

**NOTES:**

1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY SPRUHAN ENGINEERING, P.C. AS OF 5/14/2020.
2. DEED REFERENCE: BOOK 13886, PAGE 324  
PLAN REFERENCE: PLAN BOOK 6740, PLAN 375  
PLAN REFERENCE: PLAN 617 OF 1952  
MIDDLESEX COUNTY SOUTH DISTRICT REGISTRY OF DEEDS
3. THIS PLAN IS NOT INTENDED TO BE RECORDED.
4. I CERTIFY THAT THE DWELLING SHOWN IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE X, ON FLOOD HAZARD BOUNDARY MAP NUMBER 25017C0562E, IN COMMUNITY NUMBER: 250208, DATED 6/4/2010.
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 USES OF THE LAND; HOWEVER THIS NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
6. FIRST FLOOR ELEVATIONS ARE TAKEN AT THRESHOLD.
7. NO RESPONSIBILITY IS TAKEN FOR ZONING TABLE AS SPRUHAN ENGINEERING, P.C. ARE NOT ZONING EXPERTS. TABLE IS TAKEN FROM TABLE PROVIDED BY LOCAL ZONING ORDINANCE. CLIENT AND/OR ARCHITECT TO VERIFY THE ACCURACY OF ZONING ANALYSIS.
8. THE ELEVATIONS SHOWN ARE BASED ON CITY OF NEWTON DATUM.
9. ZONING INFORMATION: SR-2 (SINGLE RESIDENCE 2), LOT WAS CREATED BEFORE 1953

LEGEND	
[Symbol]	BOUND
[Symbol]	IRON PIN/PIPE
[Symbol]	STONE POST
[Symbol]	TREE
[Symbol]	TREE STUMP
[Symbol]	SHRUBS/FLOWERS
[Symbol]	SIGN
[Symbol]	BOLLARD
[Symbol]	SEWER MANHOLE
[Symbol]	DRAIN MANHOLE
[Symbol]	CATCH BASIN
[Symbol]	WATER MANHOLE
[Symbol]	WATER VALVE
[Symbol]	HYDRANT
[Symbol]	GAS VALVE
[Symbol]	ELECTRIC MANHOLE
[Symbol]	ELECTRIC HANDHOLE
[Symbol]	UTILITY POLE
[Symbol]	LIGHT POLE
[Symbol]	MANHOLE
[Symbol]	SPOT GRADE
[Symbol]	TOP OF WALL
[Symbol]	BOTTOM OF WALL
[Symbol]	EXISTING BUILDING
[Symbol]	RETAINING WALL
[Symbol]	STONE WALL
[Symbol]	FENCE
[Symbol]	TREE LINE
[Symbol]	SEWER LINE
[Symbol]	DRAIN LINE
[Symbol]	WATER LINE
[Symbol]	GAS LINE
[Symbol]	UNDERGROUND ELECTRIC LINE
[Symbol]	OVERHEAD WIRES
[Symbol]	145" CONTOUR LINE (MJR)
[Symbol]	140" CONTOUR LINE (MNR)



**SPRUHAN ENGINEERING, P.C.**

80 JEWETT ST. (SUITE 1)  
NEWTON, MA 02458  
Tel: 617-816-0722  
Email: edmond@spruhaneng.com



**432 DEDHAM STREET  
NEWTON,  
MASSACHUSETTS**

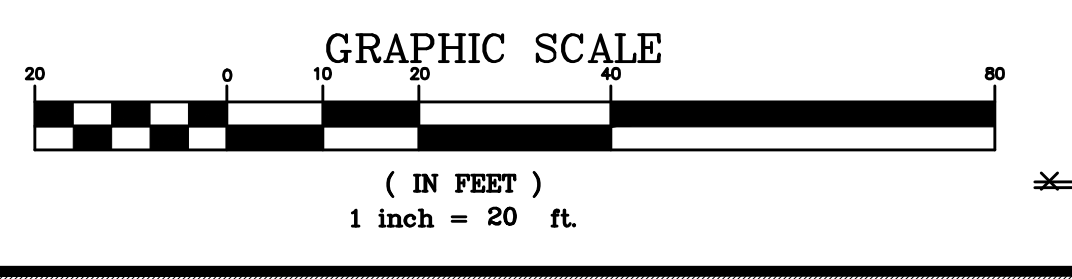
**REVISION BLOCK**

DESCRIPTION	DATE
REVISED RETAINING WALL HEIGHT	8/3/2020
REVISED DETAILS & WALL LOCATION	9/14/2020

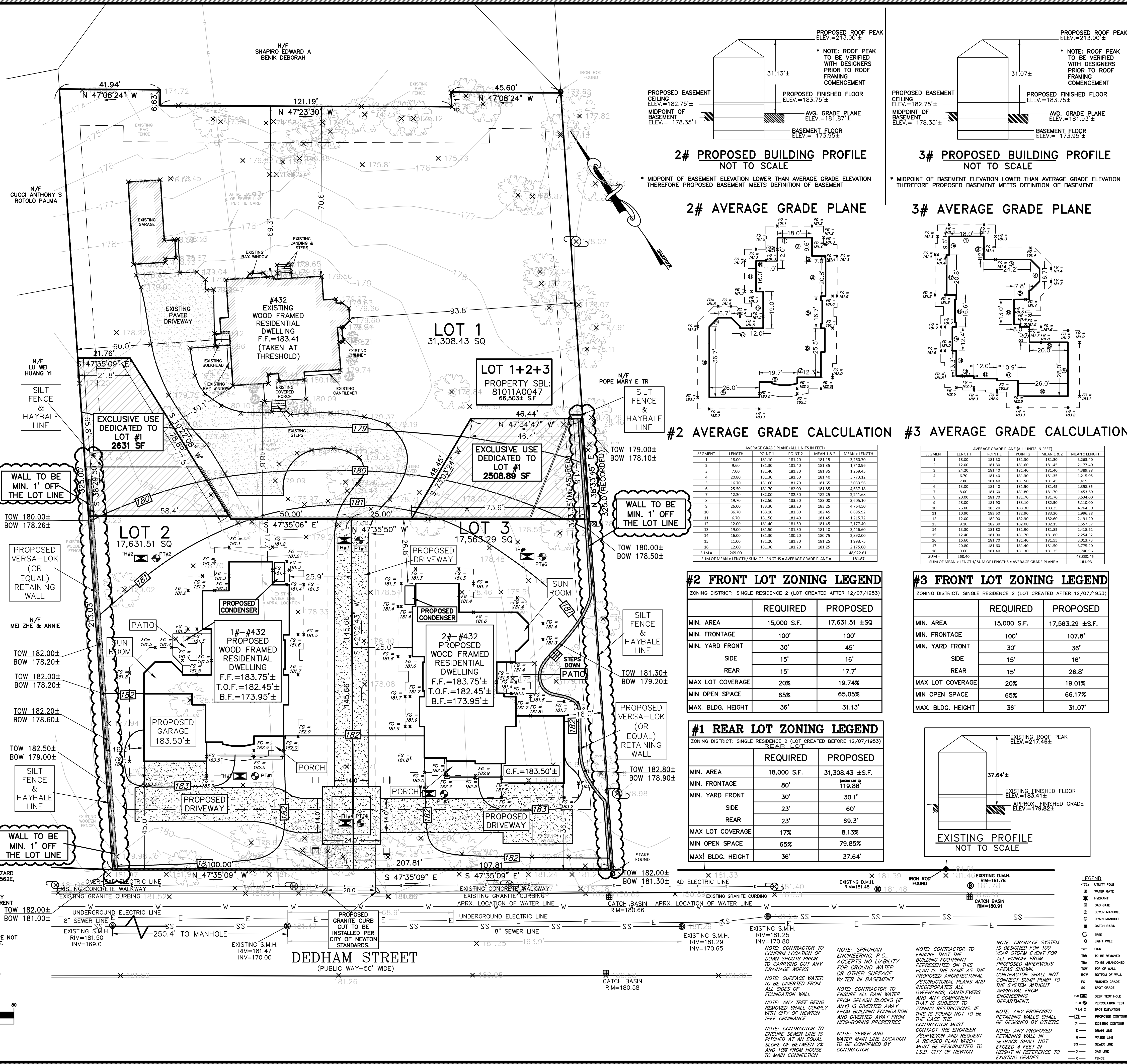
All legal rights including, but not limited to, copyright and design patent rights, in the designs, arrangements and plans shown on this document are the property of Peter Nolan & Associates, LLC, or Spruhan Engineering, P.C. They may not be used or reused in whole or in part, except in connection with this project, without the prior written consent of Spruhan Engineering, P.C.. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on this project, and Spruhan Engineering, P.C., must be notified of any variation from the dimensions and conditions shown by these drawings.

**SURVEY PLAN**

SCALE:	1" = 20'
DATE:	6-10-20
DRAWN BY:	KK
CHECKED BY:	ES
APPROVED BY:	ES



- ELEVATIONS REFER TO CITY OF NEWTON DATUM.
- THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED AND EXISTING UTILITIES.
- MASSACHUSETTS STATE LAW REQUIRES UTILITY NOTIFICATION AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL DIG-SAFE AT 1-888-344-7233 IN ORDER TO COMPLY WITH STATE LAW.
- ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS, LATEST EDITION, PREPARED AND ISSUED BY THE NEWTON ENGINEERING DEPARTMENT. COPIES MAY BE OBTAINED AT THE OFFICE OF THE CITY ENGINEER. REFER TO NOTE 7 FOR DETAILS. NOTE: A TRENCH PERMIT MUST BE OBTAINED PRIOR TO ANY EXCAVATION BEING CARRIED OUT.
- PROPOSED SEWER PIPE SHALL BE 6" PVC SDR 35.
- PROPOSED WATER SERVICE SHALL BE 1" TYPE K COPPER.
- THIS PLAN IS THE RESULT OF AN INSTRUMENT SURVEY DONE ON THE GROUND MAY 14TH, 2019.
- ALL WORK SHALL BE SUBJECT TO THE INSPECTION BY AND APPROVAL OF THE CITY ENGINEER.
- NO EXCAVATION SHALL BE MADE BY THE CONTRACTOR IN ANY PUBLIC WAY OR UTILITY EASEMENT UNLESS AT LEAST FORTY-EIGHT (48) HOURS, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS, BEFORE THE PROPOSED EXCAVATION IS TO BE MADE. HE HAS SUBMITTED NOTICE OF THE PROPOSED EXCAVATION TO THE FOLLOWING:
  - SUCH PUBLIC UTILITY COMPANIES AS SUPPLY GAS, ELECTRICITY, AND TELEPHONE SERVICE IN THE CITY.
  - SUCH PRIVATE COMPANIES AS PROVIDE CABLE TELEVISION SERVICE IN THE CITY.
  - CITY OF NEWTON WATER & SEWER DEPARTMENT. SUCH NOTICE SHALL SET FORTH THE STREET NAME AND A REASONABLY ACCURATE DESCRIPTION OF THE LOCATION OF THE EXCAVATION.
- THE CONTRACTOR SHALL PROVIDE CITY OF NEWTON POLICE OFFICERS FOR THE DIRECTION AND CONTROL OF TRAFFIC AS REQUIRED BY THE CITY ENGINEER.
- NO WORK SHALL BE PERFORMED UNTIL THE NECESSARY PERMITS ARE OBTAINED FROM THE CITY OF NEWTON PUBLIC WORKS DEPARTMENT.
- ALL TRENCHES IN PAVED STREETS SHALL BE TEMPORARILY PATCHED WITH PAVEMENT OF EXISTING PAVEMENT THICKNESS OR AS DIRECTED BY THE CITY ENGINEERING INSPECTOR. LAID HOT AND MAINTAINED UNTIL THE PERMANENT PATCH IS INSTALLED.
- WARNING SIGNS SHALL CONFORM TO PAGE 66 OF THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS.
- ALL TOPSOIL, SUBSOIL OR IMPERVIOUS SOIL MUST BE EXCAVATED AND REMOVED BELOW THE LEACHING SYSTEM AND TO A DISTANCE 5' LATERALLY IN ALL DIRECTIONS BEYOND THE SIDES OF THE GALILEYS BACKLOG AS REQUIRED WITH A CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES. THE SAND SHALL HAVE A PERCOLATION RATE OF 2 MINUTES PER INCH OR FASTER.
- IN CASES WHERE LEDGE OR BouldERS ARE ENCOUNTERED, SPRUHAN ENGINEERING, P.C. WILL NOT BE RESPONSIBLE FOR THE AMOUNT OF ROCK ENCOUNTERED.
- IF ANY PART OF THIS DESIGN IS TO BE ALTERED IN ANY WAY, THE DESIGN ENGINEER, AS WELL AS THE APPROVING AUTHORITIES, SHALL BE NOTIFIED IN WRITING BEFORE CONSTRUCTION.
- THE ROOF RUNOFF FROM THE ROOF SURFACES SHALL BE COLLECTED BY GUTTERS AND DIRECTED TO THE STORM WATER DRAINAGE SYSTEM.
- PRIOR TO AN OCCUPANCY PERMIT BEING ISSUED, AN AS-BUILT PLAN MUST BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND HARD COPY. THE PLAN SHOULD SHOW ALL UTILITIES AND FINAL GRADES, TIES TO ALL EXISTING, VALVES, CLEAN-OUTS, CONNECTION POINTS AT MAINS, STRUCTURE ADJUSTMENT COVERS, ANY EASEMENTS AND FINAL GRADING.
- THE APPLICANT WILL HAVE TO APPLY FOR A STREET OPENING & UTILITIES CONNECTION PERMITS AS WELL AS A SIDEWALK CROSSING PERMIT AND A TRENCH PERMIT WITH THE DPW.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGN ENGINEER FOR INSPECTIONS OR AS-BUILT LOCATIONS. PETER NOLAN & ASSOCIATES, LLC, WILL NOT PROVIDE AS-BUILT CERTIFICATION TO UNINSPECTED BACKLOG UTILITIES. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED PRIOR TO INSPECTIONS.
- ANY PROPOSED PVC PIPES UNDER PAVING OR CONCRETE WITH LESS THAN 30" OF COVER MUST BE ENCASED IN CONCRETE. (SEE PAGE 21, CITY OF NEWTON GENERAL CONSTRUCTION DETAILS).
- THE EXISTING WATER & SEWER SERVICES SHALL BE CUT AND CAPPED AT THE MAIN AND BE COMPLETELY REMOVED FROM THE SITE, REPLACED AS SPECIFIED AND PROPERLY BACKFILLED. THE ENGINEERING DIVISION MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM UTILITIES MAY THEN BE BACKFILLED.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 48 HOURS IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE DRAINAGE SYSTEM, WATER & SEWER SERVICES INSPECTED. THE SYSTEM UTILITIES MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM UTILITIES MAY THEN BE BACKFILLED.
- THE EXISTING CONDITIONS OF THE LAND ARE NOT TO BE ALTERED BY MORE THAN THREE (3) FEET AS A RESULT OF THE PLACEMENT OR REMOVAL OF SOIL, LOAM, CLAY, GRAVEL, OR STONE, OR OTHER SOLID MATERIAL UNLESS A RETAINING WALL OR SHIELD IS INSTALLED AFTER UTILITIES ARE EXPOSED. ANY CHANGES TO THE EXISTING CONDITIONS OF THE LAND MUST BE APPROVED BY BOTH CITY OF NEWTON ENGINEERING DEPARTMENT & CITY OF NEWTON I.S.D.
- NO WORK IS ALLOWED WITHIN A CITY OF NEWTON RIGHT-OF-WAY BETWEEN NOVEMBER 15TH AND APRIL 15TH, UNLESS AN EMERGENCY EXISTS OR THERE ARE EXISTING CIRCUMSTANCES. APPLICANT MAY REQUEST PERMISSION FROM THE CITY ENGINEER. IF ALLOWED, SPECIAL CONSTRUCTION REQUIREMENTS WILL BE ISSUED, AND AS SUCH IT IS RECOMMENDED THAT THE APPLICANT OR APPLICANT'S REPRESENTATIVE CONTACT THE CITY OF NEWTON ENGINEERING DEPARTMENT PRIOR TO START OF WORK FOR CLARIFICATION.
- AT THE END OF CONSTRUCTION, ALL DRAINAGE STRUCTURES ARE TO BE CLEANED OF SILT, STONES AND OTHER DEBRIS.
- DURING CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED ONCE PER WEEK AND WITHIN 24 HOURS OF ANY STORM EVENT GENERATING MORE THAN 1/2" OF RAINFALL. THE EROSION CONTROL MEASURES SHALL BE MAINTAINED REGULARLY AND ADJUSTED IF NECESSARY TO ENSURE THAT NO SILT OR DEBRIS LEAVES THE SITE.
- WITH EXCEPTION OF GAS UTILITY SERVICES, ALL UTILITY TRENCHES WITHIN ANY CITY OF NEWTON RIGHT-OF-WAY WILL BE BACKFILLED WITH TYPE II<sub>3</sub> (EXCAVABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING DEPARTMENT.
- ALL CONSTRUCTION ACTIVITIES WITHIN THE CITY OF NEWTON RIGHT-OF-WAY MUST FULLY COMPLY WITH ALL CITY OF NEWTON CONSTRUCTION SPECIFICATIONS AS WELL AS 521 CMR 21.00 AND 22.00.
- ALL NEW SEWER SERVICE AND/OR STRUCTURES SHALL BE PRESSURE TESTED OR VIDEO TAPED AFTER FINAL INSTALLATION IS COMPLETE. METHOD OF FINAL INSPECTION SHALL BE DETERMINED SOLELY BY THE CONSTRUCTION INSPECTOR FROM THE CITY ENGINEERING DIVISION. ALL SEWER MAINS SHALL BE VACUUM TESTED ACCORDANCE TO THE CITY'S CONSTRUCTION STANDARDS AND SPECIFICATIONS. THE SEWER SERVICE WILL NOT BE ACCEPTED UNTIL ONE OF THE TWO METHODS STATED ABOVE IS COMPLETED. ALL TESTING MUST BE WITNESSED BY A REPRESENTATIVE OF THE ENGINEERING DIVISION. A CERTIFICATE OF OCCUPANCY WILL NOT BE RECOMMENDED UNTIL THIS TEST IS COMPLETED AND A WRITTEN REPORT IS RECEIVED BY THE CITY ENGINEER.
- ALL SITUATION CONTROL NEEDS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER'S OFFICE FOR APPROVAL PRIOR TO COMMENCEMENT.
- ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MGL CHAPTER 82A, TRENCH EXCAVATION SAFETY REQUIREMENTS, TO PROTECT THE GENERAL PUBLIC FROM UNAUTHORIZED ACCESS TO UNATTENDED TRENCHES. A TRENCH EXCAVATION SAFETY PERMIT MUST BE OBTAINED PRIOR TO THE START OF ANY WORK.
- APPROVAL OF THIS PLAN BY CITY OF NEWTON ENGINEERING DIVISION IMPLIES THAT THE PLAN MEETS THE MINIMAL DESIGN STANDARDS OF THE CITY OF NEWTON. HOWEVER, THE ENGINEERING DIVISION MAKES NO REPRESENTATION AND ASSUMES NO RESPONSIBILITY FOR THE DESIGN(S) IN TERMS OF SUITABILITY FOR THE PARTICULAR SITE CONDITIONS OR OF THE FUNCTIONALITY OR PERFORMANCE OF ANY ITEMS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN(S). THE CITY OF NEWTON ASSUMES NO LIABILITIES FOR DESIGN ASSUMPTIONS, ERRORS OR OMISSIONS BY THE ENGINEER OF RECORD.
- PER CITY OF NEWTON ORDINANCE NO.8-42, COUNCIL ITEM #251-19, BUILDING SEWER, WATER SERVICE PIPE & SIDEWALK/CURB REPLACEMENT ORDINANCE. THE APPLICANT IS REQUIRED TO INSTALL REPLACEMENT SIDEWALK & CURB ALONG THE ENTIRE FRONTAGE. THIS SHALL INCLUDE APPROPRIATE TRANSITION TO ADJOINING CURBING & WALKWAYS, INCLUDING ACCESSIBLE CURB CUTS & OTHER ACCESS AS REQUIRED. THE ENGINEERING CONSTRUCTION INSPECTOR MAKES A DETERMINATION, BASED ON THE MATERIAL & MANNER OF CONSTRUCTION OF THE EXISTING SIDEWALK & CURB, THAT THE EXISTING SIDEWALK & CURB HAS THE ABILITY TO BE RE-SET OR REUSED WITHOUT REPLACEMENT.



