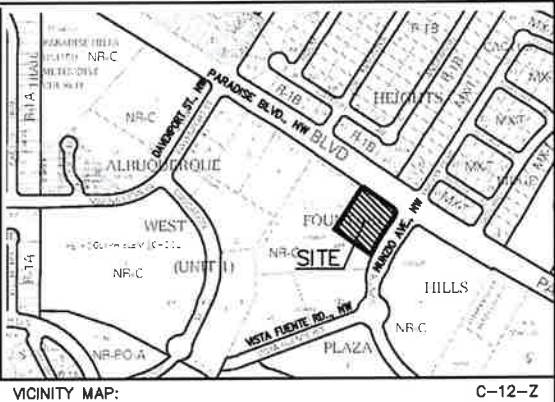


Temporary Erosion and Sediment Control Plan

KEYED NOTES:

- 24" CURB OPENING.
- PROPOSED 24" SIDEWALK CULVERT.
- 24" CONCRETE VALLEY GUTTER.
- DEPRESSED LANDSCAPING ARE.
- PROPOSED 8" STORM DRAIN PIPE, SDR 35.
- 8" NYLOPLAST DRAIN, 7001-110-272.



VICINITY MAP:

C-12-Z



FIRM MAP:

FM35001C0116G
09-06-2008

LEGAL DESCRIPTION:

TRACT A-2-B-2 FOUNTAIN HILLS PLAZA
CONTAINING 1.1941 ACRES, 52,016.00 SF

GENERAL NOTES:

- CONTOUR INTERVAL IS HALF (1.00) FOOT.
- ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION LSS-302, HAVING AN ELEVATION OF 5444.139 FEET ABOVE SEA LEVEL.
- UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
- THIS IS NOT A BOUNDARY SURVEY. BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
- SLOPES ARE AT 3:1 MAXIMUM.

LEGEND

- 5030 EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- BOUNDARY LINE
- PROPOSED SPOT ELEVATION
- EXISTING GRADE
- EXISTING FLOWLINE ELEVATION
- PROPOSED RETAINING WALL
- BOTTOM OF CHANEL
- TOP OF CURB
- TOP OF ASPHALT
- HIGH POINT
- AS-BUILT GRADES

GRAPHIC SCALE



THIS PLAN SHALL BE USED FOR EROSION AND SEDIMENT CONTROL PURPOSES DURING CONSTRUCTION ONLY. THIS PLAN IS NOT TO BE USED FOR FLOOD CONTROL AND OR GRADING ASPECTS OF THIS SITE. THIS PLAN SHOWS EXCERPTS OF GRADING PLANS PREPARED BY OTHERS. UTILIZATION OF APPROVED GRADING PLANS PREPARED BY OTHERS IS REQUIRED TO SHOW THE INTERIM CONSTRUCTION MEASURES TO ADDRESS THE EROSION AND SEDIMENT CONTROL OF THE SITE PER THE CITY OF ALBUQUERQUE ORDINANCE.

KIDDIE ACADEMY WEST SIDE GRADING PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
202002-GD.DWG	SH-H	03-29-2020	1 OF 2

Location
TRACT A-2-B-2, Fountain Hills Subdivision is located at the northeast corner of Nunzio Avenue NW and Paradise Blvd., NW, containing 1.1941 acres. See attached portion of Vicinity Map C-12-Z for exact location.

Purpose
The purpose of this drainage report is to present a grading and drainage solution for new building and improvements with this tract of land.

Existing Drainage Conditions
This site falls within Musser Drainage Plan for Fountain Hills under the City project number C12-D003. This project falls within Basin B-1-A. The site currently drain from northwest to southeast side of the site to Vista Puente Road and Nunzio Avenue NW. This site drains to Nunzio Avenue. The allowable discharge under Basin B-1-A is (37.73 cfs / 9.03 acres) 4.18 cfs/acre. Therefore, the allowable discharge is (1.19 acres x 4.18 cfs/acre) 5.02 cfs.

