

L 6.55

7 77

67/14
c

Rt. Smith

UCO

WAR DEPARTMENT
U. S. ENGINEER OFFICE
ALBUQUERQUE DISTRICT
ALBUQUERQUE, NEW MEXICO

SPECIFICATIONS
FOR
CONSTRUCTION
OF
WATER SUPPLY WELLS

M

GRANADA RELOCATION CENTER
COLORADO

PREPARED BY
WILSON & COMPANY, ENGINEERS
ALBUQUERQUE, NEW MEXICO

June 23, 1942

I N F O R M A T I O N

The information contained in these Drawings and Specifications is not to be publicized in any way. It must be clearly explained to all persons to whom this information is made available that it is to be held in strict confidence, and not, under any circumstances, to be transmitted to others for publication or release to the press, periodicals or other agencies of public contact having either general or limited distribution. Any person failing to observe these restrictions may be prosecuted under the provisions of the Espionage Act, Title 50, U.S.C., Sections 31 and 32.

I M P O R T A N T N O T I C E

The attention of all bidders is invited to the fact that all capital equipment is subject to allocation by the War Production Board. It is expected that each bidder will own, or will have arranged to rent or otherwise acquire, and have available the plant and construction equipment necessary to construct the work herein specified. Delays in procurement of plant and equipment necessary for completion of the work under this contract will not constitute justification for any extension of time to the contract period as herein specified.

No. _____ Bidder _____

(Do not write above this line)

STANDARD GOVERNMENT FORM OF INVITATION FOR BIDS

(Construction Contract)

WAR DEPARTMENT
UNITED STATES ENGINEER OFFICE
ALBUQUERQUE DISTRICT
ALBUQUERQUE, NEW MEXICO

June 24, 1942.

A CONTRACT will be negotiated, subject to the conditions contained herein for furnishing all plant, labor and materials, and performing all work in accordance with the attached specifications for drilling, casing and testing three wells at the Granada Relocation Center, Colorado.

I. SPECIFICATIONS AND PLANS. - The work shall be performed in strict accordance with the specifications, bidding schedule and plans, all of which are made a part hereof, and designated as follows:

Specifications for Water Supply Wells, Granada Relocation Center, Colorado.

The drawings which will become a part of the proposed contract are designated in paragraph 1-03 of the specifications.

II. INVESTIGATION OF CONDITIONS. - It is expected that bidders will visit the site and acquaint themselves with all available information including local conditions and the availability of labor, and to make their own estimates of the facilities required and difficulties attending the execution of the work. Failure to acquaint himself with all available information concerning these conditions will not relieve the successful bidder of assuming all responsibility for estimating the difficulties and costs of successfully performing the complete work as required. Prospective bidders should contact the Area Engineer at Lamar Colorado, who will make the necessary arrangements for the inspection of the site.

III. COMMENCEMENT AND COMPLETION. - The work to be done shall be commenced within one day after the date of receipt of notice of award and shall be completed in accordance with provisions of paragraph 1-05 of the specifications.

IV. MISCELLANEOUS PROVISIONS. -

(a) Labor and Wages Conditions to be maintained under the proposed contract or any subcontract thereunder, for work executed at the site of the project, shall be as stated in paragraphs 1-06, 1-10, and GC-5 of the specifications and Articles 11, 17 and 19 of the contract. The United States Employment Services, with offices in Lamar, Colorado, has facilities for the referral of local labor. The use of this service is optional with the contractor, but the contractor shall use such labor as may be available from the relief rolls which he finds satisfactory.

This labor is to be paid the established prevailing rate referred to in paragraph 1-10 of the specifications.

(b) Minimum Wage Rates. - Pursuant to the provision of Article 17 of the contract, the minimum wage rates to be paid labor under this contract will be determined by the Department of Labor.

(c) Hours of Work and Overtime Pay. - Provisions regarding hours of work and overtime pay will be made a part of the contract. (See paragraph GC-32 of the specifications.)

(d) Reports. - In order to assist the Department of Labor in obtaining employment statistics and to assist the Government in obtaining cost data, bidders, unless otherwise indicated in their bids will be considered as having voluntarily consented, without cost to the Government to the inclusion of paragraphs GC-5 and GC-41 of the specifications as a part of the contract.

(e) Liquidated Damages for delay will be prescribed. (See paragraph 1-05 of the Specifications and Article 9 of the contract.)

(f) Patents. - Articles on patents will be made a part of the contract. (See paragraph GC-7 of the specifications.)

(g) Partial Payments will be made. (See paragraph GC-36 of the specifications and Article 16 of the Contract.)

(h) Claims, Protests and Appeals. - Decisions on claims protests and appeals will be made by the Secretary of War, Washington, D. C. (See paragraph GC-39 of the specifications and Articles 9 and 15 of the contract.)

(i) Federal, State and Local Taxes. - Provisions for adjustment of contract price by means of change in Federal, state and local taxes will be made a part of the contract. (See paragraph GC-42 of the specifications.)

(j) Accident Prevention, Liability and Safety Requirements. - The attention of bidders is directed to the requirements of paragraph GC-16 of the specifications regarding accident prevention, liability and safety requirements.

(k) Labor Discrimination. - Provision on discrimination against workers because of race, creed, color or national origin will be made a part of the contract.

(l) Assignment of Claims. - Articles on assignment of claims will be made a part of the contract. (See paragraph GC-35 of the specifications.)

(m) Priorities. - The attention of bidders is directed to paragraph 1-07 and GC-29 of the specifications which provides for the establishment of a priority rating for the contract.

(n) Liability Resulting from Enemy Operations. - A provision to relieve the contractor from liability for damage due to enemy operations will be made a part of the contract.

(o) Termination for the Convenience of the Government. - A provision for "Termination for the Convenience of the Government" will be made a part of the contract.

(p) Discounts. - No offers of discount for prompt payment or cash discounts will be tendered to or considered by the Government.

V. PREPARATION OF BID. -

(a) Form. - Bids must be submitted on the Standard Government Form of Bid to be eligible for consideration in awarding the contract.

(b) Bidding Schedule. - The bid form has an entry for each item on which estimates will be given or payments made. The quantities of each item of the bid, as finally ascertained at the close of the contract, in the units given and unit prices of the several items stated by the bidder in the accepted bid, will determine the total payments to accrue under the contract. No other allowance of any kind will be made unless specifically provided for in the specifications or the contract or by adjustments under Article 3 of the contract. The unit price bid for each item must allow for all collateral or indirect cost connected therewith.

(c) Bid Bond. - A bid bond is not required.

VI. DATA TO BE FURNISHED WITH BIDS. -

(a) General. - All bids submitted must be accompanied by a statement establishing that the bidder maintains a permanent place of business and has a suitable financial status to meet obligations incident to the work. (See paragraph 3 of the bidding schedule.) In addition, each bidder shall submit with his bid the statement of equipment which he proposes to employ on this work, including its location, ownership and how it is proposed to be obtained if not already owned or controlled by the bidder. These data are considered essential in enabling the contracting officer to determine whether the bidder is responsible and experienced in similar types of construction and whether the bid is based on a careful study of construction methods applicable to the work and full realization of the various factors which may affect the progress of the work.

(b) Experience. - Each bidder shall state in the space provided in the bidding schedule, a brief description of the character of the work previously executed by him and the locations of the major projects. After the bids are open, any bidder may be required by the contracting officer to state whether he is now or ever has been engaged in any construction work similar to that proposed, the year in which it was done, and the manner of its execution, and to give such other information as will tend to show his ability to prosecute vigorously the work required by these specifications. (See paragraph 2 of the Bidding Schedule)

VII. AWARD OF CONTRACT. - Award of contract will be made as a whole to one bidder, subject to the right reserved, as the interest of the Government may require, to reject any and all bids and to waive any informality in bids received. A bid may be rejected if the bidder fails to submit the data required with his bid or cannot show, to the satisfaction of the contracting officer, that he has the necessary capital and experience and owns or controls by firm option or can procure the necessary plant, as listed in the bidding schedule submitted to commence work at the time prescribed in the specifications and thereafter, to prosecute and complete the work at the rate of time specified; and that he is not already obligated for the performance of other work which would delay the commencement, prosecution or completion of the work contemplated. Any unbalanced bid which, in the opinion of the contracting officer jeopardizes the interest of the Government will be subject to rejection for that reason. The United States specifically reserves the right to reject any qualified bids and will normally reject those which make it impossible to determine the true amount of the bid.

