

1/2017 2:17:26 PM 2017/17016 - Lee's S Station 3/1 - Drawir

### **EROSION CONTROL NOTES:**

- REPAIRED. COPIES OF LOG SHALL BE FURNISHED TO THE ENGINEER.
- PROGRESSES WITH APPROVAL OF ENGINEER.
- 3. THE CONTRACTOR SHALL COMPLY WITH THE SOIL EROSION CODE FOR THE CITY OF LEE'S SUMMIT, MISSOURI.
- STABILIZED TO A NON-EROSIVE STATE WITH ESTABLISHED GRASS OR AS DIRECTED BY THE ENGINEER.
- PREPARATION MAY BY REQUIRED TO PROPERLY INSTALL SUCH MEASURES.
- TO 70% COVERAGE.
- REPLACEMENT.
- CONTRACTOR'S RESPONSIBILITY.
- OF EXPOSURE OF UNPROTECTED SOIL AND OTHER CONSTRUCTION MATERIALS TO RAINFALL

## **STORM WATER MANAGEMENT - Sediment Control**

- SATISFACTORY, AND UNTIL ALL TEMPORARY PRACTICES HAVE BEEN PROPERLY REMOVED.
- STRUCTURES IN A MANNER TO MAXIMIZE STORM WATER CONTROL.
- SITE.

#### CONSTRUCTION SPECIFICATIONS

- 5. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

## FINAL RESTORATION PLAN CONSTRUCTION SEQUENCE:

- . REMOVE ANY BMP'S THAT WERE CONSTRUCTED WITH THE PRE-CLEARING PLAN THAT ARE NOT SHOWN ON THIS SHEET.
- STABILIZATION IS PLACED AND VEGETATIVE COVER IS ESTABLISHED OVER THE REMAINDER OF THE SITE.
- CONTROLS.
- PRACTICABLE. ANY SUCH MODIFICATION SHALL REQUIRE THE PRIOR APPROVAL OF THE PERMITTING AUTHORITY.

THE RETENTION OF ACCESS CONTROLS AND SEDIMENT CONTROLS FOR AREAS WHERE SEED HAS NOT ESTABLISHED 70% COVER.

# Bartlett & West

www.bartlettwest.com

THE CONTRACTOR SHALL KEEP A WRITTEN LOG OF WHEN CONSTRUCTION ACTIVITIES BEGIN, EROSION AND SEDIMENT CONTROLS ARE INSTALLED, INSPECTED AND

THE CONTRACTOR SHALL MONITOR EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE PROJECT. THIS PLAN MAY BE UPDATED AS CONSTRUCTION

2

4. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INSTALLED AS PART OF THIS PLAN SHALL NOT BE REMOVED FOLLOWING CONSTRUCTION UNTIL SLOPES ARE

IMMEDIATELY AFTER MOBILIZATION AND PRIOR TO STARTING ANY SOIL DISTURBING ACTIVITIES. THE CONTRACTOR SHALL INSTALL ANY PERIMETER EROSION AND SEDIMENT CONTROL MEASURES, GRAVEL CONSTRUCTION ENTRANCE(S) AND ANY TEMPORARY SEDIMENT BASIN(S). IT IS RECOGNIZED THAT SOME SITE CLEARING AND

THE RECOMMENDED SEQUENCE OF CONSTRUCTION ACTIVITIES AND OF THE INSTALLATION AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES IS AS FOLLOWS: ANY PERIMETER CONTROL MEASURES (SILT FENCE) INCLUDING AREAS DRAINING TO A DRAINAGE WAY SUCH AS A STREAM, GRAVEL CONSTRUCTION ENTRANCE(S), CONSTRUCTION OF SANITARY SEWERS, STORM SEWERS, INLET PROTECTION AND DITCH CHECKS, STREETS, FINAL GRADING, SEEDING, FERTILIZING AND MULCHING ON ALL SLOPES AND DISTURBED AREAS, INDIVIDUAL SITE CONTROL MEASURES, REMOVAL OF TEMPORARY PRACTICES, REMOVAL OF PERIMETER CONTROLS AND SITE CLEANUP.

