CONSTRUCTION SPECIFICATION
April 2011

Project Number: OT-0907RB
Bid Number: 11-16DS

Bid Opening Date: May 17, 2011 @ 2:00 p.m. CST

City Hall Elevator Modernization:

Re-Bid
City Hall
411 West First Street

ARCHITECT:  CITY OF DULUTH
Department of Public Administration
Office of City Architect
1532 West Michigan Street
Duluth, Minnesota 55806
(218)730-5730
City of Duluth
CITY HALL

Elevator Modernization Specifications, Bid Documentation, and Maintenance Agreement

ELEVATORS #1 & #2

Elevator De-Commissioning of Two Existing City Hall Elevators & Floor Level Infill

ELEVATORS #3 & #4

ELEVATOR ADVISORY GROUP, INC.
375 Kellogg Boulevard East * Saint Paul, Minnesota 55101 * 651-293-0595
Project Name: City Hall Elevator Modernization - REBID

PROJECT NUMBER: OT-0907RB

Date: April 12, 2011

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.

Name: Terry L. Groshong
Registration Number: 15872

ARCHITECT: CITY OF DULUTH
Department of Public Administration
Office of City Architect
1532 West Michigan Street
Duluth, Minnesota 55806
(218)730-5730
tgroshong@duluthmn.gov
PROJECT IDENTIFICATION & CERTIFICATION

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CITY OF DULUTH

INVITATION TO BID

PROJECT NAME/DESCRIPTION: City Hall Elevator Modernization - REBID
PROJECT NUMBER: OT-0907RB
BID NUMBER: 11-16DS

Sealed bids will be received by the City Purchasing Agent in and for the Corporation of the City of Duluth, Minnesota in Room 100 City Hall, Duluth, Minnesota 55802, (218) 730-5340 at 2:00 p.m., local time on Tuesday, May 17, 2011 for the Modernization of Elevators 1 & 2 and the De-Commissioning of Elevators 3 & 4 located in City Hall, 411 West First Street, Duluth, Minnesota; immediately thereafter, bids will be taken to Room 106A City Hall where they will be publicly opened and read aloud.

NOTICE TO BIDDERS:

1. A Project Labor Agreement (PLA) will be required for any bid that is over or could virtually go over $150,000.
2. Unless a Certificate of Exemption is provided, any out-of-state bidder receiving a bid award will have 8% retained from invoice payments.

This advertisement is also available on the City of Duluth website at http://www.duluthmn.gov/purchasing/bid_information.cfm

In general, this project consists of complete code compliant modernization of the main, City Hall elevators, cars 1 & 2, as well as, the de-commissioning, removal and flooring infill of elevators 3 & 4. There is some emergency power wiring, miscellaneous lighting in the infill areas, steel angles, metal deck and concrete floor infill at the de-commissioned elevators 3 & 4. There is some cutting of walls and installation of doors in the penthouse for existing equipment removal.
Proposal forms, contract documents, plans and specifications as prepared by the firm of City Architect's Office are on file at the following offices: City Purchasing Office; City Architect's Office; Duluth Builder's Exchange; McGrawhill Construction; Minneapolis Builder's Exchange; Reed Construction Data, and the St. Paul Builder's Exchange.

Copies of bidding documents may be obtained by contacting our City Purchasing Office located in Room 100 City Hall, Duluth, Minnesota 55802, (218) 730-5340.

Attention is called to the fact that not less than the minimum salaries, wages and benefits as set forth in the contract documents must be paid on this project. 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 disadvantage business enterprises when possible.

The City of Duluth reserves the right to reject any or all bids or to waive any informalities in the bidding. Bids may be held by the City of Duluth for a period not to exceed thirty (30) days from the date of opening the bids for the purpose of reviewing the bids and investigating the qualifications of the bidders, prior to awarding the contract. The City of Duluth is an Equal Opportunity Employer. Contractor shall comply with all applicable Equal Employment Opportunity laws and regulations.

CITY OF DULUTH

[Signature]
Dennis Sears
Purchasing Agent
BID INSTRUCTIONS

INVITATION TO BIDDERS

A proposal for work described and conditions set forth in these documents shall be addressed to:

Ted Smith, President
ELEVATOR ADVISORY GROUP, INC.
375 Kellogg Boulevard East
St. Paul, Minnesota 55101

-AND-

Terry L. Groshong, AIA
City Architect – City of Duluth
15332 West Michigan Street
Maintenance Shop
Duluth, MN 55806

Bids shall be received until 2:00 P.M. CST; Tuesday, May 17, 2011.

Proposal must be made on the form provided. The blank places in the form must be filled in as noted, and no change shall be made in the phraseology of the proposal or in the items mentioned herein.

Proposal must be signed by the Bidder in accordance with the directions on the form and must be enclosed in a sealed envelope, plainly identified with the name and address of the Bidder.
INSTRUCTIONS TO BIDDERS

A. PROPOSAL INFORMATION

1. Firm lump sum for all work specified. Price to be firm for 120 days from bid date.

2. Provide complete schedule for project from award date to completion date by working single shifts and leaving at least -- passenger cars running continuously. Consideration of schedule will be a factor in contract award.

B. QUALIFICATIONS OF BIDDER

1. Any Bidder, after opening of bids and before the award of contract, upon request by the Owner, shall furnish satisfactory evidence that he/she has had previous experience and possesses an adequate plant, financial resources and organization to perform the type and quality of work specified and to complete project within the time specified. Owner shall have the right to make an award to the Bidder with the ability and equipment to best perform the requirements of these specifications.

C. EXAMINATION OF EXISTING BUILDING AND CONTRACT DOCUMENTS

1. Bidder shall carefully examine existing building and make all necessary investigations required to inform himself/herself thoroughly and fully as to facilities for delivering materials and equipment.

2. Each Bidder shall examine specifications and all other data or instructions pertaining to the work. No pleas of ignorance of conditions that exist, or of difficulties or conditions that may be encountered or of any other matter concerning the work to be performed will be accepted as an excuse for any failure or omission on the part of the Bidder to fulfill every detail of all the requirements of the documents governing the work. Bidder, if awarded the contract, shall not be allowed any extra compensation by reason of any matter or thing concerning which such Bidder might have fully informed himself/herself prior to bidding, including increased costs which may occur during the contract period.
3. When tendering proposal, Bidder shall give written notice to Owner of any materials or apparatus that is in violation of laws or ordinances, rules or regulations of all authorities having jurisdiction. If Bidder fails to give such written notice, it shall be assumed that he/she has included the cost to remedy all such items in his proposal and will be held responsible for satisfactory functioning and approval of entire installation without extra compensation.

D. EXPLANATIONS AND ADDENDA

1. Any Bidder in doubt as to the true meaning of any part of the specifications or other proposed contract documents shall submit to the Owner a written request for an interpretation thereof. Any interpretation of the proposal documents shall be made only by an addendum duly issued. A copy of such addendum shall be mailed or delivered to each Bidder.

2. Any addendum issued up to and including the bid date shall be included in the bid price and any contract resulting therefrom.

3. Any verbal information obtained from or statements made by Owner at the time of examination of the documents or site shall not be construed as in any way amending contract documents. Only such corrections or addenda as are issued in writing to all Bidders shall become part of the contract.

E. REJECTION OF BIDS

1. Owner reserves and has the right to reject any of all bids, waiving of informalities and awarding of any bid.

F. SUBSTITUTION OF MATERIAL OR EQUIPMENT

1. All Bidders must submit their proposals in strict accordance with materials mentioned in specifications as base bid.

2. Bidders may, at their option, submit substitutions based on materials or equipment other than that specified by name in the specifications if prior approval is given by Architect or Consultant. Request for approval of substitutions must be in writing and received not later than seven (7) calendar days before the subcontract bid opening date.
3. All substitutions and alternates must be submitted with base bid. In no event can substitutions or alternates be submitted unless a bid is also submitted in strict conformance with specifications of the base bid.

4. Bidder must state alternate's name, manufacture, type or brand of material or equipment and deduction from base bid with his proposal.

5. Substitute materials or equipment must meet all requirements as to type, quality, and function as that originally specified.

6. Acceptance of a substitute article, material or piece of equipment, shall be subject to approval of the Owner and his/her decision shall be final.

7. Bidder shall submit upon request, complete engineering data to indicate comparable quality, design, and efficiency of alternate.

G. FORM OF PROPOSAL

All bids shall be submitted in the form of proposal attached hereto.

H. ASSIGNMENTS

The Bidder selected to do the work set forth herein shall not assign all or any part of said work without prior approvals of the Owner.
REQUEST FOR BID
Date: May 17, 2011
Project #: OT-0907RB
Bid #: 11-16DS

CITY OF DULUTH
RETURN BY BID OPENING TIME TO:
PURCHASING DIVISION
100 City Hall
Duluth, Minnesota 55802

PHONE: (218)730-5340
FAX: (218)730-5921

City Hall Elevator Modernization

BID OPENING AT: 2:00 PM ON Tuesday, May 11, 2011

NOTE: All bids must be written, signed and transmitted in a sealed envelope, plainly marked with the Subject Matter and Opening Date. The City of Duluth reserves the right to split award where there is substantial savings to the City, waive informalities and to reject any and all bids. Bidder shall state in proposal if Bid price is based on acceptance of total order. Sales Tax is not to be included in the unit price. Bidder shall state freight charges if, the proposal F.O.B. is shipping point, freight not allowed. Low Bid will not be the only consideration for award of Bid. All pages shall be signed or initialed by authorized bidder(s) representative as indicated at the bottom of the page(s) of the request for bid forms.

RETURN BID IN DUPLICATE WITH DUPLICATE DESCRIPTIVE LITERATURE TO THE CITY PURCHASING OFFICE

The Proposal Form contained in specification section 14000 Elevator Modernization & De-Commissioning is intended as informational and a work sheet. The City of Duluth Bid Form stated below is the form which must be submitted, IN DUPLICATE to Purchasing for this project.

BID DEPOSIT REQUIREMENTS: 5% of Bid Amount
Deposit shall mean cash, cashier's check, or corporate surety bond payable to or in favor of City of Duluth.

PERFORMANCE and PAYMENT BONDS: Shall be required of the successful bidder. Bonds shall BOTH be in the full amount of the Contract amount.

INSURANCE CERTIFICATE: Shall be required per specified requirements per the attached requirements.

Designated F.O.B. Point:
City Architect
Jobsite(s)

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Qty</th>
<th>U/OM</th>
<th>Description</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

{See Additional Page(s)}

FREIGHT CHARGES $

TOTAL BASE BID $
TO INCLUDE ANY ADDITIONAL PAGES

PAYMENT TERMS:

F.O.B. POINT:

DELIVERY DATE:

By: ____________________________ (Print) Title ____________________________

(SIGNATURE) Tele #
The City of Duluth is an Equal Opportunity Employer.
Project name: City Hall Elevator Modernization  
411 West First Street - Duluth, MN

The undersigned, having familiarized himself/themselves/itself with the existing conditions on the project affecting the cost of the work, and with the Contract Documents which include the Invitation to Bid, the Contract Agreement Form, the Non-Collusion Affidavit, any/all Addenda, General Conditions (parts I & II), the Special Conditions, Technical Specifications, Drawings (as listed in the schedule of drawings), EEO Affirmative Action Policy Statement & Compliance Certificate, and Form of Surety Bond or Bond as prepared by the City of Duluth and on file in the office of the City Architect and City Purchasing Agent, and hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, appurtenances, equipment & services, including utilities and transportation services required to complete the Modernization of City Hall elevators 1 & 2 and the De-Commissioning and Removal of City Hall elevators 3 & 4, drawings and specification by the Elevator Advisory Group, Inc. and the City Architect.

BASE BIDS:

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Qty</th>
<th>U/OM</th>
<th>Description</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>1</td>
<td>L.S.</td>
<td>BASE BID:</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bidder agrees to perform work as describe in the Specification and/or shown on the plans for a Sum of: $</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(In words - See Additional Page(s) as required)

Breakdown of Base Bid (included for information purposes only):
Bonds & Insurances: $ 

Elevator Modernization; CH 1 & 2 (complete): $ 
Elevator Decommissioning; CH 3 & 4 (complete): $ 
General Construction Work (both items): $ 

ESTIMATED TIME SCHEDULE:

Anticipated Award Date: 
Shop Drawings for Approval: 
Start Modernization: 

Initial: __________________
Date: May 17, 2011
Project #: OT-0907RB
Bid #: 11-16DS

{See Additional Page(s)}

50% Complete Date: ___________________________

Anticipated Code Test Date: ______________________

Acceptance Review: _____________________________

Final Acceptance: _______________________________

Number of Weeks - Out of Service (each car): __________________________

If the prime submitter is a General Contractor, you are requested to furnish the information listed below. This will have no bearing on the award of this contract:

ELEVATOR SUBCONTRACTOR:

List the name of the proposed Elevator subcontractor and amount.

MECHANICAL SUBCONTRACTOR:

List the name of the proposed Mechanical sub-contractor and amount.

ELECTRICAL SUB CONTRACTOR:

List the name of the proposed Electrical sub-contractor and amount.

Initial: ____________
B. MAINTENANCE

A separate Owner’s maintenance contract shall be provided by the building manager. Contract shall commence and include services as specified in outline of work. The agreement will not be activated until accepted by the Owner at the end of the warranty period.

Interim Maintenance: Interim maintenance shall commence on the date of notice to proceed and end at the date of job completion. Interim maintenance shall comply with the conditions of the Owner’s Full Maintenance Contract, available from the building manager. Interim maintenance cost shall be part of the Base Bid. If the Owner elected to purchase interim maintenance separately, the price per unit, per month shall be provided.

Interim Maintenance: $________________________ per unit, per month.

Warranty Maintenance: Warranty maintenance shall commence when the elevators have been accepted as complete by the Owner. The warranty maintenance shall be for one (1) year period. The warranty maintenance shall comply with the conditions of the Owner’s Full Maintenance Contract. Warranty maintenance cost shall be part of the Base Bid. If the Owner elected to purchase interim maintenance separately, the price per unit, per month shall be provided.

Warranty Maintenance: $________________________ per unit, per month.

Full Maintenance: The Owner’s Full Maintenance contract is available from the building manager. At the Owner’s option, the Owner’s Full Maintenance contract may be purchased at the end of the Warranty maintenance period. The price quoted shall be effective at the end of the Warranty maintenance period.

Full Maintenance: $________________________ per unit, per month.

Initial: __________
Completion Time:

The undersigned hereby affirms & agrees, if awarded a contract, to begin work immediately upon receipt of Notice to Proceed and to substantially complete the work within the time schedule indicated in the Special Conditions, ___ Calendar Days.

Security in the sum of $_________ in the form of __________ is submitted herewith in accordance with the Instructions to Bidders, payable without condition to the City of Duluth which is agreed shall be retained as liquidated damages for the delay and extra expense caused the Owner if the undersigned fails to execute the contract and furnish bonds required by the contract documents.

Signed: ______________________________________ for

_______________________________

a partnership (or)

_______________________________

a corporation incorporated under the laws of the State of

_______________________________

President: ________________________ Vice President: ________________________

Secretary: ________________________ Treasurer: ________________________

Address(es): ________________________

_______________________________, being duly sworn, deposes and says that there are no other persons comprising above company or firm than the above names, and that there are no persons or corporations interested in the forgoing proposals, either as principal or subcontractor, other than the above names; also that the proposals are made without any connection with any person or persons acting in any official capacity whatever for the City of Duluth is directly or indirectly interested therein, or any portion of the profit thereof.

_______________________________

Subscribed and Sworn to before me this _________ day of ________________, A.D., ________________,

_______________________________ Notary Public.

Stamp/Seal

Initial: ___________
Please Note! Please disregard the note on page 1 regarding sales tax for this bid. All applicable sales and/or use tax are to be included in the bid pricing. All bids are to be bid F.O.B. jobsite, the blank on page 1 for freight shall be left blank.

City Project Contact:  Terry Groshong,, City Architect - (218)730-5730 & (218)723-3560  FAX
PURCHASE ORDER TERMS AND CONDITIONS

1. ACCEPTANCE. ACCEPTANCE OF THIS ORDER BY SELLER IS EXPRESSLY LIMITED TO THE TERMS AND CONDITIONS CONTAINED IN THIS ORDER. ANY TERM OR CONDITION STATED BY THE BUYER IN ANY PRIOR PROPOSAL, ON ANY FORM OF ORDER OR NEGOTIATION OR OTHERWISE, WHETHER OR NOT CONSIDERED OR ACKNOWLEDGED OR ACCEPTING THIS ORDER, WILL NOT CONSTITUTE ACCEPTANCE BY SELLER OF THE TERMS AND CONDITIONS. ANY OF THE FOLLOWING ACTS BY SELLER SHALL CONSTITUTE ACCEPTANCE OF THIS ORDER AND ALL OF ITS TERMS AND CONDITIONS, EXCEPT WHERE EXPRESSLY CONTRARY PROVIDED FOR ON THE FACE OF THE ORDER.

2. FORCE. If price (either fixed price or hourly rate) is set forth, delivery is not specified by Buyer on the face of this order, Seller will promptly submit its price, delivery and/or order data and schedule which shall be subject to Buyer's approval and acceptance. Seller warrants that the prices and other terms for all the materials and articles under this order are in conformity with the terms and conditions of this order, and under no condition shall Buyer be liable for any deviation therefrom. Seller shall be liable for any deviation of its invoice to the price, delivery, and/or order data and schedule of this order.

3. PACKING AND SHIPPING. If Goods are to be delivered under this order, the cost and fee negotiated for this order shall be included in the total price charged. The packing and shipping charges will be as follows:

4. FOB AND RISK OF LOSS. Unless otherwise specified on the face of this order, the F.O.B. point shall be Buyer's location designated on the face of this order. If transportation is F.O.B. Seller's location, Seller shall bear all risk of loss or damage to the Goods until delivery of the Goods to the carrier. If transportation is F.O.B. Buyer's location, Seller shall be responsible for the cost of transportation and insurance.

5. INVOICING. All invoices shall be rendered in duplicate unless otherwise specified and shall be rendered within 24 hours after shipment. Taxes, freight and insurance costs shall be shown separately. Each invoice shall be accompanied by bill of lading or express receipt. Payments shall be subject to adjustment for errors, shortages, rejections and other causes. Discount period, if any, shall commence on

6. INSPECTION. All material and workmanship shall be subject to inspection at the place of receipt and/or storage and at the place of ultimate installation by Seller and of Buyer. Payment shall be subject to final inspection at Buyer's plant. Seller shall have the right to reject all goods not conforming to specifications or containing defective material or workmanship. Rejected goods shall be returned at Seller's expense and risk, including transportation both ways, promptly after notification of rejection. Buyer may elect to return defective goods and to remedy defects at Seller's expense and deduct cost of remedying same from amount due Seller. Seller warrants that goods shall be produced under a quality control system that provides for minimum standards and that all quality control records are maintained on file for a minimum of one year from date of shipping or as otherwise specified by contract. Buyer reserves the right, upon 72 hours notice, to audit Seller's facilities and inspection records in the normal course of business.

