AGENDA

Lexington Planning Board

Thursday, July 19, 2018
Selectmen's Meeting Room, Town Office Building, 1625 Massachusetts Avenue
7:00 PM

Staff Reports

1. **General Updates (as needed)**
2. **Hartwell Avenue Zoning Initiative Update**

Development Administration

1. **167-177 Cedar St (Winding Road): Conventional Subdivision Tripartite Reduction Request**
2. **443 Lincoln Street: Definitive Balanced Housing Development Discuss Decision**
3. **8 Adams Street: Definitive Site Sensitive Development (Public Hearing)**
4. **55 & 56 Watertown Street (Belmont Country Club): Planned Development (Public Hearing)**

Board Administration

1. **Board Member Updates**
2. **Comprehensive Plan Update**
3. **Upcoming Meetings & Anticipated Schedule**
4. **Minutes**

Adjourn

Meeting broadcast by LexMedia

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

General Updates (as needed)

PRESENTER:

Carol Kowalski

ITEM NUMBER:

SUMMARY:

The general update is a standing agenda item providing the Planning Office staff the opportunity to update the community and Board on day-to-day matters.

SUGGESTED MOTION:

Staff's update requires no action on the part of the Board.

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Hartwell Avenue Zoning Initiative Update

PRESENTER:

Carol Kowalski

ITEM NUMBER:

SUMMARY:

This is a standing agenda item to provide updates to the Planning Board on the status of the Hartwell Zoning Initiative.

SUGGESTED MOTION:

Staff's update requires no action on the part of the Board.

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

167-177 Cedar St (Winding Road): Conventional Subdivision Tripartite Reduction Request

PRESENTER:

David Kucharsky

ITEM NUMBER:

SUMMARY:

Applicant, Finnegan Development, is seeking to reduce their existing tripartite agreement by $171,673.16.

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

443 Lincoln Street: Definitive Balanced Housing Development Discuss Decision

PRESENTER:

ITEM NUMBER:

SUMMARY:

During the June 21st meeting the Planning Board closed the public hearing. Board will discuss their decision on this item. Please click **here** to view latest plans and relevant documents. A revised plan set showing changes made to the on-site trail connections was added 07/16/2018.

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

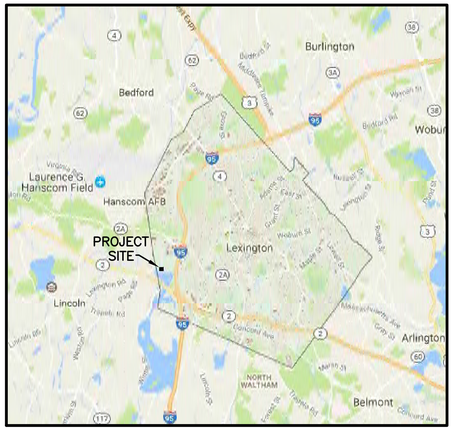
ATTACHMENTS:

	Description	Type
🗋	Plan Set (revised 07/16/2018)	Backup Material

HOMES AT HOBBS BROOK

DEFINITIVE PLAN
BALANCED HOUSING RESIDENTIAL DEVELOPMENT
443 LINCOLN STREET
LEXINGTON, MASSACHUSETTS

FEBRUARY 20, 2018
REVISED: MAY 15, 2018
REVISED: MAY 30, 2018
REVISED: JULY 12, 2018



TOWN LOCUS
SCALE: 1"=10,000'

LOCUS MAP
SCALE: 1"=120'

0 60 120 240 360 480 FT

SHEET INDEX

SHEET 1	TITLE SHEET
SHEET 2	SITE ANALYSIS MAP
SHEET 3	PROPERTY RIGHTS PLAN OF LAND
SHEET 4	SITE CONSTRUCTION PLAN
SHEET 5	PLAN AND PROFILE
SHEET 6	UTILITY PLAN
SHEET 7	LANDSCAPE PLAN
SHEET 8	CONVENTIONAL SUBDIVISION PROOF PLAN
SHEET 9–10	CONSTRUCTION DETAILS
SHEET 11	EROSION AND SEDIMENT CONSTROL PLAN

APPLICANT
SYMES DEVELOPMENT & PERMITTING, LLC
50 DODGE STREET
BEVERLY, MA 01915

LANDSCAPE ARCHITECT
JAMES EMMANUEL, ASSOCIATES
22 CARLTON ROAD
MARBLEHEAD, MA 01945

SURVEYOR/ENGINEER
STAMSKI AND MCNARY, INC.
1000 MAIN STREET
ACTON, MA 01720

ATTORNEY
LATHAM LAW OFFICES, LLC
643 MAIN STREET
READING, MA 01867–3096

RECORD OWNER
THE GERTRUDE M. PIANTEDOSI TRUST
443 LINCOLN STREET
LEXINGTON, MA

REFERENCE
MIDDLESEX REGISTRY OF DEEDS
SOUTH DISTRICT
DEED BOOK 65347 PAGE 366
PLAN BOOK 239 PLAN 26
ASSESSOR'S MAP 35 PARCEL 2

ZONING DISTRICT
RO

DATUM
N.G.V.D. OF 1929

LEGEND:

- N/F — NOW OR FORMERLY
- OHW — OVERHEAD WIRES
- TREE
- TREE LINE
- UP — UTILITY POLE
- GG ▪ — GAS GATE
- — G — GAS SERVICE (BURIED)
- WG ▪ — WATER GATE
- — W — WATER SERVICE (BURIED)
- ○ DMH — DRAIN MANHOLE
- — D — SUB–SURFACE DRAIN LINE
- ---89--- EXISTING CONTOUR
- – – 85 – – – EXISTING CONTOUR
- ☼ — LIGHTPOLE
- △ — WETLAND FLAG
- 99X9 — SPOT ELEVATION
- ○○○○○ — STONE WALL
- EDGE OF PAVEMENT

TEST PITS WERE PERFORMED ON DECEMBER 15, 2017
BY STAMSKI AND MCNARY, INC., RICHARD J. HARRINGTON, P.E., S.E. No. 1012

SOILS INFORMATION

TEST PIT: TP 17–1
ELEV.=175.1±

0"–12"	FILL: GRAVEL PARKING
12"–33"	FILL: GENERAL FILL
33"–72"	LAYER C1: MEDIUM SAND
72"–108"	LAYER C2: FINE SAND

WATER WEEPING @ 100"
MOTTLING OBSERVED @ 33"
E.S.H.G.W. ELEV =172.4'

TEST PIT: TP 17–2
ELEV.=174.7±

0"–66"	FILL
66"–120"	LAYER C: MEDIUM SAND

WATER WEEPING @ 84"
MOTTLING OBSERVED @ 66"
E.S.H.G.W. ELEV =169.2'

TEST PIT: TP 17–3
ELEV.=174.4±

0"–36"	FILL
36"–110"	LAYER C: MEDIUM SAND

WATER WEEPING @ 74"
MOTTLING OBSERVED @ 36"
E.S.H.G.W. ELEV =171.4'

TEST PIT: TP 17–4
ELEV.=175.4±

0"–10"	HORIZON A: SANDY LOAM
10"–24"	HORIZON B: LOAMY SAND
24"–40"	LAYER C1: MEDIUM SAND
40"–100"	LAYER C2: FINE SAND

WATER WEEPING @ 80"
MOTTLING OBSERVED @ 24"
E.S.H.G.W. ELEV =173.4'

TEST PIT: TP 17–5
ELEV.=177.3±

0"–12"	HORIZON A: SANDY LOAM
12"–14"	HORIZON B: LOAMY SAND
14"–40"	LAYER C1: MEDIUM SAND
40"–108"	LAYER C2: FINE SAND

WATER WEEPING @ NONE
MOTTLING OBSERVED @ 40"
E.S.H.G.W. ELEV =174.0'

TEST PIT: TP 17–6
ELEV.=176.4±

0"–12"	HORIZON A: SANDY LOAM
12"–24"	HORIZON B: LOAMY SAND
24"–40"	LAYER C1: MEDIUM SAND
40"–114"	LAYER C2: FINE SAND

WATER WEEPING @ NONE
MOTTLING OBSERVED @ 36"
E.S.H.G.W. ELEV =173.4'

TEST PIT: TP 17–7
ELEV.=179.0±

0"–9"	HORIZON A: SANDY LOAM
9"–20"	HORIZON B: LOAMY SAND
20"–34"	LAYER C: COARSE SAND

WATER WEEPING @ 34"
MOTTLING OBSERVED @ NONE
E.S.H.G.W. ELEV =176.2'

TEST PIT: TP 17–8
ELEV.=178.4±

0"–17"	HORIZON A: SANDY LOAM
17"–27"	HORIZON B: LOAMY SAND
27"–40"	LAYER C1: FINE SAND
40"–108"	LAYER C2: COARSE SAND

WATER WEEPING @ 50"
MOTTLING OBSERVED @ 50"
E.S.H.G.W. ELEV =174.2'

TEST PIT: TP 17–9
ELEV.=175.4±

0–36"	FILL: SANDY LOAM
36"–40"	HORIZON A: SANDY LOAM
40"–44"	HORIZON B: LOAMY SAND
44"–109"	LAYER C: MEDIUM SAND

WATER WEEPING @ 100"
MOTTLING OBSERVED @ 44"
E.S.H.G.W. ELEV =171.7'

TEST PIT: TP 17–10
ELEV.=175.9±

0"–30"	FILL: SANDY LOAM
30"–36"	HORIZON A: SANDY LOAM
36"–44"	HORIZON B: LOAMY SAND
44"–60"	LAYER C1: COARSE SAND
60"–120"	LAYER C2: MEDIUM SAND

WATER WEEPING @ 94"
MOTTLING OBSERVED @ 60"
E.S.H.G.W. ELEV =170.9'

SLOPE KEY:
- <15%
- 15% – 25%
- 25% – 40%
- 40% – 100%
- DIRECTION OF FLOW

UTILITY NOTE:

1. ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS THE APPROPRIATE PUBLIC UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. DIG SAFE TELEPHONE No. 1–888–344–7233.

2. EXISTING TOPOGRAPHY & SITE FEATURES OBTAINED FROM AN ON THE GROUND FIELD SURVEY.

3. THE LOCUS PROPERTY IS NOT LOCATED WITHIN A FLOOD ZONE AS DEPICTED ON THE MOST RECENT FLOOD INSURANCE RATE MAP.

4. PROJECT SITE IS NOT HABITAT FOR RARE SPECIES OR RARE WILDLIFE.

5. EXISTING SEWER & WATER MAIN INFORMATION OBTAINED FROM TOWN OF LEXINGTON, MASSACHUSETTS ENGINEERING DIVISION; SEWER & WATER MAIN CONSTRUCTION AS–BUILT PLAN DATED SEPTEMBER 14, 2001; LINCOLN STREET (STA 9+13 TO 20+19) [R.S.708B].

"THIS PLAN IS SUBJECT TO A COVENANT DATED _____"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED _____"

"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED _____"

I, _____, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ _____
TOWN CLERK DATE

APPROVED BY:
LEXINGTON PLANNING BOARD

_____
_____
_____ _____
_____ DATE
_____

0 20 40 80 160 FT
(5676 DEF BHD 2C.dwg)

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

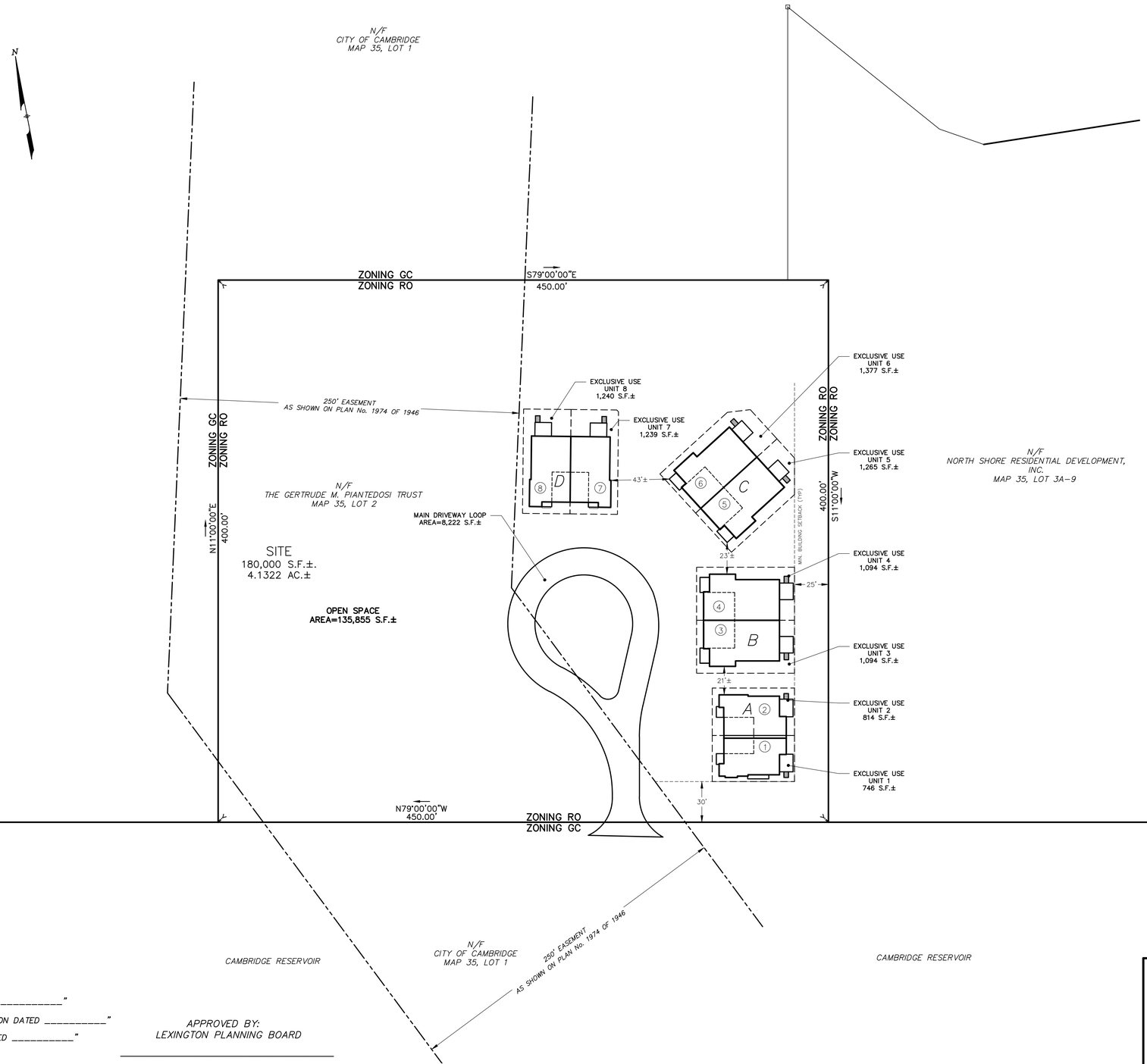
SITE ANALYSIS MAP

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT AND PERMITTING, LLC
SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING – PLANNING – SURVEYING

SHEET No. 2 OF 11 | PROJECT No. SM–5676



FOR REGISTRY OF DEEDS USE ONLY

I DECLARE, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

JOSEPH MARCH, PLS — DATE

LEGEND:

N/F	NOW OR FORMERLY
OHW	OVERHEAD WIRES
	TREE
	TREE LINE
UP	UTILITY POLE
GG∘	GAS GATE
G	GAS SERVICE (BURIED)
WG∘	WATER GATE
W	WATER SERVICE (BURIED)
DMH	DRAIN MANHOLE
D	SUB-SURFACE DRAIN LINE
99	EXISTING CONTOUR
95	EXISTING CONTOUR
	LIGHTPOLE
	WETLAND FLAG
99X9	SPOT ELEVATION
	STONE WALL
	EDGE OF PAVEMENT
	PROPOSED PERVIOUS PAVEMENT

NOTE:

OPEN SPACE EXCLUDES BUILDINGS, EXCLUSIVE USE AREAS, AND THE MAIN DRIVEWAY LOOP.

"THIS PLAN IS SUBJECT TO A COVENANT DATED _____"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED _____"

"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED _____"

I,_____, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

TOWN CLERK — DATE

APPROVED BY:
LEXINGTON PLANNING BOARD

DATE

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

PROPERTY RIGHTS PLAN OF LAND

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT & PERMITTING, LLC
SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING - PLANNING - SURVEYING

SHEET No. 3 OF 11 | PROJECT No. SM-5676

LEGEND:

- N/F — NOW OR FORMERLY
- OHW — OVERHEAD WIRES
- TREE
- TREE LINE
- UP — UTILITY POLE
- GG — GAS GATE
- G — GAS SERVICE (BURIED)
- WG — WATER GATE
- W — WATER SERVICE (BURIED)
- DMH — DRAIN MANHOLE
- D — SUB-SURFACE DRAIN LINE
- 99 — EXISTING CONTOUR
- 95 — EXISTING CONTOUR
- LIGHTPOLE
- WETLAND FLAG
- 99X9 — SPOT ELEVATION
- STONE WALL
- EDGE OF PAVEMENT
- PROPOSED PERVIOUS PAVEMENT

N

MEAN ANNUAL HIGH-WATER AS DELINEATED BY B&C ASSOCIATES, INC. ON SEPTEMBER 27, 2016 (RF 1-13) CONNECT RF 13 TO B26 ORAD ISSUED DEP#201-1038

N/F CITY OF CAMBRIDGE

MEAN ANNUAL HIGH WATER LINE, FLAGS B26-B32 AS SHOWN IN ORDER OF CONDITIONS DEP#201-1015 AS DELINEATED BY LEC ENVIRONMENTAL

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES, INC. (WF 1-24, 26 & 27) CONNECT WF 27 TO WF 11 ORAD ISSUED DEP#201-1038

HOBBS BROOK PERENNIAL

EDGE OF BORDERING VEGETATED WETLANDS, FLAGS 11-18 AS SHOWN IN ORDER OF CONDITIONS DEP#201-1015 AS DELINEATED BY LEC ENVIRONMENTAL

WF 25 REMOVED

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES, INC. ON SEPTEMBER 27, 2016 ORAD ISSUED DEP#201-1038

MEAN ANNUAL HIGH-WATER AS DELINEATED BY B&C ASSOCIATES, INC. ON SEPTEMBER 27, 2016 ORAD ISSUED DEP#201-1038

200' RIVERFRONT AREA

100' BUFFER ZONE

S79°00'00"E 450.00'

N11°00'00"E 400.00'

N79°00'00"W 450.00'

S11°00'00"W 400.00'

S40°00'22"E 143.61'

S59°46'34"E 34.54'

S87°49'35"E 116.19'

S89°27'02"E 25.78'

S75°10'50"E 27.86'

PROTECTED LAND UNDER DECLARATION OF RESTRICTIVE COVENANT AREA = 43,318 S.F.±

N82°46'06"W 89.75'

S80°57'55"W 86.91'

S62°50'36"W 151.77'

N05°28'21"E 143.49'

N24°32'08"W 8.62'

S71°21'49"W 119.69'

S15°19'12"E 55.64'

S23°59'08"E 117.38'

SITE
180,000 S.F.±.
4.1322 AC.±

VISTA VIEW

250' EASEMENT AS SHOWN ON PLAN No. 1974 OF 1946

EXISTING SERVICE SHOP TO BE RAZED

MEADOW

PATH

TURF

PARKING

DRIVE A

BASIN (INV.=175.00)

INFILTRATION BASIN (INV.=174.80)

SEDIMENT FOREBAY

OUTET STRUCTURE X174.9

LEVEL SPREADER (SEE DETAIL)

TREES

PROPOSED TREELINE

PROPOSED SLIDE GATE (SEE DETAIL)

PROPOSED TWO-FAMILY DWELLING (TYPICAL)

PROPOSED AREA DRAIN (TYPICAL) (SEE DETAIL)

EXISTING DWELLING #443 TO BE RAZED

EXISTING TREES

END STOCKADE FENCE

BEGIN STOCKADE FENCE

RAIL FENCE

PROPOSED PATH

PROPOSED PRIVATE DRIVEWAY

EXCLUSIVE USE UNIT 18 5,175 S.F.±

EXCLUSIVE USE UNIT 20 4,056 S.F.±

EXCLUSIVE USE UNIT 16 4,636 S.F.±

EXCLUSIVE USE UNIT 9 1,179 S.F.±

EXCLUSIVE USE UNIT 7 2,408 S.F.±

EXCLUSIVE USE UNIT 5 3,372 S.F.±

EXCLUSIVE USE UNIT 3 4,900 S.F.±

BLDG 1 · BLDG 2 · BLDG 3 · BLDG 4 · BLDG 5 · BLDG 6 · BLDG 8 · BLDG 9

PAVED SURFACE · LANDSCAPED AREA · Visitor Parking · Berm

GREY OAKS CIRCLE

S STREET

TOTAL LOT AREA
200,544 S.F.±/4.604 AC±

1 ½" PC200 PVC P.S. SERVICE STUB PLUGGED (TYP.)

1 ½" CHECK VALVE (TYP.)

1 ½" BALL VALVE & BOX

FLUSHING CONNECTION

8" GATE VALVE & BOX

8" CLDI CAP & NIPPLE

EXISTING HYDRANT

EXISTING 8" CLDI WATER MAIN (APPROX)

EXISTING 1½" PC200 PRESSURE SEWER

EXISTING 2" PC200 PVC PRESSURE SEWER

EXISTING 2" X 1½" REDUCER

TBM BOLT ON BONNET ELEV.=177.84

TBM NAIL IN UP ELEV.=180.39

1" TYPE K COPPER WATER SERVICE W/CORPORATION STOP, COPPER TUBING, CURB STOP AND SERVICE BOX.

100' BUFFER ZONE

LINCOLN STREET (PUBLIC - VARIABLE WIDTH)

CAMBRIDGE RESERVOIR

N/F CITY OF CAMBRIDGE

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES, INC. ORAD ISSUED DEP#201-1038

0 20 40 80 160 FT

(5676 DEF BHD 2C.dwg)

TABLE OF DIMENSIONAL CONTROLS FOR BALANCED HOUSING SPECIAL PERMIT RESIDENTIAL DEVELOPMENT

TOTAL SITE AREA: 180,000 S.F.±

	ALLOWED	PROPOSED
MAXIMUM IMPERVIOUS SURFACE	31,355 S.F.	26,992 S.F.
MAXIMUM GROSS FLOOR AREA	28,800 S.F.	22,945 S.F.
MINIMUM COMMON OPEN SPACE	59,400 S.F.	135,855 S.F.

BUILDING SIZE (GFA)

UNIT #	G.F.A. PROPOSED (S.F.)
1	2,644±
2	2,583±
3	3,092±
4	3,092±
5	3,092±
6	3,092±
7	2,675±
8	2,675±

TOTAL: 22,945 S.F.

IMPERVIOUS AREAS:

ITEM	S.F.
DWELLING A FOOTPRINT:	2,639
DWELLING B FOOTPRINT:	3,459
DWELLING C FOOTPRINT:	3,459
DWELLING D FOOTPRINT:	2,910
MAIN DRIVE:	8,222
ASPHALT CURB:	554
DWELLING A DRIVE:	1,432
DWELLING B DRIVE:	1,280
DWELLING C DRIVE:	2,169
DWELLING D DRIVE:	868

TOTAL: 26,992 S.F.

HARDSCAPE AREAS:

PERVIOUS PAVERS

ITEM	S.F.
DWELLING A DRIVE:	413
DWELLING D DRIVE:	382
VISITOR PARKING:	782

TOTAL: 1,577 S.F.

"THIS PLAN IS SUBJECT TO A COVENANT DATED _____"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED _____"

"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED _____"

I,_____, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ TOWN CLERK _____ DATE

APPROVED BY:
LEXINGTON PLANNING BOARD

_____

_____

_____ _____ DATE

_____

_____

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

SITE CONSTRUCTION PLAN

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT & PERMITTING, LLC

SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING - PLANNING - SURVEYING

SHEET No. 4 OF 11 PROJECT No. SM-5676

AVERAGE EXISTING GRADE CALCULATION/BUILDING HEIGHT

UNIT	EXISTING GRADE ELEVATIONS AT BUILDING CORNERS 1	2	3	4	AVERAGE EXISTING GRADE	HIGHEST RIDGE	BUILDING HEIGHT
1	181.4	179.9	179.7	179.6	180.15	217.43	37.28
2	181.4	179.9	178.4	178.2	179.48	217.43	37.96
3	176.3	178.6	178.4	177.0	177.58	213.60	36.03
4	176.3	178.6	178.5	175.9	177.33	213.60	36.28
5	174.7	175.6	177.7	174.2	176.05	214.10	38.05
6	174.7	175.6	174.3	174.6	174.80	214.10	39.30
7	175.1	175.2	175.1	174.9	175.08	214.68	39.61
8	175.1	175.2	175.4	175.4	175.28	214.68	39.41

SITE CONSTRUCTION PLAN

UNIT	FFE	T.C.	G.F.	B.F.
1	184.33	183.25	182.58	176.90*
2	184.33	183.25	182.58	176.90*
3	184.33	183.25	182.58	176.90*
4	184.33	183.25	182.58	176.90*
5	184.83	183.75	183.08	177.40*
6	184.83	183.75	183.08	177.40*
7	184.83	183.75	183.08	177.40*
8	184.83	183.75	183.08	177.40*

* CRAWL SPACE – MAX HEIGHT = 6'–8"**
** MEASURED FROM BOTTOM JOIST TO BASEMENT FLOOR

"THIS PLAN IS SUBJECT TO A COVENANT DATED _____"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED _____"

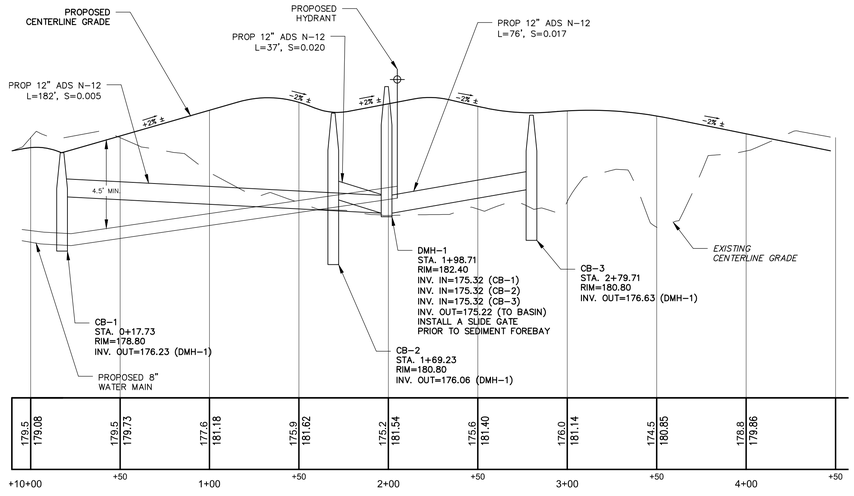
"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED _____"

I,_____, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

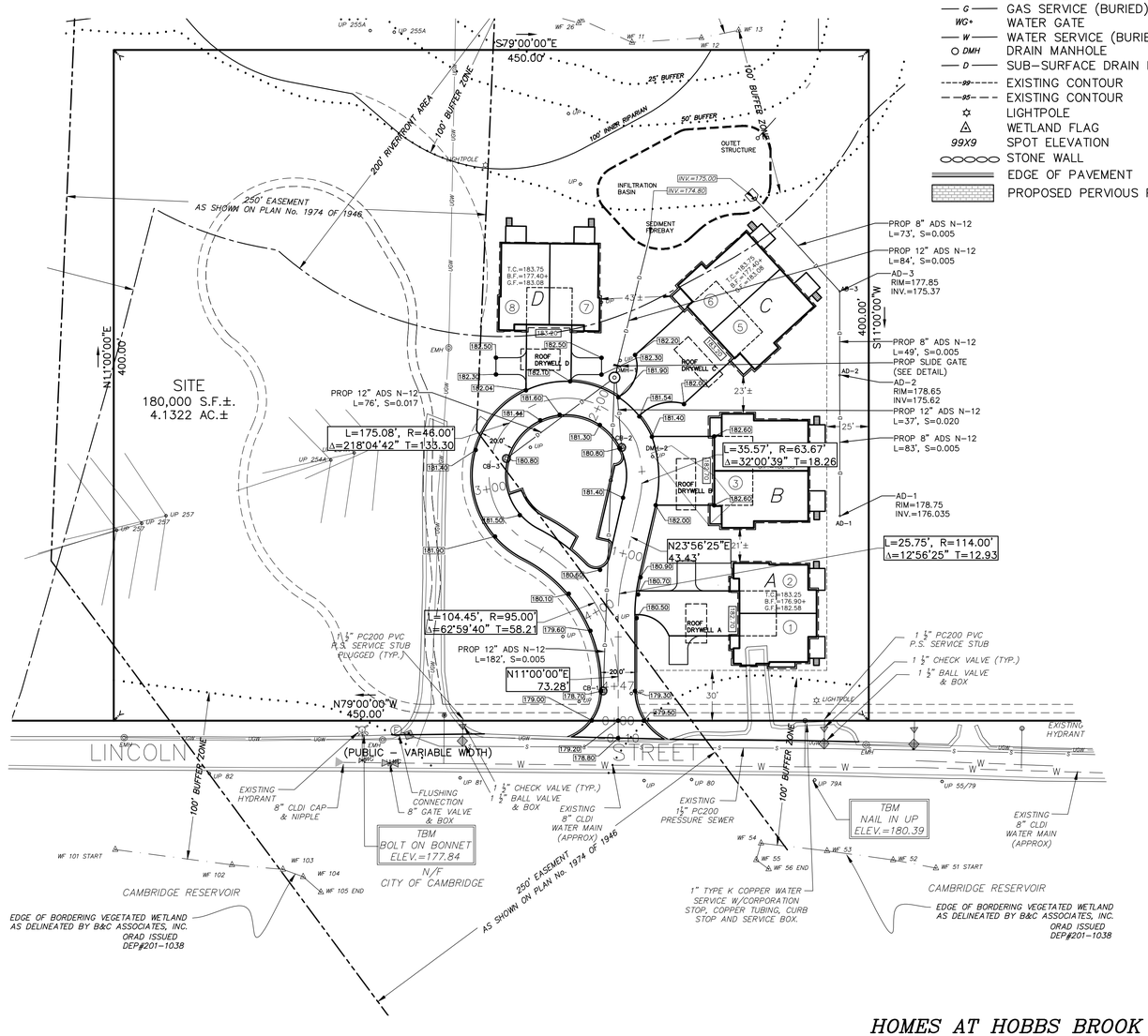
_____ _____
TOWN CLERK *DATE*

APPROVED BY:
LEXINGTON PLANNING BOARD

_____
_____
_____ _____
DATE
_____
_____



PROFILE: SCALE: 1"= 40' H.
1"= 4' V.



PLAN: SCALE: 1"=40'

LEGEND:

- N/F — NOW OR FORMERLY
- OHW — OVERHEAD WIRES
- TREE
- TREE LINE
- UP — UTILITY POLE
- GG* — GAS GATE
- G — GAS SERVICE (BURIED)
- WG* — WATER GATE
- W — WATER SERVICE (BURIED)
- DMH — DRAIN MANHOLE
- D — SUB-SURFACE DRAIN LINE
- 99 — EXISTING CONTOUR
- 95 — EXISTING CONTOUR
- LIGHTPOLE
- WETLAND FLAG
- 99X9 — SPOT ELEVATION
- STONE WALL
- EDGE OF PAVEMENT
- PROPOSED PERVIOUS PAVEMENT

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

PLAN AND PROFILE
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT & PERMITTING, LLC
SCALE: 1" = 40' *DATE: FEBRUARY 20, 2018*

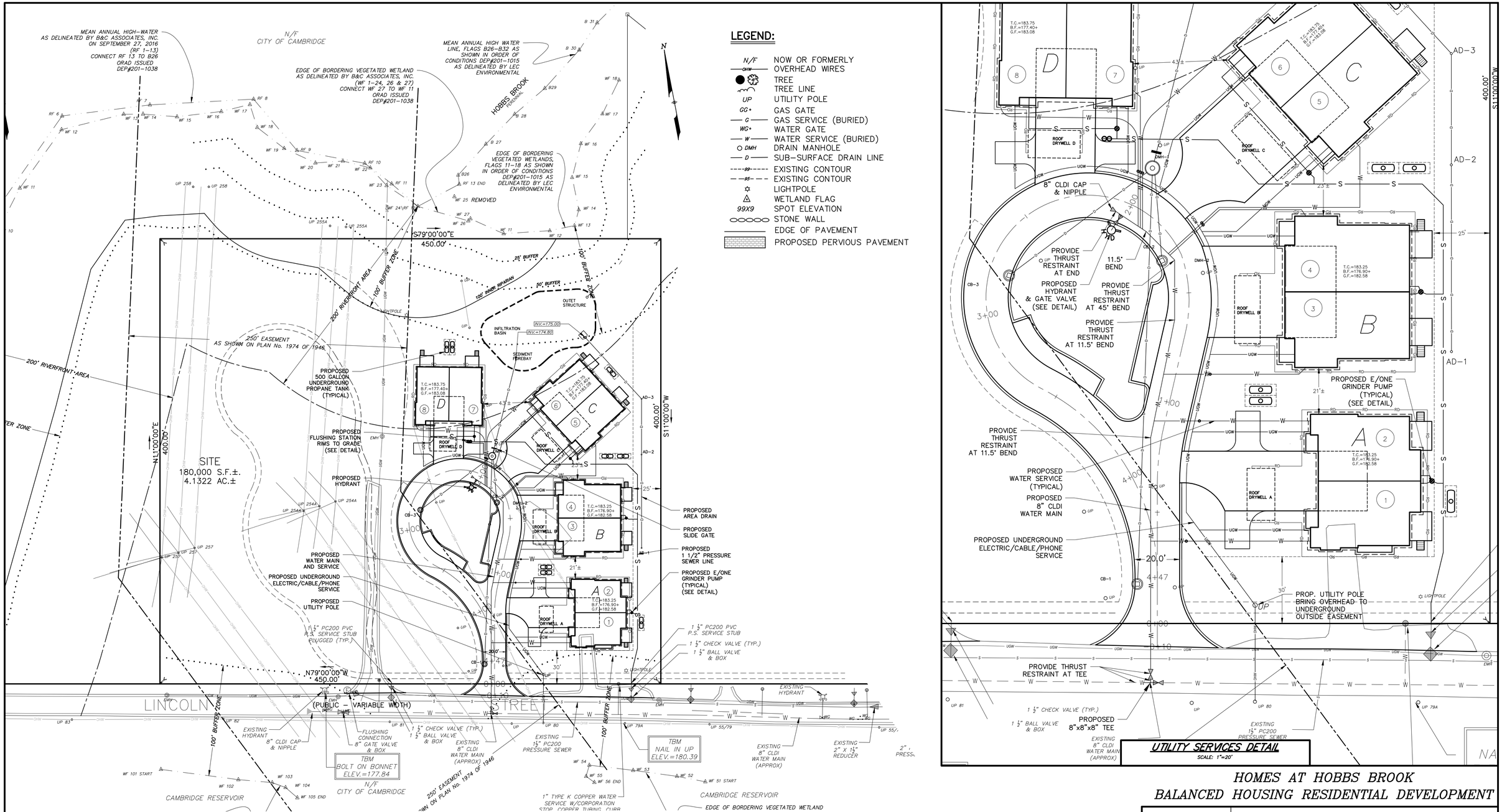
PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING – PLANNING – SURVEYING

SHEET No. 5 OF 11 *PROJECT No. SM–5676*

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

(5676 DEF BHD 2C.dwg)



LEGEND:

- N/F — NOW OR FORMERLY
- OHW — OVERHEAD WIRES
- TREE
- TREE LINE
- UP — UTILITY POLE
- GG+ — GAS GATE
- G — GAS SERVICE (BURIED)
- WG+ — WATER GATE
- W — WATER SERVICE (BURIED)
- DMH — DRAIN MANHOLE
- D — SUB-SURFACE DRAIN LINE
- 99 — EXISTING CONTOUR
- 95 — EXISTING CONTOUR
- LIGHTPOLE
- WETLAND FLAG
- 99X9 — SPOT ELEVATION
- STONE WALL
- EDGE OF PAVEMENT
- PROPOSED PERVIOUS PAVEMENT

"THIS PLAN IS SUBJECT TO A COVENANT DATED _____"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED _____"

"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED _____"

I, _____, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ _____
TOWN CLERK DATE

APPROVED BY:
LEXINGTON PLANNING BOARD

_____
_____
_____ _____
DATE
_____
_____

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

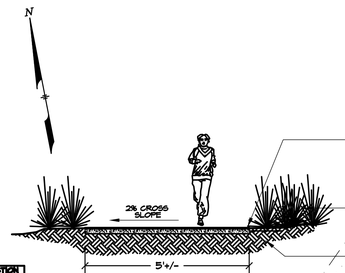
SITE UTILITY PLAN

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT & PERMITTING, LLC
SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING - PLANNING - SURVEYING

SHEET No. 6 OF 11 PROJECT No. SM-5676



2 TYPICAL PATH SURFACING
L-1 SCALE: 1/4"=1'-0"

2" DENSE GRADED GRAVEL

VEGETATION MEADOW GRASS (TYP.)

EXISTING OR COMPACTED SUBGRADE

MEAN ANNUAL HIGH-WATER AS DELINEATED BY B&C ASSOCIATES, INC. ON SEPTEMBER 27, 2016 (RF 1-13) CONNECT RF 13 TO B26

N/F CITY OF CAMBRIDGE

MEAN ANNUAL HIGH WATER LINE, FLAGS B26-B32 AS SHOWN IN ORDER OF CONDITIONS DEF#201-1015 AS DELINEATED BY LEC ENVIRONMENTAL

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES, INC. (WF 1-24, 26 & 27) CONNECT WF 27 TO WF 11

HOBBS BROOK PERENNIAL

EDGE OF BORDERING VEGETATED WETLANDS, FLAGS 11-18 AS SHOWN IN ORDER OF CONDITIONS DEF#201-1015 AS DELINEATED BY LEC ENVIRONMENTAL

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES, INC. ON SEPTEMBER 27, 2016

MEAN ANNUAL HIGH-WATER DELINEATED BY B&C ASSOCIATES, INC. ON SEPTEMBER 27, 2016

200' RIVERFRONT AREA

100' BUFFER ZONE

PROPOSED PATH

PROTECTED LAND UNDER DECLARATION OF RESTRICTIVE COVENANT AREA = 43,318 S.F.±

SITE
180,000 S.F.±
4.1322 AC.±

VISTA VIEW

MEADOW

TURF

PARKING

BASIN

INFILTRATION BASIN

SEDIMENTATION FOREBAY

OUTET STRUCTURE

LEVEL SPREADER (SEE DETAIL)

TREES

EXISTING SERVICE S.F.D. TO BE RAZED

EXISTING DWELLING #44.3 TO BE RAZED

PROPOSED TWO-FAMILY DWELLING (TYPICAL)

PROPOSED TREELINE

REMOVE EXISTING FENCE AND CLOSE ENTRANCE

END STOCKADE FENCE

EXISTING TREES

EXCLUSIVE USE UNIT 18 5,175 S.F.±

EXCLUSIVE USE UNIT 20 4,056 S.F.±

EXCLUSIVE USE UNIT 16 4,636 S.F.±

EXCLUSIVE USE UNIT 8 1,179 S.F.±

EXCLUSIVE USE UNIT 7 2,408 S.F.±

EXCLUSIVE USE UNIT 5 3,372 S.F.±

EXCLUSIVE USE UNIT 3 4,900 S.F.±

BLDG 1 · BLDG 2 · BLDG 3 · BLDG 4 · BLDG 5 · BLDG 6 · BLDG 7 · BLDG 8 · BLDG 9 · BLDG 10

LANDSCAPED AREA · PAVED SURFACE · Water Retaining Berm · 4' Wide Bit. Cedar Sidewalk (Typ.)

GREY OAKS CIRCLE · 20' Paved

TOTAL LOT AREA
200,544 S.F.±/4.604 AC±

1 1/2" PC200 PVC P.S. SERVICE STUB

1 1/2" CHECK VALVE (TYP.)

1 1/2" BALL VALVE & BOX

1" TYPE K COPPER WATER SERVICE W/CORPORATION STOP, COPPER TUBING, CURB STOP AND SERVICE BOX.

