

STAR EXCAVATION LLC.

THE FAMILY RANCH RECLAMATION PROJECT

LEE'S SUMMIT, MISSOURI

GBA
architects
engineers

9801 Renner Boulevard
Lenexa, Kansas 66219
913.492.0400
www.gbateam.com

Star Excavation LLC.
The Family Ranch Reclamation Project

Original 2013 Permit: 14.65 Acres
(Permit : #PRPWLD20130577)
Expanded 2015 Permit: 26.53 Acres
Total Area: 41.18 Acres
Expanded 2021 Permit: 8.00 Acres
Total Area: 49.18 Acres

General Notes:

1. Tree Locations and Sizes are Approximate and are for Reference Only.
2. Property dimensions and bearings shown were taken from an Alto/Acsm Land Title Survey prepared by Engineering Solutions, October 16th, 2012 and have not been checked by GBA.
3. Any construction stormwater discharges from the project site shall be treated with appropriate BMPs in accordance with the project SWPPP and Missouri State Operating Permit MO-G491279.
4. Oil / Gas wells are not present on site per Missouri Department of Natural Resources.
5. The contractor shall contact the City's Development Services Engineering Inspection to schedule a pre-construction meeting with an inspector prior to any land disturbance work at (816) 969-1200.
6. Suitable Bat Tree Review was performed on March 28th, 2022 by GBA.

FLOODPLAIN NOTE:

According to FEMA Flood Insurance Rate Map (FIRM) Community Panel No. 29095C0408G, effective Date 1/20/17, and Panel No. 29095C0416G, effective Date 1/20/17, the tract lies outside of the Areas Designated as Flood Hazard Areas.

UTILITY CONTACTS

Sanitary Sewers:
Mr. Jeff Thorn, PE
City of Lee's Summit Water Utilities
1200 SE Hamblen Road
Lee's Summit, MO 64063
(816) 969-1900
email: jeff.thorn@cityofLS.net

Gas:
Mr. Donnie Richards
Missouri Gas Energy
7500 E 35th Terrace
Kansas City, MO 64129
(816) 472-9464
Fax (816) 472-3488
email: donnie.richards@sug.com

Cable Television:
Mr. Greg Thomas
Time Warner Cable
8221 W. 119th Street
Overland Park, KS 66213
(913) 643-1950
email: greg.thomas@twcable.com

