

DEFINITIVE RESIDENTIAL SUBDIVISION PLAN

FIVE PATHS

ASSESSORS MAP #39 PARCEL 15A

WAYLAND, MA

SITE DATA

LOT AREA: 13.74± AC. (598,679 ±SF)
WATER SUPPLY: MUNICIPAL
SEWAGE DISPOSAL: INDIVIDUAL ONSITE SEWAGE DISPOSAL SYSTEMS

ASSESSORS REFERENCE

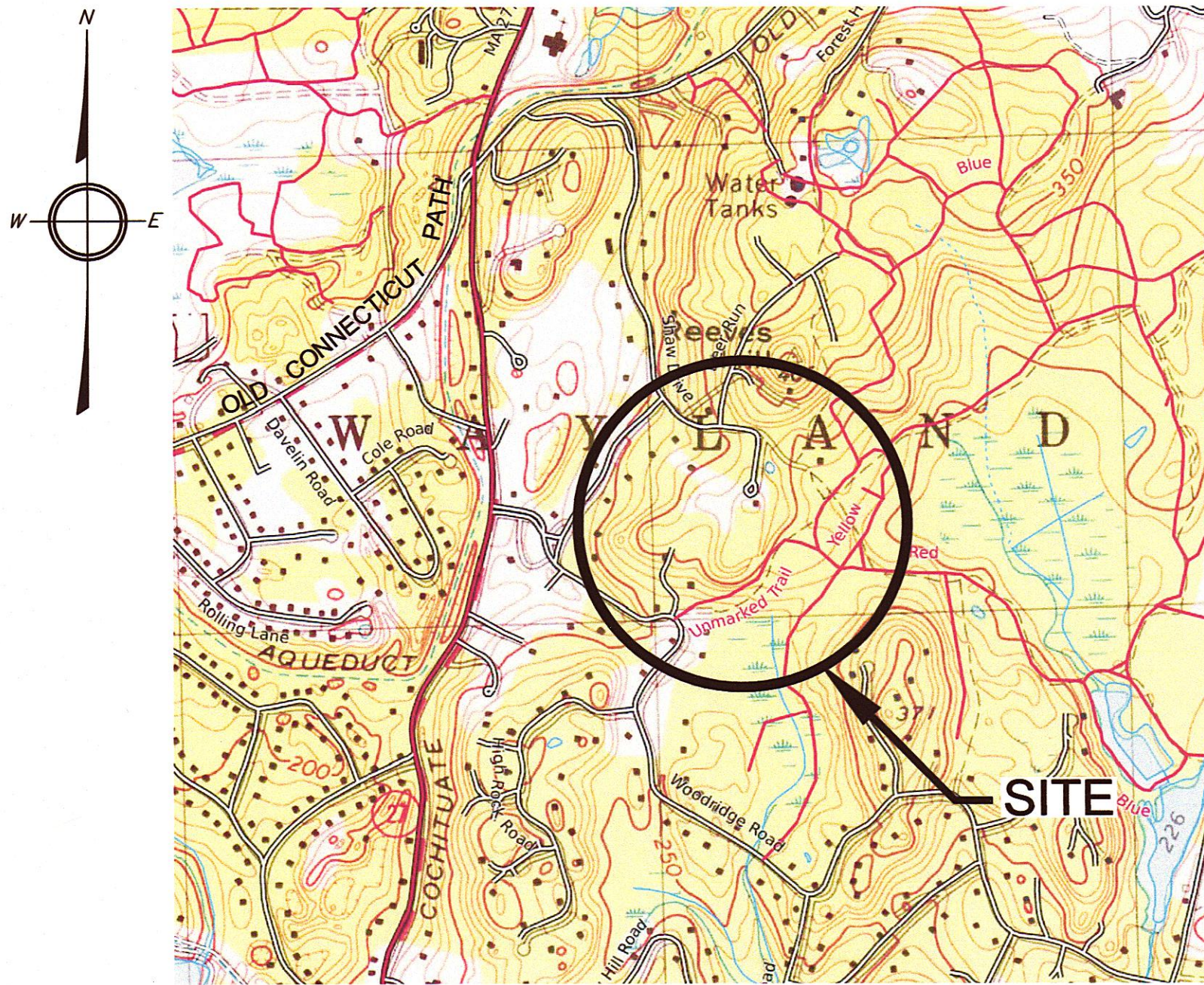
ASSESSORS MAP 39, PARCEL ID 15A
OWNER: W. FLOYD & PAULA D. WILKINSON
SUBDIVISION: LOT 1, 2, 3, REMAINING LAND OF PARCEL 15A & FIVE PATHS COURT RIGHT-OF-WAY

GENERAL NOTES

- LOCATIONS OF EXISTING UNDERGROUND UTILITIES/OBSTRUCTIONS/SYSTEMS SHOWN HEREON ARE APPROXIMATE ONLY. ALL UTILITIES/OBSTRUCTIONS/SYSTEMS MAY NOT BE SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES/OBSTRUCTIONS/SYSTEMS, WHETHER OR NOT SHOWN HEREON.
- UNLESS OTHERWISE SHOWN, ALL NEW UTILITIES SHALL BE UNDERGROUND.
- BURIED UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THEIR RESPECTIVE COMPANY SPECIFICATIONS.
- CONSTRUCTION LAYOUT OF BUILDING AND SITE IMPROVEMENTS SHALL BE PERFORMED BY A LICENSED PROFESSIONAL LAND SURVEYOR. LOCATIONS OF EXISTING FEATURES OR PROPOSED IMPROVEMENTS DERIVED BY SCALING DRAWINGS MAY NOT BE ACCURATE. PROPERTY LINES SHOWN HEREON ARE APPROXIMATE. SEE PLAN REFERENCE HEREON.
- SAFETY MEASURES, CONSTRUCTION METHODS, AND CONTROL OF WORK SHALL BE RESPONSIBILITY OF CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ANY EXISTING UTILITY OR STRUCTURE DAMAGED DURING CONSTRUCTION THAT ARE NOT DESIGNATED FOR DEMOLITION AND/OR REMOVAL HEREON. DAMAGED UTILITY OR STRUCTURE SHALL BE REPAIRED TO THE SATISFACTION OF THEIR RESPECTIVE OWNERS.
- ANY INTENDED REVISION OF THE HORIZONTAL AND/OR VERTICAL LOCATION OF IMPROVEMENTS TO BE CONSTRUCTED AS SHOWN HEREON SHALL BE REVIEWED AND APPROVED BY ENGINEER PRIOR TO IMPLEMENTATION.
- CONTRACTOR SHALL NOTIFY ENGINEER UPON COMMENCEMENT OF CONSTRUCTION IN ORDER TO ENSURE THAT REQUIRED INSPECTIONS ARE PERFORMED IN A TIMELY AND EFFICIENT MANNER.
- CONTRACTOR SHALL PROMPTLY NOTIFY ENGINEER UPON DISCOVERY OF ANY UNFORESEEN SURFACE OR SUBSURFACE CONDITIONS THAT MAY IMPACT SITE CONSTRUCTION.
- FINISH RIM ELEVATIONS SHOULD MATCH PAVEMENT, GRADING OR LANDSCAPING, UNLESS SPECIFICALLY INDICATED OTHERWISE.
- WHERE EXISTING UTILITY LINES/STRUCTURES ARE TO BE CUT/BROKEN DOWN/ABANDONED, LINES/STRUCTURES SHALL BE PLUGGED/CAPPED/FILLED IN ACCORDANCE WITH UTILITY OWNER REQUIREMENTS.
- EROSION CONTROL MEASURES, SUCH AS SILT FENCE OR STRAW BALES AS MAY BE SHOWN HEREON, SHALL BE INSTALLED BEFORE EARTH DISTURBANCE OCCURS WITHIN BUFFER ZONE, AND SHALL SERVE AS THE LIMIT OF WORK.
- WHERE THE WORD "INSTALL" IS USED HEREIN, IT IS INTENDED TO DIRECT CONTRACTOR TO "FURNISH, INSTALL, AND PLACE IN OPERATION" THE COMPONENT REFERRED TO.
- ALL STORM DRAIN PIPE TO BE SMOOTH INTERIOR HDP PIPE, 2.0 PSI GASKETED JOINT, UNLESS OTHERWISE NOTED.
- WHERE SHOWN, CONSTRUCTION NOTES ARE INTENDED TO SUMMARIZE AND CLARIFY MAJOR ITEMS OF WORK. THESE NOTES SHOULD NOT BE CONSTRUED AS AN EXHAUSTIVE LISTING OF ALL WORK REQUIRED. CONTRACTOR SHOULD CONTACT ENGINEER WHEN FURTHER CLARIFICATION OF DEPICTED WORK IS DESIRED.
- CONSTRUCTION OF FIRE AND DOMESTIC WATER SUPPLY IMPROVEMENTS SHALL CONFORM TO TOWN OF WAYLAND REQUIREMENTS.
- WHERE DIMENSIONS INVOLVE CURB, DIMENSIONS ARE TO FACE OF CURB. WHERE SLOPED GRANITE CURB OR CAPE COD BERM SPECIFIED, FACE OF CURB IS EDGE OF FINISH PAVEMENT AT TOE OF CURB.
- NO DEBRIS, JUNK, RUBBISH OR OTHER NON-BIODEGRADABLE MATERIALS, FILL CONTAINING HAZARDOUS MATERIALS OR WASTES, OR STUMPS SHALL BE BURIED ON ANY LAND ON THIS SITE, OR LEFT ON ANY LOT OR ON THE STREET RIGHT OF WAY.
- EXISTING CONDITION INFORMATION BASED ON AN ON-THE-GROUND TOPOGRAPHIC AND BOUNDARY SURVEY PERFORMED BY GOLDSMITH, PREST & RINGWALL, INC. IN MAY AND JULY 2019.
- FIRE BOXES TO BE PROVIDED AS REQUIRED BY THE TOWN OF WAYLAND FIRE DEPARTMENT.

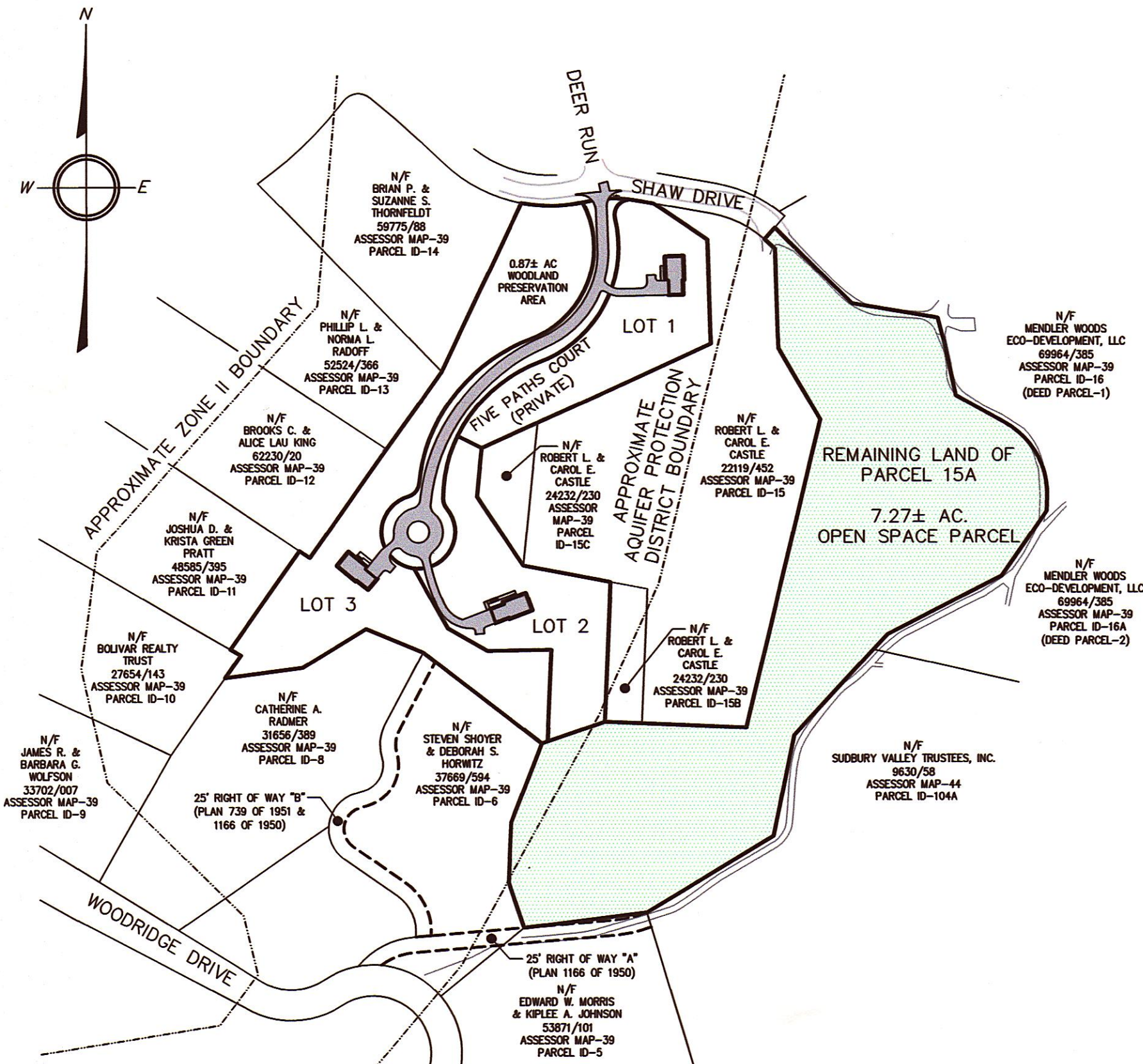
REGULATORY NOTES

- CONTRACTOR SHALL CONTACT DIG-SAFE FOR UNDERGROUND UTILITY MARKING AT 888.344.7233 AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL GIVE TWENTY-FOUR (24)-HOUR NOTICE TO PERTINENT TOWN DEPARTMENTS BEFORE COMMENCING ANY WORK IN THE FIELD.
- CONTRACTOR SHALL COORDINATE AND OBTAIN ALL CONSTRUCTION PERMITS REQUIRED BY REGULATORY AUTHORITIES.
- CONTRACTOR SHALL BE AWARE OF ALL CONSTRUCTION REQUIREMENTS, CONDITIONS, AND LIMITATIONS IMPOSED BY PERMITS AND APPROVALS ISSUED BY REGULATORY AUTHORITIES PRIOR TO COMMENCEMENT OF ANY WORK.
- GENERAL COMPLIANCE WITH 28 CFR PART 36 - 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND 521 CMR PART C, EXTERIOR OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS IS INTENDED. CONTRACTOR SHALL VERIFY COMPLIANCE DURING CONSTRUCTION AND SHALL NOTIFY THE OWNER OF ANY NON-COMPLIANCE ISSUES AS SOON AS DISCOVERED.



KEY PLAN

SCALE: 1" = 1000' ±



INDEX PLAN

SCALE: 1" = 200'

ZONING

Parameter	Section [1]	Required	Proposed
Zoning District	Zoning Map	R-60 (60,000 sf lots)	Complies
Overlay District	Overlay Map	Aquifer Protection	Project partially located in overlay district and complies with overlay district requirements.
Proposed Use	198-1603.1 (4)	Residential	Allowed
Lot Area [see Note 2]	198 Attachment 1	60,000 SF	Complies
Frontage [see Note 2]	198 Attachment 1	210 FT	Complies
Lot Width [see Note 2]	198-705.1.8	100 Ft circle	Complies
Wetlands Setback	—	None on site	N/A
MDEP Riverfront Area	—	None on site	N/A
FEMA Floodplain	—	None on site	N/A
ACEC	—	None on site	N/A
Zone 1 Protective Radius	—	None on site	N/A
Mapped Zone 2	—	None on site	N/A
IWPA	—	None on site	N/A

NOTES:

- [1] Reference to section of Town of Wayland Zoning Bylaw as adopted on April 29, 2019.
[2] Residence Zone 60,000 square feet - 210 feet frontage, no building lot may be laid out and no dwelling may be erected on a lot unless the center of a circle 100 feet in diameter can be passed along a continuous line from the side line of the street along which the frontage of the lot is measured to any point of the dwelling, or proposed dwelling, on the lot without the circumference intersecting any side lot lines.

ABBREVIATIONS:

SF=square feet; CF=cubic feet; FT=feet; GFA=gross floor area; AC=acres; PB=Planning Board; ZBA=Zoning Board of Appeals; IWPA=interim wellhead protection area; ACEC=Area of Critical Environmental Concern; FIRM=Flood Insurance Rate Map; MDEP=Massachusetts Dept of Environmental Protection

REFERENCES

- "SUBSURFACE SEWAGE DISPOSAL SYSTEM - NEW CONSTRUCTION - FIVE PATHS COURT, WAYLAND, MA" PREPARED FOR ROSS C. WILKINSON, AND ESTATE OF PAULA D. WILKINSON BY GOLDSMITH, PREST & RINGWALL, INC. DATED OCTOBER 2020, JOB NO. 171053.
- "CERTIFICATION OF PLANNING BOARD ACTION ON FIVE PATHS RESIDENTIAL SUBDIVISION MEMO, MAP 39, PARCEL 039-15A" AS ISSUED BY THE TOWN OF WAYLAND PLANNING DEPARTMENT, DATED SEPTEMBER 17, 2020.

APPROVED WAIVERS

(SEE REFERENCE NO. 2)

(FROM THE "THE TOWN OF WAYLAND MASSACHUSETTS SUBDIVISION RULES AND REGULATIONS," ADOPTED OCTOBER, 1968, REVISED SEPTEMBER 4, 2001 AND AUGUST 18, 2015, AS ALLOWED PER SECTION V(8))

SECTION IV.B.1.D: DESIGN STANDARDS - STREETS - LOCATION AND ALIGNMENT

REQUIREMENT: A MINIMUM SEPARATION OF FIFTY (50) FEET FROM THE SUBDIVISION BOUNDARY TO THE RIGHT-OF-WAY.

GRANTED: ALLOW A MINIMUM SEPARATION OF 38.7± FEET AND 43.9± FEET BETWEEN THE RIGHT OF WAY AND RESPECTIVELY, THE WESTERLY AND EASTERLY SUBDIVISION BOUNDARIES.

REQUIREMENT: NO DEAD-END STREET SHALL BE MORE THAN SIX HUNDRED NINETY (690) FEET IN LENGTH, AS MEASURED ALONG ITS CENTER LINE FROM ITS INTERSECTION WITH THE SIDELINE OF THE RIGHT-OF-WAY OF THE THROUGH STREET TO THE CENTER POINT OF THE CIRCULAR TURN-AROUND (MAKING THE OVERALL LENGTH NO MORE THAN SEVEN HUNDRED FIFTY (750) FEET).

GRANTED: ALLOW FIVE PATHS COURT DEAD-END STREET RIGHT-OF-WAY CENTERLINE LENGTH OF 1,135± FROM SIDELINE OF FOX MEADOW DRIVE (NEAREST THROUGH STREET) TO CUL-DE-SAC CENTERPOINT, FOR OVERALL LENGTH OF 1,195±.

SECTION V.B.2.A: REQUIRED IMPROVEMENTS - ROADWAY

REQUIREMENT: EACH STREET OR PORTION THEREOF NECESSARY TO SERVE EACH LOT IN A SUBDIVISION SHALL BE CONSTRUCTED AND BROUGHT TO FINISH GRADE AS INDICATED ON THE APPROVED DEFINITIVE PLAN AND IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.

GRANTED: ALLOW THE CONSTRUCTION OF A DRIVEWAY INSTEAD OF A SUBDIVISION STREET, WITHIN THE RIGHT-OF-WAY SHOWN IN THE APPROVED DEFINITIVE PLAN.

SECTION IV.B.2: DESIGN STANDARDS - STREETS - RIGHT OF WAY WIDTH AND STREET DESIGN STANDARDS

REQUIREMENT: MINIMUM 290' RADIUS OF CURVE FOR LIMITED RESIDENTIAL STREETS.

GRANTED: ALLOW 18-FOOT WIDE PAVEMENT PLUS 2-FOOT GRAVEL SHOULDER ON ONE SIDE, AND 160-FOOT RADIUS OF CURVATURE FOR FIVE PATHS COURT RIGHT-OF-WAY.

SECTION IV.B.1.C: DESIGN STANDARDS - STREETS - LOCATION AND ALIGNMENT

REQUIREMENT: A MINIMUM 200-FOOT LENGTH TANGENT SHALL BE PROVIDED BETWEEN THE POINT OF TANGENCY (PT, THE END) OF ONE CURVE AND THE POINT OF CURVATURE (PC, THE BEGINNING) OF ANY FOLLOWING CURVE.

GRANTED: ALLOW NO TANGENT BETWEEN CURVES.

SHEET INDEX

- C1.1 TITLE SHEET
C2.1 EXISTING CONDITIONS
C3.1 LOTTING PLAN
C4.1 LAND DISTURBANCE PLAN
C4.2 SITE LAYOUT AND UTILITIES PLAN
C4.3 GRADING AND PAVING PLAN
C4.4 DRAINAGE PLAN
C4.5 SITE STABILIZATION PLAN
C5.1 ROADWAY PLAN AND PROFILES
C6.1 EROSION AND SEDIMENT CONTROL PLAN
C7.1 CONSTRUCTION DETAILS
C7.2 CONSTRUCTION DETAILS

APPROVED BY THE
WAYLAND PLANNING BOARD

CHAIR
APPLICATION FILED 7-26-19
HEARING DATE
PLAN APPROVED 9-15-20

12-11-2020

DRAWING ISSUED FOR:

- ☐ CONCEPT ☐ CONSTRUCTION
☒ PERMIT ☐ CONSTRUCTION RECORD

THIS DRAWING MAY NOT SHOW CONSTRUCTION DETAILS AND SPECIFICATIONS FOR ALL PROPOSED IMPROVEMENTS, AND MAY NOT IDENTIFY ALL CONSTRUCTION WORK ITEMS/AREAS OF CONTRACTOR JURISDICTION.

PER 250 CMR 5.03(13), THE FOLLOWING ARE EXCLUDED FROM THE PROFESSIONAL ENGINEER'S RESPONSIBILITY: ALL BOUNDARY INFORMATION; LOCATION OF EXISTING STRUCTURES, TREES, UTILITIES, TOPOGRAPHY OR SIMILAR FEATURES; DESIGN OF RETAINING WALLS, PROPRIETARY EQUIPMENT. SEE GENERAL NOTES #19.

NO.	DATE	BY	APP.	REVISION DESCRIPTION
2	11/30/20	LT/KFB	KFB	DRIVEWAY TURNAROUND REVISION
1	7/14/20	LT/KFB	KFB	DRIVEWAY/DRAINAGE COMMENTS

GPR

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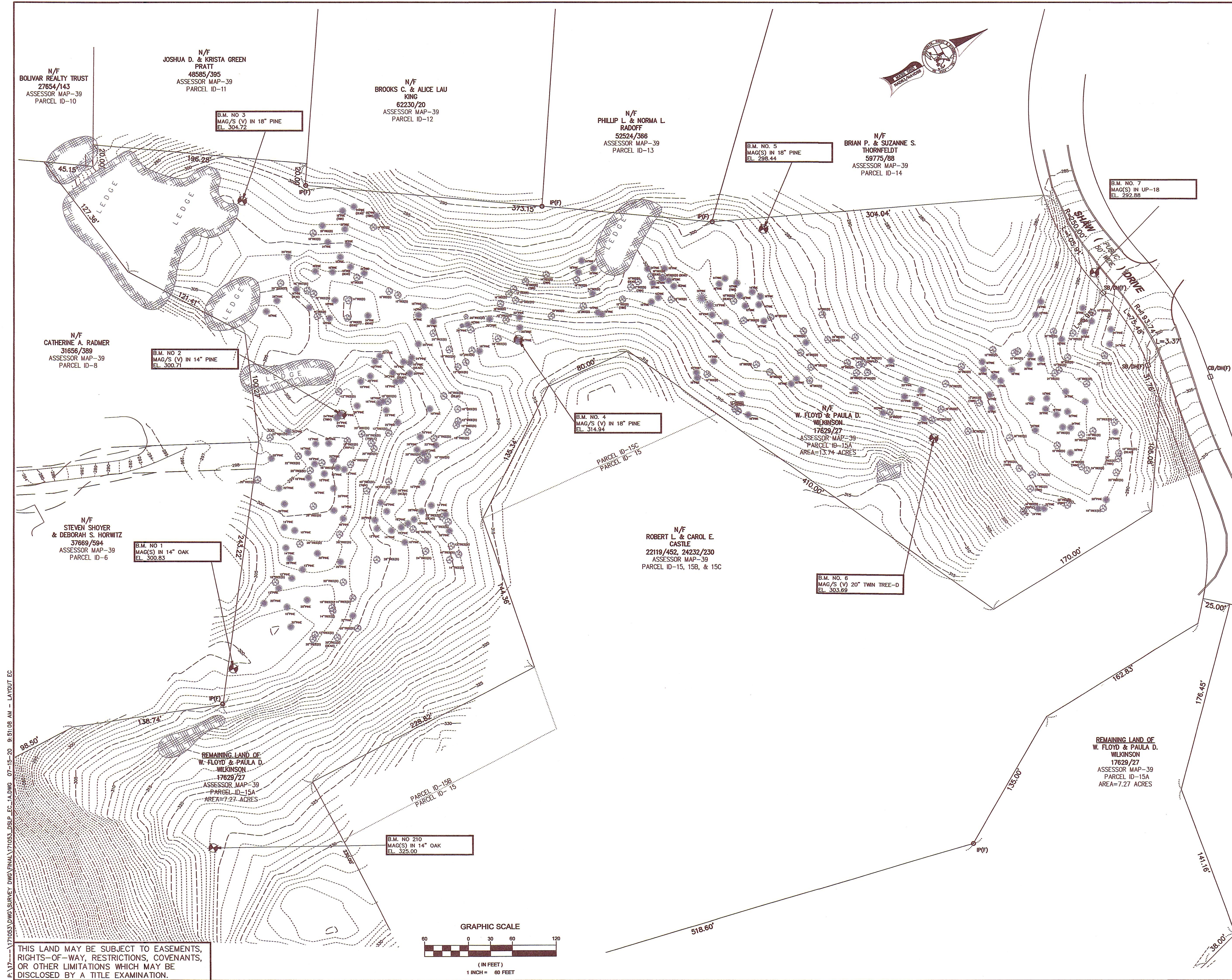
RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN

TITLE SHEET

FIVE PATHS
ASSESSORS MAP #39 PARCEL 15A
WAYLAND, MA

RECORD OWNER & APPLICANT:
ROSS C. WILKINSON, PERSONAL REPRESENTATIVE,
ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03086

DES. BY: KFB	DATE: JULY 2019	JOB 171053	C1.1
CHK. BY: NMP			



ELEVATION DATUM

DATUM: NAVD 88

- B.M. NO.1
- TREE-CONIFEROUS (10">)
- TREE-DECIDUOUS (10">)
- (SEE NOTE 3)

GENERAL/SURVEY NOTES:

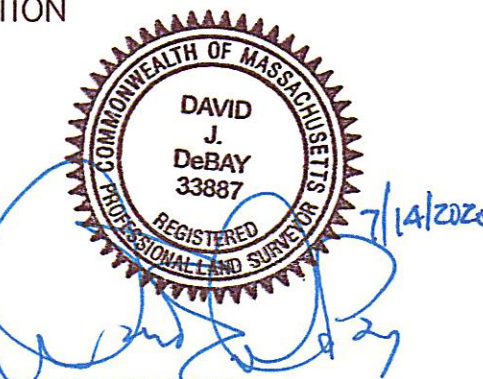
- EXISTING CONDITION INFORMATION BASED ON AN ON-THE-GROUND TOPOGRAPHIC AND BOUNDARY SURVEY PERFORMED BY GOLDSMITH, PREST & RINGWALL, INC. BETWEEN MAY 2018 TO JULY 2019, WITH TREE LOCATION UPDATES MADE DURING YEAR 2020.
- SEE SHEET C3.1 FOR ADDITIONAL NOTES & REFERENCES.
- THE TREE SURVEY, AS IDENTIFIED HEREON, IS NOT TO BE CONSIDERED COMPLETE FOR MAPPING COVERAGE OF ALL TREES LOCATED ON THE SUBJECT PROPERTY, AND HAS BEEN LIMITED TO MAPPING WITHIN DEVELOPMENT LIMIT OF DISTURBANCE.

