

Quivira Estates Building Phase Temporary Erosion and Sediment Control Plan

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ESC Plan Standard Notes (2023-06-16)

1. 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:
 - a. The City Ordinance § 14-5-2-11, the ESC Ordinance,
 - b. The EPA's 2022 Construction General Permit (CGP), and
 - c. The City Of Albuquerque Construction BMP Manual.
2. 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.
3. Self-inspections - In accordance with City Ordinance § 14-5-2-11(C)(1), "at a minimum a routine 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 and made available upon request.
4. Corrective action reports must be kept by the person or entity authorized to direct the construction activities on the site and made available upon request.
5. Final Stabilization and Notice of Termination (NOT) - In accordance with City Ordinance § 14-5-2-11(C)(1), self-inspections must continue until the site is "determined as stabilized by the city." The property owner/operator is responsible for determining when the "Conditions for Terminating CGP Coverage" per CGP Part 8.2 are satisfied and then for filing their Notice of Termination (NOT) with the EPA. Each operator may terminate CGP coverage only if one or more of the conditions in Part 8.2.1, 8.2.2, or 8.2.3 has occurred. After filing the NOT with the EPA, the property owner is responsible for requesting a Determination of Stabilization from the City.
6. When doing work in the City right-of-way (e.g. sidewalk, drive pads, utilities, etc.) prevent dirt from getting into the street. If dirt is present in the street, the street should be swept daily or prior to a rain event or contractor induced water event (e.g. curb cut or water test).
7. When installing utilities behind the curb, the excavated dirt should not be placed in the street.
8. When cutting the street for utilities the dirt shall be placed on the uphill side of the street cut and the area swept after the work is complete. A wattle or mulch sock may be placed at the toe of the excavated dirt pile if site constraints do not allow placing the excavated dirt on the uphill side of the street cut.
9. ESC Plans must show longitudinal street slope and street names. On streets where the longitudinal slope is steeper than 2.5%, wattles/mulch socks or j-hood silt fence shall be shown in the front yard swale or on the side of the street.

Owner/Operator Information

Site Owner (1): Quivira Land LLC
Contact: Tim McNaney
505 322-6027
tmcnaney@twilighthomesnrm.com

Site Owner (2): Take Down LLC
Contact: Tim McNaney
505 322-6027
tmcnaney@twilighthomesnrm.com

Site Operator: Twilight Homes
Contact: Tim McNaney
505 322-6027
tmcnaney@twilighthomesnrm.com

Stormwater Team: 814 Solutions

Contact: Gaylen Barnett (Environmental Compliance Manager)
505 382-4828
gaylen@814solutions.com

2nd Contact: Eric Maez (Inspector/Maintenance Manager)
505 401-7843
eric@814solutions.com

BMP Installation: 814 Solutions
Eric Maez (Inspector/Maintenance Manager)
505 401-7843
eric@814solutions.com



North Lot was stabilized with Hydroseeding on 7/30/2024.

Curb cutbacks will serve as primary BMP during building phase. Pond constructed on Tract A will be secondary BMP for runoff.

Legend

- Concrete Washout
- Curb Cutbacks
- Dumpster
- Inlet Protection
- Portable Toilet
- Retaining Wall
- Silt Fence
- Stabilized North Lot
- SWPPP Permit / Book

Note that 814 Solutions did not create grading and drainage plan. Plan was edited by 814 Solutions to include stormwater measures.

BMPs are not to scale and have been enhanced for clarity.

Soil Information

62.7% Alameda sandy loam (0-5% slopes)

K-factor: 0.24

Bulk density, 1/3 bar:
1.43 grams/cubic centimeter

37.3% Madurez-Wink association, gently sloping

K-factor: 0.24

Bulk density, 1/3 bar:
1.43 grams/cubic centimeter

CAUTION:

