

LEGEND

- BOUNDARY / RIGHT OF WAY
- - - - - EXIST. GRADE ELEVATIONS
- TEMPORARY SILT FENCE
- LOC — LOC — LIMITS OF CONSTRUCTION / DISTURBANCE
- [Hatched Box] LIMITS OF TEMPORARY PARKING, STORAGE, SPOILS, AND STAGING AREA
- [Stippled Box] STABILIZED CONSTRUCTION ENTRANCE
- [Cross-hatched Box] ROCK FILTER DAM
- [Square with X] CONCRETE WASHOUT

NOTES:

1. FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE PERMITTED (SEE NOTE #6).
2. INSPECTOR HAS THE AUTHORITY TO ADD AND OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH CITY RULES AND REGULATIONS.
3. THE CONTRACTOR MAY NOT BLOCK, DIRECT, IMPEDE, OR REROUTE PEDESTRIAN AND VEHICULAR TRAFFIC, NOR PLACE A BARRICADE OR OTHER TRAFFIC CONTROL DEVICE IN A RIGHT-OF-WAY, WITHOUT FIRST OBTAINING A TEMPORARY USE OF RIGHT-OF-WAY PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS THAT ARE REQUIRED TO COMPLY WITH THE CITY CODE REGARDING EXCAVATION IN PUBLIC RIGHT-OF-WAY.
5. CONTRACTOR SHALL CLEAN UP SPOILS THAT MIGRATE INTO EXISTING RIGHT-OF-WAY A MINIMUM OF ONCE PER DAY.
6. CONTRACTOR TO INSTALL CHAIN LINK FENCE AT ALL POINTS WHERE LIMITS OF CONSTRUCTION IS SHOWN.
7. ALL STORM WATER LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES MUST PASS THROUGH THE SILT FENCE OR ROCK BERMS.
8. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP OR REVEGETATION MATTING.
9. CONTRACTOR IS RESPONSIBLE FOR THE TIMELY REMOVAL OF TEMPORARY BMP'S ONCE CONSTRUCTION IS COMPLETE.

SEQUENCE OF CONSTRUCTION ACTIVITIES

- * INSTALLATION OF TEMPORARY BEST MANAGEMENT PRACTICES (2.159 ACRES)
- * SITE CLEARING (2.159 ACRES)
- * MASS GRADING (2.159 ACRES)
- * FINAL SITE GRADING (2.159 ACRES)
- * FINAL PAVING OF DRIVE LANES (0.654 ACRES)

LEGAL DESCRIPTION:

LOTS 02-05, BLOCK 14, N.C.B. 10879, SOUTHLAKE (IDZ-2) SUBDIVISION PLAT NO. 20-11800408 VOL. 20002, PAGE 383, D.P.R. IN THE CITY OF SAN ANTONIO, TEXAS

EROSION CONTROL MEASURES	
①	LIMITS OF CONSTRUCTION
②	INSTALL SILT FENCE (2' FROM PROPERTY LINE, REFERENCE SHEET C006)
③	STAGING AREA
④	CONCRETE WASHOUT PIT (REFERENCE SHEET C006)
⑤	STABILIZED CONSTRUCTION ENTRANCE (REFERENCE SHEET C006)
⑥	ROCK FILTER DAM AS REQUIRED (REFERENCE SHEET C006)

PRE-CONSTRUCTION RUNOFF COEF. "C"	POST-CONSTRUCTION RUNOFF COEF. "C"
0.47	0.65

AREA DISTURBED (ACRES)	AREA UNDISTURBED (ACRES)	TOTAL AREA (ACRES)
2.159	2.01	4.169

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FOR PERMIT REVIEW ONLY

PLAT NO. 20-11800408
 SOUTHLAKE - PHASE 2 & 3
 STORM WATER POLLUTION PREVENTION PLAN

REV	DATE	DESCRIPTION	BY

DESIGNED BY:
 DRAFTED BY:
 CHECKED BY:

SHEET
C005
 OF 25

Date: 01/04/2023 8:01am User: R. J. Jones
 Path: \\server\projects\20-11800408\Drawings\20-11800408-01-Storm Water Pollution Prevention Plan.dwg
 Sheet: 01 of 25
 Scale: As Shown
 Plot: 01/04/2023 8:01am User: R. J. Jones

SEDIMENTATION AND EROSION CONTROLS

A. DESIGN CRITERIA

- Fences are to be constructed along level contours.
- The ends of the fence shall be turned upstream to prevent bypass of stormwater.
- Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of one foot.
- The toe of the silt fence shall be trenched in with a spade or mechanical trencher, so that the downslope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g. pavement), weight fabric flap with washed gravel on uphill side to prevent flow under fence.
- 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.
- 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 shall be a 6" double overlap, securely fastened where ends of fabric meet.
- Inspection shall be made weekly or after each rainfall. Repair or replacement shall be made promptly as needed.
- Accumulated silt shall be removed when it reaches a depth of 6 inches. The silt shall be disposed of in an approved site and in such a manner as to not contribute to the additional siltation.

B. TEMPORARY DIVERSION DIKE

- Maximum depth of flow at the dike shall be 1 foot.
- Side slopes of the diversion dike shall be 3:1 or flatter.
- Minimum width of the embankment at the top shall be 2 feet.
- Minimum embankment height shall be 18 inches as measured from the toe of slope on the upgrade side of the berm.
- The dikes shall remain in place until all disturbed areas which are protected by the dike are permanently stabilized unless other controls are put into place to protect the site.
- Compacted earth dikes require stabilization immediately upon placement so as not to contribute to the erosion problem they are addressing.
- All diversion dikes shall have positive drainage to an outlet.
- Dikes must be inspected on a regular basis to determine if silt is building up behind the dike, or if erosion is occurring on the face of the dike. Silt shall be removed in a timely manner. If erosion is occurring on the face of the dike, the slopes of the face shall be stabilized.

C. INTERCEPTOR SWALE

- Maximum depth of flow in the swale shall be 1 foot.
- The minimum bottom width of the swale shall be 2 feet.
- Side slopes of the swale shall be 3:1 or flatter.
- Minimum design channel freeboard shall be 6 inches.
- Swales must maintain positive grade to an acceptable outlet.
- Interceptor swales must be stabilized immediately upon excavation so as not to contribute to the erosion problem they are addressing.
- All trees, brush, stumps, obstructions and other material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
- All earth removed and not needed in construction shall be disposed of in an approved spoils site.
- Inspection must be made after each rain event to locate and repair any damage to the channel or to clear debris or other obstructions so as not to diminish flow capacity. Damages which result from normal construction activities shall be repaired at the end of each work day.

D. HAY BALE DIKE

- Each hay bale shall be placed into an excavated trench having a depth of 4 inches and a width just wide enough to accommodate the bales themselves.
- Hay bales shall be installed in such a way that there is no space between to allow for any kind of seepage.
- Individual bales shall be held in place by no less than two wood or steel stakes driven a minimum distance of 6 inches into undisturbed ground, with the first stake driven at an angle toward the previously installed bale.
- The ends of the dike shall be turned upgrade to prevent bypass of stormwater.
- Inspection shall be weekly or after each rainfall event and repair or replacement shall be made promptly as needed by the contractor.
- When silt reaches a depth of 6 inches, it shall be removed and disposed of in an approved site.
- Hay bales shall be replaced if there are signs of degradation such as straw located downstream from the bales, structural deficiencies due to rotting straw in the bale or other signs of deterioration. Sediment should be removed from behind the bales when it reaches a depth of approximately 6 inches. If the bales become clogged, they should be replaced immediately.