ASSESSORS REFERENCE:

ASSESSORS MAP 39, LOT 15A, (13.74 ACRES)

DRAWING ISSUED FOR:

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- ☐ CONSTRUCTION
- ☒ PERMIT
- ☐ CONSTRUCTION RECORD



NO.	DATE	BY	APP.	REVISION DESCRIPTION
2	11/30/20	—	—	NO CHANGES ON THIS SHEET
1	7/14/20	DSB	KB	ADDITIONAL TREE LOCATIONS ADDED

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**RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN**

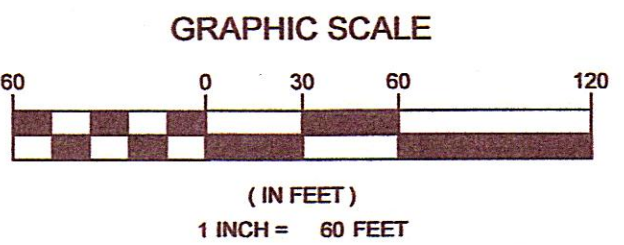
EXISTING CONDITION PLAN

**FIVE PATHS
ASSESSORS MAP 39 – PARCEL 15A
WAYLAND, MA**

RECORD OWNER & APPLICANT:
ROSS C. WILKINSON, PERSONAL REPRESENTATIVE
ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03086

DESIGN: MPB/KFB	DATE: JULY 2019	JOB 171053	C2.1
SURVEY: AMB			
CALC.BY: DSB			

THIS LAND MAY BE SUBJECT TO EASEMENTS,
RIGHTS-OF-WAY, RESTRICTIONS, COVENANTS,
OR OTHER LIMITATIONS WHICH MAY BE
DISCLOSED BY A TITLE EXAMINATION.



P:17-171053.DWG SURVEY DWS FINAL 171053.DSW EC 14.DWG 07-15-20 9:51:08 AM - LAYOUT EC

2020 © COPYRIGHT GOLDSMITH, PREST & RINGWALL, INC.

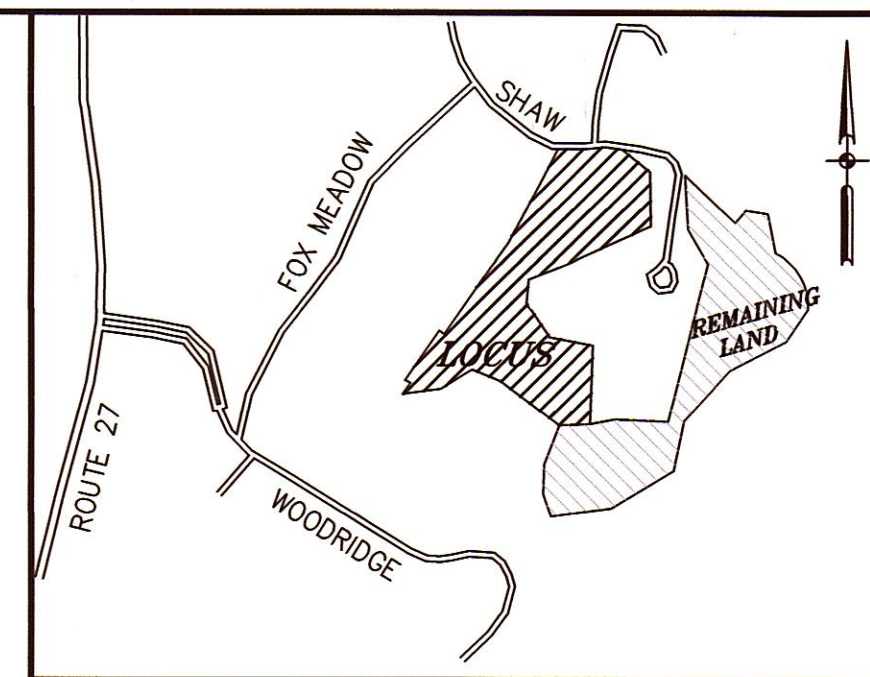
- PLANS ON FILE AT THE MIDDLESEX SOUTH DISTRICT REGISTRY OF DEEDS
- 2) PLAN 82 OF 1994
 - 3) PLAN 471 OF 1992
 - 4) PLAN 1186 OF 1969
 - 5) PLAN 1625 OF 1955
 - 6) PLAN 451 OF 1951
 - 7) PLAN 739 OF 1951
 - 8) PLAN 740 OF 1951
 - 9) PLAN 2026 OF 1950
 - 10) PLAN 1166 OF 1950
 - 11) PLAN 830 OF 1950

PLAN REFERENCES:

1) UNRECORDED PLAN TITLED: "PERIMETER PLAN, WILKINSON PROPERTY, 57R SHAW DRIVE, WAYLAND, MA 01778" PREPARED BY COLER & COLANTONIO, DATED: JULY 11, 2000.

NOTES:

- 1) BASIS OF BEARINGS SHOWN ARE REFERENCE TO MASS MAINLAND GRID, OBTAINED BY GPS MEASUREMENTS BY THIS OFFICE.
- 2) ZONING DISTRICT: SINGLE RESIDENTIAL



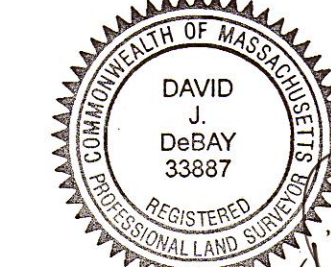
LOCUS MAP ~ NOT TO SCALE

LEGEND

N/F	NOW OR FORMERLY	CTR	CENTER
1111/111	DEED BOOK/PAGE	DH	DRILL HOLE
(F)	FOUND	○	PIPE/ROD
(S)	SET	□	STONE BOUND
IP	IRON/STEEL PIPE	⊙	DRILL HOLE
SB	STONE BOUND	⊗	STONE WALL
HOA	HOME OWNERS ASSOCIATION		

THE ACTUAL SURVEY OF BOUNDARY LINES OF THIS TRACT OF LAND WAS MADE ON THE GROUND IN ACCORDANCE WITH THE BOARD OF REGISTRATION OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS (SEE 250CMR 6.00, PROCEDURAL AND TECHNICAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING).

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS.



DAVID J. DeBAY, PLS# 33887

11/30/2020

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- ☐ CONCEPT ☐ CONSTRUCTION
☒ PERMIT ☐ CONSTRUCTION RECORD

NO.	DATE	BY	APP.	REVISION DESCRIPTION
2	11/30/20	DSB	KB	PRESERVATION AREAS
1	7/14/20	DSB	DJD	DRIVEWAY/DRAINAGE COMMENTS

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RESIDENTIAL SUBDIVISION DEFINITIVE PLAN

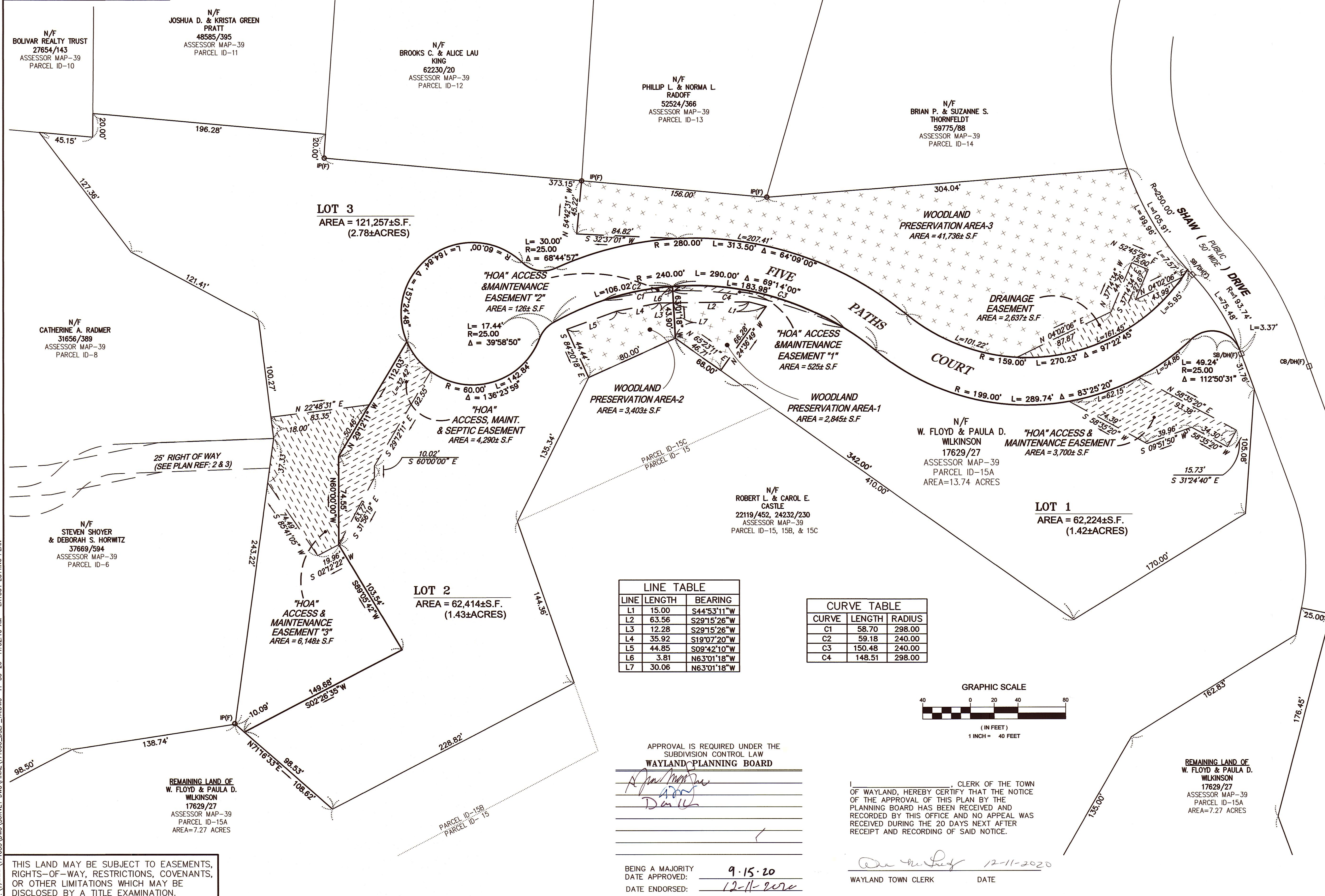
LOTING PLAN

**FIVE PATHS
ASSESSORS MAP 39 - PARCEL 15A
WAYLAND, MA**

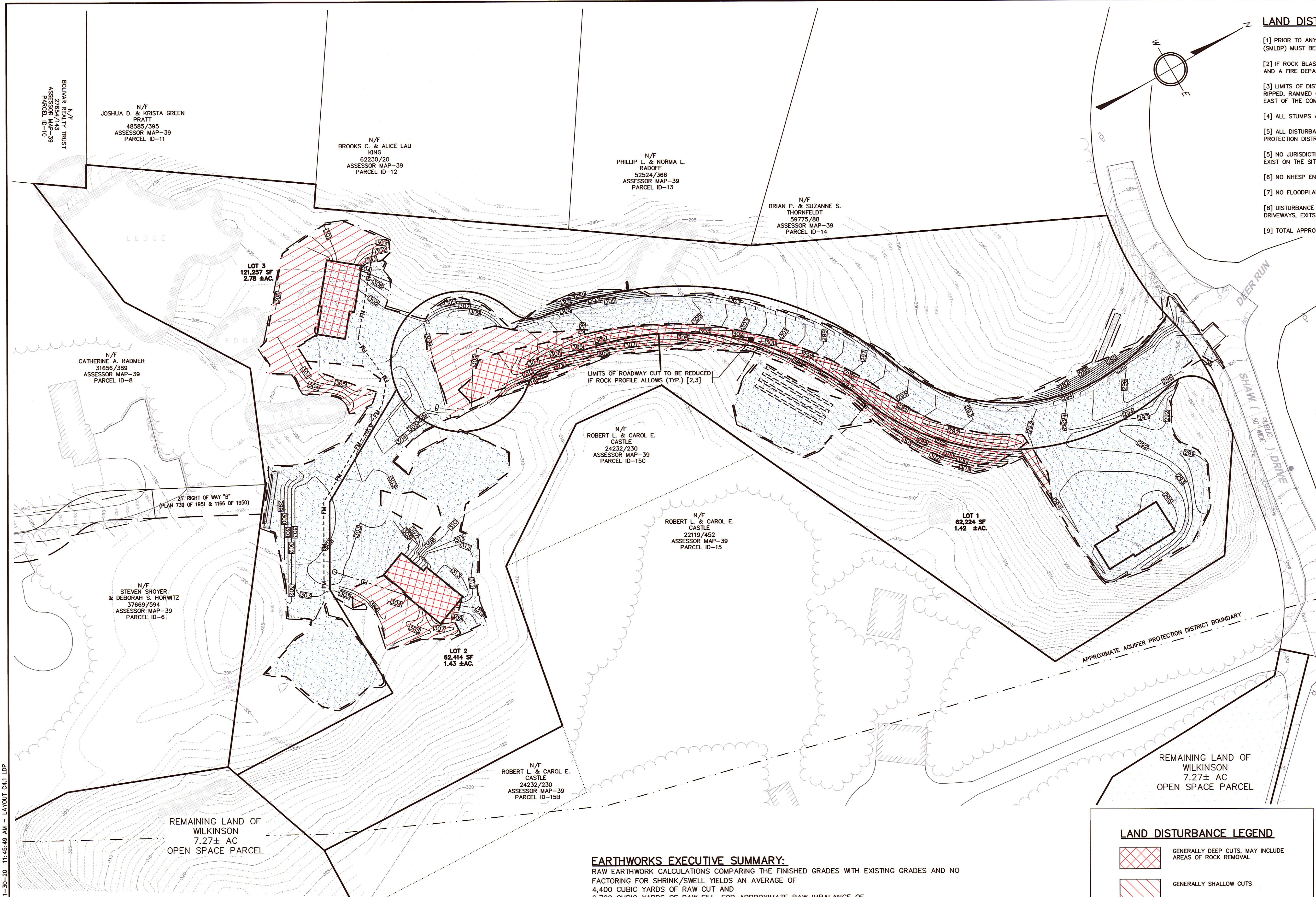
RECORD OWNER & APPLICANT:
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ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03086

DESIGN: MPB/KFB	DATE: JULY 2019	JOB 171053	C3.1
SURVEY: AMB			
CALC BY: DSB			

FOR REGISTRY USE ONLY



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LAND DISTURBANCE NOTES

- [1] PRIOR TO ANY LAND CLEARING, A STORMWATER MANAGEMENT AND LAND DISTURBANCE PERMIT (SMDP) MUST BE APPROVED BY THE WAYLAND CONSERVATION COMMISSION.
- [2] IF ROCK BLASTING ACTIVITIES ARE REQUIRED, THE WAYLAND FIRE DEPARTMENT SHALL BE NOTIFIED AND A FIRE DEPARTMENT DETAIL SHALL BE PRESENT DURING ALL BLASTING ACTIVITIES.
- [3] LIMITS OF DISTURBANCE SHALL BE REDUCED IF ROCK PROFILE ALLOWS FOR STABLE, STEEPER RIPPED, RAMMED OR BLASTED FACE. PRIMARY OPPORTUNITIES FOR SUCH TREATMENT ARE ANTICIPATED EAST OF THE COMMON DRIVE DRAINAGE DITCH.
- [4] ALL STUMPS ARE TO BE REMOVED FROM THE PROPERTY AND PROPERLY DISPOSED OF.
- [5] ALL DISTURBANCE IS WITHIN AQUIFER PROTECTION OVERLAY AND OUTSIDE ZONE 2 WELLHEAD PROTECTION DISTRICT.
- [6] NO JURISDICTIONAL AREAS PER THE 310 CMR 10 (MASSACHUSETTS WETLAND PROTECTION ACT) EXIST ON THE SITE.
- [7] NO NHEP ENDANGERED SPECIES HABITAT HAS BEEN IDENTIFIED ON THE SITE.
- [8] DISTURBANCE LIMITS MAY ADJUST TO ACCOMMODATE FINAL ARCHITECTURAL FOOTPRINTS, ACCESS, DRIVEWAYS, EXITS OR SITING.
- [9] TOTAL APPROXIMATE LIMIT OF WORK IS 3.20± ACRE.

APPROVED BY THE
WAYLAND PLANNING BOARD
[Signature] CHAIR
[Signature] APPLICATION FILED 7-26-19
[Signature] HEARING DATE
PLAN APPROVED 9-15-20
12-11-2020

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RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN

LAND DISTURBANCE PLAN

FIVE PATHS
ASSESSORS MAP#39 PARCEL 15A
WAYLAND, MA

RECORD OWNER & APPLICANT:
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ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03068

DES. BY: MPB	DATE: JULY 2019	JOB 171053	C4.1
CHK. BY: KFB			

EARTHWORKS EXECUTIVE SUMMARY:

RAW EARTHWORK CALCULATIONS COMPARING THE FINISHED GRADES WITH EXISTING GRADES AND NO FACTORING FOR SHRINK/SWELL YIELDS AN AVERAGE OF 4,400 CUBIC YARDS OF RAW CUT AND 6,700 CUBIC YARDS OF RAW FILL, FOR APPROXIMATE RAW IMBALANCE OF 2,300 CUBIC YARDS OF RAW NET FILL MATERIAL REQUIRED TO BE HAULED INTO THE SITE.

OFFSETTING PROJECT VOLUMES OF HAULED IN MATERIALS:

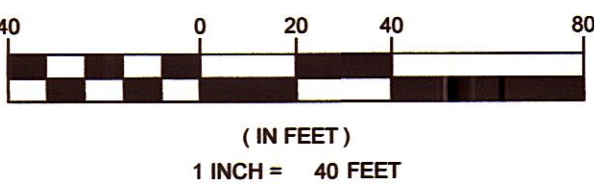
VOLUME OF PAVEMENT = 22,245± SF X 19" DEPTH = 1,304 CY (HAUL IN FILL)
VOLUME OF IC-1 + IC-2 STONE = 9,644 CF + 6,186 CF = 586 CY (HAUL IN FILL)
VOLUME OF IC-1 + IC-2 CHAMBERS = 5,002 CF + 3,672 CF = 321 CY (HAUL IN FILL)

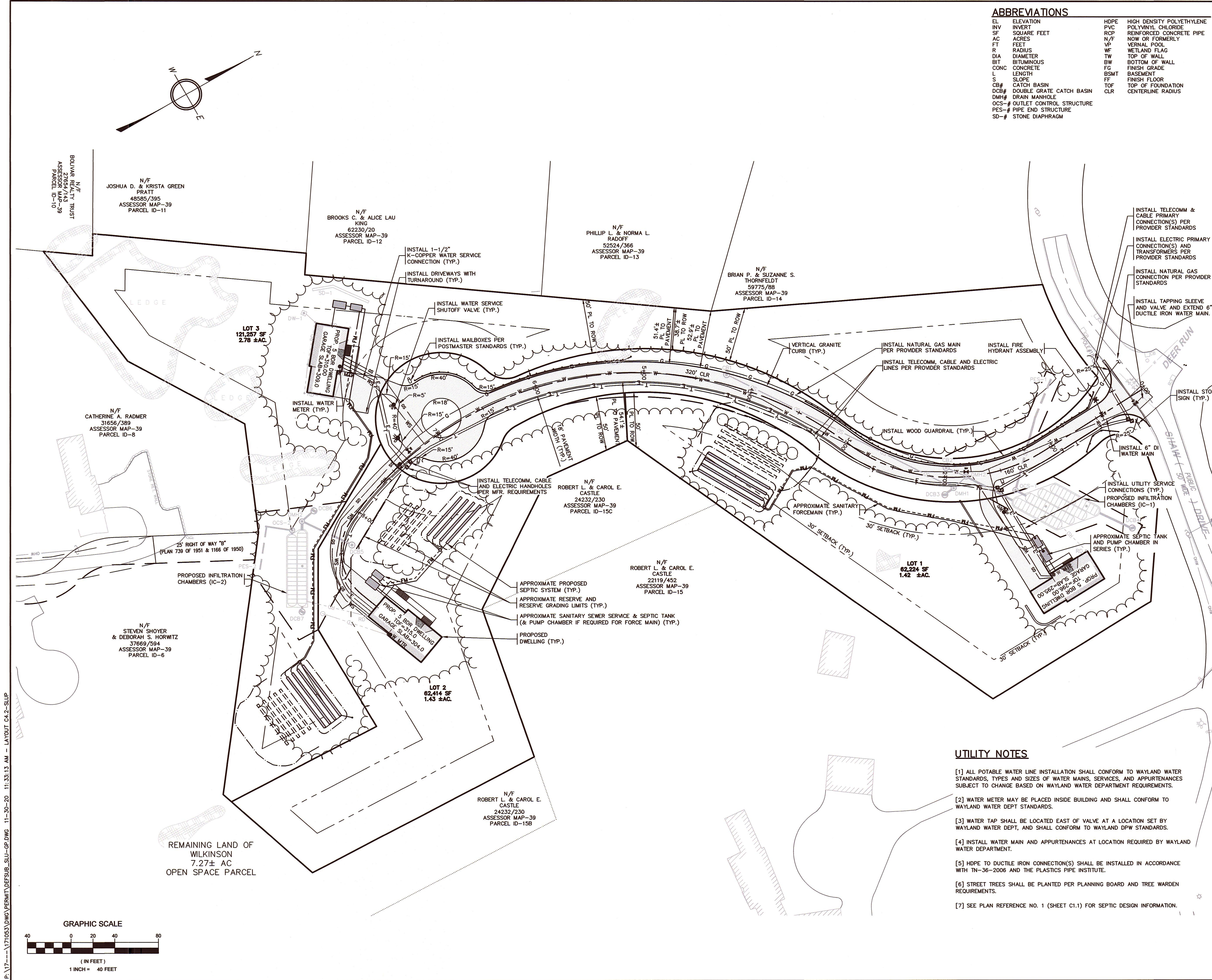
Site Volume Table: Unadjusted					
Site	Stratum	Surf1	Surf2	Cut yards	Fill yards
FIVE PATHS	d2f	ex_cond	NAVDB8	defsub3finish	
				4453	6649
				4421	6730
					2196 (F)
					2309 (F)
					Grid Composite

LAND DISTURBANCE LEGEND

- GENERALLY DEEP CUTS, MAY INCLUDE AREAS OF ROCK REMOVAL
- GENERALLY SHALLOW CUTS
- GENERAL AREAS OF SOIL FILLING (FILL)
- EXISTING TREELINE
- PROPOSED TREELINE (LIMITS OF TREE CLEARING)
- LIMITS OF WORK

GRAPHIC SCALE





ABBREVIATIONS

EL	ELEVATION	HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT	PVC	POLYVINYL CHLORIDE
SF	SQUARE FEET	RCP	REINFORCED CONCRETE PIPE
AC	ACRES	N/F	NOW OR FORMERLY
FT	FEET	VP	VERNAL POOL
R	RADIUS	WF	WETLAND FLAG
DIA	DIAMETER	TW	TOP OF WALL
BIT	BITUMINOUS	BW	BOTTOM OF WALL
CONC	CONCRETE	FG	FINISH GRADE
L	LENGTH	BSMT	BASEMENT
S	SLOPE	FF	FINISH FLOOR
CB#	CATCH BASIN	TOF	TOP OF FOUNDATION
DCB#	DOUBLE GRATE CATCH BASIN	CLR	CENTERLINE RADIUS
DMH#	DRAIN MANHOLE		
OCS#	OUTLET CONTROL STRUCTURE		
PES#	PIPE END STRUCTURE		
SD#	STONE DIAPHRAGM		

