

Public Works / Finance Committee



Regular Meeting ~Agenda~

Laurie M. Hopkins
City Clerk

www.ci.moscow.id.us

208.883.7015

**Monday
April 26, 2021**

3:00 PM

**Council Chambers
206 E. Third St.**

The Moscow Mayor, City Council and Staff welcome you to today's meeting. Due to the rise in COVID-19 cases in the area, the meeting is open to the public, but is subject to social distancing protocols and masks will be required of attendees. If you do not have a mask, a disposable mask will be provided. The number of attendees at any one time is limited to no more than 14 due to social distancing requirements in Stage 3 of the Idaho Rebounds Plan and the City of Moscow Public Health Emergency Order. We appreciate and encourage public participation. Citizens wishing to comment on business on the agenda are encouraged to communicate with the Mayor and City Council by phone or email (council@ci.moscow.id.us) in order to respect social distancing protocol. Please note that Council Committee meetings are televised, videotaped and/or recorded. Links to view the City Council meeting live can be found on the City website, YouTube, Facebook and Spectrum Cable 1301. Thank you for your interest in City government.

REGULAR AGENDA

1. Approval of April 12, 2021 Public Works/Finance Committee Minutes (ACTION ITEM) - Taylor Riedner

2. BBC LLC Developer Participation Request (ACTION ITEM) - Bill Belknap

On April 8th of this year, City Staff received a request from Rich Beebe, representative of BBC LLC, owner of 232 acres located to the south of the City's playfield property located on W. Palouse River Drive, requesting the City's financial participation in the construction of the extension of Conestoga Road and the accompanying bridge construction as it provides mutual benefit to both parties. The total cost of the construction of the roadway, bridge and attendant utilities to the southerly boundary of the City's property is estimated at \$2,372,062. Staff will present information on the history of the City's property and prior proposed playfield development of the property for the Council's consideration.

PROPOSED ACTIONS: Review request and provide Staff direction.

3. Acceptance of the Southview Extension Right-of-way Dedication (ACTION ITEM) - Bob Buvel

On June 17, 2019, the City Council approved a lot division on the parcel of land east of the Southview Avenue / Alice Street intersection. Every buildable lot is required by city code to abut public right-of-way so the lot split required a dedication of right-of-way that would extend Southview Avenue approximately 128 feet. The public improvements associated with the lot split have been completed and the right-of-way containing those improvement needs to be accepted by City Council per state code.

PROPOSED ACTIONS: Recommend acceptance of the right-of-way dedication extending Southview Avenue or provide staff further direction.

4. Slurry Seal - 2021 Bid Results and Contract Award (ACTION ITEM) - Nate Suhr

The City published an advertisement for bids on April 2nd, 2021 for the Slurry Seal -2021 Project. The bid for the project consists of applying an Asphalt Slurry Seal Coat (Type II) at the

following locations: Area 1 - Concord, Eisenhower, and Moser (56,717 SY); Area 2 – Adams, Spotswood, and Styner (44,320 SY); Area 3 – Jackson and “D” Street (3,186 SY). On April 12, 2021 an addendum was issued adding Area 4 - Lanny, Highland, and Kirk Drive (11,844 SY).

PROPOSED ACTIONS: Recommend acceptance of the low bid from Blackline, Inc. and award the contract in the amount of \$207,759.93, and authorize staff approval for construction change orders in an amount not to exceed 10% (\$20,775.99) of the contract amount or provide staff further direction.

5. Paradise Pathway Lighting Project - 2021 Bid Results and Contract Award (ACTION ITEM) - Nate Suhr

The City published an advertisement for bids on April 2nd, 2021 for the Paradise Pathway Lighting Project. The bid for the project includes the installing an electrical service connection, eighteen (18) lighted bollards, and twenty-nine (29) overhead lighting fixtures along the Paradise Pathway between Main Street and Styner Avenue located in Moscow, Idaho. Work also consists of the trenching and installation of approximately two thousand eight hundred and fifty (2,850) feet of conduit, accompanying electrical wire, and installing seven (7) junction boxes to power the lighting system. The Engineer's estimate for the project was \$178,035.40.

PROPOSED ACTIONS: Recommend that City Council reject all bids, or provide staff further direction.

REPORTS

Staff Report (if needed)

ADJOURN

NOTICE: Moscow City Council and committee meetings are televised, videotaped and/or recorded. Individuals attending the meeting who require special assistance to accommodate physical, hearing, or other impairments, please contact the City Clerk, at (208) 883-7015 or TDD 883-7019, as soon as possible so that arrangements may be made.

Public Works / Finance Committee



Regular Meeting ~Minutes~

Laurie M. Hopkins
City Clerk

www.ci.moscow.id.us

208.883.7015

Monday, April 12, 2021

3:00 PM

**Council Chambers
206 E. Third St.**

The meeting was called to order at 3:00 p.m.

PRESENT: Maureen Laflin (Virtual), Anne Zabala (Virtual), Art Bettge

OTHERS: Mayor Bill Lambert, Council Member Gina Taruscio, Council Member Sandra Kelly

STAFF: Gary Riedner, Sarah Banks (Virtual), David Schott, Bob Buvel, Chief James Fry, Captain Roger Lanier, Tyler Palmer (Virtual), Bill Belknap (Virtual), Mia Bautista (Virtual), Laurie Hopkins (Virtual), Taylor Riedner

REGULAR AGENDA

1. Approval of Public Works/Finance Committee March 22,2021 Minutes (ACTION ITEM) - Taylor Riedner

The minutes were approved as presented.

2. Disbursement Report March 2021 (ACTION ITEM) - Sarah Banks

Presentation of the Accounts Payable Report for the month ending March, 2021.

ACTION: Approve and sign the Disbursement Report for the month of March 2021.

Banks introduced the report by highlighting the major expenses for the previous month including a police facility construction payment, Well #10 Phase 2 payment, and a biannual insurance payment to ICRMP. The Committee approved the report and recommended it be placed on the Council consent agenda.

3. Second Quarter Financial Report January 1 ,2021 to March 31, 2021 for FY2021 (ACTION ITEM) - Sarah Banks

Staff will present the financial report for the second quarter of Fiscal Year 2021 (January 1, 2021 to March 31,2021).

ACTION: Approve the FY2021 Second Quarter Report.

Banks reviewed the Quarterly Financial Report from the packet. At this time staff would expect about 50% of the budget spent. Unused Capital Outlay funds will go towards purchasing the mask fitting machine for the fire department, which was included in the COVID reimbursement. This expense will be coming forward in the future and will be brought forward during the open budget process. Items listed at 100% are transfers that are completed at the beginning of the fiscal year. The Committee approved the report and recommended it be placed on the Council consent agenda.

4. Hamilton-Lowe Aquatic Center Play Structure Replacement Equipment (ACTION ITEM) - David Schott

City staff is requesting authorization to purchase a replacement play structure for the Hamilton-Lowe Aquatic Center (HLAC) from Vortex USA in an amount not to exceed \$134,000. The City issued a Request for Proposals (RFP) to provide the design, sale, construction, and installation of the play structure. The legal advertisement was published in the Daily News on October 31, 2020 and November 7, 2020. The RFP was also sent directly to ten (10) aquatic play structure suppliers and posted on the City website. Each aquatic play structure supplier was giving the option to submit two separate proposals. The City received six (6) proposals from three (3) play structure suppliers. Four (4) of the proposals were deemed non-responsive by City staff. Given only two responsive proposals

were received by the City, both from Vortex USA, staff opted to bring the two very similar proposals to the Parks and Recreation Commission on January 28, 2021 for their recommendation to City Council.

PROPOSED ACTIONS: Recommend approval of purchase of Hamilton-Lowe Aquatic Center replacement play structure from Vortex USA in an amount not to exceed \$134,000, or provide staff further direction.

Schott introduced the item as written above and stated the current play structure was installed as part of the original pool construction in 2000. Construction would begin at the end of the 2021 pool season and be completed in the spring of 2022. The structure would require new footers and remain roughly the same footprint as the original and water will be recycled from the pool rather than pulling from the main water supply. The capital improvement plan for the large slides includes detailed maintenance schedules that should keep the slides in good shape through 2030. The Committee recommended approval and that it be placed on the Council consent agenda.

5. Hamilton-Lowe Aquatic Center Play Structure Replacement Installation (ACTION ITEM) - David Schott

City staff is requesting authorization to retain WMS Aquatics for the installation of the new Hamilton-Lowe Aquatic Center (HLAC) play structure in the amount of \$54,567.22, and authorize staff approval of construction change orders in an amount not to exceed 10% of the contract amount. The City issued a Request for Proposals (RFP) to provide the design, sale, construction, and installation of the play structure. The legal advertisement was published in the Daily News on October 31, 2020 and November 7, 2020. The RFP was also sent directly to ten (10) aquatic play structure suppliers and posted on the City website. Pursuant to the invitation of the City, extended through the RFP, WMS Aquatics submitted a proposal based upon the RFP and a March 4, 2021 site visit for the installation of the play structure supplied by Vortex USA.

PROPOSED ACTIONS: Recommend acceptance of the proposal from WMS Aquatics, award the contract in the amount of \$54,567.22, and authorize staff approval of construction change orders in an amount not to exceed 10% of the contract amount, or provide staff further direction.

Schott introduced the item as written above and explained that this project was anticipated in this year's budget. The installation will be at the end of the 2021 pool season and finish in the spring of 2022. ADA compliance with pool structures has been met with this project. Needing no further discussion, the Committee recommended approval and that it be placed on the Council consent agenda.

6. South Lift Station Force Main Bid Results and Contract Award (ACTION ITEM) - Bob Buvel

The South Lift Station Force Main Project will install approximately 2500 linear feet of 16" sanitary force main from the South Lift Station at South Main and Nelson Avenue to a gravity sanitary line in the intersection of South Main and Styner Avenue. The new force main will replace the existing 10" force main running under South Main. Portions of the force main have already been installed through developer participation with The Indian Hills Ninth Addition Phase 2 Project and the construction of the new Moscow Police Station. This project will fill in the gaps from Nelson Avenue to Styner. The City published an advertisement for bids on March 6th and 13th, 2021 and the budget for construction in the Capital Improvement Plan is \$600,000.00. Bids were opened on Tuesday, March 30, 2021. Five responsive bids were received with bids ranging from \$633,609.31 to \$850,759.00. The low bid was submitted by J7 Contracting. A complete Bid Tabulation is included in the committee packet.

PROPOSED ACTIONS: Recommend acceptance of the low bid from J7 Contracting, Inc., award the contract for the bid amount of \$633,609.31, and authorize staff approval of construction change orders in an amount not to exceed 10% of the contract amount, or provide staff further direction.

Buvel introduced the item as written above. Money in the sewer budget will be able to assist with the overage on the awarded bid. The contract period will be 60 calendar days, and the contract dates will be

from May 17, 2021 to August 13, 2021. This installation will ease access to any future maintenance and reduce road closure issues. The Committee recommended approval and that it be placed on the Council consent agenda.

ADJOURN

The meeting adjourned at 3:37 p.m.

DRAFT

COMMITTEE STAFF REPORT

DATE: Monday, April 26, 2021



RESPONSIBLE STAFF

Bill Belknap, Deputy City Supervisor, Community Planning and Design

ADDITIONAL PRESENTER(S)

OTHER RESOURCES

AGENDA ITEM TITLE

BBC LLC Developer Participation Request (ACTION ITEM) - Bill Belknap

DESCRIPTION

On April 8th of this year, City Staff received a request from Rich Beebe, representative of BBC LLC, requesting the City's financial participation in the construction of the extension of Conestoga Road and the accompanying bridge construction as it provides mutual benefit to both parties. The total cost of the construction of the roadway, bridge and attendant utilities to the southerly boundary of the City's property (located on W. Palouse River Drive) is estimated at \$2,372,062. While not specified within the letter of request, it is Staff's understanding they are requesting that the City equally share in the cost of those improvements. Separated by fund, the requested 50% financial contribution without contingency would be \$47,000 for the Sewer Fund, \$90,000 for the Water Fund and \$941,210 for the Street Fund, for a total cost of \$1,078,210.

As detailed in the attached memo, the City Council has previously recognized its obligation to extend existing roadways through new development areas to ensure that the City can grow in an orderly and logical way as is required of private subdivisions within the City. This roadway extension and the resulting access and utility extension to the City's property is a fundamental element needed for the future development of the playfield facilities and it would appear appropriate for the City to financially participate in the improvements. City Staff have identified available funding within the City's capital fund accumulation that could be utilized to fund the requested participation. Staff recommends that the City condition the financial contribution upon the requirement that BBC LLC improve West Palouse River Drive from the intersection with Conestoga Drive east to U.S. 95. The subject improvements would include widening West Palouse River Drive to a minimum width of 34 feet and the addition of curbing and sidewalk on the southside of the roadway through the segment. This would ensure that roadway would be improved to the City's minor arterial standard to accommodate the anticipated vehicle traffic that will result from the future development of the playfield property and the proposed residential development to the South.

STAFF RECOMMENDATION

Review request and provide Staff direction.

PROPOSED ACTIONS

PROPOSED ACTIONS: Review request and provide Staff direction.

FISCAL IMPACT

\$47,000 from the Sewer Capital Fund
\$90,000 from the Water Capital Fund
\$941,210 from the Street Capital Fund

PERSONNEL IMPACT

ATTACHMENTS

1. mem-Palouse River Drive Developer Participation
2. Request Letter
3. BBC02-Conestoga Estimate-2021-04-08

Memo

To: Gary J. Riedner, City Supervisor

From: Bill Belknap, Deputy City Supervisor

Date: April 22, 2021

Re: Palouse River Drive Ballfield Access Road Participation Request

As you are aware, the City purchased the 44-acre Palouse River Drive playfield property in 2002 from Sherm Clyde for the purpose of development of athletic playfields which had been identified as a significant need within the community. The property was located adjacent to a designated arterial roadway (West Palouse River Drive), was relatively flat and was well buffered from adjacent land uses, making it well suited for the intended use. The South Fork of the Palouse River bisects the property and park development is commonly a suitable and compatible use of floodplain areas that help preserve them for their natural flood storage function. Shortly after purchasing the property, the City partnered with the Palouse Clearwater Environmental Institute to complete a river restoration project at a cost of \$506,000. This included 12,000 plantings along the river with 47 plant species

The City then formed a group of stakeholders to prepare a conceptual masterplan for the development of the property which included seven playfields (2 baseball, 2 softball, 2 soccer, and 1 lacrosse field) along with supporting parking lots and natural open space areas with a walking path located on the north side of the river. Early in the design process, the City Council recognized that the City should be held to the same standard to extend existing roadways through new development areas to ensure that the City can grow in an orderly and logical way as is required of private subdivisions within the City. Design and planning efforts spanned several years as the community and the City Council evaluated project elements such as extending effluent reuse to the site for irrigation, roadway improvements to Palouse River Drive to U.S. 95, as well as the extension of Conestoga Drive to the south (including the construction of a bridge crossing) across the site to provide access to the fields and parking lots and the undeveloped property to the South. The preliminary development cost was estimated at approximately \$7.9 M which included the development of all fields, parking areas, the extension of Conestoga Drive and bridge construction, extension of effluent irrigation systems and the improvement of West Palouse River Drive to U.S. Highway 95.



In 2011, the City Council ultimately determined that the Palouse River Drive Playfield project was too expensive to advance at that time and instead approached the Moscow School District to advance the development of what is now the Moscow School District Community Playfields on Mountain View Road. The Moscow School District Community Playfields project was completed in 2016 at a cost of \$3.5 Million which was shared between the City and the Moscow School District.

It was recognized that the smaller Moscow School District Community Playfields facility did not fully meet the current demand for athletic field space and that demand will only grow in the future. The City Council chose to retain the Palouse River Drive Property for future athletic fields and to be developed at a time when it could be coordinated with development of the surrounding area.

On April 8th of this year, City Staff received a request from Rich Beebe, representative of BBC LLC owner of the 232 acres adjacent and south of the City's playfield property, requesting the City's financial participation in the construction of the extension of Conestoga Road and the accompanying bridge construction as it provides mutual benefit to both parties. The total cost of the construction of the roadway, bridge, and attendant utilities to the southerly boundary of the City's property is estimated at \$2,372,062. While not specified within the letter of request, it is Staff's understanding that they are requesting that the City equally share in the cost of those improvements. Separated by fund, the requested 50% financial contribution without contingency would be \$47,000 for the Sewer Fund, \$90,000 for the Water Fund, and \$941,210 for the Street Fund, for a total cost of \$1,078,210.

As noted above, the City Council has previously recognized its obligation to extend existing roadways through new development areas to ensure that the City can grow in an orderly and logical way as is required of private subdivisions within the City. This roadway extension and the resulting access and utility extension to the City's property is a fundamental element needed for the future development of the playfield facilities, and it would appear appropriate for the City to financially participate in the improvements.

Staff have examined the available street capital funding that could be allocated to fund fifty percent of the cost of construction of the Conestoga Street extension and bridge construction to facilitate access to the City's Palouse River Drive Ballfields Property. The City has several other large projects that will be under construction this year including the Third Street LHSIP project, the Sixth Street Bridge Project as well as the advancement of the Mountain View Project to construction in 2021. It appears that with an additional \$526,707 of allocation, the City would be able to fund all planned projects within FY2021 along with the contribution to the Conestoga extension and bridge and continue to fund the anticipated future projects over the next three years. The proposed additional Street allocation would include \$349,900 from the Park Improvement accumulation and \$176,707 from the Streetscape allocation. With this reallocation, it is anticipated that the City would be able to fund the proposed contribution and the other capital projects as identified within the City's Capital Improvement Plan.

If the City Council were to contribute the requested funding, Staff would recommend that the City condition the financial contribution upon the requirement that BBC LLC improve West Palouse River Drive from the intersection with Conestoga Drive east to U.S. 95. The subject improvements would include widening West Palouse River Drive to a minimum width of 34 feet and the addition of curbing and sidewalk on the south side of the roadway through the segment. This would ensure that roadway would be improved to the City's minor arterial standard to accommodate the anticipated vehicle traffic that will result from the future development of the playfield property and the proposed residential development to the South.

Staff would recommend that the City's financial contribution would be limited to no more than 50% of the actual cost of construction, shall not to exceed a total amount of \$1,078,210, and shall not be disbursed until completion and city acceptance of the Conestoga extension, bridge, and improvements to West Palouse River Drive.

April 8, 2021

Mayor Lambert and Moscow City Council
City Hall
Moscow, ID 83843

Re: Bridge and Roadway Funding Assistance Request

Dear Mayor Lambert and City Council:

BBC LLC is requesting bridge and roadway funding assistance for the proposed extension of Conestoga Street south of Palouse River Drive and bridge across the South Fork of the Palouse River through the City of Moscow's Park property in that location. The roadway is approximately 1300 feet in length with an estimated construction cost of \$1,206,420.00. The bridge across the South Fork of the Palouse River will connect City of Moscow park property and future residential development to Palouse River Drive. For efficiency of construction, we are proposing to use a Contech *Conspan* precast concrete bridge structure. The estimated bridge design and construction costs are \$950,000.00 plus permitting fees.

The construction of the roadway and bridge through the city park will benefit the City and future development to the south. The benefits will be realized in numerous ways such as; reduced construction costs utilizing public/private investment through shared infrastructure cost, public access to premier parkland on the south side of the South Fork of the Palouse River, increased availability of housing in Moscow, increase availability of "Affordable Housing" through an agreement with the Moscow Affordable Housing Trust and lastly, promote sustainable smart growth in an area of high demand.

This is an exciting opportunity to achieve these positive goals for the City and its growth. We appreciate any input you have and thank you for your consideration of this project.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Rich Beebe', with a long horizontal flourish extending to the right.

Rich Beebe
BBC LLC

Conestoga Drive Extension Cost Estimate

City of Moscow



Preliminary Construction Cost Estimate

Prepared by: SynTier Engineering (SAS - 4/8/2021)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	Mobilization/Demobilization	LS	1	\$190,000.00	\$190,000.00
2	Excavation (Excluding Stripping)	CY	2,000	\$6.00	\$12,000.00
3	Stripping (including stockpiling)	CY	2,000	\$6.00	\$12,000.00
4	Embankment	CY	7,500	\$3.00	\$22,500.00
5	Topsoil Placement	SY	4,000	\$3.00	\$12,000.00
6	Aggregate Base	SY	4,750	\$15.00	\$71,250.00
7	Asphalt	TON	1,550	\$100.00	\$155,000.00
8	Curb & Gutter	LF	2,750	\$20.00	\$55,000.00
9	Sidewalk (with base rock)	SY	2,300	\$50.00	\$115,000.00
10	ADA Ramps	EA	2	\$2,000.00	\$4,000.00
11	Street Monuments	EA	5	\$650.00	\$3,250.00
12	Catch Basins	EA	10	\$2,200.00	\$22,000.00
13	Storm Sewer Manhole	EA	4	\$3,500.00	\$14,000.00
14	Storm Sewer Pipe	LF	1,150	\$80.00	\$92,000.00
15	Inlet protection	EA	10	\$80.00	\$800.00
16	Silt Fence	LF	2,700	\$5.00	\$13,500.00
17	Sanitary Sewer Manhole	EA	4	\$3,500.00	\$14,000.00
18	Sanitary Sewer Pipe	LF	1,000	\$80.00	\$80,000.00
19	Watermain Pipe (including fittings)	LF	1,400	\$120.00	\$168,000.00
20	Fire Hydrants	EA	3	\$4,000.00	\$12,000.00
21	Franchise Utility Trench	LF	1,400	\$45.00	\$63,000.00
22	Bridge	LS	1	\$950,000.00	\$950,000.00
23	Bridge Design (Bridge, Road, Utility, Geotechnical)	LS	1	\$75,120.00	\$75,120.00
				Subtotal	\$2,156,420.00
				Contingency (25%)	\$215,642.00
				Project Total	\$2,372,062.00

Notes:

- 1.) Does not include permit fees.
- 2.) Does not include prevailing wage

COMMITTEE STAFF REPORT

DATE: Monday, April 26, 2021



RESPONSIBLE STAFF

Bob Buvel

ADDITIONAL PRESENTER(S)

OTHER RESOURCES

AGENDA ITEM TITLE

Acceptance of the Southview Extension Right-of-way Dedication (ACTION ITEM) - Bob Buvel

DESCRIPTION

On June 17, 2019, the City Council approved a lot division on the parcel of land east of the Southview Avenue / Alice Street intersection. Every buildable lot is required by city code to abut public right-of-way so the lot split required a dedication of right-of-way that would extend Southview Avenue approximately 128 feet. The public improvements associated with the lot split have been completed and the right-of-way containing those improvement needs to be accepted by City Council per state code.

STAFF RECOMMENDATION

Staff has reviewed the Deed of Dedication and recommends acceptance of the right-of-way.

PROPOSED ACTIONS

PROPOSED ACTIONS: Recommend acceptance of the right-of-way dedication extending Southview Avenue or provide staff further direction.

FISCAL IMPACT

PERSONNEL IMPACT

ATTACHMENTS

1. Moscow City Council 6.17.19 Agenda Item 1b
2. DeedOfDedication;Southview Ave_Alice St;Thompson (2021)_final

CITY COUNCIL STAFF REPORT

DATE: Monday, June 17, 2019



RESPONSIBLE STAFF

Leah Carlson, Planner I

REVIEWED BY

This was reviewed by the Public Works/Finance Committee on 6/10/2019 and recommended for approval.

ADDITIONAL PRESENTER(S)

OTHER RESOURCES

AGENDA ITEM TITLE

Proposed Lot Division in an Area Generally Located East of the Intersection of Southview Avenue and Alice Street - Leah Carlson

DESCRIPTION

The applicant, Thompson Family Limited Partnership, is requesting a lot division in an area generally located east of the intersection of Southview Avenue and Alice Street. The existing lot is approximately 281,003 sf or 6.45 acres in size. The applicant is proposing to create three new lots of approximately 9,600 sf, 9,650 sf, and 11,273 sf in size, leaving a remainder lot of 250,480 sf. The applicant intends to create the three lots for future development of single-family residential homes. On June 3, 2019, City Council approved a rezone of the property from Agriculture/Forestry (AF) Zoning District to Low-Density, Single-Family Residential Zoning District (R-1). Within the R-1 Zoning District, lots require a minimum lot size of 9,600 sf and a minimum lot width of 80 feet. The three proposed lots meet these requirements. There are currently no buildings on the subject property. This was reviewed by the Public Works/Finance Committee on 6/10/2019 and recommended for approval.

STAFF RECOMMENDATION

Approve the proposed lot division with no conditions.

PROPOSED ACTIONS

ACTION: Approve the lot division request with no conditions.

FISCAL IMPACT

No fiscal impact.

PERSONNEL IMPACT

No personnel impact.

ATTACHMENTS

1. Notice of Public Meeting
2. Site Plan
3. Application Letter
4. Legal Descriptions

NOTICE OF PUBLIC MEETING

Proposed Lot Division in an area generally located east of the intersection of Southview Avenue and Alice Street in the City of Moscow, Idaho (LUP2019-0009)

A public meeting before the Public Works/Finance Committee of the City Council will be conducted during which the following proposal will be considered:

Applicant is requesting a lot division to create three new parcels of approximately 9,600 sf, 9,650 sf, and 11,273 sf in size from an existing parcel of approximately 281,003 sf.

MEETING DATE AND TIME:

Monday, June 10th, 2019

LOCATION OF MEETING:

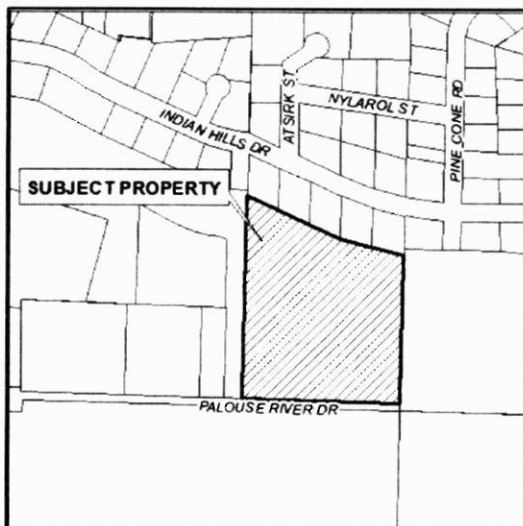
Council Chambers, Second Floor, Moscow City Hall
206 East Third Street, Moscow, Idaho

MEETING TIME:

3:00 p.m.

Note: Meeting start time is not necessarily indicative of discussion start time for the application advertised in this notice. Multiple hearings and/or agenda items may make it difficult to determine hearing start time, which could occur late in the meeting.

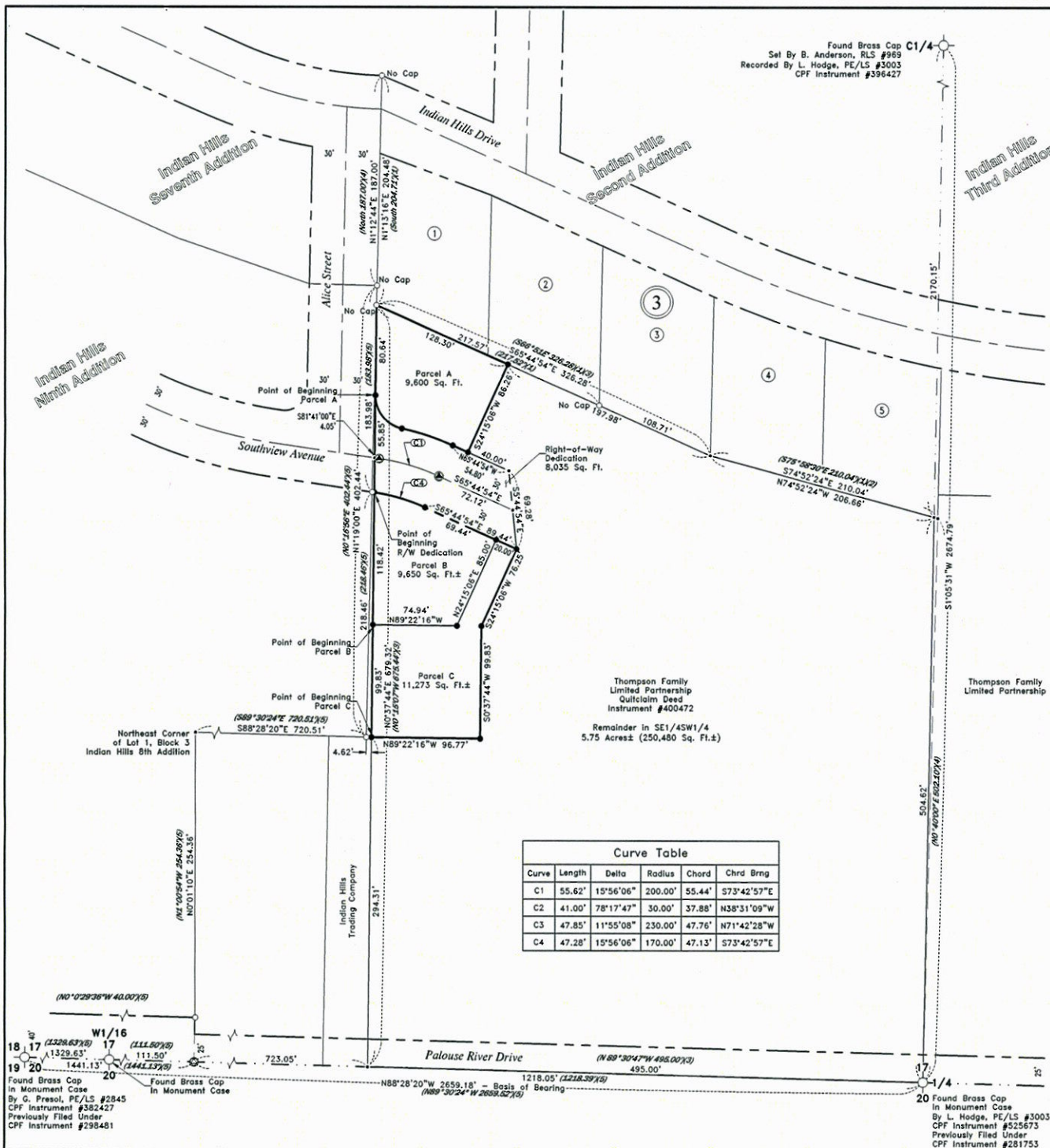
The file containing information on this matter is available for public review (an appointment may be necessary) at the Community Development Department located in the Paul Mann Building, 221 East Second Street, Moscow, Idaho. You may also call 883-7035 to obtain the meeting agenda, further information on the application or the public hearing process, and/or to request a meeting with City Staff.



Laurie Hopkins, Moscow City Clerk

A handwritten signature in cursive script that reads 'Anne Peterson'.

Anne Peterson, Deputy City Clerk



Survey References

- Indian Hills Second Addition to the City of Moscow, Instrument #258594, surveyor not identified on plat.
- Indian Hills Third Addition to the City of Moscow, Instrument #284160, by J. Hammond, PE/LS #2102.
- Quitclaim Deed, Instrument #400472, Eugene & JoAnn Thompson to Thompson Family Limited Partnership.
- Indian Hills 7th Addition to the City of Moscow, Instrument #413530, by J. Hammond, PE/LS #2102.
- Indian Hills 9th Addition to the City of Moscow, Instrument #595522, by J. Hammond, PE/LS #2102.

Surveyor's Certificate

I, Duane Priest, PLS #6449, State of Idaho, do hereby certify that the survey represented by this map was performed by me or under my supervision in accordance with the laws of the State of Idaho and at the request of Garrett Thompson in August 2018.

Basis of Bearings

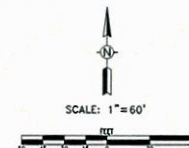
The Basis of Bearings for this survey is the south line of the SW1/4 of Section 17, shown hereon as N89°28'20"W per GPS observation.

Purpose Of Survey

To locate, and map the boundaries of the Thompson property, located in the SE1/4 of the SW1/4 of Section 17, as described in Quitclaim Deed Instrument #400472. Also to divide, monument and map the boundaries of two new parcels out of sold property, as shown hereon.

Legend

- Found Monument as Described
- Set Centerline Monument
- Found Aluminum Cap Centerline Monument in Monument Case
- Set 5/8" Diameter Rebar w/ Yellow Plastic Cap Stamped "Priest 6449"
- Found 5/8" Diameter Rebar "Hedco 2102" or as Described
- Calculated Position
- Block Number
- Lot Number
- Curve Data - See Curve Table
- Reference Data - See Survey References
- Parent Parcel Boundary Line
- New Parcel Boundary Line
- Existing Lot Line
- Section/Section Subdivision Line
- Centerline
- Right-of-Way



NO. _____ AT THE REQUEST OF:

DATE & HOUR: _____

BY: _____ M.

FEE \$ _____ BY: _____

Record of Survey for:
Garrett Thompson
Latah County, Idaho

Drafted by: SW

Checked by: DEP

File Name: 4075 R05.dwg

Tab: Layout

Plot Style: Default.ctb

Project: 4075-08-18

Date: 2/11/19

1 of 1

SUSAN R. WILSON

ATTORNEY AT LAW, PLLC

208 S. Main St., Ste 2, Moscow, ID 83843

Ph: 208-882-8060 ~ Fx: (866) 221-9397 ~ sw2@moscow.com

March 7, 2019

RECEIVED

MAR 07 2019

City of Moscow

City of Moscow
Honorable Mayor and Councilmembers
206 East Third Street
Moscow, Idaho 83843

RE: Petition for Lot Division - ~~Lot 19, Block 6, Indian Hills VI Addition, Moscow~~

Dear Mayor and Councilmembers,

I represent Thompson Family Limited Partnership, owner of the property described herein located in the City of Moscow. My client is requesting approval of a lot division, which would create three new parcels located directly east of the recently approved Indian Hills Ninth Addition to the City of Moscow.

Per your lot division requirements, please consider the following:

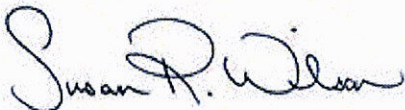
1. Lot Size, Width and Depth: - Parcel A lot size of 9,601 SF; Parcel B lot size of 9,650 SF; and Parcel C lot size of 11,273+/- SF. See Attached.
2. Public Street Frontage and Lot Access: Southview Avenue.
3. Location of Utilities and City Services: See Attached.
4. Required Street Improvements: Southview Avenue.
5. Park Land Dedication: Not Applicable.
6. Off-Street Parking: Not Applicable.
7. Right-of-way dedication and/or Easement Issues: See Attached Legal Description for Southview Avenue Dedication.
8. Building Setbacks: Not Applicable.
9. Required Street Trees: Not Applicable.

Also enclosed please find the following:

- A. Complete legal descriptions of the three new proposed lots.
- B. A scaled site plan with dimensions, property lines, adjacent streets, driveways, easements, site drainage, and North arrow and scale. There are no structures existing.
- C. A check for the Community Development Application Fee and Engineering Review Fee.

My client asks that this application be reviewed and put on the City agendas at your earliest convenience. Please send notices of the scheduled meetings to my office and to Thompson Family Limited Partnership at 1024 Pine Crest Rd., Moscow, Idaho 8383. If you have any further questions or concerns, please contact me at 208-882-8060.

