Preserve at Culebra, Unit 15
Stormwater Pollution Prevention Plan
For large
construction activities

Developed For

KB Home Lone Star, Inc.
4800 Fredericksburg Rd, San Antonio, TX 78229

October 9, 2024

Developed By

Compliance Resources, Inc.
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Georgetown, Texas 78627
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1. Introduction

Regulatory Requirements for Construction Stormwater

Section 26.040 of the Texas Water Code and Section 402 of the Clean Water Act require that at least one stormwater pollution prevention plan (SWPPP) shall be developed for each construction project or site covered by the permit.

The SWPPP shall be completed prior to a submittal of the Notice of Intent and shall provide for compliance with the terms and schedule of the SWPPP beginning with the initiation of construction activities.

The SWPPP shall be available, upon request, to the Director, a State, Tribal, or local agency approving sediment and erosion control plans, grading plans, or stormwater management plans; local government officials; or the operator of a municipal separate storm sewer system receiving discharges from the site.

Site Size

Small construction activities are construction activities disturbing at least 1 acre, but less than 5 acres and are not part of a larger common plan of development or sale that cumulatively disturbs 5 or more acres.

Large construction activities are construction activities disturbing 5 or more acres, or less than 5 acres if part of a larger common plan of development or sale that cumulatively disturbs five or more acres.

Notice of Intent

The NOI must be submitted to TCEQ through the State of Texas Environmental Electronic Reporting System (STEERS) prior to the start of construction (an email confirmation receipt must be received from TCEQ before starting construction). The NOI must be signed by a duly authorized representative and retained on site where the stormwater discharge is generated. All authorization numbers will be posted onsite.

A copy of the 'signed and certified' Notice(s) of Intent (NOI) must be supplied to the operator of the Municipal Separate Storm Sewer System (MS4) if discharges enter an MS4 at least two (2) days prior to commencement of construction activities.

This site discharges to the following MS4(s): Bexar County

Applications and notifications are located in Appendix A.

Operator Name	Operator Scope	Operator Type
KB Home Lone Star, Inc.	Developer	Primary
GENERAL CONTRACTOR TO BE DETERMINED	General Contractor	Primary

SWPPP and Permit Amendment

The permittee must revise or update the SWP3, including the site map, within seven (7) days of when any of the following occurs:

- a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;
- changing site conditions based on updated plans and specifications, new operators, new areas of responsibility, and changes in BMPs; or
- results of inspections or investigations by construction site personnel authorized by the permittee, operators of a municipal separate storm sewer system receiving the discharge, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

Permittees must submit a Notice of Change (NOC) to TCEQ through the State of Texas Environmental Electronic Reporting System (STEERS) within 14 days to the executive director upon the discovery of a change in information or an omission, inaccuracies or submittal of incorrect information on the Notice of Intent. A copy of the Notice of Change must also be submitted to the operator of the MS4 receiving the discharge from the site.

Changes to Authorization Log

Operator Name	Authorization Number	Operator Scope	Summary of Changes
KB Home Lone Star, Inc.	TXR1559DR	Developer	- Change permitted site name to Preserve at Culebra, Units 1,2,3,4,5,6,7,8,14,15 - Change in acreage from 160.13 to 172.83 acres

This site discharges to the following MS4(s): Bexar County

Applications and notifications are located in Appendix A.

Notice of Termination

Permittees must submit a completed Notice of Termination (NOT) to TCEQ through the State of Texas Environmental Electronic Reporting System (STEERS) (must be signed by a duly authorized representative) upon meeting any of the following conditions:

- Final stabilization has been achieved on all portions of the site that are the responsibility of the operator (a uniform perennial vegetative cover with a density of 70% of the native background vegetative cover for the area on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures have been employed)
- A transfer of operational control has occurred
- The operator has obtained alternative authorization under an individual or general TPDES permit

Submit a copy of the Notice of Termination (NOT) to the operator of any MS4 receiving the discharge within 30 days of submitting the NOT.

This site discharges to the following MS4(s): Bexar County

Applications and notifications are located in Appendix A.

Transfer of Day-to-Day Operational Control

Information related to transferring operational control is located in Appendix F.

Signage Requirements

Notices required to be posted near the entrance of the site include:

- TXR150000 Large Construction Site Notice (CSN) for Primary Operators with permit number

In areas where safety is a concern, the Construction Site Notice must be posted in a local public building or publicly accessible location near the construction site.

Edwards Aquifer Requirements

30 Texas Administrative Code (TAC) Chapter 213 is known as the Edwards Aquifer Rules and requirements for construction activities over the Edwards Aquifer Recharge Zone, Contributing Zone, and Contributing Zone within the Transition Zone.

No person may commence the construction of any regulated activity until an Edwards Aquifer protection plan or modifications to the plan as required by §213.5 of this title (relating to Required Edwards Aquifer Protection Plans, Notification, and Exemptions) or exception under §213.9 of this title (relating to Exceptions) has been filed with the appropriate regional office, and the application has been reviewed and approved by the executive director.

This site is located outside the Edwards Aquifer Recharge and Contributing Zones. A WPAP, CZP, or SCS is not required.

Tribal, Local, and State Requirements

This SWPPP is designed to comply with local and state requirements as follows.

As this site is not located in an area where separate tribal requirements may apply, no additional stormwater management controls are required to minimize the effects of stormwater runoff to affected areas.

- Bexar County Regulations for Storm Water Pollution Prevention: https://www.bexar.org/1567/Contractors

The Texas Commission on Environmental Quality (TCEQ) TPDES General Permit TXR150000 regulations pursuant to Section 26.040 of the Texas Water Code and Section 402 of the Clean Water Act. The TCEQ TPDES General Permit TXR150000 can be found here: https://www.tceq.texas.gov/downloads/permitting/stormwater/general/construction/2023-cgp-txr150000.pdf

Retention of Records

The permittee must retain the following records for a minimum period of three (3) years from the date that a NOT is submitted as required in Part II.F.1. and 2. of this permit. For activities in which a NOT is not required, records shall be retained for a minimum period of three (3) years from the date that the operator terminates coverage under Section II.F.3. of this permit. Records include:

A. a copy of the SWP3;

B. all reports and actions required by this permit, including a copy of the TCEQ construction site notice;

C. all data used to complete the NOI, if an NOI is required for coverage under this general permit; and

D. all records of submittal of forms submitted to the operator of any MS4 receiving the discharge and to the secondary operator of a large construction site, if applicable.

2. Site Description

Site Description

The site is located southwest of the intersection of Blacktail Crest and Snowy Egret Fall in the City of San Antonio, Bexar County, Texas 78253.

Latitude and longitude: 29.512453, -98.795759

Block of Construction	Total Acres
Unit 15	12.7

Operator	Block of Construction	Scope of Work	Disturbed Acres
KB Home Lone Star, Inc.	Unit 15	Developer	12.7
GENERAL CONTRACTOR TO BE DETERMINED	Unit 15	Land Development	12.7

Soil type(s)

Abbreviation	Soil Description
HtA	Branyon clay, 0-1% slopes, is found on stream terraces. This soil is moderately drained with a high runoff class and has no frequency of flooding or ponding.
HtB	Branyon Clay, 1-3% slopes, is found on stream terraces. This soil is moderately well drained with a very high runoff class and has no frequency of flooding or ponding.
LvB	Lewisville silty clay, 1-3% slopes, is found on stream terraces. This soil is well drained with a low runoff class and has no frequency of flooding or ponding.

100-Year Floodplain

No portions of the site are within the 100-year floodplain.

Receiving Waters and Description of Drainage System

Post-construction runoff discharges into a tributary of Medio Creek. Some runon is received from adjacent properties during typical storm events.

Construction stormwater runoff will discharge from the site by the sequential system(s) listed below:

- Storm sewers are followed by drainage channels/outlet protection to facilitate storm water treatment prior to offsite discharge.
- No sequential systems are planned for portions of the site due to sheet flow.

Impaired Water Body

The Texas Integrated Report describes the status of the state's waters, as required by Sections 305(b) and 303(d) of the federal Clean Water Act. It summarizes the condition of the state's surface waters, including concerns for public health, fitness for use by aquatic species and other wildlife, and specific pollutants and their possible sources.

Segmented Water Body	Impaired
Segment ID#1912A-Upper Medio Creek	No

Link to the Texas Integrated Report of Surface Water Quality:
https://www.tceq.texas.gov/waterquality/assessment/22twqi/22txir

Link to the 2022 Texas Integrated Report – Index of Water Quality Impairments:
https://www.tceq.texas.gov/downloads/water-quality/assessment/integrated-report-2022/2022-imp-index.pdf

Total Maximum Daily Load (TMDL)

A TMDL is a scientifically-derived target that tells us the greatest amount of a particular substance that we can add to a waterway and still keep it healthy. The TMDL gives us a measurable way to target our efforts to protect and improve the quality of our streams, lakes, and bays.

Segment Water Body	Existing TMDL and Implementation Plan (I-Plan)	I-Plan Link
Segment ID#1912A-Upper Medio Creek	No	N/A

Link to the Total Maximum Daily Load Program: *https://www.tceq.texas.gov/waterquality/tmdl*

Critical Environmental Features

There are no critical environmental features on-site or within close proximity to the site.

Endangered or Threatened Species

No information was provided to Compliance Resources, Inc. regarding endangered or threatened species on-site or within close proximity to the site.

County	Category	Name	Status
Bexar County	Amphibians	Cascade Caverns salamander	Threatened
Bexar County	Amphibians	Texas salamander	Threatened
Bexar County	Birds	white-faced ibis	Threatened
Bexar County	Birds	wood stork	Threatened
Bexar County	Birds	piping plover	Threatened
Bexar County	Birds	whooping crane	Endangered
Bexar County	Birds	golden-cheeked warbler	Endangered
Bexar County	Fish	widemouth blindcat	Threatened
Bexar County	Fish	toothless blindcat	Threatened
Bexar County	Mammals	black bear	Threatened
Bexar County	Mammals	white-nosed coati	Threatened
Bexar County	Mollusks	false spike	Threatened
Bexar County	Reptiles	Cagle's map turtle	Threatened
Bexar County	Reptiles	Texas tortoise	Threatened
Bexar County	Reptiles	Texas horned lizard	Threatened

3. Site Scope, SWPPP Responsibility, and Construction Activity Logs

Site Scope

The scope of the project includes:

- The construction of all site infrastructure including roadways and associated utilities.
- The construction of single-family residential lots and open space/drainage easement lots.
- The construction of single-family residences.

The major soil disturbing events are:

- clearing and grubbing
- rough cut grading
- excavation
- regrading
- final grading

SWPPP Responsibility

KB Home Lone Star, Inc. shall be responsible for the development of a stormwater Pollution Prevention Plan.

The Developer shall be responsible for, and retain controls over any changes to site plans and the design of erosion and sedimentation controls. The Developer or its designee shall perform any additions, deletions, or changes in design of control measures. The General Contractor shall be fully responsible for daily implementation, inspection, and maintenance of the erosion and sedimentation measures or controls.

Through the identified inspection report process, the contractor shall notify the appropriate KB Home Lone Star, Inc. representative of any amendments to the SWPPP and/or control measures.

Each operator shall be fully responsible for actions of Subcontractors for which they direct on site activities.

GENERAL SEQUENCE FOR CONSTRUCTION ACTIVITIES (UNIT 15)	
CONSTRUCTION ACTIVITY	**DATE ACTIVITY BEGAN**
CONSTRUCTION START DATE:	
Install temporary erosion and sedimentation controls.	
Begin clearing and grubbing.	
Rough grade streets.	
Install utilities.	
Complete block grading.	
Lay first course of base material.	
Install curb and gutter.	
Lay final course of base material.	
Lay asphalt.	
Restore construction spoils and staging area to natural grade.	
Complete permanent erosion controls and restoration of site vegetation (i.e. landscaping where applicable).	
Remove/dispose of temporary erosion controls.	
Complete final site clean up.	

STABILIZATION ACTIVITIES (UNIT 15 - LD)	DATE ACTIVITY BEGAN

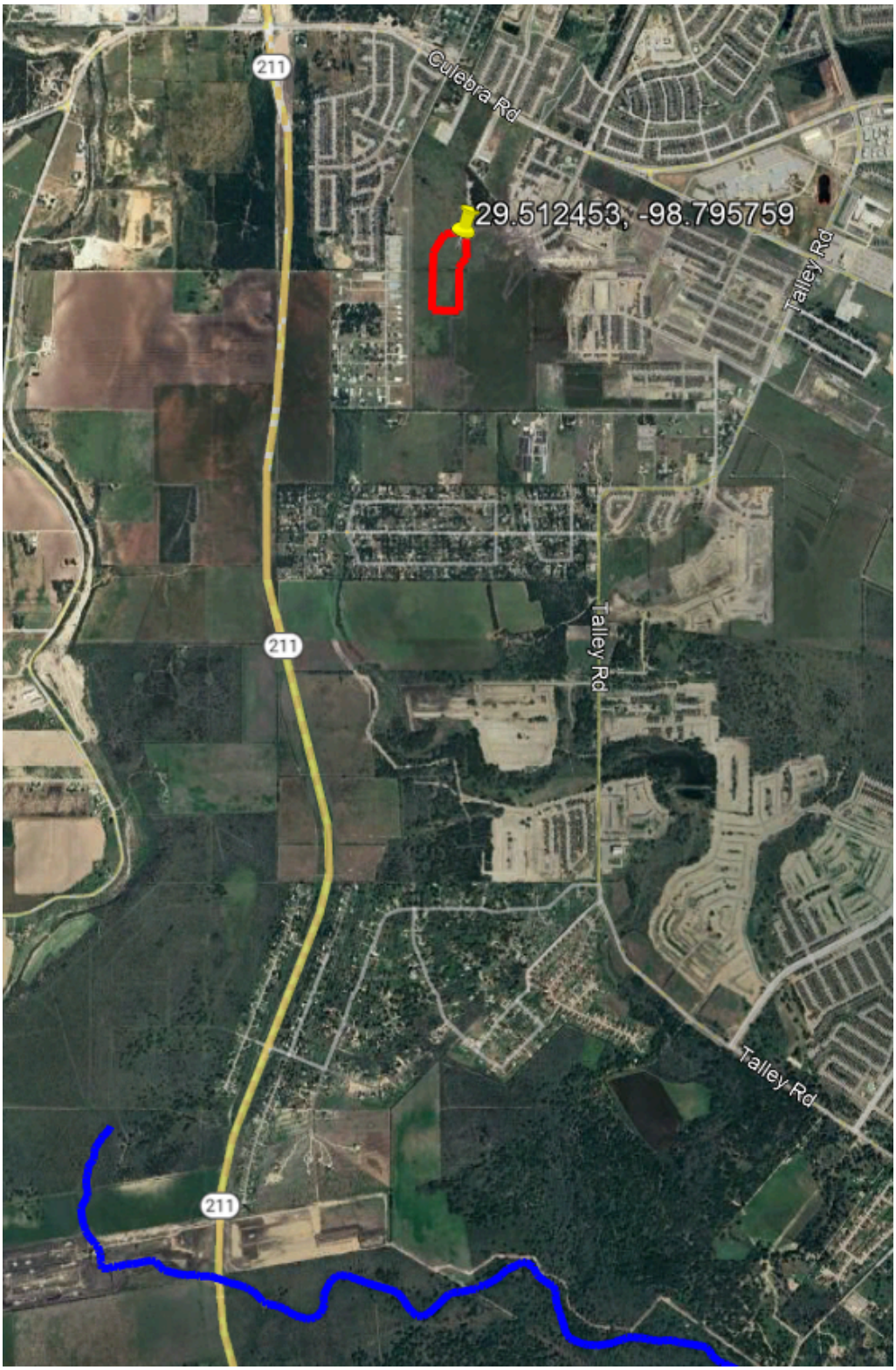
CONSTRUCTION ACTIVITIES CEASE ON PORTION/ALL OF SITE (UNIT 15 - LD)	DATE ACTIVITY CEASED

4. Maps

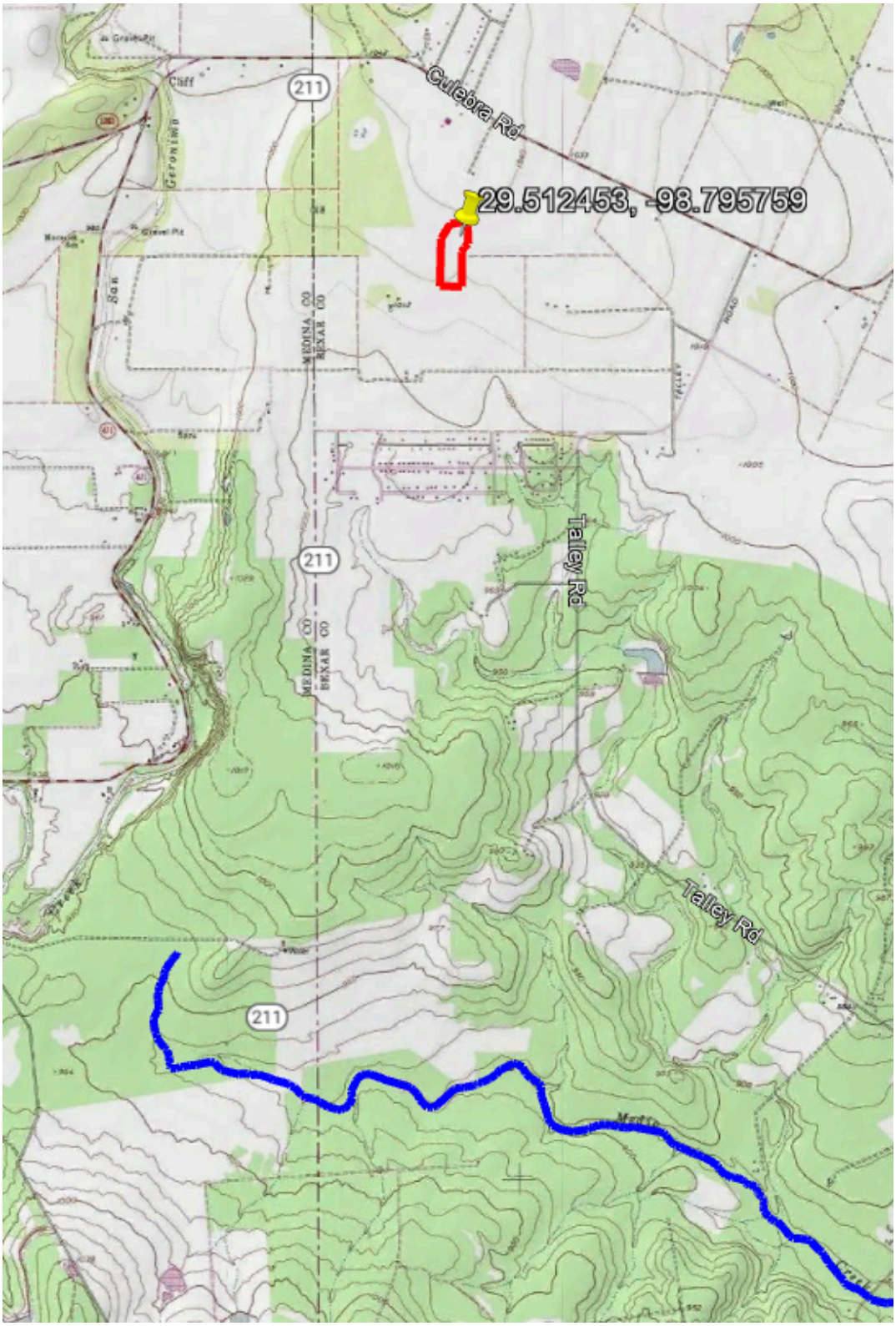
Master Plan Map

(Information related to the master plan map was not made available to Compliance Resources, Inc.)

