FOUR SELECT VERTICAL EVACUATION SITE ESTIMATED COSTS

Structure Septiment Sept														
Septimen	Table 1: Long Beach Berm													
Size	Scope													
State Stat										• •				
Section Sect														
Section Sect	Concrete													
Design Fees (RES) General Conditions (1570) Contractor Fee, CBRF (15N) Contractor Fee, CBRF (15N) SETURITIES Quantity Unit Cost per Unit Material Cost Installation Cost Sala, 200 Site Utilities Quantity Unit Cost per Unit Material Cost Installation Cost Sala, 200 Sala	Landscaping									\$74,094				
Secretary Secr	Construction Totals									,				
Contraction Cont														
Site Utilities														
Stign Little Stign Sti										• •				
Size Utilities	• , , ,									. ,				
Site Utilities	Estimate/Design Contingency (10%)									\$56,737				
Mobilization of Equipment 6 EA \$116.00 \$185.00 \$100.00% \$1,806.00 \$35.00 \$00.00% \$1,806.00 \$35.00 \$00.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$35.00 \$100.00% \$1,806.00 \$1,806.00 \$1,80	Project Total								\$	839,708				
Mobilization of Equipment 6 EA \$116.00 \$185.00 \$100.00% \$1,806.00 \$50.00 \$0.000 \$1,806.00 \$50.00 \$1,806.00 \$50.00 \$1,806.0										·				
Mobilization of Equipment 6 EA \$116.00 \$185.00 \$100.00% \$1,806.00 \$50.00 \$0.000 \$1,806.00 \$50.00 \$1,806.00 \$50.00 \$1,806.0	Site Utilities	Quantity	Unit	Cost ner Unit	Material Cost	Installation Cost	Fauinment Cost	Location Factor	Total Cost	Comments				
Mobilization of Equipment	Site Offices	quantity	Oc	cost per onit	Widterial Cost	mistanation cost	Equipment cost	Location ractor	Total Cost					
Domestic Water, Ductile Iron Class 250, MJ, 6" diameter 100	Mobilization of Equipment	6	FΔ			\$116.00	\$185.00	100.00%	\$1.806.00					
Exavate, 3/4 CY Exavator 4'-6' deep 70 BCY \$2.16 \$2.13 108.20% \$324.92 Selection Cost Data, 2011, 31.23 Sexual Sexual Selection Cost Data, 2011, 31.23 Sexual Several Selection Cost Data, 2011, 31.23 Sexual Selection Cost Data, 2011, 31.23 Sex						\$110.00	7105.00		71,000.00					
Exavate, 3/4 OF Excavator 4'-6' deep 70 BCY \$2.16 \$2.13 108.20% \$324.92 15.15, Excavating Trench \$1.00 LF \$14.60 \$510.70 \$2.72 108.20% \$33.91.70 \$2.000 \$2.0	Domestic water, Ductile from class 250, 1413, 6 diameter	100	<u> </u>					100.2070						
State Stat	Excavate, 3/4 CY Excavator 4'-6' deep	70	BCY			\$2.16	\$2.13	108.20%	\$324.92					
Instal & Test, 6" Ductile Iron Piping, MJ 100	Executate) 5/ 1 of Executation 1 of deep	, 0	50.			Ψ2.10	Ų2.120	100.2070	ψ32 1.32					
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 12 LCY \$20.00 108.20% \$259.68 Conversation on June 29th, 2011 Residency, May phone conversation on June 29th, 2011 Residency, May pho	Install & Test. 6" Ductile Iron Piping, MJ	100	LF		\$14.60	\$10.70	\$2.72	108.20%	\$3.031.76					
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 12 LCY \$20.00 108.20% \$5259.68 conversation on June 29th, 2011 108.20% \$16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 05 RSMeans, Building Construction Cost Data, 2011, 31 05 RSMeans, Building Construction Cost Data, 2011, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23 23.21 femily By Daver, No Compaction 10 ECY \$5.05 \$5.05 \$1.08.20% \$35.68 \$23.15 fill By By Daver, We Utility Bedding Construction Cost Data, 2011, 31 23 \$15.78 \$12.31 \$15.78	, , , , , , , , , , , , , , , , , , ,				7=	72000	7		70,000					
Haul of Material, 40 MPH, cycle 40 MPH 12 LCY S7.64 \$14.10 108.20% \$282.27 16, 31 23 23.20 Hauling Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling Construction Cost Data, 2011, 31 23 32.30 Hauling Construction Cost Data, 201	Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	12	LCY		\$20.00			108.20%	\$259.68					
Haul of Material, 40 MPH, cycle 40 MPH 12 LCY \$7.64 \$14.10 108.20% \$328.27 16, 31 23 23.20 Hauling Sideman, Suilding Construction Cost Data, 2011, 31 23 23 20 Hauling Sideman, Suilding Construction Cost Data, 2011, 31 23 23 20 Hauling Sideman, Suilding Construction Cost Data, 2011, 31 23 23 20 Hauling Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suilding Construction Cost Data, 2011, 31 23 23 Data Sideman, Suil	, , , , , , , , , , , , , , , , , , ,				,									
Same	Haul of Material, 40 MPH, cycle 40 MPH	12	LCY			\$7.64	\$14.10	108.20%	\$282.27	_				
Sample S	, , ,					,	,		•					
Storm Drainage Stor	Compacting Bedding In Trench	10	ECY			\$3.05	\$0.34	108.20%	\$36.68					
Assuming 100' distance from service at street										RSMeans, Building Construction Cost Data, 2011, 31 23				
Excavate, 3/4 CY Excavator, 6'-10' deep 60 BCY \$2.88 \$2.85 108.20% \$371.9 16.13 Excavating, Trench Standard	Backfill, General Fill By Dozer, No Compaction	75	LCY			\$0.50	\$1.05	108.20%	\$125.78	23.17 General Fill				
Excavate, 3/4 CY Excavator, 6'-10' deep 60 BCY \$2.88 \$2.85 108.20% \$371.99 16.13 Excavating, Trench RSMeans, Building Construction Cost Data, 2011, 33 41 108.20% \$2.307.91 Storm Utility Orainage Piping Quote per Quigg Bros, Aberdeen, WA, phone 25.95.68 Conversation on June 29th, 2011 25.95.68 Conversa	Storm Drainage									Assuming 100' distance from service at street				
Install & Test, 12" Bituminous Coated 100 LF \$11.50 \$8.30 \$1.53 \$108.20% \$2,307.91 \$50rm Utility Drainage Piping Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 12 LCY \$20.00 \$108.20% \$259.68 \$00rwersation on June 29th, 2011 RSMeans, Building Construction Cost Data, 2011, 33 41 RSMeans Building Construction Cost Data, 2011, 31 05 108.20% \$259.68 \$00rwersation on June 29th, 2011 RSMeans Building Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 24.20 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 25.20 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 25.21 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 25.22 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 25.21 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 25.22 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 25.25 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 25.25 Fill By Borrow &										RSMeans, Building Construction Cost Data, 2011, 31 23				
Install & Test, 12" Bituminous Coated 100	Excavate, 3/4 CY Excavator, 6'-10' deep	60	BCY			\$2.88	\$2.85	108.20%	\$371.99					
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 12 LCY \$20.00 108.20% \$259.68 Conversation on June 29th, 2011 RSMeans Building Construction Cost Data, 2011, 31 05 RSMeans Building Construction Cost Data, 2011, 31 05 RSMeans, Building Construction Cost Data, 2011, 31 05 RSMeans, Building Construction Cost Data, 2011, 31 05 RSMeans, Building Construction Cost Data, 2011, 31 23														
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 12 LCY \$20.00 108.20% \$259.68 conversation of June 29th, 2011 RSMeans Building Construction Cost Data, 2011, 31 05 RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.17 General Fill Area Drains/Catch Basins Concrete, Precast, 4' ID riser, 4' deep 6 EA \$1,425.00 \$1,200.00 \$0.00 108.20% \$17,041.50 installation Cost) Electrical Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY \$20.00 \$20.00 \$25.16 \$2.13 108.20% \$324.92 16.31 Excavating Tench RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 31 23 108.20% \$324.92 16.31 Excavating Tench RSMeans, Building Construction Cost Data, 2011, 31 23 108.20% \$324.92 16.31 Excavating Tench RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 31 23 108.20% \$324.92 16.31 Excavating Tench	Install & Test, 12" Bituminous Coated	100	LF		\$11.50	\$8.30	\$1.53	108.20%	\$2,307.91					
Haul of Material, 40 MPH, cycle 40 MPH 12 LCY \$7.64 \$14.10 \$108.20% \$282.27 \$8 Means Building Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23														
Haul of Material, 40 MPH, cycle 40 MPH 12 LCY \$7.64 \$14.10 108.20% \$282.27 16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans Assemblies Cost Data, 2011, 31 23 RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) RSMeans, Building Construction Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 33 71	Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	12	LCY		\$20.00			108.20%	\$259.68					
Compacting Bedding In Trench 10 ECY \$3.05 \$0.34 108.20% \$36.68 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.17 General Fill Assuming 6 Area Drains/Catch Basins on Site RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Included in Included	Hard of Advisor Salado Adolina and Adolina	4.2	1.677			67.64	ć4.4.40	400 200/	6202.27					
Compacting Bedding In Trench 10 ECY \$3.05 \$0.34 \$108.20% \$36.68 \$23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY \$3.05 \$0.34 \$108.20% \$36.68 \$23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 33 71	Haul of Material, 40 MPH, Cycle 40 MPH	12	LCY			\$7.64	\$14.10	108.20%	\$282.27					
Backfill, General Fill By Dozer, No Compaction 60 LCY \$0.50 \$1.05 108.20% \$100.63 23.17 General Fill Area Drains/Catch Basins Assuming 6 Area Drains/Catch Basins on Site RSMeans, Building Construction Cost Data, 2011, 31 23 Assuming 6 Area Drains/Catch Basins on Site RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY S2.16 \$2.13 108.20% \$324.92 16.13 Excavating Trench RSMeans, Building Construction Cost Data, 2011, 33 71	Compacting Redding In Trench	10	ECV			\$2.05	¢0.34	108 20%	\$36.68					
Backfill, General Fill By Dozer, No Compaction 60 LCY \$0.50 \$1.05 108.20% \$100.63 23.17 General Fill Area Drains/Catch Basins Assuming 6 Area Drains/Catch Basins on Site RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Included in Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Installation Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equip	Compacting bedding in Herich	10	LCI			\$3.03	Ş0.34	108.2070	\$30.08	, , ,				
Assuming 6 Area Drains/Catch Basins on Site RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY S1,200.00 \$1,200.00 \$1,200.00 \$0.00 108.20% \$17,041.50 Installation Cost) Assuming 10' distance from service at street RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 33 71	Backfill, General Fill By Dozer, No Compaction	60	ICY			\$0.50	\$1.05	108 20%	\$100.63					
RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY S1,200.00 \$1,200.00 \$1,200.00 \$0.00 108.20% \$17,041.50 Installation Cost) Assuming 100' distance from service at street RSMeans, Building Construction Cost Data, 2011, 31 23 Excavate, 3/4 CY Excavator, 4'-6' deep RSMeans, Building Construction Cost Data, 2011, 33 71	the state of the s	- 00	20.			φ0.50	Ų 2100	100.2070	\$100.03					
Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY S1,200.00 \$1,200.00 \$1,200.00 \$0.00 108.20% \$17,041.50 Installation Cost) Assuming 100' distance from service at street RSMeans, Building Construction Cost Data, 2011, 31 23 Excavate, 3/4 CY Excavator, 4'-6' deep RSMeans, Building Construction Cost Data, 2011, 33 71	The Diams, catering assists													
Concrete, Precast, 4' ID riser, 4' deep 6 EA \$1,425.00 \$1,200.00 \$0.00 108.20% \$17,041.50 Installation Cost) Electrical Assuming 100' distance from service at street RSMeans, Building Construction Cost Data, 2011, 31 23 Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY \$2.16 \$2.13 108.20% \$324.92 16.13 Excavating Trench RSMeans, Building Construction Cost Data, 2011, 33 71														
Electrical Assuming 100' distance from service at street RSMeans, Building Construction Cost Data, 2011, 31 23 Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY \$2.16 \$2.13 108.20% \$324.92 16.13 Excavating Trench RSMeans, Building Construction Cost Data, 2011, 33 71	Concrete, Precast, 4' ID riser, 4' deep	6	EA		\$1,425.00	\$1,200.00	\$0.00	108.20%	\$17,041.50					
Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY \$2.16 \$2.13 108.20% \$324.92 RSMeans, Building Construction Cost Data, 2011, 31 23 108.20% \$324.92 I6.13 Excavating Trench RSMeans, Building Construction Cost Data, 2011, 33 71	Electrical			1	, , ==:==	, ,	,		. ,,	·				
Excavate, 3/4 CY Excavator, 4'-6' deep 70 BCY \$2.16 \$2.13 108.20% \$324.92 16.13 Excavating Trench RSMeans, Building Construction Cost Data, 2011, 33 71										ŭ				
RSMeans, Building Construction Cost Data, 2011, 33 71	Excavate, 3/4 CY Excavator, 4'-6' deep	70	BCY			\$2.16	\$2.13	108.20%	\$324.92					
	·													
	Install & Test PVC, type EB 4 @ 3" diameter	100	LF	1	\$2.00	\$8.05		108.20%	\$1,087.41	19 Electrical Underground Ducts and Manholes				

								Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	40	LCY	\$20.00	\$0.00	\$0.00	108.20%	\$865.60	conversation on June 29th, 2011
								RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	40	LCY		\$7.64	\$14.10	108.20%	\$940.91	16, 31 23 23.20 Hauling
								RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	35	ECY		\$3.05	\$0.34	108.20%	\$128.38	23.16 Fill By Borrow & Utility Bedding
								RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	44	LCY		\$0.50	\$1.05	108.20%	\$73.79	23.17 General Fill
								RSMeans, Building Construction Cost Data, 2011, 31 23
Light Pole, Aluminum, 20' high, 1 arm bracket	8	EA	\$1,250.00	\$1,075.00	\$0.00	108.20%	\$20,125.20	23.17 General Fill
							\$49,813.97	

Excavation-Backfill	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments
Site Preparation									
									RSMeans Building Construction Cost Data, 2011, 31 13
Clear & Grub	3	acres			\$320.00	\$525.00	108.20%	\$2,742.87	13, Selective Clearing
									RSMeans Building Construction Cost Data, 2011, 02 21
Survey Site	3	acres		\$32.50	\$565.00	\$35.00	108.20%	\$2,053.10	13 Site Surveys
									RSMeans, Building Construction Cost Data, 2011, 01 54
Mobilization of Equipment	10	EA			\$69.00	\$116.00	100.00%	\$1,850.00	36.50 Mobilization
Material Costs									
									RSMeans Building Construction Cost Data, 2011, 31 05
									16, Aggregates for Earthwork, Select Structural Fill &
Fill Material, Select Structural Fill, 1 1/2" minus aggregate	5076	LCY		\$20.00	\$1.75	\$3.44	108.20%	\$138,349.32	Material Cost from Quigg Bros., Aberdeen, WA
									RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	5076	LCY			\$7.64	\$14.10	108.20%	\$119,401.12	16, 31 23 23.20 Hauling
Placement of Material									
									RSMeans Building Construction Data, 2011, 31 23 23.13
Compacting Backfill, 6"to 12" lifts, vibrating roller	4700	ECY			\$0.63	\$1.81	108.20%	\$12,408.38	Backfill
Stabilization Fabric, Polypropylene, 6oz/SY, 18" lifts, 5082									RSMeans Building Construction Cost Data, 2011, 32 11
SF per lift	7340	SY		\$1.48	\$0.09	\$0.03	108.20%	\$12,707.01	23 Aggregate Base Courses
								\$289,511.80	

Concrete Unit **Material Cost Installation Cost Total Cost** Quantity Cost per Unit Equipment Location Factor Comments RSMeans, Building Construction Cost Data, 2011, 01 54 Mobilization of Equipment 10 EΑ \$116.00 \$185.00 100.00% 36.50 Mobilization 88' long wall, 6 feet deep, at base of berm stepped Concrete Wall, 6' Deep, 88' in length RSMeans Assemblies Cost Data, 2011, A2010 110 building Excavation & Backfill, 6' deep, sand, gravel, or common earth. (Equipment Cost included in Excavation, 6' deep 528 SF \$0.00 \$5.30 \$0.00 108.20% \$3,027.87 Installation) RSMeans Assemblies Cost Data, 2011, A2020 110, Walls, Cast In Place, 10' pumped, 12" thick (Equipment Walls, Cast in place, 6' deep, pumped, 12" thick, 88 ' long 88 LF \$46.25 \$81.00 \$0.00 99.30% \$11,119.61 | Cost included in Installation) RSMeans Assemblies Cost Data, 2011, A 2020 220, Subdrainage Piping (Equipment Cost included in \$507.70 \$2.04 \$3.77 \$0.00 99.30% Subdrainage Piping, 4" diameter, PVC, perforated 88 LF Installation) Stepped Concrete Wall 4' high 88', 86', 82', 72', 60' length walls, 12" thick, 5' high. RSMeans Assemblies Cost Data, 2011, A2020 110, Walls, Cast In Place, 6' pumped, 8" thick. Material costs have been increased 25% for additional reinforcing 5' high wall, pumped, 8" thick, 88', 86, 82, 72, 60 length required for seismic event and tsunami. (Equipment 388 LF \$33.75 \$77.00 \$0.00 99.30% \$42,670.20 Cost Included in Installation) walls. RSMeans Assemblies Cost Data, 2011, A 2020 220, Subdrainage Piping (Equipment Cost included in Subdrainage Piping, 4" diameter, PVC, perforated 388 LF \$2.04 \$3.77 \$0.00 108.20% \$2,439.13 Installation)

								RSMeans Assemblies Cost Data, 2011, B2010 128 Stone
Stone Veneer, Ashlar Veneer, 4" thick, conc. Block backup	1940	SF	\$13.75	\$24.50	\$0.00	109.20%	\$81,031.86	Veneer (Equipment Cost included in Installation)
18" High Concrete Wall								Assume 80' LF curb, 18" high
								RSMeans Assemblies Cost Data, 2011, G1030 807
								Trenching Sand & Gravel (Equipment Cost included in
Trenching, sand and gravel, 2' wide, 2' deep	80	LF	\$0.54	\$1.61	\$0.00	108.20%	\$186.10	Installation)
								RSMeans Building Construction Cost Data, 2011, 32 16
Concrete, Wood Forms, 6" x 18" radius	80	LF	\$4.90	\$10.00	\$0.00	99.30%	\$1,183.66	13.13 Cast-in Place Concrete Curbs and Gutters
Concrete Curb at Sand Play Area								Assume 160' LF curb, 18" high
								RSMeans Assemblies Cost Data, 2011, G1030 807
								Trenching Sand & Gravel (Equipment Cost included in
Trenching, sand and gravel, 2' wide, 2' deep	160	LF	\$0.54	\$1.61	\$0.00	108.20%	\$372.21	Installation)
								RSMeans Building Construction Cost Data, 2011, 32 16
Concrete, Wood Forms, 6" x 18" radius	160	LF	\$4.90	\$10.00	\$0.00	99.30%	\$2,367.31	13.13 Cast-in Place Concrete Curbs and Gutters
Concrete or Gravel Platform								
Grade area	1866	SF			\$0.00	108.20%	\$0.00	
Asphaltic Concrete Paving, 6" stone base, 2" binder								RSMeans Building Construction Cost Data, 2011, 32 12
course, 1" toping	1866	SF	\$1.85	\$0.20	\$0.24	108.20%	\$4,623.54	16.14 Asphaltic Concrete Paving
								RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	60	CY		\$7.64	\$14.10	108.20%	\$1,411.36	16, 31 23 23.20 Hauling
Sidewalks								
								Unit SF price only, per RSMeans Square Foot Costs,
								Residential Modifications/Adjustments/Alternatives,
								Sidewalks, 3000 PSI with mesh (Equipment and
Concrete Sidewalk, 6" thick with wire mesh		SF	\$3.60		\$0.00	99.30%	\$0.00	Installation are included in the Material Cost)
							\$153,950.56	

Landscaping Quantity Unit Cost per Unit **Material Costs** Installation Costs | Equipment Costs | Location Factor **Total Cost** Comments RSMeans, Building Construction Cost Data, 2011, 01 54 Mobilization of Equipment EΑ \$116.00 \$185.00 100.00% \$1,806.00 36.50 Mobilization Sand Play Area Plug number, based on previous estimate for material Filter Fabric 140 sy \$2.00 \$0.00 \$0.00 108.20% \$302.96 costs for filter fabric Material & Equipment cost per estimator's best guess, Installation per RSMeans Building Construction Cost \$19.65 CY 108.20% \$1,132.31 Sand 10 \$60.00 \$25.00 Data31 23 23.13 Backfill. Based on price of playground equipment from Home Depot and \$1000 assumed cost for labor and \$1,000.00 108.20% \$2,164.00 Playground Equipment EΑ \$1,000.00 \$0.00 transportation. Treated Wood Trellis Walkway 60' x 12' RSMeans Assemblies Cost Data, 2011, B1010 266 Wood Deck (doubled material price to account for treated deck material not listed in RSMeans) & (Equipment SF \$2.72 \$3.02 \$0.00 97.30% \$4,021.21 Wood, laminated type, complete in place, 60' span 720 Costs are included in Installation) RSMeans Assemblies Cost Data, 2011, B1010 266 Wood Cedar Wood, 2" thick, 40 PSF load at Maximum Span 720 SF \$5.65 \$3.02 \$0.00 97.30% \$6,073.86 Deck (Equipment Costs are included in Installation) RSMeans Assemblies Cost Data, 2011, B1010 264 Wood Beam & Joist (Equipment Costs are included in Post & Beams 720 SF \$9.10 \$4.17 \$0.00 97.30% \$9,296.43 Installation) Berm Landscaping RSMeans Building Construction Cost Data, 2011, 32 91 \$24.00 \$0.00 108.20% \$34,845.81 19.13 Top Dress by hand, 1 CY for 600 SF Top Soil 565 LCY \$33.00 Hydro-Seed 1400 SY \$0.20 \$0.10 \$0.06 108.20% \$545.33 Mechanical Seeding, 44lb/sy Top Soil at Stepped Concrete Walls 85 LCY \$33.00 \$24.00 \$0.00 108.20% \$5,242.29 RSMeans Assemblies Cost Data, 2011, G2040 105 Fence Fencing at Top of Berm, chain link, 2" post, 15/8" rail, 9 & Guardrails (Equipment Costs are included in ga. Galv. Wire 5' high 85 LF \$17.65 \$4.82 \$0.00 95.40% \$1,822.09 Installation)

Irrigation System	1164	SF	\$0.32	\$0.46	\$0.00	108.20%	RSMeans Building Construction Costs, 2011, 32 84 23.10, sprinkler irrigation system
Dock at Pond (Optional) (20' long, 5' wide bridge assumed)							
Wood, laminated type, complete in place	100	SF	\$65.50	\$10.05	\$3.23	97.30%	RSMeans Building Construction Costs, 2011, 32 34 20, Bridges, Pedestrian, 80' span

\$74,093.96

Table 2: Tokeland Farmers Market Tower												
Scope									Cost			
Site Utilities									\$15,257			
Excavation-Backfill									\$13,034			
Foundation						\$85,557						
Structure						\$78,835						
Roofing						\$20,540						
Stairs/Ramps/Guardrails						\$55,734						
Fire Protection						\$10,195						
Total								\$	279,151			
Design Fees (8%)							\$22,332					
General Conditions (10%)							\$27,915					
Contractor Fees, O&P (15%)							\$41,873					
Construction Contingency (5%)									\$13,958			
Estimate/Design Contingency (10%)									\$27,915			
Project Total								\$	413,143			
•												
Site Utilities	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments			
									RSMeans, Building Construction Cost Data, 2011, 01 54			
Mobilization of Equipment	10	EA			\$116.00	\$185.00	100.00%	\$3,010.00	36.50 Mobilization			
Fire Water, Ductile Iron Class 250, MJ, 4" diameter	50	LF		\$16.05					Assuming 50' distance from service at street			
									RSMeans, Building Construction Cost Data, 2011, 31 23			
Excavate, 3/4 CY Excavator 4'-6' deep	35	BCY			\$2.16	\$2.13	108.20%	\$162.46	16.13, Excavating Trench			
					_				RSMeans, Building Construction Cost Data, 2011, 33 11			
Install & Test, 4" Ductile Iron Piping, MJ	50	LF		\$12.50	\$8.55	\$2.17	108.20%	\$1,256.20	Water Utility Distribution Piping			
									Quote per Quigg Bros, Aberdeen, WA, phone			
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	6	LCY		\$20.00			108.20%	\$129.84	conversation on June 29th, 2011			
	_				4	4			RSMeans Building Construction Cost Data, 2011, 31 05			
Haul of Material, 40 MPH, cycle 40 MPH	6	LCY			\$7.64	\$14.10	108.20%	\$141.14	16, 31 23 23.20 Hauling			
	_				4	4			RSMeans, Building Construction Cost Data, 2011, 31 23			
Compacting Bedding In Trench	5	ECY			\$3.05	\$0.34	108.20%	\$18.34	23.16 Fill By Borrow & Utility Bedding			
									RSMeans, Building Construction Cost Data, 2011, 31 23			