PROPOSED PRIVATE DRIVEWAY

EXISTING HYDRANT

8" GATE VALVE & BOX

EXISTING 8" DICL WATER MAIN (APPROX)

EXISTING 2" X 1 1/2" REDUCER

EXISTING 2" PC200 PRESSURE SEWER

EXISTING 14" PC200 PRESSURE SEWER

EXISTING 8" DICL WATER MAIN (APPROX) 1946

250' EASEMENT AS SHOWN ON PLAN No. 1974 OF 1946

FLUSHING CONNECTION 8" GATE VALVE & BOX

1 1/2" CHECK VALVE (TYP.)

1 1/2" BALL VALVE & BOX

EXISTING HYDRANT

8" DICL CAP & NIPPLE

TBM BOLT ON BONNET ELEV.=177.84

TBM NAIL IN UP ELEV.=180.39

STONE RAIL FENCE

LINCOLN STREET (PUBLIC - VARIABLE WIDTH)

5 STREET

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES, INC.

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES, INC.

N/F CITY OF CAMBRIDGE

0 20 40 80 160 FT

(5676 DEF BHD 1.dwg)

Plant Schedule

	Botanical Name	Common Name	Size
DECIDUOUS TREE OPTIONS:			
	Ostrya virginiana	Hophornbeam	2-2.5"cal
	Acer rubrum 'Red Sunset'	Red Sunset Maple	2-2.5"cal
	Acer saccharum 'Green Mountain'	Sugar Maple	2-2.5"cal
	Nyssa sylvatica	Tulelo	2-2.5"cal
	Tilia americana	Basswood	2-2.5"cal
	Carya ovata	Shagbark Hickory	2-2.5"cal
	Quercus coccinea	Scarlet Oak	2-2.5"cal
	Carpinus caroliniana	American Hornbeam	2-2.5"cal
EVERGREEN OPTIONS:			
	Abies balsamea	Balsalm Fir	7-8'
	Chamaecyparis thyoides	White Cedar	7-8'
	Juniperus virginiana	Eastern Red Cedar	8-10'
	Pinus rigida	Pitch Pine	6-7'
	Pinus strobus	White Pine	8-10'
SHRUB OPTIONS:			
	Calycanthus floridus	Carolina Allspice	2-3'
	Clethra alnifolia	Summmer Sweet	2-3'
	Myrica pennsylvanica	Northern Bayberry	2-3'
	Comptonia peregrina	Sweet Fern	18-24"
	Ilex glabra	Inkberry	2-3'
	Ilex verticillata	Winterberry	2-3'
	Vaccinium corymbosum	Highbush Blueberry	2-3'
	Kalmia latifolia	Mountain Laurel	2-3'
	Rosa virginiana	Virginia Rose	18-24"
	Prunus Maratima	Beach Plum	2-3'
	Cornus amomum	Silky Dogwood	2-3'
	Viburnum dentatum	Arrowwood	2-3'
FLOWERING TREE OPTIONS:			
	Cercis candensis	Eastern Redbud	2-2.5"cal
	Oxudenfrum arboreum	Sourwood	2"cal
	Hamamellis virginiana	Witch Hazel	7-8'
	Magnolia virginaina	Sweetbay Magnolia	7-8'
	Amelanchier canadensis	Serviceberry	8-10'
	Cornus florida	White Dogwood	2-2.5"cal

MEADOW SEED MIX:

Creeping Red Fescue, (Festuca rubra), Canada Wild Rye, (Elymus canadensis), Annual Ryegrass, (Lolium multiflorum), Perennial Ryegrass, (Lolium perenne), Blue Grama, (Bouteloua gracilis), Little Bluestem, (Schizachyrium scoparium), Indian Grass, (Sorghastrum nutans), Rough Bentgrass, (Agrostis scabra), Upland Bentgrass, (Agrostis perennans

APPLICATION RATE: 35 lb/acre | 1250 sq ft/lb

"THIS PLAN IS SUBJECT TO A COVENANT DATED _____"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED _____"

"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED _____"

I, _____, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ _____
TOWN CLERK DATE

APPROVED BY:
LEXINGTON PLANNING BOARD

_____
_____
_____ _____
_____ DATE
_____

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

LANDSCAPE PLAN

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT & PERMITTING, LLC
SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING - PLANNING - SURVEYING

james k. emmanuel | associates
LANDSCAPE ARCHITECTS
22 Carlton Rd.,
Marblehead, MA 01945
tel. (781) 622-7487
fax (781) 623-0293
james@jamesemmanuel.com
www.jamesemmanuel.com

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
1	7/12/18	PATH LAYOUT	JE	JE
1	5/9/18	PLANT LIST	JE	JE

SHEET No. 7 OF 11 PROJECT No. SM-5676

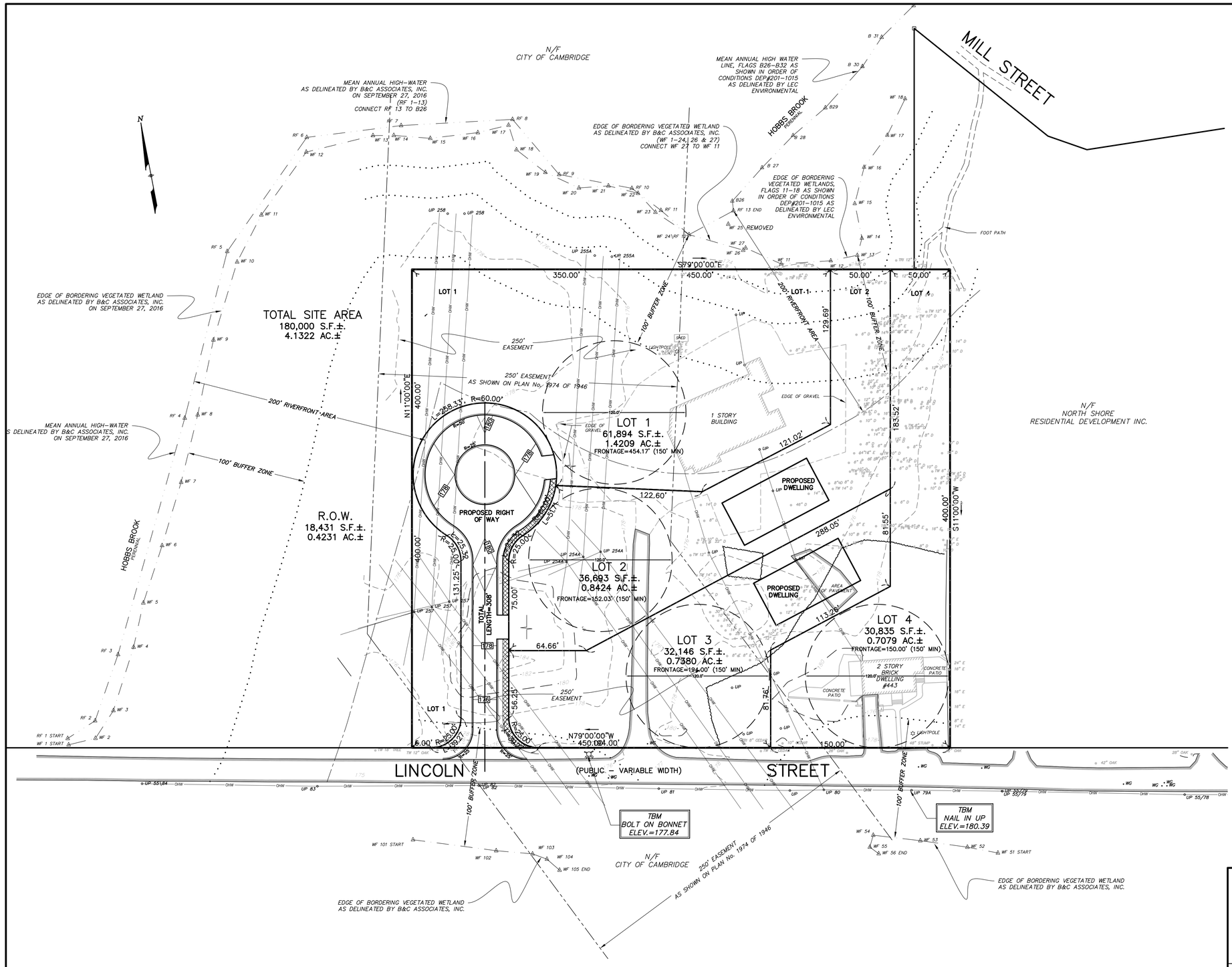


TABLE OF DEVELOPMENT DATA – BALANCED HOUSING DEVELOPMENT

TOTAL LAND AREA: 180,000 S.F.±
TOTAL LAND AREA FOR 4 LOTS: 161,569 S.F. ±
TOTAL LAND AREA WITHIN PROP. RIGHT OF WAY (ROW): 18,431 S.F.±
AREA OF IMPERVIOUS SURFACES WITHIN ROW: 11,967 S.F.±

MAX. GROSS FLOOR AREA (4 LOTS X 7,200 S.F.): 28,800 S.F.
MAX. AREA OF IMPERVIOUS SURFACE: 31,355 S.F.±
4 LOTS; AREA 161,569 S.F. X 0.12 = 19,388 S.F.±
IMPERVIOUS SURFACE WITHIN ROW = 11,967 S.F.±

NUMBER OF DWELLINGS – NO LIMIT
SITE COVERAGE – NO LIMIT

MINIMUM COMMON OPEN SPACE: 59,400 S.F.±
(TOTAL LAND AREA X 33%)

EACH DWELLING TO BE PROVIDED WITH A CRAWL SPACE WITH A FLOOR TO CEILING HEIGHT LESS THAN SEVEN FEET.

ON-SITE RIVERFRONT AREA: 60,666 S.F.
10% MAX : 6,067 S.F.

LEGEND:

- N/F — NOW OR FORMERLY
- OHW — OVERHEAD WIRES
- TREE
- TREE LINE
- UP — UTILITY POLE
- GG* — GAS GATE
- G — GAS SERVICE (BURIED)
- WG* — WATER GATE
- W — WATER SERVICE (BURIED)
- DMH — DRAIN MANHOLE
- D — SUB-SURFACE DRAIN LINE
- 99 — EXISTING CONTOUR
- 95 — EXISTING CONTOUR
- LIGHTPOLE
- WETLAND FLAG
- 99X9 — SPOT ELEVATION
- STONE WALL
- EDGE OF PAVEMENT

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

CONVENTIONAL SUBDIVISION PROOF PLAN

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

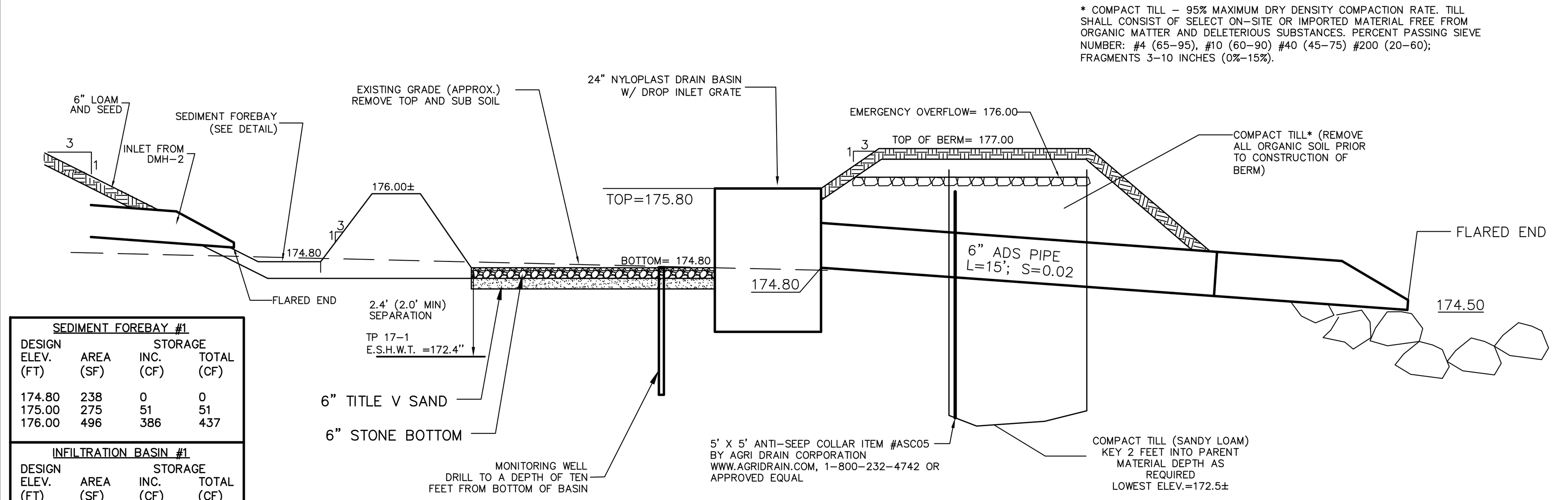
PREPARED FOR
SYMES DEVELOPMENT AND PERMITTING, LLC
SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING – PLANNING – SURVEYING

SHEET No. 8 OF 11 | *PROJECT No. SM-5676*

REVISIONS

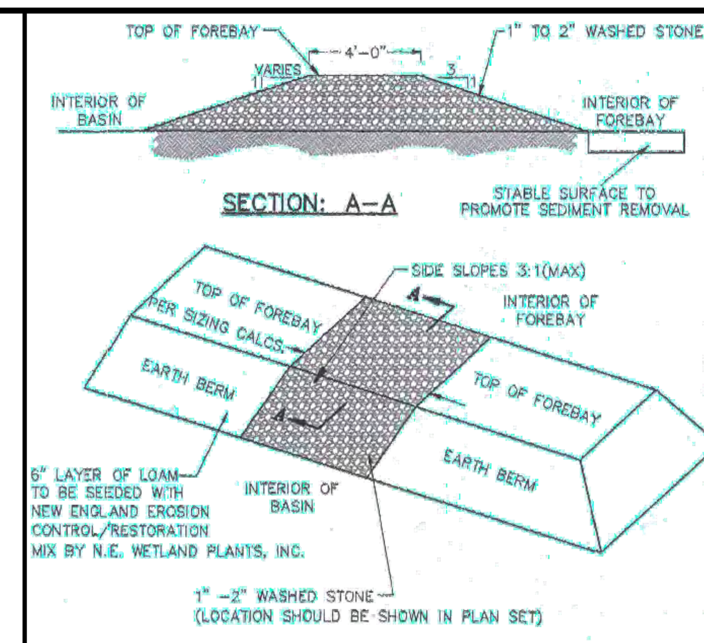
NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH



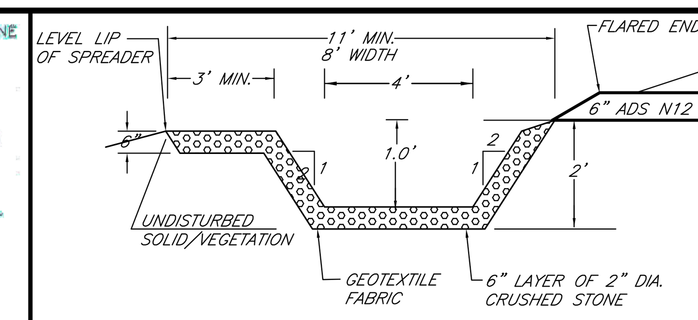
SEDIMENT FOREBAY #1			
DESIGN ELEV. (FT)	AREA (SF)	STORAGE INC. (CF)	TOTAL (CF)
174.80	238	0	0
175.00	275	51	51
176.00	496	386	437

INFILTRATION BASIN #1			
DESIGN ELEV. (FT)	AREA (SF)	STORAGE INC. (CF)	TOTAL (CF)
174.80	2635	0	0
175.00	2990	562	562
176.00	3741	3358	3920
177.00	5270	4483	8404

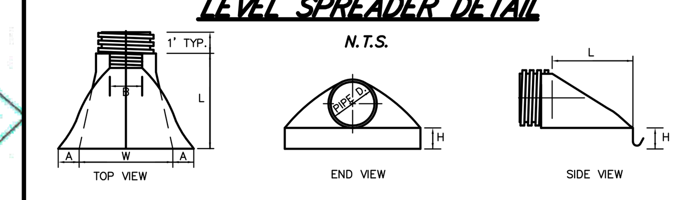
INFILTRATION BASIN 1 DETAIL
NOT TO SCALE



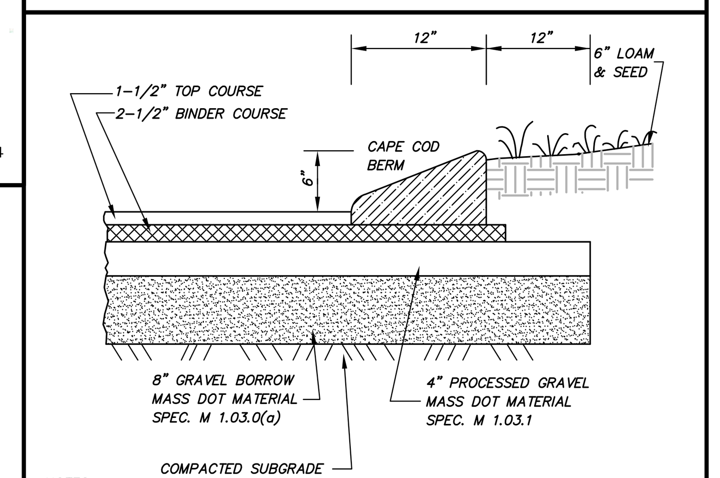
SEDIMENT FOREBAY DETAIL
NOT TO SCALE
DR–14



LEVEL SPREADER DETAIL
N.T.S.



ADS END SECTION DIMENSIONS
NOT TO SCALE



NOTES:
1. MINIMUM PAVEMENT THICKNESS SHOWN IS FOR RESIDENTIAL STREETS, PROPOSED PAVEMENT DESIGNS FOR OTHER ROADWAYS TO BE APPROVED BY TOWN ENGINEER.
2. RECLAIMED ASPHALT PAVEMENT MATERIAL MAY BE SUBSTITUTED FOR DENSE GRADED CRUSHED STONE AND GRAVEL SUB-BASE IF APPROVED BY TOWN ENGINEER.
3. ALL GRAVEL IS TO BE COMPACTED TO 95% MAX. DRY DENSITY

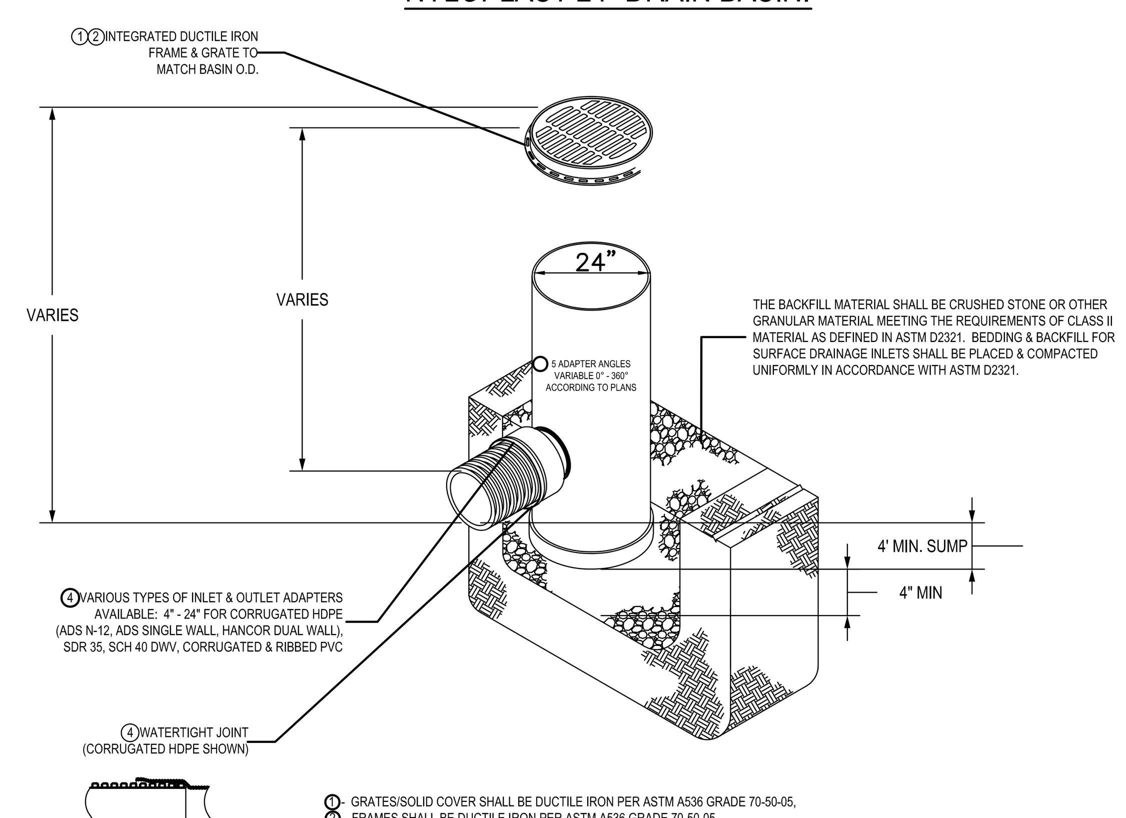
CAPE COD BERM DETAIL
NOT TO SCALE

GENERAL NOTES:

1. ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED BEFORE EXCAVATING.
2. BEFORE BLASTING, INSTALLING, BACKFILLING, GRADING, OR PAVEMENT RESTORATION OR REPAIR, ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED, INCLUDING THOSE IN CONTROL OF UTILITIES. SEE CHAPTER 370, ACTS OF 1963 MASS.
3. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPT. MUST BE CONSULTED. THE CONTRACTOR SHALL NOTIFY PUBLIC UTILITY COMPANIES AT LEAST 72 HOUSE PRIO TO DIGGING OR EXCAVATING ON PUBLIC OR PRIVATE PROPERTY. DIG SAFE TEL. NO. 1–888–344–7233.
4. ALL HYDRANTS, WATER VALVES, VALVE BOXES, ETC SHALL BE AMERICAN MADE; VALVES SHALL OPEN RIGHT (CLOCKWISE), HYDRANTS SHALL OPEN RIGHT (CLOCKWISE), PER TOWN OF LEXINGTON REQUIREMENTS.
5. ALL STUMPS AND OTHER CONSTRUCTION DEBRIS SHALL BE PROPERLY REMOVED FROM THE SITE. ANY FILL MATERIAL USED SHALL BE FREE OF HAZARDOUS MATERIALS, WASTE, AND CONSTRUCTION DEBRIS.
6. RIP RAP SHALL CONSIST OF HARD DURABLE STONE, ANGULAR IN SHAPE, THAT IS WELL GRADED WITHIN THE 25# TO 125# RANGE. THE RIP RAP SHALL BE PLACED OVER A 12" BASE OF COARSE BANK RUN GRAVEL. RIP RAP SHOWN SCHEMATICALLY AT DRAINAGE OUTFALLS SHALL BE PLACED FOR A 3' WIDTH AND 6' LENGTH UNLESS OTHERWISE SPECIFIED.
7. THE LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING PER THE STORMWATER POLLUTION PREVENTION PLAN.
8. EXISTING TOPSOIL SHALL BE STRIPPED, STOCKPILEDM SCREENED AND SPREAD TO REQUIRED DEPTHS AS SHOWN ON THE PLAN IN AREAS OF GENERAL LOAM AND SEED.
9. CATCHBASIN SUMPS AND STORM WATER BASINS SHALL BE CLEANED FOLLOWING COMPLETION OF CONSTRUCTION AND ANUALLY THEREAFTER PER O&M.
10. THE ENTIRE WORK AREA SHALL BE CLEARED OF BUILDINGS TO BE RAZED, PAVEMENT, DEBRIS, BOULDERS, BRUSH, TREES, STUMPS, UNSUITABLE MATERIAL AND LIKE MATERIALS.
11. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A SAFE CONDITION THROUGHOUT THE CONTRACT PERIOD. THE CONTRACTOR SHALL FULLY COMPLY WITH ALL STATE, FEDERAL, AND LOCAL REGULATIONS PERTAINING TO SAFETY.
12. SHRUBS – PROVIDE PER LANDSCAPE PLAN SPECIFICAITONS.
13. THE PROPOSED SIGNS SHALL BE DESIGNED AND INSTALLED IN CONFORMANCE WITH THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009 EDITION FOR STREETS AND HIGHWAYS OR AS MOST RECENTLY AMENDED. EXISTING SIGNS TO BE RELOCATED WHERE NECESSARY.
14. THE ELECTRICAL POWER DISTRIBUTION SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE LEXINGTON MUNICIPAL LIGHT PLANT IN EFFECT AT THE TIME. ELECTRICAL REQUIREMENTS AND LOCATION TO BE DETERMINED BY OTHER AND CONFIRMED WITH OWNER.
15. NO EARTH SHALL BE REMOVED FROM THE SITE.
16. PLAN IS SUBJECT TO REVIEW AND COMMENT BY THE CITY OF CAMBRIDGE WATER DEPARTMENT, DUE TO LOCATION OF CAMBRIDGE RESERVOIR IN PROXIMITY TO THE SITE.
17. THE EXISTING PRIVATE ON-SITE SEWAGE DISPOSAL SYSTEM SHALL BE ABANDONED IN ACCORDANCE WITH 310 CMR 15.354: ABANDONMENT OF SYSTEMS.
18. THE PROPOSED SEWER PUMPING SYSTEM SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE APPLICANT'S DESIGNEE. A SIGN SHALL BE PLACED ON EACH PUMPING UNIT INCLUDING EMERGENCY CONTACT INFORMATION IN THE EVENT OF FAILURE.
19. THE PROPOSED PRESSURE SEWER PIPE SHALL BE OF TYPE SDR 21 PVC.
20. PROPOSED WATER MAIN PIPE SHALL BE CEMENT LINED DUCTILE IRON THICKNESS CLASS 52. INSTALLATION SHALL CONFORM TO TOWN REQUIREMENTS.
21. ALL MANHOLE FRAMES AND COVERS SHALL CONFORM TO TOWN OF LEXINGTON STANDARDS.
22. PER THE CAMBRIDGE WATER DEPARTMENT, THE PROPOSED SEWER LINES, FLUSHING STATION, GRINDER PUMP STATIONS, AND ACCESS COVERS SHALL BE WATER TIGHT. A VENT PIPE EXTENSION WILL BE USED TO ELEVATE THE PUMP TANK VENT ABOVE THE GROUND SURFACE.
23. PER THE LEXINGTON ENGINEERING DIVISION, MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE CROWN OF PRESSURE SEWER LINES AND THE INVERT OF WATER LINES WHEN LINES MUST CROSS OR A 10' HORIZONTAL SEPARATION CANNOT BE MAINTAINED.

OUTLET STRUCTURE
NOT TO SCALE

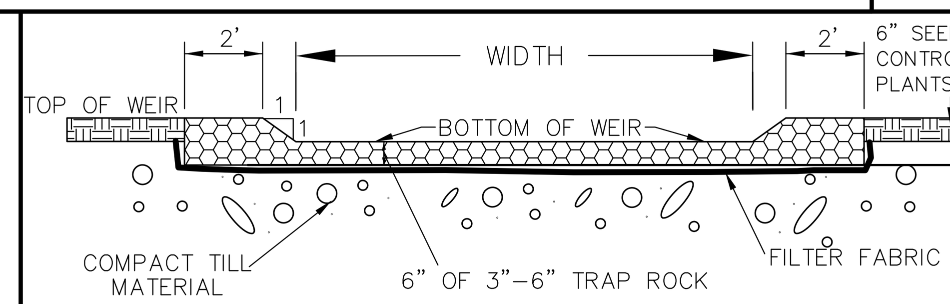
NYLOPLAST 24" DRAIN BASIN:



① - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05,
② - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
③ - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
④ - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
⑤ - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-013.

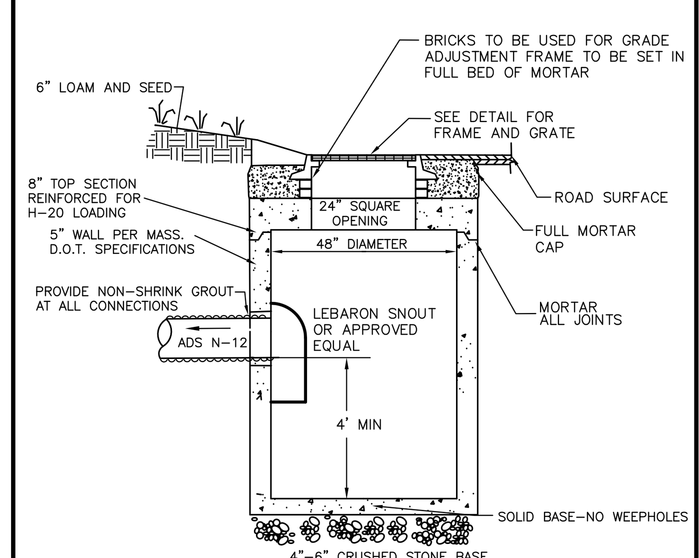
THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.

DRAWN BY EBC	MATERIAL	Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 4-3-06			
APPD BY CJA	PROJECT NO./NAME	TITLE	24 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL
DATE 4-3-06			
DWG SIZE A	SCALE 1:40 SHEET 1 OF 1	DWG NO. 7001-110-192	REV

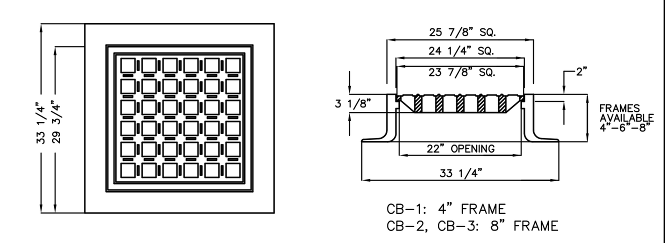


AREA	BOTTOM WIDTH OF WEIR
BASIN 1	6.0'

EMERGENCY OVERFLOW WEIR
NOT TO SCALE



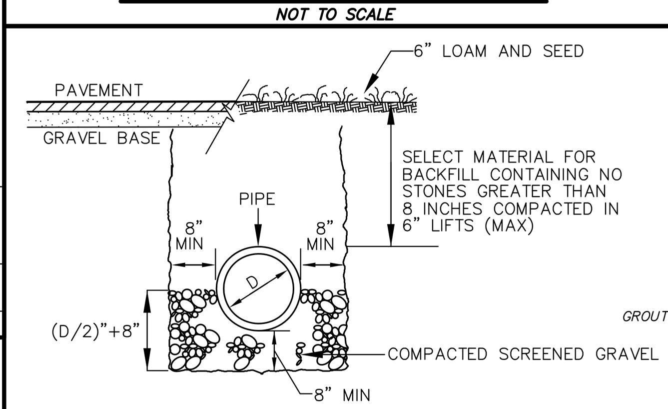
PRECAST CATCH BASIN DETAIL
NOT TO SCALE



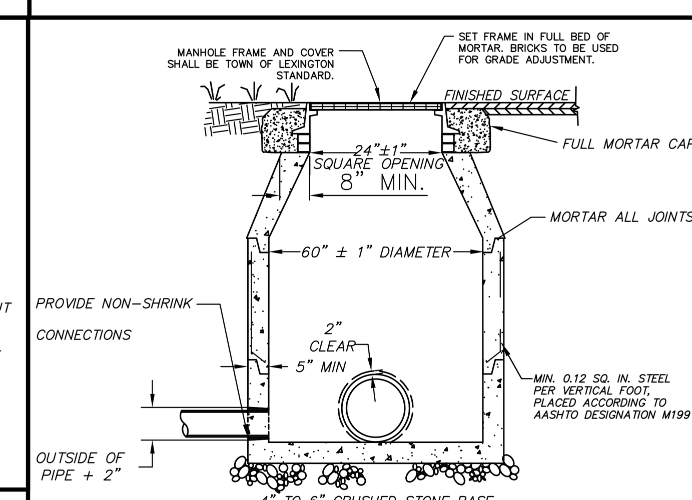
FULLY MACHINED AND INTERCHANGABLE FRAMES AND COVERS.
HIGH QUALITY MATERIALS AND WORKMANSHIP.
NO ROCK COVERS.
H–20 LOADING RATE
WEIGHT OF GRATE 215 LBS.
GRATE – 1 (EA) 0MA552000075
FRAME – 0MA554000002 (CB–1), 0MA554000002 (CB–2, CB–3)
BY LEBARON OR APPROVED EQUAL

CATCH BASIN FRAME AND GRATE DETAIL
NOT TO SCALE

NOTES
1. FRAME AND GRATE TO CONFORM TO MASS HIGHWAY CONSTRUCTION STANDARDS (SEE DETAIL 201.6.0)

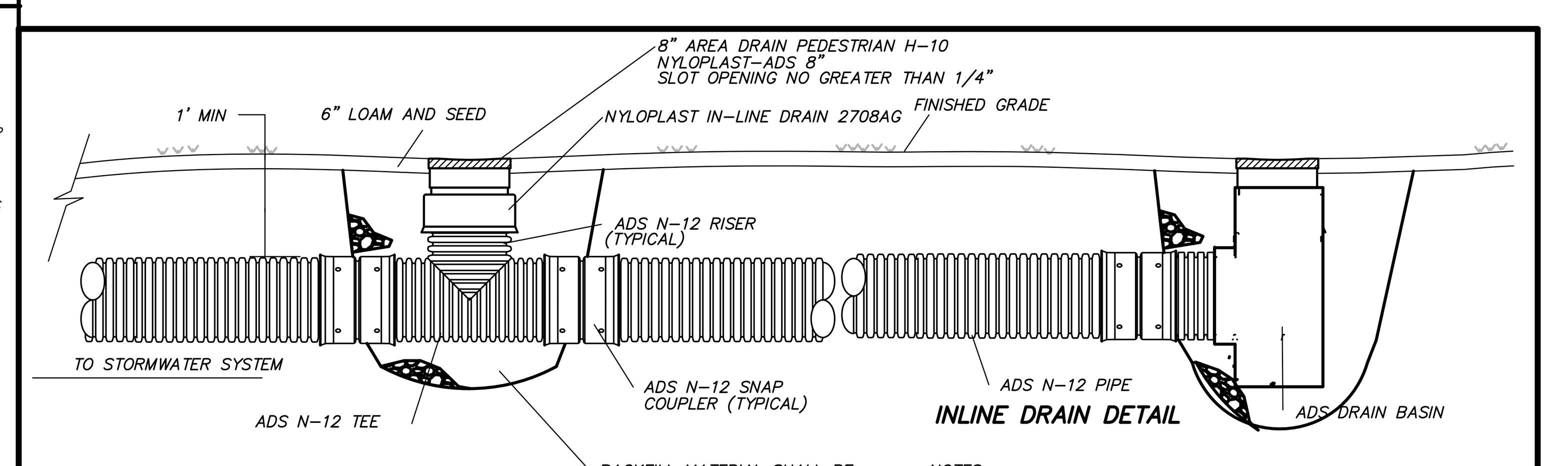


TYPICAL TRENCH DETAIL
NOT TO SCALE



NOTES
1. MANHOLE TO CONFORM TO MASS HIGHWAY CONSTRUCTION STANDARDS (SEE DETAIL 202.4.0)
2. FACE OF PIPE FLUSH OR NOT TO PROJECT MORE THAN 4" FROM FACE OF WALL ALONG CENTERLINE OF PIPE.

PRECAST CONCRETE MANHOLE DETAIL
NOT TO SCALE



AREA DRAIN DETAIL
NOT TO SCALE

INLINE DRAIN DETAIL

NOTES:
1. INLINE DRAINS SHALL BE AS MANUFACTURED BY ADS OR APPROVED EQUAL.
2. INLINE DRAIN BASINS, DRAINS, GRATES AND FRAMES SHALL BE INSTALLED AS REQUIRED BY THE MANUFACTURER'S SPECIFICATIONS.
3. GRATE AND FRAME MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70–50–05 & A48–CLASS 30B.

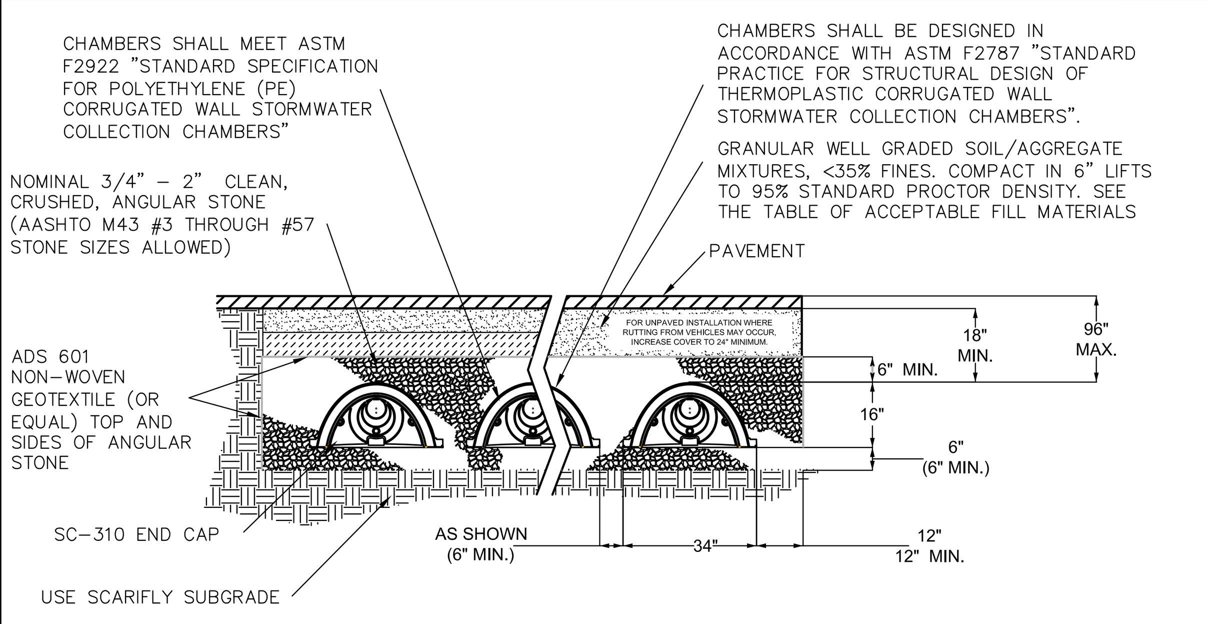
"THIS PLAN IS SUBJECT TO A COVENANT DATED ______________"
"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED ____________"
"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED ____________"

I,_________________________________, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

______________________ TOWN CLERK ____________ DATE

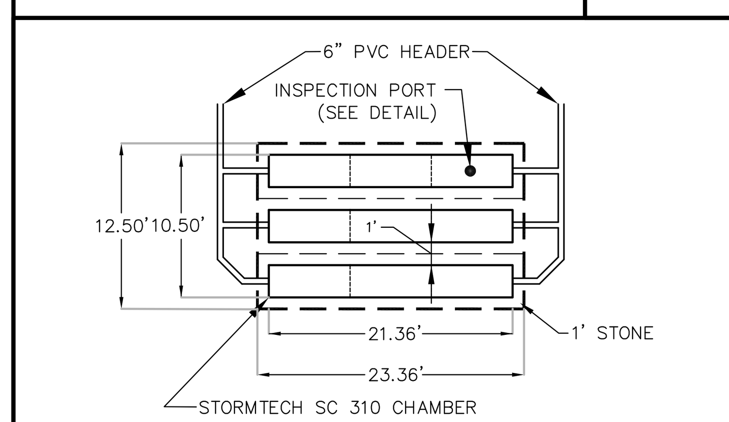
APPROVED BY:
LEXINGTON PLANNING BOARD

____
____
______________________ ____________ DATE
____
____



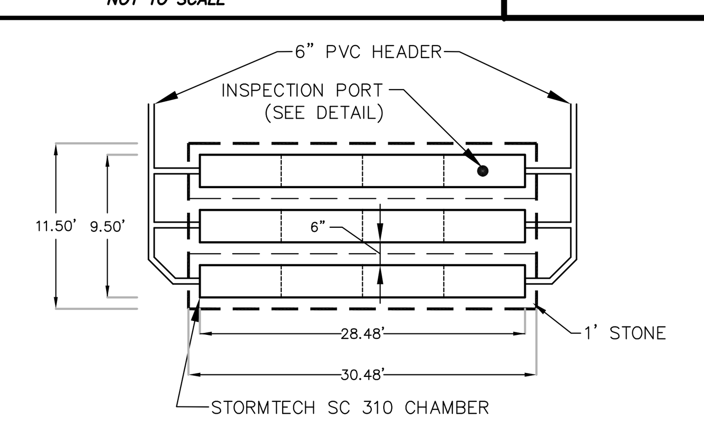
THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LFRD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.

