

SIZING CALCULATION:

Rooftop Area (square feet)	Depth of Gravel From Top of Pipe (inches)			
	18	24	30	36
	Required Linear Feet of MFD			
100	6	5	4	3
500	30	25	20	15
1000	60	45	40	35
2000	120	95	75	65
3000	185	140	115	100
4000	245	190	155	130
5000	305	235	195	165

MEASURE CONTRIBUTING DRAINAGE AREA AND READ
AREA FOR GIVEN MEDIA DEPTH.

CONTRIBUTING DRAINAGE AREA= 596 SQ FT
 DEPTH OF STONE MEDIA= 18 INCHES
 WIDTH OF TRENCH= 24 INCHES
 LENGTH OF MFD= 64 FT

MAINTENANCE:

1. INSPECT GUTTERS AND DOWNSPOUTS
REMOVING ACCUMULATED LEAVES AND
DEBRIS, CLEANING LEAF REMOVAL SYSTEM(S).
2. IF APPLICABLE, INSPECT PRETREATMENT
DEVICES FOR SEDIMENT ACCUMULATION.
REMOVE ACCUMULATED TRASH AND DEBRIS.
3. INSPECT MFD FOLLOWING A LARGE RAINFALL
EVENT TO INSURE OVERFLOW IS OPERATING
AND FLOW IS NOT CAUSING PROBLEMS.

mfd calcs

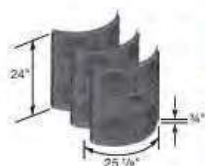
FLO-WELL® ENGINEERED DRY WELL



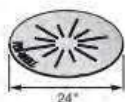
Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWAS24WH	24" diam. x 28.75"H Flo-Well® Stormwater Leaching System	Black	1	18.95	10FW	NDS #FWAS24WH structural foam polyolefin round drywell system with UV inhibitors, 50 gal. storage capacity.
Includes 3 side panels; 1 top component. Fits 4" Sch. 40 Pipe and 4" DWV Pipe.						



Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWAS24WH	24" diam. Flo-Well® Cover	Black	2	5.92	10FW	Structural foam polyolefin round drywell system cover with UV inhibitors, 24-1/4" dia., 4-1/2" height, 3/4" outer lip, 4.5" center knockout fits NDS #FWS069 4" pipe and 4" Sch. 40 pipe.
Use with #FWAS24.						



Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWSP33WH	Flo-Well® Side Panels/Extension Only	Black	1	4.35	10FW	Structural foam polyolefin side panels with UV inhibitors with 23 1-1/2" knockout leaching ports and 4 4.5" knockout inlet/outlet ports per panel, 0.75" lip for firm stacking.
Includes 3 side panels; makes 1 round drywell. (May also be used as a durable compost bin)						



Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWBP24	24" diam. Flo-Well® Bottom	Black	5	3.41	10FW	Structural foam polyolefin round Flo-Well® bottom with UV inhibitors, 24" diameter with six 1-1/2" leaching ports. Collects debris for easy cleanup.
Fits #FWB524. (Not included in #FWAS24 kit)						

