

City of Dilworth

Dilworth Community Center

Dilworth, Minnesota

BID GROUP II

Project Specification Manual for Bid Package Work:

3A	CONCRETE – BUILDING – PREVIOUSLY BID
3B	CONCRETE POLISHING – PREVIOUSLY BID
3D	PRECAST CONC. H.C. PLANK (MATERIAL) – PREVIOUSLY BID
4	MASONRY – PREVIOUSLY BID
5A	STRUCTURAL STEEL (MATERIAL) – PREVIOUSLY BID
5B	STRUCTURAL STEEL AND H.C. (ERECTION) – PREVIOUSLY BID
6A	GENERAL WORK AND LABOR – PREVIOUSLY BID
6B	MILLWORK (MATERIAL) – PREVIOUSLY BID
7A	MOISTURE PROTECTION – PREVIOUSLY BID
7B	LIQUID APPLIED WEATHER BARRIERS – PREVIOUSLY BID
7E	PREFINISHED METAL PANELS – PREVIOUSLY BID
7G	SEALANTS – PREVIOUSLY BID
8A	DOORS, HARDWARE, FRAMES – PREVIOUSLY BID
8C	OVERHEAD DOORS AND COILING DOORS – PREVIOUSLY BID
8E	GLAZING SYSTEMS – PREVIOUSLY BID
9B	DRYWALL – PREVIOUSLY BID
9C	TILEWORK – PREVIOUSLY BID
9E	ACOUSTICAL – PREVIOUSLY BID
9G	RESILIENT FLOORING AND CARPETING – PREVIOUSLY BID
9I	PAINTING – PREVIOUSLY BID
9J	CONCRETE FLOOR FINISHES – PREVIOUSLY BID
11E	KITCHEN EQUIPMENT – PREVIOUSLY BID
12B	MOVEABLE WALL – PREVIOUSLY BID
21	BUILDING SPRINKLER SYSTEM – PREVIOUSLY BID
22	PLUMBING – PREVIOUSLY BID
23	HVAC AND TEMP CONTROLS – PREVIOUSLY BID
26	ELECTRICAL SYSTEMS – PREVIOUSLY BID
31	EARTHWORK – PREVIOUSLY BID
32A	PAVING AND SURFACING – PREVIOUSLY BID
32C	LANDSCAPING / SITE IRRIGATION
33	SITE UTILITIES – PREVIOUSLY BID



August 7, 2026

ZBA Project No. 25-011

BID DATE & TIME: Wednesday, September 9, 2026
at 2:00 p.m. local time

LOCATION: City of Dilworth
Dilworth City Hall
2 1st Ave SE
Dilworth, MN 56529

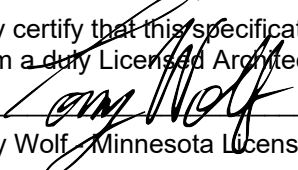
**SECTION 00 0105
CERTIFICATIONS PAGE**

FOR THE:

City of Dilworth
Dilworth Community Center
16th Street North
Dilworth, Minnesota 56562
Bid Group II

ZERR BERG ARCHITECTS, INC.: PROJECT ARCHITECT

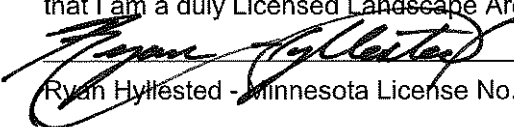
I hereby certify that this specification was prepared by me or under my direct supervision, and that I am a duly Licensed Architect under the laws of the state of Minnesota.

 DATE 08/07/2026

Anthony Wolf - Minnesota License No. 57169

KIMLEY-HORN AND ASSOCIATES, INC.: LANDSCAPE ARCHITECT

I hereby certify that this specification was prepared by me or under my direct supervision, and that I am a duly Licensed Landscape Architect under the laws of the state of Minnesota.

 DATE 8/7/2026

Ryan Hyllested - Minnesota License No. 53828

DESIGN TEAM

FOR THE

City of Dilworth
Dilworth Community Center

DILWORTH, MINNESOTA

ZBA PROJECT NO. 25-011

ZERR BERG ARCHITECTS: PROJECT ARCHITECT

510 4th Avenue North
Fargo, ND 58102
Tel: 701-280-0187

FOODSERVICE CONCEPT DESIGN (FCD): FOODSERVICE DESIGN CONSULTANT

7900 International Drive, Suite 300 - 7043
Bloomington, MN 55425
Tel: 612-325-1494

KIMLEY-HORN AND ASSOCIATES, INC.: LANDSCAPE ARCHITECT

767 N Eustis Street, Suite 100
St. Paul, MN 55114
Tel: 651-645-4197

CMTA INC.: CIVIL CONSULTANT

2201 12th Street North, Suite E
Fargo, ND 58102
Tel: 701-280-0500

HEYER ENGINEERING: STRUCTURAL CONSULTANT

4180 24th Avenue South
Fargo, ND 58104
Tel: 701-280-0949

CMTA INC.: MECHANICAL CONSULTANT

2201 12th Street North, Suite E
Fargo, ND 58102
Tel: 701-280-0500

CMTA INC.: ELECTRICAL CONSULTANT

2201 12th Street North, Suite E
Fargo, ND 58102
Tel: 701-280-0500

END OF SECTION

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**SECTION 00 0150
BID PACKAGES SCOPE OF WORK (SOW)**

**THE FOLLOWING PAGES CONTAIN INDIVIDUAL BID PACKAGE SCOPE OF WORK (SOW)
DESCRIPTIONS INCLUDING TECHNICAL SECTIONS INCLUDED IN EACH PACKAGE.**

The Scope of Work is intended to be a general description of the items included in each Bid Package.
It is not intended to be an exhaustive list of all items included and does not supercede or replace
information provided elsewhere within the Construction Documents or elsewhere within the
specifications.

Bid Package 32C: Landscaping / Site Irrigation

END OF SECTION

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Bid Package 32C – Landscaping / Site Irrigation

1.00 BID PACKAGE SUMMARY

- A. Comply with all specification section as contained in the project manual including but not limited to:
 - 1. Division 00 – Procurement and Contracting Requirements
 - 2. Division 01 – General Requirements
 - 3. 31 2200 – Site Grading (as applicable)
 - 4. 31 2323 – Fill & Backfill (as applicable)
 - 5. 32 3315 – Site Furnishings
 - 6. 32 8000 – Irrigation Systems
 - 7. 32 9113 – Soil Preparation
 - 8. 32 9300 – Landscape Planting
 - 9. 32 9310 – Turf Establishment

1.01 INSTALLATION AND COORDINATION

- A. Furnish and install all items but not limit to plantings, seeding, mulch, edging, rocks, and all other landscaping items as shown on the plans and noted in the specifications.
- B. Furnish and install all benches, garbage cans, bike racks, etc. as shown on the plans and noted in the specifications. (see alternates and unit prices)
- C. Responsible for final grading after the irrigation system has been installed. Haul out any spoils as necessary.
- D. Any areas that are not getting irrigated include watering of plantings and grass seed as needed until rooted or germination. (see alternate)
- E. Coordinate with BP 32A for landscaping around the railroad ties and axel locations.
- F. Provide and install straw ground stabilization on any significant slope areas around drains.
- G. Responsible for calling for all locates for the completion of this contractor's work.
- H. Responsible for coordinating private locates with the Construction Manager and the foreman for Bid Package 26.
- A. Furnish and install all materials associated with a complete irrigation system for sod, seed, and planting areas. Bid Package 22 provides a service stub only for water.
- B. Furnish and install the controller for the specified irrigation system. Coordinate electrical requirements for irrigation system Construction Manager and Bid Package 26.
- C. Furnish and install irrigation sleeves under the subgrade for all sidewalks and roads. Contractor is responsible for all work associated with installing sleeves and will provide a sleeve plan for the Construction Manager. (see alternates for breakout) (sleeve locations shown on plan are for guidance only)
- D. Provide owner training for the irrigation system. Construction Manager will help to coordinate the owner training.
- E. Provide (1) winterization and (1) start up the following year to make all systems operate properly.
- F. Provide warranty as per spec.
- G. All field measurements and layout work necessary for the completion of this contractor's work.
- H. See allowances, unit prices, and alternates as applicable.

- I. Cooperate with other trades on site in the completion of their work. Cooperation with the owners Construction Manager in the use and management of the site, and in the coordination of work with other trades.

1.02 SITE CLEANING AND MAINTANENCE

- A. Debris tracked or carried off site into traffic lanes must be cleaned up immediately. If tracking continues, the Contractor shall provide continuous cleaning operations during activities of their work.
- B. Mandatory cleaning every Thursday from 2:00-4:00, see section 01 7000.
- C. Construction cleaning shall be performed daily for debris generated by this contractor.
- D. Provide and maintain all sump pumps as required for completion of this contractor's work.

1.03 SUBMITALS

- A. Provide timely submission of shop drawings, submittals, product data, and samples as noted in the specification.
- B. Submittals will be uploaded to Procore or emailed to the Construction Manager running the project.
- C. Provide phased and accelerated submittals and shop drawings for all items needed to achieve start dates and meet the project schedule.
- D. Accurate set of as-built drawings at the completion of the project.
- E. Provide warranties, maintenance, manuals, and training as specified.

1.04 MATERIAL HANDLING AND STORAGE

- A. All equipment necessary to complete this contractor's work including but not limited to scaffold, hoists, forklifts, pumps, etc.
- B. Housekeeping and final cleanup must be completed before leaving the site weekly. Final payment will not be authorized unless site is clean.
- C. All freight and delivery charges for the delivery of material shall be paid for by this contractor.
- D. Contractor is responsible for coordinating, receiving, and offloading materials installed by this contractor.
- E. Storage of onsite materials shall be approved by the Construction manager and coordinated with the other trades.

1.05 SAFETY

- A. Comply with all federal, state, and local safety guidelines.
- B. Comply with Gehrtz Construction Services "Site Specific Safety Plan".
- C. Every contractor needs to have a safety plan and competent person on site while the contractor is performing work.
- D. Thoroughly plan all work activities and operations so they are performed safely, as well as efficiently.
- E. Effectively communicate the health and safety requirements of Gehrtz Construction Services' Site-Specific Safety Plan to all contractors and their workers through open communications, comprehensive training, assessments, and workplace inspections.
- F. Develop an understanding, among those in leadership on this project, of their responsibilities and accountability for providing a safe and healthy workplace.

- G. Plan and coordinate work operations and activities to minimize or eliminate situations which may jeopardize worker's health and safety due to conflicting or simultaneous work operations or activities.
- H. Communicate to all workers that safety is their responsibility, and they will be held responsible, accountable, and assigned the appropriate authority for their individual safety and the safety of their co-workers.

1.06 SWPPP

- A. Dewatering must follow the SWPPP and Erosion and Sediment Control guidelines.
- B. Sweep city streets and site roads as needed during excavation, hauling, backfilling, utility work, foundation work, paving, or when contractor vehicles track out of the site. (Minimum of once per week).
- C. Concrete and grout trucks either need to wash out in a designated concrete washout pit, or into their hopper, coordinate with the Construction Manager. Details must be communicated to all persons involved in activity.

**SECTION 00 1100
ADVERTISEMENT FOR BIDS**

PROJECT:

Dilworth Community Center
16th Street North
Dilworth, Minnesota 56562
Bid Group II

OWNER:

City of Dilworth
2 First Avenue SE
Dilworth, Minnesota 56529

SEPARATE SEALED BIDS FOR THE FOLLOWING BID GROUP PACKAGES OF CONSTRUCTION WORK FOR THE PROJECT NAMED ABOVE WILL BE RECEIVED BY CITY OF DILWORTH UNTIL WEDNESDAY, SEPTEMBER 9, 2026 AT 2:00 PM LOCAL TIME AT 2 FIRST AVENUE SE , DILWORTH , MINNESOTA 56529, WHERE BIDS WILL BE PUBLICLY OPENED AND READ.

BID PACKAGES:

32C: Landscaping / Site Irrigation

The construction is expected to begin upon contract awards following the bid date. Completion of the project is scheduled for 09-01-2027.

The Information to Bidders, Form of Bid, Form of Contract, Drawings, Specifications, and other contract documents may be examined at the following places:

1. North Dakota Builders Exchanges: Bismarck Mandan Builder's Exchange, Bismarck Construction Plains Exchange, Fargo-Moorhead Builder's Exchange, Grand Forks Builders & Traders Exchange, and Minot Builders Exchange.
2. Minnesota Builders Exchanges: Minnesota Builders Exchange (Minneapolis) and St. Cloud Builders Exchange.
3. South Dakota Builders Exchanges: Aberdeen Builder's Exchange, Construction Industry Center Exchange (Rapid City), and Plains Builders Exchange (Sioux Falls).

Electronic copies of the above documents may be obtained from Gehrtz Construction Services. Request documents via email at info@gcs-fm.com.

Bids shall be submitted by mail or in-person, using the bid form contained in the specifications. The Owner, Architect, and Construction Manager assume no responsibility for receiving and delivering contractor proposals to the bid opening.

The Owner reserves the right to waive any informality or to reject any or all bids.

No bidder may withdraw their bid within 30 days after the actual date of the opening thereof.

Each sealed bid shall be accompanied by the 00 2110 - MN Responsible Contractor Verification Form and bid security in the form a bidders bond in a sum equal to 5 % of the full amount of the bid made payable to the owner, executed by the bidder as principal and by a surety company authorized to do business in Minnesota, conditioned that if the principal's bid be accepted and the contract awarded to the principal, within ten days after notice of award, the principal will execute and effect a contract in accordance with the terms of the bid and a contractors bond as required by law the regulations and determinations of the governing board.

1. By Minnesota State Statutes, Section 429.041 subdivision 1, bid security can be submitted in the following forms: cash deposit, cashier's check, bid bond, or certified check payable to the Owner.

2. The Bid Form, Contractor Verification, and Bid Bond do not need to be submitted in separate envelopes.

By Minnesota State Statutes, Section 16C.285 subdivision 3, each bid must contain the endorsed form verifying compliance with the minimum responsible contractor requirements in the statute. Submit completed form with the bid. See section 00 2110 - MN Responsible Contractor Verification for compliance form.

END OF SECTION

**SECTION 00 2100
INFORMATION TO BIDDERS**

1.01 CONSTRUCTION MANAGEMENT METHOD OF BIDDING/CONSTRUCTING THE PROJECT

- A. The construction work for this project, Dilworth Community Center, in Dilworth, Minnesota will be completed utilizing the Construction Management Agency (CMA) method of securing bids for the work and administrating the Construction Phase work. Primarily, this means that the construction work will be divided into a larger number of bid packages or divisions than the normal three - General, Mechanical and Electrical, and contracts for the work will be executed by the Owner with the contractor selected for each of these additional portions of the work.
- B. Zerr Berg Architects will provide to the Owner on this project the architectural and engineering services normal to this type of project. Gehrtz Construction Services will provide construction management agency services to the owner and will be the on site Construction Manager. Your attention is called to Article 2 - Administration of the Contract of the General Conditions that outlines the responsibilities of each entity in this method of project construction.
- C. EACH BID PACKAGE CONTRACTOR IS HEREBY CAUTIONED TO BE AWARE THAT SOME ADDITIONAL RESPONSIBILITIES MAY BE INCLUDED IN YOUR WORK THAT IS NORMALLY PROVIDED BY A PRIME CONTRACTOR, SUCH AS LAYOUT WORK, DIMENSION VERIFICATION, COORDINATION OF WORK WITH OTHER CONTRACTORS, CLEANUP, ETC. ALSO, ALL REQUIREMENTS INCLUDED IN DIVISION 00 - CONDITIONS OF THE CONTRACT AND DIVISION 01 - GENERAL REQUIREMENTS OF THESE SPECIFICATIONS SHALL BE INCLUDED IN THE RESPONSIBILITIES OF EACH BID PACKAGE CONTRACTOR. (SEE TABLE OF CONTENTS FOR ITEMS AND SPECIFICATION SECTIONS INCLUDED IN DIVISION 00 AND DIVISION 01.)

1.02 RECEIPT AND OPENING OF BIDS

- A. Please provide separate sealed bids on the form attached hereto for Bid Package Work for the Dilworth Community Center, located in Dilworth, Minnesota. Bids will be received by City of Dilworth at Dilworth City Hall, 2 1st Ave SE, Dilworth, MN 56529 until Wednesday, September 9, 2026 at 2:00 pm local time, where bids will be publicly opened and read aloud.
- B. Bids shall be submitted by mail or in-person, using the bid form contained in the specifications.
- C. Bids may also be delivered to the office of Gehrtz Construction Services up until 1 hour prior to the bid time. These bids will be transported to the bid opening location by authorized personnel.
- D. The Owner reserves the right to waive any informality or to reject any or all bids.
- E. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof.
- F. Any bid received after the time and date specified shall not be considered.
- G. No bidder may withdraw their bid within 30 days after the actual date of the opening thereof.

1.03 PREPARATION OF AND SUBMISSION OF BIDS

- A. See Section 00 1100 - Advertisement for Bids for bid submission requirements.
- B. Each bid must be submitted on the bid form contained in these specifications.
- C. The Owner, Architect, and Construction Manager assume no responsibility for the delivery or receiving of bids. Bidders are encouraged to submit their bids as early as possible to avoid the possibility of rejection due to late submittal.

1.04 MODIFICATIONS OF BIDS

- A. Modifications of bids by fax or email is not permitted.

1.05 LAWS AND REGULATIONS

- A. The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
- B. Bidders must hold a Minnesota Contractor's license, carry Minnesota Workmen's Compensation Insurance, and conform to all governing laws of the State of North Dakota.

1.06 STATE EXCISE AND USE TAX (SALES TAX)

- A. In submitting the bid, the bidder is understood to have included in the bid price the state excise tax on all sales of building materials, supplies and equipment to contractors, subcontractors or builders for the erection of buildings or their alteration, repair or improvement.

1.07 MATERIAL ONLY CONTRACTS

- A. "Material Only" contracts **MUST EXCLUDE** all sales or use tax and shall be bid as F.O.B. jobsite. Owner will provide purchasing agent letter and tax ID.
- B. A Minnesota Contractor's license is NOT required for "Material Only" contracts.
- C. Bid Bond is required for "Material Only" contracts.

1.08 OBLIGATION OF BIDDER

- A. At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the drawings and other Contract Documents (including all addenda). The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect to his bid.

1.09 INDIVIDUAL BIDS

- A. Contractors/suppliers are required to submit an individual bid for each bid package. However, contractors/suppliers may stipulate that they will only accept a contract for a combination of bid packages.
- B. Construction Manager will determine if multiple bid packages will be awarded to an individual contractor.

1.10 MULTIPLE BID GROUP COORDINATION

- A. Reference to Bid Packages not listed in the Section 00 0150 - Bid Packages Scope of Work (SOW) or in Section 00 1100 - Advertisement for Bids are included for reference only. These Bid Packages were previously bid in a separate Bid Group.
- B. All Bid Group contractors must coordinate their work with rough-ins, fixtures, etc. required by other Bid Group contractors.
- C. Bid Group I packages were bid previously. Bid Group II contractors shall coordinate their work with Bid Group I contractors.

1.11 SUBSTITUTIONS OF MATERIALS AND EQUIPMENT

- A. Contractor's, subcontractor's, & supplier's attention is directed to specification Section 00 4325 - Substitution Request Form - During Procurement, regarding substitutions of materials and/or equipment.

1.12 ALTERNATE PROPOSALS

- A. See Section 01 2300 - Alternates, for general description of alternates. The technical sections of these specifications shall also apply to the alternate work, whether so noted in each technical section or not.

1.13 METHODS OF AWARD - LOWEST QUALIFIED BIDDER

- A. The contract will be awarded on the following basis:
 - 1. Base bid or combination of base bid and such alternates that produce the most complete project.
 - 2. Ability to staff the project to keep pace with construction.

3. Past performance on similar projects. Provide references upon request of the Construction Manager.
4. Approval of the owner's representative(s) of the above criteria.
5. Time of completion.

1.14 CONTRACTS AND SUBCONTRACTS

- A. The bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a contract or subcontract under this contract must be acceptable to the Owner. Causes for rejection include but are not limited to the following:
 1. Poor workmanship on past projects.
 2. Lack of cooperation and/or inability to meet construction schedule on past projects.
 3. Inadequate personnel to meet construction schedule.
 4. Inability to meet project contract requirements.
- B. The lowest bidder must submit to the Construction Manager a complete list of all suppliers and subcontractors within seven (7) days after the time of the award of contract. Inability to provide a list of acceptable subcontractors shall be just cause for rejection of the bidder's proposal.

1.15 PERFORMANCE AND PAYMENT BONDS

- A. Simultaneously with the delivery of the executed contract, each contractor shall furnish a performance-payment bond as security for faithful performance of this contract and furnishing materials in connection with this contract. The surety of such bond or bonds shall be a duly authorized surety company satisfactory to the Owner. The amount of the bonds shall be 100% of the contract.

1.16 POWER OF ATTORNEY

- A. Attorneys-in-fact who sign bonds on contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

1.17 BUILDERS RISK

- A. Builder's Risk Insurance will be maintained by the Construction Manager to cover all contractors. The contractor submitting the claim will be responsible for the deductible portion of the claim. The Construction Manager will have a \$25,000.00 deductible. The Construction Manager's policy does not include coverage for contractor's equipment or materials stored off-site. It is the contractor's responsibility to properly secure all on-site materials. Unsecured on-site storage is not eligible for a claim.

1.18 WAGES

- A. **NO** Federal funds are involved on this project; therefore, federal wage rates **DO NOT** apply.

1.19 TIME OF COMPLETION

- A. Bidder must agree to commence work upon notification to proceed. See Section 01 3216 - Project Construction Schedule for project completion.

1.20 WORK HOURS

- A. Normal work hours on the site shall be 6:00 am to 6:00 pm Monday through Friday. Work outside of these hours are to be coordinated and approved by the Construction Manager.
- B. All work that may disrupt Owner activities must be coordinated with the Construction Manager.

1.21 CONDITIONS OF WORK

- A. Each bidder must inform themselves fully of the conditions relating to the construction of the project. Failure to do so will not relieve a successful bidder of their obligation to furnish all material and labor necessary to carry out the provisions of their contract. Insofar as possible, the contractor in carrying out their work must employ such methods of means as will not cause any interruption of or interference with the work of any other contractor or the owner.
- B. Upon award of contract, successful bidders shall order materials and begin off-site equipment fabrication.

- C. Contractor's Note: If any machinery is used on the project inside the new building floor to complete any work, the individual contractor shall clean and repair (at contractor's expense) any equipment or material spills, etc. caused by their work, and/or machinery to a condition satisfactory to the Construction Manager.

1.22 TOBACCO-FREE BUILDINGS

- A. Smoking/chewing tobacco, vaping, etc is NOT permitted on the site or in the building.

1.23 ALCOHOL

- A. Absolutely no alcoholic beverages are allowed on the jobsite at any time during the construction process.

1.24 FOOD

- A. No food, food products, or beverages will be permitted inside the construction of the building.

1.25 DRIVEWAYS AND ENTRANCES

- A. Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries with Construction Manager to minimize space and time requirements for storage of materials and equipment on-site.

1.26 SITE DAMAGE AND REPAIRS

- A. Damage to streets, curbs, sidewalks, plantings, buildings, and any other elements surrounding the site shall be repaired to the Owner's satisfaction by the responsible party. The Construction Manager shall have the complete, unrestricted authority to assign responsibility for making repairs to the contractor or contractors they feel is responsible for the damages.

1.27 CONTRACT CLOSEOUT

- A. Each contractor will be required to submit the following forms, fully executed, at the appropriate time prior to retainage reduction or final payment as requested by the Construction Manager.
 - 1. Signed lien waiver for the amount of each pay request.
 - 2. AIA G707 - Consent of Surety to Final Payment.
 - 3. AIA G706A - Contractor's Affidavit of Release of Liens.
 - 4. AIA G706 - Contractor's Affidavit of Payment of Debts and Claims.
 - 5. AIA G704 - Certificate of Substantial Completion.

END OF SECTION

SECTION 00 2110
MN RESPONSIBLE CONTRACTOR VERIFICATION

By Minnesota State Statutes, Section 16C.285, Subdivision 3, the Responsible Contractor Verification of Compliance form shall be made a part of these Contract Documents. A copy of the document is included herein. Contractor shall submit completed form with their **bid**.

1. A contractor responding to these solicitation documents shall submit to the Owner a signed statement under oath by an owner or officer verifying compliance with each of the minimum criteria in Minnesota Statutes, Section 16C.285
2. The term 'responsible contractor' as used in these solicitation documents means a contractor as defined in Minnesota Statutes, Section 16C.285, subdivision 3.
3. Any prime contractor or subcontractor that does not meet the minimum criteria in Minnesota Statutes, Section 16C.285, subdivision 3 or fails to verify that it meets those criteria is not a responsible contractor and is not eligible to be awarded the construction contract for the project or to perform work on the project.
4. A false statement under oath verifying compliance with any of the minimum criteria shall render the prime contractor or subcontractor that makes the false statement ineligible to be awarded a construction contract on the project and may result in termination of a contract awarded to a prime contractor or subcontractor that submits a false statement.
5. A prime contractor shall submit to the Owner, upon request, copies of the signed verifications of compliance from all subcontractors of any tier pursuant to Minnesota Statutes, Section 16C.285, subdivision 3, clause 7.

END OF SECTION

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Contractor Name _____
ATTACHMENT A

RESPONSIBLE CONTRACTOR AND CERTIFICATION OF COMPLIANCE

PROJECT TITLE:

Minn. Stat. §16.285, Subd., 7, **IMPLEMENTATION.** any prime contractor or subcontractor that does not meet the minimum criteria in subdivision 3 or fails to verify it meets those criteria is not a responsible contractor and is not eligible to be awarded a construction contract for the project or to perform work on the project.

Minn. Stat. §16.285, Subd. 3. **RESPONSIBLE CONTRACTOR, MINIMUM CRITERIA.** “Responsible contractor” means a contractor that conforms to the responsibility requirements in the solicitation document for its portion of the work on the project and verifies that it meets the following minimum criteria:

1. The Contractor:
 - a. is in compliance with workers' compensation and unemployment insurance requirements;
 - b. is currently registered with the Department of Revenue and the Department of Employment and Economic Development if it has employees;
 - c. has a valid federal tax identification number or a valid Social Security number if an individual; and
 - d. has filed a certificate of authority to transact business in Minnesota with the secretary of state if a foreign corporation or cooperative.
 - e.
2. The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 177.24, 177.25, 177.41 to 177.44, 181.13, 181.14, or 181.722, and has not violated United States Code, title 29, sections 201 to 219, or United States Code, title 40, sections 3141 to 3148. For purposes of this clause, a violation occurs when a contractor or related entity:
 - a. repeatedly fails to pay statutorily required wages or penalties on one or more separate projects for a total underpayment of \$25,000 or more within the three-year period;
 - b. has been issued an order to comply by the commissioner of labor and industry that has become final;
 - c. has been issued at least two determination letters within the three-year period by the Department of Transportation finding an underpayment by the contractor or related entity to its own employees;
 - d. has been found by the commissioner of labor and industry to have repeatedly or willfully violated any of the sections referenced in this clause pursuant to section 177.27;
 - e. has been issued a ruling or findings of underpayment by the administrator of the Wage and Hour Division of the United States Department of Labor that have become final or have been upheld by an administrative law judge or the Administrative Review Board; or
 - f. has been found liable for underpayment of wages or penalties or misrepresenting a construction worker as an independent contractor in an action brought in a court having jurisdiction. Provided that, if the contractor or related entity contests a determination of underpayment by the Department of Transportation in a contested case proceeding, a

violation does not occur until the contested case proceeding has concluded with a determination that the contractor or related entity underpaid wages or penalties.

3. The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 181.723 or chapter 326B. For purposes of this clause, a violation occurs when a contractor or related entity has been issued a final administrative or licensing order.
4. The contractor or related entity has not, more than twice during the three-year period before submitting the verification, had a certificate of compliance under section 363A.36 revoked or suspended based on the provisions of section 363A.36, with the revocation or suspension becoming final because it was upheld by the Office of Administrative Hearings or was not appealed to the office.
5. The contractor or related entity has not received a final determination assessing a monetary sanction from the Department of Administration or Transportation for failure to meet targeted group business, disadvantaged business enterprise, or veteran-owned business goals, due to a lack of good faith effort, more than once during the three-year period before submitting the verification.
6. The contractor or related entity is not currently suspended or debarred by the federal government or the state of Minnesota or any of its departments, commissions, agencies, or political subdivisions; and
7. All subcontractors that the contractor intends to use to perform project work have verified to the contractor through a signed statement under oath by an owner or officer that they meet the minimum criteria listed in clauses (1) to (6).

Minn. Stat. 1§16.285, Subd. 5. **SUBCONTRACTOR VERIFICATION.** A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project.

If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.

A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier pursuant to subdivision 3, clause (7). A prime contractor and subcontractors shall not be responsible for the false statements of any subcontractor with which they do not have a direct contractual relationship. A prime contractor and subcontractors shall be responsible for false statements by their first-tier subcontractors with which they have a direct contractual relationship only if they accept the verification of compliance with actual knowledge that it contains a false statement.

Minn.Stat. §16.285, Subd. 4. **VERIFICATION OF COMPLIANCE.** A contractor responding to a solicitation document of a contracting authority shall submit to the contracting authority a signed

statement under oath by an owner or officer verifying compliance with each of the minimum criteria in subdivision 3 at the time that it responds to the solicitation document.

A contracting authority may accept a sworn statement as sufficient to demonstrate that a contractor is a responsible contractor and shall not be held liable for awarding a contract in reasonable reliance on that statement. Failure to verify compliance with any one of the minimum criteria or a false statement under oath in a verification of compliance shall render the prime contractor or subcontractor that makes the false statement ineligible to be awarded a construction contract on the project for which the verification was submitted.

A false statement under oath verifying compliance with any of the minimum criteria may result in termination of a construction contract that has already been awarded to a prime contractor or subcontractor that submits a false statement. A contracting authority shall not be liable for declining to award a contract or terminating a contract based on a reasonable determination that the contractor

CERTIFICATION

By signing this document I certify that I am an owner or officer of the company, and I swear under oath that:

- 1) My company meets each of the Minimum Criteria to be a responsible contractor as defined herein and is in compliance with Minn. Stat. §16.285,**
- 2) I have included Attachment A-1 with my company's solicitation response, and**
- 3) if my company is awarded a contract, I will also submit Attachment A-2 as required.**

Authorized Signature of Owner or Officer:	Printed Name:
Title:	Date:
Company Name:	

ATTACHMENT A-1

FIRST-TIER SUBCONTRACTOR LIST
(Submit with Prime Contractor Response)

PROJECT TITLE:

Minn. Stat. §16.285, Subd. 5: A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project.

[illegible]

ATTACHMENT A-2

ADDITIONAL SUBCONTRACTOR LIST

(Prime Contractor to submit as subcontractors are added to the project)

PROJECT TITLE:

This form must be submitted to the Project Manager or individual as identified in the solicitation document.

Minn. Stat. §16.285, Subd. 5: If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.

Additional Subcontractor Names (Legal name of company as registered with the Secretary of State)	Name of city where company home office is located

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-2

By signing this document I certify that I am an owner or officer of the company, and I swear under oath that:

All additional subcontractors listed on Attachment A-2 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. §16.285.

Authorized Signature of Owner or Officer:	Printed Name:
Title:	Date:
Company Name:	

**SECTION 00 4100
BID FORM**

PROJECT:

City of Dilworth
Dilworth Community Center
Dilworth, Minnesota
Bid Group II

DATE: WEDNESDAY, SEPTEMBER 9, 2026

Proposal of _____, hereinafter called the bidder, a

_____ corporation / partnership / an individual, doing business as
(State) (strike out inapplicable terms)
_____ to City of Dilworth, hereinafter called the Owner.

TO THE OWNER:

The bidder in compliance with the Advertisement for Bids for the construction of Dilworth Community Center having examined the plans and specifications with related documents and the site of the proposed work and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies and to construct the project in accordance with the contract documents within the time set forth therein and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the contract documents of which this proposal is a part.

Bidder hereby agrees to commence work under this contract on or before a date noted in the Project Construction Schedule included in these specifications and to fully complete the project in the time allotted by this same schedule.

Bidder acknowledges receipt of the following addenda: _____.

Bidder acknowledges the review of Section 00 0150 Bid Packages Scope of Work: _____
(initial).

BASE PROPOSAL:

Bidder agrees to perform all of the Construction Work described in the specifications and shown on the plans for the following Bid Package(s) for the sum of money as noted following each Bid Package: (Contractors are required to submit individual bids for each Bid Package. Bidders are allowed to submit combined bids as well.)

Bidder shall include under Base Bid all pertinent allowances described for specific Bid Packages under Section 01 2100 - Allowances.

BID PACKAGE

Number/Name	Amount of Bid
# _____	\$ _____
# _____	\$ _____
# _____	\$ _____
# _____	\$ _____

ALTERNATE PROPOSALS: See 01 2300 - Alternates for Descriptions

Alternate No. A - Site Furnishings.

Add/Deduct \$ _____

Alternate No. B - Irrigation at Sod and Plants within Sodded Areas and Planting Beds.

Add/Deduct \$ _____

Alternate No. C - Irrigation at Seed and Plantings within Seeded Areas.

Add/Deduct \$ _____

Alternate No. D - Irrigation for Parking Islands.

Add/Deduct \$ _____

Alternate No. E - Irrigation Boring in lieu of Standard Pipe Installation.

Add/Deduct \$ _____

Alternate No. F - Watering of Plantings and Turf Establishment Areas.

Add/Deduct \$ _____

UNIT PRICES: See 01 2200 - Unit Prices for Descriptions

Unit Price No. 1 - Table and Bench Set.

