

Division 31 | Subgrade Processing & Topsoil Replacement

This design guideline is written to the designer of record (DOR). This guideline is written to document UA standards of work, assist the designers in ensuring UA standards are incorporated into the contract documents and provide a resource to facilitate the design process. It is the designer of record's responsibility to coordinate the criteria set forth in these design guidelines and in conjunction with the manufacturer requirements and use the most stringent standard.

Section 31 20 00 – Earth Moving

A. General

This section addresses requirements for earthwork, including clearing, grading, excavation and fill and excavation support and protection related to building construction and infrastructure projects on The University of Alabama Campus.

The design of site and landscape elements is very important in enhancing the campus environment and maintaining its distinctive character. These elements are the basis for creating a campus environment which is cohesive and preserves its sense of continuity.

The campus site and landscape standards which follow are intended to be used as basic design guidelines during the site design process and for the preparation of contract documents. They are also intended to be used as tools to aid the Design Consultant in making their planning and design decisions.

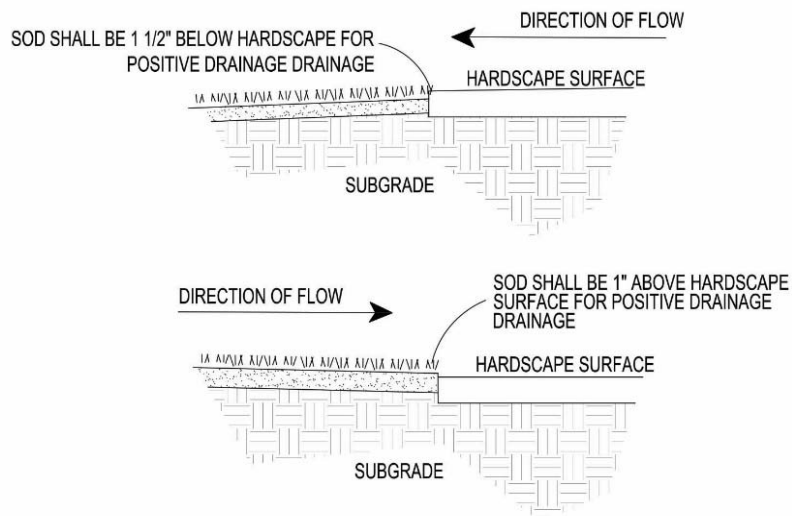
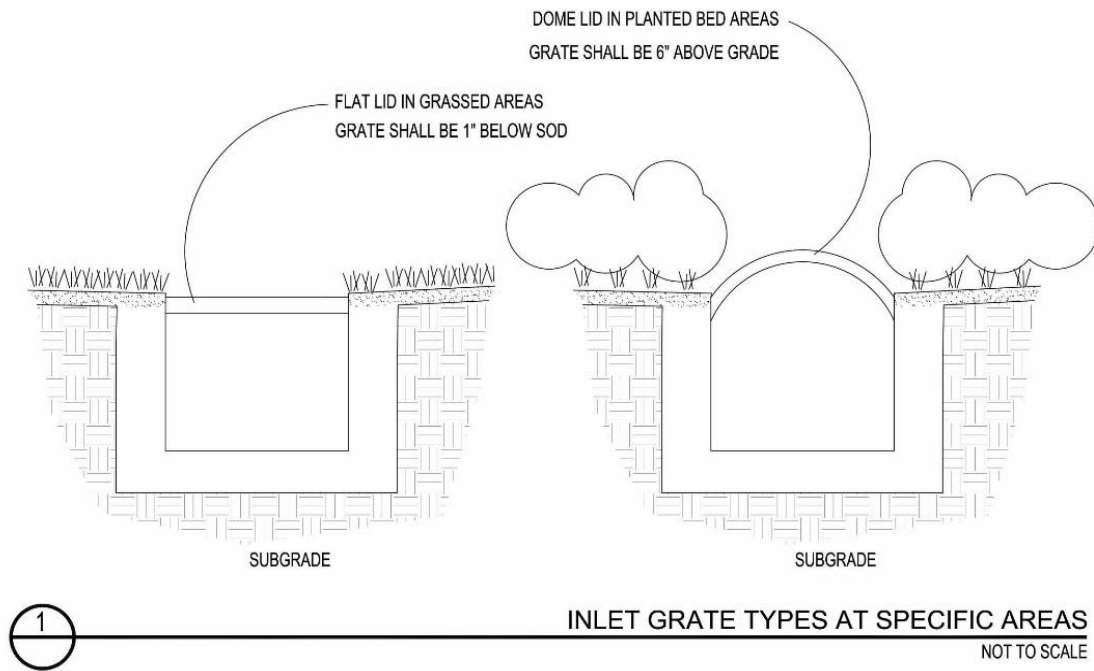
B. Subgrade and Topsoil Requirements

