# Weber County Stormwater Construction Activity Permit

Application submittals will be accepted by appointment only. (801) 399-8374, 2380 Washington Blvd, Suite 240, Oaden, UT 84401

Date Submitted 06/04/2018	Fees (Office Use)	Receipt Num	ber (Office Use)	Priority Site (Office	Use) No	Permit Number (Office Use)
Property Owner/A	uthorized Representat	ive	Project In		0	
	s)/Authorized Representative	(s)	Project Name			
Phone 801-389-9193	Fax	<del>V-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-</del>	Project Addre 4435 East Eag		84310	
Email Address ryanu.arc@gmail.com						
Mailing Address of Proper 2708 N 1325 E. North Ogd	ty Owner(s)/Authorized Repre en, UT 84414	esentative(s)				
			Estimated Pro	ject Length (mo)	Previo	ous Permit No. (if applicable)
			Estimated Star 06/25/2018	t Date	Actua	l Start Date
Submittal Checklist						
Failure to acquire a requuse permit application, c Water Construction Activity Permit pursual permit application, c Water Construction Activity Permit pursual permit application, c Water Construction Activity Permit Permit application of the Construction of the Cons	e date that the applicant subn ) weeks before the developer ant to this Chapter, ired Storm Water Construction or building permit application, vity Permit, neeting is required before pre	e plan application or ar its a building permit a nits a land use permit a intends to perform any n Activity Permit is grou It is unlawful to comm	mended site plan. pplication if the ap pplication. y type of work not  unds for tabling a sence work (move	oplicant proposes to listed above that wo related subdivision a dirt) on a developme	uld require pplication, ent site befo	building on an existing lot or a Storm Water Construction site plan application, conditional ore obtaining a required Storm
Applicant Narrative lease explain your request						
equirement						
Authorization  By signing below the Own wher or Authorized Repre	ner / Representative authorize		he property to pe	rform inspections.		Date 6-4-2018

(This SWPPP Template is for the Common Plan Permit Only, and does NOT address SWPPP requirements found in the CGP.)

# Common Plan SWPPP for

Lot 65 Eagle Ridge

4435 E. Eagle Ridge Drive Eden, Ut 84310

# Matt & Teal Wardle

1163 E. 3400 N. North Ogden, UT 84414

# Ryan Udell A.R.C. Builders, Inc

2708 N. 1325 E. North Ogden, Ut 84414

## Date

June 4, 2018



# 1. Project Information

Zip: 84310

State: UT

Project Name: Lot 65 Eagle Ridge Subdivision

Address: 4435 E. Eagle Ridge Dr.

City: Eden

Latitude: Degrees, Decimal Minutes

Longitude: Degrees, Decimal Minutes

UPDES Permit Tracking Number: Click here to enter text.

Owner: Matt & Teal Wardle

Contact Person: Matt Wardle

Address: 1163 E. 3400 N.

City: North Ogden State: UT Zip: 84414

Telephone Number: 801-725-6936

Email Address: mdwardle@gmail.com

General Contractor: A.R.C. Builders, Inc.

Contact Person: Ryan Udell

Address: 2708 N 1325 E

City: North Ogden State: UT Zip: 84414

Telephone Number: 801-389-9193

Email Address: ryan.arc@gmail.com

### 1.5

Unknown Features (although this may be a law under another program, it's not a permit requirement). Discovery of Historical, Archaeological or Paleontological Objects, Features, Sites, or Human Remains

- Immediately suspend construction operations in the vicinity(100 foot minimum buffer) of the discovery.
- B. Verbally notify the Public Works Department and provide them the exact location.
- Protect the discovery and provide written confirmation of the discovery to the City and State Historic Departments within two calendar days.
- D. Contractor and City follow State mitigation laws.

