HAYSTACK WOODS

PREPARED FOR

THE FOUNDATION FOR NORFOLK LIVING

OLD COLONY ROAD
NORFOLK, CONNECTICUT

Hrica Associates LLC

Engineers *Surveyors*

LIST OF DRAWINGS

SHEET	TITLE
C1	PROPERTY SURVEY
C2	EXISTING CONDITIONS SURVEY
C3	GENERAL PLAN OF DEVELOPMENT
C4	SITE GRADING PLAN
C5	SITE UTILITY PLAN
C6-C8	HAYSTACK WOODS ROAD PLAN & PROFILES
C9-C10	CONSTRUCTION NOTES AND DETAILS
C11	EROSION AND SEDIMENT CONTROL PLAN
C12	EROSION AND SEDIMENT CONTROL NARRATIVE

Not Valid Without Original Seal

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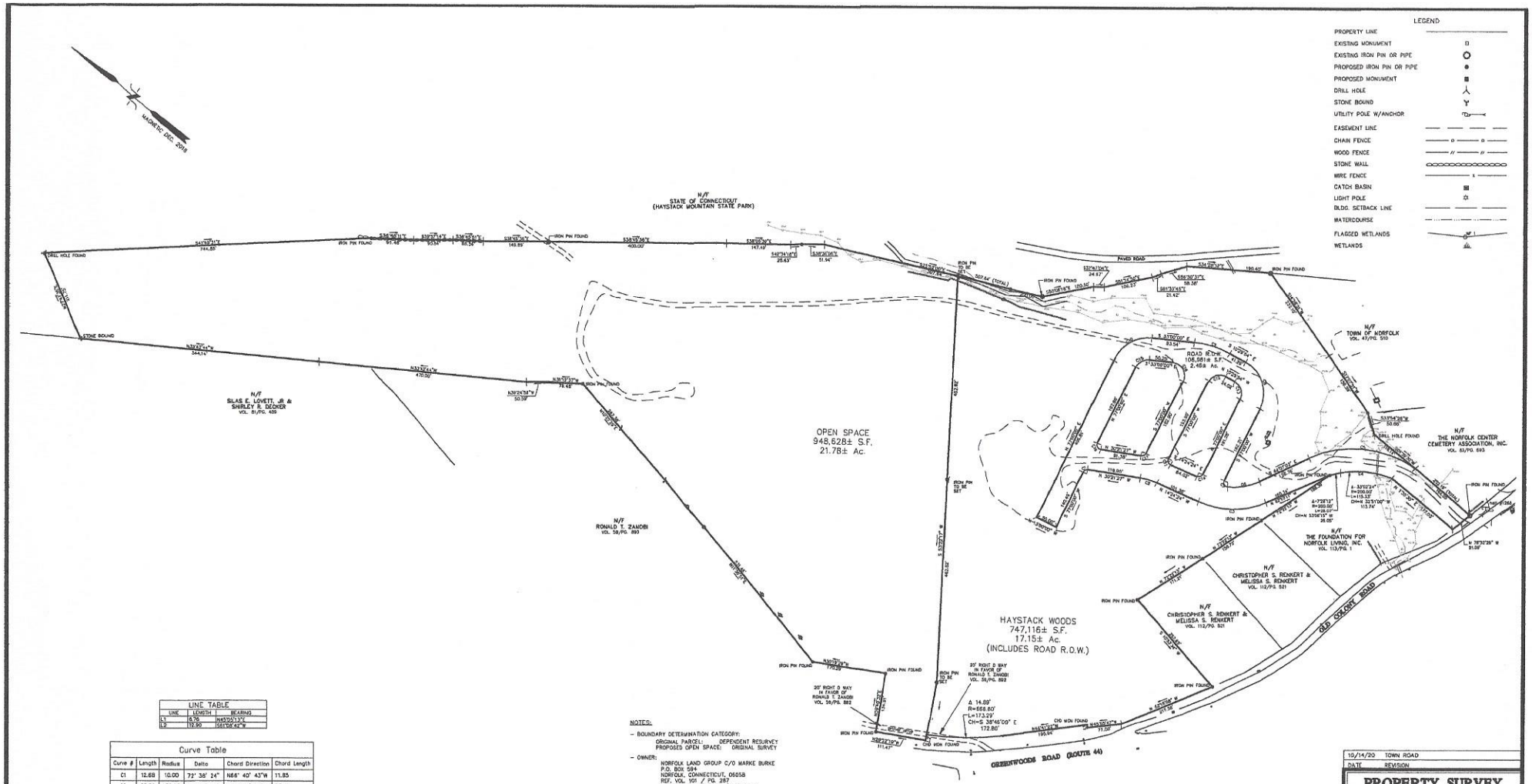
MARCH 8, 2019 — Date
OCTOBER 14, 2020 — Latest Revision

HAYSTACK WOODS
PREPARED FOR
THE FOUNDATION FOR NORFOLK LIVING
OLD COLONY ROAD
NORFOLK, CONNECTICUT



LEGEND

PROPERTY LINE	
EXISTING MONUMENT	
EXISTING IRON PIN OR PIPE	
PROPOSED IRON PIN OR PIPE	
PROPOSED MONUMENT	
DRILL HOLE	
STONE BOUND	
UTILITY POLE W/ANCHOR	
EASEMENT LINE	
CHAIN FENCE	
WOOD FENCE	
STONE WALL	
WIRE FENCE	
CATCH BASIN	
LIGHT POLE	
BLDG. SETBACK LINE	
WATERCOURSE	
FLAGGED WETLANDS	
WETLANDS	

LINE TABLE

LINE	LENGTH	BEARING
L1	6.76	N45°55'13"E
L2	12.90	S61°06'42"W

Curve Table

Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	12.68	10.00	72° 38' 24"	N66° 40' 43"W	11.85
C2	37.58	135.00	15° 57' 00"	N22° 22' 55"W	37.46
C3	138.39	190.00	47° 45' 36"	N38° 17' 17"W	153.84
C4	141.40	200.00	40° 30' 38"	N38° 35' 02"W	138.47
C5	249.19	235.00	60° 45' 00"	S33° 44' 23"E	237.68
C6	74.16	140.00	30° 21' 00"	S48° 56' 33"E	73.29
C7	19.33	10.00	110° 46' 12"	S21° 36' 58"W	16.46
C8	122.17	80.00	87° 30' 00"	S33° 15' 03"W	110.64
C9	84.44	215.00	22° 30' 00"	S21° 44' 57"E	83.89
C10	97.74	80.00	70° 00' 00"	S68° 00' 00"E	91.77
C11	15.95	10.00	91° 24' 36"	S31° 17' 48"W	14.31
C12	48.43	30.00	92° 30' 00"	N56° 44' 57"W	43.34
C13	45.81	30.00	87° 30' 00"	N33° 15' 03"E	41.49
C14	15.46	10.00	88° 35' 24"	S68° 42' 12"E	13.97
C15	38.65	30.00	70° 00' 00"	S68° 00' 00"E	34.41
C16	18.74	10.00	107° 21' 36"	N23° 19' 17"E	16.11
C17	12.68	10.00	72° 40' 12"	N66° 40' 43"W	11.85
C18	57.60	30.00	110° 00' 00"	S22° 00' 00"W	49.15

NOTES:

- BOUNDARY DETERMINATION CATEGORY:
  ORIGINAL PARCEL: DEPENDENT RESURVEY
  PROPOSED OPEN SPACE: ORIGINAL SURVEY
- OWNER:
  NORFOLK LAND GROUP C/O MARKE BURKE
  P.O. BOX 594
  NORFOLK, CONNECTICUT, 06058
  REF. VOL. 101 / PG. 287
  ASSESSORS MAP 7-12 / LOT 97-1
- TOTAL AREA = 1,695,632 +/- S.F.; 38.93 +/- Ac.
- TOTAL AREA OF OPEN SPACE = 1,005,519 +/- S.F.; 23.08 +/- ACRES. (59% OF TOTAL PARCEL AREA)
- ZONE: RU
- REFER TO THE FOLLOWING MAPS: TC# 1392, 1130, 1199, 1112 ON FILE IN NORFOLK LAND RECORDS.
- REFER TO THE FOLLOWING DEEDS: VOL.82 / PG.488, VOL.41 / PG.235, VOL.59 / PG.892, VOL.83 / PG.893 ON FILE IN NORFOLK LAND RECORDS.
- PROPERTY IS SUBJECT TO A 20' EASEMENT IN FAVOR OF RONALD T. ZANOBI VOL.59 / PG.892 ON FILE IN NORFOLK LAND RECORDS.
- PROPERTY IS SUBJECT TO DRAINAGE RIGHTS IN FAVOR OF THE NORFOLK CENTER CEMETERY ASSOCIATION, INC. VOL.83 / PG.893 ON FILE IN NORFOLK LAND RECORDS.
- PROPERTY IS SUBJECT TO EASEMENTS, COVENANTS AND RESTRICTIONS AS OF RECORD THEY MAY APPEAR.
- STONE WALLS AND FENCES MAY VARY FROM PRINCIPLE COURSES SHOWN.
- WETLANDS FLAGGED IN THE FIELD BY SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC., THOMAS W. PIETRAS, C.S.S., 06/13/2004
- PER FEMA FLOOD INSURANCE RATE MAP (FIRM), TOWN OF NORFOLK CONNECTICUT, LITCHFIELD COUNTY, COMMUNITY PANEL NUMBER 090181 0010 A, EFFECTIVE DATE: DECEMBER 3, 1982, THE SUBJECT PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD HAZARD ZONE.

"I HEREBY DECLARE THAT TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON." THIS SURVEY CONFORMS TO THE STANDARDS OF AN A-2 SURVEY AND WAS PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THROUGH 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES AND THE MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

KENNETH E. HRICA P.E.,L.S. CT LIC. #16866
NOT VALID WITHOUT ORIGINAL SEAL

DATE	REVISION
10/14/20	TOWN ROAD

PROPERTY SURVEY

PREPARED FOR

THE FOUNDATION FOR NORFOLK LIVING, INC

ASSESSORS MAP 7-12, LOT 97-1
OLD COLONY ROAD
NORFOLK, CONNECTICUT

INCHES

Hrica Associates LLC
Engineers Surveyors
Kenneth S. Hrica, P.E.,R.S
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Litchfield, Connecticut 06759
860-567-2112 (business)
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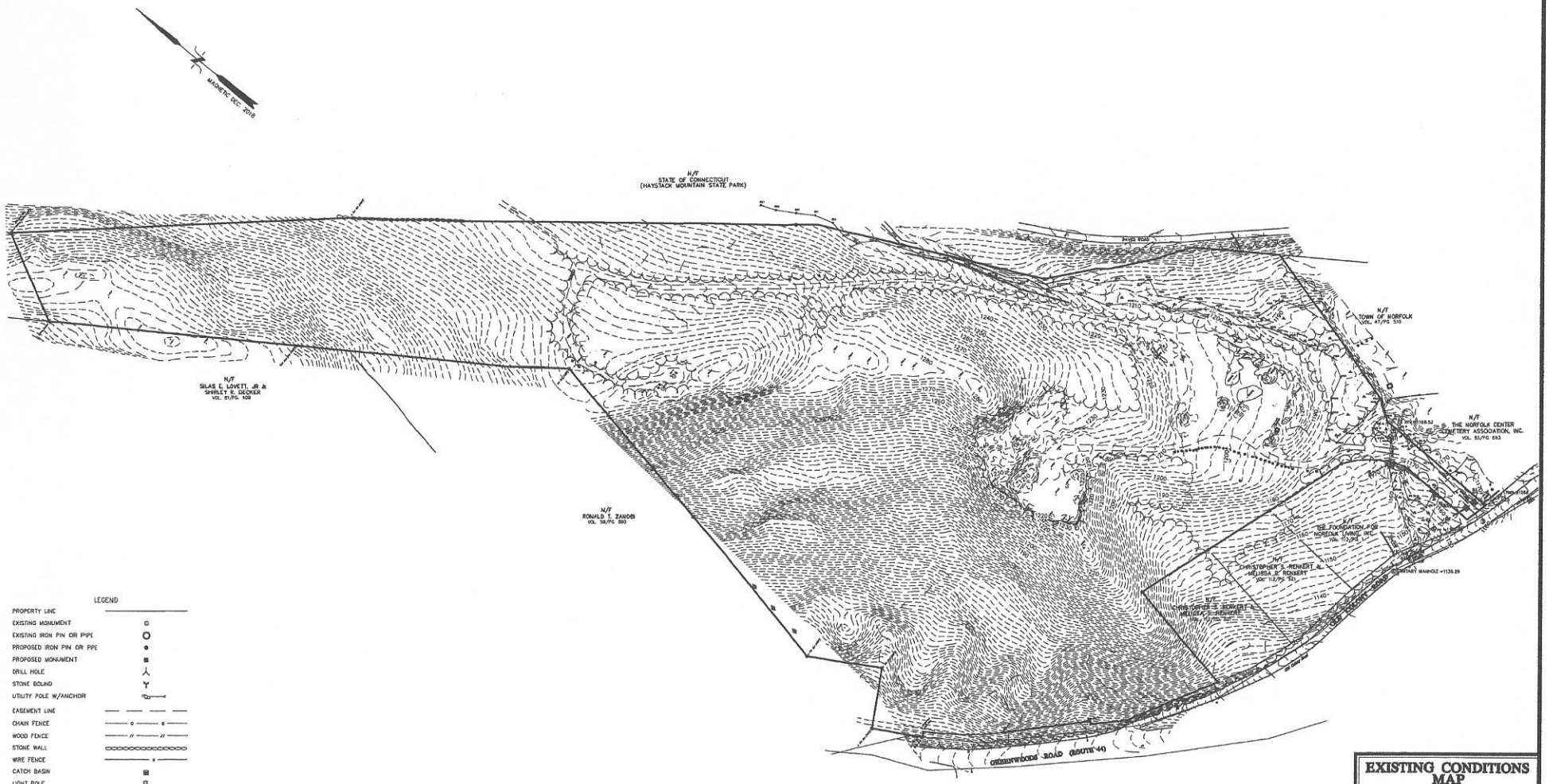
hricaassocs@optonline.net

DATE:	03/08/2019	MAP #:	0723
SCALE:	1"=100 ft.	SHEET #:	C-1
DRAWING:	180723	DRAWN BY:	JLP
PROJECT #:	18-0723	CHECKED BY:	KSH



LEGEND

PROPERTY LINE	
EXISTING MONUMENT	
EXISTING IRON PIN OR PIPE	
PROPOSED IRON PIN OR PIPE	
PROPOSED MONUMENT	
DRILL HOLE	
STONE BOUND	
UTILITY POLE W/ANCHOR	
EASEMENT LINE	
CHAIN FENCE	
WOOD FENCE	
STONE WALL	
WIRE FENCE	
CATCH BASIN	
LIGHT POLE	
BLDG. SETBACK LINE	
WATERCOURSE	
EXISTING CONTOUR	310
EXISTING SPOT ELEVATION	311.5
PROPOSED CONTOUR	310
PROPOSED SPOT ELEVATION	311+5
LOT NUMBER	4
STREET NUMBER	55
TREE LINE	
SEDIMENT FENCE/ LIMIT OF CONSTRUCTION	CSF
FLAGGED WETLANDS	W
WETLANDS	WL
SOIL BOUNDARY	BCa BKc
ROCK OUTCROP	
GUIDE RAIL	

EXISTING CONDITIONS MAP
HAYSTACK WOODS

PREPARED FOR

THE FOUNDATION FOR NORFOLK LIVING, INC.