Respectfully,



Susan R. Wilson
Attorney at Law

Enclosures

9-19-2018

**Legal Description by Hodge & Associates
For Garrett Thompson – Parcel A**

A legal description for a parcel of land located in the SE1/4 of the SW1/4 of Section 17, T39N, R5W, B.M., in the City of Moscow, Latah County, Idaho and being more particularly described as follows:

Commencing at the southeast corner of the SW1/4 of Section 17, Thence along the south line of said SW1/4, also the south line of Quitclaim Deed, Instrument #400472, N88°28'20"W, 495.00 feet, to the southwest corner of said Quitclaim Deed, Thence leaving the south line of the SW1/4 of Section 17, N0°37'44"E, 598.68 feet along the west line of Quitclaim Deed Instrument #400472, to a point on the the east right-of-way of Alice Street and the **Point of Beginning**:

Thence along the east right-of-way of Alice Street, N0°37'44"E, 86.64 feet, to the northwest corner of Quitclaim Deed, Instrument #400472 also the southwest corner of Indian Hills Second Addition to the City of Moscow;
Thence leaving said east line and said east right-of-way, S65°44'54"E, 128.30 feet along the north line of said Quitclaim Deed and the south line of Indian Hills Second Addition;
Thence leaving said common line at a right angle, S24°15'06"W, 86.26 feet;
Thence, parallel to said common line N65°44'54"W, 14.80 feet;
Thence 47.85 feet along a curve to the left, said curve having a Delta = 11°55'08", Radius = 230.00 feet, Chord = 47.76 feet and a Chord Bearing = N71°42'28"W;
Thence 41.00 feet along a curve to the right, said curve having a Delta = 78°17'47", Radius = 30.00 feet, Chord = 37.88 feet and a Chord Bearing = N38°31'09"W to the **Point of Beginning**

Parcel contains 9,601 Square Feet, more or less.



9-19-2018

**Legal Description by Hodge & Associates
For Garrett Thompson – Parcel B**

A legal description for a parcel of land located in the SE1/4 of the SW1/4 of Section 17, T39N, R5W, B.M., in the City of Moscow, Latah County, Idaho and being more particularly described as follows:

Commencing at the southeast corner of the SW1/4 of Section 17, Thence along the south line of said SW1/4, also the south line of Quitclaim Deed, Instrument #400472, N88°28'20"W, 495.00 feet, to the southwest corner of said Quitclaim Deed, Thence leaving the south line of the SW1/4 of Section 17, N0°37'44"E, 394.14 feet along the west line of Quitclaim Deed Instrument #400472 to the **Point of Beginning**:

Thence continuing along said west line, N0°37'44"E, 118.42 feet, to the south right-of way of Southview Avenue;

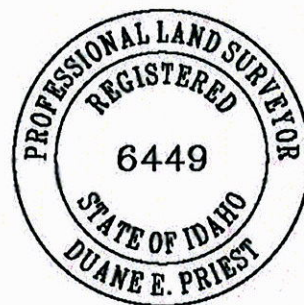
Thence leaving said common line 47.28 feet along a curve to the right, said curve having a Delta = 15°56'06", Radius = 170.00 feet, Chord = 47.13 feet and a Chord Bearing = S73°42'57"E;

Thence, parallel to the south line of Indian Hills Second Addition to the City of Moscow and the north line of Quitclaim Deed Instrument #400472, S65°44'54"E, 69.44 feet;

Thence, at a right angle, S24°15'06"W, 85.00 feet;

Thence perpendicular to the west line of Quitclaim Deed, Instrument #400472, N89°22'16"W, 74.94 feet to the **Point of Beginning**

Parcel contains 9,650 Square Feet, more or less.



9-19-2018

**Legal Description by Hodge & Associates
For Garrett Thompson – Parcel C**

A legal description for a parcel of land located in the SE1/4 of the SW1/4 of Section 17, T39N, R5W, B.M., in the City of Moscow, Latah County, Idaho and being more particularly described as follows:

Commencing at the southeast corner of the SW1/4 of Section 17, Thence along the south line of said SW1/4, also the south line of Quitclaim Deed, Instrument #400472, N88°28'20"W, 495.00 feet, to the southwest corner of said Quitclaim Deed, Thence leaving the south line of the SW1/4 of Section 17, N0°37'44"E, 294.31 feet along the west line of Quitclaim Deed Instrument #400472, to the **Point of Beginning**:

Thence continuing along the west line of said Quitclaim Deed N0°37'44"E, 99.83 feet;
Thence leaving said west line, at a right angle, S89°22'16"E, 74.94 feet;
Thence, perpendicular to the south line of Indian Hills Second Addition to the City of Moscow and the north line of Quitclaim Deed Instrument #440472, N24°15'06"E, 85.00 feet;
Thence parallel to said common line, S65°44'54"E, 20.00 feet;
Thence, at right angle, S24°15'06"W, 76.25 feet;
Thence, parallel to the west line of Quitclaim Deed, Instrument #400472, S0°37'44"W, 99.83 feet;
Thence perpendicular to said west line, N89°22'16"W, 96.77 feet to the **Point of Beginning**

Parcel contains 11,273 Square Feet, more or less.



9-19-2018

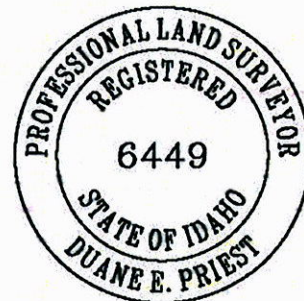
**Legal Description by Hodge & Associates
For Garrett Thompson – Right-of-Way Dedication**

A legal description for a Right-of-Way Dedication, located in the SE1/4 of the SW1/4 of Section 17, T39N, R5W, B.M., in the City of Moscow, Latah County, Idaho and being more particularly described as follows:

Commencing at the southeast corner of the SW1/4 of Section 17, Thence along the south line of said SW1/4, also the south line of Quitclaim Deed, Instrument #400472, N88°28'20"W, 495.00 feet, to the southwest corner of said Quitclaim Deed, Thence leaving the south line of the SW1/4 of Section 17, N0°37'44"E, 512.56 feet along the west line of Quitclaim Deed Instrument #400472, to the **Point of Beginning**:

Thence continuing along said west line, N0°37'44"E, 86.12 feet to a point on the east right-of-way of Alice Street;
Thence 41.00 feet along a curve to the left, said curve having a Delta = 78°17'47", Radius = 30.00 feet, Chord = 37.88 feet and a Chord Bearing = S38°31'09"E
Thence 47.85 feet along a curve to the right, said curve having a Delta = 11°55'08", Radius = 230.00 feet, Chord = 47.76 feet and a Chord Bearing = S71°42'28"E;
Thence, parallel to the south line of Indian Hills and the north line of Quitclaim Deed Instrument #400472, S65°44'54"E, 54.80 feet;
Thence S5°44'54"E, 69.28 feet;
Thence, parallel to the south line of Indian Hills and the north line of Quitclaim Deed Instrument #400472, N65°44'54"W, 89.44 feet;
Thence 47.28 feet along a curve to the left, said curve having a Delta = 15°56'06", Radius = 170.00 feet, Chord = 47.13 feet and a Chord Bearing = N73°42'57"W to the **Point of Beginning**

Dedication contains 8,035 Square Feet, more or less.



DEED OF DEDICATION

Thompson Development, LLC, 1024 Pine Crest Road, Moscow, Idaho 83843 (hereinafter "GRANTOR") for value received, does hereby convey and dedicate unto CITY OF MOSCOW, IDAHO, a municipal corporation of the State of Idaho, 206 East Third Street, Moscow, Idaho 83843 (hereinafter "GRANTEE") for public street, public utilities, and customary related public uses, the following described real property situated in the County of Latah, State of Idaho, to-wit:

A parcel of land located in the SE1/4 of the SW1/4 of Section 17, T39N, R5W, B.M., in the City of Moscow, Latah County, Idaho and being more particularly described as follows:

Commencing at the southeast corner of the SW1/4 of Section 17, Thence along the south line of said SW1/4, also the south line of Quitclaim Deed, Instrument #400472, N88°28'20"W, 495.00 feet, to the southwest corner of said Quitclaim Deed, Thence leaving the south line of the SW1/4 of Section 17, N0°37'44"E, 512.56 feet along the west line of Quitclaim Deed Instrument #400472, to the Point of Beginning:

Thence continuing along said west line, N0°37'44"E, 86.12 feet to a point on the east right-of-way of Alice Street;

Thence 41.00 feet along a curve to the left, said curve having a Delta = 78°17'47", Radius = 30.00 feet, Chord = 37.88 feet and a Chord Bearing = S38°31'09"E;

Thence 47.85 feet along a curve to the right, said curve having a Delta = 11°55'08", Radius = 230 feet, Chord = 47.76 feet and a Chord Bearing = S71°42'28"E;

Thence, parallel to the south line of Indian Hills Second Addition and the north line of Quitclaim Deed Instrument # 400472, S65°44'54"E, 54.80 feet;

Thence S5°44'54"E, 69.28 feet;

Thence, parallel to the south line of Indian Hills Second Addition and the north line of Quitclaim Deed Instrument # 400472, N65°44'54"W, 89.44 feet;

Thence 47.28 feet along a curve to the left, said curve having a Delta = 15°56'06", Radius = 170.00 feet, Chord = 47.13 feet and a Chord Bearing = N73°42'57"W to the Point of Beginning

Dedication contains 8,035 Square Feet, more or less.

Pursuant to Idaho Code § 50-1313, the City Council accepted and confirmed this Deed of Dedication on the ____ day of _____, 2021.

IN WITNESS THEREOF, GRANTOR and GRANTEE have hereunto set their hand and seal this ____ day of _____, 2021.

GRANTOR:

GRANTEE:

Thompson Development, LLC

By: _____
Garrett A. Thompson, Authorized Agent

Bill Lambert, Mayor

ATTEST:

Laurie Hopkins, City Clerk

ACKNOWLEDGEMENTS

STATE OF IDAHO)
) ss.
County of Latah)

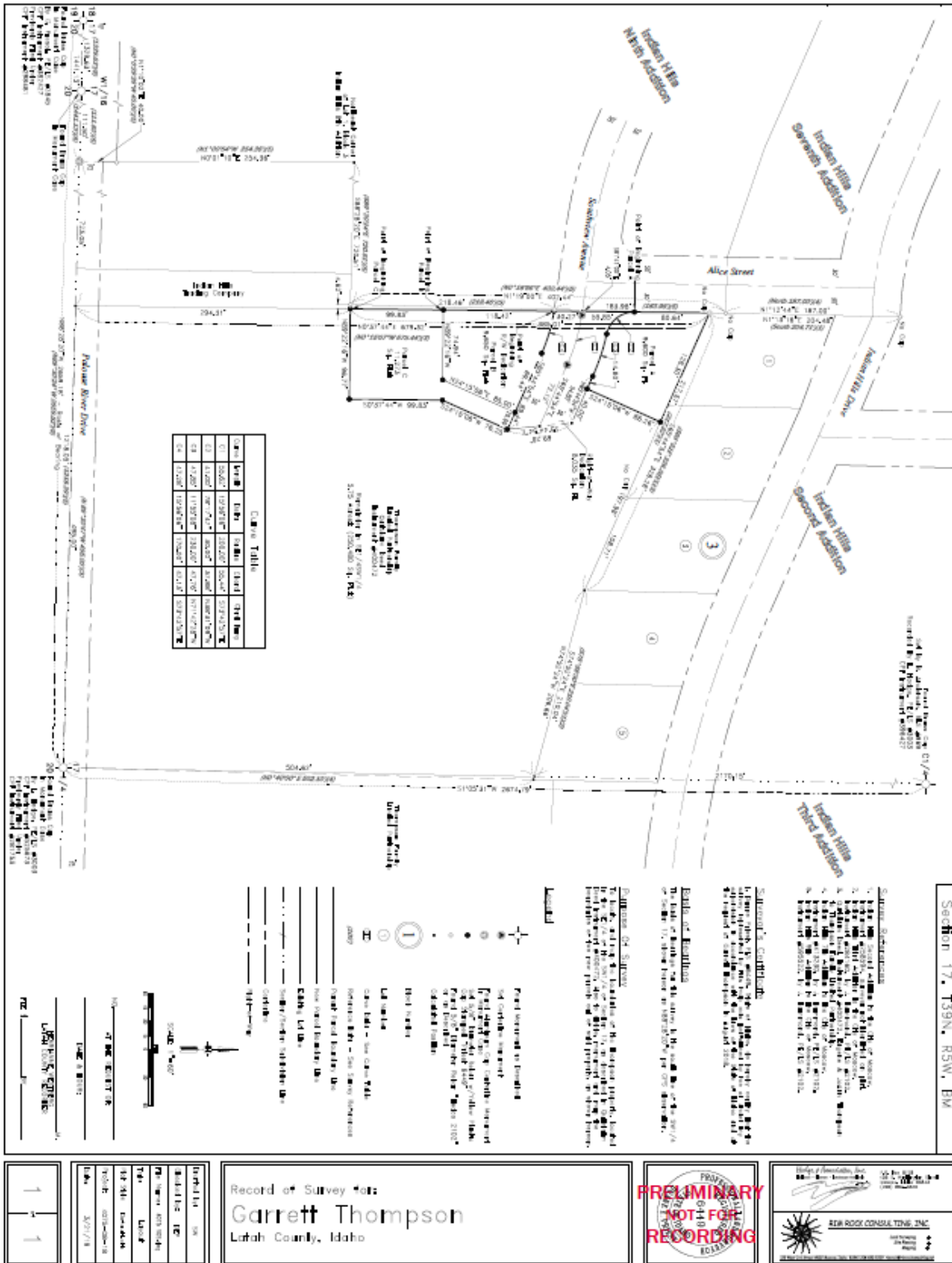
On this _____ day of _____, 2021, before me, a Notary Public, personally appeared Garrett A. Thompson, in his official capacity of authorized agent for Thompson Development, LLC, known to me to be the person named above, and acknowledged to me that he executed the foregoing document.

Notary Public for the State of Idaho

Residing at _____

My Commission Expires: _____

“Exhibit A”



Slurry Seal - 2021
Bids Opened 04/16/2021

Item No.	Item Description	Qty.	Unit	Engineers Estimate		Bid From: Blackline		Bid From: Morgan Pavement		Bid From: Intermountain Slurry Seal		Bid From: Doolittle Construction	
				Unit Price	Amount	Price	Total	Price	Total	Price	Total	Price	Total
1	Asphalt Slurry Seal Coat Type II	116067	SY	\$1.70	\$197,313.90	\$1.79	\$207,759.93	\$1.85	\$214,723.95	\$1.97	\$228,535.92	\$2.13	\$247,222.71
				TOTAL	\$197,313.90	TOTAL	\$207,759.93	TOTAL	\$214,723.95	TOTAL	\$228,535.92	TOTAL	\$247,222.71

**CONSTRUCTION AGREEMENT
FOR SLURRY SEAL - 2021
BETWEEN CITY OF MOSCOW, IDAHO
AND BLACKLINE, INC.**

THIS CONSTRUCTION AGREEMENT FOR INDIAN HILLS WATER LINE IMPROVEMENTS BETWEEN CITY OF MOSCOW, IDAHO AND BLACKLINE, INC. (hereinafter "Agreement"), dated this ____ day of _____, 2021, by and between the City of Moscow, Idaho, a municipal corporation of the State of Idaho, 206 East Third Street, Moscow, Idaho, 83843 (hereinafter "CITY"), and Blackline, Inc., PMB 196, 13023 NE Hwy 99, Ste. #7, Vancouver, Washington, 98686 (hereinafter "CONTRACTOR");

WITNESSETH:

WHEREAS, pursuant to the invitation of CITY, extended through an "Invitation to Bid" and amended through "Addendum No. 1", CONTRACTOR submitted a Bid Proposal containing an offer invited by said solicitation; and

WHEREAS, CITY has determined that said offer was the lowest responsive Bid Proposal; and

WHEREAS, CITY has accepted CONTRACTOR's Bid Proposal;

NOW THEREFORE, the Parties to this Agreement, in consideration of the mutual covenants and stipulations set out, agree as follows:

**ARTICLE 1.
CONTRACT DOCUMENTS**

The Contract Documents which comprise the entire Agreement between CITY and CONTRACTOR concerning the work to be performed, are this Agreement, pages one (1) through six (6), and the following:

1. Drawings, Specifications and Proposal, Attachment 'A' for: Slurry Seal 2021- City of Moscow Project No. 111-021;
2. Addenda issued prior to the opening of bids, see Attachment 'B';
3. Bid Proposal of CONTRACTOR, dated April 16, 2021, see Attachment 'C';
4. Performance and Payment Bonds, and Insurance Certificates, physically attached to this Agreement; and
5. Change Orders which may be delivered or issued after the effective date of this Agreement.

There are no Contract Documents other than those listed in Article 1. This Agreement may only be amended by change order as provided in the Project Specifications.

ARTICLE 2. WORK

CONTRACTOR shall complete the entire Work as specified, indicated, and required under the Contract Documents contained herein under Article 1., for CITY project (hereinafter “Project”) titled:

“Slurry Seal - 2021”

ARTICLE 3. CONTRACT TIME/SUBSTANTIAL COMPLETION

The work to be performed pursuant to this Agreement shall not begin prior to June 14, 2021 and shall be substantially completed on or before August 31, 2021. Work shall be substantially completed within thirty (30) calendar days of commencement of work, unless adjustment of the substantial completion time is made in accordance with the provisions of the Contract Documents.

CONTRACTOR and CITY recognize that time is of the essence and that CITY will suffer financial loss if the Project is not completed within the time specified above, unless approved extensions thereof are permitted in accordance with Article 12 of the General Conditions. The Parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by CITY if the Project is not completed on time. Accordingly, instead of requiring any such proof, CITY and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay CITY One Half of One Percent (0.5%) of the Contract Sum for each day that expires after the time specified above for Substantial Completion until the Project is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Project within the Time of Completion or by any proper extension thereof granted by CITY, CONTRACTOR shall pay CITY One Half of One Percent (0.5%) of the Contract Sum for each day that expires after the time specified above for completion, until the Project is completed and ready for final payment.

ARTICLE 4. CONTRACT SUM

CITY shall pay CONTRACTOR for completion of the Project in accordance with the Contract Documents in current funds in the amount of Two Hundred Seven Thousand Seven Hundred Fifty-Nine and 93/100 Dollars (\$207,759.93), as submitted by CONTRACTOR. In no event shall Contract amount exceed CONTRACTOR’s bid amount of Two Hundred Seven Thousand Seven Hundred Fifty-Nine and 93/100 Dollars (\$207,759.93), unless otherwise authorized by CITY in writing. Any work additional to the current Agreement shall be compensated in accordance with pricing terms specified in the Bid Proposal, and shall be agreed to by the Parties in writing. Said Contract Sum shall be paid in accordance with the Contract Documents.

ARTICLE 5.
INDEPENDENT CONTRACTOR

The Parties warrant by their signature that no employer-employee relationship is established between CONTRACTOR and CITY by the terms of this Agreement. It is understood by the Parties hereto that CONTRACTOR is an independent contractor and, as such, neither CONTRACTOR nor CONTRACTOR's employees, agents, representatives or Subcontractors, if any, are employees of CITY for purposes of tax, retirement system, or social security (FICA) withholding.

ARTICLE 6.
SCOPE OF SERVICES

CONTRACTOR shall perform all Work required by the Contract Documents. All Work shall be completed in accordance with the specifications and plans established for this Project.

ARTICLE 7.
HOLD HARMLESS/INDEMNIFICATION

In addition to other rights granted CITY by the Contract Documents, CONTRACTOR agrees to indemnify, defend, and hold harmless CITY, its officers, agents, employees, and engineers, from and against any and all losses, lawsuits, actions, claims, judgments for damages, or any injuries or damages received or sustained by any person, persons, or property and losses, and expenses, and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with the acts and/or any performances, activities, errors or omissions by CONTRACTOR, CONTRACTOR's servants, agents, officers, employees, representatives, guests, business invitees or its Subcontractors; or on account of or in consequence of any neglect in safeguarding the Project; or through use of unacceptable materials in constructing the Project; or because of any claims or amounts recovered from any infringements of patent, trademark or copyright; or from any claims or amounts arising out of or recovered under the Workmen's Compensation Act or any other law, ordinance, order, or decree.

ARTICLE 8.
CONFLICT OF INTEREST

CONTRACTOR covenants that it presently has no interest and will not acquire any interest, direct or indirect, in the Project which would conflict in any manner or degree with the performance of CONTRACTOR's services hereunder. CONTRACTOR further covenants that, in performing this Agreement, CONTRACTOR will employ no person who has any such interest. Should any conflict of interest arise during the performance of this Agreement, CONTRACTOR shall immediately disclose such conflict to the Engineer and CITY.

ARTICLE 9.
ENTIRE AGREEMENT, MODIFICATION AND ASSIGNABILITY

This Agreement and the exhibits hereto contain the entire Agreement between the Parties, and no statements, promises, or inducements made by either Party, or agents of either Party are valid or binding unless contained herein. This Agreement may not be enlarged, modified or altered except

upon written agreement signed by the Parties hereto. CONTRACTOR may not subcontract or assign its rights (including the right to compensation) or duties arising hereunder, other than as provided within the Contract Documents, without the prior written consent and express authorization of CITY.

ARTICLE 10.

LICENSES AND ADHERENCE TO LAW REQUIRED

CONTRACTOR represents that it possesses the skill and experience necessary and all licenses required to perform the Work under this Agreement. CONTRACTOR further agrees to comply with all applicable Federal, State and Local Statutes and Regulations in the performance of the Work hereunder, and are hereby made a part of this Agreement and shall be adhered to at all times. Violation of any of these statutes or regulations by CONTRACTOR shall be deemed material and shall subject CONTRACTOR to termination of this Agreement for cause. No pleas of misunderstanding or ignorance on the part of CONTRACTOR will in any way serve to modify the provisions of this requirement. CONTRACTOR and its surety shall indemnify, defend and hold harmless CITY and its employees, agents, engineers and representatives, against any claim or liability arising from or based on the violation of any such laws, codes, ordinances, or regulations, whether by CONTRACTOR, CONTRACTOR's employees, or its Subcontractors.

ARTICLE 11.

EMPLOYMENT DISCRIMINATION

It is illegal under the U.S. Federal law to discriminate against an employee, either intentionally or through disparate impact, on account of race, color, gender, religion, sex (including pregnancy), national origin, physical or mental disability, age, marital or familial status, sexual orientation, and gender expression or identity. CONTRACTOR shall not discriminate against any employee or applicant for employment. CONTRACTOR's action under this Section shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. CONTRACTOR agrees to post in conspicuous places, available to employees and other applicants for employment, notices setting forth the provisions of this non-discrimination Section.

ARTICLE 12.

LEGAL FEES

In the event either Party incurs legal expenses to enforce the terms and conditions of this Agreement, the prevailing Party is entitled to recover attorney's fees and other costs and expenses, whether the same are incurred with or without a lawsuit.

ARTICLE 13.

JURISDICTION, VENUE AND NONWAIVER

It is agreed that this Agreement shall be construed under and governed by the laws of the State of Idaho. In the event of litigation concerning it, it is agreed that proper venue shall be the District Court of the Second Judicial District of the State of Idaho, in and for the County of Latah. Failure

of CITY to exercise any of the rights under this Agreement, or breach thereof, shall not be deemed to be a waiver of such right or a waiver of any subsequent breach.

ARTICLE 14. SPECIAL WARRANTY

CONTRACTOR warrants that nothing of monetary value has been given, promised, or implied as remuneration or inducement to enter into the Agreement. CONTRACTOR declares that no improper personal, political or social activities have been used or attempted in an effort to influence the outcome of the competition, discussion, or negotiation leading to the award of this Agreement. Any such activity by CONTRACTOR shall make this Agreement null and void. CONTRACTOR further warrants that all materials and goods supplied under this Agreement shall be of good merchantable quality and that all services will be performed in a good workmanlike manner. CONTRACTOR acknowledges that it will be liable for any breach of this warranty.

ARTICLE 15. COMMUNICATIONS

Such communications as are required by this Agreement shall be satisfied by mailing or by personal delivery to the Parties at the following addresses:

CONTRACTOR:

Blackline, Inc.
PMB 196
13023 NE Hwy 99, Ste #7
Vancouver, WA 98686

CITY:

City Engineer
City of Moscow
206 East Third Street
P O Box 9203
Moscow, Idaho 83843

ARTICLE 16. NON-APPROPRIATIONS

This Agreement is contingent upon CITY receiving the necessary funding to cover the obligations of CITY. In the event that such funding is not received or appropriated, then, and in that event, CITY's obligations under this Agreement shall cease and each Party shall be released from further performance under this Agreement without any liability to the other Party, and CONTRACTOR shall be entitled to receive just and equitable compensation for any Work satisfactorily completed hereunder.

ARTICLE 17. APPROVAL REQUIRED AND SEVERABILITY

This Agreement shall not become effective or binding until approved by the CITY. If any part of this Agreement is held unenforceable, the remaining portions of the Agreement will, nevertheless, remain in full force and effect.

ARTICLE 18. EXECUTION

IN WITNESS WHEREOF, said CONTRACTOR and CITY have caused this Agreement to be executed on the day and year first above written.

CONTRACTOR

Blackline, Inc.

CITY

City of Moscow, Idaho

By:

Bill Lambert, Mayor

ATTEST:

By:

Laurie M. Hopkins, City Clerk

Approved As To Form:

Mia Bautista, City Attorney

ACKNOWLEDGMENT

STATE OF _____)
) ss:
County of _____)

On this ____ day of _____, 2021, before me, the undersigned, a Notary in and for said State, personally appeared _____ and _____ known to me to be the person(s) whose name(s) is/are subscribed to the foregoing Agreement and acknowledged to me that he/she/they executed the same in his/her/their capacity as _____ for Blackline, Inc.

(seal)

Notary Public residing at: _____
My commission expires: _____



**COMMUNITY PLANNING & DESIGN
ENGINEERING DIVISION**

DRAWINGS, SPECIFICATIONS AND
PROPOSAL FOR:

SLURRY SEAL - 2021

CITY OF MOSCOW PROJECT NO. 111-021

CITY OF MOSCOW, IDAHO

**Community Planning and Design
Engineering Division
Moscow, Idaho 83843
(208) 883-7034**

Plans, Specifications and Proposal

For

SLURRY SEAL - 2021

CITY OF MOSCOW PROJECT NO. 111-021

**Original Signed By:
Brian Scott Bontrager**

**Date Original Signed:
04/02/2021
On File With:
City of Moscow
Engineering Division**

**CITY ENGINEER:
SCOTT BONTRAGER, P.E.**

TABLE OF CONTENTS

INVITATION TO BID	1
BID PROPOSAL	2
(DRAFT – DO NOT SUBMIT WITH BID)	5
CONSTRUCTION AGREEMENT	5
INSTRUCTION TO BIDDERS	11
IB-1. INTENT OF PLANS AND SPECIFICATIONS	11
IB-2. PLANS, SPECIFICATIONS, AND ADDITIONAL INFORMATION	11
IB-3. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE	11
IB-4. PREPARATION AND DELIVERY OF PROPOSAL	11
IB-5. PROPOSAL GUARANTY	12
IB-6. US CITIZEN	12
IB-7. QUALIFICATIONS OF BIDDER	12
IB-8. AWARD OF CONTRACT	12
IB-9. FAILURE TO EXECUTE CONTRACT	13
IB-10. NONDISCRIMINATION IN EMPLOYMENT	13
IB-11. WAGE RATES	13
IB-12. CONTRACTOR FOR PUBLIC WORKS TO PAY OR SECURE TAXES AGREEMENT	13
IB-13. PERFORMANCE PERIOD	14
IB-14. CONSIDERATION OF MULTIPLE DIVISIONS OF WORK	14
IB-15. ALTERNATES	14
IB-16. SUB CONTRACTORS TO BE LISTED ON BID	14
GENERAL CONDITIONS	16
GC-1. COMPLIANCE	16
GC-2. DEFINITIONS	16
GC-3. PLANS AND SPECIFICATIONS AND ADDITIONAL DRAWINGS	17
GC-4. ALTERATION OR MODIFICATION OF CONTRACT DOCUMENTS	18
GC-5. INVESTIGATION BY BIDDERS	18
GC-6. NON-DISCRIMINATION	18
GC-7. INTERPRETATION OF THE SPECIFICATIONS	18
GC-8. CONTRACTS	18
GC-9. QUANTITIES FURNISHED BIDDERS	22
GC-10. MAJOR CHANGES	22
GC-11. EXTRA WORK	23
GC-12. MONTHLY PAYMENTS	23
GC-13. TIME OF COMPLETION/LIQUIDATED DAMAGES	25
GC-14. ABANDONMENT OF WORK	26
GC-15. AUTHORITY OF ENGINEER	26
GC-16. PERFORMANCE AND PAYMENT BONDS	27
GC-17. INSURANCE/CITY TO BE NAMED AS ADDITIONAL INSURED	28
GC-18. PATENT ROYALTIES AND PROCESS FEES	29
GC-19. CONTRACTOR RESPONSIBLE FOR WORK	29
GC-20. USE OF COMPLETED PORTION	29
GC-21. SIGNATURES	29
GC-22. ORDERS TO BEGIN WORK	29
GC-23. ORDER OF WORK	29
GC-24. EFFICIENCY OF OPERATION/LICENSING	30
GC-25. PROTECTION OF WORK AND PROPERTY	30
GC-26. RESPONSIBILITY FOR SAFETY	31
GC-27. GUARDS AND BARRICADES	31
GC-28. EXISTING TRAFFIC SIGNS AND FACILITIES	31
GC-29. MAINTAINING POSTAL SERVICE	31
GC-30. EMERGENCY WORK	32
GC-31. SUPERVISION OF WORK	32

GC-32.	CORRECTION AND COMPLETION OF WORK	32
GC-33.	SUBSTITUTES CLAUSE	33
GC-34.	DETAILED BREAKDOWN OF CONTRACT PRICE	34
GC-35.	CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE	34
GC-36.	STREET CLEANUP DURING CONSTRUCTION	35
GC-37.	CLEANUP	35
GC-38.	PROOF OF TAX PAYMENT	35
GC-39.	HOLD HARMLESS REQUIREMENT	35
GC-40.	JURISDICTION AND DISPUTE RESOLUTION	35
GC-41.	PERMITS AND LICENSES	36
GC-42.	ENVIRONMENTAL MATTERS	36
GC-43.	NO THIRD PARTY BENEFICIARIES	37
GC-44.	COMPLIANCE WITH GRANT CONDITIONS	37
	ENGINEERING SPECIFICATIONS	38
ES-1.	SCOPE OF WORK	38
ES-2.	TRAFFIC CONTROL/R.O.W USE PERMITS	38
ES-3.	MATERIALS	40
ES-4.	REMOVALS AND DISPOSALS	40
ES-5.	EARTHWORK	41
ES-6.	SUBGRADE SEPARATION GEOTEXTILES	42
ES-7.	CRUSHED ROCK BASE	43
ES-8.	SOFT SPOT REPAIR	45
ES-9.	WATERING	46
ES-10.	WEIGHING	46
ES-11.	CONCRETE	47
ES-12.	CONCRETE CONSTRUCTION REQUIREMENTS	49
ES-13.	CONCRETE CURB	53
ES-14.	CONCRETE SIDEWALK	54
ES-15.	SUPERPAVE HOT MIX ASPHALT	57
ES-16.	CEMENT CONCRETE PAVEMENT	59
ES-17.	ADJUSTMENT OF GATE VALVE BOXES, MONUMENTS, CATCH BASINS, CATCH INLETS, AND MANHOLES	63
ES-18.	MANHOLES AND CATCHBASINS	64
ES-19.	TRENCH EXCAVATION AND BACKFILL	67
ES-20.	PIPE	74
ES-21.	GATE VALVES AND VALVE BOXES	82
ES-22.	FIRE HYDRANTS	83
ES-23.	STORM AND SANITARY CONNECTIONS	86
ES-24.	STREET / ALLEY CUT REPAIR	88
ES-25.	EROSION AND SEDIMENT CONTROL	88
ES-26.	STORMWATER RUNOFF CONTROL	88
ES-27.	IMPORTED TOPSOIL	88
ES-28.	SEEDING	88
ES-29.	TREE TRIMMING	89
ES-30.	INSPECTION	90
ES-31.	WORKMANSHIP AND CLEAN UP	90
ES-32.	MOBILIZATION	91
	SPECIAL PROVISIONS	92
SP-1.	ASPHALT SLURRY SEAL COAT (TYPE II)	92
	PART 1 GENERAL	92
	PART 2 MATERIALS	93
	PART 3 EXECUTION	97
	APPENDIX I	101

INVITATION TO BID

The City of Moscow, Idaho is accepting electronic bids to be submitted to the Community Planning and Design Building at 221 East Second Street, Moscow, Idaho 83843, and clearly marked "Bid Enclosed - Slurry Seal - 2021" until 3:00 p.m., prevailing local time, Friday, April 16, 2021, for the following project:

SLURRY SEAL - 2021

The project consists of applying an Asphalt Slurry Seal Coat (Type II) at the following locations:

Area 1	Concord, Eisenhower, and Moser	56,717 SY
Area 2	Adams, Spotswood, and Styner	44,320 SY
Area 3	Jackson and D Street	3,186 SY

Any objections to the contents or terms of the Specifications shall be raised one (1) day prior to bid opening or it shall be deemed to have been waived.

Prevailing wages are not required on this project.

Proposal Guarantee (Bid bond) is not required with bid submittal.

Contractor shall furnish a sealed, written and signed bid (on Bid Proposal form) to perform this work to the Capital Projects Administrative Assistant, Kendra Ewing, bids must be submitted by e-mail to kewing@ci.moscow.id.us by 3:00 p.m., Prevailing Local Time, Friday, April 16, 2020. All responders will be notified of results by e-mail by Tuesday, April 20, 2021. *Contact Kendra Ewing at kewing@ci.moscow.id.us with any questions.*

The City reserves the right to reject any and all Bid Proposals, to waive any formality in the Bidding Contract Documents and to make selection to the lowest responsive, responsible and qualified Bidder as it may best serve the interest of the Owner.

BID PROPOSAL

TO: Mayor and City Council
City of Moscow, Idaho

Date: _____

This proposal is submitted as an offer by the undersigned to enter into contract with the City of Moscow, Idaho as represented by the City Council, hereinafter referred to as the 'CITY' for SLURRY SEAL - 2021, (hereinafter "Project"), specified herein and which construction documents are on file with the City Engineer, Paul Mann Building, Moscow, Idaho, and which are a condition hereof with the same force and effect as though they were attached hereto. The offer is conditioned on the following declarations as to the facts, intention and understanding of the undersigned and the agreement of the CITY to the terms and prices herein submitted.

1. All Project specifications and drawings examined by the undersigned and their terms and conditions are hereby agreed to.
2. The undersigned certifies that he/she has received or made himself/herself aware of any and all existing site conditions that may affect the proposed work.
3. It is understood that the contract drawings may be supplemented by additional drawings and specifications in explanation and elaboration of the contract drawings and it is agreed that such supplemental drawings, when not in conflict with those referred to in paragraph 1 above, will have the same force and effect as if attached hereto and that when received they will be considered a part of the contract.
4. The undersigned will furnish separate performance and payment bonds in the full amount of the contract price.
5. Proposal Guarantee (Bid bond) is not required with bid submittal.
6. The undersigned further agrees that CITY shall have the right to accept or reject any bid which rejection or acceptance is deemed to be in the best interest of CITY.
7. The undersigned agrees to order all necessary equipment and materials within a period of three (3) days after Notice to Proceed has been issued by the Engineer.
8. The undersigned, as a bidder, acknowledges that Addenda Number _____ through _____ have been delivered to him/her and have been examined as part of the contract documents.
9. The undersigned agrees to complete all work embraced in the contract within the time limitations set forth in paragraph IB-13 of the Instruction to Bidders.
10. The undersigned holds Idaho Public Work's License Number _____.

SLURRY SEAL - 2021

PAGE 2 OF 105

11. The undersigned proposes to use the following sub-contractors in the performance of meeting the contract requirements. Information herein must comply with Idaho Code Section 67-2310 and IB-16:

<u>Subcontractors</u>	<u>Trade Specialty</u>	<u>Idaho Public Works License No.</u>	<u>\$ Amount</u>
a.			
b.			
c.			
d.			
e.			