UP-1 \$ _____ per Set.

Unit Price No. 2 - Bench.

UP-2 \$ _____ per Item.

Unit Price No. 3 - Trash Receptacle.

UP-3 \$ _____ per Item.

Unit Price No. 4 - Bike Rack.

UP-4 \$ _____ per Set.

Unit Price No. 5 - Seeding.

UP-5 \$ _____ per Square Yard.

Unit Price No. 5 - Sod.

UP-5 \$ _____ per Square Yard.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informality in the bidding.

The bidder agrees that this bid shall be good and may not be withdrawn for a period of 30 days after the scheduled closing time for receiving bids.

Upon receipt of written notice of acceptance of this bid, bidder will execute the formal contract attached within 10 days and deliver a surety bond or bonds as required by the specifications.

Respectfully submitted,

By _____
(signature)

Title _____

Business Address _____

(SEAL if bid is by a Corporation) _____

Telephone No. _____

E-Mail _____

END OF SECTION

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**SECTION 00 4200
BID BOND**

The Standard AIA Form Document A310 - 2010 Bid Bond shall be made a part of these Contract Documents. A copy of the document is included herein.

END OF SECTION

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**AIA**[®]

Document A310[™] – 2010

Bid Bond

CONTRACTOR:*(Name, legal status and address)***SURETY:***(Name, legal status and principal place of business)***OWNER:***(Name, legal status and address)***BOND AMOUNT:****PROJECT:***(Name, location or address, and Project number, if any)*

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

Init.

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User Notes:

(927682644)

Signed and sealed this day of ,

(Contractor as Principal) (Seal)

(Witness)

(Title)

(Surety) (Seal)

(Witness)

(Title)

Init.

/

SECTION 00 4325
SUBSTITUTION REQUEST FORM - DURING PROCUREMENT

The Substitution Request form shall be made part of these contract documents. A copy of the document is included herein.

END OF SECTION

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SUBSTITUTION REQUEST

Project: Dilworth Community Center Substitution Request Number: _____
Dilworth, Minnesota From: _____
To: Zerr Berg Architects – Attn: Andrew Wangler Date: _____
510 4th Avenue North, Fargo, ND 58102 A/E Project Number: 25-011
Re: Substitution Request Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____ Phone: _____

Trade Name: _____ Model No.: _____

Installer: _____ Address: _____ Phone: _____

History: ☐ New product ☐ 2-5 years old ☐ 5-10 years old ☐ More than 10 years old

Differences between proposed substitution and specified product: _____

☐ Point-by-point comparative data attached

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____

Address: _____ Owner: _____

_____ Date Installed: _____

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: ☐ No ☐ Yes [Add] [Deduct] _____ days.

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

SUBSTITUTION REQUEST (Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments: _____

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01330.
- ☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Signed by:

Date:

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ A/E ☐ _____

**SECTION 00 5200
AGREEMENT FORM**

PART 1 GENERAL

1.01 FORM OF AGREEMENT

- A. Construction Manager as Advisor
 - 1. Owner Contractor Agreement Form: AIA Document A132 - 2019 Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition shall be made a part of these Contract Documents.

1.02 THE AGREEMENT TO BE EXECUTED IS ATTACHED FOLLOWING THIS PAGE.

1.03 RELATED REQUIREMENTS

- A. Section 00 7200 - General Conditions.
- B. Section 00 7300 - Supplementary Conditions.
- C. Section 01 4216 - Definitions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

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AIA® Document A132™ – 2019

Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition

AGREEMENT made as of the day of in the year
(In words, indicate day, month, and year.)

BETWEEN the Owner:
(Name, legal status, address, and other information)

and the Contractor:
(Name, legal status, address, and other information)

for the following Project:
(Name, location, and detailed description)

The Construction Manager:
(Name, legal status, address, and other information)

The Architect:
(Name, legal status, address, and other information)

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser. AIA Document A232™–2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS

EXHIBIT B DETERMINATION OF THE COST OF THE WORK

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

Bid Package

ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

- ☐ The date of this Agreement.
- ☐ A date set forth in a notice to proceed issued by the Owner.
- ☐ Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

Init.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion of the Project or Portions Thereof

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the date of Substantial Completion of the Work of all of the Contractors for the Project will be:

(Paragraph Deleted)

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of all of the Contractors for the Project are to be completed prior to Substantial Completion of the entire Work of all of the Contractors for the Project, the Contractors shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
-----------------	-----------------------------

§ 3.4 When the Work of this Contract, or any Portion Thereof, is Substantially Complete

§ 3.4.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall substantially complete the entire Work of this Contract:

(Check one of the following boxes and complete the necessary information.)

☐ Not later than () calendar days from the date of commencement of the Work.

☒ By the following date:

§ 3.4.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of this Contract are to be substantially complete prior to when the entire Work of this Contract shall be substantially complete, the Contractor shall substantially complete such portions by the following dates:

Portion of Work	Date to be substantially complete
-----------------	-----------------------------------

(Paragraph Deleted)

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following:

(Check the appropriate box.)

☒ Stipulated Sum, in accordance with Section 4.2 below

☐ Cost of the Work plus the Contractor's Fee, in accordance with Section 4.3 below

☐ Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

(Based on the selection above, complete Section 4.2, 4.3 or 4.4 below.)

§ 4.2 Stipulated Sum

§ 4.2.1 The Contract Sum shall be (\$), subject to additions and deductions as provided in the Contract Documents.

§ 4.2.2 Alternates

§ 4.2.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
------	-------

§ 4.2.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.

(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
------	-------	---------------------------

§ 4.2.3 Allowances, if any, included in the Contract Sum:

(Identify each allowance.)

Item	Price
------	-------

§ 4.2.4 Unit prices, if any:

(Identify the item and state the unit price, and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

| *(Paragraphs Deleted)*

| *(Table Deleted)*

| *(Paragraphs Deleted)*

| *(Table Deleted)*

| *(Paragraphs Deleted)*

| *(Table Deleted)*

| *(Paragraphs Deleted)*

| *(Table Deleted)*

| *(Paragraphs Deleted)*

| *(Table Deleted)*

| *(Paragraphs Deleted)*

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any, to be assessed in accordance with Section 3.4.)

None

§ 4.6 Other:

(Insert provisions for bonus, cost savings or other incentives, if any, that might result in a change to the Contract Sum.)

None

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and Certificates for Payment issued by the Construction Manager and Architect, the Owner shall make progress payments on account of the Contract Sum, to the Contractor, as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 Provided that an Application for Payment is received by the Construction Manager not later than the twenty-fifth day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the thirtieth day of the following month. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment of the amount certified shall be made by the Owner not later than sixty-five (65) days after the Construction Manager receives the Application for Payment.

(Paragraph Deleted)

§ 5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum

§ 5.1.4.1 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.4.2 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.4.3 In accordance with AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.4.3.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.4.3.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;

- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232–2019; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.5 Progress Payments Where the Contract Sum is Based on the Cost of the Work without a Guaranteed Maximum Price

§ 5.1.5.1 With each Application for Payment, the Contractor shall submit the cost control information required in Exhibit B, Determination of the Cost of the Work, along with payrolls, petty cash accounts, receipted invoices, or invoices with check vouchers attached, and any other evidence required by the Owner, Construction Manager or Architect to demonstrate that payments already made by the Contractor on account of the Cost of the Work equal or exceed progress payments already received by the Contractor, plus payrolls for the period covered by the present Application for Payment, less that portion of the payments attributable to the Contractor's Fee.

§ 5.1.5.2 Applications for Payment shall show the Cost of the Work actually incurred by the Contractor through the end of the period covered by the Application for Payment and for which the Contractor has made or intends to make actual payment prior to the next Application for Payment.

§ 5.1.5.3 In accordance with AIA Document A232-2019 and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.5.3.1 The amount of each progress payment shall first include:

- .1 The Cost of the Work as described in Exhibit B, Determination of the Cost of the Work;
- .2 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified; and
- .3 The Contractor's Fee computed upon the Cost of the Work described in the preceding Section 5.1.5.3.1.1 at the rate stated in Section 4.3.2; or if the Contractor's Fee is stated as a fixed sum in Section 4.3.2 an amount which bears the same ratio to that fixed-sum Fee as the Cost of the Work included in Section 5.1.5.3.1.1 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

§ 5.1.5.3.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232–2019;
- .5 The shortfall, if any, indicated by the Contractor in the documentation required by Section 5.1.5.1 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- .6 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.5.4 The Owner, Construction Manager and Contractor shall agree upon a mutually acceptable procedure for review and approval of payments to Subcontractors and the percentage of retainage held on Subcontracts, and the Contractor shall execute subcontracts in accordance with those agreements.

§ 5.1.5.5 In taking action on the Contractor's Applications for Payment, the Construction Manager and Architect shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor, and such action shall not be deemed to be a representation that (1) the Construction Manager and Architect have made a detailed examination, audit or arithmetic verification of the documentation submitted in accordance with Article 5 or other supporting data; (2) that the Construction Manager and Architect have made exhaustive or continuous on-site inspections; or (3) that the Construction Manager and Architect have made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Contract. Such examinations,

audits and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

§ 5.1.5.6 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.1.5.7 If final completion of the Work is materially delayed through no fault of the Contractor, then the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A232-2019.

(Paragraphs Deleted)

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to when the Work of this Contract is substantially complete, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Paragraph Deleted)

§ 5.1.7.1.1 The following items are not subject to retainage:

(Paragraph Deleted)

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(Paragraph Deleted)

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, when the Work of this Contract is substantially complete, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted when the Work of this Contract is substantially complete shall not include retainage as follows:

(Paragraph Deleted)

§ 5.2 Final Payment

§ 5.2.1 Final Payment Where the Contract Sum is Based on a Stipulated Sum

§ 5.2.1.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A232-2019, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect.

§ 5.2.1.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment, or as follows:

See

§ 5.1.3

Init.

(Paragraphs Deleted)

§ 5.2.1.3 Submit final paperwork:

(Paragraphs Deleted)

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as Initial Decision Maker pursuant to Article 15 of AIA Document A232–2019, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.

(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A232–2019, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

☐ Arbitration pursuant to Article 15 of AIA Document A232–2019.

☒ Litigation in a court of competent jurisdiction.

(Paragraph Deleted)

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 Where the Contract Sum is a Stipulated Sum

§ 7.1.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232–2019.

§ 7.1.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A232–2019, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner’s convenience.)

§ 7.1.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019.

(Paragraphs Deleted)

§ 7.3 Suspension

The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019; in such case, the Contract Sum and Contract Time shall be increased as provided in Article 14 of AIA Document A232–2019, except that the term “profit” shall be understood to mean the Contractor’s Fee as described in Section 4.3.2 or 4.4.2, as applicable, of this Agreement.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A232–2019 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner's representative:

(Paragraph Deleted)

§ 8.3 The Contractor's representative:

(Paragraph Deleted)

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition, Insurance and Bonds, and elsewhere in the Contract Documents.

Certificate of Insurance – list Owner, Architect, and Construction Manager as additional insureds (does not apply to supplier only contracts). See General Conditions & Supplementary Conditions for limits. Worker's Compensation in state of project (does not apply to supplier only contracts).

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A132™–2019, Exhibit A, and elsewhere in the Contract Documents.

(Paragraphs Deleted)

§ 8.7 Relationship of the Parties

Where the Contract is based on the Cost of the Work plus the Contractor's Fee, with or without a Guaranteed Maximum Price, the Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Architect and exercise the Contractor's skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish and approve, in a timely manner, information required by the Contractor and to make payments to the Contractor in accordance with the requirements of the Contract Documents.

§ 8.8 Other provisions:

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition
- .2 AIA Document A132™–2019, Insurance and Bonds Exhibit

.3 AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

(Paragraphs Deleted)

.4 Drawings

Number	Title	Date
Exhibit 1		

.5 Specifications

Section	Title	Date	Pages
Exhibit 2			

.6 Addenda, if any:

Number	Date	Pages
--------	------	-------

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.7 Other Exhibits:

(Paragraph Deleted)

☒ AIA Document A132™–2019, Determination of the Cost of the Work, Bid Form

(Paragraphs Deleted)

(Table Deleted)

☒ Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
See Specifications, Exhibit 2	General Conditions & Supplementary Conditions		

.8 Other documents, if any, listed below:

(Paragraph Deleted)

This Agreement is entered into as of the day and year first written above.

OWNER (Signature)

CONTRACTOR (Signature)

(Printed name and title)

(Printed name and title)

Init.

Additions and Deletions Report for AIA® Document A132™ – 2019

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 12:22:53 ET on 04/07/2021.

PAGE 2

TABLE OF ARTICLES

...

Bid Package

...

~~ARTICLE -~~

...

ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

PAGE 3

(Insert the date of Substantial Completion of the Work of all Contractors for the Project.)

...

[X] By the following date:

...

~~§ 3.4.3 If the Contractor fails to substantially complete the Work of this Contract, or portions thereof, as provided in this Section 3.4, liquidated damages, if any, shall be assessed as set forth in Section 4.5.~~

...

[X] Stipulated Sum, in accordance with Section 4.2 below

PAGE 4

~~§ 4.3 Cost of the Work Plus Contractor's Fee without a Guaranteed Maximum Price~~

...

~~§ 4.3.1 The Cost of the Work is as defined in Exhibit B, Determination of the Cost of the Work.~~

...

~~§ 4.3.2 The Contractor's Fee:~~

...

~~(State a lump sum, percentage of Cost of the Work or other provision for determining the Contractor's Fee.)~~

...

~~§ 4.3.3 The method of adjustment of the Contractor's Fee for changes in the Work:~~

...

~~§ 4.3.4 Limitations, if any, on a Subcontractor's overhead and profit for increases in the cost of its portion of the Work:~~

...

~~§ 4.3.5 Rental rates for Contractor owned equipment shall not exceed percent (%) of the standard rental rate paid at the place of the Project.~~

...

~~§ 4.3.6 Unit prices, if any:~~

...

~~(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)~~

...

Item

Units and Limitations

Price per Unit (\$0.00)

...

~~§ 4.3.7 The Contractor shall prepare and submit to the Construction Manager, within 14 days of executing this Agreement, a written Control Estimate for the Owner's review and approval. The Control Estimate shall include the items in Section B.1 of Exhibit B, Determination of the Cost of the Work.~~

...

~~§ 4.4 Cost of the Work Plus Contractor's Fee with a Guaranteed Maximum Price~~

...

~~§ 4.4.1 The Cost of the Work is as defined in Exhibit B, Determination of the Cost of the Work.~~

...

~~§ 4.4.2 The Contractor's Fee:~~

...

~~(State a lump sum, percentage of Cost of the Work or other provision for determining the Contractor's Fee.)~~

...

~~§ 4.4.3 The method of adjustment of the Contractor's Fee for changes in the Work:~~

...

~~§ 4.4.4 Limitations, if any, on a Subcontractor's overhead and profit for increases in the cost of its portion of the Work:~~

...

~~§ 4.4.5 Rental rates for Contractor-owned equipment shall not exceed — percent (— %) of the standard rental rate paid at the place of the Project.~~

...

~~§ 4.4.6 Unit Prices, if any:~~

...

~~(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)~~

...

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

...

~~§ 4.4.7 Guaranteed Maximum Price~~

...

~~§ 4.4.7.1 The Contract Sum is guaranteed by the Contractor not to exceed (\$), subject to additions and deductions by Change Order as provided in the Contract Documents. This maximum sum is referred to in the Contract Documents as the Guaranteed Maximum Price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Contractor without reimbursement by the Owner.~~

...

~~§ 4.4.7.2 Alternates~~

...

~~§ 4.4.7.2.1 Alternates, if any, included in the Guaranteed Maximum Price:~~

...

Item	Price
------	-------

...

~~§ 4.4.7.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.~~

...

(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

...

Item	Price	Conditions for Acceptance
------	-------	---------------------------

...

~~§ 4.4.7.3 Allowances, if any, included in the Guaranteed Maximum Price:~~

...

(Identify each allowance.)

...

Item	Price
------	-------

...

~~§ 4.4.7.4 Assumptions, if any, upon which the Guaranteed Maximum Price is based:~~

...

(Identify each assumption.)

...

~~§ 4.4.8 To the extent that the Contract Documents are anticipated to require further development, the Guaranteed Maximum Price includes the costs attributable to such further development consistent with the Contract Documents and reasonably inferable therefrom. Such further development does not include changes in scope, systems, kinds and quality of materials, finishes, or equipment, all of which, if required, shall be incorporated by Change Order.~~

...

~~§ 4.4.9 The Owner shall authorize preparation of revisions to the Contract Documents that incorporate the agreed-upon assumptions contained in Section 4.4.7.4. The Owner shall promptly furnish such revised Contract Documents to the Contractor. The Contractor shall notify the Owner and Architect of any inconsistencies between the agreed-upon assumptions contained in Section 4.4.7.4 and the revised Contract Documents.~~

PAGE 5

None

...

None

...

~~§ 5.1.3 Provided that an Application for Payment is received by the Construction Manager not later than the twenty-fifth day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the thirtieth day of the following month. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment of the amount certified shall be made by the Owner not later than sixty-five (65) days after the Construction Manager receives the Application for Payment.~~

...

(Federal, state or local laws may require payment within a certain period of time.)

PAGE 7

~~§ 5.1.6 Progress Payments Where the Contract Sum is Based on the Cost of the Work with a Guaranteed Maximum Price~~

...

~~§ 5.1.6.1 With each Application for Payment, the Contractor shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner, Construction Manager or Architect to demonstrate that payments already made by the Contractor on account of the Cost of the Work equal or exceed progress payments already received by the Contractor plus payrolls for the period covered by the present Application for Payment, less that portion of the progress payments attributable to the Contractor's Fee.~~

...

~~§ 5.1.6.2~~ Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Guaranteed Maximum Price among: (1) the various portions of the Work; (2) any contingency for costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order; and (3) the Contractor's Fee.

...

~~§ 5.1.6.2.1~~ The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

...

~~§ 5.1.6.2.2~~ The allocation of the Guaranteed Maximum Price under this Section 5.1.6.2 shall not constitute a separate guaranteed maximum price for the Cost of the Work of each individual line item in the schedule of values.

...

~~§ 5.1.6.2.3~~ When the Contractor allocates costs from a contingency to another line item in the schedule of values, the Contractor shall submit supporting documentation to the Architect and Construction Manager.

...

~~§ 5.1.6.3~~ Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed; or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Contractor on account of that portion of the Work and for which the Contractor has made payment or intends to make payment prior to the next Application for Payment by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

...

~~§ 5.1.6.4~~ In accordance with AIA Document A232-2019, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

...

~~§ 5.1.6.4.1~~ The amount of each progress payment shall first include:

...

- ~~1~~** That portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the most recent schedule of values;

...

- ~~.2 That portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction or, if approved in writing in advance by the Owner, suitably stored off the site at a location agreed upon in writing;~~

...

- ~~.3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified; and~~

...

- ~~.4 The Contractor's Fee, computed upon the Cost of the Work described in the preceding Sections 5.1.6.4.1.1 and 5.1.6.4.1.2 at the rate stated in Section 4.4.2 or, if the Contractor's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed sum fee as the Cost of the Work included in Sections 5.1.6.4.1.1 and 5.1.6.4.1.2 bears to a reasonable estimate of the probable Cost of the Work upon its completion.~~

...

~~§ 5.1.6.4.2 The amount of each progress payment shall then be reduced by:~~

...

- ~~.1 The aggregate of any amounts previously paid by the Owner;~~

...

- ~~.2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232-2019;~~

...

- ~~.3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;~~

...

- ~~.4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232-2019;~~

...

- ~~.5 The shortfall, if any, indicated by the Contractor in the documentation required by Section 5.1.6.1 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and~~

...

- ~~.6 Retainage withheld pursuant to Section 5.1.7.~~

...

~~§ 5.1.6.5~~ The Owner and the Contractor shall agree upon a mutually acceptable procedure for review and approval of payments to Subcontractors and the percentage of retainage held on Subcontracts, and the Contractor shall execute subcontracts in accordance with those agreements.

...

~~§ 5.1.6.6~~ In taking action on the Contractor's Applications for Payment, the Construction Manager and Architect shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor and such action shall not be deemed to be a representation that (1) the Construction Manager or Architect have made a detailed examination, audit, or arithmetic verification of the documentation submitted in accordance with Section 5.1.6.1 or other supporting data; (2) that the Construction Manager or Architect have made exhaustive or continuous on-site inspections; or (3) that the Construction Manager or Architect have made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Contract. Such examinations, audits, and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

...

~~§ 5.1.6.7~~ Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

...

~~§ 5.1.6.8~~ If final completion of the Work is materially delayed through no fault of the Contractor, then the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A232-2019.

...

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

...

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

...

(If the retainage established in Section 5.1.7.1 is to be modified prior to when the entire Work of this Contract is substantially complete, including modifications for completion of portions of the Work as provided in Section 3.4.2, insert provisions for such modifications.)

...

(Insert any other conditions for release of retainage when the Work of this Contract is substantially complete, or upon Substantial Completion of the Work of all Contractors on the Project or portions thereof.)

...

See

~~§ 5.2.2~~ Final Payment Where the Contract Sum is Based on the Cost of the Work with or without a Guaranteed Maximum Price **5.1.3**

~~§ 5.2.2.1~~ Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

...

- ~~1~~ the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A232-2019, and to satisfy other requirements, if any, which extend beyond final payment;

...

- ~~2~~ the Contractor has submitted a final accounting for the Cost of the Work, pursuant to Exhibit B, Determination of the Cost of the Work and a final Application for Payment; and

...

- ~~3~~ a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect in accordance with Exhibit B, Determination of the Cost of the Work.

...

~~§ 5.2.2.2~~ The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment, or as follows: **5.2.1.3 Submit final paperwork:**

...

~~§ 5.3~~ Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

...

(Insert rate of interest agreed upon, if any.)

...

☒ [X] Litigation in a court of competent jurisdiction.

...

☐ [-] Other: *(Specify)*

...

~~§ 7.2~~ Where the Contract Sum is Based on the Cost of the Work with or without a Guaranteed Maximum Price

...

~~§ 7.2.1~~ Termination

...

~~§ 7.2.1.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232-2019.~~

...

§ 7.2.1.2 Termination by the Owner for Cause

...

~~§ 7.2.1.2.1 If the Owner terminates the Contract for cause as provided in Article 14 of AIA Document A232-2019, the Owner shall then only pay the Contractor an amount as follows:~~

...

~~1 Take the Cost of the Work incurred by the Contractor to the date of termination;~~

...

~~2 Add the Contractor's Fee, computed upon the Cost of the Work to the date of termination at the rate stated in Section 4.3.2 or 4.4.2, as applicable, or, if the Contractor's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed sum Fee as the Cost of the Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion;~~

...

~~3 Subtract the aggregate of previous payments made by the Owner; and~~

...

~~4 Subtract the costs and damages incurred, or to be incurred, by the Owner under Article 14 of AIA Document A232-2019.~~

...

~~§ 7.2.1.2.2 When the Contract Sum is based on the Cost of the Work with a Guaranteed Maximum Price, if the Owner terminates the Contract for cause as provided in Article 14 of AIA Document A232-2019, the amount, if any, to be paid to the Contractor under Article 14 of AIA Document A232-2019 shall not cause the Guaranteed Maximum Price to be exceeded, nor shall it exceed the amount calculated in Section 7.2.1.2.1.~~

...

~~§ 7.2.1.2.3 The Owner shall also pay the Contractor fair compensation, either by purchase or rental at the election of the Owner, for any equipment owned by the Contractor that the Owner elects to retain and that is not otherwise included in the Cost of the Work under Section 7.2.1.2.1.1. To the extent that the Owner elects to take legal assignment of subcontracts and purchase orders (including rental agreements), the Contractor shall, as a condition of receiving the payments referred to in this Article 7, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Contractor, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Contractor under such subcontracts or purchase orders. All Subcontracts, purchase orders and rental agreements entered into by the Contractor will contain provisions allowing for assignment to the Owner as described above.~~

...

§ 7.2.1.3 Termination by the Owner for Convenience

...

~~If the Owner terminates the Contract for convenience in accordance with Article 14 of AIA Document A232-2019, then the Owner shall pay the Contractor a termination fee as follows:~~

...

~~(Insert the amount of or method for determining the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)~~

PAGE 9

~~(Name, address, email address, and other information)~~

...

~~(Name, address, email address, and other information)~~

...

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A132™-2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition, ~~Exhibit A~~, Insurance and Bonds, and elsewhere in the Contract Documents.

...

Certificate of Insurance – list Owner, Architect, and Construction Manager as additional insureds (does not apply to supplier only contracts). See General Conditions & Supplementary Conditions for limits. Worker's Compensation in state of project (does not apply to supplier only

...

§-contracts).

...

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A132™-2019, Exhibit A, and elsewhere in the Contract Documents.

...

~~**§ 8.6** Notice in electronic format, pursuant to Article 1 of AIA Document A232-2019, may be given in accordance with AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:~~

...

~~(If other than in accordance with AIA Document E203-2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)~~

...

.2 AIA Document A132™-2019, ~~Exhibit A~~, Insurance and Bonds Exhibit

PAGE 10

~~.4 AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:~~

...

(Insert the date of the E203-2013 incorporated into this Agreement.)

...

~~.5~~ .4 Drawings

...

Exhibit 1

...

~~.6~~ .5 Specifications

...

Exhibit 2

...

~~.7~~ .6 Addenda, if any:

...

~~.8~~ .7 Other Exhibits:

...

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

...

[X] AIA Document A132™-2019, ~~Exhibit B~~, Determination of the Cost of the ~~Work~~ Work, Bid Form

...

[~~-~~] ~~AIA Document E235™-2019, Sustainable Projects Exhibit, Construction Manager as Adviser Edition, dated as indicated below:~~

...

(Insert the date of the E235-2019 incorporated into this Agreement.)

...

☐ The Sustainability Plan:

...

Title	Date	Pages
-------	------	-------

...

☒ Supplementary and other Conditions of the Contract:

...

<u>See Specifications, Exhibit 2</u>	<u>General Conditions & Supplementary Conditions</u>
--------------------------------------	--

...

~~0~~ 8 Other documents, if any, listed below:

...

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A232-2019 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, , hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 12:22:53 ET on 04/07/2021 under Order No. 5531360427 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A132™ - 2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)

SECTION 00 6100
PERFORMANCE AND PAYMENT BOND

AIA Document A312 - 2010 Performance and Payment Bond shall be made a part of these Contract Documents. A copy of the document is included herein.

END OF SECTION

This page intentionally left blank

AIA® Document A312™ – 2010

Performance Bond

CONTRACTOR:
(Name, legal status and address)

SURETY:
(Name, legal status and principal place
of business)

OWNER:
(Name, legal status and address)

CONSTRUCTION CONTRACT

Date:
Amount: \$
Description:
(Name and location)

BOND

Date:
(Not earlier than Construction Contract Date)

Amount: \$
Modifications to this Bond: ☐ None ☐ See Section 16

CONTRACTOR AS PRINCIPAL
Company: (Corporate Seal)

SURETY
Company: (Corporate Seal)

Signature: _____
Name and
Title:

Signature: _____
Name and
Title:

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

§ 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 Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall 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 Section 3.1 shall 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 shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .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 Section 3.1 shall 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 Section 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 Owner's 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 Section 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:

- .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
- .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 Section 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 Section 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 Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall 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

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .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 Section 5; and
- .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 Section 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 shall not be reduced or set off on account of any such unrelated obligations. No right of action shall 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 may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall 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 period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall 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 shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall 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 to the Contractor of 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.

Init.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company: _____
(Corporate Seal)

SURETY

Company: _____
(Corporate Seal)

Signature: _____
Name and Title: _____
Address: _____

Signature: _____
Name and Title: _____
Address: _____

Init.

/



AIA® Document A312™ – 2010

Payment Bond

CONTRACTOR:

(Name, legal status and address)

SURETY:

(Name, legal status and principal place of business)

OWNER:

(Name, legal status and address)

CONSTRUCTION CONTRACT

Date:

Amount: \$

Description:

(Name and location)

BOND

Date:

(Not earlier than Construction Contract Date)

Amount: \$

Modifications to this Bond: ☐ None ☐ See Section 18

CONTRACTOR AS PRINCIPAL

Company: *(Corporate Seal)*

SURETY

Company: *(Corporate Seal)*

Signature: _____

Name and

Title:

Signature: _____

Name and

Title:

(Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE:

(Architect, Engineer or other party:)

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

Init.

§ 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 shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 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 Section 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 shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

- .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
- .2 have sent a Claim to the Surety (at the address described in Section 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 Section 13).

§ 6 If a notice of non-payment required by Section 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 Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 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 Section 7.1 or Section 7.2 shall 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 Section 7.1 or Section 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 shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall 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 shall 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 satisfy 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 shall 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 Section 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 shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall 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 shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request 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:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .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;
- .4 a brief description of the labor, materials or equipment furnished;
- .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;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .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 shall be to include without limitation in the terms "labor, materials or equipment" that part of 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 shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company:

(Corporate Seal)

SURETY

Company:

(Corporate Seal)

Signature: _____

Name and Title: _____

Address: _____

Signature: _____

Name and Title: _____

Address: _____

Init.

/

**SECTION 00 7200
GENERAL CONDITIONS**

PART 1 GENERAL

1.01 FORM OF GENERAL CONDITIONS

- A. Construction Manager as Advisor
 - 1. AIA Document A232 - 2019 (Articles 1 through 15, inclusive) General Conditions of the Contract for Construction, Construction Manager as Adviser Edition shall be made a part of these Contract Documents.

1.02 THE GENERAL CONDITIONS APPLICABLE TO THIS CONTRACT IS ATTACHED FOLLOWING THIS PAGE.

1.03 RELATED REQUIREMENTS

- A. SECTION 00 7300 - Supplementary Conditions.
- B. SECTION 01 4216 - Definitions.

1.04 SUPPLEMENTARY CONDITIONS

- A. REFER TO DOCUMENT 00 7300 - Supplementary Conditions FOR AMENDMENTS TO THESE GENERAL CONDITIONS.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

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AIA® Document A232™ – 2019

General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

for the following PROJECT:

(Name, and location or address)

THE CONSTRUCTION MANAGER:

(Name, legal status, and address)

THE OWNER:

(Name, legal status, and address)

THE ARCHITECT:

(Name, legal status, and address)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents. The Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract. The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and the Construction Manager or the Construction Manager's consultants, (3) between the Owner and the Architect or the Architect's consultants, (4) between the Contractor and the Construction Manager or the Construction Manager's consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of their duties.

§ 1.1.3 The Work. The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project. The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Contractors, and by the Owner's own forces and Separate Contractors.

§ 1.1.5 Contractors. Contractors are persons or entities, other than the Contractor or Separate Contractors, who perform Work under contracts with the Owner that are administered by the Architect and Construction Manager.

§ 1.1.6 Separate Contractors. Separate Contractors are persons or entities who perform construction under separate contracts with the Owner not administered by the Architect and Construction Manager.

§ 1.1.7 The Drawings. The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.8 The Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.9 Instruments of Service. Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.10 Initial Decision Maker. The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as

binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work, and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 The Owner shall retain a construction manager adviser lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.4 If the employment of the Construction Manager or Architect terminates, the Owner shall employ a successor construction manager or architect to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.

§ 2.3.5 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.6 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.7 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.3.8 The Owner shall forward all communications to the Contractor through the Construction Manager. Other communication shall be made as set forth in Section 4.2.6.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to review by the Construction Manager and prior approval of the Architect, and the Construction Manager or Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Construction Manager's and Architect's and their respective consultants' additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.5, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Construction Manager and Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted to the Construction Manager in such form as the Construction Manager and Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Construction Manager and Architect any nonconformity discovered by or made known to the Contractor as a request for information submitted to Construction Manager in such form as the Construction Manager and Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, the Construction Manager, and the Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. The Construction Manager shall review the proposed alternative for sequencing, constructability, and coordination impacts on the other Contractors. Unless the Architect or the Construction Manager objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner, Construction Manager, and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices, and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner, Construction Manager, and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect and Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of

the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor, stating the reasons. If the Owner or Contractor disputes the Architect's determination or recommendation, either party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents:

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect, through the Construction Manager, of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor, stating whether the Owner, the Construction Manager, or the Architect (1) has reasonable objection to the proposed superintendent or (2) require additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager, or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information, and the Construction Manager's use in developing the Project schedule, a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Contractors, or the construction or operations of the Owner's own forces or Separate Contractors.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Construction Manager's and Architect's approval. The Architect and Construction Manager's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Construction Manager and Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall participate with other Contractors, the Construction Manager, and the Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

§ 3.10.4 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager, and Architect, and incorporated into the approved Project schedule.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Construction Manager, Architect, and Owner, and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data, and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.10 through 4.2.12. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Construction Manager, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the Project submittal schedule approved by the Construction Manager and Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Contractors, Separate Contractors, or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples, and similar submittals with related documents submitted by other Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been reviewed and approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Construction Manager and Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner, the Architect, and the Construction Manager shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Construction Manager shall review submittals for sequencing, constructability, and coordination impacts on other Contractors.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Construction Manager and Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

§ 3.13.1 The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.13.2 The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner, Separate Contractors, or of other Contractors by cutting, patching, or otherwise altering such

construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner, Separate Contractors, or by other Contractors except with written consent of the Construction Manager, Owner, and such other Contractors or Separate Contractors. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Separate Contractors, other Contractors, or the Owner, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner, Construction Manager, and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager, and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner, Architect, or Construction Manager. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect through the Construction Manager.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, Architect, Construction Manager's and Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 The Construction Manager is the person or entity retained by the Owner pursuant to Section 2.3.3 and identified as such in the Agreement.