VIII. CONTRACT. - Contract will be required to be executed by the successful bidder on the accompanying standard form No. 23, in accordance with the accompanying Government Instructions to Bidders. (Standard Form No. 22.)

IX. PERFORMANCE AND PAYMENT BONDS. - Performance and Payment Bonds will be required as follows:

(a) A performance bond with good and sufficient surety or sureties, for the protection of the United States, Standard Form No. 25 will be executed in a penal sum of approximately equal to and not less than ten per cent (10%) of the full amount of the consideration of the contract. (See Standard Government Form of Bid, Paragraph 5, for time limit of submitting payment bonds.)

(b) If the consideration of the contract will exceed two thousand dollars (\$2,000.00) in amount, payment bond with good and sufficient surety or sureties, for the protection of persons furnishing material and labor for the work, Standard Form 25-A will be executed in a penal sum approximately equal to and not less than fifty per cent (50%) of the full amount of the consideration of the contract when the latter is not more than one million dollars, (\$1,000,000.00), forty per cent (40%) where the contract exceeds one million dollars (\$1,000,000.00) but is not more than five million dollars (\$5,000,000.00) and two million five hundred thousand dollars (\$2,500,000.00) for all contracts above five million dollars (\$5,000,000.00)

X. ESTIMATES OF COST. - Bidders are advised that the Government will prepare estimates of the cost of construction of the work required under the specifications.

XI. RELEASE OF CLAIMS - ADDITIONAL FEE. - If prospective contractor now has a contract on cost-plus-a-fixed-fee basis it will be necessary that there be furnished in quadruplicate, to the District Engineer,

U. S. Engineer Office, Albuquerque, New Mexico, an unconditional release, releasing the United States, its officers, and agents, from any and all claims or demands for additional fee by virtue of work or services prior to date of negotiation and the execution of the release in connection with the Cost-Plus-a-Fixed-Fee Contract.

Note: U. S. Standard Form No. 23, Construction Contract,
U. S. Standard Form No. 22, Instructions to Bidders, and
U. S. Standard Form Release of Claims, are attached.

U. S. Standard Forms Nos. 25 and 25A, Performance and
Payment Bonds, may be obtained on application to the
U. S. Engineer Office, Albuquerque, New Mexico.

INDEX TO SPECIFICATIONS

<u>Par. No.</u>	<u>Paragraph Title</u>	<u>Page No.</u>
GENERAL CONDITIONS		
GC-1	General	1
GC-2	Visiting Site	1
GC-3	Site of Work	1
GC-4	Contract Requirements	1
GC-5	Contractor's Reports	1
GC-6	Liability for Damages	1
GC-7	Patents	2
GC-8	Standard Stock Products	2
GC-9	Control and Access to Work	2
GC-10	Character of Work and Mechanics	2
GC-11	Subcontractors	2
GC-12	Interpretation of Contract	2
GC-13	Lines, Grades, and Stakes	3
GC-14	Roads and Grounds	3
GC-15	Utilities	3
GC-16	Accident Prevention, Liability and Safety Requirements	4
GC-17	Substitutes for Critical Materials	6
GC-18	Protection of Stored Material	6
GC-19	Misplaced Material	6
GC-20	Standard Tests, Quality and Guarantees	6
GC-21	Federal Specifications	7
GC-22	Material, Equipment and Samples to be Submitted	7
GC-23	Drawings and Specifications, Cooperative	8
GC-24	Discrepancies	8
GC-25	Drawings	8
GC-26	Complete Work Required	9
GC-27	Minor Modifications	9
GC-28	Interference with Other Contractors	10
GC-29	Priorities	10
GC-30	Order of Work	10
GC-31	Work Covered by Contract Price	10
GC-32	Hours of Work and Overtime Pay	10
GC-33	Workmen's Compensation Laws	11
GC-34	Insurance	11
GC-35	Assignment of Claims	11
GC-36	Payments	12
GC-37	Organization, Plant and Progress	12
GC-38	Inspection	13
GC-39	Claims, Protests and Appeals	14
GC-40	Purchase Orders	14
GC-41	Cost Data	14
GC-42	Adjustment of Contract Price by Reason of Change in Federal, State or Local Taxes	15
GC-43	Restoration of Site	15
GC-44	Final Examination and Acceptance	15

Par. No.

Paragraph Title

Page No.

SECTION I - SPECIAL PROVISIONS

1-01	Location	I-1
1-02	Work to be Done	I-1
1-03	Drawings	I-1
1-04	Quantity of Work	I-1
1-05	Commencement and Prosecution	I-2
1-06	Sundays, Holidays and Nights	I-2
1-07	Priorities	I-2
1-08	Equipment Furnished by the Government	I-2
1-09	Material, Procurement of which is Arranged by the Government	I-2
1-10	Minimum Wage Rates	I-2

SECTION II - TECHNICAL PROVISIONS

2-01	Scope	II-1
2-02	Approximate Log of Well	II-1
2-03	Proposed Capacity	II-2
2-04	General Description	II-2
2-05	Materials	II-2
2-06	Type of Drill	II-2
2-07	Tests	II-3
2-08	Alignment of Well	II-3
2-09	Sand Pumping	II-3
2-10	Determination of Draw-Down	II-3
2-11	Capping	II-3
2-12	Log of Well	II-3
2-13	Measurement and Payment	II-4

WAR DEPARTMENT
U.S. ENGINEER OFFICE
ALBUQUERQUE DISTRICT
ALBUQUERQUE, NEW MEXICO

GENERAL CONDITIONS

GC-1. GENERAL.- These conditions are a part of the Specifications and shall govern wherever applicable. (See "Special Conditions").

GC-2. VISITING SITE.- The Bidder should visit the site and acquaint himself as to local conditions, availability of labor, water, electric power, roads, soil conditions, the relation of finished grade of the building to existing grades and difficulties which may attend execution of the work. The submission of a proposal will be construed as evidence that such a visit and investigation has been made and later claims for labor, equipment, or materials required, or difficulties encountered will not be considered.

GC-3. SITE OF WORK. - The term "Site of Work", as used in these specifications and in Articles 17 and 19 of the contract, will embrace all areas wherein field operations are conducted by the contractor in connection with this contract, including work areas, shops, camps, yards, etc., irrespective of whether such operating areas lie within the limits of right-of-way shown on the drawings.

GC-4. CONTRACT REQUIREMENTS.- The contractor shall acquaint himself and require subcontractors to be thoroughly acquainted with all the provisions and requirements of the basic contract and exact strict compliance with all terms thereof affecting such subcontractors, particularly as to wages, reports and affidavits.

GC-5. CONTRACTOR'S REPORTS.- The contractor will report monthly, and will cause all subcontractors to report in like manner, within five days after the close of each calendar month, on forms to be furnished by the Department of Labor, the number of persons on their respective pay rolls, the aggregate amount of such pay rolls, the man hours worked, and the total expenditures for materials. He shall furnish the Department of Labor the names and addresses of all subcontractors on the work at the earliest date practicable provided that the foregoing shall be applicable only to work at the site of the construction project.

GC-6. LIABILITY FOR DAMAGES.- The contractor will be held responsible for all damage to the work under construction, whether from fire, water, high wind, or other causes, during performance and until final completion and acceptance, even though partial payments may have been made under the contract. He will be held answerable for all damages that may occur to persons, property, animals, or vehicles from want of proper shoring, bracing, lighting, watching, boarding or enclosing, and for any accident arising from defective

GENERAL CONDITIONS

scaffolding or apparatus, or any negligence on the part of himself or his employees.

