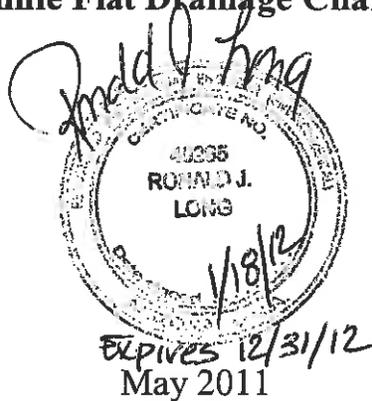


SPECIAL PROVISIONS
For
Town of Camp Verde
Finnie Flat Drainage Channel



TOWN OF CAMP VERDE
CAMP VERDE, ARIZONA

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GHD Project Number 8613045

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SECTION 000 INTRODUCTION

The work herein shall be done in accordance with the requirements of the following:

Maricopa Association of Governments, *Uniform Standard Specifications for Public Works Construction*, most recent edition (MAG Specifications);

Maricopa Association of Governments, *Standard Details for Public Works Construction*, most recent edition (MAG Details);

Town of Camp Verde Engineering Standards, most recent edition;

Camp Verde Water District Specifications & Details;

Arizona Revised Statutes for Waterline and Sewer line Construction;

American Water Works Association Standards, most recent edition;

Arizona Department of Transportation (ADOT) Standard Specifications and Details, most recent editions.

U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Traffic Control Devices (MUTCD).

American Concrete Institute (ACI) Building Code for Structural Concrete

Uniform Building Code (UBC), 1997

International Building Code (IBC), 2003

ADOT Specifications were used when the MAG Specifications did not have an applicable specification or when the ADOT Specification was preferable to MAG. The Special Provisions designate when ADOT Specifications shall be substituted for MAG Specifications. Modifications to the MAG Specifications and ADOT Specifications (from here on referred to as the Specifications) are made in the Special Provisions and take precedence over the Specifications as follows: where there is no conflict between the Specifications and the Special Provisions, the Special Provisions are to be construed as being additions to the Specifications. In cases of conflict between the Specifications and the Special Provisions, the Special Provisions are to be construed as supplanting only the conflicting portions of the Specifications.

In the case of conflict, the following order of precedence shall govern:

1. Construction Plans
2. Special Provisions
3. Town of Camp Verde Engineering Standards and Specifications
4. Camp Verde Water Department Standards and Specifications
5. MAG Standards and Specifications
6. ADOT Standards and Specifications
7. Manual of Uniform Traffic Control Devices (MUTCD)
8. ACI
9. IBC
10. UBC

**SPECIAL PROVISIONS
MODIFICATIONS TO THE MAG AND ADOT SPECIFICATIONS**

SECTION 101 ABBREVIATIONS AND DEFINITIONS

101.2 DEFINITIONS AND TERMS:

The work is to be performed for the Town of Camp Verde, located in Yavapai County, Arizona. All references in the specifications to public agencies and officials shall be interpreted as if suitably modified so as to be appropriate to a Town of Camp Verde project.

ENGINEER: GHD, Flagstaff, Arizona, acting through its duly authorized representative.

END SECTION

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

102.1 ELIGIBILITY AND PREFERENCE:

If requested by the Town, a Bidder shall furnish satisfactory evidence of the Bidder's competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the Bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available.

In addition, if requested, a Bidder shall furnish the Town of Camp Verde with satisfactory evidence of the Bidder's financial responsibility. Such evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the Bidder's financial resources and liabilities as of the last calendar year or the Bidder's last fiscal year. Such statement or report shall be certified by a public accountant. At the time of submitting such financial statement or report, the Bidder shall further certify whether the Bidder's financial responsibility is approximately the same as stated or reported by the public accountant. If the Bidder's financial responsibility has changed, the Bidder shall qualify the public accountant's statement or report to reflect the Bidder's true financial condition at the time such qualified statement or report is submitted to the Town of Camp Verde.

The Bidder shall submit such "evidence of competency" and "evidence of financial responsibility" to the Town of Camp Verde no later than five (5) days after receipt of a written request by the Town of Camp Verde.

Each bidder, contractor and subcontractor shall possess and maintain the appropriate contractor's license for the work included in this contract. The appropriate license shall be as required by the Arizona State Registrar of Contractors and as required by Arizona Revised Statutes Chapter 10, Title 32.

Unless specified otherwise in the Special Provisions for this contract, all bidders and prime contractors for public works construction shall hold and maintain the license appropriate for the work that each is proposed to provide under the terms of this contract.

102.2 CONTENTS OF PROPOSAL PAMPHLET:

The Plans, Specifications and other Documents designated in the Contract Documents shall be considered material parts of the Contract, whether attached to the Contractor's bid or not.

The Town of Camp Verde reserves the right to refuse to issue to or accept a proposal form from a prospective Bidder for any of the following reasons:

- (A) Failure to comply with any pre-qualification regulations of the Town of Camp Verde, if such regulations are cited, or otherwise included, in the Proposal as requirement for bidding.
- (B) Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force (with the Town of Camp Verde) at the time the Town of Camp Verde issues the Proposal to a prospective Bidder.
- (C) Contractor has defaulted under previous contract(s) with the Town of Camp Verde.
- (D) Record of unsatisfactory work on previous contract(s) with the Town of Camp Verde.

The prospective bidders may obtain and examine plans and special provisions at the office of GHD, 1501 South Yale Street, Suite 101, Flagstaff, Arizona, 86001; Telephone: (928) 774-7179 and at the Town of Camp Verde Streets Department 395 S. Main Street, Camp Verde, AZ 86322 Telephone (928) 567-0534.

102.3 INTERPRETATION OF QUANTITIES IN PROPOSAL:

See Section 109 for additional information concerning interpretation of quantities, measurement of quantities, and payment for work complete.

102.6 SUBCONTRACTORS LIST:

The List of Subcontractors form must be submitted with the Bid and include all subcontractors to be used as well as work noted as being performed by the bidder. Identification of subcontractors after the bids are opened will not be permitted.

102.7 IRREGULAR PROPOSALS:

Proposals shall be considered irregular for the following additional reasons:

- (F) If the Proposal contains unit prices that are obviously unbalanced.
- (G) If the Proposal is not accompanied by the proposal guaranty specified by the Town of Camp Verde.

The Town of Camp Verde reserves the right to reject any irregular Proposal and the right to waive technicalities for acceptance of Proposals, if such waiver is in the best interest of the Town of Camp Verde and conforms to local laws and ordinances pertaining to the letting of construction contracts.

102.12 DISQUALIFICATION OF BIDDERS:

A Bidder shall also be considered disqualified if the Bidder is considered to be in "default" for any reason specified in Subsection 102.2.

102.13 SUCCESSFUL BIDDERS:

The Town of Camp Verde shall provide six (6) sets of Plans and Contract Documents at no additional cost to the successful Bidder. Additional copies may be obtained at actual print shop cost.

END SECTION

SECTION 103 AWARD AND EXECUTION OF CONTRACT

103.5 REQUIREMENT OF CONTRACT BONDS:

Performance and payment bonds shall conform to all statutory requirements of A.R.S. 34-222 and A.R.S. 34-223, as applicable.

END SECTION

SECTION 104 SCOPE OF WORK

104.1.1 GENERAL:

The Contractor shall furnish all labor, materials, equipment, transportation, utilities, services and facilities required to perform all work for the construction of the project within the time specified.

