SECTION 01000

DIVISION 1 – GENERAL REQUIREMENTS

This contract will be constructed and administered under the requirements of the Montana Public Works Standard Specifications (MPWSS), Fifth Edition, March 2003 and all supplemental documents contained herein. The Montana Public Works Standard Specifications are included in their entirety, as applicable, and as modified, amended, added, or replaced as follows:

01010 SUMMARY OF WORK *(MPWSS as amended)*
01030 PERMITS *(Added Section)*
01041 PROJECT COORDINATION *(MPWSS as amended)*
01045 MISCELLANEOUS WORK *(Added Section)*
01047 MOBILIZATION, INSURANCE, BONDS, AND PREPARATORY WORK (*Added Section)*
01050 FIELD ENGINEERING *(MPWSS as amended)*
01300 SUBMITTALS *(MPWSS as amended)*
01400 CONTRACTOR QUALITY CONTROL AND OWNER QUALITY ASSURANCE *(MPWSS as amended)*
01570 TRAFFIC CONTROL *(added section to replace MPWSS equivalent)*

SECTION 01010

SUMMARY OF WORK

DELETE SECTION 01010 “SUMMARY OF WORK” IN ITS ENTIRETY AND REPLACE WITH THE FOLLOWING:

PART 1 - GENERAL

1.1 SUMMARY

A. PROJECT OVERVIEW

This project consists of installation of curb and gutter, sidewalks, drainage sumps, asphalt patching, and related incidental work in portions of the Brooks Street Commercial Corridor in Missoula, Montana.

1.2 WORK COVERED BY CONTRACT

A. Work to be performed includes:

1. Furnish all labor, materials, and equipment required in accordance with provisions of the Contract Documents.

2. Secure and comply with all necessary federal, state, and local permits associated with work within a public right-of-way before beginning the work

3. Cleanup site removing all trash and foreign materials from the site. Any disturbed or damaged facilities will be suitably restored or replaced consistent with condition(s) which existed prior to construction

1.3 CONTRACTOR'S USE OF PREMISES

A. Access is limited to public rights-of-way and dedicated sidewalk easements as shown on the plans. Minimize the work area and disrupted portions of adjacent properties and businesses. Restrict work area to the absolute minimum area required to accomplish the work.

B. Coordinate use of easement areas under direction of the Owner and the Engineer.

C. Haul all removed concrete and asphalt materials immediately from the site. No stockpiling of materials will be allowed.

D. The Contractor assumes full responsibility for the protection and safekeeping of products and materials Contractor has stored on the work site.

G. Confine all materials storage, equipment storage and employee and subcontractor parking to the areas within the site boundaries. Do not store materials or equipment, nor shall employees of the Contractor or subcontractors park automobiles in a manner that hinders public access.

H. The Contractor shall obtain and pay for the use of any additional storage or work areas if needed for the Contractor operations.

I. The Contractor shall restore any areas used for materials storage, equipment storage, or employee and subcontractor parking to their original condition or better.

1.4 WORK SEQUENCE – PROJECT PHASING

A. General: Construct work in stages to allow for uninterrupted public access during construction. Coordinate construction schedule and operations with the Owner, Engineer and with the Missoula City Engineering Department. The Contractor shall plan, schedule, and coordinate his excavation and construction operations and activities in a manner that will facilitate the progress of the work included in these Contract Documents.

B. Constraints: No more than 25% of the work areas may be under construction at any given time during the contract period. To the maximum extent feasible, complete all work in a work area prior to beginning work in a new area.

C. Hours of operation shall not extend beyond the period from 7 AM to 7 PM, unless otherwise approved by the Owner and Engineer.

1.5 SUBSTANTIAL COMPLETION

A. For the purposes of establishing when the Project is substantially complete and suitable for its intended purpose, all components and work elements described in Paragraph 1.2 shall be complete as outlined within the construction drawings and specifications, on or before the dates provided in the Agreement. Additional requirements of Substantial Completion Include:

1. Correction of all state, local, and other regulatory agencies' defective Work lists.
2. All required submittals have been received and approved by the Engineer as provided within the Contract Documents.
3. Any warranty or insurance coverage requirements have been provided.

B. Final completion of total project: Additional work elements that shall be completed include:

1. Final clean up of the site.
2. Any final punch list Items
3. Completion and termination of any permitting required for the Project.

1.6 REGULATORY REQUIREMENTS

A. Contractor shall comply with all Federal, State, and local laws, regulations, codes, and ordinance applicable to the Work.

B. References in the Contract Documents to local codes shall mean State of Montana, Missoula County, Montana and City of Missoula, Montana.

C. Other standards and codes that apply to the Work are designated in the Specifications.

1.7 ACCESS BY GOVERNMENT OFFICIALS

A. Authorized representatives of governmental agencies shall at all times have access to the Work where it is in preparation or progress. Contractor shall provide proper facilities for access and inspection.

