PROPOSED SITE PLAN
"TROPIC STAR CONVENIENCE"
TAX MAP 238, LOT 4
ROUTE 125, BARRINGTON, NH

SHEET INDEX

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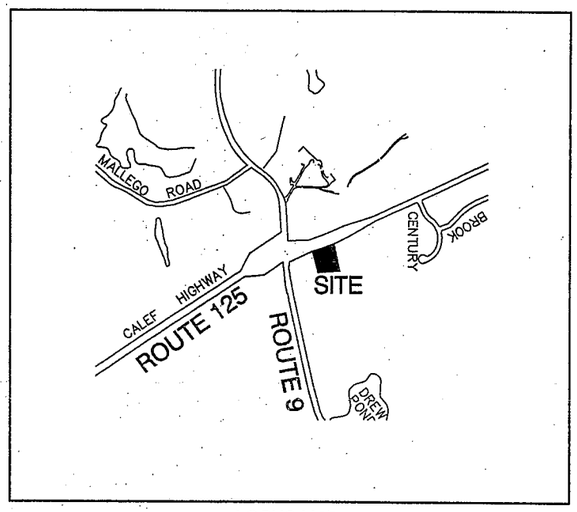

LOCUS MAP
SCALE 1" = 2000'

PERMITS

TYPE OF PERMIT	STATUS
NHDOT DRIVEWAY PERMIT: NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, DISTRICT SIX P.O. BOX 740 DURHAM, NEW HAMPSHIRE 03824 (603) 868-1133 RESPONSIBLE CONSULTANT- JONES & BEACH ENGINEERS, INC.	SUBMITTED: 12/13/11 PERMIT NO. 06-027-510 DATED: 8/2/2013 EXPIRATION: 8/2/2014
NHDES INDIVIDUAL SEWAGE DISPOSAL SYSTEM: NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES P.O. BOX 95, 29 HAZEN DRIVE CONCORD, NEW HAMPSHIRE 03302 RESPONSIBLE CONSULTANT- JONES & BEACH ENGINEERS, INC.	SUBMITTED: 1/17/12 PERMIT NO. CA2012107613 DATED: 2/21/12 EXPIRATION: 2/12/16

USEPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT, NOTICE OF INTENT (NOI), AND NOTICE OF TERMINATION (NOT) TO BE FILED IN ACCORDANCE WITH FEDERAL AND LOCAL REGULATIONS PRIOR TO AND FOLLOWING CONSTRUCTION:
EPA STORMWATER NOTICE PROCESSING CENTER
MAIL CODE 4203M,
US EPA
1200 PENNSYLVANIA AVENUE, NW
WASHINGTON, DC 20460
RESPONSIBLE CONSULTANT:
JONES & BEACH ENGINEERS, INC.

GENERAL LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		CENTERLINE
		FRESHWATER WETLANDS LINE
		TREE LINE
		STONEWALL
		BARBED WIRE
		FENCE
		STOCKADE FENCE
100		EASEMENT
98		MAJOR CONTOUR
		MINOR CONTOUR
VGC	VGC	EDGE OF PAVEMENT
SGC	SGC	VERTICAL GRANITE CURB
MCC	MCC	SLOPE GRANITE CURB
PCC	PCC	MONOLITHIC CONCRETE CURB
X	X	POURED CONCRETE CURB
D		SILT FENCE
S	S	DRAINAGE LINE
G	GAS	SEWER LINE
W	W	GAS LINE
WS	WS	WATER LINE
OHE	OHE	WATER SERVICE
UGE	UGE	OVERHEAD ELECTRIC
		UNDERGROUND ELECTRIC
		IRON PIPE/IRON ROD
		DRILL HOLE
		IRON ROD/DRILL HOLE
		STONE/GRANITE BOUND
100x0		SPOT GRADE
x 100.00		PAVEMENT SPOT GRADE
x 100.00 TC 99.50 BC		CURB SPOT GRADE
		BENCHMARK (TBM)
		DOUBLE POST SIGN
		SINGLE POST SIGN
		WELL
		TEST PIT
		PERC TEST
		TREES AND BUSHES
		UTILITY POLE
		LIGHT POLES
		DRAIN MANHOLE
		SEWER MANHOLE
		HYDRANT
		WATER GATE
		WATER SHUT OFF
		REDUCER
		SINGLE GRATE CATCH BASIN
		DOUBLE GRATE CATCH BASIN
		TRANSFORMER
D		CULVERT W/WINGWALLS
D		CULVERT W/FLARED END SECTION
D		CULVERT W/STRAIGHT HEADWALL
		STONE CHECK DAM
		DRAINAGE FLOW DIRECTION
		RIPRAP
		FRESHWATER WETLANDS
		STABILIZED CONSTRUCTION ENTRANCE
		CONCRETE
		GRAVEL
		SNOW STORAGE

APPLICANT / DEVELOPER
THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD
HAMPTON, NH 03842
(603) 926-7770
Contact: JAMES MITCHELL

CIVIL ENGINEER / SURVEYOR
JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
PO BOX 219
STRATHAM, NH 03885
(603) 772-4746
Contact: WAYNE MORRILL
Email: wmorrill@jonesandbeach.com

TRAFFIC ENGINEER
STEVEN G. PERNAW & CO., INC.
P.O. BOX 1721
CONCORD, NH 03302

LANDSCAPE DESIGNER
HOWARD SNYDER, RLA
26B STRONG STREET
NEWBURYPORT, MA 01950
Contact: HOWARD SNYDER
(978) 764-6155

ELECTRIC
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
74 OLD DOVER ROAD
ROCHESTER, NH 03867
(603) 332-4227

TELEPHONE
VERIZON
237 DANIEL WEBSTER HWY, FLOOR 2
MERRIMACK, NH 03054
(603) 743-1114

CABLE TV
COMCAST COMMUNICATION CORPORATION
334-B CALEF HIGHWAY
EPPING, NH 03042-2325
(603) 679-5695

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NOTES:

1. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN.
2. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.
3. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
4. IN ACCORDANCE WITH TOWN REGULATIONS AND RSA 676:13, ALL IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, INSPECTED AND APPROVED BY THE TOWN OF BARRINGTON PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
5. IN ACCORDANCE WITH BARRINGTON SITE PLAN REVIEW REGULATIONS AND RSA 676:12, ALL OFF-SITE IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, INSPECTED AND APPROVED BY THE TOWN OF BARRINGTON (AND/OR THE NHDOT, IF APPLICABLE) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
6. A WAIVER TO SECTION 4.8.2.3 DRIVEWAYS OF THE SITE PLAN REGULATIONS HAS BEEN GRANTED TO THIS PROJECT TO ALLOW THE CONSTRUCTION OF A ONE-WAY ENTRANCE DRIVEWAY WITHIN 150' OF THE DRIVEWAY ACCESS TO BARRINGTON TAX MAP 238 / LOT 5.

PROJECT PARCEL
TOWN OF BARRINGTON, NH
TAX MAP 238, LOT 4

APPLICANT
THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD
HAMPTON, NH 03842
BOOK 3937, PAGE 0522

TOTAL LOT AREA
80,273.55 SQ. FT.
1.84 ACRES

PLANNING BOARD
APPROVAL BLOCK

Design: WGM	Draft: GPC	Date: 01/03/12
Checked: WGM	Scale: AS NOTED	Project No.: 10144
Drawing Name: 10144-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

STATE OF NEW HAMPSHIRE — BARRY W. GIER No. 12535 — LICENSED PROFESSIONAL ENGINEER

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/18/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

Plan Name: COVER SHEET
Project: TROPIC STAR CONVENIENCE, CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record: THE THREE SOCIOS, LLC, 321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
CS
SHEET 1 OF 22
JBE PROJECT NO. 10144

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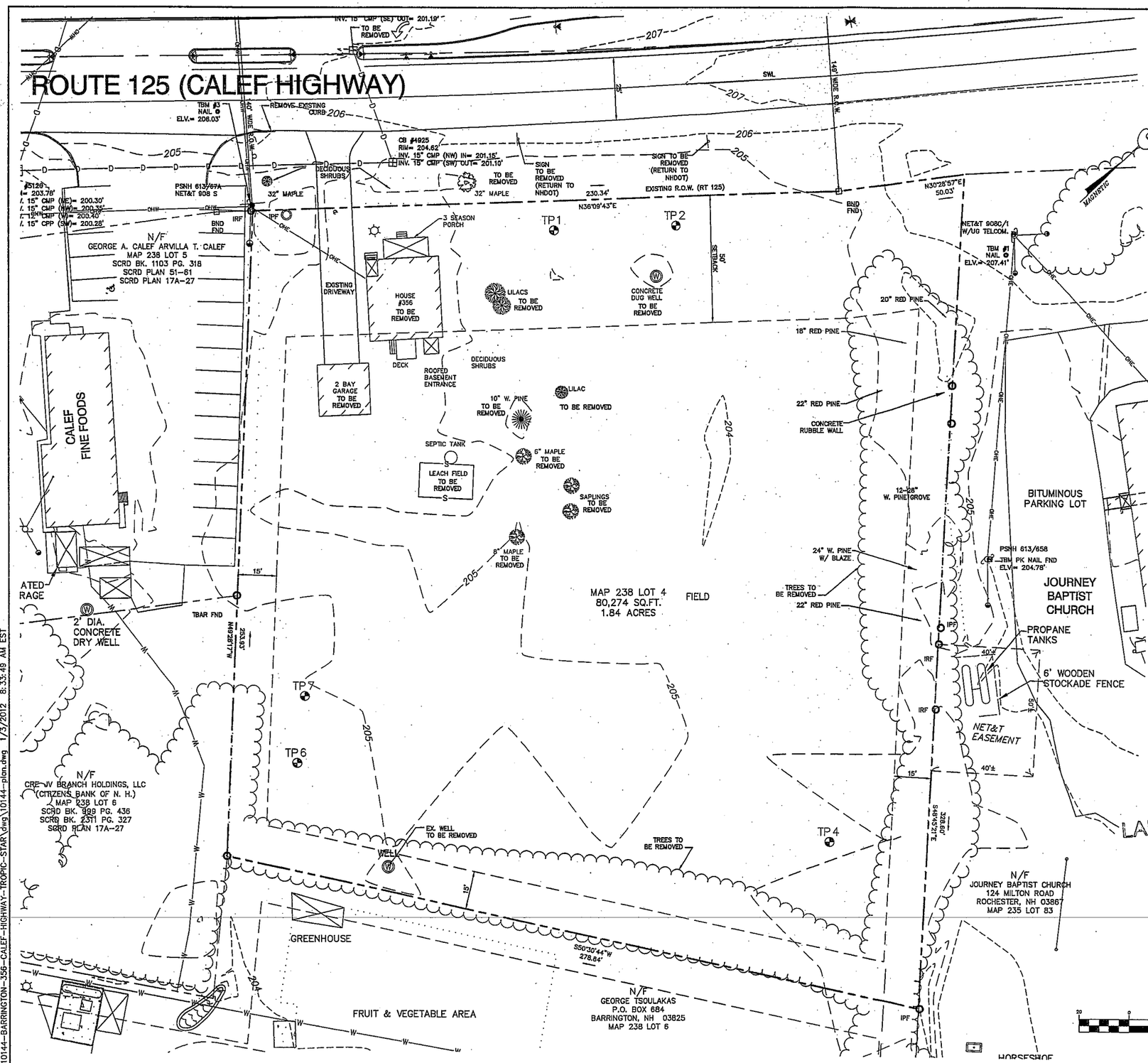

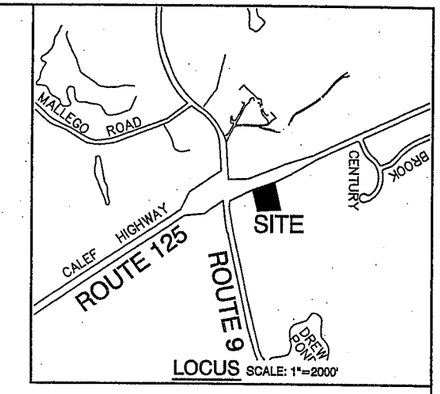

BARRINGTON, NEW HAMPSHIRE

ZONING
TOWN CENTER(TC)/STRATIFIED DRIFT AQUIFER OVERLAY

DIMENSIONAL REQUIREMENTS
MINIMUM LOT SIZE = 20,000 S.F.
MINIMUM FRONTAGE = 40'
FRONT SETBACK= 20' (50' ALONG RT. 125)
SIDE SETBACK = 15'
REAR SETBACK = 15'
MAX. LOT COVERAGE = 80%
MAXIMUM HEIGHT = 40' OR 3 STORIES

EXISTING CONDITIONS AND DEMOLITION NOTES:

1. THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR SITE DEMOLITION. IT SHOULD BE NOTED THAT ALL MANMADE FEATURES, PAVEMENT, SIGNS, POLES, CURBING, CONCRETE WALKS, UTILITIES, ETC., SHALL BE REMOVED AS NECESSARY TO CONSTRUCT WORK, UNLESS OTHERWISE NOTED TO REMAIN. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCIES FROM DATA AS SHOWN ON DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
2. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).
3. PROJECT DATUM: U.S.G.S.-1929.
4. BASE ELEVATION WAS ESTABLISHED THROUGH MULTIPLE GPS POST PROCESS OBSERVATIONS AND WAS REDUCED TO THE NAVD88 DATUM BY THE NATIONAL GEODETIC SURVEY OPUS SOFTWARE.
5. SUBJECT PROPERTY IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 33017C 0305 D, DATED MAY 17, 2005.
6. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED. CLEARING LIMITS ARE THE EDGE OF THE PROPERTY AND THE LIMITS OF WORK.
7. ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION AREA, UNLESS OTHERWISE NOTED TO REMAIN, SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES. ANY BURNING ON-SITE SHALL BE SUBJECT TO LOCAL ORDINANCES.
8. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL CONTAMINATED MATERIAL LOCATED IN THE AREA OF EXISTING LEACHFIELDS IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS.
9. ALL CURBING, CONCRETE, PAVEMENT, BUILDINGS AND SUBBASE MATERIALS LOCATED WITHIN PROPOSED LANDSCAPED AREAS SHALL BE REMOVED AND REPLACED WITH LOAM MATERIALS SUITABLE FOR LANDSCAPING IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS. (SEE ALSO LANDSCAPE PLAN).
10. SEE LANDSCAPE PLAN FOR "TREES TO BE SAVED" AND DETAILS ASSOCIATED WITH LANDSCAPED AREAS.
11. THE CONTRACTOR SHALL OBTAIN TREE CLEARING PERMIT FROM LOCAL AND STATE AUTHORITIES PRIOR TO START OF CONSTRUCTION (IF REQUIRED).
12. CONTRACTOR SHALL HAVE THE OPTION TO REMOVE DRAINAGE/SEWER STRUCTURES, OR REMOVE MANHOLE FRAME AND GRATE/COVER TO A MINIMUM OF 36" BELOW FINISH GRADE, FRACTURE BOTTOM AND FILL WITH COMPACTED BORROW.
13. IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
14. TEST PITS PERFORMED BY WAYNE MORRILL, JONES & BEACH ENGINEERS, INC., 11/16/11.
15. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND ANY EARTH MOVING OPERATIONS. SILT FENCE SHALL BE INSTALLED AT THE LIMITS OF IMPACT AREAS ACCORDING TO THE DETAILS SHOWN ON SHEET E1.
16. WETLAND BOUNDARIES AND CONSTRUCTION LIMITS ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.
17. EXCAVATED MATERIALS WILL BE PLACED WITHIN UPLAND AREAS AS FILL MATERIAL OR HAULED OFF-SITE FOR DISPOSAL IN AN APPROPRIATE UPLAND LOCATION.
18. ON-SITE SOILS OBTAINED FROM NRCS SOIL SURVEY: WINDSOR LOAMY SAND.
19. WETLANDS WERE DELINEATED BY CHRISTOPHER S. ALBERT OF JONES & BEACH ENGINEERS, INC., (JBE) IN OCTOBER, 2011 PERFORMED TO THE STANDARDS OF THE "US ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1" (JANUARY, 1987). THIS SITE CONTAINS NO WETLAND AREAS.

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OWNERS SIGNATURE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

STATE OF NEW HAMPSHIRE CHRISTOPHER S. ALBERT 12/23/13 No. 021 CERTIFIED WETLAND SCIENTIST

PROJECT PARCEL
TOWN OF BARRINGTON, NH
TAX MAP 238, LOT 4

APPLICANT
THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD
HAMPTON, NH 03842
BOOK 3937, PAGE 0522

TOTAL LOT AREA
80,273.55 SQ. FT.
1.84 ACRES

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Design: WGM	Draft: GPC	Date: 01/03/12
Checked: WGM	Scale: AS NOTED	Project No.: 10144
Drawing Name: 10144-PLAN.dwg		

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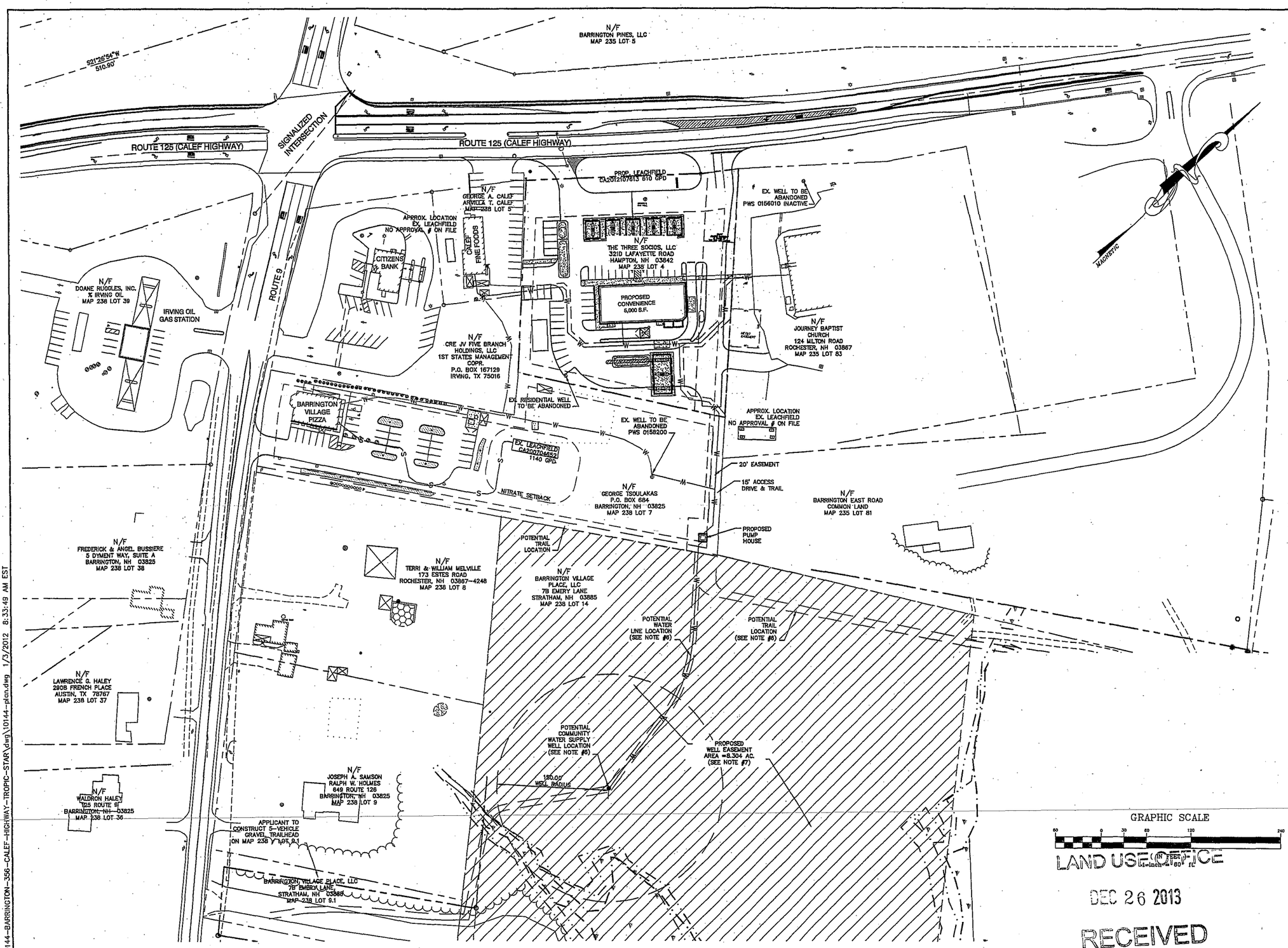
STATE OF NEW HAMPSHIRE BARRY W. GIER No. 12535 LICENSED PROFESSIONAL ENGINEER

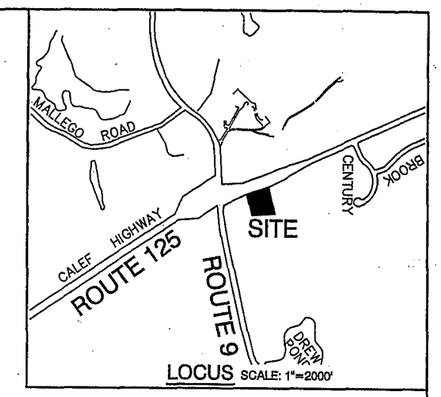
REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

Plan Name: EXISTING CONDITIONS PLAN
Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
C1
SHEET 2 OF 22
JBE PROJECT NO. 10144





SITE NOTES:

1. THE INTENT OF THIS PLAN IS TO DEPICT THE PROPOSED DEVELOPMENT OF BARRINGTON TAX MAP 238 LOT 4 AND THE SUBJECT LOT'S LOCATION RELATIVE TO MAJOR ROADWAYS AND PROPERTIES IN THE VICINITY.
2. CURRENT OWNER OF RECORD: THE THREE SOCIOS, LLC
   3210D LAFAYETTE ROAD
   HAMPTON, NH 03842
3. APPLICANT: THE THREE SOCIOS, LLC
   321D LAFAYETTE ROAD
   HAMPTON, NH 03842
4. TAX MAP 238 LOT 4
5. TOTAL PARCEL AREA: 1.84 ACRES
6. POTENTIAL WELL, WATERLINE, AND TRAILS TO BE DETERMINED BASED UPON FINAL WELL LOCATION.
7. FINAL WELL EASEMENT TO BE NO GREATER THAN 4 ACRES. FINAL LOCATION TO BE DETERMINED AFTER FINAL WELL LOCATION HAS BEEN ESTABLISHED.
8. WELL USERS AND ANTICIPATED FLOWS

BARRINGTON VILLAGE PIZZA (57 SEATS X 20 GPD)	= 1,140 GPD
CALEF FINE FOOD (2,000 SQ. FT. @ 7.5 GPD/100)	= 150 GPD
PROPOSED CONVENIENCE STORE 3,000 SQ. FT. @ 5 GPD/100 + 16 SEATS @ 20 GPD + 35 GPD/ EMPLOYEE	= 610 GPD
CHURCH (300 SEATS @ 3 GPD)	= 900 GPD
TOTAL FLOW	2,800 GPD

GRAPHIC SCALE

60 0 30 60 120 240

1 inch = 60 ft.

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PROJECT PARCEL
TOWN OF BARRINGTON, NH
TAX MAP 238, LOT 4

APPLICANT
THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD
HAMPTON, NH 03842
BOOK 3937, PAGE 0522

TOTAL LOT AREA
80,273.55 SQ. FT.
1.84 ACRES

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STATE OF NEW HAMPSHIRE BARRY W. GIER No. 12535 LICENSED PROFESSIONAL ENGINEER

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
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12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

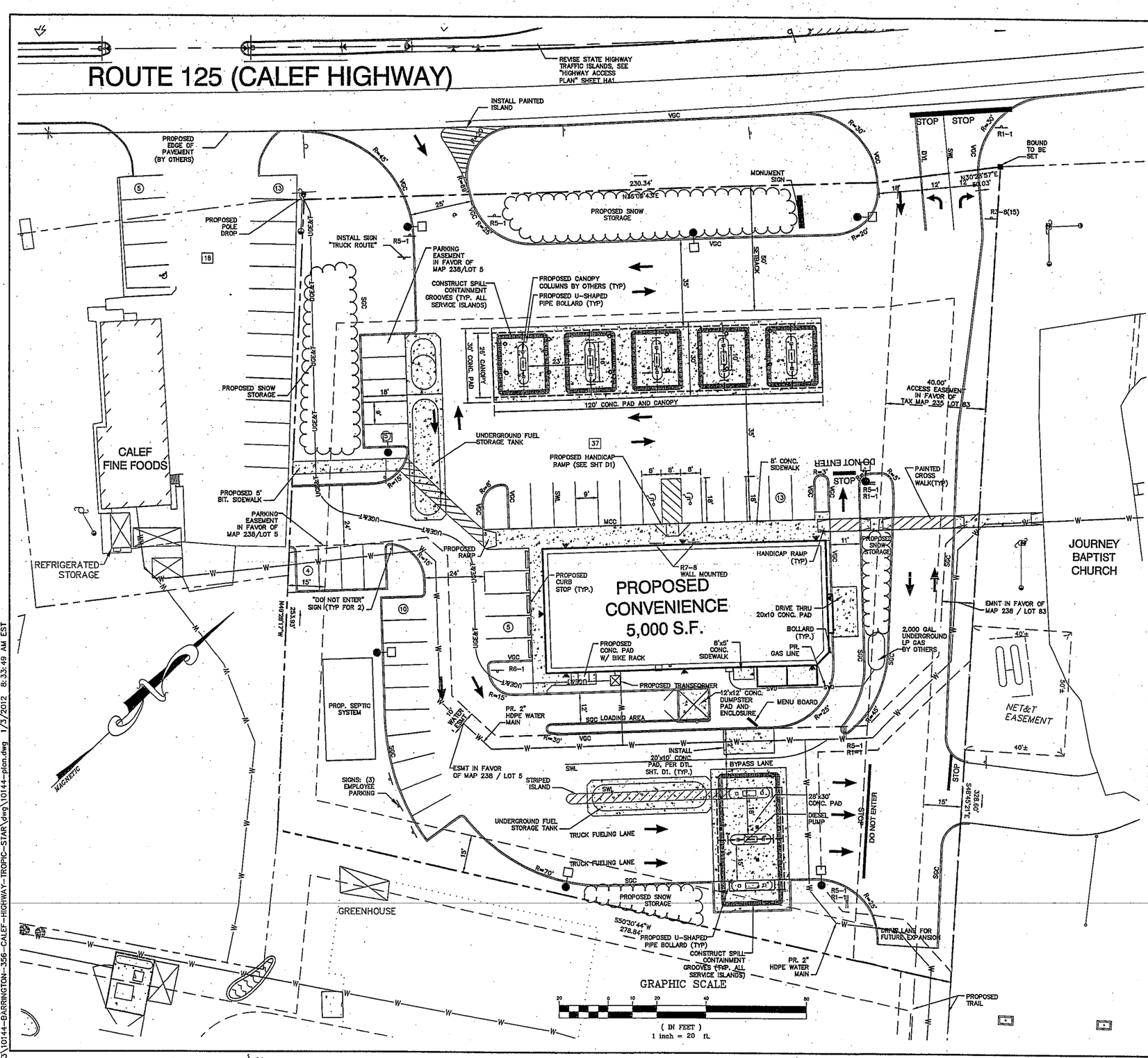
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

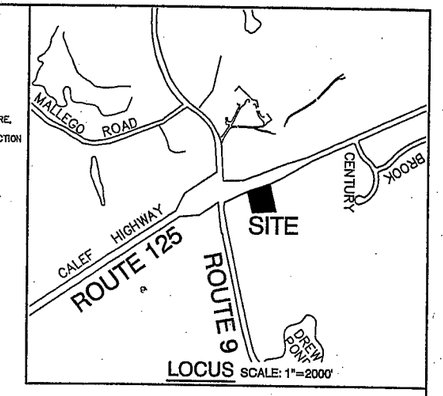
Plan Name:	OVERALL VICINITY PLAN
Project:	TROPIC STAR CONVENIENCE CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record:	THE THREE SOCIOS, LLC 321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.

