



EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

GRADING AND EROSION CONTROL PLAN CHECKLIST

	Revised: July 2019	Applicant	PCD	
1. <u>G</u>	RADING AND EROSION CONTROL PLAN added coversheet (made into separate package)	_ i ippiiouit	1 CD	
а	Vicinity map.	х	N	
b	Adjacent city/town/jurisdictional boundaries, subdivision names, and property parcel numbers labeled.	X	Y	
С	North arrow and acceptable scale (1"=20' to 1"=100').	X	Y	
ď	Legend for all symbols used in the plan.	X	Y	
е	Existing and proposed property lines. Proposed subdivision boundary for subdivision projects.	x	Y	
f	All existing structures.	х	Y	
g	All existing utilities.	X	Y	
h	Construction site boundaries.	X	Y	
i	Existing vegetation (notes are acceptable in cases where there is no notable vegetation, only grasses/weeds, or site has already been stripped).	X	N	
j	FEMA 100-yr floodplain. added note	n/a	N/A	
k	Existing and proposed water courses including springs, streams, wetlands, detention ponds, stormwater quality structures, roadside ditches, irrigation ditches and other water surfaces. Show maintenance of pre-existing vegetation within 50 feet of a receiving water.	х	Y	
	Existing and proposed contours 2 feet or less (except for hillside).	х	Y	
m	The second of th			
n	Identify and protect areas outside of the construction site boundary with existing fencing, construction fencing or other methods as appropriate.			
0	Offsite grading clearly shown and called out.	х	N	
р	added Callout			
q	Conclusions from soils/geotechnical report and geologic hazards report incorporated in grading design (slopes, embankments, materials, mitigation, etc.)	х	Y	
-	Proposed slopes steeper than 3:1 with top and toe of slope delineated. Erosion control blanketing or other protective covering required.	х	Υ	
-	Stormwater flow direction arrows.	х	Y	
	Location of any dedicated asphalt / concrete batch plants.	n/a	N/A	
	Areas used for staging, storage of building materials, soils (stockpiles) or wastes. The use of construction office trailers requires PCD permitting.	X	Y	
v	All proposed temporary construction control measures, structural and non-structural. Temporary construction control measures shall be identified by phase of implementation to include" "initial," "interim," and "final" or shown on separate phased maps identifying each phase.	х	Υ	
w	Vehicle tracking provided at all construction entrances/exits. Construction fencing, barricades, and/or signage provided at access points not to be used for construction.	х	Υ	
×	Temporary sediment ponds provided for disturbed drainage areas greater than 1 acre.	n/a	N/A	
	Dewatering operations to include locations of diversion, pump and discharge(s) as anticipated at time of design.	n/a	N/A	
z í	All proposed temporary construction control measure details. Custom or other jurisdiction's details used must meet or exceed EPC standards.	х	N	