The proposed project is located in the Town of Camp Verde, Arizona north of Finnie Flat Road between Cliffs Parkway and Main Street. The proposed box culvert improvements commence at the north east corner of the Walgreens on the south side of Finnie Flat Road. The proposed channel improvements commence at the northwest corner of Finnie Flat Road and Seventh Street. The improvements follow the western edge of the Outpost Townsite housing development. The improvements terminate where the channel intersects a larger channel at the northwest end of Outpost Townsite. The project generally consists of constructing concrete drainage channel and box culvert.

Requests for Information: All requests for information shall be submitted in writing (e-mail is acceptable), verbal requests will not be considered an action. Request for information shall be submitted to Ron Lon (rlong@cvaz.org), fax (928) 567-1540.

Traffic Control: The Contractor is required to prepare and submit a traffic control plan. The traffic control plan must be approved in writing by the Town before construction operations begin. The traffic control plan must be revised and resubmitted to the extent necessary to obtain Town approval.

Whenever reasonably possible, the Contractor shall maintain access to all side streets, access roads, driveways, alleys, parking lots and to adjacent businesses at all times during their hours of operations. The contractor shall notify business owner's 48 hours prior to limiting business access.

Erosion Protection and Site Restoration: The Contractor is responsible for complying with the requirements of the Arizona Pollutant Discharge Elimination System Permit Program. This generally includes submittal of a Notice of Intent to ADEQ and submittal of a Notice of Termination to ADEQ for the project. Erosion control devices are typically installed at the tops and toes of all fill slopes, in graded earthen channels, and at the outlets of all drainage culverts. Devices generally include straw bales, straw wattles, or silt fences as appropriate and must be approved by the Engineer prior to placement. The cost for complying with the AZPDES permit process shall be included in the Administration portion of the Contractors bid.

Housekeeping: Daily cleanup of the construction site (sweeping the streets, providing proper traffic control devices, etc.) will be required; no separate payment will be made for daily clean up.

Hours of Construction: The construction hours of operation shall be 7:00 AM to 6:00 PM. Hours may be modified by the Town of Camp Verde if complaints are received from nearby property owners or occupants. If modified hours substantially reduce the time each day for construction, the Contractor may request a time extension or cost increase. Any such request will be reviewed on its merits.

Storage of Materials: The Contractor shall store all construction materials within his construction yard or on Town or private off-street locations for which arrangements have been made by the Contractor. The Contractor will be required to furnish evidence of permission to use any site proposed as a staging or storage area for this project and will be required to obtain any permits normally required by the Town of Camp Verde for such use. Only a one-day supply of construction materials will be allowed to be stored in roadways or alleys at the construction location unless extended storage is specifically authorized by the Town.

Town Authority to Shut Down/Clean the Work Area: The Town retains the right to shut down the construction activities of the Contractor if, in the Town's opinion, the work site is unsafe, unsightly, or not maintained in a workmanlike condition for the public convenience, and the Contractor has not responded to requests by the Town to improve the site conditions. The right of the Town to order such a shutdown does not relieve the Contractor of any obligation to provide and maintain a safe worksite and to conform to all requirements of the Contract Documents.

If the Town requires a shutdown for reasons stated above, the shutdown will be in effect until such time as the Contractor has provided the necessary corrective action. The Contractor, by submitting its bid, affirmatively agrees that it will not make a claim against the Town for any loss of work or contract time associated with a Town demand for corrective action.

If, in the opinion of the duly authorized representatives of the Town, an emergency condition or public nuisance exists, the Town also retains the right to correct unsafe, unsightly, or ill-maintained site conditions and recover any costs incurred by the Town for those corrections against the Contractor, if again, the Contractor has not responded to the Town's requests for corrective action. The Contractor will be allowed not more than 48 hours in which to make corrections as requested by the Town prior to the Town commencing any work.

104.2.2 ALTERATION OF WORK DUE TO PHYSICAL CONDITIONS:

The provisions of this section are subordinate to the provisions and requirements of Section 102 and Section 109. The referenced sections may substantially limit the Contractor's ability to request additional payment for changes in the work due to unforeseen physical conditions.

END SECTION

SECTION 105 CONTROL OF WORK

105.2 PLANS AND SHOP DRAWINGS:

Shop drawings and manufacturer's specification sheets are required for all components. The Contractor shall submit all data at one time, bound and indexed in an orderly manner, including manufacturer's specifications, literature, performance data and dimensions, making all markings with ink in color other than red. The Contractor shall procure shop drawings (e.g. wiring diagrams, etc.) from other trades involved and comply as required for complete installation. The Contractor shall maintain a complete set of all approved shop drawings and an accurate as-built set of plans on site for reference at all times. The as-built plans will be furnished by the Contractor to the Owner at the completion of the project for record.

105.6 COOPERATION WITH UTILITIES:

It is distinctly understood and agreed that the Contractor has considered in his proposal all of the permanent and temporary utility appurtenances in their present or relocated positions as shown on the Plans or as determined by him during the bidding period, in accordance with the requirements of Section 102.4, and that no additional compensation will be allowed for any delays, inconvenience, or damage sustained by him due to any interference from the said utility appurtenance or the operation of moving them.

The Contractor shall notify all utility companies and the Town of Camp Verde of his intent to begin work. In particular, the Contractor shall make contact Blue Stake service by calling 1-800-STAKE-IT at least 2 working days before beginning work. The Contractor shall exercise all care to avoid damaging utilities whether shown on the Plans, staked in the field, or not.

105.8 CONSTRUCTION STAKES, LINES AND GRADES:

The Contractor shall be responsible for retaining a Registered Land Surveyor, licensed to practice in Arizona, who shall be responsible for providing all stakes necessary to establish construction lines and grades. Stakes provided shall be of sufficient number to satisfy the Engineer that the work may be constructed in accordance with the Plans.

105.12 MAINTENANCE DURING CONSTRUCTION:

Adequate drainage of the construction area shall be provided at all times. The channel will need to be drained prior to construction and remain free of water during construction. The proposal shall include the phone number(s) for an emergency contact(s) available 24 hours during construction. To further promote good drainage of the site, drainage channels, culverts, and structures, shall be constructed from downstream to upstream in such a way that, during construction, they do not impede the flow of water from the construction area.

Damage to any portion of the work caused by the Contractor's failure to provide adequate drainage of the construction area, or to order the work so as to minimize the possible extent of such damage, shall be repaired at the Contractor's expense. No extension of time shall be granted on account of the time required to make such repairs.

END SECTION

SECTION 106 CONTROL OF MATERIALS

106.2 SAMPLES AND TESTING OF MATERIALS:

The Contractor shall employ and pay for an independent testing laboratory to provide all materials testing for the Project. The Contractor shall supply the Town with samples of materials and test results at the regularly scheduled project meeting (meeting to be scheduled at the pre-construction meeting). Note that the following is a generic testing specification and not all tests may be required for this project. In addition testing subcontractor shall keep records of test locations on as-built plans showing test numbers.

TABLE 106.2

QUALITY ASSURANCE TESTING

Density: Standard Proctor @ 1 each for each material to be tested.
Pavement sub-grade @ 1 per 1,000 S.Y. (1 minimum).
Pavement ABC @ 1 per 1,000 S.Y. (1 minimum).
Pavement (nuclear correlated to cores) @ 1 per 1000 S.Y. (1 minimum).
Curb sub-grade @ 1 per 250 L.F. (1 minimum).
Sidewalk sub-grade @ 1 per 1500 S.F. (1 minimum).
Trench bedding, shading, and backfill for CMP trench under paving @ 1 set each per CMP.
Trench bedding, shading, and backfill for water/sewer line trenches @ 1 set each between each pair of manholes for sewer and 1 each for every 200 LF of waterline (minimum of 1 set).
Sewer manhole bases @ 1 each per manhole base.
Catch basin sub-grade @ 1 each per basin.

