

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

For Construction Activities At:

**McMahon Lots
McMahon Blvd. NW & Unser Blvd. NW
Albuquerque, New Mexico 87114**

SWPPP Prepared For:

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Estimated Project Dates:

Project Start Date: 12/24/2019

Project Completion Date: 12/31/2023

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES	5
1.1 OPERATOR(S) / SUBCONTRACTOR(S)	5
1.2 STORMWATER TEAM.....	6
SECTION 2: SITE EVALUATION, ASSESSMENT, AND PLANNING.....	7
2.1 PROJECT/SITE INFORMATION	7
2.1.1 Climate and Topography.....	7
2.1.2 Soils and Hydrology	8
2.2 DISCHARGE INFORMATION.....	8
2.2.1 Receiving Waters	8
2.2.2 Impairment Status and Tier Designation	8
2.3 NATURE OF CONSTRUCTION ACTIVITIES	9
2.4 SEQUENCE AND ESTIMATED DATES OF CONSTRUCTION ACTIVITIES	9
2.5 AUTHORIZED NON-STORMWATER DISCHARGES.....	10
2.6 SITE MAPS AND DRAINAGE.....	11
2.6.1 Ariel Project Location	11
2.6.2 Slopes and Drainage Patterns.....	12
2.6.3 Revised Universal Soil Loss Equation (RUSLE)	12
2.6.4 Sediment and Erosion Control Management Plan.....	18
2.6.5 Rational for Selected BMPs.....	18
SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS	19
3.1 ENDANGERED SPECIES PROTECTION.....	19
3.1.1 Eligibility Criterion	19
3.1.2 Supporting Documentation.....	21
3.2 HISTORIC PRESERVATION	22
3.2.1 Eligibility Criterion	22
3.3 SAFE DRINKING WATER ACT UNDERGROUND INJECTION CONTROL REQUIREMENTS.....	24
SECTION 4: EROSION AND SEDIMENT CONTROLS	25
4.1 NATURAL BUFFERS OR EQUIVALENT SEDIMENT CONTROLS	25
4.2 PERIMETER CONTROLS	26
4.2.1 Wattles	26
4.2.2 Earth Berms.....	28
4.2.3 Silt Fence.....	30
4.2.4 Gravel Bags.....	32
4.2.5 Cut Back Curb	34
4.3 SEDIMENT TRACK OUT	36
4.4 STOCKPILED SEDIMENT OR SOILS	38
4.5 MINIMIZE DUST	40
4.6 MINIMIZE STEEP SLOPE DISTURBANCE.....	43
4.7 TOPSOIL	44
4.8 SOIL COMPACTION.....	44
4.9 STORM DRAIN INLET CONTROLS	45
4.10 STORMWATER CONVEYANCE CHANNELS	47
4.11 SEDIMENT BASINS.....	47
4.12 CHEMICAL TREATMENT	48
4.13 DEWATERING PRACTICES.....	48
4.14 OTHER STORMWATER CONTROLS.....	49
4.14.1 NPDES Notification Board.....	49
4.14.2 Temporary Sanilet Facilities	50
4.15 SITE STABILIZATION	51

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

4.15.1	Initiation Timeframe Requirements	51
4.15.2	Initiation Activities.....	52
4.15.3	Completion Deadline	52
4.15.4	Temporarily Ceased Activities.....	53
4.15.5	Post Construction Stabilization	54
SECTION 5: POLLUTION PREVENTION STANDARDS		55
5.1	POTENTIAL SOURCES OF POLLUTION	55
5.2	SPILL PREVENTION AND RESPONSE.....	56
5.3	FUELING AND MAINTENANCE OF EQUIPMENT OR VEHICLES	57
5.4	WASHING OF EQUIPMENT AND VEHICLES	59
5.5	STORAGE, HANDLING, AND DISPOSAL OF BUILDING PRODUCTS, MATERIALS, AND WASTES	60
5.5.1	Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials	60
5.5.2	Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals	61
5.5.3	Hazardous or Toxic Waste	63
5.5.4	Construction and Domestic Waste	65
5.5.5	Sanitary Waste.....	67
5.6	WASHING OF APPLICATORS AND CONTAINERS USED FOR PAINT, CONCRETE OR OTHER MATERIALS	68
5.7	FERTILIZERS.....	69
5.8	OTHER POLLUTION PREVENTION PRACTICES.....	69
SECTION 6: INSPECTION, MAINTENANCE, AND CORRECTIVE ACTION		70
6.1	INSPECTION PERSONNEL AND PROCEDURES	70
6.1.1	General Site Awareness.....	70
6.1.2	Specific Inspection Frequency.....	70
6.1.3	Reduction in Inspection Frequency.....	70
6.1.4	Personnel Responsible for Inspections.....	71
6.1.5	Inspection Report Forms	71
6.2	CORRECTIVE ACTIONS	72
6.2.1	Corrective Action Log	73
6.2.2	Personnel Responsible for Corrective Actions.....	74
6.3	DELEGATION OF AUTHORITY	74
SECTION 7: TRAINING.....		75
7.1	DOCUMENTATION FOR COMPLETION OF TRAINING.....	75
SECTION 8: CERTIFICATION AND NOTIFICATION.....		76

Appendices

Tab 1	Stormwater Pollution Prevention Plan Site Map
Tab 2	Delegation of Authority Letter, Subcontractor Certification, Inspector Qualifications
Tab 3	Notice of Intent
Tab 4	RUSLE 2 Calculation, Soil Map and Report, Documentation for Arid/Semi Arid Climate
Tab 5	Water Quality Information and Tier Determination
Tab 6	Endangered Species and Cultural Properties
Tab 7	Housekeeping and Training Documents
Tab 8	BMP Product Details
Tab 9	2017 NPDES CGP
Tab 10	Completed Inspection and Training Reports

STORM WATER POLLUTION PREVENTION PLAN

McMahon Lots

PREFACE

The United States Environmental Protection Agency (EPA) has issued a final 2017 Construction General Permit (CGP) that covers stormwater discharges from construction sites.

The 2017 National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activity (Appendix D) includes the following requirements:

- Conduct critical habitat and threatened/endangered species research
- Conduct historic/cultural property research
- Develop and implement a SWPPP in accordance with good engineering practices
- Submit a Notice of Intent (NOI)
- Install and maintain erosion and stormwater controls
- Perform and document storm water inspections during construction and site stabilization
- Amend the SWPPP as necessary
- Submit a Notice of Termination (NOT) following project completion and final stabilization of disturbed areas.

Authorization to discharge storm water is required under the Permit for both large and small construction projects disturbing one (1) acre or more or less than one (1) acre but part of a larger common plan of development that will ultimately disturb more than one (1) acre.

All parties that meet the definition of Operator must be permitted. Each Permittee is not required to develop and implement a separate SWPPP Plan. It is required that there be at least one SWPPP Plan for a site that incorporates the required elements for all Operators.

The New Mexico (Region 6) permit number is NMR100000. This Plan, which has been developed for McMahon Lots, describes the nature and sequencing of construction activities, potential sources of pollution, and identifies the Best Management Practices (BMPs) to minimize the potential for erosion and stormwater pollution. This Plan was developed in accordance with the provisions of the Clean Water Act (33 U.S.C. § § 1251 et seq. as amended by the Water Quality Act of 1987, P.L. 100-4), and the regulations established by the U.S. Environmental Protection Agency (EPA) for the National Pollutant Discharge Elimination System (NPDES) General Permits for Storm Water Discharges from Construction Activities.

SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Operator(s) / Subcontractor(s)

OWNER/ OPERATOR:

**JMD-McMahon, LLC.
2325 San Pedro NE Suite 2A
Albuquerque, New Mexico 87110
Doug Peterson, President
505-884-3578
doug@petersonproperties.net**

24-HOUR EMERGENCY CONTACT

**JMD-McMahon
Doug Peterson
505-884-3578**

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

1.2 Stormwater Team

The Stormwater Team will be comprised of personnel who are responsible for overseeing the development, implementation, maintenance, and revision of this SWPPP and for the compliance requirements of the 2017 Construction General Permit. Each member of the Stormwater Team must have ready access to either an electronic or paper copy of applicable portions of the 2017 CGP and this SWPPP. The Stormwater Team Members are familiar with the management and operations of McMahon Lots.

Table 1.2

NAME	TITLE	RESPONSIBILITY
JMD-McMahon, LLC.	President	Owner • Certifies SWPPP • Submits NOI and NOT • Certifies Inspection Reports • Certifies SWPPP Modifications
		Operator • Certifies SWPPP • Submits NOI and NOT • Certifies Inspection Reports • Confirms Corrective Actions • Certifies Corrective Action Reports • Certifies SWPPP Modifications
Inspections Plus	SWPPP Development	SWPPP Development Team
Inspections Plus	Site Inspector	Site Inspections and NPDES Compliance Team
Inspections Plus	Foreman	Implementation Team
Inspections Plus	Foreman	Maintenance and Corrections Team

SECTION 2: SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 Project/Site Information

The project site is located at McMahon Blvd. NW & Unser Blvd. NW
Albuquerque, New Mexico, 87114
Bernalillo County

GPS Location: 35.2116 N, 106.6973 W

Google Earth was used to determine latitude/longitude.

This project is not located on Indian country lands or property of religious or cultural significance belonging to N/A.

The earth disturbing activities of McMahon Lots are not in response to a public emergency.

Operators of this project are not applying for permit coverage as a “Federal Operator” as defined in Appendix A of the 2017 Construction general Permit (CGP)

2.1.1 Climate and Topography

Site specific meteorology at McMahon Lots is influenced by its proximity to topographic features such as mountains, canyons, and arroyos. These features influence the local wind patterns across the site. Canyons and arroyos tend to channel or funnel wind, whereas mountains create upslope/downslope diurnal patterns to wind flows. Winds tend to blow towards the mountains or up the Rio Grande Valley during the day. Nocturnal winds tend to blow down the mountains toward the Rio Grande Valley. These topographically-induced wind flows can be enhanced or negated by weather systems that move across the southwestern U.S. The strongest winds occur in the spring when the monthly wind speeds average 10.3 mph. wind gusts commonly reach 50 mph.

Large diurnal temperature ranges, summer monsoons, and frequent drying winds are characteristic of the regional climate in New Mexico. Temperatures are typical of mid latitude dry continental climates with summer high temperatures of approximately 90°F and winter high temperatures of approximately 50°F. Daily low temperatures range from approximately 60°F in the summer to approximately 20°F in the winter. The dry continental climate also produces low average humidity in the late spring and summer prior to the onset of the monsoon season. Daytime relative humidity can be between 10 and 20 percent in the spring and early summer, with an average humidity near 30 percent. Winter relative humidity averages near 50 percent.