STORMTECH SC 310
NOT TO SCALE



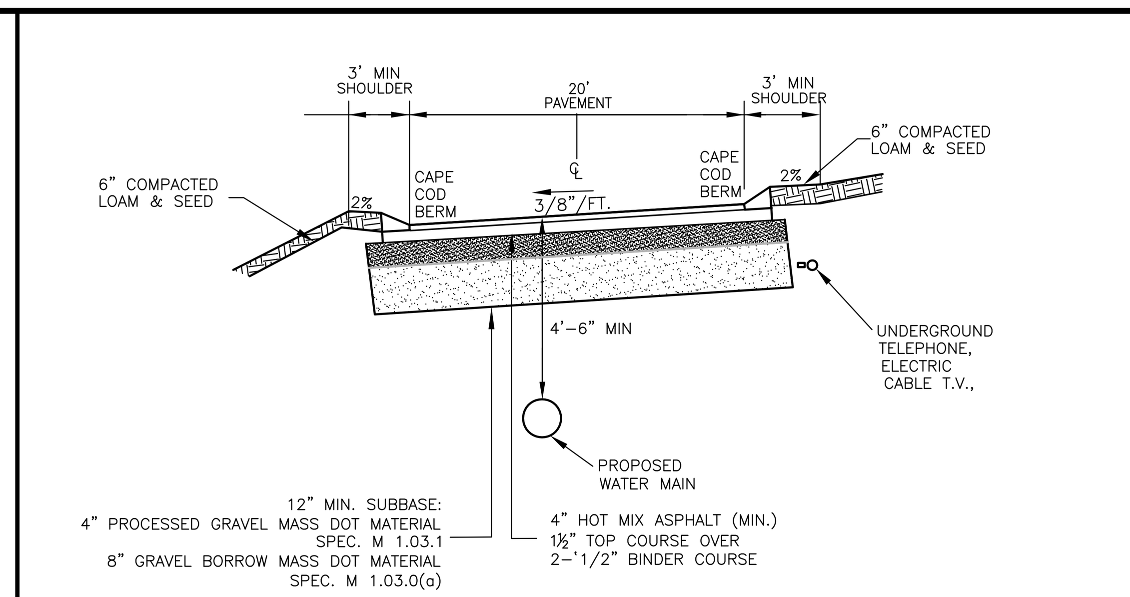
ROOF DRYWELL DWELLINGS A & D
NOT TO SCALE

#	BOTTOM STONE	TEST PIT	E.S.H.G.W.	OFFSET TO G.W. (2' MIN.)
A	176.50'	TP–17–8	174.2'	2.3'
D	176.00'	TP–17–10	170.9'	5.1'



ROOF DRYWELL DWELLINGS B & C
NOT TO SCALE

#	BOTTOM STONE	TEST PIT	E.S.H.G.W.	OFFSET TO G.W. (2' MIN.)
B	176.00'	TP–17–9	171.7'	4.3'
C	176.00'	TP–17–6	173.4'	2.6'



* UTILITIES TO BE LABELED AND MARKED WITH MAGNETIC TAPE PRIOR TO BACKFILL

TYPICAL MAIN DRIVEWAY CROSS SECTION
NOT TO SCALE

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

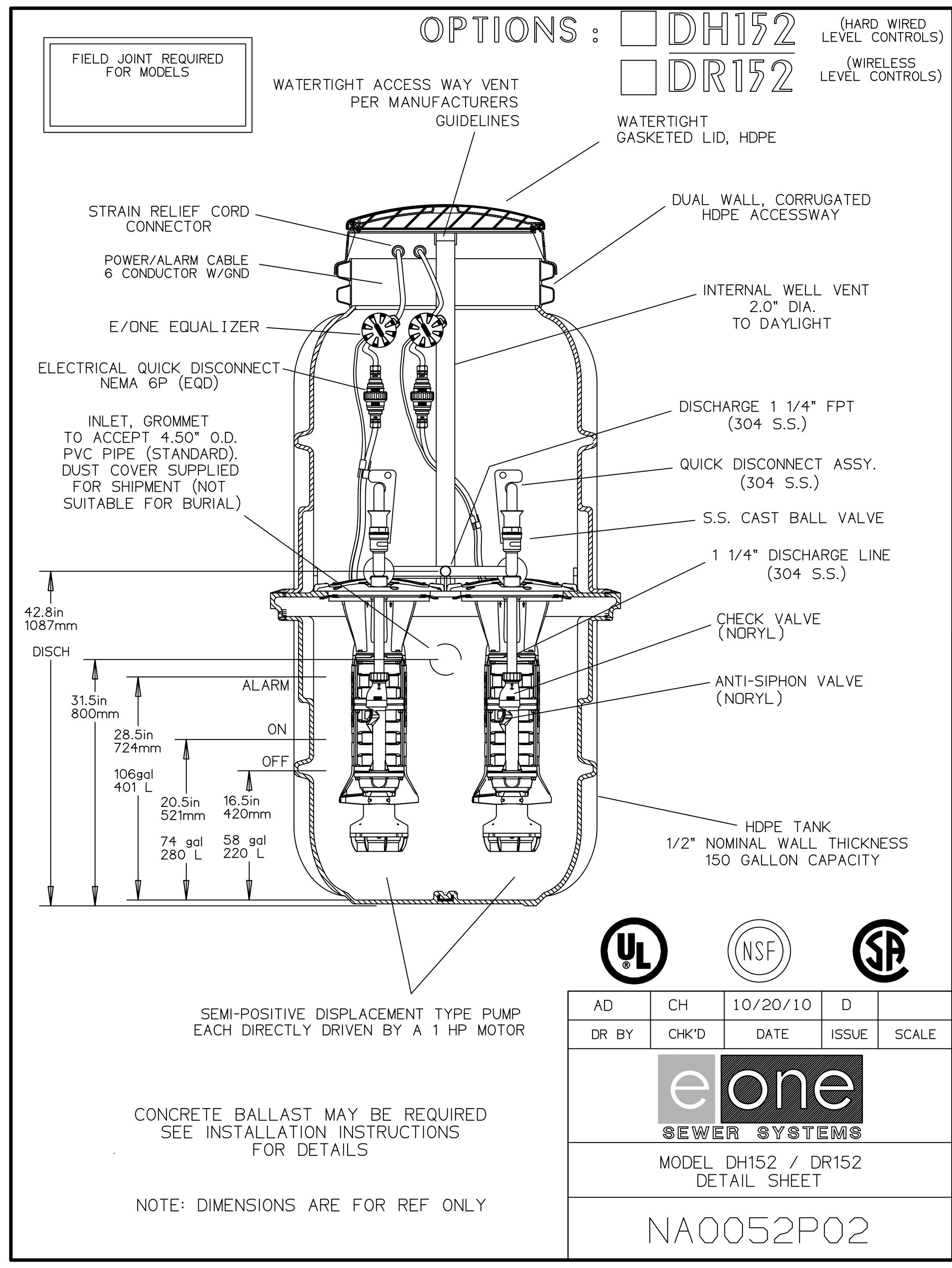
CONSTRUCTION DETAILS

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

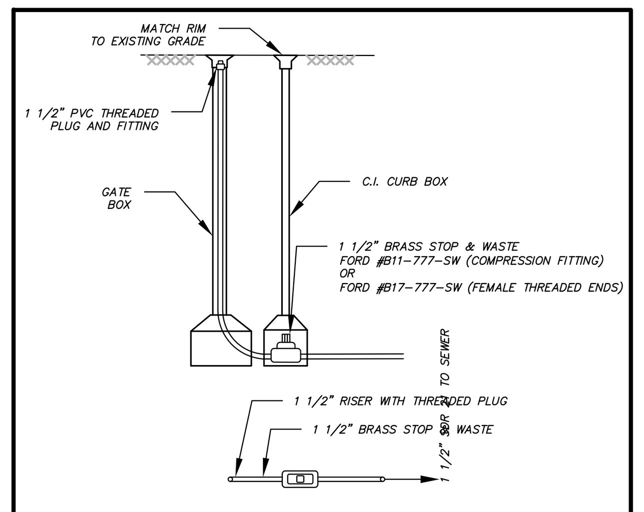
PREPARED FOR
SYMES DEVELOPMENT AND PERMITTING, LLC
SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING – PLANNING – SURVEYING

SHEET No. 9 OF 11 PROJECT No. SM–5676

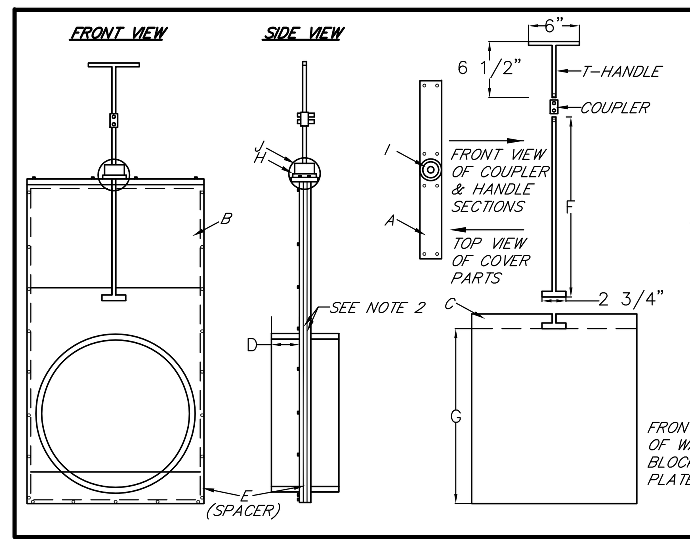


UNIT #	4" INV. @ BUILDING	FINISHED GRADE E/ONE	4" INV. @ E/ONE
1	175.37	180.00	174.75
2	175.37	180.00	174.75
3	175.37	180.00	174.25
4	175.37	180.00	174.25
5	178.92	182.25	177.50
6	178.92	182.25	177.50
7	178.54	182.25	177.50
8	178.54	182.25	177.50



FLUSHING STATION DETAIL

NOT TO SCALE



	A	B	C
10"	3" X 13 1/4"	13" X 22 1/2"	13 3/4" X 11 3/4"
12"	3" X 15 1/4"	15" X 26 1/2"	15 1/2" X 13 3/4"
15"	3" X 18"	17 3/4" X 32"	18 3/4" X 16 1/2"
18"	3" X 21 3/8"	21 1/8" X 38 3/4"	19 7/8" X 22"

	D	E	F	G
10"	3"	5/8"	16"	11 3/4"
12"	3"	5/8"	16"	13 1/2"
15"	3"	5/8"	19 1/4"	16 3/4"
18"	3"	5/8"	22"	20"

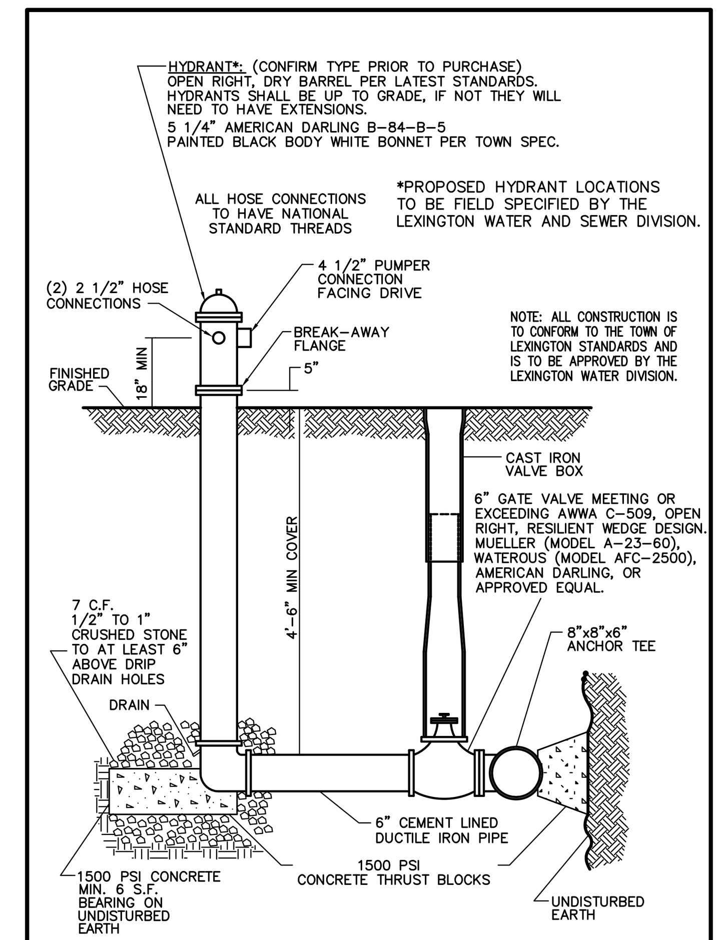
*ALL PVC MATERIAL IS 1–2" THICK.
**STUBS ARE SDR 35 PVC MALE.

H: 1/2" PVC CIRCLE 2 3/4" THREADED
I: 1/2" CPVC MALE ADAPTOR
J: 2" PVC DWV X 1 1/4"

NOTES
1. PROPOSED AGRI DRAIN SLIDE GATE VALVE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. CONTACT AGRI DRAIN AT1–800–232–4742.
2. FLEXIBLE RUBBER SEALS AROUND OPENINGS ON BOTH FRONT AND BACK COVER, CREATE A WATER TIGHT SEAL AGAINST THE SLIDING WATER BLOCKAGE PLATE.
3. SLIDE GATE VALVE TO BE ATTACHED TO 12" ADS DRAIN PIPE WITH A FLEX COUPLER AS MANUFACTURED BY FERNCO. PH. 1–800–521–1283.
4. SLIDE GATE HANDLE SECTIONS SHALL BE MODIFIED TO FIT IN ACCESS MANHOLE.
5. SLIDE GATES SHALL BE INSTALLED PRIOR TO ALL ROADWAY DISCHARGES TO STORMWATER BASINS AND SUBSURFACE INFILTRATION AREAS LOCATED WITHIN ALL INTERIM WELLHEAD PROTECTION AREAS (IWPA).

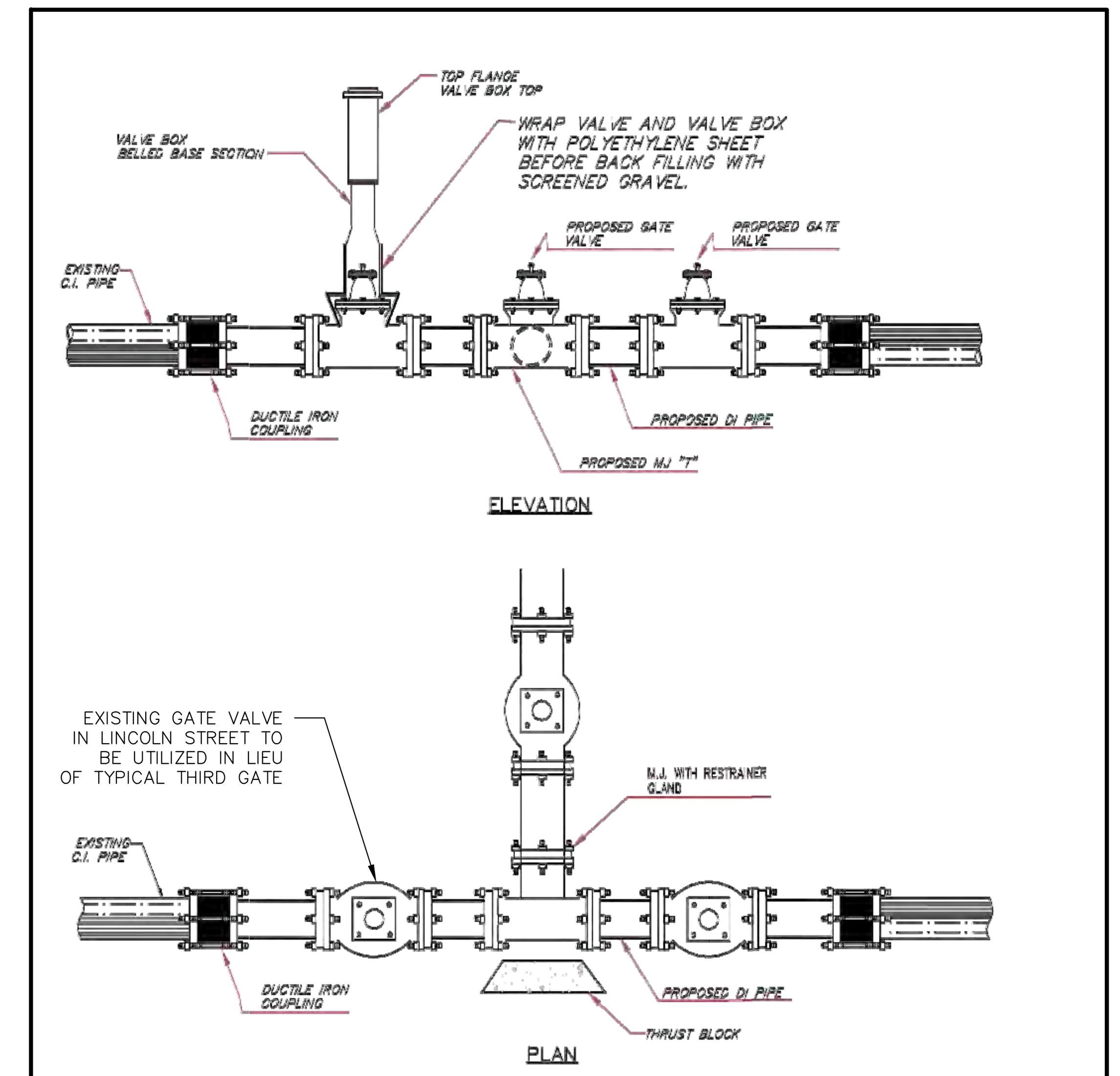
SLIDE GATE DETAIL

NOT TO SCALE



FIRE HYDRANT DETAIL

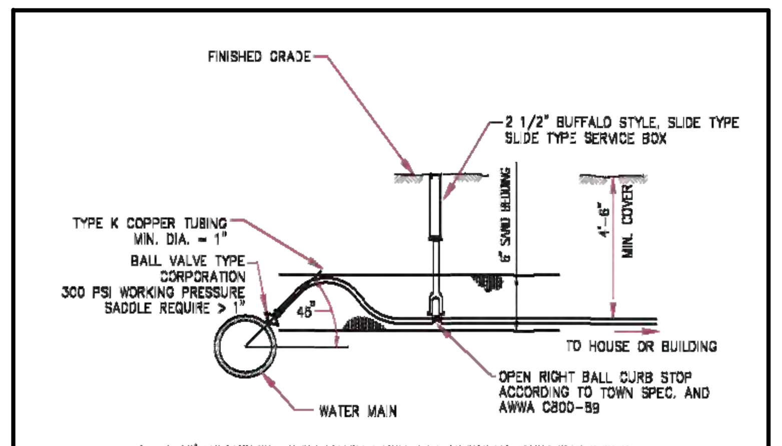
NOT TO SCALE



TRIPLE GATE CUT IN WATER MAIN CONNECTION

NOT TO SCALE

NOTE: GATE VALVES TO BE MJ, RESILIENT WEDGE, DUCTILE IRON, OPEN RIGHT MEETING AWWA C–509, C–153, C–509 & C–550

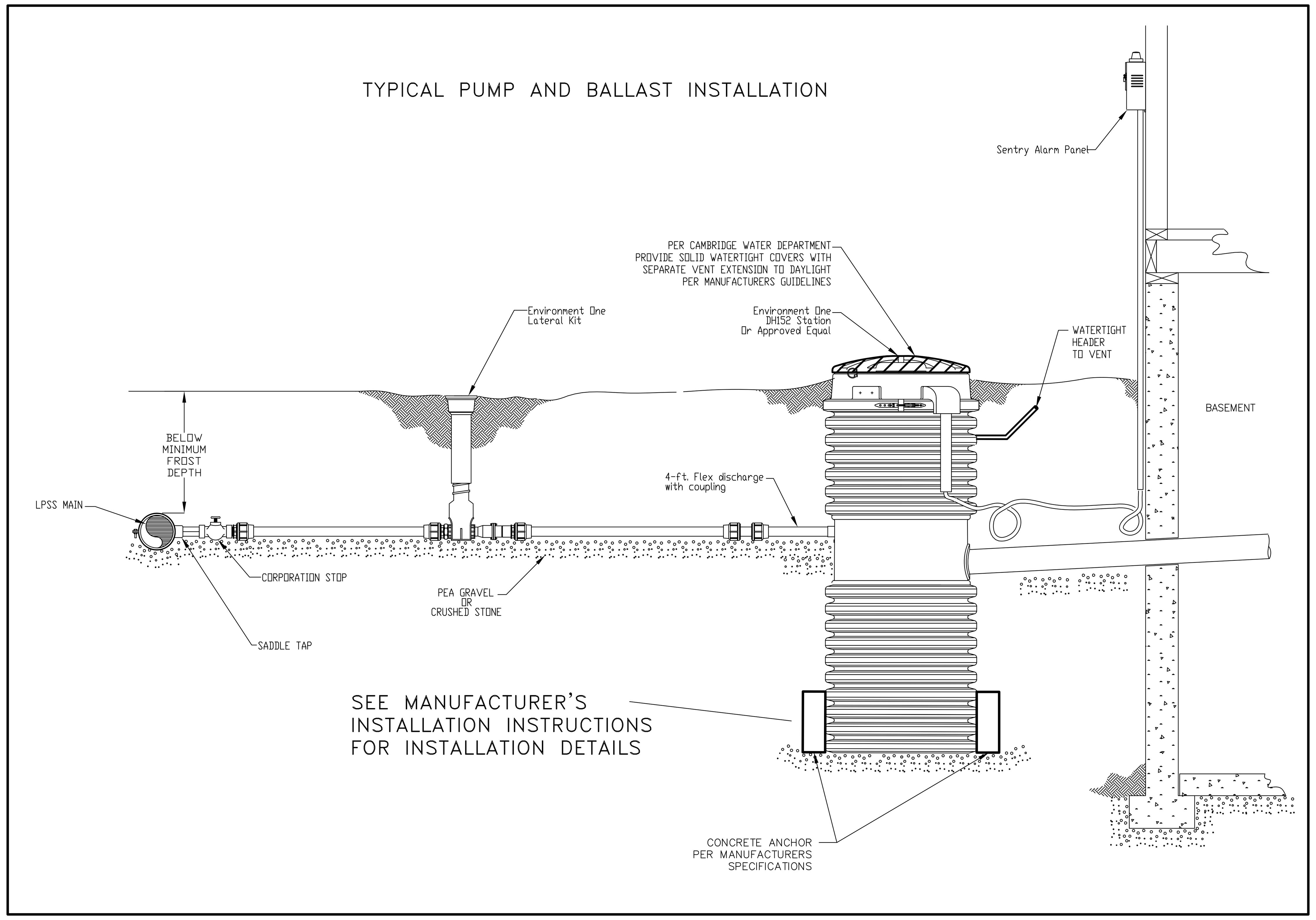


1. A 10' HORIZONTAL SEPARATION MUST BE MAINTAINED FROM THE SEWER SERVICE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING DIVISION.
2. FOR SERVICE RENEWALS, TUBING SHALL BE REPLACED TO THE PROPERTY LINE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING DIVISION.
3. WHERE AN EXISTING SERVICE IS BEING REPLACED TO THE MAIN, THE OLD SERVICE SHALL BE CAPPED AT THE CORPORATION.
4. THE WATER AND SEWER DIVISION MUST BE NOTIFIED IF LEAD SERVICES ARE ENCOUNTERED.
5. SERVICE TAPS SHALL BE PERFORMED BY THE WATER DIVISION.
6. SERVICE TAPS GREATER THAN 1" REQUIRE A SADDLE AND ARE SUBJECT TO THE APPROVAL OF THE ENGINEERING DIVISION.
7. USE QUICK STYLE COMPRESSION CONNECTIONS FOR ALL SERVICE BRASS.
8. FOR 1" CONNECTIONS TO EXIST. 3/4" CURB STOP CONNECT ADAPTER DIRECTLY TO CURB STOP. MOST EXISTING CURB STOPS REQUIRE 3/4" X 1" FEMALE ADAPTERS FOR NEW ENGLAND STYLE THREADS.
9. ALL CONNECTIONS TO EXIST. CURB STOPS SHALL REPLACE SERVICE BOXES IF NOT BUFFALO STYLE.
10. WATER SERVICE SHALL INCLUDE A BALL VALVE WITH COMPRESSION FITTING JUST BEFORE METER.

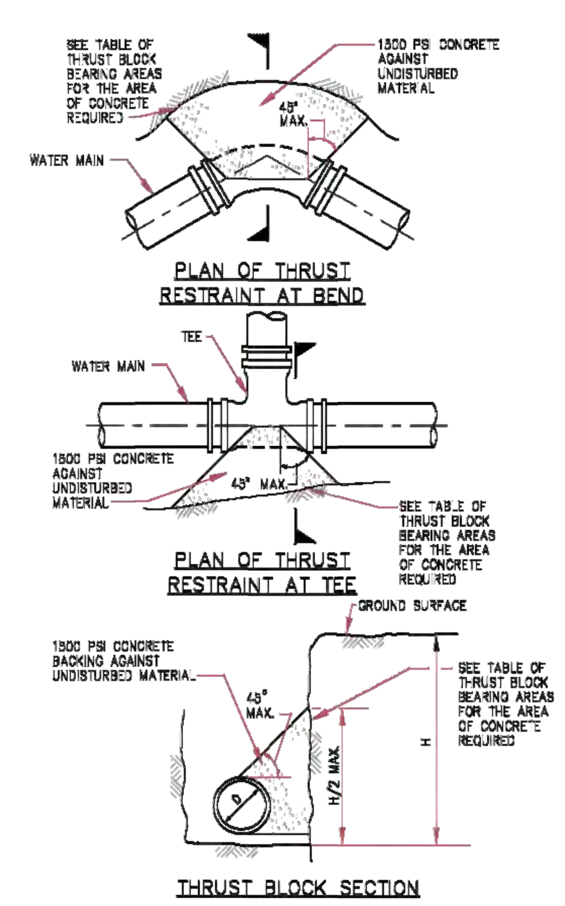
WATER SERVICE CONNECTION 2" AND SMALLER

NOT TO SCALE

TYPICAL PUMP AND BALLAST INSTALLATION



SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR INSTALLATION DETAILS



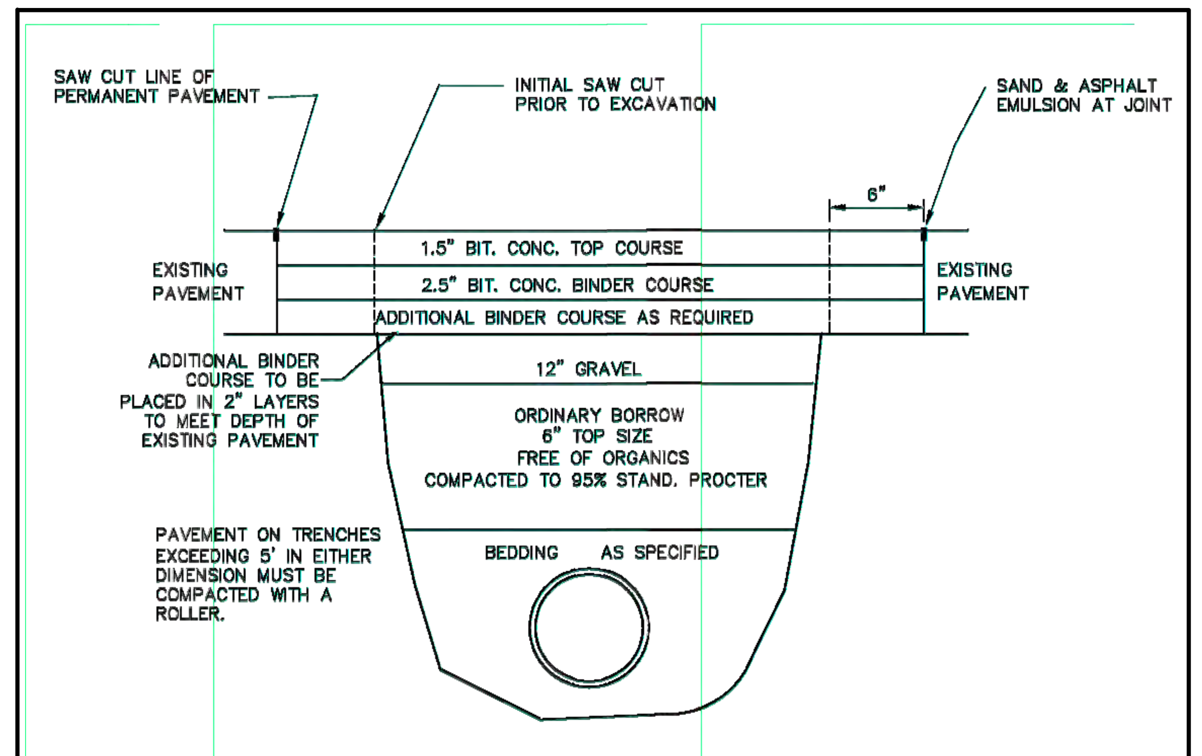
THRUST RESTRAINT AT FITTINGS

NTS
2-1.23 (REV. 12-15-94)

BEARING AREA FOR VARIOUS DIAMETERS

FITTING	4"	6"	8"	10"	12"	16"
1/32 BEND (11 1/4°)	2 S.F.	2 S.F.	2 S.F.	2 S.F.	3 S.F.	5 S.F.
1/16 BEND (22 1/2°)	2 S.F.	2 S.F.	3 S.F.	3 S.F.	4 S.F.	5 S.F.
1/8 BEND (45°)	2 S.F.	2 S.F.	3 S.F.	5 S.F.	7 S.F.	12 S.F.
1/4 BEND (90°)	3 S.F.	3 S.F.	6 S.F.	9 S.F.	12 S.F.	21 S.F.
TEE/PLUG	2 S.F.	3 S.F.	4 S.F.	6 S.F.	9 S.F.	16 S.F.

NOTES:
1. ALL ELBOWS, BENDS, AND CAPS SHALL BE BRACED WITH CONCRETE THRUST BLOCKS. JOINTS SHALL NOT BE ENCASED IN CONCRETE.
2. BEARING AREA IS AREA OF CONCRETE IN CONTACT WITH WALL OF TRENCH (H X L).
3. HEIGHT AND LENGTH AS REQUIRED TO OBTAIN BEARING AREA SHOWN IN THE TABLE W/ H APPROX. 1/2 L.
4. THRUST BLOCK SIZING BASED ON 150 PSI WATER PRESSURE AND 2000 PSI SOIL BEARING CAPACITY.



TRENCH RESTORATION

*FOR LINCOLN STREET PAVEMENT PATCH

NOT TO SCALE

APPROVED BY:
LEXINGTON PLANNING BOARD

____
____
_______________________ DATE
____
____

"THIS PLAN IS SUBJECT TO A COVENANT DATED ______________"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED ____________"

"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED ____________"

I,________________________________, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

TOWN CLERK ______________ DATE ______________

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

CONSTRUCTION DETAILS

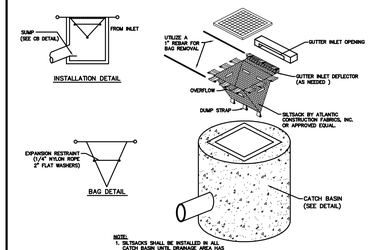
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT AND PERMITTING, LLC

SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

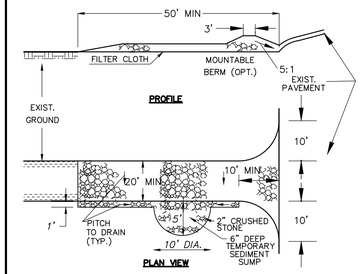
PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING – PLANNING – SURVEYING

SHEET No. 10 OF 11 PROJECT No. SM–5676



EROSION CONTROL SILT SACK DETAIL

NOT TO SCALE (EC-11)



STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. THE ENTRANCE OF THE PROPOSED DRIVEWAY SHALL INITIALLY HAVE 6" OF 2" CRUSHED STONE LAID DOWN AS A TRAFFIC SEDIMENT CONTROL SURFACE AS SHOWN IN THE STABILIZED CONSTRUCTION ENTRANCE DETAIL. THIS STONE PACK SHALL BE PLACED OVER THE DRIVEWAY FOR A MINIMUM DISTANCE OF 40 FEET FROM THE EDGE OF PAVEMENT AND SHALL BE REMOVED AND REPLACED WITH ROADWAY GRAVEL IMMEDIATELY PRIOR TO THE PLACEMENT OF PAVEMENT.
2. STONE SIZE – USE 2" CRUSHED STONE.
3. WIDTH – TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE WIDTH AT POINTS OF INGRESS OR EGRESS.
4. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE.
5. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED NEAR CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMANDS AND REPAIR ANY MEASURES USED TO TRAP SEDIMENT.
7. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO THE ENTRANCE ONTO PUBLIC RIGHT–OF–WAYS. WHEN WASHING IS DONE IT SHALL BE DONE ON STABILIZED ENTRANCE WITH STONE AND WHICH DRAINS INTO THE SEDIMENT SUMP AS SHOWN.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM.

EROSION AND SEDIMENTATION CONTROL NOTES

1. THE LIMITS OF WORK SHALL BE MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION ON THE SITE. SILTATION BARRIER AND SILT FENCE SHALL BE PLACED IN ALL AREAS AS SHOWN ON ALL THE PLANS AND IN ANY OTHER AREAS AS DETERMINED NECESSARY DURING CONSTRUCTION.
3. ALL SOIL STOCKPILES SHALL HAVE EROSION CONTROL MEASURES AROUND THEIR EDGES AT ALL TIMES. SOIL STOCKPILES SHALL BE COVERED WITH TEMPORARY VEGETATION OR FASTENED TARPAULIN SHEETS.
4. THE DRAINAGE SYSTEM SHALL BE CONSTRUCTED DURING THE EARLIEST STAGES OF THE PROJECT IN ORDER TO COLLECT RUNOFF AND SEDIMENT.
5. ALL CATCH BASINS SHALL BE PROTECTED WITH SILT SACKS DURING CONSTRUCTION.
6. ALL CUT AND FILL SLOPES SHALL BE IMMEDIATELY COVERED WITH 6" OF LOAM AND SEEDED DURING THE GROWING SEASON (APRIL 1 TO NOVEMBER 1) OR COVERED WITH HAYMULCH DURING THE NON–GROWING SEASON (NOVEMBER 1 TO APRIL 1). IN AREAS SUBJECT TO THE WETLANDS PROTECTION ACT, THE HAYMULCH AND/OR REQUIRED MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION IS ESTABLISHED. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL RECEIVE 6" OF LOAM AND BE SEEDED TO PREVENT EROSION.
7. THE DRAINAGE BASIN SHALL BE CLEANED FOLLOWING CONSTRUCTION AND ANNUALLY THEREAFTER. UPON ACCUMULATION OF 6" OF SEDIMENT, THE DRAINAGE BASIN SHALL BE CLEANED.
8. THE SILTATION BARRIER SHALL BE MAINTAINED UNTIL VEGETATIVE COVER HAS BEEN SUITABLY ESTABLISHED AND GRADED SLOPES ARE STABLE.

INSPECTION/MAINTAINENCE:

9. THE SITE CONTRACTOR IS RESPONSIBLE TO CLEAN UP ANY SEDIMENT WHICH ERODES FROM THE SITE INTO LINCOLN STREET OR ABUTTING PROPERTY IMMEDIATELY UPON DISCOVERY.
10. THE CONTRACTOR SHALL FOLLOW STANDARD PRACTICE AND LOAM AND SEED ALL DISTURBED AREAS FOLLOWING CONSTRUCTION.
11. OPERATOR PERSONNEL MUST INSPECT THE CONSTRUCTION SITE AT LEAST EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5 INCHES OR MORE. DISTURBED AREAS THAT HAVE BEEN STABILIZED MUST BE INSPECTED AT LEAST ONCE PER MONTH.
12. ALL CATCH BASIN SUMPS AND MANHOLES SHALL BE CLEANED OUT AFTER CONSTRUCTION.
13. DURING CONSTRUCTION, THE CONTRACTOR SHALL SPRAY DOWN THE SITE WITH A WATER TRUCK AS NEEDED FOR DUST CONTROL.
14. DURING CONSTRUCTION THE CONTRACTOR SHALL INSPECT LINCOLN ROAD AND SWEEP AS NECESSARY.
15. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL STRUCTURES AND DEVICES THROUGHOUT CONSTRUCTION. ANY EROSION CONTROL DEWCES FOUND TO NO LONGER TO BE SERVICEABLE SHALL BE REMOVED AND REPLACED. ALL ACCUMULATED SEDIMENTS MUST BE REMOVED WHEN DEPOSITS REACH NO MORE THAN ONE HALF THE HEIGHT OF THE SILTATION BARRIER.
16. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING (7 DAYS IF WITH 100 FEET OF A STREAM, POND OR WETLAND) AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
17. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT THE SITE FROM SPRING RUNOFF PROBLEMS. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TEMPORARY MULCH OR OTHER METHODS APPROVED BY THE ENGINEER SHALL BE EMPLOYED TO PROTECT THE SITE.
18. A STOCKPILE OF ADDITIONAL SILT FENCE AND COMPOST FILTER SOCKS SHALL BE KEPT ONSITE IN ORDER TO BE ABLE TO IMMEDIATELY RESPOND TO ISSUES WHICH MIGHT DEVELOP DURING CONSTRUCTION.

LONG TERM POLLUTION PREVENTION AND DRAINAGE SYSTEM OPERATION AND MAINTENANCE PLAN

1. THERE SHALL BE NO ILLICIT DISCHARGES TO ANY PART OF THE STORM DRAIN SYSTEM.
2. ALL DRAIN PIPE SHALL BE ADS, UNLESS OTHERWISE NOTED.

THE IMPLEMENTATION, INSPECTION, AND REPAIR OF THE EROSION CONTROLS IS THE RESPONSIBILITY OF THE SITE CONTRACTOR DURING CONSTRUCTION.

THE INSPECTION AND OPERATION OF THE STORM WATER MANAGEMENT SYSTEM UPON COMPLETION OF CONSTRUCTION IS THE RESPONSIBILITY OF:

DURING CONSTRUCTION: SYMES DEVELOPMENT AND PERMITTING, LLC

PARTIES RESPONSIBLE FOR LONG TERM OPERATION/MAINTENANCE:

CONDOMINIUM ASSOCIATION

SCHEDULE FOR INSPECTION AND MAINTENANCE:

STREET SWEEPING:

IT IS RECOMMENDED THAT THE PAVEMENT SHALL BE PROPERLY SWEPT TWICE A YEAR, WITH CONCENTRATIONS IN THE SPRING AND THE FALL.

DEEP SUMP AND HOODED CATCH BASINS

DURING CONSTRUCTION, CATCH BASIN GRATES SHALL BE WRAPPED WITH FILTER FABRIC. CATCH BASINS SHALL BE CLEANED UPON THE COMPLETION OF CONSTRUCTION. AFTER CONSTRUCTION, THE DEEP SUMPS FOR ALL CATCH BASINS AND DRAIN MANHOLES SHALL BE INSPECTED FOUR TIMES A YEAR AND CLEANED FOUR TIMES A YEAR. SEDIMENT REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.

- THE DEPTH OF THE SEDIMENT IN A BASIN SHALL NOT EXCEED A DEPTH OF 18 INCHES AS DETERMINED BY PROBING WITH A STICK. IF THE STICK HITS THE BOTTOM WITHIN 30 INCHES OF THE WATER LEVEL, MORE THAN 18 INCHES OF SEDIMENT HAS ACCUMULATED AND MUST BE REMOVED. LICENSED PERSONS SHOULD REMOVE AND DISPOSE OF THE CONTENTS OF THE SUMP IN ACCORDANCE WITH APPLICABLE REGULATIONS.