1.8 PROTECTION OF PUBLIC AND PRIVATE PROPERTY

A. All pavement, surfacing, landscaping, driveways, curbs, walks, buildings, utility poles and boxes,

guy wires, sprinkler systems, irrigation systems, fences, signs, and other surface or subsurface structures removed or damaged by construction operations shall be restored to their original condition as determined and approved by the Engineer. All replacements shall be made with new materials. Sprinkler systems and fences may have to be relocated out of the construction area at no cost to the owner. All fences and sprinkler systems may not be shown on the drawings. Maintain all fences affected by the Work until completion of the Work and keep any gates closed and locked when not in use.

B. Protect, shore, brace, support, and maintain underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by construction operations.

C. Restore to their original condition, pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with sod and shrubs, whether within or outside the easement sites.

D. Use new materials for replacements of all damaged items.

E. Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, that may be caused by transporting equipment, materials, or workers to or from the Work or any part or site thereof, whether by Contractor or Contractor's subcontractors or suppliers.

F. Make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, any damaged property concerning its repair, replacement, or payment of costs incurred in connection with the damage.

G. Keep fire hydrants and water control valves free from obstruction and available for use at all times.

H. In areas where the Contractor's operations are adjacent to or near a utility and such operations may cause damage which might result in expense, loss, and inconvenience, the operation shall be suspended until all arrangements necessary for the protection thereof have been made by the Contractor.

I. Notify all utility offices which may be affected by the construction operation at least 48 hours in advance. Before exposing any utility, the utility having jurisdiction shall grant permission and may oversee the operation. Should service of any utility be interrupted due to the Contractor's operation, the proper authority shall be notified immediately. Contractor shall cooperate with the said authority in restoring the service as promptly as possible and shall bear any costs incurred.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

PART 4 – MEASUREMENT AND PAYMENT (NOT USED)

END OF SECTION 01010

01010 SUMMARY OF WORK

APPENDIX A

CITY OF MISSOULA - ENGINEERING/UTILITY SECTION ADMINISTRATIVE RULE No. 661

Public Works MISSOULA Engineering Division	**Engineering/Utility Section Administrative Rule No. 661**
	Tests and Specs for Infrastructure Improvements

Adopted: July 29, 1993

Revised: _____

In order to better document the inspection and certification of public infrastructure improvements, the City Engineering Division shall require the following information for all projects approved for construction. This documentation shall be required prior to final acceptance of sanitary sewer, storm drain, Portland cement concrete, and bituminous pavement improvements within City right-of-way or easements.

THE FOLLOWING DOCUMENTATION SHALL BE REQUIRED ON ALL PROJECTS APPROVED BY THE CITY ENGINEERING DIVISION:

1. The Engineer shall submit a letter to the City certifying that the public improvements (ie: sanitary sewers, drainage structures and streets) were installed in accordance with the approved plans and specifications.

2. Dates of acceptable tests for sanitary sewer, which shall include lamping and cleaning, exfiltration by air or water and pipe deflection shall be included in the certification letter. This information shall be required for all public sewer main extensions.

3. Photographs of all underground conduit connections to manholes and junction structures shall be provided by the engineer. Photographs of sanitary sewer flexible connections to manholes shall be provided. This information shall be required for all public sewer main extensions. This information should be provided for all storm drainage structures.

4. An accurate record of the location of all sanitary sewer tee branches as installed, and the length of all service lines installed must be provided by the Engineer. Depth at the end of dry service line stub-ins is required. Sanitary tee connections shall be tied to manholes for gravity sewers and permanent structures for STEP sewers. This information shall be required for all public sewer main extensions.

5. The Engineer shall furnish documentation of tests in accordance with methods prescribed by AASHTO for theoretical maximum density, optimum moisture content, and sieve analysis for the surfacing/cushion material, the imported base material, and excavation backfill material within the right-of-way. The existing base/subbase material within the right-of-way shall be field density tested until the material no longer responds to compactive efforts. This information shall be required for all public sewer main, storm drain and street extensions more than two hundred feet (200') in total length.

6. The Engineer shall furnish documentation of in place field density tests. In place density tests for trenches and embankments shall, as a minimum, be required for the first lift of backfill to set a pattern of compaction, shall be provided daily, and as backfill material changes. In place density tests for roadways shall, as a minimum, be required at intervals of 200 feet. Tests for roadways shall be provided for subgrade, base, and cushion materials. A minimum of the top 6 inches of subgrade which are to be paved or covered with sidewalk, curb and gutter shall be field density tested until the material no longer responds to compactive efforts. All trench backfill material in improved areas and all embankments shall be compacted for the full depth and shall be compacted to 95~ of the theoretical maximum proctor density as determined by AASHTO-T-99.

This information shall be required for all public sewer main, storm drain and street extensions more than two hundred feet (200') in total length.