added details



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ownership of the Owner or Operator.	X	Y
Existing and proposed permanent storm water management facilities, including areas proposed for stormwater infiltration or subsurface detention. added note, awaiting esmt recordation number	r n/a	N/A
The proposed sustained (permanent and construction) including required on site easements.	х	N
height, series of walls, or walls supporting a surcharge.	n/a	N/A
Plan certified by a Colorado Registered P.E., with EPC standard signature blocks for Engineer, Owner and EPC.	х	Υ
Engineer's Statement (for standalone GEC Plan): This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this plan.	x	N/A
Engineer of Record Signature Date added statement to new coversheet		
Engineer's Statement (for GEC Plan within Construction Drawing set): These detailed plans and specifications were prepared under my direction and supervision. Said plans and specifications have been prepared according to the criteria established by the County for detailed roadway, drainage, grading and erosion control plans and specifications, and said plans and specifications are in conformity with applicable master drainage plans and master transportation plans. Said plans and specifications meet the purposes for which the particular roadway and drainage facilities are designed and are correct to the best of my knowledge and belief. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparation of these detailed plans and specifications. Engineer of Record Signature Date		N
Owner's Statement (for standalone GEC Plan): I, the owner/developer have read and will comply with the requirements of the Grading and Erosion Control Plan. Owner Signature Date added statement to new coversheet		N/A
Owner's Statement (for GEC Plan within Construction Drawing set): I, the owner/developer have read and will comply with the requirements of the grading and erosion control.	х	N
	Existing and proposed permanent storm water management facilities, including areas proposed for stormwater infiltration or subsurface detention. added note, awaiting esmt recordation number Existing and proposed easements (permanent and construction) including required off site easements. Retaining walls (not to be located in County ROW unless approved via license agreement). Design by P.E. and building permit from Regional Building Department required for walls greater than or equal to 4 feet in height, series of walls, or walls supporting a surcharge. Plan certified by a Colorado Registered P.E., with EPC standard signature blocks for Engineer, Owner and EPC. Engineer's Statement (for standalone GEC Plan): This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or ornissions on my part in preparing this plan. Engineer of Record Signature Date added statement to new coversheet Engineer's Statement (for GEC Plan within Construction Drawing set): These detailed plans and specifications were prepared under my direction and supervision. Said plans and specifications have been prepared according to the criteria established by the County for detailed roadway, drainage, grading and erosion control plans and specifications, and said plans and specifications are in conformity with applicable master drainage plans and master transportation plans. Said plans and specifications meet the purposes for which the particular roadway and drainage facilities are designed and are correct to the best of my knowledge and belief. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparation of these detailed plans and specifications. Engineer of Record Signature Date Owner's Statement (fo	wership of the Owner or Operator. Existing and proposed permanent storm water management facilities, including areas proposed for stormwater infiltration or subsurface detention. added note, awaiting esmt recordation number in number and proposed easements (permanent and construction) including required off site easements. Retaining walls (not to be located in County ROW unless approved via license agreement). Design by P.E. and building permit from Regional Building Department required for walls greater than or equal to 4 feet in height, series of walls, or walls supporting a surcharge. Plan certified by a Colorado Registered P.E., with EPC standard signature blocks for Engineer, Owner and EPC. Engineer's Statement (for standalone GEC Plan): This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this plan. Engineer's Statement (for GEC Plan within Construction Drawing set): These detailed plans and specifications were prepared under my direction and supervision. Said plans and specifications have been prepared according to the criteria established by the County for detailed roadway, drainage, grading and erosion control plans and specifications, and said plans and specifications are in conformity with applicable master drainage plans and master transportation plans. Said plans and specifications meet the purposes for which the particular roadway and drainage facilities are designed and are correct to the best of my knowledge and belief. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparation of these detailed plans and specifications. Engineer of Record Signature Date Owner's Statement (for standalone GEC Plan): I, the owne



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_	Revised: July 2019 added statement to new coversheet	Applicant	DCD.
Ü	El Paso County (standalone GEC Plan): County plan review is provided only for general conformance with County Design Criteria. The County is not responsible for the accuracy and adequacy of the design, dimensions, and/ or elevations which shall be confirmed at the job site. The County through the approval of this document assumes no responsibility for completeness and/ or accuracy of this document. Filed in accordance with the requirements of the El Paso County Land Development Code, Drainage Criteria Manual Volumes 1 and 2, and Engineering Criteria Manual, as amended. In accordance with ECM Section 1.12, these construction documents will be valid for construction for a period of 2 years from the date signed by the El Paso County Engineer. If construction has not started within those 2 years, the plans will need to be resubmitted for approval, including payment of review fees at the Planning and Community Development Director's discretion. County Engineer/ECM Administrator Date	Applicant	N N
2. <u>A</u>	DDITIONAL REPORTS/PERMITS/DOCUMENTS		
а	Soils report / geotechnical investigation as appropriate for grading/utilities/drainage/road construction.	x	
b	Use Agreement/easement between the Owner or Operator and other third party for use of all offsite grading or stormwater control measures, used by the owner or operator but not under their direct control or ownership.	n/p	
C	Floodplain Development Permit	n/a	
d	USACE 404/wetlands permit/mitigation plan	n/a	
е	FEMA CLOMR	n/a	
f	State Engineer's permit/Notice Of Intent to Construct	n/a	
g	Stormwater Management Plan (SWMP)	X	
h	Financial Assurance Estimate (FAE) (signed)	x	
i	Erosion and Stormwater Quality Control Permit (ESQCP) (signed)	x	
j	Pre-Development Site Grading Acknowledgement and Right of Access Form (signed)	x	
k	Conditions of Approval met?	n/a	