12. The undersigned proposes to furnish labor, materials, equipment and services of all kinds required for SLURRY SEAL - 2021 as described in the specifications, including all appurtenant work, all as required by the specifications and this proposal for the prices in accordance with the completed schedule contract prices as follows:

BID SCHEDULE

SLURRY SEAL - 2021

<u>Item No.</u>	<u>Description</u>	<u>Quantity & Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
1.	Asphalt Slurry Seal Coat Type II	104,223 SY	\$ _____	\$ _____
			BID TOTAL	\$ _____

Firm Name of Bidder

Signature of Bidder

Official Title

Bidders Mailing Address

Public Works License No.

State of Incorporation if Incorporated

SEAL (if incorporated)

Dated at _____

This ____ day of _____, 2021

SLURRY SEAL - 2021

PAGE 4 OF 105

(DRAFT – DO NOT SUBMIT WITH BID)

**CONSTRUCTION AGREEMENT
FOR SLURRY SEAL - 2021
BETWEEN CITY OF MOSCOW, IDAHO
AND _____**

THIS CONSTRUCTION AGREEMENT FOR SLURRY SEAL - 2021 BETWEEN CITY OF MOSCOW, IDAHO AND _____ (hereinafter "Agreement"), dated this _____ day of _____, 2021, by and between the City of Moscow, Idaho, a municipal corporation of the State of Idaho, 206 East Third Street, Moscow, Idaho, 83843 (hereinafter "CITY"), and _____ (hereinafter "CONTRACTOR");

WITNESSETH:

WHEREAS, pursuant to the invitation of CITY, extended through a "Solicitation for Bids", CONTRACTOR submitted a Bid Proposal containing an offer invited by said solicitation; and

WHEREAS, CITY has determined that said offer was the lowest responsive Bid Proposal; and

WHEREAS, CITY has accepted CONTRACTOR's Bid Proposal;

NOW THEREFORE, the Parties to this Agreement, in consideration of the mutual covenants and stipulations set out, agree as follows:

**ARTICLE 1.
CONTRACT DOCUMENTS**

The Contract Documents which comprise the entire Agreement between CITY and CONTRACTOR concerning the work to be performed, are this Agreement, pages one (1) through six (6), and the following:

1. Advertisement for Bids;
2. Project Specifications titled: Slurry Seal - 2021
3. Bid/Proposal of CONTRACTOR, dated _____, attached to this Agreement; City of Moscow Project No. 111-021
4. The Engineering Plans;
5. Performance and Payment Bonds, and Insurance Certificates, physically attached to this Agreement;
6. Addenda issued prior to the opening of bids, to be physically attached to this Agreement;
7. Change Orders which may be delivered or issued after the effective date of this Agreement.

There are no Contract Documents other than those listed in Article 1. This Agreement may only be amended by change order as provided in the Project Specifications.

SLURRY SEAL – 2021

PAGE 5 OF 105

**ARTICLE 2.
WORK**

CONTRACTOR shall complete the entire work as specified, indicated, and required under the Contract Documents contained herein under Article 1., for CITY project (hereinafter "Project") titled:

"Slurry Seal - 2021"

**ARTICLE 3.
CONTRACT TIME/SUBSTANTIAL COMPLETION**

The work to be performed pursuant to this Agreement shall be substantially completed on or before August 31, 2021, unless adjustment of the Agreement time is made in accordance with the provisions of the Contract Documents.

CONTRACTOR and CITY recognize that time is of the essence and that CITY will suffer financial loss if the Project is not completed within the time specified above, unless approved extensions thereof are permitted in accordance with Article 12 of the General Conditions. The Parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by CITY if the Project is not completed on time. Accordingly, instead of requiring any such proof, CITY and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay CITY One Half of One Percent (0.5%) of the Contract Sum for each day that expires after the time specified above for Substantial Completion until the Project is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Project within the Time of Completion or by any proper extension thereof granted by CITY, CONTRACTOR shall pay CITY One Half of One Percent (0.5%) of the Contract Sum for each day that expires after the time specified above for completion, until the Project is completed and ready for final payment.

**ARTICLE 4.
CONTRACT SUM**

CITY shall pay CONTRACTOR for completion of the Project in accordance with the Contract Documents in current funds in the amount of _____, as submitted by CONTRACTOR. In no event shall Contract amount exceed CONTRACTOR's bid amount of _____ unless otherwise authorized by CITY in writing. Any work additional to the current Agreement shall be compensated in accordance with pricing terms specified in the Bid Proposal, and shall be agreed to by the Parties in writing. Said Contract Sum shall be paid in accordance with the Contract Documents.

**ARTICLE 5.
INDEPENDENT CONTRACTOR**

The Parties warrant by their signature that no employer-employee relationship is established between CONTRACTOR and CITY by the terms of this Agreement. It is understood by the Parties

SLURRY SEAL - 2021

PAGE 6 OF 105

hereto that CONTRACTOR is an independent contractor and, as such, neither CONTRACTOR nor CONTRACTOR's employees, agents, representatives or Subcontractors, if any, are employees of CITY for purposes of tax, retirement system, or social security (FICA) withholding.

ARTICLE 6. SCOPE OF SERVICES

CONTRACTOR shall perform all Work required by the Contract Documents. All Work shall be completed in accordance with the specifications and plans established for this Project.

ARTICLE 7. HOLD HARMLESS/INDEMNIFICATION

In addition to other rights granted CITY by the Contract Documents, CONTRACTOR agrees to indemnify, defend, and hold harmless CITY, its officers, agents, employees, and engineers, from and against any and all losses, lawsuits, actions, claims, judgments for damages, or any injuries or damages received or sustained by any person, persons, or property and losses, and expenses, and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with the acts and/or any performances, activities, errors or omissions by CONTRACTOR, CONTRACTOR's servants, agents, officers, employees, representatives, guests, business invitees or its Subcontractors; or on account of or in consequence of any neglect in safeguarding the Project; or through use of unacceptable materials in constructing the Project; or because of any claims or amounts recovered from any infringements of patent, trademark or copyright; or from any claims or amounts arising out of or recovered under the Workmen's Compensation Act or any other law, ordinance, order, or decree.

ARTICLE 8. CONFLICT OF INTEREST

CONTRACTOR covenants that it presently has no interest and will not acquire any interest, direct or indirect, in the Project which would conflict in any manner or degree with the performance of CONTRACTOR's services hereunder. CONTRACTOR further covenants that, in performing this Agreement, CONTRACTOR will employ no person who has any such interest. Should any conflict of interest arise during the performance of this Agreement, CONTRACTOR shall immediately disclose such conflict to the Engineer and CITY.

ARTICLE 9. ENTIRE AGREEMENT, MODIFICATION AND ASSIGNABILITY

This Agreement and the exhibits hereto contain the entire Agreement between the Parties, and no statements, promises, or inducements made by either Party, or agents of either Party are valid or binding unless contained herein. This Agreement may not be enlarged, modified or altered except upon written agreement signed by the Parties hereto. CONTRACTOR may not subcontract or assign its rights (including the right to compensation) or duties arising hereunder, other than as provided within the Contract Documents, without the prior written consent and express authorization of CITY.

**ARTICLE 10.
LICENSES AND ADHERENCE TO LAW REQUIRED**

CONTRACTOR represents that he possesses the skill and experience necessary and all licenses required to perform the Work under this Agreement. CONTRACTOR further agrees to comply with all applicable Federal, State and Local Statutes and Regulations in the performance of the Work hereunder, and are hereby made a part of this Agreement and shall be adhered to at all times. Violation of any of these statutes or regulations by CONTRACTOR shall be deemed material and shall subject CONTRACTOR to termination of this Agreement for cause. No pleas of misunderstanding or ignorance on the part of CONTRACTOR will in any way serve to modify the provisions of this requirement. CONTRACTOR and its surety shall indemnify, defend and hold harmless CITY and its employees, agents, engineers and representatives, against any claim or liability arising from or based on the violation of any such laws, codes, ordinances, or regulations, whether by CONTRACTOR, CONTRACTOR's employees, or its Subcontractors.

**ARTICLE 11.
EMPLOYMENT DISCRIMINATION**

It is illegal under the U.S. Federal law to discriminate against an employee, either intentionally or through disparate impact, on account of race, color, gender, religion, sex (including pregnancy), national origin, physical or mental disability, age, marital or familial status, sexual orientation, and gender expression or identity. CONTRACTOR shall not discriminate against any employee or applicant for employment. CONTRACTOR's action under this Section shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. CONTRACTOR agrees to post in conspicuous places, available to employees and other applicants for employment, notices setting forth the provisions of this non-discrimination Section.

**ARTICLE 12.
LEGAL FEES**

In the event either Party incurs legal expenses to enforce the terms and conditions of this Agreement, the prevailing Party is entitled to recover attorney's fees and other costs and expenses, whether the same are incurred with or without a lawsuit.

**ARTICLE 13.
JURISDICTION, VENUE AND NONWAIVER**

It is agreed that this Agreement shall be construed under and governed by the laws of the State of Idaho. In the event of litigation concerning it, it is agreed that proper venue shall be the District Court of the Second Judicial District of the State of Idaho, in and for the County of Latah. Failure of CITY to exercise any of the rights under this Agreement, or breach thereof, shall not be deemed to be a waiver of such right or a waiver of any subsequent breach.

**ARTICLE 14.
SPECIAL WARRANTY**

CONTRACTOR warrants that nothing of monetary value has been given, promised, or implied as remuneration or inducement to enter into the Agreement. CONTRACTOR declares that no improper personal, political or social activities have been used or attempted in an effort to influence the outcome of the competition, discussion, or negotiation leading to the award of this Agreement. Any such activity by CONTRACTOR shall make this Agreement null and void. CONTRACTOR further warrants that all materials and goods supplied under this Agreement shall be of good merchantable quality and that all services will be performed in a good workmanlike manner. CONTRACTOR acknowledges that it will be liable for any breach of this warranty.

**ARTICLE 15.
COMMUNICATIONS**

Such communications as are required by this Agreement shall be satisfied by mailing or by personal delivery to the Parties at the following addresses:

Contractor:

City:

City Engineer
City of Moscow
206 East Third Street
P O Box 9203
Moscow, Idaho 83843

**ARTICLE 16.
NON-APPROPRIATIONS**

This Agreement is contingent upon CITY receiving the necessary funding to cover the obligations of CITY. In the event that such funding is not received or appropriated, then, and in that event, CITY's obligations under this Agreement shall cease and each Party shall be released from further performance under this Agreement without any liability to the other Party, and CONTRACTOR shall be entitled to receive just and equitable compensation for any Work satisfactorily completed hereunder.

**ARTICLE 17.
APPROVAL REQUIRED AND SEVERABILITY**

This Agreement shall not become effective or binding until approved by the CITY. If any part of this Agreement is held unenforceable, the remaining portions of the Agreement will, nevertheless, remain in full force and effect.

ARTICLE 18.
EXECUTION

IN WITNESS WHEREOF, said CONTRACTOR and CITY have caused this Agreement to be executed on the day and year first above written.

CONTRACTOR

CITY

City of Moscow, Idaho

By: _____

Bill Lambert, Mayor

ATTEST:

By: _____

Laurie M. Hopkins, City Clerk

Approved As To Form:

Mia Bautista, City Attorney

ACKNOWLEDGMENT

STATE OF _____)
) ss:
County of _____)

On this ____ day of _____, 2021, before me, the undersigned, a Notary in and for said State, personally appeared _____ and _____ known to me to be the person(s) whose name(s) is/are subscribed to the foregoing Agreement and acknowledged to me that he/she/they executed the same in his/her/their capacity as _____ for _____.

(seal)

Notary Public residing at: _____
My commission expires: _____

SLURRY SEAL – 2021

PAGE 10 OF 105

INSTRUCTION TO BIDDERS

IB-1. INTENT OF PLANS AND SPECIFICATIONS

- A. It is the intention of these specifications to provide for careful, thorough and workmanlike construction procedure in the installation of material and equipment and in the manufacture or delivery of such materials and equipment. The bidder to whom the contract is awarded shall furnish all the material, equipment and labor necessary to complete said contract in accordance with all of its terms and conditions. All contracts shall be awarded subject to those instructions to bidders.
- B. The plans and specifications shall be considered and used together; anything appearing as a requirement of either shall be accepted as applicable to both even though not stated therein or shown. All specifications and notes appearing on the plans shall have the same force and effect as though they were repeated herein.

IB-2. PLANS, SPECIFICATIONS, AND ADDITIONAL INFORMATION

- A. Additional information relative to the Plans and Specifications may be obtained from the office of the City Engineer.

IB-3. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE

- A. Bidders shall satisfy themselves by personal examination of the plans, specifications, and site of the proposed improvement, and by any other examinations and investigation which they may desire to make, as to the accuracy of the estimate of quantities, the nature of the soil, conditions of the project site, and difficulties to be encountered.

IB-4. PREPARATION AND DELIVERY OF PROPOSAL

- A. Bids shall be prepared and submitted upon the "Proposal" form supplied by the Engineer. Each and every blank provided for in the "Proposal" shall be filled in with ink or typing. Proposals, which are incomplete or submitted on an unauthorized form, may be rejected as informal.
- B. After the date and hour set for the opening of the bids, no bidder may withdraw his/her proposal unless award of contract is delayed for a period exceeding the time limits described in IB-8, AWARD OF CONTRACT.
- C. If discrepancies exist between the Unit Prices and the Total Price or Bid Total amount, the CITY will use the Unit Prices and calculate a corrected Bid Total.
- D. The CITY reserves the right to reject any or all bids, any or all schedules or to accept the bid or schedule deemed to be in the best interest of the CITY.

IB-5. PROPOSAL GUARANTY

- A. Proposal Guarantee (Bid bond) is not required with bid submittal.

IB-6. US CITIZEN

- A. The contractor/consultant warrants and takes the steps to verify that it does not knowingly hire or engage persons not authorized to work in the United States; and that any misrepresentation in this regard or any employment of person not authorized to work in the United States constitutes a material breach and shall be cause for the imposition of monetary penalties up to five percent (5%) of the contract price, per violation, and/or termination of its contract.

IB-7. QUALIFICATIONS OF BIDDER

- A. The owner desires that this project shall be built by a contractor who is competent and adequately financed. The Owner may request the Bidder to submit a written statement to show experience in construction work of this character as an indication of qualification and business standing. If required, the Bidder may make his/her statement in such form as may seem appropriate; said statement shall be notarized.
- B. This public works project is not financed in whole or in part by federal-aid funds. Bid proposals will be accepted from those contractors only (prime contractors, subcontractors and/or specialty contractors) who, prior to the bid opening, hold current licenses as public works contractors in the State of Idaho.
- C. The prime contractor shall submit with his/her proposal a list of the subcontractors and their license numbers.
- D. The successful bidder, in addition to listing the names and addresses of subcontractors in his bid, shall, within seven (7) days after opening of the bids, notify the Engineer in writing of the names of all major equipment and material suppliers proposed for the principal parts of the work, and for such others as the Engineer may direct, and shall not employ any subcontractors, (or purchase any equipment), to which the Engineer or CITY may, within a reasonable time, object to as incompetent or undesirable.

IB-8. AWARD OF CONTRACT

- A. The contract will not be awarded until the CITY is satisfied the successful bidder is reasonably familiar with the class of work upon which he/she has submitted a proposal and has the necessary capital and tools to satisfactorily perform the same. The CITY may request and the bidder must provide the CITY with a current balance sheet and a list of tools owned by the bidder.
- B. Within thirty-five (35) days after the opening of the proposals the CITY will accept one of the proposals or reject all bids. The award will be made upon the basis of the proposal that, in the CITY's judgment, will serve the best interest of the CITY.

- C. The contract will not be awarded until the bidder has obtained an appropriate Idaho public works license from the Idaho Public Works Contractors State License Board. Subcontractors are also subject to this requirement.

IB-9. FAILURE TO EXECUTE CONTRACT

- A. In the event the successful bidder fails to furnish approved performance and payment bonds, execute the contract and comply with all other pertinent legal requirements within ten (10) days after notification by the Engineer of the award of contract, the next best proposal will then be considered the successful bid and, at the discretion of the CITY, be awarded the contract.

IB-10. NONDISCRIMINATION IN EMPLOYMENT

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, or disability. The Contractor will take action, if necessary, to ensure that applicants are employed, and treated during such employment, without regard to their race, color, religion, sex, national origin, age, or disability. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- B. The Contractor shall comply with City Ordinance No. 2013-06 Gender Anti-Discrimination in Housing, Employment & Public Accommodations.

IB-11. WAGE RATES

- A. Contractors are not required to pay prevailing wages on this Project. Prevailing wages no longer are required on Public Works projects in Idaho.

IB-12. CONTRACTOR FOR PUBLIC WORKS TO PAY OR SECURE TAXES AGREEMENT

- A. The contractors, in consideration of securing the business of erecting or construction public works in this State, recognizing that the business in which he/she is engaged is of a transitory character, and that in the pursuit thereof, his/her property used therein may be without the State when taxes, excises, or license fees to which he/she is liable become payable, agrees:
 - 1. To pay promptly when due all taxes, (other than real property), excises and license fees due to the State, its subdivisions, and municipal quasi-municipal corporations therein, accrued or accruing during the term of this contract, whether or not the same shall be payable at the end of such term;

2. That if the said taxes, excises, and license fees are not payable at the end of said term, but liability, for the payment thereof exists, even though the same constitute liens upon his/her property, to secure the same to the satisfaction of the respective officers charged with the collection thereof; and
3. That, in the event of his/her default in the payment or securing of such taxes, excises, and license fees, to consent that the department, officer, board, or taxing unit entering into this contract may withhold from any payment due him/her hereunder the estimated amount of such accrued and accruing taxes, excises, and license fees for the benefit of all taxing units to which said contractor is liable.

IB-13. PERFORMANCE PERIOD

- A. This work shall start no earlier than July 5, 2021 and shall be substantially completed no later than August 31, 2021. The work shall be completed within Thirty (30) calendar days from the commencement of work, unless adjustment of the Agreement time is made in accordance with the provisions of the Contract Documents.

IB-14. CONSIDERATION OF MULTIPLE DIVISIONS OF WORK

- A. The bidder shall submit a proposal for all divisions, if applicable. Considerations of proposals for each division of work shall be made separately (i.e. one bidder may be awarded one division; another bidder may be awarded one of the other divisions).

IB-15. ALTERNATES

- A. If an alternative bid schedule is included, the bidder must submit a bid for each item in the alternate bid schedule. Low bid will be based upon the combined total price of the alternate(s) that the owner elects to use plus the base bid. If the owner elects to use an alternate(s), the amount of the contract will be the amount of the base bid modified in accordance with the amount of the alternate(s). An alternate may be additive to the scope of work described by the base bid items or may be substituted for the base bid item. Unit prices for alternate items will receive the same consideration for award as unit prices for base bid items.

IB-16. SUBCONTRACTORS TO BE LISTED ON BID

- A. All bidders shall comply with Idaho Code Section 67-2310. Failure to comply with Idaho Code Section 67-2310 shall render such bid unresponsive and void. Information provided pursuant to this section must be current and correct as of the date of the submission of the bid. Do not use the term "mechanical" when identifying any work to be performed on this project.
- B. The name, address, Idaho Public Works License Number and bid amount for each subcontractor to be utilized on the project must appear on the bid. Every subcontractor intending to perform plumbing work, and/or heating and air conditioning work, and/or electrical work must include its name, address, and Idaho Public Works License Number

which allows it to perform such work, and bid amount for each of the following areas: plumbing work, heating and air conditioning work, electrical work. If a subcontractor intends to perform work in more than one of these specialties, such a subcontractor must list its name, address, Idaho Public Works License Number, and bid amount more than once (i.e., for each of the following subject areas: plumbing work, heating and air conditioning work, electrical work). It is helpful, but not mandatory, that each subcontractor includes its specialty construction category numbers, if any, with its submission of its Idaho Public Works License Number.

- C. Every contractor intending to perform its own plumbing work, and/or heating and air conditioning work, and/or electrical work, must include its name, address, and Idaho Public Works License Number which allow it to perform such work for each of the following areas: plumbing work, heating and air conditioning work, electrical work. A contractor does not need to list the amount of the bid for plumbing work, heating and air conditioning work, or electrical work which it intends to perform.
- D. Subcontractors, Equipment and Material: The successful bidder, in addition to listing the names and addresses of subcontractors in his bid, shall, within seven (7) days after opening of the bids, notify the Engineer in writing of the names of all major equipment and material suppliers proposed for the principal parts of the work, and for such others as the Engineer may direct, and shall not employ any subcontractors, (or purchase any equipment), to which the Engineer or CITY may within a reasonable time object to as incompetent or undesirable.

GENERAL CONDITIONS

GC-1. COMPLIANCE

- A. The Contractor shall observe and comply with all Federal, State, and Local laws, codes, ordinances, and regulations, including all licensing and permit requirements which, in any manner, apply to the work being performed under this contract. No pleas of misunderstanding or ignorance on the part of the Contractor will in any way serve to modify the provisions of this requirement. The Contractor and his/her surety shall indemnify and save harmless CITY and its employees, agents and representatives against any claim or liability arising from or based on the violation of any such laws, codes, ordinances, or regulations, whether by himself/herself, his/her employees, or his/her subcontractors.
- B. All work shall be completed in accordance with the specifications and plans established for this project.

GC-2. DEFINITIONS

Architect	The Project Architect, if such is designated by the Contract Documents.
Assistant Parks and Recreation Director	The City Parks & Facilities Manager of Moscow, Idaho, and/or engineers and inspectors acting under his/her orders; their authority being limited to the particular duties to which they are assigned
Attorney	The City Attorney of Moscow, Idaho.
City	The City of Moscow, Latah County, Idaho ("CITY"), a municipal corporation existing under and by virtue of the laws of the State of Idaho. Action herein designated as taken by the CITY is to be considered the acts of the Council acting through the Mayor and Clerk.
City Engineer	The City Engineer of Moscow, Idaho, resident engineers and inspectors acting under his/her orders; their authority being limited to the particular duties to which they are assigned.
Clerk	The duly appointed City Clerk of the City of Moscow, Idaho.
Contract Documents	These generally consist of the plans, specifications, agreement, performance bond, payment bond and proof of various types of insurance, including all modifications thereof incorporated in the documents before their execution. These are identified in the Contract.
Contractor	The person, persons, firm, partnership, corporation or other entity contracting to do the work under these

	specifications. The term also includes the Contractor's agents or employees.
Council	The duly elected Council of the City of Moscow, Idaho.
Engineer	The Project Engineer, if such is designated by the Contract Documents.
Subcontractor	The person, persons, firm, corporation or other entity performing work under contract with the "Contractor" but subject, in such performance, to all the requirements of the 'Contract Documents' insofar as they are pertinent.
Bid/Proposal	The written document which is required to be signed by the bidder and which contains the formal statement of price or prices to be paid by the City for the performance required.

GC-3. PLANS AND SPECIFICATIONS AND ADDITIONAL DRAWINGS

- A. The plans for this improvement and the specifications accompanying them shall be considered as a whole, and anything shown or called for in one (1) and omitted in the other is as binding as if called for or shown by both. Figure dimensions shall be in all cases used in preference to scale dimensions. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words so applied having a well-known technical or trade meaning shall be held to refer to such recognized standards.
- B. The Engineer shall furnish to the Contractor the necessary plans and specifications required for the execution of the work at no additional cost. The Engineer shall furnish with reasonable promptness, additional instructions, by means of drawings or otherwise, necessary for the proper execution of the work.
- C. The Contractor shall submit with such promptness as to cause no delay in his/her own work or in that of any other Contractor, copies of all shop drawings and schedules required for the work of various trades as required by the Engineer, and the Engineer shall pass upon them with reasonable promptness, making desired corrections relating to effects on design. The Contractor shall make any corrections required by the Engineer, file with him/her such corrected copies as the Engineer shall direct, and furnish such other copies as may be needed. The Engineer's approval of such drawings or schedules shall not relieve the Contractor from responsibility for deviation from drawings or specifications, unless he/she has in writing called the Engineer's attention to such deviation at the time of submission, nor shall it relieve him/her from responsibility for errors of any sort in shop drawings or schedules.
- D. The Contractor shall keep one (1) copy of all drawings and specifications on the work, in good order, available to the Engineer, CITY, and its representatives.

GC-4. ALTERATION OR MODIFICATION OF CONTRACT DOCUMENTS

- A. No alteration or modification of the terms and conditions of the Contract Documents, except by written change order as provided herein, will be binding unless outlined in detail in a separate written addendum, and then only when properly signed and attested by the Contractor, CITY, and the Engineer.

GC-5. INVESTIGATION BY BIDDERS

- A. The instructions to bidders cover the general scope of this investigation under the article entitled "Examination of the Plans, Specifications and Site". Bidders are specifically instructed to faithfully examine and investigate the entire bid prices submitted on their proposals. No bidder may, without the consent of CITY, withdraw his/her proposal or claim damages or extra compensation by reason of any error or omission made by said bidder in preparing his/her proposal.

GC-6. NON-DISCRIMINATION

- A. The Contractor shall not discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, national origin, age, or disability.
- B. The Contractor shall comply with City Ordinance No. 2013-06 Gender Anti-Discrimination in Housing, Employment & Public Accommodations.

GC-7. INTERPRETATION OF THE SPECIFICATIONS

- A. In the event the specifications and plans are deficient or not clearly expressed, the parties submitted proposals hereunder must apply to the Engineer for the required information or explanation before the bids are submitted.
- B. The request for such explanation or interpretation shall be made in writing and the person submitting the request will be responsible for its prompt delivery. Such interpretation or explanation will be given by the Engineer in writing and a copy will be filed in the office of the City Clerk. CITY will not be responsible for any other explanation or interpretation of the plans and specifications. After submission of bids, no bidder shall claim any misunderstanding in or to the nature of the amount of work to be performed or attempt to hold CITY or any person responsible for any error or omission that may have been made by the bidder.

GC-8. CONTRACTS

- A. Contract Form
1. A copy of the construction agreement form is included in these documents.
- B. Execution of Agreement
1. Within ten (10) days after receiving properly prepared Contract Documents from CITY, the successful bidder shall sign the Agreement. Work shall be started upon written notice to proceed from the Engineer.

C. Subcontracts

1. The Contractor agrees that he/she is as fully responsible to CITY for the acts and omissions of his/her subcontractors and of persons either directly or indirectly employed by them, as he/she is for the acts and omissions of persons directly employed by him/her, and that the Contractor shall hold CITY harmless for any activities of such subcontractors and shall indemnify and defend CITY from damages and claims of whatever nature relating or resulting to the activities of such subcontractors.
2. Relations of Contractor and Subcontractor: The Contractor agrees to bind every subcontractor to the terms of the construction contract, the information to bidders, the general conditions, the plans, and the specifications as far as applicable to his/her work, including the following provisions of this article. Nothing in this section shall create any obligation on the part of CITY to pay to or to see to the payment of any sums to any subcontractor.
 - a. The Contractor shall bind every subcontractor to the following:
 - (1) To be bound to the Contractor by the terms of the Contract Documents, and to assume toward him/her all the obligations and responsibilities that he/she, by those documents, assumes toward the CITY. Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and CITY.
 - (2) To submit to the Contractor applications for payment in such reasonable time as to enable the Contractor to apply for payment. The Engineer shall, on request, furnish to any subcontractor, wherever practical, evidence of the amounts certified on his/her account.
 - (3) To make all claims for extras, for extension of time and for damages for delays or otherwise, to the Contractor in the manner provided in the general conditions for like claims by the Contractor upon the CITY, except that the time for making claims for extra cost is one (1) week from the date such claim arises.
 - b. The Contractor agrees:
 - (1) To be bound to the subcontractor by all the obligations that CITY assumes to the Contractor under the Contract Documents.
 - (2) To pay the subcontractor for conforming work, upon the payment of certificates, if issued under the terms of payments for the work, the amount allowed to the Contractor on account of the subcontractor's work to the extent of the subcontractor's interest therein.

- (3) To pay the subcontractor for conforming work, upon the payment of certificates, if issued otherwise than as in (2) so that at all times his/her total payments shall be as large in proportion to the value of the work done by him/her as the total amount certified to the Contractor is to the value of the work done by him/her.
- (4) To pay the subcontractor for conforming work to such extent as may be provided by the Contract Documents or the subcontract if either of these provides for earlier or larger payments than the above.
- (5) To pay the subcontractor for conforming work on demand on his/her work or materials as far as executed and fixed in place, less retained percentage, at the time the certificate should be issued, even though the Engineer fails to issue it for any cause not the fault of the subcontractor.
- (6) To make no demands for liquidated damages or penalty for delay in any sum in excess of such amount as may be specifically named in the subcontract.
- (7) That no claim for services rendered or material furnished by the Contractor to the subcontractor shall be valid unless written notice thereof is given by the Contractor to the subcontractor during the first ten (10) days of the calendar month following that in which the claim originated.
- (8) To give the subcontractor an opportunity to be present and to submit evidence in any hearing involving his/her rights.
- (9) To pay each subcontractor for satisfactory performance of its contract no later than twenty (20) calendar days from receipt of each payment the Contractor receives from CITY. The Contractor shall return retainage to each Subcontractor within twenty (20) calendar days after the Subcontractor's work is satisfactorily completed.
- (10) To certify with each estimate payment to subcontractors has been made within the prescribed time frames. The certification will be made on forms provided by CITY, and returned within twenty (20) calendar days of receiving the estimate payment.

D. CITY's Right to Terminate Agreement - If the Contractor:

1. Fails to begin work within a reasonable time after the effective date of "Notice to Proceed," or
2. Fails to supply sufficient skilled workmen or suitable materials or equipment to complete the work within the time limits specified; or

3. Performs the work unsuitably or neglects or refuses to remove materials or to re-perform such work which is not in accordance with the plans and specifications; or
4. Discontinues the prosecution of the work for more than ten (10) days; or
5. Fails to resume work which has been discontinued within a reasonable time after notice to do so; or
6. Fails to make prompt payments to subcontractors or for labor, materials, or equipment; or
7. Disregards laws, ordinances, or the instruction of the Engineer; or
8. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or
9. Makes an assignment for the benefit of creditors; or
10. Is guilty of a substantial violation of any provisions of the Agreement; in any such event(s), CITY, upon recommendation of the Engineer that sufficient cause exists to justify such action may, without prejudice to any other right or remedy, give notice to the Contractor and his/her surety of such delay, neglect, or default. If the Contractor or his/her surety, within a period of ten (10) days after such notice, does not proceed in accordance therewith, then CITY shall have full power and authority, without violating the Agreement, to take the prosecution of the work from the Contractor. CITY may appropriate or use any or all materials and equipment on the grounds as may be suitable and acceptable and may enter into an Agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as may be required for the completion of the contract in an acceptable manner.
11. Costs and charges incurred by CITY, together with the cost of completing the work under the Agreement, will be deducted from any moneys due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the Agreement, then the Contractor and its surety shall be liable and shall pay to CITY the amount of such excess.

E. Contractor's Right to Stop Work or Terminate Agreement:

1. If the work should be stopped pursuant to lawful order of a court of competent jurisdiction, or pursuant to lawful order of other public authority having jurisdiction, for a period of three (3) months, through no act or fault of the Contractor or of anyone employed by him/her, or if the Engineer should fail to issue any certificate for payment within twenty-two (22) days after it is due, or if CITY should fail to pay to the Contractor within twenty-two (22) days of its maturity and presentation, any sum certified by the Engineer or awarded by the court, then the Contractor may, upon twenty-two (22) days' notice to CITY and Engineer, stop work or terminate this Agreement or recover from CITY payment for all work

executed and any loss sustained upon any plant or materials and reasonable profit and damages.

F. Assignment:

1. The Contractor shall not assign this contract or sublet or subcontract any portion of it without the prior written consent of CITY nor shall the Contractor assign any moneys due or to become due to him/her hereunder, without the prior written consent of CITY. Any such assignment or sublet without such prior written consent shall be null and void and shall be a ground for termination for cause of this contract by CITY.

GC-9. QUANTITIES FURNISHED BIDDERS

- A. Unit Price Contract. The quantities shown in the proposal are approximations only and are for the purpose of comparing bids. The CITY reserves the right to increase or decrease, within twenty five percent (25%) of the stated quantities, any of the quantities shown and the Contractor will be paid for the actual quantities of work finally installed or performed at the applicable unit prices stated in his/her proposal.
1. Should the actual quantities exceed twenty five percent (25%) in excess of the stated amounts, the Contractor shall notify the Engineer before said excess is considered extra work. The twenty five percent (25%) limit does not apply to items listed as optional by the CITY, or which are specifically excluded.
 2. If a pay item is indicated as a contingency item, the Contractor shall be paid for only the actual quantity installed, and will be paid at the bid price up to twenty five percent (25%) in excess of the stated contingency bid quantity. Should the actual quantity exceed twenty five percent (25%) in excess of the stated contingency item amount, the Contractor shall notify the Engineer before said excess is considered extra work.
- B. Lump Sum Contract. The Contractor shall include in the contract sum all allowances named in the Contract Documents and shall cause the work so covered to be performed for such sums as the Engineer may direct, the contract sum being adjusted in conformity therewith. The Contractor declares that the contract sum includes such sums for expenses and profit on account of cash allowances as he/she deems proper. No demand for expenses or profit other than those included in the contract sum shall be allowed. The Contractor shall not be required to employ for any such work persons whom he/she has reasonable objection.

GC-10. MAJOR CHANGES

- A. If unforeseen conditions require a substantial change in the dimensions of a structure, location of underground utilities, or major variation of a similar nature from the original plans, such change shall be covered by a change order. The change order is to set forth in complete detail the nature of the change and reasons therefore, including compensation to be paid and time allotted the Contractor. The change order shall also detail whether the

change constitutes an addition or reduction with respect to the original contract costs. Should additional or supplemental drawings be required, they will be furnished by the Engineer providing the Engineer determines the change is warranted.

- B. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.
- C. Upon written notification, the Engineer will investigate the conditions, and if it is determined that the conditions differing materially and cause an increase or decrease in the cost or time required for the performance of any work under the contract, and adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.
- D. No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

GC-11. EXTRA WORK

- A. CITY shall have the right to issue written change orders to Contractor within the general scope of the work without the consent of the Contractor and without notice to any surety of the Contractor. If for any reason extra work is ordered by CITY and the compensation for such extra work cannot be agreed upon in advance, such work will be paid for at the actual cost of the labor, materials, and field supervision required, with the addition of not to exceed a total of fifteen percent (15%) to cover general overhead and profit (including subcontractor's general overhead and profit), use of small tools, payment of insurance and medical aid, taxes, and all other costs in connection therewith. If a fixed sum or unit prices can be agreed upon for any extra work that may be ordered, such sum and prices, together with a description of the work, shall be made a part of the written order. Such orders will be prepared by the Engineer in triplicate, with one (1) copy to CITY, one (1) to the Contractor and one (1) retained by the Engineer.
- B. If during the progress of the work, the Contractor believes he/she is entitled to extra compensation for performing certain phases or items, any and all such claims must be promptly presented to CITY and the Engineer. Unless such claim is presented in writing within fifteen (15) days after it occurs, CITY may, at its discretion, reject the claim. CITY shall specifically reject claims of this nature that have been withheld by the Contractor for more than thirty (30) days.

GC-12. MONTHLY PAYMENTS

- A. The Contractor shall file a monthly request for payment with the Engineer on the 20th day of each month for all work completed to the 20th day of the month. If monthly requests for payment are not received as stated, the CITY shall have the right to withhold payment for that month. The Engineer shall review Contractor's monthly requests for payment on the first day of the month for all work completed to the 20th day of the preceding month,

and shall certify such requests for payment. Progress payments will be made by the CITY for all work completed to the 20th day of the preceding month and duly certified by the Engineer, on or before the 10th day of each month in cash or interim warrants. These payments will be equal to ninety-five percent (95%) of the total amounts of the certified requests for payment. The CITY shall retain five (5) percent of the total amount owing the Contractor after the contract has been completed and accepted by the CITY for a minimum period of thirty (30) days. Should any liens or claims be filed during the retention period, the retained percentage will be held until a satisfactory agreement is reached between the CITY, the Contractor, and the Contractor's surety. Before final payment will be made by the CITY, Contractor agrees that it shall furnish the CITY with satisfactory evidence that all persons, including subcontractors, that have performed work or furnished materials pursuant to this Agreement and are entitled to a lien for their work or materials under the laws of the State of Idaho have been fully paid or are no longer entitled to such lien, and the Contractor shall file with the Clerk a notarized affidavit to that effect. Final payment will not be made until CITY has received a tax release from the Idaho State Tax Commission per GC-38.