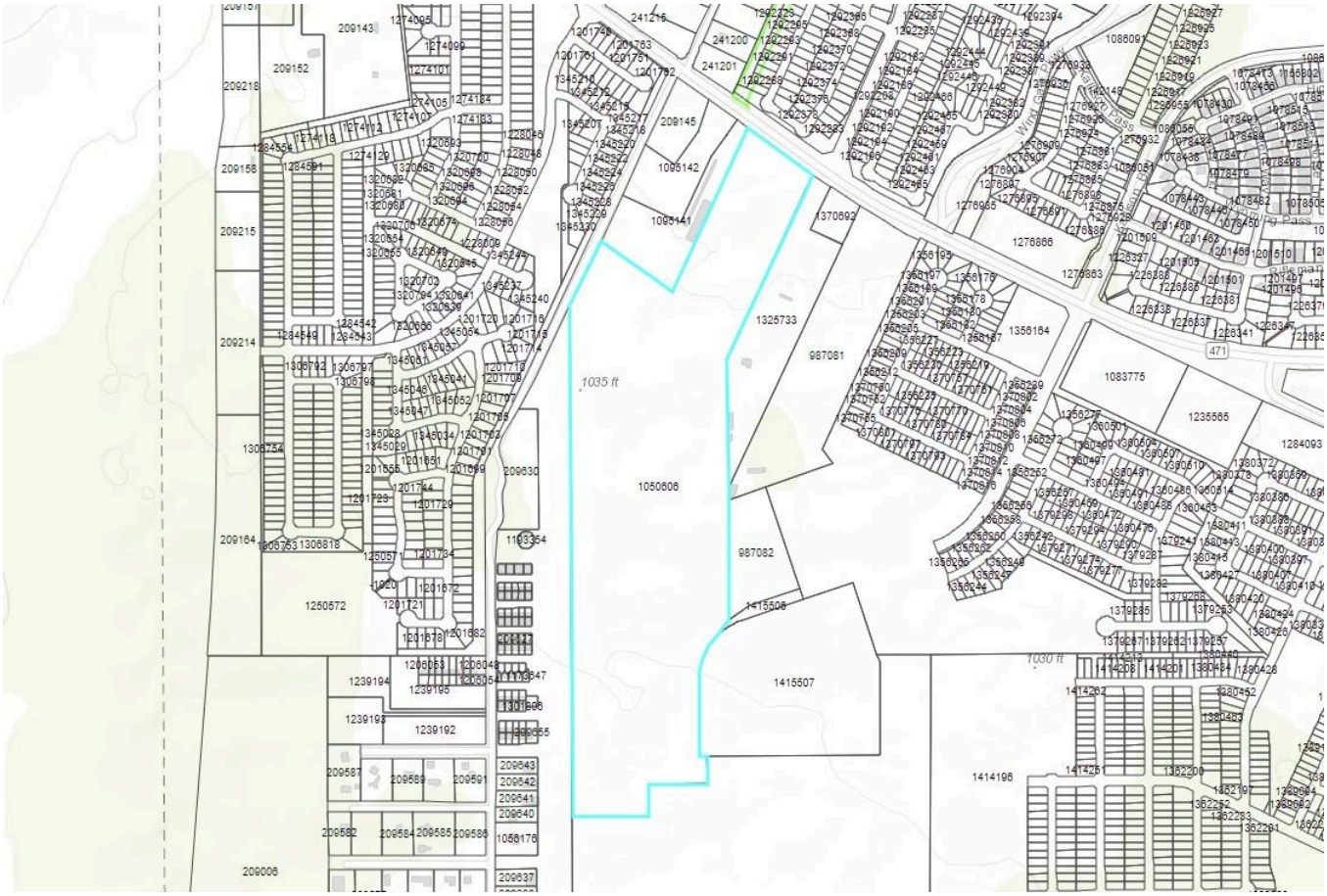
Local Map



Topographic Map

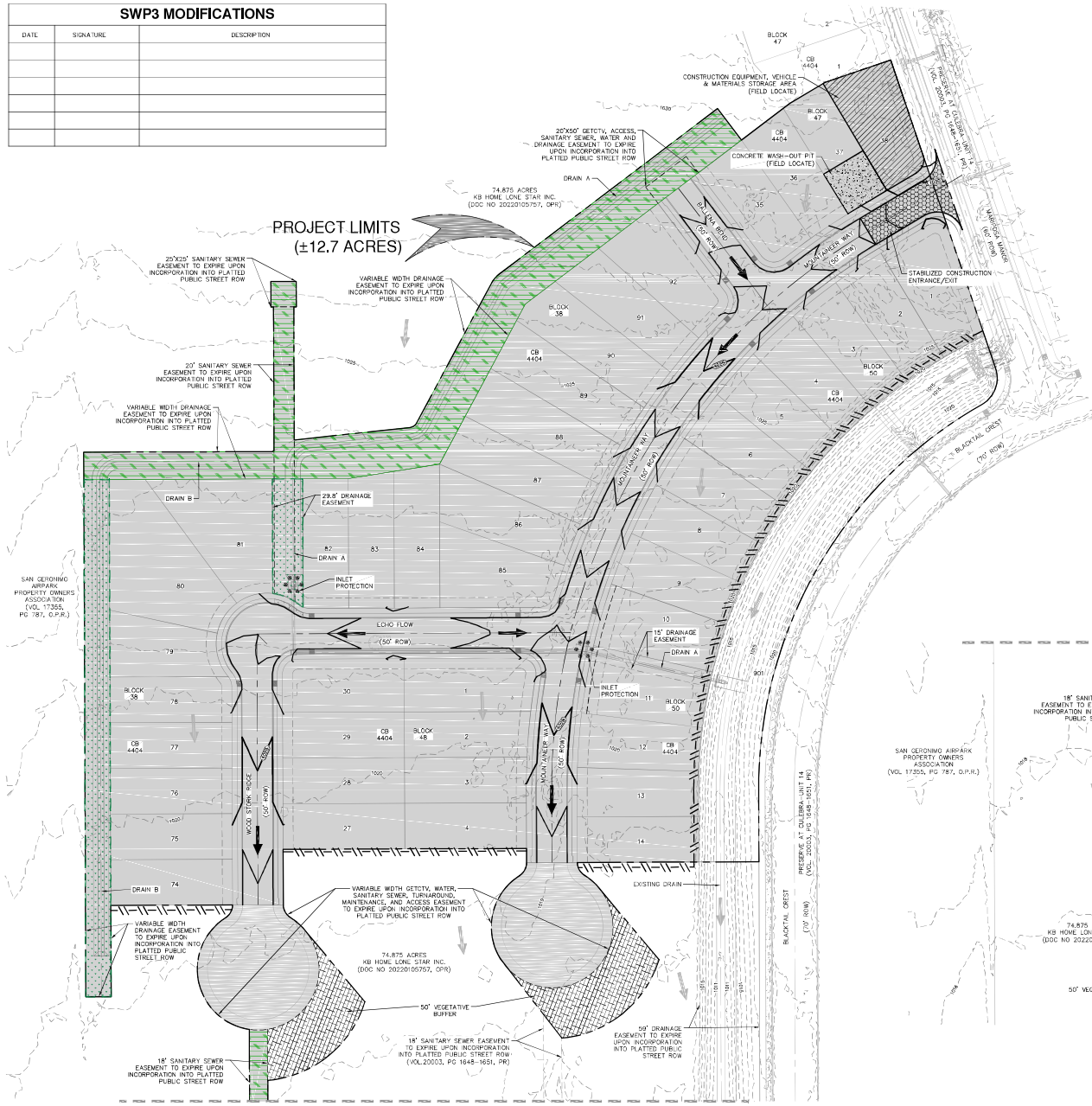


Property Boundary Map



SWP3 MODIFICATIONS

DATE	SIGNATURE	DESCRIPTION



GENERAL NOTES

1. DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.

2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH-OUT PIT, AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO BE DETERMINED IN THE FIELD.

3. STORM WATER POLLUTION PREVENTION CONTROLS MAY NEED TO BE MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. ALL MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATED BY THE RESPONSIBLE PARTY.

4. RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS BY USE OF ADEQUATE FENCING, IF NECESSARY.

5. ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO BE MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES.

6. FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION PREVENTION CONTROLS REFER TO THE TPDES STORM WATER POLLUTION PREVENTION PLAN.

7. STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD BE CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL CLARITY.

8. AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT BE COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT AREAS, EMBANKMENT SLOPES, ETC. WILL BE STABILIZED PER APPLICABLE PROJECT SPECIFICATIONS.

9. BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES TO COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS.

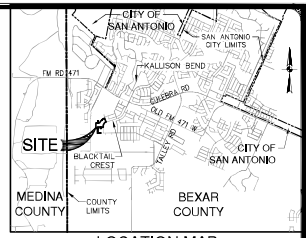
10. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE THE WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.

11. UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION, AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERMS IN DRAINAGE FEATURES.

12. WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.

13. SHADED AREA ▭ DENOTES LIMITS OF DISTURBED AREAS. OTHER AREAS WITHIN THE PROJECT LIMITS, WITH THE EXCEPTION OF A CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT A PART OF THIS TPDES STORM WATER POLLUTION PREVENTION PLAN (SWP3) AND WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES. HOUSE CONSTRUCTION ACTIVITIES WILL REQUIRE A SEPARATE STORM WATER POLLUTION PREVENTION PLAN.

14. CPS ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON THIS PROJECT AND WILL BE INSTALLING ELECTRIC UTILITIES.

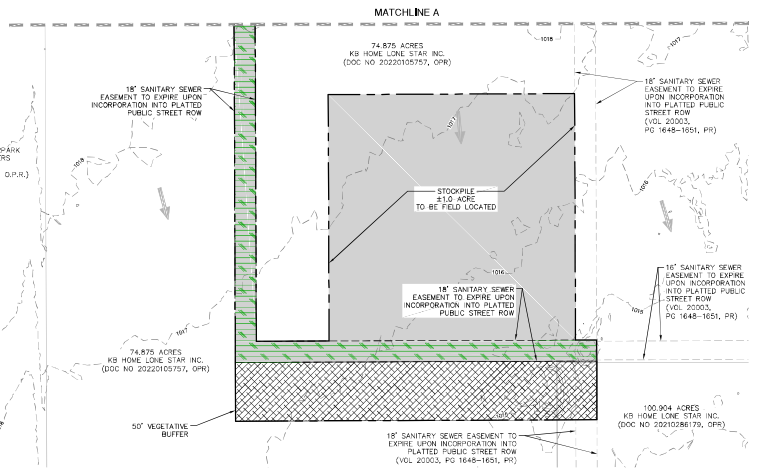


LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 50'
0' 50' 100' 150'

SWPPP LEGEND

- PROJECT LIMITS
- EXISTING CONTOUR 976
- PROPOSED CONTOUR (976)
- FLOW ARROW (EXISTING)
- FLOW ARROW (PROPOSED)
- SILT FENCE
- ROCK BERM
- GRAVEL FILTER BAGS
- GRATE INLET PROTECTION
- SEDIMENT CONTROL ROLLS
- LIMITS OF DISTURBED AREA (±11.19 AC)
- STABILIZED CONSTRUCTION ENTRANCE/EXIT (FIELD LOCATE)
- CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA (FIELD LOCATE)
- CONCRETE TRUCK WASH-OUT PIT (FIELD LOCATE)
- 50' NATURAL VEGETATIVE BUFFER
- AREA TO BE PERMANENTLY STABILIZED/VEGETATED
- AREA TO BE TEMPORARILY STABILIZED/REVEGETATED



THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

NO.	REVISION	DATE

9/9/2024

STATE OF TEXAS
REBECCA ANN CARROLL
92666
LICENSED PROFESSIONAL ENGINEER

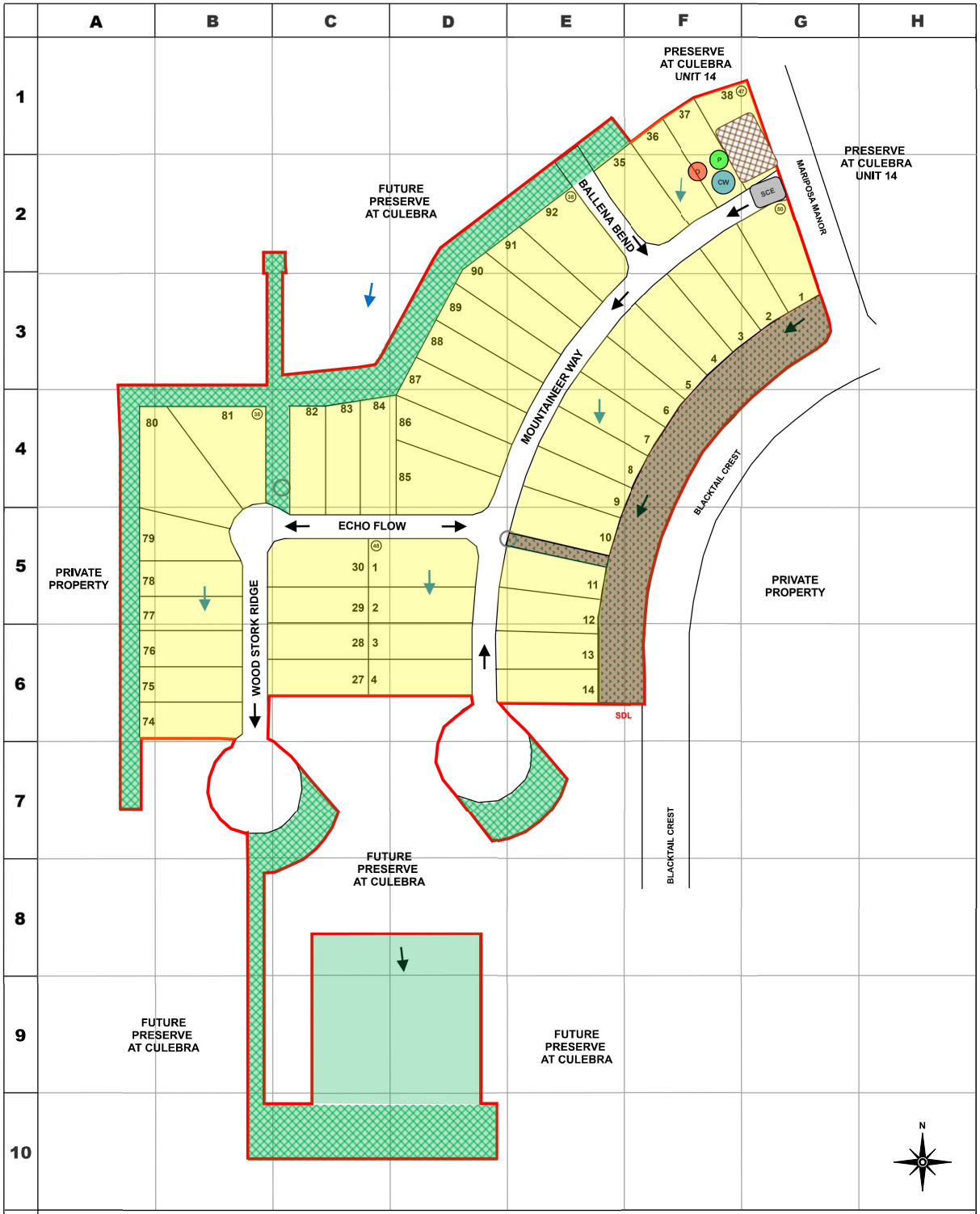
PAPE-DAWSON ENGINEERS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM 470 | TEXAS SURVEYING FIRM # 100806-00

PRESERVE AT CULEBRA-UNIT 15

BEXAR COUNTY, TEXAS

STORM WATER POLLUTION PREVENTION PLAN

PLAT NO. 24-11800306
JOB NO. 11668-19
DATE SEPTEMBER 2024
DESIGNER JB
CHECKED ____ DRAWN AR
SHEET C8.00



LEGEND

- CRI — CRI SIGN
- CT — CONSTRUCTION/STORAGE TRAILER
- SCE — STABILIZED CONSTRUCTION ENTRANCE (SCE)
- P — PORTABLE TOILET
- D — ROLLOFF DUMPSTER
- T — TRASH RECEPTACLE
- F — FUEL TANK
- SP — STOCK PILE
- HT — HERITAGE TREE
- CW — CONCRETE WASHOUT AREA
- HOUSE
- TD — SILT FENCE TRI-DIKE
- HB — HAY BALE
- G — GRAVEL BAG
- M — MULCH
- C — CURB BACK-CUT
- ROCK BERM
- LEVEL SPREADER
- GABION
- RIP RAP
- OUTSIDE OF SWP3 CONTROL
- TEMPORARY STABILIZATION
- STABILIZED AREA
- GEOTEXTILE
- STAGING AREA
- (UN-)DISTURBED) ENGINEERED VEGETATVE BUFFER
- CRITICAL ENVIRONMENTAL FEATURE
- CONCRETE
- POND
- DRAINAGE CHANNEL
- SILT FENCE
- TREE PROTECTION
- SOCK / WATTLE
- ORANGE PROTECTION FENCE
- DIVERSION BERM
- WATER LINE
- WASTEWATER LINE
- CREEK
- 100 YEAR FLOODPLAIN
- MATCH LINE
- SECTION / PHASE LINE
- PROJECT BOUNDARY / LIMITS OF CONSTRUCTION
- INLET PROTECTION / SDL
- INLET (W/O PROTECTION) / SDL
- INLET PROTECTION
- PROPOSED INLET
- HEADWALL
- HEADWALL W/ VELOCITY DISSIPATOR
- MULCH BERM
- SDL / OUTFALL / SHEET FLOW — STORMWATER DISCHARGE LOCATION
- NATURAL/ EXISTING FLOW
- GRADED/POST DEV. FLOW

REFER TO CIVIL PLANS FOR EXISTING DRAINAGE FLOW.

ALL SLOPE EQUALS 1 - 3% UNLESS OTHERWISE INDICATED.

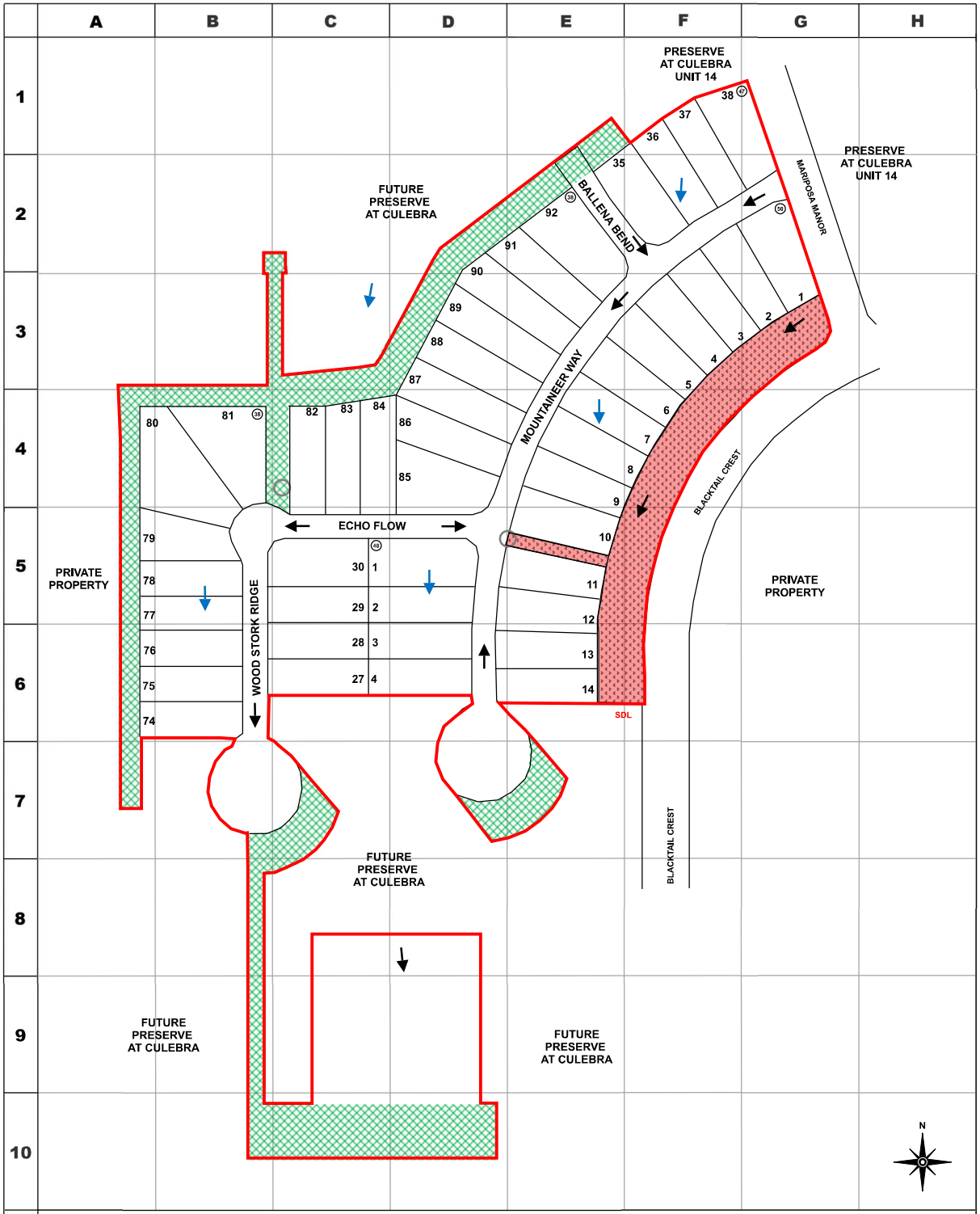
FIGURE #1

SITE MAP - PROPOSED STABILIZATION
PRESERVE AT CULEBRA
UNIT 15
SAN ANTONIO, TX 78253

FOR:
KB HOME LONE STAR, INC (SAN ANTONIO)

MEDIO CREEK
(IMPAIRED - SEG ID#1912A UPPER MEDIO CREEK)

DATE: PENDING START
NAME:



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- GRADED/POST DEV. FLOW

REFER TO CIVIL PLANS FOR EXISTING DRAINAGE FLOW.

ALL SLOPE EQUALS 1 - 3% UNLESS OTHERWISE INDICATED.

FIGURE #1

SITE MAP - BMP TRACKING
PRESERVE AT CULEBRA
UNIT 15
SAN ANTONIO, TX 78253

FOR:
KB HOME LONE STAR, INC (SAN ANTONIO)

MEDIO CREEK
(IMPAIRED - SEG ID#1912A UPPER MEDIO CREEK)

DATE: PENDING START
NAME:

5. Best Management Practices

Erosion and Sediment Control Requirements Applicable to All Sites

Except as provided in 40 CFR §§ 125.30-125.32, any discharge regulated under this general permit, with the exception of sites that obtained waivers based on low rainfall erosivity, must achieve, at a minimum, the following effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available (BPT). The BPT are also required by and must satisfy the Effluent Limitations Guideline (ELG) permitting requirement for application of 40 CFR § 450.24 New Source Performance Standards (NSPS), 40 CFR § 450.22 Best Available Technology Economically Achievable (BAT), and 40 CFR § 450.23 Best Conventional Pollutant Control Technology (BCT).

1. Erosion and sediment controls: Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:
    1. Control stormwater volume and velocity within the site to minimize soil erosion in order to minimize pollutant discharges;
    2. Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge point(s);
    3. Minimize the amount of soil exposed during construction activity;
    4. Minimize the disturbance of steep slopes;
    5. Minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
    6. Provide and maintain appropriate natural buffers around surface water in the state. Direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. ***If providing buffers is infeasible, the permittee shall document the reason that natural buffers are infeasible and shall implement additional erosion and sediment controls to reduce sediment load;***
    7. Preserve native topsoil at the site, unless the intended function of a specific area of the site dictates that the topsoil be disturbed or removed, or it is infeasible; and
    8. Minimize soil compaction. In areas of the construction site where final vegetative stabilization will occur or where infiltration practices will be installed, either:
        a. Restrict vehicle and equipment use to avoid soil compaction; or
        b. Prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetation growth, if necessary and feasible;

Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

9. TCEQ does not consider stormwater control features (e.g. stormwater conveyance channels, storm drain inlets, sediment basins) to constitute “surface water” for the purposes of triggering the buffer requirement in Part III.G.1.(f) above.