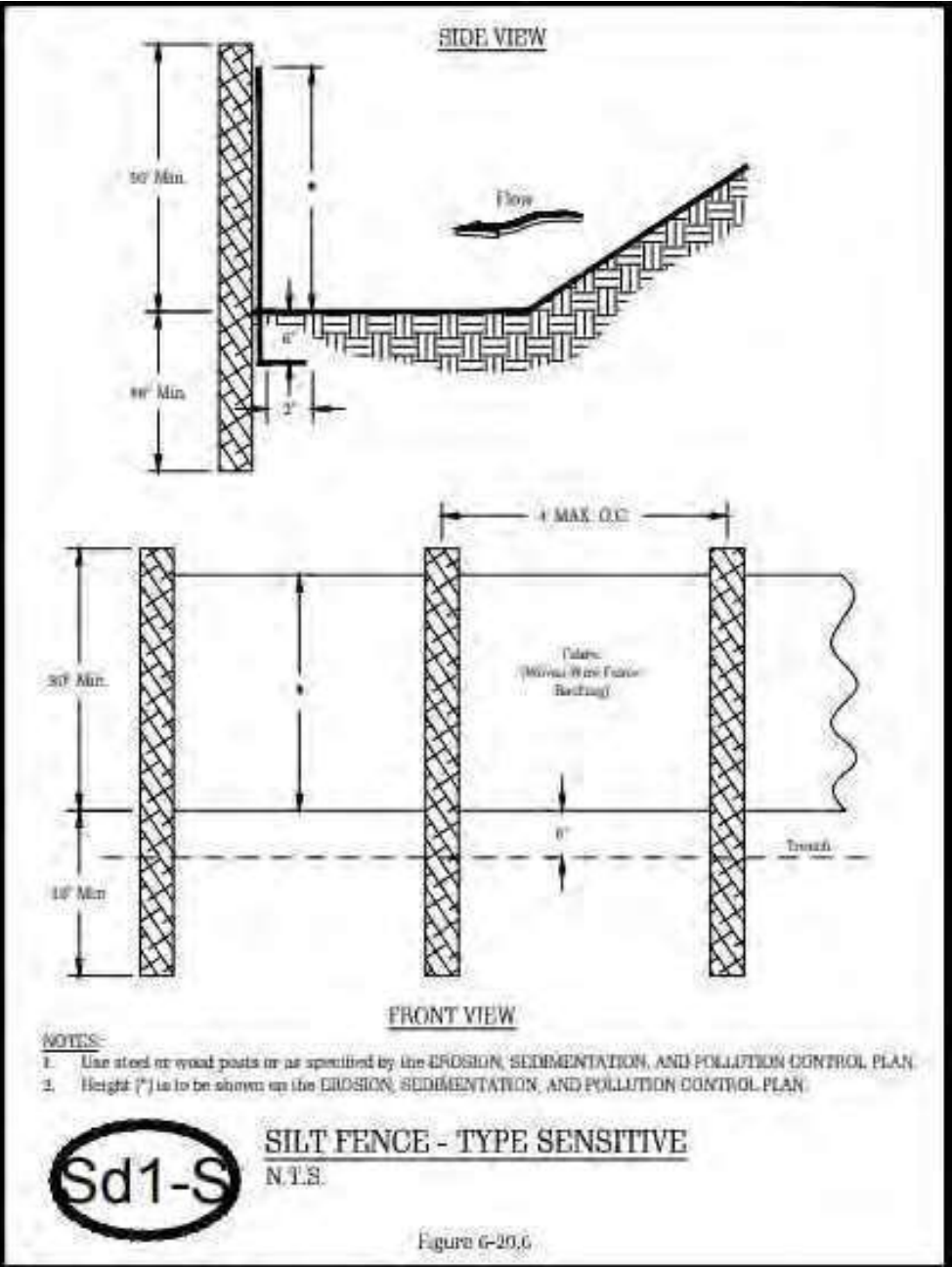


Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWSD69	4" Sch. 40 Surface Drain Inlet with Grate	Black	5	1.85	10FW	Structural foam polyolefin 6" grate with 4" inlet with UV inhibitors, 6" diameter at inlet, 9" high, 4.5" O.D. fits Sch. 40 PVC fittings. Open surface area 8.22 square inches, 25.15 GPM.
Fits #FWAS24 and #FWAS24C. ADA Compliant.						



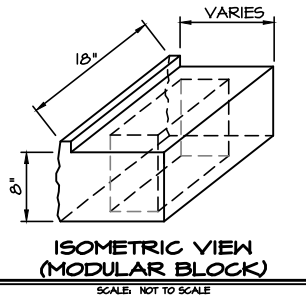
Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWF67	Porous Filter Fabric Wrap for Flo-Well®	Black	1	0.35	10FW	7" long x 2" wide to surround Flo-Well® Drywell System. Non-woven fabric. Weight 1 oz. Mullen burst 175 psi, 200 GPM flow-through.
Use with #FWAS24.						