C2

SHEET 3 OF 22





SITE NOTES:

1. THE INTENT OF THIS PLAN IS TO DEPICT THE PROPOSED DEVELOPMENT OF BARRINGTON TAX MAP 238 LOT 4 WITH A 5,000 SQ.FT. CONVENIENCE STORE, ASSOCIATED PARKING, DRAINAGE, AND UTILITIES. THIS PLAN INCLUDES IMPROVEMENTS TO TAX MAP 238 LOT 5 PARKING, AND DRIVE INTERCONNECTION TO TAX MAP 235 LOT 83.
2. CURRENT OWNER/APPLICANT OF RECORD:

   TAX MAP 238 / LOT 4
   THE THREE SOCIOS, LLC
   321D LAFAYETTE ROAD
   HAMPTON, NH 03842

   TAX MAP 238 / LOT 5
   CALEF, GEORGE & ARVILLA (2) 1/2 INT
   IN ARVILLA/ GEO LIVING TRUST
   35 MALLEGO ROAD
   BARRINGTON, NH 03825
3. TAX MAP 238 LOT 4, BOOK 3937 PAGE 0522
   TAX MAP 238 LOT 5
4. TOTAL PARCEL AREA: 1.84 ACRES
5. ZONING DISTRICT: TOWN CENTER (TC)
   MIN. LOT SIZE: 20,000
   MIN. LOT FRONTAGE: 40'
   MIN. YARD SETBACKS:
   FRONT 50' (RT 125)
   SIDE 15'
   REAR 15'
   MAX. BUILDING HEIGHT: 40'
   MAX. LOT COVERAGE: 80%
   PROPOSED LOT COVERAGE: 75.0%
   MIN. DRIVEWAY SEPARATION: 75'
   (WAIVER REQUIRED FOR EXISTING DRIVEWAY LOCATIONS)
6. PARKING CALCULATIONS:
   PARKING SPACE DIMENSIONS – 9'x18'
   DRIVE AISLE WIDTH – 24'
   MAX. DRIVEWAY WIDTH – 30'
   PARKING SPACE REQUIREMENTS:
   1 SPACE / 200 S.F. CONVENIENCE (LOT 4).
   1 SPACE / 75 S.F. FAST FOOD (LOT 4)
   1 SPACE / 300 S.F. GROCERY (LOT 5)

   4,000 S.F. (CONVENIENCE) / 200 = 20 SPACES REQUIRED (LOT 4)
   1,000 S.F. (FAST FOOD) / 75 = 13 SPACES REQUIRED (LOT 4)
   2,000 S.F. (GROCERY) / 300 = 7 SPACES (LOT 5)
   TOTAL SPACES REQUIRED = 40 SPACES

   PARKING SPACES PROVIDED = 55
7. THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ONSITE OR OFFSITE TO ENSURE SAFETY AND OBEY THE LAW.
8. ALL CONSTRUCTION SHALL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
9. SUBJECT PROPERTY IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 33017C 0305 D, DATED MAY 17, 2005.
10. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.). THIS DOCUMENT IS TO BE KEPT ONSITE AT ALL TIMES AND UPDATED AS REQUIRED.
11. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
12. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED. A SIGN PERMIT MUST BE OBTAINED PRIOR TO SIGN INSTALLATION.
13. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND NHDOT STANDARDS AND SPECIFICATIONS (NON-REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.
14. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING SHALL HAVE TWO COATS OF PAINT, ALKYD BASIN SYNTHETIC RESIN, FEDERAL SPECIFICATION TTP-115 TYPE 1, IN A COLOR OF WHITE.
15. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.
16. ALL CURBING SHALL BE CONSTRUCTED WITH A MINIMUM RADIUS OF 2', UNLESS OTHERWISE NOTED.
17. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.
18. ALL OUTDOOR DISPLAY AREAS SHALL BE MAINTAINED IN A NEAT AND ORDERLY FASHION.
19. SNOW TO BE STORED AT EDGE OF PAVEMENT AND IN AREAS SHOWN ON THE PLANS, OR TRUCKED OFFSITE TO AN APPROVED SNOW DUMPING LOCATION.
20. ROOF TOP HEATING AND AIR CONDITIONING UNITS (RTU's) SHALL BE DESIGNED TO VENT UPWARDS AND AIR INTAKES SHALL BE DIRECTED AWAY FROM ABUTTING NEIGHBORS.
21. NO OVERNIGHT TRACTOR TRAILER PARKING SHALL BE ALLOWED ON THE PREMISES. NO TRUCK HORN BLOWING SHALL BE ALLOWED ON THE PREMISES.
22. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
23. PROPERTY IS LOCATED IN THE STRATIFIED DRIFT AQUIFER OVERLAY DISTRICT AND STORAGE TANKS MUST COMPLY WITH THE TOWNS ZONING ORDINANCE.
24. SUBJECT PROPERTY TO BE SERVICED BY ON-SITE SEPTIC AND COMMUNITY WELL.
25. THIS PLAN DEPICTS SUFFICIENT QUEING (AT ORDERING BOARD) FOR TEN (10) VEHICLES, FROM ORDERING BOARD TO DRIVE ALONG FRONT OF BUILDING.
26. SPILL CONTAINMENT GROOVES SHALL BE SIZED TO CONTAIN FIVE (5) GALLONS MINIMUM PER DISPENSER, PER NHDES ADMINISTRATIVE RULE ENV-WM 1401.28V.

CERTIFICATION:

MY SEAL AND SIGNATURE ARE AFFIXED TO THIS PLAT ON THE BEHALF OF JONES & BEACH ENGINEERS, INC., OF STRATHAM, NH, FOR THE SOLE PURPOSE OF SATISFYING THE REQUIREMENT OF THE TOWN OF BARRINGTON'S RECORDATION OF APPROVED SITE PLANS.

PURSUANT TO RSA 676:18-III AND RSA 672:14

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

A COPY OF THIS PLAN HAS BEEN FILED WITH THE TOWN OF BARRINGTON PLANNING BOARD RSA 676:18 PAR. IV

OWNERS SIGNATURE – MAP 238 / LOT 4

OWNERS SIGNATURE – MAP 238 / LOT 5

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STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 892 DAVID M. COLLIER
SIGNATURE

DAVID M. COLLIER, LLS 892 DATE:
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

PLANNING BOARD APPROVAL BLOCK

Design: WGM	Draft: GPC	Date: 01/03/12
Checked: WGM	Scale: AS NOTED	Project No.: 10144
Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE BARRY W. GIER No. 12935 LICENSED PROFESSIONAL ENGINEER

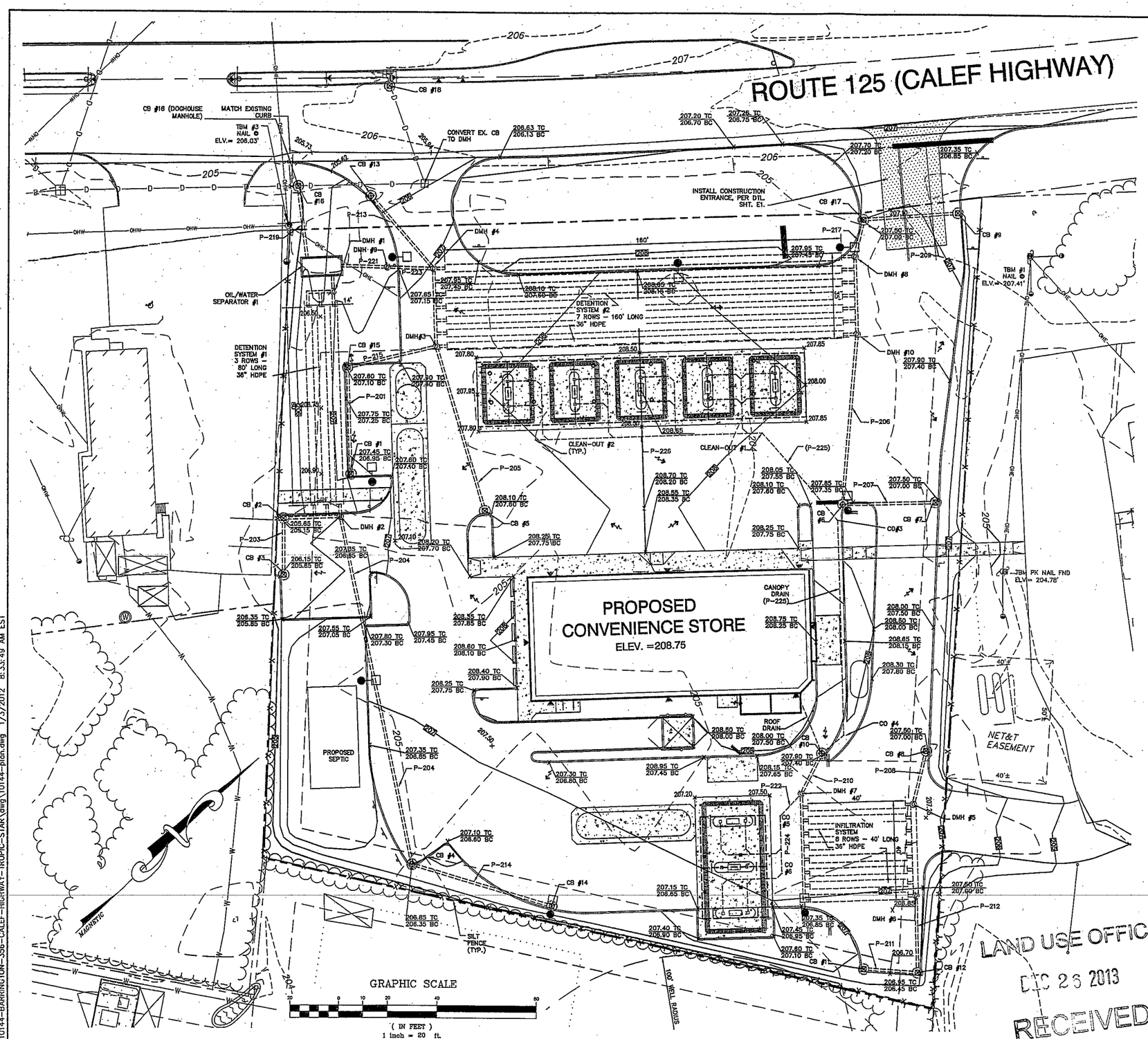
REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/23/13	REVISED PER NHDOT	BWG

Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

Plan Name: SITE PLAN
Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
C3
SHEET 4 OF 22
JBE PROJECT NO. 10144

F:\Land Projects 3\10144-BARRINGTON-356-CALEF-HIGHWAY-TROPIC-STAR\dwg\10144-plan.dwg 1/3/2012 8:33:49 AM EST



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DRAINAGE STRUCTURES:

CB #1
RIM = 206.95
INVout=202.80 (P-201)

CB #2
RIM = 205.20
INVin=202.00 (P-203)
INVout=201.90 (HDR)

CB #3
RIM = 205.65
INVout=202.20 (P-203)

CB #4
RIM=206.35
INVin=202.85 (P-214)
INVout=202.75 (P-204)

CB #5
RIM=207.80
INVout=202.50 (P-205)

CB #6
RIM=207.35
INVin=202.60 (P-207)
INVout=202.50, (P-208)

CB #7
RIM=207.00
INVout=202.80 (P-207)

CB #8
RIM=206.80
INVout=201.85 (P-208)

CB #9
RIM=206.70
INVout=202.55 (P-209)

CB #10
RIM=207.50
INVin=203.35 (ROOF)
INVin=201.85 (CANOPY)
INVout=201.70 (P-210)

CB #11
RIM=206.45
INVout=202.10 (P-211)

CB #12
RIM=206.45
INVin=202.00 (P-211)
INVout=201.90 (P-212)

CB #13
RIM=205.50
INVout=202.35 (P-213)

CB #14
RIM=206.25
INVout=203.15 (P-214)

CB #15
RIM=207.10
INVin=202.55 (P-201)
INVout=202.45 (P-215)

CB #16
RIM=205.40
INVin=200.85 (P-218)
INVout=200.85 (EX. 15")

CB #17
RIM=207.00
INVin=202.35 (P-209)
INVout=202.25 (P-217)

CB #18
RIM=206.15
INVout=201.90 (EX. 15")

OIL/WATER SEPARATOR #1
INVin=201.25 (P-220)
INVin=201.25 (P-221)
INVout=201.00 (P-219)

DMH #1
(SEE DTL. SHT. D2)
RIM=206.75
INVin=201.90 (HDR)
INVin=201.40 (UNDER)
INVout=201.30 (P-220)

DMH #2
RIM=206.00
INVin=202.00 (P-204)
INVout=201.90 (HDR)

DMH #3
RIM=207.60
INVin=202.15 (P-205)
INVin=202.15 (P-215)
INVout=202.05 (HDR)

DMH #4
RIM=207.05
INVin=202.15 (P-213)
INVin=202.05 (HDR)
INVin=201.55 (UNDER)
INVout=201.45 (P-223)

DMH #5
RIM=207.15
INVin=201.60 (P-208)
INVout=201.50 (HDR)

DMH #6
RIM=206.95
INVin=201.60 (P-212)
INVout=201.50 (HDR)

DMH #7
RIM=207.40
INVin=201.60 (P-217)
INVout=201.50 (HDR)

DMH #8
RIM=207.30
INVin=202.15 (P-217)
INVout=202.05 (HDR)

DMH #9
(SEE DTL. SHT. D2)
RIM=207.85
INVin=201.35 (P-223)
INVout=201.35 (P-221)

DMH #10
RIM=207.60
INVin=202.15 (P-206)
INVout=202.05 (HDR)

P-201
43' – 15" HDPE
S=0.005 FT/FT

P-203
23' – 15" HDPE
S=0.005 FT/FT

P-204
144' – 15" HDPE
S=0.005 FT/FT

P-205
69' – 15" HDPE
S=0.005 FT/FT

P-206
69' – 15" HDPE
S=0.005 FT/FT

P-207
38' – 15" HDPE
S=0.005 FT/FT

P-208
22' – 15" HDPE
S=0.010 FT/FT

P-209
36' – 15" HDPE
S=0.005 FT/FT

P-210
18' – 15" HDPE
S=0.005 FT/FT

P-211
22' – 15" HDPE
S=0.005 FT/FT

P-212
31' – 15" HDPE
S=0.010 FT/FT

P-213
39' – 15" HDPE
S=0.005 FT/FT

P-214
59' – 15" HDPE
S=0.005 FT/FT

P-215
37' – 15" HDPE
S=0.008 FT/FT

P-217
15' – 15" HDPE
S=0.005 FT/FT

P-219
30' – 15" HDPE
S=0.005 FT/FT

P-220
7' – 15" HDPE
S=0.005 FT/FT

P-221
19' – 15" HDPE
S=0.010 FT/FT

P-222 (CANOPY)
12' – 8" HDPE
S=0.010 FT/FT

P-223
19' – 15" HDPE
S=0.005 FT/FT

P-224 (CANOPY)
23' – 8" HDPE
S=0.010 FT/FT

P-225 (CANOPY)
156' – 8" HDPE
S=0.008 FT/FT

P-226 (CANOPY)
92' – 8" HDPE
S=0.010 FT/FT

ROOF DRAIN
35' – 8" HDPE
S=0.010 FT/FT

CO #1
INV=203.10 (P-225)
INV=203.10 (P-226)

CO #2
INV=204.00 (P-226)

CO #3
INV=202.73 (P-225)

CO #4
INV=202.04 (P-225)

CO #5
INV=202.30 (P-222)

CO #6
INV=202.55 (P-224)

GRADING AND DRAINAGE NOTES:

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888-DIG-SAFE (888-344-7233).
2. PROJECT DATUM: USGS
3. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
4. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
5. ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
6. PROPOSED RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
7. ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIED.
8. ALL DRAINAGE STRUCTURE INTERIOR DIAMETERS (4' MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 3' DEEP SUMPS WITH GREASE HOODS, UNLESS OTHERWISE NOTED.
9. ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED.
10. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
11. IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES. IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
12. ALL DRAINAGE PIPE SHALL BE NON-PERFORATED REINFORCED CONCRETE PIPE (RCP) OR APPROVED EQUAL, UNLESS OTHERWISE INDICATED.
13. STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS. SEE DETAIL WITHIN THE DETAIL SHEETS.
14. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
15. SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
16. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.5" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
17. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
18. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
19. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCH DIA. CLEAR OPENING. THE WORD "DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
20. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H20 LOADS.
21. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
22. SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
23. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
24. SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.
25. IMPERMEABLE LINER SHALL BE 30 MIL. THICK HDPE GSE HD SMOOTH GEOMEMBRANE LINER AS MANUFACTURED BY GSE LINING TECHNOLOGIES, LLC. OR APPROVED EQUAL.
26. OWNER IS TO COMPLY WITH THE STIPULATIONS OF THE STORMWATER MANAGEMENT/SPILL PREVENTION OPERATIONS AND MAINTENANCE MANUAL AS PREPARED BY JONES & BEACH, INC., FOR THE THREE SOCIOS; 321 D LAFAYETTE ROAD; HAMPTON, NH 03842. THIS SHALL RUN WITH THE LAND.
27. OWNER IS TO COMPLY WITH THE LANDSCAPE, AS WELL AS DRAINAGE SCHEDULE MAINTENANCE, AS STIPULATED IN THE STORMWATER MANAGEMENT/SPILL PREVENTION OPERATIONS AND MAINTENANCE MANUAL AS PREPARED BY JONES & BEACH, INC., FOR THE THREE SOCIOS; 321 D LAFAYETTE ROAD; HAMPTON, NH 03842. THIS SHALL RUN WITH THE LAND.
28. OWNER IS TO COMPLY WITH ALL NOTES AND SPECIFICATIONS AS SHOWN ON PLAN SHEETS TITLED: LANDSCAPE NOTES (L2.0), PLANS (L 3.0), DETAILS (L4.0 AND 4.1), AND SPECS (L5.0), AS SHOWN ON SHEETS 13–17.

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Design: WGM	Draft: GPC	Date: 01/03/12	
Checked: WGM	Scale: AS NOTED	Project No.: 10144	
Drawing Name: 10144-PLAN.dwg			

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STATE OF NEW HAMPSHIRE – BARRY W. GIER No. 12535 – LICENSED PROFESSIONAL ENGINEER – 01/23/13

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

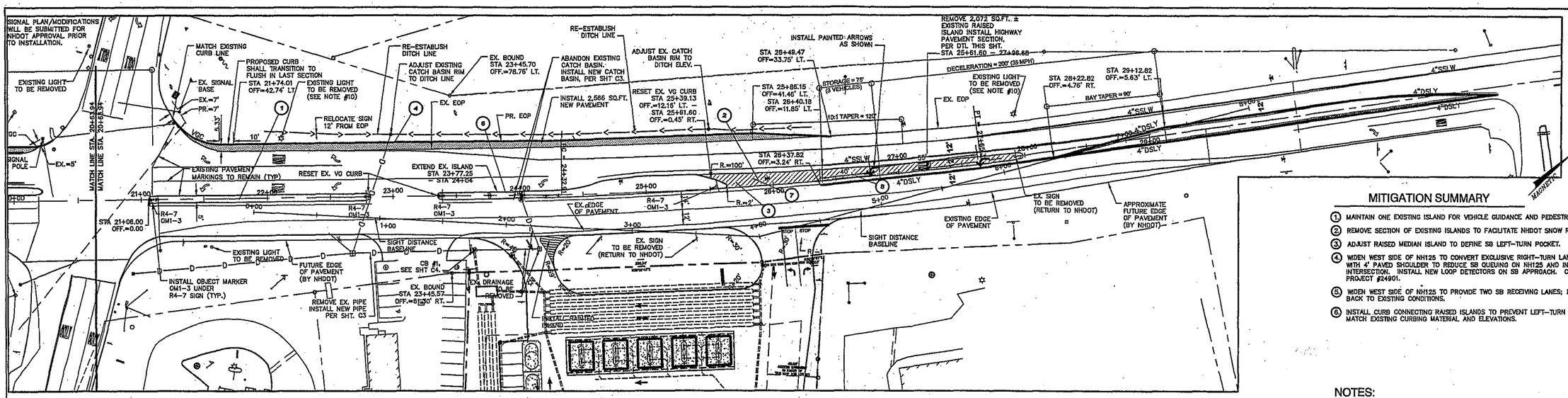
Plan Name: GRADING AND DRAINAGE PLAN

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
C4

SHEET 5 OF 22
JBE PROJECT NO. 10144



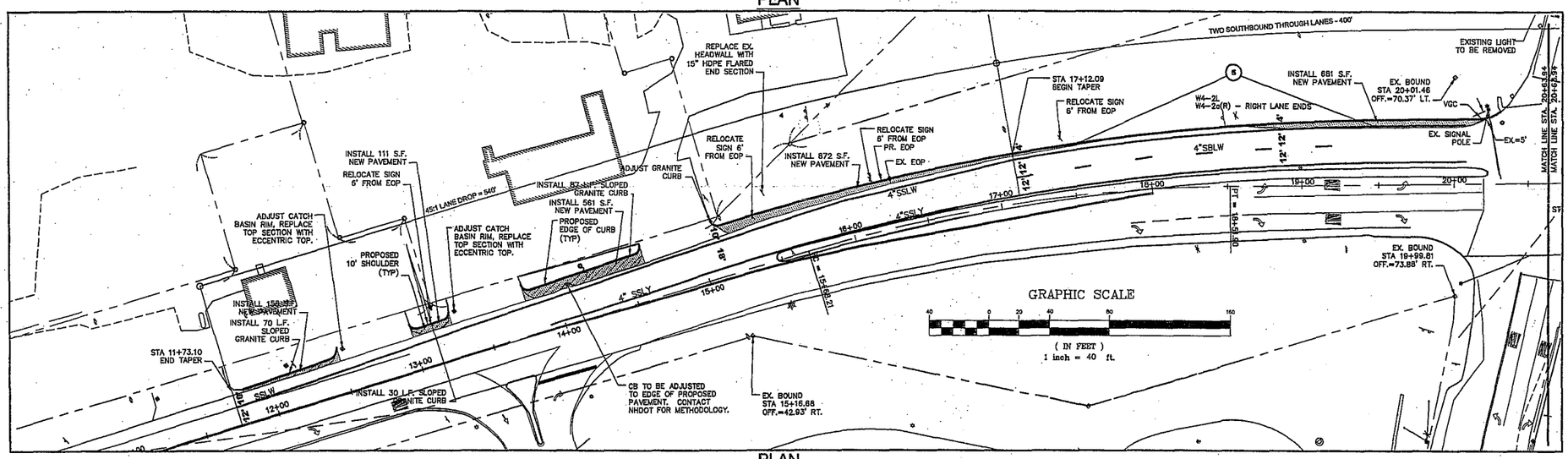
PLAN

MITIGATION SUMMARY

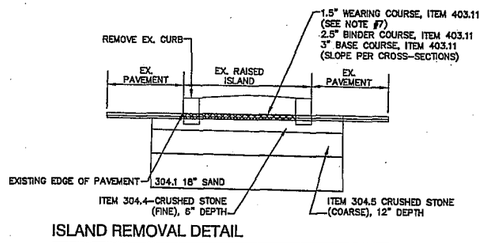
1. MAINTAIN ONE EXISTING ISLAND FOR VEHICLE GUIDANCE AND PEDESTRIAN REFUGE.
2. REMOVE SECTION OF EXISTING ISLANDS TO FACILITATE NHDOT SNOW REMOVAL, AS SHOWN.
3. ADJUST RAISED MEDIAN ISLAND TO DEFINE SB LEFT-TURN POCKET.
4. WIDEN WEST SIDE OF NH125 TO CONVERT EXCLUSIVE RIGHT-TURN LANE INTO A SHARED THROUGH-RIGHT LANE WITH 4' PAVED SHOULDER TO REDUCE SB QUEUING ON NH125 AND INCREASE CAPACITY OF SIGNALIZED INTERSECTION. INSTALL NEW LOOP DETECTORS ON SB APPROACH. COORDINATE WITH NHDOT RESURFACING PROJECT #24901.
5. WIDEN WEST SIDE OF NH125 TO PROVIDE TWO SB RECEIVING LANES; PROVIDE 45:1 LANE DROP TO TRANSITION BACK TO EXISTING CONDITIONS.
6. INSTALL CURB CONNECTING RAISED ISLANDS TO PREVENT LEFT-TURN EXIT FROM SOUTHERN SITE ENTRANCE. MATCH EXISTING CURBING MATERIAL AND ELEVATIONS.