2. Soil stabilization. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have

permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth disturbing activities have temporarily or permanently ceased. Temporary stabilization must be completed no more than 14 calendar days after initiation of soil stabilization measures, and final stabilization must be achieved prior to termination of permit coverage. In arid, semi-arid, and drought-stricken areas where initiating vegetative stabilization measure immediately is infeasible, alternative non-vegetative stabilization measures must be employed as soon as practicable. Refer to Part III.F.2.(b) for complete erosion control and stabilization practice requirements. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

3. Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited, unless managed by appropriate controls to address sediment and prevent erosion. Operators must perform an inspection of the dewatering controls once per day while the dewatering discharge occurs as described in Part III.F.7. of this general permit.

4. Pollution prevention measures. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:

1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
2. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater;
3. Minimize the exposure of waste materials by closing waste container lids at the end of the workday and during storm events. For waste containers that do not have lids, where the container itself is not sufficiently secure enough to prevent the discharge of pollutants absent a cover and could leak, the permittee must provide either a cover (e.g., a tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation, stormwater, and wind, or a similarly effective means designed to minimize the discharge of pollutants (e.g., secondary containment);
4. Minimize exposure of wastes by implementing good housekeeping measures. Wastes must be cleaned up and disposed of in designated waste containers on days of operation at the site. Wastes must be cleaned up immediately if containers overflow;
5. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the release. You must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release; and
6. Minimize exposure of sanitary waste by positioning portable toilets so that they are secure and will not be tipped or knocked over, and so that they are located away from surface water in the state and stormwater inlets or conveyances.

5. Prohibited discharges. The following discharges are prohibited:
    1. Wastewater from wash out of concrete, unless managed by an appropriate control;
    2. Wastewater from wash out and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
    3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
    4. Soaps or solvents used in vehicle and equipment washing; and
    5. Toxic or hazardous substances from a spill or other release.

6. Surface outlets. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible. If infeasible, the permittee must provide documentation in the SWP3 to support the determination, including the specific conditions or time periods when this exception will apply.

Concrete Truck Wash Out Requirements

This general permit authorizes the land disposal of wash out from concrete trucks at construction sites regulated under this general permit, provided the following requirements are met. Any discharge of concrete production wastewater to surface water in the state must be authorized under a separate TCEQ general permit or individual permit.

A. Discharge of concrete truck wash out water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.
B. Concrete truck wash out water shall be disposed in areas at the construction site where structural controls have been established to prevent discharge to surface water in the state, or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent discharge to surface water in the state. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.
C. Wash out of concrete trucks during rainfall events shall be minimized. The discharge of concrete truck wash out water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck wash out as the result of rainfall or stormwater runoff.
D. The disposal of wash out water from concrete trucks, made under authorization of this general permit must not cause or contribute to groundwater contamination.
E. If a SWP3 is required to be implemented, the SWP3 shall include concrete wash out areas on the associated site map.

Potential Pollutant Sources

Potential pollution sources associated with the site include the following:

- **Soil disturbing activities** – such as clearing of vegetation, grading/excavation of the lot in preparation for construction, and landscaping. These activities typically expose soil and sediment particles to precipitation which can then move (erode) the pollutants downhill, potentially into stormwater conveyances and receiving waters.

- **Equipment storage** – such as earth-moving equipment, delivery vehicles, power tools, etc. Much of this equipment contains petroleum-based fuels or lubricants, which when exposed to precipitation can discharge with the stormwater runoff.

- **Paving** – asphalt paving activities during road construction can result in the discharge of hydrocarbons with stormwater runoff.

- **Concrete truck washout** – runoff from the cleanouts of concrete trucks can result in sediment, debris, and excessively high pH discharge with stormwater runoff.

- **Vehicle and equipment maintenance** – such as fueling, lubrication, and repair. If conducted on site, accidental spills or improper disposal of automotive fluids or petroleum products can significantly impact stormwater runoff and receiving waters.

- **Material storage** – such as storage of concrete and concrete products, metal reinforcing materials such as rebar and welded wire fabric, lumber, plastic (PVC), metal pipe and fittings, rock, gravel, sand, soil, petroleum products like lubricants, fuel, oil-based paints and paint thinners, miscellaneous chemicals or products including latex paint, joint compound, adhesives, fertilizers, etc. Some materials may contain hazardous or toxic ingredients which can pollute surface waters or make source water unsafe for consumption. Other materials may contain ingredients which are non-toxic but can still impact stormwater conveyances by silting or clogging them, causing flooding, or using up needed oxygen for aquatic life to survive in the receiving waters.

- **Waste generation, storage and disposal** – such as excess fill material, soil contaminated by spilled petroleum, leftover chemicals, cement, miscellaneous trash and debris, and human wastes. All these materials can negatively impact the runoff leaving the construction site as described above.

Control of these potential pollution sources, thereby preventing contamination of stormwater runoff is the goal of this plan and will be described in detail in this section of the SWPPP.

Potential Pollutant Sources Onsite:

Hi Solids Polyester
- Methyl Amyl Ketone
- 2-Butoxy-Ethyl Acetate
- Normal Butyl Alcohol
- Aromatic Hydrocarbon 150
- 1-Methoxy-2-Propanol Acetate
- Xylol
- Aromatic 100 Solvent
- Diethylene Glycol N-Butyl Ether
- Toluol
- Oxo-Hexyl Acetate

Aluminum Alloys
- See attachment

Quick Dry Floor Sweep
- Hydrotreated Petroleum Distillates

Acetone

Silicone Sealant
- Silicone Polymer
- Polydimethylsiloxane
- Silica
- Ethyltriciacetoxsilane
- Acetoxysilanse with oligomers
- Titanium Dioxide
- Carbon

Adhesive-Sealant
- Dimethyl Siloxane OH Terminated
- Methyltriacetoxy Silane
- Titanium Dioxide
- Ethyltriciacetoxsilane
- Polydimethylsiloxane

Acrylic Seam Sealer
- Acrylic Resin/Toluene Solution
- Toluene
- Silicon Dioxide
- Isopropyl Alcohol

Acrylic Bedding Sealant
- Acrylic Resin/Toluene Solution
- Toluene
- Silicon Dioxide

Blue X Institutional Strength Cleaner
- 2-Butoxyethanol
- Ammonium Hydroxide

Sweep Ez
- Dupont Oil Red B Liquid

Aromatic Hydrocarbon
- Toluene

Acrylic Sealant
- Toluene

High Performance Glazing Tape Sealant
- Carbon

General Purpose Glazing Sealant
- Silicone Polymer
- Polydimethylsiloxane
- Silica
- Silane
- Oximino Silane

Transmission Fluid
- Light Paraffinic Petroleum
- Heavy Paraffinic Petroleum
- Light Napthenic Petroleum
- Metacrylic Acid

Motor Oil
- Alkenysuccinimide Dispersant
- Heavy Paraffinic Petroleum

Soluble Oil D
- Sodium Petroleum Sulfonate
- Heavy Paraffinic Petroleum

Lumber

Glass

Fiberglass Insulation

Dry-wall material

Oil and Water Based Paint

Concrete

Steel (Steel rebar)

Petroleum Based Automotive Fuel

Diesel Fuel

Formaldehyde (used in Portable Toilet facilities)

Sand

Note: also refer to on-site copies of any MSDS information.

Non-Stormwater Discharges

The following non-stormwater discharges from sites authorized under this general permit are also eligible for authorization under this general permit:

- Discharges from emergency firefighting activities (emergency firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, or similar activities);
- Uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water); water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where solvents, detergents, and soaps are not used, where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;
- Uncontaminated water used to control dust;
- Potable water sources including waterline flushings, but excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life;
- Uncontaminated air conditioning condensate;
- Uncontaminated groundwater or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents;
- Lawn watering and similar irrigation drainage.

To prevent unauthorized non-stormwater discharges, all such discharges will be directed to sedimentation and erosion control structures prior to discharge. Attempts will be made to minimize such discharges to prevent contact with stormwater runoff.

BMP Responsibility and Implementation

Non-structural and structural control measures and stabilization practices that will be implemented to prevent or control potential pollutants in stormwater discharges are summarized in the tables below. Each major activity will identify the appropriate control measure, general timing, (specific timing will be addressed in an attached construction schedule) and the responsible permittee for controlling the discharge.

Non-Structural Controls and Maintenance	Permittee Responsible	Schedule
Soil Disturbing Activities		
Areas are not to be disturbed until it is necessary for construction to proceed. Disturbed areas are to be covered and stabilized as soon as possible.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Erosion and Sediment Controls		
Erosion/sediment controls will be designed to retain sediment on site to the extent practicable with consideration for site topography, soil type, and rainfall.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Erosion/sediment controls will be designed and used to reduce the offsite transport of suspended sediments and other pollutants if dewatering activities are necessary.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Structural Controls and Maintenance	Permittee Responsible	Schedule
Erosion and Sediment Controls (continued)		
Erosion/sediment control measures will be in place prior to commencement of construction activities including clearing and grading. Disturbed areas will be restored as soon as practicable during construction. Temporary erosion and sedimentation controls will be removed only after all disturbed areas have been restored.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Erosion/sediment controls such as silt fences, rock berms, outlet protection, and drainage channels are inspected weekly to ensure their effectiveness. Erosion and sediment control inspections are documented to ensure site compliance.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Erosion/sediment controls are promptly maintained (as soon as practicable after damage is discovered, and prior to the next rain event, but no later than seven days after the inspections) to ensure maximum sediment removal from stormwater runoff.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
If sediment escapes the site, accumulations will be removed at a frequency to minimize negative effects and prior to the next rain event, if feasible.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Sediment removed from erosion controls will be reused on site to minimize waste generation.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Sediment deposited onto public right-of-way will be regularly removed to prevent sediment discharge from off site tracking during storm events, and reused on site whenever possible to prevent excess waste generation.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Accumulated sediment will be removed when the depth reaches six inches (or 50% of the design capacity of site controls).	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Dust control will be provided by water trucks in such a manner that runoff does not occur.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Non-Structural Controls and Maintenance	Permittee Responsible	Schedule
Erosion and Sediment Controls (continued)		
Disturbed areas including the construction storage and staging area and spoils disposal site where construction activity ceases for at least 14 days will be initiated immediately. Stabilization measures that provide a protective cover will be initiated immediately in portions of the site where construction activities have permanently ceased.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	No temporary cessation of site construction is anticipated, but if so, October 2024 - October 2027
Mulching for temporary or final stabilization shall be accomplished by using shredded wood mulch. To avoid waste generation, trees cut down on site will be recycled into mulch for stabilization.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Seeding for temporary or final stabilization shall be accomplished by broadcast seeding, sodding, or hydromulch application.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Irrigation for temporary or final stabilization will be achieved by sprinkling in a manner that will not erode the topsoil but will sufficiently soak the soil to a depth of six inches. The irrigation may occur at 10-day intervals during the first two months. Rainfall occurrences of 0.5 inch or more should postpone the watering schedule for one week.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Non-Structural Controls and Maintenance	Permittee Responsible	Schedule
Material Storage, Handling, and Disposal		
Construction materials will be stored in the construction staging and materials storage area. An attempt will be made to store materials inside or under cover as practicable to minimize contact of stormwater with potential pollutants and prevent water damage to materials.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Excess spoils will be temporarily stored away from drainage channels/creeks and ponds, preferably out of floodplains to prevent offsite discharge.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
An effort will be made to store only enough products required to do the job to minimize waste generation and potential contact with stormwater.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Lubricants will not routinely be stored on site, except the small amount needed for a specific process or piece of equipment.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Materials will be used according to the manufacturer's recommendation for proper use and disposal.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Chemicals will be stored in their original containers (unless they are not resealable), with the labels intact for proper identification.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Material Safety Data Sheets and original labels for products used or stored at the site will be retained as they contain important storage, handling, and disposal information.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
During landscaping, fertilizers and pesticides will not be applied just before or during a storm event. Such landscape chemicals will be applied in the minimum amount recommended by the manufacturer. Fertilizers will be worked into the soil to minimize contact with stormwater.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
If disposal is necessary for excess product, the manufacturer's recommendations or local or state regulations for proper disposal will be followed.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Non-Structural Controls and Maintenance	Permittee Responsible	Schedule
Waste Storage, Handling, and Disposal		
Portable toilet facilities serviced by a licensed disposal company are available on the site to ensure proper disposal of wastes.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	Weekly
Non-stormwater discharges such as from concrete truck wash outs, surplus concrete or drum water will be limited to the designated concrete washout areas. Designated concrete washout areas are recommended to be: ● at least 15 feet from the curb ● excavated below grade for pit area ● lined with a poly-liner ● have a large stabilized entrance ● have sufficient perimeter BMP's They will be maintained as needed to contain concrete rinse water and minimize offsite discharges and to prevent potential discharge to stormwater runoff. Upon construction completion, the designated concrete washout areas will be cleaned up in accordance with applicable regulations.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Waste generation will be minimized by purchasing only the amount of material estimated as necessary for the application, and where practicable, using all of a product prior to disposal of the container.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
The site will be routinely patrolled for regular trash and debris collection. Once collected, the waste will be stored as described below.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Waste materials will be collected and stored in metal dumpsters meeting state and local waste management requirements. When full, the	KB Home Lone Star,	October 2024 -

dumpsters will be emptied and the trash hauled to an approved offsite dump. No construction waste materials will be buried on site.	Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2027
Non-hazardous, latex paint wastes (i.e. wash water) will be disposed of in accordance with applicable regulations.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Potentially hazardous and/or liquid wastes generated on site will be stored under cover, in leak proof containers to await proper disposal by licensed disposal companies.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Non-Structural Controls and Maintenance	Permittee Responsible	Schedule
Spill Prevention and Response		
Spill cleanup materials will be stored on site in the material storage area, and may include: brooms, dustpans, mops, rags, gloves, goggles, sawdust or other absorbent material, plastic/metal trash containers specifically for this purpose.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Site personnel will be made aware of spill clean up procedures and location of spill cleanup materials.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Spills will be cleaned up upon discovery following the procedure outlined in Section V.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Storage of vehicles and equipment on site will be limited to minimize potential for leaks or spills to contaminated stormwater runoff.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027
Where possible, vehicles and equipment will be stored over an impervious surface, away from stormwater conveyances, to facilitate clean up of potential leaks or spills and prevent contact with stormwater.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

Vehicles and equipment used on site will be monitored and maintained to prevent leaks from occurring.	KB Home Lone Star, Inc. GENERAL CONTRACTOR TO BE DETERMINED	October 2024 - October 2027

BMP Specifications

Interim Structural Controls	Schedule of Implementation	Location	Reason
Silt fence	Prior to and throughout site development	Refer to the civil plans and site maps	Silt fence will be constructed at the downstream edge of disturbed areas where there will be shallow sheet flow to slow the flow of stormwater runoff and promote sediment deposition.
Socks / wattles	Prior to and throughout site development	Refer to the civil plans and site maps	Socks/wattles will be constructed at the downstream edge of disturbed areas where there will be shallow sheet flow to slow the flow of stormwater runoff and promote sediment deposition.
Stabilized Construction Entrance/Exit	Prior to and throughout site development	Refer to the civil plans and site maps	Construction entrances/exits consisting of 3"-5" dump rock will be placed on the site to minimize off site tracking of sediment by vehicles.
Designated concrete washout	Throughout site development	Refer to the civil plans and site maps	A designated concrete washout will be used to prevent discharge of washout material into the storm drains or water bodies.
Earth dikes (diversion berms)	N/A	N/A	Earthen dikes (diversion berms) will not be used due to the use of alternative stormwater treatment devices.
Sediment Traps	Throughout site development	Refer to the civil plans and site maps	Sediment traps in the form of an excavated area will be used to help slow the flow of stormwater and promote sediment deposition.
Check Dams	Throughout site development	Refer to the civil plans and site maps	Rock berms will be installed to slow the flow of stormwater runoff and to promote sediment deposition. Gravel filter bags will be installed to slow the flow of stormwater runoff and to promote sediment

			deposition.
Storm drain inlet protection (existing inlets)	Prior to soil disturbing activities in areas that would drain to curbs or storm drain inlets	Installed as needed at any inlet onsite and within close proximity to the site - refer to the civil plans and site maps	Inlet protection will be installed to prevent sediment entry into the storm sewer system. This protection should be monitored and removed during flash flooding / flooding that could cause harm to the public or property.
Storm drain inlet protection (proposed inlets)	Throughout site development after storm drain inlets have been installed	Installed as needed at any inlet onsite and within close proximity to the site - refer to the civil plans and site maps	Inlet protection will be installed to prevent sediment entry into the storm sewer system. This protection should be monitored and removed during flash flooding / flooding that could cause harm to the public or property.
Temporary basins	N/A	N/A	No temporary basins were required for the site due to the proposed site conditions and controls.

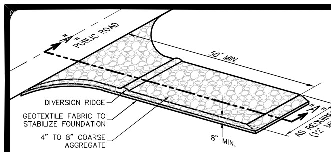
Permanent Structural Controls

Measures that will be installed during construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed.

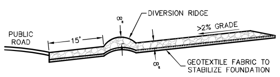
Stormwater Management Measures	Schedule of Implementation	Location	Reason
Drainage Swales	Throughout site development	Refer to the civil plans and site maps	Proposed drainage easements/channels will be used to convey stormwater runoff into the storm sewer system or offsite thereby slowing the flow of stormwater runoff and promoting sediment deposition.
Velocity/energy dissipation devices/rip rap	Throughout site development	Refer to the civil plans and site maps	Velocity/energy dissipation devices and/or rip rap will be used to prevent erosion around the stormwater outfalls/outlets.
Level Spreaders	N/A	N/A	Level spreaders will not be used due to the use of alternative stormwater treatment devices.
Gabions	N/A	N/A	Gabions will not be used due to the use of alternative stormwater treatment devices.
Stormwater Detention Structures	N/A	N/A	No permanent detention basins were required for the site due to the proposed site conditions and controls.
Stormwater Retention Structures	N/A	N/A	No permanent retention basins were required for the site due to the proposed site conditions and controls.
Stormwater Bio-Infiltration Structures	N/A	N/A	No permanent bio-infiltration basins were required for the site due to the proposed site conditions and controls.

Interim Stabilization Practices	**Schedule of Implementation**	**Location**	**Reason**
Temporary vegetation / mulching	Throughout site development	Various areas throughout the site	Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
Rolled erosion control products (geotextiles)	Throughout site development	As needed at various locations throughout the site	Rolled erosion control products (geotextiles) will be used as an interim practice to prevent topsoil loss and erosion.
Protection of trees	Prior to and throughout site development	As needed at various locations throughout the site	Tree protection will be used to prevent damage to this valuable natural resource.

Permanent Stabilization Practices	**Schedule of Implementation**	**Location**	**Reason**
Permanent vegetation / mulching	During site landscaping	At various landscaped areas throughout the site	Permanent vegetation (hydromulching or sod stabilization) / mulching will be used to quickly establish vegetative cover to prevent erosion. Additional considerations were infiltration and improvement of storm water quality.
Vegetative buffer strips	Prior to and throughout site development	Refer to the civil plans and site maps	Vegetative buffer strips will be used on and off site primarily for aesthetic and drainage reasons. Secondary considerations were the improvement of water quality by promoting infiltration and sediment deposition.
Preservation of mature vegetation	Prior to and throughout site development	Various locations throughout the site	Desirable mature vegetation such as the native grasses and trees will be used to prevent pollutants from leaving the site and prevent erosion.



SCHEMATIC OF TEMPORARY CONSTRUCTION ENTRANCE/EXIT



SECTION "A-A" OF A CONSTRUCTION ENTRANCE/EXIT

MATERIALS

1. THE AGGREGATE SHOULD CONSIST OF 4-INCH TO 8-INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8-INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD², A MULLEN BURST RATING OF 140 LB/IN², AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4-INCH DIAMETER WASHED STONE OR COMMERCIAL ROCK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.

INSTALLATION

1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6-INCHES TO 8-INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

COMMON TROUBLE POINTS

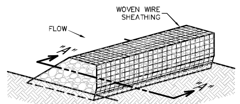
1. INADEQUATE RUNOFF CONTROL-SEDIMENT WASHES ONTO PUBLIC ROAD.
2. STONE TOO SMALL OR GEOTEXTILE FABRIC ABSENT, RESULTS IN MUDDY CONDITION AS STONE IS PRESSED INTO SOIL.
3. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC-EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.
4. PAD NOT FLARED SUFFICIENTLY AT ROAD SURFACE, RESULTS IN MUD BEING TRACKED ON TO ROAD AND POSSIBLE DAMAGE TO ROAD.
5. UNSTABLE FOUNDATION - USE GEOTEXTILE FABRIC UNDER PAD AND/OR IMPROVE FOUNDATION DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES

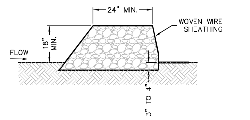
1. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

NOT-TO-SCALE



ISOMETRIC PLAN VIEW



SECTION "A-A"

ROCK BERMS

THE PURPOSE OF A ROCK BERM IS TO SERVE AS A CHECK DAM IN AREAS OF CONCENTRATED FLOW, TO INTERCEPT SEDIMENT-LADEN RUNOFF, DETAIN THE SEDIMENT AND RELEASE THE WATER IN SHEET FLOW. THE ROCK BERM SHOULD BE USED WHEN THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 5 ACRES. ROCK BERMS ARE USED IN AREAS WHERE THE VOLUME OF RUNOFF IS TOO GREAT FOR A SILT FENCE TO CONTAIN. THEY ARE LESS EFFECTIVE FOR SEDIMENT REMOVAL THAN SILT FENCES, PARTICULARLY FOR FINE PARTICLES, BUT ARE ABLE TO WITHSTAND HIGHER FLOWS THAN A SILT FENCE. AS SUCH, ROCK BERMS ARE OFTEN USED IN AREAS OF CHANNEL FLOWS (DITCHES, GULLIES, ETC.). ROCK BERMS ARE MOST EFFECTIVE AT REDUCING BED LOAD IN CHANNELS AND SHOULD NOT BE SUBSTITUTED FOR OTHER EROSION AND SEDIMENT CONTROL MEASURES FARTHER UP THE WATERSHED.

INSPECTION AND MAINTENANCE GUIDELINES

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
3. REPAIR ANY LOOSE WIRE SHEATHING.
4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

MATERIALS

1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
2. CLEAN, OPEN GRADED 3-INCH TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-INCH TO 8-INCH DIAMETER ROCKS MAY BE USED.