GC-7 PATENTS.- The contractor shall hold and save the Government, its officers, agents, servants and employees, harmless from liability of any nature or kind including costs and expenses for or on account of any patented or unpatented invention, article or appliance manufactured or used in the performance of this contract, including its use by the Government. These specifications are furnished with the explicit understanding that when drawings, specifications and other data prepared by the War Department are furnished manufacturers and others for use in the manufacture or purchase of supplies, or for any other purpose, the Government assumes no responsibility nor obligation whatever, and the furnishing of said data by the War Department is not to be regarded by implication or otherwise as in any manner licensing the holder or conveying the rights or permission to manufacture, use, or sell any patented invention that may in any way be thereto related.

GC-8. STANDARD STOCK PRODUCTS.- All materials, supplies and articles furnished shall, wherever so specified, and otherwise wherever practicable, be the standard stock products of recognized reputable manufacturers. The standard stock products of manufacturers other than those specified will be accepted, if in the opinion of the contracting officer, they are equal in strength, durability, usefulness and convenience for the purpose intended. (See Article 7 of the contract. Any changes required in the details and dimensions shown on the drawings for the substitution of standard stock products, other than those provided for, shall be properly made as approved by the contracting officer, and at the expense of the contractor.

GC-9. CONTROL AND ACCESS TO WORK.- The work shall be entirely under the control of the contracting officer and he or his authorized representatives shall have access to same at all times. The contracting officer may require the contractor to dismiss such employees as he deems to be incompetent or careless.

GC-10. CHARACTER OF WORK AND MECHANICS.- The work shall be executed in the best and most workmanlike manner by qualified, careful and efficient mechanics, in strict accordance with the drawings and specifications.

GC-11 SUBCONTRACTORS.- Subcontractors and their employees shall be considered to be employees of the contractor as the term "employee" is used in these specifications.

GC-12. INTERPRETATION OF CONTRACT.- Unless otherwise specifically set forth, the contractor shall furnish all materials,

GENERAL CONDITIONS

labor, etc., necessary to complete the work according to the true intent and meaning of the drawings and specifications of which intent and meaning the contracting officer shall be the interpreter. Except when otherwise indicated, no local terms or classifications will be considered in the interpretation of the contract or the specifications forming a part thereof.

GC-13. LINES, GRADES, AND STAKES.

(a). The contractor shall, at his own expense, furnish all stakes, material for batter boards, templates, patterns, platforms, and special labor that may be required in setting and cutting or laying out any part of the work. After lines and grades for any part of the work have been given by the Government inspectors, the contractor will be required to check their accuracy and will be held responsible for the proper execution of the work to the correct lines and grades. All stakes or other marks given shall be preserved by him until authorized by the inspector to remove them. The contracting officer may require that work be suspended at any time when for any reason such marks cannot be properly followed.

(b) The contracting officer will furnish to the contractor all location and limit marks reasonably necessary for the primary layout of the work, including grades for utility systems, to five feet outside the building lines. After primary layout of each unit has been furnished, the contractor shall make all further layout necessary for the prosecution of the work including the setting of batter boards. He shall be responsible for the preservation of the primary layout and, in case any portion is destroyed, he shall replace it as directed by the contracting officer.

GC-14. ROADS AND GROUNDS.- All building operations, and the grounds used in connection therewith, shall be confined to the limits designated by the contracting officer. Only such established and temporary roadways as the contracting officer may authorize shall be used by the contractor. Damaged roadways shall be repaired as directed by the contracting officer, at no expense to the United States. The contractor shall keep the buildings and grounds in use by him at the site of the work in an orderly and sanitary condition.

GC-15. UTILITIES.- Where water and electrical current are available from existing systems belonging to the United States, the contractor on application to the contracting officer will be furnished same through metered connections as required for his work, provided, however, that in case of emergency and/or in the opinion of the contracting officer the water supply becomes only sufficient to meet military needs, the contractor shall furnish the water necessary for his use from other approved sources.

GENERAL CONDITIONS

Connection to water mains or services shall be made by the contractor under the supervision of the contracting officer at the contractor's expense. The contractor shall provide all piping, corporation cocks, fittings, etc., required to make the connection and from it the contractor shall run such piping as he requires. Temporary piping shall be run underground in such locations as are approved by the contracting officer.

The contractor shall house connection to main or service in an accessible and approved manner and properly protect all piping against freezing. Connections, pipe, fixtures and fittings shall be maintained by the contractor. Failure to stop any leakage or other waste will be cause for use of the water to be discontinued. After temporary lines have served their purpose, the contractor shall remove all or part and restore the surface of the ground, as required by the contracting officer.

The closing of corporation cocks at mains shall be done by the contractor in a manner satisfactory to the contracting officer. Where water and/or electrical current are not available from the United States, the contractor will make his own arrangements for securing the same.

The United States will not be liable for delays or for any damage or expenses occasioned by the contractor due to any water and/or power shortage.

GC-16. ACCIDENT PREVENTION, LIABILITY AND SAFETY REQUIREMENTS.

(a) The contractor will not be allowed to block or obstruct any public highway without having secured prior permission from the contracting officer, and having provided safe, temporary detours. During the time the highways are so blocked, the contractor shall replace danger lights, barricades and warning signs in accordance with all local and State laws or as directed by the contracting officer.

(b) The contractor shall be responsible that his employees strictly observe the laws of the United States at the site under the contract.

(c) Accident Prevention.- In order to protect the life and health of employees in the performance of this contract, the contractor will comply with all pertinent provisions of the "Safety Requirements in Excavation- Building- Construction" approved by the Chief of Engineers, December 16, 1941, (a copy of which is on file in the office of the contracting officer) and as may be amended, and will take or cause to be taken such additional measures as the contracting officer may determine to be reasonably necessary for

GENERAL CONDITIONS

this purpose. The contractor will maintain an accurate record of and will report to the contracting officer in the manner and on the forms prescribed by the contracting officer, all cases of death, occupational disease and traumatic injury arising out of or in the course of employment on work under this contract. The contracting officer will notify the contractor of any non-compliance with the foregoing provisions and the action to be taken. The contractor shall, after receipt of such notice, immediately correct the conditions to which attention has been directed. Such notice, when served on the contractor or his representative and at the site of the work, shall be deemed sufficient for the purpose aforesaid. If the contractor fails or refuses to comply promptly, the contracting officer may issue an order stopping all or any part of the work. When satisfactory corrective action is taken, a start order will be issued. No part of the time lost due to any such stop order shall be made the subject of claim for extension of time or for excess costs or damages by the contractor.

(d) Particular attention is invited to Section 8302.03 of the "Safety Requirements in Excavation- Building- Construction" referred to in paragraph (c) above providing for First Aid Stations, infirmaries, medical and First Aid personnel, and ambulance services.

(e) The Infirmary and all First Aid Stations shall remain open and be completely manned as directed by the contracting officer during all hours that work is being performed.

(f) On projects employing 500 or more persons, a competent Safety Engineer shall be provided by the contractor for full-time supervision of the contractor's Safety Program. This Safety Engineer shall be an employee of the contractor and not a representative of the contractor's insurance company. The Safety Engineer shall have full authority to plan and direct an efficient Safety Program for the contractor and to correct deficiencies found by him or reported to him by representatives of the contracting officer.

(g) It will be permissible for the contractor to make arrangements to combine his facilities with the facilities of other contractors prosecuting work at the site, who have established the facilities and services specified in subparagraph (c) and (f) above, so that the combined facilities and services meet the requirements of these specifications. Such arrangements shall be subject to the prior approval of the contracting officer.

(h) Nothing in this paragraph shall be construed as modifying the responsibility of the contractor as set forth in Article 10 of the contract.

GENERAL CONDITIONS

GC-17. SUBSTITUTES FOR CRITICAL MATERIALS.- The plans and specifications for the various divisions of work have been prepared with a view toward reducing the use of critical materials to a minimum.

Where further changes in materials are deemed necessary in compliance with the lists of prohibited items as issued by the Army and Navy Munitions Board on priorities instructions, such changes will be ordered by the contracting officer. Any increase or decrease in cost occasioned by such changes to be adjusted according to Article 3 of the contract.

