

INVITATION TO BID

HARRISON PARK IMPROVEMENTS PHASE 1

3002 West 3rd Street
Duluth, MN

POSTED: FRIDAY, JUNE 23, 2017

Bid #: 17-0445

BIDS DUE: FRIDAY, JULY 7, 2017 @ 2:00 PM CST



Property & Facilities Management Division
1532 West Michigan St.
Duluth, MN 55806

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PLANS & SPECIFICATIONS



Purchasing Division
100 City Hall, 411 W. 1st Street
Duluth, MN 55802-1189
TEL. 218-730-5340
purchasing@duluthmn.gov

INVITATION TO BID

HARRISON PARK IMPROVEMENTS - PHASE 1

BID NUMBER: 17-0445

BID OPENING: FRIDAY, JULY 7, 2017 AT 2:00 PM

PROJECT DESCRIPTION: Construction of park improvements, including a new walkway connection through the park, a concrete patio off the back door of the community building with an ADA-compliant ramp entrance, site lighting, landscape trees, and the removal of an abandoned tennis court and fence. Please refer to the plans and specifications for more information.

PRE-BID/WALK-THROUGH: A pre-bid walk-through will be conducted on Wednesday, June 28, 2017 at 2:00 PM at Harrison Park, located at 3002 West Third Street in Duluth, MN. All interested bidders are encouraged to attend.

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

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

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

INSTRUCTIONS TO BIDDERS

All bids must be complete, signed, and transmitted in a sealed envelope plainly marked with the bid number, subject matter, and opening date.

Bids may be mailed to the Purchasing Office, City Hall, 411 West 1st Street, Room 100, Duluth, MN 55802 or dropped off in person at the same address.

Bids must be received in Purchasing before 2:00 PM local time on the bid opening date specified on the Invitation for Bids. The City Purchasing Agent or her designee will conduct a public bid opening in Room 100 immediately following receipt of the bids. Once all bids have been reviewed, bid results will be posted online at <http://www.duluthmn.gov/purchasing/bids-request-for-proposals/>.

No alternatives to the specifications will be considered unless specifically requested. Erasures or other changes to the bid must be initialed and dated, however no special conditions shall be made or included in the bid form by the bidder.

The City of Duluth reserves the right to split the award where there is a substantial savings to the City, to waive informalities and to reject any and all bids. Price may not be the only consideration for bid award. Bids must be firm for a minimum of 30 days.

The following documents must be submitted with your bid:

1. **Bid Bond** - A certified check or bank draft, payable to the order of the City of Duluth, negotiable U.S. Government Bonds (at par value), or a satisfactory bid bond executed by the bidder and acceptable surety,

in an amount equal to five per cent (5%) of the total bid. Bids may be withdrawn without forfeiture of surety if the request is submitted by the Bidder and received at the Purchasing Office in writing or by e-mail prior to the scheduled bid opening.

2. **Acknowledgment of Addendum** – any changes to this solicitation will be announced via Addendum. Bidders must indicate that they have reviewed any addendum(s) by initialing and dating on the bid form where indicated. Failure to acknowledge addendum(s) may result in your bid being deemed non-responsive.

3. **Responsible Contractor** - No construction contract in excess of \$50,000 will be awarded unless the Bidder is a "responsible contractor" as defined in Minnesota Statute §16C.285, subdivision 3. All Bidders submitting a proposal for this project must verify that they meet the minimum criteria specified in the statute by submitting a Responsible Contractor Verification and Certification of Compliance form (attached) with their bid.

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

1. **Insurance** – Contractor must provide proof of Public Liability and Automobile Liability Insurance with limits not less than \$1,500,000 Single Limit prior to the commencement of work. The City of Duluth must be named as an additional insured. Please refer to the draft Contract, Section 7.

2. **Affidavit of Non-Collusion** – The successful bidder shall be required to execute the attached affidavit stating that he/she has not entered into a collusive agreement with any other person, firm, or corporation in regard to any bid submitted.

3. **Performance & Payment Bonds** – The awarded contractor will be required to submit performance and payments bonds in the full amount of the project cost prior to award. City bond forms can be found at <http://www.duluthmn.gov/purchasing/forms/>

4. **Affirmative Action/EEO** - The contractor must take affirmative action to ensure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin, and must meet the affirmative action goals. Contractors are encouraged to subcontract with Disadvantaged Business Enterprises (DBEs) when possible. A current list of certified DBEs is available on the Minnesota Unified Certification website at <http://mnucp.metc.state.mn.us> . Contractor will comply with all applicable Equal Employment Opportunity laws and regulations. Awarded contractor will submit the attached Equal Employment Opportunity (EEO) Affirmative Action Policy Statement & Compliance Certificate.

5. **Project Labor Agreement (PLA)** - A PLA will be required for any bid that is over or could virtually go over \$150,000. A copy of the City standard PLA can be found on the city website at <http://www.duluthmn.gov/purchasing/forms/>

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

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

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

CITY OF DULUTH

Amanda Ashbach
Purchasing Agent

BID FORM
BID # 17-0445
HARRISON PARK IMPROVEMENTS – PHASE 1

ITEM	PRICE
Total from EXHIBIT A - Schedule of Prices (must be returned with Bid)	\$

TOTAL PRICE IN WRITING

ACKNOWLEDGMENT OF ADDENDA

ADDENDUM #	INITIAL/DATE
ADDENDUM #	INITIAL/DATE
ADDENDUM #	INITIAL/DATE
ADDENDUM #	INITIAL/DATE

Signature _____ Date _____

Name/Title _____

Company Name _____

Address _____

City, State, Zip _____

Tel. _____ E-Mail _____

If your organization is certified as a Disadvantaged Business Enterprise, please check here: ☐

EXHIBIT A

PART 1. BID SCHEDULE

The following bid items are to include materials, labor, profit, taxes and overhead for the complete system in place.

ITEM #	DESCRIPTION	PRICE
1	General Requirements/Mobilization	
2	Site Preparation/Restoration	
3	Bituminous Court and Base Removals	
4	Site Grading for Walks and Drainage	
5	Abandon Catch Basin	
6	Sidewalks	
7	Concrete Bases for Walk Lighting (6)	
8	Fence Removal	
9	Topsoil & Sod	
10	Light Pole and Electrical Removal	
TOTAL OF ITEMS 1 THRU 10 (BASE BID) Copy this total on page 1 of the Bid Form.		

DEDUCT/ADD ALTERNATES

ITEM #	DESCRIPTION	PRICE	
11	Topsoil & Seed (in lieu of item 8 sod)		DEDUCT ALT
12	Walk Lighting Poles, Fixtures & Electrical (6)		ADD ALT #2
13	Excavation, Grading and Concrete Patio		ADD ALT #3
14	Excavation, Concrete Steps, Ramp, Railing from building to patio		ADD ALT #4
15	Tree & Shrub Planting		ADD ALT #5

PART 2. SUPPLEMENTAL SCHEDULE OF UNIT PRICES

All items must be completed. Failure to complete this portion of the Bid Proposal may result in disqualification of the bid.

The following prices are intended to be the basis for additions or deletions to the work for items bid as lump sums, if required, the value of such changes to be determined by the quantities involved at the time of Award and/or throughout the contract duration.

All unit price amounts for each of the items listed below shall include its pro rata share of materials, labor, profit, taxes, overhead, etc. for the item in place. Unit prices are to be valid for the life of the contract.

ITEM #	DESCRIPTION (FURNISH & INSTALL)	UNIT	UNIT PRICE
1	4" Sidewalks per detail (includes grading)	SF	
2	4" Topsoil	SF	
3	Sod	SF	
4	Tree	EA	
5	Common Excavation	CY	

PART 3. PRE-APPROVED SUBSTITUTIONS

If a pre-approved substitution(s) is proposed, specify brand and model number below.

SUBSTITUTION

DEDUCT/ADD AMOUNT (List in Complete Detail)

1

2

THIS FORM MUST BE RETURNED WITH YOUR BID

PRIME CONTRACTOR RESPONSE

RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANCE

STATE PROJECT NUMBER: _____

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

Minn. Stat. § 16C.285, Subd. 7. **IMPLEMENTATION.** ... any prime contractor or subcontractor or motor carrier that does not meet the minimum criteria in subdivision 3 or fails to verify that it meets those criteria is not a responsible contractor and is not eligible to be awarded a construction contract for the project or to perform work on the project...

