

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

This Agreement is by and between City of Sandpoint, Idaho (“Owner”) and Vortex Services, LLC (“Contractor”).

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

- A. Installation of approximately 713 linear feet of 21-inch cured-in-place pipe (CIPP) sanitary sewer main and 2,524 linear feet of 24-inch CIPP storm drain main, mainline cleaning, CCTV inspection, and bypass pumping at two locations in Sandpoint, Idaho: within the public right-of-way at Olive Avenue, and within a utility easement at Farmin Stidwell Elementary School (1626 Spruce Street). CIPP may be installed using either UV-cured or thermally cured methods.

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: City of Sandpoint – 2025 CIPP Project.

ARTICLE 3—ENGINEER

3.01 The Owner will assume all duties and responsibilities of Engineer, and have rights and authority assigned to Engineer in the Contract.

3.02 The project has been designed by the Owner’s consultant Century West Engineering.

ARTICLE 4—CONTRACT TIMES

4.01 *Time is of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Dates*

- A. The Work will be substantially complete on or before September 18, 2026, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before September 25, 2026.
- B. The Contractor shall achieve the following interim Milestones:

- a. Storm Drain CIPP Rehabilitation Milestone: All 24-inch storm drain CIPP rehabilitation work, including required cleaning, CCTV inspection, CIPP installation, reinstatements, testing, and related restoration necessary for that portion of the Work, shall be completed no later than August 28, 2026.
- C. The Contractor shall sequence the Work as necessary to meet the interim Milestone and Contract Times.

4.05 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above plus any extensions thereof allowed 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 Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 - 1. *Substantial Completion*: Contractor shall pay Owner \$1,000.00 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
 - 2. *Completion of Remaining Work*: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$500.00 for each day that expires after such time until the Work is completed and ready for final payment.
- B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

ARTICLE 5—CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:
 - A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

- 6.01 *Submittal and Processing of Payments*
 - A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 *Progress Payments; Retainage*
 - A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the 30th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted

in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.
 - a. 95 percent of the value of the Work completed (with the balance being retainage).
 - b. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 *Consent of Surety*

- A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.05 *Interest*

- A. All amounts not paid when due will bear interest at the rate of 6% percent per annum.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

- A. The Contract Documents consist of all of the following:
 1. This Agreement.
 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
 3. Standard General Conditions, EJCDC C-700 (2018 Edition).
 4. Supplementary Conditions.
 5. Specifications (not attached but incorporated by reference) consisting of the Idaho Standards for Public Works Construction (ISPWC – 2020 Edition), excluding Division 100.
 6. Special Provisions.

7. Drawings (not attached but incorporated by reference) consisting of [6] sheets with each sheet bearing the following general title: **City of Sandpoint 2025 CIPP Project**
8. Addenda (number 1 – not attached but incorporated by reference).
9. Contractor's Bid
10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
 - e. Warranty Bond, if any.
11. In the event of inconsistency between the Contract Documents, the Contract Documents shall be interpreted in accordance with the listed priorities set forth in this provision, i.e, requirements of item 1 shall supersede all lower ranked items.
 - B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
 - C. There are no Contract Documents other than those listed above in this Article 7.
 - D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 Contractor's Representations

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 4. Contractor has carefully studied the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the drawings.
 5. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the

effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.

6. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
7. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
8. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
9. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
10. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.
11. The Contractor is an appropriately licensed public works contractor per Idaho Code Section 54-1902.
12. Contractor shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring the Contractor's compliance with any Laws or Regulations.

8.02 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and

4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.
- B. This is to certify that the Contractor and its owners or agents is not owned or operated by the government of China, nor will it be owned or operated by the government of China during the duration of any and all contracts entered into with the Owner.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on June 04, 2026 (which is the Effective Date of the Contract).

Owner: City of Sandpoint

Contractor: Vortex Services, LLC

(typed or printed name of organization)

By: _____
(individual's signature)

Date: June 03, 2026
(date signed)

Name: Jeremy Grimm
(typed or printed)

Title: Mayor
(typed or printed)

Attest: _____
(individual's signature)

Title: City Clerk
(typed or printed)

Address for giving notices:
City of Sandpoint – City Clerk
1123 Lake Street
Sandpoint, ID 83864

Designated Representative:
Name: Holly Ellis
(typed or printed)

Title: Public Works Director
(typed or printed)

Address:
City of Sandpoint
1123 Lake Street
Sandpoint, ID 83864

Phone: 208-946-2087

Email: hellis@sandpointidaho.gov

(If [Type of Entity] is a corporation, attach evidence of authority to sign. If [Type of Entity] is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

(typed or printed name of organization)

By: Chris Peccia
Chris Peccia (Jun 4, 2026 10:24:09 MDT)
(individual's signature)

Date: 06/04/2026
(date signed)

Name: Chris Peccia
(typed or printed)

Title: Regional Vice President
(typed or printed)

(If [Type of Entity] is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(individual's signature)

Title: _____
(typed or printed)

Address for giving notices:
3400 Centennial Drive
Helena, Montana 59601
406-447-5050

Designated Representative:
Name: Chris Peccia
(typed or printed)

Title: Regional Vice President
(typed or printed)

Address:
3400 Centennial Drive
Helena, Montana 59601
406-447-5050

Phone: 406-447-5050

Email: cpeccia@vortexcompanies.com

License No.: 075086
(where applicable)

State: Idaho







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Final Audit Report

2026-06-04

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

- requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
 12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
 17. *Cost of the Work*—See Paragraph 13.01 for definition.
 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
 20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
 21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor’s plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers’ instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.

43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
 - C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
- a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;

3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

- Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.
- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
 - F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
 - G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
 - H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
 - I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
 - J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
 - K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 Contractor's Insurance

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds:* The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

4. not seek contribution from insurance maintained by the additional insured; and
5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 *Substitutes*

- A. *Contractor's Request; Governing Criteria:* Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

- d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
- 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or

9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 Delegation of Professional Design Services

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

- 9.05 *Lands and Easements; Reports, Tests, and Drawings*
- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
 - B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
 - C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 *Insurance*
- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 *Change Orders*
- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.
- 9.08 *Inspections, Tests, and Approvals*
- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *Limitations on Owner's Responsibilities*
- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 *Undisclosed Hazardous Environmental Condition*
- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 *Evidence of Financial Arrangements*
- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).
- 9.12 *Safety Programs*
- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
 - B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*

1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

- 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
- 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
- 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
- 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 6. Expenses incurred in preparing and advancing Claims.
- 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
- 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

- d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

SC-1.01 Delete Paragraph 1.01.A.46.c in its entirety and replace with the following:

46.c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

SC-1.01 Add the following immediately after Paragraph 1.01.A.50:

51. *Special Provisions* - The part of the Contract that amends or supplements the Specifications.

52. *Request for Information* – A written request for information or clarification, requiring a written response to Owner, Engineer, or Contractor, initiated by Owner, Engineer, or Contractor.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

- A. Owner shall furnish to Contractor [1] printed copy of conformed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully signed counterpart of the Agreement). Additional printed copies of the conformed Contract Documents will be furnished upon request at the cost of reproduction.

2.03 *Before Starting Construction*

SC-2.03 Delete Paragraph 2.03.A.1 in its entirety and replace with the following:

1. a detailed, Progress Schedule used to plan, coordinate, and control the progress of construction and shall include the following:
 - a. provide for orderly, timely, and efficient prosecution of the Work;
 - b. contain sufficient detail to enable both the Contractor and the Engineer to plan, coordinate, and control their respective Contract responsibilities;

- c. sufficient detail for each Bid Item of Work, at a minimum, and indicate the durations, dates for starting and completing the various stages of the Work, and including subcontractor work; and,
- d. durations and relationships of required submittals, major material procurement lead times, permitting, traffic control, and any utility coordination.

2.05 *Acceptance of Schedules*

SC-2.05 Delete Paragraph 2.05.A in its entirety and replace with the following:

- A. No Work on Site shall begin until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times and meets the requirements of the Contract. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 3 days to revise and resubmit the schedule.

SC-2.05 Add the following immediately after Paragraph 2.05.A:

- B. Acceptance of the Progress Schedule will provide an overall, baseline for progressing the Work and be supplemented with a "look ahead" Work schedule each week to the Engineer. The "look ahead" Project Work schedule will be presented in a bar chart that shows at least three weeks of activity including the week the bar chart is issued with the largest time scale unit of 1 calendar day (smaller scales may be used) representing each activities that will be done including the location/limits of the Work. The first "look ahead" schedule will be provided within one week after acceptance of the Progress Schedule.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

SC-3.01 Delete Paragraph 3.01.C in its entirety.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.05 *Delays in Contractor's Progress*

SC-4.05 Amend Paragraph 4.05.C by adding the following subparagraphs:

- 5. *Weather-Related Delays*
 - a. If "abnormal weather conditions" as set forth in Paragraph 4.05.C.2 of the General Conditions are the basis for a request for an equitable adjustment in the Contract

Times, such request must be documented by data substantiating each of the following: 1) that weather conditions were abnormal for the period of time in which the delay occurred, 2) that such weather conditions could not have been reasonably anticipated, and 3) that such weather conditions had an adverse effect on the Work as scheduled.

- b. The existence of abnormal weather conditions will not relieve Contractor of the obligation to demonstrate and document that delays caused by abnormal weather are specific to the planned work activities or that such activities thus delayed were on Contractor's then-current Progress Schedule's critical path for the Project.

ARTICLE 5—SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.02 Use of Site and Other Areas

SC-5.02 Delete Paragraph 5.02.A.2 and insert the following paragraph in its place:

- A. 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, defend, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

5.03 Subsurface and Physical Conditions

SC-5.03 Delete Paragraph 5.03A in its entirety and replace with the following:

- A. *Reports and Drawings:* No reports or drawings related to explorations and tests of subsurface conditions or existing physical conditions at or adjacent to the Site are known by Owner.

5.04 Differing Subsurface or Physical Conditions

SC-5.04 Delete Paragraph 5.04.A in its entirety and replace with the following:

- A. Notice by Contractor: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions

or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

5.06 *Hazardous Environmental Conditions*

SC-5.06 Delete Paragraph 5.06A and 5.06B in its entirety and replace with the following:

- B. *Reports and Drawings*: No reports or drawings related to Hazardous Environmental Conditions at the Site are known by Owner.
- C. Not used.

SC-5.06 Delete Paragraph 5.06.J and insert the following paragraph in its place:

To the fullest extent permitted by Laws and Regulations, Contractor shall defend, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for Whom Contractor is responsible. Nothing in Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

ARTICLE 6—BONDS AND INSURANCE

6.02 *Insurance—General Provisions*

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:

- 1. Contractor may obtain worker's compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the Project is located, (b) is certified or authorized as a worker's compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker's compensation insurance for similar projects by the state within the last 12 months.

SC-6.02 Add the following immediately after Paragraph 6.02.D:

- 1. All certificates of insurance shall name as additionally insured:
 - a. Owner: City of Sandpoint

6.03 *Contractor's Insurance*

SC-6.03 Add the following immediately after Paragraph 6.03.C:

- D. *Workers' Compensation and Employer's Liability*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, United States Longshoreman and Harbor Workers' Compensation Act, Jones Act, stop-gap

employer’s liability coverage for monopolistic states, and foreign voluntary workers’ compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions). All insurance policies shall contain a Waiver of Subrogation coverage or endorsements.

Workers’ Compensation and Related Policies	Policy limits of not less than:
Workers’ Compensation	
State	Statutory
Applicable Federal (e.g., Longshoreman’s)	Statutory
Foreign voluntary workers’ compensation (employer’s responsibility coverage), if applicable	Statutory

- F. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor’s employees,
 2. damages insured by reasonably available personal injury liability coverage, and
 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. *Commercial General Liability—Form and Content:* Contractor’s commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor’s contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Underground, explosion, and collapse coverage.
 5. Personal injury coverage.
 6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.

7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 “Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured” or its equivalent.
 8. All policies shall contain waiver of subrogation coverage or endorsements.
- H. *Commercial General Liability—Excluded Content:* The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
1. Any modification of the standard definition of “insured contract” (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 2. Any exclusion for water intrusion or water damage.
 3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
 4. Any exclusion of coverage relating to earth subsidence or movement.
 5. Any exclusion for the insured’s vicarious liability, strict liability, or statutory liability (other than worker’s compensation).
 6. Any limitation or exclusion based on the nature of Contractor’s work.
 7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.
- I. *Commercial General Liability—Minimum Policy Limits*

Commercial General Liability	Policy limits of not less than:
General Aggregate	\$2,000,000.00
Products—Completed Operations Aggregate	\$2,000,000.00
Personal and Advertising Injury	\$1,000,000.00
Bodily Injury and Property Damage—Each Occurrence	\$1,000,000.00

- J. *Automobile Liability:* Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

Automobile Liability	Policy limits of not less than:
Combined Single Limit	
Combined Single Limit (Bodily Injury and Property Damage)	\$1,000,000.00

- K. *Umbrella or Excess Liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer’s liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

Excess or Umbrella Liability	Policy limits of not less than:
Each Occurrence	\$2,000,000.00
General Aggregate	\$2,000,000.00

- L. *Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements:* Contractor may meet the policy limits specified for employer’s liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy’s policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein.
- M. *Contractor’s Pollution Liability Insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from Contractor’s operations and completed operations. This insurance must be maintained for no less than three years after final completion.

Contractor’s Pollution Liability	Policy limits of not less than:
General Aggregate	\$1,000,000.00

- N. *Contractor’s Professional Liability Insurance:* If Contractor will provide or furnish professional services under this *Contract*, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance must cover negligent acts, errors, or omissions in the performance of professional design or related services by the insured or others for whom the insured is legally liable. The insurance must be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. The retroactive date on the policy must pre-date the commencement of furnishing services on the Project.

Contractor’s Professional Liability	Policy limits of not less than:
Each Claim	\$500,000.00
Annual Aggregate	\$1,000,000.00

SC-6.04 Delete Paragraphs 6.04.B and 6.04.C in their entirety and add the following immediately after Paragraph 6.04.D:

1. All insurance required by the Contract Documents or by law or regulations shall remain in full force and effect on all phases of the Work, whether or not the Work is occupied or utilized by the Owner, until all Work included in the agreement has been completed and final payment has been made.
2. Nothing contained in the insurance requirements shall be construed as limiting the extent of the Contractor’s responsibility for payment of damages resulting from his operations under the Contract. Contractor agrees that they alone shall be completely responsible for procuring and maintaining full insurance coverage as provided herein or

as may be otherwise required by the Contract Documents. Any approval by Owner or Engineer shall not operate to the contrary.

SC-6.04 Add the following immediately after Paragraph 6.04.E:

F. *Builder's Risk Requirements:* The builder's risk insurance must:

1. be written on a builder's risk "all risk" policy form that at a minimum includes insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment stored and in transit, and must not exclude the coverage of the following risks: fire; windstorm; hail; flood; earthquake, volcanic activity, and other earth movement; lightning; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; and water damage (other than that caused by flood).
 - a. Such policy will include an exception that results in coverage for ensuing losses from physical damage or loss with respect to any defective workmanship, methods, design, or materials exclusions.
 - b. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake, volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance will be provided through other insurance policies acceptable to Owner and Contractor.
2. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
3. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of contractors, engineers, and architects).
4. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
5. extend to cover damage or loss to insured property while in transit.
6. allow for the waiver of the insurer's subrogation rights, as set forth in this Contract.
7. allow for partial occupancy or use by Owner by endorsement, and without cancellation or lapse of coverage.
8. include performance/hot testing and start-up, if applicable.

9. be maintained in effect until the Work is complete, as set forth in Paragraph 15.06.D of the General Conditions, or until written confirmation of Owner's procurement of property insurance following Substantial Completion, whichever occurs first.
- 10 include as named insureds the Owner, Contractor, Subcontractors (of every tier), and any other individuals or entities required by this Contract to be insured under such builder's risk policy. For purposes of Paragraphs 6.04, 6.05, and 6.06 of the General Conditions, and this and all other corresponding Supplementary Conditions, the parties required to be insured will be referred to collectively as "insureds."

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.03 *Labor; Working Hours*

SC-7.03 Delete Paragraph 7.03.C in its entirety, and insert the following:

- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, Contractor may perform the Work at the Site only between the hours of 8AM and 8PM, Monday thru Friday, unless otherwise authorized by the Owner in writing.

7.09 *Permits*

SC-7.09 Add the following immediately after Paragraph 7.09.A:

- B. Contractor and any subcontractors shall obtain a City of Sandpoint Business License prior to mobilization.

7.10 *Taxes*

SC-7.10 Add the following paragraph immediately after Paragraph 7.10.A:

- B. In the event of the Contractor's default on the payment of taxes, excises, and license fees as set forth in Idaho Code 63-1503, the Owner shall have the authority to withhold from any payment due the Contractor under this contract, the estimated amount of such accrued and accruing taxes, excises, and license fees for the benefit of all taxing authorities to which said Contractor is liable.

7.11 *Laws and Regulations*

SC-7.11 Add the following paragraph immediately after Paragraph 7.11.C:

- D. While not intended to be inclusive of all Laws or Regulations for which Contractor may be responsible under paragraph 6.09, the following Laws or Regulations are included as mandated by statute or for the convenience of the Contractor;

1. **Idaho Code Section 63-1501. Definitions.** As used in this act, the following terms shall have the following meanings:

"Contracting units" shall include the state or any officer or department thereof, the counties or other subdivisions of the state, and all municipal and quasi-municipal corporations therein.

“Contractor” shall mean any person, firm, co-partnership, association, or corporation, foreign or domestic, entering into a contract for the construction, erection, repair, or improvement of any kind or character of public works in this state.

“Taxes” shall mean all taxes, assessments, excises, and license fees authorized to be levied, assessed, and collected under the laws of this state, other than taxes on real property.

“Taxing unit” shall mean the state or any officer or department thereof, the counties or other subdivisions of the state, and all municipal and quasi-municipal corporations therein authorized by law to assess, levy and collect taxes.