GC-18. PROTECTION OF STORED MATERIAL.- All materials, supplies, and articles delivered at the site, shall be adequately housed or otherwise protected against deterioration and damage to the satisfaction of the contracting officer. In case material or equipment furnished and stored by the contractor, on which payments have been made, becomes damaged or destroyed due to improper protection, the contractor shall replace such material at his own expense and to the satisfaction of the contracting officer.

GC-19. MISPLACED MATERIAL.- Any material that is deposited elsewhere than the place designated or approved by the contracting officer will not be paid for, the contractor may be required to remove such material and waste it or redeposit it as directed.

GC-20. STANDARD TESTS, QUALITY AND GUARANTEES.

(a) All materials, supplies and parts and assemblies thereof entering into the work to be done under these specifications shall be tested as specified herein, or, if not specified, in conformity with Article 6 of the contract and according to the best modern approved method for the particular type and class of work.

(b) Unless otherwise authorized or directed, where standard published specifications of recognized authorities or organizations are specified, the latest revisions of such specifications current at the time the work is executed shall govern.

(c) Unless waived in writing by the contracting officer, all tests and trials shall be made in the presence of a duly authorized representative of the contracting officer. When the presence of the inspector is so waived, sworn statements, in triplicate, of the tests made and the results thereof shall be furnished the contracting officer by the contractor as soon as possible after the tests are made.

(d) All costs of all tests and trials, excepting the

GENERAL CONDITIONS

expenses of the Government inspector and the testing of concrete aggregate and concrete cylinder tests shall be borne by the contractor and shall be included in the contract unit price for the items to which the inspections apply.

(e) In accordance with Article 7 of the contract, all materials, supplies and articles furnished and incorporated in the permanent structure shall be of the highest grade, free from defects and imperfections, of recent manufacture, and unused. Workmanship shall be of the highest grade and in accordance with the best modern standard practice.

(f) All articles, supplies, equipment parts and assemblies thereof, of standard manufacture, or for which detail designs or requirements are not prescribed in these specifications shall be guaranteed by the contractor against any failure in proper use or operation, caused by defective material, workmanship or design, for a period of one year from the date of final acceptance of the complete work under this contract. Failure in any part due to such causes within that time shall be promptly and satisfactorily remedied by the contractor without cost to the Government.

GC-21. FEDERAL SPECIFICATIONS. - All Federal Specifications hereinafter referred to shall include the latest revisions and amendments and may be seen in this office. Federal Specifications may be obtained from the Superintendent of Documents, Washington, D.C., or they may be seen at the U.S. Engineer Office, Albuquerque, New Mexico.

GC-22. MATERIAL, EQUIPMENT AND SAMPLES TO BE SUBMITTED. - As soon as practicable and within fifteen (15) days or any additional time as determined necessary by the contracting officer after the date of receipt of notice of award of the contract and before any materials, fixtures or equipment are purchased, the contractor shall submit for approval a complete list of all materials, fixtures and equipment which he intends to incorporate in the work, in triplicate, together with the names and addresses of the manufacturers, servicing agencies and their catalog numbers and trade names. The contractor shall also furnish samples or detailed information in accordance with requirements specified in the detailed specifications. Approval of materials will be based on manufacturer's published ratings. The equipment of any manufacturer who does not have an established distributing warehouse or servicing shop, conducted under responsible management and having qualified and experienced mechanics available, within a reasonable distance from the airfield, will not be considered. Failure to furnish the names of servicing agencies, or any other data called for in these specifications, will be considered sufficient reason for rejection of the equipment. Such servicing facilities shall have been established prior to the submittal of

GENERAL CONDITIONS

bids and not merely set up for the purpose of complying with this requirement of the specifications. In the event the contractor submits for approval materials, fixtures, and equipment that are not in conformity with the specifications, or not of the best quality and grade, the contracting officer reserves the right to reject such materials, fixtures, and equipment and to select a complete line; or the contractor shall submit for approval other equipment which is in conformity with the specifications. If the contractor fails to submit for approval within the specified time after the date of receipt of notice of award of the contract, the list of materials as above specified, then the contracting officer reserve the right to select a complete line of materials, fixtures and equipment. The selection made by the contracting officer shall be final and binding upon the contractor and shall be furnished and installed by the contractor without change in the contract price.

GC-23. DRAWINGS AND SPECIFICATIONS, COOPERATIVE.- The drawings and specifications shall be considered as cooperative and work and material called for by one and not shown or mentioned in the other shall be done or furnished in as faithful and thorough a manner as though fully covered by both.

GC-24. DISCREPANCIES.- Where no figures or memoranda are given, the drawings shall be accurately followed according to scale. In any case of discrepancy in the figures on drawings, the matter shall be immediately submitted to the contracting officer without whose decision said discrepancy shall not be adjusted by the contractor, save only at his risk; and in the settlement of any complications arising from such adjustment the contractor shall bear all extra expense involved.

In case of differences between drawings and specifications, the specifications shall govern.

GC-25. DRAWINGS.- The work shall conform to drawings listed in "Special Provisions."

(a) The work shall also conform to such drawings in explanation of details or modifications as may be furnished by the contracting officer from time to time during construction, including such changes as the contracting officer may consider necessary on account of special conditions encountered during prosecution of the work. (See Articles 2 and 3 of the contract.)

(b) During the prosecution of the work the contractor shall check all drawings and shall immediately report all errors and omissions found therein to the contracting officer. Parts and details not fully shown on the drawings shall be detailed by the contractor in accordance with standard architectural and engineering

GENERAL CONDITIONS

practice. The contractor shall submit three sets of prints of each of such detailed drawings and accompanying specifications to the contracting officer who will return one set with his approval or with notations of such changes as he deems necessary. Approval of drawings by the contracting officer shall not relieve the contractor of responsibility for the correct fitting together and exact position of all parts of the work and complete conformity with the specifications. After approval, the contractor shall furnish the contracting officer with five sets of prints of each approved drawing and accompanying specifications. Each print submitted for approval shall have a three-inch by four-inch white space in the lower right hand corner, just above the title, in which the contracting officer may indicate the action taken. All such approved drawings and specifications shall form a part of these specifications. Payment for the contractor's drawings, revisions thereof, and for copies furnished, shall be included in the contract prices of the various items of work.

(c) Shop and Erection Drawings. - The contractor shall submit to the contracting officer for approval five copies of all shop drawings called for under the various sections. These drawings shall be complete, giving all the required information. If approved, each copy will be identified as having received such approval by being stamped or marked thus: "THIS SHOP DRAWING APPROVED IN ACCORDANCE WITH PROVISIONS OF SPECIFICATIONS," signed and dated. Four sets will be retained by the contracting officer and one returned to the contractor. If not approved, each copy will be so identified by being stamped or marked thus: "THIS SHOP DRAWING TO BE CORRECTED AS NOTED." and dated. After being stamped and marked for correction, with the necessary changes having been indicated thereon, one copy of each drawing will be returned to the contractor for the necessary corrections. After the corrections have been made and approved, the contractor shall submit five copies of the revised drawings to the contracting officer for approval and distribution as above provided. All approved shop drawings will form a part of the specifications. The approval shall not be construed as a complete check, but will only indicate that the general method of construction and detailing is satisfactory. Approval of the drawings will not relieve the contractor of the responsibility for any error which may exist, as the contractor shall be responsible for the dimensions and design of adequate connections, details and satisfactory construction of all work.

GC-26. COMPLETE WORK REQUIRED.- It is intended that the drawings and specifications include everything requisite and necessary to finish the entire work properly notwithstanding every item necessarily involved is not particularly mentioned. All work when finished shall be delivered in a complete and undamaged state and in proper working order.

GC-27. MINOR MODIFICATIONS.- The right is reserved to make such minor changes in the execution of the work to be done under

GENERAL CONDITIONS

these specifications as, in the judgment of the contracting officer, may be necessary or expedient to carry out the intent of the contract; provided that the unit cost to the contractor of doing the work shall not be increased thereby, and no increase in unit price over the contract rate will be paid to the contractor on account of such changes. (See Articles 3, 4 and 5 of the contract).

