

PROJECT SPECIFICATIONS

FOR:

**Demolition of Woodcrest Apartment
Complex**

NKU-14-2021



**FACILITIES MANAGEMENT:
PLANNING, DESIGN &
CONSTRUCTION**

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DIVISION 00 – PROCURMENT AND CONTRACTING REQUIREMENTS

SECTION 00 72 00 GENERAL REQUIREMENTS

INTENT

A. It is the intention of the Contract Documents to call for the complete demolition of Woodcrest Apartment Complex and 227 Johns Hill Road, the removal of all foundations and debris, and site restoration services as described herein, to result in a complete Project.

B. Details not shown or specified, but necessary for the proper completion of this Project, equipment, materials, etc., shall be included in the work, the same as if herein specified or indicated.

In general, and to the extent possible, all work shall be accomplished without interruption of existing facilities operations. The Contractor shall advise the Owner at least three days prior to the interruption of any services or utilities. The Owner shall be advised of the exact time that interruption will occur and the length of time the interruption will last. Failure to comply with this requirement may result in a stoppage of work until a complete schedule of interruptions can be developed.

3. CONTACT DOCUMENTS

A. The contract document consists of the Invitation to Bid, the project specifications and all appendices thereto. These documents provide a general guideline for management of the Project and all bidders shall consider this fact and bid appropriately. If field conditions necessitate a departure from these documents, the Contractor shall submit to the University for prior approval any such departure, before proceeding with the work.

SUPERVISION OF WORK

A. The Contractor shall personally supervise the work for which he is responsible or have a competent superintendent, approved by the University, on the work at all times during progress with full authority to act for him.

7. CODES, RULES, PERMITS, FEES, INSPECTIONS, REGULATIONS, ETC.

A. The Contractor shall give all necessary notices, obtain and pay for all permits, government sales taxes, fees, inspections and other costs, including all utility connections, meters, meter settings, taps, tap fees, extensions, water and/or sewer system development charge, etc. in connection with his work. He shall also file all necessary plans, prepare all documents and obtain all necessary approvals of all governmental departments and/or the appropriate municipality or utility company having jurisdiction, whether indicated or specified or not, with the exception of the permit needed from KYTC for hauling to/from Norse Boulevard, which the University shall obtain. The Contractor shall hire an independent Registered Engineer to witness installations and provide necessary certifications where required by utility companies, municipal agencies or others that have review authority. He shall also obtain all required certificates of inspection for his work and deliver same to the Engineers before request for acceptance and final payment for the work. Ignorance of Codes, Rules, Regulations, Laws, etc. shall not render the Contractor irresponsible

for compliance. The Contractor shall also be versed in all Codes, Rules and Regulations pertinent to his part of the work prior to submission of a proposal.

B. The Contractor shall include in his work, without extra cost, any labor, materials, services, apparatus and drawings in order to comply with all applicable laws, ordinances, rules and regulations, whether or not indicated or specified.

C. All materials furnished and all work installed shall comply with the National Fire Codes of the National Fire Protection Association, with the requirements of local utility companies, or municipalities and with the requirements of all governmental agencies having jurisdiction.

D. The Contractor shall ensure that his work is accomplished in accord with the OSHA Standards and that he conducts his work and the work of his personnel in accord with same.

EQUIPMENT AND MATERIALS SUBSTITUTIONS OR DEVIATIONS

A. Each Proposer shall inform himself of all of the conditions under which the work is to be performed, the site of the work, the structure of the ground, above and below grade, the obstacles that may be encountered, the availability and location of necessary facilities and all relevant matters concerning the work. Each Proposer shall also fully acquaint himself with all existing conditions as to ingress and egress, distance of haul from supply points, routes for transportation of materials, facilities and services, availability of utilities, etc. His proposal shall cover all expenses or disbursements in connection with such matters and conditions. No allowance will be made for lack of knowledge concerning such conditions after bids are accepted.

COST BREAKDOWNS (SCHEDULE OF VALUES)

A. Within thirty days after acceptance of the Contract, the Contractor shall furnish to the Engineer, one copy of a detailed cost breakdown on each respective area of work, and monthly payment invoices shall be based upon this schedule of values, once approved. This cost breakdown shall be made in a format approved by the University. Payments will not be made until satisfactory cost breakdowns are submitted.