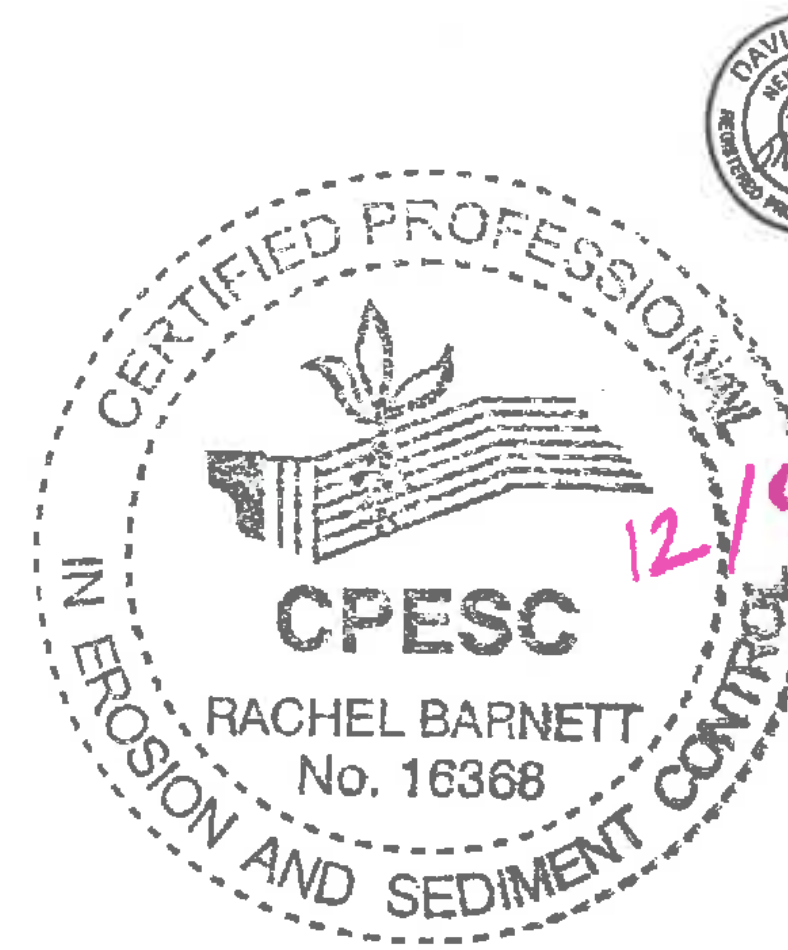
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

Lots 2 and 20 owned
Twilight Homes.

Lot 13 owned by Take Down LLC.

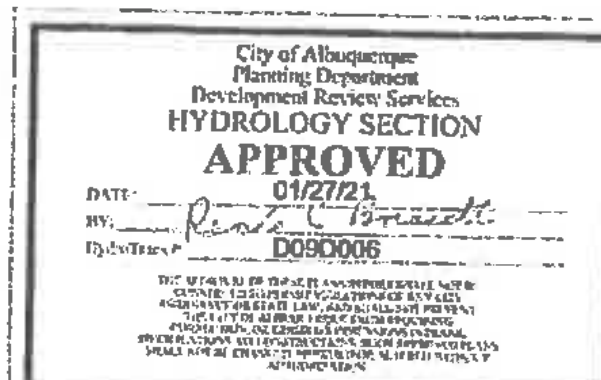
Temporary Erosion and Sediment Control Plan (TESCP) for Quivira Estates Building Phase

I David Soule, NMPE 14522, of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated 1/4/21. The record information edited on the original design document has been performed by me or under my direct supervision and is true and correct to the best of my knowledge and belief. The as-built survey was provided by THOMAS PATRICK NMPS 12651. The certification is submitted in support of a request for PERMANENT CERTIFICATE OF OCCUPANCY. The record information presented herein is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.