NOTES:

1. THE INTENT OF THIS PLAN IS TO DEPICT THE PROPOSED PHASE 1 IMPROVEMENTS TO ROUTE 125 AND THE SIGHT DISTANCE AVAILABLE FOR THE PROPOSED PROJECT EXIT ONTO ROUTE 125.
2. EXISTING CHANNELIZATION ISLANDS WITHIN ROUTE 125 SHALL BE REMOVED TO ROADWAY BASE AS SHOWN.
3. CONTRACTOR SHALL INSTALL NHDOT HIGHWAY PAVEMENT SECTION, SEE DETAIL THIS SHEET, IN AREAS OF ISLAND REMOVAL AS SHOWN ON PLAN.
4. CONTRACTOR SHALL INSTALL PAVEMENT MARKINGS WITHIN ROUTE 125 AS SHOWN THIS PLAN.
5. CONTRACTOR SHALL CONTACT NHDOT BUREAU OF TRAFFIC, PETER CROUCH (603-271-2291) ONE WEEK PRIOR TO MARKING AND SIGN INSTALLATION FOR REVIEW AND APPROVAL.
6. PROPOSED STRIPING SHALL BE LAID OUT BY CONTRACTOR AND REVIEWED BY PETER CROUCH TO ALLOW TWO SOUTHBOUND LANES ON ROUTE 125.
7. CONTRACTOR TO COORDINATE WITH NHDOT PRIOR TO INSTALLATION OF WEARING COURSE.
8. CONTACT NHDOT DISTRICT 6 PRIOR TO CONSTRUCTION FOR RELOCATION OR REMOVAL INSTRUCTIONS.
9. DRAINAGE IMPROVEMENTS DEPICTED TO BE COMPLETED BY THE CONTRACTOR AND AS SHOWN ON PLAN SHEET C4.
10. CONTRACTOR TO CONTACT FNSH AND NHDOT PRIOR TO LIGHT REMOVAL. LIGHT POLE AND FIXTURE SHALL REMAIN THE PROPERTY OF NHDOT.
11. CONTRACTOR TO COORDINATE ALL WORK WITH ALL STATE ASPHALT, INC. PRIOR TO THEIR SCHEDULED PAVEMENT OVERLAY.



PLAN

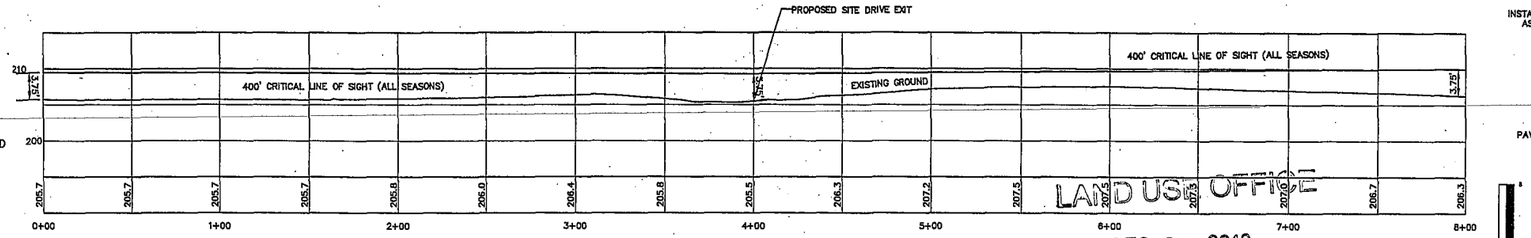


ISLAND REMOVAL DETAIL

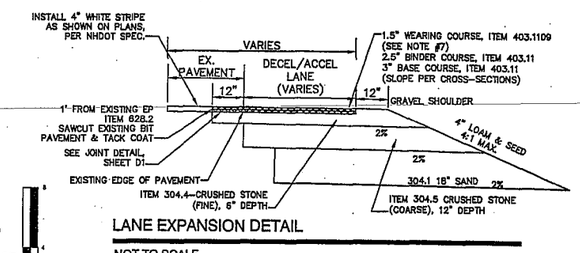
NOT TO SCALE

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		CENTERLINE
		EDGE OF PAVEMENT
SWL		SINGLE WHITE LINE
DYL		DOUBLE YELLOW LINE
DYL		DOUBLE YELLOW LINE
D		DRAINAGE LINE
		EXISTING RAISED ISLAND TO BE REMOVED



SIGHT DISTANCE PROFILE



LANE EXPANSION DETAIL

NOT TO SCALE

GRAPHIC SCALE (IN FEET) 1 inch = 40 ft. Horiz. 1 inch = 4 ft. Vert.

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Checked: WGM	Scale: AS NOTED	Project No.: 10144
Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE – BARRY W. GIER No. 12535 – LICENSED PROFESSIONAL ENGINEER – 10/18/96

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

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PO Box 219
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603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

Plan Name: HIGHWAY ACCESS PLAN - PHASE 1

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
HA1
SHEET 6 OF 22

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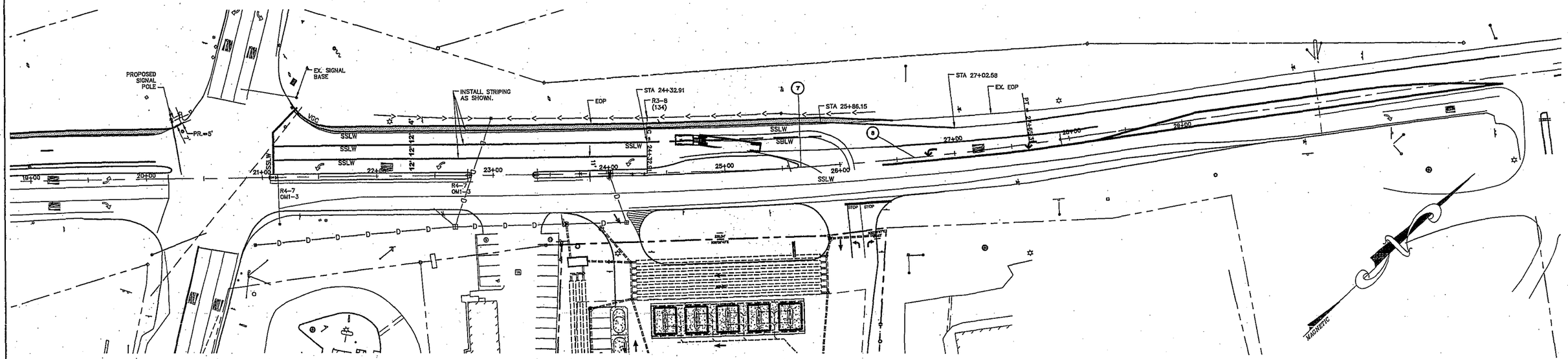

PLAN

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NOTES:

1. THE INTENT OF THIS PLAN IS TO DEPICT THE PHASE 2 PROPOSED IMPROVEMENTS TO ROUTE 125.
2. CONTRACTOR SHALL INSTALL PAVEMENT MARKINGS WITHIN ROUTE 125 AS SHOWN THIS PLAN.
3. CONTRACTOR SHALL CONTACT NHDOT BUREAU OF TRAFFIC, PETER CROUCH (603-271-2291) ONE WEEK PRIOR TO MARKING AND SIGN INSTALLATION FOR REVIEW AND APPROVAL.
4. CONTACT NHDOT DISTRICT 6 PRIOR TO RELOCATION FOR RELOCATION OR REMOVAL INSTRUCTIONS.
5. DRAINAGE IMPROVEMENTS DEPICTED TO BE COMPLETED BY THE CONTRACTOR AND AS SHOWN ON PLAN SHEET C4.

MITIGATION SUMMARY

7. PROVIDE WIDENED CENTER LANE TO FACILITATE LEFT-TURN DEPARTURES FROM SITE DRIVEWAY (TWO-STAGE GAP-ACCEPTANCE PROCESS).
8. INSTALL EXCLUSIVE LEFT-TURN LANE ON NH125 FOR SB VEHICLES ENTERING SITE.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		CENTERLINE
		EDGE OF PAVEMENT
	SWL	SINGLE WHITE LINE
	DYL	DOUBLE YELLOW LINE
	DYL	DOUBLE YELLOW LINE
D		DRAINAGE LINE
		EXISTING RAISED ISLAND TO BE REMOVED

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Checked: WGM	Scale: AS NOTED	Project No.:10144
Drawing Name: 10144-PLAN.dwg		

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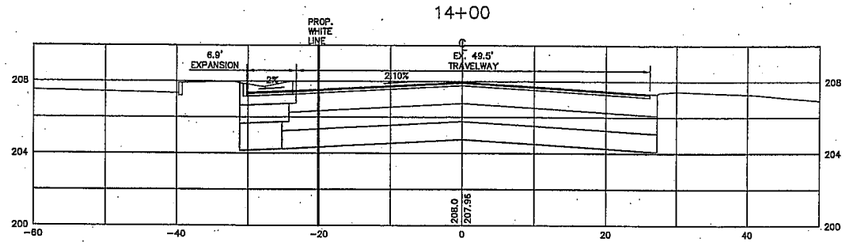
STATE OF NEW HAMPSHIRE BARRY W. GIER No. 12535 LICENSED PROFESSIONAL ENGINEER

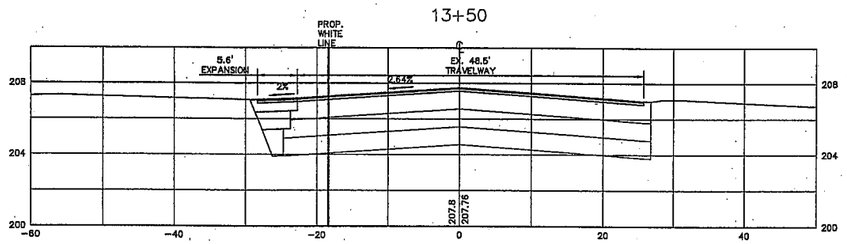
REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

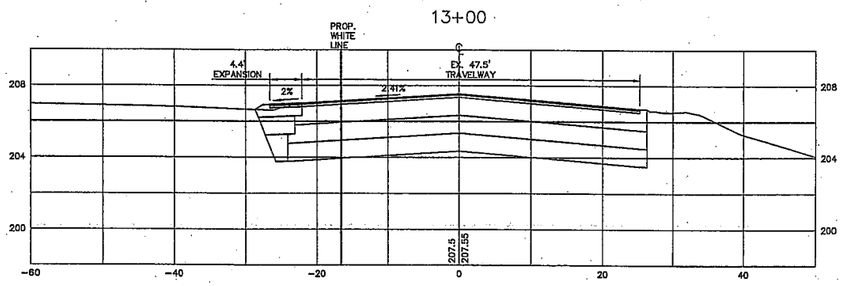
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

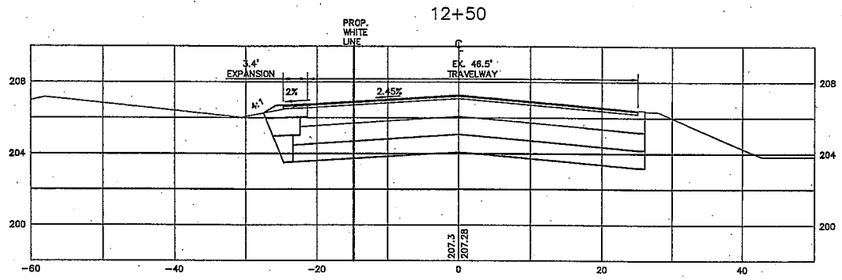
Plan Name:	HIGHWAY ACCESS PLAN - PHASE 2
Project:	TROPIC STAR CONVENIENCE CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record:	THE THREE SOCIOS, LLC 331D LAFAYETTE ROAD, HAMPTON, NH 03842

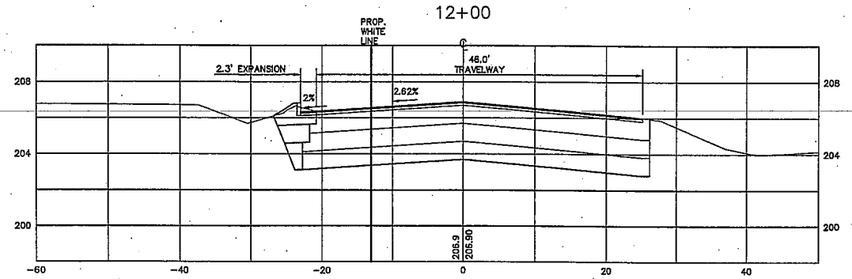
DRAWING No.
HA2
SHEET 7 OF 22

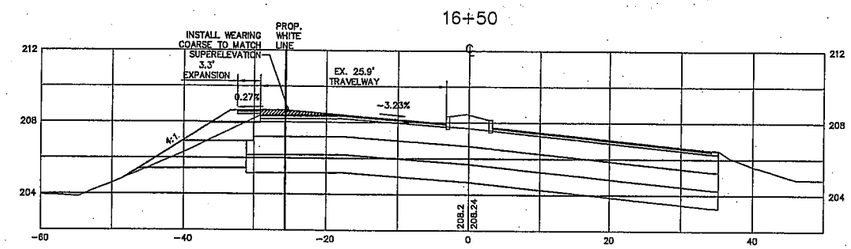


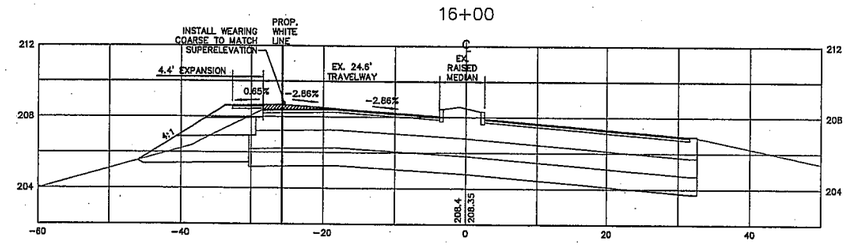


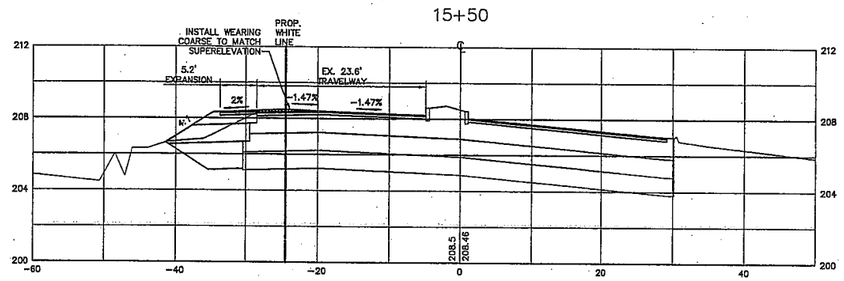


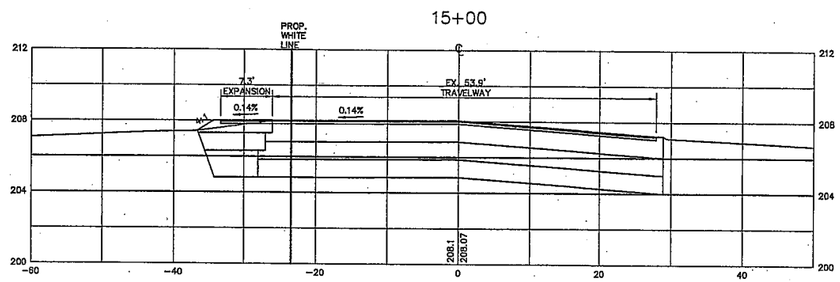


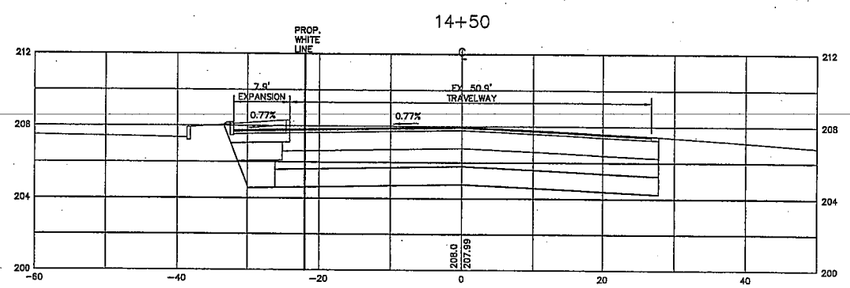












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GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft Horiz.
1 inch = 4 ft Vert.

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Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE - BARRY W. GIER No. 12535 - LICENSED PROFESSIONAL ENGINEER

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11	07/29/13	REVISED PER NHDOT	BWG

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Civil Engineering Services
85 Portsmouth Ave.
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Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

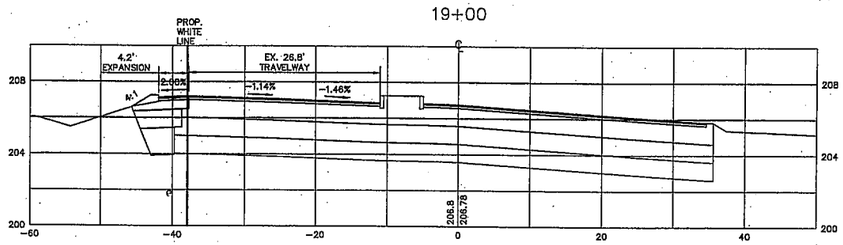
Plan Name: N.H. ROUTE 125 - CROSS SECTION PLAN #1

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
HX1
SHEET 6 OF 22
JBE PROJECT NO. 10144

19+00



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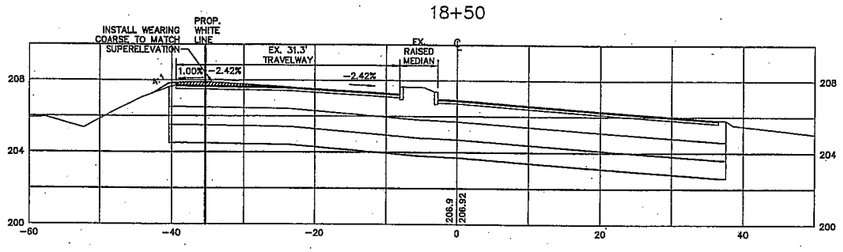

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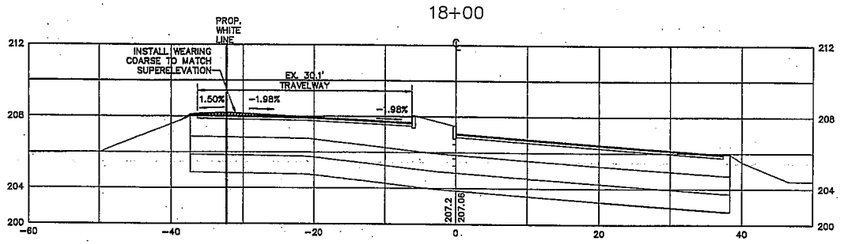

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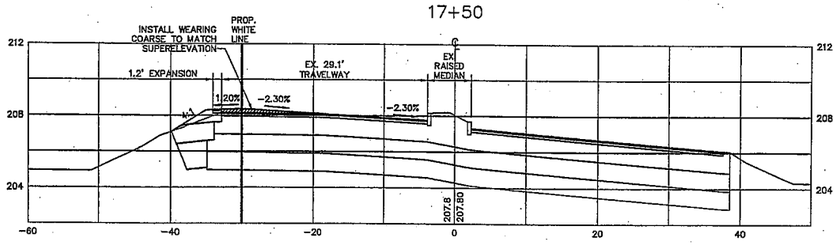

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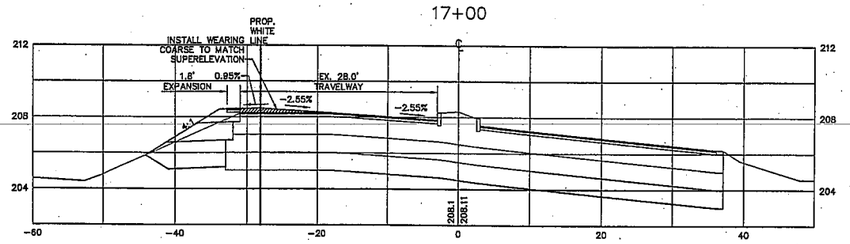

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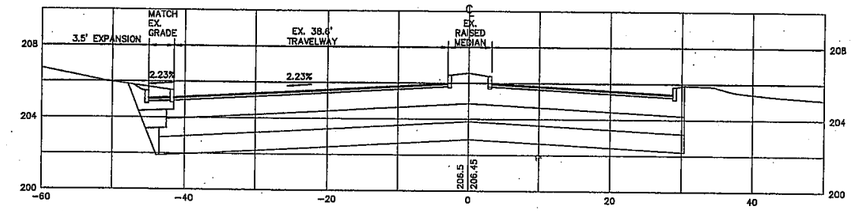

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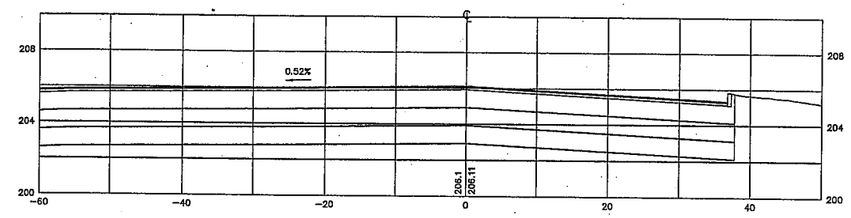

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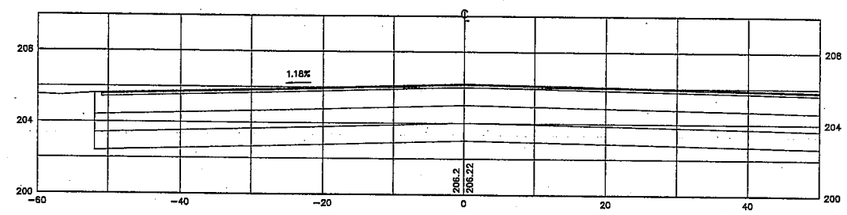

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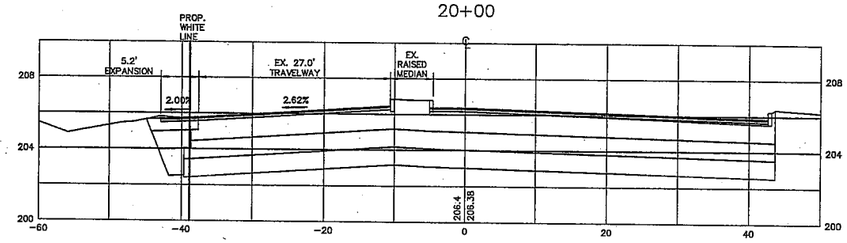

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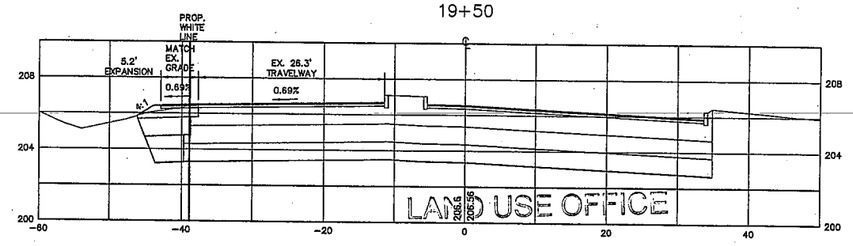

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Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE BARRY W. GIER No. 12835 LICENSED PROFESSIONAL ENGINEER 12/13/12

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11	07/29/13	REVISED PER NHDOT	BWG

J/B Jones & Beach Engineers, Inc.
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85 Portsmouth Ave.
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Stratham, NH 03885
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E-Mail: JBE@JONESANDBEACH.COM

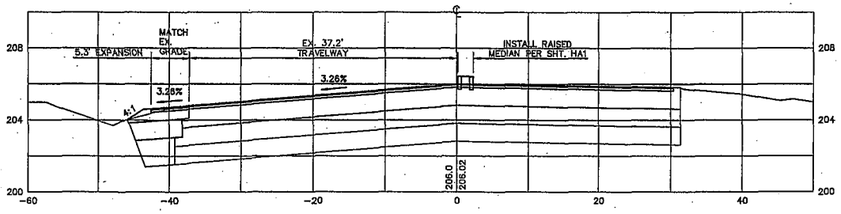
Plan Name: N.H. ROUTE 125 - CROSS SECTION PLAN #2

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
HX2
SHEET 9 OF 22

24+00



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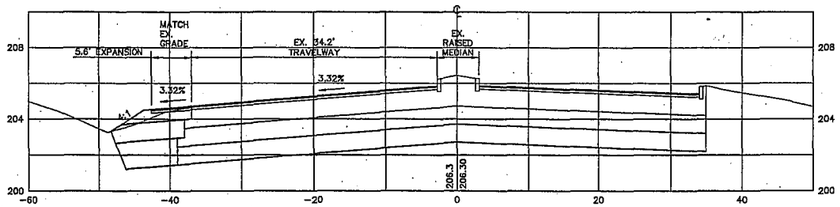

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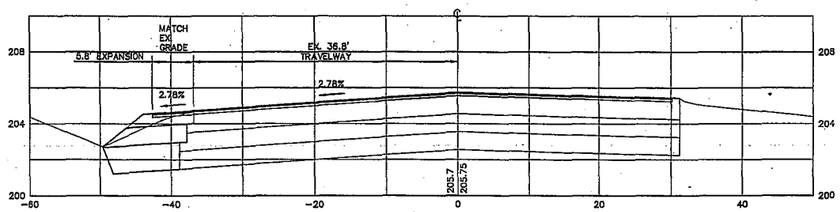

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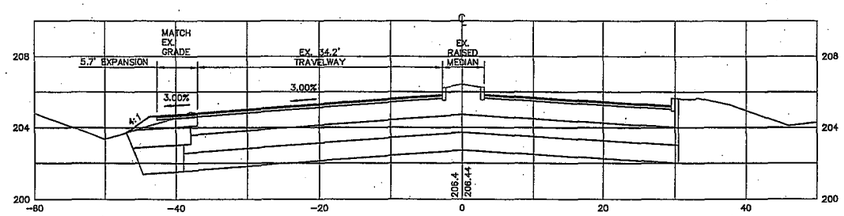

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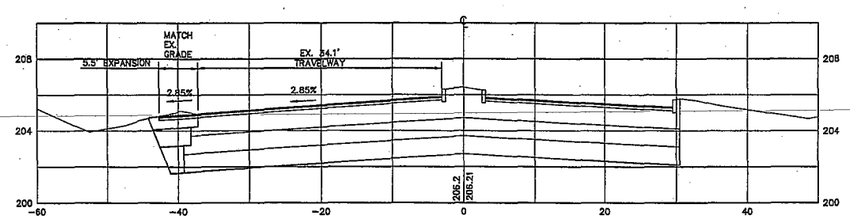