INSTALLATION

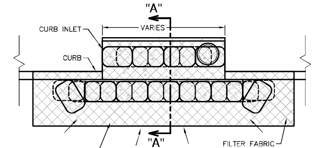
1. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.
2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM TO A HEIGHT NOT LESS THAN 18".
4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

COMMON TROUBLE POINTS

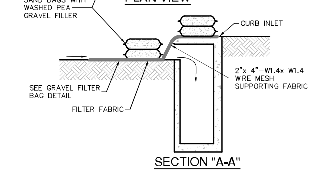
1. INSUFFICIENT BERM HEIGHT OR LENGTH (RUNOFF QUICKLY ESCAPES OVER THE TOP OR AROUND THE SIDES OF BERM).
2. BERM NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING AROUND ONE SIDE).

ROCK BERM DETAIL

NOT-TO-SCALE



PLAN VIEW



SECTION "A-A"

GENERAL NOTES

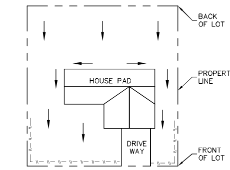
1. CONTRACTOR TO INSTALL 2"x4"-W1.4xW1.4 WIRE MESH SUPPORTING FILTER FABRIC OVER THE INLET OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR WIRE TIES AT THIS LOCATION. SAND BAGS FILLED WITH WASHED PEA GRAVEL SHOULD BE PLACED ON TOP OF WIRE MESH ON TOP OF THE INLET AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SANDBAGS FILLED WITH WASHED PEA GRAVEL SHOULD ALSO BE PLACED ALONG THE GUTTER AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SAND BAGS TO BE STACKED TO FORM A CONTINUOUS BARRIER AROUND INLETS.
2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES

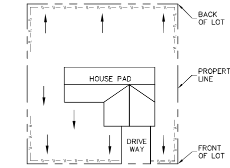
1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.
4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING.
5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BAGGED GRAVEL CURB INLET PROTECTION DETAIL

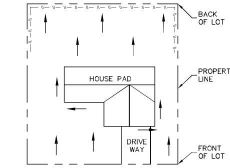
NOT-TO-SCALE



LOT TYPE-A



LOT TYPE-B



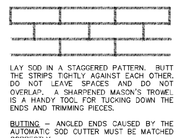
LOT TYPE-C

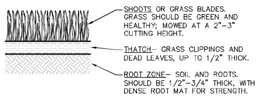
NOTE: SILT FENCE TO BE INSTALLED PER THESE DETAILS AND LOCATED ON THE DOWNGRADIENT SIDE OF EACH LOT LINE OR LIMITS OF CLEARING AS GENERALLY SHOWN ON THE OVERALL SITE PLAN.

LEGEND
SILT FENCE
DRAINAGE FLOW

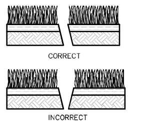
TYPICAL HOUSE LOT LAYOUTS

NOT-TO-SCALE



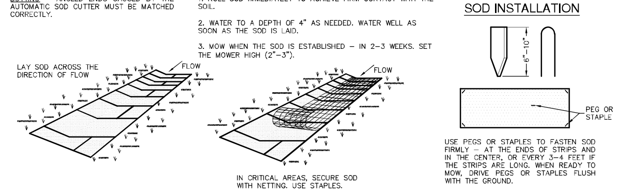


APPEARANCE OF GOOD SOD



SOD INSTALLATION

NOTES:
1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.
2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.
3. MOW WHEN THE SOD IS ESTABLISHED - IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").



MATERIALS

1. SOD SHOULD BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4" INCH (± 1/4" INCH) AT THE TIME OF CUTTING. THIS THICKNESS SHOULD EXCLUDE SHOOT GROWTH AND THATCH.
2. PIECES OF SOD SHOULD BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%. TORN OR UNEVEN PADS SHOULD NOT BE ACCEPTABLE.
3. STANDARD SIZE SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.
4. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

SITE PREPARATION

1. PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHOULD BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN.
2. THE SURFACE SHOULD BE CLEARED OF ALL TRASH, DEBRIS AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
3. FERTILIZE ACCORDING TO SOIL TESTS. FERTILIZER NEEDS CAN BE DETERMINED BY A SOIL TESTING LABORATORY OR REGIONAL RECOMMENDATIONS CAN BE MADE BY COUNTY AGRICULTURAL EXTENSION AGENTS. FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 3 INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. ON SLOPING LAND, THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR.

INSTALLATION IN CHANNELS

1. SOD STRIPS IN WATERWAYS SHOULD BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY (SEE FIGURE ABOVE).
2. AFTER ROLLING OR TAMPING, SOD SHOULD BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. MESH OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

GENERAL INSTALLATION (VA. DEPT. OF CONSERVATION, 1992)

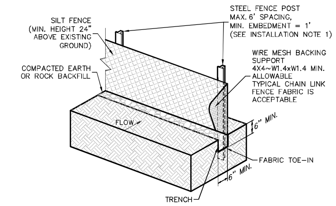
1. SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD ALSO SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN.
2. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.
3. THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHOULD BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS (SEE FIGURE ABOVE).
4. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON CONTOUR).
5. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHOULD BE ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL.
6. AFTER ROLLING, SOD SHOULD BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS THOROUGHLY WET.
7. UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4 INCHES.
8. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.

INSPECTION AND MAINTENANCE GUIDELINES

1. SOD SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.
2. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHOULD BE REPAIRED AS SOON AS PRACTICAL.

SOD INSTALLATION DETAIL

NOT-TO-SCALE



ISOMETRIC PLAN VIEW

SILT FENCE

A SILT FENCE IS A BARRIER CONSISTING OF GEOTEXTILE FABRIC SUPPORTED BY METAL POSTS TO PREVENT SOIL AND SEDIMENT LOSS FROM A SITE. WHEN PROPERLY USED, SILT FENCES CAN BE HIGHLY EFFECTIVE AT CONTROLLING SEDIMENT FROM DISTURBED AREAS. THEY CAUSE RUNOFF TO POND, ALLOWING HEAVIER SOLIDS TO SETTLE OUT. IF NOT PROPERLY INSTALLED, SILT FENCES ARE NOT LIKELY TO BE EFFECTIVE.

THE PURPOSE OF A SILT FENCE IS TO INTERCEPT AND DETAIN WATER-BORNE SEDIMENT FROM UNPROTECTED AREAS OF A LIMITED EXTENT. SILT FENCE IS USED DURING THE PERIOD OF CONSTRUCTION NEAR THE PERIMETER OF A DISTURBED AREA TO INTERCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. THIS FENCE SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY. IF CONCENTRATED FLOW OCCURS AFTER INSTALLATION, CORRECTIVE ACTION MUST BE TAKEN SUCH AS PLACING A ROCK BERM IN THE AREAS OF CONCENTRATED FLOW.

SILT FENCING WITHIN THE SITE MAY BE TEMPORARILY MOVED DURING THE DAY TO ALLOW CONSTRUCTION ACTIVITY PROVIDED IT IS REPLACED AND PROPERLY ANCHORED TO THE GROUND AT THE END OF THE DAY. SILT FENCES ON THE PERIMETER OF THE SITE OR AROUND DRAINAGE WAYS SHOULD NOT BE MOVED AT ANY TIME.

MATERIALS

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN2, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NUMBER 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM WEIGHT 1.25 LB/FT, AND BRINDELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.

INSTALLATION

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
2. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
3. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

COMMON TROUBLE POINTS

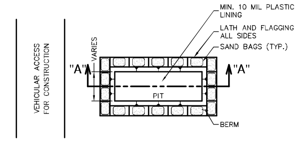
1. FENCE NOT INSTALLED ALONG THE CONTOUR CAUSING WATER TO CONCENTRATE AND FLOW OVER THE FENCE.
2. FABRIC NOT SEATED SECURELY TO GROUND (RUNOFF PASSING UNDER FENCE).
3. FENCE NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING AROUND SIDES).
4. FENCE TREATING TOO LARGE AN AREA, OR EXCESSIVE CHANNEL FLOW (RUNOFF OVERTOPS OR COLLAPSES FENCE).

INSPECTION AND MAINTENANCE GUIDELINES

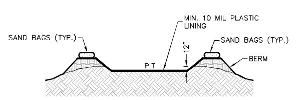
1. INSPECT ALL FENCING WEEKLY, AND AFTER RAINFALL.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
3. REPLACE TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
4. REPLACE OR REPAIR SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

SILT FENCE DETAIL

NOT-TO-SCALE



PLAN VIEW



SECTION "A-A"

GENERAL NOTES

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.
4. LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES OR WATER BODIES.
5. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE CONSTRUCTED WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

MATERIALS

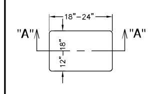
PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

MAINTENANCE

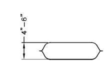
1. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF.
2. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF.
3. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

CONCRETE TRUCK WASHOUT PIT DETAIL

NOT-TO-SCALE



PLAN VIEW

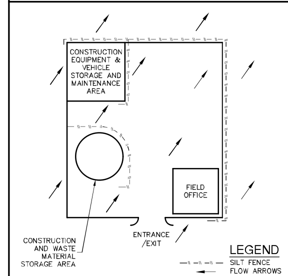


SECTION "A-A"

NOTES:
1. THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN. UNIT WEIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.
2. THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM WASHED PEA GRAVEL (0.31 TO 0.75 INCH DIAMETER).
3. SAND SHALL NOT BE USED TO FILL THE FILTER BAGS.

GRAVEL FILTER BAG DETAIL

NOT-TO-SCALE



LEGEND
SILT FENCE
FLOW ARROWS

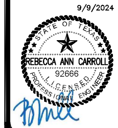
CONSTRUCTION STAGING AREA

NOT-TO-SCALE

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

DATE	NO.	REVISION



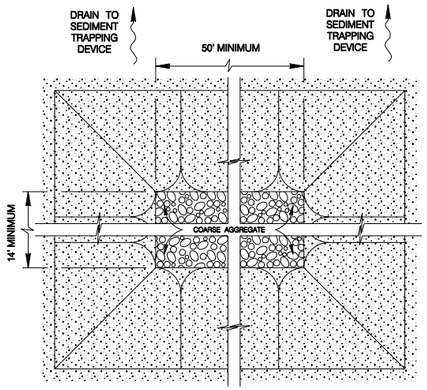
PAPE-DAWSON ENGINEERS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

PRESERVE AT CULEBRA-UNIT 15

BEXAR COUNTY, TEXAS

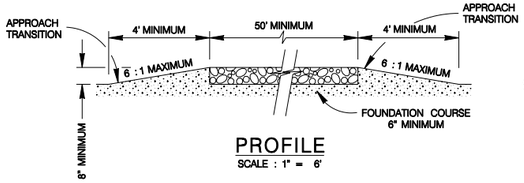
STORM WATER POLLUTION PREVENTION PLAN DETAILS

PLAT NO. 24-11800306
JOB NO. 11668-19
DATE SEPTEMBER 2024
DESIGNER JB
CHECKED ____ DRAWN AR
SHEET C8.10



PLAN

SCALE : 1" = 6'



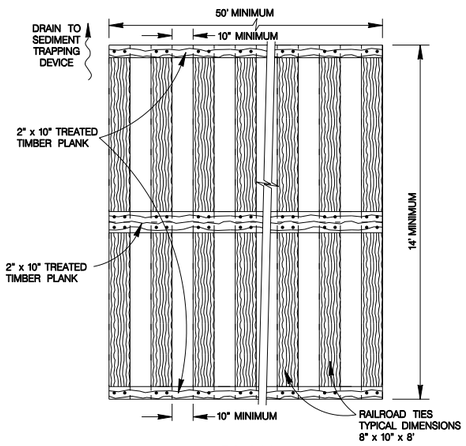
PROFILE

SCALE : 1" = 6'

GENERAL NOTES

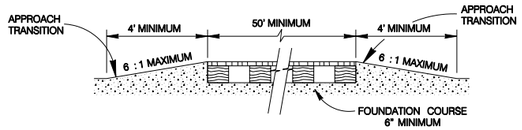
1. THE LENGTH OF THE TYPE 1 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
3. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6 :1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
4. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
5. THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
6. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

CONSTRUCTION EXIT – TYPE 1



PLAN

SCALE : 1" = 6'



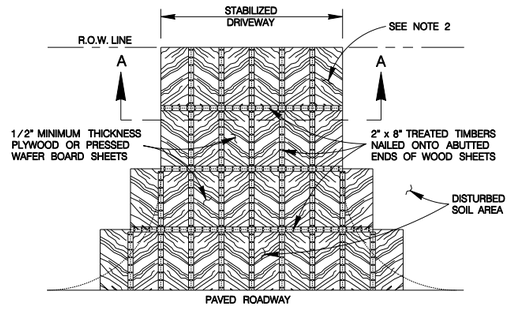
PROFILE

SCALE : 1" = 6'

GENERAL NOTES

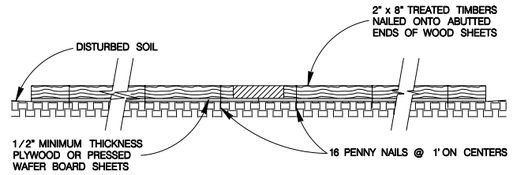
1. THE LENGTH OF THE TYPE 2 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE TREATED TIMBER PLANKS SHALL BE ATTACHED TO THE RAILROAD TIES WITH 1/2" x 6" MIN. LAG BOLTS. OTHER FASTENERS MAY BE USED AS APPROVED BY THE ENGINEER.
3. THE TREATED TIMBER PLANKS SHALL BE #2 GRADE MIN., AND SHOULD BE FREE FROM LARGE AND LOOSE KNOTS.
4. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6 :1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
5. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
6. THE CONSTRUCTION EXIT SHOULD BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
7. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

CONSTRUCTION EXIT – TYPE 2



PLAN

SCALE : 1" = 20'



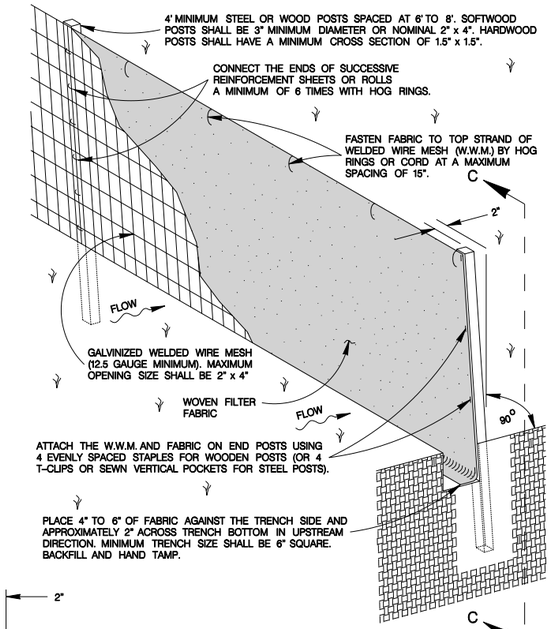
SECTION A–A

SCALE : 1" = 2'

GENERAL NOTES

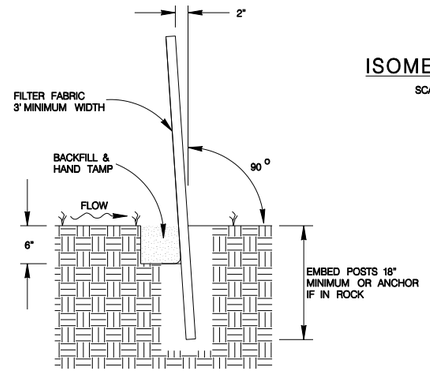
1. THE LENGTH OF THE TYPE 3 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
2. THE TYPE 3 CONSTRUCTION EXIT MAY BE CONSTRUCTED FROM OPEN GRADED CRUSHED STONE WITH A SIZE OF 2 TO 4 INCHES SPREAD A MINIMUM OF 4 INCHES THICK TO THE LIMITS SHOWN ON THE PLANS.
3. THE TREATED TIMBER PLANKS SHALL BE #2 GRADE MIN., AND SHOULD BE FREE FROM LARGE AND LOOSE KNOTS.
4. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

CONSTRUCTION EXIT – TYPE 3



ISOMETRIC VIEW

SCALE : 1" = 2'



SECTION C–C

SCALE : 1" = 2'

SEDIMENT CONTROL FENCE USAGE GUIDELINES

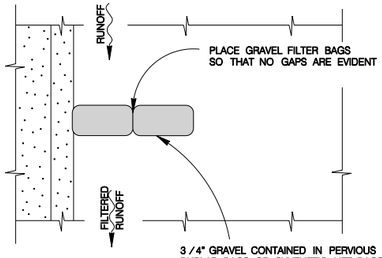
A SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUN-OFF. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED.

SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAXIMUM FLOW THRU RATE OF 100 GPM /FT SQUARED. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA LARGER THAN 2 ACRES.

GENERAL NOTES

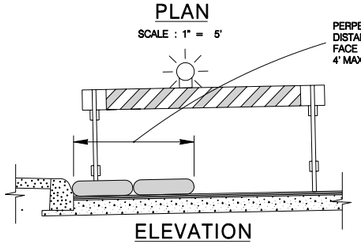
1. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

TEMPORARY SEDIMENT CONTROL FENCE



PLAN

SCALE : 1" = 5'

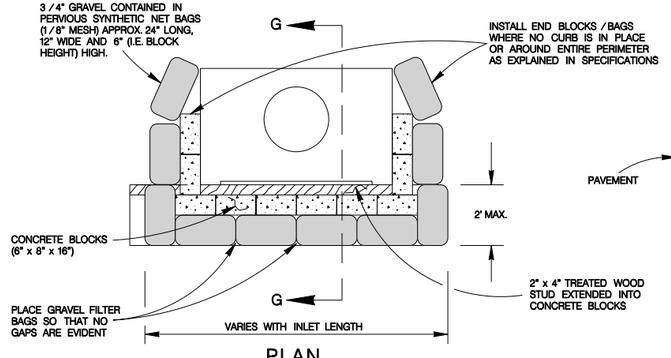


ELEVATION

SCALE : 1" = 5'

NOTE:
STRADDLE GRAVEL FILTER BAGS WITH TYPE 1 BARRICADES MOUNTED WITH TYPE "A" FLASHING WARNING LIGHT. SEE BARRICADE CONSTRUCTION SIGN DETAILS. PLACE FLASHING LIGHTS AWAY FROM GUTTER, FLUSH WITH OUTSIDE EDGE OF BAG CONFIGURATION.

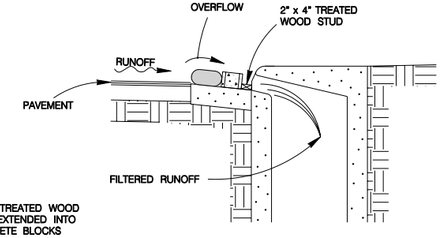
GRAVEL FILTER BAGS



PLAN

SCALE : 1" = 5'

NOTE:
GRAVEL FILTERS CAN BE USED ON PAVEMENT OR BARE GROUND.



SECTION G–G

SCALE : 1" = 5'

CURB INLET GRAVEL FILTER

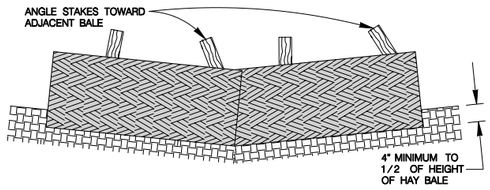
JANUARY 2005

CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

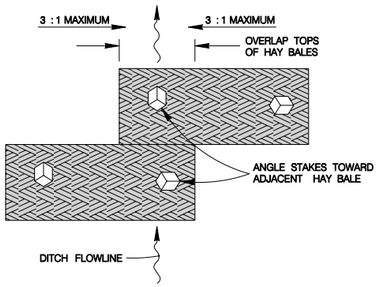
TEMPORARY EROSION, SEDIMENT & WATER POLLUTION CONTROL MEASURES STANDARDS 1

% SUBMITTAL	PROJECT NO.:		DATE:
DRWN. BY: V. VASQUEZ	DSGN. BY:	CHKD. BY:	SHEET NO.: OF



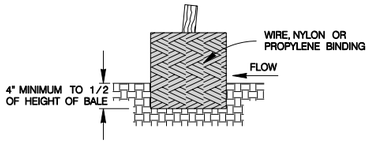
PROFILE VIEW

SCALE : 1" = 2'



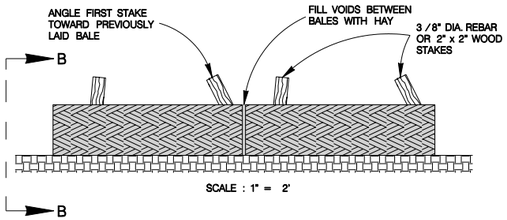
PLAN VIEW

SCALE : 1" = 2'



SECTION B–B

SCALE : 1" = 2'



SCALE : 1" = 2'

BALED HAY USAGE GUIDELINES

A BAILED HAY INSTALLATION MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A TWO YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED. THE INSTALLATION SHOULD BE SIZED TO FILTER A MAXIMUM FLOW THRU RATE OF 5 GPM /FT SQUARED OF CROSS SECTIONAL AREA. BALED HAY MAY BE USED AT THE FOLLOWING LOCATIONS:

1. WHERE THE RUNOFF APPROACHING THE BALED HAY FLOWS OVER DISTURBED SOIL FOR LESS THAN 100'. IF THE SLOPE OF THE DISTURBED SOIL EXCEEDS 10 %, THE LENGTH OF SLOPE UPSTREAM OF THE BAILED HAY SHOULD BE LESS THAN 50'.
2. WHERE THE INSTALLATION WILL BE REQUIRED FOR LESS THAN 3 MONTHS.
3. WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1/2 ACRE.

