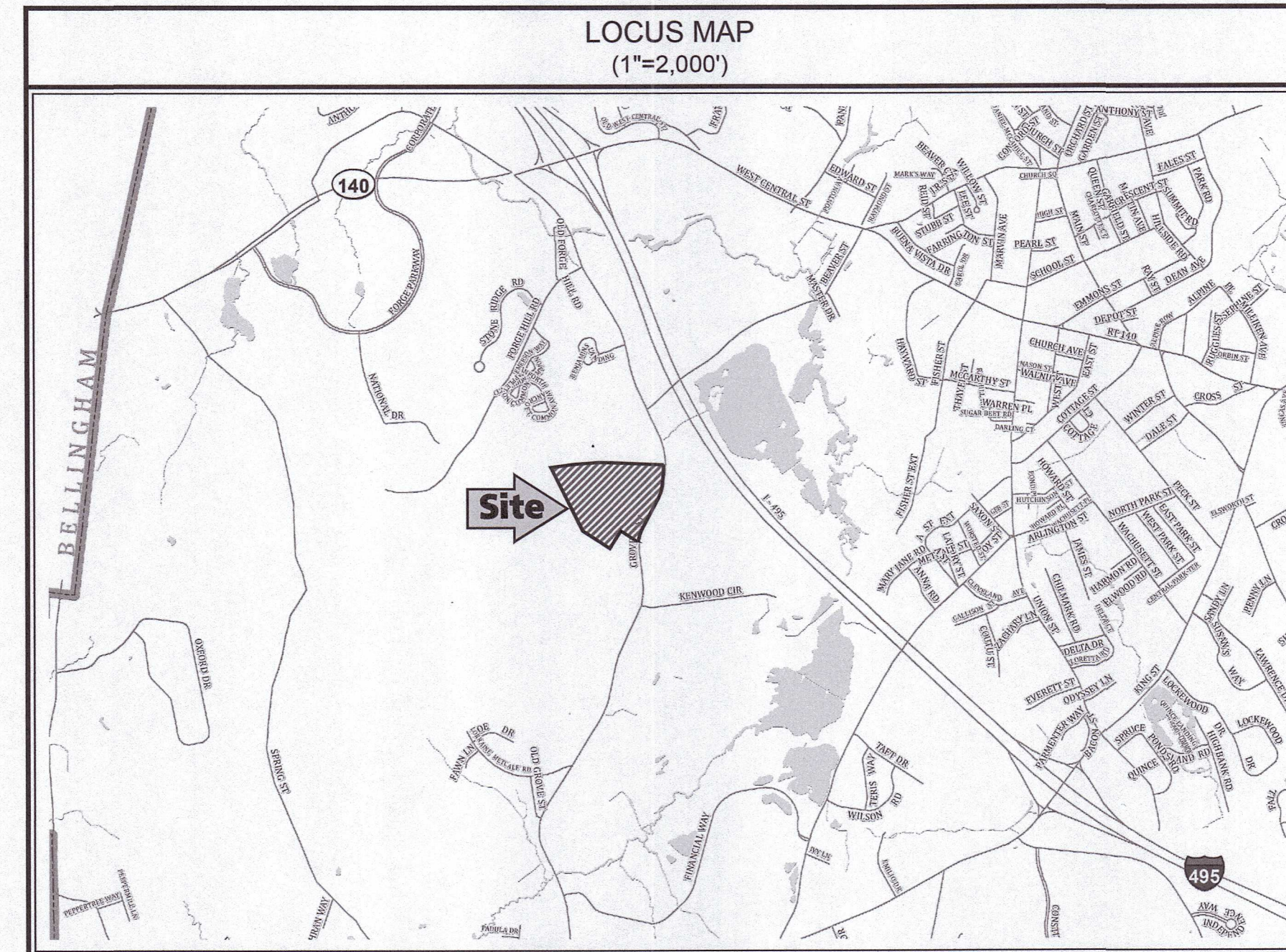


# GROVE STREET RESIDENCES

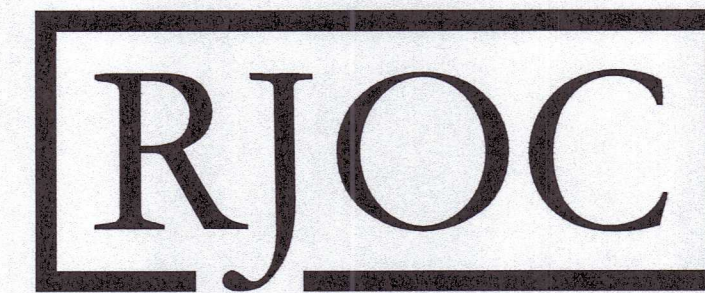
## 121 GROVE STREET - FRANKLIN, MA

DRAWING INDEX			
DRAWING DATE	LAST REVISION	DRAWING	DRAWING DESCRIPTION
10/30/2023	12/18/2023	C-0	COVER SHEET
05/25/2022	11/09/2023	1 OF 1	EXISTING CONDITIONS SITE PLAN (PREPARED BY GUERRIERE & HALNON, INC.)
10/30/2023	12/18/2023	OS-1	OVERALL SITE PLAN
10/30/2023	12/18/2023	C-1A	DEMOLITION AND EROSION CONTROL PLAN
10/30/2023	12/18/2023	C-1B	DEMOLITION AND EROSION CONTROL PLAN
10/30/2023	12/18/2023	C-2A	GRADING AND DRAINAGE PLAN
10/30/2023	12/18/2023	C-2B	GRADING AND DRAINAGE PLAN
12/18/2023	-	C-2C	WETLAND REPLICATION PLAN
10/30/2023	12/18/2023	C-3A	UTILITY PLAN
10/30/2023	12/18/2023	C-3B	UTILITY PLAN
10/30/2023	12/18/2023	C-4A	PARKING AND TRAFFIC CONTROL PLAN
10/30/2023	12/18/2023	C-4B	PARKING AND TRAFFIC CONTROL PLAN
10/30/2023	12/18/2023	C-5	SITE DETAILS - I
10/30/2023	12/18/2023	C-6	SITE DETAILS - II
10/30/2023	12/18/2023	C-7	SITE DETAILS - III
10/30/2023	12/18/2023	C-8	SITE DETAILS - IV
10/30/2023	12/18/2023	C-9	SITE DETAILS - V
10/30/2023	12/18/2023	C-10	SITE DETAILS - VI
10/30/2023	12/18/2023	C-11	SITE DETAILS - VII
10/30/2023	12/18/2023	C-12	SITE DETAILS - VIII
10/30/2023	12/18/2023	FT-1	FIRE TRUCK TURNING PLAN
10/30/2023	12/18/2023	L100-L103	LANDSCAPING PLANTING PLANS
10/30/2023	12/18/2023	L200-L203	LANDSCAPE LIGHTING PLAN
10/30/2023	12/18/2023	L300	LANDSCAPE DETAILS
10/30/2023	12/18/2023	L400-L403	LANDSCAPE PHOTOMETRIC PLANS



DESIGN TEAM	
<b>CIVIL ENGINEERING:</b> RJ O'CONNELL & ASSOCIATES, INC. 80 MONTVALE AVENUE SUITE 201 STONEHAM, MA 02180 ATTN: BRIAN DUNDON, P.E. PHONE: (781) 279-0180	<b>MANAGEMENT CONSULTANT:</b> SHIPE CONSULTING P.O. BOX 1217 CONCORD, MA 01742 ATTN: JOHN SHIPE, P.E. PHONE: (978) 857-8877
<b>SURVEY:</b> GUERRIERE & HALNON, INC. 55 WEST CENTRAL STREET FRANKLIN, MA 02038 ATTN: DONALD R. NIELSON, B.S.E.T., OFFICE MANAGER PHONE: (508) 528-3221	<b>WETLANDS:</b> LUCAS ENVIRONMENTAL, LLC 500A WASHINGTON STREET QUINCY, MA 02169 ATTN: CHRISTOPHER M. LUCAS, PRINCIPAL, PWS, CWS, RPSS CERTIFIED WETLAND SCIENTIST/ PROFESSIONAL SOIL SCIENTIST PHONE: (617) 405-4140
<b>LEGAL:</b> CORNETTA, FICCO & SIMMLER, P.C. 4 WEST STREET FRANKLIN, MA 02038 ATTN: RICHARD CORNETTA, JR. PHONE: (508) 528-5300	<b>GEOTECHNICAL:</b> NORTHEAST GEOTECHNICAL, INC. 166 RAYMOND HALL DRIVE NORTH ATTLEBOROUGH, MA 02760 ATTN: GLENN A. OLSON, P.E. PRINCIPAL ENGINEER PHONE: (508) 598-3510

REVISED PER ONSITE SOIL TESTING  
RESULTS/NOI SUBMISSION  
12/18/2023



**RJO'CONNELL & ASSOCIATES, INC.**  
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS  
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180  
 PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:

**FAIRFIELD RESIDENTIAL  
COMPANY LLC**  
 30 BRAINTREE HILL OFFICE PARK  
 SUITE 105  
 BRAINTREE, MA 02184

OWNER:

**BRYN SMITH**  
 106 MENDON STREET  
 BELLINGHAM, MA 02019  
 PARCEL ID 295-001 AND 294-007

NOT FOR CONSTRUCTION

### GOVERNMENT/UTILITY CONTACTS

**BUILDING AND INSPECTIONS  
DEPARTMENT:**  
 MUNICIPAL BUILDING  
 355 EAST CENTRAL STREET  
 FRANKLIN, MA 02038  
 ATTN: LLOYD BROWN,  
 BUILDING COMMISSIONER  
 PHONE: (508) 520-4926

**ENGINEERING DEPARTMENT:**  
 DPW ADMINISTRATION BUILDING  
 257 FISHER STREET  
 FRANKLIN, MA 02038  
 ATTN: MIKE MAGLIO, TOWN ENGINEER  
 PHONE: (508) 520-4910

**HEALTH DEPARTMENT:**  
 MUNICIPAL BUILDING  
 355 EAST CENTRAL STREET  
 FRANKLIN, MA 02038  
 ATTN: CATHLEEN LIBERTY, MPH  
 HEALTH DIRECTOR  
 PHONE: (508) 520-4905

**POLICE DEPARTMENT:**  
 911 PANTHER WAY  
 FRANKLIN, MA 02038  
 ATTN: THOMAS J. LYNCH,  
 CHIEF OF POLICE  
 PHONE: (508) 528-1212

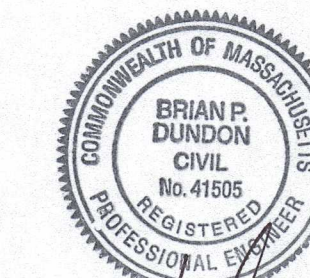
**WATER AND SEWER DIVISION:**  
 DPW ADMINISTRATION BUILDING  
 257 FISHER STREET  
 FRANKLIN, MA 02038  
 ATTN: DOUG MARTIN, P.E.  
 SUPERINTENDENT  
 PHONE: (508) 520-4910

**CONSERVATION COMMISSION:**  
 MUNICIPAL BUILDING  
 355 EAST CENTRAL STREET  
 FRANKLIN, MA 02038  
 ATTN: BREEKA LI GOODLANDER, CWS  
 CONSERVATION AGENT  
 PHONE: (508) 520-4847

**FIRE DEPARTMENT:**  
 40 WEST CENTRAL STREET  
 FRANKLIN, MA 02038  
 ATTN: JAMES McLAUGHLIN, FIRE CHIEF  
 PHONE: (508) 528-2323

**PLANNING AND COMMUNITY  
DEPARTMENT:**  
 MUNICIPAL BUILDING  
 355 EAST CENTRAL STREET  
 FRANKLIN, MA 02038  
 ATTN: AMY LOVE, TOWN PLANNER  
 PHONE: (508) 520-4907

**PUBLIC WORKS:**  
 DPW ADMINISTRATION BUILDING  
 257 FISHER STREET  
 FRANKLIN, MA 02038  
 ATTN: ROBERT A. CANTOREGGI,  
 DIRECTOR  
 PHONE: (508) 520-4910