**SPRUHAN ENGINEERING, P.C.**  
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NEWTON, MA 02458  
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Email: edmond@spruhaneng.com

### 432 DEDHAM STREET NEWTON, MASSACHUSETTS

**REVISION BLOCK**

DESCRIPTION	DATE
REVISED RETAINING WALL HEIGHT	8/3/2020
REVISED DETAILS & WALL LOCATION	9/14/2020

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### ZONING & GRADING PLAN

SCALE: 1" = 20'  
DATE: 6-10-20  
DRAWN BY: PS  
CHECKED BY: ES  
APPROVED BY: ES  
SHEET: 2 OF 8

1. ELEVATIONS REFER TO CITY OF NEWTON DATUM.

2. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED AND EXISTING UTILITIES.

3. MASSACHUSETTS STATE LAW REQUIRES UTILITY NOTIFICATION AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL 811-888-344-7233 IN ORDER TO COMPLY WITH STATE LAW.

4. ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS, LATEST EDITION, PREPARED AND ISSUED BY THE NEWTON ENGINEERING DEPARTMENT. COPIES MAY BE OBTAINED AT THE OFFICE OF THE CITY ENGINEER. REFER TO NOTE 29 FOR DETAILS. NOTE: A TRENCH PERMIT MUST BE OBTAINED PRIOR TO ANY EXCAVATION BEING CARRIED OUT.

5. PROPOSED SEWER PIPE SHALL BE 6" PVC SDR 35.

6. PROPOSED WATER SERVICE SHALL BE 1" TYPE K COPPER.

7. THIS PLAN IS THE RESULT OF AN INSTRUMENT SURVEY DONE ON THE GROUND MAY 14TH, 2019.

8. ALL WORK SHALL BE SUBJECT TO THE INSPECTION BY AND APPROVAL OF THE CITY ENGINEER.

9. NO EXCAVATION SHALL BE MADE BY THE CONTRACTOR IN ANY PUBLIC WAY OR UTILITY EASEMENT UNLESS AT LEAST FORTY-EIGHT (48) HOURS, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS, BEFORE THE PROPOSED EXCAVATION IS TO BE MADE. HE HAS SUBMITTED NOTICE OF THE PROPOSED EXCAVATION TO THE FOLLOWING:

a. SUCH PUBLIC UTILITY COMPANIES AS SUPPLY GAS, ELECTRICITY, AND TELEPHONE SERVICE IN THE CITY.

b. SUCH PRIVATE COMPANIES AS PROVIDE CABLE TELEVISION SERVICE IN THE CITY.

c. CITY OF NEWTON WATER & SEWER DEPARTMENT. SUCH NOTICE SHALL SET FORTH THE STREET NAME AND A REASONABLY ACCURATE DESCRIPTION OF THE LOCATION OF THE EXCAVATION.

10. THE CONTRACTOR SHALL PROVIDE CITY OF NEWTON POLICE OFFICERS FOR THE DIRECTION AND CONTROL OF TRAFFIC AS REQUIRED BY THE CITY ENGINEER.

11. NO WORK SHALL BE PERFORMED UNTIL THE NECESSARY PERMITS ARE OBTAINED FROM THE CITY OF NEWTON PUBLIC WORKS DEPARTMENT.

12. ALL TRENCHES IN PAVED STREETS SHALL BE TEMPORARILY PATCHED WITH PAVEMENT OF EXISTING PAVEMENT THICKNESS OR AS DIRECTED BY THE CITY ENGINEERING INSPECTOR, LAID HOT AND MAINTAINED UNTIL THE PERMANENT PATCH IS INSTALLED.

13. WARNING SIGNS SHALL CONFORM TO PAGE 66 OF THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS.

14. ALL TOPSOIL, SUBSOIL OR IMPERVIOUS SOIL MUST BE EXCAVATED AND REMOVED BELOW THE LEADING SYSTEM AND TO A DISTANCE 5' LATERALLY IN ALL DIRECTIONS BEYOND THE SIDES OF THE GALLEYS, BACKFILL AS REQUIRED WITH A CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DETERIORATED SUBSTANCES. THE SAND SHALL HAVE A PERCOLATION RATE OF 2 MINUTES PER INCH OR FASTER.

15. IN CASES WHERE LEDGE OR BouldERS ARE ENCOUNTERED, SPRUHAN ENGINEERING, P.C. WILL NOT BE RESPONSIBLE FOR THE AMOUNT OF ROCK ENCOUNTERED.

16. IF ANY PART OF THIS DESIGN IS TO BE ALTERED IN ANY WAY, THE DESIGN ENGINEER, AS WELL AS THE APPROVING AUTHORITIES, SHALL BE NOTIFIED IN WRITING BEFORE CONSTRUCTION.

17. THE ROOF RUNOFF FROM THE ROOF SURFACES SHALL BE COLLECTED BY GUTTERS AND DIRECTED TO THE STORM WATER DRAINAGE SYSTEM.

18. PRIOR TO AN OCCUPANCY PERMIT BEING ISSUED, AN AS-BUILT PLAN MUST BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND HARD COPY. THE PLAN SHOULD SHOW ALL UTILITIES AND FINAL GRADES, TIES TO ALL GATES, VALVES, CLEAN-OUTS, CONNECTION POINTS AT MAINS, STRUCTURE ACCESS/MAINTENANCE COVERS, ANY EASEMENTS AND FINAL GRADING.

19. THE APPLICANT WILL HAVE TO APPLY FOR A STREET OPENING & UTILITIES CONNECTION PERMITS AS WELL AS A SIDEWALK CROSSING PERMIT AND A TRENCH PERMIT WITH THE DPW.

20. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGN ENGINEER FOR INSPECTIONS OR AS-BUILT LOCATIONS. PETER NOLAN & ASSOCIATES, LLC WILL NOT PROVIDE AS-BUILT CERTIFICATION TO UNPROTECTED BACKLINED UTILITIES. A MINIMUM NOTICE OF 48 HOURS NOTICE IS REQUIRED PRIOR TO INSPECTIONS.

21. ANY PROPOSED PVC PIPES UNDER PAVING OR CONCRETE WITH LESS THAN 30" OF COVER MUST BE ENCASED IN CONCRETE. (SEE PAGE 21, CITY OF NEWTON GENERAL CONSTRUCTION DETAILS).

22. THE EXISTING WATER & SEWER SERVICES SHALL BE CUT AND CAPPED AT THE MAIN AND BE COMPLETELY REMOVED FROM THE SITE, REPLACED AS SPECIFIED AND PROPERLY BACKFILLED. THE ENGINEERING DIVISION SHALL BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM & UTILITIES MAY THEN BE BACKFILLED.

23. THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 48 HOURS IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE DRAINAGE SYSTEM, WATER & SEWER SERVICES INSPECTED. THE SYSTEM & UTILITIES MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM & UTILITIES MAY THEN BE BACKFILLED.

24. THE EXISTING CONTOURS OF THE LAND ARE NOT TO BE ALTERED BY MORE THAN THREE (3) FEET AS A RESULT OF THE PLACEMENT OR REMOVAL OF SOIL, LOAM, CLAY, GRAVEL, OR STONE, OR OTHER SOIL MATERIAL UNLESS A PROPOSED RETAINING WALL OR SHALE IS INSTALLED AFTER IT IS APPROVED BY BOTH CITY OF NEWTON ENGINEERING DEPARTMENT & CITY OF NEWTON I.S.D.

25. NO WORK IS ALLOWED WITHIN A CITY OF NEWTON RIGHT-OF-WAY BETWEEN NOVEMBER 15TH AND APRIL 15TH. IF AN EMERGENCY EXISTS OR THERE ARE EXTENUATING CIRCUMSTANCES, APPLICANT MAY REQUEST PERMISSION FROM THE CITY ENGINEER. IF ALLOWED, SPECIAL CONSTRUCTION REQUIREMENTS WILL BE REQUIRED, AND AS SUCH IT IS RECOMMENDED THAT THE APPLICANT OR APPLICANT'S REPRESENTATIVE CONTACT THE CITY OF NEWTON ENGINEERING DEPARTMENT PRIOR TO START OF WORK FOR CLARIFICATION.

26. AT THE END OF CONSTRUCTION, ALL DRAINAGE STRUCTURES ARE TO BE CLEANED OF SILT, STONES AND OTHER DEBRIS.

27. DURING CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED ONCE PER WEEK AND WITHIN 24 HOURS OF ANY STORM EVENT GENERATING MORE THAN 1/2" OF RAINFALL. THE EROSION CONTROL MEASURES SHALL BE CLEANED REGULARLY AND ADJUSTED IF NECESSARY TO ENSURE THAT NO SILT OR DEBRIS LEAVES THE SITE.

28. WITH EXCEPTION OF GAS UTILITY SERVICES, ALL UTILITY TRENCHES WITHIN ANY CITY OF NEWTON RIGHT-OF-WAY WILL BE BACKFILLED WITH TYPE III (EXCAVATABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING SPECIFICATIONS.

29. ALL CONSTRUCTION ACTIVITIES WITHIN THE CITY OF NEWTON RIGHT-OF-WAY MUST FULLY COMPLY WITH ALL OF CITY OF NEWTON CONSTRUCTION SPECIFICATIONS AS WELL AS 521 CDR 21.00 AND 22.00.

30. ALL NEW SEWER SERVICE AND/OR STRUCTURES SHALL BE PRESSURE TESTED OR VIDEO TAPED AFTER FINAL INSTALLATION IS COMPLETE. METHOD OF FINAL INSPECTION SHALL BE DETERMINED SOLELY BY THE CONSTRUCTION INSPECTOR FROM THE CITY ENGINEERING DIVISION. ALL SEWER MAINS SHALL BE VACUUM TESTED ACCORDANCE TO THE CITY'S CONSTRUCTION STANDARDS & SPECIFICATIONS. THE SEWER SERVICE WILL NOT BE ACCEPTED UNTIL ONE OF THE TWO METHODS STATED ABOVE IS COMPLETED. ALL TESTING MUST BE WITNESSED BY A REPRESENTATIVE OF THE ENGINEERING DIVISION. A CERTIFICATE OF OCCUPANCY WILL NOT BE RECORDED UNTIL THIS TEST IS COMPLETED AND A WRITTEN REPORT IS RECEIVED BY THE CITY ENGINEER.

31. ALL SITUATION CONTROL NEEDS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER'S OFFICE FOR APPROVAL PRIOR TO COMMENCEMENT.

32. ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MGL CHAPTER 82A, TRENCH EXCAVATION SAFETY REQUIREMENTS, TO PROTECT THE GENERAL PUBLIC FROM UNAUTHORIZED ACCESS TO UNPROTECTED TRENCHES. A TRENCH EXCAVATION PERMIT IS REQUIRED PRIOR TO COMMENCEMENT.

33. APPROVAL OF THIS PLAN BY CITY OF NEWTON ENGINEERING DIVISION IMPLIES THAT THE PLAN MEETS THE MINIMAL DESIGN STANDARDS OF THE CITY OF NEWTON. HOWEVER, THE ENGINEERING DIVISION MAKES NO REPRESENTATION AND ASSUMES NO RESPONSIBILITY FOR THE DESIGN(S) IN TERMS OF SUITABILITY FOR THE PARTICULAR SITE CONDITIONS OR OF THE FUNCTIONALITY OR PERFORMANCE OF ANY ITEMS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN(S). THE CITY OF NEWTON ASSUMES NO LIABILITY FOR DESIGN ASSUMPTION, ERRORS OR OMISSIONS BY THE ENGINEER OF RECORD.

34. PER CITY OF NEWTON ORDINANCE NO. 8-42, COUNCIL ITEM #251-19, BUILDING SEWER, WATER SERVICE PIPE & SIDEWALK/CURB REPLACEMENT ORDINANCE. THE APPLICANT IS REQUIRED TO INSTALL CURB & SIDEWALK CURB ALONG THE ENTIRE FRONTAGE. THIS SHALL INCLUDE APPROPRIATE TRANSITION TO ADVANCING CURBING & WALKWAYS, INCLUDING ACCESSIBLE CURB CUTS & OTHER ACCESS AS REQUIRED. THE ENGINEERING CONSTRUCTION INSPECTOR MAKES A DETERMINATION BASED ON THE MATERIAL & MANNER OF CONSTRUCTION OF THE EXISTING SIDEWALK & CURB, THAT THE EXISTING SIDEWALK & CURB HAS THE ABILITY TO BE RE-SET OR RE-PAVED WITHOUT REPLACEMENT.

NOTES:

1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY SPRUHAN ENGINEERING, P.C. AS OF 5/14/2020.

2. DEED REFERENCE: BOOK 13886, PAGE 324  
PLAN REFERENCE: PLAN BOOK 6740, PLAN 375  
PLAN REFERENCE: PLAN 617 OF 1952  
MIDDLESEX COUNTY SOUTH DISTRICT REGISTRY OF DEEDS

3. THIS PLAN IS NOT INTENDED TO BE RECORDED.

4. I CERTIFY THAT THE DWELLING SHOWN IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE X, ON FLOOD HAZARD BOUNDARY MAP NUMBER 25017C0562Z, IN COMMUNITY NUMBER: 250208, DATED 6/4/2010.