FOR BALED HAY INSTALLATIONS IN SMALL DITCHES, THE FOLLOWING ADDITIONAL CONDI–TIONAL CONSIDERATIONS APPLY:

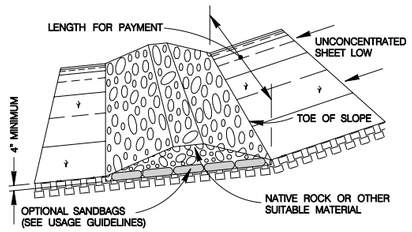
1. THE DITCH SIDESLOPES SHOULD BE GRADED AS FLAT AS POSSIBLE TO MAXIMIZE THE DRAINAGE FLOW RATE THRU THE HAY.
2. THE DITCH SHOULD BE GRADED LARGE ENOUGH TO CONTAIN THE OVERLAPPING DRAINAGE WHEN SEDIMENT HAS FILLED TO THE TOP OF THE BAILED HAY.

BALES SHOULD BE REPLACED USUALLY EVERY 2 MONTHS OR MORE OFTEN DURING WET WEATHER WHEN LOSS OF STRUCTURAL INTERGRITY IS ACCELERATED.

GENERAL NOTES

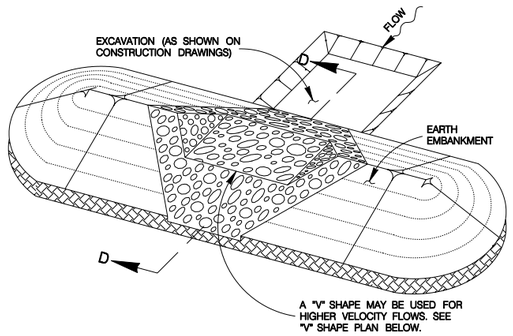
1. HAY BALES SHALL BE A MINIMUM OF 30" IN LENGTH AND WEIGH A MINIMUM OF 50 LBS.
2. HAY BALES SHALL BE BOUND BY EITHER WIRE OR NYLON OR POLYPROPYLENE STRING. THE BALES SHALL BE COMPOSED ENTIRELY OF VEGETABLE MATTER.
3. HAY BALES SHALL BE EMBEDDED IN THE SOIL A MININMUM OF 4" AND, WHERE POSSIBLE, ONE–HALF THE HEIGHT OF THE BALE.
4. HAY BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE BALES SHALL BE PLACED WITH BINDINGS PARALLEL TO THE GROUND.
5. HAY BALES SHALL BE SECURELY ANCHORED IN PLACE WITH 3 /8" DIA. REBAR OR 2" x 2" WOOD STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE SHALL BE ANGLED TO–WARDS THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.
6. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

BALED HAY FOR EROSION CONTROL



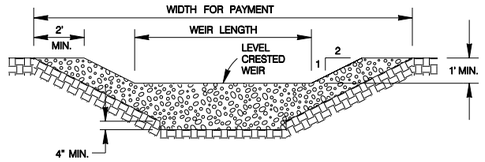
TYPE 1 FILTER DAM AT TOE OF SLOPE

SCALE : 1" = 10'



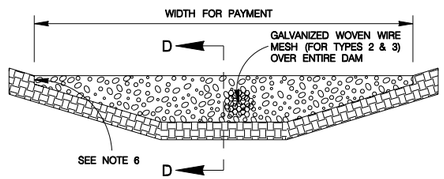
TYPE 1 & 2 FILTER DAM AT SEDIMENT TRAP

SCALE : 1" = 10'



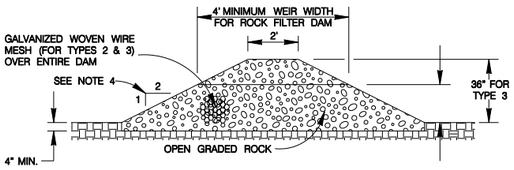
PROFILE OF TYPE 1 & 2 FILTER DAM AT SEDIMENT TRAP

SCALE : 1" = 6'



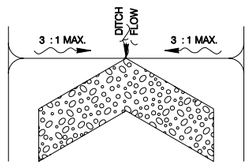
TYPE 1, 2 & 3 FILTER DAM AT CHANNEL SECTIONS

SCALE : 1" = 6'



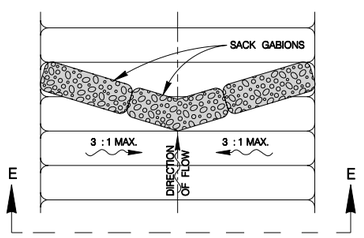
SECTION D–D

SCALE : 1" = 6'



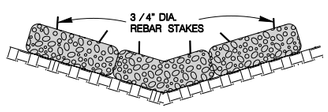
"V" SHAPE PLAN VIEW

NOT TO SCALE



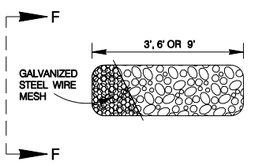
PLAN VIEW

SCALE : 1" = 10'



SECTION E–E

SCALE : 1" = 10'



TYPE 4 SACK GABION DETAIL

SCALE : 1" = 6'

SECTION F–F

SCALE : 1" = 6'

TYPE 4 FILTER DAM AT DITCHES & SMALLER CHANNELS PLAN VIEW

ROCK FILTER DAMS

ROCK FILTER DAM USAGE GUIDELINES

ROCK FILTER DAMS SHOULD BE CONSTRUCTED DOWNSTREAM FROM DISTURBED AREAS TO INTERCEPT SEDIMENT FROM OVERLOAD RUNOFF AND /OR CONCENTRATED FLOW. THE DAMS SHOULD BE SIZED TO FILTER A MAXIMUM FLOW THRU RATE OF 60 GPM /FT SQUARED OF CROSS SECTIONAL AREA.. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE.

TYPE 1 (18" HIGH WITH NO WIRE MESH) :

TYPE 1 MAY BE USED AT THE TOE OF SLOPES, AROUND INLETS, IN SMALL DITCHES AND AT DIKE OR SWALE OUTLETS. THIS TYPE OF DAM IS RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA OF 5 ACRES OR LESS. TYPE 1 MAY NOT BE USED IN CONCEN–TRATED HIGH VELOCITY FLOWS (APPROXIMATELY 8 FT./SEC. OR MORE) IN WHICH AGGREGATE WASH OUT MAY OCCUR. SANDBAGS MAY BE USED AT THE EMBEDDED FOUNDATION (4" DEEP MIN.) FOR BETTER FILTERING EFFICIENCY OF LOW FLOWS IF CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

TYPE 2 (18" HIGH WITH WIRE MESH) :

TYPE 2 MAY BE USED IN DITCHES AND AT DIKE OR SWALE OUTLETS.

TYPE 3 (36" HIGH WITH WIRE MESH) :

TYPE 3 MAY BE USED IN STREAM FLOW AND SHOULD BE SECURED TO THE STREAM BED.

TYPE 4 (SACK GABIONS) :

TYPE 4 MAY BE USED IN DITCHES AND SMALLER CHANNELS TO FORM AN EROSION CONTROL DAM.

GENERAL NOTES

1. IF SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, FILTER DAMS SHOULD BE PLACED NEAR THE TOE OF SLOPES WHERE EROSION IS ANTICIPATED, UPSTREAM AND /OR DOWNSTREAM AT DRAINAGE STRUCTURES, AND IN ROADWAY DITCHES AND CHANNELS TO COLLECT SEDIMENT.
2. MATERIALS (AGGREGATE, WIRE MESH, SANDBAGS, ETC.) SHALL BE AS INDICATED BY THE SPECIFICATION FOR ROCK FILTER DAMS FOR EROSION AND SEDIMENTATION CONTROL.
3. THE ROCK FILTER DAM DIMENSIONS SHALL BE AS INDICATED ON THE STORM WATER POLLUTION PREVENTION PLANS.
4. SIDE SLOPES SHOULD BE 2 : 1 OR FLATTER. DAMS WITHIN THE SAFETY ZONE SHALL HAVE SIDE SLOPES OF 6 : 1 OR FLATTER.
5. MAINTAIN A MINIMUM OF 1' BETWEEN TOP OF ROCK FILTER DAM WEIR AND TOP OF EMBANKMENT FOR FILTER DAMS AT SEDIMENT TRAPS.
6. FILTER DAMS SHOULD BE EMBEDDED A MINIMUM OF 4" INTO THE EXISTING GROUND.
7. THE SEDIMENT TRAP FOR PONDING OF SEDIMENT LADEN RUNOFF SHALL BE OF THE DIMENSIONS SHOWN ON THE PLANS.
8. ROCK FILTER DAM TYPES 2 & 3 SHALL BE SECURED WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1" DIAMETER HEXAGONAL OPENINGS. THE AGGREGATE SHALL BE PLACED ON THE MESH TO THE HEIGHT AND SLOPES SPECIFIED. THE MESH SHALL BE FOLDED AT THE UPSTREAM SIDE OVER THE AGGREGATE AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS. IN STREAM USE, THE MESH SHOULD BE SECURED OR STAKED TO THE STREAM BED PRIOR TO AGGREGATE PLACEMENT.
9. SACK GABIONS SHOULD BE STAKED DOWN WITH 3 /4" DIA. REBAR STAKES.
10. FLOW OUTLET SHOULD BE ONTO A STABILIZED AREA (VEGETATION, ROCK, ETC.).
11. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

JANUARY 2005

CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

TEMPORARY EROSION, SEDIMENT & WATER POLLUTION CONTROL MEASURES STANDARDS 2

____% SUBMITTAL	PROJECT NO.:_____		DATE:_____
DRWN. BY: V. VASQUEZ	DSGN. BY:_____	CHKD. BY:_____	SHEET NO.:____OF____

1.4.18 Concrete Washout Areas

The purpose of concrete washout areas is to prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employees and subcontractors.

The following steps will help reduce stormwater pollution from concrete wastes:

- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Avoid mixing excess amounts of fresh concrete.
- Perform washout of concrete trucks in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite, except in designated areas.

For onsite washout:

- Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
- Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.

Below grade concrete washout facilities are typical. These consist of a lined excavation sufficiently large to hold expected volume of washout material. Above grade facilities are used if excavation is not practical. Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this section, with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

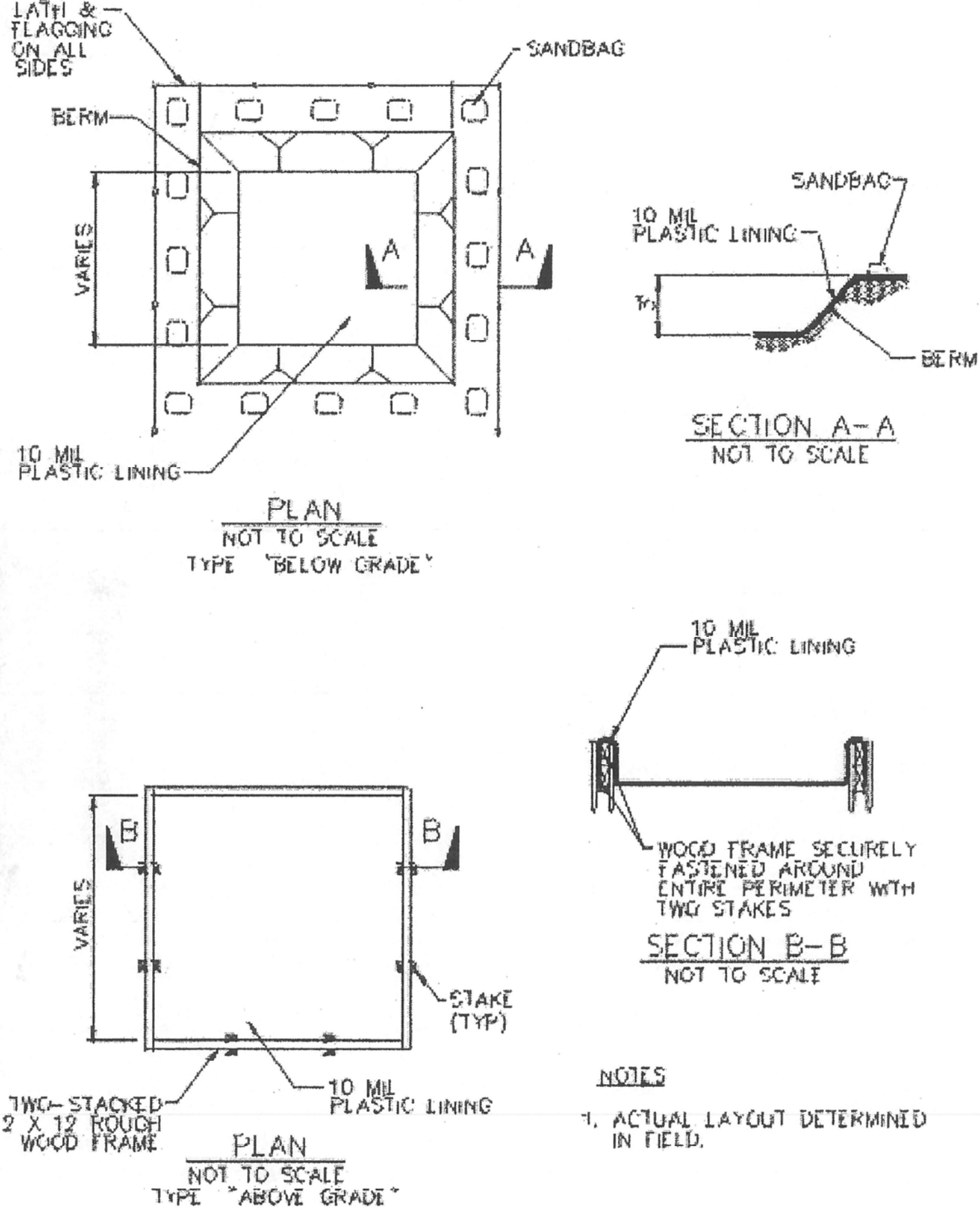
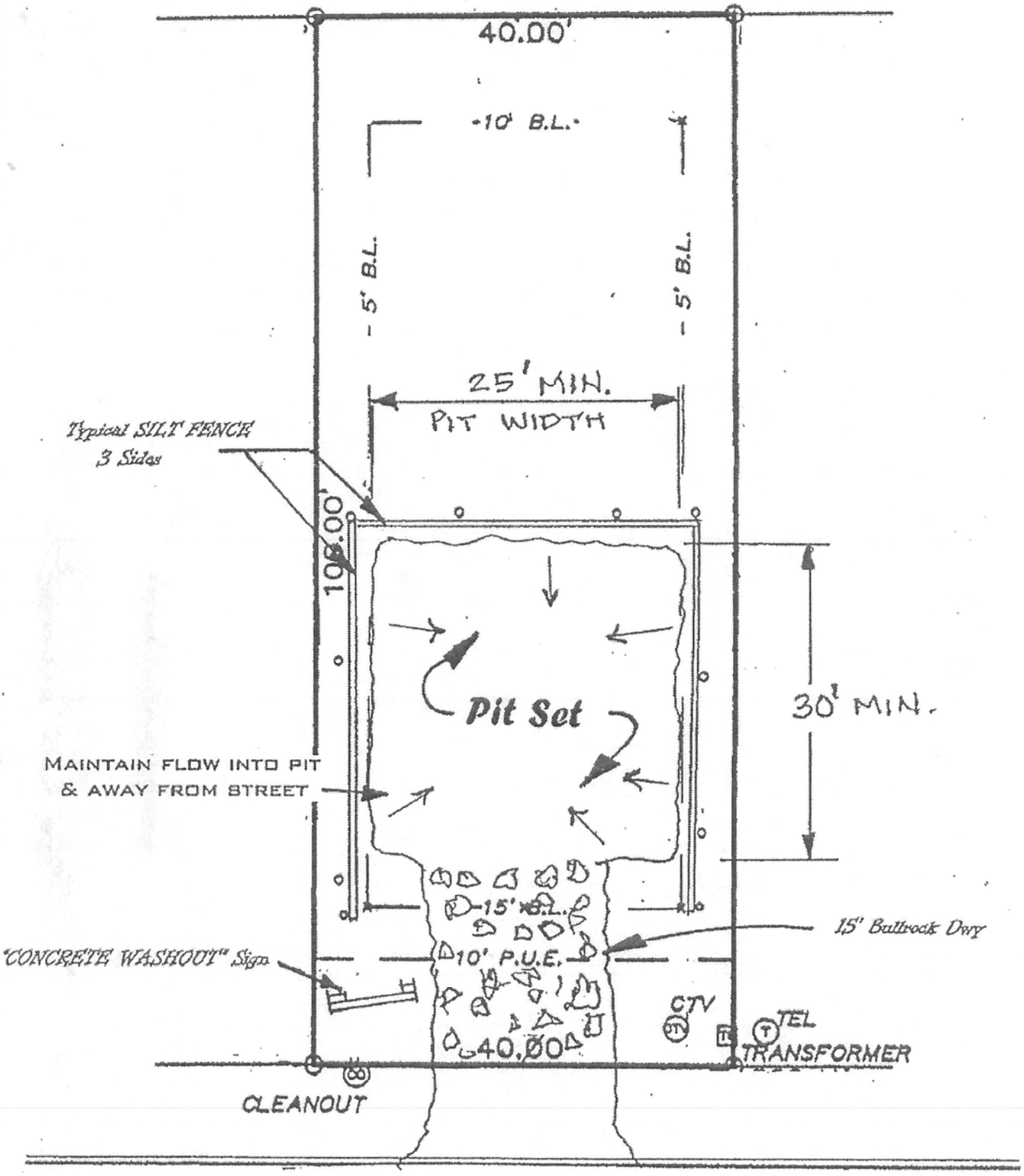
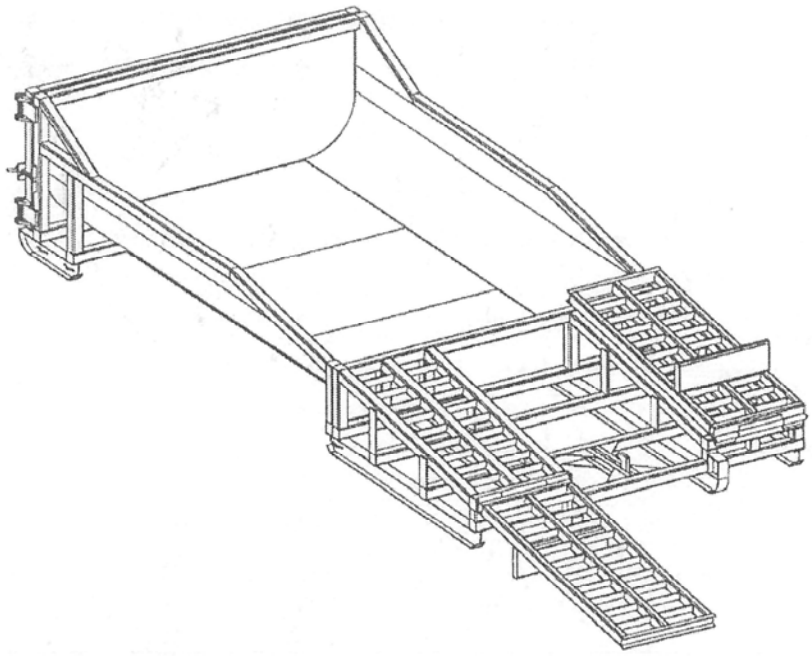


Figure 1-43 Schematics of Concrete Washout Areas



— TYPICAL CONCRETE WASHOUT —

PORTABLE CONCRETE WASHOUT CONTAINER



CONCRETE WASHOUT SYSTEMS

PO Box 2604
Carmichael, CA. 95609
Phone: 1.877.292.7468
Fax: 1.916.244.0403
info@concretewashout.com
www.concretewashout.com
Patent Pending

DESCRIPTION
A portable, self-contained and watertight container affixed with ramps that controls, captures and contains caustic concrete wastewater and washout material.

PURPOSE & OBJECTIVE
Allows trade personnel to easily washout concrete trucks, pumps and other equipment associated with cement on site and allows easy off site recycling of the same concrete materials and wastewater.

APPLICATION
Construction projects where concrete, stucco, mortar, grout and cement are used as a construction material or where cementitious wastewater is created.

MAINTENANCE
Inspect and clean out when ¾ full, not allowing the container to overflow.
Inspect wastewater level and request a vacuum if needed.
Inspect subcontractors to ensure that proper housekeeping measures are employed when washing out equipment.

SPECIFICATIONS
The container must be portable and temporary, watertight, equipped with ramps and have a holding capacity to accept washout from approximately 350 yards of poured concrete. A vacuum service must accompany washout container and be used by site superintendent as needed. A rampless container may be used in conjunction with a ramped container or by itself if a concrete pump is not needed. The washwater must be disposed of or treated and recycled in an evironmentally safe maanner and in accordance with federal, state or local regulatory guidelines.

TARGETED POLLUTANTS
Caustic wastewater (high pH level near 12 units)
Suspended solids
Assorted Metals; Chromium VI, Nickel, Sulfate, Potassium, Magnesium and Calcium Compounds

6. Dewatering

Dewatering Details

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited, unless managed by appropriate controls to address sediment and prevent erosion. Operators must perform an inspection of the dewatering controls once per day while the dewatering discharge occurs as described in Part III.F.7. of this general permit.

Inspection of Dewatering Controls Pursuant to Part IV.C. of this General Permit

(a) personnel provided by the permittee must inspect dewatering controls at a minimum of once per day on the days where dewatering discharges occur. Personnel conducting these inspections must be knowledgeable of this general permit, the construction activities at the site, and the SWP3 for the site. Personnel conducting these inspections are not required to have signatory authority for inspection reports under 30 TAC § 305.128 (relating to Signatories to Reports).

(b) Requirements for Inspections

i. a report summarizing the scope of any inspection must be completed within 24-hours following the inspection. The report must also include, at a minimum, the following:

(A) date of the inspection;

(B) name(s) and title(s) of personnel making the inspection;

(C) approximate times that the dewatering discharge began and ended on the day of inspection;

(D) estimates of the rate (in gallons per day) of discharge on the day of inspection;

(E) whether or not any indications of pollutant discharge were observed at the point of discharge (e.g., foam, oil sheen, noticeable odor, floating solids, suspended sediments, or other obvious indicators of stormwater pollution);

(F) major observations, including: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

ii. actions taken as a result of inspections, including the date(s) of actions taken, must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

iii. the names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

DEWATERING EVALUATION FORM

Dewatering Evaluation

This form is Pursuant to Part IV.C. of the Texas Construction General Permit TXR150000 2023.

