Request for Proposal

Demolition of 1 Sigma Avenue, Wheeling, WV 7 Wade Avenue, Wheeling, WV

RFP # 2023 - 001

Crittenton Properties 2606 National Road Wheeling, WV 26003

July 24, 2023

- 1. Intent of Request for Proposals (RFP) and Bid Requirements
 - a. The purpose of this Request for Proposals is to solicit competitive sealed proposals from qualified and experienced individual(s) or firm(s) to provide demolition services for Crittenton Properties, Inc. (Crittenton). Crittenton is requesting bids for the demolition and site clearance of its properties located at the following addresses:
 - i. 1 Sigma Avenue Wheeling, WV 26003
 - ii. 7 Wade Avenue Wheeling, WV 26003
 - b. The successful Contractor will be expected to provide all tools, transportation, labor, and equipment necessary to perform the required duties herein. The overall objective of this project is to raze 2 separate structures by removing all structures, debris, identified greenery, site components, etc. and to leave the ground empty, appropriately sloped for drainage, and ready for future development.
 - c. Bid Requirements.
 - i. Bids must be sealed and submitted in a timely manner. Bidders shall provide (1) sealed copy of the proposal form, Attachment #1, and it MUST be labeled on the outside with **Demolition RFP # 2023-001.** Proposals must be submitted before 5:00 p.m. on August 14, 2023, to Crittenton Services, Attn: Mark Ackermann, Operations Manager, 2606 National Road, Wheeling, WV 26003. Any proposal received after that deadline will be deemed non-responsive and will not be considered for evaluation. **Faxed copies will not be accepted.**
 - ii. Bids must be signed by an official of the company authorized to bind the offeror. The proposed price shall be good for a period of at least one hundred twenty (120) days from the submittal date. Crittenton reserves the right to refuse any and all bids and to waive any technicalities and formalities. Crittenton reserves the right to negotiate with all qualified offerors and reserves the right to cancel this solicitation in part or in its entirety if it is in the best interest of Crittenton to do so. Any agreement for services is subject to the board of director's approval.
 - iii. A **mandatory** Pre-Bid walk-through at the site (beginning with 1 Sigma Avenue) will occur on August 2, 2023 at 10:00 AM. Attendance at walk-through is **mandatory** to qualify to bid project.
 - iv. Those wishing to submit a bid for the project must provide, at a minimum, the following items:
 - 1. Proof of all other appropriate professional licensing as required by the State of West Virginia.
 - 2. A disposal and recycling plan for all structures and debris removed from the site.
 - 3. Proof of Insurance: General Liability, Workers Comp, Automobile (must be current).
 - v. This solicitation does not commit Crittenton to award a contract, or to pay for any cost incurred in the preparation of your proposals, or to procure or contract for any articles of goods or services.
- 2. Scope of Service
 - a. Fees.
 - i. Contractor is responsible for all permits, fees, inspections, certifications and approvals necessary to demolish the buildings as outlined by the standards established by federal, state, and local authorities.
 - b. Compliance with City of Wheeling Building and Planning Department:

- i. At all times, the contractor will remain in compliance with the guidelines established by the City of Wheeling Building and Planning Department. The City of Wheeling guidelines for the demolition of a structure can be found at https://www.wheelingwv.gov/media/Economic%20Development/Building_Planning/Demolition%20Packet.pdf
- ii. Crittenton will follow all guidelines set by the City of Wheeling Building and Planning Department for both structures since utilities at these structures, even though 7 Wade it is not in the city, are provided by the City of Wheeling Water and Water Pollution Control Departments.
- c. Utilities and Terminations.
 - i. Prior to commencement of work by Contractor, Crittenton will conduct all utility terminations, power/phone/cable disconnections, as well as be responsible for any service or termination fees (if applicable) on each the property not including mainlines.
 - ii. The contractor will assure the temporary disconnect sheet has been signed by the gas company so the demolition permit may be obtained.
 - iii. When first arriving onsite, contractor will disconnect the gas service line and the gas company contacted to verify and sign off on the disconnect sheet.
 - iv. Lateral water lines will be terminated at meter vault.
 - v. Prior to the time of building demolition, contractor will cap or plug the sewer line with concrete at property line and have inspection completed by Wheeling Water Pollution Control Department prior to covering.
 - vi. All lateral lines (sewer, water, etc.) from the disconnection point to the building shall be removed and disposed of by Contractor.
- d. Removal of mulch in "playground" area.
 - i. Prior to demolition, the contractor will need to remove mulch in the playground area beside of 1 Sigma which is 8 to 12 inches deep.
- e. Demolition and site clearance.
 - i. Contractor shall demolish and remove all above and below ground debris and appurtenances including but not limited to; the main structure and all basements, footings, foundations floors, porches and debris of any kind, unless directed otherwise by the City Engineer with approval of Crittenton Management. Contractor shall include the demolition and removal of all underground piping, junk or trash which may be present. No debris shall be left or buried on the site.
 - 1. The following items are to remain, if at all possible:
 - a. The white vinyl fencing along the southern property border of 1 Sigma with 3 Sigma.
 - b. The private sidewalk between Sigma Avenue and Hervey Lane.
 - c. The concrete parking area at the rear of 1 Sigma.
 - ii. Demolition methods must include a means of controlling dust generated on the site. Should these means include the use of water, the rental of a City of Wheeling Water Department water meter and cost of water will be the responsibility of the Contractor.
 - iii. AT NO TIME SHALL THE CONTRACTOR HOOK INTO A MUNICIPAL WATER SOURCE (HYDRANT) WITHOUT CITY APPROVAL AND THE REQUIRED METER.
 - iv. All removal from this site of debris, rubbish, and other materials resulting from demolition operations must be disposed of in a legal manner.
 - v. Green Waste
 - 1. Contractor will remove all trees and plant material, except for 1 tree identified on the northwest corner of the Sigma 1 property identified with orange banding.
- f. Backfill and Compaction

i. Excavated areas associated with the removal of all substructures should be backfilled. See attached Earth Moving Specification Section 312000.

g. Final Grading and Seeding

- i. At the rear of Sigma 1, South of the sidewalk, a gravel lot is to be installed to allow for parking within that area between the sidewalk and the white vinyl fencing.
- ii. The final grading of each site shall be appropriate to allow for proper drainage of the site.
- iii. Both sites shall be graded and seeded to allow for soil maintenance.

h. Dumping Requirements

i. All demolition debris must be taken to a licensed landfill. All landfill receipts (for general debris and hazardous waste) must be turned in before final approval and payment.

i. Infrastructure Protection

i. Protect City sidewalk, drive approaches, curbs and street by means acceptable to Wheeling City Engineering. Contractor will be liable for any damage to public property.

j. Salvage and Recycling

- i. Salvage rights belong to the Contractor after contractor is notified to proceed with demolition. All portions of the demolitions must be removed, to include scrap metals, concrete, and other materials.
 - 1. Contractor may sell any and all materials and retain any proceeds from the sale of such materials.
 - 2. It is the expectation of Crittenton that any proceeds earned by Contractor through recycling or salvaging will offset some of the costs of their services.

k. Safety

- i. Public and resident safety must be considered at all times. The Contractor must take precautions at all times to utilize and store materials and equipment in a way that will prevent injury to citizens.
- ii. As Crittenton is a children's residential facility campus, the safety of our residents is of the utmost importance. Tools and other items which could be potentially harmful to someone must be kept secured when not in use. Tools and other such items will need to be secured within a job box when not in use and during the off hours. Additionally, vehicles are to be secured, to the extent possible with construction equipment, and keys are to be removed from vehicles and secured when not in use.
- iii. Before leaving for the day, Contractor must ensure that proper signs, caution tape, physical barriers or other devices as needed to signal a hazard or restrict public access are in place. In addition, the Contractor must assure the safety of their workers by adhering to industry best practices, OHSHA safety, and traffic safety guidelines as applicable for the activity being performed.
- iv. Crittenton Management reserves the right to temporarily stop work if they see an unsafe practice and to suspend work until the issue is addressed to the satisfaction of the Management.

1. Smoking:

- i. As Crittenton is a children's residential facility campus, there is no smoking and/or vaping permitted on the campus.
- ii. Contractor staff and Crittenton staff are permitted to smoke at designated smoking areas off of the Crittenton campus.

m. Record of Lines.

- i. Contractor will provide Crittenton with location and extent of all capped and abandoned lines below grade.
- 3. Asbestos Inspection Report and Asbestos Abatement.

