STORMWATER MANAGEMENT PLAN AMENDMENTS

UPDATE TO PLAN
TO MEET
TERMS AND CONDITIONS FOR
COR40000

Morgan Hill Lot Improvement

PERMITTED FACILITY

COR401047

CERTIFICATION #

Community Development Group Morgan Hill, Inc

OPERATOR

AMENDMENT PREPARED
MARCH 29, 2018

Prepared by
OPEN 8 Consulting
303-495-8336

CONTENTS

Description of SWMP Requirement Changes per COR 400000

Permit Topic	SWMP Amendments for COR400000 requirement	Description and or location or method of amendment
Stormwater Management Plan General Requirements		
General Permit	Copies of the new COR 40000, including permit certification, must be included in the SWMP.	COR-03000 fact sheet and permit certification relocated to Other Documentation section. Pages 2 -23 removed from SWMP. New permit and certification added under permit section.
Allowable Non-Stormwater Discharges	New permit provides a significantly more detailed listing of types of discharges allowed under the permit.	Amendment 1: A complete section identifying of types of discharges authorized, as well as the full text of Non stormwater discharges anticipated at this site added to SWMP: corresponding language redacted from original SWMP. A copy of the Division Low Risk Guidance policy added under "Other Documentation"
Plan Completion Requirements	SWMP must be complete prior to the commencement of any construction activity.	Not Applicable, SWMP was in place as start of construction. No changes made to SWMP
	Public emergency related sites,	Not Applicable. No changes made to SWMP
Permittee Requirements	Both the owner and the operator must apply as permittees, except for instances where the duties of the owner and operator are managed by the owner.	Original permit application and original SWMP identifies both the Owner and Operator. These were identified in the "contacts" section of the SWMP. No changes made to SWMP.
Plan Modifications	Significant changes to section(s) detailing plan revisions made prior to or following a change(s) onsite.	Amendment 2 details requirements for making changes to the SWMP narrative. Corresponding section of original SWMP redacted.
Stormwater Management Plan Contents		
Qualified Stormwater Manager	The permittee has determined that those listed in as project mangers, third party consultants and the management and crew leaders of the identified maintenance companies are Qualified Stormwater Manager(s) based upon ongoing experience with developing, implementing, maintaining the permittees compliance program.	The contacts portion of the SWMP identifies stormwater management plan administrator, project manager and/or site superintendent as well as third party companies. Each of these is, or staff is directed by, a person deemed as a Qualified Stormwater Manger due to past and ongoing professional experience. Additional certifications on this are planned for later date
Implementation of control measures: Requirements for control measures outside of the permitted area	The plan must include a documented use agreement between the permittee and the owner or operator of any control measures located outside of the permitted area	Any Documented use agreements in place at the site will be included in the Other documentation portion of the SWMP.
Site description: Stream crossings	The plan site description must include a description of all stream crossings located within the construction site boundary	Amendment 3 provides a site assement for stream crossing and provides information as needed.
Site map: Flow direction arrows	The plan site map must include flow arrows that depict stormwater flow directions on-site and runoff direction.	If not included on the original site map these have been added.
Site map: Areas requiring pre-existing vegetation to be maintained	The plan site map must include areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible	If not included on the original site map these have been added.
Site map: Stream crossings	The plan site map must include locations of all stream crossings located within the construction site boundary (I.C.2.vii.j)	See Amendment 3. Item will be shown on the map if present.
Site inspections		
Person conducting inspections	The permittee is responsible for ensuring that the inspector is a qualified stormwater manager (I.D.1)	No Specific Language added to SWMP. See discussion above regarding Qualified Stormwater managers.
Inspection frequency	Permittees must conduct the first site inspection within seven calendar days of the commencement of construction activities on site (I.D)	Not Applicable as inspections occurring on this site at his time. No changes made to SWMP
	Permittees must conduct site inspections in accordance with one of the following minimum frequencies: 1) At least one inspection every 7 calendar days. OR	Amendment 4 adds to the existing inspection frequency language to address every 7 day inspections. No language was altered from the original SWMP.
	Permittees must conduct site inspections at least once every 7 calendar days for sites that discharge to a water body designated as an Outstanding Water by the Water Quality Control Commission (I.D.3)	This is not addressed as the site not subject to an Outstanding Water designation.

INTRODUCTION

This amendment to the original Stormwater Management Plan (SWMP) has been prepared on behalf of the permittee by Open 8 Consulting to adequately address changes in the requirements of the Colorado Discharge Permits System (CDPS) General Permit for Stormwater Discharges Associated with Construction Activities resulting from the implantation of CDPS General Permit COR-400000, effective from April 1, 2019 to March 31, 2024. It was developed after comparison of the existing stormwater management plan and the requirements of the new permit, and after reviewing the document titled Stormwater Management Plan Requirement Changes in the Construction Stormwater Permit Renewal[1].

The intent of this document is;

- to incorporate new elements and/or language to the existing SWMP,
- remove elements and/or language that no longer meets the permit requirements. This will be done by:
  - redacting language;
  - adding pages or sections; or
  - replacing pages or sections.

Several of the new permit changes relate to original permit application (e.g. co-permittee requirements) or to original SWMP development, (e.g. requirements to identify pre-existing site vegetative cover prior to initial disturbance.) and cannot be retroactively required in the permit, or, may not be accurately gauged at this point in the construction process. Such items will be excluded for this amendment. However, as appropriate a notation explaining the exclusion will be provided.

For purposes of language conformity, the new term "control measures" and the term Best Management Practice(s) or "BMP(s) used throughout the original SWMP should be considered analogous.

This amendment consists of two parts: Part I, a table identifying all changes and method of change. Part II, narrative language of all additions to or modifications of existing SWMP language. This will include additional items the permittee has modified or added to reflect corporate policy.

AS of the time of printing of this amendment the COR40000 permit certifications effective on April 1, 2019 have not been provided by the state. As such, the permit Certifications will be added to all SWMP plans as soon as they are received, printed and can be delivered.

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[1] Posted on the CDPHE website at the following location (as of March 28, 2019)
https://environmentalrecords.colorado.gov/HPRMWebDrawer/RecordView/1297176

☐ Discharge of ground water utilizing the low risk discharge guidance. Control measures to manage this activity are located in separate section of this SWMP

☐ Discharge of ground water under separate permit. If checked this permit information is available upon request.

Discharges resulting from emergency firefighting activities are neither anticipated nor always known unless they occur on lots under direct control of the permittee. If the builder becomes aware of such an occurrence it will be noted on the site map.

AMENDMENT 2

SWMP REVIEW AND REVISION

A record of SWMP changes, amendments or revisions made during the course of the project must be maintained. Any changes must include the date and identification of the changes. Changes to the SWMP may occur in any of the following ways:

- Handwritten notations in the body of the SWMP;
- Replaced pages of the SWMP showing strike and replace text;
- Notations on the site map;
- Replacing a cluttered and difficult to read map with a new copy reflecting only the current site conditions. (an exception to the inclusion of the date for changes will be modified in this instance. All control measures transferred from the old map will be treated as "existing" at that point in time.); or,
- Inclusion of new documentation such as newly implemented documented use agreements, newly issued groundwater discharge permits, management plans for contaminated soils, etc. Such documentation will be noted and filed in other documentation and,

Amendments that must be made to the SWMP includes, but is not limited to:

- A change in design, construction, operation, or maintenance of the site requiring implementation of new or revised control measures;
- The SWMP proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions;
- Control measures identified in the SWMP are no longer necessary and are removed; and,
- Corrective actions are taken onsite that result in a change to the SWMP; and,

REVISIONS

For SWMP revisions made prior to or following a change(s) onsite, including revisions to sections addressing site conditions and control measures, a notation must be included in the SWMP that identifies:

- The date of the site change;
- The control measure removed, or modified;
- The location(s) of those control measures,
- and any changes to the control measure(s).

AMENDMENT 4

INSPECTION FREQUENCY

Permittees must conduct site inspections in accordance with one of the following minimum frequencies. The permittee has the option to change the inspection frequency during the course of the project if such a change is noted. With the exception of inspections at completed sites/areas this option is not anticipated. Should the permittee choose to implement one of the other inspection frequency options it will be noted the inspection report.

The Inspection interval for the site is noted below:

☒ At least one inspection every 7 calendar days.

☐ Site discharges to a water body designated as an outstanding water by the Water Quality Control Commission.

DELAY IN INSPECTIONS

The permit provides no exception to the inspection schedule other than those identified in the SWMP. However, the permittee will add the following delay to meeting every 7 or 14 day inspection schedule. In instances where weather or other conditions would impede the inspector to safely access the site the inspection will be delayed until the inspector is able to access the site. This delay is most likely to be triggered, but not limited to, snow, blowing snow and/or road closures. This may include conditions on site, or on the travel routes to the site if highways are closed or the Colorado State Patrol, or local authorities have issued requests for limited travel. If a delay occurs due to such conditions the inspection will be rescheduled as soon as possible, usually the next day. Additionally, such conditions will be noted on the subsequent inspection report.

- discharges of sediment or other pollutants from the site;
- control measures needing maintenance;
- and identification of inadequate control measures;
- and identification of additional control measures are needed that were not in place at the time of inspection

POST INSPECTION REQUIREMENTS

After adequate corrective action(s) and maintenance have been taken, as outlined in AMENDMENT 6, or where a report does not identify any incidents requiring corrective action or maintenance, the report shall contain the statement

> "I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

AMENDMENT 6

MAINTENANCE

All Control measures identified in the SWMP will be maintained in effective operating condition and protected from activities that would reduce their effectiveness. Control measures must be maintained in accordance with good engineering, hydrology and pollution control practices.

ROUTINE MAINTENANCE

Per the terms of the permit, the permittee(s) (operator) must ensure that all control measures:

- Remain in effective operating condition and are protected from activities that would reduce their effectiveness.
- Control measures must be maintained in accordance with good engineering, hydrologic and pollution control practices.
- Observations leading to the required maintenance of control measures can be made during a site inspection, or during general observations of site conditions.
- The necessary repairs or modifications to a control measure requiring routine maintenance, must be conducted to maintain an effective operating condition.

CORRECTIVE ACTIONS

Per the terms of the permit, the permittee(s)/operator(s) must assess the adequacy of control measures at the site, and the need for changes to those control measures, to ensure continued effective performance. When an inadequate control measure, is identified (i.e., new or replacement control measures become necessary), the following corrective action requirements apply:

- The permittee is in noncompliance with the permit until the inadequate control measure is replaced or corrected and returned to effective operating condition.
- Additionally, the permittee(s) (operator) must take all necessary steps to minimize or prevent the discharge of pollutants until a control measure is implemented and made operational and/or an inadequate control measure is replaced or corrected and returned to effective operating condition.

AMENDMENT 8

PRACTICES FOR OTHER COMMON POLLUTANTS

Bulk storage, 55 gallons or greater, for petroleum products and other liquid chemicals must have secondary containment, or equivalent protection, in order to contain spills and to prevent spilled material from entering state waters.

AMENDMENT 9

STABILIZATION REQUIREMENTS

The following requirements will be implemented for this permitted facility.

TEMPORARY STABILIZATION

Per the permit, temporary stabilization must be implemented for earth disturbing activities on any portion of the site where ground disturbing construction activity has permanently ceased, or temporarily ceased for more than 14 calendar days.

The permit also stipulates that areas may exceed the 14-day schedule when either the function of the specific area of the site requires it to remain disturbed, or, physical characteristics of the terrain and climate prevent stabilization. In such instances The SWMP will:

- Document the constraints necessitating the alternative schedule.
- Provide the alternate stabilization schedule.
- identify all locations where the alternative schedule is applicable on the site map.

AMENDMENT 10

MAP CONTENTS

The original SWMP content is amended with the following additions:

- Flow arrows that depict stormwater flow directions on site and runoff directions
- Term "borrow and fill" analogous to "cut and fill" in original SWMP;
- locations of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt;
- locations of masonry mixing stations;
- locations of areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible; and
- locations of all stream crossings located within the construction site boundary.

If any of these items are not present on site they will not be referenced on the site map.

AMENDMENT 13

RETENTION OF RECORDS

Copies of documentation required by this permit, including records of all data used to complete the application for permit coverage to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.

ON-SITE RECORDS RETENTION

The SWMP for this site is located:

☒ On site

- ☐ In the construction office.
- ☐ In a secure container on site.
- ☐ In a consolidated construction office located near the permitted facility.

☐ Compiled in an electronic format accessible by the Qualified Stormwater Manager. Copies are available with 24 advance notice.

☐ Date SWMP report format switched from paper to electronic retention:
(Reports previously recorded on paper format may be archived offsite. Copies available upon request.)

See also: Amendment 5 for location of inspection reports.