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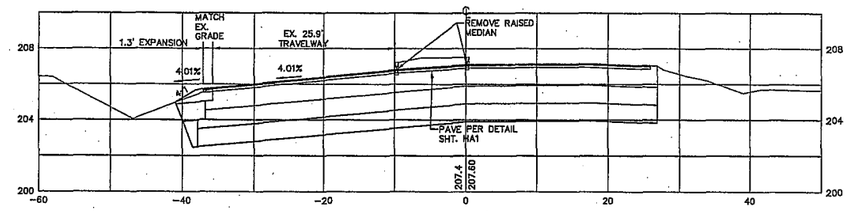

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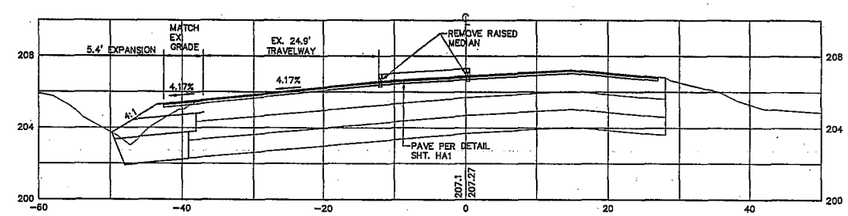

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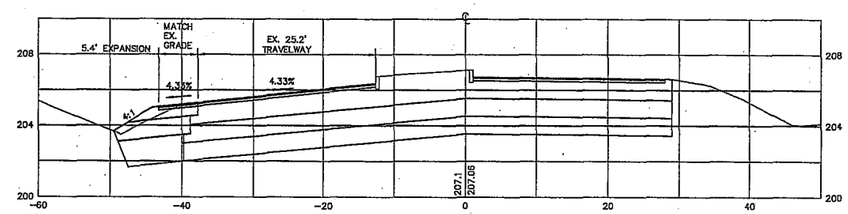

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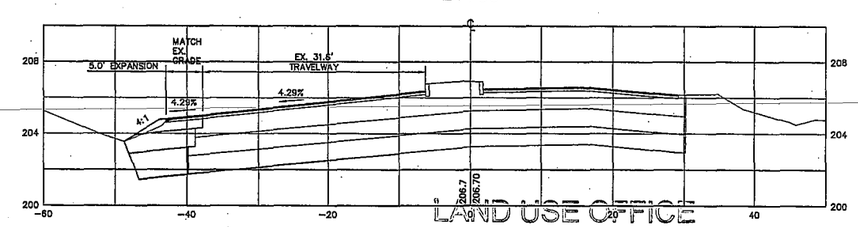

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Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE BARRY W. GIBB No. 12535 LICENSED PROFESSIONAL ENGINEER 12/28/12

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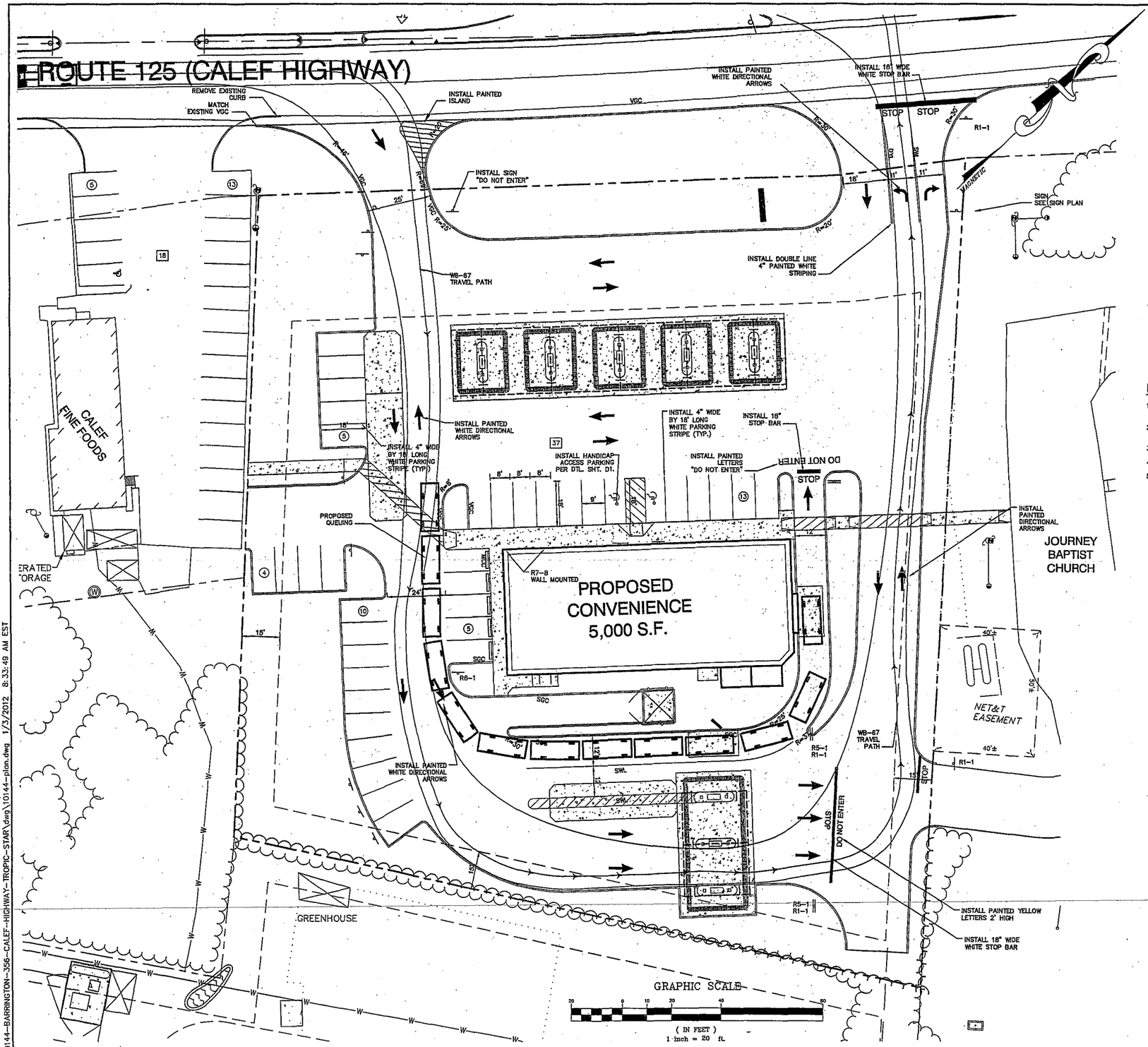
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

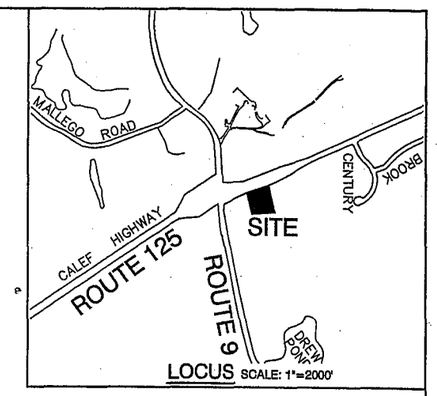
Plan Name: N.H. ROUTE 125 - CROSS SECTION PLAN #3

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
HX3
SHEET 10 OF 22
JBE PROJECT NO. 10144





NOTES:

1. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND NHDOT STANDARDS AND SPECIFICATIONS (NON-REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.
2. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING SHALL HAVE TWO COATS OF PAINT, ALKYD BASIN SYNTHETIC RESIN, FEDERAL SPECIFICATION TTP-115 TYPE 1, IN A COLOR OF WHITE.
3. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.
4. PAINTED ISLANDS SHALL BE CONSTRUCTED UTILIZING 4" WHITE STRIPES AT 1'-6" O.C. AT 45 DEGREES.
5. ARROWS AND LETTERING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS AND MARKINGS BOOK.

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Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE GARRY W. GER No. 12535 LICENSED PROFESSIONAL ENGINEER 12/28/12

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11	07/29/13	REVISED PER NHDOT	BWG

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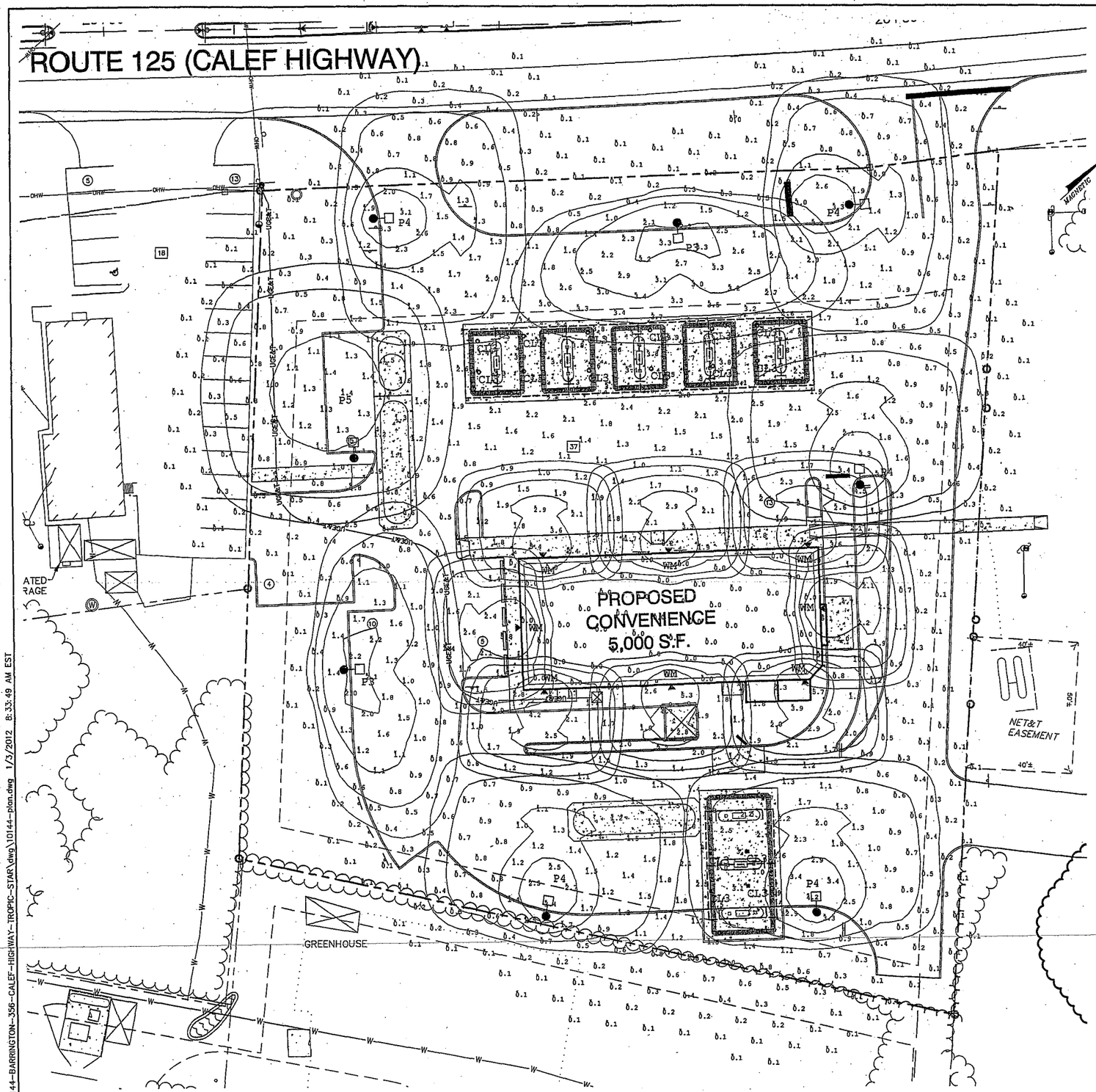
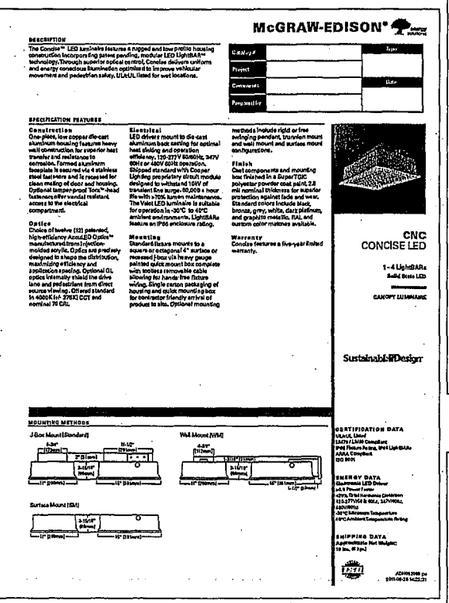
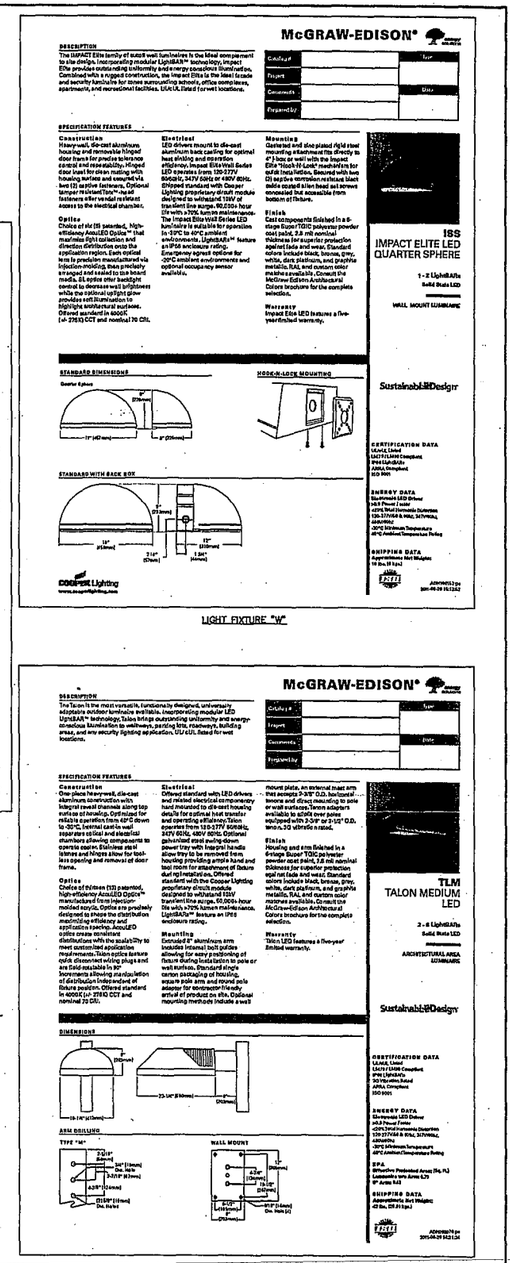
Plan Name:	PAVEMENT MARKING PLAN
Project:	TROPIC STAR CONVENIENCE CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record:	THE THREE SOCIOS, LLC 321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
M1
SHEET 11 OF 22
JBE PROJECT NO. 10144





LIGHT FIXTURE "B"



LIGHT FIXTURE "W"

LIGHT FIXTURE "A"

NOTE:

1. FIXTURE HEIGHT REPRESENTS HEIGHT ABOVE FINISHED GRADE (AFG). CONTRACTOR SHALL ADJUST POLE HEIGHTS TO MATCH AFG ELEVATIONS.
2. LIGHT FIXTURES TO BE AS SHOWN. ANY MODIFICATION TO FIXTURE OR LOCATION SHALL BE BY ENGINEER PRIOR TO INSTALLATION.
3. EXISTING UTILITIES SHALL BE DIGSAFED BEFORE CONSTRUCTION.
4. SITE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
5. CONTRACTOR SHALL INSTALL PROPOSED LIGHT POLES ACCORDING TO TOWN REGULATIONS.
6. LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
7. ILLUMINATION READINGS SHOWN ARE BASED ON A TOTAL LLF OF 0.75 AT GRADE. ILLUMINATION READINGS SHOWN ARE IN UNITS OF FOOT-CANDLES.
8. LIGHTING CALCULATIONS SHOWN ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM AND SAFETY.
9. ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF DARK-SKY COMPLIANT, UNLESS OTHERWISE NOTED.
10. THE PROPOSED LIGHTING CALCULATIONS AND DESIGN WAS PERFORMED BY CHARRON, INC., P.O. BOX 4550, MANCHESTER, NH 03108, ATTENTION KEN SWEENEY. ALL LIGHTS SHOULD BE PURCHASED FROM THIS COMPANY, OR AN EQUAL LIGHTING DESIGN SHOULD BE SUBMITTED FOR REVIEW IF EQUAL SUBSTITUTIONS ARE PROPOSED BY THE CONTRACTOR OR OWNER.

LAND USE OFFICE

DEC 26 2013

RECEIVED

Luminaire Schedule

Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Lumens
	16	CL3	SINGLE	1.000	CNC-B01-LED-E1-SQ/ MTD UNDER CANOPY	2373
	2	P3	SINGLE	1.000	TLM-B03-LED-E1-SL3/ 20' AFG	6247
	5	P4	SINGLE	1.000	TLM-B03-LED-E1-SL4/ 20' AFG	6207
	1	P5	SINGLE	1.000	TLM-B03-LED-E1-SMQ/ 20' AFG	6881
	8	WM	SINGLE	1.000	ISS-B02-LED-E1-BL4/ WALL MTD 12' AFG	4231

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

F:\Land Projects 3\10144-BARRINGTON-356-CALEF-HIGHWAY-TROPIC-STAR\dwg\10144-plan.dwg 1/3/2012 8:33:49 AM EST

Design: WGM | Draft: GPC | Date: 01/03/12
Checked: WGM | Scale: AS NOTED | Project No.: 10144
Drawing Name: 10144-PLAN.dwg

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

Plan Name: LIGHTING PLAN

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
L1
SHEET 12 OF 22

GENERAL PROJECT NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS, DETAILS, AND SPECIFICATIONS, AND PER ALL APPLICABLE CODES AND REQUIREMENTS.
2. THE CONTRACTOR SHALL CAREFULLY INSPECT THE SITE AND VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH ANY WORK DESCRIBED HEREIN. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES WITH THESE DOCUMENTS PRIOR TO BEGINNING ANY CONSTRUCTION.
3. THE CONTRACTOR SHALL CARRY ALL WORKER'S COMPENSATION, PUBLIC LIABILITY, AND PROPERTY DAMAGE INSURANCE AS REQUIRED BY THE OWNER.
4. HOLD HARMLESS AND INDEMNIFICATION CLAUSE - THE CONTRACTOR SHALL AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. INCLUDING SAFETY TO ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY; REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE LANDSCAPE ARCHITECT.
5. DAMAGE RESPONSIBILITY - CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE IMPOSED, INTENTIONALLY OR ACCIDENTALLY, TO EXISTING UTILITIES, BUILDINGS, OR OTHER AMENITIES, DUE TO THE ACTIONS OF THE CONTRACTOR, CONTRACTOR'S EMPLOYEES, AND/OR CONTRACTOR'S SUB CONTRACTORS. CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGE OR STOLEN PARTS AT HIS EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING FROM THE OWNER.
6. UNAUTHORIZED CHANGES TO PLANS - THE LANDSCAPE ARCHITECT PREPARING THESE PLANS SHALL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.
7. REVISED LANDSCAPE PLANS MUST BE SUMBITTED FOR APPROVAL IF ANY REVISIONS ARE MADE TO THE DEVELOPMENT PLAN OR PLAT FOR PAVING, GRADING, OR IMPROVEMET PLANS.
8. THE CONTRACTOR SHALL APPLY, OBTAIN, AND PAY FOR ALL REQUIRED PERMITS TO COMPLETE THE SCOPE OF WORK.
9. TRADE COORDINATION - CONSTRUCTION AND INSTALLATION OF ALL ITEMS WITHIN THESE DOCUMENTS SHALL REQUIRE CLOSE COORDINATION BETWEEN TRADES INVOLVED IN UNDERGROUND AND UTILITY INSTALLATION, AND TREE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE TO INSURE PROPER COORDINATION BETWEEN TRADES TO INSURE AND AVOID CONSTRUCTION DELAYS OR DAMAGE TO ANY IMPROVEMENTS OR UTILITIES.
10. UNDERGROUND SERVICE ALERT - CONTRACTOR SHALL NOTIFY DIG SAFE SYSTEM, INC. 72 HOURS PRIOR TO DIGGING AT 1-888-DIG-SAFE. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN WORKING NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION AND CONDITION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
11. INSPECTIONS - THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE MUNICIPAL REPRESENTATIVE AT LEAST 48 HOURS IN ADVANCE PRIOR TO ANY REQUIRED MUNICIPAL INSPECTION.
12. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 48 HOURS IN ADVANCE PRIOR TO ANY REQUIRED OR DESIRED INSPECTION (603) 391-7715.
13. THESE DRAWINGS AND SPECIFICATIONS ARE PROPERTY AND COPYRIGHT OFHOWARD SNYDER. THESE DRAWINGS SHALL NOT TO BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AUTHORIZATION FROM HOWARD SNYDER.
14. WRITTEN DIMENSIONS TAKE PREFERENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF WORK.
15. ALL QUANTITIES INDICATED ON THE PLANS ARE PROVIDED AS A COURTESY ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES SHOWN BY CONDUCTING A INDEPENDENT QUANTITY TAKE OFF.
16. THE LANDSCAPE ARCHITECT SHALL DECIDE ALL QUESTIONS RELATING TO THE INTERPRETATION OF THE DRAWINGS AND THE ACCEPTABLE FULFILLMENT OF THE CONTRACT DOCUMENTS.
17. THE CONTRACTOR SHALL MAINTAIN THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS, AND RUBBISH INCIDENTAL OF HIS WORK AT ALL TIMES INCLUDING WEEKENDS AND HOLIDAYS. ALL RUBBLE, TRASH, OR DISPOSABLE ITEMS RESULTING FOR THE DEMOLITION OF CONSTRUCTION SHALL BE DISPOSED OF IN A LEGAL, LAWFUL, AND SAFE MANNER TO AN APPROVED DISPOSAL SITE.
18. PLANT MATERIAL TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ALL TREES SHALL HAVE A NUMBERED TAG.
19. ALL PLANT MATERIAL TO BE STAKED BY THE LANDSCAPE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY HOLES BEING DUG.
20. ALL GRADES TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL.
21. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FINISHED GRADES.
22. THE LANDSCAPE CONTRACTOR SHALL VERIFY BERM AND RETENTION BASIN LOCATIONS SHOWN ON THESE PLANS WITH THOSE ON THE CIVIL ENGINEERING PLANS. SHOULD A DISCREPANCY EXIST BETWEEN THE PLANS, THIS OFFICE SHALL BE NOTIFIED IMMEDIATELY.
23. ALL DECIDUOUS TREES TO BE UNCONDITIONALLY GUARANTEED FOR ONE YEAR AFTER INSTALLATION.
24. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS DURING THE FINISH GRADING PROCESS.
25. NO SLOPES TO EXCEED 4:1 IN LANDSCAPE AREAS.
26. UNDER NO CIRCUMSTANCES SHALL ANY TREE BE PLANTED WITHIN 6' OF ANY BUILDING WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT. TREES MUST BE LOCATED AT LEAST 7' FROM A SEWER LINE EASEMENT CENTERLINE. PLANT MATERIALS WITH INTRUSIVE ROOT SYSTEMS SHALL NOT BE PLACE WITHIN DRAINAGE BASINS WITH ENGINEERED BOTTOMS.
27. ALL PLANT MATERIAL WITHIN SIGHT VISIBILITY TRIANGLES SHALL BE PLACED SO AS NOT TO INTERFERE WITH A VISIBILITY PLANE DESCRIBED BY TWO HORIZONTAL LINES LOCATED 30 INCHES AND 72 INCHES ABOVE FINISHED GRADE OF THE ROADWAY SURFACE.
28. IT IS RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO INFORM THE LANDSCAPE ARCHITECT/OWNER OF ANY PLANT MATERIAL CONCERNS BASED ON PLANTING SEASON (E.G. WINTER, SUMMER). SHOULD THE LANDSCAPE CONTRACTOR HAVE ANY CONCERNS ABOUT PLANT MATERIAL DUE TO HEAT/FROST OR EXPOSURE, HE SHALL REQUEST A SUBSTITUTION OR DELAY IN PLANTING. ONCE PLANTED, ALL PLANT MATERIAL IS SUBJECT TO SPECIFIED WARRANTIES.

PLANT LEGEND

EXISTING TREES	SIZE	NOTES	QTY
Decidious Tree to Remain Reference Civil Survey for Additional Information	Varies		

DECIDIOUS TREES	SIZE	NOTES	QTY
Betula populifolia Gray Birch Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	19" Ball	Multi-trunk	4
Fraxinius pennsylvanica White Ash Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	23" Ball		4
Liquidambar styraciflus Sweetgum Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	27" Ball		3
Pyrus calleryana 'Bradford' Bradford Pear Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	23" Ball		3
Quercus palustris Pin Oak Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	19" Ball		5

CONIFER TREES	SIZE	NOTES	QTY
Thuja occidentalis 'Hoveyi' Eastern Arborvitae Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	15" Ball		10
Juniperus virginiana Eastern Redcedar Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	23' Ball		6
Tsuga canadensis Eastern Hemlock Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2.",2.5",3" Cal.	23' Ball		7

SHRUBS	SIZE	NOTES	QTY
Buddleja davidii Butterfly Bush	1 Gallon		38
Cornus serica Red Osier Dogwood	1 Gallon		15
Ilex glabra Inkberry	5 Gallon		9
Vaccinium corymbosum Highbush Blueberry	1 Gallon		31
Viburnum opulus Highbush Cranberry	1 Gallon		37

GRASSES	SIZE	NOTES	QTY
Helictotrichon sempervirens Blue Oat Grass	1 Gallon		56
Miscanthus sinensis 'Huron Sunset' Maiden Grass Variety	5 Gallon		28
Molinia caerulea 'Variegata' Striped Purple Moor Grass	1 Gallon		42

GROUNDCOVERS	SIZE	NOTES	QTY
Astilbe chinensis pumila False Goat's Beard	1 Gallon	9"-12"	53
Penstemon newberryi Penstemon	1 Gallon	9"-12" ht.	56
Seasonal Annuals Annual flower varieties	Flats/Trays	Plant no more than 6" o.c.	235 sq. ft.