Concrete: Air test and four cylinders (7,14,28, hold) for:
Curb @ 1 per 250 L.F. (minimum of 1 set).
Sidewalk @ 1 per 1500 S.F. (minimum of 1 set).
Structures (catch basins, etc.) @ 1 per three structures (minimum of 1 set).
Structures (box culverts, wing walls, bridge barriers, etc.) @ 1 per truck (minimum of 1 set).
Valley Gutter @ 1 per Valley Gutter

Paving: Extraction/gradation @ 1 per day's production.

END SECTION

SECTION 107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107.2 PERMITS:

The Contractor shall, at his own expense, obtain all required permits for the work. The Contractor is responsible for all taxes, including sales tax, required by all laws and ordinances having jurisdiction.

107.2.2 DISPOSAL OF WASTE AND SURPLUS MATERIAL:

The Contractor is responsible for disposal of waste materials. All disposal costs, regardless of disposal site, shall be included in the bid unit price for the appurtenant or related item of work and no direct payment will be made for disposal of waste or surplus materials.

The Contractor is responsible for providing proper dump sites for all material removed as part of the contracted work including concrete, asphalt, fence, trees, surplus earthwork material and other items.

107.7 BARRICADES AND WARNING SIGNS:

The Traffic Barricade Manual referred to under this section and thereafter in the Standard Specifications shall be the MUTCD. Contractor shall obtain copies.

107.9 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE:

The Contractor shall file with the Engineer, at the Pre-Construction Conference, the written consent of the Owner of the property upon which he intends to dispose of surplus material.

The Contractor shall protect and/or restore all existing improvements including, but not limited to, concrete, asphalt, drainage structures, culverts, fencing, landscaping (living or non-living), and irrigation systems to original condition upon completion of the work. The Contractor will be required to replace all trees, shrubs, flowers, ground cover and sod to their original conditions prior to construction. All landscaping material shall be transplanted or replaced with comparable materials, species and specimens to ensure that the site is restored to its original condition. The one-year warranty for the work will also include all live landscaping as mentioned herein. The Contractor will also be required to maintain watering operations for landscaping during repair and/or replacement of irrigation systems throughout the course of the work. Except as specified otherwise in the Special Provisions, all costs associated with the restoration of landscaping shall be included in the amount bid for items of work to which it is incidental or appurtenant.

The contractor shall video tape the site prior to commencing construction and provide the Town with 2 copies. The Town shall specify the preferred medium for video.

107.10 CONTRACTOR'S RESPONSIBILITY FOR WORK:

The Owner will not protect or be responsible for protection of equipment, tools, materials, or work in progress in the construction area during construction.

107.11 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES:

All power poles, pedestals, guy wires and underground facilities shall be removed and/or relocated by the respective owners of the facilities. The Contractor is responsible for the notification and coordination with the utility companies to ensure that this work is accomplished in a manner consistent with the construction schedule.

All utilities shall be Blue Staked prior to construction. The Contractor shall pothole all potential utility conflicts prior to construction to verify that proper clearance is provided between the new improvements and the existing utilities. The Contractor shall notify the appropriate franchise utility immediately if any conflicts are encountered.

END SECTION

SECTION 108 COMMENCEMENT, PROSECUTION AND PROGRESS

108.1 NOTICE TO PROCEED:

All work under the contract shall be completed within the number of calendar days stated in the proposal, plus extensions, beginning with the day following the date of the Notice to Proceed. The contract time includes any time required for final cleanup of the premises.

108.2 SUBLETTING OF CONTRACT:

F) Coordination of subcontractors' work with the Contractor's work shall be the responsibility of the Contractor.

108.4 CONTRACTOR'S CONSTRUCTION SCHEDULE:

The Contractor shall be required to prepare and furnish a Critical Path Method construction schedule to the Town's representative and or the Engineer at the pre-construction conference. An update to the schedule, showing actual progress and any claimed delays, shall be prepared and submitted to the Engineer every seven (7) days during the course of construction, until the project is completed.

Contractor is required to attend weekly progress meeting, time and place to be announced. Contractor is to provide updated schedules and traffic impact plans at weekly progress meetings.

108.5 LIMITATION OF OPERATIONS:

Except in emergencies endangering life or property, written permission shall be obtained from the Town Engineer prior to performing any work on weekends, legal holidays or after regular work hours (hereinafter defined as 7:00 AM to 6:00 PM - Monday through Friday). Inspection and testing will not be provided on Sundays or Town legal holidays without prior approval from the Engineer (72 hour advance notice), and compensation by the Contractor for any necessary personnel, equipment and services.

Overtime compensation for personnel shall be one and one half times the normal billing rate for those under contract to the Town of Camp Verde and one and one half times the hourly burdened rate for Town of Camp Verde employees.

108.7 DETERMINATION AND EXTENSION OF CONTRACT TIME:

The contract time shall be **sixty (60) calendar days**. The contract time, including final clean up of the project site and storage areas, may be extended as a result of weather conditions that cannot be reasonably anticipated. The number of actual days that the scheduled work is actually impacted by adverse weather shall be recorded weekly during the construction period and included in the Contractors weekly schedule submittal. The effect of the delay must be shown on the Critical Path Schedule for the project. The Contractor shall submit claims for the delay of critical path work within two (2) working days of experiencing adverse weather and associated project delays. Only delays affecting the Critical Path for the project will be considered for a time extension. If the Contractor has not prepared and submitted an approved Critical Path Schedule for the project, the Contractor will be deemed to have failed in its obligation to demonstrate that adverse weather or other conditions have actually delayed to project completion date. Under these circumstances, a request for a time extension will not be entertained.

END SECTION

SECTION 109 MEASUREMENTS OF QUANTITIES

109.1 MEASUREMENT OF QUANTITIES:

Quantities shown on the Plans or the Bid Schedule are approximate only. The Contractor is responsible for independently estimating the contract quantities.

109.2 SCOPE OF PAYMENT:

By submitting his bid, the Contractor represents that his bid price for each item is adequate compensation for completing the item as shown on the Plans and described in the Specifications, and that the total Contract Sum is adequate compensation for completing the entire project as shown on the Plans and described in the Specifications.

Progress payments may be estimated on the basis of measurements of work complete times the Bid Schedule unit prices. If no change order or field order changing the quantity, materials or other details of an item has been issued, total payment for that item will be the total lump sum price bid for the item as shown on the Bid Schedule accompanying the Contractor's bid proposal. All payment provisions in the contract documents, including the M.A.G. Specifications, are to be considered as modified to conform to this section, and to the terms in the Form of Proposal relating to payment.

109.4.1 COMPENSATION FOR ALTERATION OF WORK BY THE CONTRACTING AGENCY:

At the sole discretion of the contracting agency, the payment for a work item increased or decreased by more than twenty percent (20%) may be calculated as the actual quantity of work performed times the unit price bid for the item.

109.4.3.2 MEASUREMENTS AND PAYMENTS - CONTRACT ALLOWANCE:

A Contract Allowance Item is provided for the purpose of encumbering funds to cover the costs to complete items of work not included in the Contract Documents. "Contingency" Items are provided for the purpose of encumbering funds to cover the costs of anticipated work that may or may not be required to complete the project. The amount of the Allowance Item is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for the project. The Contract Allowance Item provides for estimated funding to cover unforeseen changes that may be encountered and corresponding extra work needed to complete the Contract. Extra work, if any, which is to be paid out of this allowance shall be authorized in writing by the Town or Engineer prior to proceeding with the work. The extra work shall be paid for by extension of unit bid prices, negotiated price, or on a time and materials basis in accordance with Section 109.5 of the general MAG Specifications.