AMENDMENT 14

SIGNATORY REQUIREMENTS

All documents required to be submitted to the division by the permit must be signed in Accordance with the following criteria:

- For a corporation: By a responsible corporate officer, defined as:
  - a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation (Note: CDPHE has indicated minimum signatory positions to be a Director. Project Manager will not be accepted), or
- the manager of one or more manufacturing, production, or operating facilities, provided
  - the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations;
  - initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations;
  - the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements;
  - and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

AMENDMENT 15

SALE OF RESIDENCE TO HOMEOWNER

The following items are added to the conditions for which the permittee may remove residential lots from permit coverage:

The permittee is not responsible for final stabilization of the lot;

AMENDMENT 16

GENERAL TERMS AND CONDITIONS OF THE PERMIT

All COR 400000 general permit terms and conditions, not listed Above and/or not implicitly modified in the original SWMP are incorporated by reference.

Table of Contents

Introduction

This Stormwater Management Plan (SWMP) has been prepared on behalf of Community Development Group (CDG) by Open 8 Consulting for development of a lots and infrastructure as a master planned community. This SWMP covers construction activities performed by Community Development Group (CDG) or its affiliates as the contractor/operator on behalf of the property owner. This SWMP was prepared in accordance with good engineering, hydrology and pollution control practices. Changes or additions may be required to address changes in conditions at the site. Additionally, changes would be anticipated when/if the State of Colorado renews and reissues the 2012 CDPS General Permit COR–030000 prior to completion of this project.

As a condition of the Colorado Discharge Permit System (CDPS) permit, the provisions identified in the SWMP shall be implemented as written and updated as needed from commencement of construction activity until final stabilization is complete. The SWMP can be modified by Community Development Group (CDG), or a delegated entity on their behalf at any time. Community Development Group (CDG) is responsible to ensure this SWMP is amended, updated and changes to the attached site map/plans are noted and dated when erosion and sediment control activities change on site. Since the SWMP is a living document, the SWMP solely provides recommendations and procedures to help fulfill stormwater discharge requirements specified by Federal, state and local authorities, and can be modified by Community Development Group (CDG), or a delegated entity on their behalf at any time. The site information, description, and responsible parties are provided within.

The purpose of this SWMP is to:

- Establish the stormwater criteria Community Development Group (CDG) will follow for the site development work and construction activities for this project;
- Adequately address the requirements stated in the CDPS General Permit COR–030000, effective from July 1, 2007 to June 30, 2012 (administratively continued July 1, 2012);
- Identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site;
- Describe the Best Management Practices (BMPs) to be used to reduce the amount of pollutants in stormwater discharges from this construction site; and,
- Ensure the practices and BMPs are selected, installed, implemented and maintained in accordance with good engineering practices.

This SWMP will be implemented prior to soil disturbing activities associated with all active disturbances. The requirements of the CDPS General Permit are intended to be met year-round. A copy of the CDPS General Permit and any applicable local permits are included in or near the SWMP notebook. This SWMP shall be kept at the construction site during construction activity at all times, or at a nearby off-site location pre-approved by the State, if conditions arise that do not allow for the SWMP to be kept on-site. It is likely that when the General Permit is re-authorized this stormwater plan will need to be updated.

A SWMP for this site was originally prepared in 2014. However, due to lack of land sale CDG did not begin earth disturbing activities until 2018. The decision was made to keep the permit open as the sale remained "eminent" throughout the 4-year interval between the original application date and the actual start of earth disturbing activities by CDG. (See also Part A, Section

1.4 Other Property Owners; 1.5 Oil and Gas lease considerations; and Part B, Section 1.2 Description of Adjacent Areas.)

SPECIAL NOTE: The Appendices in this SWMP are organized for convenience and not chronologically.

PART A – PERMITTEE INFORMATION

Community Development Group (CDG) creates master–planned, green space communities in collaboration with land planners, architects and home building companies to develop neighborhoods that incorporate housing, open space, recreation and numerous amenities, including, as appropriate, mixed–use commercial developments.

SECTION 1: Land Control and Permit Coverage

1.1 Land Ownership

The permitted facility is owned by Morgan Hill Investors, LLC and the developer is CDG Morgan Hill, Inc. These entities, while having distinctly separate legal identifications, share one or more owners and fall under the Community Development Group umbrella. As such Community Development Group is the Authorized Representative for contracting, land management and permitting. This includes permit coverage under COR-030000 as both the owner and operator of the Larger Common Plan of Development.

1.2 Affiliates

CDG is the overall management company. However, several different entities or holding companies are used to facilitate contract obligations, property management and/or controlling monies held in trust for project development. These organizations are identified in APPENDIX A.

1.2.1 Unified Contact Information

All entities listed in section 1.2 and/or APPENDIX A have a single point of contact:
Community Development Group
2500 Arapahoe Ave. Suite 220
Boulder, CO 80302
Tel: (303) 442–2299

1.2.2 Additional Active Construction Entities

The larger common plan of development has multiple projects under construction from land development in Morgan Hill Community and home building companies. As these activities intersect with the area permitted under this SWMP controls will be coordinated as needed. The larger common plan of development also contains active oil and gas production facilities. In the past five years these companies have had several site disturbances to develop underground and above ground infrastructure. These activities are permitted and performed independently and without consultation with this permittee. If future activities occur permittee will make all efforts to coordinate activities. All such activities will be noted on the site map.

1.2.3 Non–Construction Contacts

As the project progresses future entities may have earth disturbing activities within the common plan of development that are exempted from coverage under this permit. Examples of such activities would include, but not limited to:

- Landscape maintenance/repair;
- Irrigation system maintenance/repair;
- Pavement repairs that do not impact subgrade; and,
- Sidewalk repairs that do not impact subgrade

Additional contact information, as it pertains to the operation and control of non-permitted activities, is listed in APPENDIX A – Site Contact Information.

1.3 Property Control for Permit Purposes

While CDG is the Construction Manager working on behalf of the Owner and Developer and is permit holder during the overlot grading, infrastructure development and landscaping of common areas. Permitted construction activities may be controlled under any of the following manners:

- Work performed directly by CDG, or its affiliates, and performed under this permit;
- Work performed directly by the purchaser of sold property (under a permit held by purchaser);
- Work performed completely or partially under control of property purchaser in tracts or common areas that remain under the ownership of CDG or its affiliates; and,
- Work performed by property purchasers in common areas under separate permit. Once these areas are returned to CDG, control of the permitting reverts to CDG's permit.

1.3a Exclusion of Property Control for Permit Purposes

Community Development Group specifically excludes all activities relating to soils conditioning activities required for homebuilding. This includes an exclusion of general contractor / site manager activities within the areas disturbed for such activities. This portion of the site development is performed directly by the property owner under a separate contract. (Note: such activities may be performed by the same excavation contractor used for other activities under a separate contract with the property owner.)

Community Development Group requires the owner to permit this activity separately for stormwater compliance and to install and maintain erosion control measures separately from Community Development Group. During this phase of construction Community Development Group maintains inspections on the full site and will make recommendations to the permit holder as needed.

1.4 Other Property Owners

As the site is developed the property legally transferred to homebuilders or commercial entities. Once this property is sold (legally closed and operations transferred.), the requirement to maintain permit(s) is required by the new property owner and/or operator.

A record of the date of transfer will be noted in Appendix B
This information will be discussed in greater detail in other areas of this SWMP for all purchases after the date of this Plan's production. Appendix B for list of companies that land has been sold to. (This list excludes eventual homeowners or business tenants.)

1.5 Oil and Gas Lease Considerations

Contained within the Common Plan of Development are several oil and gas facilities. These properties are noted in Figure 1 – Vicinity Map & Figure 2 – Oil and Gas Map. These leases outline specific CDG obligations that limit its ability to control areas and activities associated with the leased properties. These limitations are discussed in greater detail below. Additionally, Oil and Gas production, including land improvements, have taken place since 2016. Many areas within CDG's operations have been disturbed and stabilized with seed and blanket or crimp mulch. These areas will remain under the control of the oil and gas companies until such time as CDG disturbs the areas. This will be highlighted on the maps.

1.6 Agricultural Land Usage

Some areas are leased to agricultural enterprises and are being used for agricultural purposes (farm/ranches). For the purposes of erosion and sediment control, such leased land is considered as **not** controlled by CDG. Additionally, such disturbances are exempt from the CDPS General Permit, and, as such, are not included in the SWMP.

PART B – PROPERTY INFORMATION

This section pertains to the overall Common Plan of Development. As sub–properties (i.e. filings, tracts, blocks, etc.) are developed, construction performed by, or on behalf of, CDG the pertinent information will be included in APPENDIX B – Schedule and Area Activity Log and APPENDIX I – Site Maps prior to earth disturbing activities being initiated for those subareas.

SECTION 1: Site Description

1.1 Project/Site Information

Project/Site Name: Morgan Hill Subdivision (A Common Plan of Development)

Project Street/Location: East of Colliers BLVD (co. road 3) between 10.5 road and 12 Road. See FIGURE 1 – Vicinity Map.

Latitude: 40°4'9.30"N Longitude: –105°2'29"W
40.06925 -105.041389

1.2 Description of Adjacent Areas

The site is bound by County Road 10 ½ to the south, County Road 3 to the east and agricultural land to the North and West.

1.3 Nature of Construction Activity

This SWMP covers all construction activities necessary for the development of the Morgan Hill Community Common Plan of Development. This will include:

- Grubbing and clearing;
- Site excavation;
- Over–excavation for soil preparation;
- Installation of underground and above ground utilities;
- Road improvement;
- Stockpiling;
- Homebuilding;
- Commercial buildings; and,
- Land improvement projects, including permanent water quality ponds, containment, parks, and common space areas.

What is the function of the construction activity?

☐ Residential ☐ Commercial ☐ Pipeline and Utilities
☐ Highway and Transportation ☐ Oil and Gas Exploration and Well Pad Dev't
☒ Non-Structural/Other (please specify): Land Development Residential Infrastructure

1.4 Proposed Sequence of Major Activities

Project Start Date: June, 2018
Estimated Final Stabilization Date: December 31, 2025
The anticipated construction sequencing is provided in APPENDIX B –Schedule And Construction Overview. This provides an estimated overall project schedule shall be updated and/or replaced as needed to reflect new areas within the permitted area.

Down-gradient perimeter controls (including inlet protection) and vehicle tracking control shall be installed before site disturbance, clearing and grubbing, or construction activities begin. Additional BMPs will be installed immediately prior to start of activities where they are needed to control sediment and erosion due to site disturbance.

BMPs will remain until construction is completed and final stabilization is achieved to an elevation below each BMP, and storm water discharge from disturbed areas cannot engage the BMP.

1.4.1 Sequence of Permit Transfer

Following completion of construction activities and implementation of final stabilization BMPs it is anticipated the permit will be transferred through the appropriate process from the Operator/Contractor to the new property owner for construction of homes or other structures. Once this transfer is complete the purchased property will be considered removed from CDG's permitted area. For purposes of stormwater permitting areas where all adjacent or upgradient disturbed areas CDG permitted as part of the common plan of development are stabilized, streets, sidewalks and down gradient controls in these areas will be considered stabilized and thus removed from CDG's permitted area. (see ~~APPENDIX B – Schedule and Area Activity Log and APPENDIX I –~~ Site Maps) Attached Matrix & APPX F
In such areas, the new land owner/permittee is responsible for removing any sediment or tracking on streets, common areas or other property resulting from their permitted area. Additionally, the permittee is responsible for cleaning and/or maintaining all down gradient controls that have the potential to receive stormwater flows from their disturbed area. This includes, but is not limited to sidewalks, gutters, streets, storm drain inlets, detention basins and wind-blown trash.

1.5 Site Area

The following are estimates of the construction site:

- Construction site area to be disturbed: Approximately 225 acres
- Total project area: Approximately 225 acres

- Total area of Common Plan of Development: 225 Acres

1.5.1 Acreage Reduction Benchmarks

The following is provided as informational to assist in determining acreage reduction for the purposes of managing information flow as the project progresses. Specifically, as a project's disturbed areas are reduced from any one of the following categories to a lower category the permittee may file a project amendment to reduce the annual fee, if practical.

Specific benchmarks are for projects:
Greater than 30 acres
1-30 acres
Less than 1 acre

If the project acreage has met one of these benchmarks but is likely to be eligible for permit termination due to final stabilization in the immediate future, this reduction is impractical, and the permittee may choose to forego the permit reduction.

As phases close out, or as site progression dictates, CDG will submit modifications forms to the state indicating areas that have been removed from the permit, including acreage reductions as appropriate. This will serve as a supplemental to the information provided in APPENDIX B – Schedule and Area Activity Log of this SWMP.

1.6 Summary of Existing Soil Data and Topography

The information contained herein is drawn from the Natural Resources Conservation Services Web Soil Survey at: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. This information covers the site as a whole. A summary of this information is highlighted below with the full reports located in APPENDIX C.

