

2019 Financial Assurance Estimate Form - Pond WU (with pre-plat construction)

**EPC Planning & Community
Development Department**

Updated: 7/16/2019

PROJECT INFORMATION			
Bent Grass Residential Filing No. 2	3/29/2020	SF-19-014	
Project Name	Date	PCD File No.	

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction) % Complete	Remaining
SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)							
* Earthwork							
less than 1,000; \$5,300 min		CY	\$ 8.00	=	\$ -		\$ -
1,000-5,000; \$8,000 min		CY	\$ 6.00	=	\$ -		\$ -
5,001-20,000; \$30,000 min		CY	\$ 5.00	=	\$ -		\$ -
20,001-50,000; \$100,000 min		CY	\$ 3.50	=	\$ -		\$ -
50,001-200,000; \$175,000 min		CY	\$ 2.50	=	\$ -		\$ -
greater than 200,000; \$500,000 min		CY	\$ 2.00	=	\$ -		\$ -
* Permanent Seeding (inc. noxious weed mgmnt.)		AC	\$ 800.00	=	\$ -		\$ -
* Mulching		AC	\$ 750.00	=	\$ -		\$ -
* Permanent Erosion Control Blanket		SY	\$ 6.00	=	\$ -		\$ -
* Permanent Pond/BMP Construction	2,400	CY	\$ 20.00	=	\$ 48,000.00		\$ 48,000.00
* Permanent Pond/BMP (Spillway)		EA	\$ 5,000.00	=	\$ -		\$ -
* Permanent Pond/BMP (Outlet Structure)	1	EA	\$ 80,000.00	=	\$ 80,000.00		\$ 80,000.00
Safety Fence		LF	\$ 3.00	=	\$ -		\$ -
Temporary Erosion Control Blanket		SY	\$ 3.00	=	\$ -		\$ -
Vehicle Tracking Control		EA	\$ 2,370.00	=	\$ -		\$ -
Silt Fence		LF	\$ 2.50	=	\$ -		\$ -
Temporary Seeding		AC	\$ 628.00	=	\$ -		\$ -
Temporary Mulch		AC	\$ 750.00	=	\$ -		\$ -
Erosion Bales		EA	\$ 25.00	=	\$ -		\$ -
Erosion Logs/Straw Waddle		LF	\$ 5.00	=	\$ -		\$ -
Rock Check Dams		EA	\$ 500.00	=	\$ -		\$ -
Inlet Protection		EA	\$ 167.00	=	\$ -		\$ -
Sediment Basin		EA	\$ 1,762.00	=	\$ -		\$ -
Concrete Washout Basin		EA	\$ 900.00	=	\$ -		\$ -
Road Straw Bale Check Dams		EA	\$ 100.00	=	\$ -		\$ -
<i>[insert items not listed but part of construction plans]</i>				=	\$ -		\$ -
MAINTENANCE (35% of Construction BMPs)				=	\$ -		\$ -
Section 1 Subtotal				=	\$ 128,000.00		\$ 128,000.00
SECTION 2 - PUBLIC IMPROVEMENTS *							
ROADWAY IMPROVEMENTS							
Construction Traffic Control		LS		=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)		Tons	\$ 28.00	=	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)		CY	\$ 50.00	=	\$ -		\$ -
Asphalt Pavement (3" thick)		SY	\$ 14.00	=	\$ -		\$ -
Asphalt Pavement (4" thick)		SY	\$ 19.00	=	\$ -		\$ -
Asphalt Pavement (6" thick)		SY	\$ 29.00	=	\$ -		\$ -
Asphalt Pavement (147 lbs/cf) _" thick		Tons	\$ 88.00	=	\$ -		\$ -
Raised Median, Paved		SF	\$ 8.00	=	\$ -		\$ -
Regulatory Sign/Advisory Sign		EA	\$ 300.00	=	\$ -		\$ -
Guide/Street Name Sign		EA		=	\$ -		\$ -
Epoxy Pavement Marking		SF	\$ 13.00	=	\$ -		\$ -
Thermoplastic Pavement Marking		SF	\$ 23.00	=	\$ -		\$ -
Barricade - Type 3		EA	\$ 200.00	=	\$ -		\$ -
Delineator - Type I		EA	\$ 24.00	=	\$ -		\$ -
Curb and Gutter, Type A (6" Vertical)		LF	\$ 30.00	=	\$ -		\$ -
Curb and Gutter, Type B (Median)		LF	\$ 30.00	=	\$ -		\$ -
Curb and Gutter, Type C (Ramp)		LF	\$ 30.00	=	\$ -		\$ -
4" Sidewalk (common areas only)		SY	\$ 48.00	=	\$ -		\$ -
5" Sidewalk		SY	\$ 60.00	=	\$ -		\$ -
6" Sidewalk		SY	\$ 72.00	=	\$ -		\$ -
8" Sidewalk		SY	\$ 96.00	=	\$ -		\$ -
Pedestrian Ramp		EA	\$ 1,150.00	=	\$ -		\$ -
Cross Pan, local (8" thick, 6' wide to include return)		LF	\$ 61.00	=	\$ -		\$ -
Cross Pan, collector (9" thick, 8' wide to include return)		LF	\$ 92.00	=	\$ -		\$ -
Curb Chase		EA	\$ 1,480.00	=	\$ -		\$ -
Guardrail Type 3 (W-Beam)		LF	\$ 49.00	=	\$ -		\$ -
Guardrail Type 7 (Concrete)		LF	\$ 72.00	=	\$ -		\$ -
Guardrail End Anchorage		EA	\$ 2,098.00	=	\$ -		\$ -
Guardrail Impact Attenuator		EA	\$ 3,767.00	=	\$ -		\$ -
Sound Barrier Fence (CMU block, 6' high)		LF	\$ 78.00	=	\$ -		\$ -
Sound Barrier Fence (panels, 6' high)		LF	\$ 80.00	=	\$ -		\$ -
Electrical Conduit, Size =		LF	\$ 16.00	=	\$ -		\$ -
Traffic Signal, complete intersection		EA	\$ 425,000	=	\$ -		\$ -

* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

PROJECT INFORMATION							
Bent Grass Residential Filing No. 2			3/29/2020			SF-19-014	
Project Name			Date			PCD File No.	
Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction) % Complete	Remaining
[insert items not listed but part of construction plans]				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
STORM DRAIN IMPROVEMENTS							
Concrete Box Culvert (M Standard), Size (W x H)		LF		=	\$ -		\$ -
18" Reinforced Concrete Pipe	126	LF	\$ 65.00	=	\$ 8,190.00		\$ 8,190.00
24" Reinforced Concrete Pipe		LF	\$ 78.00	=	\$ -		\$ -
30" Reinforced Concrete Pipe		LF	\$ 97.00	=	\$ -		\$ -
36" Reinforced Concrete Pipe		LF	\$ 120.00	=	\$ -		\$ -
42" Reinforced Concrete Pipe		LF	\$ 160.00	=	\$ -		\$ -
48" Reinforced Concrete Pipe		LF	\$ 195.00	=	\$ -		\$ -
54" Reinforced Concrete Pipe		LF	\$ 245.00	=	\$ -		\$ -
60" Reinforced Concrete Pipe		LF	\$ 288.00	=	\$ -		\$ -
66" Reinforced Concrete Pipe		LF	\$ 332.00	=	\$ -		\$ -
72" Reinforced Concrete Pipe		LF	\$ 380.00	=	\$ -		\$ -
18" Corrugated Steel Pipe		LF	\$ 84.00	=	\$ -		\$ -
24" Corrugated Steel Pipe		LF	\$ 96.00	=	\$ -		\$ -
30" Corrugated Steel Pipe		LF	\$ 122.00	=	\$ -		\$ -
36" Corrugated Steel Pipe		LF	\$ 147.00	=	\$ -		\$ -
42" Corrugated Steel Pipe		LF	\$ 168.00	=	\$ -		\$ -
48" Corrugated Steel Pipe		LF	\$ 178.00	=	\$ -		\$ -
54" Corrugated Steel Pipe		LF	\$ 260.00	=	\$ -		\$ -
60" Corrugated Steel Pipe		LF	\$ 280.00	=	\$ -		\$ -
66" Corrugated Steel Pipe		LF	\$ 340.00	=	\$ -		\$ -
72" Corrugated Steel Pipe		LF	\$ 400.00	=	\$ -		\$ -
78" Corrugated Steel Pipe		LF	\$ 460.00	=	\$ -		\$ -
84" Corrugated Steel Pipe		LF	\$ 550.00	=	\$ -		\$ -
Flared End Section (FES) RCP Size = 18 (unit cost = 6x pipe unit cost)	2	EA	\$ 390.00	=	\$ 780.00		\$ 780.00
Flared End Section (FES) CSP Size = (unit cost = 6x pipe unit cost)		EA		=	\$ -		\$ -
End Treatment- Headwall		EA		=	\$ -		\$ -
End Treatment- Wingwall		EA		=	\$ -		\$ -
End Treatment - Cutoff Wall		EA		=	\$ -		\$ -
Curb Inlet (Type R) L=5', Depth < 5'		EA	\$ 5,542.00	=	\$ -		\$ -
Curb Inlet (Type R) L=5', 5' ≤ Depth < 10'		EA	\$ 7,188.00	=	\$ -		\$ -
Curb Inlet (Type R) L=5', 10' ≤ Depth < 15'		EA	\$ 8,345.00	=	\$ -		\$ -
Curb Inlet (Type R) L=10', Depth < 5'		EA	\$ 7,627.00	=	\$ -		\$ -
Curb Inlet (Type R) L=10', 5' ≤ Depth < 10'		EA	\$ 7,861.00	=	\$ -		\$ -
Curb Inlet (Type R) L=10', 10' ≤ Depth < 15'		EA	\$ 9,841.00	=	\$ -		\$ -
Curb Inlet (Type R) L=15', Depth < 5'		EA	\$ 9,918.00	=	\$ -		\$ -
Curb Inlet (Type R) L=15', 5' ≤ Depth < 10'		EA	\$ 10,633.00	=	\$ -		\$ -
Curb Inlet (Type R) L=15', 10' ≤ Depth < 15'		EA	\$ 11,627.00	=	\$ -		\$ -
Curb Inlet (Type R) L=20', Depth < 5'		EA	\$ 10,570.00	=	\$ -		\$ -
Curb Inlet (Type R) L=20', 5' ≤ Depth < 10'		EA	\$ 11,667.00	=	\$ -		\$ -
Grated Inlet (Type C), Depth < 5'		EA	\$ 4,640.00	=	\$ -		\$ -
Grated Inlet (Type D), Depth < 5'		EA	\$ 5,731.00	=	\$ -		\$ -
Storm Sewer Manhole, Box Base		EA	\$ 11,627.00	=	\$ -		\$ -
Storm Sewer Manhole, Slab Base		EA	\$ 6,395.00	=	\$ -		\$ -
Geotextile (Erosion Control)		SY	\$ 6.00	=	\$ -		\$ -
Rip Rap, d50 size from 6" to 24"	2,298	Tons	\$ 80.00	=	\$ 183,840.00		\$ 183,840.00
Rip Rap, Grouted		Tons	\$ 95.00	=	\$ -		\$ -
Drainage Channel Construction, Size (W x H)		LF		=	\$ -		\$ -
Drainage Channel Lining, Concrete		CY	\$ 570.00	=	\$ -		\$ -
Drainage Channel Lining, Rip Rap		CY	\$ 112.00	=	\$ -		\$ -
Drainage Channel Lining, Grass		AC	\$ 1,469.00	=	\$ -		\$ -
Drainage Channel Lining, Other Stabilization				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
Section 2 Subtotal				=	\$ 192,810.00		\$ 192,810.00

* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

PROJECT INFORMATION							
Bent Grass Residential Filing No. 2			3/29/2020			SF-19-014	
Project Name			Date			PCD File No.	
Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
SECTION 3 - COMMON DEVELOPMENT IMPROVEMENTS (Private or District and NOT Maintained by EPC)**							
ROADWAY IMPROVEMENTS							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
STORM DRAIN IMPROVEMENTS (Exception: Permanent Pond/BMP shall be itemized under Section 1)							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
WATER SYSTEM IMPROVEMENTS							
Water Main Pipe (PVC), Size 8"		LF	\$ 64.00	=	\$ -		\$ -
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 75.00	=	\$ -		\$ -
Gate Valves, 8"		EA	\$ 1,858.00	=	\$ -		\$ -
Fire Hydrant Assembly, w/ all valves		EA	\$ 6,597.00	=	\$ -		\$ -
Water Service Line Installation, inc. tap and valves		EA	\$ 1,324.00	=	\$ -		\$ -
Fire Cistern Installation, complete		EA		=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
SANITARY SEWER IMPROVEMENTS							
Sewer Main Pipe (PVC), Size 8"		LF	\$ 64.00	=	\$ -		\$ -
Sanitary Sewer Manhole, Depth < 15 feet		EA	\$ 4,386.00	=	\$ -		\$ -
Sanitary Service Line Installation, complete		EA	\$ 1,402.00	=	\$ -		\$ -
Sanitary Sewer Lift Station, complete		EA		=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)							
Landscaping	1	EA	\$ 50,000.00	=	\$ 50,000.00		\$ 50,000.00
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
Section 3 Subtotal				=	\$ 50,000.00		\$ 50,000.00

** - Section 3 is not subject to defect warranty requirements

PROJECT INFORMATION		
Bent Grass Residential Filing No. 2	3/29/2020	SF-19-014
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)		LS		=	\$ -		\$ -
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS		=	\$ -		\$ -
						Total Construction Financial Assurance	
						\$ 370,810.00	
						(Sum of all section subtotals plus as-builts and pond/BMP certification)	
						Total Remaining Construction Financial Assurance (with Pre-Plat Construction)	
						\$ 370,810.00	
						(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)	
						Total Defect Warranty Financial Assurance	
						\$ 64,162.00	
						(20% of all items identified as (*). To be collateralized at time of preliminary acceptance)	

Approvals	
I hereby certify that this is an accurate and complete estimate of costs for the work as shown on the Grading and Erosion Control Plan and Construction Drawings associated with the Project.	
<div style="border-bottom: 1px solid black; height: 40px; margin-bottom: 10px;"></div>	
Engineer (P.E. Seal Required)	
<div style="border-bottom: 1px solid black; height: 40px; margin-bottom: 10px;"></div>	
Approved by Owner / Applicant	Date
<div style="border-bottom: 1px solid black; height: 40px; margin-bottom: 10px;"></div>	
Approved by El Paso County Engineer / ECM Administrator	Date

2019 Financial Assurance Estimate Form
(with pre-plat construction)

PROJECT INFORMATION			
Bent Grass Residential Filing No. 2	3/29/2020	SF-19-014	
Project Name	Date	PCD File No.	

