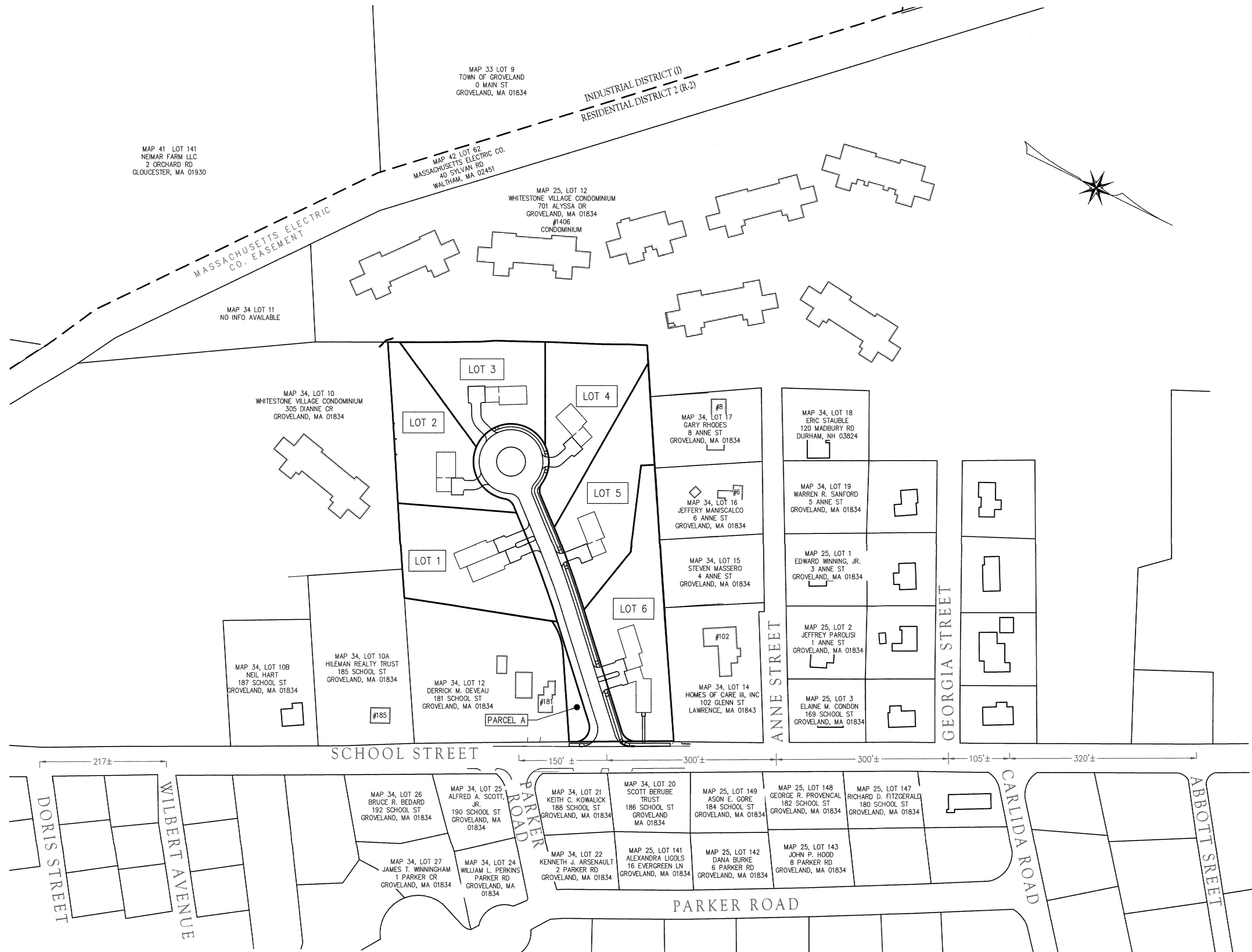


DEFINITIVE SUBDIVISION

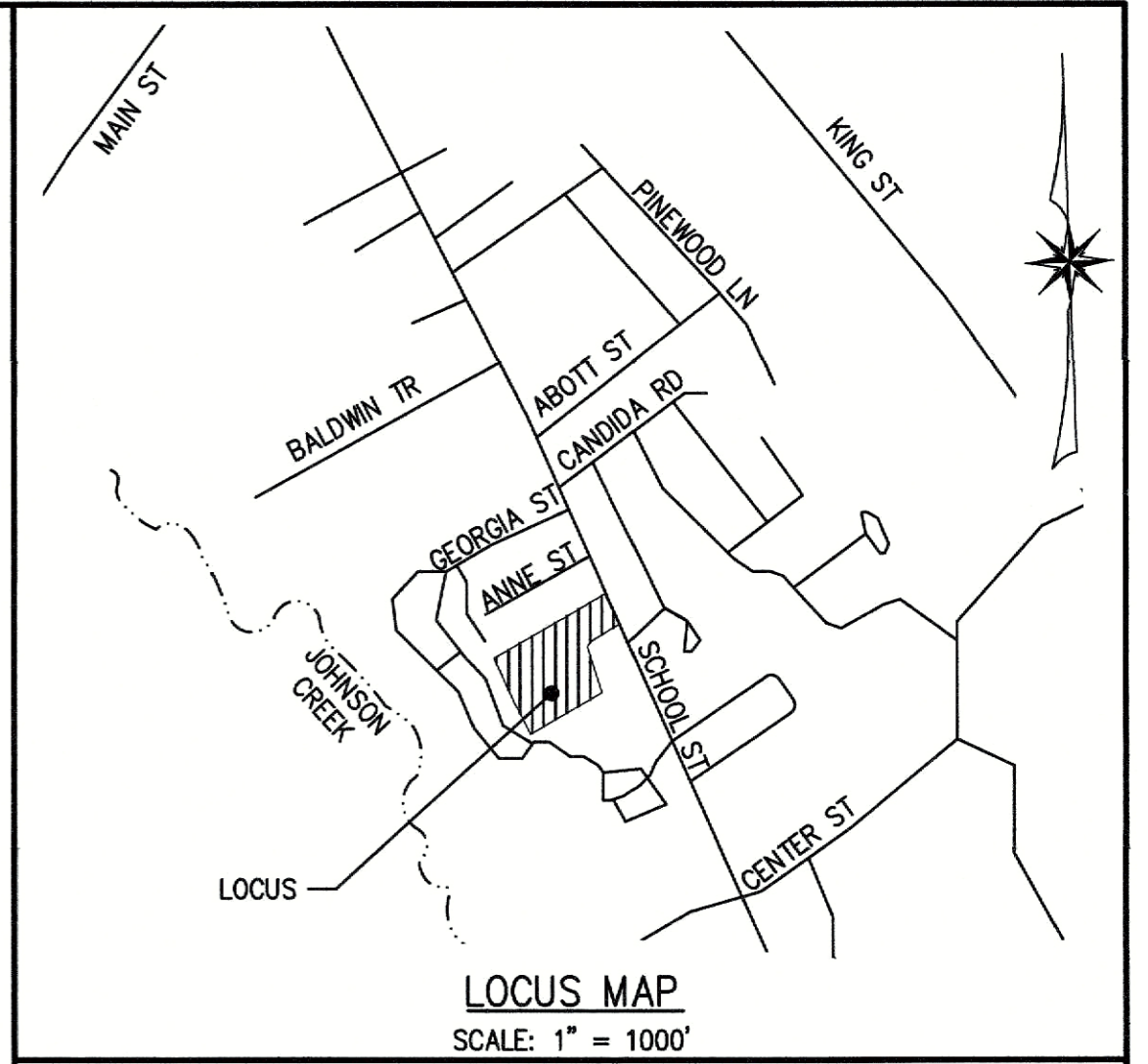
181R SCHOOL STREET

GROVELAND, MASSACHUSETTS

(ASSESSOR'S MAP 34 LOT 13)



PLAN
SCALE: 1" = 100'



FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SCHEDULE OF PLAN SET DRAWINGS:

- C-1 COVER SHEET
- C-2 EXISTING CONDITIONS PLAN
- C-3 LOTTING PLAN
- C-4 EROSION CONTROL & DEMOLITION PLAN
- C-5 SITE PLAN
- C-6 GRADING AND DRAINAGE PLAN
- C-7 UTILITIES & PROFILE PLAN
- C-8 SEWER DETAILS PLAN
- C-9 SITE DETAILS PLAN
- C-10 UTILITY DETAILS PLAN
- C-11 DRAINAGE DETAILS PLAN
- C-12 DRAINAGE DETAILS PLAN
- L-1 LANDSCAPE PLAN

LEGEND:

- 100 MAJOR TOPOGRAPHIC CONTOUR
- 98 MINOR TOPOGRAPHIC CONTOUR
- CHAIN LINK FENCE
- EDGE OF LAWN
- GAS MAIN
- OVERHEAD WIRES
- SEWER MAIN
- STORM DRAIN
- TELEPHONE SERVICE
- TREE LINE
- WATER MAIN
- CATCH BASIN
- DRAIN MANHOLE
- GUY WIRE
- HYDRANT
- SEWER MANHOLE
- SIGN
- TELEPHONE MANHOLE
- UTILITY POLE
- WATER GATE

ABBREVIATIONS:

- AC ACRES
- ACR ACCESSIBLE RAMP
- APPROX APPROXIMATE
- BIT BITUMINOUS
- CB CATCH BASIN
- CLF CHAIN LINK FENCE
- CO CLEAN OUT
- CONC CONCRETE
- DMH DRAIN MANHOLE
- DYL DOUBLE YELLOW LINE
- EOL EDGE OF LAWN
- EP EDGE OF PAVEMENT
- INV INVERT
- MAX MAXIMUM
- MIN MINIMUM
- N/O NOW OR FORMERLY
- PVC POLYVINYL CHLORIDE
- RCP REINFORCED CONCRETE PIPE
- RET RETAINING
- S SLOPE
- SF SQUARE FEET
- SL STOP LINE
- SMH SEWER MANHOLE
- SWL SINGLE WHITE LINE
- TMH TELEPHONE MANHOLE
- TYP TYPICAL
- VGC VERTICAL GRANITE CURB
- WSO WATER SHUT-OFF

WAIVER:

- SUBDIVISION REGULATION - CHAPTER 70: 70.4.3.(H)(5): NEW INTERSECTIONS ALONG ONE SIDE OF AN EXISTING STREET REQUIRED: 400 FEET APART FROM A MINOR STREET PROPOSED: 300 FEET APART FROM ANNE STREET

GENERAL NOTE:
THESE PLANS ARE PREPARED FOR PERMITTING WITH THE TOWN OF GROVELAND. THE PLANS SHALL NOT BE USED FOR CONSTRUCTION OR FOR ANY OTHER PURPOSES WITHOUT WRITTEN PERMISSION FROM THE MORIN-CAMERON GROUP, INC.

TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK _____ DATE _____
APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
DATE: _____
APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.



DEFINITIVE SUBDIVISION
FOR A
STREET TO BE NAMED
IN
GROVELAND, MASSACHUSETTS
AT
181R SCHOOL STREET
(GROVELAND ASSESSOR'S MAP 34 LOT 13)
PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
231 SUTTON STREET, SUITE 1B
NORTH ANDOVER, MA 01845
OWNER:
181R SCHOOL STREET, LLC
5 ATKINSON FARM ROAD
ATKINSON, NH 03811
JULY 31, 2024

The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 KENOZA AVENUE, MASSACHUSETTS 01830
P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | | COVER SHEET | DRAWING NO. C-1 |
|-----------|-----------------|---------|-------------|--------------------|
| NO. | DESCRIPTION | DATE | | |
| 1 | PER PEER REVIEW | 11/5/24 | | |

JULY 31, 2024
REVISED ON NOVEMBER 5, 2024

SCS SOIL LEGEND:

- 410C** SUTTON FINE SANDY LOAM, 8 TO 15% SLOPES
- 420B** CANTON FINE SANDY LOAM, 3 TO 8% SLOPES
- 420C** CANTON FINE SANDY LOAM, 8 TO 15% SLOPES
- 421C** CANTON FINE SANDY LOAM, 8 TO 15% SLOPES

MAP 34, LOT 10
WHITESTONE VILLAGE CONDOMINIUM
305 DIANNE CR
GROVELAND, MA 01834

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

DATE _____

RECORD OWNER:

181R SCHOOL STREET, LLC
5 ATKINSON FARM RD
ATKINSON, NH 03811
DEED BOOK 35976 PAGE 77
ASSESSORS MAP 34 LOT 13

GENERAL NOTES:

- THIS PLAN IS PREPARED FOR OUR CLIENTS USE ONLY FOR THE SPECIFIC PURPOSE OF DEPICTING EXISTING CONDITIONS OBTAINED BY AN ON-THE-GROUND FIELD SURVEY BY THE MORIN-CAMERON GROUP IN MARCH 2019.
- ABUTTER INFORMATION SHOW HEREON WAS TAKEN FROM THE GROVELAND GIS DATABASE.

FLOOD NOTE:

THE SUBJECT PROPERTY IS LOCATED ENTIRELY WITHIN A ZONE X: AREA OF MINIMAL FLOOD HAZARD ABOVE THE 500-YEAR FLOOD LEVEL AS ILLUSTRATED ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 25009C0232F, WHICH HAS AN EFFECTIVE DATE OF JULY 3, 2012.

DATUM:

ELEVATIONS HEREON REFER TO NAVD88 VERTICAL DATUM AND MassSPC NAD 1983

HORIZONTAL DATUM:

UTILITY NOTE:

ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY AND ARE BASED ON LOCATIONS OF OBSERVABLE FIELD EVIDENCE AND RECORDS OBTAINED FROM VARIOUS GROVELAND MUNICIPAL DEPARTMENTS. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION, REPAVING OR OTHER CONSTRUCTION, ALL UTILITY COMPANIES MUST BE NOTIFIED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS. CALL "DIG SAFE" AT 1-888-344-7233. THE MORIN-CAMERON GROUP, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCUATELY SHOWN. BEFORE FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPARTMENTS MUST BE CONSULTED.

ZONING NOTE:

THE LOT LIES WITHIN THE RESIDENTIAL DISTRICT (R-2) & AQUIFER PROTECTION DISTRICT (ZONE III).

RESIDENCE DISTRICT R-2 ZONING DISTRICT

| SETBACK | REQUIRED | EXISTING |
|--|-----------------|---------------|
| MIN. AREA | 30,000 S.F. (1) | 245,945± S.F. |
| MIN. FRONTAGE | 150 FT. (1) | 180.26± FT |
| FRONT | 30 FT. (3) | N/A |
| SIDE | 15 FT. (2) | N/A |
| REAR | 15 FT. | N/A |
| MAX. BUILDING HEIGHT | 35 FT. | N/A |
| MAX. % LOT COVERAGE | 25% | 0% |
| MAX. % IMPERVIOUS AREA | 50% | 0% |
| % OF MIN. REQUIRED LOT AREA AS CONTIGUOUS BUILDABLE AREA | 60% (4) | 100% |

(1) TWO-FAMILY OR DUPLEX STRUCTURES REQUIRE A MIN. OF TWO HUNDRED (200) FEET OF FRONTAGE AND 40,000 SF AREA IN THE R-2 DISTRICT.

(2) ON A LOT WITH LESS THAN ONE HUNDRED FIFTY (150) FEET OF FRONTAGE AND IN EXISTENCE AT THE TIME THIS BY-LAW IS PASSED, NO BUILDING SHALL BE ERRECTED WITHIN TEN (10) FEET OF A SIDE LOT LINE.

(3) IN ANY RESIDENTIAL DISTRICT NO BUILDING OR ROADSIDE STAND SHALL BE ERRECTED OR PLACED WITHIN THIRTY (30) FEET OF A STREET LINE UNLESS IT IS DETERMINED THAT THE LINE OF HOUSES EXISTING AT THE TIME THIS BY-LAW IS ADOPTED IS LESS THAN THIRTY (30) FEET FROM THE STREET LINE, AND NO BUILDING OR ACCESSORY USE OR FARM OR POULTRY FARM BUILDING OTHER THAN A DWELLING, OR ROADSIDE STAND, OR PRIVATE GARAGE, SHALL BE BUILT WITHIN SIXTY (60) FEET OF A STREET LINE.

(4) FIFTY (50) PERCENT IF PARCEL IS SERVICED BY TOWN WATER AND SEWER.

CONTIGUOUS BUILDABLE AREA:

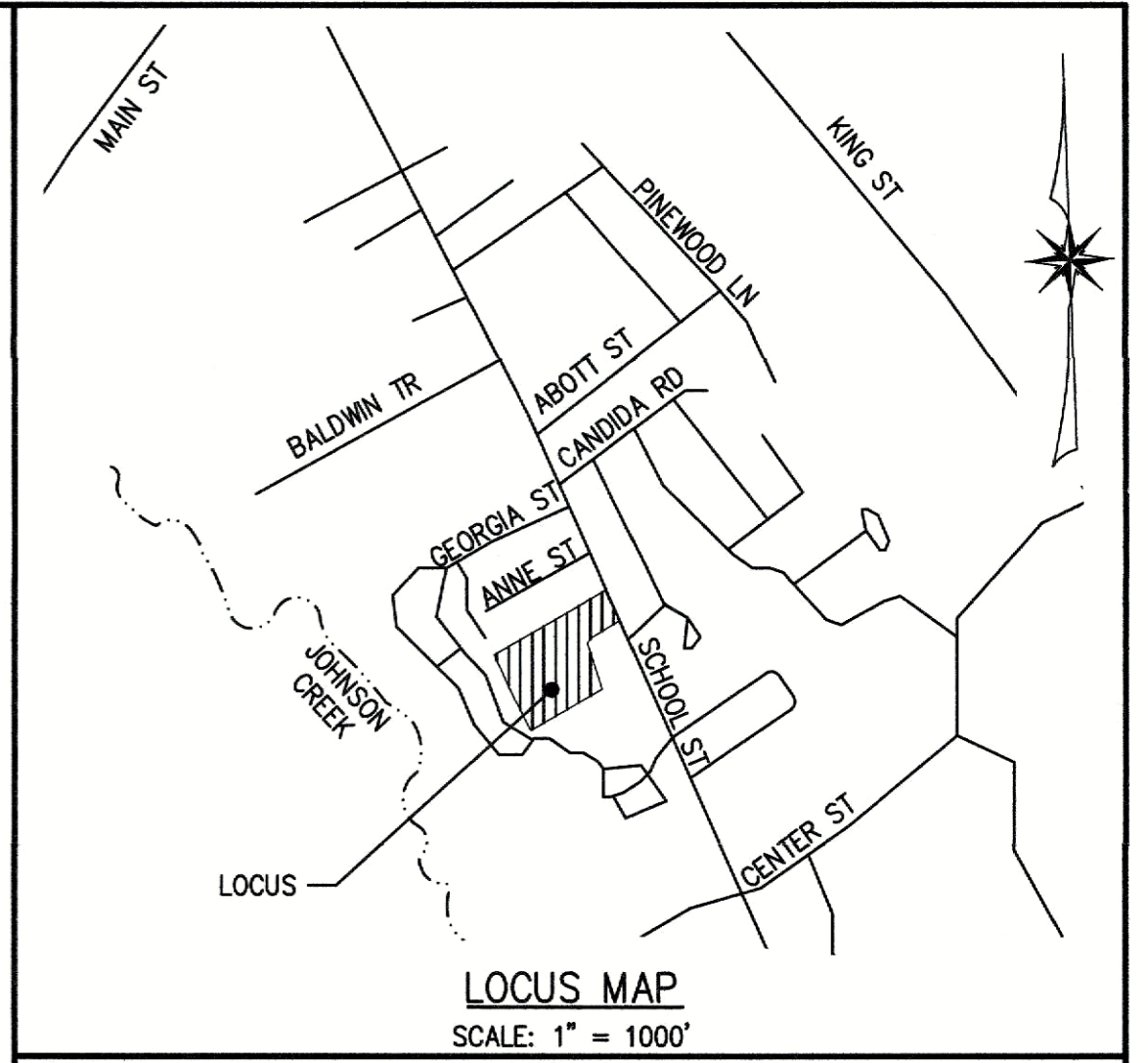
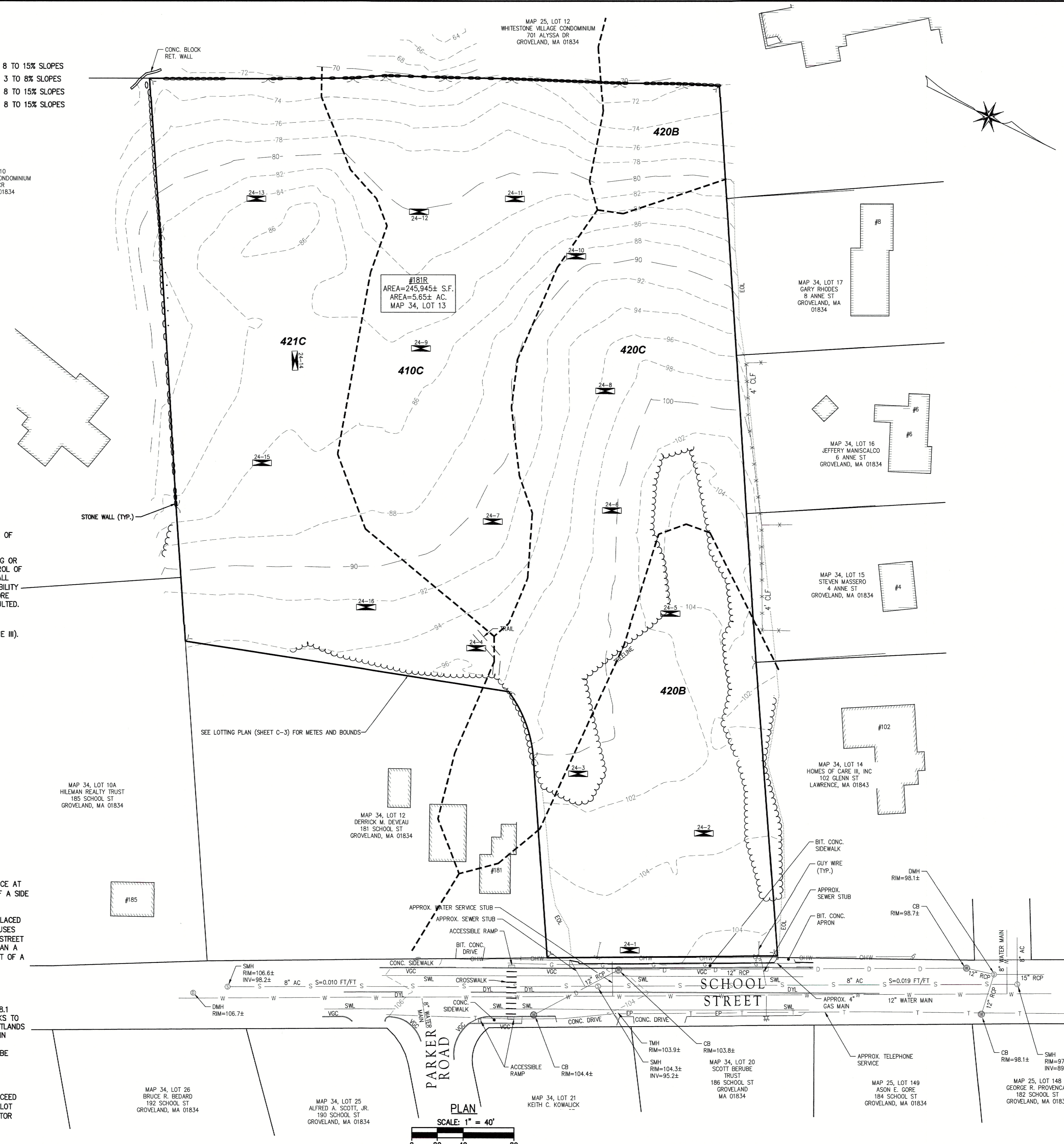
THAT AREA OF A LOT THAT IS CONTIGUOUS AND BUILDABLE LAND AS REQUIRED BY SECTION 8.1 TABLE OF DIMENSIONAL REQUIREMENTS, TOGETHER WITH THAT AREA WITHIN REQUIRED SETBACKS TO THE EXTENT SUCH AREA COMPLIES WITH THE FURTHER REQUIREMENTS OF THIS DEFINITION. WETLANDS DESCRIBED BY G.L. C. 131, INCLUDING ANY NO DISTURBANCE AND NO BUILD SETBACK AREAS IN ACCORDANCE WITH G.L. C. 131, AND THE TOWN OF GROVELAND WETLANDS BY-LAW AND ACCOMPANYING REGULATIONS, AND SLOPES IN EXCESS OF TWENTY (20) PERCENT SHALL NOT BE CONSIDERED AS BUILDABLE FOR THE PURPOSE OF CALCULATING SQUARE FOOTAGE.

LOT REGULARITY:

SECTION 80-8.2.A: NO LOT SHALL BE CREATED SO AS TO BE SO IRREGULARLY SHAPED OR EXTENDED THAT IT HAS A "SHAPE FACTOR" IN EXCESS OF (32), EXCEPT THAT A LOT MAY EXCEED THE REQUIRED "SHAPE FACTOR" IF A CONTIGUOUS PORTION OF THE LOT MEETS THE MINIMUM LOT AREA REQUIREMENT AND DOES NOT EXCEED THE REQUIRED "SHAPE FACTOR." THE SHAPE FACTOR EQUALS THE SQUARE OF THE LOT PERIMETER DIVIDED BY THE LOT AREA.

SHAPE FACTOR = (LOT PERIMETER)²/LOT AREA

DRAWING: 3634 MAIN.dwg



TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF THIS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK _____ DATE _____

APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
DATE: _____
APPROVED BY: _____

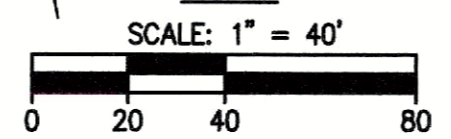
APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HEREWITH AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.

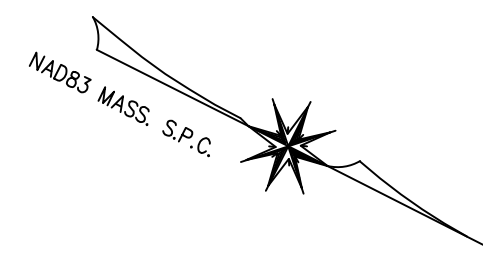


DEFINITIVE SUBDIVISION
FOR A
STREET TO BE NAMED
IN
GROVELAND, MASSACHUSETTS
AT
181R SCHOOL STREET
(GROVELAND ASSESSOR'S MAP 34 LOT 13)
PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
231 SUTTON STREET, SUITE 1B
NORTH ANDOVER, MA 01845
OWNER:
181R SCHOOL STREET, LLC
5 ATKINSON FARM ROAD
ATKINSON, NH 03811
JULY 31, 2024

The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 KENYA AVENUE, MASSACHUSETTS 01830
P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | | EXISTING CONDITIONS | DRAWING NO. C-2 |
|-----------|-----------------|---------|---------------------|--------------------|
| NO. | DESCRIPTION | DATE | | |
| 1 | PER PEER REVIEW | 11/5/24 | | |





N/F
THE SANDRA A. AUCCON REV. TRUST
BOOK 29896 PAGE 569
MAP 25 LOT 12

| LOT REGULARITY CALCULATIONS | | | | |
|-----------------------------|------------------|-------------|-------------------|--------|
| LOT# | PERIMETER (L.F.) | AREA (S.F.) | P ² /A | STATUS |
| 1 | 834 | 40,163 | 17 | PASS |
| 2 | 876 | 30,203 | 25 | PASS |
| 3 | 802 | 30,030 | 21 | PASS |
| 4 | 860 | 32,829 | 22 | PASS |
| 5 | 952 | 32,719 | 28 | PASS |
| 6 | 1,094 | 40,000 | 30 | PASS |

*PARCEL A IS NOT A BUILDABLE LOT

FOR REGISTRY USE ONLY

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MICHAEL J. SERGI, PLS No.33191 DATE

ASSESSOR REFERENCE:
MAP 34 LOT 13

N/F
PATRICK M. BAXTER ETAL
BOOK 39604 PAGE 427
MAP 34 LOT 10

N/F
GARY RHODES
BOOK 31447 PAGE 210
MAP 34 LOT 17

N/F
JEFFREY & ASHLEY KATE MANISCALO
BOOK 38332 PAGE 305
MAP 34 LOT 16

N/F
STEVEN & JESSICA MASSERO
BOOK 37982 PAGE 441
MAP 34 LOT 15

N/F
HOMES OF CARE III, INC
BOOK 29421 PAGE 314
MAP 34 LOT 14

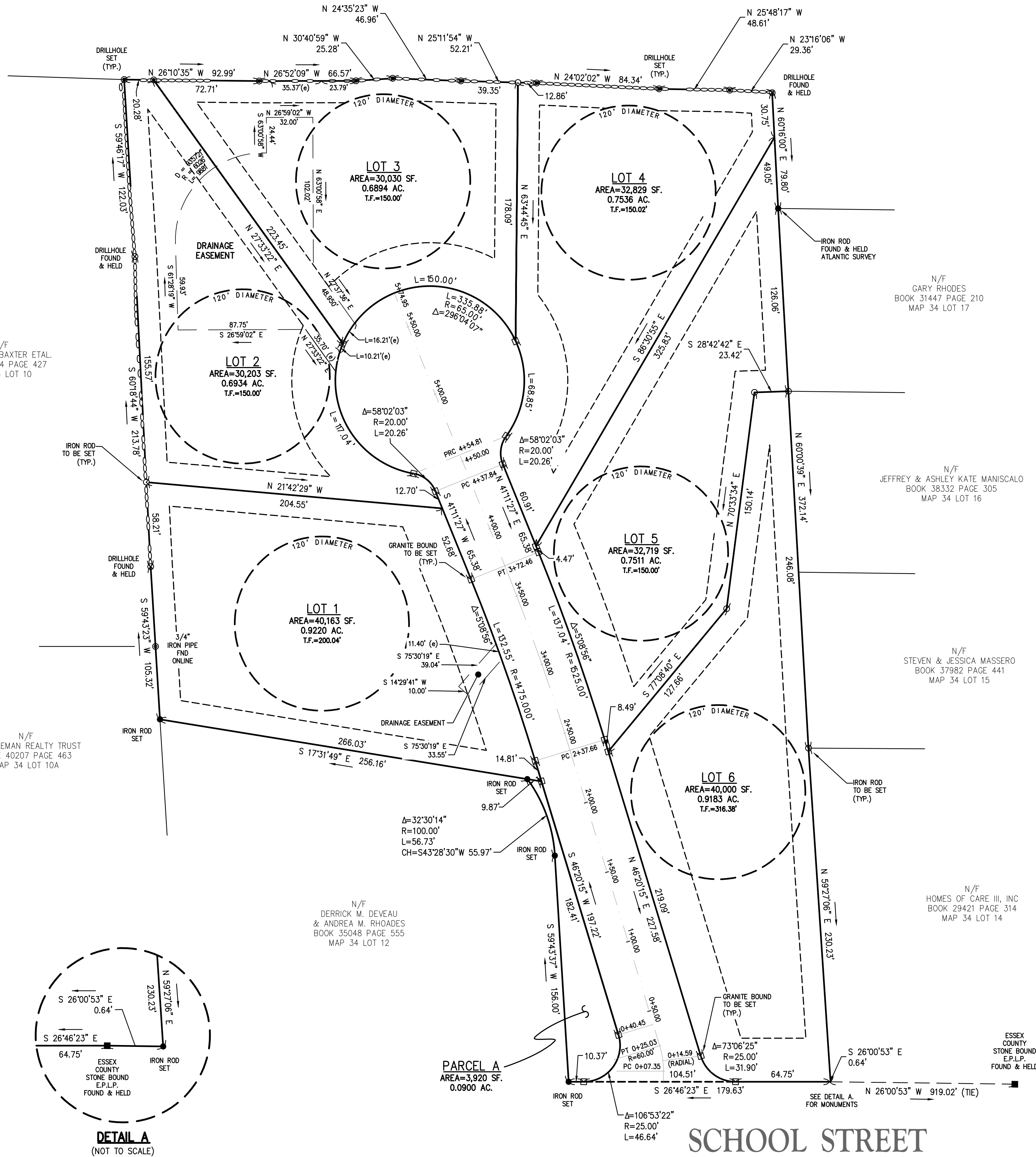
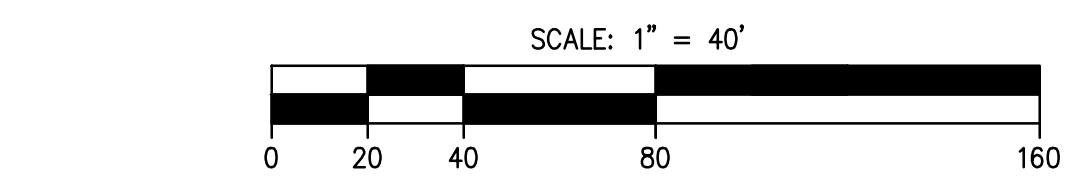
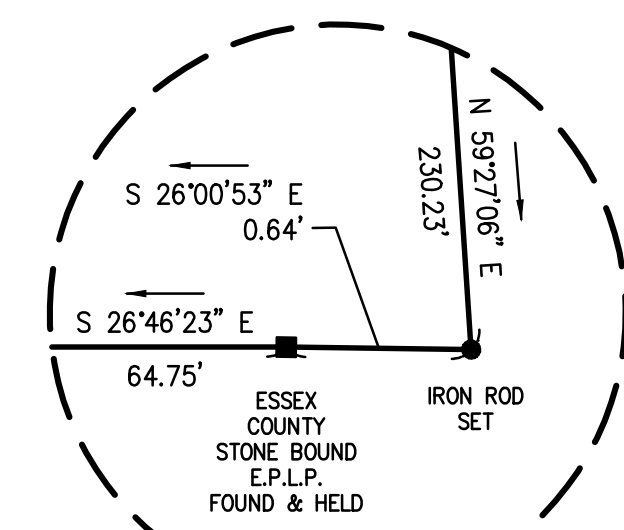
N/F
DERRICK M. DEVEAU
& ANDREA M. RHOADES
BOOK 35048 PAGE 555
MAP 34 LOT 12

ESSEX COUNTY
STONE BOUND
E.P.L.P.
FOUND & HELD

- NOTES:**
- ORIENTATION IS TO NAD83 MASSACHUSETTS STATE PLANE COORDINATES.

- KEY REFERENCE DEED:**
- DEED FROM FRANK J. FRANZONE TO 181R SCHOOL STREET, LLC, DATED JUNE 23 2017 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 35976 PAGE 77.

- KEY REFERENCE PLANS:**
- A PLAN OF A PORTION OF SCHOOL, GARDNER AND ELM PARK STREETS FROM SALEM STREET TO MAIN STREET IN THE TOWN OF GROVELAND AS RELOCATED. DRAWN BY F. RICHARD GELOTTI, SENIOR ASSISTANT COUNTY ENGINEER. DATED DEC. 18, 1984, E.C.L.O. NO. 3203 AND RECORDED IN THE SOUTH ESSEX REGISTRY OF DEEDS.
 - PLAN OF LAND AT 171 SCHOOL STREET IN GROVELAND, MASSACHUSETTS BY ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC. DATED MARCH 2, 2010 AND RECORDED IN THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 423 PLAN 27.
 - PLAN OF LAND IN GROVELAND, MASS. OCCUPIED BY CHARLES A. & NORMA J. MCGLEW BY PHILLIP A. BEVELAQUA. RLS DATED OCT. 25, 1965 AND RECORDED IN THE SOUTH ESSEX REGISTRY OF DEEDS PLAN 667 OF 1965.
 - PLAN OF LAND FOR WHITESTONE VILLAGE II AT SCHOOL STREET IN GROVELAND, MASSACHUSETTS BY ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC. DATED OCT. 21, 2004 AND RECORDED IN THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 381 PLAN 79.
 - PLAN OF LAND IN GROVELAND, MASS. AS SURVEYED FOR RAY B. DREW. BY ROBERT G. GOODWIN, RLS. DATED MAY 2, 1983 AND RECORDED IN THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 178 PLAN 67.
 - PLAN OF LAND IN GROVELAND, MASS. AS SURVEYED FOR DAVID DALE CORP. BY CHARLES H. MORSE & SON, ENGINEERS, DATED JULY 1968 AND RECORDED IN THE SOUTH ESSEX REGISTRY OF DEEDS PLAN 301 OF 1968.



TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

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CLERK _____ DATE _____

APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
DATE: _____

APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.

SURVEY STAMP INTENTIONALLY OMITTED FROM THIS PLAN UNTIL THE DRAINAGE EASEMENT ARE FINALIZED.