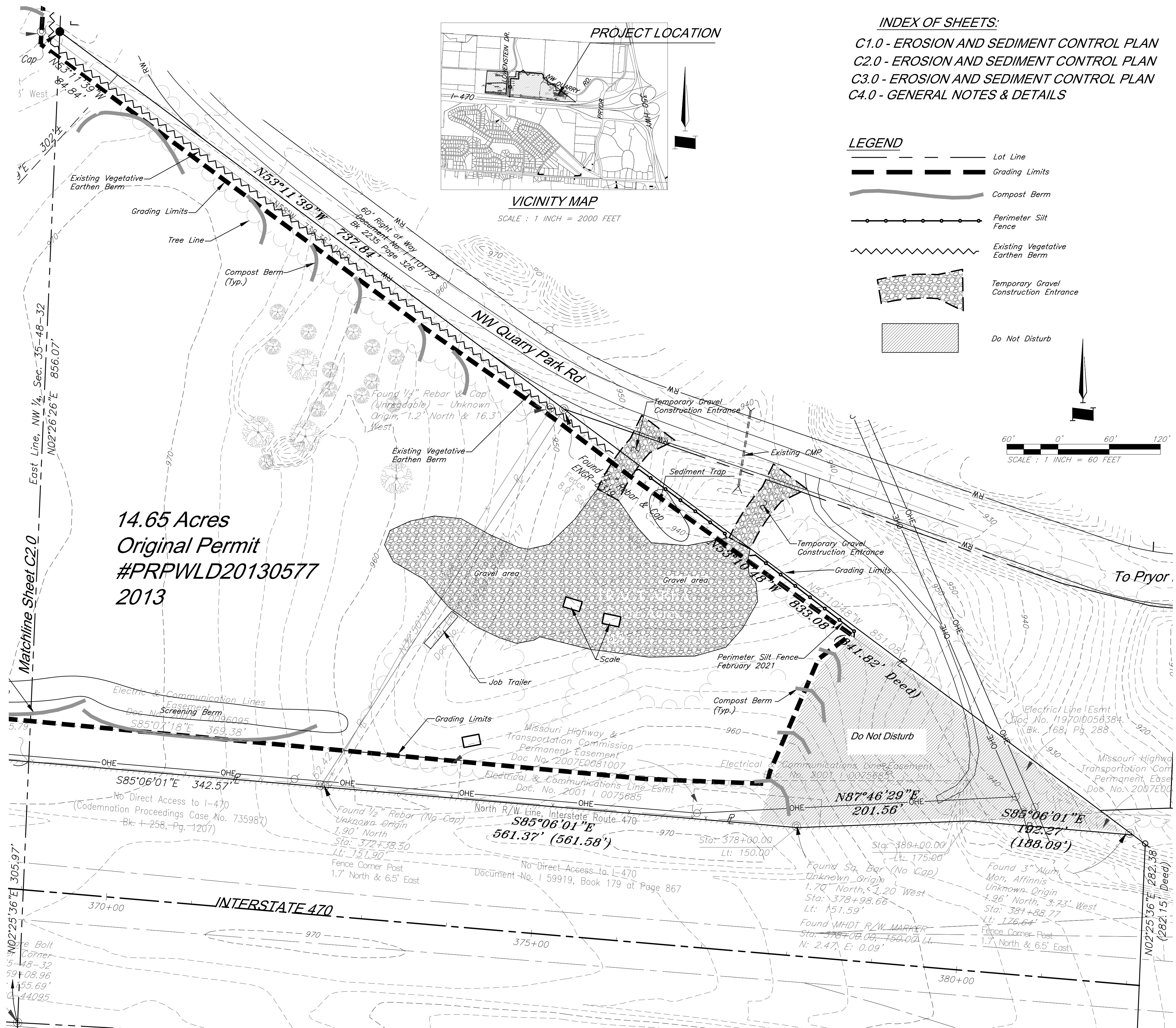
Water:
Mr. Jeff Shook
Little Blue Valley Sewer District
21101 East 78 Highway
Independence, MO 64057
(816) 285-1522
email: jshook@lbvwsd.net

Electric Service:
Mr. Nathan Michael
Kansas City Power & Light
P.O. Box 418679
Kansas City, MO 64141
(816) 220-5210
Fax (816) 245-3623
email: Nathan.Michael@kcpl.com

Missouri One Call System 1-800-344-7483 (DIG-RIITE)

DEVELOPED AND OWNED BY:
PARAGON STAR LLC 801 NORTHWEST
COMMERCE CENTER LEE'S SUMMIT,
MISSOURI 64086
PHONE: (816) 802-6801
CONTACT: Mr. Flip Short
EMAIL: fshort@legacytouch.com

PREPARED & SUBMITTED BY:
GEORGE BUTLER ASSOCIATES, INC.
9801 RENNER BOULEVARD
LENEXA, KANSAS 66219
PHONE: 913-492-0400
FAX: 913-577-8312
CONTACT: BRAD BURTON P.E.
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INDEX OF SHEETS:

- C1.0 - EROSION AND SEDIMENT CONTROL PLAN
- C2.0 - EROSION AND SEDIMENT CONTROL PLAN
- C3.0 - EROSION AND SEDIMENT CONTROL PLAN
- C4.0 - GENERAL NOTES & DETAILS

LEGEND

- Lot Line
- Grading Limits
- Compost Berm
- Perimeter Silt Fence
- Existing Vegetative Earthen Berm
- Temporary Gravel Construction Entrance
- Do Not Disturb

PROPOSED FACILITY FOR:
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I-470 & PRYOR ROAD
LEE'S SUMMIT, MISSOURI



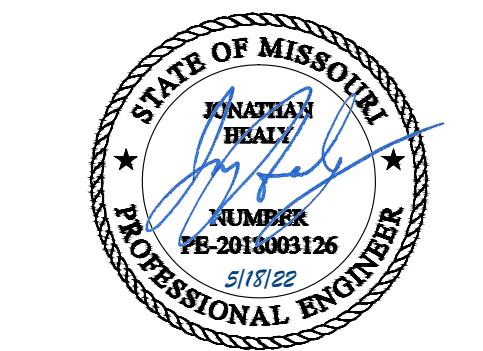
REVISION
9-10-13 Added Details of Phase
1A Per Meeting with City.