OLD COLONY ROAD

NORFOLK, CONNECTICUT

1 0 1 2

INCHES

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Litchfield, Connecticut 06759

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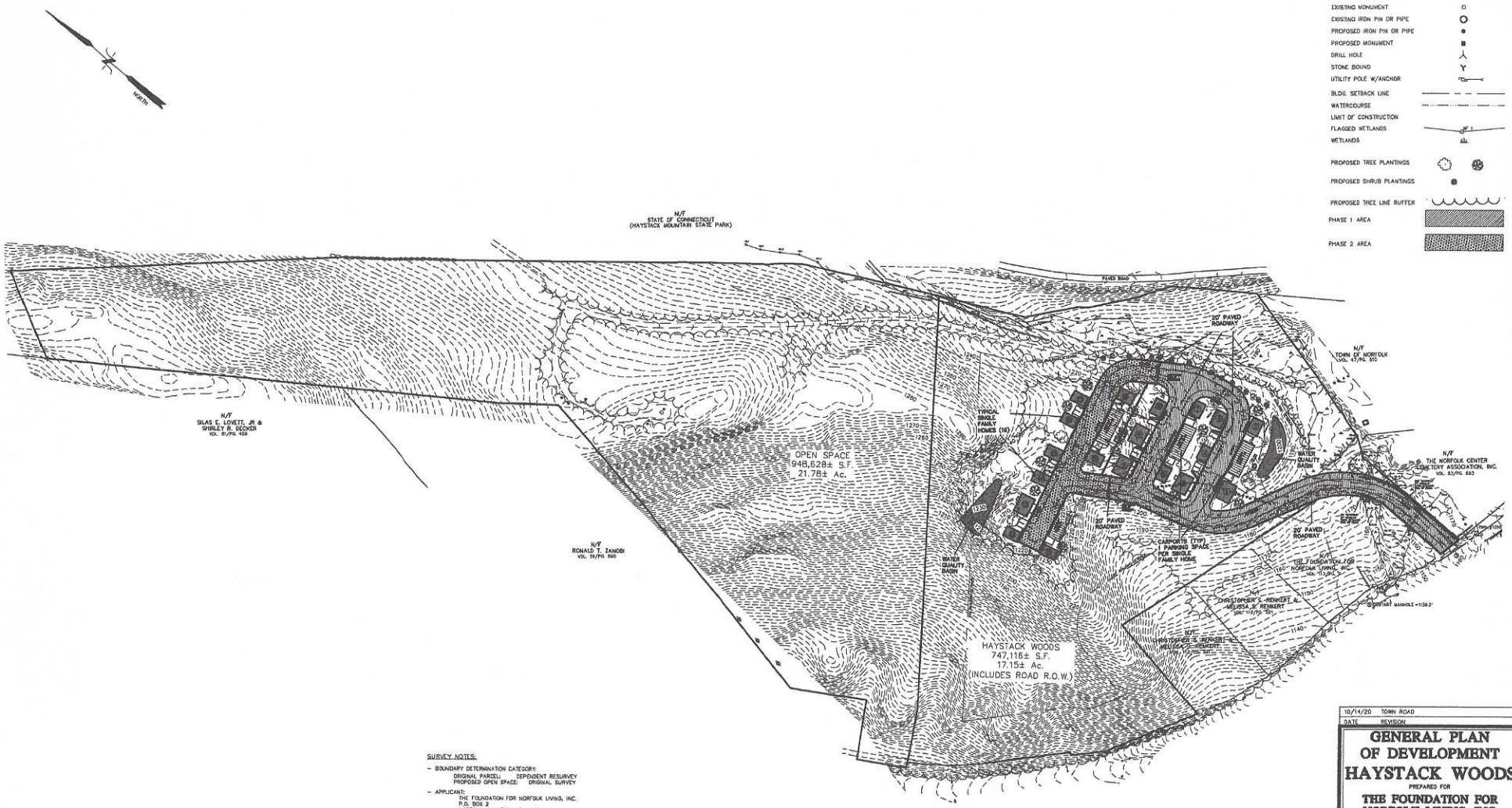
DATE:	03/08/2019	MAP #:	0723
SCALE:	1"=100 ft.	SHEET #:	C-2
DRAWING:	180723	DRAWN BY:	JJP
PROJECT #:	18-0723	CHECKED BY:	KSH



LEGEND

- PROPERTY LINE
- EXISTING MONUMENT
- EXISTING IRON PIN OR PIPE
- PROPOSED IRON PIN OR PIPE
- PROPOSED MONUMENT
- DRILL HOLE
- STONE BOUND
- UTILITY POLE W/ANCHOR
- BLDG. SETBACK LINE
- WATERCOURSE
- LIMIT OF CONSTRUCTION
- FLAGGED WETLANDS
- WETLANDS
- PROPOSED TREE PLANTINGS
- PROPOSED SHRUB PLANTINGS
- PROPOSED TREE LINE BUFFER
- PHASE 1 AREA
- PHASE 2 AREA

GENERAL NOTES:

- PROPOSED RESIDENCES TO BE SERVED BY PUBLIC WATER.
- PROPOSED RESIDENCES TO BE SERVED BY PUBLIC SEWER.
- ALL UTILITIES TO BE UNDERGROUND.
- PER FEMA FLOOD INSURANCE RATE MAP (FIRM), TOWN OF NORFOLK CONNECTICUT, LITCHFIELD COUNTY, COMMUNITY PANEL NUMBER 090181 0010 A, EFFECTIVE DATE: DECEMBER 3, 1987, THE SUBJECT PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD HAZARD ZONE.
- REFER TO THE FOLLOWING MAP: " PROPERTY SURVEY, PREPARED FOR THE FOUNDATION FOR NORFOLK LIVING, INC., ASSESSORS MAP 7-12, LOT 97-1, OLD COLONY ROAD, NORFOLK, CONNECTICUT, DATE: 01/02/2019, SCALE: 1" = 100 FT., DRAWING 180723." BY HRICA ASSOCIATES LLC, KENNETH S. HRICA, P.E., L.S., ON FIEL IN THE NORFOLK LAND RECORDS.

SURVEY NOTES:

- BOUNDARY DETERMINATION CATEGORY:
  ORIGINAL PARCEL: DEPENDENT RESURVEY
  PROPOSED OPEN SPACE: ORIGINAL SURVEY
- APPLICANT:
  THE FOUNDATION FOR NORFOLK LIVING, INC.
  P.O. BOX 2
  NORFOLK, CONNECTICUT 06058
- OWNER:
  NORFOLK LAND GROUP C/O MARKE BURKE
  P.O. BOX 504
  NORFOLK, CONNECTICUT, 06058
  REF. VOL. 101 / PG. 267
  ASSESSORS MAP 7-12 / LOT 97-1
- TOTAL AREA = 1,695,832 +/- S.F.; 38.93 +/- Ac.
- TOTAL AREA OF OPEN SPACE = 1,005,519 +/- S.F.; 23.08 +/- ACRES. (59% OF TOTAL PARCEL AREA)
- ZONE: RU
- REFER TO THE FOLLOWING MAPS:TC# 1392, 1130, 1199, 1112 ON FILE IN NORFOLK LAND RECORDS.
- REFER TO THE FOLLOWING DEEDS: VOL.62 / PG.488, VOL.42 / PG.235, VOL.59 / PG.892, VOL.83 / PG.893 ON FILE IN NORFOLK LAND RECORDS.
- PROPERTY IS SUBJECT TO EASEMENTS, COVENANTS AND RESTRICTIONS AS OF RECORD THEY MAY APPEAR.
- STONE WALLS AND FENCES MAY VARY FROM PRINCIPLE COURSES SHOWN.

ZONE CHANGE APPROVED BY THE NORFOLK PLANNING AND ZONING COMMISSION ON: _____ (DATE OF MEETING)

SIGNED: _____ CHAIRMAN OR SECRETARY

"I HEREBY DECLARE THAT TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON." THIS SURVEY CONFORMS TO THE STANDARDS OF AN A-2 SURVEY AND WAS PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THROUGH 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES AND THE MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

KENNETH S. HRICA P.E.,L.S. CT LIC. #18866
NOT VALID WITHOUT ORIGINAL SEAL

DATE	REVISION
10/14/20	TOWN ROAD

GENERAL PLAN OF DEVELOPMENT HAYSTACK WOODS

PREPARED FOR

THE FOUNDATION FOR NORFOLK LIVING, INC.

OLD COLONY ROAD
NORFOLK, CONNECTICUT

1 0 1 2
INCHES

Hrica Associates LLC

Engineers *Surveyors*

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P.O. Box 1961
Litchfield, Connecticut 06759

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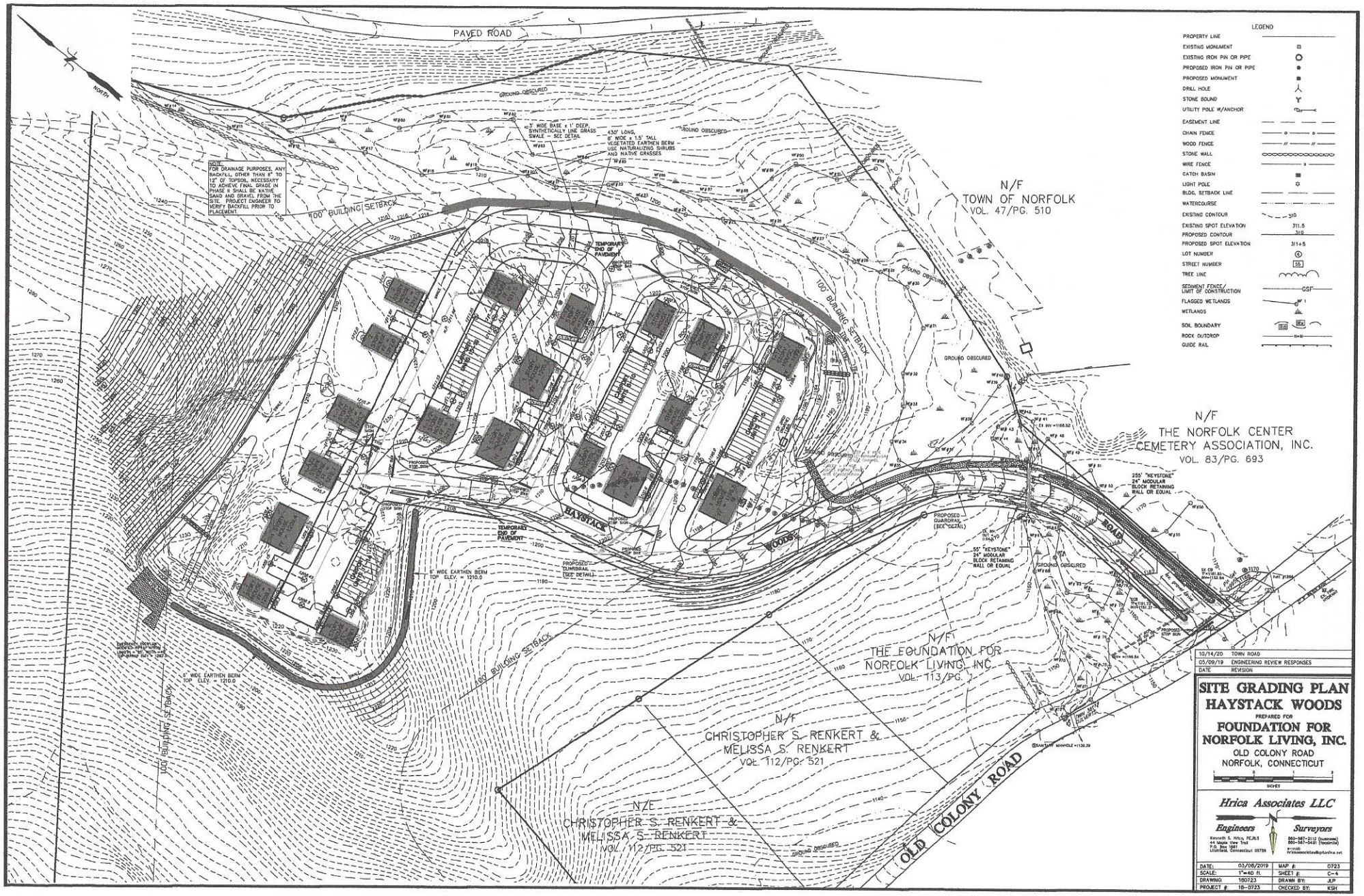
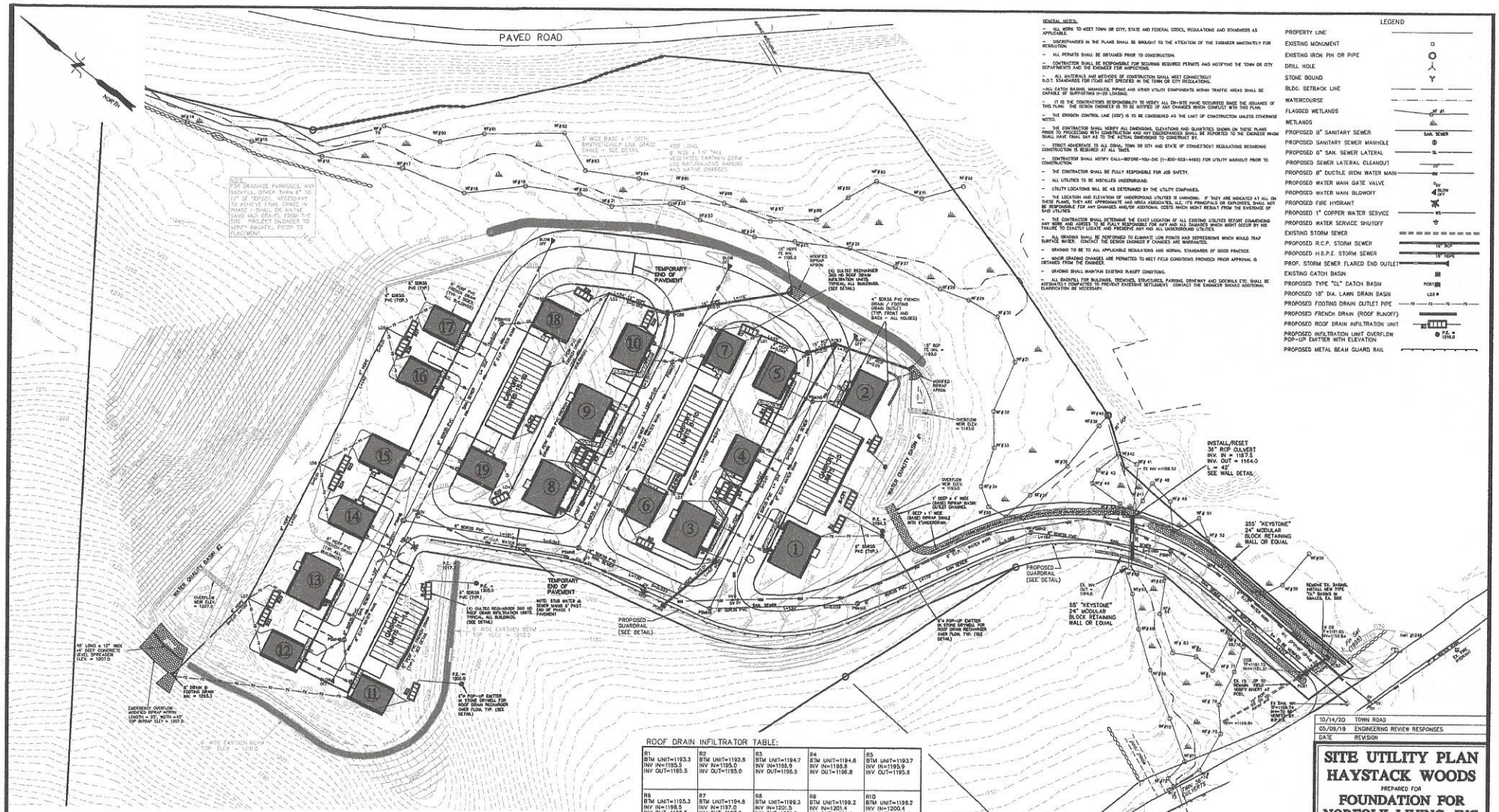
e-mail:
hricaassociates@optonline.net

DATE:	03/06/2019	MAP #:	0723
SCALE:	1"=100 ft.	SHEET #:	C-3
DRAWING:	180723	DRAWN BY:	JLP
PROJECT #:	18-0723	CHECKED BY:	KSH


PAVED ROAD
NORTH
GROUND OBSCURED
3' WIDE BASE x 1' DEEP, SYNTHETICALLY LINE GRASS SWALE - SEE DETAIL
430' LONG, 6' WIDE x 1.5' TALL VEGETATED EARTHEN BERM - USE NATURALIZING SHRUBS AND NATIVE GRASSES
NOTE: FOR DRAINAGE PURPOSES, ANY BACKFILL OTHER THAN 8" TO 12" OF TOPSOIL NECESSARY TO ACHIEVE FINAL GRADE IN PHASE II SHALL BE NATIVE SAND AND GRAVEL FROM THE SITE. PROJECT ENGINEER TO VERIFY BACKFILL PRIOR TO PLACEMENT.
100' BUILDING SETBACK
TEMPORARY END OF PAVEMENT
N/F
TOWN OF NORFOLK
VOL. 47/PG. 510
N/F
THE NORFOLK CENTER CEMETERY ASSOCIATION, INC.
VOL. 83/PG. 693
255' "KEYSTONE" 24" MODULAR BLOCK RETAINING WALL OR EQUAL
HAYSTACK
WOODS
ROAD
PROPOSED GUARDRAIL (SEE DETAIL)
55' "KEYSTONE" 24" MODULAR BLOCK RETAINING WALL OR EQUAL
PROPOSED DUMPSTER (SEE DETAIL)
5' WIDE EARTHEN BERM TOP ELEV. = 1210.0
N/F
THE FOUNDATION FOR NORFOLK LIVING, INC.
VOL. 113/PG. 1
N/F
CHRISTOPHER S. RENKERT & MELISSA S. RENKERT
VOL. 112/PG. 521
N/F
CHRISTOPHER S. RENKERT & MELISSA S. RENKERT
VOL. 112/PG. 521
OLD COLONY ROAD
LEGEND
PROPERTY LINE
EXISTING MONUMENT
EXISTING IRON PIN OR PIPE
PROPOSED IRON PIN OR PIPE
PROPOSED MONUMENT
DRILL HOLE
STONE BOUND
UTILITY POLE W/ANCHOR
EASEMENT LINE
CHAIN FENCE
WOOD FENCE
STONE WALL
WIRE FENCE
CATCH BASIN
LIGHT POLE
BLDG. SETBACK LINE
WATERCOURSE
EXISTING CONTOUR
EXISTING SPOT ELEVATION
PROPOSED CONTOUR
PROPOSED SPOT ELEVATION
LOT NUMBER
STREET NUMBER
TREE LINE
SEDIMENT FENCE/ LIMIT OF CONSTRUCTION
FLAGGED WETLANDS
WETLANDS
SOIL BOUNDARY
ROCK OUTCROP
GUIDE RAIL
10/14/20 TOWN ROAD
05/09/19 ENGINEERING REVIEW RESPONSES
DATE REVISION
SITE GRADING PLAN
HAYSTACK WOODS
PREPARED FOR
FOUNDATION FOR NORFOLK LIVING, INC.
OLD COLONY ROAD
NORFOLK, CONNECTICUT
Hrica Associates LLC
Engineers
Surveyors
DATE: 03/08/2019
MAP #: 0723
SCALE: 1"=40 ft.
SHEET #: C-4
DRAWING: 180723
DRAWN BY: JJP
PROJECT #: 18-0723
CHECKED BY: KSH



GENERAL NOTES:

- ALL WORK TO MEET TOWN OR CITY, STATE AND FEDERAL CODES, REGULATIONS AND STANDARDS AS APPLICABLE.
- DISCREPANCIES IN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY FOR RESOLUTION.
- ALL PERMITS SHALL BE OBTAINED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING REQUIRED PERMITS AND NOTIFYING THE TOWN OR CITY DEPARTMENTS AND THE ENGINEER FOR INSPECTIONS.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET CONNECTICUT D.O.T. STANDARDS FOR ITEMS NOT SPECIFIED IN THE TOWN OR CITY REGULATIONS.
- ALL CATCH BASINS, MANHOLES, PIPING AND OTHER UTILITY COMPONENTS WITHIN TRAFFIC AREAS SHALL BE CAPABLE OF SUPPORTING H-20 LOADING.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL ON-SITE HAVE OCCURRED SINCE THE ISSUANCE OF THIS PLAN. THE DESIGN ENGINEER IS TO BE NOTIFIED OF ANY CHANGES WHICH CONFLICT WITH THIS PLAN.
- THE EROSION CONTROL LINE (ECL) IS TO BE CONSIDERED AS THE LIMIT OF CONSTRUCTION UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND QUANTITIES SHOWN ON THESE PLANS PRIOR TO PROCEEDING WITH CONSTRUCTION AND ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER WHOM SHALL HAVE FINAL SAY AS TO THE ACTUAL DIMENSIONS TO CONSTRUCT BY.
- STRICT ADHERENCE TO ALL LOCAL, TOWN OR CITY AND STATE OF CONNECTICUT REGULATIONS REGARDING CONSTRUCTION IS REQUIRED AT ALL TIMES.
- CONTRACTOR SHALL NOTIFY CALL-BEFORE-YOU-DIG (1-800-922-4455) FOR UTILITY MARKOUT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR JOB SAFETY.
- ALL UTILITIES TO BE INSTALLED UNDERGROUND.
- UTILITY LOCATIONS WILL BE AS DETERMINED BY THE UTILITY COMPANIES.
- THE LOCATION AND ELEVATION OF UNDERGROUND UTILITIES IS UNKNOWN. IF THEY ARE INDICATED AT ALL ON THESE PLANS, THEY ARE APPROXIMATE AND HRICA ASSOCIATES, LLC. IT'S PRINCIPALS OR EMPLOYEES, SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES AND/OR ADDITIONAL COSTS WHICH MIGHT RESULT FROM THE EXISTENCE OF SAID UTILITIES.
- THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING ANY WORK THEREADERS TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- ALL GRADING SHALL BE PERFORMED TO ELIMINATE LOW POINTS AND DEPRESSIONS WHICH WOULD TRAP SURFACE WATER. CONTACT THE DESIGN ENGINEER IF CHANGES ARE WARRANTED.
- GRADING TO BE TO ALL APPLICABLE REGULATIONS AND NORMAL STANDARDS OF GOOD PRACTICE.
- MINOR GRADING CHANGES ARE PERMITTED TO MEET FIELD CONDITIONS PROVIDED PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.
- GRADING SHALL MAINTAIN EXISTING RUNOFF CONDITIONS.
- ALL BACKFILL FOR BUILDINGS, TRENCHES, STRUCTURES, PARKING, DRIVEWAY AND SIDEWALK ETC. SHALL BE ADEQUATELY COMPACTED TO PREVENT EXCESSIVE SETTLEMENT. CONTACT THE ENGINEER SHOULD ADDITIONAL CLARIFICATION BE NECESSARY.

LEGEND

PROPERTY LINE	
EXISTING MONUMENT	
EXISTING IRON PIN OR PIPE	
DRILL HOLE	
STONE BOUND	
BLDG. SETBACK LINE	
WATERCOURSE	
FLAGGED WETLANDS	WF #1
WETLANDS	
PROPOSED 8" SANITARY SEWER	SAN. SEWER
PROPOSED SANITARY SEWER MANHOLE	
PROPOSED 6" SAN. SEWER LATERAL	SL
PROPOSED SEWER LATERAL CLEANOUT	CO
PROPOSED 8" DUCTILE IRON WATER MAIN	WM
PROPOSED WATER MAIN GATE VALVE	WV
PROPOSED WATER MAIN BLOWOFF	BLOW OFF
PROPOSED FIRE HYDRANT	
PROPOSED 1" COPPER WATER SERVICE	WS
PROPOSED WATER SERVICE SHUTOFF	
EXISTING STORM SEWER	
PROPOSED R.C.P. STORM SEWER	15" RCP
PROPOSED H.D.P.E. STORM SEWER	15" HDPE
PROP. STORM SEWER FLARED END OUTLET	
EXISTING CATCH BASIN	
PROPOSED TYPE "CL" CATCH BASIN	PCB#1
PROPOSED 18" DIA. LAWN DRAIN BASIN	LD3
PROPOSED FOOTING DRAIN OUTLET PIPE	FD FD FD
PROPOSED FRENCH DRAIN (ROOF RUNOFF)	
PROPOSED ROOF DRAIN INFILTRATION UNIT	
PROPOSED INFILTRATION UNIT OVERFLOW POP-UP EMITTER WITH ELEVATION	P.E. = 1216.0
PROPOSED METAL BEAM GUARD RAIL	

STORMWATER STRUCTURE TABLE:

PCB1 (TYPE DG) T/F=1150.45 INV IN=1151.4 INV OUT=1151.3	PCB2 (TYPE DG) T/F=1150.45 INV OUT=1153.0	PCB3 (TYPE CL) T/F=1197.0 15" INV IN=1193.75 8" INV IN=1194.35 FD INV IN=1194.70 INV OUT=1193.55	PCB4 (TYPE CL) T/F=1197.0 INV IN=1193.85 FD INV IN=1193.0 INV OUT=1193.85	PCB5 (TYPE CL) T/F=1199.25 FD INV IN=1197.5 RD6 INV=1198.5 INV OUT=1195.9
PCB6 (TYPE CL) T/F=1200.5 15" INV IN=1197.25 8" INV IN=1197.6 FD INV IN=1198.3 INV OUT=1197.15	PCB7 (TYPE CL) T/F=1204.25 INV OUT=1200.0	PCB8 (TYPE DG) T/F=1201.0 INV OUT=1196.5	LD1 (18" DIA.) T/F=1199.6 8" INV IN=1196.6 FD INV IN=1197.8 R7 INV IN=1198.8 INV OUT=1196.5	LD2 (18" DIA.) T/F=1201.3 FD INV IN=1199.8 RCP2 IN=1198.8 INV OUT=1198.6
LD3 (18" DIA.) T/F=1208.4 8" INV IN=1201.0 FD INV IN=1204.0 R18 INV IN=1203.8 INV OUT=1200.9	LD4 (18" DIA.) T/F=1208.4 FD INV IN=1203.4 R19 IN=1203.2 INV OUT=1203.0	LD5 (18" DIA.) T/F=1210.5 FD INV IN=1207.5 R16&17 IN=1208.2 INV OUT=1207.3	LD6 (18" DIA.) T/F=1209.6 INV IN=1205.9 FD INV IN=1208.2 R14&15 IN=1207.4 INV OUT=1205.8	LD7 (18" DIA.) T/F=1210.5 INV IN=1204.4 FD INV IN=1204.8 R12&13 IN=1205.2 INV OUT=1204.3

SANITARY SEWER STRUCTURE TABLE:

SSMH1 STA. 2+16.5 T/F = 1168.65 F.L. IN = 1160.95 F.L. OUT = 1160.85	SSMH2 STA. 3+50.5 T/F = 1179.55 F.L. IN = 1171.85 F.L. OUT = 1171.75	SSMH3 STA. 5+26.0 T/F = 1191.25 F.L. IN = 1185.55 F.L. OUT = 1185.45	SSMH4 STA. 6+88.0 T/F = 1205.50 F.L. IN = 1199.0 F.L. OUT = 1199.9	SSMH5 STA. 2+15.5 T/F = 1197.85 F.L. OUT = 1192.15	
SSMH6 STA. 8+02.0 T/F = 1205.4 F.L. OUT = 1194.35 F.L. OUT = 1194.25	SSMH7 STA. 1+91.0 T/F = 1201.95 F.L. OUT = 1196.25	SSMH8 STA. 8+87 T/F = 1209.90 F.L. IN = 1201.85 F.L. OUT = 1201.55	SSMH9 STA. 9+50.9 T/F = 1208.65 F.L. OUT = 1202.85	SSMH10 STA. 6+21 T/F = 1211.40 F.L. OUT = 1205.7	

ROOF DRAIN INFILTRATOR TABLE:

R1 BTM UNIT=1193.3 INV IN=1195.5 INV OUT=1195.5	R2 BTM UNIT=1192.8 INV IN=1195.0 INV OUT=1195.0	R3 BTM UNIT=1194.7 INV IN=1196.9 INV OUT=1196.9	R4 BTM UNIT=1194.6 INV IN=1198.8 INV OUT=1196.8	R5 BTM UNIT=1193.7 INV IN=1195.9 INV OUT=1195.9
R6 BTM UNIT=1195.3 INV IN=1198.5 INV OUT=1198.5	R7 BTM UNIT=1194.8 INV IN=1197.0 INV OUT=1197.0	R8 BTM UNIT=1199.3 INV IN=1201.3 INV OUT=1201.3	R9 BTM UNIT=1199.2 INV IN=1201.4 INV OUT=1201.4	R10 BTM UNIT=1198.2 INV IN=1200.4 INV OUT=1200.4
R11 BTM UNIT=1203.5 INV IN=1208.7 INV OUT=1205.7	R12 BTM UNIT=1204.3 INV IN=1208.5 INV OUT=1206.5	R13 BTM UNIT=1204.3 INV IN=1208.5 INV OUT=1206.5	R14 BTM UNIT=1205.5 INV IN=1207.7 INV OUT=1207.7	R15 BTM UNIT=1205.5 INV IN=1207.7 INV OUT=1207.7
R16 BTM UNIT=1206.3 INV IN=1208.5 INV OUT=1208.5	R17 BTM UNIT=1206.3 INV IN=1208.5 INV OUT=1208.5	R18 BTM UNIT=1203.5 INV IN=1205.7 INV OUT=105.7	R19 BTM UNIT=1201.1 INV IN=1203 INV OUT=1203.3	
R-CP1 BTM UNIT=1193.3 INV IN=1193.5 INV OUT=1195.5	R-CP2 BTM UNIT=1196.8 INV IN=1199.0 INV OUT=1199.0	R-CP3 BTM UNIT=1201.3 INV IN=1203.5 INV OUT=1203.5	R-CP4 BTM UNIT=1214.3 INV IN=1216.5 INV OUT=1216.5	

DATE	REVISION
10/14/20	TOWN ROAD
05/09/19	ENGINEERING REVIEW RESPONSES

SITE UTILITY PLAN
HAYSTACK WOODS

PREPARED FOR

FOUNDATION FOR NORFOLK LIVING, INC.

OLD COLONY ROAD
NORFOLK, CONNECTICUT

INCHES

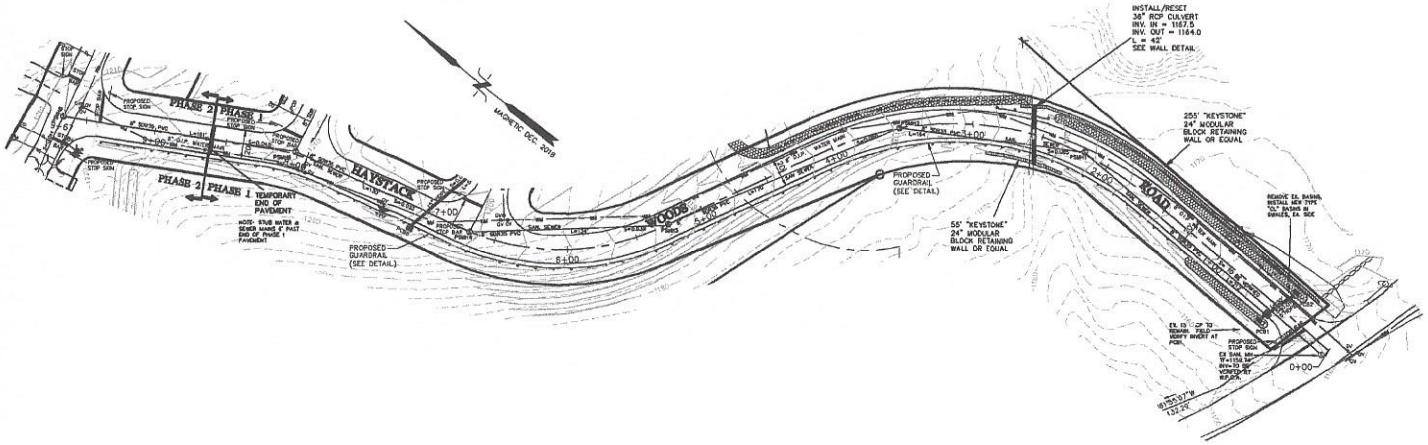
Hrica Associates LLC

Engineers — Surveyors

Kenneth S. Hrica, PE/LS
44 Maple View Trail
P.O. Box 1981
Litchfield, Connecticut 06759

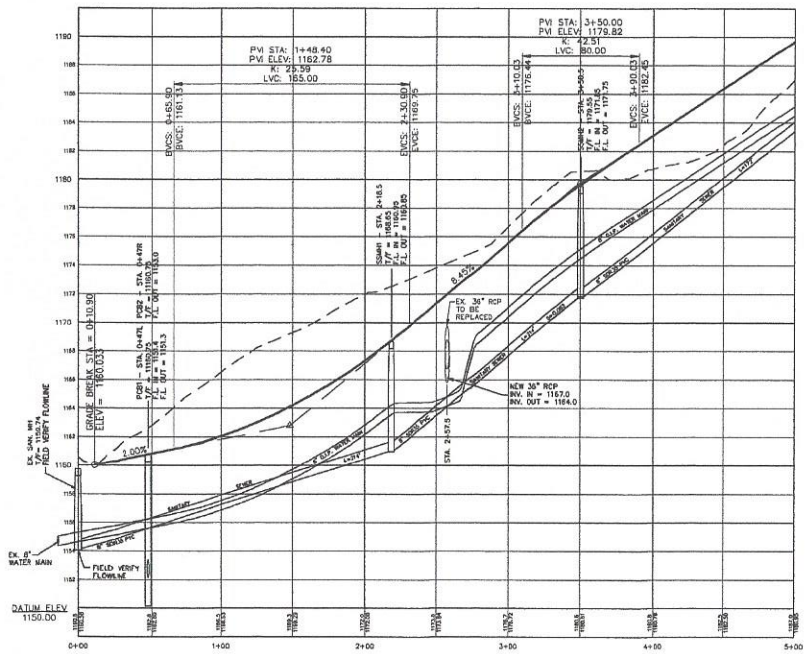
860-567-3512 (Residence)
860-567-5491 (Facsimile)
Email:
hricaassociatesllc@snlcentral.net

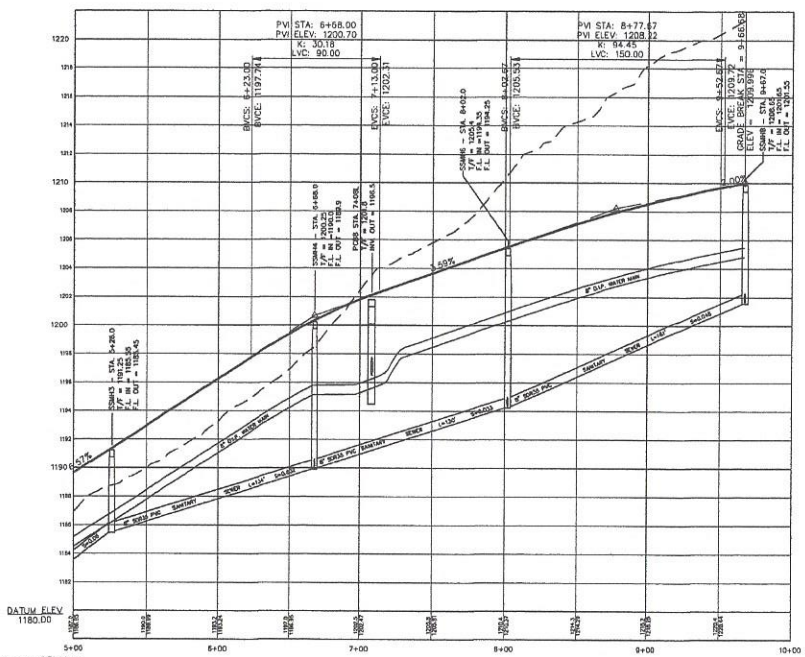
DATE:	02/20/2019	MAP #:	0723
SCALE:	1"=40 ft.	SHEET #:	C-5
DRAWING:	180723	DRAWN BY:	JLP
PROJECT #:	18-0723	CHECKED BY:	KSH



LEGEND

PROPERTY LINE	
EXISTING MONUMENT	
EXISTING IRON PIN OR PIPE	
DRILL HOLE	
STONE BOUND	
BLDG. SETBACK LINE	
WATERCOURSE	
FLAGGED WETLANDS	
WETLANDS	
PROPOSED 8" SANITARY SEWER	SAN. SEWER
PROPOSED SANITARY SEWER MANHOLE	
PROPOSED 6" SAN. SEWER LATERAL	SL
PROPOSED SEWER LATERAL CLEANOUT	CO
PROPOSED 8" DUCTILE IRON WATER MAIN	WM
PROPOSED WATER MAIN GATE VALVE	GV
PROPOSED WATER MAIN BLOWOFF	BLOW OFF
PROPOSED FIRE HYDRANT	
PROPOSED 1" COPPER WATER SERVICE	WS
PROPOSED WATER SERVICE SHUTOFF	
EXISTING STORM SEWER	
PROPOSED R.C.P. STORM SEWER	15" RCP
PROPOSED H.D.P.E. STORM SEWER	15" HDPE
PROP. STORM SEWER FLARED END OUTLET	
EXISTING CATCH BASIN	
PROPOSED TYPE "CL" CATCH BASIN	PCB7
PROPOSED 18" DIA. LAWN DRAIN BASIN	LD3
PROPOSED FOOTING DRAIN OUTLET PIPE	FD
PROPOSED FRENCH DRAIN (ROOF RUNOFF)	
PROPOSED ROOF DRAIN INFILTRATION UNIT	RI
PROPOSED INFILTRATION UNIT OVERFLOW POP-UP EMITTER WITH ELEVATION	P.E. = 1216.0
PROPOSED METAL BEAM GUARD RAIL	