								RSMeans, Building Construction Cost Data, 2011, 33 71
Install & Test PVC, type EB 4 @ 3" diameter	50	LF	\$2.00	\$8.05		108.20%	\$543.71	19 Electrical Underground Ducts and Manholes
								RSMeans, Building Construction Cost Data, 2011, 26 05
Wire, 600 volt, copper type THW, solid, #12	50	CLF	\$11.95	\$36.50	0	100.50%	\$2,434.61	19.90 Wire
								Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	19	LCY	\$20.00			108.20%	\$411.16	conversation on June 29th, 2011
								RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	19	LCY		\$7.64	\$14.10	108.20%	\$446.93	16, 31 23 23.20 Hauling
								RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	19	ECY		\$3.05	\$0.34	108.20%	\$69.69	23.16 Fill By Borrow & Utility Bedding
								RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	22	LCY		\$0.50	\$1.05	108.20%	\$36.90	23.17 General Fill

\$15,257.23

Excavation-Backfill	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments
Excavation backing	Quartery	O.I.I.C	cost per onit	Widterial Cost	mistanation cost	Equipment cost	Location ractor	Total Cost	RSMeans Building Construction Cost Data, 2011, 01 54
Mobilization	8	EA	\$0.00	\$0.00	\$69.00	\$116.00	100.00%	\$1,480.00	36 - Equipment Mobilization
Clear and Grub Site	0.25	ACRE	\$0.00	\$0.00	\$1,750.00	\$1,300.00	108.20%	\$825.03	Is clear and grub needed for structure in urban setting? RSMeans Building Construction Cost Data, 2011, 31 11 10.10 Clear and Grub Site
Excavation for Grade Beams	20	ВСҮ	\$0.00	\$0.00	\$0.00	\$0.00	108.20%	\$0.00	Grade Beams, 3' wide, 3' deep, 568 lf. RSMeans Building Construction Cost Data, 2011, 31 23 16.16 3/4 CY bucket, (Price Included in grade beam foundation
excavation for Grade Beams	20	ВСТ	\$0.00	\$0.00	\$0.00	\$0.00	108.20%	\$0.00	price) 1225 SF mat, 2' deep. RSMeans Building Construction
Excavation for slab, subgrade and capillary break	100	BCY	\$0.00	\$0.00	\$7.20	\$7.17	108.20%	\$1,554.83	Cost Data, 2011, 31 23 16.16 3/4 CY bucket
Removal of Foundation Spoils, Haul of Material, 40 MPH, cycle 40 MPH	150	LCY			\$7.64	\$14.10	108.20%	\$3,528.40	RSMeans Building Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling
Backfill Slab, subgrade, capillary break	125	LCY		\$20.00			108.20%	\$2,705.00	Quote per Quigg Bros, Aberdeen, WA, phone conversation on June 29th, 2011
Haul of Material, 40 MPH, cycle 40 MPH	125	LCY			\$7.64	\$14.10	108.20%	\$2,940.34 \$13.033.60	RSMeans Building Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling

\$13,033.60

			1		1				1
Foundation	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments
									Piling needs to 2x the height of the structure which is
Piling									23-35'?
									Per phone conversation with Quigg Bros, Aberdeen, WA
Mobilization for piling	1	EA	\$12,000.00	\$0.00	\$0.00	\$0.00	100.00%	\$12,000.00	on June 29th, 2011
									Driven pipe piles 40' long, 18"x.5", per phone
									conversation with Quigg Bros, Aberdeen, WA on June
Battered Piles, 18" Diameter, 30'-40' Deep	12	EA	\$0.00	\$3,500.00	\$1,200.00	\$0.00	100.00%	\$56,400.00	29th,2011. Equipment Included in Material/Labor Cost
									RSMeans Assemblies Cost Data 2011, A1010 250 Pile
Pile Caps, 3 Piles Per Cap, 6'-6" x 3'-6" x 37"	4	EA	\$0.00	\$370.00	\$540.00		99.30%	\$3,614.52	Caps (Equipment Costs are included in Installation Cost)
Foundation Cast-In-Place/Tower									
									RSMeans Assemblies Cost Data 2011, A 1020 210 Grade
Grade Beams 30' span, 28" deep, 14" wide, 2 KLF load	120	LF		\$34.50	\$53.00		99.30%	\$10,426.50	Beams (Equipment Cost is included in Installation Cost)
									Piling needs to 2x the height of the structure which is
Foundation Cast-In-Place/ Footings for Ramp									23-35'?
									RSMeans Assemblies Cost Data, 2011, A1010 210,
Spread Footings, load 75K, soil capacity 6 KSF, 4'-0" sq x									Spread Footings (Equipment Cost is included in
12" deep	12	EA	\$0.00	\$94.50	\$167.00	\$0.00	99.30%	\$3,116.03	Installation Cost)

\$85,557.05

Structure	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Costs	Location Factor	Total Cost	Comments
									RSMeans, Building Construction Cost Data, 2011, 01 5
Mobilization of Equipment	10	EA			\$116.00	\$185.00	100.00%	\$3,010.00	36.50 Mobilization
									Beam and Column sizes are not determined and
									estimate takes in "best guess" to assume sizes for this
Concrete Structure								\$0.00	project.
									RSMeans Assemblies Cost Data, 2011, B1010 201, CIP
Concrete Columns, rated for 1000 K load, 20' high, 26"									Column, Round Tied (Equipment Cost included in
round, concrete strength, 6000 PSI	80	VLF		\$158.00	\$7.85	\$0.00	99.30%	\$13,175.12	Installation Cost)
Slab-On-Grade, 6" thick, non-industrial, reinforced,									RSMeans Assemblies Cost Data, 2011, A1030 120, Sla
Ground Floor	1225	SF		\$3.01	\$2.97		99.30%	\$7,274.22	on Grade, Plain & Reinforced
									RSMeans Assemblies Cost Data, 2011, B1010 213
Cast-In-Place Beam and Slab, Two Way, 30x30, 170 PSF, 9"									Rectangular Precast Beams (Equipment Cost included
thick slab, 1st Floor	900	LF		\$6.95	\$11.55		99.30%	\$16,533.45	Installation Cost)
									RSMeans Assemblies Cost Data, 2011, B1010 229
Cast-In-Place Beam and Slab, Two Way, 30x30, 351 PSF, 9"									Precast Plank with No Topping (Equipment Cost
thick slab, 2nd Floor (evacuation level)	900	SF		\$8.95	\$13.60		99.30%	\$20,152.94	included in Installation Cost)
									Wood structure, hip roof to support galvanized steel
Wood Structure									panels
									Supply quote from Levee Lumber, Hoquiam, WA,
									RSMeans Assemblies Cost Data, 2011, B1020 102, Roo
									Construction, Wood/Flat or Pitched (Equipment Cost
Wood Columns 12"x12", 10' High, Select Structural	40	VLF		\$9.85	\$2.62		97.30%	\$485.33	included in Installation Cost)
									Supply quote from Levee Lumber, Hoquiam, WA,
									RSMeans Building Construction Cost Data 2011, Glued
Perimeter Joists, 3 1/8"x12", GLM 30' span	120	LF		\$4.85	\$1.95	\$22.00	97.30%	\$3,362.69	Laminated Beams 06 18 13.20
									RSMeans Assemblies Cost Data, 2011, B1020 102, Roo
									Construction, Wood/Flat or Pitched (Equipment Cost
2x10 Wood Joist w/ 1/2" CDX, 12" OC	900	SF		\$2.02	\$2.05		97.30%	\$3,564.10	included in Installation Cost)
									RSMeans Assemblies Cost Data, 2011, B1020 102, Roo
Roof, wood/pitched, 3"x12" 12" OC w/ sheeting plywood									Construction, Wood/Flat or Pitched (Equipment Cost
on roof, 5/16" CDX	1260	SF		\$4.59	\$2.62		97.30%	\$8,839.32	included in Installation Cost)
Weather Proofing/Coatings add 15% (Premium for PTS									Assumed that PTS wood is 15% more compared on
Wood)	\$16,251.44	%	15.00%					\$2,437.72	price difference shown in means
								\$78,834.88	

Roofing	Quantity	Unit	Cost per Unit	Material Cost	Installation Costs	Equipment Cost	Location Factor	Total Cost	Comments
									RSMeans, Building Construction Cost Data, 2011, 01 54
Mobilization of Equipment	4	EA			\$116.00	\$185.00	100.00%	\$1,204.00	36.50 Mobilization
									Hip and ridge style roof, peak of roof 15'. (Equipment
Roofing/Hip and Ridge Roof Steel Panels									Cost is included in Installation Cost)
									RSMeans Assemblies Cost Data, 2011, B3010 135,
Flat Roof Steel Panels, Flat Seam, Copper, 1/4" min. slope,									Formed Metal (Equipment Cost is included in
20 oz, 1.2 PSF	1260	SF		\$9.50	\$5.80		100.30%	\$19,335.83	Installation Cost)
								\$20,539.83	

Stairs/Ramps/Guardrails Cost per Unit Equipment Cost | Location Factor | Total Cost Quantity Unit **Material Cost Installation Cost** Comments RSMeans, Building Construction Cost Data, 2011, 01 54 Mobilization of Equipment EΑ \$116.00 \$185.00 100.00% \$1,806.00 36.50 Mobilization Beam and Column sizes are not determined and estimate takes in "best guess" to assume sizes for this Exterior Ramp, Rises 20', 5' wide

									RSMeans Assemblies Cost Data, 2011, B1010, 208 Steel
									Columns (Equipment Cost is included in Installation
Steel Columns, 20' high, Wide Flanged, 6", 12 locations	240	VLF		\$26.50	\$7.85	\$0.00	95.40%	\$7,864.78	Cost)
W Shape Beams and Girders, bay size 15X20,, Total Load									RSMeans Building Construction Cost Data, 2011,
263 PSF.	900	SF		\$11.70	\$3.82	\$1.50	95.40%	\$14,613.37	Structural Steel Framing, 05 12 23.17
									RSMeans Assemblies Cost Data, 2011, B1010 258,
Floor Construction, Metal Deck/Concrete Fill, Deck Span 6									Metal Deck/Concrete Fill (Equipment Cost is included in
ft, 150 PSF Superimposed Load	900	SF		\$2.38	\$2.38		95.40%	\$4,086.94	Installation Cost)
									RSMeans Building Construction Cost Data, 2011, 05 05
Weather Proofing/Coatings (Galvanized)	7.5	Tons	\$400.00	\$0.00	0	0	95.40%	\$2,862.00	13.50, Paints and Protective Coatings
									Galvanized, 2 Rail, 1 1/2" diameter, RSMeans Building
Hand Rail/Guard Rail	270	LF		\$32.50	\$9.80		95.40%	\$10,895.63	Construction Cost Date 2011, 05 52 Metal Railings
Ladders/Stairs									
Steel ladder to attic space 20" wide bolted to concrete									RSMeans Building Construction Cost Data 2011, 05 51
without cage	10	VLF		\$65.00	\$31.50	\$2.18	95.40%	\$920.61	33 - Vertical Metal Ladders
Accordion Ladder for Escape after Tsunami, Disappearing									RSMeans Building Construction Cost Data 2011, 11 33
Stairs, Heavy duty, 16'-0" ceiling	2	ea		\$1,400.00	\$172.00		95.40%	\$2,999.38	10.10, Disappearing Stairway
Platform Perimeters Railing (120 LF for each platform, 2									
locations)									
									Galvanized, 2 Rail, 1 1/2" diameter, RSMeans Building
Hand Rail/Guard Rail	240	LF		\$32.50	\$9.80		95.40%	\$9,685.01	Construction Cost Date 2011, 05 52 Metal Railings
								\$55,733.71	