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3. 5	TANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS		T CD			
1	Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off-site waters, including wetlands.	х	Υ			
2	Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations from regulations and standards must be requested, and approved, in writing.					
3	A separate Stormwater Management Plan (SMWP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction. Management of the					
4	Once the ESQCP is approved and a "Notice to Proceed" has been issued, the contractor may install the initial stage erosion and sediment control measures as indicated on the approved GEC. A Preconstruction Meeting between the contractor, engineer, and El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting time and place with County staff.					
5	Control measures must be installed prior to commencement of activities that could contribute pollutants to stormwater. control measures for all slopes, channels, ditches, and disturbed land areas shall be installed immediately upon completion of the disturbance.					
6	All temporary sediment and erosion control measures shall be maintained and remain in effective operating condition until permanent soil erosion control measures are implemented and final stabilization is established. All persons engaged in land disturbance activities shall assess the adequacy of control measures at the site and identify if changes to those control measures are needed to ensure the continued effective performance of the control measures. All changes to temporary sediment and erosion control measures must be incorporated into the Stormwater Management Plan.		Υ			
7	Temporary stabilization shall be implemented on disturbed areas and stockpiles where ground disturbing construction activity has permanently ceased or temporarily ceased for longer than 14 days.	x	Υ			
	Final stabilization must be implemented at all applicable construction sites. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either have a uniform vegetative cover with individual plant density of 70 percent of pre-disturbance levels established or equivalent permanent alternative stabilization method is implemented. All temporary sediment and erosion control measures shall be removed upon final stabilization and before permit closure.					
ן פ	All permanent stormwater management facilities shall be installed as designed in the approved plans. Any proposed changes that effect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to implementation.	х	Υ			



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10	Earth disturbances shall be conducted in such a manner so as to effectively minimize accelerated soil erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time. Preexisting vegetation shall be protected and maintained within 50 horizontal feet of a waters of the state unless shown to be infeasible and specifically requested and approved.	х	Y			
11	Compaction of soil must be prevented in areas designated for infiltration control measures or where final stabilization will be achieved by vegetative cover. Areas designated for infiltration control measures shall also be protected from sedimentation during construction until final stabilization is achieved. If compaction prevention is not feasible due to site constraints, all areas designated for infiltration and vegetation control measures must be loosened prior to installation of the control measure(s).					
12	Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off site.					
13	Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to enter State Waters, including any surface or subsurface storm drainage system or facilities. Concrete washouts shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body, creek or stream.					
14	During dewatering operations of uncontaminated ground water may be discharged on site, but shall not leave the site in the form of surface runoff unless an approved State dewatering permit is in place.					
15	Erosion control blanketing or other protective covering shall be used on slopes steeper than 3:1.	х	Y			
16	Contractor shall be responsible for the removal of all wastes from the construction site for disposal in accordance with local and State regulatory requirements. No construction debris, tree slash, building material wastes or unused building materials shall be buried, dumped, or discharged at the site.	x	N			
17	Waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. control measures may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.		N			
18	Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed of immediately.	X	N			
	The owner/developer shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, soil, and sand that may accumulate in roads, storm drains and other drainage conveyance systems and stormwater appurenances as a result of site development.		N			
20	revised notes 16-19 The quantity of materials stored on the project site shall be limited, as much as practical, to that quantity required to perform the work in an orderly sequence. All materials stored on-site shall be stored in a neat, orderly manner, in their original containers, with original manufacturer's labels.	x	Y			
21	No chemical(s) having the potential to be released in stormwater are to be stored or used onsite unless permission for the use of such chemical(s) is granted in writing by the ECM Administrator. In granting approval for the use of such chemical(s), special conditions and monitoring may be required.					



