

MOUNT ROYAL LIBRARY EXPANSION

105 Mount Royal Shopping Circle – Duluth, MN 55803

March 7th, 2016

Project #: 16-G-TR

Bid #: 16-0266

Bid Opening Date: March 22nd, 2016 @ 2:00 PM CST



City of Duluth

Property and Facilities Management

1532 W Michigan Street

Duluth, MN 55806

(218) 730-4434



11 East Superior Street, Suite 340
Duluth, MN 55802
218.724.8578
tkda.com

DULUTH, MINNESOTA

February 25, 2016

City of Duluth, MN
Mount Royal Branch Library
Interior Remodel
Duluth, MN

CERTIFICATIONS

I hereby certify that Divisions 07 through 09, of these Specifications were prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.


Benjamin M. Olson, AIA
License No. 51239

END OF DOCUMENT

TABLE OF CONTENTS

COVER SHEET
CERTIFICATION PAGE
TABLE OF CONTENTS

BIDDING REQUIREMENTS

INVITATION TO BID
INSTRUCTIONS TO BIDDERS
CONTRACTOR'S BID FORM
RESPONSIBLE CONTRACTOR VERIFICATION
AFFIDAVIT OF NON-COLLUSION
EEO COMPLIANCE & AFFIRMATIVE ACTION

CONDITIONS OF CONTRACT

DRAFT CONSTRUCTION CONTRACT
GENERAL CONDITIONS
PREVAILING WAGE RATES
PROJECT LABOR AGREEMENT

TECHNICAL SPECIFICATIONS

SECTION NO. TITLE

SECTION 07 92 00 – SEALANTS
SECTION 08 11 13 – HOLLOW METAL FRAMES
SECTION 08 14 00 – WOOD DOORS
SECTION 08 80 00 – GLASS AND GLAZING
SECTION 09 26 00 – GYPSUM WALLBOARD AND METAL STUD PARTITION SYSTEM
SECTION 09 30 00 – QUARRY TILE WORK
SECTION 09 51 00 – ACOUSTICAL CEILINGS
SECTION 09 65 00 – RESILIENT BASE
SECTION 09 68 13 – CARPET TILE
SECTION 09 91 00 – PAINTING

DRAWINGS



CITY OF DULUTH INVITATION TO BID

PROJECT NAME/DESCRIPTION: Mount Royal Library Expansion

BID NUMBER: 16-0266

BID OPENING: March 22nd, 2016 AT 2:00 PM

PROJECT DESCRIPTION: Expand the library into the vacated lease area immediately adjacent to the current library space, with a remodel to the reception desk, and new carpeting throughout the library.

PRE-BID/WALK-THROUGH: A **mandatory** pre-bid walk-through will be conducted on March 15th, 2016 at 2pm at Mount Royal Library, 105 Mount Royal Shopping Circle, Duluth, MN 55803. All interested bidders must attend.

QUESTIONS: Please submit any questions regarding this project via e-mail to purchasing@duluthmn.gov. Responses will be provided to all interested bidders as an addendum to this solicitation.

The selected contractor will be issued a construction contract (draft attached). Notice to Proceed will be issued once the agreement is fully executed.

Please note that the City of Duluth Supplemental Conditions apply to this project and will be included in the contract. This document can be found online at <http://www.duluthgov.info/engineering/documents/SupplementalGenConditions4-15-11.pdf> . Hard copies may be made available upon request.

Proposal forms, contract documents, plans and specifications are on file at the following offices: Duluth Builder's Exchange, Minnesota Builder's Exchange, BXWI-Fox Valley Plan Room, Blue Book Building and Construction Network, and Meda Construction Connection.

INSTRUCTIONS TO BIDDERS

All bids must be complete, signed, and transmitted in a sealed envelope plainly marked with the bid number, subject matter, and opening date. The City of Duluth reserves the right to split the award where there is a substantial savings to the City, to waive informalities and to reject any and all bids. Bidder must state in their proposal if bid price is based on acceptance of the total order. Do not include sales tax in the unit price. Price may not be the only consideration for bid award. Bids must be firm for a minimum of 60 days.

Bids must be received in Purchasing before 2:00 PM local time on the bid opening date specified on the Invitation for Bids. The City Purchasing Agent or her designee will conduct a public bid opening in Room 100 immediately following receipt of the bids.

No alternatives to the specification will be considered unless specifically requested. Erasures or other changes to the bid must be initialed and dated.

The following documents must be submitted with your bid:

1. **Bid Bond** - A certified check or bank draft, payable to the order of the City of Duluth, negotiable U.S. Government Bonds (at par value), or a satisfactory bid bond executed by the bidder and acceptable surety, in an amount equal to five per cent (5%) of the total bid. Bids may be withdrawn without forfeiture of surety if the request is submitted by the Bidder and received at the Purchasing Office in writing or by telephone prior to the scheduled bid opening.
2. **Acknowledgment of Addendum** (if applicable) – any changes to this solicitation will be announced via Addendum. A signature on the Bid Form acknowledging the Addendum(s) must be submitted with your bid.
3. **Responsible Contractor** - No construction contract in excess of \$50,000 will be awarded unless the Bidder is a "responsible contractor" as defined in Minnesota Statute §16C.285, subdivision 3. All Bidders submitting a proposal for this project must verify that they meet the minimum criteria specified in the statute by submitting a Responsible Contractor Verification and Certification of Compliance form (attached). The owner or officer of the company must sign the form under oath verifying compliance with each of the minimum criteria. Making a false statement under oath will render the Bidder or subcontractor that makes the false statement ineligible to be awarded a construction project and may result in termination of a contract awarded to a Bidder or subcontractor that submits a false statement. Bidders must obtain verification of compliance from all subcontractors. Bidders must submit signed copies of verifications and certifications of compliance from subcontractors at the City's request.

Please note that the following requirements also apply to this project, and any additional required documents must be submitted prior to award/contract execution. Submitting these documents with your bid will assist in expediting the process.

1. **Insurance** – Contractor must provide proof of Public Liability and Automobile Liability Insurance with limits not less than \$1,500,000 Single Limit prior to the commencement of work. The City of Duluth must be named as an additional insured. Please refer to the draft Contract, Section 7.
2. **Affidavit of Non-Collusion** – The successful bidder shall be required to execute the attached affidavit stating that he/she has not entered into a collusive agreement with any other person, firm, or corporation in regard to any bid submitted.
3. **Performance & Payment Bonds** – The awarded contractor will be required to submit performance and payments bonds in the full amount of the project cost prior to award.
4. **Affirmative Action/EEO** - The contractor must take affirmative action to ensure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin, and must meet the affirmative action goals. Contractors are encouraged to subcontract with Disadvantaged Business Enterprises (DBEs) when possible. A current list of certified DBEs is available on the Minnesota Unified Certification website at <http://mnucp.metc.state.mn.us> . Contractor will comply with all applicable Equal Employment Opportunity laws and regulations. Awarded contractor will

submit the attached Equal Employment Opportunity (EEO) Affirmative Action Policy Statement & Compliance Certificate.

5. **Project Labor Agreement (PLA)** - A PLA will be required for any bid that is over or could virtually go over \$150,000. A copy of the City standard PLA is included in this package.

6. **Out of State Contractor** - Unless a State of Minnesota Certificate of Exemption is provided, any out-of-state bidder receiving a bid award will have 8% retained from invoice payments on any contracts over \$50,000. Submit a signed copy of the signed exemption form when submitting Payment and Performance Bonds. This form may be found at the following web address: http://www.revenue.state.mn.us/Forms_and_Instructions/sde.pdf

7. **Prevailing Wage** - Not less than the minimum salaries and prevailing wages as set forth in the contract documents must be paid on this project.

The City of Duluth is an Equal Opportunity Employer. Contractor shall comply with all applicable Equal Employment Opportunity laws and regulations.

CITY OF DULUTH

Andrew Field	Amanda Ashbach
Financial Analyst	Purchasing Agent

16-0266 Bid Form

Mount Royal Library Expansion including design and build
service for the mechanical and electrical items \$

Bid amount written out:

Acknowledgment of Addendum

Addendum 1:

Addendum 2:

Addendum 3:

Addendum 4:

Name and Title:

Vendor Name:

Address:

Phone Number:

Email:

Signature:

**ATTACHMENT A
PRIME CONTRACTOR RESPONSE**

RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANCE

STATE PROJECT NUMBER: _____

This form includes changes by statutory references from the Laws of Minnesota 2015, chapter 64, sections 1-9. This form must be submitted with the response to this solicitation. A response received without this form, will be rejected.

<p>Minn. Stat. § 16C.285, Subd. 7. IMPLEMENTATION. ... any prime contractor or subcontractor or motor carrier that does not meet the minimum criteria in subdivision 3 or fails to verify that 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...</p>	
<p>Minn. Stat. § 16C.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:</p>	
(1)	<p>The Contractor:</p> <ul style="list-style-type: none">(i) is in compliance with workers' compensation and unemployment insurance requirements;(ii) is in compliance with Department of Revenue and Department of Employment and Economic Development registration requirements if it has employees;(iii) has a valid federal tax identification number or a valid Social Security number if an individual; and(iv) has filed a certificate of authority to transact business in Minnesota with the Secretary of State if a foreign corporation or cooperative.
(2)	<p>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:</p> <ul style="list-style-type: none">(i) 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, provided that a failure to pay is "repeated" only if it involves two or more separate and distinct occurrences of underpayment during the three-year period;(ii) has been issued an order to comply by the commissioner of Labor and Industry that has become final;(iii) 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;(iv) 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;(v) 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(vi) 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;*
	* Any violations, suspensions, revocations, or sanctions, as defined in clauses (2) to (5), occurring prior to July 1, 2014, shall not be considered in determining whether a contractor or related entity meets the minimum criteria.
(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 that have authority to debar a contractor; and
(7)	All subcontractors and motor carriers 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. § 16C.285, Subd. 5. SUBCONTRACTOR VERIFICATION.	
<p>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. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.</p> <p>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.</p> <p>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.</p> <p>Subd. 5a. Motor carrier verification. A prime contractor or subcontractor shall obtain annually from all motor carriers with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each motor carrier. A prime contractor or subcontractor shall require each such motor carrier to provide it with immediate written notification in the event that the motor carrier no longer meets one or more of the minimum criteria in subdivision 3 after submitting its annual verification. A motor carrier shall be ineligible to perform work on a project covered by this section if it does not meet all the minimum criteria in subdivision 3. Upon request, a prime contractor or subcontractor shall submit to the contracting authority the signed verifications of compliance from all motor carriers providing for-hire transportation of materials, equipment, or supplies for a project.</p>	

Minn. Stat. § 16C.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, with the exception of clause (7), at the time that it responds to the solicitation document.

A contracting authority may accept a signed statement under oath 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. A prime contractor, subcontractor, or motor carrier that fails to verify compliance with any one of the required minimum criteria or makes a false statement under oath in a verification of compliance shall be 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 or motor carrier 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 failed to verify compliance with the minimum criteria or falsely stated that it meets the minimum criteria. A verification of compliance need not be notarized. An electronic verification of compliance made and submitted as part of an electronic bid shall be an acceptable verification of compliance under this section provided that it contains an electronic signature as defined in section 325L.02, paragraph (h).

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. § 16C.285, and**
- 2) if my company is awarded a contract, I will submit Attachment A-1 prior to contract execution, 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:

NOTE: Minn. Stat. § 16C.285, Subd. 2, (c) If only one prime contractor responds to a solicitation document, a contracting authority may award a construction contract to the responding prime contractor even if the minimum criteria in subdivision 3 are not met.

ATTACHMENT A-1

FIRST-TIER SUBCONTRACTORS LIST

SUBMIT PRIOR TO EXECUTION OF A CONSTRUCTION CONTRACT

STATE PROJECT NUMBER: _____

Minn. Stat. § 16C.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. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

FIRST TIER SUBCONTRACTOR NAMES* (Legal name of company as registered with the Secretary of State)	Name of city where company home office is located

*Attach additional sheets as needed for submission of all first-tier subcontractors.

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-1	
By signing this document I certify that I am an owner or officer of the company, and I swear under oath that: All first-tier subcontractors listed on attachment A-1 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. § 16C.285.	
Authorized Signature of Owner or Officer:	Printed Name:
Title:	Date:
Company Name:	

ATTACHMENT A-2

ADDITIONAL SUBCONTRACTORS LIST

PRIME CONTRACTOR TO SUBMIT AS SUBCONTRACTORS ARE ADDED TO THE PROJECT

STATE PROJECT NUMBER: _____

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

Minn. Stat. § 16C.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

*Attach additional sheets as needed for submission of all additional subcontractors.

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. § 16C.285.	
Authorized Signature of Owner or Officer:	Printed Name:
Title:	Date:
Company Name:	

AFFIDAVIT AND INFORMATION REQUIRED OF BIDDERS

Affidavit of Non-Collusion:

I hereby swear (or affirm) under penalty of perjury:

- 1) That I am the bidder (if the bidder is an individual), a partner in the bidder (if the bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the bidder is a corporation);
- 2) That the attached bid or bids have been arrived at by the bidder independently and have been submitted without collusion with and without agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment or services described in the invitation to bid, designed to limit independent bidding or competition;
- 3) That the contents of the bid or bids have not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid or bids and will not be communicated to any such person prior to the official opening of the bid or bids;
- 4) That a family relationship between a City of Duluth employee and bidder/proposer are in non-collusion; and
- 5) That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Signed: _____

Firm Name: _____

Subscribed and sworn to me before this _____ day of _____, _____

NOTARY PUBLIC _____

My commission expires: _____

Bidder's Federal Identification Number _____

**EQUAL EMPLOYMENT OPPORTUNITY EEO AFFIRMATIVE ACTION
POLICY STATEMENT & COMPLIANCE CERTIFICATE**

TO: City of Duluth, MN PROJECT NUMBER & DESCRIPTION _____

FROM: _____

(Vendor's name, address, telephone number)

A) Employment: It is the policy of the above named FIRM to afford equal opportunity for employment to all individuals regardless of race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance and/or disability. The FIRM will take affirmative action to ensure that we will: (1) recruit, hire, and promote all job classifications without regard to race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability, except where sex is a bona fide occupational qualification; (2) base decisions on employment so as to further the principle of equal employment opportunity; (3) ensure that promotion decisions are in accord with the principles of equal employment opportunity by imposing only valid requirements for promotional opportunities; (4) ensure that all personnel actions such as compensation, benefits, transfers, layoffs, return from layoff, FIRM sponsored training, education tuition assistance, social and recreational programs will be administered without regard to race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability. The FIRM also intends full compliance with Veteran affirmative action requirements. Additionally, minority and female employees shall be encouraged to participate in all FIRM activities and refer applicants.

I have designated (name) _____ to direct the establishment of and to monitor the implementation of personnel procedures to guide the FIRM's affirmative action program. Where PROJECTS exceed \$500,000, this official shall also serve as the liaison officer that administers the FIRM's "Minority Business Enterprise Program." This official is charged with designing and implementing audit and reporting systems that will keep management informed on a monthly basis of the status of the equal opportunity area.

Supervisors have been made to understand that their work performance is being evaluated on the basis of their equal opportunity efforts and results, as well as other criteria. It shall be the responsibility of the FIRM and its supervisors to take actions to prevent harassment of employees placed through affirmative action efforts.

B) Reports: Unless exempted by law and regulation, the FIRM shall make available and file those reports related to equal opportunity as may be required by the City of Duluth and State and Federal compliance agencies. Requirements and Reports are defined in 41CFR60 "Compliance Responsibility for Equal Opportunity" published by the U. S. Department of Labor which is incorporated herein by reference. Additional requirements are defined in various State and Federal Civil Rights Legislation and Rules promulgated thereunder.

C) Nonsegregated Facilities: The FIRM certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The FIRM certifies that it will not maintain or provide for its employees any segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The FIRM agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this certificate. As used in this Certification, the term "segregated

facilities" means any waiting rooms, work area, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation for entertainment area, transportation, and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise.

- D) Affirmative Action Compliance Program:** Unless exempted by regulation and law, the FIRM—if the FIRM has 50 or more employees and if the value of current contracts with the City of Duluth exceeds \$50,000—shall prepare and maintain a written affirmative action compliance program that meets the requirement as set forth in 41CFR60.
- E) Non-Compliance:** The FIRM certifies that it is not currently in receipt of any outstanding letters of deficiencies, show cause, probable cause, or other such notification of non-compliance with EEO Laws and Regulations.
- F) Employment Goals - "Construction" Projects:** It shall be the goal of the FIRM if the PROJECT is of a construction nature that in all on-site employment generated that no less than 3% of the on-site workforce will be minority employees and that no less than 7% of the on-site workforce will be female employees. Further, it is the goal of the FIRM if the PROJECT is of a construction nature that in all on-site employment generated that no less than 3% of the work hours generated shall be worked by minority employees and that no less than 7% of the work hours generated shall be worked by female employees.
- G) Subcontractors:** The FIRM will for all its PROJECT subcontractors regardless of tier (unless exempted by law and regulation) that received in excess of \$2,500 require that: (1) the subcontractor shall execute an "EEO Statement and Certification" similar in nature to this "Statement and Certification", (2) said documentation to be maintained on file with the FIRM or subcontractor as may be appropriate.

Executed this _____ day of _____, 20__ by:

Printed name and title

Signature

NOTE: In addition to the various remedies prescribed for violation of Equal Opportunity Laws, the penalty for false statements is prescribed in 18 U.S.C. 1001.

CONTRACTOR & CITY OF DULUTH

THIS AGREEMENT, effective as of the date of attestation by the City Clerk, is made by and between the **CITY OF DULUTH**, a municipal corporation, hereinafter referred to as the "CITY," party of the first part, and **Contractor, address**, hereinafter referred to as the "Contractor," party of the second part;

WITNESSETH: That the Contractor and the City agree as follows:

1. The following shall be deemed to be part of this contract:
 - a. The annexed resolution and legal advertisement of the City Council.
 - b. The bid request and specifications, as modified by irreconcilable language in this written contract.
 - c. The bid by Contractor, as modified by irreconcilable language in this written contract.
 - d. The performance bond and payment bond certification.
 - e. All provisions of law applicable to a contract of this nature.
2. The Contractor agrees to furnish and deliver to the **Department** all labor, supervision, material, equipment, supplies, insurance, performance bond, payment bond and everything else necessary for general construction of **Project** at **location**, all in strict accordance with plans and specifications prepared by **design co. or city architect**, your bid of \$ and **resolution no. passed on date**. Contractor shall not commence performance of any work under this contract until Contractor receives authorization from the City's Purchasing Agent in writing and dated.
3. The City agrees to pay progress payments and make final payments to the Contractor as stated in the contract specifications. The total amount payable under this contract shall not exceed **dollar amount spelled out (\$)** unless the contract is modified by formal amendment or change order. Payments under this Agreement shall be made from the following accounts **funding** and **RQ no.**
4. The Contractor shall furnish and maintain in full force and effect until this contract is completely performed by the Contractor, a performance bond and payment bond if and when required by law, or if and when required by the City.
5. Inasmuch as this contract concerns work, materials and equipment needed for the public benefit, the provisions of this contract relating to the time of performance and completion of work and delivery of materials or equipment are of the essence of this contract.
6. The Contractor will defend, indemnify and save the City harmless from all costs, charges, damages, and loss of any kind that may grow out of the matters covered by this contract. Said obligation does not include indemnification of the City for claims of liability arising

out of the sole negligent or intentional acts or omissions of City but shall include but not be limited to the obligation to defend, indemnify and save harmless the City in all cases where claims of liability against the City arise out of acts or omissions of City which are derivative of the negligence or intentional acts or omissions of Contractor such as, and including but not limited to, the failure to supervise, the failure to warn, the failure to prevent such act or omission by Contractor and any other such source of liability. In addition Contractor will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and things to be supplied hereunder.

7. Insurance

a. Contractor shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Contractor and City from all liability described in Paragraph 6 above, subject to provisions below.

- (1) Workers' compensation insurance in accordance with the laws of the State of Minnesota.
- (2) Public Liability and Automobile Liability Insurance with limits not less than **\$1,500,000** Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.
- (3) City of Duluth shall be named as **Additional Insured** under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming itself and the City of Duluth. Contractor shall also provide evidence of Statutory Minnesota Workers Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-days notice of cancellation, non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.