GC-28. INTERFERENCE WITH OTHER CONTRACTORS.- The contractor shall not interfere with materials, appliances, or workmen of the United States or any other contractor who may have work at this site. As far as practicable all contractors shall have equal rights in the use of all assigned roads and grounds. In case of disagreement regarding such use the decision of the contracting officer shall govern.

GC-29. PRIORITIES.- Attention of the contractor is called to the fact that a priority rating will be established for this contract. (See "Special Provisions"). In case the contractor is unable to obtain the required delivery on materials and/or equipment which are to become a permanent part of the construction, the contractor shall notify the contracting officer, submitting with his notification supporting data to his claim that the required delivery of such materials or equipment cannot be obtained.

If the completion of the undertaking to be performed under the terms of this contract be delayed by reason of delay in the delivery of materials or supplies essential to such performance because of national defense priorities and without the fault or negligence of the contractor, the time of performance will be extended for a period equal to such delay, as determined by the contracting officer, and subject to appeal, as provided in Article 9 of the contract.

GC-30. ORDER OF WORK.- Construction shall be carried on in such order and sequence as found necessary and approved by the contracting officer.

GC-31. WORK COVERED BY CONTRACT PRICE.- The contractor shall, under his contract prices, furnish and pay for all materials, labor and all permanent, temporary, preparatory and incidental work, furnish all accessories and do everything which may be necessary to carry out the contract in good faith, which contemplates the completion of everything in good working order, of good material, and with accurate workmanship, skillfully fitted and properly connected and put together.

GC-32. HOURS OF WORK AND OVERTIME PAY.- The contractor will prosecute the work in accordance with the following conditions and will include the same provisions in all subcontracts entered into by him:

GENERAL CONDITIONS

(a) Overtime Rates. - Where a single shift is worked eight hours of continuous employment except for lunch periods shall constitute a day's work beginning on Monday and through Friday of each week. When work is required in excess of eight hours on any one day or during the interval from five p.m. Friday to seven a.m. Monday or on holidays such work shall be paid for at one and one-half times the basic rate of wages.

(b) Shifts. - Where two or more shifts are worked, five days of seven and one-half hour shifts from Sunday midnight to Friday midnight, shall constitute a regular weeks work. The pay for a full shift period shall be a sum equivalent to eight times the basic hourly rate and for a period less than the full shift shall be the corresponding proportional amount which the time worked bears to the time allocated to the full shift period. Any time worked from Friday midnight to Sunday midnight or in excess of regular shift hours shall be paid for at one and one-half times the basic rate of wages. Wherever found to be practicable shifts should be rotated.

GC-33. WORKMEN'S COMPENSATION LAWS. - The act approved June 25, 1936, (49 Stat. 1938, 1939) provides that the several states have authority to make their workmen's compensation laws applicable to contracts for the construction, alteration or repair of a public building, or public work of the United States, and the several states are vested with the power and authority to enforce such state laws on lands of the United States.

GC-34. INSURANCE. - No partial payment will be made until the contractor has submitted satisfactory proof that the property to be paid for is covered by a fire and comprehensive coverage insurance policy with extended coverage endorsement. Such insurance shall be in a sum at least equal to the amount of the payment to be made, plus any other partial payments previously made thereon. The contractor shall keep all such property fully insured, without cost to the Government, until final inspection and acceptance of all work under the contract. The insurance policy or policies shall be written by a company or companies satisfactory to the contracting officer, and shall provide that any loss be payable to the contractor and the Government as their respective interests may appear. All insurance policies shall be filed with the contracting officer and shall be subject to his approval.

GC-35. ASSIGNMENT OF CLAIMS.

(a) In accordance with the provisions of the Assignment of Claims Act (Public No. 811, 76th Congress, 3d Session) approved October 9, 1940, payments due under this contract may be assigned to a bank, trust company, or other financing institution, including

GENERAL CONDITIONS

any Federal lending agency.

(b) Any assignment shall cover all amounts payable under this contract and not already paid and shall not be made to more than one party, except that any such assignment may be made to one party as agent or trustee for two or more parties participating in such financing.

(c) Any claim under this contract may be subject to further assignment to a bank, trust company, or other financing institution including any Federal lending agency, and to similar further assignment; provided that any such assignee shall file written notice of further assignment, together with a true copy of the instrument of further assignment with the contractor and also as provided in proviso 4 of Section 1 of the Assignment of Claims Act of 1940 (Public No. 811, 76th Congress) in respect to original assignment.

(d) No assignee shall divulge any information concerning the contract, or contained therein, except to those persons necessarily concerned with the transaction.

(e) Payments to an assignee of any claim arising under this contract shall not be subject to reduction or set-off for any indebtedness of the assignor to the United States arising independently of this contract.

(f) Further information concerning procedure for assignment may be obtained from the contracting officer.

GC-36. PAYMENTS.- Payments to the contractor will be made semi-monthly in accordance with Article 16 of the contract and in accordance with a well-balanced schedule to be prepared by the contractor and approved by the contracting officer apportioning the total amount of the contract among the main items that go to form the completed work. The total amount shown by said schedule shall equal the amount to be paid under the contract. Ten per cent (10%) of the amount of each estimate will be retained until the contract work is fifty per cent (50%) completed, after which the total amount retained will never be less than 5 per cent (5%) of the total contract amount until the full completion and acceptance of all work covered by the contract, when final payment will be made thereon, including the retained percentage.

GC-37. ORGANIZATION, PLANT AND PROGRESS.

(a) The contractor shall within seven days after issuance of the notice of award, prepare and submit to the contracting officer, for approval a practicable and feasible schedule showing the order in which the contractor proposes to carry on the work,

GENERAL CONDITIONS

the dates on which he will start the several salient features (including procurement of materials, plant and equipment) and the contemplated dates for completing the same. The schedule shall be in the form of a progress chart of suitable scale so as to indicate appropriately the percentage of work scheduled for completion at any time. The contractor shall enter the actual progress at the end of each week and shall immediately deliver to the contracting officer three blue print copies of the same.

(b) The contractor shall furnish sufficient forces, construction plant and equipment, and shall work such hours, including night shifts and Sunday and holiday work as may be necessary to insure the prosecution of the work in accordance with the approved progress schedule. If, in the opinion of the contracting officer, the contractor falls behind the progress schedule, the contractor shall take such steps as may be necessary to improve his progress and the contracting officer may require him to increase the number of shifts, days of work and/or the amount of construction plants, all without additional cost to the Government.

(c) Failure of the contractor to comply with the requirements by the contracting officer or his authorized representative under this provision shall be grounds for the determination by the contracting officer that the contractor is not prosecuting the work with such diligence as will insure completion within the time specified; and when such determination has been made, the contracting officer may provide the necessary additional personnel and/or plant at the contractor's expense to insure completion within the required time. If the work is not already being prosecuted on a multiple shift basis, the contracting officer may require work to be carried on during additional shifts at the contractor's expense.

GC-38. INSPECTION.

(a) The work will be conducted under the general direction of the contracting officer and will be inspected in accordance with Article 6 of the contract by inspectors appointed by him. The inspectors will keep a record of the work done and see that the location and limit marks are kept in proper order, but the presence of the inspector shall not relieve the contractor or his responsible agent (See Article 8 of the contract) of the responsibility for the proper execution of the work.

(b) Except as specified in this paragraph, in Article 6 of the contract, or otherwise provided for in these specifications, all expenses of inspection will be borne by the Government.

(c) It is understood that any instructions or decisions given by a superior officer through the contracting officer are to be considered instructions or decisions of the contracting officer in all cases where, under the terms of the contract, decisions rests

GENERAL CONDITIONS

with the contracting officer.