2. **Idaho Code Section 63-1502. Conditions precedent to contract for public works.** Before entering into a contract for the construction of any public works in this state, the contracting unit shall require as conditions precedent that the contractor be authorized to do business in this state and that he furnish satisfactory evidence that he has paid or secured to the satisfaction of the respective taxing units all taxes for which he or his property is liable then due or delinquent.
3. **Idaho Code Section 63-1503. Contractor for public works to pay or secure taxes—Agreement.** Every contract for the construction of public works by a contracting unit of this state shall contain substantially the following provisions:

The Contractor, in consideration of securing the business of erecting or constructing public works in this state, recognizing that the business in which he is engaged is of a transitory character, and that in the pursuit thereof, his property used therein may be without the state when taxes, excises, or license fees to which he is liable become payable, agrees:

- a. To pay promptly when due all taxes (other than on real property), excises and license fees due to the state, its subdivisions, and municipal and 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;
 - b. 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 property, to secure the same to the satisfaction of the respective officers charged with the collection thereof; and
 - c. That in the event of his 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 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.
4. **Idaho Code Section 44-1002** requires the following: The Contractor must employ ninety-five percent (95%) bona fide Idaho residents as employees on any job under any such contract except where under such contracts fifty (50) or less persons are employed, the Contractor may employ ten percent (10%) nonresidents, provided, however, in all cases employers must give preference to the employment of bona fide residents in the performance of said work, and no contract shall be let to any person, firm, association, or

corporation refusing to execute an agreement with the above mentioned provisions in it; provided, that, in contracts involving the expenditure of federal aid funds this act shall not be enforced in such a manner as to conflict with or be contrary to the federal statutes prescribing a labor preference to honorably discharged soldiers, sailors, and marines, prohibiting as unlawful any other preference or discrimination among citizens of the United States.

5. **Idaho Code Chapter 19 of Title 54** requires proper licensing of Public Works Contractors.

7.18 *Indemnification*

SC-7.18 Delete Paragraph 7.18.A in its entirety and insert the following paragraph in its place:

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

ARTICLE 8—OTHER WORK AT THE SITE

No Supplementary Conditions in this Article.

ARTICLE 9—OWNER’S RESPONSIBILITIES

No Supplementary Conditions in this Article.

ARTICLE 10—ENGINEER’S STATUS DURING CONSTRUCTION

10.02 *Visits to Site.*

SC-10.02 Delete Paragraphs 10.02 in its entirety.

10.03 *Resident Project Representative.*

SC-10.03 Delete Paragraphs 10.03 in its entirety.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

SC-11.01 Delete Paragraph 11.01.C in its entirety and insert the following in its place:

- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by BWA's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of BWA.

ARTICLE 12—CLAIMS

No Supplementary Conditions in this Article.

ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

13.03 Unit Price Work

SC-13.03 Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. *Adjustments in Unit Price*
 - 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the extended price of a particular item of Unit Price Work amounts to 10 percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
 - 2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
 - 3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

No Supplementary Conditions in this Article.

ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

No Supplementary Conditions in this Article.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

No Supplementary Conditions in this Article.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

No Supplementary Conditions in this Article.

ARTICLE 18—MISCELLANEOUS

18.07 Controlling Law

SC-18.07 Delete Paragraph 18.07 in its entirety and insert the following paragraph in its place:

This Contract is to be governed by the law of the State of Idaho. The jurisdiction/venue for any action arising out of performance of this Contract, or interpretation of its terms and conditions, shall be in the District Court in the First Judicial District of the State of Idaho, Bonner County. In any action to enforce the terms and conditions of this Contract, the prevailing party may recover its reasonable attorney fees.

Add the following Article 19 – Prosecution of the Work, immediately following Article 18 - Miscellaneous.

ARTICLE 19—PROSECUTION OF THE WORK

SC-19.01 *General*

- A. From the time of commencement of the Work to the time of Final Acceptance the Contractor shall: provide adequate Materials, Equipment, labor, and supervision to perform and complete the Work; perform the Work as vigorously and as continuously as conditions permit, and according to a Project Work schedule that ensures completion within the Contract Time or the adjusted Contract Time; not voluntarily suspend or slow down operations without prior written approval from the Engineer; and not resume suspended Work without the Engineer's written authorization.

SC-19.02 *Cost Reduction Proposals*

- B. The Contractor may submit written proposals to the Engineer that modify Plans, Specifications, or other Contract Documents for the sole purpose of reducing the total cost of construction. Unless otherwise agreed to in writing, a proposal that is solely or primarily a proposal to reduce estimated quantities or delete Work, is not eligible for consideration as a cost reduction proposal.
- C. Proposal Requirements - The Engineer will not adopt a cost reduction proposal that impairs essential functions or characteristics of the Project, including, but not limited to, service life, economy of operation, ease of maintenance, designed appearance, or design and safety standards.

To conserve time and funds, the Contractor may first submit a written request for a feasibility review by the Engineer. The request should contain a description of the proposal together with a rough estimate of anticipated dollar and time savings. The Engineer will, within a reasonable time, advise the Contractor in writing whether or not the proposal would be considered by the Engineer, should the Contractor elect to submit a detailed cost reduction proposal.

- D. A detailed cost reduction proposal shall include without limitation the following information:
1. A description of existing Contract requirements for performing the Work and the proposed change;
 2. The Contract items of Work affected by the proposed change, including any quantity variation caused by the proposed change;
 3. Pay Items affected by the proposed change including any quantity variations;
 4. A detailed cost estimate for performing the Work under the existing Contract and under the proposed change.

Costs of re-design, which are incurred after the Engineer has accepted the proposal, shall be included in the cost of proposed work; and a date by which the Engineer must accept the proposal in order to accept the proposed change without impacting the Contract Time or cost reduction amount.

- E. Continuing to Perform Work - The Contractor shall continue to perform the Work according to Contract requirements until the Engineer issues a Change Order incorporating the cost reduction proposal. If the Engineer fails to issue a Change Order by the date specified in the proposal, the proposal shall be deemed rejected.
- F. Consideration of Proposal - The Engineer is not obligated to consider any cost reduction proposal. The Engineer will not be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted. The Engineer will determine in its sole discretion whether to accept a cost reduction proposal as well as the estimated net savings in construction costs from the adoption of all or any part of the proposal. In determining the estimated net savings, the Engineer may disregard the Schedule of Items. The Engineer will establish prices that represent a fair measure of the value of Work to be performed or to be deleted as a result of the cost reduction proposal.
- G. Sharing Investigation Costs - As a condition for considering a Contractor's cost reduction proposal, the Engineer reserves the right to require the Contractor to share in the Engineer's costs of investigating the proposal. If the Engineer exercises this right, the Contractor shall provide written acceptance of the condition to the Engineer. Such acceptance will authorize the Engineer to deduct its share of investigation costs from payments due or that may become due to the Contractor under the Contract.
- H. Acceptance of Proposal Requirements - If the Contractor's cost reduction proposal is accepted in whole or in part, acceptance will be made by a Change Order. The Contractor's cost of preparing the cost reduction proposal and the Engineer's costs of investigating the proposal, including any portion paid by the Contractor, will be excluded from determination of the estimated net savings in construction costs. Costs of re-design, which are incurred after the Engineer has accepted the proposal, will be included in the cost of the Work attributable to cost reduction measures. If the Engineer accepts the cost reduction proposal, the Change Order that authorizes the cost reduction measures will also address any Contract Time adjustment.

SC-19.03 *Force Account Work*

The Materials, Equipment and labor rates and procedures established in this Section apply to Extra Work ordered by the Engineer to be performed as Force Account Work.

- A. Extra Work on a Force Account Basis - Before ordering Force Account Work, the Engineer will discuss the proposed work with the Contractor, and will seek the Contractor's comments and advice concerning the formulation of Force Account Work specifications. The Engineer is not bound by the Contractor's comments and advice, and has final authority to: determine and direct the Materials, Equipment and labor to be used on the approved Force Account Work and to determine the time of the Contractor's performance of the ordered Force Account Work.
- B. If the Engineer orders the performance of Extra Work as Force Account Work, the Engineer will record, on a daily basis, the Materials, Equipment, labor, and Special Services used for the Force Account Work during that day. The Engineer and the Contractor shall sign the record daily to indicate agreement on the Materials, Equipment, labor, and Special Services used for the Force Account Work performed on that day.
- C. The Owner will not be responsible for additional costs that are a direct or indirect result of the Contractor's inefficient means and methods or that reasonably could have been avoided if the Materials, Equipment, labor or services had been obtained at a more commercially reasonable cost.
- D. Payment for Force Account Work shall be negotiated and agreed upon by Change Order or Minor Change Order.

PERFORMANCE BOND

<p>Contractor Name: Vortex Services LLC Address <i>(principal place of business)</i>: 3400 Centennial Drive Helena, MT 59601</p>	<p>Surety Name: Address <i>(principal place of business)</i>:</p>
<p>Owner Name: City of Sandpoint Mailing address <i>(principal place of business)</i>: 1123 Lake St. Sandpoint, Idaho 83864</p>	<p>Contract Description <i>(name and location)</i>: A26-3400-5 2025 CIPP Project Contract Price: \$525,995.00 Effective Date of Contract: June 04, 2026</p>
<p>Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

- 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
- 6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
- 7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
- 9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
- 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
- 12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
- 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: **None**

PAYMENT BOND

<p>Contractor</p> <p>Name: Vortex Services, LLC Address (<i>principal place of business</i>):</p> <p>3400 Centennial Drive Helena, MT 59601</p>	<p>Surety</p> <p>Name: Address (<i>principal place of business</i>):</p>
<p>Owner</p> <p>Name: City of Sandpoint Mailing address (<i>principal place of business</i>): 1123 Lake St. Sandpoint, ID 83864</p>	<p>Contract</p> <p>Description (<i>name and location</i>): A26-3400-5 2025 CIPP Project</p> <p>Contract Price: \$525,995.00 Effective Date of Contract: June 04, 2026</p>
<p>Bond</p> <p>Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;

- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of “labor, materials, or equipment” that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor’s subcontractors, and all other items for which a mechanic’s lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. Modifications to this Bond are as follows: **None**



BID No. 26-3400-1 - ADDENDUM NO. 1

City of Sandpoint
1123 Lake Street
Sandpoint, Idaho 83864

Date: May 27, 2026

BID Number and Title: 26-3400-1 – 2025 CIPP Project
BID Submission Deadline: Tuesday, June 2, 2026 @ 2:00 PM PST/PDT
Pages: Addendum No. 1 (2 Pages)
Bid Form (6 pages)
Reference Map (1 page)

.....

Acknowledge receipt of this Addendum by inserting its number and date on the Bid Form. Failure to do so may subject bidder to disqualification. This Addendum forms a part of the Contract Documents. It modifies the Contract Documents as follows:

SECTION 3A - BID PACKAGE

2020 ISPWC 00410 – BID BOND FORM FOR CONSTRUCTION CONTRACT

Delete the Bid Form in its entirety and replace with the attached.

New Bid Form pages 1-6 have been included in this addendum and shall be used when submitting bids for this project. A summary of changes follows:

- Update quantity for Utility Cleaning and Television Inspection.

SECTION 4A – SAMPLE AGREEMENT FORMS

2020 ISPWC 00520 – AGREEMENT BETWEEN OWNER AND CONTRACTOR

Delete Article 4.02.A in its entirety and replace with the following:

- A. The Work will be substantially complete on or before September 18, 2026, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before September 25, 2026.
- B. The Contractor shall achieve the following interim Milestones:
 - a. Storm Drain CIPP Rehabilitation Milestone: All 24-inch storm drain CIPP rehabilitation work, including required cleaning, CCTV inspection, CIPP installation, reinstatements, testing, and related restoration necessary for that portion of the Work, shall be completed no later than August 28, 2026.

- C. The Contractor shall sequence the Work as necessary to meet the interim Milestone and Contract Times.
-

SECTION 8 – CONSTRUCTION DRAWINGS

REFERENCE MAP

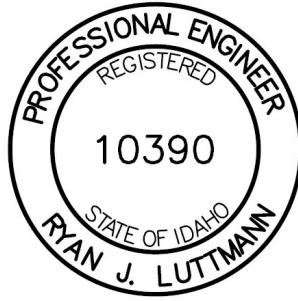
Add the following Reference Map attached as a reference document to the Bidding Documents:

The reference document is provided for informational purposes only and is not intended to prescribe Contractor means, methods, techniques, sequences, procedures, or bypass system design.

A potential bypass route from SSMH 01221 to SSMH 01612 is noted for informational purposes only. The Contractor remains solely responsible for determining, designing, installing, operating, maintaining, and removing the bypass pumping system necessary to complete the Work. The Contractor's bypass plan shall comply with the Contract Documents, applicable laws and regulations, site conditions, access constraints, and all required approvals. The concept shown does not relieve the Contractor of responsibility for means, methods, safety, capacity, redundancy, spill prevention, traffic control, or protection of public and private property.

All other terms, conditions, drawings, specifications, and requirements of the Bidding Documents remain unchanged.

END OF ADDENDUM NO. 1



SPECIAL PROVISIONS

These Special Provisions amend or supplement the Idaho Standards for Public Works Construction, 2020 Edition (ISPWC). The Work on this project shall be accomplished in accordance with the ISPWC, as modified or supplemented by the Supplementary Conditions and these Special Provisions. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Special Provisions have the meanings stated in the General Conditions. Additional terms used in these Special Provisions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Special Provisions is the same as the address system used in the ISPWC.

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SECTION 1001 CONSTRUCTION SITE MANAGEMENT

Part 1 GENERAL

Add the following after Paragraph 1.2.H:

- I. SP102 – Utility Cleaning and Television Inspection

PART 4 MEASUREMENT AND PAYMENT

Delete Paragraph 4.1.A in its entirety and insert the following in its place:

- 4.1.A Sediment Control and Construction Site Management: by the lump sum for all work associated with erosion and sediment control, and construction site management, including developing and maintaining a Stormwater Pollution Prevention Plan (SWPPP) if required, all required appurtenances for construction site housekeeping, sediment collection, runoff diversion, storm drain and channel protection, access control, dust control, and health and safety. All Stormwater Best Management Practices (BMPs) shall be incidental to this pay item.
 - 1. Bid Schedule Payment References: 1001.4.1.A.1.
 - 2. Bid Schedule Description: Sediment Control and Construction Site Management...lump sum (LS).

SECTION 1103 CONSTRUCTION TRAFFIC CONTROL

PART 1 GENERAL

Add the following after Paragraph 1.1.A:

- B. This work includes providing and maintaining safe and adequate public and private property access throughout the Site unless otherwise specified or approved by the Owner.

PART 3 WORKMANSHIP

Delete Paragraph 3.1.B in its entirety, and insert the following in its place:

- 3.1.B. Contractor shall submit a Traffic Control Plan to the OWNER for approval prior to any lane closures. The Traffic Control Plan shall specify how the Contractor will minimize the risk to vehicles, motorcycles, and bicycles caused by construction activities. Shoulder work must follow the most current MUTCD for Typical Application 3 – Work on the Shoulders and/or Typical Application 6 - Shoulder Work with Minor Encroachment. A separate traffic control plan must be provided for any deviation from the typical applications.

Delete Paragraph 3.1.C in its entirety, and insert the following in its place:

- 3.1.C. Do not cause unnecessary inconvenience to the public, as determined by the OWNER. Contractor to submit a traffic control plan for City review and approval prior to initiating construction.

Delete Article 3.2 in its entirety and replace with the following:

- 3.2 Accommodations for the Public.

- A. Staging of Materials, Equipment, and Services: temporary staging of equipment, materials, and Contractor vehicles shall be limited to the active work zone within an approved road closure and not adversely affect the adjacent residents as determined by the city. A designated staging area is not provided for this project. At the end of each working shift, heavy equipment shall be staged on the shoulder and not obstructing the roadway. Equipment, materials, and Contractor vehicles shall not be parked blocking driveways or otherwise obstructing access to residences.
- B. Emergency Vehicle Accommodations – Provide and maintain reasonable access to all locations for emergency vehicles at all times. A minimum passage width of 14-feet, capable of supporting at least 66,000 pounds is required for emergency vehicles at all times unless otherwise specified or approved by the Owner.
- C. Delivery Accommodations – Contractor to accommodate postal and other freight carrier deliveries. Contractor shall provide reasonable access or delivery support to ensure residents are able to plan accordingly and receive packages without delay.
- D. Garbage / Disposal Accommodations - Provide and maintain access to the garbage/recycle receptacles for the haulers.

SECTION 2010 MOBILIZATION

Delete this section in its entirety and replace with the following:

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Mobilization consists of preparatory work and operations, including 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 work, for premiums on bond and insurance, and for other work and operations which must be performed or costs incurred before beginning production work on the various contract items. Mobilization costs for subcontracted and supplier work is included in this item.
- B. Items which are not to be included in this item include but are not limited to:
 - 1. Any portion of the Work covered by specific Contract item or incidental Work which is to be included in a Contract item or items.
 - 2. Profit, interest on borrowed money, overhead, or management costs.

PART 2 MATERIALS

NOT USED

PART 3 WORKMANSHIP

- 3.1. The Contractor shall provide and maintain enclosed portable restroom facilities for the use of Project personnel.

- 3.2 The Contractor shall limit mobilization of material and resources to a quantity that may be installed within a 5-7 day period.

PART 4 MEASUREMENT AND PAYMENT

- 4.1 Mobilization, by the lump sum Contract price for Mobilization.
- A. Bid Schedule Payment Reference: 2010.4.1.A.1.
 - B. Bid Schedule Description: Mobilization ... per lump sum (LS).
 - C. Partial payments for Mobilization will be made as follows:
 - 1. When 5 percent of the total original Contract amount is earned from other Contract items, excluding amounts paid for materials on hand, 50 percent of the amount Bid for mobilization, or 5 percent of the total original Contract amount, whichever is the least, will be paid.
 - 2. When 10 percent of the total original Contract amount is earned from other Contract items, excluding amounts paid for materials on hand, 100 percent of the amount Bid for mobilization, or 10 percent of the total original Contract amount, whichever is the least, will be paid.
 - 3. When Substantial Completion is achieved, payment of any amount Bid for mobilization in excess of 10 percent of the total original Contract amount will be paid.
- 4.2 Sanitary Facilities: Providing and servicing restroom facilities shall be incidental to other Bid Items.

SP100 ULTRAVIOLET LIGHT CURED-IN-PLACE PIPE

PART 1 GENERAL

1.01 DESCRIPTION

A. Scope:

1. This Section specifies stormwater and sanitary sewer rehabilitation using cured-in-place pipe (CIPP). The CONTRACTOR shall provide all labor, equipment, materials, and services necessary to provide resin-impregnated fiberglass-tubes (liner) cured by ultraviolet light (UV-cured) in accordance with ASTM F2019 and as specified herein.