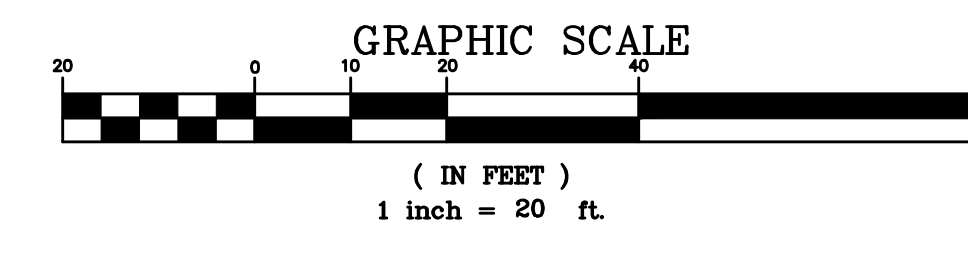
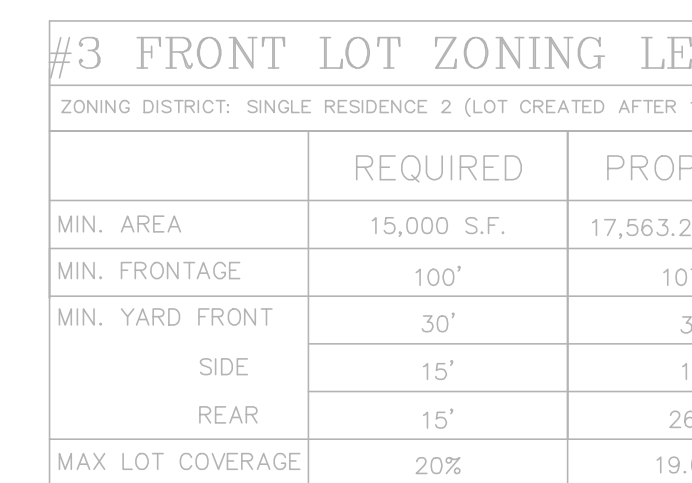
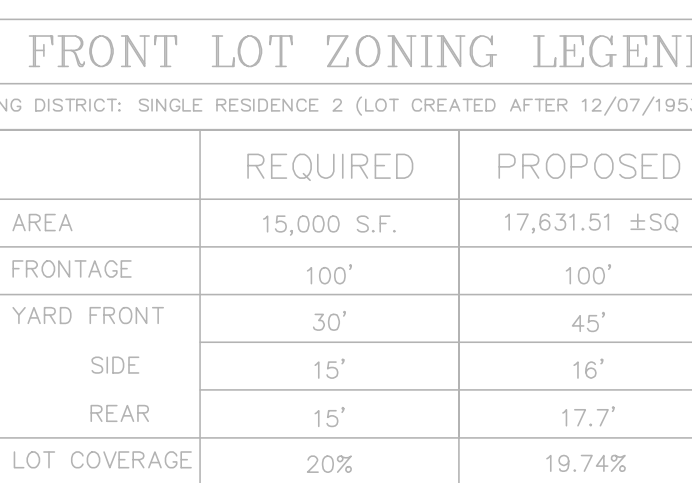
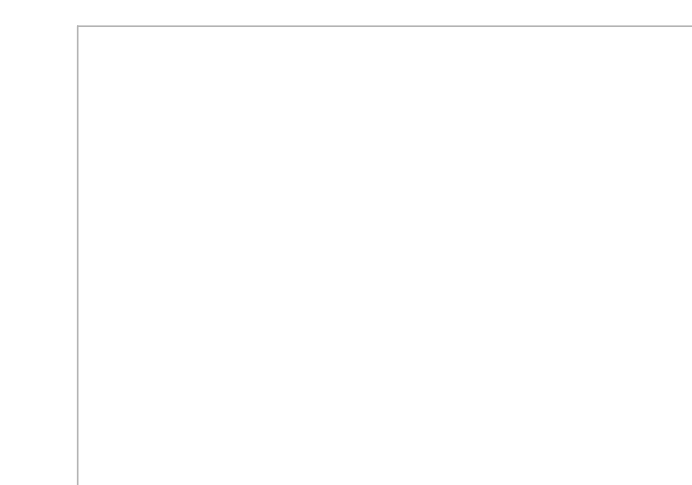
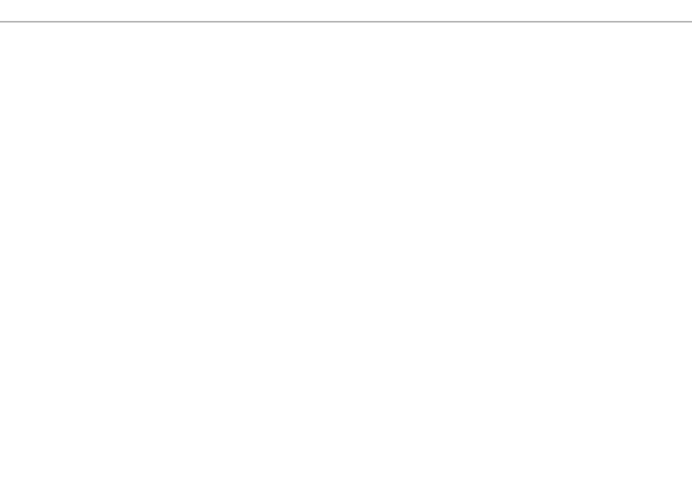
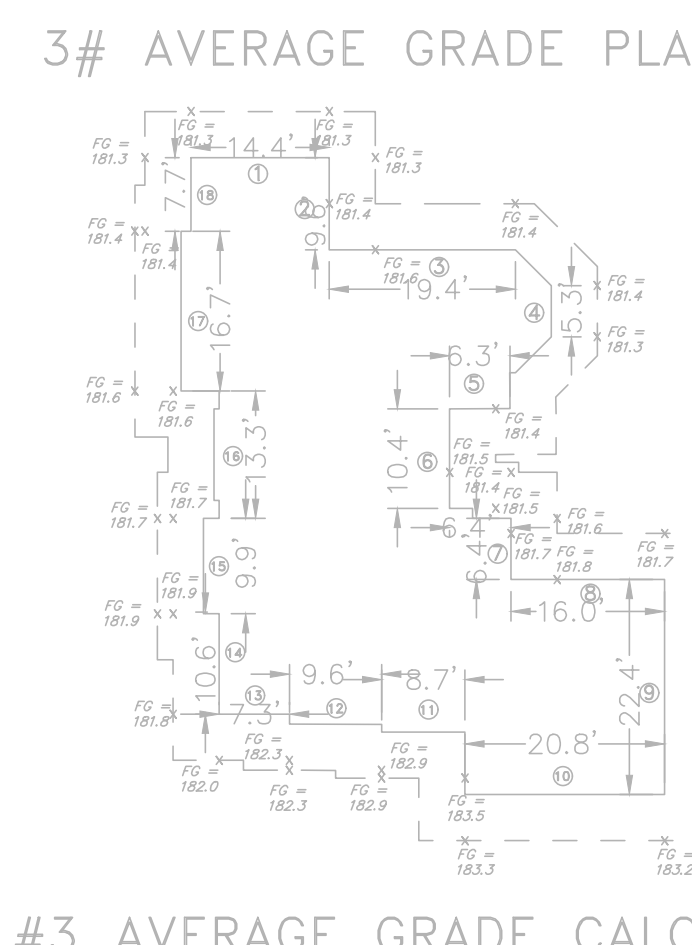
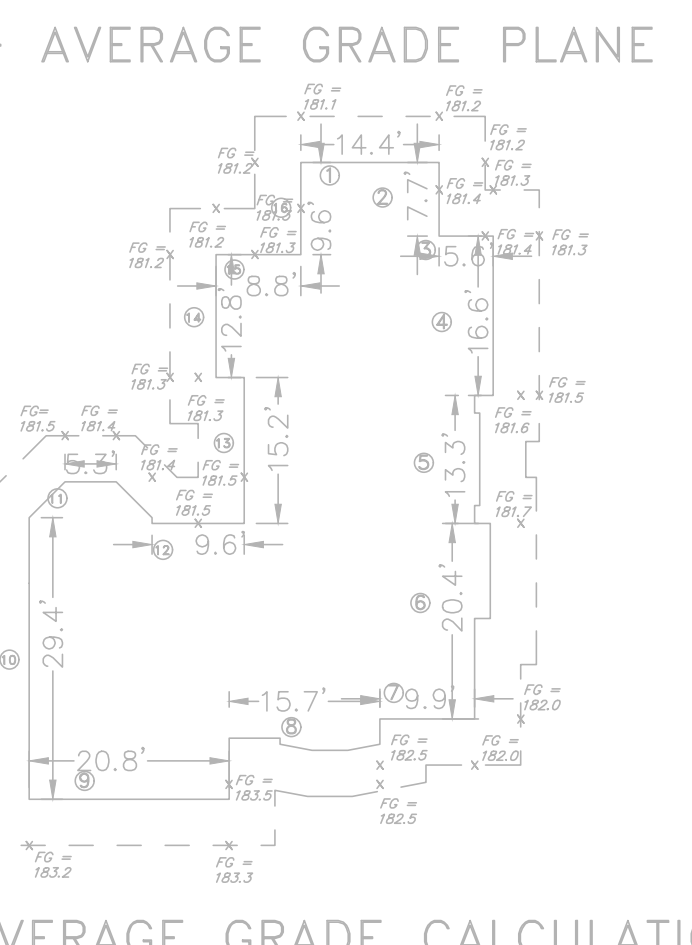
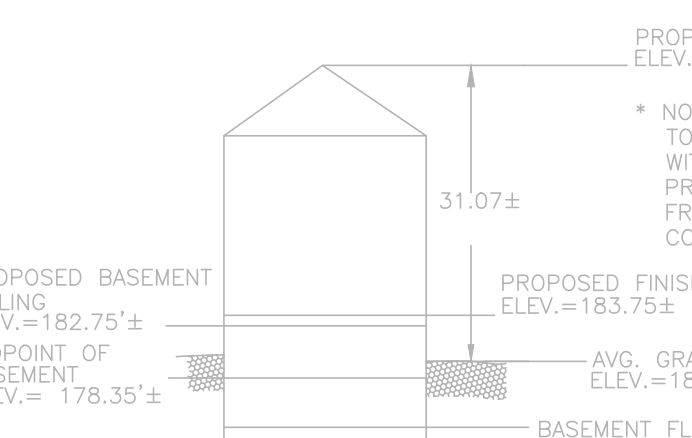
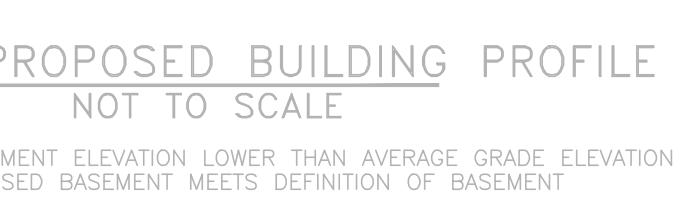
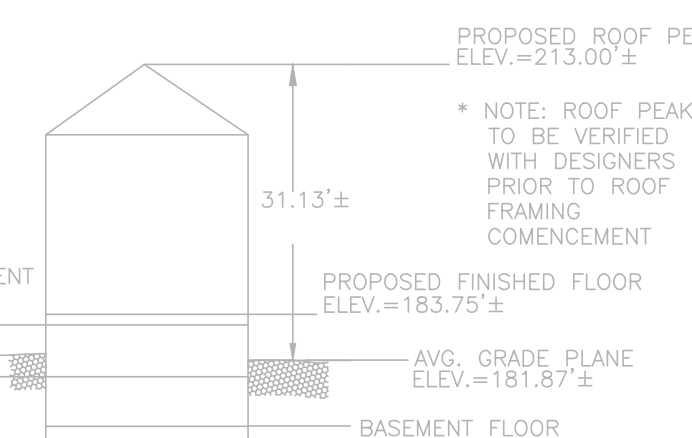
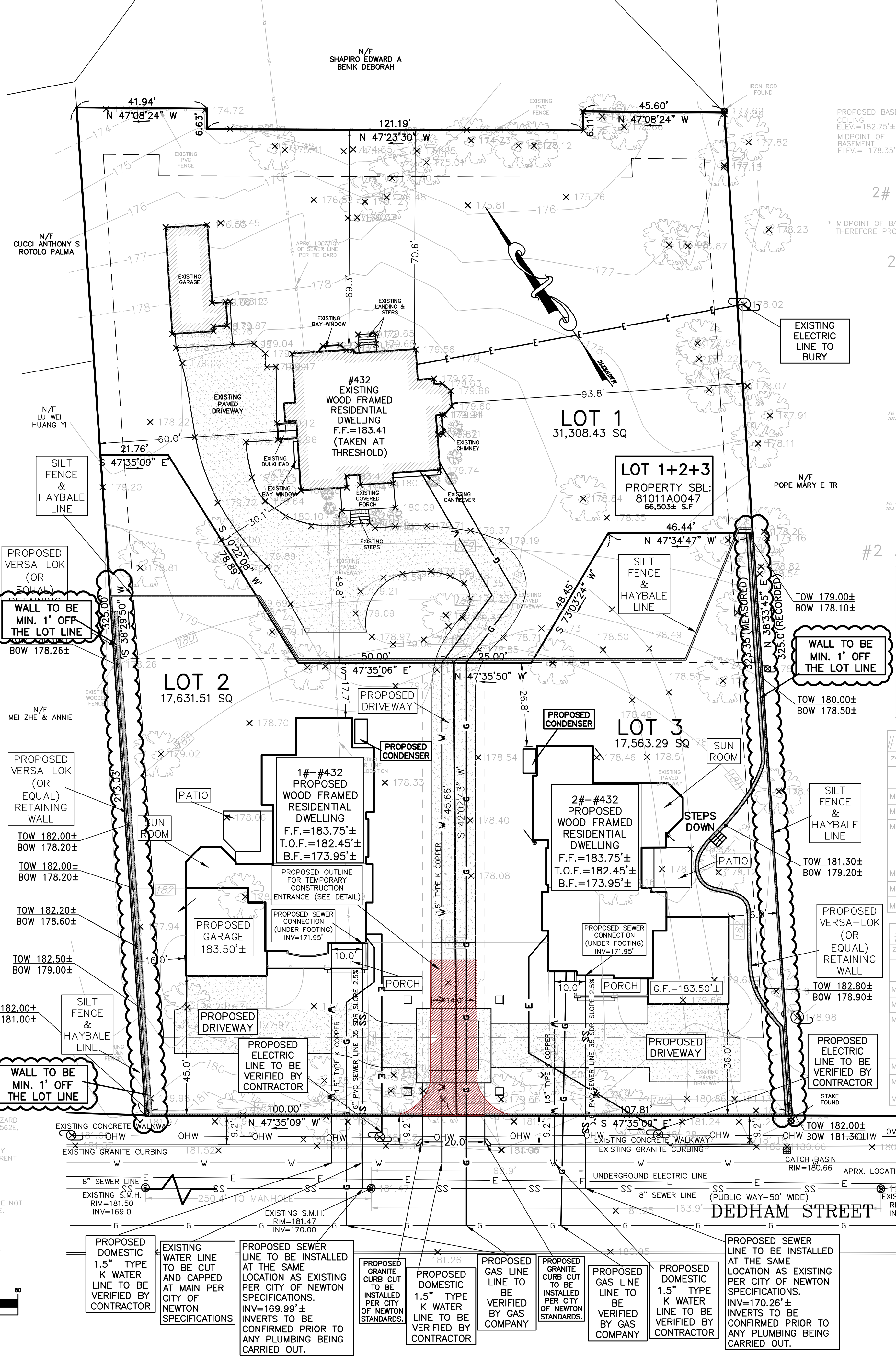
5. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT EASEMENTS OF THE LAND; HOWEVER THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

6. FIRST FLOOR ELEVATIONS ARE TAKEN AT THRESHOLD.

7. NO RESPONSIBILITY IS TAKEN FOR ZONING TABLE AS SPRUHAN ENGINEERING, P.C. ARE NOT ZONING EXPERTS. TABLE IS TAKEN FROM TABLE PROVIDED BY LOCAL ZONING ORDINANCE. CLIENT AND/OR ARCHITECT TO VERIFY THE ACCURACY OF ZONING ANALYSIS.

8. THE ELEVATIONS SHOWN ARE BASED ON CITY OF NEWTON DATUM.

9. ZONING INFORMATION: SR-2 (SINGLE RESIDENCE 2), LOT WAS CREATED BEFORE 1953



NOTE: CONTRACTOR TO VERIFY LOCATION OF DOWN SPOUTS PRIOR TO CARRYING OUT ANY DRAINAGE WORKS.

NOTE: SURFACE WATER TO BE DIVERTED FROM ALL SIDES OF FOUNDATION WALL.

NOTE: ANY TREE BEING REMOVED SHALL COMPLY WITH CITY OF NEWTON TREE ORDINANCE.

NOTE: CONTRACTOR TO ENSURE SEWER LINE IS FITTED AT AN EQUAL SLOPE OF BETWEEN .25 AND 10% FROM HOUSE TO MAIN CONNECTION.

NOTE: SPRUHAN ENGINEERING, P.C. ACCEPTS NO LIABILITY FOR GROUND WATER OR OTHER SURFACE WATER IN BASEMENT.

NOTE: CONTRACTOR TO ENSURE ALL RAIN WATER FROM SPLASH BLOCKS (IF ANY) IS DIVERTED AWAY FROM BUILDING FOUNDATION AND DIVERTED AWAY FROM NEIGHBORING PROPERTIES.

NOTE: SEWER AND WATER MAIN LINE LOCATION TO BE CONFIRMED BY CONTRACTOR.

NOTE: CONTRACTOR TO ENSURE THAT THE BUILDING FOOTPRINT REPRESENTED ON THIS PLAN IS THE SAME AS THE PROPOSED ARCHITECTURAL/STRUCTURAL PLANS AND INCORPORATES ALL OVERLAP, CANTILEVERS AND ANY COMPONENT THAT IS SUBJECT TO ZONING RESTRICTIONS. IF THIS IS FOUND NOT TO BE THE CASE, THE CONTRACTOR MUST CONTACT THE ENGINEER AND REQUEST A REVISED PLAN WHICH MUST BE RESUBMITTED TO I.S.D. CITY OF NEWTON.

NOTE: DRAINAGE SYSTEM IS DESIGNED FOR 100 YEAR STORM EVENT FOR ALL RUNOFF FROM PROPOSED ABOVEGROUND AREAS SHOWN. APPROX. FINISHED GRADE CONTRACTOR SHALL NOT CONNECT SUMP PUMP TO THE SYSTEM WITHOUT APPROVAL FROM ENGINEERING DEPARTMENT.

NOTE: ANY PROPOSED RETAINING WALLS SHALL BE DESIGNED BY OTHERS.

NOTE: ANY PROPOSED RETAINING WALL IN SETBACK SHALL NOT EXCEED 4 FEET IN HEIGHT IN REFERENCE TO EXISTING GRADES.

80 JEWETT ST. (SUITE 11)  
NEWTON, MA 02458

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Email: edmon@spruhaneng.com

432 DEDHAM STREET  
NEWTON,  
MASSACHUSETTS

REVISION BLOCK

DESCRIPTION	DATE
REVISED RETAINING WALL HEIGHT	8/3/2020
REVISED DETAILS & WALL LOCATION	9/14/2020

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UTILITY PLAN

SCALE: 1" = 20'  
DATE: 6-10-20  
DRAWN BY: PS  
CHECKED BY: ES  
APPROVED BY: ES

SHEET:  
3 OF 8

# DRAINAGE CALCULATIONS



**SPRUHAN ENGINEERING, P.C.**

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**432 DEDHAM STREET  
NEWTON,  
MASSACHUSETTS**

## REVISION BLOCK

DESCRIPTION	DATE
REVISED RETAINING WALL HEIGHT	8/3/2020
REVISED DETAILS & WALL LOCATION	9/14/2020

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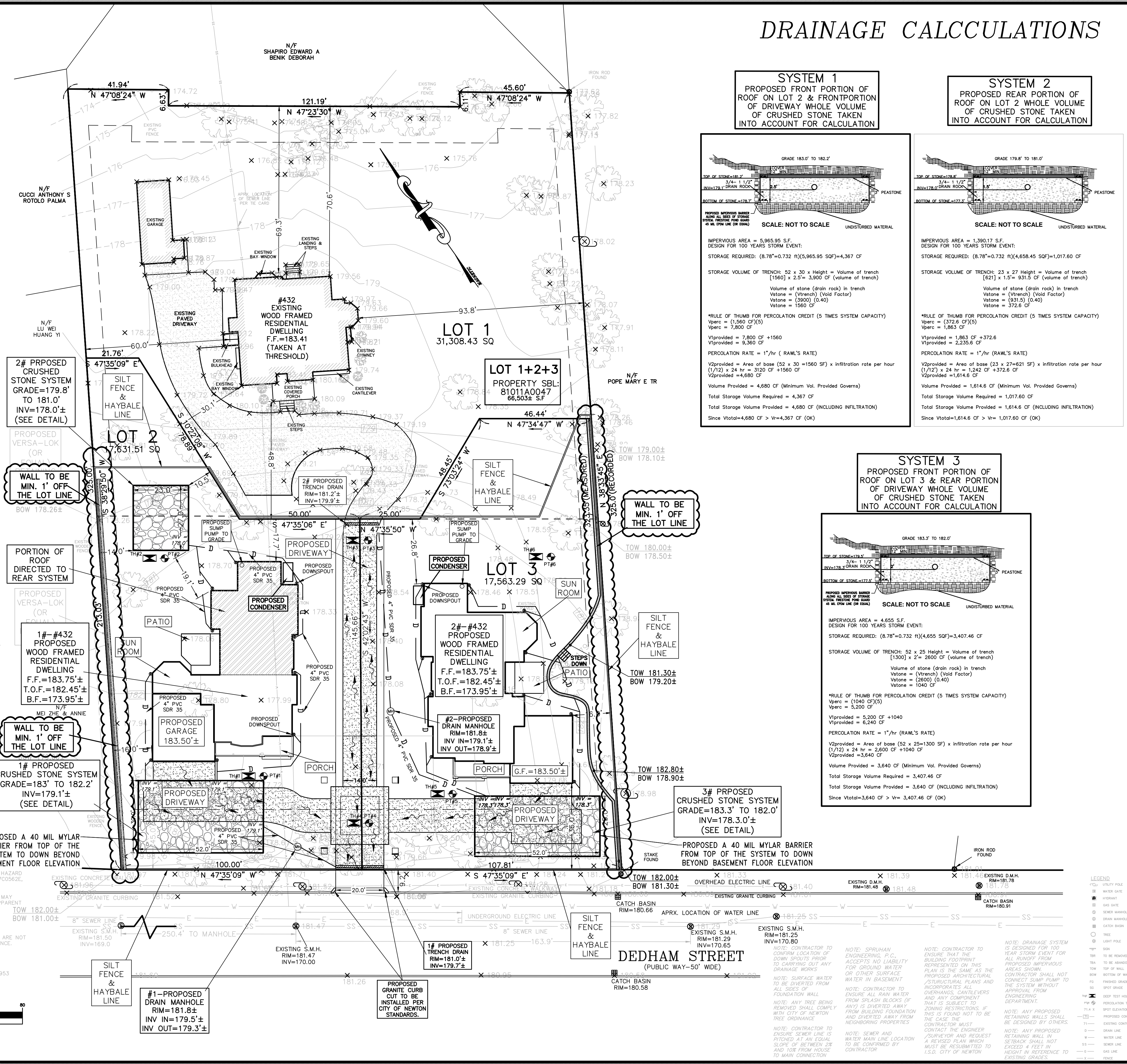
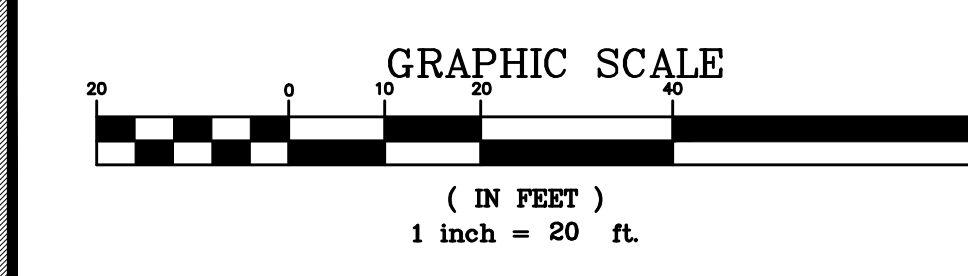
## DRAINAGE SYSTEM PLAN