7. WARRANTY. In addition and without prejudice to all other warranties expressed or implied by law, Seller warrants that all goods sold hereunder by this order shall conform to drawings, specifications and other details. All warranties shall be made by Seller to Buyer, and all goods shall be new and in good workmanship. Seller shall be liable to Buyer for any breach of warranty, and Seller shall, at its option, either repair or replace any goods which are not warranted. Seller shall, at its option, either repair or replace any goods which are not warranted.

8. COMPLIANCE WITH LAWS. Seller shall comply with all federal, state, and local laws, ordinances, rules and regulations in the manufacture and sale of the Goods hereunder. Such laws, ordinances, rules and regulations may include but not be limited to the Occupational Safety and Health Act, the Truth in Negotiated Act, the Resources Conservation and Recovery Act, and the applicable requirements of the Fair Labor Standards Act. Seller will defend and hold Buyer harmless from any loss, damage, or costs arising from or caused by any act or alleged violation of any federal, state, or local law, rule, regulation, or failure by Seller to comply with any such acts.

9. CHANGES. Buyer may, at any time by written order, make changes in drawings, designs, specifications, method of shipment or packaging, time or place of delivery, require and hold in commission any quantity of work covered by this order. If any such change causes an increase or decrease in the price under this order, or in the time required for performance, an equitable adjustment shall be made and this order shall be modified in writing accordingly. Any claim for adjustment under this provision must be asserted within 10 days from date of change or ordered and the amount of such claim must be stated in writing within 30 days thereafter.

10. BUYER'S PROPERTY, MATERIALS, AND EQUIPMENT. If Buyer furnishes equipment or materials, Buyer shall furnish the equipment and materials which the Buyer is required or directed to provide. Buyer shall grant Seller a license under Buyer's patent, trademark, or copyright to use such equipment or materials in the production of the Goods hereunder. Seller shall not be required to obtain any license, patent, trademark, or copyright to use such equipment or materials in the production of the Goods hereunder. Buyer shall not be required to obtain any license, patent, trademark, or copyright to use such equipment or materials in the production of the Goods hereunder.

11. ASSIGNMENT. Seller shall not assign this order or any rights under this order without the prior written consent of Buyer, and no purporting assignment by Seller shall bind Buyer without such written consent.

12. NOTICE OF LABOR DISPUTES. If, at any time, Buyer or a Subcontractor or any one directly or indirectly employed by Buyer shall have any labor dispute, including any strike, lock-out or other labor controversy or dispute, Seller shall notify Buyer in writing of all relevant information with respect to such dispute.

13. TERMINATION. (a) Termination Without Cause. Buyer may terminate this order at any time, in whole or in part, in accordance with the terms and conditions of this order and in whole or in part, in accordance with the terms and conditions of this order and, in such event, Buyer shall be entitled to recover from Seller any claim or account of any such termination, Seller shall submit its termination claims to Buyer, in form and with evidence satisfactory to Buyer, promptly, but no later than 90 days after the effective date of the termination. If Seller fails to submit a termination claim within that time, Buyer shall have no liability to Seller on account of the termination. If Seller's termination claim is not acceptable to Buyer, Buyer cannot be settled by negotiation, the claim shall be submitted to arbitration. (b) Termination Without Cause. If Seller fails to make any delivery in accordance with the agreement, delivery date or scheduled delivery date applicable to this order, Buyer shall have the right (in addition to any other right or remedy at law or under this agreement) by written notice to terminate all or any part of the unsold portion of this order without any liability to Seller, or to terminate the agreement without notice on such terms and in such manner as Buyer may deem appropriate and Seller shall be liable to Buyer for all excess costs occasioned thereby.

14. PATENTS AND COPYRIGHTS. Seller shall defend, at its own expense, any suit or claim that may be instituted against Buyer or any customer of Buyer for alleged infringement of patents or copyrights relating to the manufacture, sale, or use of the Goods, except for such infringement resulting from Seller's compliance with designs provided by Buyer, and Seller shall indemnify Buyer and its customers for all costs and damages arising out of such alleged infringement.

15. PUBLIC LIABILITY INSURANCE. Seller shall hold Buyer and its customers harmless from all injuries, death, or damage to life or property arising out of the performance of this order. Buyer shall have the right to require that Seller maintain insurance. Seller shall, at Seller's expense, procure and maintain insurance against all risk of loss or damage to the Goods and the work performed hereunder.

16. DELAYS. Time is of the essence. All actual or potential delays of whatever nature must be reported to Buyer immediately. Buyer may cancel or modify this order if the delay results in a delivery later than that shown on the face of this order. Buyer agrees to indemnify Buyer for all losses, costs and damages resulting from Seller's delay or failure to deliver.

17. GENERAL. This order is formed under and shall be interpreted, governed by, and construed according to the laws of the State of New York, and all disputes hereunder shall be construed as a waiver of any other rights or remedies. July 10, 1992
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 or materials, supplied, 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; and

4) 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 E.I. Number ____________________________

(Number used on employer=s quarterly Federal Tax return)
EQUAL EMPLOYMENT OPPORTUNITY EEO AFFIRMATIVE ACTION
POLICY STATEMENT & COMPLIANCE CERTIFICATE

TO: City of Duluth, MN

PROJECT NUMBER & DESCRIPTION

FROM: ________________________________________________________________

(FIRM’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 ACompliance 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 Asegregated 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 - AConstruction@ 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 AEEO Statement and Certification@ similar in nature to this AStatement 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.
Withholding Affidavit for Contractors

This affidavit must be approved by the Minnesota Department of Revenue before the state of Minnesota or any of its subdivisions can make final payment to contractors.

Please type or print clearly. This will be your mailing label for returning the completed form.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Daytime phone</th>
<th>Minnesota tax ID number</th>
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<tr>
<th>Address</th>
<th>Total contract amount</th>
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<tr>
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Project number

Project location

Project owner | Address | City | State |
--------------|---------|------|-------|

Did you have employees work on this project? □ Yes  □ No  If no, who did the work?

Check the box that describes your involvement in the project and fill in all information requested.

☐ Sole contractor

☐ Subcontractor

Name of contractor who hired you:

Address:

☐ Prime contractor- If you subcontracted out any work on this project, all of your subcontractors must file their own IC-134 affidavits and have them certified by the Department of Revenue before you can file your affidavit. For each subcontractor you had, fill in the information below and attach a copy of each subcontractor’s certified IC-134. If you need more space, attach a separate sheet.

<table>
<thead>
<tr>
<th>Business name</th>
<th>Address</th>
<th>Owner/Officer</th>
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</tbody>
</table>

I declare that all information I have filled in on this form is true and complete to the best of my knowledge and belief. I authorize the Department of Revenue to disclose pertinent information relating to this project, including sending copies of this form, to the prime contractor if I am a subcontractor, and to any subcontractors if I am a prime contractor, and to the contracting agency.

Contractor’s signature: Title: Date:

Mail to: MN Dept. of Revenue, Withholding Division, Mail Station 6610, St. Paul, MN 55146-6610

Certificate of Compliance

Based on records of the Minnesota Department of Revenue, I certify that the contractor who has signed this certificate has fulfilled all the requirements of Minnesota Statutes 290.92 and 290.97 concerning the withholding of Minnesota income tax from wages paid to employees relating to contract services with the state of Minnesota and/or its subdivisions.

Department of Revenue approval: Date:

Ins
Instructions for Form IC-134

Who must file
If you are a prime contractor, a contractor of a subcontractor who did work on a project for the state of Minnesota of any of its local government subdivisions—such as a county, city, or school district—you must file Form IC-134 with the Minnesota Department of Revenue.

This affidavit must be certified and returned before the state of any of its subdivisions can make final payment for your work.

If you’re a prime contractor and a subcontractor on the same project
If you were hired as a subcontractor to do work on a project and you subcontracted all or a part of your portion of the project to another contractor, you are a prime contractor as well. Fill out both the subcontractor and prime contractor areas on a single form.

How to file
If you have fulfilled the requirements of Minnesota withholding tax laws, the Department of Revenue will sign your affidavit and return it to you.

If any withholding payments are due to the state, Minnesota law requires certified payments before we approve the IC-134.

Submit the certified affidavit to the government unit for which the work was done to receive your final payment. If you are a subcontractor, submit the certified affidavit to your prime contractor to receive your final payment.

Where to file
Mail to:
MN Dept. of Revenue
Withholding Tax Division
Mail Station 6610
St. Paul, MN 55416-6610

Minnesota tax ID number
You must fill in your Minnesota tax ID number on the form. You must have a Minnesota tax ID number if you have employees who work in Minnesota.

If you don’t have a Minnesota ID number, you must apply for one. Call (651) 282-5225 or 1-800-657-3605.

If you prefer, you can get an application (Form ABR) from our website or by calling or writing us.

If you have no employees and did all the work yourself, you do not need a Minnesota tax ID number. If this is the case, fill in your Social Security number in the space for Minnesota tax ID number and explain who did the work.

Use of information
The Department of Revenue needs all the information to determine if you have met all state income tax withholding requirements. If all required information is not provided, the IC-134 will be returned to you for completion.

All information on this affidavit is private by state law. It cannot be given to others without your permission, except to the Internal Revenue Service, other states that guarantee the same privacy, and certain government agencies as provided by law.

Information and assistance
If you need help or more information to complete this form, call (651) 282-9999 or 1-800-657-3594.

Additional forms are available on our website at www.taxes.state.mn.us or by calling (651) 296-4444 OR 1-800-657-3676. You can also write for forms at the following address:
Minnesota Tax Forms
Mail Station 1421
St. Paul, MN 55146-1421

TTY users may contact the department through the Minnesota Relay Service at 1-800-627-3529.

We’ll provide information in an alternative format upon request to persons with disabilities.
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AGREEMENT

This Project Labor Agreement (hereinafter, the "Agreement") is entered into effective the _____ day of __________, 2007, by and between the various contractors engaged in the construction of facilities to be known as the (Project). The Duluth Building and Construction Trades Council, on behalf of its affiliated Local Unions (hereinafter "Union" or "Unions"), the (Project), (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 an 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 pick up 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 (political subdivision) 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 non-membership 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 or 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 (DATE), 2007 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

By __________________________

Its __________________________

Contractor

By __________________________

Its __________________________

City of Duluth

By __________________________

Its __________________________
SCHEDULE “A”

A-1     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    Millrights & 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
GENERAL CONDITIONS

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 non-collusion 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 judgement or claims against the City shall be allowed, the Contractor shall pay or satisfy such judgement 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 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 therefor.

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 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 "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 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 Workers' 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.
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 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 six years from the date of execution of this contract.

(End of General Conditions)
<table>
<thead>
<tr>
<th>Construction Type: Building</th>
<th>County: St Louis County in Minnesota</th>
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<tr>
<td>BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).</td>
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<td>3</td>
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<td>7</td>
<td>09/24/2010</td>
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</table>

**ASBESTOS WORKER/HEAT & FROST INSULATOR** (includes the application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems) $26.82 21.80

**BOILERMAKER** $33.84 18.53

* **BRMN0001-050 06/28/2010** ST LOUIS (remaining northern part) TILE SETTER $27.35 18.18

**BRMN0003-008 05/01/2010** ST. LOUIS CO (city of Duluth and south of a line between Townships #54 & #55, 2 miles north of Cotton) BRICK LAYER $31.06 18.18

* **BRMN0003-011 05/01/2008** ST. LOUIS (city of Duluth and south of Township Line 55) TILE SETTER $24.13 17.38

**CARP0361-012 08/02/2009** DULUTH AREA including Albom, Arnold, Bartlett, Birch, Brookston, Canyon, Clinton, Culver, Floodwood, Gowan, Island, Kelsey, Lakewood, Meadowlands, Munger, Palmet, Payne, Pratt, Shatt, Taft) CARPENTER (including Acoustical Installation, Drywall Hanging, Form Work & Overhead Door Installation) $26.40 13.80

**CARP0596-005 06/01/2009** SOFT FLOOR LAYER $28.91 12.63

**CARP0606-001 06/01/2009** EXCLUDING DULUTH AREA CARPENTER (including Acoustical Installation, Drywall Hanging, Form Work & Overhead Door Installation) $25.75 12.69

**ELEC0242-012 01/01/2011** ST. LOUIS (south part bounded on the north by the north line of Kelsey Township extended east & west) ELECTRICIAN $29.84 22.48

**ELEC0294-006 12/26/2010** ST. LOUIS (north part bounded on the south by the south line of Ellsburg Township, extended east & west) ELECTRICIAN $30.75 22.91

**ENG0409-045 05/01/2010** OPERATOR: Power Equipment

**GRP 1** $34.44 15.85 **GRP 3** $32.69 15.85 **GRP 5** $32.18 15.85

**POWER EQUIPMENT OPERATOR CLASSIFICATIONS**

**GRP 1:** Truck & Crawler Crane with 200' of Boom & over, including Jib ($50.00 premium with 300' of Boom & over, including Jib); & Tower Crane 200' & over

**GRP 2:** Truck & Crawler Crane with 150' of Boom, up to but not including 200' of Boom, including Jib; & Tower Crane 200' & over

**GRP 3:** Traveling Tower Crane; Truck & Crawler Crane, up to but not including 150' of Boom, including Jib; Tower Crane (Stationary) up to 200'; All-Terrain Vehicle Crane, Boom Truck over 100 ft.

**GRP 4:** Backhoe/Trackhoe/Trackhoist, Hoist (3 drums or more); Overhead Crane (inside building perimeter), Excavator.

**GRP 5:** Asphalt Spreader, Bulldozer, Curb Machine, Drill, Forklift, Compressor 450 CFM or over (2 or more machines); Boom Truck up to 100 ft, Loader over 1 cu yd, Hoist (1 or 2 drums); Mechanic, Milling Machine, Roller, Scraper, Tractor, Overhead D2

**GRP 6:** Bobcat/Skid Loader, Loader up to 1 cu yd, Tractor D2 or similar size

**GRP 7:** Compressor 800 CFM or over, Crane Oiler

**GRP 8:** Oiler

**IRON0512-018 05/01/2010** IRONWORKER, ORNAMENTAL, REINFORCING AND STRUCTURAL $29.36 19.90

* **LABO1091-011 05/01/2010** LABOR (ASBESTOS ABATEMENT) Removal from Floors, Walls & Ceilings $29.57 12.79

* **LABO1091-013 05/01/2010** ST. LOUIS (south of T 55 N)

**LABORERs:**

**GRP 1** $23.55 12.34 **GRP 2** $23.70 12.34 **GRP 3** $23.95 12.34 **GRP 4** $24.25 12.34

**LABORER CLASSIFICATIONS**

**GRP 1:** Common or General, Asphalt Shoveler, Carpenter Tender, Form Stripping

**GRP 2:** Vibrating Plate

**GRP 3:** Pipe Layer

**GRP 4:** Mason Tender (Brick, Cement/Concrete)

* **LABO1097-008 05/01/2010** ST. LOUIS (north of T 55 N)

**LABORER:** $22.91 12.32 **GRP 2** $23.31 13.02

**LABORERS CLASSIFICATIONS:**

**GRP 1:** Common or General, Asphalt Shoveler, Carpenter Tender, Form Stripping, Mason Tender (Brick, Cement/Concrete)

**GRP 2:** Pipe Layer, Vibrating Plate

**PAIN106-001 05/01/2010** GLAZIER $24.85 14.60 FOOTNOTE: 1 to 4 yrs svc - 1 wk pd vac; 5 to 11 yrs - 2 wks pd vac; 11 yrs or more - 3 wks pd vac


**PLAS033-024 10/01/2009** ST. LOUIS (north of White Face River) Cos CEMENT MASON/CONCRETE FINISHER $24.31 14.34

**PLAS033-059 05/01/2009** CARLTON & ST. LOUIS (south of T 55 N) COS CEMENT MASON/CONCRETE FINISHER $27.04 15.45

**PLUM0011-019 05/03/2010** ST. LOUIS (south of an east-west line drawn through Cotton) PLUMBER PIPE FITTER $35.50 16.25

**PLUM0589-007 01/01/2011** ST. LOUIS (south of an east-west line drawn through Cotton) PLUMBER PIPE FITTER $35.56 15.95
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
SPECIAL CONDITIONS

1) PROJECT

The project consists of all labor, material and equipment, as well as disposal costs, fees and taxes necessary for modernization of Elevators 1 & 2 in City Hall and the demolishing and decommissioning of Elevators 3 & 4 in City Hall. There is miscellaneous wiring to the emergency generator panel and ten (10) light fixtures in the infill areas occupied in decommissioned elevators 3 & 4.

2) ARCHITECT

The Architect of Record for this project is:

Terry Groshong, AIA, City Architect, 1532 West Michigan Street, Duluth, MN.
Phone: 218-730-5730    Fax: 218-723-3560    Email: tgroshong@duluthmn.gov

The term Elevator Consultant refers to:  Ted Smith, President; Elevator Advisory Group
375 Kellogg Boulevard East, St. Paul, Minnesota 55101.
Phone: 651-293-0595    Fax: 651-224-6758    Email: info@elevatoradvisorygroup.com

3) BIDS

Bidders are to fill in all blanks on the proposal form. See Article 5 and 13, of the instruction to bidders, for additional information.

4) SPECIAL CONDITIONS

The Articles of the Special Conditions shall modify or supplement the provisions contained in the General Conditions of the contract for construction and the Supplementary General Conditions.

5) EXAMINATION OF THE SITE

Before submitting a proposal, each bidder shall visit and examine the sites, and fully inform himself as to the existing conditions under which he will be obliged to operate in performing his part of the work, or which will in any manner affect his work under this contract. He shall include in his proposal any and all sums required to execute his work under existing conditions.

6) DRAWINGS AND SPECIFICATIONS

The Table of Contents contains a list of all specification divisions and drawing numbers included in the contract documents, and each contractor is governed by the information contained on or in all of the plans and specifications.
7) COMPLETION TIME & LIQUIDATED DAMAGES

The schedule calls for work to begin upon receipt of Notice to Proceed and to be substantially complete within 160 calendar days. It is assumed by receipt of this bid that the contractor can meet this schedule. As actual damages for any delay in completion of the work which the contractor is required to perform under this contract are impossible to determine, the contractor and his sureties shall pay to the City of Duluth the sum of Two Hundred Dollars ($200.00) as fixed, agreed, and liquidated damages for each calendar day of delay from the above stipulated for completion, or as modified in accordance with Section 111 hereof, until such work is satisfactorily completed and accepted.

8) RESPONSIBILITIES OF CONTRACTOR

Except as otherwise specifically stated in the contract documents and technical specifications, the prime contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees, or other expenses and all other services and facilities of every nature whatsoever necessary for the performance of the contract, and to deliver all improvements embraced in this contract for site preparation complete in every respect within the specified time.