PERIMETER SILT FENCE, BALE DITCH CHECKS AND CONSTRUCTION ENTRANCE(S) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS OR THE CITY REQUIREMENTS INSTALL SILT FENCE WHERE REPRESENTED ON PLAN AS DITCH CHECKS AND SLOPE CONTROL, AROUND INLETS, ALONG ROADWAYS, AREAS DRAINING TO DRAINAGE WAYS SUCH AS A STREAM AND OTHER LOCATIONS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE. MEASURES WILL BE KEPT IN PLACE UNTIL GRASS IS ESTABLISHED

8. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED BY THE GENERAL CONTRACTOR NOT LESS THAN WEEKLY OR WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR MORE. MAINTENANCE SHALL INCLUDE BUT NOT LIMITED TO SEDIMENT REMOVAL, SILT FENCE AND HAY BALE BARRIER REPAIR AND/OR

CONSTRUCTION ENTRANCES SHALL BE MAINTAINED BY THE GENERAL CONTRACTOR IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS AND PAVED STREETS. THIS MAY INCLUDE PERIODIC TOP DRESSING WITH ADDITIONAL CRUSHED STONE AS CONDITIONS WARRANT. REPAIR OF ENTRANCES, CLEANING ON A DAILY BASIS OF RIGHT-OF-WAYS AND PAVED STREETS THAT HAVE BEEN SOILED BY CONSTRUCTION ACTIVITIES SHALL BE THE GENERAL

10. THE CONTRACTOR SHALL NOTIFY EACH SUB-CONTRACTOR OR ENTITY (INCLUDING UTILITY CREWS AND CITY EMPLOYEES OR THEIR AGENTS) THAT WILL BE PERFORMING WORK AT THE SITE OF THE EROSION CONTROL PLAN AND WHAT ACTIONS OR PRECAUTIONS SHALL BE TAKEN TO MINIMIZE THE POTENTIAL FOR SOIL EROSION.

11. DURING ALL SOIL DISTURBING ACTIVITIES, THE GENERAL CONTRACTOR WILL TAKE APPROPRIATE STEPS USING ACCEPTED CONSTRUCTION METHODS TO MINIMIZE THE TIME

12. NO GROUND SHALL BE LEFT OPEN FOR MORE THAN 7 DAYS OF NON-ACTIVITY WITHOUT BEING MULCHED AND/OR SEEDED.

13. SOIL STOCKPILED FOR MORE THAN 7 DAYS SHALL HAVE SILT FENCE PLACED ON THE DOWNHILL SLOPES TO TRAP SEDIMENT

14. WHENEVER SOIL, ROCK, VEGETATION OR OTHER MATERIALS ARE EXPORTED FOR PLACEMENT IN AREAS OFF OF THE CONSTRUCTION SITE COVERED IN THIS PLAN, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THAT EPA STORM WATER PERMITTING REQUIREMENTS ARE MET. PRIOR TO THE REMOVAL OF ANY MATERIALS FROM THE SITE THE GENERAL CONTRACTOR WILL FURNISH THE ENGINEER WITH WRITTEN AGREEMENT, SIGNED BY EACH LANDOWNER WHO WILL RECEIVE EXPORTED MATERIALS, STATING THAT THEY ACCEPT THE MATERIAL AND THAT RECEIVING SITE IS PROPERLY PERMITTED, WHEN REQUIRED.

THIS PLAN OUTLINES STORM WATER MANAGEMENT AND SEDIMENT AND EROSION CONTROL PRACTICES TO BE FOLLOWED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE TO PREVENT SOIL OR SEDIMENT LOSS FROM THE CONSTRUCTION SITE AND CANNOT LEAVE THE SITE UNTIL ALL PERMANENT EROSION CONTROL, SEDIMENT CONTROL AND STORM WATER MANAGEMENT PRACTICES ARE IN PLACE, INSPECTED AND HAVE BEEN FOUND TO BE

THIS PROJECT HAS BEEN DESIGNED TO PROVIDE POSITIVE POST-CONSTRUCTION CONTROL OF EXCESS STORM WATER GENERATED ON THE SITE THROUGH THE USE OF CURBS, GUTTERS, PIPING, STORM WATER BASINS. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL AND MAINTAIN STORM WATER MANAGEMENT

THIS PROJECT IS DESIGNED TO MINIMIZE OFF-SITE EFFECT OF SOIL EROSION AND RESULTING SEDIMENT LOSS THROUGH THE USE OF PROPER CONSTRUCTION TECHNIQUES INCLUDING INSTALLING BOTH TEMPORARY AND PERMANENT MANAGEMENT PRACTICES. ALL SOIL DISTURBING ACTIVITIES PERFORMED BY THE CONTRACTOR SHALL BE ACCOMPLISHED IN SUCH A MANNER AS TO PREVENT THE LOSS OF SEDIMENT IN STORM WATER AND TRACKING OF SOIL FROM VEHICLE TRAFFIC FROM THE CONSTRUCTION

PROPOSED DETENTION BASINS TO ACT ALSO AS SEDIMENT CONTROL BASINS. REFER TO SHEET C5.2 FOR POND SIZING. NO OUTLET STRUCTURE IS PROPOSED DUE TO HIGH PECULATION RATES OF SANDY SOILS. BASIN IS DESIGNED TO CONTAIN 100 YEAR RAINFALL EVENT WITH A MINIMUM OF 2.00 FEET OF FREEBOARD.

WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE.

