

NOTES

- THE PURPOSE OF THIS PLAN IS:
SUBDIVIDE TAX MAP 5 LOT 107-3 (26.36 ACRES) CREATING PIPIT DRIVE RIGHT OF WAY, WHICH WILL BE CONVEYED TO THE TOWN OF CHESTER, AND SHOW A PROPOSED 8 UNIT OPEN SPACE CONDOMINIUM DEVELOPMENT. PIPIT DRIVE HAS BEEN PREVIOUSLY APPROVED.
- EXISTING LAND AREA IS = 26.36 ACRES.
- ALL UNITS WITHIN THIS SUBDIVISION WILL HAVE INDIVIDUAL WELLS AND WILL HAVE COMMON SUBSURFACE SEWAGE DISPOSAL SYSTEMS.
- NO PORTIONS OF THIS PROJECT LIES WITHIN THE SPECIAL FLOOD HAZARD AREA AS INTERPOLATED FROM TOWN OF CHESTER, NH FLOOD INSURANCE RATE MAP (FIRM).
- NHDES SUBDIVISION APPROVAL No. SA2019050903
NHDES NOT PERMIT PRIOR APPROVAL Act-1165A
- THIS PLAN CONTAINS A TOTAL OF 16 SHEETS. SHEETS 1 THROUGH 3 ARE ON FILE AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. THE ENTIRE SET IS ON FILE AT THE TOWN OF CHESTER PLANNING DEPARTMENT, WHICH TOGETHER CONSTITUTE THE PLAN WHICH IS APPROVED BY THE CHESTER PLANNING BOARD.
- PRESENT ZONING: R1 - RESIDENTIAL

OPEN SPACE ZONING, PARENT TRACT
MINIMUM LOT AREA = 25 ACRES
MINIMUM ROAD FRONTAGE = 60'
MAXIMUM BUILDING HEIGHT = 33'

BUILDING SETBACKS
MINIMUM FRONT SETBACK
EXTERNAL = 75'
INTERNAL = 25'
MINIMUM SIDE AND REAR SETBACK
EXTERNAL = 50'
INTERNAL = 15' (MIN. 40' BETWEEN BLDGS.)
EXTERNAL VEGETATIVE BUFFER 50'

ALL SEPTIC SYSTEM MUST BE AT LEAST 75' FROM WETLANDS

	WETLANDS, POND & STREAMS	VERNAL POOLS
BUILDING SETBACKS	75 FT	100 FT
SEPTIC SYSTEM SETBACK	75 FT	100 FT
NO CLEAR BUFFER *	25 FT	50 FT

*WITHIN THE NO CLEAR BUFFER, CLEARING INCIDENTAL TO DRIVEWAY CONSTRUCTION IS ALLOWED AND NO MORE THAN 50 PERCENT OF THE BASAL AREA OF TREES AND VEGETATION CAN BE REMOVED ANNUALLY (PER ZONING ARTICLE 5, SECTION 7.2.7).

DENSITY CALCULATIONS:

CONSTRAINED AREA:
WETLANDS AND SURFACE WATER = 6.58 Ac.
SLOPES OVER 25% = 0.00 Ac.
TOTAL CONSTRAINED AREA = 6.58 Ac.

UNCONSTRAINED AREA:
TOTAL AREA = 26.36 Ac.
LESS CONSTRAINED AREA = 0.00 Ac.
UNCONSTRAINED AREA = 19.78 Ac.

SINGLE FAMILY UNIT COUNT

19.78 Ac. / 3 Ac./UNIT = 6.59 UNITS
DENSITY BONUS FOR 60% OPEN SPACE IS 15%
6.59 x 1.15 = 7.58 UNITS USING 15% BONUS (8 UNITS PROPOSED)

BEDROOM COUNT:

8 UNITS x 3.5 BEDROOMS/UNIT = 28 BEDROOMS MAXIMUM TOTAL, USE 28 BEDROOMS. 4, 4 BEDROOM UNITS PLUS 4, 3 BEDROOM UNITS EQUALS 28 BEDROOMS TOTAL

MINIMUM OPEN SPACE DETERMINATION

26.36 Ac. x 0.60 = 15.81 Ac. (16.41 Ac. PROVIDED = 62.2% PROVIDED)
UNCONSTRAINED AREA IN OPEN SPACE
15.81 x 0.50 (MIN. 50%) = 7.91 Ac. (10.20 Ac. PROVIDED)
75% OF OPEN SPACE IS REQUIRED TO BE CONTIGUOUS AND AT LEAST 100 FEET WIDE
15.81 Ac. x 0.75 = 11.86 Ac. (15.96 Ac. PROVIDED)

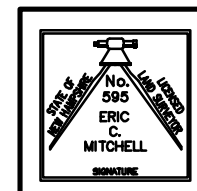
- THE OWNER/CONTRACTOR SHALL BE AWARE OF HIS/HER RESPONSIBILITY TO CONTACT "DIG-SAFE" AT 11 UPTON DRIVE, WILMINGTON, MA. (1-888-344-7233) AT LEAST 72 WORKING HOURS PRIOR TO THE START OF ANY EXCAVATION.
- ALL PROPOSED UTILITIES ARE TO BE UNDERGROUND.
- ALL BUILDINGS TO HAVE INDIVIDUAL SPRINKLER SYSTEMS (R13 COMPLIANT) IN ACCORDANCE WITH ARTICLE 6.12.2.2 OF THE CHESTER ZONING ORDINANCE.
- THE OPEN SPACE WILL BE DEEDED TO THE INDIVIDUAL CONDOMINIUM OWNERS AS COMMON LAND AND THE OPEN SPACE SHALL BE MARKED WITH SIGNAGE BEFORE RECORDING OF THE PLAN. THE OPEN SPACE AS WELL AS THE 50 FOOT WIDE IS TO REMAIN IN ITS NATURAL VEGETATED STATE EXCEPT WHERE THE PROPOSED WATER MAIN CROSSES IN THROUGH IT.
THE UNIT OWNERS WHO CLEAR OR OTHERWISE DESTROY THE VEGETATED BUFFER SHALL BE LIABLE FOR RESTORATION OF THE BUFFER PER SPECIFICATION LISTED IN ARTICLE 6.12.1.2.d OF THE ZONING ORDINANCE, ALONG WITH, AT THE CHESTER PLANNING BOARD'S DISCRETION, BE LIABLE TO REIMBURSE THE TOWN FOR ANY AND ALL LEGAL COSTS INCURRED IN THE ENFORCEMENT OF THIS ORDINANCE.
- THERE SHALL BE NO FURTHER SUBDIVIDING OF THE LOTS PER ARTICLE 6.4.4 OF THE CHESTER ZONING ORDINANCE.
- ALL PROPOSED INDIVIDUAL DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ARTICLE 4.12.9 OF THE CHESTER SUBDIVISION REGULATIONS.
- THE PROPOSED PERMANENT BOUNDARY MARKERS AND PERMANENT STREET MARKERS SHALL CONFORM TO ARTICLES 4.3.8 & 4.5.2.12 OF THE CHESTER SUBDIVISION REGULATIONS.
- THERE SHALL BE NO IN-GROUND IRRIGATION SYSTEMS INSTALLED WITHIN THE TOWN ROAD RIGHT OF WAY.
- WETLAND SHOWN WERE DELINEATED AND FLAGGED BY TIMOTHY FERWERDA WETLAND SCIENTIST #039 AS LAST OBSERVED IN 2017 BY ERIC C. MITCHELL WETLAND SCIENTIST #119.
- TOPOGRAPHIC INFORMATION WAS COMPILED BY AN SURVEY BY JAMES M. LAVELLE ASSOCIATES IN JULY, 2016 AND THE PIPIT DRIVE AS BUILT PERFORMED BY THIS OFFICE.
- WITH THE APPROVAL OF THIS PLAN, THE TOWN OF CHESTER PLANNING BOARD HAS GRANTED THE FOLLOWING WAIVER FROM THE SITE PLAN REGULATIONS:
PRIVATE WAY FOR OPEN SPACE SUBDIVISION SECTION A.2.2: TO PERMIT MORE THAN 6 DWELLINGS ON A PRIVATE WAY.

REV.	DATE	DESCRIPTION	BY
F	01/07/22	COA	CWW
E	9/21/20	UPDATE ABUTTERS FOR COA REHEARING	NRF
D	6/25/19	ROAD NAME, HOUSE NUMBERS, ADD WELLS	CJM
C	08/09/18	REVISED PER TOWN COMMENTS	BT
A	08/23/18	REVISED PER TOWN COMMENTS	BT
REV.	DATE	DESCRIPTION	BY
REVISIONS			

THE BOUNDARY SHOWN HEREON WAS PREPARED BY JAMES M. LAVELLE, LLS, WHO HAS CERTIFIED THAT THE FIELD WORK DONE FOR THE PREPARATION OF THE PLAN HAD A ERROR OF CLOSURE NO GREATER THAN 1 PART IN 10,000.

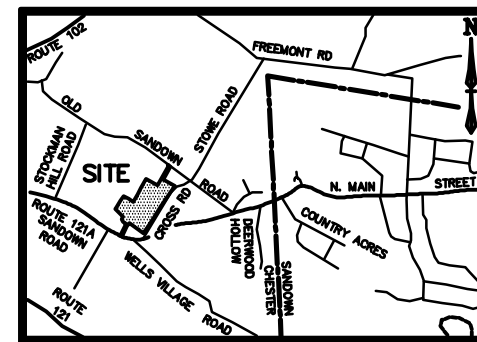
ERIC C. MITCHELL, LLS

DATE



PLAN REFERENCES:

- "SUBDIVISION PLAN OF - MAP 5 LOT 107 - OLD SANDOWN RD. - CHESTER, NH 03036 - OWNERS OF RECORD - LAWRENCE G. & SUZANNE M. DOWNING - 161 SANDOWN ROAD - CHESTER, NH 03036", SCALE 1"=80', DATED NOV. 4, 1996, PREPARED BY STEVEN C. LUGER, LLS #659. (RCRD #D-25149)
- "SUBDIVISION PLAN - MAP 5 LOT 107 - SANDOWN RD. - CHESTER, NH 03036 - SCALE: 1"=100' - OCT. 1997 - OWNERS OF RECORD - LARRY & SUZANNE DOWNING - 161 SANDOWN ROAD - CHESTER, NH 03036", PREPARED BY STEVEN C. LUGER, LLS #659. (RCRD #28014)
- "A SURVEY AND PLAT OF - PROPERTY - KNOWN AS - LOT NO. 86 - CHESTER TAX MAP NO. 5 - OWNED BY NEW HAMPSHIRE ELECTRIC COOPERATIVE, INC. - AND SITUATED IN - CHESTER, N.H." PREPARED BY R.S.L. LAYOUT & DESIGN, INC., DATED MAY 26, 1982, SCALE: 1"=50'. (RCRD #D-10842)
- "TOPOGRAPHIC SUBDIVISION PLAN/PROPOSED SUBDIVISION, MAP 5 LOTS 107 & 107-3, SANDOWN ROAD CHESTER, NEW HAMPSHIRE", PREPARED BY JAMES M. LAVELLE, LLS, DATED MAY 15, 2006, SCALE: 1"=100'
- "LOT LINE ADJUSTMENT PALN "PIPIT ESTATES" CHESTER TAX MAP 5 LOTS 107 & 107-3 SANDOWN (ROUTE 121A), CROSS & OLD SANDOWN ROADS, CHESTER NH MAY 2, 2017 SCALE: 1" = 100'" LAST REVISED ON 6/28/17, PREPARED BY THIS OFFICE. (RCRD #D-40249)



VICINITY PLAN

SCALE: 1" = 2,500'

SHEET INDEX

SHEET 1	COVER SHEET
SHEETS 2 & 3	SITE PLANS
SHEET 4	TRACT RESOURCE MAP
SHEET 5	GRADING PLAN
SHEET 6	PLAN & PROFILE
SHEETS 7-10	SEPTICS
SHEETS 11-15	DETAILS
SHEET 16	CLUSTER MAILBOX LOCATION

OWNER OF RECORD LOT 107-3:

PIPIT ESTATES REALTY TRUST
66 GILCREAST RD
LONDONDERRY, NH 03053
RCRD VOL. 5634 PG. 2408

AUTHORIZED SIGNATURE

APPROVED BY THE CHESTER, NH

PLANNING BOARD ON: _____

CERTIFIED BY: _____

CHAIRMAN: _____

SECRETARY: _____

COVER SHEET

"PIPIT ESTATES"

TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A),
CROSS & OLD SANDOWN ROADS
CHESTER NH

OWNER OF RECORD LOT 107-3:

PIPIT ESTATES REALTY TRUST
66 GILCREAST RD, LONDONDERRY, NH 03053

FEBRUARY 23, 2018

SCALE: 1" = 100'

PREPARED BY:

ERIC C. MITCHELL & ASSOC. INC.
PLANNING - SURVEYING - ENGINEERING - ENVIRONMENTAL
P.O. BOX 10298, 106 SO. RIVER RD., BEDFORD NH. 03110-0298
PH. (603) 627-1181

SHEET 1 OF 16

REV: D DWG: SITE PLAN

FLD: BK/PG:

JOB NO. 17-05

EXISTING SLOPE & DRAINAGE EASEMENT LINE TABLE		
LINE	LENGTH	BEARING
E1	50.00	N48°44'13"E
E2	265.90	N37°45'09"E
E3	101.57	N40°18'21"W
E4	80.03	N13°59'38"W
E5	137.48	N19°28'38"E
E6	61.57	S33°57'59"E

PROPOSED DRAINAGE EASEMENT		
LINE	LENGTH	BEARING
D1	140.06	N77°58'54"W
D2	124.31	N53°08'59"W
D3	230.89	N39°56'32"E

MAP 5 LOTS 108-1
RICHARD W BELLMORE (TRUSTEE)
BELLMORE HICKORY
HOLLOW TRUST
154 SANDOWN ROAD
CHESTER, NH 03038

MAP 5 LOT 107
LAWRENCE G. DOWNING
SUZANNE M. DOWNING
161 SANDOWN ROAD
CHESTER, NH 03038

MAP 5 LOT 103
OAK HILL II CONDO ASSOCIATION
C/O SHANNON RICE
18 OPOSSUM DRIVE
CHESTER, NH 03038

MAP 5 LOT 103
OAK HILL II CONDO ASSOCIATION
C/O SHANNON RICE
18 OPOSSUM DRIVE
CHESTER, NH 03038

MAP 5 LOT 107-1
ROGER PEPE
PHYLLIS PEPE
220 OLD SANDOWN ROAD
CHESTER, NH 03038-4122

MAP 5 LOTS 108-2
RICHARD W BELLMORE (TRUSTEE)
BELLMORE HICKORY
HOLLOW TRUST
154 SANDOWN ROAD
CHESTER, NH 03038

MAP 5 LOT 107-2
JOHN D HILL
DAWN W HILL
177 SANDOWN ROAD
CHESTER, NH 03038

MAP 5 LOT 109
WAYNE JOPE
211 SANDOWN ROAD
CHESTER, NH 03038

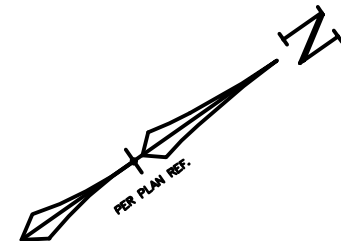
MAP 5 LOT 110
BRENDA J O'LOUGHLIN
P.O. BOX 203
CHESTER, NH 03038

MAP 5 LOT 111-104
ROBERT & PAMELA MACLEAN
231 SANDOWN ROAD
CHESTER, NH 03038

MAP 5 LOT 111-103
CHRISTOPHER MACLEAN
286 OLD SANDOWN ROAD
CHESTER, NH 03038

MAP 5 LOT 85
PAUL GARABEDIAN JR.
CHAS. GARABEDIAN TESTAMENT TRT
325 SOUTH BROADWAY
SALEM, NH 03079

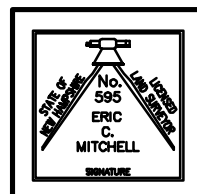
MAP 5 LOT 86
NH ELEC COOP INC
579 TENNEY WTH HWY
PLYMOUTH, NH 03284



LEGEND

CBF	CONCRETE BOUND FOUND (PER PLAN REF. #2)
IRS	IRON ROD SET (PER PLAN REF. #2)
GBS	GRANITE BOUND SET (PER PLAN REF. #2)
DHS	DRILL HOLE SET (PER PLAN REF. #2)
GBF	GRANITE BOUND FOUND
IP	IRON PIN TO BE SET
GB	GRANITE BOUND TO BE SET
UP	UTILITY POLE
SW	EXISTING STONE WALL
W	LIMIT OF WETLANDS
MB	MINIMUM BUILDING SETBACK (TYP)
NCB	NO CUT BUFFER

REV.	DATE	DESCRIPTION	BY
F	1/7/22	COA	CWW
E	9/21/20	UPDATE ABUTTERS FOR COA REHEARING	NRF
D	6/25/19	ROAD NAME, HOUSE NUMBERS, ADD WELLS	C.H
A	05/23/18	REVISED PER TOWN COMMENTS	BT
REVISIONS			



APPROVED BY THE CHESTER, NH

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CERTIFIED BY: _____

CHAIRMAN: _____

SECRETARY: _____

OVERALL SITE PLAN

"PIPIT ESTATES"

TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A),
CROSS & OLD SANDOWN ROADS
CHESTER NH

OWNER OF RECORD LOT 107-3:
PIPIT ESTATES REALTY TRUST
66 GILCREAST RD, LONDONDERRY, NH 03053
FEBRUARY 23, 2018

SCALE: 1" = 100'
PREPARED BY:

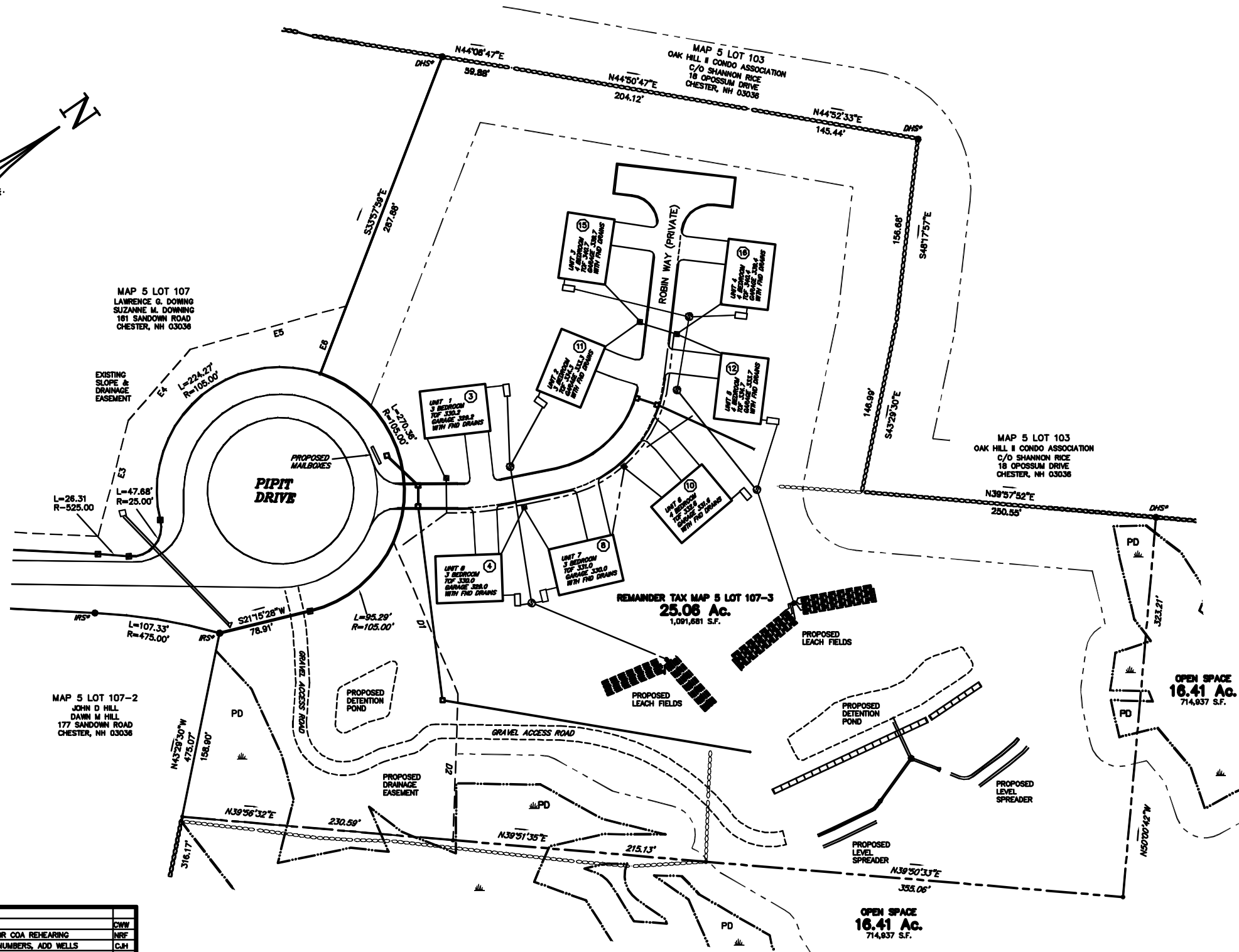
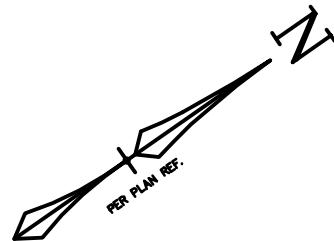
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SHEET 2 OF 16

