF 4 PROJECT No. 5652

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NOTES:

1. THE WEARING AND BINDER COURSES SHALL CONSIST OF CLASS I TYPE I–1 BITUMINOUS CONCRETE (HOT MIX ASPHALT)
2. 12" GRAVEL BASE SHALL BE SPREAD IN 2 LAYERS ON SUBGRADE. BOTTOM 6" SHALL CONFORM TO M1.03.0 TYPE A. UPPER 6" CONFORMS TO M1.03.0 TYPE C.

SLOPED GRANITE CURB

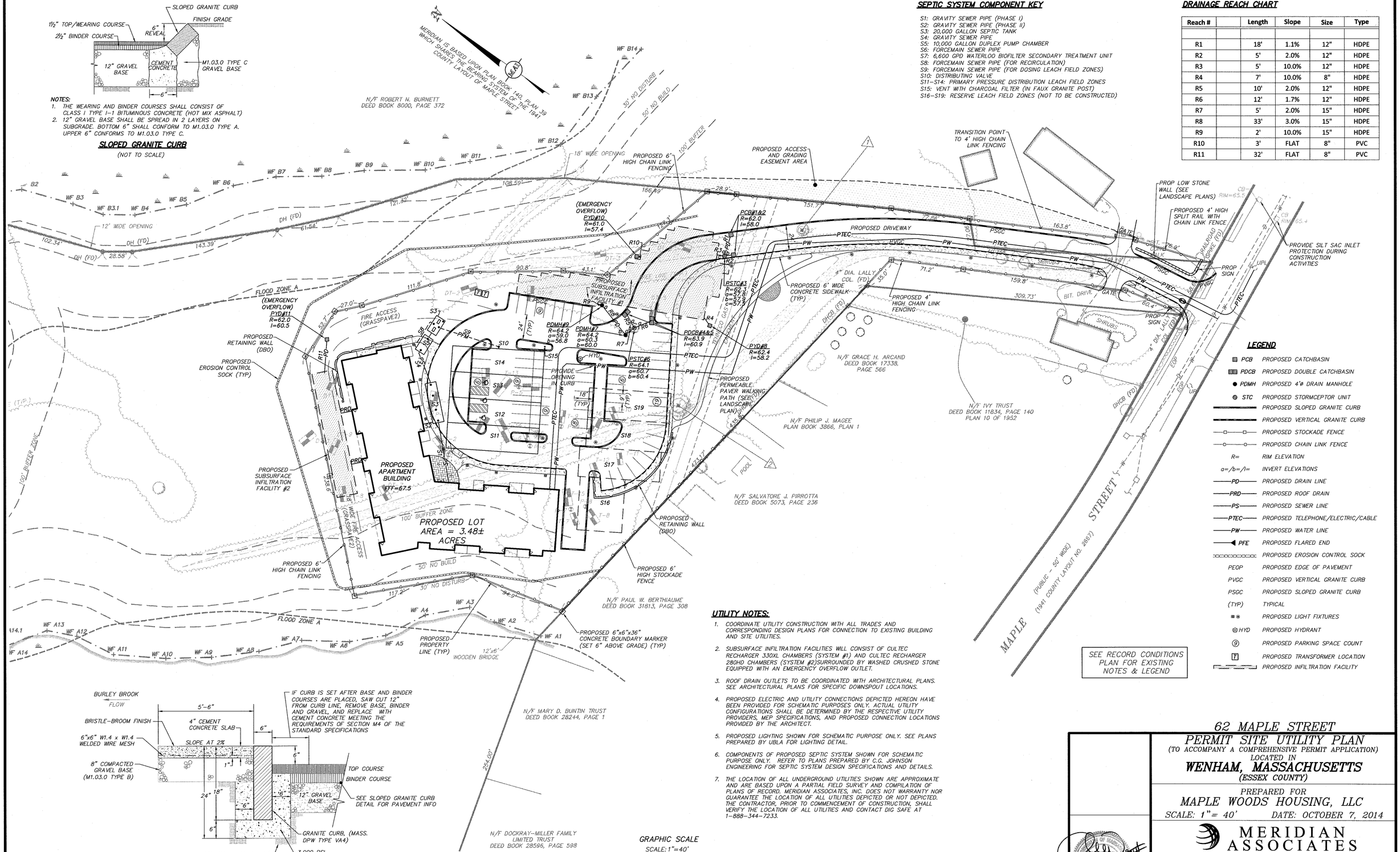
(NOT TO SCALE)

SEPTIC SYSTEM COMPONENT KEY

- S1: GRAVITY SEWER PIPE (PHASE I)
- S2: GRAVITY SEWER PIPE (PHASE II)
- S3: 20,000 GALLON SEPTIC TANK
- S4: GRAVITY SEWER PIPE
- S5: 10,000 GALLON DUPLEX PUMP CHAMBER
- S6: FORCEMAIN SEWER PIPE
- S7: 6,600 GPD WATERLOO BIOFILTER SECONDARY TREATMENT UNIT
- S8: FORCEMAIN SEWER PIPE (FOR RECIRCULATION)
- S9: FORCEMAIN SEWER PIPE (FOR DOSING LEACH FIELD ZONES)
- S10: DISTRIBUTING VALVE
- S11–S14: PRIMARY PRESSURE DISTRIBUTION LEACH FIELD ZONES
- S15: VENT WITH CHARCOAL FILTER (IN FAUX GRANITE POST)
- S16–S19: RESERVE LEACH FIELD ZONES (NOT TO BE CONSTRUCTED)