9) PARTIAL USE OF IMPROVEMENTS

The City, at its election, may give notice to the contractor(s) and place in use those sections of the improvements which have been completed, inspected, and can be accepted as complying with the technical specifications, and if in its opinion each such section is reasonably safe, fit, and convenient, for the use and accommodation for which it was intended, provided:

a. The use of such sections of the improvements shall in no way impede the completion of the remainder of the work by the contractor.

b. The contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.

c. The use of such sections shall in no way relieve the contractor of his liability due to having used defective materials or to poor workmanship.

d. The guarantee stipulated in the Section 132 hereof shall not begin to run until the date of the final acceptance of all work which the contractor is required to construct under this contract. All work under the contract shall be guaranteed for a period of one (1) year from the date of final acceptance.

10) COMMUNICATIONS

a. All notices, demands, requests, instructions, approvals, and claims must be in writing addressed to the Office of the City Architect, Attn: Terry Groshong, 1532 West Michigan Street, Duluth, Minnesota 55806. Any notice to or demand upon the contractor shall be sufficiently given if delivered at the office of the contractor, stated on the signature page of the agreement (at such other office as the contractor may from time
to time designate in writing to the City), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.

b. All papers required to be delivered to the City shall, unless otherwise specified, in writing to the contractor, be delivered to the City of Duluth, and any notice to or demand upon the City shall be sufficiently given if so delivered, or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said City at such address, or to such other address as the City may subsequently specify in writing to the contractor for such purpose.

c. Any such notice shall be deemed to have been given as of the time of actual delivery of (in the case of mailing when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt as the case may be).

d. This section does not apply to decisions given pursuant to Section 113(b) of this contract.

e. The contractor(s) shall designate in writing at the time of execution of the contract the name of its(their) duly authorized representative(s) with whom the owner may transmit all business in connection with the operation of this contract.

11) CONTRACT DOCUMENTS AND DRAWINGS

The City will furnish each contractor without charge six (6) copies of the contract documents, including technical specifications and drawings. Additional copies requested by the contractor will be furnished at cost.

12) PERMITS

a. Shall be added to General Conditions as follows: Required permits will be secured and paid for by the prime contractor.

b. (SUPPLEMENT TO INSTRUCTIONS TO BIDDERS) All work and materials are to comply in every respect with the Building Code and all associated laws and ordinances, regulations, and the directions of the inspectors of buildings and other proper officials of the area in which the building is to be constructed. Such laws, regulations, and directions are to be considered as part of this specification. If the contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without notice to the architect, he shall bear the cost arising there from.

13) CUTTING AND PATCHING

Shall be added to Section 105 of the General Conditions as follows: Costs for cutting and patching required by the contractor and subcontractors shall be included in the bid proposal of the contractor.
Patching shall be by qualified workmen, coordinated and supervised by the prime contractor and indistinguishable from surrounding surfaces.

14) INSURANCE

Section 129 of the General Conditions shall be added to as follows:

a. "Property Insurance" shall be changed as follows: Builders Risk to be provided by the prime contractor(s) on a "Multi-Peril-All-Risk" basis, which includes theft of material not installed and glass breakage. Contractor(s) is(are) liable for losses within deductible coverage.

b. Indemnification Insurance: In addition to any indemnification required under Section 4.18, the contractor shall purchase insurance as provided in Minnesota Statutes Section 337.05, as most recently amended, for the benefit of the Owner and the Architect and their agents and employees, which shall compensate them from any loss due to all claims, damages, losses, and expenses, including a minimum coverage of not less than $2.5 million per claim and $5 million per occurrence plus an appropriate amount of property damage for the size of the project. Copies of the contract of insurance shall be provided to the Owner and Architect and shall name these parties as insured. (NOTE: On projects of less than $1 million estimated construction cost, this does not apply.)

15) LINES AND LEVELS

Shall be added to the General Conditions as follows:

Before starting work, locate all general reference points. Take such steps as necessary to prevent their dislocation or destruction. If disturbed or destroyed, replace as directed. Prime contractor shall lay out work, and he is responsible for its accuracy. Coordinate with City Architect.

16) CONDITIONS OF SURFACES

Shall be added to the General Conditions as follows:

Each subcontractor shall inspect the surfaces over which his work will be installed prior to his starting work. Each subcontractor shall present notice of unacceptable surfaces to the prime contractor, who shall correct same in manner acceptable to City Architect. Subcontractor's start of work denotes his acceptance of surfaces and places responsibility for acceptable final results on himself as well as the prime contractor.

17) TEMPORARY SERVICES

a. WATER— Water for construction use will be provided by the owner. All water shall be conserved, and spillage cleaned by the contractor at fault. All hoses shall be the contractor's responsibility.

b. TEMPORARY POWER— Temporary power will be furnished by the owner for small hand tools and temporary lights. Each contractor will be responsible for running all his extension
c. TEMPORARY HEAT-- The prime contractor shall provide temporary heat (if required) as specified in the technical sections.

d. TEMPORARY ENCLOSURES-- The prime contractor shall be responsible for temporary enclosures. The temporary enclosures shall keep out all the elements, maintain temporary heat and/or building heat, and shall maintain the building security.

e. TOILETS-- Owner will designate which may be used by all contractors, provided they are kept clean by the workmen. Cleanup shall be the responsibility of the prime contractor.

f. TEMPORARY STORAGE-- Each contractor shall be responsible for the temporary storage of his own material.

18) BAILING AND PUMPING

Any required bailing and pumping shall be the responsibility of the individual contractor to complete his work.

19) HOISTS AND SCAFFOLDING

All hoists and scaffolding shall be provided by each contractor for his own work.

20) SHOP DRAWINGS

Add to Section 115 of General Conditions as follows:

Furnish four (4) copies of shop drawings. The drawings shall be 8 1/2 x 11, or foldable to that size, to facilitate filing. After folding, the title block shall be clearly visible indicating: (1) the drawing subject matter; (2) the name of the submitting firm; (3) date; and (4) specification section.

Submit the shop drawings to the City or the Architect through the prime contractor. Do not submit directly to the City, the Architect, or his consultants.

21) WARRANTY OF TITLE

Section 131 of the General Conditions shall be added to as follows:

The beginning of the warranty period relating to faulty materials and workmanship will be established by the final acceptance of the project by the owner. The necessity of partial occupancy of an uncompleted structure by the owner will not alter the warranty period herein defined.

22) STATE SALES TAX
If contractors are required to pay a sales tax for material purchased by them and such material is entirely included in the work under contract, contractors shall include the sales tax in their proposal.

23) REGULATIONS: All work and materials shall conform strictly to the respective requirements of the latest editions of the following:

a. Rules of the National Board of Fire Underwriters.
c. State Industrial Commissions.
d. Local ordinances and codes.
e. State laws of Minnesota.
f. Minnesota State Board of Health.
g. Underwriters Laboratories.
h. Occupational Safety and Health Administration.

Any conflict between the above or with these specifications must be submitted to the City Architect in writing before proceeding with the work.

24) CHANGES IN THE WORK (NEW LANGUAGE)
(See Section 109 of the General Conditions, items d-2 & d-3.)

25) ADDITIONAL CONDITION FOR FINAL PAYMENT
(Further amends General Conditions Item 108, Paragraph 2)

The contractor and all of its subcontractors shall comply with Minnesota Statutes, Section 290.92. Pursuant to Minnesota Statutes, Section 290.97, the owner will not issue final payment to the contractor prior to receipt of an "Affidavit for Obtaining Final Settlement of Contractor with the State of Minnesota and Any of Its Political or Governmental Subdivisions" (Form IC-134) from the contractor and from each of the contractor's subcontractors (if any). The contractor and subcontractors shall submit to the owner original copies of Form IC-134 already fully executed by the Commissioner of Revenue of the State of Minnesota. It shall be the responsibility of the contractor to ensure that all of the affidavits herein required are submitted to the owner. (A sample of Form IC-134 is attached to these Special Conditions; a copy is included in the pre-construction packet given to contractor.)

26) ONE-CALL EXCAVATION NOTICE SYSTEM

The contractor and all of its subcontractors shall comply with Minnesota Statutes Chapter 216D., the Minnesota One-Call Excavation Notice System, if "excavation" as defined in Minnesota Statutes 216D.01., Subdivision 1., is to be performed as a part of this contract. (One-Call contact number: 1-800-252-1166)

27) SAFETY

Section 120 of the General Conditions shall be added to as follows:
I. OSHA 500 (10-hour Construction Safety Course) Certification: The prime contractor’s superintendent or management representative on site must be certified in an OSHA 500 10-hour Construction Safety Course. Cards must be immediately available for review.

II. Written Safety and Health Program: A comprehensive Written Safety and Health Program must be supplied to the City Purchasing Office prior to any bid considerations. The written program must address, as a minimum, the following items:

A. General Requirements: The contractor will assume the entire responsibility for overall job site safety; however, this does not exclude other subcontractors from the safety responsibility with respect to their portion of the work. Any portion of the Safety and Health requirements provided for by the contractor or their subcontractors may relieve the other contractors of the actual, but not legal, responsibility for compliance with all applicable safety requirements. An example of this is, temporary GFCI equipped power supply, sanitary facilities, first aid, etc.

B. Accident Prevention Responsibilities: All successful bidders will submit a comprehensive written workplace accident and injury reduction program (AWAIR), outlining the scope of the program: the responsibilities of managers, supervisors, and employees for the implementation, maintenance, evaluation of the program, and how safe work practices and rules will be enforced. The contents of the above mentioned program will include provisions for first-aid services and emergency medical attention in case of injury. It will stress clearly acceptable work practices and rules of conduct, both general and site specific, that will be in place throughout the duration of the contract in terms of conditions of employment and outline a progressive disciplinary program for non-compliance.

It will also provide for employee training in Haz-com, Confined Space Entry, Lockout/Tagout, Respirator Protection, and other areas where necessary in categories of initial hire, remedial or annual upgrade. Records of all such training will be kept stating subject area, date presented, how was it presented, who presented the training, and to whom was it presented. Employees will certify receipt of all such training in their permanent file. Such a program shall also provide for frequent and regular inspections of the job site, materials, and equipment to be made by a competent person designated by the employer to ensure compliance.

C. Engineering Controls: This will be the primary means of hazard abatement. ONLY when this is not feasible will PPE be considered. Such controls will include, but not be limited to:

Traffic Control: Employees exposed to vehicular traffic will be protected by suitable traffic control devices as stated in the Field Manual (dated April 1995) of the Minnesota Manual on Uniform Traffic Control Devices, and shall be provided with, and shall wear, warning vests or other suitable garments marked with, or made of, reflectorized high-visibility material.
**Fall Protection:** Guarding of all open sided floors, wall openings, platforms, floor openings, etc., anything that presents a fall hazard to the employees as specified in walking-working surfaces, scaffolding, and steel erection standards. This includes falls from different elevations as well as falls from the same elevation.

**Fall Protection Program:** The employer shall provide a training program for each employee who might be exposed to fall hazards to be given by a COMPETENT PERSON. It shall follow the criteria stated in 1926.503(a)(1) with provisions made for written certification upon completion. Retraining will be provided as stated in 1926.503(b).

**Fall Protection Plan:** This option is available only to employees engaged in leading edge work, pre-case concrete erection work, or residential construction work, etc., and who can demonstrate that it is infeasible or it creates a greater hazard to use conventional fall protection equipment. This plan MUST conform to the provisions outlined in 1926.502(k)(1-10) and will be maintained up to date.

**Excavations:** This section applies to all work done in all open excavations made in the earth’s surface. Excavations are defined to include trenching operations made for whatever reason (e.g., utility placement, footings and foundations for buildings, etc.) and will be performed in compliance with CFR Part 1926.651 and 652 under the direct supervision of a COMPETENT PERSON as defined in CFR Part 1926.650(b).

**Before any digging is done!!!** Gopher State ONE-CALL (1-800-252-1166) must be called at least 48 hours in advance to insure the inventory of underground utilities (e.g., sewer, water lines, telephone, fuel, electric, etc.). Utility companies must be notified that work is to be done and you need to know the exact location of underground lines, pipes, cables, etc. If the utility company has not responded within 24 hours, or if the exact location cannot be determined, you will then proceed with caution, using detection equipment or other acceptable means to locate underground utility installations.

**Backup Alarms:** All bi-directional motorized equipment with an obstructed view to the rear will be provided with a reverse signal alarm distinguishable from the surrounding noise level, or with signaling employee, or both.

**Electrical Safety:** The use of ground fault circuit interrupters, or an assured equipment grounding conductor program is mandatory for use with all electrical powered electrical equipment on the construction site. Those electing to use the assured equipment grounding conductor program will coordinate their colors with the existing job site plan. An extension cord is not part of a permanent wiring system and will not comply with the provisions stated above. Cranes, backhoes,
scaffolding, etc., will maintain a 10-ft. clearance from energized conductors at all times.

D. Other Safety Requirements: All appropriate personal protective equipment such as head, eye, ear, and respirator protection shall be used in all operations where there is the probability of over-exposure to hazardous substances, harmful physical agents, and hazardous conditions not feasibly corrected by engineering controls.

Such use of personal protective equipment will be accompanied by relevant training programs; hearing conservation programs when appropriate; and respirator protection programs for all employees required to use such equipment. Where a hazardous condition as defined by Minnesota Rule 5205.1010 exists, or can be reasonably expected to exist, the requirements of a formal Confined Space Entry Program is mandatory. The contractor must show proof of the existence of such a program prior to start of such work.

All equipment, vehicles, tools, and other equipment used on the work site will be in safe operation, and operated within the parameters stated by the applicable subpart.

E. Specific Site Safety Requirements: The proposed work, and/or site, will be analyzed to identify site specific safety hazards, and an operational plan to include specific employee training will be required of all successful bidders.

The above mentioned items do not preclude compliance with any and all other applicable sections of CFR Part 1926, and all other standards and rules establishing safe working practices for construction. A current copy of 29 CFR Part 1926 will be on site at all times during the contract, as well as other specially required programs such as Right-to-Know, Confined Space Entry, etc., which will be used to reference safety problems.

**NOTE:** The contractors' written safety and health program must meet the requirements of the attached checklist. Any member hiring a contractor through this program will be responsible for evaluating and approving the contractors written safety and health program.

28) SUPERINTENDENT

The contractor shall at all times during the progress of the work keep a competent satisfactory superintendent or foreman who shall have the authority to receive instructions from the architect.

29) NO SMOKING

City of Duluth Buildings are non-smoking areas, no smoking will be allowed in the building.

30) SUBSTITUTIONS
Substitutions will only be accepted for bid, if they are submitted in writing with supporting information to the architect at least 7 days prior to the bid closing date. All substitutions must be approved by the architect or owner. The request shall include a self-addressed stamped envelope for response. SUBSTITUTIONS BY FAX WILL NOT BE ALLOWED.

31) **U. L. LABEL**

Where applicable all materials and equipment, for which Underwriter=s Laboratories, Inc. standards have been established, and their label service available, shall bear the appropriate U. L. Label.

32) **RESTRICTED ACCESS**

   a. Contractor shall use, and maintain in clean condition the site and building access route as approved by Owner. No other accesses shall be used for vehicle or man.
   b. Contractor and all other persons connected to this project use parking areas designated by the Owner.
   c. Contractor and workmen shall not trespass into areas beyond those required to accomplish the work.
   d. Contractor to make sure that his operations do not compromise building safety.

33) **GUARANTEES AND WARRANTIES**

Contractor shall be made responsible for proper installation of all items in his contract and shall remedy, free of charge, any defects in material and workmanship and repair all damage resulting, for a period of one year from the date of final acceptance. All systems shall be in operation prior to acceptance.

34) **ADDENDA**

Addenda will be mailed or delivered to all who are known by the architect or City to have received a complete set of bidding documents. Each bidder shall be required to acknowledge receipt of addenda on the proposal forms.

35) **CLEANING UP**

   a. Contractor must comply at all times with the General Condition requirements.
   b. Contractor shall at all times keep the premises free from accumulation of waste materials caused by his operation. At the completion of the work, he shall remove all his waste materials from the project as well as his tools, construction equipment and surplus materials and leave the work A'Broom Clean@ or its equivalent. Contractor shall restore and replace in a suitable manner all property both public and private which has been damaged or removed in the performance of this contract. The site of the work is meant to include portions of any and all buildings or structures and adjacent portions of any streets, alleys, lawns, sidewalks, driveways, or property used in executing the work.
   c. If the contractor fails to clean up, the Owner may do so and the cost thereof charged to the Contractor.
SECTION 01010 — SUMMARY OF WORK

1.01 Related Documents. Drawings and general provisions of contract, including General and Supplementary Conditions, and Division 1 specification sections, apply to work of this section.

1.02 Project Description.

a. Project comprises the modernization of City Hall Elevators 1 & 2 and the De-Commissioning, removal and floor infilling of City Hall Elevators 3 & 4. In Elevator Penthouse CH 1 & 2, there is demolition of existing bricked and block openings; cutting new openings and providing new lintel, correction, leveling of all jambs, sills and heads; installation of operable, flush steel, insulated doors with lockable, removable core cylinders, thresholds and astragals.

b. Work also consists of infilling the decommissioned elevators CH 3 & 4 with steel angles, metal deck, lightweight concrete floor, vct, sheetrock walls and fire rated acoustic ceiling and grid.

1.03 Work Sequence. Work will be conducted in contractor derived phases to provide the quickest possible completion of the project.

1. Remove existing materials and replace elevators as indicated and clean.

2. Clean operational debris, caulk & paint.

Any phased work shall and can run concurrently with each other. The City of Duluth Administrative Functions located in this structure shall remain operational for the duration of the project schedule.

END OF SECTION 01010
SECTION 01045 — CUTTING AND PATCHING

PART I — GENERAL

1.01 Related Documents. Drawings and general provisions of contract, including General and Supplementary Conditions, and Division 1 specification sections, apply to work of this section.

1.02 Scope of Work. This section includes administrative and procedural requirements for cutting and patching.

1.03 Related Sections. The following Sections contain requirements that relate to this Section:

a. Section 02070, “Selective Demolition”, for demolition of selected portions of the building for alterations.

b. Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the work. NOTE: Requirements of this Section apply to mechanical and electrical installations. Refer to Division 15 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

1.04 Submittals

a. Cutting and Patching Proposal: Submit a proposal describing procedures well in advance of the time cutting and patching will be performed if the Owner requires approval of these procedures before proceeding. Request approval to proceed.