The CONTRACTOR is made aware that the lining of the stormwater and sanitary sewers may occur during the summer months with high temperatures and severe thunderstorms. The CONTRACTOR shall be prepared for these temperatures and alter its installation procedures accordingly.

2. The finished CIPP shall be a hard, structurally sound, impermeable liner with a uniformly smooth interior and shall be of the approved specified material properties and thickness as submitted by the CONTRACTOR.
3. The host pipe shall be corrosion protected by UV CIPP with a water-tight, corrosion resistant barrier at lateral openings, any openings in the liner, and at manhole terminations. The provided barrier shall protect concrete from corrosion and prevent infiltration into the annular space between liner and host pipe.

B. Requirements:

1. CONTRACTOR shall provide and install a CIPP liner in accordance with American Society for Testing and Materials (ASTM) ASTM F2019 for the cured by ultraviolet light (UV-cured) method.

1.02 QUALITY ASSURANCE

A. REFERENCES

1. This Section contains references to the following documents. They are a part of this Section as specified and modified. In case of conflict between the requirements of this Section and those of the listed documents, the requirements affording the greatest protection to the OWNER shall apply.

Reference	Title
APS Standard	Water tightness standard for cured-in-place thermo-setting resin pipe, Porosity Test Protocol
ASTM C581	Standard Practice for Determining Chemical Resistance to Thermosetting resin used in glass fiber reinforced structures, intended for liquid service
ASTM D543	Test Method for Resistance of Plastics to Chemical Reagents
ASTM D578	Standard Specification Glass Fiber Strands
ASTM D790	Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D2122	Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
ASTM D2990	Test Method for Tensile, Compressive and Flexural Creep and Creep-Rupture of Plastics
ASTM D3039	Standard Test Method of Tensile Properties of Polymer Matrix Composite Materials
ASTM D3567	Standard Practice for Determining Dimensions of "Fiberglass (Glass Fiber Reinforced Thermosetting Resin) Pipe and Fittings
ASTM D5813	Standard Specification for Cured-in-Place Thermosetting Resin Sewer Pipe
ASTM F1216	Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of a Resin Impregnated Tube
ASTM D638	Test Method for Tensile Properties of Plastics
ASTM F1743	Rehabilitation of Existing Pipelines and Conduits by the Pull In and Inflate and Curing of a Resin-Impregnated Tube
ASTM F2019	Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic (GRP) Cured-in-Place Resin Pipe (CIPP)
ASTM F2561	Rehabilitation of a sewer Service Lateral and its Connection to the Main Using a One Piece Main and Lateral Cured-in-Place Liner
ISO 178	Determination of Flexural Properties
DIN 761	Glass Reinforced Thermosetting Plastic (GRP) Pipes
DIN EN 13566-4	Plastic piping systems for renovation of underground non- pressure drainage and sewerage systems

B. CIPP Testing and Samples:

1. The CONTRACTOR shall be responsible for all costs associated with testing and sampling.
2. Testing shall be performed by an independent, third-party laboratory as recommended by the liner manufacturer and approved by the OWNER. The testing laboratory shall be ISO 17025 certified and have American Association for Laboratory Accreditation (A2LA) for the specified test to be performed. A certified affidavit, signed by an officer of the testing laboratory, shall be provided by the CONTRACTOR.
3. Prior to construction, the CONTRACTOR shall submit certified test reports for the exact resin/liner combination to be provided on the project.
4. Prior to construction, the CONTRACTOR shall submit certified test reports of long- term and short-term flexural modulus of elasticity, flexural strength (bending stress), and tensile strength. Tested samples shall meet or exceed the requirements of Table 2 of ASTM F2019.
 - a. Long-term flexural modulus of elasticity and strength (i.e., 10,000-hour creep) shall be performed in accordance with ASTM D2990. Load shall be applicable to the design conditions or equivalent to 0.25 percent of the initial flexural modulus of elasticity as determined by ASTM 0790, minimum.
 - b. Short-term flexural modulus and strength performed in accordance with ASTM D790, Test Method 1, Procedure A. Results shall be provided for flat- plate within 16:1 length to depth ratio constraints and for curved beam, circumferential (hoop) configuration.
 - c. Short-term tensile strength performed in accordance with ASTM D5813 and ASTM D3039 or ASTM D638.
 - d. If non-round host pipes (ovality greater than 10 percent) are to be rehabilitated or the structure of the CIPP is such that the physical properties vary depending on the direction of testing (i.e., axial versus circumferential), submit test data in both directions in accordance with the test methods listed above.
5. During installation and curing, the CONTRACTOR shall take samples in accordance with ASTM F2019 and the Manufacturer's recommendations. Samples shall be restrained, taken from the ends of the installed liner unless previously approved in writing by the OWNER. Certified test reports shall be submitted as described below.
 - a. The CONTRACTOR shall provide sample specimens for wall thickness, short- term flexural modulus and strength, and tensile strength from each production lot (crate) of UV liner.
 - b. Wall thickness shall be measured per ASTM D3567 Section 7. The average thickness shall be calculated using all measured values and shall meet or exceed the minimum design thickness in accordance with the design criteria. The minimum wall thickness at any point shall not be less than 87.5 percent of the specified design thickness.
 - c. Samples shall be taken in the presence of the OWNER and in accordance with ASTM F2019. Samples shall be identified by: date, time, project, and location (street location, pipe reach).
 - d. Flat plate sampling methods using ambient sunlight to cure the liner will NOT be accepted.

6. During installation and curing, the CONTRACTOR shall take field samples to test for water tightness in accordance with the DWA M143-20/APS guideline at a negative pressure of 0.5 bar for thirty (30) minutes.
 - a. A sample shall be taken for each production lot, type, thickness, or nominal diameter of liner installed. Additional samples shall be taken for each 2000 LF of installed liner.
 - b. Samples shall be prepared in accordance with applicable requirements, taken in the presence of the OWNER or Inspector, and tested by a certified third party laboratory and certified test reports shall be submitted for liner acceptance.
 - c. Samples shall be taken at locations based on the CONTRACTOR's field review of existing conditions and the ability to obtain a sample from the installed, cured liner. The CONTRACTOR shall submit a list of proposed sampling locations for review and acceptance by the OWNER.
 7. The CONTRACTOR may, at its discretion and at no additional cost to the OWNER, conduct additional testing to demonstrate compliance with the specified requirements. No tests shall be performed on an installed and cured liner within the host pipe without prior written approval from the OWNER.
 8. The OWNER reserves the right to require additional field testing to demonstrate the provided CIPP meets the minimum material properties specified and the design requirements for the sampled thickness and material properties.
 9. Final payment will not be made until test results are received. The CONTRACTOR shall be responsible for any deviation from the specified physical properties and those evaluated through testing. Failure to meet the specified physical properties will result in the CIPP liner being considered defective work.
- C. CIPP Liner Handling:
1. CONTRACTOR shall exercise adequate care during transportation, handling, and installation to ensure the CIPP material is not torn, cut, or otherwise damaged. If any part or parts of the CIPP material becomes torn, cut, or otherwise damaged before or during insertion, it shall be repaired or replaced in accordance with the manufacturer's recommendations and approval by the OWNER before proceeding further and at the CONTRACTOR's expense.
- D. CIPP Liner Labeling:
1. Each liner tube shall be labeled by the liner manufacturer with the location of the liner manufacturer, the name of the project, the production lot number, the liner thickness, the liner diameter, the liner length, and the location where it is to be installed.
- E. Warranty:
1. The CONTRACTOR shall warrant the completed work against defect in workmanship and material for a period of two (2) years from date of Final Acceptance. During this period, all defects discovered shall be removed and replaced by the CONTRACTOR in a satisfactory manner at no cost to the OWNER. In addition to the Warranty Inspection, the OWNER may conduct independent CCTV inspections, at its own expense, of the lining Work at any time prior to the completion of the guarantee period.

1.03 MANUFACTURER QUALITY CONTROL

- A. The Manufacturer shall have a Quality Control Plan and Reporting Procedure in place that will allow the OWNER to review the manufacture of the liner and resin impregnation process.
- B. The liner shall be totally impregnated with resin in the Manufacturer's plant under quality controlled conditions. No on-site or mobile wet out will be allowed. The Manufacturer shall attach Certification Documentation in accordance with ASTM F2019, Paragraph 6.3.1, to impregnated fabric tube provided as part of the Work.
- C. Fabrication of the liner and resin impregnation (wet-out) may be inspected at the Manufacturer's facility for compliance with these specifications by the OWNER. The CONTRACTOR shall require the facility's cooperation in these inspections.
- D. No change of material, design values, or procedures for provided CIPP may be made during the course of the Work without the prior written approval of the OWNER.
- E. At the time of manufacture at the Manufacturer's facility, inspect each production lot of liner for defects. At the time of delivery, the liner shall be homogeneous throughout, uniform in color, and free of cracks, holes, foreign materials, blisters, or deleterious faults. For the purposes of inspection and testing, a production lot shall consist of all liners having the same marking number, produced during any given work shift.

1.04 MANUFACTURER'S REPRESENTATIVE

- A. The Manufacturer shall provide an authorized representative. The representative shall be factory trained and experienced in the technical application such as installation, curing, sampling, operation, and maintenance of the lining system and all of its components.
- B. The Manufacturer's Representative shall provide at least sixteen (16) hours of on-site observation during installation of UV-cured CIPP liner to monitor the Work.
- C. The Manufacturer's Representative shall verify in writing that the proper procedures and equipment are being used to perform the Work, including proper preparation, installation, curing, sampling, and reinstatement of service connections. After verifying proper procedures and equipment are being used, the Manufacturer's Representative shall be available on a 24-hour basis to provide technical support to resolve field problems throughout the duration of the Work.

1.05 SUBMITTALS

- A. The following submittals shall be provided in accordance with ISPWC and the City of Sandpoint's Standards:
 - 1. Submit Manufacturer's documentation, affidavits, and approvals as follows:
 - a. Manufacturer's QA/QC procedures and reporting plan or current ISO 9001 Certification.
 - b. Manufacturer's recommended storage and handling, installation, curing, and sampling

- procedures.
- c. Letter of Certification by the manufacturer stating the CIPP CONTRACTOR's and Superintendents' licensure to install the provided CIPP.
 - d. Letter of Surety by the manufacturer that the CIPP liner is manufactured per ASTM F2019 and the resin is suitable for the installed environment (wastewater) and for UV-curing.
 - e. Letter of Certification that Manufacturer's Representative is an authorized agent of the manufacturer and the representative's resume.
 - f. Record copies of Liner Certification Documentation per 1.03. B.
 - g. Field Certification by the Manufacturer's Representative per 1.04. C.
2. Submit CIPP material data and testing as follows:
 - a. Affidavit for third party testing laboratory per 1.07.B.
 - b. Certified test reports for long-term and short-term material properties per 1.02 8.3 and 4 and chemical resistance per 2.05. A letter of surety, signed by an officer of the manufacturer, shall be provided with all testing results stating that the materials tested and submitted and the materials provided for this project are the same or comparable.
 - c. Sampling plans and certified test results of installation/field samples per 1.02 B.S.
 - d. Proposed sampling locations for APS per 1.02 B. 6. c.
 3. Submit CIPP Thickness design calculations for each installation including design parameters and long term material properties. Calculations shall be signed and sealed by a Professional Engineer registered in the State of Idaho.
 4. Submit project specific CIPP Installation Plan per 2.15.
 5. Submit CCTV Inspection records and reports. Inspections shall be provided for each installation including:
 - a. Pre-inspection (Record submittal).
 - b. Installation (Record Submittal).
 - c. Post-installation per Paragraph 3.08.
 6. Submit Warranty.
 7. Submit materials and methods for sealing lateral service connections including the following:
 - a. Manufacturer's literature and technical data for provided products.
 - b. Manufacturer's affidavit materials are suitable for the application and compatible with provided UV Liner.
 8. Submit materials and methods for sealing termination points at manhole connections as

follows:

- a. Manufacturer's literature and technical data for provided products.
 - b. Manufacturer's affidavit materials are suitable for the application and compatible with provided UV Liner.
9. Materials and methods for CIPP repairs as required during completion of the Work. Submittals shall be made describing each repair and will be reviewed and approved on a case-by-case basis by the OWNER.
10. CONTRACTOR shall submit applicable testing and laboratory analysis reports as requested in Section 1.02.
11. Material safety data sheets (MSDS) for all hazardous chemicals used or expected to be onsite. At a minimum, sheets for the resin, catalyst, cleaners, and repair agents should be submitted. CONTRACTOR shall have copies of MSDS Sheets on site during construction.

PART 2 MATERIALS

2.01 GENERAL

- A. The CONTRACTOR shall be responsible for control of all material and process variables to provide a finished CIPP possessing the minimum properties specified in ASTM F2019 and as specified herein.
- B. Defects in the finished liner shall include delamination, dry spots, lifts, wrinkles, weeping of resin through the laminate at stitch lines and pinholes, stitching of the inner foil to the felt wear layer, holes in the inner foil that have compromised the liner during air-up, and peeling of the inner foil after curing. Defects shall be repaired by the CONTRACTOR at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the OWNER for acceptance. Circumferential wrinkles in the finished liner that exceed 3 percent (0.25-inch) of the pipe diameter are unacceptable and shall be removed or repaired. Repeated circumferential wrinkles extending more than three (3) feet shall be grounds for rejection of the liner installation. Longitudinal wrinkles in the finished liner pipe and voids between the liner and host that reduce structural stability of the pipe shall be repaired. Longitudinal wrinkles greater in length than three (3) times the nominal diameter in the cured liner of any thickness will be grounds for rejection and replacement of the liner at no additional cost to the OWNER.
- C. The CONTRACTOR shall be familiar with the site conditions and the condition of the pipe to be rehabilitated and shall be responsible for providing 10 mil thick plastic slip sheet for liner protection, structural sleeves, or pre-liners and for removing protruding taps and defects that could damage or prevent proper installation of the liner. The CONTRACTOR shall prepare a detailed Installation Plan.

2.02 UV-CURED CIPP MANUFACTURERS

- A. Approved CIPP liner manufacturers are InLiner, MTC, Permier Pipe, Insituform Technologies, Inliner Technologies, Saertex, BKP Berolina, iMPREGLiner, or approved equal.
- B. The provided CIPP shall be manufactured in accordance with the minimum requirements of ASTM F2019 suitable for curing by ultraviolet light. The CONTRACTOR shall submit reference documentation demonstrating compliance.
- C. The UV cured CIPP provided shall be a proven technology with a minimum of 250,000 linear feet of sanitary sewer/storm water collection system installation in the U.S. The CONTRACTOR shall submit reference documentation demonstrating compliance.
- D. Submit Manufacturer's product data and installation procedures.

2.03 CONTRACTORS

- A. The CIPP CONTRACTOR shall be a trained installer of the UV-cured CIPP provided and certified by the Manufacturer. The CONTRACTOR shall submit the Manufacturer's certification.
- B. The CIPP CONTRACTOR shall have successfully installed at least 50,000 linear feet of CIPP of similar diameter in accordance with ASTM F2019, UV-cured.

2.04 CIPP SUPERINTENDENT

- A. The CIPP Superintendent will be assigned full time to the project and shall remain in full, continuous, and personal supervision of the project until its completion.
- B. The CIPP Superintendent shall have successfully installed at least 30,000 linear feet of CIPP of a similar diameter in accordance with ASTM F2019, UV-cured.
- C. The CIPP Superintendent shall be certified by the Manufacturer for the provided UV-cured CIPP. The CONTRACTOR shall submit the Manufacturer's certification.

2.05 CHEMICAL RESISTANCE

- A. Domestic Sewage:
 - 1. Prior to construction, the CONTRACTOR shall submit certified test reports of chemical resistance performed in accordance with ASTM F1216.07.B- Appendix X2, ASTM D543 or C581 as applicable on previously prepared samples. Exposure should be for a minimum of one (1) month at 73.4 degrees F. During this period, the CIPP test specimens should lose no more than 20 percent of their initial physical properties when subjected to the following solutions:

Chemical Solution	Concentration, percent
-------------------	------------------------

Tap Water (pH 6-9)	100
Nitric Acid	5
Phosphoric Acid	10
Sulfuric Acid	10
Gasoline	100

Chemical Solution	Concentration, percent
Vegetable Oil	100
Detergent	0.1
Soap	0.1

Samples tested in accordance with ASTM D543 shall be weighed before immersion in medium and after immersion in the medium to account for deviations in wall thickness.

- The CONTRACTOR shall be responsible for all costs associated with the chemical resistance tests. Proof of meeting these requirements shall be provided to the OWNER for approval at least seven (7) days prior to commencement of work.

2.06 COMPONENT PROPERTIES

A. FLEXIBLE TUBE:

- The liner shall consist of at least two (2) separate tubes of corrosion resistant (E-CR or equivalent) glass fibers in accordance with ASTM D578. The tube will be constructed to withstand installation forces and have sufficient strength to bridge missing pipe.
- The liner shall be fabricated to a size that when installed will tightly fit the internal circumference and length of the host pipe providing a smooth interior surface. The liner shall be able to stretch to fit irregular pipe sections due to ovality, loss of pipe wall material, and deterioration.
- The tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric materials. No materials shall be included in the tube that may cause delamination. Resin impregnated tubes shall have no dry or unsaturated layers.
- The wall color of the interior pipe surface of the CIPP after installation shall be a light reflective color so that a clear detailed examination with CCTV inspection may be made.

B. RESINS:

- Resin shall be a chemically resistant polyester, vinyl ester thermoset UV-light cured resin and catalyst system that is compatible with the installation process and suitable for the intended service. The photo-initiator system shall be added to the resin prior to the impregnation. Resin fillers and resins created from recycled materials are not allowed.
- When cured, the resin/liner system shall meet the structural and chemical resistance

requirements of ASTM F2019 and this Section.

C. INTERIOR AND EXTERIOR FOIL:

1. The liner shall be provided with interior and exterior foils to prevent resin migration and contamination. Foils shall be in accordance with ASTM F2019 and shall be certified styrene gas barriers. Inner foil shall be fully removed during the installation process unless it is a permanent part of the system and fabricated as an integral part of the fabric tube by bonding or fusing. Exterior foil shall block UV light.
2. The interior and exterior films shall be free from tears, holes, cuts, foreign materials, and other surface defects.

