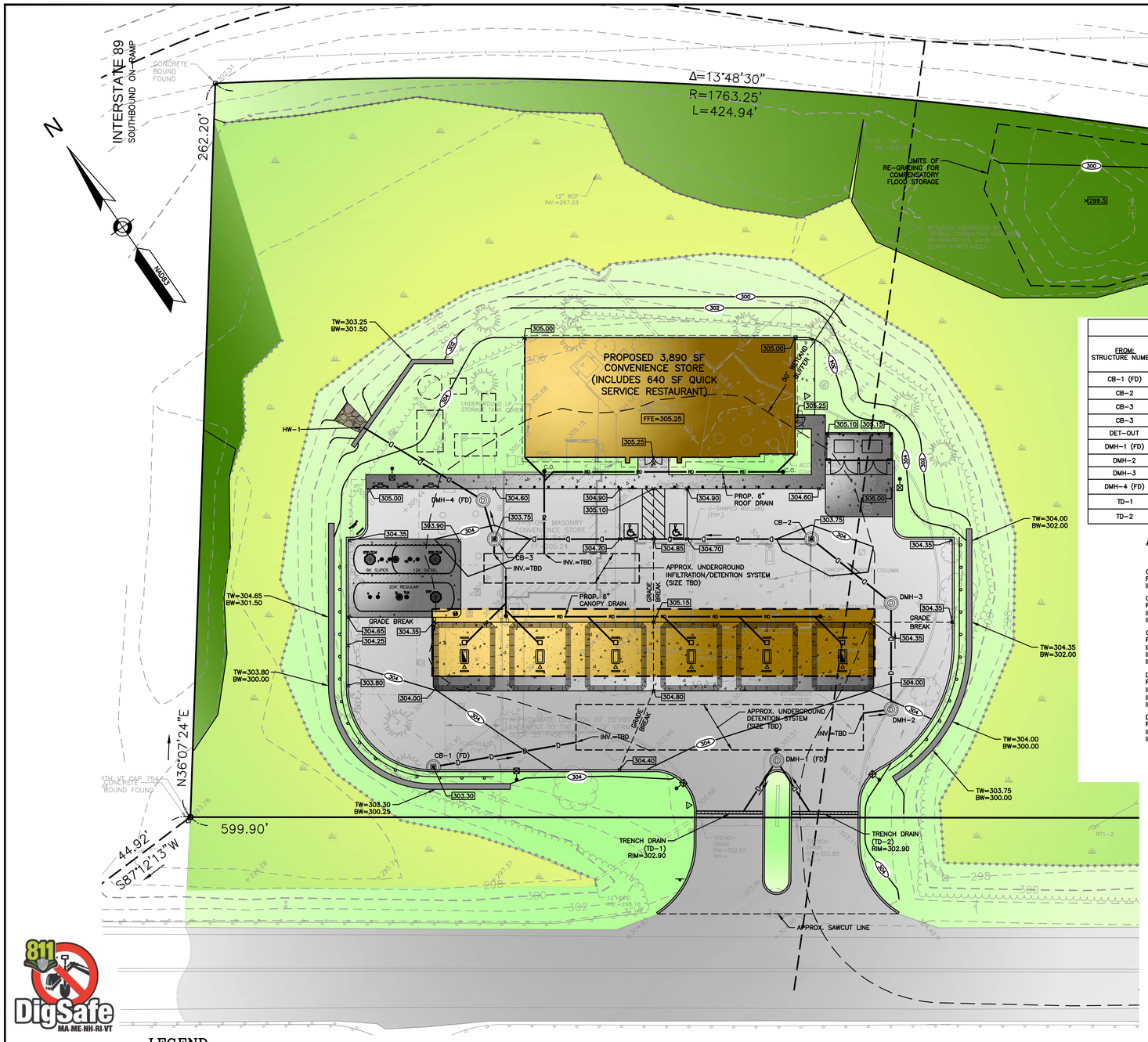

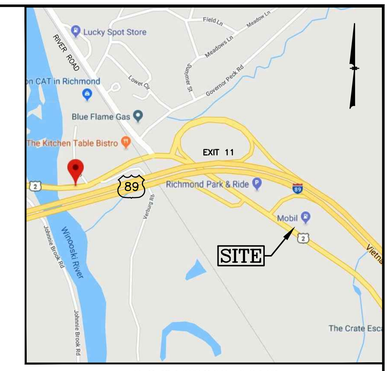

LOCATION MAP

(NOT TO SCALE)

