



City of Minot, North Dakota

Relocate Home Sweet Home Structure (Project #4360)

BIDDING DOCUMENTS

ISSUED FOR BIDS
April 6, 2018

BIDS DUE
April 27, 2018





SECTION 00 01 10

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ADVERTISEMENT FOR BIDS

Relocate Home Sweet Home Structure - Project No. 4360

The City of Minot, through the use of State of North Dakota funds, Department of Housing and Urban Development (HUD) Community Development Block Grant Disaster Recovery (CDBG-DR) funds, and Department of Housing and Urban Development National Disaster Resilience (NDR) funds, purchased Home Sweet Home at 103 4th Avenue NW, since this property is needed to allow for the construction of the new Floodwall. Home Sweet Home now needs to be moved across the street to 110 4th Avenue NW, and the City of Minot is seeking a Contractor to move this structure.

The City of Minot invites the public to bid upon the following project:

RELOCATE HOME SWEET HOME STRUCTURE - PROJECT NO. 4360

The City Council City of Minot reserves the right to reject any or all bids and to award the contract as it deems to be in the best interest of the City of Minot. Each bidder must provide a bid bond in the amount of 5% of the bid and contractor's license, which are to be included in a separate envelope attached to the outside of the bid. Any addendums that may be issued prior to bid opening must be acknowledged on the outside of the bid envelope.

The successful, responsible Bidder will be required to sign the Contract and furnish the appropriate performance and payment bonds in the amount of the total bid, and in accordance with, the State of North Dakota. The bond is required in order to secure the performance obligations of the Contractor. The Contract will not be executed, nor will work begin, should the successful Bidder fail to furnish the performance and payment bonds required. This Contract shall be subject to liquidated damages as stated in the bidding documents, which will be charged against the contractor for each day past the completion date stated in the Contract or as amended by change order.

Bidding documents for the project may be viewed at the CDM Smith Disaster Recovery Office or Minot's Builder's Exchange. Bidding documents may be obtained at the CDM Smith Disaster Recovery Office located at the Arrowhead Mall, 1600 2nd Ave SW, Suite 27, Minot, North Dakota. Bid proposals must be submitted on the forms provided.

A mandatory pre-bid conference will be held at the City Hall located at 515 2nd Ave SW, Minot, North Dakota at 11:00 A.M. (CST) on April 17, 2018 to discuss the bidding documents. There will be a mandatory walk through of the Home Sweet Home structure immediately following the meeting.

Sealed bids will be received up to the hour of 11:00 A.M. (CST) on April 27, 2018, at the City Hall. All bids will be opened at 11:00 A.M. on the same day.

The project is being funded, in part, with CDBG-DR funds. Therefore, the Bidder will be required to comply with all Federal, State, and Local regulations. These requirements include compliance with Federal Labor Standards Provisions, Section 3 employment plan, and the Contractor must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex or national origin. The City of Minot reserves the right to determine the lowest responsible and eligible bidder, to waive irregularities, and to reject any or all bids.



The City of Minot strongly encourages maximum participation in all bids by qualified Disadvantaged Business Enterprises (DBEs), Minority Business Enterprises (MBEs), and Women Business Enterprises (WBEs), small businesses, and by local companies.

(Publish April 6, 13 & 20, 2018)



SECTION 00 21 13

INFORMATION FOR BIDDERS

PART 1 GENERAL

1.01 Background Information and Program Overview

- A. General Description of Program – As a result of the Federally declared disaster (FEMA-1981-DR declared on May 10, 2011), the City of Minot (“City”) has received grants from the Department of Housing and Urban Development and the State of North Dakota for the purpose of assisting recovery in the most impacted and distressed areas of the community impacted by the flood of 2011.
- B. Structure Relocation – The relocation of Home Sweet Home will involve moving the structure from its current location to the location across the street for the purpose of implementing flood controls.
- C. Purpose of Request for Bids – The City will select a Contractor to complete this structure relocation project with this competitive sealed bid process and is soliciting bids to provide all labor, material, and equipment required to move the structure. The sealed Bid submitted by a Bidder in response to this Request for Bids will be referred to as the “Bid.”
- D. Program Administrator – The City has selected CDM Smith Inc. to be the Program Administrator and has delegated certain authorities to oversee the project for the City as the Program Administrator. Instructions to the Contractor received from the Program Administrator shall be considered to be from the City. The Program Administrator shall not be responsible for any act or omissions of any Contractor, Subcontractor, Supplier, or any other person or organization performing or furnishing work. Further, the Program Administrator shall not be responsible for any Contractor’s failure to furnish the work in accordance with the Contract Documents. Further, for the purposes of this Request for Bids and Contract, the Program Administrator shall have the same limitations of liability and indemnification provided to the City.
- E. Description of the Work – The Work shall include providing all labor, material, and equipment related to moving the Home Sweet Home structure. The Work under this Contract will be governed by the Contract Documents. The Work shall also comply with all applicable Federal, State, and Local requirements, laws, and regulations. More specifically, Contractors must comply with all Federal regulations and policies, concerning all applicable Community Development Block Grant programs, including Section 3 on contracts exceeding \$100,000. Failure to adhere to these conditions or with any provision of this Contract may result in the Program Administrator taking one of the following actions: (1) declaring the Contractor ineligible to participate in future contracts; (2) withholding funds; and, (3) terminating the Contract.
- F. Contractor Eligibility – A Contractor must be eligible to receive Federal contracts through U.S. Government Programs in accordance with the policies and procedures of the U.S. Department of Housing and Urban Development as enforced by the City of Minot and in accordance with the Title 24 Code of Federal Regulations (CFR) part 24.



PART 2 BID PROCESS

2.01 Pre-Bid Conference (Mandatory)

- A. A Pre-Bid Conference will be held on April 17, 2018 at 11:00 A.M. (CST) at Minot City Hall. Persons with disabilities requiring special accommodations should contact the Program Administrator's office at (701) 837-5813 at least two (2) days prior to the pre-bid conference.

2.02 Communications

- A. All correspondence relating to this Request for Bids, from Advertisement of Bids to Award of Contract, shall be sent to the Program Administrator's representative:

Justin Redding
CDM Smith Inc.
1600 2nd Avenue SW, Suite 27
Minot, North Dakota 58701
reddingjt@cdmsmith.com

All questions on the project should be submitted to the Program Administrator's representative at least six (6) calendar days before the Bid Opening. A final response will be distributed at least four (4) days prior to the Bid Opening in the form of an Addendum to the Bidding Documents.

2.03 Examination of the Contract Documents and Site

- A. It shall be the responsibility of each Bidder before submitting a Bid to:
 1. Examine the Bidding Documents thoroughly.
 2. Become familiar with local conditions that may affect cost, progress, performance, or furnishing of the Work.
 3. Consider Federal, State, and Local laws and regulations that may affect cost, progress, performance, or furnishing of the Work.
 4. Study and carefully coordinate the Bidder's observations with the Bidding Documents.
 5. At least six (6) calendar days prior to the Bid Opening, notify the Program Administrator of all conflicts, errors, or discrepancies in the Bidding Documents. Any interpretation of the Bidding Documents will be made only by Addendum. The Owner will not be responsible for any other explanations or interpretations of the Bidding Documents.

Contractors are required to view the Home Sweet Home structure by attending the walk through after the mandatory pre-bid conference, in order to be familiar with the type of work that will be required to move the structure.

2.04 Bid Package

- A. The Bidder shall fully complete the Bid Form, including Attachments A-F, as found in Section 00 41 00 – BID FORM and all other components of the Bid Package as delineated in Paragraph 3.01.



2.05 Bid Package Submittal

- A. Bids should be submitted no later than 11:00 A.M. on April 27, 2018.

2.06 Modification of Bid

- A. A Bidder may modify its Bid by submitting a revised Bid at any time prior to the Bid Opening. The revised Bid must be signed by the Bidder and each modification must be initialed by the Bidder.

2.07 Withdrawal of Bid

- A. A Bidder may withdraw his/her Bid without prejudice to him/herself, provided he/she files a written request with the City Clerk not later than the day before Bids are to be opened. No Bids may be withdrawn for a period of 60 calendar days after the opening of Bids.

2.08 Opening of Bids

- A. Bids will be opened publicly and read by the City Clerk at the date set in the Advertisement for Bids. Bidders or their authorized agents are invited to be present and are permitted to examine any Bid after opening.

2.09 Irregular Bids

- A. Bids may be rejected if they show any omission, alteration of form, additions not called for, conditional alternate Bids, or irregularities of any kind which may tend to make the Bid indefinite or ambiguous as to its meaning.

2.10 Disqualification of Bidders

- A. Any or all Bids will be rejected if there is a reason for believing that collusion exists among the Bidders and all participants in such collusion will not be considered in the future Bids for the same work.
- B. Bids in which the price shown obviously is unbalanced as determined by the Program Administrator will be rejected. No contract will be awarded except to responsible Bidders capable of performing the class of work contemplated.
- C. The Bidder shall furnish a complete statement of his/her experience and the amount of capital and equipment available for the proposed work, if so requested by the City or the Program Administrator.

2.11 Award of Contracts

- A. Any or all Bids may be rejected or informalities in Bids may be waived at the option of the Owner.
- B. The Contract will be awarded to the lowest responsible Bidder.

2.12 Lowest Responsible Bidder

- A. In determining lowest responsible Bidder, in addition to price, the following factors will be considered:



1. The ability, capacity, and skill of the Bidder to perform the Contract or provide the services required.
2. Whether the Bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference.
3. The character, integrity, reputation, judgment, experience, and efficiency of the Bidder.
4. The quality of performance of previous Contracts or services.
5. The previous and existing compliance by the Bidder with laws and ordinances relating to the Contract or service.
6. The sufficiency of the financial resources and ability of the Bidder to perform the Contract or provide the service.
7. The quality, availability, and adaptability of the suppliers, or contractual services to the particular use required.
8. The number and scope of the conditions attached to the Bid.

2.13 Acceptance of Bids and its Effect

- A. The acceptance of a Bid will be a notice in writing signed by a duly authorized representative of the City, and no other act of the City shall be necessary to constitute acceptance of a Bid. The acceptance of a Bid shall bind the successful Bidder to execute the required Contract.

2.14 Time for Executing Contract and Damages for Failure to Execute

- A. Any Bidder whose Bid is accepted shall be required to execute the Contract and furnish Performance Bond required under Part 2.15 hereof, within seven (7) days after notice that the Contract has been awarded to him/her. Failure to do so shall constitute a breach of the Agreement affected by the acceptance of the Bid.
- B. The damages to the Owner for such breach will include loss from interference with his/her flood recovery program and other items whose accurate amount will be difficult or impossible to compute. The amount of the Bidder's bond accompanying the Bid for such Bidder shall be retained by the Owner as liquidated damages for such breach.
- C. The City Council shall be authorized, the same as if the bond or bid contained an expressed stipulation to that effect, to cause such work to be done, or complete the work, or contract with some other contractor to do or complete the necessary work and to charge against the Bond the difference between actual cost to the City of such improvements and the sum which it would cost if the defaulting Bidder complied with their Bid.

2.15 Performance and Payment Bonds

- A. The successful Bidder shall within the time fixed by the City Council for executing the Contract, file with the City Clerk, a Performance and Payment Bond each equal to the full amount of the Contract. Such Performance and Payment Bonds shall be executed by the Bidder or Contractor as principal and a surety company, authorized to do business in the State of North Dakota and in a



form satisfactory to the City Attorney of the City of Minot. These Bonds shall remain in effect until two (2) years after the date when final payment becomes due.

- B. The Performance and Payment Bonds shall be made payable to the City, and shall be conditioned that he/she will faithfully perform the work bid in accordance with the terms of and within the time provided for such Contract, and pursuant to the Contract Documents and Bid for such work on file in the City Clerk's Office and pay for all labor and materials used in such work, all taxes of any nature, Workmen's Compensation charges, and all other obligations arising out of his/her performance of the Contract. In case of default on the part of the Bidder or Contractor to perform such work as provided in the Contract, the sum named in the Bond shall be taken and held to be fixed and liquidated damages in favor of the City and full amount thereof may be recovered from said Bidder and his/her sureties in an action by the City against them on said Bond.
- C. If the City Council shall, at any time, deem the Bond of a Contractor insufficient either in the form or as to sureties, it may require the Contractor to furnish a new Bond to be approved by the City Council within such reasonable time as the Council may fix.
- D. If the Contractor shall fail to furnish such new Bond within the required time after notice from him/her to do so, his/her Contract may be cancelled and in that event the Contractor's Bond shall be liable the same as if the Contractor had failed to perform his/her Contract.

2.16 Protest

- A. Any actual or prospective Bidder who is allegedly involved with this Request for Bids or Award of the resultant Contracts may protest. The protest must be submitted in writing to the Program Administrator within three (3) working days after such aggrieved person knows of, or should have known of, the facts giving rise thereto. If the protest is not resolved by mutual agreement, the City will promptly issue a decision in writing to the protesting party. The City has the authority to render the final determination regarding the protest. Any determination rendered by the City will be final. All protests must be made in writing and contain the following information:
 - 1. Name, address, and telephone number of the protester.
 - 2. Identification of the solicitation or project number, date, and time.
 - 3. A detailed statement of the protest's legal and factual grounds, including copies of relevant documents.
 - 4. Identification of the issue(s) to be resolved and a statement of what relief is requested.
 - 5. Arguments and authorities in support of the protest.
 - 6. A statement that copies of the protest have been mailed or delivered to all interested parties in the solicitation process.

2.17 Subsurface Exploration Report

- A. A copy of the Report of Geotechnical Explorations with respect to this building site is presented as Attachment III-D to the Supplementary General Conditions.
- B. This report identifies properties of below grade conditions and offers recommendations for the design of foundations, prepared primarily for the use of the Architect.



- C. The recommendations described shall not be construed as a requirement of this Contract, unless specifically referenced in the Contract Documents.
- D. This report, by its nature, cannot reveal all conditions that exist at the site. Should subsurface conditions be found to vary substantially from this report, changes in the design and construction may need to be made, with resulting credits or expenditures to the Contract Price accruing to the Owner.

2.18 Asbestos Report

- A. A copy of the Home Sweet Home Asbestos Report is presented as Attachment III-B to the Supplementary General Conditions
- B. This report includes estimated quantities. Actual amount could vary by 25%.

PART 3 CONTENTS OF BID PACKAGE

3.01 The Bid Package consists of the following:

- A. Bid Form and the following Attachments:
 1. Attachment A – Subcontracting Workforce
 2. Attachment B – Nepotism Statement
 3. Attachment C – Non-Collusion Statement
 4. Attachment D – Contractor Certificate of Non-Segregated Facilities
 5. Attachment E – Contractor’s HUD Section 3 Plan
 6. Attachment F – Equal Employment Opportunity Certificate
 7. Attachment G – Contractor’s/Subcontractor’s Certification Concerning Labor Standards and Prevailing Wage Requirements.
- B. Bid Bond Form with Power of Attorney
- C. Additional Documentation, including:
 1. Proof of Worker’s Compensation Insurance
 2. Current North Dakota Contractor’s License
 3. Current North Dakota Waste Hauler’s Permit (MSW)
 4. Hazardous Waste Disposal Plan

3.02 Instructions for Completing Bid Package

- A. General – The Bid Package must include all items listed in Part 3.01 and should be submitted with documents arranged in the order as shown in Part 3.01.



B. Bid Form – The Bid Form must be fully completed and include Attachments A through F.

1. Lump Sum – The bid will be provided as a lump sum and the payment for the work will be based on this lump sum in the Bid Form.
2. Disposal Fees – Site debris shall be hauled to the City of Minot Landfill or other Waste Management Landfill in Sawyer and will be subject to a disposal fee. Other types of waste, including but not limited to, HHW, HTW, E-waste, ACM, etc. must be hauled to an appropriately permitted facility, such as McDaniel Landfill or other approved facility. All disposal fees will be paid for by the Contractor and included in the Contractor's lump sum bid price.
3. Subcontracting Workforce – Bidders must complete Attachment A – Subconsulting Workforce and return it with the Bid Package.
4. Nepotism Statement – Bidders must execute Attachment B – Nepotism Statement and return it with the Bid Package.
5. Non-Collusion Statement – Bidders must execute Attachment C – Non-Collusion Statement and return it with the Bid Package.
6. Contractor Certificate of Non-Segregated Facilities – Bidders must execute Attachment D – Contractor Certificate of Non-Segregated Facilities and return it with the Bid Package.
7. Contractor's HUD Section 3 Plan – Bidders must execute Attachment E – Contractor's HUD Section 3 Plan and return it with Bid Package. If the Bid is selected for Award, Tables A and B (included in Section 00 73 00) shall be completed and submitted to the Program Administrator.
8. Equal Employment Opportunity Certificate – Bidders must execute Attachment F – Equal Employment Opportunity Certificate
9. Contractor's/Subcontractor's Certification Concerning Labor Standards and Prevailing Wage Requirements – Bidders must execute Attachment G certifying compliance with labor standards and prevailing wage rate requirements.

C. Bid Bond

1. Bidders must submit a Bid Bond in the amount of 5% of the bid made payable to the City of Minot, North Dakota. The Bid Bond must be submitted with Power of Attorney and be executed by the Principal and Surety.
2. The Bid Bond will be returned to the respective Bidders within 10 days after the Contract is awarded.

D. Additional Documentation

1. Workers' Compensation Insurance – Bidders must submit proof of Workers' Compensation Insurance and Employer's Liability Insurance.
2. North Dakota Contractor's License – Bidders must submit a copy of their current applicable North Dakota Contractor's License.



3. North Dakota Waste Hauler's Permit – Bidders must submit a copy of their current North Dakota Waste Hauler's Permit (MSW).
4. Hazardous Waste Disposal Plan – Bidders must submit their Hazardous Waste Disposal Plan.

PART 4 DELIVERY OF BIDS

4.01 Delivery of Bids

- A. Fully completed Bid Forms and additional required documentation must be placed in a sealed envelope. The envelope shall be plainly marked:

“RELOCATE HOME SWEET HOME STRUCTURE - PROJECT NO. 4360”

- B. Bids may be mailed or delivered to:

City Clerk
515 2nd Avenue SW
Minot, North Dakota 58701

- C. No bids will be accepted after the time set for Bid Opening.

END OF SECTION



SECTION 00 41 00

BID FORM
for
Relocate Home Sweet Home Structure
City of Minot, ND

Bidder's Full Legal Name (Business Entity or Individual) Name or Names, if Joint Venture)	
Trade Name (if Applicable)	
Address	
City, State, Zip	
Telephone	
ND Contractors License Number	
Classification(s)	
ND Waste Hauler's Permit No. (MSW)	

THIS BID IS SUBMITTED TO:

City Clerk
515 2nd Avenue SW
Minot, North Dakota 58701

GENERAL STATEMENTS

1. The Bidder understands that he/she is bidding on a Contract funded with Federal dollars and administered by the City of Minot, North Dakota. The Bidder understands that debarment by either the City of Minot or the Federal government will make him/her ineligible.
2. The Bidder understands that all work must be completed in accordance with CDBG program requirements, including Section 3.
3. Bidder hereby certifies that work performed will meet or exceed Federal, State, and Local regulations. Proposer understands that failure to meet or exceed applicable codes, standards, and specifications may result in debarment from future federally funded construction contracts.
4. The Bidder identified above, in compliance with your Advertisement for Bids, having examined the Bidding Documents and being familiar with all of the conditions surrounding the proposed project, including the availability of supervision, materials and labor, hereby proposes to furnish all supervision, labor, materials, equipment, and supplies and to complete the project in accordance with the Contract Documents, within the time set forth therein and at the prices stated below. These prices



are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Bid is a part.

5. Bidder hereby agrees to commence work under this contract within 48 hours of the date to be specified in the written "Notice to Proceed" from the Owner, and to have the Home Sweet Home structure completely removed from its existing site by June 1, 2018, and to fully complete all work specified in the Contract Documents before July 1, 2018.
6. Bidder understands that at least 10% of project funds will be retained for 30 days pending completion of the Final Inspection and Verification. Failure to complete punch list items or warranty work during this time will result in forfeiture of the 10% retainage.
7. Bidder accepts all of the terms and conditions of the Bidding Documents. Bidder will sign the Agreement and submit the required Bonds and other documents required by the Bidding Documents within the specified timelines.
8. In submitting this Bid, Bidder makes all representations required by the Information for Bidders and Contract Documents and further warrants and represents that the Bidder has examined copies of all the Bid Documents, the Information for Bidders, and of the following Addenda (receipt of all which is hereby acknowledged):

No.	Dated	No.	Dated
No.	Dated	No.	Dated
No.	Dated	No.	Dated
No.	Dated	No.	Dated

9. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contract with Owner in the form included with the Bidding Documents to perform all Work, including the assumption of all obligations, duties, and responsibilities necessary to the successful completion of the Contract and the furnishing of all materials and equipment required to be incorporated in and form a permanent part of the Work; tools, equipment, supplies, transportation, facilities, labor, superintendence, and services required to perform the Work; and, Bonds, insurance and submittals; all as indicated or specified in the Bidding Documents.

REPRESENTATIONS, WARRANTIES, AND CERTIFICATIONS

10. In submitting this Bid, Bidder makes all representations required by the Instructions to Bidders and other Bidding Documents, and further warrants and represents that:
 - (a) Bidder has familiarized himself with the Work required by the Bidding Documents, the locale where the Work is to be performed, local labor conditions and all laws, regulations, and other factors affecting performance of the Work, and having satisfied himself of the expense and difficulties attending performance of the Work.
 - (b) Bidder has given the Program Administrator written notice of the Bidding Documents requirements that might restrict competition or be ambiguous and the written resolution thereof by Program Administrator is acceptable to Bidder.
 - (c) Bidder has given Program Administrator written notice of all conflicts, errors, or discrepancies that it has discovered in the Bidding Documents and the written resolution thereof by Program Administrator is acceptable to Bidder.



- (d) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.
- (e) Bidder employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Bidder whose services in connection with the construction of the public building or project or in securing the public contract were in the regular course of their duties for Bidder.
- (f) No part of the contract price received by Bidder was paid or will be paid to any persons, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Bidder whose services in connection with construction of the public building or project were in the regular course of their duties for Bidder.
- (g) Neither Bidder nor any member of his company has divulged information regarding said Bid or any data relative thereto to any other person, firm, or corporation.
- (h) Neither the Bidder nor any of its proposed Subcontractors at any tier is on the List of Parties Excluded from Federal Procurement of Non-Procurement Programs promulgated in accordance with Executive Orders 12549 and 12689, 'Debarment and Suspension', as set for the at 2 CFR Part 2424 and 24 CFR Part 24.
- (i) All statements contained in said Bid are true and correct.
- (j) Bidder will use the Subcontractors listed in Attachment A of this Bid Form in performing the Work, and will use no other Subcontractors without prior approval of the Program Administrator.
- (k) The Bidder agrees that the structure should be off the current location by June 1, 2018 and relocated to the foundation at its new location by July 1, 2018 as stipulated in the Bidding Documents. Failure to complete the work in the time allotted may result in liquidated damages as outlined in Part 26 of the General Conditions.
- (l) A Bid Bond with Power of Attorney in the amount of 5% of the Bid is attached and made a part of this Bid.

Bidder agrees to complete the Work for the lump sum price included in the attached Bid Schedule.



EXECUTION, DECLARATION OF AUTHORIZATION AND ACCURACY

11. Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that I am authorized to submit the foregoing Bid on behalf of the identified Bidder (if the Bidder is a corporate or other business entity) or on my own behalf (if the Bidder is an individual), and the information presented in the foregoing Bid Form is true and correct.

Executed on this the _____ day of _____, 2018.

Signature of Individual or Representative	
Printed Name of Individual or Representative	
Title, if Person Executing is a Representative	

END OF SECTION



**CITY OF MINOT, NORTH DAKOTA
BID SCHEDULE
RELOCATE HOME SWEET HOME STRUCTURE**

Total Lump Sum Bid Price to Relocate Home Sweet Home Structure	\$	
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ATTACHMENT A – SUBCONTRACTOR WORKFORCE: Bidders are required to list all Subcontractors, Vendors, and Suppliers anticipated to be used in the Work for this Project. Include approximate percentages of subcontracted work for subcontractors designated as WBE or MBE.

Percentage of Work value and total cannot exceed 100%. (Use additional sheets if necessary)

SUBCONTRACTOR/VENDOR/ SUPPLIERS	ADDRESS OF BUSINESS OR OWNER	TYPE OF WORK	TOTAL % OF WORK	WBE %	MBE %



ATTACHMENT B
NEPOTISM STATEMENT

**FAILURE TO COMPLETE THIS ATTACHMENT SHALL RESULT IN THE PROGRAM
ADMINISTRATOR DEEMING YOUR BID "NON-RESPONSIVE"**

The Bidder or any officer, if the Bidder is other than an individual, shall state whether Bidder has a relationship, either by blood or marriage, with any official or employee of the City of Minot by completing the following:

If the Bidder is an individual:

I am not related by blood or marriage to any official or employee of the City of Minot
 I am related by blood or marriage to the following official(s) or employee(s) of the City of Minot

Name and Title of City Official or Employee: _____

Relationship: _____

If the Bidder is **NOT** an individual:

The officers of the company submitting this Bid or proposal are not related by blood or marriage to any official or employee of the City of Minot
 The officers of the company submitting this Bid are related by blood or marriage to the following official(s) or employee(s) of the City of Minot

Name and Title of Officer: _____

Employee and Title of City Official or Employee: _____

Relationship: _____



ATTACHMENT C
NON-COLLUSION STATEMENT

THE UNDERSIGNED AFFIRM THAT THEY ARE DULY AUTHORIZED TO EXECUTE THIS CONTRACT, THAT THIS COMPANY, FIRM, PARTNERSHIP, OR INDIVIDUAL HAS NOT PREPARED THIS BID IN COLLUSION WITH ANY OTHER BIDDER, AND THAT THE CONTENTS OF THIS BID AS TO PRICES, TERMS, OR CONDITIONS OF SAID BID HAVE NOT BEEN COMMUNICATED BY THE UNDERSIGNED NOR BY ANY EMPLOYEE OR AGENT TO ANY OTHER PERSON ENGAGED IN THIS TYPE OF BUSINESS PRIOR TO THE OFFICIAL OPENING OF THIS BID.

CONTRACTOR _____

ADDRESS _____

PHONE _____

FAX _____

BIDDER (SIGNATURE) _____

BIDDER (PRINTED NAME) _____

POSITION WITH COMPANY _____

**SIGNATURE OF COMPANY OFFICIAL
AUTHORIZING THIS BID** _____

COMPANY OFFICIAL (PRINTED NAME) _____

OFFICIAL POSITION _____



ATTACHMENT D
CONTRACTOR CERTIFICATION OF
NON-SEGREGATED FACILITIES

Name of Contractor

Project Name and Number

The undersigned hereby certifies that:

- (a) Section 3 provisions are included in the Contract
- (b) A written Section 3 Plan was prepared and submitted as part of the Bid proceedings
- (c) Tables A and B of Section 3 will be prepared and submitted upon receipt of the Award of Contract
- (d) No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964

Name and Title of Signer (Print or Type)

Signature

Date



ATTACHMENT E
CONTRACTOR'S HUD SECTION 3 PLAN



(Required if contract exceeds \$100,000)

Section 3 Plan Format

(Name of Contractor)
agrees to implement the following specific affirmative
action steps directed at increasing the utilization of lower income residents and businesses within the City of
Minot, North Dakota.

- A. To ascertain from the locality's CDBG-DR program official the exact boundaries of the Section 3 covered project area and where advantageous, seek the assistance of local officials in preparing and implementing this Affirmative Action Plan.
- B. To attempt to recruit from within the City the necessary number of lower income residents through: local advertising media, signs placed at the proposed site for the project, placing notices with the Minot Housing Authority, and community organizations and public or private institutions operating within or servicing the project area.
- C. To maintain a list of all lower income residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible, and if a vacancy exists.
- D. To insert this Section 3 Plan in all subcontractor documents, and to require all subcontractors to submit a Section 3 Plan, including utilization goals and the specific steps planned to accomplish these goals.
- E. To formally contact unions, subcontractors, and trade associations to secure their cooperation for this program.
- F. To ensure that all appropriate project area business concerns are notified of pending sub-contractual opportunities.
- G. To maintain records, including copies of correspondence, memoranda, etc. which document that all of the above affirmative action steps have been taken. Loans, grants, contracts, and subsidies for less than \$100,000 will be exempt.
- H. To appoint or recruit an executive official of the company or agency as Equal Opportunity Officer to coordinate the implementation of this Section 3 Plan.
- I. To list on Table A information related to subcontracts to be awarded.
- J. To list on Table B all projected workforce needs for all phases of this project by occupation, trade, skill level, and number of positions.



City of Minot

As officers and representatives of _____,
(Name of Contractor)

We, the undersigned, have read and fully agree to this Section 3 Plan, and become a party to the full implementation of this program.

Signature: _____

Title: _____

Date: _____

Signature: _____

Title: _____

Date: _____

Signature: _____

Title: _____

Date: _____



ATTACHMENT F EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

Equal Employment Opportunity Certification Excerpt From 41 CFR §60-1.4(b)

U.S. Department of Housing
and Urban Development
Office of Housing
Federal Housing Commissioner

Department of Veterans Affairs
OMB Control No. 2502-0029
(exp. 7/31/2009)

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin, such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: **Provided, however,** That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work:

Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and Federally-assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed

Firm Name and Address	By
	Title

form HUD-92010 (3/2006)
VA form 26-421



upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

Excerpt from HUD Regulations

200.410 Definition of term "applicant".

- (a) In multifamily housing transactions where controls over the mortgagor are exercised by the Commissioner either through the ownership of corporate stock or under the provisions of a regulatory agreement, the term "applicant" as used in this subpart shall mean the mortgagor.
- (b) In transactions other than those specified in paragraph(a) of this section, the term "applicant" as used in this subpart shall mean the builder, dealer or contractor performing the construction, repair or rehabilitation work for the mortgagor or other borrower.

200.420 Equal Opportunity Clause to be included in contracts and subcontracts.

- (a) The following equal opportunity clause shall be included in each contract and subcontract which is not exempt:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, promotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of the nondiscrimination clause.

(2) The contractor will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard race, creed, color, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided, advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notices in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 10925 of March 6 1961, as amended, and of the regulations, and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

(5) The contractor will furnish all information and reports required by Executive Order 10925 of March 6, 1961, as amended, and by the regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by HUD and the Committee for purposes of investigation to ascertain compliance with such regulations, and orders.

(6) In the event of the contractor's non-compliance with the nondiscrimination clause of this contract or with any of the said regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or Federally-assisted construction contracts in accordance with procedures authorized in Executive Order 10925 of March 6, 1961, as amended, and such other sanctions may be imposed and remedies invoke s provided in the said Executive Order or by regulations, or order of the President's Committee on Equal Employment Opportunity, or as otherwise provided by law.

(7) The contractor will include the provisions of Paragraphs(1) through (7) in every subcontract or purchase order unless exempted by regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to Section 303 of Executive Order 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase orders as HUD may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by HUD, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

- (b) Except in subcontracts for the performance of construction work at the site of construction, the clause is not required to be inserted in subcontracts below the second tier. Subcontracts may incorporate by referenced to the equal opportunity clause.

200.425 Modification in and exemptions from the regulations in this subpart.

- (a) The following transactions and contracts are exempt from the regulations in this subpart:

- (1) Loans, mortgages, contracts and subcontracts not exceeding \$10,000.
- (2) Contract and subcontracts not exceeding \$100,000 for standard commercial supplies or raw material;
- (3) Contracts and subcontracts under which work is to be or has been performed outside the United States and where no recruitment of workers within the United States is involved. To the extent that work pursuant to such contracts is done within the United States, the equal opportunity clause shall be applicable;
- (4) Contracts for the sale of Government property where no appreciable amount of work is involved; and
- (5) Contracts and subcontracts for an indefinite quantity which are not to extend for ore than one year if the purchaser determines that the amounts to be ordered under any such contract or subcontract are not reasonably expected to exceed \$100,000 in the case of contracts or subcontracts for standard commercial supplies and raw materials, or \$10,000 in the case of all other contracts and subcontracts.



ATTACHMENT G
**CONTRACTOR'S AND SUBCONTRACTOR'S CERTIFICATION CONCERNING LABOR
STANDARDS AND PREVAILING WAGE REQUIREMENTS**

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

**CONTRACTOR'S AND SUBCONTRACTOR'S CERTIFICATION
CONCERNING LABOR STANDARDS & PREVAILING WAGE REQUIREMENTS**

TO (APPROPRIATE RECIPIENT)	DATE	
C/O	PROJECT NUMBER (IF ANY)	
PROJECT NAME		
1. The undersigned, having executed a contract with _____ (CONTRACTOR or SUBCONTRACTOR)		
for _____ (NATURE OF WORK)		
in the amount of \$ _____ in the construction of the above-identified project, certifies that:		
a. The Labor Standards Provisions of The Contract For Construction are included in the aforesaid contract.		
b. Neither he nor any firm, corporation, partnership or association in which he has a substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6(b) of the regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5), or pursuant to Section 3(a) of the Davis-Bacon Act, as amended (40 U.S.C. 276a-2(a)).		
c. No part of the aforementioned contract has been or will be subcontracted to any subcontractor such subcontractor or any firm, corporation, partnership or association in which such subcontractor has a substantial interest is designated as an ineligible contractor pursuant to the aforesaid regulatory or statutory provisions.		
2. He agrees to obtain and forward to the contractor, for transmittal to the recipient, within ten days after the execution of any Lower tier subcontract, a Subcontractor's Certification Concerning Labor Standards and Prevailing Wage Requirements, executed by the Lower tier subcontractor, in duplicate.		
The workmen will report for duty on or about _____ (Date)		
3. He certifies that:		
a. The Legal name and the business address of the undersigned are:		
b. The undersigned is:		
<input type="checkbox"/> A SINGLE PROPRIETORSHIP <input type="checkbox"/> A CORPORATION ORGANIZED IN THE STATE OF _____		
<input type="checkbox"/> A PARTNERSHIP <input type="checkbox"/> OTHER ORGANIZATION (DESCRIBED): _____		
c. THE NAME, TITLE AND ADDRESS OF THE OWNER, PARTNERS OR OFFICERS OF THE UNDERSIGNED ARE:		
NAME	TITLE	ADDRESS



d. The names and addresses of all other persons, both natural and corporate, having a substantial interest in the undersigned, and the nature of the interest are (If none, so state):

NAME	ADDRESS	NATURE OF INTEREST

e. The names, addresses and trade classifications of all other building construction contractors in which the undersigned has a substantial interest are (If none, so state):

NAME	ADDRESS	TRADE CLASSIFICATION

Subcontractor: _____

By: _____ Date: _____
(Signature)

WARNING

U.S. CRIMINAL CODE, SECTION 1010, TITLE 18, U.S.C., PROVIDES IN PART: "WHOEVER, . . . MAKES, PASSES, UTTERS OR PUBLISHES ANY STATEMENT, KNOWING THE SAME TO BE FALSE, SHALL BE FINED NOT MORE THAN \$5,000 OR IMPRISONED NOT MORE THAN TWO YEARS, OR BOTH."



BID BOND

THE STATE OF NORTH DAKOTA

SURETY'S NO.

KNOWN BY ALL MEN PRESENT, THAT _____ of the

City of _____, County of _____, and State of _____

as Principal, _____ and _____, as Surety,

Are held and firmly bound unto the City of Minot, North Dakota, a home rule municipal corporation of Ward County, North Dakota, as Obligee, in the amount of:

(written amount)

(\$ _____)

DOLLARS for payment whereof the said Principal and Surety bind themselves, and their heirs, administrator, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee for:

NOW, THEREFORE, the condition of the obligation is such that if the Principal shall faithfully enter into such written contract, then this Bid Bond shall be void; otherwise, this Bid Bond shall remain in full force and effect.

IT IS EXPRESSLY UNDERSTOOD AND AGREED that if the Principal withdraws its Bid any time after such Bid is opened and before official rejection of such Bid by Obligee or, if the Principal is successful in securing the award of the contract, and fails to enter into the Contract or furnish satisfactory Performance and Payment Bonds (if required), the Obligee, in either of such events, shall be entitled and is hereby given the right to collect the full amount of this Bid Bond as liquidated damages.

PROVIDED, further that if any legal action is filed upon this Bond, venue shall lie in Ward County, State of North Dakota.



IN WITNESS THEREOF, the Principal and Surety does sign and seal this instrument.

This _____ day of _____, 2018.

Principal

Surety

By _____

By _____

Address _____

Address _____

APPROVED AS TO FORM:

NOTE: Attach Power of Attorney



SECTION 00 53 00

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 2018, by and between the City of Minot, a municipal corporation in the County of Ward and the State of North Dakota, hereinafter referred to as the CITY; and, _____ hereinafter referred to as the CONTRACTOR, WITNESSETH:

THAT WHEREAS, the City Council of the City of Minot called for bids for:

RELOCATE HOME SWEET HOME STRUCTURE, #4360

WHEREAS, the CITY purchased properties that were inundated during the 2011 Souris River Flood, and such properties were purchased with State of North Dakota funds, Department of Housing and Urban Development (HUD) Community Development Block Grant Disaster Recovery (CDBG-DR) funds, and Department of Housing and Urban Development National Disaster Resilience (NDR) funds.

WHEREAS, the CITY intends to relocate the Home Sweet Home structure in accordance with HUD regulatory requirements.

WHEREAS, the CITY has conducted a competitive sealed bids process to select a contractor to relocate the Home Sweet Home structure.

WHEREAS, on the _____ day of _____, the City Council, being in session, did determine that _____ was the lowest responsible bidder for the work herein specified and the City Council authorized and directed the Mayor and the City Clerk of the City of Minot to enter into a Contract with the CONTRACTOR for the completion of such work.

NOW, THEREFORE, the CONTRACTOR, in consideration of the premises and the agreements of the CITY, hereinafter set forth, does hereby agree to complete the work herein specified in accordance with the Contract Documents duly approved by the City Council and on file in the office of the City Clerk of the City of Minot, a copy of which the CONTRACTOR acknowledges to having received, and to complete such work herein provided in accordance also with its Bid and offer, which is as follows, to wit:

The CONTRACTOR further agrees to complete said work under the direction and supervision and subject to the approval of the City Program Administrator, or Program Administrator in charge of the project if consulting Program Administrators have been retained for this project.