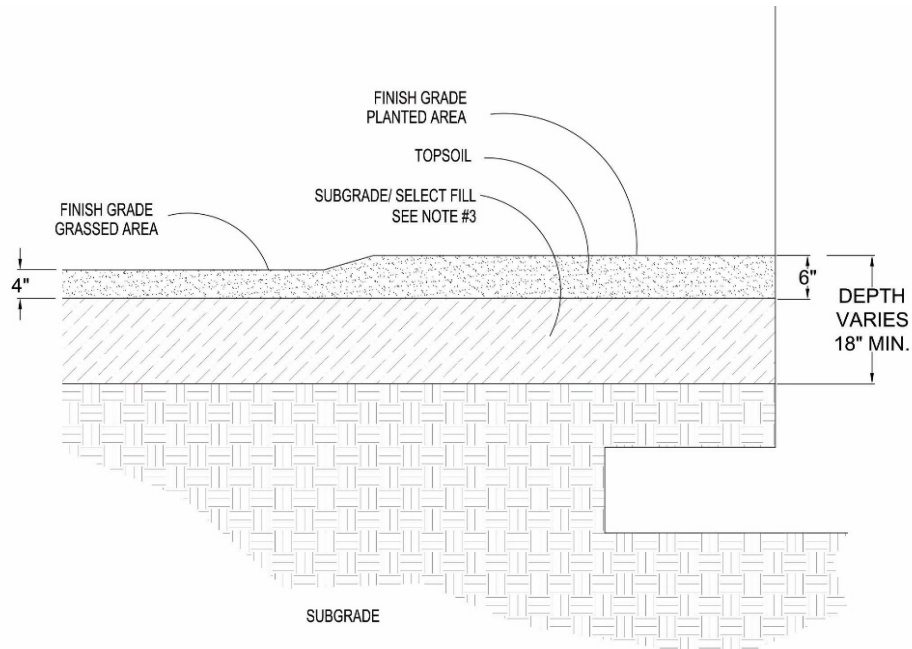
1. All the existing utilities are located and marked approximate and for information purposes only. The contractor shall verify, through University of Alabama line locate procedures, all utility locations before construction begins. In the event of any damage to the existing utilities, they shall be repaired or replaced to the satisfaction of the UA representative and utility owner at the contractor's expense. All utilities are to be potholed by the contractor and location verified before work is allowed to proceed.
2. Prior to any construction, contractor shall investigate and document condition of existing grades. If large concentrations of stone, or deleterious material is encountered then select fill shall be required. Documentation shall include photos and areas shall be indicated on plan.
3. All undisturbed subgrades and select fill areas, shall be 85% stone free. Subgrades that contain more than 15% stone and debris in any 12" x 12" area shall be removed and replaced, by the general contractor. All subgrade/select fill areas shall be free of any construction debris and waste material (stakes, roots, stone, concrete chunks, broken pipe, electrical conduit, drink bottles, etc.) Contractor to replace contaminated soil with acceptable subgrade material to be approved by campus Landscape Architect.
4. All temporary stones, for roadways, construction accesses, sidewalks, drives, construction, etc. shall be considered incidental to the project. It is the General Contractors' responsibility to fully remove, at no additional cost to the owner, these temporary materials prior to placement of subgrade/ select fill. This applies to all materials, equipment, etc., the contractor transports to the project. Do not waste on site.
5. Topsoil material and subgrade preparations shall be performed during dry weather. Contractor shall be responsible for coordinating with and providing at least 24 hour advance notice to UA

Landscape Architect for inspection and acceptance of subgrade in landscape areas prior to placement of topsoil. Any topsoil placed prior to approval of subgrade by UA Landscape Architect shall be removed by the contractor at no additional costs to the University.