# 2. Best Management Practices

{Not all standard control categories listed below are necessary nor are they all inclusive. It is encouraged to only include BMPs for pollution sources that are uncontrolled and apply to the site. Some BMPs may be used to control multiple categories however some categories may require

multiple BMPs to control and contain the pollutant sources indicated in the category. Treat each unique BMP option independently because most BMPs have different performance and maintenance requirements. Include a copy of necessary details, instructions or contracts for the BMPs in appendix L} -[Delete blue instruction text, typical all pages -]

#### 2.1 SWPPP Sign(see permit part 1.10, 4.2.11)

Description of construction board is filed in Appendix L

{The construction board shall include but not limited to; NOI, Local permits and SWPPP contacts and shall be in view of the public.} {See permit part 1.10, 4.2.11 for specific requirements}

## 2.2 Sensitive Features Control (see permit part 2.2)

None

#### 2.2.x Wetlands

No wetlands in boundary

# 2.2.x Water Bodies within or 30' from Disturbance Boundary(see permit part 2.3.5) No body of water within or 30' from disturbance boundary

## 2.3 Sediment Control (see permit part 2.1.2, 2.1.3 & 2.3)

{Including but not limited to the standard controls below} {Add unique operations or site conditions needing control as needed}

2.3.x Trap/Filter Sediment at Property Boundary(see permit part 2.1.2) swales, berms

# 2.4.x Inlet Protection(see permit part 2.1.3 & 2.3) filter fabric

# 2.4.x Steep Slopes (see permit part 2.3.2)

Berms

# 2.4.x Street Maintenance(see permit part 3.2.2) manual sweeping policy (broom and shovel)

# 2.4 Top Soil Preservation(see permit part 2.5) Reuse and or blend topsoil

# 2.5 Dust Control(see permit part)

2.5.x

dampen with water selective operation during low wind conditions

## 2.6 Egress Control(see permit part 2.4)

2.6.x Track Out(see permit part 2.4.1)

track out pads gravel

#### 2.7 Waste Management Control(see permit part 4.2.6)

2.7.x Solid Waste(see permit part 2.4.3)
dumpsters, bagging lightweight trash

# 2.7.x Construction Spoil(see permit part 2.1.1)

covering erodible materials, runoff containment, track out control for spoil removal

#### 2.7.x Sanitary Waste(see permit part 2.4.4)

covering erodible materials, runoff containment, track out control for spoil removal, haul off policy, operational controls such as not spoiling material near inlets or hard-scape directly connected to drainage system, etc....

## 2.7.x Cement Product Operations(see permit part 2.4.5, 2.9.2)

steel bins, waste disposal policies, signage directing supplies where to dump

# 2.7.x Concrete Cutting Operations(see permit part 2.9.2)

temporary dams

### 2.7.x Non Aqueous Waste(see permit part 2.8.2)

steel bins

#### 2.7.x Construction Wastewater (see permit part 2.7, 2.9, 2.9.4)

Not needed

#### 2.8 Management of Construction Materials Control

# 2.8.x Storage of Construction Materials(see permit part 2.8.2)

storing where pavement is not directly connected to waterways

## 2.8.x Construction Staging(backfill)(see permit part 2.1.1)

operational(remove backfill from pavements prior to wet conditions or before end of day whichever comes first)

### 2.8.x Construction Staging(Landscaping)(see permit part 2.1.1)

Covering or surrounding backfill, operational(remove backfill from pavements prior to wet conditions or before end of day whichever comes first)

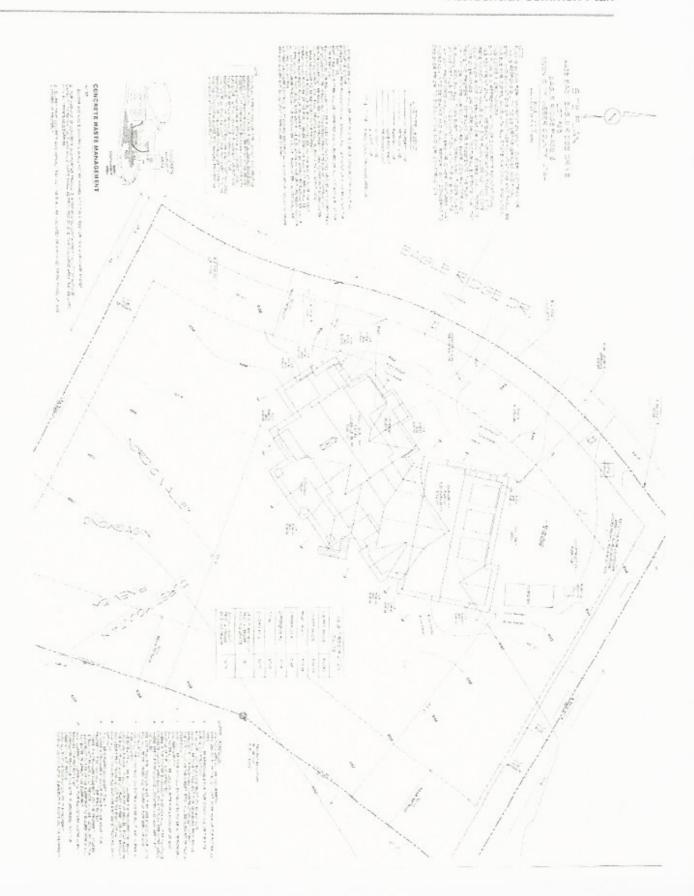
#### 2.9 Final Stabilization (see permit part 2.6)