It shall be understood that the amount of the contingency in the BID schedule is an estimate only and no guarantee is given that the full amount or any portion of it will actually be utilized. The final contract amount will be adjusted by an approved Field Order, signed by the Contractor, the Town, and the Engineer, that will reflect the actual amount of the Contract Allowance used for the project and the final contract price, as adjusted. A Field Order is required to obligate funds from "Contingency" items or the Contract Allowance. A copy of the Field Order form will be provided at the pre-construction meeting.

END SECTION

SECTION 201 CLEARING AND GRUBBING

201.1 DESCRIPTION:

The work under this section shall be in accordance with MAG Specification 201, and as modified here in.

201.3 CONSTRUCTION METHODS:

Tree removal includes all trees within grading limits. Trees not shown on plans which are incidental to construction shall be removed by the contractor. All trees with stumps less than 12" in diameter are incidental to construction and shall be removed by the contractor.

201.7 PAYMENT, REMOVAL AND DISPOSAL OF TREES:

No separate payment will be made for Clearing and Grubbing it shall be incidental to the construction. Clearing and grubbing, and shall include all saw cutting, hauling, disposal, material, tools and equipment, labor and all other work and materials or items necessary or incidental for the completion of the item.

END SECTION

SECTION 206 STRUCTURE EXCAVATION AND BACKFILL

206.1 DESCRIPTION:

The work under this section shall be in accordance with Section 206 of the MAG Standard Specifications.

206.5 PAYMENT:

No separate payment will be made for structural excavation and backfill as such; the cost thereof shall be included in the price bid for the construction and installation of the Concrete Channel, Box Culvert and Grade to Drain details. Work under this section shall be appurtenant to the installation of the concrete channel.

END SECTION

SECTION 211 FILL CONSTRUCTION

211.1 DESCRIPTION:

The work under this section shall be in accordance with MAG Specification 211, and as modified here in.

The work under this Section includes all miscellaneous grading items shown on the plans including grading areas behind the new channel wall to drain as shown on the plans in Details 5 through 12.

Cut and fill quantities are shown of the plans for contractor reference only. The contractor shall independently verify cut and fill quantities. No separate payment will be made for cut and fill; they are incidental to the channel and box culvert construction and the Grade to Drain items below.

1. Grade to Drain per Detail 5 includes fill material and landscaping rock.
2. Grade to Drain per Detail 6 includes fill material, and protection of existing landscaping and light poles.
3. Grade to Drain per Detail 8, Grade to Drain per Detail 9, Grade to Drain per Detail 11, and Grade to Drain per Detail 12 include fill material and grading.
4. Grade to Drain per Detail 7, and Grade to Drain per Detail 10 includes fill material and 4" Concrete/3" ABC match-up. Concrete shall be Class A per MAG Specification 340 and as modified in these specifications. ABC shall be per MAG Specification 310. Concrete match-up shall be made to a neat sawcut line.

211.6 PAYMENT:

Payment for Grade to Drain per Detail 5 will be at the contract unit price on a Lump Sum basis and shall include fill material, placement, compaction, landscaping rock and all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

Payment for Grade to Drain per Detail 6 will be at the contract unit price on a Lump Sum basis and shall include fill material, placement, compaction, protection of existing landscaping and light poles and all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a

complete installation.

Payment for Grade to Drain per Detail 8, Grade to Drain per Detail 9, Grade to Drain per Detail 11, and Grade to Drain per Detail 12 will be at the contract unit price on a Lump Sum basis and shall include fill material, placement, compaction, and all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

Payment for Grade to Drain per Detail 7, and Grade to Drain per Detail 10 will be at the contract unit price on a Lump Sum basis and shall include fill material, placement, compaction, concrete, aggregate base course, and all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

SECTION 220 RIPRAP CONSTRUCTION

220.1 DESCRIPTION:

The work under this section shall be in accordance with Section 220 of the MAG Standard Specifications.

220.8 PAYMENT:

Payment for Riprap will be made for the number of Cubic Yards of riprap complete and in place.

END SECTION

SECTION 340 CONCRETE CURB, GUTTER, SIDEWALK, SIDEWALK RAMPS, DRIVEWAY AND ALLEY ENTRANCE

340.1 DESCRIPTION:

The work under this section shall be in accordance with MAG Specification 340 as modified by the Town of Camp Verde Addendum to MAG, and as modified here in.

Sidewalk ramps and the pedestrian bridge ramps shall include detectable warning surfaces compliant with section 4.9 of Accessibility Guidelines for Buildings and Facilities (ADAAG), Tekway Domes or approved equal. Detectable warning surface color shall be yellow. Owner or owner's representative shall approve color and material prior to installation.

ABC under curb and gutter, driveways, sidewalks and sidewalk ramps is incidental to construction of the concrete.

340.2 MATERIALS:

First paragraph, revised to read as follows:

Concrete shall be Class A, containing 5 to 7% air entrainment, and conforming to applicable requirements of Section 725.

340.3 CONSTRUCTION METHODS:

Installation of the following items includes ABC per Section 310 compacted to 95%:

- All Curb & Gutter = 3" ABC
- All sidewalk = 3" ABC
- All ramps = 3" ABC
- Curb Termination = 3" ABC

340.6 PAYMENT

Payment for Sidewalk Ramp, Pedestrian Bridge Ramp, and 5' Concrete Sidewalk will be at the contract price per Square Foot complete and in place and shall include all labor, materials, detectable warning surfaces, 3" ABC, compaction, tools and equipment, and all other work and materials necessary or incidental for a complete installation. No separate payment shall be made for detectable warning surfaces.

Payment for MAG Type 'A' Curb & Gutter will be at the contract price per Linear Foot of curb complete and in place and shall all labor, materials, detectable warning surfaces, furnishing ABC and compaction, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

END SECTION

SECTION 345 ADJUSTING FRAMES, COVERS, VALVE BOXES AND WATER METER BOXES

345.1 DESCRIPTION:

The work under this section shall be in accordance with MAG Specification 345.

345.5 PAYMENT:

Payment for Adjust Manhole to Finish Grade and Adjust Valve Box and Cover to Finish Grade will be made at the contract unit price per Each complete adjustment, which shall include all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation and shall be full compensation for the item.

END SECTION

SECTION 350 REMOVAL OF EXISTING IMPROVEMENTS

350.1 DESCRIPTION:

The work under this section shall be in accordance with Section 350 of the MAG Standard Specifications, and as modified herein.

This work includes removal of specified existing improvements.

350.2 CONSTRUCTION METHODS:

All excess materials removed shall become the property of the Contractor, and shall be disposed off the project site at a suitable location at no additional cost to the Owner.

Pedestrian Bridge: The contractor shall remove the existing pedestrian bridge and store in a safe location until construction is complete. The contractor shall replace pedestrian bridge at the completion of construction. Removal of the pedestrian bridge includes removal and disposal of the concrete ramps at each end of the bridge.

350.3 MISCELLANEOUS REMOVAL AND OTHER WORK

Removal necessitated by the work as it progresses and not specifically called out on the Plans will be considered incidental work.

This work shall include, but not be limited to the following:

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Town of Camp Verde – Finnie Flat Drainage Channel

1. Removal and disposal of existing asphalt concrete includes removal of AC and ABC.
2. Removal and disposal of existing Portland Cement Concrete
3. Removal and disposal of existing concrete curb and gutter
4. Removal and replacement of barb wire fence includes disposal of old fence and replacement with new fence per ADOT Std. Spec. 903.
5. Abandon existing waterline includes removal and disposal of portions of the waterline that interfere with construction.

350.4 PAYMENT:

Payment for removals will be made at the unit prices bid for each pay item, which price shall be full compensation for the items complete as described herein and on the Plans. Removals necessitated by the work as it progresses and not specifically called out on the Plans will be considered incidental to the construction.