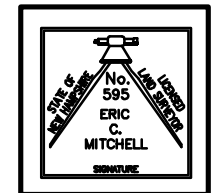
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LEGEND	
	CONCRETE BOUND FOUND (PER PLAN REF. #2)
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	GRANITE BOUND SET (PER PLAN REF. #2)
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	GRANITE BOUND FOUND
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	GRANITE BOUND TO BE SET
	UTILITY POLE
	LIMIT OF MAPPED WETLANDS
	25' NO CUT BUFFER
	MINIMUM BUILDING SETBACK (TYP.)
	STONE WALL
	PD POORLY DRAINED



APPROVED BY THE CHESTER, NH

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SITE PLAN

"PIT ESTATES"

TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A),
CROSS & OLD SANDOWN ROADS
CHESTER NH

OWNER OF RECORD LOT 107-3:
PIPET ESTATES REALTY TRUST
66 GILCREAST RD, LONDONDERRY, NH 03053
FEBRUARY 23, 2018

SCALE: 1" = 50'

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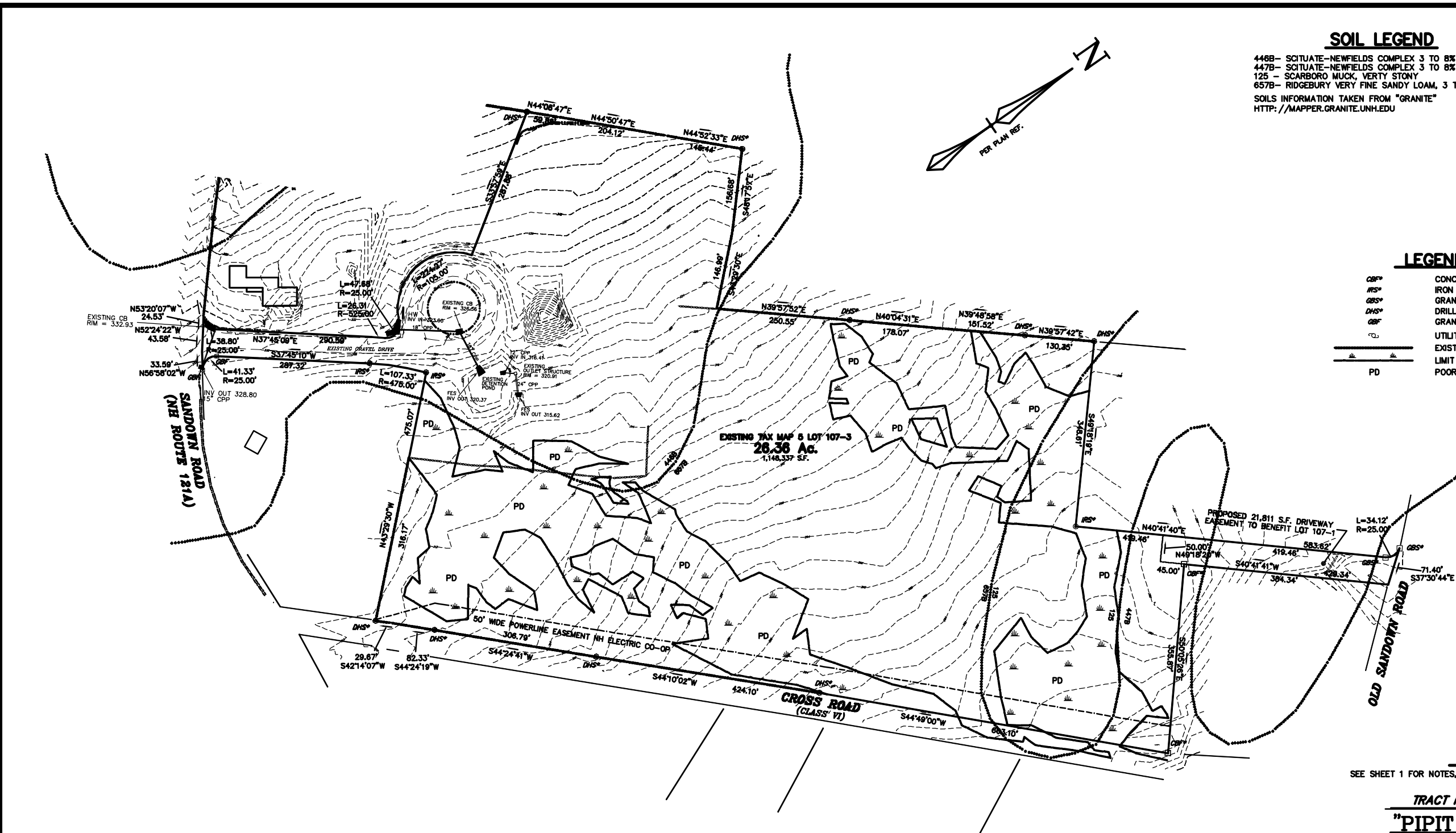
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SOIL LEGEND

446B- SCITUATE-NEWFIELDS COMPLEX 3 TO 8% SLOPES
447B- SCITUATE-NEWFIELDS COMPLEX 3 TO 8% SLOPES, VERY STONY
125 - SCARBORO MUCK, VERTY STONY
657B- RIDGEBURY VERY FINE SANDY LOAM, 3 TO 8 % SLOPES, VERY STONY
SOILS INFORMATION TAKEN FROM "GRANITE"
HTTP://MAPPER.GRANITE.UNH.EDU

LEGEND

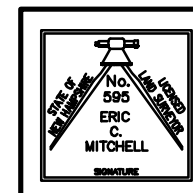
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EXISTING STONE WALL
LIMIT OF WETLANDS
PD POORLY DRAINED



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TOTAL CONSTRAINED AREA = 6.58 AC.
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5. MINIMUM OPEN SPACE DETERMINATION
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NOTES

SEE SHEET 1 FOR NOTES, PLAN REFERENCES, AND VICINITY PLAN.

TRACT RESOURCE MAP

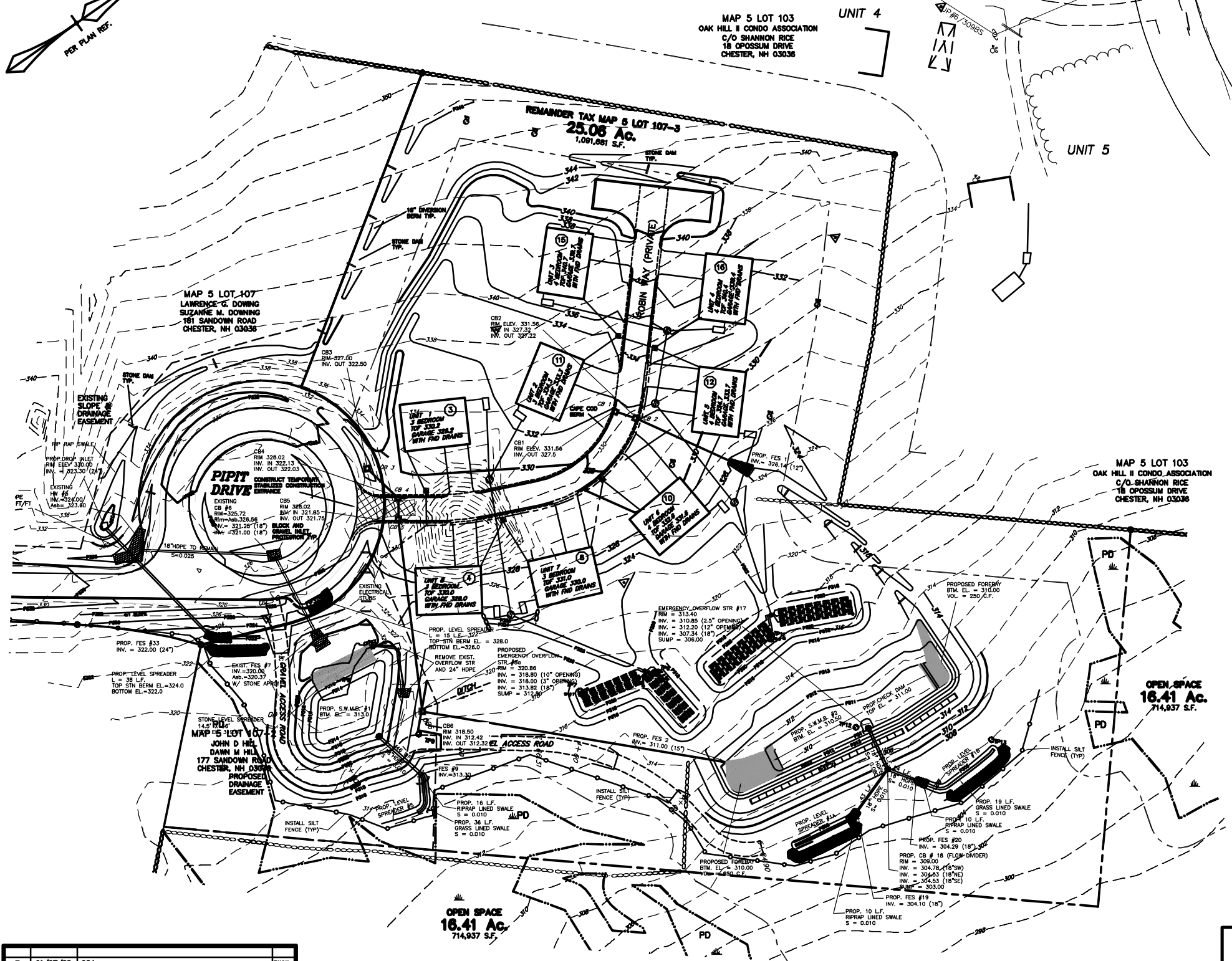
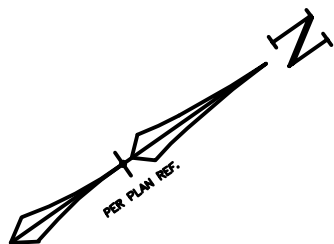
"PIPIT ESTATES"

TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A),
CROSS & OLD SANDOWN ROADS
CHESTER NH

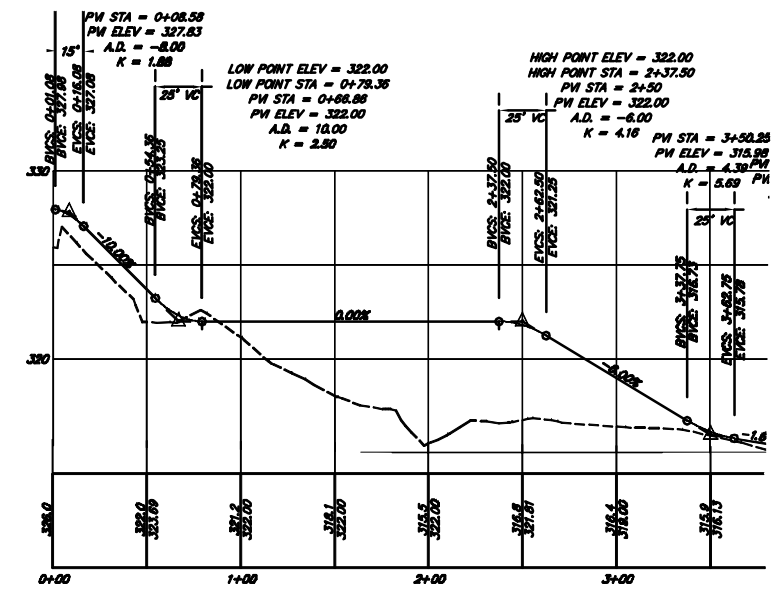
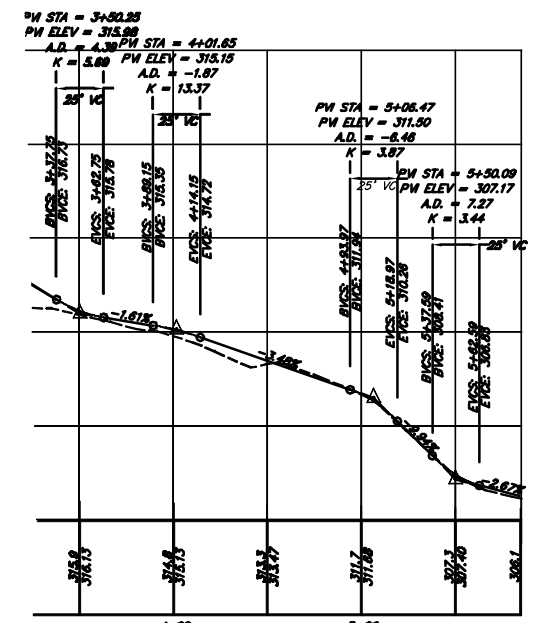
OWNER OF RECORD LOT 107-3:
PIPIT ESTATES REALTY TRUST
66 GILCREAST RD, LONDONDERRY, NH 03053
FEBRUARY 23, 2018

SCALE: 1" = 100'
PREPARED BY:

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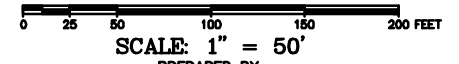
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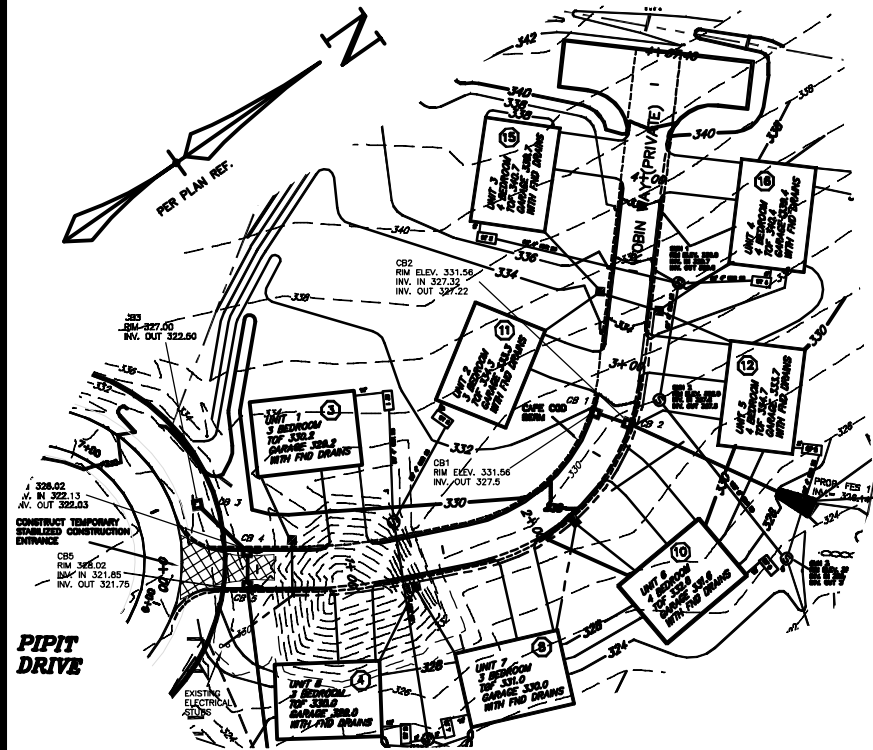
GRAVEL ACCESS ROAD PROFILE

GRADING & UTILITY PLAN
"PIT ESTATES"
TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A),
CROSS & OLD SANDOWN ROADS
CHESTER NH

OWNER OF RECORD LOT 107-3:
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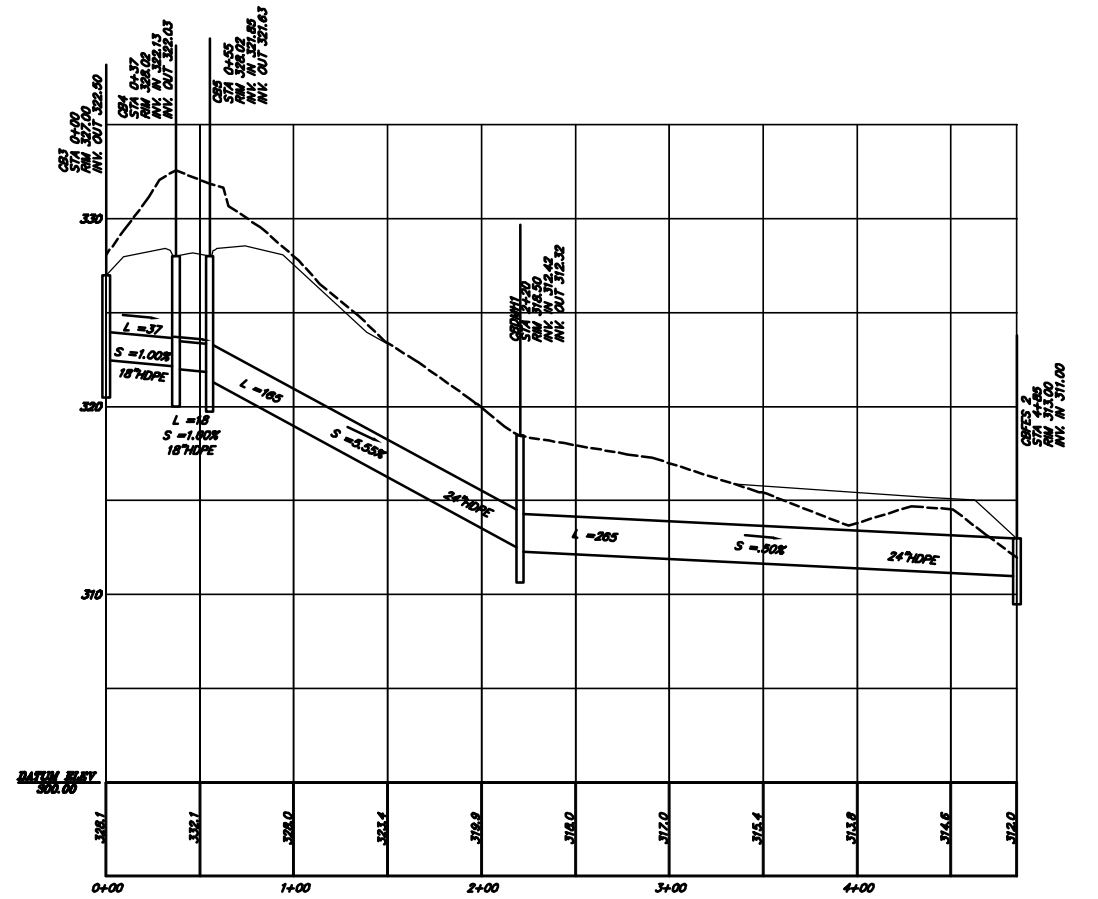


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Horizontal Alignment Station and Curve Report
Alignment: NEW DRIVE 2018

Desc:	Station	Spiral/Curve Data	Northing	Easting
PI	0+00	Length: 98.24 Course: N 34-55-38 E	4905.3130	5850.1962
PI	0+98.24	Length: 139.51 Course: N 23-33-12 E	4985.8557	5906.4407
	Delta: 11-22-27			
	0+00	Tangent Data	4905.3130	5850.1962
	0+78.32	Length: 78.32 Course: N 34-55-38 E	4969.5262	5895.0375
PC	0+78.32	Circular Curve Data	4969.5262	5895.0375
RP	1+18.02	Delta: 11-22-27 Type: LEFT	5084.0335	5731.0617
PT	1+18.02	Radius: 200.00 DOC: 28-38-52	5004.1134	5914.3995
	Length: 39.70 Tangent: 19.92			
	1+18.02	Tangent Data	5004.1134	5914.3995
	1+65.06	Length: 47.04 Course: N 23-33-12 E	5047.2332	5933.1962
PC	1+65.06	Circular Curve Data	5047.2332	5933.1962
RP	2+90.59	Delta: 71-55-29 Type: LEFT	5087.1932	5941.5272
PT	2+90.59	Radius: 100.00 DOC: 57-17-45	5161.9401	5907.9570
	Length: 125.53 Tangent: 72.55			
	2+90.59	Tangent Data	5161.9401	5907.9570
	4+80.17	Length: 189.58 Course: N 48-22-18 W	5207.8774	5766.2920