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22	materials from entering State Waters, any surface or subsurface storm drainage system or other facilities.	X	Y	
23	No person shall cause the impediment of stormwater flow in the curb and gutter or ditch except with approved sediment control measures.	х	Y	
24	Owner/developer and their agents shall comply with the "Colorado Water Quality Control Act" (Title 25, Article 8, CRS), and the "Clean Water Act" (33 USC 1344), in addition to the requirements of the Land Development Code, DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the contractor prior to construction (1041, NPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirements and other laws, rules, or regulations of other Federal, State, local, or County agencies, the most restrictive laws, rules, or regulations shall apply.			
25	All construction traffic must enter/exit the site only at approved construction access points.	х	Υ	
26	Prior to construction the permittee shall verify the location of existing utilities.	х	Y	
27	A water source shall be available on site during earthwork operations and shall be utilized as required to minimize dust from earthwork equipment and wind.	X	Y	
28	The soils report for this site has been prepared by and shall be considered a part of these plans.	x	Y	
	At least ten (10) days prior to the anticipated start of construction, for projects that will disturb one (1) acre or more, the owner or operator of construction activity shall submit a permit application for stormwater discharge to the Colorado Department of Public Health and Environment, Water Quality Division. The application contains certification of completion of a stormwater management plan (SWMP), of which this Grading and Erosion Control Plan may be a part. For information or application materials contact: Colorado Department of Public Health and Environment Water Quality Control Division WQCD – Permits 4300 Cherry Creek Drive South Denver, CO 80246-1530 Attn: Permits Unit	X	Y	
4. <u>Ar</u>	plicant Comments:			
а				
b				



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5. <u>C</u>	hecklist Review Certifications:	71ppneant	TCD
а	Engineer of Record: The Grading and Erosion Control Plan was prepared under my direction and supervision and is complete and correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. 1-10-20	x	Y
b	Review Engineer: The Grading and Erosion Control Plan was reviewed and found to meet the checklist requirements except where otherwise noted or allowed by an approved deviation request. Review Engineer Date		

Grading and Erosion Control Plan Checklist

Information regarding Items not applicable (N/A)

Section 1

- j. There is not FEMA Floodplain adjacent to the project and thus cannot be shown on the plans.
- t. Not dedicated asphalt /concrete batch plants are needed/proposed.
- x. This project disturbs less than one acre.
- y. Dewatering is not anticipated as a portion of this project.
- bb. This project disturbs less than one acre and does not require permanent water quality facilities nor area for storm water infiltration or detention. None currently exist on site.
- dd. Retaining walls are not required as a portion of this project.

GEC plan will be part of construction set. Will use ii signature block.

Section 2.

- b. A easement agreement will be provided after the initial review for the storm sewer extension to the channel and accompanying offsite grading.
- c. No floodplain development permit is required.
- d. No wetlands are being disturbed as a portion of this project.
- e. No CLORM is required.
- f. State Engineers permit/Notice to Intent to construct not required.
- k. Currently, there are no conditions of approval.

Post Construction Stormwater Management Applicability Evaluation Form

This form is to be used by the Engineer of Record to evaluate applicable construction activities to determine if the activities are eligible for an exclusion to permanent stormwater quality management requirements. Additionally Part III of the form is used to identify and document which allowable control measure design standard is used for the structure.

Part I. Project Information					
1. Project Name: WWSD Booster 2 Pump Station					
added					
2. El Paso County Project #:TBD PPR2169	3. ESQCP #:)TBD				
4. Project Location: 7010 Metropolitan Street	Project Location in MS4 Permit Area (Y or N):Y				
5. Project Description: Construct Booster Pump Station, tie to existing facilities/tank site <1.0 acre					
If project is located within the EI Paso County MS4 Permit Area, please provide copy of this completed form					
to the Stormwater Quality Coordinator for reporting	g purposes; and save completed form with project file.				

Part II Exclusion Evaluation: Determine if Post-Construction Stormwater Management exclusion criteria

Mark Not Applicable in Part III, Question 2. Questions	Yes	No	Not Applicable	Notes:
A. Is this project a "Pavement Management Site" as defined in Permit Part I E.4.a.i.(A)?			Х	This exclusion applies to "roadways" only. Areas used primarily for parking or access to parking are not included.
B. Is the project "Excluded Roadway Development"?		Χ		
 Does the site add less than 1 acre of paved area per mile? 			Х	
 Does the site add 8.25 feet or less of paved width at any location to the existing roadway? 			X	
C. Does the project increase the width of the existing roadway by less than 2 times the existing width?			Х	For redevelopment of existing roadways, only the area of the existing roadway is excluded from post-construction requirements when the site does not increase the width by two times or more. This exclusion only excludes the original roadway area it does NOT apply to entire project.
D. Is the project considered an aboveground and Underground Utilities activity?	X			Activity can NOT permanently alter the terrain, ground cover or drainage patterns from those present prior to the activity
E. Is the project considered a "Large Lot Single-Family Site"?		X		Must be a single-residential lot or agricultural zoned land, > 2.5 acres per dwelling and total lot impervious area < 10 percent.