D. ULTRAVIOLET LIGHT TRAIN:

1. The ultraviolet curing lamps shall operate at a sufficient output and in a sufficient frequency range to ensure curing of the resin. The multi-lamp ultraviolet curing lights and resin photo initiator system shall be optimized for curing of the provided resin. The Manufacturer shall approve the UV light train to be employed by the CIPP CONTRACTOR. The CIPP CONTRACTOR shall not use light trains that are not approved.
2. Individual UV Lights incorporated in the light train shall not exceed 80 percent of the logged hours of usage of the manufacturer's stated usage rate.
3. The UV light train shall have a minimum of one (1) camera for CCTV inspection of the liner.
4. The UV light train shall be sized according to the pipe diameter so that the UV bulbs are in proper proximity to the liner wall all around the pipe circumference and should include sensors to record the cure progress.

2.07 LINER DIMENSIONS

- A. The liner shall be fabricated to a size that when cured will tightly fit the stormwater and sanitary sewer pipe being rehabilitated. Allowance for longitudinal and circumferential expansion shall be taken into account when sizing and installing the liner. The CONTRACTOR shall field verify pipe diameters prior to ordering liners. It is the CONTRACTOR's responsibility to measure the actual inside diameter at different locations of the stormwater and sanitary sewer to determine the appropriate diameter of liner to use and any required liner expansion. The existing stormwater and sanitary sewer lines may be larger than their nominal size due to deterioration. The liner system shall expand to form a tight fit in the pipe including sections of pipe with ovality less than 5 percent. Pre-liners and sleeves shall be provided to restrict expansion, protect the liner foil, and maintain the inflated liner shape as recommended by the Manufacturer. The CONTRACTOR shall grout annular space between the exterior of the liner and the interior wall of the stormwater and sanitary sewer pipe and voids in the surrounding soil when pipe ovality exceeds 5 percent.

- B. The CONTRACTOR shall determine the length of the liner deemed necessary to effectively carry

out installation, seal the liner at the inlet and outlet of each manhole/structure, and take field samples as specified herein.

2.08 CURING CONTROL PROTOCOL

- A. A curing control protocol in accordance with Section 6.7 of ASTM F2019 for each installation shall be provided by the CONTRACTOR prior to installation. The protocol shall include actual materials and equipment (e.g., UV light train) to be utilized by the CONTRACTOR. The Manufacturer shall approve the control protocol.
- B. Curing and CCTV inspection records shall be automatically collected during the installation and curing process. Copies shall be submitted to the OWNER for review. Where the curing data and the curing protocol differ, the OWNER reserves the right to require additional “in pipe” sampling, testing, and repair of the sampling spot be completed by the CONTRACTOR at no additional cost to the OWNER.
- C. The protocol and recording shall include the following minimum information:
 - 1. Curing speed
 - 2. Light sources working and wattage
 - 3. Inner air pressure
 - 4. Exothermic (curing) temperature
 - 5. Date and time
 - 6. Length of liner
 - 7. Location of installation

2.09 FINISHED CIPP LINER PROPERTIES

- A. The finished CIPP shall extend the full length from manhole to manhole and provide a structurally sound, smooth, jointless, and watertight pipe.
- B. The physical properties of the cured CIPP shall have minimum initial test values as given in Table 1 of ASTM F2019. Properties for these or any other enhanced resins shall be substantiated with test data.

2.10 DESIGN CRITERIA

- A. The liner shall be designed in accordance with the procedures of ASTM F 1216, Appendix X1 for a fully deteriorated host pipe.
- B. All material properties used in design calculations shall be long-term (time-corrected) values. Time corrected values of short term flexural modulus and strength per ASTM D790 shall employ a 60 percent Creep Retention Factor. No Manufacturer material properties shall be used in design calculations unless substantiated by test data and approved by the OWNER.

- C. The required structural CIPP wall thickness shall be based at a minimum on the following parameters:
1. Factor of Safety = 2.0
 2. Modulus of soil reaction
 3. $E' = 1000$ psi
 4. Unit weight of soil = 120 pcf
 5. Poisson's Ratio = 0.3
 6. Enhancement Factor of 7
 7. Groundwater elevation over the pipe equivalent to surface grade.
 8. Ovality for each segment as applicable.
 9. Live loads (AASHTO H20 Traffic loads or Cooper E-80 loads) for each segment as applicable.
 10. Dead loads (i.e. soil depths) for each segment as specified.
 11. Minimum service life of fifty (50) years under continuous service.
 12. Deteriorated Condition: Fully
- D. The liner thickness shall be designed in incremental increases of 1.0 mm. Minimum wall thicknesses for UV Curing are shown below. Liners shall be manufactured to the manufacturer's next standard incremental thickness as specified by the approved design calculations submitted by the CONTRACTOR.

Pipe Size	Pipe Max Depth	Minimum Thickness
24" Storm	12.5'	8 mm
21" Sanitary Sewer	10.75'	7 mm

2.11 CIPP TERMINATION POINTS

- A. The termination points of the liner shall be cut flush and sealed. The seals shall be watertight, corrosion resistant, and provide a smooth transition between the liner and adjacent surface. Sealing materials and methods shall be submitted for acceptance by the OWNER. Hydraulic cements and quick set cement products will not be accepted for sealing termination points.
- B. Liner Termination points shall include but not be limited to manhole walls, service connection openings, and other exposed concrete surfaces adjacent to a liner within the host pipe.
- C. Where annular space between the exterior face of the liner and interior face of the stormwater and sanitary sewer pipe exists, the annular space shall be chemically grouted and the liner termination point sealed.

2.12 HYDROPHILIC SEALS

- A. The CONTRACTOR shall comply with the following requirements for hydrophilic seals:
 - 1. The hydrophilic waterstop end seals shall be bands that are 20 mm wide and 5 mm high, with a double bump on one side and flat on the other side. Manufacturers: De neef swellseal 3V Type S 20x5 hydrophilic waterstop, Hydrotite Style DS-0520-3.51, or approved equal. All lining ends shall have double hydrophilic waterstop end seals.
 - 2. LMK Insignia End Seal Sleeve or approved equal.
 - 3. Hydrophilic caulk or rope type materials shall not be used.

2.13 SERVICE CONNECTIONS

- A. No side services are anticipated with this project. If a side service is located during post cleaning television inspection, the CONTRACTOR shall coordinate with the City of Sandpoint, prior to connection.

2.14 CONTRACTOR'S INSTALLATION PLAN

- A. The CONTRACTOR shall prepare and submit a detailed Installation Plan for completion of the Work. The Manufacturer shall review and approve the plan and any deviations from their recommended procedures.
- B. The CONTRACTOR shall review available CCTV data for the pipelines to be rehabilitated as part of preparing the Installation Plan. The CONTRACTOR shall perform additional CCTV inspection as necessary to prepare the Installation Plan and size the CIPP liner at no additional cost to the OWNER.
- C. For each installation, the plan shall provide the following minimum information:
 - 1. Manufacturer's storage and handling recommendations with site specific requirements for the project.
 - 2. Access, termination, and intermediate manholes; direction of pull; maximum pulling force; and location of equipment (i.e., restraint sleeves, winch, rollers, etc.). The CONTRACTOR shall physically inspect each manhole for suitability and use during installation, curing, and sampling.
 - 3. Confirm diameter, alignment, depth, and condition of each pipe to be lined.
 - 4. Identify point repairs, infiltration/exfiltration repairs, and preliners, or slip sheet liners to be completed or provided prior to installation of the liner.
 - 5. Installation, curing, and sampling procedures including Manufacturer's recommendations. Curing requirements shall be provided as part of the Curing Control Protocol.
 - 6. Location of service connections and reference points for reinstatement including distance between reference points and service connections, clock position, and diameter.
 - 7. Methods and material to provide seal at service connections.

8. Methods and materials to provide seal at manholes including hydrophilic end seal material and methods for trimming and sealing at manhole walls.
9. Pre-inspection CCTV data.
10. Curing Control Protocol.
11. Affidavit of Manufacturer's review and approval.

PART 3 WORKMANSHIP

3.01 GENERAL

- A. Work shall be performed in accordance with local, state, and Federal health and safety regulations.
- B. No CIPP installations will be undertaken in weather conditions that could jeopardize the installation of the CIPP or be detrimental to the long-term performance of the
- C. If infiltration is observed in the pipe to be lined during the post cleaning inspection the CONTRACTOR shall inject grout to stop the infiltration prior to installation of the CIPP.
- D. CONTRACTOR shall install a hydrophilic waterstop in each manhole opening along the shot length.
- E. The CONTRACTOR shall provide:
 1. Adequate traffic control.
 2. Stormwater and Sanitary Sewer cleaning and Television Inspection per SP102.
 3. Bypass pumping and flow control per SP103

3.02 PREPARATORY PROCEDURES

- A. Pre-Inspection CCTV and installation plan.
 1. Prior to ordering the CIPP Liner, the CONTRACTOR shall perform CCTV inspection in accordance with SP102 as required to identify defects which may prevent proper installation of the liner and locate segments requiring sleeves and/or point repairs such as, but not limited to, offset joints or active infiltration, for proper installation. Pre-inspection shall also be used to determine service connection locations for re-establishment and determine the size of liner (diameter, length, and expansion) required.
 2. Bypass pumping shall not be required during pre-inspection CCTV. Management of flow diversion or/and or bypass pumping as required to fully inspect the stormwater and sanitary sewer to be rehabilitated shall be the responsibility of the CONTRACTOR.
 3. If inspection reveals an obstruction that cannot be removed by conventional cleaning equipment, the CONTRACTOR shall propose methods to remove the obstruction for approval by the OWNER.
 4. Based on the pre-inspection, the CONTRACTOR shall submit an Installation Plan. Construction shall not commence until the Installation Plan has been approved.

- B. Stormwater and Sanitary Sewer Cleaning: Prior to CIPP tube installation, the CONTRACTOR shall clean the existing stormwater and sanitary sewer in accordance with SP102. The CONTRACTOR shall clear the existing stormwater and sanitary sewer of obstructions such as solids or collapsed pipe that will prevent or hinder CIPP liner installation.
- C. Odor Control:
 - 1. At the project site, prior to bypassing sewage flow, the CONTRACTOR shall provide odor control measures in accordance with Federal, State, and Local Standards and SP103.
 - 2. The CONTRACTOR shall employ methods and procedures that mitigate the generation and discharge of objectionable odors to the surface environment at all times.
- D. Bypassing And Dewatering:
 - 1. The CONTRACTOR shall be responsible for bypassing flow around its work and dewatering of stormwater and sanitary sewer lines in accordance with the requirements of SP103.
- E. Measurement:
 - 1. The existing stormwater and sanitary sewer lines may be larger than their nominal size due to corrosion of the concrete. It is the CONTRACTOR's responsibility to measure the actual inside diameter at different locations of the stormwater and sanitary sewer to determine the appropriate size of CIPP liner to use.

3.03 POINT REPAIRS

- A. The CONTRACTOR shall grout any holes or voids that would prevent the proper installation of the CIPP liner.
- B. The CONTRACTOR shall provide point repairs where pipe conditions such as attached deposits, solids, dipped joints, protrusions, or collapsed pipe and/or active ground water infiltration can prevent proper installation of the liner. Point repairs shall be performed in accordance with SP102.
- C. CONTRACTOR shall grout active infiltration that may prevent proper installation or adversely impact the finished properties of the liner. Grouting shall be at no additional cost to the OWNER.

3.04 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be shipped, stored, and handled in accordance with the Manufacturer's recommendations. Storage of materials shall take into account local environmental conditions and the CONTRACTOR shall implement and document site specific procedures as required.
- B. If any part of the liner becomes damaged before or during installation, the liner shall be repaired or replaced in accordance with the Manufacturer's recommendations. Liners

damaged in such a manner that hinder or prevent proper installation or curing or release detrimental compounds shall be rejected.

- C. The OWNER reserves the right to reject liners without Certification Documentation or liners that exceed the Manufacturer's shelf life.
- D. Rejected materials shall be removed from the project site; disposed of in accordance with local, state, or federal regulations; and replaced at no additional cost to the OWNER.

3.05 INSTALLATION PROCEDURES

- A. Installation, curing, and sampling shall be in accordance with the Manufacturer's recommendations, ASTM F2019, and as specified herein. In case of conflict between these requirements, those affording the greatest protection to the OWNER shall apply.
- B. Prior to installation of the liner, CONTRACTOR shall clean and inspect the pipe reach being rehabilitated. CONTRACTOR shall perform inspections in the presence of the OWNER no more than one (1) hour prior to liner installation to demonstrate that the pipe is clean and free of conditions that will affect the installation. The inspection shall demonstrate that service connections are accurately located according to the Installation Plan and the distances shown can be replicated by crews and equipment performing service connection re-establishment.
- C. If conditions that negatively impact installation are identified, including but not limited to poorly located laterals, debris, displaced pipe, protruding taps, infiltration gushers, or infiltration runners that cannot be balanced by installation pressure, they shall be corrected in accordance with the Contract Documents and to the satisfaction of the OWNER. Installation shall not proceed until inspection meets the requirement of paragraph 3.05.B.
- D. Bypass pumping shall be performed during inspection, installation, service connection re-establishment, and post-installation CCTV inspection. Bypass pumping shall not be torn down until post CCTV inspection has been reviewed and accepted by the OWNER.
- E. Install continuous or properly trimmed hydrophilic waterstops at each manhole such that expansion occurs after installation and curing of the CIPP liner. Adhesives used to bond hydrophilic waterstop to the pipe and any spliced joints shall be as recommended and approved by the manufacture of the waterstop. Unless otherwise required for proper installation, insert waterstop a minimum of three (3) inches from the structure wall. Trimmed waterstop edges shall be butted up against each other at the crown of the pipe. Vertical overlap (e.g., stacking) of the hydrophilic waterstops will not be allowed. Waterstops with any gap between the ends will not be accepted. Provide a digital photo (3-megapixel resolution, minimum) after installation of waterstop but prior to installation of CIPP.
- F. Insert slip sheets, preliners, and liner sleeves in accordance with the approved Installation Plan. Failure to install items shall be grounds for rejection of the liner.
- G. A constant tension winch shall be used to pull the liner into place to extend fully between the

access manhole and next designated manhole or termination point. The pulling speed and tension shall not exceed Manufacturer's recommendations. CONTRACTOR shall exercise care not to damage the liner during the pulling phase.

- H. The liner shall be pressurized incrementally to the minimum recommended inner pressure. The pressure head shall be sufficient to hold the liner tight to the pipe wall and shall be maintained to allow water pockets to exfiltrate through the host pipe and prevent lifts in the liner and resin washout.
- I. Proper placement of the liner shall be verified utilizing the CCTV camera on the Light Train. The CONTRACTOR shall remove or repair any defects observed prior to curing.
- J. The liner shall be cured at a constant inner pressure. Workers shall not be present in the manhole during pressurization of the liner. Packers and clamping straps shall be properly installed and attached. If constant inner pressure cannot be maintained, replace or repair the inner foil in accordance with the manufacturer's recommendations.
- K. The UV Light Train shall be assembled according to the Manufacturer's recommendations for the stormwater and sanitary sewer pipe and liner diameter. Cure the liner in accordance with the curing protocol and submit record to the OWNER. The UV Light Train shall not be pulled in a downhill direction during the curing process unless otherwise approved by the OWNER. Approval will not be given where pipe slopes are greater than or equal to 3.0 percent.
- L. CONTRACTOR shall obtain samples during installation in accordance with ASTM F2019. Samples shall be taken in the presence of the OWNER.
- M. Remove the inner foil and flush the liner.

3.06 MANHOLE TERMINATIONS

- A. Cut liner flush within two (2) inches of the manhole wall, install hydrophilic seals. No portion of the cured liner shall remain in the manhole unless otherwise approved.
- B. Provide a smooth transition between the existing channel invert and the liner to prevent settling of sediments or debris from catching on the liner.

3.07 REINSTATEMENT OF SERVICE CONNECTIONS

- A. No side services are anticipated with this project. If a side service is located during post cleaning television inspection, the CONTRACTOR shall coordinate with the City of Sandpoint, prior to connection.

3.08 POST-INSPECTION

- A. The CONTRACTOR shall inspect the liner after re-instatement of service connections and prior to re-introduction of full flow.

- B. Post-inspection CCTV shall be performed in the presence of the OWNER or designated representative of the OWNER.
- C. All defects affecting the integrity or strength of the CIPP or adversely affecting the hydraulic capacity of the liner, as determined by the OWNER, shall be repaired or the liner replaced at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the OWNER for acceptance.

3.09 FINISHED PRODUCT

A. Finish:

- 1. The finished CIPP shall be continuous over the entire length of an installation run.
- 2. Defects such as foreign inclusions, dry spots, pinholes, delamination, seam separation and wrinkling beyond the specification allowances in paragraph 2.01, determined by the OWNER as affecting the integrity or strength of the CIPP, or as adversely affecting the hydraulic capacity of the CIPP, shall be repaired or replaced at the CONTRACTOR's expense.

B. Lateral Connections:

- 1. After the curing is complete, existing lateral connections shall be re-established. The cut liner shall have no jagged edges and shall be sanded smooth. The CONTRACTOR shall provide a seal recommended by the lining manufacturer at the service connection so that no leakage of fluids may infiltrate between the liner and the existing side service.

C. Inspection:

- 1. The CONTRACTOR shall inspect the CIPP after installation. The inspection will be performed and recorded using closed circuit television equipment in accordance with SP102. If defects or voids exist, the CONTRACTOR shall repair or replace that section of the pipe at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the OWNER for review.

3.10 CLEANUP

- A. Following inspection, the CONTRACTOR shall cleanup the entire project area. The CONTRACTOR shall dispose of all excess material and debris not incorporated into the permanent installation off site.

PART 4 MEASUREMENT AND PAYMENT

4.1 Ultraviolet Light Cured-in-Place-Pipe is to be measured in accordance with the following and as identified on the Bid Schedule.

A. Ultraviolet CIPP shall be measured by the linear foot, as measured along the horizontal centerline of the pipe. Includes all labor, equipment, set up for installation, materials, tools, testing, and related work as described in the Contract Documents and this Special Provision.

