

Please use the 2024 FAE Form found on: <https://planningdevelopment.elpasoco.com/planning-development-forms/#1584029763943-19bc4c03-3586>

Form

Comment generated due to changes from the previous submittal.

EPC STORMWATER REVIEW COMMENTS IN ORANGE BOXES WITH BLACK TEXT

Updated: 12/8/2022

PROJECT INFORMATION	
Date	5/17/2023
PCD File No.	PPR-23-025

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	131,380	CY	\$ 2.50	\$ 328,450.00		\$ 328,450.00
greater than 200,000; \$500,000 min		CY	\$ 2.00	\$ -		\$ -
Permanent Erosion Control Blanket	805.0	SY	\$ 8.00	\$ 6,440.00		\$ 6,440.00
Permanent Seeding (inc. noxious weed mgmt.) & Mulching	0.1	AC	\$ 1,875.00	\$ 125.06		\$ 125.06
Permanent Pond/BMP (provide engineer's estimate)		EA		\$ -		\$ -
Concrete Washout Basin	1	EA	\$ 1,089.00	\$ 1,089.00		\$ 1,089.00
Inlet Protection	6	EA	\$ 202.00	\$ 1,212.00		\$ 1,212.00
Rock Check Dam	6	EA	\$ 605.00	\$ 3,630.00		\$ 3,630.00
Safety Fence		LF	\$ 3.00	\$ -		\$ -
Sediment Basin		EA	\$ 2,132.00	\$ -		\$ -
Sediment Trap		EA	\$ 500.00	\$ -		\$ -
Silt Fence	11,725	LF	\$ 3.00	\$ 35,175.00		\$ 35,175.00
Slope Drain		LF	\$ 40.00	\$ -		\$ -
Straw Bale		EA	\$ 31.00	\$ -		\$ -
Straw Wattle/Rock Sock	240	LF	\$ 7.00	\$ 1,680.00		\$ 1,680.00
Surface Roughening		AC	\$ 250.00	\$ -		\$ -
Temporary Erosion Control Blanket	8,444.4	SY	\$ 3.00	\$ 25,333.33		\$ 25,333.33
Temporary Seeding and Mulching	17.0	AC	\$ 1,666.00	\$ 28,322.00		\$ 28,322.00
Vehicle Tracking Control	2	EA	\$ 2,867.00	\$ 5,734.00		\$ 5,734.00
Clearing and Grubbing	1	LS	\$ 38,000.00	\$ 38,000.00		\$ 38,000.00
Remove and Dispose of Biosolids from Lagoon	1	LS	\$ 100,000.00	\$ 100,000.00		\$ 100,000.00
Remove and Dispose of all Piping, Structures, Valves, Etc.	1	LS	\$ 20,000.00	\$ 20,000.00		\$ 20,000.00
Misc. Site Work	1	LS	\$ 5,000.00	\$ 5,000.00		\$ 5,000.00
Contractor Mobilization	1	LS	\$ 138,000.00	\$ 138,000.00		\$ 138,000.00
<i>[insert items not listed but part of construction plans]</i>						
MAINTENANCE (35% of Construction BMPs)				\$ 140,730.22		\$ 140,730.22
Section 1 Subtotal				\$ 878,920.61		\$ 878,920.61

The total project site disturbs 17 acres. Permanent seeding should be more than 0.1 acre. All area within the limits of disturbance that does not have asphalt/gravel to stabilize should be seeded.