SCALE:	1" = 20'
DATE:	6-10-20
DRAWN BY:	PS
CHECKED BY:	ES
APPROVED BY:	ES

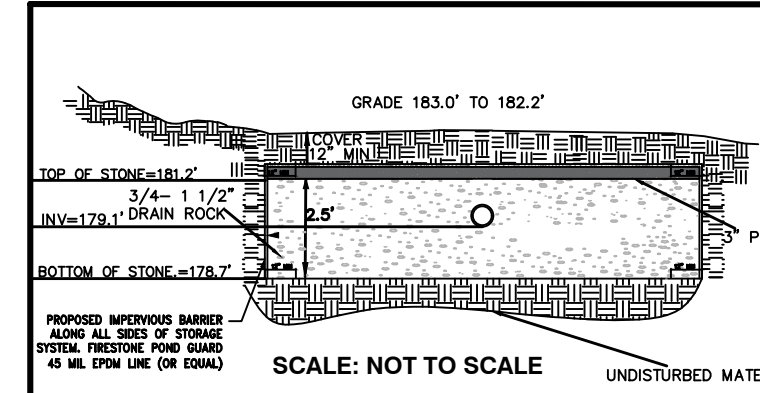
SHEET:

**4 OF 8**

- ELEVATIONS REFER TO CITY OF NEWTON DATUM.
- THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED AND EXISTING UTILITIES.
- MASSACHUSETTS STATE LAW REQUIRES UTILITY NOTIFICATION AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL 811-SAFE AT 1-888-344-7233 IN ORDER TO COMPLY WITH STATE LAW.
- ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS, LATEST EDITION, PREPARED AND ISSUED BY THE NEWTON ENGINEERING DEPARTMENT. COPIES MAY BE OBTAINED AT THE OFFICE OF THE CITY ENGINEER. REFER TO NOTE 29 FOR DETAILS. NOTE: A TRENCH PERMIT MUST BE OBTAINED PRIOR TO ANY EXCAVATION BEING CARRIED OUT.
- PROPOSED SEWER PIPE SHALL BE 4" PVC SDR 35.
- PROPOSED WATER SERVICE SHALL BE 1" TYPE K COPPER.
- THIS PLAN IS THE RESULT OF AN INSTRUMENT SURVEY DONE ON THE GROUND MAY 14th, 2019.
- ALL WORK SHALL BE SUBJECT TO THE INSPECTION BY AND APPROVAL OF THE CITY ENGINEER.
- NO EXCAVATION SHALL BE MADE BY THE CONTRACTOR IN ANY PUBLIC WAY OR UTILITY EASEMENT UNLESS AT LEAST FORTY-EIGHT (48) HOURS, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS, BEFORE THE PROPOSED EXCAVATION IS TO BE MADE. HE HAS SUBMITTED NOTICE OF THE PROPOSED EXCAVATION TO THE FOLLOWING:
  - SUCH PUBLIC UTILITY COMPANIES AS SUPPLY GAS, ELECTRICITY, AND TELEPHONE SERVICE IN THE CITY.
  - SUCH PRIVATE COMPANIES AS PROVIDE CABLE TELEVISION SERVICE IN THE CITY.
  - CITY OF NEWTON WATER & SEWER DEPARTMENT. SUCH NOTICE SHALL SET FORTH THE STREET NAME AND A REASONABLY ACCURATE DESCRIPTION OF THE LOCATION OF THE EXCAVATION.
- THE CONTRACTOR SHALL PROVIDE CITY OF NEWTON POLICE OFFICERS FOR THE DIRECTION AND CONTROL OF TRAFFIC AS REQUIRED BY THE CITY ENGINEER.
- NO WORK SHALL BE PERFORMED UNTIL THE NECESSARY PERMITS ARE OBTAINED FROM THE CITY OF NEWTON PUBLIC WORKS DEPARTMENT.
- ALL TRENCHES IN PAVED STREETS SHALL BE TEMPORARILY PATCHED WITH PAVEMENT OF EXISTING PAVEMENT THICKNESS OR AS DIRECTED BY THE CITY ENGINEER INSPECTOR. LAID HOT AND MAINTAINED UNTIL THE PERMANENT PATCH IS INSTALLED.
- WARNING SIGNS SHALL CONFORM TO PAGE 66 OF THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS.
- ALL TOPSOIL, SUBSOIL OR IMPERVIOUS SOIL MUST BE EXCAVATED AND REMOVED BELOW THE LEADING SYSTEM AND TO A DISTANCE 5' LATERALLY IN ALL DIRECTIONS BEYOND THE SIDES OF THE GALLEYS, BACKFILL AS REQUIRED WITH A CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES. THE SAND SHALL HAVE A PERCOLATION RATE OF 2 MINUTES PER INCH OR FASTER.
- IN CASES WHERE LEDGE OR Boulders ARE ENCOUNTERED, SPRUHAN ENGINEERING, P.C. WILL NOT BE RESPONSIBLE FOR THE AMOUNT OF ROCK ENCOUNTERED.
- IF ANY PART OF THIS DESIGN IS TO BE ALTERED IN ANY WAY, THE DESIGN ENGINEER, AS WELL AS THE APPROVING AUTHORITIES, SHALL BE NOTIFIED IN WRITING BEFORE CONSTRUCTION.
- THE ROOF RUNOFF FROM THE ROOF SURFACES SHALL BE COLLECTED BY GUTTERS AND DIRECTED TO THE STORM WATER DRAINAGE SYSTEM.
- PRIOR TO AN OCCUPANCY PERMIT BEING ISSUED, AN AS-BUILT PLAN MUST BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND HARD COPY. THE PLAN SHOULD SHOW ALL UTILITIES AND FINAL GRADICES, TIES TO ALL GATES, VALVES, CLEAN-OUTS, CONNECTION POINTS AT MAINS, STRUCTURE ACCESS/MAINTENANCE COVERS, ANY EASEMENTS AND FINAL GRADING.
- THE APPLICANT WILL HAVE TO APPLY FOR A STREET OPENING & UTILITIES CONNECTION PERMITS AS WELL AS A SIDEWALK CROSSING PERMIT AND A TRENCH PERMIT WITH THE DPW.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGN ENGINEER FOR INSPECTIONS OR AS-BUILT LOCATIONS. PETER NOLAN & ASSOCIATES, LLC, WILL NOT PROVIDE AS-BUILT CERTIFICATION TO UNINSPECTED BACKFILLED UTILITIES. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED PRIOR TO INSPECTIONS.
- ANY PROPOSED PVC PIPES UNDER PAVING OR CONCRETE WITH LESS THAN 30" OF COVER MUST BE ENCASED IN CONCRETE. (SEE PAGE 21, CITY OF NEWTON GENERAL CONSTRUCTION DETAILS).
- THE EXISTING WATER & SEWER SERVICES SHALL BE CUT AND CAPPED AT THE MAIN AND BE COMPLETELY REMOVED FROM THE SITE, REPLACED AS NECESSARY AND PROPERLY BACKFILLED. THE ENGINEERING DIVISION SHALL INSPECT THIS WORK. FAILURE TO HAVE THIS WORK INSPECTED MAY RESULT IN THE DELAY OF ISSUANCE OF THE UTILITY CONNECTION PERMIT.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 48 HOURS IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE DRAINAGE SYSTEM, WATER & SEWER SERVICES INSPECTED. THE SYSTEM & UTILITIES MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM & UTILITIES MAY THEN BE BACKFILLED.
- THE EXISTING CONTOURS OF THE LAND ARE NOT TO BE ALTERED BY MORE THAN THREE (3) FEET AS A RESULT OF THE PLACEMENT OR REMOVAL OF SOIL, LOAM, CLAY, GRAVEL, OR STONE, OR OTHER SOLID MATERIAL UNLESS A PROPOSED RETAINING WALL OR SHALE IS INSTALLED AFTER IT IS APPROVED BY BOTH CITY OF NEWTON ENGINEERING DEPARTMENT & CITY OF NEWTON I.S.D.
- NO WORK IS ALLOWED WITHIN A CITY OF NEWTON RIGHT-OF-WAY BETWEEN NOVEMBER 15th AND APRIL 15th. IF AN EMERGENCY EXISTS OR THERE ARE EXTENUATING CIRCUMSTANCES, APPLICANT MAY REQUEST PERMISSION FROM THE CITY ENGINEER. IF ALLOWED, SPECIAL CONSTRUCTION REQUIREMENTS WILL BE REQUIRED, AND AS SUCH IT IS RECOMMENDED THAT THE APPLICANT OR APPLICANT'S REPRESENTATIVE CONTACT THE CITY OF NEWTON ENGINEERING DEPARTMENT PRIOR TO START OF WORK FOR CLARIFICATION.
- AT THE END OF CONSTRUCTION, ALL DRAINAGE STRUCTURES ARE TO BE CLEANED OF SILT, STONES AND OTHER DEBRIS.
- DURING CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED ONCE PER WEEK AND WITHIN 24 HOURS OF ANY STORM EVENT GENERATING MORE THAN 1/2" OF RAINFALL. THE EROSION CONTROL MEASURES SHALL BE CLEANED REGULARLY AND ADJUSTED IF NECESSARY TO ENSURE THAT NO SILT OR DEBRIS LEAVES THE SITE.
- WITH EXCEPTION OF GAS UTILITY SERVICES, ALL UTILITY TRENCHES WITHIN ANY CITY OF NEWTON RIGHT-OF-WAY WILL BE BACKFILLED WITH TYPE III (EXCAVABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING SPECIFICATIONS.
- ALL CONSTRUCTION ACTIVITIES WITHIN THE CITY OF NEWTON RIGHT-OF-WAY MUST FULLY COMPLY WITH ALL CITY OF NEWTON CONSTRUCTION SPECIFICATIONS AS WELL AS 501 CMR 21.00 AND 22.00.
- ALL NEW SEWER SERVICE AND/OR STRUCTURES SHALL BE PRESSURE TESTED OR VIDEO TAPED AFTER FINAL INSTALLATION IS COMPLETE. METHOD OF FINAL INSPECTION SHALL BE DETERMINED SOLELY BY THE CONSTRUCTION INSPECTOR FROM THE CITY ENGINEERING DIVISION. ALL SEWER MANHOLES SHALL BE VACUUM TESTED ACCORDANCE TO THE CITY'S CONSTRUCTION STANDARDS & SPECIFICATIONS. THE SEWER SERVICE WILL NOT BE ACCEPTED UNTIL ONE OF THE TWO METHODS STATED ABOVE IS COMPLETED. ALL TESTING MUST BE WITNESSED BY A REPRESENTATIVE OF THE ENGINEERING DIVISION. A CERTIFICATE OF OCCUPANCY WILL NOT BE RECOMMENDED UNTIL THIS TEST IS COMPLETED AND A WRITTEN REPORT IS RECEIVED BY THE CITY ENGINEER.
- ALL SILTATION CONTROL NEEDS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER'S OFFICE FOR APPROVAL PRIOR TO COMMENCEMENT.
- ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MGL CHAPTER 82A, TRENCH EXCAVATION SAFETY REQUIREMENTS, TO PROTECT THE GENERAL PUBLIC FROM UNAUTHORIZED ACCESS TO UNSTRENGTHENED TRENCHES. A TRENCH EXCAVATION PERMIT IS REQUIRED.
- APPROVAL OF THIS PLAN BY CITY OF NEWTON ENGINEERING DIVISION IMPLIES THAT THE PLAN MEETS THE MINIMAL DESIGN STANDARDS OF THE CITY OF NEWTON. HOWEVER, THE ENGINEERING DIVISION MAKES NO REPRESENTATION AND ASSUMES NO RESPONSIBILITY FOR THE DESIGN(S) IN TERMS OF SUITABILITY FOR THE PARTICULAR SITE CONDITIONS OR OF THE FUNCTIONALITY OR PERFORMANCE OF ANY ITEMS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN(S). THE CITY OF NEWTON ASSUMES NO LIABILITIES FOR DESIGN APPROVAL, ERRORS OR OMISSIONS BY THE ENGINEER OF RECORD.
- PER CITY OF NEWTON ORDINANCE NO. B-42, COUNCIL ITEM #251-19, BUILDING SEWER, WATER SERVICE PIPE & SIDEWALK/CURB REPLACEMENT ORDINANCE. THE APPLICANT IS REQUIRED TO INSTALL 40 MIL MYLAR BARRIER & CURB ALONG THE ENTIRE FRONTAGE. THIS SHALL INCLUDE APPROPRIATE TRANSITION TO ADJOINING CURBING & WALKWAYS, INCLUDING ACCESSIBLE CURB & OTHER ACCESS AS REQUIRED. THE ENGINEERING CONSTRUCTION INSPECTOR MAKES A DETERMINATION, BASED ON THE MATERIAL & MANNER OF CONSTRUCTION OF THE EXISTING 40 MIL MYLAR BARRIER, THAT THE EXISTING SIDEWALK & CURB HAS THE ABILITY TO BE RE-SET OR REVED, WITHOUT REPLACEMENT.



**SYSTEM 1**  
PROPOSED FRONT PORTION OF ROOF ON LOT 2 & FRONT PORTION OF DRIVEWAY WHOLE VOLUME OF CRUSHED STONE TAKEN INTO ACCOUNT FOR CALCULATION



SCALE: NOT TO SCALE  
UNDISTURBED MATERIAL

IMPERVIOUS AREA = 5,965.95 S.F.  
DESIGN FOR 100 YEARS STORM EVENT:  
STORAGE REQUIRED: (8.78"=0.732 ft)(5,965.95 SQF)=4,367 CF

STORAGE VOLUME OF TRENCH: 52 x 30 x Height = Volume of trench (1560) x 2.5 = 3,900 CF (volume of trench)

Volume of stone (drain rock) in trench  
Volume = (Volume) (Void Factor)  
Volume = (3900) (0.40)  
Volume = 1560 CF

\*RULE OF THUMB FOR PERCOLATION CREDIT (5 TIMES SYSTEM CAPACITY)  
Vperc = (1560 CF)(5)  
Vperc = 7,800 CF

Vprovided = 7,800 CF + 1560  
Vprovided = 9,360 CF

PERCOLATION RATE = 1"/hr ( RAWL'S RATE)

V2provided = Area of base (52 x 30 = 1560 SF) x infiltration rate per hour (1/12) x 24 hr = 3020 CF + 1560 CF  
V2provided = 4,580 CF

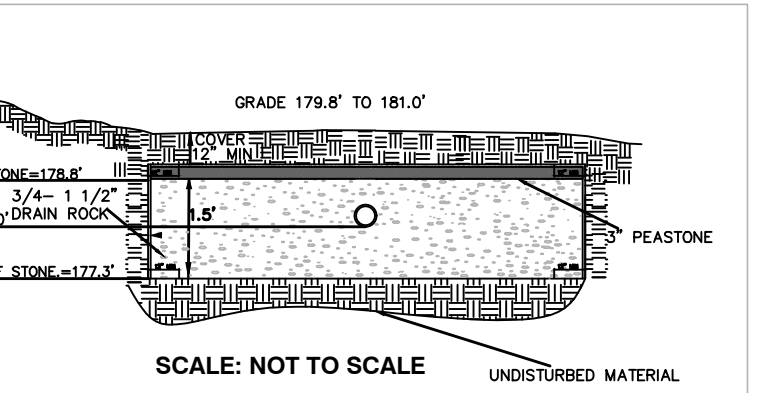
Volume Provided = 4,680 CF (Minimum Vol. Provided Governs)

Total Storage Volume Required = 4,367 CF

Total Storage Volume Provided = 4,680 CF (INCLUDING INFILTRATION)

Since Vtotal=4,680 CF > V=4,367 CF (OK)

**SYSTEM 2**  
PROPOSED REAR PORTION OF ROOF ON LOT 2 WHOLE VOLUME OF CRUSHED STONE TAKEN INTO ACCOUNT FOR CALCULATION



SCALE: NOT TO SCALE  
UNDISTURBED MATERIAL

IMPERVIOUS AREA = 1,390.17 S.F.  
DESIGN FOR 100 YEARS STORM EVENT:  
STORAGE REQUIRED: (8.78"=0.732 ft)(1,390.17 SQF)=1,017.60 CF

STORAGE VOLUME OF TRENCH: 23 x 27 x Height = Volume of trench (621) x 1.5 = 931.5 CF (volume of trench)

Volume of stone (drain rock) in trench  
Volume = (Volume) (Void Factor)  
Volume = (931.5) (0.40)  
Volume = 372.6 CF

\*RULE OF THUMB FOR PERCOLATION CREDIT (5 TIMES SYSTEM CAPACITY)  
Vperc = (372.6 CF)(5)  
Vperc = 1,863 CF

Vprovided = 1,863 CF + 372.6  
Vprovided = 2,235.6 CF

PERCOLATION RATE = 1"/hr ( RAWL'S RATE)

V2provided = Area of base (23 x 27=621 SF) x infiltration rate per hour (1/12) x 24 hr = 1,242 CF + 372.6 CF  
V2provided = 1,614.6 CF

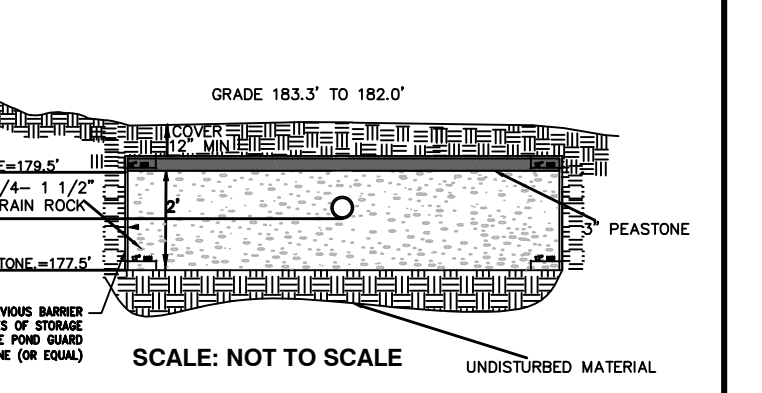
Volume Provided = 1,614.6 CF (Minimum Vol. Provided Governs)

Total Storage Volume Required = 1,017.60 CF

Total Storage Volume Provided = 1,614.6 CF (INCLUDING INFILTRATION)

Since Vtotal=1,614.6 CF > V=1,017.60 CF (OK)

**SYSTEM 3**  
PROPOSED FRONT PORTION OF ROOF ON LOT 3 & REAR PORTION OF DRIVEWAY WHOLE VOLUME OF CRUSHED STONE TAKEN INTO ACCOUNT FOR CALCULATION



SCALE: NOT TO SCALE  
UNDISTURBED MATERIAL

IMPERVIOUS AREA = 4,655 S.F.  
DESIGN FOR 100 YEARS STORM EVENT:  
STORAGE REQUIRED: (8.78"=0.732 ft)(4,655 SQF)=3,407.46 CF

STORAGE VOLUME OF TRENCH: 52 x 25 x Height = Volume of trench (1300) x 2.6 = 3,380 CF (volume of trench)

Volume of stone (drain rock) in trench  
Volume = (Volume) (Void Factor)  
Volume = (3380) (0.40)  
Volume = 1,352 CF

\*RULE OF THUMB FOR PERCOLATION CREDIT (5 TIMES SYSTEM CAPACITY)  
Vperc = (1352 CF)(5)  
Vperc = 6,760 CF

Vprovided = 5,200 CF + 1040  
Vprovided = 6,240 CF

PERCOLATION RATE = 1"/hr ( RAWL'S RATE)

V2provided = Area of base (52 x 25=1300 SF) x infiltration rate per hour (1/12) x 24 hr = 2,600 CF + 1040 CF  
V2provided = 3,640 CF

Volume Provided = 3,640 CF (Minimum Vol. Provided Governs)

Total Storage Volume Required = 3,407.46 CF

Total Storage Volume Provided = 3,640 CF (INCLUDING INFILTRATION)

Since Vtotal=3,640 CF > V= 3,407.46 CF (OK)

- LEGEND
- Utility Pole
  - Water Gate
  - Manhole
  - Gas Gate
  - Drain Manhole
  - Drain Basin
  - Catch Basin
  - Tree
  - Light Pole
  - Sign
  - To Be Removed
  - To Be Abandoned
  - Top of Wall
  - Bottom of Wall
  - Finished Grade
  - Spot Grade
  - Deep Test Hole
  - Percolation Test
  - Spot Elevation
  - Proposed Contour
  - Existing Contour
  - Drain Line
  - Water Line
  - Sewer Line
  - Gas Line
  - Fence



SPRUHAN ENGINEERING, P.C.