1.05 Quality Assurance

a. Requirements for Structural Work. Do not cut and patch structural elements in a manner that would change their load-carrying capacity or load-deflection ratio. Temporarily brace and shore as required for the conditions indicated.

b. Visual Requirements. Do not cut and patch construction exposed or in occupied spaces in a manner that would, in the Architect’s opinion, reduce the building’s aesthetic qualities. Do not cut and patch construction exposed or in occupied spaces in a manner that would, in the Architect’s opinion, reduce the building’s aesthetic qualities. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace construction cut and patched in a visually unsatisfactory manner.

1.05 Warranty

a. Existing Warranties: Replace, patch, and repair material and surfaces cut or damaged by methods and with materials in such a manner as not to void any warranties required or existing.

PART - PRODUCTS (not used)
PART 3 — EXECUTION

3.01 Inspection. Examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed before cutting. If unsafe or unsatisfactory conditions are encountered, take corrective action before proceeding.

Before proceeding, meet at the project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

3.01 Preparation

a. Temporary Support. Provide temporary support of work to be cut.

b. Protection. Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the project that might be exposed during cutting and patching operations.

c. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

d. Avoid cutting existing pipe, conduit, or ductwork serving the building but scheduled to be removed or relocated, until provisions have been made to bypass them.

3.02 Performance

a. General. Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at earliest feasible time and complete without delay.

Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.

b. Cutting. Cut existing construction using methods least likely to damage elements retained or adjoining construction. Where possible, review proposed procedures with the original installer; comply with the original installer’s recommendations.

1. In general, where cutting, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.

3. Cut through concrete and masonry using a cutting machine, such as a Carborundum saw or a diamond-core drill.
4. Where services are required to be removed, relocated, or abandoned, by-pass utility services, such as pipe or conduit, before cutting. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.

c. Patching. Patch with durable seams that are as invisible as possible. Comply with specified tolerances.

1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.

2. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

3. Where removing walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

   Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing the patch after the area has received primer and second coat.

4. Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

3.04 Cleaning

Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar items. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore any damaged pipe covering to its original condition.

END OF SECTION 01045
SECTION 01300 — SUBMITTALS

PART 1 — GENERAL

1.01 Related Documents: Drawings and general provisions of contract, including General and Supplementary Conditions and other Division 1 specification sections, apply to work of this section.

1.02 Summary. This Section includes administrative and procedural requirements for submittals required for performance of the work, including the following:

   a. Within 10 days after notice of award is received:
      1. Progress Schedule
      2. Schedule of Values.
      3. Listing of subcontractors and principal suppliers and fabricators including proprietary names of material proposed for this contract.
      4. Listing of contractor’s staff assignments and principal consultants.

   b. As work progresses:
      1. Shop drawings, samples, and required submittals.
      2. Product tests required and installation tests required.
      3. Guarantees and operating instructions and manuals.
      4. Project records, drawings.
      5. Permits.
      6. Applications for payment.

1.03 Related Sections. The following sections contain requirements that relate to this section:

Division 1 section “Contract Closeout” specifies requirements for submittal of Project Record Documents and warranties at project closeout.

1.04 Submittal Procedures

   Coordination. Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

   a. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

   b. Coordinate transmittal of different types of submittals for related elements of the work so processing will not be delayed by the need to review submittals concurrently for coordination.

      The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.

   c. Processing. To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for re-
submittals.

1. Allow 2 weeks for initial review. Allow additional time if the architect must delay processing to permit coordination with subsequent submittals.

2. If an intermediate submittal is necessary, process the same as the initial submittal.

3. Allow 2 weeks for reprocessing each submittal.

4. No extension of contract time will be authorized because of failure to transmit submittals to the architect sufficiently in advance of the work to permit processing.

1.05 Submittal Preparation. Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

   a. Provide a space approximately 4 by 5 inches (100 by 125 mm) on the label or beside the title block on shop drawings to record the contractor's review and approval markings and the action taken.

   b. Include the following information on the label for processing and recording action taken:
      1. Project name
      2. Date
      3. Name and address of the architect
      4. Name and address of the contractor
      5. Name and address of the subcontractor
      6. Name and address of the supplier
      7. Name of the manufacturer
      8. Number and title of appropriate specification section
      9. Drawing number and detail references, as appropriate

1.06 Submittal Transmittal. Package each submittal appropriately for transmittal and handling. Transmit each submittal from the contractor to the architect using a transmittal form. The architect will not accept submittals received from sources other than the contractor.

On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from contract document requirements, including variations and limitations. Include contractor's certification that information complies with contract document requirements.

1.07 Contractor's Construction Schedule

a. Bar-Chart Schedule. Prepare a fully developed, horizontal bar-chart-type, contractor's construction schedule. Submit within 10 days after the date established for "Commencement of the Work".

   1. Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the work as indicated in the "Schedule of Values".
2. Coordinate the contractor’s construction schedule with the Schedule of Values, list of subcontracts, submittal schedule, progress reports, payment requests, and other schedules.

3. Indicate completion in advance of the date established for substantial completion. Indicate substantial completion on the schedule to allow time for the architect’s procedures necessary for certification of substantial completion.

b. *Phasing.* On the schedule, show how requirements for phased completion to permit work by separate contractors and partial occupancy by the owner affect the sequence of work.

c. Distribution. Following response to the initial submittal, print and distribute copies to the architect, owner, subcontractors, and other parties required to comply with scheduled dates. Post copies in the project meeting room and temporary field office.

   When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.

d. Schedule Updating. Revise the schedule after each meeting, event, or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

1.08 **Shop Drawings.** Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the contract documents. Do not reproduce contract documents or copy standard information as the basis of shop drawings. Standard information prepared without specific reference to the project is not a shop drawing.

Shop drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates, and similar drawings. Include the following information:

a. Dimensions.

b. Identification of products and materials included by sheet and detail number.

c. Compliance with specific standards.

d. Notation of coordination requirements.

e. Notation of dimensions established by field measurement.

f. **Sheet Size:** Except for templates, patterns and similar full-size drawings, submit shop drawings on sheets at least 8½ by 11 inches (215 by 280 mm) but no larger than 36 by 48 inches (890 by 1220 mm).

g. **Final Submittal:** Submit 6 blue- or black-line prints and 2 additional prints where required for maintenance manuals. The architect will retain 3 prints and return the remainder.
One of the prints returned shall be marked up and maintained as a “Record Document”.

h. Do not use shop drawings without an appropriate final stamp indicating action taken.

1.08 Product Data

Collect product data into a single submittal for each element of construction or system. Product data includes printed information, such as manufacturer’s installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.

a. Mark each copy to show applicable choices and options. Where printed product data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:

1. Manufacturer’s printed recommendations.
2. Compliance with trade association standards.
3. Compliance with recognized testing agency standards.
4. Application of testing agency labels and seals.
5. Notation of dimensions verified by field measurement.
6. Notation of coordination requirements.

b. Do not submit product data until compliance with requirements of the contract documents has been confirmed.

c. Submittals: Submit 4 copies of each required submittal; submit 4 copies where required for maintenance manuals. The architect will retain three and will return the other marked with action taken and corrections or modifications required.

Unless noncompliance with contract document provisions is observed, the submittal may serve as the final submittal.

d. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.

1. Do not proceed with installation until a copy of product data is in the installer’s possession.

2. Do not permit use of unmarked copies of product data in connection with construction.
1.09 **Samples.** Submit full-size, fully fabricated samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.

Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

1.09 **Quality Assurance Submittals**

a. Submit quality-control submittals, including design data, certifications, manufacturer’s instructions, manufacturer’s field reports, and other quality-control submittals as required under other sections of the specifications.

b. Certifications: Where other sections of the specifications require certification that a product, material, or installation complies with specified requirements, submit a notarized certification from the manufacturer certifying compliance with specified requirements.

c. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.

1.10 **Architect’s Action.**

Except for submittals for the record or information, where action and return is required, the architect will review each submittal, mark to indicate action taken, and return promptly.

Compliance with specified characteristics is the contractor’s responsibility.

a. **Action Stamp:** The architect will stamp each submittal with a uniform, action stamp. The architect will mark the stamp appropriately to indicate the action taken, as follows:

1. **Final Unrestricted Release:** When the architect marks a submittal “Approved”, the work covered by the submittal may proceed provided it complies with requirements of the contract documents. Final payment depends on that compliance.

2. **Final-But-Restricted Release:** When the architect marks a submittal “Approved as Noted”, the work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the contract documents. Final payment depends on that compliance.

3. **Returned for Resubmittal:** When the architect marks a submittal “Not Approved, Revise and Resubmit”, do not proceed with work covered by the submittal, including purchasing, fabrication, delivery, or other
activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.

Do not use, or allow others to use, submittals marked “Not Approved, Revise and Resubmit” at the project site or elsewhere where work is in progress.

b. Other Action: Where a submittal is for information or record purposes or special processing or other activity, the architect will return the submittal marked “Action Not Required”.

c. Unsolicited Submittals: The architect will return unsolicited submittals to the sender without action.

PART 2 — PRODUCTS (Not Applicable)

PART 3 — EXECUTION (Not Applicable)

END OF SECTION 01300
SECTION 01700 — CONTRACT CLOSEOUT

PART 1 — GENERAL

1.01 Related Documents. Drawings and general provisions of contract, including General and Supplementary Conditions, and Division 1 specification sections, apply to work of this section.

1.02 Summary. This section specifies administrative and procedural requirements for project closeout.

1.03 At Site. The entire project area shall be cleaned immediately prior to final inspection. The criteria for cleaning shall include the interiors of spaces and adjacent surfaces, site, radiation, and similar items and such accessible spaces as tunnels, shafts, pipe spaces, plenums, crawl spaces, and similar areas.
Instruct designated City personnel regarding maintenance and any warranty/guarantee requirements. Operate and test performance of any and all operating equipment and systems.

1.04 Submittals. Submit evidence of completed operations liability insurance coverage during the one-year guarantee period. See General Conditions, Article 11.
Submit record copy of all bonds, guarantees, or warranties required by the technical sections of the specifications.
Submit record copy of all test results, affidavits, certificates, approvals, IC-134 forms, payrolls, or inspections required by the technical sections of the specifications.

1.05 Record Drawings (As-Built). The contractor shall maintain one (1) set of plans and specifications on the project on which the contractor shall indicate all revisions, in red pencil or ink, which occur during construction. Accurately mark up plans on a daily basis the actual installation of work indicating variations from the contract drawings. Upon completion of the work, this set shall be turned over to the architect.

1.06 Prior to Final Payment. Written notice to the architect and owner that the work required by the contract has been completed.

END OF SECTION 01700
SECTION 02060 -- DEMOLITION

PART 1 - GENERAL

1.01 General Requirements. The conditions of the contract and Division-1, as indexed, apply to this section of the specifications.

1.02 Scope of Work. The work required under this section consists of all labor, tools, and equipment necessary for any demolition work shown on the drawings or necessary to carry out the intent of the plans and specifications.

1.03 Conditions at Site. Visit the site and examine the existing structure. Note all conditions as to character and extent of work involved.

1.04 Permits, Ordinances, Etc. Procure and pay for all necessary permits or certificates required to complete the work specified. Make any and all required notifications and comply with all applicable federal, state, and local ordinances.

1.05 Protection:

   a. Execute all demolition work in an orderly and careful manner with due consideration for any existing structures, including any parts of the surrounding areas which are to remain. Barricade and cover properties. Periodically, sprinkle to allay dust.

   b. Avoid any encroachment on adjacent properties. Repair and make good any damage to adjoining properties or improvements caused by operations, including any damage or loss to adjacent tenants or property owners, whether to buildings, stocks of merchandise, trade fixtures, or the like.

   c. Care shall be taken so that no damage to items which are to remain shall be made.

   d. The contractor shall protect and maintain all existing mechanical and other services that are to remain either for temporary service during construction or for permanent service.

1.06 Disposition of Removed Material. All material removed under this contract, which is not to be salvaged or reused, shall become the property of the contractor and be promptly removed from the site. Do not store or permit debris to accumulate on the site.

1.07 Clean-Up. On completion of demolition work, leave the property and adjacent areas clean and satisfactory to local authorities and the City Architect.

1.08 Salvage Materials. All materials salvaged from site and not claimed by the owner shall become the property of the contractor and shall be removed from site by the contractor at his own expense. The City of Duluth maintains the Right of First Refusal on all materials to be demolished. Contact City Architect for materials in question.

END OF SECTION 02060
SECTION 14000
ELEVATOR MODERNIZATION

PART 1 - GENERAL CONDITIONS OF CONTRACT

1.01 ASSOCIATED SECTIONS AND DOCUMENTS

A. For work under this contract, the Elevator Contractor is referred to the instructions to Bidders, form of proposal, and all amendments and addenda thereto, all of which are hereby made part of this contract.

B. The Contractor shall be subject to the "General Conditions of the Contract" of the American Institute (AIA) Document A201, 1987 Edition, which shall form a part of this specification except as otherwise herein provided.

C. Where clauses are repeated herein it shall be understood as calling attention to them or as a further qualification and shall not be construed as omitting any other part of the clause.

D. In the event of a conflict between the documents, this contract shall govern.

E. Reference Appendix A: "General Condition of the Contractor for Construction of a Small Project."

1.02 DESCRIPTION OF WORK

A. The extent of work to be performed shall include all labor, equipment, material and services necessary to fully comply with these specifications. All work shall pertain to these elevators unless otherwise noted.

B. Definitions:

1. "Provide": To supply, install, connect and make ready for safe and normal operation the complete elevator system as specified herein.

2. "Install": To erect, mount, and connect complete with related accessories.

3. "Supply": To purchase, procure, acquire and deliver complete with related accessories.

4. "Work": Labor, materials, equipment, apparatus, controls, accessories and other items required for proper and complete installation.
5. "Wiring": Conduit, fittings, wire, traveling cables, junction and outlet boxes, switches, cutouts, receptacles, related items and accessories.

6. "Similar" or "Equal": Approved material, weight, size, design, and characteristics to the specified product.

7. "Approved", "Satisfactory", "Accepted", or "Directed": As approved, satisfactory, accepted or directed by or to the Owner.

8. "Owner": Shall be defined as person or company holding title to property in which this specified work is to be performed or his appointed representative(s).

9. "Contractor": Shall be defined as the elevator company performing the work described in these specifications.

1.03 INTENT

A. Intent of these specifications is to cover the specified work complete and operable in every respect. It is not intended to give every detail in the specifications. Owner will not be responsible for absence of wiring diagrams of existing equipment or any detail Contractor may require. Furnish all material and equipment usually furnished with such systems and/or needed to make a complete and safe operating installation, whether specifically mentioned or not, omitting only such parts and assemblies as are specifically excepted.

B. All material and equipment furnished shall be new and in perfect condition.

C. Owner's interpretation of specifications shall be final and binding upon Bidder.
1.04 QUALITY ASSURANCE

A. Installer Qualifications: Either the elevator manufacturer, a licensee of the manufacturer, or elevator contractor who has not less than five years successful experience with providing and installing similar elevator work.

B. PRODUCTS

Acceptable system manufacturers are listed as follows: No other substitution will be accepted unless approval is given before date of bid.

a. Controllers MCE, Elevator Controls
b. Fixtures Adams, Epco, The Fixture Company, Innovation, GAL
c. Electronics CE Electronics, PSI
d. Braille SCS Braille
e. Phone Rath Microtech Phone
f. Roller Guides Elsco
g. Door Operators GAL

C. Acceptable elevator contractors are as follows:

1. Otis
2. Schindler
3. ThyssenKrupp
4. Minnesota

D. Regulatory Requirements: All work shall comply with current (at time of bid) governing local codes; conform to all laws, ordinances and regulations affecting the erection, sequence of erection and completion of the whole or part of the work; and conform to the requirements of authorities having lawful or customary jurisdiction. These requirements shall take preference over the contract documents except where the contract documents require better materials or workmanship, also acceptable to the authorities. The Contractor shall be held responsible for any violations of codes caused by himself or his employees. Any additional expense caused thereby shall be borne by the Contractor. Owner warrants that as of bid date no violations have been placed upon the existing equipment by any authority having jurisdiction.

E. Standards: Except as modified by local governing codes and by this section, new work shall comply with provisions of the following, and in the event of conflict between these standards, the most stringent standard shall be used.
1. **ANSI:**


2. **ASME:** American Society of Mechanical Engineers.

3. **ASTM:** American Society for Testing and Material.

4. **AWS:** American Welding Society.

5. **CS:** Commercial Standard U.S. Department of Commerce.

6. **CSA:** Canadian Standards Association.

7. **IEEE:** Institute of Electronic and Electrical Engineers.

8. **NEC:** National Electrical Code.

9. **NEMA:** National Electrical Manufacturers Association.


11. **NBS:** National Bureau of Standards.

12. **OSHA:** Occupational Safety and Health Administration.

13. **UL:** Underwriters Laboratories.

14. **ADA:** Americans with Disabilities Act

15. **Minnesota State Building Code**
1.05 LAWS AND PERMITS

A. Contractor shall comply with all federal, state and municipal laws and ordinances, prepare all documents, give all notices, obtain all permits necessary for the work, pay all costs and fees for permits and inspections and obtain all certificates of inspection and approval for the work and deliver same to the Owner before requesting final or beneficial use acceptance.

1.06 CONFLICTS

A. Should it appear that there is real or apparent discrepancy between different sections of specifications concerning nature, quality or extent of work to be furnished, it shall be assumed that Contractor has based his/her bid on completing the work in a more stringent manner. Final decision will rest with the Owner.

1.07 SUBMITTALS

A. Contractor shall submit three sets of shop drawings for equipment layout, fixtures drawings, catalogs and catalog data of all new equipment to be provided.

B. As soon as approval has been given, Contractor shall submit four prints of approved shop drawings and schedules. Also supply to field as many prints of approved shop drawings and schedule as required.

C. All submittals shall be on dates sufficiently in advance of job progress requirements to afford ample time for checking, and no claim for extension of contract time will be granted Contractor by reason of his failure to comply with this request. All submittals shall be complete and shall contain all required and detailed information.

D. Contractor shall check all submittals for conformity with contract specifications and correct any errors, omissions or deviations before transmittal. Specifications, catalogs, etc., submitted for approval shall be properly labeled indicating specific service for which material or equipment is to be used, Manufacturer’s name and name of job. Catalogs, pamphlets or other documents submitted to describe items on which approval is being required, shall be specific and identification of item submitted shall be clearly made in ink. Data of general nature will not be accepted.
E. Contractor shall be responsible for correct quantities, dimensions, design of adequate connections, details for satisfactory construction of all work and furnishing of materials for work required by the intent of the contract documents, even if not indicated on submittals that have been approved by Owner or authorized representative.

F. Owner or authorized representative shall check drawings for design only and approval of drawings, schedules, and catalogs shall not be construed as a complete check and shall not relieve Contractor of his/her responsibilities as stated above.

G. If submittals differ from requirements of contract documents, Contractor shall make specific mention of such difference in his/her letter of transmittal with a request for substitution, together with his/her reasons for same in order that, if acceptable, suitable action may be taken for proper adjustment. It is understood and agreed that specific written approval of substitute materials and/or methods is required before Contractor can proceed with a substitution.