The CONTRACTOR further agrees that the City Council of the CITY does hereby reserve the right, in case of improper work under this contract, to suspend work thereon at any time, and to re-let said Contract or to order rework of said work or any part thereof improperly done, and that any additional cost occasioned thereby shall be deducted from the amount that would otherwise have been due to the CONTRACTOR under his said Contract herein, and shall be charged against him. The CONTRACTOR further agrees that the work shall be completed no later than July 1, 2018; however, the structure must be removed from its current site by June 1, 2018 or any time extensions granted. This Contract shall be subject to liquidated damages of \$1,000.00 per day, per Part 26 of the General Conditions, charged against the contractor for each day past the completion date stated in the Contract or as amended by change order.



It is further understood and agreed by and between the CITY and the CONTRACTOR that the said Contract Documents herein referred to on file in the office of the City Clerk of the City of Minot, shall be considered to be and are hereby made a part of the Contract as fully and completely as though written herein at length and the CONTRACTOR acknowledges that he is fully informed as to the contents of the said Contract Documents herein referred to.

Final acceptance shall be deemed to be the date on which the City Council approves final payment.

It is further understood and agreed that upon the CONTRACTOR performing the work designated in this Contract, within the time therein provided, that the City Council of the CITY will from time to time, at its discretion, as the work progresses, pay to the CONTRACTOR upon the estimates made by the City Program Administrator of the amount already earned under this Contract on the said work, ninety percent (90%) of the amount shown by such estimate to have been earned in current funds from the _____ (amount of bid) and upon the full completion, and the approval of the same by the City Program Administrator of the City of Minot, and the City Manager, the CITY will pay the balance due therefore at the prices set forth in the Bid Schedule, hereinbefore recited in the manner hereinbefore set forth.

It is further understood and agreed that all of the work under this Contract shall be paid for only in current funds from the funds above mentioned, and the CITY shall in no case be liable on this or any other Contract for the completion of such work for any sum whatsoever to be paid by money raised by general taxation and that the CITY assumes and incurs no general liability under this contract.

The CONTRACTOR further undertakes and agrees that he will protect, indemnify and save harmless the CITY from any and all damages and liability whatsoever, on account of any accident or injury which may occur or be caused directly or indirectly to any one on account of the completion of said work by CONTRACTOR or by any excavations or obstructions which may be placed in the project area by the CONTRACTOR in connection with the work or otherwise. The CONTRACTOR further agrees to pay all taxes applicable to this work hereunder, keep all employees fully covered by Workers' Compensation Insurance, and pay all premiums promptly when due.

IN WITNESS WHEREOF, the CITY has caused this Contract to be executed by the Mayor in its name and countersigned and attested to by its City Clerk, and its corporate seal to be hereunto affixed, and the CONTRACTOR has hereunto caused this Contract to be executed by its officers thereunto duly authorized.

CITY OF MINOT

(Corporate Seal)

ATTEST:

Chuck Barney, Mayor

Kelly Matalka, City Clerk

ATTEST:

CONTRACTOR



SECTION 00 72 00

GENERAL CONDITIONS

PART 1 DEFINITIONS

1.01 The following are definitions found commonly in the City of Minot Standard Specifications:

- A. **Contract Documents** – The Contract Documents consist of the following documents: Notice to Bidders, Information for Bidders, General Conditions, Specifications, Appendices, and the Contract, including all additions, deletions, and modifications incorporated therein before execution of the Contract.
- B. **Owner** – The Owner is the City of Minot, North Dakota.
- C. **Engineer** – The Engineer is the City Engineer of Minot, North Dakota, or his authorized representative.
- D. **Contractor** – The Contractor is the Contractor named in the Contract.
- E. **Bid** – The Bid is the offer of a bidder to perform the work described in the Contract Documents when presented and submitted on the prescribed Bid Form, properly signed and guaranteed.
- F. **Bid Guaranty** – The Bid Guaranty is the bid bond and/or cashier's check that the bidder submits with the Bid as a guaranty that the bidder will enter into a Contract with the Owner for construction of the work, if awarded the Contract.
- G. **Contract** – The Contract is the agreement covering the performance of the work described in the Contract Documents.
- H. **Performance Bond** – The Performance Bond is the approved form of security furnished by the Contractor and their Surety as a guarantee of good faith on the part of the Contractor to execute the work in accordance with the terms of the Contract.
- I. **Payment Bond** – The Payment Bond is the approved form of security furnished by the Contractor and their Surety as a guarantee of good faith on the part of the Contractor to pay all who have a direct contractual relationship with the Contractor or a Subcontractor who supplies labor or materials.
- J. **Written Notice** – Written Notice shall be considered as served when delivered in person, sent by registered mail, or by email to the Contractor at the address shown on the Contract or to the Contractor's Superintendent required under part 16.11 of these General Conditions.
- K. **Specifications** – Specifications shall mean the legal and procedural documents, General Conditions together with modifications thereof, and the Specification Sections included in the Contract Documents, with all addenda thereto.
- L. **Program Administrator** – The Program Administrator is as described in Section 00 21 13. The Program Administrator shall have the rights, duties, obligations, and protections set forth in the Contract Documents.



PART 2 NOTICE TO PROCEED

2.01 The mailing or delivery of a copy of the executed Contract to the Contractor or authorized agent constitutes the "Notice to Proceed." The Contractor shall begin and shall prosecute the work regularly and uninterrupted thereafter (unless otherwise directed in writing by the Owner) with such force as to secure the completion of the work within the time stated in the Contract Documents.

PART 3 CONTRACTOR'S UNDERSTANDING

3.01 It is understood and agreed that the Contractor has by careful examination satisfied their self as to:

- A. The nature of the work.
- B. Conformation of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work.
- C. The General Conditions.
- D. Local conditions.
- E. All other matters which can in any way affect the work under this Contract.

3.02 No verbal agreement with any offer, agent, or employee of the Owner, either before or after the execution of the Contract, shall affect or modify any of the terms or obligations herein contained.

PART 4 SPECIFICATIONS

4.01 Discrepancies in Specifications – Any discrepancies found between the Specifications and site conditions or any errors or omissions in the Specifications shall be immediately reported to the Program Administrator, who shall promptly correct such error or omission in writing. Any work done by the Contractor after their discovery of such discrepancies, errors or omissions shall be done at the Contractor's risk.

4.02 Specifications at the Work Site – One completed set of all Specifications shall be maintained at the work site and shall be available to the Engineer or his representative at all times.

PART 5 INSURANCE

5.01 The Contractor shall not commence work under this Contract until they have obtained the insurance required under this paragraph and filed with the City Auditor necessary insurance certificates and such insurance has been approved by the Owner. The Contractor shall not permit any Subcontractor to commence work on their sub-contract until the insurance required of the Subcontractor has been obtained and approved. The Contractor shall provide certification of the following insurance coverages:

- A. Workers' Compensation and Employer's Liability Insurance secured and maintained as required by the State of North Dakota.
- B. Public Liability, Bodily Injury, and Property Damage
 - 1. Per Accident \$1,000,000 Injury of one or more persons, and/or property damage.



C. Automobile and Truck Public Liability, Bodily Injury, and Property Damage

1. Per Accident \$1,000,000 Injury of one or more persons, and/or property damage.

PART 6 PERMITS

6.01 All permits and licenses necessary for the execution of the work, as specified, shall be secured and paid for by the Contractor. The Contractor shall be responsible for determining what licenses and permits are necessary to perform under the contract. Copies of all permits shall be submitted to the Engineer prior to commencement of work under any and all Work Orders. The Contractor shall be responsible for correcting any notices of violations issued as a result of the Contractor's or any Subcontractor's actions or operations during the performance of the contract. Corrections for any such violations shall be at no additional cost to the Owner.

PART 7 LAWS TO BE OBSERVED

7.01 The Contractor is responsible for complying with all Federal, State, and Local laws, ordinances, rules, and regulations governing the performance of the work required by these Contract Documents.

7.02 The Contractor is responsible for payments of all fees, licenses, certifications, forms, and related costs for compliance with all applicable regulations. Copies of all permits, licenses, certifications, and accreditations must be provided to the Engineer prior to the start of work.

PART 8 INDEMNITY

8.01 The Contractor shall indemnify and save harmless the Owner, its elected officials, agencies, boards and commissions, employees, representatives, Engineer, servants and its insurers, from any and all claims, damages, losses, demands, expenses, fines, legal fees, and liability as a result of the actions or inactions by the Contractor, its employees, representatives, and/or Sub-Contractors in the performance of work under this contract and further from claims, damages, losses, demands, expense, fines, legal fees, and liability that may result from any compliance or non-compliance imposed by such regulatory authorities.

PART 9 PROTECTION OF WORK

9.01 The Contractor shall, at their own expense, erect and maintain adequate signing, barricades, and warning lights and take all necessary precautions for the protection of the work and the safety of the public.

A. All barricades and obstructions shall be protected at night by signal lights which shall be lighted from sunset to sunrise.

B. The name and telephone number of the Contractor shall appear on all barricades set by them.

9.02 The Contractor will, at all times until its completion and final acceptance, protect their work, apparatus, and material from accidental or other damage and shall make good any damages thus occurring, at their own expense.



PART 10 PROTECTION OF EXISTING UTILITIES

- 10.01 The Contractor shall locate, with the aid of a City Inspector, all utilities before execution of the work at any site.
- 10.02 Damage to utilities not specified for capping or removal as part of the execution of the work shall be repaired by the Contractor at their expense.

PART 11 PUBLIC SAFETY AND CONVENIENCE

- 11.01 The Contractor shall at all times so conduct their work as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work, and to insure the protection of persons and property in a manner satisfactory to the Engineer.
- 11.02 No road or street shall be closed to the public except with the permission of the Engineer.
- 11.03 Fire hydrants on or adjacent to the work shall be kept accessible to firefighting equipment at all times.
- 11.04 Temporary provisions shall be made by the Contractor to insure the use of sidewalks and the proper functioning of all gutters, storm sewer inlets, and drainage ditches, which shall not be obstructed except as approved by the Engineer.

PART 12 ACCIDENTS

- 12.01 The Contractor shall provide, at each site, such equipment and medical facilities as are necessary to supply first-aid service to anyone who may be injured in connection with the work.
- 12.02 The Contractor must promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work; which caused death, personal injury, or property damages, giving full details and statements of witnesses. If death, serious injuries, or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the Engineer and the Owner.

PART 13 ASSIGNMENT OF CONTRACT

- 13.01 The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of their right, title or interest therein, or their obligation there under, without written consent of the Owner.

PART 14 SUBCONTRACTS

- 14.01 The Contractor shall submit, in writing to the Owner for approval of the Engineer, the names of any Subcontractors proposed for the work with their Bid. Subcontractors may not be changed except at the request or with the approval of the Engineer.
- 14.02 The Contractor shall remain responsible to the Owner for the acts and omissions of their Subcontractors. The Contract Documents shall not be construed as creating any contractual relation between any Subcontractor and the Owner. The Contractor shall bind every Subcontractor by the terms of the Contract Documents.



PART 15 RIGHTS OF VARIOUS INTERESTS

15.01 Wherever work being done by the Owner's employees or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Engineer, to secure the completion of the various portions of the work in general harmony.

PART 16 CONTRACTOR'S RESPONSIBILITY

16.01 The Contractor shall execute the work and provide all labor, materials, and equipment needed for the conduct of the work in strict conformance with the Contract Documents. The Contractor shall provide sufficient management, administration, supervision, and safety and quality controls to assure the safety, quality, completeness, and timely progress of the work. The Contractor is cautioned to provide its own personnel to provide the above functions and not the personnel of its Subcontractors. The Prime Contractor is limited to two tiers of Subcontractors below its company.

16.02 The Contractor shall have the financial ability to fund the project and pay Subcontractors and suppliers on a timely basis until such time that the Contractor receives payment from the Owner.

16.03 The Contractor shall have charge of and be responsible for the work under this Contract until the completion, and any imperfect or unfaithful work which may be discovered any time before the final acceptance of work embraced in this Contract shall be corrected immediately upon request of the Owner or Engineer.

16.04 The Contractor shall provide and pay for all materials, labor, mechanics for labor, tools, equipment, equipment rental, water, light, power, transportation, superintendents, temporary construction of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time. The Contractor shall provide all labor and materials to fully operate and maintain all equipment required to execute, complete, and deliver the work within the specified time.

16.05 The Contractor shall maintain a work force on site each workday, except during inclement weather, during the Contract period until the project is completed. Any work days not worked will be taken into account on any Request for Extension of Time for Completion and/or assessment of liquidated damages.

16.06 The Contractor shall proceed at a rate that will result in completing the work in a timely manner. Not providing stable crew counts after mobilization can be grounds for default.

16.07 The Contractor shall not move from one site to another site without prior approval from the Engineer.

16.08 The Contractor shall work during daylight hours, for a maximum of 12 hours per day, Monday through Saturday or as directed by the Engineer in coordination with the Owner.

16.09 The Contractor shall only conduct debris removal, transportation, and disposal activities from 7:00 a.m. to 5:30 p.m. on Monday thru Saturday, as these are the hours which the City of Minot's landfill operates. Any and all trucks shall be at the landfill by 5:00 PM for waste disposal. No trucks will be permitted after 5:00 PM. The contractor and any subcontractors shall be licensed waste haulers with the North Dakota Department of Health.

16.10 The Contractor shall provide a qualified superintendent for each work site during the execution of the work at that site. The superintendent will be acceptable to the Engineer, and shall be maintained



on the work and give efficient supervision to the work until its completion. The superintendent shall have full authority to act on behalf of the Contractor, and all directions given to the superintendent shall be considered given to the Contractor. The superintendent shall be responsible for implementing the Contractor's Safety Plan. The Contractor shall remove from the project any superintendent unsatisfactory to the Engineer.

- 16.11 The Contractor shall submit an organization chart within five days of receipt of Notice of Award. The Organization Chart shall illustrate the Contractor's organization with names, roles, and responsibilities.
- 16.12 The Contractor shall, when requested by the Engineer, dismiss any foreman or workman employed by the Contractor, who in the opinion of the Engineer, does not perform their work in a skillful manner, or appears to be incompetent or incorrigible, and such persons shall not again be permitted to return to the work without the written consent of the Engineer.
- 16.13 The Contractor shall not solicit work from private citizens or others to be performed in the designated work area during the period of this contract
- 16.14 The Contractor is solely responsible for compliance with all local, state, and federal regulations regarding health and safety, including, but not limited to: OSHA, NDDH, EPA, NDDOT, SHPO and other applicable requirements.
- 16.15 Home Sweet Home (103 4th Avenue NW) is historic property 32WD507, and is a distinct example of a Queen Anne Style house. It was recommended as individually eligible for listing in the National Register of Historic Places in 1985. In accordance with SHPO requirements, the subject property (inclusive of the main structure, addition and accessory building) is to be moved to a suitable and appropriate location, and all exterior features of the subject property (inclusive of the main structure, addition and accessory building) shall be maintained or replaced in kind.
- 16.16 The Contractor will conduct the work so as not to interfere with other disaster response and recovery activities of federal, state, and local governments or agencies or any public utilities.
- 16.17 The Contractor shall notify the Engineer by 4:00 p.m. each day of the number of crews that will be working the following day for the purpose of scheduling Owner personnel assigned to Contractor's crews.
- 16.18 The Contractor shall plan the work to minimize the impact on the neighborhood.
- 16.19 The Contractor shall confine all operations, including storage of equipment and materials, to areas approved by the Owner. Any land and access thereto that may be required for temporary facilities or for storage of equipment and/or materials shall be provided by the Contractor with no liability to the Owner.
- 16.20 The Contractor shall, at their own expense, protect by falsework, braces, shoring or other effective means, all buildings, walls, fences, and other property along their line of work or



affected directly by their work, against all damage and shall repair or repay the injured owners for such damage.

- 16.21 The Contractor shall exercise due care to minimize any damages to trees and general property. Any damage to private or public property shall be repaired at the Contractor's expense.
- 16.22 The Contractor shall repair any damage caused by the Contractor in a timely manner. All damage repairs shall be made to the satisfaction of the Engineer. All repairs to public property shall be made in accordance with the Owner's standards. If the Owner's standard does not exist, Engineer will establish, with the Owner, standards for repairs.
- 16.23 The Contractor shall respond to damage claims within three (3) days upon receipt of same and shall settle valid claims within 10 days. Owner shall have final authority over damage assessment and dispute resolution. Payment to the Contractor may be withheld if repairs are not made within 10 days of notification of property damage.
- 16.24 The Contractor must keep all streets, alleys, and sidewalks as free from material and debris as the character of the Work will permit. The Contractor shall remove from the streets, by sweeping or other method, all dirt, mud, nails, glass and debris resulting from its operations.
- 16.25 The Contractor shall remove and replace existing signs of any type that interfere with the work at no cost to the Owner, unless otherwise noted.
- 16.26 The Contractor shall be responsible for control of pedestrian and vehicular traffic in the work area. The Contractor shall prepare and submit a Traffic Control Plan to the Engineer at least three (3) days prior to commencement of the work. The City of Minot Traffic Division may be available to the Contractor to determine signing requirements. However, any assistance provided by the Traffic Division shall in no way relieve the Contractor of their responsibility to provide proper traffic control pursuant to the Manual on Uniform Traffic Control Devices, part VI, US Department of Transportation, Federal Highway Administration, 2009, as revised or as adopted.
- 16.27 The Contractor shall provide for all required traffic control devices. All equipment and devices must be in place before any work commences in the area affected by the Traffic Control Plan.
- 16.28 Upon termination or completion of this Contract, the Contractor shall vacate and remove, or cause to be vacated or removed, all property belonging to Contractor, any Subcontractor, agent or employee. The Owner will deem any property not removed as abandoned and any cost incurred by the Owner in disposal of same shall be withheld from any payment due.

PART 17 ENGINEER'S RESPONSIBILITY AND AUTHORITY

- 17.01 The Engineer will require, on the Owner's behalf, that the work be performed by the Contractor in accordance with the Contract Documents.
- 17.02 The Engineer shall also have authority, on behalf of the Owner, to require the proper prosecution of the work to the extent that the forces of labor may be increased or decreased by his order to insure the execution of the Contract in the time and manner prescribed.
- 17.03 The Engineer shall, within a reasonable time after presentation, make decisions in writing on any claims between the Contractor and Owner. The Engineer's decisions shall be regarded as final.

PART 18 MONITORING AND INSPECTION OF WORK



- 18.01 During the progress of the work, it shall be subject to the monitoring and inspection of the Engineer, and the Contractor shall afford every reasonable facility and assistance to the Engineer to make such inspection thorough and intelligent.
- 18.02 The fact that the Engineer, or the Engineer's representative(s) are at the work site shall not be taken as an acceptance of the Contractor's work or any part of it. The Contractor shall notify the Engineer upon completion of their work and the work shall be given final inspection and test by the Engineer. If the work is acceptable and complies with the intent of the Contract Documents, the Engineer will recommend that the Owner accept the work.

PART 19 CONFORMITY WITH CONTRACT DOCUMENTS

- 19.01 Any defective work whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause shall be removed within ten (10) days after written notice is given by the Engineer, and the work shall be re-executed by the Contractor. The fact that the Engineer may have previously overlooked such defective work shall not constitute an acceptance of any part of it.
- 19.02 In the event the Engineer finds the work performed not in conformity with the Contract Documents, but that the portion of the work affected will, in his opinion, result in the work having a level of safety, economy, durability, conformance with applicable laws, ordinances, rules and regulations, and workmanship acceptable to the Owner, he will advise the Owner of his determination that the affected work be accepted and remain in place. In this event, the Engineer will document his determination and recommend to the Owner a basis of acceptance which will provide for an adjustment in the contract price for the affected portion of the work. The Engineer's determination and recommended contract price adjustments will be based on good engineering judgment and such tests or retests of the affected work as are, in his opinion, needed.
- 19.03 The acceptance by the Owner of the Engineer's recommendation with respect to the adjustment in the Contract price shall constitute final determination of said adjustment. Thereafter, the changes in contract price shall be covered by contract modifications (change order or supplemental agreement) as applicable.

PART 20 SUSPENSION OF WORK

- 20.01 The Engineer shall have the authority to suspend the work, wholly or in part, for such period or periods, as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for prosecution of work, or failure on the part of the Contractor to carry out the provisions of the Contract Documents. The Contractor shall not suspend operation without the Engineer's permission.

PART 21 OWNER'S RIGHT TO CORRECT DEFICIENCIES

- 21.01 If the Contractor neglects to prosecute the work properly or fails to perform any provision of this Contract, the Owner may, after three (3) days written notice to the Contractor without prejudice to any other remedy he may have, correct such deficiencies and deduct the cost thereof from the payment then or thereafter due the Contractor.

PART 22 TERMINATION OF CONTRACT

- 22.01 The Owner reserves the right to terminate the Contract without cause at any time.



22.02 In the event of default by the Contractor, the Owner shall have the right to terminate the employment of the Contractor after giving seven (7) days written notice of termination to the Contractor in the event of any default by the Contractor and upon receiving written notice from the Engineer certifying cause for such action.

22.03 In the event of such termination, the Owner may take possession of the work and of all materials, tools, and equipment thereon and may finish the work by whatever method and means he may select.

22.04 In such a case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner.

22.05 It shall be considered default by the Contractor whenever they shall:

- Undergo voluntary or involuntary bankruptcy, become insolvent, or assign his assets for the benefit of his creditor.
- Disregard or violate important provisions of the Contract Documents or Engineer's instructions, or fail to prosecute the work according to the agreed schedule of completion, including extensions thereof.
- Fail to provide qualified superintendents, competent workmen or subcontractors, or proper materials, or fail to make prompt payment therefore.

22.06 At the termination of this Contract, or in the case of annulment of the Contract before completion, the Contractor, if notified to do so by the Owner, shall promptly remove any part or all of their equipment and supplies from the property of the Owner. Should the Contractor fail to remove such equipment and supplies, the Owner shall have the right to remove them at the Contractor's expense.

PART 23 CHANGES IN THE WORK

23.01 The Owner may, as the need arises, order changes in the work through additions, deletions, or modifications without invalidating the Contract.

23.02 Compensation and time of completion affected by the changes shall be adjusted at the time of ordering such changes.

23.03 For any Extra Work required, the Engineer and the Contractor shall negotiate a price by written change order.

- The written change order shall be prepared by the Engineer. If the price negotiated and agreed upon exceeds \$10,000 or 10% of the original contract amount, whichever is greater, the change order must be approved by the City Engineer and the City Manager.
- No Extra Work covered by any change order shall be done by the Contractor without a valid change order. However, the Contractor may be allowed to proceed with Extra Work without formal change order approval if, in the opinion of the Engineer, the immediate commencement of the



Extra Work will relieve a situation of hazard, or substantial inconvenience to the public. A change order shall be prepared thereafter.

- C. The Owner has the right to audit the Contractor's record with respect to Extra Work done by change order.

PART 24 DEDUCTION FOR UNCORRECTED WORK

- 24.01 If the Engineer deems it inexpedient to correct work not in accordance with the Contract Documents, and equitable deduction from the contract price shall be made thereof.

PART 25 EXTENSION OF CONTRACT TIME

- 25.01 A delay beyond the Contractor's control occasioned by an Act of God, or Act or omission on the part of the Owner or by strikes, lockouts, fire, etc., may entitle the Contractor to an extension of time in which to complete the work as determined by the Engineer; provided, however, that the Contractor shall give written notice to the Engineer within 24 hours of the cause of such delay.

- 25.02 The granting of any extension of contract time shall not be the basis for any claim for extra costs incurred by the Contractor.

PART 26 LIQUIDATED DAMAGES

- 26.01 This Contract shall be subject to liquidated damages charged against the contractor for each day past the completion date stated in the Contract or as amended by change order. Liquidated damages will be in the amount of \$1,000.00 per calendar day, if structure has not been moved off the site by June 1, 2018; and if the structure has not been completely relocated to its new location by July 1, 2018.

PART 27 FINAL ACCEPTANCE OF THE WORK

- 27.01 The Contractor, Engineer, and the Owner's representative shall perform a project walkthrough before any work is considered final and ready for acceptance by the Owner.
- 27.02 Deficiencies in work will be documented by the Engineer or Owner. Once the deficiencies are corrected, the Contractor will notify the Engineer and a final project walkthrough with the Contractor, Engineer, and Owner's representative will be performed. If no other issues are found, the Work shall be considered final.

PART 28 RELEASE OF LIENS

- 28.01 The Contractor shall deliver to the Owner a complete release of all liens arising out of this Contract before invoice is paid. If any lien remains unsatisfied after final payment is made, the Contractor shall refund to the Owner such amounts as the Owner may have been compelled to pay in discharging such liens including all costs and a reasonable attorney's fee.

PART 29 PAYMENTS

- 29.01 Invoice for payment shall be made with load tickets, certifications and all back up documentation attached. All load tickets must be legible. If the load ticket is illegible, the ticket will be disqualified for payment.



29.02 Contractor shall pay all subcontractors in a timely manner. Contractor shall submit with the invoice for payment, copies of lien waivers attesting that all subcontractors have been paid for work performed and accepted.

PART 30 GUARANTEE

30.01 The Contractor guarantees all work constructed under the Contract for a period of two (2) years from the date of final acceptance against defects in workmanship. The Contractor shall bear the entire cost and expense of all repairs which may, from any imperfection in work become necessary within that time.

30.02 If at any time within the period of guarantee, any of the work included in the guarantee shall, in the judgment of the Engineer, require any repair or reconstruction, he shall notify the Contractor to make the repairs required. Upon receipt of the notice, the Contractor shall proceed with such repairs and shall complete the same within a reasonable time.

30.03 If the Contractor shall neglect or fail to proceed with the repairs within twenty (20) days or if, in the opinion of the Engineer, the repairs do not admit of sufficient delay to issue said notice and to await the action of the Contractor, then the Owner shall have the right to cause such repairs to be made and the cost shall be paid by the Contractor. The liability of the bond given to secure the faithful performance of the Contract shall continue during the full guarantee period.

30.04 At the expiration of the guarantee period, the Contractor and their surety shall be released from further obligation under this Contract, providing the Engineer will certify to the Owner that the work performed under this Contract is in good and proper condition at the time.

END OF SECTION



SECTION 00 73 00

SUPPLEMENTARY GENERAL CONDITIONS

PART 1 RULES AND REGULATIONS SPECIFIC TO CDBG FUNDED PROJECTS

1.01 **CDBG Compliance Provisions** – The Agreement to relocate the Home Sweet Home structure will be subject to the following liens, rules, and regulations, as the same may be amended from time to time.

- A. **Provisions Required by Law Deemed Inserted** – Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract shall forthwith be physically amended to make such insertion or correction.
- B. **Flood Disaster Protection** – This is subject to the requirements of the Flood Disaster Protection Act of 1973 (P.L. 93-234). Nothing included as a part of this Contract is approved for acquisition or construction purposes as defined under Section 3(a) of said Act, for use in an area identified by the Secretary of HUD as having special flood hazards which is located in a community not then in compliance with the requirements for participation in the National Flood Insurance Program pursuant to Section 201 (d) of said Act; and the use of any assistance provided under this Contract for such acquisition for construction in such identified areas in communities then participating in the National Flood Insurance Program shall be subject to the mandatory purchase of flood insurance requirements or Section 102(a) of said Act.

Any contract or agreement for the sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under this Contract shall contain, if such land is located in an area identified by the Secretary as having special flood hazards and in which the sale of flood insurance has been made available under the National Flood Insurance Act of 1968, as amended, 42 U.S.C 4001 et seq., provisions obligating the transferee and its successors or assigns to obtain and maintain, during the ownership of such land, such flood insurance as required with respect to financial assistance for acquisition or construction purposes under Section 102(a) of Flood Disaster Protection Act of 1973.

- C. **Section 503 of the Rehabilitation Act of 1973 (29 USC 793)** – Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is otherwise qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

In the event of Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.



Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the City of Minot, provided by or through the Program Administrator. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

Contractor will include the provisions of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each Subcontractor or vendor. Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

- D. Age Discrimination Act of 1975 – Contractor shall comply with the provisions of the Age Discrimination Act of 1975. No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving federal financial assistance.
- E. Discrimination Due to Beliefs – No person with responsibilities in operation of the project to which this grant relates will discriminate with respect to any program participant or any applicant for participation in such program because of political affiliation or beliefs.
- F. Certification of Non-Segregated Facilities – By the submission of this Proposal, the Contractor certifies that it does not maintain or provide for its establishments, and that it does not permit employees to perform their services at any location, under its control, where segregated facilities are maintained. Contractor certifies further that it will not maintain or provide for employees any segregated facilities at any of its establishments, and it will not permit employees to perform their services at any location under its control where segregated facilities are maintained. Contractor agrees that a breach of this certification is a violation of the equal opportunity clause of this Contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, 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 customs or any other reason.

Contractor further agrees that (except where he has obtained identical certifications from proposed Subcontractors and material Suppliers for specific time periods), he will obtain identical certifications from proposed Subcontractors or material Suppliers prior to the award of subcontracts or the consummation of material supply agreements exceeding \$10,000, which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certification in his files.

- G. Housing and Urban Development Section 3 Workforce and Business Concerns – The work to be performed under this Contract is on a project assisted basis under a program providing direct



Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that, to the greatest extent feasible, opportunities for training and employment be given to lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.

The parties to this Contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR, Part 135, and all applicable rules and orders of this Contract. The parties to this Contract certify and agree that they are under no contractual or other disability, which would prevent them from complying with these requirements. A Contractor/Subcontractor Section 3 Plan format is attached (Attachment IX-N) and must be completed for all contracts and subcontracts expected to exceed \$100,000.

The Contractor will send to each labor organization or representative of workers with which he has a collective bargain-agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

A Section 3 Business:

1. Is at least 51 percent or more owned by Section 3 residents; or,
2. Whose permanent, full-time employees include persons, at least 30 percent of whom are currently Section 3 residents, or within three (3) years of the date of first employment with the business concern were Section 3 residents; or,
3. That provides evidence of a commitment to subcontract in excess of 25 percent of the dollar award of all subcontracts to be awarded to a Section 3 business concern.

Section 3 Residents are:

1. Public housing residents; or,
2. Low and very-low income persons who live in the metropolitan area or Non-Metropolitan County where a HUD-assisted project for housing or community development is located.

H. Drug Free Workplace – Contractor hereby certifies that it shall provide a drug-free workplace in compliance with the Drug-Free Workplace Act of 1988, as amended, and with 24 CFR Part 21.

I. Protection of Lives and Health – 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 worksite, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes, in addition to specific safety and health regulations described by Chapter XIII, Bureau of Labor Standards, Department of Labor, Part 1518) Safety and Health Regulations for Construction, as outlined in the Federal Register, Volume 36, No. 75, Saturday, April 7, 1971, Title 29 – LABOR, shall be observed and Contractor shall take or cause to be taken, such additional safety and health measures as the City may determine to be reasonably necessary.



- J. Danger Signals and Safety Devices – Contractor shall make all necessary precautions to guard against damages to property and injury to persons. He shall put up and maintain in good condition, sufficient red or warning lights at night, suitable barricades and other devices necessary to protect the public. In case Contractor fails or neglects to take such precautions, the City may have such lights and barricades installed and charge the cost of this work to the Contractor. Such action by the City does not relieve the Contractor of any liability incurred under these specifications or contract.
- K. Lead Based Paint Hazards – The reconstruction and rehabilitation of residential structures is subject to the HUD Lead-Based Paint regulations, 24 CFR Part 35. The Contractor and its Subcontractors shall comply with the provisions for the elimination and reduction of lead-based paint hazards under Subpart B of said regulations.
- L. Asbestos – Contractor shall be aware of the asbestos containing materials (ACM) that may be present in the structure and will be responsible to take appropriate measure to insure worker safety and adhere to any state, local, or federal requirements.
- M. Use of Explosives – When the use of explosives is necessary for the prosecution of the work, Contractor shall observe all local, state and federal laws in purchasing and handling explosives. Contractor shall take all necessary precaution to protect completed work, neighboring property, water lines, or other underground structures. Where there is danger to structures or property from blasting, the charges shall be reduced and the material shall be covered with suitable timber, steel or rope mats.

Contractor shall notify all owners of public utility property of intention to use explosives at least 8 hours before blasting is done close to such property. Any supervision or direction of use of explosives by the City or Program Administrator or their delegates does not in any way reduce the responsibility of Contractor or his Surety for damages that may be caused by such use.

- N. Compliance with Air and Water Acts – Contractor and all of its Subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended.

In addition to the foregoing requirements, all nonexempt Contractors and Subcontractors shall furnish to the City, the following:

1. A stipulation by Contractor or its Subcontractors, that any facility to be utilized in the performance of any nonexempt contract or subcontract, is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR Part 15, as amended.
2. Agreement by Contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857 c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.
3. A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the Contract, is under consideration to be listed on the EPA List of Violating Facilities.



4. Agreement by Contractor that he will include, or cause to be included, the criteria and requirements in paragraph (1) through (4) of this section in every nonexempt subcontract and requiring that the Contractor will take such action as the government may direct as a means of enforcing such provisions.
- O. Energy Efficiency – Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).
- P. Access to Records, Maintenance of Records – The City of Minot and the Department of Housing and Urban Development, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers and records of the Contractor which are directly pertinent to this Contract, for the purpose of audits, examinations, and making excerpts and transcriptions.

All records required by 24 CFR 570.506 that are pertinent to the activities funded under this Contract shall be maintained in a central location by Contractor and will be maintained for a period of five (5) years from closeout of the grant from which this Contract is funded.

- Q. Copyright – No materials, to include but not limited to reports, maps, or documents produced as a result of this Contract, in whole or in part, shall be available to the Contractor for copyright purposes. Any such materials produced as a result of this Contract that might be subject to copyright shall be the property of the City and all such rights shall belong to the City.
- R. Confidential Findings – All of the reports, information, data, etc., prepared or assembled by the Contractor under this Contract are confidential, and the Contractor agrees that they shall not be made available to any individual or organization without prior written approval of the City.
- S. Conflict of Interest – No member, officer, or employee of the City or the local jurisdiction of this Contract, or agent, consultant, or member of the governing body of the City or the local jurisdiction of this Contract, or other public official who exercises or has exercised any functions or responsibilities with respect to this Contract during his or her tenure, or for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the Contract or in any activity or benefit with regard to the Contract.

Contractor shall cause to be incorporated in all contracts and/or subcontracts the foregoing provision regarding conflicts of interest.

No member of or delegate to Congress, or City employee, shall be admitted to any share or part of this Contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation.

If a person receiving assistance under this Program does in fact have a conflict of interest as discussed herein, such conflict will be fully disclosed in writing to the City and addressed under applicable law.

Pursuant to the City of Minot's Conflict of Interest Policy and the Department of Housing and Urban Development (HUD) regulations, any individual or entity seeking CDBG funds for any activity in which they or related individuals or organizations have an interest must disclose that interest when applying for CDBG funding. Once the conflict of interest has been disclosed, HUD is authorized to determine whether an exception may be granted. 24 CFR 570.489 (h) (5).



Additionally, once the conflict of interest has been disclosed, the individual must recuse themselves from any municipal governmental actions or decisions to be taken that would further that individual's interest, or interest of related individuals or organizations, in gaining benefit from the CDBG funds.

- T. Interest of Contractor – Contractor covenants that he presently has no interest and shall not acquire any interest direct or indirect in the above described project or any parcels therein or any other interest which would conflict in any manner or degree with the performance or services hereunder. Contractor further covenants that in the performance of this Contract no person having any such interest shall be employed.
- U. Political Activity – Contractor will comply with the provisions of the Hatch Act (5 U.S.C. 1501 et seq.), which limits the political activity of employees.
- V. Lobbying – Contractor certified, to the best of its knowledge and belief that:
 - 1. No federally appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
 - 2. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
- W. Personnel – Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the City.

All the services required hereunder will be performed by the Contractor or under its supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under State and local law to perform such services.

No person who is serving sentence in a penal or correctional institution shall be employed on work under this Contract.

- X. Hiring of Illegal Aliens – The hiring of illegal aliens is prohibited under Federal Labor Laws.
- Y. Anti-Kickback Rules – Salaries of personnel performing work under this Contract shall be paid unconditionally and not less often than once a month without payroll deduction or rebate on any account except only such payroll deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the “Anti-Kickback Act” of June 13, 1934 (48 Stat. 948; 62 Stat. 740; 63 Stat. 108; Title 18 U.S.C. 874; and Title 40 U.S.C. 2760). Contractor shall comply with all applicable “Anti-Kickback” regulations and shall insert appropriate provisions in all subcontracts covering work under this Contract to insure compliance by the Subcontractors with such regulations, and shall be responsible for the submission of



affidavits required of Subcontractors thereunder except as the Secretary of Labor may specifically provide for variations of or exemptions from the requirements thereof.

Z. **Patents** – Contractor shall hold and save the City and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost 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 Contract.

License or Royalty Fees: License and/or Royalty Fees for the use of a process which is authorized by the City must be reasonable, and paid to the holder of the patent, or his authorized license, direct by the City and not by or through the Contractor.

If Contractor uses any design, device or materials covered by letters, patent or copyright, it shall provide for such use by suitable agreement with the owner of such patented or copyrighted design, device or material. It is mutually agreed and understood that, without exception, the Contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the Work. Contractor and/or his Sureties shall indemnify and save harmless the City from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this Contract, and shall indemnify the City for any cost, expense, or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

AA. **Debarment, Suspension, and Ineligibility** – Contractor represents and warrants that it and its Subcontractors are not debarred, suspended, or placed in ineligibility status under the provisions of 24 CFR 24 (government debarment and suspension regulations).

BB. **Subcontracts:** Contractor shall not enter into any subcontract with any Subcontractor who has been debarred, suspended, declared ineligible, or voluntarily excluded from participating in contacting programs by any agency of the United States Government or the State of North Dakota.

Contractor shall be as fully responsible to the City for the acts and omissions of the Contractor's Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by the Contractor.

Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind Subcontractor to the Contractor by the terms of the Contract Documents insofar as applicable to the work of Subcontractors and to give the Contractor the same power as regards terminating any subcontract that the City may exercise over the Contractor under any provision of the Contract Documents.

Nothing contained in this Contract shall create any contractual relation between any Subcontractor and the City.

CC. **Assignability** – Contractor shall not assign any interest in this Contract, and shall not transfer any interest in the same (whether by assignment or novation) without prior written approval of the City provided that claims for money due or to become due the Contractor from the City under this Contract may be assigned to a bank, trust company, or other financial institution, or to a Trustee in Bankruptcy, without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.