Minn. Stat. § 16C.285, Subd. 3. **RESPONSIBLE CONTRACTOR, MINIMUM CRITERIA.** "Responsible contractor" means a contractor that conforms to the responsibility requirements in the solicitation document for its portion of the work on the project and verifies that it meets the following minimum criteria:

- | | |
|-----|--|
| (1) | <p>The Contractor:</p> <ul style="list-style-type: none">(i) is in compliance with workers' compensation and unemployment insurance requirements;(ii) is in compliance with Department of Revenue and Department of Employment and Economic Development registration requirements if it has employees;(iii) has a valid federal tax identification number or a valid Social Security number if an individual; and(iv) has filed a certificate of authority to transact business in Minnesota with the Secretary of State if a foreign corporation or cooperative. |
| (2) | <p>The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 177.24, 177.25, 177.41 to 177.44, 181.13, 181.14, or 181.722, and has not violated United States Code, title 29, sections 201 to 219, or United States Code, title 40, sections 3141 to 3148. For purposes of this clause, a violation occurs when a contractor or related entity:</p> <ul style="list-style-type: none">(i) repeatedly fails to pay statutorily required wages or penalties on one or more separate projects for a total underpayment of \$25,000 or more within the three-year period, provided that a failure to pay is "repeated" only if it involves two or more separate and distinct occurrences of underpayment during the three-year period;(ii) has been issued an order to comply by the commissioner of Labor and Industry that has become final;(iii) has been issued at least two determination letters within the three-year period by the Department of Transportation finding an underpayment by the contractor or related entity to its own employees;(iv) has been found by the commissioner of Labor and Industry to have repeatedly or willfully violated any of the sections referenced in this clause pursuant to section 177.27;(v) has been issued a ruling or findings of underpayment by the administrator of the Wage and Hour Division of the United States Department of Labor that have become final or have been upheld by an administrative law judge or the Administrative Review Board; or(vi) has been found liable for underpayment of wages or penalties or misrepresenting a construction worker as an independent contractor in an action brought in a court having jurisdiction. Provided that, if the contractor or related entity contests a determination of underpayment by the Department of Transportation in a contested case proceeding, a violation does not occur until the contested case proceeding has concluded with a determination that the contractor or related entity underpaid wages or penalties;* |

(3)	The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 181.723 or chapter 326B. For purposes of this clause, a violation occurs when a contractor or related entity has been issued a final administrative or licensing order;*
(4)	The contractor or related entity has not, more than twice during the three-year period before submitting the verification, had a certificate of compliance under section 363A.36 revoked or suspended based on the provisions of section 363A.36, with the revocation or suspension becoming final because it was upheld by the Office of Administrative Hearings or was not appealed to the office;*
(5)	The contractor or related entity has not received a final determination assessing a monetary sanction from the Department of Administration or Transportation for failure to meet targeted group business, disadvantaged business enterprise, or veteran-owned business goals, due to a lack of good faith effort, more than once during the three-year period before submitting the verification;*
	* Any violations, suspensions, revocations, or sanctions, as defined in clauses (2) to (5), occurring prior to July 1, 2014, shall not be considered in determining whether a contractor or related entity meets the minimum criteria.
(6)	The contractor or related entity is not currently suspended or debarred by the federal government or the state of Minnesota or any of its departments, commissions, agencies, or political subdivisions that have authority to debar a contractor; and
(7)	All subcontractors and motor carriers that the contractor intends to use to perform project work have verified to the contractor through a signed statement under oath by an owner or officer that they meet the minimum criteria listed in clauses (1) to (6).

Minn. Stat. § 16C.285, Subd. 5. SUBCONTRACTOR VERIFICATION.	
<p>A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.</p> <p>If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.</p> <p>A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier pursuant to subdivision 3, clause (7). A prime contractor and subcontractors shall not be responsible for the false statements of any subcontractor with which they do not have a direct contractual relationship. A prime contractor and subcontractors shall be responsible for false statements by their first-tier subcontractors with which they have a direct contractual relationship only if they accept the verification of compliance with actual knowledge that it contains a false statement.</p> <p>Subd. 5a. Motor carrier verification. A prime contractor or subcontractor shall obtain annually from all motor carriers with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each motor carrier. A prime contractor or subcontractor shall require each such motor carrier to provide it with immediate written notification in the event that the motor carrier no longer meets one or more of the minimum criteria in subdivision 3 after submitting its annual verification. A motor carrier shall be ineligible to perform work on a project covered by this section if it does not meet all the minimum criteria in subdivision 3. Upon request, a prime contractor or subcontractor shall submit to the contracting authority the signed verifications of compliance from all motor carriers providing for-hire transportation of materials, equipment, or supplies for a project.</p>	

Minn. Stat. § 16C.285, Subd. 4. **VERIFICATION OF COMPLIANCE.**

A contractor responding to a solicitation document of a contracting authority shall submit to the contracting authority a signed statement under oath by an owner or officer verifying compliance with each of the minimum criteria in subdivision 3, with the exception of clause (7), at the time that it responds to the solicitation document.

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

A false statement under oath verifying compliance with any of the minimum criteria may result in termination of a construction contract that has already been awarded to a prime contractor or subcontractor or motor carrier that submits a false statement. A contracting authority shall not be liable for declining to award a contract or terminating a contract based on a reasonable determination that the contractor failed to verify compliance with the minimum criteria or falsely stated that it meets the minimum criteria. A verification of compliance need not be notarized. An electronic verification of compliance made and submitted as part of an electronic bid shall be an acceptable verification of compliance under this section provided that it contains an electronic signature as defined in section 325L.02, paragraph (h).

CERTIFICATION

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

- 1) My company meets each of the Minimum Criteria to be a responsible contractor as defined herein and is in compliance with Minn. Stat. § 16C.285, and**
- 2) if my company is awarded a contract, I will submit Attachment A-1 prior to contract execution, and**
- 3) if my company is awarded a contract, I will also submit Attachment A-2 as required.**

Authorized Signature of Owner or Officer:

Printed Name:

Title:

Date:

Company Name:

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

ATTACHMENT A-1

FIRST-TIER SUBCONTRACTORS LIST

SUBMIT PRIOR TO EXECUTION OF A CONSTRUCTION CONTRACT

STATE PROJECT NUMBER: _____

Minn. Stat. § 16C.285, Subd. 5. A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

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

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

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-1	
By signing this document I certify that I am an owner or officer of the company, and I swear under oath that: All first-tier subcontractors listed on attachment A-1 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285.	
Authorized Signature of Owner or Officer:	Printed Name:
Title:	Date:
Company Name:	

ATTACHMENT A-2

ADDITIONAL SUBCONTRACTORS LIST

PRIME CONTRACTOR TO SUBMIT AS SUBCONTRACTORS ARE ADDED TO THE PROJECT

STATE PROJECT NUMBER: _____

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

Minn. Stat. § 16C.285, Subd. 5. ... If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors. ...

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

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

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-2	
By signing this document I certify that I am an owner or officer of the company, and I swear under oath that: All additional subcontractors listed on Attachment A-2 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285.	
Authorized Signature of Owner or Officer:	Printed Name:
Title:	Date:
Company Name:	

AFFIDAVIT AND INFORMATION REQUIRED OF BIDDERS

Affidavit of Non-Collusion:

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

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

Signed: _____

Firm Name: _____

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

NOTARY PUBLIC _____

My commission expires: _____

Bidder's Federal Identification Number _____

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

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

FROM: _____

(Vendor's name, address, telephone number)

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

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

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

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

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

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

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

Executed this _____ day of _____, 20__ by:

Printed name and title

Signature

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

CONTRACTOR & CITY OF DULUTH

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

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

1. The following shall be deemed to be part of this contract:
 - a. The annexed resolution and legal advertisement of the City Council.
 - b. The bid request and specifications, as modified by irreconcilable language in this written contract.
 - c. The bid by Contractor, as modified by irreconcilable language in this written contract.
 - d. The performance bond and payment bond certification.
 - e. All provisions of law applicable to a contract of this nature.
2. The Contractor agrees to furnish and deliver to the **Department** all labor, supervision, material, equipment, supplies, insurance, performance bond, payment bond and everything else necessary for general construction of **Project** at **location**, all in strict accordance with plans and specifications prepared by **design co. or city architect**, your bid of \$ and **resolution no. passed on date**. Contractor shall not commence performance of any work under this contract until Contractor receives authorization from the City's Purchasing Agent in writing and dated.
3. The City agrees to pay progress payments and make final payments to the Contractor as stated in the contract specifications. The total amount payable under this contract shall not exceed **dollar amount spelled out (\$)** unless the contract is modified by formal amendment or change order. Payments under this Agreement shall be made from the following **funding** and **RQ no**. Due to the dollar amount of this contract, a Project Labor Agreement **is or is not** included as part of this contract (City Code Section 2-29).
4. The Contractor shall furnish and maintain in full force and effect until this contract is completely performed by the Contractor, a performance bond and payment bond if and when required by law, or if and when required by the City.
5. Inasmuch as this contract concerns work, materials and equipment needed for the public benefit, the provisions of this contract relating to the time of performance and completion of work and delivery of materials or equipment are of the essence of this contract.
6. The Contractor will defend, indemnify and save the City harmless from all costs, charges, damages, and loss of any kind that may grow out of the matters covered by this contract.

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

7. Insurance

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

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

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

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

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

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

Countersigned:

CITY OF DULUTH-Client

By

City Auditor
Approved this _____ day of _____

Mayor

Attest:

Department Director
Approved this _____ day of _____

City Clerk
Attested this _____ day of _____

Purchasing Agent
Approved this _____ day of _____

CONTRACTOR/COMPANY
Contractor

By

Assistant City Attorney
Approved this _____ day of _____

Company Representative

Its

Title of Representative
Approved this _____ day of _____

CITY OF DULUTH - PART II -
SUPPLEMENTARY GENERAL CONDITIONS FOR FEDERALLY, STATE OF MINNESOTA, AND/OR CITY ASSISTED ACTIVITIES
(revised 4/15/11)

The following conditions take precedence over any conflicting conditions in this Contract.