E. SANDBAG BERM

- Minimum height shall be 18 inches.
- Minimum width of the berm shall be 18 inches at the top and 48 inches measured at the bottom.
- Maximum side slopes shall be 2:1.
- The ends of the berm shall be turned upgrade or shall tie into natural grades to prevent bypass of stormwater.
- Sandbags should be stacked in at least three rows abutting each other, and in staggered arrangement.
- Inspections should be made on a daily basis and after each rain event. The sandbags shall be reshaped or replaced as needed during the inspection. Silt should be removed when it reaches a depth of six (6) inches.

F. STONE OUTLET SEDIMENT TRAP

- Minimum width of the embankment at the top shall be 3 feet perpendicular to the flow.
- Minimum embankment slope shall be 3:1.
- Maximum embankment height shall be 2 feet as measured from the toe of slope to the crest of the stone outlet. The height of the compacted earth embankment shall be one foot higher than the crest of the outlet.
- Sediment shall be removed and the area directly behind the berm shall be graded to its original dimensions at such point when the capacity of impoundment has been reduced to one-half of its original storage capacity.
- The stone outlet structure should be inspected frequently and after each major rain event to check for clogging of the void spaces between stones. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced.

G. SEDIMENT BASIN

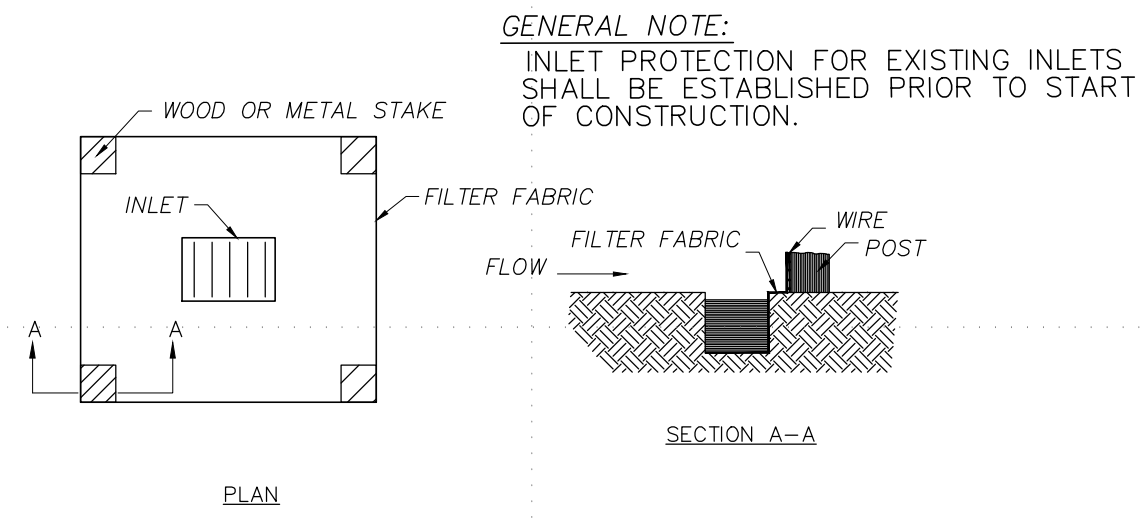
- Maximum drainage area contributing to the basin shall be 100 acres.
- Deposited sediment shall be removed when the storage capacity of the basin has been depleted by one-half.
- Minimum width of the embankment at the top shall be 8 feet.
- Minimum embankment slope shall be 3:1.
- Sediment shall be removed and the basin shall be regraded to its original dimensions. The removed sediment shall be stockpiled or redistributed in areas which are protected from erosion.
- The basin outlet structure and emergency spillway (if present) should be checked frequently and after each major rain event to check for damage.