Tables — Hydrologic Soil Group — Summary By Map Unit

Summary by Map Unit — Weld County, Colorado, Southern Part (CO618)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
4	Aquolls and Aquepts, flooded	D	0.3	0.1%
36	Midway-Shingle complex, 5 to 20 percent slopes	D	21.2	6.3%
38	Nelson fine sandy loam, 3 to 9 percent slopes	C	21.2	6.3%
40	Nunn loam, 1 to 3 percent slopes	C	25.8	7.6%
47	Olney fine sandy loam, 1 to 3 percent slopes	B	162.4	47.9%
48	Olney fine sandy loam, 3 to 5 percent slopes	B	48.0	14.2%
51	Otero sandy loam, 1 to 3 percent slopes	B	7.0	2.1%
52	Otero sandy loam, 3 to 5 percent slopes	B	23.4	6.9%
53	Otero sandy loam, 5 to 9 percent slopes	B	26.3	7.8%
67	Ulm clay loam, 3 to 5 percent slopes	C	3.2	0.9%
Totals for Area of Interest			338.8	100.0%

Tables — K Factor, Whole Soil — Summary By Map Unit

Summary by Map Unit — Weld County, Colorado, Southern Part (CO618)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
4	Aquolls and Aquepts, flooded		0.3	0.1%
36	Midway-Shingle complex, 5 to 20 percent slopes	.17	21.2	6.3%
38	Nelson fine sandy loam, 3 to 9 percent slopes	.24	21.2	6.3%
40	Nunn loam, 1 to 3 percent slopes	.24	25.8	7.6%
47	Olney fine sandy loam, 1 to 3 percent slopes	.28	162.4	47.9%
48	Olney fine sandy loam, 3 to 5 percent slopes	.28	48.0	14.2%
51	Otero sandy loam, 1 to 3 percent slopes	.28	7.0	2.1%
52	Otero sandy loam, 3 to 5 percent slopes	.28	23.4	6.9%
53	Otero sandy loam, 5 to 9 percent slopes	.28	26.3	7.8%
67	Ulm clay loam, 3 to 5 percent slopes	.20	3.2	0.9%
Totals for Area of Interest			338.8	100.0%

Tables — Wind Erodibility Index — Summary By Map Unit

Summary by Map Unit — Weld County, Colorado, Southern Part (CO618)

Map unit symbol	Map unit name	Rating (tons per acre per year)	Acres in AOI	Percent of AOI
4	Aquolls and Aquepts, flooded	0	0.3	0.1%
36	Midway-Shingle complex, 5 to 20 percent slopes	86	21.2	6.3%
38	Nelson fine sandy loam, 3 to 9 percent slopes	86	21.2	6.3%
40	Nunn loam, 1 to 3 percent slopes	48	25.8	7.6%
47	Olney fine sandy loam, 1 to 3 percent slopes	86	162.4	47.9%
48	Olney fine sandy loam, 3 to 5 percent slopes	86	48.0	14.2%
51	Otero sandy loam, 1 to 3 percent slopes	86	7.0	2.1%
52	Otero sandy loam, 3 to 5 percent slopes	86	23.4	6.9%
53	Otero sandy loam, 5 to 9 percent slopes	86	26.3	7.8%
67	Ulm clay loam, 3 to 5 percent slopes	86	3.2	0.9%
Totals for Area of Interest			**338.8**	**100.0%**

Tables — T Factor — Summary By Map Unit

Summary by Map Unit — Weld County, Colorado, Southern Part (CO618)

Map unit symbol	Map unit name	Rating (tons per acre per year)	Acres in AOI	Percent of AOI
4	Aquolls and Aquepts, flooded	5	0.3	0.1%
36	Midway-Shingle complex, 5 to 20 percent slopes	2	21.2	6.3%
38	Nelson fine sandy loam, 3 to 9 percent slopes	3	21.2	6.3%
40	Nunn loam, 1 to 3 percent slopes	5	25.8	7.6%
47	Olney fine sandy loam, 1 to 3 percent slopes	5	162.4	47.9%
48	Olney fine sandy loam, 3 to 5 percent slopes	5	48.0	14.2%
51	Otero sandy loam, 1 to 3 percent slopes	5	7.0	2.1%
52	Otero sandy loam, 3 to 5 percent slopes	5	23.4	6.9%
53	Otero sandy loam, 5 to 9 percent slopes	5	26.3	7.8%
67	Ulm clay loam, 3 to 5 percent slopes	5	3.2	0.9%
Totals for Area of Interest			**338.8**	**100.0%**

Report — RUSLE2 Related Attributes

Weld County, Colorado, Southern Part

Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
4—Aquolls and Aquepts, flooded								
Aquolls	55	–	D	–	5	–	–	–
Aquepts, flooded	25	–	D	–	5	–	–	–
36—Midway-Shingle complex, 5 to 20 percent slopes								
Midway	50	–	D	.17	2	22.1	27.9	50.0
Shingle	35	–	D	.37	2	43.2	38.8	18.0
38—Nelson fine sandy loam, 3 to 9 percent slopes								
Nelson	85	–	C	.24	3	65.2	27.3	7.5
40—Nunn loam, 1 to 3 percent slopes								
Nunn	85	–	C	.24	5	39.2	37.3	23.5
47—Olney fine sandy loam, 1 to 3 percent slopes								
Olney	85	–	B	.28	5	65.4	19.6	15.0
48—Olney fine sandy loam, 3 to 5 percent slopes								
Olney	85	–	B	.28	5	65.4	19.6	15.0
51—Otero sandy loam, 1 to 3 percent slopes								
Otero	85	–	B	.28	5	65.9	19.1	15.0
52—Otero sandy loam, 3 to 5 percent slopes								
Otero	85	–	B	.28	5	65.9	19.1	15.0
53—Otero sandy loam, 5 to 9 percent slopes								
Otero	85	–	B	.28	5	65.9	19.1	15.0
67—Ulm clay loam, 3 to 5 percent slopes								
Ulm	85	–	C	.20	5	33.2	36.3	30.5

More detailed soils information may be developed as part of future phase specific planning. Such information will be made available upon request.

1.7 Site Drainage

Due to the large size of the property, the site drains to several locations on all four sides of the property. Additionally, a significant portion of the site drains to an onsite sump and would not leave the site under normally anticipated stormwater flows. The initial phase of construction will establish two drainage channels to transport sheet and storm sewer runoff to detention basins. Once completed this will establish a drainage pattern from the center of Phase 1 to the east and west where the channels will drain to the detention basins on the

northern side of the property. Existing and post construction contours, indicating cut and fill, for the site, as platted are included on location specific erosion control maps located in APPENDIX H.

1.8 Existing Vegetation

When the permit application was originally submitted the site was under agricultural management and had an average uniform plant density of 65% At the time of this SWMP revision, portions of the site had been disturbed and/or finally stabilized by other entities not affiliated with this permittee (e.g. oil and gas, MS4 utility extension, and etc.). The site has irrigated and non–irrigated portions with significantly different vegetative cover/plant density. As such there is no single uniform plant density. The range of plant density within the common plan of development is approximately 0% (in recently disturbed areas and agricultural areas) to 75% in the areas not disturbed by previous construction or agriculture.

Reference photos of site conditions at the time of SWMP preparation and revision are included in APPENDIX B.

1.9 Receiving Waters

The site drains overland to the Town of Erie, Sullivan Ditch/Cottonwood Extension and/or Boulder Creek to the South Platte River, approximately 14 miles from the site.

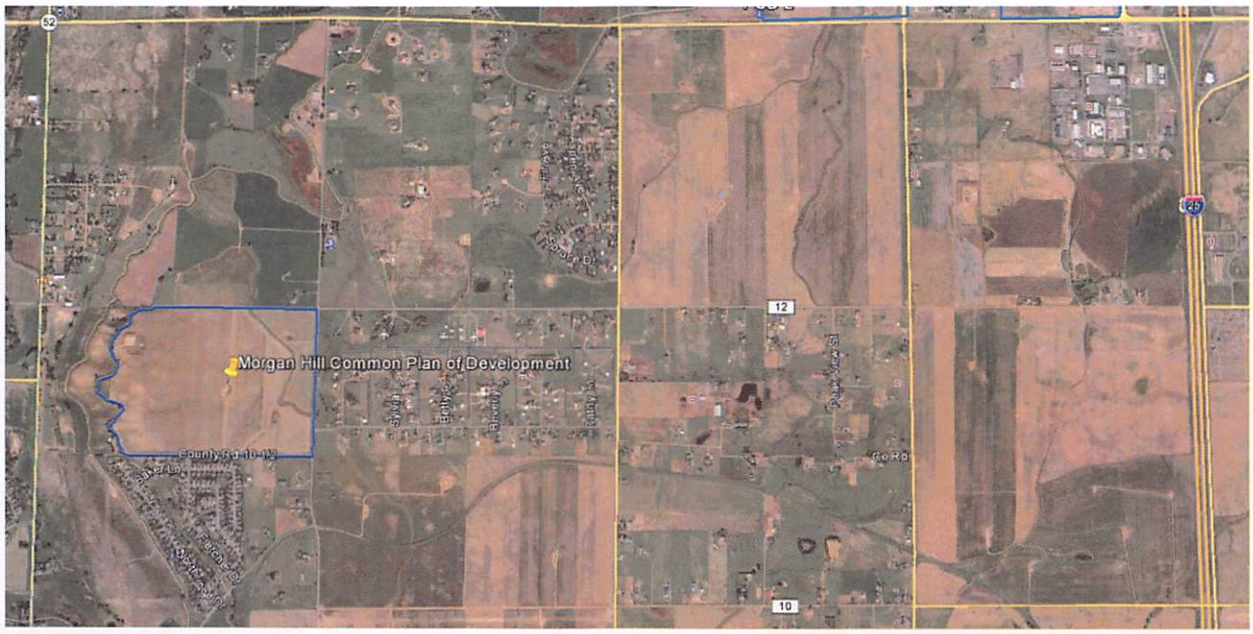
Storm Sewer Systems: Town of Erie County of Weld.

Impaired Waters or Waters Subject to Total Maximum Daily Loads (TMDLs): At the time of SWMP preparation there were no impaired waters or waters subject to TMDLs on or near the site listed on the State of Colorado website.

FIGURE 1 – Vicinity Map

= Approximate Limits of Construction

North



PART C – POTENTIAL POLLUTANTS AND DISCHARGES

SECTION 1: Allowable Sources of Non–Stormwater Discharge

The CDPS General Permit allows the following non–stormwater (NSW) discharges in combination with stormwater discharges associated with construction sites:

- Discharges from firefighting activities;
- Natural springs;
- Landscape irrigation return flow;
- Concrete washout water, provided that the washout water is confined in a concrete washout area and does not leave the site as surface runoff or to surface waters; and,
- Construction dewatering activities provided that the groundwater or groundwater combined with stormwater does not contain other pollutants in concentration exceeding the State groundwater standards in Regulation 5 CCR 1002–41 and 42 and does not leave the site as surface runoff or to surface waters.

There is a potential for each of the allowable sources of NSW discharges from this site, with the exception of natural springs. There are no known natural springs on the site. Landscape irrigation return flow is anticipated from adjacent sites as well as from the site as landscaping is completed. With the exception of the landscape irrigation return flow, allowable sources of NSW discharges will be indicated on the site map if they occur.

SECTION 2: Potential Sources of Pollution

The CDPS General Permit specifically identifies specific potential sources of pollution for which, at a minimum, must be identified in the SWMP. The permit requires that all potential pollution sources be identified, activities be evaluated, and the sources be controlled through BMP selection and implementation.

Table 2 – Potential Pollution Sources provides information regarding the specific potential pollution sources identified for this site. The table also provides the activities associated with these sources and BMPs selected to control contaminants from these sources from leaving the site in stormwater runoff. Specific details regarding BMP selection, implementation, inspection and maintenance are provided below. These sources should be updated as the project progresses. Additional pollution sources that are not included on this table should be added and indicate sources that are no longer used onsite. Handwritten changes are acceptable, date and initial changes that are made.

2.1 Oil and Gas Production Pollutants

As discussed above, there are several oil and gas production facilities located within the Common Plan of Development. While these represent a significant potential source of

pollution, they are permitted separately through the CDPHE and the Colorado Oil and Gas Commission. Controls for these sites are installed by the appropriate permittee and include, but are not limited to: berms, silt fence and erosion control logs. Additionally, spills from these locations require special training and equipment that is beyond the scope of construction specialties. As such, any spills related to such facilities will be the responsibility of the appropriate permittee. If a spill occurs and is discovered by CDG staff, the appropriated action is to utilize the emergency contact information posted at each facility to notify appropriate authorities.

