KEYED NOTES

1. PROPOSED CONCRETE VALLEY GUTTER. SEE DETAIL SHEET C-502.
2. PROPOSED DRAINAGE SWALE. SEE DETAIL SHEET C-502.
3. PROPOSED WATER HARVEST AREA. INV.=36.5 SEE DETAIL SHEET C-502.
4. PROPOSED 7' WIDE CONCRETE SPILLWAY. SEE DETAIL SHEET C-501.
5. 2 - 24" SIDEWALK CULVERTS. SEE DETAIL SHEET C-501.
6. 5' TRANSITION FROM 7' TO 4.75' TO MATCH SIDEWALK CULVERT OPENING.
7. 3' x8' RIP-RAP PAD. SEE DETAIL SHEET C-502.
8. 10' x 12'-6" CONCRETE TRASH CONTAINER PAD. SEE ARCHITECTURAL DRAWINGS.
9. PROPOSED LOADING DOCK PUMP AND FORCE MAIN. SEE MECHANICAL DRAWINGS.
10. EXISTING CONCRETE CURB.
11. EXISTING ASPHALT PAVING.
12. PROPOSED ASPHALT PAD.
13. PROPOSED CONCRETE LOADING DOCK. SEE ARCHITECTURAL DRAWINGS.
14. PROPOSED CONCRETE CURB AND GUTTER. SEE DETAIL SHEET C-502.
15. PROPOSED CONCRETE EDGING TO ASPHALT PAD. SEE ARCHITECTURAL DRAWINGS.
16. PROPOSED BIKE RACK. SEE ARCHITECTURAL DRAWINGS.
17. EXISTING CURB AND GUTTER.
18. EXISTING RAILROAD TRACKS.
19. EXISTING FIRE HYDRANTS.
20. PROPOSED BUILDING. SEE ARCHITECTURAL DRAWINGS.
21. EXISTING DRAINAGE INLETS.
22. PROPOSED SIDEWALK.
23. PROPOSED BUILDING SETBACK.
24. AREA ENCLOSURE DRAIN. SEE DETAIL SHEET C-502.
25. WHEN ABUTTING NEW ASPHALT TO EXISTING ASPHALT, SAW CUT 12" OF EXISTING ASPHALT TO A NEAT STRAIGHT LINE TO NEW ASPHALT DEPTH. MATCH EXISTING ELEVATION.
26. 4' WIDE x 12" DEEP RIP RAP RUNDOWN. SEE DETAIL SHEET C-502.

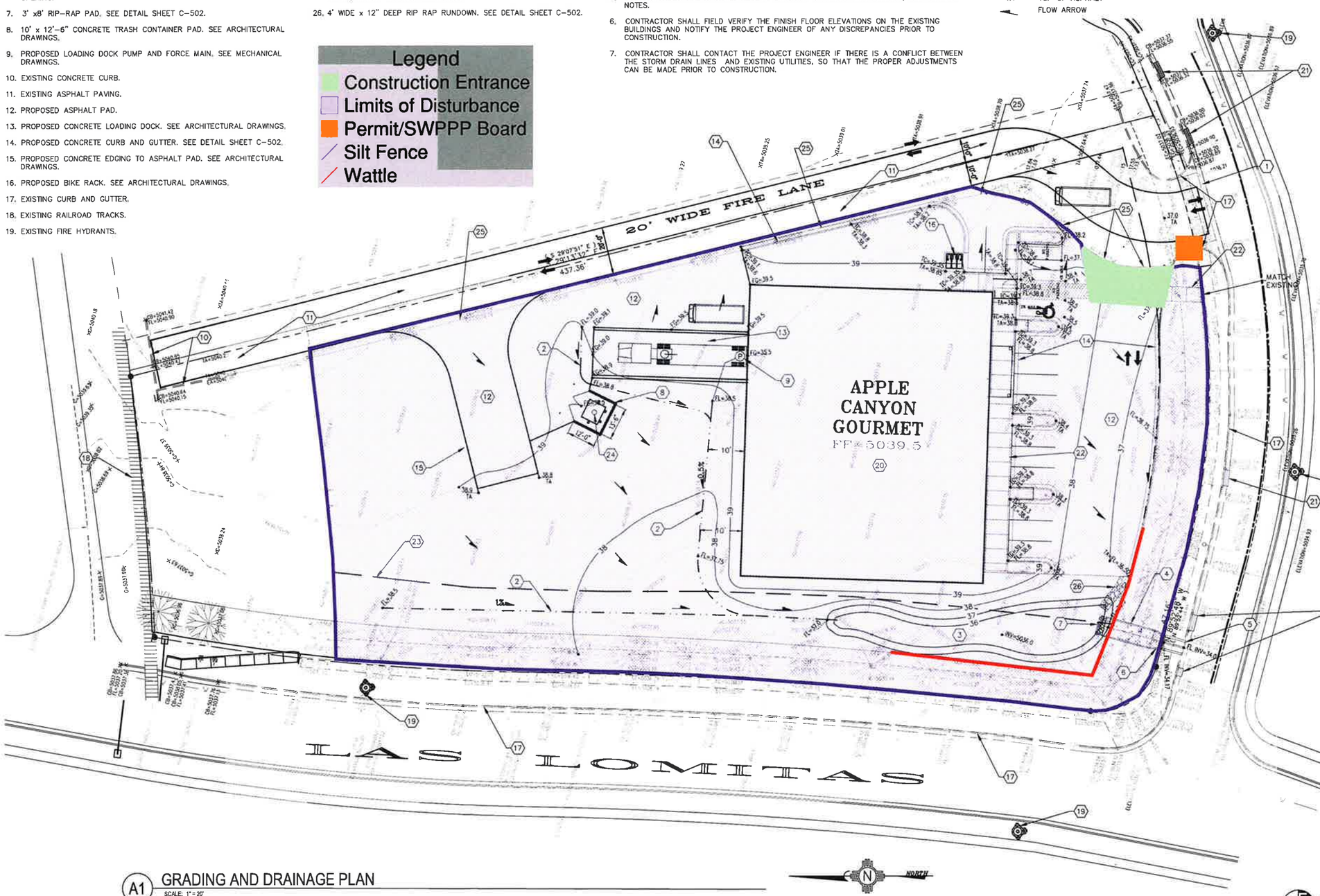
Legend
- Construction Entrance
- Limits of Disturbance
- Permit/SWPPP Board
- Silt Fence
- Wattle