VINES	SIZE	NOTES	QTY
Clematis montana Clematis	1 Gallon		4

TURF AND SEED MIX	QTY
Kentucky Bluegrass Hydroseed	6,255 S.F.
Wildflower Seed Mix Refer Detail13/Sheet L4.1 for Specification	5,135 S.F.

LANDSCAPE MATERIALS		QTY
Bark Mulch Shredded Hemlock Bark Mulch	4" depth all planting areas	14,456 S.F.
Landscape Border Annodized steel header		968' LN. FT.

LANDSCAPE NOTES

1. AREAS OF ORGANIC MULCH WITHOUT PLANT MATERIALS/ GROUNDCOVERS SHALL NOT EXCEED DIMENSIONS OF MORE THAN 7 FEET IN ANY ONE DIRECTION, MEASURED BETWEEN PLANT CANOPIES AND/OR COVERAGE.
2. A SINGLE TRUNK TREE'S CALIPER SIZE, THAT IS TO BE EQUAL TO OR LESS THAN 4-INCHES, SHALL BE DETERMINED BY UTILIZING THE SMALLEST DIAMERTER OF THE TRUNK 6-INCHES ABOVE FINISHED GRADE ADJACENT TO THE TRUNK.
3. A TREES CALIPER SIZE, FOR SINGLE TRUNK TREES THAT ARE TO HAVE A DIAMETER GREATER THAN 4-INCHES, SHALL BE DETERMINED BY UTILIZING THE SMALLEST DIAMETER OF THE TRUNK 12-INCHES ABOVE FINISHED GRADE ADJACENT TO THE TRUNK.
4. A MULTIPLE TRUNK TREE'S CALIPER SIZE IS MEASURED AT 6" ABOVE THE LOCATION THAT THE TRUNK SPLITS ORIGINATES, OR 6" ABOVE THE FINISHED GRADE IF ALL TRUNKS ORIGINATE FROM THE SOIL.
5. AREA WITHIN THE SIGHT DISTANCE TRIANGLE IS TO BE CLEAR OF LANDSCAPING, SIGNS, OR OTHER VISIBILITY OBSTRUCTIONS WITH A HEIGHT GREATER THAN 2 FEET. TREES WITHIN THE SAFETY TRIANGLE SHALL HAVE A CANOPY THAT BEGINS AT 7 FEET IN HEIGHT UPON INSTALLATION. ALL HEIGHTS ARE MEASURED FROM NEAREST STREET LINE ELEVATION.
6. RETENTION/DETENTION BASINS SHALL BE CONSTRUCTED SOLELY FROM THE APPROVED CIVIL PLANS. ANY ALTERATION OF THE APPROVED DESIGN (ADDITIONAL FILL, BOULDERS, ECT.) SHALL REQUIRE ADDITIONAL FINAL PLANS STAFF REVIEW AND APPROVAL.
7. ALL RIGHTS-OF-WAY ADJACENT TO THIS PROPERTY SHALL BE LANDSCAPED AND MAINTAINED BY THE PROPERTY OWNER.
8. NO LIGHTING IS APPROVED WITH THE SUBMITTAL.
9. NEW LANDSCAPING, INCLUDING SALVAGED PLANT MATERIAL, AND LANDSCAPING INDICATED TO REMAIN, WHICH IS DESTROYED, DAMAGED, OR EXPIRED DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE SIZE, KIND, AND QUANTITY PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY / LETTER OF ACCEPTANCE TO THE SATISFACTION OF THE INSPECTION SERVICES STAFF.

LAND USE OFFICE
DEC 26 2013
RECEIVED

APPROVED
PLANNING BOARD

DATE:

AMORY LAND DESIGN, LLC.
26B STRONG STREET
NEWBURYPORT, MA
01950-2324

TROPIC STAR CONVENIENCE

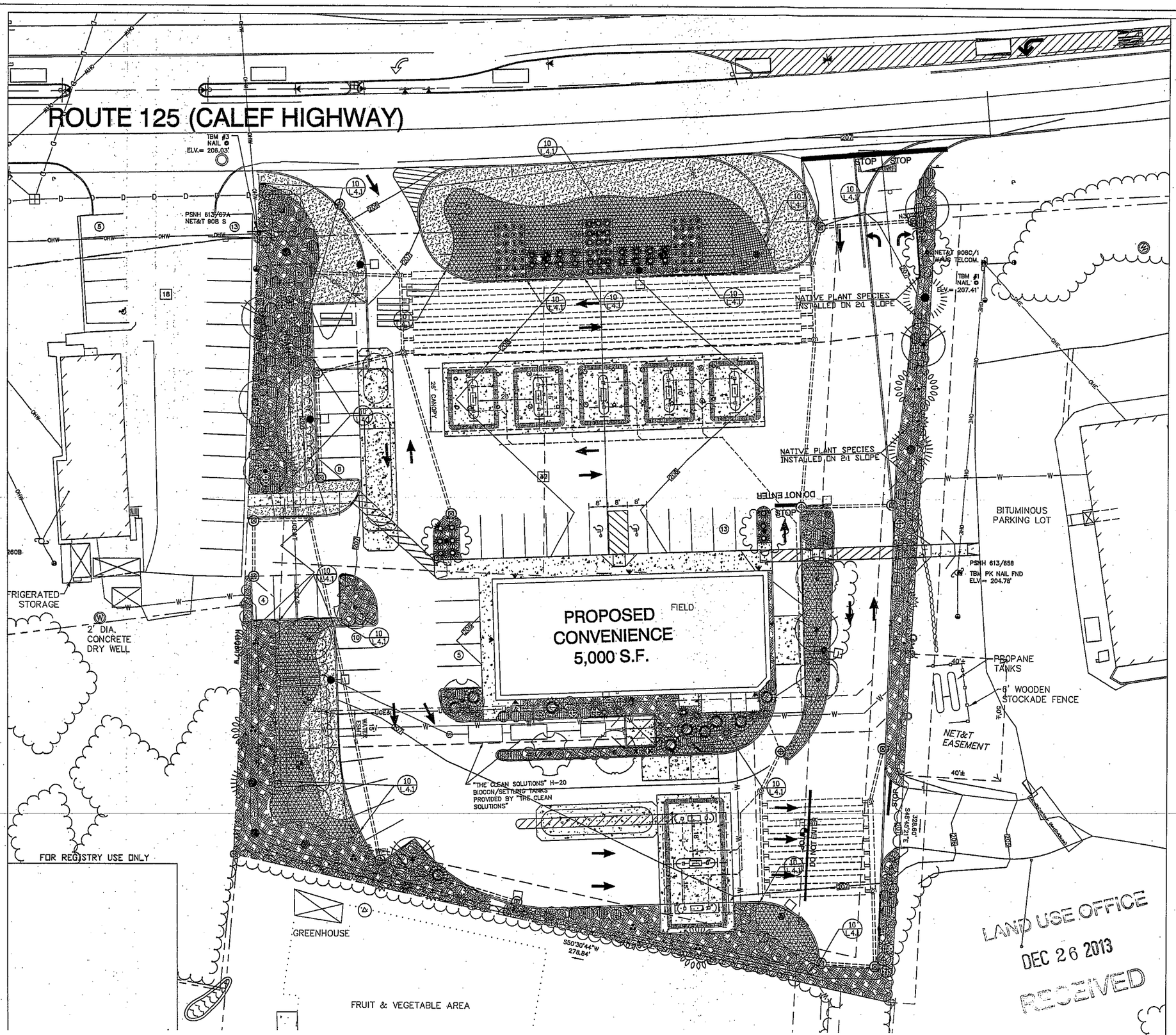
Project Address:	Calef Highway (Route 125) Barrington, New Hampshire
Project Issue Date:	December 23rd, 2013
Project Number:	11-011.00
Project Status:	Coordination and Approval
Reviewed By:	Howard Snyder

DELTA	ISSUE TITLE	DATE

LANDSCAPE NOTES

Not Sealed

L2.0



PLANT LEGEND

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Juniperus virginiana Eastern Redcedar Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2",2.5",3" Cal.	27 Ball		6
Tsuga canadensis Eastern Hemlock Earth Ball Sizes: 15,19,23,27,31 Ball Dia.= Caliper Size: 1",1.5",2",2.5",3" Cal.	23" Ball		7

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Seasonal Annuals Annual flower varieties	Flats/Trays	Plant no more than 6" o.c.	235 sq. ft.

VINES	SIZE	NOTES	QTY
Clematis montana Clematis	1 Gallon		4

TURF AND SEED MIX	QTY
Kentucky Bluegrass Hydroseed	6,258 S.F.
Wildflower Seed Mix Refer Detail 13/Sheet L4.1 for Specification	5,135 S.F.

LANDSCAPE MATERIALS		QTY
Bark Mulch Shredded Hemlock Bark Mulch	4" depth all planting areas	14,456 S.F.
Landscape Border Annodized steel header		966' LN. FT.
Detention Basin Area		5,185 S.F.

AMORY LAND DESIGN, LLC.
26B STRONG STREET
NEWBURYPORT, MA
01950-2324

0' 10' 20' 40' NORTH

APPROVED
PLANNING BOARD

DATE:

TROPIC STAR CONVENIENCE

Project Address:	Calef Highway (Route 125) Kensington, New Hampshire
Project Issue Date:	December 22nd, 2013
Project Number:	11-017.00
Project Status:	Coordination and Approval
Reviewed By:	Howard Snyder

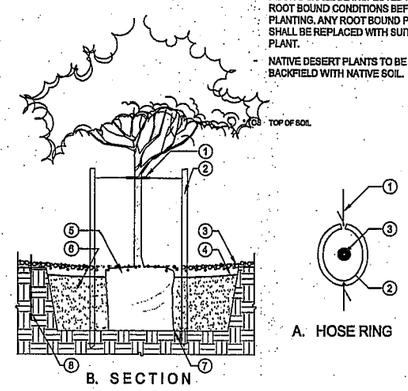
DELTA	ISSUE TITLE	DATE

LANDSCAPE PLAN

HOWARD SNYDER
104
STATE OF NEW HAMPSHIRE
LANDSCAPE ARCHITECT

Not Scaled

L3.0



NOTES:

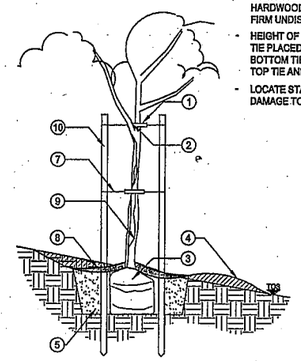
- PLANTS SHALL BE INSPECTED FOR ROOT BOUND CONDITIONS BEFORE PLANTING. ANY ROOT BOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.
- NATIVE DESERT PLANTS TO BE BACKFIELD WITH NATIVE SOIL.

LEGENDS:

1. (1) 8" DIA. "HOSE RING"/ WIRE TIES. PLACE TIES 6" ABOVE THE TREE'S TRUNK BENDING POINT.
2. (2) 2" DIA. TREE STAKES. HAMMER 6" MIN. PAST UNDISTURBED SOIL TRIM STAKES TO 6" ABOVE TIE POINTS (ORIENT STAKES TOWARD PREVAILING WINDS).
3. LIGHTLY SPREAD BARK MULCH OVER ROOTBALL.
4. CREATE GENTLE SWALE DEPRESSION. DO NOT FORM RAISED BASIN.
5. DO NOT BURY TOP OF ROOTBALL.
6. PLANTING SOIL BACKFILL MIX: 1 PART MULCH TO 3 PARTS TOPSOIL PLANTING PIT SIZES: DEPTH-2X WIDTH OF ROOTBALL FERTILIZER / AGRIFORM TABLETS DOWN ALONG PLANT ROOTBALL 1 PER 1 GAL., 2 PER 2 GAL., 3 PER 15 GAL., 4 PER 24"BOX OR LARGER
7. PIT WIDTH: 3x DIA. OF CONTAINER PIT DEPTH: TO EQUAL ROOTBALL.
8. 18"x6'-0" ROOT BARRIER. INSTALL AT ALL TREES PLACED 5'-0" FROM BLDGS. OR HARDSCAPE.
9. WIRE TIE.
10. HOSE.
11. TRUNK.

1 TREE PLANTING AND STAKING

SCALE: N T S



NOTES:

- USE 2-2"DIA. LODGE POLE STAKE HARDWOOD. DRIVE STAKE 6" INTO FIRM UNDISTURBED SOIL.
- HEIGHT OF STAKE VARIES TOP TIE PLACED FOR MAX. SUPPORT. BOTTOM TIE 1/2 WAY BETWEEN TOP TIE AND GROUND.
- LOCATE STAKE TO MINIMIZE DAMAGE TO TREE.

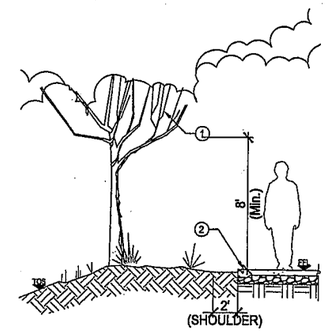
LEGENDS:

1. 1" WIDE BELT WEBBING TO TIE TREE TO STAKE.
2. LOCATE TIE ABOVE FIRST SCAFFOLD.
3. ROOT BALL TO BE 1" ABOVE GRADE & SCORED ROOTS BEFORE PLANTING.
4. GRADE & SCORED ROOTS BEFORE FORM TREE WELL BY DIVIDING SOIL EQUALLY ACROSS SLOPE.
5. SLOPING PLANT HOLE TO HAVE SCARIFIED WALLS.
6. PREPARED SOIL AS SPECIFIED. NATIVE SOIL FERTILIZER
7. WIRE TO STAKE WITH HEAVY DUTY STAPLE (12 GAUGE).
8. OPTIONAL HOSE TIE. SEE NOTES.
9. BARK MULCH (IF REQUIRED).
10. 2 -2" POLE STAKE.

*TOS TOP OF SOIL

2 TREE PLANTING AND STAKING ON SLOPE

SCALE: N T S



KEY:

1. TREE
2. CONCRETE PATHWAY/ BRICK WALKWAY

*FFL FINISH FLOOR LINE

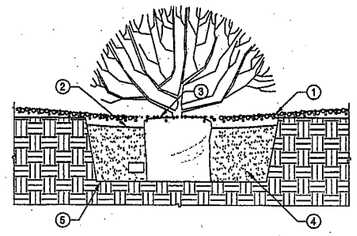
TOS TOP OF SOIL

NOTES:

- MAINTENANCE TO KEEP A MINIMUM 8'-0" CLEARANCE FROM PATH TO TREE CANOPY. TRIM AS NECESSARY.

3 TREE CLEARANCE AT PATH

SCALE: N T S



LEGEND:

1. LIGHTLY SPREAD MULCH OVER ROOTBALL.
2. CREATE GENTLE SWALE DEPRESSION.
3. DO NOT BURY TOP OF ROOTBALL.
4. PLANTING SOIL BACKFILL MIX: 1 PART MULCH TO 3 PARTS TOPSOIL PLANTING PIT SIZES: DEPTH-2X WIDTH OF ROOTBALL FERTILIZER / AGRIFORM TABLETS DOWN ALONG PLANT ROOTBALL 1 PER 1 GAL., 2 PER 2 GAL., 3 PER 15 GAL., 4 PER 24"ROOTBALL OR LARGER
5. PIT WIDTH: 3x DIA. OF CONTAINER PIT DEPTH: TO EQUAL ROOTBALL.

TOS TOP OF SOIL

NOTES:

- PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.

4 SHRUB PLANTING

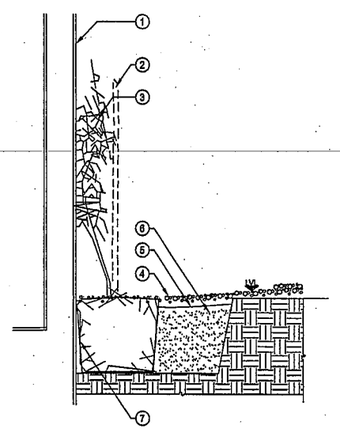
SCALE: N T S

5 NOT USED

SCALE: NTS

6 NOT USED

SCALE: NTS



LEGENDS:

1. FACE OF BUILDING OR WALL.
2. REMOVE NURSERY STAKE.
3. SPREAD ON WALL AND SECURE. USE EPOXY TIES - ATTACH TO WOOD WITH NAILS AND TO STUCCO WITH EPOXY CEMENT ROD.
4. REMOVE ANY EXCESS TRASH CONCRETE AT PLANTING HOLE.
5. CREATE SWALE DEPRESSION AWAY FROM FOOTING OF STRUCTURE.
6. PIT TO BE 2 TIMES DIA. OF BALL.
7. SET ROOTBALL NEXT TO FOOTING.

*LVL LEVEL

NOTES:

- PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.

7 VINE PLANTING

SCALE: N T S

8 NOT USED

SCALE: NTS

9 NOT USED

SCALE: NTS

LAND USE OFFICE

DEC 26 2013

RECEIVED

APPROVED
PLANNING BOARD

DATE:

AMORY LAND DESIGN, LLC.
26B STRONG STREET
NEWBURYPORT, MA
01950-2324

TROPIC STAR CONVENIENCE

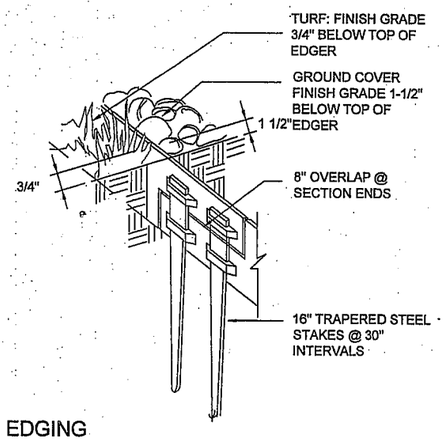
Project Address:	Calef Highway (Route 125) Barrington, New Hampshire
Project Issue Date:	December 22nd, 2013
Project Number:	11-011.00
Project Status:	Coordination and Approval
Reviewed By:	Howard Snyder

DELTA	ISSUE TITLE	DATE

LANDSCAPE DETAILS

L4.0

Not Sealed



10 STEEL EDGING
SCALE: NTS

NEW ENGLAND WETLAND PLANTS, INC
820 WEST STREET, AMHERST, MA 01002
PHONE: 413.548.8000 FAX: 413.548.4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Showy Wildflower Seed Mix

BOTANICAL NAME	COMMON NAME	IND.
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	FACU
FESTUCA RUBRA	CREEPING RED FESCUE	FACU
SORGHASTRUM NUTANS	INDIAN GRASS, PA ECOTYPE	UPL
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	FACU
DESMODIUM CANADENSE	SHOWY TICK TREFOIL	FAC
ELYMUS CANADENSIS	CANADA WILD RYE	FACU+
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	FACW-
ASCLEPIAS SYRIACA	COMMON MILKWEED	FACU-
PENSTEMON DIGITALIS	BEARD TONGUE	FAC
ZIZIA AUREA	GOLDEN ALEXANDERS	FAC
RUDBECKIA HIRTA	BLACK EYED SUSAN	FACU-
COREOPSIS LANCEOLATA	LANCE LEAVED COREOPSIS	FACU
HELIOPSIS HELIANTHOIDES	OX EYE SUNFLOWER	UPL
HELENIUM AUTUMNALE	COMMON SNEEZEWEED	FACW+
LIATRIS SPICATA	MARSH BLAZING STAR	FAC+
SILPHIUM PERFOLIATUM	CUP PLANT	FACU-
VERBENA HASTATA	BLUE VERVAIN	FACW
ASTER LAEVIS	SMOOTH BLUE ASTER	UPL
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	FACW-
BAPTISIA AUSTRALIS	WILD BLUE FALSE INDIGO	FACU
EUPATORIUM PURPUREUM	PURPLE JOE PYE WEED	FAC
EUTHAMIA GRAMINIFOLIA	GRASS LEAVED GOLDENROD	FAC
MONARDA FISTULOSA	WILD BERGAMOT	UPL
OENOTHERA BIENNIS	EVENING PRIMROSE	FACU-
TRADESCANTIA OHIENSIS	OHIO SPIDERWORT	FAC
SOLIDAGO JUNCEA	EARLY GOLDENROD	NI

PRICE PER LB. $75.00
REQ. QUANTITY: 1 LBS.
TOTAL $75.00
APPLY 25 LBS/ACRE
MINIMUM QUANTITY: 1 LBS

The New England Showy Wildflower mix includes a selection of native wildflowers and grasses that will mature into a colorful and vibrant native meadow. It is an appropriate seed mix for roadsides, commercial landscaping, parks, golf courses, and industrial sites. Always apply on clean bare soil. The mix may be applied by mechanical spreader, or on small sites it can be spread by hand. Lightly rake, or roll to ensure proper seed to soil contact. Best results are obtained with a Spring or late Fall dormant seeding. Late Spring and early Summer seeding will benefit with a light mulching of weed-free straw to conserve moisture. If conditions are drier than usual, watering may be required. Late Fall and Winter dormant seeding requires an increase to the seeding rate. Fertilization is not required unless the soils are particularly infertile. Preparation of a clean weed free seed bed is necessary for optimal results.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability.
The design criteria and ecological function of the mix will remain unchanged.
Price is labor paved, FOB warehouse, plus S&H and applicable taxes.

13 WILDFLOWER SEED MIX SPECIFICATION
SCALE: NTS

11 NOT USED
SCALE: NTS

14 NOT USED
SCALE: NTS

12 NOT USED
SCALE: NTS

15 NOT USED
SCALE: NTS

16 NOT USED
SCALE: NTS

17 NOT USED
SCALE: NTS

18 NOT USED
SCALE: NTS

AMORY LAND DESIGN, LLC.
26B STRONG STREET
NEWBURYPORT, MA
01950-2324

LAND USE OFFICE
DEC 26 2013
RECEIVED

APPROVED
PLANNING BOARD

DATE:

TROPIC STAR CONVENIENCE

Project Address: Calef Highway (Route 125) Barrington, New Hampshire
Project Issue Date: December 22nd, 2013
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DELTA	ISSUE TITLE	DATE

LANDSCAPE DETAILS

HOWARD SNYDER
LICENSED LANDSCAPE ARCHITECT
104
STATE OF NEW HAMPSHIRE

Not Sealed

L4.1

LANDSCAPE SPECIFICATIONS

1.0 GENERAL CONDITIONS

1.1 Site Inspection: Bidder is required to inspect site and thoroughly inform themselves of existing conditions. It is the responsibility of the bidder to inform the Landscape Architect of discrepancies between existing conditions and those shown on drawings prior to beginning construction.

1.2 Project Completion: shall be defined as the date construction is complete and the maintenance period begins.

1.3 Guarantee Period: Time defined in these attached documents during which the Contractor is responsible for the health and replacement of plant material.

1.4 Work Experience: The landscape contractor, with their bid submittal shall provide written verification of three (3) years demonstrative ability to perform the work specified herein. Past work shall be of similar type, scale and quality.

1.5 Damage and Responsibility: Contractor shall assume full responsibility for any damage imposed, accidentally or intentionally, to existing utilities, buildings, or other amenities, due to the actions of the contractor, contractor employees, and contractor's sub contractors. Contractor is required to protect work from damage and theft and replace all damage or stolen parts until the work is accepted in writing from the owner, without additional cost to the owner.

1.6 Unauthorized changes to plans: The Landscape architect preparing these plans is not responsible for, or liable for unauthorized changes to or used of these plans. All changes to the plans must be in writing and must be approved by the Landscape Architect and submitted to the Planning Board and Conservation Comission for approval prior to the commencement of any work.

1.7 Permits: The contractor's responsibility to apply, obtain, and pay for all required permits to complete the scope of work.

1.8 Trade Coordination: Construction and installation of items within these documents requires close coordination between trades involved in underground / utility installation and the location of improvements. Contractor is responsible to insure proper coordination between trades to ensure and avoid construction delays or damage to any improvements or utilities.

1.9 Underground service alert: Contact Dig Safe System, Inc. 72 hours prior to digging at 1-888-Dig-Safe. The contractor shall exercise extreme care in working near existing utilities. Verify the location and condition of utilities prior to construction. Pot holing required will be at no additional cost to owner.

1.10 Insurance: The contractor shall carry worker's compensation, public liability, and property damage insurance as required per local code and owner's agreement.

1.11 Hold harmless and indemnification clause: Contractor assumes sole and complete responsibility for the job site conditions during the course of construction of the project. Including safety to all persons and property This requirement applies continuously and not limited to normal working hours, and harmless from any and all liability, real or alleged. In connection with the performance of work on the project, excepting for liability arising from the sole negligence of the Landscape Architect.

1.12 Inspections: The contractor is responsible for notifying the municipal representative prior to any required municipal inspection. The contractor shall notify the Landscape Architect at least 48 hours in advance prior to any required or desired inspection at (978) 764-6155. These drawings and specifications are property and copyright of Amory Land Design, LLC. These drawings shall not be used on any other work except by written authorization from Amory Land Design, LLC. Contact: Howard Snyder, RLA at (978) 764-6155.

1.13 Dimensions: The written dimension takes preference over scale dimensions and verified on the job site. Discrepancies must be brought to the attention of the Landscape Architect prior to the commencement of work.

1.14 Questions: The Landscape Architect decides all questions relating to the interpretation of the drawings and the acceptable fulfillment of the contract.

1.15 Job Site: Maintain the premises clean and free of excess equipment materials and rubbish incidental of the work at all times including weekends and holidays. Dispose rubble, trash, or items resulting from the demolition of construction in a legal, lawful and safe manner to an approved disposal site.

2.0 WORK SPECIFIED HEREIN

2.1 Included Items: The work specified within this section includes labor, materials, equipment and services necessary to complete the improvements detailed and specified, including the following work reasonably incidental thereto. The Contractor shall be responsible for the following work unless otherwise specified on the plans.

2.2 Coordination: Coordinate the irrigation work, if any, to insure successful integration with the landscaping.

2.2.1 Grading: Responsible for finish grade ± (.1) tenth of a foot beyond the related grading and drainage plans. Coordinate with civil plans, if exist.

2.2.2 Soil Preparation: Soil condition and fine rake prior to planting lawns, ground cover, seeding and decomposed granite installation.

3.0 SAMPLES & TESTS

3.1 Soil Tests: The Landscape Architect reserves the right to take and analyze samples of materials for conformity to specifications at any time. Contractor shall furnish samples upon request by Landscape Architect. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. Cost of testing of materials not meeting specification is the Contractor's expense.