DRAINAGE PROFILE

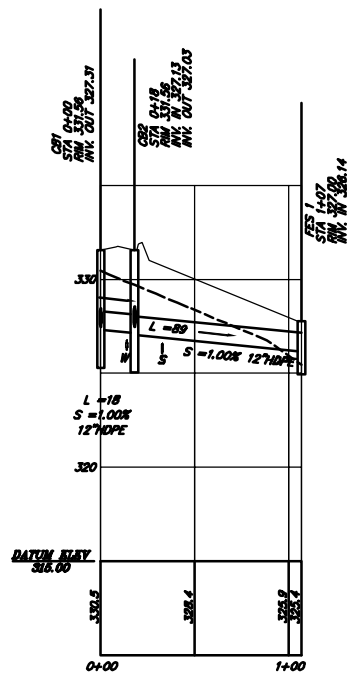
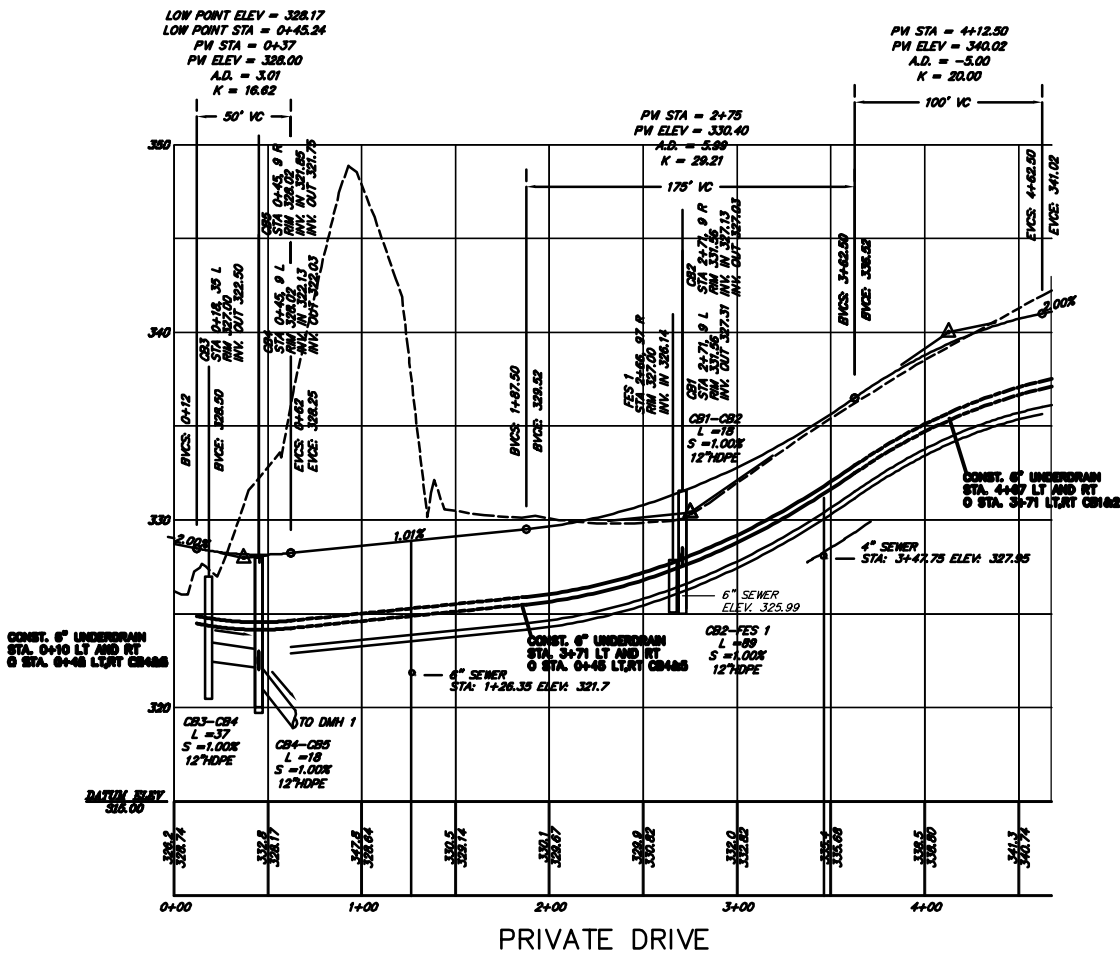
REV.	DATE	DESCRIPTION	BY
F	01/07/22	COA	CHW
E	9/21/20	UPDATE ABUTTERS FOR COA REHEARING	HRF
D	5/25/19	ROAD NAME, HOUSE NUMBERS, ADD WELLS	C.H.
C	08/09/18	REVISED PER TOWN COMMENTS	BT
A	06/23/18	REVISED PER TOWN COMMENTS	BT

REVISIONS

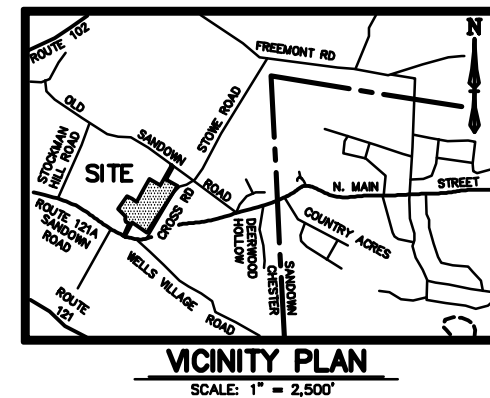
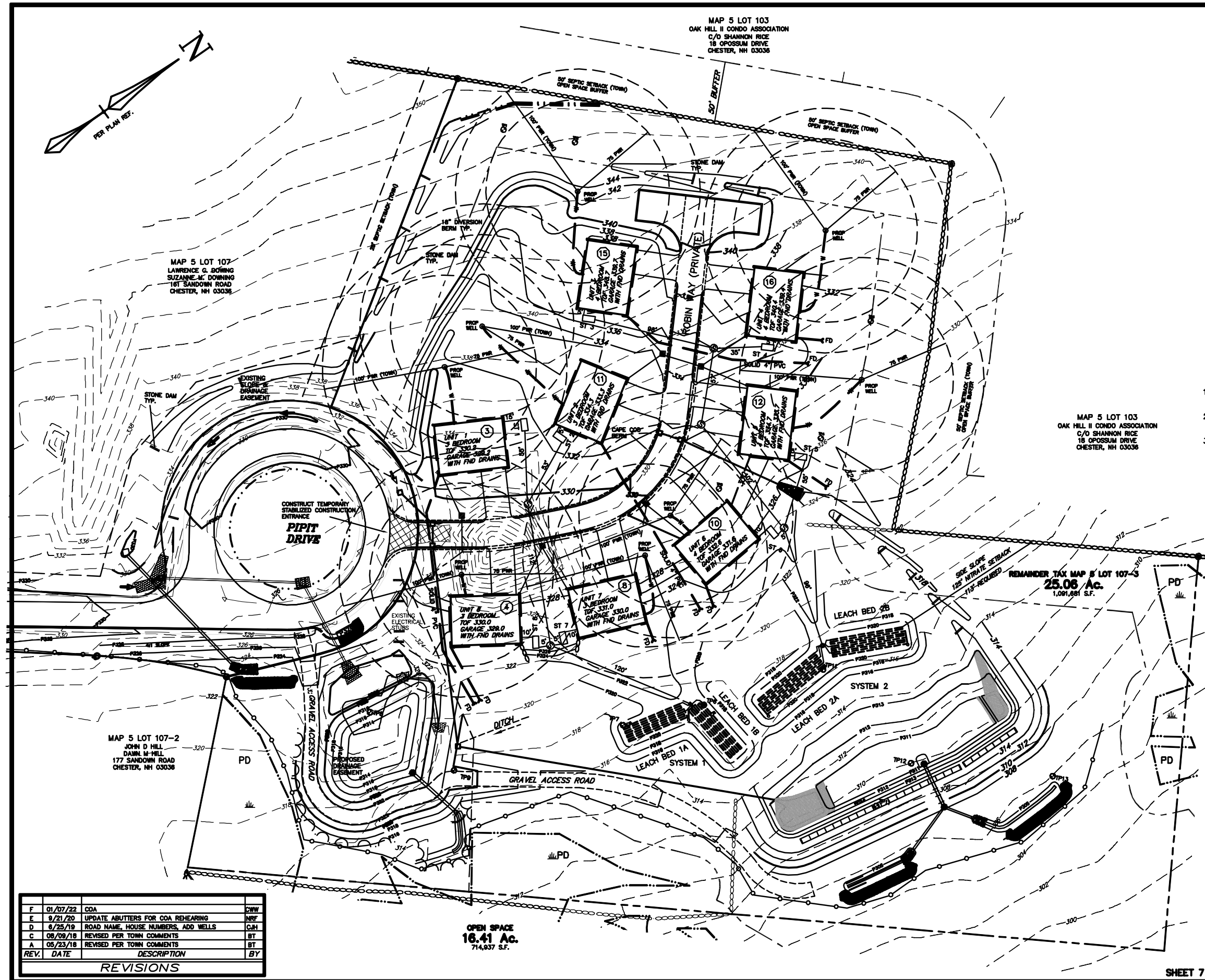
PLAN & PROFILES
"PIPIT ESTATES"
 TAX MAP 5 LOT 107-3
 SANDOWN (ROUTE 121A),
 CROSS & OLD SANDOWN ROADS
CHESTER NH
 OWNER OF RECORD LOT 107-3:
PIPIT ESTATES REALTY TRUST
 66 GILCREAST RD, LONDONDERRY, NH 03053
 FEBRUARY 23, 2018

SCALE: 1" = 50'
 PREPARED BY:

ERIC C. MITCHELL & ASSOC. INC.
 PLANNING - SURVEYING - ENGINEERING - ENVIRONMENTAL
 P.O. BOX 10298, 106 SO. RIVER RD., BEDFORD NH. 03110-0298
 PH. (603) 627-1181



DRAINAGE PROFILE

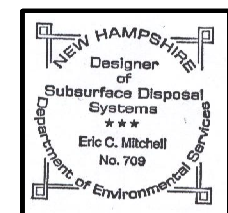


NOTES

- THIS IS A PROPOSED 8 UNIT CONDOMINIUM WITH 4 - 3 BEDROOM UNITS (UNITS 1, 2, 7 & 8) AND 4 - 4 BEDROOM UNITS (UNITS 3, 4, 5 & 6).
- PIPES USED UNDER WHEEL LOADS CAN WITHSTAND THE ANTICIPATED LOADS. ANY PIPE BURIED LESS THAN 4 FEET WITHIN THE PAVEMENT AREAS SHALL BE INSULATED.

TOWN OF CHESTER NOTES

- NO WELL/WATER SUPPLY IS WITHIN 100 FEET OF THE PROPOSED SEPTIC SYSTEM.
- NO WETLANDS ARE WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEM.
- THE PROPOSED SEPTIC SYSTEM MEETS ALL CHESTER ZONING SETBACKS.



OVERALL SEPTIC LAYOUT - SYSTEM 1

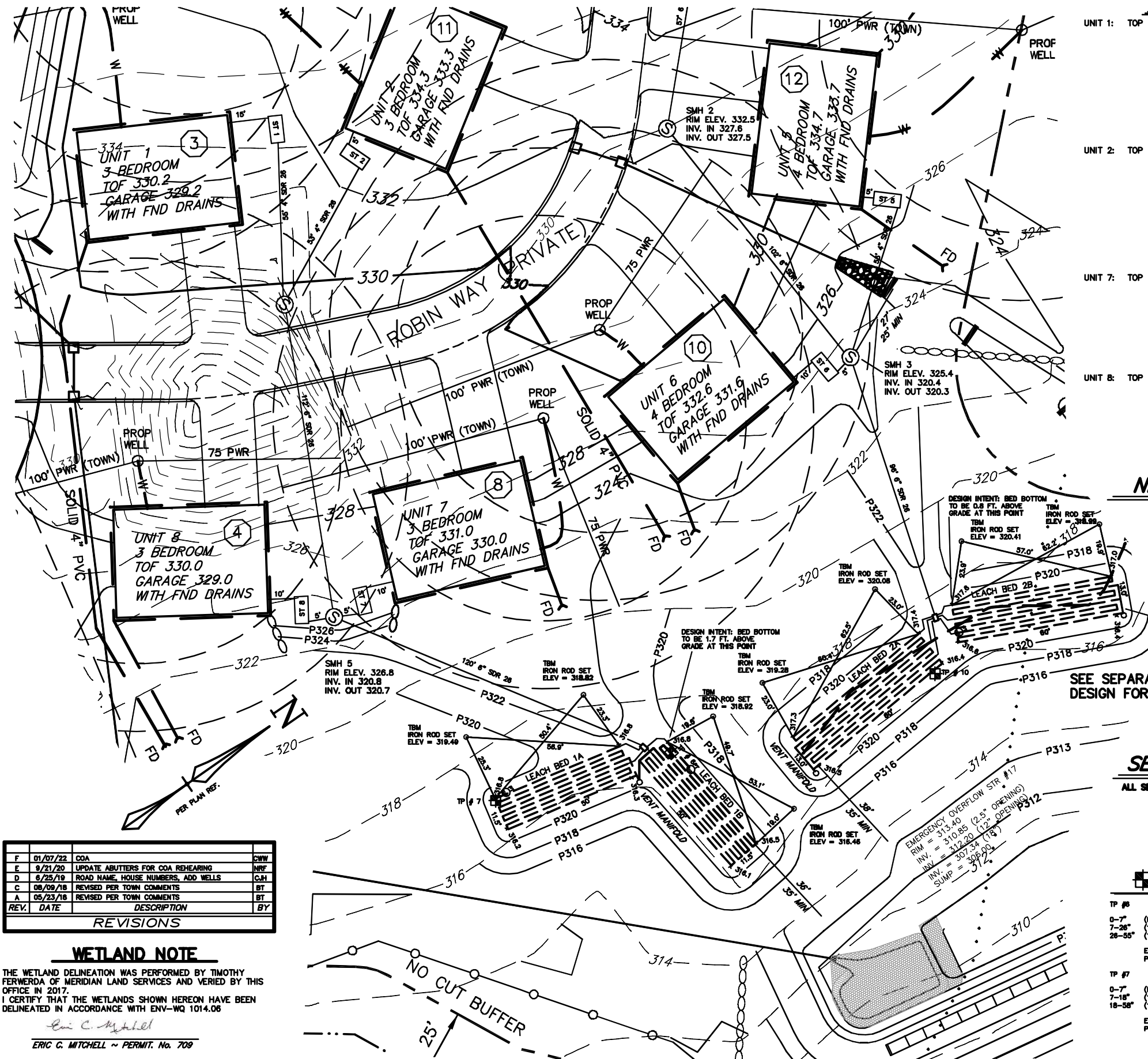
"PIPIT ESTATES"

TAX MAP 5 LOT 107-3
ROBIN WAY (PRIVATE) OFF
PIPIT DRIVE
CHESTER NH

OWNER OF RECORD LOT 107-3:
PIPIT ESTATES REALTY TRUST
66 GILCREAST RD, LONDONDERRY, NH 03053
FEBRUARY 23, 2018

SCALE: 1" = 40'
PREPARED BY:

ERIC C. MITCHELL & ASSOC. INC.
PLANNING - SURVEYING - ENGINEERING - ENVIRONMENTAL
P.O. BOX 10298, 106 SO. RIVER RD., BEDFORD NH. 03110-0298
PH. (603) 627-1181



LIST OF INVERTS

- UNIT 1: TOP OF FOUNDATION: 330.2
INVERT OUT: 324.3
INVERT INTO TANK #1: 324.0
(15 L.F. PIPE @ 2.0%)
SEPTIC TANK #1 INV. OUT = 323.7
55 L.F. PIPE @ 2.0% TO SMH #4
SMH #4 INV. IN= 322.6
SMH #4 INV. OUT= 322.5
112 L.F. PIPE @ 1.52% TO SMH #5
SMH #5 INV. IN= 320.8
SMH #5 INV. OUT= 320.7
120 L.F. PIPE @ 1.0%
DBOX BED 1 INV. IN 319.5
- UNIT 2: TOP OF FOUNDATION: 334.3
INVERT OUT: 324.5
INVERT INTO TANK #2: 324.4
(5 L.F. PIPE @ 2.0%)
SEPTIC TANK #2 INV. OUT = 324.1
53 L.F. PIPE @ 2.83% TO SMH #4
SMH #4 INV. IN= 322.6
SMH #4 INV. OUT= 322.5
112 L.F. PIPE @ 1.52% TO SMH #5
SMH #5 INV. IN= 320.8
SMH #5 INV. OUT= 320.7
120 L.F. PIPE @ 1.0%
DBOX BED 1 INV. IN 319.5
- UNIT 7: TOP OF FOUNDATION: 331.0
INVERT OUT: 321.4
INVERT INTO TANK #7: 321.2
(10 L.F. PIPE @ 2.0%)
SEPTIC TANK #7 INV. OUT = 320.9
5 L.F. PIPE @ 2.0% TO SMH #5
SMH #5 INV. IN= 320.8
SMH #5 INV. OUT= 320.7
120 L.F. PIPE @ 1.0%
DBOX BED 1 INV. IN 319.5
- UNIT 8: TOP OF FOUNDATION: 330.0
INVERT OUT: 321.4
INVERT INTO TANK #8: 321.2
(10 L.F. PIPE @ 2.0%)
SEPTIC TANK #8 INV. OUT = 320.9
5 L.F. PIPE @ 2.0% TO SMH #5
SMH #5 INV. IN= 320.8
SMH #5 INV. OUT= 320.7
120 L.F. PIPE @ 1.0%
DBOX BED 1 INV. IN 319.5

NITRATE SETBACK

BED 1A = 962.5 GPD
BED 1B = 962.5 GPD
BED 2A = 1278 GPD
BED 2B = 1278 GPD
TOTAL = 4481 GPD FOR ALL BEDS
REQUIRES 113 LF SIDE SETBACK

SIDE NITRATE SETBACK SHOWN ON SHEET 1

SEE SEPARATE
DESIGN FOR SYSTEM 2

SEPTIC TANK SIZING

ALL SEPTIC TANKS ARE 1250 GALLONS

TEST PIT DATA

- TP #6 02/15/08
0-7" (FOREST MAT & 10YR 4/4) LOAM TOPSOIL
7-28" (10YR 6/4) FINE SANDY LOAM, GRANULAR, FRABLE
28-55" (10YR 6/3) FINE SANDY LOAM, GRANULAR, FRABLE
ESHWIT = 15", NO LEDGE, WATER @ 28"
PERCOLATION RATE = 12 MIN/IN
- TP #7 02/15/08
0-7" (FOREST MAT & 10YR 4/4) LOAM TOPSOIL
7-18" (10YR 6/4) FINE SANDY LOAM, GRANULAR, FRABLE
18-55" (10YR 6/3) FINE SANDY LOAM, GRANULAR, FRABLE
ESHWIT = 15", NO LEDGE, WATER @ 40"
PERCOLATION RATE = 12 MIN/IN

PERCOLATION TEST DATA 5

TEST NO.: #5 & #7
DATE: 2/15/08
DEPTH: 18"
RATE: 12" MIN. PER INCH

SOIL DATA

SOIL TYPE: 448B - SITUATE-NEWFIELDS COMPLEX 3 TO 6% SLOPES
COUNTY: ROCKINGHAM COUNTY
SOILS BOOK PAGE NO.: GRANT DATABASE

NOTES

- THIS SYSTEM IS DESIGNED ONLY FOR SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USAGE OF A SINGLE FAMILY HOME. THIS SYSTEM IS NOT DESIGNED FOR GARBAGE DISPOSAL/GRINDER, POOL OR WATER TREATMENT SYSTEM DISCHARGE, PETROLEUM, INDUSTRIAL, CHEMICAL OR HAZARDOUS WASTES, OR ROOF, FLOOR OR FOUNDATION DRAINS. THE DESIGN CRITERIA MAY BE MODIFIED TO INCLUDE ONE OR MORE OF THE EXCLUDED DESIGN ITEMS, (I.E. IF A GARBAGE DISPOSAL IS TO BE USED, THE SEPTIC TANK MUST BE INCREASED BY 50% AS PER ENV.WQ. 1010.01(f) BUT ONLY WITH THE WRITTEN APPROVAL OF THE DESIGNER.
- IF FAILURE OF THE PROPOSED SYSTEM SHOULD OCCUR, A REPLACEMENT SYSTEM MAY NEED TO BE BUILT IN THE SAME PLACE.
- A LICENSED INSTALLER IS REQUIRED FOR THE SEPTIC SYSTEM CONSTRUCTION. THIS OFFICE ASSUMES NO RESPONSIBILITY FOR SYSTEMS NOT PROPERLY INSTALLED OR INSTALLED CONTRARY TO THIS DESIGN.
- INSTALLATION OF ALL ENVIRO-SEPTIC SYSTEMS IS TO BE IN STRICT ACCORDANCE WITH THE ENVIRO-SEPTIC DESIGN & INSTALLATION MANUAL (NOV 2017) AND THE NH STATE ATTACHMENT, APPROVED BY NHDES ON NOVEMBER 8, 2017
- NHDES REGULATIONS AND SETBACKS WILL BE MAINTAINED UNLESS TOWN REGULATIONS ARE MORE RESTRICTIVE.
- NO SURFACE WATER IS WITHIN 75 FEET OF THE SEPTIC TANK OR THE LEACH BED.
- DESIGN INTENT: BED BOTTOM TO BE 1.7 FT. ABOVE ORIGINAL GRADE AT THE HIGHEST POINT OF THE BED (BL. 316.8) USE 3 FOOT SEPARATION BETWEEN BED BOTTOM AND IMPERMEABLE SUBSTRATUM AND/OR SEASONAL HIGH WATER TABLE AS PER NHDES.WD INNOVATIVE/ALTERNATIVE TECHNOLOGY (ITA) APPROVAL No. 2008-03-01 GRANTED ON MARCH 28, 2008 AND THE APPROVED ENVIRO-SEPTIC MANUAL. THE OWNER SHALL BE RESPONSIBLE FOR COMPLYING WITH THE OPERATING REQUIREMENTS OF ENV. WQ. 1023.
- NO VEHICLES ARE ALLOWED OVER ANY PORTION OF THE LEACHING SYSTEM.
- THERE ARE NO BURIAL SITES OR CEMETERIES WITHIN 100 FEET OF ANY COMPONENT OF THE ISDS.

DESIGN CRITERIA

UNITS 1, 2, 7 & 8 ARE SERVED BY SEPTIC SYSTEM 1

UNITS 1, 2, 7 & 8 ARE 3 BEDROOM UNITS:
165 LF REQ'D WITH 12 MIN/IN PERC RATE = 4 x 165 = 660 LF

INFILTRATION:

138 LF @ 300 GPD/MILE/4 INCH DIAMETER
138 LF x 300 GPD/5280 LF/MILE x 4 INCH = 32 GPD
232 LF @ 300 GPD/MILE/6 INCH DIAMETER
232 LF x 300 GPD/5280 LF/MILE x 6 INCH = 79 GPD
MANHOLE 4 @ 8 VF TOTAL x 1 GAL/VF = 8 GPD
MANHOLE 5 @ 6 VF TOTAL x 1 GAL/VF = 6 GPD
TOTAL = 125 GPD
LF OF PIPE FOR INFILTRATION 125 GPD/100 GPF x 60 = 75 LF
TOTAL LINEAR FEET OF PIPE NEEDED = 735 LF

USE 2 BEDS 50 FEET LONG AND 8 LINES WIDE = 800 LF OR 400 LF PER BED

BED COMBINATION DISTRIBUTION: 1925 GPD TOTAL
USE 2 SECTIONS WITH 4 ROWS EACH PER BED = 482 GAL/ROW
(500 GAL/ROW MAX)

SEPTIC SYSTEM #1 PIPIT ESTATES LEACH BED 1A & 1B

TAX MAP 5 LOT 107-3 "PIPIT ESTATES" ROBIN WAY (PRIVATE) CHESTER, NEW HAMPSHIRE

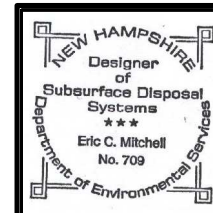
PREPARED FOR:
PIPIT ESTATES REALTY TRUST
66 GLOUCESTER ROAD
LONDONDERRY, NH 03053

PREPARED BY:
ERIC C. MITCHELL
DESIGNER NO. 709
SCALE: 1" = 20'
FEBRUARY 23, 2018

ECM
ERIC C. MITCHELL & ASSOCIATES, INC.