SURVEY, MEASUREMENTS AND GRADE

A. The Contractor shall lay out his work and be responsible for all necessary lines, levels, elevations and measurements. The Contractor shall complete site grading so that storm water runoff is managed and flows positively, with no ponding. The Contractor is responsible for all on-site job safety.

TEMPORARY SERVICES

A. The Contractor shall use the owner's water and electrical to accomplish his work.

QUALIFICATIONS OF WORKMEN

A. All mechanical work shall be accomplished by qualified workmen competent in the area of work for which they are responsible. Untrained and incompetent workmen, as evidenced by their workmanship, shall be summarily relieved of their responsibilities in areas of incompetency.

CONDUCT OF WORKMEN

A. The Contractor shall be responsible for the conduct of all workmen under his supervision. Misconduct on the part of any workman to the extent of creating a safety hazard, or endangering the lives and property of others, shall result in the prompt relief of that workman. The consumption of alcoholic beverages or other intoxicants, narcotics, barbiturates, hallucinogens or debilitating drugs on the job site is strictly forbidden. All workers are to conduct themselves appropriately, with no 'catcalling' or unsolicited commentary with NKU students.

GENERAL PROVISIONS

The Contractor shall be entirely responsible for all material and equipment furnished by him in connection with his work and special care shall be taken to properly protect all parts thereof from physical, sun, and weather damage during the construction period. Such protection shall be by a means acceptable to the manufacturer and University. Equipment damaged, stolen or vandalized while stored on site, either before or after installation, shall be repaired or replaced by the Contractor at his own expense.

23. SCAFFOLDING, RIGGING AND HOISTING

A. The Contractor shall furnish all scaffolding, rigging, hoisting and services necessary for erection and delivery onto the premises of any equipment and apparatus furnished. All such temporary appurtenances shall be set up in strict accord with OSHA Standards and Requirements. Remove same from premises when no longer required.

CLEANING

A. The Contractor shall, at all times, keep the area of his work presentable to the public and clean of rubbish and debris caused by his operations; and at the completion of the work, shall remove all rubbish, debris, all of his tools, equipment, temporary work and surplus materials from and about the premises, and shall leave the area clean and ready for use. If the Contractor does not attend to such cleaning upon request, the University may cause cleaning to be done by others and charge the cost of same to the Contractor. The Contractor shall be responsible for all damage from fire which originates in, or is propagated by, accumulations of his rubbish or debris.

RESTORATION OF NEW OR EXISTING SHRUBS, PAVING, SURFACES, ETC.

A. The Contractor shall at his expense restore to their original conditions all paving, curbing, surfaces, drainage ditches, structures, fences, shrubs, existing or new building surfaces and appurtenances, and any other items damaged or removed by his operations. Replacement and

repairs shall be in accordance with good construction practice and shall match materials employed in the original construction of the item and shall be to the satisfaction of the University.

MAINTENANCE OF EXISTING UTILITIES AND LINES

A. The locations of all piping, conduits, cables, utilities and manholes existing, or otherwise, that comes within the contract construction site, which are not marked for demolition, shall be subject to continuous uninterrupted service with no other exception, unless approval for a temporary interruption of service is granted by the University.

B. Utilities and lines, where known, are indicated on the existing as-built drawings included in ITB Appendices A, B and C. Locations and sizes are approximate. Prior to any excavation being performed, the Contractor shall ascertain that no utilities or lines, which are to remain, are endangered by excavation. Exercise extreme caution in all excavation work.

C. Cutting into existing utilities and services where required shall be done in coordination with and only at times designated by the University.

D. The Contractor shall repair to the satisfaction of the University, any surfaces or subsurface improvements damaged during the course of the work, unless such improvement is shown to be abandoned or removed.

E. Protect all new or existing lines from damage by traffic, etc. during construction. Repairs or replacement of such damage shall be at the sole expense of the party responsible.

INDEMNIFICATION

A. The Contractor shall hold harmless and indemnify the University and its employees, officers, agents and consultants from all claims, loss, damage, actions, causes of actions, expense and/or liability resulting from, brought for, or on account of any personal injury or property damage received or sustained by any person, persons, (including third parties), or any property growing out of, occurring, or attributable to any work performed under or related to this contract, resulting in whole or in part from the negligence of the Contractor, any subcontractor, any employee, agent or representative.