2.1.2 Soils and Hydrology

The prominent soil at McMahon Lots is bluepoint loamy fine sand. This soil is in the somewhat excessively drained drainage class and is in the A hydrologic soil group. This soil has a high infiltration rate. This soil has a low potential for runoff. Slopes average 5.0 percent. Native vegetation is primarily grassland with an appreciable amount of shrubs. The possibility of water erosion for this soil is low.

2.2 Discharge Information

The Operators of McMahon Lots understand the any discharges not expressly authorized under the CGP are not covered by the CGP or the permit shield provision of the CWA Section 402(k) and they cannot become authorized or shielded by disclosure to EPA, state, or local authorities via the NOI to be covered by the permit or by any other means (e.g., in the SWPPP or during an inspection). If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.2.1 and 1.2.2 will be discharged, they must either be eliminated or covered under another NPDES permit.

2.2.1 Receiving Waters

Name of the first surface water that receives stormwater directly from McMahon Lots and or the MS4:

1. Rio Grande is 4.0 miles from the site and is not a discharge point.

It is important for the reviewer to note if the waters listed a discharge points. If none of the waters are discharge points, the water does not receive direct runoff from the site. The listing is provided to demonstrate the Operator's knowledge of the surface waters in proximity of the project site.

2.2.2 Impairment Status and Tier Designation

Table 2.2.2

Water	Is this surface water listed as "impaired"	What pollutant(s) are causing the impairment?	Is this a Tier 2 water?	Has a TMDL been completed?
1	Yes	E. coli, PCBs in Fish Tissue, and Dissolved Oxygen	Yes	Yes

The above waters are impaired with PCBs and demolition of a 10,000 sq. ft. or more structure built or renovated before 1980 is not applicable to this project.

2.3 *Nature of Construction Activities*

McMahon Lots will consist of the development of access, infrastructure, utilities, permanent drainage, and permanent stabilization for the construction of commercial building lots and parking areas. McMahon Lots is a 12.25 gross acre site with a disturbed acreage of 2.5. Site hours will consist of Monday through Friday 7am to 5pm. Construction Support Activities will include a staging area and material storage and are included in within the perimeter controls of the site.

2.4 *Sequence and Estimated Dates of Construction Activities*

Soil Disturbing Activities will include but are not necessarily limited to: Clearing and grubbing, rough grading, installation of perimeter controls and other erosion and sediment management control measures, construction of infrastructure, installation of utilities, permanent drainage, and construction of pavement sections (if required) for McMahon Lots. The sequence of the following activities will be filled out by the Stormwater Team on Site as they occur.

Table 2.4

Construction Activity	Date Initiated	Date Completed
Installation of BMPs- sediment transport barriers, entrances, washouts, posting boards		
Clearing and Grubbing		
Rough Grading		
Infrastructure		
Concrete (as required)		
Final Grading		
Paving		
Site Cleanup		
Temporary Stabilization (MUST Commence immediately once it is known that construction will cease for 14 days or more)		

2.5 Authorized Non-Stormwater Discharges

The following table outlines the authorized non-storm water discharges, provided that they are in compliance with Part 1.2.2 of the 2017 CGP, and whether they are expected on the project:

Table 2.5

Non-Stormwater Discharge	Expected on Project
Discharges from Firefighting Activities	No
Fire Hydrant Flushing	No
Vehicle Wash Water Without Detergent	Yes
Water used for Dust Control	Yes
Potable water including uncontaminated water line flushing	No
Pavement wash waters without detergents (e.g. waters used in sweeping activities) providing spills or leaks of toxic or hazardous materials have not occurred or removed if an occurrence has stopped.	Yes
Uncontaminated air conditioning or compressor condensate	No
Re-vegetation or landscape irrigation	No
Foundation and Footing Drains *applies only if expected on project	No
Construction Dewatering	No
External building washdown used without soaps, solvents or detergents and external surfaces do not contain hazardous substances (e.g. paint, chalk).	Yes

2.6 Site Maps and Drainage

2.6.1 Ariel Project Location



2.6.2 Slopes and Drainage Patterns

Slopes:

Pre Construction: Existing Slopes primarily fall from South to North at 5%

Post Construction: Final Slope Percentages will mirror existing slopes near 5%, falling primarily South to North towards drainage basin.

Drainage Patterns:

Site will drain South to North

2.6.3 Revised Universal Soil Loss Equation (RUSLE)

$$A = R \times K \times LS \times C \times P$$

R = Rainfall Runoff Erosivity Factor (R-Factor Map, see figure 2.6.3a)

K = Soil Erodibility Factor (NRCS Web Soil Survey)

LS = Slope Length Factor (LS Factor for Construction Sites, see table 2.6.3b)

C = Cover Management Factor (See Table 2.6.3c)

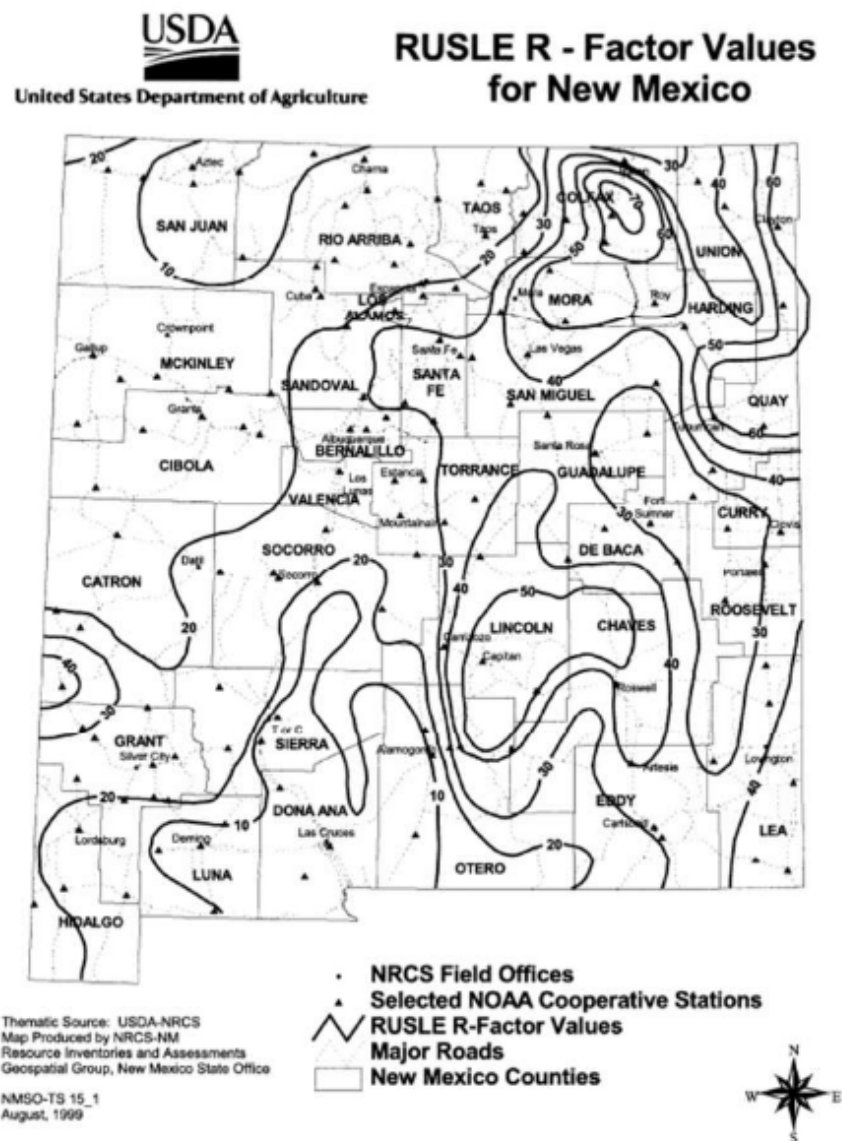
P = Erosion Control Practice Factor

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
McMahon Lots

Figure 2.6.3a RUSLE R- Factor Values for New Mexico

USDA-NRCS, NM

Agronomy Technical Note 28, Page 8



Source: USDA-NRCS, NM Agronomy Technical Note 28

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

Table 2.6.3b LS Factors for Construction Sites

USDA-NRCS, NM

Agronomy Technical Note 28, Page 19

Table 4 - Values for Disturbed Site Topographic Factor, LS, for high ratio of rill to inter-rill erosion.³

Slope (%)	Horizontal slope length (ft)															
	<3	4	9	12	15	25	50	75	100	150	200	250	300	400	600	1000
0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
0.5	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12
1.0	0.09	0.09	0.09	0.09	0.09	0.10	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.24	0.26
2.0	0.13	0.13	0.13	0.13	0.13	0.16	0.21	0.25	0.28	0.33	0.37	0.40	0.43	0.48	0.56	0.63
3.0	0.17	0.17	0.17	0.17	0.17	0.21	0.30	0.36	0.41	0.50	0.57	0.64	0.69	0.80	0.96	1.10
4.0	0.20	0.20	0.20	0.20	0.20	0.26	0.38	0.47	0.55	0.68	0.79	0.89	0.98	1.14	1.42	1.65
5.0	0.23	0.23	0.23	0.23	0.23	0.31	0.46	0.58	0.68	0.86	1.02	1.16	1.28	1.51	1.91	2.25
6.0	0.26	0.26	0.26	0.26	0.26	0.36	0.54	0.69	0.82	1.05	1.25	1.43	1.60	1.90	2.43	2.89
8.0	0.32	0.32	0.32	0.32	0.32	0.45	0.70	0.91	1.10	1.43	1.72	1.99	2.24	2.70	3.52	4.24
10.0	0.35	0.37	0.38	0.39	0.40	0.57	0.91	1.20	1.46	1.92	2.34	2.72	3.09	3.75	4.95	6.03
12.0	0.36	0.41	0.45	0.47	0.49	0.71	1.15	1.54	1.88	2.51	3.07	3.60	4.09	5.01	6.67	8.17
14.0	0.38	0.45	0.51	0.55	0.58	0.85	1.40	1.87	2.31	3.09	3.81	4.48	5.11	6.30	8.45	10.40
16.0	0.39	0.49	0.56	0.62	0.67	0.98	1.64	2.21	2.73	3.68	4.56	5.37	6.15	7.60	10.26	12.69
20.0	0.41	0.66	0.67	0.76	0.84	1.24	2.10	2.88	3.67	4.86	6.04	7.16	8.23	10.24	13.94	17.35
25.0	0.45	0.64	0.80	0.93	1.04	1.56	2.67	3.67	4.59	6.30	7.88	9.38	10.81	13.53	18.57	23.24
30.0	0.48	0.72	0.91	1.08	1.24	1.86	3.22	4.44	5.58	7.70	9.67	11.55	13.35	16.77	23.14	29.07
40.0	0.53	0.85	1.13	1.37	1.59	2.41	4.24	5.89	7.44	10.35	13.07	15.67	18.17	22.95	31.89	40.29
50.0	0.58	0.97	1.31	1.62	1.91	2.91	5.16	7.20	9.13	12.75	16.16	19.42	22.57	28.60	39.95	50.63
60.0	0.63	1.07	1.47	1.84	2.19	3.36	5.97	8.37	10.63	14.89	18.92	22.78	26.51	33.67	47.18	59.93

³ Such as for freshly prepared construction and other highly disturbed soil conditions with little or no cover (not applicable to thawing soil).

