Jefferson County School District No., R-1 Support Services

TECHNICAL GUIDELINES

DIVISION 31 – EARTHWORK

AUGUST 2022

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DIVISION 31 – EARTHWORK

31 06 00 Schedules for Earthwork - October 2010

• Grading Schedule

| Item | Maximum Slope | Minimum Slope |
|--------------------------|-------------------------|---------------|
| Driveways | 7% (7 feet in 100 feet) | 1% |
| Parking Areas | 4% or per ADA | 1% |
| Pedestrian Sidewalks | Per ADA | 1% |
| Pedestrian Cross Slope | Per ADA | 1% |
| Grassed Playfields | 3% | 2% |
| Grass swales | 9%* | 3% |
| Paved swales | 4% | 1% |
| Terraces, Embankments | 33% | 2% |
| Playpads, Courts, Tennis | 1%** | 1%** |
| 10 ft Building Perimeter | 25% | 5% |
| Athletic Fields | 2.4% *** | 1.6% |
| HS Football: | 18 inch crown | 18 inch crown |

- * NOTE: Not recommended. Where slope of grass swales equals or exceeds 10% slope, provide permanent check dams to control erosion.
- ** NOTE: Slope end-to-end or diagonally for each pair of courts
- *** Note: Maximum longitudinal field slope if evenly sloped from crown at center of field to ends. If slope is continuous across the length of the field, maximum grade is 1.8%.

END SECTION 31 06 00

31 22 00 Grading - October 2010

- Balance cut and fill to the greatest extent possible without compromising specified drainage criteria.
- Export and dispose of debris, organic matter and soil that does not meet specification criteria.
 - 1. Dispose of in accordance with applicable regulations.
- Coordination:
 - 1. See 31 06 00 for Grading Schedule
- Execution Summary
 - 1. Surfacing material for all athletic field subgrade shall be true to line when tested with a ten (10) foot straight edge
 - a. It shall have no deviation from the face of the straight edge in excess of one-fourth (1/4) inch for the final product at any point.
 - b. This does not allow $\frac{1}{4}$ " at subgrade <u>and</u> then another $\frac{1}{4}$ " at final grading.
 - 2. Laser to be used to achieve these tolerances.

END SECTION 31 22 00

31 23 00 Excavation and Fill – October 2010

- Work in this section is open to any product or material meeting the requirements of this Technical Guideline.
- Source of imported structural fill materials is subject to the review and approval of the Geotechnical Engineer
 - 1. Confirm conditions of Geotechnical Engineer "acceptance" of fill materials.
 - a. Testing may be only for expansiveness and exclude capability of material to meet specified structural performance criteria.
 - 2. Verify and enforce actual material sources consistent with approved submittals.
- Submittals
 - 1. Samples:
 - a. Soil samples per Geotechnical engineer
 - 2. Test Reports
 - 3. Closeout:
 - a. Submittals listed above
 - (1) Updated to record status.
 - b. Samples excluded.
- Excavation
 - 1. Identify and indicate existing underground utilities and construction.
 - 2. UNCC and Jefferson County School District, R-1 utility locates are mandatory.
 - 3. Protect or relocate trees and improvements proposed to remain in the finished construction.
- Fill
 - 1. Strictly comply with recommendations and reports of Geotechnical Engineer.
 - 2. Use Standard Proctor curve.
 - a. Use of Modified Proctor curve requires prior approval of Jefferson County School District, R-1
- Rock:
 - 1. Specify as per geotechnical report
 - 2. All exposed rock shall be grouted in place
 - 3. Coordination:
 - a. See Landscape inorganic mulch section
- Compaction
 - 1. Maximum lift per Geotechnical Report
 - 2. Preferred compaction method:
 - a. Sheepsfoot roller
 - 3. Prohibited compaction methods:
 - a. Construction machinery such as bulldozer or backhoe.
 - 4. Compacted areas should shed water.
 - a. Avoid conditions which can trap water and leech it to adjoining compacted subgrade or pavement.

END SECTION 31 23 00

<u>31 24 00 Embankments – October 2010</u>

• Work in this section is open to any product or material.

END SECTION 31 24 00

31 25 00 Erosion and Sedimentation Controls – October 2010

- Work in this section is open to any product or material.
- See 01 41 00 Regulatory Requirements

END SECTION 31 25 00

31 30 00 Earthwork Methods - October 2010

• Work in this section is open to any product or material.

END SECTION 31 30 00

<u>31 32 00 Soil Stabilization – October 2010</u>

• Work in this section is open to any product or material.

END SECTION 31 32 00

<u>31 40 00 Shoring and Underpinning – October 2010</u>

• Work in this section is open to any product or material.

END SECTION 31 40 00

<u>31 50 00 Excavation Support and Protection – October 2010</u>

• Work in this section is open to any product or material.

END SECTION 31 50 00

<u>31 60 00 Special Foundations and Load-Bearing Elements – October 2010</u>

• Work in this section is open to any product or material.

END SECTION 31 60 00