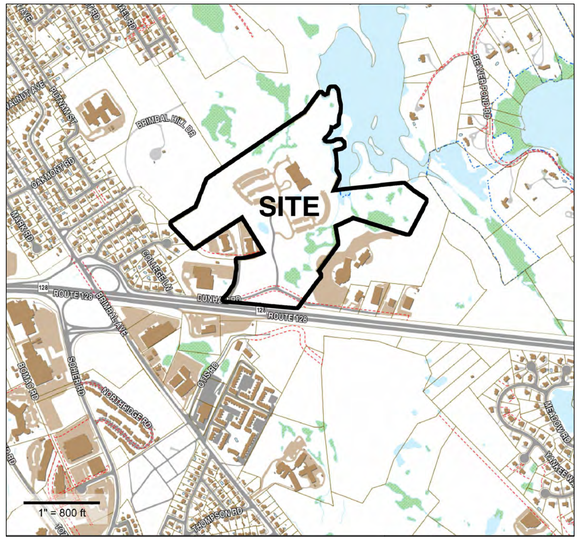
50 (44) Dunham Road
Beverly, Massachusetts

LOCUS PLAN



RENDERING

PROJECT TEAM

OWNER/APPLICANT:
DUNHAM RIDGE, LLC
c/o CUMMINGS PROPERTIES, LLC
200 WEST CUMMINGS PARK
WOBURN, MA 01801
(781) 935-8000

CIVIL ENGINEER:
MARK SLEGER - MA REG. 34407
ALAN ENGINEERING, L.L.C.
110 WINN STREET - SUITE 209
WOBURN, MA 01801
(781) 287-9789

ARCHITECT:
MICHAEL A. AVENI - MA REG. 31349
ATLANTIC BOSTON CONSTRUCTION, INC.
200 WEST CUMMINGS PARK
WOBURN, MA 01801
(781) 935-8000

TRANSPORTATION CONSULTANT
RODNEY EMERY
38 LAWRENCE STREET
BOSTON, MA 02116
(617) 763-0626

BEVERLY ZONING ORDINANCES

	EXISTING 2011	REQUIRED/ ALLOWED	PROPOSED*
ZONING DISTRICT - RESTRICTED INDUSTRIAL, RESEARCH AND OFFICE (IR)			
LOT AREA (MIN)	54 ACRES (2,340,000 S.F.)	2 ACRES (87,120 S.F.)	54 ACRES (2,340,000 S.F.)
LOT FRONTAGE (DUNHAM ROAD)	159.79' [c]	225'	159.79' [c]
FRONT YARD SETBACK	1,205'±	30'	802± (54)
SIDE YARD SETBACK	250'±	20'	20.4'± (42)
REAR YARD SETBACK	361'±	25'	26' (44)
MAXIMUM LOT COVERAGE			
BUILDINGS	1.2%	40%	10.5%
BUILDINGS AND PARKING	1.2%	60%	11.6%
BUILDING GROSS AREA (S.F.)	106,346±	NA	683,025±
BUILDING HEIGHT (MAX)	51.5'	60'	74.2' [e]
PARKING			
SURFACE SPACES	487	___ [d]	791
STRUCTURED SPACES	0	___	747
ACCESSIBLE SPACES [b]	8	26 [a]	34 [b] (19 SURF., 15 GAR.)
TOTAL	505	___ [d]	1538 [d]

* PROPOSED CONSIDERS ALL PREVIOUSLY APPROVED PROJECTS INCLUDING SPR # 111-13 (48 DUNHAM RIDGE), SPR # 112-14 (52 DUNHAM RIDGE), SPR # 126-16 (54 DUNHAM RIDGE, SPR # 136-18 (42 DUNHAM RIDGE), AND THE CURRENT APPLICATION FOR 44 DUNHAM RIDGE.

a. PER 521 CMR SECTION 23.2.1

b. TOTAL INCLUDED IN SURFACE & STRUCTURED SPACE COUNT

c. CURRENT FRONTAGE OF PRE-EXISTING NON-CONFORMING LOT

d. SEE SPECIAL PERMITS (#138-14) AND (#169-18) FOR DEVIATION TO REDUCE THE NUMBER OF PARKING SPACES

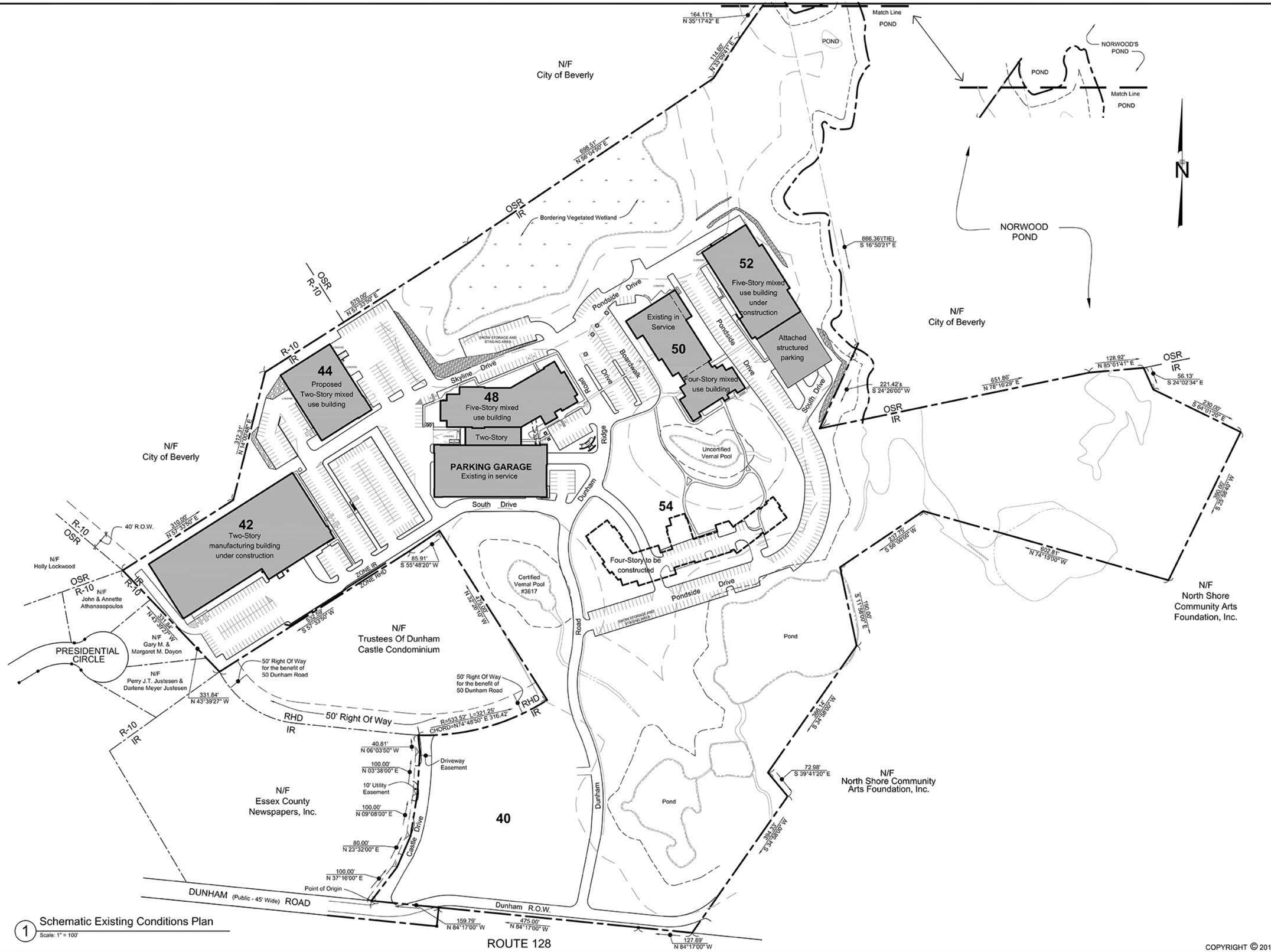
e. APPLICANT RECEIVED VARIANCE FROM THE ZONING BOARD OF APPEALS ON AUGUST 23, 2018 TO INCREASE THE BUILDING HEIGHT OF 52 DUNHAM RIDGE AS INDICATED