INFILTRATION BASINS

PREVENTATIVE MAINTENANCE SHOULD BE PERFORMED AT LEAST TWICE A YEAR, AND IDEALLY SEDIMENT SHOULD BE REMOVED FROM THE SEDIMENT FOREBAYS AFTER EVERY MAJOR STORM EVENT. SEDIMENT SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.

ONCE ONLINE, THE BASINS SHALL BE INSPECTED AFTER EVERY MAJOR STORM EVENT, FOR THE FIRST FEW MONTHS. THEREAFTER, THE BASIN SHOULD BE INSPECTED AT LEAST TWICE PER YEAR. IMPORTANT ITEMS TO CHECK FOR INCLUDE: DIFFERENTIAL SETTLEMENT, CRACKING, EROSION, LEAKAGE, OR TREE GROWTH ON THE EMBANKMENTS, CONDITION OF RIPRAP, SEDIMENT ACCUMULATION AND THE HEALTH OF THE TURF.

AT LEAST TWICE A YEAR, THE BUFFER AREA, SIDE SLOPES AND BASIN BOTTOM SHOULD BE MOWED. GRASS CLIPPINGS AND ACCUMULATED ORGANIC MATTER SHOULD BE REMOVED TO PREVENT THE FORMATION OF AN IMPERVIOUS ORGANIC MAT. TRASH AND DEBRIS SHOULD ALSO BE REMOVED AT THIS TIME.

SEDIMENT SHOULD BE REMOVED FROM THE BASIN AS NECESSARY. REMOVAL PROCEDURES SHOULD NOT TAKE PLACE UNTIL THE FLOOR OF THE BASIN IS THOROUGHLY DRY. PRETREATMENT DEVISES ASSOCIATED WITH BASINS SHOULD BE INSPECTED AND CLEANED AT LEAST TWICE A YEAR AND IDEALLY EVERY OTHER MONTH.

DRYWELLS:

INSPECT THE DRYWELL AFTER EVERY MAJOR STORM FOR THE FIRST FEW MONTHS TO ENSURE PROPER STABILIZATION AND FUNCTION. THEREAFTER, INSPECT AND CLEAN IT AT LEAST ONCE PER YEAR. WATER LEVELS SHOULD BE RECORDED OVER SEVERAL DAYS TO CHECK THE DRYWELL DRAINAGE.

DEICING AND SNOW STORAGE

THE USE OF SODIUM–BASED DEICING AGENTS IS PROHIBITED AND USE OF CHLORIDE–CONTAINING DEICERS SHALL BE LIMITED. ACCEPTABLE DEICING CHEMICALS INCLUDE A MIX OF 80% SAND AND NOT MORE THAN 20% SODIUM–FREE DEICING AGENT (SUCH AS $CaCl_2$). USE OF THE 80% SAND MIX MAY RESULT IN A NEED FOR MORE FREQUENT CLEANING OF CATCH BASINS. OTHER LOW SODIUM OPTIONS COULD BE USED IF FIRST APPROVED BY THE CAMBRIDGE WATER DEPARTMENT.

UNDER NO CIRCUMSTANCES SHALL SNOW BE STORED WITHIN THE INFILTRATION BASIN. SNOW SHALL BE STORED WITHIN THE AREA MARKED ON THIS PLAN.

LANDSCAPING AND LAWN MAINTENANCE

USE OF HERBICIDES AND PESTICIDES IS PROHIBITED UNLESS PERMITTED BY THE CAMBRIDGE WATER DEPARTMENT. FERTILIZER USE SHOULD CONFORM TO THE REQUIREMENTS OF 330 CMR 31.00.

EMERGENCY CONTACTS:

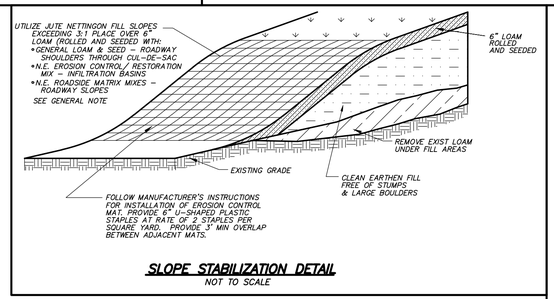
IN THE EVENT OF A HAZARDOUS MATERIALS SPILL ON THE SITE THE FOLLOWING PARTIES SHALL BE CONTACTED: FIRE DEPARTMENT: PH: 781–862–0272

RECORDS:

THE OWNER SHALL MAINTAIN AN INSPECTION LOG OF ALL ELEMENTS OF THE STORM WATER MANAGEMENT PLAN. THE OWNER SHALL MAINTAIN A MAINTENANCE LOG DOCUMENTING THE INSPECTION AND MAINTENANCE OF THE DRAINAGE STRUCTURES UNDER HIS CONTROL. A COPY OF THE EROSION CONTROL AND STORM WATER MAINTENANCE PLAN AND INSPECTION LOGS SHALL BE KEPT ONSITE AT ALL TIMES.

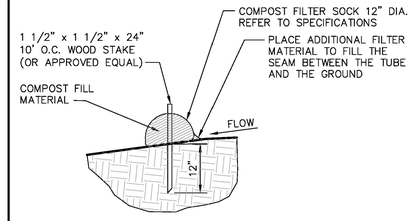
LEGEND:

- SILTATION BARRIER
- SOIL STOCKPILE AREA
- TEMPORARY SEDIMENT BASIN
- SILT SACK
- STABILIZED CONSTRUCTION ENTRANCE
- LW — LIMIT OF WORK



SLOPE STABILIZATION DETAIL

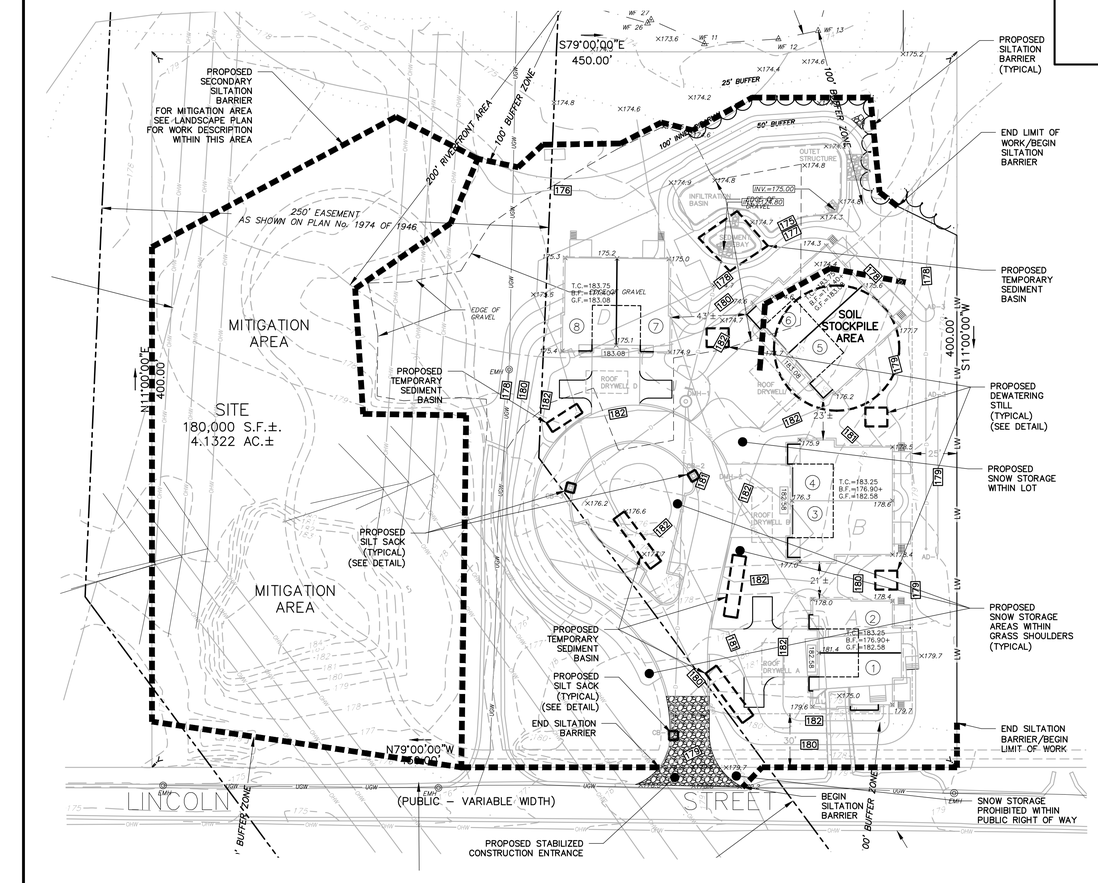
NOT TO SCALE

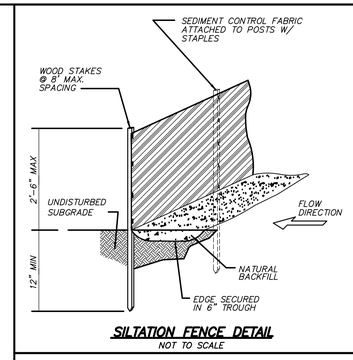


NOTE: EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH ORDER OF CONDITIONS.

SEDIMENTATION BARRIER

NOT TO SCALE



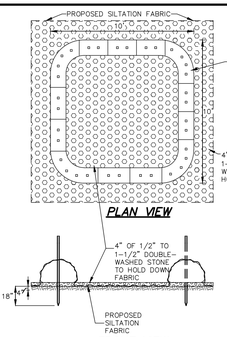


SILTATION FENCE DETAIL

NOT TO SCALE

SNOW STORAGE NOTES:

1. SNOW STORAGE PROHIBITED WITHIN PUBLIC RIGHT OF WAY.
2. SNOW IS TO BE PUSHED TO EACH SIDE OF THE DRIVEWAY. IF NECESSARY, SNOW BANKS SHALL BE PUSHED BACK PRIOR TO THE NEXT MAJOR SNOWFALL EVENT.
3. SNOW SHALL BE REMOVED TO MAINTAIN DRIVEWAY WIDTH.
4. THE CONDOMINIUM ASSOCIATION IS RESPONSIBLE FOR ALL SNOW REMOVAL WITHIN SITE.
5. SNOW STORAGE WITHIN THE INFILTRATION BASIN IS PROHIBITED.



NOTES:
1. A TRENCH DEWATERING STILL SHALL BE INSTALLED WHEREVER GROUNDWATER IS ENCOUNTERED SO AS TO PROVIDE AN AREA FOR PUMPED WATER TO BE DEPOSITED.
2. THE FILTER SOCK SHALL BE INSTALLED IN ACCORDANCE WITH THE SEDIMENTATION BARRIER DETAIL PROVIDED ON THIS PLAN.
3. THE DEWATERING STILL SHALL BE CLEANED OF SILT AS NECESSARY.

DEWATERING STILL DETAIL

N.T.S.

APPROVED BY:
LEXINGTON PLANNING BOARD

_____

_____

_____ DATE

_____

_____

"THIS PLAN IS SUBJECT TO A COVENANT DATED _____"

"THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION DATED _____"

"THIS PLAN IS SUBJECT TO A SPECIAL PERMIT DATED _____"

I, _____, CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ _____
TOWN CLERK DATE

HOMES AT HOBBS BROOK
BALANCED HOUSING RESIDENTIAL DEVELOPMENT

EROSION AND SEDIMENTATION CONTROL PLAN

LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
SYMES DEVELOPMENT & PERMITTING, LLC
SCALE: 1" = 40' DATE: FEBRUARY 20, 2018

PREPARED BY
STAMSKI AND McNARY, INC
1000 MAIN STREET ACTON, MA
ENGINEERING – PLANNING – SURVEYING

SHEET No. 11 OF 11 PROJECT No. SM–5676

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
3	7/12/18	PATH ADJUSTMENT	PFK	RJH
2	5/30/18	CONSERVATION REVISIONS	PFK	RJH
1	5/15/18	PLANNING BOARD REVISIONS	PFK	RJH

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

8 Adams Street: Definitive Site Sensitive Development (Public Hearing)

PRESENTER:

Gary Larson

ITEM NUMBER:

SUMMARY:

Planning Board will open a public hearing to discuss the application of Randall and Elaine Hiller for approval of a special permit for a Site Sensitive Development under Section 135-6.9.3, of the Code of Lexington. The property, 8 Adams Street (Map 63, Lot 77A), is located in the RS Residential Zoning District. The project proposes maintaining the existing single family dwelling unit and constructing a second unit on the lot.

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

ATTACHMENTS:

Description	Type
8 Adams Plan Set	Backup Material
Staff Report	Backup Material
Board of Health Comments	Backup Material
Abutter letter from 1 Adams	Backup Material
Abutter letter from 10 Adams	Backup Material
Attorney Memo	Backup Material
Stormwater Analysis and Calculations	Backup Material

NOTES:

1. THE INFORMATION DEPICTED ON THIS PLAN HAS BEEN COMPILED FROM THE TOWN OF LEXINGTON GEOGRAPHIC INFORMATION SYSTEM.
2. LAND USE WITHIN 500 FEET OF THE SUBJECT PROPERTY IS PRIMARILY SINGLE FAMILY DWELLINGS.

8 ADAMS STREET
(ASSESSOR'S MAP 63 – LOT 77A)
DEFINITIVE SITE SENSITIVE SUBDIVISION PLAN SET

IN ACCORDANCE WITH SECTION 175-6.0 OF THE LEXINGTON PLANNING BOARD DEVELOPMENT REGULATIONS

LOCATED IN

LEXINGTON, MASSACHUSETTS

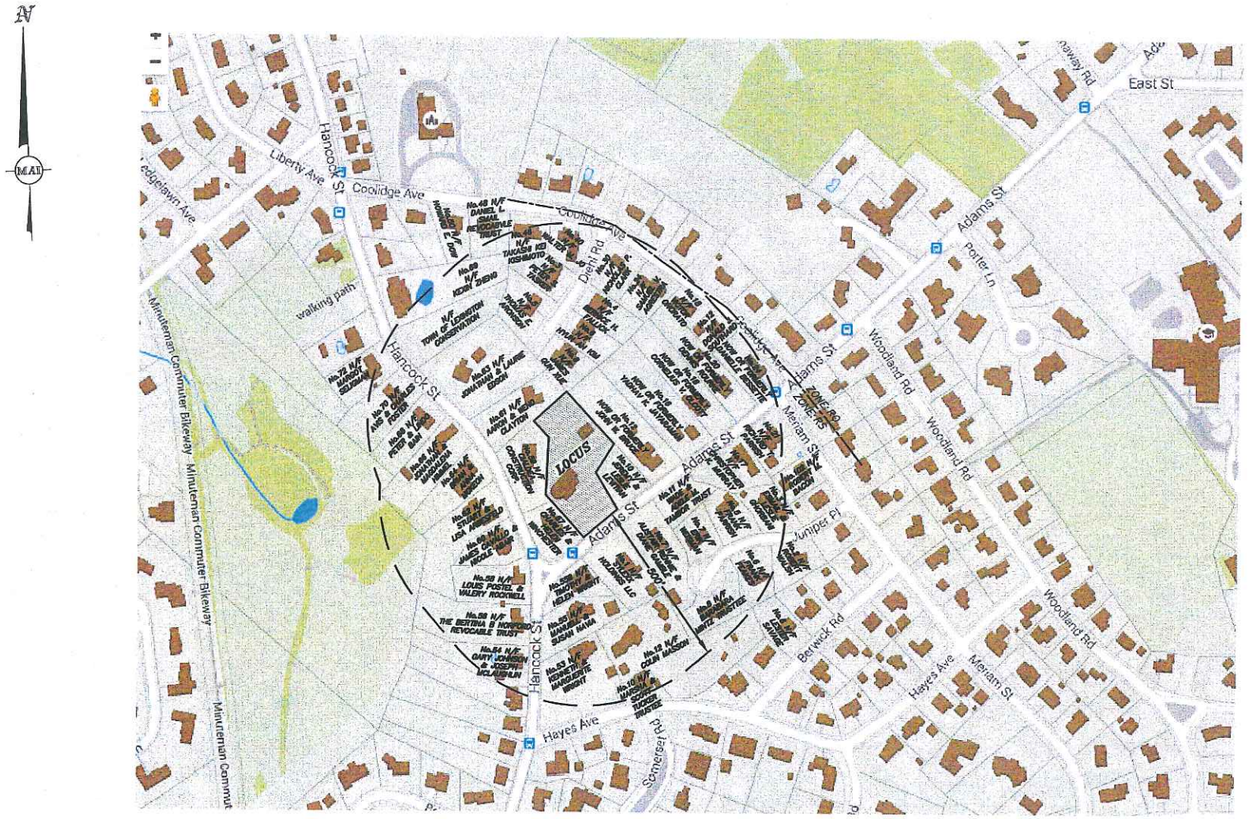
DATE: MAY 24, 2018.

REVISED: JULY 12, 2018

RECORD OWNERS/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
–DEED BOOK 26502, PAGE 3 *

*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.



LOCUS CONTEXT MAP:

GRAPHIC SCALE
SCALE: 1"=200'

FEET	200	0	100	200	400	800
METERS	0	50	100	200	300	

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

LANDSCAPE ARCHITECT

GARY LARSON RLA
6 WADMAN CRICLE
LEXIGNTON MA 02420

ATTORNEY

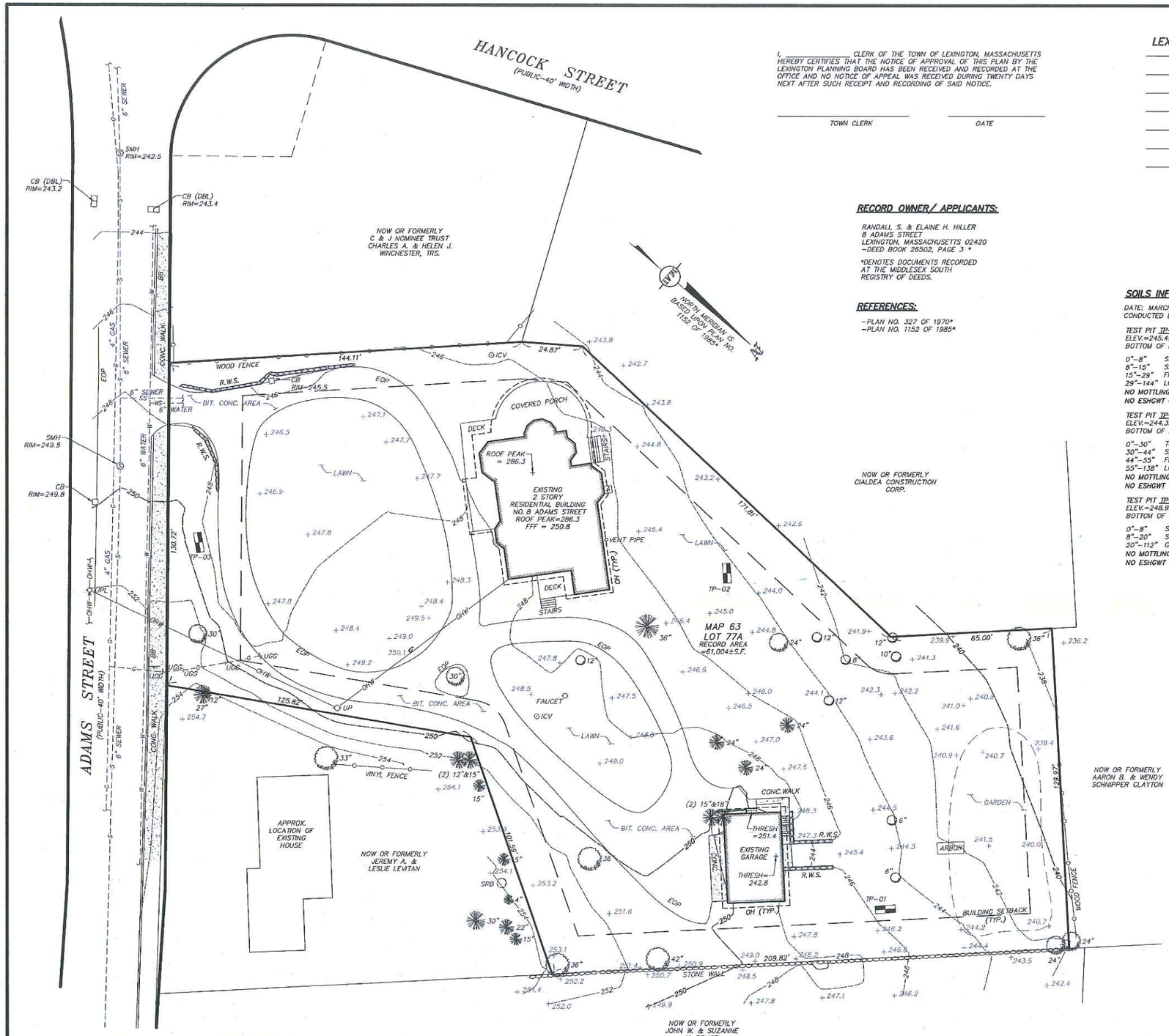
PATRICIA NELSON
7 HARTWELL AVENUE
LEXINGTON, MA 02421

DRAWING INDEX:

SHEET 1	COVER SHEET & LOCUS CONTEXT MAP
SHEET 2	RECORD CONDITIONS
SHEET 3	SITE ANALYSIS MAP
SHEET 4	PROPERTY RIGHTS PLAN OF LAND
SHEET 5	SITE CONSTRUCTION/LANDSCAPE PLAN
SHEET 6	SITE UTILITY PLAN
SHEET 7	SITE LANDSCAPE PLAN
SHEET 8	SITE DETAILS
SHEET 9	SITE DETAILS
SHEET 10	PROOF PLAN

DWG. No. 5875_DEF_CVR
(IMAGE: GIS Map 200scale)

Copyright © by Meridian Associates, Inc. All rights reserved



I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFIES THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ TOWN CLERK

_____ DATE

LEXINGTON PLANNING BOARD

_____

_____

_____

_____

_____

_____

_____

_____ DATE:

RECORD OWNER/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
-DEED BOOK 26502, PAGE 3 *

*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

REFERENCES:

-PLAN NO. 327 OF 1970*
-PLAN NO. 1152 OF 1985*

SOILS INFORMATION

DATE: MARCH 30, 2016
CONDUCTED BY: ANDREW RODRIGUEZ, SE (SE1890)

TEST PIT TP-01
ELEV.=245.4±
BOTTOM OF HOLE ELEV.=233.4±

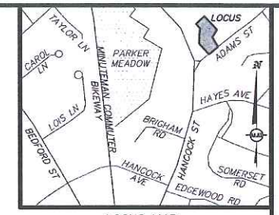
0"-8" SANDY LOAM
8"-15" SANDY LOAM
15"-29" FINE LOAMY SAND
29"-144" LOAMY SAND TRACE GRAVEL
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-02
ELEV.=244.3±
BOTTOM OF HOLE ELEV.=232.5±

0"-30" TOPSOIL
30"-44" SANDY LOAM
44"-55" FINE LOAMY SAND
55"-138" LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-03
ELEV.=248.9±
BOTTOM OF HOLE ELEV.=239.6±

0"-8" SANDY LOAM
8"-20" SANDY LOAM
20"-112" GRAVELLY LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED



LOCUS MAP:
(NOT TO SCALE)

LEGEND:

- 238 — TWO FOOT CONTOUR
- 240 — TEN FOOT CONTOUR
- +246.5 — SPOT ELEVATION
- BUILDING OVERHANG
- BUILDING SETBACK
- STONE WALL
- STONE RETAINING WALL
- -S- COMPILED SEWER LINE
- -W- COMPILED WATER LINE
- -D- COMPILED DRAIN LINE
- -G- COMPILED GAS LINE
- -SS- COMPILED SEWER SERVICE LINE
- -WS- COMPILED WATER SERVICE LINE
- -OHW- OVERHEAD WIRES
- UTILITY POLE WITH LIGHT
- UTILITY POLE
- GUY WIRE
- CB CATCH BASIN
- S SEWER MANHOLE
- TERMINUS UNKNOWN
- WB WATER SERVICE
- ICV IRRIGATION CONTROL VALVE
- DECIDUOUS TREE
- CONIFEROUS TREE
- TP-01 TEST PIT
- A AIR CONDITIONING UNIT
- A.G. ABOVE GROUND
- BIT. CONC. BITUMINOUS CONCRETE
- CONC. CONCRETE
- EOP EDGE OF PAVEMENT
- INV INVERT
- OH BUILDING OVERHANG
- FFF FINISHED FIRST FLOOR
- FGF FINISHED GARAGE FLOOR
- S.F. SQUARE FEET
- TYP. TYPICAL
- V.C. VITRIFIED CLAY
- R.W.S. RETAINING WALL
- GC GRANITE CURB
- OH OVERHANG
- SIGN
- A AIR CONDITIONING UNIT

NOTES:

1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. ON JULY 8, 11 & 12, 2016.
2. THE SUBJECT PROPERTY IS LOCATED IN THE RS ZONING DISTRICT.
3. THE SUBJECT PROPERTY IS DEPICTED AS LOT 77A ON TOWN OF LEXINGTON ASSESSORS MAP 63.
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 ELEVATIONS DEPICTED HEREON ARE BASED ON THE TOWN OF LEXINGTON SEWER DATUM.
7. 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.
8. THE SUBJECT PROPERTY 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 25017C0403E DATED JUNE 4, 2010.

GRAPHIC SCALE
SCALE: 1"=20'

FEET 20 0 10 20 40 80
METERS 0 5 10 20 30

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

DWG. No. 5875-DEF_REC
Bk#641 Pg#42

Copyright © by Meridian Associates, Inc. All rights reserved.

REVISIONS

DATE	DESCRIPTION	BY
7/12/18	NO REVISIONS TO THIS SHEET	MAC

COMMONWEALTH OF MASSACHUSETTS
KEVIN C. DANAHY
No. 39683
REGISTERED PROFESSIONAL LAND SURVEYOR
07/12/18

RECORD CONDITIONS PLAN OF LAND
LOCATED AT
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

MERIDIAN ASSOCIATES
360 CUMMINGS CENTER, SUITE 355Q
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 927-4620
69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7030
WWW.MERIDIANASSOC.COM

DESIGNED BY: C. PALMER
CHECKED BY: K. DANAHY

DATE: MAY 24, 2018
SCALE: 1"=20'
SHEET No. 2 OF 10
PROJECT No. 5875

I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFIES THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ TOWN CLERK

_____ DATE

LEGEND:

H.P.	HIGH POINT
L.P.	LOW POINT
	DIRECTION OF OVERLAND FLOW
	15-25% SLOPES
	25-40% SLOPES
	>40% SLOPES
ESHGW	ESTIMATED SEASONAL HIGH GROUND WATER
	TEST PIT

LEXINGTON PLANNING BOARD

_____

_____

_____

_____

_____

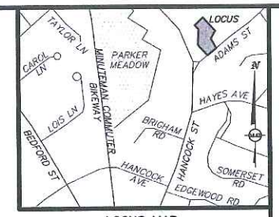
_____

_____

_____ DATE:

LEGEND:

238	TWO FOOT CONTOUR
240	TEN FOOT CONTOUR
+246.5	SPOT ELEVATION
	BUILDING OVERHANG
	BUILDING SETBACK
	STONE WALL
	STONE RETAINING WALL
S	COMPILED SEWER LINE
W	COMPILED WATER LINE
D	COMPILED DRAIN LINE
G	COMPILED GAS LINE
SS	COMPILED SEWER SERVICE LINE
WS	COMPILED WATER SERVICE LINE
OHW	OVERHEAD WIRES
	UTILITY POLE WITH LIGHT
	UTILITY POLE
	GUY WIRE
	CATCH BASIN
	SEWER MANHOLE
	TERMINUS UNKNOWN
	WATER SERVICE
ICV	IRRIGATION CONTROL VALVE
	DECIDUOUS TREE
	CONIFEROUS TREE
TP-01	TEST PIT
A	AIR CONDITIONING UNIT
A.G.	ABOVE GROUND
BIT. CONC.	BITUMINOUS CONCRETE
CONC.	CONCRETE
EOP	EDGE OF PAVEMENT
INV	INVERT
OH	BUILDING OVERHANG
FFF	FINISHED FIRST FLOOR
FGF	FINISHED GARAGE FLOOR
S.F.	SQUARE FEET
TYP.	TYPICAL
V.C.	VITRIFIED CLAY
R.W.S.	RETAINING WALL
GC	GRANITE CURB
OH	OVERHANG
"S"	SIGN
A	AIR CONDITIONING UNIT



LOCUS MAP:
(NOT TO SCALE)

SOILS INFORMATION

DATE: MARCH 30, 2016
CONDUCTED BY: ANDREW RODRIGUEZ, SE (SE1890)

TEST PIT TP-01
ELEV.=245.4±
BOTTOM OF HOLE ELEV.=233.4±

0"-8" SANDY LOAM
8"-15" SANDY LOAM
15"-29" FINE LOAMY SAND
29"-144" LOAMY SAND TRACE GRAVEL
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-02
ELEV.=244.3±
BOTTOM OF HOLE ELEV.=232.5±

0"-30" TOPSOIL
30"-44" SANDY LOAM
44"-55" FINE LOAMY SAND
55"-138" LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-03
ELEV.=248.9±
BOTTOM OF HOLE ELEV.=239.6±

0"-8" SANDY LOAM
8"-20" SANDY LOAM
20"-112" GRAVELLY LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

RECORD OWNER/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
-DEED BOOK 26502, PAGE 3 *

*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

REFERENCES:

-PLAN NO. 327 OF 1970*
-PLAN NO. 1152 OF 1985*

NOTES:

1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. ON JULY 8, 11 & 12, 2016.
2. THE SUBJECT PROPERTY IS LOCATED IN THE RS ZONING DISTRICT.
3. THE SUBJECT PROPERTY IS DEPICTED AS LOT 77A ON TOWN OF LEXINGTON ASSESSORS MAP 63.
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 ELEVATIONS DEPICTED HEREON ARE BASED ON THE TOWN OF LEXINGTON SEWER DATUM.
7. 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.
8. THE SUBJECT PROPERTY 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 25017C0403E DATED JUNE 4, 2010.
9. THE SOURCE OF NOISE AFFECTING THE SITE AND ABUTTING SITE IS THE TRAFFIC FLOW ALONG ADAMS STREET AND HANCOCK STREET
10. VEGETATION CONSISTS OF OPEN LAWN AREA BETWEEN THE MAIN HOUSE AND ADAMS STREET. MATURE SHADE TREES INCLUDING OAKS EXISTS BETWEEN HOUSE AND GARAGE AND TO THE BACK OF THE PROPERTY. SOME LAWN AREA EXISTING BEHIND THE GARAGE.
11. NO LEDGE OUTCROP WAS OBSERVED ON THE PROPERTY.

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

DWG. No. 5875-DEF_SITE ANALYSIS
XREF: 5875-DEF-REC

REVISIONS			
DATE	DESCRIPTION	BY
7/12/18	NO REVISIONS TO THIS SHEET	MAC

COMMONWEALTH OF MASSACHUSETTS
MICHAEL J. NOVAK
CIVIL
NO. 50696
REGISTERED PROFESSIONAL ENGINEER
7/12/18

COMMONWEALTH OF MASSACHUSETTS
CORY L. LARSON
NO. 529
REGISTERED LANDSCAPE ARCHITECT

8 ADAMS STREET
SITE ANALYSIS MAP
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

MERIDIAN ASSOCIATES
500 CUMMINGS CENTER, SUITE 5950
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 922-8031
69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7030
WWW.MERIDIANASSOC.COM

DESIGNED BY: C. PALMER
CHECKED BY: M. NOVAK

DATE: MAY 24, 2018
SCALE: 1"=20'
SHEET No. 3 OF 9
PROJECT No. 5875

Copyright © by Meridian Associates, Inc. All rights reserved

FOR REGISTRY OF DEEDS USE ONLY

I DECLARE, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

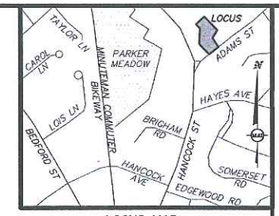
FOR MERIDIAN ASSOCIATES, INC. DATE

I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFIES THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

TOWN CLERK DATE

LEXINGTON PLANNING BOARD

DATE:



LOCUS MAP:
(NOT TO SCALE)

RECORD OWNER/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
-DEED BOOK 26502, PAGE 3 *

*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

REFERENCES:

-PLAN NO. 327 OF 1970*
-PLAN NO. 1152 OF 1985*

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE ASSESSOR'S LOT 77A DEPICTED ON ASSESSOR'S MAP 63 INTO TWO (2) LOTS (A & B).
2. THE LIMITED SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. JULY 8, 11 & 12, 2016.
3. THE SUBJECT PROPERTY IS LOCATED IN ZONING DISTRICT RS.
4. THE SUBJECT PROPERTY IS DEPICTED AS LOT 77A ON TOWN OF LEXINGTON ASSESSOR'S MAP 63.
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.

LEGEND:

——— ———	BUILDING SETBACK
○○○○○○○○	STONE WALL
——— ———	PROPOSED EASEMENT
BIT. CONC.	BITUMINOUS CONCRETE
CONC.	CONCRETE
EOP	EDGE OF PAVEMENT
S.F.	SQUARE FEET
TYP.	TYPICAL
IP	IRON PIPE
IR	IRON ROD
DH	DRILL HOLE
SBDH	STONE BOUND DRILL HOLE
FND	FOUND
R.W.S.	STONE RETAINING WALL
A.G.	ABOVE GROUND

REVISIONS

BY	DESCRIPTION	DATE
MAC	ADJ. PROP. LINE & EASEMENT	7/12/18

PROPERTY RIGHTS PLAN OF LAND
8 ADAMS STREET
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

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

DESIGNED BY: M. VAN CAMPEN | CHECKED BY: K. DANAHY

DATE: MAY 24, 2018
SCALE: 1"=20'
SHEET No. 4 OF 10
PROJECT No. 5875

DWG. No. 5875-DEF_EPL
XREF: 5875-REC

Copyright © by Meridian Associates, Inc. All rights reserved

I DECLARE, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

FOR MERIDIAN ASSOCIATES, INC. DATE

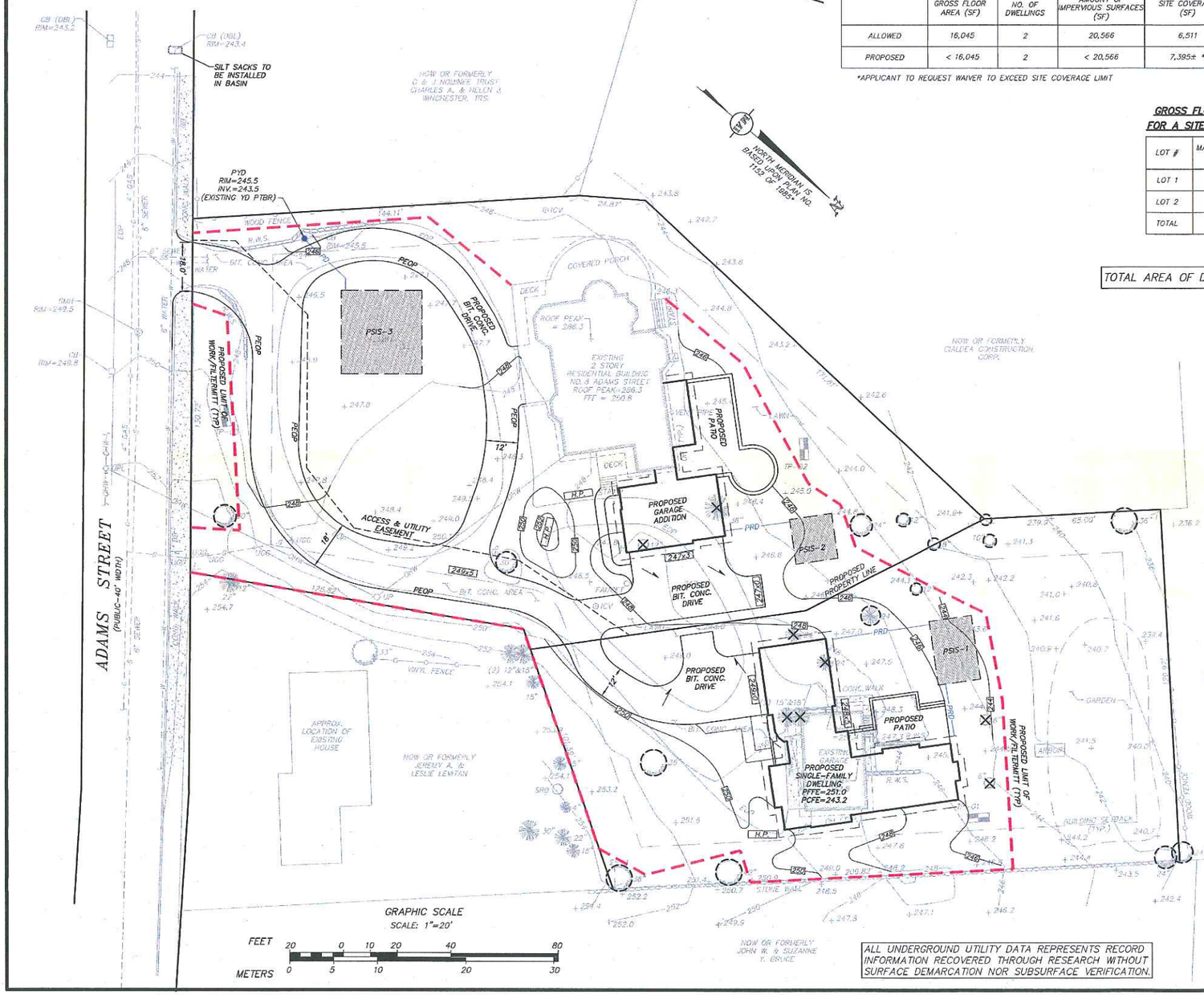
I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFIES THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

TOWN CLERK DATE

LEXINGTON PLANNING BOARD

DATE:

FOR REGISTRY OF DEEDS USE ONLY



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

SPECIAL PERMIT SUBDIVISION CALCULATIONS FOR SIGHT SENSITIVE DEVELOPMENT

	GROSS FLOOR AREA (SF)	NO. OF DWELLINGS	AMOUNT OF IMPERVIOUS SURFACES (SF)	SITE COVERAGE (SF)	COMMON OPEN SPACE REQUIRED (SF)
ALLOWED	16,045	2	20,566	6,511	NOT REQUIRED
PROPOSED	< 16,045	2	< 20,566	7,395± *	NOT REQUIRED

*APPLICANT TO REQUEST WAIVER TO EXCEED SITE COVERAGE LIMIT

GROSS FLOOR AREA (GFA) CHART FOR A SITE SENSITIVE DEVELOPMENT

LOT #	MAX. ALLOWABLE GFA (S.F.)	PROPOSED GFA (S.F.)
LOT 1	N/A	–
LOT 2	N/A	–
TOTAL	16,045	< 16,045

TOTAL AREA OF DISTURBANCE = 43,300± S.F.