PLANNING SURVEYING ENVIRONMENTAL
BOX 10298, 106 SO. RIVER ROAD
BEDFORD, NEW HAMPSHIRE 03110-0298
PH. (603) 627-1181

PREVIOUS CONSTRUCTION APPROVAL NO.
NHDES NS&PCD SUBDIVISION APPROVAL NO.
NHDES NS&PCD CONSTRUCTION APPROVAL NO.

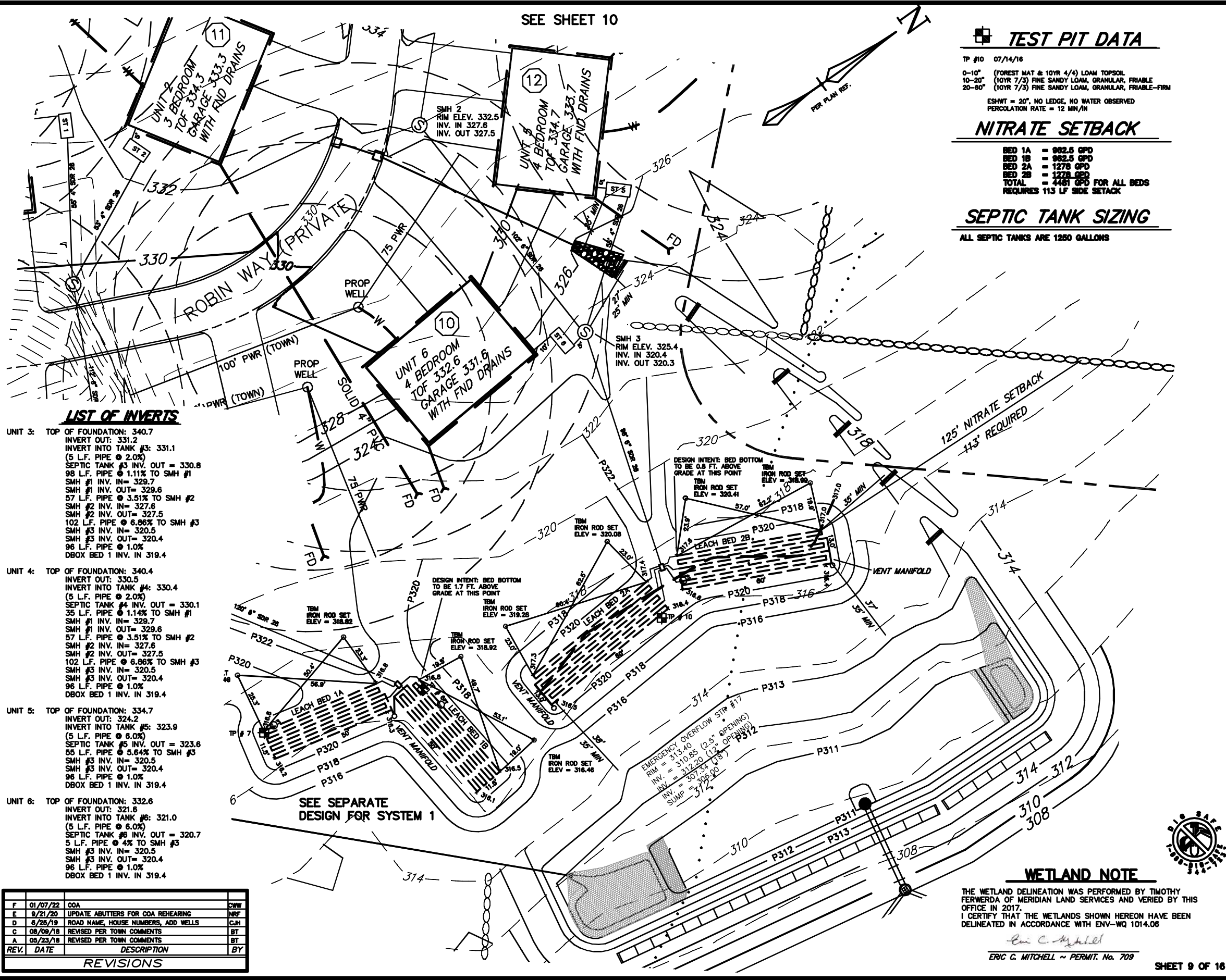


REV.	DATE	DESCRIPTION	BY
F	01/07/22	COA	CWW
E	9/21/20	UPDATE ABUTTERS FOR COA REHEARING	NHF
D	6/25/19	ROAD NAME, HOUSE NUMBERS, ADD WELLS	CJH
C	08/09/18	REVISED PER TOWN COMMENTS	BT
A	05/23/18	REVISED PER TOWN COMMENTS	BT

WETLAND NOTE

THE WETLAND DELINEATION WAS PERFORMED BY TIMOTHY FERWERDA OF MERIDIAN LAND SERVICES AND VERIFIED BY THIS OFFICE IN 2017.
I CERTIFY THAT THE WETLANDS SHOWN HEREON HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WQ 1014.06

ERIC C. MITCHELL ~ PERMIT. No. 709



TEST PIT DATA

TP #10 07/14/16
0-10" (FOREST MAT & 10YR 4/4) LDM TOPSOIL
10-20" (10YR 7/3) FINE SANDY LOAM, GRANULAR, FRABLE
20-60" (10YR 7/3) FINE SANDY LOAM, GRANULAR, FRABLE-FIRM
ESHWIT = 20", NO LEDGE, NO WATER OBSERVED
PERCOLATION RATE = 12 MIN/IN

NITRATE SETBACK

BED 1A = 982.5 GPD
BED 1B = 982.5 GPD
BED 2A = 1278 GPD
BED 2B = 1278 GPD
TOTAL = 4481 GPD FOR ALL BEDS
REQUIRES 113 LF SIDE SETBACK

SEPTIC TANK SIZING

ALL SEPTIC TANKS ARE 1250 GALLONS

PERCOLATION TEST DATA 8

TEST NO.: #10
DATE: 7/14/16
DEPTH: 18"
RATE: 12 MIN. PER INCH

SOIL DATA

SOIL TYPE: 448B - SQUATE-NEWFIELDS COMPLEX 3 TO 8% SLOPES
COUNTY: ROCKINGHAM COUNTY
SOILS BOOK PAGE NO.: GRANT DATABASE

NOTES

- THIS SYSTEM IS DESIGNED ONLY FOR SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USAGE OF A SINGLE FAMILY HOME. THIS SYSTEM IS NOT DESIGNED FOR GARBAGE DISPOSAL/GRINDER, POOL OR WATER TREATMENT SYSTEM DISCHARGE, PETROLEUM, INDUSTRIAL, CHEMICAL OR HAZARDOUS WASTES, OR ROOF, FLOOR OR FOUNDATION DRAINS. THE DESIGN CRITERIA MAY BE MODIFIED TO INCLUDE ONE OR MORE OF THE EXCLUDED DESIGN ITEMS, (I.E. IF A GARBAGE DISPOSAL IS TO BE USED, THE SEPTIC TANK MUST BE INCREASED BY 50% AS PER ENV.WQ. 1010.01(f) BUT ONLY WITH THE WRITTEN APPROVAL OF THE DESIGNER.
- IF FAILURE OF THE PROPOSED SYSTEM SHOULD OCCUR, A REPLACEMENT SYSTEM MAY NEED TO BE BUILT IN THE SAME PLACE.
- A LICENSED INSTALLER IS REQUIRED FOR THE SEPTIC SYSTEM CONSTRUCTION. THIS OFFICE ASSUMES NO RESPONSIBILITY FOR SYSTEMS NOT PROPERLY INSTALLED OR INSTALLED CONTRARY TO THIS DESIGN.
- INSTALLATION OF ALL ENVIRO-SEPTIC SYSTEMS IS TO BE IN STRICT ACCORDANCE WITH THE ENVIRO-SEPTIC DESIGN & INSTALLATION MANUAL (NOV 2017) AND THE NH STATE ATTACHMENT, APPROVED BY NHDES ON NOVEMBER 8, 2017.
- NHDES REGULATIONS AND SETBACKS WILL BE MAINTAINED UNLESS TOWN REGULATIONS ARE MORE RESTRICTIVE.
- NO SURFACE WATER IS WITHIN 75 FEET OF THE SEPTIC TANK OR THE LEACH BED.
- DESIGN INTENT: BED BOTTOM TO BE 0.8 FT. ABOVE ORIGINAL GRADE AT THE HIGHEST POINT OF THE BED (EL. 317.0) (50% RULE USED, SEE ENV. WQ. 1014-06). (BASED ON DESIGN CONTOUR 317.0) USE 3 FOOT SEPARATION BETWEEN BED BOTTOM AND IMPERMEABLE SUBSTRATUM AND/OR SEASONAL HIGH WATER TABLE AS PER NHDES.WD INNOVATIVE/ALTERNATIVE TECHNOLOGY (ITA) APPROVAL No. 2008-03-01 GRANTED ON MARCH 28, 2008 AND THE APPROVED ENVIRO-SEPTIC MANUAL. THE OWNER SHALL BE RESPONSIBLE FOR COMPLYING WITH THE OPERATING REQUIREMENTS OF ENV. WQ. 1023.
- NO VEHICLES ARE ALLOWED OVER ANY PORTION OF THE LEACHING SYSTEM.
- THERE ARE NO BURIAL SITES OR CEMETERIES WITHIN 100 FEET OF ANY COMPONENT OF THE ISDS.

DESIGN CRITERIA

UNITS 3, 4, 5 & 6 ARE SERVED BY SEPTIC SYSTEM 2
UNITS 3, 4, 5 & 6 ARE 4 BEDROOM UNITS:
220 LF REQ'D WITH 12 MIN/IN PERC RATE = 4 x 220 = 880 LF
INFILTRATION:
224 LF @ 300 GPD/MILE/4 INCH DIAMETER
224 LF x 300 GPD/5280 LF/MILE x 4 INCH = 51 GPD
258 LF @ 300 GPD/MILE/6 INCH DIAMETER
258 LF x 300 GPD/5280 LF/MILE x 6 INCH = 88 GPD
MANHOLE 1 @ 6 VF TOTAL x 1 GAL/VF = 6 GPD
MANHOLE 2 @ 6 VF TOTAL x 1 GAL/VF = 6 GPD
MANHOLE 3 @ 5 VF TOTAL x 1 GAL/VF = 5 GPD
TOTAL = 156 GPD
LF OF PIPE FOR INFILTRATION 156 GPD/100 GPF x 60 = 94 LF
TOTAL LINEAR FEET OF PIPE NEEDED = 974 LF

USE 2 BEDS 50 FEET LONG AND LINES WIDE = 800 LF OR 400 LF PER BED
BED COMBINATION DISTRIBUTION: 2556 GPD TOTAL
USE 3 SECTIONS WITH 3 ROWS EACH PER BED = 426 GAL/ROW
(500 GAL/ROW MAX)

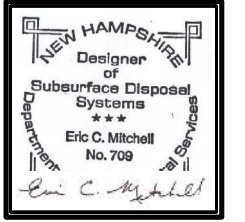
**SEPTIC SYSTEM #2
PIPET ESTATES LEACH BED 2A & 2B**

**TAX MAP 5 LOT 107-3
"PIPET ESTATES" ROBIN WAY (PRIVATE)
CHESTER, NEW HAMPSHIRE**

PREPARED FOR:
PIPET ESTATES REALTY TRUST
66 GILCREST ROAD
LONDONDERRY, NH 03053

PREPARED BY:
ERIC C. MITCHELL
DESIGNER NO. 709
SCALE: 1" = 20'
FEBRUARY 23, 2018

ECM
ERIC C. MITCHELL & ASSOCIATES, INC.
PLANNING SURVEYING ENVIRONMENTAL
BOX 10298, 106 SO. RIVER ROAD
BEDFORD, NEW HAMPSHIRE 03110-0298
PH. (603) 627-1181



PREVIOUS CONSTRUCTION APPROVAL NO. _____
NHDES NS&PCD SUBDIVISION APPROVAL NO. _____
NHDES NS&PCD CONSTRUCTION APPROVAL NO. _____

REV.	DATE	DESCRIPTION	BY
F	01/07/22	COA	CWW
E	9/21/20	UPDATE ABUTTERS FOR COA REHEARING	NRF
D	6/26/19	ROAD NAME, HOUSE NUMBERS, ADD WELLS	CJM
C	08/09/18	REVISED PER TOWN COMMENTS	BT
A	05/23/18	REVISED PER TOWN COMMENTS	BT
REV.	DATE	DESCRIPTION	BY
REVISIONS			

WETLAND NOTE

THE WETLAND DELINEATION WAS PERFORMED BY TIMOTHY FERWERDA OF MERIDIAN LAND SERVICES AND VERIFIED BY THIS OFFICE IN 2017.
I CERTIFY THAT THE WETLANDS SHOWN HEREON HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WQ 1014.06

ERIC C. MITCHELL ~ PERMIT. No. 709

WETLAND NOTE

THE WETLAND DELINEATION WAS PERFORMED BY TIMOTHY FERWERDA OF MERIDIAN LAND SERVICES AND VERIFIED BY THIS OFFICE IN 2017.
I CERTIFY THAT THE WETLANDS SHOWN HEREON HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WQ 1014.06

Eric C. Mitchell
ERIC C. MITCHELL ~ PERMIT. No. 709

PERCOLATION TEST DATA 8

TEST NO.: #10
DATE: 7/14/16
DEPTH: 18"
RATE: 12 MIN. PER INCH

SOIL DATA

SOIL TYPE: 44B- SITUATE-NEWFIELDS COMPLEX 3 TO 8% SLOPES
COUNTY: ROCKINGHAM COUNTY
SOILS BOOK PAGE NO.: GRANT DATABASE

NOTES

- THIS SYSTEM IS DESIGNED ONLY FOR SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USAGE OF A SINGLE FAMILY HOME. THIS SYSTEM IS NOT DESIGNED FOR GARBAGE DISPOSAL/GRINDER, POOL OR WATER TREATMENT SYSTEM DISCHARGE, PETROLEUM, INDUSTRIAL, CHEMICAL OR HAZARDOUS WASTES, OR ROOF, FLOOR OR FOUNDATION DRAINS. THE DESIGN CRITERIA MAY BE MODIFIED TO INCLUDE ONE OR MORE OF THE EXCLUDED DESIGN ITEMS, (I.E. IF A GARBAGE DISPOSAL IS TO BE USED, THE SEPTIC TANK MUST BE INCREASED BY 50% AS PER ENV.WQ. 1010.01(f) BUT ONLY WITH THE WRITTEN APPROVAL OF THE DESIGNER.
- IF FAILURE OF THE PROPOSED SYSTEM SHOULD OCCUR, A REPLACEMENT SYSTEM MAY NEED TO BE BUILT IN THE SAME PLACE.
- A LICENSED INSTALLER IS REQUIRED FOR THE SEPTIC SYSTEM CONSTRUCTION. THIS OFFICE ASSUMES NO RESPONSIBILITY FOR SYSTEMS NOT PROPERLY INSTALLED OR INSTALLED CONTRARY TO THIS DESIGN.
- INSTALLATION OF ALL ENVIRO-SEPTIC SYSTEMS IS TO BE IN STRICT ACCORDANCE WITH THE ENVIRO-SEPTIC DESIGN & INSTALLATION MANUAL (NOV 2017) AND THE NH STATE ATTACHMENT, APPROVED BY NHDES ON NOVEMBER 8, 2017
- NHDES REGULATIONS AND SETBACKS WILL BE MAINTAINED UNLESS TOWN REGULATIONS ARE MORE RESTRICTIVE.
- NO SURFACE WATER IS WITHIN 75 FEET OF THE SEPTIC TANK OR THE LEACH BED.
- DESIGN INTENT: BED BOTTOM TO BE 0.8 FT. ABOVE ORIGINAL GRADE AT THE HIGHEST POINT OF THE BED (EL. 317.6) (50% RULE USED, SEE ENV. WQ. 1014-06). (BASED ON DESIGN CONTOUR 317.0) USE 3 FOOT SEPARATION BETWEEN BED BOTTOM AND IMPERMEABLE SUBSTRATUM AND/OR SEASONAL HIGH WATER TABLE AS PER NHDES.WD INNOVATIVE/ALTERNATIVE TECHNOLOGY (ITA) APPROVAL No. 2008-03-01 GRANTED ON MARCH 28, 2008 AND THE APPROVED ENVIRO-SEPTIC MANUAL.
- THE OWNER SHALL BE RESPONSIBLE FOR COMPLYING WITH THE OPERATING REQUIREMENTS OF ENV. WQ. 1023.
- NO VEHICLES ARE ALLOWED OVER ANY PORTION OF THE LEACHING SYSTEM.
- THERE ARE NO BURIAL SITES OR CEMETERIES WITHIN 100 FEET OF ANY COMPONENT OF THE ISDS.

DESIGN CRITERIA

UNITS 3, 4, 5 & 6 ARE SERVED BY SEPTIC SYSTEM 2

UNITS 3, 4, 5 & 6 ARE 4 BEDROOM UNITS:
220 LF REQ'D WITH 12 MIN/IN PERC RATE = 4 x 220 = 880 LF

INFILTRATION:
224 LF @ 300 GPD/MILE/4 INCH DIAMETER
224 LF x 300 GPD/5280 LF/MILE x 4 INCH = 51 GPD
258 LF @ 300 GPD/MILE/6 INCH DIAMETER
258 LF x 300 GPD/5280 LF/MILE x 6 INCH = 88 GPD
MANHOLE 1 @ 6 VF TOTAL x 1 GAL/VF = 6 GPD
MANHOLE 2 @ 6 VF TOTAL x 1 GAL/VF = 6 GPD
MANHOLE 3 @ 5 VF TOTAL x 1 GAL/VF = 5 GPD
TOTAL = 156 GPD
LF OF PIPE FOR INFILTRATION 156 GPD/100 GPF x 60 = 94 LF
TOTAL LINEAR FEET OF PIPE NEEDED

USE 2 BEDS 60 FEET LONG AND 9 LINES WIDE = 1080 LF OR 540 LF PER BED

BED COMBINATION DISTRIBUTION: 2556 GPD TOTAL
USE 3 SECTIONS WITH 3 ROWS EACH PER BED = 426 GAL/ROW
(500 GAL/ROW MAX)

SEPTIC SYSTEM #2 PIPIT ESTATES LEACH BED 2A & 2B

TAX MAP 5 LOT 107-3
"PIPIT ESTATES" ROBIN WAY (PRIVATE)
CHESTER, NEW HAMPSHIRE

DESIGNED FOR:
PIPIT ESTATES REALTY TRUST
66 GLOUCESTER ROAD
LONDONDERRY, NH 03053

DESIGNED BY:
ERIC C. MITCHELL
DESIGNER NO. 709
SCALE: 1" = 20'
FEBRUARY 23, 2018

ECM
ERIC C. MITCHELL & ASSOCIATES, INC.