Fire Protection Quantity Unit Cost per Unit Material Cost Installation Costs Equipment Cost Location Factor **Total Cost** Comments Fire Protection, Wet Pipe System RSMeans Building Construction Cost Data, 2011, 01 54 Mobilization EΑ \$69.00 \$116.00 100.00% \$740.00 36 - Equipment Mobilization 4 RSMeans Square Foot Costs, 2011, D4010 410, Wet Pipe Sprinkler Systems (Equipment Cost included in First Floor, 2000 SF, Light Hazard 900 SF \$4.50 \$3.04 97.00% \$6,582.42 Installation Cost) RSMeans Square Foot Costs, 2011, D4010 410, Wet Pipe Sprinkler Systems (Equipment Cost included in Installation Cost) 900 SF \$1.21 \$2.08 97.00% \$2,872.17 Second Floor, 2000 SF, Light Hazard

\$10,194.59

Table 2. Comband Sine Station									
Table 3: Grayland Fire Station									
Scope									Cost
Site Utilities									\$36,509
Excavation-Backfill									\$26,578
Foundation									5254,012
Structure									188,273
Exterior Walls									\$96,042
Roofing									\$14,094
Stairs									\$54,727
Interior Finishes									\$36,786
Mechanical									\$74,647
Electrical									\$35,482
Plumbing									\$44,934
Fire Protection									\$19,155
Landscaping									\$53,903
Total								\$!	935,144
Design Fees (8%)								:	\$74,811
General Conditions (10%)									\$93,514
Contractor Fees, O&P (15%)								ç	140,272
Construction Contingency (5%)									\$46,757
Estimate/Design Contingency (10%)									\$93,514
Project Total								\$1	,384,013
Site Utilities	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment	Location Factor	Total Cost	Comments
									DOMA D. ILLI C I C D. I 2044 O4 I

Site Utilities	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment	Location Factor	Total Cost	Comments
									RSMeans, Building Construction Cost Data, 2011, 01 54
Mobilization of Equipment	8	EA			\$116.00	\$185.00	100.00%	\$2,408.00	36.50 Mobilization
Domestic Water, Ductile Iron Class 250, MJ, 6" diameter	100	LF							Assuming 100' distance from service at street
									RSMeans, Building Construction Cost Data, 2011, 31 23
Excavate, 3/4 CY Excavator 4'-6' deep	70	BCY			\$2.16	\$2.13	108.20%	\$324.92	16.13, Excavating Trench
									RSMeans, Building Construction Cost Data, 2011, 33 11
Install & Test, 6" Ductile Iron Piping, MJ	100	LF		\$14.60	\$10.70	\$2.72	108.20%	\$3,031.76	Water Utility Distribution Piping
									Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	12	LCY		\$20.00			108.80%	\$261.12	conversation on June 29th, 2011
									RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	12	LCY			\$7.64	\$14.10	108.20%	\$282.27	16, 31 23 23.20 Hauling
									RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	10	ECY			\$3.05	\$0.34	108.20%	\$36.68	23.16 Fill By Borrow & Utility Bedding
									RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	75	LCY			\$0.50	\$1.05	108.20%	\$125.78	23.17 General Fill
Fire Water, Ductile Iron Class 250, MJ, 6" diameter	100	LF							Assuming 100' distance from service at street
									RSMeans, Building Construction Cost Data, 2011, 31 23
Excavate, 3/4 CY Excavator 4'-6' deep	70	BCY			\$2.16	\$2.13	108.20%	\$324.92	16.13, Excavating Trench
									RSMeans, Building Construction Cost Data, 2011, 33 11
Install & Test, 6" Ductile Iron Piping, MJ	100	LF		\$14.60	\$10.70	\$2.72	108.20%	\$3,031.76	Water Utility Distribution Piping
									Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	12	LCY		\$20.00			108.80%	\$261.12	conversation on June 29th, 2011
					4	4		4	RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	12	LCY			\$7.64	\$14.10	108.20%	\$282.27	16, 31 23 23.20 Hauling
					4				RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	10	ECY			\$3.05	\$0.34	108.20%	\$36.68	23.16 Fill By Borrow & Utility Bedding
					40.50	44.0=	100 000/	440= =-	RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	75	LCY			\$0.50	\$1.05	108.20%	\$125.78	23.17 General Fill
Sewage									Assuming 100' distance from service at street
5 2/4 5/45 5/4 2/4/	420	0.674			42.00	ć2.0F	400 200/	6742.00	RSMeans, Building Construction Cost data, 2011, 31 23
Excavate, 3/4 CY Excavator, 6'-10' deep	120	BCY			\$2.88	\$2.85	108.20%	\$743.98	16.13 Excavating Trench

	T	I	I	1				
Install & Test, 8" SDR 35, B&S	100	LF	\$7.60	\$2.75		108.20%	\$1,119.87	RSMeans, Building Construction Cost Data, 2011, 33 31 Sanitary Utility Sewerage Piping
Ilistali & lest, 6 3DN 33, B&3	100	LF	\$7.00	\$2.75		106.20%	\$1,115.67	Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	12	LCY	\$20.00			108.80%	\$261.12	conversation on June 29th, 2011
, 6 , , , ,			,					RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	12	LCY		\$7.64	\$14.10	108.20%	\$282.27	16, 31 23 23.20 Hauling
·								RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	10	ECY		\$3.05	\$0.34	108.20%	\$36.68	23.16 Fill By Borrow & Utility Bedding
								RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	138	LCY		\$0.50	\$1.05	108.20%	\$231.44	23.17 General Fill
Storm Service								Assuming 100' distance from service at street
				4	4			RSMeans, Building Construction Cost Data, 201, 31 23
Excavate, 3/4 CY Excavator, 6'-10' deep	120	BCY		\$2.88	\$2.85	108.20%	\$743.98	16.13 Excavating Trench
Lastall G Tast Oll Diturnia and Castal	100	LF	610.70	ć= 2=	ć0.07	100 200/	ć1 020 74	RSMeans, Building Construction Cost Data, 2011, 33 41
Install & Test, 8" Bituminous Coated	100	LF	\$10.70	\$5.25	\$0.97	108.20%	\$1,830.74	Storm Utility Drainage Piping Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	12	LCY	\$20.00			108.80%	\$261.12	conversation on June 29th, 2011
othicy beduing, for Fipe & conduit, Not mei. compaction	12	LCI	\$20.00			100.0070	Ş201.1Z	RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	12	LCY		\$7.64	\$14.10	108.20%	\$282.27	16, 31 23 23.20 Hauling
				71121	7==		7-5	RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	10	ECY		\$3.05	\$0.34	108.20%	\$36.68	23.16 Fill By Borrow & Utility Bedding
								RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	138	LCY		\$0.50	\$1.05	108.20%	\$231.44	23.17 General Fill
Site Drainage								Perimeter of the building + 25%
								RSMeans, Building Construction Cost Data, 2011, 31 23
Excavate, 3/4 CY Excavator, 6'-10' deep	140	BCY		\$2.88	\$2.85	108.20%	\$867.98	16.13 Excavating, Trench
								RSMeans, Building Construction Cost Data, 2011, 33 41
Install & Test, 8" Bituminous Coated	224	LF	\$10.70	\$5.25	\$0.97	108.20%	\$4,100.87	Storm Utility Drainage Piping
			400.00			400.000/	4=44.00	Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	25	LCY	\$20.00			108.80%	\$544.00	conversation on June 29th, 2011
Houl of Material 40 MDH, evolo 40 MDH	25	LCV		¢7.64	¢14.10	109 209/	¢500.07	RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	25	LCY		\$7.64	\$14.10	108.20%	\$588.07	16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	20	ECY		\$3.05	\$0.34	108.20%	\$73.36	23.16 Fill By Borrow & Utility Bedding
Compacting bedding in menen	20	LCI		Ş3.03	Ş0.5 4	100.2070	ψ73.30	RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	150	LCY		\$0.50	\$1.05	108.20%	\$251.57	23.17 General Fill
Electrical				,	,			Assuming 100' distance from service at street
Electrical Service, includes service installation, breakers,								RSMeans Assemblies Cost Data, 2011, D 5010 120,
metering, 20' conduit & wire, 3 phase, 4 wire, 120/208								Electric Service, 3 Phase - 4 Wire, equipment included
volts, 60 A	1	EA	\$960.00	\$920.00		100.50%	\$1,889.40	in installation cost
								RSMeans, Building Construction Cost Data, 2011, 31 23
Excavate, 3/4 CY Excavator, 4'-6' deep	70	BCY		\$2.16	\$2.13	108.20%	\$324.92	16.13 Excavating Trench
								RSMeans, Building Construction Cost Data, 2011, 33 71
Install & Test PVC, type EB 4 @ 3" diameter	100	LF	\$2.00	\$8.05		108.20%	\$1,087.41	
MC COO It	400	61.5	644.05	626.50	0	400 500/	¢4.000.22	RSMeans, Building Construction Cost Data, 2011, 26 05
Wire, 600 volt, copper type THW, solid, #12	100	CLF	\$11.95	\$36.50	0	100.50%	\$4,869.23	19.90 Wire Quote per Quigg Bros, Aberdeen, WA, phone
Hility Radding For Ding & Conduit Not Incl. Compaction	38	LCY	\$20.00			108.80%	\$826.88	conversation on June 29th, 2011
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	36	LC1	\$20.00			108.80%	\$820.88	RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	38	LCY		\$7.64	\$14.10	108.20%	\$893.86	16, 31 23 23.20 Hauling
riadi di Maccilal, 40 Mi 11, epole 40 Mi 11	30	201		\$7.04	Ç14.10	100.2070	Ç655.66	RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	35	ECY		\$3.05	\$0.34	108.20%	\$128.38	23.16 Fill By Borrow & Utility Bedding
p G		_		,	,			RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	44	LCY		\$0.50	\$1.05	108.20%	\$73.79	23.17 General Fill
Natural Gas								Assuming 100' distance from service at street
								RSMeans, Building Construction Cost Data, 2011, 31 23
Excavate, 3/4 CY Excavator, 4'-6' deep	70	BCY		\$2.16	\$2.13	108.20%	\$324.92	16.13 Excavating Trench
Install and test 60 PSI 40' joints with coupling, 3" diameter								RSMeans, Building Construction Cost Data, 2011, 33 51
SDR 11	100	LF	\$5.35	\$4.19	\$1.06	108.20%	\$1,146.92	13.10 Piping, Gas Service and Distribution

								Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	38	LCY	\$20.00			108.80%	\$826.88	conversation on June 29th, 2011
								RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	38	LCY		\$7.64	\$14.10	108.20%	\$893.86	16, 31 23 23.20 Hauling
								RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	35	ECY		\$3.05	\$0.34	108.20%	\$128.38	23.16 Fill By Borrow & Utility Bedding
								RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	44	LCY		\$0.50	\$1.05	108.20%	\$73.79	23.17 General Fill
	•		•	•	•	•	\$36,509.16	

Excavation-Backfill Quantity Unit Cost per Unit **Material Cost Installation Cost** Equipment Cost | Location Factor **Total Cost** Comments RSMeans Building Construction Cost Data, 2011, 01 54 \$69.00 \$740.00 Mobilization 4 EΑ \$0.00 \$0.00 \$116.00 100.00% 36 - Equipment Mobilization Assumed site area to be 4X building pad, RSMeans Building Construction Cost Data, 2011, 31 11 10.10 \$1,750.00 \$1,300.00 \$1,749.05 Clear and Grub Site 0.53 ACRE \$0.00 \$0.00 108.20% Clear and Grub Site Included in Grade Beams, 3' wide, 3' deep, 568 lf. RSMeans grade beam Building Construction Cost Data, 2011, 31 23 16.16 3/4 foundation CY bucket, (Price Included in grade beam foundation Excavation for Grade Beams 0 BCY \$0.00 \$0.00 \$7.20 \$7.17 108.20% price 3360 SF mat, 2' deep. RSMeans Building Construction Excavation for slab, subgrade and capillary break 250 BCY \$0.00 \$0.00 \$7.20 \$7.17 108.20% \$3,887.09 Cost Data, 2011, 31 23 16.16 3/4 CY bucket RSMeans Building Construction Cost Data, 2011, 31 05 108.20% \$7,315.55 Haul of Spoils, 40 MPH, cycle 40 MPH 311 LCY \$7.64 \$14.10 16, 31 23 23.20 Hauling Quote per Quigg Bros, Aberdeen, WA, phone Fill Material for Capillary Break 270 BCY \$20.00 108.80% \$5.875.20 conversation on June 29th, 2011 RSMeans Building Construction Data, 2011, 31 23 23.13 \$1.81 Compacting Backfill, 6"to 12" lifts, vibrating roller 250 ECY \$0.63 108.20% \$660.02 RSMeans Building Construction Cost Data, 2011, 31 05 270 CY Haul of Material, 40 MPH, cycle 40 MPH \$7.64 \$14.10 108.20% \$6,351.12 16, 31 23 23.20 Hauling \$26,578.04