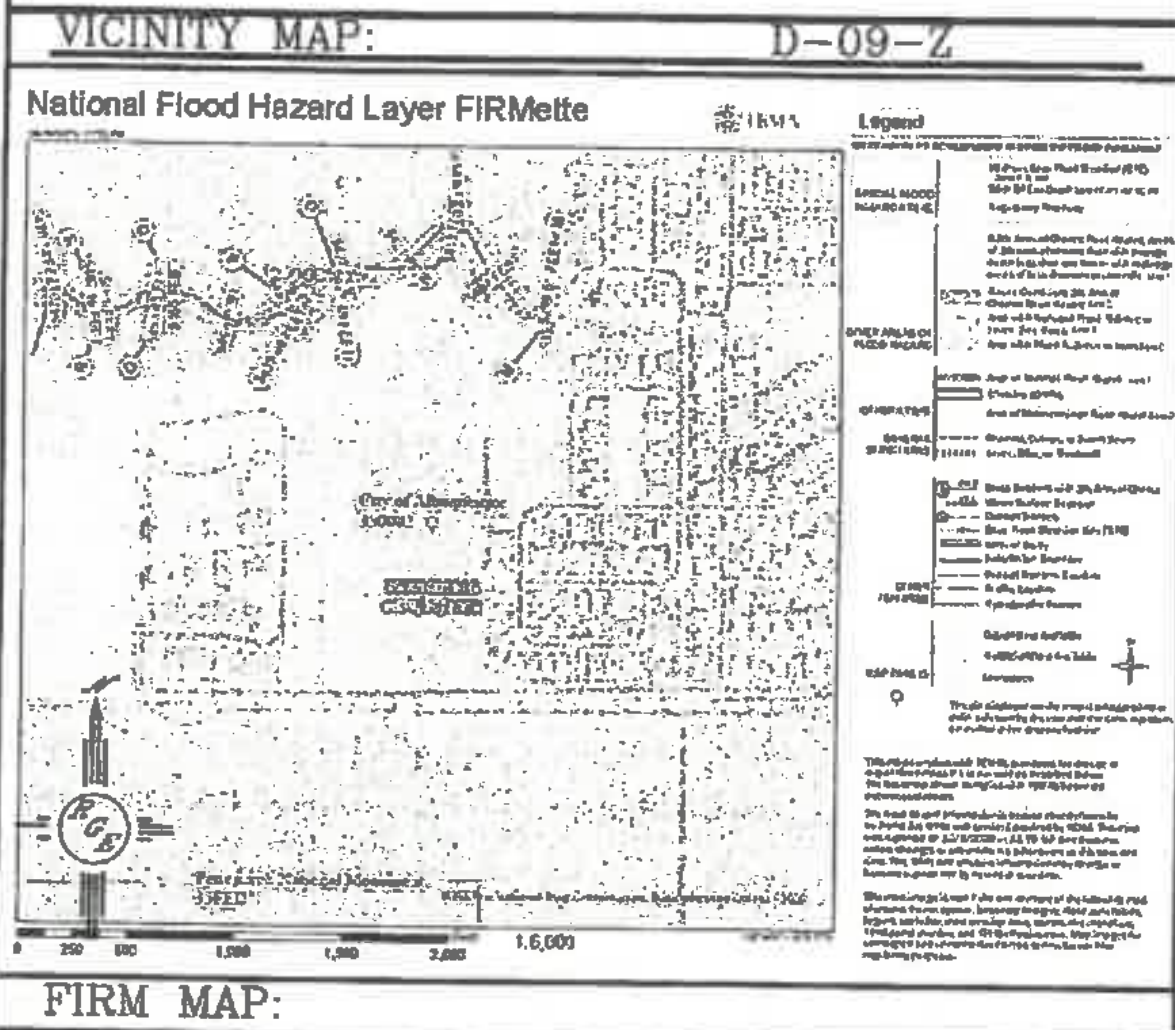
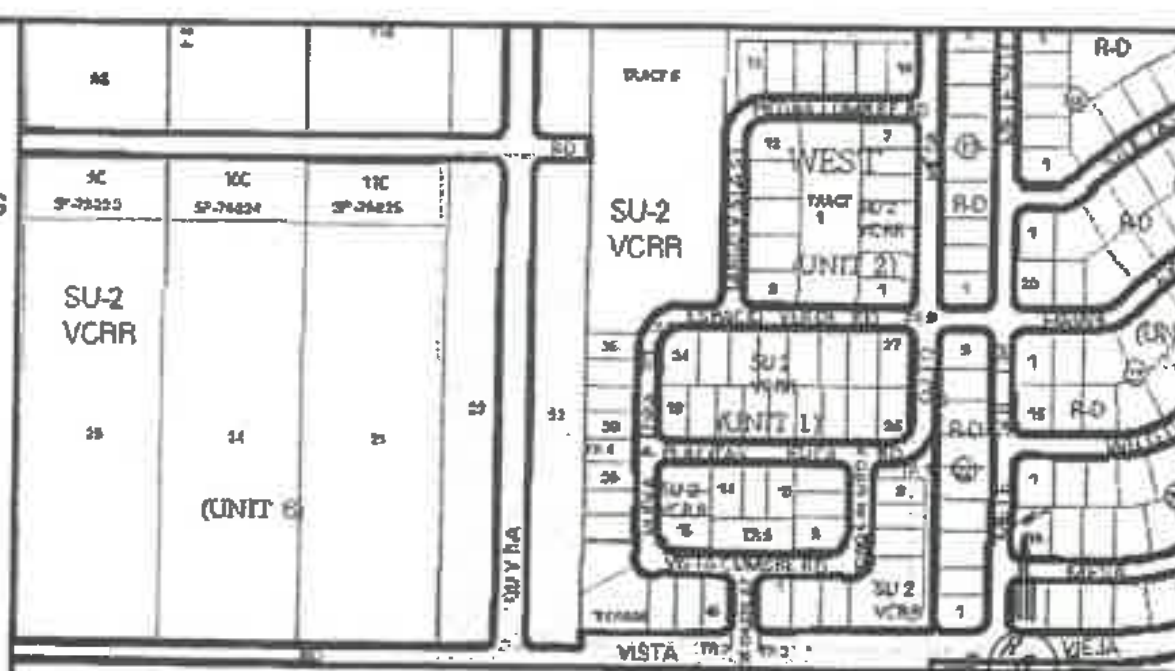
SURVEYOR'S CERTIFICATE

I, ANDREW S. MEDINA, A DAY CHANGED LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME, OR UNDER MY SUPERVISION, THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY REFLECTS THE ACTUAL CONSTRUCTION WORK SHOWN ON THESE DRAWINGS AND THAT THIS INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I, ANDREW S. MEDINA, DO NOT ACCEPT ANY LIABILITY FOR ANY OF THE DESIGN CONCEPTS, CALCULATIONS, ENGINEERING AND/OR INTENT OF THE RECORD DRAWING.



EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



LEGAL DESCRIPTION:

LOTS 1-23, AND TRACT A, QUIVIRA ESTATES

NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
- ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- ALL NEW PAVING SHALL BE 6" PCC OVER 8" SUBGRADE PREPARATION IN CONFORMANCE TO ACI 330R-08. UNLESS OTHERWISE NOTED.
- ANY CURBS OR PAVEMENT NEGATIVELY IMPACTED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED TO MATCH EXISTING CONDITIONS.
- ALL SITE WORK SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARDS FOR PUBLIC WORKS CONSTRUCTION EDITION 9

LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- SLOPE TIE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB
- EXISTING CURB AND GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- 3" ADA PATH-2% MAX SLOPE

All stamps/seals, with the exception of the CPESC stamp, were applied prior to creation of TESCP.

Record Drawing



CPN 963985

GRAPHIC SCALE

SCALE: 1"=50'

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ENGINEER'S SEAL	QUIVIRA ESTATES	DRAWN BY: WCVJ
DAVID SOULE 14522 REGISTERED PROFESSIONAL ENGINEER	GRADING AND DRAINAGE PLAN	DATE: 12-02-20
1/4/21	Rio Grande Engineering 1806 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	2102259-1/0007-4-08-20
DAVID SOULE P.E. #14522		SHEET #
		JOB # 2102059

Silt Fence

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.

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.

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.
4. Wash water may not contain soaps or chemicals, unless a separate permit is acquired.
5. 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.
6. Make sure the Vehicle Tracking Control is not bypassed by the construction traffic.

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.

Source: City of Albuquerque
Construction Site Manual 2018

Good Housekeeping

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

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.

Source: City of Albuquerque
Construction Site Manual 2018

Inlet Protection Part 2

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.

Source: City of Albuquerque
Construction Site Manual 2018

Earth Berms/ Dikes/ Drainage Swales

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.

Source: Urban Storm Drainage
Control Manual Volume 3

Arroyo and Channel Construction

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 divert 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 dissipator. 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.