PLANNING SURVEYING ENVIRONMENTAL
BOX 10298, 106 SO. RIVER ROAD
BEDFORD, NEW HAMPSHIRE 03110-0298
PH. (603) 627-1181

PREVIOUS CONSTRUCTION APPROVAL NO. _____
NHDES NS&PCD SUBDIVISION APPROVAL NO. _____
NHDES NS&PCD CONSTRUCTION APPROVAL NO. _____



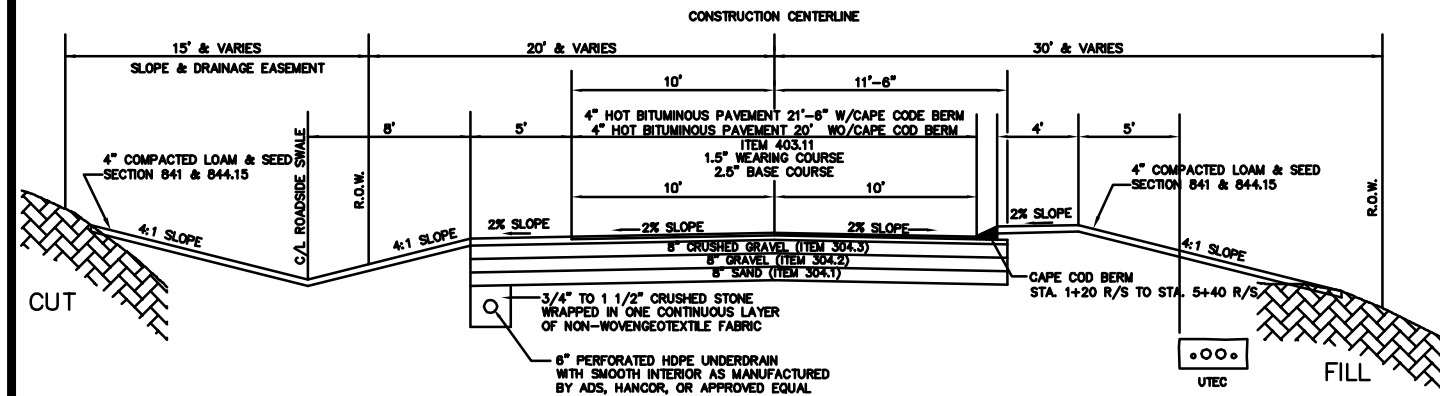
SEE SHEET 9

SHEET 10 OF 16

REV: D DWG: LEACHED FLD. BK/PG: JOB NO. 17-05

REV.	DATE	DESCRIPTION	BY
F	01/07/22	COA	CWN
E	9/21/20	UPDATE ABUTTERS FOR COA REHEARING	NMF
D	8/25/19	ROAD NAME, HOUSE NUMBERS, ADD WELLS	CWH
C	08/09/18	REVISED PER TOWN COMMENTS	BT
A	05/23/18	REVISED PER TOWN COMMENTS	BT

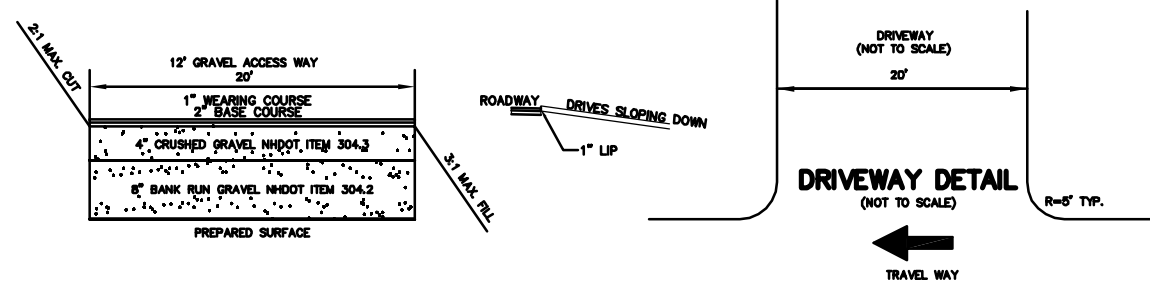
REVISIONS



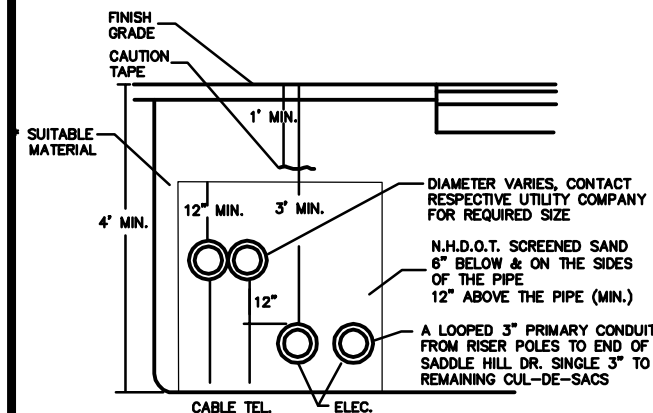
NOTE

1. ITEM NUMBERS REFERENCE THE LATEST CONSTRUCTION SPECIFICATIONS FOR NHDOT
2. ALL PAVEMENT, BASE MATERIALS, AND WORKMANSHIP SHALL BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" APPROVED AND ADOPTED 1997.

TYPICAL PIPIT DRIVE ROADWAY SECTION



DRIVEWAY /GRAVEL ACCESSWAY SECTION



* SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACK FILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL AND ALL ROCKS OVER SIX INCHES IN THE LARGEST DIMENSION, OR ANY MATERIAL, WHICH, AS DETERMINED BY THE TOWN ENGINEERS, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. SUITABLE MATERIAL SHALL BE PLACED IN 6" LIFTS AND THOROUGHLY COMPACTED.

IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE DESCRIBED AS ABOVE, EXCEPT THAT THE TOWN ENGINEERS MAY PERMIT THE USE OF TOP SOIL, LOAM, OR PEAT, IF SATISFIED THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT THE EASY ACCESS TO THE STRUCTURES FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY WILL BE PRESERVED SUITABLE MATERIAL SHALL BE PLACED IN 12" LIFTS AND THOROUGHLY COMPACTED.

- NOTES:
1. UTILITIES SHALL BE INSTALLED ACCORDING TO THE RESPECTIVE UTILITY COMPANY STANDARDS AND SPECIFICATIONS.
 2. ALL ABOVE GRADE UTILITIES MUST BE PLACED OUT OF THE R.O.W. AND IN AREAS THAT WILL NOT CONFLICT WITH THE ROADWAY DRAINAGE SYSTEM. PLACEMENT OF TRANSFORMERS CANNOT CONFLICT WITH THE INSTALLATION OF R.O.W. AND PROPERTY CORNER MONUMENTS.

UNDERGROUND UTILITIES TRENCH

NOT TO SCALE

NOTES

TREE STUMPS AND OTHER ORGANIC MATERIALS SHALL BE REMOVED BELOW THE SUBGRADE OF THE ROADWAY. LEDGE SHALL ALSO BE REMOVED TO A DEPTH OF TWO FEET BELOW THE SUBGRADE OF THE ROADWAY. TEST PITS WILL BE PERFORMED, AS DIRECTED BY THE TOWN CONSULTANT, TO DETERMINE IF LEDGE EXISTS WITHIN TWO (2) FEET OF THE SUBGRADE LEVEL. ON SOILS WHICH ARE NOT SUITABLE FOR ROADWAYS, THE SUBSOIL SHALL BE REMOVED FROM THE STREET SITE TO A DEPTH OF TWO (2) FEET BELOW THE SUBGRADE AND REPLACED WITH MATERIAL MEETING THE SPECIFICATIONS FOR GRAVEL AGGREGATE SUB-BASE BELOW.

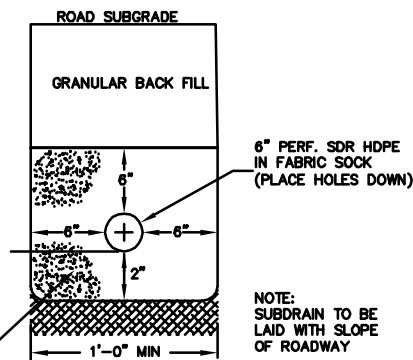
ALL FILL MATERIAL NECESSARY TO ACHIEVE SUBGRADE ELEVATION SHALL CONSIST OF STONE AND SAND REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL AND SHALL MEET THE REQUIREMENT OF THE FOLLOWING TABLE:

SEIVE SIZE	PERCENT PASSING BY WEIGHT
6 INCH	100
No. 4	20 - 100
No. 200	0 - 12

NOTES

1. ALL ROADWAY CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH N.H.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE CHESTER SUBDIVISION REGULATIONS.
2. PROVIDE 4" SCREENED LOAM AND SEED (MIN.) ON ALL SIDE SLOPES AND DRAINAGE SWALES UNLESS OTHERWISE NOTED.
3. ALL LEDGE AND ROCK SHALL BE REMOVED TO 24" BELOW SUBGRADE. BACKFILL SHALL MEET GRAVEL SUBBASE SPECIFICATIONS.
4. ROADWAY UNDERDRAIN SHALL BE PROVIDED IN ALL CUT SECTIONS
5. ROAD BASE SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTER.
6. ROADSIDE DITCHES TO BE 26" DEEP MEASURED FROM CENTERLINE OF ROADWAY
7. ALL LOOSE LEDGE SHALL BE REMOVED FROM ALL BLASTED AREAS PRIOR TO PLACING ANY FILL OR SELECT MATERIALS.
8. LEDGE SHALL BE REMOVED A MINIMUM OF 18 INCHES BELOW SUBGRADE
9. CLEAN SANDY FILL TO BE PROVIDED 12" BELOW SUBGRADE IN ALL FILL SECTIONS.

NOT TO SCALE FINAL GRADE
SEE ROADWAY SECTIONS FOR COURSES TO FINAL GRADE

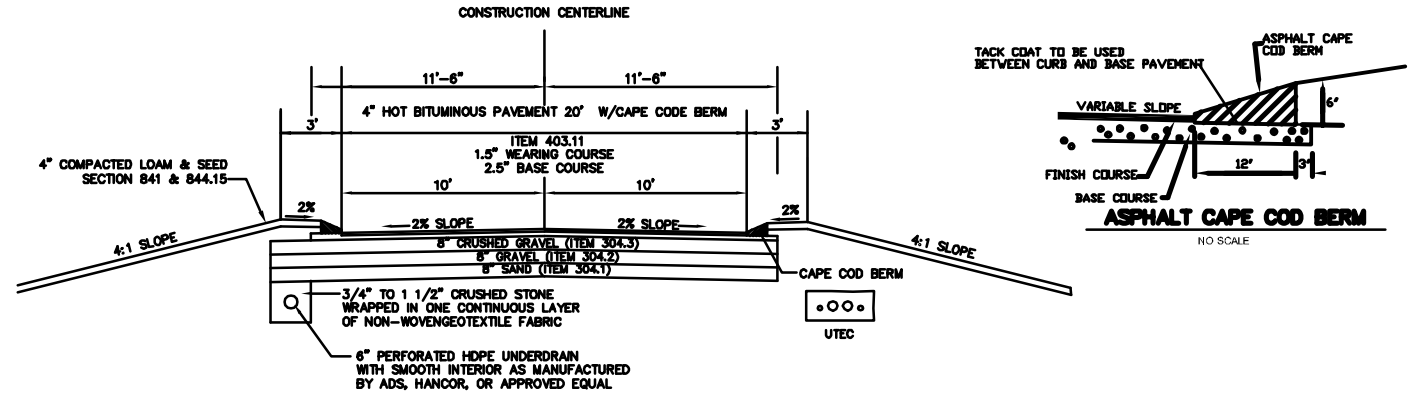


TYPICAL CROSS SECTION

SUBDRAINS TO BE TIED TO CATCH BASINS WHERE AVAILABLE. WHERE NECESSARY SUBDRAINS SHALL BE DAYLIGHTED IN ROADSIDE DITCHES AT DITCH BOTTOM. MIN. SLOPE - 1%. ALL BENDS SHALL BE SLEEPS NO GREATER THAN 45 DEGREES. ALTERNATIVELY, 6" PER. HDPE WRAPPED FILTER FABRIC AS SPECIFIED ABOVE IN A 6" BED OF SAND RATHER THAN WRAPPED STONE IS ACCEPTABLE.

SUBDRAIN DETAIL TYPICAL

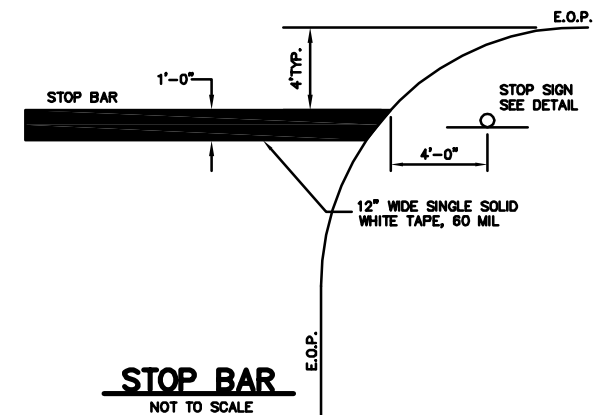
NOT TO SCALE



NOTE

1. ITEM NUMBERS REFERENCE THE LATEST CONSTRUCTION SPECIFICATIONS FOR NHDOT
2. ALL PAVEMENT, BASE MATERIALS, AND WORKMANSHIP SHALL BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" APPROVED AND ADOPTED 1997.

TYPICAL PIPIT PRIVATE DRIVEWAY SECTION



STOP BAR

NOT TO SCALE

REV.	DATE	DESCRIPTION	BY
C	08/09/18	REVISED PER TOWN COMMENTS	BT
A	08/23/18	REVISED PER TOWN COMMENTS	BT

REVISIONS

CONSTRUCTION DETAILS

"PIPIT ESTATES"

TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A).
CROSS & OLD SANDOWN ROADS
CHESTER NH

OWNER OF RECORD LOT 107-3:

PIPIT ESTATES REALTY TRUST
68 GILCREAST RD, LONDONDERRY, NH 03053

FEBRUARY 23, 2018

NOT TO SCALE

PREPARED BY:

ERIC C. MITCHELL & ASSOC. INC.
PLANNING - SURVEYING - ENGINEERING - ENVIRONMENTAL
P.O. BOX 10288, 108 SO. RIVER RD., BEDFORD NH. 03110-0288
PH. (603) 627-1161



1. MINIMUM ACCEPTABLE STANDARDS FOR ALL CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NH DOT), STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1997, (AND ALL SUBSEQUENT AMENDMENTS) AND THE TOWN OF CHESTER REGULATIONS. DRAINAGE DESIGN IS BASED ON THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" AUGUST 1992, FROM THE ROCKINGHAM COUNTY CONSERVATION DISTRICT.
2. ALL ELEVATIONS AND LOCATIONS OF EXISTING UTILITY AND DRAINAGE STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO UTILIZATION OF DESIGN ELEVATIONS ON THIS PLAN.
3. BACK FILL OF TRENCHES AND ALL PAVED AREAS SHALL BE COMPACTED TO TOWN COMPACTION STANDARDS OF 95% MODIFIED PROCTOR.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES AND SHALL PROVIDE ALL NECESSARY BARRIERS OF SUFFICIENT TYPE, SIZE AND STRENGTH TO PREVENT ACCESS TO ALL OPEN EXCAVATIONS AT THE COMPLETION OF EACH DAY.
5. ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.
6. THE CONTRACTOR SHALL BE AWARE OF HIS RESPONSIBILITY TO CONTACT "DIG SAFE" AT 111 SO. BEDFORD STREET, BURLINGTON, MA (1-800-225-4977) AT LEAST 72 WORKING HOURS PRIOR TO THE START OF ANY EXCAVATION.
7. SHORING AND STABILIZING OF TRENCH SIDEWALLS DURING EXCAVATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. ALL WORK ADJACENT TO EXISTING TOWN ROADS SHALL BE PERFORMED IN ACCORDANCE WITH THE STREET OPENING REQUIREMENTS OF THE TOWN OF CHESTER AND NH DOT STANDARD SPECIFICATIONS.
9. ALL CULVERTS, DRAINAGE STRUCTURES & ROAD CONSTRUCTION SHALL BE SUBJECT TO PARTIAL AND FINAL INSPECTION PRIOR TO ACCEPTANCE BY THE TOWN OF CHESTER. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATING INSPECTION BY THE TOWN ENGINEER.
10. UTILITY PLANS SHALL BE SUBMITTED TO THE TOWN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 4" TOPSOIL AND SEED OVER ALL DISTURBED UNPAVED AREAS UNLESS OTHERWISE SPECIFIED. TOPSOIL SPECIFICATIONS SHALL BE PROVIDED TO THE TOWN PRIOR TO PLACEMENT.
12. ALL DRIVEWAY GRADING IS SUBJECT TO TOWN REVIEW PRIOR TO DRIVEWAY CONSTRUCTION ON INDIVIDUAL LOTS. DRIVEWAY CULVERTS, LOCATED OUTSIDE THE RIGHT OF WAY, MAY BE NECESSARY DEPENDING ON THE ACTUAL LOT DEVELOPMENT.
13. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES AS NEEDED & SHALL CLEAN ALL COLLECTED SILT PRIOR TO PROJECT ACCEPTANCE.
14. PRIOR TO ROAD ACCEPTANCE BY THE TOWN, THE ROADS AND CATCH BASIN SUMPS SHALL BE CLEANED OF ALL ROAD SAND FROM THE WINTER AND CHECKED ANNUALLY. ALSO ALL FOREBAYS AND TREATMENT SWALES SHALL BE INSPECTED AND CLEANED OF ROAD SAND AND SILT ANNUALLY AND PRIOR TO ROAD ACCEPTANCE.
15. TELEPHONE BOXES AND TRANSFORMERS SHALL BE A MINIMUM OF 10' OFF THE EDGE OF PAVEMENT.
16. ALL SLOPES AT 2:1 OR GREATER SHALL BE PROTECTED WITH EROSION CONTROL MATTING.

- (1) ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.
- (2) LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:
A. ASTM F1417 "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC SEWER PIPE USING LOW-PRESSURE AIR"; OR
B. UN-BELL PVC PIPE ASSOCIATION UNI-S-8, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE"
- (3) ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER IN THE SEWER; AND TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR USE.
- (4) ALL PLASTIC SEWER PIPE SHALL VISUALLY INSPECTED AND DEFLECTION TESTED NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING THE INSTALLATION.
- (5) THE MAXIMUM ALLOWABLE DEFLECTION OF FLOIDABLE SEWER PIPE SHALL BE 5 PERCENT OF AVERAGE INSIDE DIAMETER. A RIGID BELL OR MANHOLE WITH A DIAMETER OF AT LEAST 85% OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE WITHOUT THE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.

- (1) THE MANHOLE VACUUM TEST SHALL IN ACCORDANCE WITH ASTM C1244 AND CONFORM TO THE FOLLOWING:
 - (A) THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES HG; AND
 - (B) THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH HG PRESSURE SHALL BE 9 INCHES HG SHALL BE:
 - A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DITCH;
 - B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND
 - C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP;
- (2) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED ABOVE.
- (3) FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN, OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.

UNPAVED PAVED

4" COMPACTED LOAM AND SEED (TYP)

ORDINARY FILL (SUITABLE MATERIAL FROM EXCAVATION)

2.0' MIN. DRAIN PIPE

SEE TYPICAL ROADWAY SECTION FOR PAVEMENT AND GRAVEL REQUIREMENTS

NOTES :

- ALL DRAIN PIPE SHALL BE ADS N12 (OPP) UNLESS OTHERWISE NOTED
- SELECT SAND TO 12" ABOVE PIPE SHALL BE AS FOLLOWS :
 - 100% PASSING A 1/2 INCH SIEVE
 - 15%(MAX) PASSING A NO. 200 SIEVE
 - FREE FROM ORGANIC MATERIALS

12" Min.

COMPACTED SELECT SAND TO TWELVE INCHES OVER PIPE (MIN.)

COMPACTED 3/4" CRUSHED STONE BEDDING ASTM-C33, SIZE 67

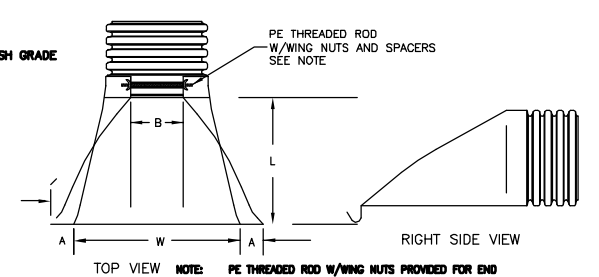
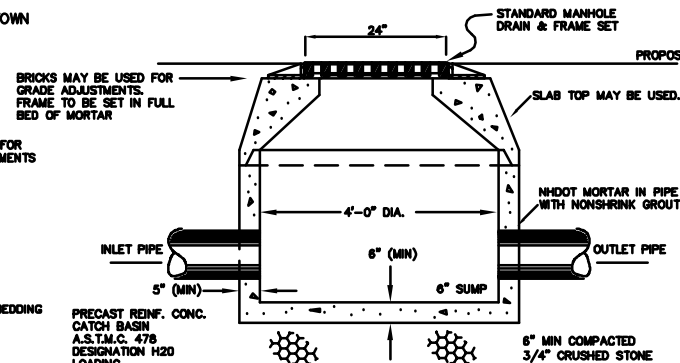
6" Min.

UNDISTURBED MATERIAL

12" MIN. TO LEDGE

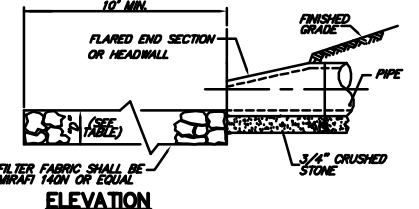
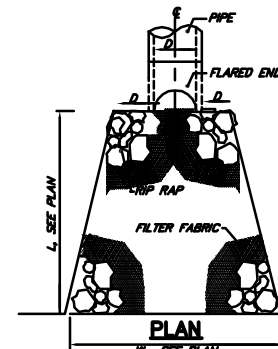
O.D. + 2'-0" (3'-0" MIN.)