### 2.9.x Landscaping Plan

Final Landscaping features when landscaped by the Operator

### 2.9.x Temporary Containment of Sediment

swales, leave front-yard lower than sidewalk, rock filters, native vegetative barriers...



# 3. Spill Prevention and Response Plan(see permit part 2.8.3, 2.9.3)

No contaminated liquids or products will be stored on site. If a spill occurs there will absorbent material to contain spill and a shovel will be used to clean and dispose in bags

dirt, sand, plastic bags, shovels and brooms etc.

Description of Spill control Plan, details and policy are filed in Appendix L.

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittee. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Agency	Phone Number	
National Response Center	(800) 424-8802	
Division of Water Quality ( DWQ) 24-Hr Reporting	(801) 538-6146; (801) 536-4123	
Utah Department of Health Emergency Response	(801) 580-6681	
Weber Fire Department	(801)745-9277 or (801)782-3580	

# Minimum spill quantities requiring reporting:

Material	Media Released To	Reportable Quantity
Engine oil, fuel, hydraulic & brake fluid	Land	25 gallons
Paints, solvents, thinners	Land	100 lbs (13 gallons)
Engine oil, fuel, hydraulic & brake fluid	Water	Visible Sheen
Refrigerant	Air	1 lb
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100 lbs (13 gallons)

## Emphasis to:

1st Priority: Protect all people (including onsite staff)

2<sup>nd</sup> Priority: Protect equipment and property

3rd Priority: Protect the environment

 Make sure the spill area is safe to enter and that it does not pose an immediate threat to health or safety of any person.

- Check for hazards (flammable material, noxious fumes, cause of spill) if flammable liquid, turn off engines and nearby electrical equipment. If serious hazards are present leave area and call 911. LARGE SPILLS ARE LIKELY TO PRESENT A HAZARD.
- Stop the spill source and contain flowing spills immediately with spill kits, dirt or other material that will achieve containment.
- Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers
- If spilled material has entered a storm sewer, regardless of containment; contact the Municipal Storm Water Division.
- Cleanup all spills (flowing or non-flowing) immediately following containment. Clean up spilled material according to manufacturer specifications, for liquid spills use absorbent materials AND DO NOT FLUSH AREA WITH WATER.
- Properly dispose of cleaning materials and used absorbent material according to manufacturer specifications.
- 8. Report the reportable quantity to the Weber Morgan Health Department.

#### **Emergency Numbers**

Utah Hazmat Response Officer 24 hrs
Weber County Sheriff Department
Weber County Engineering Division
(801)-538-3745
(801)-778-6600)
(801)-399-8374

# 4. Site Map(s) (see permit part 4.2.3)

## The SWPPP site maps are filed in Appendix B

[Maps shall include all structural BMPs, and all site components necessary to demonstrate pollution containment. Multiple SWPPP site map sheets may be necessary to clearly show how and when BMPs are to be employed relative to the construction phases]

#### The SWPPP site maps shall include but not limited to:

- 1. boundaries of project/property
- 2. boundaries of disturbance (including areas outside of property boundaries)
- 3. show slopes on site
- 4. location of structures/facilities
- locations of :
  - a. stockpiles for soils and materials
  - b. construction supplies
  - c. portable toilets
  - d. garbage/trash containers
  - e. egress points/track out pads
  - f. concrete washout pits or containers
- 6. water bodies, wetlands, natural vegetative buffers
- 7. placement of all BMPs, perimeter, erosion control, sediment control, inlet, etc.
- storm water inlets and storm water discharge points (where storm water drains off the site)
- 9. areas that will be temporarily or permanently stabilized on the site

{Refer to the regulation for specific requirements}

# 5. Record Keeping

See the appendices in Appendix A-K.