Source: City of Albuquerque
Construction Site Manual 2018

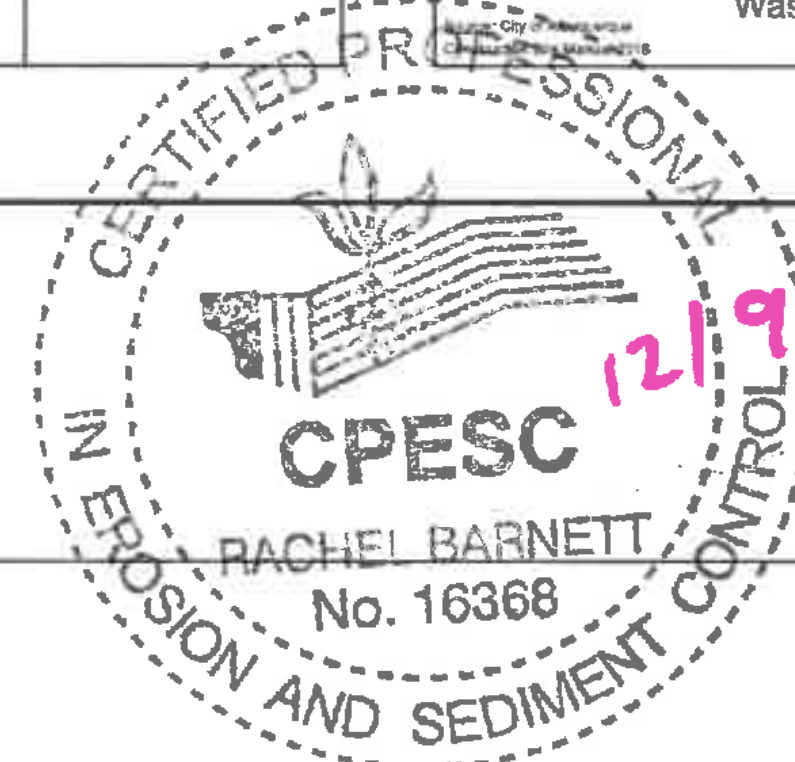
Wash-outs

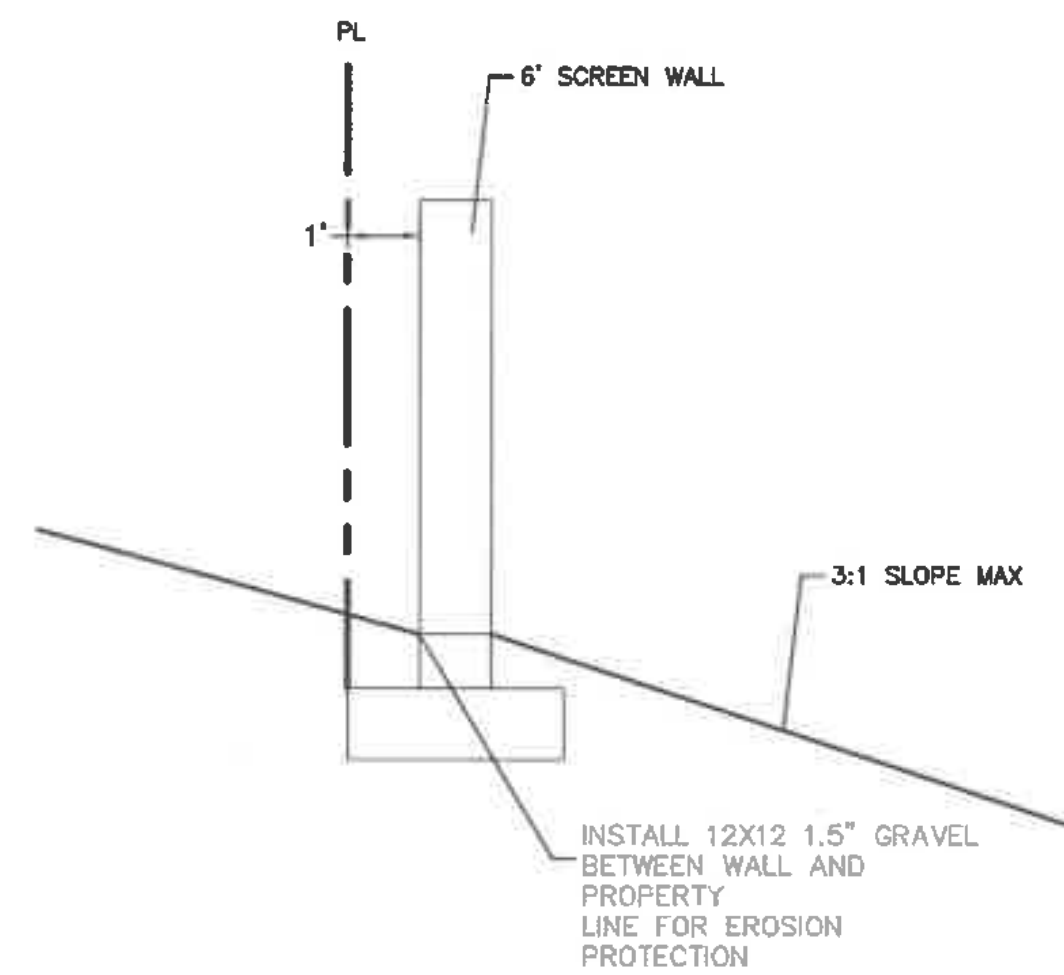
Notes:

1. Designated wash-out areas shall 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 shall 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 2022
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 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.