<u>Section</u>	<u>Title</u>
1	Restrictions on Disbursements, Subcontractors Federal Agency Requirements, Separability, Property
2	Miscellaneous Provisions
3	Definitions
4	Environmental Provisions
5	Contract Compliance
6	Records, Reports and Information, Audits and Inspections
7	Conflict of Interest and Lobbying
8	Labor Standards - Physical Improvement Projects
9	Minnesota Department of Transportation Specification 1960 Partial Payments
10	Housing and Urban Development (HUD) Section 4010
11	Equal Opportunity and Affirmative Action
12	Employment Opportunities - "HUD Section 3"
13	Federal Requirements for Minority/Women Business Enterprises Contract Guidance - MPFA
14	Forms

E-Mail Addresses

For ease in communication, the e-mail address of the person(s) responsible for preparing certified payroll reports (CPRs) is required from the prime contractor and all subcontractors (regardless of tier). This information will be provided to the project engineer prior to the pre-construction meeting OR with materials required in the Letter of Intent.

Section I

Restrictions on Disbursements

No money under this Contract shall be disbursed by the City to any Contractor except pursuant to a written contract which incorporates the applicable PART II, Supplementary General Conditions for Federally, State of Minnesota, and/or City Assisted Activities, and unless the Contractor is in compliance with the Federal Agency requirements with regard to accounting and fiscal matters to the extent they are applicable.

Subcontractors

(A) The Contractor shall include in any subcontract the clauses set forth in the PART II, Supplementary General Conditions for Federally, State of Minnesota and/or City Assisted Activities in their entirety and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(B) The Contractor shall not subcontract any part of the work covered by this Contract or permit subcontracted work to be further subcontracted without the City's prior written approval of the subcontractors. The City will not approve any subcontractor for work covered by this Contract who is at the time ineligible under the provisions of any applicable regulations issued by a Federal Agency or the Secretary of Labor, United States Department of Labor, to receive an award of such subcontract.

Federal Agency Requirements

Unearned payments under this Contract may be suspended or terminated upon refusal to accept any additional conditions that may be imposed by the Federal Agency at any time; or if the grant, if applicable, to the City under which this Contract is made is suspended or terminated.

Separability

If any provisions of this Contract is held invalid, the remainder of this Contract shall not be affected thereby if such remainder would then continue to conform to the terms and requirements of applicable law.

Property

Acquisition, use, and disposal of all property, materials and goods acquired as a result of activities made possible by this Contract shall be accomplished in accordance with the applicable provisions of Federal Management Circular (FMC)-74-7, as amended.

Section 2

Miscellaneous Provisions

(A) **Copyrights.** In the event this Contract results in a book or other copyrightable material, the author is free to copyright the work, but Federal Agency and the City reserve a royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, all copyrighted material and all material which can be copyrighted.

(B) **Patents.** Any discovery or invention arising out of or developed in the course of work aided by this Contract shall be promptly and fully reported to the Federal Agency and the City for determination by the Federal Agency as to whether patent protection on such invention or discovery shall be sought and how the rights in the invention or discovery, including rights under any patent issued thereon, shall be disposed of and administered in order to protect the public interests.

(C) **Political Activity Prohibited.** None of the funds, materials, property or services provided directly or indirectly under this Contract shall be used in the performance of this Contract on any partisan political activity, or to further the election or defeat of any candidate for public office.

(D) **Lobbying Prohibited.** None of the funds under this Contract shall be used for publicity or propaganda purposes designed to support or defeat legislation pending before the Congress or the City.

(E) **Prohibition of and Elimination of Lead-Based Paint Hazard.** Notwithstanding any other provision, the Agency and Contractor agree to comply with the regulation issued by the Secretary of Housing and Urban Development set forth in 37 F. R. 22732-3 and all applicable rules and orders issued thereunder which prohibit the use of lead-based paint in residential structures undergoing Federally assisted construction or rehabilitation and require the elimination of lead-based paint hazards. Every contract or subcontract, including paint, pursuant to which such Federally assisted construction or rehabilitation is performed shall include appropriate provisions prohibiting the use of lead-based paint.

(F) **Architectural Barriers Act.** The design for and construction of any facility funded in whole or in part by this Contract shall be in conformance with the American Standard Specification for Making Buildings and Facilities Accessible and Usable by the Physically Handicapped, Number A-117.1-1971, as modified.

(G) **Relocation and Acquisition.** Any relocation or acquisition resulting from activities funded in whole or in part by this Contract shall be in conformance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (40 U.S.C. 4601) and the implementing regulations 24CFR Part 42.

(H) **Prohibition Against Payments of Bonus or Commission.** The assistance provided under this Contract shall not be used in the payment of any bonus or commission for the purpose of obtaining Federal Agency approval for such assistance, or Federal Agency approval of applications for additional assistance, or any other approval or concurrence of a Federal Agency required under this Contract, Federal Law or Federal Regulations thereto; provided, however, that reasonable fees or bonafide technical, consultant, managerial or other such services, other than actual solicitation, are not hereby prohibited if otherwise eligible as project costs.

(I) **Hatch Act.** Where applicable, the Contractor will comply with the provisions of the Hatch Act which limits the political activity of the Contractor's employees.

Section 3

Definitions

(A) City means the City of Duluth, Contracting Officer, or other persons authorized to act on behalf of the City of Duluth.

(B) Contracting Officer is the delegated representative of the City who has the responsibility for administering the Project.

(C) Contractor means an entity, whether public or private, which furnishes (other than standard commercial supplies, office space or printing services) to the City, products, services or supplies as described in this project Contract.

(D) Federal Agency means the United States, the District of Columbia, and any executive department, independent establishment, administrative agency, or instrumentality of the United States or of the District of Columbia, including any corporation, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or by any of the foregoing departments, establishments, agencies, and instrumentalities. The term Federal Agency shall also include the person or persons authorized to act on behalf of said Federal Agency.

(E) Project means the activities to be undertaken by the Contractor as described in this Contract, which from time to time may be amended by mutual consent of the City and Contractor.

(F) Subcontractor means an entity, regardless of tier, which has entered into an agreement with the Contractor or another Subcontractor, to undertake certain Project activities as described in that agreement.

(G) The term labor standards, as used in the Contract, means the requirements of the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act (other than those relating to safety and health), the Copeland Act, and the prevailing wage provisions of the other statutes listed in 20 CFR 5.1.

(H) Work means all labor necessary to produce the construction required by the Contract Documents, all materials and equipment incorporated or to be incorporated in such construction, products, services, or supplies required by the Contract Documents, or any other requirements set forth in the Contract.

(I) Additional Definitions, that are applicable to the Labor Standards provisions - Section 8 - of this Contract can be found in 29CFR5.2 as published by the U.S. Department of Labor and said definitions are hereby incorporated by reference into the provisions of this Contract.

Section 4

Environmental Provisions

(A) The Contractor agrees to follow the regulations, requirements, policies, goals and procedures set forth by the Council on Environmental Quality (CEQ) under provisions of the National Environmental Policy Act (NEPA) (Pub. L 91-190, 42 U.S.C. 4321 et seq.), Executive Order 11514, and 40 CFR Part 1500.

(B) **Historic Properties.** The Contractor agrees to follow the regulations, requirements, policies, goals, and procedures set forth under provisions of the National Historic Preservation Act of 1966 (Pub. L. 89-665); Preservation of Historic and Archeological Data Act of 1974 (Pub. L. 93-291); Executive Order 11593; 36 CFR , Part 800 and applicable State legislation or regulations.

(C) **Coastal Zones and Wetlands.** The Contractor agrees to follow the regulations, requirements, policies, goals and procedures set forth under provisions of the Coastal Zone Management Act of 1972 (Pub. L. 92-583) and applicable State legislation or regulations.

(D) **Noise.** The Contractor agrees to comply with provisions set forth in the U.S. Department of Housing and Urban Development Handbook 1390.2, Noise Abatement and Control, Department Policy, Responsibility and Standards, 1971.

(E) **Flood Plain.** The Contractor agrees to comply with the provisions set forth in the Flood Disaster Protection Act of 1973 (Pub. L. 93-234) and implementing regulations; Title 24, Chapter X, Subchapter B, National Flood Insurance Program, Executive Order 11296, and Executive Order 11988 relating to the evaluation of flood hazards.

(F) **Air Quality.** The Contractor agrees to comply with provisions set forth in the Clean Air Act (Pub. L. 90-148) and Clean Air Act Amendments of 1970 (Pub. L. 91-604); and applicable U.S. Environmental Protection Agency implementing regulations.

(G) **Water Quality.** The Contractor agrees to comply with the provisions set forth in the Federal Water Pollution Control Act (Pub. L. 92-500) and applicable U.S. Environmental Protection Agency implementing regulations, and Executive Order 11288 relating to the prevention, control, and abatement of water pollution.

(H) **Wildlife.** The Contractor agrees to comply with the provisions of the Fish and Wildlife Coordination Act (Pub. L. 85-264).

Section 5

Contract Compliance

(A) In the event of the Contractor's noncompliance with the provisions of this Contract or with any of the said regulations, the City may withhold payment(s) until evidence of compliance by the Contractor has been demonstrated, or the Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further City contracts.

(B) In the event the Contract is terminated or canceled as a result of noncompliance with any of the provisions of this Contract, the City may subject to bids the remainder of the Project for which this Contract was made. The City shall have the right upon termination or suspension to withhold all further payments under this

Contract to the Contractor. Upon the award of a new contract for the remainder of the Project, the City shall pay to the Contractor an amount no more than the balance remaining due to the Contractor less the sum of the costs incurred by the City which are necessary in preparing the new bid specifications. In the event the amount paid the Contractor prior to the date of termination or cancellation exceeds the full amount of this Contract less the cost of the new contract and the additional costs mentioned above, the Contractor agrees to reimburse the City for such excess amount within ninety days after the new contract is awarded by the above procedures.