DD. Termination for Unavailable Funding – The continuation of this Contract is contingent upon the appropriation and release of sufficient funds to the City of Minot to fulfill the requirements of this Contract. Failure of the appropriate authorities to approve and provide an adequate budget to the City of Minot for fulfillment of the Contract terms shall constitute reason for termination of the Contract by either Party. Contractor shall be paid for all authorized services properly performed prior to termination.

EE. Breach of Contract Terms – Any violation or breach of any of the terms of this Contract on the part of Contractor or the Contractor's Subcontractors may result in the suspension or termination of this Contract or such other action that may be necessary to enforce the rights of the parties of this Contract. The duties and obligations imposed by the contract documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

FF. Compliance with sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-330) as supplemented by Department of Labor regulations at 29 CFR part 5 (construction contracts awarded by Recipients and subrecipients in excess of \$2,000, and in excess of \$2,500 for other contracts which involve the employment of mechanics or laborers).

GG. Compliance with Federal Labor Standards Provisions (Attachment III-C)

PART 2 FORMS USED DURING CONSTRUCTION

2.01 Forms Used During Construction – This Contract will require the Contractor to complete various forms during construction. Samples of those forms follow this section. These forms should be considered as samples as they may be modified somewhat for use under the Agreement. These may not be the only forms required for work for this Project and it will be the Contractor's responsibility to complete any additional paperwork required under the Program at no additional cost.

ATTACHMENT II - SAMPLE CONTRACTOR FORMS USED DURING CONSTRUCTION

Attachment II-A	Payment Bond Form
Attachment II-B	Performance Bond Form
Attachment II-C	Final Lien Waiver Affidavit by Contractor
Attachment II-D	Final Lien Waiver Affidavit by Subcontractor
Attachment II-E	HUD Section 3 Plan – Table A
Attachment II-F	HUD Section 3 Plan – Table B

PART 3 REGULATIONS AND REPORTS

3.01 NDDH Regulations – It is the Contractors' responsibility to know and follow all Local, State, and Federal laws and regulations pertaining to this project. An example of one of the many regulatory



requirements the Contractor must know and adhere to throughout the duration of this project to be in full regulatory and contractual compliance is presented as Attachment III-A.

3.02 **Highlighted Regulations and Reports:**

Attachment III-A	Asbestos Regulations Pertaining to Demolition and Renovation Projects of Facilities
Attachment III-B	Home Sweet Home Asbestos Report dated March 2, 2018
Attachment III-C	Federal Labor Standards Provisions
Attachment III-D	Report of Geotechnical Exploration for Proposed Home Sweet Home Relocation dated March 29, 2018



ATTACHMENT II-A

PAYMENT BOND

THE STATE OF NORTH DAKOTA
SURETY'S NO.

KNOWN BY ALL MEN PRESENT, THAT _____ of the
City of _____, County of _____, and State of
_____, as Principal, and _____, as
Surety, are held and firmly bound unto the City of Minot, North Dakota, a home rule municipal corporation
of Ward County, North Dakota, as Obligee, in the amount of:

_____ (written amount);
(\$_____), DOLLARS for payment whereof the said Principal and Surety bind
themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly
by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of
_____, 2018 for:

1. _____
2. _____
3. _____
4. _____

Which Contract is hereby referred to and made part hereof as fully and to the same extent as if copied at
length herein.

NOW, THEREFORE, the condition of the obligation is that if the Principal shall pay all claimants supplying
labor and material to Principal or a subcontractor in the prosecution of the work provided for in said contract,
then this obligation shall be null and void; otherwise, it is to remain in full force and effect.

PROVIDED, further that if any legal action is filed upon this Bond, venue shall lie in Ward County, State of
North Dakota.

SURETY, for value received, stipulated and agrees that no change, extension of time, alteration or addition
to the terms of the contract, or to the work performed thereunder, or the plans, specifications, or drawings
accompanying the same, or any assignment of the contract as may be provided for in the Contract
Documents, shall in any way affect its obligation on this Bond and does waive notice of any such change,
extension of time, alteration or additions to the terms of the Contract, assignment thereof, or the work
performed thereunder.



IN WITNESS THEREOF, the Principal and Surety does sign and seal this instrument.

This ____ day of _____, 2018

Principal

Surety

By _____

By _____

Address _____

Address _____

APPROVED AS TO FORM:

NOTE: Attach Power of Attorney



ATTACHMENT II-B

PERFORMANCE BOND

THE STATE OF NORTH DAKOTA
SURETY'S NO.

KNOWN BY ALL MEN PRESENT, THAT _____ as Principal and _____ as Surety, are held and firmly bound unto the City of Minot, North Dakota, a home rule municipal corporation of Ward County, North Dakota, as Obligee, in the amount of:

_____ (written amount);
(\$ _____), DOLLARS for payment whereof the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a Bid to enter a certain written contract with the Obligee for:

Specifically included in the scope of this work and bond, the additional maintenance guaranty provisions set forth in the Contract Documents, which Contract is referred to and made a part hereof as fully and to the same extent as if copied at length herein, as well as the Principal's primary obligation to perform according to plans and specifications.

NOW THEREFORE THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall faithfully perform the work in accordance with the plans, specifications, instructions to bidders, general and special conditions, and other contract documents including any addenda, then this performance bond shall be void; otherwise, this performance remain in full force and effect.

PROVIDED, further that if any legal action to be filed upon the Bond, venue shall lie in Ward County, State of North Dakota.

SURETY, for value received, stipulated and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, or any assignment of the contract as may be provided for in the Contract Documents, shall in any way affect its obligation on this Bond and does waive notice of any such change, extension of time, alteration or additions to the terms of the contract, assignment thereof, or the work performed.



IN WITNESS THEREOF, the Principal and Surety does sign and seal this instrument.

This ____ day of _____, 2018

Principal

Surety

By _____

By _____

Address _____

Address _____

APPROVED AS TO FORM:

NOTE: Attach Power of Attorney



ATTACHMENT II-C

FINAL LIEN WAIVER AFFIDAVIT BY CONTRACTOR

_____ has furnished or will furnish certain labor, materials, or equipment on the _____ Project at [fill in address] _____ (the "Project"). In consideration of the sum total of payments to date and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned waives and releases any right which it now has or in the future may have to claim a mechanic's lien or any other lien rights, and waives and releases all other claims of any kind (whether billed or unbilled), against: (a) the real property where the Project is located; (b) the improvements and other property located thereon; (c) the Owner and its title company and lender and their employees, officers, and agents; and, (d) the surety or sureties of the Owner.

In order to induce payment to be made to the undersigned, the undersigned certifies that it has paid all of its subcontractors, suppliers, and employees for all items connected with the above-referenced Project.

The undersigned has executed this waiver voluntarily and with full knowledge of the undersigned's rights under law.

EXECUTED this _____ day of _____, 2018.

Name of Contractor Company: _____

By Authorized Representative: _____

Printed Name: _____

Title: _____

Notary's Acknowledgement

Before me, the undersigned, on this day personally appeared _____, who first being duly sworn by me to be the person whose name is subscribed to the foregoing Lien Waiver Affidavit, acknowledged that he/she has the authority to make this Lien Waiver Affidavit, and further acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this _____ day of _____, 2018.

(Seal)

Notary Public, State of North Dakota

My commission expires _____



ATTACHMENT II-D

FINAL LIEN WAIVER AFFIDAVIT BY SUBCONTRACTOR

_____ has furnished or will furnish certain labor, materials, or equipment on the _____ Project at [fill in address] _____ (the "Project"). In consideration of \$ _____ representing the sum total of payments to date and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned waives and releases any right which it now has or in the future may have to claim a mechanic's lien or any other lien rights, and waives and releases all other claims of any kind against: (a) the real property where the Project is located; (b) the improvements and other property located thereon; (c) the Owner and its title company and lender and their employees, officers, and agents; and, (d) the surety or sureties of the Owner.

In order to induce payment to be made to the undersigned, the undersigned certifies that it has paid all of its subcontractors, suppliers, and employees for all items connected with the above-referenced Project. The undersigned will indemnify the Owner and its lender and title company and the Contractor for all costs and expenses, including attorney's fees, incurred as a result of claims that any of the undersigned's subcontractors, suppliers, or employees have not been paid or relating to the enforcement of this paragraph.

The undersigned has executed this waiver voluntarily and with full knowledge of the undersigned's rights under law.

EXECUTED this _____ day of _____, 2018.

Name of Subcontractor Company: _____

By Authorized Representative: _____

Printed Name: _____

Title: _____

Notary's Acknowledgement

Before me, the undersigned, on this day personally appeared _____, who first being duly sworn by me to be the person whose name is subscribed to the foregoing Lien Waiver Affidavit, acknowledged that he/she has the authority to make this Lien Waiver Affidavit, and further acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this _____ day of _____, 2018.

(Seal)

Notary Public, State of North Dakota

My commission expires _____



City of Minot

ATTACHMENT II-E
CONTRACTOR'S HUD SECTION 3 PLAN
TABLE A (if required)
PROPOSED SUBCONTRACTS BREAKDOWN

For the period covering _____, 2018 through _____, 2018.
(Duration of the CDBG-DR-Assisted Project)

Company

Project Name

EEO Officer (Signature)

Date



City of Minot

**ATTACHMENT II-F
CONTRACTOR'S HUD SECTION 3 PLAN
TABLE B (if required)
ESTIMATED PROJECT WORKFORCE BREAKDOWN**

Company Name _____ Date _____

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Job Category	Total Estimated Positions	No. Positions Currently Occupied As Permanent Employees	No. Positions Not Currently Occupied	No. Positions To Be Filled w/LIPAR*
Officers/Supervisors				
Professionals				
Technicians				
Housing Sales/Rental/Mgmt.				
Office Clerical				
Service Workers				
Others				

TRADE

Journeymen				
Apprentices				
Maximum No. Trainees				
Others				

TRADE

Journeymen				
Apprentices				
Maximum No. Trainees				
Others				

*Lower Income Project Area Residents. Individuals residing within the City of Minot whose family income does not exceed 80% of the median income for Ward County, ND.



ATTACHMENT III-A
ASBESTOS REGULATIONS PERTAINING TO DEMOLITION AND
RENOVATION PROJECTS OF FACILITIES



ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov



MEMO TO : City and County Officials Responsible for Building Permits

FROM : Terry O'Clair, P.E.
Director
Air Quality Division *1/10*

RE : Asbestos Regulations Pertaining to Demolition and
Renovation Projects of Facilities

DATE : December 13, 2016

This memorandum is to inform you of the North Dakota Asbestos Control Rules which affect demolition and renovation projects of facilities and the handling and disposal of asbestos-containing materials. We are distributing this information to you and requesting that you make it available to the appropriate individuals in your community. We are requesting, in particular, that you make building owners and contractors aware of these requirements when they request permits for demolition and renovation projects.

Facility: Means any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units). Residential homes are usually exempt from the asbestos regulations unless a group of residences (more than one) under the same ownership are demolished or renovated as part of a larger project. These residences must then be treated as facilities.

General Requirements of the Asbestos Control Rules:

1. All affected parts of a facility being renovated or demolished must be inspected for the presence of asbestos-containing materials (ACM) prior to beginning a renovation or demolition project. The inspector must be certified with the North Dakota Department of Health (Department).
2. All regulated asbestos-containing material (RACM) that would be disturbed as part of a renovation or demolition must be properly removed before beginning the project. The individuals removing the material must be certified and the asbestos abatement contractor licensed with this Department. RACM includes all friable ACM and non-friable ACM that will be made friable during the project.

Environmental Health
Section Chief's Office
701.328.5150

Division of
Air Quality
701.328.5188

Division of
Municipal Facilities
701.328.5211

Division of
Waste Management
701.328.5166

Division of
Water Quality
701.328.5210

Printed on recycled paper.



Memo

2

December 13, 2016

3. Regulated asbestos-containing waste material must be properly disposed of in an approved landfill. A waste shipment record (WSR) must be started prior to transportation of asbestos-containing waste material. The WSR must be delivered to the landfill operator at the time the material is deposited for disposal. A copy of the completed WSR must then be submitted to this Department within ten (10) days of depositing the waste material. Asbestos-containing materials that are not considered RACM must also be disposed of at an approved landfill; a WSR is not required for non-regulated asbestos-containing materials.
4. A "Notification of Demolition and Renovation" form, SFN 17987 (copy enclosed), must be submitted in accordance with the following:
 - a. For a facility being **demolished**, a "Notification of Demolition and Renovation" form must be submitted to this Department ten (10) working days prior to beginning any demolition activity. This form is required even if asbestos is not present.
 - b. For a facility being **renovated**, where more than 160 square feet or more than 260 linear feet of RACM will be disturbed, a "Notification of Demolition and Renovation" must be submitted to the Department ten (10) working days prior to beginning the removal of the asbestos-containing materials.

Unsafe and/or Fire Damaged Buildings:

A facility that is unsafe to enter or has significant structural deterioration or fire damage may be demolished without completing an asbestos inspection or conducting asbestos abatement. A letter from an appropriate governmental representative describing the unsafe condition of the building needs to be submitted to the Department with the Notification of Demolition and Renovation. The facility would be assumed to contain asbestos and must be managed in accordance with the North Dakota Air Pollution Control Rules. The debris from a fire damaged or unsafe facility that has not been inspected must be deposited at an approved landfill as asbestos waste and accompanied by a WSR. The Department can offer assistance when dealing with a facility that has been fire damaged or is considered unsafe for entry.

The Department appreciates your cooperation in assisting individuals to comply with these requirements. The Department suggests copies of the enclosed brochure be given to anyone considering a renovation or demolition project. If you require assistance or copies of the brochure, please contact this Department at (701)328-5188. Forms and additional information may also be found at the Department's website at <http://www.ndhealth.gov/aq/iaq/asb/>.

TLO/JO:saj
Attach:



ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov



Asbestos - Steps to follow when you demolish or renovate a facility

A **Facility** means any institutional, commercial, public, industrial, or residential structure, installation, church or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units). Residential homes are usually exempt from the asbestos regulations unless a group of residences (more than one) under the same operator or owner are demolished or renovated as part of a larger project. These residences must then be treated as facilities.

Once you have determined that your structure meets the definition of a "facility", the following apply:

1. A North Dakota certified asbestos inspector must inspect all portions of the structure being affected by the demolition or renovation prior to beginning work.
 - a. Current list of certified asbestos inspectors
<http://www.ndhealth.gov/AQ/IQ/ASB/Contractors.pdf>
2. All regulated asbestos-containing material that will be disturbed must be removed before beginning the project.
3. All individuals and/or contractors removing more than three square feet or more than three lineal feet of regulated asbestos-containing material must be certified by the Department.
4. Renovation – A "Notice of Demolition and Renovation" must be filed with the Department 10 days prior to start of renovation if asbestos-containing material will be disturbed.
 - a. <http://www.ndhealth.gov/AQ/Forms/Asbestos/SFN17987.pdf>
 - b. The Department will provide a response letter to the individual submitting the notification indicating that the Notification has been approved.
5. Demolition – "Notice of Demolition and Renovation" must be filed with the department 10 days prior to the start of the demolition if asbestos-containing material is present or not.
 - a. <http://www.ndhealth.gov/AQ/Forms/Asbestos/SFN17987.pdf>
 - b. The Department will provide a response letter to the individual submitting the notification indicating that the Notification has been approved.
6. Disposal - All asbestos-containing waste material must be properly disposed of in an approved and permitted landfill. To find out if your local landfill is authorized to accept asbestos-containing waste, contact the local landfill operator or a list of approved landfills can be found at:
<https://www.ndhealth.gov/wm/Publications/ApprovedlandfillFacilitiesThatWillAcceptFriableAsbestosContainingMaterialsForDisposal.pdf>
7. For more information – 701-328-5188 or www.ndhealth.gov/aq/iaq/ash

Environmental Health
Section Chief's Office
701.328.5150

Division of
Air Quality
701.328.5188

Division of
Municipal Facilities
701.328.5211

Division of
Waste Management
701.328.5166

Division of
Water Quality
701.328.5210

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ASBESTOS NOTIFICATION OF DEMOLITION AND RENOVATION

North Dakota Department of Health
Division of Air Quality
SFN 17987 (12/16)

I. Type of Notification		THIS NOTICE MUST BE SUBMITTED 10 WORKING DAYS BEFORE BEGINNING THE ACTIVITY			
<input type="checkbox"/> Original <input type="checkbox"/> Revised <input type="checkbox"/> Cancelled		Date: _____			
II. Type of Operation		III. Is Asbestos Present?			
<input type="checkbox"/> Demolition <input type="checkbox"/> Renovation <input type="checkbox"/> Ordered Demolition <input type="checkbox"/> Emergency Renovation		<input type="checkbox"/> Yes <input type="checkbox"/> No			
IV. Dates of Asbestos Removal (MM-DD-YY)		V. Dates of Demolition or Renovation (MM-DD-YY)			
Start: _____ Stop: _____		Start: _____ Stop: _____			
VI. Facility Information (identify owner and operator, if applicable)					
Owner Name _____					
Owner Address _____		City _____	State _____	Zip Code _____	
Contact Person _____		Email _____	Telephone Number _____		
Operator (if different than owner) _____					
Operator Address _____		City _____	State _____	Zip Code _____	
Contact Person _____		Email _____	Telephone Number _____		
VII. Facility Description (include building name, number and floor or room number)					
Building Name _____					
Building Address _____		City _____	State _____	Zip Code _____	County _____
Site Location (floor or room number(s)) _____					
Building Size (Sq. Ft.) _____		Number of Floors _____			Age of Building/Year Built _____
Present Use _____		Prior Use _____			
VIII. Asbestos Contractor (If applicable, please enter Demolition or Renovation Contractor information on page 2)					
Contractor Name _____				ND License Number _____	
Contractor Address _____		City _____	State _____	Zip Code _____	
Contact Person _____				Telephone Number _____	
IX. Asbestos Inspector					
Firm Name _____				ND License Number _____	
Firm Address _____		City _____	State _____	Zip Code _____	
Name of Inspector _____				Telephone Number _____	
X. Approximate Amount of Asbestos, Including:					
	Regulated Asbestos-Containing Material (RACM) to be Removed	Nonfriable Asbestos-Containing Material to be Removed		Nonfriable Asbestos-Containing Material not to be Removed	
		Category I	Category II	Category I	Category II
Pipe (Linear Ft.)					
Surface Area (Sq. Ft.)					
Volume from Facility Component(s) (Cu. Ft.)					



SFN 17987 (12/16) Page 2

XI. Testing Procedure for Determining Asbestos and Type of Asbestos Material(s)

<input type="checkbox"/> PLM <input type="checkbox"/> TEM <input type="checkbox"/> Other:	Type of Asbestos-Containing Material(s)
---	---

XII. Description of Work Practices and Engineering Controls to Prevent Asbestos Emissions (check all that apply)

<input type="checkbox"/> Adequately Wet Materials	<input type="checkbox"/> Glove Bag	<input type="checkbox"/> Seal in Leaktight Containers	<input type="checkbox"/> Encapsulate
<input type="checkbox"/> Negative Air Containment	<input type="checkbox"/> Seal in Leaktight Wrapping	<input type="checkbox"/> Mini-enclosure	<input type="checkbox"/> Other:

XIII. Description of Planned Demolition or Renovation Work (backhoe, bulldozer, hand removal, etc.)

Will the Facility or Facility Debris be Burned?			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, you must contact your local Health Unit or the Air Quality Division at 701.328.5188, to complete an Open Burn Variance Application: SFN 8509.	

XIV. Demolition Contractor

Firm Name		Secretary of State License Number	
Firm Address	City	State	Zip Code
Contact Person		Telephone Number	

XV. Waste Transporter

Name		Waste Hauler Permit Number	
Address	City	State	Zip Code
Contact Person		Telephone Number	

XVI. Waste Disposal Site for Asbestos-Containing Materials

Name	Permit Number	Telephone Number	
Address	City	State	Zip Code
Will the waste be disposed of at a site other than a Landfill approved for asbestos? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, you must contact the Waste Management Division at 701.328.5166 to complete an Inert Waste Disposal Variance Application: SFN 50278.			

XVII. Waste Disposal Site for Demolition or Renovation Materials (other than asbestos)

Name	Permit Number	Telephone Number	
Address	City	State	Zip Code

XVIII. If Demolition was Ordered by Government Agency, Identify the Agency and Attach a Copy of the Order

Authority/Agency	Date of Order (MM/DD/YY)	Telephone Number
------------------	--------------------------	------------------

XIX. Emergency Demolition or Renovation

Is this an emergency demolition or renovation? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, you must contact the Department at 701.328.5188.		
--	--	--

XX. Description of Procedures to be Followed in the Event of an Unexpected Asbestos Fiber Release

--	--	--

XXI. General Comments

--	--	--

XXII. I certify to the best of my knowledge that the above information is true and correct. I further certify that all asbestos abatement work on this project will be performed by individuals certified in accordance with the North Dakota Air Pollution Control Rules 33-15-13.

Signature of Owner/Operator	Print Name	Date
Business/Organization	Telephone Number	

Return form to: North Dakota Department of Health
Division of Air Quality, 2nd Floor
918 East Divide Avenue
Bismarck, ND 58501-1947
Telephone: 701.328.5188 or Fax: 701.328.5185 (If faxing, original copy must be mailed with valid signature)



**INSTRUCTIONS FOR COMPLETING THE
ASBESTOS DEMOLITION AND RENOVATION NOTIFICATION FORM**

GENERAL INFORMATION

The Asbestos NESHAP, Section 33-15-13-02 of the North Dakota Air Pollution Control Rules, requires written notification of demolition or renovation activities in facilities under Subsection 02.6. In most cases, a facility includes all types of structures except single family homes and apartment buildings having no more than four units. The enclosed form must be used to fulfill this requirement. Only complete notification forms will be accepted.

The notification should be typewritten or neatly printed and postmarked or delivered no later than ten working days prior to the beginning of either the asbestos removal activity (Section IV) or demolition activity (in Section V) whichever is applicable.

INSTRUCTIONS

I. Type of Notification: Check "Original" if the notification is a first time or original notification, "Revised" if the notification is a revision of a prior notification, or "Canceled" if the activity has been canceled. On the right side enter the date that the notification is being submitted.

II. Type of Operation: Check as appropriate for facility demolition, for facility renovation, for ordered demolitions, or for emergency renovations.

III. Is Asbestos Present? Answer "Yes" or "No."

IV. Scheduled Dates of Asbestos Removal (MM-DD-YY): Enter scheduled dates (month/day/year) for asbestos removal work. Asbestos removal work includes any activity, including site preparation, which may break up, dislodge or disturb asbestos material.

V. Scheduled Dates of Demolition/Renovation (MM-DD-YY): Enter scheduled dates (month/day/year) for beginning and ending the planned demolition or renovation project.

VI. Facility Information: Enter the names, addresses, contact persons and telephone numbers of the following:

Owner: Legal owner of the site at which asbestos is being removed or demolition planned.

Operator: Demolition contractor, general contractor, or any other person who leases, operates, controls or supervises the site.

If known, the name of the site supervisor should be entered as the contact person for the notification. If additional parties share responsibility for the site, demolition activity, renovation or ACM removal, include complete information (including name, address, contact person and telephone number) on additional sheets submitted with the form.

VII. Facility Description: Provide the following information on the areas being renovated or demolished:

Building Address: Physical location of site.

Building Size: The building size in square feet.

Number of Floors: Enter the number of floors including basement, if applicable.

Year Facility was Built or Age: Enter approximate age of the facility.

Present Use/Prior Use: Describe the primary use of the facility or enter the following codes: H – Hospital; S – School; P – Public Building; O – Office; I – Industrial; U – University or College; C – Commercial; or R – Residence.

VIII. Asbestos Contractor: Name and address of contractor hired to remove asbestos.

IX. Asbestos Inspector: The firm who conducted the asbestos inspection prior to demolition/renovation.



X. **Approximate Amount of Asbestos Including:** (1) Regulated ACM to be removed (including nonfriable ACM to be sanded, ground or abraded); (2) Category I and Category II nonfriable asbestos containing material (ACM) to be removed; and (3) Category I and Category II nonfriable asbestos containing material not to be removed. For both renovations and demolitions, enter the amount of RACM to be removed by entering a number in the appropriate box. If applicable, enter the amount of nonfriable ACM to be removed during a demolition or renovation, and/or enter the amount of nonfriable ACM not to be removed during a demolition or renovation.

Category I nonfriable material includes packing, gaskets, resilient floor covering and asphalt roofing materials. Category II nonfriable material includes any material, excluding Category I materials, that when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure, or mechanical forces expected to operate on the material during the demolition or renovation activity. All Category II materials must be removed prior to demolition.

Complete the volume from facility component(s) if asbestos-containing materials have been removed from facility components and the volume is known.

XI. **Asbestos Testing Procedure and Type of Asbestos Materials Present:** Check the appropriate box for the procedure that was used to determine asbestos content. Also, describe the kinds of asbestos-containing materials that are present.

XII. **Description of Work Practices and Engineering Controls to Prevent Asbestos Emissions:** Check the appropriate box(s) for work practices that will be employed to prevent asbestos emissions.

XIII. **Description of Planned Demolition or Renovation Work:** Include a brief description of the renovation/demolition technique(s) to be used. Also, indicate if the facility or facility debris will be burned.

XIV. **Demolition or Renovation Contractor:** Name and address of contractor hired to perform demolition or renovation work.

XV. **Waste Transporter(s):** Enter the name(s), address(es), contact person(s) and telephone number(s) of the person(s) or company(ies) responsible for transporting ACM from the removal site to the waste disposal site. If the removal contractor or owner is the waste transporter, state "same as owner" or "same as removal contractor." If multiple parties are responsible include complete information on an additional sheet and submit with this form.

XVI. **Waste Disposal Site for the Asbestos-Containing Materials:** Identify the waste disposal site, including the complete name, location, and telephone number of the facility. If ACM is to be disposed of at more than one site, provide complete information on an additional sheet submitted with the form. Permit number(s) must be included. If the waste will not be disposed of at a landfill approved for asbestos, then an Inert Waste Disposal Variance Application must be completed and approved by the Department.

XVII. **Waste Disposal Site for Demolition or Renovation Materials:** Identify the waste disposal site, including the complete name, location, and telephone number of the facility. If the waste will not be disposed of at a landfill approved for waste materials, then an Inert Waste Disposal Variance Application must be completed and approved by the Department.

XVIII. **If Demolition Ordered by a Government Agency, Please Identify the Agency below:** Provide the name of the responsible official, title and agency, authority under which the order was issued and the date of the order. A copy of the order from the government agency must be attached to this form.

XIX. **Emergency Demolition or Renovation Information:** Please identify if the work is an emergency demolition or renovation. If yes, please immediately contact the Department.

XX. **Description of Procedures to be Followed in the Event that Unexpected Asbestos Fiber Release:** Provide adequate information to demonstrate that appropriate actions have been considered and can be implemented to control asbestos emissions adequately, including at a minimum, conformance with applicable work practice standards. Attach an additional sheet of paper if needed and submit with this form.

XXI. **General Comments:** as necessary. Attach an additional sheet of paper if needed and submit with this form.

XXII. **Verification and Certification:** Certify the accuracy and completeness of the information provided and the intent to comply with the North Dakota Air Pollution Control Rules by signing and dating the notification form. Please sign and print the name of the owner or operator and list the business or organization the owner or operator is affiliated with.



ATTACHMENT III-B
HOME SWEET HOME ASBESTOS REPORT



3805 Pontchartrain Dr. Suite 3
Slidell, LA 70458
Ph: 985-445-1110

UID 2440

**ASBESTOS SAMPLE
CHAIN OF CUSTODY**

PROJECT: 117508-114629 DATE: 3-2-18

ADDRESS: 103 4th Ave NW ZONE _____ W.O.# _____

NDHH CERTIFIED ASBESTOS INSPECTOR: Justin Redding #5843

SAMPLE NUMBER(S): 1-001 Through 19-003

TYPE AND NUMBER OF SAMPLE(S): Bulk Quantity: 59 Air Quantity: _____

ANALYSIS REQUIRED:

PLM _____ TEM _____ PCM OTHER: _____

TURNAROUND TIME: 24HR 48HR 72HR 5 DAYS 7 DAYS

FURTHER INSTRUCTIONS: POSITIVE STOP PER HOMOGENOUS AREA

INDICATE LAYERS AND COMPOSITE POSITIVE DRYWALL CORE SAMPLES

TO: EMLAB P&K IRVINE

ADDRESS: 17461 Derian Ave Ste 100 TELEPHONE: 1-800-651-4802

CITY: Irvine STATE: CA ZIP: 92614

RECEIVER NAME/TITLE: _____ / _____

RECEIVER SIGNATURE: _____ RECEIPT DATE: _____

* Acceptance by receiver acknowledges the legal responsibility to properly dispose of ACM residue in accordance with current EPA/NDHH regulations and guidance.



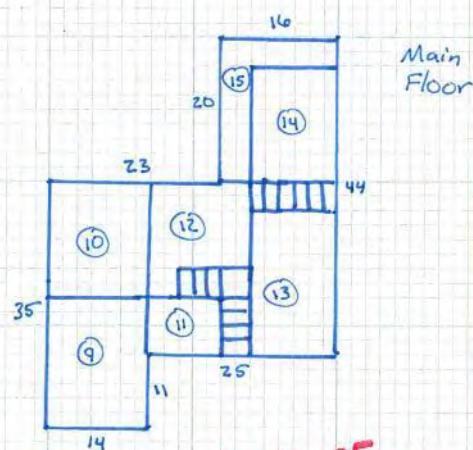
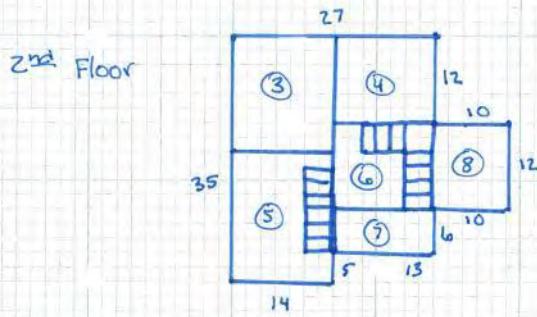
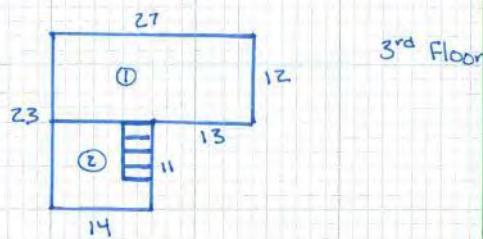
HES

Haltran Environmental Services, LLC

103 4th Ave NW

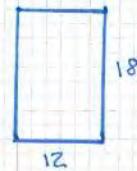
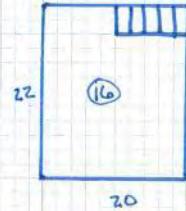
UID: 2440

3-2-18



1,410 SF

Basement



Det.
Garage

234 SF

PROJECT # 117508-114629NDDH INSPECTOR: Justin Redding #5843DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	1
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ADDRESS	ZONE	TYPE OF FOUNDATION		
103 4th Ave NW		RAISED	CONCRETE <input checked="" type="checkbox"/>	
NUMBER OF ADDITIONAL STRUCTURES	TYPE OF FOUNDATION			
1	RAISED	CONCRETE	<input checked="" type="checkbox"/>	
SUSPECT MATERIAL DESCRIPTION:	FRIABLE	YES	NO	
Roof Felt	CONDITIONS	<input checked="" type="checkbox"/> G	<input type="checkbox"/> P	
QUANTITY OF MATERIAL:	2318	SF	LF EACH	

SAMPLE #	COMMENTS	ASBESTOS TYPE	%
001	Main Roof	No ACM	
002			
003	↓		
004	Garage Roof		
005	↓		

INSPECTOR NOTES:

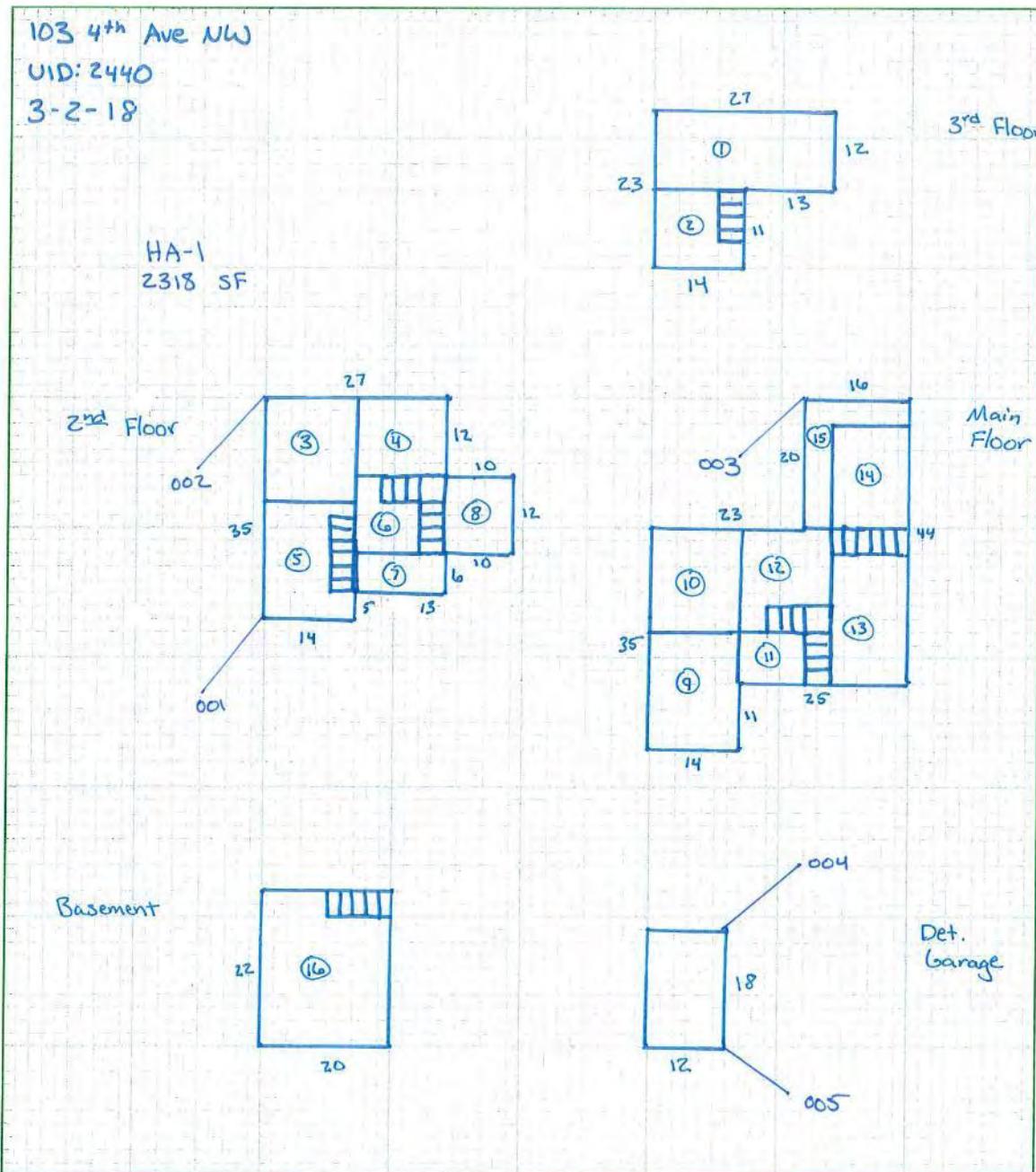
DATE ABATEMENT COMPLETED:

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Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	2
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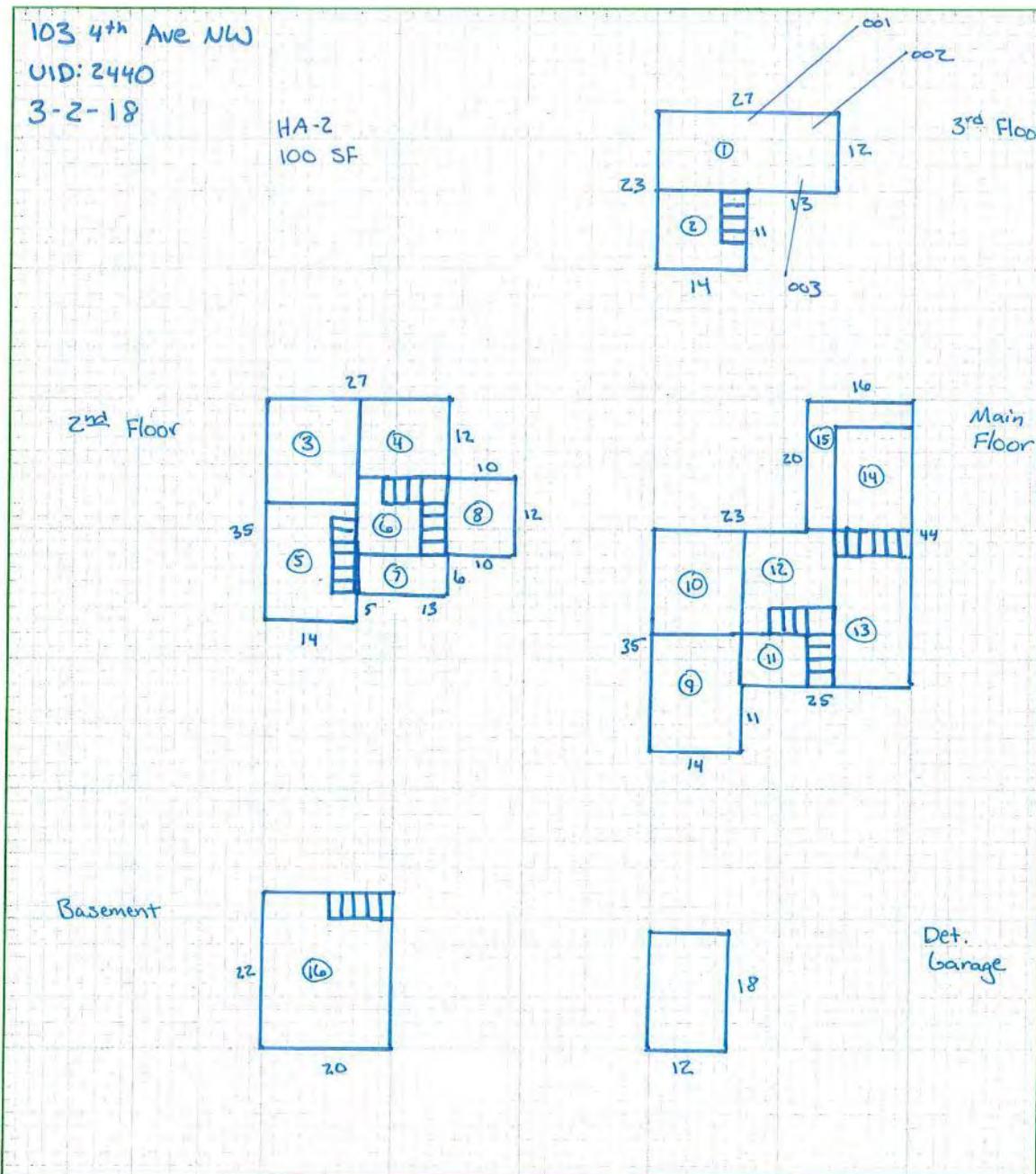
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION		
		RAISED	CONCRETE <input checked="" type="checkbox"/>	
NUMBER OF ADDITIONAL STRUCTURES 1		TYPE OF FOUNDATION		
		RAISED	CONCRETE <input checked="" type="checkbox"/>	
SUSPECT MATERIAL DESCRIPTION: Blown Insulation		FRIABLE	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
		CONDITIONS	G <input checked="" type="checkbox"/>	P <input type="checkbox"/>
QUANTITY OF MATERIAL: 100		SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH <input checked="" type="checkbox"/>