MICHAEL J. SERGI, PLS

DEFINITIVE SUBDIVISION
FOR A
STREET TO BE NAMED
IN
GROVELAND, MASSACHUSETTS
AT
181R SCHOOL STREET
(GROVELAND ASSESSOR'S MAP 34 LOT 13)
PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
231 SUTTON STREET, SUITE 1B
NORTH ANDOVER, MA 01845
OWNER:
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5 ATKINSON FARM ROAD
ATKINSON, NH 03811
JULY, 2024

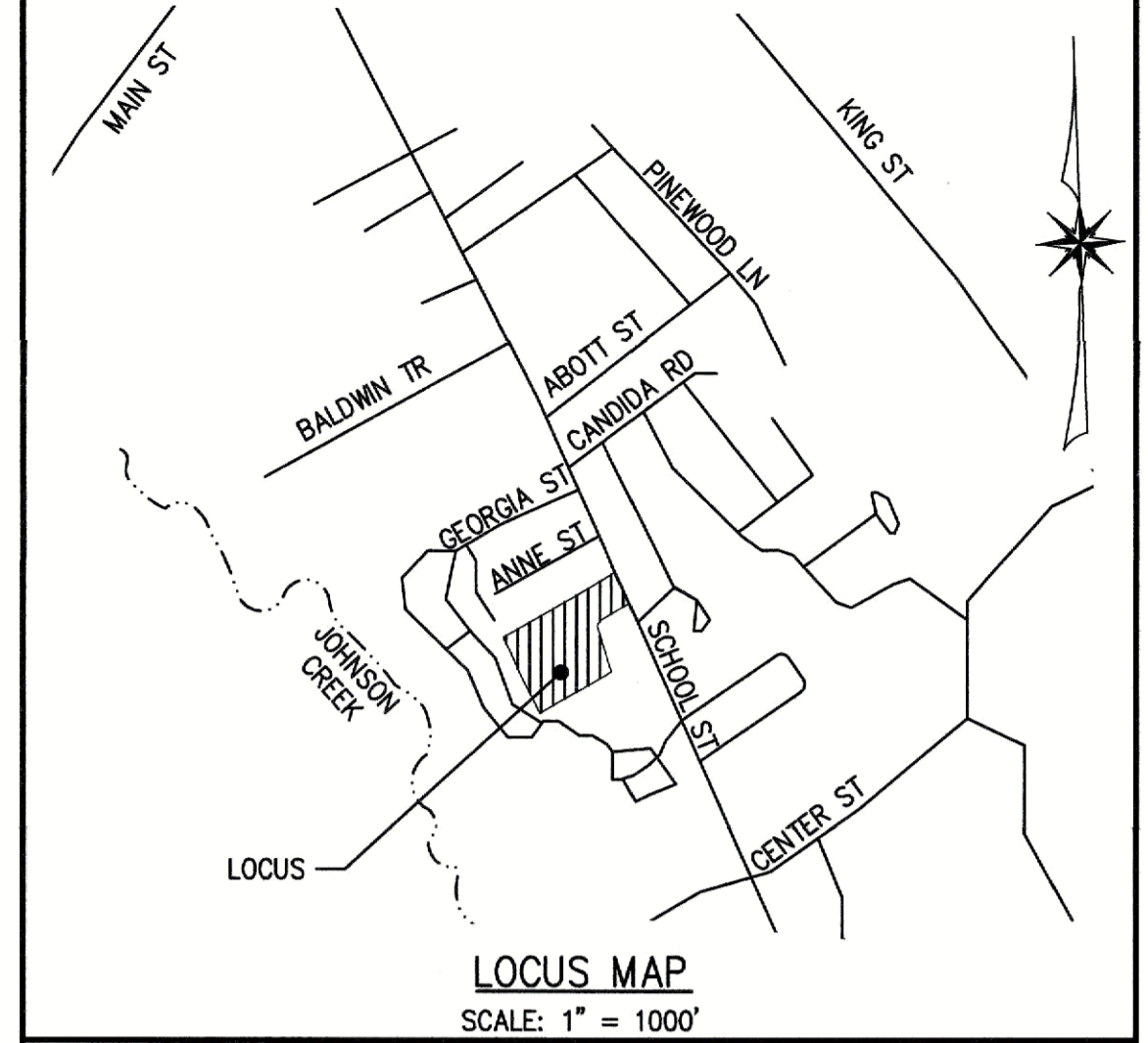
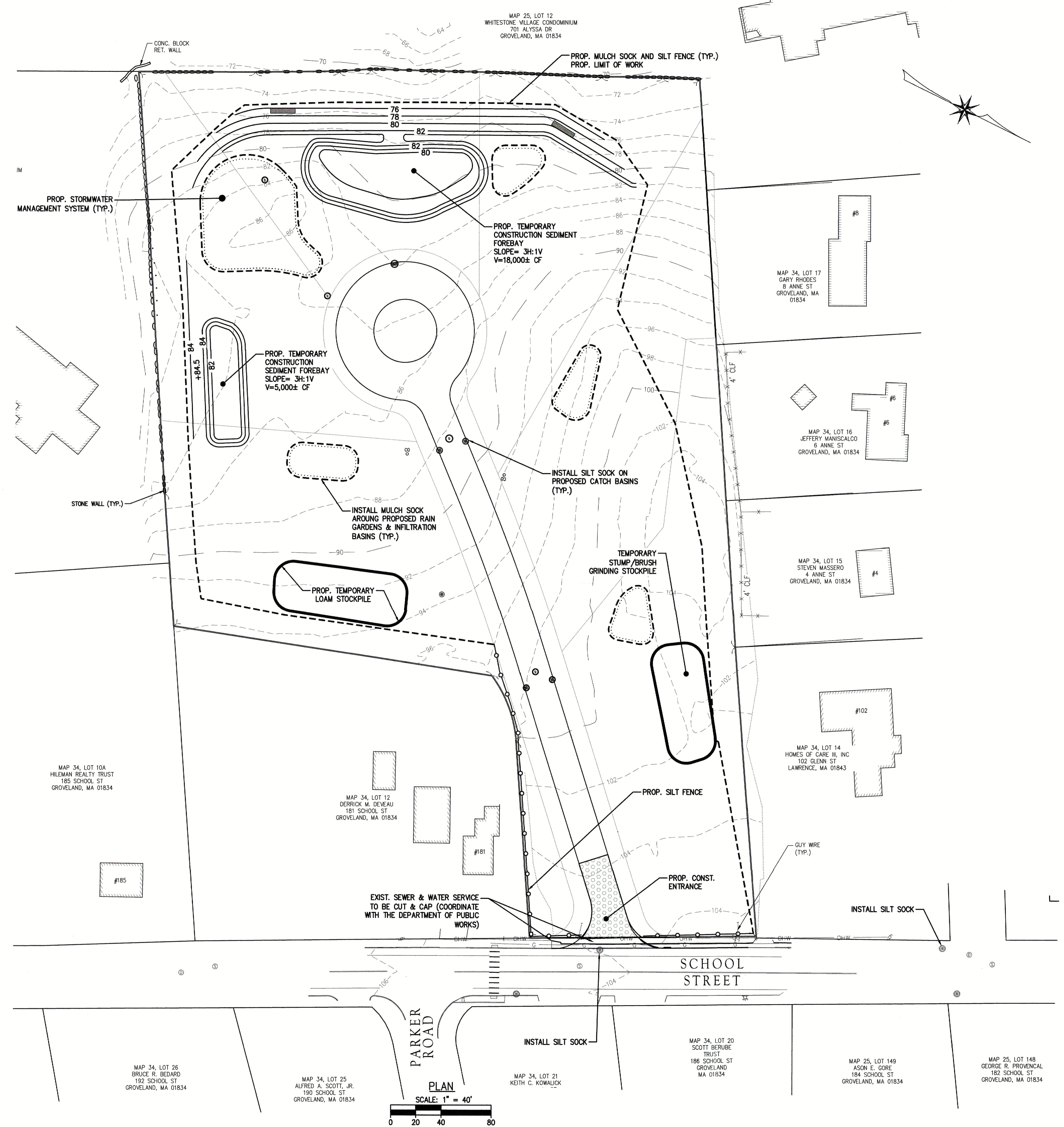
The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 KENOZA AVENUE, MASSACHUSETTS 01830
P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | | DRAWING NO. |
|-----------|-----------------|------------|-------------|
| NO. | DESCRIPTION | DATE | |
| 1 | PER PEER REVIEW | 11/05/2024 | C-3 |
| | | | |

LOTING PLAN

FOR REGISTRY USE ONLY
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

DATE _____



TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

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CLERK _____ DATE _____

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 DATE: _____
 APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.



DEFINITIVE SUBDIVISION
 FOR A
STREET TO BE NAMED
 IN
 GROVELAND, MASSACHUSETTS
 AT
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 PREPARED FOR/APPLICANT:
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 25 KENOZA AVENUE, MASSACHUSETTS 01830
 P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | |
|-----------|-----------------|---------|
| NO. | DESCRIPTION | DATE |
| 1 | PER PEER REVIEW | 11/5/24 |

EROSION CONTROL & DEMO

DRAWING NO. **C-4**

FOR REGISTRY USE ONLY
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

DATE _____

MAP 25, LOT 12
 WHITESTONE VILLAGE CONDOMINIUM
 701 ALYSSA DR
 GROVELAND, MA 01834

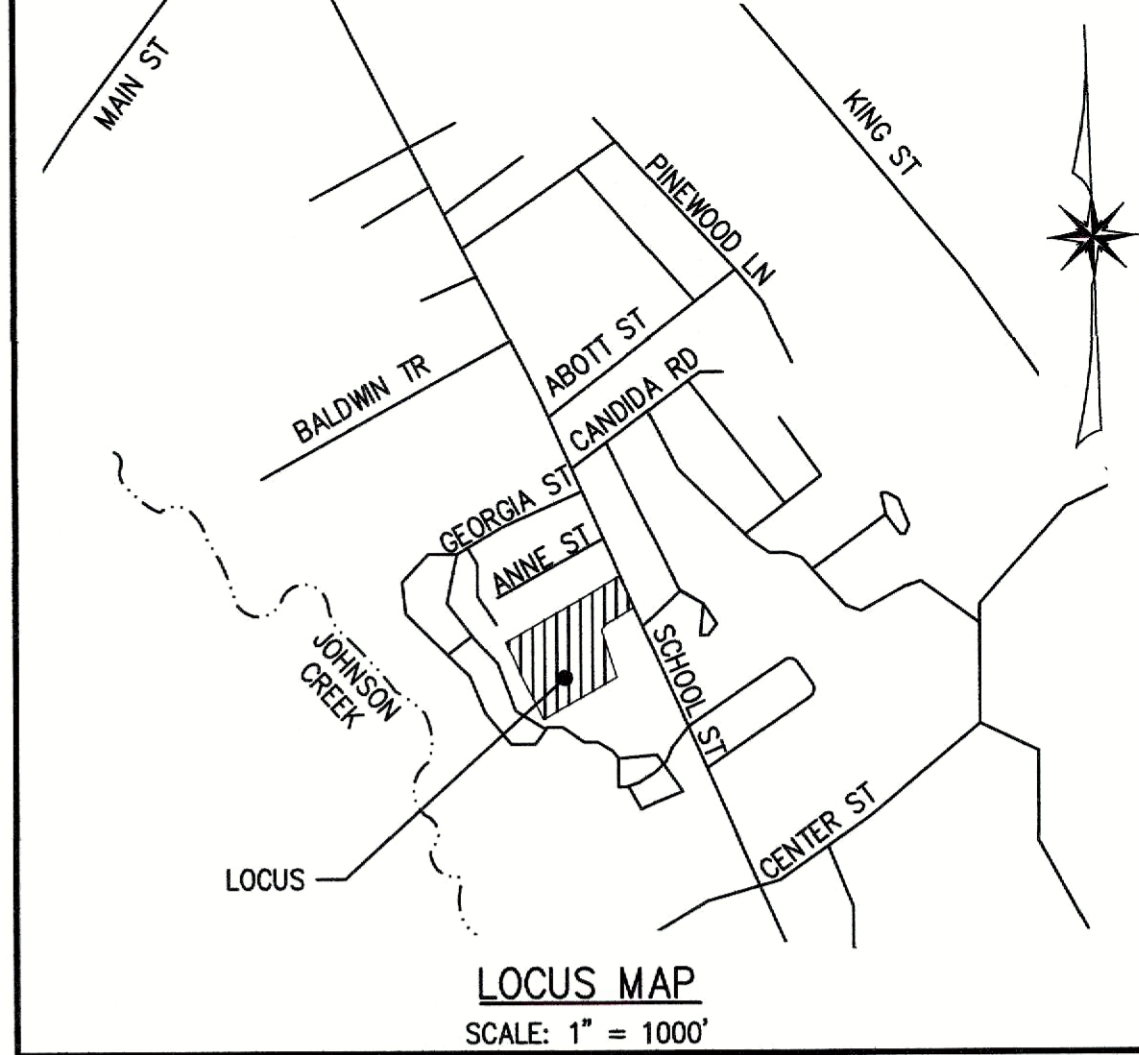
LOT DESIGN NOTE:

THE LOT IMPROVEMENTS HEREON ARE INTENDED TO BE CONCEPTUAL FOR THE PURPOSE OF DEMONSTRATING CONSTRUCTABILITY AND HOW THE LOTS FIT WITHIN THE OVERALL DEVELOPMENT PLAN. FINAL LOT DESIGN SHALL BE COMPLETED BY OTHERS AS PART OF THE BUILDING PERMIT APPLICATION PROCESS.

| RESIDENCE DISTRICT R-2 ZONING DISTRICT | | | | | | | | | |
|--|-----------------|---------------|--------|--------|--------|--------|--------|--------|---------|
| SETBACK | REQUIRED | EXISTING | LOT 1 | LOT 2 | LOT 3 | LOT 4 | LOT 5 | LOT 6 | OVERALL |
| MIN. AREA | 30,000 S.F. (1) | 245,945± S.F. | 40,163 | 30,203 | 30,030 | 32,829 | 32,719 | 40,000 | - |
| MIN. FRONTAGE | 150 FT. (1) | 180.26± FT | 200 | 150 | 150 | 150 | 150 | 251 | - |
| FRONT | 30 FT. (3) | N/A | >30 | >30 | >30 | >30 | >30 | >30 | - |
| SIDE | 15 FT. (2) | N/A | >15 | >15 | >15 | >15 | >15 | >15 | - |
| REAR | 15 FT. | N/A | >15 | >15 | >15 | >15 | >15 | >15 | - |
| MAX. BUILDING HEIGHT | 35 FT. | N/A | <35 | <35 | <35 | <35 | <35 | <35 | - |
| MAX. % LOT COVERAGE | 25% | 0% | <25% | <25% | <25% | <25% | <25% | <25% | 21%± |
| MAX. % IMPERVIOUS AREA | 50% | 0% | <50% | <50% | <50% | <50% | <50% | <50% | 14.98%± |
| % OF MIN. REQUIRED LOT AREA AS CONTIGUOUS BUILDABLE AREA | 60% (4) | 100% | 100% | 100% | 100% | 100% | 100% | 100% | - |

FOOTNOTES:

- (1) TWO-FAMILY OR DUPLEX STRUCTURES REQUIRE A MIN. OF TWO HUNDRED (200) FEET OF FRONTAGE AND 40,000 SF AREA IN THE R-2 DISTRICT.
- (2) ON A LOT WITH LESS THAN ONE HUNDRED FIFTY (150) FEET OF FRONTAGE AND IN EXISTENCE AT THE TIME THIS BY-LAW IS PASSED, NO BUILDING SHALL BE ERRECTED WITHIN TEN (10) FEET OF A SIDE LOT LINE.
- (3) IN ANY RESIDENTIAL DISTRICT NO BUILDING OR ROADSIDE STAND SHALL BE ERRECTED OR PLACED WITHIN THIRTY (30) FEET OF A STREET LINE UNLESS IT IS DETERMINED THAT THE LINE OF HOUSES EXISTING AT THE TIME THIS BY-LAW IS ADOPTED IS LESS THAN THIRTY (30) FEET FROM THE STREET LINE, AND NO BUILDING OR ACCESSORY USE OR FARM OR POULTRY FARM BUILDING OTHER THAN A DWELLING, OR ROADSIDE STAND, OR PRIVATE GARAGE, SHALL BE BUILT WITHIN SIXTY (60) FEET OF A STREET LINE.
- (4) FIFTY (50) PERCENT IF PARCEL IS SERVICED BY TOWN WATER AND SEWER.

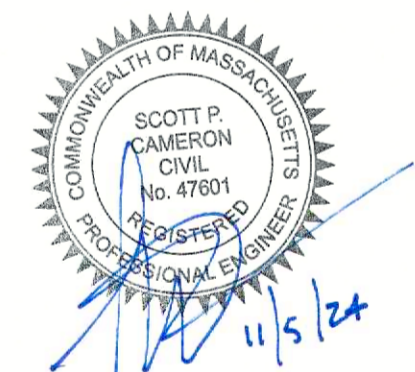


LOCUS MAP
 SCALE: 1" = 1000'

TOWN OF GROVELAND OFFICE OF THE TOWN CLERK
 THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK _____ DATE _____
 APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
 DATE: _____
 APPROVED BY: _____

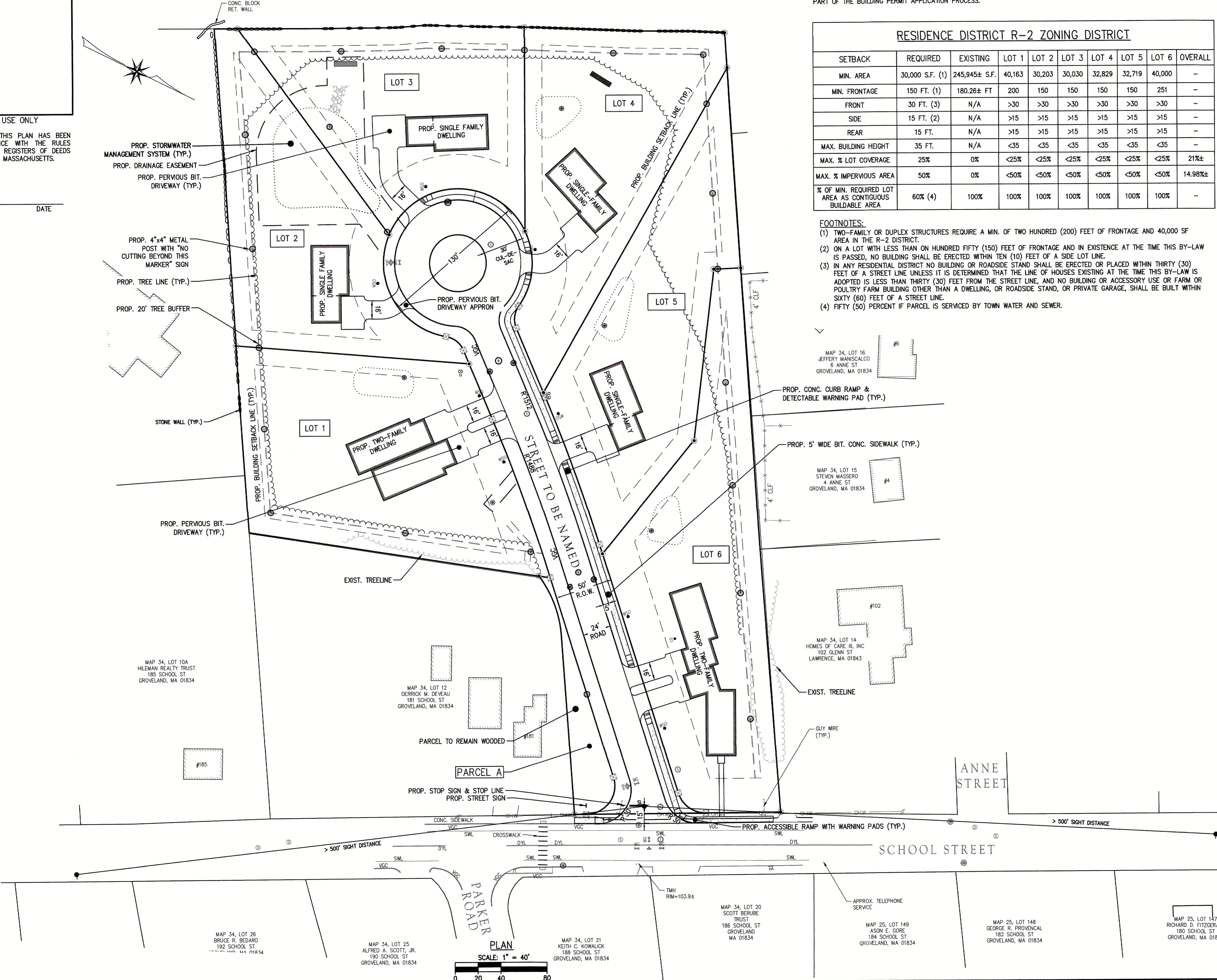
APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.



DEFINITIVE SUBDIVISION
 FOR A
STREET TO BE NAMED
 IN
 GROVELAND, MASSACHUSETTS
 AT
181R SCHOOL STREET
 (GROVELAND ASSESSOR'S MAP 34 LOT 13)
 PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
 231 SUTTON STREET, SUITE 1B
 NORTH ANDOVER, MA 01845
 OWNER:
181R SCHOOL STREET, LLC
 5 ATKINSON FARM ROAD
 ATKINSON, NH 03811
 JULY 31, 2024

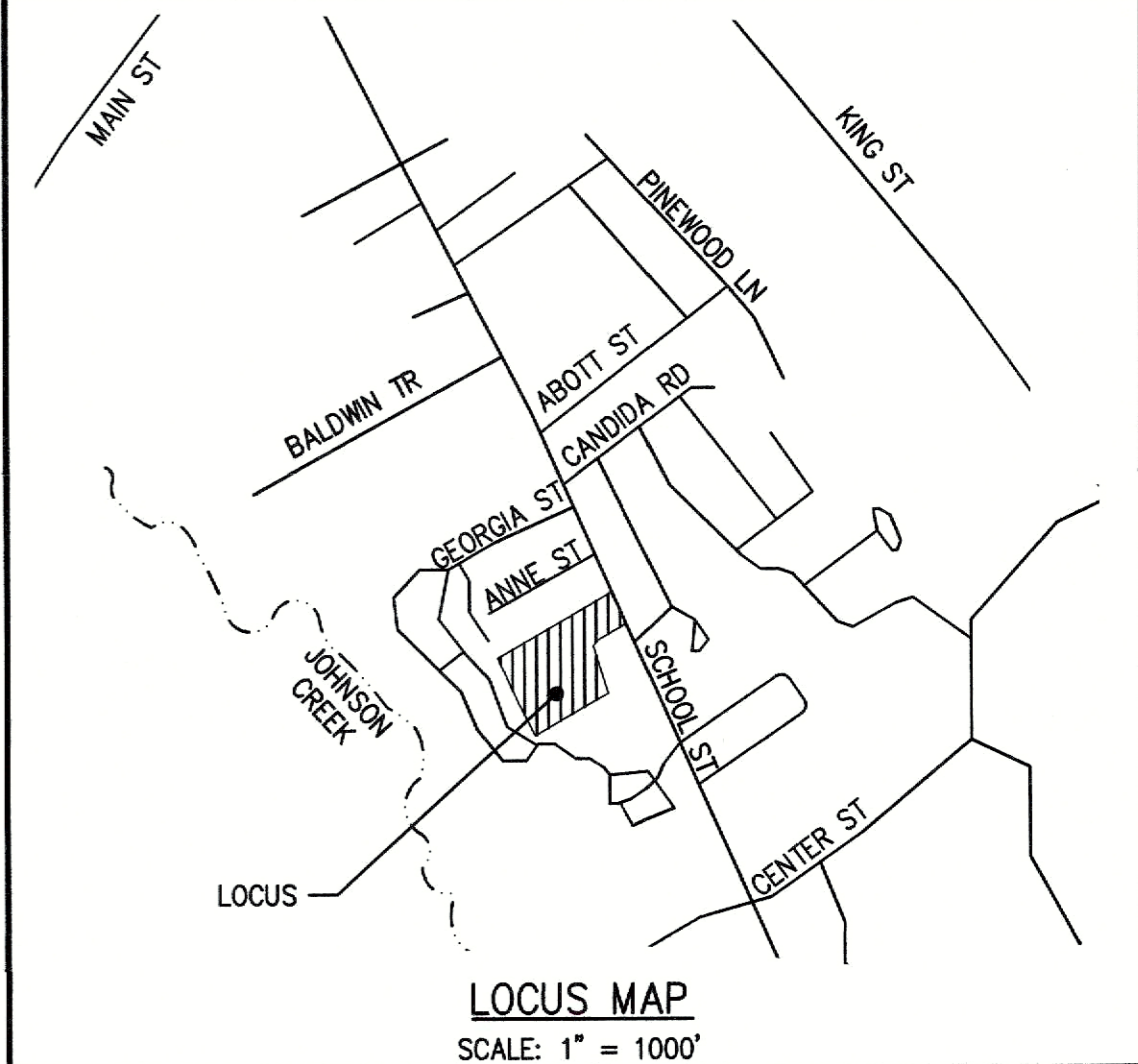
The Morin-Cameron GROUP, INC.
 CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
 LAND SURVEYORS | LAND USE PLANNERS
 25 KENOZA AVENUE, MASSACHUSETTS 01830
 P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | DATE | SITE LAYOUT | DRAWING NO. |
|-----------|-----------------|---------|-------------|-------------|
| NO. | DESCRIPTION | | | |
| 1 | PER PEER REVIEW | 11/5/24 | C-5 | |
| | | | | |



FOR REGISTRY USE ONLY
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

DATE _____



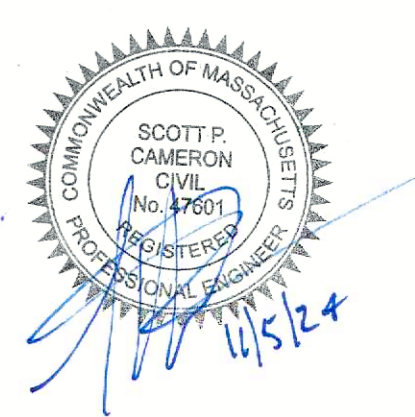
TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK _____ DATE _____

APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
 DATE: _____
 APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.



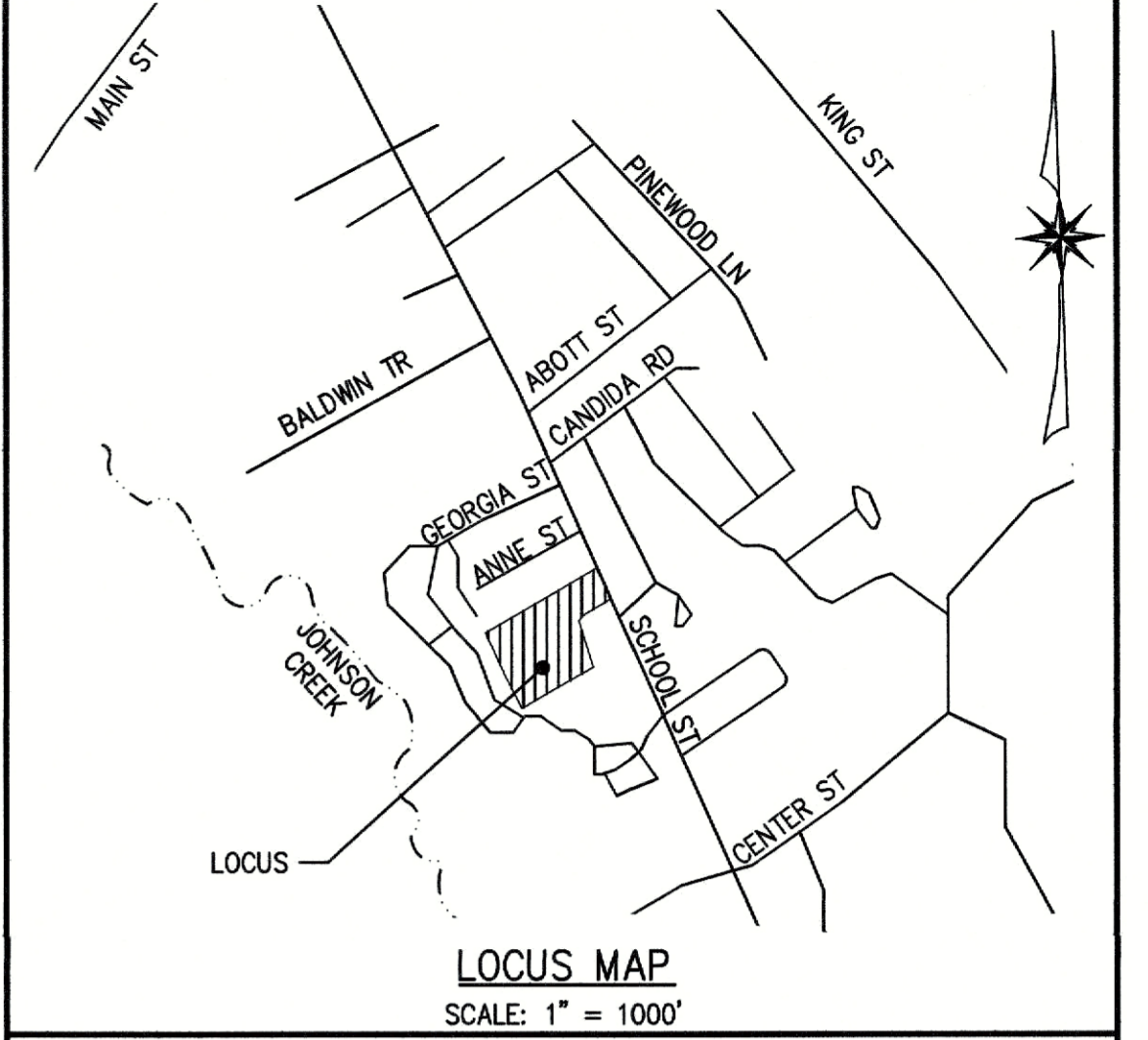
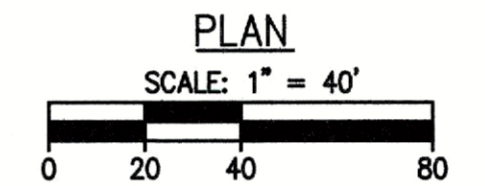
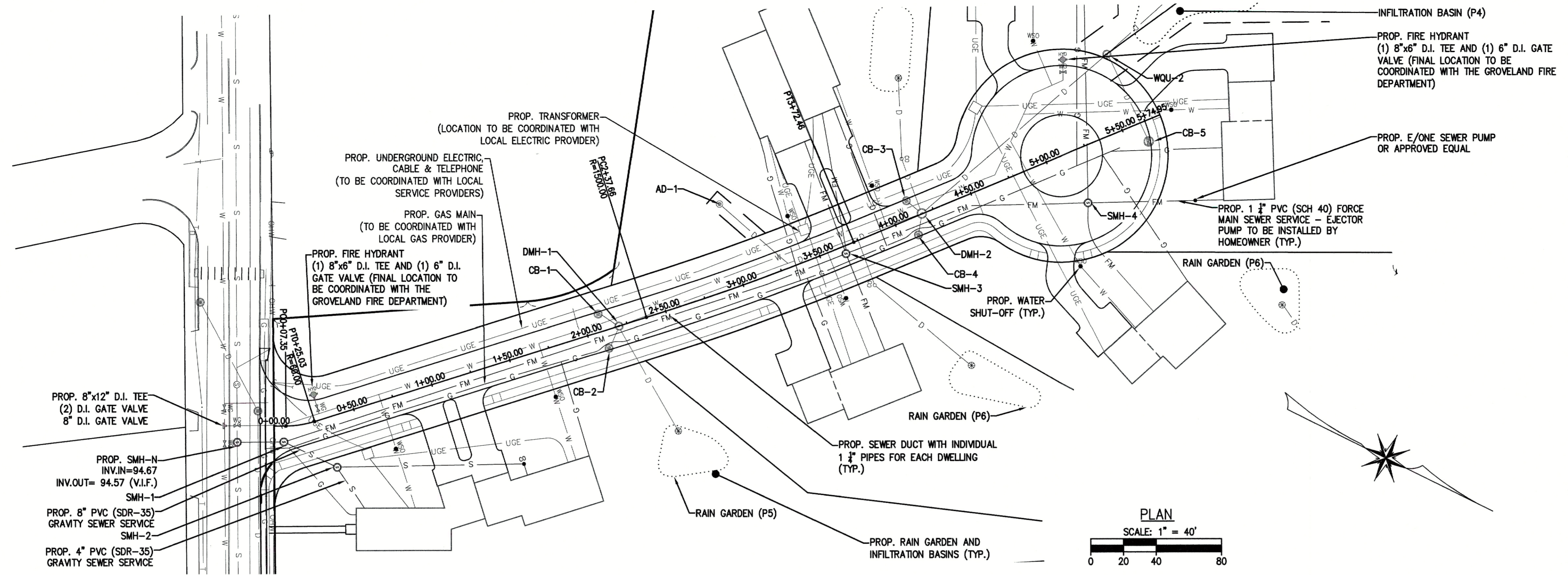
DEFINITIVE SUBDIVISION
 FOR A
STREET TO BE NAMED
 IN
GROVELAND, MASSACHUSETTS
 AT
181R SCHOOL STREET
 (GROVELAND ASSESSOR'S MAP 34 LOT 13)
 PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
 231 SUTTON STREET, SUITE 1B
 NORTH ANDOVER, MA 01845
 OWNER:
181R SCHOOL STREET, LLC
 5 ATKINSON FARM ROAD
 ATKINSON, NH 03811
 JULY 31, 2024

The Morin-Cameron GROUP, INC.
 CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
 LAND SURVEYORS | LAND USE PLANNERS
 25 KENZO AVENUE, MASSACHUSETTS 01830
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| REVISIONS | | | DRAWING NO. |
|-----------|-----------------|---------|-------------|
| NO. | DESCRIPTION | DATE | |
| 1 | PER PEER REVIEW | 11/5/24 | C-6 |
| | | | |

FOR REGISTRY USE ONLY
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

DATE _____



TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

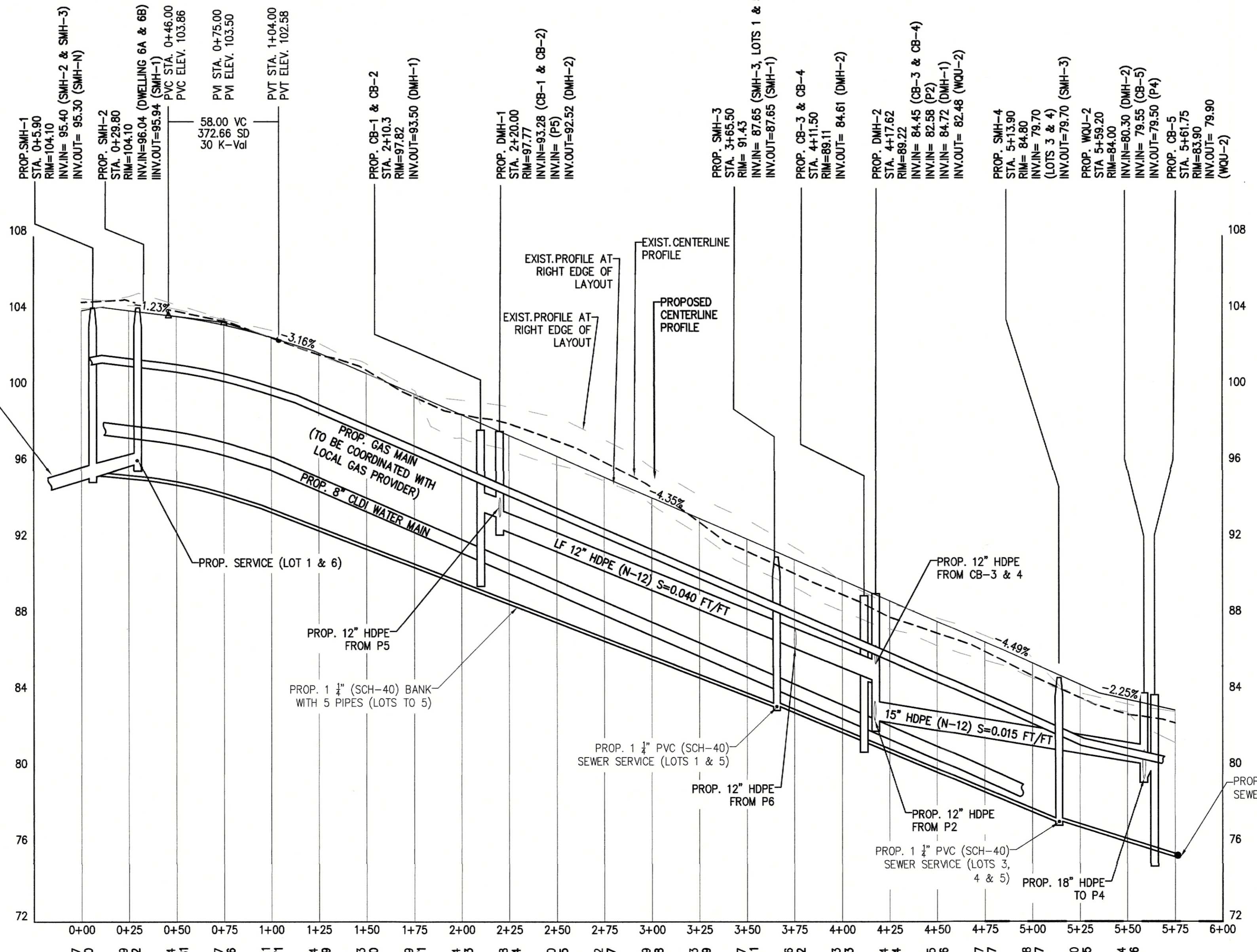
THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF THIS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK _____ DATE _____

APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
 DATE: _____
 APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.