Pay Item:	Pay Unit:
Remove and Dispose Portland Cement Concrete	Square Feet
Remove and Dispose Asphalt Concrete	Square Yard
Remove and Replace Existing Pedestrian Bridge	Lump Sum
Remove and Dispose of Existing Tree	Each
Remove and Replace Barb Wire Fence	Linear Foot
Remove and Dispose Curb and Gutter	Linear Feet
Remove and Dispose Storm Drain Pipe	Linear Feet
Abandon Existing Waterline	Linear Feet
Remove and Dispose Grouted Riprap Channel	Square Feet

END SECTION

SECTION 370 ROADSIDE SIGN SUPPORTS:

370.1 DESCRIPTION:

The work for installation of sign bases shall be in accordance with Section 607 of the ADOT Standard Specifications for Road and Bridge Construction and as modified her in.

370.5 PAYMENT:

No separate payment shall be made for labor, materials, tools and equipment for sign base installation it shall be considered incidental to New Traffic Control Signs construction.

END SECTION

SECTION 371 SIGN PANELS

371.1 DESCRIPTION:

The work under this section shall be in accordance with Section 608 of the ADOT Standard Specifications for Road and Bridge Construction, and as modified herein.

371.5 PAYMENT:

Payment for New Traffic Control Sign will be made at the contract unit price per Each sign panel installed complete and in place, which shall include sign bases, concrete, sign panels, furnishing and

installing all retro-reflective sheeting, all fastening hardware, all sign supports, all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation and shall be full compensation for the item complete. Sign bases are shall be considered incidental to New Traffic Control Sign installation.

END SECTION

SECTION 372 PAVEMENT MARKINGS:

372.1 DESCRIPTION:

The work under this section shall be in accordance with Section 705 of the ADOT Standard Specifications for Road and Bridge Construction, and as modified herein. New Text and Symbol Pavement Markings includes arrows, text and bicycle markings. Preformed Pavement Markings shall be Type 1.

372.7 PAYMENT:

Payment for New Text and Symbol Pavement Markings will be made on a Lump Sum basis, which shall include sweeping and cleaning of striping area, reflective beads, application of pavement markings, all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation and shall be full compensation for the item complete.

END SECTION

SECTION 373 PERMANENT PAVEMENT STRIPING:

373.1 DESCRIPTION:

The work under this section shall be in accordance with Section 708 of the ADOT Standard Specifications for Road and Bridge Construction, and as modified herein. New Lane Striping includes all painted striping shown on the plans including solid yellow pavement striping, dashed yellow pavement striping, solid white pavement striping, dashed white pavement striping, centerline striping and bike lane striping. Striping shall be applied in two coats.

373.5 PAYMENT:

Payment for New Lane Striping will be at the contract unit price on a Lump Sum basis and shall include sweeping and cleaning of striping area, applying white or yellow, water-borne, lead-free, rapid-dry traffic paint and reflective glass beads, furnishing all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

END SECTION

SECTION 375 MAINTENANCE AND PROTECTION OF TRAFFIC:

375.1 DESCRIPTION:

The work under this section shall be in accordance with Section 701 of the ADOT Standard Specifications for Road and Bridge Construction, and as modified herein.

375.5 PAYMENT:

Payment for Obliterate Existing Striping will be made on a Lump Sum basis, which shall include all

labor, materials, tools and equipment, removing adhesive pads, restoring the pavement surface to a condition acceptable to the Town Engineer and all other work and materials necessary or incidental for a complete removal. Payment will be made once obliteration is complete.

END SECTION

SECTION 401 TRAFFIC CONTROL:

401.1 DESCRIPTION:

The work under this section shall be in accordance with Section 701 of the ADOT Standard Specifications for Road and Bridge Construction, and as modified herein. The work under this section included temporary traffic control measures including preparing a traffic control plan, submitting it to the Town of Camp Verde for approval and revisions. Traffic control plans shall be submitted to TOCV for any work within the ROW at least 10 working days prior to expected utilization.

Construction along Finnie Flat Road shall be staged in such a way so as to allow two 12-ft lanes of traffic at all times, one in each direction. Traffic control shall provide barricades and/or trench plates to protect vehicles and pedestrians from open trenches. Maintaining business access during construction is incidental to traffic control.

401.5 PAYMENT:

Payment for Traffic Control will be made on a Percent Complete basis as estimated by the Owner/Owner's Representative. Traffic Control shall include all temporary traffic control measures required by the Town including Temporary Concrete Barriers, Temporary Impact Attenuators, Flashing Arrow Panels, Pilot Vehicles, Civilian Flagging Services, Temporary Preformed Pavement Markings, Temporary Painted Markings for Pavement, Changeable Message Boards, Temporary Delineators and Vertical Panel Barricades as required. Traffic Control shall include furnishing the traffic control plan, submitting it to TOCV for approval and revisions, changing temporary traffic control measures as warranted, repairing or replacing damaged temporary traffic control measures, all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete removal.

END SECTION

SECTION 415 FLEXIBLE METAL GUARDRAIL

415.1 DESCRIPTION:

The work under this section shall be in accordance with Section 415 of the MAG Standard Specifications, and as modified herein.

415.2 MATERIALS AND CONSTRUCTION:

The rail elements, terminal sections, bolts, nuts and other fittings shall be Cor-ten steel.

Standard Flared Terminal End Sections shall be used for guardrail terminations.

Face of "W" rail shall be set flush with the back of curb.

415.2 PAINTING:

Metal surfaces shall not be painted.

415.4 MEASUREMENT:

Measurement for work under this section shall be in accordance with Section 415.4 of the MAG Standard Specifications.

415.5 PAYMENT:

Payment for Guardrail including End Sections will be made at the contract unit price per Linear Foot of guard rail installed complete and in place which includes all posts, "w" rail, terminations, hardware fittings, bolts, materials, installation, labor and all other items necessary or incidental for completion of the item.

END SECTION

SECTION 421 WIRE FENCE (NEW SECTION)

421.1 DESCRIPTION:

The work under this section shall be in accordance with ADOT Standard Specification 903.

421.5 PAYMENT:

Payment for New Barb Wire Fence shall be per Linear Foot which includes materials, installation, labor and all other items necessary or incidental for completion of the item.

END SECTION

SECTION 440 SPRINKLER IRRIGATION SYSTEM INSTALLATION

440.1 DESCRIPTION:

The work under this section shall be in accordance with Section 440 of the MAG Standard Specifications.

The existing irrigation called out for relocation shall be relocated below the new concrete channel. Relocated irrigation line shall be sleeved.

440.4 LANDSCAPE IRRIGATION SYSTEM REMOVAL AND RESTORATION

The work under this section shall be in accordance with Section 440 of the MAG Standard Specifications. The contractor shall take care not to damage existing landscape irrigation system. The Contractor shall remove and replace conflicting portions per MAG Section 440 prior to construction. Any irrigation system damaged during construction shall be replaced.

440.11 MEASUREMENT AND PAYMENT:

Payment for Relocation of Existing Irrigation Line will be made on a Lump Sum basis which includes materials, installation, labor and all other items necessary or incidental for completion of the item. No separate payment shall be made for portions of the existing irrigation system that are in conflict with construction, which are not specified on the Plans. Removal and replacement of existing irrigation lines not specifically called for on the Plans shall be considered incidental to the channel construction.

END SECTION

SECTION 450 EROSION CONTROL AND POLLUTION PREVENTION (NEW SECTION)

450.1 DESCRIPTION:

The work under this section shall be in accordance with Section 810 of the ADOT Standard Specifications for Road and Bridge Construction, and as modified herein.