GENERAL NOTES:

1. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OR EXISTING UTILITIES.
2. BACKFILL AND COMPACTION FOR SITEWORK SHALL BE ACCORDING TO THE GEOTECHNICAL REPORT FOR THE PROJECT.
3. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
4. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
5. ALL DISTURBED AREAS SHALL RECEIVE LANDSCAPE FABRIC WITH SEEDING, SEE GENERAL NOTES.
6. CONTRACTOR SHALL FIELD VERIFY THE FINISH FLOOR ELEVATIONS ON THE EXISTING BUILDINGS AND NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
7. CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER IF THERE IS A CONFLICT BETWEEN THE STORM DRAIN LINES AND EXISTING UTILITIES, SO THAT THE PROPER ADJUSTMENTS CAN BE MADE PRIOR TO CONSTRUCTION.

LEGEND:

38.00 FG	PROPOSED SPOT ELEVATIONS (FINISHED GRADE)		GRADE BREAK-HIGH POINT
MATCH (85.19)	MATCH EXISTING ELEVATIONS		SWALE
TCON	TOP OF CONCRETE	SD	STORM DRAIN LINE
FL	FLOW LINE, CURB	5895	PROPOSED MAJOR CONTOUR
INV	INVERT		PROPOSED MINOR CONTOUR
FG	FINISH GRADE	5895	EXISTING MAJOR CONTOUR
TBC	TOP OF BASE COURSE		EXISTING MINOR CONTOUR
TC	TOP OF CURB		TOP OF CUT SLOPE
TG	TOP OF GRADE		
TA	TOP OF ASPHALT		
	FLOW ARROW		



A1 GRADING AND DRAINAGE PLAN
SCALE: 1" = 20'

N NORTH
20 10 0 20 30 40
SCALE: 1"=20'
CONTOUR INTERVAL = 1'

MILLER ENGINEERING CONSULTANTS
Engineers • Planners
3500 COMANCHE, NE
BUILDING F
ALBUQUERQUE, NM 87107
(505)888-7500
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KELLEY VINCENT RETT
NEW MEXICO
13450
REGISTERED PROFESSIONAL ENGINEER