- ABBREVIATIONS:**
- CB CATCH BASIN
 - DMH DRAIN MANHOLE
 - ELEV ELEVATION
 - EX EXISTING
 - K RATE OF VERTICAL CURVATURE
 - PR/PROP. PROPOSED
 - PVC POINT OF VERTICAL CURVATURE
 - PVI POINT OF VERTICAL INTERSECTION
 - PVT POINT OF VERTICAL TANGENCY
 - SD SIGHT DISTANCE
 - STA STATION
 - VC VERTICAL CURVE LENGTH



SCALE:
 VERTICAL: 1" = 4'
 HORIZONTAL: 1" = 40'



DEFINITIVE SUBDIVISION
 FOR A
STREET TO BE NAMED
 IN
 GROVELAND, MASSACHUSETTS
 AT
181R SCHOOL STREET
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| REVISIONS | | | UTILITIES & ROAD PROFILE | DRAWING NO. C-7 |
|-----------|-----------------|---------|--------------------------|--------------------|
| NO. | DESCRIPTION | DATE | | |
| 1 | PER PEER REVIEW | 11/5/24 | | |

PUMP CALCULATIONS:

- DWELLING 2:
STATIC HEAD(HS):
SMH-1 - PUMP ON = 95.40 - 77.48 = 17.93
SMH-1 - PUMP OFF = 95.40 - 77.15 = 18.26

DYNAMIC HEAD (HD):
FORCE MAIN: 1 1/4" DIAMETER

EQUIVALENT LENGTH METHOD:
1-90° ELBOW + 1-BALL VALVE + 1-180° BEND +
1-CHECK VALVE + 6-GATE VALVE
6.7' + 0.8' + 8.3' + 9.0' + (6x0.8) = 29.6'

TOTAL LENGTH = 619' + 29.6' = 648.6'

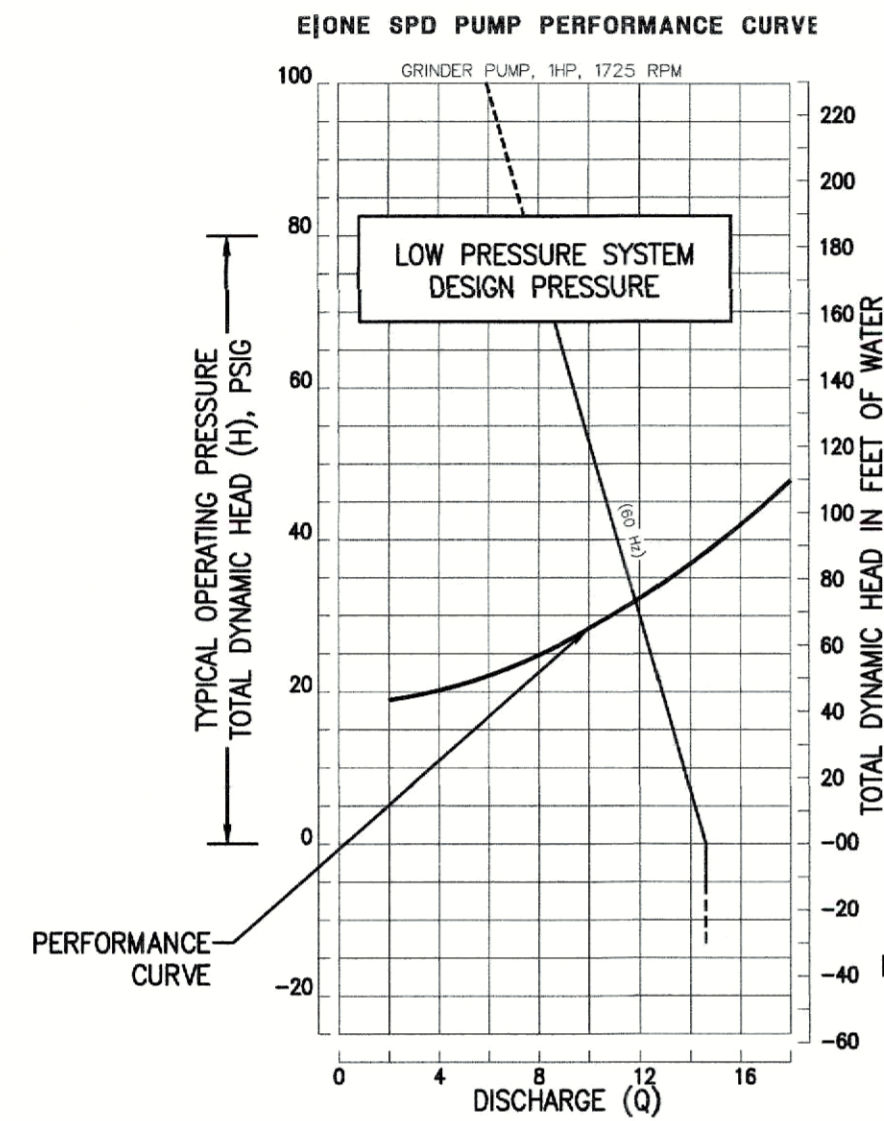
HEAD LOSS IN PIPE @ 12 GPM = 2.24 FT/100 FT

HD = 648.6' X (2.24 FT / 100 FT) = 14.53'

PUMP PARAMETERS:

T.D.H. = 32.45' - 32.78' @ 12 GPM

USE E/ONE_DHO71 OR APPROVED EQUAL.



- DWELLING 4:
STATIC HEAD(HS):
SMH-1 - PUMP ON = 95.40 - 79.88 = 15.53
SMH-1 - PUMP OFF = 95.40 - 79.55 = 15.86

DYNAMIC HEAD (HD):
FORCE MAIN: 1 1/4" DIAMETER

EQUIVALENT LENGTH METHOD:
1-90° ELBOW + 1-BALL VALVE + 1-180° BEND +
1-CHECK VALVE + 6-GATE VALVE
6.7' + 0.8' + 8.3' + 9.0' + (6x0.8) = 29.6'

TOTAL LENGTH = 589' + 29.6' = 618.6'

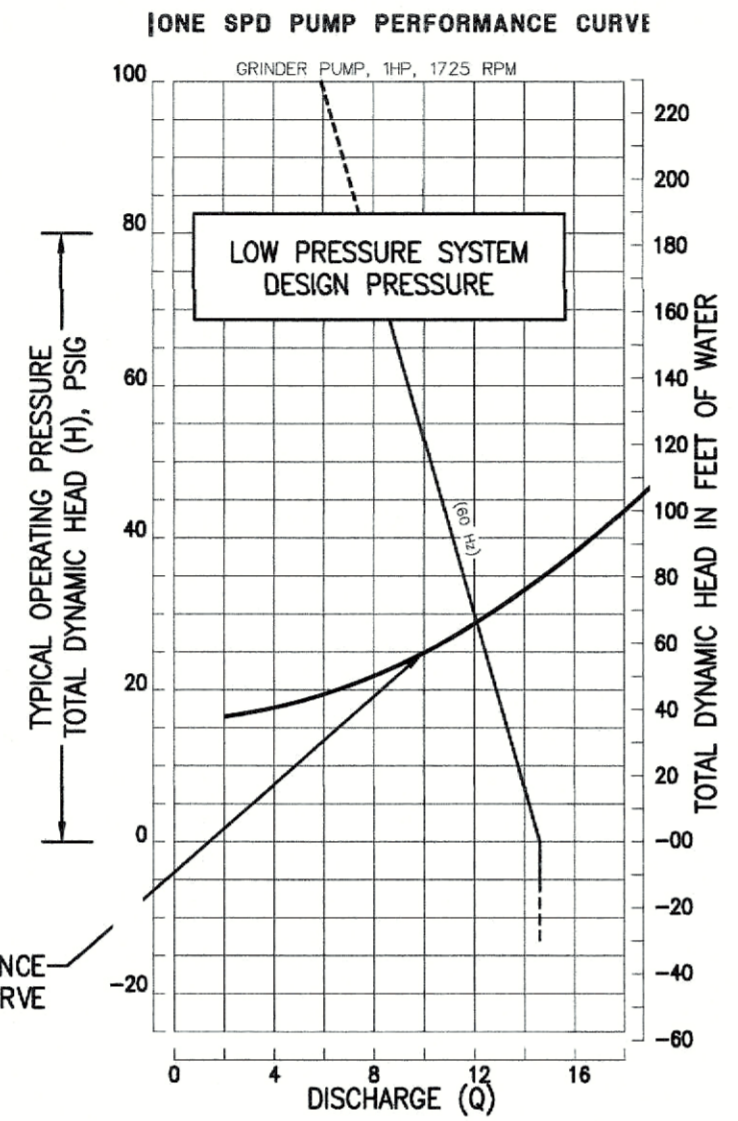
HEAD LOSS IN PIPE @ 12 GPM = 2.24 FT/100 FT

HD = 618.6' X (2.24 FT / 100 FT) = 13.86'

PUMP PARAMETERS:

T.D.H. = 29.38' - 29.71' @ 12 GPM

USE E/ONE_DHO71 OR APPROVED EQUAL.



- DWELLING 5:
STATIC HEAD(HS):
SMH-1 - PUMP ON = 95.40 - 87.38 = 8.03
SMH-1 - PUMP OFF = 95.40 - 87.05 = 8.36

DYNAMIC HEAD (HD):
FORCE MAIN: 1 1/4" DIAMETER

EQUIVALENT LENGTH METHOD:
1-90° ELBOW + 1-BALL VALVE + 1-180° BEND +
1-CHECK VALVE + 6-GATE VALVE
6.7' + 0.8' + 8.3' + 9.0' + (3x0.8) = 27.20'

TOTAL LENGTH = 411' + 27.2' = 438.2'

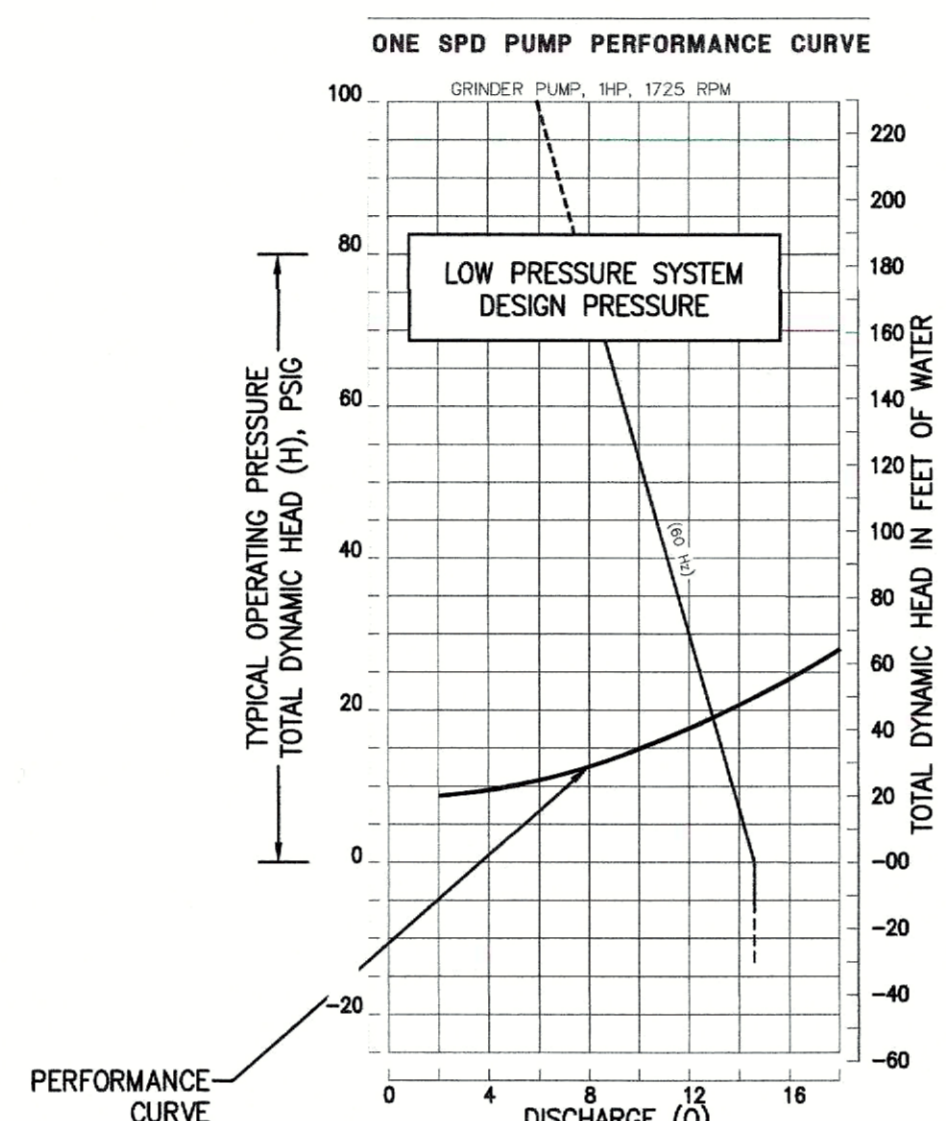
HEAD LOSS IN PIPE @ 13 GPM = 2.59 FT/100 FT

HD = 438.2' X (2.59 FT / 100 FT) = 11.35'

PUMP PARAMETERS:

T.D.H. = 19.37' - 19.70' @ 13 GPM

USE E/ONE_DHO71 OR APPROVED EQUAL.



- DWELLING 1A:
STATIC HEAD(HS):
SMH-1 - PUMP ON = 95.40 - 81.14 = 13.26
SMH-1 - PUMP OFF = 95.40 - 81.81 = 13.59

DYNAMIC HEAD (HD):
FORCE MAIN: 1 1/4" DIAMETER

EQUIVALENT LENGTH METHOD:
1-90° ELBOW + 1-BALL VALVE + 1-180° BEND +
1-CHECK VALVE + 6-GATE VALVE
6.7' + 0.8' + 8.3' + 9.0' + (3x0.8) = 27.20'

TOTAL LENGTH = 419' + 27.20' = 446.2'

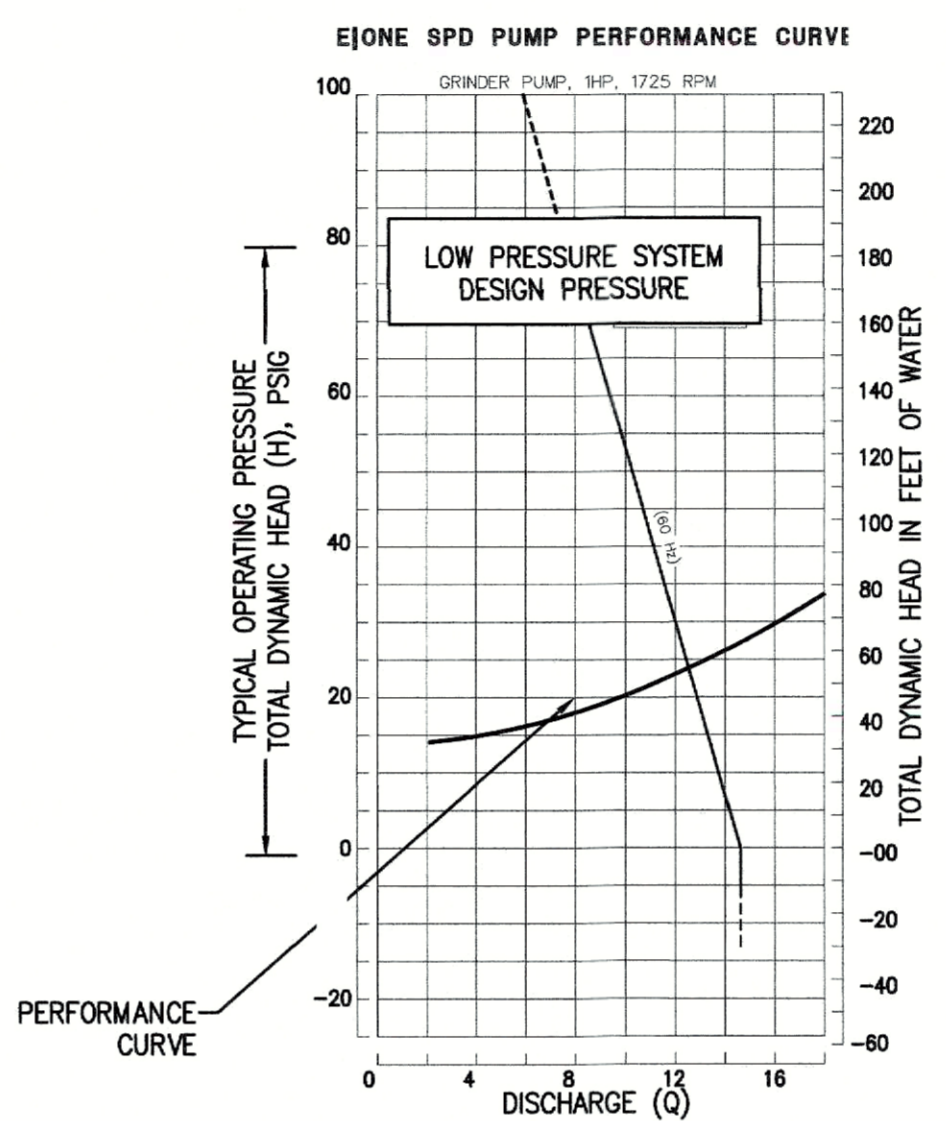
HEAD LOSS IN PIPE @ 12 GPM = 2.24 FT/100 FT

HD = 443.8' X (2.24 FT / 100 FT) = 9.99'

PUMP PARAMETERS:

T.D.H. = 23.25' - 23.58' @ 12 GPM

USE E/ONE_DHO71 OR APPROVED EQUAL.



- DWELLING 1B:
STATIC HEAD(HS):
SMH-1 - PUMP ON = 95.40 - 82.14 = 13.26
SMH-1 - PUMP OFF = 95.40 - 81.81 = 13.59

DYNAMIC HEAD (HD):
FORCE MAIN: 1 1/4" DIAMETER

EQUIVALENT LENGTH METHOD:
1-90° ELBOW + 1-BALL VALVE + 1-180° BEND +
1-CHECK VALVE + 6-GATE VALVE
6.7' + 0.8' + 8.3' + 9.0' + (3x0.8) = 27.20'

TOTAL LENGTH = 434' + 27.2' = 461.2'

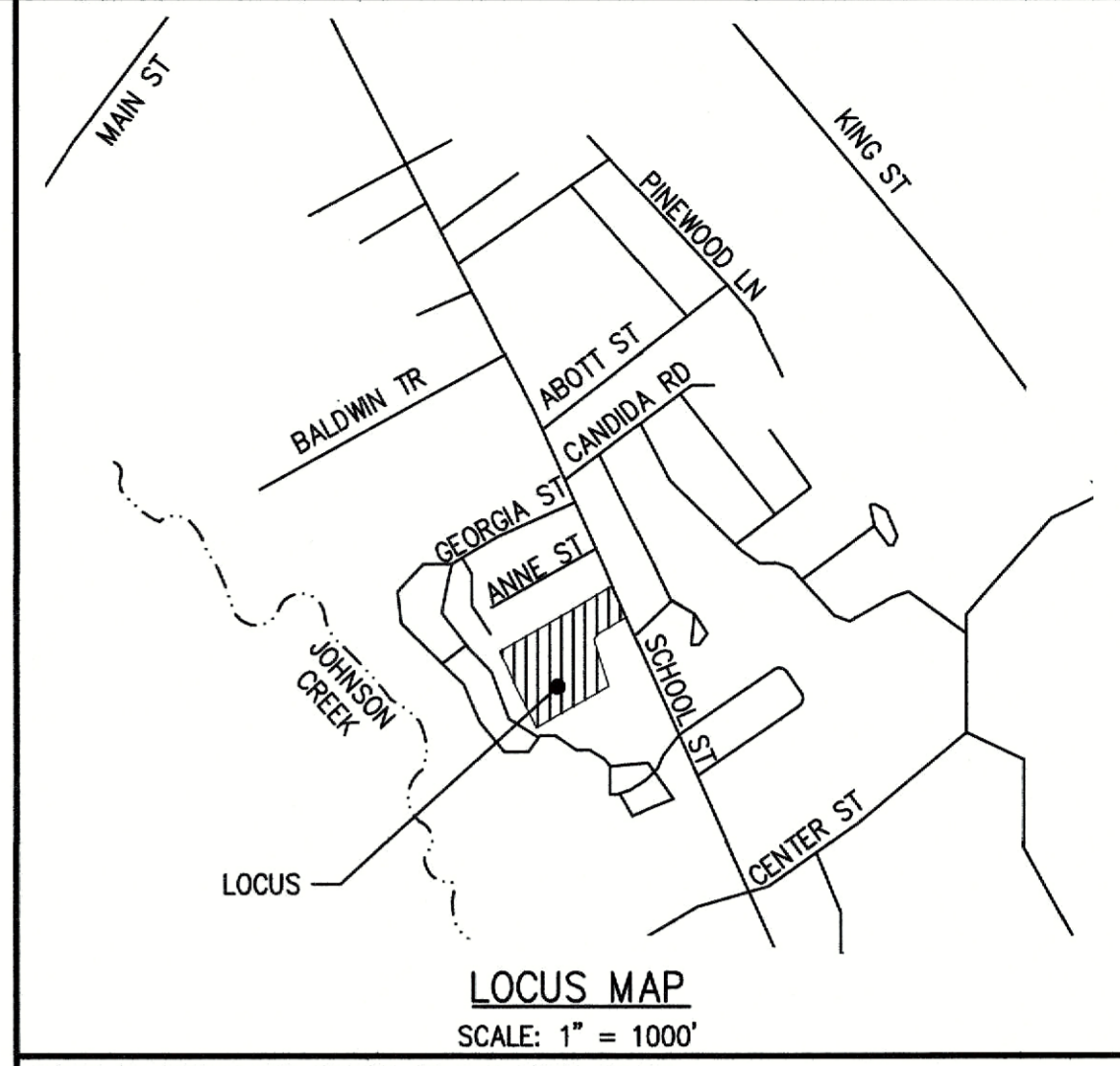
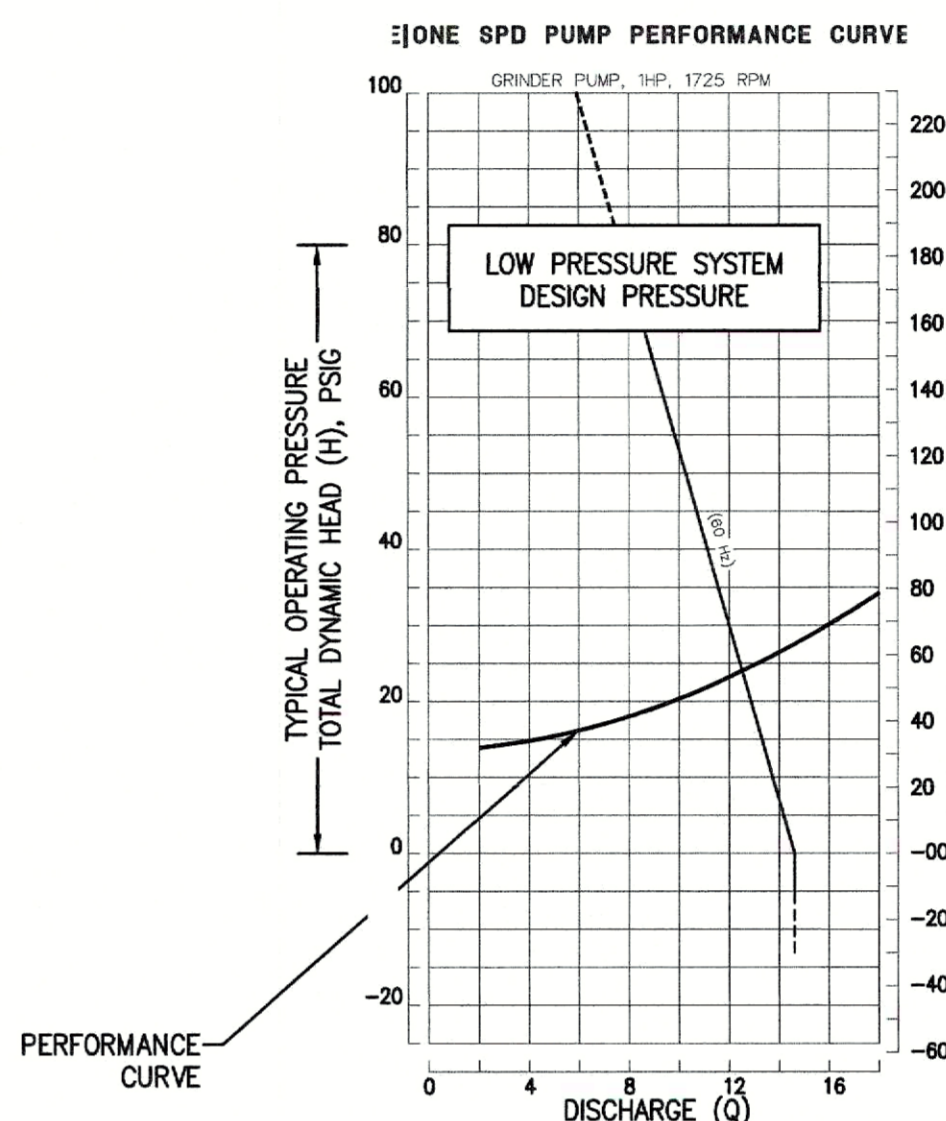
HEAD LOSS IN PIPE @ 12 GPM = 2.24 FT/100 FT

HD = 461.2' X (2.24 FT / 100 FT) = 11.95'

PUMP PARAMETERS:

T.D.H. = 25.20' - 25.53' @ 12 GPM

USE E/ONE_DHO71 OR APPROVED EQUAL.



LOCUS MAP SCALE: 1" = 100'

TOWN OF GROVELAND OFFICE OF THE TOWN CLERK
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CLERK DATE
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- DWELLING 3:
STATIC HEAD(HS):
SMH-1 - PUMP ON = 95.40 - 74.66 = 20.75
SMH-1 - PUMP OFF = 95.40 - 74.33 = 21.08

DYNAMIC HEAD (HD):
FORCE MAIN: 1 1/4" DIAMETER

EQUIVALENT LENGTH METHOD:
1-90° ELBOW + 1-BALL VALVE + 1-180° BEND +
1-CHECK VALVE + 6-GATE VALVE
6.7' + 0.8' + 8.3' + 9.0' + (6x0.8) = 29.6'

TOTAL LENGTH = 577' + 29.6' = 606.6'

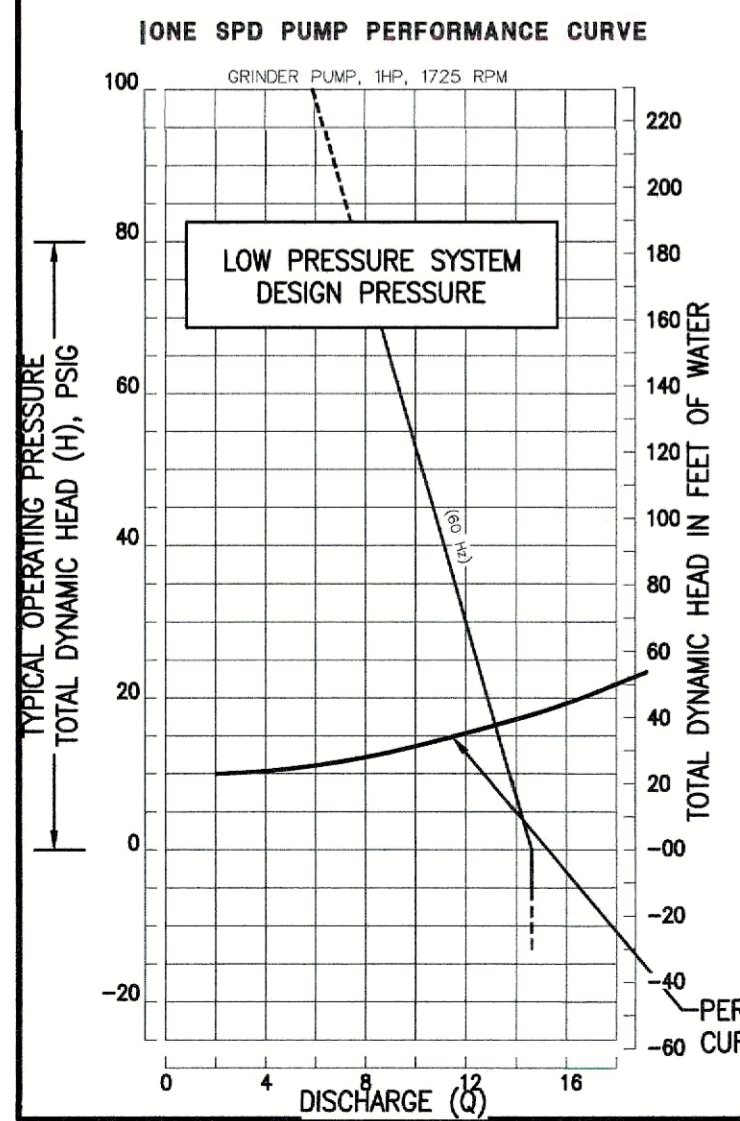
HEAD LOSS IN PIPE @ 13 GPM = 2.59 FT/100 FT

HD = 606.6' X (2.59 FT / 100 FT) = 15.71'

PUMP PARAMETERS:

T.D.H. = 36.46' - 36.79' @ 13 GPM

USE E/ONE_DHO71 OR APPROVED EQUAL.



HYDRAULIC GRADIENT LINE (HGL):

CALCULATED FOR DWELLING 3 (LOWEST ELEVATION)

HGL = ENERGY ADDED BY THE PUMP (EP) + HEADLOSS IN PIPELINE + ELEVATION (PUMP-OFF)

AT PUMP [CALCULATED FOR DWELLING 3 (LOWEST ELEVATION) CONSIDERING THE PIPE RUNNING FULL ON SMH-1]:

HGL = (95.40' + 0.67') - 74.66' + 15.71' + 74.66'

HGL = 111.78'

AT SEWER MANHOLE 1:

HGL = TOP OF PIPE = 95.40 + 0.67 = 96.07

AT SEWER MANHOLE N:

HGL = TOP OF PIPE = 94.67 + 0.67 = 95.34

ENERGY GRADIENT LINE (EGL):

EGL = VELOCITY HEAD + HGL

V = Q/A

Q = 13 GPM = 13 GPM X (1 CF/7.48 GALLONS) X (1 MIN/ 60 SEC) = 0.029 CFS

A = piR^2 = pi x (0.625")^2 = 1.227 SI x (1 SF/ 144 SI) = 0.0085 SF

V = 0.029 CFS / 0.0085 SF = 3.42 FT/S

VELOCITY HEAD:

V HEAD = V^2/2g

V HEAD = (3.42 FT/SEC)^2 / 2x(32.1740 FT/SEC^2)

V HEAD = 0.18 FT

EGL AT PUMP = 0.18' + 111.78'

EGL AT SMH-1 = 0.18' + 96.07'

EGL AT SMH-N = 111.96'

EGL AT SMH N:

Q = SUM OF ALL SERVICES = 0.552 CFS

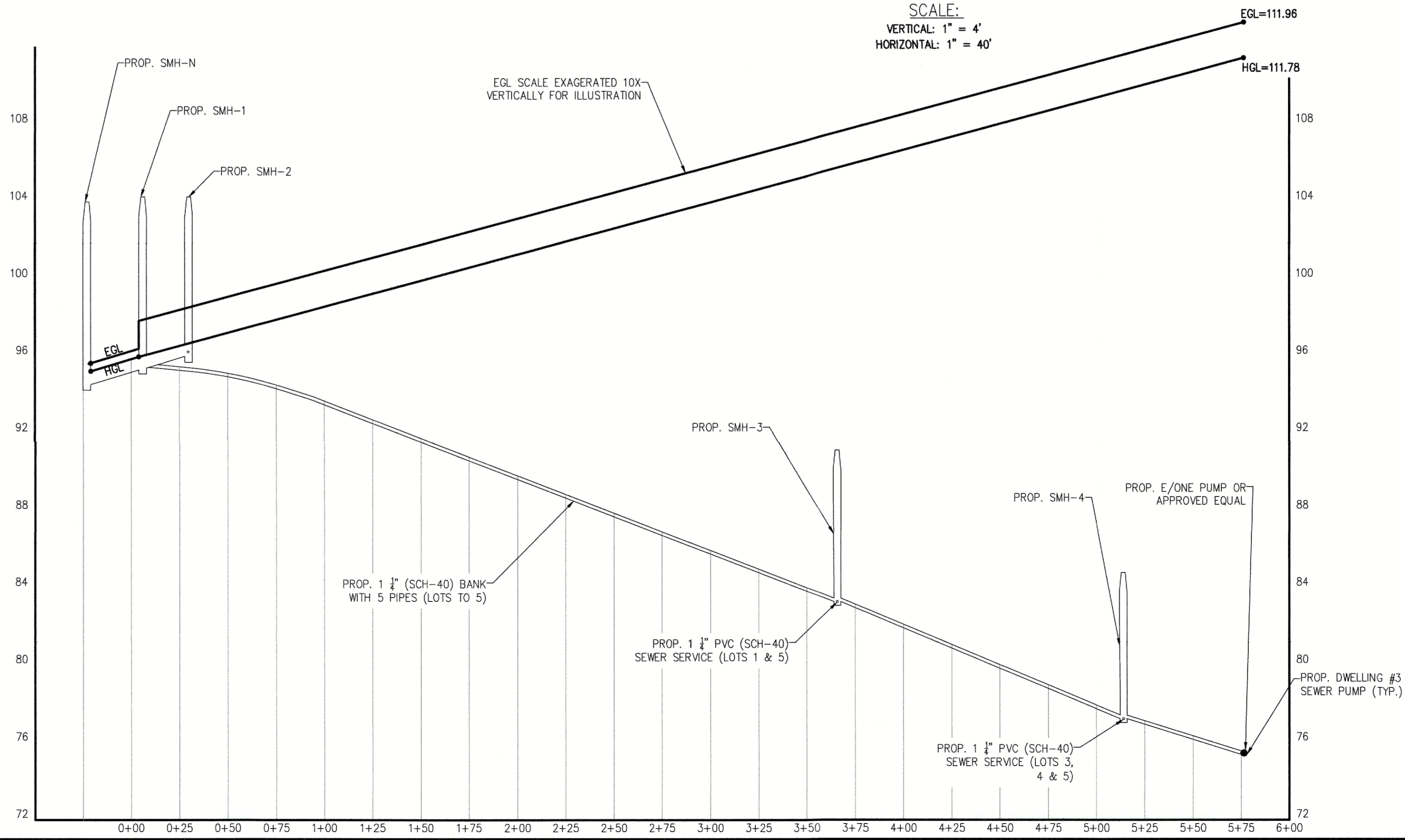
A = piR^2 = pi x (4")^2 = 50.26 SI x (1 SF/ 144 SI) = 0.35 SF

V = Q/A = 0.552 CFS / 0.352 SF = 1.58 FT/SEC

V HEAD = V^2/2g = (1.58 FT/SEC)^2 / 2x(32.1740 FT/SEC^2)