(In the Appendix there are report and log forms for all the necessary recordkeeping. The record keeping is literally demonstrating to the EPA, DWQ and MS4 that the site in incompliance. A compliant site requires effective and maintained BMP and accurate SWPPP documentation.

SWPPP Inspections-Maintenance-Correction Report (permit part 3.2.1, 3.2.2, 3.3, 3.4, 4.2.12)

Inspections are required every 7 calendar days

Repair or replace BMPs prior to need or by end of week whichever comes first. Update the Inspection-Maintenance-Correction Report weekly.

Section 3.2.2 requires daily maintenance of pavements and site grounds.

See the Inspection-Maintenance-Correction Reports in Appendix E

{There is an Inspection-Maintenance-Correction Report template provided in EXHIBIT E of this SWPPP template. File all Inspection-Maintenance-Correction reports there.}

# Changes to the SWPPP(see permit part 4.2.12, 4.2.13)

See the Amendment Log in Appendix F.

{There is a SWPPP Amendment log template provided in EXHIBIT F of this SWPPP template. Record SWPPP changes there.}

Training(see permit part 4.2.7)

Training Logs and Documents are filed in Appendix H.

{Owner/Operator is required to train all parties involved in the project, including but not limited to: company staff, sub contractors, suppliers, servicing utilities...}

# 6. Discharge Information

Receiving Waters (look up <a href="http://wq.deq.utah.gov">http://wq.deq.utah.gov</a> to identify your receiving water body)

### 1. North Fork Ogden River

Impaired Waters (refer to <a href="http://wq.deq.utah.gov">http://wq.deq.utah.gov</a> in the left hand column to determine status of receiving water body).

Impaired Surface Water	Is this surface water impaired?	Pollutant(s) causing the impairment	Has a TMDL been completed?	Pollutant(s) for which there is a TMDL
Water Body Name	□ Yes □ No	See web site above	□ Yes □ No	See web site above

Copy the table above and repeat where there is more than one water body.

# 7. Certification, Notification and Delegation(see permit part 4.2.9)

Owner Certification: See documents filed in Appendix G.

**Operator Certification:** See documents filed in Appendix G. Not necessary when the Owner and Operator are the same.

**Delegation of Authority:** insert text here If used include documents and reference their file in Appendix G.

**Subcontractor Certification:** insert text here If used include documents and reference their file in Appendix G.

**Notice of Permit Transfer Requirements:** insert text here If used include documents and reference their file in Appendix G.

{There are forms for these actions provided in EXHIBIT G of this SWPPP template. File all certification and delegation documents there.}

# **SWPPP Appendices**

Appendix A: General Location Map

Appendix B: SWPPP Site Maps

Appendix C: UPDES Permit(UTRH00000)

Appendix D: Permits; NOI, MS4 (Including City, County, State, 3rd Party; MS4

Acknowledgements)

Appendix E: Inspection-Maintenance-Correction Report

Appendix F: SWPPP Amendment Log

Appendix G: Certifications, Agreements, Delegation of Authority

Appendix H: Training Log

Appendix I: Construction Plans

Appendix J: Additional Information (e.g. Support documents and out of date SWPPP

documents, etc.)

Appendix K: BMP Specifications and Details

# APPENDIX A: General Location Map



# APPENDIX B: SWPPP Site Map



APPENDIX C: UPDES Permit (UTRH00000)