MAIN ROAD SECTION

ROADWAY PLAN & PROFILE

HAYSTACK WOODS ROAD

NORFOLK, CONNECTICUT

INCHES

Hrica Associates LLC

Engineers Surveyors

Gerard S. Hrica, P.E.,R.L.S
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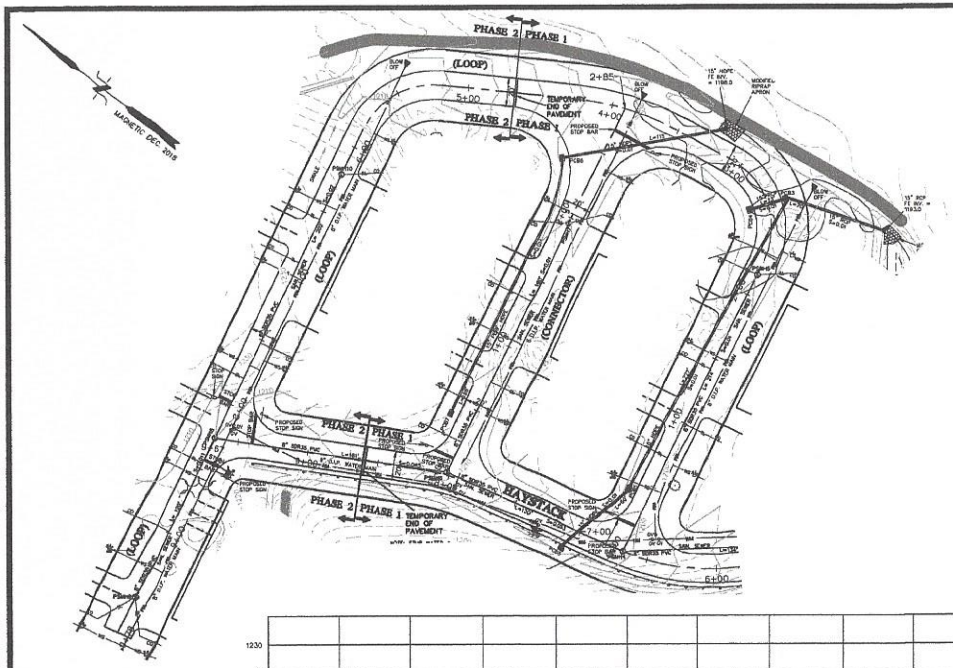
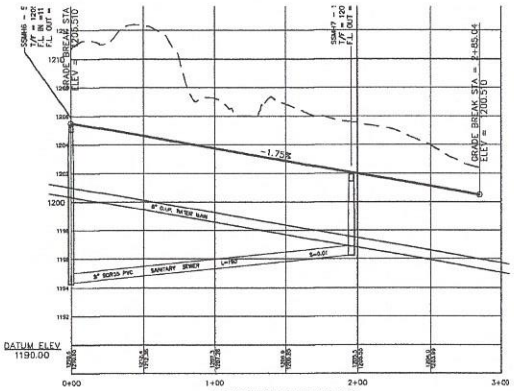
P.O. Box 1981
Litchfield, Connecticut 06759

860-567-2112 (business)
860-567-0481 (facsimile)
e-mail:
hricaassociates@optonline.net

DATE:	10/14/20	MAP #:	0723
SCALE:	1"=4'/40'	SHEET #:	C-6
DRAWING:	180723	DRAWN BY:	JJP
PROJECT #:	18-0723	CHECKED BY:	KSH

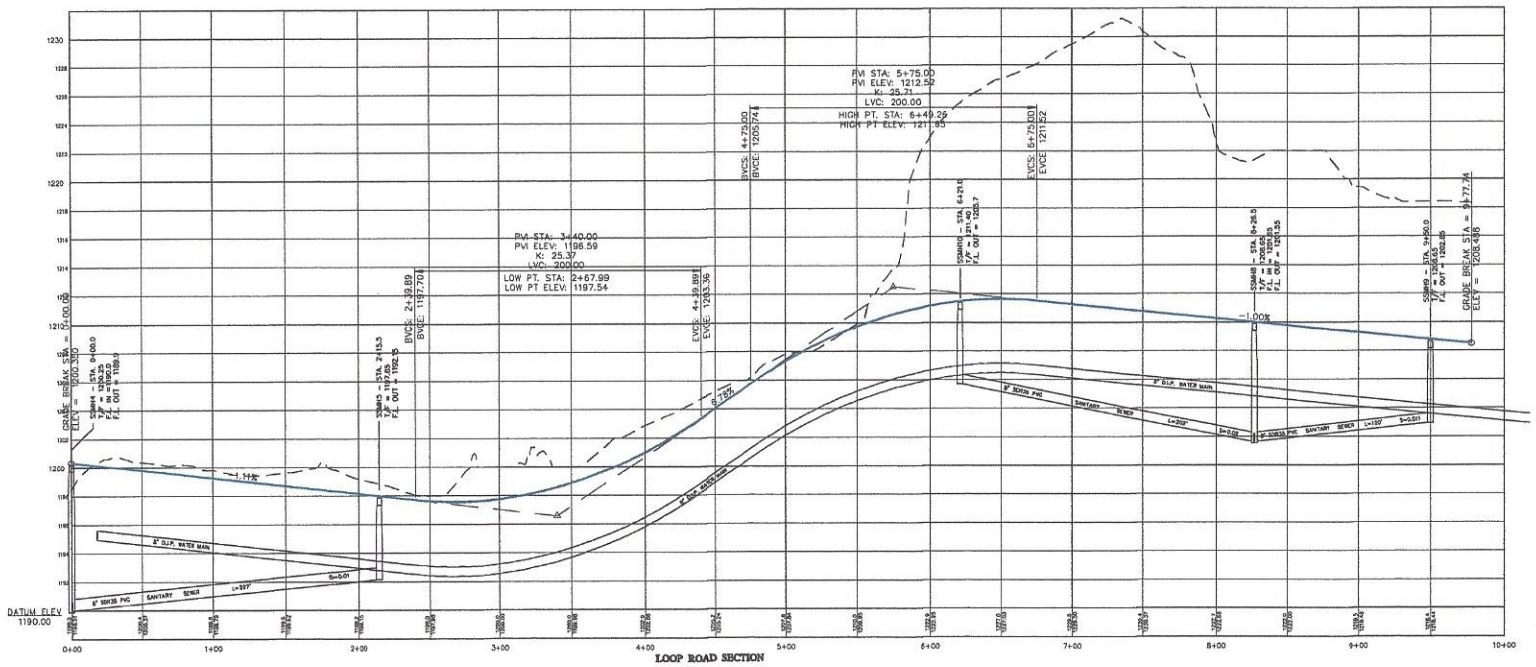




CONNECTOR ROAD SECTION

LEGEND

- PROPERTY LINE
- EXISTING MONUMENT
- EXISTING IRON PIN OR PIPE
- DRILL HOLE
- STONE BOUND
- BLDG. SETBACK LINE
- WATERCOURSE
- FLAGGED WETLANDS
- WETLANDS
- PROPOSED 8" SANITARY SEWER
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED 6" SAN. SEWER LATERAL
- PROPOSED SEWER LATERAL CLEANOUT
- PROPOSED 8" DUCTILE IRON WATER MAIN
- PROPOSED WATER MAIN GATE VALVE
- PROPOSED WATER MAIN BLOWOFF
- PROPOSED FIRE HYDRANT
- PROPOSED 1" COPPER WATER SERVICE
- PROPOSED WATER SERVICE SHUTOFF
- EXISTING STORM SEWER
- PROPOSED R.C.P. STORM SEWER
- PROPOSED H.D.P.E. STORM SEWER
- PROP. STORM SEWER FLARED END OUTLET
- EXISTING CATCH BASIN
- PROPOSED TYPE "CL" CATCH BASIN
- PROPOSED 18" DIA. LAWN DRAIN BASIN
- PROPOSED FOOTING DRAIN OUTLET PIPE
- PROPOSED FRENCH DRAIN (ROOF RUNOFF)
- PROPOSED ROOF DRAIN INFILTRATION UNIT
- PROPOSED INFILTRATION UNIT OVERFLOW POP-UP EMITTER WITH ELEVATION
- PROPOSED METAL BEAM GUARD RAIL



LOOP ROAD SECTION

ROADWAY PLAN & PROFILE

HAYSTACK WOODS ROAD

NORFOLK, CONNECTICUT

INCHES

Hrica Associates LLC

Engineers — Surveyors

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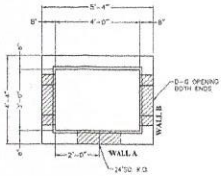
44 Maple View Trail
P.O. Box 1351
Litchfield, Connecticut 06759

860-567-3118 (business)
860-567-0481 (facsimile)

e-mail:
hricaassociates@optonline.net

DATE:	10/14/20	MAP #	0723
SCALE:	1"=4v/40h'	SHEET #	C-7
DRAWING:	180723	DRAWN BY:	JLP
PROJECT #	18-0723	CHECKED BY:	KSH

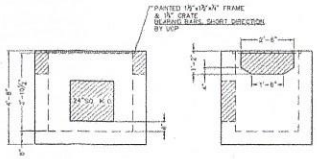


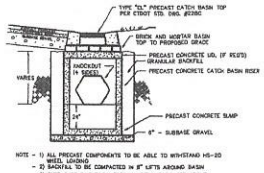
PLAN VIEW
(SHOWN W/O GRATE)

NOTES:
1. JOINT SEALANT IS BUTYL RUBBER MASTIC TYPE SEAL THAT CONFORMS TO LATEST AASHTO SPECIFICATION SPECIFICATION 35-5-00210-210-41.
3. REINFORCING STEEL DEFORMED BARS CONFORM TO LATEST ASTM SPECIFICATION A615.
4. CONCRETE COMPRESSIVE STRENGTH= 4,000 PSI AT 28 DAYS SELF COMPACTING CONCRETE MIX
5. METHOD OF MANUFACTURE WET CAST
7. BASE SECTION IS MONOLITHIC.

WEIGHT CHART	
PRODUCT	APPROX. WEIGHT
BASE SECTION	9,200 LBS.

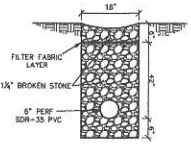
TYPE "DG" CATCH BASIN
N.T.S.



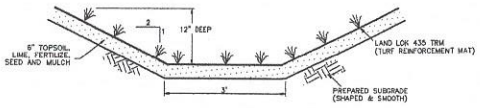


NOTE - 1) ALL PRECAST COMPONENTS TO BE ABLE TO WITHSTAND HS-20 WHEEL LOADING
- 2) BACKFILL TO BE COMPACTED IN 8" LIFTS AROUND BASIN
- 3) TYPE C OR C-G BASIN TOP MAY BE SUBSTITUTED ABOVE WHERE CALLED FOR ON THE PLANS.

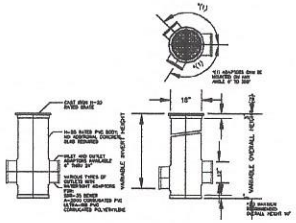
DETAIL - PRECAST CATCH BASIN WITH TYPE CL CATCH BASIN TOP
SCALE 1/4"=1'-0"



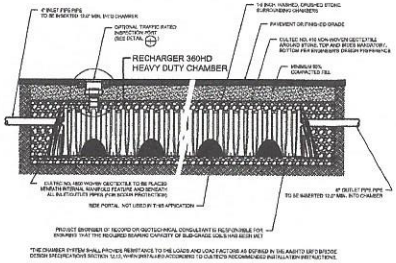
FRENCH DRAIN DETAIL
N.T.S.



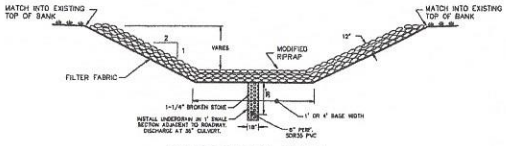
3' SYNTHETICALLY LINED GRASS SWALE DETAIL
N.T.S.



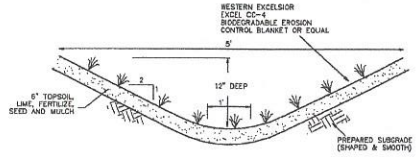
18" DRAIN BASIN (LD#)
FOR ROOF AND FOOTING DRAIN TRUNK LINE



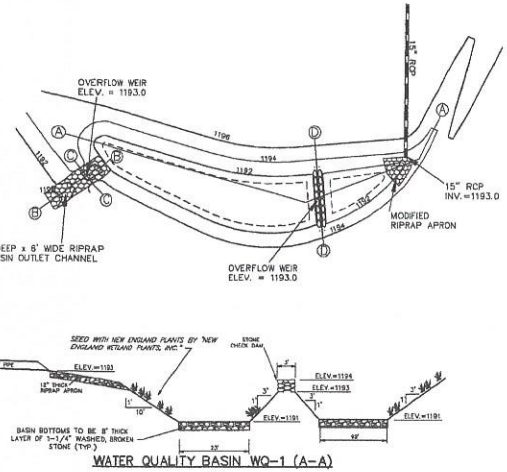
RECHARGER 360HD HEAVY DUTY CHAMBER

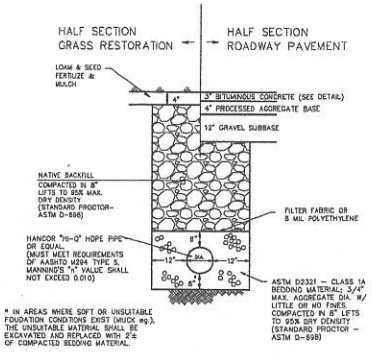


RIPRAP CHANNEL DETAIL
N.T.S.



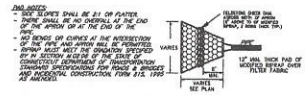
ROADSIDE GRASS SWALE DETAIL
N.T.S.





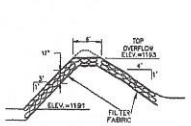
* IN AREAS WHERE SOFT OR UNSUITABLE FOUNDATION CONDITIONS EXIST (MUCK etc.), THE UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REPLACED WITH 2± OF COMPACTED BEDDING MATERIAL.

DETAIL - STORM SEWER TRENCH
N.T.S.

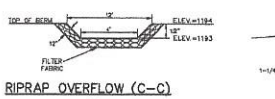


TYPICAL RIPRAP APRON WITH FIELDSTONE CHECK DAM
NOT TO SCALE

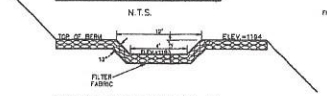
WATER QUALITY BASIN WQ-1 (A-A)
N.T.S.



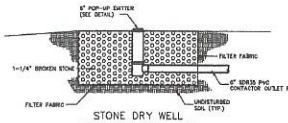
RIPRAP OVERFLOW (B-B)
N.T.S.



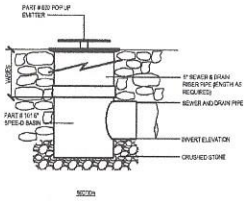
RIPRAP OVERFLOW (C-C)
N.T.S.



RIPRAP OVERFLOW (D-D)
N.T.S.

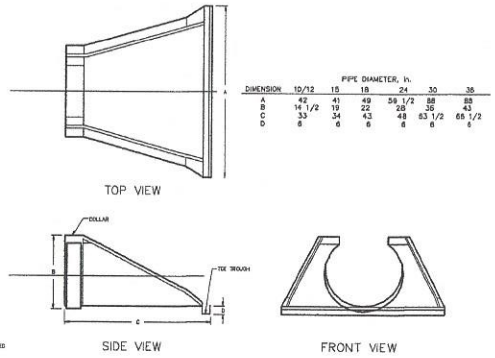


STONE DRY WELL
CROSS SECTION DETAIL
N.T.S.



NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS, (NDS, INC.)
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND OTHER PROFESSIONALS FOR PLANNING PURPOSES ONLY.
4. ALL INFORMATION CONTAINED HEREIN IS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

POP-UP DRAINAGE EMITTER
TYPICAL POP-UP DRAINA DE EMITTER (SPEE-D BASIN)



DIMENSION	PIPE DIAMETER, in. 10/12	15	18	24	30	36
A	42	41	49	59 1/2	88	83
B	14 1/2	19	22	28	36	43
C	33	34	43	48	53 1/2	65 1/2
D	6	6	6	6	6	6

HI-Q FLARED END SECTION
N.T.S.

NOT VALID WITHOUT ORIGINAL SEAL

DATE	REVISION
10/14/20	TOWN ROAD
05/08/19	ENGINEERING REVIEW RESPONSES

CONSTRUCTION NOTES & DETAILS HAYSTACK WOODS

PREPARED FOR

FOUNDATION FOR NORFOLK LIVING, INC.

OLD COLONY ROAD
NORFOLK, CONNECTICUT

0 1 2
INCHES

Hrica Associates LLC
Engineers Surveyors
Kenneth S. Hrica, PE,PLS
82 West Street
P.O. Box 1881
Litchfield, Connecticut 06759
860-567-2512 (business)
860-567-3481 (facsimile)
e-mail: hricaassoc@litchfieldhills.net

DATE:	03/08/2019	MAP #:	0723
SCALE:	AS NOTED	SHEET #:	C-8
DRAWING:	180723	DRAWN BY:	JLP
PROJECT #:	18-0723	CHECKED BY:	KSH

A. VALIDITY AND PROJECT DESCRIPTION:

VALIDITY:
THIS DOCUMENT IS TO BE CONSIDERED AN INTEGRAL PART OF THE PLANS PREPARED FOR THE PROJECT BY HRICA ASSOCIATES L.L.C. THE PROCEDURES OUTLINED HEREIN ARE TO BE STRICTLY FOLLOWED DURING THE CONSTRUCTION OPERATIONS

PROJECT DESCRIPTION:
THIS PROJECT CONSIST OF THE DEVELOPMENT OF A 19 UNIT, SINGLE FAMILY, CLUSTER HOUSING DEVELOPMENT WITH WATER AND SEWER HOOK-UP, DRIVEWAYS AND RELATED UTILITIES IN TWO PHASES.