DRAINAGE REACH CHART

Reach #		Length	Slope	Size	Type
R1		18'	1.1%	12"	HDPE
R2		5'	2.0%	12"	HDPE
R3		5'	10.0%	12"	HDPE
R4		7'	10.0%	8"	HDPE
R5		10'	2.0%	12"	HDPE
R6		12'	1.7%	12"	HDPE
R7		5'	2.0%	15"	HDPE
R8		33'	3.0%	15"	HDPE
R9		2'	10.0%	15"	HDPE
R10		3'	FLAT	8"	PVC
R11		32'	FLAT	8"	PVC



LEGEND

- PCB — PROPOSED CATCHBASIN
- PDCB — PROPOSED DOUBLE CATCHBASIN
- PDMH — PROPOSED 4'ø DRAIN MANHOLE
- STC — PROPOSED STORMCEPTOR UNIT
- PROPOSED SLOPED GRANITE CURB
- PROPOSED VERTICAL GRANITE CURB
- PROPOSED STOCKADE FENCE
- PROPOSED CHAIN LINK FENCE
- R= — RIM ELEVATION
- a=/b=/I= — INVERT ELEVATIONS
- PD — PROPOSED DRAIN LINE
- PRD — PROPOSED ROOF DRAIN
- PS — PROPOSED SEWER LINE
- PTEC — PROPOSED TELEPHONE/ELECTRIC/CABLE
- PW — PROPOSED WATER LINE
- PFE — PROPOSED FLARED END
- PROPOSED EROSION CONTROL SOCK
- PEOP — PROPOSED EDGE OF PAVEMENT
- PVGC — PROPOSED VERTICAL GRANITE CURB
- PSGC — PROPOSED SLOPED GRANITE CURB
- (TYP) — TYPICAL
- PROPOSED LIGHT FIXTURES
- HYD — PROPOSED HYDRANT
- 9 — PROPOSED PARKING SPACE COUNT
- T — PROPOSED TRANSFORMER LOCATION
- PROPOSED INFILTRATION FACILITY

SEE RECORD CONDITIONS PLAN FOR EXISTING NOTES & LEGEND

CONCRETE WALK WITH VERTICAL GRANITE CURB

(NOT TO SCALE)

UTILITY NOTES:

1. COORDINATE UTILITY CONSTRUCTION WITH ALL TRADES AND CORRESPONDING DESIGN PLANS FOR CONNECTION TO EXISTING BUILDING AND SITE UTILITIES.
2. SUBSURFACE INFILTRATION FACILITIES WILL CONSIST OF CULTEC RECHARGER 330XL CHAMBERS (SYSTEM #1) AND CULTEC RECHARGER 280HD CHAMBERS (SYSTEM #2)SURROUNDED BY WASHED CRUSHED STONE EQUIPPED WITH AN EMERGENCY OVERFLOW OUTLET.
3. ROOF DRAIN OUTLETS TO BE COORDINATED WITH ARCHITECTURAL PLANS. SEE ARCHITECTURAL PLANS FOR SPECIFIC DOWNSPOUT LOCATIONS.
4. PROPOSED ELECTRIC AND UTILITY CONNECTIONS DEPICTED HEREON HAVE BEEN PROVIDED FOR SCHEMATIC PURPOSES ONLY. ACTUAL UTILITY CONFIGURATIONS SHALL BE DETERMINED BY THE RESPECTIVE UTILITY PROVIDERS, MEP SPECIFICATIONS, AND PROPOSED CONNECTION LOCATIONS PROVIDED BY THE ARCHITECT.
5. PROPOSED LIGHTING SHOWN FOR SCHEMATIC PURPOSE ONLY. SEE PLANS PREPARED BY UBLA FOR LIGHTING DETAIL.
6. COMPONENTS OF PROPOSED SEPTIC SYSTEM SHOWN FOR SCHEMATIC PURPOSE ONLY. REFER TO PLANS PREPARED BY C.G. JOHNSON ENGINEERING FOR SEPTIC SYSTEM DESIGN SPECIFICATIONS AND DETAILS.
7. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION OF PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANTY NOR 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 1–888–344–7233.

GRAPHIC SCALE
SCALE: 1"=40'

FEET 40 0 20 40 80 160
METERS 0 10 20 40 60

DWG. No. 5652–SITE
(XREF: 5652–REC)

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
1	01/23/15	ADD INFIL SYSTEM #2/PEER REVIEW	ACF	CEW

62 MAPLE STREET

PERMIT SITE UTILITY PLAN

(TO ACCOMPANY A COMPREHENSIVE PERMIT APPLICATION)
LOCATED IN
WENHAM, MASSACHUSETTS
(ESSEX COUNTY)

PREPARED FOR
MAPLE WOODS HOUSING, LLC

SCALE: 1"= 40' DATE: OCTOBER 7, 2014

MERIDIAN ASSOCIATES
500 CUMMINGS CENTER, SUITE 5950 BEVERLY, MASSACHUSETTS 01915 TELEPHONE: (978) 299-0447
69 MILK STREET, SUITE 302 WESTBOROUGH, MASSACHUSETTS 01581 TELEPHONE: (508) 871-7030
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SHEET No. 4 OF 4 PROJECT No. 5652

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