the entire site will be regraded.

revised

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This exclusion does not apply since

Questions (cont'd)	Yes	No	Not Applicable	Notes
F. Do Non-Residential or Non-Commercial Infiltration Conditions exist? Post-development surface conditions do not result in concentrated stormwater flow or surface water discharge during an 80 th percentile stormwater runoff event.			Аррисаые	Exclusion does not apply to residential or commercial sites for buildings. A site specific study is required and must show: rainfall and soil conditions; allowable slopes; surface conditions; and ratios of imperviousness area to pervious area.
G. Is the project land disturbance to Undeveloped Land where undeveloped land remains undeveloped following the activity?		Х		Project must be on land with no human made structures such as buildings or pavement.
H. Is the project a Stream Stabilization Site?		Х		Standalone stream stabilization projects are excluded.
I. Is the project a bike or pedestrian trail?		Х		Bike lanes for roadways are not included in this exclusion, but may qualify if part of larger roadway activity is excluded in A, B or C above.
J. Is the project Oil and Gas Exploration?		Х		Activities and facilities associated with oil and gas exploration are excluded.
K. Is the project in a County Growth Area?		Х		Note, El Paso County does not apply this exclusion. All Applicable Construction Activity in El Paso County must comply the Post-Construction Stormwater Management criteria.

Part III. Post Construction (Permanent) Stormwater Control Determination					
Questions	Yes	No			
1. Is project an Applicable Construction Activity?		Х			
2. Do any of the Exclusions (A-K in Part II) apply?		Χ			

If the project is an Applicable Construction Activity and no Exclusions apply then Post-Construction (Permanent) Stormwater Management is required.

Complete the applicable sections of Part IV below and then coordinate signatures for form and place in project file.

If the project is not an Applicable Construction Activity, or Exclusion(s) apply then Post-Construction (Permanent) Stormwater Management is NOT required. Coordinate signatures for form and place in project file.

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Part IV: Onsite PWQ Requirements, Documentation and Considerations			No
1.			Χ
	Measure Requirements identified in permit Part I.E.4.a.iv.		
Α.	Water Quality Capture Volume (WQCV) Standard		Х
В.	Pollutant Removal/80% Total Suspended Solids Removal (TSS)		Χ
C.	Runoff Reduction Standard		Х
D.	Applicable Development Site Draining to a Regional WQCV Control Measure		Х
E.	Applicable Development Site Draining to a Regional WQCV Facility		Х
F.	Constrained Redevelopment Sites Standard		Х
G.	Previous Permit Term Standard		Х
2.	Will any of the project permanent stormwater control measure(s) be maintained by another MS4?		<u>X</u>
	If Yes, you must obtain a structure specific maintenance agreement with the other MS4 prior to advertisement.		
3.	Will any of the project permanent stormwater control measures be maintained by a private entity or quasi-governmental agency (e.g. HOA or Special District, respectively)?		X
	If Yes, a Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement must be recorded with the El Paso County Clerk and Recorder. added		

The ESQCP and subsequent docs (GECP...)

Part V Notes (a	attach an additional sheet if	you need more space)
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This project disturbs less than one acre. The GECP, SWMP, PBMP and other associated documents have been requested by EPC as the project will result in the movement of more than 500 cubic yards of earthen material.

add: "so a PWQ facility is not required" added

Project design is complete to include the project design, construction plans, drainage report, specifications, and maintenance and access agreements as required. The engineering, drainage considerations and information used to complete these documents is complete, true, and accurate to the best of my belief and knowledge.				
Signature and Stamp of Engineer of Record	Date			
Post-Construction Stormwater Management Applicability Form has be design, construction plans, drainage report, specifications, and main as required, have been reviewed for compliance with the Post Const. Management process and MS4 Permit requirements.	tenance and access agreements			
Signature of El Paso County Project Engineer	Date			

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