B. START AND COMPLETION DATES:

APPROXIMATE START DATE: SPRING 2021 (DEPENDENT UPON APPROVALS)
ESTIMATED TIME TO COMPLETE: 1 YEAR
COMPLETION DATE: SPRING 2022

THE ABOVE DATES ARE SUBJECT TO RECEIPT OF ALL REQUIRED PERMITS, FINANCING, AND CONTRACTOR SCHEDULING. THE EROSION AND SEDIMENT CONTROL OFFICER SHALL BE PROVIDED WITH UPDATED SCHEDULES AS THEY BECOME AVAILABLE.

C. CONSTRUCTION SEQUENCE:

A. DRIVEWAY CONSTRUCTION
1. A. OBTAIN ALL PERMITS BEFORE START OF CONSTRUCTION.
   B. NOTIFY "CALL BEFORE YOU DIG" FOR UTILITY MARKOUT.
   C. NOTIFY ALL APPLICABLE TOWN OFFICIALS OF START OF CONSTRUCTION.
2. A. INSTALL SEDIMENT FENCE AT TOE OF PROPOSED SLOPES AND AS SHOWN ON THE SITE PLANS.
   B. INSTALL ANTI-TRACKING PAD AS SHOWNED ON PLANS.
   C. MAINTENANCE OF EROSION CONTROLS TO OCCUR AT ALL TIMES DURING CONSTRUCTION OR AS DIRECTED BY THE TOWN.
3. A. REMOVE ALL BRUSH AND TREES WITHIN THE PROPOSED ROADS AND SLOPE AREAS.
   B. INSTALL TEMPORARY DIVERSIONS, TEMPORARY SEDIMENT TRAPS, WATERBARS AND OTHER TEMPORARY MEASURES FOR STORM WATER CONTROL IN ACCORDANCE WITH THE PLANS PREPARED FOR THE STATE OF CONNECTICUT STORMWATER AND DEWATERING WASTE WATERS FROM CONSTRUCTION ACTIVITES PERMIT.
   C. REMOVE AND STOCKPILE TOPSOIL FOR THE PROPOSED DRIVEWAYS AND SLOPE AREAS. TOPSOIL TO BE STOCKPILED AND SEEDED WITH ANNUAL RYE GRASS SEED.
   D. INSTALL ALL DRAINAGE PIPING AND UNDERGROUND UTILITES ACCORDING TO THE SITE PLANS.
   E. EXCAVATE AND PLACE FILL TO SUBGRADE IN ACCORDANCE WITH THE SITE PLANS.
   F. PLACE BANK RUN AND PROCESSED GRAVEL.
   G. PLACE BITUMINOUS PAVEMENT.

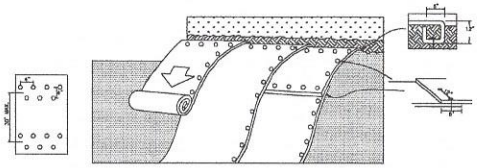
B. WATER QUALITY BASIN INSTALLATION:
1. A. REMOVE ALL BRUSH AND TREES WITHIN THE BASIN AREAS AND SLOPE AREAS.
   B. INSTALL SEDIMENT FENCE AT TOE OF PROPOSED SLOPES AND AS SHOWN ON THE SITE PLANS.
   C. REMOVE AND STOCKPILE TOPSOIL FOR THE PROPOSED DRIVEWAYS AND SLOPE AREAS. TOPSOIL TO BE STOCKPILED AND SEEDED WITH ANNUAL RYE GRASS SEED.
2. A. PROVIDE TEMPORARY DIVERSIONS AND TEMPORARY SEDIMENT TRAPS TO PREVENT STORMWATER FROM ENTERIG BASINS DURING CONSTRUTION.
   B. ROUGH GRADE BASINS, INLETS AND OUTLETS.
   C. ENSURE THAT BASIN BOTTOMS ARE NATURAL, LOOSE SAND AND GRAVEL. IF BASIN BOTTOM IS NOT LOOSE SAND AND GRAVEL, CONTACT DESIGN ENGINEER BEFORE CONTINUING WITH BASIN INSTALLATION.
3. A. INSTALL RIPRAP AND PLANTING MEDIUM AS SHOWN ON PLANS
   B. PLANT, SEED AND MULCH BASIN SIDE, BERM AND BACK SLOPES.
   C. ALLOW VEGETATION TO ESTABLISH PRIOR TO REMOVAL OF DIVERSION DEVICES PROTECTING THE BASIN.

C. UTILITY INSTALLATION:
1. A. CONSTRUCT ROADWAY UTILITIES PRIOR TO INSTALLATION OF DRIVEWAY BASE COURSE.
A. CONSTRUCT UTILITIES FROM DOWN GRADIENT TO UP GRADIENT.
B. PROVIDE PROPER BEDDING MATERIALS AS SPECIFIED, WATER STOPS AS NECESSARY, AND BACKFILL TRENCHING TO LEAVE AS LITTLE EXCAVATION OPEN AS POSSIBLE
C. IF DEWATERING IS NECESSARY, PUMP WATER INTO TEMPORARY SEDIMENT TRAPS OR "DIRT BAG" TYPE ENCLOSED SEDIMENT DEVICES TO CONTROL MUD AND SILT.
D. LEAVE "STUB-OUTS" CLEARLY MARKED.

D. HOUSE CONSTRUCTION:
1. A. PROVIDE AND MAINTAIN INDIVIDUAL EROSION CONTROL MEASURES FOR EACH DWELLING OR CARPORT.
E. ENCLOSE SOIL STOCKPILES WITH SILT FENCING OR HAYBALES.
2. A. PROVIDE SUITABLE, STABLE CONSTRUCTION ACCESS TO EACH BUILDING.
B. EXCAVATE, INSTALL FOUNDATION MATERIAL AND DRAINS AND BACKFILL.
C. ROUGH GRADE IMMEDIATE AREA AROUND EACH BUILDING TO AVOID PONDING AND CONCENTRATION OF STORMW WATER FLOWS.
3. A. DURING BUILDING CONSTRUCTION, MAINTAIN A CLEAN, TIDY WORKPLACE. PROVIDE CONVENIENT TRASH RECEPTACLES AND VISUALLY INSPECT EXTERIOR SURROUNDINGS FOR TRASH AND DEBRIS AT THE END OF EACH WORK DAY.

E.) FOR ALL PHASES OF CONSTRUCTION:
1. FINAL SITE STABILIZATION:
   A. FINE GRADE SLOPES AND DISTURBED AREAS AS QUICKLY AS POSSIBLE.
   B. PLACE TOPSOIL ON ALL DISTURBED AREAS AND FERTILIZE, SEED AND MULCH.
   C. SEDIMENTATION CONTROLS SHALL BE LEFT IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE TOWN. ALL DISTURBED AREAS TO BE IMMEDIATELY SEEDED AND MULCHED.

F. GENERAL REQUIREMENTS:
1. ALL DISTURBED AREAS TO BE STABILIZED BY TOPSOILING, SEEDING, AND MULCHING AS SOON AS PRACTICAL.
2. EROSION CONTROLS SHALL BE PLACED AT LOCATIONS SPECIFIED OR AS REQUIRED BY THE TOWN AND MAINTAINED UNTIL ALL SLOPED AND OTHER AREAS ARE STABILIZED.
3. ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING CONSTRUCTION, IF NECESSARY, TO MINIMIZE SEDIMENT TRANSPORT.
4. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF ALL CONTROLS AND PROPER DISPOSAL OF SEDIMENT REMOVED FROM THEM.
5. SEDIMENTATION CONTROLS SHALL BE LEFT IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE TOWN.
6. EROSION AND SEDIMENTATION CONTROLS TO BE CONSTRUCTED IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
7. THE RESPONSIBLE PERSON IN CHARGE OF THIS PROJECT IS:
   KATE JOHNSON, PH.#: 1-860-307-2693.
8. IF AT ANY TIME, OWNERSHIP OF THE PROJECT IS TRANSFERRED TO OTHERS, THE NEW OWNERS SHALL NOTIFY ALL APPROPRIATE OFFICIALS. THE NEW OWNER SHALL DESIGNATE A RESPONSIBLE PERSON IN CHARGE.



SLOPE STABILIZATION DETAIL
LANDLOK S2 EROSION CONTROL BLANKET (ECB) OR EQUIVALENT
N.T.S.

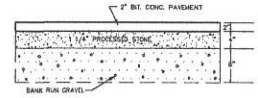
SPECIFICATIONS

SITE PREPARATION AND INSTALLATION
-PREPARE THE SURFACE, REMOVING PROTRUDING OBJECTS AND INSTALL TEMPORARY EROSION CONTROL BLANKETS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION ENSURE THAT THE ORIENTATION AND ANCHORING OF THE BLANKET IS APPROPRIATE FOR THE SITE.
-THE BLANKET CAN BE LAID OVER AREAS WHERE SPRIGGED GRASS SEEDLINGS HAVE BEEN INSERTED INTO THE SOIL WHERE LANDSCAPE PLANTINGS ARE PLANNED, LAY THE BLANKET FIRST AND THEN PLANT THROUGH THE BLANKET IN ACCORDANCE WITH LANDSCAPE PLANTING MEASURE.
-INSPECT THE INSTALLATION TO INSURE THAT ALL LAP JOINTS ARE SECURE, ALL EDGES ARE PROPERLY ANCHORED AND ALL STAKING OR STAPLING PATTERNS FOLLOW MANUFACTURER'S RECOMMENDATIONS.

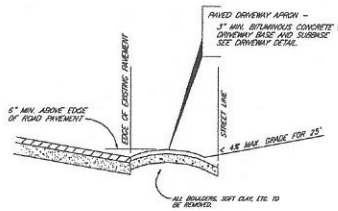
MATERIALS
TEMPORARY EROSION CONTROL BLANKETS SHALL BE COMPOSED OF FIVERS AND/OR FILAMENTS THAT:
-ARE BIODEGRADABLE OR PHOTODEGRADABLE WITHIN TWO YEARS BUT WITHOUT SUBSTANTIAL DEGRADATION OVER THE PERIOD OF INTENDED USAGE. (FIVE MONTHS MAXIMUM)
-ARE MECHANICALLY, STRUCTURALLY AND CHEMICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX OF EVEN THICKNESS AND DISTRIBUTION THAT RESIST RAINDROP SPLASH AND WHEN USED WITH SEEDINGS ALLOWS VEGETATION TO PENETRATE THE BLANKET.
-ARE OF SUFFICIENT STRUCTURAL STRENGTH TO WITHSTAND STRETCHING OR MOVEMENT BY WIND OR WATER WHEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
-ARE FREE OF ANY SUBSTANCE TOXIC TO PLANT GROWTH AND UNPROTECTED HUMAN SKIN OR WHICH INTERFERES WITH SEED GERMINATION.
-CONTAIN NO CONTAMINANTS THAT POLLUTE THE AIR OR WATERS OF THE STATE WHEN PROPERLY APPLIED AND PROVIDE EITHER 85%-90% SOIL COVERAGE WHEN USED AS A SUBSTITUTE FOR MULCH FOR SEED OR 100% INITIAL SOIL COVERAGE WHEN USED AS A SUBSTITUTE FOR TEMPORARY SOIL PROTECTION MEASURE.

APPLICATION
-ON DISTRIBUTED SOILS WHERE SLOPES ARE 2:1 OR FLATTER
-WHERE WIND AND TRAFFIC GENERATED AIR FLOW MAY DISLODGE STANDARD, UNARMORED MULCHES
-MAY BE USED AS A SUBSTITUTE FOR TEMPORARY SOIL PROTECTION
-MAY BE USED AS A SUBSTITUTE FOR MULCH FOR SEED

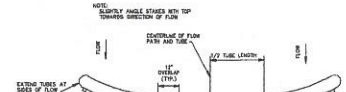
MAINTENANCE
-INSPECT TEMPORARY EROSION CONTROL BLANKETS AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER FOR FAILURES. BLANKET FAILURE HAS OCCURRED WHEN (1) SOILS AND/OR SEED HAVE WASHED AWAY FROM BENEATH THE BLANKET AND THE SOIL SURFACE CAN BE EXPECTED TO CONTINUE TO ERODE AT AN ACCELERATED RATE, AND/OR (2) THE BLANKET HAS BECOME DISLODGED FROM THE SOIL SURFACE OR IS TORN.
-IF WASHOUTS OR BREAKOUTS OCCUR, RE-INSTALL THE BLANKET AFTER RE-GRADING AND RE-SEEDING, ENSURING THAT BLANKET INSTALLATION STILL MEETS DESIGN SPECIFICATIONS. WHEN REPETIVE FAILURE OCCUR AT THE SAME LOCATION, REVIEW CONDITIONS AND LIMITATION FOR USE AND DETERMINE IF DIVERSIONS, STONE CHECK DAMS OR OTHER MEASURE ARE NEEDED TO REDUCE FAILURE RATE.
-WHEN USED AS A SUBSTITUTE FOR MULCH FOR SEED, CONTINUE TO INSPECT AS REQUIRED BY THE SEEDING MEASURE. WHEN USED AS A SUBSTITUTE FOR TEMPORARY SOIL PROTECTION CONTINUE TO INSPECT UNTIL IT IS REPLACED BY OTHER EROSION CONTROL MEASURES OR UNTIL WORK RESUMES.



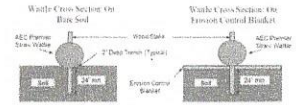
PARKING AREA DETAIL
N.T.S.

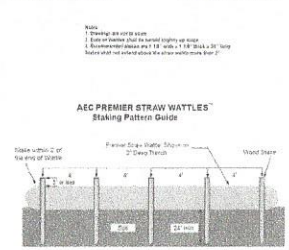


RESIDENTIAL DRIVEWAY APRON SECTION DETAIL
NOT TO SCALE



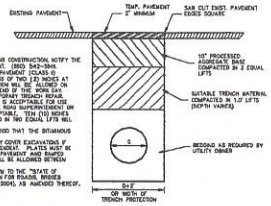
12" EXCEL COIR LOG - 165





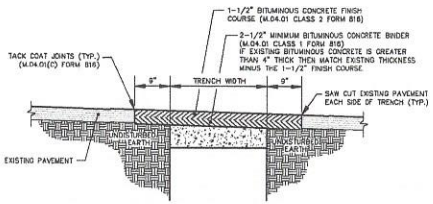
AEC PREMIER STRAW WATTLES™
Staking Pattern Guide

SILT SACK - COIR LOG (WATTLE) INSTLLATION DETAIL
N.T.S.



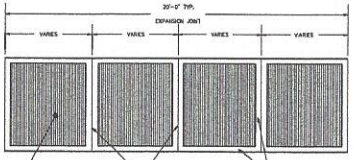
NOTES:
1. A MINIMUM OF 24 BEFORE CONTRACTOR BEGINS CONSTRUCTION, NOTIFY THE TOWN OF NORFOLK ROADWAY SUPERINTENDENT. (860) 542-5541.
2. TEMPORARY HOT MIX BITUMINOUS CONCRETE PAVEMENT (CLASS 0) SHALL BE PLACED WITH A MINIMUM THICKNESS OF TWO (2) INCHES AT THE END OF EACH WORK DAY AND ROLLED TO ELEVATIONS AS SHOWN ON FINAL PLANS UNLESS IT IS TO BE PAVED BY THE END OF THE WORK DAY. NO COLD PATCH WILL BE ALLOWED FOR TEMPORARY TRENCH REPAIR.
3. BASE MATERIAL - THE EXCAVATED MATERIAL IS ACCEPTABLE FOR USE AS SUBBASE MATERIAL IF APPROVED BY THE ROAD SUPERINTENDENT OR HIS DESIGNEE. IF THE MATERIAL IS UNACCEPTABLE, TEN (10) INCHES OF PROCESSED AGGREGATE BASE COMPACTED IN TWO EQUAL LIFTS WILL BE REQUIRED.
4. NO PAVING WILL BE ISSUES DURING THE PERIOD THAT THE BITUMINOUS BATCH PLANTS ARE CLOSED.
5. STEEL PLATES MAY BE USED TO TEMPORARILY COVER EXCAVATIONS IF APPROVED BY THE NORFOLK ROAD SUPERINTENDENT. PLATES MUST BE SECURED TO PREVENT MOVEMENT. PLATES MUST BE FEATHERED WITH BITUMINOUS CONCRETE. NO PLATES WILL BE ALLOWED BETWEEN NOVEMBER 15 AND APRIL 15.
6. ALL CONSTRUCTION ACTIVITES SHALL CONFORM TO THE "STATE OF CONNECTICUT D.O.T. STANDARD SPECIFICATION FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 816" (2004), AS AMENDED THEREOF.

TEMPORARY PAVEMENT & TRENCH RESTORATION FOR TOWN ROADS
N.T.S.

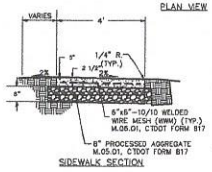


PAVEMENT PATCH PERMANENT
NO SCALE

NOTES:
1. PERMANENT PAVEMENT REPAIR SHALL BE COMPLETED BETWEEN 6 AND 13 MONTHS AFTER TEMPORARY PAVEMENT REPAIR IS INSTALLED.
2. SHORING REQUIRED PER OSHA STANDARDS.
3. IF EDGE OF TRENCH IS WITHIN TWO (2) FEET OF CURBED GUTTER LINE OR UNPAVED SHOULDER, THEN REMOVE AND REPLACE PAVEMENT.