Issued for Site Plan Review

February 8, 2019

LIST OF DRAWINGS

SHEET NO.	TITLE	DATE ISSUED
----	TITLE SHEET	2/8/19
C-1	SCHEMATIC PROPOSED CONDITIONS PLAN	2/8/19
C-2	LAYOUT AND MATERIALS PLAN	2/8/19
C-3	GRADING AND DRAINAGE PLAN	2/8/19
C-3.1	STORMWATER MANAGEMENT DETAILS	2/8/19
C-3.2	CONSTRUCTION DETAILS	2/8/19
C-4	SCHEMATIC UTILITY PLAN	2/8/19
C-5	SCHEMATIC LANDSCAPE PLAN	2/8/19
A-1	SCHEMATIC EXTERIOR ELEVATIONS	2/8/19



1 Schematic Existing Conditions Plan
Scale: 1" = 100'

COPYRIGHT © 2018

COMMONWEALTH OF MASSACHUSETTS
MARK A. SLEGER
No. 34407
REGISTERED PROFESSIONAL ENGINEER
2/8/2019

0 100' 200' 300'
SCALE IN FEET

PREPARED FOR:
DUNHAM RIDGE, LLC
200 WEST CUMMINGS PARK
WOBURN, MA

#	REVISIONS	DATE

PLAN TO ACCOMPANY
SPR APPLICATION

50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

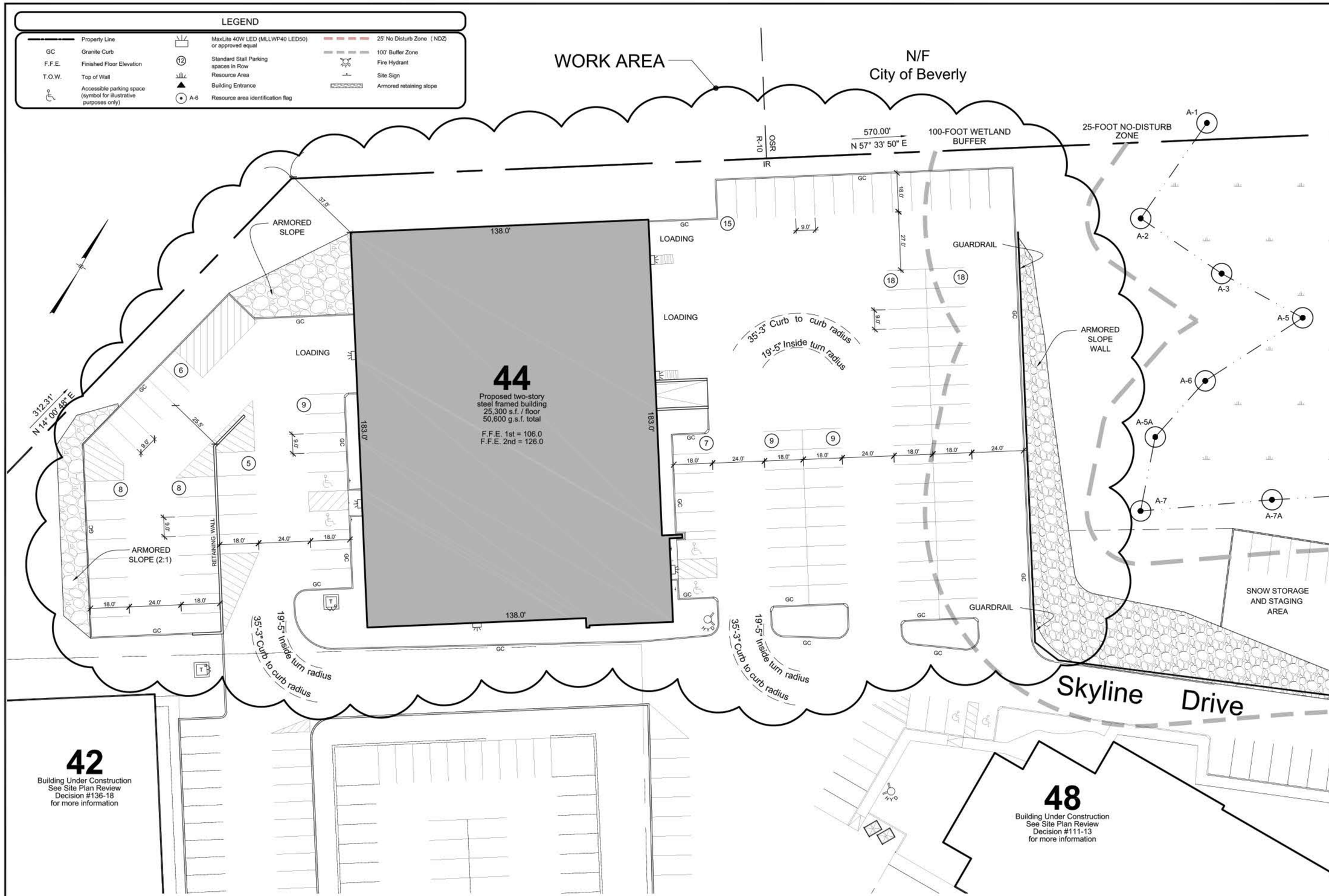
ALAN
ENGINEERING, L.L.C.
110 WINN STREET, SUITE 209
WOBURN, MA 01801
(781) 287-9789
alan.eng@verizon.net

SCHEMATIC PROPOSED
CONDITIONS PLAN

JOB NO: 1102	DWG NO: 1701
DATE: FEBRUARY 8, 2019	C-1
SCALE: AS NOTED	

LEGEND

	Property Line		MaxLite 40W LED (MLLWP40 LED50) or approved equal		25' No Disturb Zone (NDZ)
GC	Granite Curb				100' Buffer Zone
F.F.E.	Finished Floor Elevation	12	Standard Stall Parking spaces in Row		Fire Hydrant
T.O.W.	Top of Wall		Resource Area		Site Sign
	Accessible parking space (symbol for illustrative purposes only)		Building Entrance		Armored retaining slope
		A-6	Resource area identification flag		



1 Layout and Materials Plan
Scale: 1" = 20'

GENERAL NOTES

General Notes:

1. Bordering Vegetated Wetlands, Ponds, respective buffers, 'A' Series wetland flags and 'No Disturb Zone' information shown is based on a plan titled "Plan to Accompany ANRAD" by Hancock Associates revised through June 19, 2012; and ORAD issued by City of Beverly - Conservation Commission dated July 10, 2012.

