

INVITATION FOR BIDS
PARKING LOT IMPROVEMENTS
FOR THE
MERCERSBURG AMERICAN LEGION POST 517

SEALED BIDS will be received by the Mercersburg American Legion Post 517 at 100 Keefer Drive, Mercersburg, PA 17236 until 6:00 p.m. prevailing time on Thursday, June 16, 2016. All bids will be privately opened.

The bids will be for all labor, materials and equipment for the Parking Lot Improvements.

Contract documents may be obtained from Barry A. Best Surveying, 402 Bear Valley Road, Fort Loudon, PA 17224, Phone: 717-369-2249, E-Mail: babsurv@comcast.net .

Bid security in the form of a certified check or bid bond in the amount of 10% of the bid amount shall accompany all bids. The successful bidder shall be required to furnish a performance bond and labor and material payment bond in the full amount of the contract.

Bids must be submitted in a sealed envelope addressed to the Mercersburg American Legion Post 517 and marked "PROPOSAL FOR PARKING LOT IMPROVEMENTS." The envelope shall bear the name of the bidder and his address. Bids may not be withdrawn for a period of thirty (30) days after the scheduled time of bid opening.

The contractor must ensure that employees and applicants are not discriminated against because of their race, age, color, religion, sex, national origin, of handicap.

The Mercersburg American Legion Post 517 reserves the right to reject any or all bids or waive technical defects and to accept any bid that is may deem in the best interest of the Mercersburg American Legion Post 517.

William Sanders
Mercersburg American Legion Post 517
200 Keefer Drive
Mercersburg, PA 17236

INSTRUCTIONS TO BIDDERS

INSTRUCTION TO BIDDERS

BIDDER RESPONSIBILITY

The bidder shall familiarize himself with all the attached forms, instructions, general provisions, specifications, drawings, etc. as he will be held responsible to comply with the aforementioned. The bidder shall also visit the site of the proposed work and thoroughly acquaint himself with conditions affecting the work. The bidder shall also make himself familiar with all Federal, State, Local and Municipal Laws, Ordinance, Rules and Regulations which in any manner affect the work those engaged in or upon the work, or the materials or equipment used in or upon the work. If the bidder or contractor shall discover any provision in the plans, specification, or other contract document which are contrary to, or inconsistent with, and such law, ordinance, rule or regulations, he shall immediately report it to the Mercersburg American Legion Post 517.

OMMISSIONS AND DISCREPANCIES

Should a bidder find discrepancies in, or omissions from the drawings or other contract documents, or should he be in doubt as to their meaning, he should at once notify the Mercersburg American Legion Post 517. All notices of omissions or discrepancies or requires for clarification shall be forwarded to the Mercersburg American Legion Post 517.

FORM OF PROPOSAL

All bids must be submitted on the Form of Proposal contained in the Contract Documents. Bids shall be one lump sum, for performance of all work and furnishing of all necessary labor, materials and equipment for the complete project.

EXECUTION OF DOCUMENTS

The successful bidder will be required to execute the Contract Documents in triplicate.

BID BOND

Each proposal shall be accompanied by a certified check or surety company's bid bond in an amount of not less than ten (10%) percent of the base bid. The bid bond shall be payable to the Owner as payee or Obligee, and shall be forfeited as liquidated damages if the bidder fails to execute the contract in conformity with the Contract Documents, and furnish bonds as specified within the ten (10) days after notification of the awarding the contract to him. Such bid bonds will be returned to all except the two lowest bidders immediately after the award, and the remaining bid bonds will be returned when the executed contracts are delivered to the successful bidder.

TIME OF COMPLETION

The Contractor shall commence work under his Contract on a date to be specified in a written notice to proceed by the Mercersburg American Legion Post 517, and shall fully complete all work on this Contract within sixty (60) consecutive calendar days from the notice to proceed.

CERTIFICATES OF INSURANCE

The successful bidder shall submit certificates or other documentary evidence to the Mercersburg American Legion Post 517 for approval, covering Workman's Compensation Insurance, Public Liability and Property Damages Insurance as well as insurance covering Special Hazards, before any Notice to Proceed is issued. The Contractor shall take out and maintain during the life of this Contract legally adequate and acceptable Workman's Compensation insurance for all his employees employed at the site of the project and in the case where work is sublet the Contractor shall require Sub-Contractor similarly to provide Workman's Compensation Insurance for the latter's employees, unless such employees are covered by the protection afforded by the Contractor.