H. STABILIZED CONSTRUCTION EXIT

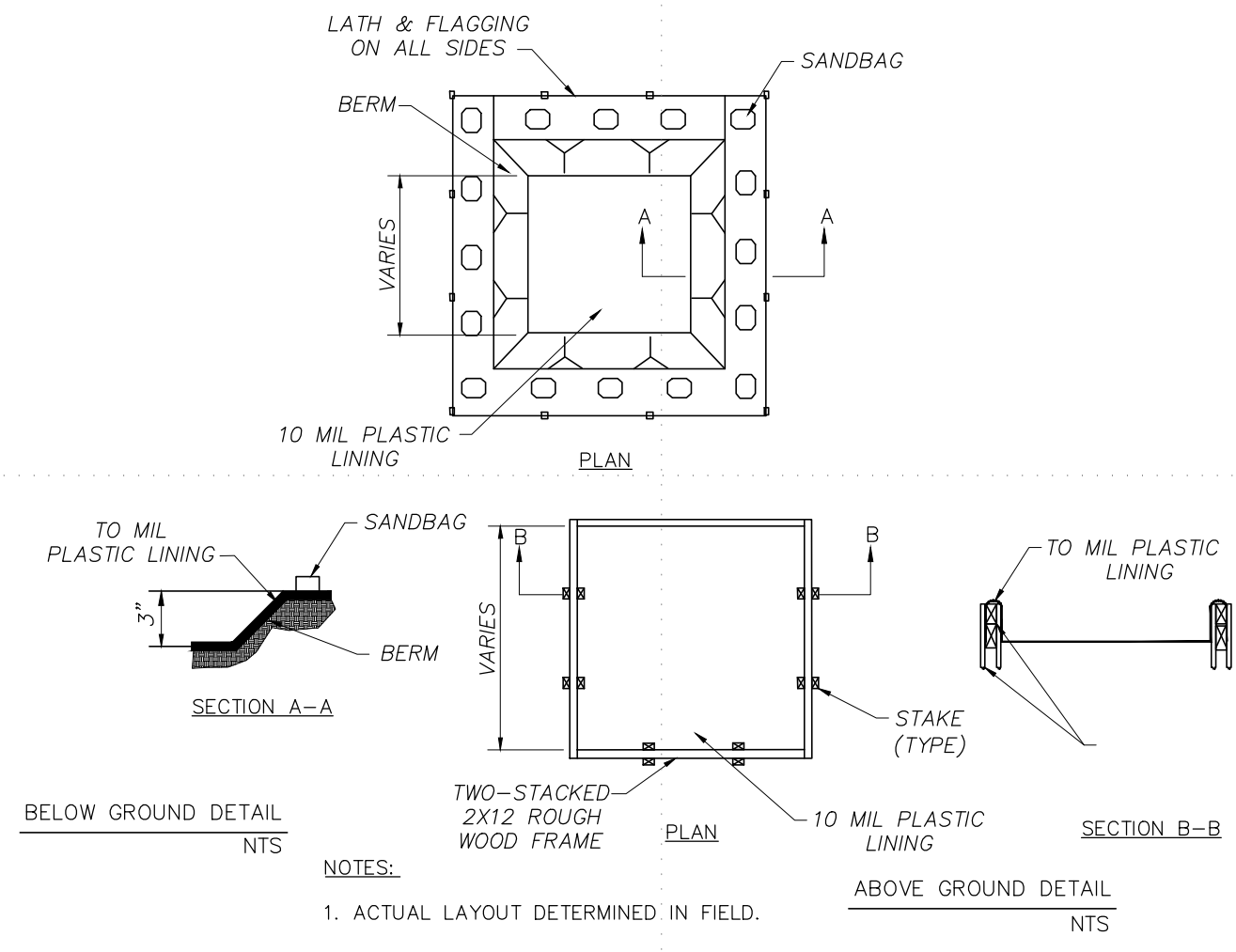
- Stone size - 3 to 5 inches crushed rock.
- Length - as effective, but not less than 50 feet, unless depth of lot is less than 150 feet from edge of pavement where length must only be 30 feet.
- Thickness - not less than 8 inches.
- Width - not less than full width of all points of ingress or egress.
- Washing - when necessary, wheels shall be cleaned to remove sediment prior to entrance onto public roadway. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
- Maintenance - the entrance shall be maintained in condition which will prevent tracking or flowing of sediment onto public roadways. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public roadway, must be removed immediately.
- Drainage - entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