HAZARDOUS MATERIALS

A. The Contractor is hereby advised that it is possible that asbestos and/or other hazardous materials are or were present in this building(s). Any worker, occupant, visitor, inspector, etc., who encounters any material of whose content they are not certain shall promptly report the existence and location of that material to the Contractor and/or Owner. The Contractor shall, as a part of his work, ensure that his workers are aware of this potential and what they are to do in the event of suspicion. He shall also keep uninformed persons from the premises during construction. Furthermore, the Contractor shall ensure that no one comes near to or in contact with any such material or fumes therefrom until its content can be ascertained to be non-hazardous. Refer to ITB Appendices D, E and F.

END OF SECTION 00 72 00

DIVISION 1 GENERAL REQUIREMENTS

SECTION 015639 – TEMPORARY TREE AND PLANT PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

1.2 SUMMARY

- A. This Section includes the protection and trimming of existing trees that interfere with, or are affected by, execution of the Work, whether temporary or permanent construction.
- B. Related Sections include the following:
 - 1. 329300 "Plants" for tree and shrub planting, tree support systems, and soil materials.

1.3 DEFINITIONS

- A. Tree Protection Zone: Area surrounding individual trees or groups of trees to remain during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Qualification Data: For tree service firm and arborist.
- C. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- D. Maintenance Recommendations: From arborist, for care and protection of trees affected by construction during and after completing the Work.

1.5 QUALITY ASSURANCE

- A. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of tree protection and trimming.
- B. Arborist Qualifications: An arborist certified by ISA or licensed in the jurisdiction where Project is located.
- C. Tree Pruning Standard: Comply with ANSI A300 (Part 1), "Tree, Shrub, and Other Woody Plant Maintenance--Standard Practices (Pruning)."
- D. Pre-installation Conference: Before tree protection and trimming operations begin, meet with Owner, Owner's Representative, and other concerned entities to review tree protection and trimming procedures and responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 1 inch (25 mm) in diameter; and free of weeds, roots, and toxic and other nonsoil materials.
 - 1. Obtain topsoil only from well-drained sites where topsoil is 4 inches (100 mm) deep or more; do not obtain from bogs or marshes.
- B. Fencing: provided fencing material a minimum of 48 inches high around all trees to be protected herein.
- C. Organic Mulch: Shredded hardwood bark, free of deleterious materials as required.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Temporary Fencing: Install temporary fencing around tree protection zones to protect remaining trees and vegetation from construction damage. Maintain temporary fence and remove when construction is complete.
 - 1. Install chain-link fence according to ASTM F 567 and manufacturer's written instructions.
- B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.
- C. Do not store construction materials, debris, or excavated material inside tree protection zones. Do not permit vehicles or foot traffic within tree protection zones; prevent soil compaction over root systems.

3.2 PROTECTION DURING EXCAVATION

- A. Install shoring or other protective support systems to minimize sloping or benching of excavations.
- B. Do not excavate within tree protection zones, unless otherwise indicated.
- C. Where excavation is required within tree protection zones, hand clear and excavate to minimize damage to root systems.
 - 1. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required bending and redirecting them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches (75 mm) back from new construction.
 - 2. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.
 - 3. Root Pruning: Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots with sharp pruning instruments; do not break or chop.

3.3 PROTECTION DURING REGRADING

- A. Do not place more than 3 inches of soil on top of existing grades within tree drip zones. Always slope grade away from tree drip zones.
- B. Grading operations shall result in a positive drainage of water away for sidewalks, buildings, trees and roads. Review final grading plan with University prior to execution. Final grading shall include the spreading of 4" of topsoil across the entire site. Refer to seeding spec.
 - 1. During excavation and regrading, do not cut main lateral roots or taproots; cut only smaller roots. Cut roots with sharp pruning instruments; do not break or chop.
- C. Minor Fill: Where existing grade is 6 inches (150 mm) or less below elevation of finish grade, fill with topsoil. Place topsoil in a single uncompacted layer and hand grade to required finish elevations. Refer to topsoil specifications.

3.4 TREE PRUNING

- A. Prune trees to remain that are affected by temporary and permanent construction.
- B. Prune trees to remain to compensate for root loss caused by damaging or cutting root system. Provide subsequent maintenance during Contract period as recommended by arborist.
- C. Pruning Standards: Prune trees according to ANSI A300 (Part 1) as follows:
 - 1. Type of Pruning: Cleaning, Thinning, Reduction.
- D. Cut branches with sharp pruning instruments; do not break or chop.
- E. Chip removed tree branches and dispose of off-site.

3.5 TREE REPAIR AND REPLACEMENT

- D. Promptly repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
- E. Remove and replace trees indicated to remain that die or are damaged during construction operations that arborist or Owner's Representative determines are incapable of restoring to normal growth pattern.

