

Cut/Fill Calculations

Location: Sunnyside Lane
 Project: Definitive Subdivision

SM-6787
 Date: 5/6/2022
 Rev: 6/1/2022

(-) = CUT
 (+) = FILL

Cut/Fill Area	Cut/Fill Volume Generated from AutoCAD (cy)	Foundation Cut/Fill (cy)	Leach Field and Septic Tank Cut/Fill (cy)	Drywell Cut/Fill (cy)	Roadway/ Driveway Cut/Fill (cy)	Total Cut/Fill Volume	Total Cut/Fill Volume plus 15% Swell
Roadway and Drainage	570	n/a	n/a	n/a	-696	-126	145 CUT
Lot 5A-1	369	-276	-33	-20.6	-59	-20	23 CUT
Lot 5A-2	1,222	-278	-32	-20.6	-60	831	955 FILL
Lot 5A-3	895	-214	-32	-25	-72	551	634 FILL
Lot 5B	1,090	-168	-32	-25.8	-41	823	946 FILL
31 Sunnyside	59	-358	-32	-35	-53	-420	483 CUT

Cut/Fill Calculations for Proposed Roadway and Drainage System

Location:
Project:

Sunnyside Lane
Definitive Subdivision

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Work Area =	37,456 s.f.	
Top/Sub Removal =	1.5 ft	(18" stripped and reused on site)
Volume removed =	0 cu. yds.	
Roadway (plus shoulders)=	14,565 s.f.	
Depth of subgravel and pavement=	1.29 ft	
Volume =	696 cu. yds.	(construction material to be (CUT) subtracted from general fill)
Volume generated from cut/fill report in autocad =	570 cu. yds.	(FILL)
Total Cut/Fill =	126 cu. yds.	(CUT)
Total plus 15% swell factor =	145 cu. yds.	(CUT)

Cut/Fill Calculations for Lot 5A-1

Location: Sunnyside Lane
 Project: Definitive Subdivision

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Total Work Area = 8,594 s.f.
 Top/Sub Removal = 1.5 ft (18" stripped and reused on site)

Volume removed = 0 cu. yds.

	Proposed Average Grade	Bottom of Footing Elev.	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5A-1 Foundation	131.3	124.5	1,044	7,099.20	262.9
5A-1 Foundation (garage)	131.3	130.7	576	345.60	12.8

Net Volume (cu. yds.) = 276 (CUT)

	Depth (ft)	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5A-1 Septic Field	2.75	204	561.00	20.8
Septic Tank	5.70	60	342.00	12.7
5A-1 Drywell	3.50	159	556.50	20.6

Total Volume (cu. yds) = 54 (CUT)

Driveway= 1,232 s.f.
 Depth of subgravel and pavement= 1.29 ft
Volume = 59 cu. yds. (construction material to be subtracted from general fill) (CUT)

Volume generated from cut/fill report in autocad = 369 cu. yds. (FILL)

Total Cut/Fill = 20 cu. yds. (CUT)

Total plus 15% swell factor = 23 cu. yds. (CUT)

Cut/Fill Calculations for Lot 5A-2

Location: Sunnyside Lane
 Project: Definitive Subdivision

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Total Work Area = 7,412 s.f.
 Top/Sub Removal = 1.5 ft (18" stripped and reused on site)

Volume removed = 0 cu. yds.

	Proposed Average Grade	Bottom of Footing Elev.	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5A-2 Foundation	129.85	123.5	1,140	7,239.00	268.1
5A-2 Foundation (garage)	130.45	130	576	259.20	9.6

Net Volume (cu. yds.) = 278 (CUT)

	Depth (ft)	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5A-2 Septic Field	2.67	200	534.00	19.8
Septic Tank	5.70	60	342.00	12.7
5A-2 Drywell	3.50	159	556.50	20.6

Total Volume (cu. yds) = 53 (CUT)

Driveway= 1,265 s.f.
 Depth of subgravel and pavement= 1.29 ft
Volume = 60 cu. yds. (construction material to be subtracted from general fill) (CUT)

Volume generated from cut/fill report in autocad = 1,222 cu. yds. (FILL)

Total Cut/Fill = 831 cu. yds. (FILL)

Total plus 15% swell factor = 955 cu. yds. (FILL)

Cut/Fill Calculations for Lot 5A-3

Location: Sunnyside Lane
 Project: Definitive Subdivision

SM-6787
 Date: 5/6/2022
 Rev:

Total Work Area = 9,070 s.f.
 Top/Sub Removal = 1.5 ft (18" stripped and reused on site)

Volume removed = 0 cu. yds.