7. The Engineer shall furnish a dated job-mix formula for hot plant mix bituminous pavement which conforms to the procedures of the Asphalt Institute's MS-2 manual. The job mix formula shall be no older than one year, and shall have the same aggregate and asphalt sources and grades as the mix used for the public improvements. The Engineer shall furnish certified results of a Marshall Test showing the bulk specific gravity determination, stability and flow data, and density and void analysis. The engineer shall furnish a minimum of one "field Marshall Test" per 1000 feet of roadway to check for variations from the job-mix formula. In addition, test results of ASTM D 1075 for the effect of water on cohesion of compacted bituminous material shall be provided by the Engineer. This information shall be required for all public street extensions more than two hundred feet (200') in total length.

8. The Engineer shall furnish asphalt core samples for bituminous pavement in the public right-of-way. One core sample shall be required for every 400 feet of road with a minimum of two samples per project. The Engineer shall provide a certified laboratory report from the samples taken as to thickness and actual density. This information shall be required for all public street extensions more than two hundred feet (200') in total length.

9. The Engineer shall furnish portland cement concrete tests for concrete placed in the public right-of-way and concrete incorporated into public infrastructure improvements. One set of tests shall be required for every 50 cubic yards of concrete placed with a minimum of one set of tests per project. The concrete shall be sampled, specimens made, and compliance determined in accordance with the following:

Sampling Fresh Concrete	ASTM C-172
Slump	ASTM C-143 or AASHTO T119
Air Content	ASTM C-231 or C-173 or C-138 or AASHTO T152
Compressive Strength	ASTM C-39 or AASHTO T22
Making and Curing Test Specimens in the Field	ASTM C-31 or AASHTO T23

This information shall be required for all public street extensions more than two hundred feet (200') in total length.

Recommended by:

R. Steven King, Assistant City Engineer

Approved by:

Bruce T. Bender, City Engineer

SECTION 01030
PERMITS

PART 1: GENERAL

1.1 DESCRIPTION

A. This section specifies the requirements for securing and complying with all local, state, and federal regulations required for the project. CONTRACTOR shall be responsible for obtaining all permits, licenses, bonds, insurance, etc., detailed within the Contract Documents or required by and Local, State, or Federal regulations unless specifically stated within the Contract Documents that Owner will provide.

1.2 GENERAL

A. Acquire all applicable permits and pay charges for such, unless otherwise specified. This includes but is not limited to:

1. MPDES Storm Water Discharge Permit. The Contractor shall be required to secure and pay all fees associated with obtaining Authorization for Storm Water Discharge Associated with construction activity under the Montana Pollutant Discharge Elimination System (MPDES). All fees associated with this permit application and any subsequent annual fees will be paid for by the Contractor.

2. Excavation and Engineering Permits. The Contractor will be required to obtain excavation and engineering permits from the City of Missoula for storm drain, paving, curb and gutter, sidewalk, right-of-way and other associated permits. Both the application form and a sample permit may be obtained from the City of Missoula Public Works Department.

3. City Business License: The Contractor shall obtain a City of Missoula business license according to Missoula Municipal Code Chapter 13.16. The Contractor will be responsible to acquire and pay directly for this license.

PART 4: MEASUREMENT AND PAYMENT

4.1 PERMITS

A. Measurement and payment for Permits will be made at the lump sum price listed in the contract, and shall include all labor, fees and incidentals necessary to comply with this section.

END OF SECTION 01030

SECTION 01041

PROJECT COORDINATION

DELETE SECTION 01041 “PROJECT COORDINATION” IN ITS ENTIRETY AND REPLACE WITH THE FOLLOWING:

PART 1: GENERAL

1.1 DESCRIPTION

A. This section specifies the requirements for coordinating and sequencing the work under the Contract Documents.

1.2 COORDINATION WITH PUBLIC AND PRIVATE AGENCIES

A. UTILITY COORDINATION:

1. The Contractor’s attention is directed to the utility facilities shown on the plans. Work around the numerous utilities, which exist on this project, that are in the vicinity of required work. Contact the respective utility representative prior to conducting any work in this vicinity.

2. Immediately notify the Engineer of any utility conflicts that will require a design change or relocation of the utility.

B. LANDOWNERS:

1. The Contractor will notify all property owners adjacent to the construction area of the proposed work and mutually work out all subsequent details for any necessary relocation of mailboxes, vehicles, etc. The Contractor must notify all affected property owners 72 hours prior to the start of construction adjacent to their property and provide them with the start date and estimated completion date.

2. The Contractor will be responsible for the removal of parking within the construction zone by signing and notification at least 48 hours in advance of moving onto the site. If the Contractor has made a reasonable effort to have a vehicle removed from the construction zone but is unsuccessful, the Contactor shall coordinate the removal of such vehicles with the City.