- B. Progress payments for materials shall be considered eligible only if the materials are jobsite, and accurate, clearly detailed invoices from the material supplier are furnished. The ownership of these materials shall, upon payment from CITY to the Contractor, be vested in the City, and such materials may not be removed from the jobsite without written authorization of the Engineer.
- C. CITY may, but is not obligated to, withhold any payments to the Contractor, in addition to retained percentage, in such an amount or amounts as may be necessary to cover:
 - 1. Payments that may be earned or due for just claims or labor or materials furnished in and about the work;
 - 2. Defective and/or condemned and/or non-conforming work or materials not remedied;
 - 3. Failure of the Contractor to make proper payments to a subcontractor;
 - 4. Reasonable doubt that this contract can be completed for the balance then unpaid;
 - 5. Damages to another Contractor where there is evidence thereof;
 - 6. Payments that cover all taxes, excises and license fees due the State and its taxing entities whether or not these moneys are yet due and payable.
- D. CITY shall have the right, but not the obligation, to disperse and shall have the right to act as agent for the Contractor for the limited purpose of dispersing such funds as have been withheld pursuant to this paragraph to the party or parties who are entitled to payment there from. In the event CITY elects to disperse such funds, CITY shall render to the Contractor a proper accounting of all such funds dispersed on behalf of the Contractor. Nothing herein shall create in such party or parties entitled to payment a cause of action against CITY for failure to exercise its rights pursuant to this section. Contractor further agrees that no cause of action shall accrue on behalf of the Contractor as a result of CITY's exercise of such right to disperse.

GC-13. TIME OF COMPLETION/LIQUIDATED DAMAGES

- A. The date of completion for this Agreement shall be defined by the Instruction to Bidders included in the Contract Documents. Contractor agrees that time is of the essence in the performance of this Agreement, and that failure to complete this Agreement by such date will result in financial injury to CITY. Contractor further agrees that failure to complete this Agreement by such date shall subject Contractor to payment of liquidated damages to CITY. The Contractor also recognizes the delays, expense and difficulties involved in proving in a legal proceeding of the actual loss suffered by CITY occasioned by failure to complete the work on time. Accordingly, instead of requiring such proof, CITY and the Contractor agree that as liquidated damages for delay (but not as a penalty) the Contractor shall pay to CITY the sum of one-half of one percent (0.005) of the Agreement amount, including change orders, will be deducted by CITY for each and every calendar day that the date of final completion is delayed. Should such deductions exceed the outstanding amount of the Agreement, the Contractor and its surety shall be liable for the excess.
- B. The Contractor herewith specifically waives claims for damages for any hindrance or delay. Contractor shall be granted extensions of time for which liquidated damages will not be claimed by CITY for the following reasons:
1. A delay caused the Contractor by any suit or other legal action against CITY (except a legal action instituted by the Contractor) regarding this Project shall entitle the Contractor to an equivalent extension of time unless the period of such delay exceeds ninety (90) days. When such period is exceeded, CITY will, upon request by the Contractor in writing, either negotiate a termination of the Agreement or grant a further extension of time, whichever shall be agreed.
 2. Time lost by inclement weather, causing suspension of work, will entitle the Contractor to an extension equivalent to the total time so lost, whether it be a single continuous period or the accumulated total of several periods. Inclement weather is defined as that which, in the opinion of the Engineer, would seriously affect the progress of the work or the quality of the work.
 3. Should unforeseen conditions require the performance under a change order, or work more complex or difficult than that originally specified and shown on the plans, and such work, in the Contractor's opinion, requires more time to execute than the proportional increase in dollar value, the Contractor shall state to CITY and Engineer, in writing prior to the performance of such work, his/her estimate of the added time required for such work. CITY may, if such estimate be reasonable, allow an added extension proportionate to the increase in the dollar value of the work.
- C. If the performance of all or any portion of the work is suspended or delayed by the Engineer for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within seven (7) calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

- D. Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the Agreement has increased as a result of such suspension and the suspension was caused by condition beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will make adjustment as provided (excluding profit) and modify the Agreement in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the Agreement is warranted.
- E. No Agreement adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.
- F. No Agreement adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term of condition of this Agreement.

GC-14. ABANDONMENT OF WORK

- A. If the Contractor abandons the work for a period of twenty (21) days for any cause other than failure of CITY to make monthly payments, or refuses to comply with the provisions of the plans and specifications, CITY shall have the right to notify the Contractor's surety and require said surety to complete the work in accordance with the aforesaid plans and specifications. In the event no liens or claims have been filed and CITY fails to make progress payments, the Contractor may then, at his/her option, cease operations until payments are resumed by notifying CITY of his/her intention to cease operations for this cause. Should the Contractor abandon the work, fail or refuse to complete the work embraced in this contract, or fail to pay just claims for labor and materials, CITY reserves the right to charge against the Contractor, and Contractor agrees to pay, all legal, engineering, or other costs caused by such abandonment, failure or refusal. The Contractor agrees that such legal costs shall also include CITY's costs of defending any suits in connection with such abandonment, failure or refusal and nonpayment of claims wherein CITY is made a co-defendant.

GC-15. AUTHORITY OF ENGINEER

- A. The Engineer shall decide questions which may arise as to the quality and acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; questions which may arise as to the interpretation of the plans and specifications; and questions as to the satisfactory and acceptable fulfillment of the terms of the Agreement.
- B. The Engineer, including his/her employees and agents, shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access and for inspection. Inspections by the Engineer shall be promptly made. If any work should be covered up without approval or consent of the Engineer, it shall be uncovered, if required by the Engineer, for examination. The costs associated with the uncovering of such non-approved work shall be the responsibility of Contractor and shall not be charged to CITY.
- C. Reexamination of questioned work may be ordered by the Engineer and if so ordered the work must be uncovered by the Contractor. If such work be found in accordance with the plans and specifications, CITY shall pay the cost of the reexamination and replacement. If

such work is found not in accordance with the plans and specifications, the Contractor shall pay such costs.

- D. If the performance of all or any portion of the work is suspended or delayed by the Engineer for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or Agreement time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within seven (7) calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
- E. Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the Agreement has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or sub-contractors at any approved tier, and not caused by weather, the Engineer will make an adjustment and modify the Agreement in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the Agreement is warranted.
- F. In making the Agreement adjustment a markup for profit will only be allowed on changed or extra work caused by the delay or suspension. No profit will be allowed on any other delay or suspension costs including, but not limited to, standby costs or extended indirect costs. Payment for changed and extra work will be made in accordance with section GC-11.
- G. No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the prescribed time.

GC-16. PERFORMANCE AND PAYMENT BONDS

- A. The Contractor shall execute a separate performance bond and payment bond, each in penal amounts at least equal to one hundred percent (100%) of the of the full Agreement price, such bonds to be executed by a corporate bonding company (surety) licensed to do business in the State of Idaho and which is acceptable to CITY. Such corporate bonding company (surety) shall be required to be named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The premiums of such bonds shall be paid by Contractor. The performance bond shall be conditioned upon the Contractor's faithful performance of all the covenants and Agreements on the part of the Contractor to be kept and performed at the times and in the manner set forth in the Agreement, including the repair or replacement where required, or the cost of repair or replacement, of all work performed under the terms of this Agreement. The payment bond shall be conditioned upon the payment to all persons, including subcontractors, who have, and fulfill, contracts for performing labor and furnishing materials in the prosecution of the work provided for in such Agreement, provided that every such payment bond shall be construed, regardless of its language, as incorporating within its provisions the obligation to pay those persons who furnish labor or materials as stated in the Contract Documents.
- B. Such bonds shall remain in full force and effect during the term of this Agreement and during the terms of any warranty required by the specifications and shall be held in the custody of CITY. The current power of attorney for the persons who sign for the surety company shall be attached to the bond. The power of attorney shall be sealed and certified

with a "first hand signature" by an officer of the surety. A facsimile signature shall not be acceptable to CITY.

- C. If, at any time, a surety on any such bond is declared as bankrupt or loses its right to do business in the State of Idaho or is removed from the list of surety companies accepted on Federal bonds, the Contractor shall, within ten (10) days after notice from CITY to do so, substitute an acceptable bond (or bonds) in such form and sum signed by such other surety or sureties as may be satisfactory to CITY. The expense of such replacement bonds shall be borne by the Contractor. No further payments by CITY pursuant to this Agreement shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond to CITY.

GC-17. INSURANCE/CITY TO BE NAMED AS ADDITIONAL INSURED

- A. The Contractor shall not commence work until he/she has obtained all insurance required under this section or until he/she has satisfied CITY in this respect; nor shall he/she allow any subcontractor to commence work until such subcontractor has also obtained such required insurance applicable to such subcontractor's work. The Contractor shall maintain such required insurance coverage throughout the term of this Agreement as will hold CITY harmless and shall indemnify CITY for any losses arising out of the Contractor's operations, including any contingent liability arising there from. The cost of such insurance shall be borne by the Contractor. The Contractor shall furnish copies of all insurance policies and/or certificates of insurance to CITY at the time of execution of this Agreement. Each policy shall include a provision to the effect that it shall not be subject to cancellation, or reduction in the amounts of its liabilities, or any other material change, until notice has been given in writing to CITY and the Engineer not less than fifteen (15) days prior to such action. Contractor shall further cause CITY to be named as an additional insured on all applicable insurance policies.
- B. The Contractor shall take out and maintain during the term of this Agreement, statutory worker's compensation insurance for all employees who will work on this Project, and if any work is subcontracted, the Contractor shall require the subcontractor similarly to provide such insurance for all of the latter's employees unless they are included under the protection afforded by the Contractor.
- C. The Contractor shall take out and maintain during the term of this Agreement comprehensive public and general liability insurance. The comprehensive public and general liability insurance shall have, at a minimum, a coverage limit of at least FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) per occurrence, and ONE MILLION DOLLARS (\$1,000,000.00) aggregate. Policies containing deductible clauses will not be acceptable.
- D. The Contractor shall take out and maintain, during the term of this Agreement, builders' risk insurance which shall be written in completed value form, shall protect the Contractor and CITY against 'all-risks' of direct physical loss to buildings, structures, equipment and materials to be used in providing, performing or completing the project. This insurance shall be written with limits not less than the insurable value of the project at completion. This insurance shall include coverage while equipment or materials are in warehouses,

during installation, during testing, and after the project is completed, but prior to final payment.

- E. Contractor's Responsibility for Materials. The Contractor shall be responsible for all materials and work performed until final acceptance by CITY.
- F. Contractor shall require all subcontractors to maintain the above referenced insurance requirements and shall verify that such requirements have been met by requiring all subcontractors to provide certification therefore.

GC-18. PATENT ROYALTIES AND PROCESS FEES

- A. The Contractor shall furnish CITY a license or licenses for the use of any process or processes in connection with this Project. The Contractor shall include in the unit price bid any patent royalties or license fees for equipment installed or construction methods used.

GC-19. CONTRACTOR RESPONSIBLE FOR WORK

- A. The Contractor shall be responsible for all work until its acceptance by CITY.

GC-20. USE OF COMPLETED PORTION

- A. CITY reserves the right to use and occupy any portion of the improvement which has been completed sufficiently to permit use and/or occupancy, and such use and/or occupancy shall not be construed as an acceptance of the work as a whole or any part thereof. Any claims which CITY may have against the Contractor shall not be deemed to have been waived by such use and/or occupancy.

GC-21. SIGNATURES

- A. A proposal made by a corporation shall be signed and sealed by the legally authorized officers of said corporation. If awarded the Agreement, the Agreement shall also be executed by proper authorized officers and be affixed with the corporate seal. If a proposal or Agreement is signed by an agent, such agent shall furnish satisfactory written evidence of the agent's authority to sign as the legal representative of the bidder. An authorized partner of a co-partnership may sign the Agreement subject to the approval of the Attorney, who may, at his/her discretion, require each and every member of the co-partnership to sign the Agreement.

GC-22. ORDERS TO BEGIN WORK

- A. The successful bidder shall not begin work until after the Agreement has been executed and the surety bond and insurance has been approved by the Attorney. The order for the Contractor to begin work shall be issued by the Engineer by a written "Notice to Proceed".

GC-23. ORDER OF WORK

- A. The Agreement period and time of completion will be as set forth in the Instruction to Bidders included in the Contract Documents.

- B. GC-13 "Time of Completion/Liquidated Damages" of the General Conditions shall apply to interim as well as final completion dates.
- C. The specific details of the order of work will be established by the Engineer before construction begins. Before the successful bidder is authorized to begin work, he/she shall attend a pre-construction conference with the Engineer. At this time the successful bidder shall present a written schedule for the entire Project, specifying the beginning and completion dates for each phase of work. Once approved by the Engineer, this schedule shall be adhered to by the Contractor and he/she shall employ the necessary work force and equipment to maintain such schedule. Contractor further agrees that the approval by the Engineer of such schedule shall not create any liability to the Engineer or CITY for Contractor's means, methods, sequences, techniques or site safety.

GC-24. EFFICIENCY OF OPERATION/LICENSING

- A. The work embraced in this Project shall be started at the earliest possible date after issuance of the Notice to Proceed, and shall be prosecuted regularly and without interruption thereafter, unless otherwise directed by the Engineer. The Contractor shall furnish work force and equipment sufficient to accomplish full completion of the work within the time specified in the proposal and Agreement. The Contractor shall at all times employ efficient and experienced workers. Contractor shall also require and verify that all workers and subcontractors are licensed in accordance with law and/or regulation.

GC-25. PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall exercise particular care in protecting surrounding buildings, structures, trees, and property from injury during the demolition and construction operation, and shall be responsible for their protection and shall repair or compensate the CITY thereof for any damage which may result from such demolition and construction operations. The expense of such compensation or repair shall be borne by Contractor, and shall not be the responsibility of CITY.
- B. The Contractor shall exercise particular care in protecting trees, located on private or public property, from injury during the demolition and construction operations. If the Contractor's duties under this Agreement shall cause any damage, mutilation, or destruction whatsoever, of any tree, due to Contractor's need to remove, top, excavate, fill, or compact the roots of such tree, or by the placement or storage of any materials which are hazardous to trees, near such tree, the Contractor shall:
 - 1. Inform the Engineer in writing of such need; and
 - 2. Plot the location of such tree on the site plan which is the subject of this Agreement; and
 - 3. Comply with all permit requirements as set forth in the Community Forest Ordinance, Moscow City Code §5-8-1 et seq.
- C. Any utilities damaged by the Contractor shall be repaired by the Contractor and the Contractor shall be responsible to maintain temporary service until such damage is repaired. The expense of such repair and/or temporary service shall be borne by Contractor, and shall not be the responsibility of CITY.

- D. The Contractor shall provide and maintain temporary sidewalks, warning lights, barricades and other preventive means to safeguard pedestrian and vehicular traffic around the construction, as deemed necessary by CITY.
- E. During all construction operations, the Contractor shall construct and maintain such facilities as may be required to provide access by all property owners to their property. No person shall be cut off from access to his/her residence or place of business unless the Contractor has made a special arrangement with the affected persons.
- F. Construction operations and parking of vehicles shall be confined to areas designated by CITY. Contractor shall consult the proper traffic regulatory authorities regarding the routing of trucks and other vehicles, and shall follow the direction of such authorities.
- G. Any structures, tanks, mechanisms or equipment damaged by the Contractor shall be repaired at the Contractors expense. Any fines or penalties incurred by CITY as a result of any damages to the facilities shall be paid or mitigated by the Contractor.

GC-26. RESPONSIBILITY FOR SAFETY

- A. The Contractor shall be responsible for the safety of his/her work, equipment, and materials until the finished project is accepted by CITY.

GC-27. GUARDS AND BARRICADES

- A. The Contractor shall erect and maintain such barricades, detour signs and warning lights as will effectively mark any hazards or detours and the Contractor shall be liable for any damage occasioned by his/her acts or negligence, or the acts or negligence of his/her employees, agents or subcontractors, and shall indemnify CITY and the Engineer against loss and/or liability for any such damage, acts or negligence. Traffic signs shall be in accordance with the standards presented in the most current edition of the "Manual on Uniform Traffic Control Devices".

GC-28. EXISTING TRAFFIC SIGNS AND FACILITIES

- A. Existing traffic and street name signs which will interfere with construction shall be removed by the Contractor and stored in a safe place. These signs shall not be removed until the Contractor has obtained the consent of the traffic regulatory authorities having jurisdiction and until the necessary measures have been taken to safeguard traffic after the signs have been removed. Preservation and maintenance of the signs shall be the sole responsibility of the Contractor. As soon as sign location no longer interferes with work, the Contractor shall reset all such signs at locations indicated by the traffic regulatory authorities having jurisdiction, in cooperation with the Engineer and Streets Department. All costs incurred in work outlined above shall be considered as incidental to the construction contract, and shall be borne by Contractor.

GC-29. MAINTAINING POSTAL SERVICE

- A. Postal service shall be maintained in accordance with instructions of the U.S. Post Office Department. The Contractor shall be responsible for moving mail boxes to temporary locations designated by the Post Office Department, and at completion of the work he/she shall replace them in locations and in condition satisfactory to the Post Office Department.

- B. It will be the Contractor's responsibility to contact the U.S. Post Office Department for their requirements in maintenance of postal service and to follow those requirements.
- C. In cases where posts upon which the box or boxes are fastened are in such condition that they cannot be reset, the Contractor shall furnish posts for this purpose at his/her own expense.
- D. All costs incurred in work outlined above shall be considered as incidental to the construction contract, and shall be borne by Contractor.

GC-30. EMERGENCY WORK

- A. The Contractor will not be allowed added compensation for any emergency work performed on Sundays or legal holidays unless such work is ordered in writing by the Engineer.

GC-31. SUPERVISION OF WORK

- A. During the progress of the work, the Contractor shall employ a competent superintendent and any necessary assistants at the job site. The superintendent shall not be changed except with the approval of the Engineer (or upon the order of the Engineer should the superintendent be or become unsatisfactory to the Engineer) unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in his/her employ. The superintendent shall represent the Contractor in the Contractor's absence and all directions given to him/her shall be as binding as if given to the Contractor. Important directions shall be so confirmed on written request in each case.
- B. The Contractor shall give efficient supervision to the work, using his/her best skill and attention. He/she shall carefully study and compare all drawings, specifications and other instructions and shall at once report to the Engineer any error, inconsistency or omission which he/she may discover, but he/she shall not be held responsible for their existence of discovery.

GC-32. CORRECTION AND COMPLETION OF WORK

- A. Correction of Work before Final Payment:
 - 1. The Contractor shall promptly remove from the premises all materials condemned by the Engineer as failing to conform to the Agreement, whether incorporated in the work or not, and shall re-execute any work condemned by the Engineer as failing to conform to the Agreement, and the Contractor shall promptly replace such non-conforming materials and re-execute such non-conforming work in accordance with the Agreement, such costs of replacement and re-execution to be borne by Contractor at no additional expense to CITY.
 - 2. If the Contractor does not re-execute such non-conforming work and/or remove and replace such non-conforming materials within a reasonable time, fixed by written notice of the Engineer, then and in that event, CITY may remove them and may store the material at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within ten (10) days' time thereafter, CITY may,

upon ten (10) days' written notice, sell such materials at auction or at private sale and shall account to Contractor for the net proceeds thereof, after deducting all the costs and expenses of such removal, storage, sale and repair. Nothing contained herein shall relieve the Contractor from his/her responsibility to perform the work in accordance with the Contract Documents, nor to reduce the liability of the Contractor to replace such non-conforming materials or re-execute such non-conforming work.

B. Correction of Work after Final Payment:

1. Neither the final certificate, nor payment, nor any provision in the Contract Documents shall relieve the Contractor of responsibility for faulty and/or non-conforming materials or workmanship and unless otherwise specified, he/she shall remedy any defects due thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of final acceptance. CITY shall give notice of observed defects with reasonable promptness.

C. Deductions for Uncorrected Work:

1. If the Engineer and CITY deem it inexpedient to correct work injured or done not in accordance with the Agreement, an equitable deduction from the Agreement price and/or extended warranty shall be made therefore.

GC-33. SUBSTITUTES CLAUSE

- A. In order to establish a basis of quality, certain processes, types of machinery and equipment, kinds of material, may be specified on the plans or herein, by designating a manufacturer by name and referring to his/her brand or product designation. It is not the intent of these specifications to exclude other processes, equipment or materials or a type and quality equal to those designated.
- B. The materials, products and equipment described in the bidding documents establish a standard or required function, dimension, appearance and quality to be met by any proposed substitution.
- C. Approval of alternate and equal specified equipment and material will be only by addenda issued by the Engineer at least five (5) days prior to bid opening. Requests for approval of alternate equipment and materials manufacturers must come from the manufacturer or bidder at least ten (10) days prior to bid opening. All such requests must be accompanied by drawings and specifications in sufficient detail to allow the Engineer to determine whether or not the equipment and materials proposed is equal to that specified. The determination as to whether or not the proposed substitute equals that specified, shall rest solely with the City, based upon the opinion of the Engineer. The burden of proof of the merit of the proposed substitute shall be upon the proposer.
- D. No extra compensation will be allowed the Contractor for any changes required to adopt the substitute equipment; therefore, the Contractor's proposal, including the approved alternate, shall include all costs for any modifications to the plans such as structural and foundation changes, additional piping or changes in piping, electrical changes, or any other modifications which may be necessary or required for approval and adoption of the proposed alternate equipment.

GC-34. DETAILED BREAKDOWN OF CONTRACT PRICE

- A. The Contractor shall, within ten (10) days after receipt of this notice to proceed, submit a complete breakdown of all lump sum bid items showing the value assigned to each part of the work, including an allowance for profit and overhead. Upon acceptance of the breakdown of the contract price by the Engineer, it shall be used as the basis for all requests for payment.

GC-35. CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. Certain utilities and structures which are expected to be adjacent to or encountered in the work are shown on the plans. It is known that there are discrepancies and omissions in the locations and quantities of existing utilities and structures shown. Those shown are for the convenience of the Contractor only, and no responsibility is assumed by either the City or the Engineer for their accuracy or completeness.
- B. It is the Contractor's responsibility to notify "CALL BEFORE YOU DIG" at nationwide #811 prior to excavating and to comply with Idaho Code Section 55-2207 and all other applicable laws and regulations regarding the protection of underground utilities.
- C. At points where the Contractor's operations could cause damage which might result in considerable expense, loss, and inconvenience when his/her operations are adjacent to or near a railway, telephone, television, power, oil, gas, water, sewer, irrigation, or other private or municipal systems, the operations shall be suspended until all arrangements necessary for the protection thereof have been made by the Contractor.
- D. The Contractor shall notify all utility offices which are affected by the construction operation at least forty-eight (48) hours in advance of such construction. Under no circumstances shall the Contractor expose any utility without first requesting permission from and being granted to do so from the affected agency. Once permission has been granted, Contractor shall locate, if necessary, and expose all existing underground utilities in advance of any trenching operation. Hand digging shall be required within twenty-four (24) inches of a marked utility.
- E. The Contractor shall protect all other poles from damage. If interfering power poles, telephone poles, guy wires, or anchors are encountered, Contractor shall notify the Engineer and the affected utility company at least forty eight (48) hours in advance of construction operations to permit the necessary arrangements to be made with the affected utility company for protection or relocation of the interfering structure.
- F. The Contractor shall be solely and directly responsible to the CITY and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims, of any character brought because of any injuries or damage which may result from the carrying out of the work to be done under the Agreement. Contractor shall hold harmless, indemnify and defend CITY from any such claims.
- G. In the event of interruption to domestic water, sewer, storm drain, or to other utility services as a result of accidental breakage, or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority. After such notification, the

Contractor shall cooperate with said authority in restoration of service as promptly as possible and the Contractor shall bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist beyond working hours unless prior approval is received from the Engineer.

- H. In the event the Contractor encounters utility lines that interfere with trenching, the Contractor may, by obtaining prior written approval of the appropriate utility company, cut the service, dig through and restore the service with similar and equal materials at the Contractor's expense.

GC-36. STREET CLEANUP DURING CONSTRUCTION

- A. The Contractor shall clean all spilled dirt, gravel, or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day's work.

GC-37. CLEANUP

- A. The Contractor shall at all times during the work keep the premises clean and orderly. He/she shall promptly remove all waste materials and rubbish. All directions from the Engineer and all authorized public officials having jurisdiction over health and safety shall be obeyed.

GC-38. PROOF OF TAX PAYMENT

- A. The Contractor shall, within ten (10) days after receipt of the Notice of Award, furnish the Idaho State Tax Commission with a completed State of Idaho Form WH-5, PUBLIC WORKS CONTRACT REPORT. Copies of the form may be obtained from CITY, or from the Idaho State Tax Commission.
- B. The Contractor shall furnish evidence that he/she has paid all state and local taxes which have become due and payable and that he/she has secured payment of state and local taxes which have accrued, but which are not due. CITY shall not make final payment to Contractor until a tax release from the Idaho State Tax Commission has been received by CITY.

GC-39. HOLD HARMLESS REQUIREMENT

- A. In addition to other rights granted CITY by the Contract Documents, the Contractor shall indemnify and save harmless CITY, its officers and employees, from all suits, actions, or claims of any character brought because of any injuries or damages received or sustained by any person, persons, or property on account of the operations of the Contractor or his/her subcontractors; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of the Contractor or his/her subcontractors; or because of any claims or amounts recovered from any infringements of patent, trademark or copyright; or from any claims or amounts arising or recovered under the Workmen's Compensation Act or any other law, ordinance, order or decree.

GC-40. JURISDICTION AND DISPUTE RESOLUTION

- A. Either CITY, or Contractor, may request mediation of any Claim submitted to Engineer for a decision before such decision becomes final and binding. A mediator with a background

in construction litigation shall be selected by mutual agreement. In the event the parties cannot mutually agree upon a mediator, the Trial Court Administrator for the Second Judicial District shall submit a list of three (3) mediators to the parties. Each party will be allowed to strike one (1) of the listed mediators, Contractor proceeding first and CITY second. The remaining person shall then be the mediator. Costs of the mediation shall be borne equally by the parties.

- B. CITY and Contractor shall participate in the mediation process in good faith. The process shall be concluded within sixty (60) days of filing of the request.
- C. If the Claim is not resolved by mediation, Engineer's action or denial shall become final and binding thirty (30) days after termination of the mediation unless, within that time period, CITY or Contractor:
 - 1. agrees with the other party to submit the Claim to another dispute resolution process; or
 - 2. gives written notice to the other party of the intent to file an action in the Second Judicial District of the State of Idaho which court, the parties agree, is the court with jurisdiction to hear the dispute. The action must then be filed not later than sixty (60) days after substantial completion of the Project.

GC-41. PERMITS AND LICENSES

- A. The Contractor shall obtain and pay for all permits and licenses, including but not limited to the following:
- B. Those required by the Moscow City Code, such as:

Community Forestry Ordinance	§5-8-1 et seq.
Building Code	§7-1-1 et seq.
Plumbing Code	§7-1-2 et seq.
Electrical Code	§7-1-3 et seq.
Gas Code	§7-1-4 et seq.
Contractor Licensing Ordinance	§7-16-1 et seq.
- C. Those required by the Idaho Code or other State Law.
- D. Those required by the Code of Federal Regulations or other Federal Law.

GC-42. ENVIRONMENTAL MATTERS

- A. Contractor shall comply with all statutes and regulations regarding environmental matters, including, but not limited to, matters of health, safety, exposure, disposal, reporting, mitigation, etc.

GC-43. NO THIRD PARTY BENEFICIARIES

- A. No claim as a third party beneficiary under this Agreement by any person other than Contractor shall be made or shall be valid against CITY, and CITY shall not be liable for or be held to pay any money to such person.

GC-44. COMPLIANCE WITH GRANT CONDITIONS

- A. Contractor shall comply with all conditions of and all laws applicable to, and all policies, practices and procedures of the City applicable to, any federal, state or local grant received by the City or Contractor at any time with respect to this contract or with respect to the provision, performance or completion of the work.

ENGINEERING SPECIFICATIONS

ES-1. SCOPE OF WORK

The scope of work for the project is as set forth in the project specific plans and specifications.

The intent of the contract is to provide for the construction and completion in every detail of the work described.

The City reserves the right to make, at any time during the progress of the work, such changes in quantities and such alterations in the scope of work as are necessary to satisfactorily complete the project and the Contractor shall perform the work as altered. Compensation for change in scope of work will be in accordance with the project specific contract documents.

Unless otherwise noted, all labor, materials, and equipment necessary for the execution and completion of the work shall be furnished by the Contractor.

ES-2. TRAFFIC CONTROL/R.O.W USE PERMITS

2.1 Traffic Control

- A. The Contractor shall obey all rules, laws, ordinances and regulations of all traffic regulatory authorities having jurisdiction regarding the closing or barricading of public streets. Work shall not begin until the proper permits have been acquired and all required traffic control devices are in place.
- B. Prior to commencement of work, the Contractor shall submit to the Engineer for review, Traffic Control Plan(s) created by an *ATSSA or ESC certified Traffic Control Supervisor*. The plan shall be consistent with requirements detailed in the current edition of the Manual of Uniform Traffic Control Devices and shall include identification of detour routes for pedestrians. All traffic control devices shall be MUTCD approved, and installed and maintained by *ATSSA or ESC certified Traffic Control Technicians*. In the event where flagging is required to control traffic flow around a work zone, all flaggers shall have a *current ATSSA or ESC flagging card*.

Traffic control plans for work within State of Idaho highway right-of-way must also be approved by the Idaho Transportation Department.

- C. The work shall be carried out so as to cause a minimum of dislocation of normal commercial pursuits. Traffic must be kept open on roads and/or streets where no detour is possible. The Contractor shall, in addition to other requirements contained herein, without further notification or other order, provide, erect, and maintain at all times during the progress or temporary suspension of the work, barricades, fences, signs, flaggers, or other protection in accordance with the most current

edition of the "Manual on Uniform Traffic Control Devices" and shall provide, keep, and maintain such danger lights, signals, and flaggers, as may be necessary or ordered by the Engineer and/or traffic regulatory authorities having jurisdiction to ensure the safety of the public as well as those engaged in connection with the work. All barricades and obstructions shall be protected by signal lights which shall be suitably distributed across and along the roadway and which shall be kept burning from one hour before sunset until one hour after sunrise and at other times as vision is obscured by fog, smoke, or dust.

- D. The Contractor shall promptly reopen streets and driveways to the public after construction work requiring their closure is completed, and all safety issues have been resolved. Local traffic shall be provided access to private properties at all times, except during necessary stages of construction when it is impractical to carry on the construction and maintain traffic simultaneously, such as for the placing of asphalt concrete pavement, placing and curing of Portland cement pavement, and deep sewer excavation which prohibits safe travel of vehicular traffic. No private driveway may be closed except as provided here-in, or unless permission is given the Contractor by the owner of the property affected. Emergency traffic such as police, fire, and disaster units shall be provided reasonable access at all times. The Contractor shall be solely responsible for any damages which may result from failure to provide such reasonable access.
- E. The Contractor shall take every precaution to protect pedestrian, bicycle and vehicular traffic. Whenever, in the opinion of the Engineer, the Contractor has not provided sufficient or proper safety precautions and safeguards, he/she shall do so immediately, and to whatever extent the Engineer directs at no additional cost to the City. Should the City Engineer deem it necessary to augment the traffic control devices and the Contractor be unresponsive or unwilling to do so, the Contractor will be charged the customary rental rate and force account charges for the required personnel to bring the site into compliance with the MUTCD.

2.2 Right of Way Use Permits

- A. All street and sidewalk closures require a City issued Street Closure Permit.
- B. Work within public right of way requires a City issued Right of Way use permit.
- C. Work within State of Idaho highway right-of-way requires an Idaho Transportation Department (ITD) permit. These permits must be obtained through the City; not directly from ITD.

2.3 Payment: Traffic Control

Traffic control will be paid for as incidental to other bid items if there is no specific bid item for traffic control included in the proposal; OR, as a lump sum amount if traffic control is included as

a separate pay item in the proposal. Lump Sum price for traffic control includes furnishing, installing and maintaining the required devices to comply with MUTCD requirements.

ES-3. MATERIALS

All materials shall be new, free of defects, manufactured in the USA, and shall be furnished and installed according to the manufacturer's specifications.

ES-4. REMOVALS AND DISPOSALS

The Contractor shall be responsible for all removals indicated on the Plans and in the Specifications, and as may be necessary to complete the work in accordance with the true intent and meaning of the drawings and the details.

The Contractor shall patch, repair, and/or replace all existing work immediately adjacent to the newly constructed areas, or where removals are made, so that such adjacent work is left in the same state as their original condition. Such applications specifically shall apply to private driveways with the intent that all such driveways will be left with a smooth consistent and constant grade constructed of the same material and to the same specifications as originally used in constructing the driveway.

When salvageable material is to remain Contracting Agency property, the Specifications will identify the material and describe how the Contractor shall remove it and where it will be stored. Any material not named in the Specifications as Contracting Agency property will become the property of the Contractor and shall be removed from the project.

The Contractor may dispose of waste material in Contracting Agency-owned sites if the Specifications or the Engineer permits it. Otherwise, the Contractor shall arrange to dispose of waste at no expense to the Contracting Agency.

The Contractor shall acquire all permits and approvals required for the use of the disposal site. The cost of any such permits and approvals shall be included in the Bid prices for other Work.

The Contractor shall provide the Engineer the location of all disposal sites to be used and also provide copies of the permits and approvals for such disposal sites before any waste is hauled off the project.

The Contractor shall protect, indemnify, and save harmless the Contracting Agency from any damages that may arise from the Contractor's activities in making these arrangements. Any action required to satisfy any permit and/or any approval requirements in a Contractor-provided disposal site shall be performed by the Contractor at no additional expense to the Contracting Agency.

Removals and disposals will be paid by lump sum or unit price:

The price shall include all costs incurred to remove and dispose of the items bid including labor and equipment and other incidental costs.

ES-5. EARTHWORK

5.1 Excavation

All excavation shall be unclassified, except that which is required for the installation of pipe (storm, sanitary, water, drain), which is classified as trench excavation.

This work shall consist of excavation and disposal of all material, not being removed under some other item, which is encountered within the limits of the work necessary for the construction in accordance with the Specifications and in reasonably close conformity with the lines, grades, or thicknesses shown on the plans, or established by the Engineer.

This work shall include all excavation performed under this item regardless of the material encountered.

This work shall include the removal and disposal of any structure or any miscellaneous obstructions which are visible or are indicated on the plans which encroach upon or otherwise obstruct the work and for which a separate bid is not taken.

This work shall also include the preparation of the subgrade when the subgrade is not on a fill section. Subgrade elevation shall be below the gravel base elevation of pavement as indicated on the plans, and shall conform to the crown of the finished pavement surface. All depressions or ruts containing water shall be drained, as arranged with the Engineer. The entire surface shall be bladed to remove inequalities and secure a uniform surface. Line and grade stakes will be provided once by the Engineer, or his representative. The Engineer, or his representative, will set one set of stakes at fifty (50) foot intervals and at closer intervals where necessary. The subgrade shall be brought to a firm unyielding surface, true to line, grade, and cross section, by rolling and processing with equipment generally used for this purpose and acceptable to the Engineer. All soft, spongy, or yielding spots, which may be ordered to be removed by the Engineer, shall be entirely removed and replaced with geotextile and suitable rock material and thoroughly compacted to the satisfaction of the Engineer.

5.2 Structural Fill

This work shall consist of furnishing and placing selected material in one or more courses to form a stable roadbed in accordance with these specifications and in conformity with the Plans.