1. Bid Schedule Payment Reference: SP100.4.1.A.1
2. Bid Schedule Description: Ultraviolet Treated CIPP (pipe size)...linear foot (LF)

SP101 THERMAL TREATED CURED-IN-PLACE PIPE

PART 1 GENERAL

1.01 DESCRIPTION

A. Scope:

1. This specification covers the work necessary to furnish and install complete, cured-in-place pipe (CIPP) system. The CONTRACTOR shall provide all materials, labor, equipment, and services necessary for bypass pumping and/or diversion of sewage flows, cleaning and television inspection of stormwater and sanitary sewer to be lined, liner installation, reconnection of service connections, and final television inspection and testing of lined pipe system.

1.02 QUALITY ASSURANCE

A. REFERENCES

1. This Section contains references to the following documents. They are a part of this Section as specified and modified. In case of conflict between the requirements of this Section and those of the listed documents, the requirements affording the greatest protection to the OWNER shall apply.

Reference	Title
ASTM D543	Test Method for Resistance of Plastics to Chemical Reagents
ASTM D790	Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D2990	Test Method for Tensile, Compressive and Flexural Creep and Creep-Rupture of Plastics
ASTM D3039	Standard Test Method of Tensile Properties of Polymer Matrix Composite Materials
ASTM D5813	Standard Specification for Cured-in-Place Thermosetting Resin Sewer Pipe
ASTM F1216	Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of a Resin Impregnated Tube
ASTM F1743	Rehabilitation of Existing Pipelines and Conduits by the Pull In and Inflate and Curing of a Resin-Impregnated Tube

B. CIPP Testing and Samples:

1. Material Testing

- a. All material testing shall be performed by a registered independent, third-party laboratory and is incidental to the liner installation.
- b. The CONTRACTOR shall provide certified test results of the short-term properties of the cured lining material from the actual installed liner at a

minimum of one location per each liner insertion setup.

- c. The cured liner shall be sampled and tested for flexural strength and flexural modulus (short term.) Flexural strength and modulus shall be tested in accordance with the requirements of ASTM D790. The liner shall be in compliance with the physical properties stated under these specifications. A certificate of compliance shall be provided for long term flexural modulus.
- d. Corrosion resistance requirements shall be as stated in ASTM F1216, Section X2, Chemical Resistance Tests.
- e. Delamination testing shall be in accordance with ASTM F1216, Section 8.4, if required by the OWNER.

C. CIPP Liner Handling:

- 1. CONTRACTOR shall exercise adequate care during transportation, handling, and installation to ensure the CIPP material is not torn, cut, or otherwise damaged. If any part or parts of the CIPP material becomes torn, cut, or otherwise damaged before or during insertion, it shall be repaired or replaced in accordance with the manufacturer's recommendations and approval by the OWNER before proceeding further and at the CONTRACTOR's expense.

D. CIPP Liner Labeling:

- 1. Each liner tube shall be labeled by the liner manufacturer with the location of the liner manufacturer, the name of the project, the production lot number, the liner thickness, the liner diameter, the liner length, and the location where it is to be installed.

E. Warranty:

- 1. The CONTRACTOR shall warrant the completed work against defect in workmanship and material for a period of two (2) years from date of Final Acceptance. During this period, all defects discovered shall be removed and replaced by the CONTRACTOR in a satisfactory manner at no cost to the OWNER. In addition to the Warranty Inspection, the OWNER may conduct independent CCTV inspections, at its own expense, of the lining Work at any time prior to the completion of the guarantee period.

1.03 MANUFACTURER QUALITY CONTROL

- A. The Manufacturer shall have a Quality Control Plan and Reporting Procedure in place that will allow the OWNER to review the manufacture of the liner and resin impregnation process.
- B. No change of material, design values, or procedures for provided CIPP may be made during the course of the Work without the prior written approval of the OWNER.
- C. At the time of manufacture at the Manufacturer's facility, inspect each production lot of liner for defects. At the time of delivery, the liner shall be homogeneous throughout, uniform in color, and free of cracks, holes, foreign materials, blisters, or deleterious faults. For the purposes of inspection and testing, a production lot shall consist of all liners having the same marking number, produced during any given work shift.

1.04 SUBMITTALS

- A. The following submittals shall be provided in accordance with ISPWC and the City of Sandpoint's Standards:
1. Submit Manufacturer's documentation, affidavits, and approvals as follows:
 - a. Manufacturer's QA/QC procedures and reporting plan or current ISO 9001 Certification.
 - b. Manufacturer's recommended storage and handling, installation, curing, and sampling procedures.
 - c. Letter of Certification by the manufacturer stating the CIPP CONTRACTOR's and Superintendents' licensure to install the provided CIPP.
 - d. Letter of Certification that Manufacturer's Representative is an authorized agent of the manufacturer and the representative's resume.
 2. Submit CIPP material data and testing as follows:
 3. Submit CIPP Thickness design calculations for each installation including design parameters and long term material properties. Calculations shall be signed and sealed by a Professional Engineer registered in the State of Washington.
 4. Submit project specific CIPP Installation Plan per 3.05.
 5. Submit CCTV Inspection records and reports. Inspections shall be provided for each installation including:
 - a. Pre-inspection (Record submittal).
 - b. Installation (Record Submittal).
 - c. Post-installation per Paragraph 3.08.
 6. Submit Warranty.
 7. Submit materials and methods for sealing lateral service connections including the following:
 - a. Manufacturer's literature and technical data for provided products.
 - b. Manufacturer's affidavit materials are suitable for the application.
 8. Submit materials and methods for sealing termination points at manhole connections as follows:
 - a. Manufacturer's literature and technical data for provided products.
 - b. Manufacturer's affidavit materials are suitable for the application.
 9. Materials and methods for CIPP repairs as required during completion of the Work. Submittals shall be made describing each repair and will be reviewed and approved on a case-by-case basis by the OWNER.
 10. CONTRACTOR shall submit applicable testing and laboratory analysis reports as requested

in Section 1.02.

11. Material safety data sheets (MSDS) for all hazardous chemicals used or expected to be onsite. At a minimum, sheets for the resin, catalyst, cleaners, and repair agents should be submitted. CONTRACTOR shall have copies of MSDS Sheets on site during construction.

PART 2 MATERIALS

2.01 Liner Tube

- A. The liner tube shall consist of one or more layers of flexible needled felt or an equivalent woven and/or non-woven material capable of carrying resin, withstanding installation pressure and curing temperatures, and is compatible with the resin system used. The liner shall be fabricated to a size that, when installed, will fit the internal circumference of the existing pipe without any annular space between the liner and existing pipe wall.
- B. The resin used shall be compatible with the rehabilitation process, shall be able to cure in the presence or absence of water and the initiation temperature for cure shall be as recommended by the resin manufacturer and reviewed by the OWNER.
- C. The liner shall be fabricated from materials which when cured, will be chemically resistant to withstand internal exposure to sewage gases containing quantities of hydrogen sulfide, carbon monoxide, methane, petroleum hydrocarbons, saturation with moisture, diluted sulfuric acid, and other chemical reagents determined by the OWNER.
- D. The minimum tube length shall be that deemed necessary by the CONTRACTOR to effectively span the distance from the inlet to the outlet of the respective manholes, or access points, unless otherwise specified. The CONTRACTOR shall verify the lengths in the field before impregnation of the tube with resin. Individual insertion runs may be made over one or more manhole sections as determined in the field by the CONTRACTOR and reviewed by the OWNER.
- E. Prior to insertion, the liner shall be free of all visible tears, holes, cuts, foreign materials, and other defects.
- F. Prior to insertion, the CONTRACTOR shall provide data on the maximum allowable stresses and elongation of the tube. The exterior of the manufactured tube shall be marked along its length at regular intervals not to exceed five feet. These marks shall be used as a gauge to measure elongation during insertion. Should the overall elongation of a reach exceed five percent, the liner tube shall be rejected and replaced.

2.02 Resin

- A. Unless otherwise specified, provide a general purpose, unsaturated, thermosetting, polyester, vinyl ester, or epoxy resin able to cure in the presence or absence of water, and a catalyst system compatible with the insertion process.
- B. Resin shall not be subjected to ultraviolet light and shall form no excessive bubbling or wrinkling during lining.
- C. The resin shall be shipped directly from the manufacturer to the CIPP wet-out facility. The resin shall not be sent to any intermediate mixing facility. Copies of the shipment documents from the resin manufacturer shall be submitted to the OWNER showing dates of shipment, the originating location and the receiving location; including with every shipment, the infrared spectrum analysis (IR Scan) from the manufacture source.
- D. The resin shall be used to manufacture the CIPP as shipped. No filler or additives shall be added at the wet-out facility except for the required catalyst as recommended by the resin

manufacture. The CONTRACTOR shall submit a Certificate of Authenticity from the resin manufacture for each shipment to the wet-out facility (to include the date of manufacture and the head distortion temperature). This information shall be submitted prior to manufacturing any CIPP.

- E. The CONTRACTOR shall identify the wet-out facility where all CIPP under this Contract will be manufactured. All CIPP shall be manufactured from this designated wet-out facility throughout the entire Contract unless specifically approved otherwise by the OWNER in writing. Multiple wet-out facilities shall not be allowed.
- F. The cured liner shall have the following minimum structural properties:
 - 1. Flexural Strength of 4,500 psi per ASTM D790
 - 2. Flexural Modulus of 250,000 psi per ASTM D790
 - 3. Tensile Strength of 3,000 psi per ASTM D638

Characteristic	Test Method	Polyester Resin Standard	Polyester Resin Enhanced
Flexural Strength	ASTM D790	4,000 psi	4,500 psi
Flexural Modulus (short Term)	ASTM D790	250,000 psi	400,000 psi
Flexural Modulus (long term)		125,000 psi	200,000 psi

2.03 Physical Properties

- A. The CIPP system shall conform to and comply with the minimum standards listed below.
 - 1. Factor of Safety: 2
 - 2. Soil Modulus: 1,000 psi
 - 3. Soil Density: 120 pcf
 - 4. Live Load: H20
 - 5. Depth of cover: As Specified
 - 6. Groundwater: Full depth of cover
 - 7. Deteriorated Condition: Fully
 - 8. Ovality: 2%
- B. The liner thickness shall be designed in incremental increases of 1.0 mm. Minimum wall thickness for Thermal Curing is shown below. Liners shall be manufactured to the manufacturer’s next standard incremental thickness as specified by the approved design calculations submitted by the CONTRACTOR.

Pipe Size	Pipe Max Depth	Minimum Thickness
24" Storm	12.5'	12 mm
21" Sanitary Sewer	10.75'	10 mm

PART 3 WORKMANSHIP

3.01 GENERAL

- A. Work shall be performed in accordance with local, state, and Federal health and safety regulations.
- B. No CIPP installations will be undertaken in weather conditions that could jeopardize the installation of the CIPP or be detrimental to the long-term performance of the
- C. If infiltration is observed in the pipe to be lined during the post cleaning inspection the CONTRACTOR shall inject grout to stop the infiltration prior to installation of the CIPP.
- D. CONTRACTOR shall install a hydrophilic waterstop in each manhole opening along the shot length.
- E. The CONTRACTOR shall provide:
 - 1. Adequate traffic control.
 - 2. Stormwater and Sanitary Sewer cleaning and Television Inspection per SP102.
 - 3. Bypass pumping and flow control per SP103

3.02 PREPARATORY PROCEDURES

- A. Pre-Inspection CCTV and installation plan.
 - 1. Prior to ordering the CIPP Liner, the CONTRACTOR shall perform CCTV inspection in accordance with SP102 as required to identify defects which may prevent proper installation of the liner and locate segments requiring sleeves and/or point repairs such as, but not limited to, offset joints or active infiltration, for proper installation. Pre-inspection shall also be used to determine service connection locations for re-establishment and determine the size of liner (diameter, length, and expansion) required.
 - 2. Bypass pumping shall not be required during pre-inspection CCTV. Management of flow diversion or/and or bypass pumping as required to fully inspect the stormwater and sanitary sewer to be rehabilitated shall be the responsibility of the CONTRACTOR.
 - 3. If inspection reveals an obstruction that cannot be removed by conventional cleaning equipment, the CONTRACTOR shall propose methods to remove the obstruction for approval by the OWNER.
 - 4. Based on the pre-inspection, the CONTRACTOR shall submit an Installation Plan. Construction shall not commence until the Installation Plan has been approved.
- B. Stormwater and Sanitary Sewer Cleaning: Prior to CIPP tube installation, the CONTRACTOR shall clean the existing stormwater and sanitary sewer in accordance with SP102. The CONTRACTOR shall clear the existing stormwater and sanitary sewer of obstructions such as solids or collapsed pipe that will prevent or hinder CIPP liner installation.

C. Odor Control:

1. At the project site, prior to bypassing sewage flow, the CONTRACTOR shall provide odor control measures in accordance with Federal, State, and Local Standards and SP103.
2. The CONTRACTOR shall employ methods and procedures that mitigate the generation and discharge of objectionable odors to the surface environment at all times.

D. Bypassing And Dewatering:

1. The CONTRACTOR shall be responsible for bypassing flow around its work and dewatering of stormwater and sanitary sewer lines in accordance with the requirements of SP103.

E. Measurement:

1. The existing stormwater and sanitary sewer lines may be larger than their nominal size due to corrosion of the concrete. It is the CONTRACTOR's responsibility to measure the actual inside diameter at different locations of the stormwater and sanitary sewer to determine the appropriate size of CIPP liner to use.

3.03 POINT REPAIRS

- A. The CONTRACTOR shall grout any holes or voids that would prevent the proper installation of the CIPP liner.
- B. The CONTRACTOR shall provide point repairs where pipe conditions such as attached deposits, solids, dipped joints, protrusions, or collapsed pipe and/or active ground water infiltration can prevent proper installation of the liner. Point repairs shall be performed in accordance with SP102.
- C. CONTRACTOR shall grout active infiltration that may prevent proper installation or adversely impact the finished properties of the liner. Grouting shall be at no additional cost to the OWNER.

3.04 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be shipped, stored, and handled in accordance with the Manufacturer's recommendations. Storage of materials shall take into account local environmental conditions and the CONTRACTOR shall implement and document site specific procedures as required.
- B. If any part of the liner becomes damaged before or during installation, the liner shall be repaired or replaced in accordance with the Manufacturer's recommendations. Liners damaged in such a manner that hinder or prevent proper installation or curing or release detrimental compounds shall be rejected.

- C. The OWNER reserves the right to reject liners without Certification Documentation or liners that exceed the Manufacturer's shelf life.
- D. Rejected materials shall be removed from the project site; disposed of in accordance with local, state, or federal regulations; and replaced at no additional cost to the OWNER.

3.05 INSTALLATION PROCEDURES

A. General:

- 1. CONTRACTOR is responsible for obtaining construction/fire hydrant meters from OWNER and for paying all applicable deposit fees and water usage fees.

B. Resin Impregnation

- 1. The uncured resin in the original containers and the unimpregnated fiber- felt tube shall be impregnated by vacuum or other means prior to installation. The materials and wet-out procedure shall be subject to inspection by the OWNER. A resin and catalyst system that is compatible with the requirements of the method shall be used.
- 2. The impregnated liner bag shall be transported to and stored at the site in such a manner that it will not be damaged, exposed to direct sunlight, or result in any public safety hazard. The impregnated liner bag shall be stored in temperature, humidity, and other conditions as recommended by the manufacturer during shipment and storage. All materials shall be subject to inspection and review prior to installation.

C. Liner Installation

- 1. On segments with any infiltration, a 6-mil clear nylon reinforced pre-liner shall be used.
- 2. The impregnated tube shall be inserted through an existing manhole or other access approved by the OWNER by means of the installation process. The application of hydrostatic head shall fully extend the liner to the next designated manhole or termination point and inflate and firmly adhere the liner to the pipe wall.
- 3. The Contractor shall install Hydrophilic End Seals at all manhole penetrations prior to curing. The End Seals shall form a 360-degree seal between the host pipe and the newly installed liner and must be a minimum of two inches wide. Acceptable End Seals are Insignia End Seals by LMK Enterprises, or preapproved equal.

D. Curing

- 1. After placement is completed, suitable heat source and distribution equipment shall be provided. The equipment shall be capable of circulating hot water throughout the section by means of pre-strung hose which has been perforated in accordance with the manufacturer's recommendations or other methods acceptable by the OWNER to raise the temperature uniformly above the temperature required to affect a resin cure. This temperature shall be determined by the manufacturer based on the resin/catalyst system employed.

2. Steam Curing: After placement is completed, suitable steam-generating equipment is required to distribute steam throughout the pipe. The equipment should be capable of delivering steam throughout the section to uniformly raise the temperature within the pipe above the temperature required to effect a cure of the resin. The temperature in the line during the cure period should be as recommended by the resin manufacturer. The steam-generating equipment should be fitted with a suitable monitor to gauge the temperature of the outgoing steam. The temperature of the resin being cured should be monitored by placing a gauge between the impregnated tube and the existing pipe at the termination end to determine the temperature during cure. Initial cure will occur during temperature heat-up and is completed when exposed portions of the new pipe appear to be hard and sound and the remote temperature sensor indicates that the temperature is of a magnitude to realize an exotherm or cure in the resin. After initial cure is reached, the temperature should be raised to post-cure temperatures recommended by the resin manufacturer. The post-cure temperature should be held for a period as recommended by the resin manufacturer, during which time the distribution and control of steam to maintain the temperature continues. (iii) The curing of the CIPP must take into account the existing pipe material, the resin system, and ground conditions (temperature, moisture level)
3. The heat source piping shall be fitted with continuous monitoring thermocouples to gauge the temperature of the incoming and outgoing water. Water temperature during the cure period shall meet the requirements of the resin manufacturer as measured at the heat source inflow and outflow return lines. At the direction of the OWNER, the CONTRACTOR shall provide standby equipment to maintain the heat source supply. An additional continuous monitoring thermocouple shall be placed between the impregnated felt tube and the pipe invert at the remote manhole and a point midway between the upstream and downstream manholes to determine the temperature during the cure. The temperature during the cure shall not be less than 130 degrees Fahrenheit at the boundary between the pipe wall and the liner unless otherwise directed by the OWNER because of the resin system used.
4. The initial cure shall be deemed to be completed when inspection of the exposed portions of the liner appears hard and sound and the remote temperature sensors indicate that an exotherm has occurred. The cure period shall be a duration recommended by the resin manufacturer during which time the recirculation of water and cycling of the heat exchanger continuously maintain the required temperature.
5. Temperature shall be maintained during the curing period as recommended by the resin manufacturer and shall follow the healing schedule supplied by the manufacturer and reviewed by the OWNER.