V HEAD = 0.039 FT

EGL AT SMH-N = 95.34 + 0.039 = 95.38



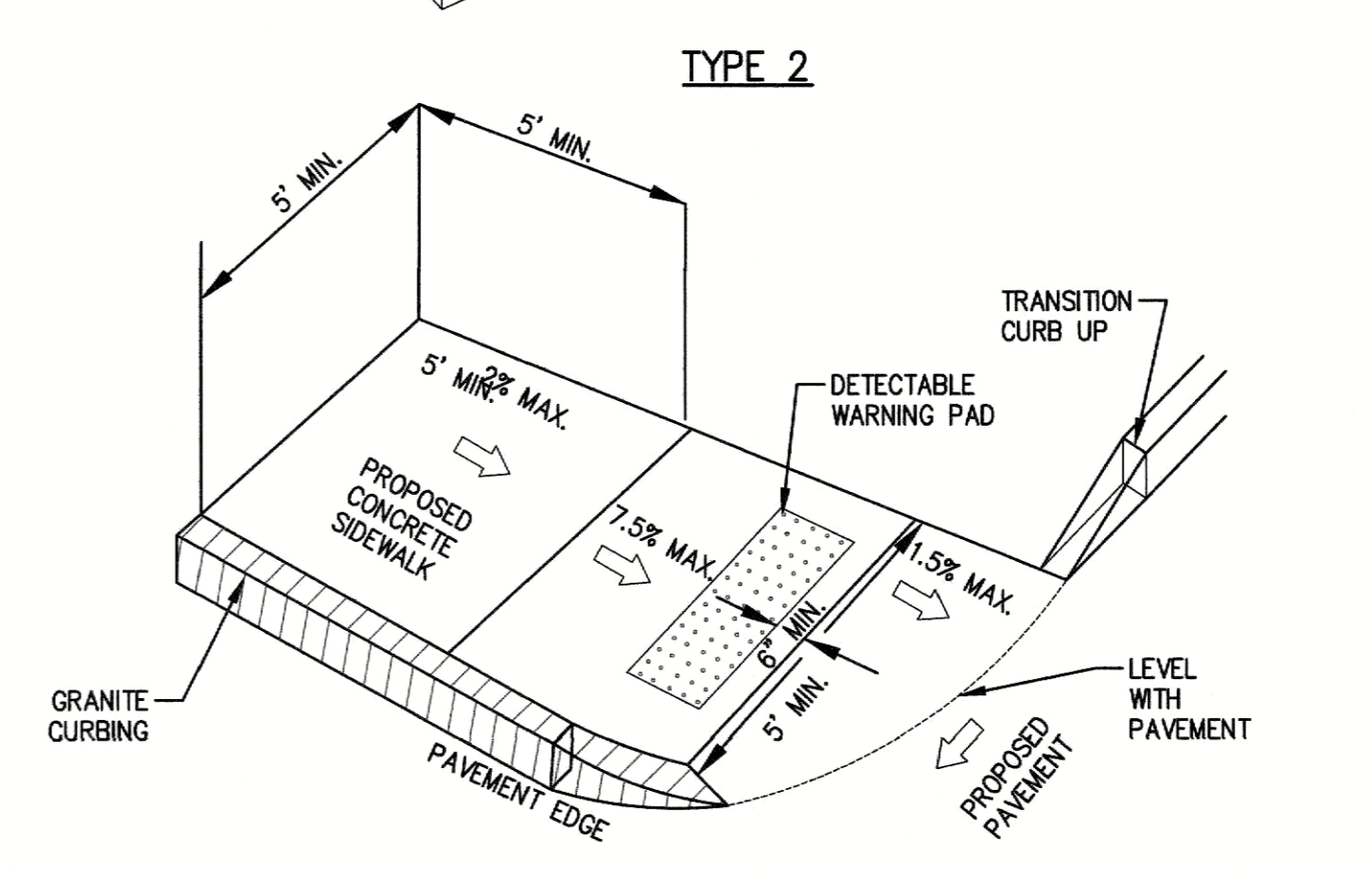
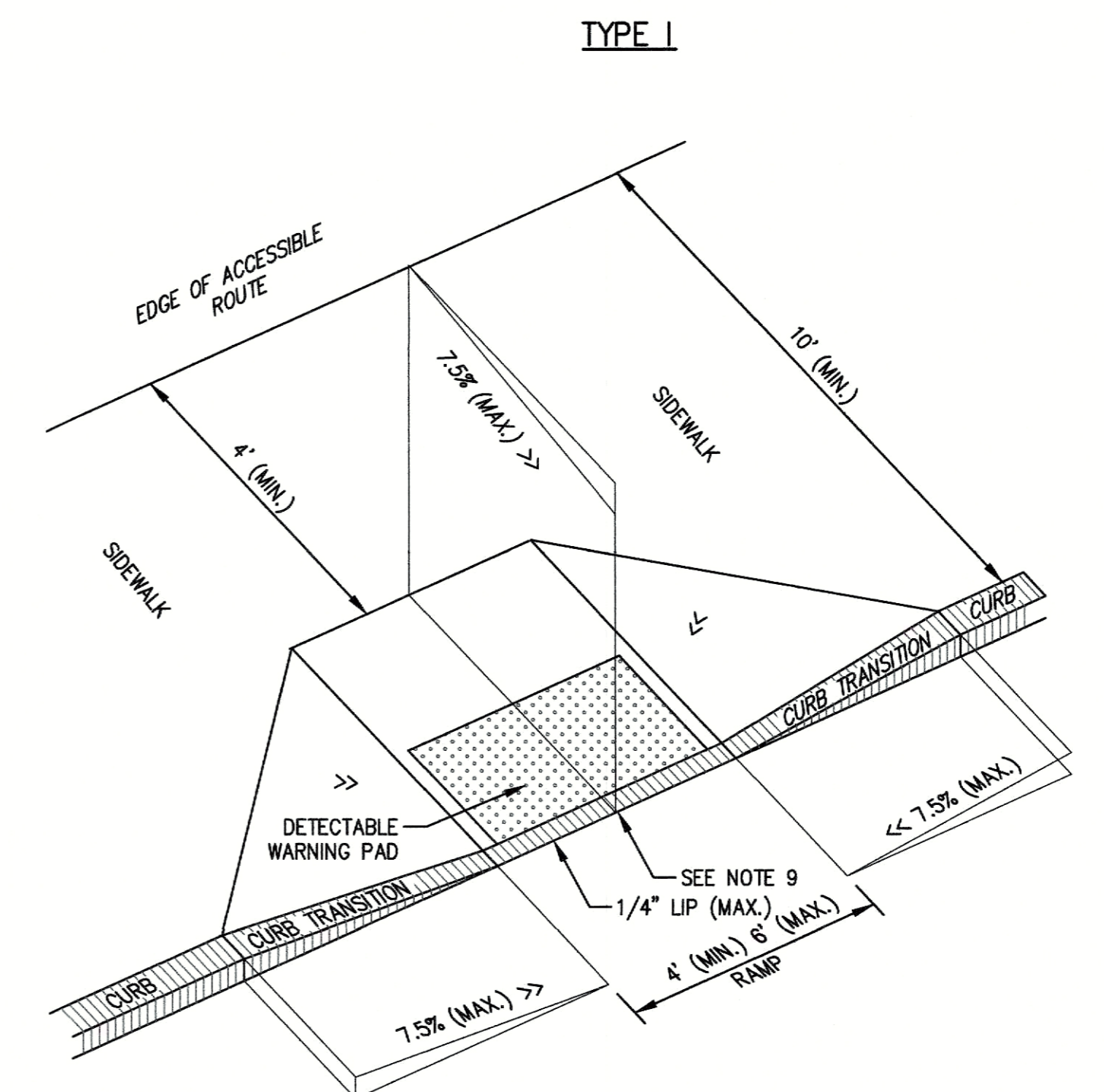
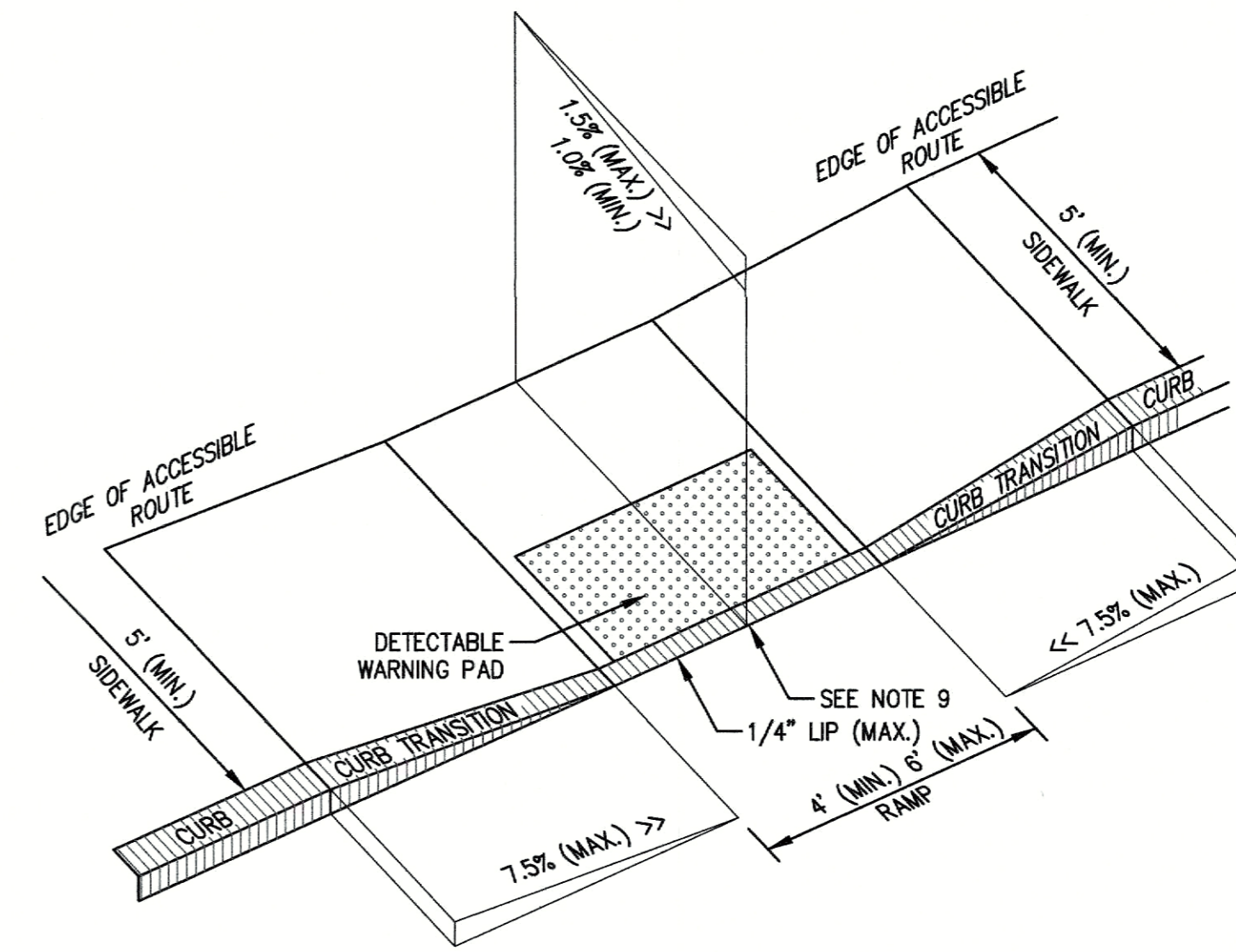
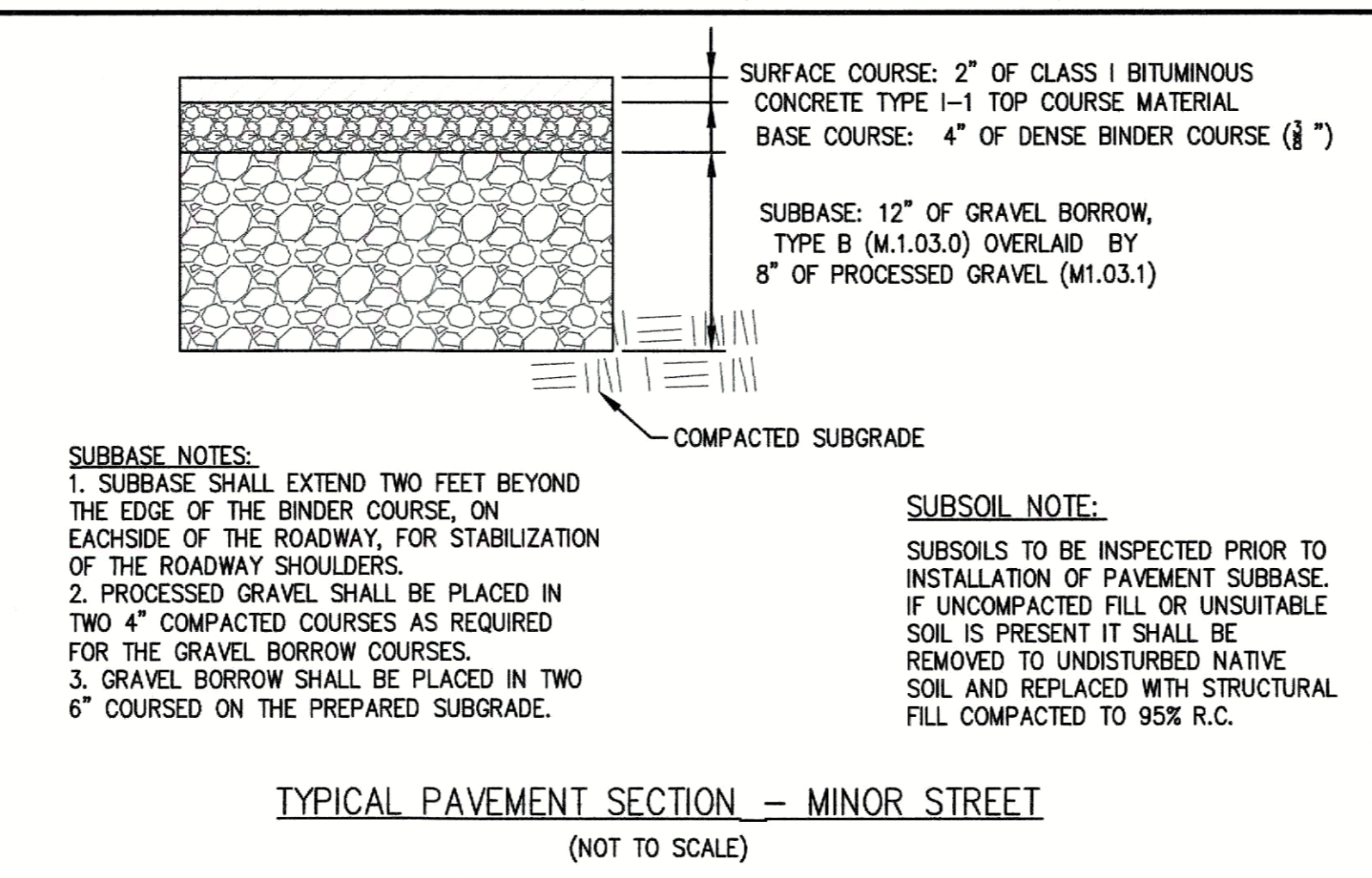
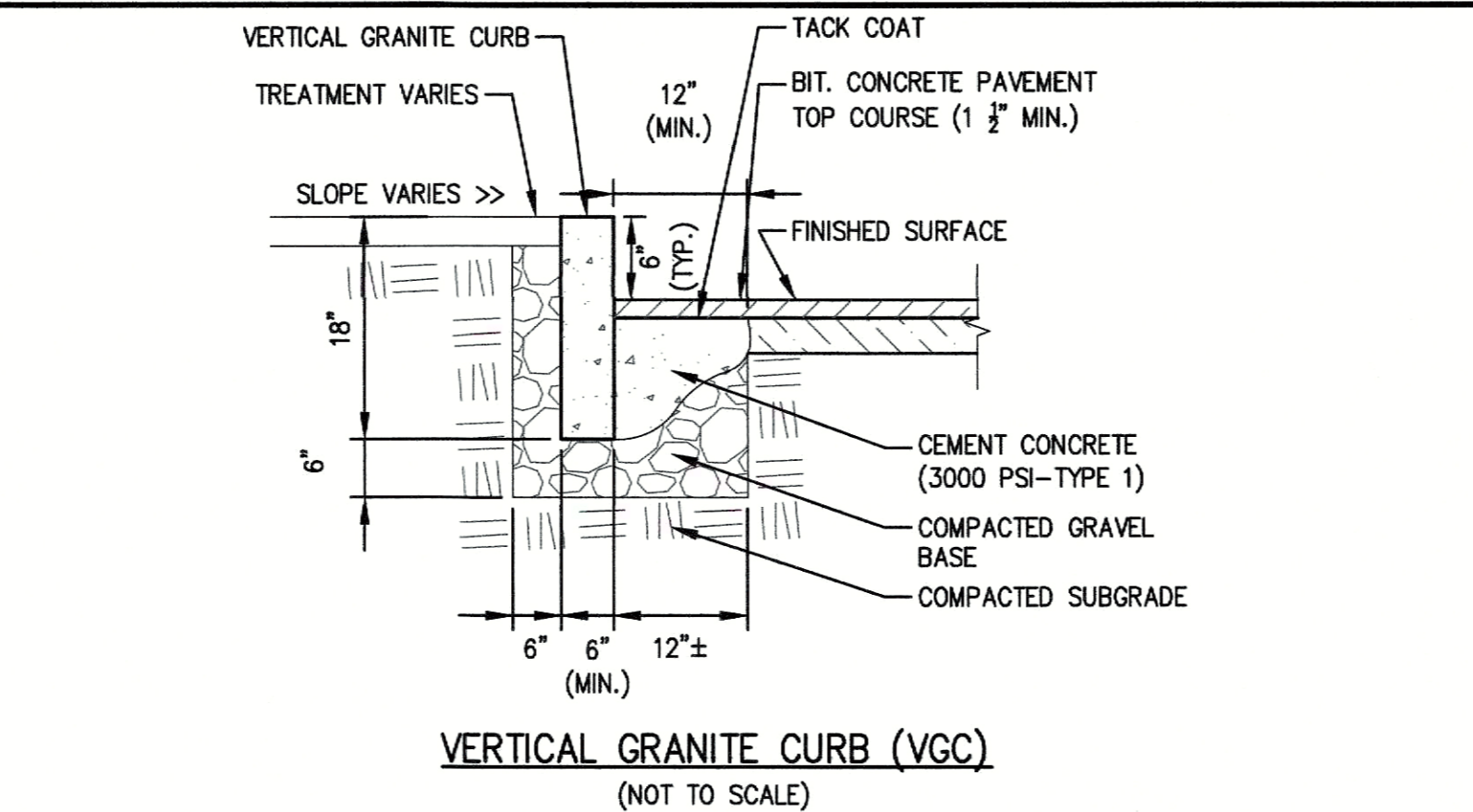
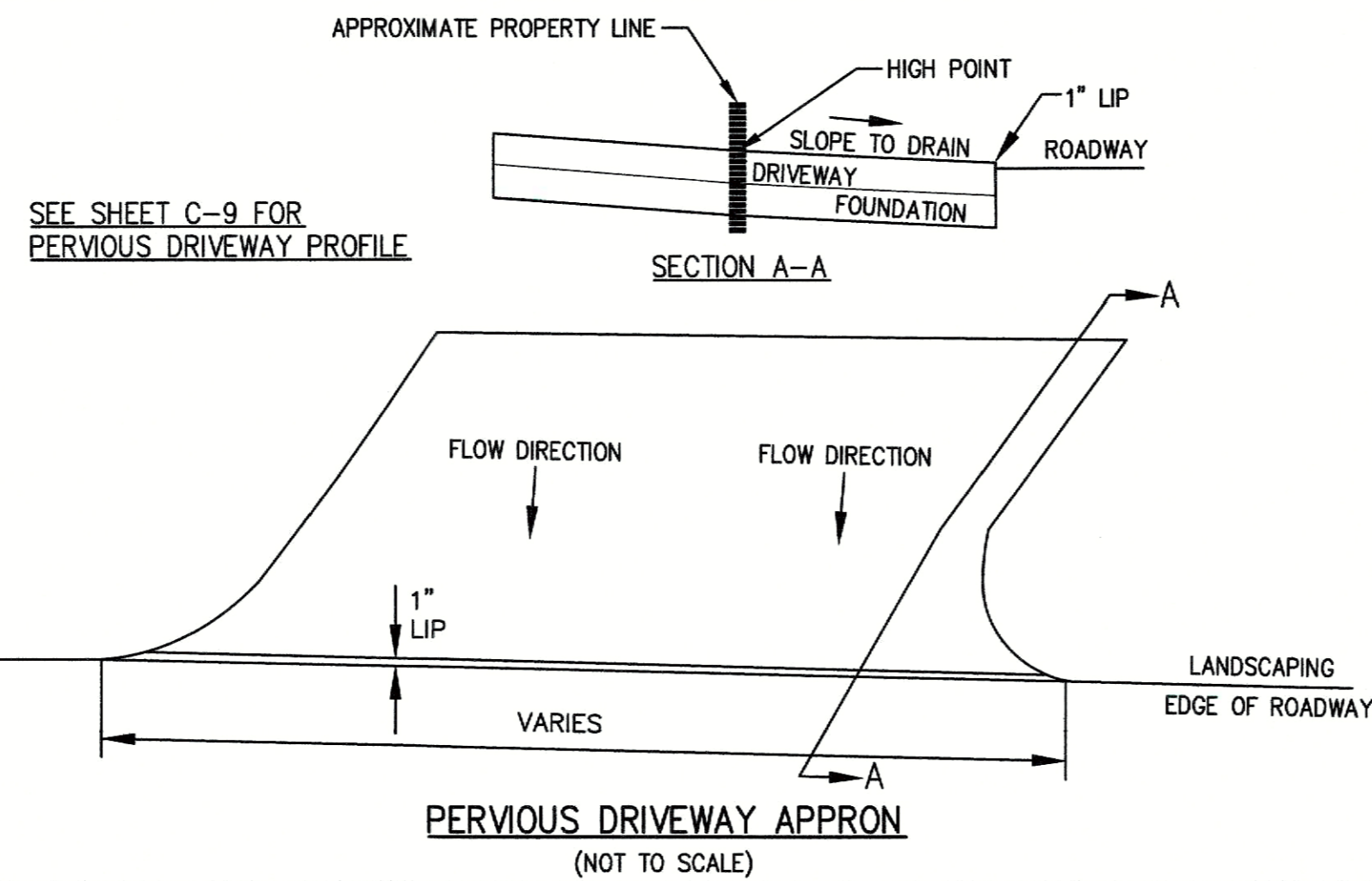
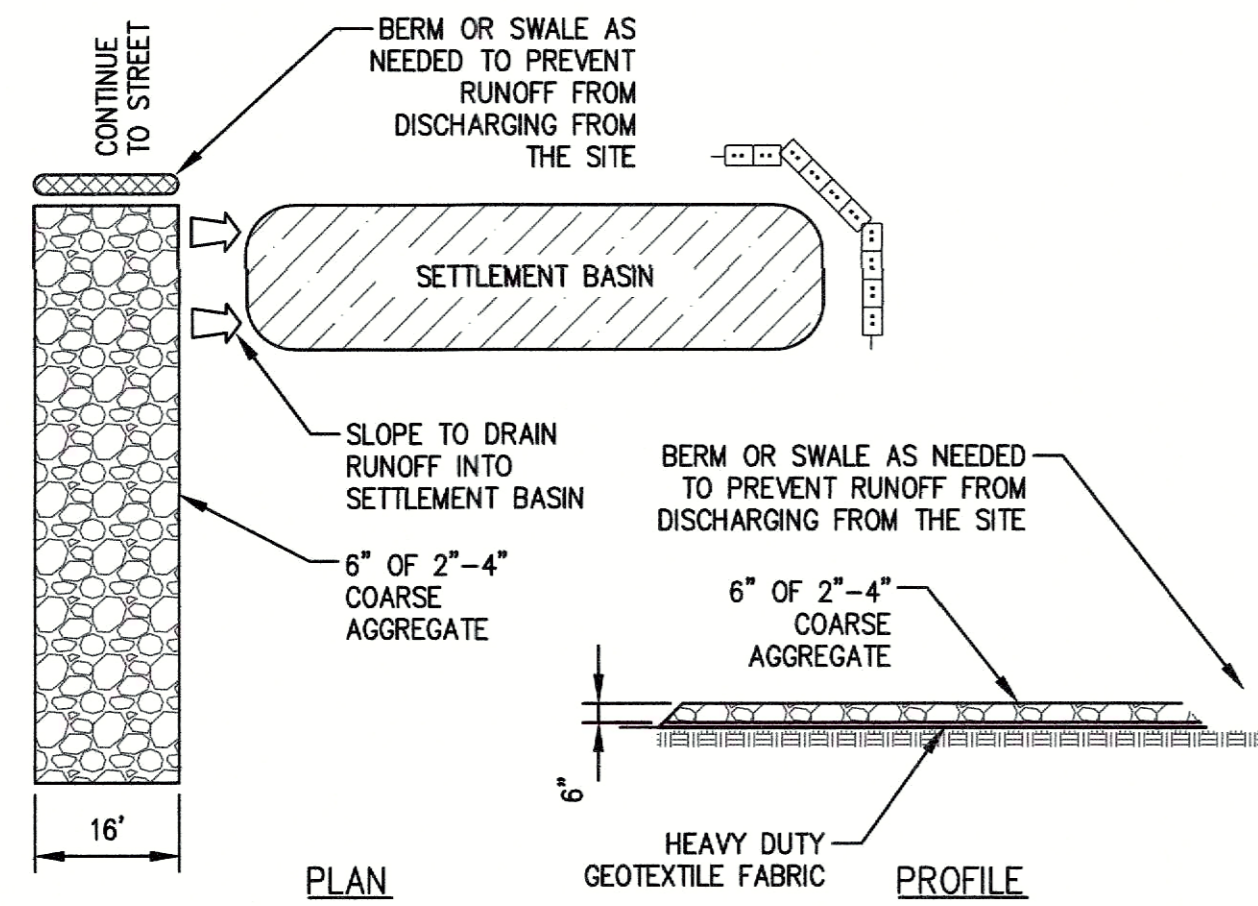
SCALE:
VERTICAL: 1" = 4'
HORIZONTAL: 1" = 40'



DEFINITIVE SUBDIVISION FOR A STREET TO BE NAMED IN GROVELAND, MASSACHUSETTS AT 181R SCHOOL STREET (GROVELAND ASSESSOR'S MAP 34 LOT 13) PREPARED FOR/APPLICANT: GROVELAND REDEVELOPMENT, LLC 231 SUTTON STREET, SUITE 1B NORTH ANDOVER, MA 01845 OWNER: 181R SCHOOL STREET, LLC 5 ATKINSON FARM ROAD ATKINSON, NH 03811 JULY 31, 2024

The Morin-Cameron GROUP, INC. CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS LAND SURVEYORS | LAND USE PLANNERS 25 KENOZA AVENUE, MASSACHUSETTS 01830 P: 978-373-0310, W: WWW.MORINCAMERON.COM

Table with 3 columns: NO., DESCRIPTION, DATE. Row 1: 1, PER PEER REVIEW, 11/5/24. Includes 'SEWER DETAILS' and 'DRAWING NO. C-8'.

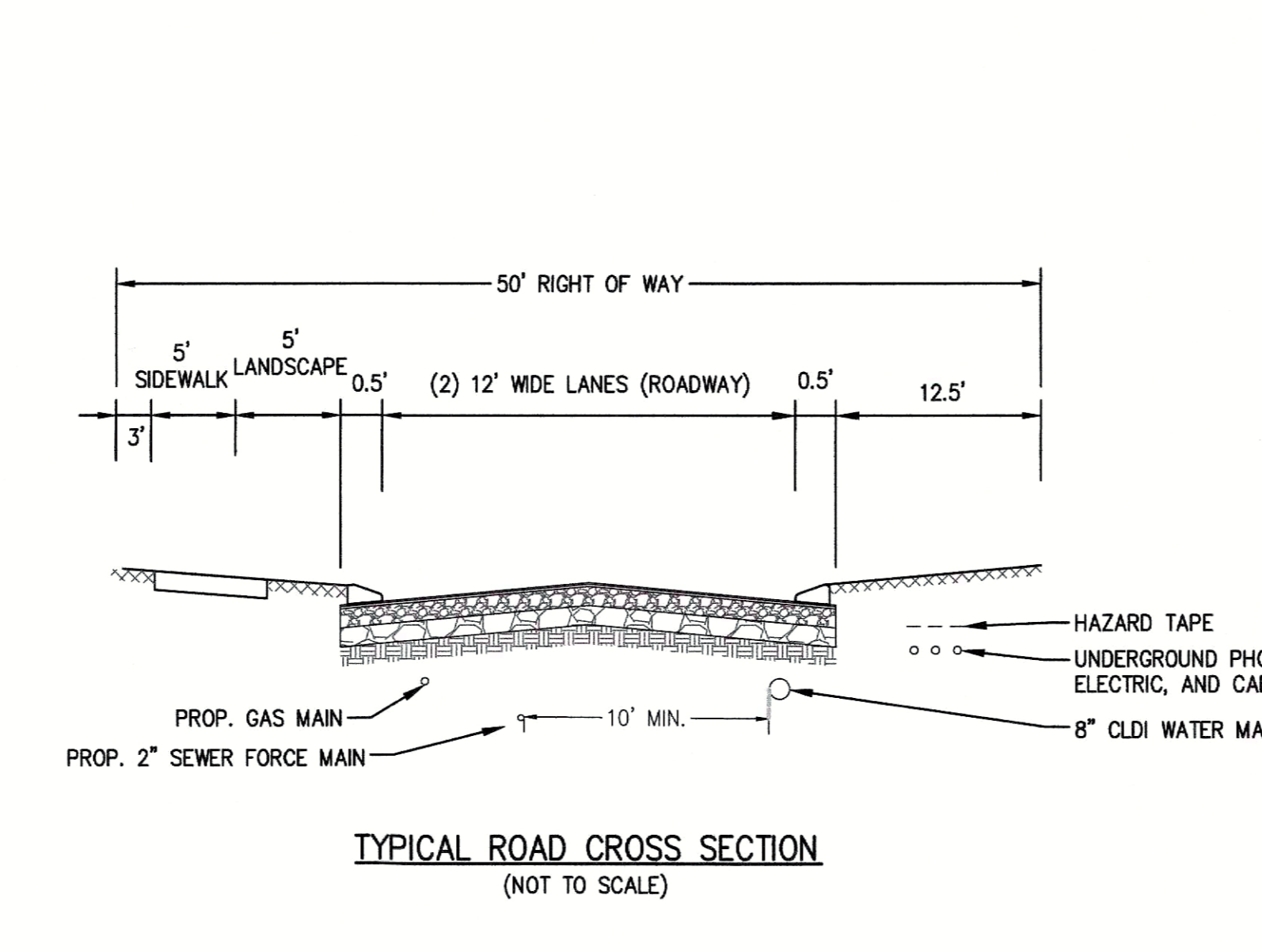
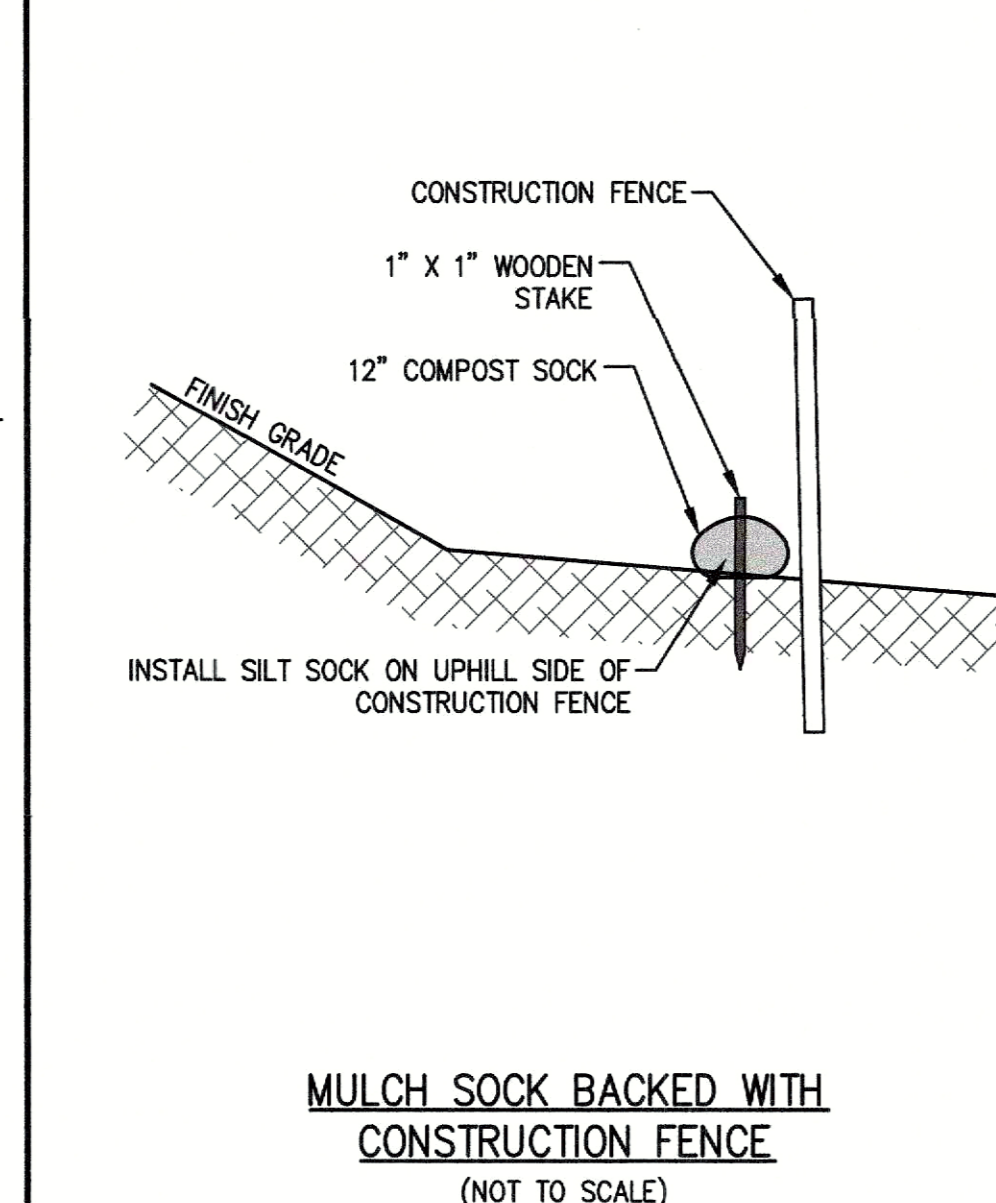
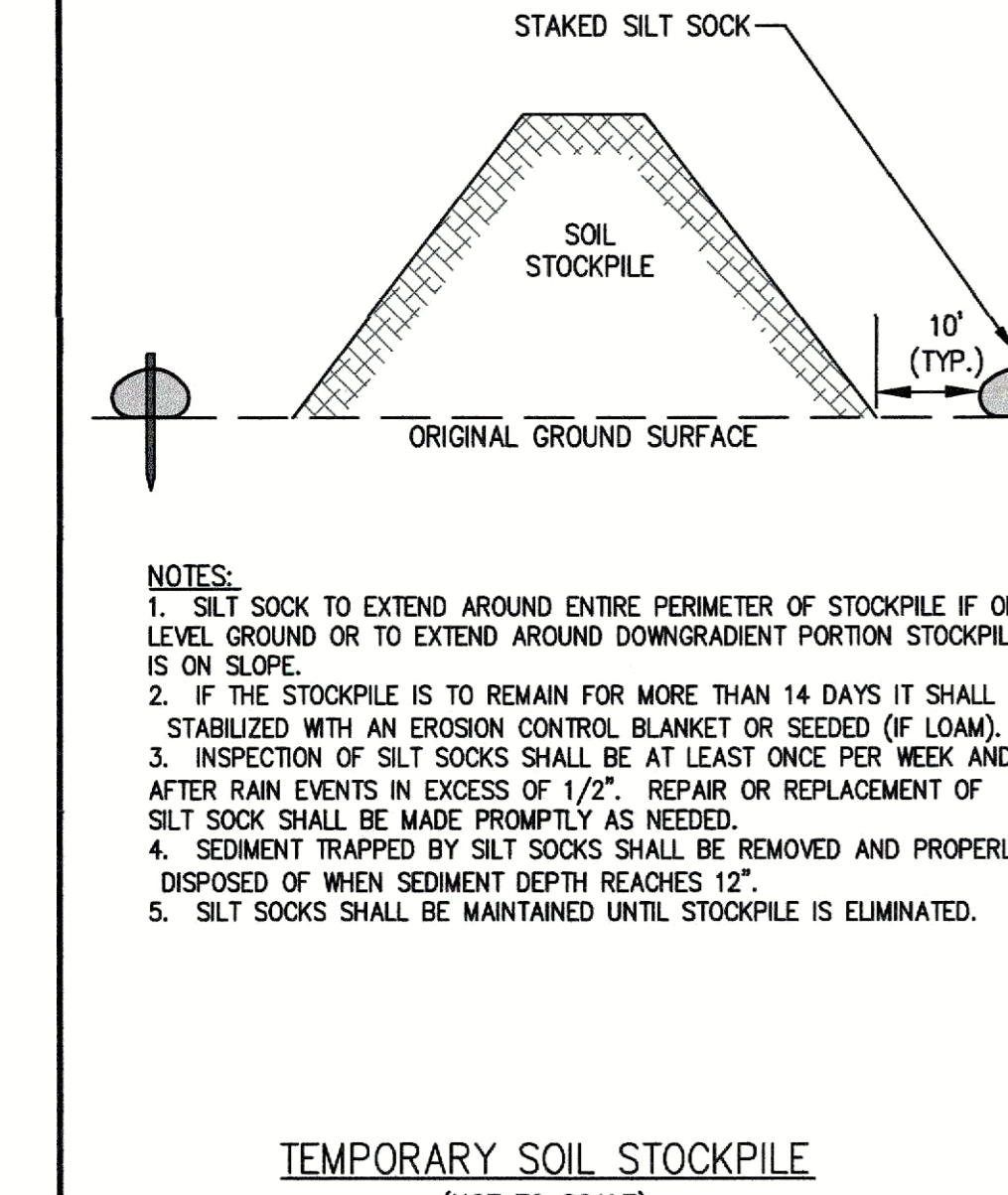
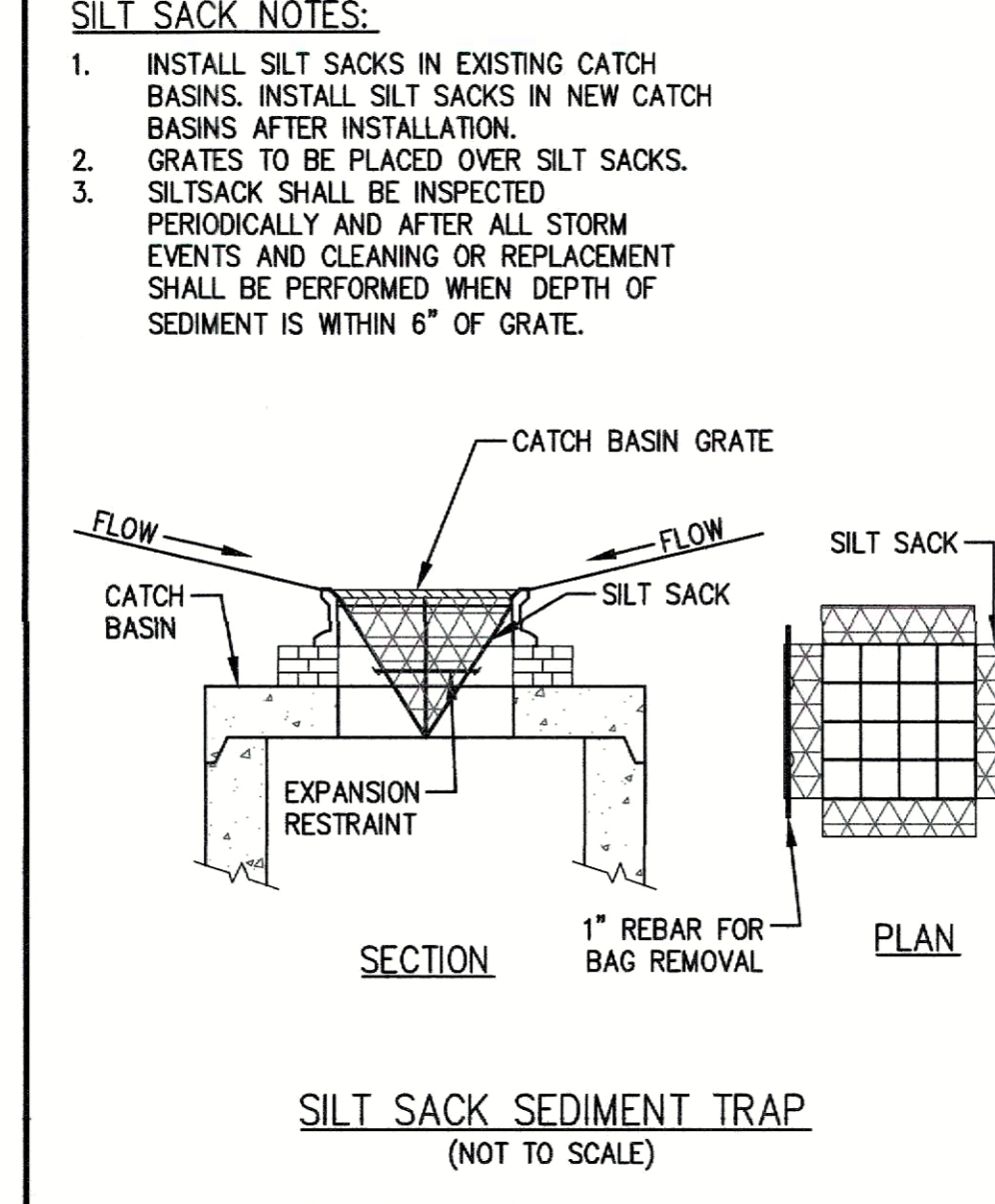
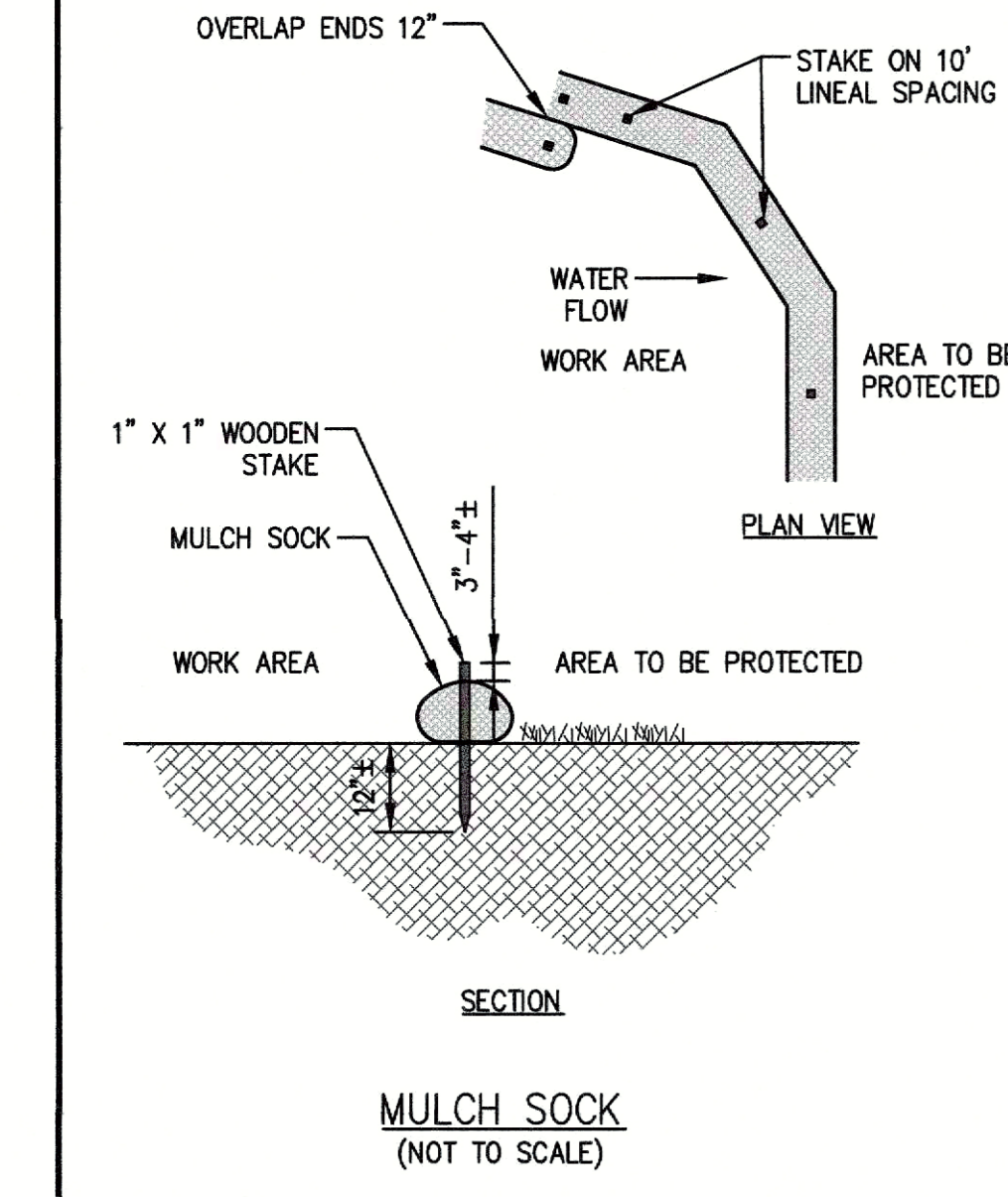


- NOTES:
- THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1% MIN.).
 - THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMP SHALL BE 5%.
 - THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMP SHALL BE 7.5%.
 - A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
 - CURB TREATMENT VARIES. SEE PLANS FOR CURB TYPE.
 - BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
 - SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
 - WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
 - ELIMINATE ALL CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.