(C) Provisions contained in subparagraph (A) and (B) above shall not be interpreted as precluding any authorized Federal, State, or County governmental unit from exercising their legal administrative or other responsibilities in respect to the enforcement by said governmental units of laws or regulations concerning activities of the Contractor.

Section 6

Records

(A) **Establishment and Maintenance of Records.** Records shall be maintained in accordance with requirements prescribed by the Federal Agency or the City with respect to all matters covered by this Contract. Except as otherwise authorized by the Federal Agency, such records shall be maintained for a period of three years after receipt of final payment under this Contract.

(B) **Documentation of Costs.** All costs shall be supported by properly executed payrolls, time records, invoices, contracts, or vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders, or other accounting documents pertaining in whole or in part to this Contract shall be clearly identified and readily accessible.

Reports and Information

At such times and in such forms as the Federal Agency or the City may require, there shall be furnished to the Federal Agency or the City such statements, records, data and information as the Federal Agency or the City may request pertaining to matters covered by this Contract.

Audits and Inspection

At any time during normal business hours and as often as the City, the Federal Agency and/or the Comptroller General of the United States may deem necessary, there shall be made available to the City, the Federal Agency and/or representatives of the Comptroller General for examination of all its records with respect to all matters covered by this Contract and will permit the City, the Federal Agency and/or representative of the Comptroller General to audit, examine and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to all matters covered by this Contract.

Section 7

Conflict of Interest and Lobbying

(A) **Interest of Members, Officers, or Employees of the City, Members of Local Governing Body, or Other Public Officials.** No member, officer, or employee of the City, or its designees or agents, or member of the governing body of the City, during his/her tenure of 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 Project assisted under this Contract. Any contract in which any of the above indicated individuals becomes directly or indirectly, interested, personally or as a member of a firm, or as an officer, director, or stockholder of a corporation, shall be and become absolutely void; and any money which shall have been paid on such contract by the City may be recovered back from any or all persons interested therein, by a joint action or several actions.

(B) The Contractor agrees that he will incorporate into every contract required to be in writing the following provisions: **Interest of Contractors and Employees** - The Contractor covenants that he presently has no interest and shall not acquire any interest, direct or indirect, in the Project which would conflict in any manner or degree with the performance of this Contract, and no person having any conflicting interest shall be employed. Any interest on the part of the Contractor or his employees must be disclosed to the Federal Agency and the City. Provided, however, that this paragraph shall be interpreted in such a manner so as not to unreasonably impede any statutory requirements that opportunity be provided for employment of and participation by certain residents of a designated geographical area, if applicable.

(C) **Interest of Member or of Delegate to Congress.** No member of or Delegate to Congress, or Resident Commissioner, 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 for its general benefit.

(D) The Contractor by signing this document certifies, to the best of his or her knowledge and belief, that:

(1) No Federal 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 Federal 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.

The above certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1332, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

(E) The parties to this Contract certify and agree that they are under no contractual or other disability which would prevent them from complying with the terms of this Contract.

Section 8

Labor Standards - Physical Improvement Projects

Where applicable, there shall be included in all construction, rehabilitation, alteration or repair contracts with private entities made possible by or resulting from this Contract, the following Labor Standards provisions;

(A) **General Requirements.**

(1) **Subcontracts.** The Contractor shall include in any subcontract the clauses set forth in Section 8, **Labor Standards**, in their entirety and also a clause requiring the subcontractors to include these clauses in any Tower tier subcontract which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(2) The transporting of materials and supplies to or from the site of the Project or Program to which this Contract pertains by the Employees of the Contractor or of any subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the Project or Program to which this Contract pertains by persons employed by the Contractor or by any subcontractor, shall for the purpose of this Contract, and without limiting the generality of the foregoing provisions of this Contract, be deemed to be work to which these **Labor Standards** provisions are applicable.

(3) No person under the age of eighteen years shall be employed on work covered by this Contract.

(4) In connection with the performance of work under this Contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1955 (18 U.S.C. 4082 (c) (2)) and Executive Order 11755, December 29, 1973.

(5) The Contractor will permit authorized representatives of the Federal Agency and the City to interview employees during working hours on the job.

(6) No employee 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) **Safety Standards.** No Contractor or subcontractor contracting for any part of a construction contract shall require any laborer or mechanic, including apprentices and trainees, employed in the performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his health or safety, as determined under construction safety and health standards promulgated by the Secretary of Labor. The Contractor or subcontractor comply with all the rules, regulations, and relevant orders, promulgated by the Secretary of Labor pursuant to Public Law 91-54.

(C) **Davis-Bacon Act - 29 CFR 5.5**

web site: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title29/29cfr5_main_02.tpl

Refer to Section 10, Page 10 Housing and Urban Development (HUD) form-4010 (06/2009) Ref Handbook 1344.1

City of Duluth "Mini Davis-Bacon"

(D) **City of Duluth - Minimum Wage Ordinance 8940, as Amended.**

(1) On a project (as defined below) funded in whole or in part by federal and/or state funds and/or city of Duluth funds, these local provisions shall prevail in those instances where the requirements of the local provisions are equal to or greater than similar minimum labor standards provisions as set forth in applicable federal and/or state laws and regulations.

(2) In all contracts in excess of \$2,000 for projects (as defined below), the Contractor's particular attention is called to Ordinance 8940, effective June 8, 1989, respectively coded as Article IV of Chapter 2 of the Duluth City Code, and entitled "An Ordinance Pertaining to Wages and Working Hours of Persons on Public Works in the City of Duluth", as set forth below:

(3) **Definitions.**

For the purposes of this section the following words and phrases shall have the meanings respectively ascribed to them in this section:

(a) **Basic hourly rate** - The hourly wage paid to any employee.

(b) **Prevailing wage rate** - The basic hourly rate plus fringe benefits prevailing in the city of Duluth as determined by the United States secretary of labor pursuant to the Davis-Bacon act, as amended; provided that whenever employer and employee organizations employing and representing a majority of a class of workers in a particular industry within the city jointly certify that the prevailing basic hourly rate plus fringe benefits of such workers differs from the amount determined by the secretary of labor, the certified rate shall be considered to be the prevailing wage rate for such class of workers in that industry.

(c) **Fringe benefits** - Employer contribution for health and welfare benefits, vacation benefits, pension benefits, and all other economic benefits other than the basic hourly rate.

(d) **Apprentice** - An employee who is working under a training program which is approved either by the U.S. Department of Labor Bureau of Apprenticeship & Training or the Minnesota Director of Voluntary Apprenticeship; see apprentice ratios on pages 6-7 and HUD 4010 in Section 10.

(e) **Trainee** - An employee registered with the U. S. Department of Labor Employment & Training Administration; see HUD 4010 in Section 10.

(f) **Project** - Erection, construction, demolition, painting, remodeling or repairing of any public building, highway, sidewalk, bridge, water or gas line, sewer and sewage treatment facility or other public work performed under contract with the city.

(f) **Labor, mechanic** - All persons utilized, employed or working on a project who are doing work usually done by mechanics and laborers, including proprietors, partners, and members of cooperatives.

(4) **Wage Rates and Hours for City of Duluth Projects.**

(a) Any contract which provides for a project of estimated total cost of over \$2,000.00 shall contain a stipulation that no laborer, mechanic or apprentice-trainee employed directly upon the project work site by the contractor or any subcontractor shall be permitted or required to work at a rate of pay less than the prevailing wage rate; nor shall any such employee be permitted or required to work more than 8 hours in any work day **OR** 40 hours in any work week unless he is paid at a rate of at least 1½ times the basic hourly rate for all hours in excess of 8 per day **OR** 40 per week [in other words: all hours in excess of eight per day and all hours after 40 per week] and unless he receives fringe benefits that are at least equal to those in the prevailing wage rate; provided that whenever employer and employee organizations employing and representing a majority of a class of workers in a particular industry within the city jointly certify that the maximum number of hours that such persons may work under existing labor agreements before overtime wages must be paid differs from the hours specified in this paragraph, the maximum number of hours specified in such labor agreements shall be substituted for those specified above in applying the provisions of this paragraph to such workers.

(b) The word "or" in the state statute and the city of Duluth Code refers to the number of hours worked in any one week or, in the alternative, the number of hours worked in any one day in the week (the days in one week being totaled for reporting purposes); the law requires use of the alternative which results in the higher number of overtime hours for each employee whose time is being reported.

EXCEPTIONS: Federal government funding only and HUD (Housing and Urban Development) funding - see point "e"

In summary, if a project is solely funded with city of Duluth monies, city ordinance 8940 as amended allows the employees to work four ten-hour days and be paid at the regular hourly rate for those ten hours; exceeding hours must be paid at the overtime rate. An employer may not withhold overtime payment exclusively until 40 hours per week have been worked. Daily overtime must be paid as it is earned.

- **The base workweek hours must be clearly indicated on each payroll. Employees may be assigned a different workweek; however, that must be clearly marked beside the employees' names.**

The following are examples of how these rules apply to different situations.