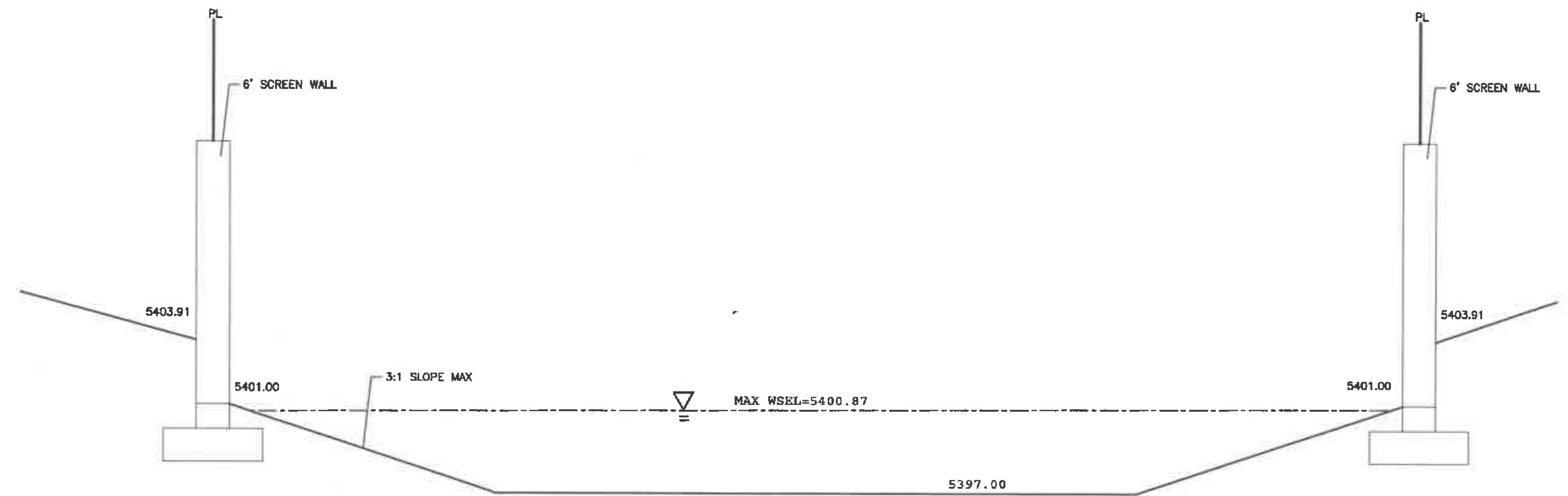
Source: City of Albuquerque
Construction Site Manual 2018

BMP Information Sheet

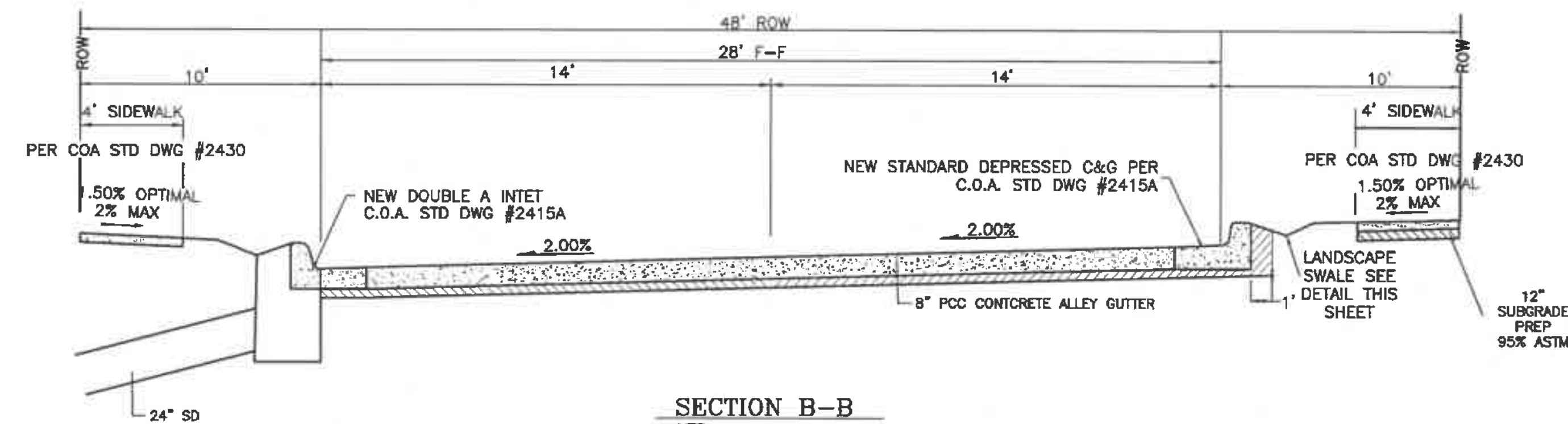




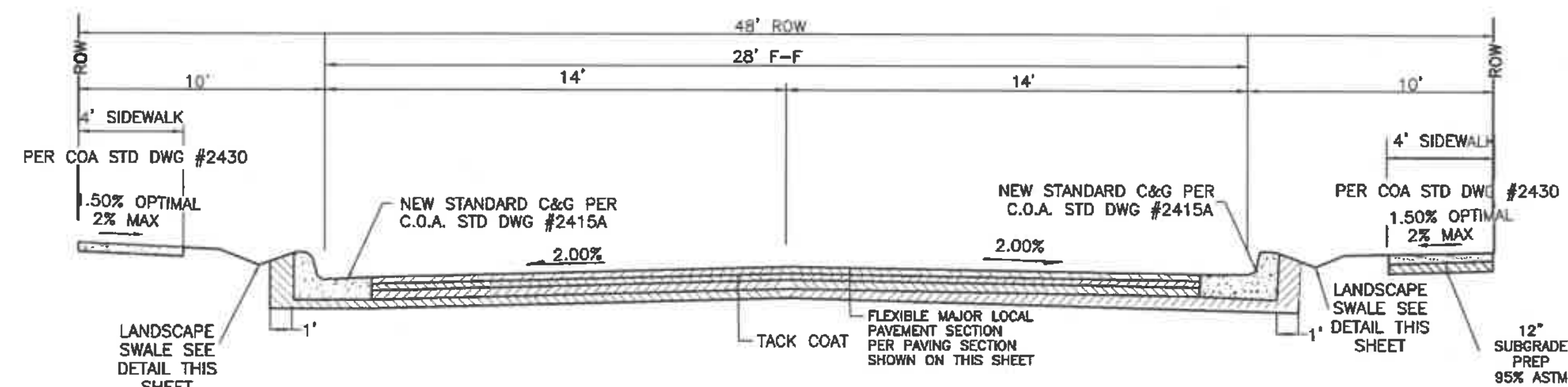
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NTS