Structural fill (also 'Borrow' or 'Embankment') may consist of naturally occurring sand, sand gravel, sand and rock mixtures, decomposed granites, and native loess or clays. Sand and rock mixtures shall contain sufficient sand to fill the voids of the larger gravel and stone to permit the required compaction. All borrow must be obtained from designated or

approved sources. Structural fill shall be free of roots, bark, topsoils or other organic materials.

The surface upon which the structural fill is to be placed shall conform to the established lines and grades and shall be smooth and uniform, having been cleared of all vegetation, roots, stumps, topsoil, and foreign material.

The Contractor shall use necessary precautions in loading borrow to assure reasonable uniformity in grading.

Borrow shall be compacted with modern, efficient, compacting equipment satisfactory to the Engineer.

Embankment shall be placed in successive horizontal layers not exceeding eight (8) inches in loose thickness. All embankment shall be compacted to at least ninety-five (95) percent of the maximum density in accordance with AASHTO T-99. At all locations that are inaccessible to a roller, the embankment shall be brought up in horizontal layers and compacted thoroughly with mechanical tampers. The horizontal layers shall not exceed eight (8) inches in loose thickness. The compacting equipment may be of any type provided they are capable of compacting each lift of the material to the specified density.

5.3 Payment

The accepted quantities of EXCAVATION will be paid for by the per cubic yard unit price or by lump sum. The quantity of excavation, as listed on the proposal or measured in the field, shall be used to compute the final payment, exclusive of any extra work ordered by the Owner or his representatives, as provided under Section GC-11, Extra Work.

The accepted quantities of STRUCTURAL FILL will be paid for by per cubic yard unit price or by lump sum. The unit price per cubic yard shall include all materials, labor, equipment and other costs incidental to furnishing and placing the borrow as herein specified and as shown on the plans.

ES-6. SUBGRADE SEPARATION GEOTEXTILES

6.1 Materials

Geotextile shall be Type II, nonwoven or woven, as set forth in Section 718.07 – Subgrade Separation Geotextile Property Requirements of the latest edition of the Idaho Transportation Department's Standard Specifications for Highway Construction.

6.2 Construction Requirements

Geotextile shall be furnished and installed in accordance with Section 640 – Construction Geotextiles of the latest edition of the Idaho Transportation Department's Standard Specifications for Highway Construction.

6.3 Payment

Geotextile will be paid for on the basis of unit price, per square yard, furnished and installed.

ES-7. CRUSHED ROCK BASE

7.1 Description

This work shall consist of furnishing and placing one or more courses of aggregate on a prepared surface in accordance with these Specifications and in reasonably close conformity with the lines, grades, thicknesses and typical sections shown on the Plans and/or established by the Engineer.

The Contractor shall make their own arrangements for obtaining crushed rock base material and shall designate the source of same in ample time to permit sampling and testing by the Engineer.

7.2 Aggregate

A. 3/4" (-) Aggregate shall conform to the following gradation:

Sieve Size	Percent Passing
1 inch	100
3/4 inch	90 – 100
No. 4	40 – 65
No. 8	30 – 50
No. 200	3 – 9

The sand equivalent shall not be less than 30 if 5 percent or more of the material passes the No. 200 sieve. Sand equivalent will not be required if less than 5 percent passes the No. 200 sieve.

B. 1-1/4" (-) Aggregate shall conform to the following gradation:

Sieve Size	Percent Passing
1-1/2 inch	100
1 inch	90 – 100
3/4 inch	60 – 80
No. 4	35 – 60
No. 8	25 – 50
No. 30	10 – 30
No. 200	2 – 9

The sand equivalent shall not be less than 30 if 5 percent or more of the material passes the No. 200 sieve. Sand equivalent will not be required if less than 5 percent passes the No. 200 sieve.

7.3 Test Methods

Tests shall be made in accordance with the following applicable standard methods:

Field determination of density of soil in-place and percent compaction.	Idaho T-74
Compaction standard for coarse granular materials by use of the vibratory spring-loaded compactor.	Idaho T-74
Moisture density relations using a 5.5 lb. rammer and 18-inch drop, method A or C.	AASHTO T-99
Nuclear method for the determination of percent compaction in place density and moisture content of soils and aggregates.	WAQTC TM7

7.4 Placing

Prior to placing base rock, the excavated subgrade will be graded smooth and compacted to the satisfaction of the Engineer. Geotextile fabric shall then be placed upon the full width of the compacted subgrade. The geotextile fabric shall be as specified in Specification ES-6. Joints between sections of fabric shall overlap a minimum of 2 feet along longitudinal joints and a minimum of 6 feet at end joints.

If the required compacted depth of the base course exceeds 8.0 inches, the base shall be constructed in two or more layers of approximate equal thickness.

7.5 Mixing

Unless otherwise specified, the Contractor shall mix the base course by any one or a combination of the three methods specified below:

Stationary Plant Method. The aggregate and water shall be mixed in an approved mixer. Water shall be added during the mixing operation in an amount necessary to facilitate compaction. After mixing, the base material shall be placed on the roadbed by means of an approved aggregate spreader.

Travel Plant Method. After the material for each layer of base course has been placed through an aggregate spreader or windrow sizing device, the base shall be uniformly mixed by a traveling

mixing plant. During the mixing, water shall be added in an amount necessary to facilitate compacting.

Road Mix Method. After material for each layer of base course has been placed, the materials shall be mixed by motor graders or other approved equipment until the mixture is uniform throughout. During the mixing, water shall be added in an amount necessary to facilitate compaction.

7.6 Shaping and Compaction

After each layer has been spread it shall be compacted for its full width. The choice of compaction equipment will be left to the Contractor. Compaction shall continue until not less than 95% of the standard density is attained as determined by AASHTO T-99.

At the request of the Contractor, the Engineer, or his representative, will set one set of stakes at fifty (50) foot intervals and at closer intervals where necessary.

All soft, spongy, or yielding spots, which may be ordered repaired by the Engineer, shall be repaired in accordance with Specification ES-8.

7.7 Payment

The accepted quantities of CRUSHED ROCK BASE will be paid for by the unit price per ton. The unit price per ton shall include all materials, labor, equipment and other costs incidental to furnishing and placing the crushed rock, as herein specified and as shown on the plans.

Weight slips, in duplicate form, shall accompany each load of crushed rock to the construction site. Upon delivery of the material, one copy of the weight slip will be given to the Engineer, or his representative, and one copy will remain with the truck driver, before the material is unloaded. Under no conditions will any weight slips be accepted by the Engineer, or his representative, after the material is unloaded from the vehicle. It shall be the responsibility of the Contractor to give the Engineer ample advance notice of the time when such material shall arrive at the job site, in order to assure the presence of the Engineer, or his representative, at the job site during delivery of the material. The weight slips will be the only basis of determination of pay quantity for this item.

ES-8. SOFT SPOT REPAIR

8.1 Materials

Geotextile shall be Type II, nonwoven or woven as per Specification ES-6. Crushed Rock Base shall be 1-1/4" (-) crushed basalt per Specification ES-7.

8.2 Construction Requirements

All soft spots in the subgrade shall be called to the attention of the Inspector prior to placing the geotextile fabric. The Inspector shall determine where additional excavation is necessary and instruct the Contractor on such over excavation.

All soft, spongy, pumping or yielding areas will be ordered by Engineer to be repaired as herein described:

1. Remove subgrade to a depth of one foot below design subgrade elevation.
2. Add Subgrade Separation Geotextile to the bottom of the excavated area. This layer of geotextile will be in addition to that required for the entire subgrade area.
3. Backfill the area with Crushed Rock Base (95% min. compaction) to subgrade design elevation.

Dispose of the excavated material per Specification ES-4.

The Contractor shall cooperate with the City in determining the areas that require Soft Spot Repair by furnishing a loaded dump truck and operator to roll over the entire subgrade area and, with the assistance of a City representative, locate and mark all soft spots.

8.3 Payment

SOFT SPOT REPAIR will be paid for on the basis of unit price, per square yard, complete, in-place; including excavation, base aggregate and geotextile.

The Engineer may determine that excavation in excess of the one-foot depth may be required to accomplish the repair; in such instance's compensation will be adjusted proportionately.

ES-9. WATERING

Bulk water furnished to contractors for the construction of City funded projects will be provided at NO cost to the contractor. Bulk water furnished to contractors for purposes other than the construction of City funded projects must be purchased from the City. All bulk water use by contractors will be metered and paid for under rates and fees established by the City's most current adopted fee schedule and pursuant to City Code.

ALL BULK WATER WILL BE FURNISHED IN ACCORDANCE WITH THE CITY OF MOSCOW'S 'BULK WATER USE POLICY'.

Contractors shall coordinate ALL water usage with the Moscow Water Department.

ES-10. WEIGHING

Weighing equipment for the weighing of crushed stone surfacing materials, bituminous construction, etc., shall consist of and conform to Section 109, of the latest edition, of the Idaho

Transportation Departments Standard Specifications for Highway Construction, and amendments thereto. In any event, the scales shall be tested and sealed, at the expense of the Contractor, as set forth in the Standard Specifications listed above. Weight slips in duplicate form shall accompany each load of crushed rock or asphalt to the construction site.

ES-11. CONCRETE

11.1 General

Portland cement concrete shall conform to Section 502 of the latest edition of the Idaho Transportation Department Standard Specifications for Highway Construction, and amendments thereto, and as follows:

Portland cement concrete shall be composed of Portland cement, fine aggregate, coarse aggregate and water, proportioned and mixed in accordance with these specifications. Unless otherwise provided, the Portland cement concrete shall be Idaho Transportation Department Class 40B having a minimum unit compressive strength at 28 days age of 4,000 psi. Class 40B concrete shall have 6 sacks of cement per cubic yard of concrete and an air entrainment content of 6.5 percent, plus or minus 1.5 percent. The slump shall be a maximum of five (5) inches and shall not vary more than one (1) inch from the average.

11.2 Portland Cement

Portland cement shall conform to AASHTO M-85, Type I or II and shall contain no more than 0.60 percent total alkali. Type III can be used with prior approval of the Engineer.

Unless otherwise permitted, the product of only one mill or any one brand and type of Portland cement shall be used on any single pour.

11.3 Aggregates

Aggregates shall be reasonably free from wood, roots, bark, soft or disintegrated pieces, or other deleterious matter. Blend sand may be approved for use to correct deficiencies in the grading sizes, provided the combination meets the specification requirements for the class of material being produced.

Fine aggregate for concrete shall conform to the following gradation:

<u>Sieve Size</u>	<u>Percent Passing</u>
3/8 inch	100
No. 4	95 – 100
No. 16	45 – 80
No. 50	10 – 30
No. 100	2 – 10
No. 200	0 – 4

Sand equivalent shall be a minimum of 70.
Fineness modulus to be between 2.50 and 3.10 (AASHTO M-6).

The amount of deleterious substances shall not exceed the following limits:

	Percent by Weight Maximum
Clay lumps	1.0
Coal & lignite	1.0
Material to be reasonably free of shale, alkali, mica, coated grains, & soft flaky particles.	

Organic impurities shall not exceed those specified in AASHTO T-21. Mortar making properties shall conform to AASHTO T-71 or ASTM C87.

Coarse aggregate for concrete shall conform to the following gradations for coarse aggregate size No. 3:

Sieve Size	Percent Passing
1 1/2 inch	100
1 inch	95 – 100
1/2 inch	25 – 60
No. 4	0 – 10
No. 8	0 – 5

The amount of deleterious substances shall not exceed the following limits:

	Percent by Weight (Maximum)
Coal & lignite	1.0
Clay lumps	0.5
Material to be reasonably free of shale, alkali, mica, coated grains, & soft flaky particles.	

11.4 Water

Water for concrete shall be obtained from any source of potable water. Sources of non-potable water shall be approved before use.

11.5 Curing Compound

The curing compound shall be a liquid membrane-forming curing compound conforming to AASHTO M-148 Type I, with a fugitive dye and shall be applied to all finished concrete surfaces immediately after the concrete has set.

11.6 Air Entraining Admixture

Air entraining admixture shall conform to AASHTO M-154.

ES-12. CONCRETE CONSTRUCTION REQUIREMENTS

12.1 Mixing and Delivery

- A. Concrete shall be mixed and delivered by means of any of the following:
 - 1. Mixed complete in a stationary mixer and the mixed concrete transported to the point of delivery in agitating equipment or in non-agitating equipment when approved. (Known as central-mixed concrete.)
 - 2. Mixed completely in a truck mixer at the batching plant or while in transit. (Known as transit mixed concrete.)
 - 3. Mixed completely in a truck mixer at the point of delivery following the addition of mixing water. (Known as truck mixed concrete.)
 - 4. Mix partially in a stationary mixer and the mixing completed in a truck mixer. (Known as shrink-mixed concrete.)
- B. Truck mixers and truck agitators shall be operated within the rated capacity and at a speed of rotation for mixing or agitating as designated by the manufacturer of the equipment.
- C. When a stationary mixer is used for the complete mixing of the concrete, the mixing time for mixers having a capacity of 10 cubic yards or less shall be 60 seconds minimum. For 10 or more yards capacity, the mixing time shall be approved. Mixing time shall be measured from the time all cement and aggregates are in the drum. The batch shall be so charged into the mixer that some water will enter in advance of cement and aggregates and all water shall be in the drum by the end of the first one-fourth (1/4) of the specified mixing time.
- D. For shrink-mixed concrete, the mixing time in the stationary mixer may be reduced to a minimum of 30 seconds. Mixing shall be completed in a truck mixer by not less than 50 or more than 100 revolutions of the drum or blades at mixing speed. The batch volume shall not exceed 70 percent of the gross volume of the drum.
- E. When a truck mixer is used for complete mixing each batch of concrete shall be mixed for not less than 70 nor more than 100 revolutions of the drum or blades at mixing speed. Additional mixing, if any, shall be at agitating speed.

- F. When a truck mixer or agitator is used for transporting concrete that has been completely mixed in a stationary mixer, mixing during transport shall be at the agitating speed.
- G. Unless otherwise approved, when a truck mixer or agitator is used for transporting concrete, the concrete shall be delivered to the site of the work and discharged completely within 1-1/2 hours or before the drum has been revolved 300 revolutions, whichever comes first, after the introduction of the cement to the aggregates. In hot weather or under conditions contributing to quick stiffening of the concrete, a time less than 1-1/2 hours may be directed. When a truck mixer is used for the complete mixing of the concrete, the mixing operation shall begin within 30 minutes after the cement has been intermingled with the aggregates. If additional mixing water is required to replace evaporated mixing water to maintain the specified slump and is added with the permission of the Engineer, a minimum of 20 revolutions of the truck mixer drum at mixing speed shall be required before discharge of any concrete.

Tests for consistency may be made at approximately the beginning, the midpoint, and the end of the load. If the results vary by more than the tolerance specified below, the mixer or agitator shall not be used until the condition is corrected.

<u>When Average Slump is</u>	<u>Tolerance</u>
3 inches or less	1/2 inch
More than 3 inches	1 inch

- H. Central mixing concrete may be transported in suitable non-agitating equipment. The bodies of such equipment shall be smooth, watertight metal containers.

12.2 Re-tempering

Concrete shall be mixed only in such quantities as are required for immediate use and shall be used while fresh before initial set has taken place. Any concrete having initial set before placing and finishing shall be wasted and not used for the work. No re-tempering of concrete (remixing with water or other materials) will be allowed, unless otherwise approved by the Engineer, and in no instance shall concrete be re-tempered at a rate in excess of 1 gallon of water per 1 cubic yard of concrete remaining in the truck.

12.3 Placing Concrete

General. Concrete shall not be placed until forms have been checked and approved by the Engineer. The forms shall be clean of all debris before concrete is placed. Concrete shall be placed so as to avoid segregation of the materials and the displacement of the reinforcement. Care shall be taken to fill each part of the form by depositing the concrete as near the final position as possible. After initial set of the concrete, the forms shall not be jarred and no strain shall be placed on the ends of projecting reinforcement.

12.4 Cold Weather Concreting

Heating and Placing Concrete. Before any concrete is placed, all snow and frost shall be completely removed. Concreting operations shall meet the following requirements when the ambient temperature falls below 40 degrees F.

To achieve adequate curing, the temperature of the concrete shall be maintained above 50°F during the entire curing period or 7 days, whichever is greater. The concrete temperature shall not be allowed to fall below 35°F during this time. Prior to placing concrete in cold weather, the Contractor shall provide a written procedure for cold weather concreting to the Engineer. The procedure shall detail how the Contractor will adequately cure the concrete and prevent the concrete temperature from falling below 35°F. Extra protection shall be provided for areas especially vulnerable to freezing (such as exposed top surfaces, corners and edges, thin sections, and concrete placed into steel forms). Concrete placement will only be allowed if the Contractor's cold weather protection plan has been approved by the Engineer.

The Contractor shall furnish concrete that will have a temperature of at least 50 degrees F and not more than 80 degrees F at the time of placing. Heating equipment shall heat all the materials uniformly. Such heating shall prevent the occurrence of non-uniform moisture contents or contamination in the aggregates. Aggregates shall be heated in a manner such that frozen lumps, ice and snow are eliminated. The average temperature of an individual batch of aggregate shall not exceed 150 degrees F.

The Contractor is solely responsible for protecting concrete from inclement weather during the entire curing period. Permission given by the Engineer to place concrete during cold weather will in no way ensure acceptance of the Work by the Contracting Agency. Should the concrete placed under such conditions prove unsatisfactory in any way, the Engineer shall still have the right to reject the Work although the plan and the Work were carried out with the Engineer's permission.

12.5 Placing in Hot Weather

The temperature of the concrete shall not exceed 80 degrees F at the time of placement. When the combination of ambient air temperature, concrete temperature, humidity and wind is such that rapid evaporation of moisture from the concrete surface will take place, the Contractor shall take measures to slow the evaporation to tolerable limits. Such measures may include, but not limited to, erecting sun shades or placing at night or early morning. Ice may be used as a part of the mixing water providing it has completely melted by the time mixing is completed.

12.6 Finishing Concrete

If in the judgment of the Engineer, rock pockets are of such extent or character as to materially affect the strength of the structure or to endanger the life of the steel reinforcement, he/she may declare the concrete defective and require the removal and replacement of that portion of the structure affected. All holes and depressions shall be cleaned, thoroughly wetted, and filled with cement mortar composed of one part of cement to two parts of sand. All fins caused by form joints and other projections shall be removed above ground line. The resulting surfaces shall be

reasonably smooth and uniform in texture and color. After the concrete is placed, it shall be struck off with a template or a vibrating screen. Concrete shall be finished to an even surface by means of both longitudinal and transverse floats. The use of power trowels will not be permitted.

When concrete sidewalk has hardened sufficiently the surface shall be given a broom finish. The broom shall be of an approved type. The stroke shall be perpendicular to the centerline with adjacent strokes, slightly overlapped. The finish shall be free from porous spots, irregularities, depressions, small pockets or rough spots.

12.7 Curing Concrete

Concrete surfaces shall be kept completely and continuously moist until a curing method is applied. Curing compound shall not be applied to concrete surfaces before the finishing has been acceptably completed and shall not be applied to construction joints or to the inside faces of joints to be sealed with silicone joint sealer. The curing compound shall not be applied during rainfall.

Prior to completion of the curing period, if any membrane surface is marred or damaged by scuffing and wear, the Engineer may require an immediate application of the same type membrane or water cure for the remainder of the cure period.

Membrane forming curing compounds shall be thoroughly mixed before use and agitated during application to prevent setting of the suspended solids. The membrane must be uniformly applied.

Membrane forming curing compounds shall be applied to the finished concrete immediately after the bleed water or free-water sheen leaves the surface of the finished concrete surface.

The curing compound shall be a liquid membrane curing compound conforming to AASHTO M-148 Type I. Curing compound shall be applied under pressure, at the rate of application as directed, and shall be at least 1 gallon per 200 square feet for each application. All concrete cured by this method shall receive two applications of the curing compound for a total minimum coverage of 1 gallon per 100 square feet. The first coat shall be applied immediately after stripping the forms and/or acceptance of the concrete finish. If the surface under the forms has dried the concrete shall be thoroughly wet with water and the curing compound applied just as the surface film of water disappears. The second application shall be applied after the first application has set. During curing operations all unsprayed exposed surfaces shall be kept wet with water.

Should the film become damaged from any cause, within 10 days, the damaged portion shall be repaired immediately with additional compound.

If this curing compound is applied to construction joints, it shall be removed by sandblasting before fresh concrete is placed against them.

All membrane forming curing compounds shall be accompanied by a Manufacturer's Certificate of Compliance and shall be approved by the Engineer, prior to its use.

12.8 Correction of Work After Completion of Construction – Two Year Warranty

The contractor/person installing the concrete shall be responsible for faulty and/or non-conforming materials or workmanship for a period of two (2) years from the date of the initial installation; he/she shall remedy any defects due thereto. The City shall give notice of observed defects with reasonable promptness.

Surface scaling (or spalling) of the new concrete surface will be the fundamental consideration for determining non-conforming workmanship and materials requiring remediation. Scaled surfaces exceeding 5% (randomly dispersed or concentrated) per twenty (20) square feet of concrete surfacing area will be considered defective and shall be replaced. Manner and method as well as configuration of the area requiring replacement will be as directed and approved by the City Engineer. All replacement of concrete shall be as per City standards and at the Contractor's expense.

ES-13. CONCRETE CURB

13.1 General

All concrete curb shall conform to the City of Moscow Standard Drawings, the Plans, and Specifications. Concrete for curbs shall conform to the requirements of ES-11 and ES-12 of these specifications.

13.2 Forms

Curb forms shall be set to line and grade as designated; securely staked, and so constructed as to result in finished lines true to the dimensions and shapes shown on the plans.

Forms shall be of wood or metal, straight and free from warp, and of sufficient strength to resist springing while placing concrete. Where a section must be constructed on a curve, straight lengths of the section shall be short enough that the middle ordinate to the curve, from the face of that section, does not exceed one-half (1/2) inch or the section shall be continuously curved.

13.3 Joints

Expansion joints (or thru joints) shall be provided at intervals of forty-eight (48) feet throughout the length of the curb and at the junction of straight curb and radii and at either end of a driveway or alley section. Pre-formed joint fillers of one-half (1/2) inch or three-eighths (3/8) inch thickness will be placed in expansion joints.

Contraction joints (or "Dummy Joints") shall be constructed every sixteen (16) feet. These joints shall be 1/8-inch minimum thickness and constructed to a minimum depth of 1-1/2 inches by scoring with a tool which will leave the corners rounded and destroy aggregate interlock.

13.4 Construction Requirements

- A. Dimensions. All curbs, unless otherwise specified, shall be in accordance with dimensions conforming to one of the types shown on City of Moscow Standard Drawings as specified by the approved project plans.
- B. Consistency. All Class A curb (cast in place) shall be of good plastic consistency and shall have a slump of three (3) inches and shall be tested by the Engineer according to the provisions of AASHTO T-119.

All Class C curb (extruded) shall meet the requirements for Class A curb, except for the amount of slump which may vary according to the conditions of the concrete mix and the extrusion equipment used. Under no circumstances however, shall the finished curb vary more than one-half (1/2) inch from the design elevation, and not more than ten (10) percent from the dimensions shown in the City of Moscow Standard Drawings and Specifications. Class C curbs will not require expansion joints.

13.5 Finishing

While the concrete is still green, the top and front face, or other exposed portions of the curb, shall be troweled to produce a uniform even surface then given a fine brush finish with brush strokes parallel to the long axis of the curb. Form marks and other irregularities shall be removed. The edges of the curb shall be rounded with an edger. Honeycombed areas in the back of the curb, that in the opinion of the Engineer are not detrimental to the curb, need not be patched.

13.6 Curing

Immediately after finishing, the concrete shall be cured in accordance with the requirements of ES-12.7.

13.7 Backfilling

All curb shall be backfilled as described herein. If sidewalk or concrete pavers are to be constructed behind the curb, all backfill material shall be 3/4" minus crushed aggregate. If the area behind the curb is to be lawn or planted area, the top 16 inches shall be topsoil. All denuded areas shall be fertilized, re-sown with grass seed and covered with mulch as specified in Sections ES-27 and ES-28.

13.8 Payment

The accepted quantities of curb will be paid for by the unit price per linear foot. Compacted aggregate base under the curb and curb and gutter pan at catch basin locations will be considered incidental to the unit price for the curb. The unit price per linear foot shall include all materials, labor, equipment and other costs incidental to constructing concrete curb as herein specified and as shown on the Plans and special drawings.

ES-14. CONCRETE SIDEWALK

14.1 General

All concrete sidewalk, including driveways, shall conform to the City of Moscow Standard Drawings, Contract Plans, and Specifications. Concrete for sidewalks shall conform to the requirements of ES-11 and ES-12 of these specifications.

14.2 Gravel Base

Sidewalk shall be constructed on a compacted base of (3/4) inch minus crushed rock; base aggregate shall be placed on compacted, non-pumping subgrade. The crushed rock shall have the following gradation:

Sieve Size	Percent Passing
1 inch	100
3/4 inch	90 – 100
No. 4	40 – 65
No. 8	30 – 50
No. 200	3 – 9

The sand equivalent shall not be less than 30 if 5 percent or more of the material passes the No. 200 sieve. Sand equivalent will not be required if less than 5 percent passes the No. 200 sieve.

The total thickness of the gravel base shall be at least six (6) inches, compacted, in-place.

The gravel base shall be graded, rolled, tamped, or otherwise compacted to ninety-five (95) percent of the maximum density determined in accordance with AASHTO T-99.

The gravel base shall be thoroughly sprinkled with water before the concrete is placed.

All cost for furnishing and placing gravel base for sidewalks shall be included in the unit price bid on the bid proposal form for constructing concrete sidewalks. No additional compensation will be made for this gravel base.

14.3 Construction requirements

- A. Dimensions. Sidewalk width, thickness, and reinforcement shall be as shown on the City of Moscow Standard Drawings.

Sidewalk shall have a cross slope of between 1% and 2%, unless otherwise approved by the Engineer.

- B. Forms. Side forms shall be rigid and shall bear full length on the compacted gravel base and shall be the full depth of the finished walk. Forms shall be well staked, braced or otherwise rigidly held to true line and grade and shall rest upon stakes driven into the ground at intervals sufficient to provide rigid support. If metal forms are used they shall be of a type satisfactory to the Engineer.

- C. **Placing and Finishing Concrete.** SLUMP SHALL NOT EXCEED FIVE (5) INCHES. The concrete shall be spread uniformly between the forms and thoroughly consolidated and leveled with an approved strike board. Expansion joints of premolded joint material one-half (1/2) inch thick or three-eighths (3/8) inch thick may be constructed through the sidewalk at intervals of twenty (20) feet. Expansion joints may also be located where new sidewalk meets existing concrete, unless otherwise approved by the Engineer. Where applicable, joints in sidewalks and curb shall coincide.

After the concrete has been thoroughly consolidated and leveled it shall be bull floated to eliminate high and low spots and to embed large aggregate. The concrete shall then be allowed to harden properly before jointing, edging, and brooming is completed.

Contraction joints shall be tooled into the concrete every four feet for four-foot-wide sidewalk and five feet for five-foot-wide sidewalk, shall be 3/8 inch minimum in depth, and shall be perpendicular to the direction of the walk. All joints shall then be edged with a 3/8-inch radius edger and the sidewalk edges shall be tooled with a one-half (1/2) inch radius edger.

After edging and jointing has been completed the concrete shall be smoothed with wood or metal hand floats. The floated surface shall then be coarse broomed uniformly in a transverse direction with a fiber hair brush or an approved type.

The placing and furnishing of all sidewalk shall be performed under the control of the Engineer, or his representative, and the tools shall meet with his approval.

The contractor shall keep a person at the job site for a minimum of four hours following the concrete surface brooming operation for the purpose of both preventing and repairing any damaged surfacing to the newly placed concrete. Concrete left unattended, if damaged or defaced shall be replaced at contractor expense.

- D. **Curing.** Curing shall be performed by applying a sealing compound conforming to AASHTO M-148 Type I to the surface of the concrete immediately after it has set sufficiently to permit such application. Curing shall conform to Section ES-12.7.
- E. **Backfill.** After removal of the forms, the area behind the sidewalks shall be backfilled and compacted with at least sixteen (16) inches of topsoil level with the sidewalk and curb. Less than 16 inches of topsoil may be approved where new sidewalk is being constructed along older streets. The topsoil shall be raked or otherwise leveled, taking care to break up large dirt clods and remove large stones. All denuded areas shall be fertilized, resown with grass seed and covered with mulch as specified in Sections ES-27, ES-28.

14.4 Payment

The accepted quantities of concrete sidewalk will be paid for by the unit price per square yard. The unit price per square yard shall include all materials, labor, equipment, and other costs

incidental to construction of concrete sidewalk, including aggregate base, as herein specified and as shown on the Plans and special drawings.

ES-15. SUPERPAVE HOT MIX ASPHALT

15.1 Hot Mix Asphalt

The Hot Mix Asphalt (HMA) pavement shall be placed in lifts to the thickness as specified on the Contract Plans and as required by the Standard Construction Drawings.

PAVEMENT THICKNESS SPECIFIED BY CITY OF MOSCOW DOCUMENTS (STANDARD DRAWINGS, STANDARD SPECIFICATIONS ETC.) SHALL MEAN THE FULLY COMPACTED, IN-PLACE DEPTH.

The materials of which the asphaltic concrete is composed shall be of such sizes and grading that, when proportioned and mixed together, they will produce a uniformly graded mixture, which when tested by means of laboratory screens, will conform to the requirements in the following table. The percentages of refer to the completed HMA mixture. All percentages shall be computed on the basis of weight. Screens and sieves used for determining the percentages of the different sizes of aggregate shall have square openings.

3/4" Superpave HMA Pavement CL SP-2 (Base Course)

<u>Sieve Size</u>	<u>Percent Passing</u>
1 inch	100
3/4 inch	90 – 100
1/2 inch	90 max
3/8 inch	52 – 80
No. 8	23 – 49
No. 200	2.0 – 8.0

1/2" Superpave HMA Pavement CL SP-2 (Surface Course)

<u>Sieve Size</u>	<u>Percent Passing</u>
3/4 inch	100
1/2 inch	90 – 100
3/8 inch	90 max
No. 8	28 – 58
No. 200	2.0 – 10.0

Superpave hot mix asphalt paving shall conform to the requirements, of the latest edition, of the Idaho Standards for Public Works Construction and amendments thereto. A copy of said specifications is available at the office of the City Engineer. Paving asphaltic cement used will be PG58-22 or PG58-28, or an approved equal, and shall conform to the specifications, of the latest edition, of the Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction and amendments thereto.

Section 405, of the latest edition, of the Idaho Transportation Department Standard Specifications for Highway Construction and amendments thereto, shall apply as to the items of "Weather Limitations, Hauling Equipment, Pavers, Rollers, Mixing Plant, Spreading and Finishing, Joints, Rolling, Surface Smoothness."

A Hveem or Super Pave Mix Design shall be submitted with associated "Job Mix Formula" (JMF) for approval, if required by the City Engineer.

15.2 Rolling and Compaction

Rolling and compaction of the asphaltic concrete mat shall be done in accordance, with the latest edition, of the Idaho Transportation Department Standard Specifications for Highway Construction and amendments thereto.

Compaction shall be achieved, as per Section 810, of the latest edition of the Idaho Standards for Public Works Construction and amendments thereto. A copy of said specifications is available at the office of the City Engineer.

The cost of the rolling and compaction shall be included in the price of furnishing and placing superpave hot mix asphalt pavement.

15.3 Tack Coat

Tack coat shall be applied at all edges where the new asphaltic surface joins the existing pavement and shall be applied in accordance with Section 401, of the latest edition, of the Idaho Transportation Department Standard Specifications for Highway Construction and amendments thereto.

15.4 Payment

The accepted quantities of superpave hot mix asphalt pavement will be paid for by the unit price per ton or per square yard. The unit price shall include all materials, labor, equipment, and other costs incidental to furnishing and placing the superpave hot mix asphalt pavement herein specified and as shown on the plans.

Weight slips in duplicate form shall accompany each load of superpave hot mix asphalt pavement to the construction site. Upon delivery of the material, one copy of the weight slip will be given to the Engineer, or his representative, and one copy will remain with the truck driver before the material is unloaded. Under no conditions will any weight slips be accepted by the Engineer, or

his representative, after the material is unloaded from the vehicle. It shall be the responsibility of the Contractor to give the Engineer ample advance notice of the time when such material shall arrive on the job site in order to assure the presence of the Engineer, or his representative, at the job site during delivery of the material. The weight slips will be the only basis of determination of pay quantity for this item.

ES-16. CEMENT CONCRETE PAVEMENT

16.1 General

Portland cement concrete shall conform to Section ES-11, of these Specifications except as modified by the following sections and subsections.

16.2 Aggregates

Aggregates shall possess such characteristics of shape and size that concrete, prepared from a mixture of fine and coarse material in the proportions specified, will be of satisfactory workability in the opinion of the Engineer. Regardless of compliance with all other provisions of these specifications, if the concrete is not of a workable character or when finished does not exhibit a proper surface, either the fine or the coarse aggregate or both shall be rejected or altered as required by the Engineer.

- A. Fine aggregate shall consist of sand or other inert materials, or combinations thereof approved by the Engineer, having hard, strong, durable particles free from adherent coating. Fine aggregate shall be thoroughly washed to remove clay, loam, alkali, organic matter or other deleterious matter.

Fine aggregate with more than the maximum percentage passing any sieve may be accepted provided the mix proportions are adjusted to produce concrete having the same net water-cement ratio, slump and workability. Any resulting increase in the cement content shall be at the expense of the Contractor. Under no circumstances shall the fine aggregate, which has a grading finer than that permitted under Section 703, of the latest edition, of the Idaho Transportation Department Standard Specifications for Highway Construction, and amendments thereto, be used in paving concrete.

Fine aggregate shall develop in the mortar strength test, at an age of 7 days, a compressive strength of not less than ninety (90) percent of the strength of a mortar prepared with the same cement (AASHTO T-71 or ASTM C-87).

- B. Coarse aggregate shall consist of gravel, crushed stone or other inert material or combinations, thereof approved by the Engineer, having hard, strong, durable pieces free from adherent coatings. Coarse aggregate shall be thoroughly washed to remove clay, loam, bark, sticks, alkali, organic matter, or other deleterious material.

Coarse aggregate containing more than the maximum percentage passing any screen may be accepted provided the mix proportions are adjusted to produce concrete having the same

net water-cement ratio, slump and workability. Any resulting increase in the cement content shall be at the expense of the Contractor.

Coarse aggregate shall not be used, under any circumstances in paving concrete, when the amount by weight passing the screens exceeds the following:

3/4" square opening.....70%
3/8" square opening.....30%

- C. Properties of concrete aggregate shall be determined in accordance with the following methods of test:
1. Amount of Material Finer than No. 200 Sieve in Aggregates: ASTM Designation C-117.
 2. Organic Impurities: AASHTO T-113.
 3. Flexural Strength of Concrete: AASHTO T-104.
 4. Percentage of Particles of Less than 1.95 Specific Gravity: AASHTO T-150.
 5. Clay Lumps in Aggregates: AASHTO T-112.
 6. Abrasion of Coarse Aggregate by Use of the Los Angeles Machine; AASHTO T-96.

16.3 Curing and Protection

- A. Curing and protection shall conform to the specifications of Section 703, of the latest edition, of the Idaho Standards for Public Works Construction and amendments thereto. A copy of said specifications is available at the office of the City Engineer.

16.4 Joint Fillers and Sealants

- A. Joint fillers and sealants shall conform to the specifications of Section 705, of the latest edition, of the Idaho Standards for Public Works Construction and amendments thereto. A copy of said specifications is available at the office of the City Engineer.

16.5 Air-Entrained Concrete

Air-entrained concrete shall be used, as per ES-11, unless otherwise provided for in the Special Provisions. Either air-entrained Portland cement or an air-entraining admixture shall be added at the mixer.