- a. Crittenton has secured asbestos testing for these structures through ASTAR Abatement and reports will be provided to winning bidder.
- b. Crittenton will contract with ASTAR Abatement, Inc. to complete any / all required ASBESTOS Abatement as required and documentation will be provided to the winning bidder.

4. Outline of Expectations

- a. Significant experience in demolition and removal of residential and commercial site debris, backfill and grading. The successful bidder shall clearly possess an understanding of the scope of work required including:
- b. Permitting and clearances
- c. Demolition site clearance and backfill/ site grading.
- d. Project completion documentation.
- e. Possess the required licenses, insurance, bonding, etc.
- f. Contractor will assure that all permitting, demolition and debris removal will comply with applicable City, State and Federal regulations and procedures covering demolition.

5. Special Instructions

a. Operating Hours: Work shall be performed between 7am and 7pm *only*. No work shall be performed on Sundays unless authorized in advance by Crittenton.

6. Contract Document

a. Crittenton will negotiate a Professional Services Agreement with the winning Contractor.

7. Insurance Requirements

- a. Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by Contractor, its agents, representatives, employees, or subcontractors. The cost of such insurance shall be included in Contractor's bid. The amount of insurance shall not be less than:
 - i. <u>Commercial General Liability</u>: \$1,000,000 combined single limit per occurrence and \$2,000,000 general aggregate for bodily injury, personal injury and property damage.
 - ii. <u>Business Automobile Liability:</u> \$1,000,000 combined single limit per accident for bodily injury and property damage for owned, non-owned and hired autos.
 - iii. Workers' Compensation and Employers' Liability: Workers' compensation limits as required by the labor code of the State of West Virginia and employers' liability with limits of \$1,000,000 per accident.
- b. The winning bidder shall agree to the following in regard to the insurance policy.
 - i. The insurance shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty days prior written notice by certified mail, return receipt requested, has been given to Crittenton.
 - ii. It is agreed that any insurance or self-insurance maintained by Crittenton, its officials, employees, agents and volunteers shall be excess of Contractor's insurance and shall not contribute with insurance provided by the policy.
- c. Each insurance policy required by this Agreement, accepting policies for Workers' Compensation and Professional Liability shall contain the following clause:
 - i. Crittenton, its officials, employees, agents and volunteers are to be named as additional insurers as respect to operations and activities of, or on behalf of, the named insured as performed under Agreement with Crittenton.
 - ii. Contractor's insurer must be authorized to do business in West Virginia at the time the contract is executed and throughout the time period the contract is maintained, unless otherwise agreed to in writing by Crittenton. Failure to maintain or renew coverage or to provide evidence of renewal will be treated by Crittenton as a material breach of contract.

- iii. Crittenton shall be furnished with original certificates of insurance and endorsements effecting coverage required within, signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be received by Crittenton before work commences.
- iv. Crittenton reserves the right to require complete, certified copies of all required insurance policies at any time.
- v. Any deductibles or self-insured retentions must be declared to and approved by Crittenton. At the option of Crittenton, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to Crittenton, its officials, employees, agents and volunteers; or Contractor shall provide a financial guarantee satisfactory to Crittenton guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- vi. Contractor shall include all subcontractors and insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.
- vii. Nothing contained herein shall be construed as limiting in any way the extent to which Contractor may be held responsible for payments of damages to persons or property resulting from Contractor's or its subcontractor's performance of the work covered under this Agreement.

8. Furnishing of W-9

a. Payment under this Agreement is contingent upon Contractor furnishing Crittenton with a signed and completed W-9 IRS tax form. Contractor shall cooperate with Crittenton in furnishing any additional information Crittenton may need to comply with rules and regulations of the Internal Revenue Service.

9. Evaluation and Award

- a. The contractor selection will be based on proposed Contractor pricing.
- b. A priority may be given to contractors who can guarantee completion of the project before October 26, 2023 at time of issuing contracts, with exceptions noted on Bid for Contract form.
- 10. Crittenton reserves the right to accept or reject any bid that best serves its convenience and/or is found to be in its best interest. Crittenton encourages and welcomes bids from women-owned and minority-owned businesses. Bidders must be in good standing with Crittenton.
- 11. Bid Submittals Those wishing to submit a bid for the project must provide, at a minimum, the following items:
 - a. Proof of all other appropriate professional licensing as required by the State of West Virginia
 - b. If applicable, documents showing pre-certification as a woman-owned, minority owned, small, or disadvantaged business.
 - c. A disposal and recycling plan for all structures and debris removed from the site.
 - d. Proof of Insurance: General Liability, Workers Comp, Automobile (must be current)

IF YOU REQUIRE ADDITIONAL INFORMATION:

Questions related to the proposal or regarding the bid process should be directed to Mark Ackermann via email at mackermann@crittentonwv.org. Please communicate via email so there is a record of correspondence.