3. Maintain reasonable vehicle access and parking and pedestrian access to all businesses and residences throughout construction. Sequence work to minimize disruption to businesses and residences to the greatest extent possible. The Contractor will coordinate the details of access with the individual residences and businesses, as well as any details of access, parking, deliveries, merchandise, etc. with each property owner.

4. During the course of construction, the Contractor will provide a 24-hour phone number with a responsible local contractor representative, foreman level or higher, to respond to after hours complaints concerning the project, blocked access to private property, etc.

5. The Contractor shall be aware that there may be underground irrigation adjacent to the location of the curb and sidewalk. Any damage to this irrigation shall be the contractor’s responsibility to repair. Any underground irrigation that is located within

the location of the new curb and sidewalk shall be the contractor's responsibility to relocate. The Contractor shall coordinate with property owners who intend to place additional irrigation sleeves under new sidewalk panels.

PART 3: EXECUTION

3.1 UNDERGROUND UTILITIES AND STRUCTURES

A. The Contractor will be responsible for locating all underground utilities and obstructions prior to beginning excavation.

B. All utilities, when encountered, shall be supported, shored, and protected wherever exposed in the trench or other excavation. Any existing utility which is damaged during excavation shall be immediately repaired at the Contractor's expense.

C. Contractor will be responsible for calling and coordinating with UULC (One Call Locators) as needed and maintaining the locate marks during construction. Contractor should anticipate having utilities marked only once, and if re-marking is required, it will be at Contractor's expense.

PART 4: MEASUREMENT AND PAYMENT

4.1 PROJECT COORDINATION AND COMMUNICATION

A. Include all costs associated with coordination and project communications in other items of work included in the contract. No separate payment will be made for project coordination or communications.

END OF SECTION 01041

SECTION 01045
MISCELLANEOUS WORK

PART 1: GENERAL

1.1 DESCRIPTION

A. The item “Miscellaneous Work” is included in the contract for any minor work and/or material which may be encountered during construction, but which is not addressed elsewhere in the contract.

B. Miscellaneous work will be measured by the respective unit for material and/or work performed as directed in writing by the Engineer.

PART 2: PRODUCTS – NOT USED

PART 3: EXECUTION – NOT USED

PART 4: MEASUREMENT AND PAYMENT

4.1 PAYMENT

A. Payment for Miscellaneous Work, measured as provided above, will be at agreed prices or on a force account basis. The number of units in dollars set in the contract is an estimated amount only, which may be adjusted up or down by the Engineer in accordance with the needs of the project. Use of this item is at the sole discretion of the Engineer and is not guaranteed to be used. If this item is not used, there will be no payment to the Contractor for this item.

END OF SECTION 01045

SECTION 01047
MOBILIZATION, INSURANCE, BONDS, AND PREPARATORY WORK

PART 1: GENERAL

1.1 DESCRIPTION

A. Mobilization/de-mobilization, as well as costs associated with insurance, bonds, move-in costs, and other preparatory costs shall be distributed accordingly over those bid items shown in the proposal.

PART 4: MEASURMENT AND PAYMENT

4.1 PAYMENT

A. Measurement and Payment for Mobilization will be made at the lump sum price listed in the contract.

END OF SECTION 01047

SECTION 01050
FIELD ENGINEERING

PART 1: GENERAL

1.1 ENGINEERING SURVEYS

Delete Paragraphs A through D in their entirety and replace with the following:

"A. All work will be done to the lines, grades and elevations shown on the plans or as provided by the ENGINEER during project staking.

B. The following construction staking will be provided. ALL other construction staking and layout is the responsibility of the CONTRACTOR.

1. Curb - offset line down each side of roadway centerline at 25-foot stations with grade hubs to top of curb.
2. Two benchmarks.
3. Two offset stakes for storm drainage structures such as manholes, intakes, or sumps.

C. The CONTRACTOR shall keep the ENGINEER informed, a reasonable time (5 days) in advance of the times and places at which he wishes to do work, so the horizontal and vertical control points may be established and any checking deemed necessary by the ENGINEER may be done with reasonable notice to the ENGINEER and minimum delay to the CONTRACTOR.

D. The CONTRACTOR will be responsible to lay out the proposed configuration of curbs, laydowns, sidewalks, ramps and detectable warning surfaces, sumps, tree pits, irrigation sleeves, and other hard infrastructure with paint, stakes or other means acceptable to the ENGINEER. The ENGINEER must review and verify the acceptability of this configuration prior to any site demolition. The ENGINEER will review the field-marked layout as soon as possible after receiving notice from the CONTRACTOR that layout is complete, but in no case shall time elapsed be greater than 24 hours (exclusive of weekends).

E. Prior to commencing work, the CONTRACTOR shall carefully compare and check all drawings, each with the other that in any way affects the location or elevation of the work to be executed by him, and should any discrepancy be found, he shall immediately report the same to the ENGINEER for verification and adjustment. Any duplication of work made necessary by failure and neglect on his part to comply with this function shall be done at his sole expense.