	Proposed Average Grade	Bottom of Footing Elev.	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5A-3 Foundation	129.2	123.5	993	5,660.10	209.6
5A-3 Foundation (garage)	130.2	130	576	115.20	4.3

Net Volume (cu. yds.) = 214 (CUT)

	Depth (ft)	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5A-3 Septic Field	2.67	200	534.00	19.8
Septic Tank	5.70	60	342.00	12.7
5A-3 Drywell	3.50	193	675.50	25.0

Total Volume (cu. yds) = 57 (CUT)

Driveway= 1,510 s.f.
 Depth of subgravel and pavement= 1.29 ft
Volume = 72 cu. yds. (construction material to be subtracted from general fill) (CUT)

Volume generated from cut/fill report in autocad = 895 cu. yds. (FILL)

Total Cut/Fill = 551 cu. yds. (FILL)

Total plus 15% swell factor = 634 cu. yds. (FILL)

Cut/Fill Calculations for Lot 5B

Location: Sunnyside Lane
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Total Work Area = 9,271 s.f.
 Top/Sub Removal = 1.5 ft (18" stripped and reused on site)

Volume removed = 0 cu. yds.

	Proposed Average Grade	Bottom of Footing Elev.	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5B Foundation	128.3	123.5	826	3,964.80	146.8
5B Foundation (garage)	129	128	576	576.00	21.3

Net Volume (cu. yds.) = 168 (CUT)

	Depth (ft)	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
5B Septic Field	2.67	200	534.00	19.8
Septic Tank	5.70	60	342.00	12.7
5B Drywell	3.50	199	696.50	25.8

Total Volume (cu. yds) = 58 (CUT)

Driveway= 854 s.f.
 Depth of subgravel and pavement= 1.29 ft
Volume = 41 cu. yds. (construction material to be subtracted from general fill)

Volume generated from cut/fill report in autocad = 1,090 cu. yds. (FILL)

Total Cut/Fill = 823 cu. yds. (FILL)

Total plus 15% swell factor = 946 cu. yds. (FILL)

Cut/Fill Calculations for 31 Sunnyside Lane

Location: Sunnyside Lane
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Total Work Area = 7,182 s.f.
 Top/Sub Removal = 1.5 ft (18" stripped and reused on site)

Volume removed = 0 cu. yds.

	Proposed Average Grade	Bottom of Footing Elev.	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
31 Sunny Foundation	129.5	123.3	1,534	9,510.80	352.3
31 Sunny Garage	129.55	129.3	600	150.00	5.6

Net Volume (cu. yds.) = 358 (CUT)

	Depth (ft)	Footprint (s.f.)	Volume (cu. ft.)	Volume (cu. yds.)
31 Sunny Septic Field	2.67	200	534.00	19.8
Septic Tank	5.70	60	342.00	12.7
31 Sunny Drywell	4.75	199	945.25	35.0

Total Volume (cu. yds) = 67 (CUT)

Driveway= 1,117 s.f.
 Depth of subgravel and pavement= 1.29 ft
Volume = 53 cu. yds. (construction material to be subtracted from general fill) (CUT)

Volume generated from cut/fill report in autocad = 59 cu. yds. (FILL)

Total Cut/Fill = 420 cu. yds. (CUT)

Total plus 15% swell factor = 483 cu. yds. (CUT)

Cut/Fill Report

Generated: 2022-05-31 08:49:43
By user: Molly.Obendorf
Drawing: Z:\6700-6799\6787\CAD DRAWINGS\Z:\6700-6799\6787\CAD DRAWINGS\6787 CUT FILL rev.dwg

Volume Summary							
Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Lot 5A-2 cut-fill	full	1.000	1.000	7411.78	12.94	1235.17	1222.23<Fill>
Lot 5A-3 cut-fill	full	1.000	1.000	9069.72	54.13	948.61	894.48<Fill>
31 Sunnyside cut-fill	full	1.000	1.000	7182.11	15.07	73.76	58.70<Fill>
Lot 5B cut-fill	full	1.000	1.000	9270.73	0.00	1090.30	1090.30<Fill>
Road & Drainage cut-fill	full	1.000	1.000	37044.23	615.93	1185.50	569.57<Fill>
Lot 5A-1 cut-fill	full	1.000	1.000	8593.95	17.75	386.35	368.60<Fill>

Totals						
			2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total			78572.53	715.82	4919.68	4203.87<Fill>

* Value adjusted by cut or fill factor other than 1.0