The Contractor shall, at all times indemnify and save harmless the Mercersburg American Legion Post 517 of and from all claims for Workman's Compensation which may be made by any of the employees of the Contractor or any of the employees performance of any part of the work embraced by this contract and the Contractor will appear for and defend the Mercersburg American Legion Post 517 against any and all such claims.

The Contractor shall take out and maintain during the life of the Contract such Public Liability and Property Damage Insurance which shall protect the Mercersburg American Legion Post 517, the Contractor, and any Sub-Contractors performing work covered by this Contract from claims for property damages, as well as from claims for damages for personal injury, including wrongful death, which may arise from operation under this Contract, whether such operations be by himself or by any Sub-Contractor directly or indirectly employed on the project.

CONTRACTOR'S LIABILITY INSURANCE

The insurance required shall be written for not less than the following limits, or greater if required by law.

1. Workman's Compensation
 - a. State of Pennsylvania
Statutory
 - b. Employer's Liability
\$500,000 each accident

- \$500,000 Disease, Policy Limit
- \$100,000 Disease, Each Employee
- 2. Comprehensive or Commercial General Liability) including Premises-Operation; Independent Contractor's Protective, Products and Completed Operation: Broad Form Property Damage);
 - a. Bodily Injury:
 - \$1,000,000 Each Occurrence
 - \$2,000,000 Aggregate
 - b. Property Damage:
 - 1,000,000 Each Occurrence
 - \$2,000,000 Aggregate
 - c. Property Damage Liability Insurance shall provide X, C, and U coverage.
- 3. Contractual Liability (hold harmless coverage):
 - a. Bodily Injury:
 - \$1,000,000 Each Occurrence
 - b. Property Damage:
 - \$1,000,000 Each Occurrence
 - \$2,000,000 Aggregate
- 4. Personal Injury (with Employment Exclusion deleted):
 - \$2,000,000 Aggregate
- 5. If the General Liability policy includes a General Aggregate such General Aggregate shall be no less than \$1,000,000.
- 6. Umbrella Excess Liability:
 - \$2,000,000 Over Primary Insurance
- 7. Automobile Liability (owned, non-owned, hired):
 - a. Bodily Injury:
 - \$1,000,000 Each Person
 - \$1,000,000 Each Accident
 - b. Property Damage:
 - \$1,000,000 Each Occurrence

ACCIDENTS AND CLAIMS

The Contractor shall be held responsible for all accidents and shall indemnify and protect the Mercersburg American Legion Post 517 from all suites, claims and actions brought against them and all cost for liability to which the Mercersburg American Legion Post 517 may be put for any injury or alleged injury to the person or property of another resulting from negligence of carelessness in the performance of the work, or in protection of the project, or from any improper or inferior workmanship, or from inferior materials used in the work.

DECLARATION – NOTICE OF CANCELLATION

Policies of Insurance shall not be subject to change of cancellation until written notice has been sent by registered mail to the Named Insured and certificate holders. Said written notice shall be received not less than thirty (30) days prior to this act. The other Contractor's Insurance policy/policies must meet or exceed the types and limits of insurance as found in this Contract.

SUPPLEMENTAL GENERAL CONDITIONS

MERCERSBURG AMERICAN LEGION POST 517

SCOPE OF WORK

The location and scope of the proposed work is shown on the plans and described in the contract Documents. The Mercersburg American Legion Post 517 reserves the right to make changes in the project at any time when such changes may be necessary. The construction time the project shall be thirty (30) Calendar days.

OBLIGATION OF CONTRACTOR

The Contractor shall at his own cost and expense, unless otherwise specified, furnish all necessary materials, labor, equipment, tools and appliances and shall construct, finish, and test in a substantial and workmanlike manner, the work of this Contract within the time and in the manner specified and in accordance with the Contract Drawings.

The Contractor shall complete the entire work to the specifications and approval of the Mercersburg American Legion Post 517 and shall accept in consideration of and as full compensation the lump-sum amount set forth in the Contract and Proposal herein contained.