ADDITIONAL NOTES:

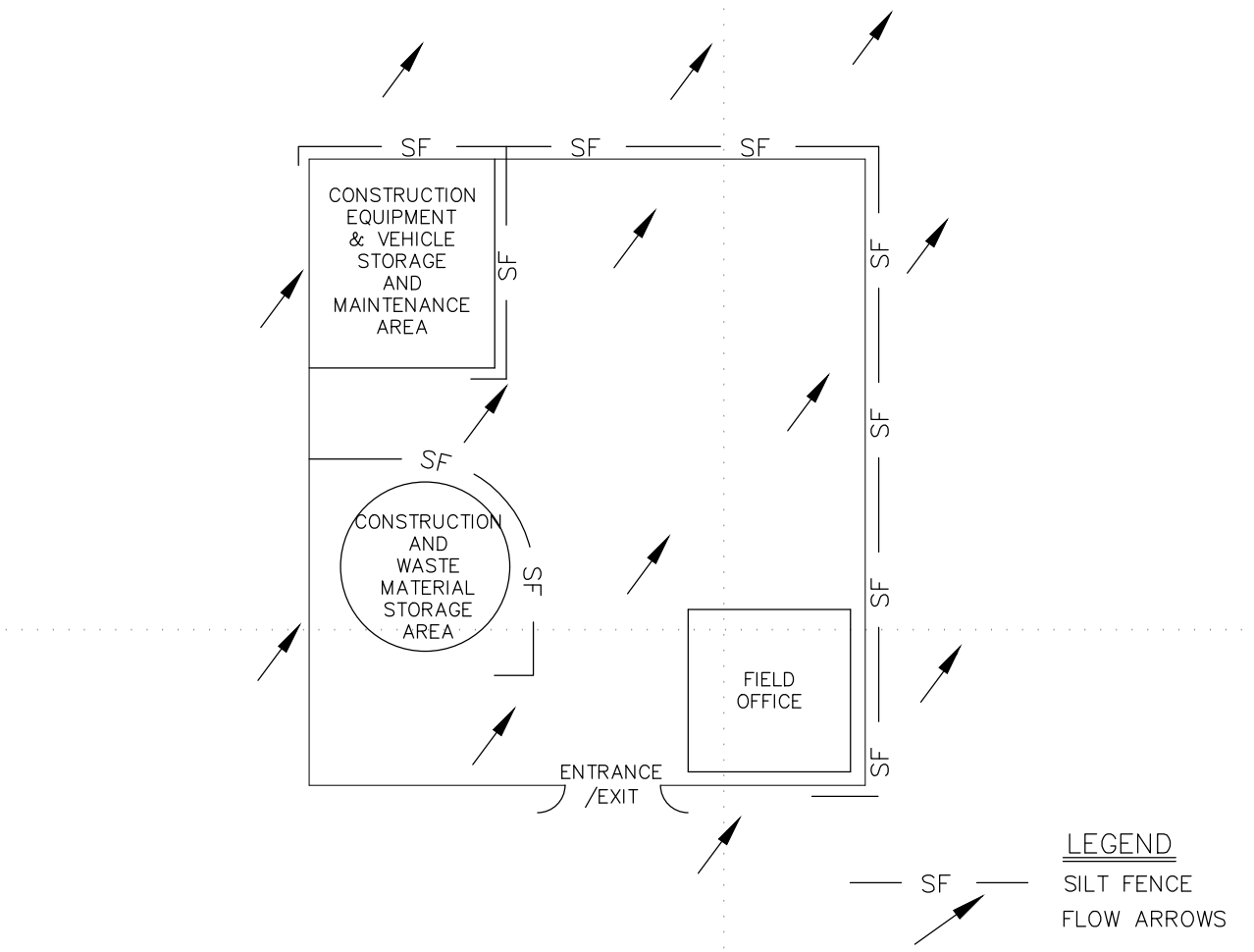
- Upon completion of construction all disturbed areas shall be revegetated to 70% of existing conditions in accordance with the SWPPP and TDES requirements.
- This project will not use any off-site material, waste/borrow/fill, or equipment storage areas.
- This site is not located adjacent to any surface waters.
- This site will not have any locations where storm water discharges directly to a surface water body.