F. The CONTRACTOR shall be responsible to protect and preserve the established construction staking provided by the OWNER until such staking is determined, by both ENGINEER and CONTRACTOR, to no longer be necessary to complete the work. Any re-staking required due to CONTRACTOR destroying or disturbing construction staking shall be replaced by ENGINEER at a rate of $110.00/hr for a 2-man survey crew, and billed to the CONTRACTOR.

END OF SECTION 01050

SECTION 01300
SUBMITTALS

PART 1: GENERAL

ADD THE FOLLOWING:

1.1 CONSTRUCTION SCHEDULES

D. Submit a construction schedule prior to start of work. Schedule to include sequence of work by item such as demolition, curb, sidewalk, asphalt and final cleanup. The schedule will detail work into minimum of two blocks or 1,000 ft.

E. Except where otherwise provided, the Contractor shall complete a daily report indicating manpower, major equipment, subcontractors, etc., involved in the performance of the work. The daily report shall be completed on forms prepared by the Contractor and approved by the Engineer and shall be submitted to the Engineer at the conclusion of each work day.

1.2 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

ADD THE FOLLOWING:

"F. Submittal Procedures

1. Submit five (5) copies of each item of product data listed below. Modify product data by deleting information that is not applicable to the project or by marking each copy to identify pertinent products. Supplement standard information, if necessary, to provide additional information applicable to project. The ENGINEER will retain three (3) copies of each submittal (and resubmittal if required) and return two (2) copies to the CONTRACTOR.

2. Submit shop drawings, product data, operation and maintenance manuals, or samples as required for all products, materials, and equipment to be incorporated into the project. Examples include but are not limited to:

a. Pipe, all sizes and types, including all glues, lubricants, and gaskets.
b. Valves and valve boxes, all sizes and types.
c. Fittings, all sizes and types.
d. Sanitary and Storm Drain structures.
e. Cast iron rings and covers.
f. Certified gradation results/moisture density curves for base and sub-base materials as required.
h. Asphalt concrete mix designs.
i. Concrete mix designs.
j. Signing and striping products.
k. Any other items specified or shown on the drawings when requested by the ENGINEER.

3. The CONTRACTOR shall resubmit the required number of copies of shop drawings and product data for any items that require resubmittal after the ENGINEER's review.

4. Transmit all submittals to:

WGM Group, Inc.
3021 Palmer
P.O. Box 16027
Missoula, MT 59808

1.3 ENGINEER'S REVIEW

A. The ENGINEER's check and review of Shop Drawings and Samples, Standard Specifications and descriptive literature submitted by CONTRACTOR will be only for general conformance with design concept, except as otherwise provided, and shall not be construed as:

1. Permitting any departure from the contract requirements;

2. Relieving the CONTRACTOR of the responsibility for any error in details dimensions or otherwise that may exist in such submittals;

3. Constituting a blanket approval of dimensions, quantities, or details of the material or equipment shown; or

4. Approving departures from additional details or instructions previously furnished by the ENGINEER. Such check or review shall not relieve the CONTRACTOR of the full responsibility of meeting all of the requirements of the Contract.

B. ENGINEER'S ACTION

1. Shop Drawings and Samples:

a. Items within transmittals will be reviewed for overall design intent and will receive one of the following actions:

1) A - FURNISH AS SUBMITTED.
2) B - FURNISH AS NOTED (BY ENGINEER).
3) C - REVISE AND RESUBMIT.
4) D - REJECTED.
5) E - ENGINEER'S REVIEW NOT REQUIRED.

2. Transmittals received will be initially reviewed to ascertain inclusion of the CONTRACTOR's approval stamp. Drawings not stamped by the CONTRACTOR will not be reviewed for technical content and will be returned without any action.

3. Transmittals returned with Action "A" or "B" are considered ready for fabrication and installation.

4. Failure to include any specific information specified under the submittal Paragraphs of the specifications will result in the transmittal being returned to the

CONTRACTOR with "C" or "D" Action. Additionally, any data omitted or additional data required for the ENGINEER to perform a complete review will be returned with a “C” or “D” action.

PART 4: BASIS OF MEASUREMENT AND PAYMENT

ADD THE FOLLOWING:

“4.1 All costs associated with the preparation and submittal of ALL submittals, including but not limited to; shop drawings, samples, operations and maintenance manuals, schedules, record drawings, and daily reports are the CONTRACTOR’s responsibility.”