Source: USDA-NRCS, NM Agronomy Technical Note 28

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
McMahon Lots

Table 2.6.3c Cover Management Factors and Support Practice Factors

Type of Cover		Factor C	Percent ¹
None (fallow ground)		1.0	0.0
Temporary Seedings (90 percent stand):			
Ryegrass (perennial type)		0.05	95
Ryegrass (annuals)		0.1	90
Small grain		0.05	95
Millet or sudan grass		0.05	95
Field brome grass		0.03	97
Permanent Seedings (90 percent stand):		0.01	99
Sod (laid immediately):		0.01	99
	Application Tons Per Acre	Rate	
Mulch:			
Hay	.50	0.25	75
Hay	1.00	0.13	87
Hay	1.50	0.07	93
Hay	2.00	0.02	98
Small grain straw	2.00	0.02	98
Wood chips	6.00	0.06	94
Wood cellulose	1.75	0.10	90

¹ Percent soil loss reduction as compacted/with fallow ground.

Source: USDA-NRCS, Connecticut Technical Guide.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

Erosion Control Treatment	C Factor	P Factor
Bare Soil	1.00	1.00
Disked Bare Soil	1.00	0.90
Sediment Basin/Trap	1.00	0.50
Straw Bale Barrier	1.00	0.80
Silt Fence Barrier	1.00	0.50
Asphalt/Concrete Pavement	0.10	1.00
Competant Gravel Layer	0.05	1.00
Established Native Grass (100% coverage)	0.03	1.00
Sod Grass	0.01	1.00
Agricultural Crop	0.45	1.00
Erosion Control Blankets	0.002 to 0.003	1.00
Turf Reinforcement Mats	0.002 to 0.003	1.00

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

RUSLE Calculation Before Construction

RUSLE	
$A = R * K * LS * C * P$	
A= Average Soil Loss (tons/acre/year)	5.13
R = Rainfall –Runoff Erosivity Factor	15
K = Soil Erodibility Factor	0.20
LS = Slope-Length Factor	1.71
C = Cover Management Factor	1
P = Erosion Control Practice Factor	1

RUSLE Calculation During Construction

RUSLE	
$A = R * K * LS * C * P$	
A= Average Soil Loss (tons/acre/year)	2.56
R = Rainfall –Runoff Erosivity Factor	15
K = Soil Erodibility Factor	0.20
LS = Slope-Length Factor	1.71
C = Cover Management Factor	1
P = Erosion Control Practice Factor	0.5

RUSLE Calculation After Construction

RUSLE	
$A = R * K * LS * C * P$	
A= Average Soil Loss (tons/acre/year)	0.513
R = Rainfall –Runoff Erosivity Factor	15
K = Soil Erodibility Factor	0.20
LS = Slope-Length Factor	1.71
C = Cover Management Factor	0.1
P = Erosion Control Practice Factor	1

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The temporary sediment and erosion control plan is located at the front of the binder.

Table 2.6.5

[illegible]

SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

3.1 *Endangered Species Protection*

3.1.1 Eligibility Criterion

This project meets the Endangered Species Act Eligibility Criterion "A". Measures were taken to determine the potential effects of potential storm water runoff and construction related activities on federally listed endangered or threatened species as required by Addendum D of the Construction General Permit.

For reference purposes, the eligibility criteria listed in CGP Appendix D are:

- **Criterion A:** No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.
- **Criterion B:** The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

- **Criterion C:** Federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area," and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.
- **Criterion D:** Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.
- **Criterion E:** Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded. The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:
 1. a biological opinion that concludes that the action in question (considering the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or
 2. written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally-designated habitat.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

- **Criterion F:** Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally-designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

3.1.2 Supporting Documentation

Tab 6 of this binder includes the documentation required to support the selected criterion. The requirement for the selected eligibility criterion from CGP Appendix D is:

For Criterion A:

No federally listed threatened/endangered species or habitats are not likely to occur within the project action area.

☒ Specific communication with staff of the U.S. Fish & Wildlife Service or National Marine Fisheries Service. INSPECTIONS PLUS contacted USFWS IPAC and Critical Habitat Mapper to assist with this determination.

☒ Publicly available species list. Documentation is found in the Protected Entities Section of this Binder.

☒ Other source: <http://criticalhabitat.fws.gov/crithab/>, a copy of the map for the area is included in the Protected Entities Section of this Binder.

3.2 *Historic Preservation*

Appendix E of the Permit lists specific requirements to determine the effect subsurface stormwater controls on a historic property. This “screening process” is intended to determine if installation of stormwater controls on your site has the potential to cause effects to historic properties and whether or not you need to contact your SHPO, THPO, or other tribal representative for further information. If there are no earth disturbing stormwater controls on the project, the reader is directed to review the listing of sites in Bernalillo County placed in the Historic Register provided in Tab 6 of this Binder.

3.2.1 Eligibility Criterion

Step 1:

Are any of the following stormwater controls installed at the project site?

Table 3.2.1

Stormwater Control	Installed at Project Site
Dike	No
Berm	No
Catch Basin	No
Pond	Yes
Ditch	No
Trench	No
Culvert	No
Channel	No
Perimeter Drain	No
Swale	No
Other type of Ground Disturbing Stormwater Control	Yes

*If none of the controls in the list are installed, the screening process is complete.

Step 2:

Have prior professional cultural resource surveys or other evaluations determined that historic properties do not exist, or have prior disturbances precluded the existence of historic properties?

Yes

*If yes, the screening process is complete. If no, continue to Step 3.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

If, during excavation or other construction activities, any previously unidentified or unanticipated historical, archaeological, and/or cultural resources are discovered, all activities that may damage or alter such resources shall be temporarily suspended.

Resources covered by this paragraph include but are not limited to:

- Any human skeletal remains or burials
- Artifacts
- Shell, Midden, Bone Charcoal, or other deposits
- Rock or Coral Alignments, Pavings, Walls or other constructed features
- Any other indication of Agricultural or Human activities

Upon such discovery, the Operator shall immediately cease activity and contact the appropriate authorities so that a determination may be made as to their significance and what, if any, special disposition of the finds should be made. The Operator shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

3.3 *Safe Drinking Water Act Underground Injection Control Requirements*

Per Part 7.2.9.c of the CGP, if you are using any of the following controls at your site, you must document any contact you have had with the applicable state agency or EPA regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR 144-147. Such controls would generally be considered Class V UIC wells.

Will you be installing any of the following controls?

No Infiltration Trenches (if stormwater is directed to any bored, drilled,, driven shaft or dug hole that is deeper than it's widest surface dimension, or has a subsurface fluid distribution system)

No Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flows

No Drywells, seepage pits, or improved sinkholes ((if stormwater is directed to any bored, drilled,, driven shaft or dug hole that is deeper than it's widest surface dimension, or has a subsurface fluid distribution system)

SECTION 4: EROSION AND SEDIMENT CONTROLS

4.1 *Natural Buffers or Equivalent Sediment Controls*

CGP Part 2.2.1 requires that sites provide and maintain natural buffers and/or equivalent erosion and sediment controls for any discharge to waters of the U.S. that are located within 50 feet of the site's earth disturbances. If the water of the U.S. is not located within 50 feet of earth disturbing activities, Part 2.2.1 does not apply.

Are there waters of the U.S. within 50 feet of earth disturbing activities at your site: No

This site will have an exception to the buffer requirement

X There is no stormwater discharge to waters of the U.S. between the disturbed portions of this site and any water of the U.S. within 50 feet of the project perimeter.

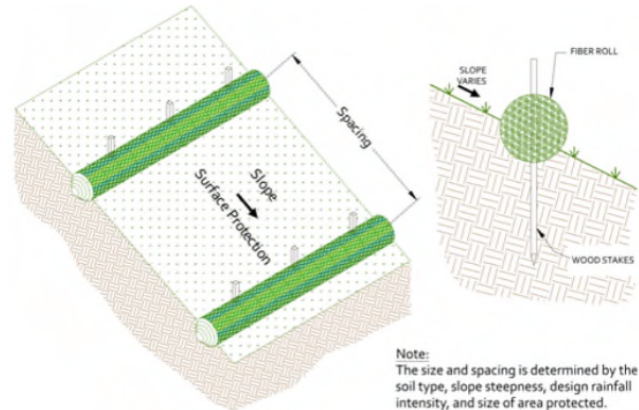
The compliance alternative for this site is:

X: Surface waters ***are not*** within 50 feet of the project's earth disturbances. Additional engineering beyond the RUSLE calculations are not required.

The Operator will implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

4.2 *Perimeter Controls*

4.2.1 Wattles



DESCRIPTION AND PURPOSE

Wattles are temporary, structural BMPs consisting of coconut husk, mulch, compost or similar material packed and placed into rolls designed to capture sediment and reduce flow velocity.

OBJECTIVES:

- Sediment Control
- Runoff Control
- Erosion Control

TARGETED POLLUTANTS

- Sediment
- Hydrocarbons/Petroleum Products

APPLICATIONS

- Sediment Capture
- Storm Inlet Protection
- Slope Length Reduction
- Perimeter Containment
- Stockpile Containment
- Velocity dissipation

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

LIMITATIONS

- Wattles are not effective unless entrenched, and are prone to migration when not properly staked and entrenched.
- Wattles, due to their relatively small size, possess a limited capture area.
- Wattles are difficult to move when sediment laden or are saturated.
- Wattles should not be used on slopes prone to creep, slumping, or landslide.

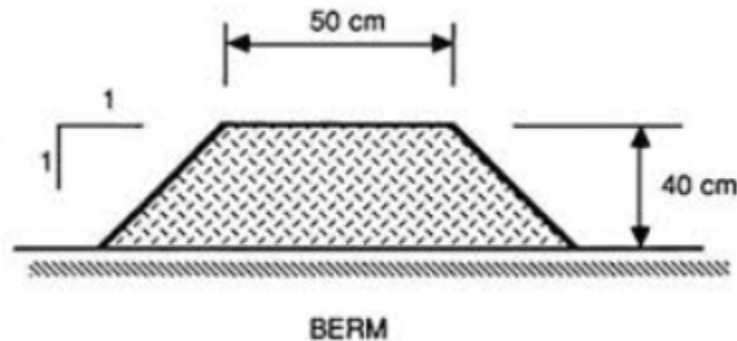
INSPECTION

- Inspect according to regulatory timetables
- Proper trenching beneath wattle
- Adjoining rolls should overlap (as opposed to meeting the adjacent roll end to end)
- When installed on slopes, wattles must be installed on the contours.