Proposed Conditions and On-Site Drainage Management Plan
The proposed runoff under the developed conditions is 4.65 cfs which is less than allowable discharge of 5.02 cfs. We are proposing to pond the 90th Percentile First Flush requirement (1.08 cfs). Total retention volume provided is 1,229.78 cfs which exceeds the required 1st flush ponding volume. Once the runoff reaches elevation of 5033 it drains out to Nunzios via inlet 3 through 4-6" pipe which are daylighted to the back of a 24" sidewalk culvert.

Calculations
City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, was used for runoff calculations. See this plan for AHYMO input and Summary output files.

NOTICE TO CONTRACTOR PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (50-18')

- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" (OR (505) 260-1990) FOR THE LOCATION OF EXISTING UTILITIES
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED
- WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24 HOUR BASIS
- CONTRACTOR MUST CONTACT AUGIE ARMJO AT (505) 857-8607 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE AN INSPECTION

APPROVALS	NAME	DATE
INSPECTOR		

PIPE FLOW CAPACITY CALCULATIONS

4-6" discharge pipes from Inlet 2

h (head) = 1.75' (from elevation 5033.25 to elevation 5035.00)
 A = 0.1963 sf
 g = 32.20

$$Q = 4 \times 0.60 \times 0.1963 \times (2 \times 32.2 \times 1.75)$$

$$Q = 5.00 \text{ cfs} > 4.65 \text{ cfs}$$

ZONE 1

100-YEAR, 6-HR STORM (UNDER HISTORICAL CONDITIONS)

START RAINFALL TIME=0.0
TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.87 IN RAIN SIX=2.20 IN
RAIN DAY=2.66 IN DT=0.03333 HR
ON-SITE COMPUTE NM HYD ID=1 HYD NO=101.0 AREA=0.001876 SQ MI
PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
TP=0.1333 HR MASS RAINFALL=-1

10-YEAR, 6-HR STORM (UNDER HISTORICAL CONDITIONS)

START RAINFALL TIME=0.0
TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.25 IN RAIN SIX=1.47 IN
RAIN DAY=1.77 IN DT=0.03333 HR
ON-SITE COMPUTE NM HYD ID=1 HYD NO=111.0 AREA=0.001876 SQ MI
PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
TP=0.1333 HR MASS RAINFALL=-1

100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)

START RAINFALL TIME=0.0
TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.87 IN RAIN SIX=2.20 IN
RAIN DAY=2.66 IN DT=0.03333 HR
ON-SITE COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.001876 SQ MI
PER A=0.00 PER B=12.00 PER C=15.00 PER D=73.00
TP=0.1333 HR MASS RAINFALL=-1

10-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)

START RAINFALL TIME=0.0
TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.25 IN RAIN SIX=1.47 IN
RAIN DAY=1.77 IN DT=0.03333 HR
ON-SITE COMPUTE NM HYD ID=1 HYD NO=111.1 AREA=0.001876 SQ MI
PER A=0.00 PER B=12.00 PER C=15.00 PER D=73.00
TP=0.1333 HR MASS RAINFALL=-1

FINISH

Portable toilet

Waste container

Concrete washout

LEGEND

Silt Fence

Construction Entrance

Affected Area

Note: Temporary ponds to be the first item of earthwork construction.

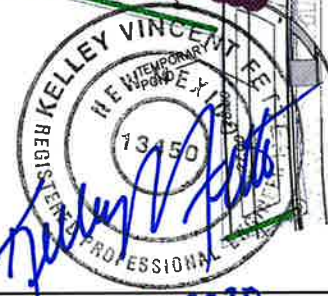
Note: All disturbed areas will be stabilized to meet NPDES requirements.