WHEELCHAIR ACCESS RAMP DETAILS (NOT TO SCALE.)

- SITE CONSTRUCTION EXIT SPECIFICATIONS FOR BOSTON WAY:
- STONE FOR STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 2"-4" STONE.
 - THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 40 FEET.
 - THE WIDTH OF THE ENTRANCE SHALL BE NO LESS THAN THE WIDTH OF THE INGRESS OR EGRESS DRIVE, OR 16 FEET, WHICHEVER IS GREATER.
 - GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
 - ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH MINIMUM 1 TO 5 SLOPES THAT CAN BE CROSSED BY VEHICLES CAN BE SUBSTITUTED.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. SEDIMENT SPILLED, WASHED OR TRACKED ONTO THE RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE DETAIL (NOT TO SCALE)



TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

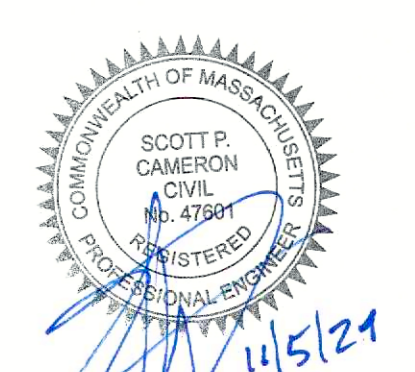
CLERK _____ DATE _____

APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U

DATE: _____

APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.

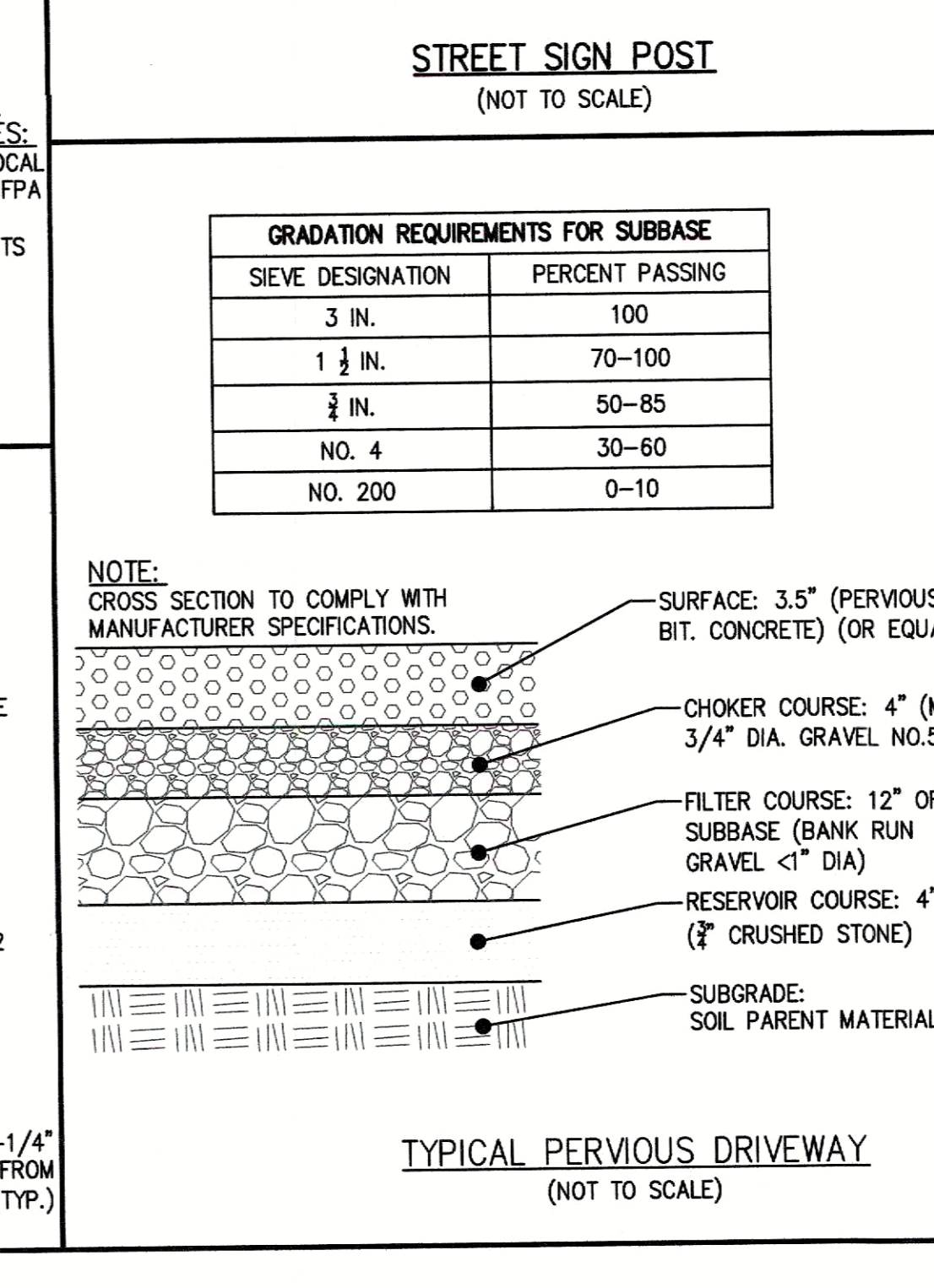
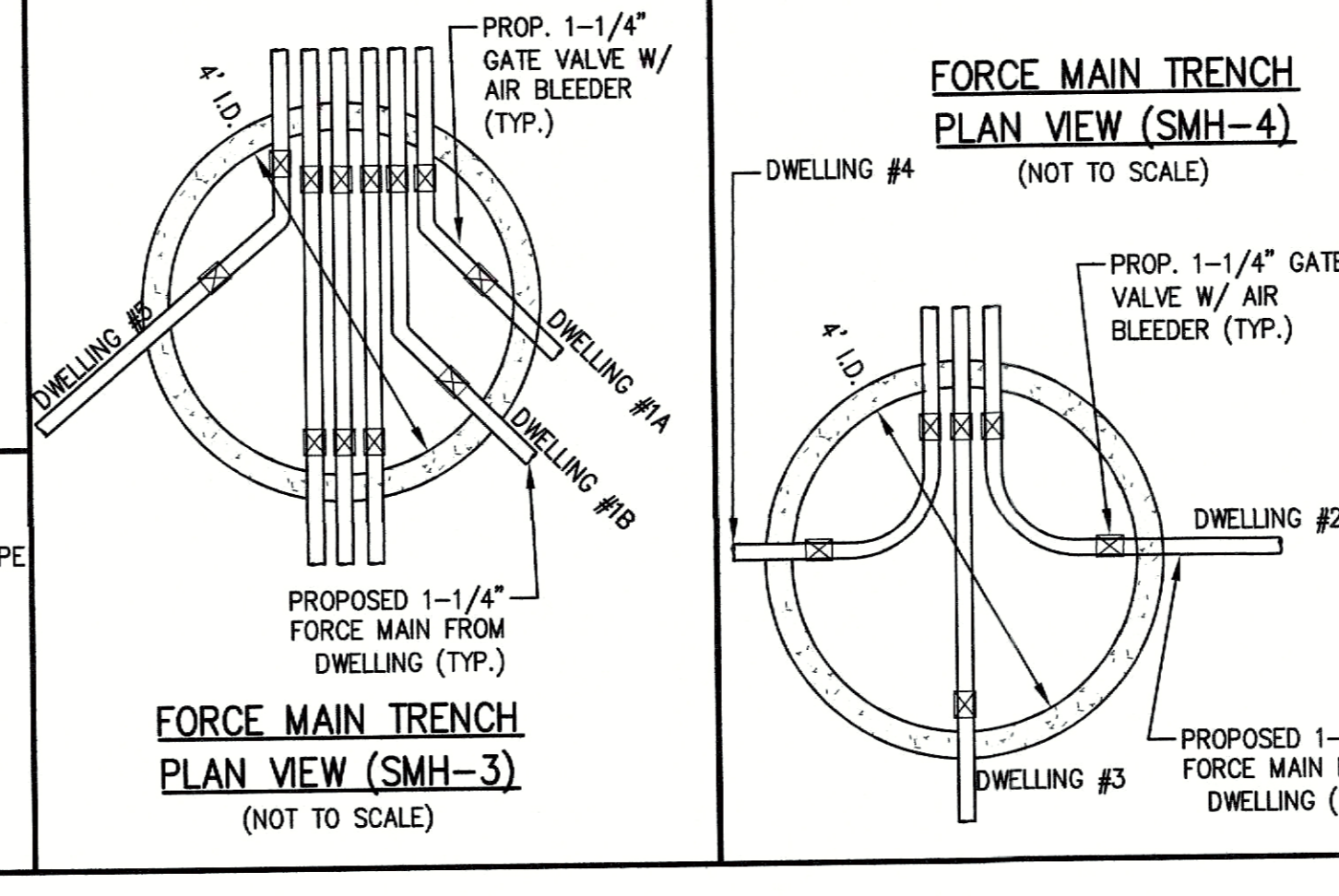
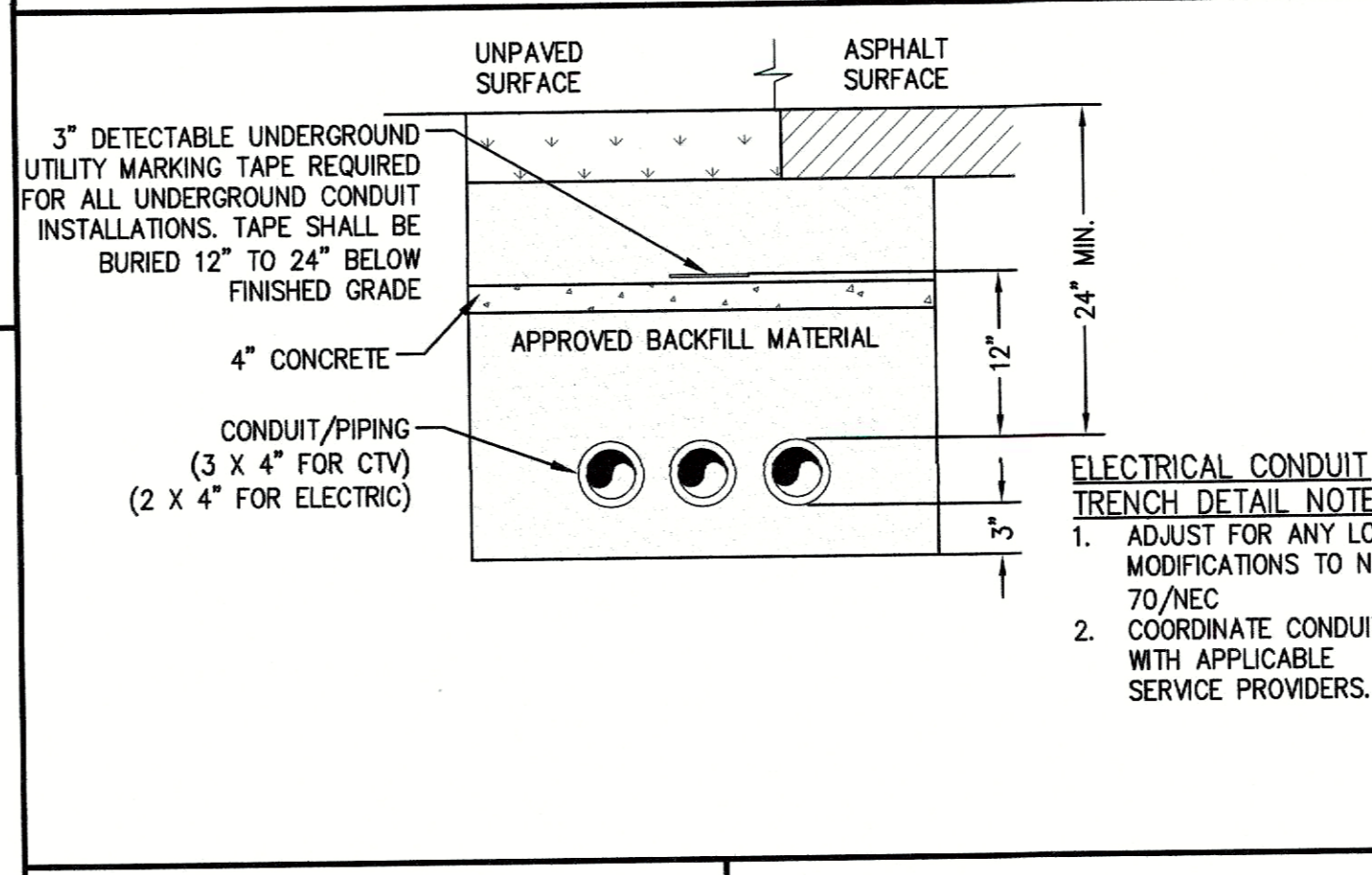
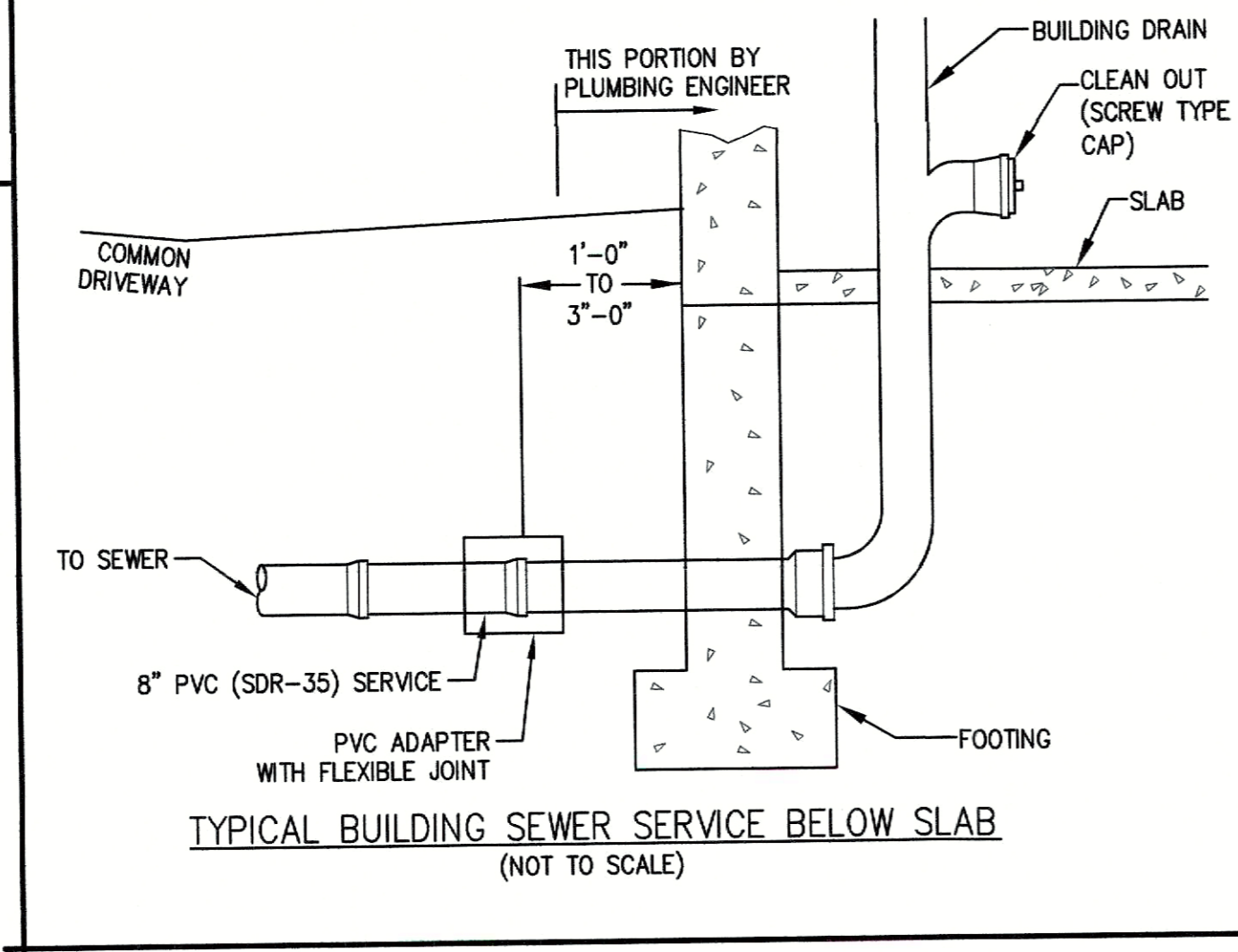
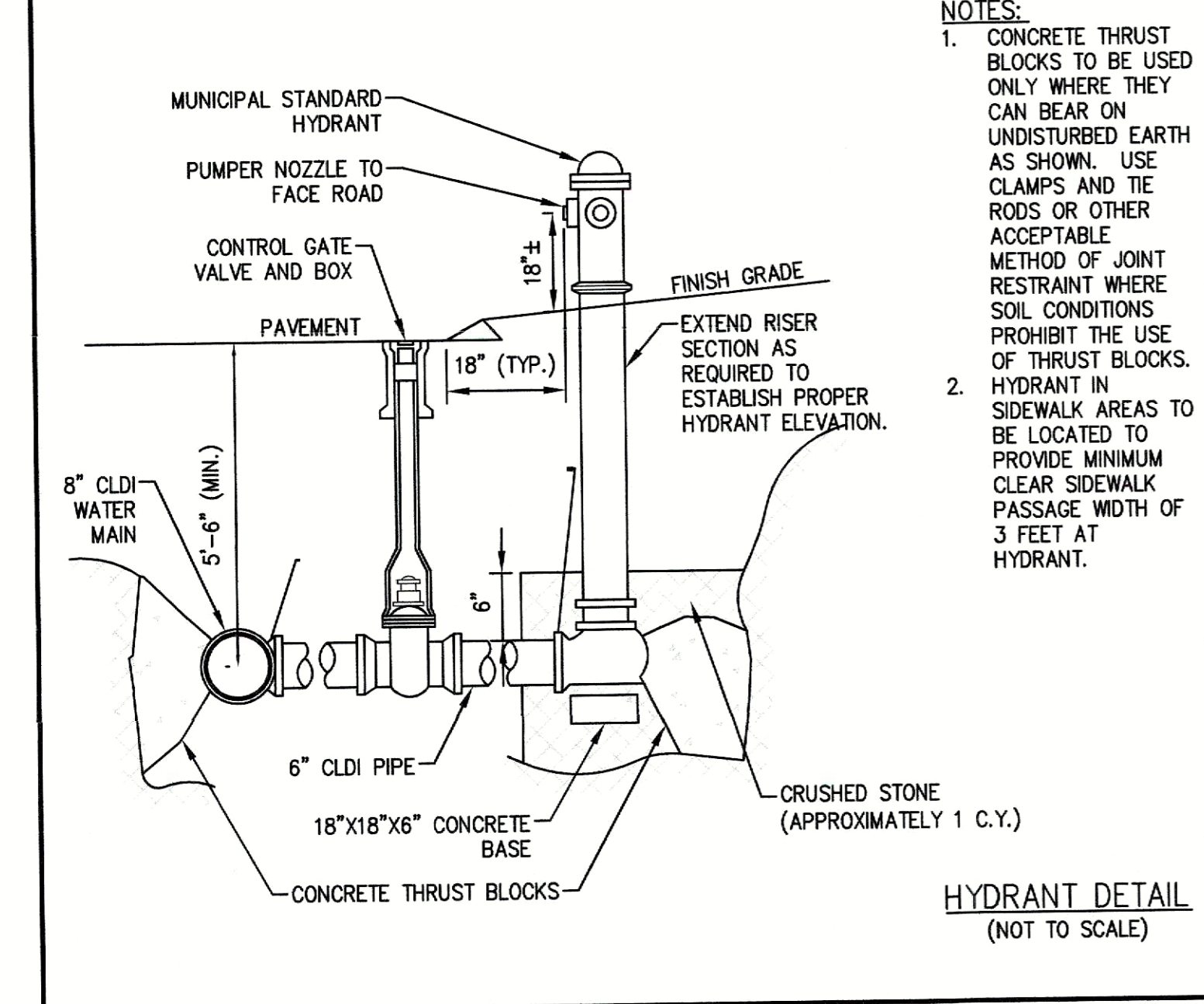
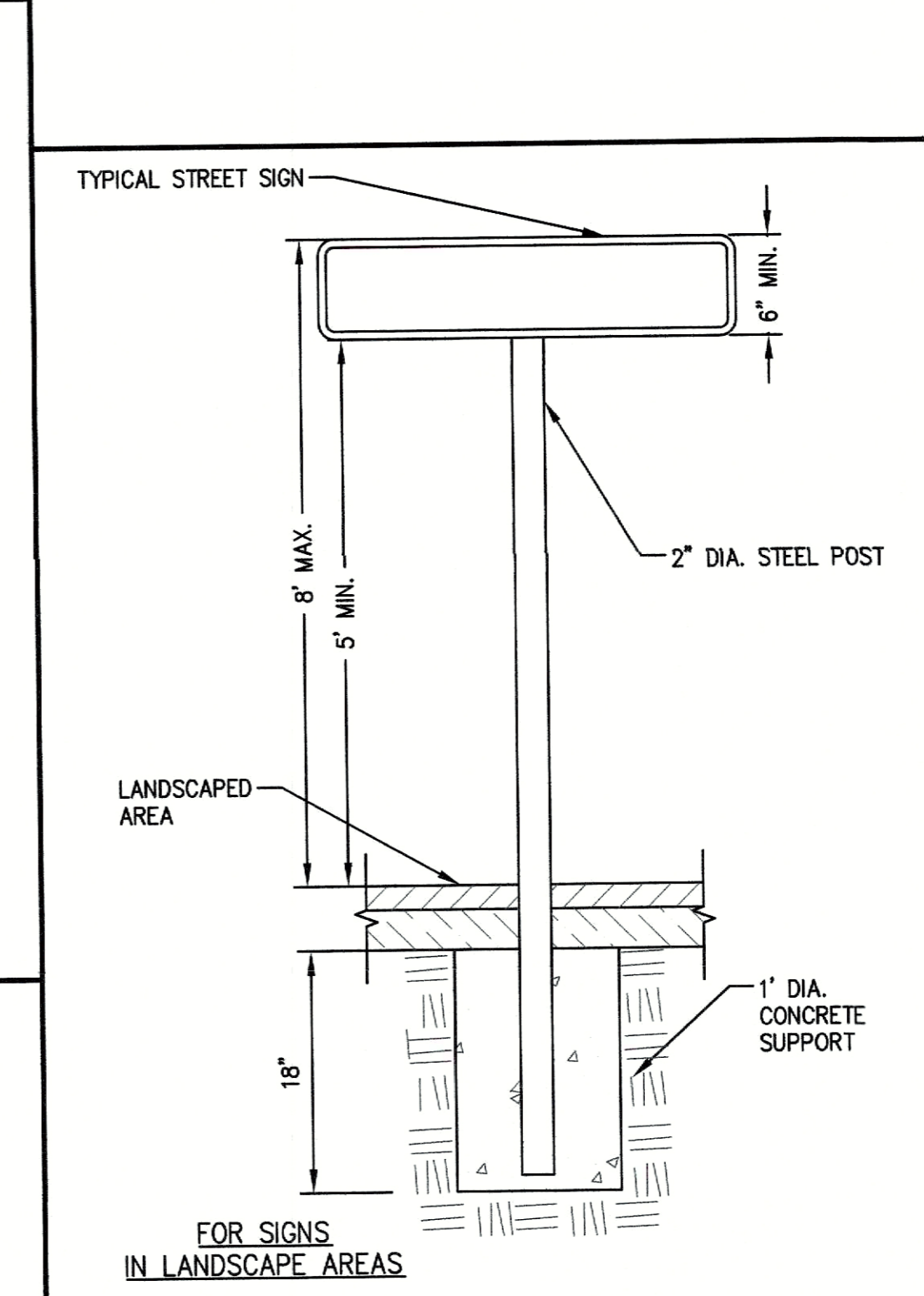
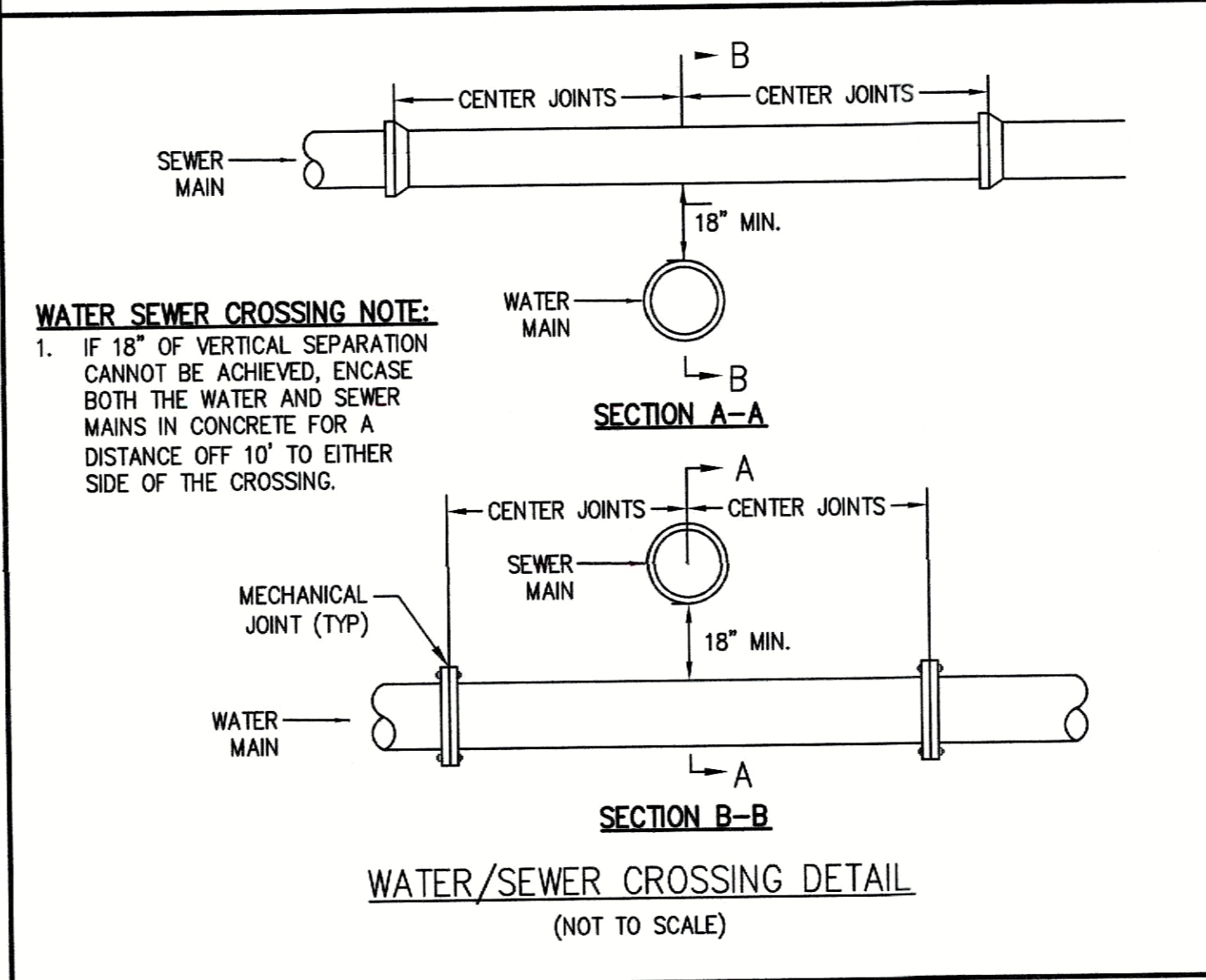
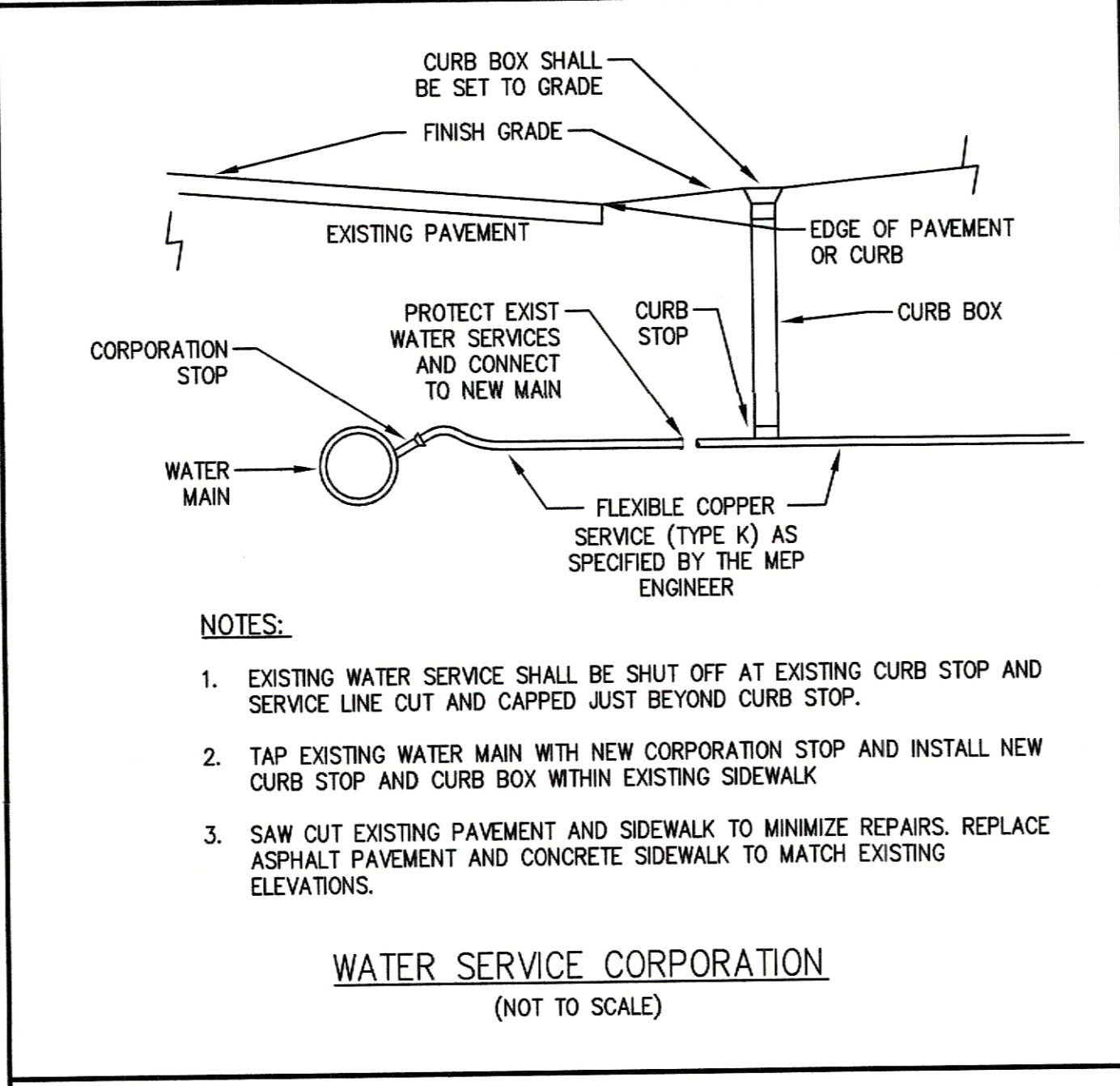
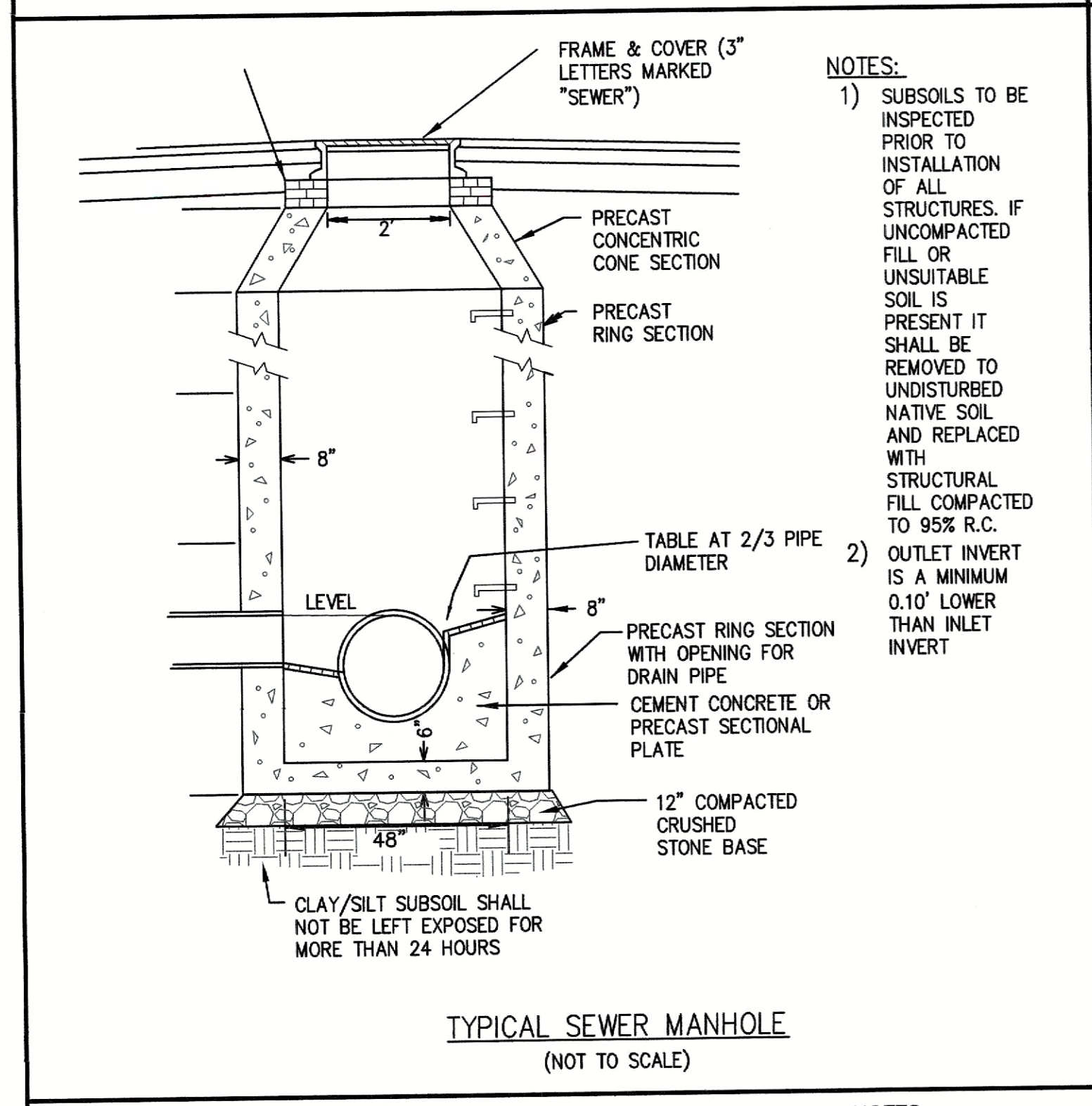
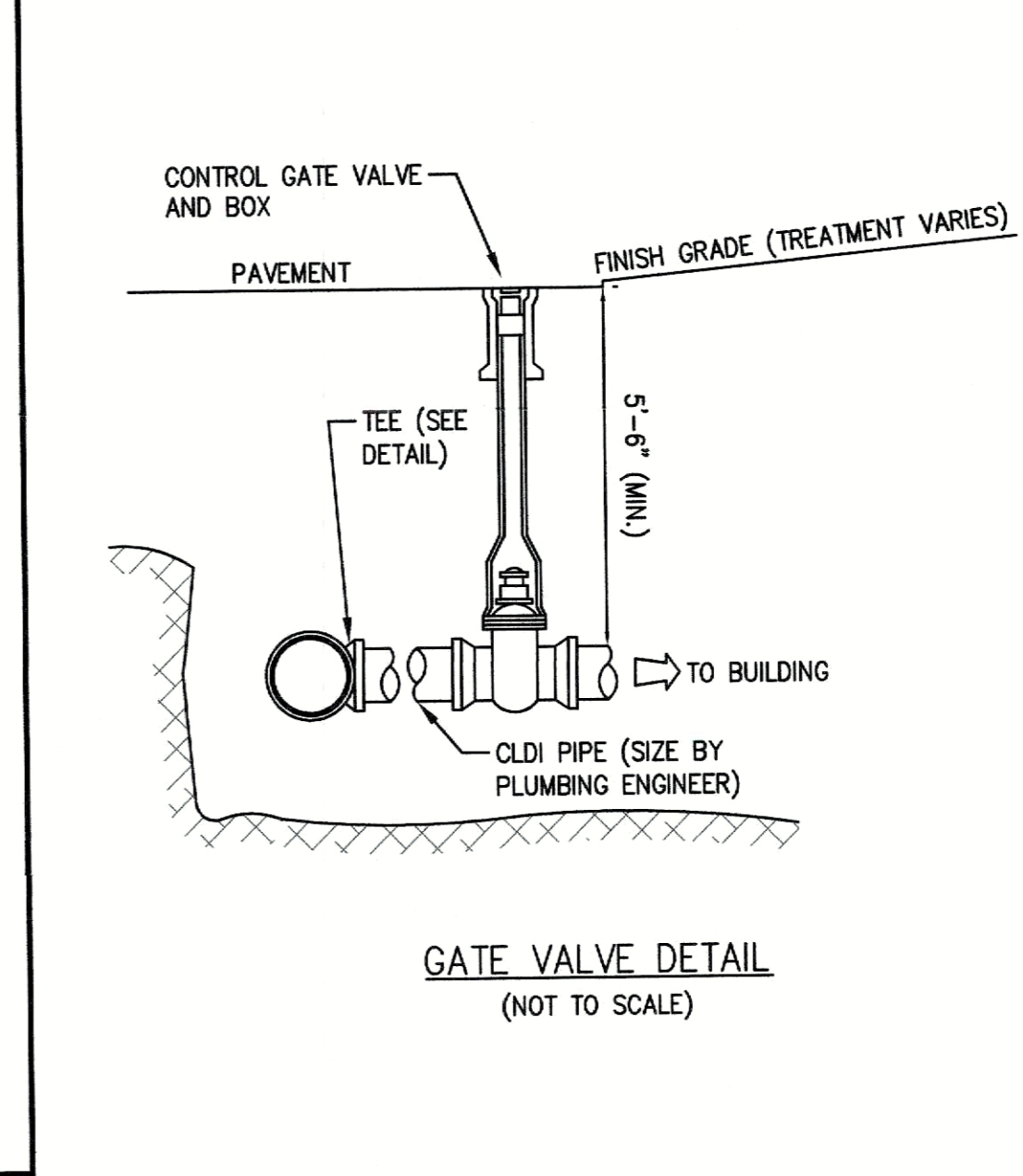
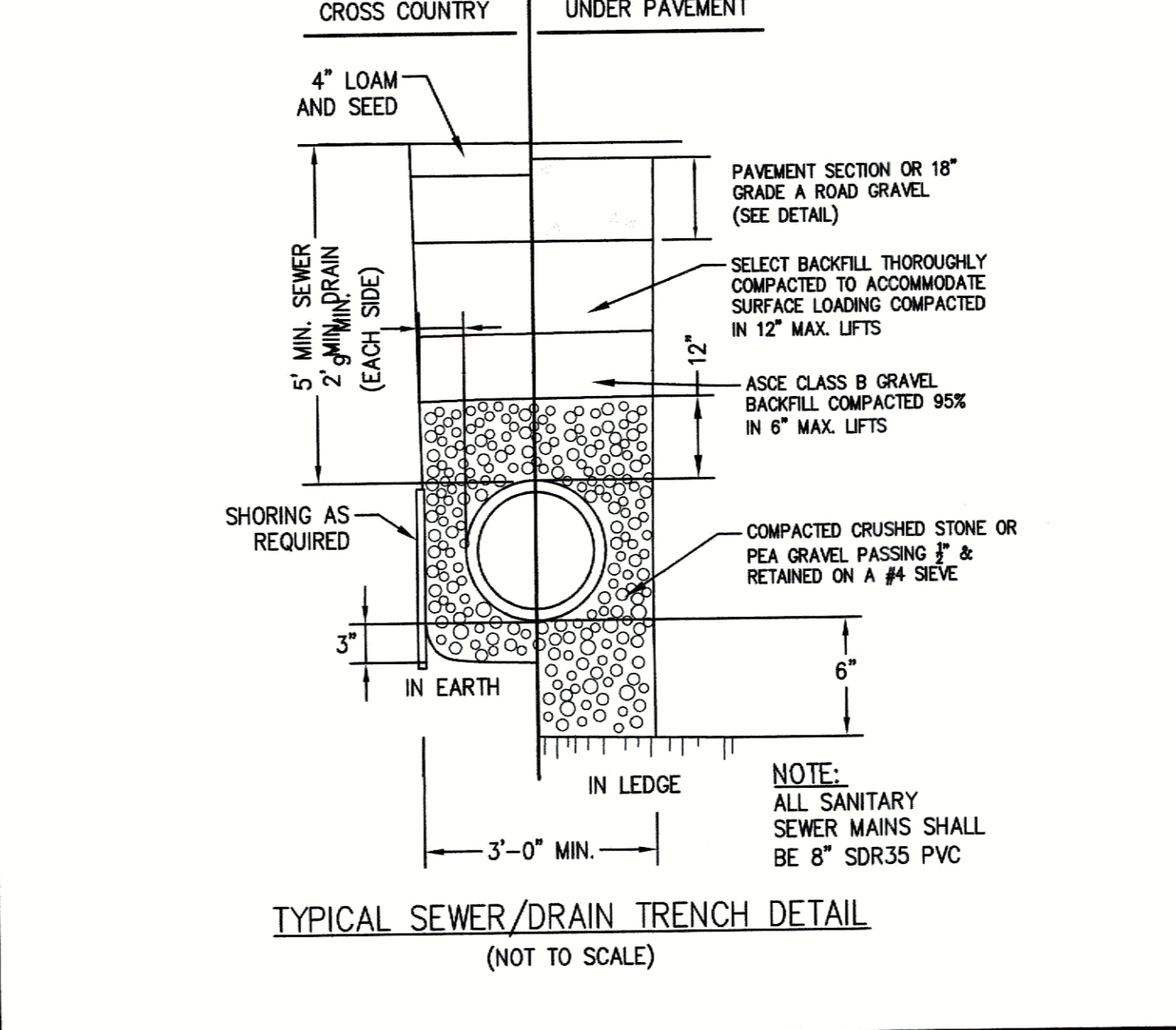
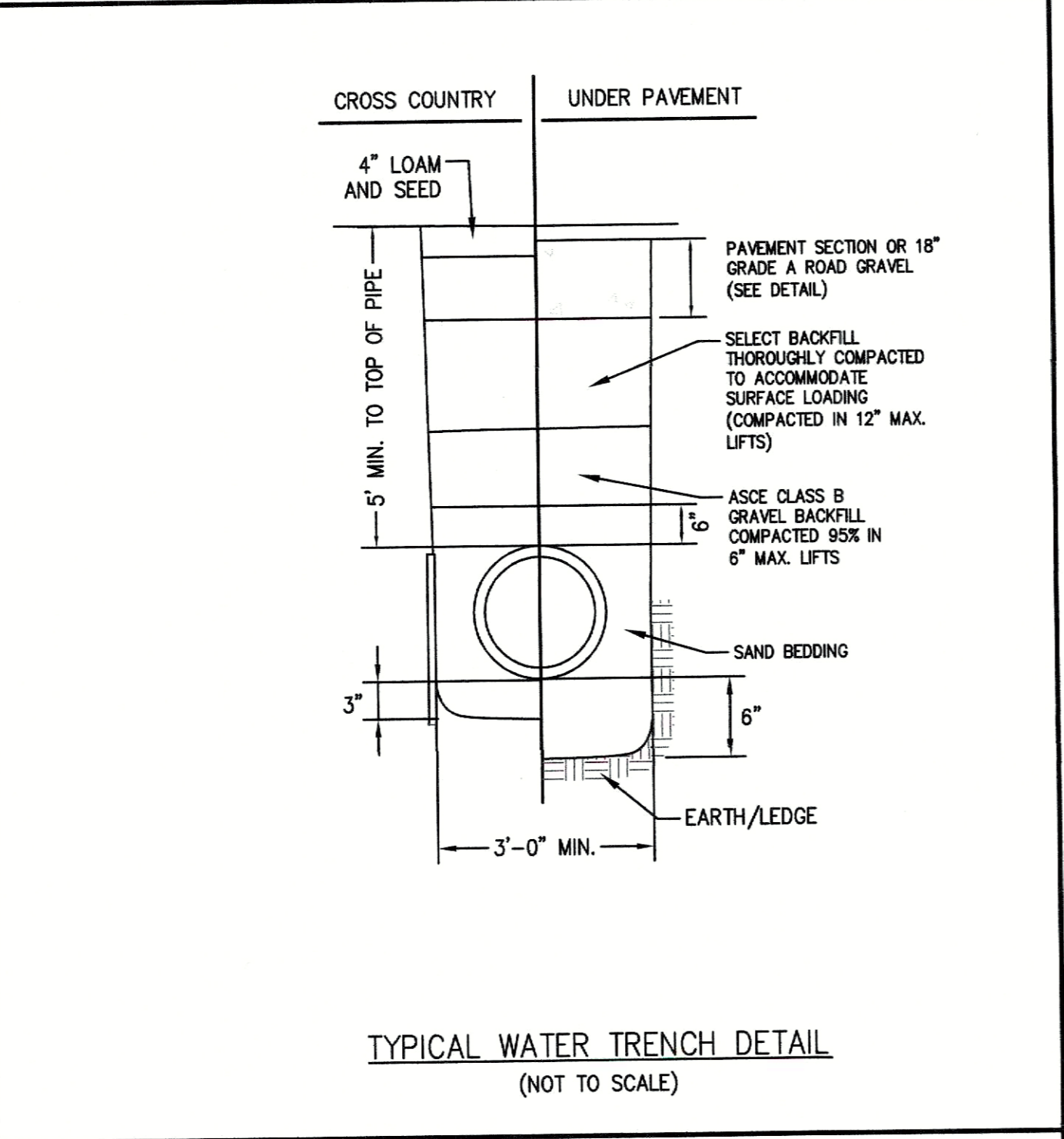
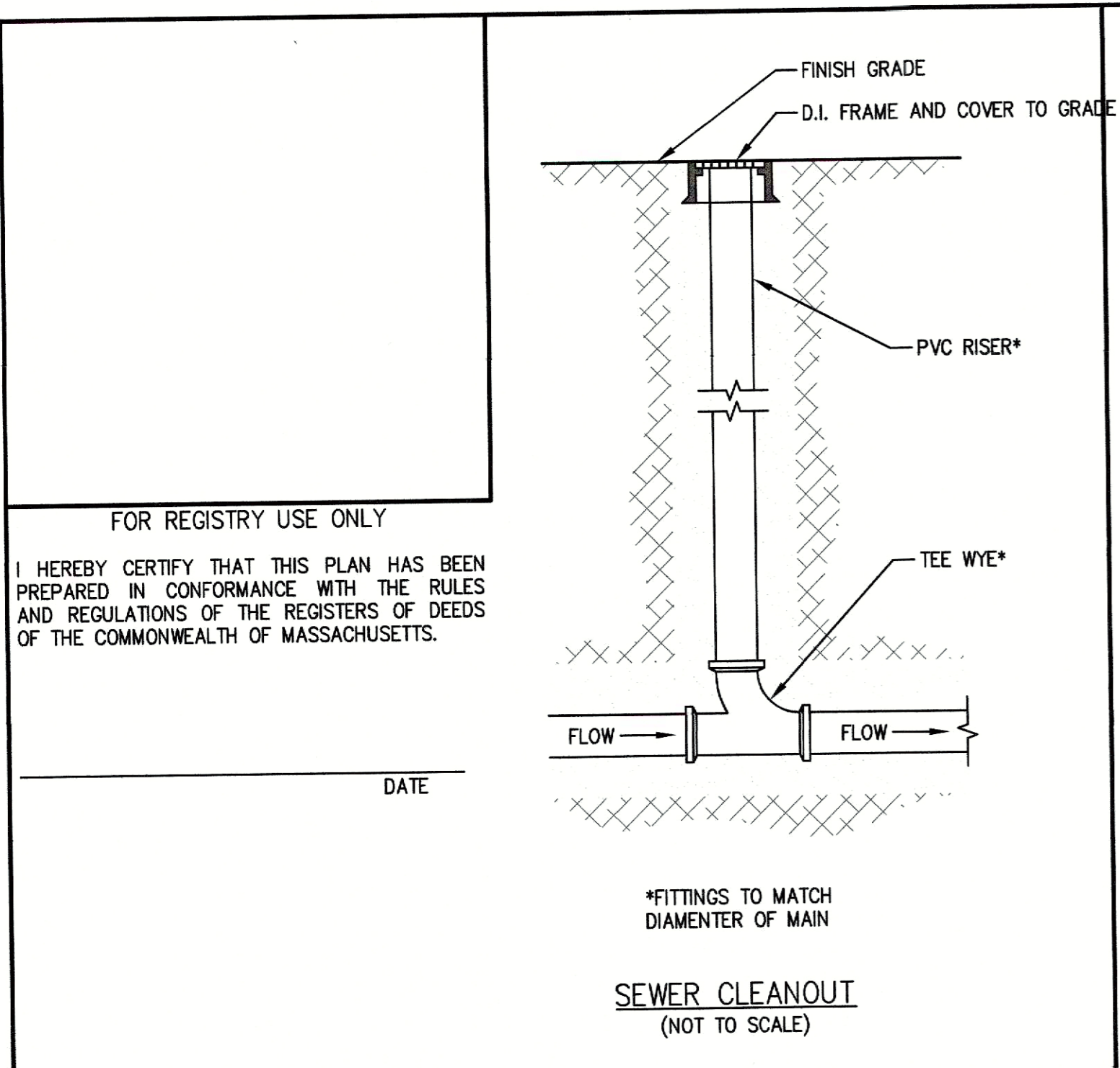


