COMMERCIAL DEVELOPMENT
TOWN CENTER SHOPS
TAX MAP 217 AND LOT 112
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

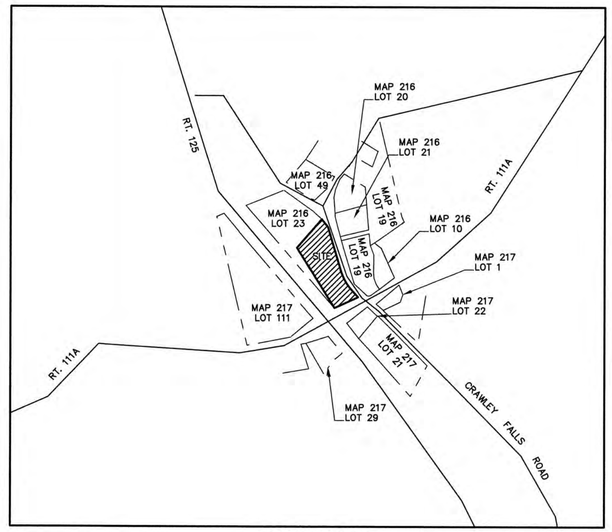
Know what's **below**
811 before you dig

GENERAL LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		CENTERLINE
		FRESHWATER WETLANDS LINE
		TIDAL WETLANDS LINE
		STREAM CHANNEL
		TREE LINE
		STONEWALL
		BARBED WIRE
		FENCE
		STOCKADE FENCE
		SOIL BOUNDARY
		AQUIFER PROTECTION LINE
		FLOOD PLAIN LINE
		ZONELINE
		EASEMENT
100	100	MAJOR CONTOUR
98	98	MINOR CONTOUR
VGC	VGC	EDGE OF PAVEMENT
SGC	SGC	VERTICAL GRANITE CURB
CCB	CCB	SLOPE GRANITE CURB
PCC	PCC	CAPE COD BERM
		POURED CONCRETE CURB
X	X	SILT FENCE
D		DRAINAGE LINE
S	S	SEWER LINE
FM	FM	SEWER FORCE MAIN
G	G	GAS LINE
W	W	WATER LINE
WS	WS	WATER SERVICE
OHE	OHE	OVERHEAD ELECTRIC
UGE	UGE	UNDERGROUND ELECTRIC
		GUARDRAIL
UD	UD	UNDERDRAIN
F	F	FIRE PROTECTION LINE
	W	THRUST BLOCK
		IRON PIPE/IRON ROD
		DRILL HOLE
		IRON ROD/DRILL HOLE
		STONE/GRANITE BOUND
100x0	100x0	SPOT GRADE
100.00	100.00	PAVEMENT SPOT GRADE
100.00 / 99.50	100.00 / 99.50	CURB SPOT GRADE
		BENCHMARK (TBM)
		DOUBLE POST SIGN
		SINGLE POST SIGN
W	W	WELL
TP1		TEST PIT
		FAILED TEST PIT
M	M	MONITORING WELL
PT		PERC TEST
1		PHOTO LOCATION
		TREES AND BUSHES
		UTILITY POLE
		LIGHT POLES
D	D	DRAIN MANHOLE
S	S	SEWER MANHOLE
		HYDRANT
		WATER GATE
		WATER SHUT OFF
		REDUCER
		SINGLE GRATE CATCH BASIN
		DOUBLE GRATE CATCH BASIN
		TRANSFORMER
		CULVERT W/WINGWALLS
		CULVERT W/FLARED END SECTION
		CULVERT W/STRAIGHT HEADWALL
		STONE CHECK DAM
		DRAINAGE FLOW DIRECTION
		4K SEPTIC AREA
		WETLAND IMPACT
		VEGETATED FILTER STRIP
		RIPRAP
		OPEN WATER
		FRESHWATER WETLANDS
		TIDAL WETLANDS
		STABILIZED CONSTRUCTION ENTRANCE
		CONCRETE
		GRAVEL
		SNOW STORAGE
		RETAINING WALL

SHEET INDEX

CS	COVER SHEET
B1	BOUNDARY PLAN
C1	EXISTING CONDITIONS PLAN
C2	SITE PLAN
C3	GRADING AND DRAINAGE PLAN
L-01	LANDSCAPE
L2	LIGHTING PLAN
D1-D3	DETAIL SHEETS
E1	EROSION AND SEDIMENT CONTROL DETAILS
A1	ARCHITECTURAL ELEVATIONS
S1-S2	SEPTIC PLANS



LOCUS MAP
SCALE 1" = 500'

PERMITS

TYPE OF PERMIT	STATUS
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.	

TYPE OF PERMIT	STATUS
BRENTWOOD SITE PLAN APPROVAL: TOWN OF BRENTWOOD PLANNING BOARD, 1 DALTON ROAD, BRENTWOOD, NH 03833, (603) 642-6400, RESPONSIBLE CONSULTANT: JONES & BEACH ENGINEERS, INC.	SUBMITTED: 03/11/20 PERMIT NO. DATED: EXPIRATION:

ABUTTERS:

TAX MAP 216 LOT 10
BRENTOWOOD COUNTRY STORE, LLC
405 MIDDLE RD, BRENTWOOD NH
03833

TAX MAP 216 LOT 19
BRENTWOOD, TOWN OF
1 DALTON RD, BRENTWOOD NH
03833

TAX MAP 216 LOT 20
LAGASSA, GEORGE K.
LAGASSA, PARTHENIA POWERLL
26 MIDDLE RD, NORTH HAMPTON NH
03862

TAX MAP 216 LOT 21
FRIZZELL, JONATHAN
161 CRAWLEY FALLS RD,
BRENTWOOD NH 03833

MAP 216 LOT 22
JAMES & DONNA MARIE JUDAH
159 CRAWLEY FALLS ROAD
BRENTWOOD, NH 03833

MAP 216 LOT 23
LAMPMAN REALTY ASSOC, LLC
14 HALE FARM ROAD
LEE, NH 03824

TAX MAP 216 LOT 49
LATTIME, MARY D.
LATTIME, FURMER
167 CRAWLEY FALLS RD,
BRENTWOOD NH 03833

TAX MAP 217 LOT 1
BRENTWOOD COUNTRY STORE, LLC
405 MIDDLE RD, BRENTWOOD NH
03833

TAX MAP 217 LOT 21
CONFALONE, KAREN
148 CRAWLEY FALLS RD,
BRENTWOOD NH 03833

TAX MAP 217 LOT 22
MIDDLE OF THE ROAD REALTY
TRUST
KRISTA LARSON, TRUSTEE
410 MIDDLE RD, BRENTWOOD NH
03833

TAX MAP 217 LOT 29
ORCUTT, EUGENE
ORCUTT, BETTE
416 MIDDLE RD, BRENTWOOD NH
03833

TAX MAP 217 LOT 111
BRENTWOOD, TOWN OF
1 DALTON RD, BRENTWOOD NH
03833

TAX MAP 217 LOT 112
SHANE McKEEN
89 ROUTE 125, KINGSTON, NH
03848

PROPERTY OWNER
SHANE MCKEEN
89 ROUTE 125
KINGSTON, NH 03848
(603) 231-7900

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

TERRAIN PLANNING & DESIGN LLC
311 KAST HILL ROAD
HOPKINTON, NH 03229
(603) 491-2322
CONTACT: ERIC BUCK
EMAIL: ERIC@TERRAINPLANNING.COM

SOILS CONSULTANT
GOVE ENVIRONMENTAL SERVICES, INC.
8 CONTINENTAL DRIVE, UNIT H
EXETER, NH 03833
(603)-778-0644
CONTACT: JIM GOVE

PROJECT PARCEL
TOWN OF BRENTWOOD, NH
TAX MAP 217, LOT 112

APPLICANT
ROB HEALEY
1 FOREST STREET
EXETER, NH 03833

TOTAL LOT AREA
97,938 SQ. FT.
2.25 ACRES

APPROVED BY THE BRENTWOOD PLANNING BOARD	DATE:
,CHAIRMAN	
RECORDING AGENT:	

IMPACT FEES ASSIGNED THESE _____ (# OF LOTS) LOTS SHALL BE $ _____ (IMPACT FEE AMOUNT) PER LOT.

DEVELOPER _____ TOWN OF BRENTWOOD _____

F:\CADD\MASTER STANDARD\dwg\JB-LAYOUTS.dwg 2/16/2017 12:25:50 PM EST

Design: EMP	Draft: EMP	Date: 02/20/20
Checked: WGM	Scale: AS NOTED	Project No.: 19133
Drawing Name: 19133-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
4	06/11/20	REVISED PER PB COMMENTS	EJH
3	05/14/20	REVISED PER TOWN COMMENTS	EMP
2	04/17/20	REVISED PER TOWN COMMENTS	EMP
1	03/24/20	REVISED PER TEST PIT DATA	EMP
0	03/11/20	ISSUED FOR REVIEW	EMP

Designed and Produced in NH
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:	TOWN CENTER SHOPS 154 CRAWLEY FALLS ROAD, BRENTWOOD, NH
Owner of Record:	SHANE McKEEN 89 ROUTE 125, KINGSTON, NH 03848 BK 5897 PG 2659

DRAWING No.
CS
SHEET 1 OF 14
JBE PROJECT NO. 19133

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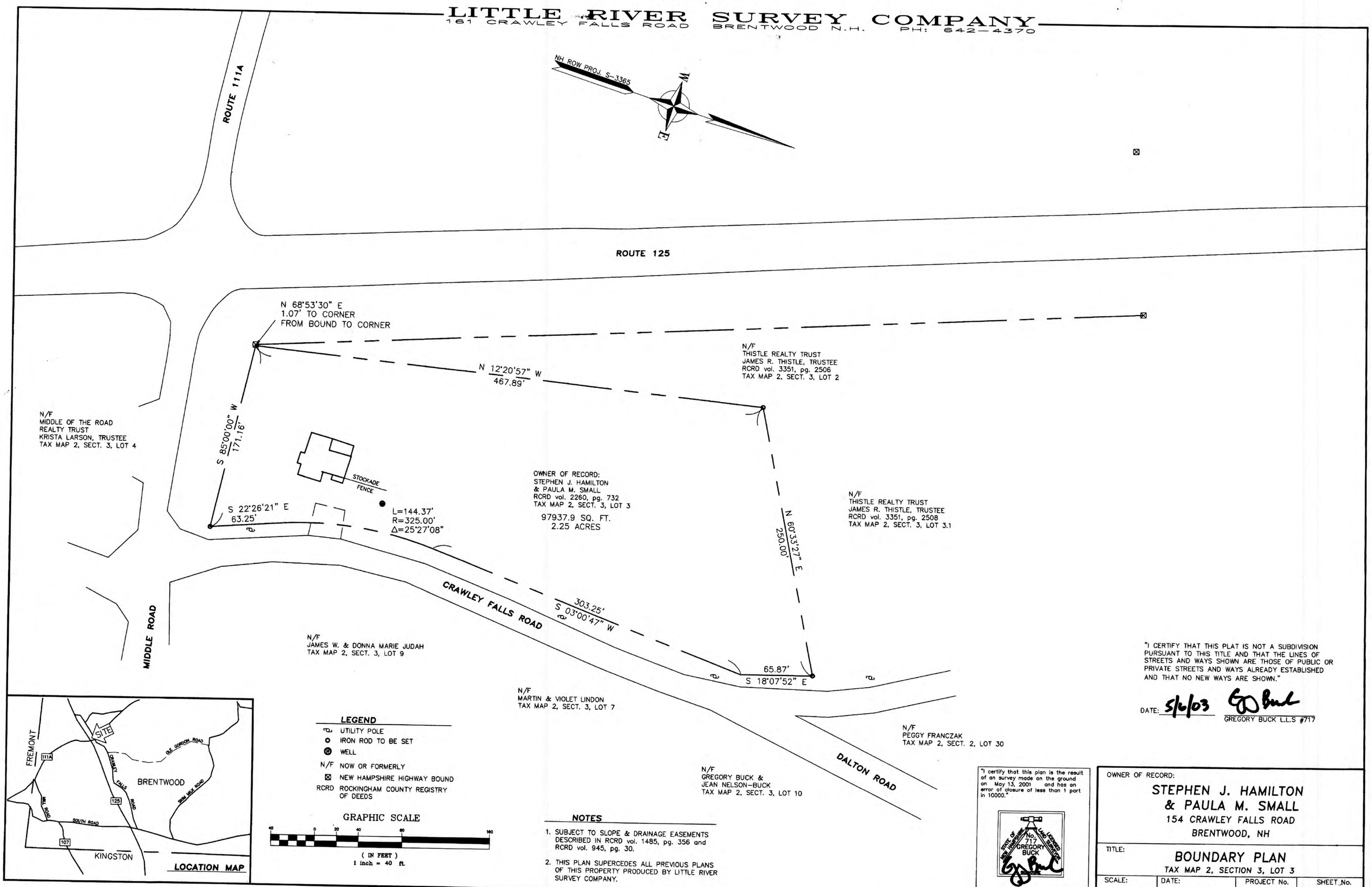
LITTLE RIVER SURVEY COMPANY

161 CRAWLEY FALLS ROAD BRENTWOOD N.H. PH: 642-4370



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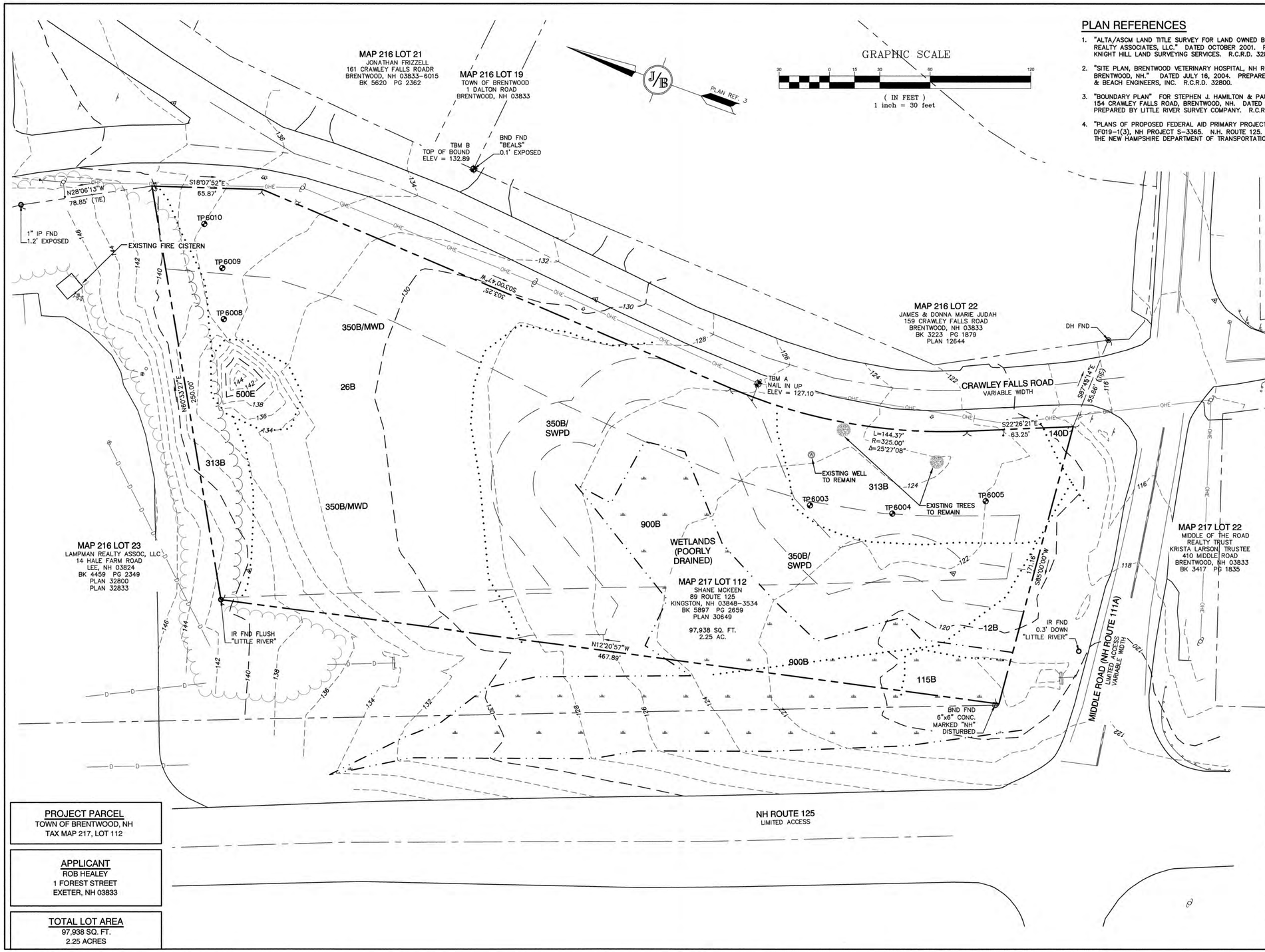
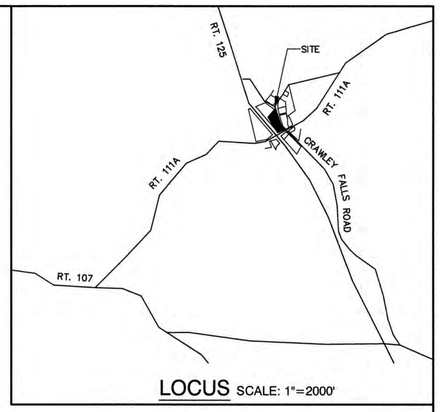