**An umbrella policy with a "following form" provision is acceptable if written verification is provided that the underlying policy names the City of Duluth as an additional insured.*

- (4) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.

- (5) The use of an “ACORD” form as a certificate of insurance shall be accompanied by two forms – 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney’s Office.
- b. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Contractor, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.
- c. Certificates showing that Contractor is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Contract.
- d. Contractor shall be required to provide insurance meeting the requirements of this Paragraph 7 unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Contractor demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City Attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the City which is reasonably available.
8. No claim whatsoever shall be made by the Contractor against any officer, agent or employee of the City for, or on account of, anything done, or omitted to be done, in connection with this contract. If this contract is not made in conformity with mandatory provisions of any statute or of the ordinances and charter of the City of Duluth, the Contractor agrees to raise no defense and make no claim against the City on the basis of ratification, laches, estoppel, or implied contract.
9. The Contractor shall not assign, transfer, convey or otherwise dispose of this contract, or his right to execute it, or his right, title or interest in or to it, or any part thereof, without the consent of the City, evidenced by a resolution duly adopted by the City Council. The prohibition contained in this paragraph shall not be deemed to prevent the contractor from subcontracting. Contractor shall remain primarily responsible for all work performed by any subcontractor.
10. The Contractor agrees that in the hiring of common or skilled labor for the performance of any work under this contract, Contractor will not discriminate by reason of race, creed or color, religion, national origin, sex, marital status, status with regard to public assistance, disability or age.
11. The Contractor agrees that Contractor shall not in any manner discriminate against or intimidate or prevent the employment of any person or persons, or on being hired, prevent or conspire to prevent any person or persons from the performance or work under this contract on account of race, creed or color, religion, national origin, sex, marital status, status with regard to public assistance, disability or age.

12. The contractor agrees that, as provided in Minnesota Statutes 16C.05, Subd. 5, contractor's books, records, documents, and accounting procedures and practices are subject to examination by the City or the state auditor for six years from the date of final payment under this contract.
13. This contract may be cancelled or terminated by the City and all moneys due or to become due hereunder may be forfeited for any failure to perform any terms or conditions of this contract including but not limited to any violation of the terms or conditions of Section 10 or 11 of this contract.
14. Any waiver by any party of any provision of this contract shall not imply a subsequent waiver of that or any other provision.
15. This contract is made in the state of Minnesota and shall be construed and interpreted in accordance with the laws of the State of Minnesota. The appropriate venue and jurisdiction for any litigation hereunder shall be in a court located in St. Louis, County, Minnesota, and the parties to this Agreement waive objection to the jurisdiction of this court, whether based on convenience or otherwise.
16. This Agreement constitutes the entire agreement between the City and the Contractor on the subject matter hereof. It may not be changed, modified, discharged or extended except by written instrument duly executed on behalf of the City and the Contractor. The Contractor agrees that no representations or warranties made by the City shall be binding upon the City unless expressed in writing herein.
17. This Agreement shall not be in force and effect, or in any way binding upon the City until the same shall have been approved by the Department Head, signed by the Mayor, attested by the Clerk, and countersigned by the City Auditor.
18. The Contractor unconditionally guarantees to perform all work pursuant to this contract in a good and workmanlike manner, in strict compliance with the specifications and instructions hereto attached, and to the satisfaction of the City of Duluth.
19. This Agreement may be executed in counterparts, each of which shall be deemed to be original and all of which together shall constitute the binding and enforceable agreement of the parties hereto. This Agreement may be executed and delivered by a party by facsimile or PDF transmission, which transmission copy shall be considered an original and shall be binding and enforceable against such party.

Countersigned:

CITY OF DULUTH-Client

By

City Auditor
Approved this _____ day of _____

Mayor

Attest:

Department Director
Approved this _____ day of _____

City Clerk
Attested this _____ day of _____

Purchasing Agent
Approved this _____ day of _____

Contractor
Consultant (Service Provider)

By

Assistant City Attorney
Approved this _____ day of _____

Company Representative

Its

Title of Representative
Approved this _____ day of _____

GENERAL CONDITIONS 4-15-11

PART I

101. DEFINITIONS

Wherever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

- a. The term "Contract" means the Contract executed by the City of Duluth in its capacity as agent for the City of Duluth and the Contractor, of which these GENERAL CONDITIONS form a part.
- b. The term "City" means the City of Duluth, Minnesota, which is authorized to undertake this Contract and within which the Project Area is situated or any employee of the City of Duluth designated by the City of Duluth for the purpose of inspecting, directing, or having in charge the work embraced in this Contract.
- c. The term "Contractor" means the person, firm, or corporation entering into the Contract with the City to construct and install the Improvements embraced in this Contract.
- d. The term "Project Area" means site within which is specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this Contract.
- e. The term "Architect" means the architect or engineer licensed to practice architecture or engineering and serving the City with architectural or engineering services, or his authorized representative or successor.
- f. The term "Change Order" means a written order to the Contractor, signed by the City, issued after execution of the Contract, authorizing and directing a change in the Work or an adjustment in the contract sum or the contract time. The contract sum and the contract time may be changed only by Change Order.
- g. The term "Contract Documents" means and shall include the following: Executed Agreement, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, Technical Specifications, and Drawings (as listed in the Schedule of Drawings), and all requested submittals such as Certificate of Insurance, performance and payment bonds, EEO Affirmative Action Policy Statement & Compliance Certificate, Certificate of Non-Collusion.
- h. The term "Drawings" means the drawings listed in the Schedule of Drawings.
- i. The term "Field Order" means a written interpretation necessary for the proper execution of the Work, in the form of drawings or otherwise issued to the Contractor by the City or the Architect.
- j. The term "Technical Specifications" means that part of the Contract Documents which describes, outlines and stipulates the quality of the materials to be furnished, the quality of workmanship required, and the methods to be used in carrying out the construction work to be performed under this Contract.
- k. The term "Addenda" or "Addendum" means any changes, revisions or clarifications of the Contract Documents which have been duly issued by the City to prospective Bidders prior to time of receiving Bids.
- l. The term "Work" means all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated in such construction.

102. SUPERINTENDENCE BY CONTRACTOR

- a. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the City and the Architect, on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.
- b. The Contractor shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

103. SUBCONTRACTS

- a. The Contractor shall not execute an agreement with any subcontractor, or permit any subcontractor to perform any work included in this contract until he has submitted a noncollusion affidavit from the subcontractor in substantially the form attached and has received written approval of such subcontractor from the City.
- b. No proposed subcontractor shall be disapproved by the City except for cause.
- c. The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- d. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of this Contract.
- e. Nothing contained in this Contract shall create any contractual relationship between the subcontractor and the City.

104. OTHER CONTRACTS

The City may award, or may have awarded, other contracts for additional work, and the Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the City. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor as scheduled.

105. FITTING AND COORDINATION OF THE WORK

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or materialmen engaged upon this Contract. He shall be prepared to guarantee to each of his subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work.

106. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts or neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the City on account of damage alleged to have been so sustained, the City shall notify this Contractor, who shall defend at his own expense any suit based upon such claim, and, if any judgment or claims against the City shall be allowed, the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith.

107. PROGRESS SCHEDULE

The Contractor shall submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and of completing each of the various sections of the work, the anticipated monthly payments to become due the Contractor and the accumulated percent of progress each month.

108. PAYMENTS

1) Partial Payments.

- a. The Contractor shall prepare his requisition of partial payment as of the last day of the month and submit it, with the required number of copies, to the City contracting officer for his approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) five percent (5%) of the total amount, this sum to be retained until final payment and (2) the amount of all previous payments. The total value of the work completed to date shall be based on the estimated quantities of work completed and on the unit prices

contained in the agreement. The value of materials properly stored on site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for the inspection of the Architect and the City.

b. Monthly or partial payments made by the City to the Contractor are moneys advanced for the purpose of assisting the Contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the City. Such payments shall not constitute a waiver of the right of the City to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the City in all details.

2) Final Payment.

a. After final inspection and acceptance by the Architect and the City of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the carefully measured and computed quantity of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments. Final payment to the Contractor shall be made subject to his furnishing the City with a release in satisfactory form of all claims against the City arising under and by virtue of his contract, other than such claims, if any, as may be specifically excepted by the Contractor from the operation of the release as provided under Section 113 hereof.

b. The City, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the City deems the same necessary in order to protect its interest. The City, however, may if it deems such action advisable make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in no way impair the obligations of any surety or sureties furnished under this Contract.

c. Withholding of any amount due the City under Section 403, entitled "Liquidated Damages," under SPECIAL CONDITIONS, shall be deducted from the final payment due the Contractor.

3) Withholding Payments

The City may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the City and, if it so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the City and will not require the City to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the City elects to do so. The failure or refusal of the City to withhold any moneys from the Contractor shall in no wise impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

4) Payments Subject to Submission of Certificates.

Each payment to the Contractor by the City shall be made subject to submissions by the Contractor of all written certifications required of him and his subcontractors by Section II, Part II Supplementary General Conditions for Federally, State of Minnesota, and/or City Assisted Activities.

109. CHANGES IN THE WORK

a. The City may make changes in the scope of work required to be performed by the Contractor under the Contract by making additions thereto, or by omitting work therefrom, without invalidating the Contract, and without relieving the Contractor from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without

relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless is expressly provided otherwise.

b. Except for the purpose of affording protection against any emergency endangering health, life, or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the Improvements or supply additional labor, services, or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the City authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.

c. If applicable unit prices are contained in the Agreement (established as a result of either a unit price bid or a Supplement Schedule of Unit Prices), the City shall order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit prices specified in the Contract; provided that, in case of a unit price contract the net value of all changes does not increase or decrease the original total amount shown in the Agreement by more than twenty-five percent (25%) in accordance with Section entitled Unit Prices, under INSTRUCTIONS TO BIDDERS.

d. If applicable unit prices are not contained in the Agreement or if the total net change increases or decreases the total Contract Price more than twenty-five (25%), the City shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from him covering the work involved in the change after which the procedure shall be as follows:

(1) If the proposal is acceptable, the City will prepare the change order in accordance therewith for acceptance by the Contractor.

(2) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the City may order the Contractor to proceed with the work on a cost-plus limited basis; provided that this basis shall not apply to costs incurred by Contractor for any work done by any subcontractor, which work may proceed under the basis set forth in sub-subparagraph (3) below. A cost-plus-limited basis is defined as the net cost of the Contractor's labor, materials, and insurance plus fifteen percent (15%) of said net cost to cover overhead and profit, the total cost not to exceed a specified limit.

(3) If the proposal of the Contractor is not acceptable in whole or part because of the proposals of one or more of the subcontractors and prompt agreement between the two parties cannot be reached, the City may order the Contractor to proceed with the work and reimburse Contractor for work done by any subcontractor on the basis of that subcontractor's net cost of labor, materials, and insurance plus twenty percent (20%) of said net cost to cover overhead and profit, the total cost not to exceed a specified limit. Contractor shall supply all data to City which is necessary to determine any such subcontractor's net costs.

e. Each change order shall include in its final form:

(1) A detailed description of the change in the work.

(2) The Contractor's proposal (if any) of a confirmed copy thereof.

(3) A definite statement as to the resulting change in the Contract price and/or time.

(4) The statement that all work involved in the change shall be performed in accordance with the Contract requirements except as modified by the change order.

110. CLAIMS FOR EXTRA COST

a. If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten (10) days after the receipt of such instructions, and in any event, before proceeding to execute the work, submit his protest thereto in writing to the City, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

b. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.

- c. Any discrepancies which may be discovered between actual conditions and those represented by the documents shall at once be reported to the City and work shall not proceed, except at the Contractor's risk, until written instructions have been received by him from the City.
- d. If, on the basis of the available evidence, the City determines that an adjustment of the Contract Price and/or time is justifiable, the procedure shall then be as provided in Section 109 hereof.

111. TERMINATION, DELAYS, AND LIQUIDATED DAMAGES

a. Termination of Contract.

If the Contractor refuses or fails to execute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified as provided in these Contract Documents, the City, by written notice to the Contractor, may terminate the Contractor's right to proceed with the work. Upon such termination, the City may take over the work and prosecute the same to completion, by contract or otherwise, and the Contractor and his sureties shall be liable to the City for any additional cost incurred by the City in its completion of the work and they shall also be liable to the City for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work such materials, tools, equipment, and plant as may be on the site of the work and necessary therefore.

b. Liquidated Damages for Delays.

If the work is not completed within the time stipulated in Section 7 (Special Conditions) hereof, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the City as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in Section 7 (Special Conditions) hereof and the Contractor and his sureties shall be liable to the City for the amount thereof.

c. Excusable Delays.

The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due: (1) To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;

(2) To any acts of the City;

(3) To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in their performance of some other contract with the City, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones, and other extreme weather conditions; and

(4) To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs (1), (2) and (3) of this paragraph "c". Provided, however, that the Contractor promptly notify the City in writing within ten (10) days the cause of the delay. Upon receipt of such notification, the City shall ascertain the facts and the cause of the delay. If, upon the basis of facts and the terms of the Contract, the delay is properly excusable, the City shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

112. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the City; provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the City. No assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract

in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

113. DISPUTES

a. All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall, within ten (10) days of the first event giving rise to the dispute, be presented by the Contractor to the City for decision. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim together with its character and scope. In the meantime, the Contractor shall proceed with the work as directed by the City. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of the first event giving rise to it, the claim will be considered only for a period commencing ten (10) days prior to the receipt by the City of notice thereof.

b. The Contractor shall submit in detail his claim and his proof thereof. Each decision by the City will be in writing and will be mailed to the Contractor by registered or certified mail, return receipt requested, directed to his last known address or actually delivered to Contractor or its managing agent. All interpretations or decisions of the City shall be consistent with the Contract and its intent.

c. If the Contractor does not agree with any decision of the City, he shall in no case allow the dispute to delay the work but shall notify the City promptly that he is proceeding with the work under protest and he may then accept the matter in question from the final release. If the Contractor does not agree with any decision of the City, he may submit the matter to arbitration no later than thirty (30) days after the date on which the Contractor received the City's decision; provided, however, that the City shall not be required to submit to arbitration without its prior written consent; and if the City does consent to arbitration, then the Contractor shall pay all costs of such arbitration.

114. TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications, shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy on Drawings or Technical Specifications, the matter shall be immediately submitted to the City, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

115. SHOP DRAWINGS

a. All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Architect or the City, as directed by the City, in two copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at his own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the Contract time will be granted by reason of his failure in this respect.

b. Any drawing submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.

c. If a shop drawing with the Contractor involves only a minor adjustment in the interest of the City not involving a change in Contract price or time, the Architect may approve the drawing. The approval shall be

general, shall not relieve the Contractor from his responsibility for adherence to the Contract or for any error in the drawing and shall contain in substance the following: "The modification shown on the attached drawing is approved in the interest of the City to effect an improvement for the Project and is ordered with the understanding that it does not involve any change in the Contract price or time; that it is subject generally to all Contract stipulation and covenants; and that it is without prejudice to any and all rights of the City under the Contract and surety bond or bonds."

116. REQUEST FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the Contractor to make timely requests of the City for any additional information not already in his possession which should be furnished by the City under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted in writing from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two (2) weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the City may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

117. MATERIALS AND WORKMANSHIP

- a. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as an equal to any particular standard, the City shall decide the question of equality.
- b. The Contractor shall furnish to the City for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval as required full information concerning all other materials or articles which he proposes to incorporate in the work. (See Section 118 hereof)
- c. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- d. Materials specified by reference to the number or symbol of a specific standard, such as A.S.T.M. Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in such reference. The Standards referred to, except as modified in the Technical Specifications shall have full force and effect as though printed therein.
- e. The City may require the Contractor to dismiss from the work such employee or employees as the City may deem incompetent, or careless, or insubordinate.

118. SAMPLES, CERTIFICATES AND TESTS

- a. The Contractor shall submit all material or equipment samples, certificates, affidavits, etc. as called for in the Contract Documents or required by the Architect, promptly after award of the Contract and acceptance of the Contractor's Bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the City or the Architect. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time. Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with Contract requirements, shall give the name and brand of the product, its place of origin,

the name and address of the producer and all specifications or other detailed information which will assist the Architect or the City in passing upon the acceptability of the sample promptly. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

b. Approval of any materials shall be general only and shall not constitute a waiver of the City's right to demand full compliance with Contract requirements. After actual deliveries, the City or the Architect will have such check tests made as they deem necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and equipment have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the City or the Architect will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

c. Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:

(1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the City or the Architect; (2) The Contractor shall assume all costs of retesting materials which fail to meet Contract requirements;

(3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient; and

(4) The City will pay for all other testing expenses.

119. CARE OF WORK

a. The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the City.

b. In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the City is authorized to act at his own discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the City. Any compensation claimed by the Contractor on account of such emergency work will be determined by the City as provided in Section 109 hereof.

c. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.

d. The Contractor shall shore up, brace, underpin, secure and protect as may be necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the Improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjacent or adjoining property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the City from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the City may become liable in consequence of such injury or damage to adjoining structures and their premises.

120. ACCIDENT PREVENTION

a. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his fault or negligence in connection with the prosecution of the work. The safety provisions of applicable Federal, State and local laws and ordinances and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the City may determine to be reasonably necessary. Machinery, equipment, and all hazards shall be guarded in accordance

with the safety provisions of the A Manual of Accident Prevention in Construction published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.

b. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Owner with reports concerning these matters.

121. SANITARY FACILITIES

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workmen. As the needs arise a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

122. USE OF PREMISES

a. The Contractor shall confine his equipment, storage of materials, and construction operations to the Contract limits as shown on the Drawings and as prescribed by ordinances or permits, or as may be directed by the City, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

b. The Contractor shall comply with all reasonable instructions of the City and the ordinances and codes of the Local Government regarding signs, advertising, traffic, fires, explosives, danger signals, barricades.

123. REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for the work, and put the whole site of the work and public rights of way in a neat and clean condition. Trash burning on the site of the work will be subject to prior approval of the City and existing State and local regulations.

124. INSPECTION

a. All materials and workmanship shall be subject to inspection, examination or test by the City or the Architect at any and all times during manufacture or construction and at any and all places where such manufacture or construction is carried on. The City shall have the right to reject defective or substandard material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge therefor. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the City may contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any moneys which may be due the Contractor, without prejudice to any other rights or remedies of the City.

b. The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. (See Section 118 hereof). All tests by the City will be performed in such a manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the Technical Specifications.

c. The Contractor shall notify the City sufficiently in advance of back-filling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent by the City, the Contractor shall uncover for inspection and recover such facilities all at his own expense, when so requested by the City.

Should it be considered necessary or advisable by the City at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his subcontractors the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus 15 percent of such costs to cover superintendence, general expenses and profit, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

d. Inspection of materials and appurtenances to be incorporated in the Improvements embraced in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

e. Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the City or its agents shall relieve the Contractor or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

125. REVIEW BY THE CITY

The City, its authorized representatives and agents, and the Architect, shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, and other relevant data and records pertaining to this Contract; provided, however, that all instructions and approvals with respect to work will be given to the Contractor only by the City through its authorized representative or agents.

126. FINAL INSPECTION

When the work embraced in this Contract is substantially completed, the Contractor shall notify the City in writing that the work will be ready for final inspection on a definite date which shall be stated in such notice. The notice shall bear the signed concurrence of the representative of the City having charge of inspection. If the City determines that the status of the Improvements is as represented, it will make the arrangements necessary to have final inspection commenced on the date stated in such notice, or as soon thereafter as is practicable.

127. DEDUCTION FOR UNCORRECTED WORK

If the City deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the City and subject to settlement, in case of dispute, as herein provided.

128. TIME

a. The Contract Time is the period of time allotted in the Contract for completion of the Work. The date of commencement of the Work is the date established in a notice to proceed issued by the City to the Contractor. The Contractor shall begin the Work upon receipt of the notice to proceed.

b. The term "day" as used herein shall mean calendar day.

c. If a date of completion is included in the Contract, it shall be the Date of Substantial Completion of the Work, including authorized extensions thereto. The "Date of Substantial Completion of the Work" is the date certified by the City when construction is sufficiently complete, in accordance with the Contract, so the City may occupy the Work for the use for which it is intended.