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction) % Complete	Remaining
SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)							
* Earthwork							
less than 1,000; \$5,300 min		CY	\$ 8.00	=	\$ -		\$ -
1,000-5,000; \$8,000 min	4,202	CY	\$ 6.00	=	\$ 25,212.00		\$ 25,212.00
5,001-20,000; \$30,000 min		CY	\$ 5.00	=	\$ -		\$ -
20,001-50,000; \$100,000 min		CY	\$ 3.50	=	\$ -		\$ -
50,001-200,000; \$175,000 min		CY	\$ 2.50	=	\$ -		\$ -
greater than 200,000; \$500,000 min		CY	\$ 2.00	=	\$ -		\$ -
* Permanent Seeding (inc. noxious weed mgmnt.)		AC	\$ 800.00	=	\$ -		\$ -
* Mulching		AC	\$ 750.00	=	\$ -		\$ -
* Permanent Erosion Control Blanket	2,800	SY	\$ 6.00	=	\$ 16,800.00		\$ 16,800.00
* Permanent Pond/BMP Construction	6,100	CY	\$ 20.00	=	\$ 122,000.00		\$ 122,000.00
* Permanent Pond/BMP (Spillway)	2	EA	\$ 5,000.00	=	\$ 10,000.00		\$ 10,000.00
* Permanent Pond/BMP (Outlet Structure)	2	EA	\$ 55,000.00	=	\$ 110,000.00		\$ 110,000.00
Safety Fence	80	LF	\$ 3.00	=	\$ 240.00		\$ 240.00
Temporary Erosion Control Blanket	62,815	SY	\$ 3.00	=	\$ 188,445.00		\$ 188,445.00
Vehicle Tracking Control	2	EA	\$ 2,370.00	=	\$ 4,740.00		\$ 4,740.00
Silt Fence	16,368	LF	\$ 2.50	=	\$ 40,920.00		\$ 40,920.00
Temporary Seeding	42	AC	\$ 628.00	=	\$ 26,376.00		\$ 26,376.00
Temporary Mulch		AC	\$ 750.00	=	\$ -		\$ -
Erosion Bales		EA	\$ 25.00	=	\$ -		\$ -
Erosion Logs/Straw Waddle		LF	\$ 5.00	=	\$ -		\$ -
Rock Check Dams		EA	\$ 500.00	=	\$ -		\$ -
Inlet Protection	11	EA	\$ 167.00	=	\$ 1,837.00		\$ 1,837.00
Sediment Basin	2	EA	\$ 1,762.00	=	\$ 3,524.00		\$ 3,524.00
Concrete Washout Basin	2	EA	\$ 900.00	=	\$ 1,800.00		\$ 1,800.00
Road Straw Bale Check Dams	111	EA	\$ 100.00	=	\$ 11,100.00		\$ 11,100.00
[insert items not listed but part of construction plans]				=	\$ -		\$ -
MAINTENANCE (35% of Construction BMPs)					=	\$ 97,559.70	\$ 97,559.70
Section 1 Subtotal					=	\$ 660,553.70	\$ 660,553.70
SECTION 2 - PUBLIC IMPROVEMENTS *							
ROADWAY IMPROVEMENTS							
Construction Traffic Control	1	LS	\$ 5,000.00	=	\$ 5,000.00		\$ 5,000.00