MAINTENANCE

- Repair or replace roll that experiences splits, tears, unraveling, clogging, or slumping within 24 hours.
- Remove accumulation of soil behind roll beyond levels allowed by local regulations and manufacturers specifications within 24 hours.
- Ensure stakes are spaced and driven correctly, according to regulations and manufacturer specifications.

4.2.2 Earth Berms



DESCRIPTION AND PURPOSE

Earth Berms are temporary or permanent, structural BMPs that are utilized to intercept and divert run on/off site water to prevent it from entering or leaving a site.

OBJECTIVES

- Runoff Control
- Erosion Control
- Post Construction Management

TARGETED POLLUTANTS

- Sediment

APPLICATIONS

- Divert run on water away from disturbed areas
- Above existing disturbed slopes and cut or fill slopes
- At or near project perimeter

LIMITATIONS

- Freezing weather
- Topographic features

IMPLIMENTATION CONSIDERATIONS

- The berm should be sufficient in size and shape to prevent run on/off from the site.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

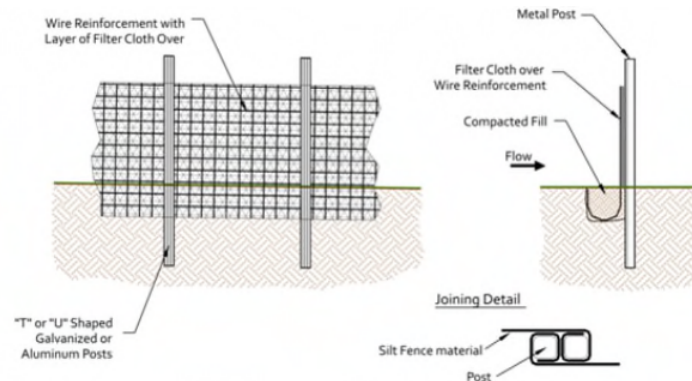
INSPECTION

- Inspect according to regulatory timetables
- Correct location and dimensions
- Accumulation of sediment
- Evidence of runoff over-topping the berm

MAINTENANCE

- Repair erosion damage (rills, gullies) when encountered.
- Remove accumulation of sediment.
- Remove debris and trash.

4.2.3 Silt Fence



DESCRIPTION AND PURPOSE

Silt fence is a temporary, structural BMPs consisting of filter fabric stretched across stakes and entrenched.

OBJECTIVES:

- Sediment Control
- Runoff Control

TARGETED POLLUTANTS

- Sediment
- Trash and Debris

APPLICATIONS

- Perimeter Control
- Small Sediment Containment System

LIMITATIONS

- Silt fence should not be installed where conditions preclude uniform entrenchment of filter fabric or installation posts. (e.g. across a paved or rocky area)
- Silt fence may not be used in an area of concentrated flow.
- Silt fence is degraded by ultraviolet (UV) light and wind.
- Silt fence is designed to accept a certain amount of flow from a drainage area per linear foot of silt fence.
- Not for use in areas where accumulation of water may cause flooding.
- Not for use on steep slopes.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

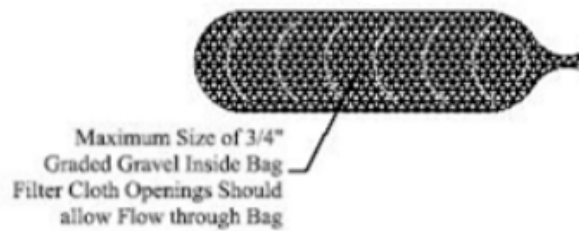
INSPECTION

- Inspect according to regulatory timetables
- Placement according to the SWPPP Plan, with field adjustments as needed.
- Sagging, frayed, torn, or otherwise worn or damaged fabric
- Proper stake materials and filter fabric.
- Damaged or broken reinforcement and staking materials
- Correct stake spacing, every 10 feet.
- Sediment build-up
- Undercutting/end runs
- Missing or removed silt fence
- Ensure proper entrenchment, applying physical pressure for verification.

MAINTENANCE

- Repair end runs and undercutting within 24 hours.
- Repair or replace worn, torn, or sagging fabric within 24 hours.
- Remove sediment deposits that accumulate to 1/3 height of the fabric within 24 hours.
- Check for reinforcement and staking materials for structural integrity and replace when necessary.

4.2.4 Gravel Bags



DESCRIPTION AND PURPOSE

Gravel Bags are a temporary, structural BMP that utilizes bags filled with gravel to create a small sediment trap upstream of a storm drain inlet or culvert where water can pool and let sediment fall out of suspension before clean water tops the gravel bag and enters the drain.

OBJECTIVES:

- Runoff Control
- Sediment Control

TARGETED POLLUTANTS

- Sediment
- Trash and Debris

APPLICATIONS

- Culvert Inlets
- Drop Inlets

LIMITATIONS

- Pooling situation created by the gravel bag design may encroach upon roadways or parking structures.

INSPECTION

- Inspect according to regulatory timetables
- Displacement of gravel bags.
- Ruptured or damaged bags
- Ensure contact between the bags and the material underneath/beside them.
- Sediment accumulation around bags
- Check for bypass of measure

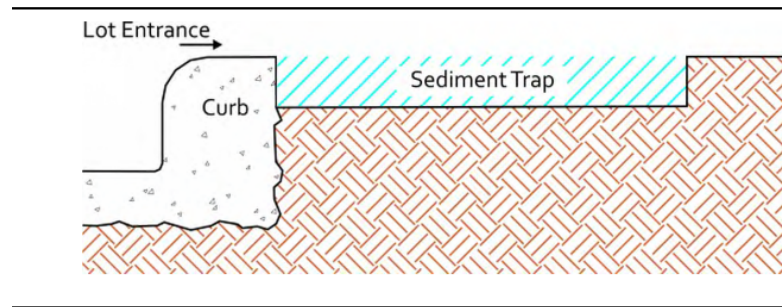
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[McMahon Lots](#)

MAINTENANCE

- Remove accumulated sediment and debris from around the gravel bags within 24 hours.
- Replace bags that have shifted and are no longer in contact with the street or curb within 24 hours.
- Repair or replace bags that become damaged within 24 hours.

4.2.5 Cut Back Curb



DESCRIPTION AND PURPOSE

Cut Back Curbs are temporary, structural, BMPs that create a place for water to pond at the back of the curb, while still allowing access to the site.

OBJECTIVE:

- Sediment Control

TARGETED POLLUTANTS

- Sediment

APPLICATIONS

- Along the curb of lots
- At site perimeters
- Linear road projects

LIMITATIONS

- When installed improperly, cut back curbs can undermine and cause the collapse of adjacent roadways and sidewalks
- Not designed to handle large amounts of water.

INSPECTION

- Inspect according to regulatory timetables
- Proper Depth of Cut Back
- Erosion of soil under roadways, curbs and sidewalks adjacent to cut-back curb
- Accumulated sediment behind cut back curb
- Soil escaping the cut back ponding area
- Accumulated trash and debris

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

MAINTENANCE

- Maintain proper depth of cut back
- Remove accumulated sediment when it reaches $\frac{1}{3}$ to $\frac{1}{2}$ the depth of the cut back within 24 hours.
- Keep cut back curb areas free of trash and debris

4.3 *Sediment Track Out*



OBJECTIVE:

A project site's access points experience concentrated and loose sediment. The EPA suggests this directive as a minimum performance guideline, "At a minimum, you must provide for maintenance that meets the following requirement in CGP Part 2..2.4.d: Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or water of the U.S."

The entrance may utilize several types of controls to capture sediment and prevent its movement offsite. Specifically, rumble mats or round stone approximately 4" in diameter have proven as effective dry approaches. Wash stations are effective wet solutions although the expense and maintenance of this method is significantly greater than a dry method.

INSTALLATION:

Stabilize all entrances to a site before construction and site disturbance begin. The stabilized entrances need to be large enough to allow the largest construction vehicle that will enter the site to fit through with room to spare. If many vehicles are expected to use an entrance in any one day, make the site entrance wide enough for two vehicles to pass at the same time with room on either side of each vehicle, and long enough to allow two full tire rotations.

If a site entrance leads to a paved road, make the end of the entrance flared so that long vehicles do not leave the stabilized area when they turn onto or off the paved roadway. If a construction site entrance crosses a stream, swale, or other depression, provide a bridge or culvert to prevent erosion from unprotected banks.

Make sure stone and gravel used to stabilize the construction site entrance are large enough so that they are not carried offsite by vehicles. Avoid sharp-edged stone to reduce

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

the possibility of puncturing tires. Install stone or gravel at a depth of at least 6 inches for the entire length and width of the stabilized construction entrance.

INSPECTION:

Common items to consider when inspecting a rock construction entrance is to determine if the rock is the appropriate size, if the rock is compacted due to frequent use and no longer effective, and if the rock has been placed over a filter cloth or blanket material. Similarly, it is important to determine if the entrance is of sufficient length and width and allow for adequate wheel rotation. Ineffective installation and maintenance of a construction entrance or track – out pad may lead to increased offsite sediment tracking and pollutant discharge.

MAINTENANCE

- Remove accumulated sediment.
- Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or water of the U.S.

4.4 *Stockpiled Sediment or Soils*



OBJECTIVE:

Stockpiles of soil, Portland Cement Concrete (PCC), Asphalt Concrete (AC), Hot Mix Asphalt Cement (HMAC) and rubble are potential storm water pollutants if not properly managed. Eliminate stockpiles whenever possible. Elimination is the most certain method available to prevent sediment discharge. Secondary protection may include perimeter control or covering with blankets to minimize the stockpile's exposure to stormwater and non-stormwater discharge.

The following are requirements that apply to all stockpiles, regardless of season or material, if elimination is not possible:

Locate stockpiles away from drainage courses, drain inlets or concentrated flows of stormwater.

For wind erosion control, apply water or other dust palliative to stockpiles.

Small stockpiles may be covered as an alternative.

Place bagged materials on pallets and cover them with a tarp or similar material.

Soil Stockpiles

The temporary perimeter sediment barriers (e.g. wattles, dikes, silt fence) will contain any soil stockpiles. The description of the structural practice employed is included in the Perimeter Control section of this document. The design, installation and maintenance requirements are included in the description. A soil stabilization measure may be used in lieu of a perimeter control when active use of the stockpile ceases for short periods. Year-round, active soil stockpiles are to be protected with temporary linear sediment barriers prior to the onset of rain.