§ 4.1.3 Duties, responsibilities, and limitations of authority of the Construction Manager and Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Construction Manager, Architect, and Contractor. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives during construction until the date the Architect issues the final Certificate for Payment. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner and the Construction Manager reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner and Construction Manager known deviations from the Contract Documents and defects and deficiencies observed in the Work.

§ 4.2.3 The Construction Manager shall provide one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner and Architect reasonably informed of the progress of the Work, and will promptly report to the Owner and Architect known deviations from the Contract Documents and the most recent Project schedule, and defects and deficiencies observed in the Work.

§ 4.2.4 The Construction Manager will schedule and coordinate the activities of the Contractor and other Contractors in accordance with the latest approved Project schedule.

§ 4.2.5 The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of, or be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

§ 4.2.6 Communications. The Owner shall communicate with the Contractor and the Construction Manager's consultants through the Construction Manager about matters arising out of or relating to the Contract Documents. The Owner and Construction Manager shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Construction Manager otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with other Contractors shall be through the Construction Manager. Communications by and with the Owner's own forces and Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.7 The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

§ 4.2.8 The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents, and will notify each other about the rejection. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, upon written authorization of the Owner, whether or not the Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations and decisions of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons performing any of the Work.

§ 4.2.9 Utilizing the submittal schedule provided by the Contractor, the Construction Manager shall prepare, and revise as necessary, a Project submittal schedule incorporating information from other Contractors, the Owner, Owner's

consultants, Owner's Separate Contractors and vendors, governmental agencies, and participants in the Project under the management of the Construction Manager. The Project submittal schedule and any revisions shall be submitted to the Architect for approval.

§ 4.2.10 The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data, and Samples. Where there are other Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from the Contractor and other Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

§ 4.2.11 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

§ 4.2.12 Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.13 The Construction Manager will prepare Change Orders and Construction Change Directives.

§ 4.2.14 The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7, and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.15 Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples, and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner upon completion of the Project.

§ 4.2.16 The Construction Manager will assist the Architect in conducting inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

§ 4.2.17 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Construction Manager of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.18 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of the Construction Manager, Owner, or Contractor through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.19 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions so rendered in good faith.

§ 4.2.20 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.21 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing, through the Construction Manager, to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include other Contractors or Separate Contractors or the subcontractors of other Contractors or Separate Contractors.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Construction Manager, for review by the Owner, Construction Manager and Architect, of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor whether the Owner, the Construction Manager or the Architect (1) has reasonable objection to any such proposed person or entity or, (2) requires additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, that the Contractor, by these Contract Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically

provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity. If the Owner assigns the subcontract to a successor Contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor Contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When the Owner performs construction or operations with the Owner's own forces or Separate Contractors, the Owner shall provide for coordination of such forces and Separate Contractors with the Work of the Contractor, who shall cooperate with them.

§ 6.1.3 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner's own forces, Separate Contractors, Construction Manager and other Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces, Separate Contractors or other Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Construction Manager and Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor or other Contractors that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Construction Manager and the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's or other Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for

discrepancies or defects in the construction or operations by the Owner or Separate Contractors or other Contractors that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a Separate Contractors or to other Contractors, because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of delays, improperly timed activities, damage to the Work or defective construction by the Owner's own forces, Separate Contractors, or other Contractors.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction, or to property of the Owner, Separate Contractors, or other Contractors as provided in Section 10.2.5.

§ 6.2.5 The Owner, Separate Contractors, and other Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, other Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor. A Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect, and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;

- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Construction Manager and Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Construction Manager and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor

change without prior notice to the Construction Manager that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner, Architect, Construction Manager, or an employee of any of them, or of the Owner's own forces, Separate Contractors, or other Contractors; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts and the Architect, based on the recommendation of the Construction Manager, determines justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Construction Manager, before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Construction Manager and the Architect. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. The Construction Manager shall forward to the Architect the Contractor's schedule of values. Any changes to the schedule of values shall be submitted to the Construction Manager and supported by such data to substantiate its

accuracy as the Construction Manager and the Architect may require, and unless objected to by the Construction Manager or the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner, Construction Manager or Architect require, such as copies of requisitions, and releases of waivers of lien from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager's receipt of the Contractor's Application for Payment, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor's Application for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Certificate for Payment, in the full amount of the Application for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

§ 9.4.2 Where there is more than one Contractor performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives all of the Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Contractor's application with information from similar applications for progress payments from the other Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

§ 9.4.2.1 Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either (1)

issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Project Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Project Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors.

§ 9.4.3 The Construction Manager's certification of an Application for Payment or, in the case of more than one Contractor, a Project Application and Certificate for Payment, shall be based upon the Construction Manager's evaluation of the Work and the data in the Application or Applications for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

§ 9.4.4 The Architect's issuance of a Certificate for Payment or, in the case of more than one Contractor, Project Application and Certificate for Payment, shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and data in the Application for Payment or Project Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

§ 9.4.5 The representations made pursuant to Sections 9.4.3 and 9.4.4 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Construction Manager or Architect.

§ 9.4.6 The issuance of a Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.3 and 9.4.4 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.2. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor or other Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager, and both will reflect such payment on the next Certificate for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Construction Manager and Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Construction Manager and Architect do not issue a Certificate for Payment or a Project Certificate for Payment, through no fault of the Contractor, within fourteen days after the Construction Manager's receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the

Contract Documents, the amount certified by the Construction Manager and Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner, Construction Manager and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the list, the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion.

§ 9.8.4 When the Architect, assisted by the Construction Manager, determines that the Work of all of the Contractors, or designated portion thereof, is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute, a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction Manager.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon completion of the Work, the Contractor shall forward to the Construction Manager a notice that the Work is ready for final inspection and acceptance, and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt, the Construction Manager shall perform an inspection to confirm the completion of Work of the Contractor. The Construction Manager shall make recommendations to the Architect when the Work of all of the Contractors is ready for final inspection, and shall then forward the Contractors' notices and Application for Payment or Project Application for Payment, to the Architect, who will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager's and Architect's final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or

Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor;
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and
- .4 construction or operations by the Owner, Separate Contractors, or other Contractors.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner, Construction Manager and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not any of them has reasonable objection to the persons or entities proposed by the Owner. If the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, the Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, their consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Construction Manager and Construction Manager's consultants, and the Architect and Architect's consultants, shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 **Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice directly to the Owner, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 **Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform both the Contractor and the Construction Manager, separately and in writing, prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 **Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice directly to the Contractor, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Construction Manager and Construction Manager's consultants; (3) the Architect and Architect's consultants; (4) other Contractors and any of their subcontractors, sub-subcontractors, agents, and employees; and (5) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, other Contractors, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor, Architect, and Construction Manager for loss of use of the Owner's property, due to fire or other hazards however caused.

§ 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Construction Manager, Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Construction Manager, Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Construction Manager or Architect has not specifically requested to examine prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion, and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the

Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, Construction Manager or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner, Separate Contractors, or other Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Construction Manager, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Construction Manager, Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

§ 13.4.5 If the Construction Manager or Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

ARTICLE 14. TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Construction Manager has not certified or the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees, or any other persons performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, after consultation with the Construction Manager, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker after consultation with the Construction Manager, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and the Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost. If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages. The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties, the Construction Manager, and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days of receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

**SECTION 00 7300
SUPPLEMENTARY CONDITIONS**

PART 1 GENERAL

1.01 SUMMARY

- A. These Supplementary Conditions amend and supplement the General Conditions defined in Document 00 7200 - General Conditions and other provisions of Contract Documents as indicated below.
Provisions that are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions that are defined in the General Conditions have the meanings assigned to them in the General Conditions.

**1.02 MODIFICATIONS TO GENERAL CONDITIONS APPLICABLE TO THIS CONTRACT ARE ATTACHED
FOLLOWING THIS PAGE.**

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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SECTION 00 7300

ARTICLE 16. SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

The following supplements modify, change, delete from, or add to the "General Conditions of the Contract for Construction, Construction Manager as Advisor Edition," AIA Document A232 - 2019. Where any article of the General Conditions is modified or any paragraph, subparagraph or clause thereof or deleted by these Supplementary Conditions, the unaltered provisions of the Article, Paragraph, Subparagraph or clause shall remain in effect.

ARTICLE 1 - GENERAL PROVISIONS

1.1 Basic Definitions

1.1.1 The Contract Documents: Add as part of Contract Documents: Performance Bond or Performance-Labor Material Bond, if required; Contractor's Bid.

1.2 Correlation and Intent of the Contract Documents

1.2.1 Add at the end of first sentence: --; in proper operating condition.

1.2.2 At the end of the last sentence, add the following: --, unless it is specified that a subcontract include specific phases or elements to complete a certain part of the work for reasons of coordination or responsibility. Where the specification has been divided into sections, it is for convenience in use. The architect assumes no responsibility for proper placement of phases of the work into the proper division or section nor the arrangement of work shown on the drawings. The architect shall not be obligated to enter into jurisdictional or other disputes as a result of the organization, arrangement or location of parts of the work in specifications or on drawings, nor to serve as arbiter to establish subcontract limits. Unless otherwise specified, the scope of work of each section shall be to furnish labor, materials, equipment, skill, erection, installation, services and related items for the phase of work of that section, as required by the drawings, as specified or as otherwise required to provide and complete the entire work of the section.

1.2.4 Add subparagraph: The general character and scope of the work is called for by the contract documents. Where a portion of the work is fully drawn and the remainder is merely indicated, the portion fully drawn shall apply to all similar parts of the work. Drawings intended primarily as information for one trade may not necessarily show the work of other trades, which shall not be construed, as there being no related materials or adjacent work.

1.2.5 Add subparagraph: Figured dimensions shall be followed in preference to measurement by scale. In the event of discrepancies between drawings, between drawings and specification or between specifications, the intent shall be interpreted by the architect, which shall be binding on the contractor. Where a dimension may be missing, the work shall be accomplished in accordance with the directions and dimensions provided by the architect. Dimensions on drawings, as well as detail drawings themselves, are subject in every case to measurements of existing, adjacent, incorporated and completed work which shall be taken by the contractor before undertaking any work dependent upon such data. Dimensions pertaining to the work shall be verified at site by contractor.

1.2.6 Add subparagraph: Where specifications are of the abbreviated or "streamlined" type, they shall be construed as complete sentences, as shall notes on the drawings. Omission of words such as "the", "the contractor shall", and "as shown on the drawings" is intentional. The words "shall" or "shall be" are to be supplied by inference. Imperative or directive instruction, directions or specifications apply and refer to the contractor. The words "symmetrical" and "similar" are used in the general sense and need not mean "identical".

1.2.7 Add subparagraph: Where a number is specified (as for gauges, weights, temperatures, an amount of time, and similar reference) and the specified number cannot be obtained, the number shall be interpreted as the next better, as available.

ARTICLE 2 - OWNER

2.4 Owner's Right to Carry Out the Work.

Delete subparagraph and insert instead: If the contractor defaults or neglects to carry out the work in accordance with the contract documents and fails within a seven day period after receipt of written notice from the Owner to the Contractor (and Surety, if applicable) to commence and continue correction of such default or neglect with diligence and promptness. The Owner may after such seven day period give the Contractor (and Surety, if applicable) a second notice to correct such deficiencies within a second seven day period and may require the Surety, if any, to assume the obligations of the Contractor within seven days following receipt by the Contractor (and Surety, if applicable) of this second seven day period. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor (or Surety, if applicable) shall pay the difference to the Owner.

ARTICLE 3 - CONTRACTOR

3.2 Review of Contract Documents and Field Conditions by Contractor

3.2.1 Add at the end: ; however, Contractor does not represent having examined conditions that are not exposed without demolition unless the necessary demolition is specified or authorized. The Contractor also represents that all Contract Documents for the project have been examined, including those intended for work of trades not normally performed by the Contractor's own forces, and has become thoroughly familiar with all conditions which may pertain to or affect the work under this contract.

3.4 Labor and Materials

3.4.3 Add to Subparagraph: All work shall be performed in the best and most workmanlike manner to the highest standards for the work. Incompetent or careless workmanship shall not be permitted by the Contractor and will not be accepted.

3.4.4 Add Subparagraph: The Contractor, and all those working under its jurisdiction, shall conform to labor laws of the state and all other laws, ordinances and legal requirements affecting the work. Prior to starting work, the Contractor shall become familiar with local labor and trade conditions, skilled and unskilled, and shall conform to local conditions. The Contractor shall consider the availability of labor in the area and import labor as may be required to meet the schedule for the work.

3.4.5 Add Subparagraph: Unless otherwise provided in Contractor Documents, all materials, equipment and other products shall be one of the brands, manufacturers or types specified. All like products for the work shall be by the same manufacturer.

3.4.6 Add Subparagraph: After the Contract has been executed, the Owner and Architect, after consultation with the Construction Manager, will consider a formal request for the substitution of products in place of those specified only under the conditions set for in the General Requirements (Division 1 of the Specifications).

3.4.7 Add Subparagraph: By making requests for substitutions based on the preceding subparagraph, the Contractor:

- .1** Represents that the Contractor has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;
- .2** Represents that the Contractor will provide the same warranty for the substitution that the Contractor would for that specified;
- .3** Certifies that the cost data presented is complete and includes all related costs under this contract except the architect's redesign costs, and waives all claims for additional costs related to the substitution which subsequently become apparent; and
- .4** Will coordinate the installation of the accepted substitute, making such changes as may be required for the work to be complete in all respects.

3.7 Permits, Fees, and Notices

3.7.1 Add to Subparagraph: The contractor shall provide and pay for all bonds that may be required to accomplish the work, including any bonds required by municipalities.

3.7.2 Add to Subparagraph: In any instance where requirements of the Contract Documents are in excess of, but not in conflict with or violation of requirements of a public authority, the provisions of the Contract Documents shall govern.

3.8 Allowances

3.8.2.3 At the end of the clause add: except where installation is specified as part of the allowance in the general requirements (Division 1 of Specifications).

3.8.2.4 Add clause: The supplier or subcontractor for an allowance item is subject to acceptance of the Owner, Architect and Construction Manager; and the Contractor's Purchase Order or Subcontract Agreement shall bind the supplier or Subcontractor to the requirements of the Contract Documents.

3.11 Documents and Samples at the Site.

3.11.1 In the third line before the words "shop drawings" change the word "approved" to "accepted". Before the last full sentence of the paragraph, insert the following: "The record documents shall be a separate set of documents used only for record purposes and kept clean and undamaged."

3.12 Shop Drawings, Product Data and Samples

3.12.7 In the last line, change the word "approved" to "approved and accepted".

3.12.8 In the third and last lines, change the word "approval" to "approval and acceptance".

3.13 Use of Site

3.13.3 Add subparagraph: The contractor shall return all improvements on or about the site, streets and adjacent property which are not shown to be altered, removed or otherwise changes, to the conditions which existed previously. The Contractor shall protect existing structured or other features from damage by any operations in connection with this Contract.

3.13.4 Add subparagraph: Utilities or other services which are shown, or not shown but encountered or otherwise found, shall be protected by the contractor from any damage from excavation or other work and operations of this contract, unless or until they are abandoned. The contractor shall immediately restore any damage from its work or operations to place the utilities or services which are shown to be abandoned or moved. They shall remain in service, and be protected by the Contractor until new utilities and services have been provided, tested and ready for use.

3.14 Cutting and Patching

3.14.1 Add to Subparagraph: Cutting and patching shall be kept to an absolute minimum by careful planning and through providing proper holes, sleeves, anchors, inserts or other built-ins as work progresses and then only to the extent required to properly place, support, hang, anchor or install work and finishes to like-new condition, to match adjoining work and shall be performed by workers skilled in the particular type of work involved. Where finishes are patched, they shall be patched to the extent necessary to provide unbroken and unattached appearance and shall be carried to natural break points as necessary. All patching is subject to the Architect's acceptance. Unauthorized or careless cutting will not be permitted. No structural member shall be cut in a manner or to an extent, which will affect the structural effectiveness, unless approved by the Architect.

3.14.3 Add subparagraph: Cutting and patching of construction work or excavation and backfilling in or around building, shall be done under the general supervision of the contractor for the phase of work being altered, who shall be responsible to see that patching and backfilling is accomplished by using proper labor, materials and methods consistent with the requirements for other similar construction.

3.19 Equal Opportunity in Employment (Add this paragraph)

3.19.1 Trade contractor shall not discriminate against any employee or applicant for employment because of sex, creed, color, religion, national origin, marital status, status with respect to public assistance, disability, age, or sexual preference. Trade contractor shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to the following: employment, upgrading, demotion or transfer, recruitment, recruitment advertising, layoff or termination, rates of pay or other form of compensation and selection for training, including apprenticeship. Trade contractor shall incorporate these same equal opportunity, anti-discrimination and affirmative action requirements into all agreement between trade contractor and its trade subcontractors.

3.20 Verification of Field Conditions (Add this paragraph and the following subparagraphs)

3.20.1 The trade contractor shall take field measurements and verify field conditions with the contract documents and final shop drawings before commencing any work. Report errors, inconsistencies or omissions to the architect and construction manager at once.

3.20.2 No change in the contract sum will be allowed on account of minor differences between actual field conditions and the contract documents.

3.21 Miscellaneous Trade Contractor Responsibilities (Add this paragraph and the following subparagraphs)

3.21.1 The trade contractor agrees to adequately and properly protect their work. The trade contractor agrees to adhere to the Federal Occupational Safety and Health Act, state and local safety regulations, so as to avoid injury or damage to persons or property resulting from failure to do so.

3.21.2 In the event the trade contractor, after 24 hour written notice from the construction manager fails to take corrective action to ensure compliance with said safety regulations. The construction manager shall remedy the situation according to OSHA standards and charge the cost of same to the trade contractor's account without further notice to the trade contractor.

3.21.3 The trade contractor agrees to notify the construction manager's representative on the job site of all accidents, which may occur to persons or property and shall provide the construction manager's representative with a copy of all accident reports on appropriate forms. All reports shall be signed by the trade contractor or his authorized representative and submitted within twenty-four (24) hours of occurrence.

3.21.4 The trade contractor agrees that all disputes concerning the jurisdiction of trades shall be adjusted in accordance with any plan for the settlement of jurisdictional disputes, which may be in effect either nationally or in the locality in which the work is being done. The trade contractor shall be bound by, and shall abide by, all such adjustments and settlements of jurisdictional disputes, whether or not the trade contractor is signature bound by the agreement establishing the Impartial Jurisdictional Disputes Board and/or its successors. The trade contractor agrees not to cause a work stoppage due to the jurisdictional assignment of work.

3.21.5 The trade contractor shall submit to the construction manager upon request, copies of orders placed for the various materials required for the project or stock lists if such material is normally a stock item. Order copies need not reflect prices but should indicate type of material, quantity, vendor name, and address, etc. The trade contractor shall be required to submit to the construction manager a monthly material status report, or more often if required by the construction manager, as a prerequisite for the monthly progress payment. The trade contractor shall notify the construction manager immediately upon learning of a change of status of any material, equipment or supplies.

3.21.6 The trade contractor agrees to maintain an adequate force of experienced workers and the necessary materials, supplies and equipment to meet the requirements of the construction manager and other trades in order to maintain construction progress schedules, as established by the construction manager and owner. In the event that their forces are, in the judgment of the construction manager, inadequate to meet the established schedules during the regular working hours, the trade contractors agree to

work sufficient overtime hours or increase their work force to meet such schedules at no extra cost to the construction manager, architect or the owner.

3.21.7 The trade contractor agrees to employ competent administrative, supervisory, and field personnel to accomplish the work, including layout, engineering, preparation and checking of shop drawings. Such supervisory personnel shall not be changed without written consent of the construction manager.

3.21.8 The trade contractor shall insure that all construction tools, equipment, temporary facilities and other items used in accomplished the work, whether purchased, rented otherwise provided by the trade contractor or provided by the others, are in a safe, sound and good condition; capable of performing the function for which they are intended and maintained in conformance with applicable laws and regulations.

3.21.9 In no event shall any act or omission on the part of the owner, the architect or the construction manager relieve the trade contractor from their obligation to perform their work in full compliance with the contract.

3.21.10 The trade contractor shall be responsible to the construction manager for the acts and omissions of all their employees and all trade subcontractors, their agent and employees, and all other persons performing any of the work under a contract with the trade contractor.

ARTICLE 4 - ARCHITECT AND CONSTRUCTION MANAGER

4.1 General

4.1.1 Delete subparagraph, insert instead: The Architect is Zerr Berg Architects, Inc. 510 4th Avenue North, Fargo, ND referred to in the contract documents as singular in number. The term architect means the architect or his authorized representative, including employees or consultants. Where "architect" may be used relating to engineering phases of the work, substitute the term "engineer" therefore.

4.1.2 Delete subparagraph, insert instead: The Construction Manager is Gehrtz Construction Services, Inc. 510 4th Avenue North, Fargo, ND, referred to in the construction documents as singular in number. The term "construction manager" means the construction manager or the construction manager's authorized representative, including employees or consultants.

4.2 Administration of the Contract

4.2.2 In the first line between the words "intervals" and "appropriate", insert the words "he deems".

4.2.11 In the last sentence change the word "approval" to "approval and acceptance".

ARTICLE 5 - SUBCONTRACTORS

5.1 Definitions

5.1.1 Change the wording of this subparagraph to read as follows: A subcontractor is a person, firm or entity having a direct contract or purchase order with the contractor to provide or furnish materials, equipment, facilities, labor or services, or a combination of these, for the execution and completion of the work or part thereof. The term subcontractor is referred to throughout the contract documents as if singular in number and means a subcontractor or an authorized representative. The term subcontractor does not include other multiple prime contractors, or subcontractors of other multiple prime contractors.

5.1.2 Change the wording of this subparagraph to read as follows: a sub-subcontractor is a person, or entity having a direct or indirect contract or purchase order with a subcontractor to provide or furnish materials, equipment, facilities, labor or service, or a combination of these, for the execution or completion of the work or part thereof. The term sub-subcontractor is referred to throughout the contract documents as if singular in number and means a sub-subcontractor or an authorized representative thereof.

5.2 Award of subcontracts and other contracts for portion of the work.

5.2.1 At the end of the first sentence, add: -- along with a list of actual materials or equipment they will be furnishing.

5.2.3 Add to subparagraph: no increase in the contract sum shall be allowed should a substitution be required as a result of the owner's or architect's reasonable objection based on specified criteria on which a proposed subcontractor will be evaluated.

ARTICLE 6 - CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS

6.2 Mutual Responsibility

6.2.1 Change subparagraph to read: The contractor and subcontractors shall cooperate with and coordinate their work with all other contractors and the owner to facilitate the general progress of the project and to prevent delaying the progress of other contractors. The contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate contractor's work with theirs as required by the contract documents. Each contractor and subcontractor shall obtain layout drawings, rough-in detail sheets and other pertinent information directly from each other (not from architect nor construction manager) to coordinate all phases of the work. For coordination with the owner's equipment or materials, information shall be obtained from the owner through the construction manager. After timely notification by the contractor of the need to accomplish a particular phase or element of the work, the other contractors shall, within a reasonable time, perform their work so as not to delay or impede the contractor.

6.2.2 Between the words "construction" and "shall", insert: --, or lack of coordination with other contractors, --

6.2.3 In the first line, delete the word "wrongfully".

ARTICLE 7 - CHANGES IN THE WORK

7.1 Changes

7.1.4 Add subparagraph: For proposed changes in the work on the lump sum or time and material methods under Clauses 7.3.1 and 7.3.3.4 above, the costs shall be determined as provided under this subparagraph 7.1.5. The contractor shall submit an itemized list of quantities with the applicable unit costs and extended price for each, in such form and detail as required by the construction manager / architect.

.1 As a minimum the detailed breakdown shall include and indicate the items enumerated below. Items (a) and (b) constitute the cost of labor, and items (c), (d), (e) and (f) constitute the basic costs referred to under this Article 7.

(a) Labor costs, itemized by each trade involved, showing the hourly rates for each, and the hours required for the change. Labor rates shall be the same for extra and credit computations and shall be the actual rate paid workmen in accordance with established management labor agreement.

(b) Burden on labor, which shall be only the actual costs of mandatory fringe benefits required by established agreements, taxes on labor, worker's or workmen's compensation, insurance on labor as affected by payroll, unemployment taxes and insurance, including FICA and FUTA.

(c) Quantities of materials, equipment and supplies, at their actual cost, with unit costs indicated.

(d) The cost of subcontracted work, computed in the same way as provided for under this subparagraph 7.1.5.

(e) Overhead, profit or commission. As noted in Section 01 2000.

(f) Applicable sales tax on materials, added after the above computations are complete.

7.4 Minor Changes in the Work

Add to paragraph: The Architect shall also have the right to make minor changes in dimensions, locations, arrangements, or details to accommodate changes in other materials and equipment, improve the work, or prevent unforeseen interference with structural or other features. Such changes shall be made without a change in the contract sum.

ARTICLE 8 - TIME

8.2 Progress and Completion

8.2.3 In the second line change the word "substantial" to "final". Add to subparagraph: The work shall not be suspended or shut down, but shall progress continuously with sufficient labor at all times, unless otherwise approved by the owner, architect and construction manager.

8.3 Delays and Extensions of Time

8.3.3 Change subparagraph to read: This paragraph 8.3 does not exclude the Owner's recovery of damages for delay under other provisions of the contract documents. The contractor's sole and exclusive remedy for delay is a right to a time extension for completion of the contract and not damages.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.2 Schedule of Values

In the first line, after the words, "Before the first Application for Payment," insert "in accordance with other requirements of the contract documents,"

9.3 Applications for Payment

9.3.4 Add Subparagraph: The contractor shall submit his Application for Payment on forms as the Construction Manager / Architect may specify or direct. The Application shall be accompanied by a sworn, notarized Certificate by the Contractor, attesting to the accuracy of the amount as being for work satisfactorily complete in accordance with the Contract Documents, and that all just claims and bills for labor, materials, equipment, subcontracts and services or other expenses represented in previous Applications for Payment have been paid, such that the Contractor is entitled to the payment.

9.3.5 Add Subparagraph: Except where the statutory requirements apply, progress payments shall be made monthly upon application, in the amount of 90% of the Work completed and materials described under 9.3.2. For a Contract over \$100 thousand, the Architect will authorize the payment of 100% of the amount completed after a total of 5% of the Contract amount has been retained, providing progress on the Work is in accordance with or ahead of the Contractor's Progress Schedule and is otherwise satisfactory to the Architect, and if the Contractor has filed a Consent of Surety with the Architect.

9.5 Decisions to Withhold Certification

9.5.1 In the fourth line change the words "certify payment" to "issue a Certificate for Payment".

9.6 Progress Payments

9.6.6 Change subparagraph to read: Issuance of a Contractor's Application and Certificate for Payment, a Progress Payment, or partial or entire use of occupancy of the project by the Owner shall not constitute an acceptance of any work not in accordance with the Contract Documents. The Contractor (and its Surety, if applicable) agree any issuance of a Contractor's Application and Certificate for Payment by the Architect, payment on the Contract Sum or in reducing any retaining amount, or any use of occupancy of the work will in no way relieve them of the obligation to completely fulfill or accomplish all obligations of the contract, including warranty of the work, and that they waive an actual or alleged rights of subrogation or action against the owner or the architect as a result of any such issuance of a Contractor's Application and Certificate for Payment, payment or use or occupancy. At any time the Surety (if any) shall have the right to examine the status of the work, as well as any payments, and may request the Owner to withhold additional sums as it considers appropriate to protect its interests.

9.8 Substantial Completion

9.8.6 Add Subparagraph: After Substantial Completion the Contractor shall coordinate his activities with the Owner's use of substantially completed work and shall diligently

complete the remaining work, without delay or interruption, within the remaining contract time.

9.10 Final Completion and Final Payment

9.10.2 In the second line between the word "Construction Manager" and the number "(1)" insert the following: "Such substantiation of the Contractor's Right to Payment as the Owner may require such as and including --."

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.2 Safety of Persons and Property

10.2.4 Add to subparagraph: and shall give the Owner reasonable advance notice.

10.2.5 In the seventh line between the words "fault" and "or", insert the words "acts, operations, methods."

10.5 Add paragraph: Miscellaneous General Provisions

10.5.1 The requirements under 10.4, Miscellaneous General Provisions, shall be considered as minimum requirements and shall not be construed to limit the amount of protection required to safeguard all persons and property, nor construed as directing or establishing the Contractor's methods or responsibilities.

10.5.2 The Contractor shall provide and maintain adequate fire extinguishers in and around the construction area, available to all workers, but shall not use extinguishers that are to be installed in the work.

10.5.3 The Contractor shall provide and maintain guard lights at barricades, railings, obstructions in streets, roads or sidewalks and at trenches or pits including at those adjacent to existing buildings, public roads, walks and similar locations where a hazard may exist. The Contractor shall provide and maintain suitable barricades or fences around excavations, including trench excavations, excavated by contractor or subcontractors.

10.5.4 As may be applicable to the project, the contractor shall provide and be responsible for: protection of equipment, materials, and supplies from water and other damaging elements; providing proper adequate drainage (temporary and permanent) of the site in connection with work of this contract; damage to property as a result of work or operations under this contract, including but not restricted to damage from water, excavation, underpinning, removal or changing of structural supports; collapse or other failure to the project resulting from the contractor's acts, operations or work, including water undermining or creating pressure on the construction; pumping of water from work areas and excavations of this contract, and spaces built, constructed or opened up under the contract, and spaces built, constructed or opened up under the contract, and if necessary, installing temporary heat to keep the spaces dry; providing protection and planking on finished floors and other finished surfaces where work is being done by the contractor or subcontractor; closing and protecting all holes or openings through walls, floors and roofs that are cut or built by the contractor or subcontractors; and which will admit water to interior spaces during the construction period or will create a potential safety hazard; removal of snow to accomplish the work; keeping premises in neat and orderly condition; eliminating fire hazards.

10.5.5 As may be applicable to the project and to his work, the contractor shall be responsible for the following; providing safe and adequate stairways (temporary and permanent) for the use of all trades; maintaining access to the site; proper protection by heating of an enclosed building during cold weather; protection for trees and other similar features, which are to remain, from damage from operations in connection with project, by boxing tree trunks and setting up barricades at sufficient distance to prevent damage to branches; the removal of accumulated snow and ice within a building, which generally shall be hauled out (not melted), unless it is a minor amount, as approved by architect / construction manager.

10.5.6 The contractor and each subcontractor shall provide storage and enclosures to protect and preserve the materials stored at and off the site. Materials such as wood,

metal, cement, masonry materials, equipment of any type, conduit and similar materials shall not be set directly on the ground. Coverings shall be durable, watertight, fully cover sides as well as top, substantial and well anchored to prevent blowing away. Shed type enclosures shall be provided for easily damaged and small items. Any protection which becomes damaged shall be replaced immediately. Contractor's storage shall be reviewed and accepted by the construction manager, as it relates to site coordination.

ARTICLE 11 - INSURANCE AND BONDS

11.1 Contractor's Liability Insurance

11.1.1 Delete subparagraph and insert instead: Contractor and Subcontractor shall purchase and maintain commercial general liability insurance as required to protect the construction, subcontractor, construction manager, architect and owner from claims set forth below which may arise out of, or result from, operations of the contract under this contract, whether such claims arise during contractor / subcontractor performance or subsequent to completion of operations under the contract / subcontract and whether such operations by contractor, subcontractor or by anyone for whose acts contractor or subcontractor may be liable. Insurance shall be purchased from a company licensed to do business in the state where the project is located, and shall be written for not less than the limits of liability specified below or required by law, whichever is greater. The types of claims, required coverage and minimum limits of liability are as follows:

A. Claims under the contractor or subcontractor Worker's Compensation, disability benefit and other similar employee benefits acts; claims for damages because of bodily injury, occupational sickness or disease or death of employees. Insurance coverage shall include: Statutory Workers' Compensation, including Employer's Liability with a minimum limit of \$100,000 for each employee.

B. Claims for damages because of bodily injury, occupational sickness or disease, or death, by any person other than employees; claims for personal injuries which are sustained (1) by any person as a result of an act or omission directly or indirectly related to the employment of such person by the contractor or subcontractor or (2) any other person; claims for damages other than to the work itself, because of injury to or destruction of tangible property including loss of use resulting there from.

Insurance coverage shall include:

Premises - Operations

Products - completed Operations

Blanket Contractual - as will cover the provisions of the contract or subcontract, including but not limited to any indemnity provision.

Broad form property damage.

Personal injury

Blanket explosion, collapse and underground property damage

Operations of independent contractors

Policy Limits:

- General Aggregate	\$2,000,000
- Product / Completed Operations Aggregate	\$1,000,000
- Person Injury	\$1,000,000
- Each Occurrence	\$1,000,000

C. Claims for damages because of bodily injury or death of any person, or any property damage, arising out of the ownership or use of any motor vehicle. Comprehensive automobile liability insurance including owned, hired and non-owned vehicles with limits of \$1,000,000.

D. The coverage limits required by Paragraphs (B) and (C) above may be achieved by the use of an Umbrella Excess Liability Policy.

E. The limits of liability specified shall be considered minimum requirements.

F. Acceptance of the insurance by the construction manager shall not relieve or decrease the liability of the contractor or subcontractor. The construction manager, architect and owner do not in any way represent that the insurance or limits of

insurance specified above are sufficient or adequate to protect the contractor's or subcontractor's interest or liabilities, but are minimums.

11.1.3 Change the number "30" in line seven to "60".

11.3 Property Insurance

11.3.1.3 Change to read as follows: The contractor submitting the claim will be responsible for the deductible portion of the claim. The Owner will have a \$10,000.00 deductible. The Owner's policy does not include coverage for contractor's equipment or materials stored off-site. It is the contractor's responsibility to properly secure all on-site materials. Unsecured on-site storage is not eligible for a claim.