E. Cool Down

1. The hardened liner shall be cooled to a temperature below 100 degrees Fahrenheit before relieving the static head or pressure in the lined pipe and returning normal flow back into the system. The cool down may be accomplished by introducing cool water into the lined pipe. Care shall be taken in the release of the static head pressure so that a vacuum will not develop which could damage the newly installed

liner.

F. Sealing of Ends

1. After the cool-down period is complete, perform final trimming and sealing of the liner at access structures, to provide watertight pipe and structure seals. Trim the finished ends of the liner to within one inch of access structure wall. Provide a smooth transition between the existing structure channel invert and the liner using a cementitious coating or other approved material to prevent settling of sediments or debris from catching on the liner or ponding of any standing water in the access structure. Seal all holes and voids in manhole and structure walls immediately surrounding the new liner with a chemical grout, compatible with the resin mixture of the liner.

3.06 MANHOLE TERMINATIONS

- A. Cut liner flush within two (2) inches of the manhole wall, install hydrophilic seals. No portion of the cured liner shall remain in the manhole unless otherwise approved.
- B. Provide a smooth transition between the existing channel invert and the liner to prevent settling of sediments or debris from catching on the liner.

3.07 REINSTATEMENT OF SERVICE CONNECTIONS

- A. No side services are anticipated with this project. If a side service is located during post cleaning television inspection, the CONTRACTOR shall coordinate with the City of Sandpoint, prior to connection.

3.08 POST-INSPECTION

- A. The CONTRACTOR shall inspect the liner after re-instatement of service connections and prior to re-introduction of full flow.
- B. Post-inspection CCTV shall be performed in the presence of the OWNER or designated representative of the OWNER.
- C. All defects affecting the integrity or strength of the CIPP or adversely affecting the hydraulic capacity of the liner, as determined by the OWNER, shall be repaired or the liner replaced at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the OWNER for acceptance.

3.09 FINISHED PRODUCT

- A. Finish:
 1. The finished CIPP shall be continuous over the entire length of an installation run.
 2. Defects such as foreign inclusions, dry spots, pinholes, delamination, seam separation and wrinkling beyond the specification allowances in paragraph 2.01, determined by the OWNER as affecting the integrity or strength of the CIPP, or as adversely affecting the

hydraulic capacity of the CIPP, shall be repaired or replaced at the CONTRACTOR's expense.

- B. No side services are anticipated with this project. If a side service is located during post cleaning television inspection, the CONTRACTOR shall coordinate with the City of Sandpoint, prior to connection.
- C. Inspection:
 - 1. The CONTRACTOR shall inspect the CIPP after installation. The inspection will be performed and recorded using closed circuit television equipment in accordance with SP102. If defects or voids exist, the CONTRACTOR shall repair or replace that section of the pipe at no additional cost to the OWNER. Methods of repair shall be proposed by the CONTRACTOR and submitted to the OWNER for review.

3.10 CLEANUP

- A. Following inspection, the CONTRACTOR shall cleanup the entire project area. The CONTRACTOR shall dispose of all excess material and debris not incorporated into the permanent installation off site.

PART 4 MEASUREMENT AND PAYMENT

- 5.1 Thermal Treated Cured-in-Place-Pipe is to be measured in accordance with the following and as identified on the Bid Schedule.
 - A. Thermal Treated CIPP shall be measured by the linear foot, as measured along the horizontal centerline of the pipe. Includes all labor, equipment, set up for installation, materials, tools, testing, and related work as described in the Contract Documents and this Special Provision.
 - 1. Bid Schedule Payment Reference: SP101.4.1.A.1
 - 2. Bid Schedule Description: Thermal Treated CIPP (pipe size) ... linear foot (LF)

SP102 UTILITY CLEANING AND TELEVISION INSPECTION

PART 1 GENERAL

1.01 DESCRIPTION

A. Scope:

1. This section specifies the requirements for cleaning of stormwater and sanitary sewers prior to television inspection and rehabilitation.

B. Requirements:

1. The CONTRACTOR shall clean the stormwater and sanitary sewers specified for television inspection and rehabilitation of debris, roots, and grease accumulations. All materials dislodged during cleaning shall be removed from the stormwater and sanitary sewer and disposed of by the CONTRACTOR. Cleaning methods shall include water jetting, sodding, pigging, or bucketing.
2. Television inspection is not required during cleaning operations. However, the CONTRACTOR may, at its own expense, inspect the stormwater and sanitary sewer to view current line conditions.
3. CONTRACTOR shall coordinate with the OWNER prior to Television Inspection to ensure someone from the City is present during the Pre/Post Television Inspection.

1.02 MAJOR BLOCKAGE

- A. A major blockage shall be defined as an obstruction within the stormwater and sanitary sewer that cannot be removed by cleaning with commercially available hydraulic or mechanical cleaning equipment. Removal of a major blockage shall be incidental to this Bid Item. Before removal of major blockages, CONTRACTOR shall present the plan of removal to the OWNER.

PART 2 MATERIALS

2.01 EQUIPMENT

A. General:

1. All equipment specified in this section shall be in good working condition and manufactured or fabricated to withstand the severity of the work covered under this section.

B. Hydraulic And Mechanical Cleaning:

1. All hydraulic cleaning equipment shall be truck mounted. Water jet cleaning equipment shall include a water tank, auxiliary engine, pumps, and hydraulically driven hose reel. The CONTRACTOR shall provide a minimum of 600 feet of high-pressure hose and a selection of high velocity nozzles, each having a capacity of 60 gallons per minute at working pressures of 1000 to 1500 pounds per square inch. Pressure to the nozzle shall be regulated by a relief

valve adjustable from 1 to 1500 psi. Nozzles shall be capable of producing a jet stream angle of 15 to 45 degrees from the horizontal. The CONTRACTOR shall also provide a high velocity gun with sufficient discharge and pressure to thoroughly clean manhole interiors.

2. Sewer Pigs, which are propelled by water, shall be readily collapsible at any time during the cleaning operations to protect against flooding of the stormwater and sanitary sewer lines. The CONTRACTOR shall provide pigs in sizes consistent with the pipe diameters encountered. Each pig shall have a flexible scraper at its periphery to ensure the total removal of grease. Sewer Pigs that are not readily collapsible are prohibited.
 3. Mechanically powered equipment, such as bucket machines, shall be provided in pairs and shall be belt-driven or employ an overload device. Power rodding machines shall be a "continuous rod" type capable of rodding distances of up to 1000 feet in one setup. Rodding machines shall have the ability to spin the rod either clockwise or counterclockwise and be able to be pushed straight out or pulled back without rotating the machine. It shall be capable of pulling pipe-size swabs or brushes back through the stormwater and sanitary sewer for cleaning and flushing purposes. The rodding machine shall have a positive drive and shall be capable of producing a 2000-pound pull. The rod shall be specifically designed for use with the rodding machine.
- C. Root Removal: The CONTRACTOR shall employ cleaning equipment to cut all roots encountered back to the pipe surface.
- D. Debris Removal: The CONTRACTOR shall provide suitable equipment to remove all debris dislodged during cleaning operations from the nearest downstream manhole. Equipment or methods that require a member or members of the CONTRACTOR's crew to physically excavate debris from within the manhole are prohibited. All debris shall be promptly removed from the line from the nearest manhole and shall be disposed of offsite in a lawful manner at an OWNER-approved location. Hauling containers shall be watertight.

PART 3 WORKMANSHIP

3.01 GENERAL

- A. The CONTRACTOR shall at all times conduct its work so as to prevent any blockage and minimize surcharging in the stormwater and sanitary sewer manholes and connecting stormwater and sanitary sewer pipelines. Damage to existing facilities as a result of the CONTRACTOR's work shall be promptly repaired in kind at the CONTRACTOR's expense.

3.02 BYPASSING AND DEWATERING

- A. CONTRACTOR shall be responsible for bypassing sewer flow around its work and dewatering of sewer lines in accordance with the requirements of SP 103 Bypass Sewage Pumping.

3.03 CLEANING

- A. Cleaning shall remove all sludge, rocks, debris, roots, grease accumulations, and obstructions from the stormwater and sanitary sewer. Cleaning methods may include water jetting, rodding,

pigging, or bucketing. Unless otherwise directed by the OWNER, the CONTRACTOR shall select the most effective of these cleaning methods according to the prevailing site condition. Where bucketing is warranted, bucket machines shall be used to remove the major portion of debris. Bucket operations shall proceed in the upstream direction in one (1) reach at a time. The operation shall continue until the buckets can pass the entire reach with minimum collection of debris. Upon completion, the line shall be cleaned using a Sewer Pig and then hydraulically cleaned.

- B. During cleaning operations, the CONTRACTOR shall provide a means of catching and removing the dislodged debris conveyed downstream with the stormwater and sanitary sewer flow. The method chosen shall not allow the transport of debris to downstream stormwater and sanitary sewer reaches.
- C. All debris removed from the stormwater and sanitary sewer shall be stored until the day's end whereupon the CONTRACTOR shall be responsible for its proper disposal off site.

3.04 RECLEANING

- A. Where the stormwater and sanitary sewer is not adequately cleaned as determined by the OWNER through prerehabilitation television inspection review, CONTRACTOR shall remove all equipment or materials from the stormwater and sanitary sewer, reclean, and CCTV the stormwater and sanitary sewer at no additional expense to the OWNER.

3.05 TAG LINES

- A. The CONTRACTOR may install a tag line after cleaning for later TV inspection equipment connections. However, the tag line shall not be left in the stormwater and sanitary sewer longer than overnight. This allowance may be rescinded by the OWNER at any location, if unacceptable procedures are used by the CONTRACTOR to secure the tag line. Damage caused by sewage backup due to the tag line shall be the responsibility of the CONTRACTOR.

PART 4 MEASUREMENT AND PAYMENT

4.1 Utility Cleaning and Television Inspection to be measured in accordance with the following as identified in the Bid Schedule. Pre and Post Television Inspection will be accounted for in Bid Price. If required and not listed in the Bid Schedule such items shall be incidental to this Bid Item.

- A. Utility Cleaning and Television Inspection: By the linear foot for lines measured on a horizontal basis based on the Unit Quantity for each distance manhole-to-manhole. This bid item consists of cleaning, root removal, equipment set up at each reach, television inspection, labor, tools, recording, documenting and submitting and all tools and equipment required to complete this task.
 - 1. Bid Schedule Payment Reference: SP102.4.1.A.1
 - 2. Bid Schedule Description: Utility Cleaning and Television Inspection ... linear foot (LF)

SP103 BYPASS SEWAGE PUMPING

PART 1 GENERAL

1.01 DESCRIPTION

- A. Scope: This section describes the existing conditions for temporary bypassing and dewatering of stormwater and sanitary sewers during internal television inspection (CCTV), cleaning operations, rehabilitation, and inspection of the project pipelines and of service laterals during the rehabilitation prior to reconnection to the rehabilitated pipeline.
- B. Requirements:
1. CONTRACTOR shall provide labor, materials, and supervision to temporarily bypass flow around the CONTRACTOR's work in accordance with the specific needs of the rehabilitation method being utilized and dewater the pipelines in preparation for cleaning and rehabilitation. All references to the bypass pumping and/or bypass pumping system include, but are not limited to, all pumps, piping, valves, and other equipment needed to move the intended flow from one location to another.
 2. The actual design of the bypass arrangement and alignment shall be prepared by the CONTRACTOR and shall be submitted to the OWNER to determine conformance to project objectives. Means and methods of accomplishing the bypassing shall be the responsibility of the CONTRACTOR.
 3. Sanitary sewer mains shall remain in service at all times throughout the duration of the project. CONTRACTOR shall be responsible for diverting flow away from the limits of construction through the use of bypass pumping or flow diversions with prior written approval by the OWNER.
 4. Service to laterals shall be disrupted for a period of no more than eight (8) hours. Laterals within residential areas shall only be out of service between the hours of 8:00 am to 5:00 pm, Monday through Friday. Laterals within business areas shall be addressed on a case by case basis. If CONTRACTOR feels that it is necessary to disrupt lateral services for a period longer than eight (8) hours, CONTRACTOR shall provide alternate means of service without disrupting use of the service by the owner/resident.
 5. CONTRACTOR shall maintain pedestrian and vehicular traffic and comply with ADA regulations for access to all residential and commercial property unless written approval is otherwise obtained from the property owner allowing for reduced access.
 6. It is the CONTRACTOR's responsibility to arrange all necessary access and temporary construction agreements with all affected parties for the location of the bypass pumping system.
 7. The bypass pumping system shall be designed to normally maintain the wastewater flow below the top of the pipe, without surcharging.
 8. The CONTRACTOR shall have the complete bypassing system in place and successfully pressure tested at 1.5 times the maximum operating pressure of the system before bypassing any sewage.

9. The CONTRACTOR shall notify the OWNER 48 hours prior to shutting down or bypassing the pipeline.
 10. The bypassed flow shall be continuously monitored.
 11. CONTRACTOR is responsible for immediate and proper cleanup should any spill occur, regardless of amount.
- C. Experience: CONTRACTOR shall utilize staff and/or a subcontractor that has been directly responsible for completion of a CIPP project that required the bypass pumping of sewage flows in excess of 1 mgd.

1.02 SUBMITTALS

- A. At the Preconstruction Conference the CONTRACTOR shall submit, in accordance with ISPWC and City of Sandpoint's Standards, drawings and complete design data showing methods and equipment it proposes to utilize in bypassing for approval by the OWNER. The submittal shall include the following information:
1. Drawings indicating the scheme and location of temporary plugs and bypass discharge lines. The drawings shall also show the method and location for discharging the bypass lines.
 2. Capacities of pumps, prime movers, and standby equipment.
 3. Design calculations proving adequacy of the system and selected equipment.
 4. Standby power source.
 5. Staffing plan.
 6. Show suction and discharge points with elevations and stationing on the design plans.
 7. Provide pump performance curves.
 8. Submit calculations to verify suction lift of pumps has not been exceeded.
 9. CONTRACTOR shall submit proposed noise control and exhaust control plans for pumping equipment.
 10. CONTRACTOR shall submit a proposed plan for disruption of sewer service laterals.
 11. CONTRACTOR shall submit bypass piping inspection plan.
- B. The actual design of the bypass arrangement shall be prepared by the CONTRACTOR or Subcontractor performing the work, and shall be submitted to the OWNER to determine conformance to project objectives. The CONTRACTOR shall be responsible for any Subcontractor's design (if used) on this Project. Means and methods of accomplishing the bypassing shall be the responsibility of the CONTRACTOR.
- C. Approval of submitted plans for stormwater and sanitary sewer connection and temporary rerouting shall in no way relieve the CONTRACTOR of their responsibility for the protection of adjacent properties and downstream drainage systems and water tributaries against sewage spill. Any litigation, claims, fines, etc. associated with any sewage spill shall be the responsibility of the CONTRACTOR.

1.03 JOB CONDITIONS

A. Available Flow Data:

1. Obtaining flow data for the sanitary sewers to be rehabilitated at the project site will be the responsibility of the CONTRACTOR.

B. Protection:

1. In areas where flows are bypassed, all bypass flows shall be discharged as approved by the OWNER. No bypassing to the ground surface, receiving waters, storm drains, or bypassing that results in soil or groundwater contamination or any potential health hazards shall be permitted.

C. Scheduling:

1. The bypassing system shall not be shut down between shifts, on holidays or weekends, or during work stoppages without written permission from the OWNER. The bypass system will have an attendant around the clock, whose only duty is to maintain the bypass pumping system until the bypassing of that specific pipeline is no longer required.

PART 2 PRODUCTS

2.01 PUMPING SYSTEMS

A. CONTRACTOR shall maintain on site the following minimum requirements for all bypass pumping systems:

1. Sufficient equipment and materials to ensure continuous and successful operation of the bypass and dewatering systems. The complete bypass system, including all piping, shall be continuously monitored by CONTRACTOR personnel.
2. A system of pumps and piping operating on site to maintain a minimum 50% over capacity of the anticipated maximum flow (as determined by the CONTRACTOR). In addition, the CONTRACTOR shall have a standby pump, equal in capacity to the largest pump in the system, piped, plumbed, and ready for operation. Standby pumps shall be fueled and operational at all times.
3. The CONTRACTOR shall maintain on site a sufficient number of valves, tees, elbows, connections, tools, plugs, piping, hoses, and other parts of system hardware to ensure immediate repair or modification of any part of the system as necessary.

2.02 BYPASS PUMPING AND FLOW CONTROL PLAN

- #### A. The actual design of the bypass arrangement and alignment shall be prepared by the CONTRACTOR. The CONTRACTOR shall prepare and submit a project specific Bypass Pumping and Flow Control Plan (Bypass Plan) for review and approval by the OWNER.

- B. Approval of the Bypass Plan shall in no way relieve the CONTRACTOR of its responsibility for the protection of adjacent properties, downstream drainage systems, and water tributaries against sewage spill. Any litigation, claims, fines, etc. associated with any sewage spill shall be the responsibility of the CONTRACTOR.
- C. Bypass operations shall be incorporated into Control Plan(s) submitted for review and approval by the government agency with jurisdiction of the right-of-way.
- D. The Bypass Pumping and Flow Control Plan(s) shall include, but not be limited to, the following:
 - 1. Flow monitoring data, location of monitoring and design calculations for flow diversions.
 - 2. A summary of flow to be bypassed including measured flows and any flows diverted.
 - 3. Drawings indicating the scheme and location of pumps, suction piping, discharge piping, and temporary plugs for each of the project sites.
 - 4. Capacities and sizes of pumps, standby equipment, and power requirements, if applicable.
 - 5. Design calculations proving adequacy of the system and selected equipment, including static lift, friction losses, fitting losses, flow velocity, pump curves showing operating range, suction pipe, and discharge pipe (thickness calculations in conjunction with pavement ramp details assuming an HS20 live loading).
 - 6. Suction and discharge locations including any new manholes proposed by the CONTRACTOR.
 - 7. Plugging method and type of plug.
 - 8. Styrene Control Plan.
 - 9. Method of noise and exhaust control for each pump and generator.
 - 10. Measures to prevent movement, support, or anchor bypass piping including but not limited to thrust and restraint block sizes, placement of barriers, and strapping.
 - 11. Staffing plan demonstrating compliance for continuous monitoring.