6. Topsoil shall be rolled in-place to prevent future settling.
7. Topsoil shall be free of viable noxious weeds or vegetation or vegetation propagules. Contractor shall be responsible for applying necessary chemicals to topsoil to rid material of such weed, seed or propagules. Chemicals to be applied must be approved by U/A Landscape Architect prior to application.
8. Any and all areas in, near or adjacent to the construction limits that are disturbed during the construction process are to be repaired to the original or better condition at no additional cost to the owner. All grades, existing and constructed, shall be tied together to match in a seamless manner and grassed.
9. Eliminate uneven areas and low spots, including those adjacent to but outside the project limits, so as to ensure proper positive drainage toward drainage areas, and provide gradual grade change(s) of ground elevations.
10. Areas to be grassed shall be Sodded, Hydro-seeded or applied with Straw Matt - To be determined by UA Landscape architect or qualified representative prior to installation. No seed and straw. All sod is to be rolled after installation per the direction of the Landscape Architect.
11. Prior to any construction, contractor shall coordinate with the UA Landscape and Grounds Department the working condition of all Irrigation system(s) within the project in order to establish the current working condition of such system(s). Contractor shall be responsible for replacement of any and all damage, of existing irrigation system(s) that was working properly before the pre-construction irrigation review meeting for the project. The contractor shall also be responsible for damage to any landscaping affected by the disruption of the irrigation system(s). Irrigation system(s) disrupted shall be repaired at direction of UA by the contractor. Any Cost associated with the aforementioned shall be the contractor's expense with no additional costs to the University of Alabama. Irrigation lines and control wiring are to be placed at a depth approved by the U/A Landscape Architect.
12. Protect all hardscape surfaces (concrete sidewalks, patios, brick pavers, inlet boxes, gutters, etc.), and water distribution infrastructure, from damage from heavy equipment by use of temporary bridging (fabric, sand, wood, etc.). Contractor shall be responsible for repairs to all damaged hardscape at no additional costs to the University of Alabama.
13. At the end of the project, the contractor shall pressure wash all concrete surfaces (i.e., curb and gutters, sidewalk, drives, storm sewer boxes, brick pavers, existing building brick and stone, specifically existing concrete abutting required concrete surfaces within the project and all adjacent area(s) to eliminate staining from earthen material, construction equipment, oils, paints, etc. This work shall be considered incidental to the contract at no additional costs to the University of Alabama.
14. Final inspection for acceptance to be performed by the U/A Landscape Architect and all deficient items are to be corrected immediately by the contractor at no additional cost to the University of Alabama.