Site Name:	**Date of Evaluation:**
Approximate Start & End Time of Dewatering on the Day of Evaluation *Start Time ____:____ - End Time ____:____*	**Continuous?** ☐
Estimated Rate of Discharge (gallons / day):	
Location of Dewatering Operations:	

Personnel Name and Position Title	**Contact Information**

Qualifications of Personnel	
I am knowledgeable of the Texas Construction General Permit TXR150000, the construction activities at the site, and the SWP3 for this site.	☐

Evaluation Results	
Are there any indictations of pollutant discharge observed at the point of discharge (e.g., foam, oil sheen, noticeable odor, floating solids, suspended sediments, or other obvious indicators of stormwater pollution)?	Yes / No / N/A
Has a visible amount of sediment been discharged beyond the permitted limits of disturbance due to dewatering activity?	Yes / No / N/A
Has a visible amount of sediment been discharged into receiving waters, including wetlands due to dewatering activity?	Yes / No / N/A
Are any BMPs used in the dewatering activity not in effective operating condition?	Yes / No / N/A
Are any additional BMPs necessary for the dewatering activity?	Yes / No / N/A
Are any BMPs inadequate and alternative BMPs necessary for the dewatering activities?	Yes / No / N/A

Compliance Statement	
There were no incidents of noncompliance noted during this dewatering evaluation. The dewatering activity is in compliance with the SWPPP and the Texas Construction General Permit.	☐

Corrective Action Log

Deficency	**Action Taken**	**Date of Observation**	**Date Action Taken**

PERSONNEL CERTIFICATION

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Personnel Name & Title	**Signature of Personnel**

SIGNATORY CERTIFICATION in accordance with required by 30 TAC § 305.128 (relating to Signatories to Reports)

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signatory Name & Title	**Signature of Signatory**

7. Spill Prevention and Response

Spill Response Protocol

Spills will be prevented utilizing Best Management Practices previously described beginning in Section IV such as proper material storage, handling, and disposal practices. However, despite such efforts, a spill may occur on site. If a spill occurs, the following procedures will be utilized.

- ***Stop the spill, if possible.*** This can include shutting off power to a pump, righting an overturned container, or plugging a hole in a damaged container.
- ***Contain the spill, safely.*** Spill containment can be accomplished using a variety of materials and methods such as the use of absorbents (i.e. sawdust, Oil Dri, rags, soil, polypropylene pads or booms, etc.) to dike the area around the spill, or placing a leaking container inside one which is not leaking. Spill containment should only be attempted if it is safe to do so. Proper safety equipment such as gloves and eye protection should be used as directed on the Material Safety Data Sheet for the spilled material.
- ***Report the spill, if necessary.*** Certain quantities of hazardous or toxic materials such as pesticides, paint thinners, gasoline, etc. are required by Federal Law to be reported to the National Response Center (NRC) at 1-800-424-8802 as soon as you have knowledge of the spill. Since most of the quantities which require reporting to the NRC are larger than that found on a typical construction site, spill reporting to the State or Local authorities is more likely. When in doubt, report the spill.

Texas Commission on Environmental Quality (TCEQ)
1-800-832-8224

- ***Clean the spill up, properly.*** Spill clean up should be performed in accordance with applicable regulations or according to the manufacturer's recommendations on the Material Safety Data Sheet. In most cases, proper spill clean up is to use a dry method such as absorbing the spill and containerize for disposal via a licensed disposal company. For non-hazardous and non-toxic materials this may be through your solid waste disposal service with prior approval.
- ***Fill in table on next page.***

The SWPPP must be modified within 14 days of a release to provide a description of the spill, the circumstances leading to the spill, and the date of the spill. Spill clean-up materials, methods, and additional Best Management Practices addressing spill prevention should also be included.

Spill Date	**Material Spilled**	**~ amount of spill *(in gallons)***	**Circumstance of Spill *(what caused the spill)***	**Corrective Action**	**Correction Date & sign-off**

8. Inspection Requirements

Inspection Frequency

At least once **every seven (7) days** the SWPPP provides for a thorough inspection of disturbed areas of the construction site that have not been finally stabilized.

If the inspection frequency changes, the reason for the change and the dates that the change is effective will be listed below.

Alternate Inspection Schedule:			Date range of alternate inspection schedule.	Reason for changing inspection schedule:
Every 7 days (weekly)	Every 7 days (weekly) and after rainfall events in excess of 0.5"	Monthly	Beginning Date-Ending Date	
			--	
			--	
			--	

Inspection Report Requirements

Inspection Reports will contain:

- A report summarizing the scope of any inspection must be completed within 24-hours following the inspection. The report must also include the date(s) of the inspection and major observations relating to the implementation of the SWP3. Major observations in the report must include: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.
- Actions taken as a result of inspections, including the date(s) of actions taken, must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the

SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

- The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable. If necessary, modify your site map to reflect changes to your stormwater controls that are no longer accurately reflected on the current site map.

Inspection and Entry

The permittee shall allow the Director or authorized representative of EPA, the State/Tribal, or municipal separate storm sewer authorized representative, upon the presentation of credentials and other documents as may be required by law to enter upon the permittee's premises where a regulated facility is located or conducted, have access to and copy any records that must be kept, and inspect any facility or equipment.

Qualified Personnel

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. This site inspection will be performed by qualified personnel familiar with the site and with the authority to ensure necessary maintenance of controls. Documentation of the inspection and actions taken is provided on forms shown in Appendix B.

Qualified personnel performing inspections are familiar with the BMPs, have knowledge to determine when a failed control is inadequate and needs to be replaced, have access to the construction schedule, have knowledge of stabilization, and have authority to make changes to the SWPPP.

KB Home Lone Star, Inc. has elected to have Compliance Resources, Inc. staff perform the required inspections.

Storm Water Pollution Prevention Plan Writer Qualifications for Compliance Resources, Inc.

Kassie Ledum, CPESC - IT, CESSWI (with CRI since July 2019)

- Bachelor of Science (BS) in Environmental Science with a minor in Biology from Texas A&M University at Corpus Christi, Corpus Christi, Texas
- Coursework in environmental regulations and policy, ecology, field biology, waste management, issues in environmental science, marine ecology, environmental geology, and Geographic Information Systems (GIS)
- HAZWOPER and Oil Spill Management Certified
- Experience in conducting field work and analyzing data
- Water Quality experience in collecting/ testing samples and reporting/analyzing data
- Experience in environmental education including the promotion of environmental conservation and implementation of program initiatives SEEDS (Strategies for Ecology, Education, Diversity, and Sustainability)
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Qualified Construction Storm Water Pollution Prevention Plan Writer (since July 2021)
- Senior Construction Storm Water Pollution Prevention Plan Writer (October 2022 – current)
- CESSWI – IT #5702 – Certified Erosion, Sediment and Storm Water Inspector - In Training (January 2020)
- CESSWI #5702 – Certified Erosion, Sediment and Storm Water Inspector (November 2020)
- CPESC – IT #12181 – Certified Professional in Erosion and Sediment Control – In Training (October 2022)

Amber Scheler, CPESC (with CRI since January 2005)

- Coursework in Computer-Aided Design at Temple College, Temple, Texas
- Applicable coursework in computer-aided design, AutoCAD, drafting, and environmental science
- Experience as an Administrative/Research Assistant for surveying company (2 years) and an SWP3 Writer since January 2005
- Sediment & Erosion Control Master Class: Evaluating Erosion, Sediment, & Sedimentation (six week course; April – May 2012)
- Attended a CESSWI review course (part 1) in October 2013
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Construction Storm Water Pollution Prevention Plan Writer (since June 2005)
- Storm Water Pollution Prevention Plan Supervisor / Team Leader (January 2007 – December 2017)
- Storm Water Pollution Prevention Plan Assistant Manager (January 2018 – November 2018)
- Storm Water Pollution Prevention Plan Manager (December 2018 – current)
- StormwaterONE Certification - Qualified Preparer of Storm Water Pollution Prevention Plans #4475000 – Texas (October 2017 - October 2019)
- StormwaterONE Certification - Qualified Compliance Inspector of Storm Water #4475000 – Texas (October 2017 - October 2019)
- CPESC – IT #9219 – Certified Professional in Erosion and Sediment Control – In Training (October 2018)
- CPESC #9219 – Certified Professional in Erosion and Sediment Control (December 2018)

Misti Shafer-Webb, CPESC, CESSWI (with CRI since September 2002)

- Bachelor of Science (BS) in Environmental Design from Texas A&M University, College Station, Texas
- Bachelor of Science (BS) in Construction Science from Texas A&M University, College Station, Texas
- Coursework in project management, soil science, environmental science, construction materials and methods, AutoCAD, drafting, surveying, concrete and steel structural engineering, and environmental design
- Internship with DPR Construction in their OSHA/Safety department
- Two years of experience in the homebuilding construction industry including permitting and project coordinating for David Weekley Homes in Austin, Texas and Houston, Texas
- Attended various trainings / conferences through Environmental Protection Agency (EPA), Texas Commission on Environmental Quality (TCEQ), Edwards Aquifer Protection Program (EAPP), International Erosion Control Association (IECA), South Central International Erosion Control Association (SCIECA), StormCon, Capital Area Erosion Control Network (CAECN), Home Builders Association (HBA), and the Austin Contractors and Engineers Association (ACEA)
- National Association of Women in Construction (Austin Chapter #7) Parliamentarian 2024-2025, Immediate Past-President 2022-2023, President 2021-2022, President-Elect 2020-2021, Director 2019-2020, Director 2018-2019, Vice President 2017-2018, and Director 2016-2017
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Office Manager (December 2002 – August 2003)
- Qualified Construction Storm Water Pollution Prevention Plan Writer (since July 2003)
- Storm Water Pollution Prevention Plan Manager (September 2003 – November 2018)
- Austin Area Manager (June 2004 – May 2006; March 2009 – December 2011)
- President and Owner (July 2018 – current)
- CPESC #5381 – Certified Professional in Erosion and Sediment Control (August 2009)
- CESSWI #0698 – Certified Erosion, Sediment and Storm Water Inspector (August 2009

Inspector Qualifications for Compliance Resources, Inc.

Juleitzy Amador Aviles, CESSWI - IT (with CRI since August 2022)

- Bachelor of Science (BS) in Multidisciplinary Studies in Environmental Science with smaller focuses of Anthropology and Women's Studies from The University of Texas at San Antonio, San Antonio, Texas
- Coursework in zoology, botany, geology, ecology, Environmental law, ecology, and conservation biology
- Experience with customer service, quality assurance and control, Microsoft and Google applications
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #9611 – Certified Erosion, Sediment and Storm Water Inspector - In Training (April 2023)

Kali Brown (with CRI since February 2024)

- Bachelor of Science (BS) in Biology from the University of Mary Hardin-Baylor, Belton, Texas
- Coursework in applied ecology, scientific writing, ornithology, plant taxonomy, organic chemistry, and research methods
- Worked for the Texas Parks and Wildlife Department - State Parks Division as a summer intern at Pedernales Falls State Park
- Worked alongside Waco Mammoth National Monument conserving paleontological specimens
- Experience in research, data collection, conservation, and education
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector

Hali Burke, CESSWI (with CRI since September 2018)

- Bachelor of Science (BS) in Zoology and a minor in Environmental Studies from Southern Illinois University in Carbondale, Carbondale, Illinois
- Coursework in environmental writing and regulatory compliance, conservation and reclamation, industrial pollution, natural resource and environmental planning, environmental education, watershed and wildlife management, water testing and pollution, river and lake ecology and management
- Coursework in conducting habitat assessments and writing environmental plans
- Studied Illinois water systems (rivers) in Carbondale for water quality standards and species abundance
- Experience in environmental education including conservation and appropriate level-based lessons to promote environmental literacy and competency (2 years)
- Experience in conducting field work, analyzing data, and lab testing (4 years)
- Experience in water sampling, water quality testing and managing and preventing sediment loading (3 years)
- Experience in onsite engineer and construction practices and reading civil engineering plans as well as experience in office administration, permit/ plan paperwork in civil engineering offices
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Field Supervisor / Team Leader (August 2021 – April 2024)
- Corporate Quality Control Supervisor (May 2024 – current)
- CESSWI – IT #5435 – Certified Erosion, Sediment and Storm Water Inspector - In Training (November 2018)
- CESSWI #5435 – Certified Erosion, Sediment and Storm Water Inspector (March 2020)

Bryton Calder (with CRI since August 2024)

- Bachelor of Arts (BS) in Environmental Studies with a concentration in Urban Sustainability from New College of Florida, Sarasota, Florida
- Coursework in biology, ecology, environmental governance, sustainability, sociology, urbanism, food systems and distribution, and sustainable agriculture
- Experience conducting fieldwork with emphasis on sample collection, site monitoring, and biological and ecological systems
- Experience with Geographic Information Systems (GIS) and data collection and management
- Published scientific work within the field of herpetology, conducted through research involving biological and ecological sample collection
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector

Christopher Calvillo, CESSWI (with CRI since July 2021)

- Bachelor of Science (BS) in Environmental Science from The University of the Incarnate Word, San Antonio, Texas
- Coursework in soil conservation, biology, ecology, environmental geology, and water quality

- Experience in customer service as a Park Ranger, assisting with education of the public as well as enforcement of city ordinances
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #6033 – Certified Erosion, Sediment and Storm Water Inspector - In Training (November 2021)
- CESSWI #6033 – Certified Erosion, Sediment and Storm Water Inspector (August 2022)

Justin Croon, CESSWI (with CRI since September 2006)

- Bachelor of Science (BS) in Political Science from Texas A&M University, College Station, Texas
- Coursework in geography and geology
- Experienced in customer service and office administration
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI #1903 – Certified Erosion, Sediment and Storm Water Inspector (August 2011)

Sierra Elizondo, CESSWI - IT (with CRI since July 2024)

- Bachelor of Science (BS) in Biology with a minor in Chemistry from Texas Tech University at Waco, Waco, Texas
- Bachelor of Science (BS) in Wildlife Biology with a minor in Geology from Texas State University, San Marcos, Texas
- Coursework in field ecology, parasitology, technical writing, invertebrate zoology, chemistry, mammalogy, tropical marine biology, structural geology, geomorphology, earth materials, sedimentation and stratigraphy, ecology, raptor ecology, wetland plant ecology management, wildlife management and techniques wildlife management, ecology of rarity, and statistic behavioral science
- Work alongside the Mammal Department at the Cameron Park Zoo as a Summer Intern helping keepers in animal husbandry and enrichment planning in the hoofstock, primates, elephant, rhinos, bears, and large cat areas
- Volunteer alongside Friends of McKinney Falls State Park once a month to clean trash
- Experience in research, conservation, field work, hand tools, and data collection and analysis
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #12882 – Certified Erosion, Sediment and Storm Water Inspector - In Training (September 2024)

Joshua Garcia (with CRI since August 2024)

- Bachelor of Arts (BA) in Environmental Studies from Brown University, Providence, Rhode Island
- Coursework in environmental policy, environmental remediation, environmental management, environmental economics, waste management, ecology, urban studies, conservation, climate science, microbiology, sustainability, and chemistry
- Conducted an independent ethnographic research study on the sources of water-related public health risk in Morocco, Nepal, and Ecuador that included interviews with environmental experts and visits to wastewater treatment facilities and contaminated sites
- Experience in water quality testing and sample collection through an environmental laboratory working on environmental remediation at the University of Barcelona as a laboratory assistant
- Experience in soil testing and land use planning as a logistics coordinator at the Brown Student Garden
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector

Jackson Giminiani, CESSWI (with CRI since September 2021)

- Bachelors of Science (BS) in Wildlife and Fisheries Science from Texas A&M University, College Station, Texas
- Coursework in ecology, environmental monitoring, techniques of wildlife management, principles of fisheries management, and fish and wildlife laws and administration
- Experience in educating the public about water conservation and habitat restoration for endangered species specifically at the headwaters of the San Marcos River
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Field Supervisor / Team Leader (January 2023 – current)
- CESSWI – IT #6058 – Certified Erosion, Sediment and Storm Water Inspector - In Training (December 2021)
- CESSWI #6058 – Certified Erosion, Sediment and Storm Water Inspector (October 2022)

Kassie Gnospelius, CESSWI (with CRI since September 2006)

- Bachelor of Science (BS) in Bioenvironmental Science from Texas A&M University, College Station, Texas
- Coursework in soil and crop science, bioremediation, and bioenvironmental science

- Internship with Texas A&M University Geochemical and Environmental Research Group, working as a lab technician testing various tissue and water samples for hazardous contaminants
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Field Supervisor / Team Leader (May 2013 – April 2017)
- Houston Area Manager (May 2017 – July 2020)
- Houston Area Assistant Manager (August 2020 – current)
- CESSWI #0774 – Certified Erosion, Sediment and Storm Water Inspector (March 2010)

Anibal Granados, CESSWI - IT (with CRI since January 2024)

- Bachelor of Science (BS) in Environmental Science and Policy from St. Edward's University, Austin, Texas
- Coursework in environmental science, environmental geology, environmental chemistry, environmental law, Texas water policy, environmental ethics, and intro to sustainability
- Worked with Environment Texas doing canvassing
- Worked for Wild Basin Creative Research Center collecting photo samples and analyzing wildlife patterns and migrations
- Experience in management, data collecting, research, teaching, water quality testing, and air quality testing
- Conducted field research on water quality and sustainability practices among certain demographics
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #12769 – Certified Erosion, Sediment and Storm Water Inspector - In Training (April 2024)

Emilia Harris, CESSWI (with CRI since August 2022)

- Bachelor of Science (BS) in Geography, Resources, and Environmental Studies from Texas State University, San Marcos, Texas
- Coursework in environmental policy and regulations, natural resource management, water resource management, air quality management**,** research methods in geography, energy resource management, and Geographic Information Systems (GIS)
- Experience in customer service, critical data analysis, and technical writing
- Water Quality experience in collecting samples and reporting/recording data findings
- Geographic technology experience through application and analysis of datasets
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #8093 – Certified Erosion, Sediment and Storm Water Inspector - In Training (October 2022)
- CESSWI #8093 – Certified Erosion, Sediment and Storm Water Inspector (February 2024)

Patrick Hodgkiss, CESSWI (with CRI since August 2017)

- Coursework towards a Bachelor of Science (BS) in Environmental Management from Columbia Southern University, Orange Beach, Alabama
- Coursework in environmental law, environmental assessment, air quality, hazardous, waste management, technical writing, pollution prevention, toxicology, waste management, and environmental issues
- Proficient in the application, execution, supervision, and management of all aspects of Military Munitions Response Actions including Site Visits, Remediation Investigations and Removal Actions
- Over 12,681 hours of environmental remediation experience at 22 project locations throughout the United States to include experience in implementing Storm Water Pollution Prevention Plans, Soil Sampling Plans, and Water Monitoring Activities
- Three years of experience as a quality control specialist in the Unexploded Ordinance industry requiring collaboration with clients and regulatory specialists to develop practical compliance requirements
- ACEA Regulatory Committee member since Spring 2019
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Austin Area Manager (August 2017 – June 2019)
- Corporate Trainer (December 2018 – current)
- Director of Business Development (July 2019 – June 2021)
- Chief Operations Officer (July 2021 – current)
- CESSWI #5228 – Certified Erosion, Sediment and Storm Water Inspector (April 2018)

Hayle Johnson, CESSWI - IT (with CRI since July 2024)

- Bachelor of Science (BS) in Geography with a minor in Environmental Science from Sam Houston State University, Huntsville, Texas

- Coursework in environmental science, sustainability and environment, conservation of natural resources, environmental and cultural geography, weather and climate, computer cartography, general botany, physical and environmental geology, soil science, general ecology, hydrology and water resources, field studies, and Geographic Information Systems (GIS)
- Worked under the National Parks Service at the San Antonio Missions State Park with Texas Conservation Corps conserving and preserving the historical acequia
- Worked at Bastrop State Park with Texas Conservation Corps on a trail construction project and an amphibian reptile exclusionary fence to preserve the Houston toad
- Volunteered at Head Waters Sanctuary to remove invasive grasses and plants
- Volunteered with Bexar Branches Project Canopy to plant 500 trees with children across five elementary schools in Bexar County
- First Aid and CPR training certified
- Experience in conservation, field work, hand tools, research, education, GIS, data collection and analysis
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #12876 – Certified Erosion, Sediment and Storm Water Inspector - In Training (September 2024)

Ashleigh Kirby, CESSWI (with CRI since June 2023)

- Bachelor of Science (BS) in Environmental Science from The University of Texas at San Antonio, San Antonio, Texas
- Coursework in ecology, watershed processes, natural resources and policy administration, environmental law, botany, geology, plant identification, global changes, soils, environmental statistics, and Geographic Information Systems (GIS)
- Fieldwork experience in performing ecological surveys, vegetation identification and sampling
- Experience in environmental education, customer service and quality assurance
- Knowledge of Microsoft office applications, Google applications, JMP, Java, and Geographic Information Systems (GIS)
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #12053 – Certified Erosion, Sediment and Storm Water Inspector - In Training (December 2023)
- CESSWI #12053 – Certified Erosion, Sediment and Storm Water Inspector (July 2024)

Kassie Ledum, CPESC - IT, CESSWI (with CRI since July 2019)

- Bachelor of Science (BS) in Environmental Science with a minor in Biology from Texas A&M University at Corpus Christi, Corpus Christi, Texas
- Coursework in environmental regulations and policy, ecology, field biology, waste management, issues in environmental science, marine ecology, environmental geology, and Geographic Information Systems (GIS)
- HAZWOPER and Oil Spill Management Certified
- Experience in conducting field work and analyzing data
- Water Quality experience in collecting/ testing samples and reporting/analyzing data
- Experience in environmental education including the promotion of environmental conservation and implementation of program initiatives SEEDS (Strategies for Ecology, Education, Diversity, and Sustainability)
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Qualified Construction Storm Water Pollution Prevention Plan Writer (since July 2021)
- Senior Construction Storm Water Pollution Prevention Plan Writer (October 2022 – current)
- CESSWI – IT #5702 – Certified Erosion, Sediment and Storm Water Inspector - In Training (January 2020)
- CESSWI #5702 – Certified Erosion, Sediment and Storm Water Inspector (November 2020)
- CPESC – IT #12181 – Certified Professional in Erosion and Sediment Control – In Training (October 2022)