11.3.1.4 Omit paragraph.

11.5.1 Add subparagraph: ALL insurance shall contain a provision that coverage afforded under any of the aforesaid insurance policies shall not be canceled or materially changed without at least sixty (60) calendar days prior written notice to construction manager, and the owner on all "accord" form certificates of insurance, the words "endeavor to" and the remaining words beginning with "but failure to" will be stricken from the cancellation notice provision.

11.6.1 Add subparagraph: All aforesaid insurance policies shall be underwritten with responsible insurance carriers with Best's Ratings of not less than A 10 and otherwise satisfactory to construction manager and the owner and licensed to provide insurance in the state in which the project is located. Non-admitted carrier may be considered on an individual basis.

11.7.1 Add subparagraph: The contractor / subcontractor is responsible at contractor's / subcontractor's expense and not a reimbursable expense for providing any additional insurance contractor / subcontractor deems necessary to protect contractor's / subcontractor's interest from other hazards or claims in excess of the aforementioned minimum insurance coverage.

ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK

12.1 Uncovering of Work

12.1.1 Add to subparagraph: The contractor shall give timely notice to the architect, through the construction manager, of the readiness of the work to be observed.

12.1.2 In the second line between the words "the" and "construction manager", insert the words "contract documents or the -".

12.2 Correction of Work

12.2.1 Add at end of first sentence: "Unless the Owner elects to accept the work as provided for under paragraph 12.3". Add at the end of the subparagraph: "Work rejected before final completion shall be corrected prior to the processing of the final contractor's Application and Certificate for Payment.

12.2.2 Add the following at the end of the subparagraph: The expiration of the above one year or any other specified time period, or any other period prescribed by law, shall not relieve the contractor of the obligation for the expense to correct any defect in the work or deficiencies which are not readily ascertained, including but not limited to defective materials and workmanship, defects attributable to material substitutions for specified material, substandard performance or otherwise not in compliance with the contract documents. Such latent defects or deficiencies shall be corrected as provided in this paragraph 12.2. Following the correction or replacement of any of the work, as above specified, the contractor shall correct any defects or deficiencies in corrected or replaced materials and workmanship, which is found within one year after the date of correction or replacement.

12.2.6 Add subparagraph: For the purpose of the commencement of the specified periods covered by this Article, or any other special specified period, the date of the inspection for substantial of the last unit, part or phase of the work shall be the starting date of the period, for all of the work, except for any work noted as incomplete or unsatisfactory at that time. The period covered by this article for said incomplete or unsatisfactory work

shall start on the date of specifically noted dates of inspection for substantial complete, (or of acceptance, in writing, by the owner of corrected work), the date of the architect's issuance of the final Certificate and Application for Payment on the entire contract will be the start of the period.

ARTICLE 13 - MISCELLANEOUS PROVISIONS

13.5 Tests and Inspections

13.5.1 Delete last sentence of subparagraph.

ARTICLE 14 - TERMINATION OR SUSPENSION OF THE CONTRACT

14.2 Termination by the Owner for Cause

14.2.2 Change wording to read: When any of the above reasons exist, the Owner, with the advice of the architect and construction manager, may, without prejudice to any other rights or remedies of the owner and after giving the contractor and contractor's surety seven days' written notice, require the surety to promptly take over and complete the work under the terms of the contract. Should the surety fail to assume the obligations of completing the work within ten days after receipt of the written notice the owner may, upon seven days' additional notice, terminate the employment of the contractor (except the obligations under the bond) and may:

.1 Take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the contractor and may finish the work by whatever method the owner may deem expedient.

.2 Accept assignment of subcontracts pursuant to paragraph 5.4

14.2.3 In the second line between the words "Contractor" and "shall" insert the words "or Contractor's Surety".

14.2.4 Change the wording to read: If the Owner complete the work and the unpaid balance of the contract sum exceeds the costs of finishing the work, including the owner's additional costs, attorneys' costs and compensation for the construction manager's and architect's additional services, such excess shall be paid by the contractor. If such costs for the owner to complete the work exceed such unpaid balance, the contractor and/or his surety shall pay the difference to the owner. The amount to be paid to the contractor or to the owner, as the case may be, shall be certified by the owner or contractor and reviewed by the construction manager, and approved by the architect and this obligation for payment shall survive the termination of the contract.

ARTICLE 16 - ADDITIONAL CONDITIONS (ADD THIS ARTICLE AND THE FOLLOWING PARAGRAPHS)

16.1 Additional Definitions

16.1.1 Provide: As used in connection with labor, materials and equipment shall mean to furnish and install complete, including connections to utilities or service, complete anchorage and suspension, fastening or anchor devices, trim, finish and other related work, unless specified otherwise.

16.1.2 Accepted, approved, satisfactory, equal to, proper, as directed and similar terms: These shall mean the decision rests with the architect, whose decision shall be final and binding upon the contractor and subcontractors.

16.1.3 Project, work, job: In the technical sections or on the drawings, these terms may be used interchangeably and are synonymous. They shall mean the facility, construction and/or improvement within the intent and scope of the contract documents. The terms shall mean the entire facility, or separable parts as appropriate to the use of the term, including that under subcontract where applicable, and includes labor, materials, equipment, service and skill.

16.1.4 Notice to Proceed: This shall be written notice by the construction manager to the contractor to commence work of the contract, issued either before or after execution of the contract. In issuing the notice, stipulations may be included as to time and other requirements that may condition commencement of the work.

16.2 Use of Drawings and Specifications

16.2.1 During construction, the contractor shall examine and use all specifications and drawings for the project, including those that may primarily pertain to other work the contractor normally does not perform with his own forces. The contractor shall use all of the project drawings and specifications: for a complete understanding of the project and the work; to determine the type of construction and systems; for coordination; to determine what other work may be involved in various parts or phases; to anticipate and notify others when work will be required; and all other relevant matters related to the project. The contractor shall also be bound by all the requirements to complete his work, that are applicable to, pertain to, or affect the work, as may be shown or inferred by the entire set of drawings and specifications.

16.3 Periodic Payment Estimate

16.3.1 When required by the owner to establish a schedule of money available to make payment of periodic Applications for Payment, the contractor shall provide an estimate by months; of the anticipated amounts for each periodic payment. The retained percentage shall be considered in the estimate schedule, as well as anticipated job progress and materials delivery. The schedule will be deemed an estimate only, for financial planning purposes, and the contractor shall not be bound to conform to the schedule. The schedule may be required by the contract documents or requested by the owner and contract execution.

16.4 Layout of the Work

16.4.1 The Construction Manager, on behalf of the Owner, shall provide surveyor and control points to be utilized for each contractor to layout their work.

16.4.2 The contractor shall recognize that the drawings necessarily are diagrammatic, in many instances. All work and in particular, exposed piping, ducts, conduit and similar items shall be neatly and carefully laid out to provide the most useful space utilization and the most orderly appearance. Except as otherwise indicated or directed, piping and similar work shall be installed as close to ceilings and walls as conditions permit, located to prevent interference with other work or with the use of the spaces in the manner required by the functions of the room and the owner. Valves shall be located in inconspicuous but accessible places. Before proceeding with any work, particularly where exposed, the contractor shall carefully plan the layout and review it with the architect and construction manager for acceptability of location.

16.4.3 The contractor shall verify grades, lines levels and dimensions shown on drawings and report any errors or inconsistencies to architect, through the construction manager for decision before commencing work. The contractor and subcontractor shall be responsible for the correct location, dimensions and elevations of his work. As the work progresses, the contractor shall be responsible for the layout of the exact location of all partitions and similar features, as guide to all trades.

16.5 General Quality of Work, Installation and Operation

16.5.1 All the work shall be strictly first quality, in materials, erection, installation and workmanship.

16.5.2 The contractor shall request interpretations from the architect, through the construction manager, for the following: work indicated on the drawings or specified in such a manner as to make it impossible to produce work of the highest quality within the space shown; possibilities of damaging effects of expansion and contraction; discrepancies found between drawings or between drawings and specifications. If the contractor does not request such interpretation, no excuse will be entertained thereafter for failure to carry out and guarantee the work in a satisfactory manner. Elements of the work intended to protect against the weather shall be guaranteed weatherproof and watertight.

16.5.3 Proper performance of the contract shall imply correct and proper placement, proper or published results for products and equipment, fitting and operation of fixed or movable and operating parts of the work, including doors, windows, hardware and all

systems and equipment. Materials and equipment shall be completed in every respect, with parts, connections, anchors, devices, backing, fittings and other necessary items, and shall be completely installed, anchored, fitted and placed in operating condition. Before buying, construction or installing work, the contractor shall notify the architect of conditions, which exist in the contract documents, which will adversely affect proper operation of first quality installation.

16.5.4 Throughout the project, accommodate various materials and pieces of equipment that are fitted to their materials and equipment and various materials that are applied to which other materials attach. Take all reasonable precautions to insure materials, devices, items, equipment or other products can be satisfactorily applied or installed to each other or work of others and make necessary adjustments during preparation of shop drawings or in advance of field work, or stop work to accommodate other work.

16.5.5 Materials or equipment shall be installed or applied according to directions of the manufacturer or recommendations of an association dealing primarily with materials, unless specifically designated otherwise. In no case shall installation, including any temporary work necessary (i.e. shoring), be below standards recommended by manufacturer. Where specified requirements exceed the manufacturer's standards, the specifications shall govern. Fabrication (including reinforcing and accessories) and installation shall be provided to insure proper placement and use of the item or material under the location, use, condition and available space to serve intended function and to meet code requirements. Equipment devices shall be provided and installed to "fail safe" under normal operating conditions and it shall be contractor's obligation to provide and install work in such manner.

16.6 General Fire Safety

16.6.1 The contractor shall exercise extreme care to maintain and exercise adequate fire safety precautions throughout construction. This shall include providing sufficient devices, watchmen, standby helpers or other precautions during construction, in use of temporary heat, welding, brazing, sweating, testing or other phases of work. Welding, brazing, cutting and sweating operations performed in vicinity of, or accessible to, combustible material shall be adequately protected to make certain that sparks or hot slag do not reach the combustible material and start a fire. Glass and glazed material shall be masked from splatter. When necessary to do cutting, welding, brazing, sweating, in vicinity of wood, or combustible materials (and the combustible material cannot be removed), the material shall be adequately protected with fireproof coverings. In addition, a helper shall be stationed nearby with proper fire extinguishers to guard against sparks and fire.

16.6.2 Whenever combustible materials have been exposed to sparks, molten metal, hot slag, or splatter, a man shall be kept at the place of work for at least two hours after completion to make sure that smoldering fires have not been started. Whenever cutting or welding operations are carried on in a vertical pipe shaft, a man to act as a fireguard shall be employed to examine floors below the point of cutting or welding. This fireguard shall be kept on duty at least two hours after completion of the work to guard against fires and he shall examine each level after this time, prior to leaving.

END OF SECTION

**SECTION 01 2000
PRICE AND PAYMENT PROCEDURES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.

1.02 RELATED REQUIREMENTS

- A. Section 00 5200 - Agreement Form: Contract Sum, retainages, payment period, monetary values of unit prices.
- B. Section 00 7200 - General Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- C. Section 01 2010 - Change Order Procedures: Percentage allowances for overhead and profit.
- D. Section 01 2100 - Allowances: Payment procedures relating to allowances.
- E. Section 01 7800 - Closeout Submittals: Project record documents.

1.03 SCHEDULE OF VALUES

- A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values in duplicate within 15 days after date established in Notice to Proceed.
- E. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification section. Identify site mobilization and bonds and insurance.
- F. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.
- G. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 CIVIL SITE SCHEDULE OF VALUES

- A. Civil Site Schedule of Values Form: Use the Included Form following this section for all Civil Site related costs.

1.05 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- D. Forms filled out by hand will not be accepted.
- E. Execute certification by signature of authorized officer.
- F. Each Application of Payment must be notarized by a duly authorized Notary Public.
- G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
- I. Submit three hard-copies of each Application for Payment.
- J. Include the following with the application:
 - 1. Transmittal letter as specified for submittals in Section 01 3000.

2. Construction progress schedule, revised and current as specified in Section 01 3216.
3. Affidavits attesting to off-site stored products.

K. When Architect requires substantiating information, submit data justifying dollar amounts in question.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 2010
CHANGE ORDER PROCEDURES**

PART 1 GENERAL

1.01 SUMMARY

- A. This section shall establish procedures for the submission of change order proposals.
- B. Change Orders may also be known as "Contract Amendments". The two terms may be used interchangeably with the same meaning.
- C. Changes in the work involving an adjustment in the contract price shall be authorized by a written change order signed by the Owner.
- D. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
- E. This section specifies administrative and procedural requirements for handling and processing contract modifications.

1.02 CHANGE ORDER PROCEDURES

- A. Processing Procedure:
 - 1. Upon the determination of the Architect, Construction Manager, and Owner that extra work beyond that indicated on the drawings and/or specifications, or that certain portions of the work will be deleted from the Contract, the Contractor shall submit a change order proposal to the Construction Manager for review.
 - 2. Upon acceptance of the change order proposal, the Construction Manager will prepare copies of the change order and obtain the necessary signatures of the Contractor and Owner indicating acceptance of the amendment of the contract.
 - 3. Copies of the change order will be distributed by the Construction Manager to the Owner and Contractor, Architect and other agencies or individuals as required.
- B. Change Order Proposals
 - 1. The proposal shall be itemized to show the following:
 - a. Quantities and cost of materials F.O.B. jobsite
 - b. Costs of labor
 - c. Subcontractors work and cost thereof
 - d. Overhead*
 - e. Profit
 - 2. Proposals may be either "Add" or "Deduct" types as necessary to cover the change.
 - 3. Allowable mark ups for overhead and profit.
 - 4. All proposals shall include allowances for overhead and profit as follows:
 - a. When change order proposals include an add and deduct as part of the same change, one overhead and one profit figure shall be used for the difference. Overhead and profit figures shall be based on the following tables.

5. Add type change order proposal mark-up shall not exceed the following:

Construction Contract Amounts	Up to \$100,000	\$100,000 to \$500,000	\$500,000 to \$1 Million	\$1 Million to \$2 Million	Over \$2 Million
Overhead	10%	9%	7%	5%	3%
Profit	6%	5.5%	5%	4.5%	4%

6. Deduct type change order proposal mark-up shall not be less than the following:

Construction Contract Amounts	Up to \$100,000	\$100,000 to \$500,000	\$500,000 to \$1 Million	\$1 Million to \$2 Million	Over \$2 Million
Overhead	10%	9%	7%	5%	3%
Profit	3%	2.75%	2.5%	2.25%	2%

7. *Overhead includes general office operating costs that are not direct costs related to the project. Overhead items would include but are not limited to general company insurance, office rental or operating costs, company vehicles and/or equipment, etc. Overhead shall also include Performance/Payment Bond costs associated with the contract amendments.

END OF SECTION

SECTION 01 2100 ALLOWANCES

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Selected materials and equipment are specified in the Contract Documents by allowances. In some cases, these allowances include installation. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
- B. See Section 00 7200 - General Conditions for additional requirements.

1.02 SUBMITTALS

- A. Comply with 01 3000 - Administrative Requirements.
- B. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.
- C. Submit invoices or delivery slips to show the actual quantities of materials delivered to the site for use in fulfillment of each allowance.

1.03 ALLOWANCE BREAKDOWN

- A. These allowances shall cover the cost to the Contractor, less any applicable trade discount, of the materials and equipment required by the allowance, delivered at the site, and all applicable taxes.
- B. The Contractor's costs for unloading and handling on the site, labor, installation costs, overhead, profit, and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowance.
- C. Whenever the cost is more or less than the allowance, the Contract Sum shall be adjusted accordingly by Change Order, the amount of which will recognize changes, if any, in handling costs on the site, labor, installation costs, overhead, profit, and other expenses.

1.04 SCHEDULE OF ALLOWANCES

- A. The Landscaping Contractor (Bid Package 32C) shall include in their proposal an allowance of \$3,000 for miscellaneous seeding to be used at the direction of the Construction Manager.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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**SECTION 01 2200
UNIT PRICES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. List of unit prices, for use in preparing Bids.
- B. Measurement and payment criteria applicable to Work performed under a unit price payment method.

1.02 COSTS INCLUDED

- A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.03 MEASUREMENT OF QUANTITIES

- A. Take all measurements and compute quantities. Measurements and quantities will be verified by Construction Manager .
- B. Assist by providing necessary equipment, workers, and survey personnel as required.

1.04 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Construction Manager, multiplied by the unit price.
- B. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from the transporting vehicle.
 - 4. Products placed beyond the lines and levels of the required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected Products.

1.05 SCHEDULE OF UNIT PRICES

- A. Unit Price No. 1: Table and Bench Set.
 - 1. Provide and install (1) table and bench set per detail 1/L201.
 - 2. Price per Set.
 - 3. Bid Package 32C.
- B. Unit Price No. 2: Bench.
 - 1. Provide and install (1) bench per detail 2/L201.
 - 2. Price per Item.
 - 3. Bid Package 32C.
- C. Unit Price No. 3: Trash Receptacle.
 - 1. Provide and install (1) trash receptacle per detail 3/L201.
 - 2. Price per Item.
 - 3. Bid Package 32C.
- D. Unit Price No. 4: Bike Rack.
 - 1. Provide and install bike rack set per detail 4/L201.
 - 2. Price per Set.
 - 3. Bid Package 32C.
- E. Unit Price No. 5: Seeding.
 - 1. Provide and install additional seeding.
 - 2. Price per Square Yard.
 - 3. Bid Package 32C.

- F. Unit Price No. 6: Sod.
1. Provide and install additional sod.
 2. Price per Square Yard.
 3. Bid Package 32C.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 2300 ALTERNATES

PART 1 GENERAL

1.01 SUMMARY

- A. The bidder shall bid on each Alternate specified as part of the specifications. Alternates not specifically requested will not be considered unless prior approval has been granted by the Construction Manager and Architect.
- B. The technical sections of these specifications shall also apply to the Alternate work, whether so noted in each technical section or not.
- C. Drawings and general provisions of the Contract, including General Conditions and Supplementary Conditions and other Division 00 and 01 Specification Sections apply to this Section.
- D. This Section includes administrative and procedural requirements governing Alternates.

1.02 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.03 SCHEDULE OF ALTERNATES

- A. Alternate No. A: Site Furnishings.
 - 1. Alternate Bid: All bid package work associated with providing and installing all site furnishings as shown on the plans.
- B. Alternate No. B: Irrigation at Sod and Plants within Sodded Areas and Planting Beds.
 - 1. Alternate Bid: All bid package work associated with providing and installing site irrigation for all sodded and planting areas as shown on the plan.
- C. Alternate No. C: Irrigation at Seed and Plantings within Seeded Areas.
 - 1. Alternate Bid: All bid package work associated with providing and installing site irrigation for all seeding areas as shown on the plan.
- D. Alternate No. D: Irrigation for Parking Islands.
 - 1. Alternate Bid: All bid package work associated with providing and installing site irrigation for islands in the west parking lot. Note: Do not include boring in this alternate. Provide standard irrigation pipe installation.
- E. Alternate No. E: Irrigation Boring in lieu of Standard Pipe Installation.
 - 1. Alternate Bid: All bid package work associated with boring irrigation to the islands in the west parking lot.
- F. Alternate No. F: Watering of Plantings and Turf Establishment Areas
 - 1. Alternate Bid: All bid package work associated with watering of plantings if irrigation alternate is not accepted. Provide four weeks of watering as needed.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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**SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General administrative requirements.
- B. Electronic document submittal service.
- C. Preconstruction meeting.
- D. Progress meetings.
- E. OwnerArchitectConstruction Managerr (OACM) Meetings
- F. Coordination drawings.
- G. Submittals for review, information, and project closeout.
- H. Number of copies of submittals.
- I. Requests for Information (RFI) procedures.
- J. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 3216 - Project Construction Schedule: Form, content, and administration of schedules.
- B. Section 01 6000 - Product Requirements: General product requirements.
- C. Section 01 7000 - Execution and Closeout Requirements: Additional coordination requirements.
- D. Section 01 7800 - Closeout Submittals: Project record documents; operation and maintenance data; warranties and bonds.

1.03 DEFINITIONS

- A. Coordination drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.
- B. Field samples are full-size physical examples erected on-site to illustrate finishes, coatings, or finish materials. Field samples are used to establish the standard by which the Work will be judged.
- C. Mockups are full-size assemblies for review of construction, coordination, testing, or operation; they are not samples.

1.04 GENERAL ADMINISTRATIVE REQUIREMENTS

- A. Comply with requirements of Section 01 7000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.

1.05 PROJECT COORDINATOR

- A. Project Coordinator: Construction Manager.
- B. Overall Project Coordination will be the responsibility of the Construction Manager as outlined in Section 00 7200 - General Conditions. As noted therein, in no way is the Construction Manager responsible for, or does he have control or charge of procedures, or for safety precautions and programs in connection with the work, but rather will provide the scheduling and coordination of the work of the various Contractors as a convenience to them as well as a service to the Owner.
- C. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for site access, traffic, and parking facilities.
- D. During construction, coordinate use of site and facilities through the Project Coordinator.

- E. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- F. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities. Responsibility for providing temporary utilities and construction facilities is identified in Section 01 5000 - Temporary Facilities and Controls.
- G. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- H. Make the following types of submittals to Architect through the Project Coordinator:
 - 1. Requests for Information.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Design data.
 - 6. Manufacturer's instructions and field reports.
 - 7. Applications for payment and change order requests.
 - 8. Progress schedules.
 - 9. Coordination drawings.
 - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
 - 11. Closeout submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF) format, as appropriate to the document, and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.
 - 1. Besides submittals for review, information, and closeout, this procedure applies to Requests for Information (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.
 - 2. Contractor and Architect are required to use this service.
 - 3. It is Contractor's responsibility to submit documents in allowable format.
 - 4. Subcontractors, suppliers, and Architect's consultants will be permitted to use the service at no extra charge.
 - 5. Users of the service need an email address, internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com), unless such software capability is provided by the service provider.
 - 6. Paper document transmittals will not be reviewed; emailed electronic documents will not be reviewed.
 - 7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.
- B. Cost: The Construction Manager's submittal service will be used.
- C. Submittal Service: The selected service is:
 - 1. Procore (866-477-6267): www.procore.com.
- D. Training: Web-based training sessions are available for all Contractors, Subcontractors, Suppliers, and Owner's representatives.

- E. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

3.02 PRECONSTRUCTION MEETING

- A. Construction Manager will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Owner.
 - 2. Architect and their consultants.
 - 3. Construction Manager
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties to Contract and Architect.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- D. Construction Manager will record minutes and distribute copies within two days after meeting to participants, Architect, Owner, and those affected by decisions made.

3.03 PROGRESS MEETINGS

- A. Construction Manager will schedule and administer meetings throughout progress of the work at maximum weekly intervals.
- B. Attendance Required as appropriate to agenda topics for each meeting: Job Superintendents, Major Subcontractors and Suppliers, Construction Manager, Owner, and Architect and their consultants.
- C. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems that impede, or will impede, planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Review of RFIs log and status of responses.
 - 7. Review of off-site fabrication and delivery schedules.
 - 8. Maintenance of progress schedule.
 - 9. Corrective measures to regain projected schedules.
 - 10. Planned progress during succeeding work period.
 - 11. Maintenance of quality and work standards.
 - 12. Effect of proposed changes on progress schedule and coordination.
 - 13. Other business relating to work.
- D. Construction Manager will record minutes and distribute copies within two days after meeting to participants, Architect, Owner, and those affected by decisions made.

3.04 OWNER ARCHITECT CONSTRUCTION MANAGER (OACM) MEETINGS

- A. Construction Manager will schedule and administer OACM meetings throughout progress of the work at maximum weekly intervals.
- B. Construction Manager will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required as appropriate to agenda topics for each meeting: Owner Representative, Architect, Engineers, Bid Package Contractor Project Managers, and Construction Manager

D. Agenda:

1. Review minutes of previous meetings.
2. Review of work progress.
3. Field observations, problems, and decisions.
4. Identification of problems that impede, or will impede, planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of RFIs log and status of responses.
7. Review of off-site fabrication and delivery schedules.
8. Maintenance of progress schedule.
9. Corrective measures to regain projected schedules.
10. Planned progress during succeeding work period.
11. Coordination of projected progress.
12. Maintenance of quality and work standards.
13. Effect of proposed changes on progress schedule and coordination.
14. Other business relating to work.

- E. Construction Manager will record minutes and distribute copies within two days after meeting to participants, Architect, Owner, and those affected by decisions made.

3.05 CONSTRUCTION PROGRESS SCHEDULE - SEE SECTION 01 3216

3.06 COORDINATION DRAWINGS

- A. Provide information required by Project Coordinator for preparation of coordination drawings.
- B. Review drawings prior to submission to Architect.

3.07 REQUESTS FOR INFORMATION (RFI)

- A. Definition: A request seeking one of the following:
1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.
 2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.
- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
1. Prepare a separate RFI for each specific item.
 - a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
 - b. Do not forward requests which solely require internal coordination between subcontractors.
 2. Prepare using software provided by the Electronic Document Submittal Service.
 3. Combine RFI and its attachments into a single electronic file. PDF format is preferred.
- D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
 2. Unacceptable Uses for RFIs: Do not use RFIs to request the following:
 - a. Approval of submittals (use procedures specified elsewhere in this section).
 - b. Approval of substitutions (see Section - 01 6000 - Product Requirements)
 - c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).

- d. Different methods of performing work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Conditions of the Contract).
- 3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response, with an explanatory notation.
- E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
 - 1. Official Project name and number, and any additional required identifiers established in Contract Documents.
 - 2. Discrete and consecutive RFI number, and descriptive subject/title.
 - 3. Issue date, and requested reply date.
 - 4. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
 - 5. Annotations: Field dimensions and/or description of conditions which have engendered the request.
 - 6. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.
- F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- G. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.
 - 1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.
 - 2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.

3.08 SUBMITTAL SCHEDULE

- A. Submit to Architect for review a schedule for submittals in tabular format.
 - 1. Submit at the same time as the preliminary schedule specified in Section - 01 3216 - Project Construction Schedule.
 - 2. Coordinate with Contractor's construction schedule and schedule of values.
 - 3. Format schedule to allow tracking of status of submittals throughout duration of construction.
 - 4. Arrange information to include scheduled date for initial submittal, specification number and title, submittal category (for review or for information), description of item of work covered, and role and name of subcontractor.
 - 5. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
 - a. For assemblies, equipment, systems comprised of multiple components and/or requiring detailed coordination with other work, allow for additional time to make corrections or revisions to initial submittals, and time for their review.

3.09 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for selection.
 - 4. Samples for verification.

- B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 7800 - Closeout Submittals.

3.10 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. Certificates.
 - 3. Test reports.
 - 4. Inspection reports.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field reports.
 - 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for Owner.

3.11 SUBMITTALS FOR PROJECT CLOSEOUT

- A. Submit Correction Punch List for Substantial Completion.
- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 7800 - Closeout Submittals:
 - 1. Project record documents.
 - 2. Operation and maintenance data.
 - 3. Warranties.
 - 4. Bonds.
 - 5. Other types as indicated.
- D. Submit for Owner's benefit during and after project completion.

3.12 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
 - 1. After review, produce duplicates.
 - 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.13 SUBMITTAL PROCEDURES

- A. General Requirements:
 - 1. Use a single transmittal for related items.
 - 2. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.
 - 3. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number and article/paragraph, as appropriate on each copy.
 - 4. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
 - a. Submittals from sources other than the Contractor, or without Contractor's stamp will not be acknowledged, reviewed, or returned.
 - 5. Deliver each submittal on date noted in submittal schedule, unless an earlier date has been agreed to by all affected parties, and is of the benefit to the project.

- a. Upload submittals in electronic form to Electronic Document Submittal Service website.
- 6. Schedule submittals to expedite the Project, and coordinate submission of related items.
 - a. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
 - b. For sequential reviews involving Architect's consultants, Owner, or another affected party, allow an additional 7 days.
- 7. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
- 8. Provide space for Contractor and Architect review stamps.
- 9. When revised for resubmission, identify all changes made since previous submission.
- 10. Distribute reviewed submittals. Instruct parties to promptly report inability to comply with requirements.
- 11. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.
- 12. Submittals not requested will not be recognized or processed.
- B. Product Data Procedures:
 - 1. Submit only information required by individual specification sections.
 - 2. Collect required information into a single submittal.
 - 3. Do not submit (Material) Safety Data Sheets for materials or products.
- C. Shop Drawing Procedures:
 - 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
 - 2. Do not reproduce Contract Documents to create shop drawings.
 - 3. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.
- D. Samples Procedures:
 - 1. Transmit related items together as single package.
 - 2. Identify each item to allow review for applicability in relation to shop drawings showing installation locations.
- E. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.

3.14 SUBMITTAL REVIEW

- A. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate action.
- B. Submittals for Information: Architect will acknowledge receipt, but will take no other action.
- C. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.
 - 1. Notations may be made directly on submitted items and/or listed on appended Submittal Review cover sheet.
- D. Architect's and consultants' actions on items submitted for review:
 - 1. Authorizing purchasing, fabrication, delivery, and installation:
 - a. "Approved".

- b. "Approved as Noted".
 - 1) At Contractor's option, submit corrected item, with review notations acknowledged and incorporated.
- 2. Not Authorizing fabrication, delivery, and installation:
 - a. "Revise and Resubmit".
 - 1) Resubmit revised item, with review notations acknowledged and incorporated.
 - 2) Non-responsive resubmittals may be rejected.
 - b. "Rejected".
 - 1) Submit item complying with requirements of Contract Documents.
- E. Architect's and consultants' actions on items submitted for information:
 - 1. Items for which no action was taken:
 - a. "For Record Only" - to notify the Contractor that the submittal has been received for record only.

END OF SECTION

SECTION 01 3030 WORKSITE SAFETY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General worksite safety requirements

1.02 GENERAL NOTES

- A. Health and safety will always remain the top priority for all levels of management, supervision, and workers engaged in construction activities. Health and safety will never be sacrificed in lieu of schedule, cost, production, or any other component of the work process. Gehrtz Construction Services expects all Contractors to execute their work on this project with a proactive commitment to safety at all levels. Each Contractor should plan their work focusing on protecting their workers from incidents and injuries.
- B. All contractors will incorporate, as a minimum, OSHA 29 CFR 1926 Construction Safety Standards, OSHA 29 CFR 1910 General Industry Standards (as applicable), specific state safety regulations, specific Owner requirements, project safety rules, and this Site-Specific Safety Policies (SSSP) when determining the safe work practices and protection of all workers. If any of these standards, requirements, or procedures conflict, the more stringent requirement shall prevail.
- C. This document is not all encompassing of Gehrtz Construction Services safety policies. Reference the Gehrtz Construction Services Site-Specific Safety Policies for additional information regarding policies and procedures.

1.03 REFERENCE STANDARDS

- A. 29 CFR 1910 - Occupational Safety and Health Standards; current edition.
- B. 29 CFR 1910.134 - Respiratory Protection; current edition.
- C. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.
- D. NFPA 70E - Standard for Electrical Safety in the Workplace; 2015.

1.04 SAFETY TRAINING

- A. Safety and health training are a requirement and mandatory for all Contractor workers assigned to this project to promote and ensure that an incident and injury free environment exists.
- B. Training:
 - 1. ***** Each Contractor is responsible for the proper training of their employee(s) in accordance with OSHA 29 CFR 1926 Construction Safety Standards, OSHA 29 CFR 1910 General Industry Standards (as applicable), specific state safety regulations, specific Owner requirements, project safety rules, and this Site-Specific Safety Policy manual. Training records and experience shall be maintained and available for review by Gehrtz Construction Services. *****

1.05 DESIGNATED CONTRACTOR COMPETENT PERSON

- A. Each Contractor will designate a competent person(s), as defined by OSHA 29 CFR 1926.32(f) as "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them", as their project safety representative. This person(s) name will be submitted (pg. 27) to Gehrtz Construction Services and this person(s) must have the authority and responsibility to ensure the proper implementation and enforcement of this SSSP. Two competent people for each category is preferred. **Contractors shall have a competent person(s) on site at all times.**
 - 1. The **General Trades Competent Person/Foreman** designated will be expected to have an adequate knowledge of OSHA construction standards.

2. The **Scaffold Competent Person** designated to oversee erection and dismantling of scaffolds will be expected to have an above average knowledge of OSHA 29 CFR 1926.450 Subpart L - Scaffolds, and proof of qualification training.
 3. The Trenching and Excavation Competent Person designated to oversee digging trenches and excavations will be expected to have an above average knowledge of OSHA 29 CFR 1926.650 Subpart P - Excavations, and proof of qualification training.
 4. The **Fall Protection Competent Person** designated to oversee their company's fall protection plan will be expected to have an above average knowledge of OSHA 29 CFR 1926.500 Subpart M - Fall Protection, and proof of qualification training.
 5. The **Electrical Competent Person** designated to oversee their company's electrical protection plan will be expected to have an above average knowledge of OSHA 29 CFR 1926.400 Subpart K and NFPA 70E - and proof of qualification training.
 6. The **Rigging Qualified Person** designated to oversee the rigging of structural steel, concrete panels, materials, or other equipment hoisted above the ground will be expected to have an above average knowledge of OSHA 29 CFR 1926.251. Competent Person designated for rigging structural steel shall have an above average knowledge of OSHA 29 CFR 1926.753 Hoisting and Rigging, and formal training.
 7. The **Safety Competent Person** designated to oversee the safety of their employees and subcontractors will be expected to have an above average knowledge of OSHA construction standards.
- B. As a minimum, each of these competent persons must:
1. be proficient in the development and execution of pre-task safety plans, competency plans and risk/severity assessments. Audit, document and submit as required.
 2. obtain an OSHA 10-hour certificate from a certified OSHA trainer and a minimum of 3 years' experience as a foreman/competent person. OSHA 30-hour certificate and at least 5 years construction safety training is highly recommended. Experience must be in the non-residential construction industry.
 3. obtain certified competency training conducted by an authorized OSHA certified trainer.
 4. conduct regular safety meetings with workers to instruct them on safe work practices and requirements.
 5. provide timely submission of all safety-related documents.
 6. conduct documented pre-task safety plans and communicate daily to workers to ensure compliance with safe work practices, this Site Safety and Prevention Program and OSHA safety regulations.
- C. For the purposes of the Program, the use of the words "competent person", in any format, is defined pursuant to the OSHA definition as stated above.