129. INSURANCE

The Contractor shall carry the following insurance, at his expense and no direct payment for premiums shall be made by the City. Carriage of such insurance shall in no way alleviate the Contractor of his responsibilities under the contract.

a. The Contractor will be required to carry insurance of the kinds and in the amounts hereinafter specified. The Contractor shall not commence work under the contract until he has obtained all the insurance required by these specifications and until such insurance has been approved by the City Attorney, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor shall have been so obtained and approved.

b. Insurance

The Contractor shall provide Commercial General Liability in an amount not less than \$1,500,000.00 combined single limit and Automobile Liability Insurance in an amount not less than \$1,500,000.00 combined single limit shall be in a company licensed to do business in Minnesota; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability. Property damage coverage for explosion, collapse, and underground Axcu to be included. City of Duluth shall be named as Additional Insured under the Commercial General Liability policy. Contractor shall also provide evidence of Statutory Worker's Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-day notice of cancellation, non-renewal, or material change provision included.

c. Subcontractor's Insurance

In the event any work contemplated by the contract is sublet, the Contractor shall have the duty to assure that the subcontractors provide insurance in accord with the minimum requirements hereinabove imposed on the Contractor.

d. Proof of Insurance

The Contractor shall not proceed with the work contemplated in this contract until he has furnished the City Attorney of the City of Duluth with satisfactory proof of the existence and carriage of insurance of the kinds and in the amounts specified.

e. Indemnification

The Contractor shall defend, indemnify and save harmless the City and all of its officers, agents and employees from all suits, actions or claims of any character, name and description brought for on account of any injuries or damages received or sustained by any person, persons or property, by or from the act or acts of said Contractor, or by or in consequence of any negligence in safeguarding the work, or through the use of unacceptable materials in constructing the work, or by or on account of any act or omission, neglect or misconduct of said Contractor, or from any claims or amount arising or recovered under the Workmen's Compensation Law or any other law, by-law, ordinance, order or decree, and so much of the money due the said Contractor under and by virtue of his contract, as shall be considered necessary by the City may be retained for the use of the City or in case no money is due, his surety shall be held until such suit or suits, action or actions, claim or claims, for injuries or damages as aforesaid, shall have been settled and suitable evidence to that effect furnished to the City. The Contractor shall indemnify and save harmless the City from any and all losses caused by or on account of any claims or amounts recovered for any infringement of patent, trademark, or copyright. The unauthorized use by the Contractor of public or private property for any purpose may be considered an injury or damage to the property so used.

130. PATENTS

The Contractor shall hold and save the City, its officers, employees, representatives and agents, and the Architect, harmless from liability of any nature or kind, including costs and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the City, unless otherwise specifically stipulated in the Technical Specifications.

131. WARRANTY

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the City free from any claims, liens, or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the City. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notices for the work when no formal contract is entered into for such materials.

132. GENERAL GUARANTY

- a. Neither the final certificate of payment nor any provisions in the Contract nor partial or entire use of the improvements embraced in this Contract by the City or the public shall constitute an acceptance of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which subsequently appears. The City will give notice of defective materials and work with reasonable promptness.
- b. If, within one year after the Date of Substantial Completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract, any of the Work is found to be defective or not in accordance with the specifications of the Contract, the Contractor shall correct it promptly upon receipt of a written notice from the City to do so, unless the City has previously given the Contractor a written acceptance of such condition or work.

133. ENVIRONMENTAL CONDITIONS

Waste Disposal: The SUBRECIPIENT shall comply with the most recent Minnesota Pollution Control Agency (MPCA) waste disposal requirements and include said disposal requirements in the project's base bid specifications. Waste material, including but not limited to: construction/demolition debris, asbestos-containing material, residential lead paint waste, hazardous waste, and above- and under-ground tanks, shall be disposed of at MPCA-permitted landfill sites only. Copies of all notification, shipment, and landfill receipt records shall be maintained in the subrecipient's project file.

Minnesota Pollution Control Agency
520 Lafayette Rd., St. Paul, MN 55155
(800) 657-3864

a. Construction/Demolition Waste.

Construction/demolition debris will be disposed of at a Minnesota Pollution Control Agency (MPCA) permitted landfill site only, with copies of all landfill receipts for said debris maintained in the subrecipient's project file.

(Solid Waste Management Rules, Chapter 7001 & 7035)

b. Asbestos-Containing Waste.

All asbestos removal and disposal shall be in strict accordance with all applicable permits. The contract bidder shall include the price of all permits, testing, removal, and disposal in the project base bid.

- Project asbestos-containing material removal pursuant to USEPA 40 CFR 61.145 Standard for Demolition and Renovation.
- All asbestos-containing waste material shall be disposed of pursuant to USEPA 40 CFR 61.150 at a MPCA permitted landfill site only, in accordance with the provisions of USEPA 40 CFR 61.154.

- For all asbestos-containing material, a copy of the MPCA Notification of Demolition and Renovation record and all Waste Shipment records shall be maintained in the subrecipient's project file.

c. Hazardous Waste Material.

The MPCA shall be contacted for instructions on handling and disposing of materials containing Polychlorinated Biphenyls (PCBs) or any other identified/encountered hazardous materials. A copy of all correspondence and disposal records shall be maintained in the subrecipient's project file.

- MPCA Hazardous Waste Compliance Guide -- October 1989, Revised January 1991

- MPCA Hazardous Waste Fact Sheet Checklist -- August 1993

d. Above and Below Ground Storage Tanks.

The MPCA Tanks and Spills Section shall be contacted for instructions on handling or removal of all above- and underground tanks identified/encountered. A copy of all correspondence and disposal records shall be maintained in the subrecipient's project file.

e. Residential Lead Paint Waste.

Projects whose activities produce residential lead paint waste are responsible for the management and proper disposal of the waste at an MPCA permitted landfill site only, pursuant to Minn. Stat. sections 116.87, 116.875, 116.88. A copy of the Residential Lead Abatement Notification and Shipping forms shall be maintained in the subrecipient's project file.

134. CONTRACTOR'S RECORDS

The contractor agrees that, as provided in Minnesota Statutes 16C.05, Subd. 5, contractor's books, records, documents, and accounting procedures and practices are subject to examination by the city or the state auditor for three years from the date of execution of this contract.

(End of Document)

General Decision Number: MN160105 03/04/2016 MN105

Superseded General Decision Number: MN20150105

State: Minnesota

Construction Type: Heavy

County: St Louis County in Minnesota.

HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	03/04/2016

BOIL0647-004 01/01/2013

	Rates	Fringes
BOILERMAKER.....	\$ 32.40	25.37

CARP0361-020 05/01/2015

ST LOUIS COUNTY (Southern 1/3 including Cotton, Floodwood, Fond Du Lac, and Proctor)

	Rates	Fringes
CARPENTER (Including Form Work).....	\$ 34.11	17.08

CARP0361-021 05/01/2015

ST LOUIS (Duluth)

	Rates	Fringes
CARPENTER (Including Form Work).....	\$ 34.11	17.08

CARP0606-010 05/01/2015

ST LOUIS COUNTY (Northeast 2/3 including Cook, Cusson, Ely; and Western part including Chisholm, Greaney, and Orr)

	Rates	Fringes
CARPENTER (Including Form Work).....	\$ 34.11	17.08

* ELEC0242-012 05/31/2015

ST. LOUIS (South part bounded on the north by the north line of Kelsey Township extended east & west)

	Rates	Fringes
ELECTRICIAN.....	\$ 33.90	24.47

ELEC0294-006 05/31/2015

ST. LOUIS (North part bounded on the south by the south line of

Ellsburg Township, extended east & west)

	Rates	Fringes
ELECTRICIAN.....	\$ 34.68	61.54%

ENGI0049-064 05/01/2015		

	Rates	Fringes
OPERATOR: Power Equipment		
Group 2.....	\$ 33.78	17.90
Group 3.....	\$ 33.23	17.90
Group 4.....	\$ 32.93	17.90
Group 5.....	\$ 29.89	17.90
Group 6.....	\$ 28.68	17.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 2: Crane with over 135' Boom, excluding jib; Dragline & Hydraulic Backhoe with shovel-type controls, 3 cubic yards and over; Grader/Blade finishing earthwork and bituminous.

GROUP 3: Dragline & Hydraulic Backhoe with shovel-type controls up to 3 cubic yards; Loader 5 cu yd and over; Mechanic; Tandem Scraper; Truck Crane; Crawler Crane

GROUP 4: Bituminous Roller 8 tons & over; Crusher/Crushing Plant; Drill Rig; Elevating Grader; Loader over 1 cu yd; Grader; Pump; Scraper up; to 32 cu yd; Farm Tractor with Backhoe attachment; Skid Steer Loader over 1 cu yd with Backhoe attachment; Bulldozer over 50 hp.

GROUP 5: Bituminous Roller under 8 tons; Bituminous Rubber Tire Roller; Loader up to 1 cu yd; Bulldozer 50 hp or less.

GROUP 6: Oiler; Self-Propelled Vibrating Packer 35 hp and over.

CRANE OVER 135' BOOM, EXCLUDING JIB - \$.25 PREMIUM;
CRANE OVER 200' BOOM, EXCLUDING JIB - \$.50 PREMIUM

UNDERGROUND WORK:
UNNELS, SHAFTS, ETC. - \$.25 PREMIUM
UNDER AIR PRESSURE - \$.50 PREMIUM

HAZARDOUS WASTE PROJECTS (PPE Required):
LEVEL A - \$1.25 PREMIUM
LEVEL B - \$.90 PREMIUM
LEVEL C - \$.60 PREMIUM

IRON0512-028 05/01/2015

	Rates	Fringes
IRONWORKER, STRUCTURAL AND REINFORCING.....	\$ 31.04	23.45

LABO1091-006 05/01/2014		

ST LOUIS (South of T. 55 N)

	Rates	Fringes
LABORERS		
(1) Common or General.....	\$ 26.97	16.21
(2) Mason Tender		
Cement/Concrete.....	\$ 27.17	16.21
(6) Pipe Layer.....	\$ 29.47	16.21

LABO1091-007 05/01/2014		

SOUTHERN ST. LOUIS COUNTY

	Rates	Fringes
LABORER		
Common or General (Natural		

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate

(weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

PROJECT LABOR AGREEMENT

NO STRIKE, NO LOCKOUT

PUBLIC SECTOR

CITY OF DULUTH

&

Vendor

Project name

Project No.

INDEX	
AGREEMENT	1
ARTICLE I - PURPOSE	2
ARTICLE II - SCOPE OF THE AGREEMENT	2
ARTICLE III - UNION RECOGNITION AND REPRESENTATION	4
ARTICLE IV - LABOR HARMONY CLAUSE	5
ARTICLE V - WORK STOPPAGES AND LOCKOUTS	6
ARTICLE VI - DISPUTES AND GRIEVANCES	6
ARTICLE VII - JURISDICTIONAL DISPUTES	6
ARTICLE VIII - NO DISCRIMINATION	7
ARTICLE IX - SAVINGS AND SEPARABILITY	7
ARTICLE X - DURATION OF THE AGREEMENT	7
SCHEDULE "A"	10

AGREEMENT

This Project Labor Agreement (hereinafter, the “Agreement”), effective as of the date of attestation by the City Clerk, by and between the various contractors engaged in the construction of facilities to be known as the (Project). The parties to this Agreement are the Building and Construction Trades Council, on behalf of its affiliated Local Unions (hereinafter “Union” or “Unions”), the City of Duluth (hereinafter “Owner”) and Contractor (hereinafter “Construction Manager/General Manager,” “Contractor,” and “Contractors”).

It is understood by the parties to this Agreement that it is the policy of the Owner that the construction work covered by this Agreement shall be contracted to Contractors who agree to be bound by the terms of this Agreement. Therefore, the Union agrees that other Contractors may execute the Agreement for the purpose of covering that work. The Construction Manager/General Contractor shall monitor compliance with this Agreement by all Contractors who through their execution of this Agreement, together with their subcontractors, have become bound hereto.

The term “Contractor” shall include all Contractors and subcontractors of whatever tier engaged in on-site construction work within the scope of this Agreement.

The Union and all signatory Contractors agree to abide by the terms and conditions contained in this Agreement with respect to the administration of the Agreement by the Owner and the performance of the construction by the Contractor of the Project. This Agreement represents the complete understanding of the parties, and it is further understood that no Contractor party is required to sign any other agreement as a condition of performing work within the scope of this Agreement. No practice, understanding or agreement between a Contractor and a Union party which is not explicitly set forth in this Agreement shall be binding on any other party unless endorsed in writing by the Project Contractor.

ARTICLE I - PURPOSE

The (Project), an undertaking of the Owner, is a public project which will employ numbers of skilled and unskilled workers. Construction of the Project will entail utilization of the construction industry in an area having multiple labor contracts and employer associations. Consequently, conflicts within labor-management relations could cause delay or disruption of the efficient completion of the .project unless maximum cooperation of all segments of the construction industry is obtained. This Agreement is to establish as the minimum standards on the Project the hours and working conditions as those prevailing for the largest number of workers engaged in the same classes of work within the area.

It is in the public interest that the Project progress and be completed in an expeditious and efficient manner, free of disruption or delay of any kind. Therefore, it is essential to secure optimum productivity and to eliminate any delays in the work. In recognition of the special needs of this Project and to maintain a spirit of harmony, labor-management peace and stability during the term of this Project Labor Agreement, the parties agree to establish effective and binding methods for the settlement of all misunderstandings, disputes or grievances which may arise. Therefore, the Unions agree not to engage in any strike, slowdown or interruption of work and the Contractor agrees not to engage in any lockout.

ARTICLE II - SCOPE OF THE AGREEMENT

Section 1. This Agreement, hereinafter designated as the “Project Labor Agreement” or “Agreement,” shall apply and is limited to all construction work included in all Bid Categories for the (Project), under the direction of the signatory Contractors and performed by those Contractor(s) of whatever tier which have contracts awarded for such work on and after the effective date of this Agreement with regard to the Project.

Such Project is generally described as the construction of: **Project**

Section 2. It is agreed that all direct subcontractors of a Contractor, of whatever tier, who have been awarded contracts for work covered by this Agreement on or after the effective date of this Agreement shall be required to accept and be bound by the terms and conditions of the Project Labor Agreement.

Section 3. The provisions of this Project Labor Agreement shall apply to all craft employees represented by any Union listed in Schedule A hereto attached and shall not apply to other field personnel or managerial or supervisory employees as defined by the National Labor Relations Act.

Section 4. All employees covered by this Agreement shall be classified in accordance with work performed and paid the base hourly wage rates for those classifications as specified in the attached Schedule A.

Section 5. The Contractors agree to pay contributions to the established employee benefit funds in the amounts designated in the appropriate Schedule A.

Contractors that are not signatory to a collective bargaining agreement beyond the scope of this Agreement ("PLA contractor") may select to participate in the legally established industry health reimbursement arrangement ("HRA") plan, in lieu of contributing to the respective bona fide benefit funds as designated in Schedule A. The amount of the contribution is based on the difference between the contribution amount of the bona fide Schedule A benefit funds and the cost of the PLA contractor's bona fide non-discretionary plans. Contributions must be made on behalf of named employees. Participating contractors will submit to the Trustees of the HRA trust and plan a copy of their plan, summary plan description, and the premium structure for workers covered under the PLA contractor's bona fide, non-discretionary plans. The value of the PLA contractor's benefit plans are subject to confirmation by the Trustees of the HRA trust and plan. This may include an independent audit according to a policy as established by the Trustees. Contractors are required to submit certified payroll reports to the Trustees or authorized administrator in order to confirm compliance with the terms of the HRA trust and plan.

The Contractors adopt and agree to be bound by the written terms of the legally-established Trust Agreements (or in lieu thereof, the aforementioned HRA plan and trust including any policies) specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractors authorize the parties to such Trust Agreements to appoint trustees and successor trustees to administer the Trust funds and hereby ratify and accept the Trustees so appointed as if made by the Contractors.

Section 6. In the event of any conflict between any provisions of this Agreement and in the Local Area Agreements, the terms of this Agreement will be applied. In other words, where a subject covered by the provisions of this Project Labor Agreement is also covered by the Local Area Agreement the provisions of this Project Labor Agreement shall prevail. Where a subject is covered by the Local Area Agreement and not covered by this Project Labor Agreement, the Local Area Agreement provisions shall prevail.

Section 7. This Agreement shall only be binding on the signatory parties hereto and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party.

Section 8. This Agreement shall be limited to work historically recognized as construction work. Nothing contained herein shall be construed to prohibit, restrict, or interfere with the performance of any other operation, work or function which may occur in or around the Project site or be associated with the development of the Project, or with the ongoing operations of the Owner.

Section 9. It is understood that the liability of any Contractor and the liability of the separate Unions under this Agreement shall be several and not joint. The Union agrees that this Agreement does not have the effect of creating any joint employment status between or among Owner and any Contractor.

Section 10. All workers delivering fill, sand, gravel, crushed rock, transit/concrete mix, asphalt or other similar materials and all workers removing any materials from the construction site as required by the specifications are subject to the provisions of the Minnesota state

prevailing wage law and are entitled to the appropriate area standard wage. For purposes of this contract, such materials are for specified future use and per Minnesota state prevailing wage law delivery and pickup of the above-listed materials constitutes incorporation.

ARTICLE III - UNION RECOGNITION AND REPRESENTATION

Section 1. The Contractor recognizes the Union as the sole and exclusive bargaining representative of all craft employees working on facilities within the scope of this Agreement.

Section 2. Authorized representatives of the Union shall have access to the Project, provided they do not interfere with the work of employees and further provided that such representatives fully comply with the posted visitor and security and safety rules of the Project.

ARTICLE IV - LABOR HARMONY CLAUSE

The contractor shall furnish labor that can work in harmony with all other elements of labor employed on that (Project) and shall submit a labor harmony plan to demonstrate how this will be done. "Harmony" shall include the provision of labor that will not, either directly or indirectly, cause or give rise to any work disruptions, slow downs, picketing, stoppages, or any violence or harm to any person or property while performing any work, or activities incidental thereto at the (project). The labor harmony plan should include the company's labor management policies, collective bargaining agreements if any and their expiration dates, past labor relations history, a listing of activities anticipated under this contract that may potentially cause friction with on-site workers, and procedures the company will undertake to eliminate this friction.

The contractor agrees that it shall require every lower-tier subcontractor to provide labor that will work in harmony with all other elements of labor employed in the work, and will include the provisions contained in the paragraph above, in every lower-tier subcontract let for work under this contract.

The requirement to provide labor that can work in harmony with all other elements of labor employed in the work throughout the contract performance is a material element of this contract. Failure by the contractor or any of its lower tier subcontractors to comply with this requirement shall be deemed a material breach of the contract which will subject the contractor to all rights and remedies the city of Duluth may have, including without limitation the right to terminate the contract.

ARTICLE V - WORK STOPPAGES AND LOCKOUTS

Section 1. There shall be no strike, picketing, work stoppages, slowdowns or other disruptive, activity for any reason by the Union or employees against any Contractor covered under this Agreement, and there shall be no lockout by the Contractor. Failure of any Union or employee to cross any picket line established by any union, signatory or non-signatory, or any other organization, at or in proximity to the Project site is a violation of this Article.

Section 2. Any party alleging a breach of Section 1, of Article IV shall have the right to petition a court for temporary and permanent injunctive relief. The moving party need not show the existence of irreparable harm, and shall be required to post bond only to secure payment of court costs and attorney fees as may be awarded by the court.

ARTICLE VI - DISPUTES AND GRIEVANCES

Section 1. This Agreement is intended to provide close cooperation between management and labor. The Construction Manager/General Contractor and the Building and Construction Trades Council shall each assign a representative to this Project for the purpose of assisting the Local Unions, together with the Contractor, to complete the construction of the Project economically, efficiently, continuously and without interruption, delays or work stoppages.

Each Contractor shall hold a pre-job conference with the Union and Construction Manager/General Contractor to clear up any project question and work assignments in which there is thought to be a difference in opinion. Every effort will be made to hold such conference well in advance of actual work performance.