450.2 GENERAL:

The Contractor shall be responsible for Arizona Pollutant Discharge Elimination System (AZPDES) permit application and implementation. The Contractor shall, at his own expense, obtain all required permits for the work. This includes but is not limited to ADEQ-SWPPP permits, AZPDES permits. The Contractor is responsible for submittal of a Notice of Intent to ADEQ, complying with the Stormwater Pollution Prevention Plan for the site, installation of Best Management Practice pollution prevention measures, maintenance of BMPs coordinating inspections with the Town of Camp Verde and submittal of a Notice of Termination to ADEQ.

450.3 EROSION PROTECTION AND SITE RESTORATION:

The Contractor shall use best management practices (BMP) in controlling stormwater runoff. Site BMPs are as follows:

Temporary Sediment Barrier

Stack sandbags at least three bags high. Butt ends of bags tightly. Overlap butt joints of row beneath with each successive row. Use a pyramid approach when stacking bags.

- Height = 18 in. maximum
- Top width = 24 in. minimum for three or more layer construction
- Side slope = 2:1 or flatter

Sandbag Material: Sandbag should be woven polypropylene, polyethylene or polyamide fabric, minimum unit weight of 4 ounces/yd², Mullen burst strength exceeding 300 lb/in² in conformance with the requirements in ASTM designation D3786, and ultraviolet stability exceeding 70% in conformance with the requirements in ASTM designation D4355. Use of burlap may not acceptable in some jurisdictions. *Sandbag Size:* Each sand-filled bag should have a length of 18 in., width of 12 in., thickness of 3 in., and mass of approximately 33 lbs. Bag dimensions are nominal, and may vary based on locally available materials.

Fill Material: All sandbag fill material should be non-cohesive, Class 1 or Class 2 permeable material free from clay and deleterious material.

Stabilized Construction Entrance/Exit

Limit the points of entrance/exit to the construction site. Limit speed of vehicles to control dust. Properly grade each construction entrance/exit to prevent runoff from leaving the construction site. Route runoff from stabilized entrances/exits through a sediment-trapping device before discharge. Design stabilized entrance/exit to support the heaviest vehicles and equipment that will use it. Select construction access stabilization (aggregate, asphalted concrete, concrete) based on longevity, required performance, and site conditions. The use of asphalt concrete (AC) grindings for stabilized construction access/roadway is not allowed. Use of constructed/manufactured steel plates with ribs for entrance/exit access is allowed. If aggregate is selected, place crushed aggregate over geotextile fabric to at least 300 mm (2 in) depth. Crushed aggregate greater than 75 mm (3 inches) and smaller than 50 mm (6 inches) shall be used. Designate combination or single purpose entrances and exits to the construction site. Implement "Street Sweeping and Vacuuming" as needed and as required. Require all employees, subcontractors, and suppliers to utilize the stabilized construction access. All exit locations intended to be used continuously and for a period of time shall have stabilized construction entrance/exit BMPs.

450.5 MEASUREMENT AND PAYMENT:

Measurement for the Storm Water Pollution Prevention Plan shall be at the contract unit price on a Lump Sum basis which includes sandbags, filter fabric, temporary erosion control blankets, aggregate, any additional BMP's not specified on the plans added during construction to prevent additional downstream pollution, Good House keeping BMPs as specified in the SWPPP document, installation, cleaning, repair, replacement, relocation, records storage, reporting, inspection, final stabilization, all materials, labor, equipment and all other items both necessary and incidental for the completion of the SWPPP.

SECTION 505 CONCRETE STRUCTURES

505.1 DESCRIPTION:

The work under this section shall be in accordance with Section 505 of the MAG Standard Specifications, and as modified herein.

Description of Work:

Construction Phasing: The Town of Camp Verde may choose to build the channel in phases. If the channel is constructed in phases, the Contractor shall coordinate transition between new and existing with the Project Engineer and the Town. The existing channel shall be graded to drain to the invert of the new channel so that the channel functions as a whole. For continuing channel construction the Contractor shall remove riprap, connect the new phase to the existing phase and provide a water tight seal between phases.

Catch Basins: Construction of catch basins includes removal and replacement of existing Asphalt and Portland Cement Concrete curb and gutter. Existing Asphalt shall be removed to a neat sawcut line. Curb and gutter shall be removed to the nearest joint. Construction of Type G Catch Basin includes installation of concrete apron. Catch basin grates shall be set so that all adjacent grades drain to the Catch Basins. The Contractor shall take care to avoid low spots where water will pond.

Channel Wall and Slab: Channel shall be constructed per the structural plans. The contractor shall have a registered structural engineer provide special inspection for the channel. The contractor shall have a land surveyor registered in the state of Arizona provide rough and final grading certification for the channel grades to assure that there are no low spots or ponding. Rough and Final Grading Certification forms are included.

Contractor shall furnish shop drawings for culvert connections and flap gates. Drawings shall be approved by the Town of Camp Verde prior the start of construction.

Channel shall be installed per the approved construction plans. All concrete shall receive a smooth float or trowel finish. Channel shall be free of water prior to installation. Channel shall be set on 6" of Type A Select Material per MAG Specification 702 compacted to 95%. Select Material shall be fine graded to within ¼" of required grade prior to culvert placement. Contractor shall provide trench protection in accordance with OSHA requirements. Select material and trench protection are incidental to channel installation.

Channel includes 2 weirs as shown on plans, weirs are incidental to channel construction. Channel construction includes openings for connecting to culverts. Channel construction includes connection to headwall and shotcrete. Channel construction includes tying roof drains to the top of the channel wall.

Box Culvert: Box culvert shall cast-in-place concrete.

The contractor shall have a land surveyor registered in the state of Arizona provide rough and final grading certification for the box culvert to assure that it is built per the plans. Rough and Final Grading Certification forms are included.

Box culvert shall be installed per the approved construction plans and specifications. Box culvert trench shall be free of water prior to installation. Box culvert shall be set on 6" of ABC per MAG Specification 702 compacted to 100%. ABC shall be fine graded to within ¼" of required grade prior to culvert placement. Box culvert installation includes trench protection in accordance with OSHA requirements.

Box culvert installation includes horizontal bends and widening as shown on the plans and openings for connecting culverts, catch basins and manholes. The box culvert widens from a 3-ft to 3.5-ft to match the channel height. Box culvert shall be furnished with rebar extensions from both ends for connection to headwall and vault structure. All concrete shall receive a smooth float or trowel finish.

Pre-cast box culverts may be substituted as an approved alternate. Pre-cast box culvert shall be Jensen Precast Type 1 or approved equal. Contractor shall furnish shop drawings and structural loading calculations for pre-cast box culverts. Contractor shall submit shop drawings and calculations to the Town of Camp Verde prior bid opening. Alternate box culvert options must be approved in writing by the Town of Camp Verde prior to bid opening. Pre-cast box culvert shall be capable of handling AASHTO H-20 traffic loading.

505.10 PAYMENT:

Payment for MAG Type 'E' Catch Basin, Modified MAG Type 'E' Catch Basin, MAG Type 'E' Catch Basin with curb and AC match-up, Modified MAG Type 'G' Catch basin with Concrete Apron, and Concrete Scupper will be at the contract unit price per Each concrete structure complete and in place which includes all concrete, rebar, forms, fittings, grates, frames, finishing, removal of existing curb and gutter, removal of existing asphalt, replacement of asphalt, subgrade preparation, ABC, material, excavation, installation, labor and all other items necessary or incidental for completion of the item.

Payment for MAG Headwall Drop Inlet, Concrete Headwall, and Concrete Vault will be at the contract unit price per Each concrete structure complete and in place which includes all concrete, rebar, dowels, forms, fittings, bolts, grates, frames, connection to box culvert, connection to existing headwall, finishing, subgrade preparation, ABC, material, excavation, installation, labor and all other items necessary or incidental for completion of the item.