(NOT TO SCALE)



PART #	PIPE SIZE	A	B (MAX)	H	L	W
1210NP	12 IN	6.50 IN	10.00 IN	6.50 IN	25.00 IN	29.00 IN
1510NP	15 IN	6.50 IN	10.00 IN	6.50 IN	25.00 IN	29.00 IN
1810NP	18 IN	7.50 IN	15.00 IN	6.50 IN	32.00 IN	35.00 IN
2410NP	24 IN	7.50 IN	18.00 IN	6.50 IN	36.00 IN	45.00 IN
3015NP	30 IN	7.50 IN	12.00 IN	8.60 IN	58.00 IN	63.00 IN
3615NP	36 IN	7.50 IN	25.00 IN	8.60 IN	58.00 IN	63.00 IN

HDPE FLARED END SECTION



N, SEE PLAN	STONE SIZES				
	C1	C2	C3	C4	C5
	D = MIN. BLANKET THICKNESS				
	12"	12"	24"	30"	48"
% OF PASSING BY WEIGHT					
100%	3-6"	6-8"	9-12"	12-18"	15-20"
85%	2.5-3.5"	6-11"	7-15"	10-15"	20-27"
50%	2-3"	4-6"	6-9"	8-12"	10-15"
15%	0.5-1"	1.25-2"	1.75-3"	3-4"	5-6"

NOTE: RIP RAP SHALL CONFORM TO MHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1990, SECTION 505, STONE FILL WITH THE FOLLOWING REQUIREMENTS:

F.E.S. #	Do (feet)	Le (feet)	W1 (feet)	W2 (feet)	d50 (Inches)	d
F.E.S. #7	1.50"	17"	6"	21"	6.5"	18"
F.E.S. #9	1.50"	13"	6"	17"	6"	18"
F.E.S. #33	2.00"	21"	6"	27"	6"	24"
F.E.S. #1	2.00"	16"	4.5"	13"	6"	1.5"
F.E.S. #2	1.00"	10"	4.5"	13"	6"	24"
F.E.S. #18	1.50"	12"	4.5"	16"	6"	1.5"
F.E.S. #20	1.50"	12"	4.5"	16"	6"	1.5"
F.E.S. #4	1.25"	11"	4.5"	15"	6"	1.5"

"PIPIT ESTATES"

OWNER OF RECORD LOT 107-3:

FEBRUARY 23, 2018

NOT TO SCALE

PREPARED BY:
MITCHELL 2-1

J. MITCHELL & A
URVEYING - ENGINEERING -

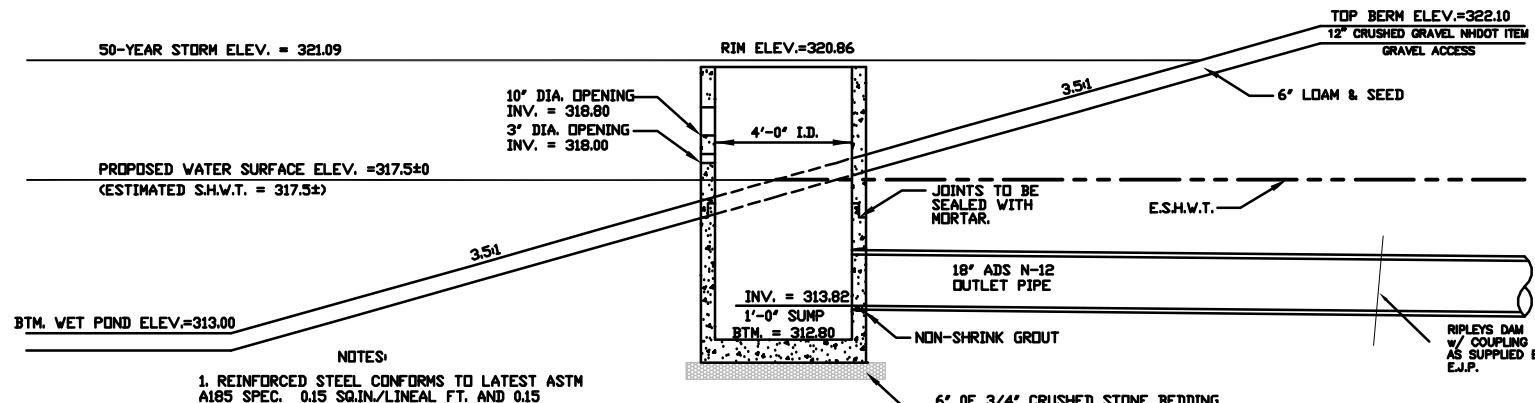
P.O. BOX 10298, 108 SO. RIVER RD., BEDFORD NH. 03110-0298
PH. (603) 627-1181

REV: D	DWG: 17-05 DETAILS	FLD. BK/PQ:	JOB
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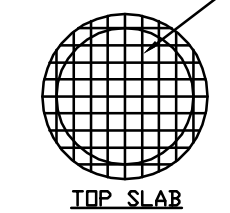


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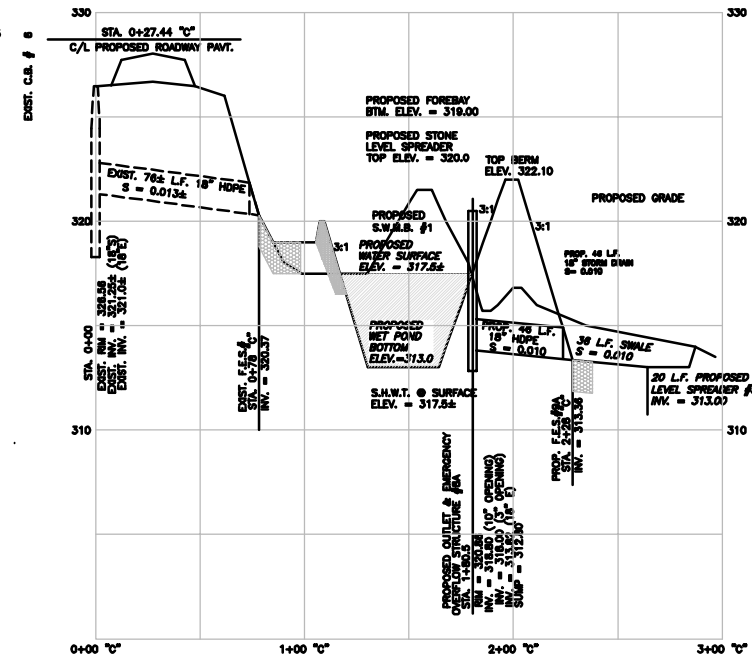
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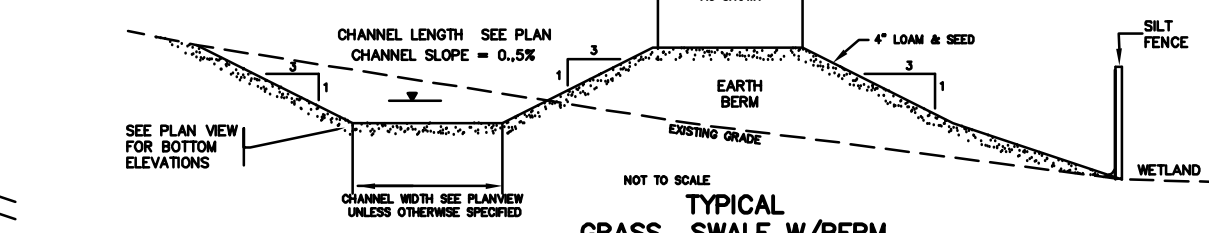
- NOTES:
1. REINFORCED STEEL CONFORMS TO LATEST ASTM A165 SPEC. 0.15 SQ. IN./LINEAL FT. AND 0.15 SQ. IN. (BOTH WAYS) BASE BOTTOM.
 2. REINFORCED STEEL CONFORMS TO LATEST ASTM A 185 SPEC. 0.12 SQ. IN./LINEAL FT.
 3. CONCRETE COMPRESSIVE STRENGTH - 4,000 PSI MINIMUM.
 4. SPECIFICATIONS CONFORM TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
 5. STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEPS TO CONFORM TO LATEST ASTM C348.
 6. EACH CASTING TO HAVE LIFTING HOLES CAST IN.



#8 REBARS SPACED 6' C. TO C. WELDED AT EACH CROSSING COMPLETE ASSEMBLY TO BE GALVANIZED. ASSEMBLY TO BE SECURELY BOLTED TO CONCRETE STRUCTURE WITH 1/2 DIA. GALVANIZED BOLTS AND WASHERS.



S.W.M.B. #1, CROSS SECTION N.T.S.



MAINTENANCE
THE EARTH DIKE SHALL BE INSPECTED AFTER EVERY STORM AND REPAIRS MADE TO THE DIKE, FLOW CHANNEL, AND THE OUTLET AS NECESSARY. DAMAGE CAUSED BY CONSTRUCTION EQUIPMENT SHOULD BE REPAIRED THE SAME DAY AS THE DAMAGE OCCURS. WHEN THE DIKE IS REMOVED, THE AREA SHALL BE SMOOTHED AND VEGETATED USING THE APPROPRIATE MEASURES OUTLINED IN THE BMP'S FOR VEGETATIVE MEASURES.

TIMELY MAINTENANCE IS IMPORTANT TO KEEP THE VEGETATION IN THE SWALE IN GOOD CONDITION. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP THE VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION. HOWEVER IT SHOULD NOT BE MOWED BELOW 6 INCHES SO AS TO REDUCE THE FILTERING EFFECT. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.

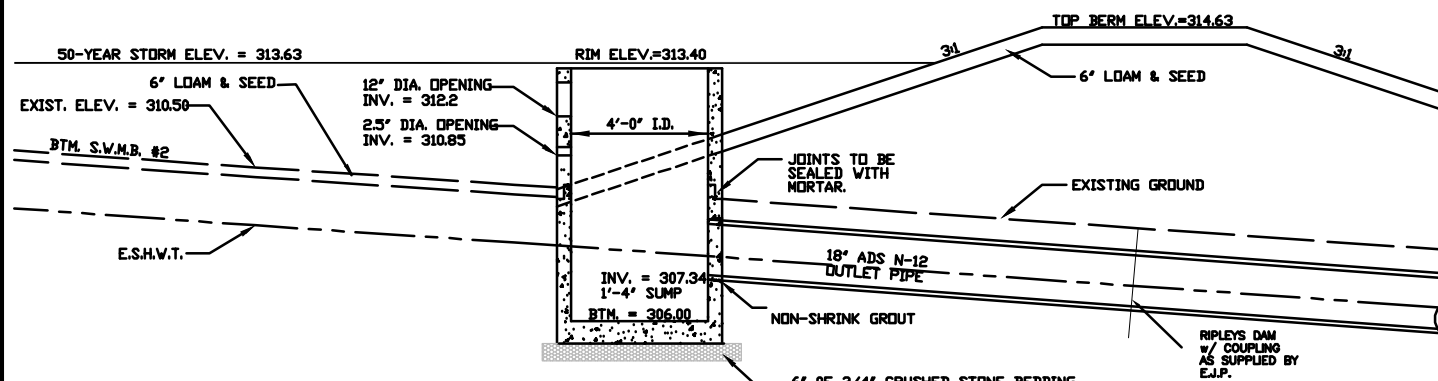
THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND RE-VEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

STONE GRADATION	
SIEVE DESIGNATION	% BY WEIGHT PASSING SQUARE MESH SIEVE
12-INCH	100%
6-INCH	84% TO 100%
3-INCH	68% TO 83%
1-INCH	42% TO 55%
NO. 4	8% TO 12%

- CONSTRUCTION SPECIFICATIONS**
1. CONSTRUCT THE LONG LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
 2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
 3. AN EROSION STOP SHALL BE PLACED VERTICALLY A MINIMUM OF SIX INCHES DEEP IN A SILT TRENCH ONE FOOT BACK OF THE LEVEL LIP AND PARALLEL TO THE LIP. THE EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP.
 4. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OR EXCELISOR MATTING ALONG THE LIP. EACH STRIP SHALL OVERLAP THE EROSION STOP BY AT LEAST SIX INCHES.
 5. THE ENTRANCE TO THE LEVEL SPREADER SHALL NOT EXCEED A 1.0% GRADE FOR AT LEAST 50 FEET BEFORE ENTERING INTO THE SPREADER.
 6. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
 7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.

- MAINTENANCE REQUIREMENTS**
1. INSPECT AT LEAST ONCE ANNUALLY FOR ACCUMULATION OF SEDIMENT AND DEBRIS AND FOR SIGNS OF EROSION WITHIN APPROACH CHANNEL, SPREADER CHANNEL, OR DOWN-SLOPE OF THE SPREADER.
 2. REMOVE DEBRIS WHENEVER OBSERVED DURING INSPECTION.
 3. REMOVE SEDIMENT WHEN ACCUMULATION EXCEEDS 25% OF SPREADER CHANNEL DEPTH.
 4. MOW AS REQUIRED BY LANDSCAPING DESIGN. AT A MINIMUM, MOW ANNUALLY TO CONTROL WOODY VEGETATION WITHIN THE SPREADER.
 5. SNOW SHOULD NOT BE STORED WITHIN OR DOWN-SLOPE OF THE LEVEL SPREADER OR ITS APPROACH CHANNEL.
 6. REPAIR ANY EROSION AND RE-GRADE OR REPLACE STONE BERM MATERIAL, AS WARRANTED BY INSPECTION.
 7. RECONSTRUCT THE SPREADER IF DOWN-SLOPE CHANNELIZATION INDICATES THAT THE SPREADER IS NOT LEVEL OR THAT DISCHARGE HAS BECOME CONCENTRATED, AND CORRECTIONS CANNOT BE MADE THROUGH MINOR RE-GRADEING.

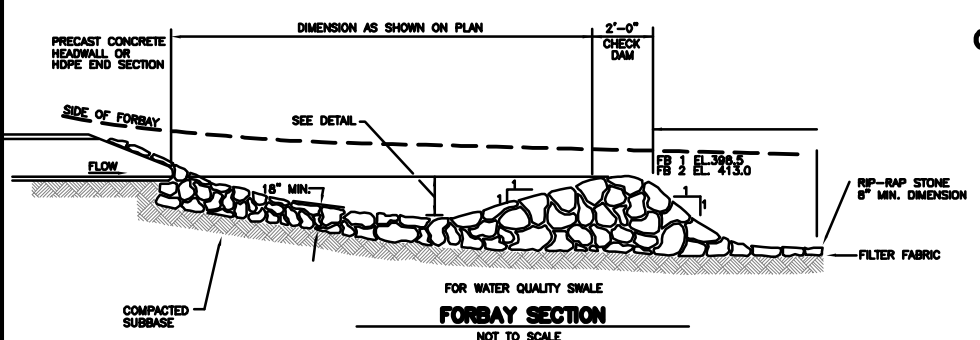
STONE BERM LEVEL SPREADER



S.W.M.B. #2, OUTLET STRUCTURE #17 (PRECAST CONCRETE CONTROL STRUCTURE) N.T.S.

FORBAY	REQUIRED FORBAY	PROPOSED FORBAY VOLUME OF	ROCK DAM	STONE
1	222 CF	1396 CF	1.0	CLASS C
2	600	650 CF	1.0	CLASS C
2	280 CF	250 CF	1.0	CLASS C

GRAVEL ACCESS SECTION



REV.	DATE	DESCRIPTION	BY
A	05/23/18	REVISED PER TOWN COMMENTS	BT

REVISIONS

CONSTRUCTION DETAILS
"PIPIT ESTATES"
TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A),
CROSS & OLD SANDOWN ROADS
CHESTER NH

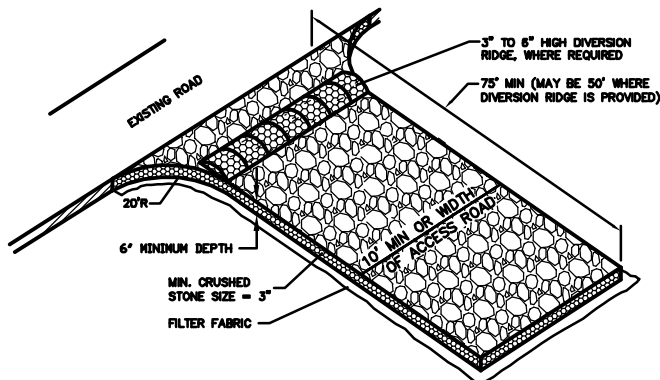
OWNER OF RECORD LOT 107-3:
PIPIT ESTATES REALTY TRUST
66 GILCREAST RD, LONDONDERRY, NH 03053
FEBRUARY 23, 2018



NOT TO SCALE
PREPARED BY:
ERIC C. MITCHELL & ASSOC. INC.
PLANNING - SURVEYING - ENGINEERING - ENVIRONMENTAL
P.O. BOX 10288, 108 SO. RIVER RD., BEDFORD NH. 03110-0288
PH. (603) 627-1161

SHEET 13 OF 16

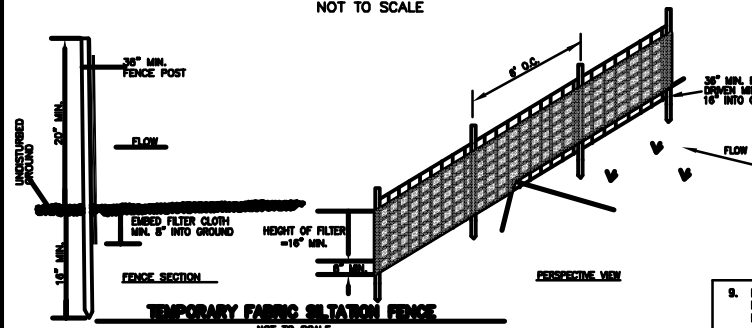
REV: D DWG: 17-05 DETAILS FLD. BK/PK: JOB NO. 17-05



- MAINTENANCE**
- THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL, REGRADED ON SITE, AND STABILIZED. THE ENTRANCE SHALL THEN BE RECONSTRUCTED.
 - THE CONTRACTOR SHALL SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT OR TRAVELED WAY.
 - WHEN WHEEL WASHING IS REQUIRED, IT SHALL BE CONDUCTED ON AN AREA STABILIZED WITH ADDEGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.
- CONSTRUCTION SPECIFICATIONS**
- ONLY CONSTRUCTION TRAFFIC LEAVING THE SITE IS REQUIRED TO USE THE TEMPORARY STABILIZED EXIT. CONSIDER PROVIDING A SEPARATE, UNPROTECTED, ENTRANCE FOR TRAFFIC ENTERING THE SITE. THIS WILL INCREASE THE LONGEVITY OF THE STABILIZED EXIT BY ELIMINATING HEAVY LOADS ENTERING THE SITE AND REDUCING THE TOTAL TRAFFIC OVER THE DEVICE.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR MAINTENANCE OF ANY MEASURES USED TO TRAP SEDIMENT.
 - STONE FOR A TEMPORARY CONSTRUCTION EXIT SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
 - THE MINIMUM LENGTH OF THE PAD SHALL BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
 - THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
 - THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE EXIT OR 10 FEET, WHICH EVER IS GREATER.
 - GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
 - ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

TEMPORARY CONSTRUCTION EXIT

NOT TO SCALE



- NOTES:**
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STUPLD.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

CONSTRUCTION SEQUENCES:

(THESE SEQUENCES TO APPLY FOR BOTH ROAD & LOT CONSTRUCTION)

- PRIOR TO CONSTRUCTION INSTALL FABRIC SILTATION FENCING AS SHOWN ON PLAN. CONSTRUCT TEMPORARY STABILIZED ENTRANCE, AND INSTALL OTHER APPROPRIATE SEDIMENT AND EROSION CONTROL.
- CUT AND CLEAR ALL VEGETATION AND STUMPS FROM CUT SLOPES, PONDS, AND SWALE AREAS.
- COMPLETE EXCAVATION AND BERM CONSTRUCTION OF THE MICRO POOL DETENTION BASIN AND TEMPORARY FOREBAYS WITHIN THE POND, STABILIZED SLOPES AND SWALES.
- ALLOW FOR VEGETATION STABILIZATION TO OCCUR WITHIN THE SWALES PRIOR TO DIRECTING STORM WATER INTO THE:
 - A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE, OR RIP-RAP HAS BEEN INSTALLED; OR
 - D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- CUT AND CLEAR ALL VEGETATION AND STUMPS FROM AREAS TO BE DISTURBED FOR THE CONSTRUCTION OF THE PROPOSED ROADWAY.
- REMOVE TOPSOIL AND OTHER ORGANIC MATERIALS FROM AREAS TO BE DISTURBED. ALL SUCH TOPSOIL, REMOVED SHALL BE STOCKPILED FOR LATER USE. ALL STOCKPILES SHALL BE SEEDDED AND MULCHED TO PREVENT LOSS DUE TO EROSION, AND ENCLOSED WITH FABRIC SILT FENCE. WHEN CONSTRUCTION ACTIVITIES ARE TEMPORARILY CEASED FOR MORE THAN 21 DAYS, PERMANENTLY CEASED, OR SHUT DOWN FOR WINTER, THE CONTRACTOR SHALL LEAVE NO SLOPES STEEPER THAN 3:1 AND SHALL IMPLEMENT TEMPORARY LOADING, SEEDING AND MULCHING WHERE CONSTRUCTION ACTIVITIES HAVE BEEN SUSPENDED OUTSIDE THE GROWING SEASON ALL EXPOSED SOIL SHALL BE STABILIZED BY MULCHING, AND ALL SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NETTING & PINNING.
- CONSTRUCT, CUT, AND FILL SLOPES. ALL CUT AND FILL SLOPES TO BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION. ALL SLOPES GREATER THAN 3:1 TO BE STABILIZED WITH JUTE MATTING. ALL CUT AND FILL SLOPES SHALL BE SEEDDED AND LOADED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- CONSTRUCT STORM DRAINAGE, AND OTHER UNDERGROUND UTILITIES. ALL SWALES TO BE PROTECTED WITH TEMPORARY EROSION CONTROL MEASURES SHOWN. ALL CATCH BASIN OPENINGS TO BE PROTECTED WITH BLOCK AND GRAVEL INLET SEDIMENT FILTERS AS SHOWN.

MAINTENANCE REQUIREMENTS

- TEMPORARY SEEDING SHALL BE INSPECTED WEEKLY AND AFTER ANY RAINFALL EXCEEDING 1/4 INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES. TEMPORARY SEEDING SHALL ALSO BE INSPECTED JUST PRIOR TO SEPTEMBER 15, TO ASCERTAIN WHETHER ADDITIONAL SEEDING IS REQUIRED TO PROVIDE STABILIZATION OVER THE WINTER PERIOD.
 - BASED ON INSPECTION, AREAS SHALL BE RESEED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS. IF IT IS TOO LATE IN THE PLANTING SEASON TO APPLY ADDITIONAL SEED, THEN OTHER TEMPORARY STABILIZATION MEASURES SHALL BE IMPLEMENTED.
 - AT A MINIMUM, 85% OF THE SOIL SURFACE SHALL BE COVERED BY VEGETATION.
 - IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE RESEED, WITH OTHER TEMPORARY MEASURES (E.G., MULCH) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
- SPECIFICATIONS**
- SITE PREPARATION:**
- INSTALL NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS SILTATION BARRIERS, DIVERSIONS, AND SEDIMENT TRAPS.
 - GRADE AS NEEDED FOR THE ACCESS OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
 - RUNOFF SHALL BE DIVERTED FROM THE SEEDDED AREA.
 - ON SLOPES 4:1 OR STEEPER, THE FINAL PREPARATION SHALL INCLUDE CREATING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.