2. See also 50 Dunham Road Exhibit Plan dated December 17, 2015 and associated Amended ORAD dated January 25, 2016 for additional information.

3. Existing conditions shown on this plan are based on a field surveys performed in October 2016 and September 2018.

COMMONWEALTH OF MASSACHUSETTS
MARK A. SLUSER
No. 34407
REGISTERED PROFESSIONAL ENGINEER
2/8/2019

0 20' 40' 60'
SCALE IN FEET

PREPARED FOR:
DUNHAM RIDGE, LLC
200 WEST CUMMINGS PARK
WOBURN, MA

#	REVISIONS	DATE

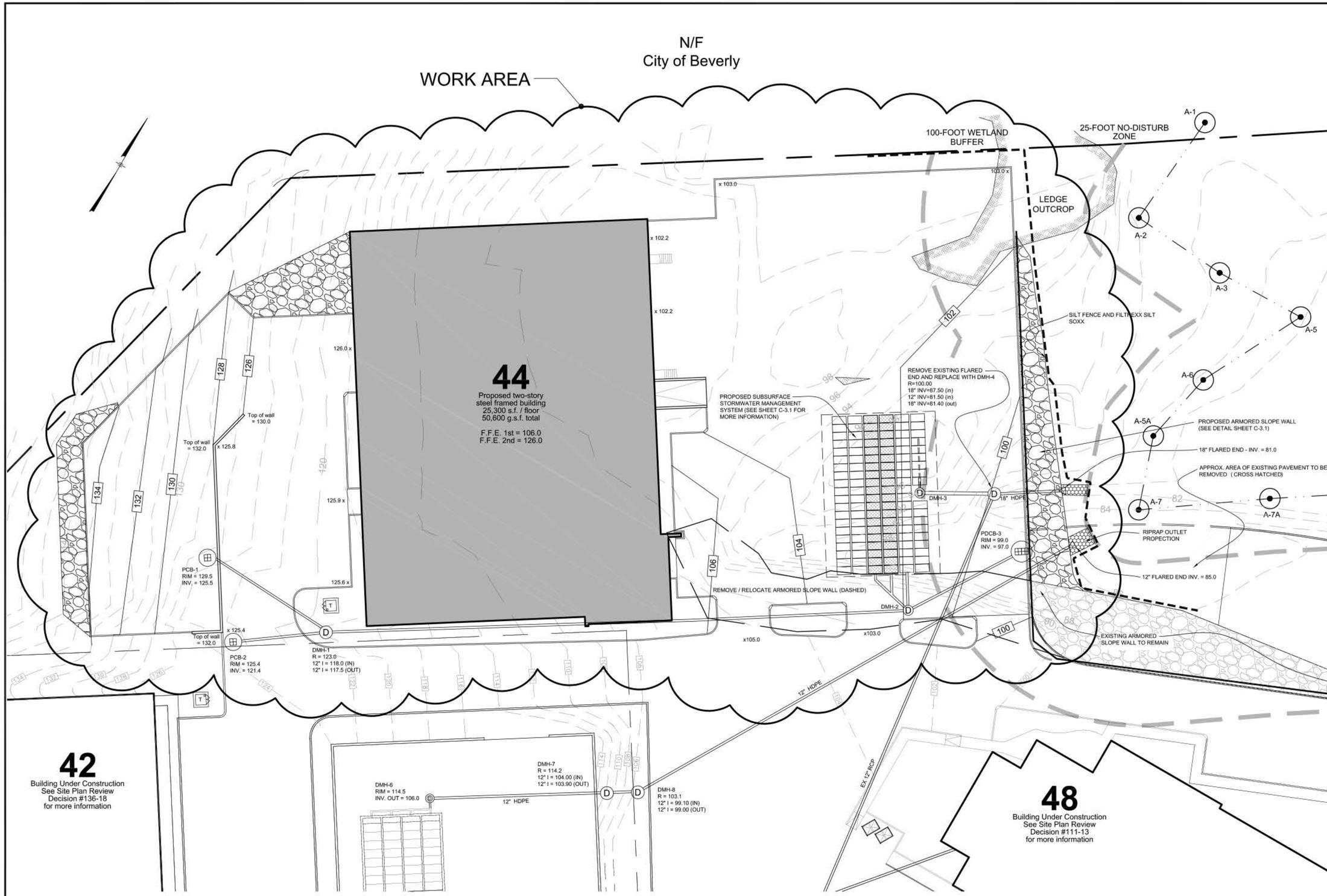
PLAN TO ACCOMPANY
SPR APPLICATION
50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

ALAN
ENGINEERING, L.L.C.
110 WINN STREET, SUITE 209
WOBURN, MA 01801
(781) 287-9789
alan.eng@verizon.net

LAYOUT AND
MATERIALS PLAN

JOB NO: 1102	DWG NO: 1701
DATE: FEBRUARY 8, 2019	C-2
SCALE: AS NOTED	

COPYRIGHT © 2019



1 Grading and Drainage Plan
Scale: 1" = 20'

GENERAL NOTES

General Notes:

1. Bordering Vegetated Wetlands, Ponds, respective buffers, 'A' Series wetland flags and 'No Disturb Zone' information shown is based on a plan titled "Plan to Accompany ANRAD" by Hancock Associates revised through June 19, 2012; and ORAD issued by City of Beverly - Conservation Commission dated July 10, 2012.

2. See also 50 Dunham Road Exhibit Plan dated December 17, 2015 and associated Amended ORAD dated January 25, 2016 for additional information.

3. Existing conditions shown on this plan are based on a field surveys performed in October 2016 and September 2018.

4. This work is subject to an Order of Conditions issued by the Beverly Conservation Commission. See MassDEP File # 5-1257.