PLAN REFERENCES

1. "ALTA/ASCM LAND TITLE SURVEY FOR LAND OWNED BY LAMPMAN REALTY ASSOCIATES, LLC." DATED OCTOBER 2001. PREPARED BY KNIGHT HILL LAND SURVEYING SERVICES. R.C.R.D. 32833.
2. "SITE PLAN, BRENTWOOD VETERINARY HOSPITAL, NH ROUTE 125, BRENTWOOD, NH." DATED JULY 16, 2004. PREPARED BY JONES & BEACH ENGINEERS, INC. R.C.R.D. 32800.
3. "BOUNDARY PLAN" FOR STEPHEN J. HAMILTON & PAULA M. SMALL, 154 CRAWLEY FALLS ROAD, BRENTWOOD, NH. DATED MAY 2003. PREPARED BY LITTLE RIVER SURVEY COMPANY. R.C.R.D. 30649.
4. "PLANS OF PROPOSED FEDERAL AID PRIMARY PROJECT, NO. DF019-1(3), NH PROJECT S-3365. N.H. ROUTE 125. ON FILE WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.



LOCUS SCALE: 1"=2000'

NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF BRENTWOOD TAX MAP 217 LOT 112.
2. ZONING DISTRICT: TOWN CENTER DISTRICT
   LOT FRONTAGE MINIMUM = 50'
   BUILDING SETBACKS (MINIMUM):
   FRONT SETBACK = 75' FROM ROAD CENTERLINE (125' FROM RT. 125)
   SIDE SETBACK = NA
   REAR SETBACK = NA
   WETLAND BUFFER = 25' (NO DISTURBANCE)
3. THE UTILITY LOCATIONS SHOWN HEREON WERE DETERMINED BY OBSERVED ABOVE GROUND EVIDENCE AND SHOULD BE CONSIDERED APPROXIMATE IN LOCATION ONLY. LOCATION, DEPTH, SIZE, TYPE, EXISTENCE OR NONEXISTENCE OF UNDERGROUND UTILITIES AND/OR UNDERGROUND STORAGE TANKS WAS NOT VERIFIED BY THIS SURVEY. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK OR CALL DIG-SAFE AT 1-888-DIG-SAFE.
4. THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN AREA HAVING A SPECIAL FLOOD HAZARD ZONE DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, ON FLOOD INSURANCE RATE MAP NO. 33015C0380E, WITH EFFECTIVE DATE OF MAY 17, 2005.
5. BASIS OF BEARING: HORIZONTAL PLAN REFERENCE 3. VERTICAL – NGVD29.
6. CERTAIN DATA HEREON MAY VARY FROM RECORDED DATA DUE TO DIFFERENCES IN DECLINATION, ORIENTATION, AND METHODS OF MEASUREMENT.
7. ALL BOOK AND PAGE NUMBERS REFER TO THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
8. THE TAX MAP AND LOT NUMBERS ARE BASED ON THE TOWN OF BRENTWOOD TAX RECORDS AND ARE SUBJECT TO CHANGE.
9. RESEARCH WAS PERFORMED AT THE TOWN OF BRENTWOOD ASSESSOR'S OFFICE THE ROCKINGHAM COUNTY REGISTRIES OF DEEDS AND PROBATE, THE NEW HAMPSHIRE STATE ARCHIVES, AND THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
10. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO RETRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
11. ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL, TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
12. THE LIMITS OF JURISDICTIONAL WETLANDS WERE DELINEATED BY CHRISTOPHER ALBERT OF JONES & BEACH ENGINEERS IN OCTOBER 2019 IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:
    A. THE CORPS OF ENGINEERS FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS.
    B. THE NORTH CENTRAL & NORTHEAST REGIONAL SUPPLEMENT TO THE FEDERAL MANUAL.
    C. THE CURRENT VERSION OF THE FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, AS PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION AND/OR THE CURRENT VERSION OF THE FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, AS PUBLISHED BY THE USDA, NRCS, AS APPROPRIATE.
    D. THE CURRENT NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS, AS PUBLISHED BY THE US FISH AND WILDLIFE SERVICE.
14. THIS PLAN IS THE RESULT OF A CLOSED TRAVERSE WITH A RAW, UNADJUSTED LINEAR ERROR OF CLOSURE GREATER THAN 1 IN 15,000.
15. SURVEY TIE LINES SHOWN HEREON ARE NOT BOUNDARY LINES. THEY SHOULD ONLY BE USED TO LOCATE THE PARCEL SURVEYED FROM THE FOUND MONUMENTS SHOWN AND LOCATED BY THIS SURVEY.
16. SEE BOOK 945 PAGE 30 FOR WATERLINE EASEMENT, AND ROADWAY SHOULDER EASEMENT.
17. THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.

THE SITE SPECIFIC SOIL SURVEY WAS PRODUCED APRIL 21, 2020, AND WAS PREPARED BY JAMES P. GOVE, CSS # 004, GOVE ENVIRONMENTAL SERVICES, INC. THE SURVEY AREA IS LOCATED ON 154 CRAWLEY FALLS ROAD, BRENTWOOD, NH.

SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE # 10, JANUARY 2011. THE NUMERIC LEGEND WAS AMENDED TO IDENTIFY THE CORRECT SOIL COMPONENTS OF THE COMPLEX.

HYDROLOGIC SOIL GROUP FROM KSAT VALUES FOR NEW HAMPSHIRE SOILS, SOCIETY OF SOIL SCIENTISTS OF NEW ENGLAND, SPECIAL PUBLICATION NO. 5, SEPTEMBER, 2009.

SSSM SYM.	SSS MAP NAME	HISS SYM.	HYDROLOGIC SOIL GRP.
115	SCARBORO MUCK	611	D
313	DEERFIELD LOAMY SAND	311	B
350/MWD	UDIPSAMMENTS, WET SUBSTRATUM	361	B
350/SWPD	UDIPSAMMENTS, WET SUBSTRATUM	461	C
500	UDORTHENTS, LOAMY	261	B
900	ENDOAQUENTS, SANDY	561	D

SLOPE PHASE:
0-8% B 8-15% C 15-25% D 25%+ E

PROJECT PARCEL
TOWN OF BRENTWOOD, NH
TAX MAP 217, LOT 112

APPLICANT
ROB HEALEY
1 FOREST STREET
EXETER, NH 03833

TOTAL LOT AREA
97,938 SQ. FT.
2.25 ACRES

Design: EMP	Draft: EMP	Date: 02/20/20
Checked: WGM	Scale: AS SHOWN	Project No.: 19133
Drawing Name: 19133-PLAN.dwg		

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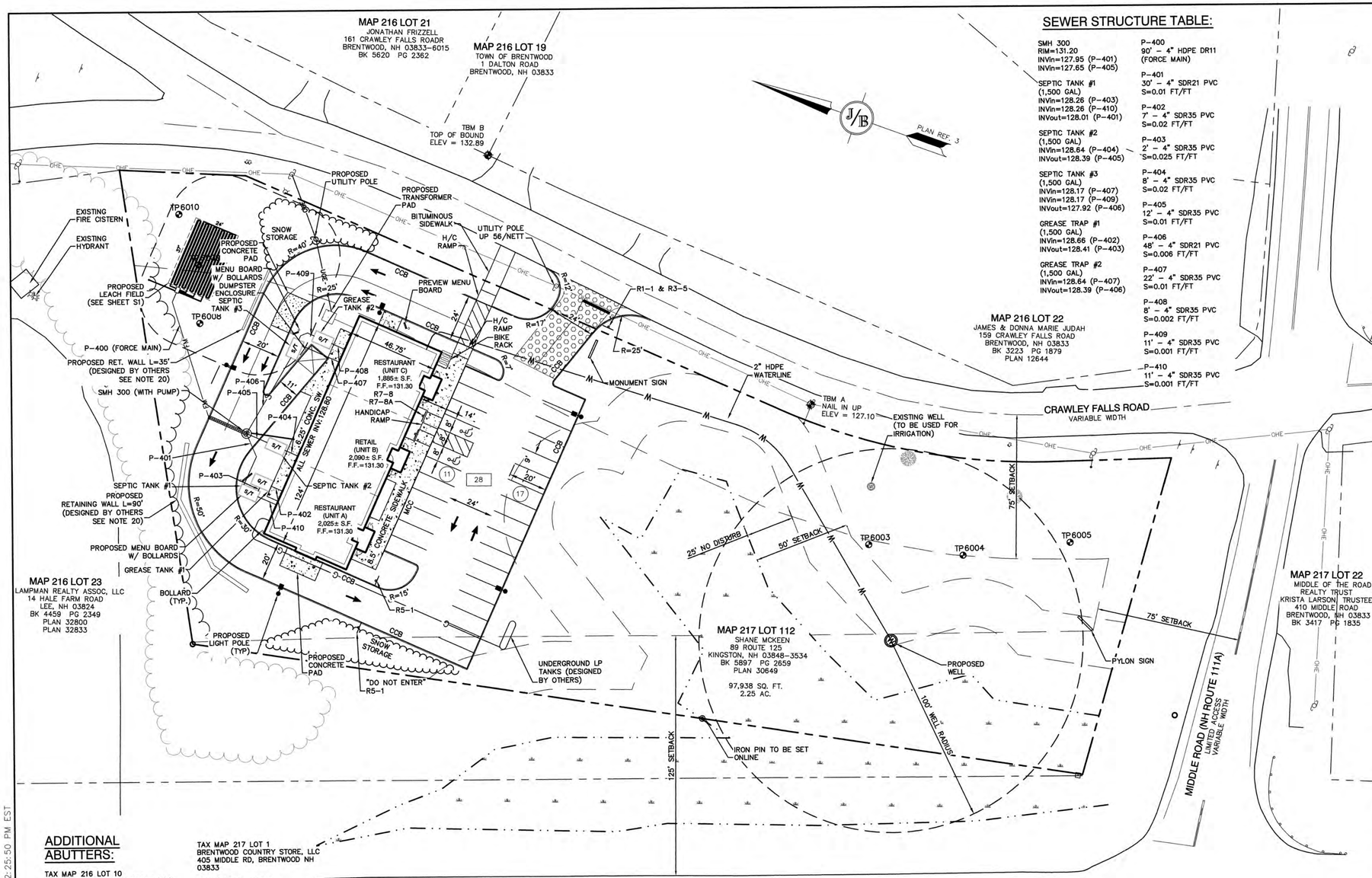
Plan Name: EXISTING CONDITIONS PLAN

Project: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.
C1
SHEET 3 OF 14
JBE PROJECT NO. 19133



SEWER STRUCTURE TABLE:

SMH 300
RIM=131.20
INVin=127.95 (P-401)
INVin=127.65 (P-405)

SEPTIC TANK #1
(1,500 GAL)
INVin=128.26 (P-403)
INVin=128.26 (P-410)
INVout=128.01 (P-401)

SEPTIC TANK #2
(1,500 GAL)
INVin=128.64 (P-404)
INVout=128.39 (P-405)

SEPTIC TANK #3
(1,500 GAL)
INVin=128.17 (P-407)
INVin=128.17 (P-409)
INVout=127.92 (P-406)

GREASE TRAP #1
(1,500 GAL)
INVin=128.66 (P-402)
INVout=128.41 (P-403)

GREASE TRAP #2
(1,500 GAL)
INVin=128.64 (P-407)
INVout=128.39 (P-406)

P-400
90' - 4" HDPE DR11
(FORCE MAIN)

P-401
30' - 4" SDR21 PVC
S=0.01 FT/FT

P-402
7' - 4" SDR35 PVC
S=0.02 FT/FT

P-403
2' - 4" SDR35 PVC
S=0.025 FT/FT

P-404
8' - 4" SDR35 PVC
S=0.02 FT/FT

P-405
12' - 4" SDR35 PVC
S=0.01 FT/FT

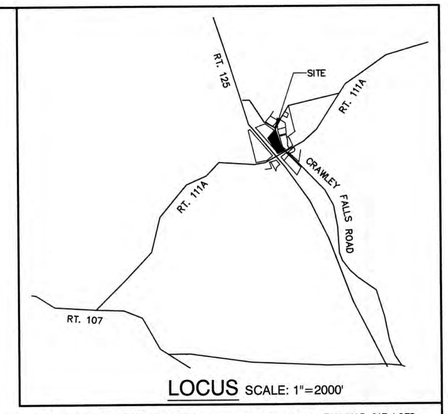
P-406
48' - 4" SDR21 PVC
S=0.006 FT/FT

P-407
22' - 4" SDR35 PVC
S=0.01 FT/FT

P-408
8' - 4" SDR35 PVC
S=0.002 FT/FT

P-409
11' - 4" SDR35 PVC
S=0.001 FT/FT

P-410
11' - 4" SDR35 PVC
S=0.001 FT/FT



LOCUS SCALE: 1"=2000'

NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW A 6,000 SF COMMERCIAL DEVELOPMENT ON BRENTWOOD, NH TAX MAP 217 LOTS 112.
2. ZONING DISTRICT: TOWN CENTER DISTRICT
   LOT FRONTAGE MINIMUM = 50'
   BUILDING SETBACKS (MINIMUM):
   FRONT SETBACK = 75' FROM ROAD CENTERLINE (125' FROM RT. 125 PAVEMENT)
   SIDE SETBACK = NA
   REAR SETBACK = NA
   WETLAND NO DISTURBANCE BUFFER = 25'
   WETLAND SETBACK = 50'
3. PROPOSED PARKING:
   PARKING SPACE DIMENSION: 9' x 20'

   RESTAURANT:
   UNIT A – 20 SEATS
   UNIT C – 20 SEATS
   REQUIRED: 14 SPACES (1 SPACE PER 3 SEATS–40 SEATS)

   RETAIL:
   UNIT B – 2,090 SF
   REQUIRED: 7 SPACES (1 SPACE PER 300 SF)

   TOTAL REQUIRED: 21 SPACES
   PROPOSED: 28 SPACES
4. 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.
5. ALL CONSTRUCTION SHALL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
6. SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 33015C0380E, DATED MAY 17, 2005.
7. LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
8. 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.
9. 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.
10. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED.
11. 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.
12. 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.
13. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.
14. ALL CURBING TO BE CAPE COD BERM WITH A MINIMUM RADIUS OF 2', UNLESS OTHERWISE NOTED.
15. 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 SET TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.
16. SNOW TO BE STORED AT EDGE OF PAVEMENT AND IN AREAS SHOWN ON THE PLANS, OR TRUCKED OFFSITE TO AN APPROVED SNOW DUMPING LOCATION.
17. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
18. AN EMERGENCY KEYBOX WILL BE PROVIDED ON SITE FOR EMERGENCY ACCESS.
19. THE PROPERTY OWNER WILL NOTIFY THE PLANNING BOARD IN WRITING, OF ANY CHANGES IN TENANTS. THE LETTER WILL INDICATE THE TYPE OF BUSINESS MOVING TO THE SITE.
20. THE PROPOSED RETAINING WALL TO BE DESIGNED AND STAMPED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE. RETAINING WALL DESIGN TO BE SUBMITTED TO PROJECT ENFINEER FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION.
21. ALL DELIVERY TRUCKS LARGER THEN A BOX TRUCK STYLE VEHICLE MUST BE LIMITED TO OFF HOURS DELIVERIES.
22. HOURS OF OPERATION: 6AM–11PM.
23. DUMPSTER NOT TO BE PICKED UP BETWEEN THE HOURS OF 7:00 PM AND 7:00 AM.