TABLE 2 – Potential Pollution Sources

Potential Pollution Source	Potential With This Project	Activities Associated With This Pollution Source	BMPs Selected to Control Source*	Approximate Location of Pollution Source Onsite**
All disturbed and stored soils (includes stockpiles).	Yes	Clearing and grubbing, grading, utility installation, building construction, and final stabilization.	Silt fence, inlet protection, vehicle tracking control, construction fencing, surface roughening, stabilized staging area, seeding/mulching, and street cleaning. Secondary containment for stockpiles as needed.	All disturbed areas of the site, except paved surfaces.
Vehicle tracking of sediments.	Yes	Clearing and grubbing, grading, utility installation, building construction, and final stabilization.	Silt fence, inlet protection, vehicle tracking control, construction fencing, surface roughening, stabilized staging area, seeding/mulching, and street cleaning.	All disturbed areas of the site, except paved surfaces.
Management of contaminated soils.	No	No known contaminated soils exist on the site.	If contaminated soils are encountered, all activity shall be stopped until the situation can be assessed. The Superintendent will be contacted for further direction. Affected soils should be isolated from clean soils (placed on and covered with plastic, or placed in 55–gallon drums) whenever possible until a remediation plan can be implemented.	Not applicable.
Loading and unloading operations.	Yes	Delivery and staging of materials.	Silt fence, inlet protection, vehicle tracking control, construction fencing, surface roughening, stabilized staging area, seeding/mulching, and street cleaning.	Stabilized staging area.
Outdoor storage activities (including building materials, fertilizers, chemicals, etc.).	Yes	Delivery and staging of materials.	Silt fence, inlet protection, vehicle tracking control, construction fencing, surface roughening, stabilized staging area, seeding/mulching, and	Stabilized staging area – only those products needed for use on the site will be onsite at any one time. Extra product not used onsite will be removed from the site by the subcontractor.

Potential Pollution Source	Potential With This Project	Activities Associated With This Pollution Source	BMPs Selected to Control Source*	Approximate Location of Pollution Source Onsite**
			street cleaning.	
Vehicle and equipment maintenance and fueling.	Yes	Fueling and equipment repair for vehicles or equipment used in all phases of construction activity.	Fueling will be performed by delivery vehicles which will provide necessary spill prevention or will be performed offsite.	Fuel, greases and other maintenance fluids will be used and removed from the site by the subcontractors. During fueling or maintenance operations items will be kept on mobile vehicles and not stored onsite.
Significant dust or particulate generating processes.	Yes	Clearing and grubbing, grading, utility installation, building construction, and final stabilization.	Wetting of soils.	All disturbed areas of the site, except paved surfaces.
Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, paints, solvents, oils, grease, glues, joint compound, etc.	Yes	Vehicle and equipment use and storage, utility installation, final stabilization.	Silt fence, inlet protection, vehicle tracking control, construction fencing, surface roughening, stabilized staging area, seeding/mulching, and street cleaning. Individual waste containment systems such as children's rigid pools, buckets, drums or other water tight vessel.	These items are generally kept in subcontractor vehicles or within the structure once constructed. Only those products needed for use on the site will be onsite at any one time. Extra product not used onsite will be removed from the site by the subcontractor.
Onsite waste management practices (waste piles, liquid wastes, dumpsters, etc.).	Yes	Clearing and grubbing, grading, utility installation, building construction, and final stabilization.	Dumpsters including regular trash removal, and site management practices. Liquid wastes will be contained and removed from the site and properly disposed by subcontractors generating such wastes. Dumpsters will be emptied by the appropriate subcontractor for disposal at a designated offsite disposal facility.	Dumpsters will be placed on the site in amounts needed for anticipated waste generation. Waste piles unable to be transferred to available dumpsters onsite will be removed from the site and transported to designated offsite disposal facilities.
Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment (includes concrete and curing compounds).	Yes	Foundation construction and flat work.	Concrete washout areas, vehicle tracking control, and site management practices.	A portable concrete washout will be provided and will be noted on the map. Concrete washout areas may be moved as needed to accommodate construction schedules.
Dedicated asphalt and concrete batch plants	No	Large scale asphalt or concrete batch plant not planned for this site. Portable masonry mixer station will be used.	See masonry mixer in the Special products group on the following page.	See masonry mixer in the Special Products Group section of this table on the following page.
Masonry Mixer and associated materials	Yes	Brick and exterior finish work	Containment surrounding the mixing unit (soil berm or plastic), dumpsters, street sweeping, and	The exact location will be noted on the site plan.

Potential Pollution Source	Potential With This Project	Activities Associated With This Pollution Source	BMPs Selected to Control Source*	Approximate Location of Pollution Source Onsite**
			vehicle tracking control	
Non–industrial waste sources such as worker trash and portable toilets.	Yes	All activities.	Dumpsters, portable toilets, site management practices. Individual units will be emptied and their contents properly disposed at offsite disposal facilities.	Dumpsters and portable toilets will be placed onsite in amounts needed for anticipated waste generation. Their exact locations will be noted on the site map.
Other areas or procedures where potential spills can occur.	No	No other sources identified at this time.	Not applicable.	Not applicable for this site.
Add additional detail to the above categories if needed.				
Oil and gas production facilities.	Yes	Non–construction activities located within the Common Plan of Development.	Earthen berms, silt fence, erosion control logs, and diversion ditches.	See Figure 1 – Vicinity Map and
Contaminated Soils 4/26/21	Yes	Sewer Blockage & Overflow — See other Documents	1 Earthen Berm — Soil removed	See Figure 1

* See further discussion of appropriate BMPs in Part C, Section 3.3 and APPENDIX G.

** For specific location of BMPs used onsite see site map provided in APPENDIX H.

PART D – SITE MAP

Maps showing the overall layout of the Common Plan of Development and BMPs were prepared by Hurst Engineering and are provided in APPENDIX I. The Site Plans reflect recommended BMPs to protect the site from sediment and pollutant discharge as well as the items listed below.

SECTION 1: Map Contents

a) Construction site boundaries;
b) All areas of ground surface disturbance;
c) Areas of cut and fill;
d) Areas used for storage of building materials, equipment, soil, or waste;
e) Locations of dedicated asphalt or concrete batch plants;
f) Locations of all structural BMPs;
g) Locations of non–structural BMPs as applicable; and,
h) Locations of springs, streams, wetlands and other surface waters.

SECTION 2: Updates to Map

As the site evolves, the Site Plans will be updated to reflect the current BMPs present on the site at any given time handwritten changes to the site map are acceptable. If a new BMP is installed, the operator shall update the SWMP prior to installation in the field. For more complex revisions, changes to the SWMP shall be done as soon as practical, but within 72 hours after the change occurs on the site. For items where changes are made prior to SWMP revision, a notation must be included in the SWMP prior to the site change. The notation must include the time and date the change was made, and the identification and location of the BMPs removed or added. As the site progresses, additional maps may be required for clarity. In such cases, new maps will only reflect current and future work from the dates indicated on the maps.

2.1 Map Information for Active Portions of the Site Under CDG Operational Control

Once maps are developed for a specific portion of the site and an addendum to this SWMP is developed for that activity, the following will apply:

- The main map located in APPENDIX H will be marked to indicate the area is no longer included on that particular map; and,
- The name and specific addendum location will be noted in Table 1– Construction Overview.

2.2 Map Information for Active Portions of the Site Under Control by Others

Once property is transferred to the operational control of others the following will apply:

- The main map located in APPENDIX H will be marked to indicate the area is no longer included on that particular map; and,

- The name of the purchaser and the appropriate permit number will be noted in Table 1, Part B.

PART E – EROSION AND SEDIMENT CONTROL BMPS

Best Management Practices are those items, physical or administrative, that work to:

- Control/contain storm flow volume;
- Control/reduce storm flow velocity;
- Provide a non–erosive surface treatment;
- Provide transition zones between disturbed or undisturbed areas;
- Provide administrative direction for management and control of work practices to facilitate all of the above; and,
- Limit transmission of offsite stormwater related pollutants.

These BMP controls are traditionally broken into structural (erosion and/or sediment control) and non–structural (administrative or erosion control). The State of Colorado also has specific controls which must be addressed in the SWMP.

SECTION 1: SWMP Administrator

The permit specifically requires that an individual(s) be identified who is responsible for developing, implementing, maintaining, and revising the SWMP. The designated SWMP Administrator shall be responsible for performing and/or assigning personnel, consultants, and/or contractors to aid in SWMP compliance. The SWMP management functions designated to and/or delegated by the SWMP Administrator includes but is not limited to:

- SWMP preparation;
- Permit submittal (state and local);
- BMP installation and maintenance;
- Inspections, including routine and storm event;
- Maintaining required onsite SWMP records;
- Communicating and responding to Federal, State and MS4 inspectors;
- Training; and,
- Inspection certification.

The SWMP Administrator and appropriate contact information is provided in APPENDIX A – Site Contact Information. The SWMP Administrator may delegate these responsibilities to other individuals within his/her organization or to a third party. The ultimate responsibility for completion of these items and compliance with the construction stormwater permit is with the SWMP Administrator's and the Owner/Operator of the site.

SECTION 2: Best Management Practices (BMPs)

The following sections describe the BMPs selected for implementation on this site. Erosion and sediment controls will be designed to retain sediment on the site to the extent practicable. Specific locations of BMPs are indicated on the Site Plans provided in APPENDIX H. Design specifications and installation details for

individual BMPs are provided in APPENDIX G. Additional BMP details are also included that may prove more effective. Please refer to both the details and the BMP description sheets for each BMP.

2.1 Structural Practices

Structural practices are those physical structures implemented at the site to minimize erosion and sediment transport. These structures include, but are not limited to: silt fence, wattles/ sediment control logs, earthen dikes/diversion, drainage swales, sediment traps and basins and inlet protection. The BMPs specified for the project are described and installation details are provided in APPENDIX G – BMP Details, Including Phasing, Implementation, and Maintenance. Specific locations for BMP implementation at the site are indicated on the Site Plans provided in APPENDIX H.

2.2 Non–Structural Practices

Non–structural practices are those practices which, when implemented, will minimize erosion and sediment transport. These practices incorporate interim and permanent practices and include, but are not limited to maintaining: existing vegetation, permanent vegetation, mulching, surface roughening, and vegetative buffer strips. The BMPs specified for the project are described and installation details are provided in APPENDIX G – BMPs Details, Including Phasing, Implementation, and Maintenance. Specific locations for BMP implementation at the site are indicated on the Site Plans, provided in APPENDIX H.

2.3 Phased BMP Implementation

BMP implementation is generally more effective when done alongside the various stages of construction. While some phasing is obvious, other items, such as phased seeding and final stabilization, may be more difficult when considering seasons, cost effectiveness of staging or mobilization, and disturbance from additional activities.

BMPs that can control erosion and sediment transport from initial site activities shall be installed at the outset. These include, but are not limited to, perimeter sediment control and vehicle tracking control.

As work progresses and additional areas are disturbed, BMPs that can control erosion and sediment transport shall be implemented prior to the start of earth disturbing activities in those areas. As portions of the site are completed and areas up–gradient of a BMP are stabilized or the BMP is no longer needed, BMPs may be removed. For example, if all the concrete onsite has been placed and no more concrete will be delivered to the site, the concrete washout can be removed from the site and the Site Map marked with the date the washout was removed.

TABLE 3 – BMP Phasing and Maintenance Activities

BMP phasing and maintenance activities are provided in TABLE 3 – BMP Phasing and Maintenance Activities below, and more details regarding the BMPs specific to the project are

described in APPENDIX G – BMPs Details, Including Phasing, Implementation and Maintenance. Specific locations for BMP implementation at the site are indicated on the Site Plans provided in APPENDIX H.

TABLE 3 – BMP Phasing and Maintenance Activities

Project Phase		BMPs to be Implemented During Each Phase[1]	Maintenance Activities[1]
Initial/Interim	Prior to construction activities	Silt fence, wattles, vehicle tracking control, sediment basin and inlet protection.	Remove accumulated sediment, trash and debris. Replace or repair damaged section or parts Clean as needed.
	Clearing, grubbing and grading	Site management practices, silt fence, wattles, vehicle tracking control, inlet protection, wind erosion controls, portable toilets, dumpsters, and street sweeping.	Remove accumulated sediment, trash and debris. Replace or repair damaged section or parts. Add additional rock. Wet soils as needed. Clean as needed.
	Utility installation	Site management practices, silt fence, wattles, vehicle tracking control, inlet protection, wind erosion controls, portable toilets, dumpsters, and street sweeping.	Remove accumulated sediment, trash and debris. Replace or repair damaged section or parts. Add additional rock. Wet soils as needed. Clean as needed.
	Lot preparation, road preparation, drainage swale construction.	Silt fence wattles, vehicle tracking control, inlet protection, wind erosion controls, portable toilets, dumpsters, and street sweeping.	Remove accumulated sediment, trash and debris. Replace or repair damaged section or parts. Add additional rock. Wet soils as needed. Clean as needed.
	Vertical Construction	Site management practices, silt fence, low profile weighted linear devices, vehicle tracking control, inlet protection, wind erosion controls, portable toilets, dumpsters and street sweeping.	Remove accumulated sediment, trash and debris. Replace or repair damaged section or parts. Add additional rock. Wet soils as needed. Clean as needed.
Final	Final Stabilization	Site management practices, silt fence, vehicle tracking control, inlet protection, wind erosion controls, portable toilets, dumpsters and street sweeping. Professional landscaping and/or seeding/mulching services for all areas not covered by pavement or structures. Professional landscaping includes installation of an automatic irrigation system, trees, shrubs, perennial grasses/flowers, sod and mulch (rock or bark) as well as permanent structures and paved areas.	Remove accumulated sediment, trash and debris. Replace or repair damaged section or parts. Clean as needed. Replace dead or dying plants or sod. Re–seed bare areas. Refresh mulch in bare areas.