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Email: edmond@spruhaneng.com



432 DEDHAM STREET  
NEWTON,  
MASSACHUSETTS

REVISION BLOCK

DESCRIPTION	DATE
REVISED RETAINING WALL HEIGHT	8/3/2020
REVISED DETAILS & WALL LOCATION	9/14/2020

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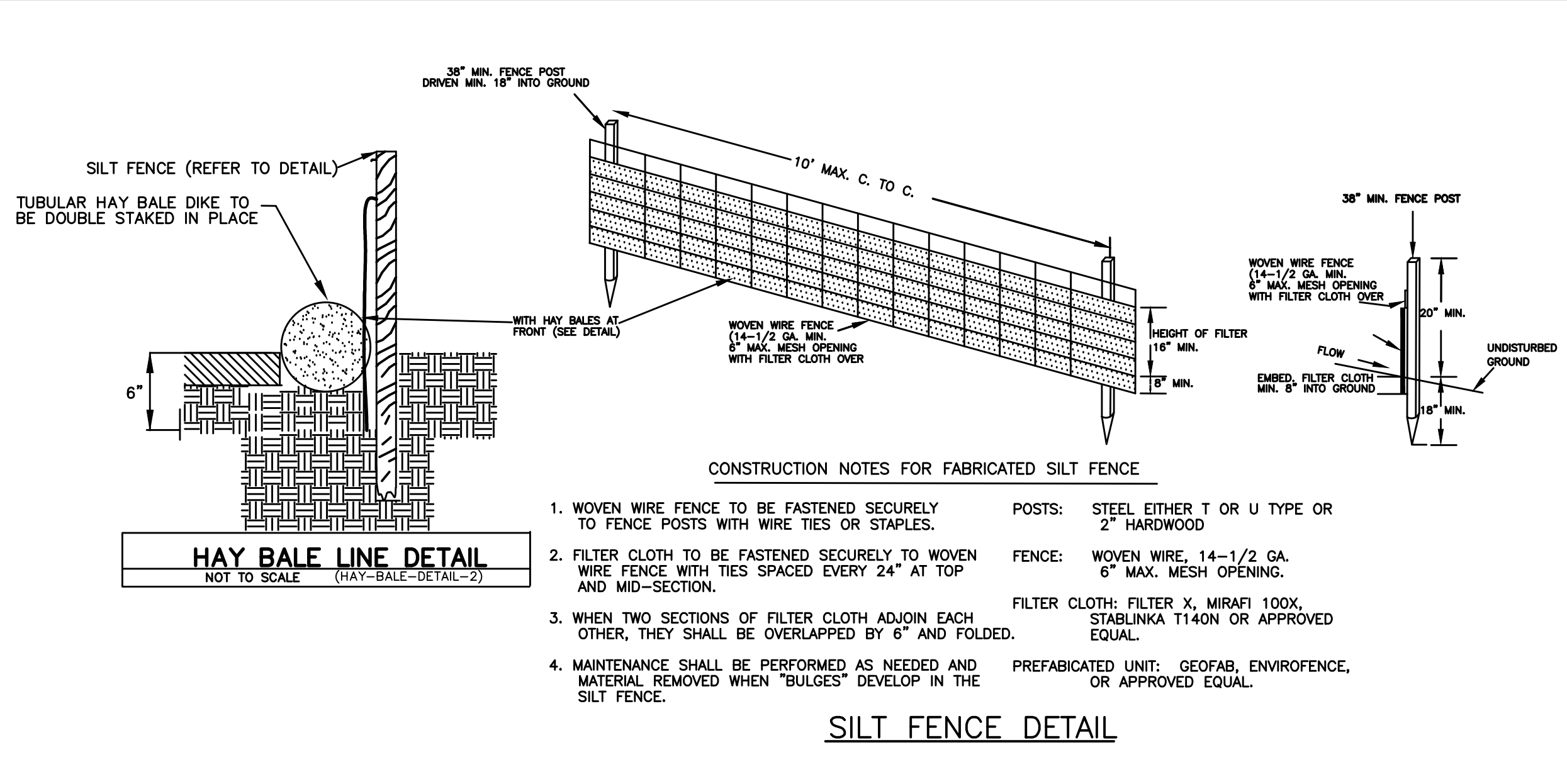
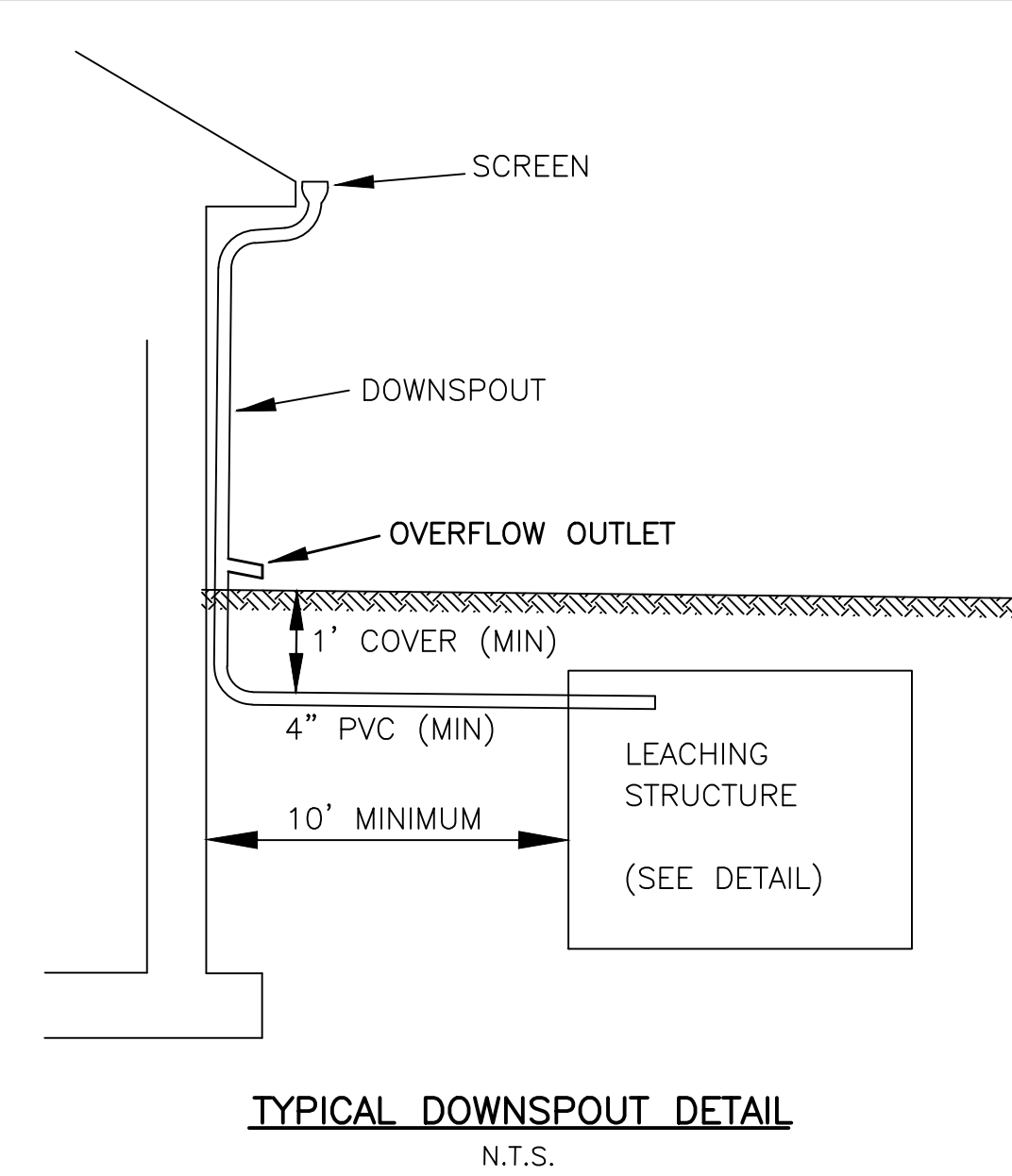
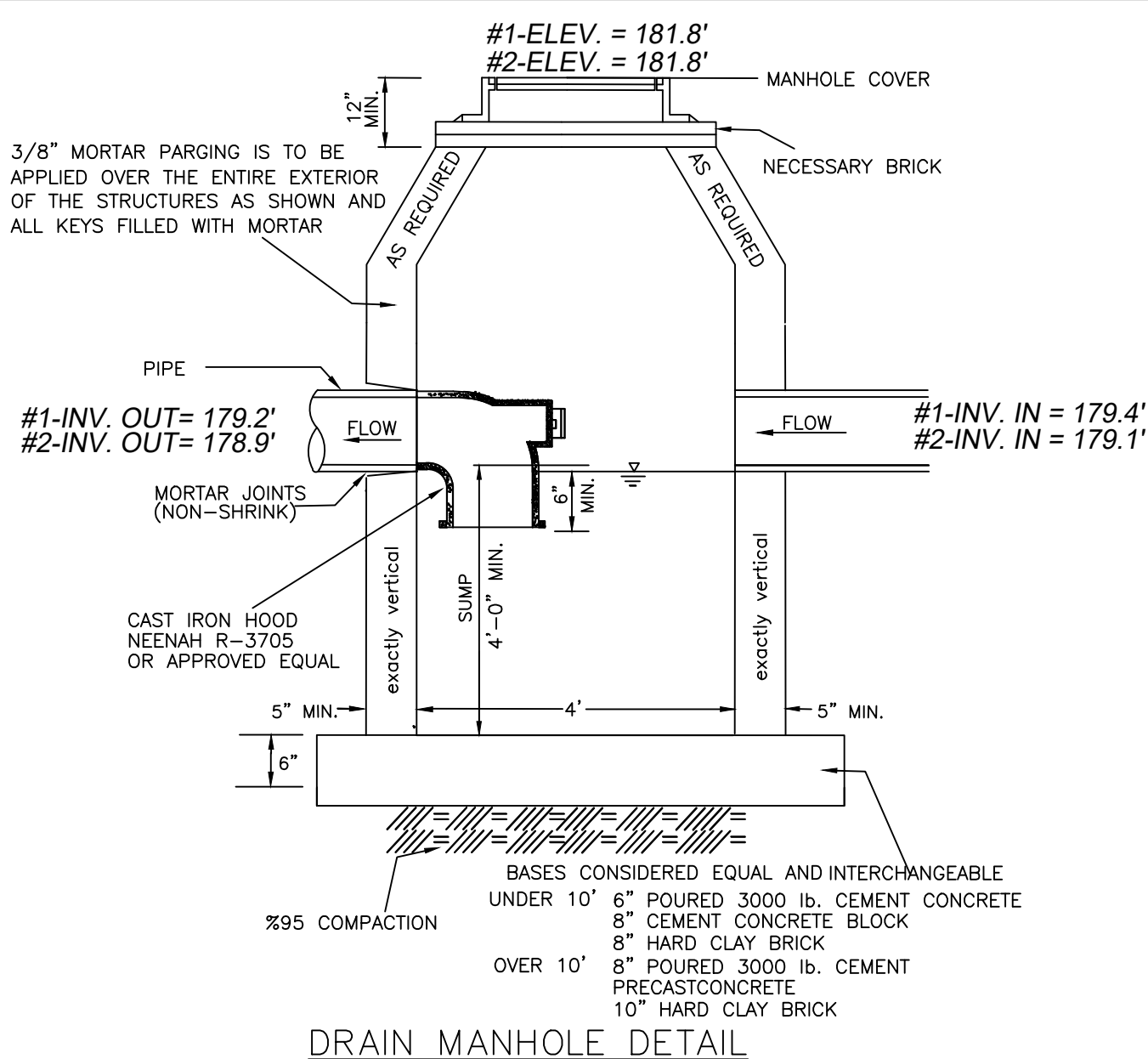
Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on this project, and Spruhan Engineering, P.C., must be notified of any variation from the dimensions and conditions shown by these drawings.

DETAILS

SCALE:	1" = 20'
DATE:	6-10-20
DRAWN BY:	PS
CHECKED BY:	ES
APPROVED BY:	ES

SHEET:

5 OF 8



1# SOIL LOG FRONT LEFT

DEEP OBSERVATION HOLE LOG  
GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 432 DEDHAM STREET, NEWTON BY PETER NOLAN & ASSOCIATES, LLC. AND SPRUHAN ENGINEERING, P.C.  
HOLE NUMBER: TP - 1 DATED: 5/20/19  
GENERAL SITE CONDITIONS: GRASS AND TREES.  
PERCOLATION TEST HOLE PT - 1  
PERCOLATION RATE : 1"/Hr USING RAWL'S RATE

GRADE	DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
177.7"-176.7"	0" - 12"	Ap	S <sub>LM</sub>	10 YR 5/4	NO	NONE
176.7"-175.7"	12" - 24"	B <sub>w</sub>	S <sub>LM</sub>	10 YR 5/6	@24"	NONE
175.7"-167.7"	24" - 120"	C <sub>1</sub>	S <sub>LM</sub>	7.5 YR 7/1	YES	NONE

STANDING WATER @BOTTOM OF HOLE

2# SOIL LOG BACK LEFT

DEEP OBSERVATION HOLE LOG  
GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 432 DEDHAM STREET, NEWTON BY PETER NOLAN & ASSOCIATES, LLC. AND SPRUHAN ENGINEERING, P.C.  
HOLE NUMBER: TP - 2 DATED: 5/20/19  
GENERAL SITE CONDITIONS: GRASS AND TREES.  
PERCOLATION TEST HOLE PT - 2  
PERCOLATION RATE : 1"/Hr USING RAWL'S RATE

GRADE	DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
178.0"-177.0"	0" - 12"	Ap	S <sub>LM</sub>	10 YR 5/4	NO	NONE
177.0"-175.5"	12" - 26"	B <sub>w</sub>	S <sub>LM</sub>	10 YR 5/6	@26"	NONE
175.5"-168.0"	26" - 120"	C <sub>1</sub>	S <sub>LM</sub>	7.5 YR 7/1	YES	NONE

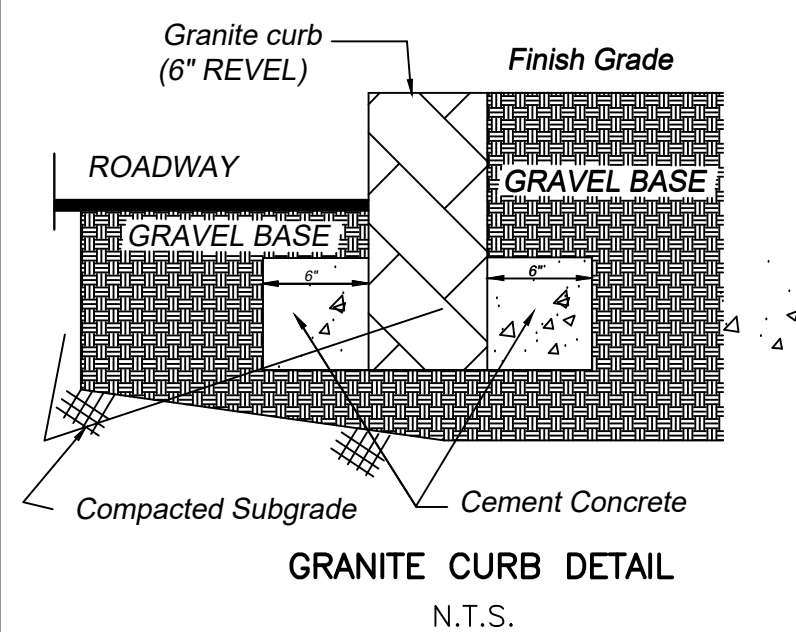
NO STANDING WATER

5# SOIL LOG FRONT RIGHT

DEEP OBSERVATION HOLE LOG  
GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 432 DEDHAM STREET, NEWTON BY PETER NOLAN & ASSOCIATES, LLC. AND SPRUHAN ENGINEERING, P.C.  
HOLE NUMBER: TP - 5 DATED: 5/20/19  
GENERAL SITE CONDITIONS: GRASS AND TREES.  
PERCOLATION TEST HOLE PT - 5  
PERCOLATION RATE : 1"/Hr USING RAWL'S RATE

GRADE	DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
178.5"-177.5"	0" - 12"	Ap	S <sub>LM</sub>	10 YR 5/4	NO	NONE
177.5"-175.0"	12" - 30"	B <sub>w</sub>	S <sub>LM</sub>	10 YR 5/6	NO	NONE
175.0"-168.5"	30" - 120"	C <sub>1</sub>	S <sub>LM</sub>	7.5 YR 7/1	@32"	NONE

NO STANDING WATER



3# SOIL LOG BACK MIDDLE

DEEP OBSERVATION HOLE LOG  
GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 432 DEDHAM STREET, NEWTON BY PETER NOLAN & ASSOCIATES, LLC. AND SPRUHAN ENGINEERING, P.C.  
HOLE NUMBER: TP - 3 DATED: 5/20/19  
GENERAL SITE CONDITIONS: GRASS AND TREES.  
PERCOLATION TEST HOLE PT - 3  
PERCOLATION RATE : 1"/Hr USING RAWL'S RATE

GRADE	DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
178.9"-176.7"	0" - 12"	Ap	S <sub>LM</sub>	10 YR 5/4	NO	NONE
176.7"-175.7"	12" - 24"	B <sub>w</sub>	S <sub>LM</sub>	10 YR 5/6	NO	NONE
175.7"-167.7"	24" - 120"	C <sub>1</sub>	S <sub>LM</sub>	7.5 YR 7/1	@30"	NONE

NO STANDING WATER

4# SOIL LOG MIDDLE FRONT

DEEP OBSERVATION HOLE LOG  
GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 432 DEDHAM STREET, NEWTON BY PETER NOLAN & ASSOCIATES, LLC. AND SPRUHAN ENGINEERING, P.C.  
HOLE NUMBER: TP - 4 DATED: 5/20/19  
GENERAL SITE CONDITIONS: GRASS AND TREES.  
PERCOLATION TEST HOLE PT - 4  
PERCOLATION RATE : 1"/Hr USING RAWL'S RATE