H. No material shall be delivered until Contractor has obtained written approval of shop drawings and other data enumerated above. Should materials or equipment be delivered before required approval, Contractor shall be liable for its removal and replacement at no charge, if material or equipment does not meet intent of documents.

I. By approving and submitting shop drawings and samples, the Contractor thereby represents that he/she has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated the shop drawings and samples with the requirements of the work of the contract documents.

J. Prior to the final acceptance of the work of this section, submit two (2) copies of the following bound manuals to the Owner or authorized representative for review:

1. Operating Instructions: Printed or typewritten literature describing the function and operation of all controls.

2. Maintenance Instructions: Printed or typewritten schedules of all required maintenance procedures.
3. Wiring Diagrams: Full size, ladder type, complete, "as built" wiring and single line diagrams showing the electrical connections, functions and sequence of operation of apparatus connected with the elevators, both in the machine room and in the hoistway, shall be furnished in duplicate for each elevator at the time of final inspection and acceptance. Coded diagrams are not acceptable.

K. Deliver to the Owner six tagged spares of each different key used to lock control cabinets and other devices using keys on the elevator, such as access switches and car operating panels.

1.08 WARRANTY

A. The Contractor warrants all workmanship and materials supplied by him/her for one (1) year. If during the correction period any defects or faulty materials are found, the Contractor shall furnish, at no additional cost to the Owner, all parts, materials, equipment, and labor necessary for the performance of service required under this contract; with the exception that the restoration to satisfactory operating condition of any equipment or any part or parts thereof damaged by negligence, abuse, or misuse thereof by persons other than the Contractor, his/her agents, representative, or employees, shall be excluded from coverage under this warranty.

1.09 MAINTENANCE

A. Twelve Month Warranty Maintenance: Service shall be provided for the period indicated in the foregoing equipment outline on each elevator completed, after it has been turned over for the Owner's use. Maintenance shall meet the conditions of the Owner's full maintenance contract. Warranty maintenance to include 24 hour callback service. All work shall be performed during regular working hours of regular working days.

1. Trained employees shall make periodic examinations of the elevator equipment and shall perform work including necessary adjustments, greasing, oiling and the replacement of parts necessary to keep the elevators in operation, except those parts which require replacement because of accidents, misuse or negligence by parties other than the elevator contractor.

2. Overtime call backs shall be provided when the loss of use of the elevator(s) causes a loss of adequate service.
B. Preventive Maintenance Program: Quote price for elevator maintenance to meet the conditions of the Owner’s maintenance contract, commencing on completion of the twelve (12) month warranty maintenance. Submit quote based upon terms and conditions of the Owner’s Elevator Maintenance Agreement. The Owner has the option to accept the maintenance agreement at any time prior to termination of the 12 month warranty maintenance period.

1.10 TESTS

A. Conduct tests and adjustment of equipment as specified or necessary to verify performance requirements as required by the ANSI/ASME A17.1 Safety Code for Elevators and Escalators.

B. Upon completion and full operation of all equipment, completely test same, both for the governing authorities and for compliance with the requirements of the contract documents. All necessary equipment for testing and cost involved shall be included as part of this contract. All tests shall be performed in accordance with the requirements of ANSI A17.2 and Applicable Codes. These tests shall include a five year safety test.

C. If tests show that the new equipment is in any way defective, of poor workmanship, at variance with the requirements of the contract documents, or dangerous or objectionable in operation, the Contractor shall make all necessary changes and remedy all defects at his/her expense, to the satisfaction of the Owner and also pay for the expenses of all subsequent tests until all equipment is acceptable.

D. Upon completion of satisfactory tests, secure and furnish to the Owner certificates from all departments having jurisdiction that the elevators and related equipment have been inspected and approved.

1.11 CONDUCT AT SITE

A. Personnel shall be instructed to refrain from un-workmanlike conduct while on the job.

B. The employees furnished by the Contractor must be acceptable to the management staff of the Owner.
1.12 PROTECTION OF PERSONS AND PROPERTY

A. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work.

B. Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

1. All employees on the project and all other persons affected thereby.

2. All the work and all materials and equipment to be incorporated therein, whether in storage on or off the site or under the care, custody or control of subcontractors.

C. Contractor shall comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority having jurisdiction over the safety of persons or property or to protect them from damage, injury or loss.

He/she shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting of danger signs and other warnings against hazards, promulgating safety regulations and notifying Owners and users of adjacent utilities.

D. Contractor shall designate a responsible member of his/her organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the Owner.

E. Contractor shall not load or permit any part of the work to be loaded so as to endanger the safety of the building or occupants.

F. In any emergency affecting the safety of persons or property, the Contractor shall act, at his/her discretion, to prevent threatened damages, injury or loss.

G. Contractor shall protect floors, walls, and other surfaces from damage during the course of the work. All damaged surfaces shall be restored by the Contractor. Failure by the Contractor to do so may result in the Owner having all restorations made, and charging all costs to the Contractor.
H. Contractor shall be held responsible for compliance with the safety requirements of all city, state and federal agencies having jurisdiction, including the Occupation Safety and Health Act of 1970. Department of Air Resources and Environmental Control Board Regulations shall also be complied with.

I. Contractor shall not include any asbestos or PCB abatement work in his/her proposal. Should the Contractor encounter any such products or material during the course of this work, the work shall cease and the Owner notified of the findings for corrective action. On completion of corrective action by Owner or his/her subcontractor, the Owner shall notify the Elevator Contractor in writing. The Elevator Contractor shall then proceed to complete his work and any predetermined schedules shall be adjusted accordingly to time required for the Owner's corrective action.

1.13 DISPOSAL OF EQUIPMENT

A. All superseded equipment hereinafter specified shall be carefully removed in a professional manner by competent people. The disposal of the removed equipment shall be the Contractor's responsibility except as otherwise directed by the Owner.

1.14 SUBCONTRACTS

A. Contractor shall submit for approval a list of all subcontractors to be used in the performance of the work. Contractor shall not assign the contract, or sub-contract any work to be performed thereunder without the prior written consent of the Owner.

1.15 APPROVALS

A. Materials, workmanship, design and arrangement of work shall be subject to approval of Owner or designated agent.

1.16 ROYALTIES AND PATENTS

A. Contractor shall pay all royalties and license fees. He/she shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss thereof.
1.17 CONTRACTOR'S INSURANCE RESPONSIBILITIES

A. Types and respective minimum limits of coverage shall be as follows:

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Limit</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive General Liability</td>
<td>$1,500,000</td>
<td>Each occurrence</td>
</tr>
<tr>
<td>Bodily Injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>$1,500,000</td>
<td>Each occurrence</td>
</tr>
<tr>
<td>Comprehensive Automobile Liability</td>
<td>$500,000/750,000</td>
<td>Each occurrence</td>
</tr>
<tr>
<td>Bodily Injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor's &amp; Manufacturer's Liability</td>
<td>$1,500,000</td>
<td>Each person</td>
</tr>
<tr>
<td>Protective Bodily Injury</td>
<td>$500,000</td>
<td>Each occurrence</td>
</tr>
</tbody>
</table>

Workman's Compensation
Statutory Limitations

B. The insurance coverage required herein shall be executed with companies satisfactory to the Owner and written for not less than the above limits, or required by law, whichever is greater, and shall include contractual liability insurance as applicable to the Contractor's obligations.

C. The insurance coverage shall include Owner as additionally insured.

D. In lieu of an additional insured endorsement, the Contractor may maintain an Owner’s and Contractor’s Protective Liability Insurance Policy naming the Owner as named insured.

E. The Contractor will defend, indemnify and hold harmless the Owner, their directors, officers, partners, employees and agents from all claims, expenses, damages, fines and legal fees which arise out of or relate to breach or negligent performance of this Specification.

1.18 PERFORMANCE BOND, LABOR AND MATERIAL PAYMENT BOND

A. At the Owner's option, the Contractor may be asked for a bond covering the faithful performance of the contract and the payment of all obligations arising thereunder, such bonds in the absence of notice hereafter provided shall be obtained by the Contractor and the premium for such bonds will be paid by the Owner.
B. Upon notice to the Contractor, upon signing of the contract, or within 60 days thereafter, the Owner shall have the right to require the Contractor to obtain the aforementioned bonds at prevailing rates with surety acceptable to the Owner. The Contractor shall have 15 days from date of notice to obtain and furnish such bonds.

1.19 CLEANING, ADJUSTMENT AND FINAL ACCEPTANCE

A. Cleaning: The Contractor shall at all times keep the premises, driveways and streets, clean and free from excess accumulation of waste materials or rubbish caused by the Contractor's operations.

At the completion of each workday, all rubbish shall be removed from and around the premises and all tools, scaffolding and temporary work shall be left broom clean, unless otherwise specified.

Should the Contractor fail to attend to such cleaning with reasonable promptness, then the Owner may cause such cleaning to be done by others and charge the cost of cleaning to the Contractor.

B. Adjustments and Removals: After completion of the work, and before the issuance of Certificate of Final Acceptance, work area shall be thoroughly cleaned, and elevators properly adjusted so that they are in proper operating conditions.

C. Contractor shall remove from the site - All debris, abandoned elevator equipment and associated materials with this contract, and shall remove all stains and defacements caused by the Contractor's work. The entire work area shall be left in a clean condition satisfactory to the Owner.

D. The Contractor shall paint all parts of the elevator equipment that should be painted, including rails, machines, controller, pit equipment, etc., with a good grade of enamel paint. All equipment shall appear to be freshly painted and conspicuously clean at all times.

1.20 PROPRIETARY INFORMATION

A. Any proprietary material, information or data contained in the equipment, or any component or feature thereof, remains the property of the Owner. This includes, but is not limited to, tools, devices, manuals, software, source codes, access codes, object codes, passwords and remote monitoring feature that is deactivated if elevator contractor maintenance is discontinued.
1.21 PAYMENT

A. All invoices shall be submitted on AIA Document G702 – APPLICATION AND CERTIFICATE FOR PAYMENT. All Pay Applications must be forwarded to Consultant for verification and/or approval prior to forwarding to Owner for payment.

B. The Owner will require a 10% retainage.

1.22 CONFIDENTIALITY

The Contractor acknowledges that certain of the Owner’s valuable, confidential, and proprietary information may come into the Contractor’s possession. Accordingly, the Contractor agrees to hold all information it obtains from or about the Owner in strictest confidence, not to use such information other than for the performance of the services, and to cause any of its employees, subcontractors, or consultants to whom such information is transmitted to be bound to the same obligation of confidentiality to which the Contractor is bound. The Contractor shall not communicate the Owner’s information in any form to any third party without the Owner’s prior written consent. In the event of any violation of this provision, the Owner shall be entitled to preliminary and permanent injunctive relief from a court of competent jurisdiction immediately enjoining the other party from continuing it’s breach, as well as an equitable accounting of all profits or benefits arising out of such violation, which remedy shall be in addition to any other rights or remedies to which the Owner may be entitled.
PART 2 - EQUIPMENT

SCOPE OF WORK:

To modernize two OTIS traction passenger elevators in the City of Duluth - CITY HALL Building, elevators 1 & 2, utilizing the plan outlined in the Specifications below. To ensure that the modernization project proceeds smoothly, within budget and time constraints. To ensure modernized elevators meet all ADA requirements, local codes, and produces excellent ride quality for passengers for the next 30 years.

To decommission and remove two passenger elevators in the City of Duluth - CITY HALL Building, elevators 3 & 4, utilizing the plan shown and as outlined in the Specifications below. Provide floor level infill as indicated and described within these Contract Documents.

2.01 MATERIALS & PRODUCT APPLICATIONS

A. DATA OUTLINE – ELEVATORS #1 & #2

NO. OF ELEVATOR(S): TWO (#1 & #2)

TYPE: Otis / R&O Traction Passenger

CAPACITY: 3,000 lbs.

SPEED: 400 fpm

TRAVEL IN FEET: 57’ 6’ field verify

NUMBER OF STOPS: FIVE (5)

FLOORS SERVED: G, 1st – 4th

GUIDE RAILS - CAR: Retain

COUNTERWEIGHT RAILS: Retain

BUFFER - CAR: Retain and Recondition to Like New (with INSPECTOR APPROVAL)

GOVERNORS - CAR: New – Hollister Whitney

SLING: Retain
SAFETY: New – Flex Wedge Clamp
CAR PLATFORM: Retain – ADD New Subfloor
TOE GUARD: New, code-compliant
GUIDE SHOES - CAR: New 6” Elsco with Adjustable Stops
LOAD WEIGH: New
CWT FRAME: Retain
(with INSPECTOR APPROVAL)
CWT FILLERS: Retain
GUIDE SHOES COUNTERWEIGHT: New Elsco 3 ½” with Adjustable Stops and new wooden slide guides.
BUFFER COUNTERWEIGHT: Retain Traveling Buffer
(with INSPECTOR APPROVAL)
CABLES - HOIST: New
CABLES - GOVERNOR: New
COMPENSATION: New – WhisperFlex (with guides in pit)
COMPENSATION CHAIN EQUIPMENT: New – with guides in pit
MACHINE GEARLESS: New, Gearless - VVVF
MACHINE MOTOR: Replace with VVVF AC
SELECTOR: New electronic
DOOR OPERATORS: Replace with GAL MOVFR
CONTROL: New Microprocessor VVVF – Non Proprietary
SIGNAL LOGIC: New Microprocessor - Non Proprietary
CAR TOP INSPECTION STATION: New with firefighter's warning
WIRING: New
TRAVELING CABLES: New with 4 Coaxial Cables
ROPE GRIPPER: Provide new
ACCESS SWITCHES: New Top and Bottom
INTERIOR CAR DIMENSIONS: 80"W x 60"D x 65"H to door X 7'H (field verify)
CAR ENCLOSURE: Modify cab as per Owner's design, as detailed in section 2.53 CAB
CAR STATIONS: New with Adams Classic or Innovation PB-8. Buttons to be raised, except phone button, to be FLUSH PB-7.
EMERGENCY LIGHT: Provide new in car station.
CAB POSITION INDICATOR: New, 2" digital with direction of travel arrows in car operating station.
CAR HANDRAIL: New code-compliant handrails with the ends of the handrails turned inward towards the cab. 1.5" tubular stainless steel - as detailed in section 2.53 CAB
TELEPHONE: New Rath Microtech auto dial - Integral to car station
ENTRANCE SIZE: 48" x 7' 2SSO (field verify)
ENTRANCES: Retain and paint with color of Owner's choice.
HOISTWAY DOORS: Replace with UL-Labeled doors similar finish to existing doors (MUST be approved by Owner / Architect). Include door escutcheon locks on all floors
CAR DOORS: Provide new #4 stainless steel

CAR DOOR TRACKS: New

CAR SILLS: New – Nickel Silver

HALL PUSH BUTTON FIXTURES: New with Adams Classic Buttons or Innovation PB-8. Face plate to be embossed with Appendix “O”.

NO. OF HALL BUTTON RISERS: One

FIRE COMMAND CENTER: Provide required fixtures – LOBBY PANEL (located behind Police Station) FF Service shall be integrated to the Fire Command Center

LOBBY PUSH BUTTON FIXTURE: New

INTERCOM: None

CAB RIDING LANTERNS: Provide new with white LED lighting. Provide proper tones for direction of travel.

EMERGENCY POWER: Provide provision, *if required*

INTERLOCKS: New - GAL

DOOR HANGER ROLLERS: New

DOOR CLOSERS: New

DOOR TRACKS: New

POWER SUPPLY: 208v; 3ph; 60 Hz (field verify)

HOISTWAY NUMBERS: New

FIREFIGHTER'S SERVICE: Provide - 2005

MACHINE ROOM MONITOR: Provide - EMS
FIRST FLOOR LOBBY PANEL: Provide New

MAINTENANCE SERVICE INCLUDED: Yes

UNITINTENDED MOTION BRAKE: New

PIT LADDER: Remove existing and replace with new, code compliant pit ladder.

GOVERNOR TENSION SHEAVES: Provide New.

B. DE-COMMISSIONED ELEVATORS 3 & 4

Remove *ALL* elevator equipment in both shafts, inclusive of, but not limited to; all power, controls, equipment, cabs, cars, rails, tracks, control devices, safety components, mounting brackets, rails and stops. Remove all hoist way doors and tracks.

Install concrete floors as indicated on the documents to support a minimum of 150lbs per square foot of floor area at each level floor level 1-4 in each hoist way 3 & 4. At ground level in each hoist way, contractor shall furnish and install, removable, grated floor over the entire floor area.

At each level in each hoist way of elevators 3 & 4; contractor shall provide and install a lockable, two (2) hour, UL rated, steel swing door and hollow metal frame into existing framed opening. Contractor shall infill, shim & level as needed to fit conditions of the existing elevator car frame opening permits. Caulk perimeter to provide a finished appearance, both sides. Locking cylinder shall be a removable core, core provided by Owner.

2.02 RAILS – CAR

The rails shall be retained for the modernization. The rails shall be cleaned and filed to remove all build up on rails. Any depression or marks caused by safety application shall be filed smooth.

All missing splice plate bolts shall be replaced with proper sized bolts compatible to original bolts. Each splice plate shall be properly tightened.

The rails shall be checked and aligned to be parallel and equidistant to each other. The compression shall be checked and corrected, if necessary. Rails shall pass a ride quality evaluation.

2.03 RAIL BACKING
The existing rail backing shall be retained. Provide additional rail backing, if required. All fastenings shall be checked for missing pieces and replaced, if necessary.

2.04 RAIL BRACKETS

The existing rail brackets shall be retained in place. Provide additional rail brackets, if required. Check brackets for secure fastening and replace any missing hardware.

2.05 BUFFERS – CAR AND COUNTERWEIGHT

The existing car and counterweight buffers shall be retained and reconditioned to like-new, with INSPECTOR APPROVAL.

All buffer supports shall be checked for proper securing of the buffer. The applicable buffer tests shall be performed in accordance with code requirements. Provide new data plates.

2.06 GOVERNOR

The existing governor shall be removed and replaced with new Hollister Whitney.

A speed governor shall be provided to operate a governor tripping mechanism should the car speed or rate of change of speed exceed the governor settings. The action of the governor on the governor rope shall cause safety application. The governor shall be connected to the car safety by a new governor rope that passes over the governor sheave. Governor tripping speed switches shall be provided that will cause appropriate action of motion control system.

The governor rope shall be iron or steel. Sheave diameter shall comply with ASME standards. The governor shall be sealed by required code and properly lubricated.

2.07 GOVERNOR PIT SHEAVES

The existing governor pit sheave shall be reused, cleaned, and lubricated.

2.08 CAR SLING

The existing car frame shall be retained. All missing mounting hardware shall be replaced. Any bent or deformed members shall be replaced with proper size members. Provide new cross head data plate.
2.09 SAFETY

The existing safety shall be replaced with new Flex-Wedge clamp style safeties.