SECTION 2 - PUBLIC IMPROVEMENTS *

ROADWAY IMPROVEMENTS						
Construction Traffic Control		LS	\$ 10,000.00	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)		Tons	\$ 34.00	\$ -		\$ -
Aggregate Base Course (135 lbs/cf)	215.0	CY	\$ 45.00	\$ 9,675.00		\$ 9,675.00
Asphalt Pavement (3" thick)		SY	\$ 17.00	\$ -		\$ -
Asphalt Pavement (4" thick)		SY	\$ 132.00	\$ -		\$ -
Asphalt Pavement (6" thick)		SY	\$ 145.00	\$ -		\$ -
Asphalt Pavement (147 lbs/cf) ___" thick		Tons	\$ 106.00	\$ -		\$ -
Raised Median, Paved		SF	\$ 10.00	\$ -		\$ -
Regulatory Sign/Advisory Sign		EA	\$ 364.00	\$ -		\$ -
Guide/Street Name Sign		EA		\$ -		\$ -
Epoxy Pavement Marking		SF	\$ 16.00	\$ -		\$ -
Thermoplastic Pavement Marking		SF	\$ 28.00	\$ -		\$ -
Barricade - Type 3		EA	\$ 241.00	\$ -		\$ -
Delineator - Type I		EA	\$ 29.00	\$ -		\$ -
Curb and Gutter, Type A (6" Vertical)		LF	\$ 35.00	\$ -		\$ -
Curb and Gutter, Type B (Median)		LF	\$ 35.00	\$ -		\$ -
Curb and Gutter, Type C (Ramp)		LF	\$ 35.00	\$ -		\$ -
4" Sidewalk (common areas only)		SY	\$ 58.00	\$ -		\$ -
5" Sidewalk		SY	\$ 72.00	\$ -		\$ -
6" Sidewalk		SY	\$ 87.00	\$ -		\$ -
8" Sidewalk		SY	\$ 116.00	\$ -		\$ -
Pedestrian Ramp		EA	\$ 1,390.00	\$ -		\$ -
Cross Pan, local (8" thick, 6' wide to include return)		LF	\$ 73.00	\$ -		\$ -
Cross Pan, collector (9" thick, 8' wide to include return)		LF	\$ 111.00	\$ -		\$ -
Curb Opening with Drainage Chase		EA	\$ 1,790.00	\$ -		\$ -
Guardrail Type 3 (W-Beam)		LF	\$ 60.00	\$ -		\$ -
Guardrail Type 7 (Concrete)		LF	\$ 87.00	\$ -		\$ -
Guardrail End Anchorage		EA	\$ 2,538.00	\$ -		\$ -
Guardrail Impact Attenuator		EA	\$ 4,556.00	\$ -		\$ -
Sound Barrier Fence (CMU block, 6' high)		LF	\$ 95.00	\$ -		\$ -
Sound Barrier Fence (panels, 6' high)		LF	\$ 97.00	\$ -		\$ -
Electrical Conduit, Size =		LF	\$ 20.00	\$ -		\$ -
Traffic Signal, (provide engineer's estimate)		EA		\$ -		\$ -