DEFINITIVE SUBDIVISION FOR A STREET TO BE NAMED IN GROVELAND, MASSACHUSETTS AT 181R SCHOOL STREET (GROVELAND ASSESSOR'S MAP 34 LOT 13) PREPARED FOR/APPLICANT: GROVELAND REDEVELOPMENT, LLC 231 SUTTON STREET, SUITE 1B NORTH ANDOVER, MA 01845 OWNER: 181R SCHOOL STREET, LLC 5 ATKINSON FARM ROAD ATKINSON, NH 03811 JULY 31, 2024

The Morin-Cameron GROUP, INC. CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS | LAND SURVEYORS | LAND USE PLANNERS 25 HENOA AVENUE, MASSACHUSETTS 01850 P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | |
|-----------|-----------------|---------|
| NO. | DESCRIPTION | DATE |
| 1 | PER PEER REVIEW | 11/5/24 |

SITE DETAILS DRAWING NO. C-9



TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOVING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

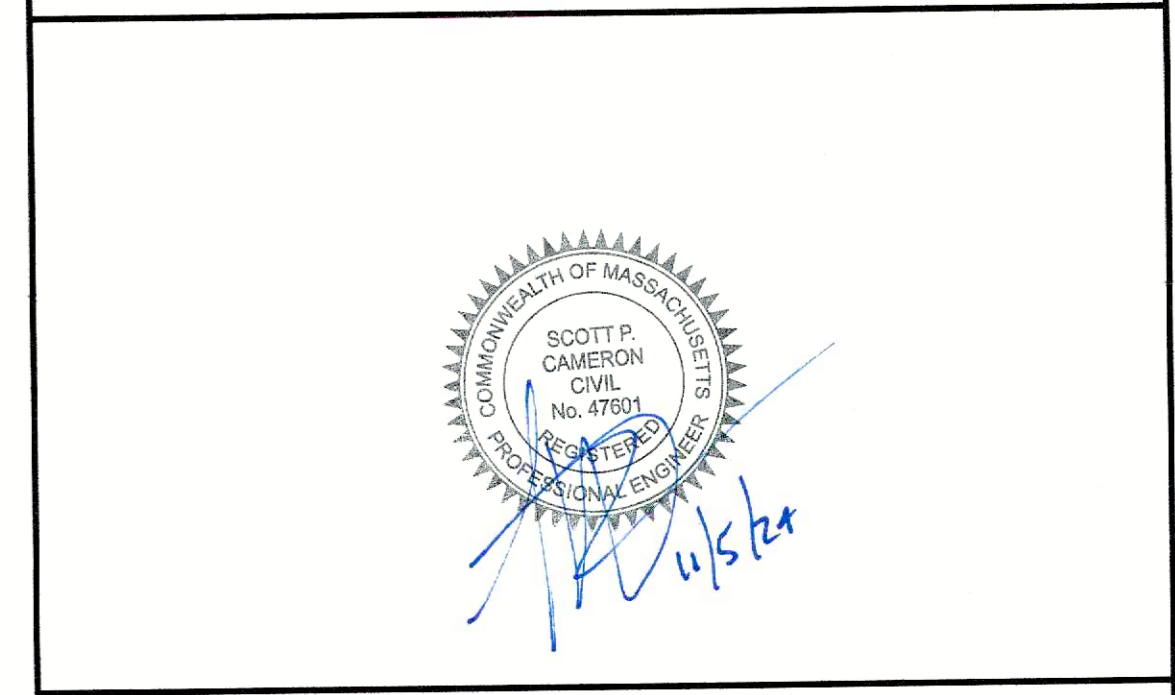
CLERK _____ DATE _____

APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U

DATE: _____

APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.



DEFINITIVE SUBDIVISION
FOR A
STREET TO BE NAMED
IN
GROVELAND, MASSACHUSETTS
AT
181R SCHOOL STREET
(GROVELAND ASSESSOR'S MAP 34 LOT 13)
PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
231 SUTTON STREET, SUITE 1B
NORTH ANDOVER, MA 01845
OWNER:
181R SCHOOL STREET, LLC
5 ATKINSON FARM ROAD
ATKINSON, NH 03811
JULY 31, 2024

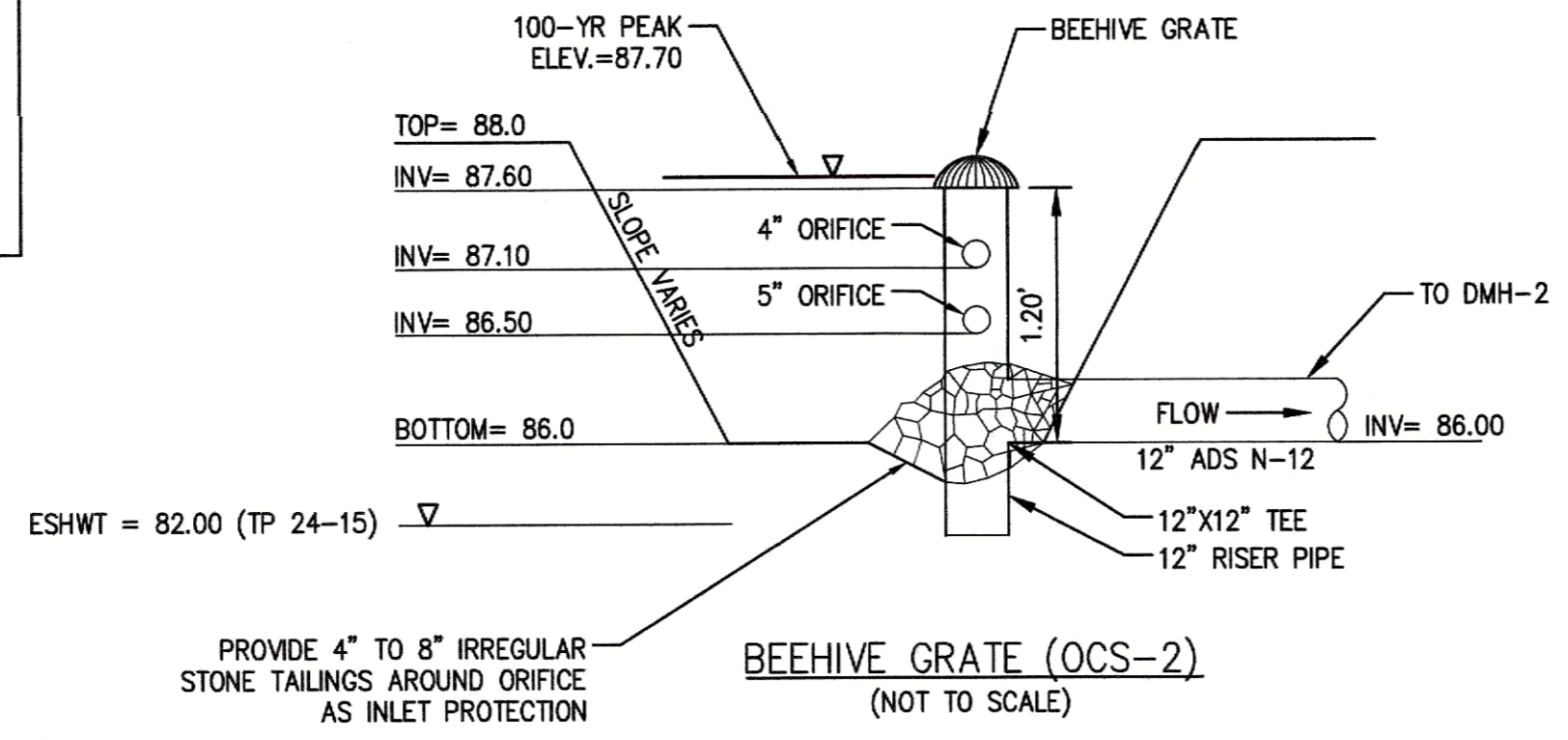
The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 KENOZA AVENUE, MASSACHUSETTS 01830
P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | |
|-----------|-----------------|---------|
| NO. | DESCRIPTION | DATE |
| 1 | PER PEER REVIEW | 11/5/24 |

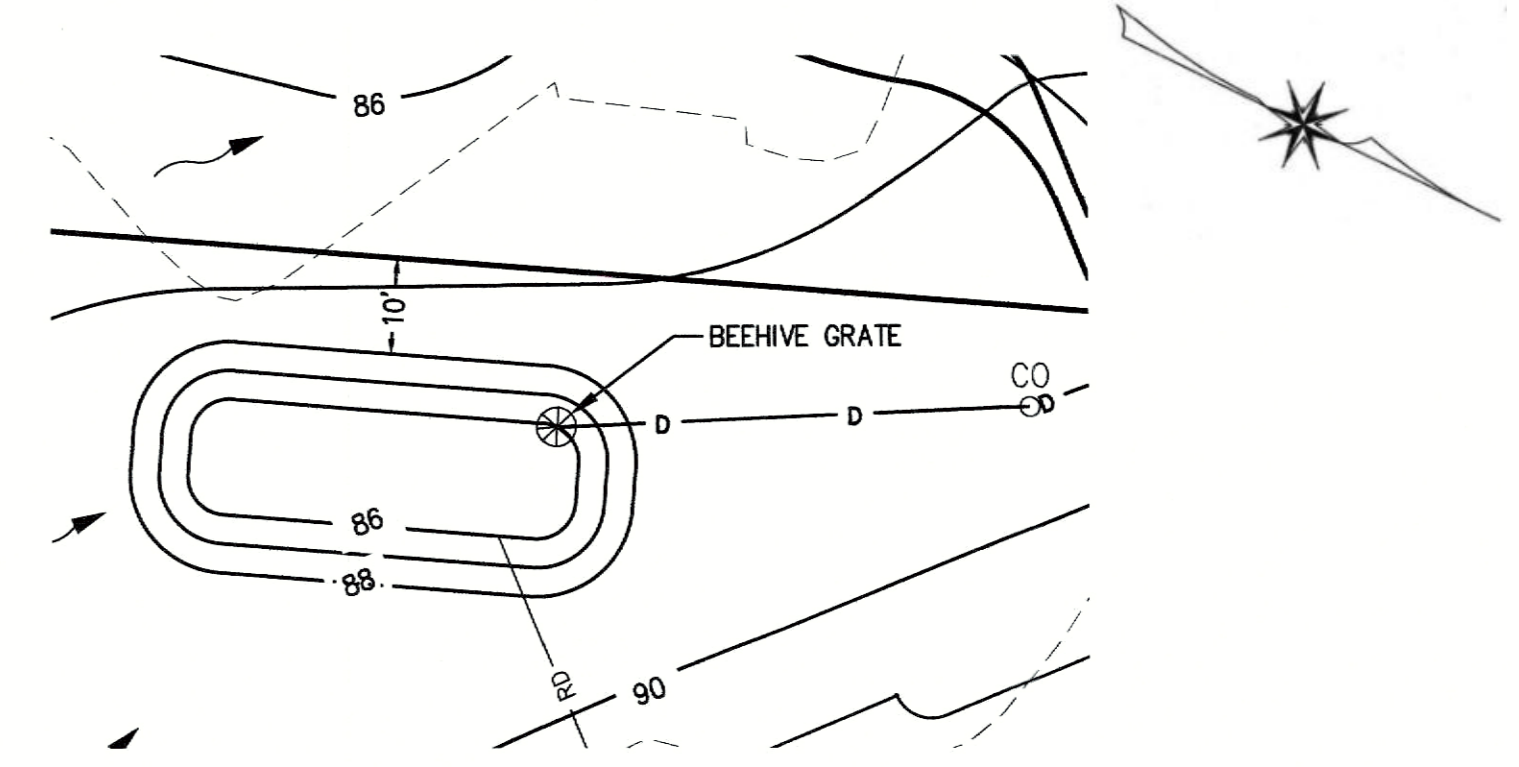
UTILITIES & SITE DETAILS DRAWING NO. **C-10**

GENERAL RAIN GARDEN NOTE:
 DURING CONSTRUCTION, TO AVOID COMPACTION OF THE PARENT MATERIAL, WORK FROM THE EDGE OF THE AREA PROPOSED AS THE LOCATION OF AN EXFILTRATING RAIN GARDENS/INFILTRATION BASIN. NEVER DIRECT RUNOFF TO THE BASIN/GARDEN UNTIL THE BASIN/GARDEN AND THE CONTRIBUTING DRAINAGE AREAS ARE FULLY STABILIZED.

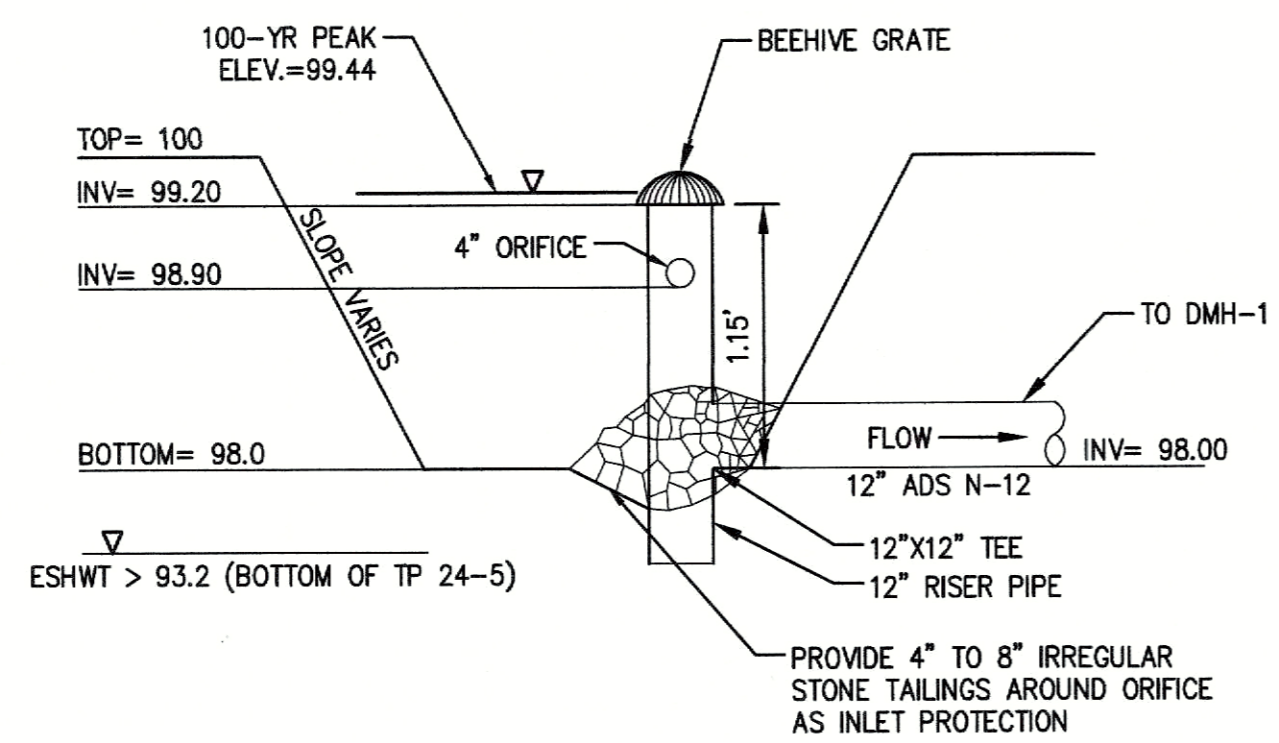
FOR REGISTRY USE ONLY
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.



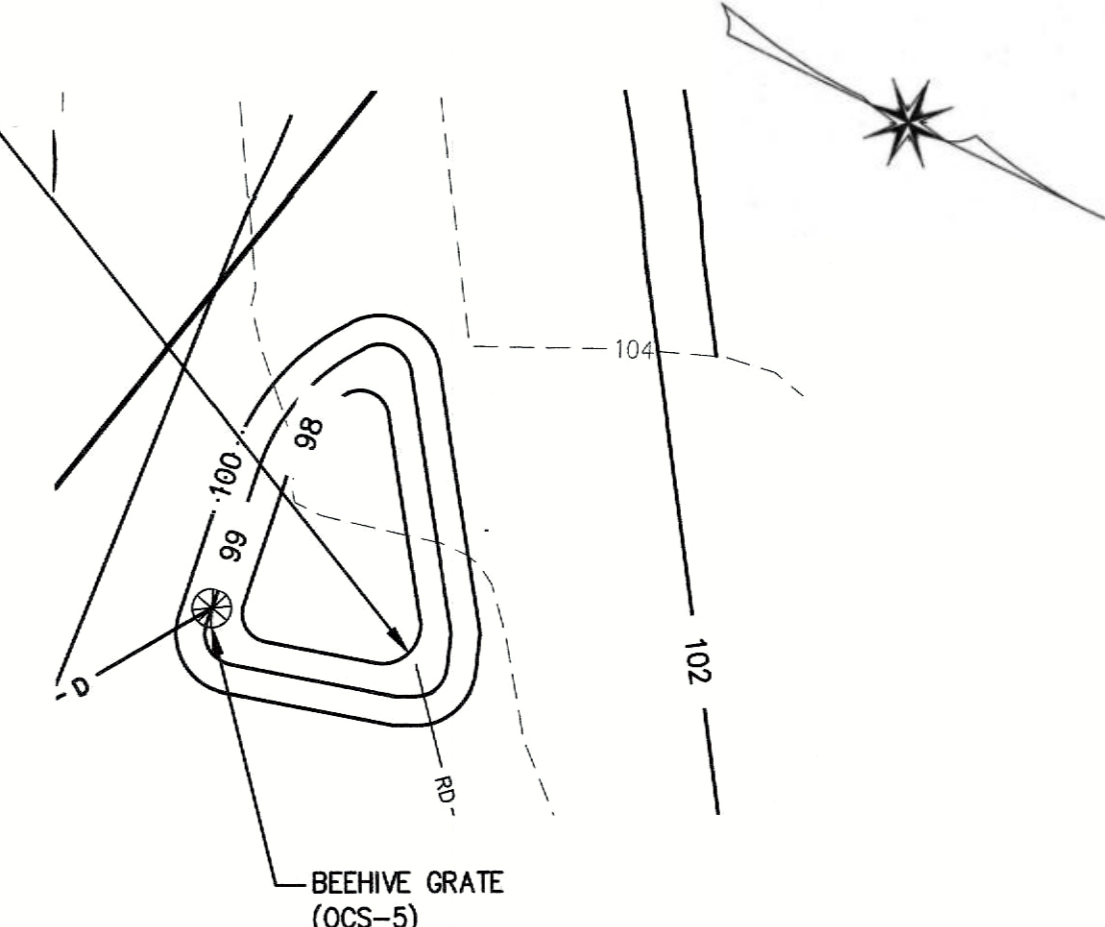
2-YEAR STORM ELEV. = 86.57
 10-YEAR STORM ELEV. = 87.05
 25-YEAR STORM ELEV. = 87.36
 100-YEAR STORM ELEV. = 87.70



RAIN GARDEN (P2)
 (NOT TO SCALE)



2-YEAR STORM ELEV. = 98.61
 10-YEAR STORM ELEV. = 99.23
 25-YEAR STORM ELEV. = 99.34
 100-YEAR STORM ELEV. = 99.44

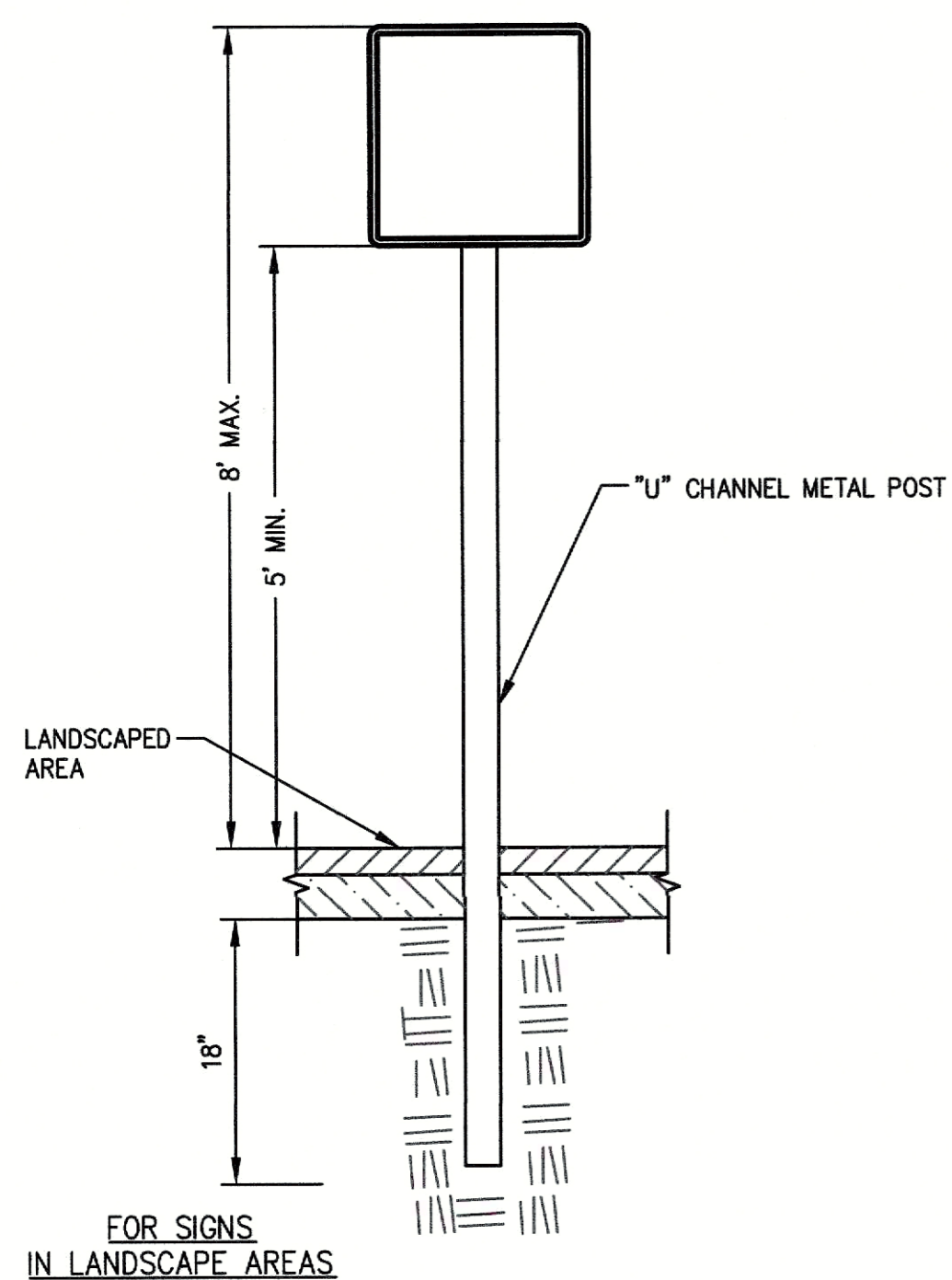
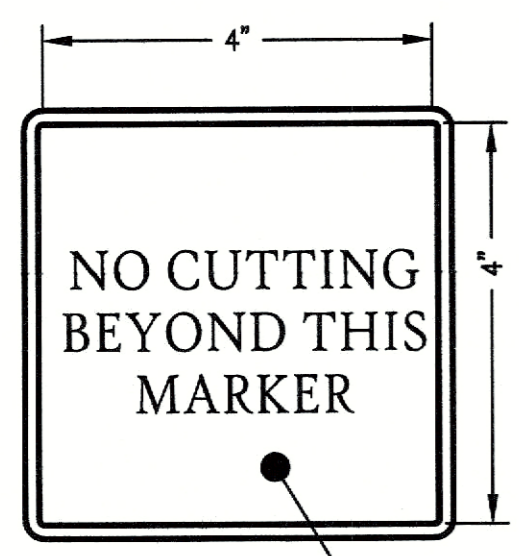