COMMONWEALTH OF MASSACHUSETTS
MARK SLEGER
No. 34407
REGISTERED PROFESSIONAL ENGINEER
2/8/2019

0 20' 40' 60'
SCALE IN FEET

PREPARED FOR:
DUNHAM RIDGE, LLC
200 WEST CUMMINGS PARK
WOBURN, MA

#	REVISIONS	DATE

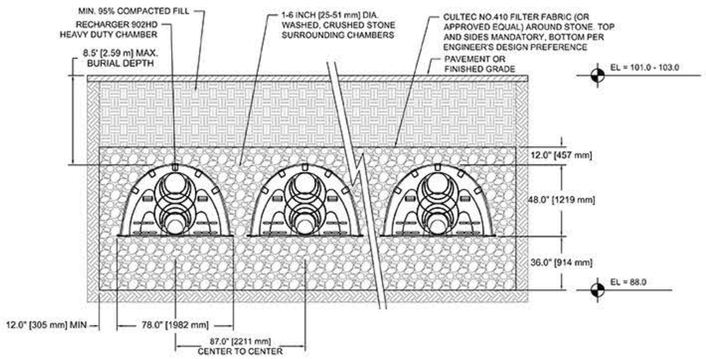
PLAN TO ACCOMPANY
SPR APPLICATION
50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

ALAN
ENGINEERING, L.L.C.
110 WINN STREET, SUITE 209
WOBURN, MA 01801
(781) 287-9789
alan.eng@verizon.net

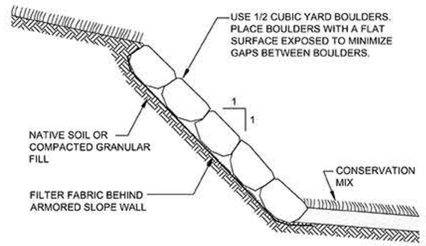
GRADING AND
DRAINAGE PLAN

JOB NO: 1102	DWG NO: 1701
DATE: FEBRUARY 8, 2019	C-3
SCALE: 1" = 20'	

COPYRIGHT © 2019

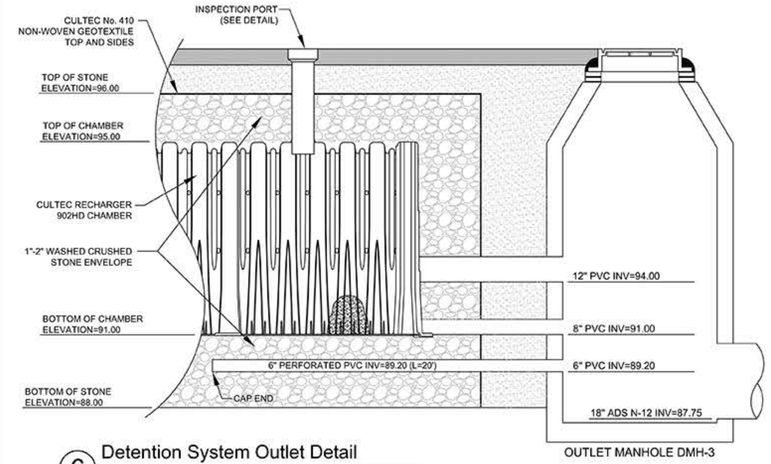


2 Subsurface Stormwater Management System Cross Section
Not to scale

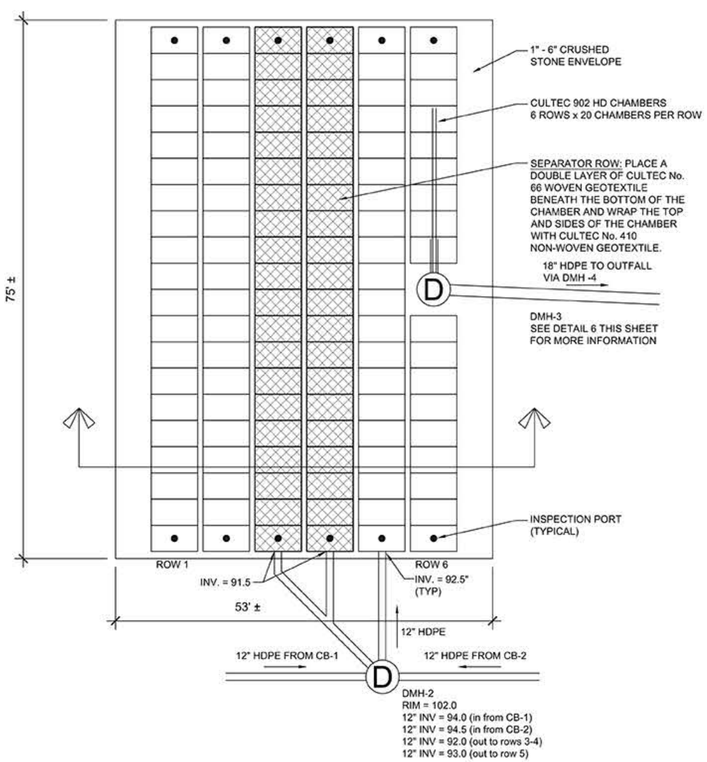


CONSTRUCTION NOTE:
REMOVE ALL TOP AND SUBSOIL FROM SLOPE AREA. IF FILL MATERIAL IS NEEDED TO ACHIEVE SUBGRADE ELEVATION USE WELL-GRADED GRANULAR FILL COMPACTED IN 6-INCH LIFTS.

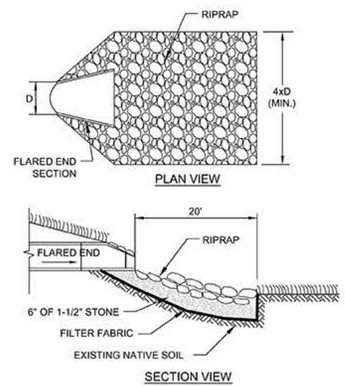
5 Armored Slope Detail
Not to scale



6 Detention System Outlet Detail
Not to scale

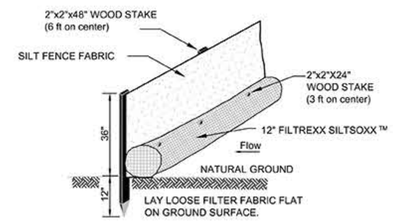


1 Subsurface Stormwater Management System Plan
Not to scale



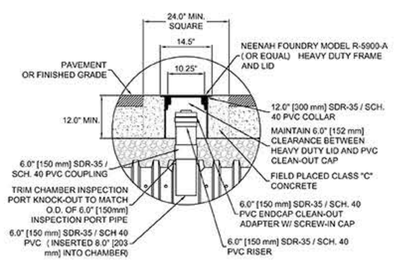
NOTES:
RIPRAP IS TO BE HARD DURABLE ANGULAR STONES RANGING IN SIZE FROM 4 INCHES TO 6 INCHES.

4 Flared End Section Detail
Not to scale



NOTES:
1. INSTALL SILT FENCE FIRST LEAVING APPROXIMATELY 6-12 INCHES OF EXTRA FILTER FABRIC AT BOTTOM.
2. SECURE SILT FENCE FABRIC TO WOOD STAKES WITH STAPLES EVERY 6 INCHES.
3. LAY LOOSE FILTER FABRIC FLAT ON GROUND UPHILL FROM SILT FENCE AND PLACE FILTREXX SILTSOXX ™ ON TOP OF IT.
4. SECURE FILTREXX SILTSOXX ™ TO GROUND WITH WOOD STAKES.