24" SIDEWALK CULVERT OPENING CALCULATIONS

24" Sidewalk Culvert 8" High Calculation Using Weir Equation
 $Q = CLIP \times L \times H^{1.48}$
 $11 - 0.67' \times C - 2.95, L = 24' (2.00')$
 $2.95 \times 24' (6.71') \times 50 - 2.95 \times 24' \times 5444.139$
 $Q = 3.236 \text{ cfs}$

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -

COMMAND	HYDROGRAPH IDENTIFICATION	FROM NO.	TO NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE	NOTATION
START RAINFALL TYPE=1											
COMPUTE NM HYD	101.00	-	1	.00188	1.56	.044	.43925	1.533	1.302	PER IMP=	2.200
START RAINFALL TYPE=1											
COMPUTE NM HYD	111.00	-	1	.00188	.30	.008	.08264	1.533	.247	PER IMP=	1.470
START RAINFALL TYPE=1											
COMPUTE NM HYD	101.10	-	1	.00188	4.65	.166	1.65989	1.500	3.873	PER IMP=	73.00
START RAINFALL TYPE=1											
COMPUTE NM HYD	111.10	-	1	.00188	2.91	.099	.99267	1.500	2.423	PER IMP=	73.00



8-26-2020

CURVE TABLE						
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C1	6486.09'	55.41'	55.40'	S55°20'55"E	0°29'22"	27.70'
C2	29.00'	45.07'	40.67'	S10°34'42"E	89°03'03"	28.52'
C3	525.33'	167.18'	166.48'	S24°49'48"E	18°14'03"	84.31'
C4	525.33'	106.91'	106.73'	S28°07'00"W	11°39'37"	53.64'
C5	525.33'	60.27'	60.24'	S18°59'59"W	06°34'25"	30.17'

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S34°53'46"W	1.00'
L2	S60°54'31"E	47.02'
L3	S87°29'20"E	57.36'

EASEMENT LINE TABLE		
LINE	BEARING	DISTANCE
E1	N54°54'05"W	10.00'
E2	S35°05'55"W	24.00'

EASEMENT NOTES:

- (A) 10.0' PUBLIC UTILITY EASEMENT
03/08/1990, BK. 90C, PG. 67
- (B) 20.0' SANITARY SEWER EASEMENT
02/02/1999, BK. 9903, PG. 5221
- (C) 10.0' DRAINAGE EASEMENT
03/08/1990, BK. 90C, PG. 67
- (D) 7.41' SANITARY SEWER EASEMENT
03/08/1990, BK. 90C, PG. 67
- (E) 10.0' PUBLIC UTILITY EASEMENT
09/19/2007, BK. 2007C, PG. 270
- (F) 1.0' PUBLIC ROADWAY EASEMENT
09/19/2007, BK. 2007C, PG. 270
- (G) A BLANKET DRAINAGE FOR TRACT A-2-B FOR THE BENEFIT OF LOT 3, BLOCK D, ALBUQUERQUE WEST AND TRACT E-2, UNIT 1, ALBUQUERQUE WEST. THE PROPERTY OWNERS OF SAID PARCELS ARE RESPONSIBLE FOR THE MAINTENANCE OF THE EASEMENT
03/15/2018, BK. 2018C, PG. 30
DOC# 2018022726
- (H) 1.0' RIGHT-OF-WAY
03/15/2018, BK. 2018C, PG. 30
DOC# 2018022726
- (I) A BLANKET DRAINAGE EASEMENT TO BE GRANTED WITH THE FILING OF THIS PLAT FOR THE BENEFIT OF TRACT A-2-B-1, TO BE MAINTAINED BY OWNER'S OF TRACT A-2-B-2.
- (J) 24.0' PRIVATE ACCESS AND PRIVATE UTILITY EASEMENT TO BE GRANTED WITH THE FILING OF THIS PLAT
- (K) 20.0' PUBLIC SANITARY SEWER EASEMENT TO BE GRANTED WITH THE FILING OF THIS PLAT
- (L) 12.59' PUBLIC SANITARY SEWER EASEMENT TO BE GRANTED WITH THE FILING OF THIS PLAT