Christopher Lord, CESSWI (with CRI since March 2014)

- Bachelor of Science (BS) in Geology from The University of Houston, Houston, Texas
- Associate of Arts (AA) in Geology from San Jacinto College, Houston, Texas
- Coursework in geography, petrology, stratigraphy, mineralogy, environmental geology, environmental biology, physical geology, meteorology, and Geographic Information Systems (GIS)
- Seven years of laboratory experience in geology and chemistry
- Experience in residential and industrial plumbing construction
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Field Supervisor / Team Leader (March 2019 – current)
- CESSWI – IT #4243 – Certified Erosion, Sediment and Storm Water Inspector - In Training (November 2014)
- CESSWI #4243 – Certified Erosion, Sediment and Storm Water Inspector (August 2016)

Luke Nelson (with CRI since July 2024)

- Bachelor of Science (BS) in Geography with a minor in Geospatial Science from Sam Houston State University, Huntsville, Texas
- Coursework in computer cartography, remote sensing, hydrology and water resources, field studies, environmental and cultural geography, weather and climate, economic geography, conservation of natural resources, tourism geography, plant science, cultural geography field studies, and Geographic Information Systems (GIS)
- Completed a field project that included gathering data points, lines and polygons on handheld GPS devices and analyzing that data in ArcGIS Pro illustrating potential erosion hazard zones and potential mitigation strategies along the cart path at the Panorama Village Golf Course in Panorama Village, Texas
- Created a health outcome map in ArcGIS Pro showing the link between low income and poor health outcomes such as mental health and cancer rates using U.S. Census Data
- Created a prospective Market Analysis for a new Rural King feed store location in Boonville, Missouri based on income and farm production data gathered from the USDA database
- Volunteered at the Sustain Huntsville Garden
- Engaged in habitat restoration projects in Punta Islita, Costa Rica at the Macaw Recovery Network's wild macaw reserve building nesting boxes and enrichment devices as well as engaged in habitat cleanup that had become polluted with debris and trash
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector

Cayden Rad, CESSWI (with CRI since July 2021)

- Bachelor of Science (BS) in Geographic Resource and Environmental Studies and a minor in Geology from Texas State University, San Marcos, Texas
- Coursework in environmental management, environmental geography, geomorphology, geology, remote sensing, and Geographic Information Systems (GIS)
- Experience with Environmental Site Assessments, Impact Statements, Watershed Management Plans and Drill Site Proposals as well as field and lab work while at Texas State
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Field Supervisor / Team Leader (September 2022 – current)
- CESSWI – IT #5983 – Certified Erosion, Sediment and Storm Water Inspector - In Training (August 2021)
- CESSWI #5983 – Certified Erosion, Sediment and Storm Water Inspector (September 2022)

Gretchen Reutzel, CPESC, CESSWI (with CRI since November 2005)

- Bachelor of Science (BS) in Environmental Science and Resource Management from Texas State University, San Marcos, Texas
- Coursework in environmental science, natural resource protection, aquatic biology, land planning, and watershed management
- Environmental Education Coordinator at Texas State University (8 years)
- Watershed Manager at the Upper Guadalupe River Authority (2 years)
- San Antonio Area Informal Education Association (SAIEA) Board Member
- Developed and published environmental curriculum distributed to local museums, river authorities, and universities
- Worked with federal, state and local regulations agencies to develop watershed and water quality programs to manage Central Texas rivers and the Edwards Aquifer
- Successfully completed the San Antonio Water System (SAWS) Texas Pollutant Discharge Elimination Systems (TPDES) Inspector Workshop
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Field Supervisor / Team Leader (November 2006 – September 2013)
- San Antonio Field Assistant Manager (October 2013 – May 2014)
- San Antonio Area Manager (June 2014 – March 2024)
- Director of Business Development (April 2024 – current)
- CESSWI #0689 – Certified Erosion, Sediment and Storm Water Inspector (August 2009)
- CPESC #6480 – Certified Professional in Erosion and Sediment Control (July 2011)

Scott Rippeth, CESSWI (with CRI since June 2023)

- Bachelor of Science (BS) in Environmental Science from The University of Texas at San Antonio, San Antonio, Texas
- Coursework in watershed processes, restoration ecology, soil science, environmental remediation, natural resource policy, environmental law, and Geographic Information Systems (GIS)
- Conducted an undergraduate independent study of the management of water quality through storm water regulation and low impact development projects to address total daily maximum load (TMDL) on impaired sections of the San Antonio River

- Experience in sample collection and water quality testing through Texas Stream Team as a Standard Core Water Quality Citizen Scientist and a Riparian Evaluation Citizen Scientist
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #11928 – Certified Erosion, Sediment and Storm Water Inspector - In Training (November 2023)
- CESSWI #11928 – Certified Erosion, Sediment and Storm Water Inspector (June 2024)

Misti Shafer-Webb, CPESC, CESSWI (with CRI since September 2002)

- Bachelor of Science (BS) in Environmental Design from Texas A&M University, College Station, Texas
- Bachelor of Science (BS) in Construction Science from Texas A&M University, College Station, Texas
- Coursework in project management, soil science, environmental science, construction materials and methods, AutoCAD, drafting, surveying, concrete and steel structural engineering, and environmental design
- Internship with DPR Construction in their OSHA/Safety department
- Two years of experience in the homebuilding construction industry including permitting and project coordinating for David Weekley Homes in Austin, Texas and Houston, Texas
- Attended various trainings / conferences through Environmental Protection Agency (EPA), Texas Commission on Environmental Quality (TCEQ), Edwards Aquifer Protection Program (EAPP), International Erosion Control Association (IECA), South Central International Erosion Control Association (SCIECA), StormCon, Capital Area Erosion Control Network (CAECN), Home Builders Association (HBA), and the Austin Contractors and Engineers Association (ACEA)
- National Association of Women in Construction (Austin Chapter #7) Parliamentarian 2024-2025, Immediate Past-President 2022-2023, President 2021-2022, President-Elect 2020-2021, Director 2019-2020, Director 2018-2019, Vice President 2017-2018, and Director 2016-2017
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Office Manager (December 2002 – August 2003)
- Qualified Construction Storm Water Pollution Prevention Plan Writer (since July 2003)
- Storm Water Pollution Prevention Plan Manager (September 2003 – November 2018)
- Austin Area Manager (June 2004 – May 2006; March 2009 – December 2011)
- Owner and Chief Executive Officer (July 2018 – current)
- CPESC #5381 – Certified Professional in Erosion and Sediment Control (August 2009)
- CESSWI #0698 – Certified Erosion, Sediment and Storm Water Inspector (August 2009)

Eric Silva, CESSWI (with CRI since May 2022)

- Bachelors of Science (BS) in Biology from Texas A&M University at Kingsville/San Antonio, San Antonio, Texas
- Course work in ecology, invertebrate zoology, bacteriology, and biostatistics
- Experience in customer service
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- CESSWI – IT #7466 – Certified Erosion, Sediment and Storm Water Inspector - In Training (July 2022)
- CESSWI #7466 – Certified Erosion, Sediment and Storm Water Inspector (June 2023)

Hailley Thompson, CESSWI (with CRI since May 2018)

- Bachelor of Arts (BA) in Global Studies: Environments & Sustainability from The University of Virginia, Charlottesville, Virginia
- Coursework in ecology, biology, geography, water quality, sustainable communities, global sustainability, climate change science and policy, environmental economics, and oceanography
- Experience in economic analysis and evaluating cost-benefit scenarios to produce cost-effective solutions
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge elimination System (TPDES) requirements for construction activities
- Qualified Inspector
- Field Supervisor / Team Leader (October 2019 – June 2021)
- Quality Assurance Manager / Corporate Trainer (July 2021 – April 2024)
- Operations Manager (May 2024 – current)
- CESSWI – IT #5329 – Certified Erosion, Sediment and Storm Water Inspector - In Training (July 2018)
- CESSWI #5329 – Certified Erosion, Sediment and Storm Water Inspector (June 2019)

Megan Weiss, CESSWI - IT (with CRI since October 2023)

- Bachelor of Science (BS) in Environmental Science from The University of the Incarnate Word, San Antonio, Texas
- Coursework in hydrology, geology, meteorology, chemistry, microbiology, soil conservation, air pollution, and ecology
- Experience in customer service, volunteering, lab testing, water sampling, soil sampling, and air pollution monitoring
- Conducted GIS work & field work in internship at the City of San Marcos (Stormwater Division)
- Conducted lab technician work in microbiology as a lab teachers assistant

- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for constructive activities
- Qualified Inspector
- CESSWI – IT #12232 – Certified Erosion, Sediment and Storm Water Inspector - In Training (February 2024)

Hannah Welker, CESSWI (with CRI since March 2017)

- Associate of Art (AA) in Liberal Arts from Northwest Vista College, San Antonio, Texas
- Experience in customer service, auditing, and office administration
- 2.5 years of experience in SWPPP project management
- Working knowledge of applicable regulations (Federal, State, local), endangered species, and Edwards Aquifer issues
- Successfully completed an internal training course on Best Management Practices and Texas Pollutant Discharge Elimination System (TPDES) requirements for construction activities
- Qualified SWP3 Auditor
- Qualified Inspector
- Field Supervisor / Team Leader (March 2021 – current)
- CESSWI – IT #5729 – Certified Erosion, Sediment and Storm Water Inspector - In Training (April 2020)
- CESSWI #5729 – Certified Erosion, Sediment and Storm Water Inspector (August 2020)

KB Sequence Inspection Form Sample:

KBHOME

[_____] Division
[_____] Site

Storm Water Site Inspection Report

Inspection Date: _____

Inspector: _____ Phone #: _____ Last Inspection Date: _____

Inspection Type: (circle one) Regular Rain Event Final

Weather: (circle one) Dry Rain Snow Icy

Note: Keep this completed Report and accompanying Responsive Action Log with the Storm Water Plan ("SWP") or be sure that access to the electronic versions of those documents on KB Sequence are easily accessible.

Outfalls, Entrances and Streets			
A. Outfalls: Excess sediment or other pollutants controlled per SWP from leaving the Site?	Y	N	N/A
B. Vehicle Tracking: Installed and maintained per SWP?	Y	N	N/A
C. Streets: Excess soil kept off streets?	Y	N	N/A
Storm Water Controls			
D. Erosion and Sediment Controls: Installed and maintained per SWP?	Y	N	N/A
E. Soil Stabilization: Implemented and maintained per SWP?	Y	N	N/A
F. Stock Piles: Properly located and stabilized per SWP?	Y	N	N/A
Non-Storm Water Controls			
G. Concrete, Stucco, Paint (etc.) Washouts: Located, installed and maintained per SWP?	Y	N	N/A
H. Waste Management & Material Storage: Trash, debris, hazardous materials, and construction materials (including material storage areas) properly managed?	Y	N	N/A
I. Sanitary Waste: Portable toilets properly located and maintained?	Y	N	N/A
Storm Water Plan and Related Documents			
J. Is the Site and Division Storm Water Compliance Representative ("SSWCR" and "DSWCR") contact information provided on Site; if so, is it current?	Y	N	N/A
K. If required, is the Applicable Permit and/or NOI on Site?	Y	N	N/A
L. Is the SWP available on Site or its location posted as required?	Y	N	N/A
M. Does the SWP match current Site conditions?	Y	N	N/A
N. Are BMPs required by the SWP appropriate for existing Site conditions?	Y	N	N/A
O. If there have been any government inspections evaluating compliance with the Applicable Permit (NPDES only) since the last Site Inspection, have all issues been addressed in response to that government inspection?	Y	N	N/A
P. Was the Site Inspection Report from the last Site Inspection (1) signed by the SSWCR and (2) certified if and as required by the Applicable Permit?	Y	N	N/A

Last Revised 11/30/12

Page 1 of 3

KBHOME

[_____] Division
[_____] Site

Storm Water Site Inspection Report

Inspection Date: _____

Q. Have all Responsive Actions from prior Site Inspections been timely addressed? **Y** **N** **N/A**

If "N", list all actions that were not addressed or are not yet completed (explaining why, if known):
(Note: For Responsive Actions identified during this Inspection, use the Responsive Action Log on the following page.)

Uncompleted Reponsive Actions From Prior Inspections				
Responsive Action Number	Deficiency (Action Item)	Location	Date of Inspection	Explanation

Name and Title of Inspector **Signature of Inspector** **Date**

Include a certification in this space when required by the Applicable Permit, using the certification language required by that Permit.

If anyone other than the Site Storm Water Compliance Representative for this Site performed the inspection, that Representative must review and sign the completed Site Inspection Report below:

Name **Signature** **Date**

KBHOME

[_____] Division
[_____] Site

Storm Water Site Inspection Report

Inspection Date: _____

Responsive Action Log

(for Action Items found during this Inspection)

Ref #	Deficiency (Action Item)	Location	Addressed By	Date	Notes

Additional Comments:

9. Regulatory Correspondence

REGULATORY CORRESPONDENCE LOG	
Date:	**Brief Description**

10. Amendments

SWPPP AMENDMENT LOG	
Amendment Date:	**Description of Changes**

Appendix A - SWPPP Signed Documents
CSN, Permit Certificate, NOI, NOC, NOT, Delegation Letter for Signatories to Reports, SWPPP Certification, Edwards Aquifer Regional Office notification (if applicable)

TCEQ Large Construction Site Notice

Primary Operator

Large construction sites disturb more than five acres or are part of a larger common plan of development that disturbs more than five acres. Primary operators of large construction sites will fill out this notice. Primary operators will then post this notice at the construction site in a location where it is safely and readily available for viewing by the general public and local, state, and federal authorities. Additional information about the TCEQ Construction Stormwater General Permit may be found on TCEQ's webpage on Assistance Tools for Construction Stormwater General Permits.

Note: You must also develop a Stormwater Pollution Prevention Plan prior to the commencement of construction.

Site-Specific TPDES Authorization Number: TXR1559DR

Primary Operator Name: KB Home Lone Star, Inc.

Contact Name and Phone Number:
Ricardo Rodriguez, 210-301-2899

Project Description:

Physical Location/Description: Preserve at Culebra
SOUTHWEST OF THE INTERSECTION OF FM 471 CULEBRA ROAD AND KALLISON BEND, SAN ANTONIO, TX 78253

Estimated Start Date: 11/2020

Projected End Date or Date Disturbed Soils Will Be Stabilized: 10/2027

Location of Stormwater Pollution Prevention Plan (SWP3):
Compliance Resources, Inc. 1103 Williams Drive, Bldg. 2 Georgetown, TX 78628 (Maintained Electronically)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Texas Pollutant Discharge Elimination System
Stormwater Construction General Permit

The Notice of Intent (NOI) for the facility listed below was received on May 23, 2023. The intent to discharge stormwater associated with construction activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) stormwater Construction General Permit TXR150000 is acknowledged. Your facility's unique TPDES CGP stormwater authorization number is:

TXR1559DR

Coverage Effective: November 09, 2020

The TCEQ's stormwater CGP requires certain stormwater pollution prevention and control measures, possible monitoring and reporting, and periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a stormwater pollution prevention plan (SWP3) that is tailored to your construction site. As a facility authorized to discharge under the stormwater CGP, all terms and conditions must be complied with to maintain coverage and avoid possible penalties.

Project/Site Information:

RN111130233
Preserve At Culebra Amenity Center And Units 1 2 3 4 5 And 6
Southwest of The Intersection of FM 471 Culebra Road And Kallison Bend
San Antonio, TX 78253
Bexar County

Operator:

CN603249053
Kb Home Lone Star Inc.
4800 Fredericksburg Rd
San Antonio, TX 78229

This CGP and all authorizations expire on March 5, 2028, unless otherwise amended. If you have any questions related to processing of your application, you may contact the Stormwater Processing Center by **email at** SWPERMIT@tceq.texas.gov **or by telephone at (512) 239-3700**. For technical issues, you may contact the stormwater technical staff by **email at** SWGP@tceq.texas.gov **or by telephone at (512) 239-4671**. Also, you may obtain information on the TCEQ web site at https://www.tceq.texas.gov/goto/wq-dpa. A copy of this document should be kept with your SWP3.

Issued Date: May 23, 2023

FOR THE COMMISSION

Texas Commission on Environmental Quality

Construction Notice of Intent Renewal

TXR1559DR

Site Information (Regulated Entity)

What is the name of the site to be authorized?	PRESERVE AT CULEBRA AMENITY CENTER AND UNITS 1 2 3 4 5 AND 6
Does the site have a physical address?	No
Physical Address	
Because there is no physical address, describe how to locate this site:	SOUTHWEST OF THE INTERSECTION OF FM 471 CULEBRA ROAD AND KALLISON BEND
City	SAN ANTONIO
State	TX
ZIP	78253
County	BEXAR
Latitude (N) (##.######)	29.515157
Longitude (W) (-###.######)	-98.78981
Primary SIC Code	6552
Secondary SIC Code	1521
Primary NAICS Code	
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN111130233
What is the name of the Regulated Entity (RE)?	PRESERVE AT CULEBRA UNIT 1
Does the RE site have a physical address?	No
Physical Address	
Because there is no physical address, describe how to locate this site:	SOUTHWEST OF THE INTERSECTION OF FM 471 CULEBRA ROAD AND KALLISON BEND
City	SAN ANTONIO
State	TX
ZIP	78253
County	BEXAR
Latitude (N) (##.######)	29.515157
Longitude (W) (-###.######)	-98.78981
Facility NAICS Code	
What is the primary business of this entity?	LAND DEVELOPER HOMEBUILDER

Customer (Applicant) Information

How is this applicant associated with this site?	Operator
What is the applicant's Customer Number (CN)?	CN603249053
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	KB Home Lone Star Inc.
Texas SOS Filing Number	800836731
Federal Tax ID	
State Franchise Tax ID	12604657143
State Sales Tax ID	

Local Tax ID	
DUNS Number	
Number of Employees	501+
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	KB Home Lone Star Inc.
Prefix	
First	Ricardo
Middle	
Last	Rodriguez
Suffix	
Credentials	
Title	Sr. Construction Manager
Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	4800 FREDERICKSBURG RD
Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78229
Phone (###-###-####)	2103012885
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	ryrodriguez@kbhome.com

Application Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	COMPLIANCE RESOURCES INC
Prefix	
First	AMBER
Middle	
Last	SCHELER
Suffix	
Credentials	
Title	SWP3 MANAGER
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2628
Routing (such as Mail Code, Dept., or Attn:)	
City	GEORGETOWN
State	TX
ZIP	78627
Phone (###-###-####)	5129307733

Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	ASCHELER@COMPLIANCERESOURCESINC.COM

CNOI-R General Characteristics

1	Is the project or site located on Indian Country Lands?	No
2	Is the project or site associated to a facility that is licensed for the storage of high-level radioactive waste by the United States Nuclear Regulatory Commission under 10 CFR Part 72?	No
3	Is your construction activity associated with an oil and gas exploration, production, processing, or treatment, or transmission facility?	No
4	What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site?	6552
5	If applicable, what is the Secondary SIC Code(s)?	1521
6	What is the total number of acres that the construction project or site will disturb under the control of the primary operator?	115.36
7	What is the construction project or site type?	Single-family residential
8	Is the project part of a larger common plan of development or sale?	Yes
9	What is the estimated start date of the project?	11/10/2020
10	What is the estimated end date of the project?	04/25/2025
11	Will concrete truck washout be performed at the site?	Yes
12	What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site?	CULEBRA CREEK,MEDIO CREEK
13	What is the segment number(s) of the classified water body(s) that the discharge will eventually reach?	1906|1912
14	Is the discharge into a Municipal Separate Storm Sewer System (MS4)?	Yes
14.1	What is the name of the MS4 Operator?	BEXAR COUNTY AND TXDOT
15	Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?	No
16	I certify that a stormwater pollution prevention plan (SWP3) has been developed, will be implemented prior to construction, and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the general permit TXR150000. Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator.	Yes
17	I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000).	Yes
18	I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.	Yes

Certification

I certify that I am authorized under 30 Texas Administrative Code Subchapter 305.44 to sign this document and can provide documentation in proof of such authorization upon request.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

1. I am Ricardo Rodriguez JR, the owner of the STEERS account ER090382.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.

4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Construction Notice of Intent Renewal TXR1559DR.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OPERATOR Signature: Ricardo Rodriguez JR OPERATOR	
Customer Number:	CN603249053
Legal Name:	KB Home Lone Star Inc.
Account Number:	ER090382
Signature IP Address:	12.215.155.126
Signature Date:	2023-05-05
Signature Hash:	A7E361792E9DB28D82BFC083987D4EE82C8BDA23A6D8A38D7A2DDD1F0C3B006D
Form Hash Code at time of Signature:	0392DFC37218B7382DAE61886E796308EC00C4A1FD8F16D1BC7585838BECA2A0

Fee Payment

Transaction by:	The application fee payment transaction was made by ER090382/Ricardo Rodriguez JR
Paid by:	The application fee was paid by JASON TOWNSLEY
Fee Amount:	$225.00
Paid Date:	The application fee was paid on 2023-05-23
Transaction/Voucher number:	The transaction number is 582EA000551410 and the voucher number is 642960

Submission

Reference Number:	The application reference number is 549474
Submitted by:	The application was submitted by ER090382/Ricardo Rodriguez JR
Submitted Timestamp:	The application was submitted on 2023-05-23 at 11:59:02 CDT
Submitted From:	The application was submitted from IP address 12.215.155.126
Confirmation Number:	The confirmation number is 468015
Steers Version:	The STEERS version is 6.64
Permit Number:	The permit number is TXR1559DR

Additional Information

Application Creator: This account was created by Rita Olguin

From: Documents at CRI
To: SWQ@bexar.org, zaid.subhi@bexar.org
Date: Tue May 30 2023 17:01:02 GMT-0600 (Mountain Daylight Time)
Subject: TPDES MS4 Notification [KB Home Lone Star, Inc. (San Antonio) - TXR1559DR] 5/30/2023

MS4 - TPDES Notification

To whom it may concern,

As required by the TCEQ General Permit Number TXR150000 for discharges of storm water runoff from construction sites, attached is a copy of the signed application for storm water discharges associated with construction activity.