SOILS INFORMATION

DATE: MARCH 30, 2016
CONDUCTED BY: ANDREW RODRIGUEZ, SE (SE1890)

TEST PIT TP-01
ELEV.=245.4±
BOTTOM OF HOLE ELEV.=233.4±

0"–8" SANDY LOAM
8"–15" SANDY LOAM
15"–29" FINE LOAMY SAND
29"–144" LOAMY SAND TRACE GRAVEL
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-02
ELEV.=244.3±
BOTTOM OF HOLE ELEV.=232.5±

0"–30" TOPSOIL
30"–44" SANDY LOAM
44"–55" FINE LOAMY SAND
55"–138" LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-03
ELEV.=248.9±
BOTTOM OF HOLE ELEV.=239.6±

0"–8" SANDY LOAM
8"–20" SANDY LOAM
20"–112" GRAVELLY LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

RECORD OWNER/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
–DEED BOOK 26502, PAGE 3 *

*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

REFERENCES:

–PLAN NO. 327 OF 1970*
–PLAN NO. 1152 OF 1985*

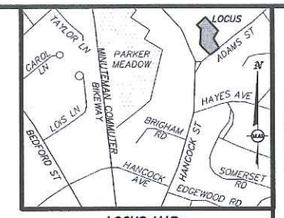
LEGEND:

- 238 — TWO FOOT CONTOUR
- 240 — TEN FOOT CONTOUR
- +248.5 — SPOT ELEVATION
- BUILDING OVERHANG
- BUILDING SETBACK
- STONE WALL
- STONE RETAINING WALL
- S — COMPILED SEWER LINE
- W — COMPILED WATER LINE
- D — COMPILED DRAIN LINE
- G — COMPILED GAS LINE
- SS — COMPILED SEWER SERVICE LINE
- WS — COMPILED WATER SERVICE LINE
- OHW — OVERHEAD WIRES
- UTILITY POLE WITH LIGHT
- UTILITY POLE
- GUY WIRE
- CATCH BASIN
- SEWER MANHOLE
- TERMINUS UNKNOWN
- WATER SERVICE
- IRRIGATION CONTROL VALVE
- DECIDUOUS TREE
- CONIFEROUS TREE
- TP-01 TEST PIT
- AIR CONDITIONING UNIT
- SIGN
- A.G. ABOVE GROUND
- BIT. CONC. BITUMINOUS CONCRETE
- CONC. CONCRETE
- EOP EDGE OF PAVEMENT
- INV INVERT
- OH BUILDING OVERHANG
- FFF FINISHED FIRST FLOOR
- FGF FINISHED GARAGE FLOOR
- S.F. SQUARE FEET
- TYP. TYPICAL
- V.C. VITRIFIED CLAY
- R.W.S. RETAINING WALL
- GC GRANITE CURB
- OH OVERHANG
- PEOP PROPOSED EDGE OF PAVEMENT
- EVERGREEN, SHADE & ORNAMENTAL TREES
- SHRUBS
- 249 — PROPOSED CONTOUR
- 249x01 — PROPOSED SPOT GRADE
- H.P. — PROPOSED SPOT GRADE
- FLOW ARROW
- EXISTING TREE PROPOSED TO BE REMOVED
- EXISTING TREE PROPOSED TO BE SAVED
- PROPOSED LIMIT OF WORK/FILTERMITT

NOTES:

1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. ON JULY 8, 11 & 12, 2016.
2. THE SUBJECT PROPERTY IS LOCATED IN THE RS ZONING DISTRICT.
3. THE SUBJECT PROPERTY IS DEPICTED AS LOT 77A ON TOWN OF LEXINGTON ASSESSORS MAP 63.
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 ELEVATIONS DEPICTED HEREON ARE BASED ON THE TOWN OF LEXINGTON SEWER DATUM.
7. 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.
8. THE SUBJECT PROPERTY 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 25017C0403E DATED JUNE 4, 2010.

DWG. No. 5875–PRELIM_SSD
XREF: 5875–REC



LOCUS MAP:
(NOT TO SCALE)

REVISIONS			
DATE	DESCRIPTION	BY
7/12/18	MODIFY DRIVEWAY	MAC

COMMONWEALTH OF MASSACHUSETTS
MICHAEL J. NOVAK
CIVIL
NO. 50696
REGISTERED PROFESSIONAL ENGINEER
7/12/18

MASSACHUSETTS
MARY L. CARPOW
NO. 529
REGISTERED LANDSCAPE ARCHITECT

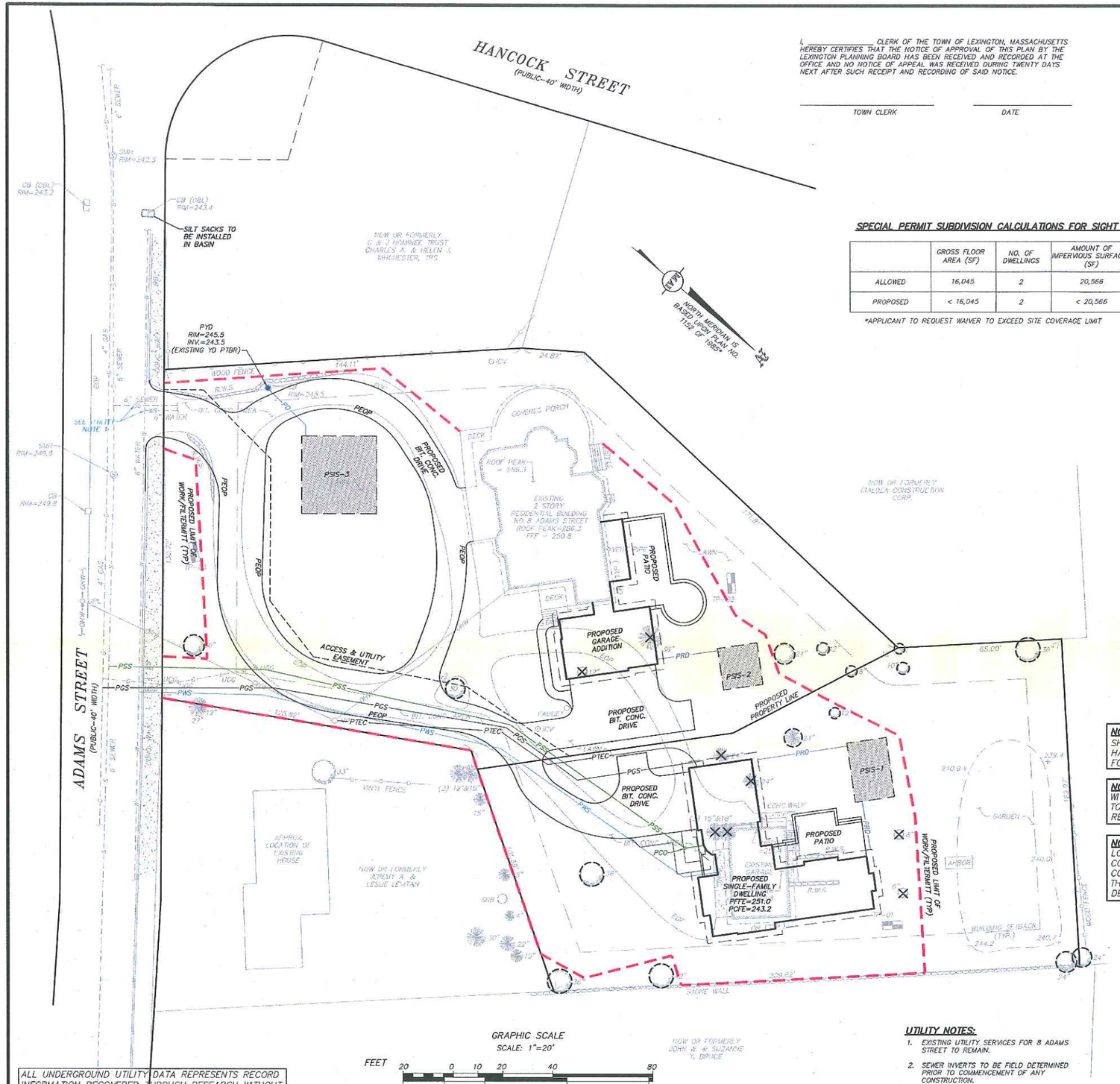
SITE CONSTRUCTION/LANDSCAPE PLAN
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET

MERIDIAN ASSOCIATES
300 CUMMINGS CENTER, SUITE 399O
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 922-1050
69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7600
WWW.MERIDIANASSOC.COM

DESIGNED BY: M. CAPACHIETTI
CHECKED BY: M. NOVAK

DATE: MAY 24, 2018
SCALE: 1"=20'
SHEET No. 5 OF 10
PROJECT No. 5875

Copyright © by Meridian Associates, Inc. All rights reserved.



I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFIES THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ TOWN CLERK

_____ DATE

LEXINGTON PLANNING BOARD

_____

_____

_____

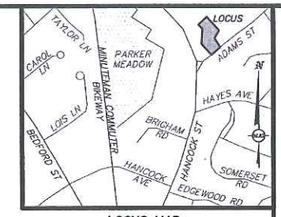
_____

_____

_____

_____

_____ DATE:



LOCUS MAP:
(NOT TO SCALE)

SPECIAL PERMIT SUBDIVISION CALCULATIONS FOR SIGHT SENSITIVE DEVELOPMENT

	GROSS FLOOR AREA (SF)	NO. OF DWELLINGS	AMOUNT OF IMPERVIOUS SURFACES (SF)	SITE COVERAGE (SF)	COMMON OPEN SPACE REQUIRED (SF)
ALLOWED	16,045	2	20,566	6,511	NOT REQUIRED
PROPOSED	< 16,045	2	< 20,566	7,395± *	NOT REQUIRED

*APPLICANT TO REQUEST WAIVER TO EXCEED SITE COVERAGE LIMIT

GROSS FLOOR AREA (GFA) CHART FOR A SITE SENSITIVE DEVELOPMENT

LOT #	MAX. ALLOWABLE GFA (S.F.)	PROPOSED GFA (S.F.)
LOT 1	N/A	–
LOT 2	N/A	–
TOTAL	16,045	< 16,045

SOILS INFORMATION

DATE: MARCH 30, 2016
CONDUCTED BY: ANDREW RODRIGUEZ, SE (SE1890)

TEST PIT TP-01
ELEV.=245.4±
BOTTOM OF HOLE ELEV.=233.4±

0"–8" SANDY LOAM
8"–15" SANDY LOAM
15"–29" FINE LOAMY SAND
29"–144" LOAMY SAND TRACE GRAVEL
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-02
ELEV.=244.3±
BOTTOM OF HOLE ELEV.=232.5±

0"–30" TOPSOIL
30"–44" SANDY LOAM
44"–55" FINE LOAMY SAND
55"–138" LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

TEST PIT TP-03
ELEV.=248.9±
BOTTOM OF HOLE ELEV.=239.6±

0"–8" SANDY LOAM
8"–20" SANDY LOAM
20"–112" GRAVELLY LOAMY SAND
NO MOTTLING OR STANDING WATER OBSERVED
NO ESHGWT OBSERVED

NOTE: ALL PROPOSED SEWER SERVICES SHALL BE 6" PVC (SDR 35) AND SHALL HAVE A MINIMUM SLOPE OF 2% FROM THE FOUNDATION TO THE SEWER MAIN.

NOTE: ALL UTILITY CONNECTION MADE WITHIN ADAMS STREET SHALL MEET THE TOWN OF LEXINGTON STANDARDS AND REGULATIONS.

NOTE: CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND CONDITION AND ELEVATIONS PRIOR TO CONSTRUCTION . IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER TO REVISE THE DESIGN.

UTILITY NOTES:

1. EXISTING UTILITY SERVICES FOR 8 ADAMS STREET TO REMAIN.
2. SEWER INVERTS TO BE FIELD DETERMINED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.

RECORD OWNER/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
–DEED BOOK 26502, PAGE 3 *

*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

REFERENCES:

–PLAN NO. 327 OF 1970*
–PLAN NO. 1152 OF 1985*

LEGEND:

- BUILDING OVERHANG
- BUILDING SETBACK
- STONE WALL
- STONE RETAINING WALL
- COMPILED SEWER LINE
- COMPILED WATER LINE
- COMPILED DRAIN LINE
- COMPILED GAS LINE
- COMPILED SEWER SERVICE LINE
- COMPILED WATER SERVICE LINE
- OVERHEAD WIRES
- UTILITY POLE WITH LIGHT
- UTILITY POLE
- GUY WIRE
- CATCH BASIN
- SEWER MANHOLE
- TERMINUS UNKNOWN
- WATER SERVICE
- IRRIGATION CONTROL VALVE
- DECIDUOUS TREE
- CONIFEROUS TREE
- TP-01 TEST PIT
- AIR CONDITIONING UNIT
- SIGN
- A.G. ABOVE GROUND
- BIT. CONC. BITUMINOUS CONCRETE
- CONC. CONCRETE
- EOP EDGE OF PAVEMENT
- INV INVERT
- OH BUILDING OVERHANG
- FFF FINISHED FIRST FLOOR
- FGF FINISHED GARAGE FLOOR
- S.F. SQUARE FEET
- TYP. TYPICAL
- V.C. VITRIFIED CLAY
- R.W.S. RETAINING WALL
- GC GRANITE CURB
- OH OVERHANG
- PEOP PROPOSED EDGE OF PAVEMENT
- PSS PROPOSED SEWER SERVICE LINE
- PWS PROPOSED WATER SERVICE LINE
- PTEC PROPOSED TELEPHONE ELECTRIC CABLE
- PROPOSED LIMIT OF WORK/FILTERMITT
- PCO PROPOSED CLEANOUT

NOTES:

1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. ON JULY 8, 11 & 12, 2016.
2. THE SUBJECT PROPERTY IS LOCATED IN THE RS ZONING DISTRICT.
3. THE SUBJECT PROPERTY IS DEPICTED AS LOT 77A ON TOWN OF LEXINGTON ASSESSORS MAP 63.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION 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 ELEVATIONS DEPICTED HEREON ARE BASED ON THE TOWN OF LEXINGTON SEWER DATUM.
7. 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.
8. THE SUBJECT PROPERTY 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 25017C0403E DATED JUNE 4, 2010.

DWG. No. 5875-DEF_SSD
XREF: 5875-REC

REVISIONS			
DATE	DESCRIPTION	BY
7/12/18	REVISE DRIVEWAY	MAC

MICHAEL J NOVAK CIVIL NO. 50695 COMMONWEALTH OF MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER 7/12/18

MASSACHUSETTS GARY L. CARPOZI NO. 528 REGISTERED LANDSCAPE ARCHITECT

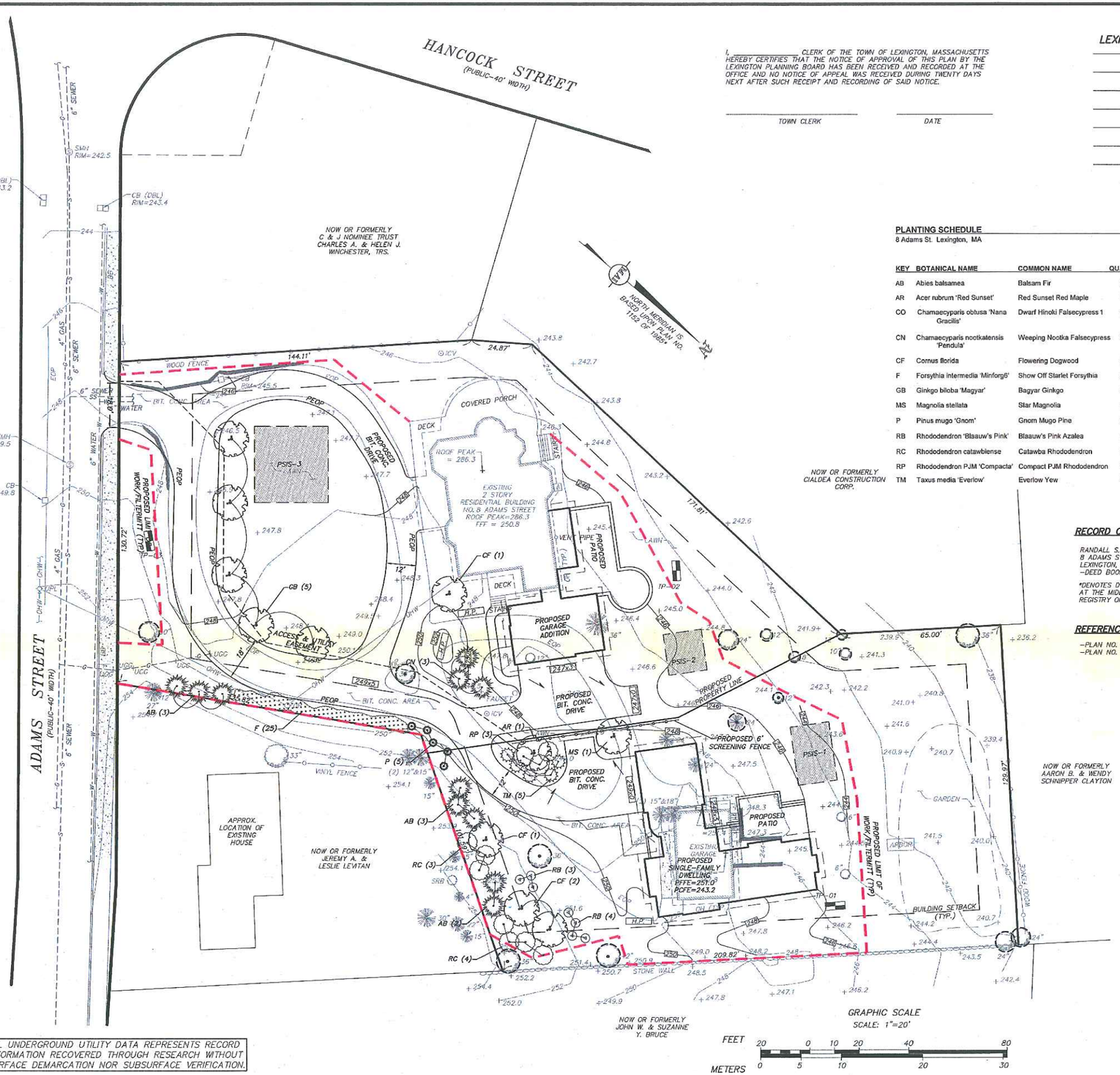
8 ADAMS STREET
SITE UTILITY PLAN
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

MERIDIAN ASSOCIATES
500 CUMMINGS CENTER, SUITE 5950
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 922-8031
69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7600
WWW.MERIDIANASSOC.COM

DESIGNED BY: M. CAPACHIETTI | CHECKED BY: M. NOVAK

DATE: MAY 24, 2018
SCALE: 1"=20'
SHEET No. 6 OF 10
PROJECT No. 5875

Copyright © by Meridian Associates, Inc. All rights reserved



I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFIES THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ TOWN CLERK

_____ DATE

LEXINGTON PLANNING BOARD

_____

_____

_____

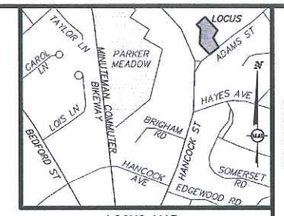
_____

_____

_____

_____

_____ DATE:



LOCUS MAP:
(NOT TO SCALE)

PLANTING SCHEDULE

8 Adams St. Lexington, MA

KEY	BOTANICAL NAME	COMMON NAME	QUANT	SIZE	COMMENTS
AB	Abies balsamea	Balsam Fir	8	8-10' bb	
AR	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	1	3 – 3.5" cal. bb	
CO	Chamaecyparis obtusa 'Nana Gracilis'	Dwarf Hinoki Falsecypress 1	30" – 36" bb		
CN	Chamaecyparis nootkatensis 'Pendula'	Weeping Nootka Falsecypress	3	7-8'bb	
CF	Cornus florida	Flowering Dogwood	4	2-2.5" cal	
F	Forsythia intermedia 'Minforg6'	Show Off Starlet Forsythia	25	18-24" bb	
GB	Ginkgo biloba 'Magyar'	Bagyar Ginkgo	5	3-3.5" cal. bb	Male
MS	Magnolia stellata	Star Magnolia	1	8 – 10'	Multi-stem. BB
P	Pinus mugo 'Gnom'	Gnom Mugo Pine	5	24-30" bb	
RB	Rhododendron 'Blaauw's Pink'	Blaauw's Pink Azalea	10	18-24"bb	
RC	Rhododendron catawbiense	Catawba Rhododendron	7	24 -30"bb	
RP	Rhododendron PJM 'Compacta'	Compact PJM Rhododendron	3	24-30" bb	
TM	Taxus media 'Everlow'	Everlow Yew	5	18-24"bb	

RECORD OWNER/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
-DEED BOOK 26502, PAGE 3 *

*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

REFERENCES:

-PLAN NO. 327 OF 1970*
-PLAN NO. 1152 OF 1985*

LEGEND:

- 238 — TWO FOOT CONTOUR
- 240 — TEN FOOT CONTOUR
- +246.5 SPOT ELEVATION
- BUILDING OVERHANG
- BUILDING SETBACK
- STONE WALL
- STONE RETAINING WALL
- -S- COMPILED SEWER LINE
- -W- COMPILED WATER LINE
- -D- COMPILED DRAIN LINE
- -G- COMPILED GAS LINE
- -SS- COMPILED SEWER SERVICE LINE
- -WS- COMPILED WATER SERVICE LINE
- OHW OVERHEAD WIRES
- UTILITY POLE WITH LIGHT
- UTILITY POLE
- GUY WIRE
- CATCH BASIN
- SEWER MANHOLE
- TERMINUS UNKNOWN
- WATER SERVICE
- ICV IRRIGATION CONTROL VALVE
- DECIDUOUS TREE
- CONIFEROUS TREE
- TP-01 TEST PIT
- AC AIR CONDITIONING UNIT
- SIGN
- A.G. ABOVE GROUND
- BIT. CONC. BITUMINOUS CONCRETE
- CONC. CONCRETE
- EOP EDGE OF PAVEMENT
- INV INVERT
- OH BUILDING OVERHANG
- FFF FINISHED FIRST FLOOR
- FGF FINISHED GARAGE FLOOR
- S.F. SQUARE FEET
- TYP. TYPICAL
- V.C. VITRIFIED CLAY
- R.W.S. RETAINING WALL
- GC GRANITE CURB
- OH OVERHANG
- PEOP PROPOSED EDGE OF PAVEMENT
- PROPOSED TREES & SHRUBS
- 249 PROPOSED CONTOUR
- 249x0 PROPOSED SPOT GRADE
- H.P. PROPOSED SPOT GRADE
- FLOW ARROW
- EXISTING TREE PROPOSED TO BE REMOVED
- EXISTING TREE PROPOSED TO BE SAVED
- PROPOSED LIMIT OF WORK/FILTERMITT

NOTES:

1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. ON JULY 8, 11 & 12, 2016.
2. THE SUBJECT PROPERTY IS LOCATED IN THE RS ZONING DISTRICT.
3. THE SUBJECT PROPERTY IS DEPICTED AS LOT 77A ON TOWN OF LEXINGTON ASSESSORS MAP 63.
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 ELEVATIONS DEPICTED HEREON ARE BASED ON THE TOWN OF LEXINGTON SEWER DATUM.
7. 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.
8. THE SUBJECT PROPERTY 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 25017C0403E DATED JUNE 4, 2010.

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

LANDSCAPE ARCHITECT

GARY LARSON RLA
6 WADMAN CRICLE
LEXIGNTON MA 02420

DWG. No. 5875-DEF_LANDSCAPE
XREF: 5875-DEF_SSD

REVISIONS			
DATE	DESCRIPTION	BY	
7/12/18	ADD THIS SHEET	MAC	

COMMONWEALTH OF MASSACHUSETTS
GARY L. LARSON
No. 928
REGISTERED LANDSCAPE ARCHITECT

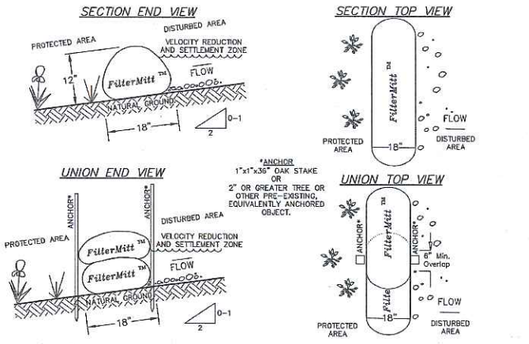
8 ADAMS STREET
SITE LANDSCAPE PLAN
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

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

DESIGNED BY: M. CAPACHIETTI | CHECKED BY: G. LARSON

DATE: MAY 24, 2018
SCALE: 1"=20'
SHEET No. 7 OF 10
PROJECT No. 5875

Copyright © by Meridian Associates, Inc. All rights reserved



FilterMitt™ COMPONENTS:

OUTSIDE CASING: 100% ORGANIC HESSIAN

FILLER INGREDIENT: *FiberRoot Mulch™*

- A BLEND OF COARSE AND FINE COMPOST AND SHREDDED WOOD.
- PARTICLE SIZES: 100% PASSING A 3" SCREEN; 90-100% PASSING A 1" SCREEN; 70-100% PASSING A 0.75" SCREEN; 30-75% PASSING A 0.25" SCREEN.
- WEIGHT: APPROX. 850 LBS./CU.YD. (AVE. 30 LBS./L.F.)

For more information visit:
www.groundscapesexpress.com
or contact us at:
Groundscapes Express, Inc.
P.O. Box 737
Wrentham, MA 02093
(508) 384-7140

FilterMitt™ INSTALLATION:

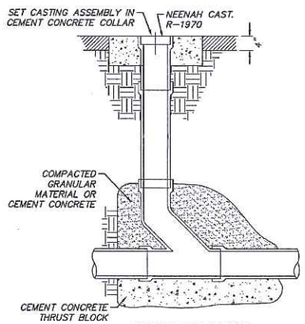
WITH THE NEWEST TECHNOLOGY AND EQUIPMENT, SECTIONS CAN BE CONSTRUCTED ON SITE IN LENGTHS FROM 1' TO 100'.

SECTIONS CAN ALSO BE DELIVERED TO THE SITE IN LENGTHS FROM 1' TO 8'.

THE FLEXIBILITY OF *FilterMitt™* ALLOWS IT TO CONFORM TO ANY CONTOUR OR TERRAIN WHILE HOLDING A SLIGHTLY OVAL SHAPE AT 12" HIGH BY 18" WIDE.

WHERE SECTION ENDS MEET, THERE SHALL BE AN OVERLAP OF 6" OR GREATER. BOTH SIDES SHALL BE ANCHORED (OAK STAKES, TREES, ETC.) TO STABILIZE THE UNION.

FILTERMITT DETAIL
(NOT TO SCALE)



CLEAN OUT DETAIL
(NOT TO SCALE)

I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ TOWN CLERK

_____ DATE

LEXINGTON PLANNING BOARD

_____

_____

_____

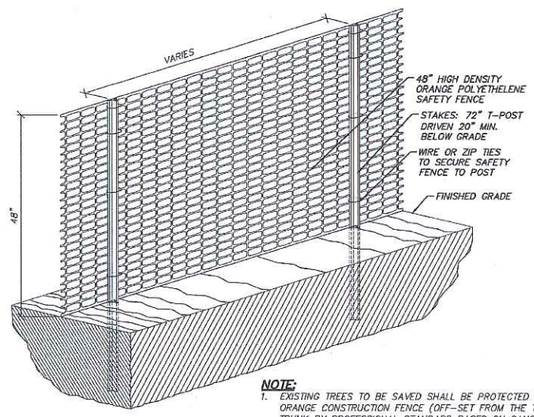
_____

_____

_____

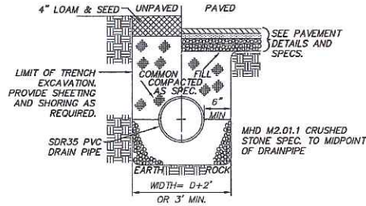
_____

_____ DATE:

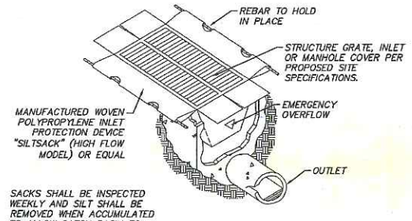


NOTE:
1. EXISTING TREES TO BE SAVED SHALL BE PROTECTED WITH ORANGE CONSTRUCTION FENCE (OFF-SET FROM THE TREE TRUNK BY PROFESSIONAL STANDARD BASED ON CANOPY) AND BURLAP AND STRAP BOARD TRUNK WRAP METHOD.

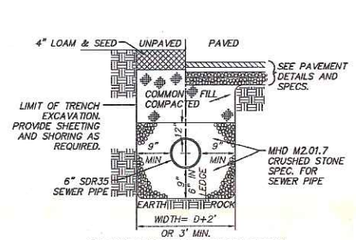
CONSTRUCTION FENCE FOR TREE PROTECTION DETAIL
(NOT TO SCALE)



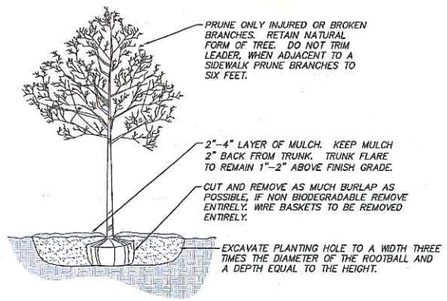
PROPOSED DRAIN PIPE TRENCH DETAIL
(NOT TO SCALE)



SILTSACK DETAIL
(NOT TO SCALE)



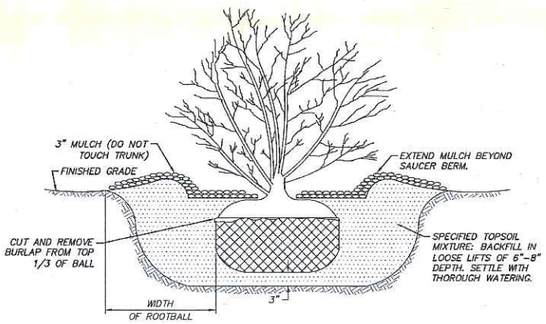
GRAVITY SEWER TRENCH DETAIL
(NOT TO SCALE)



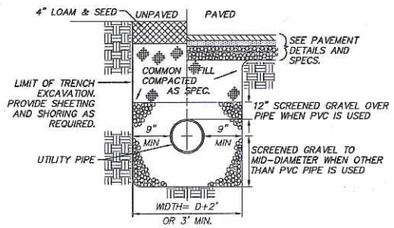
NOTES:

1. TREES TO BE A MINIMUM OF 3.5" CALIPER AND 8-10' HT.
2. BACKFILL PLANTING HOLE WITH EXISTING SOIL AMENDED AS NECESSARY.
3. BACKFILL HALF THE SOIL AND WATER TO SETTLE OUT AIR POCKETS, COMPLETE BACKFILLING AND REPEAT WATERING.
4. IF ROOTS ARE CIRCLING THE ROOTBALL EXTERIOR, CUT ROOTS VERTICALLY IN SEVERAL PLACES PRIOR TO PLANTING.
5. ONLY STAKE TREES SITUATED ON WINDY SITES OR EXPOSED TO SUBSTANTIAL PEDESTRIAN TRAFFIC.

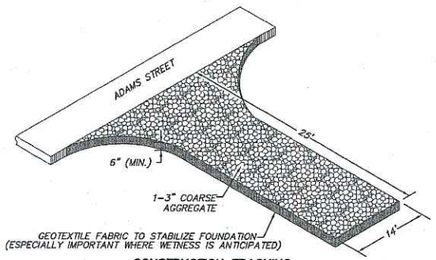
TREE PLANTING
(NOT TO SCALE)



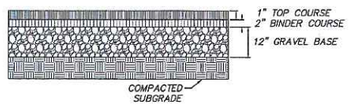
SHRUB PLANTING DETAIL
(NOT TO SCALE)



TYPICAL UTILITY TRENCH DETAIL



CONSTRUCTION TRACKING ENTRANCE/EXIT PAD
(NOT TO SCALE)



BITUMINOUS CONCRETE PAVEMENT SECTION
(NOT TO SCALE)

NOTE: REFER TO STANDARD DETAILS AS PROVIDED BY THE TOWN OF LEXINGTON ENGINEERING DEPARTMENT FOR DETAILS NOT DEPICTED HEREON.

DWG. No. 5875-DEF_DET

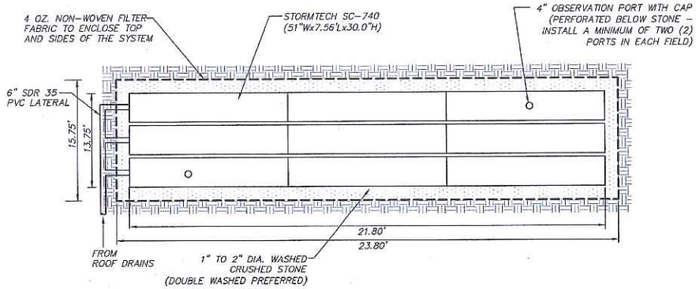
REVISIONS		
DATE	DESCRIPTION	BY
7/12/18	NO REVISIONS TO THIS SHEET	MAC

MICHAEL J. NOVAK CIVIL NO. 50096 REGISTERED
COMMONWEALTH OF MASSACHUSETTS
7/12/18

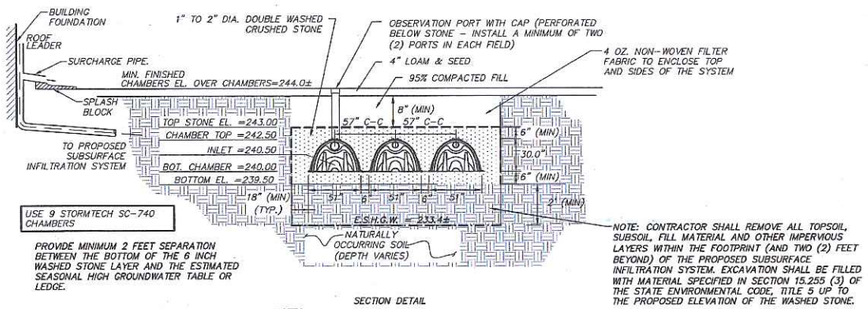
8 ADAMS STREET
SITE DETAILS
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

MERIDIAN ASSOCIATES
349 CUMMINGS CENTER, SUITE 349Q
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 299-0447
69 MILK STREET, SUITE 302
WESTBOROUGH, MASSACHUSETTS 01581
TELEPHONE: (508) 871-7030
WWW.MERIDIANASSOC.COM

DATE: MAY 24, 2018
SCALE: N/A
SHEET No. 8 OF 10
PROJECT No. 5875



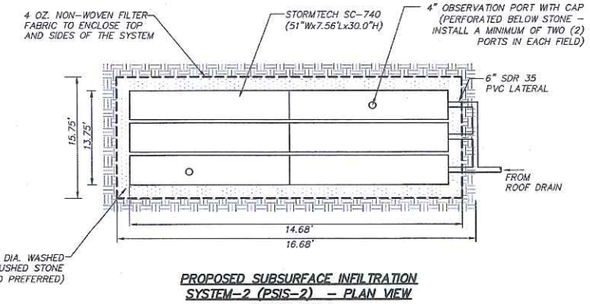
PROPOSED SUBSURFACE INFILTRATION SYSTEM-1 (PSIS-1) - PLAN VIEW
(NOT TO SCALE)



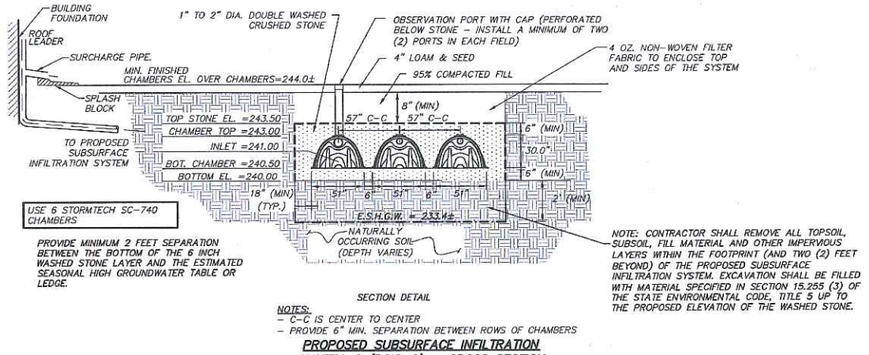
SECTION DETAIL

NOTES:
- C-C IS CENTER TO CENTER
- PROVIDE 6" MIN. SEPARATION BETWEEN ROWS OF CHAMBERS

PROPOSED SUBSURFACE INFILTRATION SYSTEM-1 (PSIS-1) - CROSS SECTION
(NOT TO SCALE)



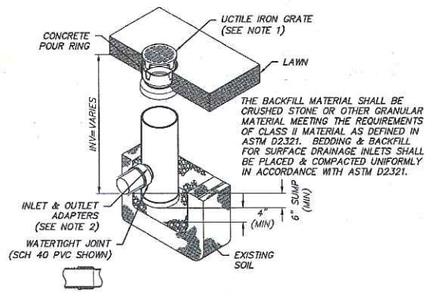
PROPOSED SUBSURFACE INFILTRATION SYSTEM-2 (PSIS-2) - PLAN VIEW
(NOT TO SCALE)



SECTION DETAIL

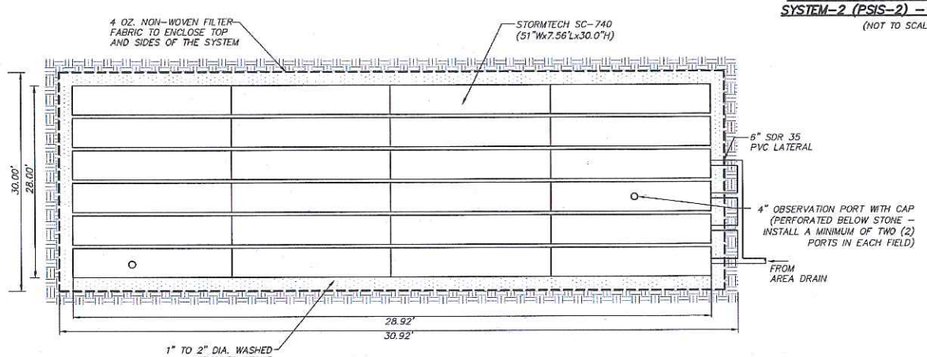
NOTES:
- C-C IS CENTER TO CENTER
- PROVIDE 6" MIN. SEPARATION BETWEEN ROWS OF CHAMBERS

PROPOSED SUBSURFACE INFILTRATION SYSTEM-2 (PSIS-2) - CROSS SECTION
(NOT TO SCALE)

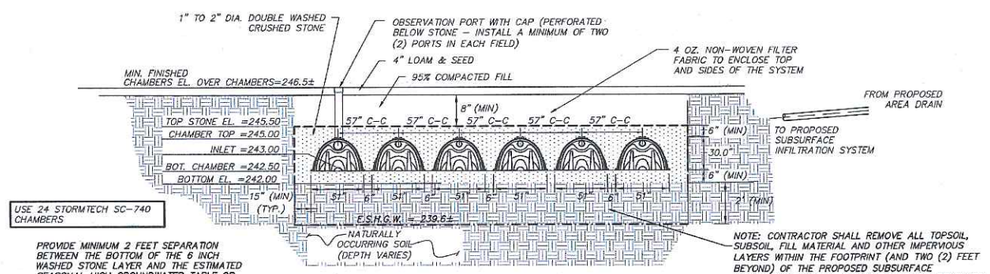


NOTES:
1. GRATES SHALL COMPLY TO H-20 LOADING CAPACITY.
2. STANDARD DRAIN BASIN HAS FIXED ADAPTER LOCATIONS OF 0° & 180°. CUSTOM DRAIN BASIN ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM SCH 40 PVC.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL)
4. SEE SITE PLAN FOR RIM AND INVERTS

PROPOSED YARD DRAIN
8" NYLOPLAST DRAIN BASIN®
(OR APPROVED EQUAL)
(NOT TO SCALE)



PROPOSED SUBSURFACE INFILTRATION SYSTEM-3 (PSIS-3) - PLAN VIEW
(NOT TO SCALE)



SECTION DETAIL

NOTES:
- C-C IS CENTER TO CENTER
- PROVIDE 6" MIN. SEPARATION BETWEEN ROWS OF CHAMBERS

PROPOSED SUBSURFACE INFILTRATION SYSTEM-3 (PSIS-3) - CROSS SECTION
(NOT TO SCALE)

REVISIONS

BY	DESCRIPTION	DATE
MAC	NO REVISIONS TO THIS SHEET	7/12/18

MICHAEL J. NOVAK CIVIL NO. 50696 REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS
7/12/18

8 ADAMS STREET

SITE DETAILS

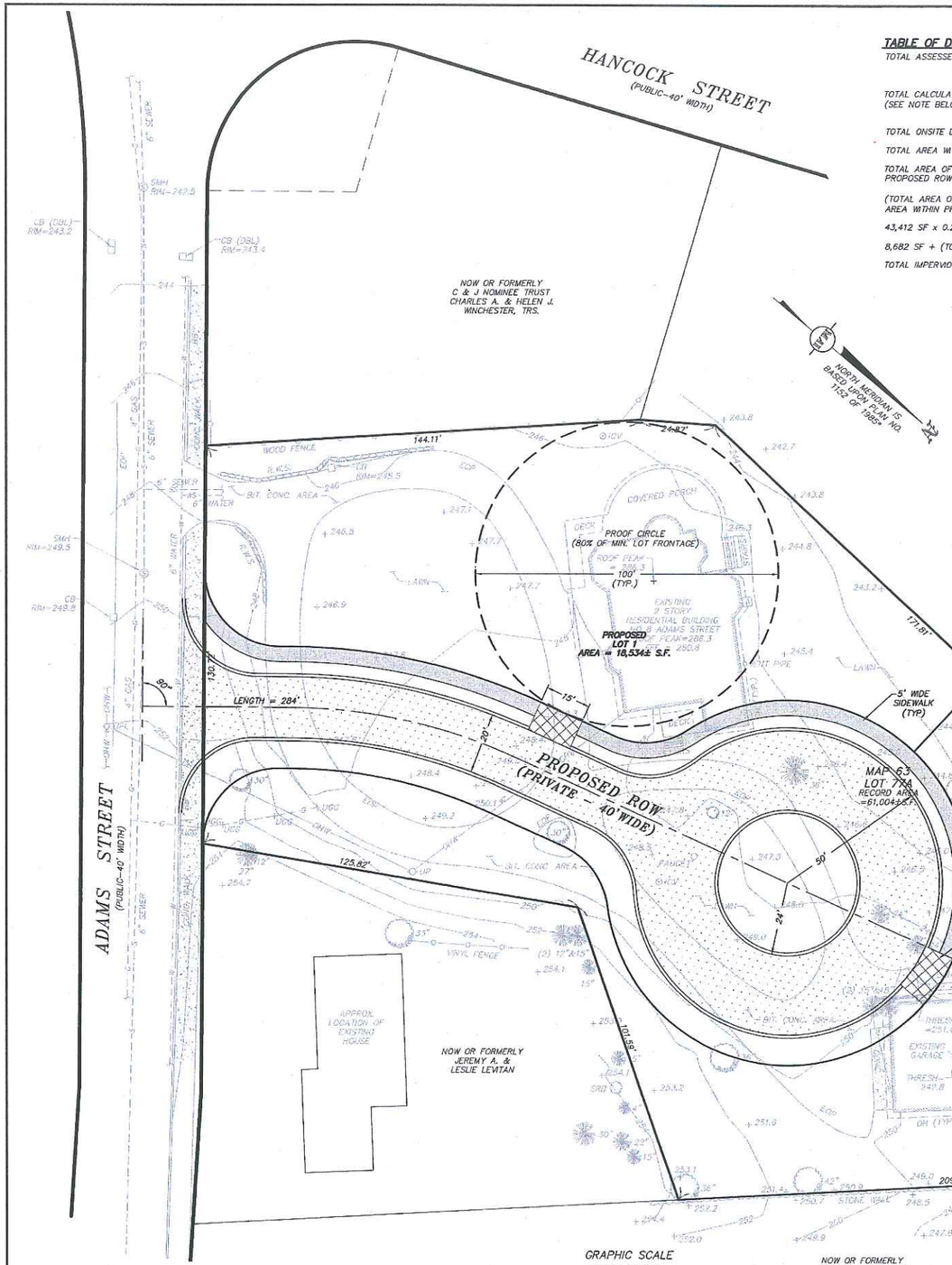
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

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

DATE: MAY 24, 2018
SCALE: N/A
SHEET No. 9 OF 10
PROJECT No. 5875

DWG. No. 5875-DEF_DET

Copyright © by Meridian Associates, Inc. All rights reserved.