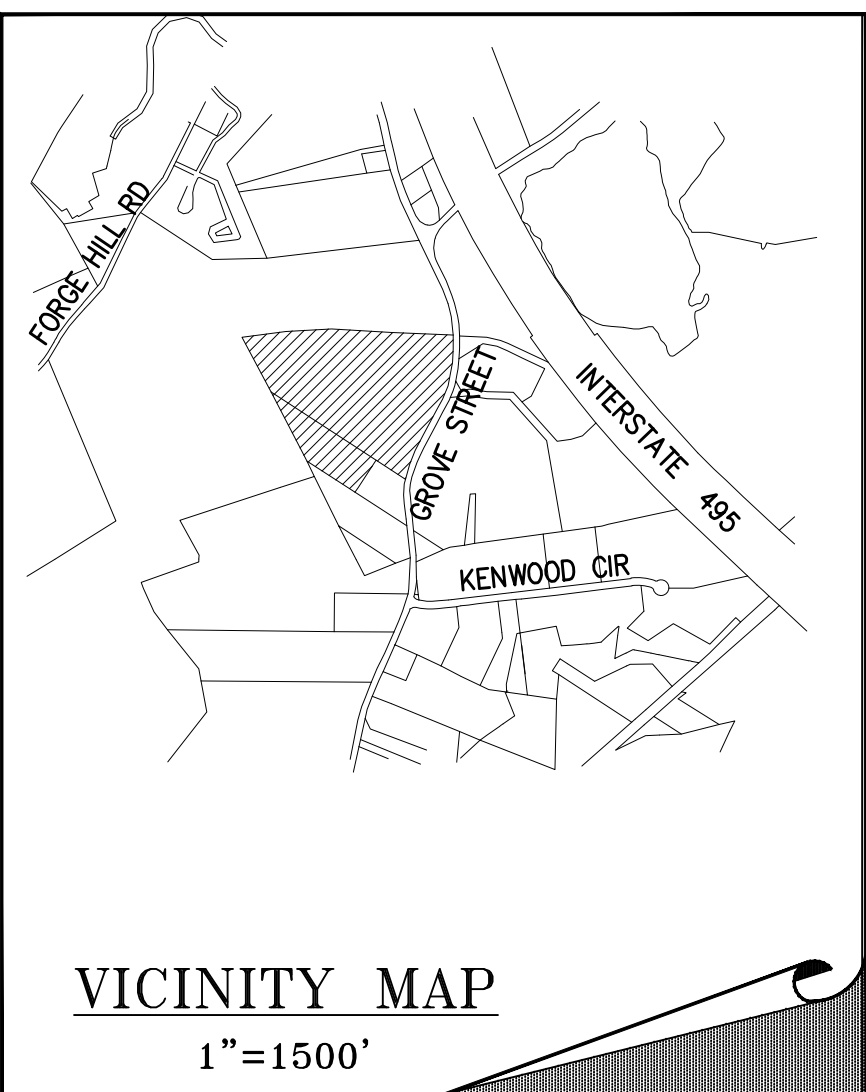
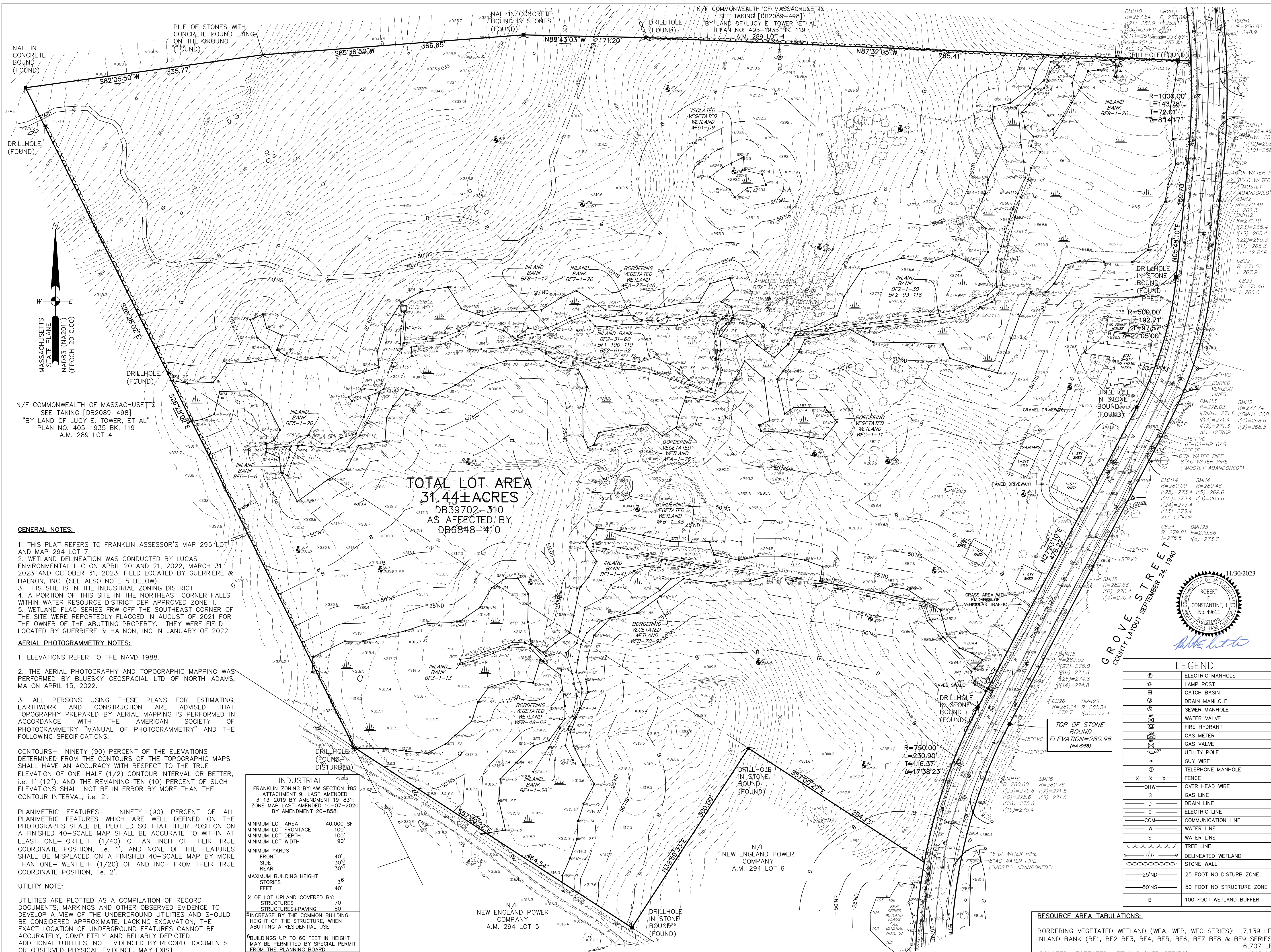
DRAWING NUMBER:

**C-0**

PROJECT NUMBER:

22016





**VICINITY MAP**  
1"=1500'

**LEGAL NOTES**

UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENTS, MARKINGS AND OTHER OBSERVED EVIDENCE TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES AND SHOULD BE CONSIDERED APPROXIMATE. LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. ADDITIONAL UTILITIES, NOT EVIDENCED BY RECORD DOCUMENTS OR OBSERVED PHYSICAL EVIDENCE, MAY EXIST. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 82 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING AND CALL DIGSAFE AT 1(888)DIG-SAFE[7233].

CONSTRUCTION ON THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

**OWNER**

BRYN SMITH  
106 MENDON STREET  
BELLINGHAM, MA 02019  
A.M. 295 LOT 1  
A.M. 294 LOT 7  
DEED BK. 3972 PG 310

**EXISTING CONDITIONS SITE PLAN**  
121 GROVE STREET  
FRANKLIN  
MASSACHUSETTS

**MAY 20, 2022**

DATE	REVISION DESCRIPTION
05.25.2022	REVISED EXISTING WATER AND SEWER.
11.16.2022	ADDED LABELS TO RESOURCE AREAS.
01.19.2023	PER PEER REVIEW COMMENTS.
04.03.2023	SERIES D ADDED.
04.20.2023	PER WETLAND SCIENTIST COMMENTS.
07.12.2023	ADDED FRW WETLAND SERIES.
11.09.2023	ADDED BF4-BF9 SERIES.

GRAPHIC SCALE: 1"=60'

55 WEST CENTRAL ST. PH. (508) 528-3221  
FRANKLIN, MA 02038 FX. (508) 528-7921  
www.gandhengineering.com

N/F COMMONWEALTH OF MASSACHUSETTS  
SEE TAKING [DB2089-498]  
"BY LAND OF LUCY E. TOWER, ET AL"  
PLAN NO. 405-1935 BK. 119  
A.M. 289 LOT 4

**GENERAL NOTES:**

- THIS PLAT REFERS TO FRANKLIN ASSESSOR'S MAP 295 LOT 1 AND MAP 294 LOT 7.
- WETLAND DELINEATION WAS CONDUCTED BY LUCAS ENVIRONMENTAL LLC ON APRIL 20 AND 21, 2022, MARCH 31, 2023 AND OCTOBER 31, 2023, FIELD LOCATED BY GUERRIERE & HALNON, INC. (SEE ALSO NOTE 5 BELOW)
- THIS SITE IS IN THE INDUSTRIAL ZONING DISTRICT.
- A PORTION OF THIS SITE IN THE NORTHEAST CORNER FALLS WITHIN WATER RESOURCE DISTRICT DEP APPROVED ZONE II.
- WETLAND FLAG SERIES FRW OFF THE SOUTHEAST CORNER OF THE SITE WERE REPORTEDLY FLAGGED IN AUGUST OF 2021 FOR THE OWNER OF THE ADJUTING PROPERTY. THEY WERE FIELD LOCATED BY GUERRIERE & HALNON, INC IN JANUARY OF 2022.

**AERIAL PHOTOGRAMMETRY NOTES:**

- ELEVATIONS REFER TO THE NAVD 1988.
- THE AERIAL PHOTOGRAPHY AND TOPOGRAPHIC MAPPING WAS PERFORMED BY BLUESKY GEOSPACIAL LTD OF NORTH ADAMS, MA ON APRIL 15, 2022.
- ALL PERSONS USING THESE PLANS FOR ESTIMATING, EARTHWORK AND CONSTRUCTION ARE ADVISED THAT TOPOGRAPHY PREPARED BY AERIAL MAPPING IS PERFORMED IN ACCORDANCE WITH THE AMERICAN SOCIETY OF PHOTOGRAMMETRY "MANUAL OF PHOTOGRAMMETRY" AND THE FOLLOWING SPECIFICATIONS:

**CONTOURS**— NINETY (90) PERCENT OF THE ELEVATIONS DETERMINED FROM THE CONTOURS OF THE TOPOGRAPHIC MAPS SHALL HAVE AN ACCURACY WITH RESPECT TO THE TRUE ELEVATION OF ONE-HALF (1/2) CONTOUR INTERVAL OR BETTER, I.E. 1' (12") AND THE REMAINING TEN (10) PERCENT OF SUCH ELEVATIONS SHALL NOT BE IN ERROR BY MORE THAN THE CONTOUR INTERVAL, I.E. 2'.

**PLANIMETRIC FEATURES**— NINETY (90) PERCENT OF ALL PLANIMETRIC FEATURES WHICH ARE WELL DEFINED ON THE PHOTOGRAPHS SHALL BE PLOTTED SO THAT THEIR POSITION ON A FINISHED 40-SCALE MAP SHALL BE ACCURATE TO WITHIN AT LEAST ONE-FORTIETH (1/40) OF AN INCH OF THEIR TRUE COORDINATE POSITION, I.E. 1', AND NONE OF THE FEATURES SHALL BE MISPLACED ON A FINISHED 40-SCALE MAP BY MORE THAN ONE-TWENTIETH (1/20) OF AN INCH FROM THEIR TRUE COORDINATE POSITION, I.E. 2'.

**UTILITIES NOTE:**

UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENTS, MARKINGS AND OTHER OBSERVED EVIDENCE TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES AND SHOULD BE CONSIDERED APPROXIMATE. LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. ADDITIONAL UTILITIES, NOT EVIDENCED BY RECORD DOCUMENTS OR OBSERVED PHYSICAL EVIDENCE, MAY EXIST.

**INDUSTRIAL**

FRANKLIN ZONING BYLAW SECTION 185  
ATTACHMENT 9; LAST AMENDED  
3-13-2019 BY AMENDMENT 19-831;  
ZONE MAP LAST AMENDED 10-07-2020  
BY AMENDMENT 20-858;

MINIMUM LOT AREA	40,000 SF
MINIMUM LOT FRONTAGE	100'
MINIMUM LOT DEPTH	100'
MINIMUM LOT WIDTH	90'
MINIMUM YARDS	
FRONT	40'
SIDE	30'
REAR	30'
MAXIMUM BUILDING HEIGHT	36 FEET
STORIES	40'
% OF LOT UPLAND COVERED BY:	
STRUCTURES	80
STRUCTURES+PAVING	80
INCREASE BY COMMON BUILDING HEIGHT OF THE STRUCTURE, WHEN ADJUTING A RESIDENTIAL USE.	
BUILDINGS UP TO 60 FEET IN HEIGHT MAY BE PERMITTED BY SPECIAL PERMIT FROM THE PLANNING BOARD.	

**LEGEND**

⊕	ELECTRIC MANHOLE
⊙	LAMP POST
⊠	CATCH BASIN
⊡	DRAIN MANHOLE
⊗	SEWER MANHOLE
⊘	WATER VALVE
⊚	FIRE HYDRANT
⊛	GAS METER
⊜	GAS VALVE
⊝	UTILITY POLE
⊞	GUY WIRE
⊟	TELEPHONE MANHOLE
⊠	FENCE
⊡	OVER HEAD WIRE
G	GAS LINE
D	DRAIN LINE
E	ELECTRIC LINE
COM	COMMUNICATION LINE
W	WATER LINE
S	WATER LINE
—	TREE LINE
⊞	DELINEATED WETLAND
⊞	STONE WALL
—	25'ND 25 FOOT NO DISTURB ZONE
—	50'NS 50 FOOT NO STRUCTURE ZONE
B	100 FOOT WETLAND BUFFER

**RESOURCE AREA TABULATIONS:**

BORDERING VEGETATED WETLAND (WFA, WFB, WFC SERIES): 7,139 LF  
INLAND BANK (BF1, BF2 BF3, BF4, BF5, BF6, BF7 BF8 & BF9 SERIES): 6,707 LF  
ISOLATED VEGETATED WETLAND (WFD SERIES): 212 LF

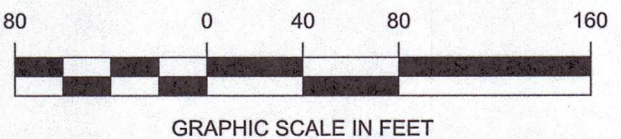
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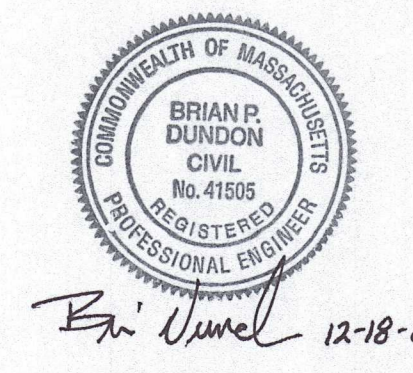


- NOTES:**
- TOTAL PARKING PROVIDED = 574 SPACES
  - AS SHOWN ON THE PLAN, THE PROPERTY CAPTURES A SMALL PORTION OF THE WATER RESOURCES OVERLAY DISTRICT. NO WORK IS PROPOSED IN THIS AREA AS PART OF THE RESIDENTIAL COMMUNITY.