GRADE	DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
178.8"-177.8"	0" - 12"	Ap	S <sub>LM</sub>	10 YR 5/4	NO	NONE
177.8"-175.3"	12" - 30"	B <sub>w</sub>	S <sub>LM</sub>	10 YR 5/6	@24"	NONE
175.3"-168.8"	30" - 120"	C <sub>1</sub>	S <sub>LM</sub>	7.5 YR 7/1	YES	NONE

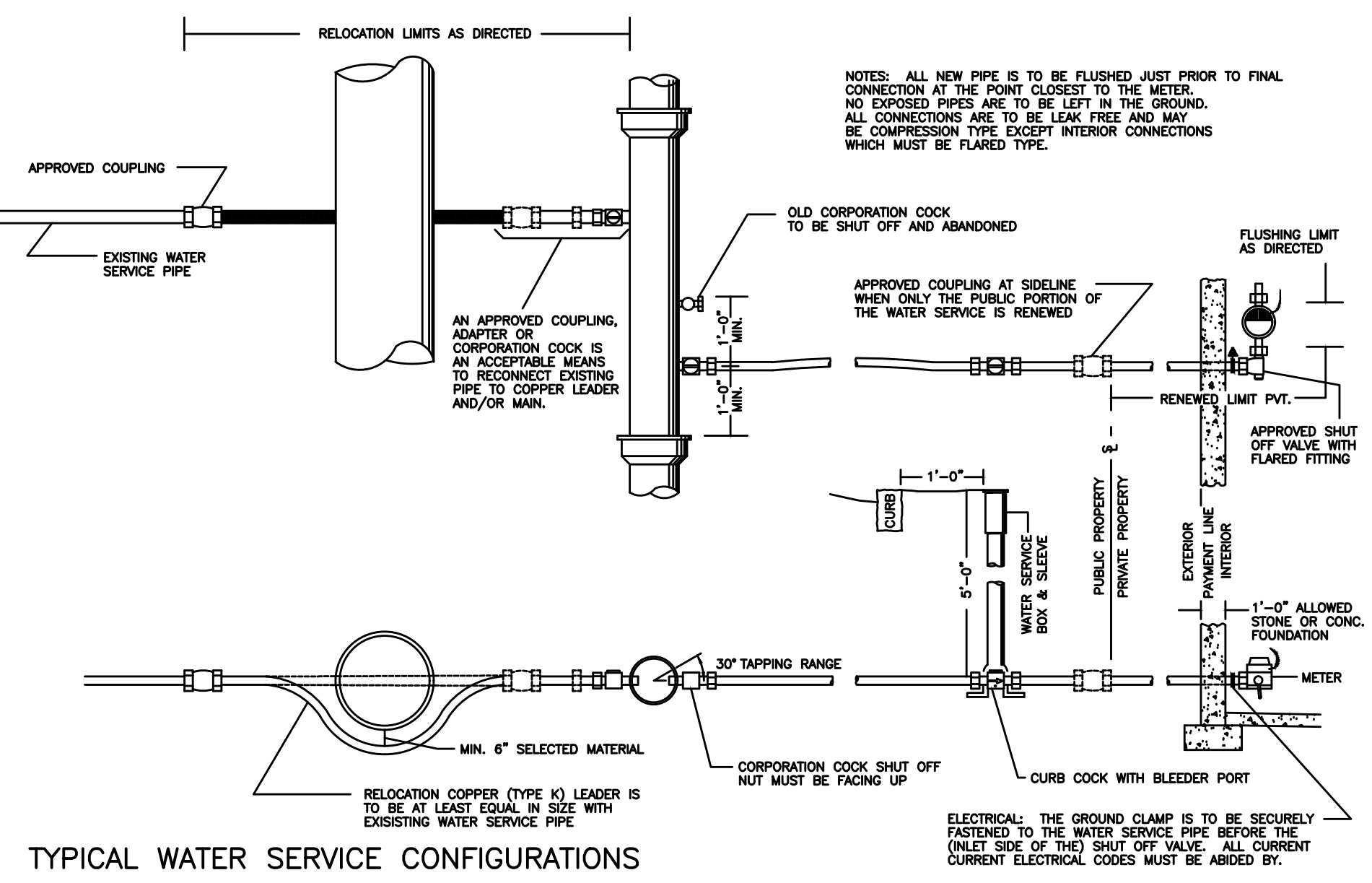
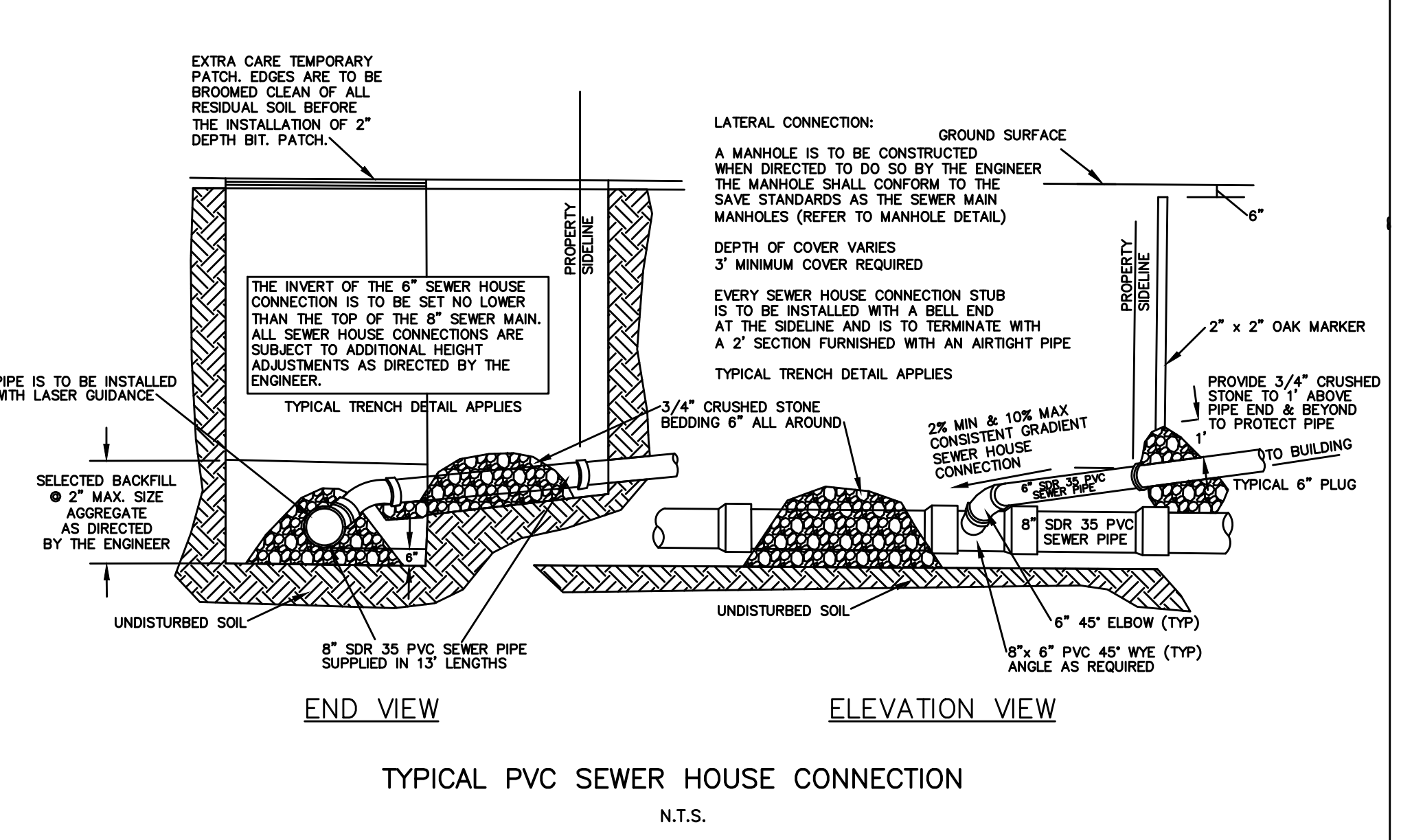
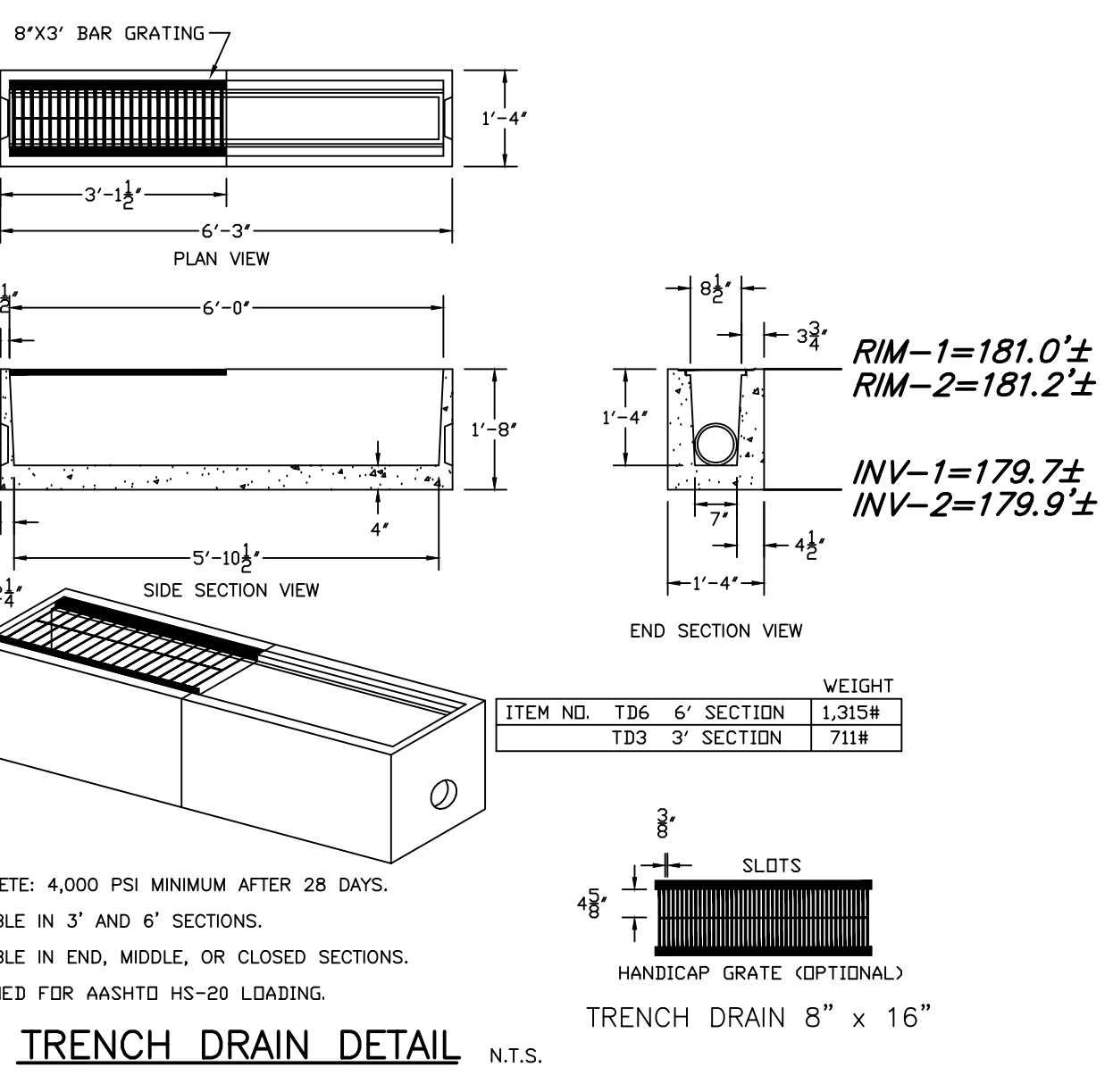
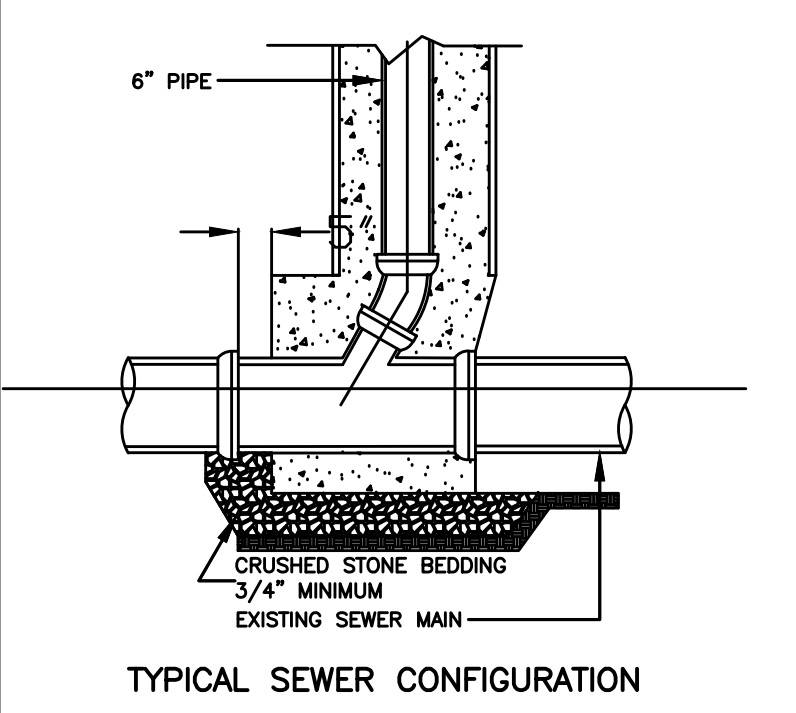
NO STANDING WATER

6# SOIL LOG BACK RIGHT

DEEP OBSERVATION HOLE LOG  
GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 432 DEDHAM STREET, NEWTON BY PETER NOLAN & ASSOCIATES, LLC. AND SPRUHAN ENGINEERING, P.C.  
HOLE NUMBER: TP - 6 DATED: 5/20/19  
GENERAL SITE CONDITIONS: GRASS AND TREES.  
PERCOLATION TEST HOLE PT - 6  
PERCOLATION RATE : 1"/Hr USING RAWL'S RATE

GRADE	DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
178.6"-177.6"	0" - 12"	Ap	S <sub>LM</sub>	10 YR 5/4	NO	NONE
177.6"-175.3"	12" - 28"	B <sub>w</sub>	S <sub>LM</sub>	10 YR 5/6	@24"	NONE
175.3"-168.6"	28" - 120"	C <sub>1</sub>	S <sub>LM</sub>	7.5 YR 7/1	YES	NONE

TIGHT MATERIAL  
NO STANDING WATER





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**432 DEDHAM STREET  
NEWTON,  
MASSACHUSETTS**