2.03 NOISE RESTRICTIONS

- A. Noise Control: CONTRACTOR shall comply with local, State, and Federal noise limitation requirements.

PART 3 EXECUTION

3.01 ESTIMATED FLOWS AND SEWER CAPACITY PROJECT PIPELINE

A. Daily Flow Data

- 1. Flow monitoring data has not been performed for this project. The CONTRACTOR is responsible for obtaining current flow condition information at the time of construction. The OWNER is not responsible for any deviations in quantity of sewage flow at any time during the construction period. Higher flows may be encountered depending on weather and other upstream conditions.

3.02 INSPECTION

- A. The CONTRACTOR shall inspect the entire bypass pumping and piping system for leaks for spills on an hourly basis. The CONTRACTOR shall also create an inspection log and shall enter the time of the inspections, the condition of the piping, and the name of the inspector into the log for review by the OWNER.
- B. Keep an inspection log at each pump location.

3.03 PROTECTION

- A. The CONTRACTOR shall be responsible for control and management of bypass flows. The CONTRACTOR shall inspect the entire bypass pumping and piping system for leaks or spills on an hourly basis.
- B. The bypass system will have a trained and qualified attendant on site around the clock, whose only duty is to maintain the bypass pumping system until the bypassing of that specific pipeline is no longer required. The attendant shall be qualified to both operate the system and repair any and all problems that may occur. The attendant shall have a cellular phone for communication between the OWNER and the site in the event of emergencies.
- C. No bypassing to the ground surface, receiving waters, storm drains, or bypassing which results in soil or groundwater contamination or any potential health hazards shall be permitted. In the event of any sewage spill, the CONTRACTOR shall be responsible for the prompt cleanup and disinfecting of the spill as called for in the bypass plan. The CONTRACTOR shall compensate the OWNER for the cost of any fines levied as the result of a spill or unauthorized discharge.
- D. CONTRACTOR shall regularly monitor, a minimum of once daily, any plugs/weirs for performance. The CONTRACTOR shall notify the OWNER of any unusually high flows.
- E. Work stoppage may be required due to a large storm event common to the seasons for which the Work is scheduled.
- F. When plugging upstream flows and storing within the system, the CONTRACTOR shall routinely check the stored depths in the next upstream manhole. When flows have reached the crown of the pipe, the contractor shall commence bypass pumping.

3.04 DAMAGES

- A. The CONTRACTOR shall repair, without cost to the OWNER, any damage that may result from its negligence, inadequate or improper installation, maintenance, and operation of bypassing system, including mechanical or electrical failures.

3.05 CLEAN-UP

- A. The bypass pumping system shall be cleaned and drained prior to being dismantled and moved to the next location. The CONTRACTOR shall alternate pigging and purging of the system to remove all loose material. After the CONTRACTOR has cleaned the pipe, and prior to dismantling of the piping for removal from the Project site, the CONTRACTOR shall disinfect the pipe with 10% chlorine and water solution. CONTRACTOR shall be responsible for the disposal of the chlorinated water.
- B. Disturbed Areas: Upon completion of bypass pumping operation, CONTRACTOR shall clean disturbed areas, restoring to original condition including, but not limited to, pavement restoration and landscaping at least equal to that which existed prior to start of Work.

3.06 SCHEDULING

- A. The bypassing system shall not be shut down between shifts, on holidays or weekends, or during work stoppages without written permission from the OWNER. The bypass system shall have an attendant around the clock.
- B. CONTRACTOR shall notify the OWNER 48 hours prior to shutting down or bypassing sewer pipeline.
- C. Special Events: Service shall not be interrupted and no bypass operations shall occur during special events, if any, as identified by OWNER.

PART 4 MEASUREMENT AND PAYMENT

4.1 Bypass Sewage Pumping is to be measured in accordance with the following and as identified on the Bid Schedule.

- A. Bypass Sewage Pumping shall be measured by the lump sum. Includes all labor, equipment, power supply, mobilization from reach to reach, ancillary controls, coordination with owner, monitoring, submission of pumping plan to Owner and related work as described in the Contract Documents and this Special Provision.
 - 1. Bid Schedule Payment Reference: SP103.4.1.A.1
 - 2. Bid Schedule Description: BYPASS SEWAGE PUMPING ... lump sum (LS)

END OF SECTION

CITY OF SANDPOINT

2025 CIPP PROJECT
MARCH 2026

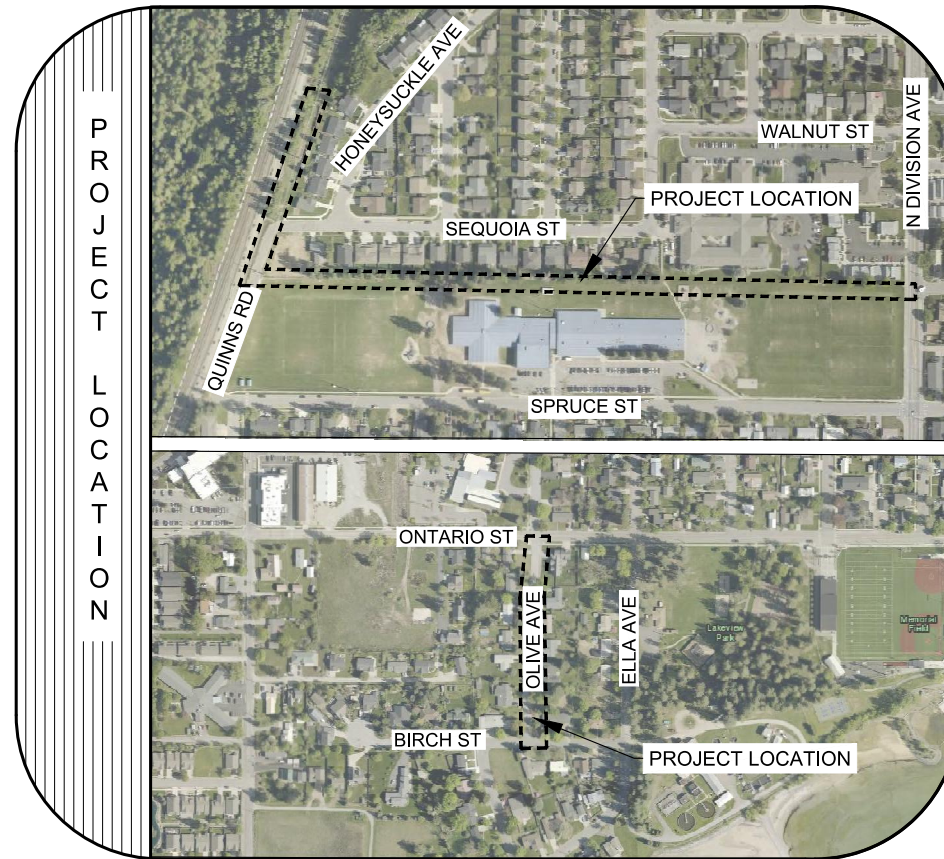


SHEET INDEX

SHEET INDEX

COVER SHEET	G1.1
SCHOOL - START TO 6+63	C1.1
SCHOOL - STA 6+63 TO 16+63	C1.2
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DETAIL SHEET	D1.1

PROJECT LOCATION



LEGEND

SEWER MAIN	— SS —
STORM MAIN	— STS —
SEWER MANHOLE	Ⓢ
STORM SEWER MAHOLE	Ⓣ

GENERAL NOTES

- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH THE 2020 IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION AS MODIFIED IN THESE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL. TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MUTCD.
- ALL CONSTRUCTION ACTIVITY SHALL BE CONFINED TO RIGHT-OF-WAY, UTILITY EASEMENTS AND CONSTRUCTION LIMITS.
- CONTRACTOR SHALL COORDINATE WITH ADJACENT RESIDENTS TO ACCOMMODATE DRIVEWAY ACCESS DURING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROL.
- MANHOLES, SERVICES, SURFACE FEATURES, AND SURFACE UTILITIES SHALL BE PROTECTED BY THE CONTRACTOR AND RESTORED TO PRE-CONSTRUCTION CONDITION.
- CONTRACTOR SHALL COORDINATE WITH LAKE PEND OREILLE SCHOOL DISTRICT FACILITIES DIRECTOR FOR WORK BETWEEN DIVISION AVENUE AND QUINNS ROAD ON SCHOOL DISTRICT PROPERTY.

CITY OFFICIALS

MAYOR	JEREMY GRIMM
CITY COUNCIL:	DEB RUEHLE JOEL AISPURO PAM DUQUETTE KYLE SCHREIBER JOE TATE JOSHUA TORREZ
PUBLIC WORKS DIRECTOR:	HOLLY ELLIS
UTILITIES SUPERVISOR:	ROD BERGET
STREETS SUPERVISOR:	WES ALBIN



CITY HALL
1123 W. Lake St.
Sandpoint, Idaho 83864
(208) 263-3158

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NO.	DATE	BY	APPR	REVISIONS



SANDPOINT OFFICE
102 S. EUCLID AVE., SUITE 107
SANDPOINT, ID 83864
208.946.4380

DATE: MARCH 2026

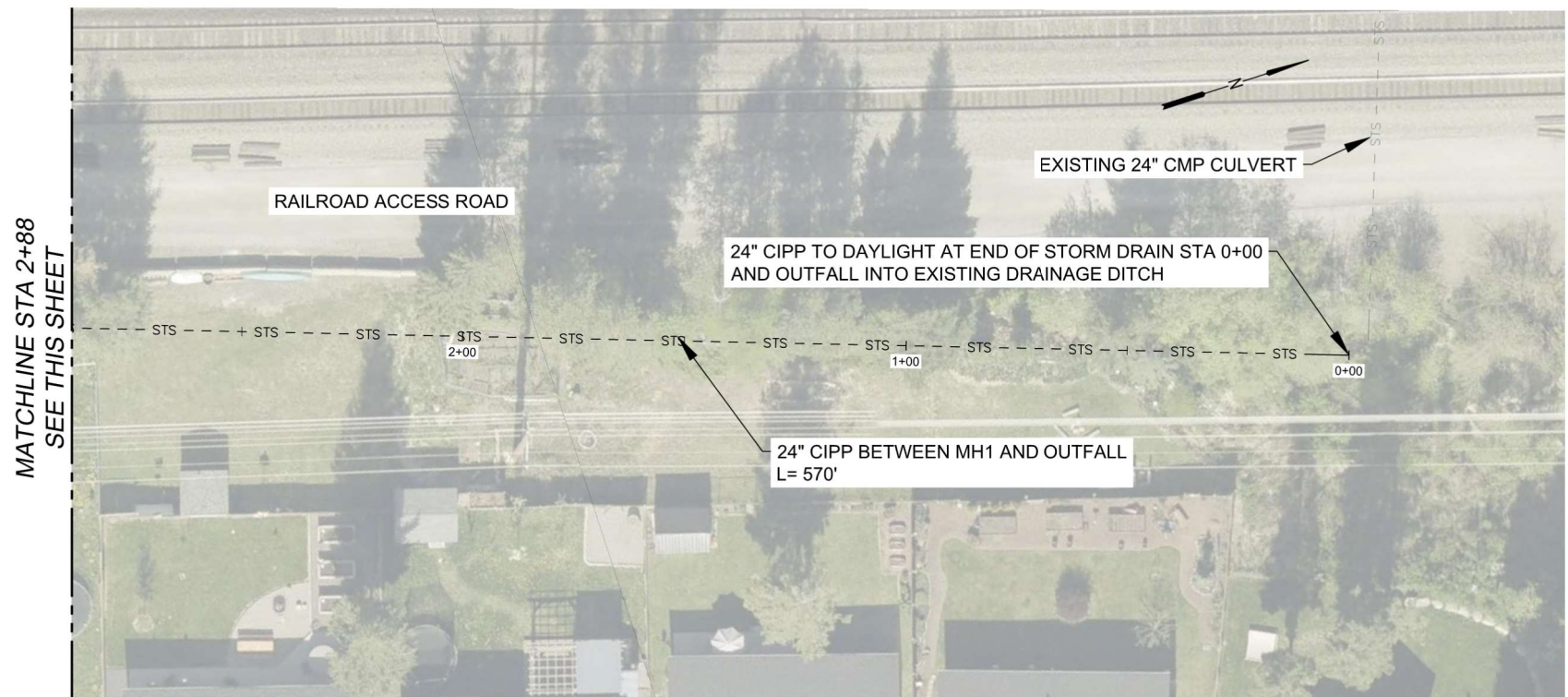
PROJECT NO: 51004.014.01

DESIGNED BY: RJL
DRAWN BY: AWS
CHECKED BY: RJL
SCALE: AS NOTED

CITY OF SANDPOINT
2025 CIPP PROJECT

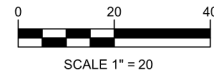
COVER SHEET

DRAWING NO. G1.1
SHEET NO. 01 OF 06

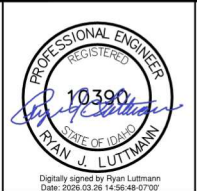
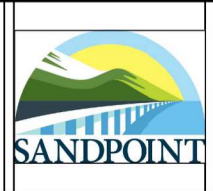


CONSTRUCTION NOTES

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CENTURY WEST ENGINEERING
 SANDPOINT OFFICE
 102 S. EUCLID AVE., SUITE 107
 SANDPOINT, ID 83864
 208.946.4380

DATE: MARCH 2026 PROJECT NO: 51004.014.01

DESIGNED BY: RJL
 DRAWN BY: AWS
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 SCALE: AS NOTED

**CITY OF SANDPOINT
 2025 CIPP PROJECT**

**24" STORM SEWER
 START TO STA 9+04**

DRAWING NO. C1.1
 SHEET NO. 02 OF 06

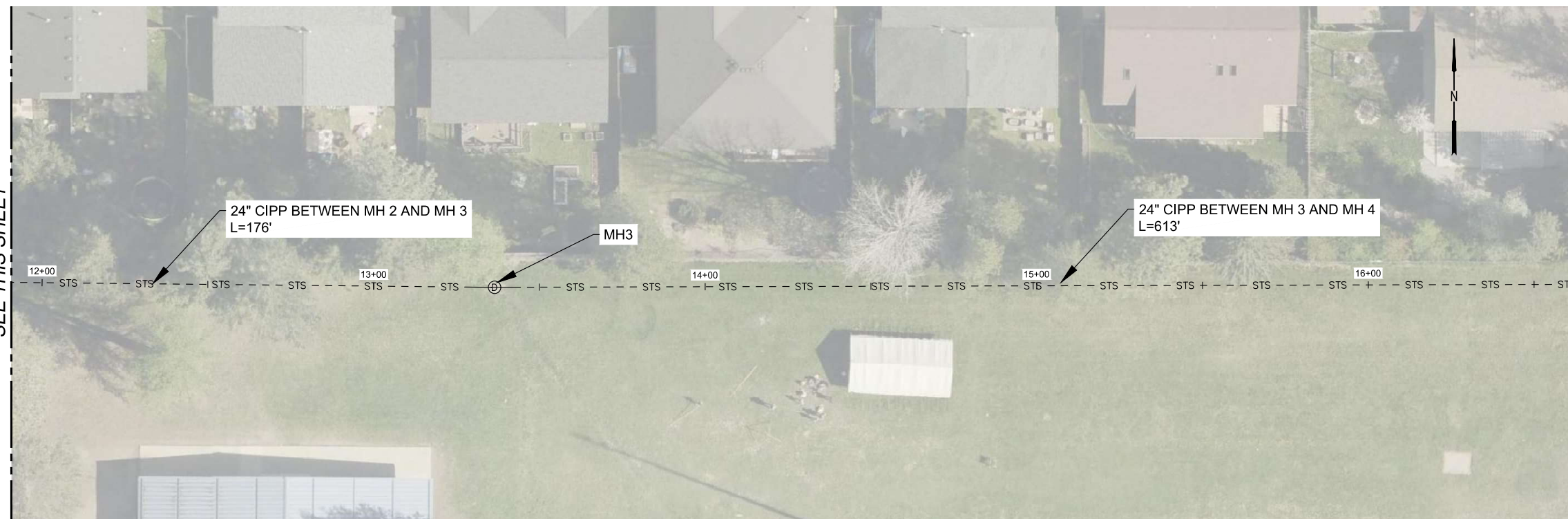


Know what's below.
Call before you dig.