Payment for Channel Access Ramp will be paid for as a Lump Sum for the ramp complete and in place which includes all concrete, wire mesh, forms, finishing, connection to channel, subgrade preparation, ABC, material, excavation, installation, labor and all other items necessary or incidental for completion of the item. Handrails, removable post, security chain, "No Trespassing Sign" are incidental to the Handrail construction.

Payment for MAG 520 48" Storm Drain Manhole, and MAG 522 48" Storm Drain Manhole Shaft will be at the contract unit price per Each manhole complete and in place and shall include concrete, frame and cover, mortar, reinforced adjusting ring, rebar, gasket, all excavation, backfill, and compaction, labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

Payment for 15' Wide Concrete Channel and 22' Wide Concrete Channel will be at the contract unit price per Linear Foot of channel complete and in place and shall include concrete, turned down edge, channel slab, wall, and footing, weirs, connection to headwalls, expansion filler, joints, rebar reinforcing, concrete, forms, finishing, taper for ramp and wall height, trench protection, furnishing, fabricating, and placing reinforcement and all materials, equipment, tools, labor, and all other work incidental to the construction.

Payment for 8'x3' Box Culvert and 10' x3.5' Box Culvert will be at the contract unit price per Linear Foot of box culvert complete and in place and shall include concrete, forms, rebar, finishing, additional width for the last 10-ft, bends, sealant, joints, connection to headwall and vault, sub-grade, grading, excavation, rigging/lifting equipment (if necessary), trench box/shoring, ABC, and all materials, equipment, tools, labor, and incidental work included.

END SECTION

ROUGH GRADING INSPECTION CERTIFICATE

Project Name:
Project Owner:

ROUGH GRADING CERTIFICATION

(A) CIVIL ENGINEER/LAND SURVEY

I am a registered CIVIL ENGINEER and/or LAND SURVEYOR in the State of Arizona. I certify that I have visited the project site and the rough grading substantially conforms to the approved grading plan(s). Work observed includes but is not limited to: areas that will be paved; cut and fill slopes; channels, swales, detention basins, including completed outlet structure(s), terraces, berms, and other drainage facilities as indicated on the plan(s).

Remarks: _____

SEAL

Name: _____

Firm: _____

Address: _____

(B) GRADING CONTRACTOR (Permittee)

I am the grading contractor. I certify that the rough grading substantially conforms to the approved grading plans and specifications. Additionally, the SWPPP has been installed per the approved plans.

Name: _____

Firm: _____

Address: _____

Signature: _____ Date: _____

(C) SPECIAL INSPECTION OF RETAINING WALLS

When the grading plan includes retaining walls, I certify that either I or a qualified professional have inspected the construction of the walls (including but not limited to the placement of the reinforcement steel and concrete).

Remarks: _____

SEAL

Name: _____

Firm: _____

Address: _____

FINAL GRADING INSPECTION AND CERTIFICATE

Project Name: _____

GRADING CERTIFICATION

CIVIL ENGINEER/LAND SURVEYOR

I am a registered CIVIL ENGINEER and/or LAND SURVEYOR in the State of Arizona. I certify that I have visited the project site and the final grading substantially conforms to the approved grading plan(s). Work observed includes but is not limited to: areas that will be paved; cut and fill slopes; channels, swales, detention basins including completed outlet structure(s), terraces, berms, and other drainage facilities as indicated on the plan(s). This also includes all drainage facilities and final stabilization measures as required by the approved plan(s).

The attached "As-Built Plans" verify that the drainage improvements were constructed in substantial conformance with the approved plans. Additionally the "As-Built Plans" indicate that the outlet structure was constructed per the approved plans, including the associated inverts elevations.

Remarks: _____

SEAL

Name: _____

Firm: _____

Address: _____

SECTION 520 STEEL AND ALUMINUM HANDRAILS

520.1 DESCRIPTION:

The work under this section shall be in accordance with Section 520 of the MAG Standard Specifications, and as modified herein.

Installation of handrails shall include installation of security chain, removable post and no trespassing signs as shown on the plans.

Handrail: Handrails shall be painted flat dark tan to blend with the natural landscape per MAG Section 530. The Contractor shall provide the Town with a color sample for approval, prior to painting the handrails. If paint is applied prior to handrail installation, the contractor shall touchup any paint damaged during installation.

Security Chain: Security Chain shall be 3/8" Galvanized Chain, Class 50 painted to match handrail. Both sections of Security Chain shall be removable attached to handrail and removable post via a lock provided by the Town.

No Trespassing Sign: The Contractor shall furnish two (2) "No Trespassing" Signs. Signs shall be BE Powder Coated Paint on 18 Gauge Steel Sign, 18" x 12" and shall say "No Trespassing" in black lettering on a white back ground. Signs shall hang horizontally from the center of the security chains.

Removable Post: Removable post shall be installed per City of Phoenix Detail No. P1173 Type 3 Pipe Sleeve Detail. Removable post shall be secured to the pipe sleeve via a padlock supplied by the Town. Top of mounting pipe shall be set flush with concrete. Handrail post shall not be welded to mounting pipe. Top of pipe shall be capped.

520.5 PAYMENT:

Payment for Handrail will be made on the contract unit price per Linear Foot which includes materials, paint, chain, posts, rails, mounting, signs, installation, labor and all other items necessary or incidental for completion of the item. No additional payment shall be made for installation of the security chain, removable post or no trespassing signs they are incidental to the construction.

END SECTION

SECTION 525 PNEUMATICALLY PLACED MORTAR

535.1 DESCRIPTION:

The work under this section shall be in accordance with Section 525 of the MAG Standard Specifications, and as modified herein. Shotcrete shall be smooth finished, float or approved equal. Contractor shall provide an allowance for colored shotcrete.

535.4 PAYMENT:

Payment the Shotcrete Channel will be made at the contract unit prices per Square Foot complete and in place, which price shall be full compensation for the work, which includes, select material, and excavation to bring the channel to grade, materials, installation, smooth finish, labor and all other items necessary or incidental for completion of the item. No separate payment shall be made for the turned down edges at each end of the.

END SECTION

SECTION 604 PLACEMENT OF CONTROLLED LOW STRENGTH MATERIAL

604.1 DESCRIPTION:

The work under this section shall be in accordance with Section 604 of the MAG Standard Specifications.

604.3 PLACEMENT:

The existing culvert shall be filled with 1/2 SACK CLSM. Contractor shall completely fill existing culvert with CLSM.

604.6 PAYMENT:

Payment for Slurry and Abandon Existing Storm Drain will be at the contract unit price on a Lump Sum basis and shall include all slurry, sandbags, forms, compaction, labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

END SECTION

SECTION 610 WATERLINE CONSTRUCTION

610.1 DESCRIPTION

The work under this section shall be in accordance MAG Specification 610, as modified by the Camp Verde Water System Construction Specifications and Details, and as modified here in.

Maintaining water service to businesses and residences during construction is incidental to construction of the new water infrastructure.

610.3 MATERIALS

Water pipe classification shall be Class 350 for ductile iron. Thrust blocking shall conform to MAG Standard Detail 380. All horizontal and vertical bends, tees, elbows, reducers, joint restraint and thrust blocks are incidental to Waterline Construction.

610.4 CONSTRUCTION METHODS

The Contractor shall locate existing waterlines prior to commencing construction and shall notify the owner's representative if the existing location/depth of the waterline is substantially different than what is shown on the plans. The Contractor shall coordinate with the Owner's representative and the Camp Verde Water System (928) 567-5281.

