GROUNDWATER RECHARGE CALCULATIONS
TOTAL RECHARGE VOLUME REQUIRED(OVERALL SITE–NET INCREASE):
FOR NRCS SOIL CLASS B, DEPTH = 0.35 INCHES
TOTAL SITE IMPERVIOUS AREA = 0.552 ACRES (ROOF AND PARKING LOT)
RECHARGE VOLUME = 0.35 INCHES X 0.552 ACRES = 0.1932 ACRE–INCHES
0.1932 ACRE–INCHES / 12 INCHES/FT = 0.0161 ACRE–FT
0.0161 ACRE–FT X (43,560 S.F./ACRE) = 701.32 CU.FT. TO RECHARGE

MINIMUM DISTANCE TO GROUNDWATER IS 7FT. WHERE THE BASIN IS PROPOSED NEAR TEST PIT#3(MOTTLES @ 200.0). TEST PIT#3 HAS BEEN TAKEN FROM A PLAN TITLED, "SEWAGE DISPOSAL PLAN", PREPARED BY STAMSKI AND McnARY, INC., DATED OCTOBER 10, 2014.

MBL NORTH

Table 3.2.4 Pre- and Post-Development Peak Discharge Rates

Design Point	2-year storm (cfs)		10-year storm (cfs)		100-year storm (cfs)	
	Pre-	Post-	Pre-	Post-	Pre-	Post-
8R	22.69	22.17	34.69	33.09	48.66	49.86
Total	22.69	22.17	34.69	33.09	48.66	49.86

Table 3.2.5 Pre- and Post-Development Volume Runoff Rates

Design Point	2-year storm (af)		10-year storm (af)		100-year storm (af)	
	Pre-	Post-	Pre-	Post-	Pre-	Post-
8R	1.749	1.735	2.692	2.686	3.811	3.812
Total	22.69	22.17	34.69	33.09	48.66	49.86

ZONING TABLE

ZONE: GENERAL INDUSTRIAL
GROUNDWATER PROTECTION ZONE 4

USE: MANUFACTURING/INDUSTRIAL

	REQUIRED ALLOWED	EXISTING	CHANGE	PROPOSED
MIN. LOT AREA	40,000 S.F. (0.918 ACRES)	2,461,212± S.F. (56.502± ACRES)	NONE	2,087,003± S.F. (47.911± ACRES)
FRONTAGE	100 FT.	1,616.44 FT.	NONE	1,616.44 FT.
SETBACKS				
FRONT	45 FT.	37.4 FT.(HAYWARD) 285.9 FT.(CHARTER)	NONE	37.4 FT.(HAYWARD) 285.9 FT.(CHARTER)
SIDE	20 FT.	37.4 FT.(HAYWARD) 285.9 FT.(CHARTER)	NONE	37.4 FT.(HAYWARD) 285.9 FT.(CHARTER)
REAR	20 FT.	69.0 FT.(ROUTE 2) OVER 400 FT.(ROUTE 2)	NONE	69.0 FT.(ROUTE 2) OVER 400 FT.(ROUTE 2)
BUILDING HEIGHT	40FT.(MAX)	30FT.±	NONE	16 FT.
BUILDING AREA	365,679± S.F.	320,347 S.F.	3,880 S.F.	324,227 S.F.
FLOOR AREA RATIO	0.20	0.175	0.010	0.177
% OF LOT COVERAGE	35.0%(MAX)	22.3%	0.01%	22.31%
BUILDING		7.354 ACRES	0.089 ACRES	7.443 ACRES
PAVEMENT		5.229 ACRES	0.462 ACRES	5.691 ACRES
OPEN SPACE		33.059 ACRES	0.551 ACRES	32.508 ACRES
WETLANDS		10.860 ACRES(19.2%)	0.000 ACRES	10.860 ACRES(19.2%)
FLOODPLAIN		6.952 ACRES(12.3%)	0.000 ACRES	6.952 ACRES(12.3%)
DEVELOPABLE SITE AREA		1,828,395±S.F.		