SEEDING PREPARATION:

- STONES AND TRASH SHALL BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
- WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
- IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON. UPDATE THE INFO:
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 400 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER1 (N-P208-K20) OR EQUIVALENT. APPLY LIMESTONE (EQUVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET).
 - FERTILIZER SHALL BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE2 NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHALL BE APPLIED WITHIN 25 FEET OF A SURFACE WATER BODY. THESE LIMITATIONS ARE REQUIREMENTS FOR ANY WATER BODY PROTECTED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT.

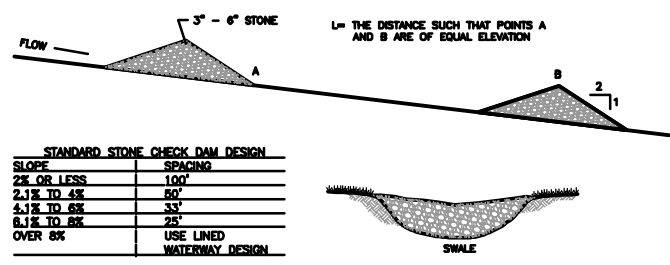
SEEDING:

- SELECT SEED FROM RECOMMENDATIONS IN TABLE 4-1.
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED TO 1/2 WHEN HYDROSEEDING.
- TEMPORARY SEEDING SHALL TYPICALLY OCCUR PRIOR TO SEPTEMBER 15TH.
- AREAS SEEDDED BETWEEN MAY 15TH AND AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE TEMPORARY AND PERMANENT MULCHING PRACTICE.
- VEGETATED GROWTH COVERING AT LEAST 80% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.

TABLE 4-1. SEEDING RECOMMENDATIONS FOR TEMPORARY VEGETATION			
SPECIES	PER ACRE BUSHELS (BU) OR POUNDS (LBS)	PER 1,000 F2	REMARKS
WINTER RYE	2 BU. OR 112 LBS.	2.5 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	2.5 BU. OR 80 LBS.	2 LBS.	BEST FOR SPRING SEEDINGS. SEED NO LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40 LBS.	1 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15. COVER THE SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30 LBS.	0.7 LB.	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1 AND JUNE 1 AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

TEMPORARY VEGETATION

- BEGIN TOP SOILING, SEEDING AND MULCHING IMMEDIATELY AFTER COMPLETION OF EMBANKMENTS. TEMPORARY EROSION CONTROL / DIVERSION CHANNELS SHALL BE IMPLEMENTED WHERE REQUIRED TO PREVENT EROSION OF EMBANKMENTS. ANY EROSION OCCURRING SHALL BE REPAIRED IMMEDIATELY UPON DISCOVERY.
- FINISH GRADING & PAVING. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADES.
- ALL PAVED AREAS TO BE COMPLETED BY NOVEMBER 15. ALL LANDSCAPED AREAS TO BE STABILIZED BY OCTOBER 15th, WITH HAY MULCH AND SEED.
- COMPLETE PERMANENT SEEDING AND MULCHING OF ALL DISTURBED AREAS. ALL TEMPORARY EROSION CONTROL MEASURES TO REMAIN IN PLACE UNTIL A FULL VEGETATIVE COVER HAS BEEN ESTABLISHED ON ALL DISTURBED AREAS.
- SILT FENCES AND HAY BALE BARRIERS TO BE REMOVED ONCE THE SITE HAS STABILIZED.
- REMOVE ACCUMULATIONS OF SEDIMENT FROM DRAINAGE STRUCTURES. MICROPOOL POND TO BE CLEARED OUT, LOADED & WANTED AS NECESSARY UPON COMPLETION OF PROJECT.
- THE MAXIMUM AMOUNT OF AREA ALLOWED TO BE DISTURBED & UNSTABILIZED AT ONE TIME IS 1.5 ACRES. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS FROM INITIAL DISTURBANCE.
- WINTER CONSTRUCTION NOTES:
 - DURING WINTER CONDITIONS, THE MAXIMUM ALLOWABLE DISTURBED AREA SHALL BE 0.5 ACRES.
 - ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MAXIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. ELSEWHERE, THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
 - ALL DITCHES AND SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
 - AFTER NOVEMBER 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER N.H.D.O.T. ITEM 304.3.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B) A MINIMUM OF 85% VEGETATIVE GROWTH HAS BEEN ESTABLISHED;
 - C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
 - D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- BASINS AND SWALES SHALL BE INSTALLED EARLY IN THE CONSTRUCTION SEQUENCE AND PRIOR TO ANY ROUGH GRADING OF THE SITE.
- ALL DITCHES, SWALES AND BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT OCCUR UNTIL AFTER THE ROADWAY AND ASSOCIATED DRAINAGE HAVE BEEN COMPLETED AND STABILIZED. INDIVIDUAL LOT DEVELOPMENT THAT IS PLANNED TO EXCEED 100,000 SQUARE FEET (OR 50,000 SQUARE FEET WITHIN THE CSP) MAY REQUIRE A ALTERATION OF TERRAIN APPLICATION PRIOR TO LOT DEVELOPMENT.



CONSIDERATIONS

- THIS PRACTICE IS INTENDED FOR USE IN AREAS OF CONCENTRATED FLOW, BUT MUST NOT BE USED IN STREAM CHANNELS (WHETHER PERENNIAL OR INTERMITTENT).
- THE CHECK DAM MAY BE LEFT IN PLACE PERMANENTLY TO AVOID UNNECESSARY DISTURBANCE OF THE SOIL ON REMOVAL, BUT ONLY IF THE PROJECT DESIGN HAS ACCOUNTED FOR THEIR HYDRAULIC PERFORMANCE AND CONSTRUCTION PLANS CALL FOR THEM TO BE RETAINED.
- IF IT IS NECESSARY TO REMOVE A STONE CHECK DAM FROM A GRASSLESED CHANNEL THAT WILL BE MOWED, CARE SHALL BE TAKEN TO ENSURE THAT ALL STONES ARE REMOVED. THIS INCLUDES STONE THAT HAS WASHED DOWNSTREAM.

MAINTENANCE REQUIREMENTS

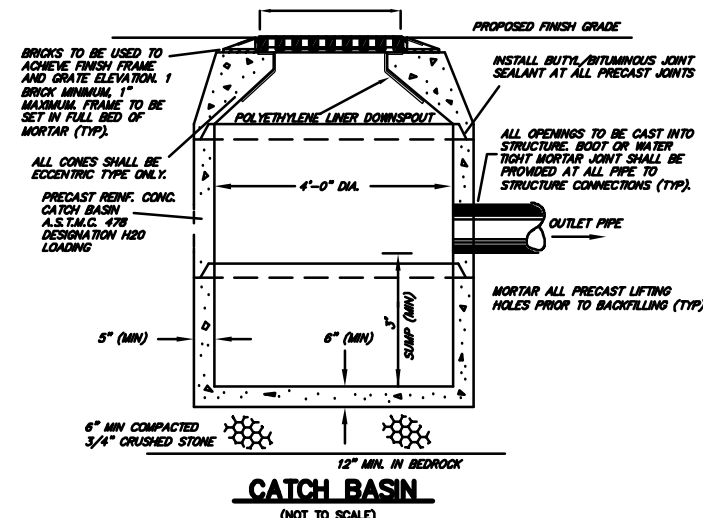
- CHECK DAMS SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL AND NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY.
- INSPECTIONS SHALL VERIFY THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES.
- EROSION CAUSED BY HIGH FLOWS AROUND THE EDGES OF THE DAM MUST BE CORRECTED IMMEDIATELY.
- IF EVIDENCE OF SILTATION IN THE WATER IS APPARENT DOWNSTREAM FROM THE CHECK DAM, THE CHECK DAM SHALL BE INSPECTED AND ADJUSTED IMMEDIATELY.
- CHECK DAMS SHALL BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE HALF OF THE ORIGINAL HEIGHT OR BEFORE.

SPECIFICATIONS

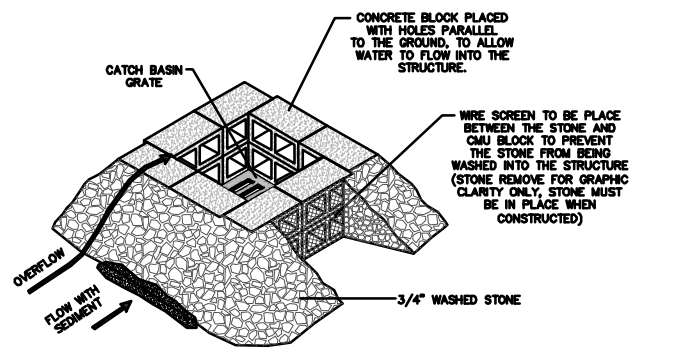
- CHECK DAMS SHALL BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
- THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE DAM SHALL BE LESS THAN ONE ACRE.
- THE MAXIMUM HEIGHT OF THE DAM SHALL BE 2 FEET.
- THE CENTER OF THE DAM SHALL BE AT LEAST 6 INCHES LOWER THAN THE OUTER EDGES.
- THE MAXIMUM SPACING BETWEEN THE DAMS SHALL BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE OVERFLOW ELEVATION OF THE DOWNSTREAM DAM.
- STONE CHECK DAMS SHALL BE CONSTRUCTED OF A WELL-GRADED ANGULAR 2-INCH TO 3-INCH STONE. 3/4-INCH STONE ON THE UPGRADIENT FACE IS RECOMMENDED FOR BETTER FILTERING.
- IF PROVIDED BY DESIGN AND CONSTRUCTION PLANS, LEAVE THE DAM IN PLACE PERMANENTLY.
- TEMPORARY STRUCTURES SHALL BE REMOVED ONCE THE SWALE OR DITCH HAS BEEN STABILIZED:
 - IN TEMPORARY DITCHES AND SWALES, CHECK DAMS SHALL BE REMOVED AND THE DITCH FILLED IN WHEN IT IS NO LONGER NEEDED.
 - IN PERMANENT STRUCTURES, CHECK DAMS SHALL BE REMOVED WHEN A PERMANENT LINING HAS BEEN ESTABLISHED. IF THE PERMANENT LINING IS VEGETATION, THEN THE CHECK DAM SHALL BE RETAINED UNTIL THE GRASS HAS MATURED TO PROTECT THE DITCH OR SWALE. THE AREA BENEATH THE CHECK DAM MUST BE SEEDDED AND MULCHED IMMEDIATELY AFTER REMOVAL.

TEMPORARY STONE CHECK DAMS

NOT TO SCALE



- WHERE DEPTH EXCEEDS 12 FT, USE 6"-0" DIAMETER (MIN.) MAXIMUM DEPTH = 18 FEET.
- MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
- ALL BOOTS, GASKETS AND SEALANTS SHALL BE IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.



MAINTENANCE REQUIREMENTS

- INLET BARRIERS SHALL BE INSPECTED BEFORE AND AFTER EACH RAIN EVENT AND REPAIRED AS NEEDED.
- SEDIMENT SHALL BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- THE BARRIERS SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED.

SPECIFICATIONS

- THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHALL BE LESS THAN ONE ACRE.
- THE INLET PROTECTION DEVICE SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES.
- ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
- THE BLOCKS SHALL BE PLACED LENGTHWISE IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET.
- THE BLOCK ENDS SHALL ABUT ONE ANOTHER.
- THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4-INCH, 8-INCH AND 12-INCH WIDE BLOCKS. THE BARRIER OF BLOCKS AND GRAVEL FILTER SHALL BE A MINIMUM OF 15 INCHES HIGH AND NO MORE THAN 24 INCHES HIGH.
- A HARDWARE CLOTH OR WIRE MESH SHALL BE PLACED OVER THE OPENINGS OF THE CONCRETE BLOCKS AND EXTEND AT LEAST 12 INCHES AROUND THE OPENING TO PREVENT AGGREGATE FROM BEING TRANSPORTED THROUGH THE OPENINGS IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED.
- THE GRAVEL FILTER SHALL BE CLEAN COARSE AGGREGATE.
- THE GRAVEL SHALL BE PLACED AGAINST THE WIRE AND ALONG THE OUTSIDE EDGES OF THE BLOCKS TO THE TOP OF THE BLOCK BARRIER.
- IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

MANUFACTURED SEDIMENT BARRIERS

16. MANUFACTURED SEDIMENT BARRIERS ARE NOW AVAILABLE THAT COULD BE FUNCTIONALLY EQUIVALENT TO THE BARRIERS LISTED ABOVE. THESE MEASURES ARE ACCEPTABLE AS LONG AS THEY ARE INSTALLED, USED, AND MAINTAINED AS SPECIFIED BY THE VENDOR OR MANUFACTURER, AND PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. IF SUCH PRODUCTS FAIL TO PERFORM THE REQUIRED SEDIMENT TRAPPING FUNCTION, THEY SHALL BE REMOVED AND REPLACED WITH AN EFFECTIVE ALTERNATIVE BARRIER.

TEMPORARY STORM DRAIN INLET PROTECTION

NOT TO SCALE

REV.	DATE	DESCRIPTION	BY
A	05/23/18	REVISED PER TOWN COMMENTS	BT
REVISIONS			

CONSTRUCTION DETAILS

"PIPT ESTATES"

TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A),
CROSS & OLD SANDOWN ROADS
CHESTER NH

OWNER OF RECORD LOT 107-3:

PIPT ESTATES REALTY TRUST

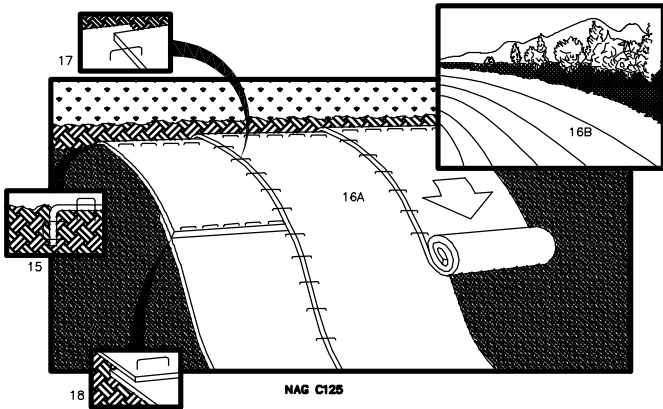
66 GILCREAST RD, LONDONDERRY, NH 03053

FEBRUARY 23, 2018

NOT TO SCALE

PREPARED BY:

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PH. (603) 627-1161



CONSIDERATIONS

1. DURING THE GROWING SEASON (APRIL 15 - SEPTEMBER 15) USE MATS OR MULCH AND NETTING ON SLOPES 15% OR GREATER AND ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND COWETLANDS.
2. DURING THE LATE FALL AND WINTER (SEPTEMBER 15 - APRIL 15) USE HEAVY GRADE MATS ON ALL AREAS NOTED ABOVE PLUS USE LIGHTER GRADE MATS OR MULCH AND NETTING ON SLOPES GREATER THAN 8% THERE MAY BE CASES WHERE MATS WILL BE NEEDED ON SLOPES FLATTER THAN 8% DEPENDING ON SITE CONDITIONS AND THE LENGTH OF THE SLOPE.

3. INSTALL MATS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE REQUIREMENTS

4. ALL BLANKET AND MATS SHOULD BE INSPECTED WEEKLY DURING THE CONSTRUCTION PERIOD, AND AFTER ANY RAINFALL EVENT EXCEEDING 1/8 INCH IN A 24-HOUR PERIOD.
5. ANY FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUT OF THE SLOPE, DISPLACEMENT OF THE MAT, OR DAMAGE TO THE MAT OCCURS, THE AFFECTED SLOPE SHALL BE REPAIRED AND RESEEDED, AND THE AFFECTED AREA OF MAT SHALL BE RE-INSTALLED OR REPLACED.

SPECIFICATIONS

SITE PREPARATION

6. GRADE AND SHAPE AREA OF INSTALLATION.

7. REMOVE ALL ROCKS, CLODS, TRASH, VEGETATIVE OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED BLANKETS WILL HAVE DIRECT CONTACT WITH THE SOIL.

8. PREPARE SEEDBED BY LOOSENING 2-3 INCHES OF TOPSOIL ABOVE FINAL GRADE.

9. INCORPORATE AMENDMENTS, SUCH AS LIME AND FERTILIZER, INTO SOIL ACCORDING TO SOIL TEST AND THE SEEDING PLAN.

SEEDING

10. SEED AREA BEFORE BLANKET INSTALLATION FOR EROSION CONTROL AND RE-VEGETATION. SEEDING AFTER MAT INSTALLATION IS OFTEN SPECIFIED FOR TURF REINFORCEMENT APPLICATION. WHEN SEEDING PRIOR TO BLANKET INSTALLATION, ALL CHECK SLOTS AND OTHER AREAS DISTURBED DURING INSTALLATION MUST BE RESEDED.

11. WHERE SOIL FILLING IS SPECIFIED, SEED THE MATTING AND THE ENTIRE DISTURBED AREA AFTER INSTALLATION AND PRIOR TO FILLING THE MAT WITH SOIL.

INSTALLING AND ANCHORING BLANKETS

12. BLANKETS SHALL BE INSTALLED AND ANCHORED PER THE MANUFACTURER'S SPECIFICATIONS.

13. ENSURE COMPLETE CONTACT OF THE PROTECTION MATTING WITH THE SOIL.

INSTALLATION ON SLOPES

14. BLANKETS SHALL BE INSTALLED ON SLOPES PER THE MANUFACTURER'S SPECIFICATIONS. IF THE MANUFACTURER'S INSTRUCTIONS DIFFER FROM THOSE LISTED BELOW, THE MANUFACTURER'S INSTRUCTIONS SHOULD BE FOLLOWED.

15. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

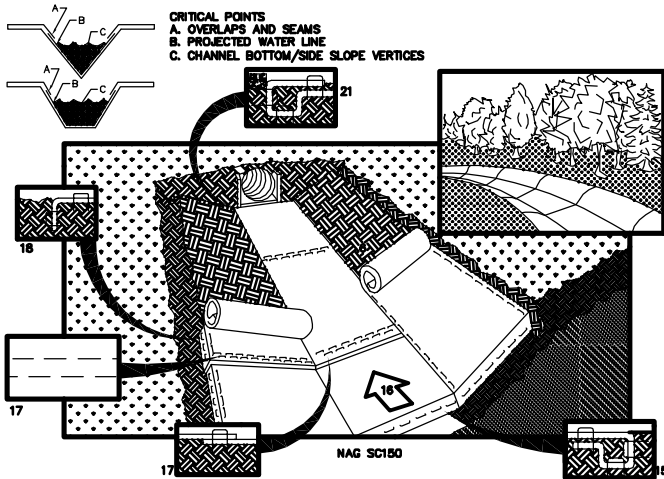
16. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.

17. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP.

18. WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

TEMPORARY EROSION CONTROL BLANKET ON SLOPES

NOT TO SCALE



CONSIDERATIONS

1. DURING THE GROWING SEASON (APRIL 15 - SEPTEMBER 15) USE MATS OR MULCH AND NETTING ON THE BASE OF GRASSED WATERWAYS.
2. DURING THE LATE FALL AND WINTER (SEPTEMBER 15 - APRIL 15) USE HEAVY GRADE MATS ON SIDE SLOPES OF GRASSED WATERWAYS.

3. INSTALL MATS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE REQUIREMENTS

4. ALL BLANKET AND MATS SHOULD BE INSPECTED WEEKLY DURING THE CONSTRUCTION PERIOD, AND AFTER ANY RAINFALL EVENT EXCEEDING 1/8 INCH IN A 24-HOUR PERIOD.

5. ANY FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUT OF THE SLOPE, DISPLACEMENT OF THE MAT, OR DAMAGE TO THE MAT OCCURS, THE AFFECTED SLOPE SHALL BE REPAIRED AND RESEDED, AND THE AFFECTED AREA OF MAT SHALL BE RE-INSTALLED OR REPLACED.

SPECIFICATIONS

SITE PREPARATION

6. GRADE AND SHAPE AREA OF INSTALLATION.

7. REMOVE ALL ROCKS, CLODS, TRASH, VEGETATIVE OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED BLANKETS WILL HAVE DIRECT CONTACT WITH THE SOIL.

8. PREPARE SEEDBED BY LOOSENING 2-3 INCHES OF TOPSOIL ABOVE FINAL GRADE.

9. INCORPORATE AMENDMENTS, SUCH AS LIME AND FERTILIZER, INTO SOIL ACCORDING TO SOIL TEST AND THE SEEDING PLAN.

SEEDING

10. SEED AREA BEFORE BLANKET INSTALLATION FOR EROSION CONTROL AND RE-VEGETATION. SEEDING AFTER MAT INSTALLATION IS OFTEN SPECIFIED FOR TURF REINFORCEMENT APPLICATION. WHEN SEEDING PRIOR TO BLANKET INSTALLATION, ALL CHECK SLOTS AND OTHER AREAS DISTURBED DURING INSTALLATION MUST BE RESEDED.

11. WHERE SOIL FILLING IS SPECIFIED, SEED THE MATTING AND THE ENTIRE DISTURBED AREA AFTER INSTALLATION AND PRIOR TO FILLING THE MAT WITH SOIL.

INSTALLING AND ANCHORING BLANKETS

12. BLANKETS SHALL BE INSTALLED AND ANCHORED PER THE MANUFACTURER'S SPECIFICATIONS.

13. ENSURE COMPLETE CONTACT OF THE PROTECTION MATTING WITH THE SOIL.

INSTALLATION IN CHANNELS

14. BLANKETS SHALL BE INSTALLED IN CHANNELS PER THE MANUFACTURER'S SPECIFICATIONS. IF THE MANUFACTURER'S INSTRUCTIONS DIFFER FROM THOSE LISTED BELOW, THE MANUFACTURER'S INSTRUCTIONS SHOULD BE FOLLOWED.