END OF SECTION 01300

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SECTION 01400
CONTRACTOR QUALITY CONTROL AND OWNER QUALITY ASSURANCE

PART 1: GENERAL

Add the following paragraphs:

"1.3 LABORATORY TESTS

A. The CONTRACTOR will employ and pay for the services of an independent testing laboratory to perform specified laboratory testing of materials and equipment where the technical specifications specifically obligate the CONTRACTOR to provide the services:

B. The OWNER will employ and pay for the services of an independent testing laboratory to perform soils, concrete, and asphalt testing for determining compliance with the specifications. The CONTRACTOR shall cooperate with the laboratory to facilitate the execution of its required services.

1.4 CONTRACTOR'S RESPONSIBILITIES

A. Cooperate with laboratory personnel and provide access to work.

B. Secure and deliver to the laboratory adequate quantities of representative samples of materials proposed to be used and that require testing.

C. Provide to the ENGINEER the preliminary mix proposed to be used for concrete, asphalt, and other material mixes that require control by the testing laboratory.

D. Provide samples of materials proposed to be used for backfill of structures or piping for determination of moisture density relationship.

E. Furnish copies of product test reports as required.

F. Furnish incidental labor and facilities:

1. To provide access to Work to be tested.

2. To obtain and handle samples at the Project site or at the source of the product to be tested.

3. To facilitate inspections and tests.

4. For storage and curing of test samples.

G. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

H. Coordinate testing services with laboratory and the ENGINEER. Understand all requirements of project testing and ensure all testing

complete prior to completion of the Project.

PART 3: EXECUTION

3.1 GENERAL

Add the following paragraphs:

"E. The OWNER shall provide (and the CONTRACTOR shall schedule) nuclear density testing for trench backfill and surfacing materials. (i.e. all base gravels, asphaltic concrete, or gravel surfacing). The CONTRACTOR will provide the OWNER with all the necessary moisture/density curves for all the density testing on this project. The CONTRACTOR will be required to utilize the services of an independent and certified testing laboratory for all proctors. The CONTRACTOR shall reimburse the OWNER the cost of the testing for each FAILED "trench backfill and/or surface" density test.

F. The CONTRACTOR shall schedule all field testing. The CONTRACTOR shall notify laboratory representative and the ENGINEER as to the dates and times of all testing. The CONTRACTOR shall coordinate with the ENGINEER the requirements of the Project and ensure all testing is complete to meet Project Specifications. The CONTRACTOR shall provide all required materials, labor, equipment, water, and power required for testing.

G. The CONTRACTOR shall perform:

1. Initial moisture/density proctor curves for all bedding, gravel bases, and asphaltic concrete surfacing performed by an independent laboratory. The maximum density curve shall be current (within the last 12 months), and the asphalt mix design shall be current (within the last 12 months).

2. The CONTRACTOR shall make provisions for the OWNER/ENGINEER to enter all trenches for the purpose of conducting inspection services; an example would be performing field density tests in a deep trench. Such provisions shall exceed all OSHA requirements, including fall rescue equipment, gas safety equipment, entrance procedures, etc.

H. Related requirements specified elsewhere:

1. Inspection and testing required by laws, ordinances, rules, regulations, orders, or approvals of public authorities: Conditions of the Contract.

2. Certification of products: The respective section of Specifications.

3. Test, adjust, and balance equipment: The respective sections of Specifications.

4. Field tests required and standards for testing: The respective Specification sections.

I. All tests shall be performed in the presence of the ENGINEER.

K. Repair all materials that fail during testing with no additional compensation."

PART 4: MEASUREMENT AND PAYMENT

4.1 PAYMENT FOR TESTING

Delete Paragraph B in its entirety and replace with the following paragraphs:

"B. The OWNER will pay field soil and surfacing density tests and any concrete tests on the Project.

C. Costs of corrective action, costs of "failing" soils and/or concrete tests, cost of testing associated with establishment of mix design and initial material Proctor tests base course and bedding material are the sole responsibility of the CONTRACTOR.

D. Other testing: Required testing, testing procedures, reports, certificates, and costs associated with all phases of securing required satisfactory test information which may be required by individual sections of Specifications or Drawings are the full responsibility of the CONTRACTOR."

END OF SECTION 01400

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SECTION 01570
TRAFFIC CONTROL

DELETE SECTION 01570 "CONSTRUCTION TRAFFIC CONTROL" IN ITS ENTIRETY AND REPLACE WITH THE FOLLOWING:

PART 1: GENERAL

1.1 SUMMARY

A. The CONTRACTOR shall schedule his construction operations in a manner which will assure that the safety and convenience of motorists, business and residents and the safety of construction workers and the general public are adequately met at all times.

PART 2: PRODUCTS

2.1 SUMMARY

A. All products used for Traffic Control shall be in accordance with the Manual of Uniform Traffic Control Devices for Streets and Highways or Local Standards. See City of Missoula Administration Rule No. 651, attached for referral.

