

Staff Engineering Work Summary

Task	Senior Engineer (SEGR)	Project Manager (PM)	Project Engineer (EGR)
	# person-hours	# person-hours	# person-hours
1: Hydrologic Analysis			
1.1: Sample Site Identifications		16	16
1.2: Sample Site Characteristics		8	24
1.3: Code Research		8	16
1.4: Post-Development Characteristics of Sample Sites	0.5	8	24
1.5: Determination of Necessary Storage based upon Rational Method	0.5		24
1.6: Determination of Necessary Storage based LID Requirements	0.5		24
1.7: Determine Required Retention Volume for each Sample Site	0.5		24
2: Geotechnical Analysis			
2.1: Consult Geotech and Drywell Specialists, and request Existing Soil Data from Flagstaff		8	24
2.2: Acquire Existing Geotechnical Reports from Flagstaff		8	24
2.3: Compile Known Soil Conditions in Flagstaff	1	8	24
3: Drywell Design			
3.1: Determine Drywell Dimensions for each Sample Site	1	16	48
3.2: Determine Pretreatment Features Necessary for Certain Sites	1		36
4: Cost Analysis			
4.1: Determine Costs of Other Stormwater Management Systems For Certain Development Sizes		8	24
4.2: Determine Value of Land Saved Through Implementation of Drywells		8	16
4.3: Cost of Drywell Per Site Given Certain Site Characteristics	1	8	24

4.4: Determine Monetary Cost Increase or Decrease of Using Drywells as Compared to Using Other Stormwater Management Systems	1	8	16
5: Feasibility Determination			
5.1: Determining Overall Feasibility of Drywell Use to Manage Stormwater in Flagstaff	20	20	48
5.2: Recommendations	20	20	48
6: Impact Assessment			
6.1: Economic Impact Assessment	8		8
6.2: Social Impact Assessment	8		8
6.3: Environmental Impact Assessment	8		8
7: Project Deliverables			
7.1: 30% Deliverable	8	16	16
7.2: 60% Deliverable	8	16	16
7.3: 90% Deliverable	8	16	16
7.4: Final Deliverable	8	16	16
8: Project Management			
8.1: Meetings	16	16	16
8.2: Coordination	16	24	16
8.3: Schedule Management	24	24	
8.4: Resource & Financial Management	24	24	
8.5: Record All Hours Worked		16	

Subtotal (person-hours)	183	320	604
Total (person-hours)	1107	(138 person-days @ 8 hrs/day)	

Cost of Engineering Services			
1.0 Personnel	Hours	Rate, \$/hr	Cost
SEGR	183	168	\$30,824
PM	320	110	\$35,235
EGR	604	77	\$46,508
3.0 Total			\$112,567