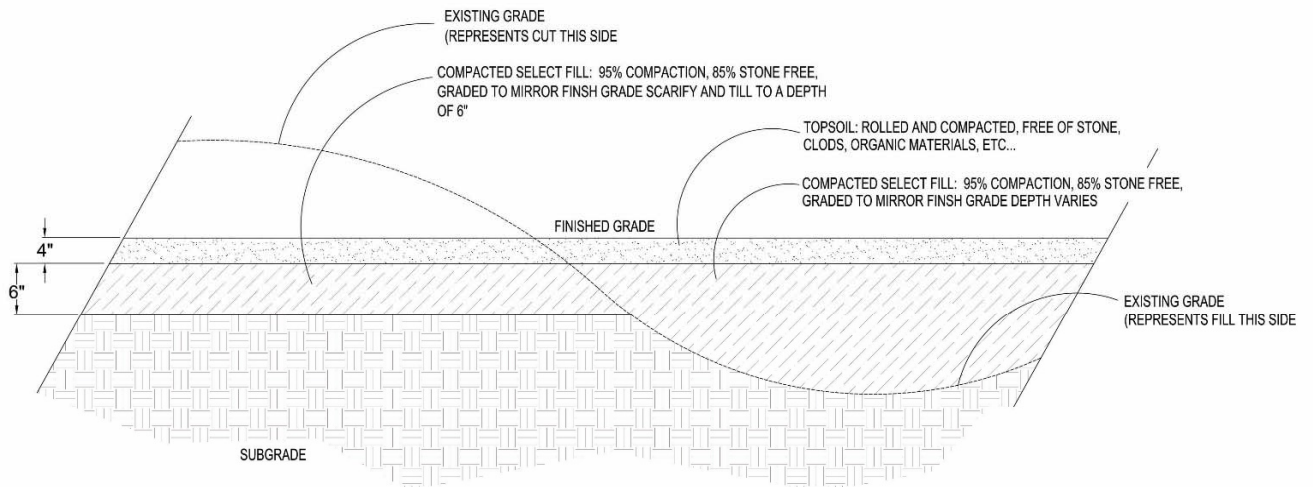
C. Grading Details





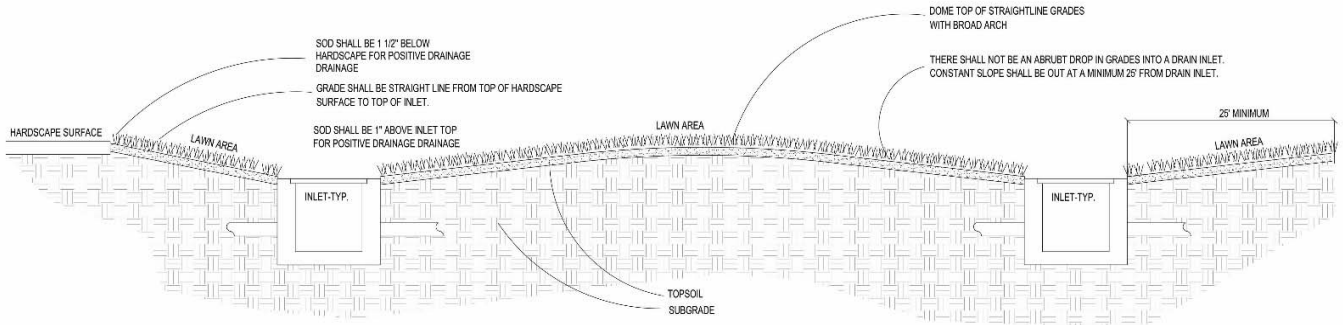
CAMPUS LANDSCAPE ARCHITECT TO APPROVE SUBGRADE AND TOPSOIL PRIOR TO INSTALLATION

3 TYPICAL GRADING SECTION AT BUILDING
NOT TO SCALE

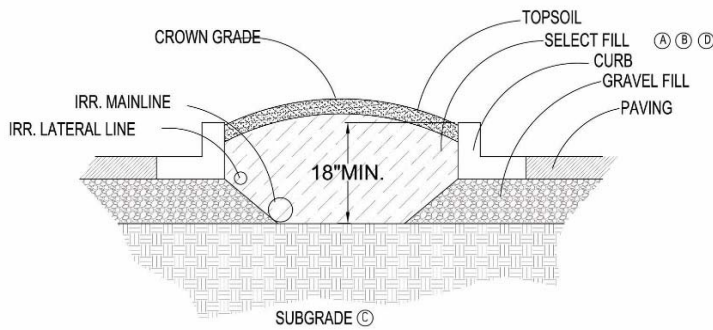


CAMPUS LANDSCAPE ARCHITECT TO APPROVE SUBGRADE AND TOPSOIL PRIOR TO INSTALLATION

4 SUBGRADE AND TOPSOIL DETAIL
NOT TO SCALE

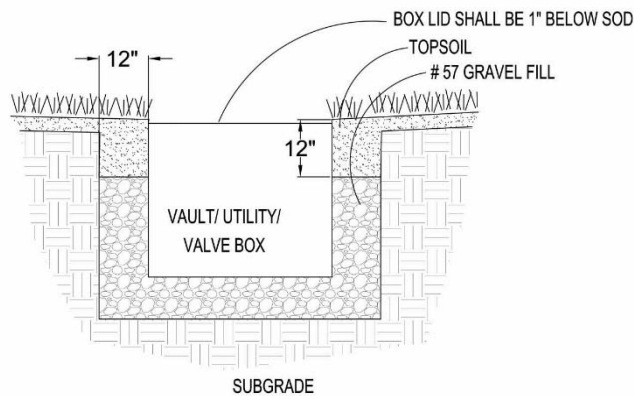


5 GRADING AT INLET DETAIL
NOT TO SCALE



6 FILL AT PARKING ISLAND/ MEDIAN
NOT TO SCALE

- (A) SELECT FILL AS APPROVED UA LANDSCAPE ARCHITECT (SEE SPECS)
- (B) SELECT FILL AREA AND SUBGRADE SHALL BE FREE OF ANY CONSTRUCTION DEBRIS AND/ OR STONE
- (C) SUBGRADE TO BE REVIEWED AND APPROVED BY UA LANDSCAPE ARCHITECT PRIOR TO PLACEMENT OF SELECT FILL
- (D) SELECT FILL SHALL BE PLACED IN 8" LIFTS AND COMPACTED TO 95%



7 GRADING AT VAULT/ UTILITY/ VALVE BOX
NOT TO SCALE

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