15. BEGIN AT THE OUTLET OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

16. ROLL CENTER BLANKET IN DIRECTION OF THE INLET END OF THE CHANNEL.

17. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.

18. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

19. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED.

20. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.

21. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

TEMPORARY EROSION CONTROL BLANKET FOR CHANNELS

NOT TO SCALE

TEMPORARY & PERMANENT MULCHING

CONSIDERATIONS

1. WITHIN 100 FEET OF STREAMS, WETLANDS AND IN LAKE WATERSHEDS, TEMPORARY MULCH SHOULD BE APPLIED WITHIN 7 DAYS OF EXPOSING SOIL OR PRIOR TO ANY STORM EVENT.
2. AREAS THAT HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHOULD BE MULCHED IMMEDIATELY FOLLOWING SEEDING.
3. AREAS THAT CANNOT BE SEEDED WITHIN THE GROWING SEASON SHOULD BE MULCHED FOR OVER-WINTER PROTECTION. THE AREA SHOULD BE SEEDED AT THE BEGINNING OF THE NEXT GROWING SEASON.
4. MULCH ANCHORING SHOULD BE USED ON SLOPES WITH GRADIENTS GREATER THAN 8% IN LATE FALL (PAST SEPTEMBER 15), AND OVER-WINTER (SEPTEMBER 15 - MAY 15).
5. PERMANENT MULCH CAN BE USED IN CONJUNCTION WITH TREE, SHRUB, VINE, AND GROUND COVER PLANTINGS.

MAINTENANCE REQUIREMENTS

6. ALL TEMPORARY MULCHES MUST BE INSPECTED PERIODICALLY AND IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 80% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHOULD BE IMMEDIATELY APPLIED. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGES OCCUR, REPAIR ANY DAMAGE TO THE SLOPE AND RE-INSTALL OR REPLACE NETTING AS NECESSARY. INSPECTIONS SHOULD TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED (80% SOIL SURFACE UNIFORMLY COVERED WITH HEALTHY STAND OF GRASS).

7. EROSION CONTROL MIX MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

8. WHERE PERMANENT MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE. REPAIR AS NEEDED.

9. PERMANENT MULCHED AREAS SHOULD BE INSPECTED AT LEAST ANNUALLY, AND AFTER EACH LARGE RAINFALL (2.5 INCHES OR MORE IN A 24-HOUR PERIOD). ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY. WHERE EROSION CONTROL MIX HAS BEEN USED, PLACE ADDITIONAL MIX ON TOP OF THE MULCH TO MAINTAIN THE RECOMMENDED THICKNESS. WHEN THE MULCH IS DECOMPOSED, CLOGGED WITH SEDIMENT, ERODED OR INEFFECTIVE, IT MUST BE REPLACED OR REPAIRED.

10. IF THE MULCH NEEDS TO BE REMOVED, SPREAD IT OUT INTO THE LANDSCAPE.

SPECIFICATIONS

GENERAL

11. APPLY MULCH PRIOR TO A STORM EVENT. THIS IS APPLICABLE IN EXTREMELY SENSITIVE AREAS SUCH AS WITHIN 100 FEET OF LAKES, PONDS, RIVERS, STREAMS, AND WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.

12. MULCHING SHOULD BE COMPLETED WITHIN THE FOLLOWING SPECIFIED TIME PERIODS FROM ORIGINAL SOIL EXPOSURE:
 - WITHIN 100 FEET OF RIVERS AND STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD SHOULD BE NO GREATER THAN 7 DAYS. THIS 7-DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
 - IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 DAYS, THE LENGTH OF TIME VARYING WITH SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS. OTHER STATE OR LOCAL RESTRICTIONS MAY ALSO APPLY.

13. THE CHOICE OF MATERIALS FOR MULCHING SHOULD BE BASED ON SITE CONDITIONS, SOILS, SLOPE, FLOW CONDITIONS, AND TIME OF YEAR.

HAY OR STRAW MULCHES

14. ORGANIC MULCHES INCLUDING HAY AND STRAW SHOULD BE AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS.

15. APPLICATION RATE SHOULD BE 2 BALES (70-90 POUNDS) PER 1000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90 % OF THE GROUND SURFACE.

16. HAY OR STRAW MULCH SHOULD BE ANCHORED TO PREVENT DISPLACEMENT BY WIND OR FLOWING WATER, USING ONE OF THE FOLLOWING METHODS:
 - NETTING: INSTALL JUTE, WOOD FIBER, OR BIODEGRADABLE PLASTIC NETTING OVER HAY OR STRAW TO ANCHOR IT TO THE SOIL SURFACE. INSTALL NETTING MATERIAL ACCORDING TO MANUFACTURER'S RECOMMENDATION. NETTING SHOULD BE USED JUDICIOUSLY, AS WILDLIFE CAN BECOME ENTANGLED IN THE MATERIALS.
 - TACKIFIER: APPLY POLYMER OR ORGANIC TACKIFIER TO ANCHOR HAY OR STRAW MULCH. APPLICATION RATES VARY BY MANUFACTURER. TYPICALLY 40-80 LBS./ACRE FOR POLYMER MATERIAL, AND 80-120 LBS./ACRE FOR ORGANIC MATERIAL. LIQUID MULCH BINDERS ARE ALSO TYPICALLY APPLIED HEAVIER AT EDGES, IN VALLEYS, AND AT CRESTS THAN OTHER AREAS.

17. WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON), IT SHOULD BE APPLIED TO A DEPTH OF FOUR INCHES (150-200 POUNDS OF HAY OR STRAW PER 1000 SQUARE FEET, OR DOUBLE STANDARD APPLICATION RATE). SEEDING SHOULD BE COMPLETED PRIOR TO GROW UP THROUGH THIS DEPTH OF MULCH AND WILL BE SMOOTHED, IF VEGETATION IS DESIRED, THE MULCH WILL NEED TO BE REMOVED IN THE SPRINGTIME AND THE AREA SEEDED AND MULCHED.

WOOD CHIPS OR BARK

18. WOOD CHIPS OR GROUND BARK SHOULD BE APPLIED TO A THICKNESS OF 2 TO 6 INCHES.

19. WOOD CHIPS OR GROUND BARK SHOULD BE APPLIED AT A RATE OF 10 TO 20 TONS PER ACRE OR 480 TO 920 POUNDS PER 1,000 SQUARE FEET.

EROSION CONTROL MIX

20. EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE PROJECT SITE. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE SHREDDED BARK, STUMP GRUNDIES, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

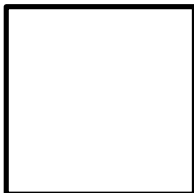
21. COMPOSITION OF THE EROSION CONTROL MIX SHOULD BE AS FOLLOWS:
 - EROSION CONTROL MIX SHOULD CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHOULD MEET THE FOLLOWING STANDARDS:
 - THE ORGANIC MATTER CONTENT SHOULD BE BETWEEN 25 AND 65% DRY WEIGHT BASIS.
 - PARTICLE SIZE BY WEIGHT SHOULD BE 100% PASSING A 3" SCREEN, 90% TO 100% PASSING A 1-INCH SCREEN, 70% TO 100% PASSING A 0.75-INCH SCREEN, AND A MAXIMUM OF 30% TO 70% PASSING A 0.25-INCH SCREEN.
 - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
 - THE MIX SHOULD NOT CONTAIN SILTS, CLAYS OR FINE SANDS.
 - SOLUBLE SALTS CONTENT SHOULD BE < 4.0 MMHOS/CM.
 - THE PH SHOULD BE BETWEEN 5.0 AND 8.0.

22. THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS.

23. THE BARRIER MUST BE A MINIMUM OF 15" HIGH, AS MEASURED ON THE UPWILL SIDE OF THE BARRIER, AND A MINIMUM OF TWO FEET WIDE.

WINTER CONSTRUCTION NOTES

1. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCT. 15TH, OR WHICH ARE DISTURBED AFTER OCT. 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCT. 15TH, OR WHICH ARE DISTURBED AFTER OCT. 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER NOV. 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.



REV.	DATE	DESCRIPTION	BY
A	05/23/18	REVISED PER TOWN COMMENTS	BT
REVISIONS			

GN-4: VEGETATION STABILIZATION NOTES

ALL VEGETATION STABILIZATION SHALL BE IN ACCORDANCE WITH USDA NRCS "VEGETATING NEW HAMPSHIRE SAND AND GRAVEL PITS", IN ADDITION TOO "BEST MANAGEMENT PRACTICES FOR ROUTINE ROADWAY MAINTENANCE ACTIVITIES IN NEW HAMPSHIRE", LATEST EDITIONS.

PARK SEED TYPE 15 SHALL NORMALLY BE USED ON LOAM AREAS. THIS SEED MIXTURE SHALL CONFORM TO TABLE 1 UNLESS AMENDED BY THE PROJECT ENGINEER TO SUIT ACTUAL FIELD CONDITIONS.

KIND OF SEED	TABLE 1		POUNDS/ACRE
	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	
CREeping FESCUE	96	85	40
PERENNIAL RYEGRASS	98	90	50
KENTUCKY BLUEGRASS	97	85	25
REDTOP	95	80	5
TOTAL			120

SLOPE SEED TYPE 44 SHALL NORMALLY BE USED FOR ALL SLOPE WORK, and SHALL CONFORM TO TABLE 2 UNLESS AMENDED BY THE DESIGN ENGINEER TO SUIT ACTUAL FIELD CONDITIONS.

KIND OF SEED	TABLE 2		POUNDS/ACRE
	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	
CREeping RED FESCUE	96	85	35
PERENNIAL RYEGRASS	98	90	30
REDTOP	95	80	5
ALSIKE CLOVER	97	90	5
BIRDSFOOT TREFOL	98	80	5
TOTAL			80

SEEDING SEASON:

1. SEEDBED PREPARATION
 - A. ALL AREAS TO BE SEEDED SHALL BE A REASONABLY FIRM, BUT FRIABLE.
 - B. SURFACE and SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WATER KILLING.
 - C. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM and SMOOTH CONDITION, FOLLOWING SEEDING OPERATIONS.
 - D. ALL AREAS TO BE SEEDED SHALL MEET THE SPECIFIED GRADES, AS SPECIFIED ON THE APPROVED PLAN.
 - E. ALL VEGETATION SHALL BE INSPECTED ANNUALLY FOR UNHEALTHY or DEAD AREAS. ANY and ALL SUCH AREAS ARE TO BE REPAIRED or REPLACED IN KIND.
2. ESTABLISHING A STAND
 - A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
 - AGRICULTURAL LIMESTONE: 2 TONS PER ACRE OR 0.09 LBS. PER SQ. FT.
 - NITROGEN (N): 50 LBS. PER ACRE OR 1.1 LBS. PER 1000 SQ. FT.
 - PHOSPHATE (P₂O₅): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.
 - POTASH (K₂O): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10)
 - B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH 0.25 INCH O SOIL OR LESS, BY CULTIPACKING OR RAKING.
3. MULCH
 - A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
 - B. MULCH WILL BE HELD IN PLACE USING TECHNIQUES FROM THE "BEST MANAGEMENT PRACTICE FOR MULCHING", AS SHOWN IN, "STORMWATER MANAGEMENT AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE".
4. MAINTENANCE TO ESTABLISH A STAND
 - A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
 - B. FERTILIZATION WILL BE PERFORMED ANNUALLY IN ACCORDANCE WITH NOTE 2A.
 - C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING or TRIMMING WILL BE PERFORMED ANNUALLY TO CONTROL GROWTH.
- B. ALL VEGETATION SHOULD BE INSPECTED REGULARLY and AFTER EVERY MAJOR RAIN EVENT (≥ 5"/24 hr). DAMAGED AREAS SHOULD BE REPAIRED AND RE-VEGETATED IMMEDIATELY.

CONSTRUCTION DETAILS

"PIPIT ESTATES"

TAX MAP 5 LOT 107-3
SANDOWN (ROUTE 121A).
CROSS & OLD SANDOWN ROADS
CHESTER NH

OWNER OF RECORD LOT 107-3:

PIPIT ESTATES REALTY TRUST
68 GILCREAST RD, LONDONDERRY, NH 03053

FEBRUARY 23, 2018

NOT TO SCALE

PREPARED BY:

ERIC C. MITCHELL & ASSOC. INC.
PLANNING - SURVEYING - ENGINEERING - ENVIRONMENTAL
P.O. BOX 10288, 108 SO. RIVER RD., BEDFORD NH. 03110-0288
PH. (603) 627-1161

SHEET 15 OF 16

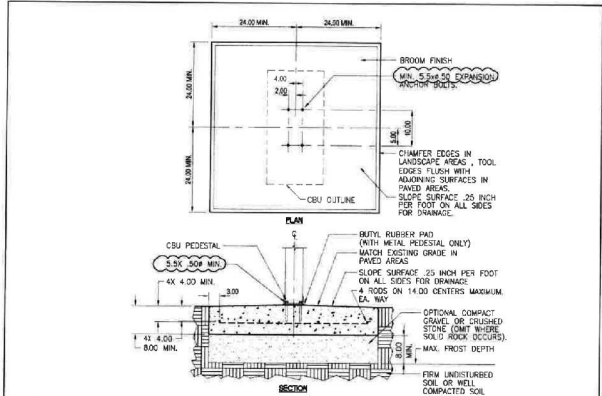
REV:D

DWG: 17-05 DETAILS

F.LD. BK/Pg:

JOB NO. 17-05

NOTES TO A/E:



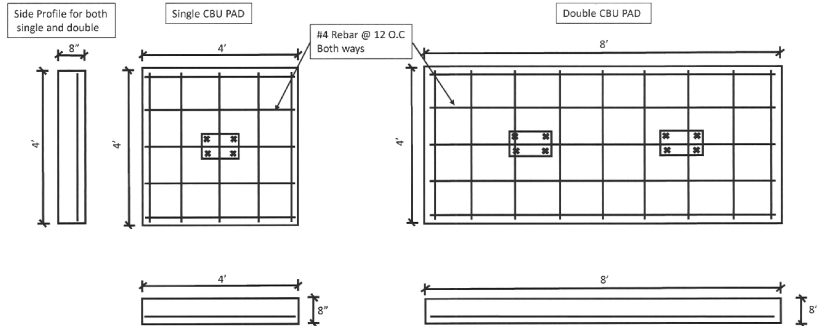
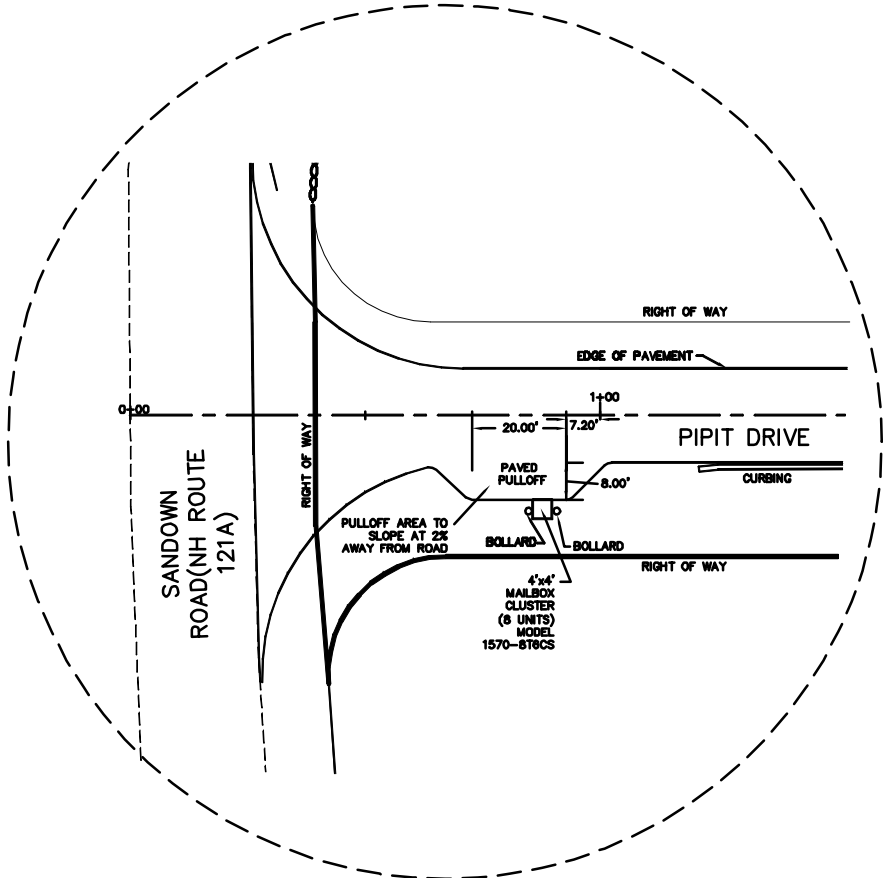
- NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI.
 2. 28 DAYS, CONTAIN AN MIN. 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50"±4.50 SLUMP IN ACCORDANCE WITH ACI 301.
 3. REINFORCING STEEL PILES SHALL CONFORM TO ASTM A615, GRADE 60.
 4. REINFORCING BOLTS SHALL BE EQUIVALENT TO THE FOLLOWING PROVIDERS:
a. HERTZ Kwik Bolt (www.kwikbolt.com) 8-1/2" DIAMETER x 5-1/2"
b. GALVANIZED, CATALOG # 900-453-896
c. HERTZ Kwik Bolt (www.kwikbolt.com) 8-1/2" DIAMETER x 5-1/2"
d. GALVANIZED, CATALOG # 900-453-896
e. HERTZ Kwik Bolt (www.kwikbolt.com) 8-1/2" DIAMETER x 5-1/2"
f. GALVANIZED, CATALOG # 900-453-896
 5. 1/4" RADIUS ROUNDED TRUNKS (www.vitalmail.com) GALVANIZED, 1/2" DIAMETER x 7' OVERALL LENGTH; CATALOG NUMBER: 95-17700
6. 1/4" RADIUS ROUNDED TRUNKS (www.vitalmail.com) GALVANIZED, 1/2" DIAMETER x 5-1/2" OVERALL LENGTH; CATALOG NUMBER: 95-17700
7. 1/4" RADIUS ROUNDED TRUNKS (www.vitalmail.com) GALVANIZED, 1/2" DIAMETER x 5-1/2" OVERALL LENGTH; CATALOG NUMBER: 95-17700
8. 1/4" RADIUS ROUNDED TRUNKS (www.vitalmail.com) GALVANIZED, 1/2" DIAMETER x 5-1/2" OVERALL LENGTH; CATALOG NUMBER: 95-17700

CLUSTER BOX UNIT (CBU) INSTALLATION - SINGLE UNIT

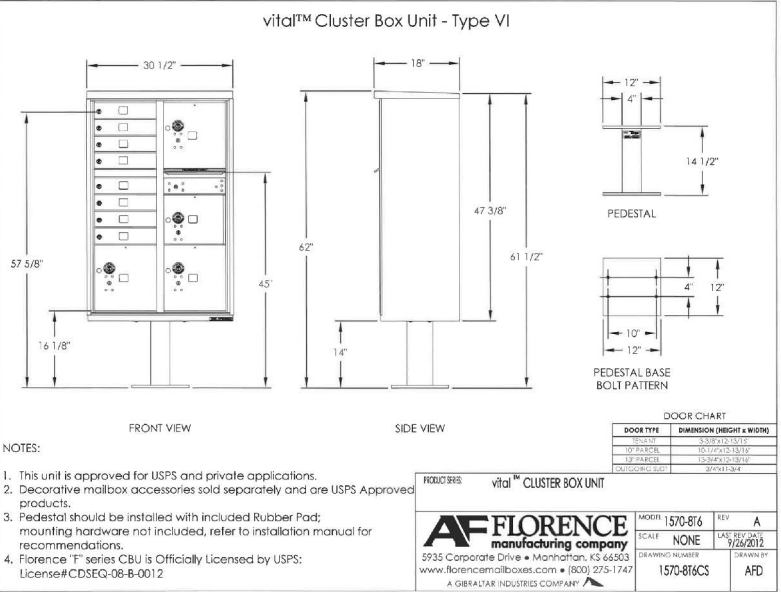
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UNITED STATES POSTAL SERVICE

STANDARD DETAIL LIBRARY



- Note:
1. Concrete shall have a compressive strength of 4000 psi @ 28 days, contain 4% min ~ 6% max air entrainment and be placed with a 3.50"±4.50 slump in accordance to 301.
 2. All Rebar ASTM A615 Grade 60, Minimum of 1" cover
 3. Edges will have a chamfer.
 4. Top will have a broom finish.
 5. The front side of the pad will also sit flush with surrounding terrain to allow ease of access for delivery and customer approach.



NOTES:

1. This unit is approved for USPS and private applications.
2. Decorative mailbox accessories sold separately and are USPS Approved products.
3. Pedestal should be installed with included Rubber Pad; mounting hardware not included, refer to installation manual for recommendations.
4. Florence "F" series CBU is Officially Licensed by USPS; License# CD5EQ-08-B-0012

PRODUCT: vital™ CLUSTER BOX UNIT

AF FLORENCE
manufacturing company
5935 Copeland Drive • Monrovia, KS 66203
www.florencemailboxes.com • (800) 276-7477
A GIBBS INDUSTRIES COMPANY

MODEL: 1570-876
SCALE: NONE
DATE: 9/28/2012
DRAWN BY: AFD
CHECKED BY: AFD

REV.	DATE	DESCRIPTION	BY
A			

PROPOSED MAILBOX LOCATION PLAN

"PIPIT ESTATES"

CHESTER TAX MAP 5
LOTS 107 & 107-3

SANDOWN ROAD

CHESTER NH

OWNER OF RECORD LOT 107-3:

PIPIT ESTATES REALTY TRUST

66 GILCREAST RD, LONDONDERRY, NH 03038

JANUARY 10, 2022

SCALE: 1" = 20'

PREPARED BY:

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