Operator - Authorization: **KB Home Lone Star, Inc. (San Antonio) - TXR1559DR**
Project:
Application Type: **Notice of Intent / Renewal (2023)**
Application Action: **2023 Renewal**
Application Date: **5/23/2023**

Thank you,

[Automated message]
Compliance Resources, Inc.
512-930-7733 Office
888-CRI-SW3P Toll Free
512-801-8144 Mobile
documents@complianceresourcesinc.com
www.complianceresourcesinc.com
MAILING ADDRESS: P.O. BOX 2628, GEORGETOWN, TX 78627
PHYSICAL ADDRESS: 1103 WILLIAMS DRIVE, BUILDING 2, GEORGETOWN, TX 78628

Providing **A**ccurate, **C**omplete, and **T**imely customer service that your company can rely on.
Please consider the environment before printing.

Attachments:

- 7fc50508.File.202721.pdf

add Unit 15

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Texas Pollutant Discharge Elimination System
Stormwater Construction General Permit

The Notice of Change (NOC) submitted to update the Notice of Intent (NOI) for the facility listed below was received on October 10, 2024. The intent to discharge stormwater associated with construction activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) stormwater Construction General Permit (CGP) TXR150000 is acknowledged. Your facility's unique TPDES CGP stormwater authorization number is:

TXR1559DR

Coverage Effective: November 09, 2020

The TCEQ's stormwater CGP requires certain stormwater pollution prevention and control measures, possible monitoring and reporting, and periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a stormwater pollution prevention plan (SWP3) that is tailored to your construction site. As a facility authorized to discharge under the stormwater CGP, all terms and conditions must be complied with to maintain coverage and avoid possible penalties.

Project/Site Information:
RN111130233
Preserve At Culebra Units 1 2 3 4 5 6 7 8 14 15
Southwest of The Intersection of FM 471 Culebra Road And Kallison Bend
San Antonio, TX 78253
Bexar County

Operator:
CN603249053
Kb Home Lone Star Inc.
4800 Fredericksburg Rd
San Antonio, TX 78229

This CGP and all authorizations expire on March 5, 2028, unless otherwise amended. If you have any questions related to processing of your application, you may contact the Stormwater Processing Center by **email at** SWPERMIT@tceq.texas.gov **or by telephone at (512) 239-3700**. For technical issues, you may contact the stormwater technical staff by **email at** SWGP@tceq.texas.gov **or by telephone at (512) 239-4671**. Also, you may obtain information on the TCEQ web site at https://www.tceq.texas.gov/goto/wq-dpa. A copy of this document should be kept with your SWP3.

Issued Date: October 10, 2024

FOR THE COMMISSION

Texas Commission on Environmental Quality

Construction Notice of Change

TXR1559DR

Site Information (Regulated Entity)

What is the name of the site to be authorized?	PRESERVE AT CULEBRA UNITS 1 2 3 4 5 6 7 8 14
Does the site have a physical address?	No
Because there is no physical address, describe how to locate this site:	SOUTHWEST OF THE INTERSECTION OF FM 471 CULEBRA ROAD AND KALLISON BEND
City	SAN ANTONIO
State	TX
ZIP	78253
County	BEXAR
Latitude (N) (##.######)	29.515157
Longitude (W) (-###.######)	-98.78981
Primary SIC Code	6552
Secondary SIC Code	1521
Primary NAICS Code	
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN111130233
What is the name of the Regulated Entity (RE)?	PRESERVE AT CULEBRA UNITS 1 2 3 4 5 6 7 8 14
Does the RE site have a physical address?	No
Physical Address	
Because there is no physical address, describe how to locate this site:	SOUTHWEST OF THE INTERSECTION OF FM 471 CULEBRA ROAD AND KALLISON BEND
City	SAN ANTONIO
State	TX
ZIP	78253
County	BEXAR
Latitude (N) (##.######)	29.515157
Longitude (W) (-###.######)	-98.78981
Facility NAICS Code	
What is the primary business of this entity?	LAND DEVELOPER HOMEBUILDER

Customer (Applicant) Information

How is this applicant associated with this site?	Operator
What is the applicant's Customer Number (CN)?	CN603249053
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	KB Home Lone Star Inc.
Texas SOS Filing Number	800836731

Federal Tax ID	
State Franchise Tax ID	12604657143
State Sales Tax ID	
Local Tax ID	
DUNS Number	
Number of Employees	501+
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	KB Home Lone Star Inc.
Prefix	
First	RICARDO
Middle	
Last	RODRIGUEZ
Suffix	
Credentials	
Title	SR. CONSTRUCTION MANAGER
Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	4800 FREDERICKSBURG RD
Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78229
Phone (###-###-####)	2103012885
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	RYRODRIGUEZ@KBHOME.COM

Application Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	COMPLIANCE RESOURCES INC
Prefix	
First	AMBER
Middle	
Last	SCHELER
Suffix	
Credentials	
Title	SWP3 MANAGER
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2628
Routing (such as Mail Code, Dept., or Attn:)	

City	GEORGETOWN
State	TX
ZIP	78627
Phone (###-###-####)	5129307733
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	ASCHELER@COMPLIANCERESOURCESINC.COM

Notice of Change General Characteristics

1	What are you proposing to change from what was last provided for this permit?	Changes to General Characteristics|Permitted Site Name
1.1	What is the proposed permitted site name?	Preserve at Culebra, Units 1,2,3,4,5,6,7,8,14,15
2	What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site?	6552
3	If applicable, what is the Secondary SIC Code(s)?	1521
4	What is the total number of acres that the construction project or site will disturb under the control of the primary operator?	172.83
5	Is the project site part of a larger common plan of development or sale?	Yes
6	What is the estimated start date of the project?	11/10/2020
7	What is the estimated end date of the project?	10/11/2027
8	What is the construction project or site type?	SINGLE-FAMILY RESIDENTIAL
9	Will concrete truck washout be performed at the site?	Yes
10	What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site?	CULEBRA CREEK,MEDIO CREEK
11	What is the segment number(s) of the classified water body(s) that the discharge will eventually reach?	1906|1912
12	Is the discharge into a Municipal Separate Storm Sewer System (MS4)?	Yes
12.1	What is the name of the MS4 Operator?	BEXAR COUNTY AND TXDOT
13	Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?	No
14	I certify that a stormwater pollution prevention plan (SWP3) has been developed, will be implemented prior to construction, and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the general permit TXR150000. Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator.	Yes

Certification

I certify that I am authorized under 30 Texas Administrative Code 305.44 to sign this document and can provide documentation in proof of such authorization upon request.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

1. I am Ricardo Rodriguez JR, the owner of the STEERS account ER090382.
2. I have the authority to sign this data on behalf of the applicant named above.

3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Construction Notice of Change TXR1559DR.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OPERATOR Signature: Ricardo Rodriguez JR OPERATOR

Customer Number:	CN603249053
Legal Name:	KB Home Lone Star Inc.
Account Number:	ER090382
Signature IP Address:	170.85.98.190
Signature Date:	2024-10-10
Signature Hash:	A1337D73AB47E800ADC3DDF75F56A112606FEEC40A724F3A98333298ABFDEEC7
Form Hash Code at time of Signature:	65AE42132A984D2EB8F687CFDFA5B8ED0CF6E802182B37AAE49A458B6BCFEABB

Submission

Reference Number:	The application reference number is 691018
Submitted by:	The application was submitted by ER090382/Ricardo Rodriguez JR
Submitted Timestamp:	The application was submitted on 2024-10-10 at 13:27:55 CDT
Submitted From:	The application was submitted from IP address 170.85.98.190
Confirmation Number:	The confirmation number is 570529
Steers Version:	The STEERS version is 6.82
Permit Number:	The permit number is TXR1559DR

Additional Information

Application Creator: This account was created by Amber Scheler

SWPPP Certification - Authority Signature

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authority Representative Name and Title:

Ricardo Rodriguez

Sr. Construction Manager

KB Home Lone Star, Inc.

Ricardo Rodriguez 10/10/24

Signature Date

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 23, 2023

Re: Confirmation of the Submission of the Construction Delegation of Signatories to Report

Dear Permittee,

This is an acknowledgement that you have successfully completed the application of Construction Delegation of Signatories to Report.

ER Account Number: ER090382

Application Reference Number: 549530

Delegation Application Contact: Ricardo Rodriguez

TPDES Permit(s) Number: TXR15464N, TXR1511HF, TXR15466N, TXR15494D, TXR15465N, TXR15353L, TXR15185K, TXR1522HM, TXR1545HO, TXR1580HX, TXR15217U, TXR15814T, TXR1579HD, TXR15516V, TXR1569IK, TXR1559DR, TXR1539FO, TXR1536BM, TXR1578HD, TXR1566CQ, TXR1560DR, TXR1568IK, TXR1542AP, TXR1592EL, TXR15979W

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Stormwater Processing Center by email at SWPERMIT@tceq.texas.gov or by telephone at (512) 239-3700.

Sincerely,
Stormwater Program
Water Quality Division

Texas Commission on Environmental Quality

Delegation of Signatories - CGP

multiple

Section 1# Site Information

Site Info#: 1

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15464N|UECKER TRACT|RN109164244|UECKER TRACT|SOUTHEAST OF THE INTERSECTION OF FM 1863 AND WILEY ROAD, BULVERDE, TX, 78163

Site Info#: 2

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1511HF|TMM SOMERSET UNIT 1 UNIT 2 GRADING & STOCKPILE|RN111373361|TMM SOMERSET UNIT 1 UNIT 2 GRADING & STOCKPILE|EAST OF THE INTERSECTION OF SOMERSET ROAD AND WATSON ROAD, SAN ANTONIO, TX, 78073

Site Info#: 3

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15466N|OVERLOOK AT MEDIO CREEK UNITS 1 6 AND 7|RN108362484|OVERLOOK AT MEDIO CREEK UNITS 1 2 3 4 AND 5|SOUTHWEST OF THE INTERSECTION OF MARBACH ROAD AND MARBACH OAKS, SAN ANTONIO, TX, 78245

Site Info#: 4

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15494D|FISCHER TRACT UNITS 1A AND 1B|RN109734483|FISCHER TRACT UNITS 1AAND 1B|NORTHEAST OF THE INTERSECTION OF EVANS ROAD AND CIBOLO VISTA, SAN ANTONIO, TX, 78261

Site Info#: 5

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15465N|TEXAS RESEARCH PARK UNITS 1 1AAND 3|RN109163048|TEXAS RESEARCH PARK UNITS 1 1AAND 3|SOUTH AND SOUTHWEST OF THE INTERSECTION OF LAMBDA DRIVE AND OMICRON DRIVE, SAN ANTONIO, TX, 78245

Site Info#: 6

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15353L|CHAMPIONS LANDING|RN110370269|CHAMPIONS LANDING|SOUTHWEST OF THE INTERSECTION OF MARBACH ROAD AND CAGNON ROAD, SAN ANTONIO, TX, 78245

Site Info#: 7

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15185K|PALO ALTO|RN110299971|PALO ALTO UNITS 1A 1B AND 2|SOUTHWEST OF THE INTERSECTION OF SH 16 PALO ALTO ROAD AND MISSION GATE, SAN ANTONIO, TX, 78224

Site Info#: 8

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1522HM|BORALIS TRACT UNIT 1 PHASE 1 AND WEST AKA SPANISH TRAILS|RN111389573|BORALIS TRACT UNIT 1 PHASE 1|SOUTHWEST OF THE INTERSECTION OF IH-410 AND SINCLAIR ROAD, SAN ANTONIO, TX, 78222

Site Info#: 9

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1545HO|THE VILLAS AT PRESIDIO|RN111396743|THE VILLAS AT PRESIDIO|SOUTH OF THE INTERSECTION OF VANCE JACKSON ROAD AND PRESIDIO PARKWAY, SAN ANTONIO, TX, 78249

Site Info#: 10

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1580HX|CORDOVA CROSSING UNIT 2|RN111417663|CORDOVA CROSSING UNIT 2|SOUTHEAST OF THE INTERSECTION OF HIGHWAY 46 AND CORDOVA ROAD, SEGUIN, TX, 78155

Site Info#: 11

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15217U|DEER CREST UNITS 1 2 3 4 AND 5|RN110609658|DEER CREST UNIT 1 AND UNITS 2 AND 3 GRADING|SOUTH OF THE INTERSECTION OF STATE HIGHWAY 46 AND COUNTY ROAD 128 WELTNER ROAD, NEW BRAUNFELS, TX, 78130

Site Info#: 12

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15814T|ESCONDIDO NORTH UNITS 4 7 AND 8|RN110592441|ESCONDIDO NORTH UNIT 4 & 7|NORTHWEST OF THE INTERSECTION OF BINZ-ENGLEMAN ROAD AND TEXAS PALM DRIVE, SAN ANTONIO, TX, 78259

Site Info#: 13

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1579HD|HARLANDALE SUBDIVISION UNIT 1|RN111369914|HARLANDALE SUBDIVISION UNIT 1|NORTHEAST OF THE INTERSECTION OF LOOP 410 ACCESS ROAD AND WALHALLA AVENUE, SAN ANTONIO, TX, 78221

Site Info#: 14

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15516V|KNOX RIDGE PHASE 1 UNITS 1 2 AND 3|RN110687415|KNOX RIDGE PHASE 1 UNIT 1|NORTHWEST OF THE INTERSECTION OF LOOP 1604 AND INTERSTATE HIGHWAY 10, CONVERSE, TX, 78109

Site Info#: 15

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1569IK|MISSION DEL LAGO UNIT 11D|RN111459483|MISSION DEL LAGO UNIT 11D|SOUTHEAST OF THE INTERSECTION OF CLUBHOUSE BLVD. AND ASHWORTH BLVD., SAN ANTONIO, TX, 78221

Site Info#: 16

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1559DR|PRESERVE AT CULEBRA AMENITY CENTER AND UNITS 1 2 3 4 5 AND 6|RN111130233|PRESERVE AT CULEBRA UNIT 1|SOUTHWEST OF THE

	INTERSECTION OF FM 471 CULEBRA ROAD AND KALLISON BEND, SAN ANTONIO, TX, 78253

Site Info#: 17

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1539FO|SADDLE CREEK RANCH SUBDIVISION UNIT 7|RN111270526|SADDLE CREEK RANCH SUBDIVISION UNIT 7|NORTHEAST OF THE INTERSECTION OF COY LANE AND SADDLE TRAIL, CIBOLO, TX, 78108

Site Info#: 18

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1536BM|SHORELINE PARK PHASES 1 2 3 4 AND 6|RN110970217|SHORELINE PARK PHASE 1|WEST OF THE INTERSECTION OF RANGER CREEK ROAD AND OAK ACRES LANE, BOERNE, TX, 78006

Site Info#: 19

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1578HD|SOUTH POINT SUBDIVISION UNIT 1 AND MASS GRADING|RN111369906|SOUTH POINT SUBDIVISION UNIT 1 AND MASS GRADING|SOUTHEAST OF THE INTERSECTION OF LEGEND POND AND KLEIN MEADOWS, NEW BRAUNFELS, TX, 78130

Site Info#: 20

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1566CQ|SOUTHTON COVE UNITS 1 2 2B AND 3 AND OFF-SITE SANITARY SEWER|RN111069357|SOUTHTON COVE UNIT 1 AND OFF-SITE SANITARY SEWER|SOUTHEAST OF THE INTERSECTION OF INTERSTATE HIGHWAY 37 AND SOUTHTON ROAD, SAN ANTONIO, TX, 78223

Site Info#: 21

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1560DR|TERRA BUONA|RN111130241|TERRA BUONA UNITS 1 & 2 & OFFSITE SANITARY SEWER|NORTH OF THE INTERSECTION OF US HIGHWAY 90 AND GROSENBACHER ROAD, SAN ANTONIO, TX, 78245

Site Info#: 22

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1568IK|THE COVE AT WESTOVER HILLS|RN111459475|THE COVE AT WESTOVER HILLS|NORTH OF THE INTERSECTION OF MILITARY DRIVE WEST AND BOBCAT PASS, SAN ANTONIO, TX, 78251

Site Info#: 23

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1542AP|THE PARKLANDS UNITS 1 AND 2|RN110886280|THE PARKLANDS UNIT 1|EAST OF THE INTERSECTION OF ECKHARDT ROAD CR 376C AND FROBOESE LANE, SCHERTZ, TX, 78108

Site Info#: 24

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR1592EL|WILLOW VIEW UNITS 1 2 AND 3|RN111188421|WILLOW VIEW UNIT 1|NORTH OF THE INTERSECTION OF

	BOENIG DRIVE AND GRAYTOWN ROAD, CONVERSE, TX, 78109

Site Info#: 25

Authorization Number, Site Name, Regulated Entity Number, Regulated Entity Name, Physical Location	TXR15979W|WOODSIDE FARMS UNITS 1 2 AND 3 AND FM 20 IMPROVEMENTS|RN110759800|WOODSIDE FARMS UNITS 1 AND 2 AND FM 20 IMPROVEMENTS|NORTHEAST OF THE INTERSECTION OF HIGHWAY 123 AND FM 20, SEGUIN, TX, 78155

Customer (Applicant) Information

How is this applicant associated with this site?	Operator
What is the applicant's Customer Number (CN)?	CN603249053
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	KB Home Lone Star Inc.
Texas SOS Filing Number	800836731
Federal Tax ID	
State Franchise Tax ID	12604657143
State Sales Tax ID	
Local Tax ID	
DUNS Number	
Number of Employees	501+
Independently Owned and Operated?	Yes

Section 1# Delegated Information

Delegation#: 1

1	Position	Project Manager
2	Name	
3	I certify that the person/title above is a duly authorized representative described in 30 TAC 305.128.	Yes

Delegation#: 2

1	Position	Construction Manager
2	Name	
3	I certify that the person/title above is a duly authorized representative described in 30 TAC 305.128.	Yes

Delegation#: 3

1	Position	Site Superintendent
2	Name	
3	I certify that the person/title above is a duly authorized representative described in 30 TAC 305.128.	Yes

Certification

1	I understand that this authorization does not extend to the signing of a Notice of Intent, Notice of Change, or Notice of Termination for obtaining coverage under a stormwater general permit.	Yes

Delegation Application Contact

Person TCEQ should contact for questions about this application:

1	Organization Name	
2	Prefix	
3	First	Ricardo
4	Middle	
5	Last	Rodriguez
6	Suffix	
7	Credentials	
8	Title	Sr. Construction Manager
Mailing Address		
9	Address Type	Domestic
9.1	Mailing Address (include Suite or Bldg. here, if applicable)	4800 Fredericksburg Road
9.2	Routing (such as Mail Code, Dept., or Attn:)	
9.3	City	San Antonio
9.4	State	TX
9.5	ZIP	78229
10	Phone (###-###-####)	2103012899
11	Extension	
12	Alternate Phone (###-###-####)	
13	Fax (###-###-####)	
14	Email	ryrodriguez@kbhome.com

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I certify that I am authorized under 30 Texas Administrative Code 305.44 to sign this document and can provide documentation in proof of such authorization upon request.

1. I am Ricardo Rodriguez JR, the owner of the STEERS account ER090382.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Delegation of Signatories - CGP multiple.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OPERATOR Signature: Ricardo Rodriguez JR OPERATOR

Customer Number:	CN603249053
Legal Name:	KB Home Lone Star Inc.
Account Number:	ER090382
Signature IP Address:	12.215.155.126
Signature Date:	2023-05-23
Signature Hash:	A7E361792E9DB28D82BFC083987D4EE82C8BDA23A6D8A38D7A2DDD1F0C3B006D
Form Hash Code at time of Signature:	255961F7390040549BD4327CAE2385A20B182E520E6AE76E5098A4070B54D0FE

Submission

Reference Number:	The application reference number is 549530
Submitted by:	The application was submitted by ER090382/Ricardo Rodriguez JR
Submitted Timestamp:	The application was submitted on 2023-05-23 at 12:21:10 CDT
Submitted From:	The application was submitted from IP address 12.215.155.126
Confirmation Number:	The confirmation number is 468036
Steers Version:	The STEERS version is 6.64

Additional Information

Application Creator: This account was created by Rita Olguin

TCEQ Large Construction Site Notice

Primary Operator

Large construction sites disturb more than five acres or are part of a larger common plan of development that disturbs more than five acres. Primary operators of large construction sites will fill out this notice. Primary operators will then post this notice at the construction site in a location where it is safely and readily available for viewing by the general public and local, state, and federal authorities. Additional information about the TCEQ Construction Stormwater General Permit may be found on TCEQ's webpage on Assistance Tools for Construction Stormwater General Permits.

Note: You must also develop a Stormwater Pollution Prevention Plan prior to the commencement of construction.

Site-Specific TPDES Authorization Number: TXR15Pending

Primary Operator Name: GENERAL CONTRACTOR TO BE DETERMINED

Contact Name and Phone Number:
Corporate Authority Name:, Phone Number

Project Description:

Physical Location/Description: Preserve at Culebra, Unit 15
southwest of the intersection of Blacktail Crest and Snowy Egret Fall, San Antonio, TX 78253

Estimated Start Date: 10/2024

Projected End Date or Date Disturbed Soils Will Be Stabilized: 10/2027

Location of Stormwater Pollution Prevention Plan (SWP3):
Compliance Resources, Inc. 1103 Williams Drive, Bldg. 2 Georgetown, TX 78628 (Maintained Electronically)

SWPPP Certification - Authority Signature

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authority Representative Name and Title:

Corporate Authority Name:

Corporate Title:

GENERAL CONTRACTOR TO BE DETERMINED

Signature Date

Appendix B - Edwards Aquifer Protection Plan

N/A

Appendix C - Inspection Reports

Appendix D - Site Maps

Appendix E - Dewatering Evaluations

Appendix F - Transfer of Day-to-Day Operational Control

The new primary operator must submit a Notice of Intent at least ten (10) days prior to the transfer of operational control.

Documentation of notifying the new primary operator of their authorization responsibility is located in this appendix.

Name of new primary operator assuming day-to-day operational control	Authorization Number	Operator Scope