ADDITIONAL ABUTTERS:

TAX MAP 216 LOT 10
BRENTOWOOD COUNTRY STORE, LLC
405 MIDDLE RD, BRENTWOOD NH 03833

TAX MAP 216 LOT 19
BRENTWOOD, TOWN OF
1 DALTON RD, BRENTWOOD NH 03833

TAX MAP 216 LOT 20
LAGASSA, GEORGE K.
LAGASSA, PARTHENIA POWERLL
26 MIDDLE RD, NORTH HAMPTON NH 03862

TAX MAP 216 LOT 21
FRIZZELL, JONATHAN
161 CRAWLEY FALLS RD,
BRENTWOOD NH 03833

TAX MAP 216 LOT 49
LATTIME, MARY D.
LATTIME, FURMER
167 CRAWLEY FALLS RD,
BRENTWOOD NH 03833

TAX MAP 217 LOT 1
BRENTWOOD COUNTRY STORE, LLC
405 MIDDLE RD, BRENTWOOD NH 03833

TAX MAP 217 LOT 21
CONFALONE, KAREN
148 CRAWLEY FALLS RD,
BRENTWOOD NH 03833

TAX MAP 217 LOT 22
MIDDLE OF THE ROAD REALTY TRUST
KRISTA LARSON, TRUSTEE
410 MIDDLE RD, BRENTWOOD NH 03833

TAX MAP 217 LOT 29
ORCUTT, EUGENE
ORCUTT, BETTE
416 MIDDLE RD, BRENTWOOD NH 03833

TAX MAP 217 LOT 111
BRENTWOOD, TOWN OF
1 DALTON RD, BRENTWOOD NH 03833

APPROVED BY THE BRENTWOOD PLANNING BOARD	DATE:
,CHAIRMAN	
RECORDING AGENT:	

PROJECT PARCEL
TOWN OF BRENTWOOD, NH
TAX MAP 217, LOT 112

APPLICANT
ROB HEALEY
1 FOREST STREET
EXETER, NH 03833

TOTAL LOT AREA
97,938 SQ. FT.
2.25 ACRES

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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Design: EMP	Draft: EMP	Date: 02/20/20
Checked: WGM	Scale: AS SHOWN	Project No.: 19133
Drawing Name: 19133-PLAN.dwg		

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

REV.	DATE	REVISION	BY
4	06/11/20	REVISED PER PB COMMENTS	EJH
3	05/14/20	REVISED PER TOWN COMMENTS	EMP
2	04/17/20	REVISED PER TOWN COMMENTS	EMP
1	03/24/20	REVISED PER TEST PIT DATA	EMP
0	03/11/20	ISSUED FOR REVIEW	EMP

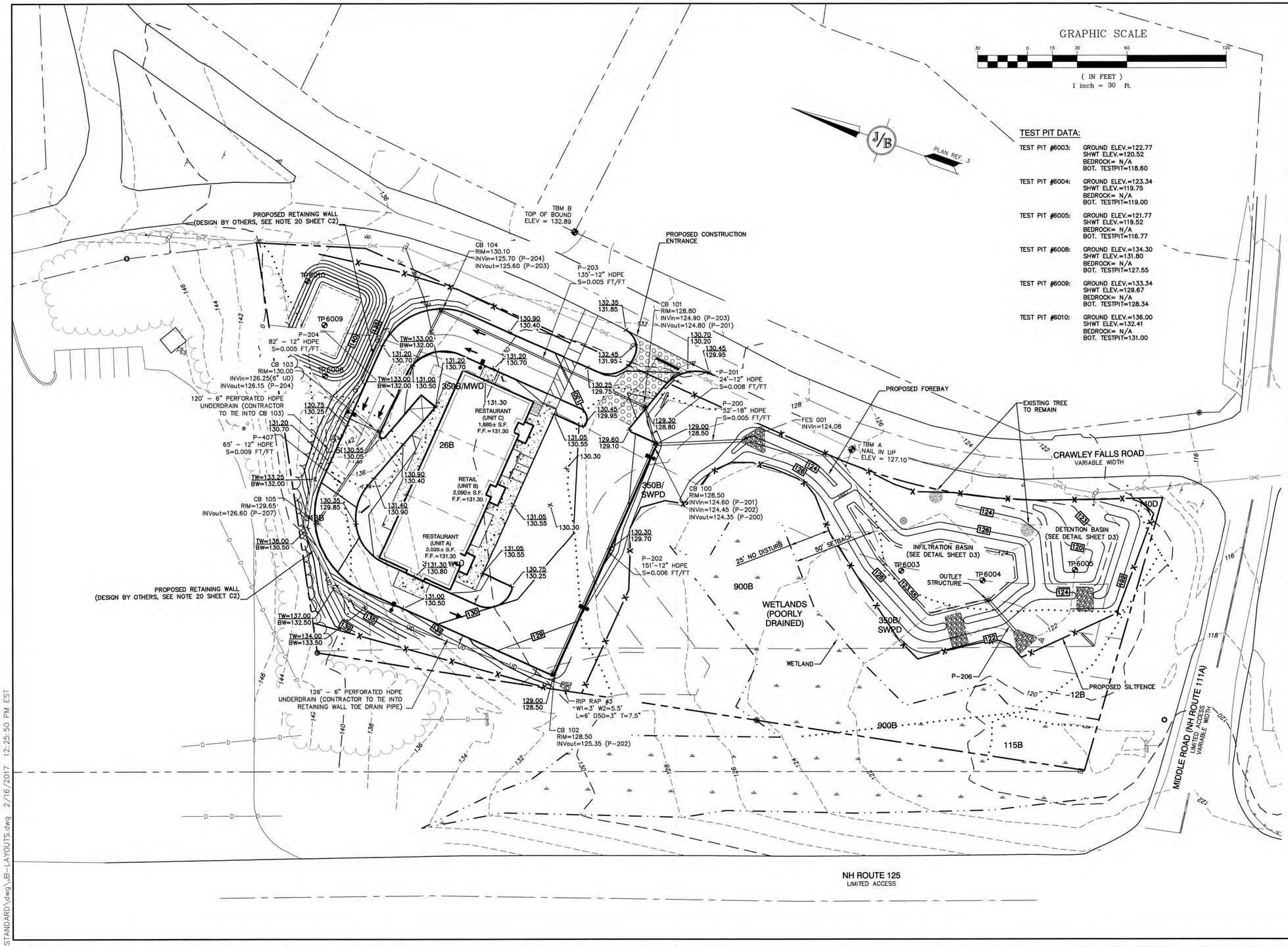
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: SITE PLAN

Project: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.
C2
SHEET 4 OF 14
JBE PROJECT NO. 19133



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. VERTICAL DATUM: NGVD29. HORIZONTAL DATUM: PLAN REFERENCE 1.
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. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
6. ALL ROOF DRAINS FROM BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT THE END. ALL EXTERIOR ROOF DOWNSPOUTS ARE TO BE INSTALLED WITH OVERFLOW DEVICES.
7. ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
8. PROPOSED RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
9. 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.
10. ALL DRAINAGE AND SANITARY 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.
11. ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED. SEE SHEET SHEET D1 FOR DRAINAGE DETAILS.
12. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
13. IMMEDIATELY APPLY AND COMPACT STONE BASE FOR BUILDING PAD TO +/-½" PRIOR TO EXCAVATING INTERIOR AND PERIMETER FOOTINGS.
14. 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.
15. ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
16. STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS. SEE DETAIL WITHIN THE DETAIL SHEETS.
17. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
18. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
19. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
20. SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
21. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.25" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
22. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
23. CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
24. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
25. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
26. SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
27. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
28. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
29. SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.

TEST PIT DATA:

TEST PIT #6003:	GROUND ELEV.=122.77 SHWT ELEV.=120.52 BEDROCK= N/A BOT. TESTPIT=118.60
TEST PIT #6004:	GROUND ELEV.=123.34 SHWT ELEV.=119.75 BEDROCK= N/A BOT. TESTPIT=119.00
TEST PIT #6005:	GROUND ELEV.=121.77 SHWT ELEV.=119.52 BEDROCK= N/A BOT. TESTPIT=116.77
TEST PIT #6008:	GROUND ELEV.=134.30 SHWT ELEV.=131.80 BEDROCK= N/A BOT. TESTPIT=127.55
TEST PIT #6009:	GROUND ELEV.=133.34 SHWT ELEV.=129.67 BEDROCK= N/A BOT. TESTPIT=128.34
TEST PIT #6010:	GROUND ELEV.=136.00 SHWT ELEV.=132.41 BEDROCK= N/A BOT. TESTPIT=131.00

PROJECT PARCEL
TOWN OF BRENTWOOD, NH
TAX MAP 217, LOT 112

APPLICANT
ROB HEALEY
1 FOREST STREET
EXETER, NH 03833

TOTAL LOT AREA
97,938 SQ. FT.
2.25 ACRES

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Design: EMP	Draft: EMP	Date: 02/20/20
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Drawing Name: 19133-PLAN.dwg		

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

REV.	DATE	REVISION	BY
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Civil Engineering Services
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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: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.
C3
SHEET 5 OF 14
JBE PROJECT NO. 19133

GENERAL NOTES:

1. BASE PLAN DEVELOPED FROM INFORMATION PROVIDED BY JONES & BEACH ENGINEERS, INC., DRAWING TITLE, "SITE PLAN, TOWN CENTER SHOPS" DATED 02-20-20.
2. VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS IN THE FIELD, PRIOR TO CONSTRUCTION. VERIFY FIELD CONDITIONS RELATING TO WORK TO BE INSTALLED. NOTIFY LANDSCAPE ARCHITECT OF ANY UNUSUAL OR DIFFICULT CONDITIONS IN A TIMELY FASHION PRIOR TO CONSTRUCTION CONCERNING THE CONDITION IN QUESTION.
3. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF BRENTWOOD AND STATE OF NEW HAMPSHIRE. NOTIFY APPROPRIATE AGENCIES AT LEAST 48 HOURS PRIOR TO PERFORMING THE WORK UNDER THEIR JURISDICTION.
4. CONTRACTOR IS RESPONSIBLE FOR SECURING AND PAYING FOR ALL CONSTRUCTION PERMITS AND LICENSES REQUIRED TO COMPLETE SITE WORK. CONTRACTOR IS RESPONSIBLE FOR ALL APPROPRIATE INSPECTIONS OF HIS/HER WORK.
5. ALL WORK SHALL BE OF WORKMANLIKE QUALITY AND IN CONFORMANCE WITH ALL APPLICABLE CODES. CONTRACTOR SHALL READ ALL ZONING AND ENVIRONMENTAL PERMITS WHICH PERTAIN TO THE PROJECT AND SHALL COMPLY WITH ALL THE CONDITIONS THEREIN.
6. NOTIFY LANDSCAPE ARCHITECT AT LEAST 72 HOURS PRIOR TO ANY ROUTINE REQUIRED FIELD OBSERVATION. OBTAIN LANDSCAPE ARCHITECT'S APPROVAL OF THE LAYOUT OF ALL IMPROVEMENTS PRIOR TO CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF DAMAGE OR DISTURBANCE TO OTHER AREAS WHICH MAY OCCUR AS THE RESULT OF HIS/HER WORK WHETHER WITHIN OR OUTSIDE OF THE CONTRACT LIMIT LINES.
8. CONSTRUCTION SHALL FOLLOW THE SEQUENCES AND CONDITIONS ESTABLISHED IN THE SPECIFICATIONS AND PERMITS.
9. IT IS INTENDED THAT THE WORK BE EXECUTED IN ACCORDANCE WITH THE BEST CUSTOMARY BUILDING PRACTICES. IF WORK IS REQUIRED IN A MANNER TO MAKE IT IMPOSSIBLE TO PRODUCE FIRST-CLASS WORK OR IF ERRORS, CONFLICTS OR DISCREPANCIES APPEAR AMONG THE CONTRACT DOCUMENTS, INFORM THE LANDSCAPE ARCHITECT IMMEDIATELY AND REQUEST INTERPRETATION BEFORE PROCEEDING WITH THE WORK.
10. IF CONTRACTOR FAILS TO MAKE SUCH A STATEMENT AND REQUEST, NO EXCUSE WILL THEREAFTER BE ENTERTAINED, NOR ADDITIONAL EXPENSE BE ACCEPTED. FOR FAILURE TO CARRY OUT WORK IN A SATISFACTORY MANNER. SHOULD CONFLICT OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS, CONTRACTOR IS DEEMED TO HAVE ESTIMATED ON THE MORE EXPENSIVE WAY OF DOING WORK UNLESS HE/SHE SHALL HAVE OBTAINED A WRITTEN DECISION, BEFORE SUBMITTING HIS BID, AS TO WHICH METHOD OR MATERIALS WILL BE REQUIRED.
11. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS AND EQUIPMENT STORED AT SITE.
12. EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY WORK.
13. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION AND RESOLUTION PRIOR TO ANY FURTHER WORK.
14. VISIBLE EXISTING CONDITIONS WHERE FIELD LOCATED, AND UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. SITE SUBCONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS, DIMENSIONS, AND GRADES. PRIOR TO START OF ANY FOUNDATION OR UTILITY WORK.
15. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TERRAIN PLANNING & DESIGN LLC, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR,ENGINEER OR LANDSCAPE ARCHITECT HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
18. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LANDSCAPE ARCHITECT. TERRAIN PLANNING & DESIGN LLC ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT OF RECORD.
19. TERRAIN PLANNING & DESIGN LLC ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD.
20. BASE PREPARATION UNDER ALL HARD SURFACES TO BE COMPACTED TO 98% STANDARD PROCTOR DENSITY.
21. SITE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE PRIOR TO ANY EXCAVATION, 1-888-DIG-SAFE.