MICK RICH CONTRACTORS 8401 FIRESTONE LANE, ALBUQUERQUE NM, 87198

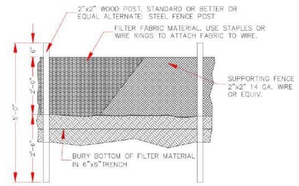
JOB # 20-18

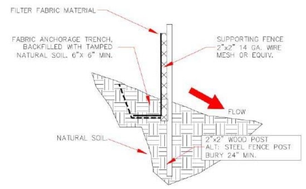
DATE 07.27.21

A NEW FACILITY
FOR
APPLE CANYON GOURMET FOODS
ALBUQUERQUE 2021 NEW MEXICO

GRADING AND DRAINAGE PLAN

SHEET NO. C-101



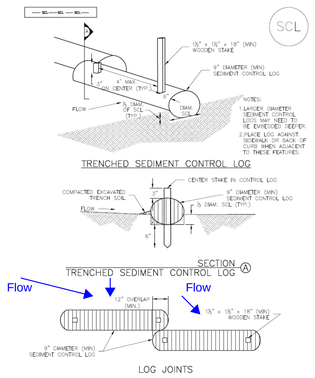


Notes:
1. Wire mesh is not required, but it is recommended as it will help prevent tearing due to increased wind speed or sediment/water load.
2. Pole spacing is not to exceed 10 feet between poles in straight-run sheet flow areas.
3. Pole spacing in a site's lower corners should be spaced approximately 6 feet apart or closer.
4. Silt fence is not created for use in high velocity situations, where flow is heavily concentrated. If concentrated flow does drain toward silt fence, then use additional BMPs to reduce the flow's velocity.
5. Silt fence fabric transition points should have posts interlocked with no gaps in the silt fence coverage.

Silt Fence

Source: City of Albuquerque Construction Site Manual 2018

Sediment Control Log (SCL) SC-2

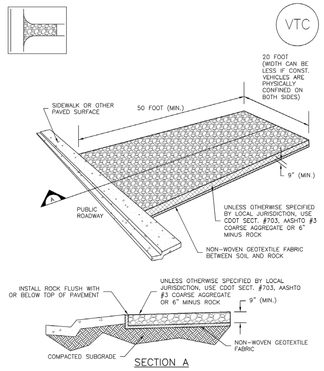


Notes:
1. It is recommended that wattles be trenched into the ground to a depth of approximately 1/3 of the diameter of the log. If trenching to this depth is not feasible or desirable, then a lesser trenching depth may be acceptable with more robust staking. Sandbags may be used on impervious surfaces.
2. Wattles that are 8 lb/ft or more do not need to be trenched.
3. Remove sediment from the upstream side of wattle when sediment accumulation is 1/2 the height of the wattle.
4. For parallel flow past the wattle joints, make sure the upstream wattle is on the interior side of the downstream wattle
5. Place wattle around stockpiles that are not being worked on or that are on impervious surfaces.

Wattle/ Filter Sock/ Sediment Control Log

Source: Urban Storm Drainage Criteria Manual Volume 3

Vehicle Tracking Control (VTC) SM-4



Notes:
1. A stabilized construction entrance/exit shall be located at all access points where vehicles access the construction site from paved right-of-ways.
2. Sediment tracked onto paved roads is to be removed throughout the day and at the end of the day by shoveling or sweeping. Sediment may not be washed down storm sewer drains.
3. Some Vehicle Tracking Controls may need a wheel wash station. When a wheel wash is available, make sure to direct wash water to a sediment trap prior to discharge from the site. Wash water may not contain soaps or chemicals, unless a separate permit is acquired.
4. A metal grate can be used in conjunction with an aggregate track-out pad. The grate should be regularly cleared of sediment, and help prevent track-out.
5. Make sure the Vehicle Tracking Control is not bypassed by the construction traffic.

Vehicle Tracking Control

Source: Urban Storm Drainage Criteria Manual Volume 3

Wash-out from curb-cutting operation.

Notes:
1. The preferred method to access a site is to cut the curb, so a ramp is not required. Placing curb cut in the same place as future entrance/exit can minimize work.

2. When cutting the curb, the cutting machine uses water, and the byproduct of the process is similar to concrete wash-out. Place byproduct in wash-out container.

Notes:
3. Laying lumber parallel to curb is an alternative, but this method is not be used on high speed (35 MPH and greater) roads due to it being a road hazard.

4. Adding cold-mix asphalt with a pipe in the gutter is acceptable, but do not extend asphalt past the gutter into the paved portion of the roadway.

5. Vehicle Tracking Controls are still needed if using a ramp over a curb.

Cold-mix asphalt ramp used for accessing the site.

Lumber laid parallel to the curb to create a ramp to access the site.

Notes:
6. Do not use dirt ramps to access sites with curbs, because the dirt can be easily washed to into storm drains.

7. WARNING! Any injury or property damage to a motorist, cyclist, or pedestrian due to the installation of a ramp is the responsibility of the contractor/property owner.

