

PROJECT NAME: 554 NORTH RIVERSIDE DR, POMPANO BEACH, FL
STORM DRAINAGE CALCULATIONS

Date: 7/28/2021

SITE CHARACTERISTICS AND AREAS

BUILDING AREA/ROOF	3204.0	SF	40.01%
IMPERVIOUS PAVED AREAS	1581.00	SF	19.74%
POOL/WATER	182.00	SF	2.27%
PERVIOUS SITE AREA	3041.00	SF	37.97%
TOTAL SITE AREA	8008.00	SF	100.00%

RUNOFF COEFFICIENTS

IMPERVIOUS AREAS	0.90	
PERVIOUS AREAS	0.35	
Wet season water table elev.	0.50	NAVD
Average finished grade in pervious area	4	FT NAVD
Compacted waetr storage	6.57	Inches

DESIGN STORM FREQUENCY FOR WATER QUALITY

2.5 x % IMPERVIOUS OR FIRST INCH WHICHEVER IS GREATER

First inch runoff (Total site area x (1/12))	667.33	CF
Site area for water quality (Total site - Bldg+Pool)	4622.00	SF
Impervious area for water quality	1581.00	SF
Percent of impervious for water quality	34.21	%
2.5" x Percent impervious	0.86	Inches
Volume required (Site area -Pool x inches to be treated)	557.70	CF

Since 667.33 CF > 557.70 CF computed for first inch of runoff the 667.33 CF controls

STORAGE REQUIRED PROVIDED IN SWALES:

NORTH RETENTION AREA:

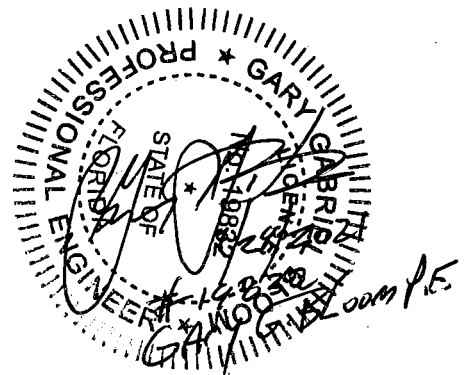
Area =	676.00	SF
Bottom area	310.00	SF
Average depth	1.00	FT
Volume	310.00	CF

Sides area	366.00	SF
Average depth	0.50	FT
Volume	183.00	CF

Total Volume	493.00	CF
--------------	--------	----

EAST RETENTION AREA:

Area =	930.00	SF
Bottom area	24.00	SF
Average depth =	1.00	FT
Volume =	24.00	CF



DRC

PZ21-12000019

CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS • CONSTRUCTION MANAGERS



Sides area	906.00	SF
Average depth	0.50	FT
Volume	453.00	CF

Total Volume =	477.00	CF
----------------	--------	----

Total Volume provided

970.00

CF > 667.33 CF Required.

DRC

PZ21-12000019

CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS • CONSTRUCTION MANAGERS