DRAINAGE



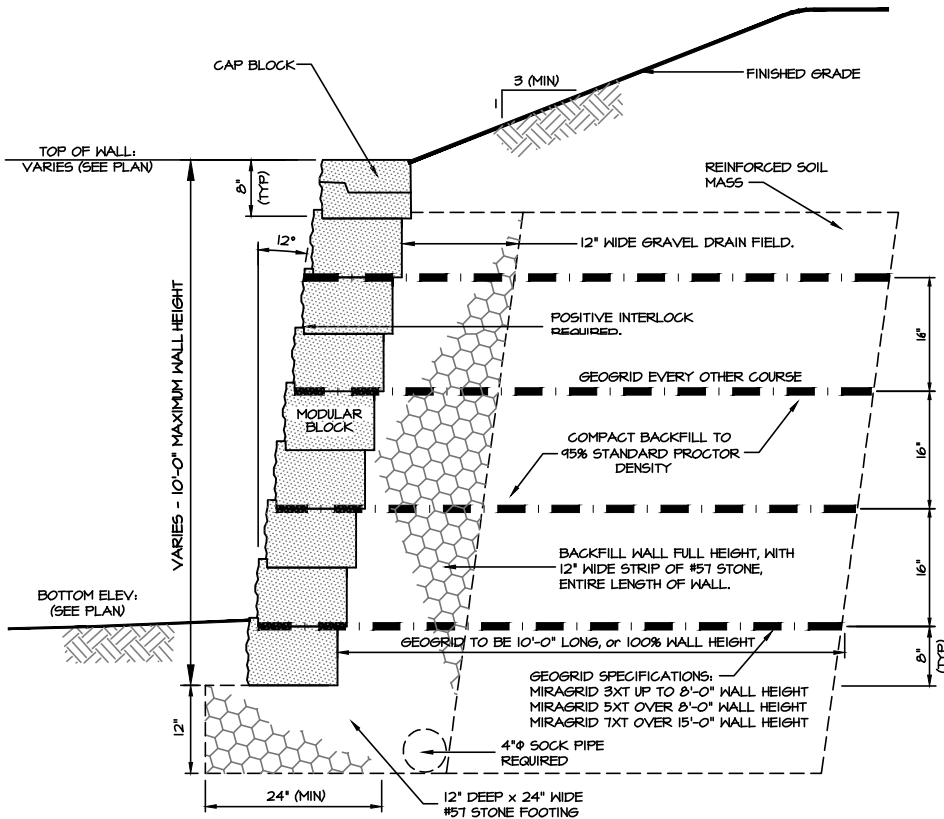
APPLICABLE CODES

GEORGIA STATE MINIMUM CODES;
INTERNATIONAL BUILDING CODE, 2018
and 2020 GEORGIA STATE AMENDMENTS.



DESIGN CRITERIA

1. MINIMUM ALLOWABLE SOIL BEARING PRESSURE: 2,000 PSF
2. BACKFILL MATERIAL: AS SHOWN.
3. SURCHARGE LOADING:
DEAD LOAD: 50 PSF
LIVE LOAD: 50 PSF
8. LATERAL EQUIVALENT FLUID DESIGN PRESSURE:
ACTIVE: 45 PSF/FT
PASSIVE: 375 PSF/FT
4. EXTERNAL SOIL $\phi_{1/2}$: 32
5. EXTERNAL SOIL DENSITY: 110 PCF
6. WALL SOIL FRICTION ANGLE: 22°
7. INTERNAL ANGLE OF FRICTION: 33°
8. K_a (HORIZ): 0.27



MODULAR BLOCK RETAINING WALL SECTION
(10'-0" MAX. HEIGHT)

SCALE: NOT TO SCALE

GENERAL NOTES:

- 1) BACKFILL ABOVE WALL NOT TO EXCEED 3:1 MIN. SLOPE.
- 2) ALLOWABLE SOIL BEARING CAPACITY OF NATURAL SOIL MUST BE GREATER THAN 2,000 PSF.
- 3) GRAVEL DRAIN FIELD MATERIAL TO BE FREE DRAINING, WELL-GRADED, COMPACTIBLE AGGREGATE, SUCH AS #51 STONE. FILL BLOCK CORES WITH AGGREGATE.
- 4) DRAINAGE MATERIAL TO BE PLACED IN EXCAVATED EMBEDMENT TRENCH TO ACT AS A LEVELING PAD.
- 5) USE A WALK BEHIND, VIBRATORY FLAT PLATE COMPACTOR TO CONSOLIDATE THE AGGREGATE IN THE BASE COURSE AND GRAVEL DRAIN FIELD. USE 8-INCH LIFTS, STARTING ON THE WALL, AND WORKING IN A PATH THAT RUNS PARALLEL TO THE WALL TOWARDS THE BACK OF THE REINFORCED ZONE.
- 6) COMPACT CLEAN BACKFILL SOILS IN THE REINFORCED ZONE AND IN FRONT OF THE WALL TO 95% STANDARD PROCTOR DENSITY. USE A PLATE COMPACTOR NEAR WALL, PLACING SOIL IN 8-INCH LIFTS.
- 7) NEVER OPERATE COMPACTING EQUIPMENT DIRECTLY ON THE GEOGRID. PLACE LIFTS OF SOIL ON TOP OF THE GEOGRID AND THEN COMPACT.
- 8) NEVER ALLOW HEAVY EQUIPMENT ON BACKFILL WITHIN 4-FEET OF WALL.
- 9) INSTALLATION TO BE IN ACCORDANCE WITH THE BLOCK MANUFACTURERS DESIGN MANUAL. THE LEVELING PAD, INITIAL BLOCK PLACEMENT (FOOTING), GRAVEL DRAIN FIELD, AND BACKFILL INSTALLATION MUST BE INSPECTED BY AN ENGINEER REGISTERED IN THE STATE OF GEORGIA.



REVISED: 22 JULY 2024

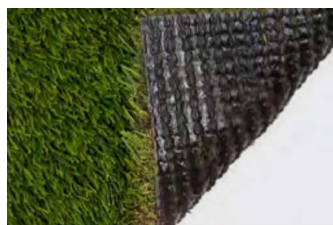
1	8	1
CLIENT:	OUTDOOR MAKEOVER	
ADDRESS:	3443 KESWICK COURT	
	CITY OF CHAMBLEE, GA	
SCALE:	NOT TO SCALE	
DATE:	05 JUNE 2024	
	A.P.	

DRAWING TITLE:

**MODULAR BLOCK RETAINING
WALL DRAWINGS**

**PALMER CONSTRUCTION
CONSULTANTS, INC.**
209 ARNOLD MILL ROAD
WOODSTOCK, GA 30188
TTO-886-5033 office
TTO-886-8084 fax

VISTA 80 APPLE (V80A)



MATERIALS

PRIMARY YARN POLYMER	Polyethylene
YARN CROSS SECTION	Omega / "S" Shape Monofilament
STANDARD COLOR	Field/Apple
UV STABILIZED	Yes
FABRIC CONSTRUCTION	Tufted
SECONDARY YARN POLYMER THATCH	Texture Polyethylene
SECONDARY YARN COLOR	Brown/Tan
PRIMARY BACKING	15 PP/18 PET
COATING TYPE	Polyurethane
POLYETHYLENE YARN DENIER / ENDS	10,800/6
TEXTURIZED THATCH DENIER / ENDS	5,000/8
SUSTAINABILITY	Recyclable
WARRANTY PERIOD	15 years

FINISH FABRIC

ENGLISH SYSTEM

ASTM STANDARDS

NOMINAL SPECIFICATION	VALUE	UNITS	METHOD
PILE HEIGHT (NOMINAL)	1-3/4	inches	D-5823
FACE WEIGHT	80	oz/yd2	D-5848
TOTAL FABRIC WEIGHT	107	oz/yd2	D-5848
PRIMARY BACKING WEIGHT	7	oz/yd2	D-5848
SECONDARY COATING WEIGHT	20	oz/yd2	D-5848
TUFT BIND	>8	lbs.	D-1335
GRAB TEAR STRENGTH (AVERAGE)	>200	lbs.	D-5034
LEAD CONTENT	<50	ppm	F-2765
TOTAL YARN LINEAR DENSITY	15,840	Denier	D-1577
ELONGATION TO BREAK	>60	%	D-2256
YARN BREAKING STRENGTH	>19	lbs.	D-2256
YARN MELTING POINT	248	F°	D-7138
STITCH RATE	3.5	Spi.	D-5793
MACHINE GAUGE	3/8	inch	D-5793
FLAMMABILITY	Pass		D-2859
WATER PERMEABILITY	>30	in/hr	DIN 18-035
FABRIC WIDTH	15	ft	None

Note: Any change from the specified values is considered a special product that will require confirmation from manufacturing. All values are ± 5%.