Section 2. The Contractor, Union, and employees collectively and individually, realize the importance to all parties to maintain continuous and uninterrupted performance of the work of the Project, and agree to resolve disputes over grievances in accordance with the arbitration provisions set forth in the Local Area Agreements in effect with the Unions listed in Schedule A attached hereto.

ARTICLE VII - JURISDICTIONAL DISPUTES

Section 1. There will be no strikes, work stoppages, slowdowns, or other disruptive activity arising out of any jurisdictional dispute. Pending the resolution of the dispute, the work shall continue uninterrupted as assigned by the Contractor.

Section 2. Building construction work shall be assigned by the Contractor in accordance with the procedural rules of the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (hereinafter the "Plan"). Any jurisdictional dispute over the Contractor's assignment of work shall be settled in accordance with the provisions of the Plan.

Section 3. Where a jurisdictional dispute involves the International Brotherhood of Teamsters, it shall be referred for resolution to that International Union and the disputing International Union. The resolution of the dispute shall be reduced to writing, signed by the authorized representative of the International Unions and the Contractor. The assignments made by the Contractor shall be followed until such time as the dispute is resolved in accordance with this Section.

ARTICLE VIII - NO DISCRIMINATION

Section 1. The Contractor and Union agree that they will not discriminate against any employee or applicant for employment because of his or her membership or nonmembership in a Union or based upon race, color, religion, sex, national origin or age in any manner prohibited by law or regulation.

Section 2. Any complaints regarding application of the provisions of Section 1 should be brought to the immediate attention of the involved Contractor for consideration and resolution.

Section 3. The use of the masculine or feminine gender in this Agreement shall be construed as including both genders.

ARTICLE IX - SAVINGS AND SEPARABILITY

It is not the intention of the parties to violate any laws governing the subject matter of this Agreement. The parties hereto agree that in the event any provisions of the Agreement are finally held determined to be illegal or void as being in contravention of any applicable law, the remainder of the Agreement shall remain in full force and effect unless the part or parts so found to be void are wholly inseparable from the remaining portions of this Agreement. Further, the contractor and Union agree that if and when any and all provisions of this Agreement are finally held or determined to be illegal or void by Court of competent jurisdiction, the parties will promptly enter into negotiations concerning the substance affected by such decision for the purpose of achieving conformity with the requirements of an applicable law and the intent of the parties hereto.

ARTICLE X DURATION OF THE AGREEMENT

The Project Labor Agreement shall be effective as of the date of attestation by the City Clerk, and shall continue in effect for the duration of the Project construction work described in Article II hereof. Construction of any phase, portion, section or segment of the project shall be deemed complete when such phase, portion, section or segment has been turned over to the Owner and has received the final acceptance from the Owner's representative.

Since there are provisions herein for no strikes or lockouts in the event any changes are negotiated and implemented under a Local Area Agreement during the term of this Agreement, the Contractor agrees that, except as specified herein, such changes shall be recognized and shall apply retroactively to the termination date in the particular Local Agreement involved. Each Contractor which has a Local Agreement with a Union at the time that its contract at the project

commences shall continue it in effect with each said Union so long as the Contractor remains on the project. In the event any such Local Area Agreement expires, the Contractor shall abide by all of the terms of the expired Local Agreement until agreement is reached on a new Local Agreement, with any changes being subject to the provisions of this Agreement.

The Union agrees that there will be no strikes, work stoppages, sympathy actions, picketing, slowdowns or other disruptive activity affecting the Project by any Union involved in the negotiation of a Local Area Agreement nor shall there be any lockout on this Project affecting the Union during the course of such negotiations.

IN WITNESS WHEREOF the parties have entered into this Agreement to be effective as of the day and year above written.

DULUTH BUILDING AND
CONSTRUCTION TRADES COUNCIL

VENDOR

By: _____

By: _____

Its _____
(Printed Name/Title)

Its _____
(Printed Name/Title)

Date: _____

Date: _____

CITY OF DULUTH

By: _____
Mayor

Attest:

City Clerk

Date: _____

City Auditor

Date: _____

Assistant City Attorney

Date: _____

SCHEDULE “A”

- A1 Asbestos Workers Local 49
- A-2 Boilermakers Local 647
- A-3 BAC Local 1 Chapter 3 Duluth & Iron Range
- A-4 Carpenters Local 361
- A-5 Cements Masons/Plasterers Local 633
- A-6 Elevator Constructors Local 9
- A-7 IBEW Local 242
- A-8 Iron Workers Local 512
- A-9 Laborers Local 1091
- A-10 Millwrights & Machinery Erectors Local 1348
- A-11 Operating Engineers Local 49
- A-12 Painters & Allied Trades Local 106
- A-13 Plumbers & Fitters Local 11
- A-14 Roofers Local 96
- A-15 Sheet Metal Workers Local 10
- A-16 Sprinkler Fitters Local 669
- A-17 Teamsters Local 346

SECTION 07 92 00

SEALANTS

PART 1 - GENERAL

1.01 SUMMARY

- A. Work Description. Install sealant between all dissimilar materials. Place sealant and backer rod as shown on the drawings. Work of this Section includes joint sealant systems:

1. Interior joints in vertical surfaces and horizontal non-traffic surfaces.
2. Extra Materials. Provide one (1) tube of each color and type of sealant used. Label each container with date used, shelf life expected, and locations where similar material was used and deliver to the Owner as directed.

- 1.02 PERFORMANCE REQUIREMENTS. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

1.03 SUBMITTALS

- A. Manufacturer's Product Data for each joint-sealant product indicated.
- B. Color Charts. Provide a printed, accurate color chart of all color options as specified herein for selection by Architect.
- C. Compatibility and adhesion test reports.
- D. Product test reports.

1.04 QUALITY ASSURANCE

- A. Preconstruction Compatibility and Adhesion Testing. Submit samples of materials that will contact or affect joint sealants to joint-sealant manufacturers for testing according to manufacturer's standard test method to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
- B. Preconstruction Field-Adhesion Testing. Before installing elastomeric sealants, field test their adhesion to Project joint substrates according to the method in ASTM C 1193 that is appropriate for the types of Project joints.

1.05 WARRANTY

- A. Special Installer's Warranty. Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
1. Warranty Period. One year from date of Substantial Completion.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications. The installer must have five (5) years experience with the installation

of sealants and a similar application as is being proposed for this project. Provide certification of work experience, if requested. Provide a list of three (3) projects that are sealant applications similar in scope, complexity, and finish to this project, if requested. The project list shall be submitted for review and approval. The project examples must include project name, project location, and project Architect's name and telephone number. Provide the noted verification information as part of the submittal process. If Installer qualifications are requested, provide the required information in the format herein stated with the submittals noted in Article 1.04 of this Section.

- B. Single Source Responsibility for Joint Sealer Materials. Obtain joint sealer materials from a single manufacturer as much as practical.
- C. Manufacturer Qualifications. The manufacturer of the sealant used shall have been in the business of manufacturing the specified types of such sealants for not less than ten (10) years.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Delivery. The product shall be delivered in the manufacturer's original unopened container, clearly identifying each product specified, relating it to the product literature submitted.
- B. Storage and Handling shall be in accordance with manufacturer's recommendations, with proper precautions concerning shelf life, temperature, humidity, and similar storage factors ensuring the fitness of the material when installed.

- 1.08 GUARANTEE. Provide manufacturer's standard single source guarantee with available options, signed by the Applicator and Authorized Representative of Manufacturer, and guaranteeing sealant materials against failures resulting from normal exposure, but excluding failures due to unusual weather phenomena, failure of substrate, fire, or abuse by unusual traffic, or other activities.

Sealant joints shall be guaranteed against adhesive and cohesive failure of the sealant and against water penetration through the sealed joint for a period of five (5) years.

PART 2 - PRODUCTS

- 2.01 ACCEPTABLE MANUFACTURERS. Subject to compliance with the Specification requirements, provide products of one of the following for 'General Purpose Sealant.' For other sealant types see individual items specified:

- A. BASF Construction Systems, Shakopee, MN
- B. Pecora Corporation, Harleysville, PA
- C. Sika Chemical Corporation, Lyndhurst, NJ
- D. Tremco, Beachwood, OH

- 2.02 SEALANTS. Furnish compatible primer, bond breaker and backer rod, for each.

Provide color of sealant as selected by Architect from the manufacturer's complete range of at least 50 special colors available.

- A. Sealant at Building Interior Between Hollow Metal Frames and Substrate, shall be an acrylic latex type. Sealant shall conform to ASTM C834-86.

1. One-part sealant shall be a paintable, acrylic latex type. Provide color of sealant as selected by Architect from the manufacturer's complete range of seven (7) colors available.
 - a. "AC-20 + Silicone" as made by Pecora Corp.
 - b. "Sikaflex-1a" as made by Sika Chemical Corp.
 - c. "Tremco #834" as made by Tremco.
 - B. Acoustical Sealant, shall be an acrylic latex type. Sealant shall conform to ASTM C834
 1. One-part sealant shall be a paintable, acrylic latex type. Provide color of sealant as selected by Architect from the manufacturer's full range of colors available.
 - a. "Acoustical Sealant" as made by USG Sheetrock Brand.
- 2.03 BACK-UP. Back-up material must be used in all joints. Use back-up rod whenever possible. If it is impossible due to joint size and configuration to use back-up rod, use bond breaker tape. Backer material at horizontal surfaces must be closed cell material. Backer material at vertical surfaces may be closed cell material or open cell material at the Contractor's option. Select sizes to compress as recommended by the manufacturer when inserted in joint.
- A. Closed Cell Back-Up Rod. Provide one of the following in thickness as required for each joint. A variety of rod diameters shall be required.
 1. "Ethafaam" by Dow Chemical Company, Midland, MI.
 2. "Green Rod" by Namaco, Inc., Zebulon, NC.
 3. "MasterSeal 921" by BASF Construction Systems.
 4. "Sof-Rod" by Applied Extrusion Technologies, Middletown, DE.
 - B. Bond Breaker Tape. Provide an acceptable polyethylene or similar type bond breaker tape that is recommended by the sealant manufacturer. Size the bond breaker tape for the joint so the tape will prevent three-sided adhesion and will provide a correctly designed joint for movement.
- 2.04 PRIMERS. Provide as recommended by the sealant manufacturer for the substrates and exposures. Primer shall be used in accordance with the manufacturer's instructions, with all primers being applied prior to installation of any back-up material. Manufacturer shall be consulted for all surfaces not specifically covered in the submittal application instructions. If a stain type primer is used, apply material in a manner that will prevent exposed stain residue related to application procedures.

PART 3 - EXECUTION

- 3.01 INSPECTION. Substrate surface shall be inspected to ensure that no bond-breaker materials contaminate the surface to which the sealant is to adhere and to ensure that the unsound substrates are repaired. Installation of sealant shall be evidence of acceptance of the substrate. Joint dimensions shall be verified prior to installation of the sealant to ensure that all dimensions are within tolerance established in the manufacturer's literature. Unacceptable variations shall be called to the Architect's attention for resolution prior to installing any material.
- 3.02 PREPARATION

- A. Surface Cleaning of Joints. Clean out joints immediately before installing joint sealants.
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant.
- B. Clean Porous Joint Substrate Surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
- C. Clean Nonporous Surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- D. Joint Priming. Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- E. Masking Tape. Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.03 INSTALLATION

- A. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- B. Install Sealant Backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture, or tear sealant backings.
 - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- C. Install Bond-Breaker Tape behind sealants where sealant backings are not used between sealants and backs of joints.
- D. Install Sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 1. Place sealants so they directly contact and fully wet joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Sealants. Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealant from surfaces adjacent to joints.
 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
- F. Clean Off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

END OF SECTION

SECTION 08 11 13

HOLLOW METAL FRAMES

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Standard hollow metal frames.
2. Thermally broken hollow metal frames.

B. Related Sections

1. Division 08 Section "Door Hardware" for door hardware for hollow metal doors.
2. Division 09 Sections "Interior Painting" for field painting hollow metal doors and frames.

1.02 DEFINITIONS

A. Minimum Thickness. Minimum thickness of base metal without coatings.

B. Standard Hollow Metal Work. Hollow metal work fabricated according to ANSI/SDI A250.8.

C. Custom Hollow Metal Work. Hollow metal work fabricated according to ANSI/NAAMM-HMMA 861.

1.03 SUBMITTALS

A. Product Data. For each type of product indicated. Include construction details, material descriptions, core descriptions and finishes.

B. Shop Drawings. Include the following:

1. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
2. Details of each different wall opening condition.
3. Details of anchorages, joints, field splices, and connections.
4. Details of accessories.
5. Details of moldings, removable stops, and glazing.

C. Samples for Verification

1. For each type of exposed finish required, prepared on Samples of not less than 3 by 5 inches.
2. For the following items, prepared on Samples about 12 by 12 inches to demonstrate compliance with requirements for quality of materials and construction:

- a. Frames. Show profile, corner joint, floor and wall anchors, and silencers. Include separate section showing fixed hollow metal panels and glazing if applicable.

D. Other Action Submittals

- 1. Schedule. Provide a schedule of hollow metal work prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with door hardware schedule.

- E. Product Test Reports. Based on evaluation of comprehensive tests performed by a qualified testing agency, for each type of hollow metal door and frame assembly.

1.04 QUALITY ASSURANCE

- A. Source Limitations. Obtain hollow metal work from single source from single manufacturer.

- B. Pre-installation Conference. Conduct conference at Project site.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver Hollow Metal Work palletized, wrapped, or crated to provide protection during transit and Project-site storage. Do not use non-vented plastic.

- B. Deliver Welded Frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

- C. Store Hollow Metal Work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4-inch high wood blocking. Do not store in a manner that traps excess humidity.

- 1. Provide minimum 1/4-inch space between each stacked door to permit air circulation.

1.06 PROJECT CONDITIONS

- A. Field Measurements. Verify actual dimensions of openings by field measurements before fabrication.

1.07 COORDINATION

- A. Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Subject to compliance with requirements, provide products by one of the following:

- 1. Amweld Building Products, LLC.
- 2. Benchmark, a division of Therma-Tru Corporation.
- 3. Ceco Door Products, an Assa Abloy Group company.

4. Curries Company, an Assa Abloy Group company.
5. Kewanee Corporation (The).
6. Steelcraft, an Ingersoll-Rand company.

2.02 MATERIALS

- A. Cold-Rolled Steel Sheet. ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Hot-Rolled Steel Sheet. ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- C. Metallic-Coated Steel Sheet. ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum A40 metallic coating.
- D. Frame Anchors. ASTM A 591/A 591M, Commercial Steel (CS), 40Z coating designation; mill phosphatized.
- E. Inserts, Bolts, and Fasteners. Hot-dip galvanized according to ASTM A 153/A 153M.
- F. Powder-Actuated Fasteners in Concrete. Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow metal frames of type indicated.
- G. Glazing. Comply with requirements in Division 08 Section "Glazing."

2.03 STANDARD HOLLOW METAL FRAMES

- A. General. Comply with ANSI/SDI A250.8 and with details indicated for type and profile.
- B. Interior Frames. Fabricated from cold-rolled steel sheet.
 1. Fabricate frames as face welded unless otherwise indicated.
 2. Frames for Wood Doors. 0.053-inch thick steel sheet.
 3. Frames for Borrowed Lights. Same as adjacent door frame.
- C. Hardware Reinforcement. Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.

2.04 THERMALLY BROKEN HOLLOW METAL FRAMES

- A. General. Fabricate frames of construction indicated. Close contact edges of corner joints tight with faces mitered and stops butted or mitered. Continuously weld faces and soffits and finish faces smooth. Comply with ANSI/NAAMM-HMMA 861.
 1. Door frames for openings 48-inches Wide or Less. Fabricated from 0.053-inch thick steel sheet.
 2. Sidelight Frames. Fabricated from same thickness material as adjacent door frame.
 3. Borrowed-Light Frames. Fabricated from 0.053-inch thick steel sheet.
- B. Interior Frames. Fabricated from cold-rolled steel sheet.

- C. Hardware Reinforcement. Fabricate according to ANSI/NAAMM-HMMA 861 with reinforcing plates from same material as frame.
- D. Head Reinforcement. Provide minimum 0.093-inch thick, steel channel or angle stiffener for opening widths more than 48 inches.
- E. Provide Manufacturer's standard gasket for thermally broken frames indicated on drawings.

2.05 FRAME ANCHORS

A. Jamb Anchors

- 1. Stud-Wall Type. Designed to engage stud, welded to back of frames; not less than 0.042 inch thick.

B. Floor Anchors. Formed from same material as frames, not less than 0.042 inch thick, and as follows:

- 1. Monolithic Concrete Slabs. Clip-type anchors, with two holes to receive fasteners.

2.06 STOPS AND MOLDINGS

- A. Loose Stops for Glazed Lites in Frames. Minimum 0.032 inch thick, fabricated from same material as frames in which they are installed.

2.07 ACCESSORIES

- A. Mullions and Transom Bars. Join to adjacent members by welding or rigid mechanical anchors.
- B. Ceiling Struts. Minimum 1/4-inch-thick by 1-inch wide steel.

2.08 FABRICATION

- A. Fabricate Hollow Metal Work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.
- B. Tolerances. Fabricate hollow metal work to tolerances indicated in ANSI/NAAMM-HMMA 861.
- C. Hollow Metal Frames. Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - 1. Welded Frames. Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.
 - 2. Sidelight Frames. Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.
 - 3. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.

4. Floor Anchors. Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
5. Jamb Anchors. Provide number and spacing of anchors as follows:
 - a. Stud-Wall Type. Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Three anchors per jamb up to 60 inches high.
 - 2) Four anchors per jamb from 60 to 90 inches high.
 - 3) Two anchors per head for frames more than 42 inches wide and mounted in metal-stud partitions.
6. Door Silencers. Except on weather-stripped doors, drill stops to receive door silencers as follows. Keep holes clear during construction.
 - a. Single-Door Frames. Drill stop in strike jamb to receive three door silencers.
 - b. Double-Door Frames. Drill stop in head jamb to receive two door silencers.
- D. Fabricate Concealed Stiffeners, edge channels, and hardware reinforcement from either cold- or hot-rolled steel sheet.
- E. Hardware Preparation. Factory prepare hollow metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door Hardware Schedule and templates furnished as specified in Division 08 Section "Door Hardware."
 1. Locate hardware as indicated, or if not indicated, according to ANSI/NAAMM-HMMA 861.
 2. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
- F. Stops and Moldings. Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints.
 1. Single Glazed Lites. Provide fixed stops and moldings welded on secure side of hollow metal work.
 2. Provide loose stops and moldings on inside of hollow metal work.
 3. Coordinate rabbet width between fixed and removable stops with type of glazing and type of installation indicated.

2.09 STEEL FINISHES

- A. Prime Finish. Apply manufacturer's standard primer immediately after cleaning and pretreating.
 1. Shop Primer. Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine Substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine Roughing-In for embedded and built-in anchors to verify actual locations before frame installation.
- C. For the Record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- D. Proceed with Installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Remove Welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- B. Prior to Installation, adjust and securely brace welded hollow metal frames for squareness, alignment, twist, and plumbness to the following tolerances:
 - 1. Squareness. Plus or minus 1/16-inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - 2. Alignment. Plus or minus 1/16-inch, measured at jambs on a horizontal line parallel to plane of wall.
 - 3. Twist. Plus or minus 1/16-inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - 4. Plumbness. Plus or minus 1/16-inch, measured at jambs on a perpendicular line from head to floor.

3.03 INSTALLATION

- A. General. Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.
- B. Hollow Metal Frames. Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11.
 - 1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - b. Install frames with removable glazing stops located on secure side of opening.
 - c. Remove temporary braces necessary for installation only after frames have been properly set and secured.