4.0 COORDINATION AND RESPONSIBILITY

4.1 Collaboration with Trades: Coordinate and cooperate with other trades working on the site for successful completion of the project.

4.2 Site knowledge: Before commencing work on the site, become thoroughly acquainted with layout of all underground utilities and structures over the entire site. All requisite repairs to correct damage caused by work of this Section shall be at the Contractor's expense.

4.3 Existing material: Protect and maintain existing plant material and associated elements not indicated for removal as necessary to ensure survival.

4.4 Pre-construction Conference: A pre-construction conference is required prior to work. The Contractor, and related subcontractors together the Owner's representative and Landscape Architect are given an opportunity to review plans together before any work is performed. The purpose of this conference is to discuss the project in detail, including scheduling of work, site preparation, interpretation of documents and to answer questions that may arise. Unless followed up in writing, verbal authorizations or acknowledgment by anyone present are not be binding. It is the responsibility of the contractor to notify the owner and Landscape Architect 10 days prior before a date requested for the conference.

5.0 STANDARDS

5.1 Quantity: Quantities on plant list, if shown, are for reference purposes only. Contractor is responsible for installing all plant materials shown on the plans. If shown, quantities are provided for estimating or City approval purposes only, and are not to be considered accurate for bidding. All significant differences between the site and the drawings shall be reported to the Landscape Architect immediately upon determining said discrepancies. Failure to do so, require the Contractor to make additional plantings to fill spaces, or other changes determined by the Landscape Architect at the Contractor's expense.

5.2 Plant Material Substitution: At the time of bidding, the Contractor shall verify the ability to purchase all plant materials required to complete this work. Upon award of bids, the Contractor shall make arrangements with his suppliers for adequate and properly sized materials as specified on the plans. If perceived shortage is determined either at time of bidding, or upon award of contract, the supplier may employ one of the following methods.

5.2.1 Contract Growing of Materials: When required on the construction documents, and sufficient lead time allows, plants shall be contract grown. Specified minimum time of six months per container, prior to moving into larger sizes, shall be waived, provided adequate roots develop throughout the container to hold the soil together upon removal from the container. Cost for contract growing shall be stipulated to and agreed upon as a separate contract cost with the Owner prior to commencing any work toward contract growing.

5.2.2 Substitution of Materials: If the above method proves inadequate, plant substitutions approval is required from the Owner/Landscape Architect. The Contractor can make recommendations to the Landscape Architect, in writing, for consideration. The substitutions must be make with the same sized container material. Substitutions will not be considered prior to bidding. The Contractor must provide a list of suppliers searched to the Landscape Architect for materials not available, if requested.

5.3 Nomenclature: If specific plant material is in question provide copies of the project's order forms to verify with the Landscape architect. The landscape architect will determine if any plant rejections occur. If requested, make plant material corrections at no expense to the owner. Names of plant materials on the plans are in accordance with the American Nursery and Landscape Association and/or as specified in the plant list.

5.4 Quality & Size: The quality and size of all plant materials shall be based upon the American Nursery and Landscape Association Accepted Standards for size, shape and caliper unless specified otherwise on the plans. Rejected materials shall be removed from the site, and replaced immediately the decision of the Landscape Architect shall be final. Container grown plants shall have been grown in containers or boxes for a minimum of six months, except when the plants hold the entire rootball together upon removal from the containers, without being root-bound. "Climatized" non-Massachusettes grown plants for at least four weeks in partial shade, during the summer months, prior to delivery to the site. Trees shall have straight trunks throughout their height, except multi-trunked specified material. Any tree with weak trunks incapable of supporting its full growth shall be double-staked, whether called for in the specifications or not.

5.5 Plant Material Procurement: Purchase trees, shrubs, vines and groundcovers within 30 days of contract award by the owner. Forward written verification that this has taken place to the Owner and Landscape Architect. All storage and maintenance costs is borne by the Contractor.

5.6 Inspection: All plant materials are subject to acceptance or reject by the Landscape Architect. Notify the Landscape Architect after delivery of plant materials. The Landscape Architect will visit the site, determine the quality of stored materials, and notify the Contractor of all rejected materials.

5.7 Product Delivery, Storage & Handling: All plant materials delivered to the be planted as soon as practical, after inspection and approval. Keep all sun sensitive plant materials out of full sun during summer months. Delivery, maintenance and installation of all plant materials is the sole responsibility of the Contractor, and they shall make all arrangements for proper labor to avoid delays and rejection of plant materials which have been on-site too long without planting or installation.

6.0 MATERIALS

6.1 Mulch: Use organic, well-rotted, decomposed bark fiber, (wood chips not acceptable) materials with no fillers or agents save for the balance of nitrogen-adding ingredients. Ph shall range from 6.8 to 7.2; moisture content shall be 30 to 40% by weight, and nutrients shall comply with the following minimum requirements by volume: Nitrate Nitrogen - 1.5%; Organic Nitrogen - 3.65%; Phosphorus - 1.14%; Potassium - 1.19%; Iron - 0.84%. Delivery to site shall be either bulk or marked bags. Acceptable products is dye-free "Hemlock Mulch" or approved equal.

6.2 Sand: Shall be course, granular concrete sand or grout sand (not mortar or silica sand), conforming to ASTM C-33, thoroughly and uniformly washed, entirely free of oil or other deleterious substances.

6.3 Fertilizer/ Hormones: Apply Superthrive root stimulant as directed by manufacture at the time of installation. Provide a second applications a week later. Add 0/10/10 slow release tablet fertilizer and sulfur granular per manufacture specifications to the plant pit back fill.

6.5 Topsoil: Mend soil free from non-organic refuse, noxious weeds, nut grass, thorny clay, clods, roots and all material toxic to plant growth. Excavation may need to extend past the first 6" of soil on the site. Topsoil shall comply with MASSDot specifications.

6.6 Planting Pit Backfill: Use native top soil material generated from plant pit excavation with said amenities evenly mixed in. Do not physically compact material, only water compact material in 12" layers at a time.

6.6.1 Native Top Soil Dressing: Produced from on-site top soil. Generate during original site grading, coordinate with general contractor as required. Harvest the first 6" of native land to product material. Screen material save only 4" minus product.

6.7 Tree Staking, Guying & Bracing: Stake 15-gal. and larger nursery trees shown on the plans.

6.7.1 Lodge Pole Staking: Stakes shall be a 2" diameter round knot free Pine "lodge pole", length as required below, and installed as follows: Stakes immediately adjacent to, but in no case through, the root ball, penetrating at least 6" into undisturbed soil, and aligned vertically. The stake alignment should not interfere with the existing branch structure of the tree. Install stakes as follows: 15-gal. - 2 ea. 8' long pole; 24" and 30" drum laced root ball size - 2 ea. 12' long stakes;

6.7.2 Guying & Bracing: 36" root ball sized trees and larger size apply guying and bracing method. Use three guy wires with ground stakes (see details on plans). Attach #8 gauge guy wire to a #5 ribbed bar 36" long with a drilled hole completely through the ground stake, and securing the wire with two mechanical clamps per wire. Use #12 gauge plastic coated guy wire for fastening trees to stake. Attach wire to trees at the lowest branches, encased with 24" rubber hoses, and clamped with at least two clamps. Use only rubber hosing, no plastic. Allow 4" min. clearance around the trunks of 36" box trees or larger. Set the ground stakes an appropriate distance from the tree to provide an approximate angle of 45 degrees between the ground and wire.

6.8 Headers: See plans and details for type of header and installation specifications. All headers shall be mounted with their tops flush with sidewalks, kept 1 $\frac{1}{2}$" above finished grades of decomposed granite. Use continuous curves and straight lined forms free of wiggles and dips. Notify the Landscape Architect 48 hours in advance for the opportunity to verify form work / layout prior to pour. Landscape architect reserves the right to reject any material thought to be improperly installed.

6.9 Stone: Provide material void of lump and free of foreign substances. Use type and size specified on plans and in details. One color shall be used for the entire work, and shall be obtained from a single source.

6.10 Lawn Materials

6.10.1 Sod: Kentucky Bluegrass or as specified on the plans. Sod shall be warranted by grower to be weed-free, insect-free, disease, and toxin-free. No growth reducing chemical or condition shall be acceptable. Sod material to be provided from one source. Plant sod cut and harvested must be stacked, delivered and installed within 24 hours of initial harvest-cut. Any sod delivered to site must have accompanying invoice/delivery tickets indicating time of cut, quantity delivered and any other pertinent information requested by Project Manager. Installation of cut and delivered sod shall commence immediately upon delivery.

7.0 PLANT INSTALLATION

7.1 Contractor shall stake tree locations as shown on drawings. The Landscape Architect shall field check the layout location of plants and will direct the Contractor to adjust to exact position before excavation begins. Notify the Landscape Architect at least 48 hours prior to scheduling work.

7.2 Notify the Landscape Architect of rock cellache, hard pan clay, and other obstructions which are encountered in the excavation of plant pits. Alternative planting locations may be selected by Landscape Architect.

7.3 Plants to sit in a 2" deep basin (barely visible) Do not provide swales around planting pits.

7.4 Plants injured or root ball broken during planting operations will be rejected. cut larger containers as required to remove plant material without injury.

7.5 All ground cover and mulch areas shall be treated with a pre-emergent and herbicides as outlined in Section 7.9.

7.6 Set finished grade 1- 2" below tops of header, walks, etc. (Typical)

7.7 Broom sidewalks and paving daily during planting operation. Empty plant containers and debris are to be picked up and disposed of daily. Contractor's trash shall be removed from the site at the completion of work.

7.8 Weed control: Remove all weeds by mechanical methods or by spraying with 'Round-up" or equal. Remove all weeds by mechanical methods or by repeating sprayings of Round-up or equal. Use Manage on nut grass infestation as required. A pre-emergent such as "Dacthal" or equal, shall be used in all decomposed granite areas. Follow manufacturers recommendations for applications. Plastic liners shall not be allowed. It is the sole responsibility of the contractor to provide a clean and weed free environment for plant material until the end of the maintenance period.

8.0 INSTALLATION

8.1 Soil Preparation: The Contractor shall be solely responsible for removing all ABC, rocks or foreign objects larger than 1" from all planted areas. The Contractor shall visit the site, and work with the General Contractor to assure themselves this provision is complied with. In areas where turf will not be planted, they shall take proper precautions for the removal of any existing turf and other aggressive weeds.

8.2 Shrubs & Trees: Shall be installed in accordance with the foregoing specifications and the details shown on the plans. Plant pits shall always provide adequate growth volumes for new roots, and shall meet the following minimum standards, which may be increased on the details: Dig planting pits 1 $\frac{1}{2}$ times the width and the same height of the root ball. Buried rootball will not be accepted.

8.3 Lawn Materials: Soil Preparation: Clear and grub area, then scarify and cultivate to a minimum depth of 8"; then set to finish grade. During the operation, remove debris, including all stones over 1" in any dimensions, and disposed of offsite. Next, provide chemical fertilizer, 16-20-0 composition, mechanically spread over the entire area at an average rate of 10 pounds per 1000 sq. ft. Cultivate fertilizer into the top six inches of soil. Inform the Landscape Architect for inspect and approve these areas prior to planting.

Special handling and installation requirements are as follows:
1. All sod delivered shall be installed within the 24 hour harvest/installation time frame.
2. All sod installed shall be laid down using a staggered seam regimen, alternating each set of rows so no two ends of sod strip are adjacent to each other.
3. Once installed sod is watered and all trimmings and scraps are removed and disposed of, all turf areas shall be power-rolled using at least a 500 pound weighted roller. All areas shall be rolled in perpendicular directions making certain all areas are rolled at least two times.
4. Commence irrigation to installed turf as soon as possible. Any areas not receiving irrigation water due to irrigation design or installation problems, shall receive immediate hand watering attention by installation crew members and subsequently report problem to Project Manager.

8.4 Berms/Grading: Earth berms shall be formed as indicated on the plans. Grading responsibility shall be work of the mass grading contractor unless specified otherwise on the construction documents. The Landscape Architect shall approve all grading based on aesthetics, prior to any tree irrigation and site improvements. The Civil Engineer shall approve all grading based upon drainage. Approvals must be obtained in writing prior to commencing landscape work. Notify Landscape Architect at least 48 hours prior to scheduled work.

9.0 PRUNING AND REPAIR

9.1 Upon completion of the work of this Section, prune trees and shrubs if required or directed by the Landscape Architect, and injuries repaired. Limit amount of pruning to the minimum necessary to remove dead and injured twigs and branches.

10.0 GUARANTEE AND REPLACEMENT

10.1 Guarantee all lawns and planting for a period of 90 days from the date of final acceptance unless otherwise noted. All lawns and planting shall be alive and in satisfactory growth at the end of the guarantee period.

10.2 During the guarantee period, all plants shall be in a healthy, viable condition. Replace any plant not in a healthy condition when notified by the Landscape Architect. Should any difference of opinion arise over replacement, the Landscape Architect's decision is final.

10.3 Guarantee replacements for a period of 90 days from the date of final acceptance

10.4 The guarantee period for deciduous trees shall be in effect until all are showing new growth the spring following planting provided the tree was installed just prior to it's dormant stage.

11.0 ACCEPTANCE OF WORK

11.1 After completion of all work and before the beginning of the maintenance period, notify the Landscape Architect to schedule the maintenance inspection. Provide on-site, a complete set of as-builts for Landscape Architect review during the maintenance inspection.

11.2 Before scheduling the maintenance inspection, insure that all tests and work related to irrigation is completed. The Landscape Architect shall be notified (14) days prior to scheduling inspection.

11.3 Insure that tree, shrub and ground cover quantities are according to plan and at correct spacings, and are in healthy substantially vigorous condition.

11.4 Irrigation system needs to be fully functional and complete on the date of inspection for approval. Open all valve boxes and controllers to expose hardware for inspection just prior to the arrival of the Landscape Architect/ Owner. Demonstrate the operation of all remote control valves from the controller, in sequence, and provide enough time for the Landscape Architect to inspect all areas being watered.

11.5 Should the Landscape Architect or Owner's representative determine the site to be sufficiently incomplete or poorly installed, they reserve the right to postpone or extend the maintenance period until the project is in acceptable condition.

12.0 MAINTENANCE

12.1 Maintenance shall be for a period of 90 days from date of final acceptance unless noted otherwise.

12.2 Ground cover areas shall be maintained weekly for first thirty days, bi-weekly during the remaining days, removing all weeds and grasses, and fine-tuning the irrigation system to ensure adequate coverage while minimizing overspray.

12.3 Lawns shall not be mowed until the height reaches 2 and 1/2" keeping all heavy objects off lawns until that time. Allow one day without water prior to mowing.

12.3.1 Lawns shall be fertilized at 30 day intervals with 5 lbs. of Ammonia Sulfate per 1000 sq. ft. Contractor shall supply proof of these fertilizations prior to final acceptance by the Landscape Architect.

12.4 During the entire maintenance period, the Contractor shall be responsible for all weeding, spraying, fertilizing, mowing, raking, sweeping, mulching, replanting and watering areas with proper amounts of water to assure proper growth of all planted materials.

12.5 The maintenance period may be extended by the Landscape Architect if in their opinion the project is not being properly maintained during the designated period.

13.0 FINAL ACCEPTANCE

13.1 Notify the Landscape Architect at least 14 days in advance of their final inspection. All punch-list items generated from the 'Acceptance of Work' must be completed. The site must be in perfect condition, with lawns mowed and trimmed (clippings removed), planted areas free from weeds/grasses, all refuse removed from planted areas, walks and drives clean and dry, The Contractor reprogram a final watering times and cycles of all sprinkler irrigated areas after initial times were set during the construction process. List in writhing the watering schedules for the owner to present to his maintenance staff. If all is in order, or can be made so within 24 hours, the site will be accepted verbally at this time, or extended until such time as the site can be accepted. A 'Letter of Acceptance' from the Landscape Architect will be presented to the contractor within (14) days signing off each party from contracted obligations to the document's work accomplished. Should the project require additional maintenance, the Landscape Architect shall notify the involved parties at this time. All additional time/cost involvement required by the Landscape Architect due to continuation of the maintenance period will be the responsibility of the Contractor. This time shall be billed at $75.00 per hour plus expenses.

END OF SECTION

LAND USE OFFICE
DEC 26 2013
RECEIVED

APPROVED
PLANNING BOARD

DATE:

AMORY LAND DESIGN, LLC.
26B STRONG STREET
NEWBURYPORT, MA
01950-2324

TROPIC STAR CONVENIENCE

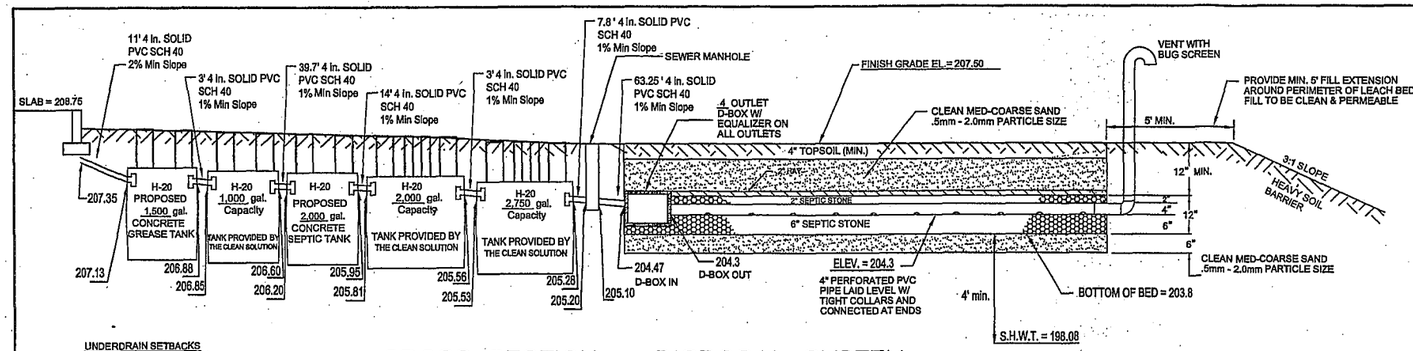
Project Address:	Calef Highway (Route 125) Barrington, New Hampshire
Project Issue Date:	December 23rd, 2013
Project Number:	11-011.03
Project Status:	Coordination and Approval
Reviewed By:	Howard Snyder

DELTA	ISSUE TITLE	DATE

LANDSCAPE SPECS

L5.0

Not Sealed



UNDERDRAIN SETBACKS
10' FROM SEPTIC TANK
25' FROM LEACH FIELD
35' FROM WELL

CROSS SECTION – DISPOSAL SYSTEM

NOT TO SCALE

TEST PIT LOGS

PERFORMED BY: Wayne Morrill, Jones & Beach Engineers, Inc., SSD #1358

TEST PIT #6

0'– 9" TOPSOIL

9"–21" 10YR 5/6 YELLOWISH BROWN LOAMY SAND GRANULAR, FRIABLE

21"–28" 10YR 5/8 YELLOWISH BROWN COARSE SAND GRANULAR, FRIABLE

28"–55" 2.5Y 6/4 LIGHT YELLOWISH BROWN COARSE SAND GRANULAR, FRIABLE

55"–83" 2.5Y 6/3 LIGHT YELLOWISH BROWN FINE SAND GRANULAR, FRIABLE

83"–100" 2.5Y 6/2 LIGHT BROWNISH GRAY FINE SAND GRANULAR, FRIABLE

SHWT = 83"
ROOTS TO 28"
H20 @ 83"
NO REFUSAL OBSERVED
PERC RATE = 2 MIN./INCH

TEST PIT, DATE: 11-20-13

PERC. TEST, DATE: 11-20-13
2 MIN./INCH

TEST PIT #7

0'– 9" TOPSOIL

9"–21" 10YR 5/8 YELLOWISH BROWN LOAMY SAND GRANULAR, FRIABLE

21"–28" 10YR 5/8 YELLOWISH BROWN COARSE SAND GRANULAR, FRIABLE

28"–55" 2.5Y 6/4 LIGHT YELLOWISH BROWN COARSE SAND GRANULAR, FRIABLE

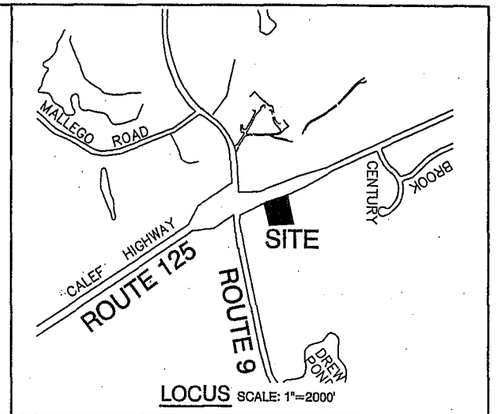
55"–83" 2.5Y 6/3 LIGHT YELLOWISH BROWN FINE SAND GRANULAR, FRIABLE

83"–100" 2.5Y 6/2 LIGHT BROWNISH GRAY FINE SAND GRANULAR, FRIABLE

SHWT = 83"
ROOTS TO 28"
H20 @ 83"
NO REFUSAL OBSERVED
PERC RATE = 2 MIN./INCH

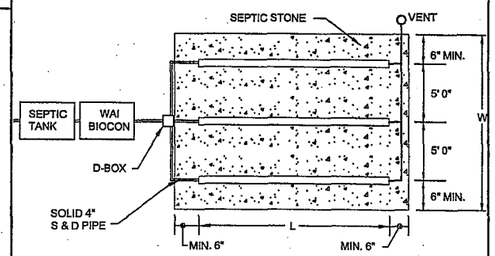
TEST PIT, DATE: 11-20-13

PERC. TEST, DATE: 11-20-13
2 MIN./INCH



LOCUS SCALE: 1"=2000'

TYPICAL PLAN VIEW



THIS SYSTEM UTILIZES FOUR (4) ROWS OF 4" PERFORATED PIPE. SEE 20-SCALE PLAN AT LEFT FOR LAYOUT.

GENERAL NOTES

CONTRACTOR TO VERIFY ALL ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION

- FILL TO BE MEDIUM TO COURSE-TEXTURED SAND (0.5mm-2.0mm).
- REMOVE TOPSOIL BEFORE PLACING FILL.
- 4 INCH THICK LOAM & SEED AROUND PERIMETER OF FILL.
- SIDE SLOPES OF FILL= 3(HORIZONTAL): 1(VERTICAL).
- INLET AND OUTLET OF SEPTIC TANK SHALL BE SEALED WITH HYDRAULIC CEMENT PRIOR TO INSPECTION.
- 50' SETBACK FROM POORLY DRAINED SOILS.
- 75' SETBACK FROM VERY POORLY DRAINED SOILS.
- THE OUTLET BAFFLE SHALL BE A VENTED TEE WHICH SHALL EXTEND TO A DISTANCE BELOW THE SURFACE EQUAL TO 40% OF THE LIQUID DEPTH.
- THE OUTLET AND INLET BAFFLES SHALL EXTEND ABOVE THE LIQUID LINE TO NOT LESS THAN ONE INCH FROM THE TOP OF THE TANK.
- NO VEHICULAR, NOR LIVESTOCK TRAVEL, NOR SNOW REMOVAL ALLOWED IN AREA OF SYSTEM.
- SEPTIC TANK IS TO BE SEALED AND GROUTED WITH NON-SHRINK MORTAR OR THICK PLASTIC CEMENT.
- SYSTEM WILL BE REPLACED IN SAME LOCATION IN CASE OF FAILURE.
- RECOMMENDED CLEANING SEPTIC TANK AT LEAST ONCE EVERY 2 YEARS.
- CROWN SYSTEM TO SHED RAINWATER; SLOPE SYSTEM AWAY FROM HOUSE.
- IF GARBAGE GRINDERS ARE DESIRED, SEPTIC TANK 50% LARGER.
- NO SURFACE WATER OR WELLS WITHIN 75'.
- 5 FT. FILL EXTENSION.
- TOWN OF BARRINGTON REQUIRES BED BOTTOM INSPECTION.
- 2,000 GALLON SEPTIC TANK, GREASE TRAP & D-BOX TO BE SUPPLIED BY: EF SHEA NEW ENGLAND CONCRETE PRODUCTS, INC. (603-942-5668) OR EQUAL.
- ROCKINGHAM COUNTY SOIL CONSERVATION SERVICE SOIL TYPE: WINDSOR .
- "THE CLEAN SOLUTION" SYSTEM IS DESIGNED AND PROVIDED BY WASTEWATER ALTERNATIVES, INC. (866)-900-2415. THE OWNER / APPLICANT OF THE CONVENIENCE STORE IS RESPONSIBLE TO COMPLY WITH MAINTENANCE OF THE CLEAN SOLUTION SYSTEM PER THE GUIDELINES IN THE WASTEWATER ALTERNATIVE, INC. INSPECTION CONTRACT.
- SEE SHEET D3 FOR SEPTIC SYSTEM DETAILS

STONE & PIPE DESIGN CALCULATIONS

CONVENIENCE STORE/GAS -3,000 S.F. (5 GPD / 100 S.F.) = 150 GPD
FAST FOOD 16 SEAT - 20 GPD PER SEAT + 35 GPD PER EMPLOYEE = 460 GPD
TOTAL GPD = 610

