

REV	DATE	DESCRIPTION

APPLICANT/OWNER:

ORION UNH LLC

225 FRANKLIN STREET, 26TH FLOOR

BOSTON, MA 02110

PROJECT:

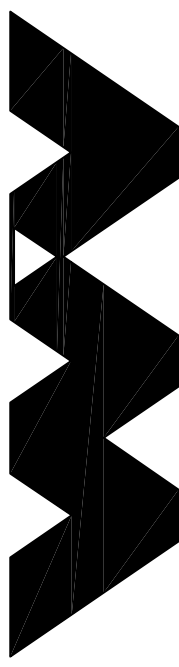
ORION

STUDENT HOUSING

25/35 MAIN STREET

DURHAM, NEW HAMPSHIRE

PROJECT NO.	192501	DATE:	06/09/14
SCALE:	1" = 20'	DWG. NAME:	GRADING
DRAFTED BY:	SM	CHECKED BY:	RPC
PREPARED BY:			



ALLEN & MAJOR

ASSOCIATES, INC.

civil & structural engineering • land surveying

environmental consulting • landscape architecture

w w w . a l l e n a n d m a j o r . c o m

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DRAWING TITLE: GRADING & DRAINAGE PLAN

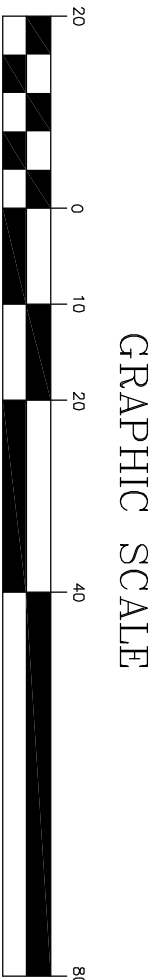
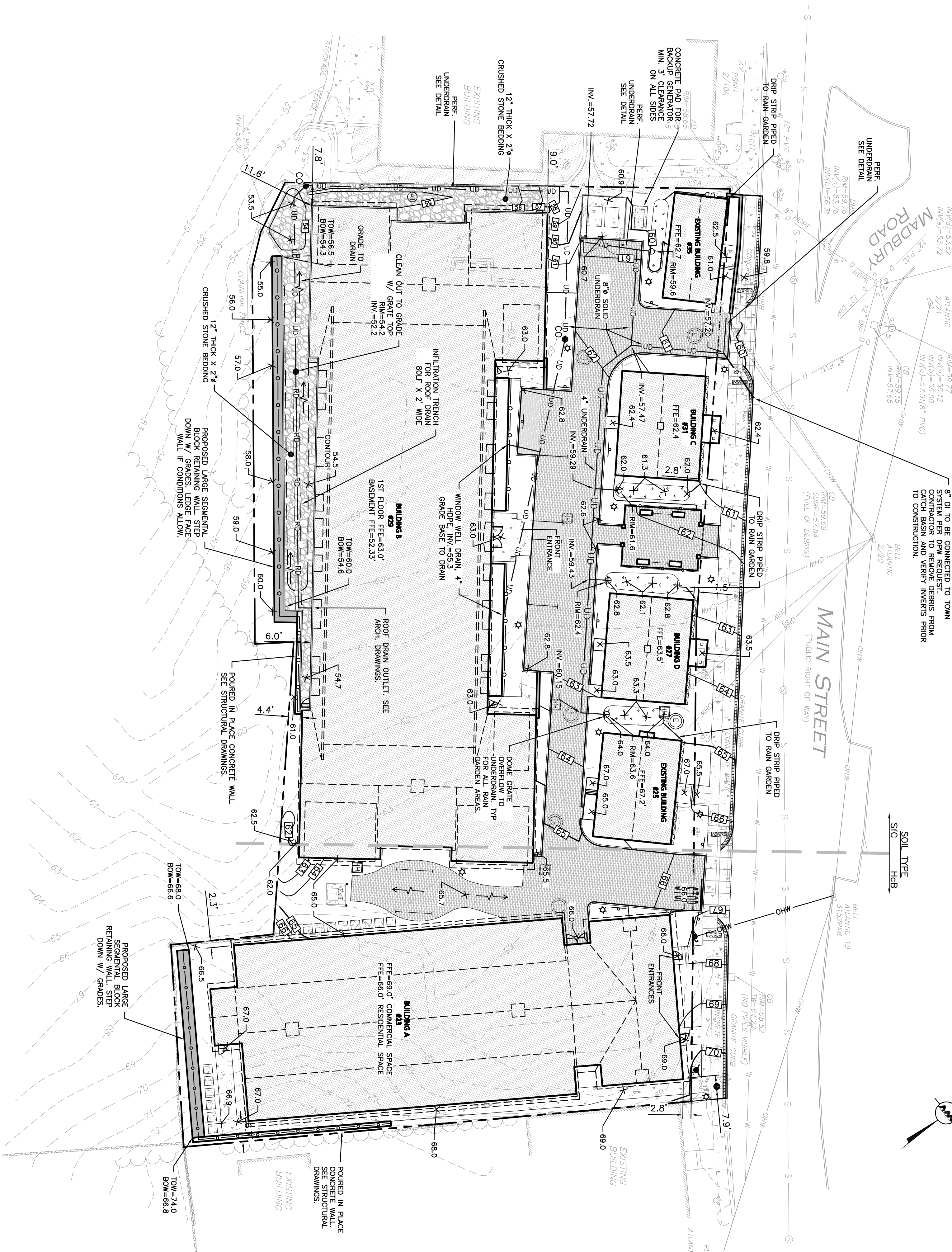
SHEET NO. C-2