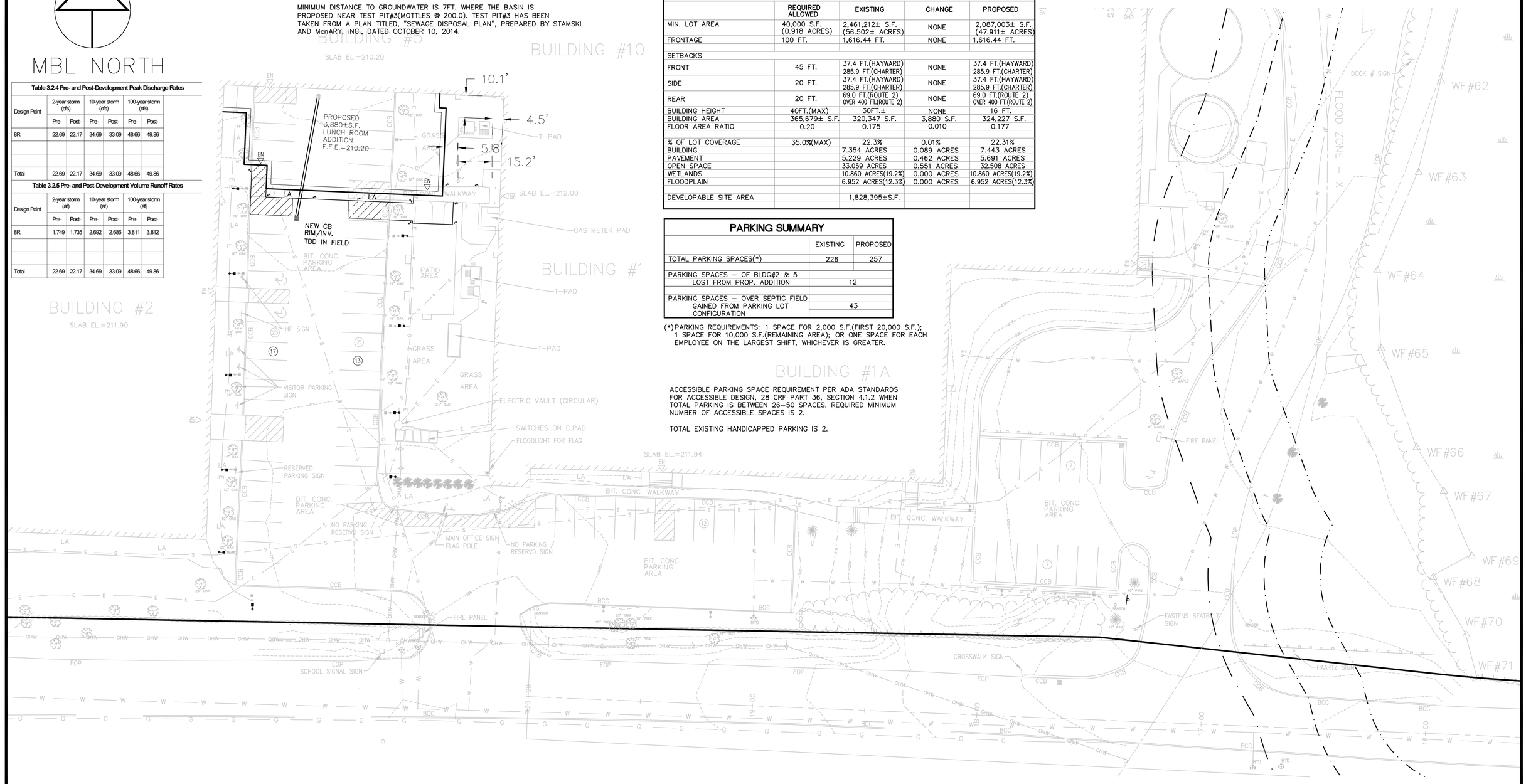
PARKING SUMMARY

	EXISTING	PROPOSED
TOTAL PARKING SPACES(*)	226	257
PARKING SPACES – OF BLDG#2 & 5 LOST FROM PROP. ADDITION	12	
PARKING SPACES – OVER SEPTIC FIELD GAINED FROM PARKING LOT CONFIGURATION	43	

(*)PARKING REQUIREMENTS: 1 SPACE FOR 2,000 S.F.(FIRST 20,000 S.F.); 1 SPACE FOR 10,000 S.F.(REMAINING AREA); OR ONE SPACE FOR EACH EMPLOYEE ON THE LARGEST SHIFT, WHICHEVER IS GREATER.

ACCESSIBLE PARKING SPACE REQUIREMENT PER ADA STANDARDS FOR ACCESSIBLE DESIGN, 28 CRF PART 36, SECTION 4.1.2 WHEN TOTAL PARKING IS BETWEEN 26–50 SPACES, REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES IS 2.

TOTAL EXISTING HANDICAPPED PARKING IS 2.



NOTE: THE PROPOSED BUILDING AND ADDITIONS ARE SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR TO REFER TO ARCHITECTURAL PLANS PREPARED BY THE ARCHITECT OF RECORD FOR EXACT DIMENSIONS AND LAYOUT.

NOTES:
LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD BY THE APPROPRIATE UTILITY COMPANY PRIOR TO ANY CONSTRUCTION. THIS PLAN IS BASED ON AVAILABLE RECORD INFORMATION AND PLANS AND AN ACTUAL ON THE GROUND FIELD SURVEY BY THIS FIRM ON 06/19/2014 – 08/25/2014

No.	DATE	DESCRIPTION	BY
1	6/9/2015	ADD ZONING TABLE PER PLANNING OFFICE	THL

REVISIONS

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL: COMMONWEALTH OF MASSACHUSETTS JAMES E. MILLER No. 36385 PROFESSIONAL LAND SURVEYOR

SEAL: COMMONWEALTH OF MASSACHUSETTS JAMES E. MILLER CIVIL No. 31064 PROFESSIONAL ENGINEER

PREPARED FOR
HAARTZ CORPORATION
87 HAYWARD ROAD
ACTON MASSACHUSETTS

SCALE:
HORZ.: 1"=20'
VERT.:
DATUM:
HORZ.:
VERT.:
20 10 0 20
GRAPHIC SCALE

MBL
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SITE DEVELOPMENT PLANS
LAYOUT AND MATERIAL PLAN
87 HAYWARD ROAD
ACTON MASSACHUSETTS

PROJ. No.: 2014-028
DATE: MAY 28, 2015

C-4.0

UCS: WRLD MS VIEW: vp20 LMAN: CTB: MBL Standard
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