RAIN GARDEN (P5)
 (NOT TO SCALE)

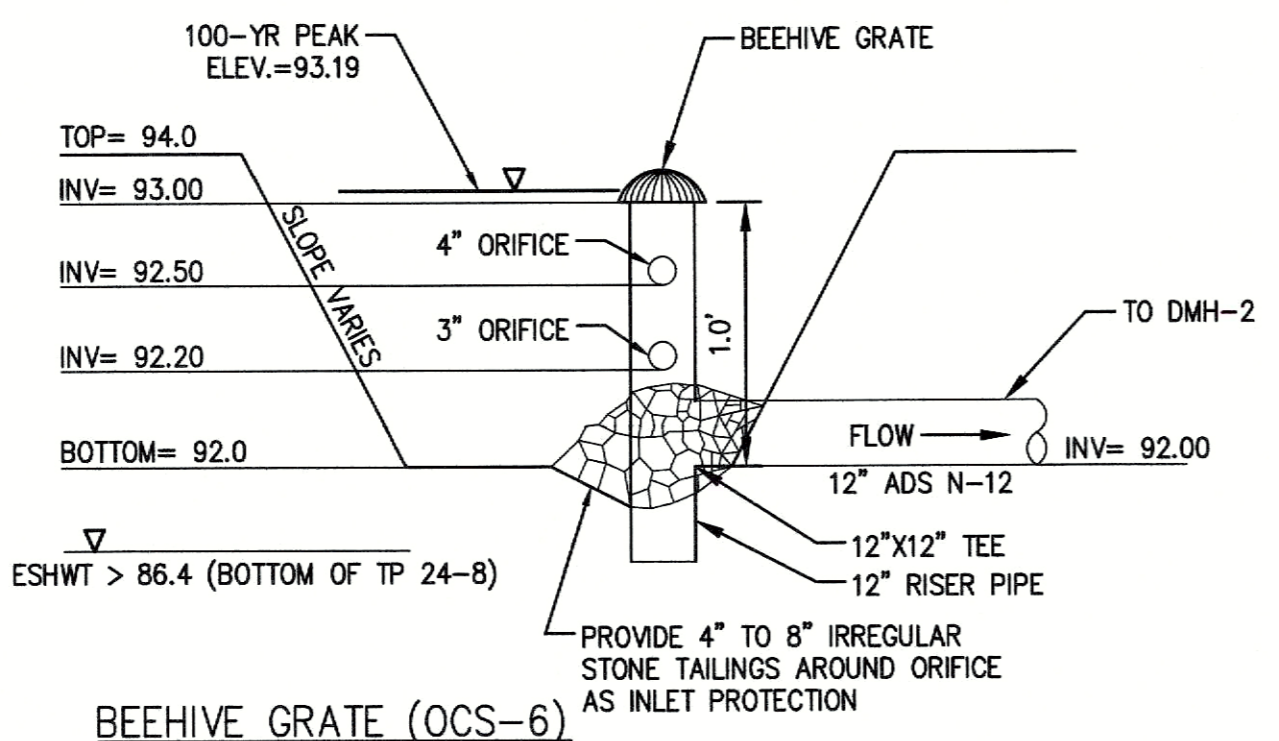
TOWN OF GROVELAND OFFICE OF THE TOWN CLERK
 THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK _____ DATE _____
 APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
 DATE: _____
 APPROVED BY: _____

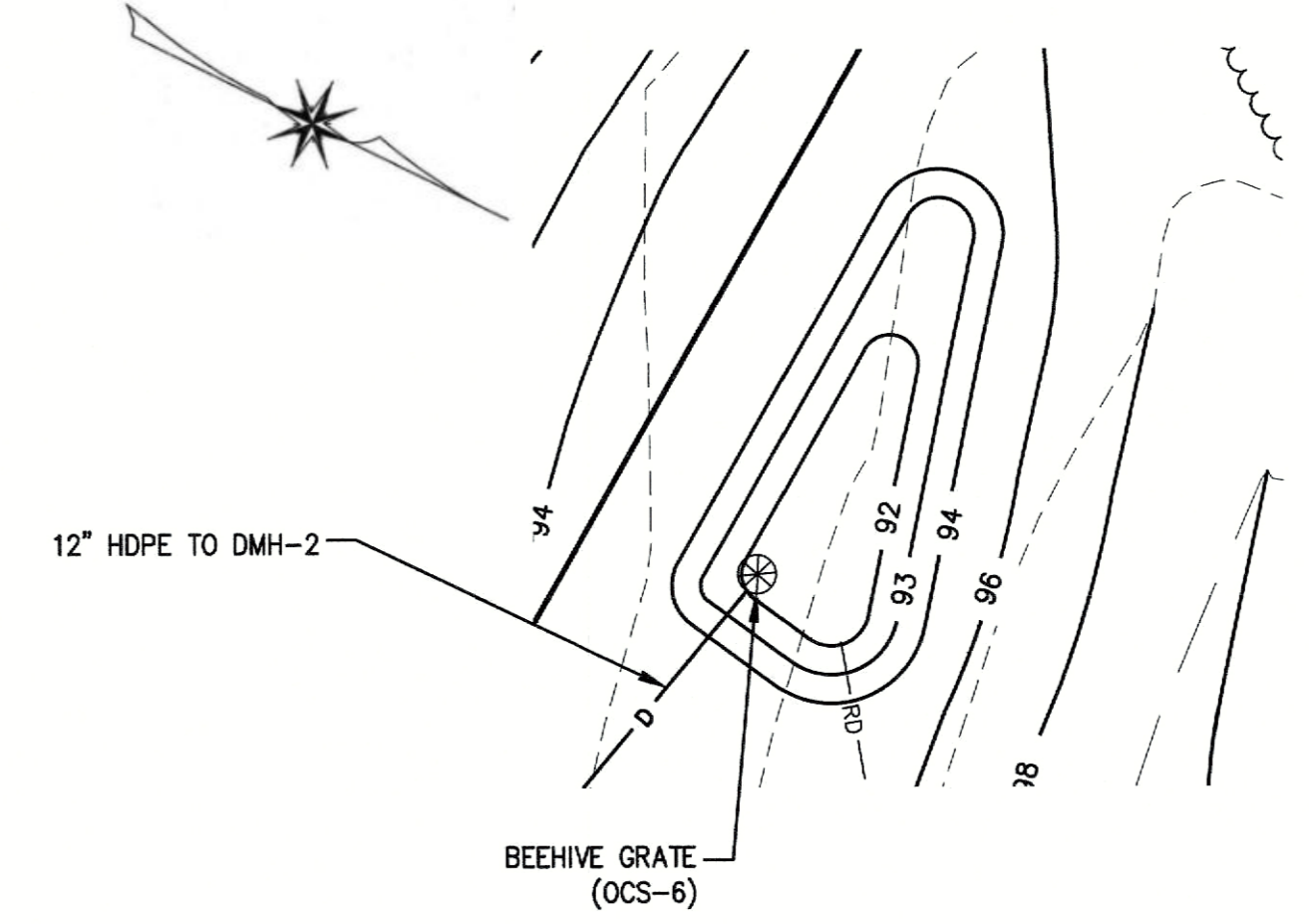
APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____, A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____, SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.



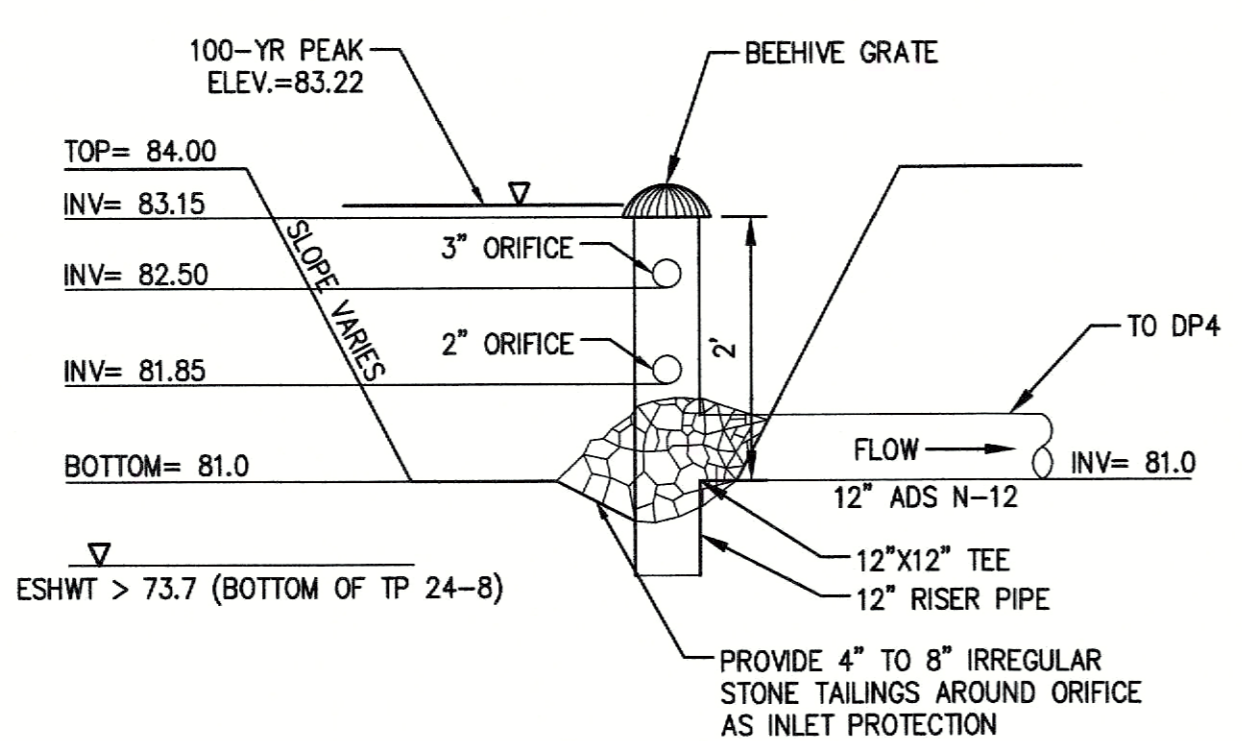
TREE BUFFER SIGN
 (NOT TO SCALE)



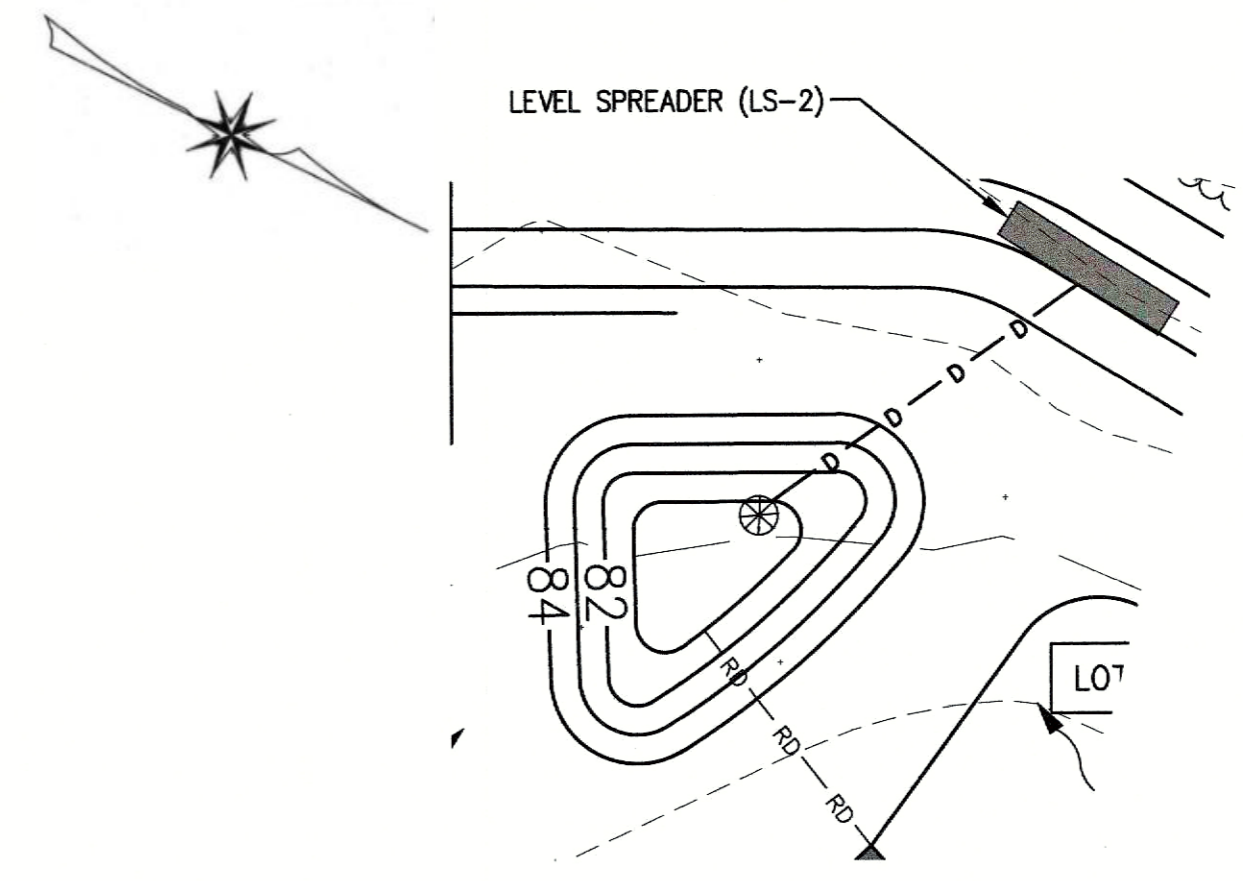
2-YEAR STORM ELEV. = 92.43
 10-YEAR STORM ELEV. = 92.88
 25-YEAR STORM ELEV. = 93.08
 100-YEAR STORM ELEV. = 93.19



RAIN GARDEN (P6)
 (NOT TO SCALE)



2-YEAR STORM ELEV. = 81.73
 10-YEAR STORM ELEV. = 82.43
 25-YEAR STORM ELEV. = 82.79
 100-YEAR STORM ELEV. = 83.22



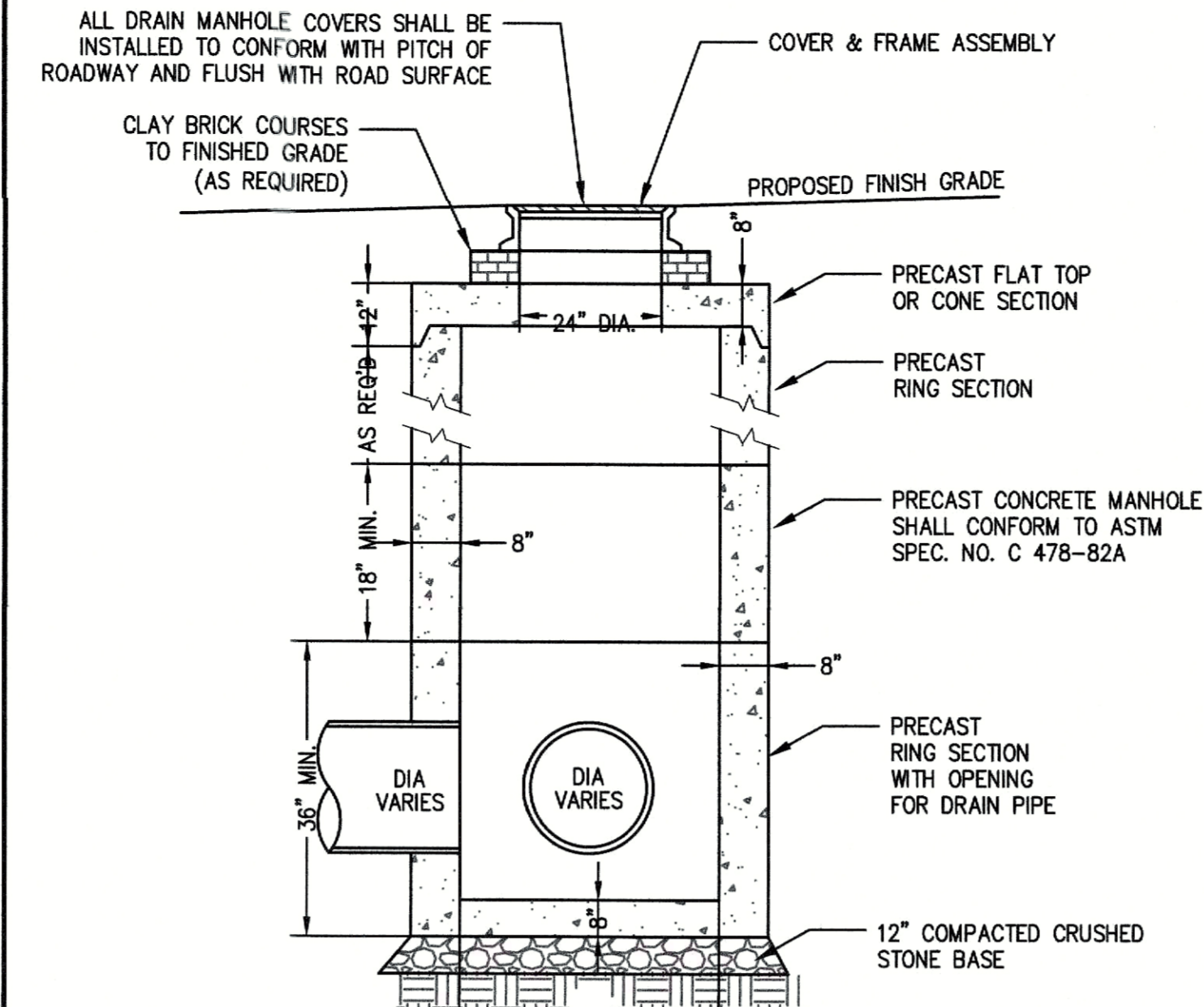
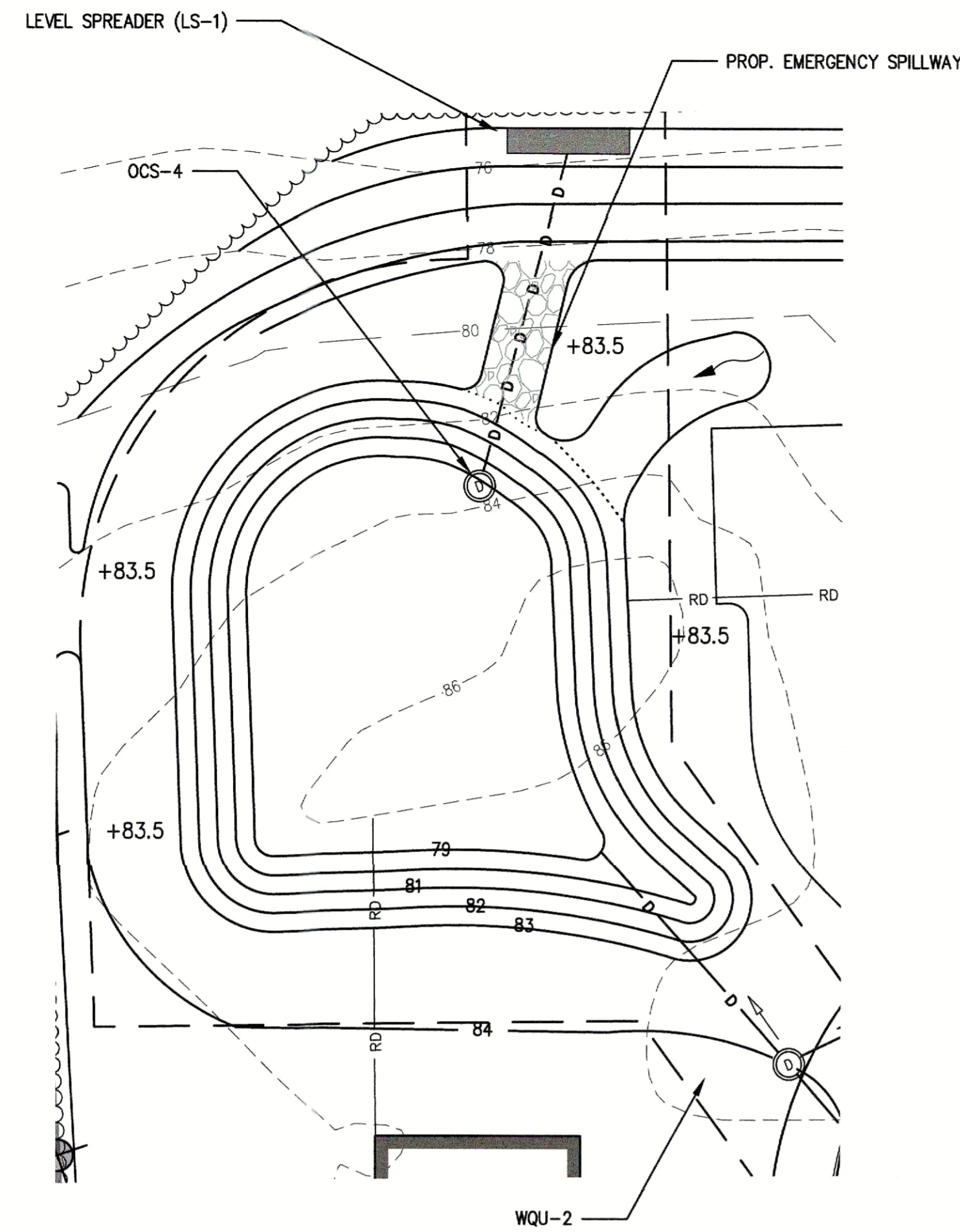
RAIN GARDEN (P7)
 (NOT TO SCALE)



DEFINITIVE SUBDIVISION
 FOR A
STREET TO BE NAMED
 IN
 GROVELAND, MASSACHUSETTS
 AT
181R SCHOOL STREET
 (GROVELAND ASSESSOR'S MAP 34 LOT 13)
 PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
 231 SUTTON STREET, SUITE 1B
 NORTH ANDOVER, MA 01845
 OWNER:
181R SCHOOL STREET, LLC
 5 ATKINSON FARM ROAD
 ATKINSON, NH 03811
 JULY 31, 2024

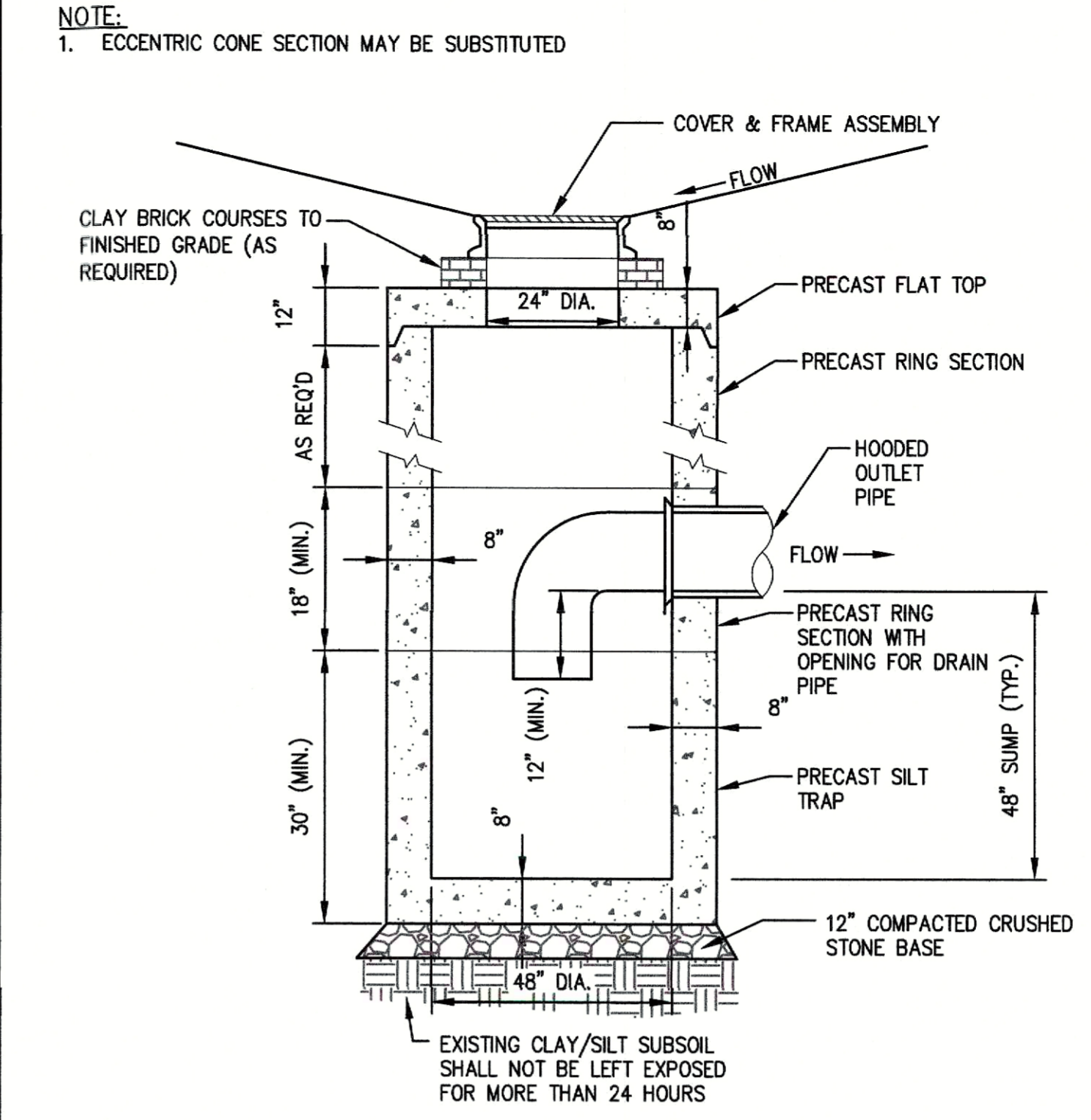
The Morin-Cameron GROUP, INC.
 CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
 LAND SURVEYORS | LAND USE PLANNERS
 25 KENOZA AVENUE, MASSACHUSETTS 01830
 P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | | DRAWING NO. |
|-----------|-----------------|---------|-------------|
| NO. | DESCRIPTION | DATE | |
| 1 | PER PEER REVIEW | 11/5/24 | C-11 |
| | | | |



- FRAME AND COVER NOTE:**
- 4" FRAME AND COVER SHALL BE NEENAH FOUNDRY MODEL No. R-1708-1 OR APPROVED EQUIVALENT.
 - 8" FRAME AND COVER SHALL BE NEENAH FOUNDRY MODEL No. R-1670-A OR APPROVED EQUIVALENT.
- SUBSOIL NOTE:**
- SUBSOILS TO BE INSPECTED PRIOR TO INSTALLATION OF ALL STRUCTURES. IF UNCOMPACTED FILL OR UNSUITABLE SOIL IS PRESENT IT SHALL BE REMOVED TO UNDISTURBED NATIVE SOIL AND REPLACED WITH STRUCTURAL FILL COMPACTED TO 95% R.C.

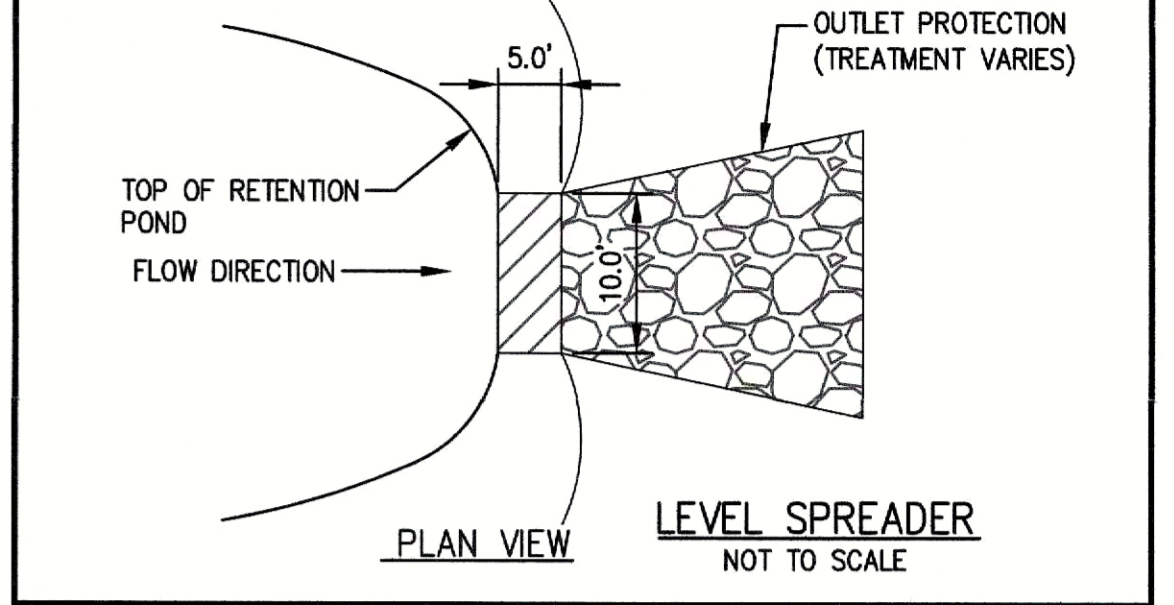
TYPICAL DRAIN MANHOLE (NOT TO SCALE)



- FRAME AND COVER NOTE:**
- 3" FRAME AND COVER SHALL BE NEENAH FOUNDRY MODEL No. R-3560 OR APPROVED EQUIVALENT.
 - 6" FRAME AND COVER SHALL BE NEENAH FOUNDRY MODEL No. R-3405 OR APPROVED EQUIVALENT.
- SUBSOIL NOTE:**
- SUBSOILS TO BE INSPECTED PRIOR TO INSTALLATION OF ALL STRUCTURES. IF UNCOMPACTED FILL OR UNSUITABLE SOIL IS PRESENT IT SHALL BE REMOVED TO UNDISTURBED NATIVE SOIL AND REPLACED WITH STRUCTURAL FILL COMPACTED TO 95% R.C.

TYPICAL CATCH BASIN (NOT TO SCALE)

- LEVEL SPREADER NOTES:**
- IT IS CRITICAL FOR THE CURB TO BE SET LEVEL ACROSS ITS ENTIRE LENGTH TO ENSURE PROPER LEVEL SPREADER FUNCTION.
 - MAXIMUM ALLOWABLE TOLERANCE FOR LEVELING CURB IS $\pm 0.25''$.
 - PRECAST CURB IS A SUITABLE SUBSTITUTE FOR GRANITE CURB.
 - CURB JOINTS SHALL BE MORTARED TO CREATE A SMOOTH TRANSITION BETWEEN SECTIONS. MAXIMUM SECTION LENGTHS SHALL BE USED TO MINIMIZE JOINTS.
 - ALL EXPOSED SOIL AREAS SHALL BE REINFORCED WITH AN EROSION CONTROL BLANKET (JUTE MESH) OR EQUIVALENT. SEED SHALL BE APPLIED AT A RATE OF 4 LBS PER 1000 SF AND SHALL INCLUDE A MAJORITY OF PERENNIAL RYE FOR QUICK GERMINATION TIMES.



TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

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CLERK _____ DATE _____

APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
DATE: _____

APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HERewith AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.

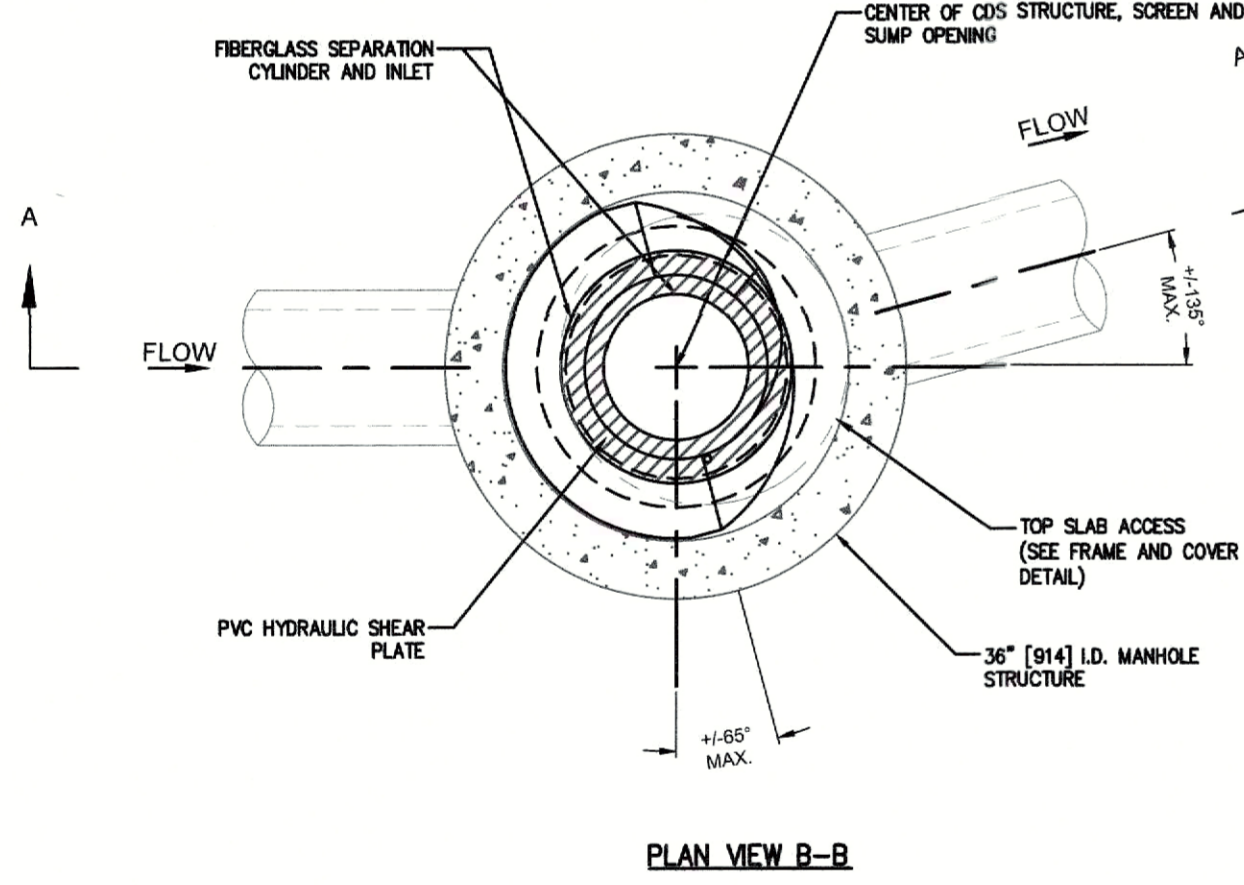
FOR REGISTRY USE ONLY

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DATE _____

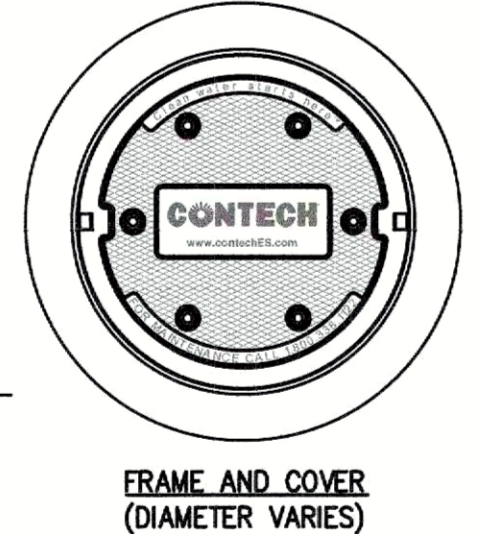
2-YEAR STORM ELEV. = 79.68
10-YEAR STORM ELEV. = 80.53
25-YEAR STORM ELEV. = 81.15
100-YEAR STORM ELEV. = 81.98

ESHWT > 77.0 (BOTTOM OF TP 24-13)