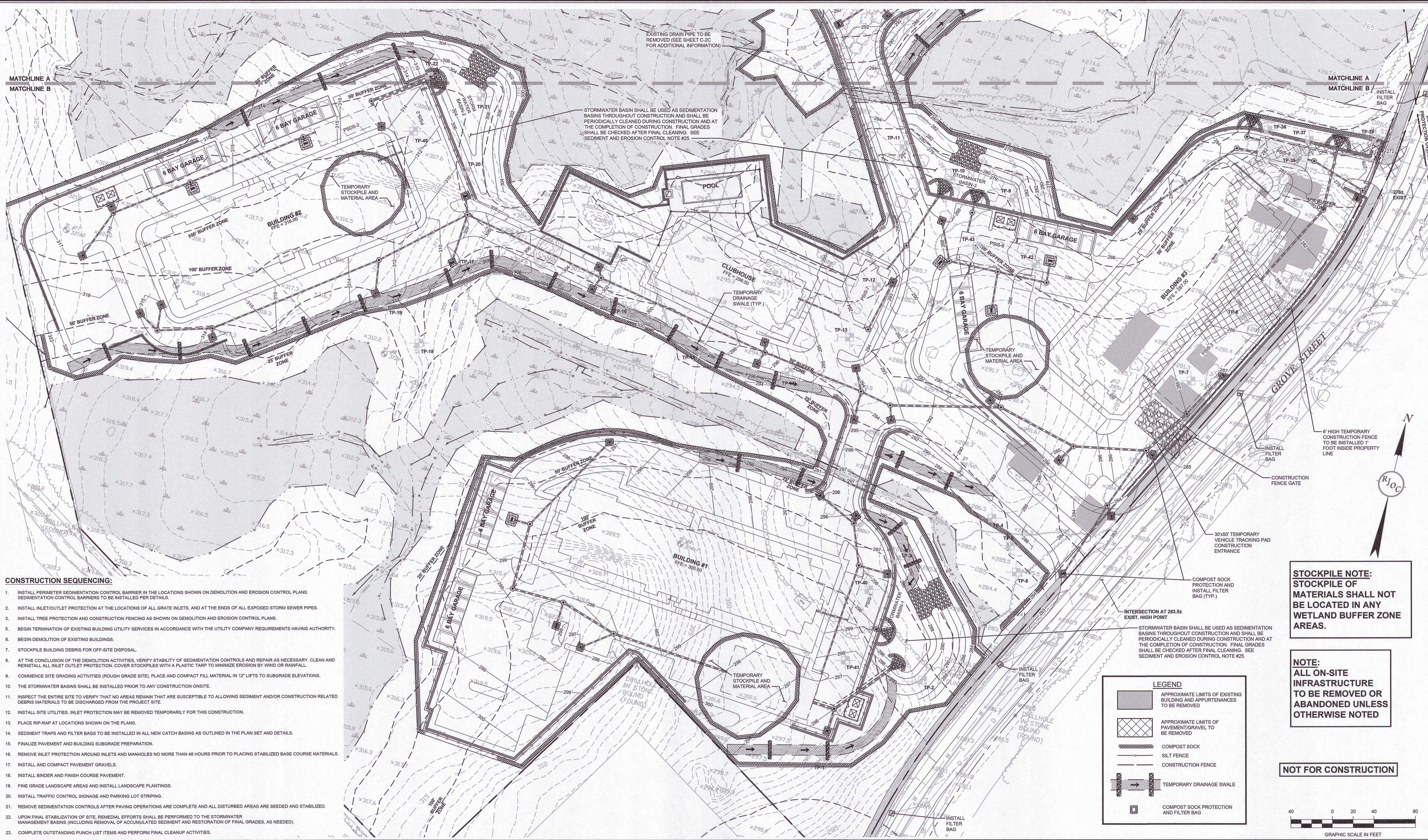
**NOT FOR CONSTRUCTION**



Drawing name: G:\MA\Fairfield\Fairfield Residential\121 Grove Street\Main\2016\_OS-1 Overall Site Plan.dwg  
Dec 19, 2023 - 16:28pm

					DESIGNED BY: MAC DRAWN BY: MCR REVIEWED BY: BJM SCALE: 1" = 80'		PREPARED FOR: <b>FAIRFIELD GROVE STREET LLC</b> 30 BRAINTREE HILL OFFICE PARK SUITE 105 BRAINTREE, MA 02184		 <i>Brian Duncanson</i> 12-18-2023		PREPARED BY: <b>RJO'CONNELL &amp; ASSOCIATES, INC.</b> <small>CIVIL ENGINEERS, SURVEYORS &amp; LAND PLANNERS          80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180          PHONE: 781.279.0180 RJOCONNELL.COM</small>		DRAWING NAME: <b>OVERALL SITE PLAN</b>	
	PROJECT NAME: <b>GROVE STREET RESIDENCES</b> FRANKLIN, MA		DRAWING NUMBER: <b>OS-1</b>		DATE: 10/30/2023 PROJECT NO.: 22016									
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**CONSTRUCTION SEQUENCING:**

1. INSTALL PERIMETER SEDIMENTATION CONTROL BARRIER IN THE LOCATIONS SHOWN ON DEMOLITION AND EROSION CONTROL PLANS. SEDIMENTATION CONTROL BARRIERS TO BE INSTALLED PER DETAILS.
2. INSTALL INLET/OUTLET PROTECTION AT THE LOCATIONS OF ALL GRATE INLETS, AND AT THE ENDS OF ALL EXPOSED STORM SEWER PIPES.
3. INSTALL TREE PROTECTION AND CONSTRUCTION FENCING AS SHOWN ON DEMOLITION AND EROSION CONTROL PLANS.
4. BEGIN TERMINATION OF EXISTING BUILDING UTILITY SERVICES IN ACCORDANCE WITH THE UTILITY COMPANY REQUIREMENTS HAVING AUTHORITY.
5. BEGIN DEMOLITION OF EXISTING BUILDINGS.
6. STOCKPILE BUILDING DEBRIS FOR OFF-SITE DISPOSAL.
7. AT THE CONCLUSION OF THE DEMOLITION ACTIVITIES, VERIFY STABILITY OF SEDIMENTATION CONTROLS AND REPAIR AS NECESSARY. CLEAN AND REINSTALL ALL INLET/OUTLET PROTECTION. COVER STOCKPILES WITH A PLASTIC TARP TO MINIMIZE EROSION BY WIND OR RAINFALL.
8. COMMENCE SITE GRADING ACTIVITIES (ROUGH GRADE SITE). PLACE AND COMPACT FILL MATERIAL IN 12" LIFTS TO SUBGRADE ELEVATIONS.
9. THE STORMWATER BASINS SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ONSITE.
10. INSPECT THE ENTIRE SITE TO VERIFY THAT NO AREAS REMAIN THAT ARE SUSCEPTIBLE TO ALLOWING SEDIMENT AND/OR CONSTRUCTION RELATED DEBRIS MATERIALS TO BE DISCHARGED FROM THE PROJECT SITE.
11. INSTALL SITE UTILITIES. INLET PROTECTION MAY BE REMOVED TEMPORARILY FOR THIS CONSTRUCTION.
12. PLACE RIP-RAP AT LOCATIONS SHOWN ON THE PLANS.
13. SEDIMENT TRAPS AND FILTER BAGS TO BE INSTALLED IN ALL NEW CATCH BASINS AS OUTLINED IN THE PLAN SET AND DETAILS.
14. FINALIZE PAVEMENT AND BUILDING SUBGRADE PREPARATION.
15. REMOVE INLET PROTECTION AROUND INLETS AND MANHOLES NO MORE THAN 48 HOURS PRIOR TO PLACING STABILIZED BASE COURSE MATERIALS.
16. INSTALL AND COMPACT PAVEMENT GRAVELS.
17. INSTALL BINDER AND FINISH COURSE PAVEMENT.
18. FINE GRADE LANDSCAPE AREAS AND INSTALL LANDSCAPE PLANTINGS.
19. INSTALL TRAFFIC CONTROL SIGNAGE AND PARKING LOT STRIPING.
20. REMOVE SEDIMENTATION CONTROLS AFTER PAVING OPERATIONS ARE COMPLETE AND ALL DISTURBED AREAS ARE SEEDED AND STABILIZED.
21. UPON FINAL STABILIZATION OF SITE, REMEDIAL EFFORTS SHALL BE PERFORMED TO THE STORMWATER MANAGEMENT BASINS (INCLUDING REMOVAL OF ACCUMULATED SEDIMENT AND RESTORATION OF FINAL GRADES, AS NEEDED).
22. COMPLETE OUTSTANDING PUNCH LIST ITEMS AND PERFORM FINAL CLEANUP ACTIVITIES.

STORMWATER BASIN SHALL BE USED AS SEDIMENTATION BASINS THROUGHOUT CONSTRUCTION AND SHALL BE PERIODICALLY CLEANED DURING CONSTRUCTION AND AT THE COMPLETION OF CONSTRUCTION. FINAL GRADES SHALL BE CHECKED AFTER FINAL CLEANING. SEE SEDIMENT AND EROSION CONTROL NOTE #25.

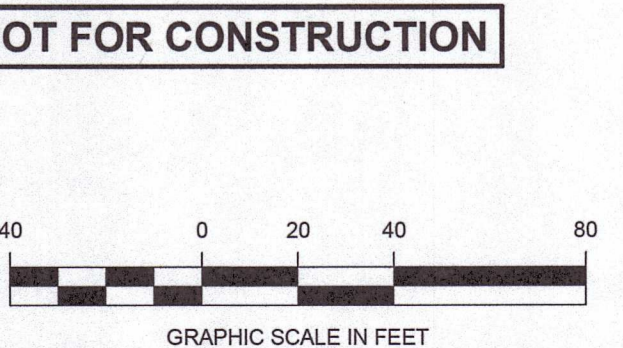
EXISTING DRAIN PIPE TO BE REMOVED (SEE SHEET C-2C FOR ADDITIONAL INFORMATION)

**STOCKPILE NOTE:**  
STOCKPILE OF MATERIALS SHALL NOT BE LOCATED IN ANY WETLAND BUFFER ZONE AREAS.

**NOTE:**  
ALL ON-SITE INFRASTRUCTURE TO BE REMOVED OR ABANDONED UNLESS OTHERWISE NOTED

**LEGEND**

- APPROXIMATE LIMITS OF EXISTING BUILDING AND APURTENANCES TO BE REMOVED
- APPROXIMATE LIMITS OF PAVEMENT/GRAVEL TO BE REMOVED
- COMPOST SOCK
- SILT FENCE
- CONSTRUCTION FENCE
- TEMPORARY DRAINAGE SWALE
- COMPOST SOCK PROTECTION AND FILTER BAG



Drawing name: G:\MA\Fairfield\Fairfield Residential\121 Grove Street\Main\202106\_C-1 Demolition and Erosion Control Plan.dwg  
Dec 19, 2023 - 9:54am

	DESIGNED BY: MAC		PREPARED FOR: <b>FAIRFIELD GROVE STREET LLC</b> 30 BRAINTREE HILL OFFICE PARK SUITE 105 BRAINTREE, MA 02184	SEAL: 	PREPARED BY: <b>RJO'CONNELL &amp; ASSOCIATES, INC.</b> CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS 80 MONTVALS AVENUE, SUITE 201 STONEHAM, MA 02180 PHONE: 781.279.0160 RJOCONNELL.COM	DRAWING NAME: <b>DEMOLITION AND EROSION CONTROL PLAN</b>
	DRAWN BY: MCR					
REVIEWED BY: BJM		SCALE: 1" = 40'		DATE: 10/30/2023		PROJECT NO.: 22016
1. REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION 12/18/2023						
NO.	REVISION	DATE	NO.	REVISION	DATE	

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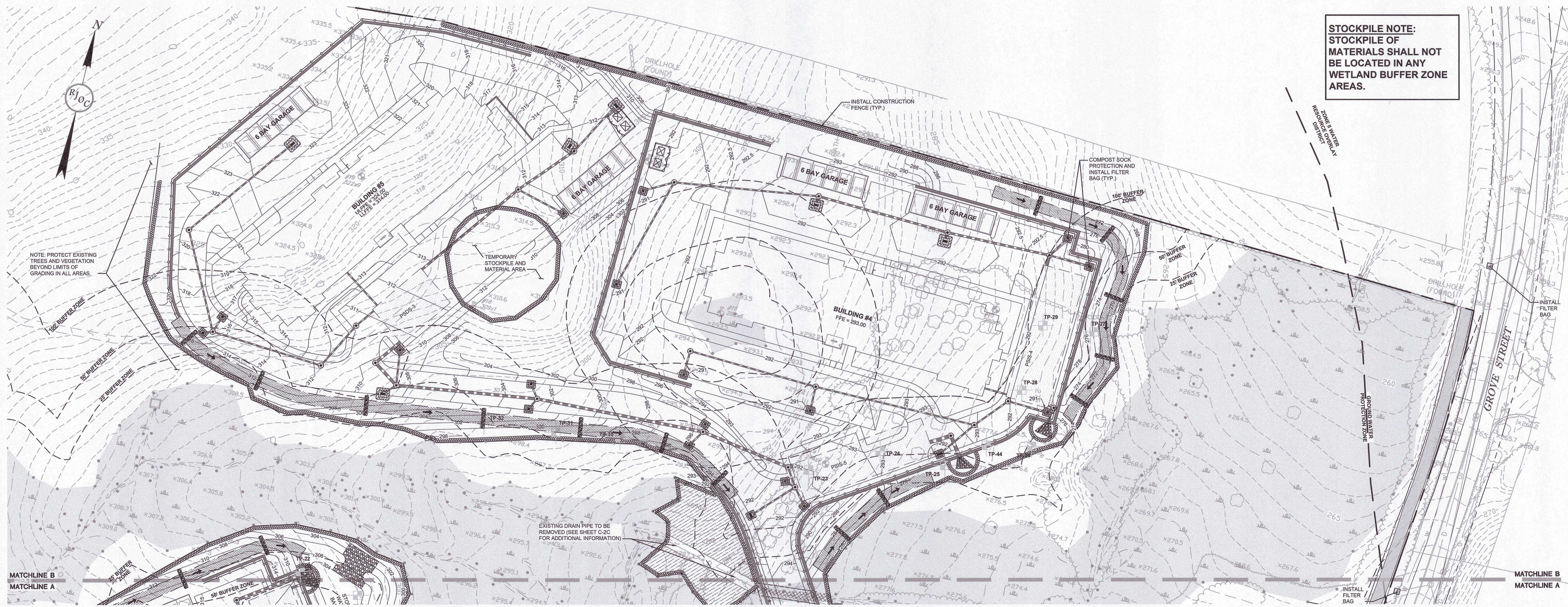
**SEDIMENT AND EROSION CONTROL NOTES**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG SAFE" (1-800-344-7233) AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH MASSACHUSETTS EROSION AND SEDIMENTATION CONTROL GUIDELINES, FOR URBAN AND SUBURBAN AREAS MARCH 1997, THE U.S.D.A. S.C.S. EROSION AND SEDIMENT CONTROL IN SITE DEVELOPMENT, MASSACHUSETTS CONSERVATION GUIDE, SEPTEMBER 1983, LOCAL MUNICIPAL REGULATIONS AND THE PERMIT REQUIREMENTS FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION RELATED ACTIVITIES AS OUTLINED IN THE MOST RECENT NPDES GENERAL PERMIT.
- STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED COMPOST WATTLES/SOCKS AND/OR SILTATION FENCE TO PREVENT AND/OR CONTROL SILTATION AND EROSION.
- TOPS OF STOCKPILES SHALL BE COVERED IN SUCH A MANNER THAT STORMWATER DOES NOT INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.
- EARTHWORK ACTIVITY ON THE SITE SHALL BE DONE IN A MANNER SUCH THAT RUNOFF IS DIRECTED TO THE TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON CIVIL EROSION CONTROL PLAN.
- FILTER BAGS SHALL BE PLACED UNDERNEATH THE GRATES OF EXISTING AND PROPOSED CATCH BASINS AND MAINTAINED AS OUTLINED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- ALL 3H:1V SLOPES OR STEEPER WILL BE STABILIZED WITH A CURLEX EROSION CONTROL MATTING BY AMERICAN EXCELSIOR COMPANY (OR ENGINEER APPROVED EQUAL) PRIOR TO HYDROSEEDING AND PROTECTED FROM EROSION.
- THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL COMPOST WATTLES/SOCKS, FILTER BAGS AND EXTRA SILTATION FENCING FOR INSTALLATION AT THE DIRECTION OF THE ENGINEER TO MITIGATE ANY EMERGENCY CONDITION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK INCLUDING BUT NOT LIMITED TO DEMOLITION.
- THE LIMIT OF WORK LINE SHALL BE THE SAME AS THE LIMIT OF WORK LINE NECESSARY FOR GRADING PURPOSES, (I.E., THE GRADING LIMITS AROUND THE PERIMETER OF THE PROJECT AREA).

- THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AS DETERMINED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
- THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
- CATCH BASINS WITH TEMPORARY FILTER BAGS MUST BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT. SEDIMENT WILL BE REMOVED FROM FILTER BAG IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- UPON COMPLETION OF ALL SITE WORK CONSTRUCTION, SITE CONTRACTOR SHALL INSPECT ALL ON-SITE CATCH BASINS, SWALES, SEDIMENT FOREBAYS AND BASINS, AND REMOVE ALL SEDIMENT AND TRASH DEBRIS THAT HAS ACCUMULATED WITHIN EACH BMP STRUCTURE DURING THE COURSE OF CONSTRUCTION. ALL ON-SITE CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE VACUUMED CLEAN PRIOR TO THE ISSUANCE OF AN OCCUPANCY PERMIT.
- ALL CONSTRUCTION SHALL MEET OR EXCEED THE TOWN OF FRANKLIN'S ENGINEERING AND DPW DEPARTMENT SPECIFICATIONS.
- TO MINIMIZE THE MIGRATION OF DUST AND SILT FROM THE CONSTRUCTION SITE, THE FOLLOWING MEASURES SHALL BE IMPLEMENTED AS REQUIRED:
  - SPRAY DISTURBED AREAS WITH WATER DURING DRY AND WINDY DAYS.
  - WASH WHEELS OF VEHICLES BEFORE LEAVING THE SITE.
  - PERIODICALLY CLEAN SURROUNDING ROADWAYS NEAR THE ENTRANCE TO THE SITE.
  - ALL VEHICLES HAULING MATERIAL TO AND FROM THE SITE SHALL PLACE SECURE COVERS OVER THEIR LOADS.
- THE CONTRACTOR SHALL BE AWARE THAT THE ON-SITE SOILS AT THIS SITE MAKE IT PARTICULARLY SUSCEPTIBLE TO SOIL EROSION AND SENSITIVE TO ITS CONSEQUENCES. IT SHOULD BE NOTED THAT THE EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS DEPICT THE MINIMUM REQUIRED AND ARE REPRESENTATIVE OF A SINGLE STAGE OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITING, RELOCATION AND AUGMENTATION OF EROSION CONTROL DEVICES AS THE PROJECT PROGRESSES AND AS SITE DRAINAGE CONDITIONS CHANGE.
- THE CONTRACTOR SHALL ANTICIPATE AND MODIFY EROSION CONTROL MEASURES BASED ON PAST AND CURRENT WEATHER CONDITIONS AND ANTICIPATED CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBED SOIL. EFFORTS SHALL BE MADE TO LIMIT THE TIME OF EXPOSURE OF DISTURBED AREAS.
- THE CONTRACTOR SHALL NOTIFY THE TOWN OF FRANKLIN PLANNING AND CONSERVATION DEPARTMENT AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY SITEWORK AND BEFORE EACH OF THE FOLLOWING:
  - INSTALLATION OF SEDIMENT AND EROSION CONTROL MEASURES.
  - START OF CONSTRUCTION.
  - COMPLETION OF SITE CLEARING.
  - COMPLETION OF ROUGH GRADING.
  - INSTALLATION OF STORMWATER CONTROLS.
  - CLOSE OF THE CONSTRUCTION SEASON.
  - COMPLETION OF FINAL LANDSCAPING.

- PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AT THE SITE, THE CONTRACTOR SHALL ENGAGE AN INDIVIDUAL WITH SPECIFIC PROFESSIONAL TRAINING AND EXPERTISE IN EROSION AND SEDIMENT CONTROL. THE EROSION CONTROL MONITOR SHALL PREPARE A WEEKLY REPORT WHICH SHALL BE KEPT ON SITE AT ALL TIMES AND SHALL BE SHOWN TO LOCAL, STATE AND FEDERAL AGENTS UPON REQUEST. THIS REPORT SHALL INDICATE THE STATUS OF THE EROSION CONTROLS AND ANY MAINTENANCE REQUIRED AND PERFORMED. THIS REPORT SHALL CONFORM TO THE REQUIREMENTS OF THE EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR DISCHARGE FROM CONSTRUCTION ACTIVITIES.
- THE LOCATION OF COMPOST WATTLES/SOCKS AND FILTER BAGS SHALL BE FIELD VERIFIED DURING SITE PREPARATION OPERATIONS BY THE ENGINEER AT RECORD.
- ANY DEWATERING ACTIVITIES PERFORMED IN CONJUNCTION WITH CONSTRUCTING THE SITE SHALL MAKE USE OF A SETTLING POND OR SIMILAR DEVICE TO REMOVE SEDIMENT BEFORE WATER IS RELEASED. THERE SHALL BE NO DIRECT DISCHARGE OF WATER TO CATCH BASINS AND/OR THE MUNICIPAL DRAINAGE SYSTEM.
- CONTRACTOR TO REMOVE A MINIMUM OF 18" INCHES FROM THE BOTTOM OF THE TEMPORARY SEDIMENTATION BASINS WHERE PROPOSED INFILTRATION BASINS ARE TO BE CONSTRUCTED.
- WINTER CONSTRUCTION AND STABILIZATION  
THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15  
SEDIMENT BARRIERS: DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL. PREVENTS THE PROPER INSTALLATION OF COMPOST WATTLES/SOCKS OR SILT FENCES.  
MULCHING: ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB PER 1000 SF OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A 1-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, ASPHALT EMULSION CHEMICAL, OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH WORKDAY DURING FINAL GRADING ACTIVITIES.  
SOIL STOCKPILING: STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A 4-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND REESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.  
SEEDING: BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOOSED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1000 SF. ALL AREAS SEEDING DURING THE WINTER WILL BE INSPECTED IN THE SPRING BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE RE-VEGETATED IN THE SPRING.

- WINTER STABILIZATION OF DITCHES AND CHANNELS:** ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE DITCH:  
INSTALL A SOD LINING IN THE DITCH: A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD ONTO AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH. TO PREVENT THE SOD FROM SLOTTING DURING FLOW CONDITIONS.  
INSTALL A STONE LINING IN THE DITCH: A DITCH MUST BE LINED WITH STONE RIP RAP BY NOVEMBER 15. CONTACT REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH.
- WINTER STABILIZATION OF DISTURBED SLOPES:** ALL STONE-COVERED SLOPES GREATER THAN 15% MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE:  
TEMPORARY VEGETATION AND EROSION CONTROL MATS: BY OCTOBER 1 THE DISTURBED SLOPE MUST BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1000 SF AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST 3 INCHES OR FAILS TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIP RAP.  
SOD: THE DISTURBED SLOPE MUST BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.  
EROSION CONTROL MIX: EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.  
STONE RIP RAP: PLACE LAYER OF STONE RIP RAP ON THE SLOPE BY NOVEMBER 15. CONTACT THE PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIP RAP.
- WINTER STABILIZATION OF DISTURBED SOILS:** BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN:  
TEMPORARY VEGETATION: BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1000 SF, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SF, AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST 3 INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR WINTER PROTECTION AS DESCRIBED BELOW.  
SOD: STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.  
MULCH: BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 LBS PER 1000 SF ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.



**STOCKPILE NOTE:**  
STOCKPILE OF MATERIALS SHALL NOT BE LOCATED IN ANY WETLAND BUFFER ZONE AREAS.

Drawing name: G:\M\Franklin\Fairfield Residential\121 Grove Street\Main\2016\_C-1 Demolition and Erosion Control Plan.dwg  
Dec 19, 2023, 9:53am



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NO.	REVISION	DATE	NO.	REVISION	DATE
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:  
**FAIRFIELD GROVE STREET LLC**  
30 BRAINTREE HILL OFFICE PARK  
SUITE 105  
BRAINTREE, MA 02184

SEAL:  
BRIAN P. DUNDON  
CIVIL  
No. 41505  
PROFESSIONAL ENGINEER  
12-18-2023

PREPARED BY:  
**RJO'CONNELL & ASSOCIATES, INC.**  
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PROJECT NAME:  
**GROVE STREET RESIDENCES**  
FRANKLIN, MA

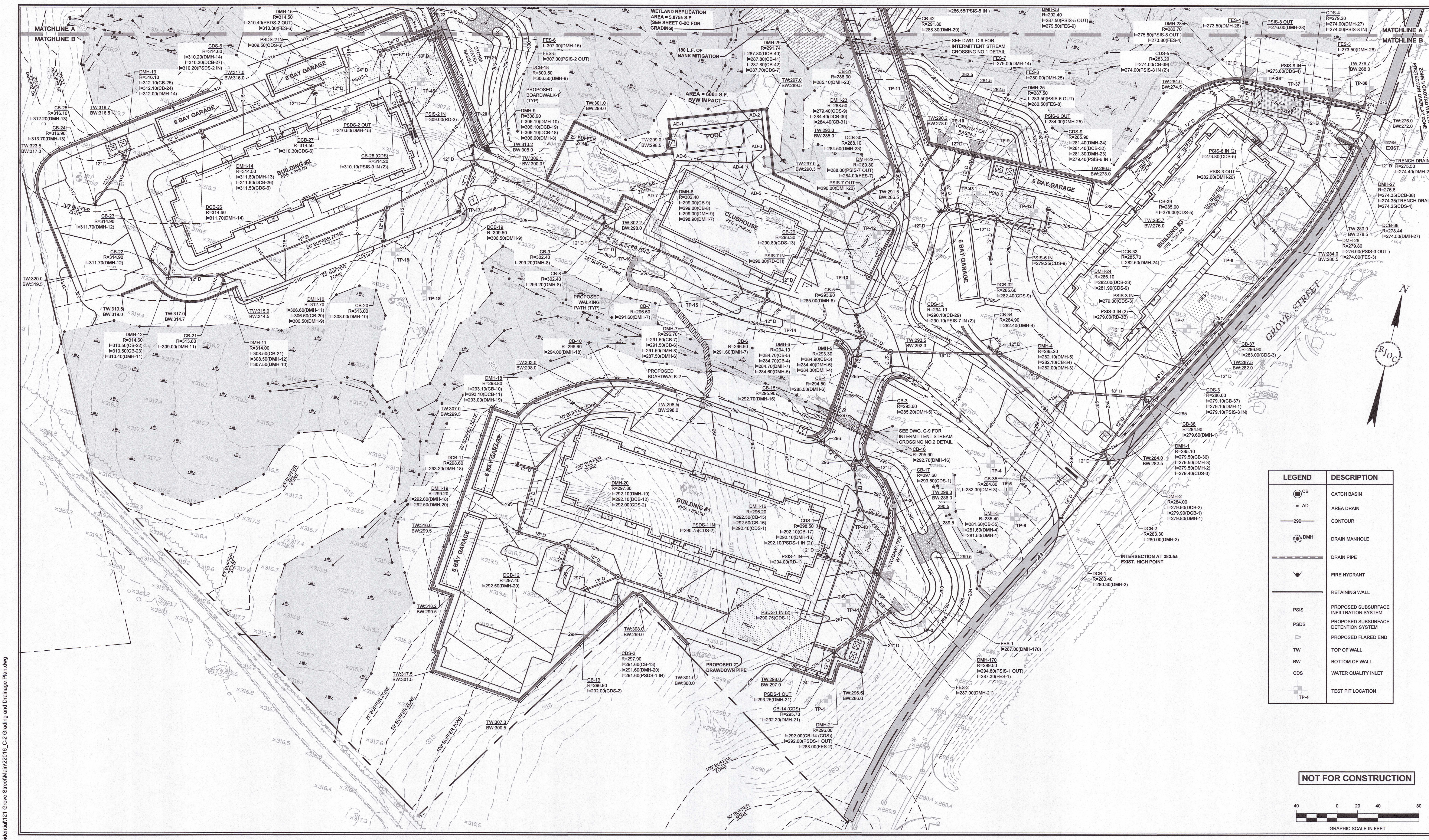
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DRAWING NUMBER:  
**C-1B**

DATE: 10/30/2023 PROJECT NO.: 22016

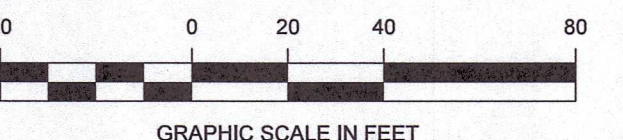
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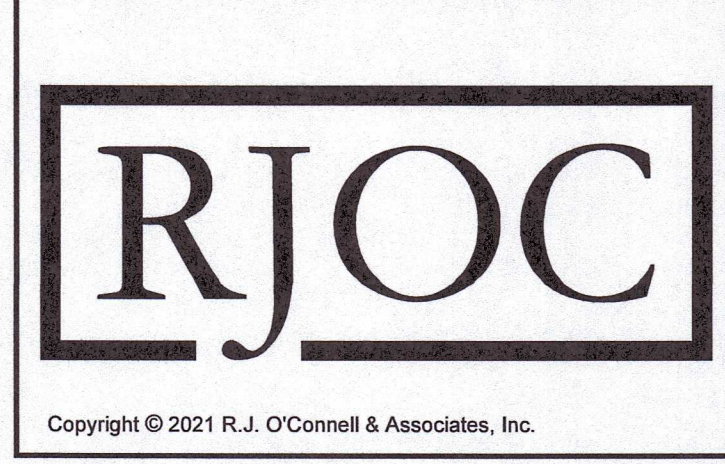


LEGEND	DESCRIPTION
	CATCH BASIN
	AREA DRAIN
	CONTOUR
	DRAIN MANHOLE
	DRAIN PIPE
	FIRE HYDRANT
	RETAINING WALL
	PROPOSED SUBSURFACE INFILTRATION SYSTEM
	PROPOSED SUBSURFACE DETENTION SYSTEM
	PROPOSED FLARED END
	TOP OF WALL
	BOTTOM OF WALL
	WATER QUALITY INLET
	TEST PIT LOCATION

NOT FOR CONSTRUCTION



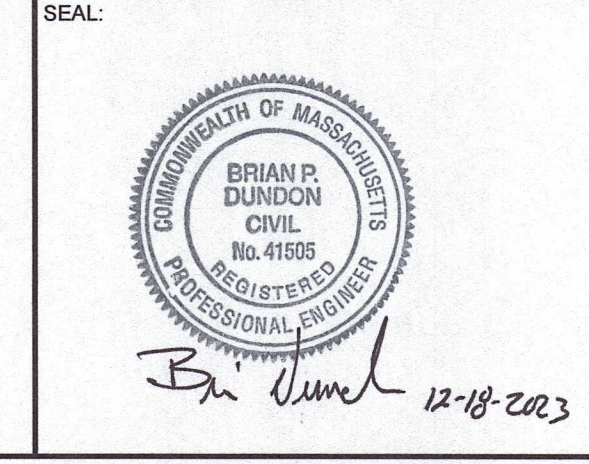
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NO.	REVISION	DATE
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DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:  
**FAIRFIELD GROVE STREET LLC**  
 30 BRAINTREE HILL OFFICE PARK  
 SUITE 105  
 BRAINTREE, MA 02184