PROJECT NUMBER
12720.01
DATE
03/21/13 10/08/21
09/10/13
10/22/15
02/04/21
08/16/21

DESIGNED
DWG
DRAWN
DWG/JWM
REVIEWED
BBB
SHEET TITLE
EROSION AND SEDIMENT
CONTROL PLAN

SHEET NUMBER
C1.0

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2022



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DWC

DRAWN
DWC/JWM

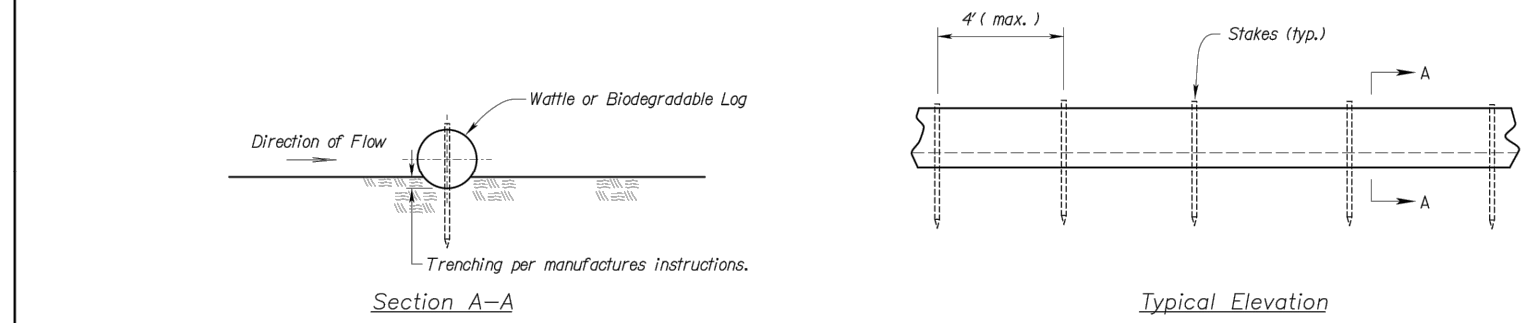
REVIEWED
BDB

SHEET TITLE
EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER
C2.0

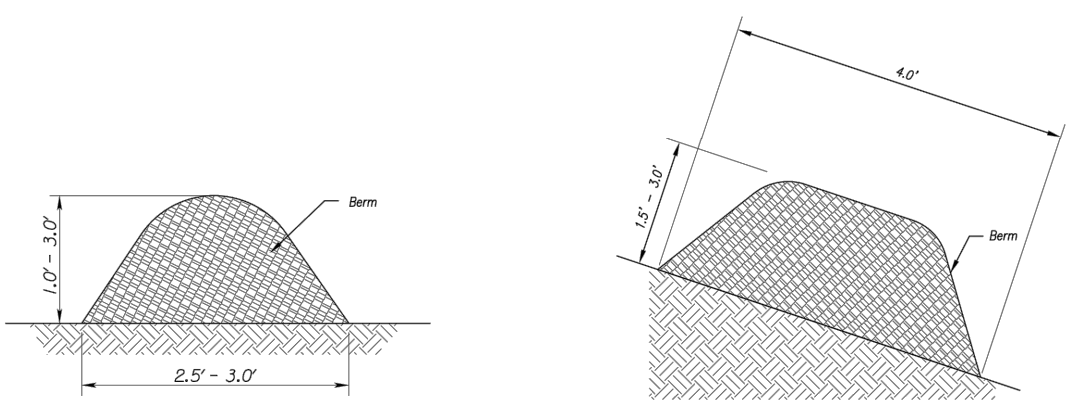
Sediment Control General Notes:

- The construction covered by these plans shall conform to all applicable standards and specifications of the Lee's Summit design and construction manual.
- Except where necessary to install erosion and sediment control devices, clearing activities shall not begin until all erosion and sediment control devices have been installed.
- The contractor shall provide for control of surface erosion and sediment deposition during all phases of construction and until the owner accepts the work as complete. The contractor shall provide temporary seeding, berms, silt fence, sediment traps or other means to prevent sediment from reaching the public right-of-way, streams or adjacent property. In the event the prevention measures are not effective, the contractor shall remove any debris sediment and restore the right-of-way and adjacent property to it's original or better condition.
- All land disturbances, including residential and commercial development projects, shall provide adequate erosion control to protect public streets, public storm sewer systems, adjacent property, streams, and surface waters from being polluted with sediment and silt.
- Contractor shall keep the entire project site free of debris and trash at all times. Contractor shall execute work using methods that minimize excessive noise or dust emissions. Contractor shall provide methods, means and facilities to prevent contamination of soil or water from discharge of potential construction site pollutants (i.e., diesel fuel, port-a-potty waste, paints, etc.)
- Areas are not noted on the plan sheets for stockpiling of materials. Soil stockpiles shall be graded such that they do not exceed 3:1, mulch berms or another effectively equal best management practice (bmp) shall be installed completely around the down gradient perimeter of the soil stockpiles and the disturbed areas shall be seeded within 14 days once construction activities on them cease. Gravel material stockpiles shall have mulch berms or another effectively equal bmp installed completely around the down gradient perimeter of the gravel material stockpile.
- Following stripping operations, the contractor shall remove existing topsoil and stockpile the material in an approved area. Stockpiles shall be stabilized by temporary seeding and mulch berms (see note 6).
- Soil stabilizing erosion control measures as detailed in sections 215.3 of APWA shall be implemented within 14 calendar days after construction activities have temporarily or permanently ceased on any portion of the project site.
- Contractor must install and maintain the erosion and sediment control measures shown on these plans. If the engineer determines that the installation or the maintenance is inadequate, the contractor must immediately correct at his expense. If it is determined that additional erosion and sediment control measures are needed the contractor will be directed to install and maintain those measures.
- All mulch berms shall be left in place following final stabilization of the project site.
- Erosion control BMPs shall remain in place until the watershed treated by each BMP has been stabilized.



- Notes for Wattles and Biodegradable Log Slope Protection:**
- The slope barriers shall be placed along contour lines, with a short section turned upstream at each end of the barrier. The maximum length of the log barrier shall not exceed 200 feet, and the barrier ends need to be staggered.
 - Install wattle and biodegradable logs per manufacturer's instructions.
 - Spacing of stakes per manufacturer's instructions with 4" max. spacing. Length of stakes shall be a minimum of 2 times the diameter of the log with minimum of 24".