The volume of air in freshly mixed concrete shall conform to that specified in the table which follows:

AIR CONTENT OF FRESHLY MIXED CONCRETE

Maximum Size of Coarse Aggregate (Inches)	Air Content (Percent by Volume)
--	------------------------------------

1-1/2, 2, and 3	5 ± 1
3/4 and 1	6 ± 1
3/8 and 1/2	7-1/2 ± 1

If the measured air content is found above or below the values contained in the table, the Contractor shall immediately make changes in mixing or materials as will be necessary to comply with the requirements for air content.

If an air-entraining agent is used, it shall be introduced at the nominal rate of one fluid ounce per sack of cement, but the rate shall be varied if necessary to comply with the requirements for air content.

An automatic dispenser accurate to 10%, which will introduce into the mixing water the specified amount of air-entraining agent for each cycle of mixing, shall be connected to the mixer.

Aggregates shall be adjusted to compensate for increased yield resulting from air-entrainment so that the specified amount of cement is contained in each cubic yard of concrete. Adjustment shall be made by decreasing the weight of fine aggregates only, unless otherwise directed by the Engineer.

Other Admixtures: Calcium chloride or any other admixture for any purpose other than air-entrainment may be added only upon the approval of the Engineer and under his supervision.

16.6 Reinforcing Steel

Reinforcing steel shall consist of round or square deformed bars or wire mesh. Square twisted bars shall not be used.

- A. Deformed steel bars for concrete reinforcement sizes No. 3 through 11 shall conform to the requirements of ASTM A-615M, Billet Steel Bars for Concrete Reinforcement, Grade 60, except as noted on the plans and except that the bars shall be made only by the open-hearth process or the electric furnace process.

The form of the deformed bars shall conform to ASTM A-706M, Minimum Requirements for Deformations of Deformed Steel Bars for Concrete Reinforcement.

Deformed bars size No. 14 and size No. 18 for concrete reinforcement shall conform to the requirements of ASTM A-615M, Special Large Size Deformed Billet Steel Bars for Concrete Reinforcement Intermediate Grade.

- B. Wire mesh for concrete reinforcement shall conform to the requirements of the standard specifications of AASHTO M-55, Welded Steel Wire Fabric for Concrete Reinforcement. All wire mesh shall be of an approved kind and quality of manufacture.

- C. Tie bars shall be free from rust, loose mill scale, dirt, grease or other defects affecting the strength or bond with the concrete.

16.7 Measurement of Materials

The fine aggregate and each size of coarse aggregate shall be measured by weighing. Corrections shall be made for variations in weight of material due to moisture content and specific gravity. The quantities of aggregates used in each batch shall be such that the cement can be measured in full sacks unless it is weighted in bulk.

Fine and coarse aggregate shall be proportioned by weight, except that if the project is small, then volumetric proportioning may be used with permission of the Engineer. In proportioning, the unit of measure for cement will be by the sack, ninety-four (94) pounds.

Weights of fine and coarse aggregate are based on a bulk specific gravity, saturated surface dry, of 2.67. When volume measurements are used, one cubic foot of sand shall be taken as equivalent to 100 pounds of sand and one cubic foot of gravel shall be taken as equivalent to 105 pounds of gravel. Corrections must be made for contained moisture in the aggregates and variations in specific gravity.

Concrete mixes shall be proportioned to the satisfaction of the Engineer. The proportion of aggregate may be altered to give better workability only upon written approval of the Engineer.

16.8 Re-tempering

Concrete shall be mixed only in such quantities as are required for immediate use and shall be used while fresh before initial set has taken place. Any concrete having initial set before placing and finishing shall be wasted and not used for the work. No re-tempering of concrete (remixing with water or other materials) will be allowed.

16.9 Construction of Portland Cement Concrete Pavement

Construction of Portland cement concrete pavement shall conform to the requirements of Section 705, of the latest edition, of the Idaho Standards for Public Works Construction and amendments thereto. A copy of said specifications is available at the office of the City Engineer. Concrete pavement batches shall meet the requirements of Section 703, of these Standard Specifications.

Concrete batch proportions shall be approved by the Engineer and any subsequent changes to the approved batch must be made in writing by the Engineer.

16.10 Payment

The accepted quantities of Portland cement concrete pavement will be paid for by the unit price per square yard. The unit price per square yard shall include all materials, labor, equipment and other costs incidental to furnishing and placing the Portland cement concrete pavement herein specified and as shown on the plans.

Batch slips in triplicate form shall accompany each load of concrete for pavement delivered to the construction site. Upon delivery of the material, one copy of the batch slips will be given to the Engineer, or his representative, and one to the Contractor. Delivery of concrete shall mean discharged from the mixer truck and all water added to the mix shall be added to the batch slip. It shall be the responsibility of the Contractor to give the Engineer ample advance notice of the time when such material shall arrive at the job site in order to assure the presence of the Engineer, or his representative, at the job site during material delivery. The batch slips may be used for the determination of cross section conformity.

1. All catch basins shall be separated from the pavement and curb by boxing out around basin. Expansion joint material shall extend completely through curb and slab. Manhole castings within the pavement limits shall be boxed in like manner except when telescoping type castings are used.
2. When a joint falls within 5 feet of, or contacts, basins, manholes or other structures, shorten one or more panels either side of opening to permit joint to fall on round structures and at or between corners of rectangular structures.
3. All transverse joints must extend through curbs and must be continuous across pavement, except tied transverse construction joints. Expansion joints will not be required except at structures or as shown on the plans.
4. Transverse sawed joints to be a + 15' o.c. as shown on drawings. Joints at 60' to be sawed the same day as placement. Intermittent joints at 15' to be sawed next day after placement. Longitudinal joints shall be sawed prior to permitting traffic on the pavement.

ES-17. ADJUSTMENT OF GATE VALVE BOXES, MONUMENTS, CATCH BASINS, CATCH INLETS, AND MANHOLES

Gate valve boxes, catch basins, catch inlets, monument casings, and manholes shall be adjusted to the grade, as established by the Engineer. Valve boxes, casings, rings and covers shall be reset in a careful and workmanlike manner to conform to the new grade. Special care shall be exercised in all operations in order not to damage the structures, equipment or water mains. Any damage occurring to the manholes, catch basins, gate valves, monuments, water meters or water mains, due to the contractor's operation, shall be repaired at the contractor's expense. Any masonry adjustment shall be made by using pre-cast risers, bricks, concrete blocks or poured concrete.

The Contractor shall notify the appropriate utility company, in advance, if gas valve boxes need to be adjusted, so the utility company personnel can do so, in a timely manner.

The Contractor shall notify the City Water Department, in advance, if water meter boxes need to be adjusted, so the Water Department personnel can do so, in a timely manner.

Location of valve boxes, catch basins and manholes on the plans is approximate only. They will be accurately located and referenced by the Engineer, or his representative, whenever possible. Manhole lids and catch basin and monument covers and valve box lids shall, preferably, be set to grade following the final application of asphaltic concrete. During paving operations, tops of manholes, monuments, catch basins and valve box lids shall be covered with building paper, diesel oil, or other suitable material to prevent sticking of asphalt to the metal lids.

Where excavation is necessary to adjust the grade of manholes, catch basins, monuments, or valve boxes, the backfill shall be carefully placed and tamped by hand.

Payment for adjustment of manholes, catch basins, gate valves, and monuments will be made according to the unit price for each unit adjusted:

The unit price bid shall include all costs incurred in furnishing materials and labor necessary to adjust the particular units to grade.

ES-18. MANHOLES AND CATCH BASINS

18.1 General

Catch basins, catch inlets, and manholes shall be precast reinforced concrete units, furnished and installed in accordance with the project plans, these Standard Specifications, and the Standard Drawings.

Completed catch basins and manholes including ring shall be capable of withstanding, with a reasonable margin of safety, a concentrated load of 20,000 pounds.

Backfill shall be placed in horizontal layers no more than 6 inches thick with each layer compacted to 95 percent of the maximum density or as approved by the Engineer.

18.2 Precast Reinforced Concrete Manholes, Catch Basins, and Catch Inlets

Precast reinforced manholes, catch basins, and catch inlets sections shall conform to AASHTO M-199, ASTM C-478 and ASTM C-433 and as shown on the Standard Construction Drawings.

- A. Base Sections. Base shall be placed on a well graded dewatered granular bedding course. The bedding course shall be firmly tamped and made smooth and level to assure uniform contact and dimensions shall conform to the standard drawings. If the base is cast in place, the concrete shall conform, to the latest edition, of the Idaho Transportation Department Standard Specifications for Highway Construction Class 30 concrete. Where water is encountered at the site all cast in place bases shall be placed on a one-piece waterproof membrane so as to prevent any movement of water into the fresh concrete.
- B. Joints. All lift holes and all joints between precast elements shall be first filled with an asphaltic fiber material then finished smooth with mortar. The fiber shall be Ramneck brand or approved equal.

SLURRY SEAL – 2021

PAGE 64 OF 105

- C. Steps. Not required.
- D. Workmanship and Finish. Cones and sections shall be substantially free from fractures, large and deep cracks and surface roughness. In precast sections where loops have been provided in lieu of lift holes, the loops shall be removed flush with the inside wall surface after the manhole or catch basin has been completed. No sharp cut-off protrusions will be permitted. If concrete spalling occurs as a result of loop removal, the spalled area shall be restored in workmanship manner to a uniform smooth surface with mortar.

18.3 Rings and Lids

Rings and lids shall be cast iron and shall conform to the Standard Drawings. Castings shall conform to the requirements of ASTM A-48 Class 138 and shall be free of porosity shrink cavities, cold shuts or cracks, or any surface defects which would impair serviceability.

18.4 Sanitary Sewer Manholes

- A. General. Sanitary sewer manholes shall be constructed according to Plans, Standard Drawings and Specifications. All sanitary manholes shall be constructed of precast reinforced concrete sections.

The Contractor may construct a channel through the manhole by either running sewer pipe through the bottom of the manhole, pouring concrete around the pipe and breaking out the upper half of the pipe; or by pouring concrete in the bottom of the manhole and forming a channel through the manhole by hand.

- B. Basis of Payment. Sanitary sewer manholes will be paid for according to the unit price per each or per vertical foot.

The unit price bid shall include all cost incurred in furnishing materials, labor, excavation, installing the manholes in place including the asphaltic coating on the outside of the manhole and the manhole rings and lids, and backfilling.

- C. Water tightness

1. SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED WATERTIGHT. All visible leaks (infiltrating subsurface water) shall be sealed; sealing shall be accomplished by a manner and method, in the opinion of the Engineer, that constitutes permanency. Leaks that cannot be sealed by Contractor shall be sealed either by the pressure grouting method (injected chemical sealants) or the interior surface coating method, utilizing a firm specializing in such services, at the Contractor's expense. Less than four minor drips in a single manhole will be considered negligible and will not require sealing.

2. Hydrostatic Testing.

- a. All sanitary sewer manholes constructed in areas where subsurface water may, in the opinion of the Engineer, pond around them shall be hydrostatically tested in accordance with this specification.
- b. Prior to testing, the manhole shall be completely constructed and all inlet and outlet pipes shall be plugged. The Contractor shall fill the manhole to the top with water. Four hours minimum after the manhole has been filled, the Contractor shall refill the manhole to the original water level and commence the test for a minimum 2-hour period. The leakage rate shall not exceed 0.2 gallons per hour per foot of test head above the pipe invert elevation. Manholes which fail the test shall be repaired and re-tested until they pass.
- c. Manholes tested by the exfiltration method shall have all infiltrating water sealed prior to beginning the exfiltration test.

18.5 Storm Sewer Manholes

- A. General Storm sewer manholes shall be constructed according to the Plans, Standard Drawings and Specifications. Storm sewer manholes shall be precast reinforced concrete, unless otherwise approved by the Engineer.

All pipe extending into catch basins shall be trimmed within 1"-2" of the inside wall surfaces and shall be neatly grouted inside and out and watertight.

- B. Basis of Payment. Storm sewer manholes will be paid for according to the unit price per each or per vertical foot.

The unit price bid shall include all costs incurred in furnishing materials, labor, excavation, installing manholes in place including the manhole rings and lids, and backfilling.

18.6 Catch Basins and Catch Inlets

- A. General Catch basins and catch inlets shall be constructed according to the Plans, Standard Drawings and specifications. Catch basins shall be precast reinforced concrete per WSDOT TYPE 1, catch inlets shall be WSDOT CONCRETE INLET - unless otherwise approved by the Engineer.

All pipe extending into basins and inlets shall be trimmed within 1"-2" of the inside wall surfaces shall be neatly grouted inside and out and watertight

Lids, grates, and risers shall be centered over the basin or inlet; unless specifically allowed otherwise.

- B. Payment. Catch basins will be paid for by the unit price per each.

The unit price shall include all cost incurred in furnishing materials, labor, excavation, installing catch basins in place including the catch basin rings and lids, and backfilling.

18.7 Risers

- A. Risers for height adjustment shall be as per WSDOT's standard for the precast unit being furnished.

ES-19. TRENCH EXCAVATION AND BACKFILL

19.1 Scope

This section covers the work necessary for the trench excavation and backfill above the pipe zone. Pipe zone backfill is included under the specification for the pipe.

19.2 Type of Backfill

The class of backfill to be used above the pipe zone shall be as set forth on the Plans or as given in the project Special Provisions and if not specifically set forth in project documents then as required by the "use" description given herein. The right is reserved to modify the use, location, and quantities of the various types of backfill, during construction, as the Engineer considers being in the best interest of the Owner.

Trench backfill, above the pipe zone, shall be as follows:

1. Class A Backfill. Use in landscaping and agricultural type areas where lawn sod, shrubs, topsoil, fences, and other landscape items are either being replaced or are anticipated.
2. Class B Backfill. Use within existing or proposed gravel parking lots – not within gravel streets or alleys.
3. Class C Backfill. Use in areas where asphalt pavement, concrete, curb, sidewalk, gravel surfacing, landscaping and agricultural use is not anticipated, present or future.
4. Class D Backfill. Use in existing gravel streets and alleys, existing gravel roadway shoulders and in areas where asphalt pavement, concrete, curb, and sidewalk is existing or anticipated in the future.
5. Class E Backfill. Use in lieu of Class D Backfill in new streets when specifically allowed by the City Engineer.
6. Class F Backfill. Use within and immediately adjacent to existing asphalt paved streets, alleys, driveways, and parking lots.

19.3 Excavation and Backfill for Fire Hydrants

Excavation and backfill for fire hydrants shall be included in the unit price payment for Fire Hydrants (See ES-22).

19.4 Trench Excavation

Trench excavation shall be classified as common excavation or rock excavation and shall include whatever materials are encountered to the depths as shown or as directed by the Engineer.

Common Excavation. Common excavation is defined as the removal of all material which is not classified as rock excavation.

Rock Excavation. Rock excavation shall conform to all specifications of Section 302, of the latest edition, of the Idaho Standards for Public Works Construction and amendments thereto. A copy of said Specifications is available at the office of the City Engineer.

19.5 Materials

- A. **Foundation Stabilization.** Materials for foundation stabilization shall be 3/4 inch minus crushed rock with reasonable even gradation from coarse to fine and free from excessive dirt or other foreign material.
- B. **Granular Material.** Granular backfill shall be 3/4 inch minus crushed basalt conforming to ES-7.
- C. **Imported Topsoil.** Imported topsoil shall possess friability and a high degree of fertility. It shall be free of clods, roots, gravel and other inert material. It shall be free of quack grass, horsetail and other noxious vegetation and seed. Should such regenerative material be present in the soil, it shall be the responsibility of the Contractor to remove all such growth, both surface and root, which may appear in the planting within one year following acceptance of the job, at his own expense, and in a manner satisfactory to the Owner.
- D. **Compaction Equipment.** Compaction equipment shall be of suitable type and adequate to obtain the amount of compaction specified. Compaction equipment shall be operated in strict accordance with the manufacturer's instructions and recommendations and shall be maintained in such condition that it will deliver the manufacturer's rated compactive effort.

19.6 Workmanship

- A. **Clearing.** Do not remove existing trees or tree limbs over 2 inches in diameter, whether on public or private property, unless they are within 4 feet of the pipe centerline without permission from the Engineer. All such work shall conform to the City's Community Forestry ordinance. The Contractor shall bear all costs of disposing of trees, stumps, brush, roots, limbs, and other waste materials from clearing operations. Material shall be disposed of in such a manner as to meet all requirements of state, county and local regulations regarding health, safety and public welfare.
- B. **Obstructions.** This term refers to obstructions which may be removed and do not require replacement. Obstructions within the trench area or adjacent thereto such as tree roots, stumps, abandoned piling, buildings and concrete structures, logs, rubbish and debris of all

types shall be removed without additional compensation from the Owner. The Engineer will, if requested, make changes in the trench alignment to avoid major obstructions; if such alignment changes can be made within the perpetual easement and right-of-way and without adversely affecting the intended function of the facility.

The contract amount will be adjusted accordingly for any cost changes resulting from such alignment modifications.

Dispose of obstructions removed from the excavation in accordance with section ES-4.

- C. **Utility Repairs.** Any and all underground utility damaged in any way during trench excavation shall be repaired and properly backfilled, by the Contractor, at no cost to the City. The repair shall be as approved by the City – NO EXCEPTIONS.
- D. **Removal and Replacement of Topsoil.** In all cases where trenches cross lawns, garden areas, pasture lands, cultivated fields, or other areas on which reasonable topsoil conditions exist, first remove the topsoil for a depth of 10 inches for the full width of the trench to be excavated. Stockpile this topsoil to one side of the right-of-way and do not mix with the remaining excavated material. Replace the topsoil in the top 10 inches of the backfilled trench. In lieu of stockpiling the top 10 inches of soil, "Imported Topsoil" from borrow pits may be substituted in the top 8 inches. Maintain the finished grade of the topsoil, over the center line of the trench, level with the immediate area bordering the trench, until acceptance of final seeding. Correct all damage to adjacent topsoil caused by trenching or pipe laying operations by removal of all rock, gravel, clay, and any other foreign materials from the surface and by regrading the additional topsoil as required.
- E. **Pavement, Curb and Sidewalk Removal.** Cut (full depth) all asphaltic concrete or Portland Cement concrete pavements (regardless of the thickness), and all curbs and sidewalks prior to excavation of the trenches with an approved pavement saw, hydrohammer or other approved pavement cutter. Removal of street surfacing for excavations shall comply with the Specifications and Standard Drawing for Street/Alley Curb Repair. Pavement and concrete materials removed shall be hauled from the site and not used for trench backfill.
- F. **Trench Width.** Minimum width of trenches in which pipe is to be laid shall be 18 inches greater than the inside diameter of the pipe except by permission of the Engineer.

The maximum clear width at the top of the trench will not be limited, except in cases where excess width of excavation would cause damage to adjacent structures or property.

In all cases, confine trench widths to dedicated rights-of-way for public thoroughfares or within areas for which construction easements have been obtained.

- G. **Grade.** Carry the bottom of the trench to the lines and grades shown, or as established by the Engineer, with proper allowance for pipe thickness and for pipe base or special bedding, when required. If the trench is excavated below the required grade, correct any part of the trench excavated below the grade, at no additional cost to the Owner, with gravel of the

type specified for pipe zone material. Place the gravel over the full width of trench in compacted layers, not exceeding 6 inches deep, to the established grade with allowance for the pipe base or special bedding.

- H. OSHA Compliance. All trench excavation and backfill shall conform to the latest published OSHA regulations, NO EXCEPTIONS.
- I. Location of Excavated Materials. During trench excavation, locate the excavated material within the construction easement or right-of-way or specified working area so that the excavated material will not obstruct private or public traveled roadways or streets. It shall be the contractor's responsibility to conform with the federal, state and local codes governing the safe loading of all trenches with excavated material.
- J. Removal of Water. Provide and maintain ample means and devices which will promptly remove and dispose of all water entering the trench excavation during the time the trench is being prepared for the pipe laying, during the laying of pipe, and until the backfilling of the pipe zone has been completed. These provisions shall apply during the hunch hour as well as overnight.

Dispose of the water in an approved manner without damage to adjacent property.

Drainage of trench waste through the pipeline, under construction, is prohibited.

- K. Foundation Stabilization. When, in the opinion of the Engineer, the existing material in the bottom of the trench is unsuitable for supporting the pipe, excavate below the flow line of the pipe, as directed by the Engineer, and backfill the trench to the subgrade of pipe base with approved material. Place the material over the full width of the trench in compacted layers, not exceeding 6 inches deep, to the established grade.
- L. Backfill in Pipe Zone. Pipe zone backfill is included in the Specification for the pipe.
- M. Trench Backfill Above Pipe Zone. Do not push the backfill material into the trench in such a way as to permit free fall of the material into the open trench, until at least 2 feet of cover is provided over the pipe. Under no circumstances allow sharp, heavy pieces of material to drop directly onto the pipe or the tamped material around the pipe. Do not use backfill material of consolidated masses larger than 1 cubic foot.
- N. Classes of Backfill.
Trench backfill shall comply with the City's Standard Construction Drawings and as follows:
 - 1. Class A Backfill
Backfill the trench, above the pipe zone, with approved excavated trench material to within 10 inches of final surface grade. Compact the entire trench depth in suitable lifts with a vibratory compactor, pneumatic or gasoline powered tampers,

or hydraulic hammers. Determine the method and type of equipment and amount of compaction required to prevent subsequent settlement.

Where Class A backfill is specified replace topsoil in the top 10 inches of the trench. Compact and rake to match the ground surface adjacent to the trench.

Maintain the surface of the backfilled trench level with the existing grade until the entire project is accepted by the Owner. Any subsequent settlement of the finished surfacing during the warranty period shall be considered to be a result of improper or insufficient compaction and shall be promptly repaired by the Contractor at no cost to the Owner.

2. Class B Backfill

Backfill the trench, above the pipe zone, with approved excavated trench material to within 6 inches of final surface grade. Compact the entire trench depth in suitable lifts with vibratory compactors, pneumatic or gasoline power tampers, or hydraulic hammers. Determine the method and type of equipment and the amount of compaction required to prevent subsequent settlement. Place and compact granular material in the top 6 inches.

Maintain the surface of the backfilled trench level with the existing grade by additions of granular backfill material, as specified, until final surface replacement is completed or the entire project is accepted by the Owner. Any subsequent settlement of the finished surface, during the warranty period, shall be considered to be a result of insufficient compaction and shall be promptly repaired by the Contractor at no cost to the Owner.

3. Class C Backfill

After the completion of the backfilling of the pipe zone, the excavated trench material may be pushed back into the trench by mechanical means.

In all locations where Class C backfill is used, the Contractor shall make his own estimate of the amount of backfill material required at the trench, so that after normal settlement has occurred, the finished surface will meet the existing grade. Neatly windrow the material over the trench and remove all excess. Any excess or deficiency of backfill material, which becomes apparent after settlement within the warranty period, shall be corrected by regrading, disposing of excess material or adding additional material where required. Remove rocks larger than 2 inches from the upper 8 inches of backfill.

4. Class D Backfill

Backfill the entire trench, above the pipe zone, with granular backfill material. Compact the entire trench depth to 95 percent density in 6 inch lifts with mechanical, vibrating or impact tampers. Determine the method and type of equipment and amount of compaction required to prevent subsequent settlement.

Maintain the surface of the backfilled trench level with the existing grade with crushed rock backfill material until final surface replacement is completed or the entire project is accepted by the Owner. Any subsequent settlement of the finished surface during the warranty period shall be considered to be a result of insufficient compaction and shall be promptly repaired by the Contractor at no cost to the Owner.

5. Class E Backfill

Class E trench backfill is to be used only where a new paved street is going to be constructed above the installed pipe.

The width of the trench, above the pipe zone, may be increased beyond the required specifications for pipe zone width, as described in the City of Moscow Standard Drawing #15, but shall not be less than (6) six feet.

Approved native excavated material may be used for backfill above the pipe zone in this widened trench. Compaction for all trench backfill, above the pipe zone, shall be 95% minimum of AASHTO T-99. All native backfill shall be placed in (6) six inch maximum lifts and method of compaction shall be only by a (5) five foot minimum wide sheepsfoot roller. Density testing frequency, for this approved native excavated material, will be in excess of that required for the Class 'D' crushed basalt backfill.

6. Class F Backfill

Backfill the trench, above the pipe zone, with granular material to within 4 inches of the finished surface.

Compact the entire trench, above the pipe zone, in six (6) inch maximum lifts with vibratory compactors, pneumatic or gasoline power tampers, or hydraulic hammers to a minimum 95 percent standard density. The top 4 inches of the trench is to have smooth cut edges before being backfilled with two equal lifts of asphaltic concrete patching mix.

7. Subsurface Drain Backfill

Backfill the entire trench to within 10 inches of the final surface grade or to the street subgrade, as applicable, with crushed or naturally occurring granular material from approved sources.

The material shall be washed, if necessary, to render the particles free from clay. It shall contain not more than 1% of clay lumps or other decomposed material. It shall conform to the following requirements for grading:

Sieve Size	Percent Passing
3"	100
2.5"	95 – 100

3/4"	50 – 80
1/4"	30 – 60
No. 8	20 – 50
No. 30	8 – 30
No. 50	3 – 12
No. 200	0 – 1.2

* All percentages are by weight.

That portion of the gravel backfilled for drains retained on a 1/4" square sieve shall not contain more than 0.05% by weight of wood waste.

Compaction, above the pipe zone, shall be accomplished by the use of mechanical, vibrating or impact tampers. Determine the method and type of equipment to use and amount of compaction required to prevent subsequent settlement.

Maintain the surface of the backfilled trench level with the existing grade by additions of granular backfill material as specified until final surface replacement is completed or the entire project is accepted by the Owner. Any subsequent settlement of the finished surface, during the warranty period, shall be considered to be a result of insufficient compaction and shall be promptly repaired by the Contractor at no cost to the Owner.

- O. Maintenance of Excavated Trench. Maintain the excavated trench between any two successive valved sections of pipeline or as specified in the project Special Provisions until the following operations have been completed, to the satisfaction of the Engineer, for waterline construction: Service connections have been installed, including pressure tap; valves, valve boxes, hydrants and thrust blocks installed, hydrostatic or air testing, sterilization, cleanup and restoration of all physical features, utilities restored to their original condition, or better, and in general, all work required between the two line valves accomplished with the exception of repaving.
- P. Maintenance of Trench Backfill. This maintenance shall include, but not be limited to, the addition of crushed rock backfill material to keep the surface of the backfilled trenches reasonably smooth and free from excessive ruts and potholes and suitable for normal traffic flow.

Trenches backfilled within existing paved streets shall be temporarily surfaced with 2.5 inches of cold mix asphalt pavement, which temporary cold mix surfacing shall be placed within one day of completion of trench backfilling. This temporary patch shall be installed and maintained smooth until the permanent hot mix patch is installed. Under certain circumstances, this requirement may be waived by the City Engineer.

No additional payment will be made for the maintenance of the trench backfill prior to completion of the work outlined above, and the trench backfill maintenance shall be considered as incidental to that item of work.

- Q. Disposal of Excess Excavation. All excess excavation not required or suitable for backfill shall be disposed of in a waste area arranged by the Contractor.
- R. Drainage Culverts. Replace, in like kind, drainage culverts which are removed or damaged. If the pipe is damaged during removal, dispose of it and furnish and install new pipe. Dispose of culvert pipe that is in too poor condition to reuse because of age or physical conditions. Repair drainage pipes with manufactured fittings only; encase Ferncos in concrete.
- S. Blasting. Blasting shall conform to all specifications of Section 302, of the latest edition, of the Idaho Standards for Public Works Construction and amendments thereto. A copy of said specifications is available at the office of the City Engineer.

19.7 Payment

Payment for trench excavation and backfill will be as specified for main line pipe as follows:

- A. Trench Excavation and Backfill. Payment for trench excavation and backfill shall be included in the price per linear foot of the respective pipe stated in the Contractor's bid proposal.

Payment for trench excavation and the respective backfill shall constitute full compensation for all work specified and incidental to the price per linear foot of the respective pipe.

Pipe zone backfill is specified under Section ES-20.

- B. Rock Excavation. Rock excavation shall be measured for payment as the actual quantity of rock removed within the approved limits.

ES-20. PIPE

20.1 Storm Sewer Pipe

Mains, 4-inch to 15-inch: SDR 35 PVC ASTM D 3034, gasketed.

Mains, 18-inch to 36-inch: Solid wall PVC ASTM F 679 or HDPE (High Density Polyethylene) AASHTO M 294, smooth-walled interior, silt-tight.

Culvert Pipe: Corrugated Steel Pipe and Pipe Arches conforming to AASHTO M 36, 2-2/3" x 1/2 corrugations. Round pipe shall be 16 gage minimum; arch pipe shall be 12 gage minimum.

Storm Sewer Service Laterals: SDR 35 PVC ASTM D-3034, except as follows: where a service lateral crosses a water main or a water service line with less than 18 inches of clearance between the two pipes the sanitary sewer service lateral pipe shall be un-jointed.

PVC pressure water pipe, either Schedule 40 PVC or Class 160 PVC ASTM D-2241 for distance nominally ten feet each side of the crossing. This pressure water pipe shall be joined to standard SDR 35 PVC pipe at both ends with FERNCO couplers having stainless steel shear ring bands.

20.2 Sanitary Sewer Pipe

All sanitary sewer pipe shall be a minimum of eight (8) inch diameter except sewer to house connections which shall be a minimum of four (4) inch diameter.

Mains, 8-inch diameter and larger: SDR 35 PVC ASTM D-3034.

Service Laterals: SDR 35 PVC ASTM D-3034, except as follows: where a service lateral crosses a water main or a water service line with less than 18 inches of clearance between the two pipes the sanitary sewer service lateral pipe shall be un-jointed PVC pressure water pipe, either Schedule 40 PVC or Class 160 PVC ASTM D-2241 for distance nominally ten feet each side of the crossing. This pressure water pipe shall be joined to standard SDR 35 PVC pipe at both ends with FERNCO couplers having stainless street shear ring bands.

20.3 Perforated Subsurface Drain Pipe

- A. General. A perforated roadway underdrain system may be shown on the Plans and shall be furnished and installed as herein described in these Specifications, as shown on the City's Standard Construction Drawings and as shown on the Plans.

Laterals will generally be connected to the collector at 60° angles. The terminal end of each lateral will be sealed with a plug. All connections between pipe sections and branches are to be water tight.

The pipe shall be wrapped with a filtering sock.

Perforated Subsurface Drain Pipe that is corrugated on the inside will not be allowed.

Perforated pipe and fittings will not be dumped into the trench. All pipe shall be inspected prior to lowering into the trench and if necessary cleaned of any material tending to plug the perforations of the pipe.

Pipe shall be laid with the perforations at the bottom, per manufacturer's instructions.

Gravel backfill for drains shall be as defined under Section ES-19.

- B. Types of Pipe. Perforated subsurface drain pipe as indicated on the plans and standard drawings shall be one of the following types of pipe or as approved by the Engineer:
- Perforated Corrugated Plastic Pipe
 - Perforated Solid Wall Plastic Pipe

1. Perforated Corrugated Plastic Pipe

This pipe shall be Advanced Drainage System (ADS) N-12 pipe or approved equal. The pipe shall be 4" in diameter, having at least two (2) rows of perforations parallel to the axis of the pipe. The pipe and fittings shall meet the requirements of AASHTO M-252 Type S (corrugated outside-SMOOTH INSIDE). The joints shall be gasketed non-water tight joints (Soil tight per AASHTO section 26); Gaskets may be architectural weather stripping material per ASTM D-1056 or rubber per ASTM F-477.

2. Perforated Solid Wall Plastic Pipe

This pipe shall be Advanced Drainage System (ADS) pipe or approved equal. The pipe shall be 4" in diameter, having at least two (2) rows of perforations parallel to the axis of the pipe. The pipe and fittings shall meet the requirements of AASHTO M-252. The joints shall be gasketed non-water tight joints (Soil tight per AASHTO section 26); Gaskets may be architectural weather stripping material per ASTM D-1056 or rubber per ASTM F-477.

20.4 Water Pipe & Ductile Iron Fittings

- A. Joints. Pipe joints shall be push-on joints except where specifically shown or detailed otherwise.
- B. Mechanical Joint Fittings. Three-inch through sixteen inch mechanical joint ductile iron fittings shall be Tyler SSB Class 350 ductile iron fittings, or an approved equal, and shall conform to ANSI/AWWA C-111.
- C. Flanged Ductile Iron Fittings. Flanged fittings shall conform to ANSI/AWWA C-110 and shall be faced and drilled to 125-pound ANSI. The fittings shall be 125 PSI rated working pressure and cement-mortar lined to same thickness specified for pipe.
- D. Mechanical Couplings. Mechanical couplings, not a part of the pipe itself, shall be ductile iron couplings with long solid sleeves and be Mechanical Joint Class 350. Mechanical couplings shall mean straight couplings, transition couplings, reducing couplings, and flanged coupling adapters.
- E. Ductile Iron Pipe. All ductile iron pipe shall be centrifugally cast of 60-42-10 iron and shall conform to ANSI / AWWA C-151. Thickness class or classes shall be 51 (minimum). The pipe shall be cement mortar lined and seal coated in accordance with ANSI / AWWA C-104. The rubber ring gaskets shall be suitable for the specified pipe sizes and pressure and shall conform to applicable parts of the latest federal specification ANSI / AWWA C-111, and shall be furnished by the pipe manufacturer. A nontoxic vegetable soap lubricant shall be supplied with the pipe in sufficient quantities for installing the pipe.

- F. Polyvinyl Chloride (PVC) Pressure Pipe. All PVC pressure pipe shall conform to pressure Class 150 AWWA C-900 or pressure Class 165 AWWA C-905. All pipe shall be push-on joints with one gasket bell end.
- G. Tapping Sleeves. All tapping sleeves shall be ROMAC "SST" Stainless Steel as per ASTM A-240, Type 304 and Type 304L or an approved equal.

20.5 Pipe Laying

Pipes shall be laid in straight lines at uniform rates of grade as shown on the plans.

Proper preparation of foundation, placement of foundation material where required, and placement of pipe zone material below the pipe shall precede the installation of all sewer, water and culvert pipe. This shall include necessary leveling of the native trench bottom or the top of the foundation material as well as placement and compaction of required pipe zone material, below the pipe, to a uniform grade so that the entire length of pipe will rest firmly on a well compacted material, so the backfill material around the pipe will be placed in a manner to meet requirements specified under backfilling.

Water pipe delivered for construction shall be handled so as to minimize entrance of foreign material. When pipe laying is not in progress as, for example, at the close of a day's work, all openings in the pipeline shall be closed by water-tight plugs. Joints of all pipe in the trench shall be completed before work is stopped. If water accumulates in the trench, the plugs shall remain in place until the trench is dry.

If dirt that, in the opinion of the Engineer, will not be removed by flushing enters the pipe, the interior of the pipe shall be cleaned and swabbed as necessary with a 5% hypochlorite disinfecting solution.

- A. Backfill at the Pipe Zone. The pipe zone shall be considered to include the full width of the excavated trench from the bottom of the trench (a minimum of 4 inches under the pipe) to a point 12 inches above the top outside surface of the barrel of the pipe.

Particular attention must be given to the area of the pipe zone from the flow line to the center line of the pipe to ensure that firm support is obtained to prevent any lateral movement of the pipe during the final backfilling of the pipe zone.

Backfill the area of the pipe zone from the bottom to the horizontal center line of the pipe with "imported pipe zone material." Hand place the material around the pipe in 6 inch layers and thoroughly hand tamp with approved tamping bars supplemented by "walking in" and slicing with a shovel.

All material, within the pipe zone, shall be hand tamped and done in such a manner as to not change the grade of the pipe (particularly gravity pipe).

- B. Joints. In making the joints on the pipe care shall be exercised to clean all dirt, rock or other foreign matter completely from the inside of the bells and the outside of the spigots. The pipe shall be forced tightly in place with a bar or mechanical puller of a type approved by the Engineer. When the pipe is aligned it shall be supported by placing sufficient backfill material alongside and carefully tamped into place as described under Section 20.5.A.