PREPARED BY:  
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PROJECT NAME:  
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 FRANKLIN, MA

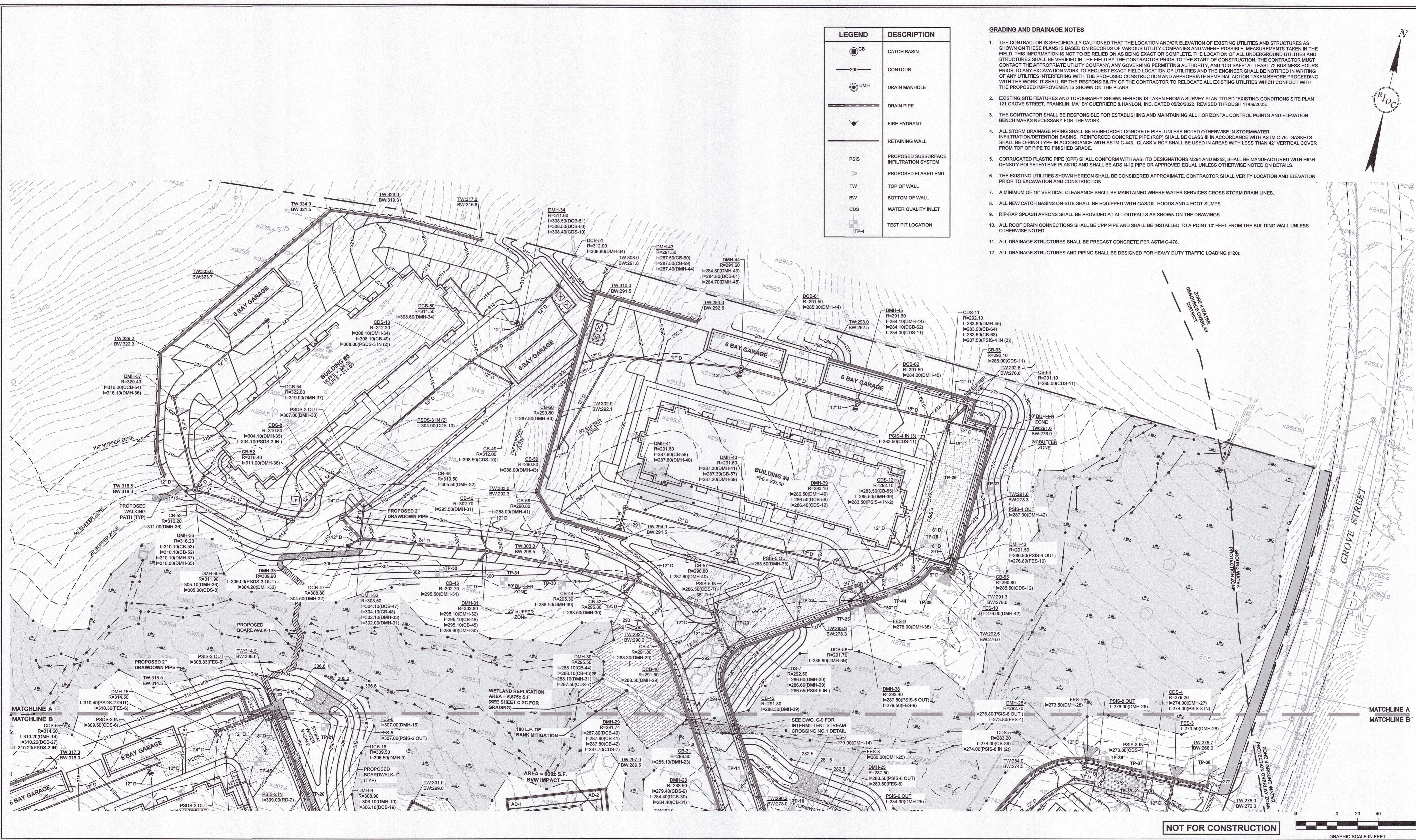
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**GRADING AND DRAINAGE PLAN**

DRAWING NUMBER:  
**C-2A**

DATE: 10/30/2023 PROJECT NO.: 22016

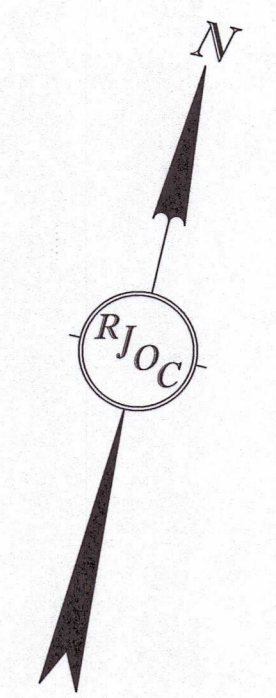


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LEGEND	DESCRIPTION
	CATCH BASIN
	CONTOUR
	DRAIN MANHOLE
	DRAIN PIPE
	FIRE HYDRANT
	RETAINING WALL
	PROPOSED SUBSURFACE INFILTRATION SYSTEM
	PROPOSED FLARED END
	TOP OF WALL
	BOTTOM OF WALL
	WATER QUALITY INLET
	TEST PIT LOCATION

- GRADING AND DRAINAGE NOTES**
1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG SAFE" AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
  2. EXISTING SITE FEATURES AND TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A SURVEY PLAN TITLED "EXISTING CONDITIONS SITE PLAN 121 GROVE STREET, FRANKLIN, MA" BY GUERRIERE & HANLON, INC. DATED 05/20/2022, REVISED THROUGH 11/09/2023.
  3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL HORIZONTAL CONTROL POINTS AND ELEVATION BENCH MARKS NECESSARY FOR THE WORK.
  4. ALL STORM DRAINAGE PIPING SHALL BE REINFORCED CONCRETE PIPE, UNLESS NOTED OTHERWISE IN STORMWATER INFILTRATION/DETENTION BASINS. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III IN ACCORDANCE WITH ASTM C-76. GASKETS SHALL BE O-RING TYPE IN ACCORDANCE WITH ASTM C-443. CLASS V RCP SHALL BE USED IN AREAS WITH LESS THAN 42" VERTICAL COVER FROM TOP OF PIPE TO FINISHED GRADE.
  5. CORRUGATED PLASTIC PIPE (CPP) SHALL CONFORM WITH AASHTO DESIGNATIONS M294 AND M252. SHALL BE MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC AND SHALL BE ADS N-12 PIPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON DETAILS.
  6. THE EXISTING UTILITIES SHOWN HEREON SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION PRIOR TO EXCAVATION AND CONSTRUCTION.
  7. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER SERVICES CROSS STORM DRAIN LINES.
  8. ALL NEW CATCH BASINS ON-SITE SHALL BE EQUIPPED WITH GAS/OIL HOODS AND 4 FOOT SUMPS.
  9. RIP-RAP SPLASH APRONS SHALL BE PROVIDED AT ALL OUTFALLS AS SHOWN ON THE DRAWINGS.
  10. ALL ROOF DRAIN CONNECTIONS SHALL BE CPP PIPE AND SHALL BE INSTALLED TO A POINT 10' FEET FROM THE BUILDING WALL UNLESS OTHERWISE NOTED.
  11. ALL DRAINAGE STRUCTURES SHALL BE PRECAST CONCRETE PER ASTM C-478.
  12. ALL DRAINAGE STRUCTURES AND PIPING SHALL BE DESIGNED FOR HEAVY DUTY TRAFFIC LOADING (H20).



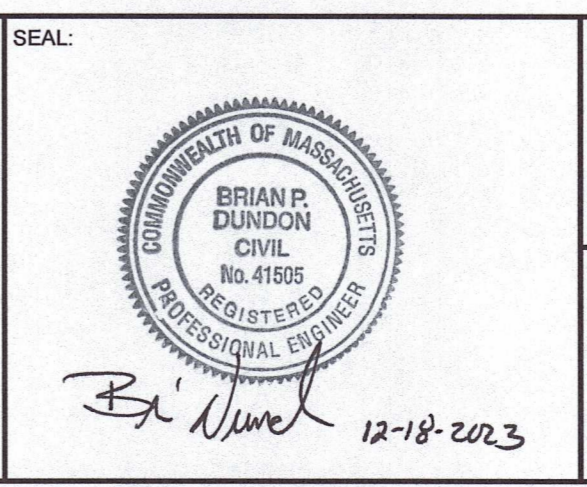
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GRAPHIC SCALE IN FEET



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DESIGNED BY: MAC  
 DRAWN BY: MCR  
 REVIEWED BY: BJM  
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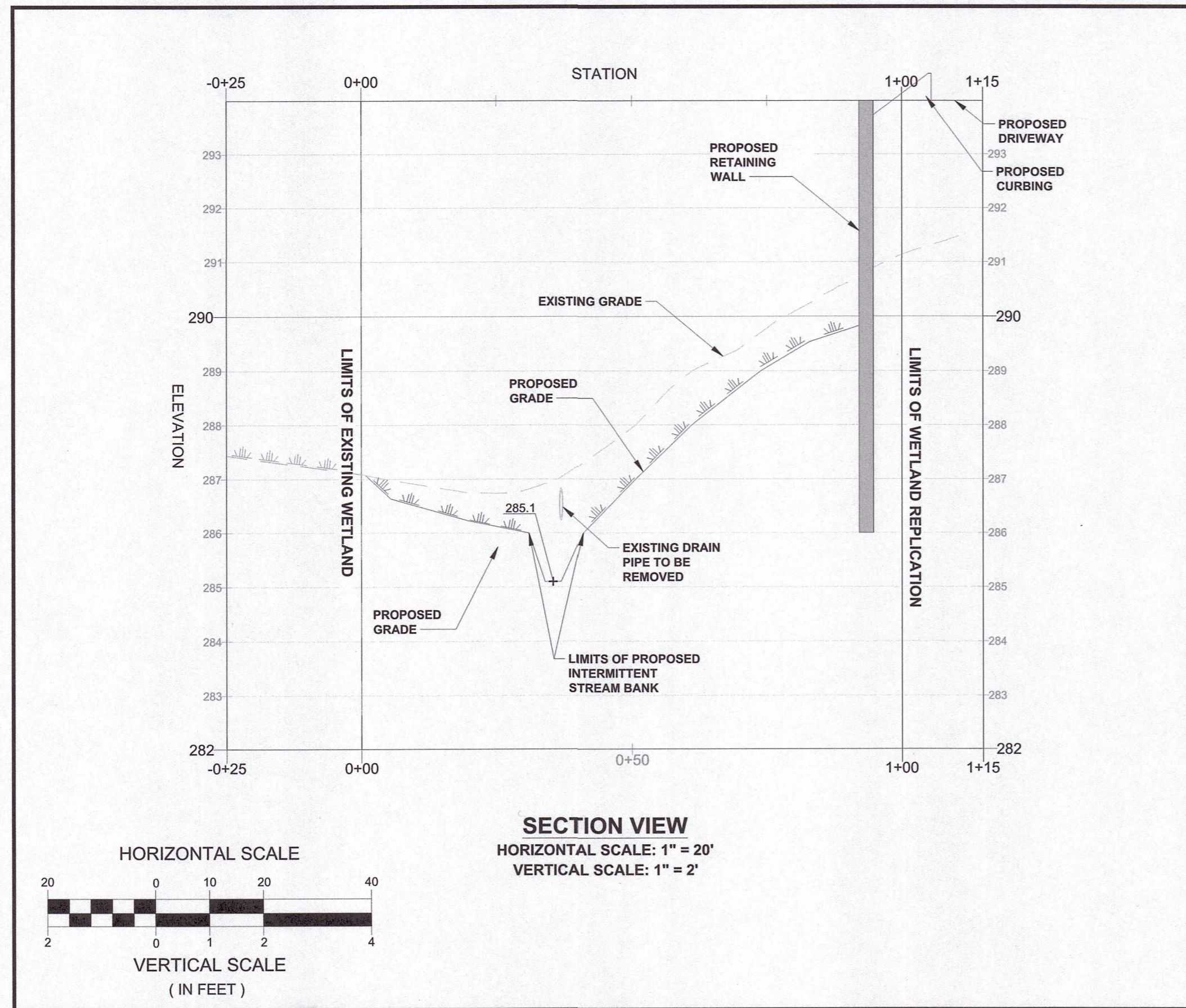
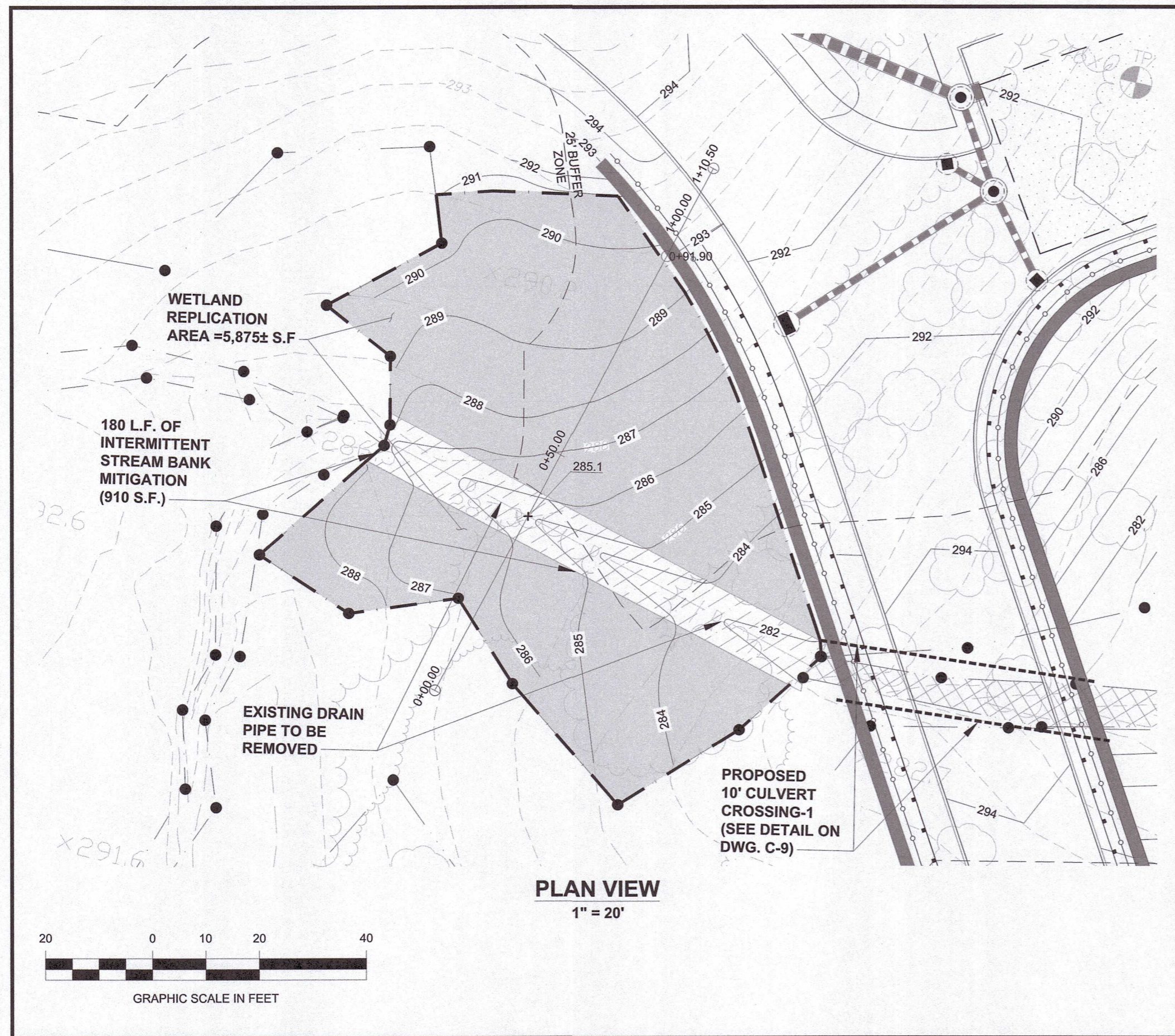
PREPARED BY:  
**RJO'CONNELL & ASSOCIATES, INC.**  
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 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180  
 PHONE: 781.278.0190 RJOCONNELL.COM