LEGEND

EXISTING	PROPOSED
100.0	ELEVATION CONTOUR
100.0	SPOT GRADE
---	PROPERTY LINE
---	APPROXIMATE AQUIFER PROTECTION DISTRICT BOUNDARY
---	LIMIT OF WORK
---	USDA SOIL CLASSIFICATION
---	EASEMENT
---	TREE LINE / EDGE OF VEGETATION
---	EDGE OF PAVEMENT
---	CAPE COD BERM CURBING
---	GRANITE CURBING
---	GRAVEL/DIRT ROAD
---	STOCKADE FENCE
---	STONE WALL
---	WATER MAIN
---	WATER SERVICE
---	FIRE SERVICE
---	WATER VALVE
---	FIRE HYDRANT
---	FORCE MAIN
---	GRAVITY SEWER LINE
---	SEWER MANHOLE
---	GAS LINE
---	GAS VALVE
---	BURIED POWER LINE
---	OVERHEAD POWER LINE
---	UTILITY POLE
---	GUY WIRE
---	ELECTRIC BOX
---	STORM DRAIN
---	UNDERDRAIN
---	ROOF DRAIN
---	FOUNDATION DRAIN
---	CATCH BASIN
---	DRAIN MANHOLE
---	SILT FENCE BARRIER
---	STRAW BALES
---	DEEP SOIL OBSERVATION HOLE
---	SITE LUMINAIRE
---	SIGN
---	SURFACE RUNOFF DIRECTION
---	STONE BOUND
---	DRILL HOLE
---	IRON ROD

APPROVED BY THE
WAYLAND PLANNING BOARD

CHAIR

APPLICATION FILED 7.26.19

HEARING DATE

PLAN APPROVED 9.15.20

12-11-2020

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NO.	DATE	BY	APP.	REVISION DESCRIPTION
2	11/30/20	LT/KFB	KFB	DRIVEWAY TURNAROUND REVISION
1	7/14/20	LT/KFB	KFB	DRIVEWAY/DRAINAGE COMMENTS

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RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN

SITE LAYOUT AND UTILITIES PLAN

FIVE PATHS
ASSESSORS MAP#39 PARCEL 15A
WAYLAND, MA

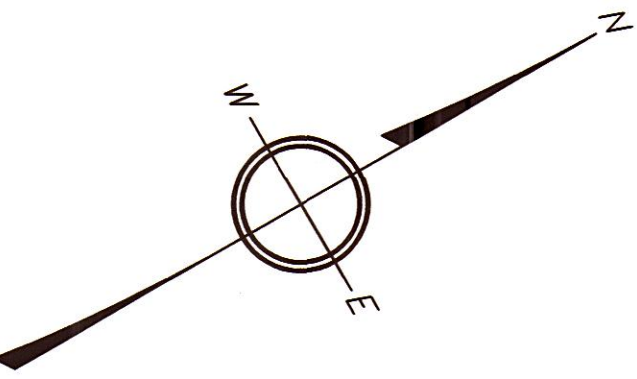
RECORD OWNER & APPLICANT:
ROSS C. WILKINSON, PERSONAL REPRESENTATIVE,
ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03086

DES. BY: KFB	DATE: JULY 2019	JOB 171053	C4.2
CHK. BY: NMP			

UTILITY NOTES

- [1] ALL POTABLE WATER LINE INSTALLATION SHALL CONFORM TO WAYLAND WATER STANDARDS, TYPES AND SIZES OF WATER MAINS, SERVICES, AND APPURTENANCES SUBJECT TO CHANGE BASED ON WAYLAND WATER DEPARTMENT REQUIREMENTS.
- [2] WATER METER MAY BE PLACED INSIDE BUILDING AND SHALL CONFORM TO WAYLAND WATER DEPT STANDARDS.
- [3] WATER TAP SHALL BE LOCATED EAST OF VALVE AT A LOCATION SET BY WAYLAND WATER DEPT, AND SHALL CONFORM TO WAYLAND DPW STANDARDS.
- [4] INSTALL WATER MAIN AND APPURTENANCES AT LOCATION REQUIRED BY WAYLAND WATER DEPARTMENT.
- [5] HDPE TO DUCTILE IRON CONNECTION(S) SHALL BE INSTALLED IN ACCORDANCE WITH TN-36-2006 AND THE PLASTICS PIPE INSTITUTE.
- [6] STREET TREES SHALL BE PLANTED PER PLANNING BOARD AND TREE WARDEN REQUIREMENTS.
- [7] SEE PLAN REFERENCE NO. 1 (SHEET C1.1) FOR SEPTIC DESIGN INFORMATION.

P:\171053\DWG\PERMIT\DEFINITIVE\SUB-SLU-GP.DWG 11-30-20 11:35:13 AM - LAYOUT C4.2-SLUP



N/F
BOULVAR REALTY TRUST
27654/143
ASSESSOR MAP-39
PARCEL ID-10

N/F
JOSHUA D. & KRISTA GREEN
PRATT
48585/395
ASSESSOR MAP-39
PARCEL ID-11

N/F
BROOKS C. & ALICE LAU
KING
62230/20
ASSESSOR MAP-39
PARCEL ID-12

N/F
PHILLIP L. & NORMA L.
RADOFF
52524/366
ASSESSOR MAP-39
PARCEL ID-13

N/F
BRIAN P. & SUZANNE S.
THORNFELDT
59775/88
ASSESSOR MAP-39
PARCEL ID-14

N/F
CATHERINE A. RADMER
31656/389
ASSESSOR MAP-39
PARCEL ID-8

N/F
STEVEN SHOYER
& DEBORAH S. HORWITZ
37669/594
ASSESSOR MAP-39
PARCEL ID-6

N/F
ROBERT L. & CAROL E.
CASTLE
24232/230
ASSESSOR MAP-39
PARCEL ID-15C

N/F
ROBERT L. & CAROL E.
CASTLE
22119/452
ASSESSOR MAP-39
PARCEL ID-15

N/F
ROBERT L. & CAROL E.
CASTLE
24232/230
ASSESSOR MAP-39
PARCEL ID-15B

LOT 3
121,257 SF
2.78 ± AC.

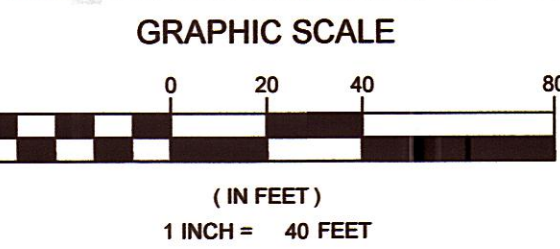
LOT 2
82,414 SF
1.43 ± AC.

LOT 1
62,224 SF
1.42 ± AC.

APPROXIMATE LIMIT OF
SEPTIC RESERVE FILL (TYP.)

REMAINING LAND OF
WILKINSON
7.27 ± AC
OPEN SPACE PARCEL

REMAINING LAND OF
WILKINSON
7.27 ± AC
OPEN SPACE PARCEL



ABBREVIATIONS

EL	ELEVATION	HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT	PVC	POLYVINYL CHLORIDE
SF	SQUARE FEET	RCP	REINFORCED CONCRETE PIPE
AC	ACRES	N/F	NOW OR FORMERLY
FT	FEET	VP	VERNAL POOL
R	RADIUS	WF	WETLAND FLAG
DIA	DIAMETER	TW	TOP OF WALL
BIT	BITUMINOUS	BW	BOTTOM OF WALL
CONC	CONCRETE	FG	FINISH GRADE
L	LENGTH	BSMT	BASEMENT
S	SLOPE	FF	FINISH FLOOR

LEGEND

EXISTING	PROPOSED
---100---	---100---
X100.0	FG
---	ELEVATION CONTOUR
---	SPOT GRADE
---	PROPERTY LINE
---	APPROXIMATE AQUIFER PROTECTION DISTRICT BOUNDARY
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APPROVED BY THE
WAYLAND PLANNING BOARD

CHAIR
APPLICATION FILED 7-26-19
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PLAN APPROVED 9-15-20
12-16-2020

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RESIDENTIAL SUBDIVISION DEFINITIVE PLAN

GRADING AND PAVING PLAN

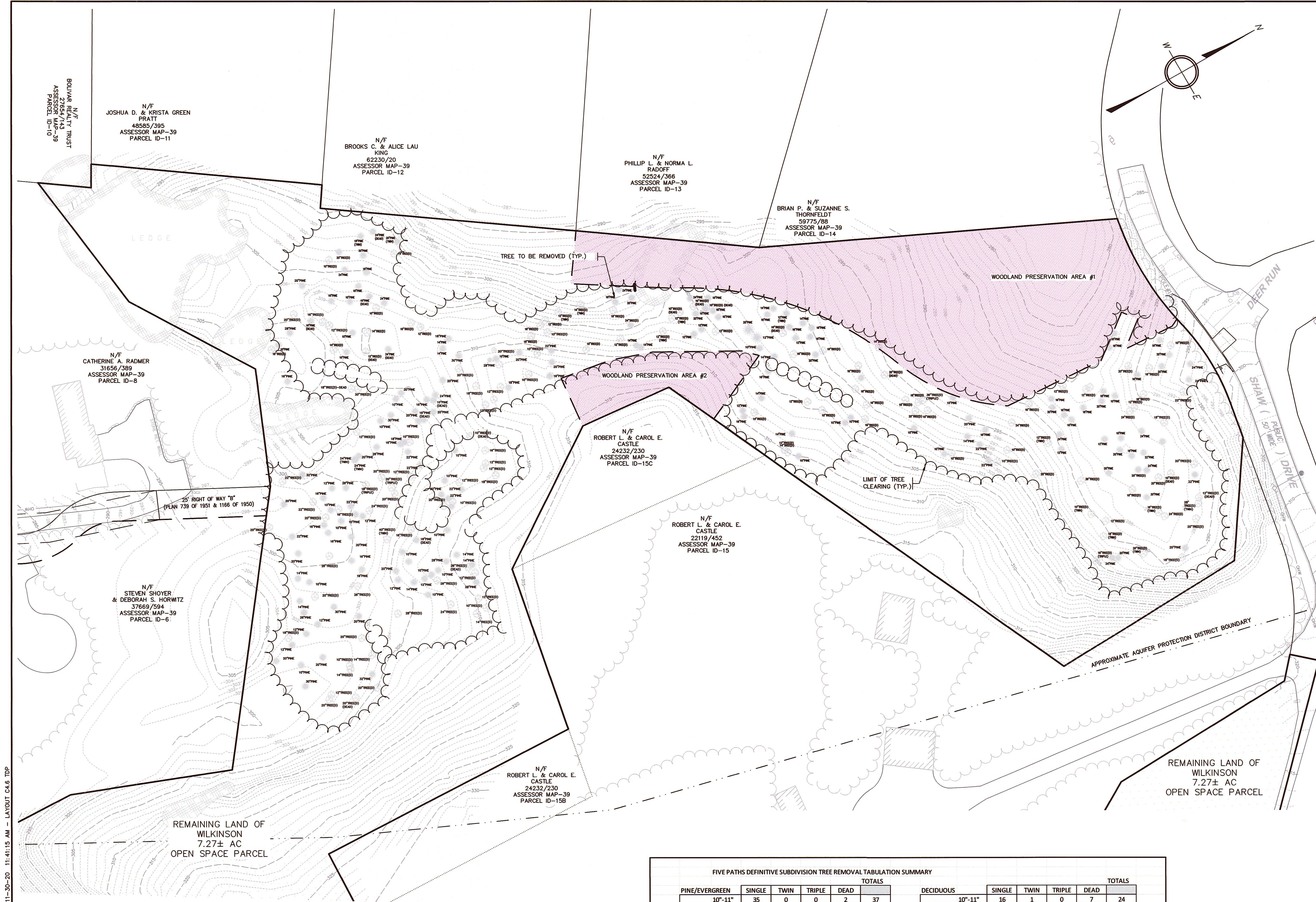
FIVE PATHS
ASSESSORS MAP#39 PARCEL 15A
WAYLAND, MA

RECORD OWNER & APPLICANT:
ROSS C. WILKINSON, PERSONAL REPRESENTATIVE,
ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03086

DES. BY: KFB	DATE: JULY 2019	JOB 171053	C4.3
CHK. BY: NMP			



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APPROVED BY THE
WAYLAND PLANNING BOARD

[Signature] CHAIR

[Signature] APPLICATION FILED **7-26-19**

HEARING DATE _____

PLAN APPROVED **9-15-20**

12-11-2020

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**RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN**

TREE REMOVAL PLAN

**FIVE PATHS
ASSESSORS MAP#39 PARCEL 15A
WAYLAND, MA**

RECORD OWNER & APPLICANT:
ROSS C. WILKINSON, PERSONAL REPRESENTATIVE,
ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03068

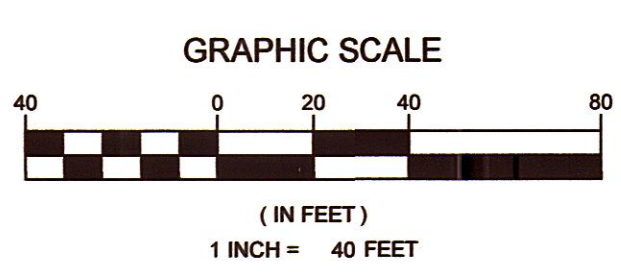
DES. BY: LT	DATE: JULY 2019	JOB 171053	C4.6
CHK. BY: KFB			

FIVE PATHS DEFINITIVE SUBDIVISION TREE REMOVAL TABULATION SUMMARY											
PINE/EVERGREEN						DECIDUOUS					
	SINGLE	TWIN	TRIPLE	DEAD	TOTALS		SINGLE	TWIN	TRIPLE	DEAD	TOTALS
10"-11"	35	0	0	2	37	10"-11"	16	1	0	7	24
12"-17"	51	1	0	2	54	12"-17"	42	6	1	2	51
18"-23"	52	2	0	1	55	18"-23"	34	2	2	2	40
24" AND GREATER	25	2	0	2	29	24" AND GREATER	11	2	1	1	15
TOTALS	163	5	0	7	175	TOTALS	103	11	4	12	130

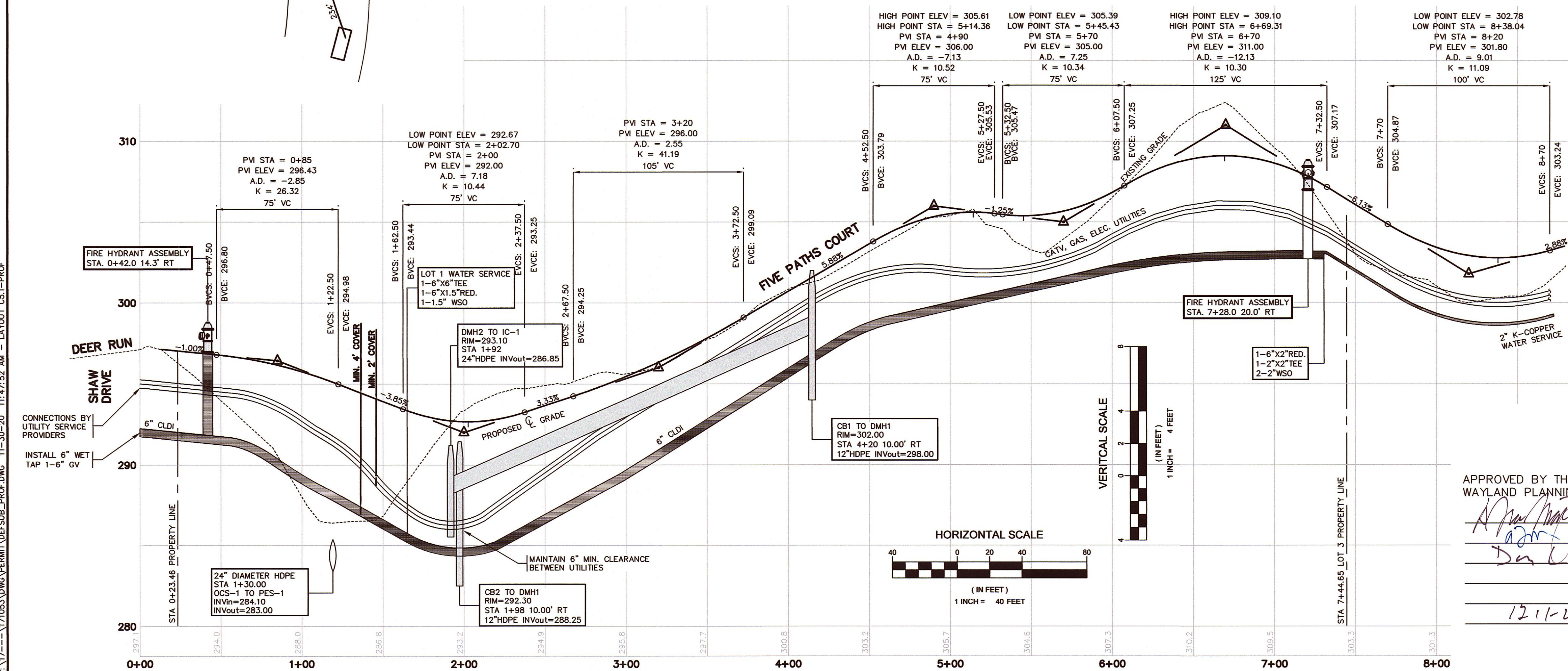
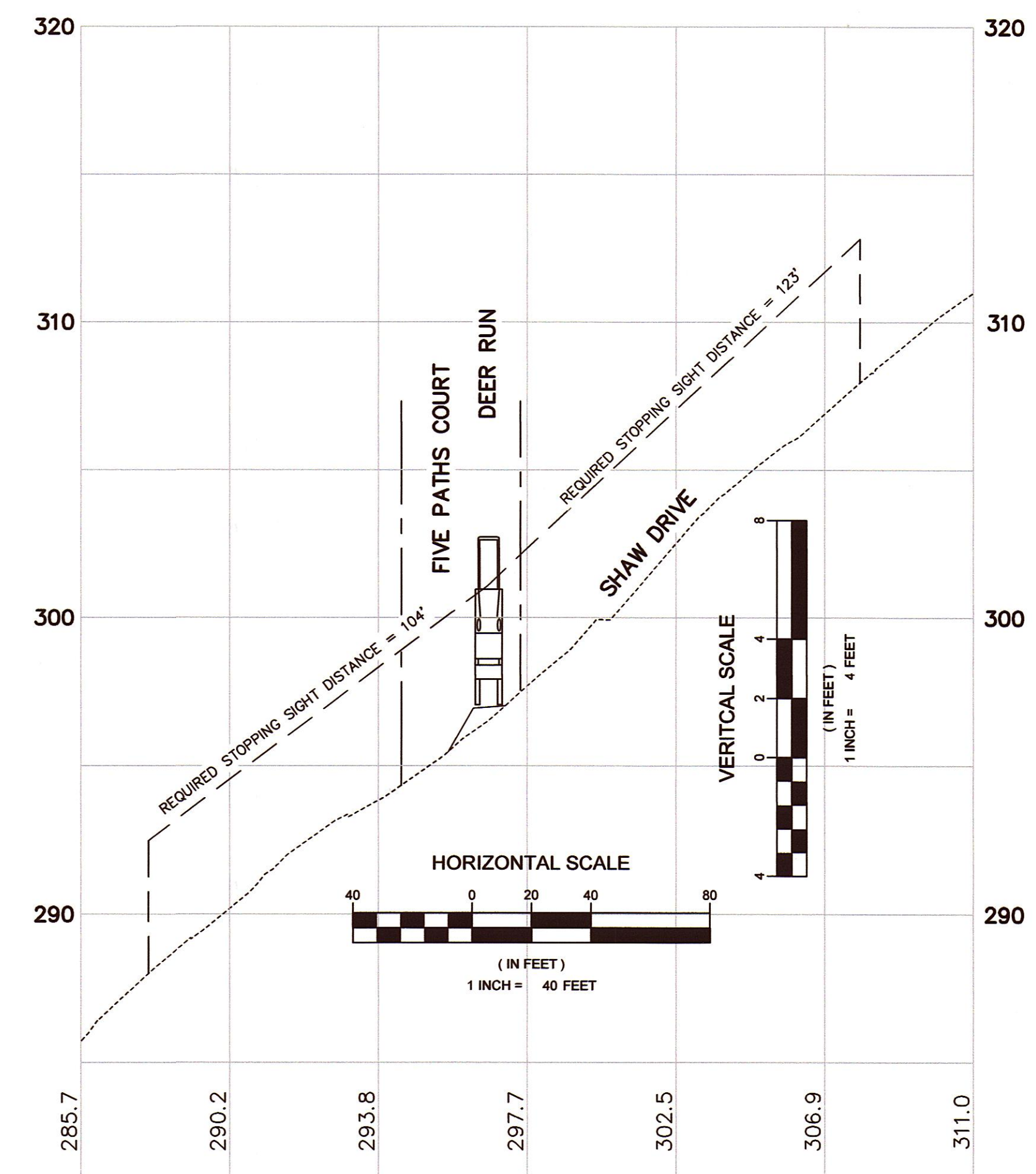
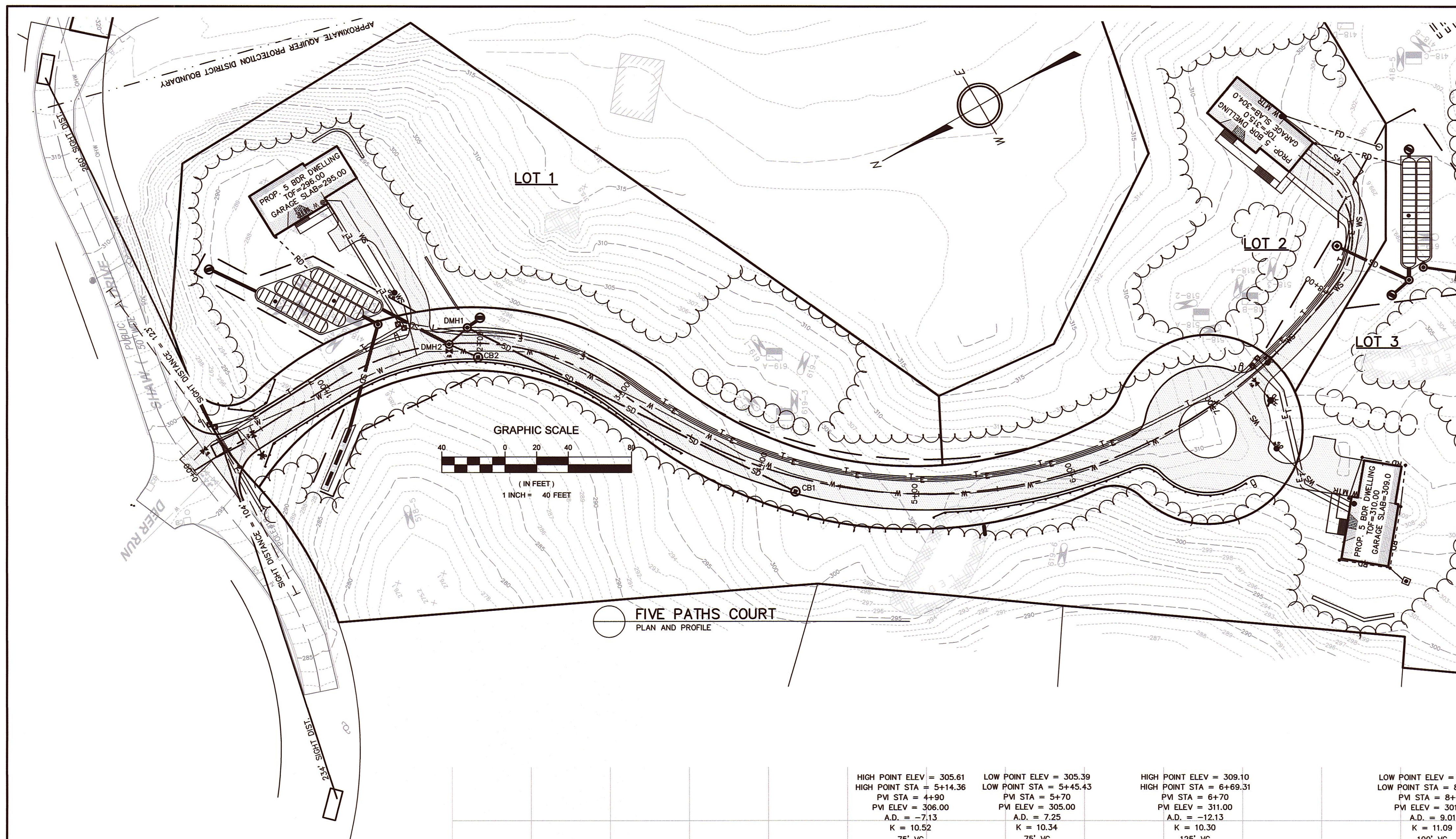
TREE REMOVAL TABULATION NOTES

1. TREE DIAMETER SURVEYED AT NORMAL BREAST HEIGHT (DIAMETER BREAST HEIGHT - DBH).
2. TREES 10" DIAMETER AND LARGER TO BE REMOVED ARE SHOWN PER WAYLAND SUBDIVISION RULES AND REGULATIONS.
3. TWIN AND TRIPLE TREE CLUSTERS ARE COUNTED ONLY ONCE IN THE TOTALS.
4. DEAD TREES ARE INCLUDED IN THE TOTALS.