- TT refers to the total time worked on the day or in the week
- RT refers to the hours worked at the regular rate of pay (straight time)
- OT refers to the hours worked for which overtime must be paid

State Funded with or without federal funding Projects								City-only Funded Projects (4 ten-hour days)							
	Mon	Tues	Wed	Thurs	Fri	Sat	Total		Mon	Tues	Wed	Thurs	Fri	Sat	Total
TT	10	10	10	10	0	6	46		10	10	10	10	0	6	46
RT	8	8	8	8	0	6	38		10	10	10	10	0	0	40
OT	2	2	2	2	0	0	8		0	0	0	0	0	6	6

State Funded with or without federal funding Projects								City-only Funded Projects (4 ten-hour days)							
	Mon	Tues	Wed	Thurs	Fri	Sat	Total		Mon	Tues	Wed	Thurs	Fri	Sat	Total
TT	0	10	10	0	7	0	27		10	0	12	0	0	0	32
RT	0	8	8	0	7	0	23		10	0	10	10	0	0	30
OT	0	2	2	0	0	0	4		0	0	2	0	0	0	2

c) **Overtime Calculations**

Minnesota Statutes Chapter 177.42, subd 4 specifies that the prevailing hours of labor may not be more than eight hours per day or more than 40 hours per week (as stated above in (b)), the City of Duluth does allow for ten hours per day/40 hours per week with City funding *only*. **Example: hours exceeding eight per day are paid at 1.5 times the rate in the contract's wage decision OR the base rate the employee is being paid if it is higher than the required base rate; once 40-hours in any one week are attained, all hours exceeding that 40 are paid at 1.5 times the rate in the project contract's wage decision.** See example (1) and (2) below.

Minnesota Statutes Chapter 177.42, subd 5 defines the hourly basic rate as the hourly wage paid to any employee. (subd 6): The prevailing wage rate means the hourly basic rate of pay plus the contribution for health and welfare benefits, vacation benefits, pension benefits, and any other economic benefit paid to the largest number of workers engaged in the same class of labor within the area...

Minnesota Statutes Chapter 177.43, subd 1 (1) ...employees are permitted to work more hours than the prevailing hours of labor [being] paid for all hours in excess of the prevailing hours at a rate of at least 1-½ times the hourly basic rate of pay. (2) A laborer or mechanic may not be paid a lesser rate of wages than the prevailing wage rate in the same or most similar trade or occupation in the area.

An employer may pay a lower **regular time/straight time** hourly rate and higher fringe benefit rate--to a bona fide plan--than stated in the contract's wage decision providing the total of the two rates is equal to or greater than the total in the wage decision; however, the **OVERTIME rate** must be paid on the higher rate in the contract's wage decision.

(1) Overtime Calculation with Fringe Benefits Paid to Bona Fide Plans

For overtime purposes, an employer paying higher fringe benefits to a bona fide plan and paying a lower hourly rate **MUST** calculate the overtime on the higher hourly rate as stated in the project contract's wage decision. The fringe benefit amount may be reduced to reflect any increase in the total prevailing wage package IF the plan administrator permits such a reduction. This acceptance must be verified in writing by the plan administrator and attached to the appropriate certified payroll report.

(2) Overtime Calculation with Cash Payment of Fringe Benefits

When the fringe benefit is paid directly to an employee, the prevailing base rate and the fringe benefit rate as established in the project contract's wage decision for a specific classification are totaled to arrive at the hourly rate. *Overtime is calculated at 1.5 x the base rate of the wage decision with the fringe benefit amount added to that rate: base rate of the wage decision x 1.5 + fringe benefit rate = overtime rate.*

Contract Work Hours and Safety Standards Act

[Refer to page two of this document.] All projects valued at \$100,000 or greater are subject to this Act. As with Minnesota Statutes Chapter 177.43, the overtime rate is calculated as in items one and two above OR (e) below.

- (d) A contractor shall not reduce a worker's private, regular rate of pay when the wage rate certified by the U. S. Department of Labor or the Minnesota Department of Labor & Industry is less than the worker's normal hourly wage [Minnesota Statute 181.03 subdivision 1(2)].

(e) **Regular Time & Overtime Definitions**

- **State of Minnesota** funded projects with or without federal funding *only allow for five eight-hour days per week at regular time*. Overtime is calculated at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount. (see (1) above for example when a lower base rate and higher fringe are paid)
- **City of Duluth** funded projects do permit four ten-hour work days at regular time--see point 4-a, b for stipulations. Overtime is calculated at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision--OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount. (see (1) above for example when a lower base rate and higher fringe are paid)
- **Federal** funded only projects allow overtime pay for hours worked in excess of 40 in a workweek at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount.
- **HUD** funded projects allow overtime pay for hours worked in excess of 40 in a workweek at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount.

** When a combination of funding sources are included in any one project, the most strict requirements will apply.

- (f) The minimum hourly prevailing wages are contained in each project specification. When both federal (general decision rates from the U. S. Department of Labor) and State of Minnesota prevailing wages for state funded construction projects from the Minnesota Department of Labor and Industry are used, the prime contractor and all subcontractors including trucking operations, are required to pay the higher of the two wages for all laborers and mechanics [MnDOT Contract Administration Manual, Section 5-591.320].
- (g) The prime contractor and any lower-tier subcontractor shall review all wage decisions and compensate a worker according to the type of work performed and at the rate that is the greatest.
- (h) State of Minnesota prevailing wages typically list two rates for each classification with two effective dates. Should any City of Duluth contract continue to and past the second effective date, that rate and fringe benefit will be in effect through the remainder of the project.
- (i) **Mn/DOT Statement of Compliance is required on all city of Duluth construction projects (regardless of the project funding source) with each weekly certified payroll report.** web site: <http://dot.state.mn.us/const/labor/forms.html>
- (j) All contracts for city projects shall have applicable schedules of prevailing wage rates set forth in the contract. Schedules of applicable prevailing wage rates shall be posted on all project job sites for public review and shall be protected from the weather.
- (k) Employees on projects shall be paid at least **weekly**. Fringe benefits shall be paid either in cash or to an employee benefit plan that has been approved by the U.S. Department of Labor. ■ **The fringe benefit package is an integral portion of the prevailing wage. Should the prime contractor or any subcontractor (regardless of tier) become delinquent with any fringe benefit plan administrator's requirements for monthly payment, the monthly estimate(s) may be withheld until the plan payments are made current.** (city ordinance 8940 6-18-89 plus amendments)
See MnDOT Specification 1906 on page nine and Section 5 of this document: Contract Compliance.
See Statement of Compliance and Certified Payroll Report requirements in Section 10, HUD 4010 and web sites in Section 14, Forms.
- (l) Any contractor or subcontractor working on a project shall furnish the City with **original** certified payroll reports with **original signatures** relating to the project. Such certified payroll reports shall be **submitted weekly** on U.S. Department of Labor standard forms (WH-347) or their equivalent--using the same format--to the City of Duluth Labor Standards representative. All City of Duluth funded projects must have the base workweek hours indicated on the certified payroll form and/or beside each employee's name (should some employees be working different base workweeks).
- (m) No contractor or subcontractor working on a project shall evade or attempt to evade the provisions of this section through the use of non-recognized training programs. The only employees involved in training programs that shall be allowed to work on projects covered by this section shall be apprentice-trainees as defined by this article.
- (n) Any person violating the provisions of this section shall be guilty of a misdemeanor with each day of violation constituting a separate offense. In addition, if the prevailing wage rate and accompanying fringe benefit rate is not paid to employees working on a project, the City of Duluth may withhold contract payments to the prime contractor until such deficiencies are corrected. Should fringe benefits be paid to authorized Plans, the payments must be made within the demands of those Plans. Delinquencies may result in withholding of project funds to the prime contractor.
- (o) This section shall not apply to contracts for projects where the total cost of the project is less than \$2,000.00; nor to materialmen who do no more than deliver materials to the work site, except that this section shall apply to employees who deliver asphalt, concrete or mineral aggregate such as sand, gravel or stone where such material is incorporated into the project by depositing the material substantially in place, either directly or through spreaders, from the transporting vehicle.

(5) **Helpers**

A helper may perform work *only* if the helper classification is specified and defined in the federal wage decision and/or State of Minnesota wage decision incorporated into the project contract. Without such a helper classification, the contractor must assign a job classification that is the "same or most similar" [Minnesota Statute 177.44, subdivision 1] and compensate the helper for the actual work performed regardless of the helper's skill level.

(6) **Apprentice Ratios**

Journeyworkers must be on site with the apprentices and their hours must match.

FUNDING SOURCE:

City of Duluth and State of Minnesota with or without Federal funding

- Apprentices are not permitted to work alone under any circumstances.
- Working foremen are acceptable as a journeyworker PROVIDING he/she is in the same classification.
 - » Example: carpenter foreman and carpenter apprentice
- Ratios are determined by the trade's labor agreement.
- In the absence of ratio language, the following State of Minnesota apprenticeship ratios will be applied:
(apprentice : journeyworker) 1:1 2:4 3:7 4:10, etc.

- Employees working in excess of the allowable ratio must be paid the full journeyworker compensation.
- Out-of-ratio apprentices will be calculated beginning with the **apprentice at the highest level of training** and, then, to less senior apprentices in their rank order.
- Should two or more out-of-ratio apprentices have the same level of training, whomever was on the work site first will receive journeyworker pay; if the apprentices at the same level of training began work on the project site at the same time, hours worked out-of-ratio for which restitution is due will be divided among those apprentices.