PLAN VIEW

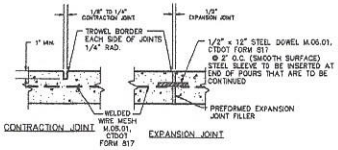


SIDEWALK SECTION

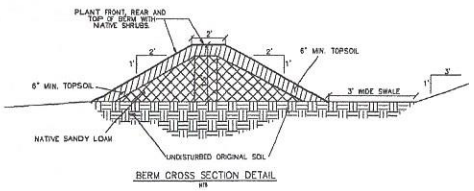
NOTES:
1. CLASS F 4000 PSI (28 DAYS) CONCRETE M.03.01, CTDOT FORM 817, WITHIN 5% TO 7% ENTRAINED AIR

CTDOT STD. SPEC 9.21

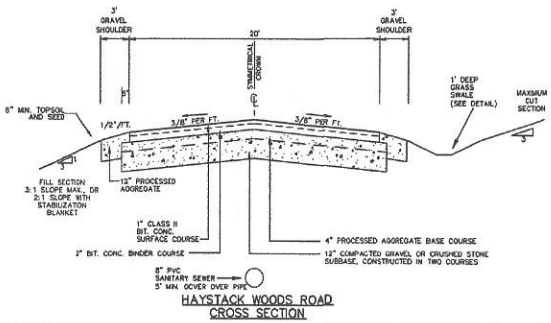
2. WALKS NOT TO EXCEED 2% CROSS SLOPE.
3. EXPANSION JOINTS, AASHTO M213, TO BE INSTALLED EVERY 20 FEET MAX.
4. ALL CONCRETE WALKS AND CURBS ARE TO BE SEALED WITH "SALTGUARD"-A PROSOCO CONCRETE SEALER OR APPROVED EQUAL AS DETAILED IN THE SPECIFICATIONS.
5. PROCESSED AGGREGATE BASE TO BE COMPACTED TO 95% PROCTOR DENSITY.



4' CONCRETE SIDEWALK DETAIL



BERM CROSS SECTION DETAIL
N.T.S.



HAYSTACK WOODS ROAD CROSS SECTION

DATE	REVISION
10/14/20	TOWN ROAD
05/09/19	ENGINEERING REVIEW RESPONSES

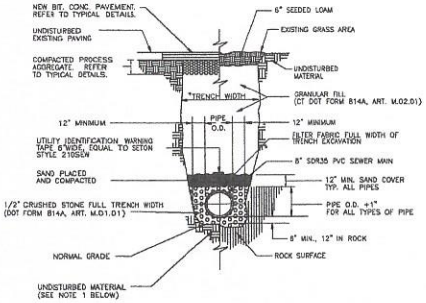
CONSTRUCTION NOTES & DETAILS
HAYSTACK WOODS
PREPARED FOR
FOUNDATION FOR NORFOLK LIVING, INC.
OLD COLONY ROAD
NORFOLK, CONNECTICUT

NOTES

Hrica Associates LLC
Engineers Surveyors
Kenneth S. Hrica, P.E.,P.L.S. 860-567-2113 (Business)
83 West Street 860-567-0491 (Facsimile)
P.O. Box 1861
Litchfield, Connecticut 06759

DATE:	03/08/2019	MAP #:	0723
SCALE:	AS NOTED	SHEET #:	C-9
DRAWING:	160723	DRAWN BY:	JLP
PROJECT #:	16-0723	CHECKED BY:	KSH

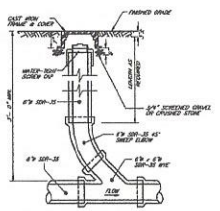
NOT VALID WITHOUT ORIGINAL SEAL



DETAIL – SEWER MAIN TRENCH

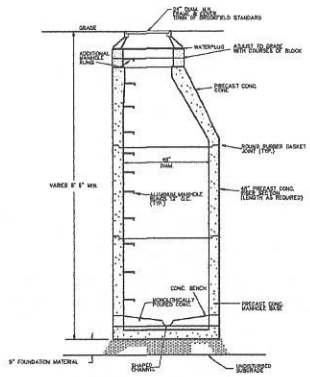
NOT TO SCALE

NOTE:
1. UNSUITABLE MATERIAL BELOW NORMAL GRADE SHALL BE REPLACED WITH 1/2" CRUSHED STONE (DOT FORM 814A, ART. M.01.01) AS DIRECTED BY THE DESIGN ENGINEER



SEWER LATERAL CLEANOUT DETAIL

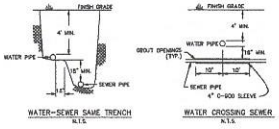
N.T.S.



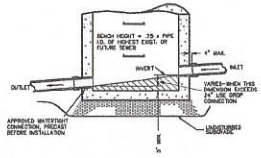
STANDARD MANHOLE

N.T.S.

STANDARD MANHOLE COVER



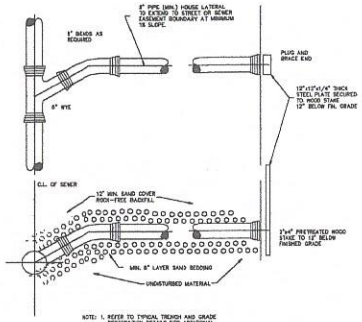
WATER-SEWER SAME TRENCH N.T.S. | WATER CROSSING SEWER N.T.S.



SANITARY SEWER MANHOLE INVERT DETAIL

N.T.S.

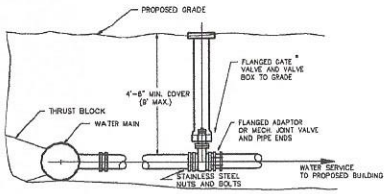
NOTE:
SEATING SURFACES OF MANHOLE FRAME & COVERS SHALL BE MACHINED TO INSURE A NON-CHATTERING FIT. MANHOLE FRAMES AND COVERS SHALL BE PROPERLY CLEANED AND DIP COATED IN A WATERPROOF ASPHALTUM APPLIED BY IMMERSION



NOTE: 1. REFER TO TYPICAL TRENCH AND GRADE RESTORATION DETAILS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
2. P.V.C. PIPE SHALL CONFORM TO 22.5 DEGREES.
3. P.V.C. PIPE SHALL CONFORM TO ASTM D-3034 SDR 35
3. P.V.C. PIPE SHALL CONFORM TO ASTM D-3034 SDR 35

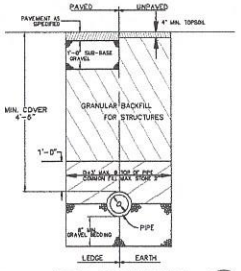
SEWER LATERAL CONNECTION

N.T.S.

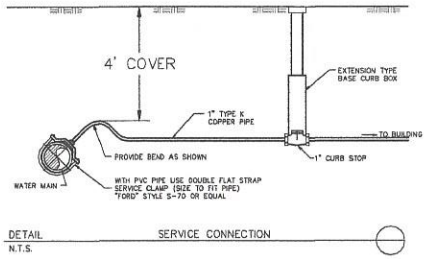


TYPICAL WATER SERVICE / GATE VALVE DETAIL

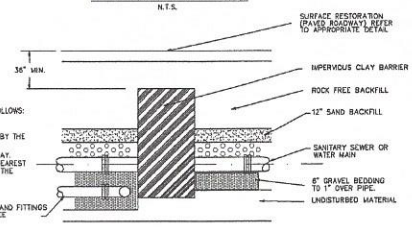
N.T.S.



DETAIL N.T.S. TYPICAL TRENCH SECTION FOR WATER MAIN



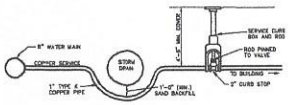
DETAIL N.T.S. SERVICE CONNECTION



NOTES:
1. WATERSTOP TO BE 2'-3' LONG.
2. INSTALL ALONG SEWER AND WATER LINES AS FOLLOWS:
   SLOPES: 0-5% = 1000' ±
   >5% - 400' ±
   WATERSTOPS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER.
3. INSTALL FILTER FABRIC BETWEEN STONE AND CLAY.
4. THE 6" P.V.C. PIPE SHOULD OUTLET INTO THE NEAREST DRAINAGE STRUCTURE WITH BAGGED STONE AT THE OPPOSITE END.

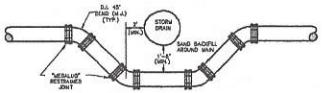
IMPERVIOUS BARRIER CLAY WATERSTOP – PROFILE

N.T.S.



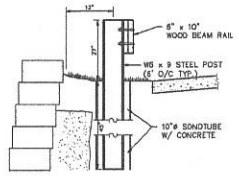
TYPICAL COPPER SERVICE DETAIL

N.T.S.



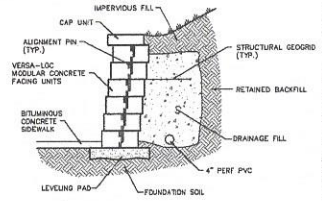
TYPICAL OFFSET DETAIL

N.T.S.



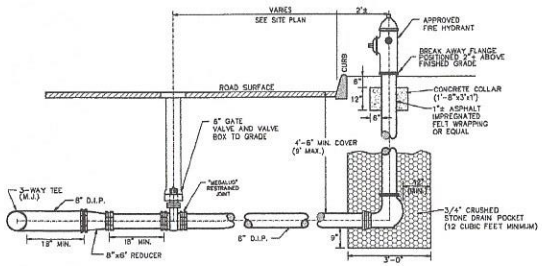
GUARD RAIL DETAIL

TYPICAL GUARD RAIL
SCALE: NONE



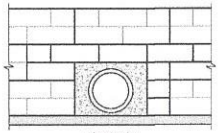
VERSA-LOK® RESIDENTIAL RETAINING WALL DETAIL

NOT TO SCALE

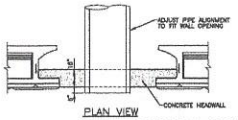


TYPICAL HYDRANT INSTALLATION DETAIL

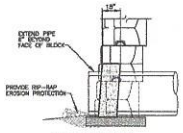
N.T.S.



ELEVATION



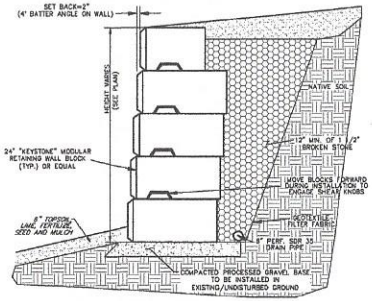
PLAN VIEW



CROSS SECTION

CONCRETE HEADWALL DETAIL

NOT TO SCALE



TYPICAL MODULAR BLOCK RETAINING WALL ALONG ROADWAY

N.T.S.

NOT VALID WITHOUT ORIGINAL SEAL

DATE	REVISION
10/14/20	TOWN ROAD
05/09/19	ENGINEERING REVIEW RESPONSES

CONSTRUCTION NOTES & DETAILS HAYSTACK WOODS

PREPARED FOR

FOUNDATION FOR NORFOLK LIVING, INC.

OLD COLONY ROAD
NORFOLK, CONNECTICUT

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NOTES

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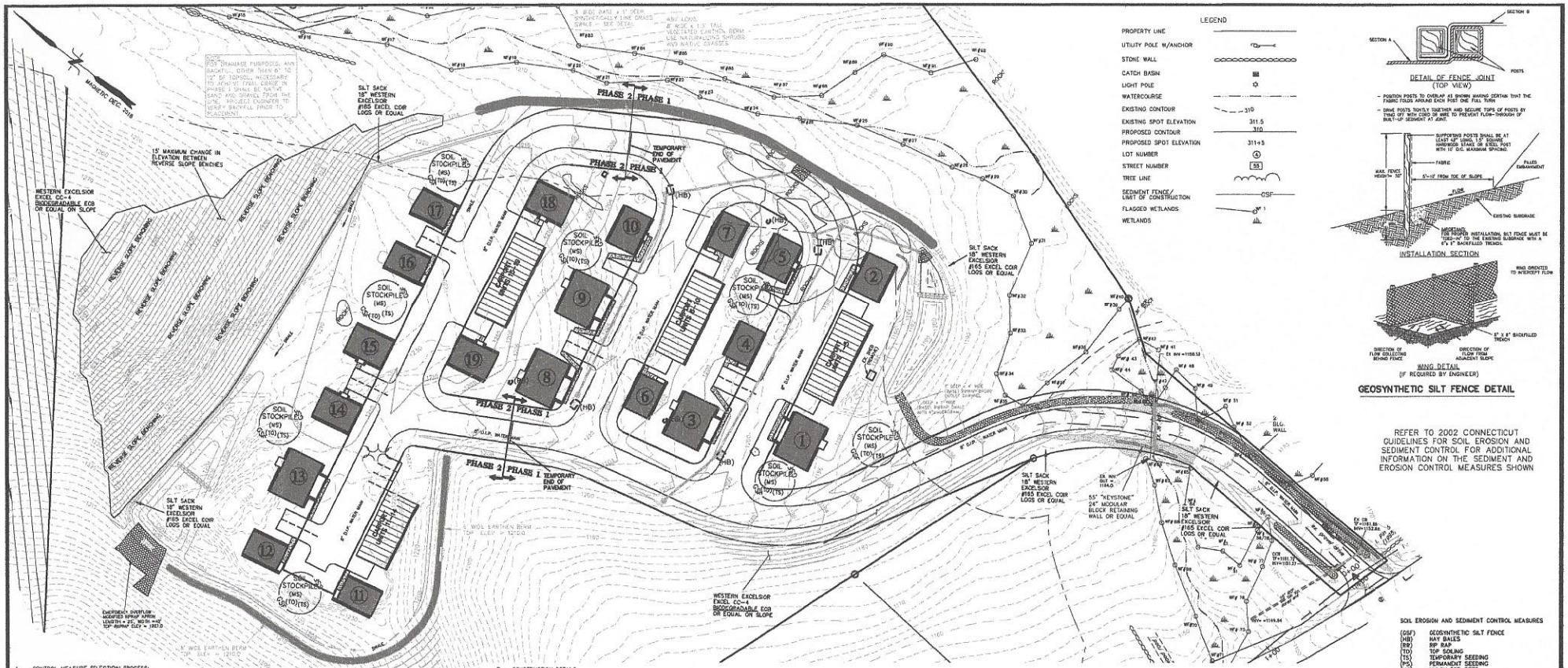
DATE:	03/08/2019	MAP #:	0723
SCALE:	AS NOTED	SHEET #:	C-10
DRAWING:	180723	DRAWN BY:	JLP
PROJECT #:	18-0723	CHECKED BY:	KSH



GEOSYNTHETIC SILT FENCE DETAIL

REFER TO 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL INFORMATION ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN

A. CONTROL MEASURE SELECTION PROCESS:

EROSION IS CAUSED BY SOIL MOVEMENT, WATER MOVEMENT AND SEDIMENT MOVEMENT. THE OBJECTIVE OF THE EROSION AND SEDIMENT CONTROL PLAN IS TO PREVENT OFF-SITE SEDIMENTATION DAMAGE. THE STEPS INVOLVED IN THE EROSION CONTROL SELECTION PROCESS ARE AS FOLLOWS:

A. IDENTIFY CONTROL PROBLEM
B. IDENTIFY PROBLEM AREA
C. IDENTIFY REQUIRED STRATEGY
D. IDENTIFY CONTROL MEASURE GROUP
E. SELECT SPECIFIC CONTROL MEASURE

THE THREE BASIC METHODS USED TO CONTROL EROSION ARE SOIL STABILIZATION, RUNOFF CONTROL AND SEDIMENT CONTROL. A COMBINATION OF THESE THREE METHODS ARE PROPOSED IN ORDER TO MINIMIZE OFF-SITE SEDIMENTATION DAMAGE.

A. SOIL MOVEMENT: SOIL MOVEMENT IS CREATED BY SHEET EROSION, RILL EROSION AND WIND EROSION.
1. PROBLEM AREAS: SOIL MOVEMENT OCCURS ON SLOPES, EXPOSED AREAS AND TRAVEL AREAS. SHEET AND RILL EROSION ON STEEP, EXPOSED, UNVEGETATED SLOPES CAN PRODUCE SIGNIFICANT EROSION ESPECIALLY DURING MAJOR RAIN STORMS. WIND EROSION ON ROADS UNDER CONSTRUCTION CAN PRESENT PROBLEMS DURING DRY PERIODS.
2. REQUIRED STRATEGY: PROTECTION OF THE SURFACE IS THE MOST EFFECTIVE METHOD OF CONTROLLING SOIL MOVEMENT.
3. CONTROL MEASURE GROUP: CONTROL MEASURE GROUPS CONSIST OF VEGETATIVE SOIL COVERS, NONVEGETATIVE SOIL COVERS AND ENVIRONMENTAL ENHANCEMENT.
4. SPECIFIC CONTROL MEASURE:
A. PERMANENT VEGETATIVE COVER (PV) IS SPECIFIED AS SOON AS FINAL GRADE OF ANY SLOPE IS REACHED ABOVE THE PROPOSED PERMANENT WATER ELEVATIONS. HYDROSEEDING IS RECOMMENDED.
B. TOPSOILING (TO) OF THE SAME SLOPES IS ALSO SPECIFIED.
C. TEMPORARY VEGETATIVE COVER (TV) IS RECOMMENDED ON TOPSOIL STOCKPILES AND SECTIONS OF THE PROJECT THAT ARE DISTURBED FOR PERIODS OF ONE YEAR OR MORE.
D. THE USE OF TEMPORARY AND PERMANENT MULCHING IS NOT RECOMMENDED ON THE STEEP SLOPES.