1.06 PERSONAL PROTECTIVE EQUIPMENT

- A. All personal protective equipment (PPE) shall meet applicable standard of the American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM) and properly used in accordance with the manufactures' recommendations. Each employer shall furnish their employees approved PPE that fits to size and provide training in the selection, use and care of such, retraining to be performed as necessary. Employees must maintain their PPE in good sanitary conditions, if defective or showing signs of excessive wear PPE must be replaced. All person(s) entering the jobsite will, as a minimum, always wear the following personal protective equipment in the designated work area while on this project (except in office and lunch areas). At no time during the project will PPE requirements be relaxed.
1. Head Protection: An approved type 2 hard hat must always be worn. The employer and employee's name shall be on the front of the hard hat.
 2. Eye and Face Protection
 - a. Safety glasses (Z87.1) with side shields must always be worn.
 3. Workers that wear prescription glasses may do one of the following:
 - a. Obtain prescription safety glasses (Z87.1) with rigid side shields.

- b. Wear over-the-glass safety glasses.
- 4. In addition, the following eye/face equipment must be worn when performing the following work activities:
 - a. Arc welding - Welding hood with proper shading.*
 - b. Burning - Burning goggles with proper shading.
 - c. Grinding or cutting metals - Face shield.*
 - d. Drilling (rock) - Face shield.*
 - e. Chemical handling - Face shield.*
 - f. Molten materials - Face shield.*
 - g. Corrosive liquids - Face shield.*
 - h. Concrete pouring - Face shield.*

Note: *Safety glasses will be worn in conjunction with face shields & welding hoods.

- 5. Foot Protection: Above the ankle hard-sole work boots or shoes that are in good condition must always be worn. Safety-toed work boots if worn must conform to ASTM F2412-05 & ASTM F2413-05.

1.07 WORK ATTIRE

- A. Clothing
 - 1. Shirt sleeves will have a minimum length of 4 inches. No shorts, tank tops, or cut-off shirts are permitted.
 - 2. All personnel shall wear ANSI class II reflective vests or high visibility clothing while in the designated work zone. During the hours of dusk to dawn ANSI class II reflective vests or clothing shall be worn.
 - 3. Long pants that fit properly around the waist and are of proper length so as not to create a trip hazard.
 - 4. Long hair must be contained so as not to create a hazard of getting caught.
- B. Respiratory Protection
 - 1. All Contractors are required to determine if hazards exist that require respiratory protection. If so, the Competent Person must submit a plan to Gehrtz Construction Services prior to the start of work. Respiratory protection would be required if OSHA permissible exposure limits are exceeded, and no means of engineering controls could be used. The subcontractor would be responsible for determining the exposure level by sampling airborne contamination.
 - 2. When respiratory protection is required, the employer must establish a comprehensive respiratory protection program, as outlined in OSHA's Small Entity Compliance Guide for Respiratory Protection, and as required in the OSHA respiratory protection standard 29 CFR 1910.134 and 29 CFR 1926.103.
 - 3. Use of Respirators: As the primary means of preventing or minimizing exposures to airborne contaminants, use effective source controls such as substitution, automation, enclosed systems, local exhaust ventilation or wet methods.
- C. Hearing Protection: Approved hearing protection will be worn as specified in posted areas and while working with or around high-noise level producing machines, tools, or equipment. A good rule to follow is: When you must raise your voice to be heard, you need hearing protection. Exposure to impulsive or impact noise must not exceed 140dB noise level. Wired and Wireless earphones are not permitted as hearing protection.
- D. Hand Protection: Workers will wear an appropriate level of hand protection as necessary and as determined by the Competent Person to prevent hand and finger injuries.
- E. Additional Protections: Specific activities may require that additional personal protective equipment be worn such as working on energized circuits. Contractors and their Competent Persons shall evaluate the need for additional protection based on their pre-task safety plan.
- F. Hand and Power Tools: All hand and power tools will be operated, kept in good condition, and regularly maintained per manufacturer's recommendations. Workers working 6 feet or greater above a lower

level while using handheld tools and or power tools that may be subject to dropping shall be tethered or area barricaded to prevent tools from hitting unsuspected workers below.

1.08 DEMOLITION

- A. Demolition plans shall follow OSHA 29 CFR 1926 Subpart T.
- B. Prior to the start of any demolition work, an engineering survey of the building or area to be demolished is required to determine the condition of the area. Debris and material shall not be dropped through walls, floor holes, windows, or other elevated work areas without the area below being barricaded and proper signs posted.
- C. Debris chutes shall have a substantial gate at all elevated openings.
- D. Gehrtz Construction Services may require the demolition Contractor to submit a site-specific fall protection plan if the work requires the removal of exterior walls and or flooring.

1.09 CRANE SAFETY, RIGGING AND HOISTING OPERATIONS

- A. Any Contractor who uses a crane on the Project Site shall adhere to the requirements of 29 CFR 1926.1400 Cranes and Derricks in Construction and ASME B30. All crane operators shall provide required documentation such as annual inspection certification, operator's license, and signalman training when requested.
- B. Each qualified crane operator will be responsible for conducting a detailed daily inspection of their crane and ensuring findings are properly logged in a written daily report.

1.10 FALL PROTECTION

- A. All individuals will take all practical measures to eliminate, prevent, and control fall hazards. All work will be planned with the intent to eliminate identified and potential fall hazards. Gehrtz Construction Services fall protection policy and OSHA 29 CFR 1926.500 Subpart M govern the requirements to protect workers exposed to falls. Gehrtz Construction Services fall protection policy is 100% fall protection when exposed to 6 feet or greater above a lower level. The use of conventional fall protection systems (passive preferred) shall be utilized to protect workers from falls to lower levels. Workers wearing personal fall arrest systems shall not free fall more than 6 feet or contact a lower level.
- B. A written fall protection and prevention plan, including a rescue plan as applicable, may be required as deemed necessary by Gehrtz Construction Services. Contractors engaged in the following shall submit their fall protection plan for approval prior to beginning work on site: Steel erection, concrete (cast in place), wood framing, dry laid masonry wall (segmented), pre-cast concrete walls, tilt-up concrete walls, and roofing work. The plan must be agreed to prior to beginning work and the designated competent person must enforce said plan.
- C. Acceptable fall protection systems include the following conventional systems: guardrails, safety netting, floor and wall hole covers, positioning device systems, fall restraint systems, protection from falling objects and personal fall arrest systems.
 - 1. *****Gehrtz Construction Services does not allow the higher regulatory thresholds for fall protection systems found in Subpart R Steel Erection, Subpart L Scaffold, or Subpart Q Concrete and Masonry, including Pre-Cast Concrete. Safety monitoring system is prohibited.*****
- D. Workers exposed to fall hazards shall be uniformly equipped, trained, and given periodic refresher training in fall protection at specific intervals to minimize the adverse effects of accidental falls. Fall protection training records will be maintained on the project and available for review by Gehrtz Construction Services.

1.11 HAZARDOUS COMMUNICATIONS/SDS

- A. All Contractors will submit their hazardous communication program and SDS to Gehrtz Construction Services prior to the start of work. Each Contractor must supervise employees under their direct supervision for proper training and proper precautions prior to the hazardous chemical's introduction to the jobsite.

1.12 HOT WORK PERMIT REQUIREMENTS

- A. A Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to brazing, flame cutting, grinding, soldering, torch applied roofing and welding. Hot Work Permits will be issued by Gehrtz Construction Services and will be filled out by the Contractor engaged in hot work operations in an enclosed building/structure.
- B. All provisions of the Hot Work Permit will be followed including fire watch personnel. Hot Work Permits can be issued for the duration of the hot work but not to exceed the work shift.

1.13 HOUSEKEEPING AND ORDERLINESS

- A. All people shall always maintain their work locations in an orderly and clean manner. Daily cleanup of work areas is mandatory for all.
- B. Gehrtz Construction Services Cleanliness Standard:
 - 1. Dumpsters for general trash, construction debris (wood, metal, concrete... etc.) and recycling will be provided pursuant to contract requirements. Contractors shall provide trash containers on site for general trash and debris. All miscellaneous trash generated by workers shall be deposited in a container or in the back of pickup trucks daily. Do not throw bottles, food wrappers, cups, or any other types of trash on the floor or ground. When containers are 3/4 full, they will be either removed from the site or dumped in a large metal dumpster. Contractors, as required by contract, will provide their own dumpsters for their specific excess materials, and allocate adequate resources to ensure the housekeeping standard is maintained throughout their time on the project. Gehrtz Construction Services shall address this housekeeping standard with all subcontractors prior to beginning work.
- C. General Housekeeping Requirements:
 - 1. Housekeeping is an important part of daily work. All materials, equipment, etc. brought on site shall be organized and stored in areas designated by Gehrtz Construction Services. Trade partners are responsible for organizing material, equipment, and tools so they do not create tripping hazards or impede/block exits. Trade partners are responsible for the daily clean-up of excess material and debris which shall be deposited in appropriate containers throughout the day. When work is completed in a room or area, all excess material and debris shall be removed and broom cleaned.

1.14 LADDER SAFETY

- A. Gehrtz Construction Services requires all portable ladders to be rated heavy duty Type 1, 1A, or 1AA. Type II or Type III Ladders (<225 Lbs.) & all types of aluminum ladders are prohibited. Job-made ladders shall comply with ANSI A14.4 1979 and 2009 as well as OSHA 29 CFR 1926 Subpart X. Contractor Competent Person shall evaluate the use of person fall protection systems while on ladders great than 6 feet above the finished floor the ladder sits on.
- B. If working on a ladder near an edge or opening, the employee shall be a distance equal to the height of the ladder plus four feet from the edge or opening or use a fall arrest or restraint system to prevent a greater fall distance.
- C. Refer to manufacturer's specifications for the proper use of all ladders.

1.15 STEEL ERECTION

- A. The steel erection Contractor shall submit a written steel erection plan to Gehrtz Construction Services prior to any work being performed. The plan must be comprehensive and include all aspects of the erection process, including but not limited to storage/staging of materials, equipment for hoisting materials, routes for lifting operations, critical lifts, rigging procedures, connection procedures, erection bridging procedures, stability requirements, fall protection requirements, decking procedures, and proper training of workers. Steel erection procedures shall follow OSHA 29 CFR 1926.750 Subpart R - Steel Erection Standard and any supplemental requirements required by Gehrtz Construction Services. The following requirements shall be incorporated in the plan:

1. 100% continuous fall protection for heights 6 feet or greater above a lower level. Workers engaged in steel erection activities to include connecting, bolt-up and decking are not exempt from the project's 100% fall protection requirements.
2. During skeletal steel erection, a tightly planked temporary floor shall be maintained within 2 stories or 30 feet, whichever is less, below, and directly under that portion of each tier of beams on which any work is being performed.
3. During structural steel assembly, a safety railing of wire rope (at least 3/8" dia.) or equivalent shall be installed. The top railing should be 45 inches and a mid-railing at 22 inches above the deck along all open sides including stairway landings and elevator shafts. The railing must support 200 lbs. of downward force and not deflect below 39 inches and shall not deflect outward beyond the edge of the floor. Flagging must be placed no more than every 6 feet apart using a hi-visibility material.
4. When placing structural steel members, the load shall not be released from the hoisting line until the member is secured by at least two bolts or the equivalent at each connection, drawn up wrench tight.

1.16 TRENCHING & EXCAVATION SAFETY

- A. The following regulations apply to all trenching and excavation activities on this site: OSHA 29 CFR 1926 Subpart P.
 1. Any Contractor engaged in trenching operations deeper than 5 feet shall designate a Competent Person and inform Gehrtz Construction Services.
 2. Underground utilities must be located.
 3. Trenches or excavations greater than 5 feet in depth shall be sloped, benched, or otherwise protected from cave-ins as determined by the Competent Person. Sloping, benching or other protective systems are recommended for any trenches and excavations over 3 feet in depth.
 4. Protective systems designed to be placed in trenches such as trench boxes must have tabulated data available for review as necessary. Trench boxes shall have permanent identification to link it to manufacturer's tabulated data.
 5. Spoil piles and other materials will be placed a minimum of 2 feet from the edges of all trenches and excavations.
 6. In trenches deeper than 4 feet, locate means of egress, such as ladders or steps or ramps (45-degree slope), so they are no more than 25 feet of travel from anyone in the trench.
 7. The Competent Person must inspect all trenches daily before work begins and after every rainstorm or other hazardous conditions. A Competent Person shall be onsite during trenching and excavating activities.
 8. A registered professional engineer must design all excavation and protective systems over 20 feet in depth.

1.17 UNDERGROUND UTILITY LOCATIONS

- A. Any Contractor who digs a trench or excavation shall call the State appropriate 811 service. Before digging, be sure that all utilities have responded to the locate request.

1.18 DOCUMENTS

- A. **This document is not all encompassing of Gehrtz Construction Services safety policies.**
Reference:
 1. **Gehrtz Construction Services Site-Specific Safety Policies (SSSP),**
 2. **OSHA 29 CFR 1926 Construction Safety Standards,**
 3. **OSHA 29 CFR 1910 General Industry Standards (as applicable),**
 4. **Your company's safety policies and procedures,**
 5. **Specific State safety regulations,**
 6. **Specific Owner requirements,**
- B. **for additional information regarding policies and procedures. If any of these standards, requirements, or procedures conflict, the more stringent requirement shall prevail.**

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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SECTION 01 3216
PROJECT CONSTRUCTION SCHEDULE

PART 1 GENERAL

1.01 SUMMARY

- A. General Construction Timeline
 - 1. Construction Start Date: Work shall begin within 10 days of receipt of the Notice to Proceed.
 - 2. Construction Completion: July 15, 2027.
 - a. The entire project must be fully completed including major punch list items.
 - b. In no case will the deadline be extended.
 - 3. Landscaping and irrigation will take place May 24, 2027 to July 16, 2027.
- B. Project Construction
 - 1. The Construction Schedule will become part of each Contractor's contract.
 - 2. There are no liquidated damages or penalties associated with any of the contracts for this project. However, each Contractor will be contractually required to commit adequate resources, both on-site and administrative, to ensure timely delivery of materials, equipment, and labor necessary to meet the Construction Schedule. If during the course of the construction period a Contractor is unable to confirm their ability to meet the Construction Schedule or has demonstrated the same, the Owner reserves the right to terminate the contract and, if possible, secure another Contractor that can meet the Construction Schedule.
 - 3. Time and Personnel: Each bidder shall include in their proposal adequate provisions for time and personnel to meet the Construction Schedule which could include overtime if necessary.
 - 4. Material and Equipment Delivery: If the delivery time for any material or equipment indicated on the drawings or specified herein is anticipated by a bidder to pose a risk to meeting the Construction Schedule, the bidder is asked to contact the Construction Manager immediately so that any necessary adjustments can be made to maintain the Schedule.
 - 5. Material Storage: Deliver materials only as needed for each day's work to be completed, or as agreed upon by the Construction Manager. Site storage space will be limited.
 - 6. The Architect will make every effort to expedite the project through prompt review of shop drawings, early decisions regarding construction questions, and any other assistance that can be offered the Contractors during the construction process.

1.02 SUBMITTALS

- A. Within 10 days after date of Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
 - 1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.
- F. Submit in PDF format.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification section number.

- C. Identify work of separate stages and other logically grouped activities.
- D. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- E. Indicate delivery dates for owner-furnished products and products identified under Allowances.
- F. Provide legend for symbols and abbreviations used.

3.02 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- D. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit reports required to support recommended changes.

END OF SECTION

**SECTION 01 4000
QUALITY REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittals.
- B. Quality assurance.
- C. References and standards.
- D. Testing and inspection agencies and services.
- E. Contractor's construction-related professional design services.
- F. Contractor's design-related professional design services.
- G. Control of installation.
- H. Mock-ups.
- I. Tolerances.
- J. Manufacturers' field services.
- K. Defect Assessment.

1.02 RELATED REQUIREMENTS

- A. Document 00 7200 - General Conditions: Inspections and approvals required by public authorities.
- B. Section 01 3000 - Administrative Requirements: Submittal procedures.
- C. Section 01 4216 - Definitions.
- D. Section 01 6000 - Product Requirements: Requirements for material and product quality.

1.03 REFERENCE STANDARDS

- A. ACI SPEC-301 - Specifications for Concrete Construction; 2020.
- B. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2015.
- C. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)); 2012.
- D. ASTM D1556/D1556M - Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method; 2015, with Editorial Revision (2016).
- E. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2012a.
- F. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing; 2014a.

1.04 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:
 - 1. Temporary sheeting, shoring, or supports.
 - 2. Temporary scaffolding.
 - 3. Temporary bracing.
 - 4. Temporary foundation underpinning.
 - 5. Temporary stairs or steps required for construction access only.
 - 6. Temporary hoist(s) and rigging.
 - 7. Investigation of soil conditions to support construction equipment.

1.05 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Base design on performance and/or design criteria indicated in individual specification sections.

1.06 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Test Reports: After each test/inspection, promptly submit electronic copies of report to Architect, Construction Manager, and Contractor.
 - 1. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
 - 2. All test results and reports, including those the Owner does not pay additional for, shall become the property of the Owner .
- C. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
 - 1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- D. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.07 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
 - 1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.

1.08 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. The Owner, with the assistance of the Construction Manager, shall arrange for all tests expressly required by the Contract Documents, as well as any inspections mandated by applicable governmental authorities. The Owner further reserves the right to require additional tests at its discretion.
 - 1. If any such test indicates that the materials furnished or the work performed by the Contractor/Subcontractor fail to comply with the requirements of the Contract Documents, the Contractor/Subcontractor shall bear the full cost of the initial test, any subsequent retests, and any additional inspections necessitated by such noncompliance.
 - 2. Conversely, if the test results demonstrate compliance with the Contract Documents, the Owner shall bear the costs associated with those tests and inspections.
- B. The cost of the following tests are to be paid for by the Owner:
 - 1. Concrete Work: Slump tests, 7 day and 28 day compressive strength of concrete. See the most recent version of ACI SPEC-301.
 - 2. Concrete Grout.
 - 3. Mortar.
 - 4. Structural Frame: Tests as specified in 05 1200 - Structural Steel Framing.
 - 5. Earthwork: Compaction of interior and exterior fill and backfill material.
 - 6. Site Utility: Compaction of site utility fill material.
 - 7. Paving and Surfacing: Compaction of fill below surface.
 - 8. Asphalt: Density tests at base course and wear course.
- C. The cost of the following tests are to be paid for by the Contractor completing the work:
 - 1. Concrete Mix Designs for each type of concrete used.

2. Grout Mix Design for each type of grout used.
 3. Mortar Mix Design for each type of mortar used.
 4. Fire Sprinkler Test: Provide air and water test as per local code requirements. See Spec Division 21.
 5. Plumbing Piping: Provide air test as per local code requirements. See Spec Division 22.
 6. Ventilation and Air Conditioning: Provide air test on ductwork as per local code requirements. See Spec Division 23.
 7. Fire Alarm Test: Certify that fire alarm system works in accordance with specifications. See Spec Division 28.
- D. The cost of the following inspections (See Structural) are to be paid for by the Owner:
1. Concrete reinforcement and formwork.
 2. Masonry: Reinforcement, grout placement, and installation.
 3. Structural steel / deck fastening.
- E. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- F. Contractor Employed Agency:
1. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.

1.09 FIELD TESTS

- A. Concrete
1. See Structural Drawings - General Notes.
 2. All tests indicated in ACI SPEC-301 are required.
 3. Do not test the third cylinder (28 day) unless a deficient result is obtained in the other two.
 4. Make at least one strength test for each 100 cubic yards, or fraction thereof, of each mixture design placed in any one day.
 5. See Structural Drawings for formwork, reinforcement, and concrete placement.
- B. Concrete Grout
1. See Structural Drawings - General Notes.
 2. Provide concrete grout mixes of each type used.
 3. Provide testing at all areas, including masonry walls and below steel columns.
 4. See Structural Drawings for continuing and periodic inspection.
- C. Mortar for Masonry Units
1. See Structural Drawings - General Notes.
 2. Provide mortar mixes of each type of mortar used.
 3. See Structural Drawings for continuing and periodic inspection.
- D. Structural Frame
1. See Structural Drawings - General Notes.
 2. Provide testing of the structural frame.
 - a. Non-slip critical bolted connections shall be visually inspected at the rate of 100% of all connections. At least 10% shall be field tested for proper bolt torque.
 - b. All full penetration welds at or exceeding 5/16 inch shall be ultrasonic tested. All full penetration welds less than 5/16 inch shall be magnetic particle tested.
 - c. Fillet welds shall be visually inspected, with a minimum of 10% of all welded connections field-verified for dimensional compliance, including weld plates at concrete planks and/or panels.
 - d. See Structural Drawings for stud shear connector weld testing.
 - e. See Structural Drawings for expansion bolt and adhesive anchor testing.
- E. Earthwork / Demolition

1. **COMPACTION REQUIREMENTS SCHEDULE:** Compact and test subgrade and fill materials to achieve the minimum percentage of maximum dry density determined in accordance with ASTM D698 (Standard Proctor), Method C or Method D.
 - a. Review local municipality/county/state requirements.
 - b. See Structural Drawings - General Notes.
 - c. See requirements in individual specification sections.
 2. Field density test reports shall clearly identify the following information for each test:
 - a. Horizontal and vertical location of test.
 - b. Material type being tested.
 - c. Proctor test method.
 - d. Maximum proctor density.
 - e. Specified density.
 - f. Optimum moisture content.
 - g. Field test method.
 - h. Actual moisture content.
 - i. Tested density.
 - j. Pass/fail indication.
 3. Do not submit reports of failing tests without follow-up report of reworked area and passing retest. Submitted test reports without specified information will be returned for revisions and resubmittal.
- F. Paving and Surfacing
1. Asphalt Surface and Base Course
 - a. One density test shall be taken on the surface course at a random location.
 - b. One density test shall be taken on the base course at a random location.
 - c. Aggregate Base Course: Same number of density tests.
 - d. The Contractor shall also furnish samples of the material used to an independent testing laboratory to determine the gradation, bituminous content, and stability.
 2. ASTM D698, Test for moisture-density relations of soils (Proctor Method).
 3. ASTM D1556/D1556M, Test for density of soil in place (Sand Cone Method).
 4. ASTM C94/C94M, Ready-mixed concrete. See concrete test requirements.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

- A. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

- C. Accepted mock-ups will be used as a comparison standard for the remaining Work.
- D. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Architect.

3.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 TESTING AND INSPECTION

- A. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
 - 5. Perform additional tests and inspections required by Architect.
 - 6. Attend preconstruction meetings and progress meetings.
 - 7. Submit reports of all tests/inspections specified.
- B. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.
- C. Contractor Responsibilities:
 - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 - 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
 - 4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
 - a. If the Architect is not notified as stated above and the Contractor proceeds with the work, the Architect shall have the authority to direct the Contractor to remove part or all of the installed materials at the Contractor's expense for detailed observation.
 - b. The respective Contractor and/or subcontractor shall correct any deficiencies that may be observed. Construction work observations, or lack thereof, by the Architect does not relieve the Contractor and/or subcontractor from any liability of faulty workmanship that may have occurred or may occur at a later date.
 - c. The Architect shall be notified at the following points of work:
 - 1) Footing bottoms and concrete reinforcement prior to pouring any concrete.
 - 2) Vapor barrier prior to concrete slab installation.
 - 3) Water drainage test on sloped concrete surfaces prior to finish floor material installation.

- 4) Waterproofing/dampproofing prior to any backfilling work.
- 5) Mechanical and Electrical systems above ceiling inspection prior to installation of finish ceiling material.
- 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- D. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Architect.
- E. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

3.05 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance equipment as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.06 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not complying with specified requirements.
- B. If, in the opinion of Architect, it is not practical to remove and replace the work, Architect will direct an appropriate remedy or adjust payment.

END OF SECTION

**SECTION 01 4216
DEFINITIONS**

PART 1 GENERAL

1.01 SUMMARY

- A. This section supplements the definitions contained in the General Conditions.
- B. Other definitions are included in individual specification sections.

1.02 DEFINITIONS

- A. Furnish: To supply, deliver, unload, and inspect for damage.
- B. Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, start up, and make ready for use.
- C. Product: Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products may be new, never before used, or re-used materials or equipment.
- D. Project Manual: The book-sized volume that includes the procurement requirements (if any), the contracting requirements, and the specifications.
- E. Provide: To furnish and install.
- F. Supply: Same as Furnish.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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**SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Dewatering
- B. Temporary Light and Power.
- C. Temporary Water Supply.
- D. Temporary Heat.
- E. Temporary telecommunications services.
- F. Temporary sanitary facilities.
- G. Temporary Controls: Barriers, enclosures, and fencing.
- H. Security requirements.
- I. Vehicular access and parking.
- J. Waste removal facilities and services.
- K. Field offices.

1.02 DEWATERING

- A. Provide temporary means and methods for dewatering all temporary facilities and controls.
 - 1. Each Contractor and/or Subcontractor is responsible for dewatering their own work areas.
 - 2. The Concrete Contractor (Bid Package 3A) is responsible for dewatering footing trenches until backfilled.
- B. Maintain temporary facilities in operable condition.

1.03 TEMPORARY LIGHT AND POWER

- A. The Electrical Contractor shall provide temporary lighting during construction as follows:
 - 1. Lighting Requirements:
 - a. A minimum of one (1) 300-watt lamp shall be provided for every 900 square feet of building area.
 - b. For any room with an area less than 900 square feet, a minimum of one (1) 300-watt lamp shall be installed.
 - 2. Installation and Maintenance:
 - a. The Electrical Contractor shall furnish, install, and maintain all lamps and associated sockets.
 - b. All temporary lighting shall be kept in proper working order for the duration of the construction period.
- B. The Electrical Contractor shall coordinate with the local power utility to arrange for installation of the temporary secondary electrical service. The service shall be brought to a location on the construction site as directed by the Construction Manager. All costs associated with this portion of the temporary service, as charged by the utility provider, shall be borne by the Owner.
 - 1. The Electrical Contractor shall extend the temporary secondary service from the utility-provided switchboard to the construction site. For each designated area of the project, the Contractor shall furnish and install a 200-amp, three-phase distribution panel equipped with a main disconnect switch and capacity for up to 30 single-pole branch circuit breakers.
 - 2. The Electrical Contractor shall provide all major temporary wiring from each temporary service panel to sub-panels equipped with plug-in receptacles. Such sub-panels shall be located so that temporary power is available within 100 feet of all interior construction areas.
 - 3. Each contractor and subcontractor shall furnish their own extension cords, equipped with proper ground-fault protection, as required for connection to the temporary sub-panels.

4. The Electrical Contractor shall provide temporary power to the Construction Manager's trailer and to up to 6 additional contractor trailers. A dedicated distribution panel shall be furnished and installed to serve the jobsite trailer area and to provide the necessary power connections.
 5. The Electrical Contractor shall provide temporary electrical power, as required, for all temporary heating equipment—including fans, heaters, and related devices—furnished by the HVAC Contractor.
- C. Use of Permanent Electrical Systems for Temporary Power
1. When permanent distribution panels, outlets, and related equipment have been installed and energized, the Electrical Contractor may extend temporary wiring from these permanent systems as required. Under no circumstances shall permanent, specified lighting fixtures be used for temporary lighting unless written approval is obtained from the Construction Manager.
- D. The cost of electrical power consumed from both temporary and permanent services during construction shall be borne by the Owner.
1. All contractors shall be responsible for diligently supervising the use of electricity and temporary lighting. Abuse or waste of electrical power or lamps may be grounds for a back charge to the responsible contractor, as determined by the Construction Manager.
- E. In the event of any dispute regarding the quantity of temporary wiring or lamps required, the Construction Manager shall be the sole authority to determine the necessary amount.

1.04 TEMPORARY WATER SUPPLY

- A. The Plumbing Contractor shall furnish and install temporary water service from the nearest available source and provide all necessary temporary water distribution piping, fittings, and related materials as required by any or all contractors and subcontractors. All temporary water systems shall be removed when no longer needed. Hoses for water distribution around the building shall be furnished by the respective contractors requiring them.
- B. Use trigger-operated nozzles for water hoses, to avoid waste of water.
- C. The cost of water consumed from both temporary and permanent services during construction shall be borne by the Owner.
1. All contractors shall be responsible for diligently supervising the use of water. Abuse or waste of water may be grounds for a back charge to the responsible contractor, as determined by the Construction Manager.
- D. If the water supply at or available to the construction site is inadequate, requiring water to be hauled to the site, the cost of the water and its transportation shall be borne by the contractor requiring the water for their work.

1.05 TEMPORARY HEAT

- A. During construction and prior to building enclosure, except as otherwise noted, each contractor shall provide all necessary heat, fuel, and related services required to protect their work and materials—and the work and materials of their subcontractors—from damage due to cold or moisture. Contractors shall furnish approved temporary heating equipment, adequate fuel, fire-safe enclosures, insulation, and any other protective measures needed to support their respective trades. When open-flame or fuel-burning heaters are in use, the contractor shall provide continuous attendance by qualified personnel.

Temporary Heat Schedule and Requirements:

Condition	Equipment Provisions & Operation Responsibility	Cost of Fuel Paid by
Concrete (See Section 03 3000)	Concrete Contractor Bid Package 3A	Concrete Contractor Bid Package 3A
Masonry	Masonry Contractor Bid Package 4	Masonry Contractor Bid Package 4
From 15 days after building enclosure / partial enclosure until temporary heat is no	HVAC Contractor Bid Package 23	Owner

Condition	Equipment Provisions & Operation Responsibility	Cost of Fuel Paid by
longer required		

- B. Construction shall continue without interruption during cold weather. Each contractor is responsible for providing sufficient temporary heat, as specified herein, to perform their work and to protect all work and materials from damage caused by cold temperatures and moisture.
1. The Concrete Contractor shall be responsible for all winter concrete costs, including the provision of insulated blankets and any other measures necessary to properly perform and protect their work during cold weather.
 2. The Masonry Contractor shall be responsible for all heat and shelters necessary to properly perform and protect their work during cold weather.
- C. The building, or any portion thereof, shall be considered satisfactorily enclosed when, in the judgment of the Construction Manager, the exterior walls have been erected, the roof deck has been completed, and the roof and/or wall insulation is installed and protected sufficiently to retain heat within the enclosed areas.
1. All contractors shall promptly enclose the building in accordance with these requirements. Work progress shall closely follow the construction schedule. Any schedule changes must be reported to the Construction Manager at least one week in advance.
 2. The General Work & Labor Contractor (Bid Package 6A) is responsible for closing all exterior openings in the building. Openings shall be sealed with approved and properly installed closure materials. When substitute materials are used, they shall consist of reinforced polyethylene sheeting with a minimum thickness of 6 mil, securely fastened to framing and tightly attached to the building structure. Opaque or loosely fitted closure materials are not permitted.
 - a. Contractor shall ensure temporary doors are properly fitted, and all cracks and small openings are sealed with insulation to maintain heat retention. Any tears, gaps, or unnecessary openings in closure materials shall be repaired immediately when they occur.
- D. Within 15 days following the date on which the Building, or any designated portion thereof, has been deemed enclosed in accordance with the requirements herein, the HVAC Contractor shall mobilize, install, operate, maintain, and subsequently remove all temporary heating equipment necessary to provide adequate heat for the continuation of the Work and for the protection of all completed Work and stored materials from damage due to cold or moisture.
1. For the purposes of Bid Package 23, the HVAC Contractor is hereby designated as the entity responsible for providing the primary temporary heating source for the Building. Under no circumstances shall the permanent HVAC system be utilized for temporary heating operations unless prior written authorization is granted by both the Owner and the Mechanical Engineer.
 2. The HVAC Contractor shall be solely responsible for the care, operation—whether manual or automatic—and all services necessary for the continuous operation of the temporary heating system until Substantial Completion of the Project and/or final acceptance of the permanent heating system by the Owner. All such labor, equipment, and services shall be provided and financed by the HVAC Contractor without additional cost to the Owner.
 - a. Upon determination that temporary heating is no longer required, the HVAC Contractor shall promptly dismantle and remove all temporary and non-permanent heating systems, including but not limited to boilers, radiators, fans, piping, and associated appurtenances, leaving the premises clean and free of all such materials.
 - b. The temporary dry heat system shall consist of a remote, natural-gas-fired external boiler or boilers, equipped with remote radiators and circulating fans. The quantity, capacity, and placement of such equipment shall be sufficient to achieve and maintain uniform interior temperatures in all designated areas, in full compliance with the temperature requirements specified herein.
 3. Fuel costs associated with the operation of temporary heat shall be borne by the Owner.
 4. The Electrical Contractor shall furnish and install all electrical service, wiring, and appurtenant equipment necessary for the operation of the temporary heating units.

5. In the event the HVAC Contractor fails to provide and maintain sufficient heat to all required spaces as specified herein, the Construction Manager may direct others to furnish such heating. All costs incurred as a result of such failure shall be the responsibility of, and charged to, the HVAC Contractor.
 6. A minimum indoor temperature of 70°F shall be maintained throughout the building for at least two weeks prior to the installation of millwork, interior finishes, floor coverings, and painting, and shall continue without interruption until final acceptance of the building by the Owner. At no time shall the temperature in any enclosed construction area fall below 40°F, regardless of whether construction activities are occurring in those areas.
- E. In the event of any dispute regarding the adequacy, extent, or necessity of temporary heat or enclosure measures, the Construction Manager shall serve as the sole and final authority in determining the amount and level of temporary heating and enclosure required.