Any replacement parts shall be of the same design and materials as original safety to provide for compatibility and original manufacturer's design requirements. All necessary adjustments shall be made to cause safety to perform in accordance with code requirements.

2.10 PLATFORM

The existing platform shall be retained, cleaned, painted, and repaired as required. Composition shall be engineered to comply with capacity and strength requirements.

Provide new nickel silver car sill.

Provide new code compliant toe guard.

Provide new subfloor.

2.11 GUIDE SHOES

New roller guide shoes shall be furnished securely bolted to the car and counterweight frame at top and bottom. Each roller guide shall consist of, as a minimum, a set of three sound-reducing wheels in precision type ball bearings and held in contact with the rail surfaces by means of adjustable devices. Roller guides shall run on dry unlubricated guide rails.

Top of car and counterweight roller guides shall be fitted with dust guards.

The guides for the car shall be Elsco Model “B” with 6" diameter rollers and adjustable stops. The counterweight guides shall be Elsco Model “D”, 3 1/2" diameter roller guides with adjustable stops.

Roller guides shall be properly aligned in respect to rail surface.

2.12 LOAD WEIGH

The existing load switch shall be replaced with new load weigh system.

A load weigh system shall be incorporated in the platform and/or frame design that will provide information to the control for requirements of motion control, load dispatch and load bypass. Adequate individual outputs to provide these various functions shall be independently adjustable.
2.13 PIT LADDER & WORK PLATFORM

The existing pit ladders shall be removed if not code compliant, and replaced with new code-compliant pit ladders. Provide work platforms and pits, if required by code.

2.14 COUNTERWEIGHT

The existing counterweight shall be retained, with Inspector Approval. Weights shall be added or removed as necessary to compensate for the car weight plus a minimum of 40% of rated load.

In the event the new weight of car, counterweight, and capacity exceeds 5% more than the existing weight, Owner will provide architectural and engineering services to certify the adequacy of existing supporting structure(s).

Retain Traveling Buffer, with Inspector Approval.

2.15 CABLE FASTENING

Replace all cable fastenings with new wedge style devices when hoistropes are replaced. Springs shall be of proper tension to handle the specified loads. Two clips per rope per end shall be properly spaced to comply with design criteria and code. Cable tags shall be applied to end of cables to provide data as specified by code. Shackles shall not have Babbit. Shackle height shall be staggered.

2.16 GOVERNOR ROPE

The existing governor rope shall be replaced. New iron or steel governor rope shall be provided. The rope shall be of type and design to be compatible with the governor design.

2.17 HOIST ROPES

The existing hoist ropes shall be replaced.

Traction steel hoist ropes of the size and number to insure proper wearing qualities shall be provided. As a minimum, the number of ropes shall comply with the factor of safety requirements of the American Standard Safety Code for elevators. They shall be pre-stretched. Ropes shall not stretch at the floor with varied capacity.

2.18 CHAIN COMPENSATION

N/A
2.19 MACHINE BEAMS

The existing machine beams shall be reused. Additional spacing beams shall be installed, if needed, and will meet engineered requirements and code.

2.20 MACHINE – GEARLESS

The existing gearless machine shall be replaced with new, VVVF Gearless Machine.

The machine shall be a gearless traction type with the motor, brake pulley and drive sheave mounted in proper alignment on a common bedplate. Machine the drive sheave with grooves providing proper traction with a minimum of cable and sheave wear. The sheave shall have the Brinell hardness mark properly located.

Provide the machine with an electro-mechanical brake. The brake shall be spring applied and electrically released.

Swivel type brake shoes shall be applied to the braking surface simultaneously and with equal pressure by means of helical compression springs. The brake electromagnet shall be designed for quick release to provide smooth and gradual application of the brake shoes.

Provide cable guards from the floor to the cable pinch point, on both sides of the machine sheave, to prevent items from being caught between the cables and sheave per ASME A17.1.

Provide new ROPE GRIPPER, per code.

2.21 SHEAVES

The existing sheaves shall be replaced.

2.22 GENERATOR

The existing motor generator set shall be replaced with new AC VVVF motor drive.

2.23 TRANSFORMERS

Isolation transformers shall be provided. They shall be fused, if required by Code Authorities.

2.24 DOOR OPERATOR
A passenger type master door operator shall be furnished to open and close the car and hoistway doors simultaneously. Door movement shall be electrically controlled throughout the entire travel of doors. The new operator shall be a GAL MOVFR, Otis AT 400, or the Otis I-Motion 2.

DOOR CONTROL

The operator shall be controlled with a solid state controller located on top of elevator enclosure. The operation of the doors shall be controlled by open and close commands from the Microprocessor signal logic. The operation shall be provided with a motor of adequate horsepower for opening size. Operation shall be fully controlled for smooth consistent operation. Opening speed shall be a minimum of 2 F.P.S. and closing speed shall be set to meet the force and torque requirements of applicable codes. The door operator shall reduce the kinetic energy of the door system to meet the ADA requirements of 2.5 ft. lbs. The doors shall operate smoothly and quietly in both directions.

DOOR COUPLER / CLUTCH

A mechanical coupler to connect the car and hoistway door shall be provided. The operation of the coupler shall provide driving motion of the hoistway doors for full open and full close direction. The drive rollers shall remain engaged to prevent separation of the hoistway doors from the car doors. The doors shall be provided with a restrictor device to prevent the opening of the doors when the car is out of the leveling zone.

CAR DOOR CONTACTS

Each elevator car door shall be equipped with an approved electric contact which will prevent the operation of the elevator driving machine by the normal operating device unless the car door is in the closed position (as defined by the ANSI Code) except when the car is in the landing zone and is either stopped or being stopped. Car door contacts shall be so located that they are not readily accessible from the inside of the car.

CAR DOOR HANGERS AND TRACKS

Door hangers and tracks shall be provided for each car door. The hangers and rollers shall be designed for high speed power operation and have provisions for vertical and lateral adjustment. Hangers shall be designed for two point suspension of each door panels. Hanger sheaves shall have a resilient surface and
pre-lubricated sealed bearings. Hangers shall be provided with upthrusts adjustments to prevent sheaves from being removed from track unless upthrusts are loosened. The track(s) shall be a shaped finished surface to fit the sheave profile and of adequate strength to properly support the doors and periphery equipment without deflection of track. Provide the hangers with safety retainer device.

HOISTWAY DOOR INTERLOCKS

An electro-mechanical interlock shall be provided for each hoistway entrance. The interlock system shall be a tested and approved system to comply with the applicable codes. The interlocks shall be wired with high temperature wire, as required by code. The interlocks shall prevent operation of the car away from the landing unless the doors are in closed and locked position as defined by applicable codes.

The interlocks shall also prevent the opening of a hoistway door from the landing side unless the car is within the landing zone and is either stopped or being stopped at that level. Interlocks shall be so located that they are not accessible from the landing side when the hoistway doors are closed.

UNLOCKING DEVICES

Emergency devices and keys for opening the hoistway doors from the landing shall be provided in accordance with code requirements. A lunar key and fire box shall be provided and installed in the Main Egress Lobby.
DOOR PROTECTIVE DEVICES

The car doors shall be provided with a protective device that detects an object in the path of the closing doors at such a distance that reversal of the doors can be provided without physical contact of the detector.

The device shall include infrared light beams that provide protection across the entire opening. The arrangement of the infrared beams shall be to maintain the doors in a full open direction if the doors are open and the beams are obstructed. Should the doors not be obstructed and in the closing motion, the reversal shall be dependent on the detector assembly to allow continuous closing until minimum distance to object is reached. An automatic adjustable timed cutout shall be provided should the beams become obstructed for an extensive period of time.

Door nudging shall be initiated when the infrared light beams are constantly interrupted for a predetermined time.

A distinctive buzzer shall sound, if the infrared door control unit shall become inoperative and the doors shall commence closing action. The door protective device shall remain operative and the doors shall remain in the position where the infrared beams were interrupted, but not return to the open position. When the infrared beams are restored, power shall be restored to the doors and they will attempt to close. The gentle nudging action by the doors at the point where they are being held shall be used to reduce delays in door operation. The kinetic energy of the doors shall be reduced to 2.5 ft. lbs. or less when the nudging feature is activated.

2.25 CONTROL – VVVF

The control of the motor shall be a variable voltage variable frequency control. The control shall be designed for elevator motor control and capable of handling the varying loads of overhauling or driven motors.

Regeneration capabilities for overhauling load shall be accomplished by a network that allows the incoming supply lines to be used as a load source.

The control shall be a closed loop feedback system that controls the elevator throughout the performance cycle. The control shall be designed for high efficiency and high power factor for reduced energy consumption.

All phases of the performance cycle shall be accurately controlled and separately adjustable. Low line voltage protection shall be provided. Motor current protection shall be provided.
The system shall utilize technology that provides for minimum noise produced by the motor throughout the performance cycle. Audible or electromagnetic interference shall not be acceptable. AM Radio interference is not acceptable. The effects of electrical harmonics shall be reduced to zero.

2.26 SIGNAL LOGIC MICROPROCESSOR

The signal logic shall be a microprocessor based system. All individual car logic and group logic shall be done by utilizing solid state boards and Microprocessor. The system shall be of manufacturer's latest production design. Prototype systems are not acceptable. The system shall be non-proprietary and serviceable by any competent elevator service technician.

The system shall have the capability of remote monitoring. The system shall have capability to display on the monitors car movement, car position, car calls, landing calls, reserved calls, car load status, call mode status, car direction, door motion and door position. The system shall be “remote monitoring” ready through the installation of extra communication ports, in the group supervisory system.

The group dispatcher shall contain capability of fault diagnostic, traffic statistics, system parameters, test data and traffic mode to be displayed on machine room monitor. The system shall have the capability of printer connection for printouts. All diagnostic equipment shall be built into the control cabinets or provided separate as part of the base system. No required diagnostic equipment shall be removed from the equipment room.

Diagnostic lights shall be clearly visible on solid state boards. The system shall contain built-in diagnostic capability. No system utilizing removable diagnostic equipment shall be accepted without the diagnostic equipment being furnished to owner as part of the equipment.

All inputs to the Microprocessor assembly shall be through opto-isolation. Outputs shall be isolated and designed for handling required current and voltage loads. Power supplies shall be properly filtered and voltage levels designed to accommodate a 10% line voltage variation without losing regulation or over heating. All components shall be commercially available.

2.28 GROUP

A microprocessor based group dispatcher shall be furnished.

All dispatching features shall be selected automatically to meet the passenger traffic demand.
The system shall monitor:

- Position of all cars
- Direction of all cars
- Load status of all cars
- Door status of all cars
- Number of car calls and destinations
- Number of elevators available
- Operational status of each elevator
- Corridor calls and their location / direction
- Assigned calls
- Waiting interval of each call
- Mode of operation - Up-peak - Down-peak - etc.
- Motion of cars

This information shall be analyzed by the Group Computer which will instantly select and dictate the proper action for each car. The selection of action shall correspond to current actual traffic conditions. Assignments of calls shall be constantly reviewed and calls re-assigned when service can be improved.

The system shall contain but not be limited to the following features:

- **Anti-Nuisance**: Cancellation of car call when proper inputs are not provided
- **Dispatch Protection**: Predetermined stops in the event of failure of dispatcher
- **Delayed Car Removal**: Removal from group of a delayed car
- **Load Dispatch**: Lobby dispatch with predetermined percent of rated capacity
- **Load Bypass**: No hall call allocation accepted
- **Program Door Control**: Varying door times according to traffic
- **Long Door Hold**: “DH” button extends door open dwell time for loading purpose
- **Independent Service**: Removal from group for independent control
- **Car Parking**: Specified floor parking capability
Anti-Nuisance Cancellation of car call when proper inputs are not provided

The system shall provide for continuously changing operation in various peak traffic situations which include predominantly one way, intense directional traffic with opposite direction traffic, balanced two-way traffic, light traffic and occasional traffic. All traffic analysis shall be done by optimization and call allocation. All program changes shall be selected automatically. The system shall automatically adjust to the number of elevators available for group service.

The system operations shall change continuously by demand and not rely on a forced method of program change.

The system shall be capable of being readily programmed to suit varying building requirements.

The system shall include a color monitor and printer in the security room and the building manager’s office. The system shall have capability to display on the monitors car movement, car position, car calls, landing calls, reserved calls, car load status, call mode status, car direction, door motion and door position. The system shall include a Windows version of the Central Monitoring System (CMS) or Interact. The machine room CMS station or Interact station shall be equipped with a printer to be used to print out CMS/Interact reports. The CMS/Interact will be complete without the calling feature.

The group dispatcher shall contain capability of fault diagnostic, traffic statistics, system parameters, test data and traffic mode to be displayed on machine room monitor. The system shall have the capability of printer connection for printouts. All diagnostic equipment shall be built into the control cabinets or provided separate as part of the base system. No required diagnostic equipment shall be removed from the equipment room.

ALL CARS

Full-Load-By-Pass - Cars loaded to a pre-determined level shall not be assigned to landing calls in both directions until the car load has decreased below this level. All by-passed calls shall remain activated and will be answered by another assigned car or when the load in the car has been decreased to accept additional passengers.

Delayed-Car-Protection - The system shall automatically remove a car from the group in the event the car is delayed for a predetermined time. The car shall be automatically put back into group operation when the cause of the delay has been eliminated. On simplex operation an adjustable delay time shall be provided to disconnect hall calls and prevent further registrations of hall call until delay has been corrected.
Direction-Reversal - A car without registered car calls arriving at a floor where both up and down hall calls are registered shall initially respond to the hall call in the direction that the car was traveling and, if no car or hall call is registered for future travel in that direction, the car shall reverse its travel preference and respond to the hall call in the opposite direction. Lantern operation always correspond to the next direction of elevator travel.

Programmed-Door-Control - Door opening time intervals shall be programmed to match the prevailing passenger transfer condition as follows:

1) **Extended-Door-Interval** - When the car stops at a floor where both a car call and hall call corresponding to the direction of car travel have been registered, the extended door interval shall be selected automatically. The extended door interval shall allow sufficient time for passengers in the hall to reach and enter car after exit of last passenger from car.

2) **Medium-Door-Interval** - When the car stops at a floor where either a car call or a hall call corresponding to the direction of car travel has been registered, the medium door interval shall allow sufficient time for passengers in the hall to reach and enter the car, or a passenger in the rear of a crowded car to exit from the car.

3) **Shortened-Door-Interval** - When passenger transfer continues after the extended or medium door interval has expired, the shortened door interval shall recycle with each passenger transfer until the last passenger has passed through the photo-electric light beams.

4) **Long-Door-Hold** - Initiated by ADH® button in car station. Provide variable extended door open dwell time (from 20 seconds to 40 seconds). Once the feature is activated, doors remain open until time has expired, or any car station button, door close button, nudging, or firefighter feature is activated to cancel this feature.

5) **Floor-Passing-Tones**

6) If passenger transfer is complete prior to the expiration of the extended or medium door intervals, the registration of a car call shall automatically initiate the shortened door interval.

7) If the doors are closing and a light beam is interrupted, the doors shall reverse and reopen to the fully open position. The doors shall reclose after the shortened door interval has expired.
8) **Lobby-Door-Time** - Main floor door times shall be independently adjustable. As a car approaches a lobby terminal, the car and hoistway doors shall be signaled to open automatically for a pre-determined time interval to allow passengers to leave the car. After the expiration of the interval, the doors shall close until a call is registered at which time the doors shall reopen.

9) **Hall-Button-Automatic-Cutout** - In the event that a hall button is stuck or damaged for a constant registration signal and can not be successfully canceled it shall automatically be removed from the assignment for adjustable time interval. When the interval has expired the call shall be re-assigned as a normal call and again an attempt made to cancel it.

10) **Car-Parking** - A method of statistically placing car at floors when demand for service is low. This shall be field programmable and shall not be such that one car serves a zone of floors. The assignment process shall be used for call response.

11) **Up-Peak** - This mode shall become effective when the call demand is predominantly in the up direction from the entrance floors. Timing at entrance floor shall be adjustable.

12) **Down-Peak** - This mode shall become effective when a predominance of down hall calls are registered with a minimum of up hall calls and car calls when cars are traveling in an up direction or leaving the entrance floors.

13) **Intense Traffic** - Balanced modes shall be effective when calls are not predominantly in one direction. During these modes, the cars should remain spaced apart and assignments made to average the waiting interval. No continuous bunching of cars shall be allowed.

14) **Light Traffic** - Shall cause the cars to establish parking floors, or areas, that will place the cars in a position to respond in a minimum response time when a call is assigned.

15) **Special Programs** - Shall interact in the various modes to further enhance the system to provide the optimum minimum response and riding times.

**2.30 INDEPENDENT OPERATION**

A key operated switch shall be provided for each car for selecting independent service operation. When the switch is turned to the "on" position, all previously registered car calls for that car shall be canceled and an attendant will be required to operate the car.
The car shall park with its doors open. The closing of the doors and starting the
car shall be subject to constant pressure on a floor button in the car operating
panel until the car starts in motion. If the floor button is released before the doors
are fully closed, the doors shall reopen.

After the car is in motion, the floor button may be released and the car shall
automatically proceed to and stop at the floor for which the car call was
registered.

A car operating on independent service shall automatically bypass registered hall
calls. Registered hall calls shall not be canceled, but shall remain registered and
answered by a car in normal automatic operation.

When the independent service switch is turned to the "off" position, the car shall
be restored to normal operation.

2.31 HOISTWAY ACCESS

The existing hoistway access switches shall be removed and replaced with new.
Key operated switches shall be furnished in hoistway entrance jamb or adjacent to
the jamb at top and bottom floor for hoistway access. A key operated switch shall
be furnished in the car operating panel to place the car on access control.

Operation of hoistway access switches after initiation by car operating switches
shall operate car with hoistway door open at the respective floor being operated
and allow access to top or bottom of hoistway.

Rail mounted switches shall be provided to limit the car travel to comply with
code.

2.32 DISPATCH PROTECTION

A reserve dispatching feature shall be provided which allows the cars to run for
simulated hall calls in the event of the loss of communications between the
individual and dispatching computers, or the loss of power to the hall call
pushbuttons.

When reserve dispatching is activated, each car shall answer simulated hall calls
in a pre-determined pattern, depending on the designation of the car and the
number of cars in the group.

Cars shall respond to a different pattern of calls on an alternating basis as each
one leaves the bottom floor. The top floor, bottom floor and all main floors shall
be served by all cars on all trips.
When communications is restored or power reconnected to the hall call pushbuttons, the cars shall resume automatic operation.

2.33 ANTI-NUISANCE

An anti-nuisance feature shall be provided which will reset the car buttons, thus requiring re-registration of car calls, if an excessive number of calls are registered for the measured load.