Aggregate Base Course (135 lbs/cf)	20,700	Tons	\$ 28.00	=	\$ 579,600.00		\$ 579,600.00
Aggregate Base Course (135 lbs/cf)	14,500	CY	\$ 50.00	=	\$ 725,000.00		\$ 725,000.00
Asphalt Pavement (3" thick)		SY	\$ 14.00	=	\$ -		\$ -
Asphalt Pavement (4" thick)		SY	\$ 19.00	=	\$ -		\$ -
Asphalt Pavement (6" thick)		SY	\$ 29.00	=	\$ -		\$ -
Asphalt Pavement (147 lbs/cf) 4" thick	9,540	Tons	\$ 88.00	=	\$ 839,490.96		\$ 839,490.96
Raised Median, Paved		SF	\$ 8.00	=	\$ -		\$ -
Regulatory Sign/Advisory Sign	15	EA	\$ 300.00	=	\$ 4,500.00		\$ 4,500.00
Guide/Street Name Sign	15	EA	\$ 300.00	=	\$ 4,500.00		\$ 4,500.00
Epoxy Pavement Marking	1,050	SF	\$ 13.00	=	\$ 13,650.00		\$ 13,650.00
Thermoplastic Pavement Marking		SF	\$ 23.00	=	\$ -		\$ -
Barricade - Type 3		EA	\$ 200.00	=	\$ -		\$ -
Delineator - Type I		EA	\$ 24.00	=	\$ -		\$ -
Curb and Gutter, Type A (6" Vertical)	7,597	LF	\$ 30.00	=	\$ 227,910.00		\$ 227,910.00
Curb and Gutter, Type B (Median)		LF	\$ 30.00	=	\$ -		\$ -
Curb and Gutter, Type C (Ramp)	14,000	LF	\$ 30.00	=	\$ 420,000.00		\$ 420,000.00
4" Sidewalk (common areas only)		SY	\$ 48.00	=	\$ -		\$ -
5" Sidewalk		SY	\$ 60.00	=	\$ -		\$ -
6" Sidewalk	9,938	SY	\$ 72.00	=	\$ 715,536.00		\$ 715,536.00
8" Sidewalk		SY	\$ 96.00	=	\$ -		\$ -
Pedestrian Ramp Add for T intersections	37	EA	\$ 1,150.00	=	\$ 42,550.00		\$ 42,550.00
Cross Pan, local (8" thick, 6' wide to include return)	780	LF	\$ 61.00	=	\$ 47,580.00		\$ 47,580.00
Cross Pan, collector (9" thick, 8' wide to include return)		LF	\$ 92.00	=	\$ -		\$ -
Curb Chase		EA	\$ 1,480.00	=	\$ -		\$ -
Guardrail Type 3 (W-Beam)		LF	\$ 49.00	=	\$ -		\$ -
Guardrail Type 7 (Concrete)		LF	\$ 72.00	=	\$ -		\$ -
Guardrail End Anchorage		EA	\$ 2,098.00	=	\$ -		\$ -
Guardrail Impact Attenuator		EA	\$ 3,767.00	=	\$ -		\$ -
Sound Barrier Fence (CMU block, 6' high)		LF	\$ 78.00	=	\$ -		\$ -
Sound Barrier Fence (panels, 6' high)		LF	\$ 80.00	=	\$ -		\$ -
Electrical Conduit, Size =		LF	\$ 16.00	=	\$ -		\$ -
Traffic Signal, complete intersection		EA	\$ 425,000	=	\$ -		\$ -