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Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	3
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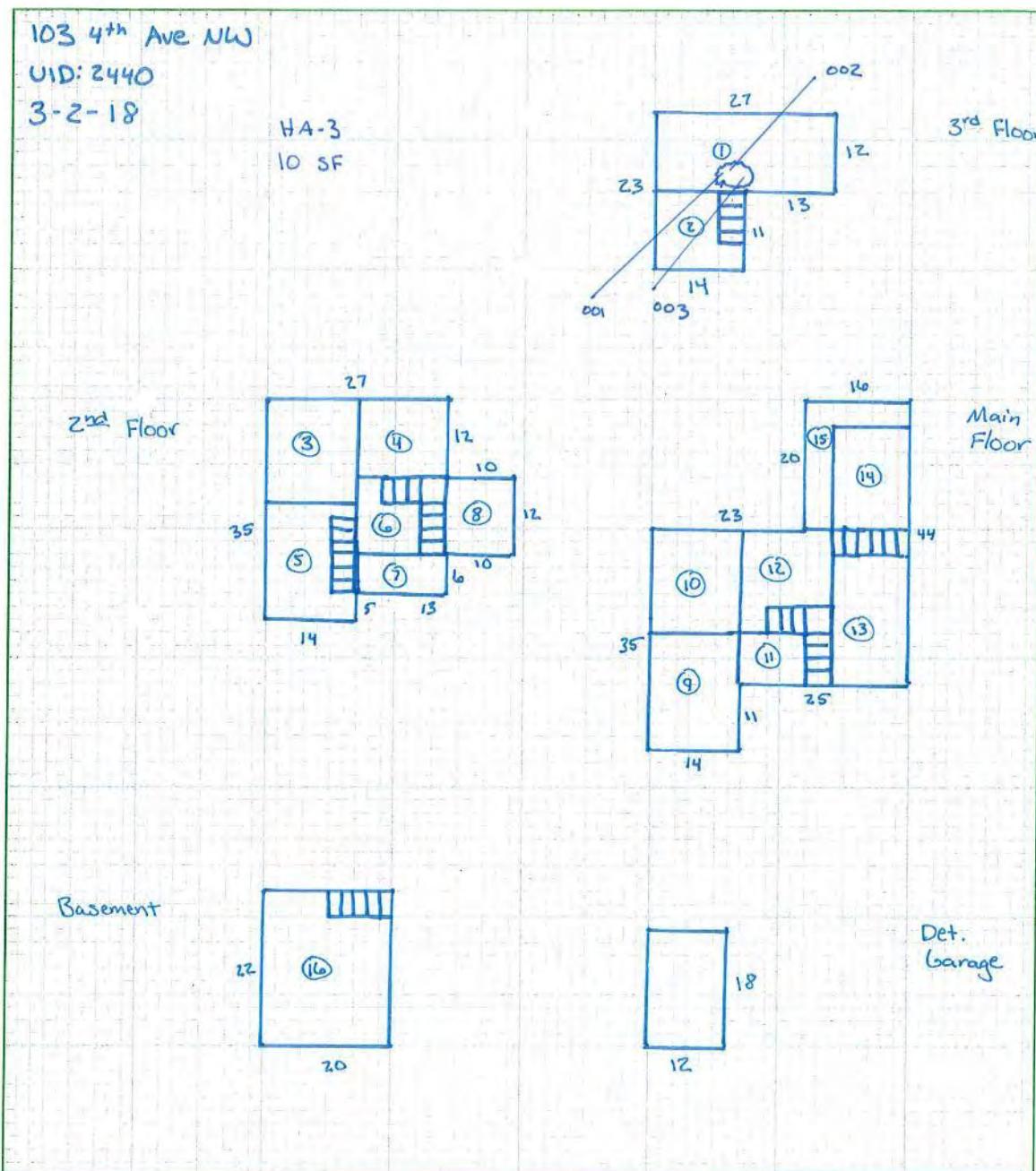
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES 1	TYPE OF FOUNDATION		
	RAISED	CONCRETE <input checked="" type="checkbox"/>	
SUSPECT MATERIAL DESCRIPTION: Vermiculite Insulation	FRIABLE		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	CONDITIONS	<input checked="" type="checkbox"/> G <input type="checkbox"/> P	
QUANTITY OF MATERIAL: 10	SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH

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Haltran Environmental Services, LLC



PROJECT # 117508-114629NDDH INSPECTOR: Justin Redding #5843DATE: 3-2-18

UID #:	<u>2440</u>	HOMOGENOUS AREA:	<u>4</u>
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ADDRESS	ZONE	TYPE OF FOUNDATION	
<u>103 4th Ave NW</u>		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES		TYPE OF FOUNDATION	
	<u>1</u>	RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION:		FRIABLE	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
<u>Gray Floor Tile</u>		CONDITIONS	<u>G</u> <input type="checkbox"/> P
QUANTITY OF MATERIAL:	<u>340</u>	SF <input checked="" type="checkbox"/>	LF EACH

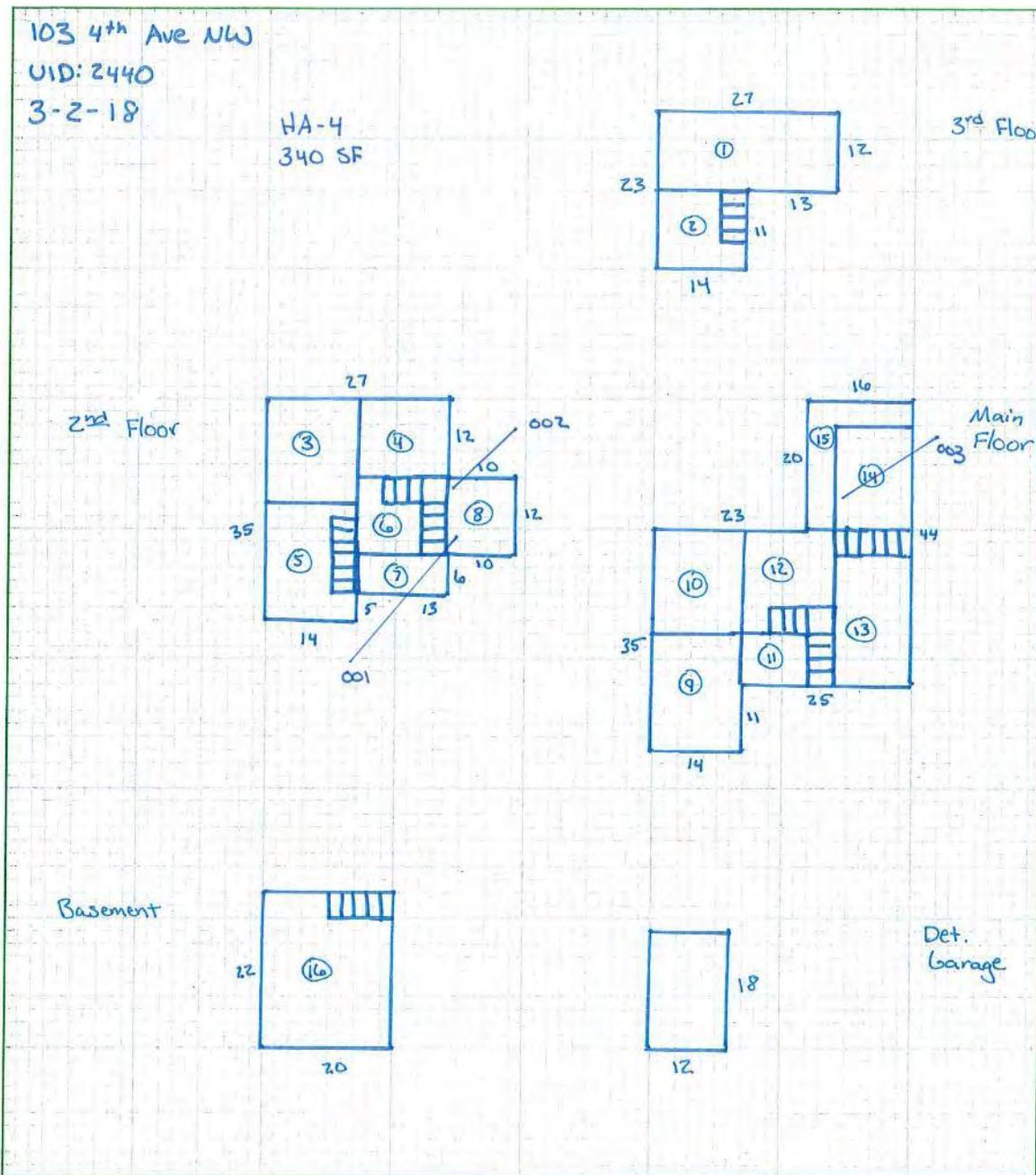
SAMPLE #	COMMENTS	ASBESTOS TYPE	%
001	<u>Room 8</u>	<u>No ACM</u>	
002	<u>↓</u>		
003	<u>Room 14</u>		
INSPECTOR NOTES:			
DATE ABATEMENT COMPLETED:			

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDHD INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440	HOMOGENOUS AREA: 5
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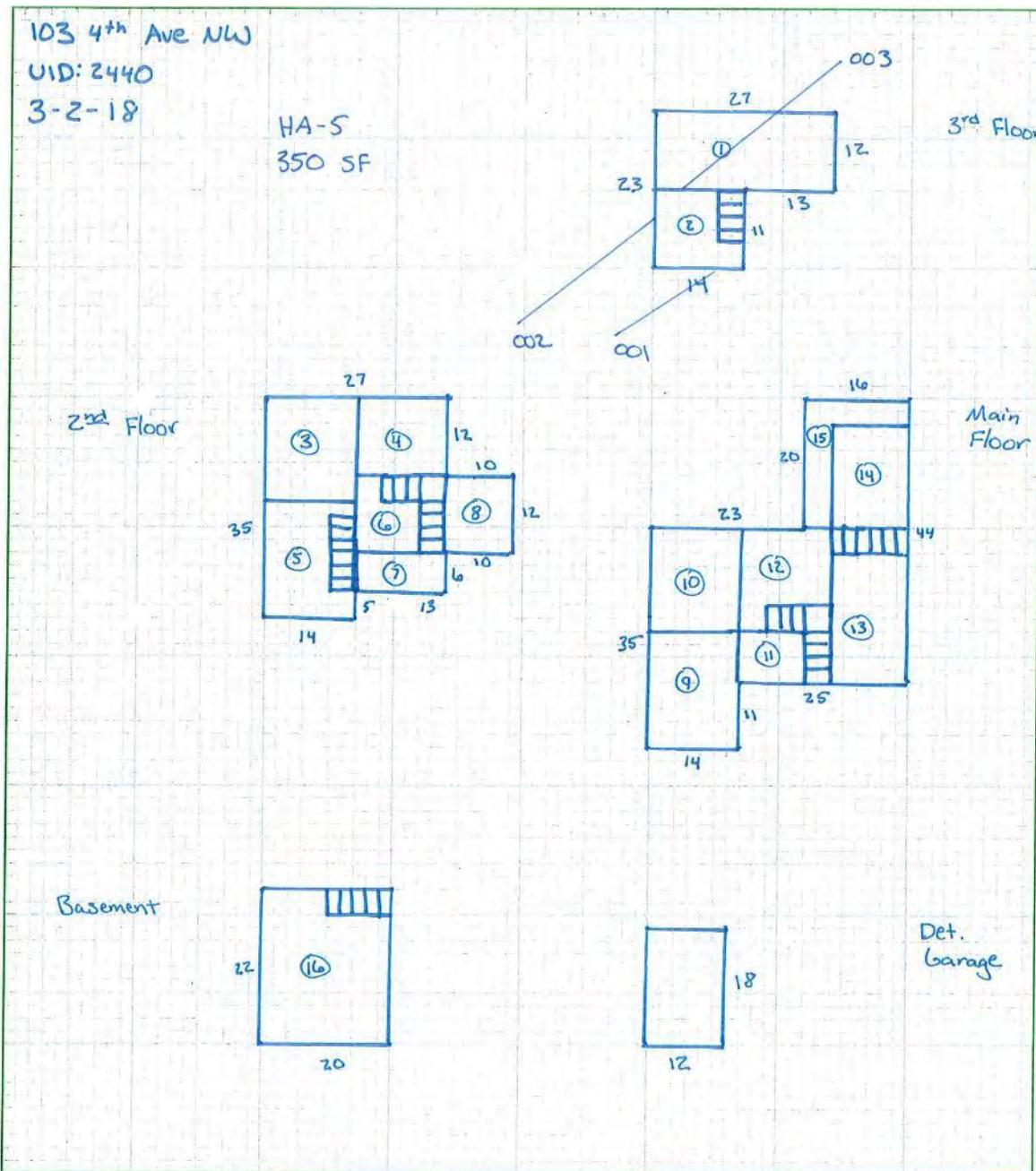
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>	
NUMBER OF ADDITIONAL STRUCTURES 1	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>		
SUSPECT MATERIAL DESCRIPTION: Wall Plaster	FRIABLE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO CONDITIONS <input checked="" type="checkbox"/> G <input type="checkbox"/> P		
QUANTITY OF MATERIAL: 350	SF <input checked="" type="checkbox"/>	LF <input checked="" type="checkbox"/>	EACH

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	6
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ADDRESS	ZONE	TYPE OF FOUNDATION	
103 4th Ave NW		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES		TYPE OF FOUNDATION	
1		RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION:		FRIABLE	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Heavy Popcorn Texture		CONDITIONS	<input checked="" type="checkbox"/> G <input type="checkbox"/> P
QUANTITY OF MATERIAL:	881	SF <input checked="" type="checkbox"/>	LF EACH

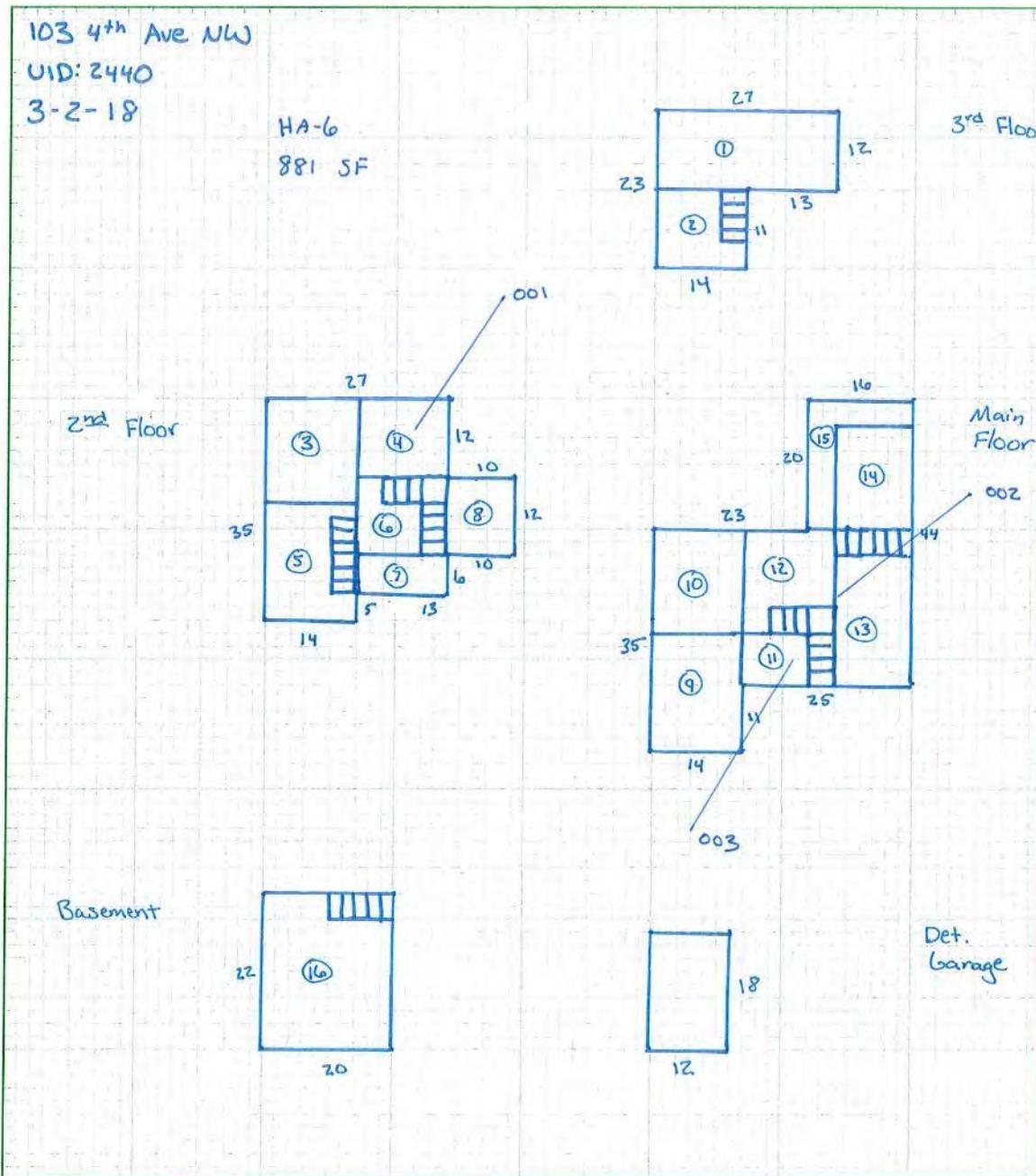
SAMPLE #	COMMENTS	ASBESTOS TYPE	%
001	Room 4	NO ACM	
002	Room 13		
003	Room 11		
INSPECTOR NOTES: Also in Room 10, Room 6			
DATE ABATEMENT COMPLETED:			

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440	HOMOGENOUS AREA: 7
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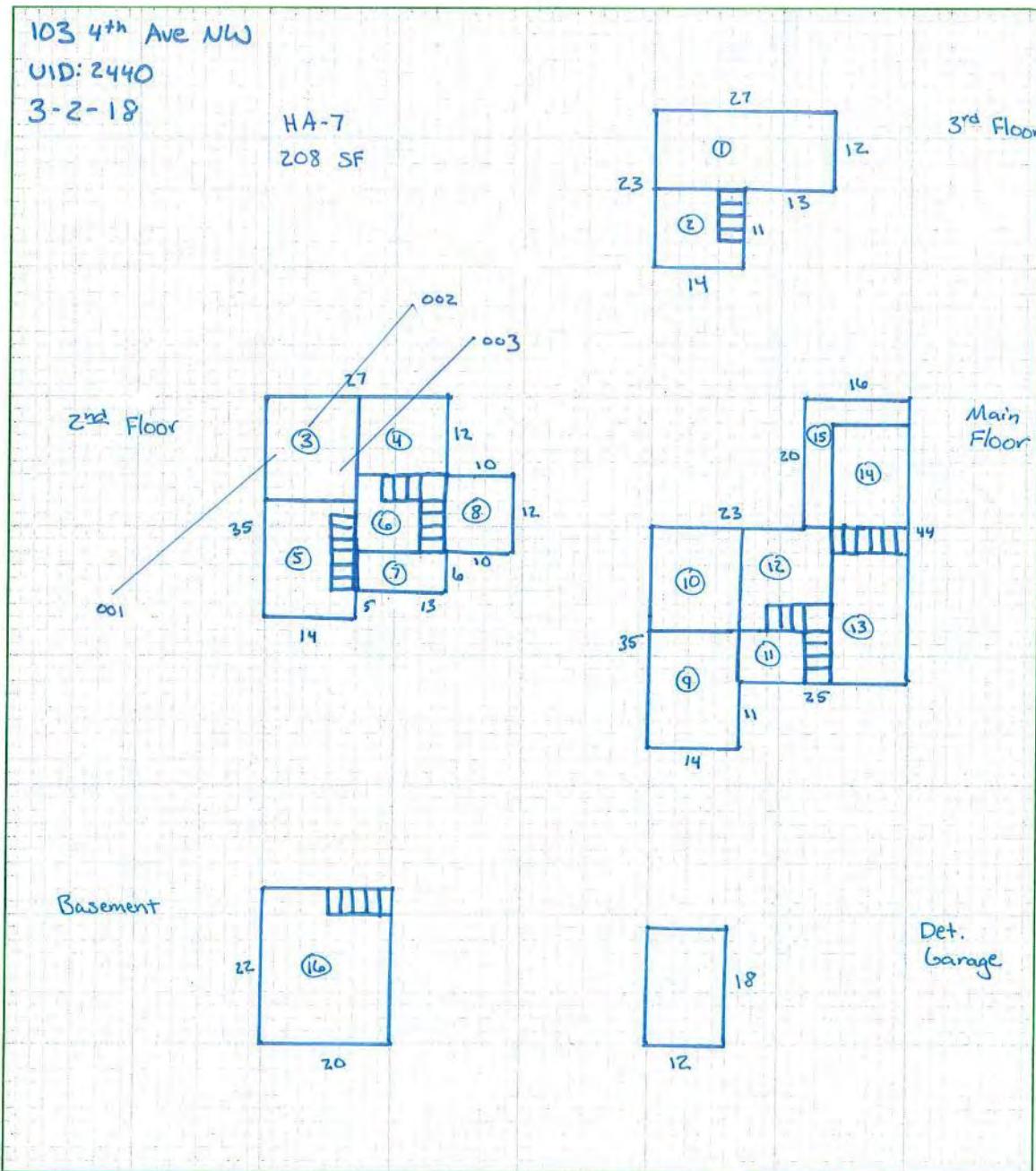
ADDRESS	ZONE	TYPE OF FOUNDATION	
103 4th Ave NW		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES		TYPE OF FOUNDATION	
1		RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION:		FRIABLE	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Rough Ceiling Texture		CONDITIONS	G <input checked="" type="checkbox"/> P <input type="checkbox"/>
QUANTITY OF MATERIAL:		208 <input checked="" type="checkbox"/>	SF LF EACH

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HES

Haltran Environmental Services, LLC



PROJECT # 117508-114629NDDH INSPECTOR: Justin Redding #5843DATE: 3-2-18

UID #:	<u>2440</u>	HOMOGENOUS AREA:	<u>8</u>
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ADDRESS	ZONE	TYPE OF FOUNDATION	
<u>103 4th Ave NW</u>		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES			TYPE OF FOUNDATION
	<u>1</u>	RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION:			FRIABLE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<u>Acoustic Ceiling Tile</u>			CONDITIONS <input type="checkbox"/> G <input checked="" type="checkbox"/> P
QUANTITY OF MATERIAL:		<u>910</u> <input checked="" type="checkbox"/> SF <input type="checkbox"/> LF <input type="checkbox"/> EACH	

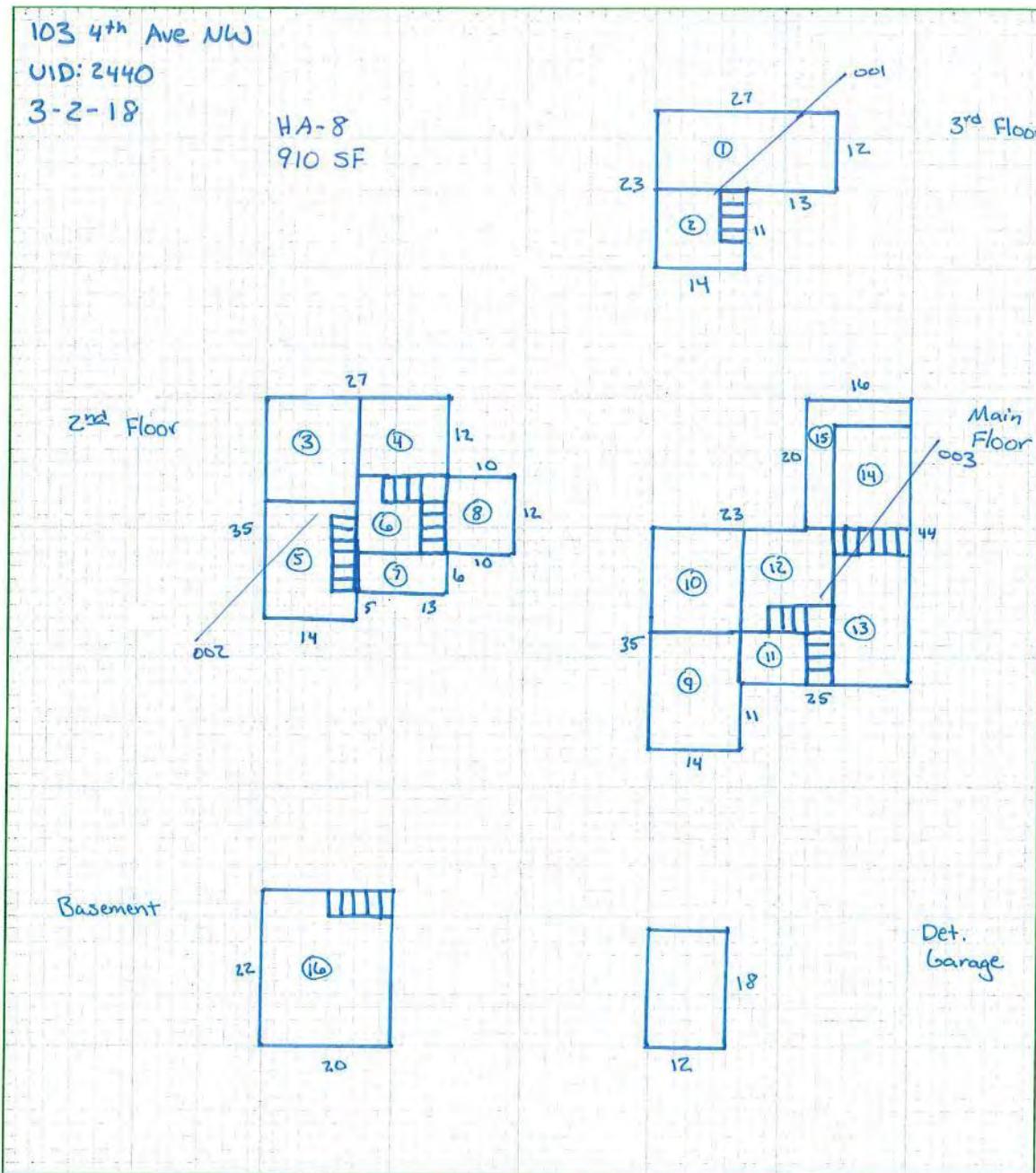
SAMPLE #	COMMENTS	ASBESTOS TYPE	%
001	<u>Room 2</u>	<u>No ACM</u>	
002	<u>Room 5</u>		
003	<u>Room 12</u>		
INSPECTOR NOTES: <u>Also in Room 5</u>			
DATE ABATEMENT COMPLETED:			

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	9
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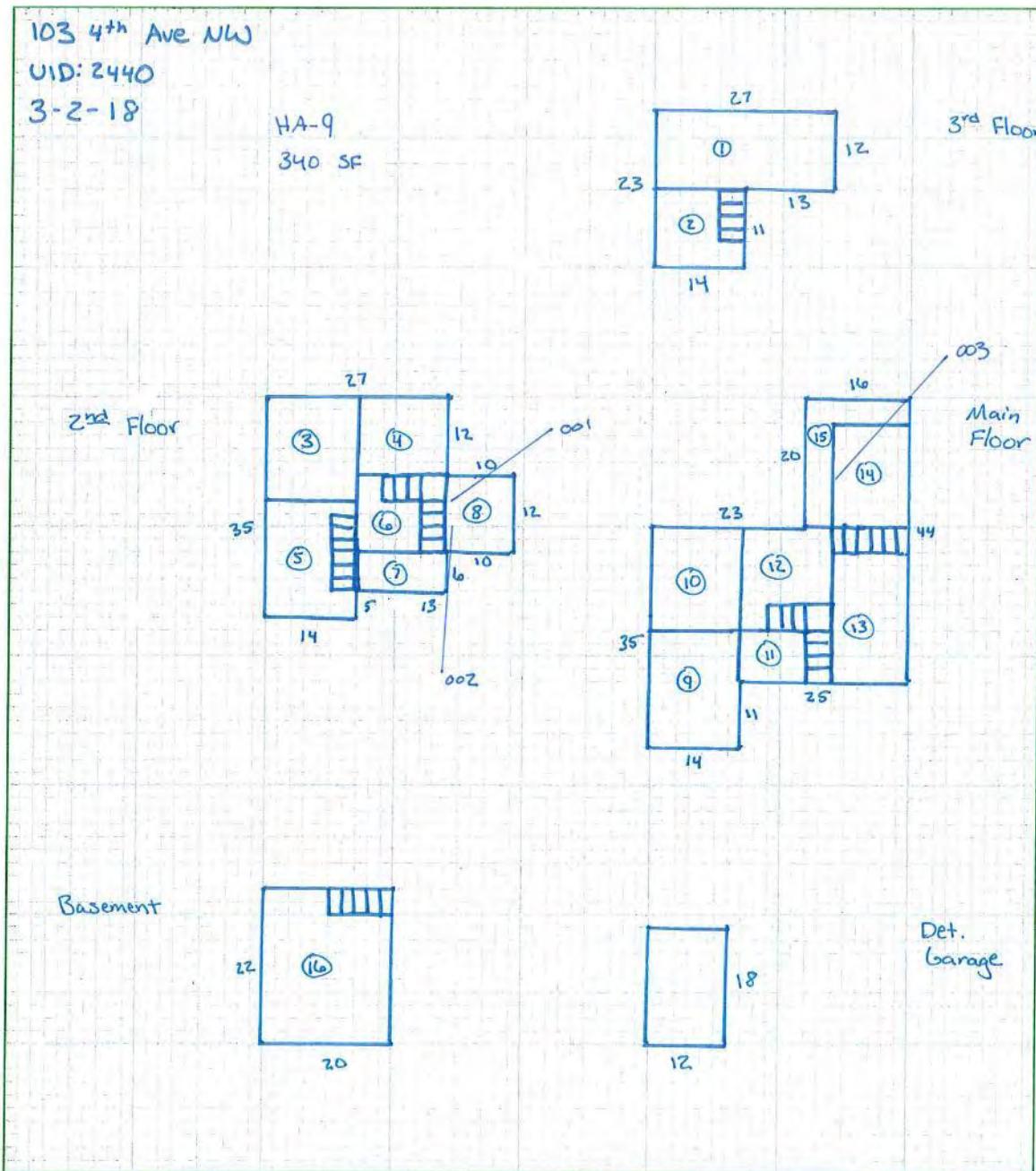
ADDRESS	ZONE	TYPE OF FOUNDATION			
103 4th Ave NW		RAISED	CONCRETE <input checked="" type="checkbox"/>		
NUMBER OF ADDITIONAL STRUCTURES		TYPE OF FOUNDATION			
1		RAISED	CONCRETE <input checked="" type="checkbox"/>		
SUSPECT MATERIAL DESCRIPTION:		FRIABLE	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
Smooth Ceiling Texture		CONDITIONS	<input checked="" type="checkbox"/> G <input type="checkbox"/> P		
QUANTITY OF MATERIAL:	340	SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH	

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Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440	HOMOGENOUS AREA: 10
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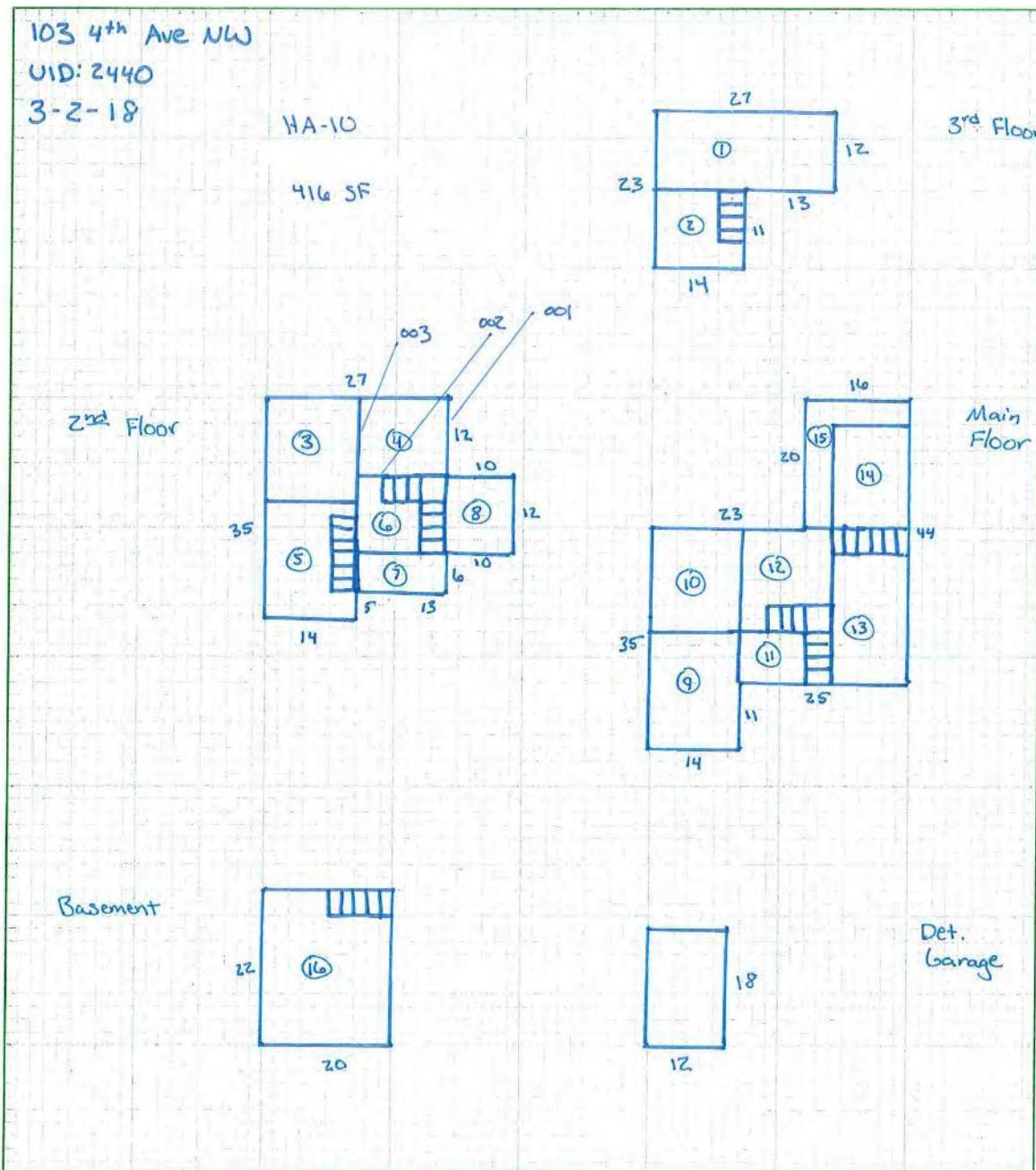
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES 1		TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION: Wall Plaster		FRIABLE	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
		CONDITIONS	G <input type="checkbox"/> P <input type="checkbox"/>
QUANTITY OF MATERIAL: 416	SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH <input type="checkbox"/>

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440	HOMOGENOUS AREA: 11
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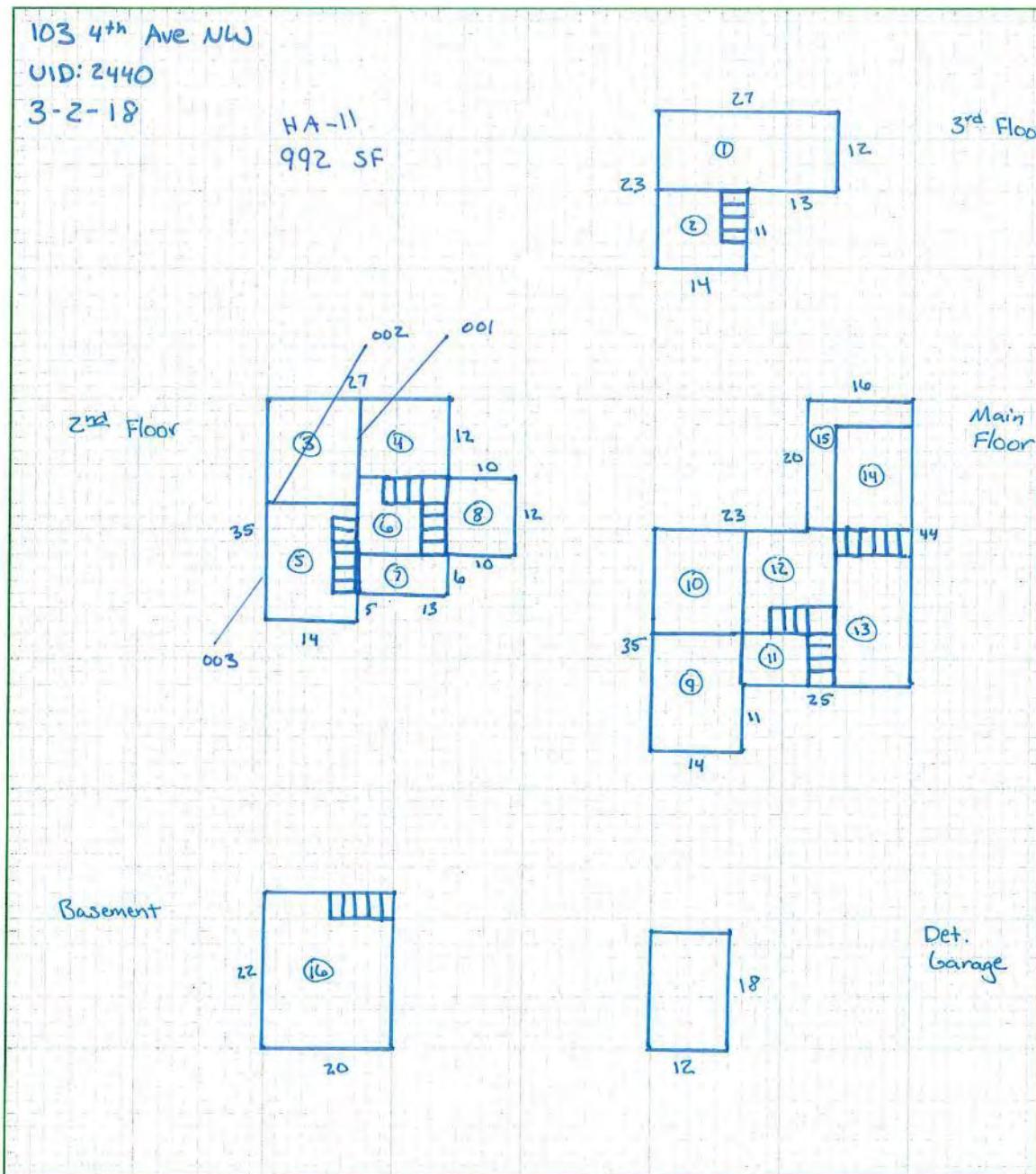
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES 1		TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION: Medium wall Plaster		FRIABLE	YES <input checked="" type="checkbox"/>
		CONDITIONS	G <input checked="" type="checkbox"/>
QUANTITY OF MATERIAL: 992		SF <input checked="" type="checkbox"/>	LF <input checked="" type="checkbox"/>
		EACH	