# APPENDIX D: Permits, NOI, MS4

·	eber County Sto	rmwater	Constru	iction Activi	ity P	ermit
VV	submittals will be accepted by a	viscost only (9	1011 399-8374.	2380 Washington Blvd.	Suite 24	so, Ogden, UT 84401
	Fert (Office Use)	Receipt Number	er (Office (Ne)	Priority sate (Centre of	No	Permit Number (Office (Ise)
Nate Submitted 6/04/2018			Project Information			
Contact Informati	authorized Representativ		Project Nam			
Name of Property Owne Ryan Odell A.R.C. Builde	r(s)/Authorized Representative(s)		Lot 65 Eagle			
Phone 901, 459 9193	Fax		Project Add 4435 fast E	ress igle Hidge Dr. Eden, UT B	4310	
Fmeil Address nonuarceignalicom						
Making Address of Pros 2708 N 1325 E. North O	perty Owner(s)/Austronized Repres gden, UT 84414	sentative(s)		Project Length (mo)	Prev	rious Permit No. (if applicable)
			12 months Estimated : 06/25/2018		Act	ual Start Date
Submittal Check						
Subdivision: The Site Plan: The di- Building Permit parcel. Land Use Permit Other: At least t Activity Permit part to permit applicat water Construction	in The date that the applicant sub wo (2) weeks before the develope sursuant to this Chapter.  I required Storm Water Construction, or building permit application Activity Permit.  Clion meeting is required before a	the preliminary subsite plan application or mits a building permit ornits a land use permit intends to perform ion Activity Permit is in. It is unlawful to co	t application if the application, any type of work grounds for tab mmerice work.	the applicant proposes to the not listed above that w ling a related subdivision move dirt) on a develops	applications	ect a building on an existing lot or guire a Storm Water Construction tion, site plan application, conditional before obtaining a required Storm
Please explain your a Requirement						
Authorization						
By signing below	the Owner / Representative autho	arizes the county to cr	nței the propert	y to perform inspections		low
Owner or Authorized	Representative Signature	-1				Date 6-4-2018
Signature of Appen	-				A THE	Date

APPENDIX E: Inspection-Maintenance-Correction Report

### Stormwater Pollution Prevention Plan(SWPPP) 2016-07-28 Residential Common Plan

WEEKLY INSPECTION-MAINTENANCE-CORRECTION REPORT (permit peri321, 322, 33, 3.4)  NSPECTION PERIOD:  NSPECTOR:  SITE NAME: RAINEVENTS: CURRENT WEATHER:					
BIMP	INSPECTION DATE	OKNOTOK?	BMP CONDITION	CORRECTION DATE	CORRECTION ACTIONS TAKEN
ve all pollution sources controlled? Do any other troblems exist?					
ust all SWPPP BMPs	-				
					11-2-11-24
	-				
	_	-			
A Company of the Comp					

\*DAILY MAINTENANCE- Section 3.2.2 requires daily removal of dirt from pavements and the removal of loose light weight trash. This is separate from maintenance and correction requirements resulting from the weekly inspections. It is encouraged but not required to include other regular maintenance actions demonstrating the site is regularly maintained. This may help avoid additional maintenance requirements from the City inspector.

EMPORSITE FEATURE MAINTAINED DURING THE REPORTWEEK	DAY/DATE	BMP CONDITION\SITE CONDITION	MAINTENANCE PERFORMED

Locatify 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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:	Titl	6
Signature:	Da	te

APPENDIX F: SWPPP Amendment Log

## Stormwater Pollution Prevention Plan(SWPPP) 2016-07-28 Residential Common Plan

SWPPP AWEN	WPPP AMENDMENT LOG					
Amendment#	Description of the Amendment	Date of Amendment	Notes			

APPENDIX G: Certificates, Agreements, Delegation of Authority

# OWNER CERTIFICATION

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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name			
: R	Lyan Udell	Title: Presiden	t
Signature :	for Alle	Date:	6-4-18
Company:	A.R.C. Builder	s, Inc	
Project:	Lot 65 Eagle R	ide	

# **OPERATOR CERTIFICATION**

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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name :	Zyan Udell	Title: Presider	<i>t</i>
Signature :	Jun Clill	Date:	6-4-18
Company:	AIR.C. Builde	is Dic.	
Project:	Lot 65 Eagle	Ridge	

# SUBCONTRACTOR CERTIFICATION STORMWATER POLLUTION PREVENTION PLAN

Project Number:
Project Title:
Operator(s):
As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.
Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:
I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.
This certification is hereby signed in reference to the above named project:
Company:
Address:
Telephone Number:
Type of construction service to be provided:
Signature:
Title:
Date:

# Delegation of Authority Form

# Delegation of Authority

I,	(name), hereby designate the person or specifically described
	duly authorized representative for the purpose of overseeing compliance
with environmental red	quirements, including the Construction General Permit, at the
	construction site. The designee is authorized to
	water pollution prevention plans and all other documents required by the
permit.	
	(name of person or position)
	(company)
	(address)
	(city, state, zip)
Y <u></u>	(phone)
as set forth in	zation, I confirm that I meet the requirements to make such a designation  (Reference State Permit), and that the the definition of a "duly authorized representative" as set forth in  (Reference State Permit).
direction or supervisio properly gathered and or persons who manag information, the information and complete. I am av	of law that this document and all attachments were prepared under my in accordance with a system designed to assure that qualified personnel evaluated the information submitted. Based on my inquiry of the person is the system, or those persons directly responsible for gathering the nation submitted is, to the best of my knowledge and belief, true, accurate, were that there are significant penalties for submitting false information, by of fine and imprisonment for knowing violations.
Name:	
Company:	
Title:	
Signature:	
Data	