All buried metal pipe, valves, and fittings shall be protected from corrosion by encasement in polywrap per MAG Specifications Section 610.5.2. Separation of Sewer and Water mains will comply with Arizona Administrative Code (ACC) R-18-5-502-C.

Joint restraint shall be approved by the Town and Camp Verde Water System.

610.15 TESTING:

All pipe shall be pressure tested in accordance with AWWA Standard C600 by the Contractor and the test results furnished to the Town of Camp Verde and the Camp Verde Water System prior to acceptance.

610.19 MEASUREMENT AND PAYMENT:

No separate measurement or payment shall be made for horizontal or vertical bends, elbows, joint restraint and thrust blocks.

Payment for New 6" DIA. Class 350 DIP Waterline will be at the contract unit price for Linear Foot of

waterline installed and shall include pipe, tracer wire, marking tape, thrust blocking, joint restraint, horizontal bends, polywrap, testing, all excavation, backfill, and compaction, labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

Payment for Waterline Vertical Realignment will be Lump Sum for realigning the 6" water main and shall include fittings, tracer wire, marking tape, thrust blocking, pipe, joint restraint, bends, polywrap, all excavation, backfill, and compaction, labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

END SECTION

SECTION 618 STORM DRAIN CONSTRUCTION

618.1 DESCRIPTION:

The work under this section shall be in accordance with Section 618 of the MAG Standard Specifications, and as modified herein.

Contractor shall provide materials submittal and shop drawings for flap gates and connection. Submittals shall be approved by the Project Engineer. Contractor shall install of Flap Gates such that the gates operate unimpeded by the channel wall. Installation of Nyloplast-ADS Catch Basin includes, 8" ADS Drain Pipe, 8" Flap Gate, 8" Solid Lid connection to existing 4" PVC pipe, and all other work associated with a complete installation. 4" PVC Connection includes installation of a 4" Flap Gate.

Existing 18" Reinforced Concrete Pipe shall be cut neatly to match flush to the wall of the new channel. Existing 30"x40" Arch CMP shall be cut neatly to match flush to the wall of the new box culvert.

Connection of existing 30"x18" CMP includes cutting and removing a portion of the existing pipe, concrete pipe collar and extension of existing pipe to adjust invert to match into the side of the proposed box culvert.

Flared end section shall include toe down.

618.5 MEASUREMENT:

Measurement for the work under this section shall be made per each connection.

618.6 PAYMENT:

Payment for Connect 18" RCP Storm Drain will be made at the contract unit price per Each and includes cutting existing pipe, concrete, rebar, form work, and all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

Payment for 18" Flared End Section will be made at the contract unit price per Each and includes all labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

Payment for Connect Pipe Culvert to Box Culvert, Connect 4" PVC Pipe & 4" Flap Gate, Nyloplast-ADS Catch Basin & 8" Flap Gate, and 18" Pipe Connection & 18" Flap Gate will be made at the contract unit price per Each complete and in place, which includes concrete, rebar, pipe, forms, and all other materials, labor, and tools, and all other items necessary or incidental for completion of the item.

END SECTION

SECTION 621 CORRUGATED METAL PIPE AND ARCHES

621.1 DESCRIPTION:

The work under this section shall be in accordance with Section 621 of the MAG Standard Specifications.

621.6 PAYMENT:

Payment for 18" SRP Culvert will be at the contract unit price per Linear Foot of storm drain culvert complete and in place and shall include pipe, connection to channel, connection to existing culvert, culvert stubs, removal of caps and stub outs, bends, concrete, rebar, fittings, all excavation, backfill, and compaction, labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

END SECTION

Section 630 Tapping Sleeves, Valves and Valve Boxes on Waterlines

630.1 DESCRIPTION:

The work under this section shall be in accordance MAG Specification 630 as modified by Camp Verde Water System Construction Specifications and Details.

630.9 PAYMENT:

Payment for 6" Gate Valve will be at the contract unit price for Each valve complete and in place and shall include gate valve, box and cover, tracer wire, thrust blocking, joint restraint, polywrap, all excavation, backfill, and compaction, labor, materials, tools and equipment, and all other work and materials necessary or incidental for a complete installation.

END SECTION

SECTION 787 GRAY IRON CASTING

787.1 DESCRIPTION:

The work under this section shall be in accordance with Section 787 of the MAG Standard Specifications, and as modified herein.

Substitution of polypropylene steps must be approved by the Town of Camp Verde.

Steps shall be set 6" from the top of wall and at 12" intervals vertically, measured from center of step to center of step.

787.7 MEASUREMENT (NEW SECTION):

Measurement for work under this section shall be for each set of steps complete and in place, and shall include labor, materials, tools, etc for complete installation. A set of steps includes a total of 3 steps.

787.8 PAYMENT (NEW SECTION):

Payment for Access Steps will be made at the contract unit price per Each set of steps complete and in place, which includes materials, installation, labor and all other items necessary or incidental for completion of the item.

END SECTION

ADOT 801 CONSTRUCTION SURVEYING AND LAYOUT (NEW SECTION)

801.1 DESCRIPTION:

The work under this section shall be in accordance with Section 105.8 of the MAG Standard Specifications, as modified in section 105.8 of these specifications and as modified herein.

Replace section 105.8 as follows:

“The Contractor shall be responsible for retaining a Registered Land Surveyor (RLS), licensed to practice in Arizona, who shall be responsible for providing all stakes necessary to establish construction lines and grades. Stakes provided shall be of sufficient number to satisfy the Engineer that the work may be constructed in accordance with the Plans.

“The Contractor will have his RLS set construction stakes establishing lines and grades for road work, curbs, gutters, sidewalks, structures and centerlines for utilities and necessary appurtenances as he may deem necessary. These stakes and marks shall constitute the field control by and in accordance with which the Contractor shall establish other necessary controls and perform the work.

“The Contractor shall perform the work in accordance with the RLS’s stakes and marks, and shall be charged with full responsibility for conformity and agreement of the work with such stakes and marks. The Contractor shall be held responsible for the preservation of all stakes and marks, and if the construction stakes or marks have been carelessly or willfully destroyed or disturbed by the Contractor, the cost for replacing them will be charged against him and will be deducted from the payment for the work.

“The Contractor shall set the construction stakes for buildings establishing lines, grades, and elevations to include necessary utilities and appurtenances and shall be responsible for their conformance with plans and specifications. The Engineer will establish or designate a control line or bench mark of known location and elevation for use as a reference.

801.5 PAYMENT:

Payment for Construction Staking shall be at the Lump Sum contract price for construction staking.

END SECTION

PART 800 FRANCHISE UTILITIES

800.1 DESCRIPTION:

The work under this section includes relocation of utilities as part of this project. Contractor shall confirm location of all utilities prior to construction. The Contractor shall coordinate relocation of utilities with the Town of Camp Verde and each franchise utility prior to construction.

Utility company contacts are:

Camp Verde Sanitary District (Sewer)	(928) 567-6794
Camp Verde Water System (Water)	(928) 567-5281
Arizona Public Service (Electric)	(928) 300-1001
Qwest (Telephone)	(928) 634-2102
Unisource (Gas)	(928) 634-1210
Cable	(928) 606-4521

Qwest shall be responsible for relocation of existing telephone lines.

Contractor shall protect existing street lights along adjacent to the channel. Street light relocations includes all street lights that conflict with the construction whether called for on the plans or not. Relocation of street lights includes storage and electrical connection. Damaged street lights shall be replaced at no extra cost.

800.2 PAYMENT:

Payment for Remove and Relocate Existing Light Pole shall be at contract unit price on a Lump Sum basis which includes materials, installation, labor and all other items necessary or incidental for completion of the item.

END SECTION