1. Specific details regarding the implementation and maintenance of each BMP type are provided in APPENDIX G.

NOTE: The outlined BMP Phasing and Activities above create an obligation for CDG and their authorized representative designated as the SWMP Administrator (Refer to PART E, SECTION 1 – SWMP Administrator) to document the transitional stages of construction from the above listed milestones.

2.4 Materials Handling

Consistent with the permit requirements, all potential pollutants other than sediment will be handled and disposed of in a manner that does not cause contamination of stormwater. Non–sediment pollutants that may be present during construction activities include, but are not limited to:

- Petroleum products, including fuel, lubricants, hydraulic fluids and form oil;
- Building materials and waste;
- Concrete, mortar, stucco or similar products;
- Solvents, paints or similar products; and,
- Fertilizers, pesticides or other soil amendments.

These materials, and other materials, used during construction with the potential to impact stormwater will be stored, managed, used, and disposed of in a manner that minimizes the potential for releases to the environment, especially into stormwater. Specific items identified for potential use on the site are further described in TABLE 2 – Potential Pollution Sources.

2.5 Vehicle Maintenance and Fueling

Vehicles entering the construction site should be properly maintained to prevent spills and leaks of hazardous fluids that would be exposed to stormwater. Vehicles used onsite will be inspected for leaks. Leaking vehicles will not be allowed to stay onsite, and the vehicle operator will be responsible for any necessary cleanup. Vehicles will not be parked in or near retention areas, natural drainage areas, storm sewer inlets or surface waters. If necessary, drip pans will be utilized for secondary protection of onsite vehicles until leaking vehicles can be removed from the site. Any maintenance or fueling procedure done onsite will be conducted at a minimum of 50 feet away from any storm drain, retention area, surface water, wetland, natural drainage area, or paved roadway.

2.6 Stockpiles

Stockpiles of soils, rock, landscape materials and other loose particulates have a pollutant potential based on:

- The size/weight of the material;
- Contaminants mixed with the material;
- Location of the material in relationship to receiving waters, paved roadways, inlets or other sensitive areas;
- Expected length of time material to remain in place; and,
- Overall size of stockpile.

The construction industry traditionally considers stockpiles as large soils or rock materials that will remain in place for weeks or months at a time. Such stockpiles should have appropriately sized controls including, but not limited to, compacted earthen berms, diversion ditches, silt fence, etc. A buffer area of at least 3 to 10 feet should be maintained between the toe of the stockpile and the perimeter control. If such stockpiles are located immediately adjacent to the perimeter control, then additional controls may be required. Any stockpiles that will be in place for over 30 days with no

activity (no additions to or removal from the stockpile) require the installation of temporary or permanent erosion control such as blankets, tackifier, hydromulch, surface roughening and/or seeding, and such controls should be installed as soon as possible.

Stockpiles located adjacent to receiving waters, storm event conveyances, waterways, defined areas of concentrated flow, wet lands or marshes almost certainly will require secondary containment in addition to and/or distinctly separate from perimeter controls, terracing, surface roughening or other controls in the immediate vicinity. The duration the stock pile will remain in this location may be considered as a factor in BMP selection if it will be removed by the end of the work day.

While some individual inspectors or agencies state that each stockpile requires individual and separate protection, this leaves open the question of what is considered a "stockpile". The following are some examples of stockpiles with suggestions to protect them.

2.6.1 Small Materials Piles

Small material piles, including landscaping material, squeegee, and sand, located within a protected materials storage area, on flat areas located away from paved surfaces, receiving waters and inlets, or other sensitive areas that are contained within appropriately sized BMPs, may not need additional protection. If additional protection is required, controls may include, but are not limited to compacted soil berms, diversion ditches and linear erosion controls such as wattles or silt fences.

2.6.2 Backfill

Back fill consists of materials removed from foundations or trenches that will be placed back in the excavation or trench within a short period of time (usually 8 to 72 hours), or trench bedding material such as squeegee or sand. The best control for backfill materials is to place it up–gradient to the area it was removed from so that any flow off the backfill pile will be contained within the excavated area.

If such materials are placed adjacent to receiving waters, paved roadways, inlets or other sensitive areas, then additional protection may include, but is not limited to, linear erosion control such as compacted soil berms, diversion ditches, wattles or silt fences.

2.7 Spill Prevention

A Spill Prevention Control and Countermeasures Plan (SPCC) is not planned for this project. If a spill of pollutant(s) threatens stormwater or has the potential to discharge from the site, the spill response procedures outlined in APPENDIX E must be implemented in a timely manner to prevent the release of pollutants.

2.8 Dedicated Concrete or Asphalt Batch Plants

It is not anticipated that a large scale dedicated concrete or asphalt batch plant will be included with this project. However, a portable masonry mixer may be located on the site for use during brick

work for building exteriors. The mixer is identified as a pollution source in Table 2 and will been identified on the working copy of the site map. The mixer will be provided with secondary containment. As soon as the type of secondary containment is determined this SWMP will be updated to reflect detail of the containment device.

2.9 Vehicle Tracking Control

The transfer of soil onto paved surfaces will be controlled through a variety of structural and non–structural practices. Vehicle tracking control will be implemented wherever a hard surface road (e.g. asphalt or concrete pavement, gravel, etc.) adjoins disturbed soil. Effective structural vehicle tracking BMPs include vehicle tracking pads, geotextile mats, cattle guards, etc.

Effective non–structural vehicle tracking BMPs include but are not limited to: limiting vehicle access to unpaved areas, cleaning/scraping mud and sediment off equipment or tires before re–entering paved areas, and regularly scheduled and as–needed street sweeping/cleaning.

Vehicle tracking construction details are provided and discussed in APPENDIX G – BMP Details, Including Phasing, Implementation and Maintenance.

2.10 Waste Management and Disposal

2.10.1 Solid waste

Solid waste generated on this site will be disposed of in dumpsters provided by an outside contractor. The dumpsters will be kept at convenient locations and a licensed company will be contracted to empty the dumpsters as needed. The site project managers/superintendents will be responsible for monitoring the site to ensure that all site personnel and subcontractors utilize the proper waste disposal practices and facilities. Liquid wastes, including petroleum products and paint, are not allowed to be disposed of in solid waste dumpsters. Liquid hazardous wastes will be removed from the site and disposed of in accordance with all applicable Federal, state and local regulations.

2.10.2 Concrete Washout

A designated washout facility will be installed onsite and the location reflected on the site plan. As work progresses on the site, it may be necessary to move the concrete washout. All changes in the location will be reflected on the site plan. Washout facilities should be located a minimum of 50 feet away from: storm drain openings, shallow surface waters, natural drainages, streams, wetlands and retention areas. The hardened concrete and/or excess wash water shall be hauled away by an approved contractor to a designated facility designed to receive such materials. If it is necessary to remove hardened material from the washout pit without immediately removing it from site, the following conditions must be met:

If there is a secondary containment berm (compacted) around the pit, then solidified waste material may be placed on the berm directly above the pit. (The waste concrete must not damage the integrity

of the containment berm and any stormwater runoff from the material must be routed back into the containment pit.
Or:
Solid waste removed from the pit may be stored on soil so long as appropriate secondary containment is installed. If practical, it is best to store in a shallow depression. The waste material should be located away from inlets or other environmentally sensitive areas on site.

In either case, removal of the material as soon as practical is encouraged.

2.10.3 Portable Toilets

As needed, portable sanitary facilities will be provided in a convenient, level location away from traffic areas, storm drains, or retention areas. Portable sanitary facilities must be staked or secured to the ground to prevent tipping over. A licensed company will be hired to maintain and clean the units, inspect the units for deficiencies, and keep the units in good working order. Sanitary waste will be cleaned as required by local regulations. The site project manager/superintendents will be responsible for ensuring that the units are properly utilized and maintained.

2.11 Groundwater and Stormwater Dewatering

The permit allows for dewatering of groundwater and stormwater to the ground surface to allow for infiltration on the site. No groundwater from construction dewatering shall be discharged as surface runoff or on top of surface waters on the site. It is not anticipated that dewatering activities will be required during this project. Should dewatering become necessary, stormwater may be pumped offsite if it is not co–mingled with groundwater or process water and is treated to prevent sediment from leaving the site. The SWMP shall clearly describe and locate the practices implemented at the site to control stormwater pollution from dewatering from excavations, low areas, etc. The location of pumping and deposition of the stormwater shall be marked on the Site Plan prior to the start of pumping activities.

The conditional discharge of construction dewatering to the ground is allowed as long as:

- The discharge is not authorized under a separate CDPS discharge permit;
- Groundwater is prevented from leaving the site as surface runoff or to surface waters; and,
- The SWMP clearly describes and locates the control practices to be used.

If it becomes necessary to pump groundwater offsite, then a Groundwater Discharge Permit must be obtained from the State prior to engaging such activities.

2.12 Training

Effective management of stormwater pollution requires contractors and employees to be alert to conditions that may cause pollutants to enter stormwater. Proper design, use, and maintenance of BMPs by all contractors and employees are essential to SWMP implementation. CDG will be responsible for ensuring that all staff responsible for SWMP implementation understands the components of the SWMP, how it will be implemented, and their individual role in contributing to

the effectiveness of the SWMP. Training will address control measures identified in the SWMP, good housekeeping, materials management, spill response, maintenance of controls, and inspections. Training can be formal or informal. Informal training can include partnering meetings, weekly briefings, "tailgate" meetings, etc. Formal training can include classroom training, videos, printed materials, etc. Onsite pollution prevention training should be conducted on an ongoing basis during project construction.

PART F – FINAL STABILIZATION

Final stabilization includes those measures taken to control pollutants in stormwater after soil disturbing activities are complete. Practices implemented to achieve final stabilization will include: paved areas, (asphalt and gravel), structures, sod, seed and mulch, blankets, shrubs, trees and decorative landscape material such as bark mulch and rock.

Final stabilization is achieved when ground disturbing activities have been completed and uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre–disturbance vegetative cover/density, or equivalent permanent physical erosion reduction methods have been employed. For this permitted facility, disturbed areas not transferred to other entities will be either stabilized with seed and mulch or will stabilized per an as-yet-to-be finalized landscape plan. (this plan will be available by request once it is developed.)

Areas transferred to other entities will be temporarily stabilized or contained prior to the transfer. Final stabilization in these areas will be the responsibility of the transferee.

PART G – INSPECTIONS

1.1 Inspection Intervals

Site operators shall inspect the site to insure the BMPs implemented on the site are functioning as specified based on the following frequency:

- Bi-Weekly (every 14 days) inspections are required by the State of Colorado. (Inspections will be performed by a combination of in house and third-party inspections.)
- In addition to weekly inspections, inspections are also required within 24 hours after the end of precipitation or snow melt events which cause surface erosion. However, if onsite construction activities are not anticipated following the end of a storm event, an inspection can occur prior to commencing/resuming construction activities but within 72 hours following the end of the storm event. A post–storm inspection may be used to fulfill the regularly scheduled inspection if the timing is appropriate. The occurrence of any such delayed inspection must be documented in the inspection record. A more frequent inspection schedule may be necessary to ensure that BMPs continue to function as required.
- Where final stabilization has been implemented, but vegetative cover has not become established for the site, or portions of the site, inspections can be performed once a month and storm event inspections are not required if the following criteria are met:
    - All construction involving earth disturbance activities are complete;
    - All activities required for final stabilization have been completed, with the exception of seed application that has not occurred due to seasonal conditions; and,
    - The SWMP has been amended to indicate those areas which will be inspected in accordance with the reduced schedule.

1.2 Inspection Considerations

In areas where permits and/or operational controls overlap, CDG will inspect all areas within its limits of construction and any commonly shared BMPs (VTC, concrete washout, etc.). Any overlapping corrective actions will be discussed with other permittee as appropriate. The responsibility for correcting those items will be assigned and/or prorated accordingly. Some examples of this include, but are not limited to:

- Cleaning/sweeping street(s) at common point of access and common haul routes;
- Maintaining VTC at a common point of access;
- Maintaining inlet protection down–stream of both projects;
- Maintaining shared concrete washout; and,
- Any items directly related to property owner and/or permittee's contractor crossing the limits of construction between the areas of operation.
- Monthly inspections for areas waiting for growth to finalize stabilization and 14-day inspections may be combined as appropriate.