2. SILT FENCE SHALL BE TRENCHED IN WITH A MECHANICAL TRENCHER SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

3. THE TRENCH SHOULD BE A MINIMUM OF 6" DEEP AND 6" WIDE TO ALLOW FOR THE SILT FENCE TO BE LAID IN THE GROUND AND BACKFILLED.

4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH WOOD, SUPPORT POST OR TO WOVEN WIRE WHICH IS IN TURN ATTACHED TO THE WOOD FENCE POSTS.

SILT FENCE SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

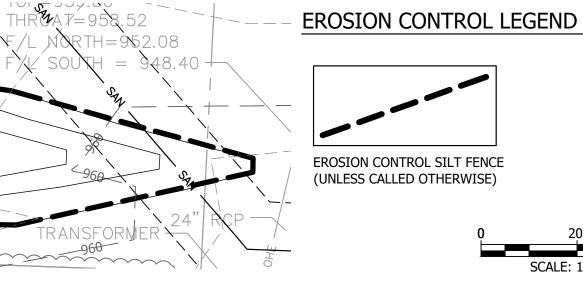
7. SEDIMENT TRAPPED BY THIS PRACTICE SHALL BE UNIFORMLY DISTRIBUTED ON THE SOURCE AREA PRIOR TO TOPSOILING.

8. THE EROSION CONTROL SHOWN SHALL BE SILT FENCE. ADDITIONAL EROSION CONTROL PROVIDED BY CONTRACTOR MAY BE STRAW BALE DIKE.

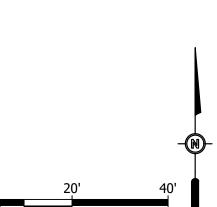
2. IMPLEMENT FINAL STABILIZATION: COORDINATE REMOVAL OF CONSTRUCTION PHASE BMPS NECESSARY TO PLACE FINAL STABILIZATION WITH LOCAL WEATHER FORECAST SO THAT REMOVAL AND PLACEMENT MAY BE COMPLETED WITHIN A FORECAST DRY PERIOD. DOWN-SLOPE PERIMETER CONTROLS SHALL NOT BE REMOVED UNTIL FINAL

3. ESTABLISHMENT AND FINAL CONSTRUCTION: ONCE THE REMAINDER OF THE SITE IS STABILIZED INCLUDING ESTABLISHMENT OF SEEDED COVER TYPES, CONSTRUCT PERMANENT WATER QUALITY BMPS AND REMOVE THE SEDIMENT CONTROLS AND THE REMAINING ACCESS CONTROLS. RESTORE AREA DISTURBED BY REMOVAL OF SEDIMENT

4. PLAN MODIFICATION: THE CONTRACTOR MUST MODIFY THE PLAN IF THE PLAN FAILS TO SUBSTANTIALLY CONTROL EROSION AND OFFSITE SEDIMENTATION. PLAN MODIFICATIONS DUE TO INEFFECTIVENESS MAY BE TAKEN WITHOUT PRIOR APPROVAL OF THE REVIEW AGENCY, BUT MUST BE FULLY DOCUMENTED AND APPROVAL SECURED FROM THE PERMITTING AUTHORITY AS SOON AS PRACTICABLE. THE CONTRACTOR MAY MODIFY THE PLAN OR CONSTRUCTION SEQUENCE IF IMPLEMENTATION IS INFEASIBLE FOR SITE CONDITIONS OR CONTRACTOR METHODS. ANY SUCH MODIFICATION SHALL CONTROL EROSION AND OFFSITE SEDIMENTATION TO THE MAXIMUM EXTENT



EROSION CONTROL SILT FENCE (UNLESS CALLED OTHERWISE)



SCALE: 1" = 20'

|      | — 08/23/2018 —                              |
|------|---|
|      | REVISIONS                                   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      | Williams Spurgeon                           |
|      | Kuhl & Freshnock<br>Architects, Inc. © 2018 |
|      |   |
|      |   |
|      |   |
|      |   |
| 0    | adaman                                      |
| -    | OF MISS BI                                  |
| X    | BELL EN                                     |
| 80   | BRIAN LL                                    |
| Š 🔺  | WENNINGHOFF                                 |
|      | PE-2013030730                               |
| RZ   | N S las 1 . N S N                           |
| 81   | 2 2218 8                                    |
| age. | (25/20)                                     |
| Sol. | NALES COM                                   |

 $\mathcal{O}$ 

Σ

SO

**N** 

┛╙

Kuhl &

Williams

Spurgeon

⊩reshnock

Architects, Inc. Missouri Certificate of Authority

#2003011262

FINAL

RESTORATION

PLAN

Ω Õ

Z Ó

Ο

Σ

Ш

' ନ ଏ

JOB NUMBER

- 17016 <sup>-</sup> ISSUE DATE