Examples:

Four apprentices working unsupervised are on site. [4:0]
Ratio calls for four apprentices and ten journeyworkers [4:10]

Correction: all apprentices will receive the full journeyworker compensation as apprentices are not permitted to work alone.

Three apprentices and two journeyworkers are on site. [3:2]
Ratio calls for three apprentices and seven journeyworkers [3:7]

Two journeyworkers may accompany only one apprentice; therefore, the two highest level apprentices are paid the full journeyworker compensation.

Even though this particular job has three apprentices—the second journeyworker is a mute point; a third journeyworker would also be a mute point in this example.

Correction: the two highest level apprentices are paid the full journeyworker compensation and the third lower level apprentice is considered in ratio.

H U D (CDBG) and Federal funding only

- Apprentices are not permitted to work alone unless the U. S. Department of Labor-approved agreement allows that practice.
- Working foremen are acceptable as a journeyworker PROVIDING he/she is in the same classification.
 - » Example: electrician foreman and electrician apprentice
- Ratios are determined by the trade's U. S. Department of Labor-approved agreement.
- In the event of the absence of ratio language in the applicable agreement, the Minnesota Department of Labor ratio of one apprentice for the first journeyworker and one apprentice for each three journeyworkers thereafter will be applied, (i.e., 1:1, 2:4, 3:7, 4:10, etc.).
- The **legal apprentices are those who first came to work on the job site**; in the event that all apprentices begin work on the project site at the same time, hours worked out-of-ratio for which restitution is due will be divided among the apprentices.
- Time cards will be required to substantiate the start times.
- Employees working in excess of the allowable ratio—or for which U. S. Department of Labor-apprentice agreement/certificate is not provided—must be paid the full journeyworker compensation.

Examples:

Four apprentices and one journeyworker are on site. [4:1]
Ratio calls for four apprentices and ten journeyworkers. [4:10]

The first apprentice on site is considered in ratio as one journeyworker may only accompany one apprentice [1:1]; this particular job has four apprentices.

Correction: the second through the fourth apprentices coming on site are paid the full journeyworker compensation.

Six apprentices and two journeyworkers are on site [6:2]
Ratio calls for six apprentices and sixteen journeyworkers [6:16]

The first apprentice on site is considered in ratio as two journeyworkers may only accompany one apprentice; this particular job has six apprentices—the second journeyworker is a mute point.

Correction: the second through sixth apprentices coming on site are paid the full journeyworker compensation.

(7) Poster Boards

The prime contractor must construct and display a poster board, which contains all required posters, is legible and is accessible to all workers from the first day of work until the project is 100% complete. Posters must be protected from the weather. Prime contractors are not allowed to place a poster board at an off-site facility location.

(8) Trucking Issues

a) For the purpose of sections seven and eight, the term “owner” includes all persons having an ownership interest in the trucking entity or a partnership interest in the trucking entity and has a legal and rightful title to the vehicle(s) or has an approved lease on the vehicle(s). “Operate” means the owner either physically drives the vehicle or hires another to physically drive the vehicle; yet, maintains the right to direct the day-to-day operations of the vehicle.

b) Trucking Operations Definitions: See MN Rule 5200.1106 web site: <https://www.revisor.mn.gov/rules/?id=5200.1106>

Independent Trucking Operator: an individual or partnership who owns or holds a vehicle under lease and who contracts that vehicle and the owner's services to an entity which provides construction services to a public works project. The individual owns or leases and drives the equipment, is responsible for the maintenance of the equipment, bears all operating costs, determines the details and means of performing the services, and enters into a legally binding agreement that specifies the relationship to be that of an independent contractor and not that of an employee.

Multiple Truck Operations: any legal business entity that owns more than one vehicle and hires the vehicles out for services to brokers or contractors on public works projects. The owners of a trucking firm may either drive the vehicles or hire employees to drive the vehicles. Employee drivers are subject to the appropriate prevailing wage rate. The owner driving a vehicle is obligated to account for the value of his/her services as a driver at the appropriate prevailing wage.

Partnerships: a legal business entity where two or more individuals hold vehicles under lease and contract those vehicles and their services to an entity which provides construction services to a public works project. The partners own or lease the equipment, are responsible for maintenance and all operating costs, drive the equipment, determine the details and means of performing the services, and enter a legally binding agreement that specifies the

relationship to be that of a partner and not that of an employee. All partners are subject to the appropriate prevailing wage per city of Duluth ordinance 8940 as amended.

Corporation: any legal business entity that owns or leases vehicles to provide construction services to public works projects. All individuals are employees of the corporation and subject to the appropriate prevailing wage regardless of title or position.

Broker: an individual or firm who (activities include, but are not limited to):

- contracts to provide trucking services [equipment and driver] in the construction industry to users of such services, such as prime contractors and various subcontractors of the prime;
- contracts to obtain services from other trucking operations and dispatches them to various assignments;
- receives payment from the users (such as prime contractors and various subcontractors) in consideration for the trucking services provided; and
- makes payment to the providers (trucking operations so contracted with) for their services.

(9) **Specific documentation from trucking operations.**

Independent Trucking Operators

The owner/operator of a truck must submit a copy of his/her commercial driver's license (CDL), cab card, and insurance certificate for each truck the owner/operator drives on each construction project *before commencing work on that project*. These documents must be sent to the prime contractor who will then forward the material to Labor Standards, Engineering Division at the City of Duluth.

Multiple Truck Operators

Weekly certified payrolls and payment of corresponding prevailing wages plus the fringe benefit package will be required for each project where trucks are operating. This covers the owner plus all employees performing work on the project.

Partnerships

Weekly certified payrolls and payment of corresponding prevailing wages plus fringe benefit packages will be required for each project where trucks are operating. This covers all partners of the organization who perform work on the project.

Each partner performing work on a project must submit a copy of his/her commercial driver's license (CDL), cab card, and insurance certificate for the truck being operated with that weekly certified payroll. It is not necessary to repeat such supporting documentation until a different truck is used and/or certificates or licenses have expired.

Employees of the partnership are always reported on a weekly certified payroll and paid the appropriate prevailing wage plus fringe benefit package for the work being performed.

Corporations

All persons employed by the corporation are subject to receive payment of the prevailing wage plus the fringe benefit package for the work performed on a project regardless of title or position. Weekly certified payrolls must be submitted for all work performed on the project.

Brokers

Truck ownership and a **bonafide contract** between the broker and another trucking operation, a prime contractor, or a subcontractor must be identified. Paperwork must be submitted with the month end trucking report to the city of Duluth Labor Standards representative - Engineering. Certified payrolls are not required when the above documentation is provided and approved.

(10) **Month End Trucking Report - ONLY REQUIRED WITH STATE OF MINNESOTA FUNDING**

The Minnesota Department of Transportation Month End Trucking Report Form A and Form B plus Minnesota Department of Transportation Month End Trucking Report Statement of Compliance are *only required on state funded projects*.

A guide for completing the forms including definitions and the reports, themselves, may be downloaded from:

www.dot.state.mn.us/const/labor/forms.html

Payment to the prime contractor may be withheld until documentation is received and approved.

(11) **Truck Rental Rates - ONLY REQUIRED WITH STATE OF MINNESOTA FUNDING**

Truck rental rates are listed in the prevailing wage section of the project specifications.

(12) **Minnesota Rules 5200.1105 and 5200.1106**

These rules are incorporated into this supplementary general conditions part II by reference and are found on these web sites:

www.revisor.mn.gov/rules/?id=5200

(13) **Truck Axles** web site: <https://www.revisor.mn.gov/rules/?id=5200.1100>

Per Minnesota Rules 5200.1100 Master Job Classifications, a truck "unit" refers to all axles including the steering axle. A tag axle is also counted as one of the axles. Examples: four rear axles plus one steering axle = five axles total one rear axle plus one steering axle = two axles total

(14) **Non-Compliance and Enforcement**

- a) The prime contractor shall be liable for any unpaid wages to its workers or those of its lower-tier subcontractors, trucking companies/Multiple Truck Owners (MTO's) and/or Independent Truck Owner/Operator (ITOs) [MnDOT Standard Specifications for Construction, Section 1801].
- b) See Section 9, MnDOT Specification 1906 Partial Payments and Section 5, page two of this document.
- c) City of Duluth ordinance 8940 as amended.

(15) **IC-134 form - Withholding Affidavit for Contractors**

The IC-134 form will be required from all Multiple Truck Operators, Partnerships, and Corporations performing trucking services on a project before the retainage or all remaining funds can be released. Web site for completing form online: www.mndor.state.mn.us

The form, itself, is found at: www.taxes.state.mn.us/Forms_and_Instructions/ic134.pdf

(16) **Owners, Supervisors, Foremen listed on certified payrolls.**

All persons working on a City of Duluth project including owners, partners, supervisors, salaried persons, and working foremen who perform laborer and/or mechanic work shall be reported on the weekly certified payroll reports including all data required of any laborer or mechanic. (ordinance 8731, 6/24/85 and 8940 as amended).

(17) **Supporting documentation.**

At his/her discretion, the City of Duluth employee responsible for prevailing wage labor standards may demand proof of payment of the prevailing wage which may include copies of a payroll register, itemized time sheet and matching cancelled check, or any other supporting documents as stipulated. Payment to the prime contractor may be withheld until documentation is received and approved.