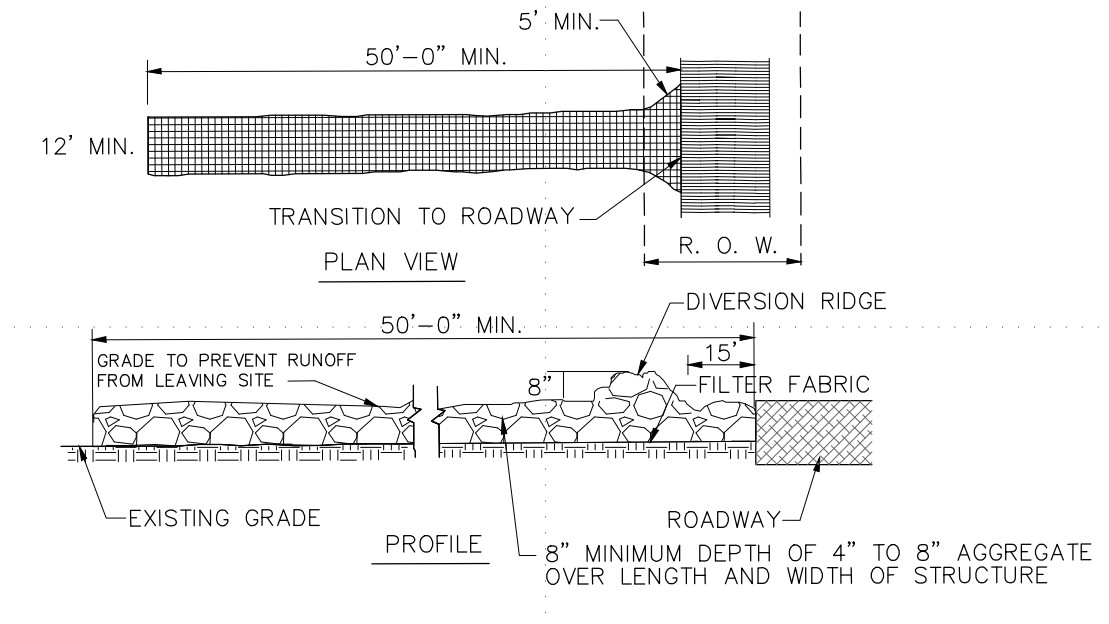
3 INLET PROTECTION
SCALE: N.T.S.