PART 3: EXECUTION

3.1 SUMMARY

A. The CONTRACTOR shall submit a detailed traffic control plan for each section of the project, as required. The detour plans and signing shall be done in accordance with the Manual of Uniform Traffic Control Devices for Streets and Highways, the Montana Department of Transportation (MDT) standards and the City of Missoula standards. Prior to starting work or altering an approved segment of the traffic control plan, the CONTRACTOR shall submit to the City of Missoula his plan for barricading, signing, detouring and securing the project area and its related traffic. The City shall have final authority for the review and approval of traffic control and may direct the CONTRACTOR to provide additional items at no additional compensation if, in their estimation, the proposed plan does not adequately address the safety and convenience of the public and/or does not conform to the required standards.

B. Keep open all travel lanes, intersecting streets and alleys, all public and private drives and entrances at all times unless previously approved by the Engineer. Access to parking lots must be maintained at all times. This may be accomplished by working on one access if there are multiple accesses or one half of the access if there is only one access to the parking lot. Include proposed closures on the required traffic control plan per 3.1.A of this section. No detour of traffic on adjacent streets will be allowed.

C. No work shall commence or advance until the related traffic control plan is approved. Therefore, the plan must be submitted prior to issuance of the Notice to Proceed. The CONTRACTOR shall then install all required traffic control facilities prior to commencing work and maintain such throughout the project. The CONTRACTOR shall notify property owners a minimum of 24 hours in advance of private driveway closures. Private driveways that are closed due to construction should be reopened as soon as possible. The CONTRACTOR shall provide safe and continuous passage for pedestrians at all times.

3.2 TRAFFIC CONTROL SIGNING COMPLIANCE

A. The CONTRACTOR is solely responsible for the construction traffic control devices, and the material, use, and types of all traffic control devices shall meet the requirements of OSHA and the Manual of Uniform Traffic Control Devices (MUTCD).

3.3 NOTIFICATION OF CONSTRUCTION

A. The CONTRACTOR shall be responsible for notifying all State, County, City, local or private services, departments, agencies, or organizations whose normal or emergency services may be affected by the construction activity. Notification shall be made at least forty-eight (48) hours in advance of the proposed construction activity. Immediately after the applicable construction activity has been completed, the notified department, agencies, or organizations shall be contacted and informed that the affected highway, road, street, alley, or access is open for normal traffic flow.

3.4 ACCESS FOR EMERGENCY SERVICES

A. Full time access to and from fire station(s) and other locations where emergency vehicles are housed will be provided. It shall be the CONTRACTOR's responsibility to coordinate with local emergency providers to determine emergency vehicle locations.

3.5 ACCESS FOR GARBAGE COLLECTION

A. Contractor shall schedule and stage activities and coordinate with affected business operators so that garbage collection from adjacent businesses is not disrupted.

PART 4: MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT

A. Measurement and payment for Traffic Control will be made at the lump sum price listed in the contract and shall include all labor, material, equipment, and incidentals required to provide traffic control per all local and state requirements and per the requirements contained within this Section 01570. Progress payments for Traffic Control will be made monthly and will paid at the same percentage as the total work complete each month.

END OF SECTION 01570

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01570 TRAFFIC CONTROL

APPENDIX A

CITY OF MISSOULA - ENGINEERING/UTILITY SECTION ADMINISTRATIVE RULE No. 651

Public Works
MISSOULA
Engineering Division

Engineering/Utility Section Administrative Rule No. 651

Public Street Closure Notice Requirements

Adopted: July 18, 1999

Revised: March 25, 2005

BACKGROUND: Public street closure is sometimes necessary to efficiently and safely protect construction work zones for utility or street repair projects. However, closing a public street can also cause serious access problems for adjacent property owners, businesses, and bus routes. This rule has been established to provide advance notice requirements for contractors, utility companies, and public works project coordinators for city street closure.

A. **Collector and Arterial Streets:** Construction impacts vary depending on the type of street affected. The following notice requirements shall apply to all non-emergency city street closures more than four (4) hours in length on streets classified as "collectors" or "arterials" as defined in the Missoula Traffic Control Plan book. A street closure is defined as blocking access from private property to the adjacent public street by construction activities or detour routing. These advance notice requirements do not apply to street closures of less than four (4) hours, mobile and temporary operations, or any emergency utility repairs or connections, or alley closures.

1. **Advance Courtesy Notice (minimum 14-days):** First notice of a planned street closure shall be in writing, delivered by mail or flyer to all property owners, tenants and businesses adjacent to the street closure. Notice shall be provided to businesses within the limits of the advanced "Detour" warning sign locations for the approved traffic control plan, and in all cases, to businesses within 200 feet of the closure. Notice shall also be delivered to all affected transportation companies.

   The notice may be provided any time in advance of the project with a minimum of 14-days notice prior of the street closure and contain the following information:

   a. The estimated date for the start of street closure. If the exact date of the street closure is not known, or if the work is planned in stages, the notice should state information about the approximate dates that the project may begin.

   b. Length of time the street is planned to be closed.

   c. Company name and phone number for further information.

   d. The notice shall also state that a second notice will be delivered a minimum of 48-hours prior to the actual street closure.