1.06 TELECOMMUNICATIONS SERVICES

- A. Construction Manager to provide, maintain, and pay for telecommunications services to field office at time of project mobilization.
 1. Each Contractor is responsible for providing, maintaining, and paying for their own telecommunications services.

1.07 TEMPORARY SANITARY FACILITIES (BY CONSTRUCTION MANAGER)

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. New permanent facilities may not be used during construction operations.
- C. Maintain daily in clean and sanitary condition.
- D. At end of construction, return facilities to same or better condition as originally found.

1.08 BARRIERS (BY CONSTRUCTION MANAGER)

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.09 FENCING (BY BID PACKAGE 32B)

- A. Construction: Commercial grade chain link fence.
- B. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.10 EXTERIOR ENCLOSURES (BY BID PACKAGE 6A)

- A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks. Cover and protect the large curtainwall openings in the activity space.

1.11 SECURITY

- A. Provide security and facilities to protect Work, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Each individual contractor shall provide security for their own equipment and materials.
- C. Each Contractor shall be responsible for removing all ladders and similar means of access to the Work under their control at the conclusion of each working day. All building entrances and access points shall be securely barricaded or locked daily to prevent unauthorized entry, as directed by the Construction Manager or by a Contractor designated by the Construction Manager.

- D. Coordinate with Owner's security program.

1.12 VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

1.13 WASTE REMOVAL

- A. See Section 01 7000 - Execution and Closeout Requirements for requirements.

1.14 FIELD OFFICES (BY CONSTRUCTION MANAGER)

- A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 15 persons.

1.15 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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SECTION 01 5713
TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Prevention of erosion due to construction activities.
- B. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
- C. Restoration of areas eroded due to insufficient preventive measures.
- D. Compensation of Owner for fines levied by authorities having jurisdiction due to non-compliance by Contractor.

1.02 REFERENCE STANDARDS

- A. ASTM D3786/D3786M - Standard Test Method for Hydraulic Bursting Strength of Knitted Goods and Nonwoven Fabrics--Diaphragm Bursting Strength Tester Method; 2013.
- B. ASTM D4355/D4355M - Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture, and Heat in a Xenon Arc-Type Apparatus; 2021.
- C. ASTM D4491/D4491M - Standard Test Methods for Water Permeability of Geotextiles by Permittivity; 1999a (Reapproved 2014).
- D. ASTM D4533/D4533M - Standard Test Method for Trapezoid Tearing Strength of Geotextiles; 2015 (Reapproved 2023).
- E. ASTM D4632/D4632M - Standard Test Method for Grab Breaking Load and Elongation of Geotextiles; 2015a.
- F. ASTM D4751 - Standard Test Method for Determining Apparent Opening Size of a Geotextile; 2012.
- G. ASTM D4833/D4833M - Standard Test Method for Index Puncture Resistance of Geomembranes, and Related Products; 2007 (Reapproved 2013).
- H. ASTM D4873/D4873M - Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples; 2017 (Reapproved 2021).

1.03 PERFORMANCE REQUIREMENTS

- A. Comply with all requirements of the City of Dilworth and the State of Minnesota for erosion and sedimentation control .
- B. Develop and follow an Erosion and Sedimentation Prevention Plan and submit periodic inspection reports.
- C. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits.
 - 1. Owner will obtain permits and pay for securities required by authority having jurisdiction.
- D. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.
- E. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
 - 1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
 - 2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 25 years.
- F. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.

1. Control movement of sediment and soil from temporary stockpiles of soil.
 2. Prevent development of ruts due to equipment and vehicular traffic.
 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- G. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
1. Prevent windblown soil from leaving the project site.
 2. Prevent tracking of mud onto public roads outside site.
 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
 4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- H. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
 2. If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.
- I. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- J. Open Water: Prevent standing water that could become stagnant.
- K. Maintenance: Maintain temporary preventive measures until permanent measures have been established.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Erosion and Sedimentation Control Plan:
1. Submit not less than 30 days prior to anticipated start of clearing, grading, or other work involving disturbance of ground surface cover.
 2. Include:
 - a. Site plan identifying soils and vegetation, existing erosion problems, and areas vulnerable to erosion due to topography, soils, vegetation, or drainage.
 - b. Site plan showing grading; new improvements; temporary roads, traffic accesses, and other temporary construction; and proposed preventive measures.
 - c. Where extensive areas of soil will be disturbed, include storm water flow and volume calculations, soil loss predictions, and proposed preventive measures.
 - d. Schedule of temporary preventive measures, in relation to ground disturbing activities.
 - e. Other information required by law.
 - f. Format required by law is acceptable, provided any additional information specified is also included.
 3. Obtain the approval of the Plan by authorities having jurisdiction.
 4. Obtain the approval of the Plan by Owner.
- C. Certificate: Mill certificate for silt fence fabric attesting that fabric and factory seams comply with specified requirements, signed by legally authorized official of manufacturer; indicate actual minimum average roll values; identify fabric by roll identification numbers.
- D. Inspection Reports: Submit report of each inspection; identify each preventive measure, indicate condition, and specify maintenance or repair required and accomplished.

- E. Maintenance Instructions: Provide instructions covering inspection and maintenance for temporary measures that must remain after Substantial Completion.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Grass Seed For Temporary Cover: Select a species appropriate to climate, planting season, and intended purpose. If same area will later be planted with permanent vegetation, do not use species known to be excessively competitive or prone to volunteer in subsequent seasons.
- B. Silt Fence Fabric: Woven polypropylene geotextile resistant to common soil chemicals, mildew, and insects; non-biodegradable; in longest lengths possible; fabric including seams with the following minimum average roll lengths:
 - 1. Average Opening Size: 30 U.S. Std. Sieve, maximum, when tested in accordance with ASTM D4751.
 - 2. Permittivity: 0.05 sec^{-1} , minimum, when tested in accordance with ASTM D4491/D4491M.
 - 3. Ultraviolet Resistance: Retaining at least 70 percent of tensile strength, when tested in accordance with ASTM D4355/D4355M after 500 hours exposure.
 - 4. Tensile Strength: 100 pounds-force, minimum, in cross-machine direction; 124 pounds-force, minimum, in machine direction; when tested in accordance with ASTM D4632/D4632M.
 - 5. Elongation: 15 to 30 percent, when tested in accordance with ASTM D4632/D4632M.
 - 6. Tear Strength: 55 pounds-force, minimum, when tested in accordance with ASTM D4533/D4533M.
 - 7. Color: Manufacturer's standard, with embedment and fastener lines preprinted.
- C. Silt Fence Posts: One of the following, minimum 5 feet long:
 - 1. Steel U- or T-section, with minimum mass of 1.33 pound per linear foot.
- D. Temporary Sediment Filter.
 - 1. Drop-in Sediment Filter unit that inserts into an inlet.
 - a. Use Flexstorm Inlet Filter by ADS or equal.
 - 1) Provide curb opening protection for existing inlets with curb openings.
- E. Temporary Pumped Sediment Control Device.
 - 1. Non-woven geotextile fabric sewn into a bag using a double needle machine and high strength thread.
 - a. Seams shall have an average width strength of 60 lb/inch as per ASTM D4883 and meet or exceed the following:
 - 1) Grab tensile of 205 lbs as per ASTM D4632/D4632M.
 - 2) Puncture of 110 lbs as per ASTM D4833/D4833M.
 - 3) Flow rate of 95 gal/min/sf as per ASTM D4491/D4491M.
 - 4) Permittivity of 1.5 Sec^{-1} as per ASTM D4491/D4491M.
 - 5) Mullen Burst Strength of 350 psi as per ASTM D3786/D3786M.
 - 6) AOS% of 80% US Sieve as per ASTM D4751.
 - 2. Spout large enough to accommodate a 4 inch discharge hose with strap to tie unit closed.
 - 3. Use one of the following:
 - a. Dirtbag by ACF Environmental Inc.
 - b. Dandy Dewatering Bag by Dandy Products Inc.
 - c. Or approved equal.
- F. Gravel: See Section 31 2323 for aggregate.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

3.02 PREPARATION

- A. Schedule work so that soil surfaces are left exposed for the minimum amount of time.

3.03 SCOPE OF PREVENTIVE MEASURES

- A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measures are not required.
- B. Construction Entrances: Traffic-bearing aggregate surface.
 - 1. Width: As required; 20 feet, minimum.
 - 2. Length: 50 feet, minimum.
 - 3. Quantity: Provide two Construction Entrances.
 - 4. Provide at each construction entrance from public right-of-way.
 - 5. Where necessary to prevent tracking of mud onto right-of-way, provide wheel washing area out of direct traffic lane, with drain into sediment trap or basin.
- C. Natural vegetation shall be retained whenever feasible.
- D. Land grading and excavating shall be kept at a minimum to reduce the possibility of creating runoff and erosion problems which require extensive control measures.
- E. Land exposure shall be minimized in terms of area and time.
- F. Linear Sediment Barriers: Made of silt fences.
 - 1. Provide linear sediment barriers:
 - a. Along downhill perimeter edge of disturbed areas, including soil stockpiles.
 - b. Along the top of the slope or top bank of drainage channels and swales that traverse disturbed areas.
 - c. Along the toe of cut slopes and fill slopes.
 - d. Perpendicular to flow across the bottom of existing and new drainage channels and swales that traverse disturbed areas or carry runoff from disturbed areas; space at maximum of 200 feet apart.
 - e. Across the entrances to culverts that receive runoff from disturbed areas.
 - 2. Space sediment barriers with the following maximum slope length upslope from barrier:
 - a. Slope of Less Than 2 Percent: 100 feet..
 - b. Slope Between 2 and 5 Percent: 75 feet.
 - c. Slope Between 5 and 10 Percent: 50 feet.
 - d. Slope Between 10 and 20 Percent: 25 feet.
 - e. Slope Over 20 Percent: 15 feet.
- G. Temporary Sediment Filters. See Civil Drawings for details.
 - 1. Place immediately before land is disturbed adjacent to existing storm sewer manholes with open grates.
 - 2. Place immediately after new storm sewer manholes with open grates are installed and immediately before land is disturbed adjacent to existing storm sewer manholes with open grates.
 - 3. Remove, maintain, reinstall, etc. when requested by local authorities.
- H. Temporary Pumped Sediment Control Device.
 - 1. Device shall be used to control sediment discharge in any dewatering or pumped water application.
- I. Temporary Concrete Washout.
 - 1. Provide at a defined area on site or to an area designated for cement washout.
 - 2. Shall be sufficient in size to contain the wash water and residual cement.
- J. Temporary Splash Pads: Stone aggregate over filter fabric; size to suit application; provide at downspout outlets and storm water outlets.
- K. Soil Stockpiles: Protect using one of the following measures:

1. Cover with polyethylene film, secured by placing soil on outer edges.
 2. Cover with mulch at least 4 inches thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.
- L. Mulching: Use only for areas that may be subjected to erosion for less than 6 months.
- M. Temporary Seeding: Use where temporary vegetated cover is required.

3.04 INSTALLATION

- A. Traffic-Bearing Aggregate Surface:
1. Excavate minimum of 6 inches.
 2. Place geotextile fabric full width and length, with minimum 12 inch overlap at joints.
 3. Place and compact at least 6 inches of 1 1/2 to 3 1/2 inch diameter stone.
- B. Silt Fences:
1. Store and handle fabric in accordance with ASTM D4873/D4873M.
 2. Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16 inch high barriers with minimum 36 inch long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.
 3. Where slope gradient is steeper than 3:1 or barriers will be in place over 6 months, use nominal 28 inch high barriers, minimum 48 inch long posts spaced at 6 feet maximum, with fabric embedded at least 6 inches in ground.
 4. Where slope gradient is steeper than 3:1 and vertical height of slope between barriers is more than 20 feet, use nominal 32 inch high barriers with woven wire reinforcement and steel posts spaced at 4 feet maximum, with fabric embedded at least 6 inches in ground.
 5. Install with top of fabric at nominal height and embedment as specified.
 6. Embed bottom of fabric in a trench on the upslope side of fence, with 2 inches of fabric laid flat on bottom of trench facing upslope; backfill trench and compact.
 7. Do not splice fabric width; minimize splices in fabric length; splice at post only, overlapping at least 18 inches, with extra post.
 8. Fasten fabric to steel posts using wire, nylon cord, or integral pockets.
 9. Wherever runoff will flow around end of barrier or over the top, provide temporary splash pad or other outlet protection; at such outlets in the run of the barrier, make barrier not more than 12 inches high with post spacing not more than 4 feet.
- C. Temporary Sediment Filters.
1. Drop-in Sediment Trap, place as recommended by manufacturer.
- D. Temporary Pumped Sediment Control Device.
1. Install per manufacturer's recommendations.
- E. Temporary Seeding:
1. When hydraulic seeder is used, seedbed preparation is not required.
 2. When surface soil has been sealed by rainfall or consists of smooth undisturbed cut slopes, and conventional or manual seeding is to be used, prepare seedbed by scarifying sufficiently to allow seed to lodge and germinate.
 3. If temporary mulching was used on planting area but not removed, apply nitrogen fertilizer at 1 pound per 1000 sq ft.
 4. On soils of very low fertility, apply 10-10-10 fertilizer at rate of 12 to 16 pounds per 1000 sq ft.
 5. Incorporate fertilizer into soil before seeding.
 6. Apply seed uniformly; if using drill or cultipacker seeders place seed 1/2 to 1 inch deep.
 7. Irrigate as required to thoroughly wet soil to depth that will ensure germination, without causing runoff or erosion.
 8. Repeat irrigation as required until grass is established.

3.05 MAINTENANCE

- A. Inspect preventive measures weekly, within 24 hours after the end of any storm that produces 0.25 inches or more rainfall at the project site, and daily during prolonged rainfall.
- B. Repair deficiencies immediately.
- C. Silt Fences:
 - 1. Promptly replace fabric that deteriorates unless need for fence has passed.
 - 2. Remove silt deposits that exceed one-third of the height of the fence.
 - 3. Repair fences that are undercut by runoff or otherwise damaged, whether by runoff or other causes.
- D. Clean out temporary sediment control structures weekly and relocate soil on site.
- E. Temporary Pumped Sediment Control Device.
 - 1. Replace the unit when half full of sediment or when sediment has reduced the flow rate of the pump discharge to an impractical rate.
- F. Place sediment in appropriate locations on site; do not remove from site.

3.06 CLEAN UP

- A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by Architect.
- B. Clean out temporary sediment control structures that are to remain as permanent measures.
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

END OF SECTION

**SECTION 01 6000
PRODUCT REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. Sustainable design-related product requirements.
- C. Re-use of existing products.
- D. Transportation, handling, storage and protection.
- E. Product option requirements.
- F. Substitution limitations.
- G. Procedures for Owner-supplied products.
- H. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

- A. Section 01 4000 - Quality Requirements: Product quality monitoring.

1.03 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.
- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. See Section 01 4000 - Quality Requirements, for additional source quality control requirements.
- C. Use of products having any of the following characteristics is not permitted:
 - 1. Containing lead, cadmium, or asbestos.
- D. Provide interchangeable components by the same manufacture for components being replaced.

2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.

- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.04 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION LIMITATIONS

- A. Any item referenced to a Commercial Standard, Federal Specification, trade association standard, or similar standard shall meet the latest applicable requirements for design, manufacture, and installation in effect as of the date of the Advertisement or Invitation for Bids. If this specification calls for a higher level of quality than the referenced standard, this specification shall take precedence.
- B. Where a proprietary material or method is specified for a particular use, the intent is to define a standard of quality, performance, or size, and not to exclude other products of equal or superior merit.
 - 1. For the items specified above, bids shall be based on the products identified in the specifications or on products designated by the Architect via addendum as approved equals. A product named in the specifications or by addendum will be acceptable only if it meets all requirements of the specifications, including the manufacturer's specifications in effect on the date of the Advertisement or Invitation for Bids. Requests for approval of a product as an equal will not be considered unless sufficient data is submitted for the Architect to properly evaluate it. In reviewing such requests, the Architect will consider delivery time, service availability, and the product itself in determining approval under this provision.
- C. Submitting a request for substitution represents that the submitter:
 - 1. Has evaluated the proposed product and determined that it meets or exceeds the specified product's quality standards.
 - 2. Agrees to provide the same warranty for the substitution as is required for the specified product.
 - 3. Will coordinate installation and make any necessary modifications to related Work to ensure completion without additional cost to the Owner.
 - 4. Waives any claims for additional cost or time extensions that may later arise from the substitution.
- D. Substitution Submittal Procedure (after contract award):
 - 1. Submit two copies of each substitution request for review. Each request shall address only one proposed substitution.
 - 2. Provide shop drawings, product data, and certified test results demonstrating the proposed product's equivalence. The proposer is responsible for proving equivalency.

3.02 OWNER-SUPPLIED PRODUCTS

- A. See Section 01 2600 - Work by Others for individual responsibilities.

3.03 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.04 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 01 7419.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Do not store products directly on the ground.
- I. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- J. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- K. Prevent contact with material that may cause corrosion, discoloration, or staining.
- L. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- M. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

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SECTION 01 7000
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Pre-installation meetings.
- C. Cutting and patching.
- D. Surveying for laying out the work.
- E. Cleaning and protection.
- F. Starting of systems and equipment.
- G. Demonstration and instruction of Owner personnel.
- H. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- I. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 3030 - Worksite Safety: General worksite safety requirements.
- B. Section 01 5713 - Temporary Erosion and Sediment Control: Additional erosion and sedimentation control requirements.

1.03 REFERENCE STANDARDS

- A. 29 CFR 1910 - Occupational Safety and Health Standards; current edition.
- B. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
 - 1. On request, submit documentation verifying accuracy of survey work.
 - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in compliance with Contract Documents.
 - 3. Submit surveys and survey logs for the project record.
- C. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate Contractor.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.05 QUALIFICATIONS

- A. For surveying work, employ a land surveyor registered in the State in which the Project is located and acceptable to Architect. Submit evidence of surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate. Employ only individual(s) trained and experienced in collecting and recording accurate data relevant to ongoing construction activities,
- B. For field engineering, employ a professional engineer of the discipline required for specific service on Project, licensed in the State in which the Project is located. Employ only individual(s) trained and experienced in establishing and maintaining horizontal and vertical control points necessary for laying out construction work on project of similar size, scope and/or complexity.

- C. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.06 PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- C. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- D. Perform dewatering activities, as required, for the duration of the project.
- E. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- F. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
 - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
- G. Erosion and Sediment Control: See Section 01 5713 - Temporary Erosion and Sediment Control.
- H. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- I. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.07 SAFETY

- A. See Section 01 3030 - Worksite Safety for general worksite safety requirements.
- B. Each contractor is responsible for the safety of their own personnel. At a minimum, all contractors shall comply with OSHA 29 CFR 1926 Construction Safety Standards, OSHA 29 CFR 1910 General Industry Standards (as applicable), applicable state safety regulations, Owner safety requirements, project safety rules, and the Site-Specific Safety Policies (SSSP) when establishing safe work practices and protecting all workers.
 - 1. If any of these standards, requirements, or procedures conflict, the more stringent requirement shall prevail.
- C. Each contractor shall submit their Hazard Communication Program and Safety Data Sheets (SDS) to the Construction Manager prior to the start of work. Contractors shall ensure that employees receive proper training and supervision, and that necessary precautions are taken before any hazardous chemicals are brought onto the jobsite. Contractors are also responsible for maintaining accessible SDS files for their employees, subcontractors, sub-subcontractors, and onsite suppliers.
- D. Each contractor shall submit documentation of an Employer Safety Program that complies with current OSHA regulations and requirements prior to beginning any contract work.
- E. The contractor, along with all subcontractors, sub-subcontractors, and suppliers, shall take all necessary precautions to ensure the safety of the public and all workers on the job, and to prevent accidents or injuries to any persons on, about, or adjacent to the worksite. The contractor and all tiers of subcontractors and suppliers shall comply with Federal and State OSHA regulations, as well as all applicable laws, codes, ordinances, and safety regulations relating to accident prevention and worker protection.
- F. Each contractor shall designate a competent person, as defined in OSHA 29 CFR 1926.32(f), meaning an individual who is capable of identifying existing and predictable hazards in the work environment and has the authority to take prompt corrective action to eliminate them, to serve as the contractor's project safety representative.

1.08 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Architect of any discrepancies discovered.
- C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- D. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- F. Utilize recognized engineering survey practices.
- G. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
 - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
 - 2. Grid or axis for structures.
 - 3. Building foundation, column locations, ground floor elevations.
- H. Periodically verify layouts by same means.
- I. Maintain a complete and accurate log of control and survey work as it progresses.

3.05 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.06 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of mechanical, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.
 - 5. Repair areas adjacent to cuts to required condition.

6. Repair new work damaged by subsequent work.
 7. Remove samples of installed work for testing when requested.
 8. Remove and replace defective and non-complying work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing.
 - D. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
 - E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
 - F. Restore work with new products in accordance with requirements of Contract Documents.
 - G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
 - H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material , to full thickness of the penetrated element.
 - I. Patching:
 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.
 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.07 PROGRESS CLEANING

- A. During construction, each contractor and subcontractor shall be responsible for daily cleanup and removal of boxes, excess materials, and other debris generated by their work that can be clearly attributed to them. Debris shall be removed from the site by each contractor or placed in the designated trash receptacle(s) noted below. The construction site shall be maintained in a clean and orderly condition at all times.
 1. Each trade shall include in its bid 4 man-hours per week for site cleanup.
 2. Contractors who do not clean up their own materials will be backcharged by the General Work and Labor Contractor (Bid Package 6A) at a rate of \$100.00 per hour.
- B. The General Work and Labor Contractor (Bid Package 6A) shall be responsible for thorough cleanup of the jobsite, both inside and outside the building, twice weekly (Wednesdays and Fridays). This cleanup is intended to remove miscellaneous construction debris such as dirt, dust, small material scraps, wire, screws, nails, empty containers, pallets, and other items that cannot be reasonably assigned to a specific contractor or subcontractor. Cleanup shall include sweeping floors, collecting debris from work areas, organizing materials in a neat manner, and removing debris from the site.
- C. The Construction Manager shall provide 1 large trash receptacle (minimum 15-yard capacity) at the site for use by all contractors throughout the construction period. The Construction Manager shall remove and dispose of the trash each time the receptacle is full (except as otherwise noted below). The location of the receptacle shall be as directed by the Construction Manager.
 1. Demolition debris must be sorted by respective trade in proper trash containers provided by the Construction Manager. Contractors will be back-charged accordingly, if waste materials are not stored / disposed off properly.
 2. Contractors performing exterior enclosure or structural work (e.g., footings, foundations, concrete, masonry, steel, and roofing) shall be responsible for removing their own debris from the site.
- D. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- E. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.

- F. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- G. Collect and remove waste materials, debris, and trash/rubbish from site (as indicated above) and dispose off-site; do not burn or bury.

3.08 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Protect work from spilled liquids. If work is exposed to spilled liquids, immediately remove protective coverings, dry out work, and replace protective coverings.
- G. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- H. Prohibit traffic from landscaped areas.
- I. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.09 SYSTEM STARTUP

- A. Coordinate with requirements of Section 01 9113 - General Commissioning Requirements.
- B. Coordinate schedule for start-up of various equipment and systems.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- G. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.10 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of Owner's personnel.
- D. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

3.11 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

- B. Testing, adjusting, and balancing HVAC systems: See Division 23.

3.12 FINAL CLEANING

- A. Each contractor and subcontractor shall remove all debris generated by their work and clean any soiling that affects the work of others. The Construction Manager will coordinate the final clean-up, unless otherwise noted.
- B. Use experienced personnel or professional cleaners to perform final cleaning. Restore all surfaces and equipment to a condition consistent with standard commercial building cleaning and maintenance requirements. Follow all manufacturer's cleaning instructions.
- C. Use cleaning materials that are nonhazardous.
- D. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- E. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition. Leave concrete floors broom clean.
- F. Resilient floors and tile floors shall have their protection removed and floor wet-mopped. All maintenance type sealers shall be applied by Owner, once the Operation and Maintenance manuals have been submitted, and/or the training of their staff completed.
- G. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- H. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned. Remove excess lubrication and other substances. Clean light fixtures and lamps.
- I. Clean filters of operating equipment.
- J. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- K. Clean site; sweep paved areas, rake clean landscaped surfaces.
- L. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.13 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
- E. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
- F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- G. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.

- H. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

3.14 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION

**SECTION 01 7800
CLOSEOUT SUBMITTALS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project record documents.
- B. Operation and maintenance data.
- C. Warranties and bonds.

1.02 RELATED REQUIREMENTS

- A. Section 00 7200 - General Conditions: Performance bond and labor and material payment bonds, warranty, and correction of work.
- B. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- C. Section 01 7000 - Execution and Closeout Requirements: Contract closeout procedures.
- D. Individual Product Sections: Specific requirements for operation and maintenance data.
- E. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. Submit an electronic (PDF) format document of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return with comments.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed electronic documents within ten days after acceptance.
 - 3. Submit and electronic (PDF) format of completed documents 15 days prior to final inspection. This document will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.
 - 5. Submit the two sets in hardcopy format and provide (1) one copy in electronic / digital format.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.

- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.

3.02 OPERATION AND MAINTENANCE DATA

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 - 1. Product data, with catalog number, size, composition, and color and texture designations.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
 - 1. Description of unit or system, and component parts.
 - 2. Identify function, normal operating characteristics, and limiting conditions.
 - 3. Include performance curves, with engineering data and tests.
 - 4. Complete nomenclature and model number of replaceable parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

- C. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- D. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Provide servicing and lubrication schedule, and list of lubricants required.
- G. Include manufacturer's printed operation and maintenance instructions.
- H. Include sequence of operation by controls manufacturer.
- I. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Include test and balancing reports.
- K. Additional Requirements: As specified in individual product specification sections.

3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into an organized and "bookmarked" electronic (PDF) format for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate "sub-bookmarks" for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each electronic document with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- F. Tables of Contents: List every item identified with a "bookmark"; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Electronic Document Bookmarks: Provide "bookmarks" for each separate product and system; identify the contents of the "bookmarked" section with "sub-bookmarks" describing the product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- I. Drawings: Provide in electronic (PDF) format as part of the O&M manuals.
- J. Arrange content by systems under section numbers and sequence Table of Contents of this Project Manual.
- K. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses and telephone number of the Architect, Construction Manager, Contractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category identify names, addresses and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.

- d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
- 3. Part 3: Project documents and certificates, including the following:
 - a. Product data, shop drawings, and other submittals.
 - b. Air and water balance reports.
 - c. Certificates.
 - d. Photocopies of warranties and bonds.
- L. Provide a listing in the Table of Contents for design data, with tabbed dividers and space for insertion of data.
- M. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Architect, Consultants and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.

3.06 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 by 11 inch three D side ring binders with durable plastic covers.
- F. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- H. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

END OF SECTION

SECTION 31 22 00 SITE GRADING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Removal of topsoil.
- B. Rough grading the site.
- C. Subgrade Preparation-Pavements.
- D. Finish grading.

1.02 REFERENCE STANDARDS

- A. Report of Geotechnical Exploration by American Engineering Testing dated November 20, 2025.

1.03 DEFINITIONS

- A. Subgrade: Top of excavation or fill material located at the bottom of the aggregate at pavement areas or bottom of topsoil or landscape material in non-pavement areas.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Topsoil: Topsoil excavated on-site.
 - 1. Graded.
 - a. Topsoil shall be fine graded to particle sizes not exceeding 1/2 inch.
 - 2. Free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds and foreign matter.
 - 3. Contractor shall remove existing topsoil and import new topsoil material necessary for project if unable to fine grade existing salvaged topsoil.
 - 4. Import topsoil if necessary for quantity.

PART 3 EXECUTION

3.01 PREPARATION

- A. Protect existing utilities from damage.
 - 1. The contractor shall contact Gopher State One Call at 800-252-1166 prior to beginning any excavation work.
 - a. Also contact the Owner's Representative for private site utility locations.
 - 2. The contractor shall notify the various utility companies if work will expose, affect, or endanger any existing utility.
 - 3. The contractor shall support, protect or relocate existing utilities affected by the work.
 - a. Means and methods shall be approved by the utility owner.
- B. Identify required lines, levels, contours, and datum.
- C. Provide temporary means and methods to remove all standing or ponding water from areas prior to grading.
- D. Protect site features to remain, including but not limited to paving, from damage by grading equipment and vehicular traffic.

3.02 SITE GRADING

- A. Remove topsoil and organic soils from areas to be further excavated, re-landscaped, or re-graded, without mixing with foreign materials.
- B. Do not remove topsoil when wet.
- C. Remove subsoil from areas to be further excavated, re-landscaped, or re-graded.
- D. Do not remove wet subsoil , unless it is subsequently processed to obtain optimum moisture content.

- E. Stability: Replace damaged or displaced subsoil to same requirements as for specified fill.
- F. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack surface water control.
- G. Grade to project's subgrade elevations.

3.03 SUBGRADE PREPARATION-PAVEMENT

- A. Compact and shape the subgrade to produce the required density and stability of the subgrade at the required elevation.
 - 1. Density and stability shall be in-place at the time the aggregate base and/or geotextile fabric is placed.
 - 2. The required stability shall be such that no rutting or displacement of the subgrade shall occur from construction equipment.
- B. Compaction Density as per ASTM D698-Standard Proctor, unless otherwise specified or indicated.
 - 1. Scarify the soils at the new subgrade elevation and recompact the soils to a minimum 95 percent of maximum dry density.
 - a. 12 inches, minimum, within vehicular pavement areas (or remove and replace, if necessary, to reach 12 inch depth)
 - 1) Recompact with a large roller with a minimum drum diameter of 3-1/2 feet.
 - b. 3 inches, minimum, in pedestrian (sidewalk) pavement areas.
 - c. Moisture condition the soils as necessary after scarifying and prior to recompacting.
 - 1) Per Reference 1.02.A.
- C. The required stability shall be such that no rutting or displacement of the subgrade shall occur from construction equipment.
- D. Completed subgrade shall be within 1/2 inch of plan elevation.
- E. Proofroll vehicular pavement subgrades prior to placing geotextile fabric and/or aggregate.
 - 1. Proofroll shall be observed by a geotechnical engineer to determine if the results of the procedure meet the project specifications.
 - a. Proofroll with a fully aggregate loaded tandem-axle truck.
 - b. The Contractor shall correct areas that display excessive yielding or rutting during the proofroll, as determined by the geotechnical representative.
 - 1) Corrections shall include, as necessary, moisture conditioning and recompaction, and subcutting and replacement of soil.
- F. Tolerances
 - 1. Completed subgrade shall be within 1/2 inch of plan elevation.
- G. Placement of aggregate and/or geotextile fabric shall not take place until results of the proofroll are known, the final elevations have been checked, and given notice to proceed from the Owner's Representative.

3.04 SOIL REMOVAL

- A. Remove excess topsoil from site.

3.05 FINISH GRADING TOPSOIL AREAS

- A. Before Finish Grading:
 - 1. Verify subgrade has been compacted.
- B. Remove debris, roots, branches, stones, in excess of 1/2 inch in size.
- C. Where topsoil is to be placed, scarify surface to a minimum depth of 3 inches.
- D. Place topsoil in areas not designated in the Drawings as pavement areas.
 - 1. Include all areas graded as part of this project as well as all adjacent turf areas disturbed by construction

- E. Place topsoil where required to level finish grade.
- F. Place topsoil to the following compacted thicknesses:
 - 1. Areas to be seeded or sodded with Grass: 4 inches, minimum.
- G. Place topsoil during dry weather.
- H. Remove roots, weeds, rocks, and foreign material while spreading.
- I. Fine grade topsoil.
 - 1. Rake, chain drag and lightly roll topsoiled areas, remove all ridges and fill all depressions.
 - 2. Use hydraulic power box rake or similar mechanical equipment to remove soil lumps, rocks and debris, fill and level low areas; and correct other grading deficiencies in preparation of seed or sod bed.
 - 3. Maintain profiles and contour of subgrade.
 - 4. Lightly compact placed topsoil to prevent sinkage pockets when watered.

3.06 TOLERANCES

- A. Top Surface of Subgrade: Plus or minus 0.04 foot (1/2 inch) from required elevation.
- B. Top Surface of Finish Grade: Plus or minus 0.04 foot (1/2 inch).

3.07 REPAIR AND RESTORATION

- A. Existing Facilities, Utilities, and Site Features to Remain: If damaged due to this work, repair or replace to original condition.

END OF SECTION

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SECTION 31 23 24 SITE FILL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Filling and compacting for work shown on the Civil Drawings.

1.02 DEFINITIONS

- A. Finish Grade Elevations: Indicated on drawings.
- B. Subgrade Elevations: Top of excavation or fill material located at the bottom of the aggregate at pavement areas bottom of topsoil of landscape material in non-pavement areas.

1.03 REFERENCE STANDARDS

- A. Report of Geotechnical Exploration by American Engineering Testing dated November 20, 2025.

PART 2 PRODUCTS

2.01 FILL MATERIALS

- A. General Fill: Subsoil excavated on-site.
 - 1. Graded.
 - 2. Free of lumps larger than 3 inches, rocks larger than 2 inches, organic materials/soils and debris.
- B. Imported Subsoil to be used as General Fill, if necessary.
 - 1. Natural, non-organic soils native to the project area.
 - a. Similar to existing on-site subsoils.
 - 2. Free of lumps larger than 3 inches, rocks larger than 2 inches, and debris.