GC-39. CLAIMS, PROTEST AND APPEALS. - If the contractor considers any work demanded of him to be outside the requirements of the contract, or if he considers any action or ruling of the contracting officer or of the inspectors to be unfair, the contractor shall, without undue delay, upon such demand, action or ruling, submit his protest thereto in writing to the contracting officer, stating clearly and in detail the basis of his objections. The contracting officer shall thereupon promptly investigate the complaint and furnish the contractor his decision, in writing, thereon. If the contractor is not satisfied with the decision of the contracting officer, he may, within thirty (30) days appeal in writing to the Secretary of War, whose decision, or that of his duly authorized representative, shall be final and binding upon the parties to the contract. Except for such protests or objections as are made of record in the manner herein specified and within the time limit stated, the records, rulings, instructions or decisions of the contracting officer shall be final and conclusive. All appeals from decisions of the contracting officer authorized under the contract shall be addressed to the Secretary of War, Washington, D. C. The appeal shall contain all the facts or circumstances upon which the contractor bases his claim for relief and should be presented to the contracting officer for transmittal within the time provided for in the contract.

GC-40. PURCHASE ORDERS. - Two copies of all purchase orders, showing firm names and addresses, shall be submitted to the contracting officer prior to the placement of orders for materials which are to be incorporated in the work. Two copies of shipping bills or invoices covering shipment of all materials received, whether they are to be incorporated in the permanent work or consumed in the course of construction, shall be furnished in each case within ten days after receipt of shipment. Such invoices or shipping bills shall clearly indicate, in the case of each shipment, the firm names and addresses, the car initials and numbers when shipped by railroad, and the weights or other units of measure. In the case of material which is to be incorporated in the permanent work, the invoices or shipping bills will be so worded or marked that each item, piece or member can be definitely identified on the drawings.

GC-41. COST DATA. - The Government will keep a record of the costs of the work performed under these specifications and the contractor shall permit the contracting officer to have access to his timekeeping, invoices and plant records for this purpose. The contractor shall also furnish the contracting officer with a statement of the initial cost and date of purchase of all plant used in connection with the work. (See paragraph IV (d), Invitation for Bids.)

GENERAL CONDITIONS

GC-42. ADJUSTMENT OF CONTRACT PRICE BY REASON OF CHANGE IN FEDERAL, STATE OR LOCAL TAXES. - Unless otherwise indicated, the prices herein include any Federal, state and local tax or charge heretofore imposed which is applicable to the supplies or work covered hereby. If after the date of the award, the Federal Government or any state or local government shall impose, remove or change any duty, sales, use or excise tax or any other tax or charge directly applicable to the supplies or work covered hereby or the materials used in the manufacture thereof or directly upon the importation, production, processing, manufacture, construction or sale of such supplies, work, or materials, which tax or charge must be borne by the contractor because of a specific contractual obligation or by operation of law, or, in case of a decrease or elimination of a tax, where the contractor is relieved to that extent, and if in case of an increase in an existing tax or the imposition of a new tax the contractor has paid such tax or charge to the Federal Government or a state or local government, or any person, then the prices named herein will be increased or decreased accordingly and any amount due to the contractor as a result of such change will be charged to the Government and entered on vouchers (or invoices) as a separate item; provided, however, that the Government reserves the right to issue to the contractor in lieu of such payment a tax exemption certificate or certificates acceptable to the Federal Government or state or local government, as the case may be, and the contractor agrees, in the case of any such state or local tax or charge, to take such steps as may be requested by the Government to cause such tax or charge to be paid under protest, to preserve and to cause to be assigned to the Government any and all rights to the refund of such tax or charge, and to furnish to the Government all reasonable assistance and cooperation requested by the Government in any litigation or proceeding for the recovery of such tax or charge; and Provided further, That nothing contained herein shall be construed as requiring the Government to reimburse the contractor for any Federal, state or local income taxes, income surtaxes or excess profits taxes.

GC-43. RESTORATION OF SITE. - Before final payment is made, the contractor shall remove from the site, without expense to the Government, all rubbish, unused materials provided by him, temporary buildings and other structures erected by him, shall fill all holes or cavities made for his convenience, except as otherwise provided, and shall leave the entire site in good order and condition, all as required by the contracting officer.

GC-44. FINAL EXAMINATION AND ACCEPTANCE. - When all work called for under this contract has been completed, the contracting officer will make a thorough examination of the same and, if it is found to fully comply with the requirements of the contract, it will be accepted and final payment will be made in accordance with the provisions of Article 16 (d) of the contract.

WAR DEPARTMENT
U. S. ENGINEER OFFICE
ALBUQUERQUE DISTRICT
ALBUQUERQUE, NEW MEXICO

APPROPRIATION: 212/30905 ENGINEER SERVICE, ARMY, 1942 and 1943,
(A 0905-23).

SPECIFICATIONS: CONSTRUCTION OF WATER SUPPLY WELLS, GRANADA RELOCATION
CENTER, COLORADO.

SECTION I

SPECIAL PROVISIONS

1-01. LOCATION. - The site of the work is near Granada, Colorado.

1-02. WORK TO BE DONE. - The work to be performed under this contract, in accordance with these specifications, is authorized by the Fifth Supplemental National Defense Appropriation Act, 1942, approved March 5, 1942, (Public Law 474, 77th Congress - Second Session), and consists of furnishing all plant, labor and materials for the construction, in accordance with the drawings and with these specifications of Water Supply Wells, Granada Relocation Center, Colorado.

1-03. DRAWINGS.

(a) There is one drawing which forms a part of these specifications filed in the U. S. Engineer Office, Albuquerque, New Mexico, with file number as follows:

<u>Designation</u>	<u>File No.</u>
Water Supply Wells - Location Map	GC-W-1/1

(b) Two prints of the drawing and two sets of specifications will be furnished the contractor without charge. Additional sets may be secured upon request at cost of reproduction.

(c) The work shall also conform to such modifications as may be furnished by the contracting officer, as stated under "General Conditions."

1-04. QUANTITY OF WORK. - The following quantity of work is given only to serve as a basis for canvassing bids and for determining the approximate amount of the consideration of the contract. The contractor will be required to perform under this item the entire amount of work specified in paragraph 1-02.

Specifications: Water Supply Wells, Granada Relocation Center, Colorado.

TOTAL ESTIMATED QUANTITIES FOR 3 WELLS

<u>Item No.</u>	<u>Designation</u>	<u>Unit</u>	<u>Quantity</u>
1.	Drilling Wells	Lin.Ft.	2475
2.	Well Casing, Standard	Lin.Ft.	2265
3.	Well Casing, Perforated	Lin.Ft.	210
4.	Test Pumping	Hour	44

1-05. COMMENCEMENT AND PROSECUTION. - The contractor shall deliver his well drill, with the necessary personnel, complete and ready to operate, to the site, and commence work within the time stated by him on the bid form and made a part of this contract. The work shall be prosecuted vigorously during all seasons of the year.

1-06. SUNDAYS, HOLIDAYS AND NIGHTS. - Work shall be prosecuted on Sundays and holidays on the same basis as on other weekdays. Work at night shall be at the option of the contractor subject to the requirements of paragraph 1-05 and GC-37.

1-07. PRIORITIES. - A priority rating of A-1-e will be established for this contract. (See General Conditions).

1-08. EQUIPMENT FURNISHED BY THE GOVERNMENT. - None.

1-09. MATERIALS, PROCUREMENT OF WHICH IS ARRANGED BY THE GOVERNMENT. - None.

1-10. MINIMUM WAGE RATES. -

(a) The minimum wages to be paid laborers and mechanics on this project, as determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the pertinent locality, are as follows:

Classification of Laborers and Mechanics: Minimum Rates of Wages per Hour.

Air Tool Op. / Jackhammermen, Vibrator	\$.75
Asbestos Workers	1.40
Asbestos Workers Improvers, 1st Year	.85
" " " 2nd Year	.95
" " " 3rd Year	1.00
" " " 4th Year	1.05

Specifications: Water Supply Wells, Granada Relocation Center, Colorado.