If, while in normal, automatic operation, the car makes a predetermined number of stops in response to car calls, without the photo light beam being interrupted, indicating that no one is entering or leaving the car, all registered car calls shall be canceled. The number of stops used in the anti-nuisance feature shall be adjustable.

Once the car calls are canceled, the anti-nuisance feature shall not function again until the photo light beam has been interrupted at least once.

Load detection combined with number of registered car calls may be used as a method of providing call cancellation.

2.34 FIREFIGHTER’S SERVICE

The elevators shall be equipped with devices and circuits to provide firefighters service in accordance with applicable codes in effect as of the date of this specification.

A smoke-sensing device shall be installed at all floors and such other locations as required by local code.

Smoke-sensing devices shall be provided, installed and wired by the Contractor and shall be equipped with a dry contact and shall be wired to the elevator machine room for connection to the elevator control system circuits.

PHASE-I-OPERATION

Provide a three position ("On" "Off" "By-Pass") key operated switch at the designated level. The key shall be removable in the "On" and "Off" position. With the key in the "Off" position normal elevator service shall be provided and the smoke/combustion detectors shall be functional.

Smoke detectors shall be provided in the elevator lobby, at each floor, and in the associated elevator machine room. Smoke detector operation at the main or designated level shall return all cars to an alternate level as approved by the enforcing authority. Smoke detector activated operation shall only be reset manually.
The key switch at the designated level in the "by-pass" position shall delete the smoke/combustion detector command and restore the elevators back to normal operation.

Phase I operation shall be initiated by the activation of the smoke/combustion detectors or placing the designated level key switch in the "On" position. The following operation shall occur:

a) All cars controlled by this activation shall return non-stop to the designated level, the doors shall open and remain open.

b) A car traveling away from the designated level shall reverse at the next available floor without opening its doors and cause it to proceed to the designated floor non-stop.

c) Door reopening devices on power operated doors affected by smoke or heat shall be rendered inoperative. Mechanically operated devices shall remain operative.

d) Cars standing at any floor other than the designated floor shall close their doors and proceed to the designated floor without stopping for car or hall calls.

e) Cause the car and hall buttons to become inoperative, and extinguish call register lights and hall lanterns. Position indicators shall remain operative.

f) Cause the emergency stop switch to become inoperative once the car has started in motion. All other emergency devices shall remain operative.

g) All cars shall be provided with a visual and audible signal system which shall be activated and remain activated until the car has returned to the designated level.

h) A car standing at a landing shall have the door open button rendered inoperative as soon as the door is closed and the car starts to the designated level. It shall remain inoperative until the car has returned to the designated or alternate level.

PHASE-II-OPERATION

A three position (labeled "Off" "Hold" and "On") key operated switch shall be provided in the car operating panel in each car. The switch shall become effective only when Phase I operation is in effect and the car has returned to the designated or alternate floor. The key shall be removable in each position.
The operation on the switch shall not change the operation until the car is at a floor with the doors fully open.

The switch shall be in normal operation when it is in the "Off" position. Phase I operation shall be in effect if activated by turning to "On".

The switch in the "Hold" position shall cause the car to remain at the first floor with its doors open and the door close button shall be inoperative after the car has been placed into Phase II operation at the designated or alternate level.

Operation of the key switch to the "On" position shall place the elevator on Phase II emergency operation. The operation shall be as follows:

a) The elevator shall be operated only by a person in the car registering car calls.

b) All hall lanterns and corridor buttons shall remain inoperative.

c) Doors shall be opened by constant pressure of the "door open" button and if the pressure on this button is released prior to the time the doors reach their full open position, the doors shall immediately re-close. Once the doors are fully open, they shall remain open until the closing procedure is initiated as described herein.

d) After registration of a car call, the doors shall be closed by constant pressure of the "door close" button.

e) Car calls registered in error may be cancelable by momentary operation of the cancel button.

f) Upon completion of the door close operation and the registering of a car call, the car shall travel to the car call floor and stop with the doors closed.

g) Car shall operate only by registration of a car call in the car and does not respond to hall calls.

h) Door reopen devices rendered inoperative in Phase I operation shall remain inoperative.

i) The key operated switch in the hall to the "Off" position, "by-pass" position, or resetting the combustion detectors shall not override the car switch.
Phase I and Phase II switches shall operate by the same key. Locality standard keys shall be used. This key shall not operate any other devices and no other key shall operate these switches.

The description is for a standard firefighters service operation. It shall be the responsibility of the elevator contractor to provide firefighters service to meet the specific job location requirements in accordance with local code requirements.

2.35 CAR TOP INSPECTION STATION

An inspection station shall be provided on top of the car for operation of the car at low speed by authorized personnel. The station shall contain an inspection toggle switch, up and down buttons and a run/stop toggle switch. A safety button shall be provided. When the car top inspection switch is turned to the "insp" position, the car shall be put on inspection operation.

The car shall be run either up or down by constant pressure on the up or down button and the safety button providing the doors are closed and the safety circuit is made. Releasing the button shall cause the car to stop immediately. The button required to operate the car top inspection station shall be mounted on a pendant with a 6" cord.

Turning the run/stop switch to the "stop" position shall render the car inoperative. Turning the inspection switch to the "run" position shall restore the car to automatic operation.

The new car top inspection station should include a work light with cover and a 110-volt GFI receptacle. Locate the car top inspection station at a convenient location on top of the Crosshead.

Provide firefighter's buzzer and lighted jewel in the inspection station. Ensure compliance with the latest firefighter's provisions, required by local code authorities.

2.36 WIRING

All necessary wiring for proper operation of the equipment, beginning at the power sources shall be newly installed and shall conform to the requirements of the applicable electrical codes.

All conductors shall be run in rigid conduit or metal wireways and shall be installed in an orderly manner. Flexible metal conduit may be used for short runs between such equipment and risers and limit switches, interlocks, pushbuttons boxes, etc. and between controllers, motors and brakes.
All new communication cables for interconnections of controllers shall be furnished. The wiring shall be a shielded cable properly enclosed in duct and conduit as applicable.

All new wiring between hoistway and machine room equipment shall be furnished and installed in accordance with applicable codes and in a workmanlike fashion.

All power wiring in the machine room shall be of proper size and type for equipment furnished.

All wiring shall be in strict accordance with good wiring practices and in compliance with the National Electric Code and ASME A17.1 requirements.

2.37 TRAVELING CABLES

New coaxial traveling cables of adequate number of conductors shall be furnished. Traveling cables shall be so suspended and anchored that the strain on the individual cable conductors shall be reduced to a minimum. Connections to terminal blocks shall be free from all strain, and the cables shall be free from contact with the hoistway construction, car or other equipment.

The outer cable covering must remain intact between junction boxes without abrupt bending of the cable. They must be hung so that the proper size loop is obtained. The outer braid shall be fire resistant and meet Underwriters Laboratories Standard Test. Steel supporting strands shall be used where the rise exceeds 100 feet. Ten percent (10%) spares shall be provided in all traveling cables.

The cables shall contain #14 gauge wires for lighting supply. Traveling cables shall contain a minimum of two (2) shielded twisted pair and jacketed pairs per traveling cable. The traveling cables shall contain one (1) co-axial cable to run continuous from the controller to the car top for use with closed circuit TV.

A car top junction box with compression terminals shall be provided. The traveling cables shall be terminated in the car junction box.

2.38 LIMIT SWITCHES

Normal and final terminal stopping devices -

1) Provide new normal and final terminal stopping devices shall be provided for the elevator at each terminal. Terminal stopping devices shall have rollers having rubber or other approved composition to provide silent operation when actuated.
2) Normal terminal stopping devices shall be provided and arranged to stop the car automatically from any speed obtained under normal operation within the top and bottom overtravels, independent of the operating devices, final terminal stopping device, and the buffers.

3) Final terminal stopping devices shall be provided and arranged to stop the car and counterweight automatically from the speed specified within the top clearance and bottom overtravel independent of the operation of the normal terminal stopping device but with the buffers operative. When the final terminal stopping devices operate, normal operation in either direction is prohibited.

2.39 PIT SWITCH

The existing pit stop switch shall be replaced.

A stop switch shall be provided in the elevator pit. The switch shall be designed to cut off power to the elevator motor, apply the brake and bring the car to rest independent of the regular operating devices. The switch shall be accessible from the pit access door or pit ladder. Where multiple hoistways are accessed from a common door the stop switch for each elevator shall be located adjacent to the nearest point of access from the door.

2.40 CAR OPERATING PANEL MAIN

Provide a new car operating panel main and locate it on the front return. The panel shall contain floor call buttons corresponding to the number of floors served plus the standard devices of door open, door close, and alarm buttons, fan and light switches as a minimum. The buttons shall be Innovation PB-8 with numeral stamped on button. Lamping to be long life white LED cluster bulbs.

The car station shall have a button marked “DH” on the braille to initiate the door hold feature. The braille used in the car station shall be SCS square cast with white letters on black background with no border.

Locate the standard required cluster of devices at a centerline height of 35" from cab floor to comply with accessibility requirements. All standard required devices and floor call buttons shall have accessibility indications adjacent to them.

Appropriate firefighter's service switch, jewel, and fire call cancel button, shall be provided in car operating panel. The face of the core of the key switch shall be permanently stamped with an arrow indicating position of the switch. Provide firefighters jack in the car operating panel.
The car operating panel shall include a lockable service panel. Locate rocker switches for lights, independent service, emergency light test, inspection, and stop switch behind the lockable panel door. The service panel will also incorporate a 15 amp receptacle (GFI).

An auto-dial telephone meeting ADA requirements shall be an integral part of the car operating panel. A flush PB-8 push button similar to all of the push buttons in the car operating panel shall be provided for the dialing of the auto-dial telephone. The pushbutton crystal must be flush with the panel and include a call answer light. The telephone shall be a Rath Microtech, of the latest model. The car operating panel shall have a speaker grill for the phone. The speaker shall also be provided for firefighter’s intercom, if required. The phone must work with the existing phone system.

The car operating panel shall have the following engravings:

- Capacity .375” size
- Car # .5” size
- Phase II Firefighters Service Instructions .125” size

2.41 CAB RIDING LANTERNS

Provide new cab riding lanterns in car entrance jamb, (NOT REQUIRED if using Innovation Direction in hall). When the car stops and the doors are opening, the lanterns shall indicate the direction in which the car will travel. When the lantern is illuminated, a tone shall sound once for the “up” direction and twice for the “down” direction.

The lanterns shall not be in operation should the car be operating in the “independent” mode. The lanterns shall meet all applicable codes and ADA requirements.

The lantern shall incorporate long life LED cluster bulbs and new tone sounding devices. The down lantern shall illuminate red and the up lantern shall illuminate white. The white LED cluster bulbs are to be used in the up lantern and the red LED cluster bulbs in the down lantern.

2.42 POSITION INDICATORS – CAR

The existing position indicator shall be removed and replaced with a new position indicator in the upper portion of the car station. The electronic readout type position indicator shall be provided to give a visual indication of the car position and direction of car travel.
As the car travels through the hoistway, the numeral corresponding to the floor at which the car has stopped or is passing shall be displayed on the position indicator. The numeral shall be formed on a "Bar Segment" or "Dot Matrix" display, from binary information received from the controller. Change from one numeral to another shall be instantaneous and complete. The assembly shall provide the required floor passing tones.

The readout size letters shall be a minimum of 2" in height with arrows unless herein specified to be of a different size. The elevator will have a readout in the front cab transom. The position indicator shall be provided with floor passing tones. The position indicator cover plate cover any hole left in the transom panel by the previous position indicator.

2.43 POSITION INDICATORS - HALL

At the lobby floor, retain and refurbish the existing “ROTARY DIAL” type position indicators to like-new condition.

2.44 CORRIDOR CALL BUTTONS

The existing corridor call button shall be removed and new flush mounted stainless steel fixtures located at code-required ADA height. The new cover plates shall be of such length to cover existing button box and new box location with one cover plate.

A riser of corridor call buttons shall be provided for each group of cars. The button assembly shall consist of a single illuminated button for each terminal, and two illuminated buttons at each intermediate landing.

The button or other indication shall be illuminated when it is pressed for the desired direction, and the action registered in the group control. The buttons shall be identical to the floor call buttons in the car operating panel, unless specifically detailed to be of other design.

A firefighter's service switch assembly shall be provided at the fire recall floor(s), as required by code. The cover plate shall be engraved or permabonded with ‘IN CASE OF FIRE, USE EXIT’ pictograph. The cover plates also shall contain applicable Braille to comply with code and/or ADA requirements. The cover plates are to be stainless steel #4 finish. A speaker, and/or firefighter’s phone jack shall also be provided for the firefighters, if required.

2.45 ALARM BELL

The existing alarm bell shall be replaced with a new alarm bell to work with the car’s emergency light system.
An electric signal bell shall be provided in or adjacent to the elevator hoistway. The bell shall be connected to the alarm button in the car operating panel.

2.46 EMERGENCY POWER

Provide provision for Emergency Power utilizing existing Emergency Generator located on ground floor, City Hall.

When stand-by power has been applied to the elevator controllers, the operating system shall automatically select one elevator, start the car, return it to the main floor and remove it from service. A second elevator shall then be selected and returned to the main floor, and this sequence shall be followed until all elevators have been returned and removed from service. The operating system shall then automatically return a pre-selected elevator, or elevators, to service for operation in the normal manner. If a pre-selected elevator is not in operating condition, the operating system shall automatically select another elevator.

When normal power is restored to the building, the elevators in operation shall automatically be returned to the main floor and removed from service. Stand-by power shall then be removed and, after a lapse of approximately one minute, normal power shall be applied to the elevator controllers and all elevators shall return to normal operation.

The Owner shall furnish and install the following:

1) Stand-by power having the same voltage, phase and frequency as the normal power and of sufficient capacity to operate one or more elevators with rated load at rated speed in the up direction.

2) A transfer device for transferring the power supply to the elevator power feeders from normal power to stand-by power. The transfer device shall contain two auxiliary contacts, one of which is closed when the transfer device is in the normal power position, and the other which is closed when the transfer device is in the stand-by power position.

3) Wiring from each auxiliary contact on the transfer device to the designated elevator control panel.

4) Means for absorbing power regenerated by the elevator motor generator set drive motor when the elevator is running with overhauling load, such as maximum load down.

The elevator contractor shall furnish and install:

1) Provisions in the operating system for automatic selection and operation of elevators on stand-by power.
2) Wiring between the stand-by power fixture and the elevator controllers.

2.47 FIRST FLOOR LOBBY PANEL

To be #4 stainless steel cover plate. Panel to have standby power manual override switch.

2.48 LOBBY HOISTWAY VENT FIXTURE

Fixture to have key switch and lighted jewel for vent position.

2.49 TELEPHONE

A new Rath Micro Tech Telephone shall be installed integral in the car station.

2.50 HANDRAILS

The existing handrails shall be removed and replaced with 1.5" diameter tubular stainless steel handrails at ADA height of 32". The handrails shall have their ends turned to the cab wall.

2.51 ENTRANCES

The existing complete entrances shall be reused. Entrances to be refinished to like new and painted the color of the Owner’s choice.

New Entrance Braille adhesive with mechanical fasteners shall be provided and installed. The braille shall be cast with white characters on black background and no border. Braille manufacturer shall be SCS.

2.52 HOISTWAY DOORS

The hoistway doors shall be replaced with code-compliant UL labeled doors. The hoistway door frames shall be retained and refinished, and repainted the color of the Owner’s choice.

1. The door panels shall be formed of not lighter than 16-gauge steel and all joints shall be welded. Each door panel must be provided with 2 gibs, with gib fire stops. Each door panel to be provided with new safety retainer guide on lower portion of door as required by safety inspection authorities. The hanger on the doors shall be provided with required safety retained. Provide code required unlocking devices.

2. The bottom of the doors shall be provided with removable laminated phenolic guides that run in the sill slots. Doors shall be reinforced for
separate hangers or built to include integral hangers and shall contain suitable material for sound deadening.

3. The doors are to be painted with the color of the architect’s choosing.

2.53 CAB

The existing cab shall be retained and modified with the following SNAP CAB selections of the Owner / Architect:

1. Island down lights in stainless steel with halogen bulbs
2. Tubular 1.5” stainless steel handrails (located at ADA height)
3. CAB LAYER CHOICES –
   a. 6 – Dark Maple with Dental Molding
   b. 5 & 4 – Dark Maple Raised Panel
   c. 3 – Dark Maple Flat Panel
   d. 2 – Dark Maple Raised Panel
   e. TOE GUARD – Code Compliant

In addition to the above specified cab interior finishes, provide new #4 stainless steel reveals, base and frieze, and provide appropriate concealed vent. Cab modifications are required for code compliance and to meet aesthetic objectives.

Existing exhaust fans should be replaced with a silent, high-velocity blower. Provide new Morrison OE 90 2-Speed Silent Squirrel Cage Blower with stainless steel diffuser.

2.54 RELATED WORK

A. ADDITIONAL WORK REQUIRED

1. Any modification to existing structural support required for new equipment. Contractor will provide loading data if in excess of 5% of existing load.

2. Any modification to existing shaftway to provide a legal shaftway in compliance with latest code requirements, including, but not limited to, setbacks and ledges.

3. Vent hoist ways to outside air per applicable Building Code. Minimum 3 sq. ft. or 32% of hoistway area per hoistway (elevator). The hoistway vents must also be a motorized louver style. The motorized louver style is to be activated by a firefighter using a key switch at the first floor lobby. The louver shall have a switch activated by the louver blade that lights the position of louver lighted jewel in the lobby fixture.
4. Changes required to ventilation or temperature control system to maintain machine room temperature range of 55°F to 85°F. The 55°F temperature is maximum free air temperature at any place in the machine room. Air movement must be such as to eliminate hot areas. The relative humidity should not exceed 85% non-condensing.

5. Changes required to provide GFI power outlets in machine room and adequate machine room illumination.

6. Changes to any electrical requirements that may be caused by equipment specified or furnished in the shaftway and machine room.

7. Any modifications to machine room to provide adequate and code compliance access to same. Stabilize and reinforce the existing ships ladder access to the machine room as shown and detailed. Provide a legal landing with steps and handrails outside of machine room as shown and detailed. Provide adequate access to machine room for the removal and replacement of any equipment, including cranes. Upon completion of the project, infill opening as detailed, providing code compliant, insulated locking doors shown. Doors shall have a removable core, core by Owner.

8. Suitable storage space for the elevator equipment during the modernization process.

9. Heat and smoke sensing units required by local codes. Such units will be installed and wired to marked terminal in the machine room.

10. Removal of any illegal pipes, drains that may be in code violations.

11. Foreign drains, pipes, chases, equipment, etc., not associated with elevator equipment are not permitted to be exposed in elevator machine rooms, hoistways or pits.