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

TABLE OF DEVELOPMENTAL DATA

TOTAL ASSESSED LAND AREA OF DEVELOPMENT 1.40 AC. (MAP 63, LOT 77A)

TOTAL CALCULATED LAND AREA OF DEVELOPMENT 60,884± SF (MAP 63, LOT 77A)
(SEE NOTE BELOW)

TOTAL ONSITE DEVELOPABLE SITE AREA	60,884± SF
TOTAL AREA WITHIN PROPOSED ROW	17,472± SF
TOTAL AREA OF IMPERVIOUS SURFACES WITHIN PROPOSED ROW	11,884± SF

(TOTAL AREA OF LOTS IN PROOF PLAN = TOTAL CALCULATED LAND AREA OF DEVELOPMENT – TOTAL AREA WITHIN PROPOSED ROW = (60,884 – 17,472) = 43,412 SF

43,412 SF x 0.20 = 8,682 SF

8,682 SF + (TOTAL IMPERVIOUS AREA WITHIN ROW OF PROOF PLAN) = (8,682 + 11,884) = 20,566 SF

TOTAL IMPERVIOUS SURFACE AREA ALLOWABLE IN A SITE SENSITIVE DEVELOPMENT = 20,566 SF.

I, _____ CLERK OF THE TOWN OF LEXINGTON, MASSACHUSETTS HEREBY CERTIFIES THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ TOWN CLERK

_____ DATE

LEXINGTON PLANNING BOARD

_____

_____

_____

_____

_____

_____

_____

_____ DATE:

SPECIAL PERMIT SUBDIVISION CALCULATIONS

TYPE OF SPECIAL PERMIT RESIDENTIAL DEVELOPMENT	MAXIMUM GROSS FLOOR AREA (SF)	NO. OF DWELLINGS	MAXIMUM AMOUNT OF IMPERVIOUS SURFACES (SF)	MAXIMUM SITE COVERAGE (SF)	MINIMUM COMMON OPEN SPACE REQUIRED (SF)
SITE SENSITIVE	16,045 S.F. (SEE GFA CHART)	2	20,566	6,511	NOT REQUIRED

GROSS FLOOR AREA (GFA) CHART FOR A SITE SENSITIVE DEVELOPMENT

LOT #	MAX. ALLOWABLE GFA (S.F.)
LOT 1	7,515
LOT 2	8,530
TOTAL	16,045

TABLE OF DIMENSIONAL REQUIREMENTS:

ZONE: RS

ITEM	REQUIREMENT
MIN. LOT AREA	15,500 S.F.
MIN. FRONTAGE	125'
BUILDING SETBACKS:	
FRONT YARD	30'
SIDE/REAR YARD	15'

RECORD OWNER/ APPLICANTS:

RANDALL S. & ELAINE H. HILLER
8 ADAMS STREET
LEXINGTON, MASSACHUSETTS 02420
–DEED BOOK 26502, PAGE 3 *

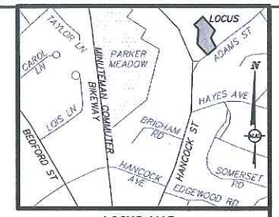
*DENOTES DOCUMENTS RECORDED AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

REFERENCES:

–PLAN NO. 327 OF 1970*
–PLAN NO. 1152 OF 1985*

MINOR RESIDENTIAL STREET:

NUMBER OF DWELLING UNITS SERVED: 2 PROPOSED
WIDTH OF PROPOSED RIGHT-OF-WAY: 40' (40' MIN. REQUIRED)
MINIMUM PAVEMENT WIDTH: 20' (20' REQUIRED)
PROPOSED RADIUS OF RIGHT-OF-WAY ROUNDING: 25' (MIN. PERMITTED: 25')
LENGTH OF RIGHT-OF-WAY: 284'± (MAX. PERMITTED: 650')



LOCUS MAP:
(NOT TO SCALE)

LEGEND:

238	TWO FOOT CONTOUR
240	TEN FOOT CONTOUR
+246.5	SPOT ELEVATION
	BUILDING OVERHANG
	BUILDING SETBACK
	STONE WALL
	STONE RETAINING WALL
–S–	COMPILED SEWER LINE
–W–	COMPILED WATER LINE
–D–	COMPILED DRAIN LINE
–G–	COMPILED GAS LINE
–SS–	COMPILED SEWER SERVICE LINE
–WS–	COMPILED WATER SERVICE LINE
OHW	OVERHEAD WIRES
	UTILITY POLE WITH LIGHT
	UTILITY POLE
	GUY WIRE
CB	CATCH BASIN
S	SEWER MANHOLE
	TERMINUS UNKNOWN
WS	WATER SERVICE
ICV	IRRIGATION CONTROL VALVE
	DECIDUOUS TREE
	CONIFEROUS TREE
A/C	AIR CONDITIONING UNIT
	SIGN
A.G.	ABOVE GROUND
BIT. CONC.	BITUMINOUS CONCRETE
CONC.	CONCRETE
EOP	EDGE OF PAVEMENT
INV	INVERT
OH	BUILDING OVERHANG
FFF	FINISHED FIRST FLOOR
FGF	FINISHED GARAGE FLOOR
S.F.	SQUARE FEET
TYP.	TYPICAL
V.C.	VITRIFIED CLAY
R.W.S.	RETAINING WALL
GC	GRANITE CURB
OH	OVERHANG
	APPROXIMATE EXISTING PROPERTY LINES
	PROOF CIRCLE
R=	RADIUS
TYP.	TYPICAL
PEOP	PROPOSED EDGE OF PAVEMENT
SF	SQUARE FEET
ROW	RIGHT OF WAY
DIA	DIAMETER
	PROPOSED ROADWAY
	PROPOSED SIDEWALK
	PROPOSED DRIVEWAY APRON

NOTES:

1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. ON JULY 8, 11 & 12, 2016.
2. THE SUBJECT PROPERTY IS LOCATED IN THE RS ZONING DISTRICT.
3. THE SUBJECT PROPERTY IS DEPICTED AS LOT 77A ON TOWN OF LEXINGTON ASSESSORS MAP 63.
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 ELEVATIONS DEPICTED HEREON ARE BASED ON THE TOWN OF LEXINGTON SEWER DATUM.
7. 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.
8. THE SUBJECT PROPERTY 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 25017C0403E DATED JUNE 4, 2010.

DWG. No. 5875-DEF_PROOF
XREF: 5875-REC

REVISIONS

DATE	DESCRIPTION	BY
7/12/18	NO REVISIONS TO THIS SHEET	MAC

MICHAEL J. NOVAK
CIVIL
NO. 50696
REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS
7/12/18

MASSACHUSETTS
GARY L. CAPOBIANCO
NO. 529
REGISTERED LANDSCAPE ARCHITECT
7/12/18

8 ADAMS STREET
PROOF PLAN OF LAND
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)
PREPARED FOR
RANDALL S. & ELAINE H. HILLER

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

DESIGNED BY: M. CAPACHIETTI | CHECKED BY: M. NOVAK

DATE: MAY 24, 2018
SCALE: 1"=20'
SHEET No. 10 OF 10
PROJECT No. 5875

Lexington Planning Office Memorandum

To: Planning Board

From: David Fields, Planner

Date: July 16, 2018

Subject: Site Sensitive Development Plan for 8 Adams Street

GENERAL INFORMATION

Owner / Applicant:	Randall & Elaine Hiller
Designers:	Gary Larson, RLA; and Meridian Associates, Inc.;
Submission Materials:	Special permit application for a Site Sensitive Development.
Location:	8 Adams Street, Assessor's Map 63, Parcel 77A
Assessed Area:	1.4 ± acres
Zoning:	RS, One Family (15,500 S.F. lot, 125 ft. frontage)
Current Land Use:	Single Family Residence
Surrounding Land Use:	The property at 8 Adams Street is surrounded by single family homes and is located off of Hancock Street, roughly ½ mile from Lexington Center.
Topography/Land Cover:	The site is flat with a small portion of 25-40% slope on the southeast portion of the lot fronting Adams Street. Soils on the site consist Charlton-Urban Land-Hollis Complex fine sandy loam and Merrimac-Urban Land Complex fine sandy loamy over very gravely sand.
Wetlands/Flood Zone:	There are no known wetlands on site. The property is not located in any FEMA Flood Zone determined to be in the 1% and 0.2% annual chance floodplains.
Historic Status:	The existing structure is not located in a Historic District, however, the structure is a historically significant building.
Other Board, Commission & Department Status:	This plan has been reviewed by the Development Review Team.

DEVELOPMENT DATA

Compliance with Zoning: The lot has roughly 130 feet of frontage on Adams Street, a total area of 1.4 ± acres which meets the requirements for residential developments in Section 135-4.0 of the Lexington Zoning Bylaw.

Development Data	Conventional	Proposed SSD
Dwelling Units (DU)	2	2
Density	1.42 DU/AC	1.42 DU/AC
Maximum Site Coverage (SF)	N/A	7,875
Total GFA	16,045 for total site	<16, 045 for total site
Impervious Surface (SF)	Allowed 20,566 for total site	<17,500 for total site

SUMMARY OF THE PLAN

The plan for 8 Adams Street has been submitted under §135-6.9 *Special Permit Residential Developments* of Lexington's Zoning Bylaw, specifically the provision defined in §135-6.9.3. The proof plan shows a single minor residential street terminating in a cul-de-sac, retaining no existing features of the site. As shown, all lots on the proof plan comply with conventional dimensional requirements.

The proposed Site Sensitive Development shows the retention of the existing home, however, the detached out building will be demolished. The proposal shows an addition on the rear of the home to be retained. The applicant should discuss the proposal with the Lexington Historical Commission regarding alterations to the structures and may have done so already; clarification should be sought by the Board as to the status of these conversations, if they have taken place. Furthermore, as the existing home is built in to the sideyard setback, the height of any addition may be subject to the height limit adopted during the 2016 Town Meeting season, or the height of the existing nonconforming structure; whichever is greater.

The applicant should be prepared to discuss any conversations conducted with the Lexington Fire Department as to the status of fire suppression required for the proposed new dwelling unit.

The proposed additional structure to the rear of the existing home at 8 Adams Street is designed to be a 1.5 story structure to accommodate buyers in all potential age ranges. While this is commendable, this design also creates a more sprawling building. As such the applicant will require a waiver for site coverage if this project moves forward as is. While the additional height that would come with shrinking the building footprint is not a particularly great compromise, site coverage could be reduced by:

1. Not adding on to the existing home
2. Not designing three car garages for the existing home (5 bays in total on site for two homes)

It will be for the Board to decide whether to grant a waiver for site coverage if the plan moves forward.

With regard to the proposed common driveway serving both homes, the width should be a uniform 18 feet. This was confirmed through discussion with the Lexington Fire Department. The 18 foot minimum can be used on the portions of the common drive serving both homes. The individual drives that are not to be common use can remain as less than 18 feet in width as they serve only one unit.

Town of Lexington

Land Use, Health and Development Department
Office of Public Health
1625 Massachusetts Avenue
Lexington, MA 02420
(781)-698-4533
Fax (781)-861-2780

Gerard F. Cody, R.E.H.S./R.S.
Health Director x 84503

Kathy P. Fox, R.E.H.S. /R.S., C.H.O., CP-FS
Environmental Health Agent x 84507

David Neylon, B, S.N., R.N.
Public Health Nurse x 84509

Board of Health
Wendy Heiger-Bernays, PhD, Chair
Sharon Mackenzie, R.N., CCM
Burt M. Perlmutter, M.D.
David S. Geller, M.D.
John J. Flynn, J.D.

June 15, 2018

To: David Fields, Planner, Planning Office | Land Use, Health and Development

From: Gerard F. Cody, R.E.H.S./R.S.

Re: Comments on 8 Adams Street

The Office of Public Health received a *definitive Subdivision Plan for "8 Adams Street."* The applicant asked for comments from the Office of Public Health about this project. New Construction can sometimes create unintentional nuisance conditions by creating harborage conditions for both mosquitoes, rodents and other pests. The Office of Public Health would like to share with the developer some "best practices" to help avoid mosquito and pest harborage nuisance conditions during new construction and to help avoid them in the future once the project is completed.

Mosquito Population Reduction through storm water runoff design

During periods of several rain events and the when the ground water is high within a 10 day period, mosquito populations will increase. Below, you will find some general best practices to help reduce the mosquito population at this location:

- Ensure that stormwater structures such as dry wells, rain gardens and detention basins are designed to infiltrate water within 48 hours of a rain event to help reduce mosquito populations. Dry wells and detention ponds should be located, if possible, at elevations that are more than 2 feet above the seasonal ground water mark.
- Any outflow pipes/ drainage ditches that take water from dry wells, detention basins and catchbasins should be directed to upland areas, if possible, and if not into existing waterways. They should not be directed into a wetland because the inflow of water could cause increased water levels that is sufficient to allow immature mosquitoes in their larval and pupal stages to complete their development.
- Designing detention basins that are sloped and have low flow channels that are designed to prevent water from stagnating is beneficial. The low flow channels need to be maintained periodically to eliminate sand and sediment from obstructing the channels.
- As previously mentioned infiltrating stormwater is preferred to directing runoff into wetlands. If developers could install catchbasins with porous bottoms or even porous

pavement in some locations, those designs would be beneficial from a mosquito control perspective.

Rodent Population Reduction

New Construction, demolition or renovation projects, can displace rodents from their natural habitat. Rodents may seek shelter or harborage in storm drains on residential and commercial properties. The Lexington Office of Public Health would like to provide you with the following information to help ensure that rodents do not take shelter permanently in this area or cause a nuisance condition for the general public.

- Maintain or Rodent Proof the outside structure
- Seal cracks and openings in building foundations, openings for pipes, electric wires, drain spouts, and vents. Do not leave holes any larger than 1/4 inch unsealed.
- If gnawing is suspected to be a problem plug holes and gaps with sheet metal, coarse steel wool or wire screening.
- Most rodents are excellent climbers so do not focus just on the ground level, check the roof as well. Make sure internal screens on roof and in attic air vents are in good repair.
- Keep side doors and garage doors tightly closed.
- Make sure that all windows that can be opened have screens that are in good condition.
- Cover crawl space with a tight fitting cover.
- Cover chimneys with a spark arrester.
- Make sure all exterior doors are tight fitting and weatherproofed at the bottom.
- Remember that pet doors in the house or garage also provide and easy entrance for rodents.
- Sanitation is a very important part of rodent control. Without proper sanitation other steps to eliminate and prevent rodents will not work.
- Keep the areas around your work zone "clutter free" to reduce hiding spaces for rodents.
- Store rubbish and garbage properly in air tight cans with tight fitting lids. All rubbish and garbage should be in cans, do not have bagged or loose rubbish and garbage on the ground.
- Article XI Dumpsters states in part that "*It shall be the responsibility of the property owner or agent being serviced to maintain the dumpster free of odors, scattered debris, overflow and all other nuisances. It shall also be the responsibility of the property owner or agent being serviced to maintain the dumpster area free from any condition that may be considered an attraction for rodents or other pests*".

cc: Board of Health

1 Adams Street

Lexington, MA 02420

Planning Board

Town Office Building
1625 Massachusetts Avenue
Lexington, MA 02420

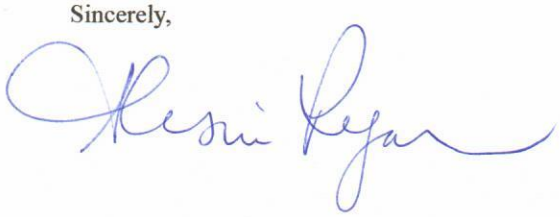
June 7, 2018

Dear Chairman Johnson,

My family lives at 1 Adams Street, across from the proposed site sensitive development currently under consideration at 8 Adams Street. Our home overlooks the current historical house. Our neighbor, Randy Hiller, have been transparent and forthcoming with information regarding their desire to preserve their current home while building an additional home on their lot.

I have reviewed the plans prepared by Colin Smith and Gary Larsen and submitted by Randy to the Planning Board. We are supportive of the project and particularly the character of the lower profile (though higher site coverage) new house proposed. We fear the destruction of the existing historical home at 8 Adams Street, and hope that an expiditious planning board approval of the Hiller development plans will mitigate this risk.

Sincerely,



Alison Ryan

Cc: Randy Hiller

Phil Posner
Patricia Nelson

10 Adams Street
Lexington, MA 02420

Planning Board
Town Office Building
1625 Massachusetts Avenue Lexington, MA 02420

June 11, 2018

Dear Chairwoman Johnson,

We live at 10 Adams Street, adjacent to the proposed site sensitive development currently under consideration at 8 Adams Street. We still favor a low-profile house design (initially presented to the Planning Board in December 2016 and as indicated in our letter to the Board dated December 27, 2016). Recently, Randy Hiller showed us updated plans and we believe this design will have the least impact on our family's home while maintaining appropriate scale for the lot. We continue to ask that the Board incorporate substantial ground cover and trees as screening as conditions of any permit you may issue.

Sincerely,

Jeremy Levitan

Cc: Randy Hiller
Patricia Nelson

Patricia S. Nelson
Attorney At Law
19 Muzzey Street, Suite 207
Lexington, Massachusetts 02421

Telephone: 781-863-8688
Fax: 781-863-2201
E-Mail: psnelson@masslaw.us

July 12, 2018

MEMORANDUM TO: Ginna Johnson, Chair
Lexington Planning Board
Town Hall, 1625 Massachusetts Avenue
Lexington MA, 02420

RE: Definitive Site Plan Application, Site Sensitive Plan

PROPERTY: 8 Adams Street, Lexington MA

OWNERS: Randall Hiller and Elaine Hiller

The following is a Memorandum in support of the Definitive Site Plan Application filed with the Planning Board on May 25, 2018 for a Site Sensitive Development on the Property creating two lots and preserving the existing 1903 home.

BACKGROUND

The current house ("Historic House") was built on the foundation of an earlier Queen Anne house (built 1888) which burned in December of 1902. (Report of Nancy Seasholes to the Historical Commission dated January 1998 ("Seasholes Report"), Form B, copy attached). The existing house at 8 Adams Street was built in 1903, designed by noted local architect Willard D. Brown and is sited on a 61,004 square foot lot, of sufficient size, shape and frontage to support a two lot subdivision if both the house and garage were removed. (See Proof Plan previously submitted.)

The Historical Commission approved the Demolition of the existing garage in October of 2016 on the grounds that the building was not structurally sound.

The Hillers presented a sketch plan to the Planning Board for its hearing on January 5, 2017, which involved demolition of two or more walls of the Historic House, demolition of the garage and construction of a new two plus story home with a footprint of 3142 square feet and a GFA of 5907 square feet.

As noted in the letter of Owner Randall Hiller, attached, the response of the Planning Board was generally positive.

In response to the comments of the Planning Board, the input of the abutter at 10 Adams Street, and the Owners personal concerns for historic preservation, the current plan:

a) Limits exterior alteration of the Historic House to removal of only one (1) wall at the rear of the property;

b) Reduces the height of the new home by one story, with a profile of 1.5 stories;

c) Reduces the footprint of the new building from 3142 sq ft to 2595 sq ft.

d) Reduces the GFA of the new building from 5907 sq ft to 4950 sq ft.

COMPLIANCE WITH REQUIREMENTS OF Chapter 135 §6.9

The proposed project serves the following purposes of Chapter 135 §6.9 as a site sensitive development. A site sensitive development (SSD) is the development of a parcel with configurations of lots allowing flexibility and creativity in residential development through reductions in minimum lot area and frontage requirements in order to minimize site disturbance, preserve historic and sensitive natural resources, and allow for efficient patterns of construction to lower development cost.

1. The Proposed Plans show a "development ….designed with sensitivity to the characteristics of the site that otherwise might be limited by application of uniform, largely geometric standards". In this case, a "by right" development is feasible but would entail the destruction of the Historic George O. Whiting/Gilmore House.

2. The proposal preserves historical and architectural features of the existing Historic House and setting.

3. By grouping the Historic House and the new house in the middle of the property (front to back) where the current structures are roughly located, both the set back with circular drive from the street and the significant amount of open space at the rear of the property are preserved.

4. The proposed designs are in keeping with the existing structures and with the livability, scale, character and economic value of the existing neighborhood as follows:

a) The Historic House will remain in its current location set "far back" from Adams Street as noted in the Seasholes Report;

b) The proposed designs retain the semi-circular carriage drive leading up to the front porch and entrance;

c) The changes to the exterior of the Historic House will take place at the rear of the house.

d) The new structure will be located in the approximate location of the current garage, (also set well back from Adams Street) and will be approximately the same height (within two feet) as the current garage.

e) In deference to the request of the abutter most affected by the new construction (owners of 10 Adams Street), the new house will be reduced by one story, keeping a low profile from the viewpoint of the abutters and Adams street.

DOCUMENTS SUBMITTED

The Owners application includes the following submittals:

- Completed Application and Cover Letter
- Drainage Report and Engineering Calculations
- Cover Sheet & Locus Context Plan
- Record Conditions Plan
- Site Analysis Plan
- Property Rights Plan of Land
- Site Construction Plan
- Landscape Plan
- Site Utilities Plan
- Site Details
- Proof Plan
- Completed Application and Cover Letter
- Drainage Report and Engineering Calculations
- Cover Sheet & Locus Context Plan
- Record Conditions Plan
- Site Analysis Plan
- Property Rights Plan of Land
- Site Construction Plan
- Landscape Plan
- Site Utilities Plan
- Site Details
- Proof Plan

- Form W and Addendum
- Owner Letter

WAIVERS

The Owners request a waiver from the site coverage requirements as noted on Form W, attached, with explanations as noted therein.

CONCLUSION

For the reason stated herein and as presented in the Application and supporting documents, the Owners request that the Planning Board approve the plans for a site sensitive development be approved as submitted.

Randall Hiller
Elaine Hiller
By Their Attorney

Patricia S. Nelson
19 Muzzey Street, Suite 207
Lexington MA 02421
781-863-8688
psnelson@masslaw.us

Town of Lexington
Planning Office

Land Use, Health and Development Department
1625 Massachusetts Avenue
Lexington, MA 02420

Tel: (781) 698-4560

FORM W
APPLICATION FOR WAIVERS

Applicant: Randall Hiller and Elaine Hiller

Description of Land: 8 Adams Street, Lexington MA 02420

Type of Development: Site Sensitive Development

Item #	Section of Development Regulations	From (the required standard): To (the proposed alternative):
1	c 135 Section 9.9.	From 6511 square feet To 7395 square feet

This form is to be submitted with the application for development.

In addition, §176-3.4 of the Zoning Regulations and/or §175-3.5 of the Subdivision Regulations requires:

1. a plan showing how the site would be developed if the plan complied with that provision of these Regulations and no waiver is granted; and
2. a narrative statement that explains how granting the waiver would be in the public interest and not inconsistent with the intent and purpose of the Subdivision Control Law. (Please use a separate sheet of paper.)

8 ADAMS STREET – DEFINITIVE SITE SENSITIVE PLAN

FORM W – ADDENDUM

Item #1 – The Applicants Randall and Elaine Hiller request a waiver from c. 135 section 6.9.9 on the following grounds:

1. The existing 1903 arts and crafts style home was constructed in a style that features "strong horizontal lines" and includes a "large semi-circular [covered] porch at the south end". Because the porch is covered, it technically is included in the site coverage calculations. Were the cover to be removed, the development as a whole would meet current site coverage requirements. A photo of the porch is part of the report of Nancy Seasholes to the Lexington Historical Commission, Form B, a copy of which is submitted with Applicants' materials. The waiver would avoid penalizing the Owners for keeping this historic feature intact.

2 A new home could be constructed with an additional story on a smaller footprint that would comply with site coverage requirements (see materials submitted herewith). Compared with the taller building, the proposed lower profile building would be more in keeping with the "strong horizontal lines" of the existing building and would present a lower profile as seen from Adams Street and the home of the abutters at 10 Adams Street.

Randy Hiller
8 Adams Street
Lexington, MA 02420

July 11, 2018

Town of Lexington Planning Board
1625 Massachusetts Ave.
Lexington, MA 02420

To whom it may concern,

I am the current owner/developer of 8 Adams Street. I have lived in the beautiful historic house on the property since 1995, and have lived in Lexington since 1988. I wanted to provide some context for my application for a Site Sensitive permit to develop a new house sharing a driveway with the existing #8 Adams.

A few years ago, in conversation with Lester Savage, it became clear to me that the size of the lot at 8 Adams could potentially endanger the preservation of the beautiful historic Willard Brown 1902 house currently on the site. The large lot has remained undeveloped in the past because the road frontage on Adams Street is insufficient to allow a second house. Lester showed me how a developer could, by removing the existing house, put a cul-de-sac on the property and create two buildable lots. The pressure to build new houses in Lexington would increasingly jeopardize the preservation of the existing historic house. I love this historic house. My father wrote a wonderful historic retrospective of the property, a copy of which currently resides at the Lexington Historical Society.

In response to this threat, I, in conjunction with Gary Larson, put together a Site Sensitive development plan to create a second lot on the property without the need to destroy the existing house by utilizing a shared driveway. In our preliminary hearing, Planning Board member Ginna Johnson said that the plan we had submitted was the first Site Sensitive Development Plan she had seen that adhered to what the Site Sensitive development code was truly written for. I was encouraged to move forward.

At the subsequent Planning Board meeting, I presented a proposed low profile house that my immediate neighbor at 10 Adams Street strongly supported. My neighbor was worried that the site coverage limitations would require us to build a 2.5 story house, which would be both less sensitive to the existing site and would obstruct his view more. After spending the past year trying to locate a developer who would carry the development plan to fruition, it became clear to me that most developers were interested in maximizing the size of the new house with very little sensitivity to my prior agreement with my neighbor or with blending with the existing house at 8 Adams Street. Hence, I have decided to develop the property myself with the help of local businesses, Colin Smith Architecture and Sramowicz General Contractors.

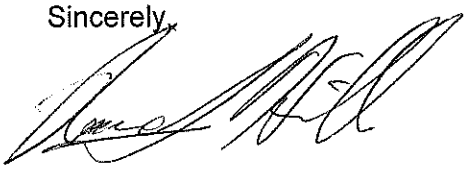
In this final version of our Site Sensitive Development plan, Colin Smith Architecture has created a stunning low-profile home that fits with the existing historic home on the property. He has reduced the footprint, and added architectural features that link the new home to the architectural style of the existing home designed by Willard Brown. While we have reduced the footprint of the new home from what we originally proposed, we still ask you to give us a variance on the site coverage limitations. We feel this is appropriate for three reasons: 1) our most impacted neighbor (at 10 Adams Street) has strongly requested that we limit the height of the new house. 2) Both houses (existing #8 and the proposed new low profile house) fall well within the 15% site

coverage limitations on their respective properties for our zoning district. 3) our calculations of site coverage include the covered porch of the existing house... we feel it is important to maintain the historic character of the house and not to remove the covering roof of the existing porch in order to get under the site coverage limitations. Without the covered porch, we are well within the site sensitive site coverage guidelines.

The plan we have submitted maintains the historical character of the site with a beautiful custom home designed by local architect Colin Smith and built by local builders, Michael and Paul Sramowicz. Colin Smith's team has put together a exquisite design that adheres to the character of the existing Willard Brown house while maintaining the appeal of a a low profile carriage house. This enables us to utilize the additional land on this one and one half acre lot without destroying the existing historical house.

I sincerely hope that you see the value of the Site Sensitive proposal we have submitted, and that you grant us the requested site coverage waiver. Thank so much for your time and commitment to the Town of Lexington.

Sincerely,



Randall Hiller
Owner, 8 Adams Street

STORMWATER ANALYSIS AND CALCULATIONS

for

8 ADAMS STREET
LEXINGTON, MASSACHUSETTS

Prepared for:

Randall S. & Elaine H. Hiller
8 Adams Street
Lexington, Massachusetts 02421

Prepared by:

Meridian Associates, Inc.
500 Cummings Center, Suite 5950
Beverly, Massachusetts 01915
(978) 299-0447

May 24, 2018

MERIDIAN ASSOCIATES

TABLE OF CONTENTS

Calculation Methods

Source of Data

Report Summary:

* Calculation Objectives
* Selection of Storm Events
* Classification of Soils
* Existing Conditions Overview
* Proposed Conditions Overview
* Performance of Peak Rate Runoff
* Conclusion

Stormwater Analysis:

* Existing Conditions
  - Watershed Routing Diagram
  - 1-Year 24 Hour Storm Event Analysis
  - 2-Year 24 Hour Storm Event Analysis
  - 10-Year 24 Hour Storm Event Analysis
  - 100-Year 24 Hour Storm Event Analysis

* Proposed Conditions
  - Watershed Routing Diagram
  - 1-Year 24 Hour Storm Event Analysis
  - 2-Year 24 Hour Storm Event Analysis
  - 10-Year 24 Hour Storm Event Analysis
  - 100-Year 24 Hour Storm Event Analysis

Appendix:

* Pre-Development Drainage Plan
* Post-Development Drainage Plan
* NRCS – Soils Map
* Operation and Maintenance Program

CALCULATION METHODS

- TR 20 SCS Unit Hydrograph Procedure
- Runoff Curve Numbers
- Time of Concentration by TR55 Methodology
- Reach and Pond Rating by the Dynamic Storage-Indication Method
- Manning Equation

SOURCE OF DATA

- Technical Report No. 20
- Technical Report No. 55
- Technical Paper No. 40
- Field Survey and Soil Testing by Meridian Associates, Inc.
- Massachusetts Stormwater Handbook February 2008

REPORT SUMMARY:

This project proposes to create a residential development through the process outlined in Chapter 175, Section 11F of the Lexington Development Regulations.

Calculation Objective

The purpose of this drainage analysis is to design a stormwater management system that maintains and/or reduces the peak rates and volumes of stormwater runoff from pre development conditions in the post development conditions for the 1, 2, 10 and 100-year design storm events

The proposed stormwater management system designed for this project will consist of the installation of three (3) subsurface infiltration systems. These systems will collect stormwater runoff from roof area, driveways, walkways and grassed areas via the use of an area drain or gutters and downspouts. The installation of the three (3) subsurface infiltration systems will allow the development to not have an increase in stormwater runoff (rate or volume) from the site during the 1, 2, 10 and 100-year design storms

Classification of Soils:

Existing soil conditions within the limits of the watershed analyzed for this study have been categorized as:

- Merrimac-Urban land complex, 0-8% Slopes, Hydrologic Group A.
- Charlton-Urban land-Hollis complex, 3-15% Slopes, Hydrologic Group A.

The classification is based upon the Natural Resource Conservation Service Maps dated May 1984. A copy of this soil map is contained in the Appendix of this report. Onsite soil testing was conducted by Meridian Associates Inc. on March 30, 2016 in the areas depicted on the attached plan. This testing revealed a loamy sand parent material with no groundwater observed at depths varying from 112" to 144".

Selection of Storm Events

The storm event frequencies and intensities have been selected based upon the Massachusetts Stormwater Guidelines requirements. The storm event rainfall data has been compiled from the Soil Conservation Service Technical Report No. 55 and the U.S. Department of Commerce Technical Paper No. 40.. Rainfall frequency data has been provided as follows:

Frequency	Rainfall [24 hour event(inch)]
1 year	2.5
2 year	3.1
10 year	4.6
100 year	6.6

Existing Site Overview

The site is a single family lot consisting of a single-family home, detached garage, bituminous concrete driveway, associated walkways, decks, porches and grassed/landscaped areas.

- **Subcatchment SC1** – This subcatchment area consists of portions of the existing house, driveway and grassed areas. Stormwater runoff generated in this subcatchment flows southerly across the lot into an existing area drain **(DP1)**.

- **Subcatchment SC2** – This subcatchment area consists of portions of the existing house, a retaining wall and grassed areas. Stormwater runoff generated in this subcatchment flows southerly across the lot towards an abutters property. **(DP2)**.

- **Subcatchment SC3** – This subcatchment area consists of portions of the existing house, driveway and grassed areas. Stormwater runoff generated in this subcatchment flows westerly across the lot towards an abutters property **(DP3)**.

- **Subcatchment SC4** – This subcatchment area consists of portions of the existing house, retaining walls, concrete and grassed areas. Stormwater runoff generated in this subcatchment flows northwesterly across the lot towards an abutters property. **(DP4)**.

Proposed Site Overview

The proposed project is comprised of the redevelopment of the existing residential property into a residential subdivision. The proposed development includes the creation of a second single family dwelling. This proposed development will include an attached garage addition to the existing dwelling, razing the existing detached garage and replacing it with a new single family dwelling. Additionally associated driveways, walkways and patios are proposed for both dwellings.

This project will not be subject to the Massachusetts Stormwater Management Standards as all the disturbance will occur beyond any wetland resource areas or their associated buffers and this is a project defined as a "housing development comprised of detached single-family dwellings on four or fewer lots that does not contain a stormwater discharge that may affect a critical area". It is also not subject to the Town of Lexington Stomrwater Bylaw as it does not alter more than one (1) acre of land.

However, a formal drainage system has been designed in order to manage stormwater runoff in an appropriate and responsible manner. The proposed project has been developed with the intent of maintaining the existing drainage patterns of the site to the maximum extent practicable.

In order to not increase runoff from the subject property portions of the runoff from the proposed site improvements will be directed to subsurface infiltration systems to mitigate for any increases in rate and volume of runoff to the selected Design Points during the designated storm rainfall events. The six (6) subcatchments in the post construction scenario are as follows:

- **Subcatchment SC101** – This subcatchment area consists of existing roof area, proposed driveway and grassed. Stormwater runoff generated in this subcatchment flows southerly across the lot into an area drain **(DP1)** which will outlet to a proposed subsurface infiltration system (**PSIS-3).**

- **Subcatchment SC201** – This subcatchment area consists of portions of the existing house, a retaining wall and grassed areas. Stormwater runoff generated in this subcatchment flows southerly across the lot towards an abutters property. **(DP2)**.

- **Subcatchment SC301** – This subcatchment area consists of portions of the existing house, proposed driveway, proposed patio and grassed areas. Stormwater runoff generated in this subcatchment flows westerly across the lot towards an abutters property **(DP3)**.

- **Subcatchment SC401** – This subcatchment area consists of portions of the proposed patio and grassed areas. Stormwater runoff generated in this subcatchment flows northwesterly across the lot towards an abutters property. **(DP4)**.

- **Subcatchment SC501** – This subcatchment area consists of the entire roof area of the proposed single family dwelling. Stormwater runoff generated in this subcatchment is captured by gutters and downspouts and directed to a proposed subsurface infiltration system **(PSIS-1).**

- **Subcatchment SC601** – This subcatchment area consists of the entire roof area of the proposed attached garage addition, along with a portion

of the existing roof. Stormwater runoff generated in this subcatchment is captured by gutters and downspouts and directed to a proposed subsurface infiltration system **(PSIS-2).**

Summary of Flows at the Design Point

Design Point 1 (DP1)

Peak Rates (CFS)

DP1	1-year Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	0.02	0.06	0.35	0.91
Proposed	0.00	0.00	0.00	0.00

Peak Volumes (CF)

DP1	1-Inch Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	188	483	1,348	3,020
Proposed	0	0	0	0

Design Point 2 (DP2)

Peak Rates (CFS)

DP2	1-Inch Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	0.00	0.00	0.03	0.09
Proposed	0.00	0.00	0.03	0.09

Peak Volumes (CF)

DP2	1-Inch Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	11	33	124	301
Proposed	11	33	124	301

Design Point 3 (DP3)

Peak Rates (CFS)

DP3	1-year Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	0.02	0.07	0.48	1.29
Proposed	0.00	0.03	0.29	0.89

Peak Volumes (CF)

DP3	1-Inch Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	242	583	1,889	4,312
Proposed	117	339	1,268	3,084

Design Point 4 (DP4)

Peak Rates (CFS)

DP4	1-Inch Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	0.00	0.00	0.03	0.24
Proposed	0.00	0.00	0.01	0.14

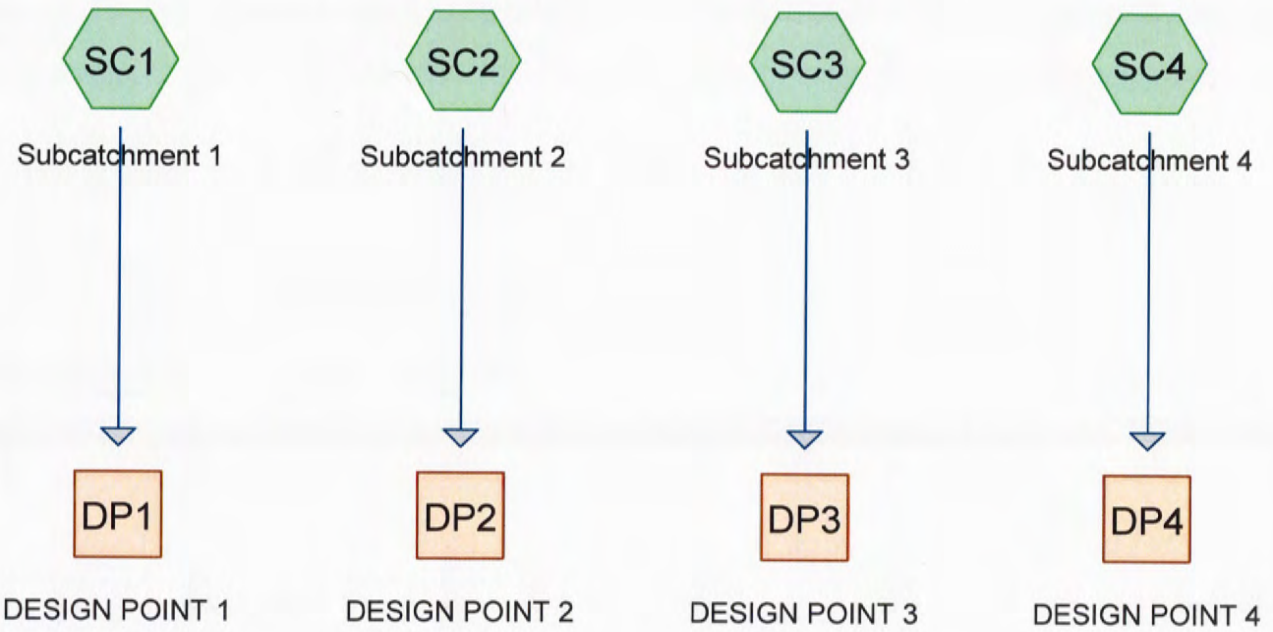
Peak Volumes (CF)

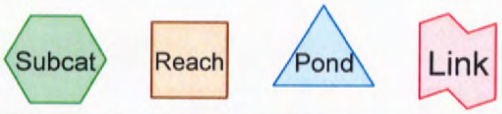
DP4	1-Inch Storm	2-Year Storm	10-Year Storm	100-Year Storm
Existing	0	20	348	1,263
Proposed	0	4	211	875

Conclusion

The calculations for each of the selected Design Points demonstrate that proposed site improvements will not result in an increase in the peak rate or volume of stormwater runoff for the 1-year, 2-year, 10-year or 100-year 24-hour storm events at the design point with the proposed stormwater mitigation system improvements.