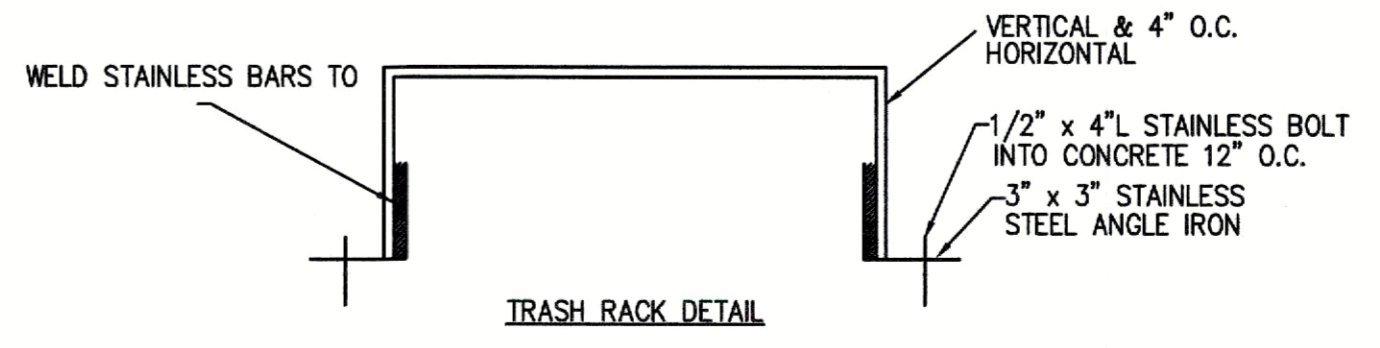
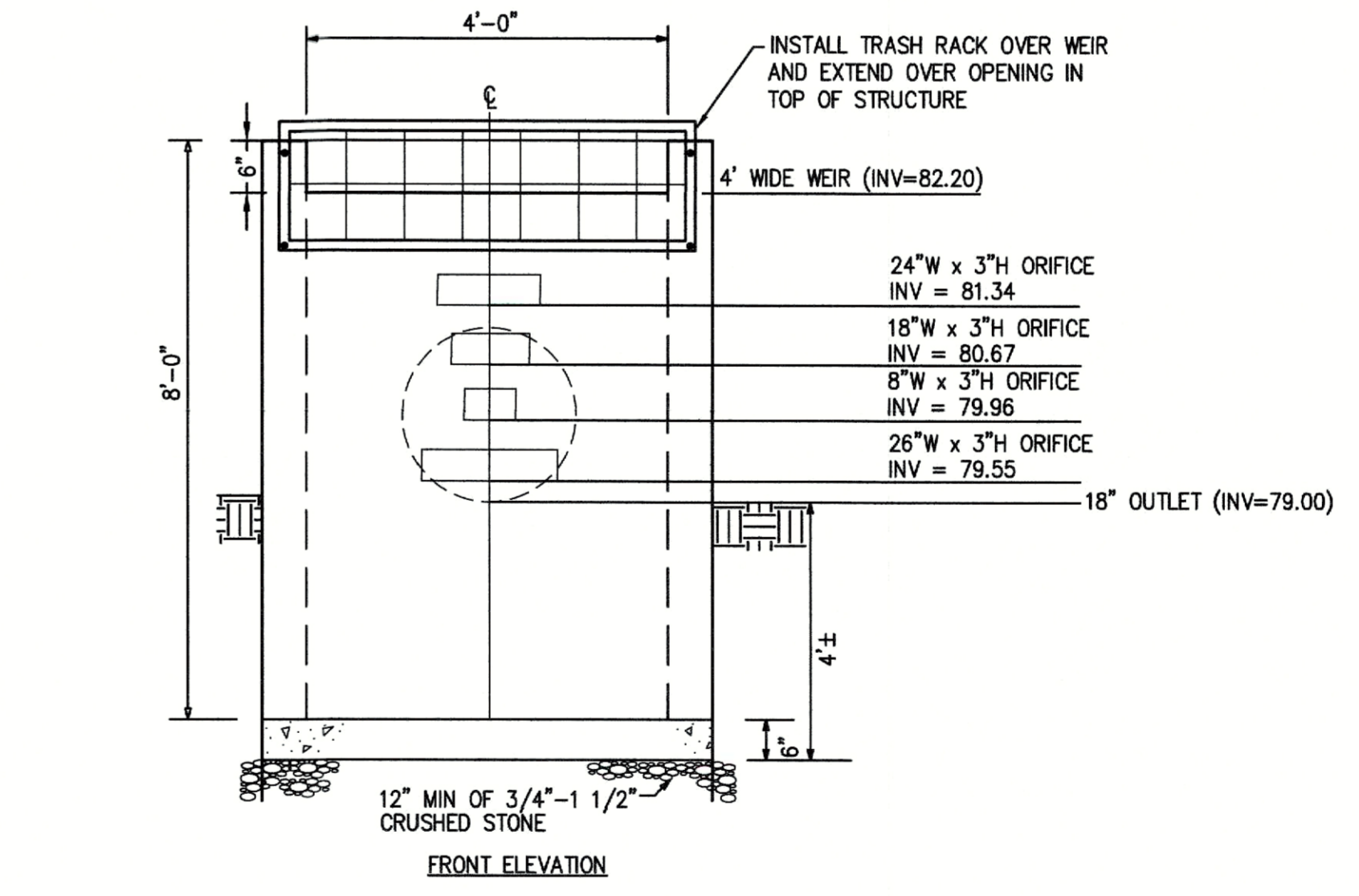
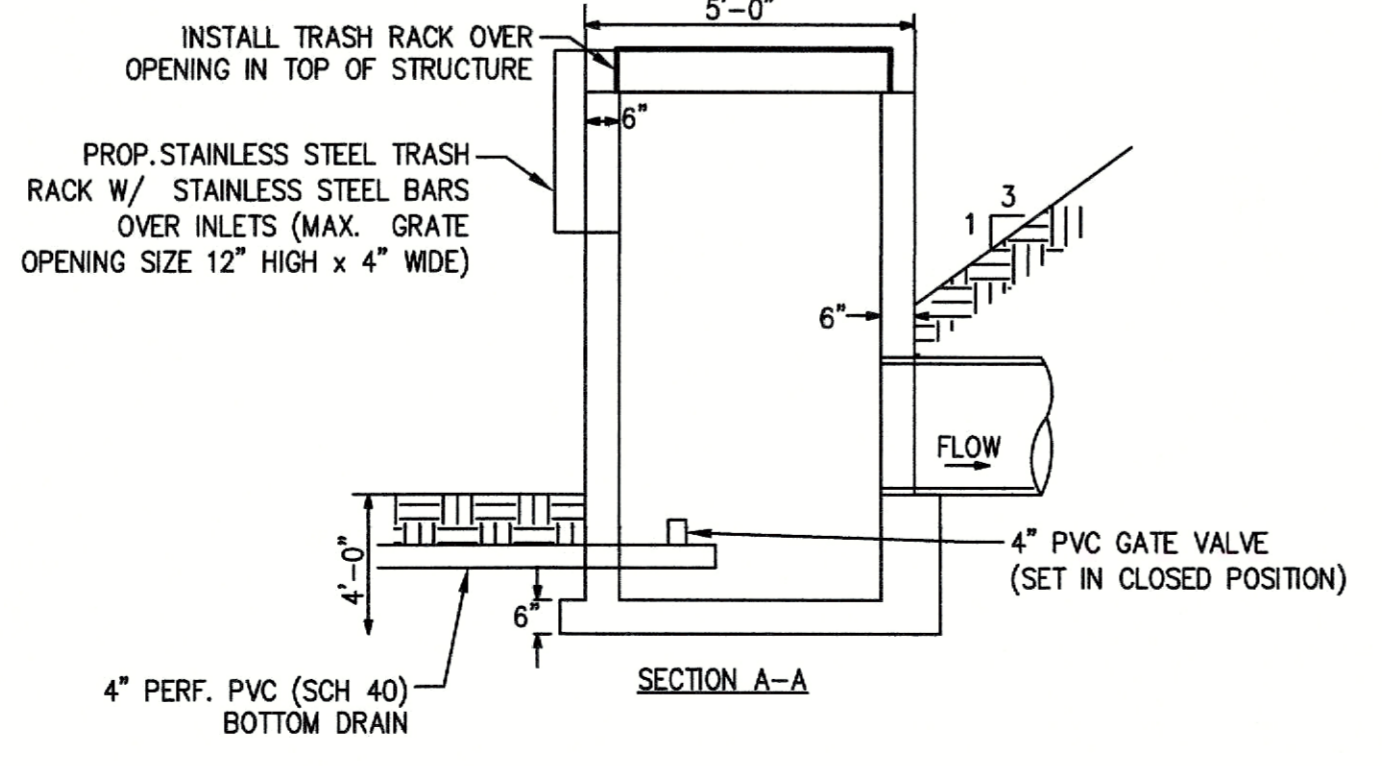
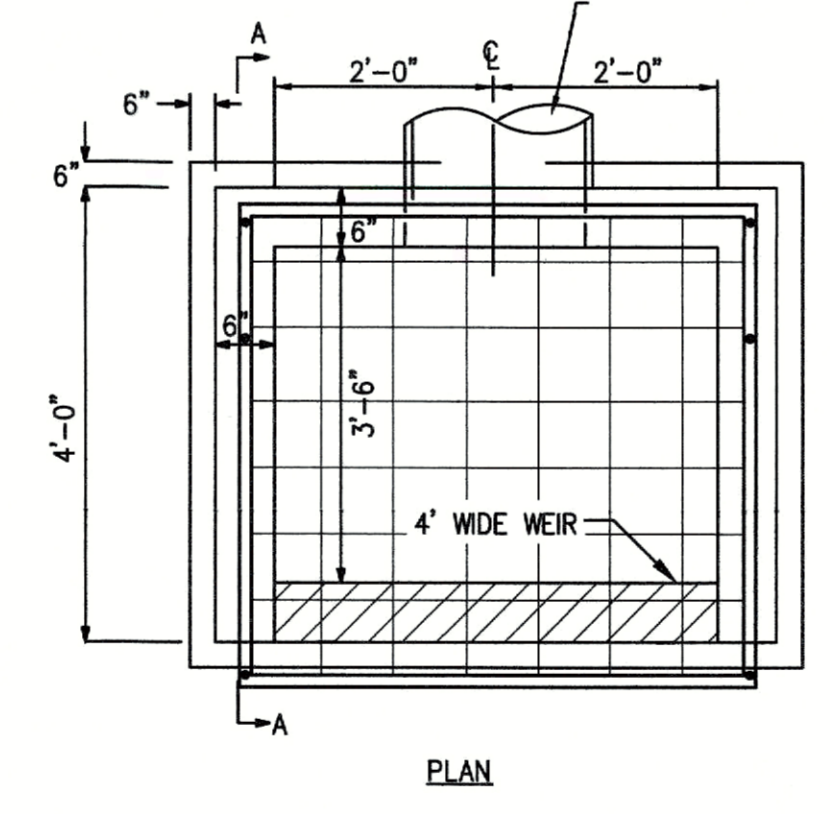
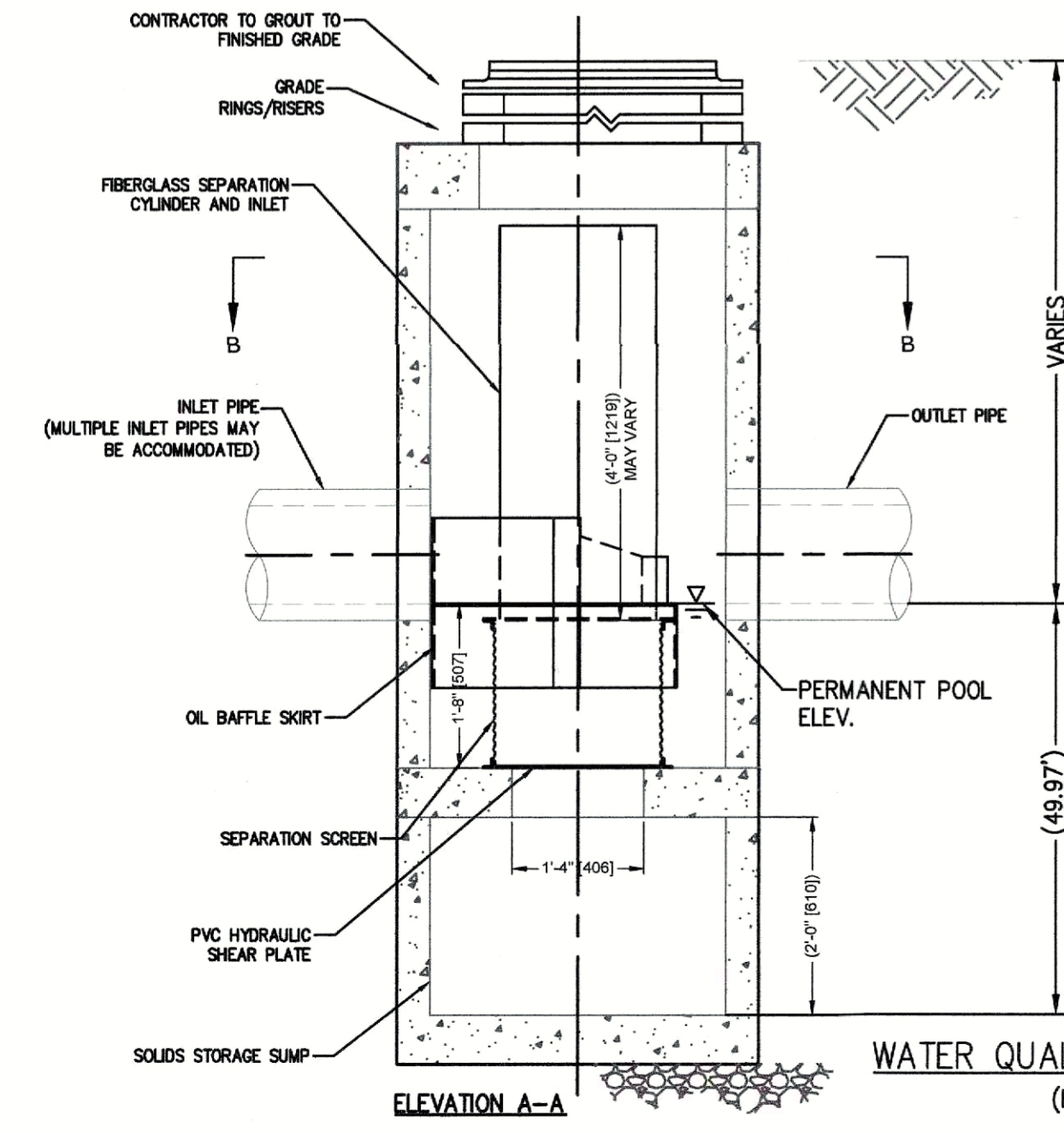


GENERAL NOTE:

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SEE DRAIN PIPE SCHEDULE ON PAGE C5.0 (GRADING & DRAINAGE PLAN) FOR INVERTS INFORMATION



OUTLET CONTROL STRUCTURE (OCS-1) (NOT TO SCALE)



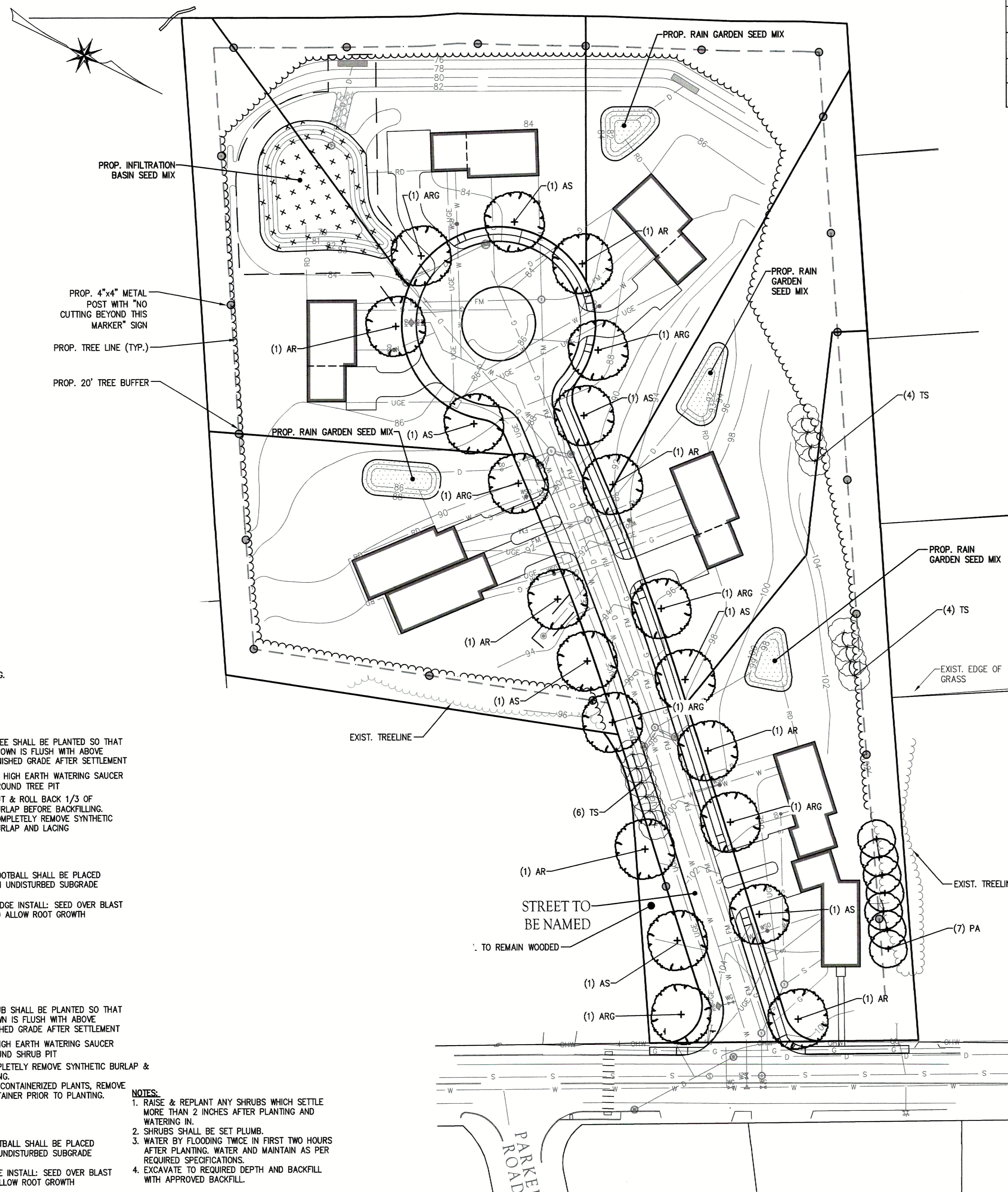
DEFINITIVE SUBDIVISION
FOR A
STREET TO BE NAMED
IN
GROVELAND, MASSACHUSETTS
AT
181R SCHOOL STREET
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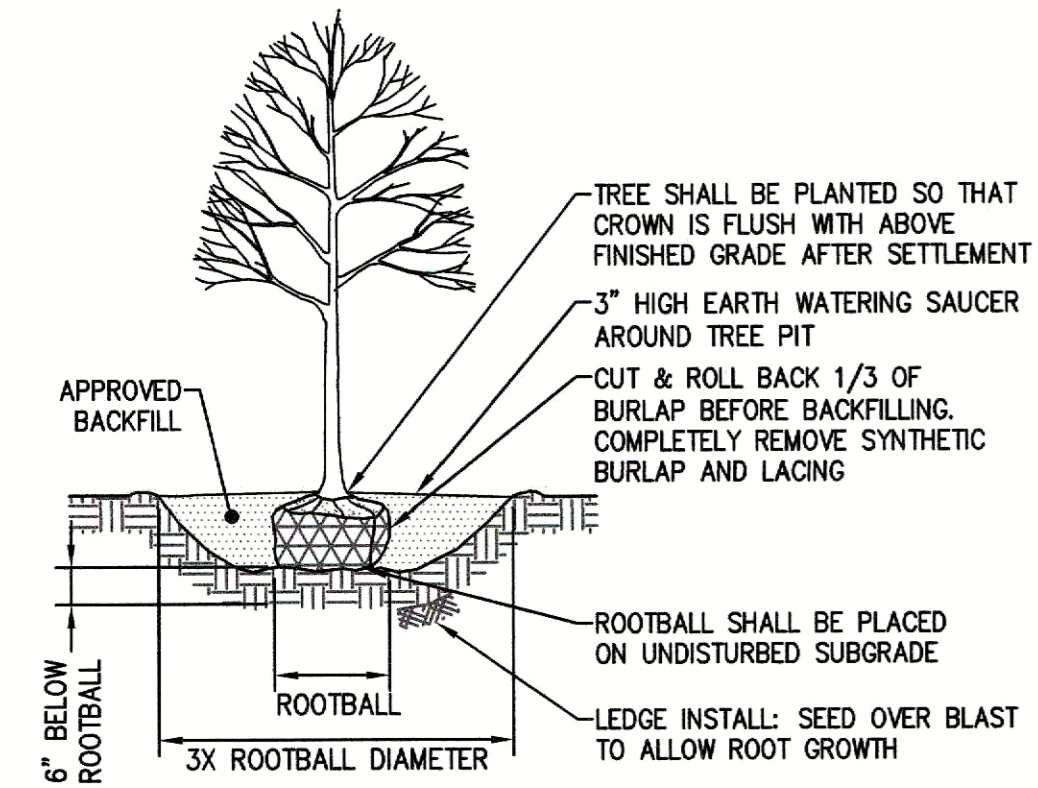
| REVISIONS | | | DRAWING NO. |
|-----------|-----------------|---------|-------------|
| NO. | DESCRIPTION | DATE | |
| 1 | PER PEER REVIEW | 11/5/24 | C-12 |
| | | | |

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I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

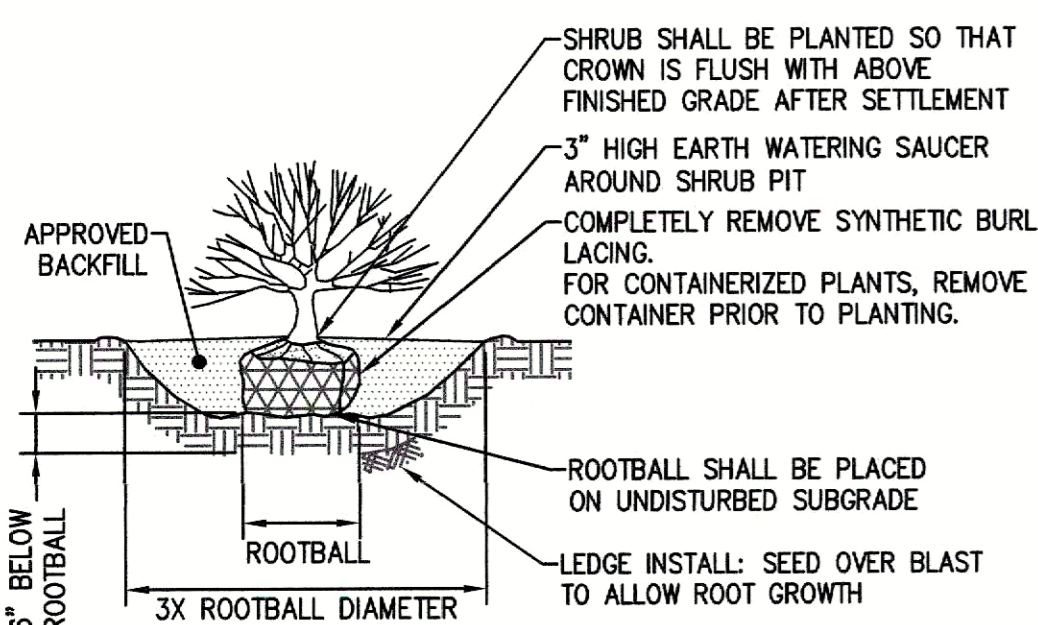
DATE _____



- NOTES:**
- DO NOT CUT LEADER.
 - TREE WRAP SHALL NOT BE USED.
 - TREE SHALL BE SET PLUMB.
 - WATERING SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING.



TREE PLANTING
(NOT TO SCALE)



SHRUB PLANTING
(NOT TO SCALE)

- NOTES:**
- RAISE & REPLANT ANY SHRUBS WHICH SETTLE MORE THAN 2 INCHES AFTER PLANTING AND WATERING IN.
 - SHRUBS SHALL BE SET PLUMB.
 - WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER AND MAINTAIN AS PER REQUIRED SPECIFICATIONS.
 - EXCAVATE TO REQUIRED DEPTH AND BACKFILL WITH APPROVED BACKFILL.

| PLANT SCHEDULE | | | | | |
|----------------|------------------|-------------------------|-----------------------------|--------------|----------|
| ABBREVIATION | COMMON NAME | SCIENTIFIC NAME | SIZE | SPACING | QUANTITY |
| AR | RED SUNSET MAPLE | <i>Acer rubrum</i> | 12' HEIGHT/3" CALIPER MIN. | 50'/AS SHOWN | 7 |
| ARG | OCTOBER GLORY | <i>Acer rubrum</i> | 12' HEIGHT/3" CALIPER MIN. | 50'/AS SHOWN | 7 |
| AS | SUGAR MAPLE | <i>Acer saccharum</i> | 12' HEIGHT/3" CALIPER MIN. | 50'/AS SHOWN | 7 |
| PA | NORWAY SPRUCE | <i>Picea abies</i> | 15' HEIGHT/ 3" CALIPER MIN. | 13'/AS SHOWN | 7 |
| TS | GREEN GIANT | <i>Thuja standishii</i> | 15' HEIGHT/ 3" CALIPER MIN. | 10'/AS SHOWN | 14 |

LANDSCAPING NOTES:

- LANDSCAPE DESIGN BY JARRET BASTYS, E.I.T., B.S.EnvE (ENVIRONMENTAL ENGINEERING & LANDSCAPE ARCHITECTURE).
- WHERE DISCREPANCIES OCCUR BETWEEN DRAWING AND PLANT NOTES OR SCHEDULE, DRAWINGS SHALL SUPERCEDE.
- PLANTS SHALL BE TRUE TO SPECIES AND VARIETY SPECIFIED AND NURSERY GROWN IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK UNDER CLIMATIC CONDITIONS SIMILAR THOSE IN THE LOCALITY OF THE PROGRAM.
- WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.
- CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATIONS, STRUCTURES AND PLANTING BEDS.
- PLANTS SHALL HAVE THE SAME RELATIONSHIP TO FINISHED GRADE AS ORIGINAL GRADES BEFORE INSTALLATION.
- PLANT MATERIALS AND TRANSPLANTING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN STANDARD OF NURSERY STOCK.
- ALL LANDSCAPED AREAS WITH SHRUBS AND TREES HAVE A MINIMUM OF 2' OF TOPSOIL. USE OF PEAT MOSS IS PROHIBITED.
- ALL LAWN AREAS HAVE A MINIMUM OF 6" OF TOPSOIL. USE OF PEAT MOSS IS PROHIBITED.
- ALL EXPOSED BURLAP, WIRE BASKETS, AND OTHER MATERIALS ATTACHED TO THE PLANTS SHALL BE REMOVED PRIOR TO PLANTING. CARE SHALL BE TAKEN NOT TO DISTURB THE ROOT BALL OF PALATES.
- NO IRRIGATION SYSTEM FOR THE RIGHT-OF-WAY IS PROPOSED.
- ALL PROPOSED PLANT SPECIES ARE NATIVE TO THIS REGION.
- EXACT PLANT PLACEMENT SHALL BE COORDINATED WITH FINAL LOT DESIGN. ADJUSTMENTS MAY BE NECESSARY BASED ON FINAL DRIVEWAY LOCATION OR UTILITY DESIGN.
- ALL WORK AND MATERIALS SHALL COMPLY WITH THE TOWN OF GROVELAND SUBDIVISION REGULATIONS §70-4.14 & §70-5.12.



Ernst Conservation Seeds
8884 Mercer Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Date: October 22, 2024

Retention Basin Floor Mix - Low Maintenance - ERNMX-126

| Botanical Name | Common Name |
|--|--------------------------------------|
| 20.00 % <i>Panicum clandestinum, Tioga</i> | Deertongue, Tioga |
| 20.00 % <i>Puccinellia distans, Fulls</i> | Alkaligrass, Fulls |
| 15.00 % <i>Elymus virginicus, Madison-NY Ecotype</i> | Virginia Wildrye, Madison-NY Ecotype |
| 15.00 % <i>Agrostis stolonifera, Penncross</i> | Creeping Bentgrass, Penncross |
| 15.00 % <i>Poa palustris</i> | Fowl Bluegrass |
| 10.00 % <i>Carex vulpinoidea, PA Ecotype</i> | Fox Sedge, PA Ecotype |
| 1.00 % <i>Carex scoparia, PA Ecotype</i> | Blunt Broom Sedge, PA Ecotype |
| 1.00 % <i>Juncus effusus</i> | Soft Rush |

100.00 %
Seeding Rate: 20-40 lbs per acre, or 0.5-1 lb/1,000 sq ft with a cover crop. For a cover crop use one of the following: grain rye (1 Sep to 30 Apr; 30 lbs/acre), Japanese millet (1 May to 31 Aug; 10 lbs/acre), or barnyard grass (1 May to 31 Aug; 10 lbs/acre).

Grasses & Grass-like Species - Herbaceous Perennial; Stormwater Management

The hardy inexpensive grass and grass-like species are ideal for retention basins that may have high salt inflows and where mowing may be required. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

INFILTRATION BASIN SEED MIX

Rain Garden Mix - ERNMX-180

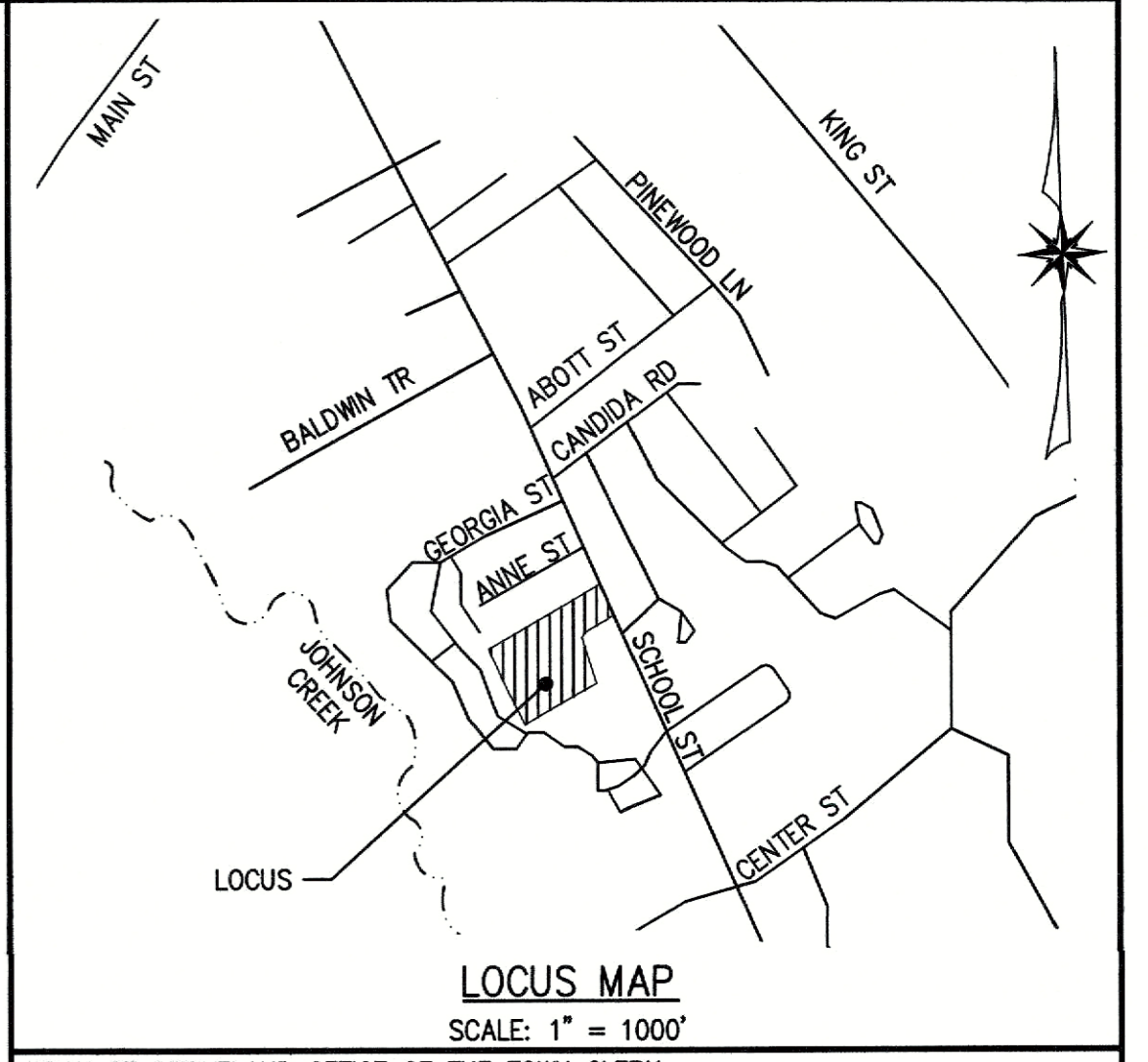
| Botanical Name | Common Name |
|--|---|
| 29.50 % <i>Schizachyrium scaparium, Fort Indiantown Gap-PA Ecotype</i> | Little Bluestem, Fort Indiantown Gap-PA Ecotype |
| 20.00 % <i>Elymus virginicus, Madison-NY Ecotype</i> | Virginia Wildrye, Madison-NY Ecotype |
| 9.00 % <i>Carex vulpinoidea, PA Ecotype</i> | Fox Sedge, PA Ecotype |
| 8.00 % <i>Echinacea purpurea</i> | Purple Coneflower |
| 5.80 % <i>Panicum rigidulum, PA Ecotype</i> | Redtop Panicgrass, PA Ecotype |
| 5.30 % <i>Chasmanthium latifolium, WV Ecotype</i> | River Oats, WV Ecotype |
| 3.00 % <i>Coreopsis lanceolata</i> | Lanceleaf Coreopsis |
| 3.00 % <i>Rudbeckia hirta</i> | Blackeyed Susan |
| 2.50 % <i>Verbena hastata, PA Ecotype</i> | Blue Vervain, PA Ecotype |
| 2.00 % <i>Panicum clandestinum, Tioga</i> | Deertongue, Tioga |
| 1.80 % <i>Helopsis helianthoides, PA Ecotype</i> | Oxeye Sunflower, PA Ecotype |
| 1.50 % <i>Asclepias incarnata, PA Ecotype</i> | Swamp Milkweed, PA Ecotype |
| 1.30 % <i>Penstemon digitalis, PA Ecotype</i> | Tall White Beardtongue, PA Ecotype |
| 1.00 % <i>Carex scoparia, PA Ecotype</i> | Blunt Broom Sedge, PA Ecotype |
| 1.00 % <i>Senna hebecarpa, VA & WV Ecotype</i> | Wild Senna, VA & WV Ecotype |
| 1.00 % <i>Zizia aurea, PA Ecotype</i> | Golden Alexanders, PA Ecotype |
| 0.50 % <i>Baylisia australis, Southern WV Ecotype</i> | Blue False Indigo, Southern WV Ecotype |
| 0.50 % <i>Juncus effusus</i> | Soft Rush |
| 0.50 % <i>Juncus tenuis, PA Ecotype</i> | Path Rush, PA Ecotype |
| 0.50 % <i>Pycnanthemum tenuifolium</i> | Narrowleaf Mountainmint |
| 0.50 % <i>Vernonia noveboracensis, PA Ecotype</i> | New York Ironweed, PA Ecotype |
| 0.40 % <i>Aster novae-angliae, PA Ecotype</i> | New England Aster, PA Ecotype |
| 0.40 % <i>Monarda fistulosa, Fort Indiantown Gap-PA Ecotype</i> | Wild Bergamot, Fort Indiantown Gap-PA Ecotype |
| 0.20 % <i>Aster proranthoides, PA Ecotype</i> | Zigzag Aster, PA Ecotype |
| 0.10 % <i>Aster lanceolatus</i> | Lance Leaved Aster |
| 0.10 % <i>Aster lateriflorus</i> | Calico Aster |
| 0.10 % <i>Aster pilosus, PA Ecotype</i> | Heath Aster, PA Ecotype |
| 0.10 % <i>Eupatorium perfoliatum, PA Ecotype</i> | Boneset, PA Ecotype |
| 0.10 % <i>Mimulus ringens, PA Ecotype</i> | Square Stemmed Monkeyflower, PA Ecotype |
| 0.10 % <i>Solidago juncea, PA Ecotype</i> | Early Goldenrod, PA Ecotype |
| 0.10 % <i>Solidago nemoralis, PA Ecotype</i> | Gray Goldenrod, PA Ecotype |
| 0.10 % <i>Solidago rugosa, PA Ecotype</i> | Wrinkleleaf Goldenrod, PA Ecotype |

100.00 %
Seeding Rate: 20 lb per acre with a cover crop. For sites that drain within 24 hours of a rain event use one of the following cover crops: Oats (1 Jan to 31 Jul; 30 lbs/acre), Japanese Millet (1 May to 31 Aug; 10 lbs/acre), or grain rye (1 Aug to 31 Dec; 30 lbs/acre).

Grasses & Grass-like Species - Herbaceous Perennial; Herbaceous Flowering Species - Herbaceous Perennial; Stormwater Management; Uplands & Meadows

The native perennial forbs and grasses provide food and cover for rain garden biodiversity. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

RAIN GARDEN SEED MIX



LOCUS MAP
SCALE: 1" = 1000'
TOWN OF GROVELAND OFFICE OF THE TOWN CLERK

THIS IS TO CERTIFY THAT ON _____ I RECEIVED FROM THE GROVELAND PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE TWENTY (20) DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK _____ DATE _____
APPROVED UNDER SUBDIVISION CONTROL LAW M.G.L. CHAPT. 141 SEC. 81U
DATE: _____
APPROVED BY: _____

APPROVED _____ SUBJECT TO TERMS AND CONDITIONS STATED IN A MEMORANDUM OF DECISION DATED _____ BETWEEN THE GROVELAND PLANNING BOARD, ON BEHALF OF THE TOWN OF GROVELAND, _____ A COPY OF WHICH DECISION IS RECORDED HEREWIT AND SUBJECT ALSO TO RECORDING OF THIS PLAN AND SAID DECISION IN THE SOUTH ESSEX REGISTRY OF DEED ON OR BEFORE _____ SUBJECT TO TERMS AND CONDITIONS OF A COVENANT DATED _____ GROVELAND PLANNING BOARD.



DEFINITIVE SUBDIVISION
FOR A
STREET TO BE NAMED
IN
GROVELAND, MASSACHUSETTS
AT
181R SCHOOL STREET
(GROVELAND ASSESSOR'S MAP 34 LOT 13)
PREPARED FOR/APPLICANT:
GROVELAND REDEVELOPMENT, LLC
231 SUTTON STREET, SUITE 1B
NORTH ANDOVER, MA 01845
OWNER:
181R SCHOOL STREET, LLC
5 ATKINSON FARM ROAD
ATKINSON, NH 03811
JULY 31, 2024

The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 KENZO AVENUE, MASSACHUSETTS 01830
P: 978-373-0310, W: WWW.MORINCAMERON.COM

| REVISIONS | | | LANDSCAPE PLAN | DRAWING NO. L-1 |
|-----------|-----------------|---------|----------------|-----------------|
| NO. | DESCRIPTION | DATE | | |
| 1 | PER PEER REVIEW | 11/5/24 | | |