1. Provide new trees of 6-inch (150-mm) caliper size and of a species selected by Owner's Representative when damaged trees are required to be replaced. Plant and maintain new trees as specified in Division 2 Section "Exterior Plants."
- F. Aerate surface soil, compacted during construction, 10 feet (3 m) beyond drip line and no closer than 36 inches (900 mm) to tree trunk. Drill 2-inch- (50-mm-) diameter holes a minimum of 12 inches (300 mm) deep at 24 inches (600 mm) o.c. Backfill holes with an equal mix of augered soil and sand.

END OF SECTION 015639

DEMOLITION 024100

PART 1 - GENERAL

1.1. SUMMARY

A. Section Includes:

1. Demolition and removal of Oak, Sycamore and Willow Residence Hall apartment buildings and 227 Johns Hill Road as well as related site improvements as defined herein.
2. Removing below-grade construction.
3. Disconnecting, capping or sealing, and abandoning in-place or removing site utilities, to the extent such disconnecting, capping and sealing is not completed by the University or its subcontractors prior to the initiation of demolition operations.

1.2 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged. Refer to the ITB for more detail.

1.3 INFORMATIONAL SUBMITTALS

A. Schedule of Building Demolition Activities: Indicate the following:

1. Detailed sequence of demolition work, with starting and ending dates for each activity.
2. Temporary interruption of utility services.
3. Shutoff and capping or re-routing of utility services.

B. Pre-demolition Photographs: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by demolition operations.

1.4 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with governing Commonwealth of Kentucky permit regulations before beginning demolition. Comply with air quality, hauling, and disposal regulations of authorities having jurisdiction. Comply with KYTC permit for using Norse Boulevard for site access.

B. Pre-demolition Conference: Conduct conference at Project site.

1. Inspect and discuss condition of construction to be demolished.
 2. Review structural load limitations of existing structures.
 3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 4. Review and finalize protection requirements.
 5. Review procedures for noise control and dust control.
 6. Review procedures for protection of adjacent buildings, hardscapes and landscaping which are to remain.
- C. Temporary Protection: Erect temporary fencing protection in entirety around construction site. It is the contractor's responsibility that the site remains secure at all times with perimeter fencing, locked gates, and informative signage. Refer to Appendix A Site Reference Drawing for further detail.
- D. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.
- E. Protect adjacent buildings during demolition.

1.5 PROJECT CONDITIONS

- A. Buildings to be demolished are vacant and Work can be scheduled at the Contractor's convenience, once all other project initiation requirements outlined herein have been met.
- B. Buildings immediately adjacent to demolition area will be occupied. Conduct building demolition so operations of occupied buildings will not be disrupted.
1. Provide not less than 72 hours' notice of activities that will affect operations of adjacent occupied buildings.
 2. Maintain access to existing walkways exits, and other facilities used by occupants of adjacent buildings.
 3. Do not close or obstruct walkways, exits, or other facilities used by occupants of adjacent buildings without written permission from the University or from authorities having jurisdiction.

C. Owner assumes no responsibility for condition of buildings and structures to be demolished. Refer to Appendix Woodcrest Apartments Monitoring Program_Field Report Final – 022421 . Buildings will be used for Local Fire Department training prior to demolition. List of all activities can be provided by the University upon request.

D. Hazardous Materials: See attached reports by Geotechnology (for Woodcrest) and ATC (for 227 Johns Hills Road).

E. On-site storage or sale of removed items or materials is not permitted.

1.6 COORDINATION

A. Arrange demolition schedule so as not to interfere with Owner's on-site operations or operations of adjacent occupied buildings.

PART 2 – PRODUCTS

PART 3 – EXECUTION

a. EXAMINATION

A. Verify that utilities have been disconnected and capped before starting demolition operations.

B. Review Project Record Documents of existing construction provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.

C. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.

D. Except as indicated, verify that hazardous materials have been remediated before proceeding with building demolition operations.

3.2 PREPARATION

A. Existing Utilities: Locate, identify, disconnect, and seal or cap off existing utilities serving buildings and structures to be demolished. Location to be reviewed and coordinated with university.

1. Coordinate schedule of utility shut offs with the Owner with 72 hours notice.
2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass

buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.

B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.