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440 HOMOGENOUS AREA: 12

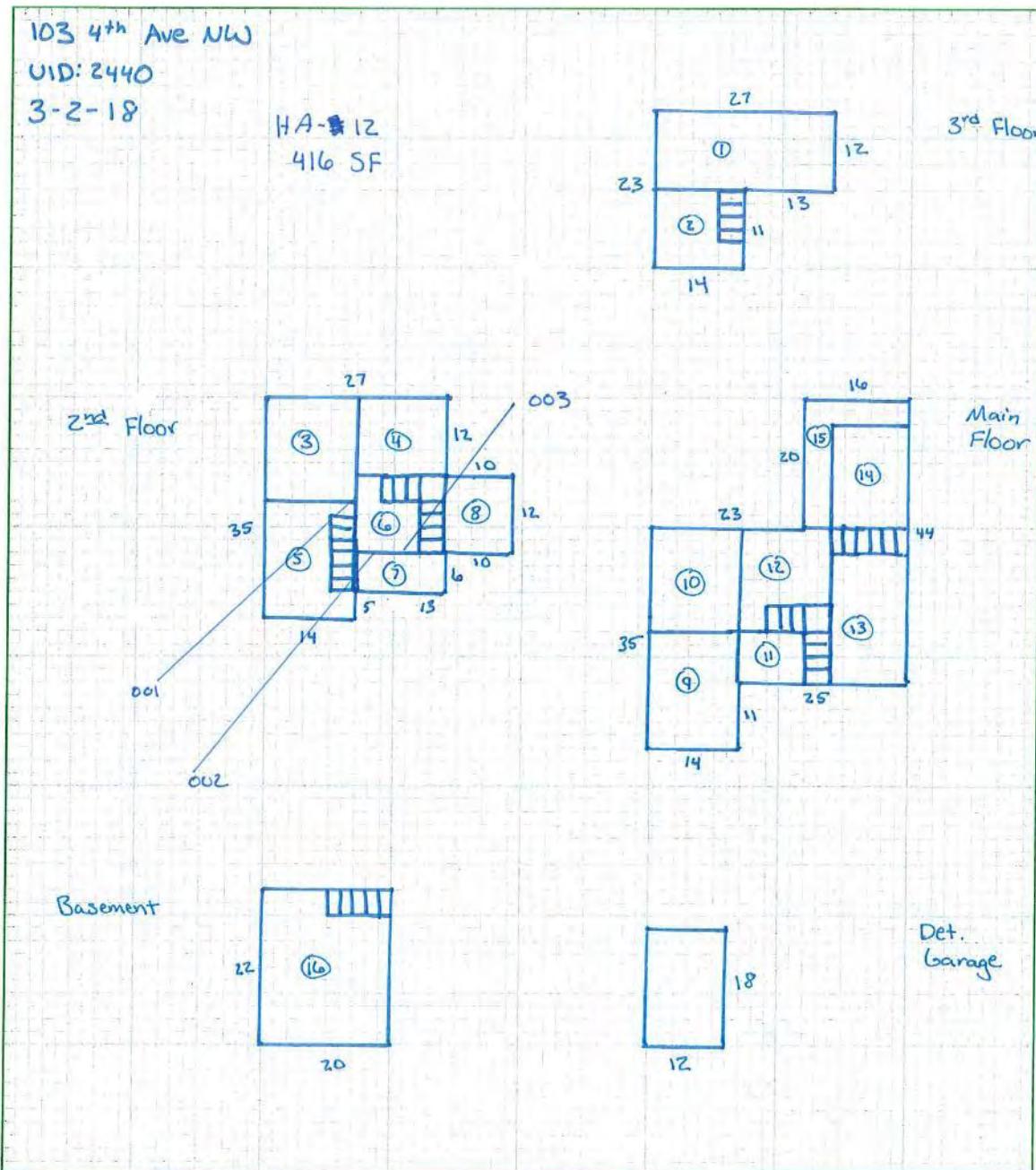
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>	
NUMBER OF ADDITIONAL STRUCTURES 1	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>		
SUSPECT MATERIAL DESCRIPTION: Light Plaster walls	FRIABLE <input checked="" type="checkbox"/>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
CONDITIONS <input checked="" type="checkbox"/> G <input type="checkbox"/> P			
QUANTITY OF MATERIAL: 416	SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH <input type="checkbox"/>

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440 HOMOGENOUS AREA: 13

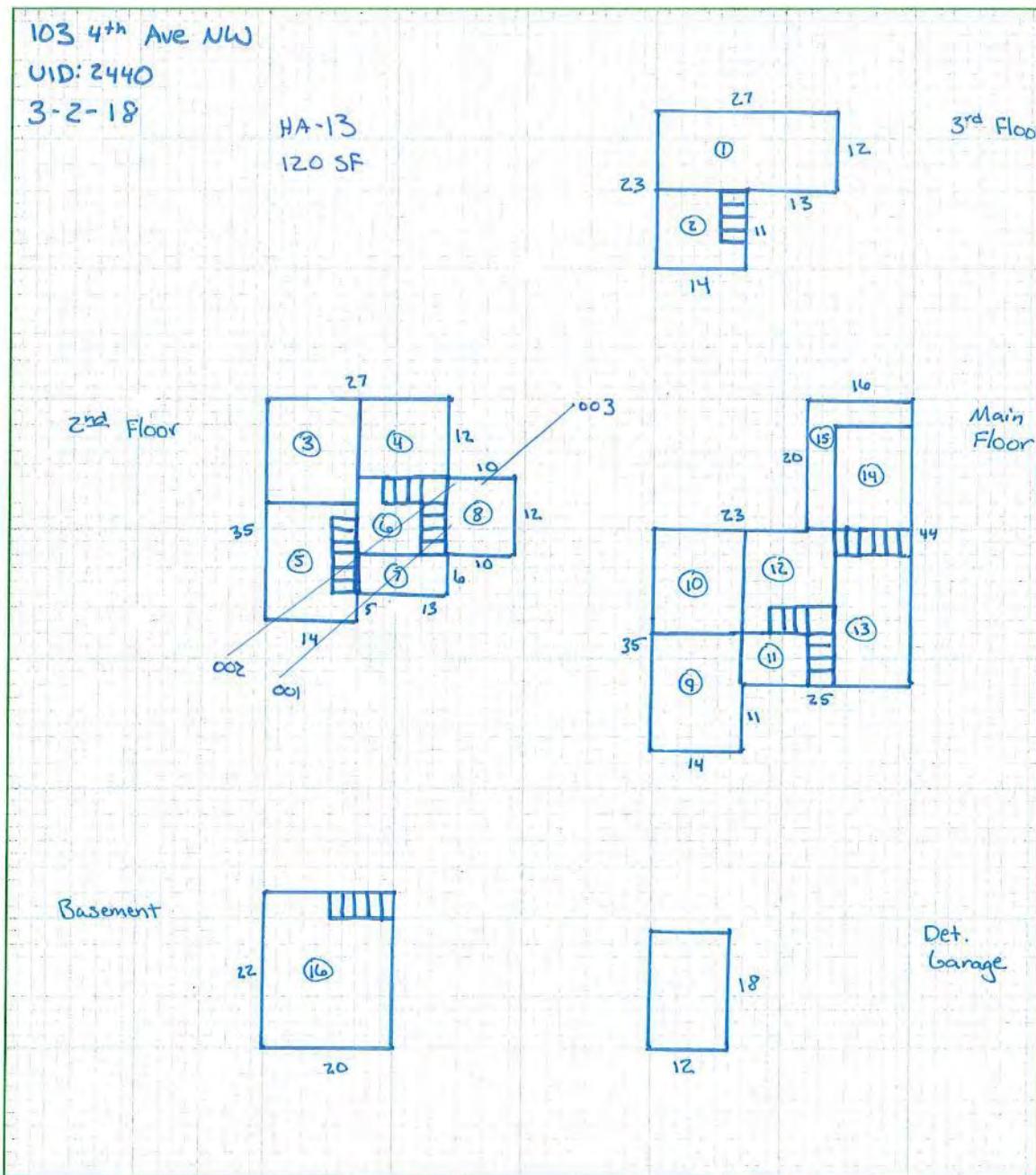
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>	
NUMBER OF ADDITIONAL STRUCTURES 1	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>		
SUSPECT MATERIAL DESCRIPTION: Tan Floor Tile	FRIABLE CONDITIONS		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> G <input checked="" type="checkbox"/> P <input type="checkbox"/>
QUANTITY OF MATERIAL: 120	SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	14
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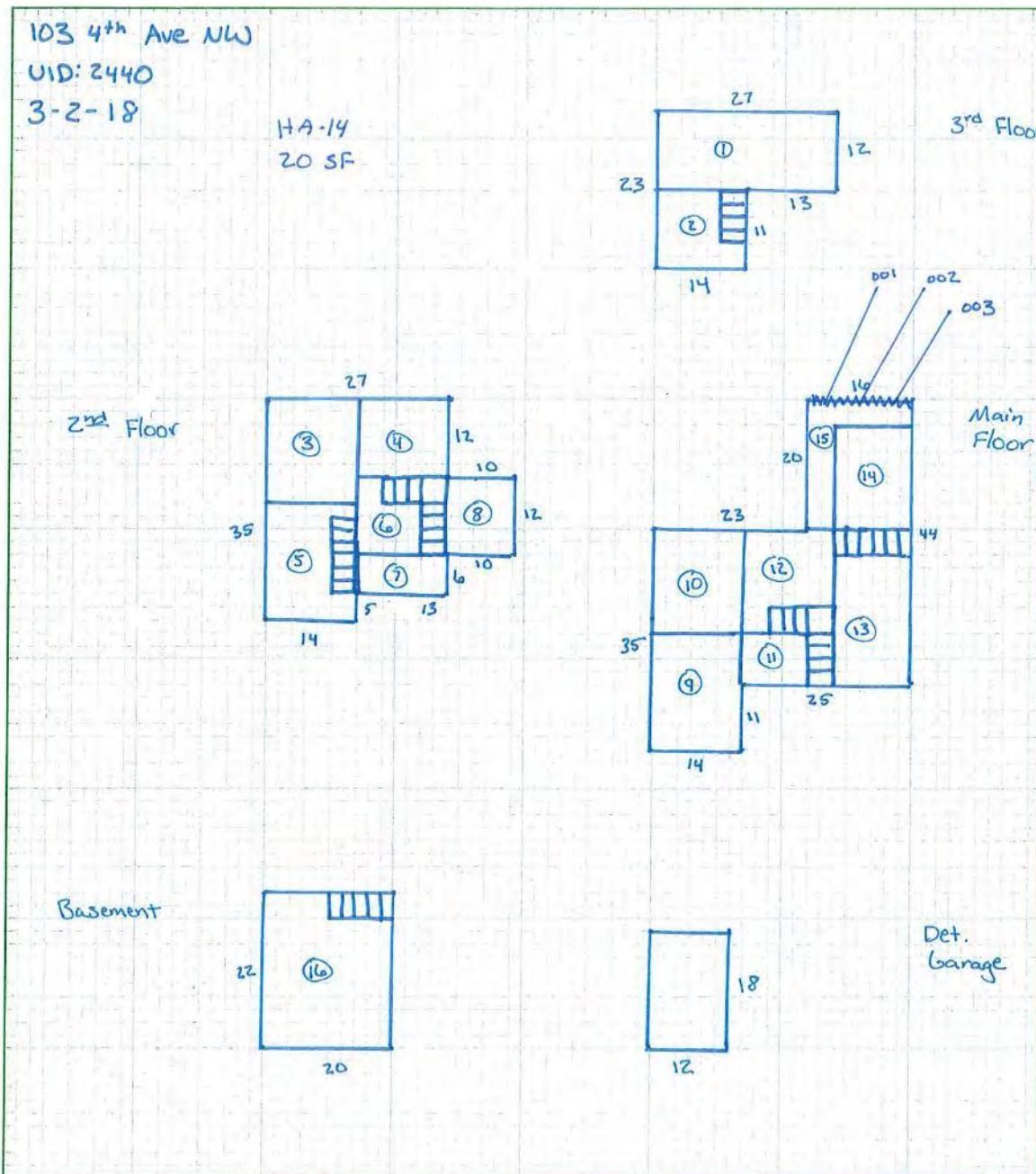
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION		
		RAISED	CONCRETE <input checked="" type="checkbox"/>	
NUMBER OF ADDITIONAL STRUCTURES 1		TYPE OF FOUNDATION		
		RAISED	CONCRETE <input checked="" type="checkbox"/>	
SUSPECT MATERIAL DESCRIPTION: Shingle Roll		FRIABLE	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
		CONDITIONS	G <input type="checkbox"/>	P <input checked="" type="checkbox"/>
QUANTITY OF MATERIAL: 20		SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH <input type="checkbox"/>

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Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440	HOMOGENOUS AREA: 15
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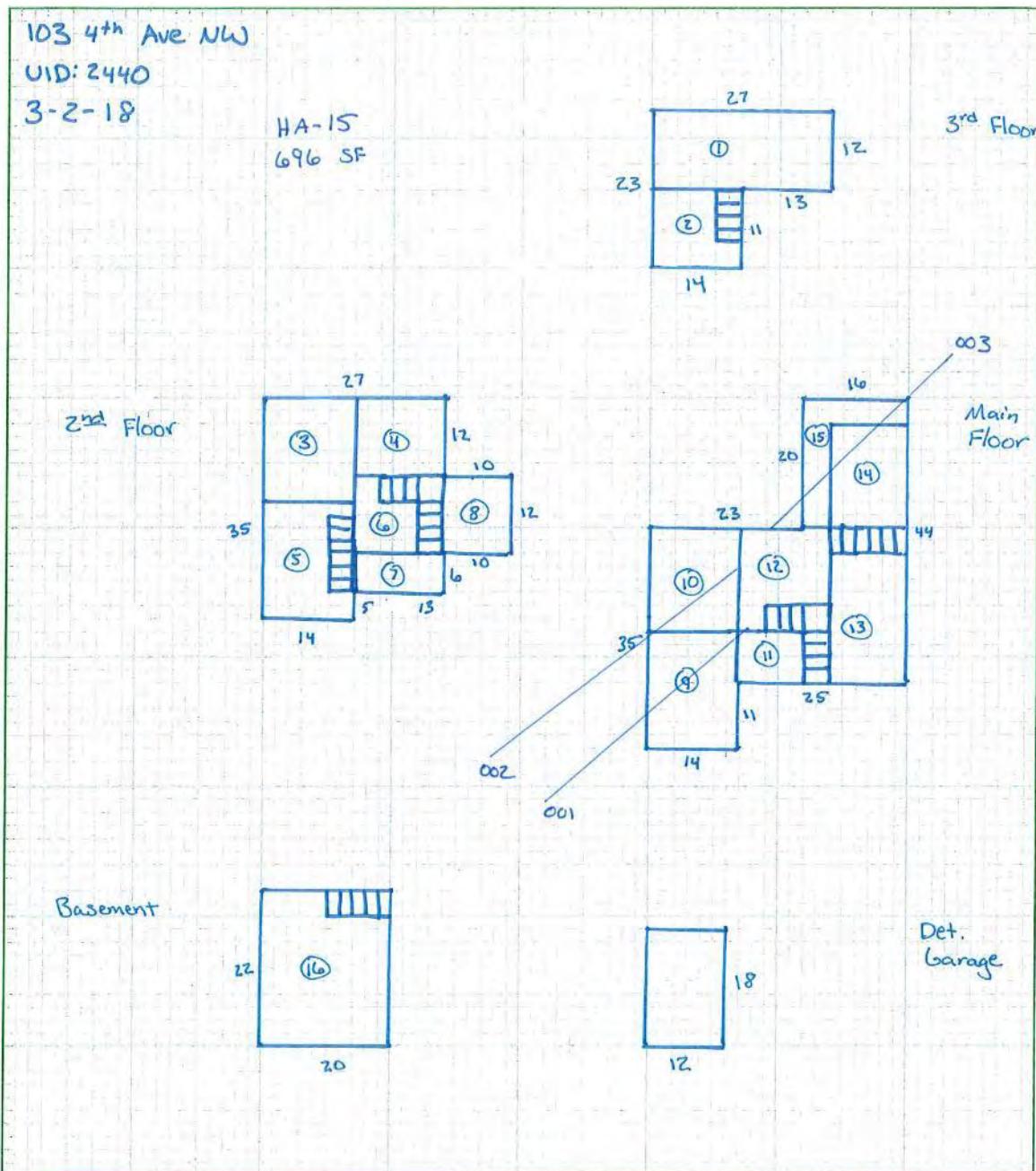
ADDRESS	ZONE	TYPE OF FOUNDATION	
103 4th Ave NW		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES		TYPE OF FOUNDATION	
1		RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION:		FRIABLE	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Rough wall texture		CONDITIONS	G <input checked="" type="checkbox"/> P <input type="checkbox"/>
QUANTITY OF MATERIAL:		696	SF <input checked="" type="checkbox"/> LF <input type="checkbox"/> EACH <input type="checkbox"/>

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Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	16
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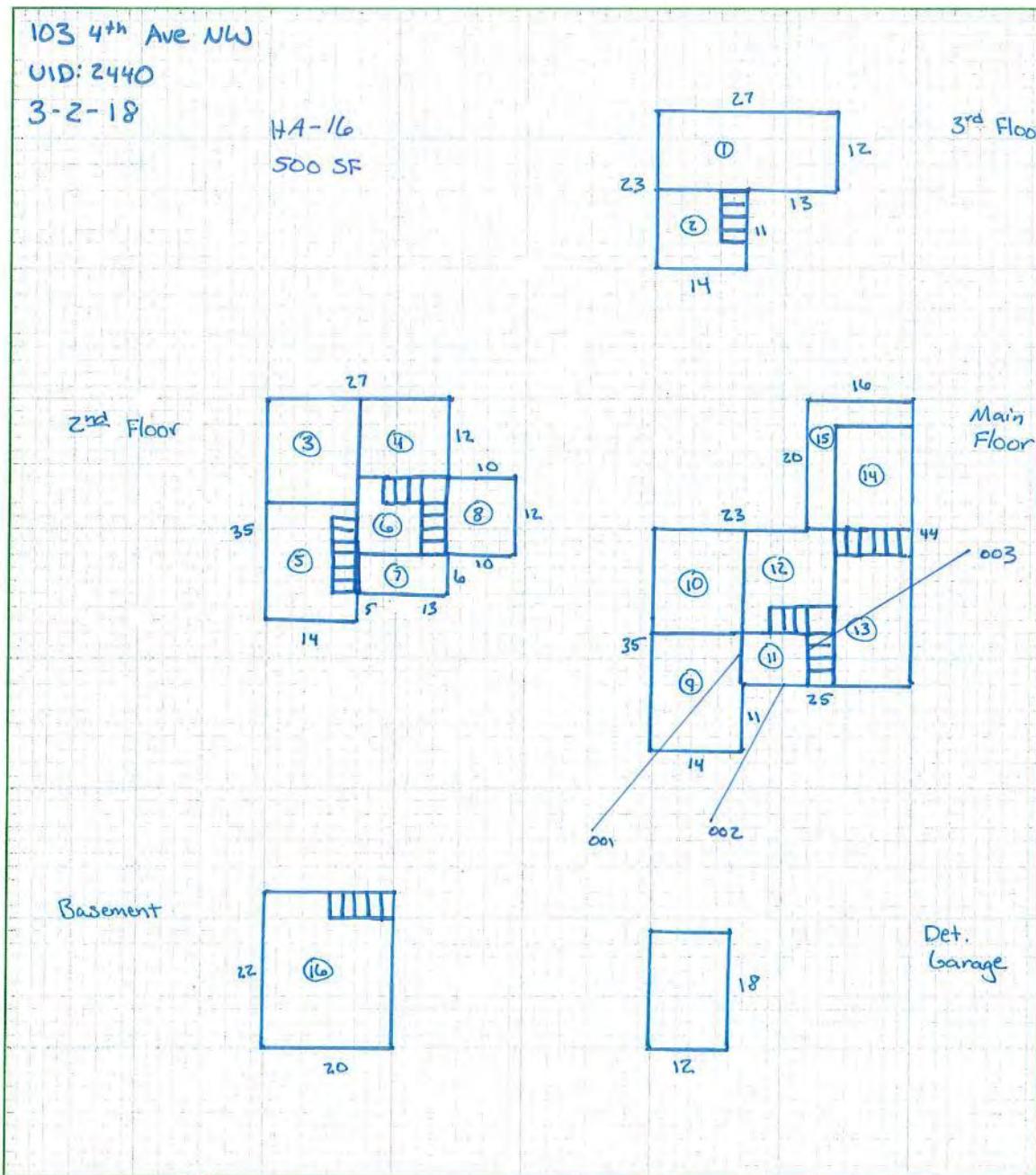
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES 1		TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION: Medium Wall Plaster		FRIABLE	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
		CONDITIONS	<input checked="" type="checkbox"/> G <input type="checkbox"/> P
QUANTITY OF MATERIAL: 500 <input checked="" type="checkbox"/> SF <input type="checkbox"/> LF <input type="checkbox"/> EACH			

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Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDHD INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #: 2440 HOMOGENOUS AREA: 11

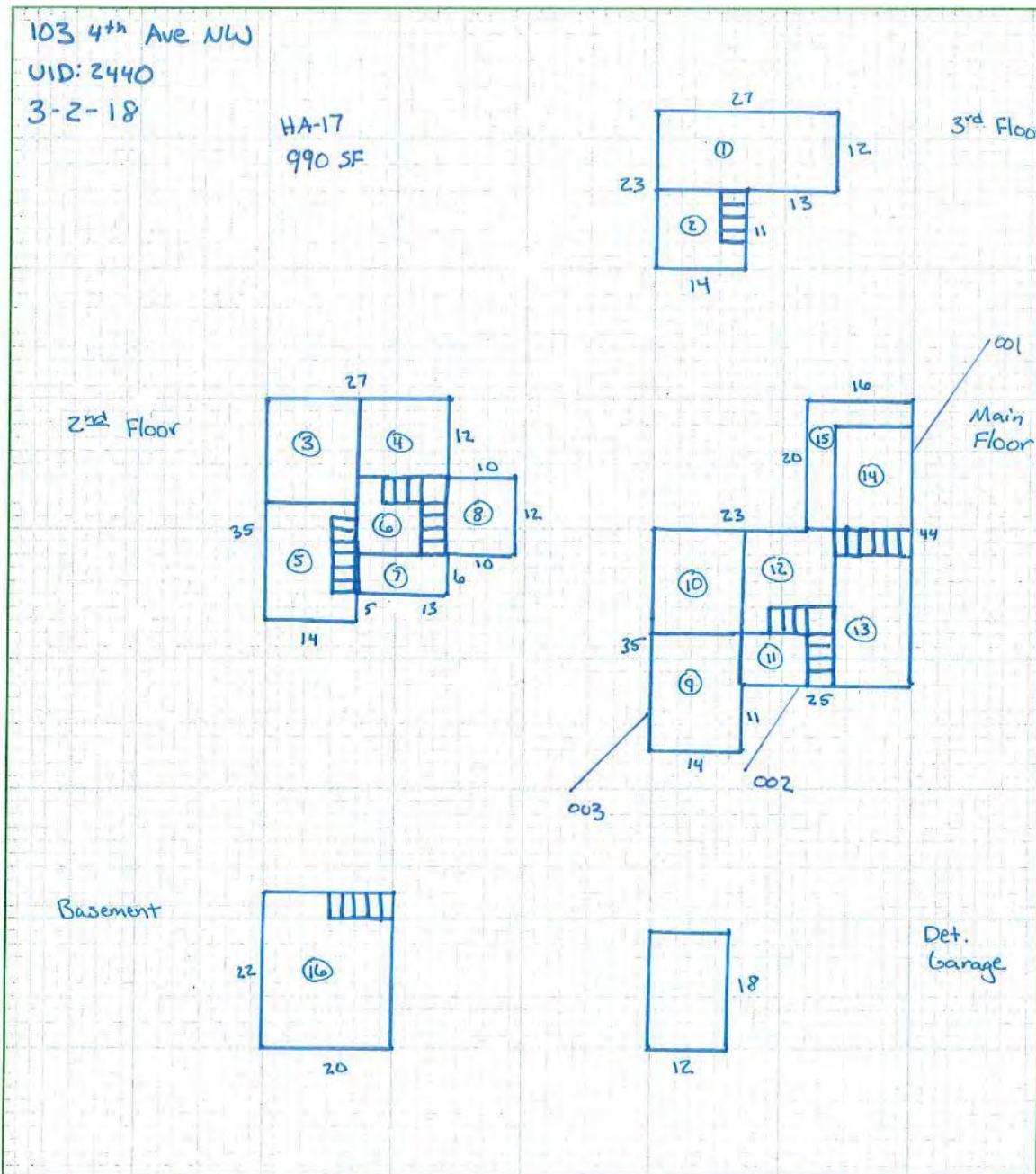
ADDRESS <i>103 4th Ave NW</i>	ZONE	TYPE OF FOUNDATION	
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NUMBER OF ADDITIONAL STRUCTURES <i>1</i>		TYPE OF FOUNDATION	
		RAISED <input type="checkbox"/>	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION: <i>Sharp Wall Texture</i>		FRIABLE <input type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
		CONDITIONS <input type="checkbox"/>	G <input checked="" type="checkbox"/> P <input type="checkbox"/>
QUANTITY OF MATERIAL: <i>990</i>		SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>
		EACH <input checked="" type="checkbox"/>	

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	18
--------	------	------------------	----

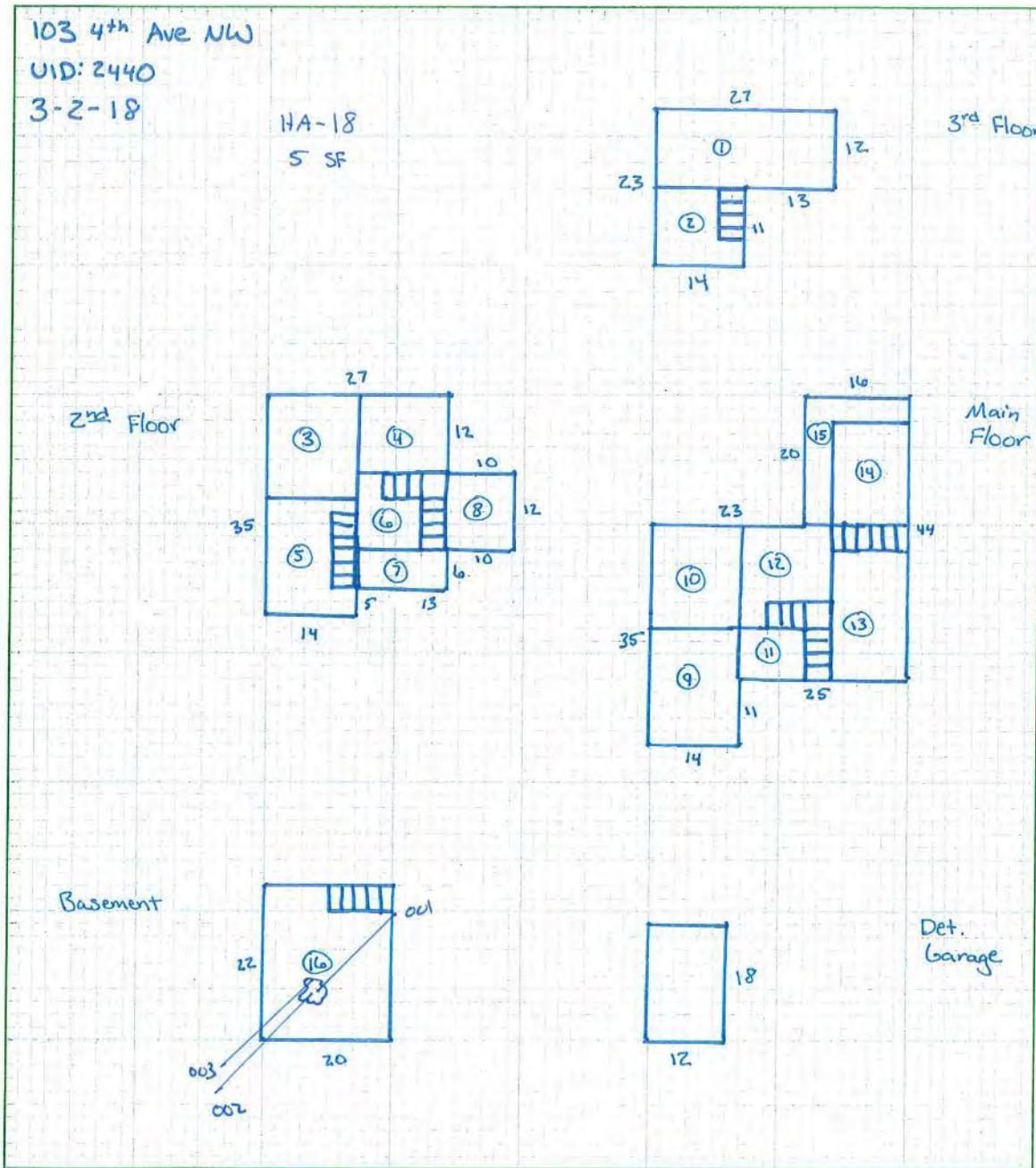
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>	
NUMBER OF ADDITIONAL STRUCTURES 1	TYPE OF FOUNDATION RAISED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/>		
SUSPECT MATERIAL DESCRIPTION: Suspect Paper Material	FRIABLE <input checked="" type="checkbox"/>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
QUANTITY OF MATERIAL: 5	SF <input checked="" type="checkbox"/>	LF <input type="checkbox"/>	EACH <input type="checkbox"/>

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HES

Haltran Environmental Services, LLC





PROJECT # 117508-114629

NDH INSPECTOR: Justin Redding #5843

DATE: 3-2-18

UID #:	2440	HOMOGENOUS AREA:	19
--------	------	------------------	----

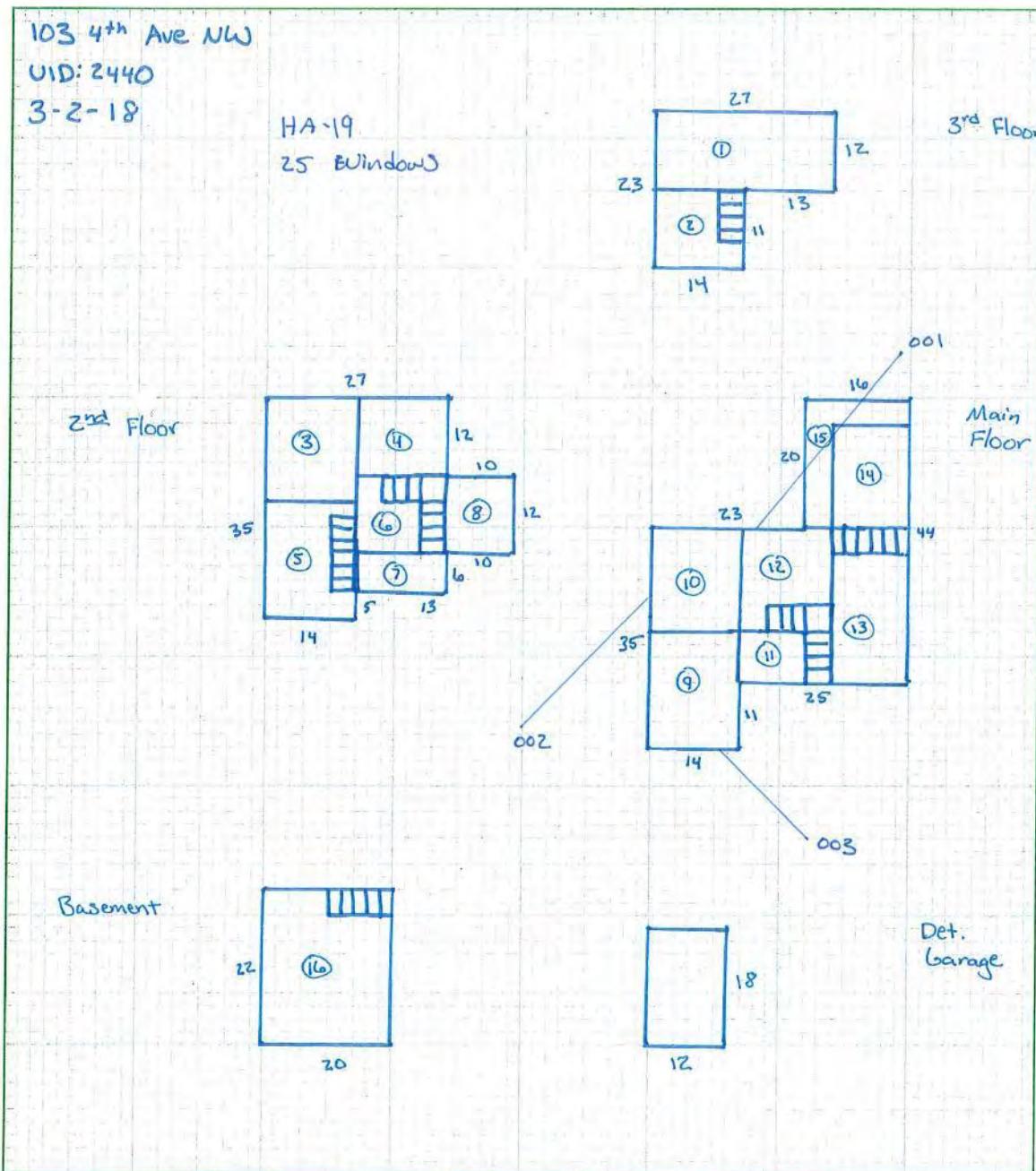
ADDRESS 103 4th Ave NW	ZONE	TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
NUMBER OF ADDITIONAL STRUCTURES 1		TYPE OF FOUNDATION	
		RAISED	CONCRETE <input checked="" type="checkbox"/>
SUSPECT MATERIAL DESCRIPTION: Window Glaze		FRIABLE	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
		CONDITIONS	G <input type="checkbox"/> P <input checked="" type="checkbox"/>
QUANTITY OF MATERIAL: 25		SF	LF EACH <input checked="" type="checkbox"/>

Page 19 of 19



HES

Haltran Environmental Services, LLC





Report for:

Wes Hall
Haltran Environmental Services
3805 Ponchartrain Dr.
Suite 3
Slidell, LA 70458

Regarding: Project: UID 2440; 103 4th Ave., NW
EML ID: 1888636

Approved by:

A handwritten signature in black ink.

Dates of Analysis:
Asbestos PLM: 03-05-2018

Approved Signatory
Danny Li

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

**EMLab P&K**

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(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT

Total Samples Submitted:	59
Total Samples Analyzed:	45
Total Samples with Layer Asbestos Content > 1%:	7

Location: 01-001

Lab ID-Version‡: 8864606-1

Sample Layers	Asbestos Content
Black Roofing Felt	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: 01-002

Lab ID-Version‡: 8864607-1

Sample Layers	Asbestos Content
Black Roofing Felt	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: 01-003

Lab ID-Version‡: 8864608-1

Sample Layers	Asbestos Content
Black Roofing Felt	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: 01-004

Lab ID-Version‡: 8864609-1

Sample Layers	Asbestos Content
Black Roofing Felt	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: 01-005

Lab ID-Version‡: 8864610-1

Sample Layers	Asbestos Content
Black Roofing Felt	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

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‡ A "Version" indicated by "x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT**Location: 02-001**

Lab ID-Version‡: 8864611-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 02-002

Lab ID-Version‡: 8864612-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 02-003

Lab ID-Version‡: 8864613-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 03-001

Lab ID-Version‡: 8864614-1

Sample Layers	Asbestos Content
Brown Vermiculite Insulation	< 1% Actinolite
Composite Non-Asbestos Content:	99% Vermiculite
Sample Composite Homogeneity:	Good

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT**Location: 03-002**

Lab ID-Version: 8864615-1

Sample Layers	Asbestos Content
Brown Vermiculite Insulation	< 1% Actinolite
Composite Non-Asbestos Content:	99% Vermiculite
Sample Composite Homogeneity:	Good

Location: 03-003

Lab ID-Version: 8864616-1

Sample Layers	Asbestos Content
Brown Vermiculite Insulation	< 1% Actinolite
Composite Non-Asbestos Content:	99% Vermiculite
Sample Composite Homogeneity:	Good

Location: 04-001

Lab ID-Version: 8864617-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Yellow Adhesive	ND
Sample Composite Homogeneity:	Moderate

Location: 04-002

Lab ID-Version: 8864618-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Yellow Adhesive	ND
Sample Composite Homogeneity:	Moderate

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT

Location: 04-003

Lab ID-Version[‡]: 8864619-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Yellow Adhesive	ND
Sample Composite Homogeneity:	Moderate

Location: 05-001

Lab ID-Version[‡]: 8864620-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 05-002

Lab ID-Version[‡]: 8864621-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 05-003

Lab ID-Version[‡]: 8864622-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Moderate

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT**Location: 06-001**

Lab ID-Version‡: 8864623-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Location: 06-002

Lab ID-Version‡: 8864624-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Location: 06-003

Lab ID-Version‡: 8864625-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Location: 07-001

Lab ID-Version‡: 8864626-1

Sample Layers	Asbestos Content
Off-White Ceiling Texture with Paint	2% Chrysotile
Sample Composite Homogeneity:	Good

Comments: Samples 7-002 and 7-003 were not analyzed due to prior positive series.