WATTLES AND BIODEGRADABLE LOG

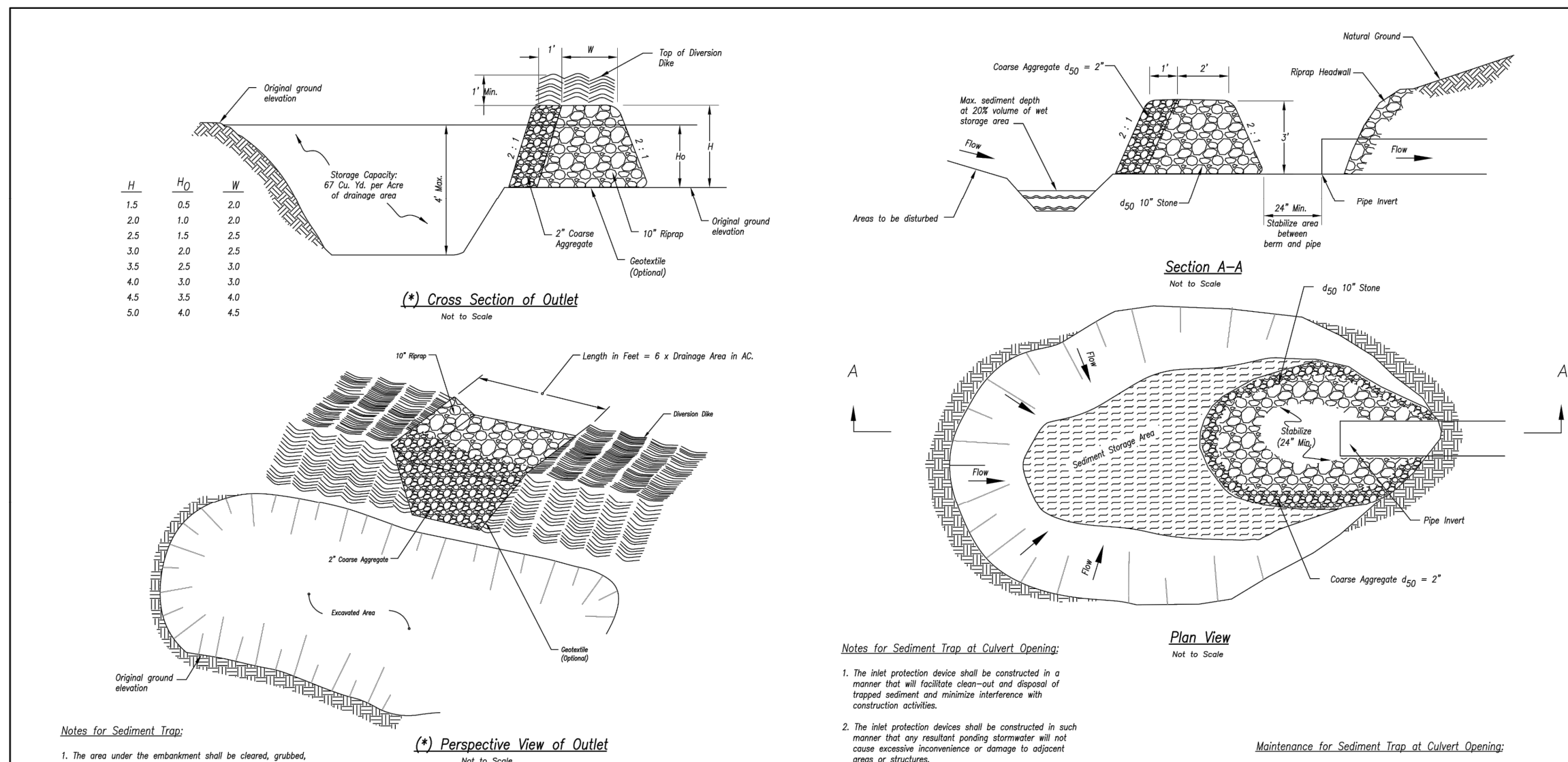


- Notes for Mulch and Compost Filter Berm:**
- The sediment control berm shall be placed uncompact in a window at locations shown on the plans or as directed by the engineer.
 - Parallel to the base of the slope, or around the perimeter of other affected areas, construct a 1 to 3 foot high by 2.5 to 3 foot wide berm (see Figure 1). For maximum water treatment ability, the filter media construct is 1.5 to 3 foot high riprap filter berm that is a minimum of 4 feet wide at the base (see Figure 2). In extreme conditions, or where specified by the engineer, a second berm shall be constructed at the top of the slope. Engineer will specify berm requirements.
 - If berm is to be left as permanent or part of the natural landscape, the compost berm may be seeded using appropriate for permanent vegetation.
 - Do not use compost or wood mulch berms in any runoff channels or concentrated flow areas.
 - Wood mulch shall consist of tree and shrub debris resulting from clearing and grubbing and shall be ground by the mechanical means such as a chipper, hammermill, disk grinder or other approved method. Mulch being come with a maximum width of 2" and a maximum length of 10".

- Maintenance for Mulch and Compost Filter Berm:**
- Berm shall be reshaped and material added as necessary to maintain function and dimensions.
 - Breaches in the berm shall be repaired promptly.

MULCH OR COMPOST FILTER BERMS

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
WATTLES/Biodegradable LOG	STANDARD DRAWING NUMBER ESC-04
MULCH/COMPOST FILTER BERM	ADOPTED 10/24/2016