Foundation Quantity Unit Cost per Unit **Material Cost** Installation Cost Equipment Cost | Location Factor **Total Cost** Comments Piling Driven pipe piles 40' long, 16"x.5", Condon Johnson Quote, Equipment Included in Material/Labor Cost \$55.00 \$15.00 \$0.00 100.00% \$117,600.00 (Equipment Cost included in Installation Cost) Piles, 18" Diameter, 30'-40' Deep 1680 LF \$0.00 RSMeans Assemblies Cost Data 2011, A1010 250 Pile Pile Caps, 3 Piles Per Cap, 6'-6" x 3'-6" x 37" 6 EΑ \$0.00 \$370.00 \$540.00 99.90% \$5,454.54 Caps (Equipment Cost included in Installation Cost) RSMeans Assemblies Cost Data 2011, A1010 250 Pile Pile Caps, 2 Piles Per Cap, 6'-6" x 3'-6" x 37" 12 EΑ \$0.00 \$375.00 \$540.00 99.90% \$10,969.02 Caps (Equipment Cost included in Installation Cost) \$35,000.00 Mobilization for Piling 1 EΑ \$35,000.00 Condon Johnson Quote Foundation/ Footings for Ramp RSMeans Assemblies Cost Data, 2011, A1010 210, Spread Footings, load 75K, soil capacity 6 KSF, 4'-0" sq x Spread Footings (Equipment Cost included in 12" deep \$94.50 \$167.00 99.90% \$3,134.86 12 EΑ \$0.00 \$0.00 Installation Cost) RSMeans Assemblies Cost Data 2011, A 1020 210 Grade LF \$29.50 \$56.00 99.90% \$35,532.43 Beams (Equipment Cost included in Installation Cost) Grade Beams 40' span, 40" deep, 12" wide, 2 KLF load 416 RSMeans Assemblies Cost Data, 2011, A 1030 120, Slab Ground Floor Slab, 8" thick, Heavy Industrial, Reinforced 3360 SF \$5.70 \$8.10 99.90% \$46,321.63 On Grade (Equipment Cost included in Installation Cost

\$254,012.49

Structure	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Costs	Location Factor	Total Cost	Comments
									RSMeans, Building Construction Cost Data, 2011, 01 54
Nobilization of Equipment	6	EA			\$116.00	\$185.00	100.00%	\$1,806.00	36.50 Mobilization
									Four walls identified, 2 @ 24'x16', 2 @ 40'x20',
									RSMeans Assemblies Cost Data, 2011, B2010 101, Cast
heer Walls, Assume Cast In Place Concrete Wall, 12"									In Place Concrete (Equipment Cost included in
hick, 5000 psi, plaine finish.	2368	SF		\$7.25	16.25		99.90%	\$55,592.35	Installation Cost)
									RSMeans Assemblies Cost Data, 2011, B1010 Steel
teel Columns, 500K load, 20' high, 12" diameter	360	VLF		\$158.00	7.85	0	95.40%	\$56,959.52	Columns (Equipment Cost included in Installation Cost
ay Size (ft) 20x25, Beam x Gird, Superimposed Load (PSF)									RSMeans Assemblies Cost Data, 2011, B1010 241 W
00, to take on anticipated seismic event and safe haven									3500 Shape Beams & Girders (Equipment Cost include
latform	2560	SF		\$13.95	4.48		95.40%	\$45,010.48	in Installation Cost)
									RSMeans Assemblies Cost Data, 2011, B1010 241 W
ay Size (ft) 20x25, Beam x Gird, Superimposed Load (PSF)									2900 Shape Beams & Girders (Equipment Cost include
0 for roof above office space/attic/common area	960	SF		\$5.35	2.19		95.40%	\$6,905.43	in Installation Cost)
									RSMeans Assemblies Cost Data, 2011, B1010 261,
Vood framed floor for attic space above offices/common									Wood Joists, included 1/2" CDX floor (Equipment Cost
rea, 2x12 joists at 12" OC	960	SF		\$2.32	2.07		97.30%	\$4,100.61	included in Installation Cost)
oof Concrete Floor, at safe haven platform includes pan									RSMeans Assemblies Cost Data, 2011, B1010 258 Meta
ecking, concrete, wire mesh, finish floor, 8' deck									Deck/Concrete Fill (Equipment Cost included in
pan,200 superimposed load, PSF, 4" thick	3520	SF		\$2.60	2.49		99.90%	\$17,898.88	Installation Cost)

Exterior Walls	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments
Exterior wans	quantity	- Oille	cost per ome	Waterial Cost	motanation cost	Equipment cost	Location ractor		RSMeans Assemblies Cost Data, 2011, B2010 117, Split
									Face Block Wall, Regular Weight, Entire enclosure
									surrounding bays that store the fire trucks (20' high)
									and half the height of the common area (8' high).
Split Block Exterior Facing, Regular Weight, No Core Fill,									Remove the SF of the garage doors. (Equipment Cost
8x8x16, Un-Reinforced	2912	SF		\$4.16	8.35		109.20%	\$39,780.60	included in Installation Cost)
									RSMeans Assemblies Cost Data, 2011, B2010 148, Panel
									Shingle & Lap Siding, Upper 8' of Common Area portion
Wood Siding, 3-5/8" metal studs, 16 GA. 24" OC insulation									of building (Equipment Cost included in Installation
wall, 1"x6" cedar drop siding	864	SF		\$7.20	5.5		97.30%	\$10,676.53	
									RSMeans Square Foot Costs, 2011, Exterior Enclosure,
									2030 Exterior Doors, includes common area only
			4						(Material, Installation and Equipment Cost included in
Exterior Doors	960	SF	\$4.25				101.80%		Cost per Unit)
									RSMeans Square Foot Costs, 2011, Exterior Enclosure,
									2020 Exterior Windows, includes common area only
Exterior Windows	960	SF	\$1.92				101.80%		(Material, Installation and Equipment Cost included in Cost per Unit)
Exterior willdows	960	3F	\$1.92				101.80%	\$1,870.38	Cost per Offit)
									Cost of door based on 12'x12' garage door RSMeans,
									Assemblies Cost Data, 2011, B2030 220, Exterior Doors,
									8 doors total, front and rear loading (Equipment Cost
									included in Installation Cost). Cost per square foot for
Garage Doors, Steel 24 Ga. Overhead, Sectional, Electric									the materials of a 12'x12' door was used for a 12'x18'
Operation, 12'x18'	8	EA		\$3,561.00	\$1,296.00		101.80%		door. \$6 a square foot was used for installation.
	1		1		1			\$96,042.36	

Roofing Installation Costs | Equipment Cost | Location Factor **Total Cost** Quantity Unit Cost per Unit **Material Cost** Comments RSMeans Assemblies Cost Data, 2011, B3010 105, Built Built-Up Roof Covering, Asphalt base sheets & 3 plies #15 Up Roofing (Equipment Cost included in Installation asphalt felt, mopped 3520 100.30% \$9,073.54 Cost) SF \$0.91 \$1.66

	1		1	T	1		1		1
									RSMeans Square Foot Costs, 2011, M.220, Fire Station,
									B30 Roofing (Equipment Cost included in Installation
Roof Opening, skylights, roof hatches	3520	SF		\$0.14			101.80%	\$501.67	Cost)
									RSMeans Assemblies Cost Data, 2011, G2040 105,
Guardrail, fence, chain link, 2" post, 1 5/8" rail, 9 ga. Galve									Fence & Guardrails, surrounding the safe haven area.
wire, 5' high	208	LF		\$17.95	\$4.82		95.40%	\$4,518.30	(Equipment Cost included in Installation Cost)
								\$14,093.51	
Stairs/Ramps	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments
Interior Stairs, 2 flights, 16 risers, with landing, steel,									RSMeans Assemblies Cost Data, 2011, C2010 110,
grate type w/nosing & rails	1	Each		\$7,875.00	\$1,975.00	\$0.00	95.40%	\$9,396.90	Stairs
									Beam and Column sizes are not determined and
									estimate takes in "best guess" to assume sizes for this
Exterior Ramp, Rises 20', 6' wide									project.
									RSMeans Assemblies Cost Data, 2011, B1010, 208 Steel
Steel Columns, 20' high, Wide Flanged, 6", 12 locations	240	VLF		\$26.50	\$7.85	\$0.00	95.40%	\$7,864.78	Columns (Equipment Cost included in Installation Cost)
W Shape Beams and Girders, bay size 15X20,, Total Load	240	VLI		\$20.50	\$7.65	Ş0.00	93.40%	\$7,804.78	RSMeans Building Construction Cost Data, 2011,
263 PSF.	900	SF		\$11.70	\$3.82	\$1.50	95.40%	\$14 613 37	Structural Steel Framing, 05 12 23.17
203 F 31.	900	31		\$11.70	Ş3.6Z	Ş1.J0	93.4070	\$14,013.37	RSMeans Assemblies Cost Data, 2011, B1010 258,
Floor Construction, Metal Deck/Concrete Fill, Deck Span 6									Metal Deck/Concrete Fill (Equipment Cost included in
ft, 150 PSF Superimposed Load	900	SF		\$2.38	\$2.38		99.30%	\$4,254.01	Installation Cost)
it, 130 F31 Superimposed Load	900	31		J2.36	\$2.36		99.3070	34,234.01	RSMeans Building Construction Cost Data, 2011, 05 05
Weather Proofing/Coatings (Galvanized)	7.5	Tons	\$400.00	\$0.00	0	0	95.40%	\$2,862.00	13.50, Paints and Protective Coatings
weather Froothig/ coatings (darvanized)	7.5	10113	Ş400.00	Ş0.00		0	33.4070	72,002.00	Galvanized, 2 Rail, 1 1/2" diameter, RSMeans Building
Hand Rail/Guard Rail	270	LF		\$32.50	\$9.80		95.40%	\$10.895.63	Construction Cost Date 2011, 05 52 Metal Railings
Ladders/Stairs For Post-Tsunami Escape	270	Li		732.30	φ5.00		33.40%	ψ10,033.03	Construction Cost Date 2011, 05 52 Wetar Hallings
Steel ladder attached to exterior 20" wide bolted to									RSMeans Building Construction Cost Data 2011, 05 51
concrete without cage	20	VLF		\$65.00	\$31.50	\$2.18	95.40%	\$1,841.22	33 - Vertical Metal Ladders
Accordion Ladder for Escape after Tsunami, Disappearing	20	V L1		\$65.00	ψ31.30	Ų2.10	33.4070	71,071.22	RSMeans Building Construction Cost Data 2011, 11 33
Stairs, Heavy duty, 16'-0" ceiling	2	ea		\$1,400.00	\$172.00		95.40%	\$2,999.38	10.10, Disappearing Stairway
	I.		l	, ,	,			\$54,727.29	5 to 17
								, - ,	
Interior Finishes	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments
	,					4. 1			RSMeans Square Foot Costs, 2011M.230 Fire Station,
									Interiors, Common Space and Upstairs Only (Materials,
									Installation and Equipment Cost included in Cost per
Interior Walls	1920	SF	\$8.84				103.40%	\$17,549.88	· ·
	1320	J1	Ş0.04				103.40/0	Ç17,343.00	RSMeans Square Foot Costs, 2011M.230 Fire Station,
									Interiors (Materials, Installation and Equipment Cost
Painting	1920	SF	\$3.26				93.30%	\$5,839.83	included in Cost per unit)
_ · · · v			7					, =,===:30	RSMeans Square Foot Costs, 2011M.230 Fire Station,
									Interiors (Materials, Installation and Equipment Cost
Flooring	1920	SF	\$2.25				106.40%	\$4,596.48	included in Cost per Unit)
	1320	<u>. </u>	V 2.23		1		100.1073	+ 1,000.40	RSMeans Square Foot Costs, 2011M.230 Fire Station,
									Interiors (Materials, Installation and Equipment Cost
Ceiling Finishes	1920	SF	\$2.20				103.30%	\$4,363.39	included in Cost per Unit)
centrig i mones	1320	J1	72.20				103.3070	Ÿ ¬ ,303.33	· · · · · · · · · · · · · · · · · · ·
									RSMeans Square Foot Costs, 2011M.230 Fire Station,
Interior Deers	1920	SF	\$2.27				101.80%	¢4.426.05	Interiors (Materials, Installation and Equipment Cost
Interior Doors	1920	٥٢	ŞZ.Z/				101.80%	\$4,436.85	included in Cost per Unit)