1.3 Inspection Reports

Records of inspections must be maintained throughout the length of the project and for three years following the inactivation of the permit. Inspection records must identify areas of noncompliance with the terms and conditions of the permit. The inspector should observe the site and identify areas of noncompliance for the following items:

- All erosion and sediment control practices identified in the SWMP;
- The construction site perimeter;
- All disturbed areas;
- Material and/or waste storage areas that are exposed to precipitation;
- Discharge locations, including inlets, outfalls and natural drainage areas; and,
- Locations where vehicles access the site.

At a minimum, the inspection report must include:

A. The inspection date;
B. Name(s) and title(s) of the individual making the inspection;
C. Location(s) of discharges of sediment or other pollutants from the site;
D. Location(s) of BMPs in need of maintenance;
E. Location(s) of BMPs that failed to operate as designed or proved inadequate for the location;
F. Deviations from the minimum inspection schedule outlined above;
G. Descriptions of corrective actions for items identified in C, D and E above, dates of corrective action(s) taken and measures taken to prevent future violations, including revising the SWMP if necessary; and,
H. After adequate corrective action(s) have been taken or where a report does not identify corrective actions required, the report shall contain a signed statement indicating the site is in compliance with the permit to the best of the signor's knowledge and belief.

1.4 Location of Reports

Location of inspection report are identified in Appendix I. As this permit is anticipated to be open for a long period of time full report binders may be removed from the site and archived at the main office. Such records will be available upon request from the SWMP administrator.

PART H – BMP MAINTENANCE AND REPLACEMENT OF FAILED BMPS

All BMPs identified in the SWMP will be maintained in effective operating condition. BMPs that are not adequately maintained in accordance with good engineering, hydrology and pollution control practices are considered to be no longer operating effectively and will be modified or replaced. BMPs implemented at the site must be adequately designed and maintained to provide control for all potential pollutant sources associated with the construction activity to prevent pollution or degradation of State waters. Where site inspections note the need for BMP maintenance activities, BMPs must be maintained until such time as these conditions are met. Maintenance items include but are not limited to: removal of accumulated sediment, repair or replacement of worn or damaged sections, repositioning to correct placement, and reinstallation of BMPs displaced.

Where BMPs have failed, they must be assessed and modified or replaced with a more appropriate BMP as soon as possible to minimize potential discharges. When new BMPs are installed that were not previously included in the SWMP, the SWMP must be changed to reflect the new BMP. The location of the new item must be noted on the SWMP site map as well as the details delineated in the SWMP narrative for the correct installation of the BMP.

1.1 Maintenance Considerations

In areas where permits and/or operational controls overlap, CDG is responsible for BMPs within its limits of construction. Any commonly shared BMPs (VTC, concrete washout, etc.) will be discussed with other permittees as appropriate. The responsibility for maintaining those items will be assigned and/or prorated as accordingly. Some examples of this include, but are not limited to:

- Cleaning/sweeping street(s) at common points of access and common haul routes;
- Maintaining VTC at a common point of access;
- Maintaining inlet protection down–stream of both projects;
- Maintaining a shared concrete washout; and,
- Any items directly related to property owner and/or permittee's contractor crossing the limits of construction between the areas of operation.

1.1 Maintenance Timing Considerations

While the State permit indicates that a specific timeline for implementing maintenance procedures is not included in this permit because BMP maintenance is "expected to be proactive, not reactive," and in the case of BMPs that have "failed, resulting in noncompliance," minor repairs such as a tear in the silt fence or small amounts of collected sediment should not be considered a failure as long at the BMP can still function.

The following considerations should be taken into account for maintenance scheduling.
Risk of offsite contamination and hazardous material exposure takes priority. This includes, but is not limited to:

- Damaged or missing down–gradient perimeter control;
- Points of offsite discharge (including inlet protection that does not drain to an onsite detention area);
- Any fuels or liquid wastes that would trigger the spill prevention plan; and,
- Concrete waste or wash–out water that is not contained or on bare soil.

Except for the items listed above, the following are areas or conditions that would cause potentially larger issues than the recommended maintenance action. For example:

- When site access would create ruts, additional tracking or other damage due to muddy conditions;
- Where projected phasing negates the need for the recommended maintenance in the short term;
- When safety considerations – injury or life – outweigh the environmental benefits. The act of ordering supplies or scheduling the work is a maintenance "action." The permit expects, however, that some other temporary measure may need to be taken when waiting for the maintenance item to be completed. For example, scarifying the VTC until more rock arrives, or restricting vehicle traffic from disturbed areas during muddy conditions. Any significant delays in maintenance should be noted in the inspection reports with an estimated schedule for availability of supplies, personnel or other reasons for delay.

PART I – SWMP REQUIREMENTS/RECORDKEEPING

The SWMP shall be implemented prior to commencement of construction activities. A copy of the SWMP will be retained onsite at all times. The SWMP will be kept accurate and up–to–date, and it will reflect the actual onsite ground conditions. Only changes in site conditions that require new or modified BMPs need to be addressed in the SWMP. The SWMP will be amended:

- When there is a change in design, construction, operation, or maintenance of the site which would require the implementation of new or revised BMP(s); or
- If the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity; or
- When BMPs are no longer necessary and are removed.

SWMP changes (e.g. handwritten notations on the SWMP narrative or site map) shall be made prior to changes in the site conditions, except as noted below.

SWMP revisions may include but are not limited to: identification of potential pollutant source(s); selection of appropriate BMPs for site conditions; BMP maintenance procedures; and, interim and final stabilization practices.

The SWMP changes may include a schedule for further BMP design and implementation, provided that, if any interim BMPs are needed to comply with the permit, they are also included in the SWMP and implemented during the interim period.

The majority of SWMP revisions to address changing site conditions can be made immediately with simple field revisions to the SWMP. In the less common scenario where more complex development of materials to modify the SWMP is necessary, SWMP revisions shall be made in accordance with the following requirements:

(1) The SWMP shall be revised as soon as practicable, but within 72 hours after the change(s) in BMP installation and/or implementation occurs at the site; and,
(2) A notation must be included in the SWMP prior to a site change that includes the time and date of the change in the field, an identification of the BMP(s) removed or added, and the location(s) of those BMP(s).

Upon request, a copy of this SWMP shall be provided to the State or any local agency within the timeframe requested. If the SWMP is required to be submitted, it must include a signed certification in accordance with the General Permit certifying that the SWMP is complete and meets all permit requirements. The signatory requirement for this certification can be found in Part 1.F.1 of the state permit. A copy of this certification is provided in APPENDIX D for convenience.

PART J – PROJECT CLOSEOUT AND PERMIT TERMINATION

When all construction earth disturbing activities are completed, and the site is ready for closeout as well as finally stabilized, the permittee shall submit an Inactivation Notice to the State in order to terminate the permit.

1.1 Sale of Residence to Homeowners (for residential construction only)

When a residential lot has been conveyed to a homeowner and all criteria in paragraphs a. through e. below are met, coverage under this permit is no longer required. The conveyed lot may be removed from coverage under the permittee's certification. At such time, the permittee is no longer responsible for meeting the terms and conditions of this permit for the conveyed lot, including the requirement to transfer or reassign permit coverage. The permittee remains responsible for inactivation of the original certification.

a. The lot has been sold to the homeowner(s) for private residential use;
b. The lot is less than one acre of disturbed area;
c. All construction activity conducted by the permittee on the lot is completed;
d. A certificate of occupancy (or equivalent) has been awarded to the homeowner; and,
e. The SWMP has been amended to indicate the lot is no longer covered by the permit.

Lots not meeting all of the above criteria require continued permit coverage. However, this permit coverage may be transferred or reassigned to a new owner or operator as discussed below.

1.2 Transfer and Reassignment

If final stabilization is not achieved and the responsibility for the permitted area changes from one party to another, then either a Notice of Transfer (NOT) for the entire permitted area or a Notice of Reassignment (NOR) for portions of the permitted area shall be submitted to the State. NOT transfers the permit responsibility to the other party, thus inactivating the original permittee's permit. NOR transfers the permit responsibility for only those portions of the site involved in the transfer, and the original permittee remains responsible for the balance of the site not reassigned.

Inactivation notices, NOTs and NORs can be found on the State of Colorado Discharge Permit System (CDPS) website:

http://www.cdphe.state.co.us/wq/PermitsUnit/stormwater/construction.html

1.3 Records Retention

A copy of this SWMP, including all changes made during construction, maps and inspection records, must be kept for a period of three years following the inactivation of the permit. These records must be made available to the State upon request at any time during this three–year period.

PART K – OTHER DOCUMENTATION

As the project progresses other SWMP related documentation may be included in the SWMP under APPENDIX G. Additions will be noted below:

Documentation Added	Date
Appx G Certification Memo Added	3/20/19
Plan Updated to 2019 Reqts by BG	4/1/19
Credentials Inspection	7/24/19
[redacted] 10/1/20 Phase [redacted] schedule	10/1/20
Report of sewage spill	9/25/21

APPENDIX A – SITE CONTACT INFORMATION

SITE CONTACT INFORMATION
Updated 3/5/2018

:

Operator/Permittee Community Development Group (as CDG Morgan Hill) Jon Lee, Authorized Representative 2500 Arapahoe Avenue, Suite 220 Boulder, CO 80302 Phone: (303) 442-2299	**Owner** Morgan Hill Investors, LLC 2500 Arapahoe Avenue, Suite 220 Boulder, CO 80302 Jon Lee, Authorized Representative Phone: (303) 442-2299
SWMP Administrator Travis Young Community Development Group 2500 Arapahoe Avenue, Suite 220 Boulder, CO 80302 Phone: (720) 724-0131	**Project Manager** Wade Duncan Community Development Group 2500 Arapahoe Avenue, Suite 220 Boulder, CO 80302 Phone: (303) 442-2299
Other Land Management Entities Morgan Hill Metropolitan District 1 2500 Arapahoe Avenue, Suite 220 Boulder, CO 80302 Phone: (720) 724-0131	**Other Land Management Entities** Morgan Hill Metropolitan District 2 2500 Arapahoe Avenue, Suite 220 Boulder, CO 80302 Phone: (720) 724-0131
Other Land Management Entities Morgan Hill Metropolitan District 3 2500 Arapahoe Avenue, Suite 220 Boulder, CO 80302 Phone: (720) 724-0131	**SWMP Prepared By** Open 8 Consulting 4416 Lazy K Drive Castle Rock, CO 80104 Brian Garber, Owner (303)-459-8336

APPENDIX B – SCHEDULE AND CONSTRUCTION OVERVIEW

Construction Schedule

The Schedule listed below is an overall estimate of work to be performed. As new phases are added this section will be amended

Construction Schedule Phase I

Activity	Projected Duration	Start Date	End Date
Overall project	5 Years	7/1/14	
Install initial BMPs.	7 Days	7/12/14	
Clearing and grubbing	14 Days	7/15/14	
Grading – lots, swales, etc:	4 months		
Seed Mulch Lots	15 Days		
Utility Installation	8 Months		
Curb and Gutter	30 Days		
Sidewalk	30 Days		
Asphalt - First Lift	30Days		
Asphalt - Final Lift	30 Days		
Landscaping – Stabilization of tracts and swales	120 Days		11/30/20

Phase 2 schedule

work initiated on 1/6/2021

Project Phase		Projected Duration 365days	BMPs to be Implemented During Each Phase[1]	Maintenance Activities[1]
Initial/Interim	Prior to construction activities	14 days	Silt fence, wattles, vehicle tracking control, and inlet protection.	Remove accumulated sediment, trash and debris. Replace or repair damaged section or parts Clean as needed.
	Clearing, grubbing and grading	120 Days	Site management practices for parking, tracking and grading phases and practices such as grade differentials that provide effective runoff control to capture or provide delayed release of rainfall. portable toilets, dumpsters, and street sweeping. Initial grading for detention pond with appropriate controls and Diversion ditch Stock pile protection, materials storage areas.	Ensure each control measure is installed and maintained per control measure specifications, remove accumulated sediment, trash and debris. Replace or repair damaged section or parts. Add additional rock. Wet soils as needed. Clean as needed. Monitor all areas to determine if additional controls are needed.
	Utility installation	270	Site management practices for phasing and contractors not controlled by operator or owner. , Stock pile protection specific to utilities installation. Concrete washout.	Monitor that backfill / stock pile management is sufficient to facility conditions. Monitor all areas to determine if additional controls are needed. Replace/clean CWO as needed
	Curb and Gutter	120	Inlet protection for newly created inlet structures, back of curb controls.	Ensure each control measure is installed and maintained per control measure specifications, remove accumulated sediment, trash and debris and concrete waste.
	Asphalt	60	Reset / replace tracking control practices if removed for paving. Reset inlet protection for final configuration if needed.	Ensure each control measure is installed and maintained per control measure specifications, remove accumulated sediment, trash and debris and concrete waste.
	Temporary Stabilization	90	Surface roughening, Seed and Mulch in areas	
Final	Final Stabilization	120	Site management Remove practices, silt fence, vehicle tracking control, inlet protection, wind erosion controls, portable toilets, dumpsters and street sweeping. Professional landscaping and/or seeding/mulching services for all areas not covered by pavement or structures. Professional landscaping includes installation of an automatic irrigation system, trees, shrubs, perenni al grasses/flowers, sod and mulch (rock or bark) as well as permanent structures and paved areas.	Ensure each control measure is installed and maintained per control measure specifications, remove accumulated sediment, trash and debris. Replace or repair damaged section or parts. Replace dead or dying plants or sod. Re-seed bare areas. Refresh mulch in bare areas.