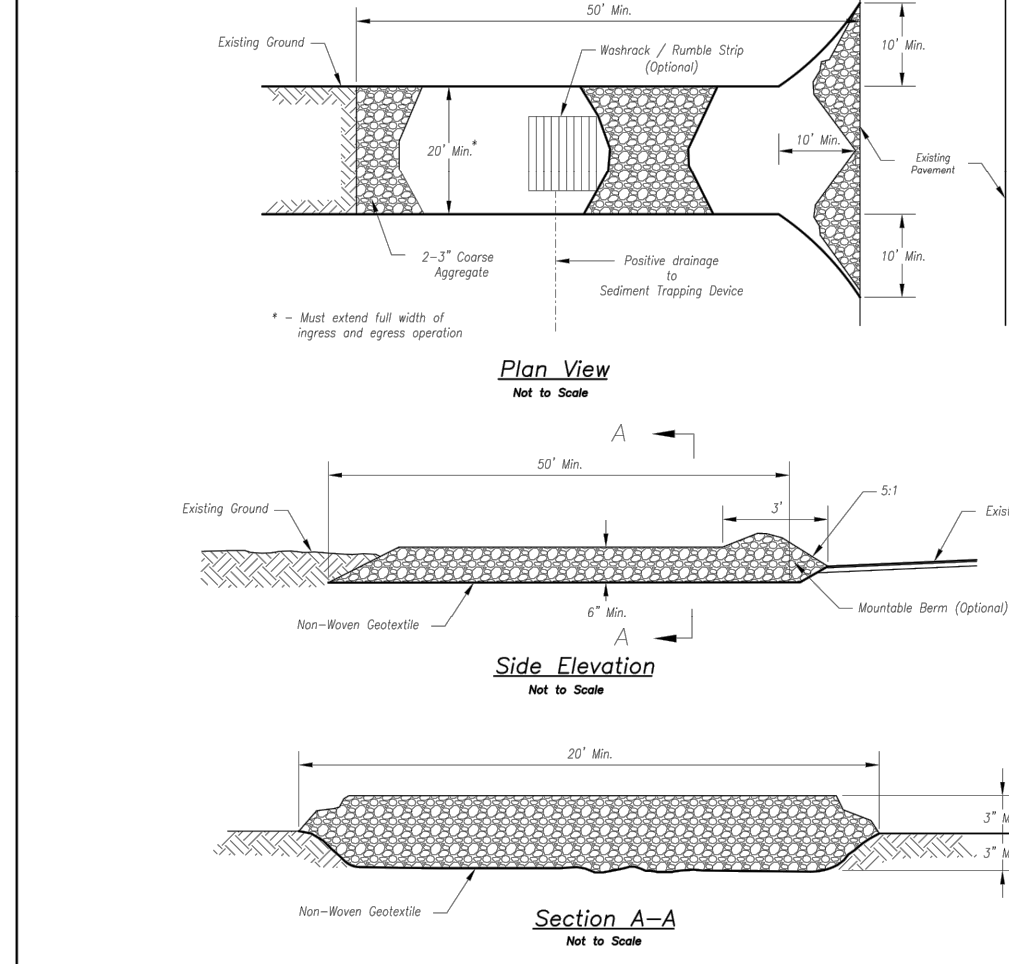
Notes for Sediment Trap:

- The area under the embankment shall be cleared, graded, and stripped of any vegetation and root mass.
- Fill material for the embankment shall be free of roots or other woody vegetation, organic material, large stones, and other debris/obstacles. The embankment should be compacted in 6-inch layers by tamping with construction equipment.
- The surface embankment shall be stabilized immediately after installation.
- Construction operations shall be carried out to minimize erosion and water pollution.
- The structure shall be removed and the area stabilized when the sediment storage area has been stabilized.
- All cut and fill slopes shall be 2H:1V or flatter, except for sediment and storage areas which may be at a maximum 1H:1V grade.

SEDIMENT TRAP

SEDIMENT TRAP AT CULVERT OPENING

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
SEDIMENT TRAPS	STANDARD DRAWING NUMBER ESC-08
	ADOPTED 10/24/2016



- Notes for Concrete Washout:**
- Concrete washout areas shall be installed prior to any concrete placement or slab.
 - Concrete washout area shall include a flat subsurface pit sized to the volume of concrete to be placed on site. The region leading out of the subsurface pit shall be 3:1 the volume leading out of the subsurface pit and the 3:1 the volume leading out of the subsurface pit shall be 3:1 the volume leading out of the subsurface pit.
 - Vehicle loading control is required at the access point to all concrete washout areas.
 - Spills shall be placed at the construction site entrance, washout area and stabilized as soon as possible (within the limits) of the concrete washout area(s) to prevent concrete truck and entry into.
 - A one-phase impervious liner may be required using the bottom and sides of the subsurface pit in which or groutly area.