\$36,786.43

Mechanical Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments RSMeans Square Foot Costs, 2011, M.220, D30 (Material, Installation and Equipment Cost incl Mechanical 3520 SF \$21.84 97.10% \$74,647.37 Cost per Unit) HVAC Equipment Rough-In Included Finish Trim Included Festing/Commissioning Included Finish Trim Included Finish	•
RSMeans Square Foot Costs, 2011, M.220, D30 (Material, Installation and Equipment Cost incl (Material) Included Inclu	•
Mechanical 3520 SF \$21.84 97.10% \$74,647.37 Cost per Unit) HVAC Equipment Rough-In Included Rinish Trim Installation and Equipment Cost incl Testing/Commissioning Included Testing/Commi	•
Mechanical 3520 SF \$21.84 97.10% \$74,647.37 Cost per Unit) HVAC Equipment Rough-In Finish Trim Fisting/Commissioning Electrical Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Electrical SF RSMeans Square Foot Costs, 2011, M.220, Fire Electrical Service/Distribution, 400 amp service, panel	cluded in
HVAC Equipment Rough-In Finish Trim Testing/Commissioning Testing/C	
Rough-In Included Finish Trim Included Testing/Commissioning Included Inclu	
Finish Trim Testing/Commissioning Testing/Co	
Electrical Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments Electrical Service/Distribution, 400 amp service, panel ST4,647.37 S74,647.37	
Electrical Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments Electrical Service/Distribution, 400 amp service, panel Output Description Description Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments RSMeans Square Foot Costs, 2011, M.220, Fire D50, Electrical (Material, Installation and Equipment Cost D50, Electrical (Material, Installation Cost D50, Electrical (Material, Installation C50) Electrical Service/Distribution, 400 amp service, panel	
Electrical SF SF RSMeans Square Foot Costs, 2011, M.220, Fire Electrical Service/Distribution, 400 amp service, panel D50, Electrical (Material, Installation and Equip	
Electrical SF SF RSMeans Square Foot Costs, 2011, M.220, Fire Electrical Service/Distribution, 400 amp service, panel D50, Electrical (Material, Installation and Equip	
Electrical SF SF RSMeans Square Foot Costs, 2011, M.220, Fire Electrical Service/Distribution, 400 amp service, panel D50, Electrical (Material, Installation and Equip	
RSMeans Square Foot Costs, 2011, M.220, Fire Electrical Service/Distribution, 400 amp service, panel RSMeans Square Foot Costs, 2011, M.220, Fire D50, Electrical (Material, Installation and Equip	
Electrical Service/Distribution, 400 amp service, panel	o Station
board and feeders 3520 SF \$1.44 100.50% \$5,094.14 Cost included in Cost per Unit)	pinene
RSMeans Square Foot Costs, 2011, M.220, Fire	e Station,
D50, Electrical (Material, Installation and Equip	pment
Lighting & Branch Wiring 3520 SF \$6.46 100.50% \$22,852.90 Cost included in Cost per Unit)	
RSMeans Square Foot Costs, 2011, M.220, Fire	
D50, Electrical (Material, Installation and Equip	pment
Communications & Security 3520 SF \$1.88 100.50% \$6,650.69 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.230, Fire	e Station
D50, Electrical (Material, Installation and Equip	
Emergency generator, 15 kW 3520 SF \$0.25 100.50% \$884.40 Cost included in Cost per Unit)	
\$35,482.13	
Plumbing Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments	
Plumbing	
RSMeans Square Foot Costs, 2011, M.220 Fire	
Plumbing Fixtures 3520 SF \$9.33 D20 Plumbing (Material, Installation and Equip	pment
Fidilibility	
RSMeans Square Foot Costs 2011 M 220 Fire	Station
RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip	
RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit)	
Gas fired water heater 3520 SF \$2.65 D20 Plumbing (Material, Installation and Equip 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire	pment e Station,
D20 Plumbing (Material, Installation and Equip Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip	pment e Station,
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip Roof Drain System 97.00% \$4,028.99 Cost included in Cost per Unit)	pment e Station,
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip	pment e Station,
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip Roof Drain System 97.00% \$4,028.99 Cost included in Cost per Unit)	pment e Station,
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip Cost included in Cost per Unit) \$44,933.50	pment e Station,
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire D20 Plumbing (Material, Installation and Equip Roof Drain System 97.00% \$4,028.99 Cost included in Cost per Unit)	pment e Station,
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) Roof Drain System 3520 SF \$1.18 97.00% \$4,028.99 Cost included in Cost per Unit) Fire Protection Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments	pment Station, pment
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) Roof Drain System 3520 SF \$1.18 97.00% \$4,028.99 Cost included in Cost per Unit) Fire Protection Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments Roof Drain System Protection Roof Drain System Square Foot Costs, 2011, M.230 Fire Protection Roof Drain System Roof Drain System Square Foot Costs, 2011, M.230 Fire Protection Roof Drain System Roof Drain System Square Foot Costs, 2011, M.230 Fire Protection Roof Drain System Roof Drain System Square Foot Costs, 2011, M.230 Fire Protection Roof Drain System Roof Drain System Square Foot Costs, 2011, M.230 Fire Protection Roof Drain System Roof Drai	pment e Station, pment e Station,
Gas fired water heater 3520 SF \$2.65 97.00% \$9,048.16 Cost included in Cost per Unit) RSMeans Square Foot Costs, 2011, M.220 Fire Protection Quantity Unit Cost per Unit Material Cost Installation Cost Equipment Cost Location Factor Total Cost Comments RSMeans Square Foot Costs, 2011, M.220 Fire Protection Installation and Equip Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit) RSMeans Square Foot Cost included in Cost per Unit)	pment station, pment station, ipment
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Site Paving		SF				108.20%		
								RSMeans Assemblies Cost Data, 2011, G2040, 810,
								Flagpoles, (Equipment Cost included in Installation
Flagpoles, on grade, aluminum, tapered, 20' high	1	EA	\$970.	00 \$585.00		108.20%	\$1,682.51	Cost)
								RSMeans Assemblies Cost Data, 2011, G2010 210
								Roadway Pavement (Equipment Cost included in
Driveways, 8" thick, 24' wide, bituminous conc. Paving	200	LF	\$138.	00 \$63.00		108.20%	\$43,496.40	Installation Cost)
								RSMeans Assemblies Cost Data, 2011, G2030 120,
								Concrete Sidewalk (Equipment Cost included in
Concrete Sidewalks, 4" thick, 4" gravel base, 4' wide	150	LF	\$8.4	\$13.25		108.20%	\$3,521.91	Installation Cost)
Planting		SF						
								RSMeans Building Construction Cost Data, 2011, 32 84
Irrigation, residential system, custom, 1" supply	3000	SF	\$0.3	\$0.46		108.20%	\$2,531.88	23.10, Sprinkler Irrigation System
								RSMeans Building Construction Cost Data, 2011, 32 91
Furnish and place, truck dumped, screened, 4" deep	333	SY	\$4.1	\$ \$0.38	\$0.25	108.20%	\$1,715.06	19.13 Topsoil Placement and Grading
								RSMeans Building Construction Cost Data, 2011, 32 92
Mechanical Seeding, 44 lb/MSY	333	SY	\$0.2	\$0.14	\$0.09	108.20%	\$154.93	19.13 Mechanical Seeding

\$53,903.37

Excavation-Backfill \$385,762 Concrete Retaining Wall Surrounding Berm \$173,072 Landscaping Concrete \$100,323 Stairs/Ramps/Guardrails \$11,498 Landscaping \$59,612 Construction Totals \$785,995 Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	naker Park Berm							
Excavation-Backfill \$385,762 Concrete Retaining Wall Surrounding Berm \$173,072 Landscaping Concrete \$100,323 Stairs/Ramps/Guardrails \$11,498 Landscaping \$59,612 Construction Totals \$785,995 Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	Cost							
Concrete Retaining Wall Surrounding Berm \$173,072 Landscaping Concrete \$100,323 Stairs/Ramps/Guardrails \$11,498 Landscaping \$59,612 Construction Totals \$785,995 Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	\$55,725							
Landscaping Concrete \$100,323 Stairs/Ramps/Guardrails \$11,498 Landscaping \$59,612 Construction Totals \$785,995 Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, 0&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	ill \$385,762							
Stairs/Ramps/Guardrails \$11,498 Landscaping \$59,612 Construction Totals \$785,995 Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	ng Wall Surrounding Berm \$173,072							
Landscaping \$59,612 Construction Totals \$785,995 Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	crete \$100,323	\$100,323						
Construction Totals \$785,995 Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	ardrails \$11,498							
Design Fees (8%) \$62,880 General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	\$59,612							
General Conditions (10%) \$78,599 Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	Totals \$785,995							
Contractor Fees, O&P (15%) \$117,899 Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	\$62,880							
Construction Contingency (5%) \$39,300 Estimate/Design Contingency (10%) \$78,599	ns (10%) \$78,599							
Estimate/Design Contingency (10%) \$78,599	O&P (15%) \$117,899							
	tingency (5%) \$39,300							
	Contingency (10%) \$78,599							
Project Total \$1,163,272	\$1,163,272							