7 Erosion and Sediment Control Detail
Not to scale



3 Inspection Port Detail
Not to scale

COPYRIGHT © 2019

PREPARED FOR:
DUNHAM RIDGE, LLC
200 WEST CUMMINGS PARK
WOBURN, MA

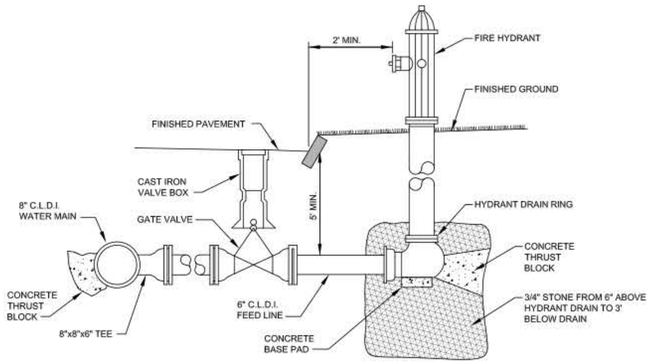
#	REVISIONS	DATE

PLAN TO ACCOMPANY SPR APPLICATION
50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

ALAN ENGINEERING, L.L.C.
110 WINN STREET, SUITE 209
WOBURN, MA 01801
(781) 287-9789
alan.eng@verizon.net

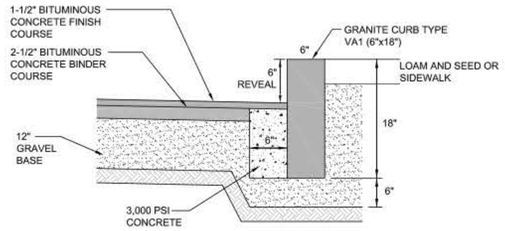
STORMWATER MANAGEMENT DETAILS

JOB NO: 1102
DWG NO: 1701
DATE: FEBRUARY 8, 2019
SCALE: AS NOTED
C-3.1



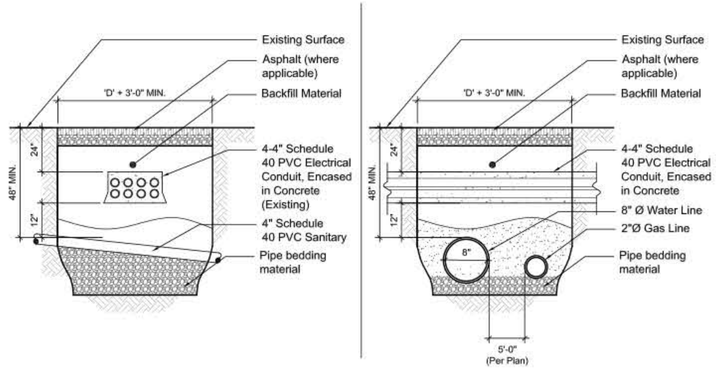
7 Hydrant Connection Detail

Not to scale



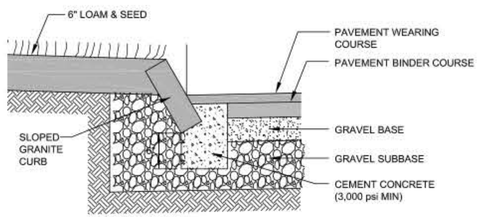
4 Vertical Granite Curb Detail

Not to scale



1 Utility Trench / Crossing Detail

Not to scale

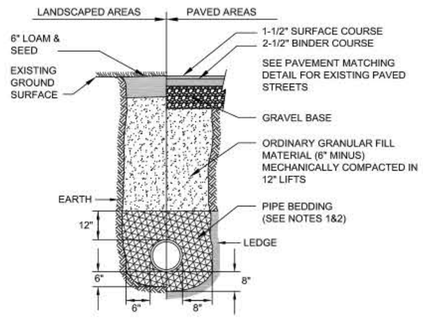


GRANITE CURBING NOTES:

1. GRAVEL SUBBASE AND CURB BACKING TO BE PLACED AND COMPACTED PRIOR TO SETTING GRANITE CURB.
2. BITUMINOUS CONCRETE IS NOT TO BE USED IN PLACE OF CEMENT CONCRETE.
3. GRANITE CURBING IS TO TYPE SB WITH THE FOLLOWING MINIMUM DIMENSIONS:
   MAX LENGTH = 10' MIN LENGTH = 3' THICKNESS = 6"-8"
4. CEMENT CONCRETE IS TO BE PLACED 1/2" BELOW THE LEVEL OF THE BINDER COURSE TO FORM A LIP.

5 Sloped Granite Curb Detail

Not to scale

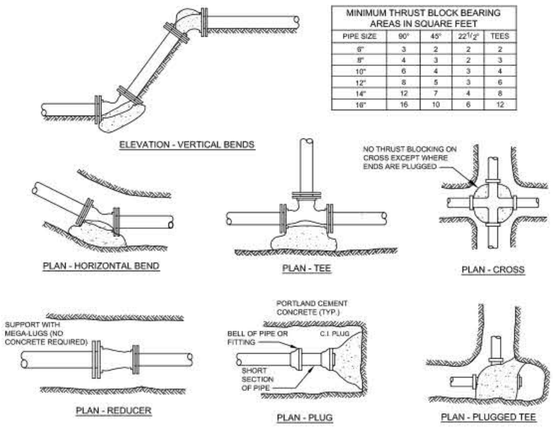


NOTES:

1. PIPE BEDDING MATERIAL TO BE AS FOLLOWS:
   - FOR CLDI WATER MAINS USE SAND
   - FOR PVC AND HDPE PIPING USE 3/4" CRUSHED STONE
   - FOR RCP USE SUITABLE GRANULAR FILL (2" MINUS)
2. FOR ANTI-SEEP COLLAR SUBSTITUTE BEDDING MATERIAL WITH BENTONITE FOR A DISTANCE OF 24 INCHES ALONG THE TRENCH.