DRAINAGE PIPE SCHEDULE

FROM: STRUCTURE NUMBER	PIPE SIZE (INCHES)	TYPE OF PIPE	APPROX. PIPE LENGTH (FEET)	SLOPE OF PIPE (FT./FT.)	TO: STRUCTURE NUMBER
CB-1 (FD)	12	HDPE	52	0.009	DET-IN 1
CB-2	12	HDPE	113	0.005	CB-3
CB-3	12	HDPE	14	0.014	DMH-4 (FD)
CB-3	12	HDPE	5	0.004	INF-OUT
DET-OUT	12	HDPE	10	0.010	DMH-2
DMH-1 (FD)	12	HDPE	4	0.080	DET-IN 2
DMH-2	12	HDPE	38	0.005	DMH-3
DMH-3	12	HDPE	36	0.005	CB-2
DMH-4 (FD)	12	HDPE	50	0.008	HW-1
TD-1	8	HDPE	22	0.009	DMH-1 (FD)
TD-2	8	HDPE	22	0.009	DMH-1 (FD)

DRAINAGE STRUCTURES

CB-1 (FD)
RIM=303.85
INV.OUT=300.85

CB-2
RIM=305.08
INV.IN=299.70(DMH-3)
INV.OUT=299.60

CB-3
RIM=303.80
INV.IN=299.00(CB-2)
INV.OUT=298.90
INV.OUT=298.90

DMH-1 (FD)
RIM=305.50
INV.IN=301.20(TD-1)
INV.IN=301.20(TD-2)
INV.OUT=302.40

DMH-2
RIM=306.20
INV.IN=300.30(DET-OUT)
INV.OUT=300.20

DMH-3
RIM=306.00
INV.IN=300.00(DMH-2)
INV.OUT=299.90

DMH-4 (FD)
RIM=306.20
INV.IN=298.70(CB-3)
INV.OUT=298.70

HW-1
INV.=298.30

TD-1
RIM=302.90
INV.OUT=301.40

TD-2
RIM=302.90
INV.OUT=301.40

FLOOD STORAGE CALCULATIONS

FLOOD ELEVATION RANGE	EXIST. FLOOD STORAGE VOLUME (CY)	PROP. FLOOD STORAGE VOLUME(CY)	CHANGE IN FLOOD STORAGE VOLUME (CY)
299-300	1,733	1,775	+42
300-301	2,174	2,243	+69
301-302	2,509	2,568	+59
302-303	2,816	2,876	+60
303-304	3,255	3,307	+52
304-305	4,480	4,669	+189
305-306	5,842	6,011	+169

THE ABOVE TABLE SUMMARIZES THE VOLUME COMPUTATIONS FOR THE 100-YEAR FLOOD ELEVATION OF 306.0 AS SHOWN ON THE FLOOD INSURANCE RATE #500070C0292E FOR THE TOWN OF RICHMOND.

NOTES:

1) ALL SITE DRAINAGE PIPE SHALL BE CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE WITH STANDARD JOINTS, DUAL-WALL, SMOOTH INTERIOR AS MANUFACTURED BY ADS, INC., OR APPROVED EQUAL, UNLESS OTHERWISE NOTED ON PLAN.

2) ALL ROOF AND CANOPY DRAIN PIPE SHALL BE 6" PVC(SDR-35) AS SHOWN ON PLAN. MINIMUM SLOPE = 1%.

3) ELEVATIONS ARE BASED ON NAVD 1988 DATUM.

4) ALL PROPOSED ELEVATIONS AS SHOWN ARE BOTTOM OF CURB ELEVATIONS, UNLESS OTHERWISE NOTED.

5) ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE LOCAL AUTHORITIES AND THE DEVELOPER PRIOR TO INSTALLATION.

6) THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR IS TO VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.

7) ALL CONSTRUCTION SHALL CONFORM TO MUNICIPAL DPW AND ALL APPLICABLE STATE AND FEDERAL STANDARDS.

8) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIG-SAFE (DIAL 811) PRIOR TO COMMENCING ANY EXCAVATION.

9) THIS SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION IF THE DISTURBANCE EXCEEDS ONE ACRE (ACTUAL DISTURBANCE = 1.7 ACRES). THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. A COMPLETED NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE; OR ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.