Mobilitation of Equipment 8										
Mobilization of Equipment Sample	Site Utilities	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment	Location Factor	Total Cost	
Demestric Water, Ductile Iron Class 259, MJ, 6" diameter 100 LF		_				4	4			
Secretarial						\$116.00	\$185.00	100.00%	\$2,408.00	
Sexavate, 3/4 Cf Exeavator 4-6 deep 85 BCY \$2.16 \$5.213 108.80% \$3.96.74 \$16.13, Exeavating Trench 10 LCY \$20.00 108.80% \$3.93.67.30 \$1.03, 201.33 31.33 31.33 31.33 31.33 31.33 32.30 3	Domestic Water, Ductile Iron Class 250, MJ, 6" diameter	100	LF							Ü
Sample S						4				, ,
Install & Test, 6" Ductile Iron Piping, MJ 100 LF \$14.60 \$10.70 \$2.72 \$108.80% \$3,048.58 \$Mater Utility Distribution Piping Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 11 LCY \$20.00 \$108.80% \$239.36 Conversation on June 29th, 2011 108.80% \$3.08 Conversation on June 29th, 2011 108.80% \$3.08 Conversation on June 29th, 2011 108.80% \$3.68 S2.85 I6.3 L2 32.32 Defauling 108.80% \$3.68 S2.85 I6.3 L2 32.32 Defauling 108.80% \$3.68 S2.85 I6.3 L2 32.32 Defauling 108.80% \$158.52 S2.31.76 General Fill 108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80% \$108.80	Excavate, 3/4 CY Excavator 4'-6' deep	85	BCY			\$2.16	\$2.13	108.80%	\$396.74	
Unity Bedding For Pipe & Conduit, Not Incl. Compaction 11					4	4				, ,
Description	Install & Test, 6" Ductile Iron Piping, MJ	100	LF		\$14.60	\$10.70	\$2.72	108.80%	\$3,048.58	
Haul of Material, 40 MPH, cycle 40 MPH 11 LCY 57.64 \$14.10 108.20% \$258.75 16. 31 23 23.20 Hauling Construction Cost Data, 2011, 31 05 105. 2011, 31 05 108.20% \$258.75 16. 31 23 23.20 Hauling Construction Cost Data, 2011, 31 23 23.20 Hauling Cons										
Haul of Material, 40 MPH, cycle 40 MPH	Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	11	LCY		\$20.00			108.80%	\$239.36	,
Sompacting Bedding In Trench Sompaction Bedding In Trench Sompacting										-
Compacting Bedding In Trench 10 ECY \$3.05 \$0.34 108.80% \$36.88 23.16 Fill By Borrow & Utility Bedding	Haul of Material, 40 MPH, cycle 40 MPH	11	LCY			\$7.64	\$14.10	108.20%	\$258.75	·
Sackfill General Fill By Dozer, No Compaction 94 LCY Scotor Service Scotor Servic										
Sackfill, General Fill By Dozer, No Compaction 94 LCY \$0.50 \$1.05 108.80% \$158.52 23.17 General Fill	Compacting Bedding In Trench	10	ECY			\$3.05	\$0.34	108.80%	\$36.88	, , ,
Assuming 200' of storm piping needed Assuming 200' of storm piping needed										
Excavate, 3/4 CY Excavator, 6'-10' deep 250 BCY \$2.88 \$2.85 108.80% \$1,558.55 16.13 Excavating Trench Standard Stand	Backfill, General Fill By Dozer, No Compaction	94	LCY			\$0.50	\$1.05	108.80%	\$158.52	
Section Sect	Storm Service									
Install & Test, 8" Bituminous Coated 200 LF \$10.70 \$5.25 \$0.97 \$108.80% \$3,681.79 \$SMeans, Building Construction Cost Data, 2011, 33 41 Quote per Quigg Bross, Aberdeen, WA, phone conversation on June 29th, 2011. RSMeans Building Construction Cost Data, 2011, 31 05 108.80% \$544.00 Quote per Quigg Bross, Aberdeen, WA, phone conversation on June 29th, 2011. RSMeans Building Construction Cost Data, 2011, 31 05 16, 31 23 32.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 05 16, 31 23 32.30 Hauling RSMeans, Building Construction Cost Data, 2011, 31 05 16, 31 23 32.30 Hauling RSMeans, Building Construction Cost Data, 2011, 31 05 16, 31 23 32.30 Hauling RSMeans, Building Construction Cost Data, 2011, 31 05 16, 31 23 32.30 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borore & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borore & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borore & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borore & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.17 General Fill 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & Utility Device Data, 2011, 31 23 23.16 Fill By Borore & U										RSMeans, Building Construction Cost Data, 201, 31 23
Install & Test, 8" Bituminous Coated 200 LF \$10.70 \$5.25 \$0.97 108.80% \$3,681.79 \$	Excavate, 3/4 CY Excavator, 6'-10' deep	250	BCY			\$2.88	\$2.85	108.80%	\$1,558.56	16.13 Excavating Trench
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 25 LCY \$20.00 108.80% \$54.00 Conversation on June 29th, 2011. Haul of Material, 40 MPH, cycle 40 MPH 25 LCY \$7.64 \$14.10 108.20% \$588.07 16, 31 23 23.20 Hauling Construction Cost Data, 2011, 31 05 RSMeans Building Construction Cost Data, 2011, 31 05 RSMeans, Building Construction Cost Data, 2011, 31 23 Compacting Bedding In Trench 23 ECY \$3.05 \$0.34 108.80% \$84.83 23.16 Fill By Borrow & Utility Bedding Construction Cost Data, 2011, 31 23 Backfill, General Fill By Dozer, No Compaction 284 LCY \$0.50 \$1.05 108.80% \$478.94 23.17 General Fill State Parinage/Area Drains/Catch Basins Concrete, Precast, 4' ID riser, 4' deep 4 EA \$1,425.00 \$1,200.00 0.00% 108.80% \$11,424.00 Installation Cost) Installation Cost Data, 2011, D 5010 120, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 volts, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,898.00 in installation cost Data, 2011, 31 23 RSMeans, Semblies Cost Data, 2011, D 5010 120, Electric Service, includes service installation, breakers, and the properties of the pro										
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction 25 LCY \$20.00 108.80% \$544.00 conversation on June 29th, 2011.	Install & Test, 8" Bituminous Coated	200	LF		\$10.70	\$5.25	\$0.97	108.80%	\$3,681.79	
RSMeans Building Construction Cost Data, 2011, 31 05 Haul of Material, 40 MPH, cycle 40 MPH 25 LCY 57.64 \$14.10 108.20% \$588.07 16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans Assemblies Cost Data, 2011, 31 23 RSMeans Assemblies Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 31 23										Quote per Quigg Bros, Aberdeen, WA, phone
Haul of Material, 40 MPH, cycle 40 MPH 25 LCY \$7.64 \$14.10 108.20% \$588.07 16, 31 23 23.20 Hauling RSMeans, Building Construction Cost Data, 2011, 31 23 23 ECY \$3.05 \$0.34 108.80% \$84.83 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.17 General Fill Site Drainage/Area Drains/Catch Basins RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical 100 LF RSMeans, Building Construction Cost Data, 2011, 31 23 23.17 General Fill RSMeans, Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 volts, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, 31 23	Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	25	LCY		\$20.00			108.80%	\$544.00	conversation on June 29th, 2011.
Compacting Bedding In Trench 23 ECY \$3.05 \$0.34 108.80% \$84.83 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 RSMeans, Building Construction Cost Data, 2011, Data Data Data Data Data Data Data Dat										RSMeans Building Construction Cost Data, 2011, 31 05
Compacting Bedding In Trench 23 ECY \$3.05 \$0.34 108.80% \$48.83 23.16 Fill By Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 Backfill, General Fill By Dozer, No Compaction 284 LCY \$0.50 \$1.05 108.80% \$478.94 23.17 General Fill Sy Borrow & Utility Bedding RSMeans, Building Construction Cost Data, 2011, 31 23 23.17 General Fill RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 volts, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 In installation cost RSMeans, Building Construction Cost Data, 2011, 31 23	Haul of Material, 40 MPH, cycle 40 MPH	25	LCY			\$7.64	\$14.10	108.20%	\$588.07	16, 31 23 23.20 Hauling
RSMeans, Building Construction Cost Data, 2011, 31 23 Backfill, General Fill By Dozer, No Compaction 284 LCY \$0.50 \$1.05 108.80% \$478.94 23.17 General Fill RSMeans Assemblies Cost Data, 2011, 31 23 RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost Data) Concrete, Precast, 4' ID riser, 4' deep 4 EA \$1,425.00 \$1,200.00 0.00% 108.80% \$11,424.00 Installation Cost Assuming 100' distance from service at street Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 volts, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 in installation cost RSMeans, Building Construction Cost Data, 2011, 31 23										RSMeans, Building Construction Cost Data, 2011, 31 23
Site Drainage/Area Drains/Catch Basins LCY \$0.50 \$1.05 \$1.05 \$1.08.80% \$478.94 \$23.17 General Fill Assume 4 area drains for structure RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 LF EA \$960.00 \$920.00 \$1.05 \$1.05 \$1.05 \$1.08.80% \$478.94 \$23.17 General Fill RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) RSMeans Assemblies Cost Data, 2011, D 5010 120, Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 LF RSMeans Assemblies Cost Data, 2011, D 5010 120, Electrical Service, 3 Phase - 4 Wire, equipment included in inistallation cost RSMeans, Building Construction Cost Data, 2011, 31 23	Compacting Bedding In Trench	23	ECY			\$3.05	\$0.34	108.80%	\$84.83	23.16 Fill By Borrow & Utility Bedding
Assume 4 area drains for structure RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Concrete, Precast, 4' ID riser, 4' deep 4 EA \$1,425.00 \$1,200.00 0.00% 108.80% \$11,424.00 Installation Cost) Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 volts, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 in installation cost RSMeans Assemblies Cost Data, 2011, D 5010 120, Electric Service, 3 Phase - 4 Wire, equipment included in installation cost RSMeans, Building Construction Cost Data, 2011, 31 23										RSMeans, Building Construction Cost Data, 2011, 31 23
RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 volts, 60 A 1 EA \$960.00 \$920.00 \$100.50% \$1,889.40 in installation cost RSMeans Assemblies Cost Data, 2011, G3030 210, Manholes & Catch Basins (Equipment Cost included in Installation Cost) Assuming 100' distance from service at street RSMeans Assemblies Cost Data, 2011, D 5010 120, Electrical Service, 3 Phase - 4 Wire, equipment included in Installation cost RSMeans, Building Construction Cost Data, 2011, 31 23	Backfill, General Fill By Dozer, No Compaction	284	LCY			\$0.50	\$1.05	108.80%	\$478.94	23.17 General Fill
Manholes & Catch Basins (Equipment Cost included in Installation Cost) Electrical Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 yolds, 60 A EA Sy60.00 S1,200.00 0.00% 108.80% \$11,424.00 Installation Cost) Assuming 100' distance from service at street RSMeans Assemblies Cost Data, 2011, D 5010 120, Electric Service, 3 Phase - 4 Wire, equipment included in Installation cost RSMeans, Building Construction Cost Data, 2011, 31 23	Site Drainage/Area Drains/Catch Basins									Assume 4 area drains for structure
Concrete, Precast, 4' ID riser, 4' deep 4 EA \$1,425.00 \$1,200.00 0.00% 108.80% \$11,424.00 Installation Cost) Electrical 100 LF Assuming 100' distance from service at street Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 yolds, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 in installation cost RSMeans Assemblies Cost Data, 2011, D 5010 120, Electric Service, 3 Phase - 4 Wire, equipment included in installation cost RSMeans, Building Construction Cost Data, 2011, 31 23										RSMeans Assemblies Cost Data, 2011, G3030 210,
Electrical 100 LF Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 20 to A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 RSMeans Assemblies Cost Data, 2011, D 5010 120, Electric Service, 3 Phase - 4 Wire, equipment included in installation cost RSMeans, Building Construction Cost Data, 2011, 31 23										Manholes & Catch Basins (Equipment Cost included in
Electrical Service, includes service installation, breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 and 1 EA \$960.00 \$920.00 \$100.50% \$1,889.40 in installation cost RSMeans, Building Construction Cost Data, 2011, 31 23	Concrete, Precast, 4' ID riser, 4' deep	4	EA		\$1,425.00	\$1,200.00	0.00%	108.80%	\$11,424.00	Installation Cost)
metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 20' conduit & wire, 3 phase, 4 wire, 120/208 20	Electrical	100	LF							Assuming 100' distance from service at street
volts, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 in installation cost RSMeans, Building Construction Cost Data, 2011, 31 23	Electrical Service, includes service installation, breakers,									RSMeans Assemblies Cost Data, 2011, D 5010 120,
volts, 60 A 1 EA \$960.00 \$920.00 100.50% \$1,889.40 in installation cost RSMeans, Building Construction Cost Data, 2011, 31 23	metering, 20' conduit & wire, 3 phase, 4 wire, 120/208									Electric Service, 3 Phase - 4 Wire, equipment included
	volts, 60 A	1	EA		\$960.00	\$920.00		100.50%	\$1,889.40	
										RSMeans, Building Construction Cost Data, 2011, 31 23
xcavate, 3/4 CY Excavator, 4'-6' deep 85 BCY \$2.16 \$2.13 108.80% \$396.74 16.13 Excavating Trench	Excavate, 3/4 CY Excavator, 4'-6' deep	85	BCY			\$2.16	\$2.13	108.80%	\$396.74	16.13 Excavating Trench