(18) **Kickbacks from Public Works employees prohibited.**

No contractor working on a project or other person shall, by force intimidation, or threat of termination of employment, cause any employee working on a project to give up any part of the compensation to which he is entitled under his contract of employment.

Section 9

**Minnesota Department of Transportation Specification 1906 Partial Payments
Process For "Withholding Contract Monies" and "Default and Termination of a Contract" 11/5/04**

Mn/DOT Specification 1906 Partial Payments describes the Commissioner's authority to withhold funds to protect the Department's interests. In addition, Specification 1808 Default and Termination of a Contract describes the Commissioner's authority to take the prosecution of the work out of the hands of the Contractor.

Additionally, on projects funded in whole or part with federal funds and in accordance with the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, "Withholding", incorporated into federal aid contracts, the Contracting Officer may, after written notice to the Contractor, 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.

However, the Department must give the Contractor, and its Sureties due notice prior to exercising these authorities. The withholding of contract funds, in accordance with Specification 1906 or the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, "Withholding", should be implemented as soon as a possible prevailing wage violation is recognized. However, Default and Termination of a Contract, in accordance with Specification 1808, should only be exercised as a "last resort" if the Contractor is not willing to comply.

Definitions

(Mn/DOT Standard Specifications for Construction 2000 Edition, Section 1103)

Commissioner: The Commissioner of the Minnesota Department of Transportation, or the chief executive of the department or agency constituted for administration of Contract work with its jurisdiction.

Contractor: The individual, firm or corporation Contracting for and undertaking prosecution of the prescribed work; the party of the second part to the Contract, acting directly or through a duly authorized representative.

Department: The Department of Transportation or the State of Minnesota, or the political subdivision, governmental body, board, commission, office, department, division, or agency constituted for administration of the Contract work within its jurisdiction.

(Form 1273 - 29 CFR, Part 5.1, Definitions)

Contracting Officer: The individual, a duly appointed successor or authorized representative who is designated and authorized to enter into Contracts on behalf of the Federal Agency and/or the City of Duluth.

Important Considerations

1. Upon completion of the work under a contract, the department should consider issuing the final voucher as soon as possible. Failure to finalize a contract expeditiously could result in subsequent claims that would prevent the department from finalizing the contract. However, before the issuance of the final voucher, the department must be able to ensure that the terms of the contract have been satisfied. Failure on the part of the department to ensure compliance could result in the Mn/DOT state aid division retaining funds from the department in accordance with *Minnesota Rules 8820.3000, subpart 5*.
2. On every contract, the department should withhold the final retainage in accordance with the following guidelines: (1) if the total amount of the contract is \$1,000,000 or more, the department should retain funds not more than \$50,000, (2) if the total amount of the contract is less than \$1,000,000, the department should retain 5% of the total contract, (3) retainage should be withheld until the department can ensure that the contractor has met the terms of the contract or until the finalization of the contract.
3. This guide specifies that the department verbally notify the bonding company early in the process. Generally, as a "rule of thumb", notifying the bonding company is usually the "last resort". However, the justification for the early notification is related to the language found in *Minnesota statute 574.31, subdivision 2*, which summarizes that if an individual or the department does not submit a claim on the payment bond within 120 days after the completion of work under the contract, the claim can be denied.

The following are general guidelines that should be followed prior to placing a Contractor in default:

- Step 1: Upon verbal or written notification that a possible prevailing wage violation exists, the Department should give written notice to the Contractor regarding the nature of the claim, along with the Department's intent to withhold monies until the claim is investigated and determined to be in compliance. Additionally, the Department should inform the Contractor that the bonding company has been verbally notified of the claim. Please be aware, the Department should ensure employee confidentiality at all times.
- Step 2: Upon a preliminary determination surrounding the financial extent of the claim, the Department should consider retaining a "reasonable" portion of one or more partial estimates in accordance with Mn/DOT's 2000 Standard Specifications for Construction, Section 1906; or on federal aid contracts, in accordance with the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, "Withholding".
- Step 3: If it is determined that the claim is valid, the Department should schedule a meeting with the Contractor and attempt to resolve the matter. If the claim is determined to be invalid, the Department should release any partial estimates that may have been held as a result of the claim. However, the Department should continue to withhold the final retainage in accordance with the above-mentioned: *Important Considerations, 2*.
- Step 4: If resolution cannot be obtained through a meeting, the Department should order the Contractor, in writing, to complete their obligations under the contract. The letter should clearly state the circumstances under which the Department has deemed that the Contractor has not met the terms of the contract. Additionally, the Department should include a reasonable deadline for this obligation to be completed. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSAE), Labor Compliance Unit and the Department's Attorney.
- Step 5: In the event that the Contractor does not respond to the Department's written order, the Department should send a similar letter, requesting that the Contractor respond immediately, in writing, regarding the Contractor's intention to comply or not comply with the order. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSAE), Labor Compliance Unit and the Department's Attorney.
- Step 6: If the Department still does not get a proper response from the Contractor, the Department should write another letter, addressed to both the Contractor and the Surety, specifying all the facts of the alleged breach, demanding that the Contractor, or its Surety, respond satisfactorily within 10 days or the Department may exercise its authority to Default and Terminate the Contract in accordance within/DOT's 2000 Specifications for Construction, Section

1808. It's important to provide sufficient detail so that the Surety understands the situation. This notification should be sent by certified mail. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSAE), Labor Compliance Unit and the Department's Attorney.

Step 7: If the Contractor or Surety is unresponsive after 10 days, the Department should consult with their attorney to consider proceeding with Default and Termination of the Contract.

Step 8: Upon termination of the contract, the Department provides a written order to the Surety, requiring the Surety to bring resolution to the prevailing wage violation.

Step 9: The Department places the Contractor on a Non-Responsible Bidder's List and rejects any future awards.

Section 10

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

Previous editions are obsolete Page 1 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1

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)(iv); 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 therefore 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 Previous editions are obsolete Page 2 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1 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 I(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 I(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/whd/wh347.pdf> 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 Previous editions are obsolete; Page 4 of 5 form **HUD-4010** (06/2009) ref. Handbook 1344.1

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 therefore 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 sub paragraph (1) of this paragraph.

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(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.

Section 11

Equal Opportunity Laws and Regulations

(A) In addition to Contract specifications set forth below, the Contractor shall conduct and administer this Contract in compliance with:

- (1) Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352) and implementing regulations issued at 24 CFR Part 1;
- (2) Title VIII of the Civil Rights Act of 1968 (Pub. L. 90-284), as amended, and implementing regulations;
- (3) Section 109 of the Housing and Community Development Act of 1974, as amended; and the regulations issued pursuant thereto (24 CFR Section 570.601);
- (4) Section 3 of the Housing and Urban Development Act of 1968, as amended, and implementing regulations of 24 CFR Part 135;
- (5) Executive Order 11246, as amended by Executive Order 11375 and 12086 and implementing regulations at 41 CFR Chapter 60;
- (6) Executive Order 11063, as amended by Executive Order 12259 and implementing regulations at 24 CFR Part 107;
- (7) Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), as amended, and implementing regulations when published for effect;
- (8) The Age Discrimination Act of 1975, as amended, (Pub. L. 94-135) and implementing regulations when published for effect;
- (9) The Minnesota Human Rights Act of 1974, as amended (Chapter 363).

Equal Opportunity and Affirmative Action

(A) Contractors and Subcontractors that have a work force in excess of fifty (50) employees and a contract in excess of \$50,000.00 shall prepare and maintain an appropriate affirmative action plan in accordance with the provisions of 41 CFR 60 "Compliance Responsibility for Equal Opportunity".

(B) Non-segregated Facilities. The Contractor shall certify that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Contractor covenants that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. As used in this paragraph the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, creed, religion, national origin, ancestry, age, marital status, status with respect to public assistance, and/or disability because of habit, local custom, or otherwise.

General Provisions Against Discrimination

(A) In all hiring or employment made possible by or resulting from this Contract, there:

- (1) will not be any discrimination against any employee or applicant for employment because of race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability.
- (2) affirmative action will be taken to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability. This requirement shall apply to, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; lay-off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. There shall be posted in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this clause. All solicitations or advertisements for employees shall state that all qualified applicants will receive consideration for employment without regard to race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability.

(B) No person in the United States shall, on the grounds of race, color, creed, religion, national origin, age, sex, marital status, status with respect to public assistance, and/or disability, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Contract. The Contractor and each employer will comply with all requirements imposed by or pursuant to the regulations of the Federal Agency effectuating Title VI of the Civil Rights Act of 1966. The Contractor will note this requirement in all solicitations or advertisements for employees. 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.

(C) 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 advising the labor union or workers' representative of the Contractor's commitments under these provisions, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(D) The Contractor hereby agrees that he will incorporate 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 pursuant to this Contract, the equal opportunity clause which is a part of these Contract Documents.

(E) The Contractor further agrees that he will be bound by the equal opportunity clause and other provisions of 41 CFR Chapter 60, with respect to his own employment practices when he participates in federally assisted construction work: **Provided:** That of the Contractor 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. Also, the Contractor will make his files available to inspection by appropriate government agencies and shall furnish those reports as may be required by said agencies.

(F) The Contractor agrees that he will assist and cooperate actively with the Federal Agency and the Secretary of Labor in obtaining the compliance of subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that he will furnish the Federal Agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that he will otherwise assist the Federal Agency in the discharge of its primary responsibility for securing compliance.