610 GPD @ 2 MIN./INCH = 762.5 S.F. REQUIRED

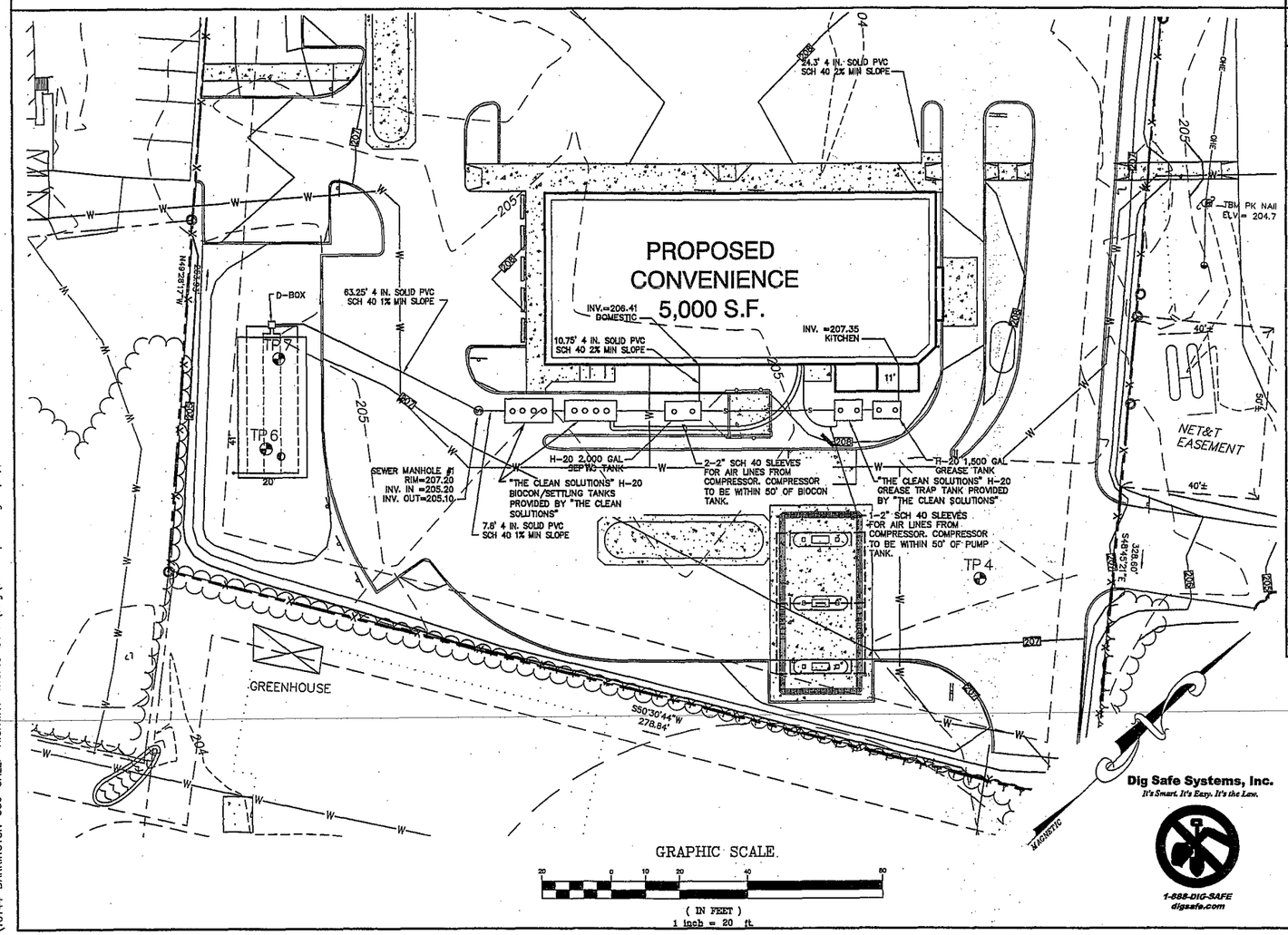
820 S.F. PROVIDED

BED DIMENSIONS 41' x 20'

THE CLEAN SOLUTION SYSTEM CAN HANDLE A PEAK LOAD OF UP TO 610 GPD

OPERATOR NOTES

- KNOW THE LOCATION OF YOUR SEPTIC TANK AND LEACHING AREA.
- INSPECT YOUR TANK YEARLY AND HAVE THE TANK PUMPED AS NEEDED AND AT LEAST EVERY THREE YEARS.
- DO NOT FLUSH BULKY ITEMS SUCH AS THROW-AWAY DIAPERS, SANITARY PADS OR BABY WIPES.
- DO NOT FLUSH TOXIC CHEMICALS SUCH AS PAINT THINNERS, PESTICIDES, OR CLORINE INTO YOUR SYSTEM AS THEY MAY KILL THE NECESSARY BACTERIA IN THE TANK.
- REPAIR LEAKING FIXTURES IN THE HOUSE PROMPTLY.
- BE CONSERVATIVE WITH YOU WATER USE AND USE WATER-REDUCING FIXTURES WHEREEVER POSSIBLE.
- KEEP DEEP-ROOTED TREES AND SHRUBS FROM GROWING ON AND ADJACENT TO YOUR LEACHING AREA.



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1-888-DIG-SAFE
digsafe.com

DESIGN INTENT

THE BOTTOM OF THE EFFLUENT DISPOSAL SYSTEM (EDS) SHALL BE CONSTRUCTED AT ELEVATION 203.8. THIS IS APPROXIMATELY 1.2 FEET BELOW ORIGINAL GROUND ON THE HIGH CONTOUR OF THE DESIGNED EFFLUENT DISPOSAL SYSTEM.

THE BUILDER/SITE CONTRACTOR IS RESPONSIBLE TO CONFIRM THE ZONING DIMENSIONAL REQUIREMENTS AND SETBACK LINE REQUIREMENTS PRIOR TO INITIATING CONSTRUCTION OF THE PROPOSED HOUSE AND SEPTIC SYSTEM. THE ZONING ORDINANCE OF THE MUNICIPALITY IS TO BE COMPLIED WITH. THE BUILDER/SITE CONTRACTOR IS ALSO RESPONSIBLE TO CONTACT THE MUNICIPALITY REGARDING INSPECTIONS PRIOR TO AND DURING CONSTRUCTION, I.E. LOCATION AND BED-BOTTOM INSPECTIONS.

SUBDIVISION APPROVAL # __PRE 1964____, ISSUED: _____

CONSTRUCTION APPROVAL # CA2012107613 , ISSUED: 2/21/12

LAND USE OFFICE
DEC 26 2013
RECEIVED

NEW HAMPSHIRE Designer of Subsurface Disposal Systems ★★★ Wayne G. Morrill No 1358 Department of Environmental Services

ZONING REQUIREMENTS
TOWN OF BARRINGTON, NH
ZONE: TOWN CENTER
BUILDING SETBACKS:
FRONT = 50
SIDES = 15
REAR = 15
WETLAND SETBACKS:
BUILDING = 75
SEPTIC SYSTEM = 75
UNDERDRAIN SETBACKS:
5' FROM SEPTIC TANK
10' FROM LEACH FIELD
OUTLET 25' FROM WELL

PROJECT PARCEL
TOWN OF BARRINGTON, NH
TAX MAP 238, LOT 4

APPLICANT
THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD
HAMPTON, NH 03842
BOOK 3937, PAGE 0522

TOTAL LOT AREA
80,273.55 SQ. FT.
1.84 ACRES

Design: WGM	Draft: GPC	Date: 01/03/12
Checked: WGM	Scale: AS NOTED	Project No.: 10144
Drawing Name: 10144-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE

15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

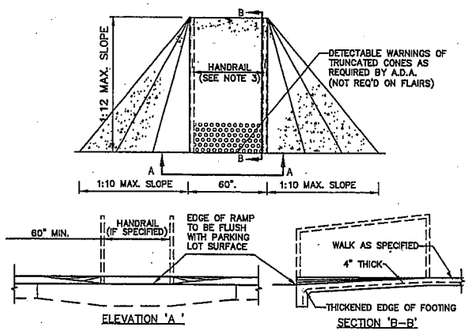
J/B Jones & Beach Engineers, Inc.
85 Portsmouth Ave. Civil Engineering Services 603-772-4746

Plan Name: EFFLUENT DISPOSAL DESIGN

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

DRAWING No. S1

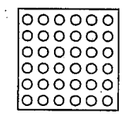
\Land Projects 3\10144-BARRINGTON-356-CALEF-HIGHWAY-TROPIC-STAR\dwg\10144-plan.dwg 1/3/2012 8:33:49 AM EST



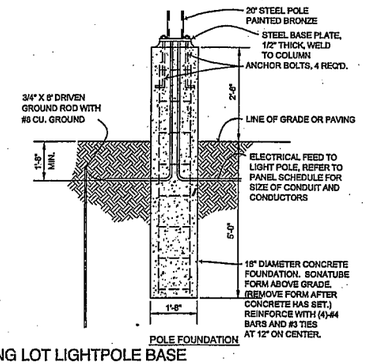
NOTES:
1. RAMP TO CONTAIN 6"x6" W1.4xW1.4 W.W.F. EXTENDING INTO FOOTING.
2. RAMP TO BE OF CONTRASTING COLOR TO WALK AND PAVEMENT.
3. HANDRAIL TO BE INSTALLED ONLY IF REQUIRED BY LOCAL CODE.

HANDICAP ACCESS RAMP

NOT TO SCALE

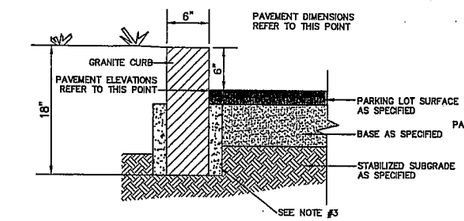


ADA STANDARDIZES DETECTABLE WARNINGS AS RAISED TRUNCATED DOMES WITH A NOMINAL 0.9 IN. DIAMETER, 0.2 IN. HEIGHT AND NOMINAL 2.35 IN ON CENTER WHICH MUST CONTRAST VISUALLY WITH ADJOINING SURFACES.



PARKING LOT LIGHTPOLE BASE

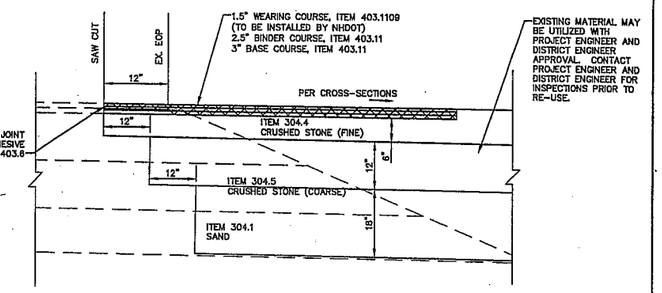
NOT TO SCALE



NOTES:
1. JOINTS BETWEEN STONES SHALL BE MORTARED.
2. EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
3. CONTRACTOR TO SET CURBING, PLACE 2"-3" OF 3,000 PSI CONCRETE ON EACH SIDE AND BRIDGE CONCRETE UNDER CURBING.

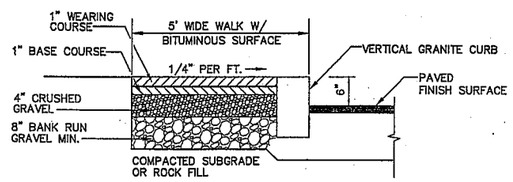
6" VERTICAL GRANITE CURB

NOT TO SCALE



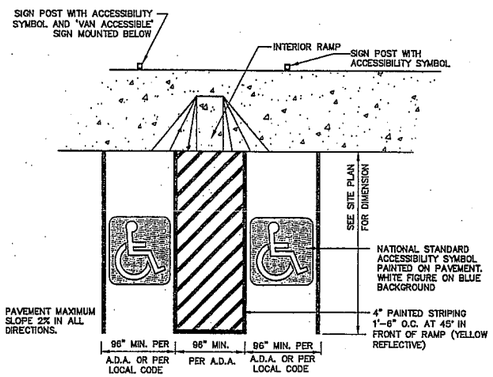
N.H. ROUTE 9 LANE EXPANSION: JOINT DETAIL

NOT TO SCALE



BIT. SIDEWALK w/VERTICAL GRANITE CURB

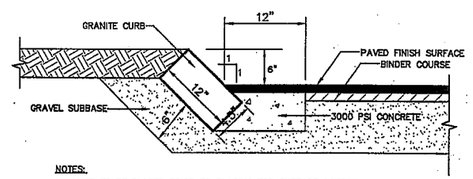
NOT TO SCALE



HANDICAP PARKING LAYOUT

NOT TO SCALE

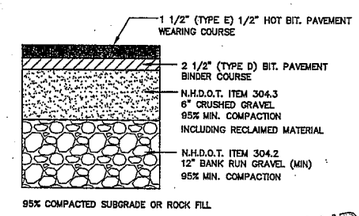
NOTES:
1. AS AN ALTERNATIVE TO POST MOUNTING, SIGN MAY BE BUILDING MOUNTED.



NOTES:
1. CURB TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
2. JOINTS BETWEEN STONES SHALL BE MORTARED.

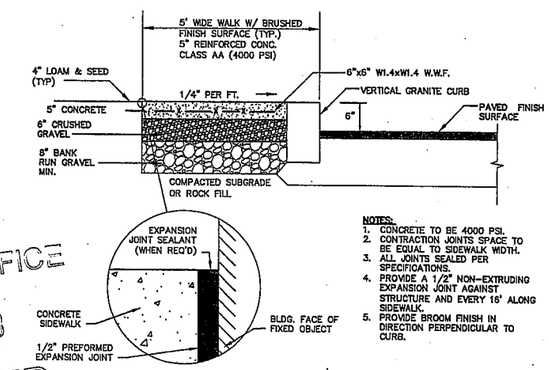
SLOPED GRANITE CURB

NOT TO SCALE



BITUMINOUS PAVEMENT

NOT TO SCALE



NOTES:
1. CONCRETE TO BE 4000 PSI.
2. CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH.
3. ALL JOINTS SEALED PER SPECIFICATIONS.
4. PROVIDE A 1/2" NON-EXTRUDING EXPANSION JOINT AGAINST STRUCTURE AND EVERY 16' ALONG SIDEWALK.
5. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

CONCRETE SIDEWALK W/ VERTICAL GRANITE CURB

NOT TO SCALE

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DEC 26 2013
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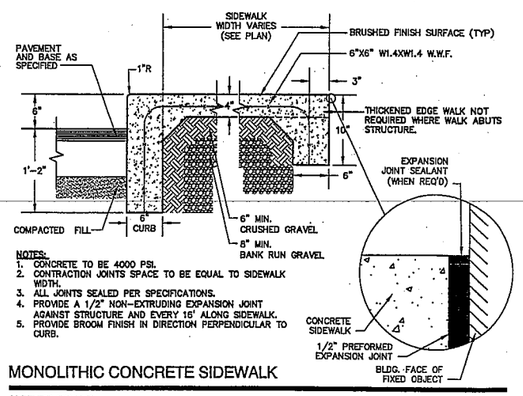
TRAFFIC CONTROL SCHEDULE

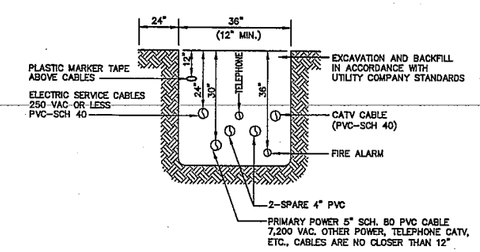
SIGN NUMBER	SIGN	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT	REMARKS
R1-1	STOP	30"	30"	WHITE ON RED	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-8 (134)	ONLY	36"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R7-8	PARKING	12"	24"	BLUE & GREEN ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R7-8A	VAN	12"	6"	BLUE & GREEN ON WHITE	CHANNEL	5'-0"	REFLECTORIZED SIGN
R14-1	TRUCK ROUTE	24"	18"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R5-1	DO NOT ENTER	30"	30"	RED / SILVER	CHANNEL	7'-0"	REFLECTORIZED SIGN
R6-1	ONE WAY	36"	12"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R4-7		18"	24"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
W4-2L		24"	24"	BLACK ON YELLOW	CHANNEL	7'-0"	REFLECTORIZED SIGN



NOTES:
1. CONCRETE TO BE 4000 PSI.
2. CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH.
3. ALL JOINTS SEALED PER SPECIFICATIONS.
4. PROVIDE A 1/2" NON-EXTRUDING EXPANSION JOINT AGAINST STRUCTURE AND EVERY 16' ALONG SIDEWALK.
5. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

MONOLITHIC CONCRETE SIDEWALK

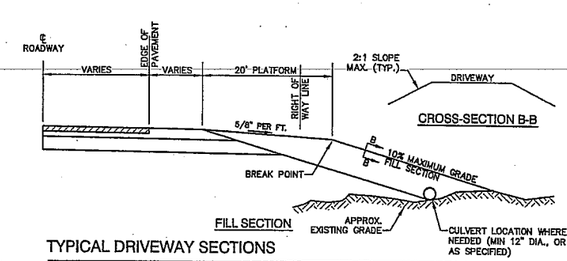
NOT TO SCALE



NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

UTILITY TRENCH

NOT TO SCALE



TYPICAL DRIVEWAY SECTIONS

NOT TO SCALE

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Design: WGM	Draft: GPC	Date: 01/03/12
Checked: WGM	Scale: AS NOTED	Project No.: 10144
Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE — BARRY W. GIER No. 12535 — LICENSED PROFESSIONAL ENGINEER — 01/03/12

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-Mail: JBE@JONESANDBEACH.COM

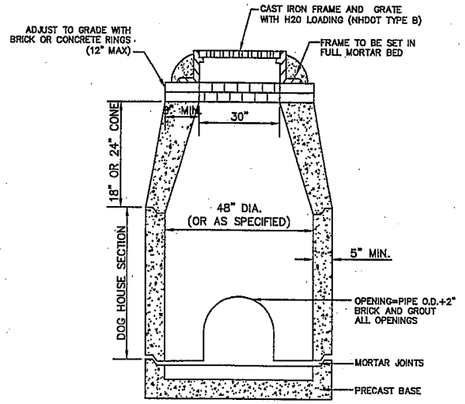
Plan Name: DETAIL SHEET

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
D1

SHEET 19 OF 22
JBE PROJECT NO. 10144

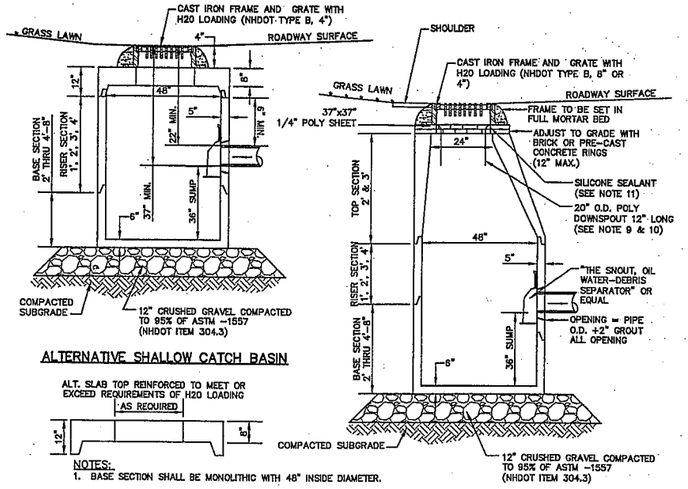


NOTES:

1. 4,000 PSI AFTER 28 DAYS.
2. JOINTS SEALED WITH BUTYL RUBBER SEALANT.
3. PROVIDED WITH CAST IRON MANHOLE FRAME AND GRATE OR SPECIAL ACCESS COVER.
4. PIPE OPENINGS OR FLEXIBLE PIPE SLEEVES MAY BE CAST IN.
5. STRUCTURES ARE TO BE SUPPLIED BY SUPERIOR CONCRETE, INC., OR AN EQUIVALENT APPROVED BY THE ENGINEER.
6. CONTRACTOR TO PROVIDE INLET/OUTLET BORINGS WHERE NECESSARY.
7. ALL PIPE CONNECTIONS TO STRUCTURES MUST BE SEALED AND GROUTED SO AS TO BE WATERTIGHT.

DOGHOUSE DRAIN CATCH BASIN

NOT TO SCALE



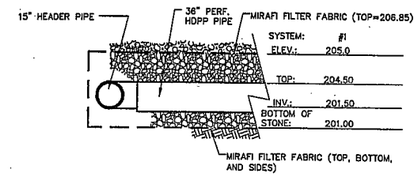
ALTERNATIVE SHALLOW CATCH BASIN

NOTES:

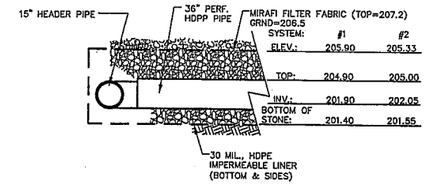
1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H20 LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H20 LOADING
5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
7. ALL CATCH BASIN FRAMES AND GRATES SHALL BE NHDOT CATCH BASIN TYPE ALTERNATE 1 OR NEENAH R-3570 OR APPROVED EQUAL (24"x24" TYPICAL).
8. STANDARD CATCH BASIN FRAME AND GRATE(S) SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"), OR PRECAST CONCRETE "DONUTS".
9. POLYETHYLENE LINER SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
10. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE OR MORTAR.
11. PLACE A CONTINUOUS BEAD OF SILICONE SEALANT BETWEEN FRAME AND POLYETHYLENE SHEET.

CATCH BASIN

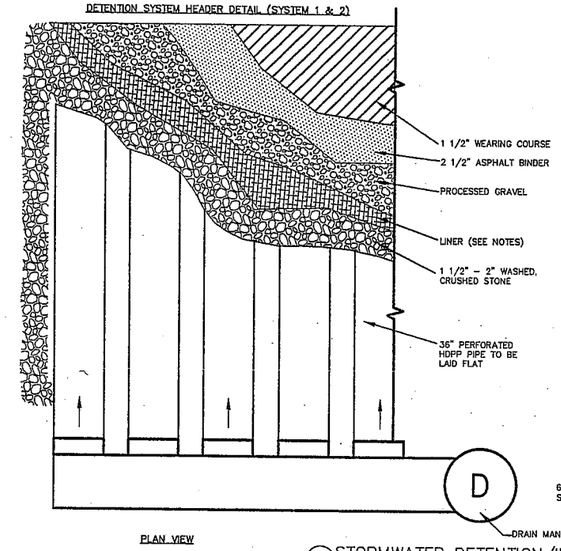
NOT TO SCALE



INFILTRATION SYSTEM HEADER DETAIL

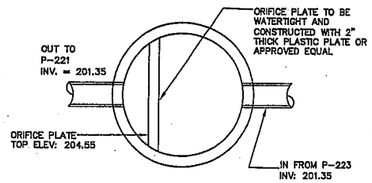


DETENTION SYSTEM HEADER DETAIL (SYSTEM 1 & 2)

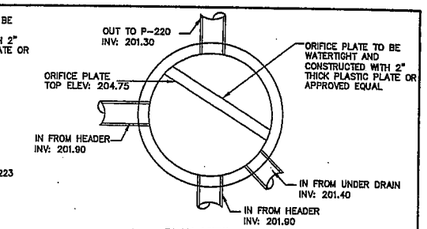


PLAN VIEW

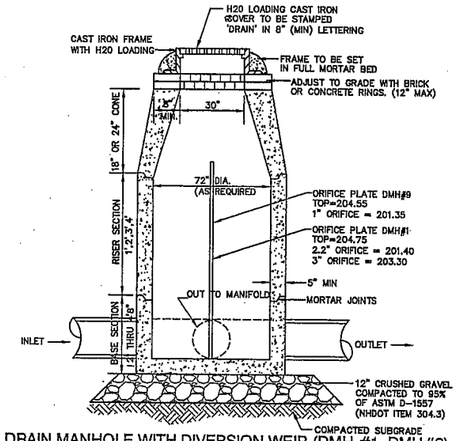
9 STORMWATER DETENTION/INFILTRATION SYSTEM



PLAN VIEW – DMH #9
NOT TO SCALE



PLAN VIEW – DMH #1
NOT TO SCALE



DRAIN MANHOLE WITH DIVERSION WEIR (DMH #1, DMH#9)

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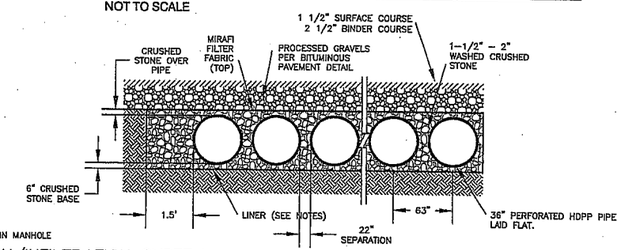
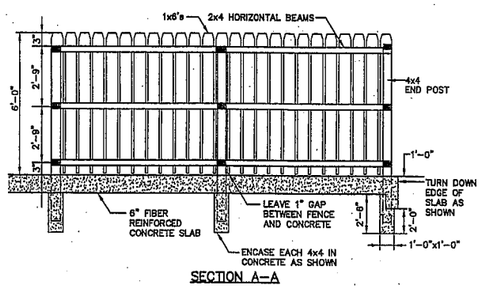
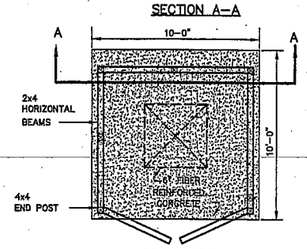


CROSS SECTION VIEW



SECTION A–A



PLAN VIEW

NOTES

1. ALL LUMBER TO BE PRESSURE TREATED.
2. WOOD FENCE TO BE PAINTED OR STAINED TO MATCH BUILDING.

DUMPSTER SCREENING

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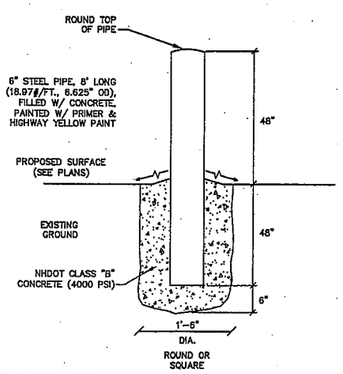

BOLLARD DETAIL

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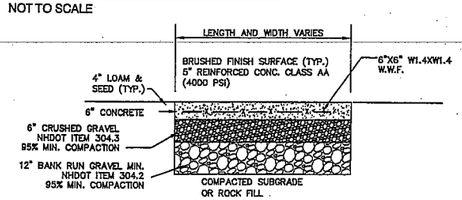
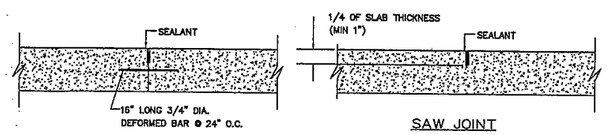