- d. Check plumbness, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
- 2. Floor Anchors. Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.
- 3. Metal-Stud Partitions. Solidly pack mineral-fiber insulation behind frames.
- 4. Ceiling Struts. Extend struts vertically from top of frame at each jamb to overhead structural supports or substrates above frame unless frame is anchored to masonry or to other structural support at each jamb. Bend top of struts to provide flush contact for securing to supporting construction. Provide adjustable wedged or bolted anchorage to frame jamb members.
- 5. Installation Tolerances. Adjust hollow metal door frames for squareness, alignment, twist, and plumb to the following tolerances:
 - a. Squareness. Plus or minus 1/16-inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - b. Alignment. Plus or minus 1/16-inch, measured at jambs on a horizontal line parallel to plane of wall.
 - c. Twist. Plus or minus 1/16-inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - d. Plumbness. Plus or minus 1/16-inch, measured at jambs at floor.
- C. Glazing. Comply with installation requirements in Division 08 Section "Glazing" and with hollow metal manufacturer's written instructions.
 - 1. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9 inches o.c. and not more than 2 inches o.c. from each corner.

3.04 ADJUSTING AND CLEANING

- A. Final Adjustments. Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.
- B. Prime-Coat Touchup. Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.

END OF SECTION

SECTION 08 14 00

WOOD DOORS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes: the furnishing of flush panel, solid core wood doors.

Follow ANSI/BHMA requirements for product standards, and follow the requirements of DHI concerning doors and recommended locations for builder's hardware.

- B. Related Sections: Metal frames are specified in Section 08 11 13. Glass and glazing is specified in Section 08 80 00. Painting and finishing are specified in Section 09 91 00.

1.02 REFERENCES

- A. AWDMA – Window and Door Manufacturer's Association

1. S-1-A 1997 Industry Standards for Flush Wood Doors

- B. The Architectural Woodwork Institute (AWI)

1. Standards Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program (Latest Edition)

- C. Door and Hardware Institute (DHI)

1. DHI Hardware for Labeled Fire Doors
2. DHI Recommended Locations for Builder's Hardware
3. DHI Abbreviations and Symbols

1.03 SUBMITTALS

- A. Shop Drawings or complete manufacturer's data shall be submitted for approval. The Contractor shall be responsible for coordinating sizes of doors and sizes of frames which are furnished under other Sections.

- B. Manufacturer's Instructions for installation shall be submitted and maintained in a readily accessible location at the job site while this work is being done.

1.04 WARRANTY

- A. Provide a full "Life of Original Installation" warranty on all doors. Delamination or warp exceeding 1/4 inch will be considered the result of defective materials or workmanship. Warp shall include bow, cup, and twist. Warp shall be measured by placing a straight edge, 7'-0" long, at any angle, against the concave side of the door and measuring the maximum deviation from the straight edge. Defective materials or workmanship which appear during the Correction Period shall promptly be replaced or repaired, as directed. The Contractor shall follow the manufacturer's installation instructions which may qualify the manufacturer's guarantee.

PART 2 - PRODUCTS

2.01 WOOD DOORS

- A. Wood doors shall have solid cores of staved lumber or particle board, as standard by the manufacturer. Doors shall be of manufacturer subject to approval by the Architect. Doors furnished under this heading shall be by the same manufacturer. Doors shall conform to "PC-5" or "SLC-5" design in AWI Table 1300-G-3, except as modified by the other requirements of this Section.
- B. Hardwood Face Panels shall be:
 - 1. Kiln dried plain sliced white oak. Verify existing Door 103 and provide match.
 - 2. "Grade A" veneer for transparent finish in accordance with AWI requirements.
 - 3. Book matched with vertical grain pattern. Verify existing Door 103 and provide match.
 - 4. Free of open joints, face depressions beyond 0.01 inch in any 3-inch span, glue stains, and core show through.
- C. The Stile Edge Bands shall:
 - 1. Be of two overlapped bands not less than 1-3/8 inch wide by 1-3/4 inch thick, including veneer.
 - 2. Have standard bevel.
 - 3. Be of the same species as the face veneers and shall be in one piece, without joints.
- D. Top and Bottom Edge Bands shall be of two overlapped bands not less than 1-1/8 inch each, of any suitable species.
- E. Edge Bands (top, bottom, and stile) shall be glued to the core.
- F. Door Laminations shall have Type I bond.

Staved lumber core doors shall be constructed with wood blocks set vertically and all of the wood blocks glued together. Particle board cores shall be constructed with core in one piece, without joints. Reinforce particle board core construction to eliminate through-bolting hardware. Bi-fold and sliding doors for closet may have any suitable veneer species on the back side which will be concealed from view. The concealed veneer shall balance the construction and prevent warping.

Doors shall be trimmed square to required sizes. Doors shall be tagged or otherwise identified for the opening for which intended and such identification shall be maintained until the doors are installed.

Where doors occur in pairs without a frame mullion between, the grain shall be matched between doors, and these pairs shall be suitably identified.

There shall be cross-banding kiln dried hardwood, not less than 1/16 inch thick, laid horizontally with tight horizontal joints and no vertical joints. Face veneers and cross-banding shall be laminated to the cores with waterproof resin glue by the hot plate process. All doors shall be trimmed square to required sizes. All doors shall be tagged or otherwise identified for the opening for which intended and such identification shall be maintained until the doors are installed.

2.02 HARDWARE PREPARATION

- A. Factory pre-machining for mortised hardware shall be as required by applicable codes and/or as arranged between the Contractor and the supplier. Factory-cut mortises shall conform to requirements in Article 3.01 of this Section.

2.03 OPENINGS

- A. For glass shall be provided as shown. When windows are scheduled on the Drawings, the stops shall be flush Algoma "W4" profile, if not otherwise noted on the drawings. Provide removable stops, fastened with screws for openings for glass. Stops and moldings shall be hardwood selected so as to match the face veneers. Work shall be suitable for the required glass; see Section 08 80 00 or the Drawings.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install all wood doors; coordinate with the work specified in applicable Division 8 Sections. Hardware shall be securely attached, straight, neat, and sightly, in accordance with the manufacturer's templates and instructions. Adjust hardware to provide proper operation and control, if applicable, of each door. Install gaskets in accordance with the manufacturer's instructions with special attention to minimum temperature for pressure-sensitive adhesive. Provide heat if necessary. Doors shall operate smoothly and properly. There shall be no defects apparent in the finished work.
- B. Wood Door installation shall be in accordance with the manufacturer's instructions which shall be at the jobsite while the work is being done. Doors shall have uniform clearance between door and side and head jambs of not more than 1/8 inch. The stile at the lock side shall have standard bevel. Clearance to floor shall be not more than 5/8 inch. If job site trimming is required, remove approximately equal amounts from both jamb stiles and/or from both top and bottom of door, as applicable.
- C. Hardware mortises shall be cut to about 1/32 inch larger than applicable hinge or lock face-plate so that these will be flush when installed. Coordinate hardware locations with frames; in no case shall centerline of knobs be more than 40-5/16 inches from the floor.

END OF SECTION

SECTION 08 80 00

GLASS AND GLAZING

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes glass and glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:
 - 1. Doors.
 - 2. Interior borrowed lites.

1.02 DEFINITIONS

- A. Manufacturers of Glass Products. Firms that produce primary glass, fabricated glass, or both, as defined in referenced glazing publications.
- B. Glass Thicknesses. Indicated by thickness designations in millimeters according to ASTM C 1036.
- C. Interspace. Space between lites of an insulating-glass unit that contains dehydrated air or a specified gas.
- D. Deterioration of Insulating Glass. Failure of hermetic seal under normal use that is attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.

- 1.03 PERFORMANCE REQUIREMENTS. Provide glazing systems capable of withstanding normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following. Defective manufacture, fabrication, and installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.

1.04 SUBMITTALS

- A. Product Data. For each glass product and glazing material indicated.
- B. Samples. For the following products, in the form of 12-inch square Samples for glass.
 - 1. Insulating glass for each designation indicated.
- C. Product Certificates. Signed by manufacturers of glass and glazing products certifying that products furnished comply with requirements.
- D. Warranties. Special warranties specified in this Section.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications. An experienced installer who has completed glazing similar in

material, design, and extent to that indicated for this Project; whose work has resulted in glass installations with a record of successful in-service performance; and who employs glass installers for this Project who are certified under the National Glass Association's Certified Glass Installer Program.

- B. Source Limitations for Glazing Accessories. Obtain glazing accessories through one source from a single manufacturer for each product and installation method indicated.
- C. Glass Product Testing. Obtain glass test results for product test reports in "Submittals" Article from a qualified testing agency based on testing glass products.
 - 1. Glass Testing Agency Qualifications. An independent testing agency with the experience and capability to conduct the testing indicated, as documented according to ASTM E 548.
- D. Glazing Publications. Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.
 - 1. GANA Publications: GANA's "Glazing Manual."
 - 2. IGMA Publication for Insulating Glass. SIGMA TM-3000, "Glazing Guidelines for Sealed Insulating Glass Units."

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect Glazing Materials according to manufacturer's written instructions and as needed to prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.
- B. For Insulating-Glass Units that will be exposed to substantial altitude changes comply with insulating-glass manufacturer's written recommendations for venting and sealing to avoid hermetic seal ruptures.

1.07 PROJECT CONDITIONS

- A. Environmental Limitations. Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.

1.08 WARRANTY shall include both labor and materials. Forms shall be modified to incorporate both.

- A. Provide a Written 10-year warranty from date of manufacture for insulating glass. Warranty covers deterioration due to normal conditions of use and not to handling, installing, protecting, and maintaining practices contrary to glass manufacturer's published instructions.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Insulating Products specified are by Viracon Glass, Owatonna, MN. Equals may be submitted for review and approval by PPG, Cardinal, Guardian or Oldcastle.

2.02 GLASS PRODUCTS

- A. Annealed Float Glass. ASTM C 1036, Type I (transparent flat glass), Quality-Q3; of class indicated.
 - 1. For uncoated glass, comply with requirements for Condition A.
- B. Insulating-Glass Units, General. Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, and complying with ASTM E 774 for Class CBA units and with requirements specified in this Article and in Part 2 "Insulating-Glass Units" Article.
- C. Shall be 1-inch thick, insulating glass units. The inner lite shall be 5/16-inch clear glass. The air space shall be 7/16-inch air space. The outer lite shall be 1/4-inch clear glass.
 - 1. Fill void between lites with Argon gas.
 - 2. Sealing System. Dual seal, with primary and secondary sealants as follows:
 - a. Sealed insulating glass units to be double sealed with a primary seal of black polyisobutylene and a secondary seal of black silicone.
 - 3. Spacer Specifications. Manufacturer's standard warm edge spacer material and construction.

2.03 MISCELLANEOUS GLAZING MATERIALS

- A. General. Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers. Types recommended by sealant or gasket manufacturer.

2.04 FABRICATION OF GLAZING UNITS

- A. Fabricate Glazing Units in sizes required to glaze openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.

2.05 INSULATING-GLASS UNITS

- A. Low-E, Bronze Tinted Insulating-Glass Units:
 - 1. Products:
 - a. Viracon or approved equal
 - 2. Overall Unit Thickness and Thickness of Each Lite. 1-inch total; 5/16-inch inner lite, 1/4-inch outer lite.
 - 3. Interspace Content. Argon.
 - 4. Outer Lite. Class 2 (clear) float glass.
 - a. Kind HS (heat strengthened).
 - 5. Inner Lite. Class 1 (clear) float glass.
 - a. Kind HS (heat strengthened).

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine Framing Glazing, with Installer present, for compliance with the following:
 - 1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
- B. Proceed with Installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.

3.03 GLAZING, GENERAL

- A. Comply with Combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Glazing Channel Dimensions, as indicated on Drawings, provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances. Adjust as required by Project conditions during installation.
- C. Protect Glass Edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
- D. Install Setting Blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- E. Do Not Exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- F. Provide Edge Blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.
- G. Set Glass Lites in each series with uniform pattern, draw, bow, and similar characteristics.

3.04 TAPE GLAZING

- A. Position Tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops.
- B. Install Tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.
- C. Cover Vertical Framing Joints by applying tapes to heads and sills first and then to jambs. Cover horizontal framing joints by applying tapes to jambs and then to heads and sills.
- D. Place Joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
- E. Do Not Remove release paper from tape until just before each glazing unit is installed.

- F. Apply Heel Bead of elastomeric sealant if exposed to the exterior/ weather.
- G. Center Glass Lites in openings on setting blocks and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.

3.05 GASKET GLAZING (DRY)

- A. Fabricate Compression Gaskets in lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
- B. Insert Soft Compression Gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
- C. Center Glass Lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
- D. Install Gaskets so they protrude past face of glazing stops.

3.06 CLEANING AND PROTECTION

- A. Protect Glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended by glass manufacturer.
- B. Remove and Replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.
- C. Wash Glass on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

END OF SECTION

SECTION 09 26 00

GYPSUM WALLBOARD AND METAL STUD PARTITION SYSTEM

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes furnishing and installing gypsum wallboard work, including metal framing, wood blocking, fasteners, acoustic insulation and incidentals.
- B. Related Sections.
 - 1. See Section 08 11 00 for hollow metal work furnished under that Section to be set in gypsum board partitions under this Section.
 - 2. See Section 09 51 00 for suspended ceiling work to be coordinated with work under this Section.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. A653/A653M Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) Quality
 - 2. A611 Spec. for Steel, Sheet, Carbon, Cold-Rolled, Structural Quality
 - 3. C11 Terminology Relating to Gypsum and Related Building Materials and Systems
 - 4. C1396 Specification for Gypsum Wallboard and Gypsum Sheathing Board
 - 5. C473 Test Methods for Physical Testing of Gypsum Board Products and Gypsum Lath
 - 6. C475 Specification for Joint Treatment Materials for Gypsum Wallboard Construction
 - 7. C518 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties of Means of the Heat Flow Meter Apparatus
 - 8. C630 Specification for Water-Resistant Gypsum Backing Board
 - 9. C754 Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Wallboard
 - 10. 1C840 Specification for Application and Finishing of Gypsum Board
 - 11. 1C1002 Specification for Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Bases
 - 12. 1C1047 Specification for Accessories for Gypsum Wallboard and

Gypsum Veneer Base

- 13. 1C1177 Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- 14. 1D4397 Specification for Polyethylene Sheeting for Construction Industrial, and Agricultural Applications
- 15. 1E84 Test Method for Surface Burning Characteristics of Building Materials
- 16. 1E119 Method for Fire Testing of Building Construction and Materials
- 17. 1E136 Test Method of Materials in a Vertical Tube Furnace at 750°C

B. American Welding Society (AWS)

- 1. D1.1 Structural Welding Code - Steel

C. Gypsum Association (GA)

- 1. GA-201 Using Gypsum Board for Walls and Ceilings
- 2. GA-216 Recommended Specifications for the Application and Finishing of Gypsum Board
- 3. GA-219 Recommendations for Installation of Steel Fire Door Frames in Steel Stud-Gypsum Board Fire-Rated Partitions
- 4. GA-220 Special Recommendations-Gypsum Board Winter Related Problems
- 5. GA-505 Gypsum Board Products-Glossary of Terminology
- 6. GA-600 Fire Resistance Design Manual Eleventh Edition

D. International Conference of Building Officials (ICBO)

- 1. IBC International Building Code, 2012 Edition

E. Underwriter's Laboratories, Inc. (UL)

- 1. Fire Resistive Directory - Latest Edition

F. United States Gypsum Company (USG)

- 1. Gypsum Construction Handbook – Latest Edition

G. Western Wood Products Association (WWPA)

- 1. Standards Standard Grading Rules for Western Lumber

1.03 DEFINITIONS. Refer to ASTM C11 and GA-505 for definitions of terms for gypsum board construction not otherwise defined in this Section or other reference standards.

1.04 SUBMITTALS

- A. Materials List. Submit for approval a list identifying materials to be furnished, including manufacturer's name, model, or series identification, and other relevant data.
 - B. Manufacturer's Instructions shall be furnished and maintained at the job site while this work is being done.
 - C. ASTM C840 shall be furnished and maintained at the job site while this work is being done.
- 1.05 DELIVERY, STORAGE, AND HANDLING. Store materials indoors, under cover; stack flat off the floor. Do not stack long lengths of wallboard over shorter lengths. Provide protection against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes.
- 1.06 PROJECT/SITE CONDITIONS. During cold weather, rooms to receive wallboard shall be maintained at 55° to 70°F for 24 hours before the work starts, during the work, and thereafter. Provide ventilation while joint treatment work is being done. Avoid drafts during dry, hot weather to prevent materials from drying too rapidly. Protect adjoining work.
- 1.07 WARRANTY. Ridging, cracking, loose boards, and other defects which appear during the Correction Period, shall be considered the results of defective materials and/or workmanship, and shall be promptly repaired.
- 1.08 FINISH QUALITY. All surfaces shall be ready to receive painting as specified under Section 09 91 00. All shall be prepared to a "Level 4" quality finish except in main lobby areas and hallways, walls shall be prepared to a "Level 5" quality finish. The Level 5 finish may be accomplished either by a final skim coat of plaster or by using Sheetrock brand "Primer-Surfer."

PART 2 - PRODUCTS

2.01 ACCEPTABLE PRODUCTS AND MANUFACTURERS

- A. Gypsum Wallboard Products. The standard of quality for this Specification is products, accessories, and installation methods of U.S. Gypsum Company and these Specifications; other products, accessories, and installation methods may be used as long as they meet or exceed those specified and these Specifications. Provide gypsum wallboard products, and accessories as manufactured by the following companies:

- 1. Gold Bond Building Products of National Gypsum Company, Charlotte, NC
- 2. United States Gypsum Company, Chicago, IL

- 2.02 GYPSON WALLBOARD. Wallboard shall conform to ASTM C36. Provide thickness as shown on the drawings. Note that products mentioned are by U.S. Gypsum Company. Equivalent products of other manufacturers will be acceptable as long as they fulfill all Specification and code requirements. Wallboard shall have rounded edges with a slight recess made to receive the seam tape. Provide gypsum board of the types indicated in maximum lengths available to minimize end-to-end joints.

- A. Typical Interior-Wall Gypsum Wallboard. If thickness is not shown, provide 5/8-inch thick wallboard to comply with ASTM C840 for application system and support spacing indicated.

- 2.03 ACCEPTABLE METAL FRAMING PRODUCTS AND MANUFACTURERS. Metal Framing Products. The standard of quality for this Specification is products, accessories, and installation methods of Unimast Inc.; other products, accessories, and installation methods may be used as long as they meet or exceed those specified and these Specifications. Manufacturer-determined "Equivalent" gauges may or may not be accepted by the architect on a per project basis. Provide

metal framing products and accessories as manufactured by the following companies:

- A. Clark Dietrich Industries, Inc., West Chester, OH
 - B. Custom Stud, Inc. Lakeville, MN
 - C. Steel Structural Systems Louisville, KY
- 2.04 METAL FRAMING, unless otherwise indicated or specified, shall be formed from galvanized steel, minimum 25 gage, sizes as shown and/or as required, Unimast, or Gold Bond, or Dietrich, or equal. Provide metal runners to fit the studs furnished and, as standard by the same manufacturer; runners shall be galvanized. Profiled/embossed "UltraSteel" studs by Clark/Dietrich are an acceptable equal. (0.015-inch thick for 25 ga.).
- 2.05 SLIP STUD TOP PLATES shall be provided for all top of walls that extend to a structure above. Provide "Sliptrack" by Brady Construction/Dietrich Metal Framing, or equal.
- 2.06 WOOD BLOCKING shall be Douglas Fir/Larch, or other suitable species, surfaced four sides and graded and stamped "Construction" or "Studs" in accordance with Article 40.11 or 41.13, as applicable, of the WWPB Standards or an equivalent material graded by a recognized authority and approved by the Architect.
- 2.07 METAL FRAMING CONNECTIONS, including anchors for wood blocking or reinforcement, shall be made as required and shall all be suitable for the purpose intended. Refer also to Article 3.02 of this Section. All mechanical fasteners shall be corrosion resistant. Include "drill-in" expansion anchors required. Use of power-driven anchors shall be by previous approval of the Architect/Engineer/Owner and shall conform to applicable regulations.
- 2.08 GYPSUM WALLBOARD SCREWS shall comply with ASTM C1002 and shall be self-tapping, self-drilling, bugle-head type for use with a power driven tool. Generally provide Type "S" 1 inch long, minimum length for use at steel framing and furring. Provide Type "W" 1-1/4 inches long for use at wood framing, blocking, and furring.
- 2.09 GYPSUM WALLBOARD JOINT TAPE shall conform to ASTM C475, ASTM C840, and the recommendations of the manufacturer of both gypsum board and joint treatment materials for the application indicated. Provide paper reinforcing tape, unless otherwise indicated. Provide alternate as recommended by the gypsum board and joint material manufacturers.
- 2.10 GYPSUM WALLBOARD JOINT COMPOUND shall conform to ASTM C475, powdered or ready-mixed at the Contractor's option. Provide special water resistant compound for use with water resistant type board.
- 2.11 FINAL FINISHING to a Level 5 shall be by either a final skim coat of joint compound or with "Primer-Surfacers" by USG/ Sheetrock or pre-approved equal.
- 2.12 GYPSUM WALLBOARD BEADS. Edge trim, corner beads, casing beads, control joints, expansion joints, and the like shall be zinc-coated steel by the hot-dip process that complies with ASTM C1047 and shall be provided by USG, Gold Bond, or equal.
- 2.13 ADHESIVE for direct application of wallboard to masonry, concrete, and the like, shall be USG Durabond 500 adhesive, or equal.
- 2.14 ACOUSTIC INSULATION, unless otherwise indicated, shall be Owens/Corning Fiberglass (OCF) "Sound Attenuation Batts", 3-1/2 inches thick, or approved equal.