RECORD DOCUMENT LEGEND

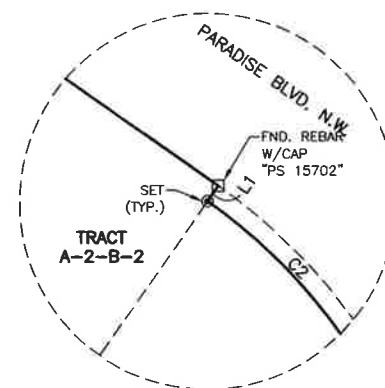
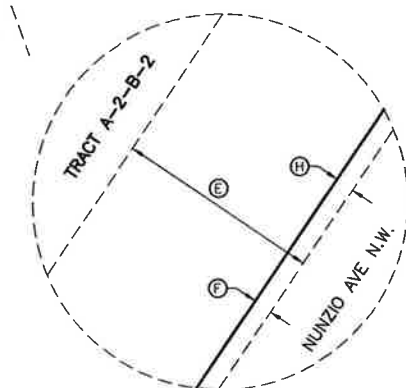
- () RECORD BEARINGS & DISTANCES PER PLAT
"PLAT OF TRACTS A-2-A & A-2-B
FOUNTAIN HILLS PLAZA SUBDIVISION"
FILED: 03/15/2018, BK. 2018C, PG. 30
DOC# 2018022726

Silt fence
extending into
Novus Property
from SBS Property.

TRACT F
ALBUQUERQUE WEST
UNIT 1
03/08/1990
BK. 90C, PAGE 67

TRACT E-2
ALBUQUERQUE WEST
UNIT 1
03/17/1995
BK. 95C, PG. 96
DOC# 1995027012

LOT 3
ALBUQUERQUE WEST
BLOCK B
11/21/1984
VOL. C25, FOLIO 138
DOC# 1984009100



Stockpile

Stockpile is on land belonging to Novus Properties. When stockpile is removed all disturbed areas will be stabilized to meet NPDES requirements as stated in letter.

Eight 14 Solutions added the location of the stockpile and additional stockpile note to the plat, which was created by Terra Land Surveys, LLC. Terra Land Surveys, LLC is not responsible for these additions.

PLAT OF TRACTS A-2-B-1 & A-2-B-2 FOUNTAIN HILLS PLAZA SUBDIVISION SITUATE WITHIN PROJECTED SECTION 13, T. 11 N., R. 2 E., N.M.P.M. TOWN OF ALAMEDA GRANT CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO JANUARY 2020

Novus Properties
Tract A-2-B-1

Azaan Holdings
Tract A-2-B-1

LEGEND

- △ FOUND CONTROL MONUMENT (AS NOTED)
- ▽ FOUND CENTERLINE MONUMENT (AS NOTED)
- FOUND REBAR (AS NOTED)
- ◇ FOUND PK NAIL (AS NOTED)
- SET 1/2" REBAR WITH CAP STAMPED "CA MEDINA PS 15702"



GRAPHIC SCALE



(IN FEET)
1 inch = 60 ft.

TERRA LAND SURVEYS, LLC

P.O. BOX 2532 • CORRALES, NM 87048 • (505) 792-0513

SHEET 3 OF 3

TERRA PROJECT NO. 2016-024

2020 C-29

(3)



Erosion and Sediment Control Plan Drawing

Part 7.2.4 of the CGP requires the SWPPP to contain a legible site map or drawing completed to-scale, showing the entire site, which identifies various stormwater related issues identified in the CGP.

This appendix contains the Erosion and Sediment Control Plan drawing meeting this requirement.