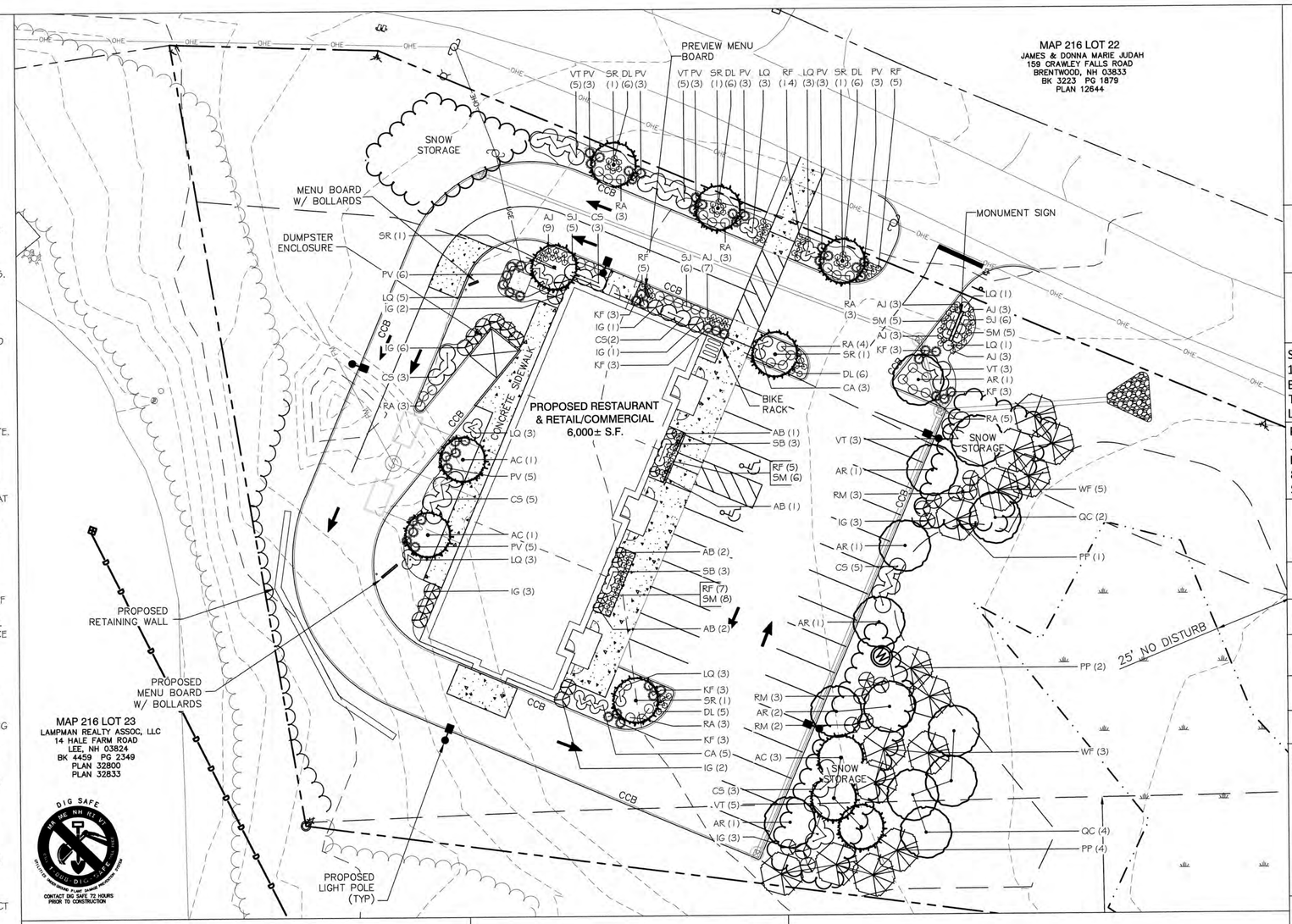
PLANTING NOTES:

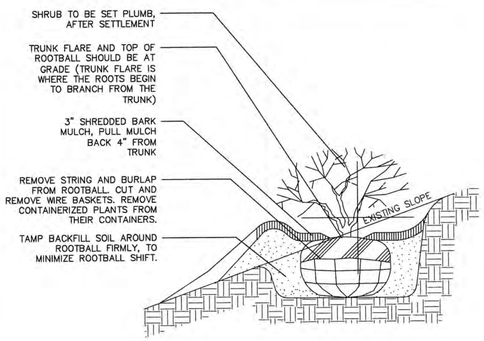
1. CONTRACTOR SHALL OBTAIN APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO PURCHASING AND/OR INSTALLING SUBSTITUTE PLANT MATERIAL PRIOR TO PURCHASE OF ANY SUBSTITUTE MATERIALS.
2. CONSTRUCTION ACCESS WILL BE AS DIRECTED BY LANDSCAPE ARCHITECT. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ACCESS ROUTE AND ALL AREAS DISTURBED BY PLANTING OPERATIONS UPON COMPLETION OF CONSTRUCTION OPERATIONS, AT NO ADDITIONAL COST TO THE OWNER.
3. LAYOUT OF ALL PLANTING BEDS AND LOCATION OF PLANTS TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO CONSTRUCTION AND INSTALLATION.
4. CONTRACTOR TO REMOVE ALL DEBRIS GENERATED BY PLANT INSTALLATION. DEBRIS TO BE DISPOSED OF IN A LEGAL MANNER.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN GOOD, HEALTHY AND FLOURISHING CONDITION FOR ONE YEAR FROM THE DATE OF FINAL INSTALLATION APPROVAL BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE, WITHOUT COST TO OWNER, AND AS SOON AS WEATHER CONDITIONS PERMIT, ALL DEAD AND NON-FLOURISHING PLANTS AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACEMENT PLANTS SHALL BE BE GUARANTEED IDENTICALLY TO ORIGINAL PLANTS, TIME PERIOD COMMENCING FROM DATE OF REPLACEMENT PLANTING APPROVAL BY LANDSCAPE ARCHITECT.
6. ALL BEDS TO BE MULCHED WITH 4" DEPTH SHREDDED BARK MULCH UNLESS NOTED OTHERWISE.
7. CONTRACTOR TO PROVIDE NECESSARY TEMPORARY IRRIGATION IF NEEDED BASED ON TIME OF YEAR THE PROJECT IS IMPLEMENTED.

PLANTING SCHEDULE

Botanical Name/ Common Name	Size	Label	Quantity	Mature Height
Trees				
Abies concolor / White Fir	6-7' B&B	WF	8	30-40'
Acer ruburm 'October Glory' / October Glory Red Maple	3-3.5" CAL.	AR	7	40-60'
Amelanchier canadensis / Serviceberry	3-3.5" CAL.	AC	5	20-30'
Picea pungens / Colorado Sruce	6-7' B&B	PP	7	40-60'
Syringa reticulata / Japanese Lilac Tree	3-3.5" CAL.	SR	6	20-30'
Quercus coccinea / Scarlet Oak	3-3.5" CAL.	QC	6	60'+
Shrubs				
Azalea 'Bloom A Thon Lavender' / Bloom A Thon Lavender Azalea	2.5-3'	AB	6	3-4'
Clethra alnifolia 'Compacta' / Compact Summersweet	2.5-3'	CA	8	3-4'
Cornus sericea 'Alleman's Compacta' / Alleman's Compact Red-Osier Dogwood	2.5-3'	CS	21	4-5'
Hydrangea paniculata 'Little Quick Fire' / Little Quick Fire Panicle Hydrangea	2.5-3'	LQ	22	3-4'
Iiex glabra 'Compacta' / Compact Inkberry	2.5-3' B&B	IG	21	5-6'
Rhododendron maximum 'Roseum' / Pink Rosebay Rhododedron	3-4' B&B	RM	8	5-6'
Spiraea bumalda 'Anthony Waterer' / Anthony Waterer Spirea	2.5-3'	SB	6	3-4'
Spiraea japonica 'Magic Carpet' / Magic Carpet Spirea	18-24"	SJ	17	12-24"
Viburnum trilobum 'Compacta' / Compact American Cranberry Viburnum	3-4' B&B	VT	21	5-6'
Perennials				
Hemerocallis 'Big Time Happy'/ Big Time Happy Daylily	#1	DL	29	18-24"
Rudbeckia flugida 'Goldsturm' / Goldsturm Black-Eyed Susan	#1	RF	36	24"
Salvia 'Marcus' / Marcus Sage	#1	SM	24	12"
Sedum spectabile 'Autumn Joy' / Autumn Joy Stonecrop	#1	AJ	28	18-24"
Grasses				
Calamagrostis a . 'Karl Foerster' / Karl Foerster Feather Reed Grass	#2	KF	18	5'
Panicum virgatum 'Shenandoah' / Shenandoah Switch Grass	#2	PV	34	3-4'
Ground Cover				
Rhus aromatica 'Grow Low' / Grow Low Sumac	#3	RA	24	18-24"

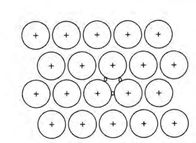
0' 10' 20' 40' 60' 100'





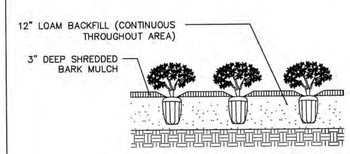
NOTE:
1. DO NOT HEAVILY PRUNE SHRUB AT PLANTING, PRUNE ONLY CROSSOVER LIMBS AND DAMAGED OR DEAD BRANCHES.
2. BACKFILL WITH LOAM, AMEND AS REQUIRED BY LANDSCAPE ARCHITECT.
3. SHRUBS & GROUNDCOVER PLANTED ADJACENT TO CITY SIDEWALKS NEED TO BE PLACED SO THE PLANTS, AT THEIR MATURE HEIGHT & WIDTH, WILL NOT ENCROACH INTO THE CITY'S SIDEWALK.

TYPICAL SHRUB PLANTING

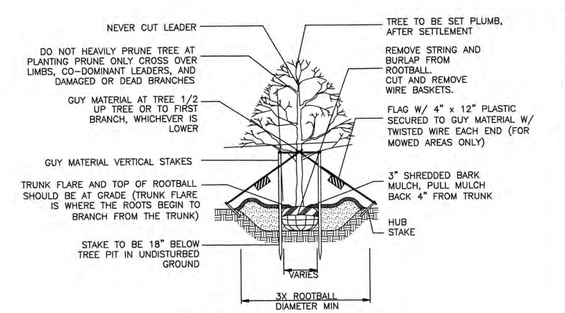


TYPICAL BED PLANT SPACING

NOTE:
D = DIMENSION OF PLANT SPACING (SHRUB OR GROUNDCOVER AS INDICATED ON PLANS)



TYPICAL PERENNIAL PLANTING



DECIDUOUS TREE PLANTING

NOTES:
1. GUYING AND STAKING TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT. LOCAL FIELD CONDITIONS AS WELL AS PLANT CHARACTERISTICS WILL DETERMINE THE NECESSITY OF GUYING AND STAKING.
2. TYPICALLY ONLY TREES WITH A 3" OR GREATER CALIPER NEED TO BE STAKED. TREES WITH LESS THAN A 3" CALIPER NEED TO BE STAKED ONLY AS REQUIRED BY LANDSCAPE ARCHITECT.
3. ONLY WRAP TREE TRUNKS AS REQUIRED BY LANDSCAPE ARCHITECT.
4. TREE SHALL BE SET PLUMB, AFTER SETTLEMENT.
5. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
6. CITY TREES PLANTED ON PRIVATE PROPERTY, ADJACENT TO A PUBLIC RIGHT-OF-WAY, NEED TO BE PLANTED A MINIMUM OF 5 FEET FROM THE EDGE OF THE CITY SIDEWALK.

terrain
planning & design llc
311 kast hill road
hopkinton nh 03229
603. 746. 3512
terrainplanning.com

TOWN CENTER SHOPS

Site Location:
154 Crawley Falls Road
Brentwood, NH 03833
Tax Map: 217
Lot #: 112

Prepared For:
Jones & Beach Engineering, Inc.
85 Portsmouth Avenue
Stratham, NH 03885

LANDSCAPE PLAN

DATE: 03 - 02 - 2020

SCALE: 1" = 20'

PROJECT #: 2012

Drawn By: RNM

Checked By: ERB

REVISIONS: DATE:
Revised per PB comments 04/27/2020

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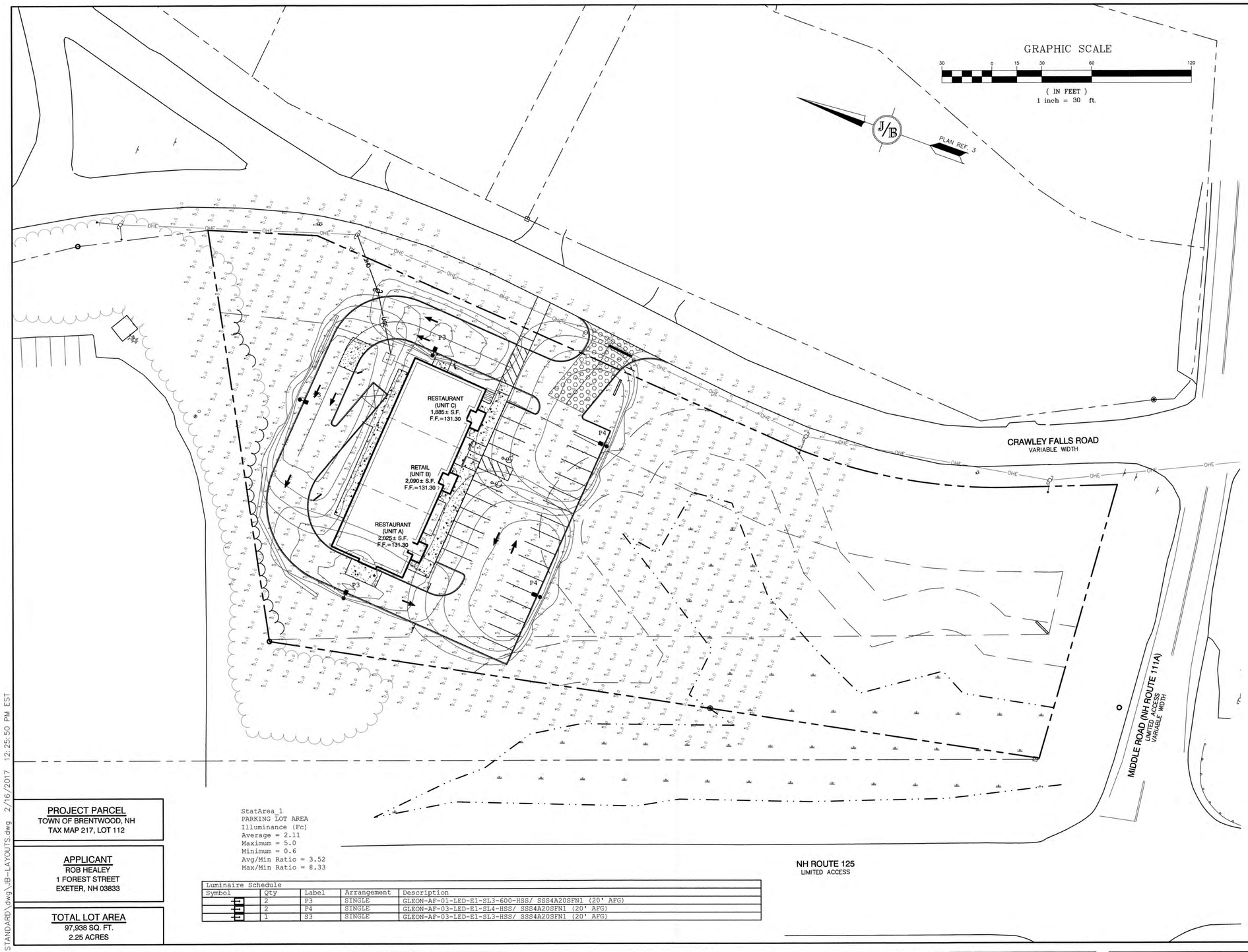

LIGHTING AND ELECTRICAL NOTES:

1. SITE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
2. CONTRACTOR SHALL INSTALL PROPOSED LIGHT POLES ACCORDING TO TOWN REGULATIONS.
3. LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
4. ILLUMINATION READINGS SHOWN ARE BASED ON A TOTAL LLF OF 0.75 AT GRADE. ILLUMINATION READINGS SHOWN ARE IN UNITS OF FOOT-CANDLES.
5. LIGHTING CALCULATIONS SHOWN ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM AND SAFETY.
6. ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF DARK-SKY COMPLIANT, UNLESS OTHERWISE NOTED.
7. ALL OUTDOOR LIGHTING SYSTEMS SHALL BE EQUIPPED WITH TIMERS TO REDUCE ILLUMINATION LEVELS TO NON-OPERATIONAL VALUES PER TOWN REGULATIONS.
8. SEE SHEET D3 FOR LIGHTING DETAILS.
9. 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.