EXISTING CONDITIONS
WATERSHED ROUTING DIAGRAM





Routing Diagram for 5875-PRE
Prepared by Meridian Associates, Printed 5/24/2018
HydroCAD® 10.00 s/n 00814 © 2011 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
46,208	39	>75% Grass cover, Good, HSG A (SC1, SC2, SC3, SC4)
9,050	98	Paved parking, HSG A (SC1, SC3)
1,158	98	ROOF (SC1)
3,958	98	Roofs, HSG A (SC2, SC3, SC4)
90	98	Wall, HSG A (SC2)
420	98	Walls and Concrete (SC4)
60,884	**53**	**TOTAL AREA**

EXISTING CONDITIONS
1-YEAR DESIGN

Summary for Subcatchment SC1: Subcatchment 1

Runoff = 0.02 cfs @ 12.41 hrs, Volume= 188 cf, Depth= 0.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
	11,593	39	>75% Grass cover, Good, HSG A
	4,170	98	Paved parking, HSG A
*	1,158	98	ROOF
	16,921	58	Weighted Average
	11,593		68.51% Pervious Area
	5,328		31.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC2: Subcatchment 2

Runoff = 0.00 cfs @ 14.59 hrs, Volume= 11 cf, Depth= 0.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
	415	98	Roofs, HSG A
	1,514	39	>75% Grass cover, Good, HSG A
*	90	98	Wall, HSG A
	2,019	54	Weighted Average
	1,514		74.99% Pervious Area
	505		25.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC3: Subcatchment 3

Runoff = 0.02 cfs @ 12.45 hrs, Volume= 242 cf, Depth= 0.12"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

Area (sf)	CN	Description
2,689	98	Roofs, HSG A
17,656	39	>75% Grass cover, Good, HSG A
4,880	98	Paved parking, HSG A
25,225	57	Weighted Average
17,656		69.99% Pervious Area
7,569		30.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC4: Subcatchment 4

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
	15,445	39	>75% Grass cover, Good, HSG A
*	420	98	Walls and Concrete
	854	98	Roofs, HSG A
	16,719	43	Weighted Average
	15,445		92.38% Pervious Area
	1,274		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 16,921 sf, 31.49% Impervious, Inflow Depth = 0.13" for 1-Year Design Storm event
Inflow = 0.02 cfs @ 12.41 hrs, Volume= 188 cf
Outflow = 0.02 cfs @ 12.41 hrs, Volume= 188 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.01% Impervious, Inflow Depth = 0.07" for 1-Year Design Storm event
Inflow = 0.00 cfs @ 14.59 hrs, Volume= 11 cf
Outflow = 0.00 cfs @ 14.59 hrs, Volume= 11 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 25,225 sf, 30.01% Impervious, Inflow Depth = 0.12" for 1-Year Design Storm event
Inflow = 0.02 cfs @ 12.45 hrs, Volume= 242 cf
Outflow = 0.02 cfs @ 12.45 hrs, Volume= 242 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 16,719 sf, 7.62% Impervious, Inflow Depth = 0.00" for 1-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

EXISTING CONDITIONS
2-YEAR DESIGN

Summary for Subcatchment SC1: Subcatchment 1

Runoff = 0.06 cfs @ 12.26 hrs, Volume= 433 cf, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
	11,593	39	>75% Grass cover, Good, HSG A
	4,170	98	Paved parking, HSG A
*	1,158	98	ROOF
	16,921	58	Weighted Average
	11,593		68.51% Pervious Area
	5,328		31.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC2: Subcatchment 2

Runoff = 0.00 cfs @ 12.38 hrs, Volume= 33 cf, Depth= 0.20"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
	415	98	Roofs, HSG A
	1,514	39	>75% Grass cover, Good, HSG A
*	90	98	Wall, HSG A
	2,019	54	Weighted Average
	1,514		74.99% Pervious Area
	505		25.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC3: Subcatchment 3

Runoff = 0.07 cfs @ 12.30 hrs, Volume= 583 cf, Depth= 0.28"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

Area (sf)	CN	Description
2,689	98	Roofs, HSG A
17,656	39	>75% Grass cover, Good, HSG A
4,880	98	Paved parking, HSG A
25,225	57	Weighted Average
17,656		69.99% Pervious Area
7,569		30.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC4: Subcatchment 4

Runoff = 0.00 cfs @ 21.24 hrs, Volume= 20 cf, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
	15,445	39	>75% Grass cover, Good, HSG A
*	420	98	Walls and Concrete
	854	98	Roofs, HSG A
	16,719	43	Weighted Average
	15,445		92.38% Pervious Area
	1,274		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 16,921 sf, 31.49% Impervious, Inflow Depth = 0.31" for 2-Year Design Storm event
Inflow = 0.06 cfs @ 12.26 hrs, Volume= 433 cf
Outflow = 0.06 cfs @ 12.26 hrs, Volume= 433 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.01% Impervious, Inflow Depth = 0.20" for 2-Year Design Storm event
Inflow = 0.00 cfs @ 12.38 hrs, Volume= 33 cf
Outflow = 0.00 cfs @ 12.38 hrs, Volume= 33 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 25,225 sf, 30.01% Impervious, Inflow Depth = 0.28" for 2-Year Design Storm event
Inflow = 0.07 cfs @ 12.30 hrs, Volume= 583 cf
Outflow = 0.07 cfs @ 12.30 hrs, Volume= 583 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 16,719 sf, 7.62% Impervious, Inflow Depth = 0.01" for 2-Year Design Storm event
Inflow = 0.00 cfs @ 21.24 hrs, Volume= 20 cf
Outflow = 0.00 cfs @ 21.24 hrs, Volume= 20 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

EXISTING CONDITIONS
10-YEAR DESIGN STORM

Summary for Subcatchment SC1: Subcatchment 1

Runoff = 0.35 cfs @ 12.11 hrs, Volume= 1,348 cf, Depth= 0.96"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
	11,593	39	>75% Grass cover, Good, HSG A
	4,170	98	Paved parking, HSG A
*	1,158	98	ROOF
	16,921	58	Weighted Average
	11,593		68.51% Pervious Area
	5,328		31.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC2: Subcatchment 2

Runoff = 0.03 cfs @ 12.12 hrs, Volume= 124 cf, Depth= 0.73"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
	415	98	Roofs, HSG A
	1,514	39	>75% Grass cover, Good, HSG A
*	90	98	Wall, HSG A
	2,019	54	Weighted Average
	1,514		74.99% Pervious Area
	505		25.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC3: Subcatchment 3

Runoff = 0.48 cfs @ 12.11 hrs, Volume= 1,889 cf, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

Area (sf)	CN	Description
2,689	98	Roofs, HSG A
17,656	39	>75% Grass cover, Good, HSG A
4,880	98	Paved parking, HSG A
25,225	57	Weighted Average
17,656		69.99% Pervious Area
7,569		30.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC4: Subcatchment 4

Runoff = 0.03 cfs @ 12.41 hrs, Volume= 348 cf, Depth= 0.25"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
	15,445	39	>75% Grass cover, Good, HSG A
*	420	98	Walls and Concrete
	854	98	Roofs, HSG A
	16,719	43	Weighted Average
	15,445		92.38% Pervious Area
	1,274		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 16,921 sf, 31.49% Impervious, Inflow Depth = 0.96" for 10-Year Design Storm event
Inflow = 0.35 cfs @ 12.11 hrs, Volume= 1,348 cf
Outflow = 0.35 cfs @ 12.11 hrs, Volume= 1,348 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.01% Impervious, Inflow Depth = 0.73" for 10-Year Design Storm event
Inflow = 0.03 cfs @ 12.12 hrs, Volume= 124 cf
Outflow = 0.03 cfs @ 12.12 hrs, Volume= 124 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 25,225 sf, 30.01% Impervious, Inflow Depth = 0.90" for 10-Year Design Storm event
Inflow = 0.48 cfs @ 12.11 hrs, Volume= 1,889 cf
Outflow = 0.48 cfs @ 12.11 hrs, Volume= 1,889 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 16,719 sf, 7.62% Impervious, Inflow Depth = 0.25" for 10-Year Design Storm event
Inflow = 0.03 cfs @ 12.41 hrs, Volume= 348 cf
Outflow = 0.03 cfs @ 12.41 hrs, Volume= 348 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

EXISTING CONDITIONS
100-YEAR DESIGN STORM

Summary for Subcatchment SC1: Subcatchment 1

Runoff = 0.91 cfs @ 12.10 hrs, Volume= 3,020 cf, Depth= 2.14"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
	11,593	39	>75% Grass cover, Good, HSG A
	4,170	98	Paved parking, HSG A
*	1,158	98	ROOF
	16,921	58	Weighted Average
	11,593		68.51% Pervious Area
	5,328		31.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC2: Subcatchment 2

Runoff = 0.09 cfs @ 12.10 hrs, Volume= 301 cf, Depth= 1.79"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
	415	98	Roofs, HSG A
	1,514	39	>75% Grass cover, Good, HSG A
*	90	98	Wall, HSG A
	2,019	54	Weighted Average
	1,514		74.99% Pervious Area
	505		25.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC3: Subcatchment 3

Runoff = 1.29 cfs @ 12.10 hrs, Volume= 4,312 cf, Depth= 2.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

Area (sf)	CN	Description
2,689	98	Roofs, HSG A
17,656	39	>75% Grass cover, Good, HSG A
4,880	98	Paved parking, HSG A
25,225	57	Weighted Average
17,656		69.99% Pervious Area
7,569		30.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC4: Subcatchment 4

Runoff = 0.24 cfs @ 12.13 hrs, Volume= 1,263 cf, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
	15,445	39	>75% Grass cover, Good, HSG A
*	420	98	Walls and Concrete
	854	98	Roofs, HSG A
	16,719	43	Weighted Average
	15,445		92.38% Pervious Area
	1,274		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 16,921 sf, 31.49% Impervious, Inflow Depth = 2.14" for 100-Year Design Storm event
Inflow = 0.91 cfs @ 12.10 hrs, Volume= 3,020 cf
Outflow = 0.91 cfs @ 12.10 hrs, Volume= 3,020 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.01% Impervious, Inflow Depth = 1.79" for 100-Year Design Storm event
Inflow = 0.09 cfs @ 12.10 hrs, Volume= 301 cf
Outflow = 0.09 cfs @ 12.10 hrs, Volume= 301 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 25,225 sf, 30.01% Impervious, Inflow Depth = 2.05" for 100-Year Design Storm event
Inflow = 1.29 cfs @ 12.10 hrs, Volume= 4,312 cf
Outflow = 1.29 cfs @ 12.10 hrs, Volume= 4,312 cf, Atten= 0%, Lag= 0.0 min

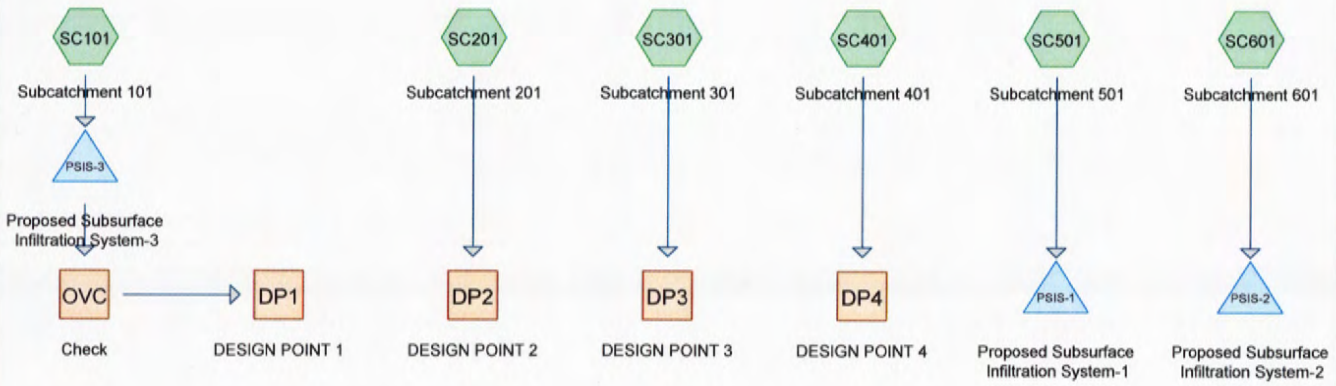
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

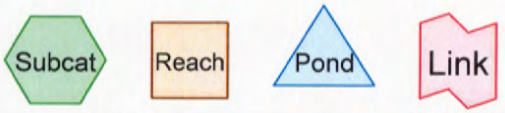
Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 16,719 sf, 7.62% Impervious, Inflow Depth = 0.91" for 100-Year Design Storm event
Inflow = 0.24 cfs @ 12.13 hrs, Volume= 1,263 cf
Outflow = 0.24 cfs @ 12.13 hrs, Volume= 1,263 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

PROPOSED CONDITIONS
WATERSHED ROUTING DIAGRAM





Routing Diagram for 5875-POST
Prepared by Meridian Associates, Printed 5/24/2018
HydroCAD® 10.00 s/n 00814 © 2011 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
42,087	39	>75% Grass cover, Good, HSG A (SC101, SC201, SC301, SC401)
5,422	98	PROPOSED DRIVEWAY (SC101)
3,152	98	PROPOSED DRIVEWAY/WALKS (SC301)
1,435	98	PROPOSED PATIO (SC301, SC401)
3,321	98	PROPOSED ROOF (SC501)
3,686	98	ROOF (SC101, SC601)
1,691	98	Roofs, HSG A (SC201, SC301)
90	98	Wall (SC201)
60,884	**57**	**TOTAL AREA**

PROPOSED CONDITIONS
1-YEAR DESIGN STORM

Summary for Subcatchment SC101: Subcatchment 101

Runoff = 0.03 cfs @ 12.36 hrs, Volume= 271 cf, Depth= 0.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
*	1,290	98	ROOF
*	5,422	98	PROPOSED DRIVEWAY
	11,999	39	>75% Grass cover, Good, HSG A
	18,711	60	Weighted Average
	11,999		64.13% Pervious Area
	6,712		35.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC201: Subcatchment 201

Runoff = 0.00 cfs @ 14.59 hrs, Volume= 11 cf, Depth= 0.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
	416	98	Roofs, HSG A
	1,513	39	>75% Grass cover, Good, HSG A
*	90	98	Wall
	2,019	54	Weighted Average
	1,513		74.94% Pervious Area
	506		25.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC301: Subcatchment 301

Runoff = 0.00 cfs @ 14.59 hrs, Volume= 117 cf, Depth= 0.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
	1,275	98	Roofs, HSG A
	15,334	39	>75% Grass cover, Good, HSG A
*	3,152	98	PROPOSED DRIVEWAY/WALKS
*	947	98	PROPOSED PATIO
	20,708	54	Weighted Average
	15,334		74.05% Pervious Area
	5,374		25.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC401: Subcatchment 401

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
	13,241	39	>75% Grass cover, Good, HSG A
*	488	98	PROPOSED PATIO
	13,729	41	Weighted Average
	13,241		96.45% Pervious Area
	488		3.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC501: Subcatchment 501

Runoff = 0.18 cfs @ 12.09 hrs, Volume= 628 cf, Depth= 2.27"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
*	3,321	98	PROPOSED ROOF
	3,321		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC601: Subcatchment 601

Runoff = 0.13 cfs @ 12.09 hrs, Volume= 453 cf, Depth= 2.27"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Design Storm Rainfall=2.50"

	Area (sf)	CN	Description
*	2,396	98	ROOF
	2,396		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 1-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.06% Impervious, Inflow Depth = 0.07" for 1-Year Design Storm event
Inflow = 0.00 cfs @ 14.59 hrs, Volume= 11 cf
Outflow = 0.00 cfs @ 14.59 hrs, Volume= 11 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 20,708 sf, 25.95% Impervious, Inflow Depth = 0.07" for 1-Year Design Storm event
Inflow = 0.00 cfs @ 14.59 hrs, Volume= 117 cf
Outflow = 0.00 cfs @ 14.59 hrs, Volume= 117 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 13,729 sf, 3.55% Impervious, Inflow Depth = 0.00" for 1-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

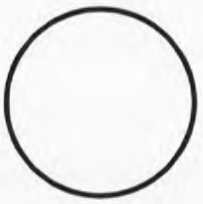
Summary for Reach OVC: Check

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 1-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 2.31 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 1.0' Slope= 0.1000 '/'
Inlet Invert= 245.00', Outlet Invert= 244.90'



Summary for Pond PSIS-1: Proposed Subsurface Infiltration System-1

Inflow Area = 3,321 sf,100.00% Impervious, Inflow Depth = 2.27" for 1-Year Design Storm event
Inflow = 0.18 cfs @ 12.09 hrs, Volume= 628 cf
Outflow = 0.02 cfs @ 12.61 hrs, Volume= 628 cf, Atten= 86%, Lag= 31.2 min
Discarded = 0.02 cfs @ 12.61 hrs, Volume= 628 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 240.40' @ 12.61 hrs Surf.Area= 375 sf Storage= 194 cf

Plug-Flow detention time= 51.2 min calculated for 628 cf (100% of inflow)
Center-of-Mass det. time= 51.2 min (813.1 - 761.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	239.50'	356 cf	**15.75'W x 23.80'L x 3.50'H Field A** 1,312 cf Overall - 422 cf Embedded = 890 cf x 40.0% Voids
#2A	240.00'	422 cf	**StormTech SC-740** x 9 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		778 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	239.50'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.02 cfs @ 12.61 hrs HW=240.40' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.02 cfs)

Summary for Pond PSIS-2: Proposed Subsurface Infiltration System-2

Inflow Area = 2,396 sf,100.00% Impervious, Inflow Depth = 2.27" for 1-Year Design Storm event
Inflow = 0.13 cfs @ 12.09 hrs, Volume= 453 cf
Outflow = 0.02 cfs @ 12.61 hrs, Volume= 453 cf, Atten= 86%, Lag= 31.1 min
Discarded = 0.02 cfs @ 12.61 hrs, Volume= 453 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 240.94' @ 12.61 hrs Surf.Area= 263 sf Storage= 140 cf

Plug-Flow detention time= 51.7 min calculated for 453 cf (100% of inflow)
Center-of-Mass det. time= 51.7 min (813.6 - 761.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	240.00'	254 cf	**15.75'W x 16.68'L x 3.50'H Field A** 919 cf Overall - 284 cf Embedded = 635 cf x 40.0% Voids
#2A	240.50'	284 cf	**StormTech SC-740** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		538 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	240.00'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.02 cfs @ 12.61 hrs HW=240.94' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.02 cfs)

Summary for Pond PSIS-3: Proposed Subsurface Infiltration System-3

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.17" for 1-Year Design Storm event
Inflow = 0.03 cfs @ 12.36 hrs, Volume= 271 cf
Outflow = 0.03 cfs @ 12.43 hrs, Volume= 271 cf, Atten= 5%, Lag= 4.3 min
Discarded = 0.03 cfs @ 12.43 hrs, Volume= 271 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 242.02' @ 12.43 hrs Surf.Area= 928 sf Storage= 7 cf

Plug-Flow detention time= 4.2 min calculated for 271 cf (100% of inflow)
Center-of-Mass det. time= 4.2 min (968.8 - 964.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	242.00'	851 cf	**30.00'W x 30.92'L x 3.50'H Field A** 3,246 cf Overall - 1,120 cf Embedded = 2,127 cf x 40.0% Voids
#2A	242.50'	1,120 cf	**StormTech SC-740** x 24 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 6 rows
		1,970 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	242.00'	**2.410 in/hr Exfiltration over Wetted area**
#2	Primary	245.00'	**6.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.05 cfs @ 12.43 hrs HW=242.02' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=242.00' (Free Discharge)
↑—**2=Orifice/Grate** (Controls 0.00 cfs)

PROPOSED CONDITIONS
2-YEAR DESIGN STORM

Summary for Subcatchment SC101: Subcatchment 101

Runoff = 0.10 cfs @ 12.15 hrs, Volume= 577 cf, Depth= 0.37"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	1,290	98	ROOF
*	5,422	98	PROPOSED DRIVEWAY
	11,999	39	>75% Grass cover, Good, HSG A
	18,711	60	Weighted Average
	11,999		64.13% Pervious Area
	6,712		35.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC201: Subcatchment 201

Runoff = 0.00 cfs @ 12.38 hrs, Volume= 33 cf, Depth= 0.20"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
	416	98	Roofs, HSG A
	1,513	39	>75% Grass cover, Good, HSG A
*	90	98	Wall
	2,019	54	Weighted Average
	1,513		74.94% Pervious Area
	506		25.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC301: Subcatchment 301

Runoff = 0.03 cfs @ 12.38 hrs, Volume= 339 cf, Depth= 0.20"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
	1,275	98	Roofs, HSG A
	15,334	39	>75% Grass cover, Good, HSG A
*	3,152	98	PROPOSED DRIVEWAY/WALKS
*	947	98	PROPOSED PATIO
	20,708	54	Weighted Average
	15,334		74.05% Pervious Area
	5,374		25.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC401: Subcatchment 401

Runoff = 0.00 cfs @ 23.77 hrs, Volume= 4 cf, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
	13,241	39	>75% Grass cover, Good, HSG A
*	488	98	PROPOSED PATIO
	13,729	41	Weighted Average
	13,241		96.45% Pervious Area
	488		3.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC501: Subcatchment 501

Runoff = 0.22 cfs @ 12.09 hrs, Volume= 794 cf, Depth= 2.87"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	3,321	98	PROPOSED ROOF
	3,321		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC601: Subcatchment 601

Runoff = 0.16 cfs @ 12.09 hrs, Volume= 573 cf, Depth= 2.87"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Design Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	2,396	98	ROOF
	2,396		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 2-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.06% Impervious, Inflow Depth = 0.20" for 2-Year Design Storm event
Inflow = 0.00 cfs @ 12.38 hrs, Volume= 33 cf
Outflow = 0.00 cfs @ 12.38 hrs, Volume= 33 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 20,708 sf, 25.95% Impervious, Inflow Depth = 0.20" for 2-Year Design Storm event
Inflow = 0.03 cfs @ 12.38 hrs, Volume= 339 cf
Outflow = 0.03 cfs @ 12.38 hrs, Volume= 339 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 13,729 sf, 3.55% Impervious, Inflow Depth = 0.00" for 2-Year Design Storm event
Inflow = 0.00 cfs @ 23.77 hrs, Volume= 4 cf
Outflow = 0.00 cfs @ 23.77 hrs, Volume= 4 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

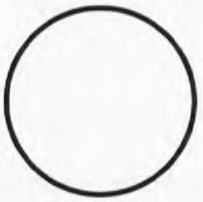
Summary for Reach OVC: Check

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 2-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 2.31 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 1.0' Slope= 0.1000 '/'
Inlet Invert= 245.00', Outlet Invert= 244.90'



Summary for Pond PSIS-1: Proposed Subsurface Infiltration System-1

Inflow Area = 3,321 sf,100.00% Impervious, Inflow Depth = 2.87" for 2-Year Design Storm event
Inflow = 0.22 cfs @ 12.09 hrs, Volume= 794 cf
Outflow = 0.03 cfs @ 12.71 hrs, Volume= 794 cf, Atten= 88%, Lag= 37.1 min
Discarded = 0.03 cfs @ 12.71 hrs, Volume= 794 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 240.65' @ 12.71 hrs Surf.Area= 375 sf Storage= 264 cf

Plug-Flow detention time= 71.2 min calculated for 793 cf (100% of inflow)
Center-of-Mass det. time= 71.2 min (828.3 - 757.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	239.50'	356 cf	**15.75'W x 23.80'L x 3.50'H Field A** 1,312 cf Overall - 422 cf Embedded = 890 cf x 40.0% Voids
#2A	240.00'	422 cf	**StormTech SC-740** x 9 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		778 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	239.50'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.03 cfs @ 12.71 hrs HW=240.65' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Summary for Pond PSIS-2: Proposed Subsurface Infiltration System-2

Inflow Area = 2,396 sf,100.00% Impervious, Inflow Depth = 2.87" for 2-Year Design Storm event
Inflow = 0.16 cfs @ 12.09 hrs, Volume= 573 cf
Outflow = 0.02 cfs @ 12.69 hrs, Volume= 573 cf, Atten= 88%, Lag= 36.5 min
Discarded = 0.02 cfs @ 12.69 hrs, Volume= 573 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 241.19' @ 12.69 hrs Surf.Area= 263 sf Storage= 191 cf

Plug-Flow detention time= 71.2 min calculated for 572 cf (100% of inflow)
Center-of-Mass det. time= 71.2 min (828.3 - 757.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	240.00'	254 cf	**15.75'W x 16.68'L x 3.50'H Field A** 919 cf Overall - 284 cf Embedded = 635 cf x 40.0% Voids
#2A	240.50'	284 cf	**StormTech SC-740** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		538 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	240.00'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.02 cfs @ 12.69 hrs HW=241.19' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Summary for Pond PSIS-3: Proposed Subsurface Infiltration System-3

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.37" for 2-Year Design Storm event
Inflow = 0.10 cfs @ 12.15 hrs, Volume= 577 cf
Outflow = 0.05 cfs @ 12.51 hrs, Volume= 577 cf, Atten= 46%, Lag= 21.3 min
Discarded = 0.05 cfs @ 12.51 hrs, Volume= 577 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 242.14' @ 12.51 hrs Surf.Area= 928 sf Storage= 50 cf

Plug-Flow detention time= 6.3 min calculated for 577 cf (100% of inflow)
Center-of-Mass det. time= 6.3 min (931.2 - 924.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	242.00'	851 cf	**30.00'W x 30.92'L x 3.50'H Field A** 3,246 cf Overall - 1,120 cf Embedded = 2,127 cf x 40.0% Voids
#2A	242.50'	1,120 cf	**StormTech SC-740** x 24 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 6 rows
		1,970 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	242.00'	**2.410 in/hr Exfiltration over Wetted area**
#2	Primary	245.00'	**6.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.05 cfs @ 12.51 hrs HW=242.14' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=242.00' (Free Discharge)
↑**2=Orifice/Grate** (Controls 0.00 cfs)

PROPOSED CONDITIONS
10-YEAR DESIGN STORM

Summary for Subcatchment SC101: Subcatchment 101

Runoff = 0.46 cfs @ 12.11 hrs, Volume= 1,675 cf, Depth= 1.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	1,290	98	ROOF
*	5,422	98	PROPOSED DRIVEWAY
	11,999	39	>75% Grass cover, Good, HSG A
	18,711	60	Weighted Average
	11,999		64.13% Pervious Area
	6,712		35.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC201: Subcatchment 201

Runoff = 0.03 cfs @ 12.12 hrs, Volume= 124 cf, Depth= 0.73"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
	416	98	Roofs, HSG A
	1,513	39	>75% Grass cover, Good, HSG A
*	90	98	Wall
	2,019	54	Weighted Average
	1,513		74.94% Pervious Area
	506		25.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC301: Subcatchment 301

Runoff = 0.29 cfs @ 12.12 hrs, Volume= 1,268 cf, Depth= 0.73"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
	1,275	98	Roofs, HSG A
	15,334	39	>75% Grass cover, Good, HSG A
*	3,152	98	PROPOSED DRIVEWAY/WALKS
*	947	98	PROPOSED PATIO
	20,708	54	Weighted Average
	15,334		74.05% Pervious Area
	5,374		25.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC401: Subcatchment 401

Runoff = 0.01 cfs @ 12.48 hrs, Volume= 211 cf, Depth= 0.18"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
	13,241	39	>75% Grass cover, Good, HSG A
*	488	98	PROPOSED PATIO
	13,729	41	Weighted Average
	13,241		96.45% Pervious Area
	488		3.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC501: Subcatchment 501

Runoff = 0.33 cfs @ 12.09 hrs, Volume= 1,208 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	3,321	98	PROPOSED ROOF
	3,321		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC601: Subcatchment 601

Runoff = 0.24 cfs @ 12.09 hrs, Volume= 871 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Design Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	2,396	98	ROOF
	2,396		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 10-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.06% Impervious, Inflow Depth = 0.73" for 10-Year Design Storm event
Inflow = 0.03 cfs @ 12.12 hrs, Volume= 124 cf
Outflow = 0.03 cfs @ 12.12 hrs, Volume= 124 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 20,708 sf, 25.95% Impervious, Inflow Depth = 0.73" for 10-Year Design Storm event
Inflow = 0.29 cfs @ 12.12 hrs, Volume= 1,268 cf
Outflow = 0.29 cfs @ 12.12 hrs, Volume= 1,268 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 13,729 sf, 3.55% Impervious, Inflow Depth = 0.18" for 10-Year Design Storm event
Inflow = 0.01 cfs @ 12.48 hrs, Volume= 211 cf
Outflow = 0.01 cfs @ 12.48 hrs, Volume= 211 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach OVC: Check

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 10-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 2.31 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 1.0' Slope= 0.1000 '/'
Inlet Invert= 245.00', Outlet Invert= 244.90'

Summary for Pond PSIS-1: Proposed Subsurface Infiltration System-1

Inflow Area = 3,321 sf,100.00% Impervious, Inflow Depth = 4.36" for 10-Year Design Storm event
Inflow = 0.33 cfs @ 12.09 hrs, Volume= 1,208 cf
Outflow = 0.03 cfs @ 12.99 hrs, Volume= 1,208 cf, Atten= 91%, Lag= 54.2 min
Discarded = 0.03 cfs @ 12.99 hrs, Volume= 1,208 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 241.36' @ 12.99 hrs Surf.Area= 375 sf Storage= 457 cf

Plug-Flow detention time= 124.1 min calculated for 1,207 cf (100% of inflow)
Center-of-Mass det. time= 124.0 min (873.5 - 749.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	239.50'	356 cf	**15.75'W x 23.80'L x 3.50'H Field A** 1,312 cf Overall - 422 cf Embedded = 890 cf x 40.0% Voids
#2A	240.00'	422 cf	**StormTech SC-740** x 9 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		778 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	239.50'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.03 cfs @ 12.99 hrs HW=241.36' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.03 cfs)

Summary for Pond PSIS-2: Proposed Subsurface Infiltration System-2

Inflow Area = 2,396 sf, 100.00% Impervious, Inflow Depth = 4.36" for 10-Year Design Storm event
Inflow = 0.24 cfs @ 12.09 hrs, Volume= 871 cf
Outflow = 0.02 cfs @ 12.96 hrs, Volume= 871 cf, Atten= 91%, Lag= 52.5 min
Discarded = 0.02 cfs @ 12.96 hrs, Volume= 871 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 241.93' @ 12.96 hrs Surf.Area= 263 sf Storage= 329 cf

Plug-Flow detention time= 121.6 min calculated for 871 cf (100% of inflow)
Center-of-Mass det. time= 121.5 min (871.0 - 749.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	240.00'	254 cf	**15.75'W x 16.68'L x 3.50'H Field A** 919 cf Overall - 284 cf Embedded = 635 cf x 40.0% Voids
#2A	240.50'	284 cf	**StormTech SC-740** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		538 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	240.00'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.02 cfs @ 12.96 hrs HW=241.93' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.02 cfs)

Summary for Pond PSIS-3: Proposed Subsurface Infiltration System-3

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 1.07" for 10-Year Design Storm event
Inflow = 0.46 cfs @ 12.11 hrs, Volume= 1,675 cf
Outflow = 0.06 cfs @ 13.32 hrs, Volume= 1,675 cf, Atten= 87%, Lag= 73.0 min
Discarded = 0.06 cfs @ 13.32 hrs, Volume= 1,675 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 242.96' @ 13.32 hrs Surf.Area= 928 sf Storage= 531 cf

Plug-Flow detention time= 86.4 min calculated for 1,674 cf (100% of inflow)
Center-of-Mass det. time= 86.3 min (968.3 - 881.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	242.00'	851 cf	**30.00'W x 30.92'L x 3.50'H Field A** 3,246 cf Overall - 1,120 cf Embedded = 2,127 cf x 40.0% Voids
#2A	242.50'	1,120 cf	**StormTech SC-740** x 24 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 6 rows
		1,970 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	242.00'	**2.410 in/hr Exfiltration over Wetted area**
#2	Primary	245.00'	**6.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.06 cfs @ 13.32 hrs HW=242.96' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=242.00' (Free Discharge)
↑—**2=Orifice/Grate** (Controls 0.00 cfs)

PROPOSED CONDITIONS
100-YEAR DESIGN STORM

Summary for Subcatchment SC601: Subcatchment 601

Runoff = 0.35 cfs @ 12.09 hrs, Volume= 1,270 cf, Depth= 6.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
*	2,396	98	ROOF
	2,396		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Reach DP1: DESIGN POINT 1

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 100-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP2: DESIGN POINT 2

Inflow Area = 2,019 sf, 25.06% Impervious, Inflow Depth = 1.79" for 100-Year Design Storm event
Inflow = 0.09 cfs @ 12.10 hrs, Volume= 301 cf
Outflow = 0.09 cfs @ 12.10 hrs, Volume= 301 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP3: DESIGN POINT 3

Inflow Area = 20,708 sf, 25.95% Impervious, Inflow Depth = 1.79" for 100-Year Design Storm event
Inflow = 0.89 cfs @ 12.10 hrs, Volume= 3,084 cf
Outflow = 0.89 cfs @ 12.10 hrs, Volume= 3,084 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Reach DP4: DESIGN POINT 4

Inflow Area = 13,729 sf, 3.55% Impervious, Inflow Depth = 0.76" for 100-Year Design Storm event
Inflow = 0.14 cfs @ 12.15 hrs, Volume= 875 cf
Outflow = 0.14 cfs @ 12.15 hrs, Volume= 875 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

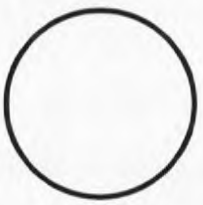
Summary for Reach OVC: Check

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 0.00" for 100-Year Design Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 2.31 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 1.0' Slope= 0.1000 '/'
Inlet Invert= 245.00', Outlet Invert= 244.90'



Summary for Pond PSIS-1: Proposed Subsurface Infiltration System-1

Inflow Area = 3,321 sf,100.00% Impervious, Inflow Depth = 6.36" for 100-Year Design Storm event
Inflow = 0.48 cfs @ 12.09 hrs, Volume= 1,760 cf
Outflow = 0.04 cfs @ 13.23 hrs, Volume= 1,760 cf, Atten= 93%, Lag= 68.6 min
Discarded = 0.04 cfs @ 13.23 hrs, Volume= 1,760 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 242.77' @ 13.23 hrs Surf.Area= 375 sf Storage= 743 cf

Plug-Flow detention time= 191.2 min calculated for 1,760 cf (100% of inflow)
Center-of-Mass det. time= 191.2 min (934.9 - 743.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	239.50'	356 cf	**15.75'W x 23.80'L x 3.50'H Field A** 1,312 cf Overall - 422 cf Embedded = 890 cf x 40.0% Voids
#2A	240.00'	422 cf	**StormTech SC-740** x 9 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		778 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Summary for Subcatchment SC101: Subcatchment 101

Runoff = 1.11 cfs @ 12.10 hrs, Volume= 3,624 cf, Depth= 2.32"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
*	1,290	98	ROOF
*	5,422	98	PROPOSED DRIVEWAY
	11,999	39	>75% Grass cover, Good, HSG A
	18,711	60	Weighted Average
	11,999		64.13% Pervious Area
	6,712		35.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC201: Subcatchment 201

Runoff = 0.09 cfs @ 12.10 hrs, Volume= 301 cf, Depth= 1.79"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
	416	98	Roofs, HSG A
	1,513	39	>75% Grass cover, Good, HSG A
*	90	98	Wall
	2,019	54	Weighted Average
	1,513		74.94% Pervious Area
	506		25.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC301: Subcatchment 301

Runoff = 0.89 cfs @ 12.10 hrs, Volume= 3,084 cf, Depth= 1.79"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
	1,275	98	Roofs, HSG A
	15,334	39	>75% Grass cover, Good, HSG A
*	3,152	98	PROPOSED DRIVEWAY/WALKS
*	947	98	PROPOSED PATIO
	20,708	54	Weighted Average
	15,334		74.05% Pervious Area
	5,374		25.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC401: Subcatchment 401

Runoff = 0.14 cfs @ 12.15 hrs, Volume= 875 cf, Depth= 0.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
	13,241	39	>75% Grass cover, Good, HSG A
*	488	98	PROPOSED PATIO
	13,729	41	Weighted Average
	13,241		96.45% Pervious Area
	488		3.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Summary for Subcatchment SC501: Subcatchment 501

Runoff = 0.48 cfs @ 12.09 hrs, Volume= 1,760 cf, Depth= 6.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Design Storm Rainfall=6.60"

	Area (sf)	CN	Description
*	3,321	98	PROPOSED ROOF
	3,321		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Standard Engineering Practice**

Device	Routing	Invert	Outlet Devices
#1	Discarded	239.50'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.04 cfs @ 13.23 hrs HW=242.77' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Summary for Pond PSIS-2: Proposed Subsurface Infiltration System-2

Inflow Area = 2,396 sf,100.00% Impervious, Inflow Depth = 6.36" for 100-Year Design Storm event
Inflow = 0.35 cfs @ 12.09 hrs, Volume= 1,270 cf
Outflow = 0.03 cfs @ 13.10 hrs, Volume= 1,270 cf, Atten= 92%, Lag= 60.8 min
Discarded = 0.03 cfs @ 13.10 hrs, Volume= 1,270 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 243.45' @ 13.10 hrs Surf.Area= 263 sf Storage= 532 cf

Plug-Flow detention time= 182.1 min calculated for 1,269 cf (100% of inflow)
Center-of-Mass det. time= 182.0 min (925.8 - 743.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	240.00'	254 cf	**15.75'W x 16.68'L x 3.50'H Field A** 919 cf Overall - 284 cf Embedded = 635 cf x 40.0% Voids
#2A	240.50'	284 cf	**StormTech SC-740** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 3 rows
		538 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	240.00'	**2.410 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.03 cfs @ 13.10 hrs HW=243.45' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Summary for Pond PSIS-3: Proposed Subsurface Infiltration System-3

Inflow Area = 18,711 sf, 35.87% Impervious, Inflow Depth = 2.32" for 100-Year Design Storm event
Inflow = 1.11 cfs @ 12.10 hrs, Volume= 3,624 cf
Outflow = 0.07 cfs @ 14.91 hrs, Volume= 3,624 cf, Atten= 94%, Lag= 168.8 min
Discarded = 0.07 cfs @ 14.91 hrs, Volume= 3,624 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 244.83' @ 14.91 hrs Surf.Area= 928 sf Storage= 1,719 cf

Plug-Flow detention time= 275.8 min calculated for 3,622 cf (100% of inflow)
Center-of-Mass det. time= 275.7 min (1,132.7 - 857.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	242.00'	851 cf	**30.00'W x 30.92'L x 3.50'H Field A**
			3,246 cf Overall - 1,120 cf Embedded = 2,127 cf x 40.0% Voids
#2A	242.50'	1,120 cf	**StormTech SC-740** x 24 Inside #1
			Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
			Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
			Row Length Adjustment= +0.44' x 6.45 sf x 6 rows
		1,970 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	242.00'	**2.410 in/hr Exfiltration over Wetted area**
#2	Primary	245.00'	**6.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.07 cfs @ 14.91 hrs HW=244.83' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=242.00' (Free Discharge)
↑—**2=Orifice/Grate** (Controls 0.00 cfs)

APPENDIX

LEGEND:

- OVERLAND FLOW DIRECTION
- SUBCATCHMENT DIVIDE
- SC1 — SUBCATCHMENT
- DP1 — DESIGN POINT
- HSG — HYDROLOGIC SOIL GROUP
- TEST PIT LOCATION
- SOIL TYPE DIVIDE

DP1
DP2
DP3
DP4
SC1
SC2
SC3
SC4

ADAMS STREET (PUBLIC-40' WIDTH)

NOW OR FORMERLY C. & I. NOMINEE TRUST CHARLES A. & HELEN J. WINCHESTER, TRS.