10) ALL PROPOSED CATCH BASINS SHALL HAVE 4' SUMPS AND OUTLETS EQUIPPED WITH "SNOUT" OIL HOODS OR APPROVED EQUAL.

11) CONTRACTOR TO REFER TO THE OPERATION & MAINTENANCE (O&M) MANUAL FOR STORMWATER MANAGEMENT SYSTEMS & SITE MAINTENANCE & INSPECTIONS DURING AND AFTER CONSTRUCTION.

12) ALL PIPE DATA IS CALCULATED TO CENTER OF STRUCTURE, TYP.

13) SEE EROSION & SEDIMENT CONTROL PLAN FOR DETAILED EROSION CONTROL MEASURES.

14) ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO VTrans AND RICHMOND DEPARTMENT OF PUBLIC WORKS, SHALL BE EMPLOYED DURING OPERATIONS WITHIN THE PUBLIC RIGHT-OF-WAY.

15) ALL ADA ACCESSIBLE WALKWAYS CANNOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE, RAMPS CANNOT EXCEED 8.33% RUNNING SLOPE AND 2% CROSS SLOPE, AND HC PARKING STALLS AND ACCESS AISLES CANNOT EXCEED 2% SLOPE IN ANY DIRECTION. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.

16) THE TOWN OF RICHMOND ZONING ORDINANCE REQUIRES THE BUILDING TO BE ONE FOOT ABOVE THE BASE FLOOD ELEVATION OR BE FLOOD PROOFED TO AN ELEVATION 2 FEET ABOVE THE BASE FLOOD ELEVATION. THE BASE FLOOD ELEVATION AT THIS LOCATION IS 306.

17) THE INTENT OF THIS PLAN IS TO COMPLY WITH RICHMOND ZONING ORDINANCE SECTION 6.8 FLOOD HAZARD OVERLAY DISTRICT, SPECIFICALLY SECTION 6.8.16(S) "FILL, CAN BE MOVED FROM ONE PLACE TO ANOTHER WITHIN THE SPECIAL FLOOD HAZARD AREA...IF THERE IS NO NET LOSS IN THE FLOODWATER HOLDING CAPACITY OF THE LAND."

LEGEND

VCC	VERTICAL CONCRETE CURB		ROOF DRAIN	C.O.	PROP. CLEANOUT
DSLY	DOUBLE SOLID LINE YELLOW		CLEANOUT	CB-1	PROP. CATCH BASIN
SSLW	SINGLE SOLID LINE WHITE		VENT	DMH-1	PROP. DRAIN MANHOLE
G	GAS LINE	1+88.69	SPOT ELEVATION	SMH-1	PROP. SEWER MANHOLE
W	WATER LINE	90	CONTOUR ELEVATION	MEG	MEET EXISTING GRADE
	UTILITY POLE		METAL GUARDRAIL	331.25	PROP. SPOT ELEVATION
	GUY WIRE		TREELINE	332	PROP. CONTOUR ELEVATION
EM	ELECTRIC METER		TREE		PROP. SILT FENCE
	MONITORING WELL		SIGN		PROP. GATE VALVE
	LIGHT POLE		BOLLARD		
	OVERHEAD WIRE		WETLAND LINE		
PB	PULL BOX		DITCH LINE		
GV	GAS VALVE		EASEMENT LINE		
	CATCH BASIN		PROPERTY LINE		
W	WELL		ABUTTER PROPERTY LINE		
			BUILDING SETBACK		

DRAFT
11-3-20

OWNER OF RECORD:

WM1436
SUMMIT DISTRIBUTING LLC
240 MECHANIC STREET
LEBANON, NH 05477
BOOK 172 PAGE 74

0 20 50 100
SCALE: 1" = 20'

GPI Engineering Design Planning Construction Management
603.893.0720 GPINET.COM
Greenman-Pedersen, Inc.
44 Stiles Road, Suite One
Salem, NH 03079

PREPARED FOR
SUMMIT DISTRIBUTING, LLC
240 MECHANIC STREET
LEBANON, NH 05477

ASSESSORS MAP 3 LOT WM1436
1436 WEST MAIN STREET
RICHMOND, VERMONT

REVISIONS

NO.	REVISION	DATE

SEPTEMBER 17, 2020

DRAWN/DESIGN BY	CHECKED BY
SJB	HS

CONCEPTUAL GRADING & DRAINAGE PLAN

SCALE: 1"=20'

NEX-465419

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