APPENDIX G – OTHER DOCUMENTATION

(NOTE: See Part K – Other documentation, for a list documents added

Open 8 Consulting

Qualified Stormwater Managers

Open 8 Consulting's staff provides stormwater and erosion control compliance services to assist companies in meeting Colorado Department of Public Health, Construction Stormwater Permit compliance. Expertise applied to gaining the Qualified Stormwater designation includes:

- Preparation of Stormwater Management Plans (SWMP) and permit submittals
- Preparation and updates of site plans
- Regulatory mandated inspections
- Assist Client's staff in internal recordkeeping and time sensitive compliance objectives
- 200+ hour immersive study, discussion and training for COR400000 permit compliance

Qualified Storm Water Managers employed or utilized by Open 8 Consulting

Brian Garber *Qualified Stormwater Manager as of April 1, 2019. Initial certification based on Prior industry knowledge and work experience including over 20,000 hours of regulatory inspections*

Certifications include: CDOT stormwater supervisor for construction, Stormwater Supervisor for Sand & Gravel and CISEC (inactive).

David Myers *- Qualified Stormwater Manager as of April 1, 2019. Initial certification based on Prior industry knowledge and work experience including over 3,000 hours of regulatory inspections*

Certification include: Basic Compliance, a 40-hour stormwater immersive training program. 100-hour field practicum for Open 8 staff and ***Thinking Inside the Box****, an 8-hour training program for project engineers and site supervisors.*

Open 8 Consulting (303) 495-8336 brian@open8.org

COLORADO
Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

Low Risk Discharge Guidance
Discharges of Uncontaminated Groundwater to Land

Originally Issued September 2009
Revised August 8, 2017

Table of Contents

Scope and Purpose of Modification

This revised guidance document is effective August 4, 2017. In addition to organizational and editorial revisions, the following substantive modifications were made:

- Additional information was added regarding determining if the discharge is uncontaminated. Refer to the Criteria section.
- Removed the reference to solid waste permitting in the background and discussion portion of the document. Uncontaminated groundwater would typically not be regulated as a solid waste, and therefore the discussion was not likely to be applicable to discharges covered by this guidance. However, it remains the responsible parties' obligation to ensure compliance with other applicable laws and regulations, including solid waste requirements.
- The requirement that the discharge be returned to the same aquifer that it was drawn from was added. This is consistent with the intent of the original version, as identified by the examples of covered discharges provided: construction dewatering, subterranean or foundation dewatering, uncontaminated vault dewatering, and utility work.

Background and Discussion

This discharge policy guidance has been developed in accordance with WQP-27, Low Risk Discharges Policy. This guidance is only applicable to discharges meeting the low risk discharge criteria and conditions identified below. **Refer to the Alternative Disposal Options section at the end of this document for additional information for discharges that do not meet the criteria and conditions of this guidance.**

The division has issued general permits for point source discharges of groundwater to land, as identified in the Alternative Disposal Options section. However, for the category of point source discharges that meet the criteria and conditions outlined in this document, the division has determined it is appropriate to manage the discharges through the development of guidance instead of through pursuing permit coverage. When the criteria and provisions of this guidance are met, the division will not actively pursue permitting or enforcement for discharges of groundwater to land, unless on a case-by-case basis, the division finds that a discharge has resulted in an adverse impact to the quality of any state waters receiving the discharge.

Discharges of uncontaminated groundwater to land that are typically associated with short term or intermittent

gutter, inlets, borrow ditches, open channels etc. If the land application is to agricultural land, it must not reach or have the potential to reach an agricultural ditch. Discharges to drainage conveyance systems as described above are a discharge to surface water that require a discharge permit and are not covered under this guidance document.

- Land application must be conducted at a rate that does not allow for any ponding of the groundwater on the surface, unless the ponding is a result of implementing control measures that are designed to reduce flow velocity. If the control measures used result in ponding, the land application must be done in an area with a constructed containment, such as an excavation or bermed area with no designed outfall. The constructed containment shall prevent the discharge of the ponding water offsite as runoff.

❖ **Compliance with construction stormwater discharge permits:** If the discharge is located at a facility covered by a CDPS General Permit for Stormwater Discharge Associated with Construction Activities, the requirements in that permit associated with the discharge of groundwater must be complied with, including identification in the Stormwater Management Plan.

❖ **Controlling erosion:** The discharge shall not cause erosion of a land surface that could cause pollution of the receiving water. Signs of visible erosion that have the potential to cause pollution without downstream controls measures implemented include the formation of rills or gullies on the land surface. Energy dissipation devices designed to protect downstream areas from erosion by reducing velocity of flow (such as hose attachments and erosion controls) may be necessary to prevent erosion.

❖ **Controlling pollutant potential of deposited sediment:** Control measures shall be implemented to prevent any sediment deposited during land application from being transported by stormwater runoff to surface waters or other conveyances.

❖ **Additional Requirements and Property Rights:**

- All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction.
- The guidance included in this document in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.
- The discharge shall not result in flooding of neighboring property, streets, gutters or storm sewers. The discharge must be diverted from building foundations or other areas that may be damaged from ground settling or swelling.

➢ <u>Implementation of Control Measures</u>

Control measures should be implemented as necessary to meet the conditions above, by anyone discharging in accordance with this guidance. The following control measures have been developed by the division to help ensure that the discharge will not negatively affect water quality. Refer to the Alternative Disposal Options section for guidance where these control measures cannot be implemented.

❖ **Identifying potentially contaminated groundwater:** It the groundwater is located within 1 mile of a landfill, abandoned landfill, mine or mine tailing area, a Leaking Underground Storage Tank (LUST), Brownfield site, or other area of contamination, there is an increased likelihood that groundwater contamination exists. In those cases additional work is appropriate to determine if your dewatering area is in an area of contamination. The following is a list of contamination and plume resources and is helpful when determining if your dewatering area is in an area of contamination, however the list is not all inclusive and in some cases site-specific characterization of groundwater may be necessary.

CDPHE Environmental Cleanup Web Page (refer to the resources under "sites and facilities"):
https://www.colorado.gov/pacific/cdphe/categories/services-and-information/environment/environmental-cleanup#sites

EPA Cleanups in My Community Maps and Lists:
https://www.epa.gov/cleanups/cleanups-my-community

COLORADO
Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

Jon Lee, VP
Community Development Group
2500 Arapahoe Ave Ste 220
Boulder, CO 80302

DATE: 3/11/2019

MEMO RE: Modification of Certification, Colorado Discharge Permit System
Permit No., COR030000, Certification Number: COR03M425

DIVISION CONTACTS: Joseph Sturgeon, 303-691-4019, Joseph.Sturgeon@state.co.us

ATTACHMENTS: Certification General Permit

On 2/26/2019, the Division received a request to modify the certification for **Morgan Hill Subd** and determined that it qualifies for coverage under the CDPS General Permit for Stormwater Discharges Associated with Construction (the permit).

FEE INFORMATION:
The fee for this permit action is $ 88 or 25% of the annual fee.
The Annual Fee for this certification is $ 350 [category 7, subcat II-J Construction Stormwater 1-30 Acres Disturbed per CRS 25-8-502]. The annual fee will be invoiced in July.

CERTIFICATION RECORDS INFORMATION:
The following information is what the Division records show for this certification.
For any changes to Contacts - Legal, Facility, or Billing - a "Notice of Change of Contacts form" must be submitted to the Division. This form is also available on our web site and must be signed by the legal contact.

Facility: Morgan Hill Subd WeldCounty
Construction Activities
Single family residence
Oil and gas production

Legal Contact *(receives all legal documentation pertaining to the permit certification):*
Jon Lee, VP
Community Development Group
2500 Arapahoe Ave Ste 220
Boulder, CO 80302
Phone number: 303-442-2299
Email: jonrlee@cdgcolorado.com

Facility Contact *(contacted for general inquiries regarding the facility):*
Scott Weisbeck,PM
Community Development Group
2500 Arapahoe Ave Ste 220
Boulder, CO 80302
Phone number: 720-333-0045
Email: scott@cdgcolorado.com

Billing Contact *(receives the invoice pertaining to the permit certification):*
Scott Weisbeck, PM
Community Development Group
2500 Arapahoe Ave Ste 220
Boulder, CO 80302
Phone number: 720-333-0045
Email: scott@cdgcolorado.com

ADMINISTRATIVE CONTINUATION EXPLANATION:
The Division is currently developing a renewal permit and associated certification for the above permitted facility. The development and review procedures required by law have not yet been completed. The Construction Stormwater General Permit, which expired June 30, 2012, is administratively continued and will remain in effect under Section 104(7) of the Administrative Procedures Act, C.R.S. 1973, 24-4-101, et seq (1982 repl. vol. 10) until a renewal permit/certification is issued and effective. The renewal for this facility will be based on the application that was received 2/26/2019 All effluent limits, terms and conditions of the administratively continued permit are in effect until the renewal is complete.

COLORADO
Department of Public
Health & Environment

CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COR-0300000
STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES

Certification Number: **COR03M425**

This Certification to Discharge specifically authorizes:

Community Development Group
to discharge stormwater from the facility identified as

Morgan Hill Subd

To the waters of the State of Colorado, including, but not limited to:

Boulder Creek- South Platte River

Facility Industrial Activity :
Single family residence
Oil and gas production

Facility Located at:
Colliers Blvd between 10.5 rd and 12 Rd Erie CO 80516
Weld County
Latitude 40.06925 Longitude -105.041389
Total Acres 226.8
Disturbed Acres 226.8

Specific Information (if applicable):

Modified, reissued, and effective date: 3/11/2019
Modification changed information regarding disturbed acreage for this permit.
Expiration date: This authorization expires upon effective date of the General Permit COR030000 renewal unless otherwise notified by the division.

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

This certification was approved by:
Meg Parish, Unit Manager
Permits Section
Water Quality Control Division

CDG Morgan Hill, Inc.

Rick Eich
Century Communities
Storm Water & Erosion Control Manager
8390 E. Crescent Pkwy Suite 650
Greenwood Village, CO 8011

12/6/2019

To Whom it May Concern:

This letter is to confirm that CDG Morgan Hill Inc. is temporarily authorizing Century Communities to operate under Colorado Department of Public Health and Environment Permit No. COR401047 for Stormwater discharge. This temporary authorization will remain in effect until Century Communities is able to apply, obtain, and implement their own respective permit for the area shown in the attached modification map.

Century Communities at this time will be responsible for monitoring, installing, and maintaining all SWMP and BMP in outlined areas of the Filing 1 improvements.

Respectfully,

Jon Lee
Authorized Representative
CDG Morgan Hill Inc.