B. WATER MOVEMENT: WATER MOVEMENT CAN CREATE GULLY EROSION, WIND FORCES CAUSING SOIL PARTICLES TO MOVE WHICH IN TURN CAN PROTECT ON SITE AND OFF SITE AREAS.
1. PROBLEM AREAS: PROBLEM AREAS CONSIST OF DRAINAGE WAYS, WATER COURSES, AND STEEP, LONG SLOPES.
2. REQUIRED STRATEGY: THE STRATEGIES FOR CONTROL OF WATER MOVEMENT INCLUDE DIRECTING RUNOFF, CONVEYING RUNOFF, STABILIZING OUTLETS, INTERCEPTING GROUNDWATER STABILIZING STEEP SLOPES AND WATERCOURSES.
3. CONTROL MEASURE GROUP: CONTROL MEASURE GROUP CONSISTS OF DIVERSIONS, WATERWAYS, OUTLETS, ENCLOSED DRAINAGE SYSTEMS, AND STABILIZATION STRUCTURES.
4. SPECIFIC CONTROL MEASURE:
A. OUTLET PROTECTION (OP) IS REQUIRED AT THE POINT OF DISCHARGE FOR ALL CULVERTS.
B. RIPRAP (RR) IS PROPOSED FOR THE FINAL STABILIZATION ON THE INLET AND OUTLET OF ALL STORM DRAINAGE PIPES AND CULVERTS.

C. SEDIMENT MOVEMENT: SEDIMENT MOVEMENT IS CREATED BY WATER OR CHANNEL AND STREAM EROSION. CONTROLLING WATER MOVEMENT CAN EFFECT OFF SITE AREAS IF NOT PROPERLY CONTAINED.

1. PROBLEM AREAS: PROBLEM AREAS ARE BOTH SMALL AND LARGE WATERBODIES, TRAVEL AREAS AND BORROW AND STOCKPILE AREAS.
2. REQUIRED STRATEGY: THE STRATEGIES FOR CONTROLING SEDIMENT MOVEMENT CONSIST OF TRAPPING SEDIMENT, DETAINING RUNOFF, CONTROLLING SEDIMENT AND FILTERING SEDIMENT.
3. CONTROL MEASURE GROUP: THE CONTROL MEASURE GROUPS ARE SEDIMENT CONTROL, MUD AND DUST CONTROL AND SEDIMENT FILTERS.
4. SPECIFIC CONTROL MEASURES:
A. DUST CONTROL (DC): DRIVEWAYS AND HAUL ROADS TO BE SPRAYED WITH WATER AS NECESSARY TO CONTROL WIND BORNE PARTICLES DURING DRY WEATHER CONDITIONS. PAVED DRIVEWAYS ARE TO BE SWEPT OF ACCUMULATED SAND AND SILT AS NECESSARY TO PREVENT SEDIMENT MOVEMENT.
B. CONSTRUCTION ENTRANCE (CE): THE CONSTRUCTION ENTRANCE LOCATION IS THE PROPOSED DRIVEWAYS UNLESS OTHERWISE INDICATED ON THE PLANS. THE ENTRANCE SHOULD BE CONSTRUCTED AS SPECIFIED AS ON THE PLANS.
C. SEDIMENT BARRIERS (ST) AND SILT CURTAIN (SU): THE USE OF SEDIMENT BARRIERS AND SILT CURTAINS ARE SPECIFIED ON THE PLANS AT THE BOTTOM OF ALL PROPOSED SLOPES. THE USE OF EARTH BERMS APPROXIMATELY 2' HIGH CAN BE UTILIZED IN LIEU OF HAYBALES AND SEDIMENT FENCE PROVIDED BARRIERS ARE PROVIDED WHERE THE RUNOFF ENTERS A BROOK.

B. CONSTRUCTION DETAILS:

SEE PLANS, NOTES AND DETAILS SHEET FOR THE FOLLOWING SEDIMENT AND EROSION CONTROL DETAILS:

ANTI-TRACKING
SEDIMENT FENCE
HAY BALES - IF APPLICABLE
CHECK DAMS

C. SITE PLANS:

SEE SITE PLANS FOR LOCATION OF PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES.

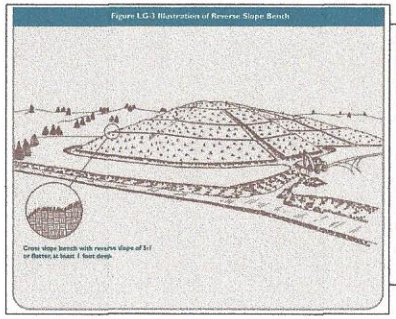
D. MAINTENANCE OF EROSION SEDIMENTATION CONTROLS:

1. ALL EROSION AND SEDIMENTATION CONTROLS TO BE CHECKED WEEKLY AND REPAIRS MADE, IF NECESSARY OR AS REQUIRED BY THE TOWN.
2. PRIOR TO THE TIME OF ANY FORECASTED RAINFALL, ALL EROSION AND SEDIMENTATION CONTROLS TO BE CHECKED AND NECESSARY REPAIRS MADE.
3. ALL SILT TO BE REMOVED FROM EROSION AND SEDIMENTATION CONTROLS AS NECESSARY AND/OR PRIOR TO ANY FORECASTED RAINFALL.
4. ALL REMOVED SILT TO BE PROPERLY DISPOSED OF OUTSIDE OF ROADWAY AREAS. ANY DISPOSED SILT TO BE IMMEDIATELY SEEDED WITH ANNUAL RYE GRASS AND MULCHED.
5. AFTER ALL DISTURBED AREAS ARE STABILIZED AND APPROVAL TO REMOVE EROSION AND SEDIMENTATION CONTROLS HAVE BEEN OBTAINED FROM THE TOWN, THE EROSION AND SEDIMENTATION CONTROLS CAN BE REMOVED. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED.
6. IT IS SUGGESTED THAT A FORMAL LOG BE KEPT OF ALL EROSION AND SEDIMENTATION CONTROL INSPECTION INCLUDING THE REMOVAL OF ANY TRAPPED SILT.
7. TEMPORARY CONTROLS TO CONSIST OF SEEDING WITH ANNUAL RYE GRASS. HAY MULCH OR OTHER APPROVED METHODS SHALL BE USED IF SEASON WILL NOT PERMIT GRASS TO GERMINATE.

E. PLANTING SCHEDULE:

1. TYPE OF GRASS SEED TO BE USED SHALL CONFORM TO CHAPTER 8 OF THE "GUIDELINES FOR SOIL EROSION & SEDIMENTATION CONTROL, CONNECTICUT" ("GUIDELINES") FOR EACH TYPE OF CONDITION ENCOUNTERED. TEMPORARY SEEDING SHOULD BE DONE WITHIN TWO (2) DAYS OF GROUND DISTURBANCE.
2. QUANTITY, FERTILIZATION AND METHOD OF INSTALLATION FOR ALL PLANTINGS SHOULD CONFORM TO THE "GUIDELINES".
3. PLANTING DATES SHOULD CONFORM TO "GUIDELINES" FOR TEMPORARY AND PERMANENT GRASS SEEDS AND ALL OTHER PLANTINGS.
4. MAINTENANCE OF ALL SEEDED AND PLANTED AREAS IS TO CONFORM WITH THE REQUIREMENTS OF THE "GUIDELINES".
5. ALL SEEDED AREAS ARE TO BE MAINTAINED AND AREAS WHICH ARE DETERMINED TO NEED ADDITIONAL WORK ARE TO BE REPAIRED AS SOON AS POSSIBLE.
6. DURING THOSE TIMES OF THE YEAR WHEN SEED CANNOT BE PLANTED, ALL DISTURBED AREAS TO BE MULCHED IN ACCORDANCE WITH CHAPTER 7 OF THE "GUIDELINES" AND BE SEEDED AS SOON AS THE SEEDING DATES PERMIT.
7. EVERY EFFORT SHALL BE MADE TO SEED DISTURBED AREAS DURING THE EARLIEST PLANTING PERIOD.

Figure LG-3 Illustration of Reverse Slope Bench



Slope Length Limitations and Reverse Slope Benches

Reverse slope benches are required whenever the vertical height of any **slope steeper than 3:1 exceeds 15 feet** (see **Figure LG-3**) except when engineered slope stabilization structures measures are included in the slope and/or a detailed soil mechanics analysis calculation has confirmed an acceptable factor of safety exists for the finished slope. Using the following design criteria provide:

- *spacing between benches into nearly equal segments and convey the surface and subsurface water to a stable outlet while still considering soils, steepness, drainage, and other site conditions.*
- *bench width(s) of at least 6 feet (or sufficient to accommodate construction and long term maintenance equipment).*
- *reverse slope(s) of 5:1 or flatter between the outer edge of the bench and the toe of the upper slope.*
- *a minimum bench depth of 3 feet.*
- *bench gradient(s) to a stable outlet of at least 1% but not greater than 2%; and*
- *an total flow length(s) within the bench exceeding 800 feet unless accompanied by appropriate design and computations to demonstrate adequate capacity and stability.*

SOIL EROSION AND SEDIMENT CONTROL MEASURES

(GSF)	GEOSYNTHETIC SILT FENCE
(HB)	HAY BALES
(RR)	RIP RAP
(TO)	TOP SOILING
(TS)	TEMPORARY SEEDING
(PS)	PERMANENT SEEDING
(MS)	MULCH FOR SEED
(CE)	CONSTRUCTION ENTRANCE

REFER TO: 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL DEP BULLETIN 34

FOR PROPER USAGE, INSTALLATION AND MAINTENANCE GUIDELINES.

DATE	REVISION
10/14/20	TOWN ROAD

EROSION & SEDIMENT CONTROL PLAN HAYSTACK WOODS

PREPARED FOR

FOUNDATION FOR NORFOLK LIVING, INC.

OLD COLONY ROAD
NORFOLK, CONNECTICUT

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DATE:	02/10/2019	MAP #:	0723
SCALE:	1"=40'	SHEET #:	C11
DRAWING:	180723	DRAWN BY:	JLP
PROJECT #:	18-0723	CHECKED BY:	KSH

(TO) TOPSOILING

- MATERIALS
  SITE INVESTIGATIONS SHALL BE MADE TO DETERMINE IF THERE IS SUFFICIENT TOPSOIL OF GOOD QUALITY TO JUSTIFY STRIPPING. HIGH QUALITY TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM). OTHER SOIL TYPES WITH HIGH ORGANIC CONTENT MAY BE FOUND SUITABLE AFTER TESTING. IT SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROOTS, AND NOXIOUS WEEDS. IT SHALL GIVE EVIDENCE OF BEING ABLE TO SUPPORT HEALTHY VEGETATION. IT SHALL CONTAIN NO SUBSTANCE THAT IS POTENTIALLY TOXIC TO PLANT GROWTH.

  ALL TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY FOR THE FOLLOWING AND SHALL MEET THE REQUIREMENTS WHEN:
  - CONTAINING NOT LESS THAN 6% AND NOT MORE THAN 20% ORGANIC MATTER AS DETERMINED BY LOSS-ON-IGNITION OF OVEN-DRIED SAMPLES DRIED AT 105 DEGREES CENTIGRADE.
  - pH RANGE SHALL BE 6.0–7.5. IF pH IS LESS THAN 6.0, LIME SHALL BE ADDED IN ACCORDANCE WITH THE RECOMENDATIONS OF THE VEGETATIVE ESTABLISHMENT PRACTICE BEING USED.
  - SOLUBLE SALTS SHALL NOT EXCEED 500 PPM.

  IF ADDITIONAL OFF-SITE TOPSOIL IS NEEDED, IT MUST MEET THE STANDARDS STATED ABOVE.
- STRIPPING
  STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4 TO 6 INCH STRIPPING DEPTH IS GENERALLY DEPTH MAY VARY DEPENDING ON THE PARTICULAR SOIL. ALL PERIMETER DIKES, BASINS, AND OTHER SEDIMENT CONTROLS SHALL BE IN PLACE PRIOR TO STRIPPING.
- STOCKPILING
  - TOPSOIL SHALL BE STOCKPILED IN SUCH A MANNER THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE SHALL RESULT.
  - TOPSOIL STOCKPILES NEED TO BE LOCATED AWAY FROM ALL CONSTRUCTION ACTIVITIES.
- SIDE SLOPES
  THE SIDE SLOPES OF ALL STOCKPILES SHALL NOT EXCEED 2 TO 1
- SEDIMENT BARRIER
  A SEDIMENT BARRIER OF DESIGNATED SILT FENCE SHALL SURROUND ALL TOPSOIL STOCKPILES.
- TEMPORARY SEEDING
  TEMPORARY SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 30 DAYS OF THE FORMATION OF THE STOCKPILE, IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE COVER MEASURES.
- SITE PREPARATION
  BEFORE TOPSOILING, ESTABLISH NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, WATERWAYS, SILT FENCE AND SEDIMENT BASINS. THESE MEASURES MUST BE MAINTAINED DURING TOPSOILING.
- GRADING
  PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOPSOILED SHALL BE MAINTAINED ACCORDING TO THE APPROVED PLAN.
- LIMING
  WHERE THE pH OF THE SUBSOIL IS 6.0 OR LESS, GROUND AGRICULTURAL LIMESTONE SHALL BE SPREAD IN ACCORDANCE WITH THE SOIL TEST OR THE VEGETATIVE ESTABLISHMENT PRACTICE BEING USED.
- BONDING
  - AFTER THE AREA TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY DISCING SCARIFYING OR TRACKING TO A DEPTH OF AT LEAST 4 INCHES TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
- APPLYING TOPSOIL
  TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS IN SUCH A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING. THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 4 INCHES. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. IT IS NECESSARY TO COMPACT THE TOPSOIL ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL AND TO OBTAIN A UNIFORM FIRM SEEDBED FOR THE ESTABLISHMENT OF A HIGH MAINTENANCE TURF. HOWEVER, UNDUE COMPACTION IS TO BE AVOIDED SINCE IT INCREASES RUNOFF VELOCITY AND VOLUME, AND PREVENTS SEED GERMINATION.
- TOPSOIL AND HERBICIDES
  PERMANENT SEEDINGS OR SOD WILL NOT BE ESTABLISHED IN TOPSOIL THAT HAS BEEN TREATED WITH HERBICIDES WHICH MOVED INHIBIT GRASS GROWTH. TOPSOIL SO TREATED WILL BE STOCKPILED FOR ONE YEAR TO ALLOW BREAKDOWN OF HERBICIDE RESIDUES OR TOPSOIL WILL BE COVERED WITH 6 INCHES OF UNTREATED TOPSOIL TO SERVE AS A SEEDBED.

(TS) TEMPORARY SEEDING

- SITE PREPARATION
  GRADE AS ACCORDING TO PLAN TO ALLOW FOR THE USE OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH THE MEASURE FOR LAND GRADING PER THE GUIDELINES.
  - INSTALL NEEDED EROSION CONTROL MEASURES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, SEDIMENT BASINS AND GRASSED WATERWAYS.
- SEEDBED PREPARATION
  - LOOSEN THE TOPSOIL TO A DEPTH OF 3–4 INCHES WITH A SLIGHTLY ROUGHENED SURFACE. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS (SUCH AS THOSE OFFERED BY THE UNIVERSITY OF CONNECTICUT SOIL TESTING LABORATORY). SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQUARE FEET USING 10–10–10 OR EQUIVALENT. IN ADDITION, 250 POUNDS OF 38–0–0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED FOR TOPDRESSING. ADD LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS:

SOIL TEXTURE	TONS/AC.	LBS./1000 SQ.FT.
CLAY, CLAY LOAM AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAMY SAND, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

  REFER TO COUNTY SOIL SURVEY REPORT FOR SOIL TEXTURES AT THE SITE.
- SEEDING
  SELECT SEED FROM RECOMMENDATIONS BELOW:

SPECIES	SEEDING RATES (LBS) PER 1,000 SQ. FT.	OPTIMUM SEEDING DATE (1)	OPTIMUM SEED DEPTH (2)
ANNUAL RYEGRASS	1.0	3/1 - 6/15 8/1 - 10/1	0.5"
PERENNIAL RYEGRASS	1.0	3/15 - 6/15 8/1 - 10/1	0.5"
WINTER RYE	1.0	4/15 - 6/15 8/15 - 10/1	1.0"

  SEE GUIDELINES FOR ADDITIONAL SPECIES.
  (1) MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR CAN BE IRRIGATED.
  (2) SEED AT TWICE THE INDICATED DEPTH FOR SANDY SOILS.
  - APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, GUTTPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED TO PERCENT WHEN HYDROSEEDING.
  - MULCHING
  TEMPORARY SEEDING MADE FROM OPTIMUM SEEDING DATES SHALL BE MULCHED ACCORDING TO THE "MULCH FOR SEED" MEASURE. NOTE WHEN SEEDING OUTSIDE OF THE OPTIMUM SEEDING DATES, INCREASE THE APPLICATION OF MULCH TO PROVIDE 95%–100% COVERAGE.

(DC) DUST CONTROL

- DEFINITION
  - THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.
- PURPOSE
  TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, AND REDUCE THE PRESENCE OF DUST WHICH MAY CAUSE OFF-SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE AND PLANTLIFE, OR REDUCE TRAFFIC SAFETY HAZARD.
- APPLICABILITY
  THIS MEASURE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND SOIL MOVEMENT WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY TO OCCUR IF PREVENTIVE MEASURES ARE NOT TAKEN.
- PLANNING CONSIDERATIONS
  - USE TRAFFIC CONTROL TO RESTRICT TRAFFIC TO PRESETERMINED ROUTES. MAINTAIN AS MUCH NATURAL VEGETATION AS IS PRACTICABLE. USE PHASING OF CONSTRUCTION TO REDUCE THE AREA OF LAND DISTURBED AT ANY ONE TIME. THE USE OF TEMPORARY MULCHING, TEMPORARY OR PERMANENT SEEDING, OR SODDING WILL REDUCE THE NEED FOR DUST CONTROL. USE MULCHING, SEEDING, OR PAVED SURFACES WHERE NECESSARY TO PREVENT DUST BLOWS OFF STAGNANT SURFACES OR DUST. I.E., ROCK CRUSHERS, SHOULD UTILIZE FINE WATER SPRAYS TO CONTROL DUST.
- INSTALLATION REQUIREMENTS
  - WATER
    THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
  - STONE
    COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. IN AREAS ADJACENT TO WATERWAYS USE CHEMICALLY STABLE AGGREGATE.
- MAINTENANCE
  REPEAT APPLICATION OF DUST CONTROL MEASURES WHEN FUGITIVE DUST BECOMES EVIDENT.