	1		1	T	1		1	T	1
Install & Test PVC, type EB 4 @ 3" diameter	100	LF		\$2.00	\$8.05		108.80%	\$1,093.44	RSMeans, Building Construction Cost Data, 2011, 33 71 19 Electrical Underground Ducts and Manholes
ilistali & lest PVC, type EB 4 @ 3 diameter	100	LF		\$2.00	\$6.05		106.60%	\$1,095.44	RSMeans, Building Construction Cost Data, 2011, 26 05
Wire, 600 volt, copper type THW, solid, #12	100	CLF		\$11.95	\$36.50	0	100.50%	\$4,869.23	19.90 Wire
								4	Quote per Quigg Bros, Aberdeen, WA, phone
Utility Bedding, For Pipe & Conduit, Not Incl. Compaction	46	LCY		\$20.00			108.80%	\$1,000.96	conversation on June 29th, 2011 RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	46	LCY			\$7.64	\$14.10	108.20%	\$1,082.04	16, 31 23 23.20 Hauling
					71.01	7==0		7-/00-101	RSMeans, Building Construction Cost Data, 2011, 31 23
Compacting Bedding In Trench	43	ECY			\$3.05	\$0.34	108.80%	\$158.60	23.16 Fill By Borrow & Utility Bedding
Light Dala Aluminum 20 high 1 arm bracket	0	ΕΔ.		¢1 250 00	¢1.07F.00	\$0.00	100 000/	ć20.226.80	RSMeans, Building Construction Cost Data, 2011, 31 23 23.17 General Fill
Light Pole, Aluminum, 20' high, 1 arm bracket	8	EA		\$1,250.00	\$1,075.00	\$0.00	108.80%	\$20,236.80	RSMeans, Building Construction Cost Data, 2011, 31 23
Backfill, General Fill By Dozer, No Compaction	54	LCY			\$0.50	\$1.05	108.80%	\$91.07	23.17 General Fill
								\$55,725.29	
				ı			ı		
Excavation-Backfill	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment	Location Factor	Total Cost	Comments
									RSMeans Building Construction Cost Data, 2011, 01 54
Mobilization	8	EA	\$0.00	\$0.00	\$69.00	\$116.00	100.00%	\$1,480.00	36 - Equipment Mobilization
									Is clear and grub needed for structure in urban setting? RSMeans Building Construction Cost Data, 2011, 31 11
Clear and Grub Site	1	ACRE	\$0.00	\$0.00	\$1,750.00	\$1,300.00	108.20%	\$3,300.10	10.10 Clear and Grub Site
									RSMeans Building Construction Cost Data, 2011, 02 21
Survey Site Fill Material for Berm	1	ACRE		\$32.50	\$565.00	\$35.00	108.20%	\$684.37	13 Site Surveys
Thi Material for Berni									RSMeans Building Construction Cost Data, 2011, 31 05
									16, Aggregates for Earthwork, Select Structural Fill &
Fill Material, Select Structural Fill, 1 1/2" minus aggregate	6100	LCY		\$20.00	\$1.75	\$3.44	108.20%	\$166,259.04	Material Cost from Quigg Bros., Aberdeen, WA
Compacting Backfill, 6"to 12" lifts, vibrating roller	5647	ECY			\$0.63	\$1.81	108.20%	\$14,908.53	RSMeans Building Construction Data, 2011, 31 23 23.13 Backfill
Compacting Backini, 0 to 12 lints, vibrating roller	3047	Lei			\$0.03	Ş1.01	100.2070	714,500.55	RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	6100	LCY			\$7.64	\$14.10	108.20%	\$143,488.35	16, 31 23 23.20 Hauling
Stabilization Fabric, Polypropylene, 6oz/SY, 18" lifts, 5082	40000			44.40	40.00	40.00	100 000/	400 40	RSMeans Building Construction Cost Data, 2011, 32 11
SF per lift Fill Material at Landscape Walls	12000	SY		\$1.48	\$0.09	\$0.03	108.20%	\$20,774.40	23 Aggregate Base Courses
Till Waterial at Lanuscape Walls									RSMeans Building Construction Cost Data, 2011, 31 05
									16, Aggregates for Earthwork, Select Structural Fill &
Fill Material, Top Soil	484	LCY		\$20.00	\$1.75	\$3.44	108.20%	\$13,191.70	Material Cost from Quigg Bros., Aberdeen, WA
Compacting Backfill, by hand, no compaction, light soil	484	LCY			\$19.65	\$0.00	108.20%	\$10,290.47	RSMeans Building Construction Data, 2011, 31 23 23.13 Backfill
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-			,			, ,, ,,	RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	484	LCY			\$7.64	\$14.10	108.20%	\$11,384.98	16, 31 23 23.20 Hauling
								\$385,761.93	
Concrete Petaining Well Surreunding									
Concrete Retaining Wall Surrounding								_	
Berm	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment Cost	Location Factor	Total Cost	Comments
Mobilization of Equipment	8	EA			\$116.00	\$185.00	100.00%	\$2,408.00	RSMeans, Building Construction Cost Data, 2011, 01 54 36.50 Mobilization
					·				Built in two sections. First section under grade, 6' high,
									second section built on top of that, 16' high. Length of
Reinforced Concrete Wall			1						wall 270'. RSMeans, Building Construction Cost Data, 2011, 01 54
Mobilization of Equipment	1	EA			\$116.00	\$185.00	95.40%	\$287.15	36.50 Mobilization
									RSMeans Assemblies Cost Data, 2011, A 2010 110
Excavation 6 deep', common earth, 4000 SF	1620	SF		\$5.30	\$0.00	\$0.00	108.20%	\$9,290.05	Building Excavation & Backfill

	1		1				1	I	Tage 4 - 11: 0 - 0 - 0044 + 0000 440
									RSMeans Assemblies Cost Data, 2011, A 2020 110,
Community of the Activity									Walls, Cast-in-Place, add 25% to material cost to
Concrete Wall, below grade section, 6' high, 16" thick,				4=0==	404 = 0	40.00	00.000/	400 400 70	include for additional reinforcing (Equipment included
pumped concrete	270	LF		\$58.75	\$84.50	\$0.00	99.30%	\$38,406.76	,
									RSMeans Assemblies Cost Data, 2011, A 2020 110,
									Walls, Cast-in-Place, add 25% to material cost to
Concrete Wall, above grade section, 16' high, 16" thick,				4		4			include for additional reinforcing (Equipment included
pumped concrete	270	LF		\$155.00	\$225.00	\$0.00	99.30%	\$101,881.80	in installation cost)
									RSMeans Assemblies Cost Data, 2011, A 2020 220,
During a State of the State of the state of	270			64.05	64.04		400 200/	62.262.44	Subdrainage Piping (Equipment included in installation
Drainage piping, 6" diameter, PVC, perforated,	270	LF		\$4.05	\$4.04		108.20%	\$2,363.41	cost)
Aesthetic Treatments for Exposed Concrete									RSMeans Building Construction Cost Data, 2011, 03 35
Sandblast Concrete Heavy Treatment	3510	SF		\$1.46	\$3.31	\$0.52	99.30%	\$18,437.92	29.60
Sandblast Concrete Heavy Heatment	3310	31		\$1.40	\$3.31	Ş0.32	99.30%	\$173,075.10	
								\$175,075.10	
Landscaping Concrete	Quantity	Unit	Cost per Unit	Material Cost	Installation Cost	Equipment	Location Factor	Total Cost	Comments
Stepped Concrete Wall 4' high	Quartery	O.I.I.C	cost per onit	Material Cost	mstanation cost	Equipment	Location ractor	Total cost	Length of walls 330' and 320'
Stepped Concrete Wall 4 High									RSMeans Assemblies Cost Data, 2011, A 2020 110,
									Walls, Cast-in-Place (Equipment included in installation
4' high walls, cast-in-place, 8" thick, pumped concrete	650	LF		\$18.10	\$51.50	\$0.00	99.30%	\$44,923.32	cost)
r mgm mans) case in place, or anony pumped contract	050			Ψ10.10	ψ52.50	φο.σσ	33.3070	ψ. 1,323.32	RSMeans Assemblies Cost Data, 2011, A 2020 220,
									Subdrainage Piping (Equipment Cost included in
Subdrainage Piping, 4" diameter, PVC, perforated	650	LF		\$2.04	\$3.77	\$0.00	108.20%	\$4,086.17	Installation Cost)
Aesthetic Treatments for Exposed Concrete				,		, , , , , ,		. , ,	,
·									RSMeans Building Construction Cost Data, 2011, 03 35
Sandblast Concrete Heavy Treatment	2000	SF		\$1.46	\$3.31	\$0.52	99.30%	\$10,505.94	
Concrete or Gravel Platform									
Asphaltic Concrete Paving, 6" stone base, 2" binder									RSMeans Building Construction Cost Data, 2011, 32 12
course, 1" toping	5750	SF		\$1.85	\$0.20	\$0.24	108.20%	\$14,247.24	16.14 Asphaltic Concrete Paving
									RSMeans Building Construction Cost Data, 2011, 31 05
Haul of Material, 40 MPH, cycle 40 MPH	160	CY			\$7.64	\$14.10	108.20%	\$3,763.63	16, 31 23 23.20 Hauling
Landscaping Stairs Up Berm									
									RSMeans Building Construction Cost Data 2011, 03 30
Stairs 10' wide, cast on ground, 24 steps	240	LF Nose		\$4.28	\$16.30	\$0.18	95.40%	\$4,712.00	53.40, Concrete in Place
						_			RSMeans Building Construction Cost Data 2011, 03 30
Stair Landing, cast on ground	200	SF		\$3.29	\$4.29	\$0.05	95.40%	\$1,446.26	53.40, Concrete in Place
0				4== 00	****	44.04	0= 400/	44.405.45	RSMeans Building Construction Cost Data 2011, 05 52
Stair Handrail, 1 1/4" diameter, galvanized	60	LF		\$57.20	\$14.89	\$1.04	95.40%	\$4,126.15	13.50 Railings, Pipe (add 30% to price for stair handrail)
Sidewalks			1		-		 		Unit SF price only, per RSMeans Square Foot Costs,
									Residential Modifications/Adjustments/Alternatives,
Flatwork in front of ground floor of tower, 6" thick with									Sidewalks, 3000 PSI with mesh (Material, Installation
wire mesh	3500	SF	\$3.60	\$0.00		\$0.00	99.30%	\$12,511.80	and Equipment Cost included in Cost per Unit)
wife filesii	3300	31	\$3.00	\$0.00		\$0.00	99.30%	\$100,322.50	
								\$100,322.50	
Stairs/Ramps/Guardrails	Quantity	Unit	Cost per Unit	Material Cost	Installation Costs	Equipment Cost	Location Factor	Total Cost	Comments
July Nampo, Gaararan	~~~~		cost per omit			_4=.pc.ii cost		.5.0.1 6051	RSMeans, Building Construction Cost Data, 2011, 01 54
Mobilization of Equipment	2	EA			\$116.00	\$185.00	100.00%	\$602.00	36.50 Mobilization
Platform Perimeters Railing (Top wall at Berm)		LA			7110.00	7103.00	100.0070	7002.00	50.50 MODINZULION
remineters running (10p wan at bernin)							1		Galvanized, 2 Rail, 1 1/2" diameter, RSMeans Building
Hand Rail/Guard Rail, Galvanized, 2 rail, 1 1/2" diameter	270	LF		\$32.50	\$9.80		95.40%	\$10,895.63	Construction Cost Date 2011, 05 52 Metal Railings
	<u>. </u>					1		\$11,497.63	, ,
								711,737.03	J

Landscaping	Quantity	Unit	Cost per Unit	Material Cost	Installation Costs	Equipment Costs	Location Factor	Total Cost	Comments
Treated Wood Trellis Walkway 60' x 12'									
Cedar Wood, 2" thick, 40 PSF load at Maximum Span	720	SF		\$5.65	\$3.02	\$0.00	97.30%	\$6,073.86	RSMeans Assemblies Cost Data, 2011, B1010 266 Wood Deck (Equipment Cost included in Installation Cost)
Post & Beams	720	SF		\$9.10	\$4.17	\$0.00	97.30%	\$9,296.43	RSMeans Assemblies Cost Data, 2011, B1010 264 Wood Beam & Joist (Equipment Cost included in Installation Cost)
Berm/Site Landscaping	720	31		Ş3.10	Ş4.17	Ş0.00	97.3070	33,230.43	Cost)
Top Soil	330	LCY		\$33.00	\$24.00	\$0.00	108.20%	\$20,352.42	RSMeans Building Construction Cost Data, 2011, 32 91 19.13 Top Dress by hand, 1 CY for 600 SF
Haul of Material, 40 MPH, cycle 40 MPH	330	LCY			\$7.64	\$14.10	108.20%	\$7,762.48	RSMeans Building Construction Cost Data, 2011, 31 05 16, 31 23 23.20 Hauling
Mechanical Seeding, 44 lb/MSY	2000	SY		\$0.20	\$0.14	\$0.09	108.80%	\$935.68	RSMeans Building Construction Cost Data, 2011, 32 92 19.13 Mechanical Seeding
Irrigation System	18000	SF		\$0.32	\$0.46	\$0.00	108.20%	\$15,191.28	RSMeans Building Construction Costs, 2011, 32 84 23.10, sprinkler irrigation system

\$59,612.15