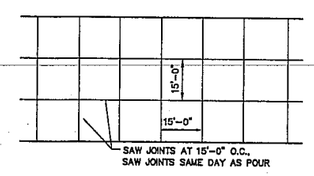
CONCRETE PAD DETAIL

NOT TO SCALE



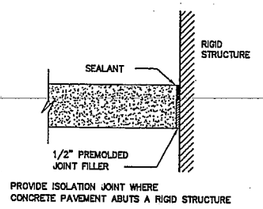
CONSTRUCTION JOINT OR DOWEL JOINT

SAW JOINT



PLAN VIEW

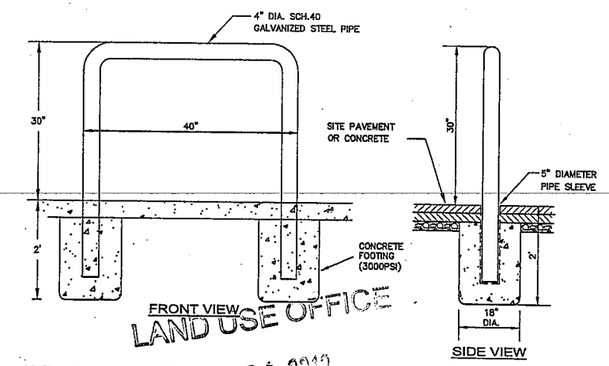
CONCRETE PAVEMENT



ISOLATION JOINT

CONCRETE PAVEMENT JOINT DETAIL

NOT TO SCALE



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Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE BARRY W. GIER No. 12535 LICENSED PROFESSIONAL ENGINEER 12/26/13

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

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PO Box 219
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Plan Name:	DETAIL SHEET
Project:	TROPIC STAR CONVENIENCE CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record:	THE THREE SOCIOS, LLC 321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
D2
SHEET 20 OF 22

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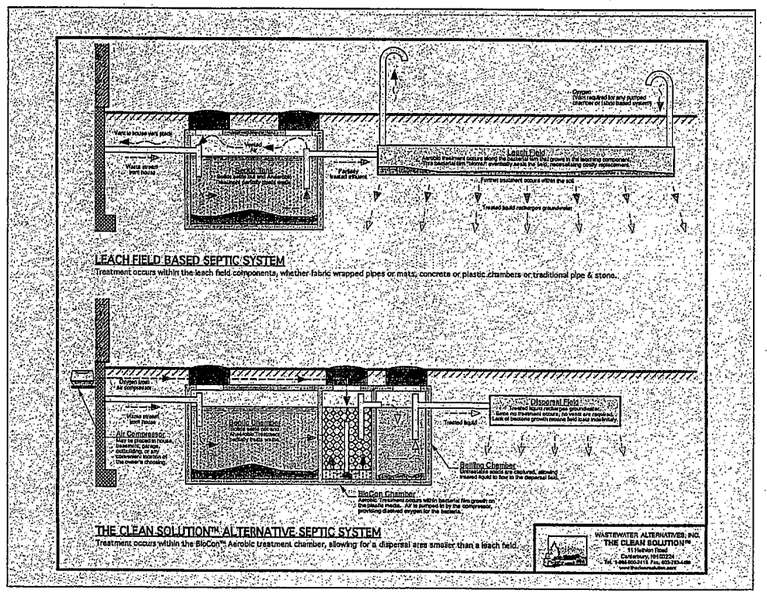

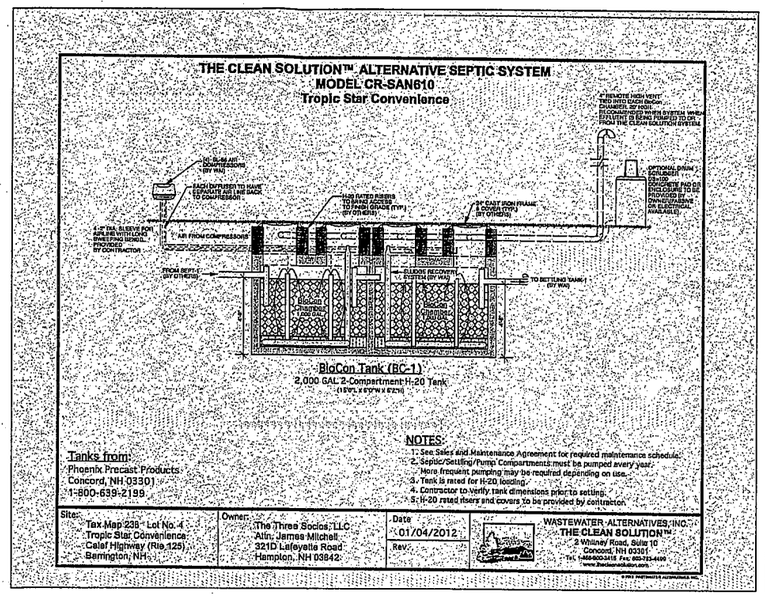

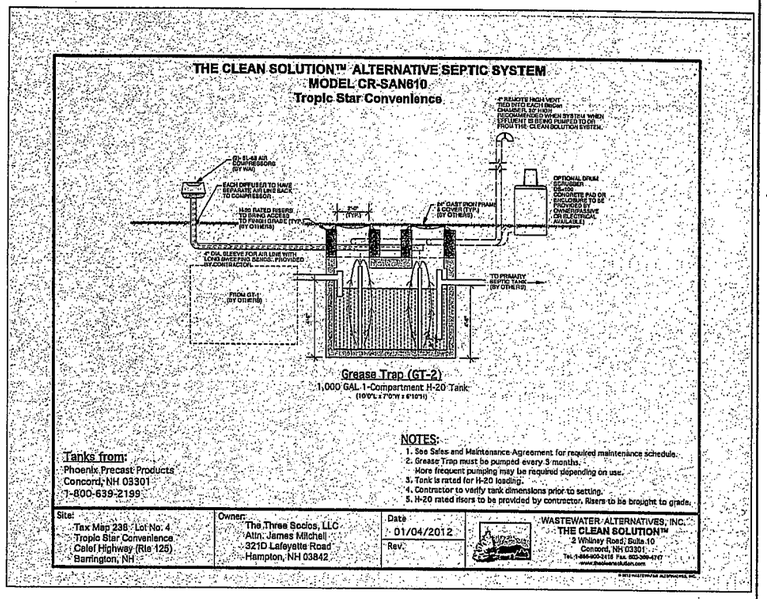

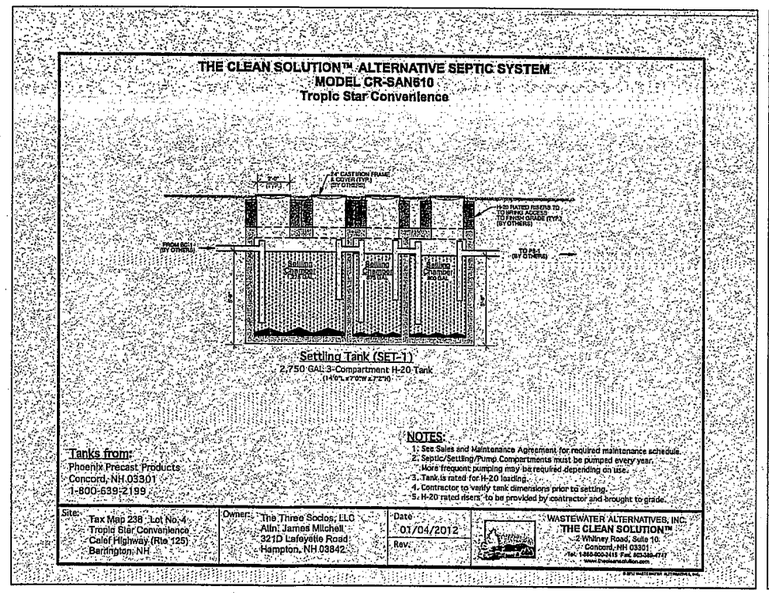

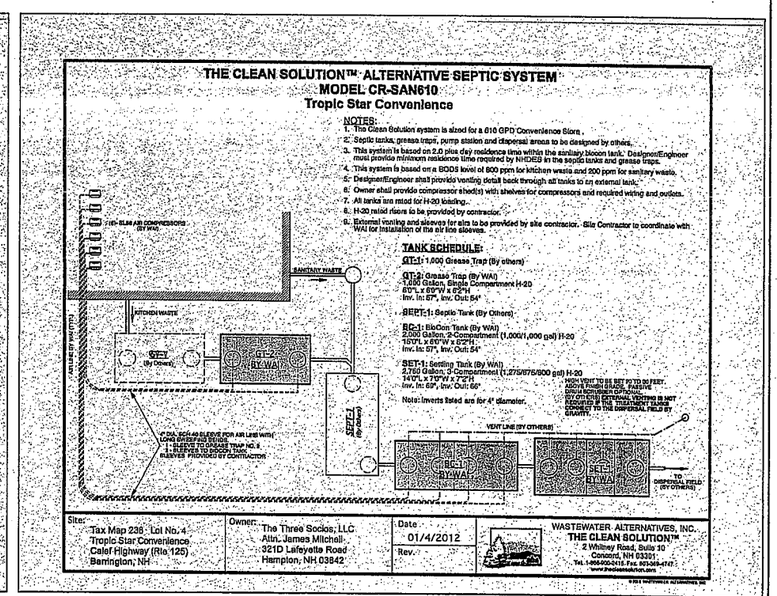

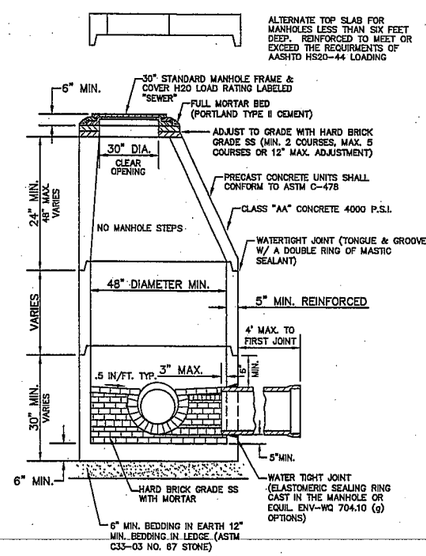

NOTES:

1. PER NHDES ENV-WQ 704.10(K), THE MORTAR SPECIFICATION SHALL BE AS FOLLOWS:
   1. MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION;
   2. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
      A. 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
      B. 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PART HYDRATED LIME;
   3. CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05;
   4. HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207-06 'STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES';
   5. SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM C33-03 'STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES';

SEWER MANHOLE

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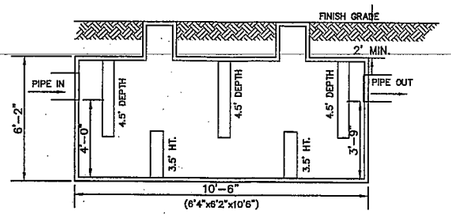

NOTES

1. SUPERIOR CONCRETE ITEM NO. 11066 (OR APPROVED EQUAL). LIQUID CAPACITY 2000 GALLONS. WT. = 12,500lbs. (PLUS BAFFLES).
2. TWO ACCESS RISERS REQUIRED WITH 30" H20 LOADING FRAME AND MANHOLE COVER.
3. TANK TO BE LAID ON COMPACTED BED OF 12" MIN. CRUSHED GRAVEL. BACK FILL WITH 3" MINUS GRAVEL COMPACTED.
4. PROVIDE 3' MIN. COVER OVER PIPES.

OIL/GREASE SEPARATOR AND SEDIMENTATION TRAP

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Drawing Name: 10144-PLAN.dwg		

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STATE OF NEW HAMPSHIRE — BARRY W. GIER No. 12635 — LICENSED PROFESSIONAL ENGINEER

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Plan Name:	DETAIL SHEET
Project:	TROPIC STAR CONVENIENCE CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record:	THE THREE SOCIOS, LLC 321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
D3
SHEET 21 OF 22
JBE PROJECT NO. 10144

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TEMPORARY EROSION CONTROL NOTES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. AT NO TIME SHALL AN AREA IN EXCESS OF THAT REQUIRED FOR CONSTRUCTION BE EXPOSED.
2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
3. ALL DISTURBED AREAS SHALL BE RETURNED TO PROPOSED GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 6" OF SCREENED ORGANIC LOAM AND SEEDED WITH SEED MIXTURE 'C' AT A RATE NOT LESS THAN 1.10 POUNDS OF SEED PER 1,000 S.F. OF AREA (48 LBS. / ACRE).
4. SILT FENCES AND OTHER BARRIERS SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5" OR GREATER. ALL DAMAGED AREAS SHALL BE REPAIRED, AND SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
5. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
6. AREAS MUST BE SEEDED AND MULCHED OR OTHERWISE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 14 DAYS OF THE INITIAL DISTURBANCE OF SOIL.
7. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER) 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.
8. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
9. AFTER NOVEMBER 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
10. 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% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED; OR
    D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
11. IN ORDER TO ENSURE THE STABILITY OF THE SITE AND EFFECTIVE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES SPECIFIED IN THE PLANS FOR THE DURATION OF CONSTRUCTION, THE CONTRACTOR SHALL BE IN STRICT COMPLIANCE WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS IN ADDITION TO THOSE CALLED FOR IN THE SWPPP:
    A. A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE START OF ALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE SITE SPECIFIC PERMIT ("PERMIT").
    B. DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY ½ INCH OR GREATER RAIN EVENT (I.E., ½ INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
    C. THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATIONS TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485 A:17.
    D. FUGITIVE DUST CONTROL IS REQUIRED TO BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000, AND THE PROJECT IS TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.

CONSTRUCTION SEQUENCE

1. PRIOR TO THE START OF ANY ACTIVITY, IT IS THE RESPONSIBILITY OF THE SITE'S SITE DEVELOPER (OR OWNER) TO FILE A NOTICE OF INTENT (NOI) FORM WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) IN ORDER TO GAIN COVERAGE UNDER THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. A PRE CONSTRUCTION MEETING AT THE TOWNS DISCRETION IS TO BE HELD WITH ALL DEPARTMENT HEADS PRIOR TO THE START OF CONSTRUCTION.
2. WETLAND BOUNDARIES ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.
3. CUT AND REMOVE TREES IN CONSTRUCTION AREA AS REQUIRED OR DIRECTED.
4. INSTALL SILT FENCING, HAY BALES AND CONSTRUCTION ENTRANCES PRIOR TO THE START OF CONSTRUCTION. THESE ARE TO BE MAINTAINED UNTIL THE FINAL PAVEMENT SURFACING AND LANDSCAPING AREAS ARE ESTABLISHED.
5. CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. THIS INCLUDES ANY REQUIRED DEMOLITION OF EXISTING STRUCTURES, UTILITIES, ETC.
6. CONSTRUCT AND/OR INSTALL TEMPORARY OR PERMANENT SEDIMENT AND/OR DETENTION BASIN(S) AS REQUIRED. THESE FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO DIRECTING RUN-OFF TO THEM.
7. STRIP LOAM AND PAVEMENT, OR RECLAIM EXISTING PAVEMENT WITHIN LIMITS OF WORK PER THE RECOMMENDATIONS OF THE PROJECT ENGINEER AND STOCKPILE EXCESS MATERIAL. STABILIZE STOCKPILE AS NECESSARY.
8. PERFORM PRELIMINARY SITE GRADING IN ACCORDANCE WITH THE PLANS.
9. PREPARE BUILDING PAD TO ENABLE BUILDING CONSTRUCTION TO BEGIN.
10. INSTALL THE SEPTIC AND DRAINAGE SYSTEMS FIRST, THEN ANY OTHER UTILITIES IN ACCORDANCE WITH THE PLAN AND DETAILS. ANY CONFLICTS BETWEEN UTILITIES ARE TO BE RESOLVED WITH THE INVOLVEMENT AND APPROVAL OF THE ENGINEER.
11. INSTALL INLET PROTECTION AT ALL CATCH BASINS AS THEY ARE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS.
12. ALL SWALES AND DRAINAGE STRUCTURES ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
13. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE DITCHES, CHECK DAMS, SEDIMENT TRAPS, ETC., TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS AND/OR PROPERTY.
14. PERFORM FINAL FINE GRADING, INCLUDING PLACEMENT OF 'SELECT' SUBGRADE MATERIALS.
15. PAVE ALL PARKING LOTS AND ROADWAYS WITH INITIAL 'BASE COURSE'.
16. PERFORM ALL REMAINING SITE CONSTRUCTION (i.e. BUILDING, CURBING, UTILITY CONNECTIONS, ETC.).
17. LOAM AND SEED ALL DISTURBED AREAS AND INSTALL ANY REQUIRED SEDIMENT AND EROSION CONTROL FACILITIES (i.e. RIP RAP, EROSION CONTROL BLANKETS, ETC.).
18. FINISH PAVING ALL ROADWAYS AND PARKING AREAS WITH 'FINISH' COURSE.
19. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
20. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
21. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
22. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE BEEN 75%-85% ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND RE-VEGETATE ALL DISTURBED AREAS.
23. CLEAN SITE AND ALL DRAINAGE STRUCTURES, PIPES AND SUMPS OF ALL SILT AND DEBRIS.
24. INSTALL ALL PAINTED PAVEMENT MARKINGS AND SIGNAGE PER THE PLANS AND DETAILS.
25. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
26. UPON COMPLETION OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ANY RELEVANT PERMITTING AGENCIES THAT THE CONSTRUCTION HAS BEEN FINISHED IN A SATISFACTORY MANNER.

SEEDING SPECIFICATIONS

1. GRADING AND SHAPING
   A. SLOPES SHALL NOT BE STEEPER THAN 2:1 WITHOUT APPROPRIATE EROSION CONTROL MEASURES AS SPECIFIED ON THE PLANS (3:1 SLOPES OR FLATTER ARE PREFERRED).
   B. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
2. SEEDBED PREPARATION
   A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
   B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND FERTILIZER AND LIME MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
3. ESTABLISHING A STAND
   A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. TYPES AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN 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 100 LBS. PER 1,000 SQ.FT.
   NITROGEN(N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ.FT.
   PHOSPHATE(P2O5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.
   POTASH(K2O), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 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 .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
   C. REFER TO THE 'SEEDING GUIDE' AND 'SEEDING RATES' TABLES ON THIS SHEET FOR APPROPRIATE SEED MIXTURES AND RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT TREFOIL AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT PRIOR TO THEIR INTRODUCTION TO THE SITE.
   D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20th OR FROM AUGUST 10th TO SEPTEMBER 1st.
4. MULCH
   A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
   B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 S.F.
5. MAINTENANCE TO ESTABLISH A STAND
   A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
   B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED.
   C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, ANNUAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E	FAIR	EXCELLENT	EXCELLENT	2/
	F	FAIR	EXCELLENT	EXCELLENT	2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE BELOW.
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

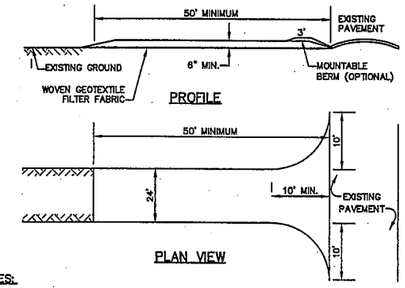
NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 15th, IF PERMANENT SEEDING NOT YET COMPLETE.

SEEDING GUIDE

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR		
FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
* C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDS FOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

SEEDING RATES

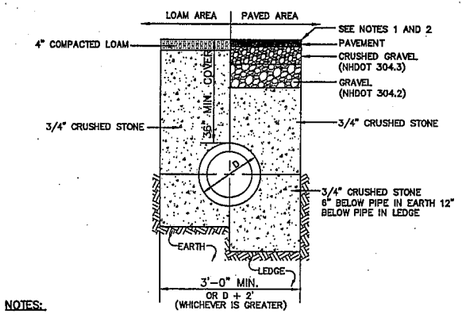


NOTES:

1. STONE FOR STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS, OR 10 FEET, WHICHEVER IS GREATER.
5. GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER FABRIC IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A STONE BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

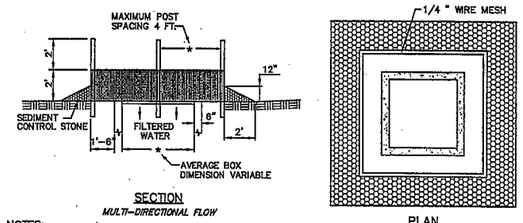


NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND TOWN SPECIFICATIONS.
3. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

DRAINAGE TRENCH

NOT TO SCALE



SECTION
MULTI-DIRECTIONAL FLOW

PLAN
MULTI-DIRECTIONAL FLOW

NOTES:

1. SEDIMENT CONTROL STONE SHALL BE 3/4" WASHED STONE.
2. WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH OPENINGS.
3. TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
4. STEEL POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
5. WOOD POST SHALL BE 6 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER.
6. POST SPACING SHALL BE A MAXIMUM OF 4 FT.

INLET PROTECTION

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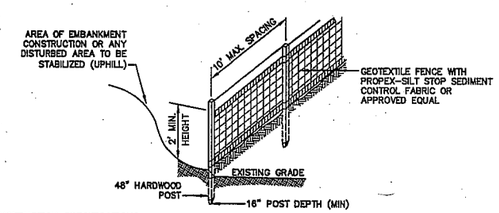
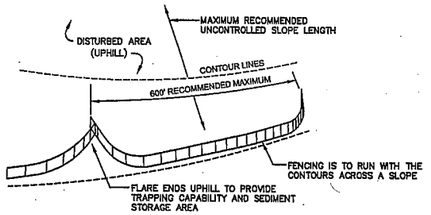


CONSTRUCTION SPECIFICATIONS:

1. WOVEN FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP, MID AND BOTTOM AND EMBEDDED IN THE GROUND A MINIMUM OF 6" AND THEN COVERED WITH SOIL.
2. THE FENCE POSTS SHALL BE A MINIMUM OF 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED 6", FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED AND PROPERLY DISPOSED OF WHEN IT IS 6" DEEP OR VISIBLE 'BULGES' DEVELOP IN THE SILT FENCE.
5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
6. SILT FENCE SHALL REMAIN IN PLACE FOR 24 MONTHS.



7. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND REVEGETATED.

MAINTENANCE:

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE DONE IMMEDIATELY.
2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
4. SEDIMENT DEPOSITS THAT ARE REMOVED, OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SILT FENCE

NOT TO SCALE

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Design: WGM	Draft: GPC	Date: 01/03/12
Checked: WGM	Scale: AS NOTED	Project No.: 10144
Drawing Name: 10144-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

STATE OF NEW HAMPSHIRE — CARRY W. GIBB No. 12535 — LICENSED PROFESSIONAL ENGINEER — 12/3/12

REV.	DATE	REVISION	BY
15	12/18/13	REVISED PER TOWN REVIEW	BWG
14	11/19/13	REVISED PER TOWN REVIEW	BWG
13	11/1/13	REVISED PER NHDES DRINKING WATER BUREAU	CSA
12	08/2/13	REVISED PER NHDOT SITE MEETING	WGM
11	07/29/13	REVISED PER NHDOT	BWG

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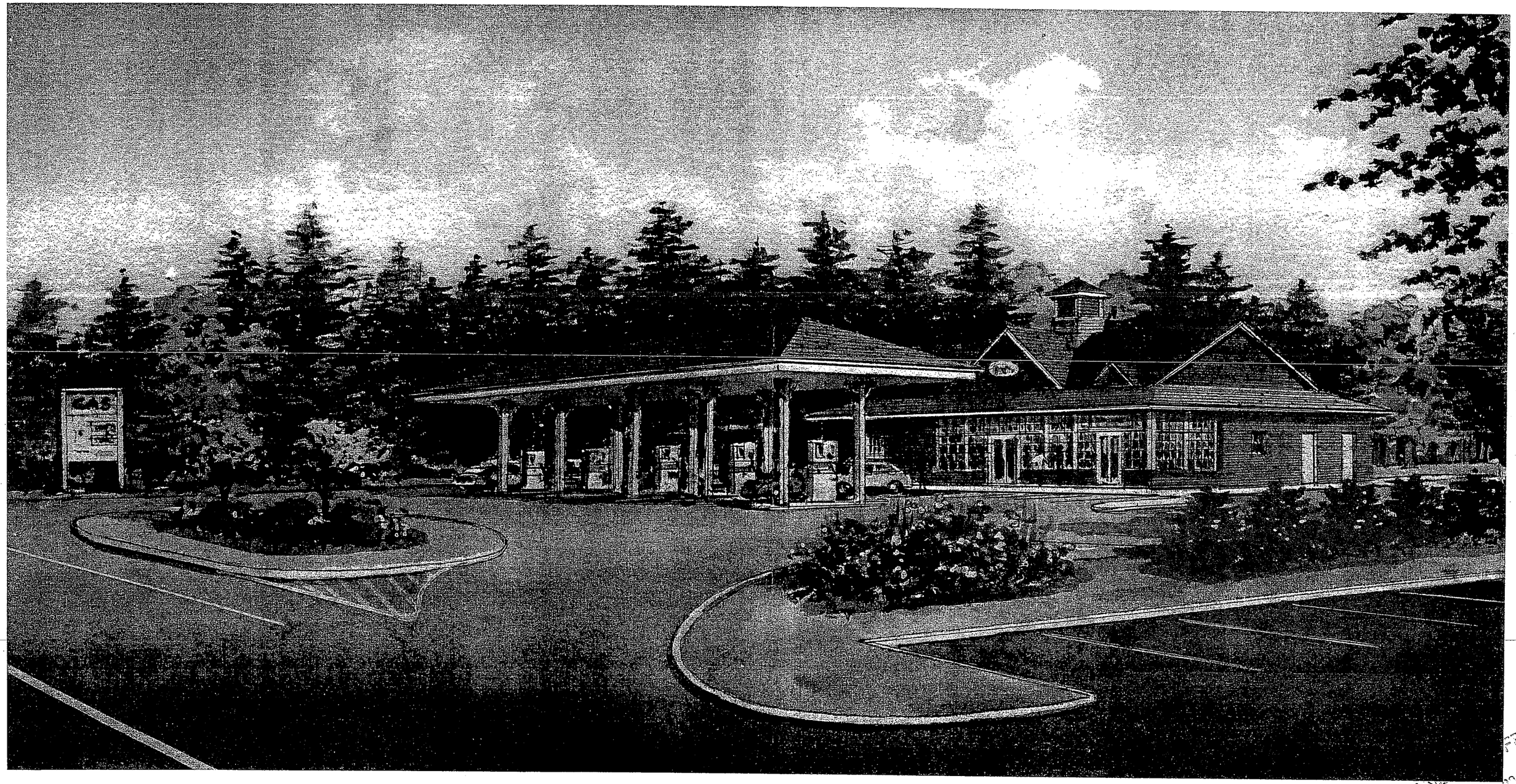
E-Mail: JBE@JONESANDBEACH.COM

Plan Name: EROSION AND SEDIMENT CONTROL DETAILS

Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH

Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
E1
SHEET 22 OF 22
JBE PROJECT NO. 10144



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