## **Notice of Permit Transfer Requirements**

Upon transfer of ownership or control of the subject property under this Permit (see section 8.2.2.a.) coverage under the UPDES CGP must continue until stabilization requirements are satisfied according to permit requirements. This requirement may be met by either of the following transfer options:

- Obtaining coverage under a new and independent Notice of Intent (NOI the application process to procure coverage under the UPDES CGP). This results in a new permit coverage number.
- 2. Coordinating with the previous owners and the State of Utah, Department of Environmental Quality, Division of Water Quality where ownership, other information, and signatures (including electronic certifications) contained in the NOI that is current for the property is changed to reflect the change in ownership and responsible parties for conducting construction activities (general contractor). For this step you would assume the responsibilities of the original CGP coverage. This continues the original permit coverage number.

Name of Previous Owner	Telephone Number			
Address of Previous Owner	City	State	Zip	
Signature of Previous Owner		Date		
Name of New Owner	Telephone Number			
Address of New Owner	City	State	Zip	
Signature of New Owner		Date		

PROJECT NAME AND LOCATION

# Stormwater Pollution Prevention Plan(SWPPP) 2016-07-28 Residential Common Plan

Previous Pe	rmit Number	Name o	of Project		
Address of l	Project		City	State	Zip
Longitude			Latitude		
WHAT KIN	ND OF TRANSF	ER: PARTIA	AL OR TO	TAL?	
Is this a tran	sfer of ownership	of partial or t	total of the p	permitted area? Total	Partial □
If this is a tr	ansfer of part of th	he permitted a	area to a nev	w owner, describe	what part:
Will there be	e a new SWPPP pr	repared?	YES 🗆	NO 🗆	
Please updat	= 5	ntractor Inform			or 2, first page). If
This form m	ust be submitted t	to the Municip	pality of Jur	isdiction and DW(	2
FAX to 801-		ail to the const	truction stor	m water coordinat	or or,
Or mail to	DWQ PO Box 144870	0			

APPENDIX H: Training Log

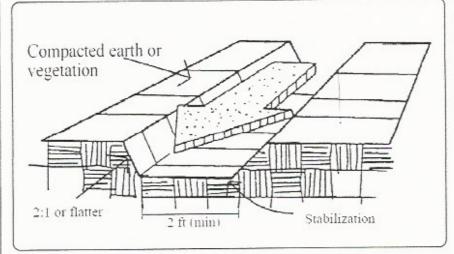
# Stormwater Pollution Prevention Plan(SWPPP) 2016-07-28 Residential Common Plan

Training Log						
Training Date	Name and Title of Trainer	Name of person(s) and Company(s) Trained	BMP(s) Pertaining	Description of training material e.g. instruction, direction, etc.  Attach all support documents in Appendix J. Including but not limited to: certifications, contracts, videos, literature, meeting minutes, memos, letters, emails, phone logs		

APPENDIX I: Construction Plans

APPENDIX J: Additional Information

APPENDIX K: BMP Specifications and Details (label BMPs to match the sections identified in this document.)



Temporary drains and swales are used to divert off-site runoff around the construction site, divert runoff from stabilized areas around disturbed areas, and direct runoff into sediment.

#### APPLICATIONS:

- Temporary drains and swales are appropriate for diverting any upslope runoff around unstabilized or disturbed areas of the construction site.
- Prevent slope failures. Prevent damage to adjacent property. Prevents erosion and transport of sediments into water ways. Increases the potential for infiltration. Diverts sediment-laden runoff into sediment basins or traps.

#### INSTALLATION/APPLICATION:

- Temporary drainage swales will effectively convey runoff and avoid erosion if built properly:
- Size temporary drainage swales using local drainage design criteria. A
  permanent drainage channel must be designed by a professional engineer
  (see the local drainage design criteria for proper design).
- At a minimum, the drain/swale should conform to predevelopment drainage patterns and capacities.
- Construct the drain/swale with an uninterrupted, positive grade to a stabilized outlet. Provide erosion protection or energy dissipation measures if the flow out of the drain or swale can reach an erosive velocity.