PART 3 EXECUTION

3.01 PREPARATION

- A. Compaction Density as per ASTM D698-Standard Proctor, Unless Otherwise Specified or Indicated:
 - 1. Scarify a minimum of 8 inches of the exposed soils at existing grade prior to placing fill and recompact the soils to a minimum 95 percent of maximum dry density.
 - a. Maintain optimum moisture content of fill materials to attain required compaction density.

3.02 FILLING

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Fill up to subgrade elevations unless otherwise indicated.
- C. Employ a placement method that does not disturb or damage other work.
- D. Maintain optimum moisture content of fill materials to attain required compaction density.
- E. Moisture content variance from optimum moisture per Reference 1.03.A.
- F. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches loose lifts or less when heavy, self propelled compaction equipment is used.
 - 1. 4 to 6 inches in loose thickness when hand-guided equipment (ie. jumping jack, plate compactor, etc.) is used.
- G. Correct areas that are over-excavated.
- H. Compaction Density as per ASTM D698-Standard Proctor, Unless Otherwise Specified or Indicated:
 - 1. 95 percent of maximum dry density.
- I. Subgrade Preparation.

1. Per Specification 31 22 00 Site Grading.

3.03 TOLERANCES

- A. Top Surface of General Filling: Plus or minus 1 inch from required elevations.
- B. Completed subgrade shall be within 1/2 inch of plan elevation.

3.04 CLEANING

- A. Remove unused stockpiled materials, leave area in a clean and neat condition.

END OF SECTION

SECTION 32 33 15 SITE FURNISHINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide all materials and equipment and do all work necessary to furnish and install the site furnishings as indicated on the drawings and as specified.
- B. Related Sections:
 - 1. Section 32 11 23 - "Aggregate Base"
 - 2. Section 32 16 05 - "Concrete Curbing and Walk"
 - 3. Section 32 13 05 - "Concrete Pavement"

1.2 REFERENCES

- A. ASTM: American Society for Testing and Materials. www.astm.org
 - 1. ASTM B26 / B26M - 12 - "Standard Specification for Aluminum-Alloy Sand Castings;" 2013.
 - 2. A 307 Carbon Steel Externally Threaded Standard Fasteners
 - 3. F593 Stainless Steel Bolts, Hex Cap Screws, and Studs

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed installation of benches, tables, bicycle racks, or trash receptacles similar in material, design, and extent to that indicated for this project and whose work has resulted in construction with a record of successful in-service performance.
- B. Manufacturer Qualifications: A firm experienced in manufacturing site furnishings similar to those required for this project and with a record of successful in-service performance.
- C. Source Limitations: Obtain each color, finish, shape, and type of site furnishing from a single source with resources to provide components of consistent quality in appearance and physical properties.
- D. Product Options: Drawings indicate size, shape and dimensional requirements of site furnishings and are based on the specific system indicated.

1.4 SUBMITTALS

- A. See Section 01 33 00 - "Submittal Procedures"
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Indicate size, shape, and dimensions, including clearances from adjacent walls, doors, and obstructions.
- D. Selection Samples: For each finish product specified, color chips representing manufacturer's full range of available colors and patterns.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Handle site furnishings with sufficient care to prevent scratches and other damage to the finish.

1.6 WARRANTY

- A. Provide standard manufacturer's warranty for all materials.

PART 2 - PRODUCTS

2.1 FASTENERS AND HARDWARE

- A. Anchorage Devices: Provide anchor bolts, nuts, washers, bolts, sleeves, and other anchorage devices as required to fasten site furnishings accurately in place to suit installation indicated. Anchor bolts shall conform to ASTM A307 and F593.
- B. Fasteners and metal components shall be stainless steel or cadmium-plated steel, unless otherwise indicated on drawings or specified otherwise.
- C. Expansion fasteners shall be stainless steel type, equal to Hilti "Kwik-Bolt" or Hilti "HVA Adhesive Anchor System," manufactured by Hilti fastening Systems, Tulsa, OK 74147, or approved equal.
- D. Exposed metal surfaces shall be painted in accordance with the requirements of Section 09 90 00 - "Painting," unless specified otherwise.

2.2 SITE FURNISHINGS

- A. Table and Bench Set
 - 1. Product: Drifter Picnic Set
 - 2. Material: Untreated Weathering Steel
 - 3. Seating Material Upcycled / Recycled Hardwood. If not available, use Douglas.
 - 4. Length: 118 Inches
 - 5. Height: 33 inches
 - 6. Seating Height: 19 Inches
 - 7. Width: 24 Inches
 - 8. Manufacturer: Streetlife USA Inc. <https://www.streetlife.com/en-US>
 - 9. Or approved equal
- B. Bench
 - 1. Product: Drifter Benches
 - 2. Material: Untreated Weathering Steel
 - 3. Seating Material Upcycled / Recycled Hardwood. If not available, use Douglas.
 - 4. Length: 79 Inches
 - 5. Seating Depth: 11.8 inches
 - 6. Seating Height: 19 Inches
 - 7. Accessories: Backrest, Armrest
 - 8. Manufacturer: Streetlife USA Inc. <https://www.streetlife.com/en-US>
 - 9. Or approved equal
- C. Trash Receptacle
 - 1. Product: Box Bins Wood
 - 2. Material: Untreated Weathering Steel
 - 3. Seating Material Upcycled / Recycled Hardwood. If not available, use Accoya.
 - 4. Manufacturer: Streetlife USA Inc. <https://www.streetlife.com/en-US>
 - 5. Or approved equal
- D. Bike Rack
 - 1. Product: Rough & Ready Bike- Key Bike Rack
 - 2. Material: Untreated Weathering Steel
 - 3. Seating Material Upcycled / Recycled Hardwood. If not available, use Douglas.
 - 4. Height: 28 Inches
 - 5. Width: 28 inches

6. Manufacturer: Streetlife USA Inc. <https://www.streetlife.com/en-US>
7. Or approved equal

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surface to receive site furnishings.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory conditions before proceeding.
- C. Do not begin installation until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Ensure surfaces to receive site furnish are clean and flat.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install level, plumb, square, and correctly located as indicated on drawings and level to the horizon, not pavement. Shim as necessary.
- C. Anchor securely in place.

3.4 CLEANING

- A. Clean installed work to like-new condition.
- B. Do not use cleaning materials or methods that could damage finish.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

3.6 INSPECTION AND ACCEPTANCE

- A. When work is completed, Owner will make an inspection to determine final completion.
- B. When inspected work does not comply with requirements, replace rejected work and continue specified maintenance until re-inspected by Owner and found to be acceptable. Remove rejected materials promptly from project site.

END OF SECTION

SECTION 32 80 00 IRRIGATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This work shall include providing all labor, associated materials (whether specified or not), equipment, and supervision required to construct the irrigation system including, but not limited to:
 - 1. Excavation and backfill for piping and valving
 - 2. Installation of reduced pressure backflow preventer, and meter, if required
 - 3. Connection of system—location shown in construction documents (field verify exact location)
 - 4. Installation of sleeving
 - 5. Boring for piping and wire
 - 6. Installation of valves (mechanical and electric), secondary wiring, piping (subsurface and pressure), sprinkler heads, flow sensor, and moisture sensors

1.2 PERFORMANCE REQUIREMENTS

- A. Irrigation zone control shall be automatic operation with controller and automatic control valves.
- B. Location of Sprinklers and Specialties: Design location is approximate. Make minor adjustments necessary to avoid plantings and obstructions such as signs and light standards. Maintain 100 percent irrigation coverage of areas indicated.
- C. Delegated Design: Design 100 percent coverage irrigation system, including comprehensive analysis by a Certified Irrigation Designer or Landscape Architect, using performance requirements and design criteria indicated.

1.3 SUBMITTALS AND SUBSTITUTIONS

- A. Irrigation systems shall be installed with Hunter or approved equal equipment, including sprinkler heads, controllers, subsurface irrigation and valves. Another manufacturer may be substituted provided they have received an “approved equal” status prior to bidding based on the substitution process established herein.
- B. Cut sheets shall be submitted for all specified products. Substitutions shall be submitted prior to bidding based on the substitution process.
- C. Delegated-Design Submittal: For irrigation systems indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the Certified Irrigation Designer or Landscape Architect responsible for their preparation.

1.4 DELIVERY AND HANDLING

- A. Materials shall be delivered to the site in accordance with manufacturer’s recommendations for shipment and protection of materials.
- B. Handling of materials as recommended by manufacturer.
- C. Storage of all materials in locations designated and approved by Owner.

1.5 CODES, INSPECTIONS, AND PERMITS

- A. The entire installation shall fully comply with all local and state laws and ordinances and with all the established codes applicable thereto including Owner.

- B. The Contractor shall take out all required permits, arrange for all necessary inspections and shall pay any fees and expenses in conjunction with the same as a part of the work under this Section.

1.6 SITE CONDITIONS

- A. The Contractor shall take precautions to ensure equipment and vehicles do not disturb or damage existing site grading, walks, curbs, pavements, utilities, plants, and other existing items and elements on public and private property.
- B. Verify locations and depths of all underground utilities prior to commencing excavation.
- C. Repair and/or return to original condition any damage caused by Contractor's negligence at no cost to the Owner.
- D. Existing Utilities:
 - 1. Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during this work.
 - 2. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in full operation. Repair damaged utilities to satisfaction of utility owner, at no additional cost to Owner.
 - 3. Do not interrupt existing utilities, except when permitted in writing by the City, and then only after acceptable temporary utility services have been provided.
 - 4. Provide minimum of 10-day Service Distribution notice to Owner and Owner's Representative and receive written notice to proceed before interrupting any utility.
 - 5. Demolish and completely remove from site existing underground utilities indicated to be removed after complete deactivation. Coordinate with utility companies for shut-off of services if lines are active.
- E. Protection of Persons and Property:
 - 1. Barricade open excavations occurring as part of this work and post warning lights.
 - 2. Operate warning lights as recommended by authorities having jurisdiction.
 - 3. Protect structures, utilities, sidewalks, pavements, curbs, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by this work.

1.7 QUALIFICATIONS

- A. All irrigation construction shall be performed by Contractors who specialize in irrigation installation.

1.8 WARRANTY

- A. For a period of one (1) year from date of final acceptance of work performed under this Section, the Contractor shall promptly furnish and install any and all parts and equipment, which prove defective in material, workmanship, or installation at no additional cost to Owner.
- B. During the one (1) year guarantee period, the Contractor shall drain and winterize the entire irrigation system(s) in fall for the winter and shall put the irrigation system(s) back into operation in spring. The Contractor shall provide a written report of any work done during the spring startup, at no additional cost to Owner. Should damage occur resulting from winter freeze, the Contractor shall make all repairs necessary to deliver a fully operational system(s) to the Owner prior to delivery and turn-over for Owner operation.
- C. During the one (1) year period, the Contractor shall coordinate with the landscaping Contractor and the Owner for programming of the irrigation system.

PART 2 - PRODUCTS

2.1 PVC & HDPE MAIN LINE

- A. Sizes shall be as shown on drawings.
- B. Pipe shall be virgin, high-impact, Schedule 40 poly-vinyl chloride (PVC) pressure pipe with solvent weld joints. PVC Pipe shall be used only on lines 2 1/2 inches or smaller.
- C. Pipe shall be continuously and permanently marked with manufacturer's name, material, size, and schedule or type.
- D. Pipe shall conform to CS 207-60 or latest revision.
- E. Material shall conform to CS 256-63 or latest revision.
- F. HDPE Pipe shall be HDPE Centennial Plastics (or equal) CenFuse HDPE 160 PSI, SDR 11, and conform to ASTM standards. Only heat fused joints acceptable. HDPE Pipe shall be used on main lines 3 inches and larger.

2.2 PVC PIPE & HDPE FITTINGS

- A. Schedule 40 PVC shall have a solvent weld on piping 2 1/2 inches or smaller.
- B. Pipe and fittings shall conform to ASTM D1784, ASTM D2466.
- C. HDPE – Fusion welded joints in main line only. Fusion welded service tees with stainless steel male adapters for connection to remote control valves.

2.3 LATERAL PVC AND POLYETHYLENE PIPE

- A. 100# NSF regulated pressure pipe. 1 inch and 1 1/4 inch only

2.4 POLYETHYLENE FITTINGS

- A. Insert type fittings double clamped with all stainless clamps 1 inch - 1 1/4 inch only.

2.5 SADDLE TEES

- A. 1 inch - 1 1/4 inch poly piping (unless noted).

2.6 SPRINKLER RISER OFF POLYETHYLENE PIPE

- A. Rotors and spray heads-see plans.

2.7 ELECTRIC CONTROL VALVES / MASTER VALVE

- A. Hunter ICV (or approved equal)

2.8 SECONDARY WIRING

- A. All secondary wiring shall be type PE solid copper for operation of 600 maximum voltage with jacketed two-wire cable - #14 for runs up to 5000 feet and #12 for runs over 5000 feet. Make secondary wire connections with 3M DBY-6 or 3M DBR-6 type splice kits and provide expansion turns at every 200 feet with 3 feet of slack at each electric valve. All wiring shall be installed in accordance with local and national electrical codes requirements and installed as per manufacturer's recommendation.
- B. Provide single jacketed two-wire path to all control valves in this project. Provide second (differentiate by jacket color) along entire main line path and terminate in valve boxes at end of main line: 1 inch only.

2.9 SPRINKLER HEADS

- A. Spray Sprinkler

1. Hunter Pro-Spray PRS30 and check valve feature (CV) (or approved equal)
2. Hunter Pro-Spray PRS40 with MP Rotator and check valve feature (CV) (or approved equal)

B. Rotors

1. Hunter PGP Ultra (or approved equal)
2. Hunter I-20 PRB (or approved equal)

2.10 BUBBLERS

- A. Hunter MSBN-V on Pro-Spray Pop-Up, 2-bubblers per tree at trees surrounded by hardscape that do are not part of a landscape bed (or approved equal)

2.11 CONTROLLER

- A. Hunter ACC2 with Centralus central control installed with Wi-Fi, LAN (Ethernet), or cellular connection (coordinate with City), (or approved equal).

2.12 SENSORS

- A. Hunter Solar Sync Sensor (or approved equal)
- B. Hunter RFC Wired Rain/ Freeze-Clik Sensor (or approved equal)
- C. Hunter Flow-Sync (or approved equal)

2.13 REDUCE PRESSURE BACKFLOW DEVICE

- A. Refer to Plumbing Construction Documents. Meters shall be installed by project's Plumbing Contractor.

2.14 IRRIGATION METER (IF RQUIRED)

- A. Refer to Plumbing Construction Documents. Meters shall be installed by project's Plumbing Contractor.

2.15 QUICK COUPLING VALVES

- A. Hunter model HQ-44LRC with model HK-44 Key (or approved equal)
- B. Contractor shall install a Quick Culper at the point of connection and at the end of any mainlines to aid in the blow out of the system.
- C. Contractor shall install Quick Coupler at the front of the building, rear of the building, and as needed to provide watering for seeded areas outside the limits of irrigation as shown on the construction documents.

2.16 VALVES

- A. Valves shall be NIBCO Brass Gate Valve with Treated Ends with a working pressure rating of 200 psi.
- B. Install isolation valves in 12-inch round Carson valve boxes.
- C. Install Schedule 40 Ball Valve and Union before electric valves. Ball valve shall have a FNPT connection.
- D. Size of valve shall match main line.

2.17 PRESSURE REDUCING CHECK VALVE (IF REQUIRED)

- A. Meters shall be installed by project's Plumbing Contractor. Refer to Plumbing Construction Documents.

2.18 VALVE BOX

- A. All valve boxes shall be of sufficient size to properly house all piping, valves, etc. and appropriate extension kits provided as required. No plumbing components or fittings shall be located outside of the valve box.
- B. Boxes shall be 16 inches x 21 inches (measured at the base) or larger, equivalent to a Carson 12-inch (high) rectangular box.
- C. Color of valve box lid to match the color of the surrounding landscape- green in lawn area, grey in rock mulch areas.

2.19 SLEEVES

- A. All pavement crossings shall be sleeved with Schedule 80 PVC Sleeves. Refer to construction drawings for number and size of sleeves required.

2.20 SWING JOINTS

- A. Installed on quick coupling valves with stabilizers

PART 3 - EXECUTION

3.1 PROGRAMMING

- A. Coordinate schedule with Construction Manager, General Contractor, City, and Landscape Contractor.
- B. Coordinate schedule with Landscape Contractor for water requirements of seeding, sod, and plants during warranty period.
- C. Prior to turning system over to the Owner, the Contractor shall set the program to normal watering. Any establishment programs shall be removed.
- D. Programing to include flow sensing to shut the system down in the vent of a break, weather data, and rain/ freeze input.
- E. Contractor shall include a blowout program for the system.

3.2 INSTALLATION

- A. Excavation and Backfilling
 - 1. Excavation shall include all materials encountered, except materials that cannot be excavated by normal mechanical means.
 - a. Rock excavation: Submit a unit cost per foot of trench for rock excavation. Include in price additional backfill materials required to replace excavated rock.
 - 2. Excavated trenches of sufficient depth and width to permit proper handling and installation of pipe and fittings. See plan.
 - 3. If the pulling method is used (except subsurface and drip), the pipe "plow" shall be a vibratory type. Starting and finishing holes for pipe pulling shall not exceed an opening of 1 foot by 3 feet. Secondary wiring shall not be pulled.
 - 4. Excavate to depths required to provide a 2-inch depth of earth fill or sand bedding for piping when rock or other unsuitable bearing material is encountered.
 - 5. Fill to match adjacent grade elevations with approved earth fill material. Place and compact fill in layers not greater than an 8-inch depth.
 - a. Provide approved earth fill or sand to a point 4 inches above the top of pipe.
 - b. Overfill with approved excavated or borrow fill materials free of lumps or rocks larger than 3 inches in any dimension. Level, compact, and water settle. Should settlement occur, refill and re-sod as required.

6. Except as indicated, install irrigation mains with a minimum cover of 18 inches based on finished grades. Install irrigation laterals with a minimum cover of 12 inches based on finished grades.
7. Excavate trenches and install piping and fill during the same working day. Do not leave open trenches or partially filled trenches open overnight.

B. Boring

1. Bore pipe and/or wiring at locations shown on the plans or as directed. Boring shall be used to route pipe and wiring beneath existing pavements, walks, curbs, and other structures where trenching is impractical or where open-cut installation is prohibited.
2. Install sleeves in all bored holes. Joints within sleeves shall be avoided. Where piping is shown beneath paved areas adjacent to turf, install piping within adjacent turf areas whenever practicable.
3. Open cutting of existing asphalt, concrete, sidewalks, curbs, roadways, or other paved surfaces to install sleeving or piping is prohibited unless approved in writing by the Construction Manager or City.
4. Boring operations shall be performed using a drill, auger, hydraulic boring equipment, water jet, or other approved method capable of producing a precise bore. Boring shall not weaken, damage, or disturb existing roadways, structures, utilities, or facilities, nor cause settlement or displacement of overlying improvements.
5. Bore installations shall be completed in a single direction and maintain horizontal and vertical alignment within 1 inch in 10 feet of bore length unless otherwise specified.
6. Water or other approved drilling fluids may be used only to lubricate cuttings during boring operations. Bentonite slurry may be used in unconsolidated soil formations to stabilize the bore, seal bore walls, lubricate equipment, and facilitate installation of piping.
7. Water jetting shall not be used unless specifically shown on the plans or approved in writing. Water jetting operations shall proceed in a single direction only. If water jetting fails to produce a smooth, stable bore, discontinue jetting and complete the installation using conventional boring methods.
8. Upon completion of boring operations, install piping, conduit, and associated wiring through the sleeve without damage to the sleeve, pipe, or surrounding improvements. All installations shall comply with the lines shown on the plans.

C. Water Supply Installation

1. Water supply for this portion of the system shall be from the source. All costs associated with connection to the fitting (by Others) including valves, meter, backflow, gauges, blow-out point, enclosure and concrete pad are to be included in the lump sum price of the irrigation system.

D. Pressure Plastic Pipe

1. Install plastic pipe in accordance with manufacturer's installation instructions. Provide for thermal expansion and contraction.
2. Saw cut plastic pipe. Use a square-in-sawing vice, to ensure a square cut. Remove burrs and shavings at cut ends prior to installation.
3. Make plastic-to-plastic joints with solvent welded joints. Use only solvent recommended by the pipe manufacturer. Install plastic pipe fittings in accordance with pipe manufacturer's instructions. Contractor shall make arrangements with pipe manufacturer for all necessary field assistance.
4. Make solvent weld joints in accordance with manufacturer's recommendation.
5. Allow joints to set at least 24 hours before pulling or pressure is applied to the system.
6. Uncoil poly-pipe and insert fitting full depth. Secure poly-pipe to insert fittings with stainless steel clamps. Double clamp pipe.
7. Maintain pipe interiors free of dirt and debris. Close open ends of pipe by acceptable methods when pipe installation is not in progress and over all non-working hours.

E. Controllers, Sprinklers, Fittings, Valves, and Accessories

1. Install fittings, valves, sprinkler heads, risers, and accessories in accordance with manufacturer's instructions, except as otherwise indicated.

2. Set sprinkler heads perpendicular to finish grades, except as otherwise indicated or as per manufacturer's recommendations.
3. Obtain Owner review and acceptance of height for proposed sprinkler heads and valves prior to installation.
4. Locate sprinkler heads to assure proper coverage of indicated areas. Do not exceed manufacturer's maximum recommendations for sprinkler head spacing.
5. Install quick-coupling valves in 25.40-cm/10-inch valve box on 360-degree swing joint assembly as per manufacturer's recommendation.
6. Install fittings and accessories as shown or required to complete the system.
7. Install in-ground control valves in a valve access box as indicated.
8. Install valve access boxes on a suitable base of gravel to provide a level foundation at proper grade and to provide drainage of the access box.
9. Seal threaded connections on pressure side of control valves as per manufacturer's recommendations.
10. For areas bordering hardscape features such as sidewalks, Sprinklers shall be mounted on either swing joints or flexible poly pipe. The use of such mounting will allow lateral movement of the sprinkler without incurring damage in those areas where maintenance operations and traffic patterns may logically be assumed.
11. Fixed sprays do not need to be mounted directly next to sidewalks, buildings, or other hardscape features. Placement 6" away will allow normal maintenance procedures and still accommodate "at head" watering.
12. Matched precipitation will be required on all sprinklers operating on the same zone.

F. Secondary Wiring

1. Install electric control cable in the piping trenches. Place wire in same trench, adjacent to pipe. Install wire with slack to allow for thermal expansion and contraction. Expansion joints in wire may be provided at intervals of 200 feet by making 5 to 6 turns of the wire around a piece of 1/2-inch pipe instead of slack. Where necessary to run wire in a separate trench, provide a minimum cover of 18 inches.
2. Provide sufficient slack at site connections at remote control valves in control boxes, and at all wire splices to allow raising the valve bonnet or splice to the surface without disconnecting the wires when repair is required.
3. Connect each remote-control valve to single station AC Baseline decoder and connect to two-wire path except as otherwise indicated.
4. Make secondary wire connections to remote control electric valves and splices of wire in the field; using PE listed burial splice connectors (i.e.: 3M DBY-6 or 3M DBR-6), in accordance with manufacturer's recommendations.
5. Provide tight joints to prevent leakage of water and corrosion build-up on the joint.
6. Provide new sleeves for all locations where existing sleeves are not indicated. Install new sleeves prior to class 5 base is installed.

G. Sleeves:

1. Unused sleeves shall be left long and capped with a PVC cap. All crossings shall be 6 inches below the class 5 aggregate base.
2. Sleeves for Future use shall be capped with a glue on cap, surveyed and marked with rebar, 18 inches in length.

H. Flushing, Testing, and Adjustment:

1. After sprinkler piping and risers are installed and before sprinkler heads are installed, open control valves and flush out the system with full head of water.
2. Perform system testing upon completion of each section. Make necessary repairs and retest-repaired sections as required.
3. Contractor shall perform a test on the system with one of the approved methods.
 - a. The pipe shall have a hydrostatic test done and be pumped up to 65 psi for 5 minutes.
 - b. The pipe shall have an air test done and be pumped up to 5 psi and all joints checked with a soapy solution.

4. Adjust sprinklers after installation for proper and adequate distribution of the water over the coverage pattern. Adjust for the proper arc of coverage.
5. Tighten nozzles on spray type sprinklers after installation. Adjust sprinkler-adjusting screw on lateral line or circuit as required for proper radius. Interchange nozzle patterns as directed by the Owner's Representative to give best arc of coverage.
6. Adjust all electric remote-control valve flow control stems and pressure regulating devices for system balance.
7. Test and demonstrate the controller by operating appropriate day, hour, and station selection features as required to automatically start and shut down irrigation cycles to accommodate plant requirements and weather conditions.
8. Fully flush all subsurface piping manually and demonstrate all automatic flush valves for proper operation.

3.3 RECORD DRAWING

- A. Furnish accurate AutoCAD, release 2017 or newer "as-built" drawings of all components. State the size, manufacturer, model number, part number, size, and exact location of each and every item furnished and installed by this Contractor. Show specific diagram layouts of piping with key locational dimensions. See Section 01 73 23 - "Construction Surveying" for Survey Requirements.
- B. Contractor will furnish Owner's Representative with 2 bound copies of instruction sheets and parts lists covering all operating equipment.

3.4 DISPOSAL OF WASTE MATERIAL

- A. Stockpile, haul from site, and legally dispose of waste materials, rock, trash, and debris.
- B. Maintain disposal route clear, clean, and free of debris.
- C. Repair any damage resulting from irrigation system installation.

3.5 FINAL ACCEPTANCE

- A. Test and demonstrate to the Construction Manager, City, or Landscape Architect the satisfactory operation of the system free of leaks. Final Acceptance shall require a minimum of 30 days of continuous operation of the system prior to acceptance. No systems shall be accepted after September 15.
- B. The Contractor shall instruct the Owner in the operation of the system, including adjustment of sprinklers and valves and programming requirements (run times) for proper watering cycles to ensure adequate watering for healthy plant growth.
- C. Final Acceptance shall require a document signed by the Contractor and the Owner establishing start and end dates for the one-year warranty.
- D. Final Acceptance shall require all irrigation punch list items to be completed.
- E. Upon acceptance, the Owner will assume operation of the system.

3.6 SPECIAL INSTRUCTIONS

- A. It is the intent of the Owner to use moderate to heavy motorized lawn mowers to maintain the sod on this project. All sprinkler heads shall safely sustain these loads without failure.
- B. The lawn irrigation system shall be in full operation by the time the new sod/seed/plantings are placed and shall provide the water for the newly placed sod/seed/plantings.

3.7 EXTRA PARTS

- A. Contractor shall furnish to Owner, at no additional cost, the following extra parts. Refer to Part 2 – "Products" of this Section for description of product requirements.

1. Five (5) – Spray Sprinkler Heads and Rotors of each type used on project
2. Five (5) of each – Sprinkler Nozzle used on project
3. Three (3) – Repair kits for valve (or approved equal)
4. One (1) –Quick Coupler Keys, matching, with hose swivels

END OF SECTION

SECTION 32 91 13 SOIL PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Planting Soils
 - 2. Planting Soils Testing
 - 3. Planting Soil Preparation
 - 4. Subgrade preparation & decompaction
- B. Related Requirements:
 - 1. Section 02 41 13 - "Removals"

1.1 REFERENCES

- A. AASHTO: American Association of State Highway and Transportation Officials; www.aashto.org
- B. ANLA: American Nursery and Landscape Association; www.anla.org
- C. ANSI: American National Standards Institute; www.ansi.org
 - 1. ANSI Z60.1 - Nursery Stock
 - 2. ANSI A300 Parts 1, 2 & 3
- D. AOAC: Association of Official Agricultural Chemists; www.aoac.org
- E. ASTM: American Society of Testing Materials; www.astm.org
- F. MnDOT: Minnesota Department of Transportation
 - 1. Minnesota Standards Specifications for Highway Construction, latest edition;
 - 2. www.dot.state.mn.us
 - 3. Approved/Qualified Products; <http://www.dot.state.mn.us/products/index.html>
 - 4. MnDOT Seeding Manual 2024 Edition;
<https://www.dot.state.mn.us/environment/erosion/vegetation.html>
- G. USDA: United States Department of Agriculture; www.usda.gov

1.2 DEFINITIONS

- A. AAPFCO: Association of American Plant Food Control Officials.
- B. Backfill: The earth used to replace or the act of replacing earth in an excavation. This can be amended or unamended soil as indicated.
- C. CEC: Cation exchange capacity.
- D. Compost: The product resulting from the controlled biological decomposition of organic material that has been sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth.
- E. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.
- F. Imported Soil: Soil that is transported to Project site for use.
- G. Layered Soil Assembly: A designed series of planting soils, layered on each other, that together produce an environment for plant growth.

- H. **Manufactured Soil:** Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.
- I. **NAPT:** North American Proficiency Testing Program. An SSSA program to assist soil-, plant-, and water-testing laboratories through interlaboratory sample exchanges and statistical evaluation of analytical data.
- J. **Organic Matter:** The total of organic materials in soil exclusive of undecayed plant and animal tissues, their partial decomposition products, and the soil biomass; also called "humus" or "soil organic matter."
- K. **Planting Soil:** Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- L. **RCRA Metals:** Hazardous metals identified by the EPA under the Resource Conservation and Recovery Act.
- M. **SSSA:** Soil Science Society of America.
- N. **Subgrade:** Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- O. **Subsoil:** Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- P. **Surface Soil:** Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- Q. **Topsoil:** The surface layer or top layer of soil. In undisturbed areas, surface soil is typically called "topsoil". Topsoil is often imported, stripped and stockpiled for reuse in amending, or amended and prepared in-situ soil to create planting soils.
- R. **USCC:** U.S. Composting Council.

1.3 QUALITY ASSURANCE

- A. **Soil-Testing Laboratory Qualifications:** An independent or university laboratory, recognized by the State of Minnesota, Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.
 - 1. **Soil Analysis**
- B. **Soil Analysis:** For each unamended soil type, furnish soil analysis and a written report by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; CAC; soluble salts; deleterious material; pH; and mineral and plant-nutrient content of the soil.
 - 1. Testing methods and written recommendations shall comply with USDA's Handbook No. 60.
 - 2. Depth, location, and number of samples to be taken per instructions from Landscape Architect or Owner's Representative. A minimum of five representative samples shall be taken from varied locations for each soil to be used or amended for planting purposes.
 - 3. Report suitability of tested soil for plant growth.
 - a. Based upon the test results, state recommendations for soil treatments and soil amendments to be incorporated. State recommendations in weight per 1000 sq. ft. or volume per cu. yd. for nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.
 - b. Test for presence of soluble salts, minerals, or heavy metals, including aluminum, arsenic, barium, cadmium, chromium, cobalt, lead, lithium, and vanadium. If such problem materials are present, provide additional recommendations for corrective action.

1.4 PREINSTALLATION MEETINGS

- A. **Preinstallation Conference:** Conduct conference at virtually or at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product provide the following:
 - 1. Include recommendations for application and use.
 - 2. Include test data substantiating that products comply with requirements.
 - 3. Include sieve analyses for aggregate materials.
 - 4. Material Certificates: For each type of imported soil and soil amendment and fertilizer before delivery to the site, according to the following:
 - a. Manufacturer's qualified testing agency's certified analysis of standard products.
 - b. Analysis of fertilizers, by a qualified testing agency, made according to AAPFCO methods for testing and labeling and according to AAPFCO's SUIP #25.
 - c. Analysis of nonstandard materials, by a qualified testing agency, made according to SSSA methods, where applicable.
- B. Samples: For each bulk-supplied material, 1-quart volume of each in sealed containers labeled with content, source, and date obtained. Each sample shall be typical of the lot of material to be furnished; provide an accurate representation of composition, color, and texture.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For each testing agency.
- B. Preconstruction Test Reports: For preconstruction soil analyses specified in "Preconstruction Testing" Article.
- C. Field quality-control reports.
- D. For Imported soils, mulch, and compost materials provide statement from manufacturers/suppliers that material is free of invasive jumping worms to the best of their knowledge.
 - 1. Notify Landscape Architect or Owner's Representative of timing of material to arrive on site and allow for inspection by Landscape Architect or Owner's Representative prior to placement & distribution of material on site.
- E. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.7 TESTING AGENCY QUALIFICATIONS

- A. Testing Agency Qualifications: An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.

1.8 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction soil analyses on existing on-site soil.
 - 1. Notify Landscape Architect or Owner's Representative seven days in advance of the dates and times when laboratory samples will be taken.

1.9 SOIL-SAMPLING REQUIREMENTS

- A. Sample Collection and Labeling: Have samples taken and labeled by Contractor under the direction of the testing agency.
 - 1. Number and Location of Samples: Minimum of five representative soil samples from varied locations for each soil to be used or amended for landscaping purposes.
 - 2. Procedures and Depth of Samples: According to USDA-NRCS's "Field Book for Describing and Sampling Soils."
 - 3. Labeling: Label each sample with the date, location keyed to a site plan or other location system, visible soil condition, and sampling depth.

1.10 TESTING REQUIREMENTS

A. Physical Testing:

1. Soil Texture: Soil-particle, size-distribution analysis by one of the following methods according to SSSA's "Methods of Soil Analysis - Part 1 - Physical and Mineralogical Methods":
 - a. Sieving Method: Report sand-gradation percentages for very coarse, coarse, medium, fine, and very fine sand; and fragment-gradation (gravel) percentages for fine, medium, and coarse fragments; according to USDA sand and fragment sizes.
 - b. Hydrometer Method: Report percentages of sand, silt, and clay.
2. Total Porosity: Calculate using particle density and bulk density according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
3. Water Retention: According to SSSA's "Methods of Soil Analysis - Part 1 - Physical and Mineralogical Methods."
4. Saturated Hydraulic Conductivity: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods"; at 85% compaction according to ASTM D 698 (Standard Proctor).