PROJECT PARCEL
TOWN OF BRENTWOOD, NH
TAX MAP 217, LOT 112

APPLICANT
ROB HEALEY
1 FOREST STREET
EXETER, NH 03833

TOTAL LOT AREA
97,938 SQ. FT.
2.25 ACRES

```
StatArea_1
PARKING LOT AREA
Illuminance (Fc)
Average = 2.11
Maximum = 5.0
Minimum = 0.6
Avg/Min Ratio = 3.52
Max/Min Ratio = 8.33
```

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description
	2	P3	SINGLE	GLEON-AF-01-LED-E1-SL3-600-HSS/ SSS4A20SFN1 (20' AFG)
	2	P4	SINGLE	GLEON-AF-03-LED-E1-SL4-HSS/ SSS4A20SFN1 (20' AFG)
	1	S3	SINGLE	GLEON-AF-03-LED-E1-SL3-HSS/ SSS4A20SFN1 (20' AFG)

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Design: EMP	Draft: EMP	Date: 02/20/20
Checked: WGM	Scale: AS SHOWN	Project No.: 19133
Drawing Name: 19133-PLAN.dwg		

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3	05/14/20	REVISED PER TOWN COMMENTS	EMP
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1	03/24/20	REVISED PER TEST PIT DATA	EMP
0	03/11/20	ISSUED FOR REVIEW	EMP

Designed and Produced in NH
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

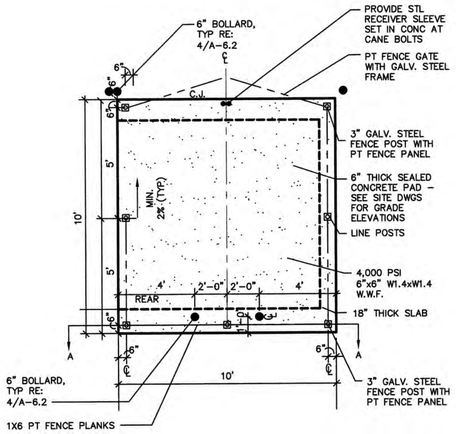
Plan Name: LIGHTING PLAN

Project: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.
L2

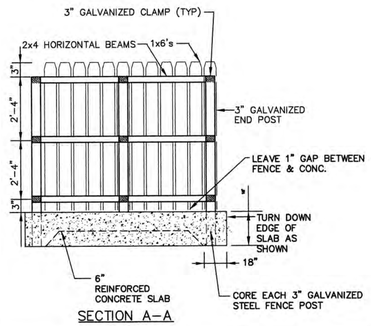
SHEET 7 OF 14
JBE PROJECT NO. 19133



SINGLE DUMPSTER ENCLOSURE PLAN

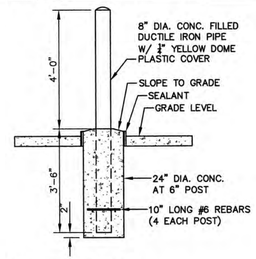
NOT TO SCALE

NOTES
1. ALL LUMBER TO BE PRESSURE TREATED.
2. WOOD FENCE TO BE PAINTED OR STAINED TO MATCH BUILDING FOUNDATION.
3. DUMPSTER SIZE VARIES, SEE SITE PLANS FOR SCREENING SIZE



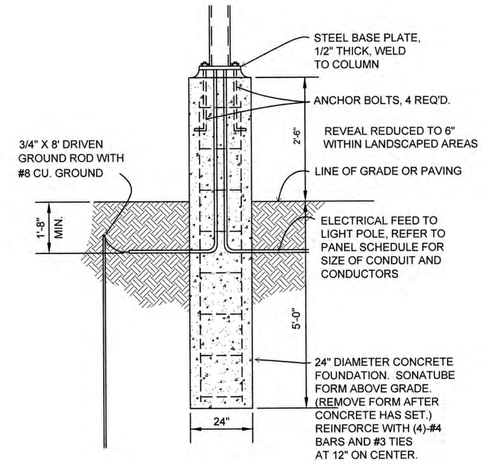
SECTION A–A

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
R7–8	VAN ACCESSIBLE	12"	24"	BLUE & GREEN ON WHITE	CHANNEL	7'–0"	REFLECTORIZED SIGN
R7–8A	VAN ACCESSIBLE	12"	6"	BLUE & GREEN	CHANNEL	5'–0"	REFLECTORIZED SIGN
R5–1	DO NOT ENTER	30"	30"	RED / SILVER	CHANNEL	7'–0"	REFLECTORIZED SIGN
R3–5	ONLY	30"	36"	BLACK ON WHITE	CHANNEL	5'–0"	REFLECTORIZED SIGN



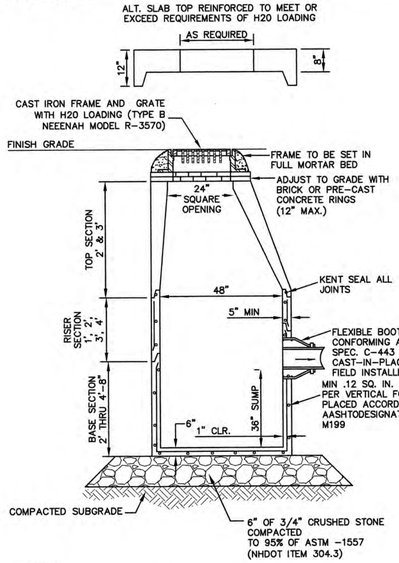
8" BOLLARD DETAIL (LOCATIONS SPECIFIED ON PLANS)

NOT TO SCALE



LIGHT POLE BASE FOUNDATION

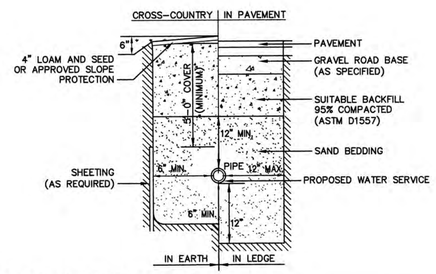
NOT TO SCALE



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'.

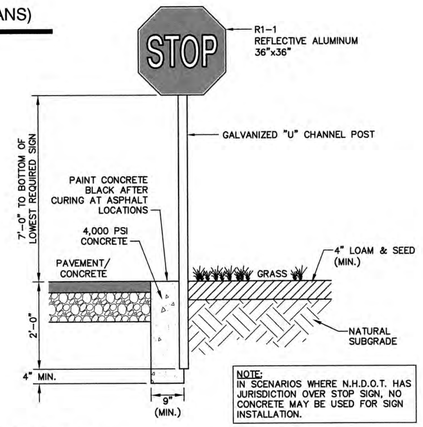
CATCH BASIN

NOT TO SCALE



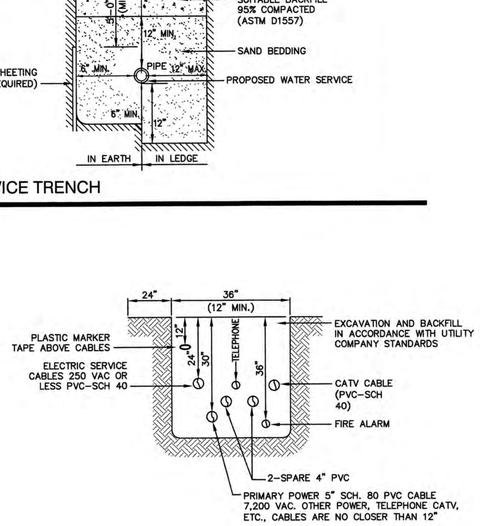
WATER SERVICE TRENCH

NOT TO SCALE



STOP SIGN (R1-1)

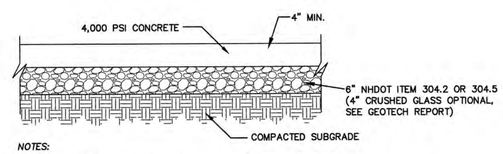
NOT TO SCALE



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

UTILITY TRENCH

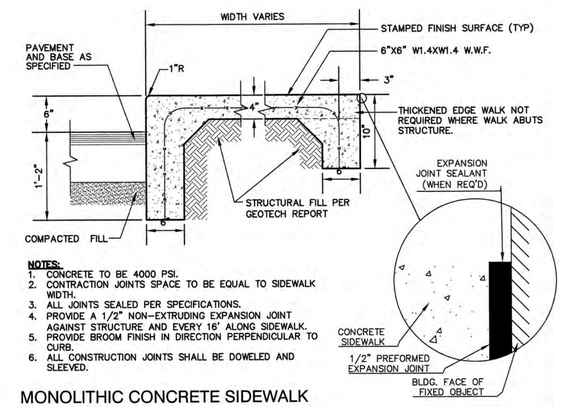
NOT TO SCALE



NOTES:
1. CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH
2. EXPANSION JOINTS 24' O/C
3. ALL JOINTS SEALED PER SPEC
4. AT ENTRANCE SLABS AND SIDEWALKS, CONTRACTOR TO EXCAVATE 4.5' BELOW TOP OF SLAB AND REPLACE WITH STRUCTURAL FILL. SEE GEOTECHNICAL REPORT.

CONCRETE SIDEWALK DETAIL

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.
6. ALL CONSTRUCTION JOINTS SHALL BE DOWELED AND SLEEVED.

MONOLITHIC CONCRETE SIDEWALK

NOT TO SCALE

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

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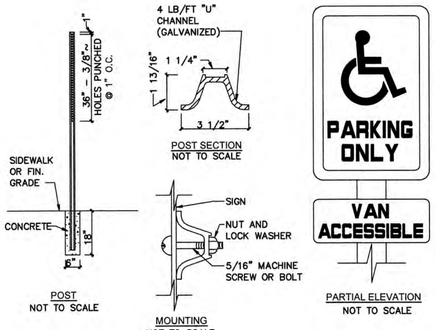
E-MAIL: JBE@JONESANDBEACH.COM

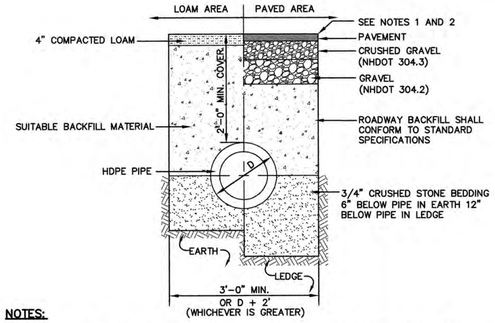
Plan Name:	DETAIL SHEET
Project:	TOWN CENTER SHOPS 154 CRAWLEY FALLS ROAD, BRENTWOOD, NH
Owner of Record:	SHANE McKEEN 89 ROUTE 125, KINGSTON, NH 03848 BK 5897 PG 2659

DRAWING No.
D1
SHEET 8 OF 14
JBE PROJECT NO. 19133



HANDICAP PARKING

NOT TO SCALE

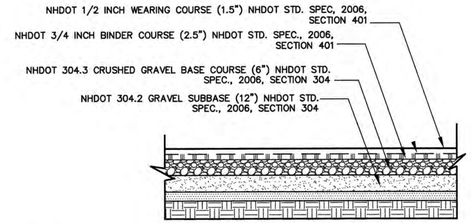


NOTES:

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

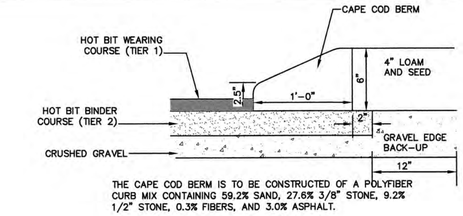


NOTES:

1. PAVEMENT SUBGRADES SHOULD BE PROOF ROLLED IN ORDER TO DENSIFY. THE SUBGRADES USING A MINIMUM OF 4 PASSES WITH A 10-TON VIBRATORY DRUM COMPACTOR. THE GRAVEL BORROW SUBGRADE COURSE AND CRUSHED GRAVEL BASE COURSE SHOULD BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM-D698).
2. PAVEMENT SECTION SUBJECT TO CHANGE BASED ON GEOTECHNICAL INVESTIGATION.

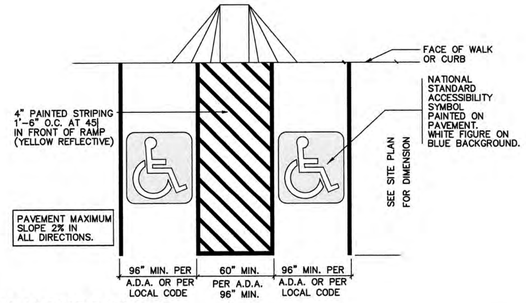
STANDARD DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE



CAPE COD BERM

NOT TO SCALE



HANDICAP PARKING

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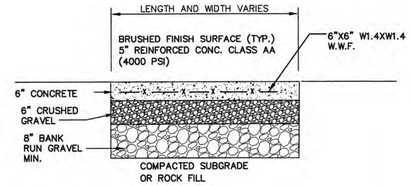
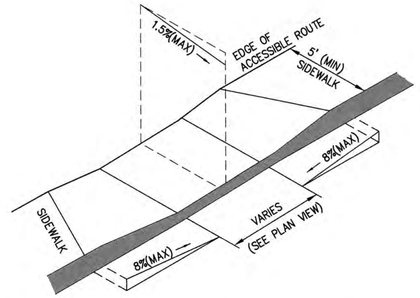


CONCRETE PAD DETAIL

NOT TO SCALE

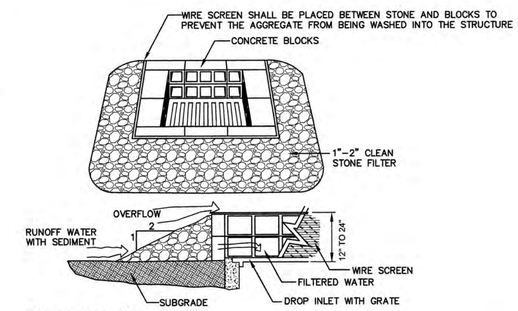


NOTES:

1. THE MAXIMUM ALLOWABLE CROSS SLOPE OF ACCESSIBLE ROUTE (SIDEWALK) AND CURB SHALL BE 1.5%.
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE (SIDEWALK) CURB RAMPS SHALL BE 8%.
4. A MINIMUM OF 4 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (i.e., HYDRANTS, UTLITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SECTION FOR RAMP CONSTRUCTION.

ACCESSIBLE CURB RAMP (TYPE 'A')

NOT TO SCALE

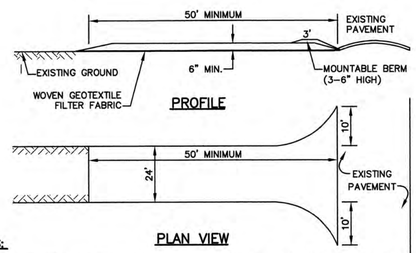


MAINTENANCE NOTE:

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINFALL AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED IN A SUITABLE UPLAND AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

TEMPORARY CATCH BASIN INLET PROTECTION (Block and Gravel Drop Inlet Sediment Filter)

NOT TO SCALE

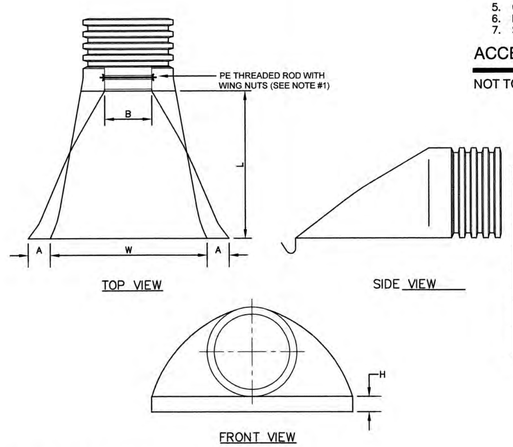


NOTES:

1. STONE FOR STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 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



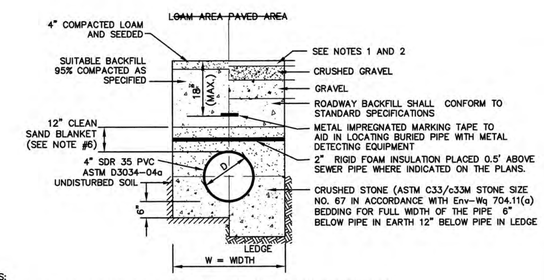
PART NO.	PIPE SIZE	A	B (MAX)	H	L	W
1210-NP	12"	6.5"	10"	6.5"	25"	29"
1510-NP	15"	6.5"	10"	6.5"	25"	29"
1810-NP	18"	7.5"	15"	6.5"	32"	35"
2410-NP	24"	7.5"	18"	6.5"	36"	45"
3010-NP	30"	10.5"	N/A	7.0"	53"	68"
3610-NP	36"	10.5"	N/A	7.0"	53"	68"

NOTES:

1. PE THREADED ROD WITH WING NUTS PROVIDED FOR END SECTIONS 12"-24". 30" AND 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S RECOMMENDATIONS.
2. ALL DIMENSIONS ARE NOMINAL.