ATTACHMENT 1 - 'BID FOR CONTRACT'

PROPOSAL FORM BID FOR LUMP SUIM CONTRACT

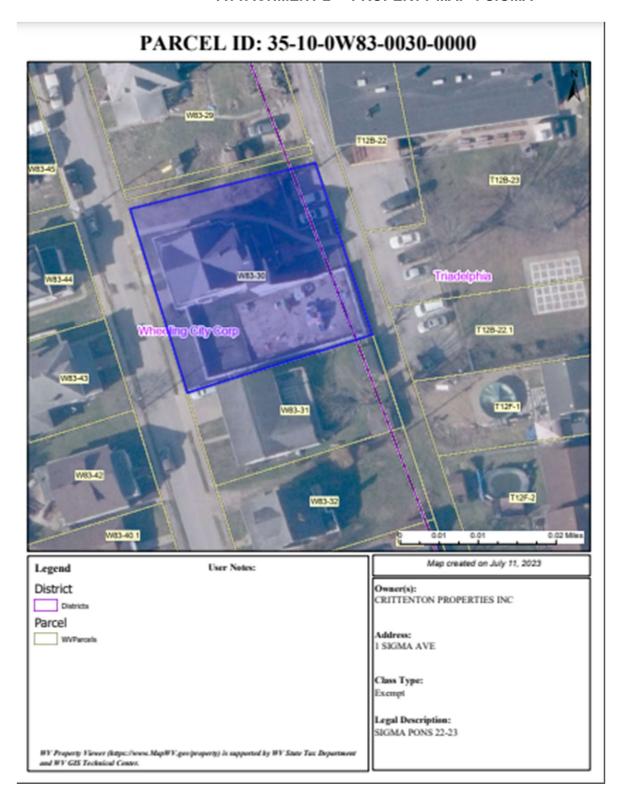
	Date:
Proposal of	(hereinafter called "Bidder"),
a(State / Commonwealth)	Corporation / Partnership / LLC / Sole Trader (Circle Applicable Term)
to CRITTENTON PROPERTIES (herein	nafter called "Owner")
The Bidder, in compliance with your inv	ritation to bids for the
	DEMOLITION OF 1 SIGMA AVENUE & 7 WADE AVANUE WHEELING, WV
work, and being familiar with all of the including availability of materials and laband to complete the project in accord therein, and at the prices stated below.	fications with related documents and the site of the proposed conditions surrounding the completion of the proposed project por, hereby proposes to furnish all labor, materials, and supplies; lance with the Contract Documents, within the time set forth. These prices are to cover all expenses incurred in performing Documents, of which this proposal is part.
Bidder hereby agrees to commence Work under this contract on or before a date to be specified by written "Notice to Proceed" of the Owner and to fully complete the project within SIXTY (60) calendar days thereafter.	
Bidder acknowledges receipt of the follo	owing Addenda:

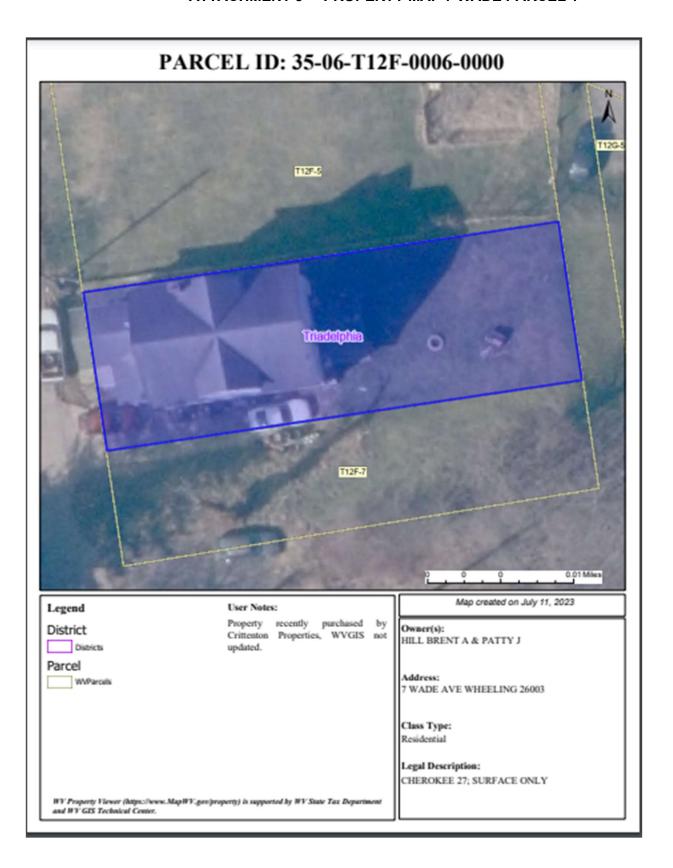
BASE BID PROPOSAL NO. 1

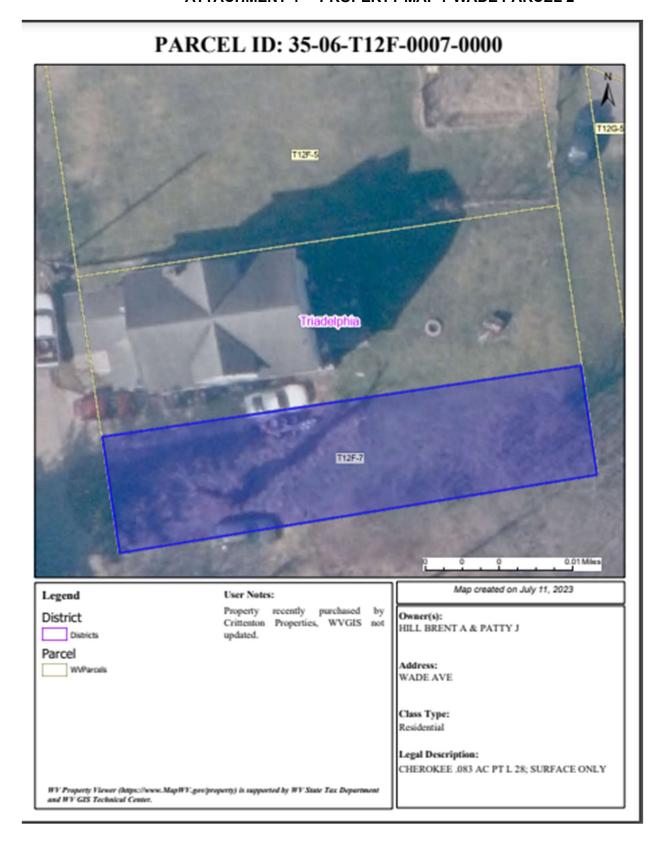
Bidder agrees to perform all Work described in the Sigma Avenue and 7 Wade Avenue, Wheeling, WV	
(Amount to be shown in	(\$) both words and figures)
BASE BID PRO	OPOSAL NO. 2
Bidder agrees to perform all Work described in the Avenue, Wheeling, WV and all other stipulated Wo	
	(\$) both words and figures)
(Amount to be shown in	both words and figures)
BASE BID PRO	OPOSAL NO. 3
Bidder agrees to perform all Work described in the Avenue, Wheeling, WV and all other stipulated Wo	
	(\$
(Amount to be shown in	both words and figures)
	to reject any or all bids and to waive any informality I be good and may not be withdrawn for a period of g time for receiving bids.
	nade for delays due to shortages of materials and/or n; and, delays due to strikes or other delays beyond s documented and verified. Upon written notice of
	Ву:
	Authorized Signature
Corporate Sea Here	Typed Name and Title
	Typed Business Address
	Typed City, State, Zip