2. **48 Hour Notice:** A second notice of a planned street closure shall be in writing, delivered by mail or flyer to all adjacent property owners, tenants and businesses adjacent to the street closure. Notice shall be provided to businesses within the limits of the advanced "Detour" warning sign locations for the approved traffic control plan, and in all cases, to businesses within 200 feet of the closure. Notice shall also be delivered to all affected transportation companies.

   The notice shall be provided a minimum of 48-hours prior to the street closure and contain the following information:

a. Date of beginning of street closure.

b. Length of time the street is planned to be closed.

c. Company name and phone number for further information.

d. It shall be the contractor's responsibility to notify the media 48-hours before the closure.

B. **All Other Streets.** The following notice requirements shall apply to all non-emergency city street closures more than one (1) day in length on streets not classified as "collectors" or "arterials".

1. **48 Hour Notice:** Notice of a planned street closure shall be in writing, delivered by mail or flyer to all adjacent property owners, tenants and businesses adjacent to the street closure. Notice shall be provided to businesses within the limits of the advanced "Detour" warning sign locations for the approved traffic control plan, and in all cases, to businesses within 200 feet of the closure. Notice shall also be delivered to all affected transportation companies.

   The notice shall be provided a minimum of 48-hours prior to the street closure and contain the following information:

   a. Date of beginning of street closure.

   b. Length of time the street is planned to be closed.

   c. Company name and phone number for further information.

C. **Proof of Notice:** The applicant for city street closure shall be required to prove that advance notice or 48-hour notice has been completed by providing the City Engineer copies or logs of such notices and dates of delivery. A City of Missoula form, which may be used for logging and evidence of the notice, is attached along with a sample NOTICE, which may be used in lieu of a contractor-designed form.

Recommended by:

Doug Kueffler, Construction Project Coordinator

Approved by:

R. Steven King, City Engineer

CITY OF MISSOULA
STREET CLOSURE NOTIFICATION VERIFICATION

Street closure is defined as blocking access from private property to the adjacent public street by construction activities or detour routing. Advance notice requirements do not apply to emergency utility repairs/connections or alley closures.

COMPANY NAME: _____

STREET TO BE CLOSED: _____

PERMIT NUMBER: _____

1) ADVANCE COURTESY NOTICE*

Advance Courtesy Notices plus the 48-Hour Notice apply on collector or arterial streets as shown on the city's functional classification map. These notices shall be in writing to all property owners or tenants and businesses adjacent to the street closure. Notice shall be provided to businesses within the limits of the advanced Detour warning sign locations for the approved traffic control plan, and, in all cases, to businesses within 200 feet of the closure. Advance notice is to be done at least 14 days in advance of the work.

INFORMATION TO BE PROVIDED IN THE NOTICE:

Estimated or approximate date of start of street closure.
Length of time – days to be closed.
Company name and phone number for further information.
Notice will state that a second notice will be given at least 48 hours in advance of closure.

2) 48 HOUR NOTICE*

ORMATION TO BE PROVIDED:

Date of beginning of street closure.
Length of time – days to be closed.
Company name and phone number for further information.

***Notification also needs to be made to all applicable companies on the City of Missoula Media Notification List.**

STREET ADDRESS NOTIFIED	ADVANCE NOTICE DATE	48 HOUR NOTICE DATE

3) RESIDENTIAL STREET CLOSURE*

Hour Notice is required for a residential street closure of more than one day in length. This notice is done at least 48 hours in advance. Notice shall be in writing to all property owners or tenants and businesses adjacent to the street closure Notice shall be provided to businesses within the limits of the advanced Detour warning sign locations for the approved traffic control plan, and, in all cases, to properties within 200 feet of the closure.

INFORMATION TO BE PROVIDED:

Date of beginning of street closure.
Length of time – days to be closed.
Company name and phone number for further information.

***Notification also needs to be made to all applicable companies on the City of Missoula Media Notification List.**

STREET ADDRESS NOTIFIED	48 HOUR NOTICE DATE

I certify that the above notifications were done in accordance with City Engineering Administrative Rule #12.

Name _____ Date _____

NOTICE

CONSTRUCTION WORK WILL RESULT IN STREET CLOSURE

THAT MAY AFFECT YOUR PROPERTY

DATES OF CLOSURE

PLANNED START DATE:_____

PLANNED COMPLETION:_____

(Dates of closure are subject to change due to unforeseen circumstances affecting construction plans, including weather. Changes to the above dates will be communicated to affected properties.)

CONTRACTOR:_____

CONTRACTOR CONTACT NAME:_____

CONTACT PHONE NUMBER:_____

ADDITIONAL NOTICE WILL BE PROVIDED 48 HOURS PRIOR TO CLOSURE