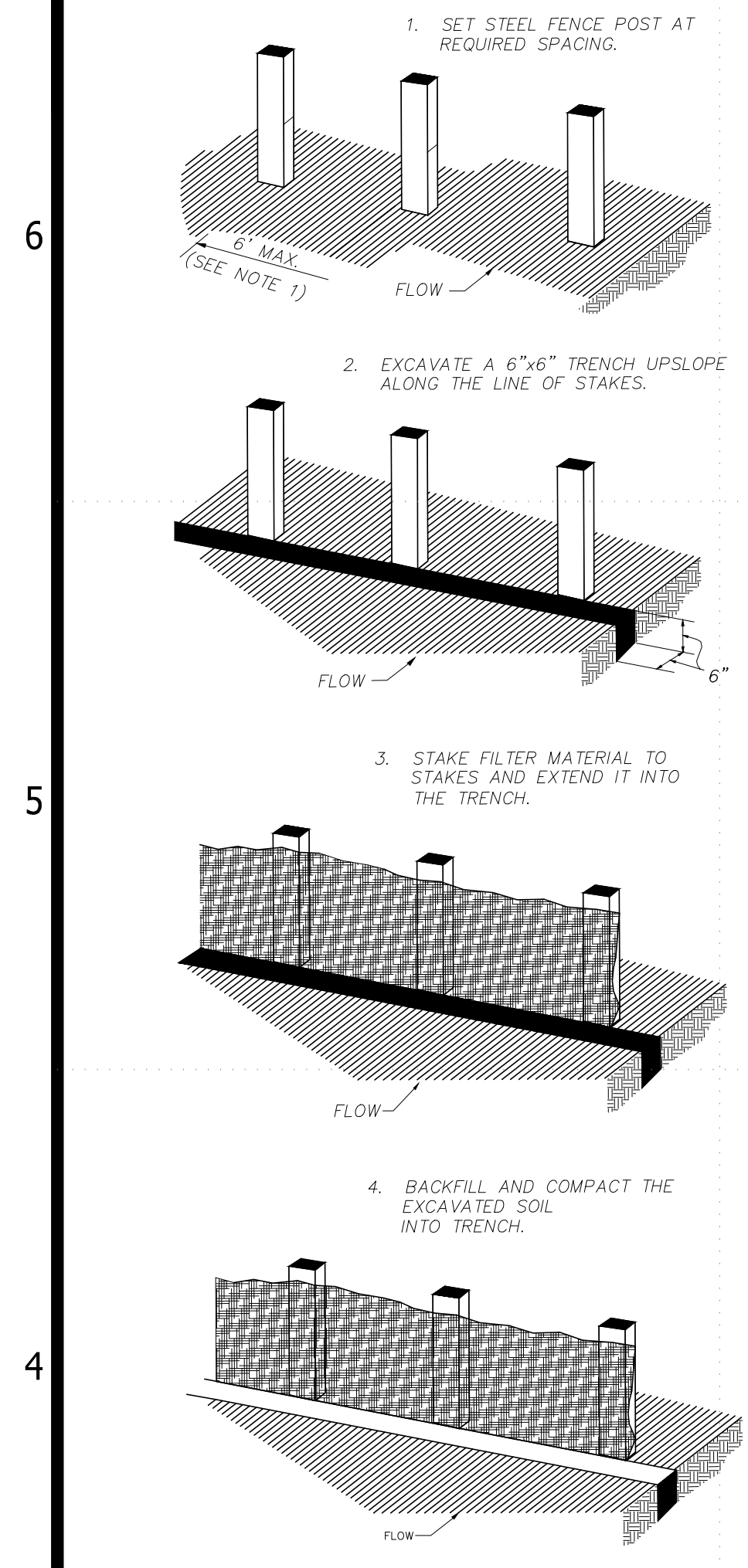
4 CONCRETE WASHOUT AREA
SCALE: N.T.S.