The Contractor will protect the work at all times with such approved means as may be necessary to protect the public throughout the course of the work.

The Contractor shall leave the job in a neat and workmanlike manner and shall remove all equipment immediately upon the completion of the work.

INSPECTION OF WORK

All work done on the project must be inspected by the Mercersburg American Legion Post 517.

INSPECTION AND CONTROL OF WORK

The Mercersburg American Legion Post 517 shall have access to the work at all times for the purpose of inspection and control of the installation. The Mercersburg American Legion Post 517 shall have control of the work and its progress by interpretation of the plans and specifications, and inspection of the work. The Mercersburg American Legion Post 517 shall confirm in writing any oral orders, direction, requirements or determinations.

LOCATION OF AND PROTECTION OF EXISTING STRUCTURES AND UTILITIES

The Contractor shall be held responsible for locating, protecting, and, maintaining all existing structures and utilities not affected by the work set forth in the drawings and specifications. The Contractor shall, at his own expense, pay for such location, maintenance and protections as is necessary to preserve the original condition of said structures and utilities.

CHANGES AND ALTERATIONS

The Owner may, at any time, require changes or alterations in the work as he may find necessary or desirable. The amount compensation for any change or alteration shall be determined as follows:

1. By such applicable unit process as set forth in the Contract, or;
2. By a lump-sum mutually agreed upon by the Owner and the Contractor, or;
3. If parties cannot agree by a lump-sum and no unit prices are set for the, then by the actual cost to the Contractor plus fifteen (5%) percent.

WARRANTY

The Contractor warrants all materials and workmanship for a period of one (1) year from the date of acceptance of the work.

CORRECTION OF WORK AFTER FINAL PAYMENT

Neither the final payment nor final estimate nor any provision in the Contract shall relieve the Contractor of the responsibility for faulty materials or workmanship and he shall remedy any defects due thereto and pay any damages resulting there from, which shall appear within a period of one (1) year from the date of completion and acceptance by the Owner.

INTERPRETATION OF PLANS

The Contractor shall not take advantage of any error or omission in the plans or discrepancy between the plans and specification, and the Mercersburg American Legion Post 517 shall make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the specifications and the plans as construed by the Mercersburg American Legion Post 517 and such decision shall be final.

PAYMENT

Payment shall be made on the following basis: Monthly, in accordance with the Contract Breakdown.

The contractor shall submit to the Mercersburg American Legion Post 517 an invoice for the work performed by the Contractor to date for which payment is requested. Upon approval of this estimate the Mercersburg American Legion Post 517 will pay the Contractor ninety (90%) percent of said estimate, by this Contract. A detailed contract breakdown shall be submitted for approval by the Mercersburg American Legion Post 517.

SUPERINTENDENCE BY CONTRACTOR

At the site of the work the Contractor shall provide a superintendent or foreman who shall have full authority to act for the Contractor, except where the Contractor is an individual and gives his personal superintendence to the work. It is understood that such representative shall be acceptable to the Mercersburg American Legion Post 517. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.

SUBCONTRACTS

- a. The Contractor shall be fully responsible to the Mercersburg American Legion Post 517 for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omission of persons directly employed by him.
- b. Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Mercersburg American Legion Post 517.

PERMITS AND CODES

The Contractor shall give all notices required by and comply with all applicable laws, ordinances, and codes of the Local Government. All construction work and/or utility installation shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the Drawings and Specifications for compliance with applicable ordinances and codes and shall immediately report an discrepancy to the Mercersburg American Legion Post 517. Where the requirements of the Drawings and Specifications fail to comply with such applicable ordinances or codes, the Mercersburg American Legion Post 517 will adjust the Contract by Change Order to conform to such

ordinances or codes (unless waivers in writing covering the differences have been granted by the governing body or department) and make appropriate adjustment in the Contract Price.

Should the Contractor fail to observe the foregoing provision and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the Drawings and Specifications), the Contractor shall remove such work without cost to the Mercersburg American Legion Post 517.