DRAWING NAME:  
**GRADING AND DRAINAGE PLAN**

DRAWING NUMBER:  
**C-2B**

DATE: 10/30/2023 PROJECT NO.: 22016





**8.1 REPLICATION AREA CONSTRUCTION SEQUENCE**

THIS SECTION DESCRIBES THE SEQUENCE OF CONSTRUCTION ACTIVITIES AND PROVIDES INFORMATION REGARDING GRADING, PLANTING, AND SEEDING. IT ALSO CONTAINS EROSION AND SEDIMENTATION CONTROL MEASURES THAT WILL BE UTILIZED THROUGHOUT CONSTRUCTION ACTIVITIES. THE CONSERVATION COMMISSION WILL BE NOTIFIED PRIOR TO THE COMMENCEMENT OF WORK, TO SCHEDULE INSPECTION OF THE WORK, TO DISCUSS DEPTH OF SOIL REMOVAL, AND RE-GRADING OF EXCESS SOIL WITHIN UPLAND AREAS. THE PWS WILL DOCUMENT CONDITIONS RELATIVE TO VEGETATION COMPOSITION AND STRUCTURE, TOPOGRAPHY, AND SOILS BOTH BEFORE AND AFTER RESTORATION.

**EROSION AND SEDIMENT CONTROLS**

PRIOR TO THE COMMENCEMENT OF THE REPLICATION AREA CONSTRUCTION, EROSION AND SEDIMENTATION CONTROLS (I.E. COMPOST FILTER SOCK/SILT FENCE) WILL BE INSTALLED AS SHOWN ON THE SITE PLANS. THE EROSION CONTROLS WILL BE INSPECTED DURING CONSTRUCTION TO MAINTAIN THEIR EFFECTIVENESS IN RETAINING SEDIMENTS.

**CLEARING, GRADING, AND SOILS**

IN ORDER FOR THE WETLAND MITIGATION AREA TO BECOME SUCCESSFUL THE FINAL GRADES NEED TO BE SET APPROXIMATELY 6 TO 12 INCHES ABOVE GROUNDWATER ELEVATIONS. MINOR ADJUSTMENTS IN FINAL GRADE MAY BE MADE IN THE FIELD BY THE SUPERVISING PWS. IF SUBSTANTIAL CHANGES IN THE REPLICATION AREA PLAN ARE NECESSARY, THE APPLICANT WILL SEEK APPROVAL FROM THE CONSERVATION COMMISSION PRIOR TO IMPLEMENTING ANY REVISIONS.

THE REPLICATION AREA WILL BE CLEARED AND GRUBBED, AND WILL BE EXCAVATED TO A DEPTH OF 18 INCHES BELOW THE FINAL DESIGN ELEVATIONS. SOILS EXCAVATED FROM THE WETLAND IMPACT AREAS ARE OFTEN STOCKPILED AND REUSED IN A PROPOSED REPLICATION AREA IF FEASIBLE AND LACKING IN INVASIVE SPECIES, OTHERWISE A PREPARED TOPSOIL WILL BE REQUIRED. THE SUPERVISING PWS WILL INSPECT THE SUB-GRADE OF THE REPLICATION AREA TO ENSURE THAT THE PROPER HYDROLOGY HAS BEEN ESTABLISHED. MINOR MODIFICATIONS TO THIS GRADING PLAN MAY BE MADE IN THE FIELD BY THE QUALIFIED PWS IN RESPONSE TO SUBSURFACE HYDROLOGIC CONDITIONS.

THE GOAL FOR SOILS AT THE WETLAND REPLICATION AREA IS TO CREATE SOIL PROFILES THAT APPROXIMATE AS CLOSELY AS POSSIBLE THE SOIL PROFILES AT THE NEAREST UNDISTURBED EXISTING WETLAND. THIS MEANS THAT A SURFACE HORIZON IS CREATED THAT APPROXIMATES THE A OR O-HORIZON AT THE UNDISTURBED WETLAND SITE AND THAT AT A MINIMUM, CONTAINS 6-12 INCHES OF A OR O MATERIAL. BENEATH THE A OR O THERE SHOULD BE A B-HORIZON (SUBSOIL) THAT APPROXIMATES THE DEPTH AND TEXTURE OF THE B-HORIZON AT THE UNDISTURBED WETLAND (OR A SUITABLE COMPOSITION OF THE C-HORIZON). THE ON-SITE PWS WILL EXAMINE THE DEPTH OF THE B-HORIZON TO ENSURE IT IS ADEQUATE. IF INADEQUATE, SUITABLE B-HORIZON SOIL MATERIAL WILL BE ADDED TO OBTAIN A MINIMUM DEPTH OF SIX (6) INCHES PRIOR TO PLACING THE TOPSOIL. THE REPLICATION AREA WILL THEN BE BACKFILLED WITH A PREPARED TOPSOIL TO A MINIMUM DEPTH OF TWELVE (12) INCHES. THE PREPARED TOPSOIL IS TO CONSIST OF A 1:1 MIXTURE (BY EQUAL VOLUMES) OF ORGANIC AND MINERAL MATERIALS, THAT CONTAINS AT LEAST 12-PERCENT ORGANIC CARBON CONTENT BY WEIGHT.

WHERE ABUTTING AN EXISTING WETLAND, THE REPLICATION AREA WILL BE GRADED TO THE SAME ELEVATION AS THE ADJACENT WETLAND TO MAINTAIN A HYDROLOGIC CONNECTION. AFTER SOILS HAVE BEEN PLACED AND TILLED, THE REPLICATION AREA WILL BE PLANTED WITH THE NATIVE SHRUBS AND TREES LISTED IN THE FOLLOWING SECTION AND THE SEED MIX WILL BE APPLIED. ANY FINE GRADING WILL BE CONDUCTED, AND EROSION CONTROLS WILL BE LEFT IN PLACE UNTIL VEGETATION IS ESTABLISHED.

**SHRUB AND TREE PLANTING**

THE SHRUBS AND TREES USED FOR RE-VEGETATION OF THE REPLICATION SITE WILL BE OBTAINED FROM A REPUTABLE WETLAND PLANT NURSERY. SHRUBS WILL MEASURE APPROXIMATELY AT LEAST 24 INCHES IN HEIGHT (ONE-GALLON CONTAINERS), AND TREE SAPLINGS WILL HAVE A MINIMUM CALIPER SIZE OF ONE-INCH WITH ROOT BALLS SECURED WITH BURLAP. ROOTSTOCK WILL BE GROUPED WITHIN THE REPLICATION SITE TO APPROXIMATE NATURAL COMMUNITIES AND PROVIDE FOOD AND/OR COVER FOR WILDLIFE.

PLANTINGS SHOULD BE PLACED BY HAND UNDER THE SUPERVISION OF A QUALIFIED PWS. THE PLANTINGS SHALL BE RELOCATED TO LOCATIONS WITH SUITABLE HYDROLOGY AND SOILS AND WHERE APPROPRIATE STRUCTURAL CONTEXT WITH OTHER PLANTINGS CAN BE MAINTAINED. TABLE 8-1 REPRESENTS THE COMPOSITION AND ABUNDANCE OF PLANT SPECIES TO BE PLANTED WITHIN THE REPLICATION AREA.

**TABLE 8-1**  
**REPLICATION AREA PLANTING SCHEDULE**

Common Name	Scientific Name	Status	Minimum Size	Quantity
<b>Trees = 26</b>				
Red Maple	<i>Acer rubrum</i>	FAC	1-2" caliper	7
Yellow Birch	<i>Betula alleghaniensis</i>	FAC	1-2" caliper	7
Gray Birch	<i>Betula populifolia</i>	FAC	1-2" caliper	6
Pussy Willow	<i>Salix discolor</i>	FACW	1-2" caliper	6
<b>Shrubs = 40</b>				
Speckled Alder	<i>Alnus rugosa</i>	FACW+	24" minimum	8
Northern Arrow-wood	<i>Viburnum recognitum</i>	FAC	24" minimum	8
Northern Spicebush	<i>Lindera benzoin</i>	FACW	24" minimum	8
Highbush Blueberry	<i>Vaccinium corymbosum</i>	FACW	24" minimum	8
Common Winterberry	<i>Ilex verticillata</i>	FACW	24" minimum	8
<b>Ground Cover</b>				
New England Wetland Seed Mix (or equivalent)		Varies	1 lb./2,500 s.f.	3 lbs.

Note: Trees and shrubs shall be spaced throughout replication area to simulate natural growth patterns.

**SEEDING**

A NEW ENGLAND WETLAND SEED MIX (OR EQUIVALENT) WILL BE USED FOR THE REPLICATION AREA. THE NEW ENGLAND WETLAND SEED MIX, CONTAINS A SELECTION OF NATIVE SEEDS WHICH ARE SUITABLE FOR MOST WETLAND REPLICATION SITES THAT ARE NOT PERMANENTLY INUNDATED. THESE SPECIES ARE BEST SUITED TO MOST DISTURBED GROUND AS FOUND IN MOST WET MEADOWS, SCRUB SHRUB, OR FORESTED WETLAND REPLICATION AREAS. THE SEEDS WILL NOT GERMINATE UNDER UNINUNDATED CONDITIONS. IF PLANTED DURING THE FALL MONTHS, THE SEED MIX WILL GERMINATE THE FOLLOWING SPRING.

DURING THE FIRST SEASON OF GROWTH, SEVERAL SPECIES WILL PRODUCE SEEDS, WHILE OTHER SPECIES WILL PRODUCE SEEDS AFTER THE SECOND GROWING SEASON. NOT ALL SPECIES WILL GROW IN ALL WETLAND SITUATIONS. THIS MIX IS COMPOSED OF THE WETLAND SPECIES MOST LIKELY TO GROW IN CREATED/RESTORED WETLANDS AND SHOULD PRODUCE MORE THAN 75% GROUND COVER IN TWO FULL GROWING SEASONS. THE MIX SHOULD BE APPLIED ON CLEAN BARE SOIL VIA HYDRO-SEEDING, MECHANICAL SPREADER, OR SPREAD BY HAND (ON SMALLER SITES). THE AREAS WHERE THE MIX IS APPLIED SHOULD BE LIGHTLY RAKED OR ROLLED TO ENSURE PROPER SOIL-SEED CONTACT. THE BEST RESULTS ARE OBTAINED WHEN SEEDING IS APPLIED DURING THE SPRING, WHEREAS LATE SPRING AND SUMMER SEEDING WILL BENEFIT WITH A LIGHT MULCHING OF CLEAN WEED-FREE STRAW TO CONSERVE MOISTURE.

IF CONDITIONS ARE DRIER THAN USUAL, WATERING MAY BE REQUIRED. LATE FALL AND WINTER DORMANT SEEDING REQUIRE AN INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT RECOMMENDED AND THE PREPARATION OF A CLEAN, WEED FREE SOIL SURFACE IS NECESSARY FOR OPTIMAL RESULTS.

TABLE 8-2 CONTAINS A LIST OF SPECIES IN THE NEW ENGLAND WETLAND SEED MIX PROPOSED TO BE USED (OR EQUIVALENT) IN THE REPLICATION AREA. APPROXIMATELY THREE POUNDS (DEPENDING ON TIME OF YEAR) OF THE NEW ENGLAND WETLAND SEED MIX WILL BE REQUIRED WITHIN THE REPLICATION AREA (ONE POUND PER 2,500 SQUARE FEET).

**TABLE 8-2**  
**NEW ENGLAND WETLAND SEED MIXTURE**

Species	Latin Name	Indicator Status
Swamp Milkweed	<i>Asclepias incarnata</i>	OBL
Starved/Calico Aster	<i>Aster lateriflorus</i>	FACW
Beggar Ticks	<i>Bidens frondosa</i>	FACW
Fringed/Nodding Sedge	<i>Carex crinita</i>	OBL
Hop Sedge	<i>Carex lupulina</i>	OBL
Lurid/Shallow Sedge	<i>Carex lurida</i>	OBL
Blunt Broom Sedge	<i>Carex scoparia</i>	FACW
Fox Sedge	<i>Carex vulpinoidea</i>	OBL
Spotted Joe Pye Weed	<i>Eutrochium maculatum</i>	OBL
American Mannagrass	<i>Glyceria grandis</i>	OBL
Blue Flag	<i>Iris versicolor</i>	OBL
Fowl Bluegrass	<i>Poa palustris</i>	FACW
Soft Rush	<i>Juncus effusus</i>	FACW
Square Stemmed Monkey Flower	<i>Minutus ringens</i>	OBL
Green Bulrush	<i>Scirpus atrovirens</i>	OBL
New York Ironweed	<i>Veronica noveboracensis</i>	FACW

**PLANNED HYDROLOGY**

THE PROPOSED LOCATION OF THE REPLICATION AREA IS ADJACENT TO WETLAND A. THE BWV BORDERS ON AN INTERMITTENT STREAM AND IS LOCATED ALONG A SLOPE. HYDROLOGY WITHIN THE BWV IS PROVIDED BY GROUNDWATER PRESENT IN THE SLOPE GROUNDWATER DRAINAGE. HYDROLOGY WITHIN THE REPLICATION AREA WILL BE DRIVEN BY THE SHALLOW DEPTH OF GROUNDWATER, AS WELL AS PRECIPITATION.