NOW OR FORMERLY CHALDEA CONSTRUCTION CORP.

NOW OR FORMERLY AARON B. & WENDY SCHNIPPER CLAYTON

NOW OR FORMERLY JEREMY A. & LESLIE LEVITAN

NOW OR FORMERLY JOHN W. & SUZANNE V. BRUCE

EXISTING 2 STORY RESIDENTIAL BUILDING NO. 8 ADAMS STREET ROOF PEAK=286.3 FFE= 250.8

MAP 63 LOT 77A RECORD AREA =61,004± S.F.

8 ADAMS STREET
PRE-DEVELOPMENT DRAINAGE PLAN
LOCATED IN
LEXINGTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

PREPARED FOR
RANDALL S. & ELAINE H. HILLER

SCALE: 1"= 40' DATE: MAY 24, 2018

20 0 20 40 80

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

DWG. No. 5875-PRE

LEGEND:

- OVERLAND FLOW DIRECTION
- SUBCATCHMENT DIVIDE
- SC101 — SUBCATCHMENT
- DP1 — DESIGN POINT
- HSG — HYDROLOGIC SOIL GROUP
- TEST PIT LOCATION
- SOIL TYPE DIVIDE

8 ADAMS STREET
POST–DEVELOPMENT
DRAINAGE PLAN

LOCATED IN

LEXINGTON, MASSACHUSETTS

(MIDDLESEX COUNTY)

PREPARED FOR

RANDALL S. & ELAINE H. HILLER

SCALE: 1"= 40' DATE: MAY 24, 2018

20 0 20 40 80

MERIDIAN ASSOCIATES

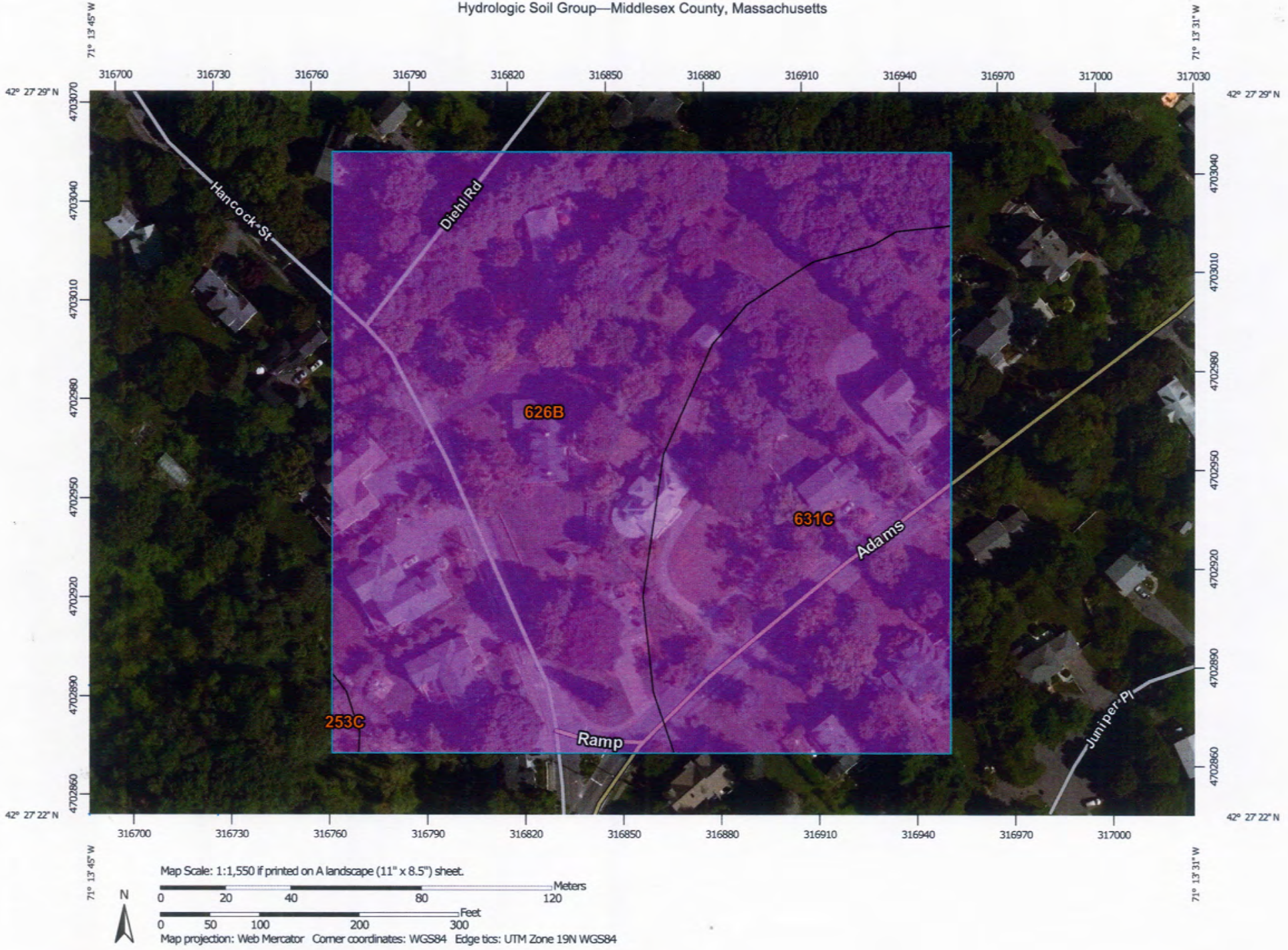
500 CUMMINGS CENTER, SUITE 5950
BEVERLY, MASSACHUSETTS 01915
TELEPHONE: (978) 299-0447

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

WWW.MERIDIANASSOC.COM

DWG. No. 5875–POST

Hydrologic Soil Group—Middlesex County, Massachusetts



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 15, Sep 28, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 10, 2014—Aug 25, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Middlesex County, Massachusetts (MA017)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
253C	Hinckley loamy sand, 8 to 15 percent slopes	A	0.0	0.4%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	A	5.4	62.8%
631C	Charlton-Urban land-Hollis complex, 3 to 15 percent slopes, rocky	A	3.2	36.8%
Totals for Area of Interest			**8.6**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

EROSION AND SEDIMENTATION CONTROL PROGRAM

for

A PROPOSED STORMWATER MANAGEMENT SYSTEM

located at

8 ADAMS STREET
LEXINGTON, MASSACHUSETTS

Applicant:

Randall S. & Elaine H. Hiller
8 Adams Street
Lexington, Massachusetts 02421

Prepared by:

Meridian Associates, Inc.
500 Cummings Center, Suite 5950
Beverly, Massachusetts 01915
(978) 299-0447

May 24, 2018

Project Name: 8 Adams Street

Owner Name: Randall S. & Elaine H. Hiller

Party Responsible for Maintenance During Construction: Contractor

Party Responsible for Maintenance After Construction: Homeowner's Association

Erosion and Sedimentation Control Measures during Construction Activities

Filtermitt (or approved equal)

Filtermitt (or approved equal) will be installed along the down gradient limit of work as depicted on the Site Plan. The FilterMitt shall be installed prior to the commencement of any work on-site and in accordance with the design plans. An additional supply of filtermitt shall be on-site to replace and/or repair any filtermitt that have been disturbed or are in poor condition. The line of FilterMitt shall be inspected and maintained on a weekly basis and after every major storm event (2-year) during construction. No construction activities are to occur beyond the FilterMitt at any time. Deposited sediments shall be removed when the volume of the deposition reaches approximately one-half the height of the filtermitt.

Stockpiles

All unused debris, soil, and other material shall be stockpiled in locations of relatively flat grades, away from any trees identified to be saved and upgradient of the filtermitt. Stockpile side slopes shall not be greater than 2:1. All stockpiles shall be surrounded by a row of filtermitt. Surrounding filtermitt shall be inspected and maintained on a daily basis.

Surface Stabilization

The surface of all disturbed areas shall be stabilized during and after construction. Disturbed areas remaining idle for more than 14 days shall be stabilized. Temporary measures shall be taken during construction to prevent erosion and siltation. No construction sediment shall be allowed to enter any infiltration system or formal drainage system. All disturbed slopes will be stabilized with a permanent vegetative cover. Some or all of the following measures will be utilized on this project as conditions may warrant.

a. Temporary Seeding
b. Temporary Mulching
c. Permanent Seeding
d. Placement of Sod
e. Hydroseeding
f. Placement of Hay
g. Placement of Jute Netting

Dust shall be controlled at the site.

Tree Protection

Existing trees to be saved shall be protected with orange construction fence (offset from the tree trunk by professional standard based on canopy).

Construction Tracking Pad

A construction tracking pad shall be installed at the designated entrances/exits, as shown on the Site plans, to the site to reduce the amount of sediment transported off site. The construction tracking pad shall be inspected weekly.

Inspection and Maintenance of Area Drain

The performance of the area drain shall be checked after every major storm event during construction.

Subsurface Infiltration Facilities

Construction activity above and around the proposed location of the subsurface infiltration facility shall be limited to prevent compaction of the existing soil. Care shall be taken to redirect stormwater runoff from this area to prevent ponding. Installation of this system shall occur under dry weather conditions and system shall be backfilled immediately to prohibit the introduction of fines or other material that would compromise the functionality of this system.

Removal of Sediment and Erosion Controls

At the completion of construction activities and after receiving approval from the Town of Lexington, all physical sediment and erosion controls shall be removed from the site per Town of Lexington. The areas where the controls have been removed shall be seeded and stabilized immediately upon removal.

Long-Term Inspection and Maintenance Measures after Construction

Erosion Control

Eroded sediments can adversely affect the performance of the stormwater management system. Eroding or barren areas should be immediately re-vegetated.

Subsurface Infiltration Facility

The infiltration system inspections should include inspections following the first several rainfall events or first few months after construction, after all major storms (3.2" inches of rain over a 24-hour period or greater), and on regular bi-annual scheduled dates, to ascertain whether captured runoff drains within 72 hours following the event. Ponded water inside the system (as visible from the observation well) after several dry days often indicates that the bottom of the system is clogged. If the water does not drain, then a qualified professional should be retained to determine the cause of apparent infiltration failure and recommend corrective action. Such corrective action should be immediately implemented by

the homeowner. If depth of sediment is observed to be greater than 3" then the system should be cleaned. The homeowner shall contact a sewer and drain cleaning company to flood the system via pump truck so the water is forced back to the upstream cleanout where sediment can be vacuumed out.

Debris and Litter Removal

Trash may collect in the BMP's, potentially causing clogging of the facilities. All debris and litter shall be removed when necessary, and after each storm event. Sediment and debris collected from vacuuming and/or sweeping should be disposed of at a permitted waste disposal facility. Avoid disposing of this material on site, where it could be washed into the proposed subsurface infiltration systems.

Lawn Mowing

All lawn mowing to take place will be done with a mulch mower so grass clippings will not be an issue.

Good Housekeeping Practices (in accordance with Standard 10 of the Stormwater Management Handbook to prevent illicit discharges)

Provisions for storing paints, cleaners, automotive waste and other potentially hazardous household waste products inside or under cover

- All materials on site will be stored inside in a neat, orderly, manner in their appropriate containers with the original manufacturer's label.
- Only store enough material necessary. Whenever possible, all of a product shall be used up before disposing of container.
- Manufacturer, local, and State recommendations for proper use and disposal shall be followed.

Vehicle washing controls

- A commercial car wash shall be used when possible. Car washes treat and/or recycle water.
- Cars shall be washed on gravel, grass, or other permeable surfaces to allow filtration to occur.
- Use biodegradable soaps.
- A water hose with a nozzle that automatically turns off when left unattended.

Requirements for routine inspection and maintenance of stormwater BMPs

- See Inspection and Maintenance Measures after Construction.

Spill prevention and response plans

- Spill Control Practices shall be in conformance with the guidelines set forth in the National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan (SWPPP)

Provisions for maintenance of lawns, gardens, and other landscaped areas

- Grass shall not be cut shorter than 2 to 3 inches and mulch clipping should be left on lawn as a natural fertilizer.
- Use low volume water approaches such as drip-type or sprinkler systems. Water plants only when needed to enhance root growth and avoid runoff problems.
- The use of mulch shall be utilized where possible. Mulch helps retain water and prevents erosion.

Requirements for storage and use of fertilizers, herbicides and pesticides

- Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.
- Do not fertilize before a rainstorm.
- Consider using organic fertilizers. They release nutrients more slowly.
- Pesticides shall be applied on lawns and gardens only when necessary and applied only in the minimum amounts recommended by the manufacturer.

Pet waste management

- Scoop up and seal pet wastes in a plastic bag. Dispose of properly, in the garbage.

Provisions for solid waste management

- All solid waste shall be disposed of or recycled in accordance with local town regulations.

Snow disposal and plowing plans relative to Resource Area

- Snow shall be plowed and stored on gravel, grass, or other permeable surfaces to allow filtration to occur.
- Once snow melts all sand salt and debris shall be extracted from surface and properly disposed of.
- Snow shall not be disposed of in any resource area or waterbody.
- Avoid disposing snow on top of storm drain catchbasins or stormwater drainage swale.

Winter Road Salt and/or Sand use and storage restrictions

- Sand storage piles should be located outside the 100-year buffer zone and shall be covered at all times. No salt to be stored or used on site.
- Alternative materials, such as sand or gravel, should be used in especially sensitive areas.

Roadway and Parking Lot sweeping schedule

- Pavement sweeping shall be conducted at a frequency of not less than once per year.
- Removal of any accumulated sand, grit, and debris from driveway after the snow melts shall be completed shortly after snow melts for the season.

Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL

Not Applicable

Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan

To be determined by the owner.

List of Emergency contacts for implementing Long-Term Pollution Prevention Plan

To be determined by the owner.

Applicant's Certification

I certify under penalty of law that I have read, understand and agree to abide by the practices outlined in this document.

Signed:_____ Date:_____

Homeowner

Contractor's Certification

I certify under penalty of law that I have read, understand and agree to abide by the practices outlined in this document.

Signed:_____ Date:_____

Contractor

STORMWATER MANAGEMENT
CONSTRUCTION PHASE

INSPECTION SCHEDULE AND EVALUATION CHECKLIST

PROJECT LOCATION: 8 Adams Street Lexington, MA **WEATHER:** _____

Inspection Date	*Inspector*	*Area Inspected*	*Required Inspection Frequency if BMP*	*Comments*	*Recommendation*	*Follow-up Inspection Required (yes/no)*
		FilterMitt	*Weekly and After Major Storm Events*			
		Construction Tracking Pad	*Weekly and After Major Storm Events*			
		Subsurface Infiltration Systems	*Weekly and After Major Storm Events*			
		Area Drain	*Weekly and After Major Storm Events*			

(1) Refer to the Massachusetts Stormwater Handbook, Volume Two: Stormwater Technical Handbook (February 2008) for recommendations regarding frequency for inspection and maintenance of specific BMP's.

(2) Inspections to be conducted by a qualified professional such as an environmental scientist or civil engineer.

Limited or no use of sodium chloride salts, fertilizers or pesticides recommended.

Other notes: (Include deviations from: Con. Comm. Order of Conditions, PB Approval, Construction Sequence and Approved Plan)

Stormwater Control Manager: _____

STORMWATER MANAGEMENT
AFTER CONSTRUCTION

INSPECTION SCHEDULE AND EVALUATION CHECKLIST

PROJECT LOCATION: 8 Adams Street, Lexington, MA **WEATHER:** _____

Inspection Date	*Inspector*	*Area Inspected*	*Required Inspection Frequency if BMP*	*Comments*	*Recommendation*	*Follow-up Inspection Required (yes/no)*
		Area Drain	*Bi-annually and After Major Storm Events*			
		Subsurface Infiltration Systems	*Bi-annually and After Major Storm Events*			

(3) Refer to the Massachusetts Stormwater Handbook, Volume Two: Stormwater Technical Handbook (February 2008) for recommendations regarding frequency for inspection and maintenance of specific BMP's.

(4) Inspections to be conducted by a qualified professional such as an environmental scientist or civil engineer.

Limited or no use of sodium chloride salts, fertilizers or pesticides recommended.

Other notes: (Include deviations from: Con. Comm. Order of Conditions, PB Approval, Construction Sequence and Approved Plan)

Stormwater Control Manager: _____

8 Adams - Renovation & New Residence

Planning Board Submission
May 22nd, 2018

PERSPECTIVE FROM ADAMS STREET

PROJECT AREA CALCULATIONS

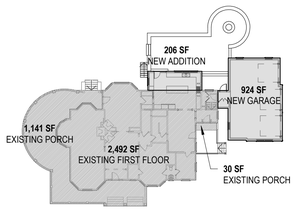
GFA CALCULATIONS 'A' - Existing House Renovation

	Existing	Addition	New Total
Lower Level	2,492 SF	0 SF	2,492 SF
Level One	2,492 SF	1,130 SF	3,622 SF
Level Two	2,104 SF	165 SF	2,269 SF
Attic	1,399 SF	0 SF	1,399 SF
Covered Porches	1,171 SF	0 SF	1,171 SF
Subtotal	9,658 SF	1,295 SF	***10,953 SF***

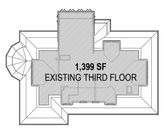
GFA CALCULATIONS 'B' - New House

	Total
Lower Level	0 SF
Level One	2,604 SF
Level Two	2,239 SF
Attic	0 SF
Covered Porches	87 SF
Subtotal	***4,930 SF***
GRAND TOTAL:	***15,883 GSF***

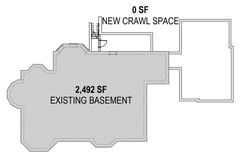
PROJECT 'A' GROSS FLOOR AREA PLANS



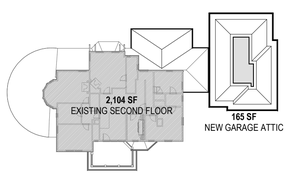
2 A01- Area Plan - First Floor Plan
1/32" = 1'-0"



4 Attic Floor Plan
1/32" = 1'-0"

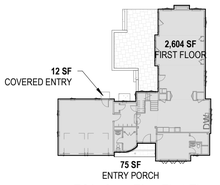


1 A00- Area Plan - Basement Floor Plan
1/32" = 1'-0"

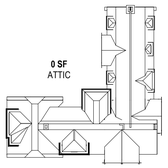


3 A02- Area Plan - Second Floor Plan
1/32" = 1'-0"

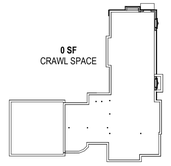
PROJECT 'B' GROSS FLOOR AREA PLANS



6 B01- Area Plan First Floor
1/32" = 1'-0"



8 B03- Area Plan Attic
1/32" = 1'-0"



5 B00-Crawl Space Area Plan
1/32" = 1'-0"

7 B02- Area Plan Second Floor
1/32" = 1'-0"

5/22/2018 11:17:58 AM

CLIENT
Randy Hiller
8 Adams St, Lexington

ARCHITECT
Colin Smith Architecture, Inc.
1666 Massachusetts Ave.
Lexington, MA 02420
781.274.0955

STRUCTURAL

PROJECT NAME
8 ADAMS STREET
8 Adams Street, Lexington MA
Planning Board Application

#	Date	Description

SEAL

SHEET NAME
Architectural Perspective & Area Plans

SHEET ISSUED: 5-22-18
SCALE: As indicated
DRAWN BY: CJB
PROJECT #: 2018-21B

SHEET NUMBER
A1.0

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

55 & 56 Watertown Street (Belmont Country Club): Planned Development (Public Hearing)

PRESENTER:

Steve Senna, National Development

ITEM NUMBER:

SUMMARY:

The Planning Board will be opening a public hearing to discuss this item. The applicant, National Development (ND Acquisitions LLC), has submitted a proposal to rezone a 17.7 acre site bisected by Watertown Street. The rezone proposes the construction of a 116 unit independent living facility and a 40 unit assisted living facilty on the west side of Watertown Street as well as a memory care facility housing 48 residents along the eastside of Watertown. Please click **here** to view plans of the proposal and other submitted documentation.

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Comprehensive Plan Update

PRESENTER:

Carol Kowalski

ITEM NUMBER:

SUMMARY:

This is a standing agenda item to provide updates to the Planning Board on the status of the Comprehensive Plan. Upcoming meetings include the following:

- CPAC Meeting - July 24, 2018 (7PM) Location TBD
- CPAC Meeting - August 28, 2018 (7PM) Location TBD
- Public Event (World Café) - September 25, 2018 (7PM) Battin Hall

SUGGESTED MOTION:

Staff's update requires no action on the part of the Board.

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Upcoming Meetings & Anticipated Schedule

PRESENTER:

Carol Kowalski

ITEM NUMBER:

SUMMARY:

This recurring agenda item is to inform the Board and public of the proposed meeting schedule. Upcoming Planning Board meetings are scheduled for the following dates:

- August 16, 2018
- August 30, 2018

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Minutes

PRESENTER:

ITEM NUMBER:

SUMMARY:

Drafts of the following meeting minutes will be reviewed by the Planning Board:

- June 4, 2018
- June 7, 2018
- June 21, 2018

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

7/19/2018

ATTACHMENTS:

Description	Type
6-4-18 PB Draft Meeting Minutes	Backup Material
6-7-18 PB Draft Meeting Minutes	Backup Material
6-21-18 PB Draft Meeting Minutes	Backup Material

PLANNING BOARD MINUTES
MEETING OF JUNE 4, 2018

A meeting of the Lexington Planning Board, held in the Battin Hall, in the Cary Memorial Building was called to order at 7:04 p.m. by Chair, Ginna Johnson with members Richard Canale, Charles Hornig, Nancy Corcoran-Ronchetti, and Bob Creech, and planning staff Carol Kowalski, David Kucharsky, and David Fields present.

On a motion duly made and seconded, it was voted 5-0, to adjourn at 8:50 p.m.

Nancy Corcoran-Ronchetti, Clerk

PLANNING BOARD MINUTES
MEETING OF JUNE 7, 2018

A meeting of the Lexington Planning Board, held in the Hudson Room, in the Cary Memorial building was called to order at 7:01 p.m. by Vice Chair, Bob Creech with members Richard Canale, Charles Hornig, Nancy Corcoran-Ronchetti, and planning staff Carol Kowalski and David Kucharsky present. Ginna Johnson was absent.

**********STAFF REPORTS**********

General Updates:

There was a Hartwell Avenue event last week and the Comprehensive Plan kick off was this week.

Hartwell Avenue Zoning Initiative Update:

A zoning consultant was hired and we are awaiting the traffic analysis from Stantec and RKG is doing a fiscal analysis. Are the analysis only looking at existing conditions? Ms. Kowalski said that some future build-out is being done as well. There will be further discussions on this once more information is received.

**********DEVELOPMENT ADMINISTRATION**********

PUBLIC HEARING

32-40 Hartwell Avenue, special permit:

Vice Chair, Mr. Creech, opened the public hearing for a special permit at 7:10 p.m. with approximately 1 person in the audience. Mr. Dominic Rinaldi of the BSC group was present and gave an explanation of the requested changes for an awning between the two buildings.

Board Comments:

- Believe this meets the requirements which was the hope for connectivity of the two buildings.
- The Board voiced approval for this change.

The public hearing was closed at 7:16 p.m.

The Board requested that staff draft a decision for granting the special permits for the next meeting.

7 Hartwell Avenue, sketch PSDUP:

The Board recommended the applicant go with a zoning change the CM district instead of a new Planned Development District.

On a motion of Mr. Hornig, seconded by Ms. Corcoran-Ronchetti, it was voted, 4-0, to approve the decision drafted by staff.

56 Webb Street, preliminary subdivision plan:

Present was James Decoulos, civil engineer, for Angie Kavlakian the applicant. It came to the Planning Board's attention that clearing has been done on the property and that is not allowed under the subdivision regulations and to contact the Planning Board before doing anything on the site.

Mr. Decoulos gave a summary and submitted papers regarding the history for the title and rights with deeds and plans showing the Trebino's right to convey the use of Dunham Street for access.

Individual Board Questions:

- Is there anything in writing to grant this to the Kavlakian family? *Mr. Decoulous said not explicitly but that does not mean the rights don't exist. We recommend that staff speak with Town Counsel. Our attorney Chris Heep feels we are on solid ground.* Are the Lee's on board with you about this we have a letter from Melissa Lee stating that you do not have those rights? *No.*

Mr. Decoulos showed the fire safety access off Webb Street at 10 and 20 scale with the Fire Department's largest truck. The applicant would like the Board to have a site visit to show access with a rented private truck to do the test.

Individual Board Questions:

- If this is an emergency vehicle access only, are you asking the Board to waive the dead end street requirement? *Mr. Decoulos said they disagree because alternate vehicle access is being provided. The applicant will seek a waiver to pursue this option as well.* What sort of vehicle will be supported with the access? There needs to be some sort of standard for vehicles under section 7.2 as a subdivision street.
- How will you handle snow removal on the emergency access? *It will be removed from the site for the emergency access only with 16 feet wide clearance.*

Mr. Decoulos said with the watershed and stormwater plan we agree to not use salt in this area since it discharges into Burlington. We are very aware of the impact to watersheds. There is no evidence of red maple cuts in any resource areas.

- Do you plan to speak with Burlington regarding the threat to the watershed or anything with the wetlands protection act? *We are working with Burlington now on another project. We do not view this as an impact or threat.*
- We have a letter from the Fire Department that does not agree with your assessment of the emergency access which is based on the fire code. *Mr. Decoulos said he would like to see the letter from the Fire Department and would like time to respond to it.*

On a motion of Mr. Hornig, seconded by Ms. Corcoran-Ronchetti, it was voted, 4-0, to deny approval of preliminary subdivision plans for 56 Webb Street as the length of dead end street is longer then permitted in the subdivision regulations the applicant has not clearly demonstrated the right to improve and use the private section of Dunham Street.

On a motion of Mr. Hornig, seconded, by Mr. Creech, it was voted to approve the decision with the additional reason to deny and authorize the acting interim Planning Director to sign on the Board's behalf.

**********BOARD ADMINISTRATION**********

Board Member Updates:

The RFQ is being prepared for a technical person and are doing some outreach for a facilitator for the Special Permit Residential Development Committee and have identified some good people. The Planning Director position closes tomorrow.

Comprehensive Plan Update:

Howard Stein Hudson has been selected and the facilitator for the Comprehensive Plan. Staff is trying to get the trend reports finished and updated to put on the website. The second Economic Development panel will be June 13 in the DPW cafeteria and is the last panel for the Comprehensive Plan. There is currently a vacant seat on the CPAC if there some individuals the Board feel might be a good participants please make sure they contact the planning office.

Board individual comments:

- Pleased with the quality of input for the kick-off event, but not necessarily the number of people who attended. There was also a good mix of people who do not usually participate.
- Give residents and stakeholders a better sense of the actual schedule on what they should be expecting over the next year.
- The materials put together were very good. The participation was very good and so was the feedback.

Upcoming Meetings & Anticipated Schedule:

The Board will be going back to Wednesday night meetings sometime in the near future.

Minutes Review and Approval:

On a motion of Mr. Hornig, seconded by Ms. Corcoran-Ronchetti, it was voted, 4-0, to approve the minutes May 24, 2018, as amended.

On a motion, duly made and seconded, it was voted to adjourn the meeting at 8:05 p.m.

The meeting was recorded by LexMedia.

The following documents used at the meeting can be found on the Planning Board website in Planning Board packets.

- 7 Hartwell Avenue, sketch PSDUP draft decision from staff (1 page).
- Letter from the assistant Fire Chief regarding 56 Webb Street (1 page).
- Draft decision from staff regarding 32-40 Hartwell Avenue (4 pages).
- Plan set for 32-40 Hartwell Avenue, dated April 5, 2018 (5 pages).

Nancy Corcoran-Ronchetti, Clerk

PLANNING BOARD MINUTES
MEETING OF JUNE 21, 2018

A meeting of the Lexington Planning Board, held in the Selectmen's Meeting Room, was called to order at 7:01 p.m. by Chair, Ginna Johnson with members Charles Hornig, Nancy Corcoran-Ronchetti, and Bob Creech, and planning staff Carol Kowalski, David Fields, and Lori Kaufman present. Richard Canale was absent.

**********STAFF REPORTS**********

Hartwell Avenue Zoning Initiative Update:

Ms. Kowalski provided the Board with an update on the Hartwell Avenue Initiative.

We are preparing a contract for the consultant and a calendar for outreach.

**********DEVELOPMENT ADMINISTRATION**********

245 Woburn Street, ANR:

On a motion of Mr. Hornig, seconded by Ms. Corocran-Ronchetti, it was voted, 4-0, to endorse the ANR plan for 245 Woburn Street.

32 & 40 Hartwell Avenue, Special Permit Decision:

On a motion of Mr. Hornig, seconded by Ms. Corcoran-Ronchetti, it was voted 4-0, to approve the special permits for 32 & 40 Hartwell Avenue in accordance with the decision drafted by staff.

CONTINUED PUBLIC HEARING

443 Lincoln Street, Definitive Balanced Housing Development (BHD) special permit:

Ms. Johnson recused herself from this special permit and Mr. Leon, Associate Planning Board Member will sit in her place for this special permit.

Vice Chair, Mr. Creech, opened the continued public hearing at 7:07 p.m. with approximately 35 people in the audience.

Present at the meeting were Jeff Rhuda, applicant, and Rich Harrrington, engineer.

Mr. Rhuda met with the Conservation Commission last week and the public hearing was closed and expect an Order of Conditions next week. We received the letter from the Cambridge Water Department that you requested and additional correspondence from the Engineering Department that all plans are corrected and updated to address all the concerns of staff and we are here to close the public hearing.

Board Comments:

- The plans then are the same as at the last meeting? *Yes.*
- There were questions from the Cambridge Water Department about the way you would be sewering the facility with pump grinders and pumping it out in instead of a Title 5

system and there were concerns with the stormwater management program. Would the concerns stated by the Cambridge Water District for the stormwater management program be included in the special permit? *Yes the Board could add to special conditions*.

- There was a concern about the pump station design for water consumption and what is the water flow calculation*? Mr. Rhuda said it was based on an approved program from next door development.*
- This will be a condominium and the Board will incorporate the requirements into the documents for the condominium association.

On a motion of Mr. Hornig, seconded by Ms. Corcoran-Ronchetti, it was voted 4-0, close the public hearing at 7:13 p.m.

Staff should draft a decision and the Board will put it on the agenda for July 19 to discuss.

The applicant has requested that the Board vote when there is a full Board, which will be July 19.

287 Waltham Street, Sketch Site Sensitive Development (SSD):

Present was Gary Larson, landscape architect, John Farrington, attorney and Iqbal Quadir the applicant.

Mr. Farrington presented a preview of the plan and discussed the access easement that is registered in Land Court and the historic house on the property. This is an 11 unit SSD with 10 new units and keep the existing historic house on the property and which has only a fraction of what would be allowed for GFA of a conventional subdivision. The applicant is not a developer and would own the site.

Mr. Larson said this site is made up of four parcels with 3 existing homes. The proof plan shows an 11 lot subdivision. Emergency access would be provided to Bushnell Drive and many trees will be retained and the units would be from 2,600 to 2,700 square feet to allow for downsizing for Lexington residents who want to age in the community.

Board Comments:

- Is there a reason you would not do a BHD this doesn't seem like a SSD.
- Want more information on the easement. *Mr. Farrington said that all the land is registered land and the easement information exists and is clear.* What is the width of the easement? *It varies at one point 10-12 feet and other points 20 feet wide.*
- The access on Waltham Street is a concern with traffic sight line and vehicles entering and leaving.
- There is open space only because the space is not a good place to build houses.

- Do you really need to build the 4 houses on the northeast corner? *In order to build the road the reality is I need to spend more money and building those houses makes sense.*
- There is no wetlands on this site but there is everything else. Concern was expressed that the blasting that would obliterate the existing landscape. Pulling out of the drive the sight line is problematic.

Public Comments:

- Concerned with flooding and runoff flooding for the houses down below.
- A 2,500 square foot home seems large for downsizing.
- Concerned with traffic access on Waltham Street.
- What provision would be made for the existing wildlife?
- Are these four story houses or will the footprint grow? *This includes gross floor area (GFA).*
- The plans that were sent to residents will those buildings be towering over the existing houses.
- After a large rainstorm there is a lake formed on the property and neighbors have water in the basement and blasting may cause more problems. *The bylaws require that no additional runoff come off the site.*
- There is so much traffic where the houses are being proposed and trying to get in and out of the site not sure how much backing up will happen if someone wants to make a left turn. Has a traffic study been done?
- Can anything be stipulated that families cannot move in? *That is not allowed by fair housing practices.*
- Concerned with safety for the increased traffic.
- Questions were asked about the suitability of the lot. Looking at the site topography this does not appear suitable for a SSD. The easement said that it is a driveway and not a road and this is a concern. *The buildability of the lot was not in question.*
- Water does flow downhill and bedrock does not percolate well. The bottom part of Wachusett Drive has a boulder and there must be a reason it was placed there.
- There was destruction of another house from blasting that will be a concern.
- This will be a common driveway and the emergency access has a hairpin drive how can the fire truck make that turn. *Right now the fire truck cannot reach our home at this point and that is a concern.* Is it necessary for you to build 10 units to obtain a driveway?

- As a senior we do not want a two-story home with stairs and 2600 square feet seems large and not suitable for seniors.
- The road proposed from Waltham Street what is the length and slope of that street. 600 feet and the grade is designed with the steepest part at 10% and in the special permit the grade can be up to 12%.
- Is this driveway going to be private, who will be responsible for it? *It will be a common driveway and maintained by the association.*
- There are a lot of springs in that area and the land is not so stable and blasting this area how are residents going to be protected from damage.
- Concerned with the streets incline and going up and down the road especially in the winter.
- This is exactly the kind of project looking for older seniors and hope it gets support.

Planning Board Comments:

- Would like to see the lot.
- Look forward to getting the information on the easement from Mr. Farrington. Have concerns that are shared with the residents and want some kind of write-off from the fire department regarding blasting.
- The design for this site is better for a public benefit development.
- Location of driveway is an issue regarding the existing height of the stone wall on Waltham Street, access and emergency access is problematic, this will destroy the historic landscape, blasting is a major concern. 10 Bushnell Drive will have four units that will not appreciate having him in the back yard especially regarding privacy and concern about wildlife.
- No way this should be a SSD with the impacts this would have on the site. On the lower portion there is question on the size of the units. When additional units are added need to keep up with the 10% affordable units. There is no benefit to the Town with this project.
- Mark the trees that will be removed you will be surprised how many would be removed.

The applicant requested that the Planning Board visit the site.

114 Wood Street, Sketch Site Sensitive Development:

Mr. Angelo Tortulo, the applicant and Mr. Novak, Meridian Associates were present for 114 Wood Street. Mr. Novak gave a preview of the site project the proof plan, access to the lots, addressed the Eversource easement, resource areas, and explained that the wetlands that have been flagged. We are working to get a letter regarding the easement from Eversource.

Individual Board Comments:

- Why are the two new houses located so far back? *This is only a first pass and wanted input*. They should be brought in closer to the existing house. Be better if they were pulled up to get further away from the houses across the street.
- Need a letter from Eversource that this can be done since it is so close to the structure.
- You could build closer to the easement but even though near conservation land this could improve the site significantly. Pull the development as close to Wood Street as possible and anything you do to that land would be an improvement. If doing a SSD make it worth our while give us something that will be a big improvement.
- Encourage you not to go within the 100 foot buffer of the resource area.
- If the applicant has items on other people's property they need to remove all improvements, landscape, and pavement to their own property.
- What are you preserving here to make it a SSD, access and the drive are problematic it has a way to go.
- Has your research found who was the owner of that gore? *No we have taken an extensive look and have not found anything yet.*
- Just build one house and move closer to Wood Street and preserve the environment.

Audience Comments:

- Will they connect to Beaumont Street and will they be condos? *No all will be single family homes and will not connect to Beaumont Street.*
- Concern about a high water table level and a stream running through my property and any additional building will have more water running though my property.
- Concerned about the existing wildlife in that area.
- What would happen with the vegetation there right now? What will we end up with?
- Concern that this will ruin the entire landscape, blasting where the powerlines are near my house and am worried will have more water in my basement. This will ruin the entire landscape go down and see the site.
- There was concern at the bottom of Amherst Street for a vernal pool Cooks Pond which is protected by the National Park. The resident read a letter from the National park and they are waiting for certification of the vernal pool and the development needs to move away from the vernal pool and this project needs to be done right to minimize the impact on the vernal pool.

- Across from us surveyors have marked trees with pink tape. Does that mean those trees are being marked for removal? *Nothing has been designated for the removal at this time. Pink ribbon is generally used as a benchmark.*

Individual Board Comments:

- Please provide a copy of the letter regarding the vernal pool.
- The hill on Amherst Street will not be removed. *Correct*.
- Need more site analysis, what is being preserved, tree loss, removal of property that is over the property line. Believe the pavement extends over the property line south of the existing house that is in question. *Mr. Novak will look into that*.

The owner Angelo Turtola said he owns two properties and love what they have and would like to build a one-story house to age in place. The powerlines are our neighbors one day there was a fire next to my house right under the powerline and was caused by a powerline surge. The wildlife is an important part of our lives and want one small house to age in place there will be no blasting since it is sand. There has been a perennial problem with water in the basements.

**********BOARD ADMINISTRATION**********

Comprehensive Plan Update:

Ms. Kowalski gave an update regarding the comprehensive plan activity work schedule for June through August.

Upcoming Meetings & Anticipated Meetings:

The Board discussed the upcoming schedule through the 2019 Annual Town Meeting.

On a motion, duly made and seconded, it was voted to adjourn the meeting at 9:52 p.m.

The meeting was recorded by LexMedia.

The following documents used at the meeting can be found on the Planning Board website in Planning Board packets.

- Project Narrative from the applicant regarding 114 Wood Street (2 pages).
- Project Plan set for 114 Wood Street (6 pages).
- Staff report regarding 114 Wood Street (4 pages).
- Letter from Meridian regarding 114 Wood Street (2 pages).
- Project Plan set for 287 Waltham Street (5 pages).
- Staff report regarding 287 Waltham Street (5 pages).
- Revised Plan set for 443 Lincoln Street balanced housing development (Homes at Hobbs Brook), dated 5/30/18 (11 pages).

- Letter dated May 30, 2018 from Stamski and McNary regarding the updated plans for 443 Lincoln Avenue (2 pages).
- Eversource Energy letter regarding established easement for 443 Lincoln Street (2 pages).
- Homes at Hobbs Brook, Project narrative 443 Lincoln Street (36 pages).
- Sewer layout regarding 443 Lincoln Street (1 page).
- E/One pressure sewer design report regarding 443 Lincoln Street (14 pages).
- E/One pressure sewer preliminary cost and design analysis report regarding 443 Lincoln Street (4 pages).
- Responses to comments from Stamski & McNary regarding 443 Lincoln Street, Homes at Hobbs Brook (8 pages).
- Updated landscape Plan for 443 Lincoln Street, Homes at Hobbs Brook (1 page).
- Water supply details for 443 Lincoln Street, Homes at Hobbs Brook (1 page).
- Plan of land ANR 285 Woburn Street.

Nancy Corcoran-Ronchetti, Clerk