PART 3 - EXECUTION

3.01 PREPARATION. Hollow metal frames shall be set accurately in place, plumbed, and braced, and then the work shall be built around them. Extra care shall be taken to assure that the jambs are parallel with each other and vertical, and square to the head. Check setting of each frame before building around it and see that jambs are parallel and plumb, that head is level and at correct elevation, and that frame as a whole is in proper position and alignment

3.02 FRAMING AND FURRING. Unless otherwise indicated or specified, the maximum spacing members to receive gypsum wallboard or sheathing shall be 16 inches o.c. Secure all framing and furring securely to the structure and at framing connections; the drawings indicate where partitions terminate at ceiling and where they extend to structure above.

A. Metal Framing. For each section of metal framing, the stud flanges shall point in the same direction. Make connections at 20 gauge or heavier members with welding. Welding shall conform to AWS Standard D1.1 as applicable. Fasteners and welding, as applicable, shall develop full strength of the members.

B. Provide Wood Blocking or Reinforcing in partitions and walls to back-up bumpers or stops at door knob height; and in partitions and walls to receive plumbing fixtures, shelving, radiation units, grab bars, and the like.

3.03 WALLBOARD APPLICATION, GENERAL. All wallboard shall be applied in accordance with the manufacturer's instructions and with applicable requirements of ASTM C840, GA-216-89, and the 'Gypsum Construction Handbook.'

On walls and partitions, apply wallboard with the long dimension vertical, unless otherwise shown or directed. Wallboard shall be of maximum lengths practicable to avoid end joints. Apply wallboard panels, advancing in the direction opposite to the direction the stud flanges point. Abut wallboard without forcing. Neatly fit ends and edges, and support ends and edges on framing members. Do not place butt ends against tapered edges. Stagger joints so as to occur on different framing members on opposite sides of a wall or partition. Attach wallboard with screws; drive screws with a power screwdriver as recommended by the board and/or screw manufacturer. Except as otherwise specified, space screws at 12 inches maximum o.c. along ends and edges, and on intermediate supports. Space screws at 8 inches o.c. along and into both studs where double studs occur at door jambs. Drive screws to a slight dimple without breaking the paper surface of the board.

Provide metal beads or trim at all exposed-to-view terminations of gypsum wallboard, and/or as shown, and/or as recommended by ASTM C840, and/or the manufacturer's recommendations.

Wallboard shall be extended, in concealed spaces above ceiling lines for partitions where these are required to be framed above the ceiling lines; see requirements elsewhere in this Section. Provide wallboard to cover all foam insulation, also above ceiling lines.

3.04 FINISH QUALITY. All surfaces shall be ready to receive painting as specified under Section 09 91 00. All shall be prepared to a "Level 4" quality finish.

3.05 WALLBOARD TRIM. Where feasible, use the same fasteners to anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges to comply with manufacturer's recommendations. Install corner beads at all external corners. Install metal edge trim whenever edge of gypsum board would otherwise be exposed or semi-exposed. Provide type with face flange to receive joint compound, except where "U" bead (semi-finishing type) is indicated. Install U-bead where indicated and where exterior gypsum board edges are not covered by applied moldings or indicated to receive edge trim with face flanges covered with joint compound.

3.06 WALLBOARD JOINTS. Tape and fill joints in accordance with the manufacturer's instructions. Fill over screws. Final surfaces shall be hard, smooth, sightly, and ready for paint, as applicable. Workmanship shall be such that after painting, joints and screws will not be visible, where

applicable. Also tape and fill at corner beads, casing beads, and the like, as required. Final preparation for painting is not required where the work will be concealed. Taping and filling is not required above ceiling lines where gypsum wallboard is installed to cover foam insulation above ceiling lines.

Caulk joints at ceilings where shown and/or where ceiling structure is subject to deflection; use caulking materials same as specified in Section 07 90 00.

- 3.07 ACOUSTIC INSULATION. Place insulation in the stud spaces of the partitions as shown; verify that details are on drawings full height of each partition. Butt joints tightly. Cut insulation and fit neatly where studs are at other than 16-inch spacing, and as required to fit around penetrations, electrical and communication outlets, and the like. Place insulation in the partitions as noted on drawings.

END OF SECTION

SECTION 09 30 00

QUARRY TILE WORK

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes furnishing and installing tile for floors as indicated and specified. Include trim pieces, setting material, grout, and accessories as needed.
- B. Extra Materials. Provide the Owner with extra tile and colored materials such as grouts or sealants. Provide at least 3% of the amount of tile installed, prorated among the different types, sizes, shapes, and colors used. Provide one tube or sausage package of each color of sealant, and provide not less than one pint dry measure of colored grout mix. Pack the extra material in the original boxes, label for location and date of installation, and deliver to a location in the building as directed.

1.02 REFERENCES

A. American National Standards Institute (ANSI)

- 1. A108.1C Contractor's Option: Installation of Ceramic Tile Using A108.1A or 108.1B
- 2. A108.4 Installation of Ceramic Tile with Organic Adhesives or Water Cleanable Tile Setting Epoxy Adhesive
- 3. A108.5 Ceramic Tile Installed with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar
- 4. A108.6 Ceramic Tile Installed with Chemical-Resistant, Water-Cleanable Tile-Setting and - Grouting Epoxy
- 5. A108.7 Electrically Conductive Ceramic Tile Installed with Conductive Dry-Set Portland Cement Mortar
- 6. A108.8 Ceramic Tile Installed with Chemical-Resistant Furan Mortar and Grout
- 7. A108.9 Ceramic Tile Installed with Modified Epoxy Emulsion Mortar/Grout
- 8. A108.10 Installation of Grout in Tile Work

B. Tile Council of America, Inc.

- 1. Handbook Latest edition of the Handbook for Ceramic Tile Installation, Tile Council of America, Inc.

1.03 SUBMITTALS

- A. Shop Drawings and setting diagrams shall be submitted for approval. Shop drawings shall show dimensions for the work as measured on the job and expansion joint layout. The Contractor shall assume full responsibility for all dimensions. Samples shall show full variations to be expected. Finished work shall be in accordance with approved samples.

- B. Certificate. Provide certificate that all tile furnished is “Standard Grade” in accordance with ANSI A137.1.
 - C. Copies. Provide copies of the referenced ANSI Standards and the TCA Handbook at the job site while this work is being done.
- 1.04 WARRANTY. Any bond failure between tile and setting material or between setting material and the substrate will be considered the results of defective workmanship or materials. The Contractor shall replace and make good all defective workmanship or material appearing within the one year correction period.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Floor Tile shall be porcelain floor tile in 8-inch by 8-inch size, as distributed by Daltile.

Quarry Tile – Daltile Quarry Textures
- B. Special Shapes shall be provided for tile work as shown and as required for neat, workmanlike appearance. Provide cove type base matching glazed wall tile where CMT is scheduled floor finish, including factory fabricated corners. Base shall have bullnose top where tile does not continue up the wall. Provide cove type base, with bullnose top, matching Porcelain Tile where Porcelain is scheduled floor finish. Provide bullnose units at tops of wainscots and the like.
- C. Crack Isolation Membrane shall be provided for all tilework at all locations where a control joint is located or where two different floor materials meet, i.e. concrete topping and other concrete work. Provide 12-inch wide membrane over joint. Membrane shall be Laticrete 150 or approved equal.
- D. Thin-Set Mortar for floors shall be Latex Portland-Cement Mortar that is produced in accordance with ANSI A118.4 for the proper formulation for the proposed use. The Latex Portland-Cement Mortar can be ‘premixed’ (mortar packaged with latex additive), or ‘site mixed’ (mortar packaged, latex additive packaged, and both properly proportioned and mixed at the site). The type of Latex Portland-Cement Mortar used (‘premixed’ or ‘site mixed’) is the Contractor’s option, but all thin-set work must be done with it.
 - 1. Premixed Portland-Cement Mortar shall be “Flex Tile 052G” (gray) for use when medium to dark grout is to be used; and “Flex Tile 052W” (white) for use when light or white grout is to be used; or equal.
 - 2. Site Mixed Latex Portland-Cement Mortar shall be “Full Set” mortar and “TA-865” latex additive, both products by H.B. Fuller Company, Palatine, IL; “Premium Thin Set” mortar and “PCI Lastoflex DL” latex additive, both products by PCI, Minneapolis, MN; or equal. Provide typical products where medium to dark grouts are to be used and use white products where light or white grout is to be used.
- E. Colored Epoxy Grout shall be provided for all floors and walls with 1/8-inch joints. Grout shall be “Spectra-Lock PRO” by Laticrete or approved equal. Colors of grout materials shall be selected by the Architect and a schedule will be created during the shop drawing phase to define the limits of each color of grout.

PART 3 - EXECUTION

- 3.01 PREPARATION OF SUBSTRATE. Surfaces to receive tile and tile setting materials shall be clean and free from any material which may cause a poor bond. The tile applicator shall be responsible for accepting the substrates and shall not apply his work to substrates where there is any question of their suitability.
- 3.02 APPLICATION OF TILE. Thicknesses allowed for tile work shall be as shown and/or as required. Surfaces to which leveling beds, setting mortar, and setting bed are to be applied shall be clean and in suitable condition. Tile setting shall be by thoroughly experienced mechanics. Tiles shall be firmly secured in place and all finished surfaces shall be brought to true and level planes. Joints in mosaic tile and glazed wall tile shall be uniform and not more than 1/16 inch in width, except as may be otherwise specified. Joints in porcelain tile shall be uniform and not more than 1/4 inch in width. Unless otherwise shown, lay tile in a grid pattern. Align joints when adjoining tiles on floor, base, walls, and trim are the same size. Lay out tile work and center tile fields in both directions of each floor space or on each wall area; make minor adjustments to align with proposed or existing expansion joints. Adjust to minimize tile cutting. Provide uniform joint widths, unless otherwise shown. Lay out the work to avoid use of pieces less than one-half tile.
- Where tile of different thicknesses are being set together or next to each other, the bonding coat bed must be adjusted so the thinner tile will receive additional bonding bed so the tiles are flat, flush, true, and planar across the entire tile surface.
- A. Floor Tile shall be applied over concrete floor substrate in accordance with TCA Handbook Method F113 using dry set mortar or latex-Portland cement mortar.
- Provide full tiles terminating under the doors, in closed position, where floor tile terminates and the floor beyond is to receive carpet. Terminate floor tile at the walls so that the "thin lip" base will cover.
- B. Grouting. Apply grout materials, specified elsewhere in this Section, in strict accordance with the manufacturer's directions. Do not grout joints before setting bed material has attained a firm set. Cure grout by keeping damp at least three full days.
- 3.03 COMPLETED WORK shall be level, plumb, and true, as required, true to pattern with uniform straight joints and free from defective, damaged, or broken tile.
- 3.04 CLEANING. All work shall be cleaned down at completion and left in an acceptable condition.

END OF SECTION

SECTION 09 51 00

ACOUSTICAL CEILINGS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes furnishing and installing acoustical ceilings, including hangers, runner channels, acoustical suspension systems, fastenings, and accessories.
- B. Extra Materials. Provide the Owner with extra tile. Provide at least 3% of the amount of tile installed, prorated among the different types, sizes, shapes, and colors used. Pack the extra tile in original boxes, label for location and date of installation, and deliver to a location in the building as directed.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. C635-95 Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings
 - 2. C636-92 Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels
 - 3. E84-95b Test Method for Surface Burning Characteristics of Building Materials

- 1.03 SYSTEM DESCRIPTION. Provide suspended acoustical ceilings where called for in the Room Finish Schedule and as indicated. The work will include panels in exposed grids.

The drawings and schedules show the height from the floor to the suspended ceiling.

The suspension systems shall be built to support and accommodate the light fixtures and shall be of adequate strength for this purpose.

1.04 SUBMITTALS

- A. Samples. Provide 12-inch square pieces of each ceiling panel type, cut from corners of panels. The samples shall be submitted for color selection, pattern selection, and product approval. The samples shall show the complete range and variation in color and texture. The work shall be in accordance with approved samples.
- B. Certification shall be submitted for the duty rating the suspension system.
- C. Copies. Provide copy of the referenced ASTM C636 at the job site while this work is being done.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Armstrong World Industries Inc., Lancaster, PA
- B. Celotex Corporation, Tampa, FL
- C. USG Interiors Inc., Chicago, IL

2.02 MATERIALS

- A. Acoustical Ceiling Tile scheduled as "ACT" shall be sound absorbent incombustible boards of mineral fibers or wet-felted mineral fibers to provide rigidity, strength, and toughness. Unless otherwise specified, the product designations provided in this Section are based on the current products of Celotex Corporation, Tampa, FL. Products that match the design intent and meet or exceed the specified attributes that are provided by Armstrong World Industries Inc., or USG Interiors Inc. may be approved by the Architect subject to equivalent design and attributes to the items specified.
 - 1. Provide 24-inch by 24-inch by 3/4-inch mineral fiber lay-in ceiling panels that are not fire rated. The panels shall provide a bold natural texture. Panels shall be not less than 3/4-inch thick and have a non-directional pattern, and a square edge condition. Panels shall be field painted to match existing ACT. Noise reduction coefficient (NRC) shall be not less than 0.55, and light reflectance not less than 0.80 minimum.
- B. Exposed Grid System shall be by Chicago Metallic Corporation or an approved equal. Grid shall be suitable for the required acoustical panels and the light fixtures. Include all accessories and fittings for complete installation. Edge trim shall be provided in all cases at walls and at all other obstructions as may be required. All metal surfaces exposed to view shall have baked on white enamel finish as standard by the manufacturer, and all parts shall be protected against rust and corrosion with paint finish. All grid systems that are part of a rated ceiling assembly (i.e., the schedule calls for a one hour rating, etc.) must provide a grid and component parts that are required to achieve the required rating. Grids shall be 15/16-inch width design.
 - 1. Typical Ceiling Grid System. Provide the grid system everywhere that "ACT" ceiling panels are being used. Provide Chicago Metallic Corporation's "Model No. 200" grid system, or equal products by the other acceptable manufacturers. System "200" shall be rated intermediate duty per ASTM C635.
- C. Hangers shall be of galvanized annealed wire no lighter than No. 12 U.S. Standard gauge.

PART 3 - EXECUTION

- 3.01 LAYOUTS shall be as shown on the drawings. If not shown, lay out the work to avoid pieces smaller than one-half panel or one-half tile to the extent practicable. The Contractor shall field measure the spaces involved and confirm dimensions and layouts before starting the work and shall consult with the Architect to adjust any discrepancies.
- 3.02 INSTALLATION shall be in accordance with ASTM C636 unless otherwise specified herein. Installation shall be made by thoroughly experienced and competent mechanics approved by the manufacturers.
 - A. Hangers shall be spaced to suit the grid system and/or the suspension system. Generally, provide one hanger for every 16 square feet of ceiling. Attach hangers to the work directly overhead by approved means, so that each hanger is nearly vertical. Wrap to bottom chord of bar joists where applicable. Provide auxiliary members spanning between bar joists if necessary. Attach to precast concrete as recommended by the precast manufacturer. Do not drill or shoot into precast concrete without the manufacturer's approval. Also provide

additional hangers to support light fixtures which are supported by the ceiling; generally, provide one hanger at each corner of each light fixture.

- B. Exposed Grid-Panel Ceilings. Unless otherwise shown, space main runners at 4'-0" centers, and space cross tees at 2'-0" centers. Provide additional 2'-0" cross tees parallel to the main runners to complete the required 2'-0"x2'-0" grid. Modify spacing if necessary to conform to the required duty rating. Provide angles around the perimeter of each room, at columns, and as required. Coordinate the placement of the grid and panels with the electrical and mechanical work.

Finished work shall be accurately leveled, such that deflections do not exceed 1/360 the distance between supports, and with no inequalities apparent to the eye.

The work, when completed, shall be clean and free from defects and of adequate strength; grid systems shall be square and straight; and panels shall bear evenly on all edges. Grid members and joints shall be straight and in good alignment across intersections. When tested with a 10-foot straightedge, the maximum variation from a true plane shall not exceed 1/8 inch.

If trim edge panels are being installed, the required job site cuts shall be made to match the factory edges.

- 3.03 COMPLETED WORK shall be neat and sightly in all respects. All other work soiled, defaced, or damaged in any manner on account of this work shall be cleaned or replaced. Touch up paint on grid as may be necessary.

END OF SECTION

SECTION 09 65 00

RESILIENT BASE

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes the furnishing and installing vinyl base as indicated and specified. Include base at casework.
- B. Related Sections.
 - 1. See Section 09 68 13 for carpet tile
- C. Extra Materials. Provide the Owner with extra tile. Provide at least 3% of the amount installed, prorated among the different colors and patterns used. Pack the extra tile in original boxes, label for location and date of installation, and deliver to a location in the building as directed.

1.02 SUBMITTALS. Samples shall be submitted for approval and for color and pattern selection.

1.03 WARRANTY. Any bond failure between tile and setting material or between setting material and the substrate will be considered the results of defective workmanship or materials. The Contractor shall replace and make good all defective workmanship or material appearing within a period of two years.

PART 2 - PRODUCTS

2.01 VINYL BASE for use with resilient flooring shall be 0.080 inch thick, top-set, cove type; and for use with carpet, shall be straight type. The standard of quality for this Section is products of Roppe and these Specifications; other products may be used as long as they meet or exceed those specified and these Specifications. Provide products equal with or exceeding the vinyl base lines of Roppe. Provide vinyl base and accessories as manufactured by one of the following companies:

- A. Armstrong World Industries Inc., Lancaster, PA
- B. Roppe Corp., Fostoria, OH
- C. Or Equal

Provide a minimum of 30 standard colors from which to select. Height of the base shall be as shown; if not shown, provide base 4-inches high. Colors of base shall be as selected by the Architect; several colors may be required. Corners may be job formed, provided that the work is done in accordance with the manufacturer's instructions and the completed corners and work are neat and workmanlike and the toe of the cove is tight to the floor at all points; otherwise factory-made corners shall be provided.

2.02 ACCESSORIES

- A. Adhesives shall be as furnished or recommended by the manufacturer.
- B. Transitions. Provide tile reducer strips and other transitions required. The standard of quality

for this Section is products of Mercer and these Specifications; other products may be used as long as they meet or exceed those specified and these Specifications. Provide products equal with or exceeding the vinyl transitions of Mercer. Provide vinyl transitions as manufactured by one of the following companies:

 Mercer Products Company, Inc., Eustis, FL

 Johnsonite, Chagrin Falls, OH

 Roppe Corp., Fostoria, OH

Provide a minimum of 12 standard colors from which to select. Height of transitions shall be based upon the actual height of the materials encountered on each side of the transition; therefore, verify material heights with the drawings and the Specifications. Colors of transitions shall be as selected by the Architect; several colors may be required. Trim the transitions as may be required to provide required edge thicknesses.

1. Transition between Carpet and Quarry Tile. Provide the appropriate Mercer Model from the following: 153; or trim Model 160.