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RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN

ROADWAY PLAN AND PROFILE

FIVE PATHS
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WAYLAND, MA

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PO BOX 98
WILTON, NH 03086

DES. BY: KFB	DATE: JULY 2019	JOB 171053	C5.1
CHK BY: KFB			

EROSION AND SEDIMENT CONTROL REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. FURNISH, INSTALL, AND MAINTAIN TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS, BUT NOT NECESSARILY LIMITED TO, HAY BALE AND SILT FENCE BARRIERS, RIPRAP, DIVERSION CHANNELS AND BERMS, CHECK DAMS, STRATEGICALLY LOCATED STOCKPILES, SEDIMENT BASINS, MULCH, AND SEED MIX (HEREINAFTER "CONTROL MEASURES") ADEQUATE TO PREVENT THE CONVEYANCE OF EROSION PRODUCTS (E.G. SOIL, MULCH, SOIL) OFF SITE, OR INTO ENVIRONMENTALLY SENSITIVE AREAS, OR INTO AREAS WHERE WORK WILL BE ADVERSELY IMPACTED. ENVIRONMENTALLY SENSITIVE AREAS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, WETLANDS, TRIBUTARIES TO WETLANDS, WETLAND BUFFER ZONES, INTERMITTENT AND PERENNIAL STREAMS / RIVERS, AND THEIR ATTENDANT BUFFER ZONES.

1. REFER TO DRAWINGS FOR LOCATION AND DETAILS OF CONTROL MEASURES REQUIRED TO COMMENCE WORK. THESE CONTROL MEASURES WILL BE ADEQUATE ONLY FOR VEGETATION CLEARING. THE DRAWINGS ARE NOT INTENDED TO GRAPHICALLY DEPICT ALL CONTROL MEASURES THAT WILL BE REQUIRED TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A.
2. DEVISE AND EMPLOY CONTROL MEASURES THROUGHOUT THE DURATION OF PROJECT, OVER ALL AREAS DISTURBED OR UNDISTURBED BY CONSTRUCTION, AS NECESSARY TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A.
3. DEVISE AND EMPLOY TEMPORARY CONTROL MEASURES AS NECESSARY TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A, WHILE ALLOWING WORK TO PROCEED IN AN EFFICIENT, COST EFFECTIVE MANNER.
4. DEVISE, EMPLOY AND MAINTAIN CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE SITE IS PERMANENTLY STABILIZED BY ESTABLISHED VEGETATION, FINISH LANDSCAPE MATERIALS, PAVED SURFACES, AND/OR ROOF AREA.
5. ONCE THE SITE IS PERMANENTLY STABILIZED AND CERTIFIED AS SUCH BY ENGINEER, REMOVE TEMPORARY CONTROL MEASURES WHILE PROTECTING STABILIZED SURFACES.

1.02 SUBMITTALS

A. SUBMIT PRODUCT DATA, WARRANTY, AND TEST REPORTS AS INDICATED ON THE DRAWINGS.

1.03 QUALITY ASSURANCE

- A. COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS FROM ACCEPTABLE MANUFACTURERS. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- B. CONFORM TO CONDITIONS OF APPROVAL ISSUED BY REGULATORY AGENCIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, LOCAL PLANNING BOARD, CONSERVATION COMMISSION, BOARD OF SELECTMEN, BOARD OF HEALTH, PUBLIC WORKS / HIGHWAY DEPARTMENT, STATE ENVIRONMENTAL PROTECTION DEPARTMENT, AND U.S. GOVERNMENT, ENVIRONMENTAL PROTECTION AGENCY. WHERE CONDITIONS OF REGULATORY APPROVAL DIFFER FROM REQUIREMENTS CONTAINED HEREIN OR ON THE DRAWINGS, COMPLY WITH THE MORE STRINGENT REQUIREMENT.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. STRAW BALES: DRY GRASS OR STRAW, MACHINE BOUND WITH JUTE OR WIRE, APPROXIMATE SIZE EACH BALE 42" X 16" X 16".
- B. SILT FENCE: NON-WOVEN, UV-RESISTANT, POLYPROPYLENE FABRIC, FLOW RATED AT 10 GPM/SF MINIMUM, GRAB TENSILE RATED AT 124 POUNDS MINIMUM, WITH INTEGRAL STAKE LOOPS, AND HARDWOOD STAKES. USE NO. 2130 BY AMOCO FABRICS & FIBERS, OR APPROVED EQUAL.
- C. STRAW WATTLES: 100% WHEAT STRAW WITH NATURAL BIO-DEGRADABLE JUTE NETTING. MINIMUM 9-INCH DIAMETER AND 10 FEET LONG. USE DIAMETER 12-INCH OR 20-INCH DIAMETER WATTLES TO PROTECT LARGER UNSTABLE AREAS.

- D. MULCH: ORGANICS INCLUDING HAY, PROCESSED PINE / HEMLOCK TWIGS AND NEEDLES.
- E. SEED MIXES: PERENNIAL RYEGRASS, KENTUCKY BLUEGRASS, AND / OR FINE FESCUE, DISEASE RESISTANT. NON-MAINTAINED AREA OPTION – ANNUAL RYEGRASS COMBINED WITH MEDIUM RED CLOVER.

- F. EXCELSIOR BLANKET: CURLED WOOD FIBER ON PHOTODEGRADABLE EXTRUDED PLASTIC MATRIX, 80% OF FIBERS 6-INCHES LONG OR LONGER, WEIGHT 0.975 POUNDS / SY, CONTAINING NO CHEMICAL ADDITIVES. USE CURLEX 1 BLANKET BY AMERICAN EXCELSIOR COMPANY, OR APPROVED EQUAL.
- G. ROCK RIPRAP: SOUND, ANGULAR, 6-INCH MINUS PROCESSED ROCK, BLAST ROCK, OR TAILINGS.

- G. CRUSHED STONE: SOUND, ANGULAR, 2-INCH MINUS PROCESSED CRUSHED STONE

PART 3 – EXECUTION

3.01 THROUGHOUT CONSTRUCTION

- A. DEVISE WORK SEQUENCE SO AS TO LIMIT DRAINAGE AREA THAT IS TRIBUTARY TO DISTURBED AREAS. DEVISE, EMPLOY, AND MAINTAIN CONTROL MEASURES SUCH AS DIVERSION CHANNELS AND BERMS, STRATEGICALLY LOCATED STOCKPILES, AND SEDIMENT BASINS TO SUBDIVIDE DRAINAGE AREAS INTO SMALL, MANAGEABLE SUBAREAS, THEREBY MINIMIZING RUNOFF AND THE POTENTIAL FOR EROSION.
- B. MAINTAIN BARRIER AT LIMIT OF WORK AND PROTECT EXISTING VEGETATION / FACILITIES OUTSIDE OF LIMIT OF WORK.
- C. MAINTAIN SPARE MATERIAL STOCKPILES FOR IMMEDIATE EMPLOYMENT / REPAIR / EXPANSION OF CONTROL MEASURES. AT A MINIMUM, SUCH MATERIALS SHALL INCLUDE HAY BALES, SILT FENCE AND STAKES, AND CRUSHED STONE.
- D. INSPECT AND MAINTAIN EFFECTIVENESS OF CONTROL MEASURES BY REPAIRING AS NECESSARY TO ENSURE INTENDED FUNCTION; BY SUPPLEMENTING AS NECESSARY FOR ADEQUATE EXTENT, BY REMOVING TRAPPED PRODUCTS OF EROSION AS NECESSARY TO MAINTAIN EFFECTIVE TRAP VOLUME.
- E. LIMIT EXTENT OF WORK AREA SO THAT ALL DISTURBED AREAS CAN BE STABILIZED WITH CONTROL MEASURES WITHIN A 24-HOUR PERIOD.
- F. INSTALL CONTROL MEASURES AS SOON AS PRACTICABLE AFTER EACH MANAGEABLE PORTION OF EARTHWORK IS COMPLETE. EMPLOY TEMPORARY MEASURES AS NECESSARY TO STABILIZE DISTURBED AREAS, EVEN WHERE SUBSEQUENT CONSTRUCTION OPERATIONS MAY REQUIRE RE-DISTURBANCE.
- G. WHEN INTENSE RAINFALL IS EXPECTED, CONSIDER, DEVISE, AND EMPLOY REINFORCING CONTROL MEASURES PRIOR TO THE RAINFALL EVENT TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A. IF NECESSARY, EMPLOY TEMPORARY CONTROL MEASURES ON MATERIAL STOCKPILES TO COUNTERACT POTENTIAL SEDIMENT TRANSPORT DURING INTENSE RAINFALL.
- H. WHEN VEHICLE REFUELING IS REQUIRED ON SITE, CONDUCT REFUELING OPERATIONS OUTSIDE OF ENVIRONMENTALLY SENSITIVE AREAS.

- I. PROPERLY DISPOSE OF DEBRIS, SOLID WASTE, TRASH, AND CONSTRUCTION WASTE / BYPRODUCTS OFF SITE.

- J. SWEEP ON-SITE PAVED AREAS AND OFF-SITE STREETS AS NECESSARY TO PREVENT SILT AND DEBRIS ORIGINATING ON SITE FROM ENTERING CLOSED DRAINAGE SYSTEMS AND / OR ENVIRONMENTALLY SENSITIVE AREAS.

3.02 SITE PREPARATION AND ACCESS

- A. WALK SITE AND IDENTIFY LOCATIONS OF LIMIT OF WORK AND ENVIRONMENTALLY SENSITIVE AREAS. ESTABLISH CONSTRUCTION STAGING AREA, LOCATED BEYOND ENVIRONMENTALLY SENSITIVE AREAS.
- B. INSTALL CONTROL MEASURES AS SHOWN ON THE DRAWINGS, INCLUDING THOSE DEFINING THE LIMIT OF WORK.
- C. LIMIT VEHICULAR TRAFFIC TO AND FROM SITE TO MINIMIZE TRANSPORT OF SEDIMENT.
- D. SCHEDULE GRUBBING AND STRIPPING TO OCCUR IMMEDIATELY PRIOR TO EARTH DISTURBANCE. DEPENDING ON SITE AREA, CONSIDER MULTIPLE GRUBBING PHASES, SEQUENCED TO TAKE ADVANTAGE OF THE EROSION PREVENTION POTENTIAL OF EXISTING VEGETATIVE COVER.
- E. MINIMIZE THE AREA OF EXISTING VEGETATION REMOVED WHEREVER POSSIBLE.
- F. LOCATE AND SIZE STOCKPILES TO MINIMIZE EROSION POTENTIAL, TAKING ADVANTAGE OF TERRAIN SLOPE AND ASPECT, WHERE APPROPRIATE.
- G. PROTECT VEGETATION, INCLUDING ROOT SYSTEMS, BEYOND LIMIT OF CLEARING.

- E. PROCESS TIMBER, STUMPS, SLASH, AND BRUSH SO AS TO PROTECT ENVIRONMENTALLY SENSITIVE AREAS AND INSTALLED CONTROL MEASURES. PROPERLY DISPOSE OF EXCESS OFF SITE. BURIAL OF STUMPS ON SITE IS PROHIBITED.

3.04 EXCAVATION FOR BUILDING FOUNDATIONS AND UTILITIES

- A. DEVISE AND INSTALL CONTROL MEASURES ADEQUATE TO HANDLE DISCHARGES AND TRAP SEDIMENT FROM FOOTING SUMP AND WELL POINT PUMPS PRIOR TO EXCAVATION.

- B. ARMOR SUMP PUMP DISCHARGE LOCATIONS TO PREVENT EROSION AT POINT OF DISCHARGE AND AREAS DOWNSTREAM.

- C. IF FOUNDATION EXCAVATIONS GRADE TO DAYLIGHT ON THE LOW SIDE, DEVISE AND INSTALL CONTROL MEASURES TO HANDLE SURFACE AND GROUNDWATER FLOW FROM EXCAVATION LOW POINT.

- D. STOCKPILE EXCAVATED MATERIALS TO BAFFLE OVERLAND RUNOFF, AVOIDING THE CREATION OF LENGTHY PATHS OF CONCENTRATED RUNOFF.

- E. BACKFILL UTILITY TRENCHES AS SOON AS PRACTICABLE TO PREVENT FLOODING, SLOUGHING, POTENTIAL OVERFLOW, AND REPETITIVE EARTH DISTURBANCE.

3.05 SITE GRADING

- A. WHERE APPLICABLE, FOLLOW EXCAVATION AND FILL PRACTICES SHOWN ON DRAWINGS TO LOCALIZE AND MINIMIZE EROSION.

- B. MONITOR SEDIMENT VOLUME IN TEMPORARY SEDIMENT BASINS AND AT DIVERSION BERMS AND CHECK DAMS. IN ALL AREAS EXCEPT THOSE THAT DO NOT PRESENT POTENTIAL PROBLEMS WITH REGARD TO FUTURE SOIL STABILITY, DRAINAGE, OR BEARING CAPACITY, REMOVE AND PROPERLY DISPOSE OF TRAPPED SEDIMENT BEFORE BRINGING SITE TO FINAL SUBGRADE.

3.06 STORMWATER MANAGEMENT SYSTEM

- A. THE STORMWATER MANAGEMENT SYSTEM INCLUDES, BUT IS NOT NECESSARILY LIMITED TO, ALL PERMANENT DETENTION / RETENTION BASINS, DISCHARGE STRUCTURES / WEIRS, CULVERTS, OPEN CHANNELS, CURBS, CUTTERS, PAVED SWALES, CATCH BASINS, DRAIN MANHOLES, DRAINAGE PIPES, ROOF DRAIN MANIFOLDS, WATER QUALITY SWALES, SEPARATORS, AND SIMILAR STORMWATER RUNOFF CONVEYANCE, TREATMENT, AND STORAGE FACILITIES.

- B. INSTALL STORMWATER MANAGEMENT SYSTEM COMPONENTS STARTING AT THE DOWNSTREAM END AND PROCEED UPSTREAM. WHERE POSSIBLE, COMPLETE INSTALLATION OF PERMANENT DETENTION / RETENTION BASINS PRIOR TO BEGINNING WORK ON UPSTREAM SYSTEM COMPONENTS.

- C. INSTALL CONTROL MEASURES AT FINISHED UPSTREAM AND DOWNSTREAM PIPE ENDS AS SOON AS POSSIBLE AFTER COMPLETION OF PIPE RUN. SUCH MEASURES INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, RIPRAP, CHECK DAMS, HAY BALE / SILT FENCE BARRIERS, AND VELOCITY DISSIPATORS.

- D. AT THE END OF EACH DAY OR WHEN RAINFALL IS EXPECTED, PLUG UPSTREAM END OF PIPES / DAM OPEN CHANNELS OR OTHERWISE REDIRECT POTENTIAL RUNOFF AND PREVENT FLOW FROM ENTERING PARTIALLY COMPLETED SYSTEM / SYSTEM COMPONENTS.

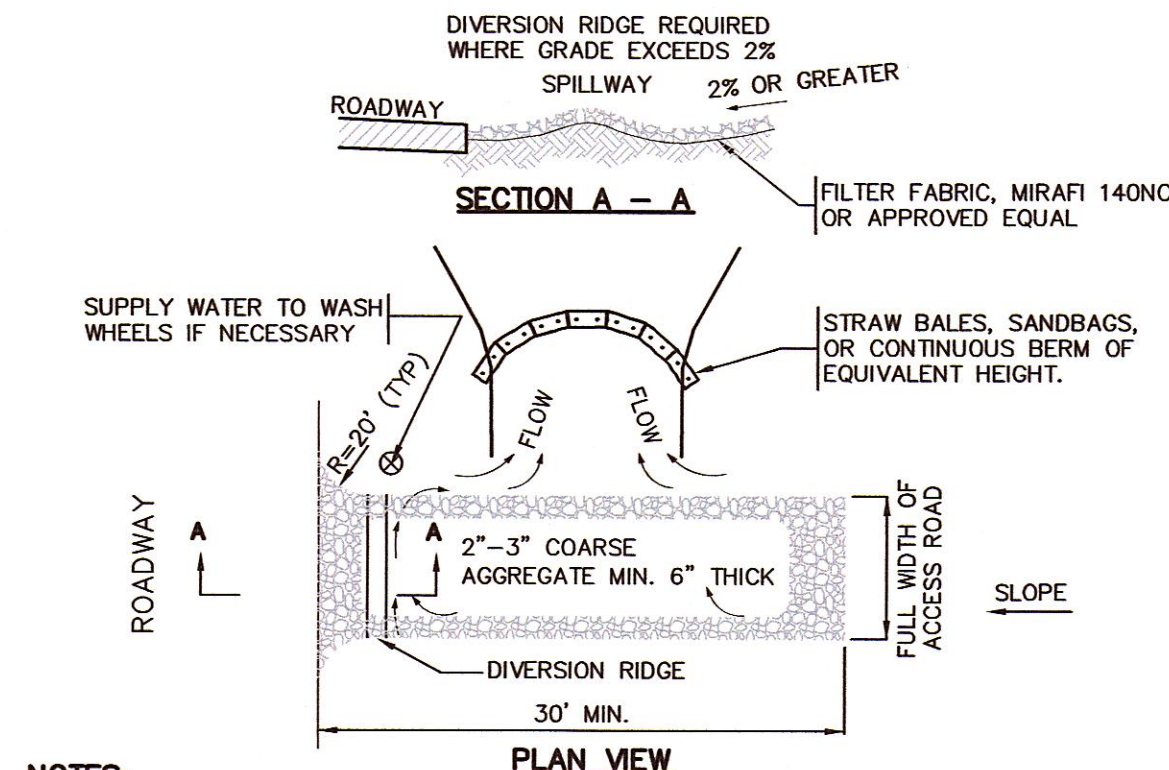
- E. WHERE PORTIONS OF A NEW SYSTEM ARE TO BE ACTIVATED PRIOR TO COMPLETION OF THE ENTIRE SYSTEM, EMPLOY CONTROL MEASURES TO PREVENT SILT AND DEBRIS FROM ENTERING THE SYSTEM. EMPLOY SILT SACKS OR FABRIC ON CATCH BASIN INLETS, AND PIPE AND CULVERT OPENINGS. EMPLOY CHECK DAMS AND TEMPORARY SEDIMENT BASINS UPSTREAM OF AND ALONG OPEN CHANNELS, SWALES, AND DITCHES TO TRAP SEDIMENT UPGRADIENT OF ENVIRONMENTALLY SENSITIVE AREAS.

- F. REMOVE TRAPPED SEDIMENT AND DEBRIS FROM ALL SYSTEM COMPONENTS AFTER COMPLETION OF INSTALLATION, AND AGAIN AFTER THE ENTIRE SITE IS PERMANENTLY STABILIZED BY ESTABLISHED VEGETATION, FINISH LANDSCAPE MATERIALS, PAVED SURFACES, AND/OR ROOF AREA. REMOVE TRAPPED SEDIMENT AND DEBRIS FROM DETENTION / RETENTION BASIN BOTTOMS SO THAT FINISH BOTTOM MATERIALS / INFILTRATION FUNCTION CONFORM TO DESIGN.

3.07 LANDSCAPING

- A. COMPLETE LANDSCAPING AS SOON AS POSSIBLE AFTER COMPLETION OF FINAL SUBGRADE.

- B. IMMEDIATELY AFTER PLACEMENT OF TOPSOIL, STABILIZE WITH CONTROL MEASURES INCLUDING, BUT NOT NECESSARILY LIMITED TO, SEED MIX, MULCH, AND / OR BLANKET.

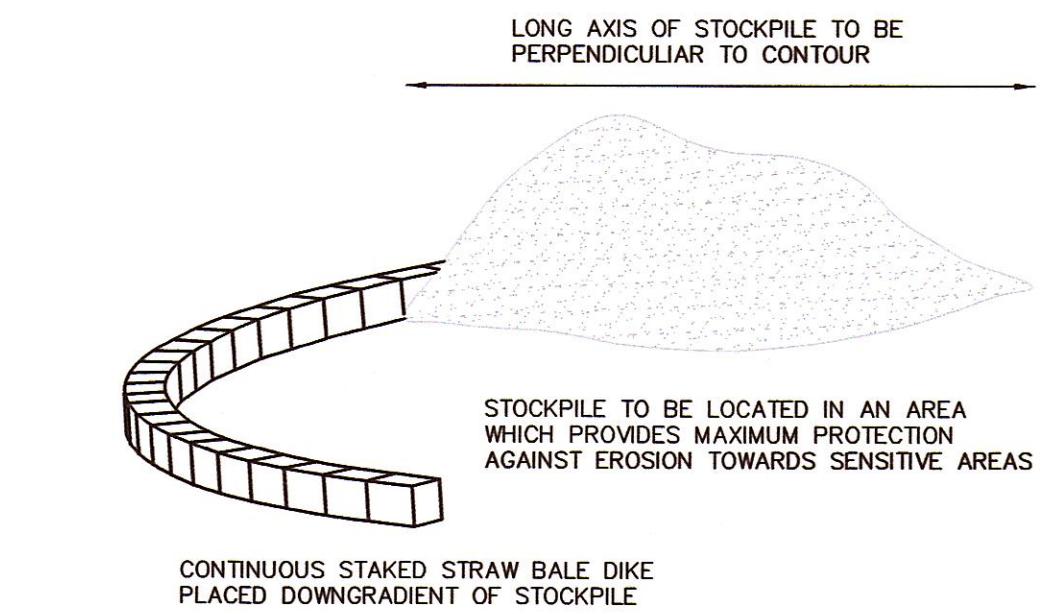


NOTES:

- [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 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 AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- [4] USE SANDBAGS, HAY BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.

CONSTRUCTION ENTRANCE

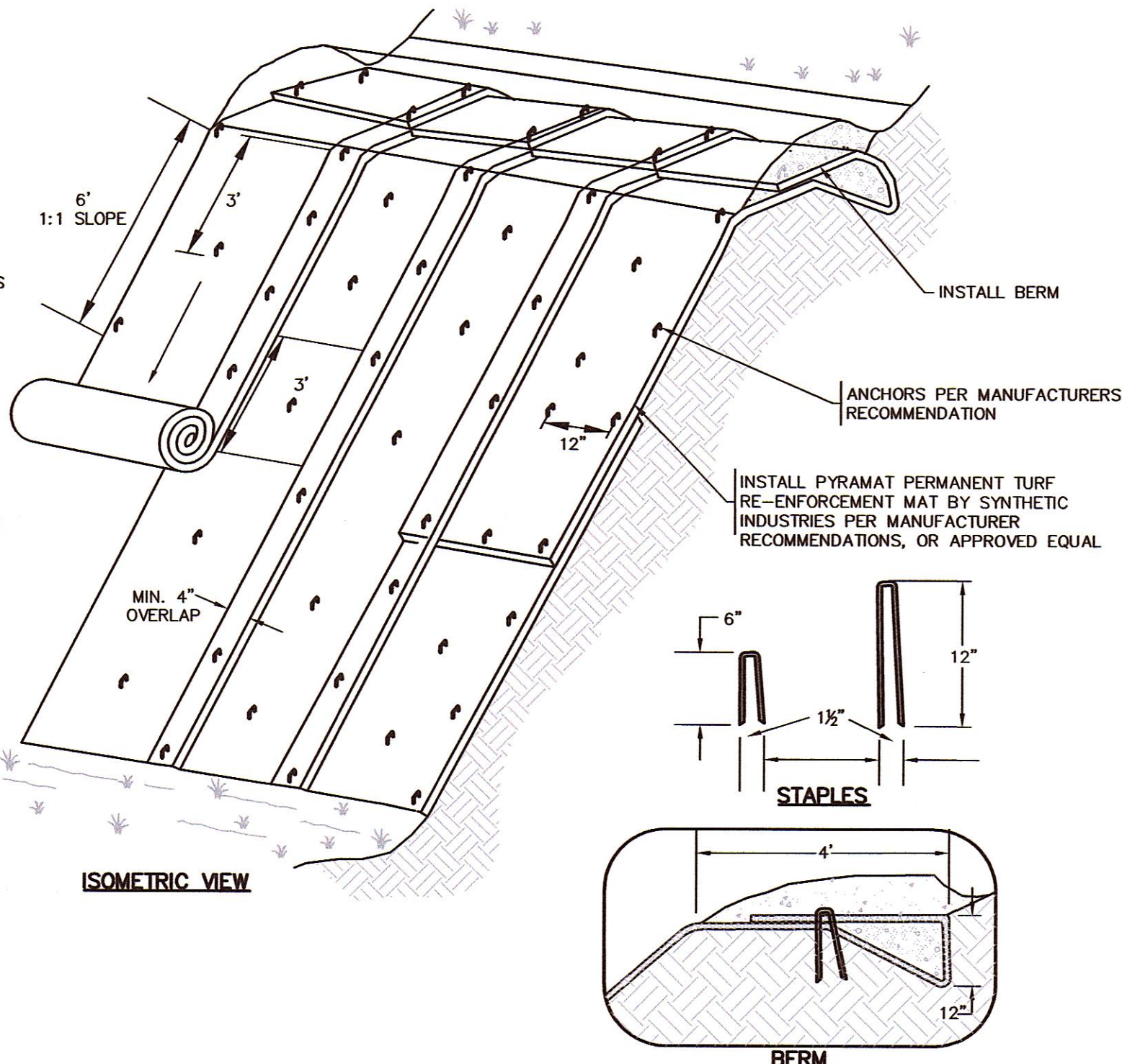
NOT TO SCALE



TEMPORARY STOCKPILE

ISOMETRIC VIEW

NOT TO SCALE

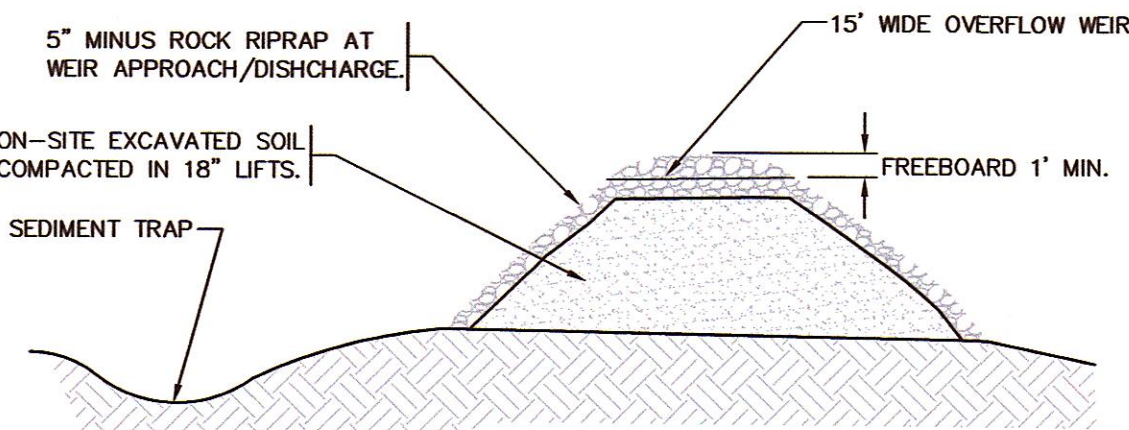


NOTES:

- [1] SLOPE SURFACE SHALL BE FREE OF ROCK, CLODS, STICKS AND GRASS, MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT
- [2] APPLY PERMANENT SEEDING PER MHD M6.03.1 EROSION SEED PRIOR TO PLACING MATS.
- [3] LAY MATS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH
- [4] MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE
- [5] TAMP SOIL OVER MAT/BLANKET

TURF REINFORCEMENT MAT

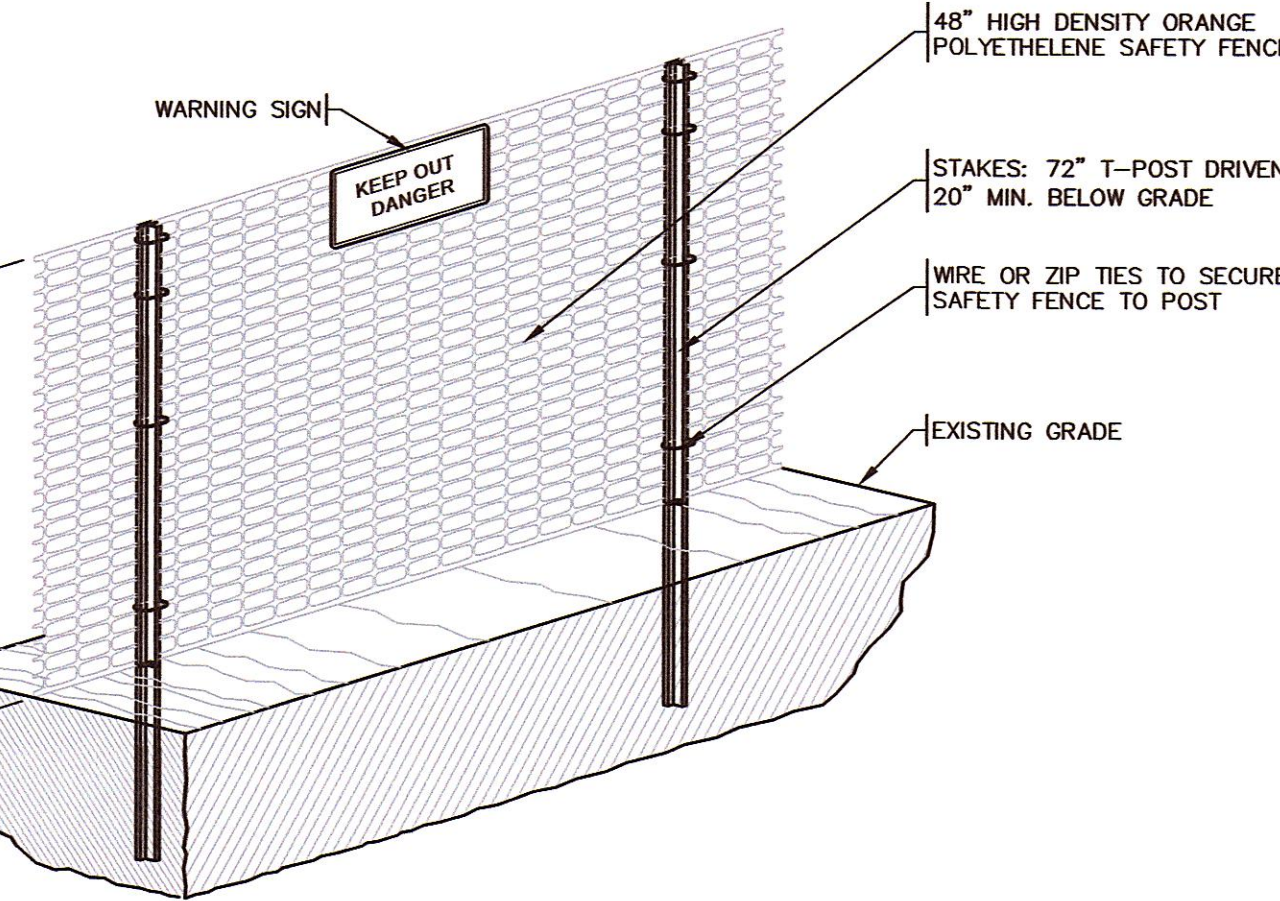
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TEMPORARY SEDIMENT BASIN

TYPICAL CROSS SECTION

NOT TO SCALE

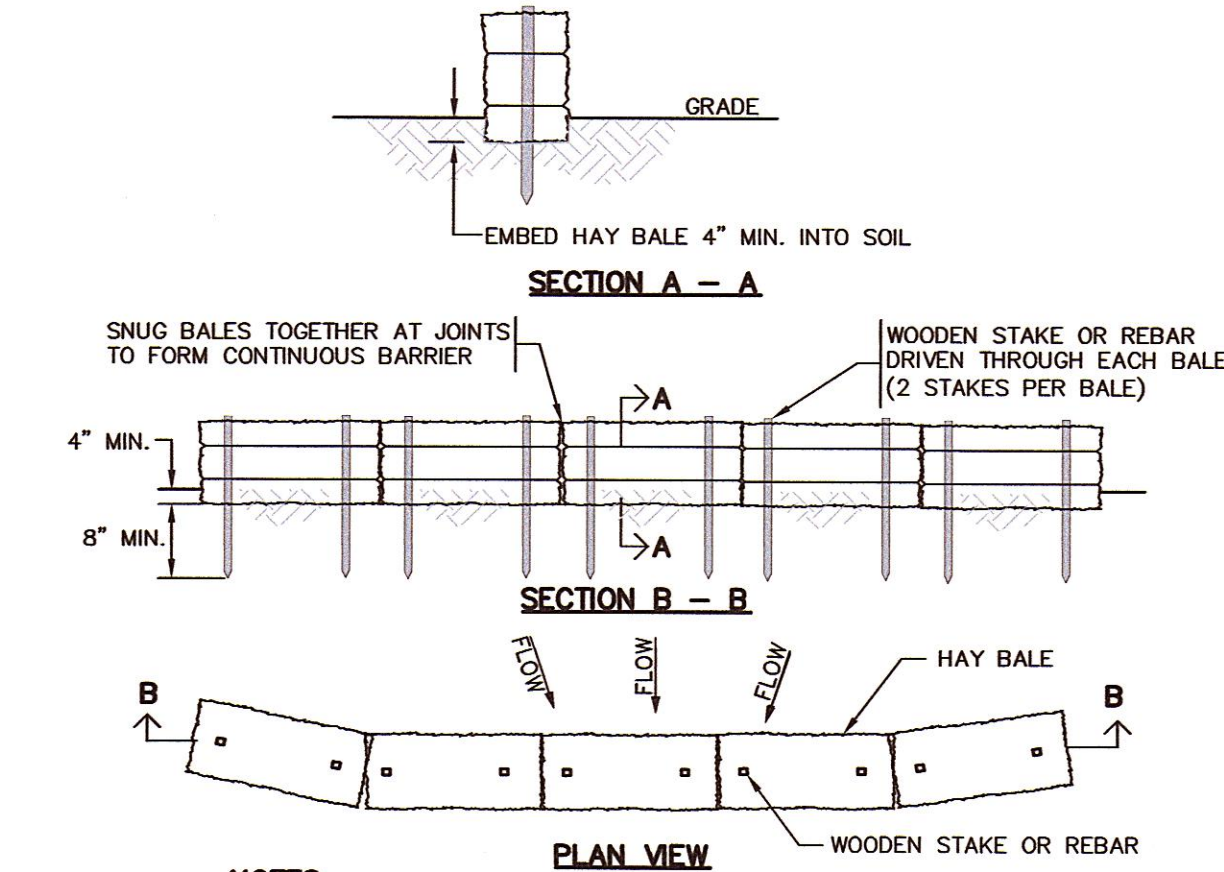


- [1] ALL ACTIVE CONSTRUCTION AREAS SHALL BE PROTECTED AS PER PLAN.
- [2] SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.
- [3] THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.
- [4] "DANGER KEEP OUT" SIGNS TO BE SPACED AT 100 FT INTERVALS.

ORANGE CONSTRUCTION SAFETY FENCE

TYPICAL CROSS SECTION

NOT TO SCALE

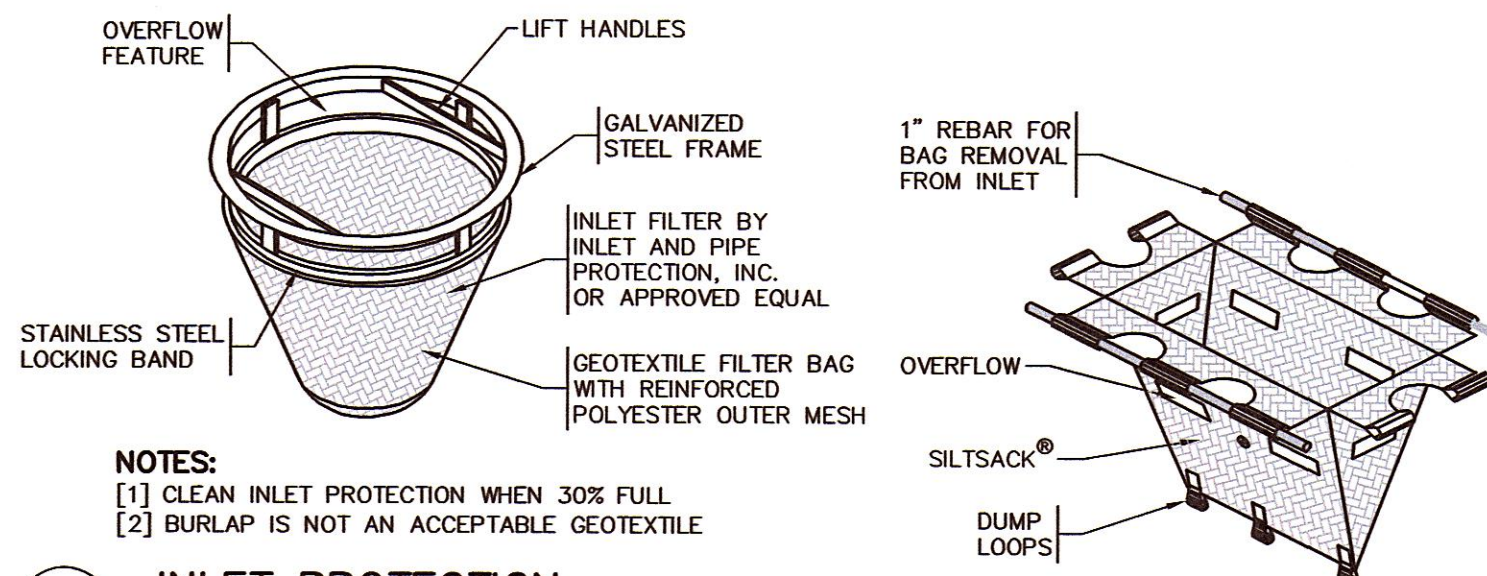


NOTES:

- [1] INSPECT AND REPAIR BARRIER AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
- [2] REMOVED SEDIMENT SHALL BE DEPOSITED TO NON-SENSITIVE UPLAND AREA.

STRAW BALE BARRIER

NOT TO SCALE



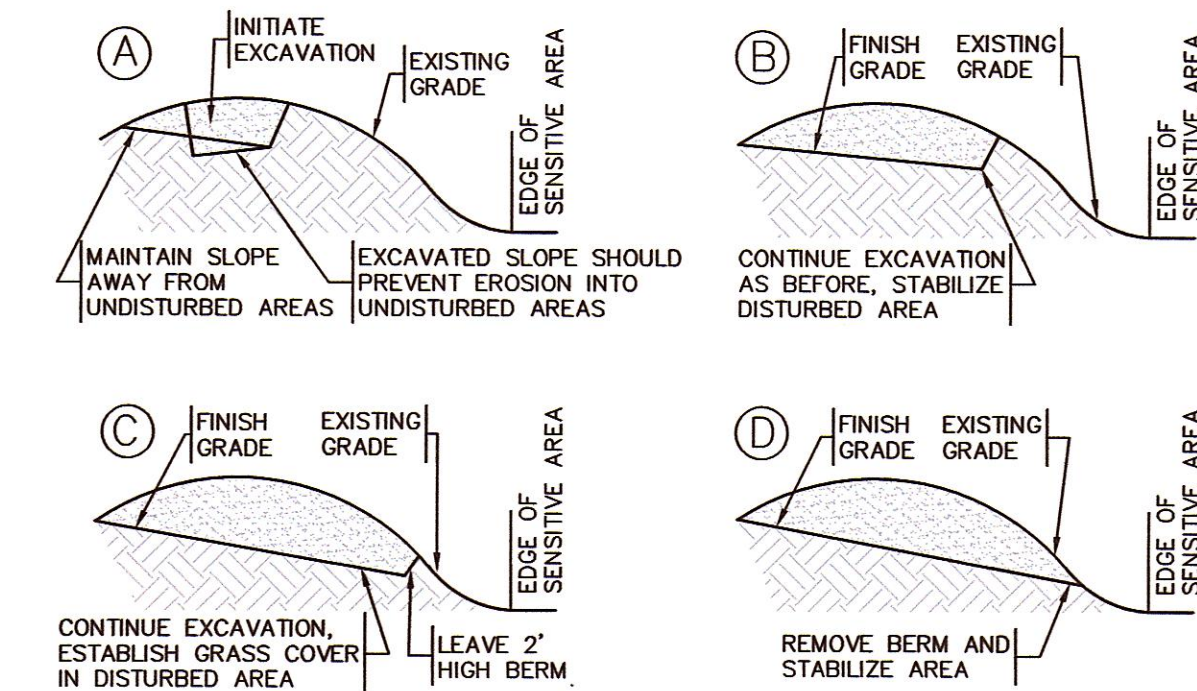
NOTES:

- [1] CLEAN INLET PROTECTION WHEN 30% FULL
- [2] BURLAP IS NOT AN ACCEPTABLE GEOTEXTILE

INLET PROTECTION

TYPICAL CROSS SECTION

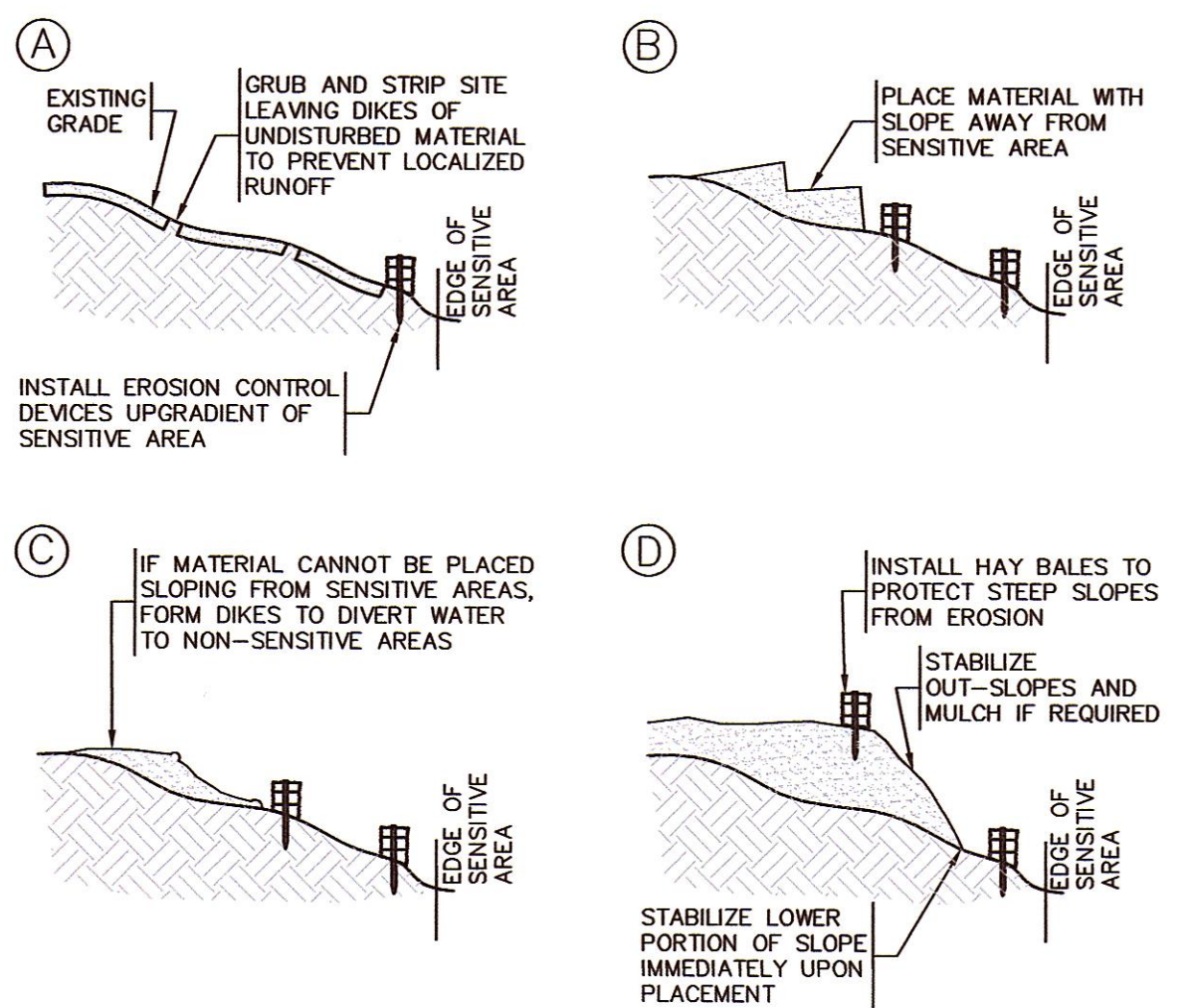
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EXCAVATION PROCEDURE

TYPICAL CROSS SECTION

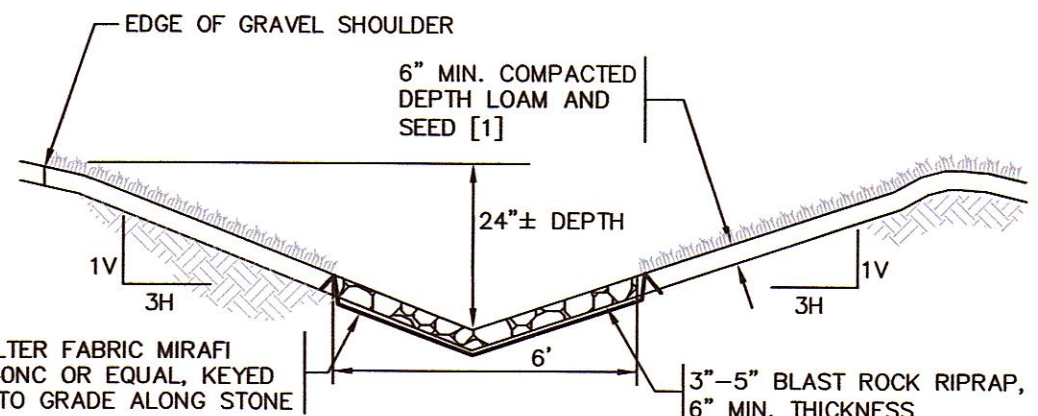
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FILL PROCEDURE

SLOPE PROFILES

NOT TO SCALE



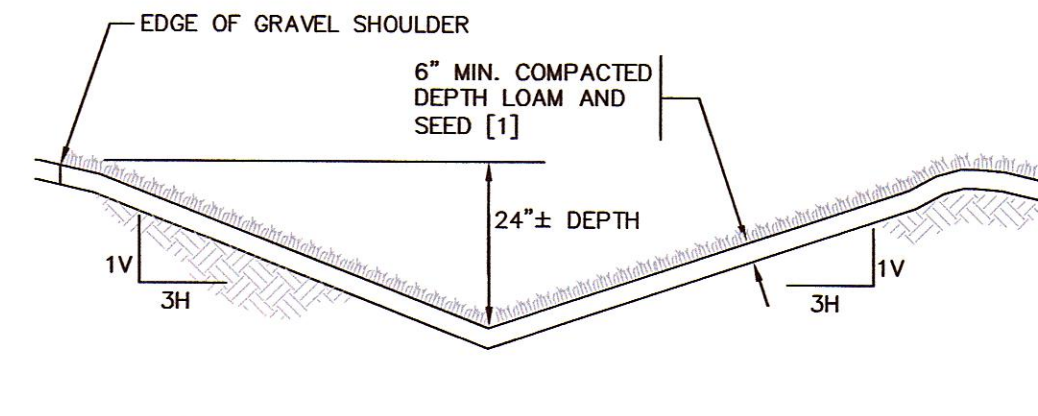
NOTES:

- [1] APPLY PERMANENT SEEDING PER MHD M6.03.1 EROSION SEED

ARMORED DRAINAGE CHANNEL

TYPICAL CROSS SECTION

NOT TO SCALE



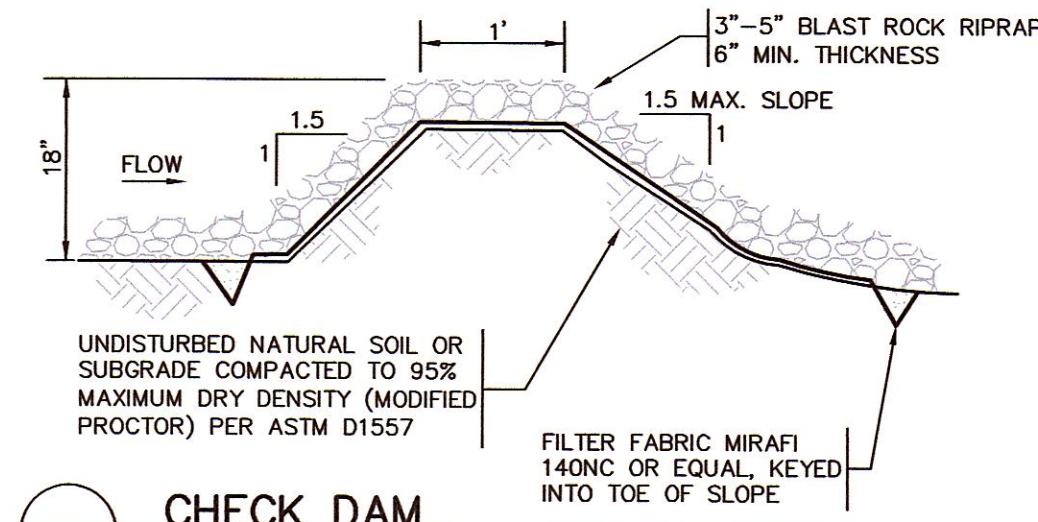
NOTES:

- [1] APPLY PERMANENT SEEDING PER MHD M6.03.1 EROSION SEED

GRASSED DRAINAGE CHANNEL

TYPICAL CROSS SECTION

NOT TO SCALE



CHECK DAM

TYPICAL CROSS SECTION

NOT TO SCALE

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☒ PERMIT ☐ CONSTRUCTION RECORD

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NO.	DATE	BY	APP.	REVISION DESCRIPTION
2	11/30/20	---	---	NO CHANGES ON THIS SHEET
1	7/14/20	LT/KFB	KFB	DRIVEWAY/DRAINAGE COMMENTS

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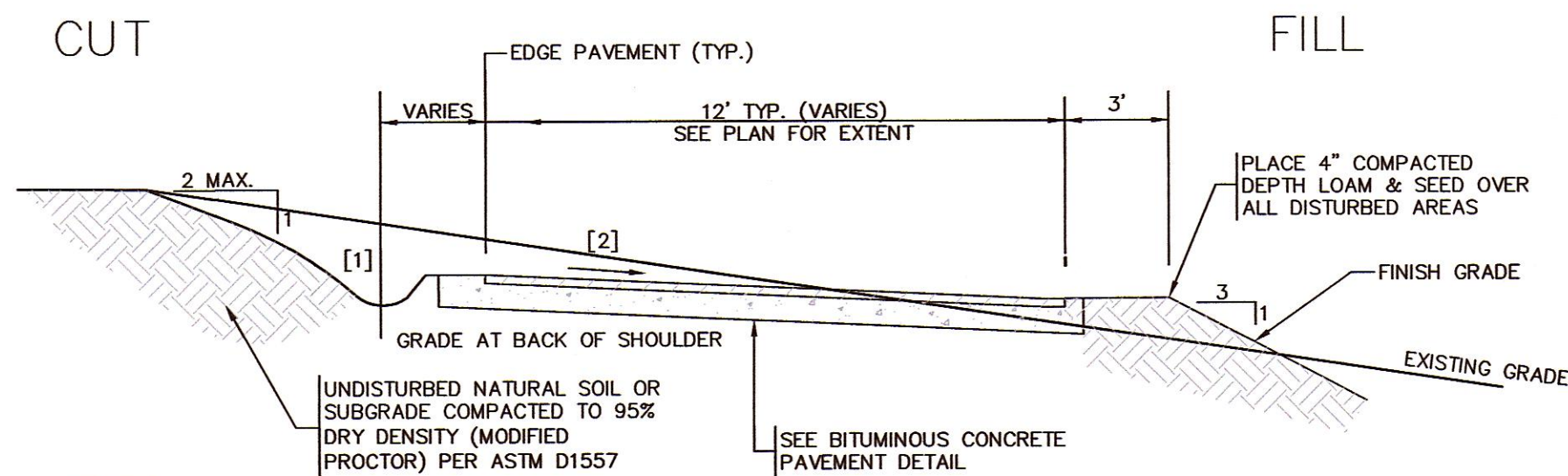
RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN

EROSION AND SEDIMENT
CONTROL PLAN

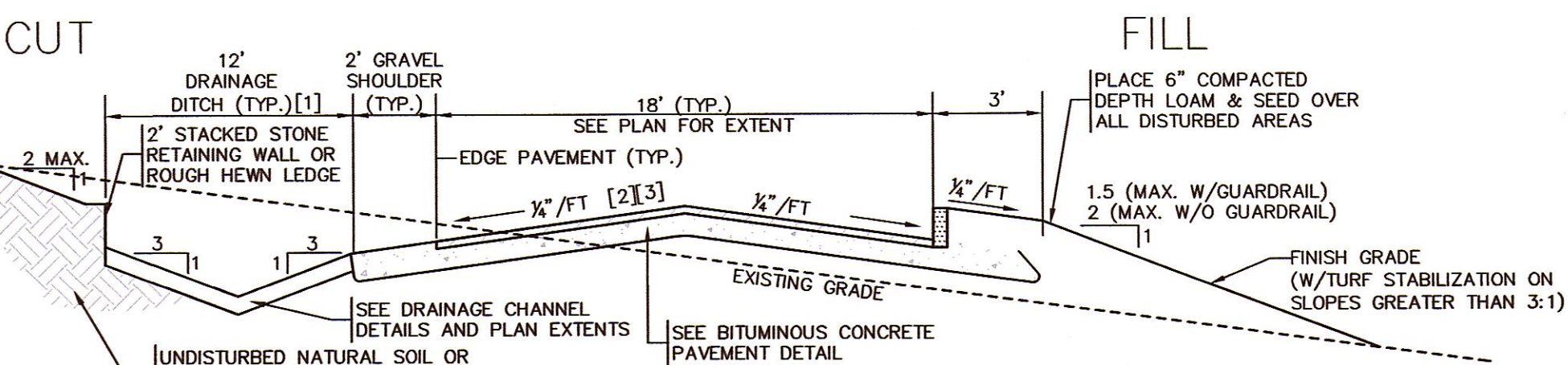
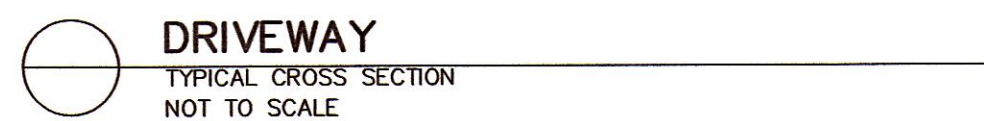
FIVE PATHS
ASSESSORS MAP#39 PARCEL 15A
WAYLAND, MA

RECORD OWNER & APPLICANT:
ROSS C. WILKINSON, PERSONAL REPRESENTATIVE,
ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03086

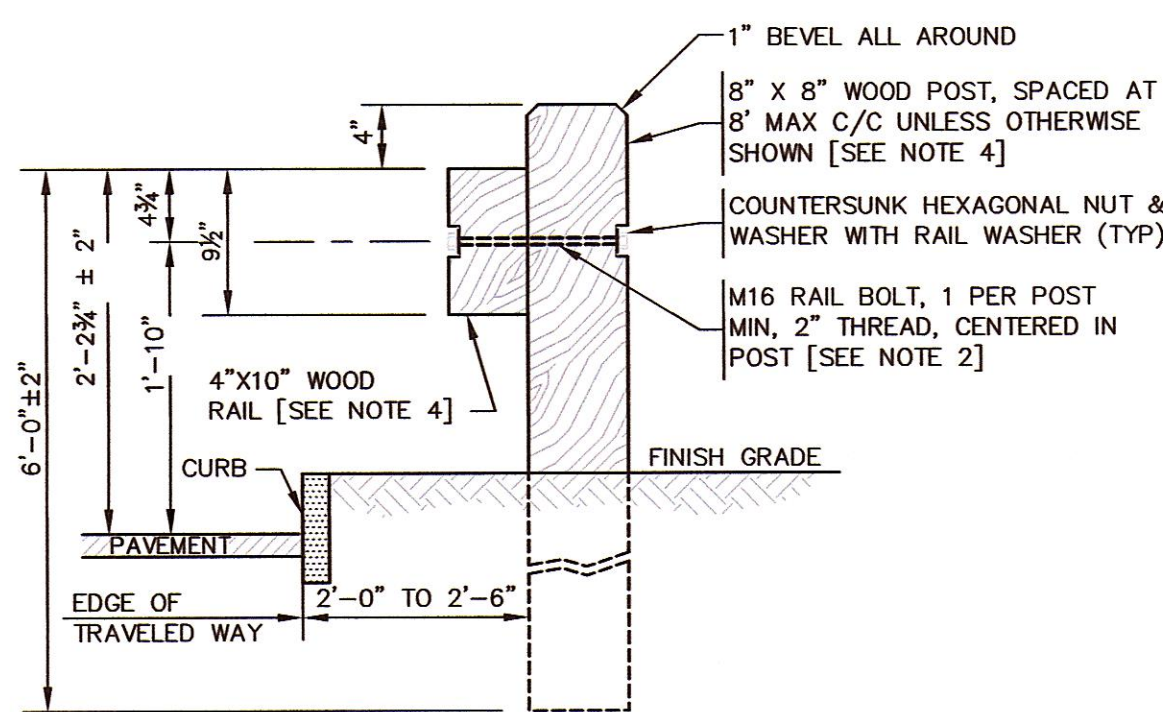
DES. BY: MPB	DATE: JULY 2019	JOB 171053	C6.1
CHK. BY: KFB			



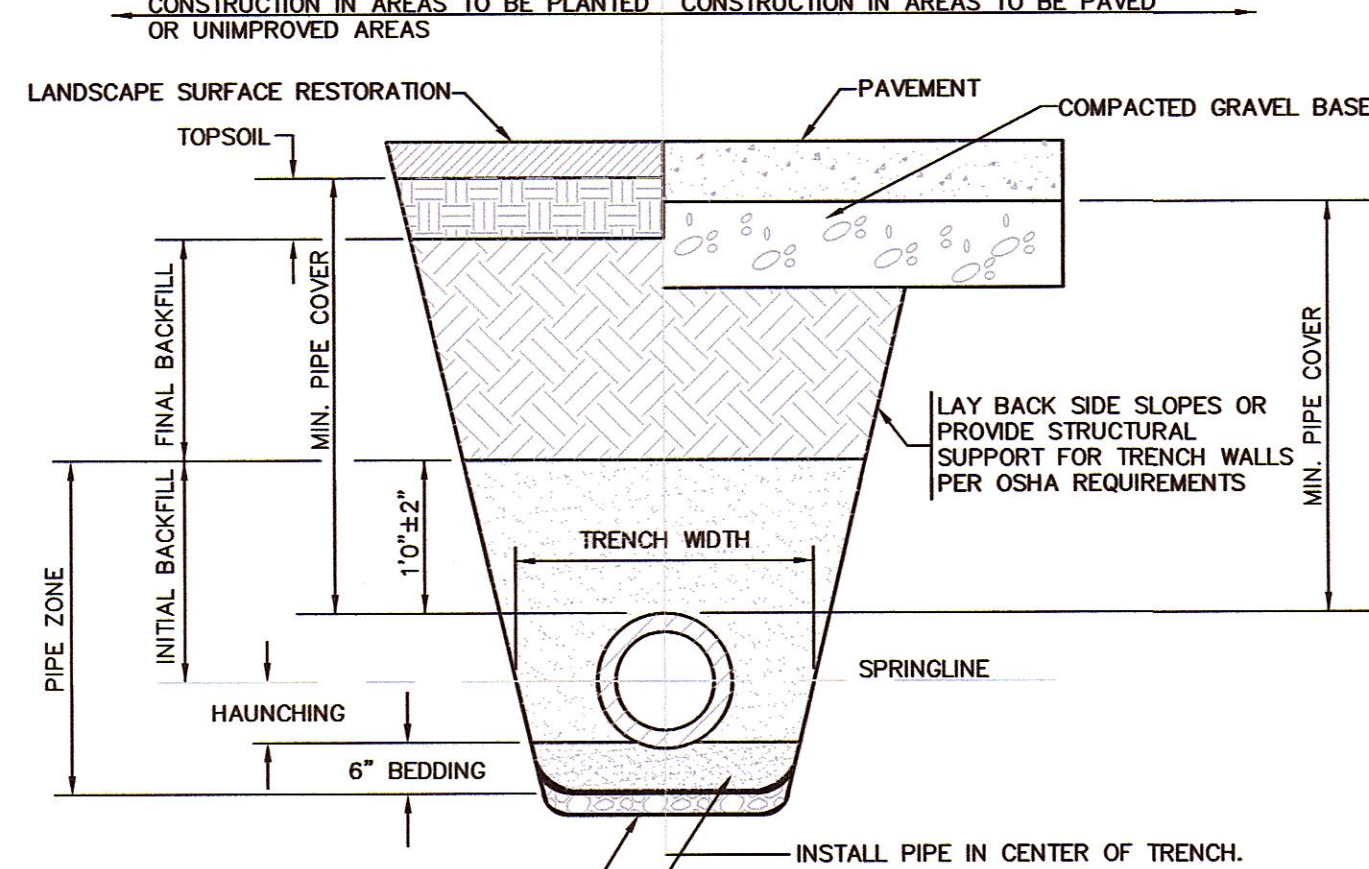
- NOTES:**
[1] DRAINAGE SWALE TO BE GRASS OR STONE AS SHOWN ON PLAN.
[2] DRIVEWAY TO BE CROSS-SLOPED AT 2% MIN. (5% MAX.) SWALE NOT INTENDED TO CONVEY PAVEMENT STORMWATER RUNOFF.



- NOTES:**
[1] DRAINAGE SWALE TO BE GRASS OR STONE AS SHOWN ON PLAN.
[2] DRIVEWAY TO BE CROWNED AT 3/4\"/>



- NOTES:**
[1] ALL NUTS, BOLTS & WASHERS ARE TO BE HIGH STRENGTH GALVANIZED STEEL.
[2] ALL SPLICES ARE TO BE MADE AT POST; FOUR (4) BOLTS EACH SPLICE.
[3] BACK-UP PLATE IS TO BE PLACED BEHIND RAIL ELEMENTS AT NON SPLICE LOCATIONS (INTERMEDIATE POSTS).
[4] WOOD AND WOOD TREATMENT SHALL COMPLY WITH MASSACHUSETTS HIGHWAY DEPARTMENT SPECIFICATIONS AND STANDARDS.
[5] TERMINAL SECTIONS SHALL BE IN ACCORDANCE WITH MASSACHUSETTS HIGHWAY DEPARTMENT SPECIFICATIONS AND STANDARDS.



FOUNDATION STABILIZATION WHEN REQUIRED BY ENGINEER. OTHERWISE, PLACE BEDDING ON UNDISTURBED NATURAL SOIL.

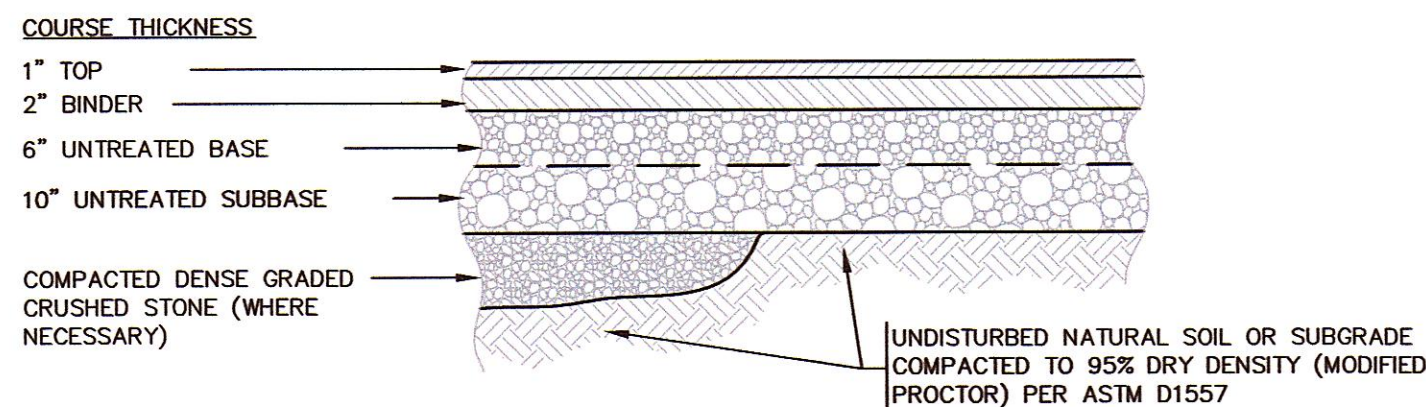
SHAPE BEDDING BY HAND TO FIT BOTTOM OF PIPE, INSTALL PIPE ON STABLE BEDDING WITH UNIFORM BEARING UNDER FULL LENGTH OF PIPE BARREL

TRENCH WIDTH:		
[1] MINIMUM WIDTH OF TRENCH MEASURED AT SPRINGLINE OF PIPE, INCLUDING ANY NECESSARY SHEATHING.		
PIPE I.D.	WIDTH	
LESS THAN 21"	O.D. + 12"	
21" TO 42"	O.D. + 24"	
GREATER THAN 42"	O.D. + 30"	

MINIMUM PIPE COVER:			
[1] MINIMUM SOIL COVER OVER TOP OF PIPE.			
PIPE MATERIAL	HDPE, PVC	RC, DI	
WATER	5' - 0"	5' - 0"	
SEWER	4' - 0"	4' - 0"	
DRAIN	2' - 0"	1' - 0"	

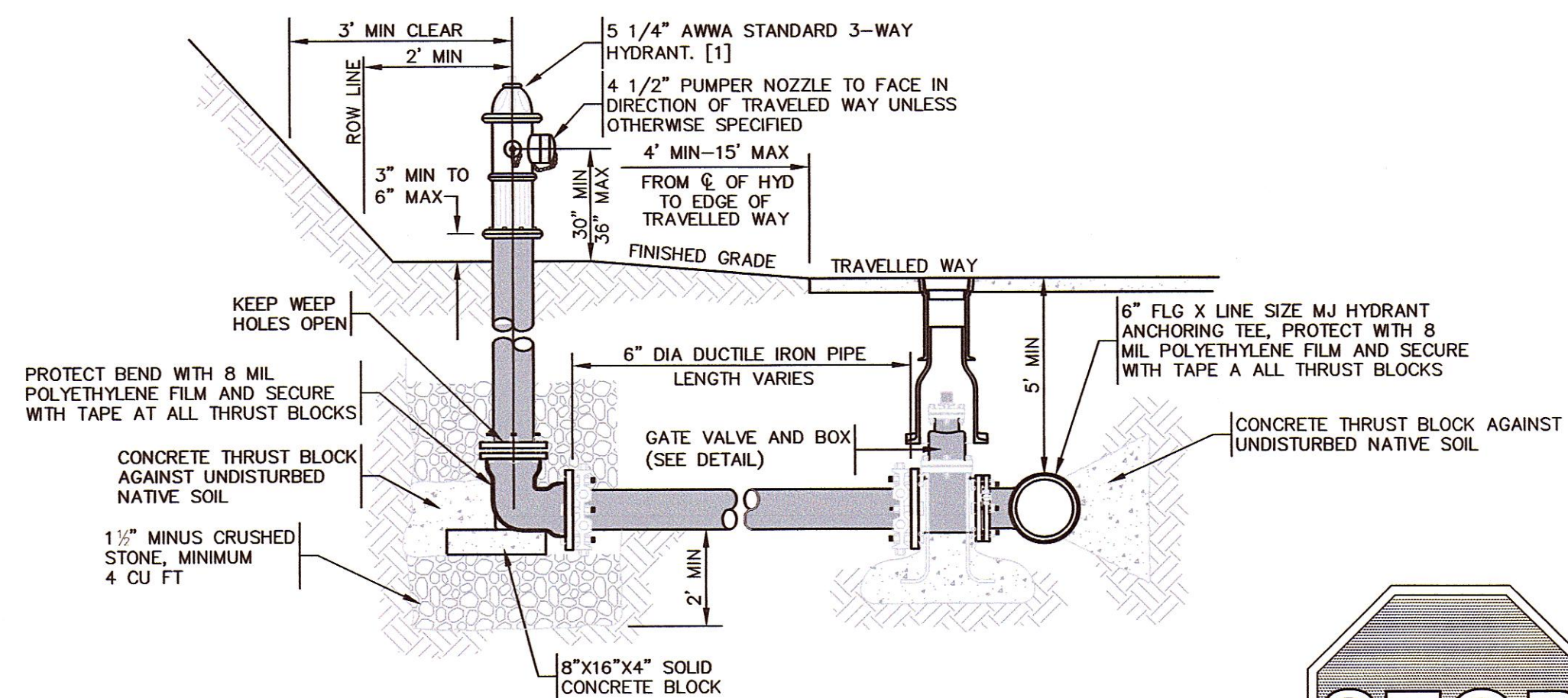
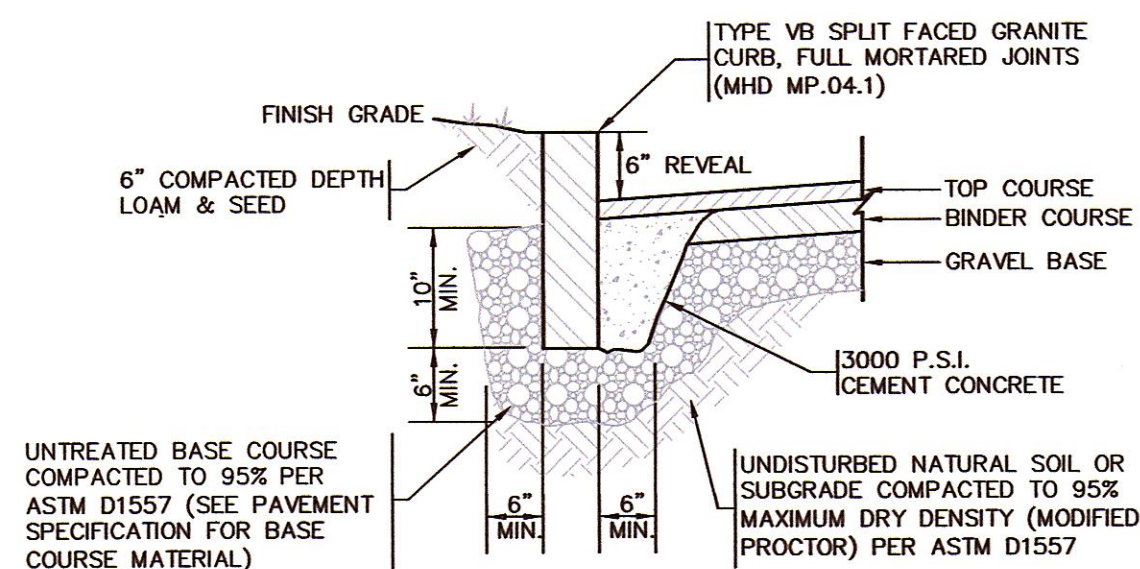
- MATERIAL KEY NOTES (SEE TABLE BELOW):**
[1] PLACE 2" MINUS CRUSHED STONE.
[2] PLACE 1/2" MINUS SAND BORROW (MHD M1.04.1), AT OPTIMUM MOISTURE IN HORIZONTAL 8" DEEP LOOSE LAYERS, COMPACT TO 95% PER ASTM D-1557 MODIFIED PROCTOR METHOD.
[3] IN PLANTED OR UNIMPROVED AREAS, USE 2-INCH MINUS ON-SITE EXCAVATED MATERIAL. COMPACT TO 90% PER ASTM D-1557, IN PAVED AREAS, OBTAIN ENGINEER APPROVAL OF 2-INCH MINUS ON-SITE EXCAVATED MATERIALS.

FOUNDATION, BEDDING AND BACKFILL MATERIALS			
PIPE MATERIAL	HDP, PVC	RC, DI	
FOUNDATION STABILIZATION	[NOTE 1]	[NOTE 1]	
BEDDING	[NOTE 2]	[NOTE 2]	
HAUNCHING	[NOTE 2]	[NOTE 2]	
INITIAL BACKFILL	[NOTE 2]	[NOTE 2]	
FINAL BACKFILL	[NOTE 3]	[NOTE 3]	

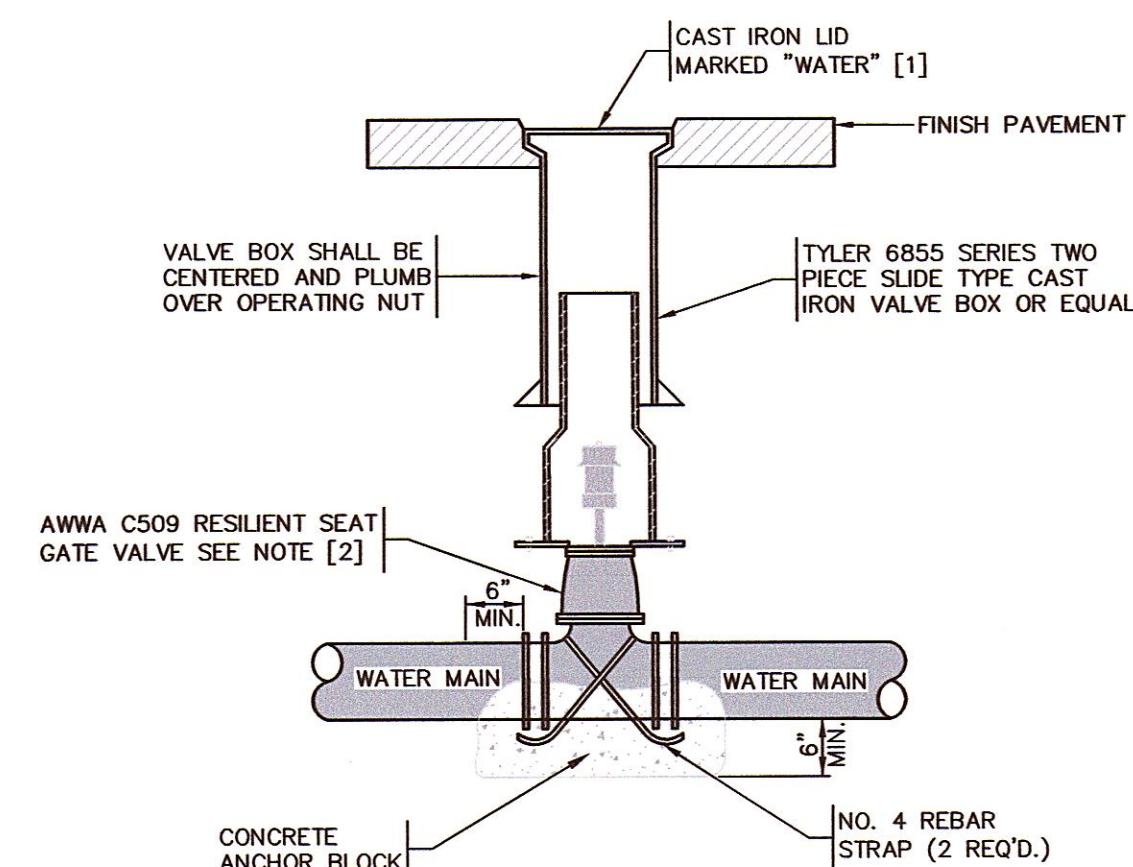


COURSE	MATERIAL	SPECIFICATION PER MASS HIGHWAY DEPARTMENT (MHD)	MAX AGG. SIZE (INCH)	COMPACTION REQUIREMENTS	TEST DESIGNATION
TOP	BITUMINOUS CONCRETE	M3.11.03 CLASS I, TYPE 1-1	1 1/2	[NOTE 1]	AASHTO-T166
BINDER	BITUMINOUS CONCRETE	M3.11.03 CLASS I, TYPE 1-1	3/4	[NOTE 1]	AASHTO-T166
BASE	GRAVEL BORROW	M1.03.0 TYPE C	2	95% [NOTE 3]	ASTM D1557/AASHTO-T99
SUBBASE	GRAVEL BORROW	M1.03.0 TYPE B	3	95% [NOTE 3]	ASTM D1557/AASHTO-T99
SUBGRADE	ORDINARY BORROW	M1.01.0 [SEE NOTE 2]	8	95% [NOTE 3]	ASTM D1557/AASHTO-T99

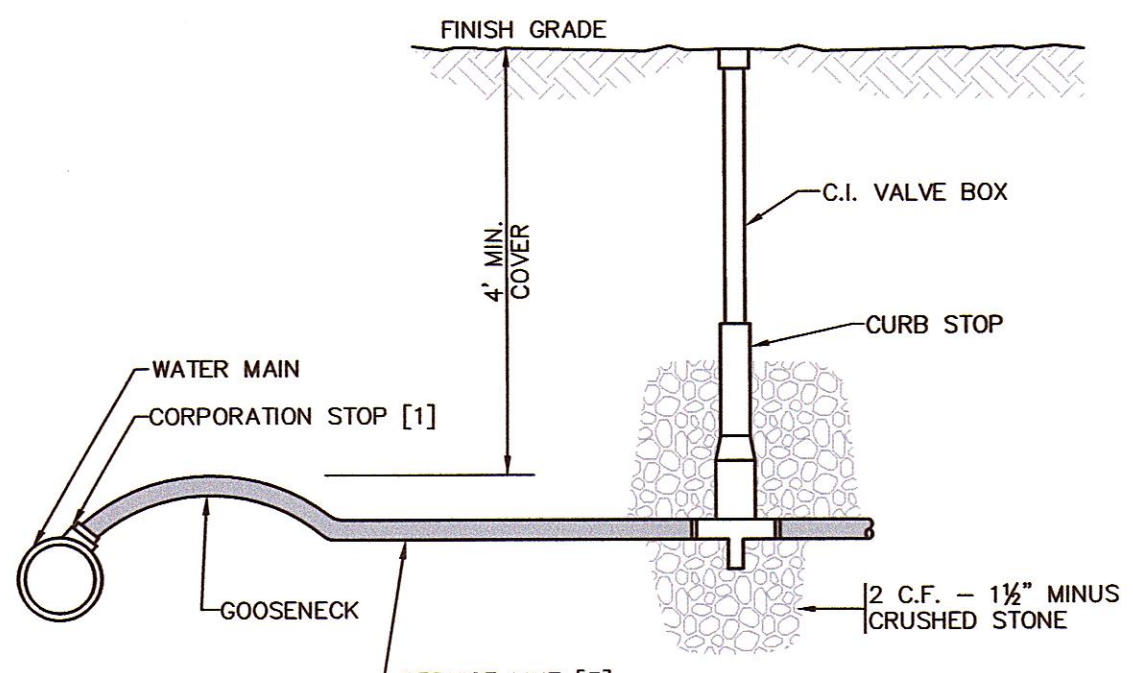
- NOTES:**
[1] COMPACT TO TEST AVERAGE OF 95% TEST SHALL NOT BE LOWER THAN 93%.
[2] UNSUITABLE MATERIAL IN THE SUBGRADE SHALL BE REMOVED AND REPLACED WITH AN ACCEPTABLE SUBSTITUTE MATERIAL: 3/4" MINUS DENSE GRADED CRUSHED STONE.
[3] MATERIAL SHALL BE SPREAD AND COMPACTED IN LAYERS NOT EXCEEDING 8-INCHES IN DEPTH, COMPACTED MEASUREMENT; LAST LAYER OF MATERIAL SHALL NOT EXCEED 4-INCHES IN DEPTH, COMPACTED MEASUREMENT.