Access onto Curbed Sites

Source: City of Albuquerque Construction Site Manual 2018

Notes:
1. Regularly collect and dispose of garbage and waste material into designated collection areas.

2. Cover and maintain dumpsters and waste receptacles. Add additional dumpster or increase frequency of waste collection if overflowing conditions occur. Consider secondary containment around waste collection areas to minimize the likelihood of contaminated discharges.

3. Routinely inspect containers and equipment to ensure that it is functioning properly without leaking.

4. Promptly clean up leaks, drips, and other spills. Train employees on proper clean up and spill response procedures.

5. Store containers, drums, and bags away from direct traffic routes to reduce container damage.

6. Store materials in accordance with directions in Material Safety Data Sheets (MSDSs).

7. Store container s on pallets or similar devices to prevent corrosion of containers that results from containers coming into contact with moisture on the ground.

8. Store toxic or hazardous liquids within curbed areas or secondary containments.

9. Frequent and proper training in good housekeeping techniques reduces the likelihood that chemicals or equipment will be mishandled.

10. Segregate and provide proper disposal options for hazardous material wastes.

11. Make sure the site has a Spill Protection Plan, Spill kit, and individuals trained on the location and workings of the plan and kit.

12. Create a designated on-site fueling and maintenance area that is clean and dry, has a spill kit, and ideally in a covered area.

13. Locate toilet facilities away from storm drain inlets and waterways to prevent accidental contamination of stormwater.

14.or outdoor painting and sanding; conduct these operations in designated areas that are paved or have a secondary containment in place. Clean up and dispose of excess paint, paint chips, protective coatings, grit waste, etc.

15. Provide tie-downs or stake downs for portable toilets.

16. For vehicle and equipment washing: ensure there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water. -(CGP 2017)

17. Recycle materials whenever possible (e.g. paper, wood, concrete, oil).

Good Housekeeping

Source: Urban Storm Drainage Criteria Manual Volume 3

One-piece inlet protection BMP for an inlet with a grate and a throat.

Notes:
1. The proper inlet protection shall be used and maintained to provent sediment and wastes from entering a stormwater drainage system and shall minimize the risk of flooding.

2. The type of inlet protection utilized shall depend on the inlet type, slope, and volume of flow.

Notes:
3. For inlets with a throat opening and a grate, the inlet shall be protected with a BMP that covers the throat and the grate.

4. For throat type of inlet protection, sediment shall not be higher than halfway up the BMP.

5. For mat type and one-piece style of BMP, more than 50% of the inlet protection must be clear of sediment and debris.

Cocoa mat used for grate and throat.

Mulch sock used for inlet protection.

Notes:
6. The inlet protection shall be able to let water drain through.

7. WARNING! Any injury or property damage to a motorist, cyclist, or pedestrian due to the installation of inlet protection is the responsibility of the contractor/property owner. Try using a mat-type inlet protection to reduce possible road hazards.

8. Make sure inlet protection is secured in place, and will not be moved by stormwater.

Inlet Protection Part 1

Source: City of Albuquerque Construction Site Manual 2018

Rock bags used for inlet protection. Photo was taken during a rain event.

Notes:
9. In residential subdivisions where there are inlets internal to the construction site, the style should change as the site is developed. When the site is mostly dirt, use a BMP that protects throat and grate. When the site has built more and less dirt is exposed, then a less restrictive style can be used to catch sediment in the gutter.

Notes:
10. Inlet protection constructed of silt fence surrounding the inlet may be used when the inlet is surrounded by stake-able dirt.

11. Inlet protection should be used for inlets/storm drains within the construction site/disturbed area, AND any inlets/storm drains outside the project area that may receive stormwater discharges from the construction site/disturbed area.

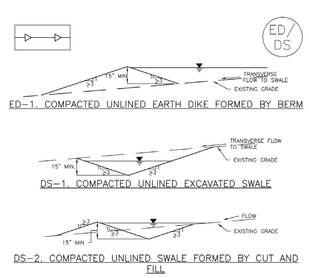
Another application of using silt fence for inlet protection.

Notes:
12. Open storm drains are considered an inlet and require protection. This also includes drains that are not actively being worked on.

Inlet Protection Part 2

Source: City of Albuquerque Construction Site Manual 2018

Earth Dikes and Drainage Swales (ED/DS) EC-10



Notes:
1. Earth dikes and drainage swales are typically used for controlling the flow path of runoff at a constructions site; sometimes by diverting water away from sensitive areas, or by conveying water to treatment BMPs (sediment traps or basins).
2. Unlined berms/dikes or swales need to be compacted, and should only be used for intercepting sheet flow runoff (not intended for diversion of concentrated flows.
3. If there is reoccuring damage, consider installing rock check dams or lining with riprap.
4. If berms/dikes or swales are not permanent, then remove berms/dikes and fill channels when upstream area is stabilized. Immediately stabilize the disturbed area after the BMP removal.