Paving Material & Waste Stockpiles

Stockpiles of PCC, AC/HMAC, aggregate base course, aggregate sub grade materials or rubbles are to be managed as follows:

Cover non - active stockpiles or protect them with temporary perimeter sediment barriers prior to the onset of rain;

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

Year – round, protect active stockpiles with temporary linear sediment barriers prior to the onset of rain.

Asphalt Stockpiles

During the non-rainy season, place non-active stockpiles of asphalt on plastic or a comparable material and cover the stockpile prior to the onset of rain.

During the rainy season, place asphalt stockpiles on plastic and always cover them. Year-round, active asphalt stockpiles are to be placed on plastic and covered prior to rain.

INSPECTION AND MAINTENANCE

Inspect stockpiles as part of the routine storm water inspection. The Owner and/or Operator may repair or replace perimeter controls and covers to ensure proper function.

4.5 *Minimize Dust*



OBJECTIVE:

Dust control BMPs reduce surface activities and air movement that causes dust to be generated from disturbed soil surfaces. Construction sites can generate large areas of soil disturbance and open space for wind to pick up dust particles. Limited research at construction sites has established an average dust emission rate of 1.2 tons/acre/month for active construction (WA Dept. of Ecology, 1992).

Airborne particles pose a dual threat to the environment and human health. First, dust can be carried offsite, thereby increasing soil loss from the construction area and increasing the likelihood of sedimentation and water pollution. Second, blowing dust particles can contribute to respiratory health problems and create an inhospitable working environment.

INSTALLATION:

Dust control measures are applicable to any construction site where there is the potential for air and water pollution from dust traveling across the landscape or through the air. Dust control measures are especially important in arid or semiarid regions, where soil can become extremely dry and vulnerable to transport by high winds.

Implement dust control measures on all construction sites where there will be major soil disturbances or heavy equipment construction activity such as clearing, excavation, demolition, or excessive vehicle traffic. Earthmoving activities are the major source of dust from construction sites, but traffic and general disturbances can also be major contributors (WA Dept. of Ecology, 1992). The dust control measures that are implemented at a site will depend on the topography and land cover of the site and its soil characteristics and expected rainfall.

DUST CONTROL METHODS

When designing a dust control plan for a site, the amount of soil exposed will dictate the quantity of dust generation and transport. Therefore, construction sequencing and disturbing only small areas at a time can greatly reduce problematic dust from a site. If land must be disturbed, consider using temporary stabilization measures before

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

disturbance. Several methods exist which can be used to control dust from a site but not all will be applicable to a site.

Consider site-specific assessments and weather conditions to determine which method may be most effective. The following lists some control measures and design criteria:

Sprinkling/Irrigation

Sprinkling the ground surface with water until it is moist is an effective dust control method for haul roads and other traffic routes (Smolen et al., 1988). This practice can be applied to almost any site.

Vegetative Cover

In areas not expected to handle vehicle traffic, vegetative stabilization of disturbed soil is often desirable. Vegetative cover provides coverage to surface soils and slows wind velocity at the ground surface, thus reducing the potential for dust to become airborne.

Mulch

Mulching can be a quick and effective means of dust control for a recently disturbed area and may reduce wind erosion by up to 80 percent.

Wind Breaks

Wind breaks are barriers (either natural or constructed) that reduce wind velocity through a site and, therefore, reduce the possibility of suspended particles. Wind breaks can be trees or shrubs left in place during site clearing or constructed barriers such as a wind fence, snow fence, tarp curtain, hay bale, crate wall, or sediment wall.

For each foot of vertical height, an 8 to 10-foot deposition zone develops on the leeward side of the barrier. The permeability of the barrier will change the breaks effectiveness at capturing windborne sediment.

Tillage

Deep tillage in large open areas brings soil clods to the surface where they rest on top of dust, preventing it from becoming airborne. Roughening the soil can reduce losses by approximately 80 percent in some situations.

Stone

Stone can be an effective dust deterrent for construction roads and entrances or as a mulch in areas where vegetation cannot be established. The size of the stones can affect the amount of erosion taking place. In areas of high wind, small stones are not as effective as 20 cm stones, for example.

Spray-on Chemical Soil Treatments (Palliatives)

Chemical palliatives should be used only on mineral soils. When considering chemical application to suppress dust, determine whether the chemical is biodegradable or water-soluble and what effect its application could have on the surrounding environment, including water bodies and wildlife. Per limited research, the effectiveness of polymer stabilization methods range from 70 percent to 90 percent.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

INSPECTION AND MAINTENANCE:

Because dust controls are dependent on specific site and weather conditions, inspection and maintenance requirements are unique for each site. Generally, however, dust control measures involving application of either water or chemicals require more monitoring than structural or vegetative controls to remain effective. If structural controls are used, inspect them regularly for deterioration to ensure that they are still achieving their intended purpose.

4.6 *Minimize Steep Slope Disturbance*



The project **does not have** steep slope areas. This section will not apply if the project does not have a steep slope.

Steep slopes have many definitions. Generally, slopes that are steeper than 2.5:1 are slopes that meet the steep slope requirements of the 2017 CGP. The methods of compliance are linked with the phase of construction.

Consider using spray-on chemical treatments as described in Section 5.8 of this plan to minimize steep slope disturbance and erosion. The palliative may be applied by hydraulic methods or executed with a spray truck (hydroseeder).

INSPECTION AND MAINTENANCE:

Inspect the palliative treatment during each regularly scheduled inspection and after each rain event. If there is evidence of erosion or sediment subsistence at the toe of the slope, reapply the temporary treatment.

4.7 *Topsoil*

This project has extensive paving, concrete or other impervious structures.

Topsoil, if the project is not highly impervious, will be stockpiled in an area of the project where it can be preserved by sediment barriers at the base of the pile combined with the mitigation measures described in the Minimization of Dust in section 4.5 of this document. Alternatively, the topsoil pile can be covered with geotextile or other impenetrable barrier to preserve the material in the pile.

INSPECTION AND MAINTENANCE:

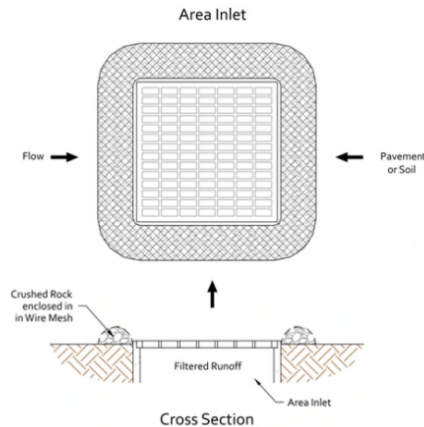
Maintenance Requirements for the topsoil pile will follow those listed in the Stockpile discussion included in the document.

4.8 *Soil Compaction*

Where engineered infiltration or vegetation practices are the stabilization methods and compaction has occurred, it is necessary to condition the area to accept the stabilization practice. Determining the level of compaction is a site-specific activity. The area to be vegetated should be marked to prevent traffic and to notify site employees to avoid the area until the vegetation activities take place.

If the conditioning method is not listed in the specification documents, the specification for installation of vegetative means or infiltrations practices will be provided by the Operator.

4.9 Storm Drain Inlet Controls



DESCRIPTION AND PURPOSE

Inlet protection at grade is a structural BMP that protects inlets that are flush with the ground or at grade (drop or yard inlets) which receive stormwater from disturbed areas of the construction site. This inlet protection may include any number of above ground constructions.

OBJECTIVES:

- Runoff Control
- Sediment Control

TARGETED POLLUTANTS

- Sediment
- Trash and Debris

APPLICATIONS

- Where additional sediment control is needed
- Where other surface protection is prohibited due to:
- The presence of vehicular traffic
- Safety hazards
- regulations
- Along highways where grates are used in combination with curb inlets

LIMITATIONS

- Pooling situation created by the inlet protection at grade may encroach upon roadways or parking structures.
- May be safety issues on roadways

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

INSPECTION

- Inspect according to regulatory timetables
- Protection fitting grate dimensions.
- Rips, tears, or other damage to materials
- Install according to SWPPP Plan.
- Sediment accumulation
- Check for bypass

MAINTENANCE

- Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible.

4.10 Stormwater Conveyance Channels

OBJECTIVE:

Incorporating conveyance channels into a project demonstrates well-developed engineering practices. Control methods must address and prevent channel deterioration to ensure the channel does not contribute to sedimentation and pollution of waters of the U.S. It is equally important to include velocity dissipation measures to ensure:

- The velocity gradient in the channel is moderated
- The geometry of the channel is maintained
- Pollutants are controlled
- Sediment is captured and contained onsite

4.11 Sediment Basins

SEDIMENT BASINS OR TRAPS WILL NOT BE INSTALLED AS A CONTROL IN THE PROJECT.

OBJECTIVE:

Sediment traps are small impoundments that allow sediment to settle from construction runoff. They are usually installed in a drainage way or other discharge point. Sediment traps are most commonly used at channels, slope drains, dewatering locations, construction site entrance wash tracks, conveyance discharge points or any other runoff outlet.

Sediment traps detain sediments in stormwater runoff to protect receiving streams, lakes, drainage systems and the surrounding area. The traps are formed by excavating an area or by placing an earthen embankment across a low area or drainage swale.

Drainage swales, sediment traps or sediment basins capture runoff and sediment on a larger scale than smaller BMPs. They are sized to manage large storm or drainage areas. Sediment basins also allow for the controlled return of surface water in dewatering situations while simultaneously capturing sediment. Lastly, sediment traps provide collections points for sediment at the perimeter of site discharge locations meeting the ELG regulatory requirements.

INSTALLATION:

- When excavating an area for a sediment trap, the side slopes should not be steeper than 2:1 and the top of the embankment no more than 5 feet from the original ground surface.
- Ensure stability of side walls, mounds and barriers by Machine-compacting all embankments. If the trap is created above grade it should be lined with well-graded stone to reduce flow rate from the trap the outlet.
- The spillway weir for each temporary sediment trap should be at least 4 feet long for a 1-acre drainage area and increase by 2 feet for each additional drainage acre added, up to a maximum drainage area of 5 acres.

INSPECTION AND MAINTENANCE:

- Inspect the sediment basin or trap per the schedule outlined in this plan. At each inspection, ensure the trap is draining properly. Remove sediments when the basin reaches 50% sediment capacity. Inspect the structure for damage from erosion by reviewing the depth of the spillway and maintain it at a minimum of 18 inches below the lowest point of the trap embankment.
- Take care to situate sediment traps for easy access by maintenance crews. The primary maintenance consideration for temporary sediment traps is to remove accumulated sediment. Do this periodically to ensure ongoing operation. Perform re-compaction of side walls, mounds and barriers after extended periods of water retention to ensure each is competent to accept future flows.