NONDISCRIMINATION CLAUSE

During the term of this Contract, the Contractor agrees as follows:

1. Contractor shall not discriminate against any employee, applicant for employment, independent Contractor, or any other person because of race, color, religious creed, ancestry, national origin, age, sex or handicap. Contractor shall take affirmative action to insure that applicants are employed, and that employees or agents are treated during employment, without regard to their race, color, religious creed, ancestry, national origin, age, sex, or handicap. Such affirmative action shall include, but is not limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training. Contractor shall post in conspicuous places, available to employees, agents, applicants for employment, and other persons, a notice to be provided by the contracting agency setting forth the provision of this nondiscrimination clause.

2. Contractor shall, in advertisements or requests for employment placed by it or on its behalf, state all qualified applicants will receive consideration for employment without regard to race, color, religious creed, ancestry, national origin, age, sex, or handicap.

3. Contractor shall send each labor union or workers' representative with which it has a collective bargaining agreement or other Contract or understanding, a notice advising said labor union or workers' representative of its commitment to this nondiscrimination clause. Similar notice shall be sent to every other source of recruitment regularly utilized by Contractor.

4. It shall be no defense to a finding of noncompliance with this nondiscrimination clause that Contractor had delegated some of its employment practices to any union, training program, or other source of recruitment which prevents it from meeting its obligations. However, if the evidence indicates that the Contractor was not on notice of the third-party discrimination or made a good faith effort to correct it, such factor shall be considered in mitigation in determining appropriate sanctions.

5. Where the practice of a union or of any training program or other source of recruitment will result in the exclusion of minority group persons, so that Contractor will be unable to meet its obligations under this nondiscrimination clause, Contractor shall then employ and fill vacancies through other nondiscriminatory employment procedures.

6. Contractor shall comply with all state and federal laws prohibiting discrimination in hiring or employment opportunities. In the event of Contractor's noncompliance with the

nondiscrimination clause of this Contract or with any such laws, this Contract may be terminated or suspended, in whole or in part, and Contractor may be declared temporarily ineligible for further Contracts, and other sanctions may be imposed and remedies invoked.

7. Contractor shall furnish all necessary employment documents and records to, and permit access to its books, records and accounts by the Contracting agency and the Office of Administration, Bureau of Minority and Women Business Opportunities (BMWBO) for purposes of investigation to ascertain compliance with the provisions of this clause. If Contractor does not possess documents or records reflecting the necessary information requested, it shall furnish such information on reporting forms supplied by the Contracting Agency and/or the Bureau of Minority and Women Business Opportunities (BMWBO).

8. Contractor shall actively recruit minority and women Subcontractors or Subcontractors with substantial minority representation among their employees.

9. Contractor shall include the provisions of this nondiscrimination clause in every Subcontract so that such provisions will be binding upon each Subcontractor.

10. Contractor's obligations under this clause are limited to the Contractor's facilities within Pennsylvania, or where the Contract is for purchase of goods manufactured outside of Pennsylvania, the facilities at which such goods are actually produced.

PROVISIONS CONCERNING THE AMERICANS WITH DISABILITIES ACT

During the term of this contract, the contractor agrees as follows:

1. Pursuant to federal regulations promulgated under the authority of The Americans with Disabilities Act, 28 C.F.R. §35.101 et. seq., the Contractor understands and agrees that no individual with a disability shall, on the basis of the disability, be excluded from participation in this Contract from activities provided for under this Contract. As a condition of accepting and executing this Contract, the Contractor agrees to comply with the General Prohibitions Against Discrimination, 28 C.F.R. §35.130, and all other regulations promulgated under Title II of The Americans with Disabilities Act which are applicable to the benefits, services, programs and activities provided by the Commonwealth through contracts with outside contractors.
2. The contractor shall be responsible for and agrees to indemnify and hold harmless the Commonwealth from all losses, damages, expenses, claims, demands, suits and actions brought by any party against the Commonwealth as a result of the contractor's failure to comply with the provisions as defined in the previous paragraph.

SPECIAL CONDITIONS

SPECIAL CONDITIONS

1. Waiver of Right to File Mechanics Liens:

A waiver by the Contractor of the right to file Mechanic's Liens shall be filed in the Office of Prothonotary, in the county of the project before commencement of any work. The document shall be drawn up, filed, and recorded in accordance with the terms and requirements of the Mechanic's Lien Law as amended to date.