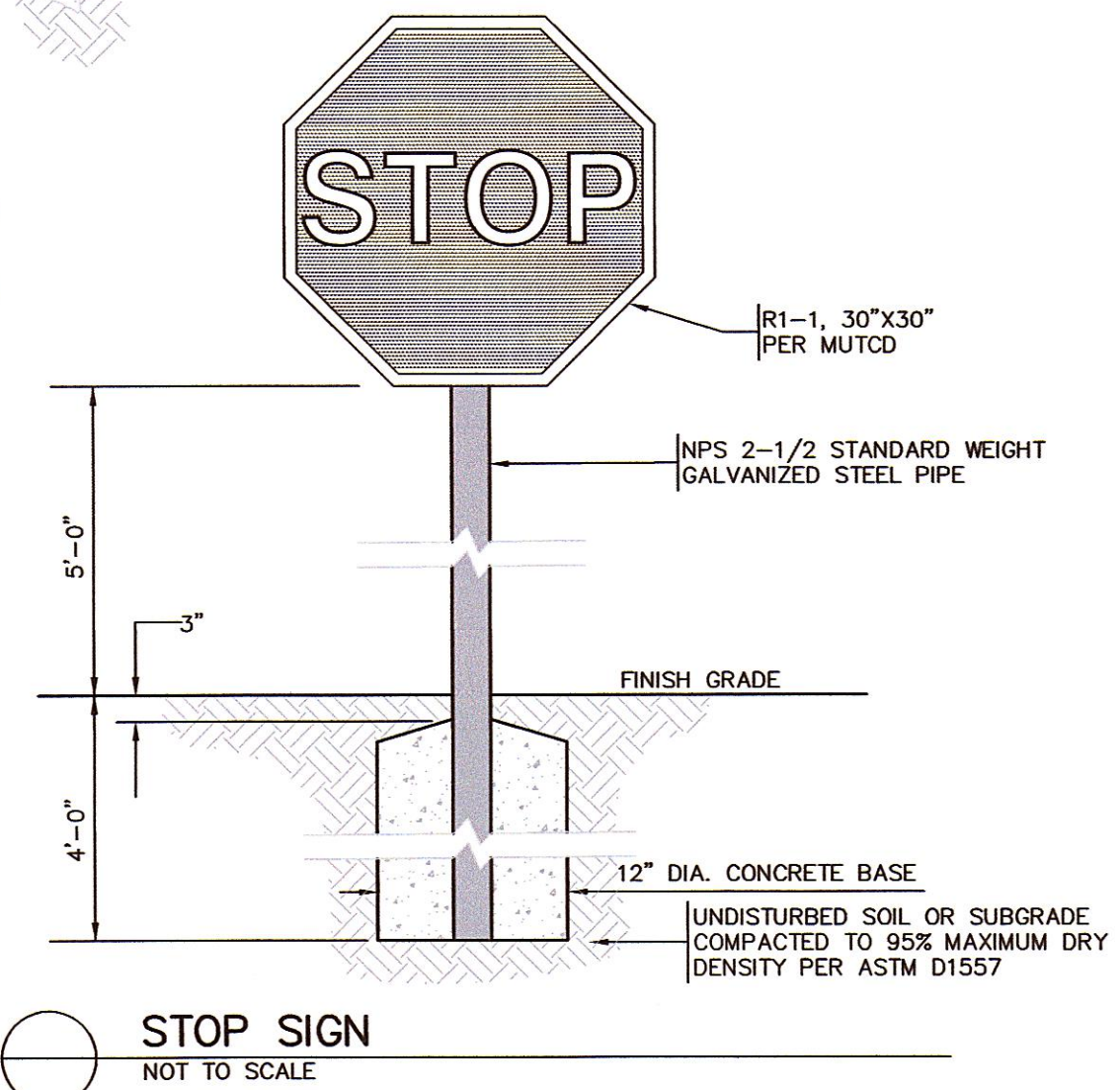
- NOTES:**
[1] HYDRANT SHALL MEET ALL TOWN AND AWWA STANDARDS AND BE UL/FM APPROVED AND EQUIPPED WITH (1) 4 1/2" PUMPER NOZZLE AND (2) 2 1/2" HOSE NOZZLES.
[2] HYDRANT SHALL OPEN IN DIRECTION AS SPECIFIED BY THE LOCAL FIRE DEPARTMENT.
[3] WHERE HYDRANT IS SHOWN BEHIND SIDEWALK, SET CENTER OF HYDRANT 2- FEET BEHIND SIDEWALK.



- NOTES:**
[1] SET LID AND CONCRETE COLLAR 1/4" TO 1/2" BELOW GRADE IN PAVEMENT OR OTHER AREAS TO BE PLOWED. SET LID 3" ABOVE FINISHED GRADE ELSEWHERE.
[2] VALVE SHALL OPEN IN DIRECTION AS SPECIFIED BY THE LOCAL WATER DEPARTMENT.



- NOTES:**
[1] WATER SERVICES LARGER THAN 1" ARE TO BE RESTRAINED TO MAIN WITH APPROVED SADDLE.
[2] COORDINATE BUILDING CONNECTION WITH PLUMBING DRAWINGS.
[3] ALL MATERIALS PER MUNICIPAL STANDARDS.



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1	7/14/20	LT/KFB	KFB	DRIVEWAY/DRAINAGE COMMENTS

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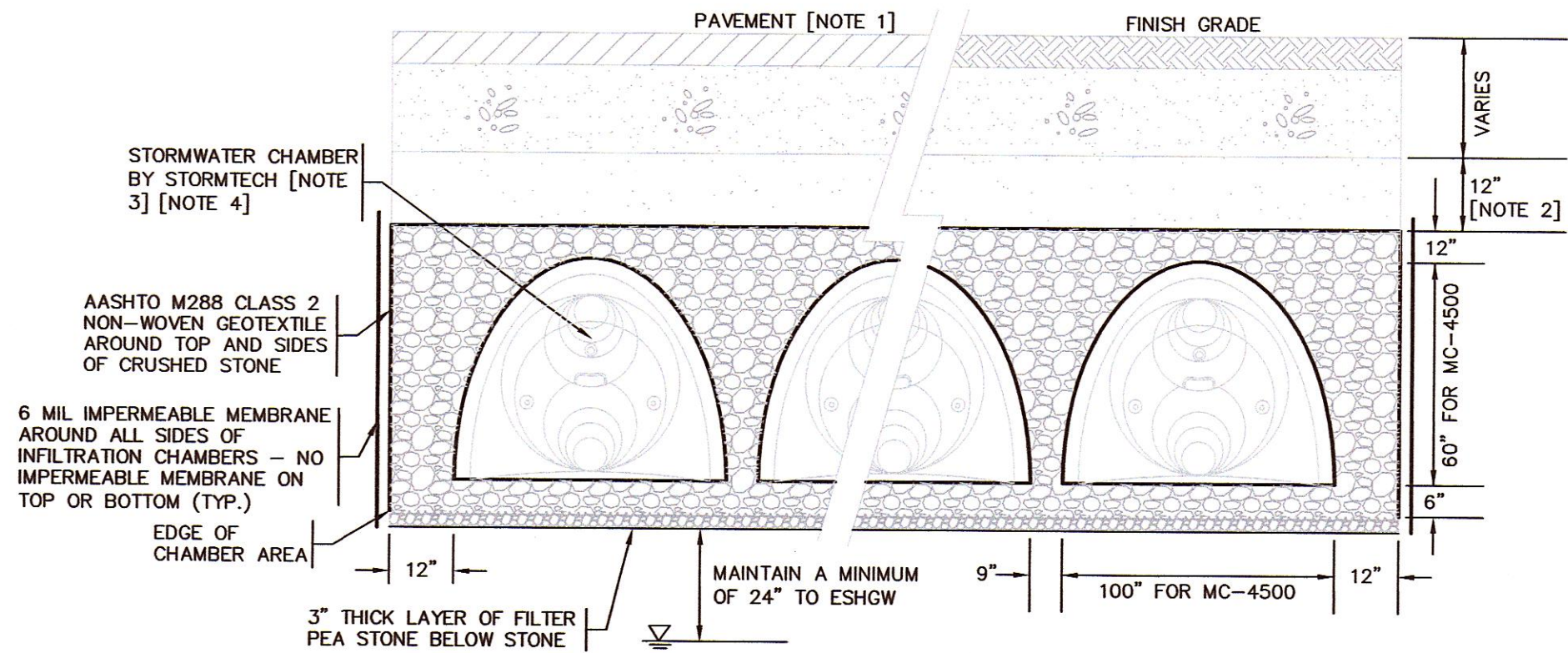
CONSTRUCTION DETAILS

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WAYLAND, MA

RECORD OWNER & APPLICANT:
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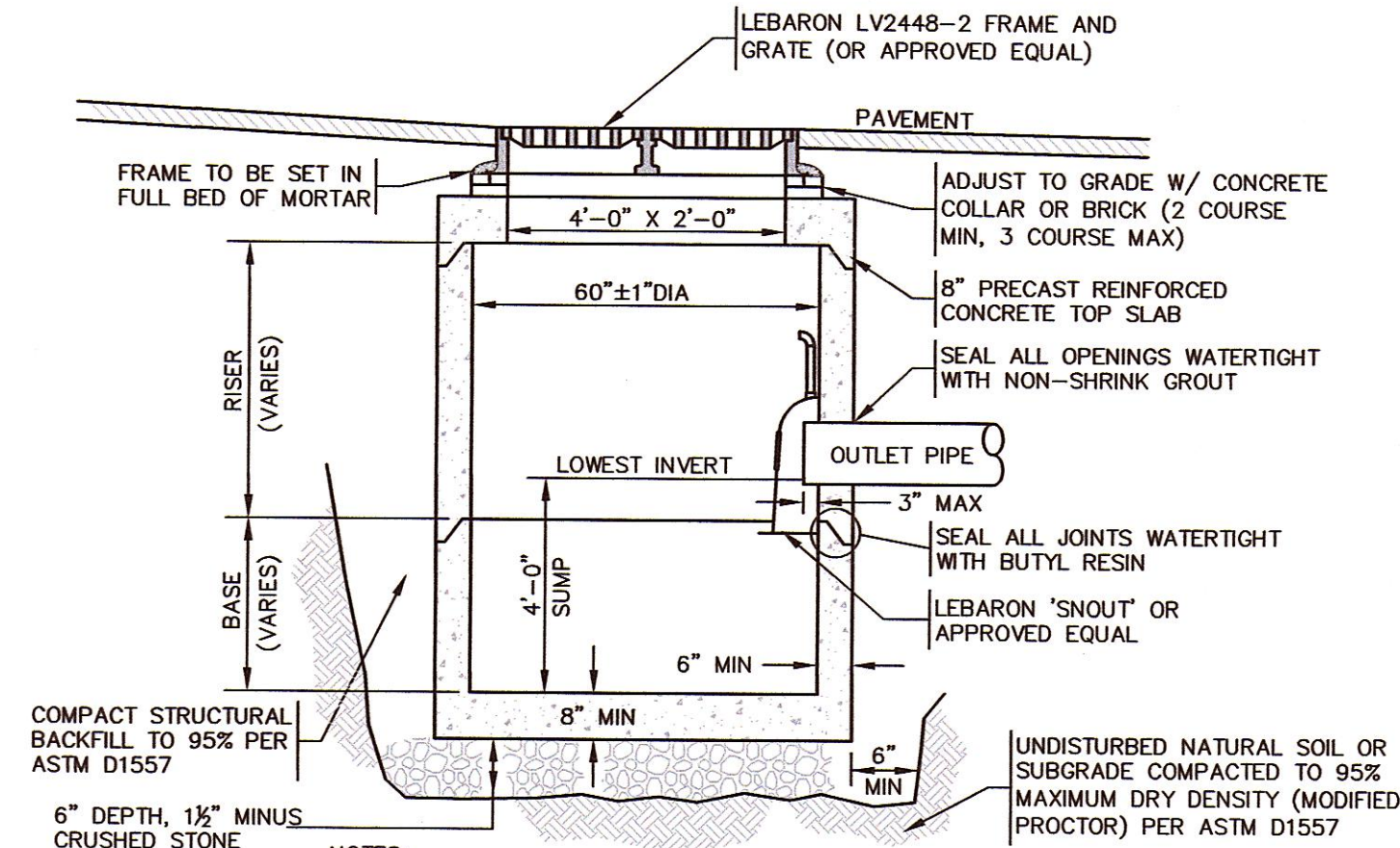
DES. BY: MPB	DATE: JULY 2019	JOB 171053	C7.1
CHK. BY: KFB			

P: V7-----\171053.DWG\PERMIT\DEFSUB_CD.DWG 11-30-20 10:40:41 AM - LAYOUT C7.2-C02



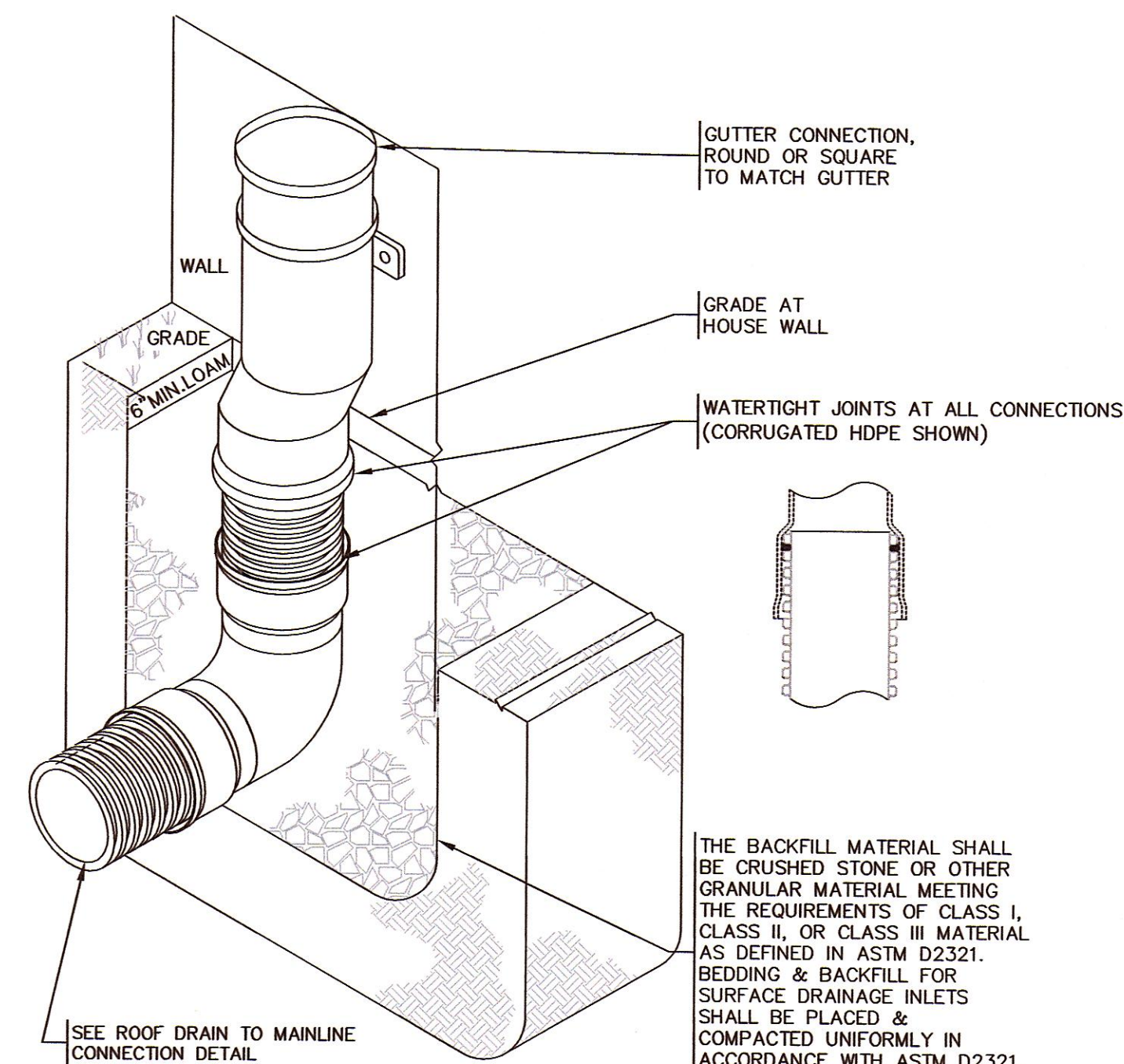
- NOTES:
- [1] SEE BITUMINOUS CONCRETE PAVEMENT DETAIL FOR MATERIALS AND SPECIFICATIONS
 - [2] GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES, COMPACT IN 6" LIFTS TO MINIMUM 95% STANDARD PROCTOR DENSITY.
 - [3] SEE STORMTECH CHAMBER SYSTEMS DESIGN MANUAL FOR MANUFACTURERS SPECIFICATIONS AND MATERIAL SPECIFICATIONS.
 - [4] ALL CHAMBERS MAY NOT BE SHOWN, SEE SITE PLAN FOR NUMBER AND CONFIGURATION.

STORMWATER CHAMBER SYSTEM
TYPICAL CROSS SECTION
NOT TO SCALE

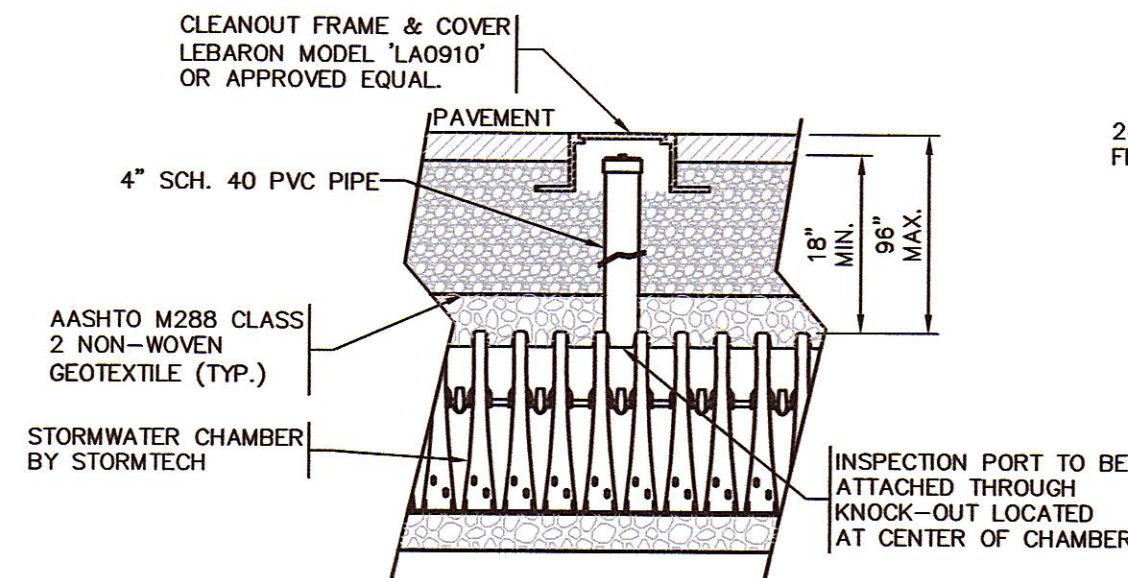


- NOTES:
- [1] 4,000 PSI PRECAST CONCRETE AT 28 DAYS CONFORMING WITH LATEST ASTM C478.
 - [2] REINFORCING PER LATEST ASTM A185.
 - [3] STRUCTURE SHALL BE RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.