4.12 Chemical Treatment

Chemical treatment is not employed as a BMP on this project.

4.13 Dewatering Practices

Dewatering is not expected on this project.

4.14 Other Stormwater Controls

4.14.1 NPDES Notification Board

OBJECTIVE:

To ensure the soil disturbance information for the project is readily for review and use by the public and site personnel. The NPDES Notification must be large enough to contain information about the project and all notifications and posting. The NPDES Notification must provide all soil disturbance information, including the NPDES tracking number, contact for additional information, directive to the SWPPP location, and a directive to contact the EPA in the event that there is an indication of stormwater pollutants in site discharge or a receiving waterbody, in accordance with Part 1.5 of the 2017 CGP.

INSTALLATION:

The NPDES Notification must be installed or posted at a location which is easily accessible to the public. It must be located so that it is visible from the public road that is nearest the active part of the construction site and it must use font large enough to be readily viewed from public right-of-way.

INSPECTION AND MAINTENANCE:

The NPDES Notification Board will be inspected during the scheduled site inspections per Part 4.2 of the CGP. The board should always be in proper condition with a rain gauge attached. Any identified board maintenance will be scheduled for repair.

4.14.2 Temporary Sanilet Facilities

OBJECTIVE:

Provide personal waste facilities for site personnel for the proper collection, disposal and prevention of waste products in compliance with OSHA regulations. Temporary sanilet facilities encourage good housekeeping measures at the construction site. Their installation meets OSHA regulations and prevents pollution and stormwater contamination.

INSTALLATION:

The sanilet provider may install the device at locations throughout the project site which provide convenient access to both site personnel and equipment maintenance or removal operators. Sanilets should not be installed near any discharge or inlet location, such as on top of or uphill from a storm drain or drop inlet. The sanilet provider should securely anchor the facility to prevent tipping. It may be necessary to install a secondary control measure, such as a wattle perimeter or earth berm, to further ensure minimal runoff.

INSPECTION AND MAINTENANCE:

Inspect sanilet facilities daily to determine if they have reached 50% volume capacity. The facilities should be removed, replaced or emptied when they have reached or exceeded this amount. Daily inspection should check that all plastic structures are intact and do not show signs of damage from construction, vandalism or weather – related activities. Inspectors should also determine if the location is appropriate and not near discharge or inlet locations.

Sanilets are designed to promote safe and sanitary use. However, if stored liquids have not been removed and the sanilet is nearing capacity, vacuum and dispose of them in an approved manner - check with the local sanitary sewer authority to determine if there are special disposal requirements.

4.15 Site Stabilization

The Site is located in an arid, semi-arid or drought stricken area.

Regardless of the project location's in an arid, semi-arid or drought stricken area, projects operating in New Mexico, except Indian country, must comply with the temporary stabilization deadlines noted in Parts 2.2.14.

4.15.1 Initiation Timeframe Requirements

Per Part 2.2.14 of the CGP, "You must initiate soil stabilization measures immediately whenever earth-disturbing activities have permanently or temporarily ceased on any portion of the site."

The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this provision, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

Per 2.2.14 of the CGP clarifies and defines 'permanently' and 'temporarily' to assist Owners and Operators to determine which requirements apply to the project area:

- "*Earth-disturbing activities have **permanently** ceased* when clearing and excavation within any area of your construction site that will not include permanent structures has been completed."
- "*Earth-disturbing activities have **temporarily** ceased* when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.
- The 14-calendar day timeframe above begins counting as soon as you know that construction work on a portion of your site will be temporarily ceased. In circumstances where you experience unplanned or unanticipated delays in construction due to circumstances beyond your control (e.g., sudden work stoppage due to unanticipated problems associated with construction labor, funding, or other issues related to the ability to work on the site; weather conditions rendering the site unsuitable for the continuation of construction work) and you do not know at first how long the work stoppage will continue, your requirement to immediately initiate stabilization is triggered as soon as you know with reasonable certainty that work will be stopped for 14 or more additional calendar days. At that point, you must comply with Parts 2.2.1.i and 2.2.1.ii."

4.15.2 Initiation Activities

If construction work ceases on a portion of the site for a continuous 14-day period, ***but will resume in the future***, the Permittee will stabilize the disturbed areas with a means shown in the list below. Part 2.2.14 of the CGP provides the following list of initiation examples as a guide. This list is not exhaustive:

1. Prepping the soil for vegetative or non-vegetative stabilization;
2. Applying mulch or other non-vegetative product to the exposed area (e.g. temporary soil stabilizer);
3. Seeding or planting the exposed area;
4. Starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and
5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization in Parts 2.2.14.

The areas disturbed will exclude locations in which construction has not started or locations in which construction has implemented permanent stabilization. Locations where permanent stabilization practices and controls have been implemented will conform to the design specifications for each of the Stabilization Practices – Post Construction listed herein.

4.15.3 Completion Deadline

Per Part 2.2.14 of the CGP, stabilization activities must be complete as soon as practicable but no later than 7 calendar days after stabilization has been initiated as discussed above. At the close of the 7 period, the site must exhibit the following:

1. Establish uniform, perennial vegetation (i.e., evenly distributed, without large bare areas) that provides 70 percent or more of the cover that is provided by vegetation native to local undisturbed areas; and or
2. Implement permanent non-vegetative stabilization measures (examples of permanent non-vegetative stabilization measures include riprap, gravel, gabions, and geotextiles) to provide effective cover.

4.15.4 Temporarily Ceased Activities

McMahon Lots may use the following stabilization methods to comply with Part 2.2.14 of the CGP. Descriptions of the mechanism and maintenance protocols for Non-Vegetative Controls are available in Tab 8 of this binder. Descriptions of the mechanism and maintenance protocols for Vegetative Controls are available in Tab 8 of this Binder.

Table 4.15.4

Stabilization Practice	Stabilization Type	Convert to Permanent?
Sprayed Water	Non Vegetative	No
Silt Fence	Non Vegetative	No
Pond	Vegetative	Yes

4.15.5 Post Construction Stabilization

The area from which vegetation is removed or the soil disturbed is that area which will be designated for excavation, grading, concrete, paving, vertical construction or landscaping for this project and must be addressed in the design of the entire project.

Stabilization is more than establishing of vegetation. Site stabilization is coverage of the disturbed area with a constructed element (e.g. a building or stabilized channel) or a natural element (e.g. seeding or planted vegetation). It is important for the reviewer to acknowledge sites include both constructed and natural elements that can deliver stabilization equivalent to the 'pre-construction condition'. A representative site evaluation will recognize an appropriately stabilized area prevents the transport of sediment off the site. Prevention of sediment transport is attainable using constructed elements as well as natural elements. The site around which this plan is developed incorporates the contract documents for constructed elements, permanent erosion control or other stabilization means.

It is the intent of the Owner, Operator, and Contractors to provide and comply with permitted coverage requirements until 70% of the natural vegetated state (prior to disturbance) is achieved.

The criteria for final stabilization in Part 2.2.14b is to "Establish uniform, perennial vegetation (i.e., evenly distributed, without large bare areas) that provides 70 percent or more cover that is provided by vegetation native to local undisturbed areas; and/or Implement permanent non-vegetative stabilization measures to provide effective cover."

There is an exception to the criteria for Arid, semi arid, and drought- stricken areas:

Final stabilization is met if the area has been seeded or planted to establish vegetation that provides 70 percent or more of the cover that is provided by vegetation native to local undisturbed areas within three (3) years and, to the extent necessary to prevent erosion on the seeded or planted area, non-vegetative erosion controls have been applied that provide cover for at least three years without active maintenance.

Table 4.15.5

Stabilization Practice	Stabilization Type	Converted from Temporary?
Pond	Vegetative	Yes
Paving	Non Vegetative	No
Landscaping	Non Vegetative	No

SECTION 5: POLLUTION PREVENTION STANDARDS**5.1 Potential Sources of Pollution**

Potential pollutants that could affect the stormwater discharges from this project may include but are not limited to:

Table 5.1

Activity	Potential Pollutants
Equipment Activity	Oils, Grease, and other Distillates
Material Storage Area	Sediment, Oils, Grease, and other Distillates
Grubbing and Clearing	Sediment
Subgrade Prep	Sediment
Asphalt Paving	Asphalt and Sediment
Paint	VOCs
Landscaping	Sediment

All equipment and materials used during the project will be stored within the site's perimeter controls. Additional appropriate controls including, but not limited to: secondary containment, drip pans, berming, and covering may be used. Additional controls will be established based on site conditions and equipment/materials used.

5.2 *Spill Prevention and Response*

The discharge or spill of hazardous substances is not expected to occur due to or during construction activities. The project and its activities are not expected to use any substance in a manner or quantity that might require the reporting of a release in excess of reportable quantities. Substances and reportable values include:

Table 5.2

Hazardous Substances	Where Released	Reportable Quantity
Engine Oil, fuel, hydraulic and brake fluids	Land	25 Gallons
Engine Oil, fuel, hydraulic and brake fluids	Water	Visible Sheen
Antifreeze, battery acid, gasoline, engine degreasers, radiator fluid	Air, Land or Water	100 lbs. or 13 Gallons
Paints, solvents and thinners	Land	100 lbs. or 13 Gallons
Freon	Air	1 lb.

When an incident (spill of hazardous material in excess of reportable quantities) occurs within the project during construction activities, the following measures will be employed:

The Operator Will:	Time Action Required	Responsible Employee Onsite
Stop the source of the spill	Immediate	Assigned Team Member
Contain the spill utilizing (compost) mulch socks or soil berms	Immediate	Safety Officer
Clean up the spill	Once Spill is Contained	Assigned Team Member
Dispose of material contaminated by the spill in an approved disposal site	Within 24 Hours	Safety Officer
Notify both the National Response Center (1-866-428-6535) and the New Mexico Environment's Hazardous and Radioactive Materials Bureau (1-505-827-4300) providing a release of hazardous materials in excess of reportable quantities has occurred.	Within 24 Hours	Superintendent
Submit a description of the incident to the appropriate authorities (SWQB)	14 Calendar Days	Superintendent
Modify SWPPP, if appropriate, and identify prevention measures.	14 Calendar Days	Inspections Plus

Sanitation: providing temporary facilities (such as portable restrooms) to ensure that the site sanitation requirements comply with federal, state and local regulations.

This site does not require a Spill Prevention Control and countermeasure (SPCC) plan. If a plan is required, it will be found in a separate binder at the construction site office.