2. Temporary Job Office

Erect a temporary job office, storage shed and other shelters as may be required for the proper and expeditious conduct of the work. Temporary buildings shall be located as directed by the Owner and shall be removed from the site when no longer required or when directed by the Owner.

3. Temporary Toilets

Provide suitable and adequate toilet facilities for all workmen on the project. Such facilities shall be enclosed in one or more weatherproof buildings and shall be of a type approved by authorities having jurisdiction over such matters.

4. Drawing Verification

Contractor shall verify all dimensions and report any discrepancies to the Mercersburg American Legion Post 517.

PROPOSAL AND AGREEMENT FORMS

PROPOSAL FORM

TO: William Sanders
Mercersburg American Legion Post 517
100 Keefer Drive
Mercersburg, PA 17236

1. Pursuant to and in compliance with the Invitation to Bid and the proposed Contract Documents relating to construction of:

Parking Lot Improvements for the
Mercersburg American Legion Post 517

We, the undersigned, having become thoroughly familiar with the terms and conditions of the proposed Contract Documents and with local conditions affecting the performance and costs of the work at the place where the work is to be completed and having fully inspected the site in all particulars, hereby proposes and agrees to fully perform the work within the time stated and in strict accordance with the proposed Contract documents including furnishing any and all labor and materials and to do all of the work required to construct and complete said work in accordance with the Contract Documents for the following sum of money:

Parking Lot Improvements

_____ Dollars (\$) _____).

2. I understand that the Owner reserves the right to reject this bid but that this bid shall remain open and not be withdrawn for a period of thirty (30) days from the date prescribed for its opening.

Signature: _____

3. If written notice of the acceptance of this bid is mailed or delivered to the undersigned within thirty (30) days after the date set for the opening of this bid, or at any other time thereafter before it is withdrawn, the undersigned will execute and deliver the Contract Documents to the Owner in accordance with this bid as accepted and will also furnish and deliver to the Owner, the Performance Bond, Labor and material Payment Bond, and proof of insurance coverage, all within ten (10) days after personal delivery or after deposit in the mails or the notification of acceptance of this bid.

4. Notice of acceptance or request for additional information may be addressed to the undersigned at 100 Keefer Drive, Mercersburg, PA 17236.

5. I hereby acknowledge the following addenda:

Addenda No. _____ Dated _____

Addenda No. _____ Dated _____

Addenda No. _____ Dated _____

6. This bid is based on using the following subcontractors and material suppliers:

Curbing _____

Paving _____

SIGNATURES

When the bidder is an individual:

Witness

Bidder (Seal)

When the bidder is a partnership

(Seal)

By _____
(Seal)

(Seal)

(Seal)

*When bidder is a Corporation

By

President

Attest:

Secretary
(Corporate Seal)

*The _____ is a Corporation organized and existing under the laws of _____.

FORM OF AGREEMENT

THIS AGREEMENT, Made this _____ day of _____ 2016, by and between _____ hereinafter called the Contractor and the Mercersburg American Legion Post 517 hereinafter called the Owner.

WITNESSETH: That the Contractor and the Owner for the considerations stated herein mutually agree as follows:

The Contractor shall furnish all of the materials, as specified and the Contractor shall perform all work shown on the drawings and described in the specifications and shall do everything required by this Agreement and the Contract Documents for the Parking Lot Improvements for the Mercersburg American Legion Post 517.

The work to be performed under this Contract shall be commenced on a date as specified in a written notice to proceed issued by the Mercersburg American Legion Post 517 and shall be fully completed within thirty (30) consecutive calendar days from and including said date.

The Contractor agrees to receive as full compensation for the performance of the Contract the sum of _____ dollars (\$_____).

Payment shall be made in accordance with paragraph entitled "Payment" in the General Conditions.

This project is funded by the Mercersburg American Legion Post 517.

The Contract Documents shall consist of the following:

1. Specifications entitled Parking Lot Improvements, dated 16 May 2016.
2. Drawings CS-1, S-1 thru S-6 inclusive dated 16 May 2016.

This agreement together with these documents form the Contract and they are fully a part of the Contract as if hereto attached or herein repeated.

IN WITNESS WHEREOF the parties hereto have executed the Agreement in triplicate the day and year first above written.