**IRRIGATION**

IF NECESSARY, THE REPLICATION AREA WILL BE IRRIGATED WITH AN APPROVED WATER SOURCE IF NATURAL HYDROLOGICAL CYCLES DO NOT PROVIDE SUFFICIENT WATER TO INITIALLY SUSTAIN THE NEWLY PLANTED VEGETATION. IRRIGATION PRACTICES WILL ONLY BE USED IN DROUGHT SITUATIONS OR IF OTHER UNDESIRABLE SITUATIONS WARRANT THE NEED FOR IRRIGATION PRACTICES. AFTER PLANTING AND SEEDING, THE REPLICATION AREA SHALL BE MULCHED WITH STRAW. THE MULCH SHALL PROVIDE SUFFICIENT COVER FOR MOISTURE RETENTION, SEED PROTECTION, AND SOIL STABILIZATION. THE MULCH WILL BE FREE OF WEEDS, REEDS, TWIGS, CHAFF, DEBRIS, AND EXCESSIVE AMOUNTS OF SEED AND GRAIN.

**8.1 WETLAND RESTORATION**

THERE ARE SEVERAL AREAS OF THE SITE WHERE THE EXISTING WETLANDS ARE BEING ACTIVELY AND LEGALLY MAINTAINED AS AGRICULTURAL AND MOWED FIELDS. THESE AREAS ARE IDENTIFIED ON THE EXISTING WETLAND DISTURBANCE EXHIBIT (SHEET EX-DIST) INCLUDED IN SECTION III-FIGURES FOR THE NOTICE OF INTENT APPLICATION. APPROXIMATELY 12,485 SQUARE FEET OF THESE WETLAND AREAS WILL BE RESTORED. RESTORATION WILL INCLUDE SEEDING PER THE SPECIFICATIONS IN THE PREVIOUS SECTION.

**8.2 BUFFER ZONE RESTORATION**

TEMPORARILY IMPACTED AREAS OF THE 25-FOOT BUFFER ZONE AND THE 100-FOOT BUFFER ZONE WILL BE RESTORED FOLLOWING COMPLETION OF CONSTRUCTION. THESE AREAS ARE IDENTIFIED ON THE WETLAND & BUFFER ZONE IMPACT EXHIBIT (SHEET BZ-EX) INCLUDED IN SECTION III-FIGURES FOR THE NOTICE OF INTENT APPLICATION. WORK GENERALLY INCLUDES GRADING AND CLEARING FOR CONSTRUCTION OF THE ROADWAYS, RETAINING WALLS, PARKING AREAS, AND OTHER INFRASTRUCTURE. APPROXIMATELY 41,575 SQUARE FEET OF THE 25-FOOT BUFFER ZONE WILL BE RESTORED UPON COMPLETION OF WORK. APPROXIMATELY 113,150 SQUARE FEET OF THE 100-FOOT BUFFER ZONE WILL BE RESTORED UPON COMPLETION OF WORK.

THE NEW ENGLAND SHOWY WILDFLOWER MIX PROVIDES A PERMANENT COVER OF GRASSES, WILDFLOWERS, AND LEGUMES FOR BOTH GOOD EROSION CONTROL AND WILDLIFE HABITAT VALUE. THE MIX IS DESIGNED TO BE A NO MAINTENANCE SEEDING, AND IS APPROPRIATE FOR CUT AND FILL SLOPES, DETENTION BASIN SIDE SLOPES, AND DISTURBED AREAS ADJACENT TO COMMERCIAL AND RESIDENTIAL PROJECTS.

THE MIX SHOULD BE APPLIED ON CLEAN BARE SOIL VIA HYDRO-SEEDING OR MECHANICAL SPREADER. THE AREAS WHERE THE MIX IS APPLIED SHOULD BE LIGHTLY RAKED OR ROLLED TO ENSURE PROPER SOIL-SEED CONTACT. THE BEST RESULTS ARE OBTAINED WHEN SEEDING IS APPLIED DURING THE SPRING, WHEREAS LATE SPRING AND SUMMER SEEDING WILL BENEFIT WITH A LIGHT MULCHING OF CLEAN WEED-FREE STRAW TO CONSERVE MOISTURE.

IF CONDITIONS ARE DRIER THAN USUAL, WATERING MAY BE REQUIRED. LATE FALL AND WINTER DORMANT SEEDING REQUIRE AN INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT RECOMMENDED AND THE PREPARATION OF A CLEAN, WEED FREE SOIL SURFACE IS NECESSARY FOR OPTIMAL RESULTS.

TABLE 8-3 CONTAINS A LIST OF SPECIES IN THE NEW ENGLAND SHOWY WILDFLOWER SEED MIX SEED MIX PROPOSED TO BE USED (OR EQUIVALENT) IN THE RESTORATION AREA.

**TABLE 8-3**  
**SHOWY WILDFLOWER SEED MIX**

Species	Latin Name	Indicator Status
Little Bluestem	<i>Schizachyrium scoparium</i>	FACU
Partridge Pea	<i>Chamaecrista fasciculata</i>	FACU
Indian Grass	<i>Sorghastrum nutans</i>	UPL
Creeping Red Fescue	<i>Festuca rubra</i>	FACU
Canada Wild Rye	<i>Elymus canadensis</i>	FACU+
Riverbank Wild Rye	<i>Elymus riparius</i>	FACW
Ox Eye Sunflower	<i>Helopsis helanthoides</i>	UPL
Lance Leaved Coreopsis	<i>Coreopsis lanceolata</i>	FACU
Black Eyed Susan	<i>Rudbeckia hirta</i>	FACU-
Marsh Blazing Star	<i>Liatris spicata</i>	FAC+
Common Milkweed	<i>Asclepias syriaca</i>	FACU-
New York Ironweed	<i>Veronica noveboracensis</i>	FACW+
New England Aster	<i>Aster novae-angliae</i>	FACW-
Purple Joe Pye Weed	<i>Eupatorium purpureum</i>	FAC
Butterfly Milkweed	<i>Asclepias tuberosa</i>	NI
Early Goldenrod	<i>Solidago juncea</i>	NI
Boneset	<i>Eupatorium perfoliatum</i>	FACW

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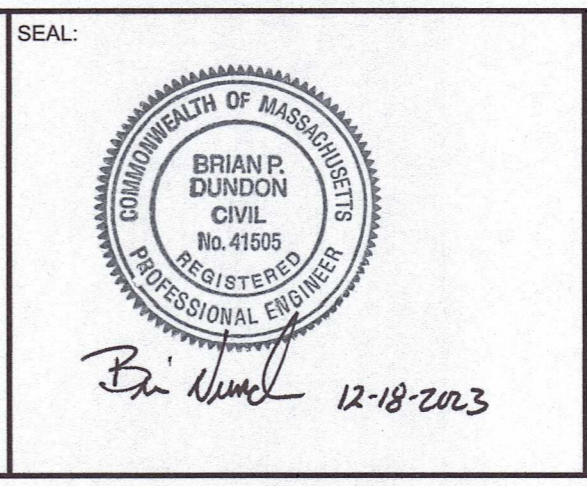
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Dec 18, 2023 - 15:07pm



NO.	REVISION	DATE	NO.	REVISION	DATE

DESIGNED BY: MAC  
DRAWN BY: MCR  
REVIEWED BY: BJM  
SCALE: AS NOTED

PREPARED FOR:  
**FAIRFIELD GROVE STREET LLC**  
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PREPARED BY:  
**RJO'CONNELL & ASSOCIATES, INC.**  
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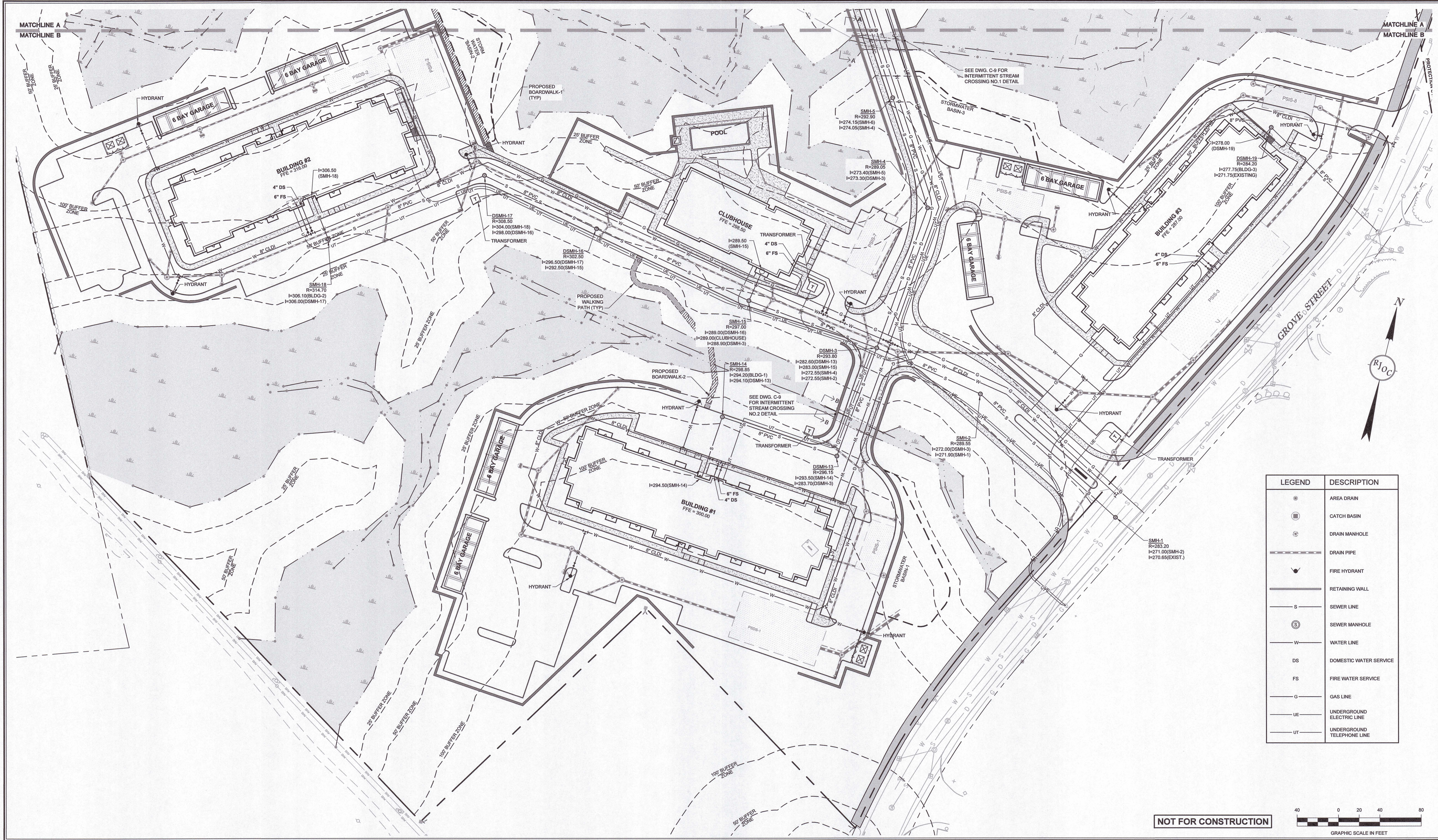
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**GROVE STREET RESIDENCES**  
FRANKLIN, MA

DRAWING NAME:  
**WETLAND REPLICATION PLAN**

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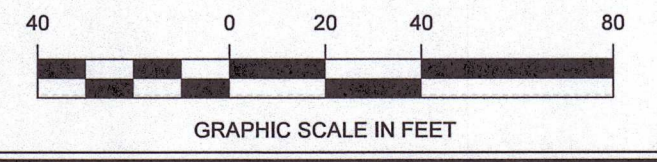
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LEGEND	DESCRIPTION
	AREA DRAIN
	CATCH BASIN
	DRAIN MANHOLE
	DRAIN PIPE
	FIRE HYDRANT
	RETAINING WALL
	SEWER LINE
	SEWER MANHOLE
	WATER LINE
	DOMESTIC WATER SERVICE
	FIRE WATER SERVICE
	GAS LINE
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND TELEPHONE LINE

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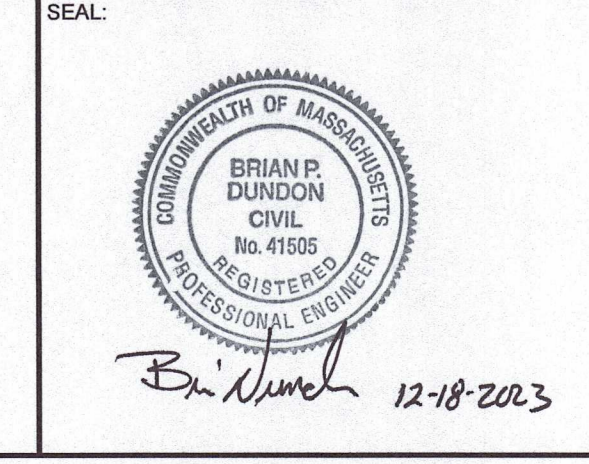
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NO.	REVISION	DATE
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DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:  
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PROJECT NAME:  
**GROVE STREET RESIDENCES**  
 FRANKLIN, MA

DRAWING NAME:  
**UTILITY PLAN**

DRAWING NUMBER:  
**C-3A**

DATE: 10/30/2023 PROJECT NO.: 22016



LEGEND	DESCRIPTION
⊙	AREA DRAIN
⊕	CATCH BASIN
⊙	DRAIN MANHOLE
—	DRAIN PIPE
—	FIRE HYDRANT
—	RETAINING WALL
—	SEWER LINE
⊙	SEWER MANHOLE
—	WATER LINE
DS	DOMESTIC WATER SERVICE
FS	FIRE WATER SERVICE
G	GAS LINE
UE	UNDERGROUND ELECTRIC LINE
UT	UNDERGROUND TELEPHONE LINE

**UTILITY NOTES**

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG SAFE" (1-800-344-7233) AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
2. EXISTING SITE FEATURES AND TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A SURVEY PLAN TITLED "EXISTING CONDITIONS SITE PLAN, 121 GROVE STREET, FRANKLIN, MA" BY GUERRIERE & HANLON, INC. DATED 05/20/2022, REVISED THROUGH 11/09/2023.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL HORIZONTAL CONTROL POINTS AND ELEVATION BENCH MARKS NECESSARY FOR THE WORK.