5.3 *Fueling and Maintenance of Equipment or Vehicles*

OBJECTIVE:

Minimize or eliminate the discharge of fuel spills and other pollutants into the MS4 on construction sites. Key areas include all construction sites where storage and maintenance occur on – site, and all fueling areas within a construction site.

LIMITATIONS:

Fuel vehicles on-site only when off-site fueling is impractical.
Comply with local codes regarding fluid disposal and on-site equipment maintenance.

STANDARDS AND SPECIFICATIONS:

- Spill cleanup kits should be available in fueling areas and on fueling trucks. Proper disposal is required.
- A drip pan or absorbent pad should be used unless fueling or maintenance activities occur over an impervious surface.
- When a vehicle is located over a water body (dock, barge) and is planned to be idle for more than one hour, a drip pan or sheet should be placed under the vehicle.

Fueling areas should be:

- Located at least 100 feet from waterways, channels, and storm drains.
- Protected from run-on or runoff.
- Located on a level-graded area.
- Attended always during fueling.
- Fueling equipment should be equipped with an automatic shut-off nozzle to contain drips.
- Fuel tanks should not be “topped-off”.
- Avoid mobile fueling.
- Observe federal, state, and local requirements relating to any stationary aboveground storage tanks. Double containment mechanisms should be employed whenever possible.
- Do not dump fuels and lubricants onto the ground.
- Do not bury used tires.
- Do not dispose of oil in a dumpster or pour it down the storm drain.
- Properly dispose of used batteries.
- Conduct washing, fueling, and major maintenance off-site whenever possible.
- Inspect vehicles for leaky hoses, gaskets, or other problems.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

- Locate vehicle services areas away from waterways, storm drains, gutters, and curbs.
- Use berms, sand bags, or other barriers to contain areas.
- Do not use detergents, solvents, degreasers, or other chemical products to do on-site cleaning.
- Use a drip pan or drip cloth if fluids will be drained and replaced on-site.
- Collect all used fluids, store in separate labeled containers, and either recycle or dispose of properly.

INSPECTION AND MAINTENANCE:

- Inspect on all containment structures.
- Maintain waste fluid containers in a leak proof condition.
- Service sumps associated with wash areas regularly.
- Inspect daily for leaks on vehicles and equipment.
- Keep an ample supply of spill cleanup materials available on-site.
- Clean up spills immediately and dispose of waste properly.
- Prevent boil-over by regularly cleaning equipment radiators.

5.4 *Washing of Equipment and Vehicles*

OBJECTIVE:

To minimize or eliminate the discharge of pollutants entering the storm drain system from vehicle and equipment cleaning operations at all construction sites where vehicle cleaning occurs.

INSTALLATION:

Limitations:

Wash water discharges may need to be pretreated before release into the sanitary sewer.

Standards and Specifications:

- On-site vehicle and equipment washing is discouraged.
- Do not clean vehicles and equipment with detergent, solvents, or steam on the project site.
- Contain wash water away from storm drain inlets or waterways for evaporative drying or percolation.
- Off-site cleanings are encouraged for all vehicles and equipment that regularly enter and leave the construction site.
- Conduct washing, fueling, and major maintenance off-site whenever possible.
- If equipment or vehicle washing must occur on-site:
- Locate cleaning area away from storm drain inlets, drainage facilities, or waterways.
- Perform the washing in a paved area with concrete or asphalt utilizing a berm to contain wash waters and prevent run-on or runoff.
- Install a sump to collect wash water.
- Do not discharge wash waters to storm drains or waterways.
- Use only when necessary.
- When cleaning vehicles with water:
- Consider using a high-pressure sprayer or a positive shut-off valve to reduce water usage.

INSPECTION AND MAINTENANCE:

- Inspect the control measure at a minimum of once per week.
- Monitor employees and subcontractors to ensure they are implementing or following proper practices.
- Regularly inspect and maintain the sump. Remove sediments and liquids as needed.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

5.5 *Storage, Handling, and Disposal of Building Products, Materials, and Wastes*

Table 5.5

Construction Product/Material/ Waste	Storage/Handling	Disposal
Building Materials	Enclosed Leak Proof Containment Area	Off Site
Construction Waste	Covered Dumpster	Off Site
Onsite Chemicals	Water Tight Containers	Off Site
Landscaping Materials	Temporary Cover	Off Site

5.5.1 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials are found on the site per CGP Part 2.3.3b

5.5.2 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

OBJECTIVE:

To minimize or eliminate the discharge of hazardous or non-hazardous materials to storm drains, watercourses, or drainage channels. These practices are applicable to all construction sites that have delivery and/or storage of:

- Fuel, oil, grease
- Herbicides, pesticides, fertilizers
- Asphalt, concrete and their components
- Acids, curing and form compounds
- Other hazardous materials

INSTALLATION:

Limitations:

- All temporary storage buildings must meet building codes.
- Storage must meet fire codes.
- All secondary containment structures and materials should be removed from the site upon completion of the project and disposed of per regulations.

Standards and Specifications:

- Designate a storage area that is not near a storm drain or watercourse.
- Follow manufacturers' instructions on application, storage, and disposal of materials.
- Store on-site only the amount of material necessary for the job.
- Use non-hazardous and environmentally friendly products.
- Provide indoor storage or cover stockpiled materials and wastes with a tarp.
- Provide covered storage for secondary containment of hazardous materials.
- Use secondary storage to prevent soil contamination.
- Monitor employees and subcontractors to ensure that proper practices are being implemented.
- Keep all material in original containers.
- Label all stored materials per state, local and federal regulations.
- Do not store incompatible materials together.
- Keep adequate supply of cleanup materials on site at all times.
- Report all spills.
- Do not apply hazardous chemicals during wet or windy conditions.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

INSPECTION AND MAINTENANCE:

- Inspect storage areas weekly to ensure neatness.
- Post proper storage instructions and Safety Data Sheets (SDS) for all currently stored materials.
- Repair and replace damaged secondary containment facilities.
- Remove all empty containers and packaging from site.
- Store materials with adequate clearances for access and emergency response.

5.5.3 Hazardous or Toxic Waste

OBJECTIVE:

To minimize or eliminate the discharge of hazardous wastes from construction sites to storm drains, gutters, watercourses and drainage channels. These practices are applicable to the following products:

- Petroleum products
- Asphalt products
- Concrete products
- Herbicides and pesticides
- Acids for cleaning masonry
- Soil stabilization chemicals
- Septic wastes
- Paints, solvents, stains and wood preservatives
- Materials that were used to treat or adsorb other wastes
- Hazardous construction wastes such as lead, asbestos, or lead paint

INSTALLATION:

Limitations:

- Does not address preexisting contamination or site assessments.
- Large spills or other serious hazardous wastes require immediate response from specialists.
- Contractor is required to follow all federal, state and local laws regarding handling, storing, and transporting waste materials.

Standards and Specifications:

- Waste containers shall be constructed of a suitable material and properly labeled according to regulations. Labels must include type of material, time of collection and site location.
- Temporary containment for stored materials should be sized at 1.5 times the volume of the stored material. Materials must be stored in sealed drums.
- Temporary containment areas shall be free of accumulated stormwater and spills.
- Temporary containment areas shall have room between containers for emergency response and cleanup.
- Incompatible materials shall be stored separately.
- Do not store different materials in the same container.
- Do not locate temporary containment areas near storm drains, gutters, watercourses or drainage channels.
- Provide adequate access to temporary containment areas.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

- Store containers on pallets under a covered, protected area unless containers are watertight.
- Do not dispose of liquid waste in dumpsters or other solid waste containers.
- Collect water from decontamination procedures, treat it and dispose of it at an appropriate disposal site.
- Educate employees and subcontractors in waste storage and disposal. Ensure that proper procedures are followed.
- Immediately repair all dikes and liners used for storage or containment.
- Recycle materials if appropriate.

INSPECTION AND MAINTENANCE:

- Ensure that all wastes are properly labeled and stored.
- Verify that all hazardous wastes are disposed of properly.
- Hazardous wastes must be collected, labeled and disposed of at authorized disposal sites.
- Keep supplies on-site for cleanup of spills.
- Post MSDS sheets for all materials stored on-site.
- Immediately repair all dikes and liners used for storage or containment.

5.5.4 Construction and Domestic Waste

DESCRIPTION

Building materials and other construction site wastes must be properly managed and disposed of to reduce the risk of pollution from materials such as surplus or refuse building materials or hazardous wastes. Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater runoff to mobilize construction site wastes and contaminate surface or ground water.

APPLICABILITY

The proper management and disposal of wastes should be practiced at every construction site to reduce stormwater runoff. Use waste management practices to properly locate refuse piles, to cover materials that might be displaced by rainfall or stormwater runoff, and to prevent spills and leaks from hazardous materials that were improperly stored.

SITING AND DESIGN CONSIDERATIONS

Solid Wastes:

- Designate a waste collection area on the site that does not receive a substantial amount of runoff from upland areas and does not drain directly to a waterbody.
- Ensure that containers have lids so they can be covered before periods of rain, and keep containers in a covered area whenever possible.
- Schedule waste collection to prevent the containers from overfilling.
- Clean up spills immediately. For hazardous materials, follow cleanup instructions on the package. Use an absorbent material such as sawdust or kitty litter to contain the spill.
- During the demolition phase of construction, provide extra containers and schedule more frequent pickups.
- Collect, remove, and dispose of all construction site wastes at authorized disposal areas. Contact a local environmental agency to identify these disposal sites.

To ensure the proper disposal of contaminated soils that have been exposed to and still contain hazardous substances, consult with state or local solid waste regulatory agencies or private firms. Some landfills might accept contaminated soils, but they require laboratory tests first.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

[McMahon Lots](#)

Paint and dirt are often removed from surfaces by sandblasting. Sandblasting grits are the byproducts of this procedure and consist of the sand used and the paint and dirt particles that are removed from the surface. These materials are considered hazardous if they are removed from older structures because they are more likely to contain lead-, cadmium-, or chrome-based paints. Ensure proper disposal of sandblasting grits by contracting with a licensed waste management or transport and disposal firm.

Detergents:

Phosphorous and nitrogen containing detergents are used in wash water for cleaning vehicles. Excesses of these nutrients can be a major source of water pollution. Use detergents only as recommended, and limit their use on the site. Do not dump wash water containing detergents into the storm drain system; direct it to a sanitary sewer or contain it so that it can be treated at a wastewater treatment plant.

LIMITATIONS

An effective waste management system requires training and signage to promote awareness of the hazards of improper storage, handling, and disposal of wastes. The only way to be sure that waste management practices are being followed is to be aware of worker habits and to inspect storage areas regularly. Extra management time may be required to ensure that all workers are following the proper procedures.