6 Typical Trench Section

Not to scale



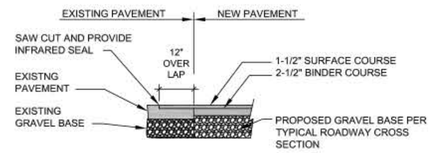
MINIMUM THRUST BLOCK BEARING AREAS IN SQUARE FEET				
PIPE SIZE	90°	45°	22 1/2°	TEES
6"	3	2	2	2
8"	4	3	2	3
10"	6	4	3	4
12"	8	5	3	6
14"	12	7	4	8
16"	16	10	6	12

NOTES:

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE SPCIFICATIONS OF THE BEVERLY WATER DEPARTMENT.
2. CONCRETE SHALL BE 3,000 PSI MINIMUM AT 28 DAYS.
3. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED EARTH.
4. ALL FITTINGS (EXCEPT AS INDICATED) SHALL BE SUPPORTED AND ANCHORED IN CONCRETE AND WITH "MEGALUG JOINT RESTRAINTS" OR APPROVED EQUAL.
5. FOR FIRE HYDRANT THRUSTING SEE HYDRANT CONNECTION DETAIL.
6. POURED CONCRETE SHALL BE KEPT 6" CLEAR OF MECHANICAL JOINTS TO ALLOW FOR FUTURE REPAIR OR REMOVAL.
7. RETAINER GLANDS REQUIRED ON ALL BENDS.
8. ALL MECHANICAL JOINT GLANDS SHALL BE WEDGE-ACTION LOCKING RESTRAINT TYPE.
9. BELL ENDS OF PUSH-ON PIPE WITHIN 30 FEET OF THE TERMINATION OF THE WATER MAIN OR EITHER SIDE OF A 90-DEGREE BEND SHALL BE MECHANICALLY RESTRAINED. (FIELD-LOC GASKETS, RODS AND RESTRAINT CLAMPS OF SET SCREW PLUG)
10. BRONZE CONDUCTIVITY WEDGES (2) SHALL BE INSTALLED AT EACH BELL JOINT.
11. THE TAPPING SLEEVE SHALL BE ALL STAINLESS STEEL WRAP-AROUND TYPE.

2 Water Main Details

Not to scale



3 Pavement Matching Detail

Not to scale

COPYRIGHT © 2019

COMMONWEALTH OF MASSACHUSETTS
MARK A. SLEGER
No. 34407
REGISTERED PROFESSIONAL ENGINEER
2/8/2019

PREPARED FOR:
DUNHAM RIDGE, LLC
200 WEST CUMMINGS PARK
WOBURN, MA

#	REVISIONS	DATE

PLAN TO ACCOMPANY SPR APPLICATION

50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

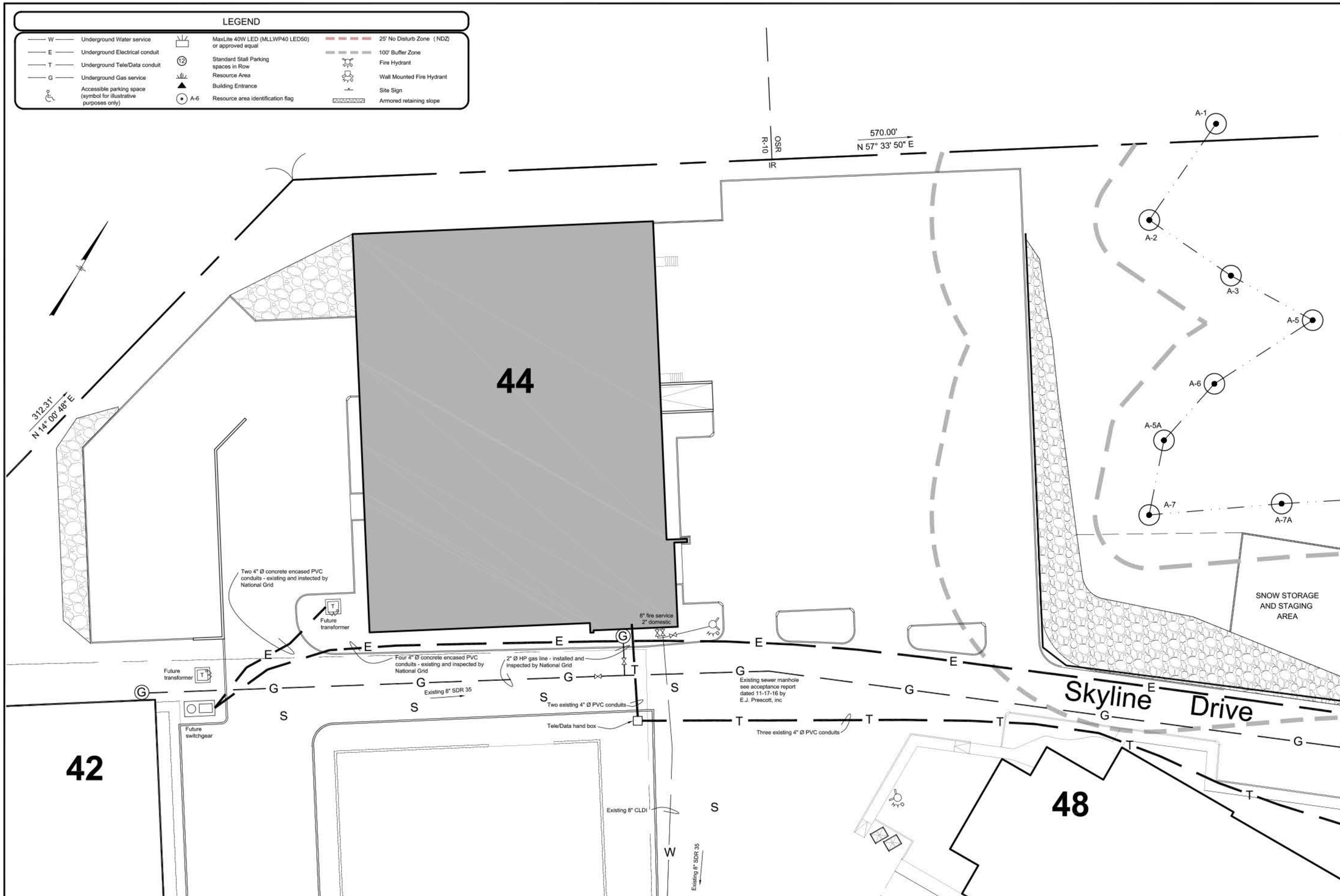
ALAN ENGINEERING, L.L.C.
110 WINN STREET, SUITE 209
WOBURN, MA 01801
(781) 287-9789
alan.eng@verizon.net

CONSTRUCTION DETAILS

JOB NO: 1102	DWG NO: 1701
DATE: FEBRUARY 8, 2019	C-3.2
SCALE: AS NOTED	

LEGEND

—— W ——	Underground Water service		MaxLite 40W LED (MLLWP40 LED50) or approved equal		25' No Disturb Zone (NDZ)
—— E ——	Underground Electrical conduit				100' Buffer Zone
—— T ——	Underground Tele/Data conduit	(12)	Standard Stall Parking spaces in Row		Fire Hydrant
—— G ——	Underground Gas service		Resource Area		Wall Mounted Fire Hydrant
	Accessible parking space (symbol for illustrative purposes only)		Building Entrance		Site Sign
		(A-6)	Resource area identification flag		Armored retaining slope