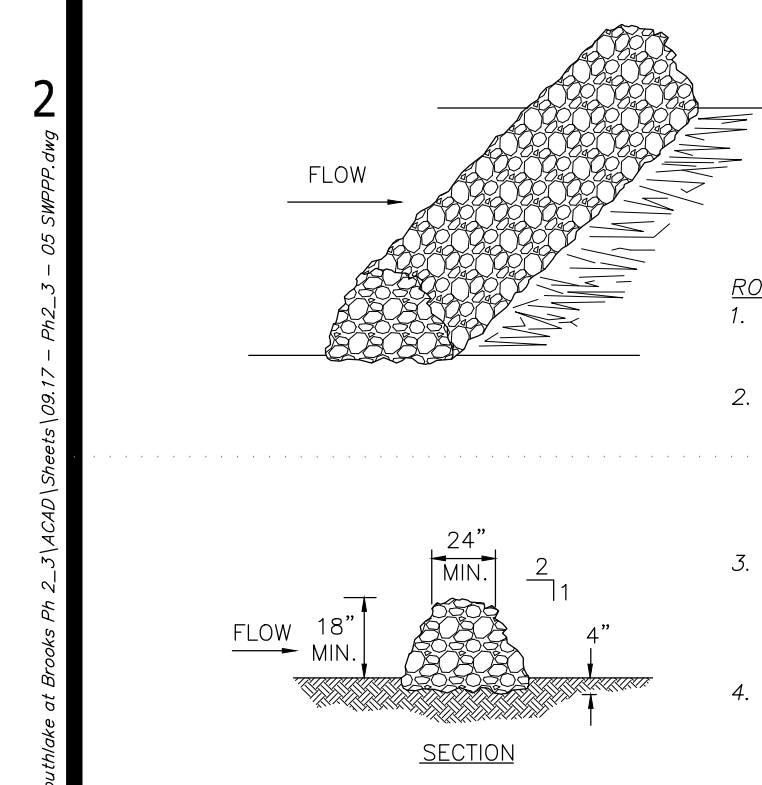
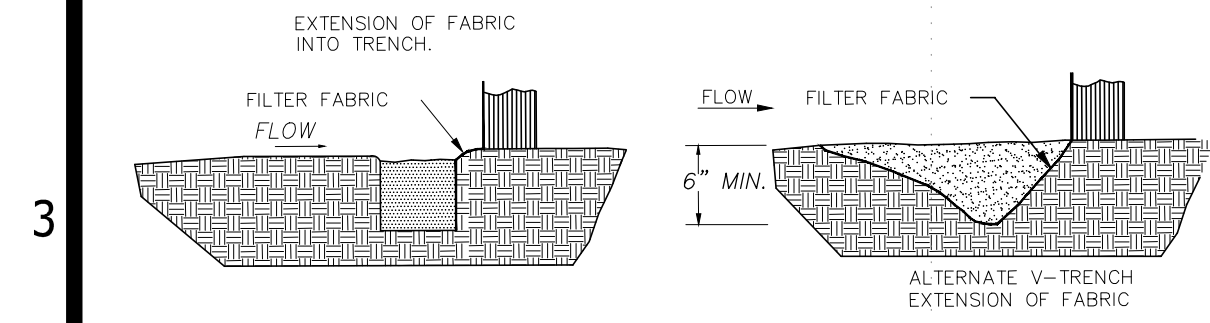
6 CONSTRUCTION STAGING AREA DETAIL
SCALE: N.T.S.



2 STABILIZED CONSTRUCTION EXIT
SCALE: N.T.S.



5 SILT FENCE
SCALE: N.T.S.



5 ROCK FILTER DAM
SCALE: N.T.S.

- ROCK BERM NOTES:
- USE ONLY OPEN GRADED ROCK 100 to 200 mm (4 to 8") DIAMETER FOR STREAM FLOW CONDITIONS. USE OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR OTHER CONDITIONS.
 - THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE). ROCK BERMS IN CHANNEL APPLICATIONS SHALL BE ANCHORED FIRMLY INTO THE SUBSTRATE A MINIMUM OF 150 mm (6") WITH T-POSTS OR WITH 15M OR 20M (#5 OR #6) REBAR, WITH MAXIMUM SPACING APART OF 1.2 m (48") ON CENTER.
 - THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
 - WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SILTATION PROBLEM.
 - DAILY INSPECTION SHALL BE MADE ON SEVERE-SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 150 mm (6").
 - WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

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FOR PERMIT REVIEW ONLY
PLAT NO. 20-11800408
SOUTHLAKE - PHASE 2 & 3
STORM WATER POLLUTION PREVENTION PLAN DETAILS

REV	DATE	DESCRIPTION	BY

DESIGNED BY:
DRAFTED BY:
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Date: 01/04/2025 8:01am User: R. Plagens
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