ADS N-12 FLARED END SECTION

NOT TO SCALE



NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO PAVEMENT DETAILS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.
3. TRENCH BACKFILL SHALL CONFORM WITH ENV. Wq 704.11(h) AND BE FREE OF DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE OR ROCKS OVER SIX INCHES.
4. W= MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12" INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, WIDTH SHALL BE NO MORE THAN 36"; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, WIDTH SHALL BE 24 INCHES PLUS PIPE O.D. WIDTH SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
5. RIGID FOAM INSULATION TO BE PROVIDED WHERE COVER IN THE ROADWAY IS LESS THAN 6' AND CROSS COUNTRY IS LESS THAN 4', PURSUANT TO DES WAIVER BEING ISSUED.
6. PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100% PASSES A 1/2 " SIEVE AND A MAXIMUM OF 15% PASSES A #200 SIEVE IN ACCORDANCE WITH Env-Wq 704.11(b).
7. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL AND CERTIFIED BY THE MANUFACTURER AS CONFORMING TO THE ASTM D3212 STANDARD IN EFFECT WHEN THE JOINT SEALS WERE MANUFACTURED, AND SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE PER Env-Wq 704.05 (e).

SEWER TRENCH

NOT TO SCALE

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

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

Plan Name: DETAIL SHEET

Project: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.

D2

SHEET 9 OF 14
JBE PROJECT NO. 19133

McGraw-Edison

Catalog #		Type
Project		
Comments		Date
Prepared by		

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting
STANDARD ARM MOUNT
Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

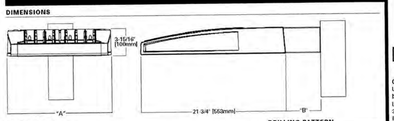
Warranty
Five-year warranty.

GLEON GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

DIMENSIONS



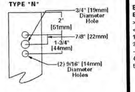
DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length[1]	Weight with Arm lbs.)	EPA with Arm ft.(Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	10" (254mm)	54 (24.5 kgs.)	1.02
9-10	33-3/8" (852mm)	7" (178mm)	10" (254mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN

TYPE 'N'



EATON Powering Business Worldwide

CERTIFICATION DATA
UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120/277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

*www.designlights.org

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McGraw-Edison

Catalog #		Type
Project		
Comments		Date
Prepared by		

DESCRIPTION

The Galleon™ Wall LED luminaire's appearance is complementary with the Galleon area and site luminaire bringing a modern architectural style to lighting applications. Flexible mounting options accommodate wall surfaces in both an upward and downward configuration. The Galleon family of LED products deliver exceptional performance with patented, high-efficiency AccuLED Optics™, providing uniform and energy conscious lighting for parking lots, building and security lighting applications.

SPECIFICATION FEATURES

Construction
Driver enclosure thermally isolated from optics for optimal thermal performance. Heavy wall aluminum housing die-cast with internal and external heat sinks to provide superior structural rigidity and an IP66 rated housing. Overall construction passes a 1.5G vibration test to ensure mechanical integrity. UPLIGHTING: Specify with the UPL option for inverted mount uplight housing with additional protections to maintain IP rating.

Optics
Choice of thirteen patented, high-efficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K and 6000K CCT. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 1200mA, 800mA, and 600mA drive currents.

Electrical
LED drivers are mounted for ease of maintenance. 120-277V 50/60Hz, 347V or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Drivers are provided standard with 0-10V dimming. An optional Eaton proprietary surge protection module is available and designed to withstand 10kV of transient line surge. The Galleon Wall LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Emergency egress options for -20°C ambient environments and occupancy sensor available.

Mounting
Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Galleon Wall "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws which are concealed but accessible from bottom of fixture.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

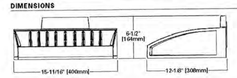
Warranty
Five-year warranty.

GWC GALLEON WALL

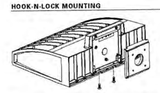
1-2 Light Squares
Solid State LED

WALL MOUNT LUMINAIRE

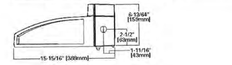
DIMENSIONS



HOOK-N-LOCK MOUNTING



BATTERY BACKUP AND THRU-BRANCH BACK BOX



EATON Powering Business Worldwide

CERTIFICATION DATA
UL/cUL Listed
LM79 / LM80 Compliant
IP66 Housing
ISO 9001
DesignLights Consortium® Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz
347V, 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

SHIPPING DATA
Approximate Net Weight:
27 lbs. (12.2 kgs.)

*www.designlights.org

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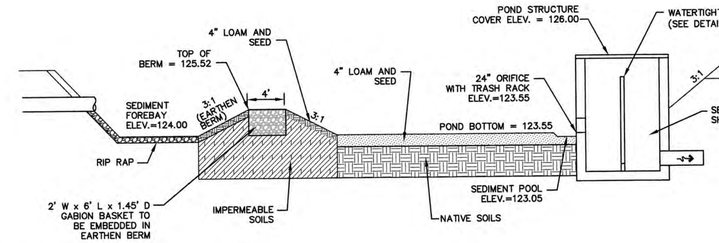

INFILTRATION BASIN

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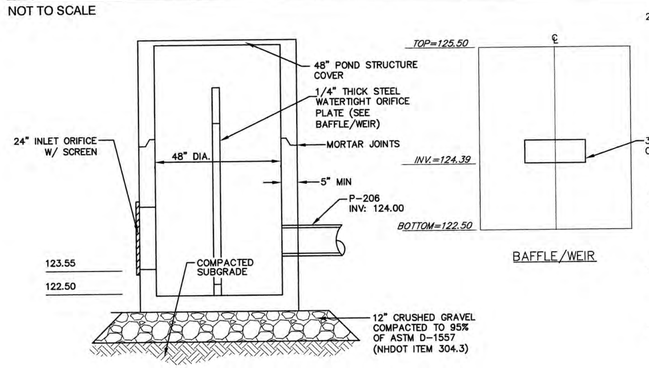

OUTLET STRUCTURE

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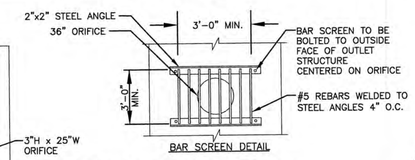
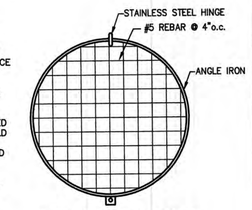
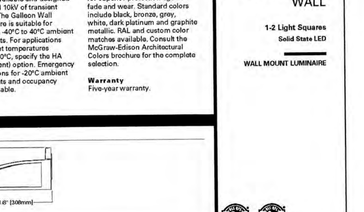


INFILTRATION GENERAL NOTES

1. DO NOT TRAFFIC DIRECTLY ON EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT DIRECTLY ON INFILTRATION BASIN FLOOR AREA. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
2. AFTER THE INFILTRATION SYSTEM AREA IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
3. DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.



POND STRUCTURE COVER



BITUMINOUS SIDEWALK DETAIL

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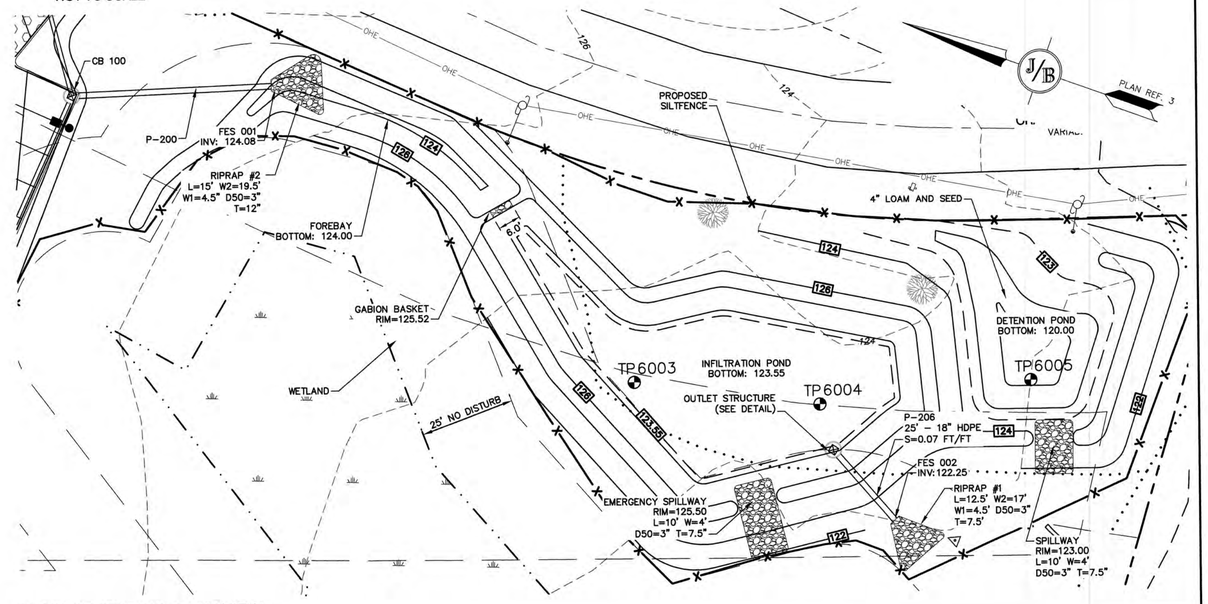

POND STRUCTURE PLAN VIEW

SCALE: 1" = 20'

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Design: EMP	Draft: EMP	Date: 02/20/20
Checked: WGM	Scale: AS NOTED	Project No.: 19133
Drawing Name: 19133-PLAN.dwg		

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

REV.	DATE	REVISION	BY
4	06/11/20	REVISED PER PB COMMENTS	EJH
3	05/14/20	REVISED PER TOWN COMMENTS	EMP
2	04/17/20	REVISED PER TOWN COMMENTS	EMP
1	03/24/20	REVISED PER TEST PIT DATA	EMP
0	03/11/20	ISSUED FOR REVIEW	EMP

Designed and Produced in NH
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Civil Engineering Services
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603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	TOWN CENTER SHOPS 154 CRAWLEY FALLS ROAD, BRENTWOOD, NH
Owner of Record:	SHANE McKEEN 89 ROUTE 125, KINGSTON, NH 03848 BK 5897 PG 2659

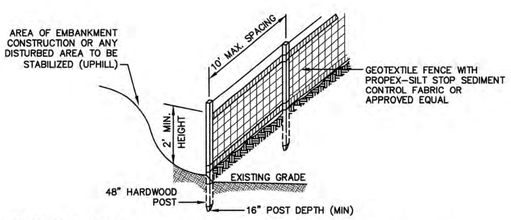
DRAWING No.

D3

SHEET 10 OF 14
JBE PROJECT NO. 19133

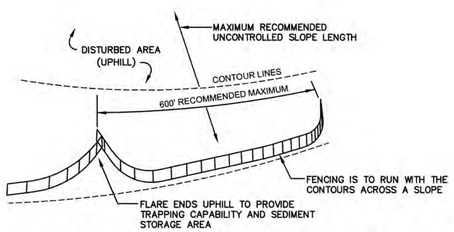
TEMPORARY EROSION CONTROL NOTES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. AT NO TIME SHALL AN AREA IN EXCESS OF 5 ACRES BE EXPOSED AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
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 (INCLUDING POND AREAS BELOW THE PROPOSED WATERLINE) 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 0.25" 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. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
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. 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.
12. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR'S NAME, ADDRESS, AND PHONE NUMBER SHALL BE SUBMITTED TO DES VIA EMAIL (SEE BELOW).
13. PRIOR TO CONSTRUCTION, A PHASING PLAN THAT DELINEATES EACH PHASE OF THE PROJECT SHALL BE SUBMITTED. ALL TEMPORARY SEDIMENT BASINS THAT WILL BE NEEDED FOR DEWATERING WORK AREAS SHALL BE LOCATED AND IDENTIFIED ON THIS PLAN.
14. 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 STABLE.
    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 AND ALL APPLICABLE DES PERMIT CONDITIONS.



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 8" 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 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

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.

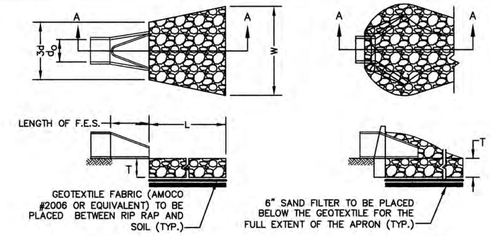
NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 15th, IF PERMANENT SEEDING NOT YET COMPLETE.

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



SECTION A–A

PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

SECTION A–A

PIPE OUTLET TO WELL-DEFINED CHANNEL

NOTES:

1. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
5. OUTLETS TO A DEFINED CHANNEL SHALL HAVE 2:1 OR FLATTER SIDE SLOPES AND SHOULD BEGIN AT THE TOP OF THE CULVERT AND TAPER DOWN TO THE CHANNEL BOTTOM THROUGH THE LENGTH OF THE APRON.
6. MAINTENANCE: THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.
7. SPECIFIC RIP RAP APRON SIZING FOR EACH INDIVIDUAL LOCATION ARE SHOWN ON THE GRADING AND DRAINAGE PLANS.

RIP RAP OUTLET PROTECTION APRON

NOT TO SCALE

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 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. AT LEAST A TEMPORARY CULVERT OR ROADBED TO BE IN PLACE 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, INCLUDING THE CONSTRUCTION OF ANY RETAINING WALLS AND SOUND WALLS.
9. PREPARE BUILDING PAD(S) TO ENABLE BUILDING CONSTRUCTION TO BEGIN.
10. INSTALL THE SEWER 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 DETAILS.
12. ALL SWALES AND DRAINAGE STRUCTURES ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
13. STORMWATER FLOWS ARE NOT TO BE DIRECTED TO TREATMENT PRACTICES UNTIL ALL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
14. 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.
15. PERFORM FINAL FINE GRADING, INCLUDING PLACEMENT OF 'SELECT' SUBGRADE MATERIALS.
16. PAVE ALL PARKING LOTS AND ROADWAYS WITH INITIAL 'BASE COURSE'.
17. PERFORM ALL REMAINING SITE CONSTRUCTION (i.e. BUILDING, CURBING, UTILITY CONNECTIONS, ETC.).
18. LOAM AND SEED ALL DISTURBED AREAS AND INSTALL ANY REQUIRED SEDIMENT AND EROSION CONTROL FACILITIES (i.e. RIP RAP, EROSION CONTROL BLANKETS, ETC.).
19. FINISH PAVING ALL ROADWAYS AND PARKING AREAS WITH 'FINISH' COURSE.
20. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
21. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
22. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
23. 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.
24. CLEAN SITE AND ALL DRAINAGE STRUCTURES, PIPES AND SUMPS OF ALL SILT AND DEBRIS.
25. INSTALL ALL PAINTED PAVEMENT MARKINGS AND SIGNAGE PER THE PLANS AND DETAILS.
26. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY QUARTER-INCH OF RAINFALL.
27. 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.