#### LIMITATIONS:

- Temporary drains and swales or any other diversion of runoff should not adversely impact upstream or downstream properties.
- Temporary drains and swales must conform to local floodplain management requirements.

#### MAINTENANCE:

- Inspect weekly and after each rain.
- Repair any erosion immediately.
- Remove sediment which builds up in the swale and restricts its flow capacity.

#### **OBJECTIVES**

- ☐ Housekeeping Practices
- □ Contain Waste
- ☐ Minimize Disturbed Areas
- □ Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion



# WEBER COUNTY

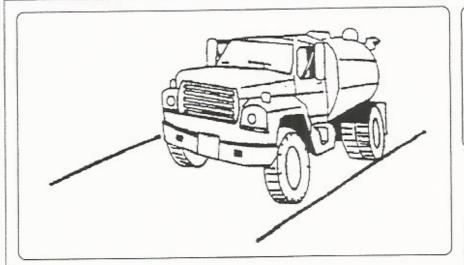
#### **ENGINEERING DEPARTMENT**

2380 Washington Blvd., Suite 240 Ogden, UT 84401 (801) 399-8374

#### TARGETED POLLUTANTS

- Sediment
- □ Nutrients
- ☐ Toxic Materials
- □ Oil & Grease
- □ Floatable Materials
  - Other Waste
- High Impact
- Medium Impact
- □ Low or Unknown Impact

- Capital Costs
- □ O&M Costs
- □ Maintenance
- □ Training
- High
- Medium
- □ Low



Dust control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities.

#### APPLICATION:

Dust control is useful in any process area, loading and unloading area, material handling areas, and transfer areas where dust is generated. Street sweeping is limited to areas that are paved.

### INSTALLATION/APPLICATION CRITERIA:

- Mechanical dust collection systems are designed according to the size of dust particles and the amount of air to be processed. Manufacturers' recommendations should be followed for installation (as well as the design of the equipment).
- Two kinds of street weepers are common: brush and vacuum. Vacuum sweepers are more efficient and work best when the area is dry.
- Mechanical equipment should be operated according to the manufacturers' recommendations and should be inspected regularly.

#### LIMITATIONS:

- Is generally more expensive than manual systems.
- May be impossible to maintain by plant personnel (the more elaborate equipment).
- Is labor and equipment intensive and may not be effective for all pollutants (street sweepers).

#### MAINTENANCE:

- If water sprayers are used, dust-contaminated waters should be collected and taken
- for treatment. Areas will probably need to be resprayed to keep dust from
- spreading.

#### **OBJECTIVES**

- Housekeeping Practices
- □ Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- □ Control Site Perimeter
- □ Control Internal Erosion



# WEBER COUNTY

## **ENGINEERING DEPARTMENT**

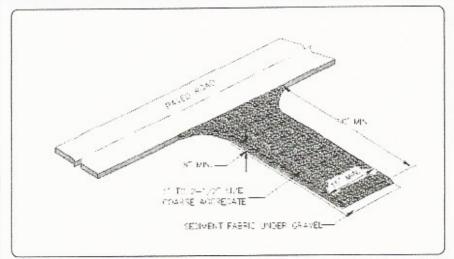
2380 Washington Blvd., Suite 240 Ogden, UT 84401 (801) 399-8374

#### TARGETED POLLUTANTS

- Sediment
- □ Nutrients
- □ Toxic Materials
- □ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste
- High Impact
- Medium Impact
- □ Low or Unknown Impact

- ☑ Capital Costs
- ☐ O&M Costs

- High
- Medium
- □ Low



A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface.

#### APPLICATIONS:

 At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

#### INSTALLATION/APPLICATION CRITERIA:

- Clear and grub area and grade to provide maximum slope of 2%.
- Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months.
- Place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.

#### LIMITATIONS:

- Requires periodic top dressing with additional stones.
- Should be used in conjunction with street sweeping on adjacent public rightof-way.