**GAS NOTES**

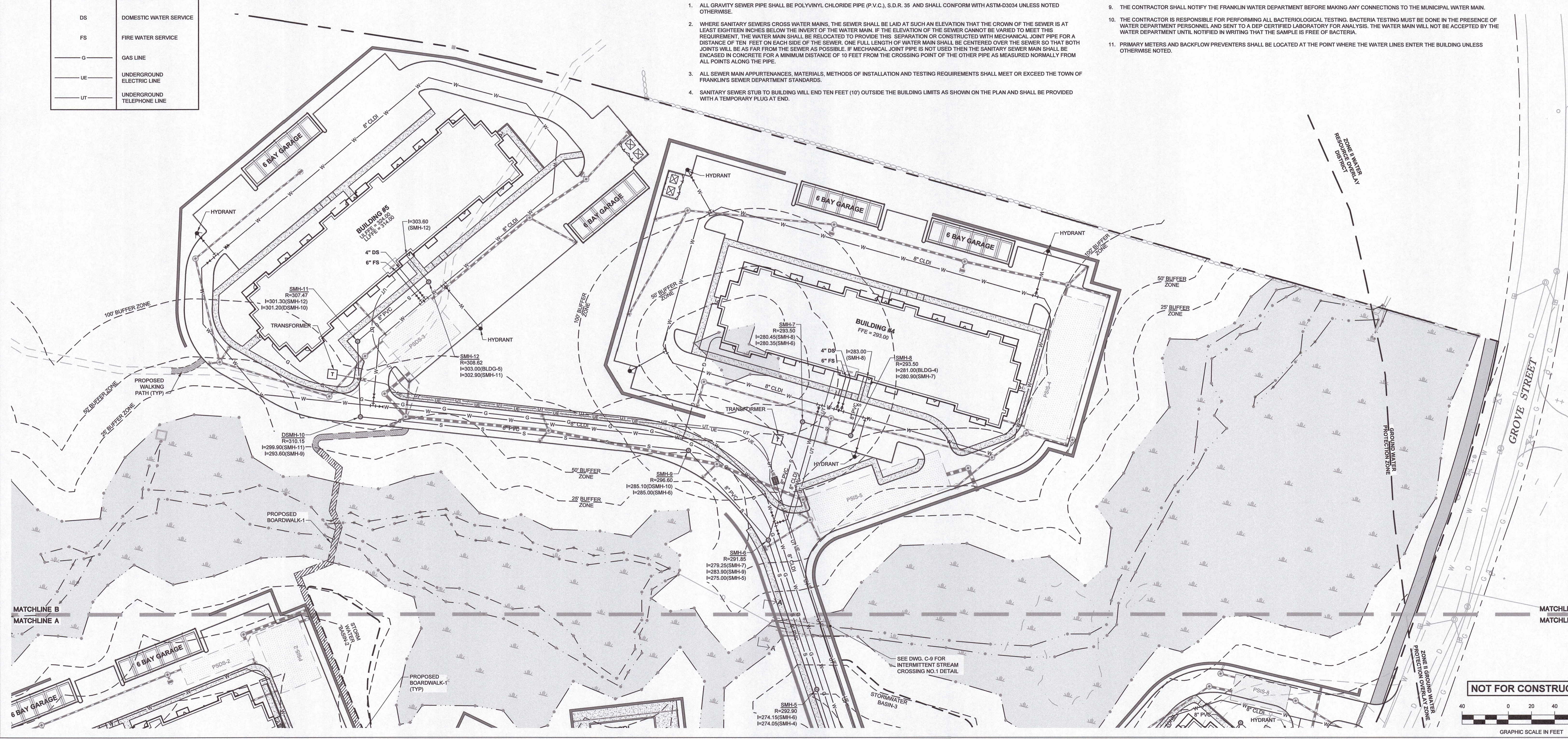
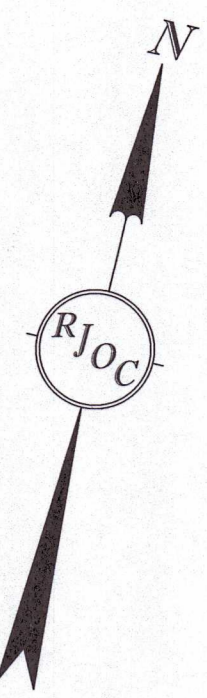
1. THE PROPOSED GAS SERVICE LOCATION IS APPROXIMATE ONLY. THE CONTRACTOR SHALL GIVE THE GAS COMPANY ADVANCE NOTICE OF WHEN THE GAS LINE CAN BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, BACKFILL AND COMPACTION OF THE GAS LINE IN ACCORDANCE WITH THE SITE WORK AND/OR GAS COMPANY SPECIFICATIONS (MORE STRINGENT SPECIFICATIONS WILL APPLY). THE CONTRACTOR IS ALSO RESPONSIBLE FOR FURNISHING AND INSTALLING PIPE BOLLARDS AS REQUIRED BY THE GAS COMPANY AND/OR LOCAL INSPECTOR IN ORDER TO PROTECT ABOVE GROUND GAS EQUIPMENT.

**SEWER NOTES**

1. ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PIPE (P.V.C.), S.D.R. 35 AND SHALL CONFORM WITH ASTM-D3034 UNLESS NOTED OTHERWISE.
2. WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST EIGHTEEN INCHES BELOW THE INVERT OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IF MECHANICAL JOINT PIPE IS NOT USED THEN THE SANITARY SEWER MAIN SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
3. ALL SEWER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED THE TOWN OF FRANKLIN'S SEWER DEPARTMENT STANDARDS.
4. SANITARY SEWER STUB TO BUILDING WILL END TEN FEET (10') OUTSIDE THE BUILDING LIMITS AS SHOWN ON THE PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.

**WATER NOTES**

1. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 5 FEET OF COVER AND A MAXIMUM OF 6 FEET OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE. GREATER DEPTHS ARE PERMITTED WHERE REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES.
2. GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. THE CONTRACTOR SHALL NOTE THAT NOT ALL FITTINGS REQUIRED UNDER THE CONTRACT ARE NOTED, SHOWN, OR INDICATED.
3. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAINS AND WATER MAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.
4. DOMESTIC WATER SERVICE 3" OR SMALLER SHALL BE TYPE K COPPER TUBING AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED CORPORATION STOP WITH APPROVED SADDLE, CURB STOP, AND BOX. DOMESTIC WATER MAIN SHALL BE INSTALLED OVER SEWER MAIN WITH A MINIMUM VERTICAL SEPARATION OF EIGHTEEN INCHES (18") AT THEIR CROSSING.
5. ALL WATER MAINS 4" AND LARGER SHALL BE CEMENT LINED DUCTILE IRON CLASS 52 AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED FITTINGS AND GATE VALVES.
6. ALL WATER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED THE TOWN OF FRANKLIN WATER STANDARDS.
7. PRESSURE AND LEAKAGE TEST, DISINFECTION AND FLUSHING SHALL BE IN ACCORDANCE WITH THE TOWN OF FRANKLIN WATER DEPARTMENT STANDARDS AND REQUIREMENTS. IN THE ABSENCE OF STANDARDS, THEY SHALL CONFORM TO THE REQUIREMENTS OF THE SITE SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTION WITH UTILITY TESTS, FLUSHING AND INSPECTIONS AS REQUIRED BY THE TOWN OF FRANKLIN'S WATER DEPARTMENT. COPIES OF TEST RESULTS WILL BE SUBMITTED TO THE FRANKLIN WATER DEPARTMENT FOR THEIR RECORDS.
8. ALL WATER LEADS TO THE BUILDING WILL TERMINATE TEN FEET (10') OUTSIDE THE BUILDING LIMITS AS SHOWN ON THE PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
9. THE CONTRACTOR SHALL NOTIFY THE FRANKLIN WATER DEPARTMENT BEFORE MAKING ANY CONNECTIONS TO THE MUNICIPAL WATER MAIN.
10. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL BACTERIOLOGICAL TESTING. BACTERIA TESTING MUST BE DONE IN THE PRESENCE OF WATER DEPARTMENT PERSONNEL AND SENT TO A DEP CERTIFIED LABORATORY FOR ANALYSIS. THE WATER MAIN WILL NOT BE ACCEPTED BY THE WATER DEPARTMENT UNTIL NOTIFIED IN WRITING THAT THE SAMPLE IS FREE OF BACTERIA.
11. PRIMARY METERS AND BACKFLOW PREVENTERS SHALL BE LOCATED AT THE POINT WHERE THE WATER LINES ENTER THE BUILDING UNLESS OTHERWISE NOTED.



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GRAPHIC SCALE IN FEET

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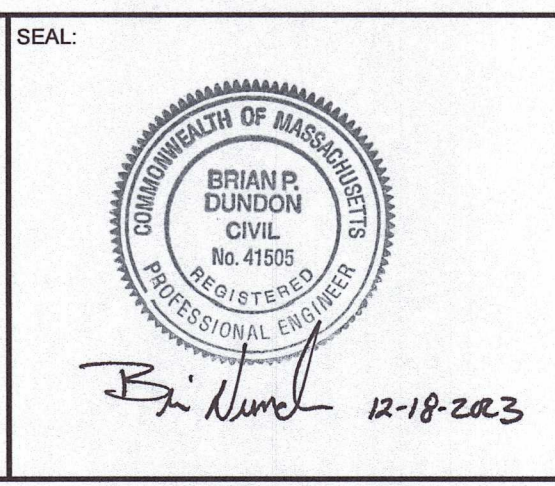


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DRAWING NAME:

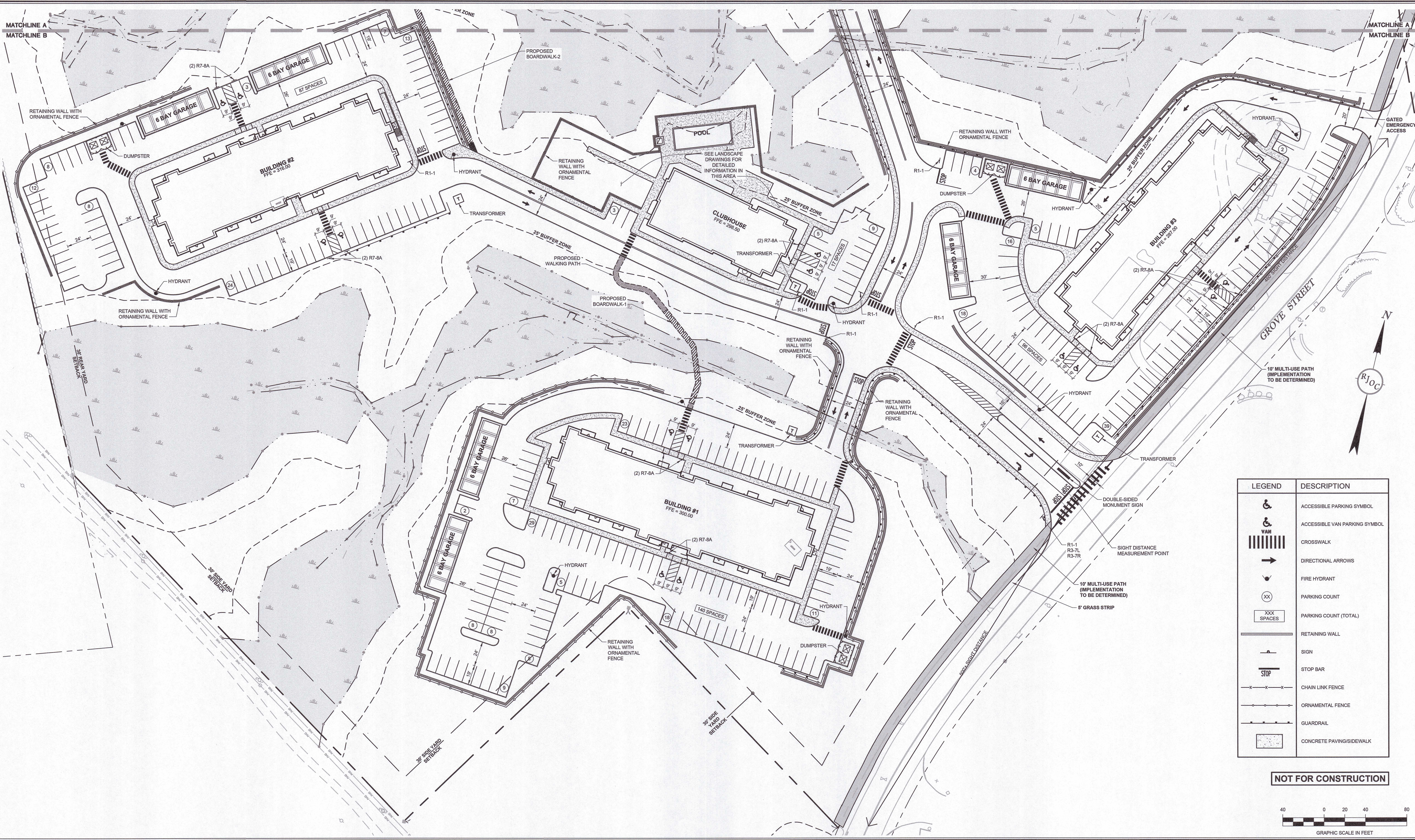
**UTILITY PLAN**

DRAWING NUMBER:

**C-3B**

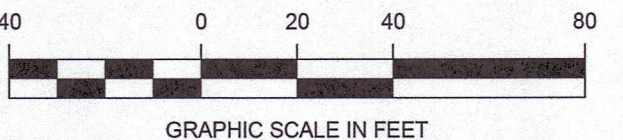
DATE: 10/30/2023 PROJECT NO.: 22016





LEGEND	DESCRIPTION
	ACCESSIBLE PARKING SYMBOL
	ACCESSIBLE VAN PARKING SYMBOL
	CROSSWALK
	DIRECTIONAL ARROWS
	FIRE HYDRANT
	PARKING COUNT
	PARKING COUNT (TOTAL)
	RETAINING WALL
	SIGN
	STOP BAR
	CHAIN LINK FENCE
	ORNAMENTAL FENCE
	GUARDRAIL
	CONCRETE PAVING/SIDEWALK

**NOT FOR CONSTRUCTION**



Drawing name: G:\MA\Fairfield\Fairfield\121 Grove Street\Main\2016\_C-4 Parking and Traffic Control Plan.dwg  
Dec 19, 2023, 1:16:32pm

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NO.	REVISION	DATE
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:

**FAIRFIELD GROVE STREET LLC**  
30 BRAINTREE HILL OFFICE PARK  
SUITE 105  
BRAintree, MA 02184

SEAL:

*Brian P. Dundon* 12-18-2023

PREPARED BY:

**RJO'CONNELL & ASSOCIATES, INC.**  
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80 MONTVALE AVENUE, SUITE 301 STONEHAM, MA 02186  
PHONE: 781.279.9160 RJOCONNELL.COM

PROJECT NAME:

**GROVE STREET RESIDENCES**  
FRANKLIN, MA

DRAWING NAME:

**PARKING & TRAFFIC CONTROL PLAN**

DRAWING NUMBER:

**C-4A**

DATE: 10/30/2023 PROJECT NO.: 22016

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