

Full Site RDM Neelytown Soil Movement Calculations

3/25/2025

Earth work calculations based on the following documents:

Survey for Neelytown Development LLC, prepared by Lanc & Tully, dated 8/26/22; Grading & Drainage Plan prepared by Colliers Engineering & Design, dated 5/12/23

PROPOSED SITE IMPROVEMENTS

	AREA (SF)		THICKNESS (In)	VOLUME (CY)
BLDG FOUNDATIONS	1,128,270		26.5	-92,281
ASPHALT PAVEMENT SD	278,715		10.5	-9,032
ASPHALT PAVEMENT HD	667,532		17.0	-35,025
CONCRETE FRONT SIDEWALK	10,506		9	-292
CONCRETE LOADING BERTHS	200,348		14	-8,657
RAISED CONCRETE PLATFORM	0		10	0
CONCRETE RAMP			12	0
<i>UTILITY TRENCHING</i>	<i>WIDTH (FT)</i>	<i>DEPTH (FT)</i>	<i>LENGTH (FT)</i>	-
BIORETENTION BASIN EXCV	120,348	2.5	1	-11,143
UTILITY TRENCHING - STORM	3	4	15,485	-6,882
UTILITY TRENCHING - SANITARY	3	4	3,591	-1,596
UTILITY TRENCHING - WATER	3	4	8,736	-3,883
UTILITY TRENCHING - ELEC	3	3	570	-190
UTILITY TRENCHING - GAS	3	3	576	-192
TOTAL	2,285,371			-169,174

CIVIL 3D ANALYSIS OF EXISTING GROUND VS. FINISHED GRADE

	VOLUME (CY)
CUT	
FILL	201,872
Shrink Factor = 10 %	222,059
NET	222,059 FILL



ADDITIONAL FACTORS

	Area of Woods TBR (SF)	DEPTH (FT)	VOLUME (CY)
TREE ROOT MASS	1,404,690	1	-52,026

NET PROJECT SOIL			860	IMPORT
FILL				
NET			860	FILL

23,219.36 CF