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT**Location: 08-001**

Lab ID-Version‡: 8864629-1

Sample Layers	Asbestos Content
Beige Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 08-002

Lab ID-Version‡: 8864630-1

Sample Layers	Asbestos Content
Beige Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 08-003

Lab ID-Version‡: 8864631-1

Sample Layers	Asbestos Content
Beige Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 09-001

Lab ID-Version‡: 8864632-1

Sample Layers	Asbestos Content
Off-White Ceiling Texture with Paint	2% Chrysotile
Beige Ceiling Texture	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Comments: Samples 9-002 and 9-003 were not analyzed due to prior positive series.

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EMLab ID: 1888636, Page 7 of 12

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT**Location: 10-001**

Lab ID-Version‡: 8864635-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 10-002

Lab ID-Version‡: 8864636-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 10-003

Lab ID-Version‡: 8864637-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 11-001

Lab ID-Version‡: 8864638-1

Sample Layers	Asbestos Content
Off-White Skin Coat with Paint	2% Chrysotile
Off-White Plaster	ND
Sample Composite Homogeneity: Moderate	

Comments: Samples 11-002 and 11-003 were not analyzed due to prior positive series.

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EMLab ID: 1888636, Page 8 of 12

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT

Location: 12-001

Lab ID-Version‡: 8864641-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 12-002

Lab ID-Version‡: 8864642-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 12-003

Lab ID-Version‡: 8864643-1

Sample Layers	Asbestos Content
Off-White Plaster with Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 13-001

Lab ID-Version‡: 8864644-1

Sample Layers	Asbestos Content
Tan Floor Tile	ND
Yellow Adhesive	ND
Sample Composite Homogeneity:	Moderate

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EMLab ID: 1888636, Page 9 of 12

**EMLab P&K**

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT**Location: 13-002**

Lab ID-Version‡: 8864645-1

Sample Layers	Asbestos Content
Tan Floor Tile	ND
Yellow Adhesive	ND
Sample Composite Homogeneity:	Moderate

Location: 13-003

Lab ID-Version‡: 8864646-1

Sample Layers	Asbestos Content
Tan Floor Tile	ND
Yellow Adhesive	ND
Sample Composite Homogeneity:	Moderate

Location: 14-001

Lab ID-Version‡: 8864647-1

Sample Layers	Asbestos Content
Black Roofing Tar with Paint	ND
Black Roofing Felt	ND
Composite Non-Asbestos Content:	35% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 14-002

Lab ID-Version‡: 8864648-1

Sample Layers	Asbestos Content
Black Roofing Tar with Paint	ND
Black Roofing Felt	ND
Composite Non-Asbestos Content:	35% Cellulose
Sample Composite Homogeneity:	Moderate

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EMLab ID: 1888636, Page 10 of 12

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Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT**Location: 14-003**

Lab ID-Version‡: 8864649-1

Sample Layers	Asbestos Content
Black Roofing Tar with Paint	ND
Black Roofing Felt	ND
Composite Non-Asbestos Content:	35% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 15-001

Lab ID-Version‡: 8864650-1

Sample Layers	Asbestos Content
Beige Texture with Paint	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Comments: Samples 15-002 and 15-003 were not analyzed due to prior positive series.

Location: 16-001

Lab ID-Version‡: 8864653-1

Sample Layers	Asbestos Content
Beige Skim Coat with Paint	2% Chrysotile
Off-White Plaster	ND
Sample Composite Homogeneity:	Moderate

Comments: Samples 16-002 and 16-003 were not analyzed due to prior positive series.

Location: 17-001

Lab ID-Version‡: 8864656-1

Sample Layers	Asbestos Content
White Texture with Paint	ND
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Moderate

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EMLab ID: 1888636, Page 11 of 12



EMLab P&K

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(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Haltran Environmental Services
C/O: Wes Hall
Re: UID 2440; 103 4th Ave., NW

Date of Sampling: 03-02-2018
Date of Receipt: 03-05-2018
Date of Report: 03-06-2018

ASBESTOS PLM REPORT

Location: 17-002

Lab ID-Version: 8864657-1

Sample Layers	Asbestos Content
White Texture with Paint	ND
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 17-003

Lab ID-Version: 8864658-1

Sample Layers	Asbestos Content
White Texture with Paint	ND
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 18-001

Lab ID-Version: 8864659-1

Sample Layers	Asbestos Content
Gray Paper	60% Chrysotile
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Samples 18-002 and 18-003 were not analyzed due to prior positive series.

Location: 19-001

Lab ID-Version: 8864662-1

Sample Layers	Asbestos Content
Off-White Window Glazing	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Comments: Samples 19-002 and 19-003 were not analyzed due to prior positive series.

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K, LLC

EMLab ID: 1888636, Page 12 of 12



ATTACHMENT III-C FEDERAL LABOR STANDARDS 4010

Federal Labor Standards Provisions

U.S. Department of Housing
and Urban Development
Office of Labor Relations

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(v); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein. Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part



of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract. HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (I) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(II) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract; but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

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(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(III) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(II) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

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the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(III) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C. "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of ... influencing in any way the action of such Administration.... makes, utters or publishes any statement knowing the same to be false.... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.



(3) **Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96), 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.



ATTACHMENT III-D
GEOTECHNICAL REPORT

REPORT OF
GEOTECHNICAL EXPLORATION

**Proposed Home Sweet Home Relocation
110 4th Avenue NW
Minot, North Dakota**

For
Attn: Mr. Tim Gustafson
EAPC
3100 Demers Avenue
Grand Forks, ND 58201

Laboratory Number G18-016

March 29, 2018

MATERIAL TESTING SERVICES, LLC



March 29, 2018

Attn: Mr. Tim Gustafson
EAPC
3100 Demers Avenue
Grand Forks, ND 58201

ref: **Geotechnical Exploration**
Proposed Home Sweet Home Relocation
110 4th Avenue NW
Minot, North Dakota
Laboratory Number G18-016

Dear Mr. Gustafson:

Enclosed is the report of the geotechnical exploration that we recently conducted for the proposed building relocation. The work was conducted in general accordance with our proposal.

Information from the above work was used to make recommendations for design and construction of foundations and floor slabs.

The soil samples will be stored at the laboratory for a period of fourteen days from the date of this report. The samples will then be discarded unless we are requested to store them for a longer period of time.

Please call if you have any questions or comments concerning this report.

Sincerely,
MATERIAL TESTING SERVICES, LLC

A handwritten signature in black ink.

Rusten R.L. Roteliuk, PE
Geotechnical Engineer





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MATERIAL TESTING SERVICES, LLC



Report of Geotechnical Exploration

Proposed Single Family Home
110 4th Avenue NW
Minot, North Dakota
Laboratory Number G18-016

1. Introduction

The proposed project is to relocate the existing Home Sweet Home building from 103 4th Avenue NW across the street to 110 4th Avenue NW in Minot, North Dakota. The purpose of the exploration was to provide recommendations on the suitability of the existing soils for the proposed construction, which included providing information for the building site preparation and allowable bearing capacity for foundation design.

2. Procedures

Four soil borings were drilled for the project. Three borings (1, 2, 3) were drilled in the area where the building will be relocated. One boring (4) was drilled in the area where a single family home was previously situated. The borings were drilled with standard penetration split-spoon methods, in accordance with ASTM D 1586. Soils were classified in accordance with ASTM Visual-Manual methods (ASTM D 2488). Additional information regarding drilling procedures and soils classification is given on the sheets included in Appendix A. The approximate locations of the borings are shown on the site sketch included in Appendix A.

The ground level elevations at the boring locations were determined with reference to the top of the hydrant in the NE corner of the intersection of 1st Street and 4th Avenue NW. For purposes of this exploration, the temporary benchmark (TBM) was assigned an arbitrary elevation of 100.0 feet.

3. Surface Observations

Based on visual observations of the crew chief, the site was mostly grass covered with some piles of branches from trees removed from the site. Boring 2 was offset approximately 20 feet east because a pile of branches obstructed the planned boring location. The site topography was fairly flat with ground elevations ranging from 97.0 feet at boring 1 to 98.5 feet at boring 4.

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4. Subsurface Observations

Information on the subsurface conditions is given on the attached boring logs in Appendix A. The logs include: descriptions and classifications of soils encountered, the depths to noted soil changes, water level measurements, and soil test results. Standard penetration resistance values are given in the N columns of the logs. Appendix A includes descriptions of symbols and terminology used on the boring logs as well as a soil classification chart.

4.1. Soils

Approximately 6 to 7 feet of old fill was encountered in each of the borings. Generally, the fill consisted of approximately 2 feet of topsoil, organic lean clay (OL) at the surface. Below the topsoil, the fill consisted of mostly silty sand (SM) that contained pockets of lean clay and topsoil.

Below the fill, the naturally deposited soils were alluvial layers of silty sand, clayey sand (SC), and sand (SP). The silty sand layers extended to approximately 12 to 14 feet below the existing ground surface. The layers of sand and clayey sand were encountered below the silty sand layers. Based on the standard penetration resistance ("N") values, the sandy soils were very loose to loose.

4.2. Groundwater

Groundwater measurements were taken in the borings at the completion of drilling. Additional measurements were taken after the boreholes were allowed to stand open for two days. After standing open, groundwater measurements ranged from 17.2 to 17.7 feet below the existing ground surface.

We wish to point out that the levels can be expected to fluctuate both yearly and seasonally. Therefore, the water level at the time of construction may differ significantly from those encountered during our exploration program. Long-term water level monitoring was not included in the scope of services.

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5. Background Information

The following represents our understanding of the project. If there are changes to the project data, or if some of the information is not correct, it is necessary that we be provided with the additional or correct information for further review.

The site is located at 110 4th Avenue NW in Minot, North Dakota. The project includes the relocation of the existing Home Sweet Home structure. We understand that it was originally constructed as a single family residence. We assumed the perimeter grade will be raised to approximately elevation 99.0 feet and the basement floor will be near elevation 91.0 feet.

It was indicated that wall loads are not expected to exceed 3 kips per lineal foot.

6. Conclusions and Recommendations

The recommendations contained in this report represent our professional opinions. These opinions were formulated in accordance with currently accepted engineering practices. Other than this, no warranty is intended or implied.

6.1. Discussion

The main concerns with the site are the presence of old, undocumented fill and loose to very loose naturally deposited soil. However, it appears that excavations for foundations and floor slabs will extend below the old fill. Further, considering the light foundation loads, the naturally deposited soils encountered below the fill should provide adequate support for the proposed structure.

6.2. Excavation and Site Preparation

We recommend that any old fill be removed from below the footprint of the new structure. The soils at the bottoms of the excavations may be sensitive to disturbance. Therefore, we recommend that final foundation excavations be performed with a backhoe equipped with a smooth cutting edge to reduce disturbance to the natural soils at the site. Disturbed soils should be removed or re-compactated prior to placing new fill or concrete. The excavation should be oversized if it extends beneath the footing elevations one foot horizontally for every foot of fill measured vertically below the bottom of the footing.

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It appears that the non-organic, on-site soils would be suitable for reuse as site fill. However, the fill should be approved by the geotechnical engineer or his representative prior to reuse.

If off site fill is required, it can consist of non-expansive, non-organic lean clay, sand, or sand with gravel. Sand fill that contains gravel should have 100 percent passing the 2-inch sieve. If lean clay is used it should have a liquid limit of 40 or less. We would not recommend using fat clay (CH) for fill below structures or slabs. All clays, whether on-site or off-site clays, should be placed at a moisture content of minus 2 to plus 3 percent of optimum moisture content.

Loose lift thicknesses should be no more than 6 inches. Vibratory rollers should be used to compact sands and sheep's foot compactors should be used on clays. Any fill that is to support footings or floor slabs should be compacted to at least 95 percent of maximum dry density as determined according to ASTM D 698 (standard Proctor).

If earthwork is done during periods of freezing temperatures, we recommend protecting the fill from freezing once it has been placed. No frozen soils should be used as fill and fill should not be placed on frozen ground. Earthwork could be difficult in the spring or late fall when conditions are often cool and wet.

6.3. Foundations

Based on measurements taken at the completion of drilling, it does not appear that groundwater will enter foundation/basement excavations. If groundwater is encountered, we should be contacted for further review. Again, soils that are disturbed will need to be removed or recompacted prior to placing new fill or concrete. The bottom of the foundation excavations should be checked by the geotechnical engineer or his representative to determine if additional excavation or subcut is necessary.

In our opinion, the naturally deposited, non-organic, undisturbed soils are capable of supporting a maximum net allowable soil bearing capacity of 2000 pounds per square foot (psf). This loading should result in a theoretical safety factor of 3 or more with respect to a punching shear failure. Total and differential settlements should not exceed 1 inch and $\frac{1}{2}$ inch, respectively.

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We recommend that perimeter footings in heated buildings be provided with at least 5 feet of final cover for frost protection. Unheated structures should have 7 feet of final cover for frost protection.

6.4. Floor Slabs

We recommend that the site be prepared as stated in Section 6.2. We recommend that slabs on grade be constructed structurally independent of foundation walls and columns. We also recommend a minimum 6-inch thick layer of sand be placed directly below the slabs. The sand should have less than seven percent passing the #200 sieve by weight. If it contains gravel, the gravel should have a maximum size of one inch. The sandy layer will be used to provide a working surface for concrete placement and serve as a capillary break.

6.5. Foundation Backfill

We recommend that the exterior foundation backfill be compacted in loose lift thicknesses not to exceed 6 inches. Compaction should be to a minimum of 92 percent of ASTM D 698 in lawn areas. Backfill which will support slabs, sidewalks or driveways should be compacted to at least 95 percent of ASTM D 698.

6.6. Basement Walls

We recommend that the basement walls be designed using an at-rest lateral earth pressure equivalent to that generated by a fluid with a total unit weight of 65 pounds per cubic foot (pcf) if the on-site soils are used as backfill.

Appropriate waterproofing sealants or membranes should be applied to basement walls.

6.7. Draintile

No groundwater entered the boreholes at the time of the exploration. Even so, there are risks that groundwater levels could rise to an elevation above the planned basement floor elevation and cause damage to the structure or contents if it cannot be controlled and kept out of the basement. There are measures that can be taken to reduce the risk of groundwater infiltration, but it cannot be eliminated for various reasons.

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We recommend that the basement floor be kept as high as practical. We also recommend that a drain tile system be used for the basement in conjunction with the free draining sand layer described in Section 6.4. As much as possible, the excavation bottom should be sloped to the drain tile. Drain tile should be located along both the exterior and interior sides of the perimeter walls. It may also be prudent to install runs of drain tile below the interior of the basement at intervals of 20 feet or less. We recommend using rigid drain tile that is a minimum of 4 inches in diameter. Proper filters should be placed around the drain tile pipe to allow flow, but avoid clogging.

6.8. Site Drainage

We advise that adequate drainage be maintained during and after construction. Exterior grades in lawn areas should slope away from the building at a rate of 1 inch per foot or greater for a distance of at least 10 feet from the building. We also recommend an appropriate gutter and downspout system be used to control roof drainage. Downspouts should have extensions and splash pads to carry the water well away from the backfill line.

6.9. Excavation Slopes

Safe excavation slopes should be provided in accordance with current Occupational Safety and Health Administration (OSHA) requirements. These regulations are found in the Federal Register, Tuesday, October 31, 1989, Part II, Department of Labor, OSHA, 29 CFR Part 1926, Occupational Safety and Health Administration, Standard-Excavation; Final Rule. Based on the boring logs, the existing soils should be considered Type C. The type of excavation will have to be verified by the contractor at the time of construction.

7. Construction Testing and Observations

We recommend that qualified field personnel be on site at the following times to observe the site soil conditions.

7.1. Site Preparation

We recommend that the site be observed after stripping by the geotechnical engineer or his representative prior to placement of controlled, compacted fill. The proposed fill should also be approved by the geotechnical engineer prior to use.

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7.2. Backfilling Operations

We recommend a representative number of compaction tests be performed during placement of the new fill. Compaction tests should also be performed during construction for foundation backfill, utility lines, etc.. The tests should be performed to determine if the recommended compaction was achieved. As a general guideline, tests should be taken for each 2,500 square feet embankment fill, every 75 to 100 feet in trench fill, and for each 2 feet of fill thickness.

7.3. Foundation Excavations

We also recommend that all footing excavations be observed by the geotechnical engineer or his representative to aid in determining if the exposed soils are capable of supporting the design load bearing pressures.

This report is written by:



Rusten R.I. Roteliuk, P.E.
Geotechnical Engineer

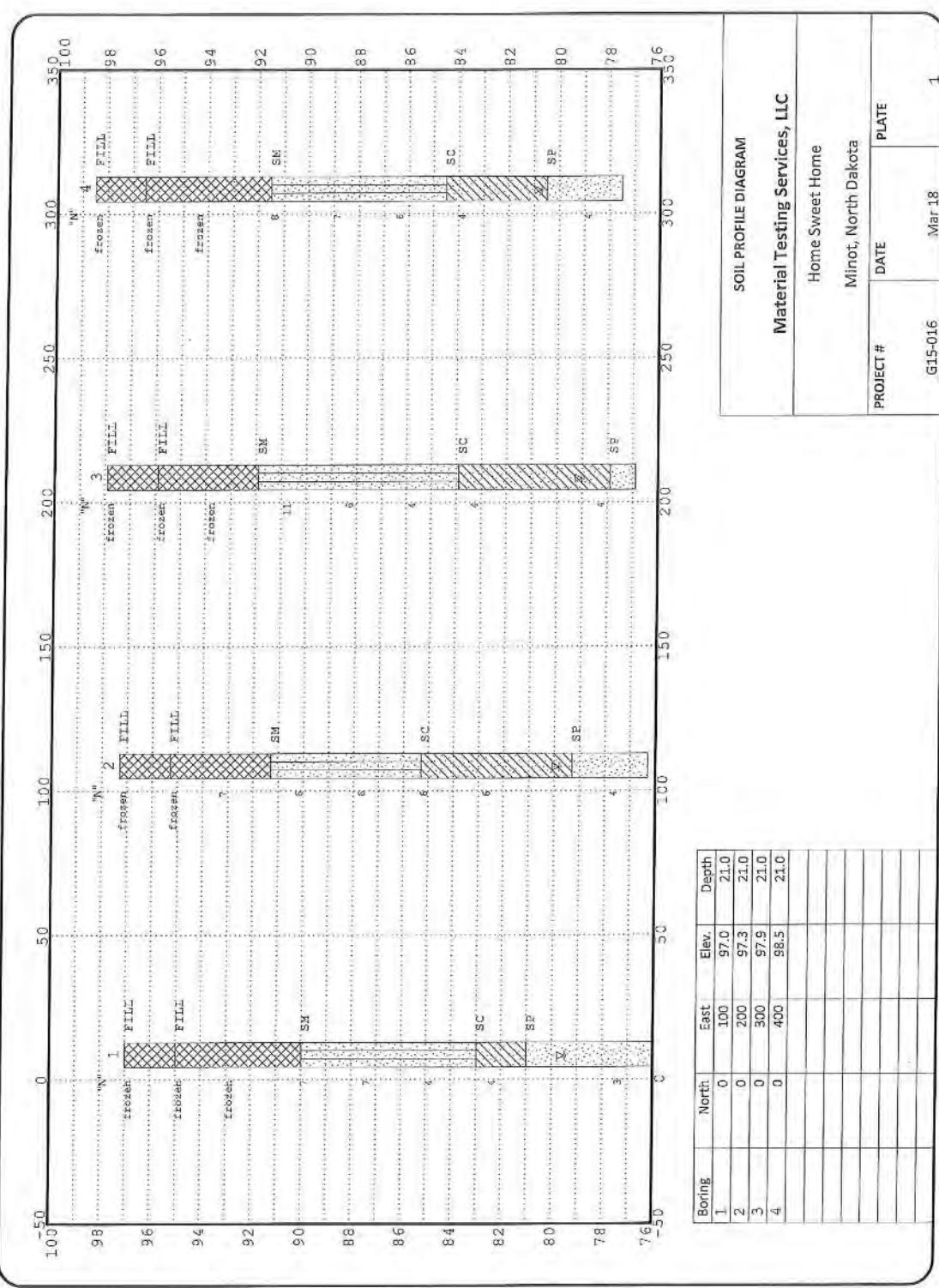
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Appendix A

Site Sketch
Profile and Boring Logs
Symbols and Descriptive Terminology used on Logs
Soil Classification Chart







MATERIAL TESTING SERVICES, LLC
Box 634
Minot, North Dakota 58702
(701) 852-5553

SOIL BORING RECORD

BORING NUMBER 1 SHEET 1 OF 1
PROJECT Home Sweet Home
PROJECT LOCATION Minot, North Dakota
PROJECT NUMBER G18-016
START DATE 3/21/18 FINISH DATE 3/21/18

LAYER DEPTH / ELEVATION (FT)	SOIL DESCRIPTION	SYMBOLIC LOG	ELEVATION / DEPTH (FT)	GEOLOGY		SAMPLE	TEST RESULTS						
				TYPE	LEGEND								
						D (pcf)	N VALUES	BLOWS (F ₁)	WATER LEVEL	MOISTURE CONTENT (%)	LIQUID LIMIT (%)	PLASTIC LIMIT (%)	Q ₁ (psf)
2.0	Fill, mostly Topsoil, Organic Lean Clay, dark brown, frozen, (OL)	XX	97.0	Fill	SB		frozen						
95.0	Fill, mostly Silty Sand, brownish gray, fine grained, small pockets of lean clay and topsoil, frozen to 5' then moist, (SM)	XX	92.0		SB		frozen					12	
7.0			87.0	Alluvium	SB		7						
30.0	Silty Sand, brownish gray, fine grained, laminations of silt, moist, loose to very loose, (SM)	XX	82.0		SB		7						
14.0			82.0		SB		4						
83.0	Clayey Sand, grayish brown, iron oxide staining, laminations of silt, wet, very loose, (SC)	XX	78.0		SB		4						
16.0			78.0		SB								
81.0	Sand, grayish brown, fine to medium grained, waterbearing, very loose, (SP)	XX	77.0		SB		3						
21.0			77.0		SB								
76.0	End of Boring												
	NM = None Measurable												
DRILLER	KD												
METHOD	4" FA												
LOGGER	MT												
REVIEWER	RR												
DRILL RIG	CME 45												
WATER LEVEL MEASUREMENTS				DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING MUD LEVEL	WATER LEVEL			
				3/21/18	0845	21		18.0		17.5			
				3/23/18	0800	21		17.5		17.3			



MATERIAL TESTING SERVICES, LLC
Box 634
Minot, North Dakota 58702
(701) 852-5553

SOIL BORING RECORD

BORING NUMBER 2 SHEET 1 OF 1
PROJECT Home Sweet Home
PROJECT LOCATION Minot, North Dakota
PROJECT NUMBER G18-016
START DATE 3/21/18 FINISH DATE 3/21/18

LAYER DEPTH/ ELEVATION (FT)	SOIL DESCRIPTION	SYMBOLIC LOG	ELEVATION/ DEPTH (FT)	GEOLOGY	SAMPLE		TEST RESULTS				
					TYPE	LEGEND	D (pcf)	N VALUES	BLOWS/ET	WATER LEVEL	MOISTURE CONTENT (%)
2.0	Fill, mostly Topsoil, Organic Lean Clay, dark brown, frozen, (OL)		97.9	Fill	SB			frozen			
95.3	Fill, mostly Silty Sand, brownish gray, fine grained, small pockets of lean clay and topsoil, frozen to 5' then moist, (SM)		92.6		SB			frozen			
6.0	Silty Sand, brownish gray, fine grained, laminations of silt, moist, loose, (SM)		92.6	Alluvium	SB				7	8	
12.0			87.3		SB				6	7	
85.3	Clayey Sand, grayish brown, iron oxide staining, laminations of silt, wet, loose, (SC)		87.3		SB				6	7	
18.0			82.3		SB				6	7	
79.3	Sand, brownish gray, fine to coarse grained, waterbearing, very loose, (SP)		82.3		SB				6	7	
21.0	End of Boring		77.3		SB				6	7	
	NM = None Measurable		77.3								
DRILLER	KD			WATER LEVEL	DATE	TIME	SAMPLED DEPTH	CASTING DEPTH	CAVE-IN DEPTH	DRILLING MUD LEVEL	WATER LEVEL
METHOD	4" FA				3/21/18	0915	21		18.5		17.5
LOGGER	MT				3/23/18	0802	21		17.7		17.2
REVIEWER	RR										
DRILL RIG	CME 45										



MATERIAL TESTING SERVICES, LLC
Box 634
Minot, North Dakota 58702
(701) 852-5553
SOIL BORING RECORD

BORING NUMBER 3 SHEET 1 OF 1
PROJECT Home Sweet Home
PROJECT LOCATION Minot, North Dakota
PROJECT NUMBER G18-016
START DATE 3/21/18 FINISH DATE 3/21/18

LAYER DEPTH/ ELEVATION (FT)	SOIL DESCRIPTION	SYMBOLIC LOG	ELEVATION/ DEPTH (FT)	GEOLOGY	SAMPLE			TEST RESULTS			
					TYPE	LEGEND	D (pcf)	N VALUES	BLOWS/FT	WATER LEVEL	MOISTURE CONTENT (%)
2.0	Fill, mostly Topsoil, Organic Lean Clay, dark brown, frozen, (OL)		97.9	Fill	SB			frozen			
95.9	Fill, mostly Silty Sand, brownish gray, fine grained, small pockets of lean clay and topsoil, frozen, (SM)				SB			frozen			
6.0	Silty Sand, brownish gray, fine grained, laminations of silt, moist, loose to very loose, (SM)		92.9	Alluvium	SB				11		
93.9			87.9		SB				6		
14.0	Clayey Sand, grayish brown, iron oxide staining, laminations of silt, wet, very loose, (SC)		82.9		SB				4		
83.9			77.9		SB				4		
20.0	Sand, grayish brown, fine to medium grained, waterbearing, very loose, (SP)		77.2		SB				4		
21.0											
76.9	End of Boring										
NM = None Measurable											
DRILLER	KD										
METHOD	4" FA										
LOGGER	MT										
REVIEWER	RR										
DRILL RIG	CME 45										
WATER LEVEL MEASUREMENTS					DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING MUD LEVEL	WATER LEVEL
					3/21/18	0950	21		19.0		18.9
					3/23/18	0804	21		18.0		17.5



MATERIAL TESTING SERVICES, LLC
Box 634
Minot, North Dakota 58702
(701) 852-5553

SOIL BORING RECORD

BORING NUMBER 4 SHEET 1 OF 1
PROJECT Home Sweet Home
PROJECT LOCATION Minot, North Dakota
PROJECT NUMBER G18-016
START DATE 3/21/18 FINISH DATE 3/21/18

LAYER DEPTH/ ELEVATION	SOIL DESCRIPTION	SYMBOLIC LOG	ELEVATION/ DEPTH (FT)	GEOLOGY	SAMPLE			TEST RESULTS			
					TYPE	LEGEND	D (PCF)	N VALUES	BLOWS/FT	WATER LEVEL	MOISTURE CONTENT (%)
2.0	Fill, mostly Topsoil, Organic Lean Clay, dark brown, frozen, (OL)		98.0	Fill	SB			frozen			
96.5	Fill, mostly Silty Sand, brownish gray, fine grained, small pockets of lean clay and topsoil, frozen to 5' then moist, (SM)		93.5		SB			frozen			
7.0				Alluvium	SB			0			
91.5	Silty Sand, brownish gray, fine grained, laminations of silt, moist, loose to very loose, (SM)		88.5		SB			7			
14.0			83.5		SB			6			
84.5	Clayey Sand, grayish brown, iron oxide staining, laminations of silt, wet, very loose, (SC)		78.5		SB			4			
18.0			73.5		SB			3			
90.5	Sand, grayish brown, fine to medium grained, waterbearing, very loose, (SP)		70.0		SB			4			
21.0			65.0		SB						
77.5	End of Boring										
	NM = None Measurable										
DRILLER	KD										
METHOD	4" FA										
LOGGER	MT										
REVIEWER	RR										
DRILL RIG	CME 45										
WATER LEVEL	MEASUREMENTS										
	DATE	TIME	DEPTH	SAMPLED DEPTH	CASING DEPTH	CAVR-IN DEPTH	DRILLING MUD LEVEL	WATER LEVEL			
	3/21/18	1020	21			18.9		17.8			
	3/23/18	0806	21			17.9		17.7			



**SYMBOLS AND DESCRIPTIVE TERMINOLOGY
ON TEST BORING LOG**

SYMBOLS FOR DRILLING AND SAMPLING		SYMBOLS FOR LABORATORY TESTS	
<u>Symbol</u>	<u>Description</u>	<u>Symbol</u>	<u>Description</u>
HSA	3 1/4" I.D. hollow stem auger	W	Water content
FA	4", 6" or 10" diameter flight auger	D	Dry density - pounds per cubic foot
HA	2", 4" or 6" hand auger	LL	Liquid limit - ASTM** D 4318
DC	2 1/2", 4", 5" or 6" steel drive casing	PL	Plastic limit - ASTM D 4318
RC	Size A, B or N rotary casing	--- Inserts in Last Column (Qu or RQD) ---	
PD	Pipe drill or cleanout tube	Qu	Unconfined compressive strength, psf - ASTM D 2166
CS	Continuous split barrel sampling	Pq	Penetrometer reading, tsf
DM	Drilling mud	Ts	Torsion reading, tsf
JW	Jetting water	G	Specific gravity
SB	2" O.D. split barrel sampling	SL	Shrinkage limits - ASTM D 427
L	2 1/2" or 3 1/2" O.D. SB liner sample	OC	Organic content - Combustion method
T	2" or 3" thin walled tube sample	SP	Swell pressure, tsf
3TP	3" thin walled tube using pitcher sampler	PS	Percent swell under pressure
TO	2" or 3" thin walled tube using Osterberg sampler	FS	Free swell, percent
W	Wash sample	SS	Shrink swell, percent
B	Bag sample	pH	Hydrogen ion content - Meter Method
P	Test pit sample	SC	Sulfate content, parts/million or mg/l
Q	BQ, NQ, or PQ wireline system	CC	Chloride content, parts/million or mg/l
X	AX, BX, or NX double tube barrel	C ⁺	One dimensional consolidation - ASTM D 2435
N	Standard penetration test, blows per foot	Qc*	Triaxial compression
CR	Core recovery, percent	D.S.*	Direct shear - ASTM D 3080
WL	Water level	K*	Coefficient of permeability, cm/sec
WL	Water level	DH*	Double hydrometer - ASTM D 4221
NMR	No measurement recorded, primarily due to presence of drilling or coring fluid	MA*	Particle size analysis - ASTM D 422
		R	Laboratory electrical resistivity, ohm-cm - ASTM G 57
		E*	Pressuremeter test
		PM*	Pressuremeter test
		VS*	Field vane shear - ASTM D 2573
		IR*	Infiltrometer test - ASTM D 3385
		RQD	Rock quality designation, percent
		*	Results shown on attached data sheet or graph
		**	ASTM designates American Society for Testing and Materials

DESCRIPTIONS OF N-VALUES VS. SOIL PROPERTIES			DESCRIPTIONS OF SOIL CONDITIONS	
<u>N Value</u>	<u>Density</u>	<u>N Value</u>	<u>Condition</u>	<u>Description</u>
0 - 4	Very loose	0 - 4	Lamination	Up to 1/2" thick stratum
5 - 10	Loose	5 - 8	Layer	1/2" to 6" thick stratum
11 - 30	Medium dense	9 - 15	Dry	Powdery, no noticeable water
31 - 50	Dense	16 - 30	Firm	Below saturation
Over 50	Very dense	Over 30	Hard	Saturated, above liquid limit
			Wet	Pervious soil below water
			Waterbearing	Pervious soil below water
			Varied	Alternating laminations of any combinations of clay, silt and fine grained sand

DESCRIPTIONS OF GRAVEL PROPORTIONS IN SOILS			DESCRIPTIONS OF PARTICLE SIZES	
<u>Soil Type</u>	<u>Description</u>	<u>Range, %</u>	<u>Material Type</u>	<u>Size</u>
Coarse grained soils	A little gravel	2 - 14	Boulders	Over 12"
Coarse grained soils	With gravel	15 - 49	Cobbles	3" - 12"
Fine grained soils:			Course gravel	3 1/4" - 3"
71-85% passing #200 sieve	A little gravel	2 - 7	Fine gravel	#4 sieve - 3/4"
71-85% passing #200 sieve	With gravel	8 - 29	Coarse sand	#4 - #10 sieve
70% passing #200 sieve	A little gravel	2 - 14	Medium sand	#10 - #40 sieve
70% passing #200 sieve	With gravel	15 - 24	Fine sand	#40 - #200 sieve
70% passing #200 sieve	Gravelly	16 - 49	Silt	100% passing #200 sieve and > 0.002mm
			Clay	100% passing #200 sieve and < 0.002mm

c:\wp\winforms\desc



SOIL CLASSIFICATION CHART

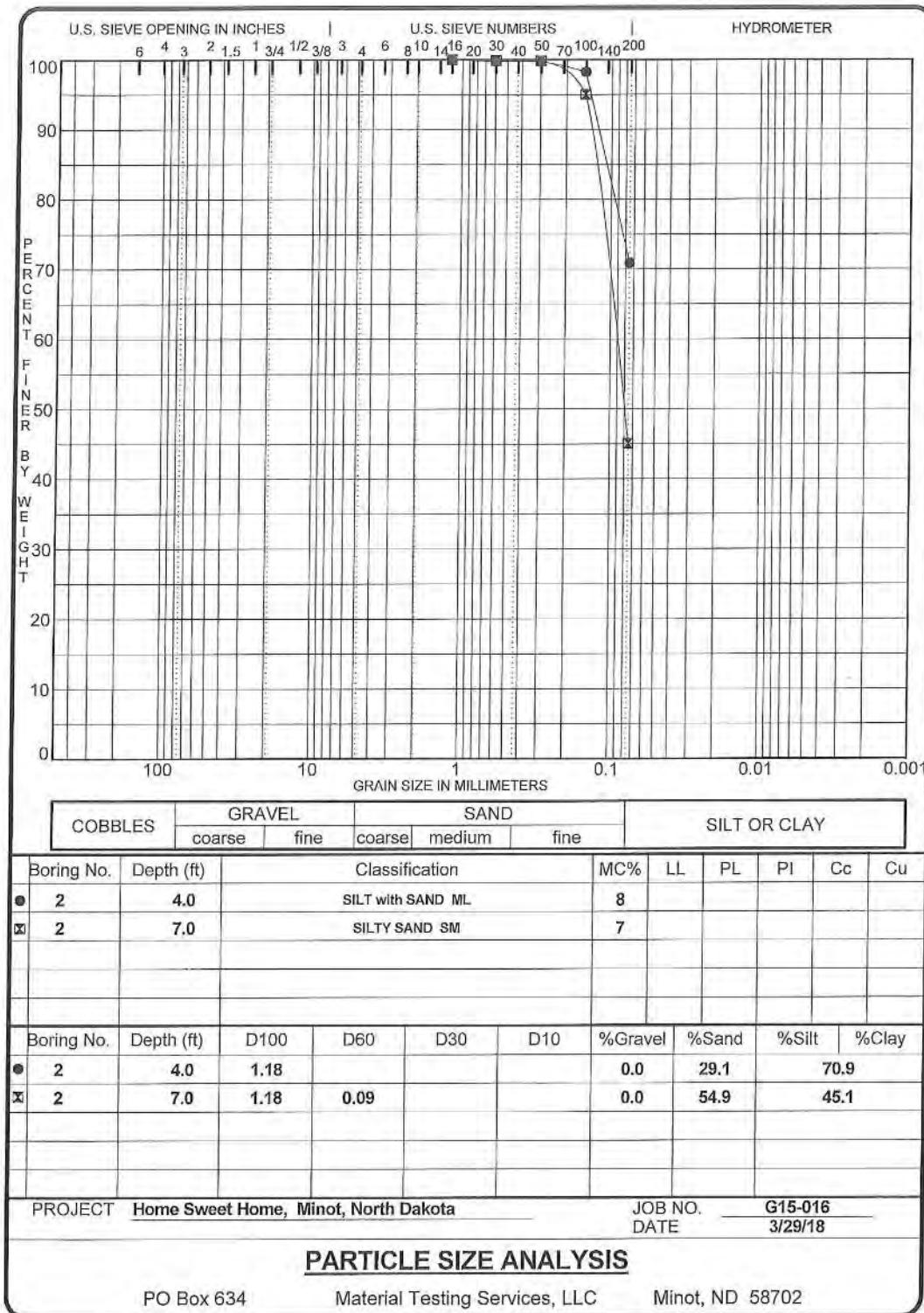
MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		CLEAN SANDS (LITTLE OR NO FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
				MH	INORGANIC SILTS, MICAEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50			CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
		HIGHLY ORGANIC SOILS		PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS



Appendix B

Laboratory Test Reports





Appendix C

Precautions For Excavating and Refilling During Cold Weather



PRECAUTIONS FOR EXCAVATING AND REFILLING DURING COLD WEATHER

The winter season in North Dakota and Montana presents specific problems for foundation construction. Soils which are allowed to freeze undergo a moisture volume expansion, resulting in a loss of density. These frost-expanded soils will consolidate upon thawing, causing settlement of any structure supported on them. To prevent this settlement, frost should not be allowed to penetrate into the soils below any proposed structure.

Ideally, winter excavation should be limited to areas small enough to be refilled to a grade higher than footing grade on the same day. Typically, these areas should be filled to floor grade. Trenching back down to unfrozen soils for foundation construction can then be performed just prior to footing placement. The excavated trenches should be protected from freezing by means of insulating or heating during foundation construction. Backfilling of the foundation trenches should be performed immediately after the below-grade foundation construction is finished. In addition, any interior footings, or footings designed without frost protection should be extended below frost depth, unless adequate precautions are taken to prevent frost intrusion until the building can be enclosed and heated.