1 Schematic Utility Plan
Scale: 1" = 20'

COMMONWEALTH OF MASSACHUSETTS
MARK A. SLEGER
No. 34407
REGISTERED PROFESSIONAL ENGINEER
2/8/2019

0 20' 40' 60'
SCALE IN FEET

PREPARED FOR:
DUNHAM RIDGE, LLC
200 WEST CUMMINGS PARK
WOBURN, MA

#	REVISIONS	DATE

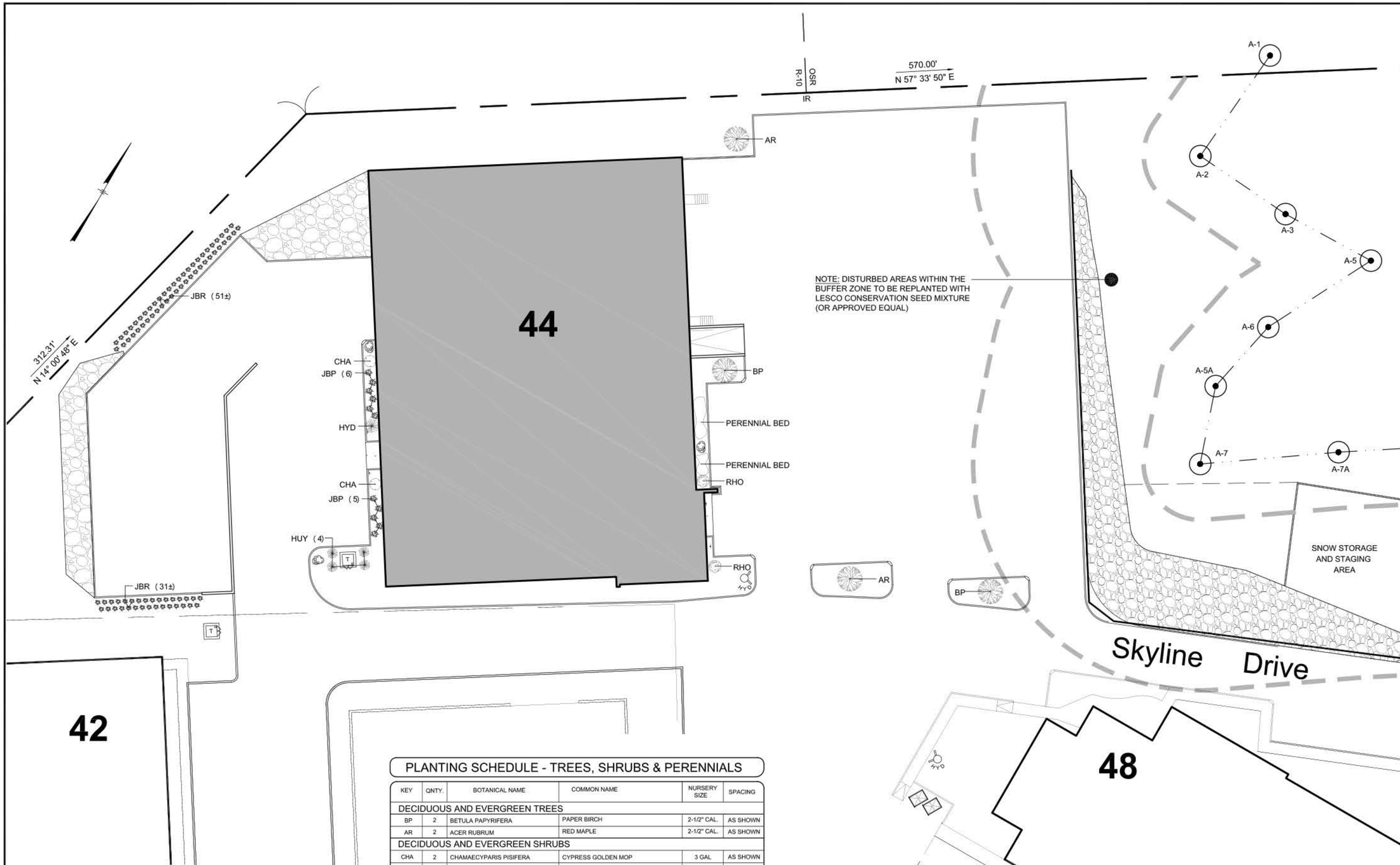
PLAN TO ACCOMPANY
SPR APPLICATION
50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

ALAN
ENGINEERING, L.L.C.
110 WINN STREET, SUITE 209
WOBURN, MA 01801
(781) 287-9789
alan.eng@verizon.net

SCHEMATIC
UTILITY PLAN

JOB NO: 1102	DWG NO: 1701
DATE: FEBRUARY 8, 2019	C-4
SCALE: AS NOTED	

COPYRIGHT © 2019



PLANTING SCHEDULE - TREES, SHRUBS & PERENNIALS

KEY	QNTY.	BOTANICAL NAME	COMMON NAME	NURSERY SIZE	SPACING
DECIDUOUS AND EVERGREEN TREES					
BP	2	BETULA PAPYRIFERA	PAPER BIRCH	2-1/2" CAL.	AS SHOWN
AR	2	ACER RUBRUM	RED MAPLE	2-1/2" CAL.	AS SHOWN
DECIDUOUS AND EVERGREEN SHRUBS					
CHA	2	CHAMAECYPARIS PISIFERA	CYPRESS GOLDEN MOP	3 GAL	AS SHOWN
HUY	4	TAXUS X MEDIA HICKSII	HICKS UPRIGHT YEW	2.5 - 3'	AS SHOWN
HYD	1	HYDRANGEA MACROPHYLLA	HYDRANGEA - 'ENDLESS SUMMER'	3 GAL	AS SHOWN
JBP	11	JUNIPERUS CONFERTA	BLUE PACIFIC JUNIPER	3 GAL	AS SHOWN
JBR	82	JUNIPERUS HORIZONTALIS WILTONII	WILTON CARPET JUNIPER	1 GAL	AS SHOWN
RHO	17	RHODODENDRON CATAWBIENSE	RHODODENDRON - 'ENGLISH ROSEUM'	3 GAL	AS SHOWN
PERENNIALS (Not shown for clarity)					
	20±	CALAMAGROSTIS ACUTIFLORA	FEATHER REED GRASS 'KARL FOERSTER'	1 GAL	24" O.C.
	20±	HOSTA (VARIEGATED) PATRIOT	HOSTA 'CHANTILLY LACE'	1 GAL	18" O.C.
	20±	PEROVSKIA ATRIPLICIOLIA	DAY LILLY 'HAPPY RETURNS'	1 GAL	18" O.C.
	20±	SALVIA NEMEROSA 'EAST FRIESLAND'	SALVIA MEADOW SAGE	1 GAL	18" O.C.