WITNESS:

CONTRACTOR:

WITNESS:

Mercersburg American Legion Post 517

WAIVER OF LIENS

WHEREAS, an agreement dated _____ has been entered into between _____ CONTRACTOR, and THE MERCERSBURG AMERICAN LEGION POST 517, for the construction of Parking Lot Improvements in accordance with Plans and Specifications prepared by BARRY A. BEST SURVEYING, 402 Bear Valley Road, Ft. Loudon, Pa 17224 and dated 16 May 2016.

NOW THEREFORE, THIS AGREEMENT Witnesseth, that the said Contractor, for and in consideration of the sum of One Dollar (\$1.00) to him in hand paid, by the Owner, the receipt whereof is hereby acknowledged, and consideration of other good and valuable consideration, for himself, his subcontractors, materialmen, laborers and suppliers, and all parties acting through or under him shall be filed or maintained by him, them, or any of them, against the said street and the lot of ground appurtenant thereto, as forming curtilage thereof, for or any of the construction of the said parking lot improvements, and the said Contractor, for himself and his subcontractors or others under him, and for all materialmen and laborers, hereby expressly waives and relinquishes the right to have filed or maintained any Mechanics' Liens or Claims against the said parking lot and lot of ground appurtenant thereto, and agrees that this Agreement waiving the right of liens shall be independent covenant.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and affixed their seals this _____ day of _____ A.D. 2016

Attest: _____

(Corp Seal)

By: _____

CONTRACTOR

Attest: _____

(SEAL)

OWNER

PARKING LOT SPECIFICATIONS

EXCAVATION

General

1. All excavation work shall be unclassified.
2. All spoils (materials unfit for backfill) shall be disposed of offsite in an approved manner immediately after their excavation. Disposal of spoils material shall be Contractor's responsibility.
3. Excess excavation material shall be disposed of offsite in an approved manner immediately after excavation. Disposal of excess material shall be Contractor's responsibility.
4. The contractor shall accept the site as he finds it and remove all trash, rubbish, brush, surface rock and any other materials not to be used in the finished work from site prior to starting earthwork. All material deemed unsuitable as fill or backfill, as herein defined, shall; be considered debris and accordingly removed from the site. All existing monuments, line pins, bench marks or other reference points pertinent to the site shall be substantially protected and maintained throughout the work. The Contractor shall be responsible to replace any such that are damaged or displaced by his work.
5. Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.
6. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfactions of utility owner.
7. Do not bring explosives onto the site or use in work without prior written permissions from authorities having jurisdiction. Contractor is solely responsible for handling, storage and use of explosive materials when their use is permitted.
8. Barricade open excavation occurring as part of this work and post with warning lights.
9. Operate warning lights as recommended by authorities having jurisdiction.
10. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

SOIL MATERIALS

1. Satisfactory soil materials are defined as those complying with American Association of State Highway and Transportation Officials (AASHTO) M 45, soil classification groups A-

- 1, A-2-4, A-2-5, and A-3. Other soils may be deemed satisfactory upon approval by the Owner.
2. Unsatisfactory soil materials are those defined in AASHTO M145 soil classification groups A-1-6, A-2-7, A-4, A-5, A-6, and A-7, also peat and other highly organic soils.
3. Subbase material, naturally or artificially graded mixture of natural or crushed gravel, crushed stone, crushed slag, natural or crushed sand.
4. Drainage fill, washed, evenly-graded mixture of crushed stone or crushed or uncrushed gravel with 100 percent passing a 1 ½ " sieve and not more than 5% passing a No. 4 sieve.
5. Backfill and fill with satisfactory soil materials, free of clay, rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, vegetable and other deleterious matter.