PROJECT INFORMATION

Town of Ramah WWTP Improvements Project

5/17/2023

PCD File No. PPR-23-025

Project Name

Date

Description	Quantity	Units	Unit Cost	=	\$	Total	(with Pre-Plat Construction)			
							% Complete	Remaining		
<i>[insert items not listed but part of construction plans]</i>										
STORM DRAIN IMPROVEMENTS										
Concrete Box Culvert (M Standard), Size (W x H)		LF		=	\$	-		\$ -		
18" Reinforced Concrete Pipe		LF	\$ 76.00	=	\$	-		\$ -		
24" Reinforced Concrete Pipe		LF	\$ 91.00	=	\$	-		\$ -		
30" Reinforced Concrete Pipe		LF	\$ 114.00	=	\$	-		\$ -		
36" Reinforced Concrete Pipe		LF	\$ 140.00	=	\$	-		\$ -		
42" Reinforced Concrete Pipe		LF	\$ 187.00	=	\$	-		\$ -		
48" Reinforced Concrete Pipe		LF	\$ 228.00	=	\$	-		\$ -		
54" Reinforced Concrete Pipe		LF	\$ 297.00	=	\$	-		\$ -		
60" Reinforced Concrete Pipe		LF	\$ 348.00	=	\$	-		\$ -		
66" Reinforced Concrete Pipe		LF	\$ 402.00	=	\$	-		\$ -		
72" Reinforced Concrete Pipe		LF	\$ 460.00	=	\$	-		\$ -		
18" Corrugated Steel Pipe		LF	\$ 98.00	=	\$	-		\$ -		
24" Corrugated Steel Pipe		LF	\$ 112.00	=	\$	-		\$ -		
30" Corrugated Steel Pipe		LF	\$ 143.00	=	\$	-		\$ -		
36" Corrugated Steel Pipe		LF	\$ 171.00	=	\$	-		\$ -		
42" Corrugated Steel Pipe		LF	\$ 197.00	=	\$	-		\$ -		
48" Corrugated Steel Pipe		LF	\$ 207.00	=	\$	-		\$ -		
54" Corrugated Steel Pipe		LF	\$ 304.00	=	\$	-		\$ -		
60" Corrugated Steel Pipe		LF	\$ 328.00	=	\$	-		\$ -		
66" Corrugated Steel Pipe		LF	\$ 397.00	=	\$	-		\$ -		
72" Corrugated Steel Pipe		LF	\$ 467.00	=	\$	-		\$ -		
78" Corrugated Steel Pipe		LF	\$ 537.00	=	\$	-		\$ -		
84" Corrugated Steel Pipe		LF	\$ 642.00	=	\$	-		\$ -		
Flared End Section (FES) RCP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$	-		\$ -		
Flared End Section (FES) CSP Size = <small>(unit cost = 6x pipe unit cost)</small>		EA		=	\$	-		\$ -		
End Treatment- Headwall		EA		=	\$	-		\$ -		
End Treatment- Wingwall		EA		=	\$	-		\$ -		
End Treatment - Cutoff Wall		EA		=	\$	-		\$ -		
Curb Inlet (Type R) L=5', Depth < 5'		EA	\$ 6,703.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=5', 5' ≤ Depth < 10'		EA	\$ 8,715.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=5', 10' ≤ Depth < 15'		EA	\$ 10,092.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=10', Depth < 5'		EA	\$ 9,224.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=10', 5' ≤ Depth < 10'		EA	\$ 9,507.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=10', 10' ≤ Depth < 15'		EA	\$ 11,901.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=15', Depth < 5'		EA	\$ 11,995.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=15', 5' ≤ Depth < 10'		EA	\$ 12,858.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=15', 10' ≤ Depth < 15'		EA	\$ 14,061.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=20', Depth < 5'		EA	\$ 12,783.00	=	\$	-		\$ -		
Curb Inlet (Type R) L=20', 5' ≤ Depth < 10'		EA	\$ 14,109.00	=	\$	-		\$ -		
Grated Inlet (Type C), Depth < 5'		EA	\$ 5,611.00	=	\$	-		\$ -		
Grated Inlet (Type D), Depth < 5'		EA	\$ 6,931.00	=	\$	-		\$ -		
Storm Sewer Manhole, Box Base		EA	\$ 14,061.00	=	\$	-		\$ -		
Storm Sewer Manhole, Slab Base		EA	\$ 7,734.00	=	\$	-		\$ -		
Geotextile (Erosion Control)		SY	\$ 8.00	=	\$	-		\$ -		
Rip Rap, d50 size from 6" to 24"		Tons	\$ 97.00	=	\$	-		\$ -		
Rip Rap, Grouted		Tons	\$ 115.00	=	\$	-		\$ -		
Drainage Channel Construction, Size (W x H)		LF	\$ -	=	\$	-		\$ -		
Drainage Channel Lining, Concrete		CY	\$ 689.00	=	\$	-		\$ -		
Drainage Channel Lining, Rip Rap		CY	\$ 135.00	=	\$	-		\$ -		
Drainage Channel Lining, Grass		AC	\$ 1,776.00	=	\$	-		\$ -		
Drainage Channel Lining, Other Stabilization				=	\$	-		\$ -		
<i>[insert items not listed but part of construction plans]</i>										
Section 2 Subtotal						=	\$	9,675.00	\$	9,675.00

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

PROJECT INFORMATION

Town of Ramah WWTP Improvements Project 5/17/2023 PCD File No. PPR-23-025

Description	Quantity	Units	Unit Cost	Total	(with Pre-Plat Construction)		
					% Complete	Remaining	
AS-BUILT PLANS (Public Improvements inc. Permanent WQCV BMPs)		LS	\$ 15,000.00	= \$ 15,000.00	\$	15,000.00	
POND/BMP CERTIFICATION (inc. elevations and volume calculations)		LS	\$ -	= \$ -	\$	-	
Total Construction Financial Assurance						\$ 903,595.61	
(Sum of all section subtotals plus as-builts and pond/BMP certification)							
Total Remaining Construction Financial Assurance (with Pre-Plat Construction)						\$ 903,595.61	
(Sum of all section totals less credit for items complete plus as-builts and pond/BMP certification)							
Total Defect Warranty Financial Assurance						\$ 68,938.01	
(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.

A. A.



Engineer (P.E. Seal Required)

Cindy M Tompkins

Approved by Owner / Applicant

1-30-24

Date

Approved by El Paso County Engineer / ECM Administrator

Date