1 Schematic Landscape Plan
Scale: 1" = 20'

COPYRIGHT © 2019

COMMONWEALTH OF MASSACHUSETTS
MARK A. SLEGER
No. 34407
REGISTERED PROFESSIONAL ENGINEER
2/8/2019

0 20' 40' 60'
SCALE IN FEET

PREPARED FOR:
DUNHAM RIDGE, LLC
200 WEST CUMMINGS PARK
WOBURN, MA

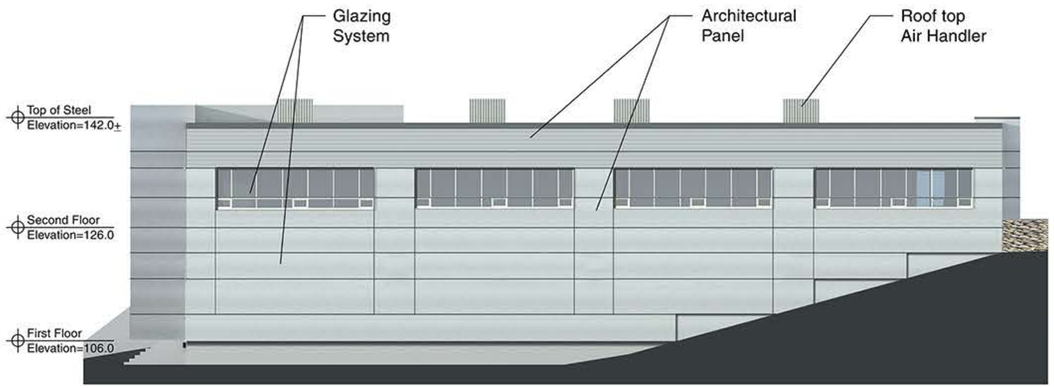
#	REVISIONS	DATE

PLAN TO ACCOMPANY
SPR APPLICATION
50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

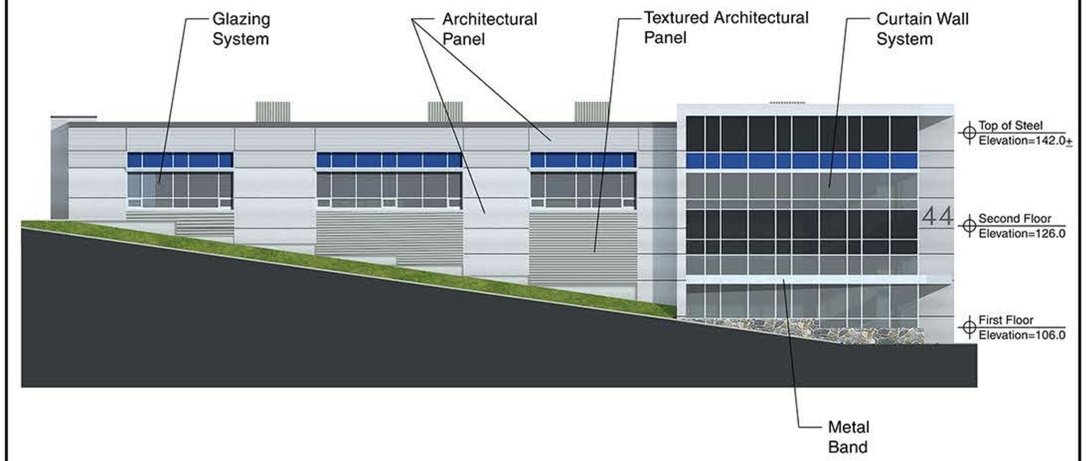
ALAN
ENGINEERING, L.L.C.
110 WINN STREET, SUITE 209
WOBURN, MA 01801
(781) 287-9789
alan.eng@verizon.net

SCHEMATIC
LANDSCAPE PLAN

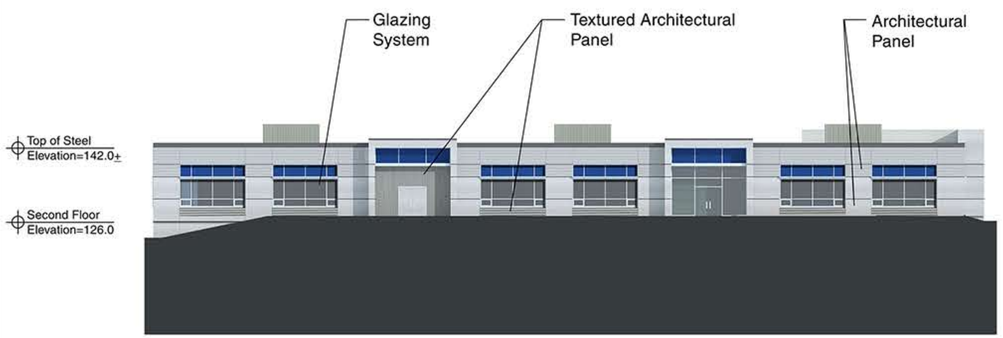
JOB NO: 1102
DWG NO: 1701
DATE: FEBRUARY 8, 2019
SCALE: AS NOTED
C-5



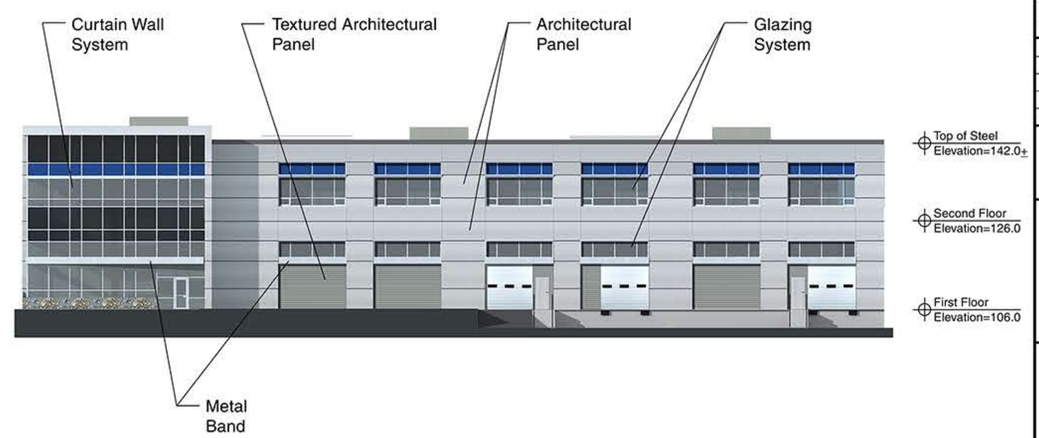
1 North Elevation



2 South Elevation

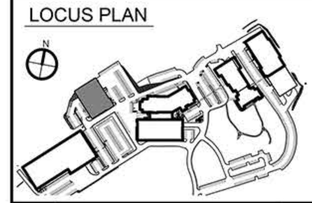


3 West Elevation



4 East Elevation

LOCUS PLAN



REV. #	DESCRIPTION	DATE

Cummings Properties
200 West Cummings Park, Woburn, MA 01801 (781) 935-8000

STAMP:

ARCHITECT:
Michael A. Aveni
Atlantic Boston Construction Inc.
200 West Cummings Park
Woburn, MA 01801

SCALE: NTS
DRAWN: TAL
CHK'D: MAA
DATE: 2.8.19

PLAN TO ACCOMPANY
SPR APPLICATION

50 DUNHAM ROAD
44 DUNHAM RIDGE
BEVERLY, MA

CAD FILE NAME:
J:\CPKI_CAD\BEVERLY\44 Dunham\Speculative Building Approvals\2019 SPI sube

W.O. #:

DUE DATE:

DRAWING #:
A-1