PART 3 - EXECUTION

3.01 APPLICATION

- A. Vinyl Base shall be installed in full accordance with the manufacturer's instructions. Install vinyl base at casework, unless otherwise shown or specified. Base shall be well secured to the substrate and shall be level and straight. Joints shall be the minimum number practicable and shall be tightly butted. Toe of base shall be tight to the floor.
- B. Transitions. Install tapered vinyl edge transitions where different flooring materials meet. Where vinyl composition tile flooring terminates and does not meet another finish, locate the transition strip centered under doors in closed position. Install suitable transition pieces where resilient flooring meets carpet and/or other floor finish.

- 3.02 CLEANING. The vinyl base shall be cleaned, acrylic waxed and buffed. This work shall be done shortly before acceptance of the work, at a time approved by the Architect.

END OF SECTION

SECTION 09 68 13

CARPET TILE

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes furnishing and installing carpet tile as indicated and specified.
- B. Related Sections. Vinyl base and vinyl transition strips between carpet and resilient flooring are specified to be furnished and installed under Section 09 65 00; carpet edge/transition strips to other floor finishes shall be furnished under this Section. Coordinate so that all transitions are trimmed, neat, and sightly.
- C. Extra Material. Provide the Owner with extra carpet tiles. Provide at least 3% of the amount installed, prorated among the different colors used. Pack the extra tile in original boxes, label for location and date of installation, and deliver to the Owner as directed.

1.02 SUBMITTALS

- A. Shop Drawings shall be submitted for approval. Drawings shall show layout of carpet tiles, layout the work to avoid pieces smaller than one-half tile to the extent practicable. Drawing shall be based on actual job site measurements.
- B. Samples of carpet and accessories shall be submitted for approval. Carpet samples shall be full tiles; submit two tiles which represent the full range of color/pattern variation that is to be expected in the finished work. Finished work shall be in accordance with the approved samples.

- 1.03 WARRANTY. Raveling at tile edges, pull out or running of yarn, or lifting of tiles from the substrate will be considered the result of defective workmanship or materials, unless it can be shown that the carpet was subjected to abuse over and above that expected under heavy commercial type traffic. The Contractor shall replace and make good defective workmanship or material appearing within a period of two years from the date of Substantial Completion.

PART 2 - PRODUCTS

2.01 CARPET shall be:

- A. Interface; Cubic Collection, i2Range, Learning
- B. Or Equal

Note: All carpet shall be approximately 18"x18" carpet tiles. Carpet shall be the colors and patterns as specified above or will be selected by the Architect from the manufacturer's standards. Several different colors may be required.

- 2.02 ADHESIVE shall be as recommended by the carpet manufacturer for direct glue-down installation of the carpet.

- 2.03 ACCESSORIES. Provide suitable carpet edge strips and other accessories as needed. Edge strips provided under this Section may be metal or vinyl, in standard colors as selected by the Architect. Coordinate with Section 09 65 00; avoid omissions and duplications.

PART 3 - INSTALLATION

- 3.01 INSTALL carpet direct to floor, without pad, in full accordance with the manufacturer's instructions. Floors shall be dry, clean, free of wax, grease, and/or oil. Where required to complete the layout indicated on the approved Shop Drawings, tiles shall be carefully cut. Joints shall be tight and not apparent to the eye; carpet shall run in the same direction. Provide and install suitable edge strips as required. Coordinate with work specified in Section 09 65 00 so as to provide a neat and sightly installation. Butt carpet to bases of casework, walls, columns, and the like, as applicable.

END OF SECTION

SECTION 09 91 00

PAINTING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes the furnishing of all labor and materials for the painting and finishing throughout the work as indicated and specified.

The work shall be painted and finished in accordance with the Schedules in this Section and the Room Finish Schedule and notes on the Drawings. The Schedules do not necessarily describe all work. New work, which is installed prime painted or unfinished, though not scheduled, shall be painted or finished same as similar items that are scheduled. If no similar items are scheduled, paint or finish as suitable and consistent with the intent of these Specifications and the exposure to be expected. Do not paint plastic laminate, plated and finished hardware, glass, resilient and the like. The following types of items may or may not be painted depending on circumstance; paint these items when specified or noted in drawings: gypsum wall board partitions, acoustical ceiling systems, hollow metal frames and other items so noted, specified or scheduled.

Note that some specific items that require painting may come to the job site pre-finished and will require to be field painted. See the painting schedule in this Section, along with schedules and notes on the drawings.

- B. Extra Materials. Unless otherwise directed by the Architect, remove all extra materials from the job site after final completion of the work.

1.02 SUBMITTALS. Any and all proposed changes to these Specifications shall be submitted as questions to the shop drawings or through normal Request for Information or Proposal Request processes. Contractor shall precisely provide all products, coats and thicknesses as specified.

- A. Provide Three Copies of a schedule detailing each substrate in the same order as the schedules used in Part 3 of this Section. Include the following:
1. The specific products to be used for each coat.
 2. Documentation that the manufacturer has reviewed and approved each painting system.
 3. Data pages for all products listed.
 4. On one set of data pages, highlight the following:
 - a. Type of resin
 - b. Dry film thickness
 - c. Volume solids
 - d. Units of sheen
 - e. Other performance or descriptive data required by Part 2 of this Section.
 - f. If this information is not on the data page, provide the information in a letter of certification from the manufacturer. Attach the letter to the appropriate data page.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Delivery. Materials shall be delivered at the building in the original containers bearing manufacturer's labels, with labels intact and seals unbroken. Labels shall include the manufacturer's instructions on surface preparation and material application; if such is not on the manufacturer's standard labels; submit the required data in a bound booklet. No materials shall be reduced or changed, except as specified by the manufacturer of the material.

No materials shall be delivered at the building, except such as have been approved as to manufacturer, brand, and quality.

- B. Storage Safety. Store all materials so as to prevent fires and to prevent the accumulation of flammable and noxious fumes. The area selected for paint storage and mixing must have good natural or mechanical ventilation. It shall be posted as a "No Smoking" area and this regulation strictly enforced.

Paints, turpentine, spirits, thinners, and all other flammable liquids shall be kept in closed metal containers. Brushes and rollers left in solvent or brush cleaners must be kept in closed containers.

There shall be no open containers of any flammable liquids, including paint, left in the storage or mixing area. Waste, rags, paper, and similar combustible material shall be placed in metal containers provided with self-closing covers. These containers are to be emptied regularly and the contents removed from the premises.

The Contractor shall provide and maintain in proper working order a 10-pound capacity CO₂ type fire extinguisher in the storage/mixing area.

PART 2 - PRODUCTS

- 2.01 ACCEPTABLE MANUFACTURER. The full name of manufacturer designated by the abbreviation BM in the Systems Schedule is Benjamin Moore; GP in the Systems Schedule is Glidden Professional and DC is Devco Coatings International; SW in the Systems Schedule is Sherwin-Williams; and TN in the Systems Schedule is Tnemec.
- 2.02 MATERIALS. Each paint and finish shall be the manufacturer's best grade of the kind called for, and each shall be suitable for the use required and over the primer used.

PART 3 - EXECUTION

- 3.01 SURFACE PREPARATION. The Contractor shall be wholly responsible for the finish of the work, and therefore shall not commence any part of it until the surface is in proper condition. All surfaces shall be properly prepared before applying paint or other finishes. Surfaces shall be carefully cleaned and hand smoothed, as may be necessary.

Holes and other defects shall be puttied. Fill over screw heads in metal door frames which would otherwise be exposed to view.

Filling defects in woodwork shall be done after the first coat of finish has been applied, allowed to harden and dry. Fill material shall be colored to match the shade of the finish coat.

Prime coats furnished under other sections of this Specification shall be touched up if damaged. Confirm that erection markings on structural steel, steel joists, precast concrete and the like have been satisfactorily, removed, erased or obscured and that the resultant surface is appropriate for

the finishing specified in this Section without bleed through or shadowing.

- 3.02 PAINT APPLICATION. Paints and finishes shall be applied in accordance with the respective manufacturer's directions. Handle all materials so as to prevent fires and to prevent the accumulation of flammable and/or noxious fumes.

All work shall be done in a workmanlike manner by skilled mechanics. All material shall be evenly spread and smoothly flowed on and shall be free from runs and sags, brush marks, lap marks, and other blemishes, and no paint, varnish, or enamel shall be applied until the preceding coat is thoroughly dry and hard.

Sufficient time shall be given to allow each coat to dry before next coat is applied, and the work shall not be hurried by the use of dryers. Time between coats shall be in accordance with the coating manufacturer's instructions and recommendations. Sanding shall be done between coats as recommended by the paint manufacturer and in order that surfaces are suitable for following applications.

Canvas and building paper shall be spread as necessary to protect finished or unfinished work. The final coat on interior work shall not be applied until after all other crafts have completed their work and surplus materials and debris have been removed from the building.

Seal all surfaces, including edges, tops, and bottoms of doors (remove from frames for painting) with all coats stated in the schedule herein.

Paint prime-coated hardware items, if any, same as scheduled for hollow metal doors and frames. Where finished hardware or fire rating labels have a plated, sealed, or finished surface, protect that surface from painting by masking off area. Remove any protective covering immediately so as not to become permanently affixed to hardware or fire labels.

Note that painting of sprinkler heads and fire alarm devices is strictly prohibited. Due to their function, sprinkler heads and fire alarm devices must not be painted so they have free movement. The painting of any of these items will require their replacement by the Contractor at no expense to the Owner.

The number of coats indicated and dry film thickness indicated in the Schedule is the minimum number of coats and dry film thickness which will be accepted. If necessary for good coverage and hiding, apply additional finish coats.

At pre-finished items that are scheduled to be field painted, the individual components of the assembly must be painted in such a way to provide a fully painted surface to all 'exposed to view surfaces.' Any surfaces not painted which may become exposed over the normal course of use must be painted. Any assemblies not fully painted will be repainted.

When the work is complete, remove all surplus materials, scaffold, etc., and clean off all misplaced paint, varnish, etc., so as to leave the premises in good condition, acceptable to the Architect.

- 3.03 COLORS

A. General. Except as otherwise specified, colors shall be as selected by the Architect. The finished work shall be in accordance with the selected color chips and approved samples in each case.

- 3.04 PAINTING AND FINISHING SYSTEMS INDEX. Note that items to be painted are included, but not limited to the items scheduled. There are additional items to be painted that are not individually listed in this schedule. See Article 1.01A of this Specification for further explanation of those items. Include all items requiring paint, and use a paint system that is one of those

specified.

<u>Surface</u>	<u>Paint System</u>
Concrete/masonry noted "epoxy," eggshell	A
Concrete/masonry noted "paint," eggshell	B
All H.M. doors, frames and interior structural steel and misc. metal assemblies, semi-gloss	C
Exterior metal fabrications, ferrous piping, gloss	D
Gypsum board walls, ceilings and soffits, eggshell	E
Wood doors and miscellaneous (int.), satin gloss	F
Exterior concrete board and trim	G
Interior cold metal pipes, sprinkler pipes	H
High Temp Pipes (cold application, 200 deg. In use)	H1
High Temp Pipes (200 deg.+ when painting)	H2
Interior plastic drain pipes	I
Galv. conduit, ductwork (exposed in finished spaces)	J
Field painting of fin tube radiation enclosures; cabinet unit heater	K
Enclosures and/or convector enclosures gloss	
Traffic/parking striping and markings	L
Steel joists, metal deck (exposed), flat	M
Rooftop mechanical metal	N
Overhead Doors	O

- 3.05 SYSTEMS DESCRIPTION SCHEDULE. Note that the 'Square Feet per Gallon' is a maximum coverage, and the 'Minimum Dry Film Thickness' is a minimum coverage. If the manufacturer recommends a heavier typical 'per coat coverage,' provide that recommended coverage.

BRUSH OR ROLLER APPLY ALL. NO SPRAY APPLICATION IS PERMITTED. Tint Primer for all Dark Colors.

Square Feet per Gallon = SFPG Minimum Dry Film Thickness = MDFT

System A:	1 coat block filler (for epoxy), (75 SFPG) and 2 coats waterbased epoxy; (2.5 MDFT each)
System B:	1 coat block filler (for paint), (75 SFPG) and 2 coats wall paint (1.5 MDFT per coat)
System C:	touch up shop coat and 2 coats metal enamel, semi-gloss (2.0 MDFT per coat)
System D:	touch up shop coat or if not shop painted and if field painting Sandblast per SSPC-SP6 1 coat zinc rich epoxy (3.0 MDFT) 1 tie-coat epoxy (2.5 MDFT) 2 coats colored polyurethane (2.5 MDFT per coat)
System E:	1 coat latex primer (1.0 MDFT) and 2 coats wall paint, eggshell finish (1.5 MDFT per coat)
System F:	1 coat stain, apply as required for proper coverage) 2 coats gloss clear polyurethane 1 coat satin clear polyurethane (1.0 MDFT each)
System G:	2 coats wall (ext.) paint (1.5 MDFT per coat)

Square Feet per Gallon = SFPG

Minimum Dry Film Thickness = MDFT

System H:	Solvent & Power Tool Clean SSPC-SP3 1 coat metal pipe primer, off-white 2 coats acrylic metal paint (2.5 MDFT per coat)
System H1:	Solvent & Power Tool Clean SSPC-SP3 1 coat metal pipe primer, off-white 2 coats metal hot pipe paint, colored (2.5 MDFT per coat)
System H2:	Solvent & Power Tool Clean SSPC-SP3 1 coat High-temp metal pipe primer, light gray 2 coats High-temp metal pipe paint, colored (2.5 MDFT per coat)
System I:	sand and clean pipes 1 coat water-based epoxy (as primer) 1 coat wall paint (2.5 MDFT per coat)
System J:	Solvent Clean and steel wool clean 1 coat galvanized metal primer (2.5 MDFT) 1 coat dryfall for ducts, oil-enamel for pipes (2.5 MDFT)
System K:	'scuff sand' the entire surface to a dull finish with 200 grit paper, mask and spray coat, do not brush apply. 2 coats, gloss (3.0 MDFT) -two comp. urethane
System L:	Clean existing bituminous surfaces of oil or other surface contaminants, 1 coat of traffic paint (7.5 MDFT).
System M:	Clean steel per SSPC-SPI and SSPC-SP3 and proceed with the work touch-up shop primer w/ferrous metal primer, or if galvanized use primer listed 1 coat dryfall paint.
System N:	Solvent clean all metal and light sandblast two coats of two comp. High-temp Polyurethane (direct to metal).
System O:	Scotch pad and solvent clean 2 coats water-based metal paint, semi-gloss

COATING TYPE

ACCEPTABLE PRODUCTS

	BM	TN	GP	SW
BLOCK FILLERS				
for 'epoxy'	173 Blk. Filler		DC-4015-1000	B42W46
for 'wall paint'	285 Blk. Filler		3010-1200	B25 W25 Pro Mar
PRIMERS				
plastic pipe primer				
latex-gyp. bd.	284 Super-Hide		High Hide Primer 1000-1200	B28 W601
conc. block	023 Fresh Start		3210 Gripper	B25W25
metal (galv./copper)	M04/ M023		4020 PF DevFlex	B66 310
metal (ferrous, int.)	163 IronClad		4360 Devguard	B50Z
metal (ferrous, ext.)	Verify		DC-Devran 224v	Macropoxy 646
metal pipes (ferrous)	Verify		4160 (at exposed threads)	B50 WZ1
High-temp pipe primer				B59A-225
wood, exterior	100		2110 P & P	Y24W20
oil int. wood stain	Benwood 234		1700 Int. Stain	A49

	BM	TN	GP	SW
epoxy	M31/M32 Primer		DC-Tru-Glaze 4030	B67A5/B67V5
zinc rich	90-97		Cathacoat 313	Zinc Clad IV
TIE COAT				
Epoxy		27 Typoxy	Devran 224v	Macropoxy 646
TOP COATS				
wall paint-gyp. bd. (eggshell)	286 Enamel		1412 UltraHide	B20W200
wall paint (cmu) ext.	170m.gloss/185 low lust.		2402 satin 2406 semi-gloss	B31/200(m.gloss) - B20/200 (eggshell)
wall paint (cmu) int.	170m.gloss/185 low lust.		1412 Ultrahide eggshell or 1416 semigloss	B31/200(m.gloss) - B20/200 (eggshell)
acrylic (doors, frames)	M29		4216 HP DevFlex	B66-300
alkyd (doors, frames)			4306 Devguard	B54Z
wall & trim (exterior)satin	108		2402	A100/A82
polyurethane (clear)	424		1902	A67
Metal enamel, s.-gloss	Verify		4306	B54z
water based metal paint (semi-gloss)	Verify		4216HP (227 g/l)	B66 350 (208 g/l)
polyurethane colored (ext. ferrous)		73 series	379	B65-600 Acrolon 218-100
Urethane (gloss)	M74		379	B65 W300/B60V30
high-temp pipe paint				High Temp Coatings # HTC-500V
high-temp polyurethane epoxy (water based)	Rust-o-leum #9879/9801 black (roof penetrations)		4406 Semi-Gloss	B70-200/B60 V25
ext. urethane	M43/M44 S.Gloss	73 Endura Shield	Devthane 379	Acrolon 218-100
dryfall (galv.)	5301 latex		1280 latex	B42W-1
dryfall (ferrous met)	M5101		1380 flat alkyd	B47W65
traffic paint	M58 latex or M56 alkyd		Traffic Zone Paint	TM2160w/TM216 1y

Materials Call-Outs Note. The numbers, series, and general call-outs noted in the schedule are generic in nature and provide a quality level; the specific product number for a particular paint application will be determined during the shop drawing phase or when actual paint colors are selected. For example, if a paint number is listed, it includes all the tint options and finish gloss levels, and the actual paint selected will influence the color options and gloss levels of the primer specified. The abbreviations used in the above table have definitions listed below:

BM: Benjamin Moore; GP/DC: Glidden Professional/Devoe Coatings International; SW: Sherwin-Williams; and TN: Tnemec

END OF SECTION

105 MOUNT ROYAL SHOPPING CIRCLE - DULUTH MN, 55803



SHEET NO.	SHEET NAME
G000	GENERAL INFORMATION
A101	DEMOLITION PLAN AND EXISTING CONDITIONS PHOTOGRAPHS
A102	FLOOR PLAN, DOOR AND FRAME ELEVATIONS
A103	REFLECTED CEILING PLAN AND BUILDING SECTION DIAGRAM
A104	DOOR SCHEDULE, HARDWARE GROUPS AND DETAILS