1. Strengthen or add new supports when required during progress of demolition.

3.3 PROTECTION

A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, lawns and hardscapes areas and other building facilities during demolition operations. Maintain clear access to exits from existing buildings.

B. Existing Utilities: Maintain utility services to remain and protect from damage during demolition operations.

1. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.

2. Where required, provide temporary services during interruptions to existing utilities, as acceptable to Owner and authorities having jurisdiction.

3. Provide at least 72 hours' notice to occupants of affected buildings if shutdown of service is required during changeover.

3.4 DEMOLITION GENERAL

A. General: Demolish indicated buildings completely. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.

2. Maintain adequate ventilation when using cutting torches.

3. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

4. Cease operations immediately when adjacent structures appear to be in danger.

B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations.

C. Explosives: Use of explosives is not permitted.

3.5 DEMOLITION BY MECHANICAL MEANS

A. Proceed with demolition of structural framing members systematically from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.

B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.

C. Below-Grade Construction: Demolish foundation walls and other below-grade construction that are within the footprint of or are associated with the existing building.

1. Remove below-grade construction, including basements, foundation walls, and footings, completely.

D. Existing Utilities: Where indicated abandon existing utilities and below-grade utility structures. Demolish and remove or abandon existing utilities and below-grade utility structures in place as indicated on the drawings.

1. Piping: Disconnect piping at unions, flanges, valves, or fittings.

3.7 REPAIRS

A. Promptly repair damage to adjacent buildings, roads, curbs, sidewalks and hardscape improvements caused by demolition operations.

3.8 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove demolition waste materials from Project site.

1. Do not allow demolished materials to accumulate on-site.

2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

3. Woodcrest: Contractor shall be responsible for building a temporary haul road from Norse Boulevard to the site, and for removing the road upon completion of demolition operations. Road shall be reseeded upon completion of use.

B. Do not burn demolished materials.

3.9 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

1. Clean roadways of debris caused by debris transport.

4.0 SITE RESTORATION

A. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations and utility disconnects with satisfactory soil materials according with the following backfill requirements.

B. Placing and spreading of backfill materials

1. Backfill materials shall be placed and spread evenly in layers. When compaction is achieved using mechanical equipment, the layers shall be evenly spread so that when compacted, each layer shall not exceed 8 inches in thickness.

2. During spreading, each layer shall be thoroughly mixed as necessary to promote uniformity of material in each layer.

3. Where the backfill material moisture content is below the optimum moisture content, water shall be added before or during spreading until the proper moisture content is achieved.

4. Where the backfill material moisture content is too high to permit the specified degree of compaction the material shall be dried until the moisture content is satisfactory.

5. After adding water or drying soils to adjust the moisture content, the layer shall be thoroughly remixed prior to compaction.

C. Compaction Requirements

1. Each layer backfill materials as defined herein, shall be mechanically compacted to the indicated percentage of density. Equipment that is consistently capable of achieving the required degree of compaction shall be used and each layer shall be compacted over its entire area while the material is at the required moisture content.
2. Compact backfill material to 98% of maximum dry density in accordance with ASTM D 698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (Standard Proctor).
3. The acceptable moisture content range for compaction shall be -2% to +3% of the optimum as determined by ASTM D 698.

5.0 SOIL MATERIALS

A. Clayey Soil Backfill

1. Classification A-6, ASTM D3282.
2. Clayey soil backfill may include shale and limestone bedrock provided that the shale is pulverized to a soil-like consistency and moisture-conditioned, and provided that the limestone is broken up and dispersed so as not to cause nesting or retard compaction. The maximum dimension of the broken-up limestone floaters in the fills should be limited to 30 inches with a maximum thickness of 6 inches. Thicker layers or larger pieces of limestone, if not capable of being broken up, should be wasted off site. Additionally, limestone floaters should be restricted from the fill within 2 feet of final grades.

B. TOPSOIL

1. Topsoil is to be spread a minimum of 4" across the entire area of disturbance.
2. Seed all finish graded areas and/or all areas of disturbance and water until grass has been established, but at a minimum for 4 weeks following application of seed.

C. GRASS AND SEED MATERIALS

1. Seed Mixture, Light requirements – sun, Container Type – Bag, Compositions – 80% Turf – Type Tall Fescues (3 Varieties), 20% Turf – Type Perennial Ryegrass (1 Variety), Coverage Area – 6-8lb/ 1,000 sq. ft., Type – All Pro Team Mate Select, Regulated – No, Brand Name – LESCO

END OF SECTION 024100