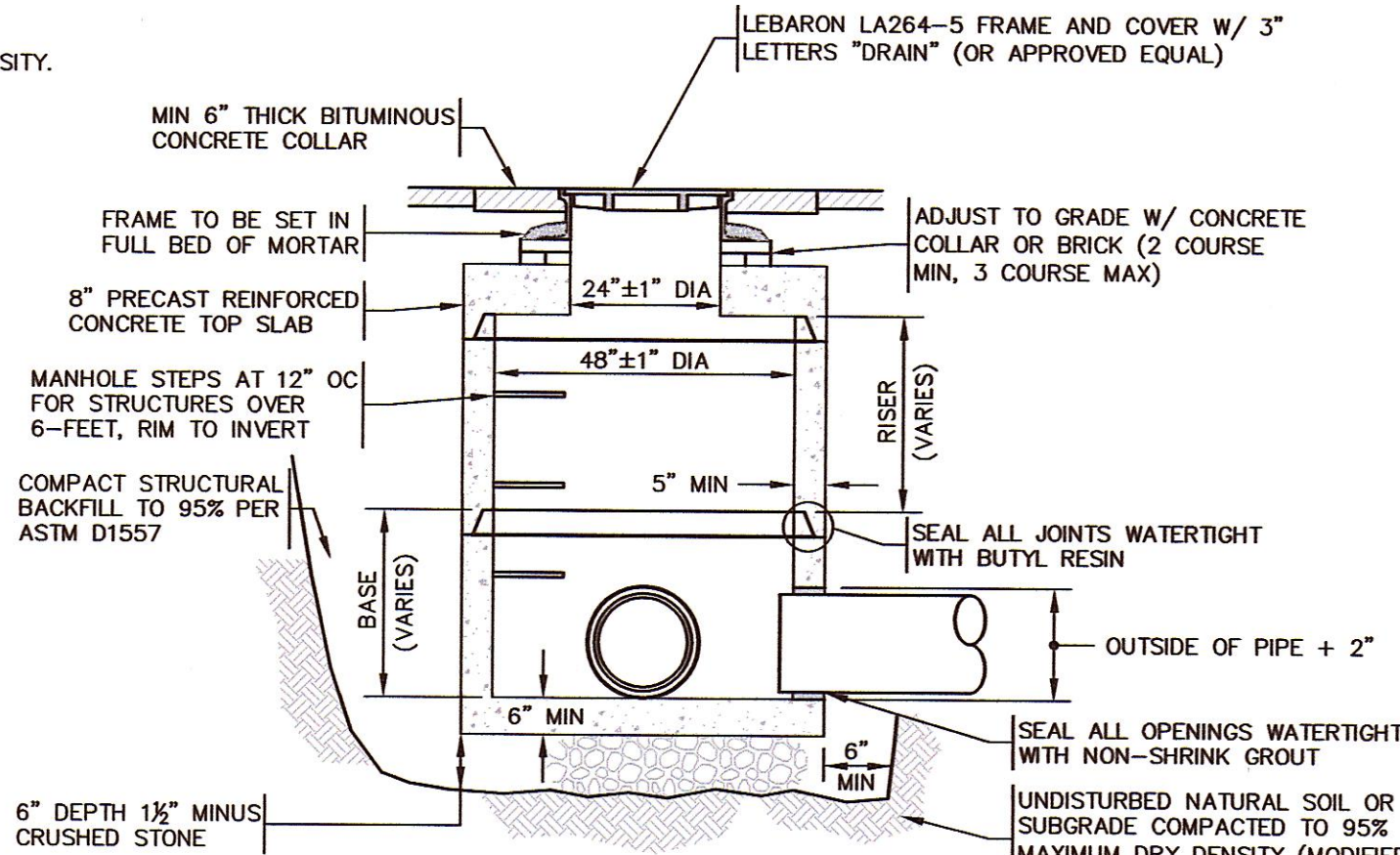
DOUBLE GRATE CATCH BASIN (DCB)
TYPICAL CROSS SECTION
NOT TO SCALE



DOWNSPOUT BOOT DETAIL
TYPICAL ISO VIEW
NOT TO SCALE

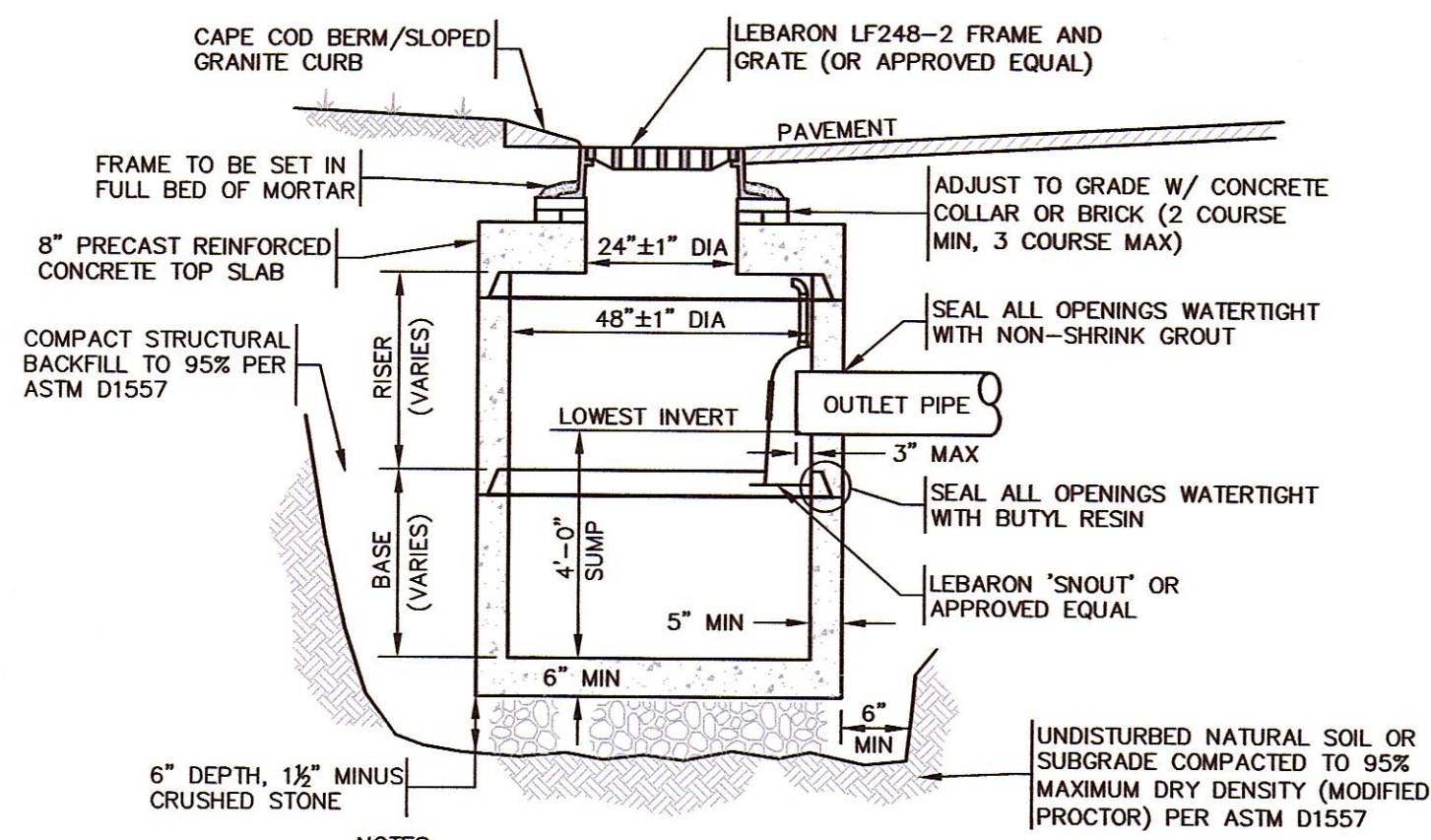


INSPECTION PORT
TYPICAL CROSS SECTION
NOT TO SCALE



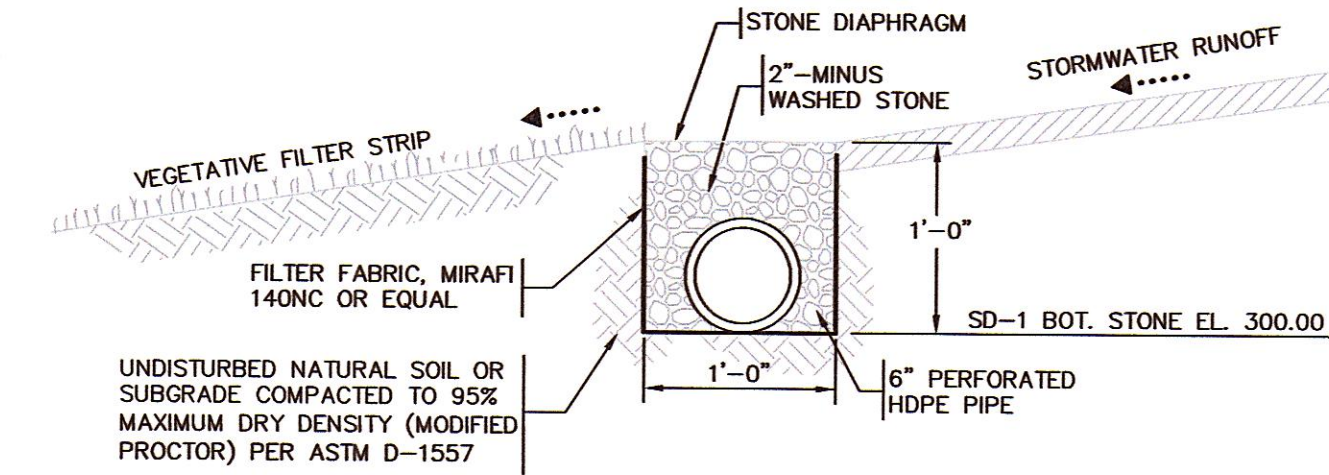
- NOTES:
- [1] 4,000 PSI PRECAST CONCRETE AT 28 DAYS CONFORMING WITH LATEST ASTM C478.
 - [2] REINFORCING PER LATEST ASTM A185.
 - [3] STRUCTURE SHALL BE RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.

DRAIN MANHOLE (DMH)
TYPICAL CROSS SECTION
NOT TO SCALE

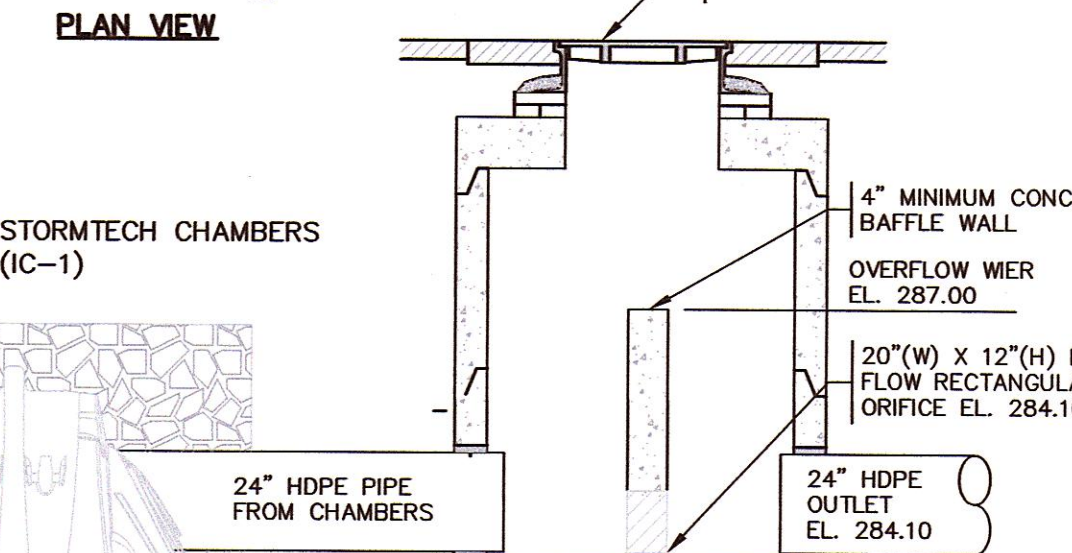
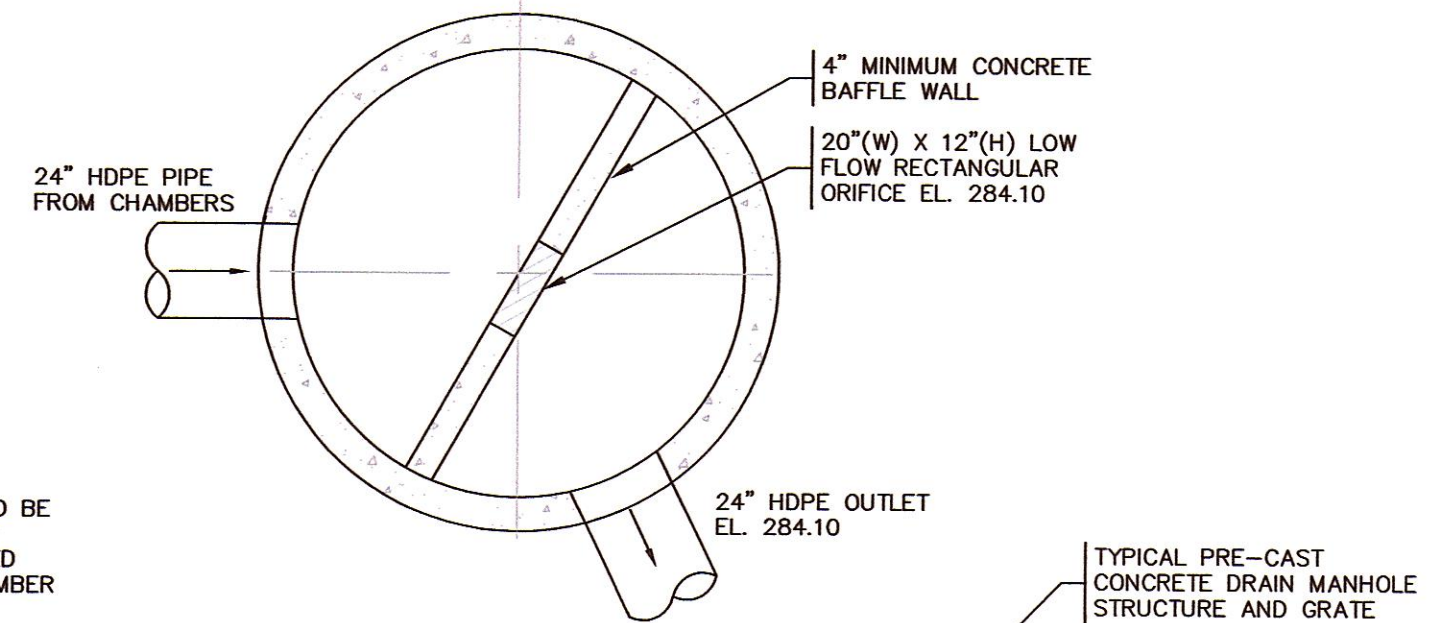


- NOTES:
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 - [2] REINFORCING PER LATEST ASTM A185.
 - [3] STRUCTURE SHALL BE RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.

CATCH BASIN (CB)
TYPICAL CROSS SECTION
NOT TO SCALE

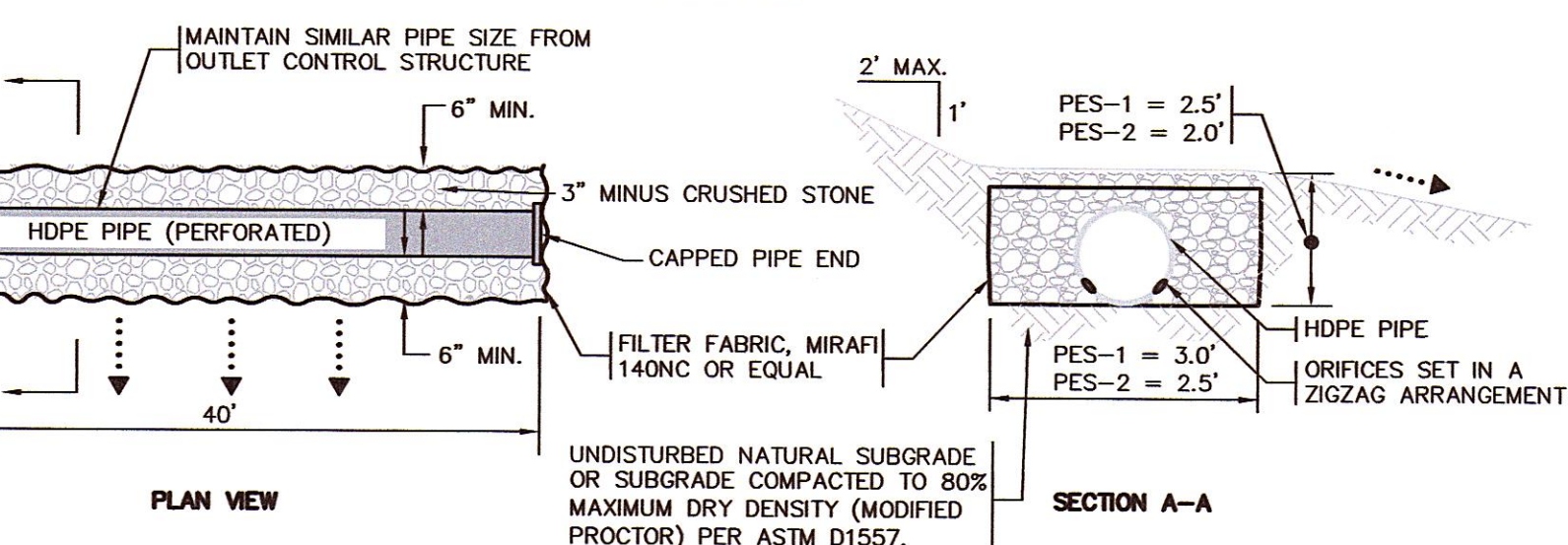
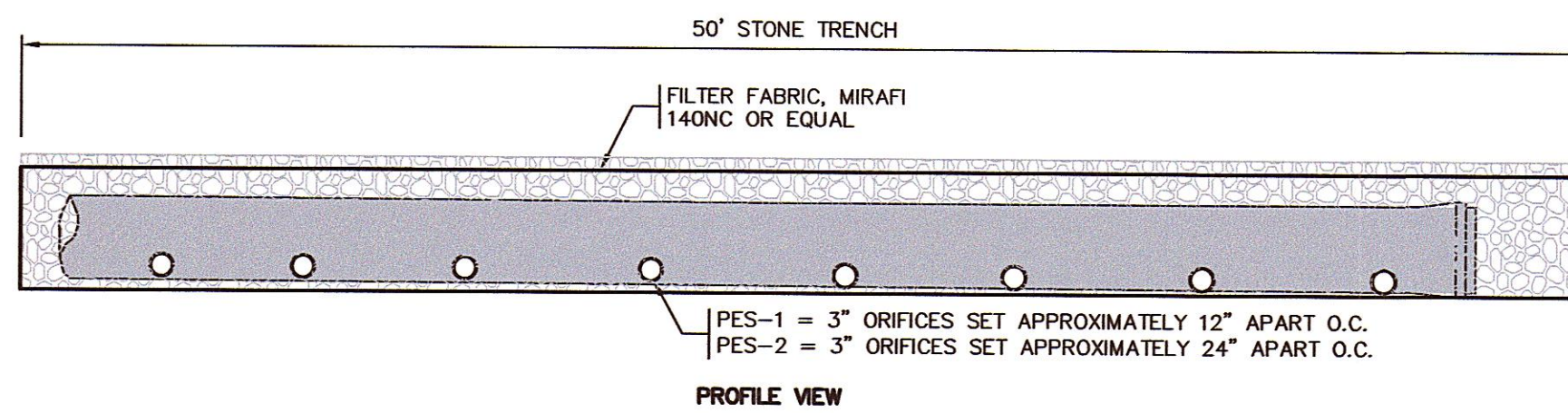


STONE DIAPHRAGM (SD)
TYPICAL CROSS SECTION
NOT TO SCALE

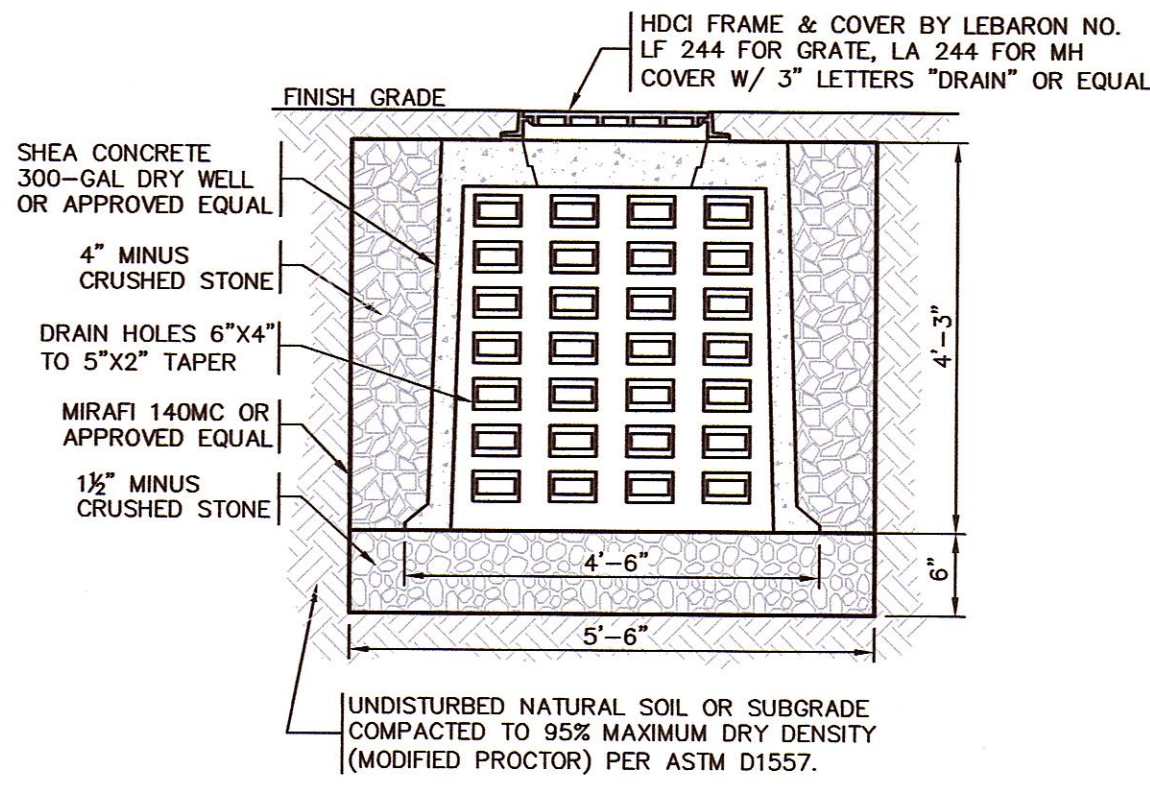


- NOTES:
- [1] 4,000 PSI PRECAST CONCRETE AT 28 DAYS CONFORMING WITH LATEST ASTM C478.
 - [2] REINFORCING PER LATEST ASTM A185.
 - [3] STRUCTURE SHALL BE RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.

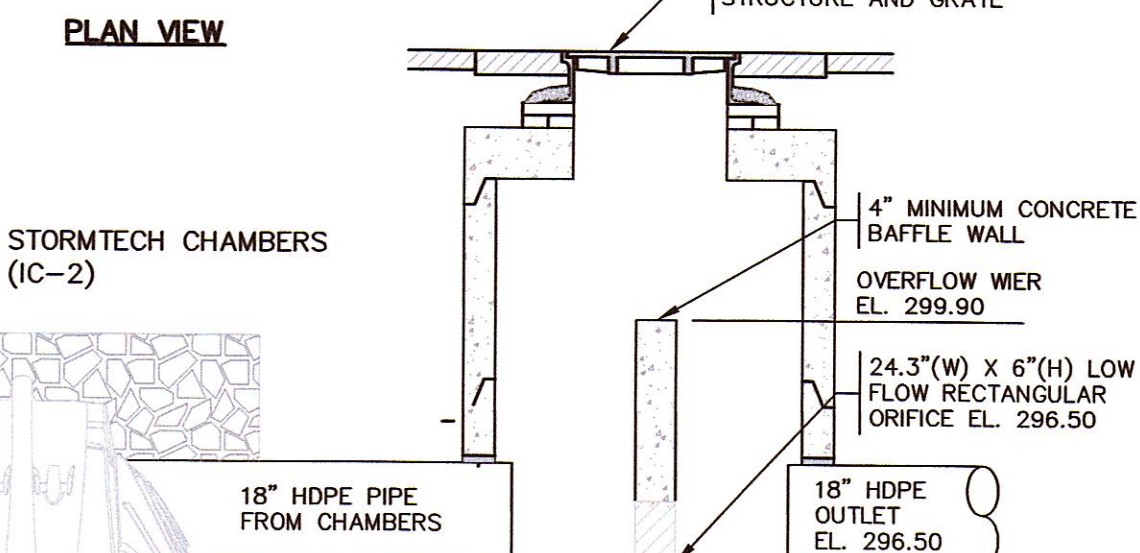
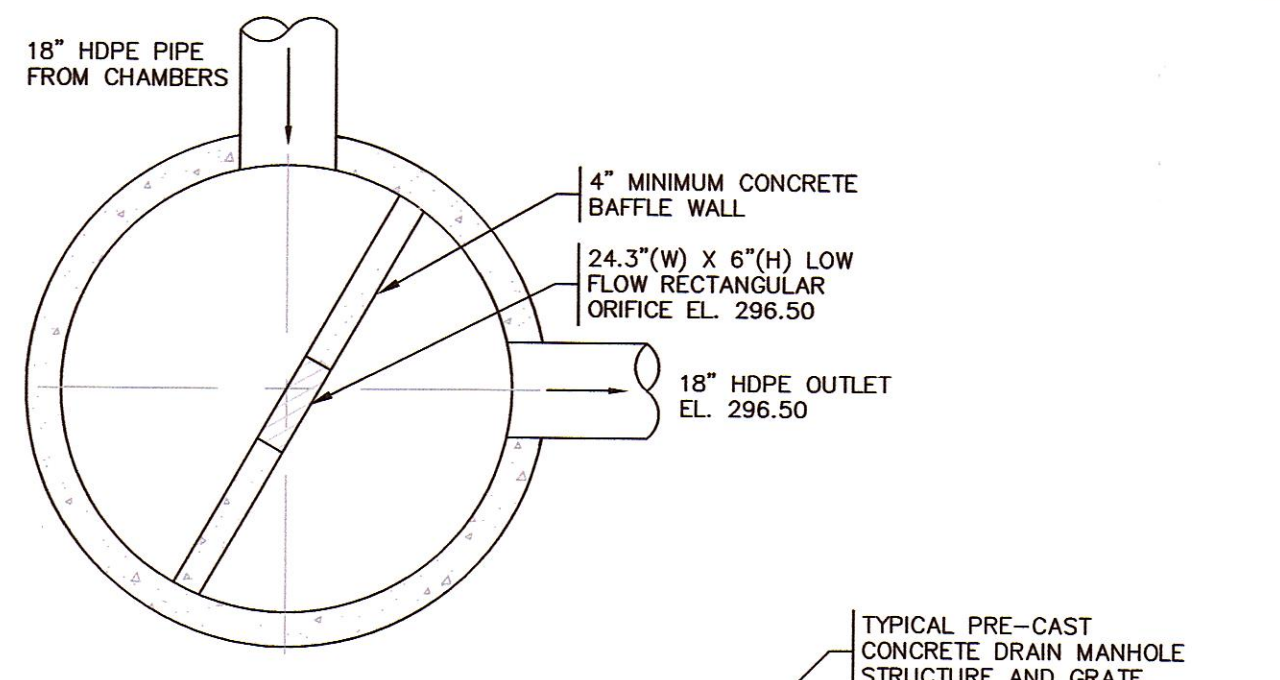
OUTLET CONTROL STRUCTURE (OCS-1)
TYPICAL CROSS SECTION
NOT TO SCALE



PIPE END STRUCTURE (PES)
NOT TO SCALE



DRY WELL (DW)
NOT TO SCALE



- NOTES:
- [1] 4,000 PSI PRECAST CONCRETE AT 28 DAYS CONFORMING WITH LATEST ASTM C478.
 - [2] REINFORCING PER LATEST ASTM A185.
 - [3] STRUCTURE SHALL BE RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.

OUTLET CONTROL STRUCTURE (OCS-2)
TYPICAL CROSS SECTION
NOT TO SCALE

DRAWING ISSUED FOR:

- ☐ CONCEPT ☐ CONSTRUCTION
☒ PERMIT ☐ CONSTRUCTION RECORD

THIS DRAWING MAY NOT SHOW CONSTRUCTION DETAILS AND SPECIFICATIONS FOR ALL PROPOSED IMPROVEMENTS, AND MAY NOT IDENTIFY ALL CONSTRUCTION WORK ITEMS/AREAS OF CONTRACTOR JURISDICTION.

PER 250 CMR 5.03(13), THE FOLLOWING ARE EXCLUDED FROM THE PROFESSIONAL ENGINEER'S RESPONSIBILITY: ALL BOUNDARY INFORMATION; LOCATION OF EXISTING STRUCTURES, TREES, UTILITIES, TOPOGRAPHY OR SIMILAR FEATURES; DESIGN OF RETAINING WALLS, PROPRIETARY EQUIPMENT. SEE GENERAL NOTE #19.

NO.	DATE	BY	APP.	REVISION DESCRIPTION
2	11/30/20	LT/KFB	KFB	DRIVEWAY TURNAROUND REVISION
1	7/14/20	LT/KFB	KFB	DRIVEWAY/DRAINAGE COMMENTS

GPR Engineering Solutions for Land & Structures

GOLDSMITH, PREST & RINGWALL, INC.
39 MAIN STREET, SUITE 301, AYER, MA 01432
CIVIL ENGINEERING • LAND SURVEYING • LAND PLANNING
VOICE: 978.772.1590 FAX: 978.772.1591
www.gpr-inc.com

**RESIDENTIAL SUBDIVISION
DEFINITIVE PLAN**

CONSTRUCTION DETAILS

**FIVE PATHS
ASSESSORS MAP#39 PARCEL 15A
WAYLAND, MA**

RECORD OWNER & APPLICANT:
ROSS C. WILKINSON, PERSONAL REPRESENTATIVE,
ESTATE OF PAULA D. WILKINSON
PO BOX 98
WILTON, NH 03086

DES. BY: MPB	DATE: JULY 2019	JOB 171053	C7.2
CHK. BY: KFB			