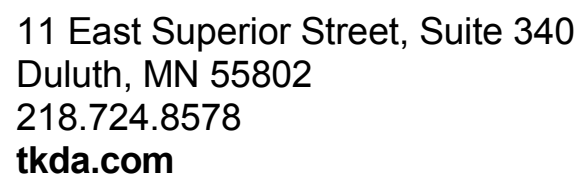


1. THE CONTRACTOR SHALL PROVIDE DESIGN BUILD MECHANICAL AND ELECTRICAL SERVICES AS PART OF THEIR BID. THIS WORK SHALL INCLUDE, BUT IS NOT LIMITED TO: HVAC, SPRINKLER, POWER, DATA AND LIGHTING DESIGN AND INSTALLATION. ITEMS SHOWN ON THE DRAWINGS ARE FOR REFERENCE AND TO DETERMINE THE SCOPE OF THE DESIGN BUILD WORK. THE DESIGN BUILD CONTRACTORS SHALL VERIFY ACTUAL LOCATIONS AND SELECTIONS WITH THE OWNER PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL NEW AND EXISTING CONDITIONS AND DIMENSIONS AT JOB SITE FOR COMPARISON WITH DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING. IF ANY DISCREPANCIES, INCONSISTENCIES OR OMISSIONS ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED, IN WRITING, FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.
3. DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL RELY ON WRITTEN DIMENSIONS AS GIVEN. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATIONS. ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR AND COORDINATED WITH ALL OF THE WORK OF ALL TRADES. IF DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT, IN WRITING, FOR CLARIFICATION BEFORE THE COMMENCEMENT OR RESUMPTION OF WORK.
4. ABBREVIATIONS THROUGHOUT THE PLANS ARE THOSE IN COMMON USE. NOTIFY THE ARCHITECT OF ANY ABBREVIATIONS IN QUESTION.
5. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE VARIOUS TRADE ITEMS WITHIN THE SPACE ABOVE ALL CEILINGS INCLUDING, BUT NOT LIMITED TO: MECHANICAL DUCTS AND INSULATION, CONDUITS, RACEWAYS, LIGHT FIXTURES, CEILING SYSTEMS, AND SHALL BE RESPONSIBLE FOR MAINTAINING THE FINISH CEILING HEIGHT ABOVE THE FINISH FLOOR INDICATED IN THE DRAWINGS AND THE FINISH SCHEDULE.
6. ACCESS PANELS SHALL BE PROVIDED AND INSTALLED WHEREVER REQUIRED BY BUILDING CODE OR FOR THE PROPER OPERATION OR MAINTENANCE OF MECHANICAL OR ELECTRICAL EQUIPMENT, WHETHER OR NOT INDICATED ON THE DRAWINGS. NO ACCESS PANEL SHALL BE LOCATED, FRAMED OR INSTALLED WITHOUT THE EXPRESSED APPROVAL OF THE ARCHITECT.
7. DIMENSIONS SHOWN ON FLOOR PLANS, SECTIONS, ELEVATIONS, AND DETAILS ARE TO CENTERLINE OF STUD AND FINISHED FACE OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED.
8. IN THE CASE OF A CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, SPECIFICATIONS SHALL TAKE PRECEDENCE. CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ANY CONFLICT BEFORE PROCEEDING WITH THE WORK.
9. ALL DUCT PENETRATIONS THROUGH PARTITIONS AND CEILING SHALL BE PROVIDED WITH NECESSARY FRAMES AND BRACING AROUND THE OPENING.
10. LEGAL EXITS SHALL NOT BE BLOCKED AT ANYTIME.
11. FINAL CLEAN UP AND DISPOSAL. REMOVE DEBRIS, RUBBISH AND WASTE MATERIAL FROM THE OWNER'S PROPERTY TO A LAWFUL DISPOSAL AREA AND PAY ALL HAULING AND DUMPING COSTS. CONFORM TO PERTAINING FEDERAL STATE AND LOCAL LAWS. REGULATIONS AND ORDERS UPON COMPLETION OF WORK. ALL CONSTRUCTION AREAS SHALL BE LEFT VACUUM-CLEAN AND FREE FROM DEBRIS. CLEAN ALL DUST, DIRT, STAINS, HAND MARKS, PAINT SPOTS, DROPPINGS, AND OTHER BLEMISHES.
12. FINISH FLOOR ELEVATIONS ARE AS ESTABLISHED DATUM LINE, UNLESS OTHERWISE NOTED.
13. THE CONTRACTOR SHALL PROTECT ALL FINISH WORK AND SURFACES FROM DAMAGE DURING THE COURSE OF CONSTRUCTION AND SHALL REPLACE AND/OR REPAIR ALL DAMAGED SURFACES CAUSED BY CONTRACTOR OR SUBCONTRACTOR PERSONNEL TO THE SATISFACTION OF THE OWNER AND ARCHITECT.

[illegible]

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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

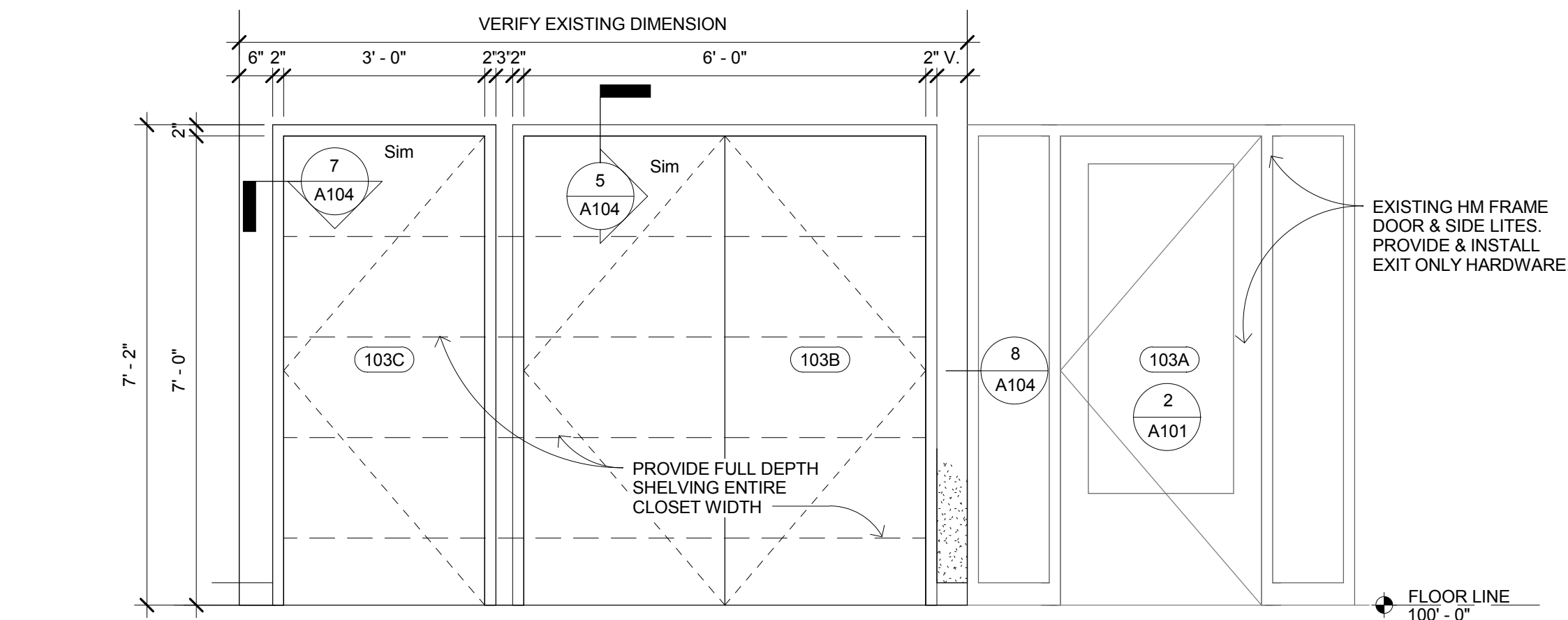
SIGNATURE: _____
 PRINTED NAME: BENJAMIN M. OLSON
 LISENCE NO: 51239 DATE: 02.25.2016



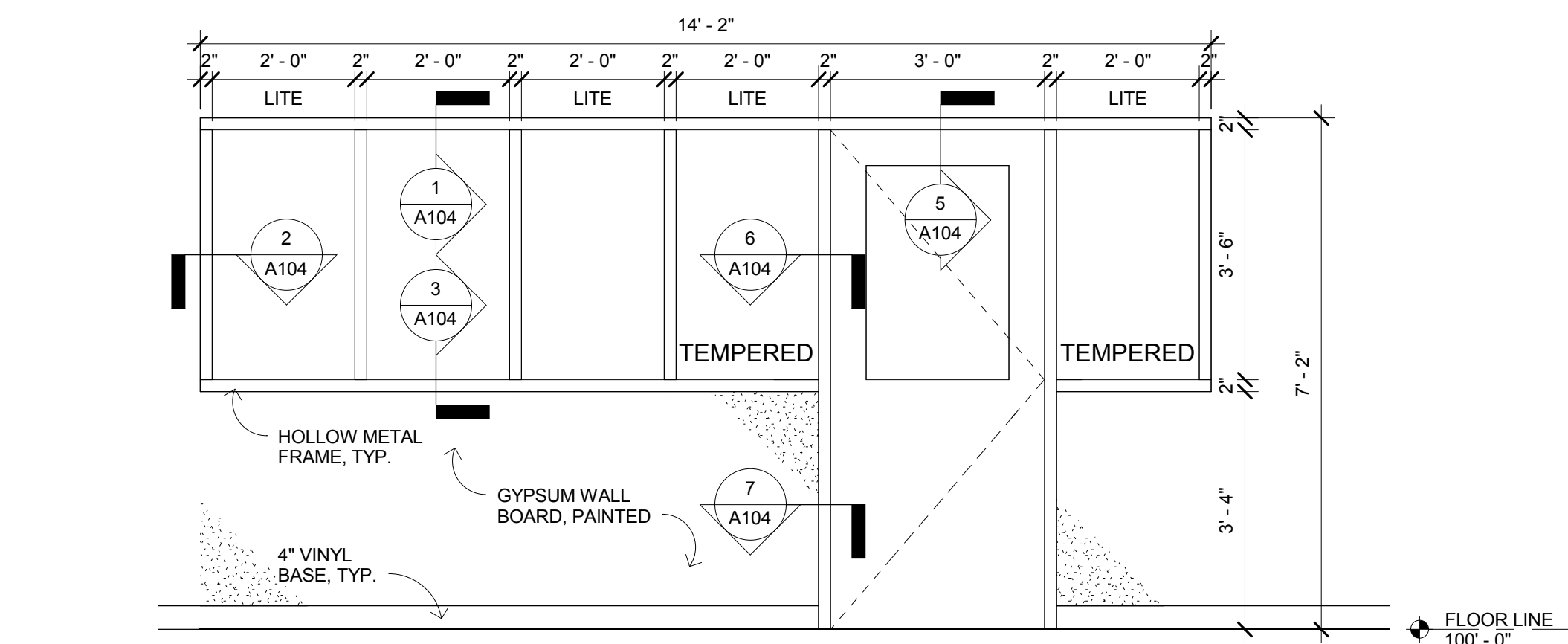
DESIGNED	DRAWN	CHECKED
BMO	BMO	KD

G000

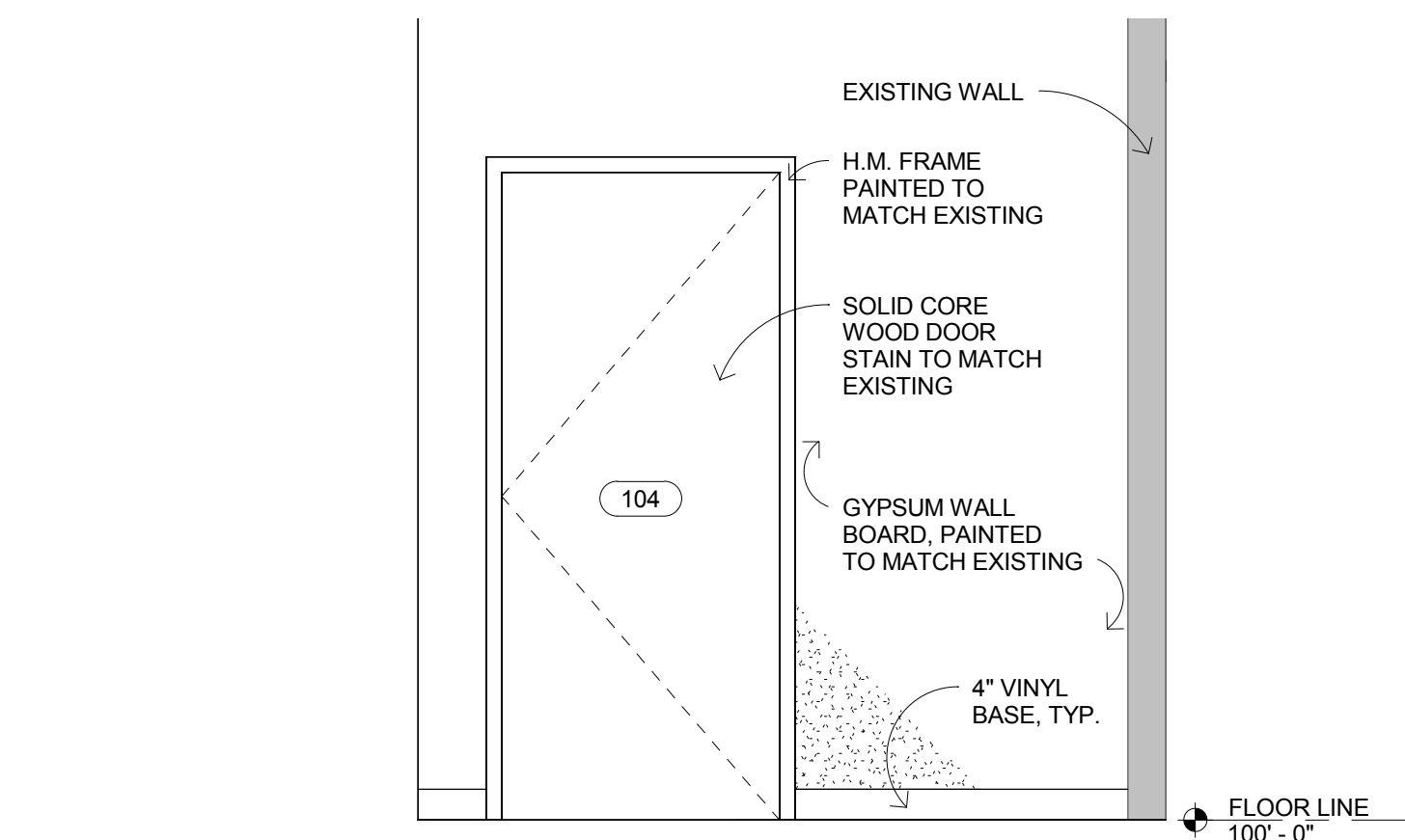
ROOM FINISH SCHEDULE														
ROOM NO.	ROOM NAME	FLOOR		NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING		REMARKS
		MATERIAL	BASE	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	HEIGHT	
100	STACKING	CPT/QT	VINYL/QT	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	PAINT	EXISTING	EXISTING	EXPOSED		PAINT OVER EXISTING MURAL; FLOORING NIC
101	CIRCULATION	CPT/QT	VINYL/QT	EXISTING	PAINT	GWB	PAINT	EXISTING	PAINT	NO WALL	NO WALL	ACT		PAINT NEW CONSTRUCTION ONLY, PAINT NEW AND EXISTING ACT
102	WORK ROOM	CPT	VINYL	GWB	PAINT	GWB	PAINT	GWB	PAINT	EXISTING	EXISTING	ACT		PAINT NEW CONSTRUCTION ONLY, PAINT NEW AND EXISTING ACT
103	PROGRAM ROOM	CPT	VINYL	GWB	PAINT	EXISTING	EXISTING	EXISTING	EXISTING	GWB	PAINT	EXPOSED		PAINT NEW CONSTRUCTION ONLY; FLOORING NIC
104	STORAGE	CPT	VINYL	GWB	PAINT	GWB	PAINT	EXISTING	EXISTING	EXISTING	EXISTING	EXPOSED		PAINT NEW CONSTRUCTION ONLY; FLOORING NIC



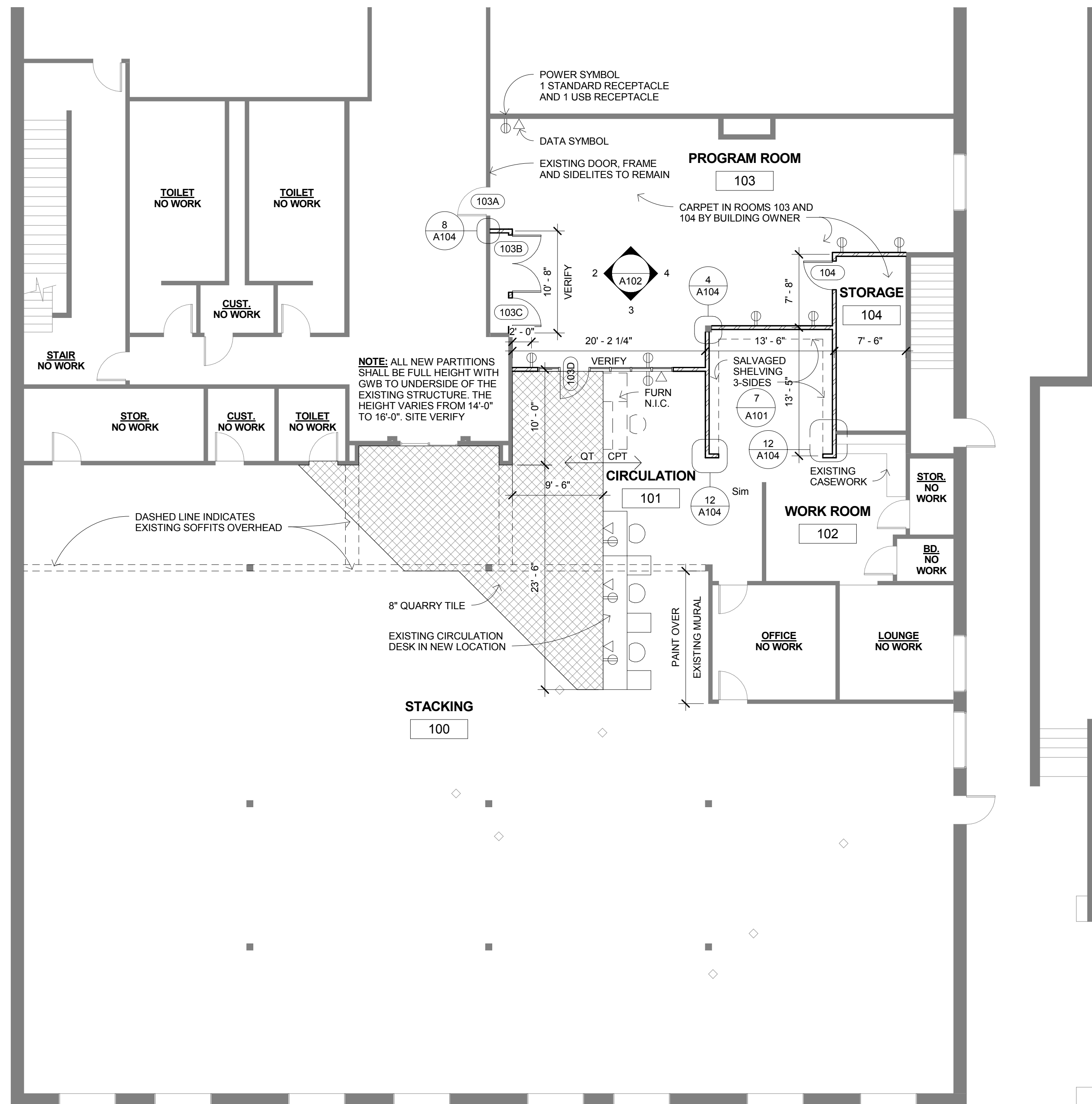
2 ELEVATION AT DOORS 103B AND 103B
A102 1/2" = 1'-0"



3 ELEVATION AT DOOR 103D
A102 1/2" = 1'-0"



4 ELEVATION AT DOOR 104
A102 1/2" = 1'-0"



1 FLOOR PLAN
A102 1/8" = 1'-0"

CITY OF DULUTH

MOUNT ROYAL BRANCH LIBRARY INTERIOR REMODEL


100% BID SET

CONSTRUCTION DOCUMENTS

[illegible]

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION,
OR REPORT 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

SIGNATURE: _____
 PRINTED NAME: BENJAMIN M. OLSON
 LISENCE NO: 51239 DATE: 02.25.2016

 11 East Superior Street, Suite 340
Duluth, MN 55802
218.724.8578
tkda.com

DESIGNED	DRAWN	CHECKED
BMO	BMO	KDJ

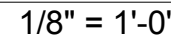
FLOOR PLAN, DOOR AND FRAME ELEVATIONS

A102

16032000

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY.

PLOTTED: 2/25/2016 2:22:47 PM



MOUNT ROYAL BRANCH LIBRARY INTERIOR REMODEL

100% BID SET

CONSTRUCTION DOCUMENTS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION,
OR REPORT 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

SIGNATURE: _____
 PRINTED NAME: BENJAMIN M. OLSON
 LISENCE NO: 51239 DATE: 02.25.2016

11 East Superior Street, Suite 340
Duluth, MN 55802
218.724.8578
tkda.com

DESIGNED	DRAWN	CHECKED
BMO	BMO	KDJ

REFLECTED CEILING PLAN AND BUILDING SECTION DIAGRAM

A103

16032000