PROJECT INFORMATION									
Bent Grass Residential Filing No. 2				3/29/2020			SF-19-014		
Project Name				Date			PCD File No.		
Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)			
						% Complete	Remaining		
[insert items not listed but part of construction plans]				=	\$ -		\$ -		*
[insert items not listed but part of construction plans]				=	\$ -		\$ -		*
STORM DRAIN IMPROVEMENTS									
Concrete Box Culvert (M Standard), Size (16 x 6)	266	LF	\$ 2,000.00	=	\$ 532,000.00		\$ 532,000.00		*
18" Reinforced Concrete Pipe	100	LF	\$ 65.00	=	\$ 6,500.00		\$ 6,500.00		*
24" Reinforced Concrete Pipe	135	LF	\$ 78.00	=	\$ 10,530.00		\$ 10,530.00		*
30" Reinforced Concrete Pipe	110	LF	\$ 97.00	=	\$ 10,670.00		\$ 10,670.00		*
36" Reinforced Concrete Pipe	250	LF	\$ 120.00	=	\$ 30,000.00		\$ 30,000.00		*
42" Reinforced Concrete Pipe	50	LF	\$ 160.00	=	\$ 8,000.00		\$ 8,000.00		*
48" Reinforced Concrete Pipe		LF	\$ 195.00	=	\$ -		\$ -		*
54" Reinforced Concrete Pipe		LF	\$ 245.00	=	\$ -		\$ -		*
60" Reinforced Concrete Pipe		LF	\$ 288.00	=	\$ -		\$ -		*
66" Reinforced Concrete Pipe		LF	\$ 332.00	=	\$ -		\$ -		*
72" Reinforced Concrete Pipe		LF	\$ 380.00	=	\$ -		\$ -		*
18" Corrugated Steel Pipe		LF	\$ 84.00	=	\$ -		\$ -		*
24" Corrugated Steel Pipe		LF	\$ 96.00	=	\$ -		\$ -		*
30" Corrugated Steel Pipe		LF	\$ 122.00	=	\$ -		\$ -		*
36" Corrugated Steel Pipe		LF	\$ 147.00	=	\$ -		\$ -		*
42" Corrugated Steel Pipe		LF	\$ 168.00	=	\$ -		\$ -		*
48" Corrugated Steel Pipe		LF	\$ 178.00	=	\$ -		\$ -		*
54" Corrugated Steel Pipe		LF	\$ 260.00	=	\$ -		\$ -		*
60" Corrugated Steel Pipe		LF	\$ 280.00	=	\$ -		\$ -		*
66" Corrugated Steel Pipe		LF	\$ 340.00	=	\$ -		\$ -		*
72" Corrugated Steel Pipe		LF	\$ 400.00	=	\$ -		\$ -		*
78" Corrugated Steel Pipe		LF	\$ 460.00	=	\$ -		\$ -		*
84" Corrugated Steel Pipe		LF	\$ 550.00	=	\$ -		\$ -		*
Flared End Section (FES) RCP Size = 18 (unit cost = 6x pipe unit cost)	2	EA	\$ 390.00	=	\$ 780.00		\$ 780.00		*
Flared End Section (FES) RCP Size = 24 (unit cost = 6x pipe unit cost)	1	EA	\$ 468.00	=	\$ 468.00		\$ 468.00		*