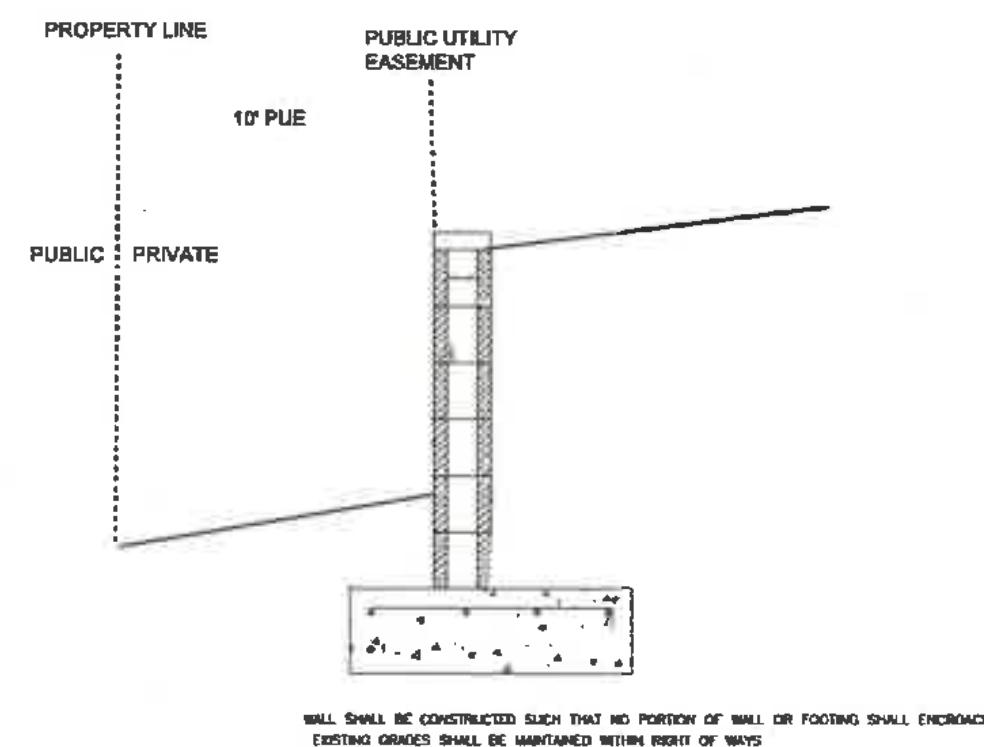
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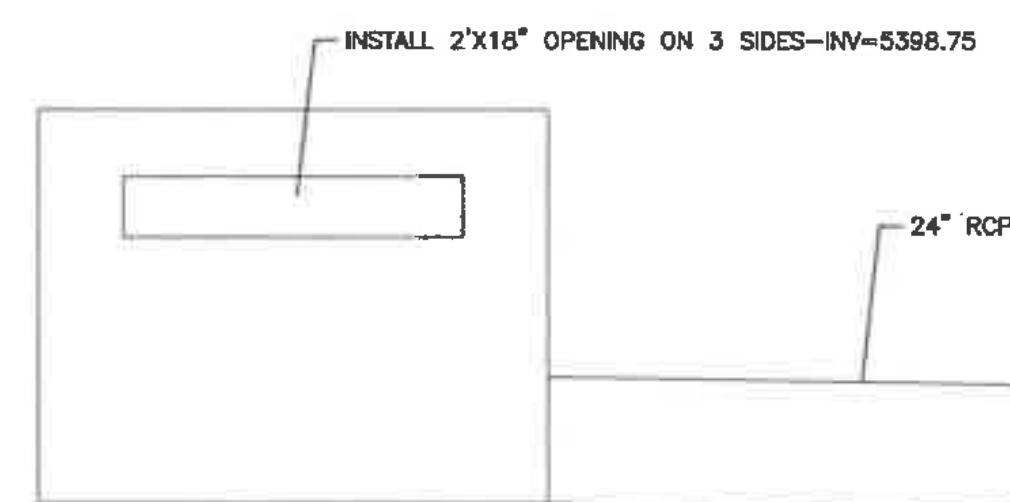
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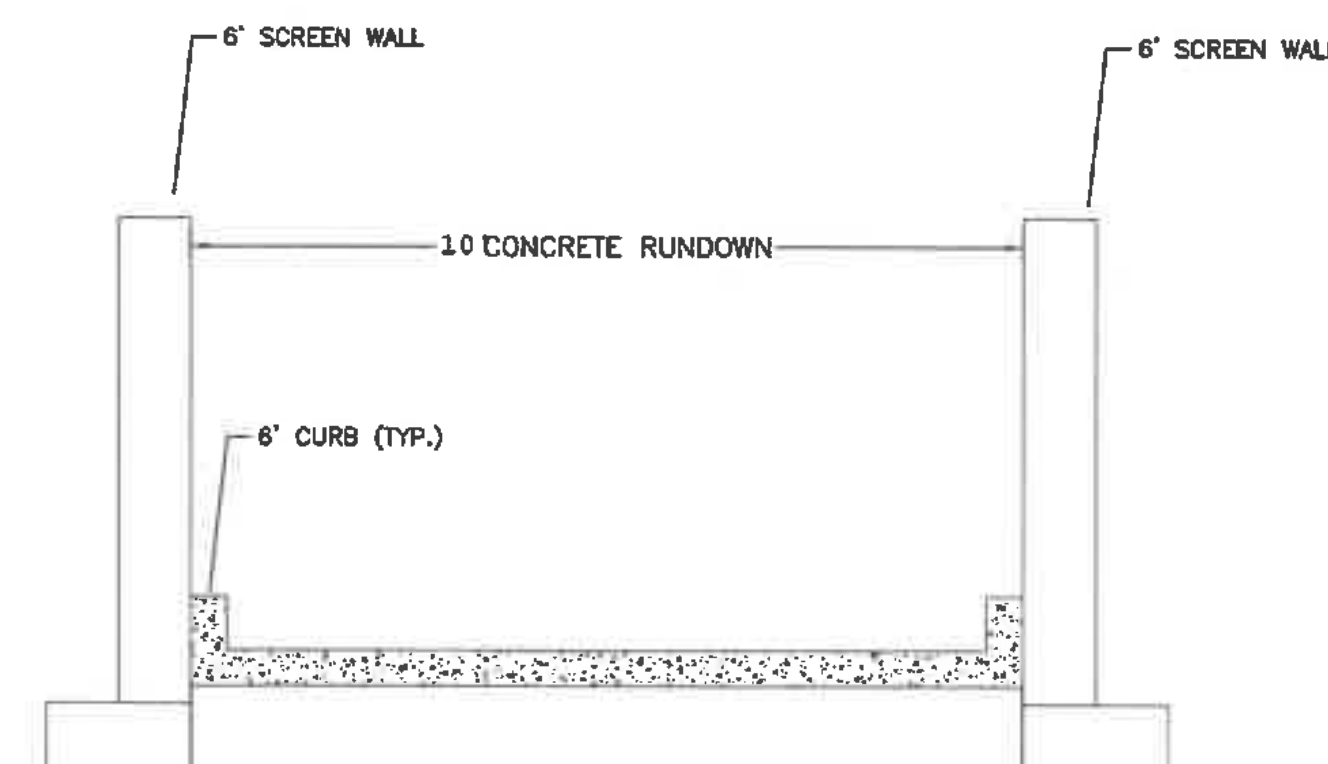
SECTION E-E
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WALL DETAIL FOR FRONT WALLS
PRIVATE SIDEWALLS MAY BE BUILT ON COMMON PROPERTY LINE



MODIFIED D INLET DETAIL
NTS




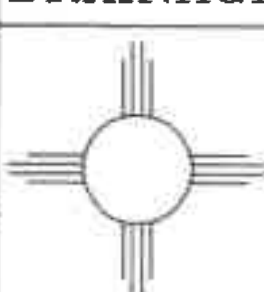
SECTION C-C
NTS



All stamps/seals, with the exception of the CPESC stamp, were applied prior to creation of TESC.



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ENGINEER'S SEAL	QUIVIRA ESTATES	DRAWN BY WCVJ
		DATE 12-02-20
		2102059-LAYOUT-9-08-20
		SHEET # —
		JOB # 2102059
DAVID SOULE P.E. #14522	 <i>Rio Grande Engineering</i> 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0988	