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Design: EMP	Draft: EMP	Date: 02/20/20
Checked: WGM	Scale: AS NOTED	Project No.: 19133
Drawing Name: 19133-PLAN.dwg		

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

REV.	DATE	REVISION	BY
4	06/11/20	REVISED PER PB COMMENTS	EJH
3	05/14/20	REVISED PER TOWN COMMENTS	EMP
2	04/17/20	REVISED PER TOWN COMMENTS	EMP
1	03/24/20	REVISED PER TEST PIT DATA	EMP
0	03/11/20	ISSUED FOR REVIEW	EMP

Designed and Produced in NH
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: EROSION AND SEDIMENT CONTROL DETAILS

Project: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

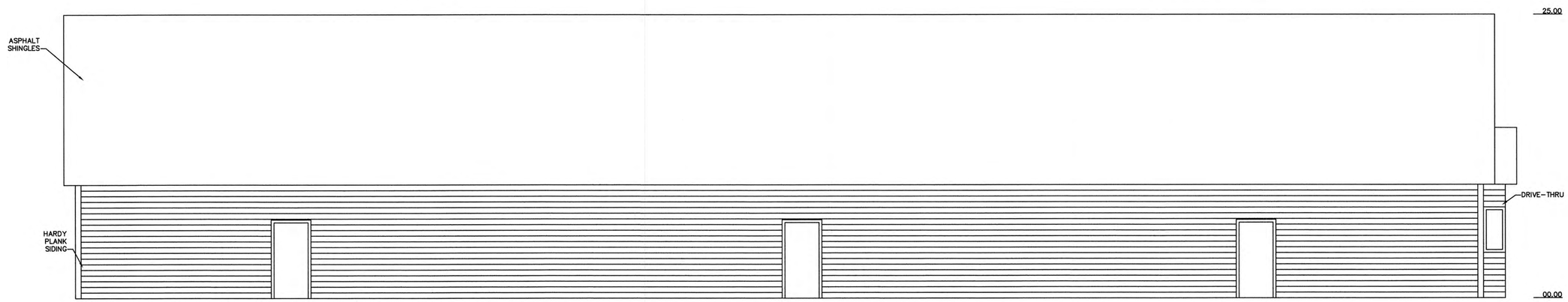
Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.
E1

FRONT ELEVATION
NOT TO SCALE

SIDE ELEVATION
NOT TO SCALE

SIDE ELEVATION
NOT TO SCALE



REAR ELEVATION
NOT TO SCALE

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Design: EMP	Draft: EMP	Date: 02/20/20
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REV.	DATE	REVISION	BY
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Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

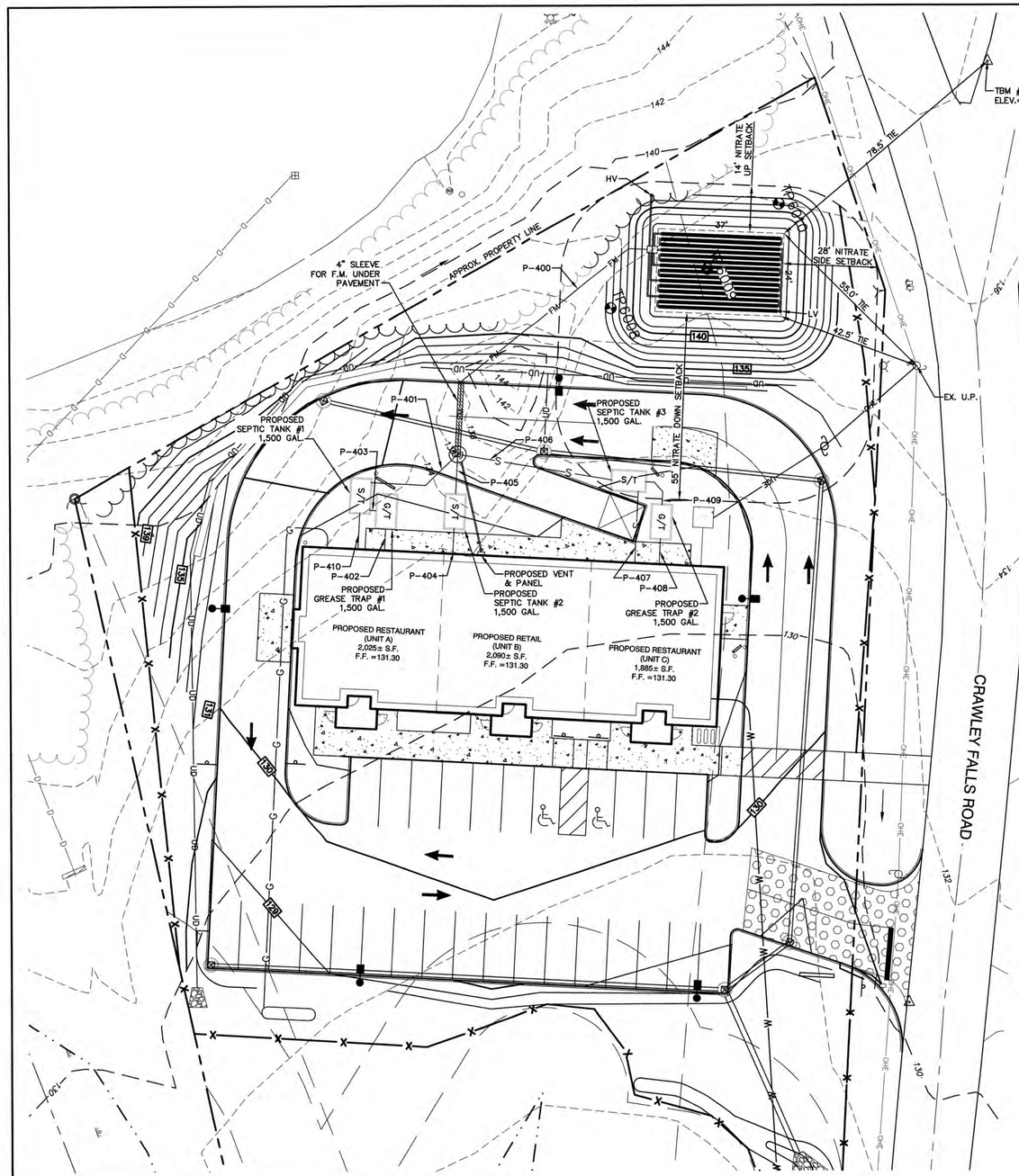
Plan Name: ARCHITECTURAL ELEVATIONS PLAN

Project: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.
A1

SHEET 12 OF 14
JBE PROJECT NO. 19133



LOT LOADING CALCULATIONS:

97,938 S.F. LOT. - 26,019 S.F. WELL RADIUS - 12,378 VPD SOILS = 59,541 S.F.

59,541 S.F. / 1.00 SOIL FACTOR = 59,541 / 43,560 x 2,000 = 2,733 GPD ALLOWABLE

SEWER STRUCTURE TABLE:

SMH 300
RIM=131.20
INVin=127.95 (P-401)
INVin=127.65 (P-405)

SEPTIC TANK #1
(1,500 GAL)
INVin=128.26 (P-403)
INVin=128.26 (P-410)
INVout=128.01 (P-401)

SEPTIC TANK #2
(1,500 GAL)
INVin=128.64 (P-404)
INVout=128.39 (P-405)

SEPTIC TANK #3
(1,500 GAL)
INVin=128.17 (P-407)
INVin=128.17 (P-409)
INVout=127.92 (P-406)

GREASE TRAP #1
(1,500 GAL)
INVin=128.66 (P-402)
INVout=128.41 (P-403)

GREASE TRAP #2
(1,500 GAL)
INVin=128.64 (P-407)
INVout=128.39 (P-406)

P-400
90' - 1.5" HDPE DR11 (FORCE MAIN)

P-401
30' - 4" SDR21 PVC
S=0.01 FT/FT

P-402
7' - 4" SDR35 PVC
S=0.02 FT/FT

P-403
2' - 4" SDR35 PVC
S=0.025 FT/FT

P-404
8' - 4" SDR35 PVC
S=0.02 FT/FT

P-405
12' - 4" SDR35 PVC
S=0.01 FT/FT

P-406
48' - 4" SDR21 PVC
S=0.006 FT/FT

P-407
22' - 4" SDR35 PVC
S=0.01 FT/FT

P-408
8' - 4" SDR35 PVC
S=0.002 FT/FT

P-409
11' - 4" SDR35 PVC
S=0.001 FT/FT

P-410
11' - 4" SDR35 PVC
S=0.001 FT/FT

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GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
20

PROJECT PARCEL
TOWN OF BRENTWOOD
TAX MAP 217, LOT 112

TOTAL LOT AREA: 2.25 ACRES

- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING THE SEPTIC PLAN FROM THE NHDES APPROVED PLAN
- 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.

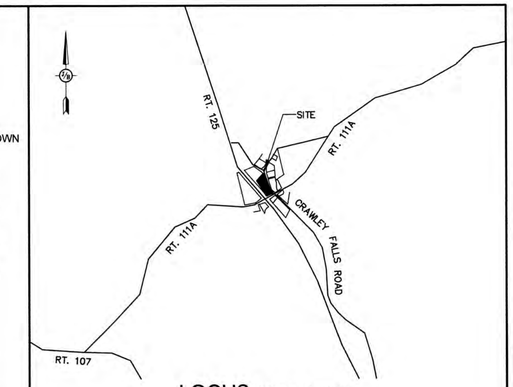
TEST PIT LOGS

PERFORMED BY: WAYNE MORRILL, JONES & BEACH ENGINEERS, INC. SSD# 1358
WITNESSED BY: MICHAEL CUOMO, ROCKINGHAM COUNTY CONSERVATION DISTRICT

TEST PIT #6009			TEST PIT #6008		
0"-3"		TOPSOIL	0"-8"		TOPSOIL
3"-44"	10YR 5/3	BROWN COARSE SAND GRANULAR, FRIABLE	8"-14"	10YR 4/6	DARK YELLOWISH BROWN LOAMY SAND GRANULAR, FRIABLE
44"-60"	2.5Y 3/3	DARK REDDISH BROWN LOAMY SAND GRANULAR, FRIABLE	14"-30"	10YR 6/3	PALE BROWN COARSE SAND GRANULAR, FRIABLE
			30"-81"	2.5Y 5/3	LIGHT OLIVE BROWN LOAMY SAND GRANULAR, FRIABLE
SHWT = 44" NO ROOTS OBSERVED NO H_2O OBSERVED NO REFUSAL OBSERVED			SHWT = 30" ROOTS TO 50" NO H_2O OBSERVED NO REFUSAL OBSERVED		

◔ TEST PIT, DATE: MARCH 16, 2020
◐ PERC. TEST, DATE: MARCH 16, 2020
4 MIN./INCH

◔ TEST PIT, DATE: MARCH 16, 2020
◐ PERC. TEST, DATE: MARCH 16, 2020
4 MIN./INCH



LOCUS SCALE: 1"=2000'

ENVIRO-SEPTIC DESIGN CALCULATIONS

PROPOSED RESTAURANT 1 (UNIT A): 20 INDOOR SEATS @ 20 GPD EA. + 4 EMPLOYEES @ 20 GPD EA.
PROPOSED RESTAURANT 2 (UNIT C): 20 INDOOR SEATS @ 20 GPD EA. + 3 EMPLOYEES @ 20 GPD EA.
RETAIL (UNIT B): 2,090 S.F. @ 5 GPD/100 S.F. + 2 EMPLOYEES @ 10 GPD EA.
= 1,065 GPD
1,065 GPD @ 4 MIN./INCH = 501 L.F. OF ENVIRO-SEPTIC PIPE REQUIRED.
525 L.F. OF ENVIRO-SEPTIC PIPE PROVIDED.
15 ROWS OF ENVIRO-SEPTIC PIPE x 35' LONG. 5 SERIES OF 3 ROWS.

BED DIMENSIONS 37' x 24'.

DESIGN INTENT

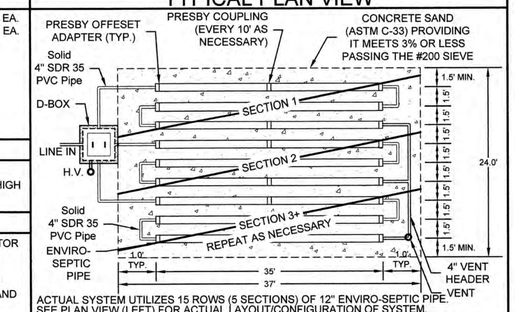
THE BOTTOM OF THE EFFLUENT DISPOSAL SYSTEM (E.D.S.) SHALL BE CONSTRUCTED AT ELEVATION 139.5. THIS IS APPROXIMATELY 1.5 FEET ABOVE ORIGINAL GROUND ON THE HIGH CONTOUR (138.0) OF THE DESIGNED E.D.S. (ENV-WQ-1003.13(aa))