MAINTENANCE CONSIDERATIONS

Inspect storage and use areas and identify containers or equipment that could malfunction and cause leaks or spills. Check equipment and containers for leaks, corrosion, support or foundation failure, or other signs of deterioration, and test them for soundness. Immediately repair or replace any that are found to be defective.

5.5.5 Sanitary Waste

OBJECTIVE:

To minimize or eliminate the discharge of sanitary wastes from construction sites to storm drains, gutters, watercourses and drainage channels. These controls apply to construction sites that have portable or temporary sanitary waste systems.

INSTALLATION:

Limitations:

- To dispose of wastes to the sanitary sewer, the leasing company must be permitted.
- On-site disposal systems must comply with all local, and state regulations.
- Temporary connections to the sanitary sewer should meet codes and regulations.

Standards and Specifications:

- Locate toilets and disposal systems where accidental discharge cannot flow to storm drains, gutters, watercourses and drainage channels.
- Anchor portable toilets so they do not overturn during high winds.
- All sanitary wastes shall eventually be discharged to a sanitary sewer.
- Employ licensed sanitary services to ensure facilities are in working order at all times.

INSPECTION AND MAINTENANCE:

- Monitor employees and subcontractors to ensure that proper practices are being implemented.
- Sanitary storage and disposal should be inspected at least once per week. Units should be properly maintained, repaired, or replaced.

5.6 *Washing of Applicators and Containers used for Paint, Concrete or Other Materials*



OBJECTIVE:

Concrete washouts are used to collect and contain concrete and liquids when the chutes of concrete mixers and hoppers of concrete pumps are rinsed after delivery. The washout controls consolidate solids for easier disposal and prevent runoff of liquids. Proper containment prevents caustic material from reaching the soil surface and migrating to surface waters or ground water.

The wash water is alkaline and contains high levels of chromium, which can leach into the ground and contaminate groundwater. It can also migrate to a storm drain, which can increase the pH of area waters and harm aquatic life. Solids that are improperly disposed of can clog storm drain pipes and cause flooding. Installing concrete washout facilities not only prevents pollution but also is a matter of good housekeeping at your construction site.

INSTALLATION:

Install the washout in an area that is convenient and provides easy access for concrete trucks, preferably near the area in which the concrete is being poured. There are various types of washout containers the Contractor may use at a jobsite to collect and contain wash water. Such methods include but are not limited to chute washout boxes, buckets and pumps, lined washout pits surrounded by an adequate berm or bale barrier, vinyl washout containers, and metal washout containers.

Washout containers should be leak proof and of adequate size to accommodate anticipated material use and waste without causing spillage. Each method should be installed in concurrence with manufacturer specifications of design specifications.

INSPECTION AND MAINTENANCE:

Inspect all concrete washout facilities daily to determine if they have filled to 75 percent capacity, which is when materials need to be removed. Washouts should be inspected daily to ensure that plastic linings are intact, and sidewalls have not been damaged by construction activities. Inspectors should also note whether the facilities are being used regularly. If drivers have washed their chutes or hoppers in other locations; place additional washouts in more convenient locations.

Concrete washouts are designed to promote evaporation where feasible. However, if stored liquids have not evaporated and the washout is nearing capacity, vacuum and dispose of the waste in an approved manner. Check with the local sanitary sewer authority to determine if there are special disposal requirements for concrete wash water.

- Remove liquids or cover the structures before predicted rainstorms to prevent overflows.
- Remove hardened solids whole or break them up depending on available equipment for removal and local regulations.
- Following material removal, build a new structure, or if the previous structure is still intact, inspect the structure for signs of weakening or damage and make any necessary repairs.
- Line the concrete structure with new plastic that is free of holes or tears each time concrete removal is performed.
- Replace signage if necessary.

5.7 *Fertilizers*

Fertilizer is not planned for use on the project.

5.8 *Other Pollution Prevention Practices*

Unique activities requiring pollution prevention practices do not exist on this project.

SECTION 6: INSPECTION, MAINTENANCE, AND CORRECTIVE ACTION**6.1 *Inspection Personnel and Procedures***

Successful SWPPP compliance includes regular BMP control inspections, preventive maintenance, and SWPPP plan review. These inspections will help to uncover conditions that might lead to a release of discharges and non-compliance violations. Planned maintenance should prevent discharges and violations. Revisions to the plan ensure it is viable and effective for the life of the project. The following activities and supporting procedures will be included in the preventive maintenance program.

6.1.1 General Site Awareness

The Operator shall continuously (during scheduled and unscheduled specific site visits) monitor the implemented erosion and sediment control measures during site specific (and project) construction activities to ensure the effectiveness and operation condition of the measures. If changes or repairs are needed to improve the effectiveness and operation of a sediment control measure, they will be implemented as soon as practicable and in no case greater than seven (7) days after the discovery of the needed corrective action.

6.1.2 Specific Inspection Frequency

Inspections will occur on a 7 day basis based on the water quality assessments for Rio Grande. Water is impaired with E. coli, PCBs, and Dissolved Oxygen. It is a Teir II water. Rain events at 0.25” will be within 24 hours. Inspections will occur only during the project’s normal working hours of Monday through Friday 7am to 5pm as described in Part 4.1.2.2 of the CGP.

6.1.3 Reduction in Inspection Frequency

If a reduction in inspection frequency is required it must be documented in the SWPPP and comply with Part 4.4.1, 4.4.2, or 4.4.3 of the CGP. This project will be reduced to monthly inspections during the dry season.

6.1.4 Personnel Responsible for Inspections

Table 6.1.4

INSPECTOR NAME	CERTIFICATIONS	COMPANY
Cassandra Durkin	CESSWI- 5184	INSPECTIONS PLUS
Miriam Mitchell	QSM	INSPECTIONS PLUS
Jeff Hart	NMED CGP Training	INSPECTIONS PLUS
Marcos Valadez	Field Training	INSPECTIONS PLUS

The supporting certification documentation for the Inspection Personnel is available for review in Tab 2 of this Binder.

Note: All personnel conducting inspections must be considered a “qualified person.” CGP Part 4.1 clarifies that a “qualified person” is a person knowledgeable in the principles and practices of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit

6.1.5 Inspection Report Forms

A copy of the inspection form is included in Tab 10 of this Binder.

6.2 Corrective Actions

Corrective actions for the site BMPS are noted on each inspection report. The corrective actions should be initiated ‘immediately’. Immediately is defined by EPA as a requirement of operators to initiate all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. This includes cleaning up any contaminated surfaces to prevent discharges from subsequent events.

Table 6.2

Corrective Condition	Deadline for Corrective Action
Stormwater control(s) needs to be repaired/replaced; and (1) the repair or replacement is not significant; and (2) it can be corrected through routine maintenance	Immediately (same day as discovered or the next business day if it is too late in the work day of discovery) initiate actions to repair/replace the control and complete by close of the next business day.
Stormwater control(s) needs to be repaired/replaced; and (1) the repair or replacement is significant; or (2) it cannot be corrected through routine maintenance	Immediately initiate actions to minimize or prevent the discharge of pollutants and maintain temporary controls until a permanent solution is installed and made operational. Install, repair, and make the control(s) operational within 7 calendar days from the date of discovery of corrective condition.
Stormwater control(s) was never installed, was installed incorrectly, or was not installed in accordance with the SWPPP or CGP requirements	Install, repair, and make the control(s) operational within 7 calendar days from the date of discovery of corrective condition.
Stormwater control(s) is not effective enough for the discharge to meet applicable water quality standards or applicable requirements in CGP Part 3.1	Modify, repair, and make the control(s) operational within 7 calendar days from the date of discovery of corrective condition.

6.2.1 Corrective Action Log

The EPA requires the Permittee to complete a Corrective Action Report or log. A log is included in Tab 7 of this Binder. The Operator or Owner will utilize the Inspection Report to identify the areas where corrective actions are required. The Inspection Report will list the conditions of the site, nature of the conditions identified for correction and the date and time of the identification.

Corrective Action Reports

For each corrective action taken in accordance with Part 5.1, you must complete a report in accordance with the following:

- Part 5.4.1: Within 24 hours of identifying the corrective action condition, document the specific condition and the date and time it was identified.
- Part 5.4.2: Within 24 hours of completing the corrective action (in accordance with the deadlines in Part 5.2), document the actions taken to address the condition, including whether any SWPPP modifications are required.
- Part 5.4.3: Each corrective action report must be signed in accordance with Appendix I, Part I.11 of this permit.
- Part 5.4.4: You must keep a copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an on-site inspection or upon request by EPA.
- Part 5.4.5: You must retain all corrective action reports completed for this Part for at least three (3) years from the date that your permit coverage expires or is terminated.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
McMahon Lots

6.2.2 Personnel Responsible for Corrective Actions

Table 6.2.2

Name or Title	Responsibility	Telephone Number and Email
JMD - McMahon, LLC	Confirms completion of corrective actions through review of inspection reports or corrective action logs.	Doug Peterson 505-884-3578 doug@petersonproperties.net
Inspections Plus	Discovery of necessary actions for stormwater controls during inspections Communicates necessity to complete corrective actions to project and Construction Management Confirms completion of corrective actions	Marcos Valadez 505-344-9410 marcos@inspectionsplus.com

6.3 Delegation of Authority

The EPA accepted delegation of authority letter(s) is included in Tab 2 of this Binder

SECTION 7: TRAINING

Each operator, or group of multiple operators, must assemble a “stormwater team” to carry out compliance activities associated with the requirements in this permit.

Prior to the commencement of construction activities, you must ensure that the following personnel on the stormwater team understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention controls);
- Personnel responsible for the application and storage of treatment chemicals (if applicable);
- Personnel who are responsible for conducting inspections as required in Part 4.1;
- Personnel who are responsible for taking corrective actions as required in Part 5.

You are responsible for ensuring that all activities on the site comply with the requirements of this permit. You are not required to provide or document formal training for subcontractors or other outside service providers, but you must ensure that such personnel understand any requirements of this permit that may be affected by the work they are subcontracted to perform.

7.1 Documentation for Completion of Training

Completed training documentation is in Tab 10 of this Binder.

SECTION 8: CERTIFICATION AND NOTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SITE OPERATOR – PLAN CONTROL AND DIRECTION (e.g. Agencies, Engineers, Owners)

JMD-McMahon, LLC.

Owner:

Date:

By: Doug Peterson, President

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

McMahon Lots

**REVISIONS TO THE STORM WATER POLLUTION
PREVENTION PLAN**

Date	Description of Revision	Authorized Signature
07/01/21	Updated NOI and SWPPP changing end date to 12/31/2023 and Acreage to 2.5 disturbed acres. Removed G.C. Wilger Enterprises	C. Durkin 

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
[McMahon Lots](#)