12. Fire extinguisher of proper type mounted in machine room.

13. Emergency power source and signaling information of power transfer to elevator emergency power panel.

14. Providing any additional machine room space that may be required due to existing conditions not in compliance with local code requirements.
15. Providing electrical power for lights, tools, and hoists during the modernization phase and for testing and adjustments of the completed system.


17. Machine room and hoistway sprinklers, if required by applicable Building Codes and conforming to ANSI/NFPA No. 13 and ASME A17.1, Rule 102.2
   a. Risers and returns must be outside elevator spaces.
   b. Branch lines in hoistway may supply sprinklers at only one floor.
   c. Shutoff valves must be supplied outside these spaces.
   d. Means must be provided to automatically disconnect mainline power to elevators prior to application of water. Power may not be disconnected from operation of sprinklers in other building areas.
   e. Disconnect means shall not be self-resetting.

18. Machine room access doors must be 1½ hour label, self closing and locking and openable from inside without key. Door must have smoke seal.

19. Electrical to include the following:
   a. Wiring through protected (fused) mainline disconnect switches or circuit breaker in machine rooms to each elevator controller for machine power. Maximum voltage drop of 5%. Locate disconnect switch near entry within sight of motor starter or car controller. NOTE: A second non-fused disconnect or stop switch (provide by the Elevator Contractor) may be required at each remote hoist machine.
   b. Standby power through regular power feeders for one elevator (per group) to run at a time. Transfer switch and sensing signal indicating standby power operation to elevator machine room through fused disconnect switch. Provide means to absorb regenerated power from elevator operating on standby power. Provide transfer switch with a 15 - 25 second delay time; an in-phase monitor or a neutral position to postpone the application of standby or normal power until the elevators come to a complete stop.
c. Emergency power through regular power feeders, if emergency power is being provided, to run cab lights, car exhaust blowers, hoist machine cooling blowers, intercom amplifier and lobby panel and fire panel elevator CRT monitors.

d. Machine space, secondary deck and overhead lighting, switches and grounded utility outlets. Light switch adjacent to strike side of entry door. Lights located over machines and about 18" in front of and behind control panels.

e. Wiring through disconnect switch to signal controller designated by Elevator Contractor in passenger machine room (approximately 20A at voltage required by Elevator Contractor).

f. Wiring for elevator lighting and ventilation (approximately 20A capacity per elevator 120-3-60). Circuits preferably on standby power system. Wire to individual car control panels. Provide circuit over current protection and switch assembly on each control panel. Switch assembly to be properly identified.

g. Pit lighting, switches and GFI receptacles (one per elevator). Locate light switch at top of access ladder, reachable from entry door. Locate pit lights to clear elevator car and equip them with wire bulb guards.

h. Telephone connection to each individual elevator controller in machine rooms.

i. Temporary lighting and power for construction when elevator work starts at jobsite.

j. Final power (or the equivalent thereof) for starting, testing and adjusting.

k. Raceways and wiring outside hoistways for smoke sensors, remote monitoring panels, etc.

l. Smoke detectors per NFPA No. 73E, Chapter 4 for Automatic Elevator Return, wired to elevator vestibules at each floor and associated elevator machine room. Sensor at main evacuation level must be on separate zone. (Sensor activation returns elevators to alternate evacuation level.)

m. Remove equipment in machine room not related to the elevator equipment, i.e. unused electrical equipment, panels and wiring.
B. WORK BY ELEVATOR CONTRACTOR

1. Contractor must assist Owner with coordination of work sequencing during modernization and de-commissioning.

2. Any permanent screening for pits or hoistways that may be required by specification or codes.

3. Patching, grouting, plastering, masonry and painting that may be required to finish walls and floors around areas of new installed fixtures or entrances required for this proposal unless specifically detailed in this proposal.

4. Removal of any illegal conduit or wiring previously installed in hoistway and machine room.

5. Telephone instruments and their connections to telephone system. Telephone wiring for each elevator to be terminated in each elevator controller.

6. All barricades required to protect open hoistway and entrances when new entrances are added or existing entrances and door panels are removed for replacement or refinishing.

7. Painting of machine room and pit floors with high grade of grey floor enamel paint.


PART 3 – EXECUTION

3.01 INSPECTION / ADJUSTMENT / TEMPORARY USE

Should the use of any elevator be required prior to final completion, the Owner shall pay for any labor and material necessary to arrange the elevator(s) for temporary service, and shall execute a "Temporary Acceptance" agreement furnished by the elevator contractor and be bound by the terms and conditions thereof. The Owner shall provide, if required, temporary car enclosures, guards or other protection for the hoistway openings, necessary power, signaling devices, lights in the car, elevator operators, and other work to permit the temporary usage.

The Owner shall also pay all costs of power and operation, including maintenance during temporary use, and agrees that the complete elevator equipment will be left in the same condition that it was at the time it was turned over for temporary use.
If repairs or replacements are necessary to restore the elevator equipment to its condition at the time it was turned over for temporary service, the Owner shall pay for such repairs or replacements at regular time/material rates.

The completion schedule of each elevator used as a temporary elevator prior to final acceptance shall be extended by the amount of time necessary (no less than the period of time and temporary usage) to complete the installation and make final adjustments during regular working hours.

3.02 PREPARATIONS

Hoistway-Inspection: Elevator Contractor must verify dimensions of hoistways, pits and machine rooms; and inspect the support structure and services, and the conditions under which elevator work is to be installed; and notify Owner or his agent contractor in writing of unsatisfactory dimensions or conditions. Do not proceed with elevator installations until unsatisfactory dimensions and conditions have been corrected in a manner acceptable to Elevator Contractor.

3.03 ADJUSTMENT

The elevator contractor shall have uninterrupted use of the elevator(s) during regular working hours for final adjustments.

3.04 INSTALLATION OF ELEVATOR SYSTEM

General - Comply with all instructions and recommendations for installation of elevator systems.

Welded-Construction - Provide welded connections for installation of elevator work where bolted connections are not required for subsequent removal or for normal operation, adjustment, inspection, maintenance and replacement of worn parts. Comply with AWS standards for workmanship and for qualifications of welding operators.

Coordination - Coordinate elevator work with work of other trades, for proper time and sequence to avoid construction delays. Use benchmarks, lines and levels designated by Owner or his agent, to ensure dimensional coordination of the work.

Sound-Isolation - All new equipment furnished shall be mounted on vibration-absorption mounts, designed to effectively prevent transmission of vibrations to structure, and thereby eliminate sources of structure- borne noise from elevator system. Lubricate operating parts of systems, including ropes, as recommended by manufacturers.
Alignment - Coordinate installation of hoistway entrances with installation of elevator guide rails, for accurate alignment of entrances with cars. Where possible, delay final adjustment of sills and doors until car is operable in shaft. Reduce clearances to minimum, safe, workable dimensions at each landing.

3.05 FIELD QUALITY CONTROL

Acceptance-Testing - Upon nominal completion of each elevator installation, and before permitting use of elevator (either temporary or permanent), perform acceptance tests as required and recommended by Code, and also perform other tests, if any, as required by governing authorities. A copy of the test results shall be forwarded to the Owner and one copy to the Consultant.

Advise Owner and/or Consultant and inspection department of governing agencies, in advance of dates and times tests are to be performed on elevators.

3.06 PROTECTION

Installer shall advise Owner and/or the Consultant of recommended protection facilities and procedures, to prevent damage and deterioration of completed elevator work (regardless of whether placed in temporary service) during remainder of construction period. Provide complete inspection and maintenance service for elevators in temporary service, if any, for period of such service, at a cost to be determined when such service is provided.

3.07 INSPECTION

The Consultant shall be permitted to make periodic and final inspections of the work for compliance with contract documents. The contractor shall provide manpower necessary to assist the architect during such inspections. The architect will prepare and submit to the contractor inspection reports describing incomplete or corrective work required to satisfy contract requirements.

3.08 SCHEDULE

The completion schedule for the modernization of cars shall be 100% complete by the date entered on the bid documents. For every day beyond the scheduled completion date, a penalty of $200.00 per day will be charged to the Contractor.

A schedule will be submitted after award.

- END OF DIVISION 14 -
DIVISION 16 - Electrical Performance Specification

General

- This specification is intended to provide a general outline of the Owner’s requirements for the electrical design on this project.
- Bidders shall submit written design proposals, which detail, in general, the bidder’s proposed electrical design. Bidders shall list service size, panel quantities/sizes, lighting types and quantities, receptacles quantities, etc. so that the Owner may intelligently compare proposals.
- The successful bidder shall provide appropriate CAD drawings signed by a registered electrical engineer in the State of Minnesota.
- Include all permit and utility fees for temporary and permanent services.
- Provide temporary lighting and power. Coordinate with general contractor for specific requirements.
- Provide a one-year warranty for the electrical system. Warranty shall begin upon final acceptance by the Owner.
- Verify standard mounting heights with the architect prior to rough-in. All elevations shall conform to the ADA.
- Provide any and all fire-stopping required for electrical penetrations.
- The intent of the scope of this project is to replace all electrical wiring, panels, voice/data, controlling devices, furnaces, water heater connections, and lighting in the Harrison Community Center. This is needed to correct all damage, visible or not, caused by the recent fire in the facility.
- It will be the contractors responsibility to survey devices and equipment in place and provide all coordination, equipment and labor necessary to restore operations to conditions prior to the fire; and, the proposed new layouts as required by design or codes.

Wiring Methods

- Wiring methods shall be in compliance with NEC and manufacturer installation requirements.
- For all spaces utilize Type MC Cable for branch circuitry.
- In exposed and unfinished areas, utilize EMT conduit.
- 4" square boxes with the appropriate mud/tile rings for MC and EMT branch circuitry.
- Aluminum conductors are allowed for feeders 100 amps and larger. Make terminations according to the manufacturer’s recommendations.
- Provide specification grade wiring devices in all areas.
- Cover plates in finished spaces shall be ivory nylon.
- Cover plates in unfinished areas shall be of the raised steel type.

Switchgear / Service

- Incoming service shall be existing. Verify connectivity and soundness with utility. Provide a freestanding main switchboard(s) sized according to the NEC. Switchboard to have a main circuit breaker and series rated branch devices. Provide with the appropriate short circuit withstand rating. Provide metering provisions per the local utility. Switchboard shall have branch devices for feeding the room distribution panels at each floor, elevators, pool equipment room (400A), spare devices (1-600A, 4-200A), common area panelboards, and other common area distribution panels.
- Distribution system shall be designed with spare capacity to serve future panelboards for future addition of approximately 8w/sq.ft.
- Provide housekeeping pads for all freestanding electrical equipment.
- All common area panelboards should be utilizing panelboard construction (not load centers).
- Provide distribution panels on each floor.
Equipment Connections

- Provide power wiring for all plumbing, heating, cooling, and ventilating equipment. The mechanical needs to be coordinated with Mechanical Contractor. Minimum requirements are that of what was in the structure prior to the fire and as otherwise existing. Verify with Division 15 contractor. Provide power to PRV’s, exhaust fans, sump pumps, etc. Coordinate with mechanical contractor and refer to the mechanical performance specifications for requirements.
- Provide control wiring for all plumbing, heating, cooling, and ventilating equipment. Coordinate with mechanical contractor and refer to the mechanical performance specifications for requirements. Control devices shall be furnished by the contractor providing the equipment requiring control.
- Provide all disconnects for equipment as required.
- Provide new motor starters for any and all pumps, fans, etc. except for packaged equipment, which are/is furnished with such or which is to remain. Verify with Mechanical contractor.
- Provide power and control wiring for handicapped door operators and automatic entrances.
- Provide power to the Owner’s structure as required upon completion of work.

Interior Lighting

- All fluorescent lamps shall be appropriate for the light fixtures specified and shown.
- Incandescent lighting shall not be utilized for public area lighting unless specifically approved or selected by the Owner or listed in this performance specification.
- All ballasts for 4’ fluorescent lamps shall be electronic, high power factor.
- 4’ 2-lamp wall bracket type fixtures with acrylic lenses shall be utilized in each of the small public restrooms indicated, in addition to overhead fixtures shown.
- Lay in fixtures shall be used in areas with ACP ceilings. Wraparounds shall be utilized areas with GWB ceilings. Provide lensed fixtures for non-occupied rooms. Provide parabolic fixtures for occupied rooms. See fixture schedule.
- Any and All wall sconces shall be ADA type.
- Stairwells lighting shall utilize 4’, 2-lamp wall bracket type fixtures with acrylic lenses or 4’, 2-lamp surface mounted wraparounds. See schedule.
- Mechanical room, electrical room, storage rooms, etc. shall utilize 4’, 2-lamp or 8’, 2-lamp fluorescent strips.
- Provide exit and egress lighting as required.
- Provide standard toggle switches in all individual rooms for lighting control. Provide 3-way/4-way switching in rooms with more than one entry.
- Provide dimmers for all incandescent light fixtures located in the common areas.
- Advise the general contractor of any fire-rated enclosures that may be required around recessed light fixtures.
- Emergency and Exit lighting shall be provided. Refer to floor plans for locations.
- Provide a Fixture allowance of two thousand dollars ($2,000) for Elevator 3 & 4, infill lighting and wiring installation shall be covered under base bid.
- See attached fixture schedule for examples of light fixtures

General Branch Circuitry Provisions

- Provide general-purpose duplex receptacles throughout the structure. Coordinate with the Owner for final locations based on layout in the building and other common areas. (Provide 6 extra outlets per floor to be located by the Architect.)
- Provide general-purpose duplex receptacles throughout all public areas so that no two receptacles are more than 45’ apart.
- Provide receptacles in all offices, housekeeping, etc. per standard design practice.
- Provide GFI receptacles in all janitors' closets; refuse rooms, electrical and mechanical rooms, kitchen and rest rooms.
- Provide GFI receptacles in all public toilet rooms.
- Provide exterior weatherproof GFI receptacles adjacent to all service doors and at existing exterior patios or deck.
- Provide power and control wiring for all equipment, new and existing to remain.
- Provide power to the owner's food service equipment. Coordinate with owner on equipment requiring dedicated circuitry. Provide four (4) floor boxes. Locations to be determined.
- Provide unit prices for adding extra outlets.

Fire Alarm System: (verify existing on site)

- Provide a complete and operational addressable fire alarm system per all State and local codes.
- Provide control and power connections to all fire/smoke dampers. Coordinate with the mechanical contractor for quantity and locations.
- Provide stand-by power to the fire alarm control power.
- Provide control and power connections to facilitate air handling unit shut down. Furnish duct smoke detectors and fan shut down relays. Coordinate with the mechanical contractor.
- Provide detectors and supervised addressable relays for Phase I & II recall associated with elevator.
- Provide control and power connections to fire protection system including but not limited to flow and supervisory switches and dry-system air compressor, and weather proof combination 24v horn/strobe (furnished with Fire Alarm system).

System Provisions

- Provide empty conduits from the main electrical room to exterior locations as required by the telephone and TV utilities. Provide quantity and sizes as required.
- Provide plywood backboards in the main electrical room for TV and telephone equipment.
- Provide grounding as required at the TV and telephone head-end locations.
- Provide raceways, as required, for the voice/data/video riser(s).
- Provide power to all phone, switches, servers, racks, amplifiers, etc. as required for the voice/data/video system.
- Provide power to any specified or required door access power supplies.

Miscellaneous

- Refer to plans for various requirements shown that are not necessarily outlined in this section.
- Low voltage contractor is responsible to hire the electrical contractor to furnish and install. Conduit, boxes, mud rings, and required branch circuit wiring associated with control power.

END OF ELECTRICAL DESIGN BUILD PERFORMANCE SPECIFICATION
MT SERIES
SURFACE MOUNT
MONITOR

features

- Occusmart technology optimized for corridor applications. A new decorative round luminaire featuring our exclusive motion sensor controlled bi-level technology.
- The sensor is fully integrated into this contemporary design, providing lower energy saving light levels when areas are unoccupied, and instantaneous full light output upon occupancy.
- Ideal for corridors, restrooms, stairwells and other areas where maximum light levels are not needed on a constant basis.
- The ultra-sonic sensor features enhanced sensitivity and a lamp conditioning circuit (patented) that keeps new lamps on for 100 hours to assure long lamp life and proper operation.
- For safety and compliance purposes in areas designated as emergency egress, we recommend choosing a standby light level that will provide minimum code compliant light levels while in the standby mode. In most municipalities, this is 1 FC average (2 FC in NYC). See back for options.

construction

- Housing is formed of code gauge steel.
- Quality construction throughout for long-term dependable service.
- Ample mounting holes are provided for convenience with power feeds.
- Meets ADA requirements for wall mounting.
- All fixtures are U.L. listed and IBEW union made.

sensor

- High frequency, extremely sensitive ultra-sonic, internally mounted.
- LED status indicator light.
- Exclusive lamp conditioning circuit (patented).
- Integral directional cones to optimize detection range in corridors.
- New fail-safe feature switches light level to high (100%) if sensor is physically damaged.
- New 5 minute walk-test feature, easy-set time and sensitivity controls, compact design.

electrical

- All electrical components are U.L. listed.
- Ballasts are class P, thermally protected.
- Numerous bi-level options are available, see ordering information on back or consult factory.
- Optional battery backup available. Please consult factory for your specific emergency pack requirements.

finish

- Steel accent rings feature a satin nickel finish.
- Internal housing painted with a lighting grade baked white enamel, having a reflectance factor exceeding 87% for premium quality and durability.

diffuser

- One-piece symmetrically contoured vacuum formed acrylic.
- Smooth white standard.
- Secured by decorative accent rings.
- Safety tether secures diffuser during relamping.

LaMar Lighting Company, Inc.

Occu-smart technology

Occu-smart is a registered trademark of LaMar Lighting Co., Inc.

Protected by one or more US Patents:
Nos. 7,271,543 & 7,083,715
**ordering guide**

Sample order number:

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<th>LIGHTING OPTION</th>
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Note: Standby option "AS" - universal voltage standard

**dimensional data**

Note: Specifications and dimensional data are subject to change without notice.

**cross sections**

17.625" x 4.0"

**WATTAGE CHART**

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**options**

- **VOLTAGE**: 120V, 277V, Universal 120-277V (Consult Factory)
- **DIFFUSER OPTIONS**: SW Smooth white acrylic
- **LIGHTING OPTIONS**: 2C: 1 lamp on constantly/1 lamp sensored, FO: All lamps on/off, All lamps sensored on, AS: User selectable standby options
- **GENERAL OPTIONS**: EM Emergency pack, 1 lamp 90 min. up to 500 lu. (Consult Factory)

Consult factory for additional options not shown or listed

Not all lamp types are dimmable, consult factory for your specific application

**accessories**

- **LAMP OPTIONS**: 17 827K, 11 830K, 16 835K, 13 841K

Before installation, please consult your local ordinances and building codes for compliance

lamar lighting

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Fax (631) 777-7705 • Outside NY (800) 724-7443 • www.lamarlighting.com

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5/09