MATCHLINE STA 6+63
SEE SHEET C1.1

MATCHLINE STA 11+90
SEE THIS SHEET

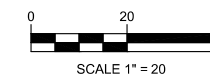


MATCHLINE STA 11+90
SEE THIS SHEET

MATCHLINE STA 16+63
SEE SHEET C1.3

CONSTRUCTION NOTES

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DATE: MARCH 2026
PROJECT NO: 51004.014.01

DESIGNED BY: RJL
DRAWN BY: AWS
CHECKED BY: RJL
SCALE: AS NOTED

CITY OF SANDPOINT
2025 CIPP PROJECT

24" STORM SEWER
START TO STA 9+04

DRAWING NO.
C1.2
SHEET NO.
03 OF 06

MATCHLINE STA 16+63
SEE THIS SHEET

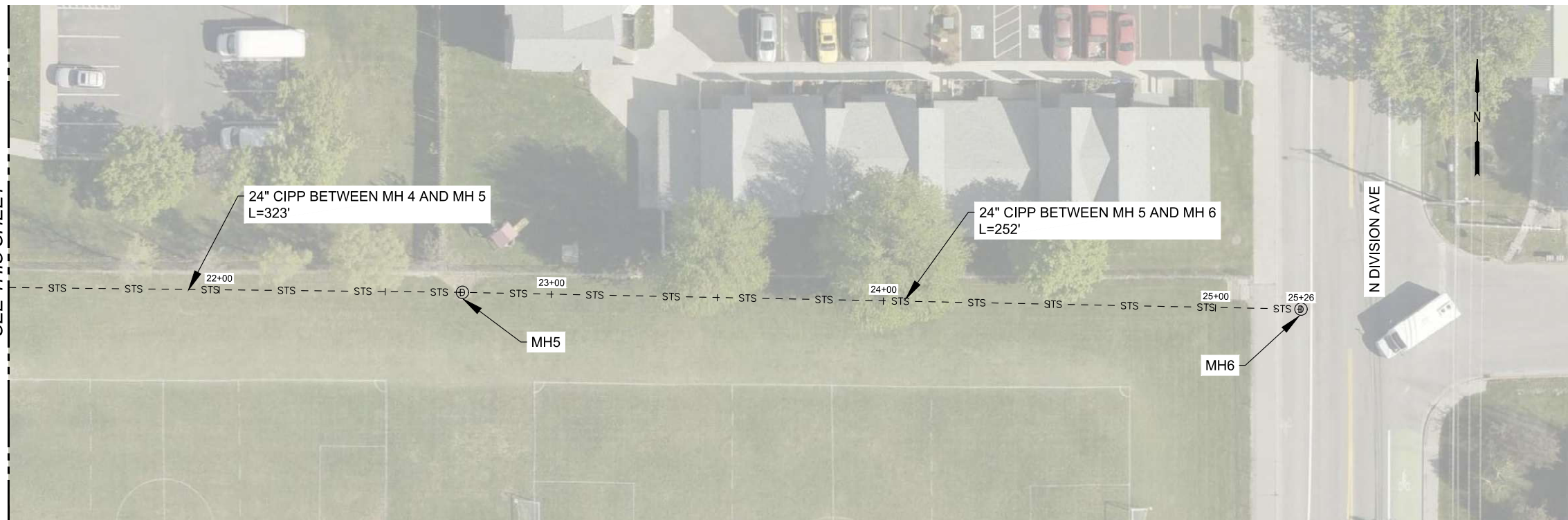


MATCHLINE STA 21+36
SEE THIS SHEET

CONSTRUCTION NOTES

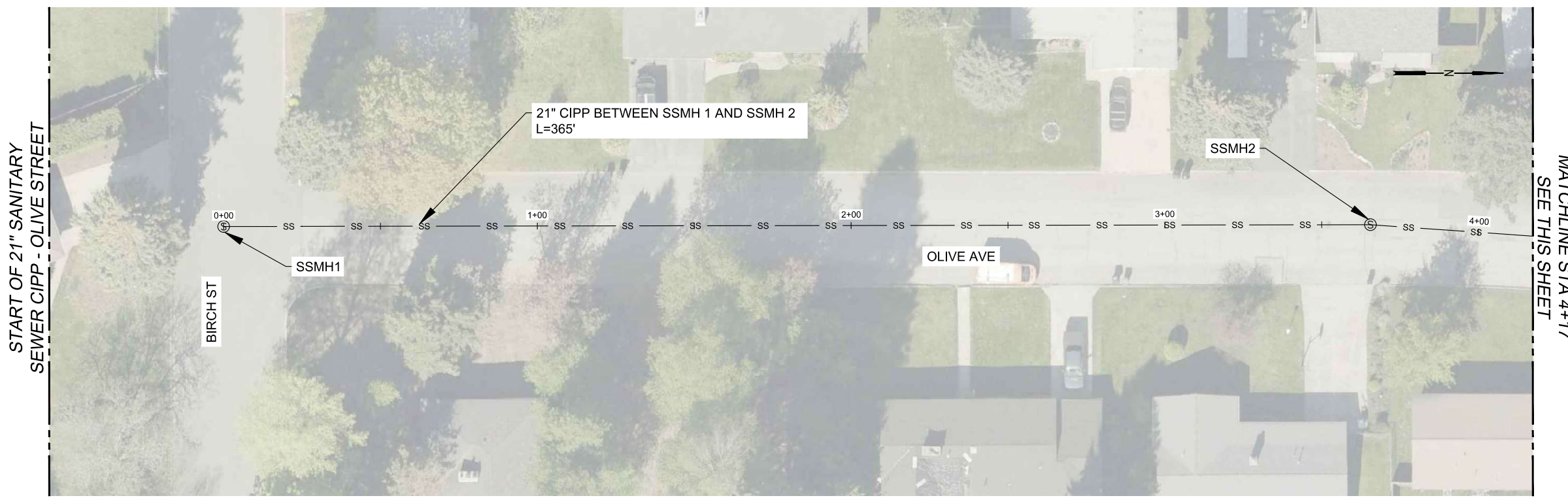
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MATCHLINE STA 21+36
SEE THIS SHEET



END OF 24" STORM
SEWER CIPP

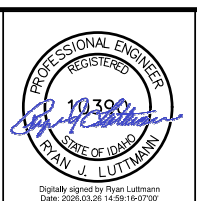
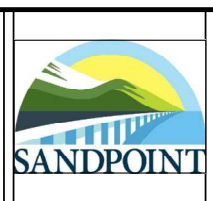
<p>REUSE OF DOCUMENTS</p> <p>THIS DRAWING, AND THE DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CENTURY WEST ENGINEERING CORPORATION, AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF CENTURY WEST ENGINEERING CORPORATION.</p> <p>© CENTURY WEST ENGINEERING CORPORATION</p>			<p>VERIFY SCALES</p> <p>BAR IS ONE INCH ON ORIGINAL DRAWING. 0" = 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>APPR</th> <th>REVISIONS</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	BY	APPR	REVISIONS																					<p>SANDPOINT OFFICE 102 S. EUCLID AVE., SUITE 107 SANDPOINT, ID 83864 208.946.4380</p>	<p>DESIGNED BY: RJL</p> <p>DRAWN BY: AWS</p> <p>CHECKED BY: RJL</p> <p>SCALE: AS NOTED</p>	<p>CITY OF SANDPOINT 2025 CIPP PROJECT</p> <p>24" STORM SEWER STA 9+04 TO STA 18+50</p>	<p>DRAWING NO. C1.3</p> <p>SHEET NO. 04 OF 06</p>
NO.	DATE	BY	APPR	REVISIONS																													
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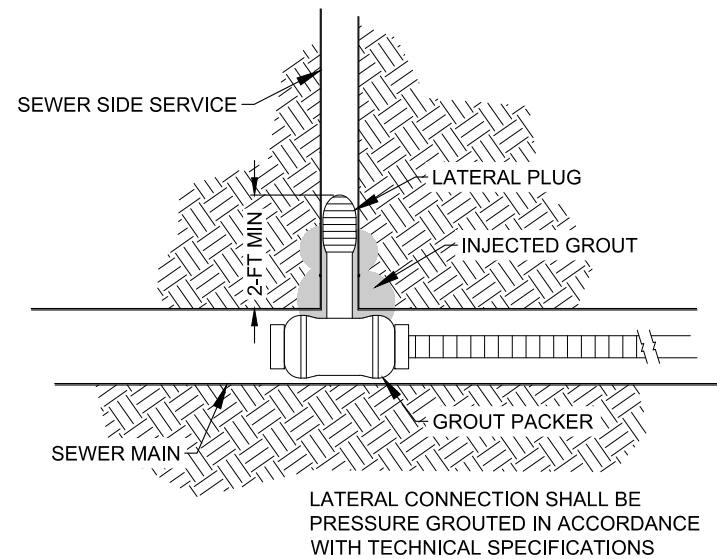
DATE: MARCH 2026 PROJECT NO: 51004.014.01

DESIGNED BY: RJL
 DRAWN BY: AWS
 CHECKED BY: RJL
 SCALE: AS NOTED

CITY OF SANDPOINT
 2025 CIPP PROJECT

OLIVE STREET 21" SANITARY SEWER
 START TO END

DRAWING NO. C1.4
 SHEET NO. 05 OF 06

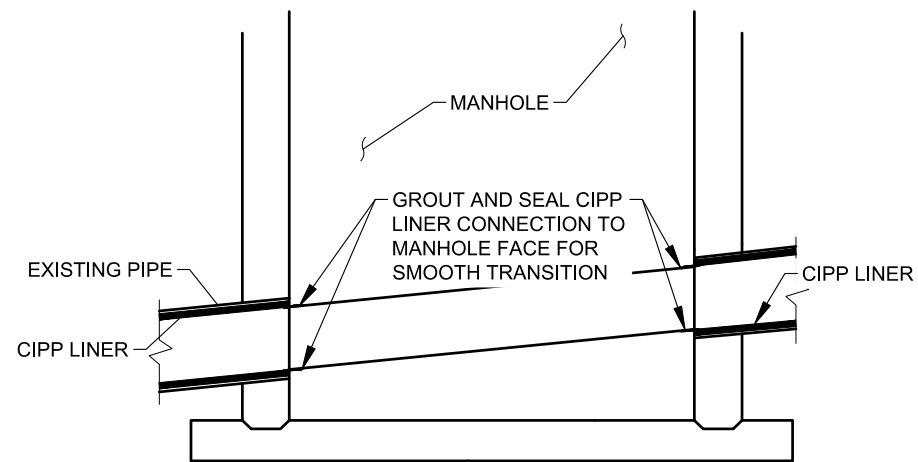


**PRESSURE GROUTING
SIDE SERVICE CONNECTION**

1
N.T.S. CU-02

NOTE:

NO SIDE SERVICES ARE ANTICIPATED WITH THIS PROJECT. IF A SIDE SERVICE IS LOCATED DURING POST CLEANING TELEVISION INSPECTION, THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF SANDPOINT, PRIOR TO CONNECTION.



LINER TO MANHOLE GROUT DETAIL

2
N.T.S. CU-02

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CITY OF SANDPOINT
2025 CIPP PROJECT

DETAIL SHEET

DRAWING NO. D1.1
SHEET NO. 06 OF 06

BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

City of Sandpoint
 City Clerk
 1123 Lake Street
 Sandpoint, ID 83864

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security in the form of: cash, a certified check, cashier’s check, or a Bid bond (on the form attached) issued by a surety meeting the requirements of paragraphs 5.01 and 5.02 of the General Conditions.;
- B. Bidder shall include in his Bid the name, or names and address, or addresses, and Idaho Public Works Contractor License Numbers of the Subcontractors who shall, in the event the Bidder secures the Contract, subcontract the plumbing, heating and air-conditioning work, and electrical work under the General Contract;
- C. State of Idaho Public Works Contractor’s License No.: 075086 ;

ARTICLE 3—BASIS OF BID—UNIT PRICES

3.01 *Unit Price Bids*

A. Bidder will perform the following Work at the indicated unit prices:

BID SCHEDULE A – BASE BID

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
2010.4.1.A.1	Mobilization Per Lump Sum	LS	1	LUMP SUM	\$ <u>32,825⁰⁰</u>
1001.4.1.A.1.	Sediment Control and Construction Site Management Per Lump Sum	LS	1	LUMP SUM	\$ <u>1,500⁰⁰</u>

1103.4.1.A.1.	Construction Traffic Control Per Lump Sum	LS	1	LUMP SUM	\$ 10,995 ⁰⁰
SP100.4.1.A.1. or SP101.4.1.A.1.	CIPP – 24-inch (UV or Thermally Cured) Per Linear Foot	LF	2524	\$ 148 ⁰⁰	\$ 373,552 ⁰⁰
SP100.4.1.B.1. or SP101.4.1.B.1.	CIPP – 21-inch (UV or Thermally Cured) Per Linear Foot	LF	713	\$ 123 ⁰⁰	\$ 87,699 ⁰⁰
SP102.4.1.A.1.	Utility Cleaning and Television Inspection Per Linear Foot	LF	3237	\$ 2 ⁰⁰	\$ 6,474 ⁰⁰
SP103.4.1.A.1.	Bypass Sewage Pumping Per Lump Sum	LS	1	LUMP SUM	\$ 12,950 ⁰⁰
TOTAL OF BID SCHEDULE A					\$ 525,995 ⁰⁰

B. Bidder acknowledges that:

1. Each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
2. Estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.
3. CIPP installation may be performed using either UV-cured (SP100) or thermally cured (SP101) methods. The Contractor shall select the method and comply with the applicable Special Provision. Payment shall be made under the bid items regardless of method selected.

ARTICLE 4—TIME OF COMPLETION

4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 *Bid Acceptance Period*

- A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 *Instructions to Bidders*

- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 *Receipt of Addenda*

- A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date
#1	5/27/26

ARTICLE 6—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Bidder’s Representations*

- A. In submitting this Bid, Bidder represents the following:
 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 4. Bidder has carefully studied the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such drawings.
 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder’s (Contractor’s) safety precautions and programs.
 7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

VORTEX SERVICES, LLC.

(typed or printed name of organization)

By:

[Signature]

(individual's signature)

Name:

JAMES PECCIA

(typed or printed)

Title:

RVP

(typed or printed)

Date:

5/29/26

(typed or printed)



If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:

[Signature]

(individual's signature)

Name:

CHRISTY AUSTIN

(typed or printed)

Title:

DIVISION CONTROLLER

(typed or printed)

Date:

5/29/26

(typed or printed)

Address for giving notices:

3400 CENTENNIAL DRIVE
HELENA, MONTANA 59601

Bidder's Contact:

Name:

JAMES PECCIA

(typed or printed)

Title:

REGIONAL VICE PRESIDENT

(typed or printed)

Phone:

406.447.5050

Email:

jpeccia@vortexcompanies.com

Address:

3400 CENTENNIAL DRIVE
HELENA, MONTANA 59601

Bidder's Contractor License No.: (if applicable)

075096



CERTIFICATION

(Vortex Services, LLC – Rocky Mountain Division)

Date: January 1, 2025

TO WHOM IT MAY CONCERN:

I, the undersigned Senior Vice President and Secretary of Vortex Companies, LLC, a Delaware limited liability company, hereby certify as follows:

- That **Vortex Services, LLC** is a wholly-owned subsidiary of Vortex Infrastructure Services, LLC, which is a wholly-owned subsidiary of Vortex Companies, LLC;
- That **Vortex Services, LLC** is the successor to Planned & Engineered Construction, Inc.; and
- That the following individuals are officers and authorized signatories of **Vortex Services, LLC – Rocky Mountain Division**:

Michael Vellano	Chief Executive Officer and President
Matthew Samford	Chief Financial Officer and Treasurer
Ryan Graham	Chief Operating Officer
Lou Gastin	Chief Accounting Officer and Assistant Secretary
B.J. Kerstiens	Senior Vice President – Services
Quin Breland	Senior Vice President – Shared Services, General Counsel, and Secretary
Chris Peccia	Regional Vice President – Rocky Mountains
Christy Austin	Divisional Controller and Assistant Treasurer

That each of the foregoing officers is authorized to execute bid packages, contracts, subcontracts, purchase orders, change orders and all other contract documents on behalf of the Company and fully bind the Company.

This Certification may be relied upon by third parties to confirm the authority of officers to act on behalf of the Company.

(Signature Page Follows)



VORTEX SERVICES, LLC

By: Vortex Infrastructure Services, LLC, its sole member

By: Vortex Companies, LLC, its sole member

By: 

Quin Breland, its Senior VP and Secretary

BID BOND (PENAL SUM FORM)

<p>Bidder Name: Vortex Services, LLC Address (principal place of business): 3400 Centennial Drive Helena, MT 59601</p>	<p>Surety Name: Swiss Re Corporate Solutions America Insurance Corporation Address (principal place of business): 1200 Main Street, Suite 800 Kansas City, MO 64105</p>
<p>Owner Name: City of Sandpoint Address (principal place of business): 1123 Lake Street Sandpoint, ID 83864</p>	<p>Bid Project (name and location): Bid No. 26-3400-1 2025 CIPP Project Bid Due Date: June 02, 2026</p>
<p>Bond Penal Sum: 5% Five Percent of Amount Bid Date of Bond: May 21, 2026</p>	
<p>Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.</p>	
<p>Bidder Vortex Services, LLC (Full formal name of Bidder)</p>	<p>Surety Swiss Re Corporate Solutions America Insurance Corporation (Full formal name of Surety) (corporate seal)</p>
<p>By: <u>[Signature]</u> (Signature)</p>	<p>By: <u>[Signature]</u> (Signature) (Attach Power of Attorney)</p>
<p>Name: <u>Luis Vecchia</u> (Printed or typed)</p>	<p>Name: Quanda Warren (Printed or typed)</p>
<p>Title: <u>RVP</u></p>	<p>Title: Attorney-In-Fact</p>
<p>Attest: <u>[Signature]</u> (Signature)</p>	<p>Attest: <u>[Signature]</u> (Signature)</p>
<p>Name: <u>CHRISTINE AUSTIN</u> (Printed or typed)</p>	<p>Name: Allison Howell (Printed or typed)</p>
<p>Title: <u>Division Controller</u></p>	<p>Title: Account Manager</p>
<p>Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.</p>	

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

SWISS RE CORPORATE SOLUTIONS

SWISS RE CORPORATE SOLUTIONS AMERICA INSURANCE CORPORATION ("SRCSAIC")
SWISS RE CORPORATE SOLUTIONS PREMIER INSURANCE CORPORATION ("SRCSPIC")

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT SRCSAIC, a corporation duly organized and existing under laws of the State of Missouri, and having its principal office in the City of Kansas City, Missouri, and SRCSPIC, a corporation organized and existing under the laws of the State of Missouri and having its principal office in the City of Kansas City, Missouri, each does hereby make, constitute and appoint: Quanda Warren

Principal: Vortex Services, LLC
Obligee: City of Sandpoint
Bond Description: City of Sandpoint - 2025 CIPP Project
Bond Number: Bid Bond
Bond Amount: See Bond Form

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

FIFTY MILLION (\$50,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both SRCSAIC and SRCSPIC at meetings duly called and held on the 9th of May, 2012:

"RESOLVED, that any two of the President, any Managing Director, any Senior Vice President, any Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is, authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Corporation bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Corporation; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Corporation may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Corporation when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."



By [Signature] David Satory, Senior Vice President of SRCSAIC & Senior Vice President of SRCSPIC



By [Signature] Gabriel Jacquez, Senior Vice President of SRCSAIC & Senior Vice President of SRCSPIC

IN WITNESS WHEREOF, SRCSAIC and SRCSPIC have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers

this 10th day of FEBRUARY, 2026

Swiss Re Corporate Solutions America Insurance Corporation
Swiss Re Corporate Solutions Premier Insurance Corporation

State of Illinois
County of Cook

On this 10th day of FEBRUARY, 2026, before me, a Notary Public personally appeared David Satory, Senior Vice President of SRCSAIC and Senior Vice President of SRCSPIC and Gabriel Jacquez, Vice President of SRCSAIC and Vice President of SRCSPIC, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



[Signature] Karen M. Szweda, Notary

I, Jeffrey Goldberg, the duly elected Senior Vice President and Assistant Secretary of SRCSAIC and SRCSPIC, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said SRCSAIC and SRCSPIC and WIC, which is still in full force and effect. IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 21st day of May, 2026.

[Signature] Jeffrey Goldberg, Senior Vice President & Assistant Secretary of SRCSAIC & SRCSPIC