Asphalt Rakers	\$.625
Asphalt Shovelers	.625
Blacksmiths	1.25
Blaster-Powderman	1.25
Blasters Helper	.80
Boilermakers	1.50
Boilermakers Helpers	1.375
Bricklayers	1.65
Bricklayers Apprentices	
1st 6 months 20 percent of journeymens rate	
2nd 6 " 20 " " " "	
3rd 6 " 30 " " " "	
4th 6 " 35 " " " "	
5th 6 " 50 " " " "	
6th 6 " 60 " " " "	
7th 6 " 65 " " " "	
8th 6 " 75 " " " "	
Carpenters, Journeymen	1.25
Carpenters Apprentices, 1st 6 months	.50
2nd 6 months	.50
3rd 6 months	.65
4th 6 months	.65
5th 6 months	.80
6th 6 months	.80
7th 6 months	.95
Cement Finishers	1.25
Electricians	1.50
Electricians Apprentices, 1st year \$10.00 per week	
2nd year	.55
3rd year	.70
4th year	.80
Elevator Constructors	1.50
Elevator Constructors Helpers	1.05
Firemen and Oilers	1.00
Glaziers	1.30
Iron Workers, Structural	1.50
Iron Workers, Ornamental	1.50
Iron Workers, Reinforcing	1.50
Iron Workers Apprentices	
1st 6 months 50 percent of journeymens rate	
2nd 6 " 60 " " " "	
2nd year 66-2/3 " " " "	
Laborers, Unskilled	.625
Lathers, Metal	1.50
Lathers, Wood	1.25
Marble Setters	1.50
Marble Setters Helpers	1.00
Mason Tenders	.90
Mortar Mixers	.90
Millwrights	1.25
Painters, Brush	1.25
Painters, Spray	1.50

Specifications: Water Supply Wells, Granada Relocation Center, Colorado.

Painters, Structural Steel	\$1.50
Painters Apprentices	
1st year 25 percent of journeymens rate	
2nd " 33 " " " "	
3rd " 50 " " " "	
4th " 75 " " " "	
Painters, Sign	1.50
Piledrivermen	1.25
Pipe Layers / Concrete and Clay/	.75
Plasterers	1.50
Plasterers Tenders	.90
Plumbers	1.50
Plumbers Apprentices, 1st year \$13.71 per week	
2nd " \$16.00 " "	
3rd " \$20.57 " "	
4th " \$22.86 " "	
5th " \$28.57 " "	
Power Equipment Operators.	
Air Compressors, 750 cu. ft. or under	.80
Air Compressors, over 750 cu. ft.	1.25
Asphalt Plant	1.43
Backfiller	1.43
Bulldozers	1.43
Cranes, Derricks, Draglines	1.50
Finishing Mach. / Cem. Conc. Pave./	1.10
Hoists, 1 Drum	1.25
Hoists, 2 or more Drum	1.43
Loader or Conveyor	1.25
Mixers, 1 cu. yd. or less	1.25
Mixers, over 1-cu. yd.	1.43
Motor Graders	1.43
Piledrivers	1.50
Pumps, under 100 H.P.	.80
Pumps, 100 H.P. or over	1.10
Rollers	1.43
Scrapers	1.43
Scrapers / Le Tourneau /	1.43
Shovels	1.50
Tractors, over 35 H.P.	1.43
Tractors, 35 H.P. or under	1.00
Tranching Machines	1.43
Roofers, Composition	1.25
Roofers, Slate and Tile	1.25
Roofers, Helpers	.80
Sheet Metal Workers	1.25
Sheet Metal Workers Apprentices	
1st 6 months 35 percent of journeymens rates	
2nd 6 " 40 " " " "	
3rd 6 " 45 " " " "	
4th 6 " 50 " " " "	
5th 6 " 55 " " " "	
6th 6 " 60 " " " "	
7th 6 " 70 " " " "	
8th 6 " 80 " " " "	

Specifications: Water Supply Wells, Granada Relocation Center, Colorado.

Soft Floor Layers /Linoleum/	\$1.15
Steam Fitters	1.50
Steam Fitters Apprentices	
1st year \$3.43 per day	
2nd year \$4.00 per day	
3rd year \$4.57 per day	
4th year \$5.49 per day	
Stone Cutters or Masons	1.50
Tank Builders	1.60
Tank Builders Helpers	1.40
Terrazzo Workers Helpers	.90
Tile Setters	1.50
Tile Setters Helpers	.90
Truck Drivers, 1-1/2 tons or less	.75
Truck Drivers, over 1-1/2 tons	1.00
Welders - Receive rate prescribed for craft performing operation to which welding is incidental.	
Well Drillers	1.25
Well Drillers Helpers	.90
Wreckers	.625
Glaziers Apprentices .	
1st year, 2nd 6 months	.46
2nd year, 1st 6 months	.49
2nd year, 2nd 6 months	.57
3rd year, 1st 6 months	.65
3rd year, 2nd 6 months	.72
4th year, 1st 6 months	.86
4th year, 2nd 6 months	.97
Terrazzo Workers	1.50

(b) Any class of laborers and mechanics not listed in the preceding paragraph, which will be employed on this contract, shall be classified or reclassified conformably to the foregoing schedule. In the event the interested parties cannot agree on the proper classifications or reclassification of a particular class of laborers and mechanics to be used, the question, accompanied by the recommendation of the contracting officer, shall be referred to the Secretary of Labor for final determination.

Specifications: Water supply Wells, Granada Relocation Center, Colorado.

SECTION II

TECHNICAL PROVISIONS

2-01. SCOPE. - The work to be done under this section consists of furnishing all materials, equipment, incidentals and labor required to drill three or more water supply wells, each approximately 825 feet deep, complete with casing and other incidental work herein specified, or necessary for the proper development of the water supply. The actual number of wells to be drilled will be determined by the contracting office after the capacity of the first well has been determined.

2-02. APPROXIMATE LOG OF WELL. - It is expected that the following formations will be encountered as drilling of the wells progress. The log, as given below, is for the guidance of the contractors and is based on the actual log of the Granada City well No. 2, located approximately one mile northeast of Granada, Colorado, which was drilled by Lewis Helms in 1930, and later deepened by Henry L. Bechtold in 1934.

<u>Depth - Feet</u>	<u>Material Encountered</u>
0-60	Soil
60-79	River bed
79-99	White rock
99-180	Black shale
180-345	Hard shale
345-395	Soft shale
395-440	Hard rock
440-475	Soft shale
475-512	Dakota formation
512-522	Dakota formation, water
522-550	White sand and clay
550-552	Oil sand or dark sand
552-573	White sand and gray sand
573-580	Shale, bottom of well
580-594	Sandstone
594-598	Gray sandy shale
598-720	Gray shale, sticky
720-728	Gray shale, sticky
728-729.5	Iron Pyrite
729.5-744	Gray shale
744-749	Gray sandstone
749-781	Gray shale
781-824	Second Dakota
824	Green shale, Morrison

Specifications: Water Supply Wells, Granada Relocation Center, Colorado.

2-03. PROPOSED CAPACITY. - The capacity of each well shall be approximately 350 g.p.m. as established by the pumping test hereinafter specified.

2-04. GENERAL DESCRIPTION. - The contractor shall furnish as a part of his equipment temporary casing of a sufficient diameter to permit the permanent installation of 10 inch I.D. casing, having screwed couplings. The temporary casing should be of length sufficient to case the well from the ground to the first Dakota sandstone. After the 10 inch permanent casing has been installed, the contractor may pull the temporary casing for re-use or leave it in place at his own expense.

2-05. MATERIALS.

(a) Well Casing. - New 10-inch I.D. standard black steel well casing, threaded and complete with necessary standard couplings, free from rust or defects will be required for casing of the well to the depth drilled or as directed by the contracting officer.

(b) Cutting Ring. - The cutting ring shall be of standard design, 8 inches in length, with the cutting edge on the outside diameter of the ring. The ring shall be made of extra-strength alloy steel, meeting the requirements of Federal Specification QQ-N-281. The cutting ring shall be connected securely to the bottom of the casing by whatever means provided by the manufacturer and with the approval of the contracting officer.