EXCAVATION

1. Strip topsoil to its full depth. Remove any rubbish, stones and all organic or other deleterious materials from topsoil and dispose of as directed. Stockpile topsoil on site where indicated or directed. Sufficient topsoil will be retained at the site and place in the areas designated for seeding and planting. The remaining topsoil, if any, will be the property of the Owner.
2. Mill and remove existing blacktop as required by the drawings. Disposal of blacktop shall be to an approved site.
3. Excavate as required and as shown on the contract drawings.
4. Should excavation, through error, be carried to elevations lower than those shown on the drawings, fill to proper levels at Contractor's expense.
5. Excavation shall be unclassified. The Contractor shall be responsible for excavating any and all materials encountered, as required, to comply with the Contract Documents. No additional compensation will be paid for rock removal or the excavation of any other material.
6. Use of explosives: Contractor is solely responsible for handling, storage and use of explosive materials. Blasting: Perform blasting operations using skilled personnel in compliance with governing regulation. Comply with ANSI A10.1 "Safety Code for Building Construction" for minimum requirements for blasting. Conduct blasting operations using explosives of such quantity and power and fired in such sequence and locations as not to injure personnel or damage property or damage adjacent work. Assume full responsibility for damages resulting from or attributable to blasting operations.

BACKFILL AND FILL:

1. Backfill excavations as promptly as work permits, but not until completion of the following:
 - a. Acceptance of construction below finish grade.
 - b. Removal of concrete formwork.
2. Place backfill and fill materials evenly adjacent to structures to required elevations. Take care to prevent wedging action of backfill against structures by carrying material uniformly around structure to approximately the same elevation in each lift.

SITE GRADING

1. Do all cutting, filling, compacting of fills and rough grading required to bring the entire project area, to sub grades as follows:
 - a. For roadways to the underside of the respective base course, as fixed by the finished grades.
 - b. For lawn areas, to 4" and 6" below finished grade.
2. Where fill is required to raise the existing grades to the new sub grade elevation indicated on Drawings, such fill shall be of earth or gravel, placed and compacted as specified.
3. Protect newly rough graded areas from the actions of the elements. Any settlement or washing that occurs prior to acceptance of the work shall be repaired and grades re-established to the required elevations and slopes. Fill to required subgrade levels, any areas where settlement occurs.
4. Before application of topsoil, the subsoil shall be shaped to allow for final grade after application of topsoil, as shown on the Drawings. The subsoil shall be disked, harrowed or scarified to secure bond with topsoil. Topsoil shall be uniformly distributed or spread to a uniform settled thickness of at least 4 inches. Topsoil in place shall be crushed or pulverized to be reasonably free of earth lumps, roots and other debris. Finish grade shall be of smooth, uniform flow, without depressions or rises and with transitions at embankments or slopes gradual and uniform.

PAVEMENT AND SUBBASE COURSE:

1. Subbase course consists of placing subbase material in layers of specified thickness over subgrade surface to support a pavement base course.
 - a. During construction, maintain lines and grades including crown and cross-slope of subbase course.

- b. Place shoulders along edges of subbase course to prevent lateral movement. Construct shoulders of acceptable soil materials, place in such quantity to compact to thickness of each subbase course layer. Compact and roll at least a 12" width of shoulder simultaneously with compacting and rolling of each layer of subbase course.
- c. Place subbase course material on prepared subgrade in layers of uniform thickness, conforming to indicated cross-section and thickness. Maintain optimum moisture content for compacting subbase material during placement operations.
- d. When a compacted subbase course is shown to be 6 inches thick or less, place material in a single layer. When shown to be more than 6 inches thick, place material in equal layers, except no single layer shall be more than 6 inches or less than 3 inches in thickness when compacted.

COMPACTIONS

1. Compact subbase with tandem rollers having a minimum weight of 10 tons. Roll in two directions until no roller marks are visible.
2. Control soil compaction during construction providing minimum percentage of density specified for each area classification.
3. Compact soil to not less than the following percentages of maximum dry density for soils which exhibit a well-defined moisture density relationship determined in accordance with ASTM D 1557 and not less than the following percentages of relative density determined in accordance with ASTM D 2049 for soils which will not exhibit a well-defined moisture-density relationship.
 - a. Lawn or unpaved area, compact top 6 inches of subgrade and each layer of backfill or fill material at 90 percent maximum dry density.
 - b. Pavements, compact top 12" inches of subgrade and each layer of backfill or fill material at 98 percent maximum dry density or 95 percent relative dry density for cohesive soil material. Layers not exceed 12 inches.
4. Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade or layer of soil material to prevent free water appearing on surface during or subsequent to compaction operations.
5. Remove and replace or scarify and air dry, soil material that is too wet to permit compaction to specified density. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by disking, harrowing or pulverizing until moisture is reduced to a satisfactory value.