When two different types of gravity pipe are joined together, a Fernco coupler may be used, upon approval of the Engineer. The completed connection shall be supported, in such a manner, as to maintain established line and grade and shall be encased, on all sides, with a minimum of four (4) inches of concrete. The concrete shall extend a minimum of two (2) feet on each side of the coupler.

Lubricant for water pipe gaskets shall be supplied by the pipe manufacturer.

- C. Caps and Connections. Caps for pipe branches, stubs, or other open ends which are not to be immediately connected shall be made of an approved material and shall be secured in a place with a joint comparable to the main line joint, or stoppers may be of an integrally cast breakout design. Caps of the type recommended by the pipe's manufacturer shall be used.
- D. Imported Pipe Zone Material. Granular material for pipe zone backfill shall be 3/4" minus crushed rock unless otherwise specified. The material shall meet the specifications, of the latest edition, of the Idaho Transportation Department Standard Specifications for Highway Construction and amendments thereto.
- E. Water Main Location and Separation. The location and separation of the water and non-potable water main pipes, both horizontal and vertical, shall meet the most current requirements of IDAPA 58.01.08 – Idaho Rules for Public Drinking Water Systems.
- F. Permissible Deflection at Joints - Water Pipe. Wherever it is necessary to deflect pipe from a straight line, either in the vertical or horizontal plane, to avoid obstructions or where long radius curves are permitted, the amount of deflection allowed shall not exceed the values in the following table:

***MAXIMUM DEFLECTION PERMITTED (18 FOOT LENGTH PIPE)**

Bell and Spigot	Mechanical Joint		Push-on Joint	
Diameter (Inches)	Max. & Min. Deflection Angle (Degrees)	Deflection (Inches)	Max. Deflection Angle (Degrees)	Deflection (Inches)
6	7-07	27	5	19
8	5-21	20	5	19
10	5-21	20	5	19
12	5-21	20	5	19

14	3-35	13 ½	3	11
16	3-35	13 ½	2	11
18	3-00	11	3	11
20	3-00	11	3	11
24	2-23	9	3	11

*The maximum deflection shall be whichever is less, the table or that recommended by pipe manufacturer.

G. Anchorage (water pipe)

1. Limiting Pipe Diameter and Degree of Bend
On all pipelines 6 inches in diameter or larger, securely anchor by suitable thrust blocking all tees, plugs, caps, and bends where unbalanced forces exist, as directed by the Engineer.
2. Thrust Blocking
Provide thrust blocks as required by the Standard Construction Drawings. The concrete mix shall have a compressive strength of not less than 2500 psi. Place blocking between the undisturbed ground and the fitting to be anchored; plastic sheathing to be placed between the concrete and fitting. The bearing surface shall be as shown or as directed by the Engineer. Place the blocking so that the pipe and fitting joints will be accessible to repairs, unless otherwise shown.
3. Metal Tie Rods
Metal tie rods, if specifically required by the Plans or the Engineer, shall be used in conjunction with thrust block. The rods, nuts and washers shall be coated with a rust resistant coating. (A product intended for such use.)

20.6 Pipe Testing and T. V. Inspection

- A. Sanitary Sewer Pipe. The finished sanitary sewer shall be tight against leakage from either the inside or the outside of the pipe.

All wyes, tees, and stubs shall be plugged with flexible jointed caps, or acceptable alternate, securely fastened to withstand the internal test pressure. Such plugs or caps shall be readily removable, and their removal shall provide a socket suitable for making a flexible jointed lateral connection or extension.

Exfiltration testing of the sanitary sewer pipe will be conducted by the Contractor, under the supervision of the Engineer, or his representative, after the sewer line is backfilled. The Contractor shall notify the Engineer at least twenty-four (24) hours in advance of his intention to pressure test the line.

If the test indicates that there is excessive leakage in the line the Contractor shall make repairs, at his own expense, and take such corrective action as may be required by the Engineer.

T.V. inspection of the sanitary and storm sewer pipe will be conducted by the City after the pipe has been backfilled and the manholes are accessible.

1. Exfiltration Test (Using Air)

The Contractor shall plug all openings in the pipe and supply necessary metering equipment and hoses for the test and a blower or compressor with adequate capacity to perform the test.

Immediately following the pipe cleaning, the pipe installation shall be tested with low pressure air. Air shall be slowly supplied to the plugged pipe installation until the internal air pressure reaches four (4) pounds per square inch greater than the average back pressure of any ground water that may submerge the pipe as determined by the Engineer.

At least two minutes shall be allowed for temperature stabilization before proceeding further. The inspector will then accurately determine the time of loss of one (1) psi. This time interval shall not be less than the time interval determined in the following formula.

$$T = 0.0109 D^2L$$

T = time in seconds

D = nominal inside diameter of pipe in inches

L = length of pipe in feet

Failure to meet or exceed the computed time interval for the loss of one (1) psi will be cause for rejection of the sewer pipe.

All repairs necessary to meet these requirements and/or testing will be at the expense of the Contractor.

The maximum length of sewer pipe, for the above tests, shall be the distance between consecutive manholes. Any section of sewer pipe, between any two manholes that does not meet the above requirements, shall be rejected.

2. T.V. Inspection

T.V. inspection, (by the City), of the newly installed sanitary and storm sewer pipes will be required, preferably, before the placement of asphalt on the roadway. It shall be the responsibility of the Contractor to give the Engineer ample advance notice of the time when this inspection is to be performed to assure the timely scheduling of the City's personnel and equipment.

Any and all imperfections (i.e. sags in the pipe invert, joints not fully seated, offset joints, poor manhole entries and exits, etc.) found in the installation of the pipe shall be immediately repaired by the Contractor at no cost to the City. Such repairs shall be as allowed and directed by the City Engineer.

B. Water Pipe

All new watermain shall pass City standard pressure testing and bacteriological testing. Pressure testing, flushing, disinfection, and bacteriological testing shall be performed by the City Water Department. All testing, flushing, and disinfecting materials and labor costs of the City's must be paid by the Contractor. It is the Contractor's responsibility to repair all leaks. The test pressure shall be 1-½ times the working pressure of the pipe per AWWA standards. The bacteriological test criteria shall be as follows: one test showing "absence" of coliform bacteria (<1) and a standard plate count of less than 100. The Contractor shall be responsible for all excavation and back fill necessary to allow the City Water Department access to the new main for the City to furnish, install, and remove all corporation stops necessary to test, chlorinate, and bacteriological sample the new main as required. This includes backfill and trench surfacing once and then returning to the site to re-excavate and re-backfill (including cold mix patching) any corporation stops that remain in the main during disinfecting and sampling procedure. Where connections are made to existing mains the fitting and pipe shall be thoroughly cleaned and spray disinfected with 150(+) ppm chlorine solution immediately prior to their installation and such procedure shall be witnessed by a representative of the City, such operations by the contractor require the City to be notified a minimum of 48 hours in advance. The 48 hour notice is necessary to allow the City crew to notify customers of the water outage. The contractor shall be responsible for coordinating and cooperating with the City Water Department for testing, flushing, and disinfecting activities.

20.7 Plugging Existing Pipe

Where shown in the Plans or where designated by the Engineer, existing pipes shall be plugged on the inlet end for a distance of 2 diameters with commercial concrete. Care shall be used in placing the concrete in the pipe to see that the opening of the pipe is completely filled and thoroughly plugged.

20.8 Basis of Payment

- A. Storm Sewer Pipe. The accepted quantities of storm sewer pipe will be paid for by the unit price per linear foot and shall include all costs incidental to furnishing and laying pipe, as herein described, including furnishing and installing lock bands at each joint and all pipe zone material.
- B. Sanitary Sewer Pipe. The accepted quantities of sanitary sewer pipe will be paid for by the unit price per linear foot and shall include all costs incidental to furnishing and laying pipe. The cost of furnishing all pipe zone material is also included in this item.

- C. Perforated Sub-Surface Drain Pipe. The accepted quantities of subsurface drain pipe will be paid for by the unit price per linear foot and shall include all costs incidental to furnishing and laying pipe, as herein described, including all angle branches, plugs, pipe connectors, and all pipe zone material.
- D. Water Pipe & Ductile Iron Fittings. Payment for main line water pipe, including fittings, thrust blocks and couplings will be made at the unit price per linear foot.
- E. Plugging existing pipes will be measured per each, for each plug installed, for pipe diameters up to and including 36 inches. The concrete for plugging pipes in excess of 36 inches in diameter will be measured by the cubic yard. Computations for corrugated metal pipes will be based on the nominal diameter.

The measurement for payment will be the field measured centerline length of the pipe in place within the limits shown. Laying lengths of valves, fittings and couplings will be included. Payment for fittings, couplings and thrust blocks shall be considered incidental to the cost of the respectively-sized pipe.

Payment for valves will be made at a per each unit price.

ES-21. GATE VALVES AND VALVE BOXES

21.1 Scope

This section covers the work necessary for furnishing and installing the gate valves and valve boxes, complete.

21.2 Materials

- A. Gate Valves (all sizes). Valves shall be ductile iron AMERICAN FLOW CONTROL SERIES 2500 resilient seated valves, or an approved equal, and shall open when the stem is rotated counterclockwise. Unless otherwise shown, valves shall have 2-inch square wrench nut. Valve ends and valve sizes shall be shown. Valves shall conform to ANSI / AWWA C-509.
- B. Valve Boxes. Valve boxes for valves 12" in size and smaller shall be Buffalo 2-piece slip - type, cast iron with 5-1/4-inch shaft, and shall be TYLER 6855 series of appropriate length for the installation, or approved equal. Valve boxes for valves over 12" in size shall be Buffalo 3-piece sliding type cast iron with 5-1/4-inch shaft and shall be TYLER 6855 series of appropriate length for the installation or approved equal. The word "Water" shall be cast into the top of the lids. Extension pieces, if required, shall be the manufacturer's standard type for use with the valve boxes.
- C. Extension stems for valve operators. Where the depth of the opening nut is more than 4.5 feet, standard operating extensions shall be provided to bring the operating nut to a point

3.5 feet below the surface of the ground or pavement. The extension stem shall be constructed of steel (and coated).

21.3 Workmanship

- A. Valves. Before installation, the valves shall be thoroughly cleaned of all foreign material, and shall be inspected for proper operation for both opening and closing, and to verify that the valves seat properly. Valves shall be installed so that the stems are vertical, unless otherwise directed by the Engineer. Jointing shall conform to AWWA C-600 or AWWA C-603, whichever is applicable. Valves shall be installed in accordance with "Standard Details". Joints shall be tested with the adjacent pipeline. If joints leak during the test, valves shall be disconnected and reconnected, and the valve and/or the pipeline retested.

Faces of flanges shall be cleaned thoroughly before flanged joint is assembled. After cleaning, the gasket shall be inserted and the nuts tightened uniformly around the flange. If flanges leak under test, the nuts shall be loosened, the gasket reset or replaced, the nuts retightened, and the valve and/or pipeline retested.

Valves on all service connections and stubouts, 4 inch and larger, shall be mechanical joint and shall be restrained with coated tie rods.

- B. Valve Boxes. Center the valve boxes and set plumb over the wrench nuts of the valves. Set valve boxes so that they do not transmit shock or stress to the valves. Set the valve box covers flush with the surface of the finished pavement as shown, or such other level as may be ordered by the Engineer. Cut extensions to the proper length so that the valve box does not ride on the extension when set at grade.

Backfill shall be the same as specified for the adjacent pipe. Place backfill around the valve boxes and thoroughly compact to a density equal to that specified for the adjacent trench and in such a manner that will not damage or displace the valve box from proper alignment or grade. Misaligned valve boxes shall be excavated, plumbed, and backfilled at the Contractor's expense.

Valve boxes shall be clean prior to final project acceptance.

21.4 Payment

Payment for gate valves furnished and installed, complete, with valve boxes will be by the unit prices per each. Payment for the gate valves and valve boxes shall constitute full compensation for the work as specified under this section.

Payment for gate valves and valve boxes furnished and installed as auxiliary valves on hydrants shall be included in the unit price for hydrants.

ES-22. FIRE HYDRANTS

22.1 Scope

This section covers the work necessary for furnishing and installing the fire hydrants, complete, and the work necessary for the removal of existing hydrants.

22.2 Materials

- A. Low Pressure Hydrants. Hydrants to be Corey pattern with nominal 5-1/4 inch main valve opening with 6 inch bottom connections. Equip with two 2-1/2 inch hose nozzles and one 4-1/2 inch pumper port with a 5 inch Storz hose nozzle. The Storz nozzle shall be an integral part of the fire hydrant and must be furnished by the manufacturer or authorized distributor designated by the manufacturer. Storz adapters will not be accepted. Operating nut shall be equipped with O-ring seals and shall open when turned to the left or counterclockwise. Hydrants shall be of the break-flange or safety-top type. Hydrants shall conform to AWWA C-502, and these Specifications. The depth of bury will generally be 5 feet; and as required to accommodate site conditions. Nozzle threads shall be American National Standard. The hydrant isolation valve shall be attached to the tee at the main and all of the piping shall be restrained from the tee to the hydrant with flanged fittings, retaining glands (mega lugs, etc.) or tie rods as approved by the City Engineer. Hydrants shall be factory painted or may be painted by the contractor using a high quality industrial enamel high intensity red paint above the ground line; spray can paint will not be allowed.
- B. Manufacturer, "Model": Waterous, "Pacer" or Mueller, "Centurion"
- C. Base Block. Solid precast concrete pier block having nominal dimensions of 8-inch thickness by 15-inch square base.
- D. Drain Rock. Washed 1-1/2 inch crushed rock or graded river gravel free of organic matter, sand, loam, clay, and other small particles that will tend to restrict water flow through the gravel.
- E. Concrete for Thrust Blocking. City Standard per ES-11.
- F. Thrust Ties. 3/4 inch diameter steel rods and Duc-Lugs as manufactured by Stellar Corporation, Columbus, Ohio, or approved equal. Rods shall have rust resistant protective coating.
- G. Auxiliary Gate Valve. See City Standard ES-21.

22.3 Workmanship

Construction and installation shall conform to the detail on the Plans and to provisions of Sections 11 and 12 of AWWA C-600, except where otherwise specified.

- A. **Location and Position.** Locate as shown or directed so as to provide complete accessibility and minimize possibility of damage from vehicles or injury to pedestrians. A 3-foot clear space shall be provided and maintained around the circumference of the hydrant or as approved by the Engineer. Where hydrants are subject to impact by a motor vehicle, guard posts other approved means shall be provided as approved by the Engineer. Improperly located hydrants shall be disconnected and relocated, at the Contractor's expense.

When placed behind the curb, set hydrant barrel so that the face of the pumper or hose nozzle cap will be 2 feet from the back of the curb. When set in lawn space between curb and sidewalk, or between sidewalk and property line, let no portion of the hydrant or nozzle cap be within 12 inches of the sidewalk.

Set all hydrants plumb and nozzles parallel with, or at right angles to the curb, with the pumper nozzle facing the curb. Set hydrants so that safety flange is a minimum of 3 inches and maximum of 6 inches above finished ground or sidewalk level to clear bolts and nuts, and as directed.

- B. **Excavation.** Do not carry below sub-base grade. Replace over-excavated areas with gravel, and hand tamp to provide firm foundation.
- C. **Base Block.** Place on firm level sub-base to assure uniform support.
- D. **Installation of Hydrants.** Place hydrant carefully on base block to prevent the base block from breaking. After hydrant is in place and connected to the pipeline, place temporary blocks to maintain the hydrant in a plumb position during subsequent work.
- E. **Drain Rock.** Place gravel around base block and hydrant bottom after hydrant has been blocked in place. Drain gravel shall be not less than 6 inches above hydrant drain opening. Do not connect drainage system to sewer.
- F. **Concrete Thrust Blocking.** Place after hydrant is blocked in its final position and hydrant is joined to pipe. Concrete thrust block shall have a minimum of 4 square feet of bearing area against undisturbed earth. Restraint devices such as flanged fitting, mega hugs, or tie rods may be used in lieu of thrust blocks if approved by the City Engineer.
- G. **Bury Depth and Thrust Ties.** The ground surface around fire hydrants shall be as follows:
1. **Behind the hydrant:** The ground surface shall be a minimum of 4.5 feet above the hydrant base (as measured from 'level') for a distance of at least 10 feet behind the back of the hydrant. The City Engineer may approve a lesser bury requirement if thrust ties consisting of two ¾ inch coated steel tie rods connecting the hydrant to the valve and the main are utilized. All earthen fill behind hydrants for a minimum distance of 10 feet shall be compacted full depth to a minimum of 95% of AASHTO T99 proctor value.
 2. **Sides of the hydrant:** The ground surface shall be a minimum of 4.5 feet above the hydrant base (as measured from 'level') for a distance of at least 6 feet from the

centerline of the hydrant barrel. All earthen fill at the sides of the hydrant for a minimum distance of 6 feet shall be compacted full depth to a minimum of 95% of AASHTO T99 proctor value.

3. Front of the hydrant (towards the main): 4.0 foot minimum cover over the hydrant lateral pipe shall be maintained – as shown on the City of Moscow Standard Construction Drawings.

Payment for existing fire hydrant removal will be made at the unit price stated in the Contractor's bid proposal for each hydrant removed, as covered herein and on the plans.

- H. Existing Fire Hydrant Removal. Remove fire hydrants on existing city mains as shown on the plans and as directed by the Engineer. The hydrants shall remain the property of the City of Moscow and shall be stockpiled, for the City, at a location to be determined. Care shall be taken so as not to damage the hydrants during removal, transporting, or stockpiling.

22.4 Payment

Payment for fire hydrants furnished and installed will be by unit price per each. Payment for fire hydrants shall constitute full compensation for all work specified under this section, and shall include the auxiliary gate valve and connecting pipe from the main line to the valve, and all trench excavation and backfill from the main to the hydrant.

Payment for existing fire hydrant removal will be made at the per each unit price.

ES-23. STORM AND SANITARY CONNECTIONS

23.1 Materials

- A. Sewer house connections, where required on the plans or ordered by the Engineer, shall be a minimum of four (4) inch diameter pipe. The pipe shall conform to Specification ES-8.2, except that it shall be green in color.
- B. Pipe zone material, unless otherwise specified, shall be 3/4 inch minus pea gravel, crushed rock, pea gravel, or clean sand.

23.2 Workmanship

- A. The sewer house connections shall be branched from the main sewer line by a Y branch on new mains; by a ROMAC style "CB" saddle on existing sewer mains. Branches shall be placed where indicated on the plans or as ordered by the Engineer, and shall be installed, at a point, above the centerline of the sanitary sewer main.
- B. ROMAC style "CB" saddles shall be furnished and installed by the City and paid for by the contractor.

- C. Sanitary sewer services shall not be connected to manholes.
- D. Maximum deflection permissible with any one fitting shall not exceed 45 degrees and shall be accomplished with long-radius curves or bends. Short-radius elbows or curves will not be permitted except by approval of the Engineer.
- E. Provide ends of all sewer house connection lines with standard watertight plugs, suitably braced to prevent blowoff during internal hydrostatic or air testing. With all plugs in place, test the sanitary sewer lines in accordance with ES-20.6.
- F. After the line has been tested by the Contractor and accepted by the Engineer, the Contractor shall furnish and install an approved marker, as per City of Moscow Standard Drawings, to identify the ends of the sewer stubs. The marker shall be wrapped with detectable sewer tape.
- G. Conform to applicable portions of Section ES-19 and Section ES-20.2.
- H. Backfill the pipe zone with granular pipe zone material, hand-placed simultaneously on both sides of the pipe for the full trench width and hand-tamped with approved tamping bars supplemented by 'walking in' and slicing with a shovel.
- I. Backfill, above the pipe zone, shall conform to applicable portions of Section ES-19. Do not backfill sewer house connection pipe until inspected and approved by the Engineer.
- J. All denuded areas shall be fertilized, re-sown with grass seed and covered with mulch as specified in Sections ES-27 and ES-28.
- K. Install as per the Standard Construction Drawings.
- L. Separation of storm and sanitary sewer service laterals from water mains and water service lines shall conform to the requirements of Idaho Drinking Water Standards.

23.3 Basis of Payment

- A. Trench excavation and backfill, required under this item, will be paid for as incidental to the price per linear foot of pipe stated in the Contractor's bid proposal. Payment for that item shall constitute full compensation for all work connected with excavation and backfill.
- C. Sewer house connection pipe, in place, will be paid for on the unit price per linear foot for the appropriate size of pipe stated in the Contractor's bid proposal. Payment for this item shall constitute full compensation for all materials and work required to install the sewer house connection pipe, complete, including trench excavation and backfill. The length of the house connection will be based on the total length of pipe installed, including all fittings, measured along the pipe center line.

ES-24. STREET / ALLEY CUT REPAIR

All excavations in to existing City street paving shall be repaired in accordance with the City's adopted STREET / ALLEY CUT REPAIR policy and as per Standard Construction Drawing entitled STREET /ALLEY CUT REPAIR.

ES-25. EROSION AND SEDIMENT CONTROL

All construction in the City involving earthwork shall comply with all of the requirements of City Code Section 7-1-4 pertaining to Erosion and Sediment Control and the City of Moscow EROSION AND SEDIMENT CONTROL STANDARDS adopted by resolution.

The Contractor shall implement appropriate erosion control eliminating sediment transport to City infra-structure and private property. The Contractor shall pay all costs associated with sediment removal from City infra-structure, private property or environmental remediation.

All sediment control devices shall be installed prior to any ground disturbing activity.

ES-26. STORMWATER RUNOFF CONTROL

All construction and development activity in the City shall comply with all of the requirements of City Code Section 5-15 STORMWATER RUNOFF CONTROL and including Moscow STORMWATER RUNOFF CONTROL STANDARDS adopted by resolution.

ES-27. IMPORTED TOPSOIL

27.1 General

Imported topsoil shall possess friability and a high degree of fertility. It shall be free of clods, roots, gravel and other inert material. It shall be free of quack grass, horsetail and other noxious vegetation and seed. Should such regenerative material be present in the soil, it shall be the responsibility of the Contractor to remove all such growth, both surface and root, which may appear in the planting within one year following acceptance of the job at his own expense and in a manner satisfactory to the Owner.

27.2 Payment

Payment for furnishing and placing imported topsoil shall be paid according to the unit price bid on the Contractor's bid proposal form or as noted as set forth in the Contract documents.

ES-28. SEEDING

28.1 Seed

Seed furnished shall be labeled; true as to variety; noxious weed-free; and meet all purity, germination specifications, and standards of the Federal Seed Act and Idaho State Seed Laws. The variety shall be as required to best satisfy the particular application - as approved by the City Engineer.

28.2 Application

Seed all cut and fill slopes and all other denuded areas where any earthwork has occurred. Seeding shall be done in accordance with Section 621 of the latest edition of the Idaho Transportation Department Standard Specifications for Highway Construction, including all amendments thereto.

28.3 Fertilizer

Fertilizer shall be commercial grade and used in the seeding application in accordance with Section 621 of the latest edition of the Idaho Transportation Department Standard Specifications for Highway Construction, including all amendments thereto.

28.4 Mulch

Mulch shall be used in the seeding operation and shall consist of furnishing and placing mulch in accordance with Section 621 of the latest edition of the Idaho Transportation Department Standard Specifications for Highway Construction, including all amendments thereto.

28.5 Seedbed Preparation

Preparing the surface area to be seeded is part of the seeding operation and shall be done in accordance with Section 621 of the latest edition of the Idaho Transportation Department Standard Specifications for Highway Construction, including all amendments thereto.

28.6 Payment

Seeding will be paid for as allowed and described in the project specific contract documents; which may include, but not limited to, the following methods of payment: unit price per unit area; lump sum amount; incidental to other item unit prices; included in a project lump sum amount.

ES-29. TREE TRIMMING

Any tree, within the construction area, whose branches, trunk or roots must be removed in order to complete the work, should be trimmed, as directed by the Engineer. All costs for such trimming shall be noted as set forth in the Contract documents. **ALL TREE TRIMMING SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE COMMUNITY FORESTRY ORDINANCE.**

ES-30. INSPECTION

Work performed under this contract shall be inspected at various stages of progress. These inspections include, but shall not be limited to the following:

- A. After storm sewer lines, sanitary sewer lines, perforated drain lines and their structures are in place, but before any backfilling is started.
- B. Prior to and during the placement of all concrete. This inspection shall be requested when the forms are in place and ready to receive the concrete.
- C. After the street has been excavated and compacted, but before any crushed rock is placed.
- D. During the application and processing of the crushed rock base and after the crushed rock base has been placed and compacted, but before the prime coat is applied.
- E. After valve boxes, catch basins, manholes and monuments have been adjusted to the proper elevation.
- F. Prior to and during the placement of prime coat and tack coat.
- G. Prior to and during the placement of all superpave hot mix asphalt pavement.
- H. At the completion of the job, after all cleanup, backfilling and all other work is done and job is ready for final acceptance.

It shall be the responsibility of the Contractor to notify the Engineer, or his representative, when the various phases of the project are ready for inspection.

Request for inspection may be verbal but shall be given in sufficient time to allow the Engineer, or his representative, to arrange to be present as required. Failure to notify the Engineer, or his representative, of the inspections shall be sufficient ground to reject the uninspected work and cause its immediate removal.

All discrepancies, indicated by the inspector, shall be corrected by the Contractor and re-inspected before the next phase of operation is started. No claim shall be made for delays caused by correction of work found unacceptable to the inspector.

ES-31. WORKMANSHIP AND CLEAN UP

It is the intent and purpose of these Specifications and Plans to obtain good workmanship throughout with the completed work complying with the said Specifications and Plans and in full working order upon completion. Work will not be accepted until this result is obtained.

All debris or rubbish caused by the contractor's operations shall be removed and the areas occupied during such operation shall be left in a neat and presentable condition.

Any damage to private property shall be repaired, replaced in kind, as approved by the City Engineer or the Owner compensated as required by the General Specifications.

Upon the satisfactory completion of all work embraced in the contract and specifications, including the cleanup, together with full compliance with the requirements of the General Specifications the Engineer will, within fifteen (15) days after such completion and compliance, issue a certificate of completion to the Owner with two (2) copies to the Contractor.

ES-32. MOBILIZATION

This item shall consist of preparatory work and operations, including but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of offices, buildings and other facilities necessary for the work on the project; for premiums on bond and insurance for the project; for all other work and operations which must be performed or costs incurred before beginning production work on the various contract items. Mobilization cost for subcontracted work shall be considered to be included in the prices bid by the prime Contractor.

The amounts to be allowed for mobilization in the partial payment to be made under the contract will be made as follows:

1. Sixty percent of the amount bid for mobilization will be paid on the first monthly progress estimate.
2. Forty percent of the amount bid for mobilization will be paid on the second monthly estimate providing that the contractor has initiated productive work on the project.

Mobilization will be measured and paid for by the Lump Sum as shown on the Contractor's Proposal

SPECIAL PROVISIONS

SP-1. ASPHALT SLURRY SEAL COAT (TYPE II)

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Products and procedures for mixing and spreading a properly proportioned mixture of fine graded aggregate, mineral filler, emulsified asphalt, and water.
- B. Products and procedures for a cured slurry with a homogeneous appearance, firm surface adhesion, and skid resistant texture.

1.2 REFERENCES

- A. AASHTO M 17: Standard Specification for Mineral Filler for Bituminous Paving Mixtures
- B. AASHTO M 29: Standard Specification for Fine Aggregate for Bituminous Paving Mixtures
- C. AASHTO M 208: Standard Specification for Cationic Emulsified Asphalt
- D. AASHTO T 11: Material Finer than 75 μm (No. 200) Sieve in Mineral Aggregate
- E. AASHTO T 27: Sieve Analysis of Fine and Coarse Aggregates
- F. AASHTO T 96: Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- G. AASHTO T 104: Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate
- H. AASHTO T 176: Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test
- I. AASHTO T 278: Surface Frictional Properties Using the British Pendulum Tester
- J. AASHTO T 279: Accelerated Polishing of Aggregates Using the British Wheel
- K. AASHTO T40:
- L. ISSA A105 Guidelines (Rev 2010)

1.3 SUBMITTALS

- A. Submit Mix Design and test results to the Engineer 10 days prior to beginning construction.
 - 1. Meet the requirements of this Section, article 2.7
 - 2. Include target gradation for combined aggregate and mineral filler.
 - 3. The Mix Design including ISSA test results shall be signed and sealed by a licensed Professional Engineer in the state where it was performed.
 - 4. Prior to development of the Mix Design, the Contractor shall meet with the City Engineer or his/her authorized representative to discuss time allowance for returning traffic to the slurry sealed surface.
- B. Provide test reports for aggregate.
 - 1. Meet the requirements of this Section, article 2.2
- C. Provide a Manufacturer's Certificate of Compliance for Mineral Filler.
- D. Provide verification that the emulsified asphalt supplier adheres to Section 2.1 by submitting a Certificate of Analysis/Compliance to indicate that the emulsion meets the specifications. Include certification that minimum 50% AASHTO T 301 Elastic Recovery is met.
- E. Provide information describing 10 completed slurry seal roadway projects each consisting of a minimum of two lane miles in length. At a minimum the submittal shall contain the location, project limits, length of time to complete the project, and references.

PART 2 MATERIALS

2.1 EMULSIFIED ASPHALT

- A. Use a polymer modified emulsion CQS-1HP, meeting CQS-1H specifications identified in AASHTO M 208 and ISSAA 105, using solid synthetic rubber or latex material.
 - 1. Combine the polymer modifier with the base asphalt or asphalt emulsion at a minimum rate of 3 percent solids by weight of asphalt, prior to loading at the manufacturing plant.
 - 2. Use a polymer modified emulsion compatible with the mix design developed for the conventional slurry seal.
- B. Verify that the shipment is the same as the mix design.

2.2 AGGREGATE

- A. Aggregate shall consist of 100 percent (100%) crushed stone, free of organic material, clay, balls, or other deleterious materials. Refer to AASHTO M 29.
- B. Use an aggregate blend with a sand equivalent of 45 or more. Refer to AASHTO T 176.
- C. Meet a minimum polishing value of 31. Refer to AASHTO T 278 and AASHTO T 279.
- D. Use aggregate with 35 percent or less loss by abrasion. Refer to AASHTO T 96.
- E. Meet 15 percent soundness maximum using Na₂SO₄. Refer to AASHTO T 104.
- F. Use material from a commercial (non-ITD controlled) source that is qualified for use on Idaho Transportation Dept. projects. A list of qualified commercial materials sources is available from ITD District 2 in Lewiston.

2.3 MINERAL FILLER

- A. Use Portland cement or hydrated lime. Refer to AASHTO M 17.

2.4 COMBINED AGGREGATE AND MINERAL FILLER

- A. Use a job mix or target gradation within the gradation band. Base the mix design on this gradation. The percent passing each sieve after the target gradation has been submitted will not vary by more than the stockpile tolerance and still remain within the gradation band. Refer to AASHTO T 11, AASHTO T 27, and Table 1. Table 1

Gradation		
Sieve Size	Gradation Band (% Passing)	Stockpile Tolerance from the Mix Design Gradation
3/8 inch	100	
No. 4	90-100	+/- 5%
No. 8	65-90	+/- 5%
No. 16	45-70	+/- 5%
No. 30	30-50	+/- 5%
No. 50	18-30	+/- 4%
No. 100	10-21	+/- 3%
No. 200	5-15	+/- 2%

The gradation of the aggregate stockpile shall not vary by more than the stockpile tolerance from the mix design gradation while also remaining within the specification gradation band. The percentage of aggregate passing any two successive sieves shall not change from one end of the specified range to the other end.

The aggregate will be accepted at the job location or stockpile based on five gradation and Sand Equivalent tests sampled according to AASHTO T 2 (ASTM D 75). The five test average will represent a maximum quantity of 750 tons or fraction thereof. If the average of the five tests is within the stockpile tolerance from the mix design gradation, the material will be accepted. If the average of those test results is out of specification or tolerance, the contractor will be given the choice to either remove the materials or blend additional aggregate with the stockpile materials to bring it into compliance. Material used in blending must meet the required aggregate quality test specifications in Section 2.2 before blending, and must be blended in a manner to produce a consistent gradation. Aggregate blending may require a new mix design at the contractors' expense.

Screening shall be required at the stockpile if there is any evidence of oversized materials in the mix.

2.5 WATER

- A. Potable and free from harmful salts and contaminants. If the quality of the water is in question, it should be submitted to the laboratory with the other raw materials for the mix design.

2.6 ADDITIVES

- A. Additives may be used to accelerate the break-set of the slurry seal.
 - 1. Determine the initial additive quantities by the mix design for the slurry mix or individual materials.
 - 2. Appropriate additives and their applicable use range shall be approved by the laboratory as part of the mix design.

2.7 SLURRY SEAL MIX DESIGN

- A. Before work begins, the contractor shall submit a signed mix design covering the specific materials to be used on the project, and meeting the specifications in Table 2. This design will be performed by an approved laboratory which has documented experience in designing Emulsified Asphalt Slurry Seal Surfacing. After the mix design has been approved, no material substitution will be permitted unless approved by the Laboratory and the Engineer.

Use the same materials and aggregate gradation to be used on the project.

The laboratory shall also report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect) according to AASHTO T19 (ASTM

C29). The report must clearly show the proportions of aggregate, mineral filler, and emulsified asphalt based on the dry weight of the aggregate.

The percentages of each individual material required shall be shown in the laboratory report. Based on field conditions, adjustments within the specific ranges of the mix design may be required.

Table 2

TESTS		
ISSA TEST NO.	DESCRIPTION	SPECIFICATION
ISSA TB 106	Slurry Seal Consistency	2cm Minimum; 3cm Max.
ISSA TB-139 (For quick-traffic systems)	Wet Cohesion 30 Minutes Minimum (Set)	12 kg-cm Minimum
	Wet Cohesion 60 Minutes Minimum	20 kg-cm Minimum
ISSA TB 109 (For heavy-traffic areas only)	Excess Asphalt by LWT Sand Abrasion	50 g/ft ² Maximum (538 g/m ² Maximum)
ISSA TB-114	Wet Stripping	Pass (90% Minimum)
ISSA TB-100	Wet-Track Abrasion Loss, One-hour Soak	75 g/ft ² (807 g/m ²)
ISSA TB-113	Mix Time**	Controllable to 180 Seconds Minimum

** Perform the mixing test and set-time test at the highest temperatures expected during construction.

2.8 COMPONENT MATERIALS

A. The component materials shall be designed within the following limits:

COMPONENT MATERIALS	SUGGESTED LIMITS
Residual Asphalt	7.5 - 13.5%
Mineral Filler	0.0 – 3.0% (Based on dry weight of aggregate)
Additives	As needed
Water	As required to produce proper consistency

2.9 MIX TOLERANCES

A. Tolerances for the slurry seal mixture are as follows:

1. After the residual asphalt content is determined, a variation of $\pm 1\%$ by weight of dry aggregate will be permitted.
2. The slurry consistency, as determined according to ISSA TB No. 106, shall not vary more than $\pm 0.2''$ from the job mix formula after field adjustments.

3. The rate of application shall not vary more than $\pm 2 \text{ lb/yd}^2$ when the surface texture does not vary significantly.

2.10 EQUIPMENT

- A. Use only a machine designed and manufactured specifically for blending, mixing, and placing slurry seal.
 1. Mix the material in a self-propelled, slurry seal mixing machine of either truck-mounted or continuous-run design.
 - a) Continuous-run machines: equipped to self-load materials while continuing to lay slurry seal
 - b) Either type machine: accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, control setting additive, and water to a revolving mixer and to discharge the mixed product on a continuous-flow basis.
 2. Maintain sufficient storage capacity within the machine for aggregate, emulsified asphalt, mineral filler, control additive and water to maintain an adequate supply to the proportioning controls.
- B. Calibrate each mixing unit in the presence of the Engineer before a machine is used on a project.