Attachment:
Modification Map for Permit # COR401047

2500 Arapahoe Avenue, Suite 220, Boulder, Colorado 80302
(303) 442-2299 ... Fax (303) 442-1241
www.communitydevelopmentgroup.com

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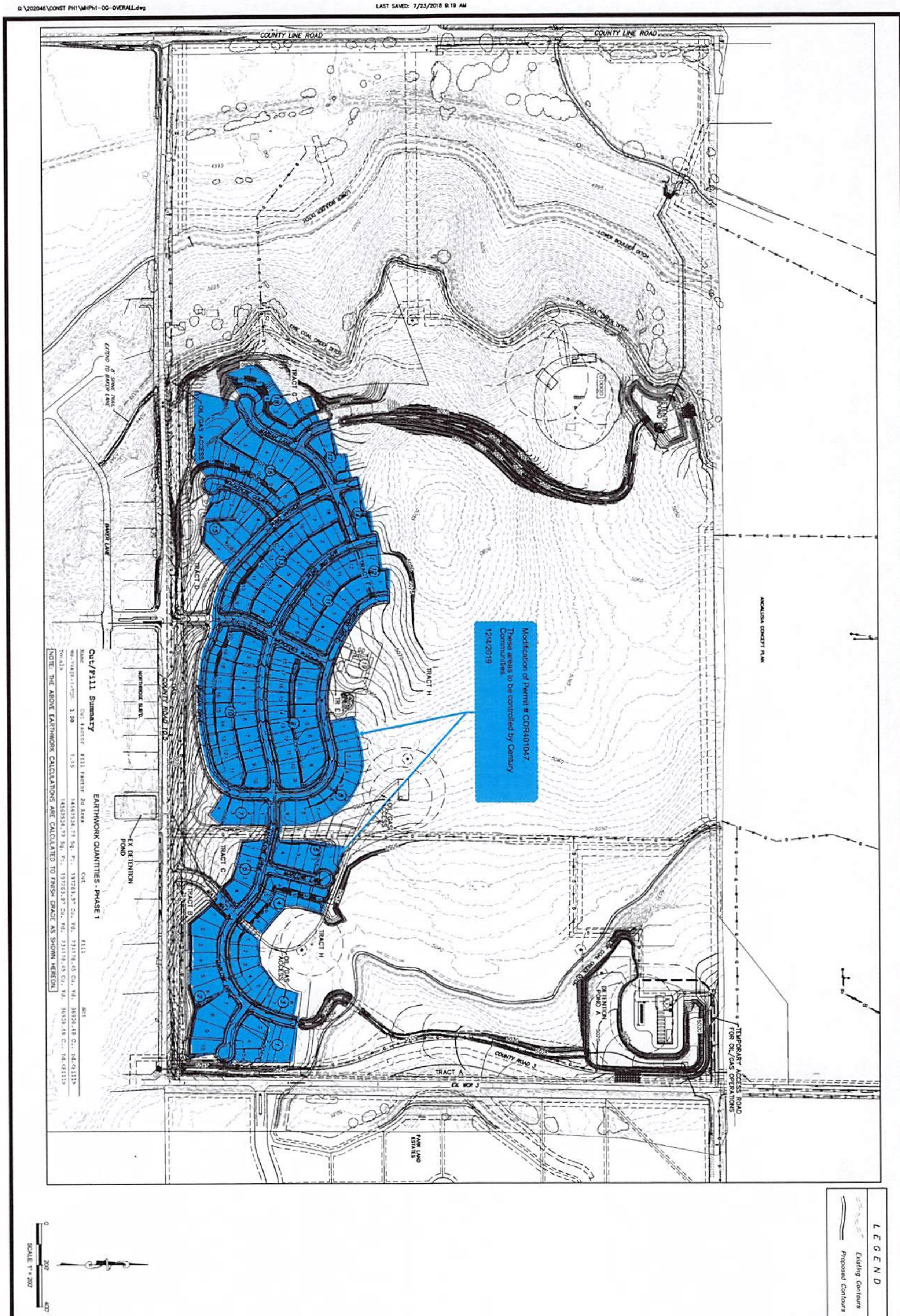


DRAWN BY: RH	MORGAN HILL PHASE 1 #FP-14-00004 CONSTRUCTION PLANS	HURST CIVIL ENGINEERING PLANNING SURVEYING	HURST & ASSOCIATES, INC. 1265 South Public Rd, Suite B Lafayette, CO 80026 303.449.9105
DESIGNED BY: JJ			
DRAWING NAME: OG-OVERALL	OVERALL GRADING PLAN		
APPROVED BY: JJ	Prepared for: COMMUNITY DEVELOPMENT GROUP		

JOB NUMBER: 2020-46
DATE: 7/23/2018
SCALE: 1"=200'
SHEET NO: 7

REVISIONS

NO.	DESCRIPTION	DATE	BY

CALL THE UTILITY NOTIFICATION CENTER OF COLORADO (U.N.C.C.) 811

EARTH X

Memo to file
Regarding COR 401047 Morgan Hill Subdivision
Prepared by Brian Garber
Division Director
Earth X Environmental

Date: 9/29/21

Regarding Reportable Spill

This memo is a record of a reportable spill which occurred at approximately 2:30 Sunday September 26. The event occurred "offsite', or outside these permitted disturbed areas. but the waste sewage did flow onto the permitted area. No waste material left the property boundary and remediation actions were implemented immediately. Additionally, the required reporting procedure was followed with the State of Colorado. Emails detailing this communication including the State's final report and acceptance of actions taken are attached to this memo.

Additionally, per requirements of the Stormwater Permit for construction requirements this action was noted has having occurred on the 9/29/21 weekly inspection: this memo, with the attachments noted above, were included in the other documentation section of the SWMP and the location of the spill were noted on the site plan.

From: Wade Duncan <wade@cdgcolorado.com>
Sent: Tuesday, September 28, 2021 6:18 PM
To: Brian Garber
Subject: FW: Report of raw sewage release

This is my report to the state, I had two conversation with Ann and one other admin named Bonnie, they asked a number of questions and Kip called, asked a few more questions and sent his closeout report.

From: Wade Duncan
Sent: Tuesday, September 28, 2021 3:15 PM
To: ann.nedrow@state.co.us
Subject: Report of raw sewage release

Ann,

Good afternoon, I work for a developer we build subdivisions and sell finished lots to respective builders. On one of our projects we had a subcontractor building a new section of road that ties into a previously built filing, they accidently filled up a live sanitary sewer manhole serving the previous filing with road base causing a blockage that eventually filled up an upstream manhole and flowed out the ring and cover onto the newly placed road base subgrade. A portion of that release did find its way into an unfinished curb inlet and into some 42" pipe that outfalls to a channel leading to an onsite detention pond. We do know that nothing left the site and only a small amount of sewage made it into the pond, there was no release from the pond to state waters, everything was contained and immediately (within 12 hours) was captured with a vacuum truck and put back into the sanitary manhole.

The release was noticed at approximately 2:30 Sunday September 26, the blockage was removed and service was restored at approximately 9:00pm at that time the containment was set up, mitigation started at 0900 Monday the 27th, at 12:30pm we had brought a vac truck on site to sanitize the concrete storm lines that came in contact with source point spill, we added 5 gallons of Sodium Hypochlorite to 2000 gallons of water and flushed the curb inlet box and the 228lf 42"RCP pipe to sanitize, we used a large 2000 gallon hydro-excavator vacuum truck to collect that water and sediment at the downhill side of the pipe, we pressure washed the stilling basin structure and washed and vacuumed the buried rip rap at that out fall before the treated water came in contact with the dirt channel.

We have also loaded the contaminated road base and into trucks and hauled to the landfill per direction of the Town.

I don't know what other remediation needs to be done. In the far past I have been part of a small release that included some raw sewage next to some existing residents, we were allowed to spread some lime on top of an existing dirt graded area, but, as I remember that was only to take care of the smell.

The dirt banks of the drainage channel and pond have recently been amended with compost and is ready for seed and irrigation, the irrigation is a raw water system that comes directly from the Erie treatment plant, do I need to sample, or remediate the soil flowline of the drainage channel? If so how is

that done with the amount of compost all along this channel? How do I get a baseline sample to test against, with the amount of compost that has been distributed, I foresee some complications.

I have attached some photos of the release and can also provide some for the "sanitization" of the concrete structures along with a markup of the area. At this point I just need the direction of what is next, the release did not reach state waters so I have not reported it as a spill, but am seeking advice on what to do next, and what to report back to the town of Erie as this area will eventually be conveyed to the town for maintenance.

Thank you for your time,

Wade Duncan
Project Manager
Community Development Group
720-347-5082 mobile
wade@cdgcolorado.com

From: Wade Duncan <wade@cdgcolorado.com>
Sent: Tuesday, September 28, 2021 6:14 PM
To: Brian Garber
Subject: FW: CDPHE Spills Tracking System Data Entry Form 2021-0470

fyi

From: Armstrong - CDPHE, Kit <kit.armstrong@state.co.us>
Sent: Tuesday, September 28, 2021 5:34 PM
To: Wade Duncan <wade@cdgcolorado.com>
Cc: David Kurz <David.Kurz@state.co.us>; Michelle Thiebaud <Michelle.Thiebaud@state.co.us>; Emma Ely - CDPHE <emma.ely@state.co.us>; Clayton Moores <clayton.moores@state.co.us>; Ben Frissell-Durley <bfrissell-durley@co.weld.co.us>; Danielle Serna <dserna@weldgov.com>; David Burns <dburns@weldgov.com>; Jay McDonald <jmcdonald@co.weld.co.us>; Lauren Light <llight@co.weld.co.us>; Lyndsay Holbrook <lholbrook@weldgov.com>; Matt Fisher <mfisher@weldgov.com>; Roy Rudisill <rrudisill@co.weld.co.us>; Taylor Robinson <TRobinson@weldgov.com>; Dan Miller <dan.miller@coag.gov>
Subject: Re: CDPHE Spills Tracking System Data Entry Form 2021-0470

Wade,

Thanks for speaking to me just now about this sanitary sewer manhole overflow that occurred on Sunday 9/26. The division understands that Community Development Group worked with the Town of Erie engineering department to remove the blockage, vacuum the sewage, haul and dispose contaminated soil, and disinfect impacted storm sewer infrastructure.

From a human health standpoint, it sounds like the impacts have been mitigated, and waters of the state were not impacted. WQCD can't speak to the requirements of the Town of Erie or Weld County, but we will close out this incident on our end without requiring additional remediation or sampling.

Please reach out with any questions or concerns.

Thanks,

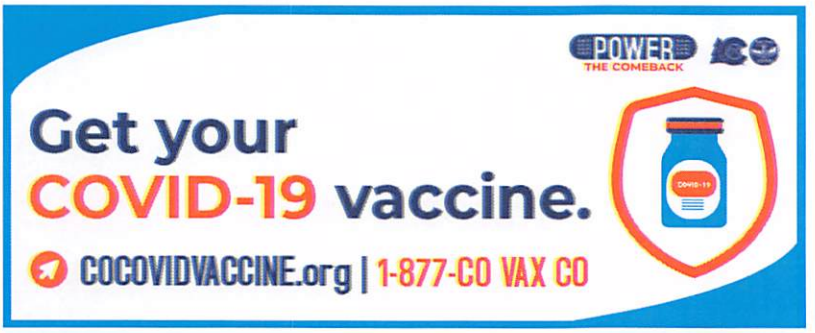
Kit Armstrong
Staff Field Engineer
Field Services Section

COLORADO
Water Quality Control Division
Department of Public Health & Environment

Phone: 720.295.0301

4300 Cherry Creek Drive South, Denver, CO 80246
kit.armstrong@state.co.us | www.colorado.gov/cdphe/wqcd

24-hr Environmental Release/Incident Report Line: 877.518.5608



On Tue, Sep 28, 2021 at 5:07 PM Armstrong - CDPHE, Kit <kit.armstrong@state.co.us> wrote:

> WQCD Denver Field Services will follow up.
>
> Thanks,
>
> **Kit Armstrong**
> Staff Field Engineer
> Field Services Section
>
> COLORADO
> Water Quality Control Division
> Department of Public Health & Environment
>
> Phone: 720.295.0301
> 4300 Cherry Creek Drive South, Denver, CO 80246
> kit.armstrong@state.co.us | www.colorado.gov/cdphe/wqcd
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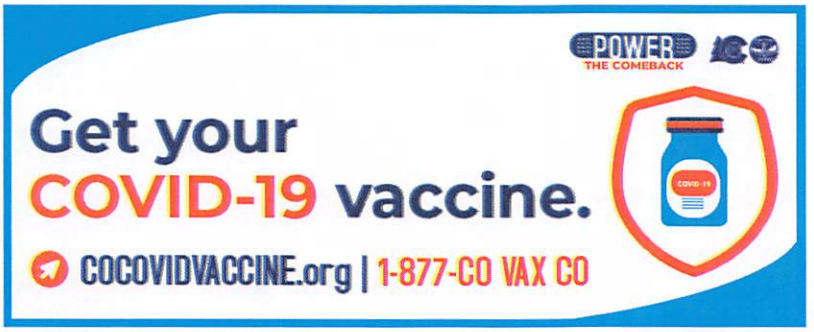

On Tue, Sep 28, 2021 at 4:24 PM Nedrow - CDPHE, Ann <ann.nedrow@state.co.us> wrote:

> Attached is a report for Weld County of a sewage backup. Clean up is underway, and they would like advice on next steps.
>
> Thank you,
> Ann

Ann Nedrow
Daytime Coordinator, Colorado Emergency and Incident Reporting Line
Office of Emergency Preparedness and Response, A-2
Office: 303-692-2709 | Cell: 720-626-2110

COLORADO
Office of Emergency Preparedness & Response
Department of Public Health & Environment

4300 Cherry Creek Drive South, Denver, CO 80246
Ann.Nedrow@State.Co.Us | www.colorado.gov/

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