Flared End Section (FES) RCP Size = 36 (unit cost = 6x pipe unit cost)	1	EA	\$ 720.00	=	\$ 720.00		\$ 720.00		*
End Treatment- Headwall		EA		=	\$ -		\$ -		*
End Treatment- Wingwall		EA		=	\$ -		\$ -		*
End Treatment - Cutoff Wall		EA		=	\$ -		\$ -		*
Curb Inlet (Type R) L=5', Depth < 5'		EA	\$ 5,542.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L=5', 5' ≤ Depth < 10'		EA	\$ 7,188.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L =5', 10' ≤ Depth < 15'		EA	\$ 8,345.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L =10', Depth < 5'		EA	\$ 7,627.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L =10', 5' ≤ Depth < 10'	4	EA	\$ 7,861.00	=	\$ 31,444.00		\$ 31,444.00		*
Curb Inlet (Type R) L =10', 10' ≤ Depth < 15'		EA	\$ 9,841.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L =15', Depth < 5'		EA	\$ 9,918.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L =15', 5' ≤ Depth < 10'	3	EA	\$ 10,633.00	=	\$ 31,899.00		\$ 31,899.00		*
Curb Inlet (Type R) L =15', 10' ≤ Depth < 15'		EA	\$ 11,627.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L =20', Depth < 5'		EA	\$ 10,570.00	=	\$ -		\$ -		*
Curb Inlet (Type R) L =20', 5' ≤ Depth < 10'	3	EA	\$ 11,667.00	=	\$ 35,001.00		\$ 35,001.00		*
Grated Inlet (Type C), Depth < 5'		EA	\$ 4,640.00	=	\$ -		\$ -		*
Grated Inlet (Type D), Depth < 5'	1	EA	\$ 5,731.00	=	\$ 5,731.00		\$ 5,731.00		*
Storm Sewer Manhole, Box Base		EA	\$ 11,627.00	=	\$ -		\$ -		*
Storm Sewer Manhole, Slab Base		EA	\$ 6,395.00	=	\$ -		\$ -		*
Geotextile (Erosion Control)		SY	\$ 6.00	=	\$ -		\$ -		*
Rip Rap, d50 size from 6" to 24"	110	Tons	\$ 80.00	=	\$ 8,800.00		\$ 8,800.00		*
Rip Rap, Grouted		Tons	\$ 95.00	=	\$ -		\$ -		*
Drainage Channel Construction, Size (26 x 5)	1,300	LF	\$ 200.00	=	\$ 260,000.00		\$ 260,000.00		*
Drainage Channel Lining, Concrete		CY	\$ 570.00	=	\$ -		\$ -		*
Drainage Channel Lining, Rip Rap		CY	\$ 112.00	=	\$ -		\$ -		*
Drainage Channel Lining, Grass		AC	\$ 1,469.00	=	\$ -		\$ -		*
Drainage Channel Lining, Other Stabilization				=	\$ -		\$ -		*
[insert items not listed but part of construction plans]				=	\$ -		\$ -		*
Section 2 Subtotal				=	\$ 4,597,859.96		\$ 4,597,859.96		

* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

Add to Soil/rip rap quantity above, the amount added from the 11/9/19 to the current amount shown on the plan that addressed PCD engineering comments. Additionally add a Quantity "channel lining rip-rap" to address the 4/2020 comments on the drainage report for the main North-south channel improvements.

PROJECT INFORMATION							
Bent Grass Residential Filing No. 2			3/29/2020			SF-19-014	
Project Name			Date			PCD File No.	
Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
SECTION 3 - COMMON DEVELOPMENT IMPROVEMENTS (Private or District and NOT Maintained by EPC)**							
ROADWAY IMPROVEMENTS							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
STORM DRAIN IMPROVEMENTS (Exception: Permanent Pond/BMP shall be itemized under Section 1)							
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
				=	\$ -		\$ -
WATER SYSTEM IMPROVEMENTS							
Water Main Pipe (PVC), Size 8"	7,850	LF	\$ 64.00	=	\$ 502,400.00		\$ 502,400.00
Water Main Pipe (Ductile Iron), Size 8"		LF	\$ 75.00	=	\$ -		\$ -
Gate Valves, 8"	117	EA	\$ 1,858.00	=	\$ 217,386.00		\$ 217,386.00
Fire Hydrant Assembly, w/ all valves	20	EA	\$ 6,597.00	=	\$ 131,940.00		\$ 131,940.00
Water Service Line Installation, inc. tap and valves	178	EA	\$ 1,324.00	=	\$ 235,672.00		\$ 235,672.00
Fire Cistern Installation, complete		EA		=	\$ -		\$ -
				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
SANITARY SEWER IMPROVEMENTS							
Sewer Main Pipe (PVC), Size 8"	8,500	LF	\$ 64.00	=	\$ 544,000.00		\$ 544,000.00
Sanitary Sewer Manhole, Depth < 15 feet	72	EA	\$ 4,386.00	=	\$ 315,792.00		\$ 315,792.00
Sanitary Service Line Installation, complete	178	EA	\$ 1,402.00	=	\$ 249,556.00		\$ 249,556.00
Sanitary Sewer Lift Station, complete		EA		=	\$ -		\$ -
				=	\$ -		\$ -
[insert items not listed but part of construction plans]				=	\$ -		\$ -
LANDSCAPING IMPROVEMENTS (For subdivision specific condition of approval, or PUD)							
Landscaping	1	LS	\$ 210,000.00	=	\$ 210,000.00		\$ 210,000.00
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
		EA		=	\$ -		\$ -
Section 3 Subtotal				=	\$ 2,406,746.00		\$ 2,406,746.00

** - Section 3 is not subject to defect warranty requirements

PROJECT INFORMATION		
Bent Grass Residential Filing No. 2	3/29/2020	SF-19-014
Project Name	Date	PCD File No.

Description	Quantity	Units	Unit Cost		Total	(with Pre-Plat Construction)	
						% Complete	Remaining
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)		LS	\$ 40,000.00	=	\$ 40,000.00		\$ 40,000.00
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS	\$ 15,000.00	=	\$ 15,000.00		\$ 15,000.00
						Total Construction Financial Assurance	
						\$ 7,720,159.66	
						(Sum of all section subtotals plus as-builts and pond/BMP certification)	
						Total Remaining Construction Financial Assurance (with Pre-Plat Construction)	
						\$ 7,720,159.66	
						(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)	
						Total Defect Warranty Financial Assurance	
						\$ 976,374.39	
						(20% of all items identified as (*). To be collateralized at time of preliminary acceptance)	

Approvals	
I hereby certify that this is an accurate and complete estimate of costs for the work as shown on the Grading and Erosion Control Plan and Construction Drawings associated with the Project.	
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Engineer (P.E. Seal Required)	
<div style="border-bottom: 1px solid black; height: 40px; margin-bottom: 10px;"></div>	
Approved by Owner / Applicant	Date
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Approved by El Paso County Engineer / ECM Administrator	Date

FAE V_4 Redlines.pdf Markup Summary

dsdkuehster (5)

Structure

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Date: 4/7/2020 10:44:07 AM
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Engineering Review

04/07/2020 11:49:24 AM

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(719) 538-6113

EPC Planning & Community

Development & Implementation

04/07/2020 11:49:24 AM

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Subject: EPC ENG Review
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Author: dsdkuehster
Date: 4/7/2020 11:49:24 AM
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Subject: text box
Page Label: 6
Author: dsdkuehster
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Add to Soil/rip rap quantity above, the amount added from the 11/9/19 to the current amount shown on the plan that addressed PCD engineering comments. Additionally add a Quantity "channel lining rip-rap" to address the 4/2020 comments on the drainage report for the main North-south channel improvements.

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Page Label: 5
Author: dsdkuehster
Date: 4/7/2020 12:04:27 PM
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