PART 3 EXECUTION

3.1 NOTIFICATION AND TRAFFIC CONTROL

- A. Notification

Homeowners and businesses affected by the paving shall be notified at least one day in advance of the surfacing. Should work not occur on the specified day, a new notification will be distributed. The notification shall be posted in written form, stating the time and date that the surfacing will take place. If necessary, signage alerting traffic to the intended project should be posted.

Contractor shall place a cone (multiple on commercial driveways) in the middle of each driveway when slurry seal is not to be driven on. Cone(s) shall be removed by Contractor once street is re-opened to traffic.
- B. Traffic Control

Traffic Control shall meet the requirements of Technical Specification TS-5. Traffic control devices shall conform to the requirements of the current Manual on Uniform Traffic Control Devices. Opening to traffic does not constitute acceptance of the work. A Traffic Control Plan for each location where work is to be performed shall be submitted to the Engineer at least 2 days in advance.

3.2 WEATHER LIMITATIONS

- A. Do not apply slurry seal during rain, when road surface moisture is present, or during other adverse weather conditions.
- B. Do not apply slurry seal if either the pavement or air temperature is below 50 degree F and falling. Slurry seal may be applied when both the pavement and air temperatures are above 45 degrees F and rising.
- C. Do not apply slurry seal when the temperature is projected below 33 degrees F within 24 hours of placing slurry seal.
- D. Cease slurry seal operations when weather or other conditions prolong opening road surface to traffic beyond two hours.
- E. Keep traffic off roadway surface until the slurry seal has cured.

3.3 STOCKPILE

- A. Construct stockpile of slurry seal aggregate.
 - 1. Engineer approves stockpile a minimum of one and a maximum of seven days prior to use.
- B. Notify the Engineer a minimum of seven calendar days prior to slurry seal placement in order for the initial stockpiles to be sampled and tested for acceptance.
- C. Obtain the Engineer's written acceptance of the stockpile prior to use in slurry seal.
- D. Remove material not meeting specifications from the stockpile area.
- E. The Laboratory will retest corrected material for acceptance.

3.4 PREPARATION

- A. Clean the surface of all dirt, sand, dust, oil, and other objectionable material immediately prior to applying the slurry.
- B. Allow cracks to dry thoroughly before applying slurry seal when using water to clean the surface.
- C. Protect manholes, valve boxes, drop inlets and other service utility entrances prior to surfacing.

3.5 APPLICATION

- A. Pre-wet the entire surface by fogging ahead of the slurry box. Do not over apply, causing free water to sit on the pavement in front of the slurry box.
- B. Carry a sufficient amount of slurry in all parts of the spreader at all times so that full width and complete coverage is obtained with no streaks or narrow spots. Avoid overloading the spreader.
- C. Apply slurry mixture of proper consistency at an average rate of 14 to 18 lbs./yd².
- D. Joints
No excess buildup, uncovered areas, or unsightly appearance shall be permitted on longitudinal or transverse joints. The contractor shall provide suitable equipment to produce a minimum number of longitudinal joints throughout the project. Longitudinal joints shall not be constructed in a wheel path. Less than full box width passes will be used only as required. If less than full box width passes are used, they shall not be the last pass of any paved area. A maximum of 6" shall be allowed for overlap of longitudinal joints. Correct bare or missed spot locations immediately with handwork.
- E. Mixture
The slurry seal shall possess sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. It shall be free of excess liquids which can create segregation of the aggregate. Spraying of additional water into the spreader box will not be permitted.
- F. Do not add additional water for any reason, once the mixture has been placed onto the road surface.
- G. Remove and replace the applied slurry if any of following occurs:
 - 1. Lumping, balling, or unmixed aggregates.
 - 2. Separation of the coarse aggregate from the emulsion and fines.
 - 3. Settling of the coarse aggregate to the bottom of the mix.
 - 4. Excessive breaking of emulsion inside the spreader box.
 - 5. Streaking caused by oversized aggregate.

3.6 FINISHING DETAILS

- A. Place slurry seal adjacent to concrete pavements or concrete curb and gutter with a straight longitudinal edge. Do not allow over-lap on these areas.
- B. Maintain straight lines at all locations.
- C. Place slurry seal at side streets and intersections out to curb returns.

- D. Use hand squeegees to spread slurry in areas that cannot be reached with slurry seal machine.
 - 1. Lightly dampen areas prior to mix placement.
 - 2. Provide complete and uniform coverage.
 - 3. Avoid unsightly appearance from hand work.
 - 4. Use the same type of finish in hand worked areas as that applied by the spreader box.
 - 5. Complete handwork during the machine application process.
- E. Use construction paper or comparable products so all beginning and ending joint lines from each construction pass are straight.
- F. Adequate means shall be provided to protect the slurry-seal from damage by traffic until the mixture has cured sufficiently so as to not be damaged by the tires of vehicles. Any damage done by traffic to the slurry-seal shall be repaired by the Contractor at his/her expense.
- G. All utility access areas, gutters, and portions of intersections not receiving the treatment shall have the slurry seal removed as directed by the engineer. The contractor shall remove any debris associated with the performance of the work on a daily basis.

3.7 BASIS OF PAYMENT

Payment for accepted work will be made as follows:

<u>Pav Item</u>	<u>Pav Unit</u>
Asphalt Slurry Seal Coat Type II.....	S.Y.

Bid unit square yard price shall include all labor, materials, equipment, bonds, warranties, taxes, insurances, mobilization, clean up, traffic control, permits, materials testing, mix design, shop drawings, submittals, freight, equipment calibration, utility protection, brooming and watering, repair of tree damage, removal of spatter or mar, collateral damage, and all other incidental costs necessary to construct the improvements described in the Specifications and Contract Documents.

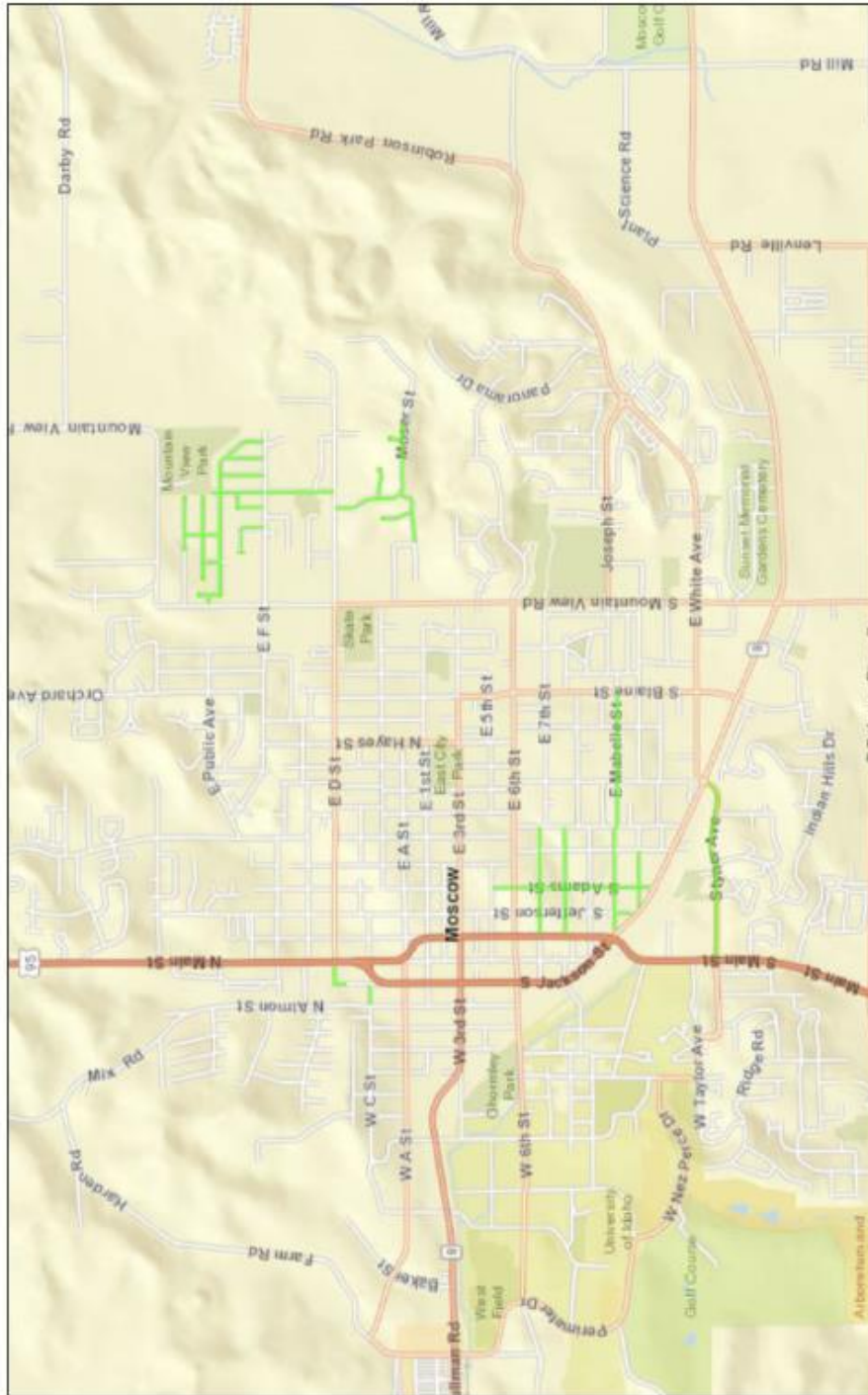
APPENDIX I

PROJECT DRAWINGS

SLURRY SEAL – 2021

PAGE 101 OF 105

Slurry Seal 2021: Vicinity Map

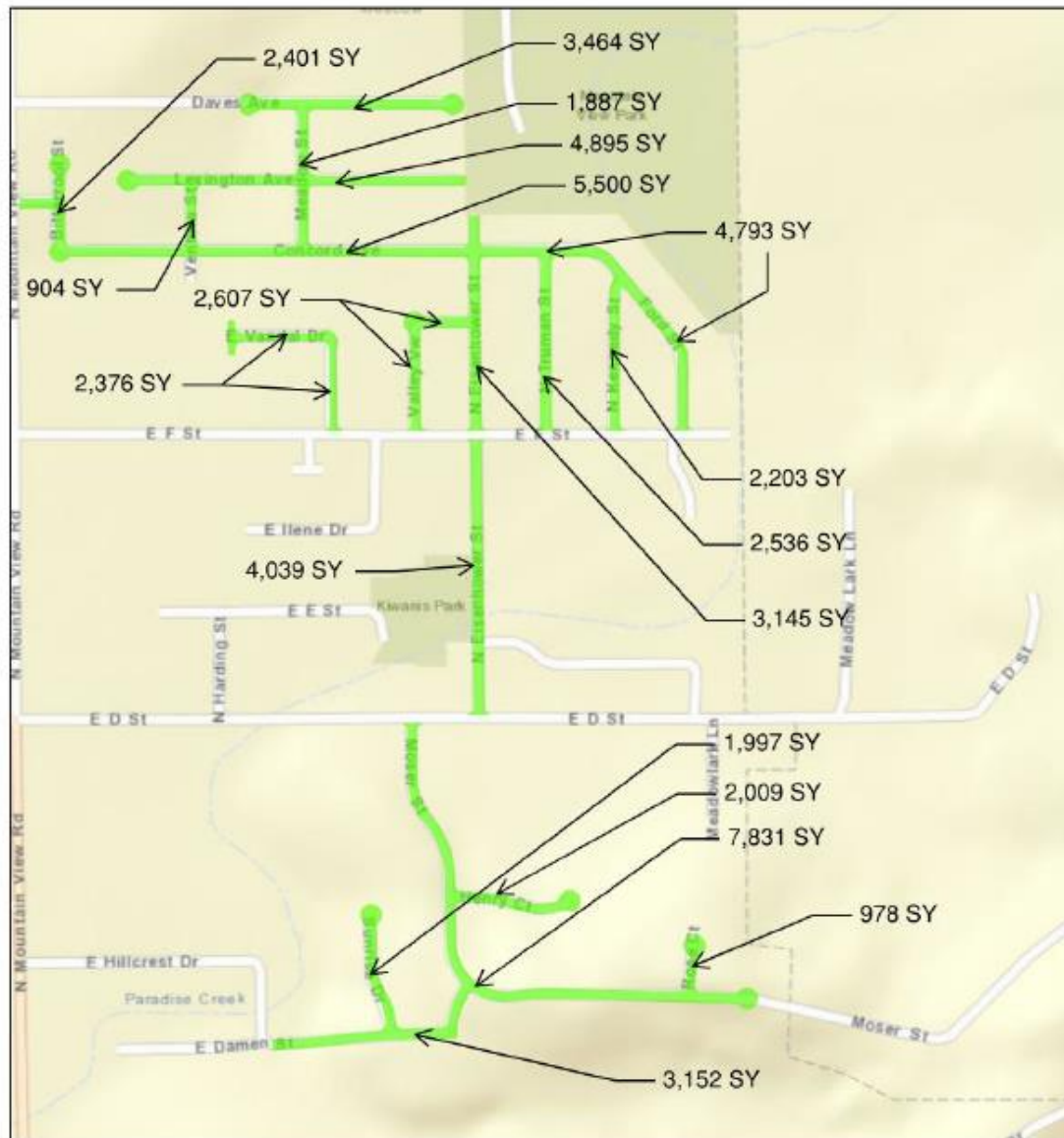


March 15, 2021

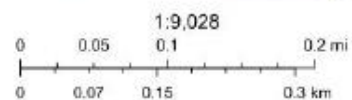
SLURRY SEAL - 2021

PAGE 102 OF 105

Area 1



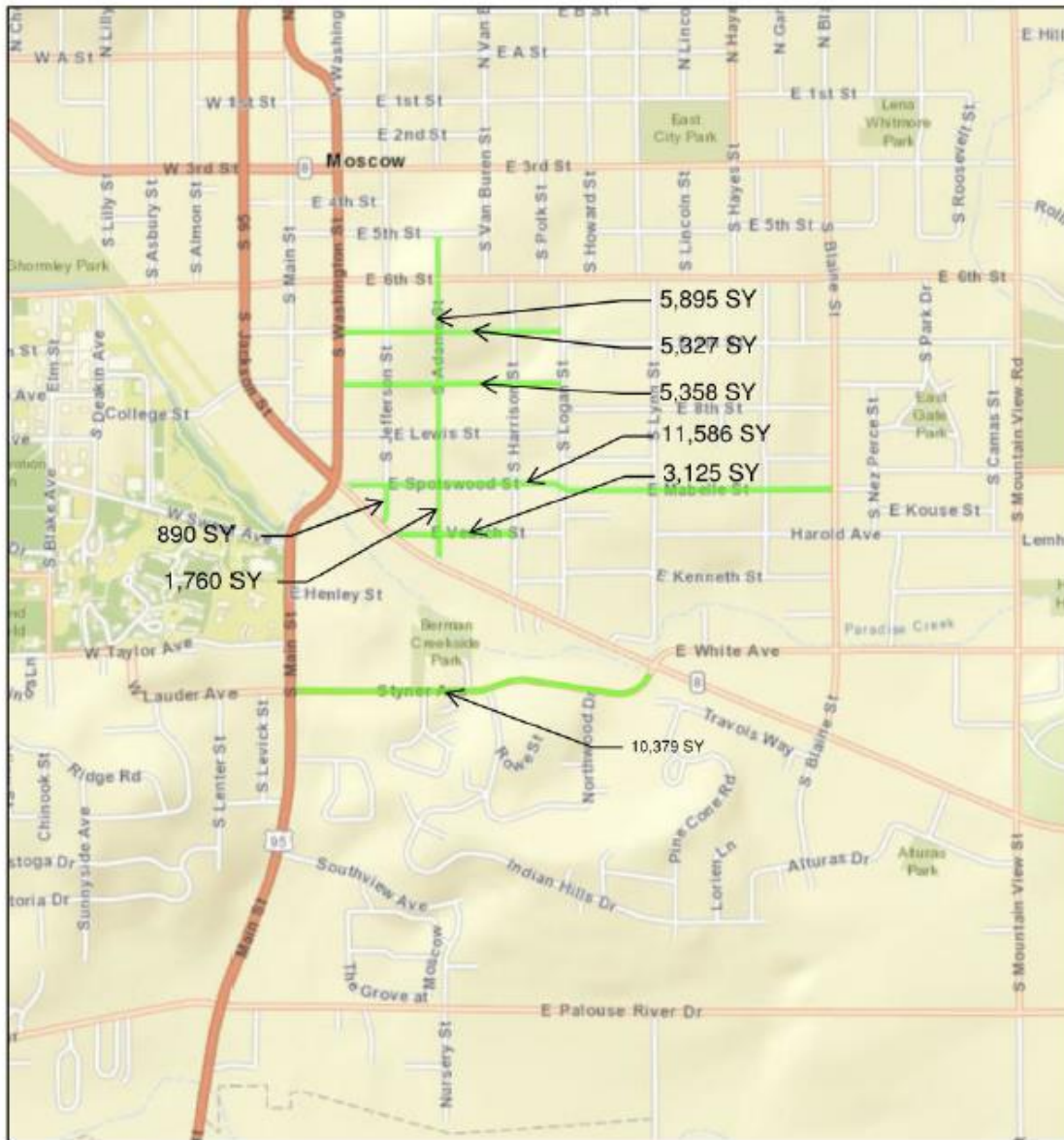
March 15, 2021



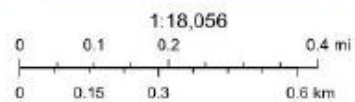
SLURRY SEAL - 2021

PAGE 103 OF 105

Area 2



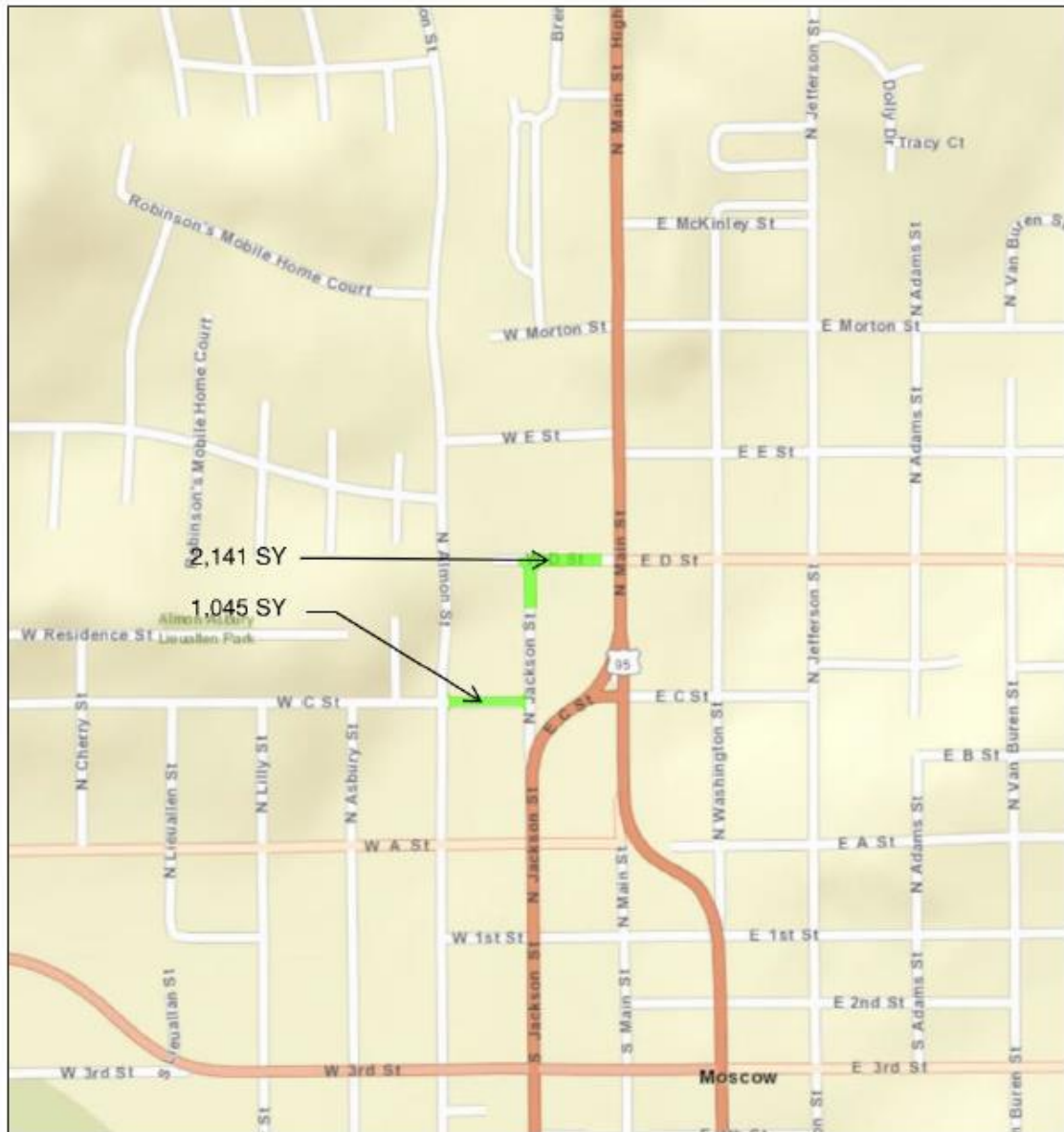
March 15, 2021



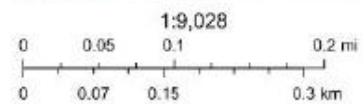
SLURRY SEAL - 2021

PAGE 104 OF 105

Area 3



March 15, 2021



SLURRY SEAL - 2021

PAGE 105 OF 105

Attachment B

April 12, 2021

ADDENDUM NO. 1

City of Moscow Project: **SLURRY SEAL -2021**

Project No. **111-021**

The following changes, additions, clarifications, and/or deletions are hereby made a part of Moscow's project **SLURRY SEAL - 2021**, as fully and completely as if the same were entirely set forth in the Plans, Specifications, and Contract Documents. This addendum, as set forth herein, shall become an integral part of any contract entered into by and between the Owner and the Contractor.

The patching and crack sealing that was necessary for the slurry seal project has been completed ahead of schedule. This has allowed the City of Moscow to widen the construction window and increase the area to be sealed as part of the **SLURRY SEAL - 2021** project.

1. **INVITATION TO BID:** Replace Page 1 of 101 with attached Page 1 of 105 titled "INVITATION TO BID" showing the additional area "Area 4" with a total of 11,844 SY.
2. **BID SCHEDULE:** Replace Page 4 of 101 with attached Page 4 of 105 titled "BID SCHEDULE" showing the new total quantity of 116,067 SY.
3. **IB-13 PERFORMANCE PERIOD:** Timeline for substantial completion will be extended. Please replace the original early start date of "July 5, 2021" with "June 14, 2021"
4. **APPENDIX I: PROJECT DRAWINGS:** Add the attached Page 106 of 105 titled "Area 4" to APPENDIX I after page 105 of 105

Receipt of **ADDENDUM NO. 1** must be acknowledged. This document must be signed and attached to the bid to acknowledge its receipt:

Firm Name of Bidder

Signature of Bidder

Title

Date

INVITATION TO BID

The City of Moscow, Idaho is accepting **electronic** bids to be submitted to the Community Planning and Design Building at 221 East Second Street, Moscow, Idaho 83843, and clearly marked "**Bid Enclosed - Slurry Seal - 2021**" until 3:00 p.m., prevailing local time, **Friday, April 16, 2021**, for the following project:

SLURRY SEAL - 2021

The project consists of applying an Asphalt Slurry Seal Coat (Type II) at the following locations:

Area 1	Concord, Eisenhower, and Moser	56,717 SY
Area 2	Adams, Spotswood, and Styner	44,320 SY
Area 3	Jackson and D Street	3,186 SY
Area 4	Lamy, Highland, and Kirk Drive	11,844 SY

Any objections to the contents or terms of the Specifications shall be raised one (1) day prior to bid opening or it shall be deemed to have been waived.

Prevailing wages are not required on this project.

Proposal Guarantee (Bid bond) is not required with bid submittal.

Contractor shall furnish a sealed, written and signed bid (on Bid Proposal form) to perform this work to the Capital Projects Administrative Assistant, Kendra Ewing, **bids must be submitted by e-mail to kewing@ci.moscow.id.us** by 3:00 p.m., Prevailing Local Time, Friday, April 16, 2020. All responders will be notified of results by e-mail by Tuesday, April 20, 2021. **Contact Kendra Ewing at kewing@ci.moscow.id.us with any questions.**

The City reserves the right to reject any and all Bid Proposals, to waive any formality in the Bidding Contract Documents and to make selection to the lowest responsive, responsible and qualified Bidder as it may best serve the interest of the Owner.

BID SCHEDULE

SLURRY SEAL - 2021

<u>Item No.</u>	<u>Description</u>	<u>Quantity & Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
1.	Asphalt Slurry Seal Coat Type II	116,067 SY	\$ _____	\$ _____
			BID TOTAL	\$ _____

Firm Name of Bidder

Signature of Bidder

Official Title

Bidders Mailing Address

Public Works License No.

State of Incorporation if Incorporated

SEAL (if incorporated)

Dated at _____

This ____ day of _____, 2021

SLURRY SEAL - 2021

PAGE 4 OF 105

Area 4



SLURRY SEAL – 2021

PAGE 106 OF 105

Attachment C

BID SCHEDULE

SLURRY SEAL - 2021

<u>Item No.</u>	<u>Description</u>	<u>Quantity & Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
1.	Asphalt Slurry Seat Coat Type II	104,223 SY	\$	\$
SEE ADDENDUM #1				
BID TOTAL				\$

Blackline Inc.

Firm Name of Bidder

Signature of Bidder

President

Official Title

13023 NE Hwy 99, Ste #7 PMB 196 Vancouver WA 98686

Bidders Mailing Address

009681-B-4

Public Works License No.

Washington

State of Incorporation if Incorporated

SEAL (if incorporated)

Dated at WOODLAND, WA

This 16th day of APRIL, 2021

SLURRY SEAL - 2021

PAGE 4 OF 101

April 12, 2021

ADDENDUM NO. 1

City of Moscow Project: **SLURRY SEAL -2021**

Project No. **111-021**

The following changes, additions, clarifications, and/or deletions are hereby made a part of Moscow's project **SLURRY SEAL - 2021**, as fully and completely as if the same were entirely set forth in the Plans, Specifications, and Contract Documents. This addendum, as set forth herein, shall become an integral part of any contract entered into by and between the Owner and the Contractor.

The patching and crack sealing that was necessary for the slurry seal project has been completed ahead of schedule. This has allowed the City of Moscow to widen the construction window and increase the area to be sealed as part of the **SLURRY SEAL - 2021** project.

1. INVITATION TO BID: Replace Page 1 of 101 with attached Page 1 of 105 titled "INVITATION TO BID" showing the additional area "Area 4" with a total of 11,844 SY.
2. BID SCHEDULE: Replace Page 4 of 101 with attached Page 4 of 105 titled "BID SCHEDULE" showing the new total quantity of 116,067 SY.
3. IB-13 PERFORMANCE PERIOD: Timeline for substantial completion will be extended. Please replace the original early start date of "**July 5, 2021**" with "**June 14, 2021**".
4. APPENDIX I: PROJECT DRAWINGS: Add the attached Page 106 of 105 titled "Area 4" to APPENDIX I after page 105 of 105

Receipt of **ADDENDUM NO. 1** must be acknowledged. This document must be signed and attached to the bid to acknowledge its receipt:

BLACKLINE, INC.

Firm Name of Bidder

Signature of Bidder

PRESIDENT

Title

APRIL 16, 2021

Date

INVITATION TO BID

The City of Moscow, Idaho is accepting **electronic** bids to be submitted to the Community Planning and Design Building at 221 East Second Street, Moscow, Idaho 83843, and clearly marked "**Bid Enclosed - Slurry Seal - 2021**" until **3:00 p.m.**, prevailing local time, **Friday, April 16, 2021**, for the following project:

SLURRY SEAL - 2021

The project consists of applying an Asphalt Slurry Seal Coat (Type II) at the following locations:

Area 1	Concord, Eisenhower, and Moser	56,717 SY
Area 2	Adams, Spotswood, and Styner	44,320 SY
Area 3	Jackson and D Street	3,186 SY
Area 4	Lanny, Highland, and Kirk Drive	11,844 SY

Any objections to the contents or terms of the Specifications shall be raised one (1) day prior to bid opening or it shall be deemed to have been waived.

Prevailing wages are not required on this project.

Proposal Guarantee (Bid bond) is not required with bid submittal.

Contractor shall furnish a sealed, written and signed bid (on Bid Proposal form) to perform this work to the Capital Projects Administrative Assistant, Kendra Ewing, **bids must be submitted by e-mail** to kewing@ci.moscow.id.us by 3:00 p.m., Prevailing Local Time, Friday, April 16, 2020. All responders will be notified of results by e-mail by Tuesday, April 20, 2021. **Contact Kendra Ewing at kewing@ci.moscow.id.us with any questions.**

The City reserves the right to reject any and all Bid Proposals, to waive any formality in the Bidding Contract Documents and to make selection to the lowest responsive, responsible and qualified Bidder as it may best serve the interest of the Owner.

BID SCHEDULE

SLURRY SEAL - 2021

<u>Item No.</u>	<u>Description</u>	<u>Quantity & Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
1.	Asphalt Slurry Seal Coat Type II	116,067 SY	\$ 1.79	\$ 207,759.93
BID TOTAL				<u>\$ 207,759.93</u>

BLACKLINE, INC.

Firm Name of Bidder

Signature of Bidder

PRESIDENT

Official Title

PMB 196

13023 NE HWY 99, SUITE 7

VANCOUVER, WA 98686

Bidders Mailing Address

009681 - B - 4

Public Works License No.

WASHINGTON

State of Incorporation if Incorporated

SEAL (if incorporated)

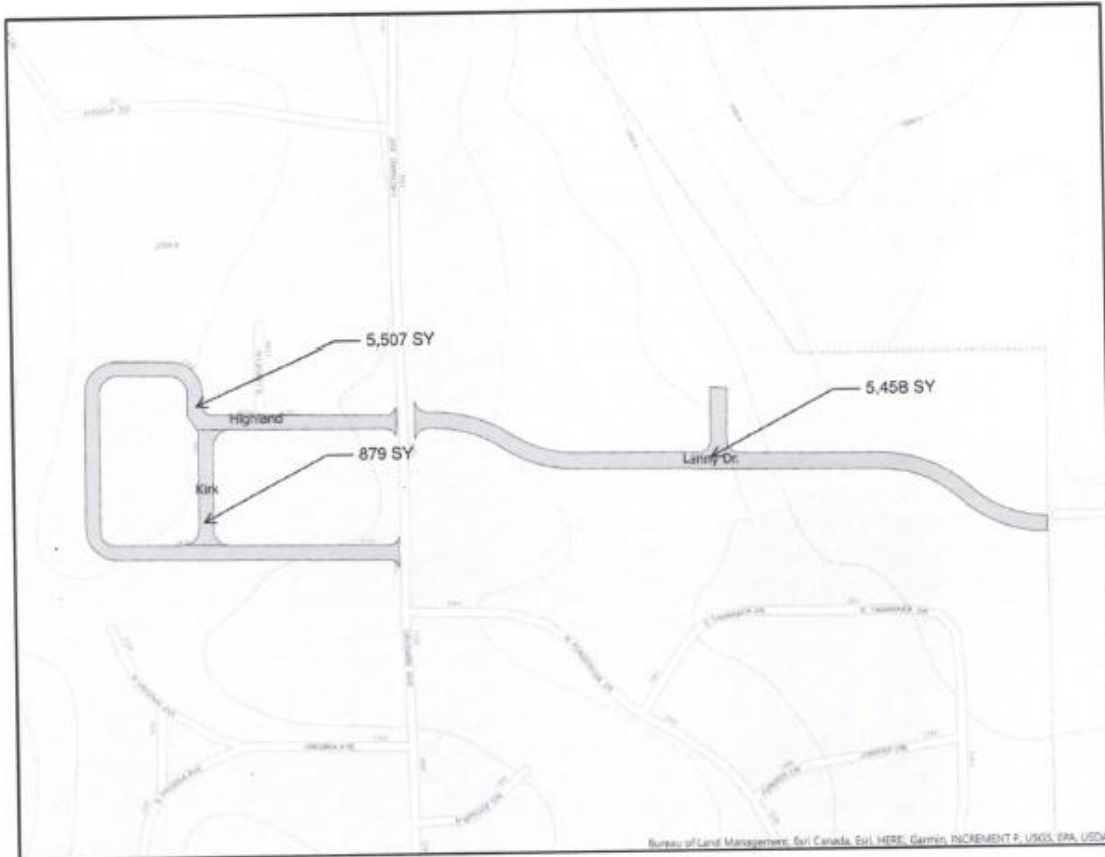
Dated at WOODLAND, WA

This 16th day of APRIL, 2021

SLURRY SEAL - 2021

PAGE 4 OF 105

Area 4



SLURRY SEAL – 2021

PAGE 106 OF 105

COMMITTEE STAFF REPORT

DATE: Monday, April 26, 2021



RESPONSIBLE STAFF

Nate Suhr, Senior Engineering Technician

ADDITIONAL PRESENTER(S)

OTHER RESOURCES

AGENDA ITEM TITLE

Paradise Pathway Lighting Project - 2021 Bid Results and Contract Award (ACTION ITEM) - Nate Suhr

DESCRIPTION

The City published an advertisement for bids on April 2nd, 2021 for the Paradise Pathway Lighting Project. The bid for the project includes the installing an electrical service connection, eighteen (18) lighted bollards, and twenty-nine (29) overhead lighting fixtures along the Paradise Pathway between Main Street and Styner Avenue located in Moscow, Idaho. Work also consists of the trenching and installation of approximately two thousand eight hundred and fifty (2850) feet of conduit, accompanying electrical wire, and installing seven (7) junction boxes to power the lighting system. The Engineer's estimate for the project was \$178,035.40.

Bid opening for the project took place on April 20th, 2021, at which one (1) bid was received. The bid received was in the amount of \$358,458.00 and was submitted by Germer Construction, Inc. A bid tabulation is attached.

STAFF RECOMMENDATION

Recommend that City Council Reject all bids.

PROPOSED ACTIONS

PROPOSED ACTIONS: Recommend that City Council reject all bids, or provide staff with further direction.

FISCAL IMPACT

This project would be expended out of the Paradise Pathway System Improvements line item 350-150-770-83

PERSONNEL IMPACT

This project would be managed and inspected by Engineering Division Staff.

ATTACHMENTS

1. Paradise Pathway Lighting Project - 2021 Bid Tabulation

Paradise Pathway Lighting Project - 2021
Bids Opened 4/20/2021

				Engineers Estimate		Bid From: Germer Construction	
Item No.	Item Description	Qty.	Unit	Unit Price	Amount	Price	Total
1	Mobilization	1	LS	\$15,000.00	\$15,000.00	\$25,317.00	\$25,317.00
2	Remove / Dispose Bituminous Surface	12	SY	\$120.00	\$1,440.00	\$121.00	\$1,452.00
3	Install 1-Inch Electrical Conduit	2850	LF	\$18.00	\$51,300.00	\$52.50	\$149,625.00
4	Bollard	18	EA	\$1,573.84	\$28,329.12	\$2,248.00	\$40,464.00
5	Overhead Lighting Fixtures W/ Poles	29	EA	\$1,733.32	\$50,266.28	\$3,370.00	\$97,730.00
6	Electrical Service Connection	1	EA	\$8,000.00	\$8,000.00	\$8,670.00	\$8,670.00
7	Hot Mix Asphalt Patching	12	SY	\$450.00	\$5,400.00	\$500.00	\$6,000.00
8	Straw Wattles	1100	LF	\$5.00	\$5,500.00	\$12.00	\$13,200.00
9	Silt Fence	400	LF	\$7.00	\$2,800.00	\$15.00	\$6,000.00
10	Force Account	1	EST	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
				TOTAL	\$178,035.40	TOTAL	\$358,458.00