**REVISION BLOCK**

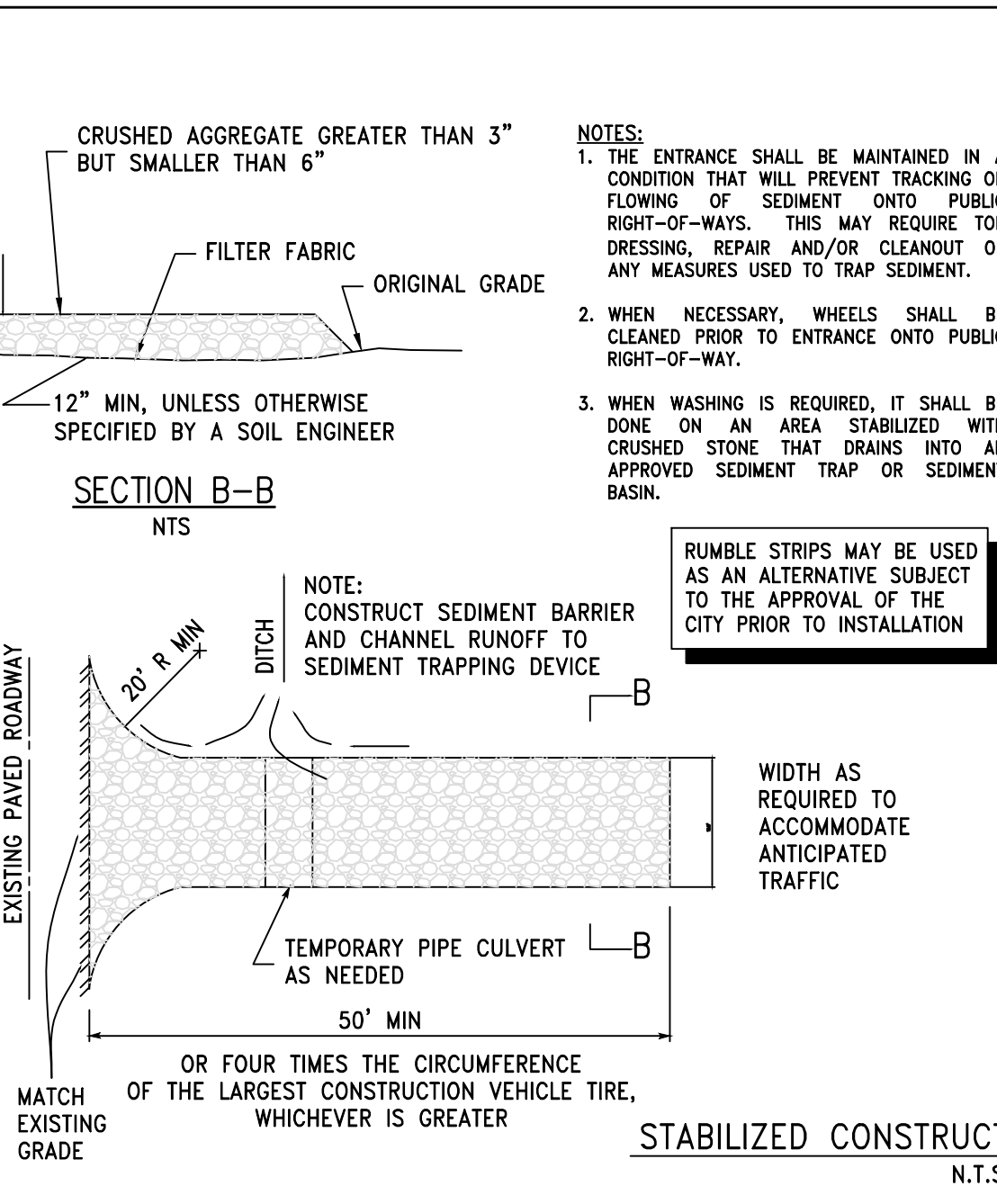
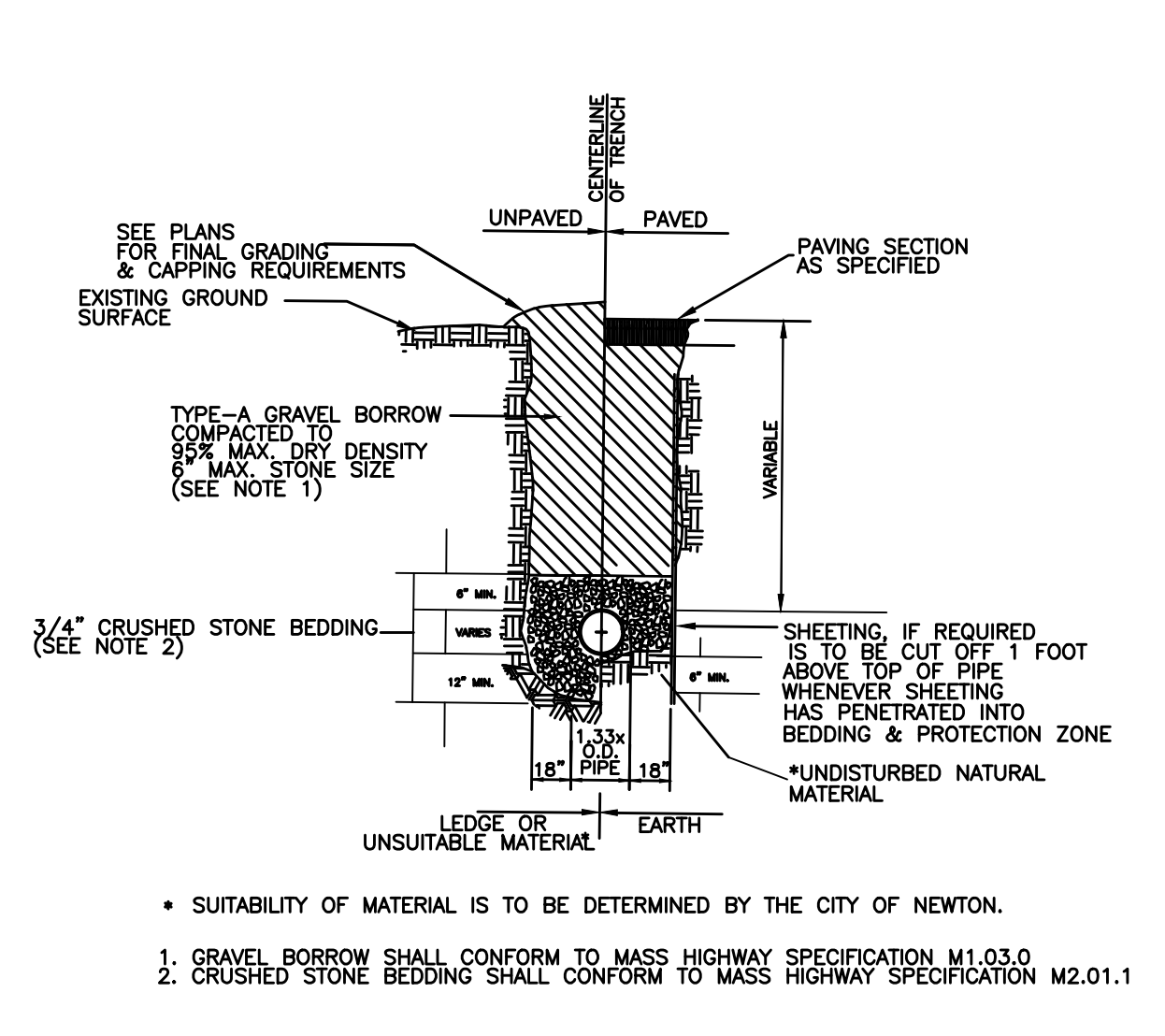
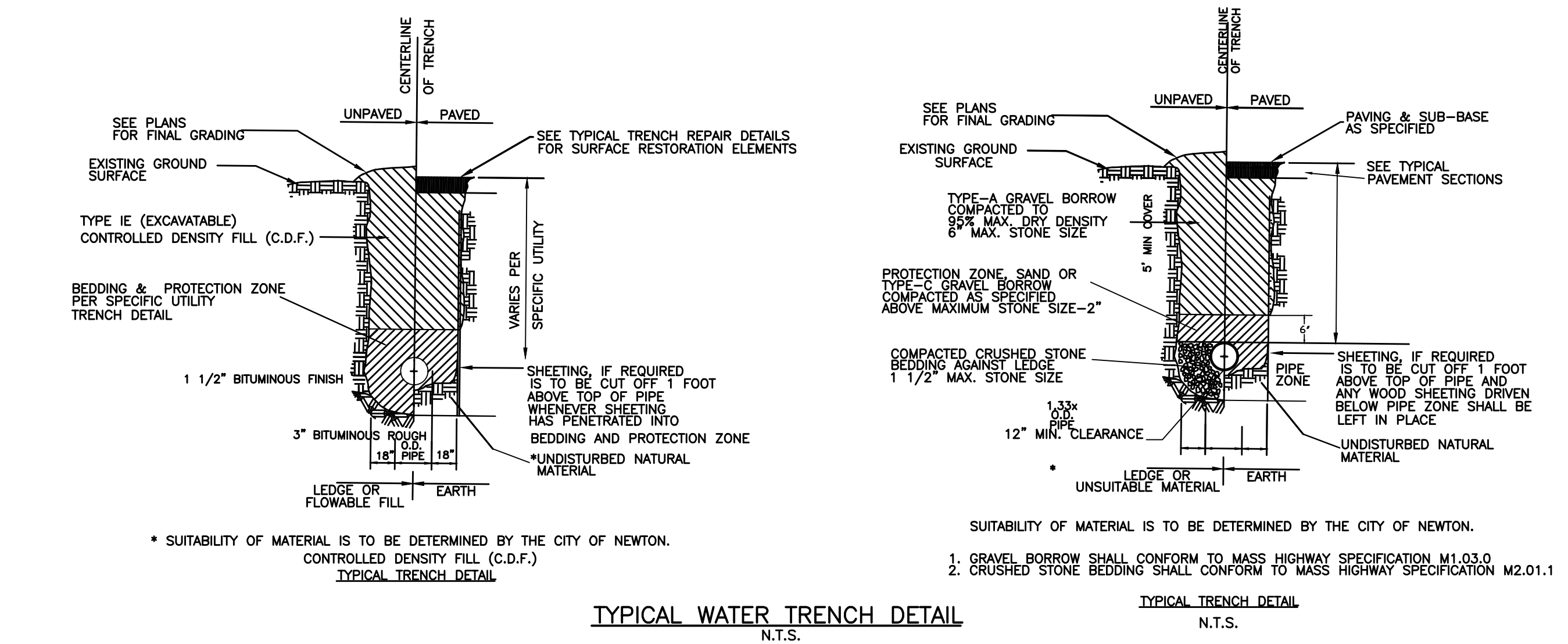
DESCRIPTION	DATE
REVISED RETAINING WALL HEIGHT	8/3/2020
REVISED DETAILS & WALL LOCATION	9/14/2020

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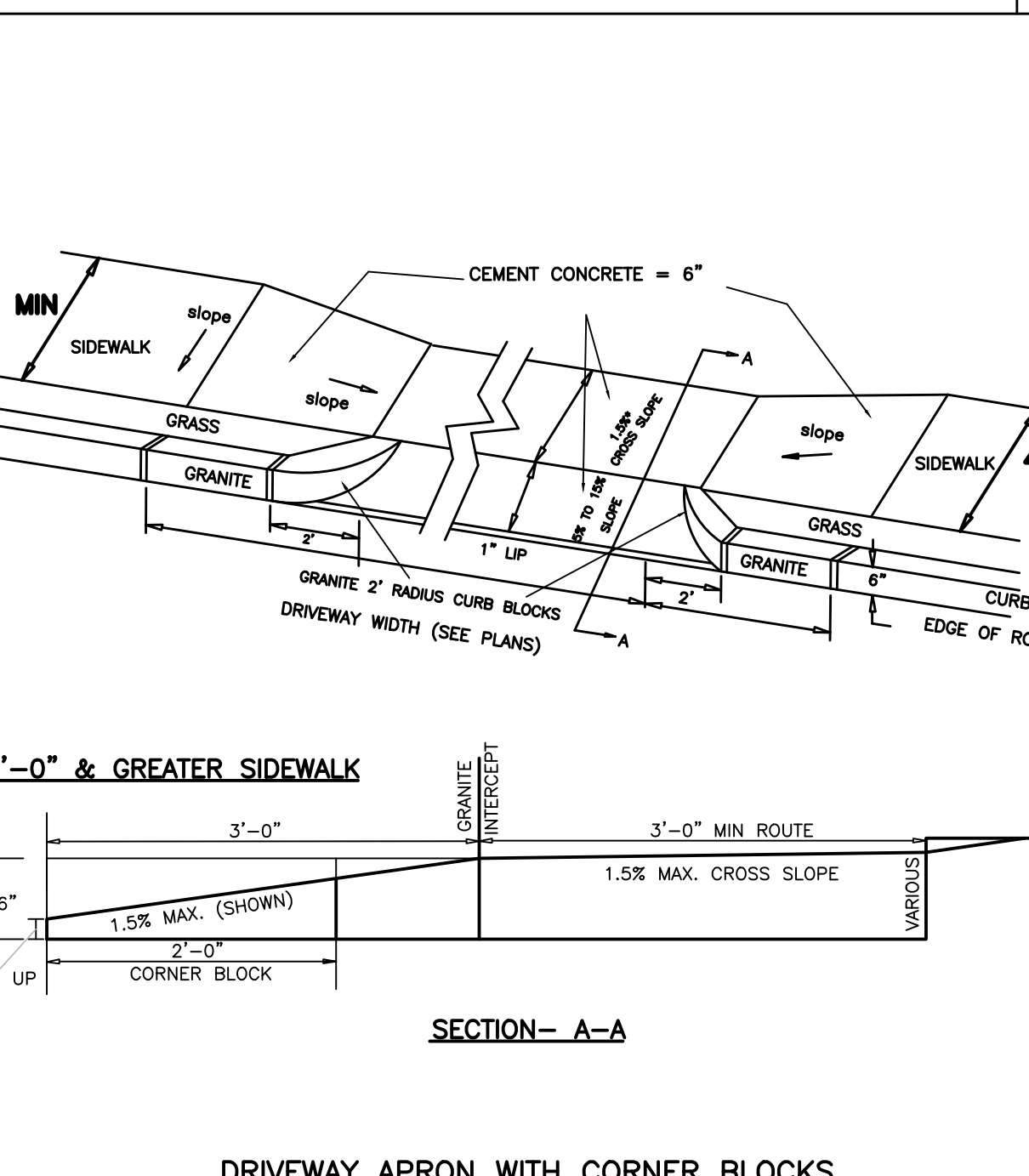
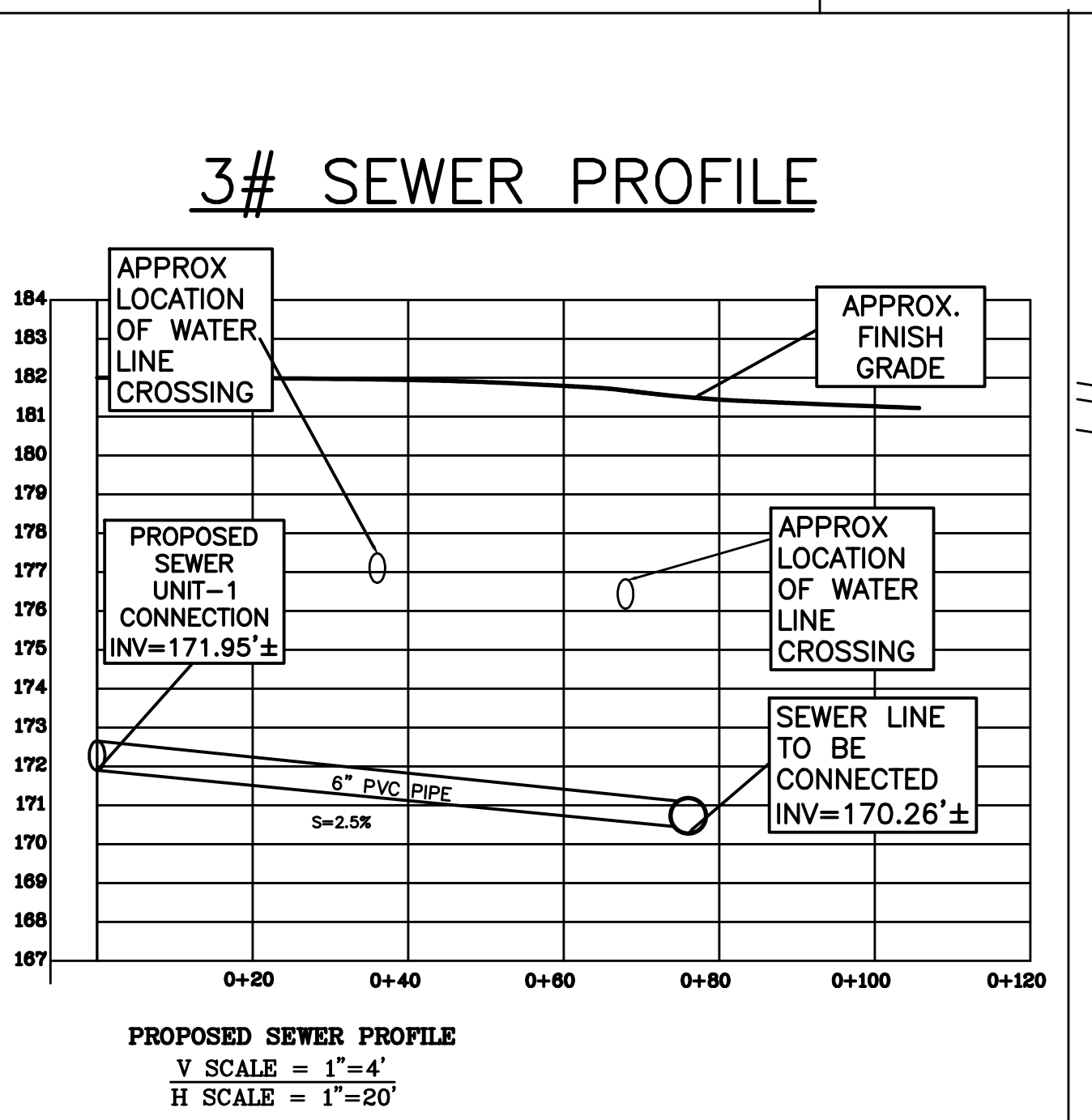
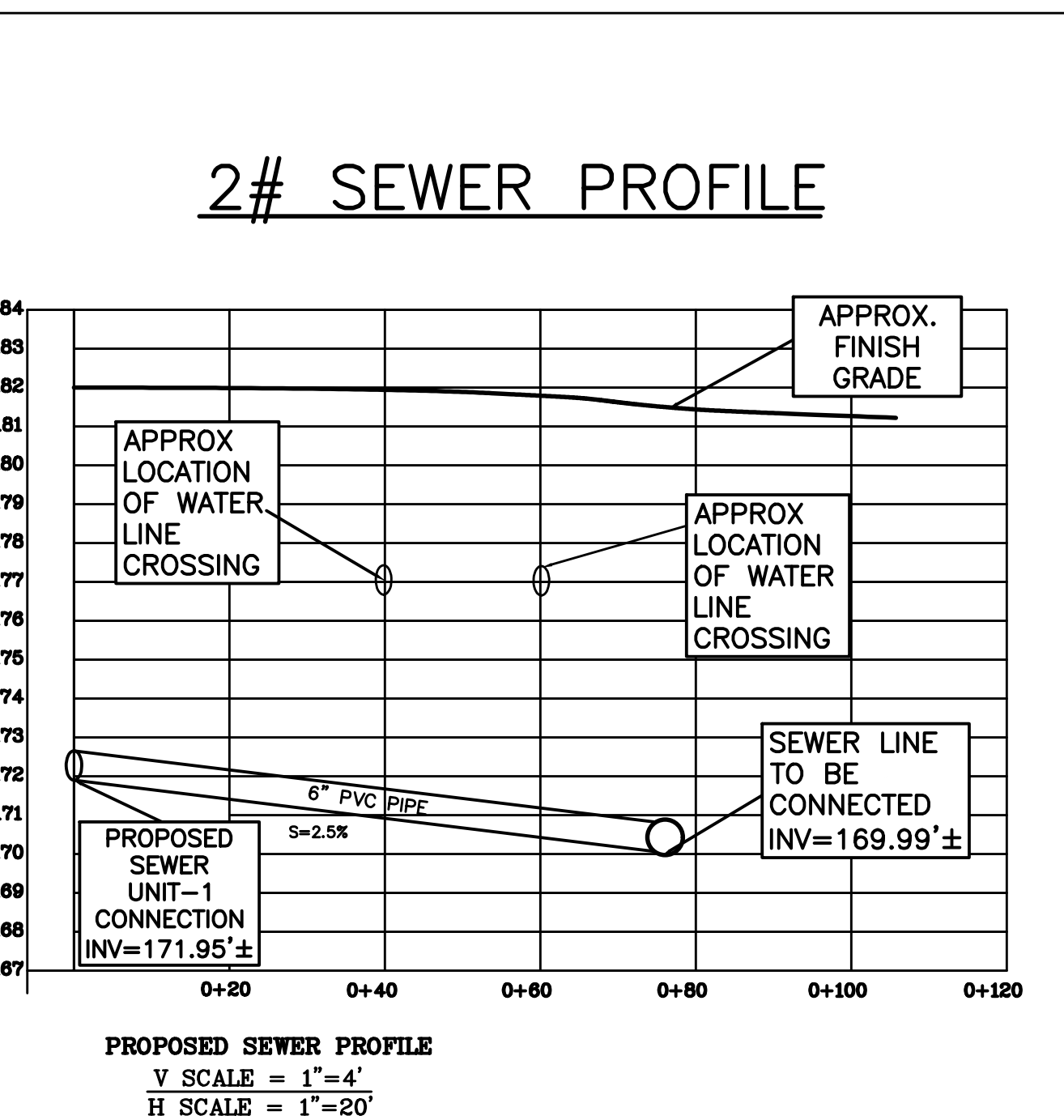
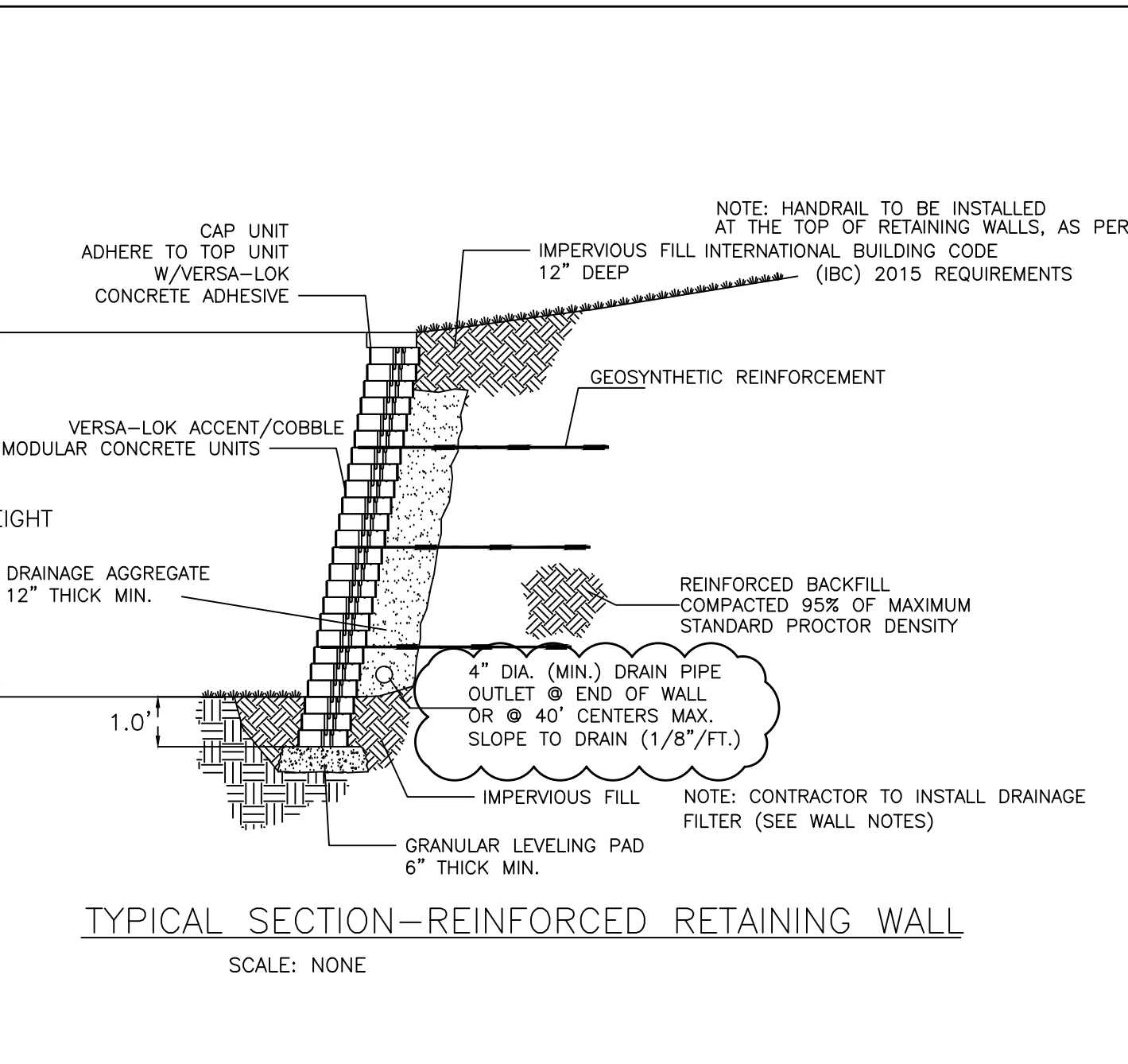
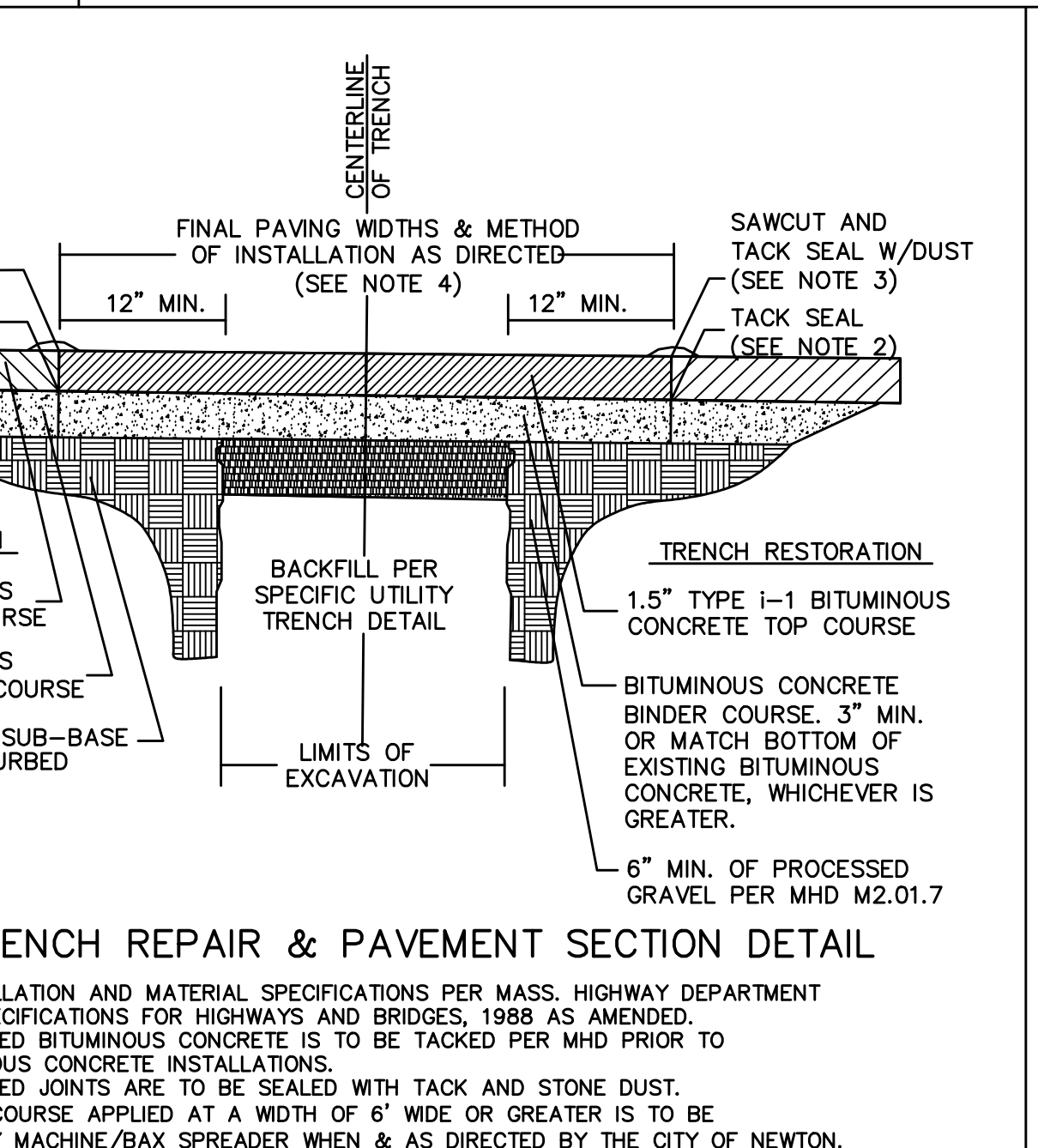
**DETAILS**