Erosion and Sediment Control Plan Drawing Notes:

- All Erosion and Sediment Control (ESC) work on these plans, except as otherwise stated or provided hereon shall be permitted, constructed, inspected, and maintained in accordance with:
 - The City Ordinance § 14-5-2-11, the ESC Ordinance,
 - The EPA's 2017 Construction General Permit (CGP), and
 - The City Of Albuquerque Construction BMP Manual.
- All BMP's must be installed prior to beginning any earth moving activities except as specified hereon in the Phasing Plan. Construction of earthen BMP's such as sediment traps, sediment basins, and diversion berms shall be completed and inspected prior to any other construction or earthwork. Self-inspection is required after installation of the BMPs and prior to beginning construction.
- Self-inspections - At a minimum a routine compliance self-inspection is required to review the project for compliance with the Construction General Permit once every 14 days and after any precipitation event of 1/4 inch or greater until the site construction has been completed and the site determined as stabilized by the city. Reports of these inspections shall be kept by the person or entity authorized to direct the construction activities on the site.
- BMPs shall be inspected and maintained until all disturbed areas are stabilized in accordance with the Final Stabilization Criteria (CGP 2.2.14.b). Generally, all disturbed areas, other than structures, must have uniform perennial vegetation that provides 70 percent or more of the cover provided by native vegetation or seed the disturbed area and provide non-vegetative mulch that provides cover for at least three years without active maintenance. Final stabilization must be documented on self-inspection reports and approved by the City of Albuquerque prior to removal of BMPs and discontinuation of inspections.



Sequence of Control Measure Implementation/Construction Activity:

Control Measure	Associated Construction Activity	Site Location	Estimated Date		Actual Date	
			Installation	Removal	Installation	Removal
Silt fence	All	Along project perimeter	8/10/2020	5/1/2021		
Construction entrance/exit	Driving	Entrance of project	8/10/2020	5/1/2021		
Temporary sediment ponds	All	NW site and SE site	8/10/2020	5/1/2021		
Concrete washout	Concrete activities	NW site	8/10/2020	5/1/2021		
Portable toilets	All	NW site	8/10/2020	5/1/2021		
Waste management	All	Throughout site	8/10/2020	5/1/2021		



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 8 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
Control 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
Control Manual Volume 3

Access onto Curbed Sites

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.
3. Laying lumber parallel to curb is an alternative, but this method is not to 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.

Good Housekeeping

Source: City of Albuquerque
Construction Site Manual 2018

Notes:

1. Regularly collect and dispose of garbage and waste material into designated collection areas.
2. Routinely inspect containers and equipment to ensure that it is functioning properly without leaking.
3. Promptly clean up leaks, drips, and other spills. Train employees on proper clean up and spill response procedures.
4. 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.
5. For 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, grill waste, etc.
6. Store containers, drums, and bags away from direct traffic routes to reduce container damage.
7. Store materials in accordance with directions in Material Safety Data Sheets (MSDSs).
8. Store containers on pallets or similar devices to prevent corrosion of containers that results from containers coming into contact with moisture on the ground.
9. Store toxic or hazardous liquids within curbed areas or secondary containments.
10. Frequent and proper training in good housekeeping techniques reduces the likelihood that chemicals or equipment will be mishandled.
11. Recycle materials whenever possible (e.g. paper, wood, concrete, oil).
12. Segregate and provide proper disposal options for hazardous material wastes.
13. Locate toilet facilities away from storm drain inlets and waterways to prevent accidental contamination of stormwater.
14. Provide tie-downs or stake downs for portable toilets.
15. Make sure the site has a Spill Protection Plan, Spill kit, and individuals trained on the location and workings of the plan and kit.
16. Create a designated on-site fueling and maintenance area that is clean and dry, has a spill kit, and ideally in a covered area.
- 17.

Good Housekeeping

Source: Urban Storm Drainage
Control Manual Volume 3

Inlet Protection Part 1

Notes:

1. The proper inlet protection shall be used and maintained to prevent 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.
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.
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 2

Source: City of Albuquerque
Construction Site Manual 2018

Inlet Protection Part 2

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.
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.
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 construction 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 recurring 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
Control Manual Volume 3

Wash-outs

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
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.
5. Mortar lowers 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

EIGHT 14 SOLUTIONS
EROSION CONTROL & ENVIRONMENTAL CONSULTING

Kelley Vincent
Professional Engineer
8-26-2020