#### MAINTENANCE:

- Inspect daily for loss of gravel or sediment buildup.
- Inspect adjacent roadway for sediment deposit and clean by sweeping or shoveling.
- Repair entrance and replace gravel as required to maintain control in good working condition.
- Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

#### **OBJECTIVES**

- Housekeeping Practices
- □ Contain Waste
- Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- □ Protect Slopes/Channels
- ☑ Control Site Perimeter
- □ Control Internal Erosion



# WEBER COUNTY

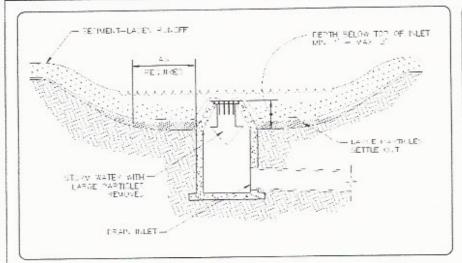
#### ENGINEERING DEPARTMENT

2380 Washington Blvd., Suite 240 Ogden, UT 84401 (801) 399-8374

#### TARGETED POLLUTANTS

- Sediment
- □ Nutrients
- □ Toxic Materials
- □ Oil & Grease
- Floatable Materials
- □ Other Waste
- High Impact
- Medium Impact
- □ Low or Unknown Impact

- Capital Costs
- ☑ O&M Costs
- ☑ Maintenance
- □ Training
- High
- Medium
- □ Low



An area excavated around a storm drain inlet to impound water below the inlet.

#### APPLICATION:

 Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection).

#### INSTALLATION/APPLICATION CRITERIA:

- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, excavate adjacent area 1 to 2 feet lower than the grate elevation. Size of excavated area should be based on soil type and contributing acreage.

#### LIMITATIONS:

- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires flat area adjacent to inlet.

#### MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches one half of the excavated sump below the grate.
- Repair side slopes as required

#### **OBJECTIVES**

- ☐ Housekeeping Practices
- □ Contain Waste
- ☐ Minimize Disturbed Areas
- □ Stabilize Disturbed Areas
   □ Protect Slopes/Channels
- □ Control Site Perimeter
- Control Internal Erosion



# WEBER COUNTY

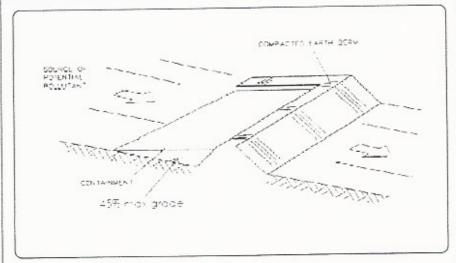
## **ENGINEERING DEPARTMENT**

2380 Washington Blvd., Suite 240 Ogden, UT 84401 (801) 399-8374

#### **TARGETED POLLUTANTS**

- Sediment
- □ Nutrients
- ▼ Toxic Materials
- □ Oil & Grease
- Floatable Materials
- □ Other Waste
- High Impact
- Medium Impact
- □ Low or Unknown Impact

- □ Capital Costs
- □ O&M Costs
- Maintenance
- □ Training
- High
- Medium
- □ Low



A temporary containment control constructed of compacted soil.

#### APPLICATION:

- Construct around waste and materials storage area.
- Construct around staging and maintenance areas.
- Construct around vehicle parking and servicing areas.

### INSTALLATION/APPLICATION CRITERIA:

- Construct an earthen berm down hill of the area to be controlled. The berm should surround fueling facilities and maintenance areas on three sides to provide containment.
- Berm needs to be a minimum of 1 foot tall by 1 foot wide and be compacted by earth moving equipment.

#### LIMITATIONS:

- Not effective on steep slopes.
- ▶ Limits access to controlled area.
- Personnel need to quickly respond to spills with remedial actions.

#### MAINTENANCE:

- Observe daily for any non-stormwater discharge.
- Look for runoff bypassing ends of berms or undercutting berms.
- Repair or replace damaged areas of the berm and remove accumulated sediment.
- Recompact soil around berm as necessary to prevent piping.

#### **OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
   ☐ Protect Slopes/Channels
- □ Protect Slopes/Channe
   ☑ Control Site Perimeter
- □ Control Internal Erosion



# WEBER COUNTY

## ENGINEERING DEPARTMENT

2380 Washington Blvd., Suite 240 Ogden, UT 84401 (801) 399-8374

#### **TARGETED POLLUTANTS**

- □ Sediment
- □ Nutrients
- Toxic Materials
- □ Oil & Grease
- Floatable Materials
- □ Other Construction Waste
- High Impact
- Medium Impact
   Med
- □ Low or Unknown Impact

- Capital Costs
- □ O&M Costs
- ☑ Maintenance
- □ Training
- High
- ☑ Medium
- ☐ Low