B. Chemical Testing:

1. CEC: Analysis by sodium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
2. Clay Mineralogy: Analysis and estimated percentage of expandable clay minerals using CEC by ammonium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 1 - Physical and Mineralogical Methods."
3. Metals Hazardous to Human Health: Test for presence and quantities of RCRA metals including aluminum, arsenic, barium, copper, cadmium, chromium, cobalt, lead, lithium, and vanadium. If RCRA metals are present, include recommendations for corrective action.
4. Phytotoxicity: Test for plant-available concentrations of phytotoxic minerals including aluminum, arsenic, barium, cadmium, chlorides, chromium, cobalt, copper, lead, lithium, mercury, nickel, selenium, silver, sodium, strontium, tin, titanium, vanadium, and zinc.

C. Fertility Testing: Soil-fertility analysis according to standard laboratory protocol of SSSA NAPT NCR-13, including the following:

1. Percentage of organic matter.
2. CEC, calcium percent of CEC, and magnesium percent of CEC.
3. Soil reaction (acidity/alkalinity pH value).
4. Buffered acidity or alkalinity.
5. Nitrogen ppm.
6. Phosphorous ppm.
7. Potassium ppm.
8. Manganese ppm.
9. Manganese-availability ppm.
10. Zinc ppm.
11. Zinc availability ppm.
12. Copper ppm.
13. Sodium ppm and sodium absorption ratio.
14. Soluble-salts ppm.
15. Presence and quantities of problem materials including salts and metals cited in the Standard protocol. If such problem materials are present, provide additional recommendations for corrective action.
16. Other deleterious materials, including their characteristics and content of each.

D. Organic-Matter Content: Analysis using loss-by-ignition method according to SSSA's "Methods of Soil Analysis - Part 3 - Chemical Methods."

- E. Recommendations: Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated to produce satisfactory planting soil suitable for healthy, viable plants indicated. Include, at a minimum, recommendations for nitrogen, phosphorous, and potassium fertilization, and for micronutrients.
1. Fertilizers and Soil Amendment Rates: State recommendations in weight per 1000 sq. ft. for 6-inch depth of soil.
 2. Soil Reaction: State the recommended liming rates for raising pH or sulfur for lowering pH according to the buffered acidity or buffered alkalinity in weight per 1000 sq. ft. for 6-inch depth of soil.

1.11 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and compliance with state and Federal laws if applicable.
- B. Herbicides: handle and store all herbicides as required by state and local laws.
- C. Bulk Materials:
1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 3. Do not move or handle materials when they are wet or frozen.
 4. Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

PART 2 - PRODUCTS

2.1 PLANTING SOILS

- A. This article is organized around two types of soil sources used to produce planting soils: existing, on-site soil and imported soil. Manufactured planting soil produced off-site or on-site by an intensive blending process is also included as a type of planting-soil mix.
- B. General: Soil amendments, fertilizers, and rates of application specified in this article are guidelines that may need revision based on testing laboratory's recommendations after preconstruction soil analyses are performed.
- C. Topsoil to be existing top soil from site unless agreed to in writing by City and Landscape Architect.
- D. EXISTING ON-SITE PLANTING SOIL: Existing, on-site surface soil, with the duff layer, if any, retained in-situ; and/or stockpiled on-site; modified to produce viable planting soil:
1. Unacceptable Properties: Clean soil of the following:
 - a. Unacceptable Materials: Concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
 - b. Unsuitable Materials: Stones, roots, plants, sod, clay lumps, and pockets of coarse sand that exceed a combined maximum of 8 percent by dry weight of the imported soil.
 - c. Large Materials: Clods, roots, clay lumps, and pockets of coarse sand exceeding 4" in any dimension. Stones shall not exceed 2" inches in diameter.
 2. Amended Soil Composition: Blend imported, unamended soil with the following soil amendments and fertilizers per recommendations from testing to achieve designated planting soil.
 - a. Compost.
 - b. Sphagnum
 - c. Lime.

- d. Sulfur/Iron Sulfate.
 - e. Agricultural Gypsum.
 - f. Superphosphate.
 - g. Commercial Fertilizer.
 - h. Slow-Release Fertilizer.
3. Shall conform to MNDOT Spec 3877 (Table 3877-2) - "Loam Topsoil Borrow." Contractor shall be responsible for mixing and placement.
- E. IMPORTED PLANTING SOIL: Shall be natural, friable, fertile, fine, sandy loam possessing the characteristics of representative topsoil in the vicinity which produce heavy growths of vegetation. The topsoil shall be free from subsoil, clay lumps, clods, weeds, brush, tree roots, branches, stones larger than 1-inch in any dimension, lime, concrete, ashes, slag, or other deleterious matter and shall be well drained in its original conditions and free of toxic quantities of acid or alkaline elements.
- 1. Sources: Unamended soil from sources that are naturally well-drained sites where topsoil occurs at least 4 inches deep, not from bogs or marshes; and that do not contain undesirable organisms; disease-causing plant pathogens; or noxious weeds and invasive plants including, but not limited to: quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and brome grass.
 - 2. Planting Soil for tree/shrub/plant backfill shall conform to MNDOT Spec 3877 (Table 3877-2) - "Loam Topsoil Borrow." Contractor shall be responsible for hauling, mixing and placement.
 - 3. Unacceptable Properties: Manufactured soil shall not contain the following:
 - a. Unacceptable Materials: Concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
 - b. Unsuitable Materials: Stones, roots, plants, sod, clay lumps, and pockets of coarse sand that exceed a combined maximum of 5 percent by dry weight of the manufactured soil.
 - c. Large Materials: Stones, clods, roots, clay lumps, and pockets of coarse sand exceeding 2 inches in any dimension.

2.2 INORGANIC SOIL AMENDMENTS

- A. The need for soil amendment shall be determined upon site soil conditions prior to planting. Landscape contractor shall notify Landscape Architect for the need of any soil amendments.
- B. Lime: ASTM C 602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:
 - 1. Class: O, with a minimum of 95 percent passing through a No. 8 sieve and a minimum of 55 percent passing through a No. 60 sieve.
 - 2. Form: Provide lime in form of ground dolomitic limestone.
- C. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent elemental sulfur, with a minimum of 99 percent passing through a No. 6 sieve and a maximum of 10 percent passing through a No. 40 sieve.
- D. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
- E. Aluminum Sulfate: Commercial grade, unadulterated.
- F. Perlite: Horticultural perlite, soil amendment grade.
- G. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through a No. 50 sieve.
- H. Sand: Clean, washed, natural or manufactured, free of toxic materials, and according to ASTM C 33/C 33M.

2.3 ORGANIC SOIL AMENDMENTS

- A. The need for soil amendment shall be determined upon site soil conditions prior to planting. Landscape contractor shall notify Landscape Architect for the need of any soil amendments.
- B. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 3/4-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
 - 1. Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source separated or compostable mixed solid waste.
 - 2. Organic-Matter Content: 30 to 60 percent dry weight.
- C. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.

2.4 FERTILIZERS

- A. Bonemeal: Commercial, phosphate mixture, soluble; a minimum of 4 percent nitrogen.
- B. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition: 1 lbs./1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
- C. Slow-Release Fertilizer: Granular or pellet fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - 1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
 - 2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified testing agency.

2.5 HERBICIDES

- A. Non-glyphosate containing herbicides: Effective for removing existing turf grass and weeds from the site prior to and during soil preparation. EPA registered and approved, of type recommended by manufacturer for application. Provide Aquatic-Safe herbicide when working within 200' of water bodies. Provide selective, grass-specific herbicide to treat grass and weeds within 50' of and below dripline of existing trees.

PART 3 - EXECUTION

3.1 GENERAL

- A. Place planting soil and fertilizers according to requirements in this and other Specification Sections as well as in the Drawings.
 - 1. Install Boulevard Topsoil Blend within tree/shrub/planting areas as shown in Drawings.
- B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil. Proceed with soil placement only after unsatisfactory conditions have been corrected.

3.2 REMOVAL OF EXISTING TURF GRASS AND WEEDS

- A. Prior to any decompaction of soils, use a herbicide to kill off existing plant materials. Wait until herbicide takes effect prior to starting any excavations or decompacting work.
- B. Take care around existing vegetation to remain. Do not over broadcast. Any damage to existing trees shall be replaced at the cost of the Contractor.
- C. Where broadleaf weeds persist around existing trees, sod cut to a depth of 1-inch. Use caution to avoid damage to existing root systems. Do not sod cut within 6 feet of trunk of existing trees.

3.3 EXCAVATIONS

- A. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
- B. Unsuitable Materials: Clean soil to contain a maximum of 8 percent by dry weight of stones, roots, plants, sod, clay lumps, and pockets of coarse sand.

3.4 SOIL DECOMPACTION/ SUBGRADE DEEP TILLING In all proposed landscape areas, and prior to planting or placing any topsoil, fracture any and all compacted soils and subgrades to the depth indicated in the Drawings. This may require the use of jack hammers, excavation and pulverizing, ripping in several directions with a chisel plow or frost ripper.

- B. After fracturing, wait 2 weeks for weed regrowth to occur, then apply a second application of non-glyphosate containing herbicide to kill off any new weed growth. Take care around existing vegetation to remain. Do not over broadcast. Any damage to existing trees shall be replaced at the cost of the Contractor.
- C. After herbicide takes effect, apply any necessary soil amendments as indicated in soils testing, such as organic matter or pH modifying agents. Rototill the fractured soil twice, in two perpendicular directions to a depth indicated in the Drawings. Avoid and protect underground utilities.
- D. Holes, depressions, and rivulets shall be filled in and brought to a smooth finish grade. Do not plant on land that does not have a properly prepared seed bed in accordance with these specifications.
- E. Protect soils from compaction until landscape area is planted. In all areas where paving abuts landscape areas, the finish grade of the landscape area shall be set 1 inch below the downhill edge of the paving to allow runoff to sheet onto adjacent landscape areas.

3.5 BLENDING PLANTING SOIL IN PLACE APPLYING COMPOST TO SURFACE OF PLANTING SOIL

- A. Application: Apply a 1-inch topdressing of compost over decompacted soils or raingarden filter soils and blend into top 4 inches of soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Finish Grading: Grade surface to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests and inspections:
 - 1. Compaction: Test planting-soil compaction after placing each lift and at completion using a densitometer or soil-compaction meter calibrated to a reference test value based on laboratory testing according to ASTM D 698. Space tests at no less than one for each 1000 sq. ft. of in-place soil or part thereof.
- C. Soil will be considered defective if it does not pass tests and inspections.

3.7 PROTECTION AND CLEANING

- A. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Vehicle traffic.
 - 4. Foot traffic.
 - 5. Erection of sheds or structures.
 - 6. Impoundment of water.
 - 7. Excavation or other digging unless otherwise indicated.
- B. If planting soil or subgrade is over compacted, disturbed, or contaminated by foreign or deleterious materials or liquids, remove the planting soil and contamination; restore the subgrade as directed by Landscape Architect or Owner's Representative and replace contaminated planting soil with new planting soil.

3.8 CLEANING

- A. Protect areas adjacent to planting-soil preparation and placement areas from contamination. Keep adjacent paving and construction clean and work area in an orderly condition.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable materials, trash, and debris and legally dispose of them off Owner's property unless otherwise indicated.

END OF SECTION

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SECTION 32 93 00 LANDSCAPE PLANTING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Trees, Shrubs, Plants, Sod, Soil Amendments, Fine Grading, Wood Mulch, Initial Maintenance of Landscape Materials, Edging, Miscellaneous Landscape Work and Required Warranty Work.

1.2 QUALITY ASSURANCE

- A. Subcontract landscape work to a firm specializing in landscape work that possesses a minimum of 5 years of experience with projects of similar size and scope.

1.3 SOURCE QUALITY CONTROL

- A. Supply of Planting Stock: by submitting a Proposal and accepting award of the Contract, the Contractor acknowledges investigation of the supply of planting stock, obtaining a firm commitment from suppliers, and assurance of delivery of the specified plant stock as required for completion of the Contract. The Contractor shall present a list of suppliers and the materials to be furnished by each of them at the time of product submittal.
- B. Substitutions: if required plant materials are not available, the Contractor shall provide written documentation that the plant is not available, and that the substitute plant meets the Contract requirements. The City may either approve the substitute plant or extend the Contract time to ensure availability of the specified plant.
- C. Analysis and Standards: package standard products with manufacturers certified analysis. For other materials, provide analysis from a recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, whenever applicable.
- D. Trees, Shrubs, and Plants: provide trees, shrubs, and plants of quantity, size, genus, species, and variety shown and scheduled for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock." Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae, and defects such as knots, sunscald, injuries, abrasions, or disfigurement.
- E. Label each tree and shrub with securely attached waterproof tag bearing legible designation of botanical and common name.
 - 1. Where formal arrangements or consecutive order of trees or shrubs are shown, select stock of uniform height and spread, and label with number to assure symmetry in planting.
- F. Inspection: The Owner reserves the right to inspect trees before, during or after installation, for their compliance with requirements as specified. All trees not conforming to the requirements herein specified shall be considered defective, and such plants, whether in place or not, shall be marked as rejected and removed immediately from the site of the work and replaced with new trees at the Contractor's expense.

1.4 SUBMITTALS

- A. Plant and Material Certification:
 - 1. Certificates of inspection as required by governmental authorities.
 - 2. Manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials.
 - 3. Label data substantiating that plants, trees, shrubs and planting materials comply with specified requirements.

- B. Planting Schedule: Proposed planting schedule, indicating dates for each type of landscape work during normal seasons for such work. Submit prior to commencement of work. Correlate with specified maintenance periods to provide maintenance from date of installation completion. Revisions will be accepted only upon written consent of the Owner.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Packaged Materials: Deliver packaged materials in containers showing weight, analysis, and name of manufacturer. Protect materials from deterioration during delivery, and while stored at site.
- B. Trees and Shrubs: Provide freshly dug trees and shrubs. Do not prune prior to delivery unless otherwise approved by Owner. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches, or destroy natural shape. Provide protective covering during delivery. Do not drop balled and burlapped stock during delivery.
- C. Deliver trees and shrubs after preparations for planting have been completed and plant immediately. Notify Owner at least one week prior to delivery. If planting is delayed more than six hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist by covering with mulch, burlap or other acceptable means of retaining moisture.
- D. Do not remove container-grown stock from containers until planting.

1.6 JOB CONDITIONS

- A. Utilities: Locate and mark locations of underground utilities, duct banks, including underground irrigation and perform work in a manner which will avoid possible damage. Contractor will be responsible for any damages occurring due to failure to locate underground utilities. Hand-excavate as required. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned.
- B. Topsoil: Confirm suitability and depth of topsoil prior to commencing planting operations. Notify owner if unacceptable conditions are encountered.
- C. Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Owner before planting.

1.7 SEQUENCING AND SCHEDULING

- A. Stake all trees and outline all shrub and perennial beds for approval prior to planting.
- B. Planting Time: Proceed with, and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
- C. Coordination with Lawns: Plant trees and shrubs after final grades are established and prior to planting of turfgrass unless otherwise acceptable to Owner. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

1.8 SPECIAL PROJECT WARRANTY- MAINTENANCE AND WARRANTY PERIOD

- A. Warranty lawns from installation until 60 days following final acceptance, and for fall planting, lawns shall be warrantied for 60 days of the following spring growing season.

- B. Warranty trees, shrubs and other plants for a period of one year after date of project completion, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Contractor's control. The date of project completion is determined when all landscape work is completed and all required corrective work made as determined by the Owner. The Contractor shall make monthly visits to the project to make certain that the materials are properly watered, cultivated, pruned and plantings are standing plumb. Under this warranty the Contractor accepts the provisions of the landscape specifications and plant schedule as adequate and proper to maintain satisfactory growth. Final acceptance will occur after completion of warranty period.
- C. Promptly remove and replace trees, shrubs, and other plants found to be dead or in unhealthy condition during maintenance and warranty period or as soon as season and weather conditions permit. Make replacements during growing season. Replace trees, shrubs, and other plants which are in doubtful condition at end of warranty period.
- D. Only one replacement (per tree, shrub or plant) will be required at end of warranty period, except for losses or replacements due to failure to comply with specified requirements.
- E. Submit monthly inspection reports during the growing season and bi-monthly reports during the dormant season. Reports shall include any and all activity the contractor performs, including but not limited to pruning, watering, mulch replacement, weeding, and general maintenance.

PART 2 - PRODUCTS

2.1 TOPSOIL AMENDMENTS

- A. Confirm suitability of topsoil placed on site. Contractor is responsible to confirm depths and limits.
- B. For planting beds and lawns, provide amendments to allow for suitable plant growth:
 - 1. Lime: Natural dolomitic limestone containing not less than 85 percent of total carbonates with a minimum of 30 percent magnesium carbonates, ground so that not less than 90 percent passes a 10-mesh sieve and not less than 50 percent passes a 100-mesh sieve.
 - 2. Aluminum Sulfate: Commercial grade.
 - 3. Peat: Coarse Hypnum, sphagnum, or reed-sedge type, free of wood and other extraneous matter. Humus or peat muck is unacceptable.
 - 4. Bonemeal: Commercial, raw, finely ground; 4 percent nitrogen and 20 percent phosphoric acid.
 - 5. Superphosphate: Soluble mixture of treated materials; 20 percent available phosphoric acid.
 - 6. Sand: Coarse, clean, washed sand, free of toxic materials, with 40 percent or fewer particles passing through a 0.25 - 1.00 mm sieve, and with a pH level equal to or less than 7.5.
 - 7. Perlite: Conforming to National Bureau of Standards PS 23.
 - 8. Vermiculite: Horticultural grade, free of toxic substances.
 - 9. Sawdust: Rotted sawdust, free of chips, stones, sticks, soil, or toxic substances and with 7.5 pounds of nitrogen uniformly mixed into each cubic yard of sawdust.
 - 10. Manure: Well-rotted, unleached stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials and containing no chemicals or ingredients harmful to plants.
 - 11. Commercial Fertilizer: Completed fertilizer of neutral character, with some elements derived from organic sources.
 - 12. For trees and shrubs, provide: "Agriform" tablets by Osmocote, slow release 20-10-5.
- C. For lawns, provide fertilizer with percentage of nitrogen required to provide not less than 1 pound of actual nitrogen per 1,000 square feet of lawn area, not less than 10 percent phosphoric acid, and not less than 10 percent potassium. Provide nitrogen in a form that will be available to lawn during initial period of growth; at least 50 percent of nitrogen must be organic form.

2.2 PLANT MATERIALS

- A. Quality: Provide trees, shrubs, and other plants of size, genus, species, and variety shown and scheduled for Landscape Work and complying with requirements of ANSI Z60.1 "American Standard for Nursery Stock." All plants shall be nursery grown in accordance with good horticultural practices under climatic conditions similar to those of project for at least two years unless specifically authorized otherwise by Owner. Unless noted otherwise, plants shall be exceptionally heavy, symmetrical, and tightly knit, as well as trained or favored in development and appearance for superiority in form, number of branches, compactness, and symmetry.
 - 1. Plants shall be true to species and variety and shall conform to measurements specified except that plants larger than specified may be used if approved by Owner. Use of such plants shall not increase contract price. If larger plants are approved the root ball shall be increased as specified. The measurements specified shall be the minimum size acceptable and are the measurements after pruning where pruning is required. Plants that meet the measurements specified but do not possess a normal balance between height and spread, as determined by the Owner, shall be rejected.
 - 2. Container stock shall have grown in the container in which delivered for at least six months, but not over two years. Rootbound plants will be rejected.
- B. Deciduous Trees, Shrubs and Other Plants: Provide of height and caliper scheduled or shown and with branching configuration recommended by ANSI Z60.1 for type and species required.
 - 1. All plants shall be well formed and have a habit of growth that is normal to the species; be sound, healthy, vigorous, and free from insect pests, plant diseases, sun scalds, abrasions of the bark, and disfigurements including dead or broken branches. Tree trunks shall be sturdy and well "hardened off." All trees shall have normally well-developed branch systems, and vigorous and fibrous root systems which are neither root nor pot-bound.
 - 2. Provide straight, upright single stem trees of height listed or shown and with branching configurations consistent with the genus and species unless otherwise specified.
 - 3. Provide balled and burlapped, container grown trees and shrubs at the Contractor's option. No synthetic burlap is permitted.
- C. Coniferous and Broadleaved Evergreens: Provide evergreens of sizes shown or listed. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types, such as globe, dwarf, cone, pyramidal, broad upright, and columnar. Provide normal-quality evergreens with well-balanced form complying with requirements for other size relationships to the primary dimension shown.
 - 1. Container-grown evergreens will be acceptable, subject to specified limitations for container grown stock.

2.3 SOD

- A. Harvest and Delivery: Harvest from the source and deliver to project site within 24 hours. Deliver only as much sod as can be installed in one day's work.
- B. Review: Sod not transplanted within this time period shall be reviewed prior to installation.
- C. Type of sod to be used shall be grown locally, within 100 miles of the Project Site and consist primarily of *Poa pratensis* with some creeping red fescue.
- D. Install sod commonly referred to as mineral sod.
- E. Submit specific sod mix to landscape architect for approval prior to purchasing sod for project.

2.4 MISCELLANEOUS LANDSCAPE MATERIALS

- A. Steel Edging: Provide commercial grade steel edging – 3/16 inches x 4 inches black with stakes 4 feet O.C minimum and at each end of piece whether abutting or turning.

- B. Edging to be commercial grade col-met (or equal) steel edging; 3/16" thick x 4" tall, color black, or spaded edge, as indicated. Steel edging shall be placed with smooth curves and staked with metal spikes no greater than 4 foot on center with top of edger at grade, for mowers to cut above without damage. Utilize curbs and sidewalks for edging where possible. Where edging terminates at a sidewalk, bevel or recess ends to prevent trip hazard. Spaded edge to provide V-shaped depth and width to create separation between mulch and grass. Individual tree to be spaded edge, unless noted otherwise.
- C. Anti-desiccant: Emulsion type, film-forming agent. Deliver in manufacturer's fully identified containers and mix in accordance with manufacturer's instructions.
 - 1. Provide "Wiltpruf" or approved equal.
- D. Pre-Emergent Herbicide: Apply Preen, or equal pre-emergent herbicide to all planting beds prior to placement of mulch.
- E. Wrapping: Commercial-grade, asphaltic tree-wrap tape not less than 4 inches wide, designed to prevent borer damage and winter freezing.
- F. Stakes and Guys: Provide staking and guying of trees as directed by Owner.
- G. Mulch: Double shredded hardwood mulch to be used around all trees within turf areas. Mulch ring to be 3' in diameter. Mulch to be at all trees. Beds shall have 4" depth of double shredded hardwood mulch. Mulch to be free of deleterious material and natural in color (dye-free), or approved equal.
- H. Rock Mulch: Rock mulch to be St. Cloud granite, 1 1/2" diameter, at minimum 3" depth, or approved equal. Apply pre-emergent herbicide prior to mulch placement per manufacturer recommendations, use preen or pre-approved equal. Rock mulch to be on commercial grade filter fabric, by Typar, or approved equal with no exposure. Contractor to submit sample prior to purchase and installation of rock mulch.
- I. Cost of double shredded hardwood mulch, anti-desiccant, pre-emergent herbicide, wrapping, and stakes & guys are incidental to project.

PART 3 - EXECUTION

3.1 PREPARATION OF TOPSOIL FOR PLANTING BEDS

- A. Before mixing, clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful or toxic to plant growth.
- B. For pit and trench type backfill, mix planting soil prior to backfilling, and stockpile at site.
- C. For backfill at trees, shrubs and ground cover add commercial fertilizer as specified and mix thoroughly.
- D. For planting beds and lawns, mix planting soil either prior to planting or apply on surface of topsoil and mix thoroughly before planting.
 - 1. Mix lime with dry soil prior to mixing of fertilizer.
 - 2. Prevent lime from contacting roots of acid-loving plants.
 - 3. Apply phosphoric acid fertilizer (other than that constituting a portion of complete fertilizers) directly to subgrade before applying planting soil and tilling.
- E. Contractor's responsibility to verify topsoil is placed to a 12-inch depth for tree, shrubs, and perennials.

3.2 PREPARATION OF TOPSOIL FOR PLANTING SOD AREAS

- A. Contractor's responsibility to verify topsoil is placed to a 6-inch depth. Remove stones measuring over 1- 1/2 inches in any dimension. Remove sticks, roots, rubbish, and other extraneous matter. Limit preparation to areas which will be planted promptly after preparation.

3.3 PREPARATION OF PLANTING BEDS

- A. Loosen topsoil of planting bed areas to a minimum depth of 2 feet for shrubs using a cultmulcher or similar equipment. Remove stones measuring over 1- 1/2 inches in any dimension. Remove sticks, stones, rubbish, and other extraneous matter.

3.4 EXCAVATION FOR TREES AND SHRUBS

- A. Excavate pits, beds, and trenches with vertical sides and with bottom of excavation slightly raised at center to provide proper drainage. Loosen hard subsoil in bottom of excavation.
 - 1. For balled and burlapped, make tree excavations at least two feet greater than the ball diameter and make shrub excavations at least one foot greater than the ball diameter. Excavate for both trees and shrubs to depths equal to the ball depth.
 - 2. For container grown stock, excavate as specified for balled and burlapped stock, adjusted to size of container width and depth.
 - 3. Minimize damage to existing trees when planting new ones. Cleanly trim damaged roots prior to backfilling.
- B. Dispose of excess subsoil removed from planting excavations. Remove to on-site disposal area designated by General Contractor.
- C. Fill excavations for trees and shrubs with water and allow water to percolate out prior to planting.

3.5 PLANTING TREES, SHRUBS AND OTHER PLANTS

- A. Set balled and burlapped (B&B) stock on layer of compacted planting soil mixture, plumb and in center of pit or trench with top of ball at same elevation as adjacent finished landscape grades. Adjust orientation of all plants for best visual effect, as directed by Owner. Apply commercial fertilizer at rates specified and thoroughly mix into remaining backfill.
- B. After completing adjustments, place planting soil backfill around base and sides of rootball in layers with a maximum thickness of 8 inches, working each layer to settle backfill and eliminate voids and air pockets. Prior to backfilling: cut and remove the upper 18 inches of wire away from rootballs encased in wire baskets, and for B & B rootballs, cut tying material and burlap away from each tree and shrub when backfilling is approximately 2/3 complete. Remove all tying material from around tree trunks and upper portions of rootball for shrubs, regardless of type of rootball containment. Water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill.
- C. Set container grown stock, as specified, for balled burlapped stock, except cut cans on 2 sides with an approved can cutter; remove bottoms of wooden boxes after partial backfilling so as not to damage rootballs.
- D. Dish top of backfill to allow for mulching.
- E. Place pre-emergent herbicide per manufacturer's recommendations
- F. Mulch pits, trenches, and planted areas. Provide not less than thickness of mulch as indicated on the plans.
- G. Prune, thin out, and shape trees and shrubs in accordance with standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise directed by Owner, do not cut tree leaders, and remove only injured or dead branches from flowering trees, if any. Prune shrubs to retain natural character.

- H. Improperly or excessively pruned stock, as determined by the Owner, shall be removed immediately from the job site or replaced at the Contractor's expense.
- I. Wrap trees as indicated on the plans.
- J. Guy and stake trees as indicated on the plans.

3.6 MISCELLANEOUS LANDSCAPE WORK

- A. Install steel edging where indicated.

3.7 MAINTENANCE AND ESTABLISHMENT PERIOD (MEP)

- A. Begin maintenance and establishment immediately after planting.
- B. Maintain trees, shrubs, and other plants until project completion, but in no case, less than following period:
 - 1. 1 year after Project completion.
- C. Maintain trees, shrubs, and other plants by pruning, cultivating, and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease. Replenish mulch to the required depth.
- D. Maintain lawns for 60 days after installing sod which includes watering and mowing.
- E. Ensure sod receives 1 inch of water/week during maintenance & establishment period. Ensure continuous, consistent adequate moisture levels during maintenance & establishment period, which could include multiple waterings/day.
- F. Replace dead plant material during the MEP.

3.8 CLEANUP AND PROTECTION

- A. During landscape work, keep pavements clean and work area in an orderly condition. Protect existing pavement and site features to prevent equipment tire marks, grease and oil spills, and breakage.
- B. Protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance and establishment periods. Treat, repair, or replace damaged landscape work as directed.

3.9 INSPECTION AND ACCEPTANCE

- A. When landscape work is completed, including maintenance, the Owner will perform an inspection to determine acceptance of final completion.
- B. When inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until re-inspected by Owner and found to be acceptable. Remove rejected plants and materials promptly from project site.
- C. Final Acceptance shall require a signed Landscape Final Completion document available from the Construction Coordinator. The document shall be signed by the Contractor and the Owner and shall establish start and end dates for the one-year warranty.
- D. Final Acceptance shall require all landscape punch list items to be completed.
- E. Upon acceptance, the Owner will assume maintenance of the landscaping.

END OF SECTION

SECTION 32 93 00 TURF ESTABLISHMENT

PART 1 - GENERAL

1.1 INDEX

- 1.1 Index
- 1.2 Specifications Which Apply
- 1.3 Definitions
- 2.0 Products
- 3.0 Execution
- 4.0 Measurement and Payment

1.2 SPECIFICATIONS WHICH APPLY

- A. Division II: Construction Details and Division III: Materials from the 2025 edition of the Minnesota Department of Transportation's (MnDOT) *Standard Specifications for Construction* and any current supplemental specifications shall apply to sitework on this project except as modified herein.
- B. All work for topsoil placement shall be performed in accordance with MnDOT Standard Specification 2574 - "Soil Preparation" except as modified and/or supplemented herein.
- C. All work for Erosion and Sedimentation Control shall be performed in accordance with MnDOT Standard Specification 2575 - "Establishing Vegetation and Controlling Erosion," except as modified and/or supplemented herein.
- D. All work for seed placement shall be performed in accordance with MnDOT Standard Specification 2575 - "Establishing Vegetation and Controlling Erosion" except as modified and/or supplemented herein.

1.3 DEFINITIONS

- A. All reference to the Commissioner, MnDOT, the State, or the Engineer shall be construed to refer to the City, or its authorized representative.
- B. All reference to Right of Way shall be construed to refer to the project limits shown on the drawings.
- C. Turf Establishment by the lump sum is for establishing permanent vegetation on small areas of less than 2 ½ acres or less per Contract. Such work shall include soil preparation, fertilizer, sod, or mulch, rolled erosion prevention products, seed repair of erosion rills of 3 inches or greater in width or depth.

PART 2 - PRODUCTS

2.1 FERTILIZER

- A. Type 4 Natural-Based Fertilizer In accordance with MnDOT 3881.2B.4

2.2 SEED TYPE

- A. RESILIENCE II Turf Type Tall Fescue Bland available from Twin City Seed Co. (or approved equal)

PART 3 - EXECUTION

- 3.1 After excavating material, the ground shall be scarified and broken up with approved equipment to a minimum depth of 3 inches.

3.2 SEEDING:

- A. Planting depth: 1/8 inch to 1/4 inch
- B. Seeding Rate: 425 pounds per acre
- C. Placement: Seed per MnDOT Method 2 Hydroseed and per Type 6 Hydraulic Soil Stabilizer.

3.3 FERTILIZING:

- A. One (1) pound phosphorus per 1,000 s.f.
- B. Add to soil before seed bed preparation and till in within 24 hours. Seed no more than 48 hours after fertilizing.

3.4 VEGETATION ERADICATION AND SOIL PREPARATION OF EXISTING VEGETATED AREA:

- A. Spray glyphosate or other approved vegetation killer over existing grass intended to be removed. add a surfactant to aid in leaf absorption. after 7-10 days inspect area for any missed spots. spray missed areas. An applicator's license is required to complete the work.
- B. After one more week, rototill area to minimum 4" depth.
- C. After rototilling, harley rake area and remove any clumps of root mass or dead grass in preparation for seeding.
- D. Hand rake area to avoid low spots. Grade as directed by engineer.

END OF SECTION



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Job #: 25-011 Dilworth Community Center
333 16th Street N.E.
Dilworth, Minnesota 56529

Specifications Included In Dilworth Community Center Landscaping/Irrigation Bid Group II, Dilworth, MN

Number	Description	Revision	Issued Date	Received Date	Set
00 - Procurement and Contracting Requirements					
00 0000.1	Cover BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 0105.1	Certifications Page BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 0110.1	Table of Contents BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 0150.1	Bid Packages Scope of Work (SOW) BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 1100.1	Advertisement for Bids BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 2100.1	Information to Bidders BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 2110	MN Responsible Contractor Verification	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 4100.1	Bid Form BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 4200	Bid Bond	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 4325	Substitution Request Form - During Procurement	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 5200	Agreement Form	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 6100	Performance and Payment Bond	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 7200	General Conditions	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
00 7300	Supplementary Conditions	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 - General Requirements					
01 2000	Price and Payment Procedures	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 2010	Change Order Procedures	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 2100.1	Allowances BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 2200.1	Unit Prices BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 2300.1	Alternates BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 3000	Administrative Requirements	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 3030	Worksite Safety	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 3216.1	Construction Progress Schedule BGII	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 4000	Quality Requirements	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 4216	Definitions	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 5000	Temporary Facilities and Controls	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 5713	Temporary Erosion and Sediment Control	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 6000	Product Requirements	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 7000	Execution and Closeout Requirements	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
01 7800	Closeout Submittals	1	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
31 - Earthwork					
31 22 00	Site Grading	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
31 23 24	Site Fill	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
32 - Exterior Improvements					
32 33 15	Site Furnishings	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
32 80 00	Irrigation	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
32 91 13	Soil Preparation	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26



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Number	Description	Revision	Issued Date	Received Date	Set
32 93 00	Landscape Planting	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26
32 93 10	Turf Establishment	0	08/20/2026	08/20/2026	Bid Set BGII 08/07/26