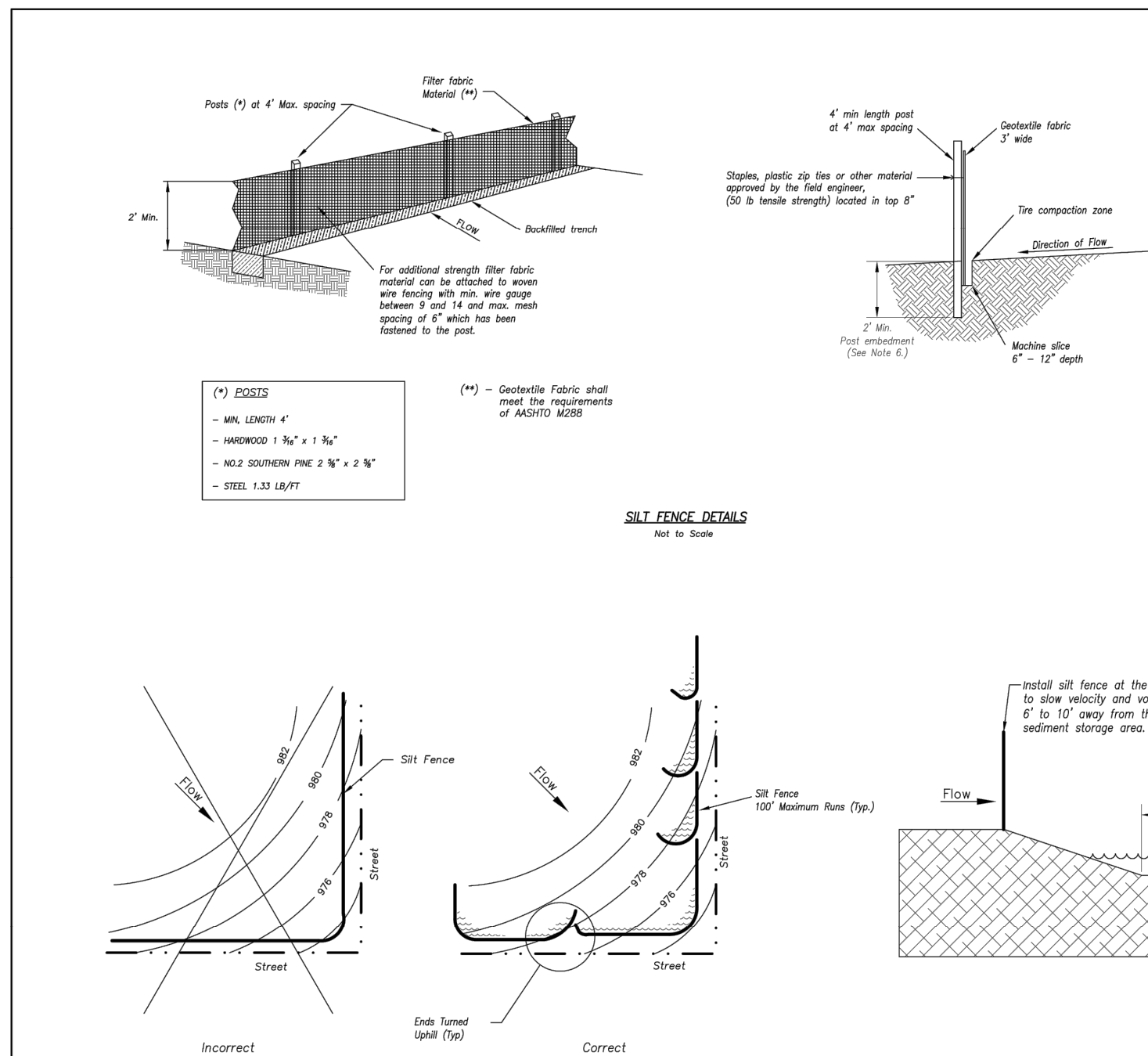
Maintenance for Concrete Washout:

- Concrete washout materials shall be removed once the materials have been placed in approximately 24 hours.
- Concrete washout areas shall be enlarged as necessary to maintain capacity for washed concrete.
- Concrete washout water, waste, phase of concrete and all other debris in the subsurface pit shall be transported from the pit into a water-tight container and disposed of properly.
- Concrete washout areas shall remain in place until all concrete for the project is placed.
- When concrete washout areas are removed, materials shall be filled with suitable compacted sand and gravel, any displaced area associated with the washout, maintenance, repair or removal of the concrete washout areas shall be stabilized.

CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT	STANDARD DRAWING NUMBER ESC-01
	ADOPTED 10/24/2016



Notes:

- In order to contain water, the ends of the silt fence must be turned up (Figure A).
- Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
- Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
- Attach fabric to upstream side of post.
- Install posts a minimum of 2' into the ground.
- Tranching will only be allowed for small or difficult installation, using string machine control as necessary used.

Maintenance:

- Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
- Repair as necessary to maintain function and structure.

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
SILT FENCE	STANDARD DRAWING NUMBER ESC-03
	ADOPTED 10/24/2016

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