SCALE:	1" = 20'
DATE:	6-10-20
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CHECKED BY:	ES
APPROVED BY:	ES

SHEET:  
**6 OF 8**



- CONSTRUCTION SPECIFICATIONS:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
  3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR MAINTENANCE OF ANY MEASURES USED TO TRAP SEDIMENT.
  2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
  3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
  4. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. SEE SEDIMENT BASIN BMP.
  5. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, STRAW BALES, OR OTHER APPROVED METHODS.
  6. MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.
  7. REPLACE GRAVEL MATERIAL WHEN SURFACE VOIDS ARE NOT VISIBLE.
  8. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY.
  9. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS WITHIN 24 HOURS.
- INSPECTION AND MAINTENANCE:**
1. THE AGGREGATE SIZE FOR CONSTRUCTION OF THE PAD SHALL BE 2-3 INCH (50-75 MM) STONE. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
  2. THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 6 INCHES (152 MM). USE GEOTEXTILE FABRICS, IF NECESSARY, TO IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.
  3. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS AND IN ANY CASE SHALL NOT BE LESS THAN 12 FEET (3.6 M) WIDE.
  4. THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET (15.2 M).
  5. LOCATE CONSTRUCTION ENTRANCES AND EXITS TO LIMIT SEDIMENT LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES WHICH HAVE STEEP GRADES AND ENTRANCES AT CURVES IN PUBLIC ROADS.
  6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR MAINTENANCE OF ANY MEASURES USED TO TRAP SEDIMENT.
  7. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
  8. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
  9. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. SEE SEDIMENT BASIN BMP.
  10. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, STRAW BALES, OR OTHER APPROVED METHODS.



**DRIVEWAY TRANSITIONS TO INTERCEPT STD CURB REVEAL (TARGET VALUES ONLY)**

WALK WIDTH	CORNER BLOCK REVEAL	DISTANCE TO APRON INTERCEPT	RISE TO APRON INTERCEPT	GUTTER GRADE	HIGH SIDE LENGTH OF TRANSITION CURB INCLUDING THE 2' RADIUS COR. BLK.
4'-6"	3 5/8" MAX	1'-6" FIXED	3 5/8" MAX	UP TO 5	4'-0"
				1	4'-0"
				2	4'-0"
				3	5'-0"
				4	6'-0"
				5	8'-0"
				6	13'-6" MAX
5'-0"	4 1/2" MAX	2'-0" FIXED	4 1/2" MAX	0-5	4'-0"
				1	4'-0"
				2	4'-0"
				3	4'-0"
				4	4'-0"
				5	5'-6"
				6	8'-6" MAX
6'-0" & GREATER	6'	3'-0" FIXED	6 1/2" MAX	ALL GRADES	NO TRANSITION
				7 & GREATER	15'-0" MAX

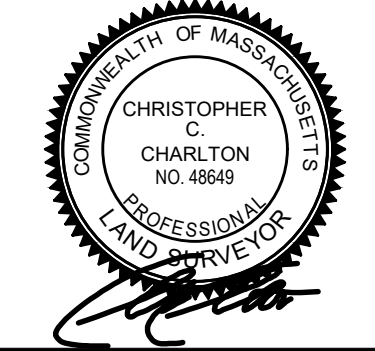
① FINAL PRODUCT(S) MUST NOT EXCEED THE 7.5% GRADIENT OR 1.5% CROSS SLOPE STANDARDS.  
② WHEN THE FACTOR FALLS BETWEEN THE LISTED RANGE, USE THE LESSER GRADIENT FACTOR.  
③ THE MAXIMUM REQUIRED TRANSITION LENGTH OF CURBS IS 15'-0"  
④ SIDEWALKS WITH LOAM BORDRS DO NOT REQUIRE TRANSITION CURBS.



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432 DEDHAM STREET  
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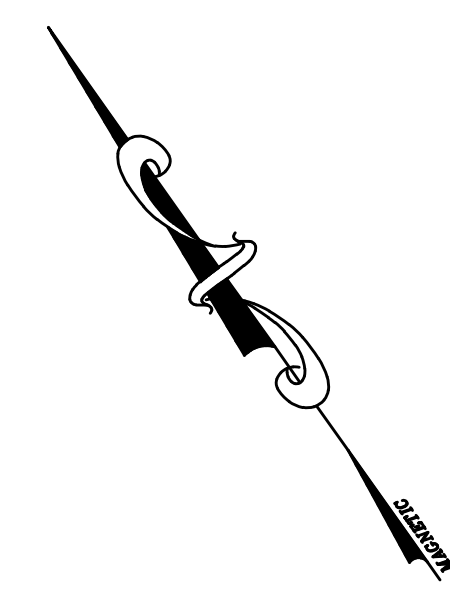
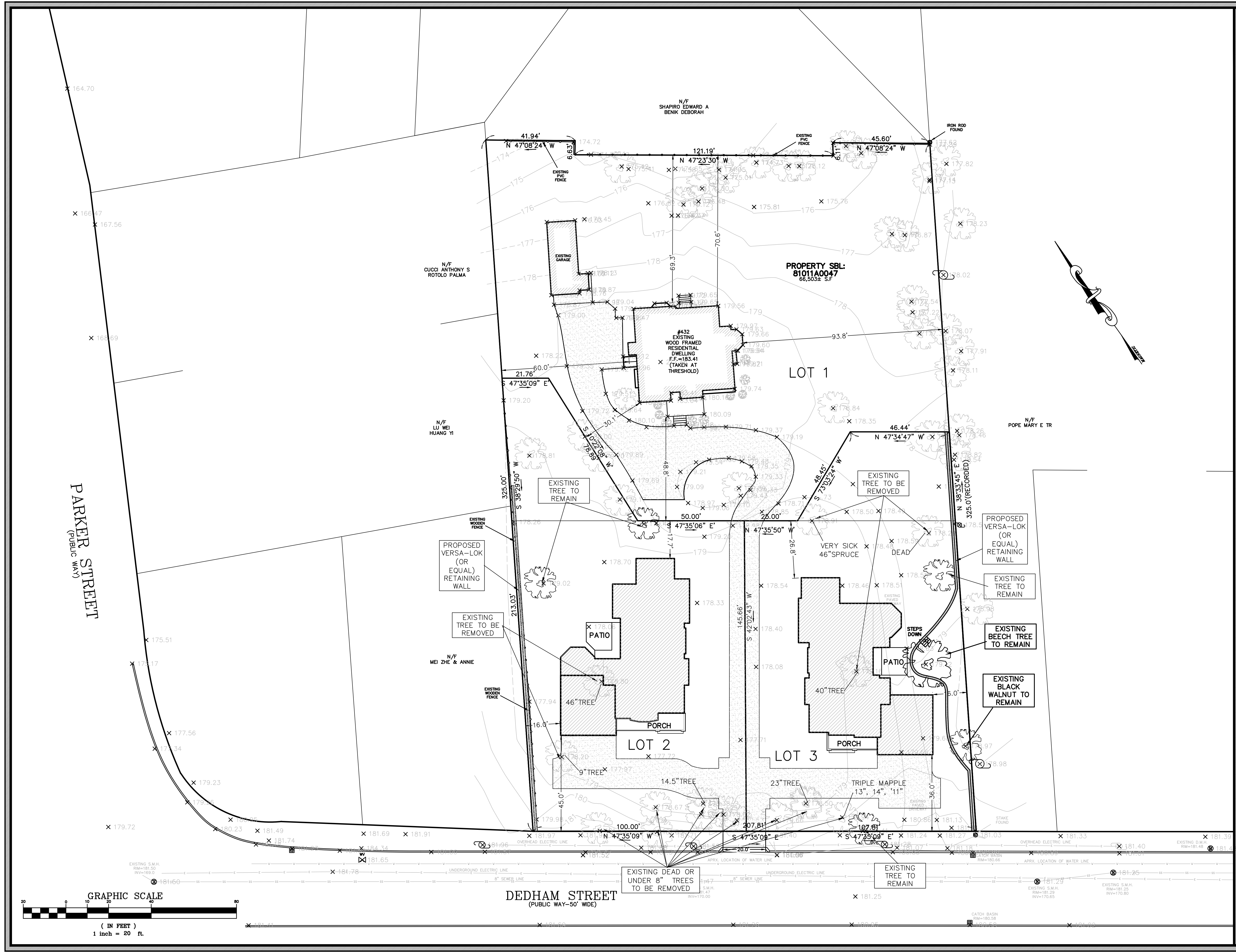
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TREE PLAN

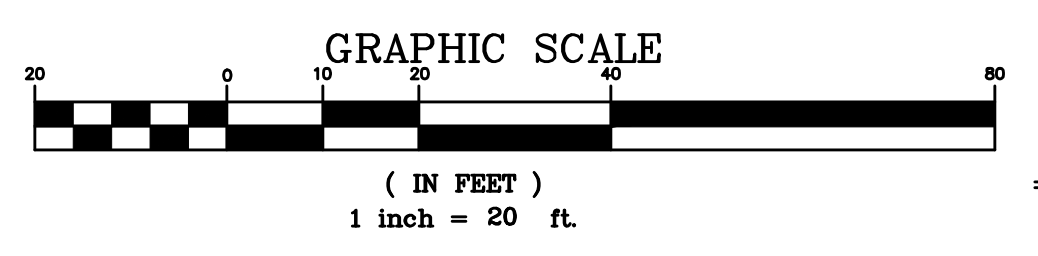
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PARKER STREET  
(PUBLIC WAY)

DEDHAM STREET  
(PUBLIC WAY-50' WIDE)





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DESCRIPTION	DATE

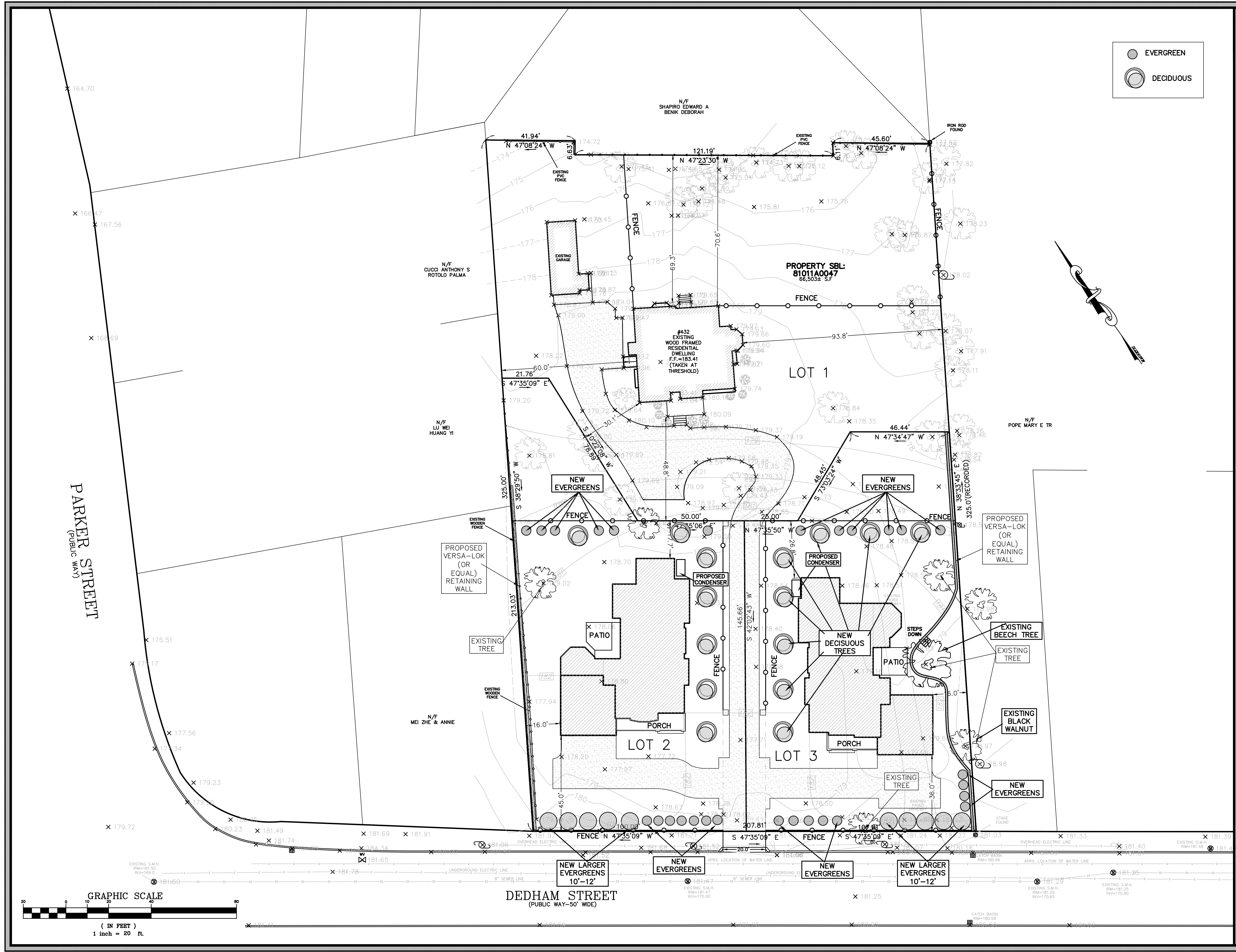
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LANDSCAPE PLAN

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