(c) Perforated Casing. - Perforated casing shall be standard 10-inch casing, perforated with slots approximately 1/8 inch wide and uniformly spaced to provide a slotted area equal to 20 per cent of the surface area of the casing. A sample length shall be submitted to the contracting officer for approval before installation. There shall be approximately 40 feet of perforated casing at the bottom of the well, and approximately 30 feet located in the first Dakota sandstone. The exact number of feet and location will be determined from the contractor's drilling log and placed as directed by the contracting officer.

(d) Cap. - The top of the casing shall be closed by a dust-proof plug or cap.

2-06. TYPE OF DRILL. - Drilling may be done with any type of drill that will satisfactorily penetrate the overlying material to the desired water bearing strata.

Specifications: Water Supply Wells, Granada Relocation Center, Colorado.

2-07. TESTS. - In order to determine that a dependable supply of water can be secured from any well, the contractor shall furnish a pump having a capacity of at least 400 g.p.m., and shall run the test on any well as directed by the contracting officer. The first test shall be run continuously for a period of 10 hours at a rate of approximately 200 g.p.m. The second test shall be run continuously for a period of 10 hours, at a rate of approximately 300 g.p.m., beginning after the elapsed period of approximately 24 hours from the end of the first test. The third test shall be run continuously for a period of 24 hours, at a rate of approximately 400 g.p.m., or at a rate to produce a drawdown of 400 feet from the surface of the ground if the capacity of the well is less than 400 g.p.m.; the third test will begin after an elapsed period of approximately 24 hours from the end of the second test.

The determination of the quantity of water secured by these tests will be made by the contracting officer. The contractor shall dispose of the water from testing operations in such a manner as not to damage adjacent property and as approved by the contracting officer. In case the required supply is secured in 3 wells, the wells will be considered as adequate and no further wells will be drilled. In case the required supply is not obtained, the contractor shall proceed as outlined in paragraph 2-01, or as directed by the contracting officer.

2-08. ALIGNMENT OF WELL. - A truly vertical well is required. Should the well at any depth divert from a true vertical alignment to such an extent that the turbine pump cannot be hung in the well to its full length without binding at any point against the casing, the well will be considered as defective and no payment will be made therefor.

2-09. SAND PUMPING. - Upon completion of the installation of perforated casing, a sand bucket, as large as the size of the casing will permit, shall be violently oscillated or churned opposite all the perforated section of the casing or where otherwise directed for such time as may be required by the contracting officer.

2-10. DETERMINATION OF DRAW-DOWN. - The contractor shall furnish and install in each well during the testing period an airline, tee, gauge, automobile tube stem and necessary equipment for determining the draw-down of water during the testing period. The equipment shall be as approved by the contracting officer.

2-11. CAPPING. - Upon completion of testing operations, the pump shall be removed from the well and the top of the casing fitted with a suitable cap to prevent entrance of foreign matter into the well. The cap shall be securely attached in a manner satisfactory to the contracting officer.

2-12. LOG OF WELL. - The contractor will not be required to furnish samples of materials through which the drilling passes. However, the contractor shall record carefully the depths and kinds of material encountered. He shall furnish the contracting officer with an accurate log of each well.

Specifications: Water Supply Wells, Granada Relocation Center, Colorado.

2-13. MEASUREMENT AND PAYMENT.

(a) Drilling Well. - Payment for drilling the wells specified under this section will be made at the contract price, per linear foot, for "Drilling Wells," measured from the original ground surface, and shall include all costs of labor and equipment required to drill the well to the depth required by the contracting officer.

(b) Well Casing. - Payment for the well casing will be made at the contract price, per linear foot, for "Well Casing, Standard," which shall include all costs in connection with furnishing and installing the well casing to the required depth.

(c) Perforated Casing. - Payment for perforated casing will be made at the contract price, per linear foot, for "Well Casing, Perforated," which shall include all costs in connection with furnishing and installing the perforated casing as required.

(d) Test Pumping. - Payment for test pumping will be made at the contract price, per hour, for "Test Pumping," which shall include all costs in connection with furnishing equipment and labor necessary to complete the test.

STANDARD GOVERNMENT FORM OF BID

(Construction Contract)

(Place) _____

(Date) _____

To: The District Engineer,
U. S. Engineer Office,
Post Office Box 1538,
Albuquerque, New Mexico.

1. In compliance with your Invitation for Bids, dated June 23,
1942, and subject to all the conditions thereof, the undersigned

a Corporation organized and existing under the laws of the State of

a partnership consisting of _____

or an individual trading as _____

of the City of _____

hereby proposes to furnish within the time specified all plant, labor
and materials, and to perform all work required for the drilling of
Water Supply Wells near Granada, Colorado, at the location shown on the
location map to the extent required by the contracting officer in
strict accordance with the specifications, for the following consider-
ation for the corresponding items of work:

SCHEDULE FOR BID ITEMS

Item No.	Quantity	Unit	Designation	Unit Price	Amount
TOTAL ESTIMATED QUANTITIES FOR 3 WELLS					
1	2475	Lin. Ft.	Drilling Wells	\$ _____	\$ _____
2	2265	Lin. Ft.	Well Casing, Standard	\$ _____	\$ _____
3	210	Lin. Ft.	Well Casing, Perforated	\$ _____	\$ _____
4	44	Hours	Test Pumping	\$ _____	\$ _____
TOTAL BID PRICE					\$ _____

The well drilling equipment will be delivered to the site of the work ready for operation, and operation begun, within * _____ calendar days from date of notice of award.

It is understood and agreed that 3 or more wells, involving approximately the above quantities of work, may be drilled and if additional wells are required by the contracting officer, the above unit prices shall apply.

* Time to be inserted by Bidder.

- NOTE: (1) All amounts and totals above will be subject to verification by the Government. In case of variation between unit bid price and total shown by bidder, the unit price will govern.
- (2) Bids must be for the entire work and must have each blank space filled in to be acceptable.

2. Data Sheet for Well Drill. - Each bidder shall fill in and submit with his bid the information required and listed below concerning the well drill he proposes to furnish.

Make of well drill _____

Model No. _____

Age _____

Type of engine _____

Type of mounting _____

Maximum size and depth of hole which can be drilled _____

_____ Diameter _____ Ft. deep _____

Condition of well drill _____

Present location of well drill _____

Make of pump _____

Model No. and Description _____

Age _____

Condition of Pump _____

Present location of pump _____

3. Previous Experience _____

5. The undersigned agrees, upon receipt of written notice of the acceptance of this bid for work, to execute the standard form of Government contract, in accordance with the bid as accepted within 10 days after the prescribed forms are presented for signature.

By _____

(Business Address)

Witness:

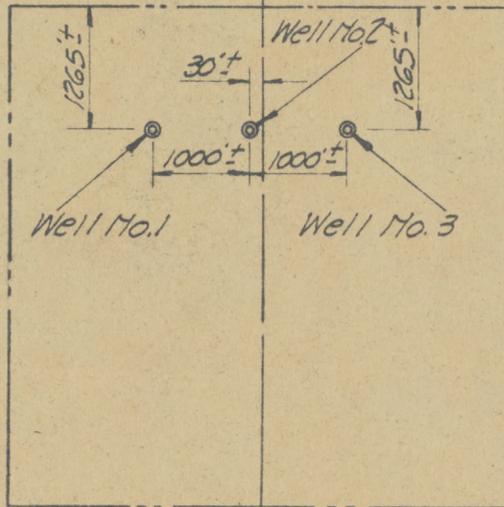
NOTE: Read Standard Government Instructions to Bidders before preparing this bid.



Base Line 0+00 E-W

Exact Location To Be
Determined In The
Field.

Base Line 0+00 N-S



SEC. 14-T235-R44W

GRANADA RELOC. CENTER, COLO.

**WATER SUPPLY WELLS
LOCATION MAP**

U. S. ENGINEER OFFICE

WILSON & COMPANY - ENGINEERS

ALBUQUERQUE, N.M.

JUNE 1942

GC-W-1/1