Earth Berms/ Dikes/ Drainage Swales

Source: Urban Storm Drainage Criteria Manual Volume 3

Energy dissipator for large storm drains

Notes:
1. When working in or adjacent to an arroyo or concrete channel, loose soil shall not be stockpiled or left in the low-flow area of the arroyo or channel. A berm or a similar BMP is to be constructed to diver flow into a low-flow area.
2. When working in or adjacent to an arroyo or concrete channel, pollutants (chemicals, debris, waste, etc.) shall not be left in the low-flow area of the arroyo or channel.
3. If there are active storm drains in the work zone, an energy dissipator is to be constructed at the pipe outfall to slow the velocity of the stormwater to less than 3 ft/sec at the end of the dissipater. A plunge pool constructed of large aggregate is the most common energy dissipator.
4. If there is an arroyo or channel draining into the work zone, and energy dissipator is to be constructed upstream of the confluence to slow the velocity of the stormwater to less than 3 ft/sec at the end of the dissipator. There are equations provided by the United States Bureau of Reclamation (USBR) and the Federal Highway Administration (FHWA) for sizing the energy dissipator and the aggregate.
5. If working adjacent to an arroyo or concrete channel, install BMPs to protect against or filter stormwater entering the drainage.

Arroyo and Channel Construction

Source: City of Albuquerque Construction Site Manual 2018

These roll-off wash-out containers were lowered for easier access.

Notes:
1. Designated wash-out areas should be provided for any concrete, stucco, mortar, or paint operations. Wash-outs should be as far away as possible from waters of the U.S., stormwater inlets, or conveyances.

2. "Wash-out should be directed to leak-proof containers or leak proof and lined pit designed so that no overflows can occur due to inadequate sizing or precipitation." -CGP 2017

Notes:
3. If the concrete/stucco/mortar is firm when it contacts the soil, then it is not considered wash-out (not wet enough to infiltrate into the soil).

4. A centralized wash-out may be effective for concrete trucks. For stucco, mortar, and paint wash-outs, a local wash-out and wash-out education has been more successful in avoiding improper wash-outs.

Mortar towers with plastic beneath as a BMP.

Notes:
5. Mortar towers shall have a plastic liner beneath them to prevent the wet mortar from contacting the soil. If wet stucco or mortar contacts the ground due to mixing, it would be a compliance issue.

6. If a wash-out occurs on bare soil, the Operator is expected to remove it same day. The wash-out material, as well as the wetted soil, are to be removed and disposed of appropriately.

Wash-outs

Source: City of Albuquerque Construction Site Manual 2018

BMP Information Sheet

EIGHT 14 SOLUTIONS
EROSION CONTROL & ENVIRONMENTAL CONSULTING

Project Name:
Owner:
Operator:

NPDES Permit #:
Date:
Sheet:

Site Owner: Cloche LLC

Contact: Anna and Greg Shawver

505 332-2000

anna@applecanyon.com, greg@applecanyon.com

Site Operators: Mick Rich Contractors Inc.

Owner: Mick Rich (will sign reports)

505 823-9782

mickrich@mickrichcontractors.com

Stormwater Team: 814 Solutions

Contact: Gaylen Barnett (SWPPP preparer/inspector)

505 382-4828

gaylen@814solutions.com

2nd Contact: Eric Maez (Inspector)

505 401-7843

eric@814solutions.com

BMP Installation: 814 Solutions

Contact: Sergio Lozoya

505 250-3734

sergio@814solutions.com

Project Information:

Acres: 1.5

Expected area to be disturbed: 1.5 acres

Expected activities (including but not limited to):

- Clearing and grubbing
- Excavation
- Grading
- Building
- Utility installation
- Landscaping (all disturbed areas are expected to be paved or landscaped.
- If any disturbed areas remain, final stabilization within 14 days of last disturbance will either be seeded or rocked

BMP information:

The project will have silt fence surrounding the perimeter of the project to mitigate dust and water runoff. The site slopes to the SW corner, where there will be a wattle in place in addition to the silt fence to mitigate runoff. There is a difference in elevation of 6’ throughout the project. The highest elevation is 5,038’ and the lowest is 5,032’. No significant slopes/drop-offs exist. The site does not discharge to any impaired water bodies and is approximately 2.5 miles away from the Rio Grande River.