In many cases, final grade cannot be attained in one day's time, even though small areas are worked. In the event final grade cannot be attained in one day's time, frost can be expected to develop overnight. The depth of frost penetration can be minimized by leaving a layer of loose soil on top of the compacted material overnight. However, any frost which forms in this loose layer, or snow, should never be used as fill material.

After the structure has been enclosed, all floor slab areas should be subjected to ample periods of heating to allow thawing of the soil system. Alternatively, the frozen soils can be completely removed and be replaced with an engineered fill. The floor slab areas should be checked at random and representative locations for remnant areas of frost, and density tests should be performed to document fill compaction prior to slab placement.

Due to the potential problems associated with fill placement during cold weather, any filling operations should be monitored by a full-time, on-site soils technician. Full-time monitoring aids in detecting areas of frozen material, or potential problems with frozen material within the fill, so that appropriate measures can be taken. The choice of fill material is particularly important during cold weather, since clean granular fill materials can be placed and compacted more efficiently than silty or clayey soils. In addition, greater magnitudes of heaving can be expected with freezing of the more frost susceptible silts and clays.

If more specific frost information, or cold weather data concerning other construction materials is required, please contact us.



ATTACHMENT III-E
DRAWINGS

HOME SWEET HOME STRUCTURE RELOCATION

103 4TH AVE SW
MINOT, NORTH DAKOTA

CITY PROJECT #4360

LIST OF DRAWINGS

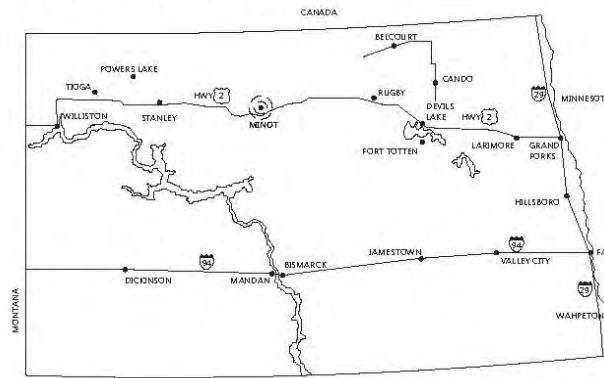
GENERAL

G001 COVER SHEET

STRUCTURAL

S001 GENERAL STRUCTURAL NOTES
S200 FOUNDATION PLAN
S601 STRUCTURAL DETAILS

NORTH DAKOTA STATE MAP



CONTACT INFORMATION



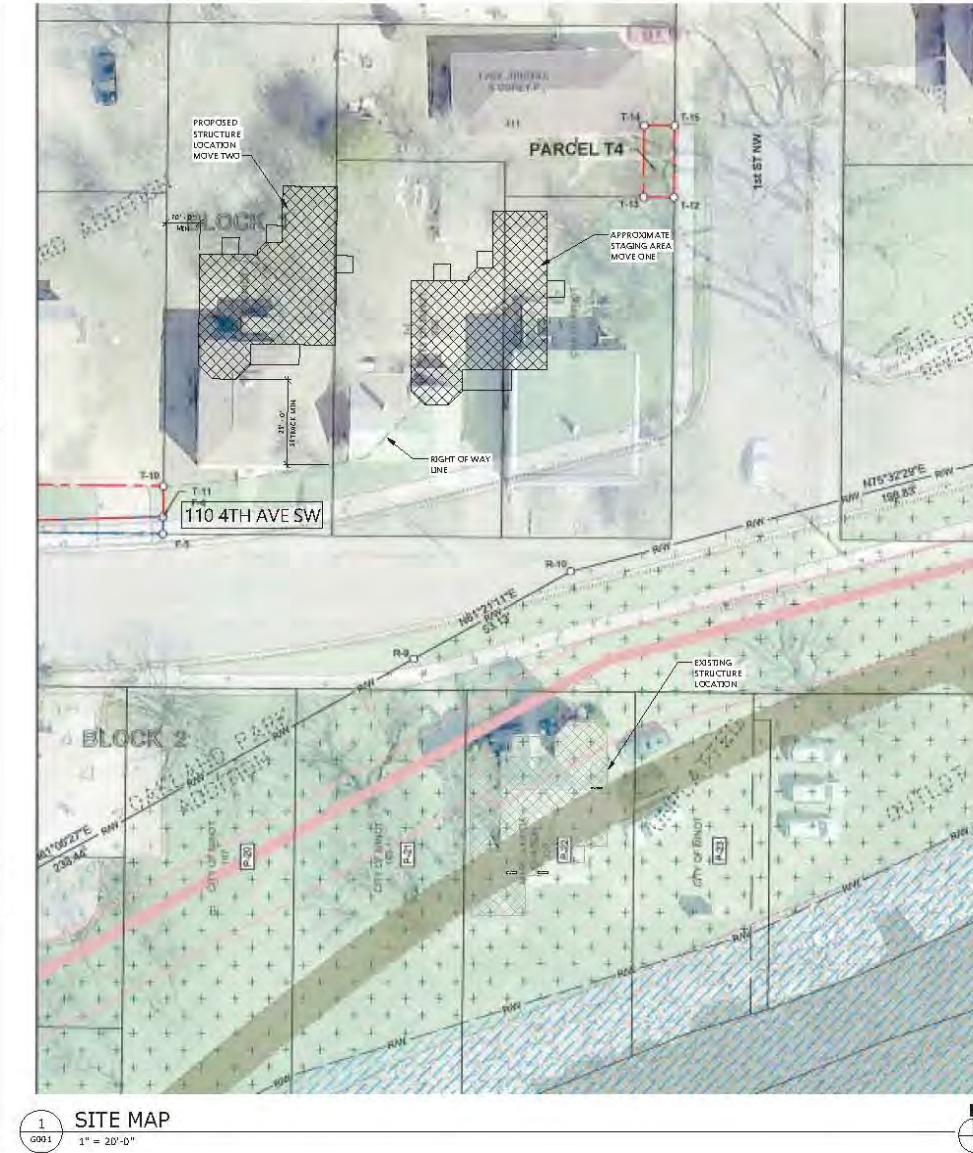
OWNER:
CITY OF MINOT



STRUCTURAL ENGINEER
EAPC
TIM GUSTAFSON
(701) 775-3000
EMAIL: Tim.Gustafson@eapc.net

REGISTRATION

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originally issued & sealed by
Timothy J. Gustafson, PE,
Registration #1807
PE-0367 on 06 APR 2018.
& the original documents
are stored at the
Minot office of
EAPC Architects Engineers



Architecture Engineering Industrial
Wind Energy Interior Design Construction

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Orion Park ND
Wittman ND
Boring Hill
Dakota Park ND

Page ND
Minot ND
Gros Ventre River ND

Eastwood ND
Harvey ND
Gros Ventre ND

www.eapc.net

CLIENT
CITY OF MINOT

PROJECT DESCRIPTION
HOME SWEET HOME
STRUCTURE
RELOCATION

CITY MINOT
STATE NORTH DAKOTA

ISSUE DATES

CD CONSTRUCTION DOCUMENTS	4/6/2018
MARK DESCRIPTION	DATE

PROJECT NO: 20182360

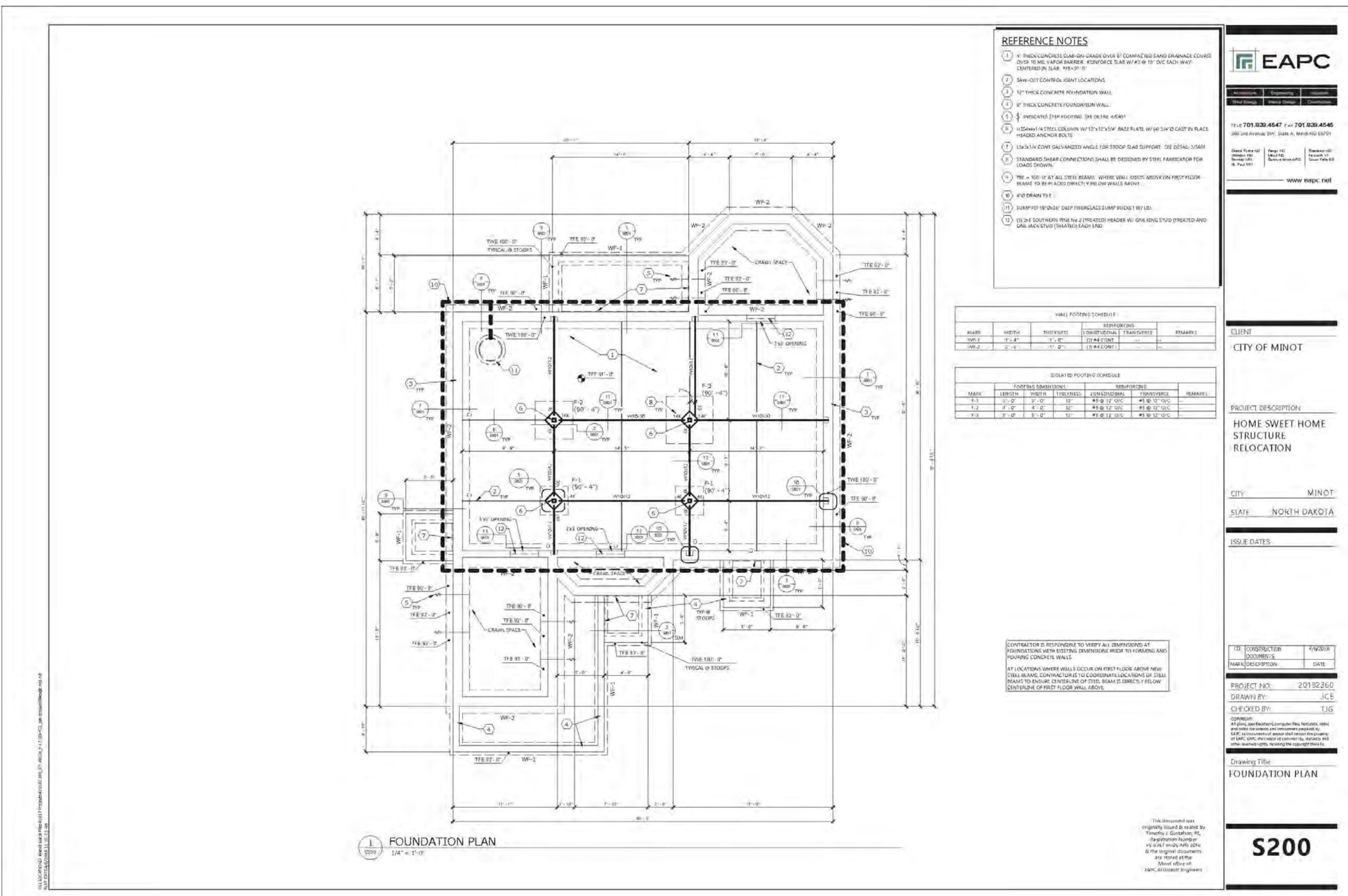
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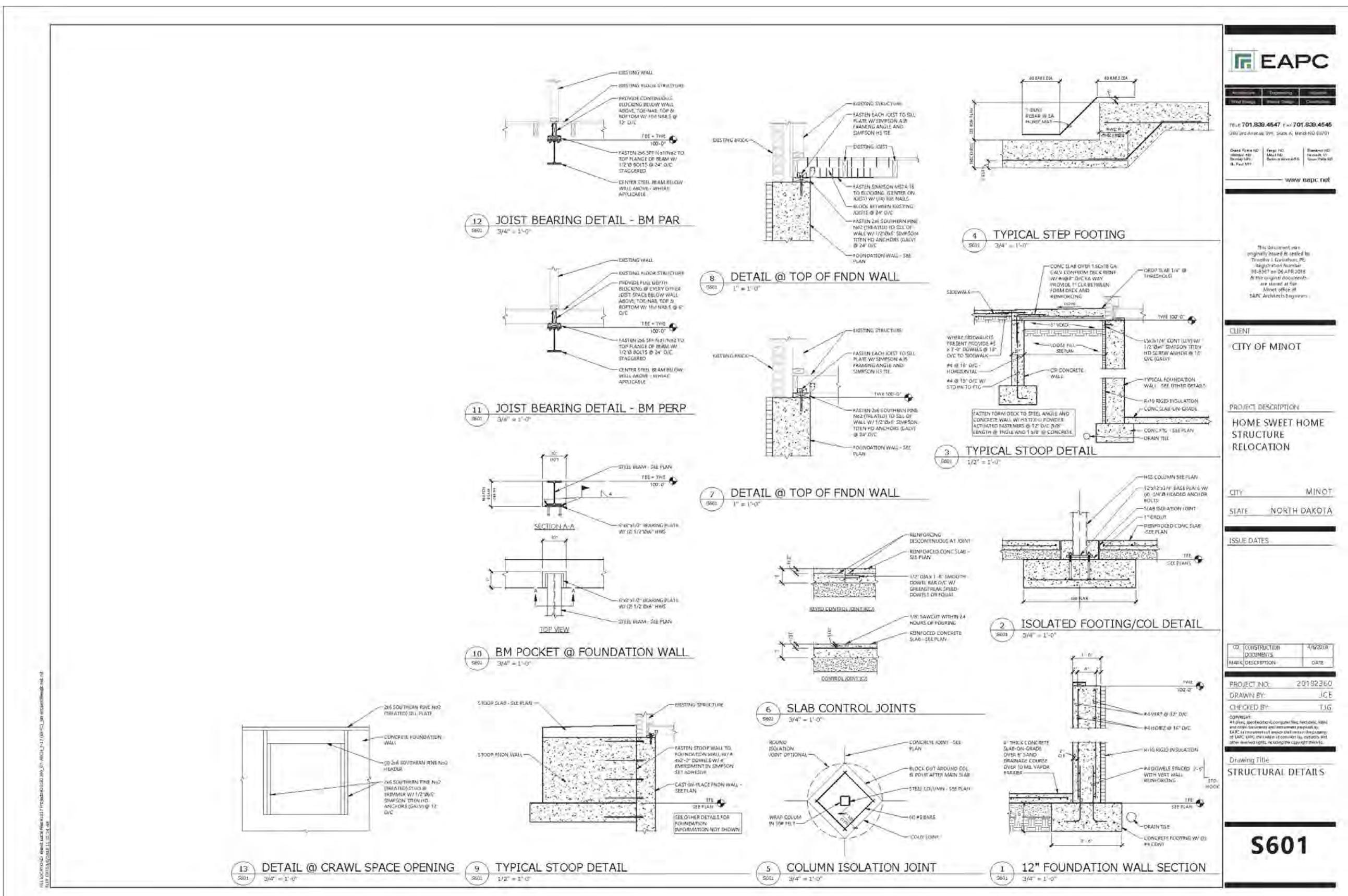
CHECKED BY: TJG

DRAWING NO:
44-182360-1
Architectural, construction, computer A/E, As-Built, maps
and other documents and materials prepared by EAPC
Architects Engineers, Inc., Minot, ND, USA, for the
City of Minot, ND, and its agents, employees, and
other persons, and all other persons by license and
other implied rights, including copyright thereto.

Drawing Title
COVER SHEET

G001







SECTION 01 14 00

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 Debris Removal and Disposal

- A. The Contractor is solely responsible for securing and utilizing appropriate disposal facilities for waste generated under this Contract.
- B. Landfill tipping fees, taxes, and all other costs associated with disposal at the certified landfills shall be paid by the Contractor and shall be included in the quoted price listed in the Bid Form.

END OF SECTION



SECTION 02 41 00

DEMOLITION AND DEBRIS REMOVAL, TRANSPORTATION, AND DISPOSAL

PART 1 GENERAL

1.01 Damage

- A. The Contractor shall repair all roadways, sidewalks, utilities, drainage structures, and other features not designated for demolition or removal, which are damaged by Contractor operations. This will include re-sloping damaged surfaces to original grade. It shall be duly noted that concrete slabs, sidewalks, structural foundations, and piers/pilings attached to the ground which ARE EXCLUDED from the scope of this work shall not be demolished or damaged.

1.02 Mobilization and Demobilization

- A. Mobilization shall consist of all preparatory work and operations, including those necessary for movement of personnel, equipment, supplies, and incidentals to and from the project sites, installing and maintaining temporary roads and drainage structures as needed to access the project sites, the costs of bonds, required insurance, and all other pre- and post-construction expenses necessary to perform this work. It shall be duly noted that such expenses are the sole responsibility of the Contractor.
- B. Demobilization shall consist of removing all signs of temporary facilities, work areas, structures or temporary structures, stockpiles of excess waste materials, or any other vestiges of the work of this Contract at each site. Restoration to original contours will generally not be required, unless specifically directed by the CDA. However, all restored areas shall be smoothly and evenly dressed. Street signs shall be returned to pre-existing location and condition following completion of the work at each site. It shall be duly noted that such activities are incidental and related expenses are the sole responsibility of the Contractor.

1.03 Staging and Disposal Sites

- A. The Contractor is responsible to negotiate and secure contracts for all sites and site access for staging areas and loading. All work shall be coordinated with adjacent landowners throughout the project duration. All infrastructure, facilities, and property affected by site access and staging shall be restored to their original condition. The Contractor shall videotape and photograph all staging areas prior to mobilization to assure proper restoration, as well as furnish the Engineer with copies of all videotapes and photographs.
- B. The Contractor shall be responsible for the segregation of debris to facilitate disposal in approved sites. The Contractor is responsible for all tipping fees and disposal costs and shall provide proof of a contract or an account with all of the landfills, which he designates for disposal under this Contract. The Contractor is responsible for providing an approved area for truck and equipment inspections.



PART 2 SUBMITTALS

2.01 Contractor Safety Plan

- A. The Contractor shall submit a Contractor Safety Plan in accordance with the 2003 edition of EM 385-1-1, Safety and Health Requirements Manual. The plan shall address decommissioning of hazardous material tasks, hazards, and mitigation measures for review and approval prior to implementation of any decommissioning. One (1) copy of the completed Contractor Safety Plan shall be provided to the Engineer within three (3) working days of the Contract award. This Plan must be reviewed by the Engineer prior to the commencement of any work.

2.02 Work Schedule

- A. The Contractor shall provide a work schedule including a timeline for each site. The work schedule shall include number of hours per day and days of the week the Contractor anticipates working.

PART 3 EQUIPMENT AND MATERIALS

3.01 General

- A. All trucks and other equipment shall be in compliance with all applicable Federal, State, and Local regulations and laws.
- B. Trucks or equipment, which is designated for use under this Contract, shall not be used for any other work during the working hours of this Contract.

3.02 Trucks

- A. Any truck used to haul debris shall be covered with a tarp while hauling debris, and shall be capable of rapidly dumping its load without assistance of other equipment.

PART 4 ENVIRONMENTAL PROTECTION, HISTORIC PRESERVATION, PROTECTION OF PROPERTY, AND RESTORATION

4.01 General

- A. For the purpose of this Contract, environmental protection is defined as the retention of the environment in its natural state to the greatest extent possible during execution of this Contract. Environmental protection requires consideration of air, water, and land and involves noise and solid waste management, as well as other pollutants. The Contractor and its Subcontractors shall incorporate appropriate measures to manage environmental pollution arising from the demolition and debris/waste removal activities in performance of this Contract in accordance with all Federal, State, and Local regulations and laws.
- B. The Contractor will address potential asbestos containing materials using Best Management Practices to the maximum extent practical, for the purposes of: (1) conformance with all Federal, State, and Local requirements; (2) removal of appropriate ACM; and, (3) classifying the waste stream resulting from demolition as construction and demolition (C&D).



4.02 Historical and Archaeological Concerns or Resources

- A. The Contractor shall not remove or disturb any historical, archaeological, architectural, or cultural artifacts, relic remains, or objects. All items having any apparent historical or archaeological interests, which are discovered shall be carefully preserved. The Contractor shall leave the archaeological find undisturbed and immediately report to the Engineer.

4.03 Hazardous and Sensitive Materials

- A. The Contractor shall not remove or disturb any human remains. If human remains are encountered during removal activities, all work at that site shall be stopped. The Contractor shall immediately notify the Engineer.
- B. If the Contractor encounters animal remains, the remains shall be secured onsite and work may continue. The Contractor shall immediately notify the Engineer.
- C. If the Contractor encounters ammunition, weapons, or explosives during project activities, all work shall be stopped in the adjacent area. The Contractor shall immediately notify the Engineer.

4.04 Valuables

- A. Valuables may include jewelry, cash, safes, and other items of monetary or sentimental value. Under no circumstances shall the Contractor, Subcontractor, or employees keep any found items for souvenirs or other uses. If the Contractor encounters valuables, such items shall be secured onsite and work may continue. The Contractor shall immediately notify the Engineer.

PART 5 EXECUTION OF THE WORK

5.01 General

- A. The Contractor shall cordon-off the work zone with caution tape, and ensure that it is effectively delineated to prevent access by unauthorized personnel. All personnel within the work zone shall have the required accreditations.
- B. ACM removal crew size and composition shall be included in the Contractor's Waste Disposal Plan and submitted with their Bid.

5.02 Removal of Debris/Waste

- A. During and following the removal and loading of debris, the Contractor shall, by sweeping or other method, remove from the streets, alleys, and sidewalks, all dirt, mud, nails, glass, and debris resulting from its operations.

5.03 Transporting and Disposing of the Debris/Waste

- A. The Contractor shall provide means for hauling debris and waste from the work site to the designated disposal facilities included in the Contractor's Waste Disposal Plan. The Contractor may store loaded trucks and containers overnight, however, it shall be the responsibility of the Contractor to assure that same are covered by an additional tarp and are sealed tightly by binding straps and shall have any required warning placards displayed in accordance with all



applicable regulations. Equipment and trucks will not be allowed to park overnight on any streets within the City of Minot.

- B. The Contractor shall transport and dump debris and waste at the appropriate disposal facility. Debris shall be transported in a manner that prevents spillage on streets or adjacent areas. Transportation of all debris shall be in compliance with all applicable Federal, State, and Local regulations and laws governing same.

END OF SECTION



SECTION 02 41 15

STRUCTURE RELOCATION

PART 1 GENERAL

1.01 Related Documents

- A. Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 Summary

- A. Scope of Work: Bidder shall provide moving services to relocate the house located at 103 4th Avenue SW to a new lot located at 110 4th Avenue SW in Minot, North Dakota.

1.03 Qualifications

- A. Move Experience: Bidders must have at least five (5) years' experience moving projects. Moving historical houses' experience is a plus.
- B. References: Provide references for at least three (3) commercial moves, completed within the last five (5) years, of similar size and complexity. Details must include the date of the move, the name and location of the client, contact name and telephone number, square footage of the move and a description showing the services that were performed. With each reference, indicate what your responsibilities were on each of these projects.
- C. Valuation Rate/Insurance: State the valuation rate or insurance provided for loss or damage to the property during the move.

1.04 Special Terms and Conditions

- A. The move locations are in public, high-traffic coed areas, in view of the general public. The Mover shall ensure that a safe environment is maintained around all move activities. The Mover and his/her personnel are cautioned against creating interruptions, noise or offensive situations.
- B. The Mover will ensure adequate workforce and equipment commitments, at or above the minimum requirements as stated below, so that a smooth move is accomplished. If there are delays in the move because of any shortages, any associated time and material costs will be at the Mover's expense.
- C. Permits: Permits from the City of Minot will be needed on this contract and it will be the Mover's responsibility to obtain them in advance of move.
- D. Working Hours: Working hours are considered to be 8:00 am through 8:00 pm seven days a week, at Mover's discretion.



1.05 Pre-Installation Meetings

- A. Pre-relocation Conference: Conduct conference before the move
 - 1. Inspect and discuss conditions of structure being moved.
 - 2. Review conditions of existing site and new location before the move.
 - 3. Review requirements of work performed by other trades as they related to the house move.
 - 4. Verify all dimensions and connections to the new foundations in the new location.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 Building Protection: The Contractor will:

- A. Prevent damage to all building structures involved in the move including, but not limited to all walls, floors, stairways, doorways, stained glass, brick work and stucco finishes.
 - 1. The contractor may elect to remove items that can be damaged during the move and re-install said items in the new location.
- B. Estimate and supply the correct amount and sizes of building protection materials. Those materials will be taken up and removed at the end of each phase of moving. If further building protection is needed, materials to do so will be provided and installed by the Contractor, kept in place while moving, and removed afterward.
- C. Not block access to emergency ingress/egress points of building infrastructure hubs including but not limited to stairwells and rooms where electrical and mechanical equipment is located.
- D. The Mover will provide all trucks, moving equipment, building protection materials.

3.02 Building Removal

- A. All work shall be done in accordance with these specifications and in accordance with local ordinances and regulations. In the event there is a conflict between these specifications and local ordinances and regulations, the local ordinances and regulations shall govern.
- B. The power has been disconnected, the Contractor will remove the existing entry panel and move it to the new location, if possible.
- C. The municipal water service has been disconnected and the water meter removed. The sanitary sewer service connections into the building will be cut off and permanently sealed by the City of Minot and will not be the responsibility of this Contractor.
- D. Any furnace, boiler, laundry tubs, appliances, ducts, pipes, wiring, wood, wallboard, columns, and debris can be left in the basement and will be removed by the City of Minot.



- E. The Contractor shall at all times keep the premises free from the accumulation of waste materials and debris.
- F. The Contractor shall furnish and erect a snow fence (or an approved substitute), approximately four feet in height completely enclosing the open basement. The fence shall be erected on the same day that the building is pulled away from the foundation. The fence must be kept in place until work begins on removal of the foundation by a City of Minot different project.
- G. Due to the time constraints of this project, the house might need to be moved twice if the foundations are not ready by June 1st, 2018. The City of Minot has made available the lot adjacent to 110 4th Avenue SW for that purpose.
- H. Damaged property: The Contractor will be responsible for repairing or replacing any property damaged or lost during the moves.

3.03 Building Characteristics and Selected Measurements

- A. The building measures approximately 36' in the north-south direction and 40' in the east-west direction. The building is a 2 1/2 and partial 3 story building. The northeast corner of the home has a bay window approximately 15' wide and is 3 stories tall. The south side of the home has a bay window approximately 10' wide. The south west corner of the building has a 15' wide x 20' long single story addition. The basement consists of a 24' wide x 28' long full depth basement and several areas of the basement having a crawl space. The exterior of the first floor has brick and stucco from the basement level to the top of the first floor (approximately 11' tall). The exterior brick and stucco are cracked and deteriorating at several locations on the building. The floor joists at the south basement wall have rotated out of plumb. The beams under the south west crawl space portion of the building have settled and rotated. The building has a brick chimney located at approximately the center of the 2 1/2 story portion of the building. The chimney is visible in the basement, but does not extend full height thru the attic and roof. The attic at the 2 1/2 story portion of the building consist of 2x4 rafter spaced at 24" on center. The attic is open framing with no ridge board at the peak.

END OF SECTION



SECTION 02 82 00

ASBESTOS REMOVAL

PART 1 GENERAL

1.01 Summary

- A. The Contractor shall adhere to all Federal, State, and Local rules, laws, and regulations and protocol with regard to asbestos removal during the execution of the work specified in these Contract Documents. The Contractor is encouraged to fully understand all rules and regulations established by applicable regulatory agencies regarding the management, handling, removal, and disposal of asbestos when demolishing structures and basements and conducting all other work associated with this Contract.

END OF SECTION



SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 Summary

- A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.
- B. Section also includes below-slab plastic sheet vapor barrier and drainage course.

1.03 Definitions

- A. Cementitious Materials: Portland cement alone or in combination with fly ash; materials subject to compliance with requirements.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.04 Action Submittals

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Indicate amounts of mixing water to be withheld for later addition at Project site. If no water is indicated, it is not allowable to add water at the project site.
- C. Steel Reinforcement Shop Drawings: Placing Drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.
- D. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.
 - 1. Location of construction joints is subject to approval of the Architect.

1.05 Information Submittals

- A. Material Certificates: For each of the following, signed by manufacturers:
 - 1. Fly ash.
 - 2. Admixtures.



3. Curing compounds.
4. Floor and slab treatments.
5. Bonding agents.
6. Adhesives.
7. Repair materials.

B. Material Test Reports: For the following, from a qualified testing agency:

1. Aggregates: Include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
2. Field Quality Control Reports.

1.06 Quality Assurance

A. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to be involved, including the following:

1. Contractor's superintendent.
2. Independent testing agency responsible for concrete design mixtures.
3. Ready-mix concrete manufacturer.
4. Concrete subcontractor.

B. Review special instructions and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, cold- and hot-weather concreting procedures, curing procedures, construction contraction and isolation joints, and joint-filler strips, vapor-retarder installation, anchor rod and anchorage device installation tolerances, concrete repair procedures, and concrete protection.

C. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

D. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.

1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician, Grade I. Testing agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician, Grade II.

E. Welding Qualifications: Qualify procedures and personnel according to AWS D1.4/D 1/4M.



1.07 Delivery, Storage, and Handling

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

1.08 Field Conditions

- A. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 1. When average high and low temperature is expected to fall below 40 deg F (4.4 deg C) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301 (ACI 301M).
 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- B. Hot-Weather Placement: Comply with ACI 301 (ACI 301M) and as follows:
 1. Maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

PART 2 PRODUCTS

2.01 Concrete – General

- A. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 1. ACI 301 (ACI 301M) for production of concrete materials.
 2. ACI 117 (ACI 117M) for placement tolerances.

2.02 Form-Facing Materials

- A. Smooth-Formed Finished Concrete: Form-facing panels that provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 1. Plywood, metal, or other approved panel materials.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.



- C. Forms for Cylindrical Columns, Pedestals, and Supports: Metal, glass-fiber-reinforced plastic, paper, or fiber tubes that produce surfaces with gradual or abrupt irregularities not exceeding specified formwork surface class. Provide units with sufficient wall thickness to resist plastic concrete loads without detrimental deformation.
- D. Void Forms: Biodegradable paper surface, treated for moisture resistance, structurally sufficient to support weight of plastic concrete and other superimposed loads.
- E. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch (19 by 19 mm), minimum.
- F. Rustication Strips: Wood, metal, PVC, or rubber strips, kerfed for ease of form removal.
- G. Form-Release Agents: Commercially formulated form-release agent that does not bond with, stain, or adversely affect concrete surfaces and does not impair subsequent treatments of concrete surfaces.
 - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- H. Form Ties: Factory-fabricated, removable or snap-off glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
 - 1. Furnish units that leave no corrodible metal closer than 1 inch (25 mm) to the plane of exposed concrete surface.
 - 2. Furnish ties that, when removed, leave holes no larger than 1 inch (25 mm) in diameter in concrete surface.
 - 3. Furnish ties with integral water-barrier plates to walls indicated to receive damp proofing or waterproofing.

2.03 Steel Reinforcement

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
- B. Low-Alloy-Steel Reinforcing Bars: ASTM A 706/A 706M, deformed.
- C. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, plain, fabricated from as-drawn steel wire into flat sheets.
- D. Deformed-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, flat sheet.

2.04 Reinforcement Accessories

- A. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), plain-steel bars, cut true to length with ends square and free of burrs.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:



1. For concrete surfaces exposed to view, where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.
2. Precast blocks are allowed only for slab-on grade.

2.05 Concrete Materials

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- B. Cementitious Materials:
 1. Portland Cement: ASTM C 150/C 150M, Type I or Type II, gray.
 2. Fly Ash: ASTM C 618, Class F or C as provided by Coal Creek Station.
- C. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar applications and service conditions using similar aggregates and cementitious materials.
 1. Maximum Coarse-Aggregate Size: 1-inch (25 mm) or $\frac{3}{4}$ -inch (19 mm) nominal.
 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- D. Air-Entraining Admixture: ASTM C 260/C 260M.
- E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride. Contractor and ready-mix supplier may select from any of the listed admixtures:
 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
 2. Retarding Admixture: ASTM C 494/C 494M, Type B.
 3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
 4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
- F. Water: ASTM C 94/ C 94 M and potable.

2.06 Vapor Retarders and Drainage Course

- A. Sheet Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 10 mils (0.25 mm) thick.
- B. Drainage Course: Free draining sand with less than 7% passing the #200 sieve. Sand shall meet the ASTM C33 fine aggregate Class 1S or better deleterious limits.



2.07 Curing Materials

- A. Evaporation Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 10 mils (0.25 mm) thick.
- B. Drainage Course: Free draining sand with less than 7% passing the #200 sieve. Sand shall meet the ASTM C33 fine aggregate Class 1S or better deleterious limits.

2.08 Curing Materials

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) when dry.
- C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
- F. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

2.09 Related Materials

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Bonding Agent: ASTM C 1059/C 1059M, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

2.10 Repair Materials

- A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch (3.2 mm) and that can be feathered at edges to match adjacent floor elevations.
 1. Cement Binder: ASTM C 150/C 150M, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3.2 to 6 mm) or coarse sand as recommended by underlayment manufacturer.
 4. Compressive Strength: Not less than 4,000 psi at 28 days when tested according to ASTM C 109/C 109M.



- B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch (6.4 mm) and that can be filled in over a scarified surface to match adjacent floor elevations.
 - 1. Cement Binder: ASTM C 150/C 150M, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 - 2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
 - 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3.2 to 6 mm) or coarse sand as recommended by topping manufacturer.
 - 4. Compressive Strength: Not less than 5000 psi (34.5 MPa) at 28 days when tested according to ASTM C 109/C 109M.

2.11 Concrete Mixtures – General

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301 (ACI 301M).
 - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 - 1. Fly Ash: 25 percent.
- C. Limit water-soluble, chloride-ion content in hardened concrete to 0.06 percent by weight of cement.
- D. Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use water-reducing high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing and -retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 - 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a w/c ratio below 0.50.

2.12 Concrete Mixtures for Building Elements

- A. Footings: Normal-weight concrete.
 - 1. Minimum Compressive Strength: 3000 psi (20.7 MPa) at 28 days.



2. Slump Limit: Plus or minus 1 inch (25 mm) from the slump indicated on the approved mix design.
3. Air Content: 6.0 percent, plus or minus 1.0 percent at point of delivery for 1-inch (25-mm) or 3/4-inch (19-mm) nominal maximum aggregate size.

B. Foundation Walls/Piers: Normal-weight concrete.

1. Minimum Compressive Strength: 4000 psi (27.6 Mpa) at 28 days.
2. Maximum W/C Ratio: 0.48
3. Slump Limit: Plus or minus 1 inch (25 mm) from the slump indicated on the approved mix design.
4. Air Content: 6.0 percent, plus or minus 1.0 percent at point of delivery for 1-inch (25-mm) or 3/4-inch (19 mm) nominal maximum aggregate size.

C. Slabs-on-Grade: Normal-weight concrete

1. Minimum Compressive Strength: 4000 psi (27.6 MPa) at 28 days.
2. Maximum W/C Ratio: 0.48.
3. Minimum Cementitious Materials Content: 540 lb/cu. yd. (320 kg/cu.m).
4. Slump Limit: Plus or minus 1 inch (25 mm) from slump indicated on the approved mix design.
5. Air Content: Do not allow air content of trowel-finished floors to exceed 3 percent.

2.13 Fabricating Reinforcement

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.14 Concrete Mixing

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.

1. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.

PART 3 EXECUTION

3.01 Formwork Installation

A. Design, erect, shore, brace, and maintain formwork, according to ACI 301 (ACI 301M), to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.



- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117 (ACI 117M).
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
 - 1. Class A, 1/8 inch (3.2 mm) for smooth-formed finished surfaces.
 - 2. Class B, 1/4 inch (6 mm) for rough-formed finished surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Construct forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
 - 1. Install keyways, reglets, recesses, and the like, for easy removal.
 - 2. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.02 Embedded Item Installation

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor rods, accurately located, to elevations required and within tolerances in Section 7.5 of AISC 303, summarized as follows:
 - a. $\pm \frac{1}{4}$ " from indicated dimensions, and not more than $\frac{1}{4}$ " per 100 LF along any column line, not to exceed 1" along a column grid.



3.03 Removing and Reusing Forms

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F (10 deg C) for 48 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations, and curing and protection operations need to be maintained.
 - 1. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material are not acceptable for exposed surfaces. Apply new form-release agent.
- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

3.04 Vapor-Retarder and Drainage Course Installation

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder according to ASTM E 1643 and manufacturer's written instructions.
 - 1. Lap joints 6 inches (150 mm) and seal with manufacturer's recommended tape.
- B. Place drainage course over the plastic sheet vapor barrier.
 - 1. Compact with vibrating equipment to uniform compaction that is not less than 98% of maximum dry unit weight as per ASTM D698.

3.05 Steel Reinforcement Installation

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
 - 1. Weld reinforcing bars according to AWS D1.4/D1.4M, where indicated.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.



E. Install welded-wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

3.06 Joints

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated. Continue reinforcement through sides of strip placements of floors and slabs.
2. Do not use keyed joints.
3. Locate joints for slabs where indicated.
4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:

1. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- (3.2-mm-) wide joints into concrete when cutting action does not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.

D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at locations as indicated.

1. Terminate full-width joint-filler strips not less than 1/2 inch (13 mm) or more than 1 inch (25 mm) below finished concrete surface where joint sealants, specified in Section 079200 "Joint Sealants," are indicated.
2. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

E. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.



3.07 Concrete Placement

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections are completed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless such water is indicated in the approved mix designs.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301 (ACI 301M) if such water is indicated in the approved mix design.
 - 1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
 - 1. Deposit concrete in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints.
 - 2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301 (ACI 301M).
 - 3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches (150 mm) into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- E. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
 - 1. Consolidate concrete during placement operations, so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
 - 2. Maintain reinforcement in position on chairs during concrete placement.
 - 3. Screed slab surfaces with a straightedge and strike off to correct elevations.
 - 4. Slope surfaces uniformly to drains where required.
 - 5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

3.08 Finishing Formed Surfaces

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on



formed-surface irregularities.

1. Apply to concrete surfaces not specifically indicated for smooth-formed finish.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
 1. Apply to concrete surfaces exposed to public view, to receive a rubbed finish, and at locations specifically indicated.
- C. Rubbed Finish: Apply the following to smooth-formed finished as-cast concrete, where indicated:
 1. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix 1-part portland cement to 1-1/2 parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches, so color of dry grout matches adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.
- D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.09 Finishing Floors and Slabs

- A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power-driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.
 1. Apply float finish to surfaces to receive trowel finish and to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.
- C. Trowel Finish: After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
 1. Apply a trowel finish to surfaces indicated exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin-film-finish coating system.
 2. Finish and measure surface, so gap at any point between concrete surface and an unleveled, freestanding, 10-ft.- (3.05-m-) long straightedge resting on two high spots and placed anywhere on the surface does not exceed 3/16 inch (4.8 mm).



D. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, ramps, and elsewhere as indicated.

1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with Architect before application.

3.10 Miscellaneous Concrete Item Installation

A. Filling In: Fill in holes and openings left in concrete structures after work of other trades is in place unless otherwise indicated. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.

B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.

C. Equipment Bases and Foundations:

1. Coordinate sizes and locations of concrete bases with actual equipment provided.
2. Construct concrete bases 6 inches ((150 mm)) high unless otherwise indicated, and extend base not less than 6 inches (150 mm) in each direction beyond the maximum dimensions of supported equipment unless otherwise indicated or unless required for seismic anchor support.
3. Minimum Compressive Strength: as per floor slab mix design requirements.
4. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 18-inch (450-mm) centers around the full perimeter of concrete base.
5. For supported equipment, install epoxy-coated anchor bolts that extend through concrete base and anchor into structural concrete substrate.
6. Prior to pouring concrete, place and secure anchorage devices. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
7. Cast anchor-bolt insert into bases. Install anchor bolts to elevations required for proper attachment to supported equipment.

3.11 Concrete Protecting and Curing

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 (ACI 301M) for hot-weather protection during curing.

B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching $0.2 \text{ lb/sq. ft.} \times \text{h}$ ($1 \text{ kg/sq. m} \times \text{h}$) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.



- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for remainder of curing period.
- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
- E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch (300-mm) lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period, using cover material and waterproof tape.
 - a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
 - b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
 - c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies does not interfere with bonding of floor covering used on Project.
 - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - a. Do not use curing compound on floor slabs.
 - 4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.
 - a. Where not indicated, use on all permanently exposed interior concrete floor slabs.

3.12 Joint Filling

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
 - 1. Defer joint filling until concrete has aged at least one month(s). Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joints clean and dry.



- C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches (50 mm) deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

3.13 Concrete Surface Repairs

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of 1-part portland cement to 2-1/2 parts fine aggregate passing a No. 16 (1.18-mm) sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch (13 mm) in any dimension to solid concrete. Limit cut depth to 3/4 inch (19 mm). Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar matches surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
 1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch (0.25 mm) wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
 2. After concrete has cured at least 14 days, correct high areas by grinding.
 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
 4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.



5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch (6 mm) to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
6. Repair defective areas, except random cracks and single holes 1 inch (25 mm) or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch (19-mm) clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete, except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
7. Repair random cracks and single holes 1 inch (25 mm) or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.

F. Repair materials and installation not specified above may be used, subject to Architect's approval.

3.14 Field Quality Control

A. Testing Agency: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.

B. Inspections:

1. Steel reinforcement welding, for ASTM A615 reinforcing steel.
 - a. ASTM A706 reinforcing steel does not require inspections.
2. Headed bolts and studs.

C. Soil Tests: Compaction of drainage course shall be verified by in-place testing.

1. Tests using standard ASTM test methods.
2. Perform one test for every 2,000 square feet of floor area.

D. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172/C 172M shall be performed according to the following requirements:

1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd. (4 cu. m), but less than 25 cu. yd. (19 cu. m), plus one set for each additional 50 cu. yd. (38 cu. m) or fraction thereof.
 - a. When frequency of testing provides fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.



2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231/C 231M, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F (4.4 deg C) and below or 80 deg F (27 deg C) and above, and one test for each composite sample.
5. Compression Test Specimens: ASTM C 31/C 31M.
 - a. Cast and laboratory cure two sets of two standard cylinder specimens (4 total) for each composite sample.
 - b. Cast and field cure two sets of two standard cylinder specimens for each composite sample when cold weather concrete conditions are present.
6. Compressive-Strength Tests: ASTM C 39/C 39M; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.
 - a. When field-cured specimens are required, test one set of two field-cured specimens at 7 days and one set of two specimens at 28 days.
 - b. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
7. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
8. Strength of each concrete mixture will be satisfactory if every average of any three, consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi (3.4 MPa).
9. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
10. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
11. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.
12. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.



13. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

END OF SECTION



SECTION 05 12 00

STRUCTURAL STEEL FRAMING

PART 1 GENERAL

1.01 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 Summary

- A. Section includes:

1. Structural steel.
2. Grout.

1.03 Definitions

- A. Structural Steel: Elements of the structural frame indicated on Drawings and as described in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

1.04 Coordination

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

1.05 Action Submittals

- A. Shop Drawings: Show fabrication of structural-steel components.
 1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
 2. Include embedment Drawings.
 3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain.
 4. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical, high-strength bolted connections.
- B. Delegated-Design Submittal: For structural-steel connections indicated to comply with design loads, include analysis data.



1.06 Informational Submittals

- A. Field quality control and special inspection reports.

1.07 Quality Assurance

- A. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category STD.
- B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
 - 1. Welders and welding operators performing work on bottom-flange, demand-critical welds shall pass the supplemental welder qualification testing, as required by AWS D1.8/D1.8M. FCAW-S and FCAW-G shall be considered separate processes for welding personnel qualification.
- C. Comply with applicable provisions of the following specifications and documents:
 - 1. AISC 303.
 - 2. First subparagraph below applies to "High-Seismic Applications" as defined in AISC 360.
 - 3. AISC 360.
 - 4. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

1.08 Delivery, Storage, and Handling

- A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from corrosion and deterioration.
 - 1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.
- B. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.
 - 1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
 - 2. Clean and relubricate bolts and nuts that become dry or rusty before use.
 - 3. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F 1852 fasteners and for retesting fasteners after lubrication.



PART 2 PRODUCTS

2.01 Performance Requirements

- A. Connections: Provide details of simple shear connections and braced frame connections required by the Contract Documents to be selected or completed by structural-steel fabricator to withstand loads indicated and comply with other information and restrictions indicated.
 - 1. Select and complete connections using schematic details indicated and AISC 360.
 - 2. Use Allowable Stress Design; data are given at service-load level.

2.02 Structural Steel Materials

- A. W-Shapes: ASTM A 992/A 992M.
- B. Channels, Angles -Shapes: ASTM A 36/A 36M.
- C. Plate and Bar: ASTM A 36/A 36M.
- D. Cold-Formed Hollow Structural Sections: ASTM A 500/A 500M, Grade B, structural tubing.
- E. Corrosion-Resisting, Cold-Formed Hollow Structural Sections: ASTM A 847/A 847M, structural tubing.
- F. Steel Pipe: ASTM A 53/A 53M, Type E or Type S, Grade B.
 - 1. Weight Class: Standard.
 - 2. Finish: Black.
- G. Welding Electrodes: Comply with AWS requirements.

2.03 Bolts, Connectors, and Anchors

- A. High-Strength Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade C, (ASTM A 563M, Class 8S) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M), Type 1, hardened carbon-steel washers; all with plain finish.
 - 1. Direct-Tension Indicators: ASTM F 959, Type 325 (ASTM F 959M, Type 8.8), compressible-washer type with plain finish.
- B. Shear Connectors: ASTM A 108, Grades 1015 through 1020, headed-stud type, cold-finished carbon steel; AWS D1.1/D1.1M, Type B.
- C. Unheaded Anchor Rods: ASTM F 1554, Grade 36.
 - 1. Configuration: Straight.
 - 2. Nuts: ASTM A 563 (ASTM A 563M) heavy-hex carbon steel.
 - 3. Plate Washers: ASTM A 36/A 36M carbon steel.



4. Washers: ASTM F 436 (ASTM F 436M), Type 1, hardened carbon steel.
5. Finish: Plain.

D. Threaded Rods: ASTM A 36/A 36M.

1. Nuts: ASTM A 563 (ASTM A 563M) heavy-hex carbon steel.
2. Washers: ASTM F 436 (ASTM F 436M), Type 1, hardened carbon steel.
3. Finish: Plain.

2.04 Primer

- A. Primer: Fabricator's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer complying with MPI#79 and compatible with topcoat.
- B. Galvanizing Repair Paint: ASTM A 780/A 780M.

2.05 GROUT

- A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107/C 1107M, factory-packaged, nonmetallic aggregate grout, noncorrosive and nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

2.06 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," and to AISC 360.
 1. Camber structural-steel members where indicated.
 2. Fabricate beams with rolling camber up.
 3. Identify high-strength structural steel according to ASTM A 6/A 6M and maintain markings until structural steel has been erected.
 4. Mark and match-mark materials for field assembly.
 5. Retain subparagraph below if shop priming is required.
 6. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
- B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.
- C. Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces.
- D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.



- E. Cleaning: Clean and prepare steel surfaces that are to remain unpainted according to SSPC-SP 2, "Hand Tool Cleaning."
- F. Shear Connectors: Prepare steel surfaces as recommended by manufacturer of shear connectors. Use automatic end welding of headed-stud shear connectors according to AWS D1.1/D1.1M and manufacturer's written instructions.
- G. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel members.
 - 1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
 - 2. Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
 - 3. Weld threaded nuts to framing and other specialty items indicated to receive other work.

2.07 Shop Connections

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 - 1. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303 for mill material.

2.08 Shop Priming

- A. Shop prime steel surfaces except the following:
 - 1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches (50 mm).
 - 2. Surfaces to be field welded.
 - 3. Surfaces of high-strength bolted, slip-critical connections.
 - 4. Surfaces to receive sprayed fire-resistive materials (applied fireproofing).
 - 5. Galvanized surfaces.
 - 6. Surfaces enclosed in interior construction.
- B. Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:
 - 1. SSPC-SP 2, "Hand Tool Cleaning."



2. SSPC-SP 3, "Power Tool Cleaning."
3. SSPC-SP 7/NACE No. 4, "Brush-off Blast Cleaning."
4. SSPC-SP 11, "Power Tool Cleaning to Bare Metal."
5. SSPC-SP 14/NACE No. 8, "Industrial Blast Cleaning."
6. SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
7. SSPC-SP 10/NACE No. 2, "Near-White Blast Cleaning."
8. SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning."

C. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils (0.038 mm). Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

1. Stripe paint corners, crevices, bolts, welds, and sharp edges.
2. Apply two coats of shop paint to surfaces that are inaccessible after assembly or erection. Change color of second coat to distinguish it from first.

D. Painting: Prepare steel and apply a one-coat, nonasphaltic primer complying with SSPC-PS Guide 7.00, "Painting System Guide 7.00: Guide for Selecting One-Coat Shop Painting Systems," to provide a dry film thickness of not less than 1.5 mils (0.038 mm).

PART 3 EXECUTION

3.01 Examination

A. Verify, with certified steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.

1. Prepare a certified survey of existing conditions. Include bearing surfaces, anchor rods, bearing plates, and other embedments showing dimensions, locations, angles, and elevations.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 Preparation

A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place unless otherwise indicated.

1. Do not remove temporary shoring supporting composite deck construction until cast-in-place concrete has attained its design compressive strength.



3.03 Erection

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
- B. Baseplates Bearing Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
 - 1. Set plates for structural members on wedges, shims, or setting nuts as required.
 - 2. Weld plate washers to top of baseplate.
 - 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
 - 4. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.
- C. Maintain erection tolerances of structural steel within AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."
- D. Align and adjust various members that form part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that are in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 - 1. Level and plumb individual members of structure.
 - 2. Make allowances for difference between temperature at time of erection and mean temperature when structure is completed and in service.
- E. Splice members only where indicated.
- F. Do not use thermal cutting during erection unless approved by Architect. Finish thermally cut sections within smoothness limits in AWS D1.1/D1.1M.
- G. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.
- H. Shear Connectors: Prepare steel surfaces as recommended by manufacturer of shear connectors. Use automatic end welding of headed-stud shear connectors according to AWS D1.1/D1.1M and manufacturer's written instructions.

3.04 Field Connections

- A. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.



- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 - 1. Comply with AISC 303 and AISC 360 for bearing, alignment, adequacy of temporary connections, and removal of paint on surfaces adjacent to field welds.
 - 2. Remove backing bars or runoff tabs where indicated, back gouge, and grind steel smooth.
 - 3. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," for mill material.

3.05 Field Quality Control

- A. Special Inspections: Engage a qualified special inspector to perform the following special inspections:
 - 1. Verify structural-steel materials and inspect steel frame joint details.
 - 2. Verify weld materials and inspect welds.
 - 3. Verify connection materials and inspect high-strength bolted connections.
- B. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- C. Bolted Connections: Inspect and test bolted connections according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
- D. Welded Connections: Visually inspect field welds according to AWS D1.1/D1.1M.
 - 1. In addition to visual inspection, test and inspect full penetration field welds according to AWS D1.1/D1.1M and the following inspection procedures, at testing agency's option:
 - a. Liquid Penetrant Inspection: ASTM E 165.
 - b. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration are not accepted.
 - c. Ultrasonic Inspection: ASTM E 164.
 - d. Radiographic Inspection: ASTM E 94.

3.06 Repairs and Protection

- A. Galvanized Surfaces: Clean areas where galvanizing is damaged or missing and repair galvanizing to comply with ASTM A 780/A 780M.
- B. Touchup Painting: Immediately after erection, clean exposed areas where primer is damaged or missing and paint with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
 - 1. Clean and prepare surfaces by SSPC-SP2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning.

END OF SECTION



SECTION 07 11 13

BITUMINOUS DAMPROOFING

PART 1 GENERAL

1.01 Related Documents

- A. Drawings and general provisions of this Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 Summary

- A. Section Includes

- 1. Cold-applied, emulsified-asphalt damproofing.

- B. Related Requirements

- 1. Section 03 30 00 "Cast-in-Place Concrete."

1.03 Action Submittals

- A. Product Data: For each type of product.

1.04 Field Conditions

- A. Weather Limitations: Proceed with application only when existing and forecasted weather conditions permit damproofing to be performed according to manufacturer's written instructions.

- B. Ventilation: Provide adequate ventilation during application of damproofing in enclosed spaces. Maintain ventilation until damproofing has cured.

PART 2 PRODUCTS

2.01 Manufacturers

- A. Source Limitations: Obtain primary damproofing materials and primers from single source from single manufacturer. Provide protection course and auxiliary materials recommended in writing by manufacturer of primary materials.

2.02 Performance Requirements

- A. VOC Content: Products shall comply with VOC content limits of authorities having jurisdiction unless otherwise indicated.

2.03 Cold-Applied, Emulsified-Asphalt Damproofing

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

- 1. BASF Corp. – Construction Chemicals.



2. ChemMasters, Inc.
3. Euclid Chemical Company (The); an RPM company.
4. Henry Company.
5. Mar-flex Waterproofing & Building Products.
6. W.R. Meadows, Inc.

- B. Trowel Coats: ASTM D1227, Type II, Class 1.
- C. Fibered Brush and Spray Coats: ASTM D1227, Type II, Class 1.
- D. Brush and Spray Coats: ASTM D1227, Type III, Class 1.

2.04 Auxiliary Materials

- A. Furnish auxiliary materials recommended in writing by dampproofing manufacturer for intended use and compatible with bituminous dampproofing.
- B. Emulsified-Asphalt Primer: ASTM D1227, Type III, Class 1, except diluted with water as recommended in writing by manufacturer.
- C. Patching Compound: Epoxy or latex-modified repair mortar of type recommended in writing by dampproofing manufacturer.
- D. Protection Course: Fan folded, with a core of extruded-polystyrene board insulation faced on one side with plastic film, nominal thickness $\frac{1}{4}$ inch, with a compressive strength of not less than 8 psi per ASTM D1621, and maximum water absorption by volume of 0.6 percent per ASTM C272/C272M.
- E. Protection Course: Extruded-polystyrene board insulation, unfaced, ASTM C578, Type X, $\frac{1}{2}$ inch thick.
- F. Protection Course: Smooth-surfaced roll roofing complying with ASTM D6380/D6380M, Class S, Type III.

PART 3 EXECUTION

3.01 Examination

- A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for surface smoothness, maximum surface moisture content, and other conditions affecting performance of the Work.
- B. Proceed with application only after substrate construction and penetrating work have been completed and unsatisfactory conditions have been corrected.



3.02 Preparation

- A. Clean, prepare, and treat substrates according to manufacturer's written instructions. Provide clean, dust-free, and dry substrates for dampproofing application.
- B. Mask or otherwise protect adjoining exposed surfaces from being stained, spotted, or coated with dampproofing. Prevent dampproofing materials from entering and clogging weep holes and drains.
- C. Clean substrates of projections and substances detrimental to dampproofing work; fill voids, seal joints, and remove bond breakers, if any.
- D. Apply patching compound to patch and fill tie holes, honeycombs, reveals, and other imperfections.

3.03 Application – General

- A. Comply with manufacturer's written instructions for dampproofing application, cure time between coats, and drying time before backfilling, unless otherwise indicated.
 1. Apply dampproofing to provide continuous plane of protection.
 2. Apply additional coats if recommended in writing by manufacturer or to achieve a smooth surface and uninterrupted coverage.
- B. Where dampproofing footings and foundation walls, apply from finished-grade line to top of footing; extend over top of footing and down a minimum of 6 inches over outside face of footing.
 1. Extend dampproofing 12 inches onto intersecting walls and footings, but do not extend onto surfaces exposed to view when Project is completed.
 2. Install flashings and corner protection stripping at internal and external corners, changes in plane, construction joints, cracks, and where indicated as "reinforced," by embedding an 8-inch wide strip of asphalt-coated glass fabric in a heavy coat of dampproofing. Dampproofing coat for embedding fabric is in addition to other coats required.

3.04 Cold-Applied, Emulsified-Ashphalt Dampproofing

- A. Concrete Foundations: Apply two brush or spray coats at not less than 1.5 gal/100 sq. ft. for first coat and 1 gal/100 sq. ft. for second coat, one fibered brush or spray coat at not less than 3 gal/100 sq. ft. or one trowel coat at not less than 4 gal/100 sq. ft.

3.05 Protection Course Installation

- A. Install protection course over completed-and-cured dampproofing. Comply with dampproofing material and protection course manufacturer's written instructions for attaching protection course.
 1. Support protection course over cured coating with spot application of adhesive type recommended in writing by protection board manufacturer.
 2. Install protection course within 24 hours of dampproofing installation (while coating is tacky) to ensure adhesion.



3.06 Protection

- A. Protect installation insulation drainage panels from damage due to UV light, harmful weather exposures, physical abuse, and other causes. Provide temporary coverings where panels are subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.
- B. Correct dampproofing that does not comply with requirements; repair substrate and reapply dampproofing.

END OF SECTION



SECTION 1200

TEMPORARY EROSION AND SEDIMENT CONTROL

PART 4 GENERAL

4.01 Section Summary

- A. Temporary erosion and sedimentation devices and techniques.

4.02 Related Sections

- A. Section 1800 – Excavation and Embankment
- B. Section 3700 – Lawns and Grasses

4.03 References

- A. North Dakota Department of Transportation – Standard Specification for Road and Bridge Construction, 2008 edition, as revised
- B. Section 708.02 – Seeding, Sodding, and Mulching
- C. Section 708.03 – Erosion Control Blanket and Turf Reinforcement Mat
- D. Section 708.04 – Riprap and Aggregate Cushion
- E. Section 708.05 – Fabric Formed Slope Protection
- F. Section 708.07 – Silt Fence
- G. Section 708.08 – Fiber Rolls
- H. Section 708.09 – Floating Silt Curtain
- I. Section 708.10 – Stabilized Construction Access
- J. Section 709 – Geotextile Fabrics
- K. Section 856 – Erosion Control Blanket and Turf Reinforcement Fabric

4.04 Submittals

A. Erosion Control Plans

- 1. Temporary Erosion Control Plan for use during construction activities.
- 2. Permanent Erosion Control Plan for site restoration after construction.
- 3. Storm Water Pollution Prevention Plan (SWPPP).



4. "Notice of Intent to Obtain Coverage Under NDPDES General Permit for Storm Water Discharge Associated with Construction Activity" (NOI).

4.05 Permits

A. NDPDES General Permit

1. Contractor shall acquire and maintain a NDPDES permit from the North Dakota Department of Health. The Contractor shall pay all fees associated with acquiring and maintaining the permit.

4.06 Sequencing and Scheduling

- A. Before starting any grading or construction activities, submit for approval all items listed in paragraph 1.04 of this Section and all permits listed in paragraph 1.05 of this Section.
- B. All temporary erosion control devices shall be installed before any construction may begin and shall remain in place and be maintained at all times, at the Contractor's expense.
- C. Permanent erosion control shall be installed as soon as construction shall allow.
- D. The Contractor is responsible for establishing permanent turf to avoid excessive soil erosion and for installation of landscaping and final project site stabilization.

PART 5 PRODUCTS

5.01 Silt Fence

- A. Pre-fabricated silt fence will not be permitted. Any other variations in materials and/or devices shall be approved by the Engineer.
- B. Posts – Conform to NDDOT Specification Section 708.07.B.1.
 1. Wood
 - a. Length – Minimum 6-foot Green-treated.
 - b. Width – 2-inch diameter round or 1½-inch by 1½-inch.
 2. Steel
 - a. Length – Minimum 5-foot with projections for fastening wire

or

Fabric and steel plate welded to bottom for extra support.

 - b. Minimum weight of 1.3 lb/LF.
- C. Fabric – Conform to NDDOT Specification Section 708.07.B.3.
 1. Minimum width of 36 inches
 - a. For specific properties, conform to Table 1 in NDDOT Specification Section 708.07.B.3.
 - b. Monofilament Geotextile fabric shall be used when possible.



5.02 Stabilized Construction Access

- A. Aggregate
 - 1. Washed rock or woodchips.
- B. Geotextile Fabric
 - 1. Meet the requirements for R1 fabric according to NDDOT Specification 858.

5.03 Storm Drain Inlet Protection

- A. Fiber Rolls
 - 1. 6-inch fiber rolls, minimum.
- B. Sand Bags
- C. Road Drain
 - 1. Manufacturer – Wimco, LLC or approved equal.
- D. Straw Bales

5.04 Ditch Checks and Velocity Checks

- A. Silt Fence – Supported and Unsupported
- B. Straw Bales
- C. Fiber Rolls

5.05 Erosion Control Blanket

- A. Erosion Control Blanket shall meet the requirements of the type specified on the Plans, as detailed in NDDOT Specification 856, Table 856-1.

5.06 Dust Control

- A. Water – Free of any material which impedes flow through spraying device.

5.07 Temporary Cover Crop

- A. Seed
 - 1. Use NDDOT seed mix Class IV in all areas except for high maintenance areas where winter wheat shall be omitted and replaced with an equal amount of rye seed by weight.
- B. Cover Material
 - 1. Conform to NDDOT Specification Section 708.02.B.3.



PART 6 EXECUTION

6.01 General

- A. Conform to NDDOT Specification 708 except as modified herein:
 1. Where not specifically stated, use Best Management Practices (BMPs) at a minimum.
 2. Only clear and grub, disturb, or grade areas necessary for construction.
- B. Contractor shall inspect, maintain, and repair all erosion control devices after each rainfall greater than 0.5 inches and at a minimum once every week.

6.02 Installation

- A. Silt Fence – Conform to NDDOT Specification 708.07.
 1. Bury bottom of silt fence a minimum of 6 inches, in a “J” configuration. The trench on the upstream side shall be filled with soil and compacted.
 2. Splices shall only be at supported posts and shall be 18 inches in overlap.
 3. Posts shall be 4 feet apart and driven to a minimum of 20 inches into the ground. Depth shall be increased to 24 inches if on a slope 3:1 or greater.
 4. Attach Geotextile fabric to posts with staples, wire, nails, or in accordance with manufacturer’s specifications.
 5. Silt fences should be continuous and traverse to flow and shall be placed so water cannot flow around the edge.
- B. Stabilized Construction Access – Conform to NDDOT Specification 708.10.
 1. If an access is constructed that restricts flow through a ditch, the Contractor shall determine the length and size of culvert needed to meet the conditions.
 2. If an access is constructed where topsoil exists, the topsoil shall be stripped before construction, and replaced and re-seeded after construction.
- C. Storm Drain Inlet Protection
 1. Fiber Rolls
 - a. Each roll shall be overlapping by 1 foot minimum and tied tightly together. Fiber rolls shall be trenched and staked according to manufacturer’s specifications.
 - b. Use 6-inch rolls for drop inlets and sheet flows down backslopes and foreslopes. Use 12-inch and 20-inch rolls in ditch bottoms, pipe inlets, and at the edge of right-of-way.
 - c. 2-inch by 2-inch stakes should be used to secure fiber rolls, angled such that the force of water would rotate the stakes vertically. Secure stakes a minimum of 1 foot in the ground.
 2. Sand Bags
 - a. Fill sand bags and secure ends so sand will not escape.
 - b. Place sand bags around inlet on all sides no closer than 1 foot from the inlet.



3. Road Drains
 - a. Insert into catch basin as detailed in manufacturer's specifications. Inlet grate shall be inserted over top of the device.
4. Straw Bales
 - a. Bales must be tied together to prevent gaps in protection. Also, they must be secured in place to avoid being displaced.
 - 1) Bales are not allowed in street sections for inlet protection.
5. Silt Box
 - a. Silt box shall be constructed around the catch basin so that water must be filtered through the fabric.

D. Ditch Checks and Velocity Checks

1. Silt Fence
 - a. Conform to the requirements of paragraph 3.02.A of this Section.
 - b. In high flow, high velocity situations, supported silt fence may be used. The mesh must be a minimum of 32 inches above the ground and have a maximum opening size of 6 inches by 6 inches. The wire shall be 14 gauge and grade 60 and shall conform to ASTM A116, Class 1 zinc coating for wire.
 - c. Straw bales may also be used in conjunction with silt fence for ditch and velocity checks.
2. Straw Bales
 - a. Bales must be packed tightly together to avoid gaps in protection.
 - b. Each bale must have two (2) 1-½-inch by 1-½-inch by 3-inch stakes through each bale to secure them in place. Each stake must be driven into the ground a minimum on 18 inches.

E. Erosion Control Blanket

1. All Erosion Control Blankets and Type 1 Turf Reinforcement Mat
 - a. The area to be covered should be properly prepared and seeded before the blanket is applied. All rocks and clods over 1-½-inch in diameter, and all sticks and other foreign material shall be removed.
2. Type 2 Turf Reinforcement Mat
 - a. Conform to NDDOT Specification Section 708.03.C.2.

F. Dust Control

1. Contractor shall apply water to areas where dust is being generated due to construction activities. The Contractor shall apply water as directed by the Engineer.

G. Temporary Cover Crop

1. Seed
 - a. Conform to NDDOT Specification Section 708.02.C.1.
2. Cover Material
 - a. Conform to NDDOT Specification Section 7087.02.C.3-5.



6.03 Maintenance

- A. Conform to NDDOT Specification 708 for maintenance information, and as follows:
 1. The Contractor is responsible for inspection, maintenance, and repair of any washouts or accumulations of sediment that occur as a result of the grading or construction.
 2. Inspection of all erosion control devices shall occur within 24 hours after a rainfall event of 0.5 inches or greater. At a minimum, one (1) inspection per week must be conducted.
 - a. An Inspection Report shall be given to the Engineer after every inspection.
 3. Immediately remove any material that has been deposited onto public roadways. Remove all sediment within 24 hours.
 4. Damage from the elements, Contractor's operation, or negligence shall be repaired at the Contractor's expense. Repair must be made before final acceptance.

6.04 Measurement and Payment

- A. Bid Items have been provided for temporary erosion control measures and devices. Payment at the Bid Unit Price will be considered compensation in full for all work necessary to complete the Bid Item in full, including installation, maintenance, sediment removal, repairs, and removals.
 1. Silt Fence – Measurement will be made by linear foot (LF) of material specified on the plans.
 2. Stabilized Construction Entrance – Measurement will be made by each (EA) entrance installed.
 3. Storm Drain Inlet Protection – Measurement will be made by each (EA) inlet protection installed.
 4. Erosion Control Blanket and Turf Reinforcement Mat – Measurement will be made by square yard (SY) for each type of material specified on the plans.
 5. Ditch Check – Measurement shall be by the linear foot (LF) for the type of ditch check specified on the plans.
 6. Velocity Check – Measurement shall be made by the linear foot (LF) for the type of velocity check specified on the plans.
 7. Dust Control – Measurement shall be based on units of M (1,000) gallons (MGAL).
 8. Temporary Cover Crop – Measurement shall be made by the acre (Ac), and shall include seeding, cover crop, and soil preparation.
- B. All other work and costs of this Section shall be incidental to the Project.

END OF SECTION



SECTION 1800

EXCAVATION AND EMBANKMENT

PART 7 GENERAL

7.01 Section Summary

- A. This Section includes excavation, haul, placement, and compaction of embankment materials.
- B. General excavation of ponds, channels, and other areas.

7.02 Relation Sections

- A. Section 1500 – Removals
- B. Section 1600 – Project Site Clearing
- C. Section 1900 – Subgrade Preparation
- D. Section 2000 – Trench Excavation and Backfill

7.03 References

- A. North Dakota Department of Transportation “Standard Specifications for Road and Bridge Construction” 2008 edition, as revised.

7.04 Submittals

- A. Gradation test results.
- B. Compaction test results.
- C. Geotextile fabric sample.

7.05 Definitions

- A. Common Excavation – Common Excavation shall include all excavation not otherwise classified.
- B. Muck Excavation – Muck Excavation shall include materials that are organic in nature and unsuitable for embankment material.
- C. Borrow Excavation – Borrow excavation shall include materials obtained from locations outside of the right-of-way.
- D. Subgrade – Top of the surface underneath the Class 5 or subbase layer.

PART 8 PRODUCTS

8.01 Soil Materials

- A. Embankment and Fill – Soil that is free of organic materials, frozen clumps, and large rocks. Also, the soil must be compactable to support the roadway above.



- B. Granular Borrow – Any pit run or crusher run material that is graded from course to fine such that the portion passing the #200 sieve divided by the portion passing the 1-inch sieve may not exceed 10 percent by mass.

8.02 Geotextile Fabric

- A. Conform to NDDOT Specification 858.01 Type R1 woven.

PART 9 EXECUTION

9.01 General Construction Requirements

- A. Conform to NDDOT Specification Section 203.02.F and Section 203.02.G.
- B. Contractor shall be responsible for locating and coordinating all utility relocations due to construction.
- C. Before any construction activities begin, erosion control must be in place.
- D. Strip and stockpile all topsoil to be used for restoration purposes.
- E. Prior to placement of the embankment material, the site must be reviewed by the Engineer.

9.02 Excavation

- A. Perform excavations to line, grade, cross section, and contours as detailed in the plans or as directed by the Engineer.
- B. If unsuitable materials are discovered, these materials will be excavated and removed at the direction of the Engineer. Excess common excavation shall be used as backfill unless directed otherwise by the Engineer. If the Contractor proceeds without the direction of the Engineer, all work and material to restore the roadbed to the proper grade will be at the Contractor's expense.
- C. Protect the subgrade from weather events. Provide drainage away from the excavation to prevent washouts and damage to the subgrade.
- D. Remove all large rocks that are within 12 inches of the subgrade.

9.03 Compacting Embankments

- A. Place soil in layers not to exceed 6 inches. Place layers evenly to provide for uniform compaction.
- B. All embankments shall be compacted by specified density method:
 1. Under areas with proposed paved or structural improvements – 100 percent Standard Proctor from the proposed pavement subgrade elevation down 1 foot.
 2. Ninety-five percent (95%) Standard Proctor from the bottom of the excavation up to 1 foot below the subgrade elevation. Moisture content shall be within +/- three percent (3%) of optimum.



- C. Ninety-five percent (95%) Standard Proctor for areas with no paved or structural improvements. Moisture content shall be within +/- three percent (3%) of optimum.

9.04 Field Quality Control

- A. Engineer shall engage a qualified independent testing laboratory to perform geotechnical testing.
- B. Contractor shall assist the testing agency in performing field tests.
- C. If testing agency reports failing tests, Contractor shall correct the deficiencies until specified compaction is obtained.
- D. The minimum amount of testing must be completed as detailed in Section 600 – Project Testing Requirements.
- E. Before placement of granular base, subgrade will be checked by the Engineer.
 - 1. A tolerance of 0.04 feet above or below the finished subgrade elevation will be allowed.

9.05 Geotextile Fabric Installation

- A. Prepare subgrade in conformation with Section 1900 – Subgrade Preparation before geotextile is installed.
- B. Conform to the NDDOT Specification Section 709.03.A and Section 709.03.E, except as modified herein:
 - 1. The first lift of aggregate applied above the fabric shall be a minimum of 8 inches.
 - 2. Metal pins will be allowed in lieu of stitching.
 - 3. Minimum overlap shall be 30 inches.

9.06 Measurement and Payment

- A. Common Excavation – Common Excavation shall be measured by the cubic yard (CY) and will include all labor and costs to excavate, load, haul, and dispose of materials. The Engineer will cross section the original material and final cut and the average end area will be used to compute the volume excavated.
- B. Muck Excavation – Muck Excavation shall be measured by the cubic yard (CY) and will include all labor and costs to excavate, load, haul, and dispose of materials. The Engineer will cross section the original material and final cut and the average end area will be used to compute the volume excavated.
- C. Common Borrow – Common Borrow shall be measured by the cubic yard (CY) compacted and will include all labor and costs to excavate, load, haul, and place the materials. The Engineer will cross section the original material and final cut and the average end area will be used to compute the volume excavated.
- D. Granular Borrow – Granular Borrow shall be measured by the cubic yard (CY) compacted and will include all labor and costs to excavate, load, haul, and place the materials. The Engineer will cross



section the original material and final cut and the average end area will be used to compute the volume excavated.

- E. Geotextile Fabric – Geotextile Fabric shall be measured by the square yard (SY) and shall include all costs for placement. No payment for overlap shall be made.
- F. All other work and costs of this Section shall be incidental to the Project.

END OF SECTION



SECTION 3700

LAWNS AND GRASSES

PART 10 GENERAL

10.01 Section Summary

- A. Restoration of construction areas using topsoil, seed, mulch, and other materials.

10.02 Related Sections

- A. Section 1200 – Temporary Erosion and Sediment Control.
- B. Section 1800 – Excavation and Embankment.

10.03 References

- A. North Dakota Department of Transportation “Standard Specifications for Road and Bridge Construction” 2008 edition, as revised.
 - 1. Section 203 – Excavation and Embankment.
 - 2. Section 708 – Erosion Control.
 - 3. Section 856 – Erosion Control Blanket and Turf Reinforcement Mat.

10.04 Submittals

- A. Provide Engineer verification of seed type used on the Project.

10.05 Quality Assurance

- A. At the end of the warranty period, a final inspection shall be made to determine areas of insufficient growth of the specified seed type. Areas of insufficient growth shall be re-seeded and established at the sole expense of the Contractor.

PART 11 PRODUCTS

11.01 Topsoil

- A. Topsoil shall consist of loose, friable, loamy topsoil free of excess acid, alkali, and objectionable amounts of sod. Topsoil shall have demonstrated the growth of healthy crops or grasses.

11.02 Fertilizer

- A. Conform to fertilizer requirements of NDDOT Specification Section 708.02.B.1.e or as modified by the Engineer.

11.03 Seed

- A. Seeding in developed urban areas shall be:



Common Name	Bulk Rate lb/acre	% of Mixture Component
Bluegrass – Park	72	60
Ryegrass – Fineleaf Perennial	36	30
Red Fescue, creeping	12	10
Totals	120	100.00

B. Seeding in areas not regularly maintained shall conform to NDDOT Class II or Class III seed mixtures as specified on the plans.

11.04 Sod

A. Conform to NDDOT Specification Section 708.02.B.2.

11.05 Mulch

A. Conform to NDDOT Specification Section 708.02.B.3.

11.06 Erosion Control Blanket

A. Conform to NDDOT Specification 856.01.

PART 12 EXECUTION

12.01 General

A. Prior to beginning restoration activities, the Contractor will review the site with the Engineer to determine the extent of restoration to take place.

B. The Contractor shall notify the Engineer in advance before placing topsoil in the event that the Engineer will have the topsoil tested.

C. All finish grading activities shall be completed and accepted by the Engineer prior to topsoil placement.

D. The Contractor shall comply with the seeding dates as stated in the NDDOT Specifications. The Contractor assumes full risk if he seeds outside the specified seeding dates. All areas not established or damaged due to erosion resulting from seeding outside the recommended dates shall be repaired at no cost to the Owner.

E. No seeding shall occur when sustained wind velocities exceed 20 mph, in standing water, or on frozen ground.

F. Areas of inadequate or non-uniform coverage shall be re-seeded at the Contractor's expense.

12.02 Seedbed Preparation

A. Conform to NDDOT Specification Section 708.02.C.1, except as modified herein:



1. Topsoil shall be placed 6 inches thick, areas that settle or hold water will be repaired by the Contractor.
2. Unless otherwise stated in the Contract Documents, Type C seedbed preparation shall be used.

12.03 Sowing Seed

- A. Conform to NDDOT Specification Section 708.02.C.1, except as modified herein:
 1. A Brillion seeder is an acceptable piece of equipment for sowing seed as long as it places seed at the specified depth and rate, and rolls in a single operation.
 2. Seed shall be sown at the rate specified.

12.04 Hydro-Mulch

- A. In all urban areas where a manicured lawn will be installed, the seed must be covered with hydro-mulch conforming to NDDOT Specification Section 708.02.C.3.

12.05 Straw Mulch

- A. Conform to NDDOT Specification Section 708.02.C.4.
- B. Conform to NDDOT Specification Section 708.02.C.2.

12.06 Erosion Control Blanket

- A. Erosion Control Blanket shall be installed after the seedbed has been prepared and seeded. The blanket shall be installed according to NDDOT Specification Section 708.03.C.1.

PART 13 MEASUREMENT AND PAYMENT

- 13.01 Seeding – Seeding shall be paid for by the square yard (SY) or by the acre (Ac) for the type and class specified on the plans. Price shall include all materials and equipment necessary for installation including preparation of seedbed, seed, hydro-mulch, disk anchoring and related activities, and maintenance.
- 13.02 Erosion Control Blanket – Erosion Control Blanket shall be paid for by the square yard (SY) for the type of blanket specified in the plans. Price shall include all materials and labor necessary for installation including preparation of seedbed, seed, blanket, staples, and maintenance.
- 13.03 Sod – Sod shall be paid for by the square yard (SY) complete and in place. Price shall include all materials and labor necessary for installation including soil preparation, sod, staking, and maintenance.
- 13.04 Topsoil for Type C Seeding – Topsoil for Type C Seeding shall be paid for by the cubic yard (CY) in its original position in the borrow area or in the hauling unit.
- 13.05 All other work and costs of this Section shall be incidental to the Project.

END OF SECTION