(PS) PERMANENT SEEDING

TIMING
SEED WITH A PERMANENT SEED MIXTURE WITHIN 7 DAYS AFTER ESTABLISHING FINAL GRADES OR WHEN DRAWING WORK WITHIN A DISTURBED AREA IS TO BE SUSPENDED FOR A PERIOD OF MORE THAN 1 YEAR. SEEDING IS RECOMMENDED FROM APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1.
FOR THE COASTAL TOWNS AND IN THE CONNECTICUT RIVER VALLEY FINAL FALL SEEDING DATES CAN BE EXTENDED AN ADDITIONAL 15 DAYS, AND
DO NOT USE PERMANENT SEEDING ON GLOPES STEEPER THAN 3 TO 1.

A. SITE PREPARATION
GRADE IN ACCORDANCE WITH THE SITE GRADING PLAN. INSTALL ALL SURFACE WATER CONTROLS FOR AREAS TO BE MOWED. REMOVE ALL STONES 2 INCHES OR LARGER. REMOVE ALL OTHER DEBRIS SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

NOTE: ON AREAS WHERE WOOD CHIPS AND/OR BARK MULCH WAS PREVIOUSLY APPLIED, OTHER REMOVE THEM AND TILL OR INCORPORATE IT INTO THE SOIL WITH A NITROGEN FERTILIZER ADDED. NITROGEN APPLICATION RATE IS DETERMINED BY SOIL TEST AT TIME OF SEEDING; ANTICIPATE 12lbs NITROGEN PER TON OF WOOD CHIPS AND/OR BARK MULCH.

B. SEEDBED PREPARATION
- RIPPY TOPSOIL IF NECESSARY.
  APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF CONNECTICUT SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIOUS SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQUARE FEET USING 10–10–10 OR EQUIVALENT. IN ADDITION, 250 POUNDS OF 38–0–0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED FOR TOPDRESSING. ADD LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS:

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CLAY, CLAY LOAM AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAMY SAND, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

  REFER TO COUNTY SOIL SURVEY REPORT FOR SOIL TEXTURES AT THE SITE.
  WORK LIME AND FERTILIZE INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHENEVER POSSIBLE.
  REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
  INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

D. SEEDING
  SELECT A MIXTURE FROM BELOW OR USE MIXTURE RECOMMENDED BY THE SOIL CONSERVATION SERVICE. CIRCULATE THE ALL LEGUME SEED WITH THE CORRECT TYPE AND AMOUNT OF INOCULANT.
  APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, GUTTPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDINGS WHICH ARE MULCHED MAY BE LEFT ON SOIL SURFACE.
  WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
  HYDRAULIC APPLICATION (HYDROSEEDING), IS A SUITABLE METHOD FOR USE IN CRITICAL AREAS. WHEN HYDROSEEDING, A SEEDBED IS PREPARED IN THE CONVENTIONAL WAY OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN SIX INCHES IN DIAMETER. SLOPES MUST BE NO STEEPER THAN 3 TO 1 (3 FEET HORIZONTAL TO 1 FOOT VERTICAL). APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. THE USE OF MANY BROADCAST SEEDERS WITH SLURRY IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). FIBER MULCH DOES NOT PROVIDE ADEQUATE SEEDBED PROTECTION. BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH. SEEDING RATES MUST BE INCREASED 10 PERCENT WHEN HYDROSEEDING.
  SEED WARM SEASON GRASSES DURING THE SPRING PERIOD ONLY.

  APPLY MULCH ACCORDING TO THE TEMPORARY MULCHING MEASURE OF THE SEDIMENT CONTROL GUIDELINES.
  IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE IN THE GUIDELINES TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

MAINTENANCE
INITIAL ESTABLISHMENT
  INSPECT SEEDED AREA AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER DURING THE GROWING SEASON.
  WHERE SEED HAS BEEN REMOVED OR WHERE SOIL EROSION HAS OCCURRED DETERMINE THE CAUSE OF THE FAILURE. SEED DAMAGE MAY BE PROBLEM IF MULCH WAS APPLIED TO THINLY TO PROTECT SEED. RE-SEED AND RE-MULCH, IF NOTICEDIT WAS THE RESULT OF WIND. REPAIR EROSION DAMAGE ANY, RE-APPLY SEED AND MULCH, AND APPLY MULCH ANCHORING FAILURE WAS CAUSED BY CONCENTRATED WATER. (1) INSTALL ADDITIONAL MEASURES TO CONTROL WATER AND SEDIMENT MOVEMENT. (2) REPAIR EROSION DAMAGE. (3) RE-SEED AND (4) RE-APPLY MULCH WITH ANCHORING OR USE "TEMPORARY EROSION CONTROL BLANKET AND/OR "PERMANENT TURF REINFORCEMENT MAT MEASURE.
  CONTINUE INSPECTION UNTIL AT LEAST 100 PLANTS PER SQUARE FOOT HAVE GROWN AL LEAST 6 INCHES TALL OR UNTIL THE FIRST MOWING.
FIRST MOWING
  ALLOW THE MAJORITY OF PLANTS TO ACHIEVE A HEIGHT OF AT LEAST 6 INCHES BEFORE MOWING THE FIRST TIME. DO NOT MOW WHILE THE SURFACE IS WET. MOW ONLY WHEN THE SURFACE IS FIRM. AVOID MAKING RUTS OR MOVING WHEN THE SOIL HAS OPTEN LEAVE A 1 SERIES UNNECESSARY RUTS. THE FIRST MOWING SHOULD REMOVE APPROXIMATELY ONE THIRD OF THE HEIGHT, DEPENDING ON THE TYPE OF GRASS AND WHERE IT IS BEING USED. DO NOT MOW GRASS BELOW 3 INCHES.
  IF THE SEEDED AREA WAS MULCHED, DO NOT ATTEMPTED TO RAKE OUT THE MULCHING MATERIAL. NORMAL MOWING WILL GRADUALLY REMOVE ALL MANMADE DEBRIS.
  ONE THIRD OF THE, DEPENDING ON THE TYPE OF GRASS

LONG TERM MAINTENANCE
  MOW AND FERTILIZE AT A RATE THAT SUSTAINS AN AREA CONDITION THAT SUPPORTS THE INTENDED USE. IF APPROPRIATE THE HEIGHT OF THE CUT MAY BE ADJUSTED DOWNWARD, BY DEGREES, AS NEW PLANTS BECOME ESTABLISHED. CARRY OUT ANY FERTILIZATION PROGRAM ACCORDANCE WITH APPROVED SOIL TEST THAT DETERMINE THE PROPER AMOUNT OF LIME AND FERTILIZER NEED TO MAINTAIN A VIGOROUS SOD YET PREVENT EXCESSIVE LEACHING OF NUTRIENTS TO THE GROUND-WATER OR RUNOFF TO SURFACE WATER.
  ALTHOUGH WEEDS MAY APPEAR TO BE A PROBLEM, THEY SHADE THE NEW SEEDLINGS AND HELP CONSERVE SURFACE MOISTURE. DO NOT APPLY WEED CONTROL UNTIL THE NEW SEEDING HAVE BEEN MOWED AT LEAST FOUR TIMES.

SELECTED SEED MIX TO MATCH NEED
AREA TO BE SEEDED

	MIXTURE NUMBER1		
	MOWING DESIRED	MOWING NOT REQUIRED	
BORROW AREAS, ROADSIDES, DIKES, LEVEES, POND BANKS AND OTHER SLOPES AND BANKS			
A) WELL OR EXCESSIVELY DRAINED SOILS	1,2,3,4,5, OR 8	5,6,7,8,9,10,11,12,16,22	
B) SOMEWHAT POORLY DRAINED SOILS	2	5,8	
C) VARIABLE DRAINAGE SOILS	2	5,8,11	
DRAINAGE DITCH AND CHANNEL BANKS			
A) WELL OR EXCESSIVELY DRAINED SOILS	1,2,3, OR 4		
B) SOMEWHAT POORLY DRAINED SOILS	2	9,10,11,12	
C) VARIABLE DRAINAGE SOILS	2		
DIVERSIONS			
A) WELL OR EXCESSIVELY DRAINED SOILS	2,3, OR 4	9,10,11	
B) SOMEWHAT POORLY DRAINED SOILS	2		
C) VARIABLE DRAINAGE SOILS	2		
EITLUENT DISPOSAL		5 OR 8	
GRAVEL PITS3		26,27,28	
BUILDED AND ERODED AREAS		3,4,5,6,10,11,12	
MINESPOIL & WASTE			
AND OTHER SPOIL BANKS		15,16,17,18,26,27,28	
(F TOXIC SUBSTANCES AND PHYSICAL PROPERTIES NOT LIMITING)3			
SHORELINES (FLUCTUATING WATER LEVELS)		5 OR 8	
SKI SLOPES		4,10	
SOD WATERWAYS AND SPILLWAYS	1,2,3,4,8,7, OR 8	1,2,3,4,6,7, OR 8	
SUNNY RECREATION AREAS (PICNIC AREAS AND PLAYGROUNDS OR DRIVING AND ARCHERY RANGES, NATURE TRAILS)	1,2, OR 3		
CAMPING AND PARKING, NATURE TRAILS (SHADED)	19,21, OR 23		
SAND DUNES (BLOWING SAND)	25		
WOODLAND ACCESS ROADS, SKID TRAILS AND LOG HARDING AREAS		9,10,16,22,28	
LAWNS AND HIGH MAINTENANCE	1,19,21,OR 23		

FOOTNOTES:
1 THE NUMBERS FOLLOWING IN THESE COLUMNS REFER TO SEED MIXTURES IN FOLLOWING TABLE. MIXES FOR SHADY AREAS ARE IN BOLD ITALICS PRINT (INCLUDING MIXES 23 THROUGH 28).
2 SEE COUNTY SOIL SURVEY FOR DRAINAGE CLASS. SOIL SURVEYS ARE AVAILABLE FROM THE COUNTY SOIL AND WATER CONSERVATION DISTRICT OFFICE.
3 USE MIX 26 WHEN SOIL PASSING A 200 MESH SIEVE IS LESS THAN 15% OF TOTAL WEIGHT. USE MIX 28 & 27 WHEN SOIL PASSING A 200 MESH SIEVE IS BETWEEN 15 AND 20% OF TOTAL WEIGHT - USE MIX 28,27 & 28 WHEN SOIL PASSING A 200 MESH SIEVE IS ABOVE 20% OF TOTAL WEIGHT.

SEED MIXTURES FOR PERMANENT SEEDING

No.	SEED MIXTURE (VARIETY)	LBS/ACRE	LBS/1,000 SF
1S	KENTUCKY BLUEGRASS	20	.45
	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	20	.45
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	2	.05
		TOTAL 42	1.00
2S	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	20	.45
	REDTOP (STREEKER, COMMON)	2	.05
	TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN)	20	.45
		TOTAL 42	.95
3S	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	20	.45
	BIRDS FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT	6	.20
	TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN)	20	.45
		TOTAL 48	1.10
4S	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	20	.45
	OR TALL FESCUE (KENTUCKY 31)	2	.05
	REDTOP (STREEKER, COMMON)	8	.20
	BIROS FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT	TOTAL 30	.70
5S	WHITE CLOVER	10	.25
	PERENNIAL RYE GRASS	3	.05
		TOTAL 13	.30
6S	CREEPING RED FESCUE	20	.50
	REDTOP (STREEKER, COMMON)	2	.05
	PERENNIAL RYE GRASS	20	.50
		TOTAL 43	1.05
7S	SMOOTH BROMEGRASS (SARATOGA, LINCOLN)	16	.35
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	6	.10
	BIROS FOOT TREFOIL (EMPIRE, VIKING) W/INOCULANT	2	.05
		TOTAL 30	.79
8S	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK)	10	.25
	WEEPING LOVEGRASS	3	.07
	LITTLE BLUESTEM (BLAZE, ALDOUS, CAMPER)	10	.25
		TOTAL 23	.57
9S	CREEPING RED FESCUE (PENNLAWN, WINTERGREN)	10	.25
	CROWN VETCH (CHEWUING, PENNGIFT) WITH INNOCULANT	15	.35
	OR (FLATPEA (LATHCO) WITH INOCULANT)	(30)	(.75)
	TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN) REDTOP (STREEKER, COMMON)	2	.05
		TOTAL 37 (OR 52)	.85 (OR 1.25)
11S	BIROS FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT	8	.20
	CROWN VETCH (CHEWUING, PENNGIFT) WITH INNOCULANT	15	.35
	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)		
12S	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK)	10	.25
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	6	.10
	CROWN VETCH (CHEWUING, PENNGIFT) WITH INNOCULANT	15	.35
		TOTAL 49	1.06
13S	CROWN VETCH (CHEWUING, PENNGIFT) WITH INNOCULANT1	10	.25
	OR (FLATPEA (LATHCO) WITH INOCULANT1)	(30)	(.75)
	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK)	51	.10
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	8	.10
		TOTAL 20 (OR40)	.45 (OR .85)
14S	CROWN VETCH (CHEWUING, PENNGIFT) WITH INNOCULANT1	15	.35
	OR (FLATPEA (LATHCO) WITH INOCULANT1)	(30)	(.75)
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	10	.25
		TOTAL 25 (OR40)	.60 (OR 1.00)
15S	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK)	5	.10
	BIG BLUESTEM (INDIANA, KAW) OR LITTLE BLUESTEM (BLAZE, ALBOUS,CAMPER)	5	.10
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	5	.10
	BIROS FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT1	10	.10
		TOTAL 20	.40
16S	TALL FESCUE (KENTUCKY 31)	20	.45
	FLATPEA (LATHCO) WITH INOCULANT1	30	.75
		TOTAL 50	1.20
17S	DEER TONGUE (TOOA) WITH INOCULANT1	10	.25
	BIROS FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT1	8	.20
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	1	.02
		TOTAL 21	.52
18S	DEER TONGUE (TOOA) WITH INOCULANT1	10	.25
	CROWN VETCH (CHEWUING, PENNGIFT) WITH INNOCULANT1	15	.35
	PERENNIAL RYEGRASS (NORLEA, MANHATTAN)	2	.05
		TOTAL 28	.67
19S	CHEWINGS FESCUE	35	.80
	HARD FESCUE	30	.70
	COLONIAL BENTGRASS	1	.02
	BIROS FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT1	20	.50
	PERENNIAL RYEGRASS	20	.50
		TOTAL 100	2.50
20S	SELETED DUE TO INVASIVE SPECIES		
21S	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	TOTAL 60	1.35
22S	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	40	.80
	TALL FESCUE (KENTUCKY 31)	20	.45
		TOTAL 60	1.80
23S	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	1	.35
	FLATPEA (LATHCO) WITH INOCULANT1	30	.75
		TOTAL 45	1.80
24S	TALL FESCUE (KENTUCKY 31)	TOTAL 150	3.60
25S	AMERICAN BEACHGRASS (CAPE)	50,500 CLUMS/ACRE	1.345 CLUMS/100 SF
26s	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK)	4.0	.10
	BIG BLUESTEM (INDIANA, KAW)	4.0	.10
	LITTLE BLUESTEM (BLAZE, ALDOUS, CAMPER)	2.0	.05
	SAND LOVEGRASS (NE-27, BENO)	1.5	.03
	BIRD'S-FOOT TREFOIL (EMPIRE VIKING)	2.0	.05
		TOTAL 13.5	.33
27s	FLATPEA (LATHCO)	10	.25
	PERENNIAL PEA (LANCER)	2	.05
	CROWN VETCH (CHEWUING, PENNGIFT)	10	.20
	TALL FESCUE (KENTUCKY 31)	2	.05
		TOTAL 24	.55
28s	ORCHARDGRASS (PENNLAYE, KAY,POTOMAC)	5	.10
	TALL FESCUE (KENTUCKY 31)	10	.20
	REDTOP (STREEKER, COMMON)	2	.05
	BIRD'S-FOOT TREFOIL (EMPIRE VIKING)	5	.10
		TOTAL 22	.45
29	TURF TYPE TALL FESCUE (BONANZA, MUSTANG, REBEL II, SPARTAN, JAGUAR) OR PERENNIAL RYE ("FUTURE 2000" MIX: FIESTA II, BLAZER II, AND DASHER II)	175 – 250	6 TO 8

FOOTNOTES:
1 USE PROPER INOCULANT FOR LEGUME SEEDS. USE FOUR TIMES RECOMMENDED RATE WHEN HYDROSEEDING.
2 USE PURE LIVE SEED (PLS). (PLS=PURITY% X P.G.R%)
  EXAMPLE: COMMON BERMUDA SEED WITH 70% GERMINATION AND 80% PURITY=
  70% OR 56 OR 56%
  10LBS PLS/ACRE/56% = 17.9 LBS/ACRE OF BAGGED SEED
3 D.O.T. ALL PURPOSE MIX
4 WILD FLOWER MIX CONTAINING NEW ENGLAND ASTER, BAYBERRY BREATH, BLACK EYE SUSAN, BLUE FLAX, BLUE VERVAIN, PURPLE CONEFLOWER, LANCED-LEAVED COREOPSIS, CORNFLOWER, EVE DAISY, SCARLET FLAX, FOXGLOVE, GAYFEATHER, ROCKY LARKSPUR, SPANISH LARKSPUR, CORN POPPY, SPURRED SNAPDRAGON, WALLFLOWER AND/OR YARROW MAY
  BE ADDED TO ANY SEED MIX GIVEN. MOST SEED SUPPLIERS CARRY A WILD FLOWER MIXTURE THAT IS SUITABLE FOR THE NORTHEAST AND CONTAINS A VARIETY OF BOTH ANNUAL AND PERENNIAL FLOWERS. SEEDING RATES FOR THE SPECIFIC MIXTURES SHOULD BE FOLLOWED.
5 CONSIDERED TO BE A WARM SEASON MIX.
6 CONSIDERED TO BE A WARM SEASON MIX.

(CE) ANTI-TRACKING PAD CONSTRUCTION ENTRANCE

N.T.S.
REFERENCE: 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.