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY DESIGNER OF ANY ABNORMAL CONDITIONS (HARDPAN OR SATURATED SOILS, LEDGE, ETC.) FOUND WHEN EXCAVATING PRIOR TO INSTALLING THE SYSTEM.
- LEACH BED COMPRISED OF ENVIRO-SEPTIC LEACHING PIPE. FOR DETAILED INSTALLATION INFORMATION REFER TO "ENVIRO-SEPTIC & SIMPLE-SEPTIC LEACHING SYSTEMS DESIGN AND INSTALLATION MANUAL", 2019 EDITION (OR MOST CURRENT EDITION). CONTACT PRESBY ENVIRONMENTAL AT PHONE (800) 473-5298 OR WWW.PRESBYENVIRONMENTAL.COM
- PER ENV-WQ 1016.03, CONTRACTOR IS TO PROTECT THE NATURAL ABSORPTION QUALITIES OF THE SOIL. DO NOT COMPACT OR DRIVE OVER THE AREA WITH EQUIPMENT AND PROTECT OPEN EXCAVATION TO PREVENT THE ENTRANCE OF SILT AND DEBRIS.
- FILL AROUND ENVIRO PIPES TO BE ASTM C-33 (CONCRETE SAND) OR EQUAL
- REMOVE TOPSOIL BEFORE PLACING FILL.
- 4 INCH THICK LOAM & SEED AROUND PERIMETER OF FILL.
- CONTRACTOR TO INSTALL A VENT WHEN PROVIDING MORE THAN 18" OF COVER.
- 3 FT. FILL EXTENSION. SIDE SLOPES OF FILL = 2:1.
- CROWN SYSTEM TO SHED RAINWATER; SLOPE SYSTEM AWAY FROM HOUSE.
- SYSTEM WILL BE REPLACED IN SAME LOCATION IN CASE OF FAILURE.
- DISTRIBUTION BOX SHALL HAVE FLOW EQUALIZERS INSTALLED IN THE OUTLET PORTS.
- JOINTS ARE TO BE BELLED PVC OR STANDARD SLIP COLLARS.
- PER ENV-WQ 1010.11, THE FIRST COMPARTMENT IN MULTI-COMPARTMENT SEPTIC TANKS MUST EQUAL AT LEAST 2/3 OF THE REQUIRED VOLUME.
- PER ENV-WQ 1010.10, EXCEPTING LEDGE TANKS, THE LIQUID DEPTH OF THE SEPTIC TANK IS TO BE AT LEAST 40".
- THE OUTLET BAFFLE SHALL BE A VENTED TEE WHICH SHALL EXTEND TO A DISTANCE BELOW THE SURFACE EQUAL TO 40% OF THE LIQUID DEPTH AND SHALL EXTEND ABOVE THE LIQUID LINE TO NOT LESS THAN ONE INCH FROM THE TOP OF THE TANK.
- ALL CONNECTIONS BETWEEN A SEPTIC TANK AND THE PIPES LEADING TO AND EXITING FROM THE SEPTIC TANK SHALL BE SEALED WITH A WATERTIGHT, FLEXIBLE JOINT CONNECTOR THAT: (1) WILL ACCOMMODATE NORMAL MOVEMENT OF THE SEPTIC TANK WITHOUT LEAKING OR BREAKING; AND (2) HAS BEEN CERTIFIED BY ITS MANUFACTURER OR DISTRIBUTOR AS MEETING OR EXCEEDING THE APPLICABLE STANDARD IN ASTM C 1644-06, SECTION 7.
- CONTRACTOR TO PROVIDE RISERS FOR TANKS WITH MORE THAN 12" OF COVER.
- IF GARBAGE GRINDERS ARE DESIRED, SEPTIC TANK SHALL BE 50% LARGER.
- TOWN OF BRENTWOOD REQUIRES BED BOTTOM INSPECTION.
- ENVIRO-SEPTIC TO BE SUPPLIED BY: ELIMINATOR SYSTEMS INC. (603) 868-2242) OR EQUAL.
- 1,500 GALLON SEPTIC TANKS, 1,500 GREASE TRAPS & D-BOX TO BE SUPPLIED BY: SHEA CONCRETE. (800-696-7432) OR EQUAL.
- ROCKINGHAM COUNTY SOIL CONSERVATION SERVICE SOIL TYPE: WINDSOR LOAMY SAND.
- ANY CHANGES TO SEPTIC TANK, BUILDING OR WELL LOCATION/ORIENTATION WILL REQUIRE AN AS-BUILT PLAN TO BE PROVIDED BY THE DESIGNER PRIOR TO NHDES FINAL INSPECTION.
- PER ENV-WQ 1004.10, SYSTEMS OVER 2,500 GPD ARE TO BE INSPECTED BY DESIGNER.
- PER ENV-WQ 1003.13(a)(3) THERE ARE NO KNOWN BURIAL SITES OR CEMETERIES ON THE LOT WITHIN 100' OF ANY COMPONENT OF THE ISDS.
- 50' SETBACK FROM POORLY DRAINED SOILS.
- DISTANCE FROM SEWER PIPE TO SURFACE WATER, OPEN DRAINAGE, VERY POORLY DRAINED SOIL, AN OPEN LOOP GEOTHERMAL WELL, OR A PRIVATE ON-SITE WELL SHALL BE 75 FT. THIS MAY BE REDUCED TO 50 FT IF SDR26 OR EQUIVALENT IS USED IN ACCORDANCE WITH ENV-WQ 1008.04(c)(1).
- DISTANCE FROM SEPTIC TANK TO SURFACE WATER, OPEN DRAINAGE, VERY POORLY DRAINED SOIL, AN OPEN LOOP GEOTHERMAL WELL, OR A PRIVATE ON-SITE WELL SHALL BE 75 FT. THIS MAY BE REDUCED TO 50 FT IF THE SEPTIC TANK IS EITHER MADE FROM PLASTIC OR COATED WITH A SEALANT TO PREVENT INFILTRATION AND EXFILTRATION IN ACCORDANCE WITH ENV-WQ 1008.04(c)(2).
- APPROVAL FOR CONSTRUCTION IS VALID FOR 4 YEARS | 90 DAYS FROM DATE OF ISSUE.

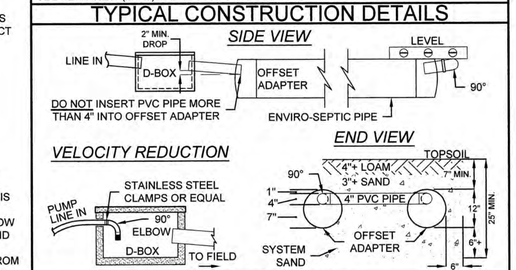
- PWS # PENDING ISSUED:_____.
- SUBDIVISION APPROVAL # N/A ISSUED: PRE-1967
- CONSTRUCTION APPROVAL #_____ ISSUED:_____.

TYPICAL PLAN VIEW



ACTUAL SYSTEM UTILIZES 15 ROWS (5 SECTIONS) OF 12" ENVIRO-SEPTIC PIPE. SEE PLAN VIEW (LEFT) FOR ACTUAL LAYOUT/CONFIGURATION OF SYSTEM.

TYPICAL CONSTRUCTION DETAILS



WELL LOCATION

- INSTALLATION SHALL COMPLY WITH 'We 602.05' WELL LOCATION RULES
- THE PROPOSED WELL IS A NON TRANSIENT WELL, THE FOLLOWING CONDITIONS APPLY
  - 50' FROM SURFACE WATERS, WETLANDS, NATURAL DRAINAGE WAYS
  - 50' FROM EDGE OF RIGHT OF WAY, DRIVEWAYS, PARKING AREAS
  - WELLHEAD ABOVE 100-YEAR FLOOD ELEVATION
  - LOCATED OUTSIDE OF THE NITRATE SETBACK AREA

WETLAND DELINEATION

WETLANDS ON-SITE WERE DELINEATED BY: CHRISTOPHER ALBERT, JONES & BEACH ENGINEERS, INC., 85 PORTSMOUTH AVE., STRATHAM, NH

DATE: FALL, 2019

OWNER NOTES

- KNOW THE LOCATION OF YOUR SEPTIC TANK AND LEACHING AREA.
- INSPECT YOUR SEPTIC TANK YEARLY. HAVE THE SEPTIC TANK PUMPED AS NEEDED BUT AT LEAST ONCE EVERY THREE YEARS.
- DO NOT FLUSH BULKY ITEMS SUCH AS DIAPERS, SANITARY PADS OR BABY WIPES.
- DO NOT FLUSH TOXIC CHEMICALS SUCH AS PAINT THINNERS, DRANO, PESTICIDES, OR CHLORINE, AS THEY MAY KILL THE NECESSARY BACTERIA IN THE SEPTIC TANK.
- REPAIR LEAKING FIXTURES IN THE BUILDING PROMPTLY.
- BE CONSERVATIVE WITH WATER USE, SPREAD OUT USE OVER TIME, AND USE WATER-REDUCING FIXTURES WHENEVER AND WHEREVER POSSIBLE. TOO MUCH USE IN A SHORT TIME CAN OVERLOAD THE SYSTEM, WHICH MAY LEAD TO FAILURE.
- MOW YOUR LEACHING AREA REGULARLY. PREVENT DEEP-ROOTED TREES AND SHRUBS FROM GROWING ON AND ADJACENT TO YOUR LEACHING AREA.
- NO VEHICULAR TRAVEL, LIVESTOCK TRAVEL, OR SNOW REMOVAL IN AREA OF SYSTEM, UNLESS SPECIFICALLY DESIGNED FOR H20 LOADING.

Design: EMP	Draft: EMP	Date: 06/11/2020
Checked: WGM	Scale: 1" = 20'	Project No.: 19133
Drawing Name: 19133-PLAN.DWG		

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3	05/14/20	REVISED PER TOWN COMMENTS	EMP
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1	03/24/20	REVISED PER TEST PIT DATA	EMP
0	03/11/20	ISSUED FOR REVIEW	EMP

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PO Box 219
Stratham, NH 03885
603-772-4746
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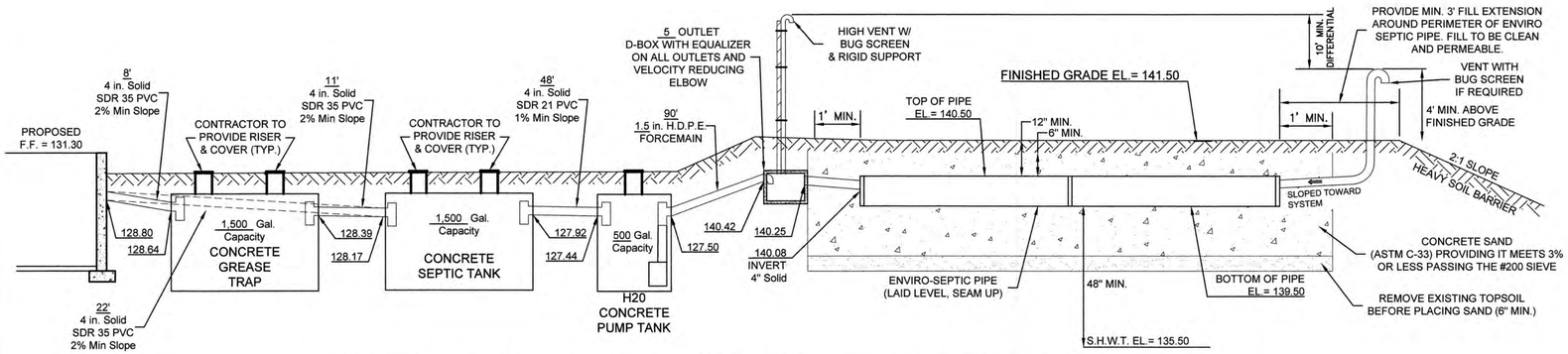
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EFFLUENT DISPOSAL DESIGN

Project: TOWN CENTER SHOPS
154 CRAWLEY FALLS ROAD, BRENTWOOD, NH

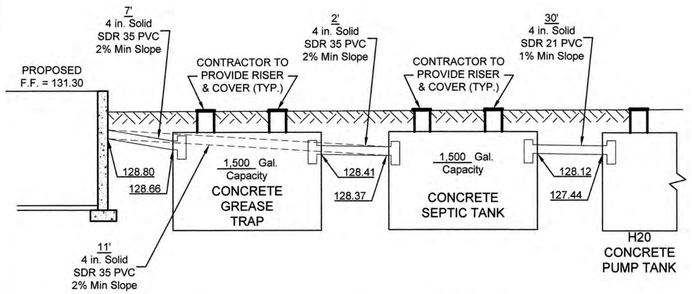
Owner of Record: SHANE McKEEN
89 ROUTE 125, KINGSTON, NH 03848
BK 5897 PG 2659

DRAWING No.
S1
SHEET 13 OF 14
JBE PROJECT NO. 19133

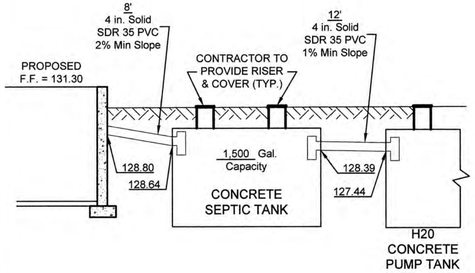


CROSS SECTION - DISPOSAL SYSTEM - UNIT C GREASE TRAP & SEPTIC TANK

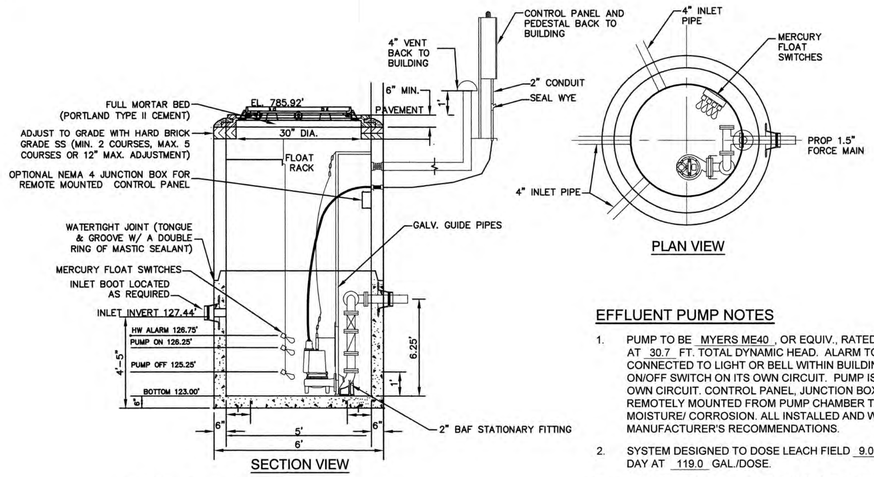
N.T.S.



UNIT A GREASE TRAP & SEPTIC TANK



UNIT B SEPTIC TANK

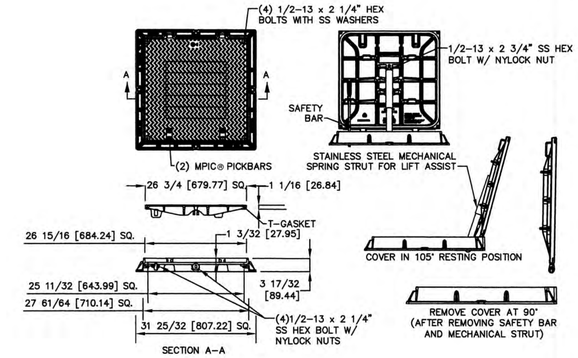


SEWER PUMP STATION

NOT TO SCALE

EFFLUENT PUMP NOTES

1. PUMP TO BE MYERS ME40 , OR EQUIV., RATED AT 31 GPM AT 30.7 FT. TOTAL DYNAMIC HEAD. ALARM TO BE CONNECTED TO LIGHT OR BELL WITHIN BUILDING WITH ON/OFF SWITCH ON ITS OWN CIRCUIT. PUMP IS TO BE ON ITS OWN CIRCUIT. CONTROL PANEL, JUNCTION BOX, ETC. TO BE REMOTELY MOUNTED FROM PUMP CHAMBER TO AVOID MOISTURE/ CORROSION. ALL INSTALLED AND WIRED PER MANUFACTURER'S RECOMMENDATIONS.
2. SYSTEM DESIGNED TO DOSE LEACH FIELD 9.0 TIMES PER DAY AT 119.0 GAL./DOSE.
3. PUMP WILL OPERATE FOR APPROX. 3.8 MINUTES PER DOSE.
4. PUMP CHAMBER TO BE WATER TIGHT AND VENTED.



GALVANIZED HATCH

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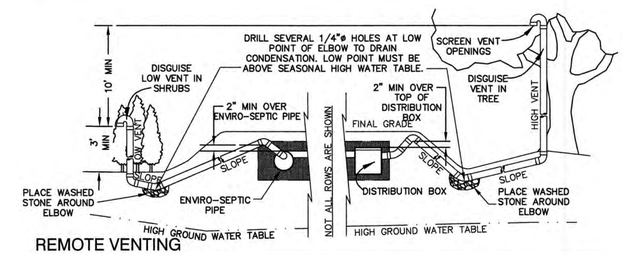
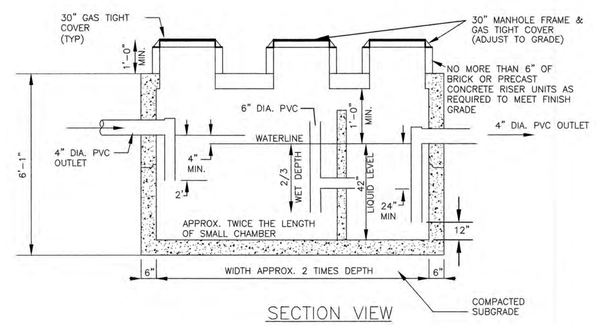


REMOTE VENTING

NOT TO SCALE



DESIGN DATA & GENERAL NOTES:

(1) CONCRETE STRENGTH 3,000 PSI MIN. STRENGTH @ 28 DAYS
(2) STEEL REINFORCEMENT – ASTM A-615 GRADE 60
(3) COVER TO STEEL – 1" MIN.
(4) TANKS ARE DESIGNED TO MEET ASTM C858 AND ACI 318 WITH AASHTO HS-20 LOADING
(5) EARTH COVER – 0 TO 4 FEET
(6) CONSTRUCTION JOINT – SEALED WITH 1" DIA. BUTYL RUBBER OR EQUIVALENT
(7) CONSTRUCTION TO CONFORM WITH ASTM C1613

NOTE: PRECAST CONCRETE GREASE TRAP MUST CONFORM TO ALL STATE & LOCAL PLUMBING CODES

1,500 GALLON GREASE INTERCEPTOR (H-20)

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