Bid for Contract Page 2 of 2

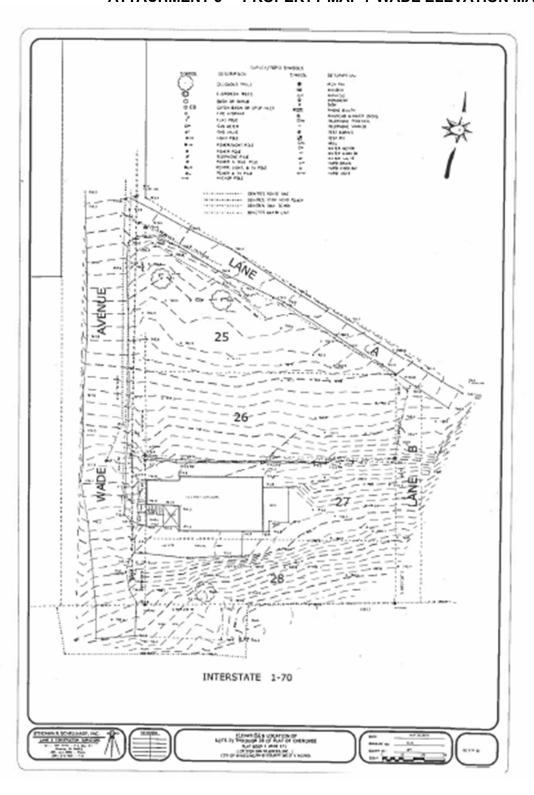
ATTACHMENT 2 - 'PROPERTY MAP 1 SIGMA'







ATTACHMENT 5 - 'PROPERTY MAP 7 WADE ELEVATION MAP'



ATTACHMENT 6 - 'SECTION 312000 EARTH MOVING'

CRITTENTON PROPERTIES

SECTION 312000 - EARTH MOVING

DEMOLITION OF 1 SIGMA AVENUE & 7 WADE AVENUE, WHEELING WV

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- Excavating and filling for rough grading the Site.
- 2. Backfilling after building demolition.

1.2 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
- B. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
- D. Fill: Soil materials used to raise existing grades.
- E. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other fabricated stationary features constructed above or below the ground surface.
- F. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- G. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:
 - Classification according to ASTM D2487.
 - 2. Laboratory compaction curve according to ASTM D698.

1.4 QUALITY ASSURANCE

A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E329 and ASTM D3740 for testing indicated.

1.5 FIELD CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.

- Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
- 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify "Miss Utility" for area where Project is located before beginning earth-moving operations.
- C. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures are in place.
- D. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - Foot traffic.
 - Erection of sheds or structures.
 - Impoundment of water.
 - 6. Excavation or other digging unless otherwise indicated.
 - Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- E. Do not direct vehicle or equipment exhaust towards protection zones.
- F. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D2487, or a combination of these groups; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D2487, or a combination of these groups.
 - Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 12 percent passing a No. 200 (0.075-mm) sieve.
- E. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch (25-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

- F. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch (37.5-mm) sieve and zero to 5 percent passing a No. 8 (2.36-mm) sieve.
- G. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch (25-mm) sieve and zero to 5 percent passing a No. 4 (4.75-mm) sieve.
- H. Sand: ASTM C33/C33M; fine aggregate.
- I. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

2.2 ACCESSORIES

- A. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches (150 mm) wide and 4 mils (0.1 mm) thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches (750 mm) deep; colored as follows:
 - Red: Electric.
 - 2. Yellow: Gas, oil, steam, and dangerous materials.
 - 3. Orange: Telephone and other communications.
 - Blue: Water systems.
 - Green: Sewer systems.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Provide dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
- B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- C. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.

- Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

3.3 EXPLOSIVES

- A. Explosives:
 - Do not use explosives.

3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.5 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.6 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Testing and inspecting underground utilities.
 - 4. Removing trash and debris.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.7 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:

- 1. Under grass and planted areas, use satisfactory soil material.
- Under footings and foundations, use engineered fill.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.8 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 - Remove and replace, or scarify and air dry, otherwise satisfactory soil material that
 exceeds optimum moisture content by 2 percent and is too wet to compact to
 specified dry unit weight.

3.9 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches (200 mm) in loose depth for material compacted by heavy compaction equipment and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly and uniformly.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D698:
 - 1. Scarify and recompact top 12 inches (300 mm) of existing subgrade and each layer of backfill or fill soil material at 95 percent.

3.10 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from site and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 - 1. Turf or Unpaved Areas: Plus or minus 1 inch (25 mm).
 - 2. Walks: Plus or minus 1 inch (25 mm).
 - Pavements: Plus or minus 1/2 inch (13 mm).

3.11 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

- B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- C. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.12 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.13 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 312000