LEGEND:

DRAIN MANHOLE	
DRAIN LINE	
5" CONTOUR	
1' CONTOUR	
SPOT GRADE	
ROOF DRAIN	
UNDERDRAIN	
SOS SOILS BOUNDARY	

GRADING & DRAINAGE NOTES:

- VERTICAL DATUM IS NAVD83.
- 8 FOOT DIAMETER DRAIN MANHOLES AND CATCH BASINS MAY BE NECESSARY DURING STORM DRAINAGE INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
- ALL PROPOSED CATCH BASINS ON-SITE SHALL BE EQUIPPED WITH HOODS AND 4 FOOT SLUICES AND SHALL CONFORM TO THE TOWN OF DURHAM STANDARDS. EXISTING CATCH BASINS TO REMAIN SHALL BE EQUIPPED WITH HOODS.
- ALL NEW ROOF DRAINAGE PIPES SHALL BE SDR 35 PVC, SIZED AS NOTED ON THE PLANS, TURNED UP ABOVE GRADE AND BE TERMINATED WITH A FITTING SPECIFICALLY DESIGNED TO RECEIVE A RECTANGULAR DOWNSPOUT.
- A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER SERVICES CROSS STORM DRAIN LINES. WATER SERVICES SHALL BE ENCASED IN CONCRETE REGARDLESS OF CLEARANCE WHEN PASSING BELOW STORM DRAIN LINES. EXISTING WATER SERVICES SHALL BE PROTECTED BY A MINIMUM OF 18" VERTICAL CLEARANCE. THE OTHER PIPE AS MENTIONED NORMALLY FROM ALL POINTS ALONG THE PIPE.
- ALL PROPOSED DRAINAGE SHALL CONFORM TO TOWN OF DURHAM STANDARDS.
- ALL SERVICE CONNECTIONS (I.E. ROOF DRAINS) SHALL BE INSTALLED TO THE BUILDING WALL AND TURNED UP ABOVE GRADE UNLESS OTHERWISE NOTED OR DETAILED.
- ALL GRADY DRAINAGE PIPE SYSTEMS ARE TO BE CONSTRUCTED BEGINNING AT THE LOWEST POINT IN THE SYSTEM AND PROCEEDING TO THE HIGHEST POINT.
- UNLESS OTHERWISE NOTED, ALL EXISTING DRAINAGE STRUCTURES AND PIPES SHALL BE REMOVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ALL DRAINAGE STRUCTURES ON SITE PRIOR TO COMPLETION OF PROJECT.
- ALL DRAIN, WATER AND SANITARY SEWER PIPES INSTALLED WITHIN 10 FEET OF THE FOUNDATION SHALL ALSO BE PERMITTED AND INSTALLED BY A NEW HAMPSHIRE LICENSED PLUMBER.
- CONTRACTOR/OWNER TO OBTAIN TEMPORARY CONSTRUCTION EASEMENT IN ORDER TO CONSTRUCT PROPOSED WALLS ON WEST, SOUTH, AND EAST PROPERTY LINES.
- ALL STORMWATER MANAGEMENT INFRASTRUCTURE SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH DESIGN STANDARDS OF THE DURHAM SITE PLAN REVIEW REGULATIONS. THE INFRASTRUCTURE SHALL BE OWNED BY THE PROPERTY OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS TO PROTECT THE QUALITY OF ON-SITE AND OFF-SITE WATER RESOURCES AND WETLAND HABITAT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS AND SPECIFICATIONS AND TO NOTIFY THE ENGINEER AND/OR ARCHITECT PRIOR TO START OF CONSTRUCTION SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DRAWINGS, SPECIFICATIONS, OR RELATIVE CODES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT PRIOR TO START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT SHALL BE CONSIDERED A BREACH OF CONTRACT AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT THE DEFECTIVE WORK AND/OR REBUILT PART OF THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- THE DESIGN ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR DESIGN OF THE DRAINAGE SYSTEMS AND FOR THE CONSTRUCTION OF THE SAME, AND/OR THE DESIGN ENGINEER'S NEGLIGENCE OR FOR ANY PROBLEMS WHICH MAY ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF THE DESIGN ENGINEER WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF THE CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY ALLEN & MAJOR ASSOCIATES DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, SUBCONTRACTORS, OR THE GENERAL PUBLIC. THE CONTRACTOR OF THE ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE STATE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE, AND LOCAL REGULATIONS.



( IN FEET )

1 inch = 20 ft.