(G) The Contractor further agrees that he will refrain from entering into any contract or any contract modification subject to Executive Order 11246 of September 24, 1965, with a subcontractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order. In addition, the Contractor agrees that if he fails or refuses to comply with these undertakings, the City or the Federal Agency may take any or all of the following actions: Terminate or suspend in whole or in part this Contract; refrain from extending any further assistance to the Contractor under the Project with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received from such Contractor and refer the case to the Department of Justice for appropriate legal proceedings.

Affirmative Action - "Construction Contracts" over \$10,000

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity
(Executive Order 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

<u>Timetables</u>	<u>Goals for minority participation (percent)</u>	<u>Goals for female participation (percent)</u>
From April 1, 1980 until revised	3.0	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the City and to the Director of the Office of Federal Contract Compliance Programs; U.S. Department of Labor, ESA/OFCPP, 16th Floor, 230 South Dearborn Street, Chicago, Illinois, 60604, within 10 working days of award of any construction subcontract and/or subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the contractor and/or subcontractor; employer identification number; estimated dollar amount of the prime contract; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Notice, and in the Contract, the "covered area" is all work under a contract currently held with the City of Duluth, Minnesota.

Standard Federal Equal Employment Opportunity
Construction Contract Specifications (Executive Order 11246)

1. As used in these specifications:

- a) "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor; or any person to whom the Director delegates authority;
- b) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- c) "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notices of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitments and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of officers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, creed, religion, national origin, sex, ancestry, age, marital status, status with respect to public assistance and/or disability.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails

to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Affirmative Action for Handicapped Workers

(applies to contracts in excess of \$2,500)

(A) The 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 is 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.

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

(C) In the event of the 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.

(D) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. 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.

(E) The 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.

(F) The Contractor will include the provisions of this clause in every subcontract or purchase order of \$2,500 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. The 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.

Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era

(applies to contracts in excess of \$10,000)

(A) The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans status 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.

(B) The Contractor agrees that all suitable employment openings of the Contractor which exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring at an establishment of the Contractor other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall be listed at an appropriate local office of the State employment service system wherein the opening occurs. The Contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required.

State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service, but are not required to provide those reports set forth in paragraphs (D) and (E).

(C) Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and non-veterans. The listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the Contractor from any requirements in Executive Orders or regulations regarding nondiscrimination in employment.

(D) The reports required by paragraph (B) of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the Contractor has more than hiring location in a State, with the central office of that State employment service. Such reports shall indicate for each hiring location (1) the number of individuals hired during the reporting period, (2) the number of non-disabled veterans of the Vietnam era hired, (3) the number of disabled veterans of the Vietnam era hired, and (4) the total number of disabled veterans hired. The reports should include covered veterans hired for on-the-job training under 38 U.S.C. 1787. The Contractor shall maintain at each hiring location copies of the reports submitted until the expiration of one year after final payment under the contract, during which time these reports and related documentation shall be made available, upon request, for examination by any authorized representatives of the contracting officer of the Secretary of Labor. Documentation would include personnel records respecting job openings, recruitment and placement.

(E) Whenever the Contractor becomes contractually bound to the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these provisions, and has so

advised the State system, there is no need to advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(F) This clause does not apply to the listing of employment openings which occur and are filled outside of the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

(G) The provisions of paragraphs (B), (C), (D), and (E) of this clause do not apply to openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement for that opening.

(H) As used in this clause:

(1) "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: Production and non-production; plant and office; laborers and mechanics; supervisory and non-supervisory; technical; and executive, administrative, and professional openings as are compensated on a salary basis of less than \$25,000 per year. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment. It does not include openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement nor openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances an employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise supplied, where listing would be contrary to national security, or where the requirement of listing would otherwise not be for the best interest of the Government.

(2) "Appropriate office of the State employment service system" means the local office of the Federal-State national system of public employment offices with assigned responsibility for serving the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

(3) "Openings which the Contractor proposes to fill from within his own organization" means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and the parent companies) and includes any openings which the Contractor proposes to fill from regularly established "recall" lists.

(4) "Openings which the Contractor proposes to fill pursuant to a customary and traditional employer-union hiring arrangement" means employment openings which the Contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the Contractor and representatives of his employees.

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

(J) In the event of the 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.

(K) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era for employment, and the rights of applicants and employees.

(L) The Contractor will notify each labor union representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Vietnam Era Veterans Readjustment Assistance Act, and is committed to take affirmative action to employ and advance qualified disabled veterans and veterans of the Vietnam era..

(M) The 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 the Act, 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 Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

Section 12

Employment Opportunities - "HUD Section 3"

General

These requirements apply to the City of Duluth contracts receiving assistance under the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Program.

Type of Covered Projects

24CFR570.607 (b) of the HUD CDBG Program Regulations state in part "... that employment and other economic opportunities arising in connection with housing rehabilitation, housing construction, or other public construction projects shall to the greatest extent feasible, and consistent with existing Federal, State, and local laws and regulations be given to low- and very low-income persons.

Thresholds

In accordance with the provisions of 24CFR135.3(a) (3) (ii) (A), the requirements of this Section apply to those recipients as defined at 24CFR135.5 when the amount of this contract exceeds \$200,000.

In addition, in accordance with the provisions of 24CFR135.3 (a) (3) (ii) (B), the requirements of this Section apply to any contractor or subcontractor whose contract exceeds \$100,000 as a result of assistance provided under this contract.

Requirements (Section 3 Clause)

(A) The work to be performed under this contract 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). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(B) The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

(C) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement, or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The

notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

(D) The Contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

(E) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligation under 24 CFR part 135.

(F) Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD-assisted contracts.

Section 13

Federal Requirements for Minority/Women Business Enterprises Contract Guidance - MPFA

General

Municipalities that receive loan funding must comply with Federal requirements concerning utilization of Minority Business Enterprises (MBE) and Women's Business Enterprises (WBE). These requirements are designed to encourage the prime contractors to utilize MBEs and WBEs whenever procurement opportunities occur.

Regulation

40 C.F.R. Section 35.3145(d) Application of other Federal Authorities, M/WBE Requirements

Executive Orders No. 11625, 12138 and 12432 - Promoting the use of M/WBEs

Section 129 of Public Law 100-590 - Small Business Administration Reauthorization and Amendment Act of 1988

Regulations detailed in the EPA's *Cross-Cutting Federal Authorities - Clean Water Act State Revolving Fund Program and Safe Drinking Water Act State Revolving Fund Program*

Implementation

The "fair share" target percentage participation proposed for this project is 3.5 percent (3.5%) for MBE and 11.5 percent (11.5%) for WBE.

If the Contractor intends to let any subcontractors for a portion of the work, the Contractor shall take affirmative steps to assure that minority and women businesses are utilized when possible as sources of supplies, equipment, construction and services. Affirmative steps shall include the following:

- a) Include qualified minority businesses on solicitation lists.
- b) Assure that minority businesses are solicited whenever they are potential sources.
- c) When economically feasible, divide total requirements into smaller tasks or quantities so as to permit maximum small and minority business participation.
- d) Where the requirement permits, establish delivery schedules, which will encourage participation by minority businesses.
- e) Use the services and assistance of the Office of Minority Business Enterprise of the Department of Commerce.

The low bidder will be required to submit to the City of Duluth documentation of his good faith efforts to meet the targeted goals of utilizing MBEs and WBEs.

Section 14 - Forms

Minnesota Department of Transportation and City of Duluth, Minnesota funded certified payroll forms

- MnDOT Prime Contractor's-Subcontractor's Statement of Compliance form (12/2010)
www.dot.state.mn.us/const/labor/forms.html
- Certified Payroll Forms
<http://www.dol.gov/forms/whd/wh347.pdf>
use front side only

U. S. Department of Housing and Urban Development and federal government funded certified payroll forms

- Statement of Compliance Form & Certified Payroll Forms
<http://www.dol.gov/forms/whd/wh347.pdf>
(use reverse side for Statement of Compliance form)
- MnDOT Prime Contractor's-Subcontractor's Statement of Compliance form (12/2010)
www.dot.state.mn.us/const/labor/forms.html

Minnesota Department of Transportation Trucking Requirements

- Month End Trucking Report Form A and Form B
- Month End Trucking Report Statement of Compliance
- Definitions, instructions, forms:
www.dot.state.mn.us/const/labor/forms.html

General Decision Number: MN170105 06/23/2017 MN105

Superseded General Decision Number: MN20160105

State: Minnesota

Construction Type: Heavy

County: St Louis County in Minnesota.

HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017
1	02/03/2017
2	03/03/2017
3	04/14/2017
4	05/19/2017
5	06/23/2017

BOIL0647-004 01/01/2017

	Rates	Fringes
BOILERMAKER.....	\$ 35.65	29.89

CARP0361-020 05/01/2016

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

	Rates	Fringes
CARPENTER (Including Form Work).....	\$ 34.57	18.16

CARP0361-021 05/01/2016

ST LOUIS (Duluth)

	Rates	Fringes
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CARPENTER (Including Form Work).....	\$ 34.57	18.16
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CARP0606-010 05/01/2015

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

	Rates	Fringes
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CARPENTER (Including Form Work).....	\$ 34.11	17.08
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* ELEC0242-012 06/04/2017

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

	Rates	Fringes
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ELECTRICIAN.....	\$ 35.90	25.64
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ELEC0294-006 05/29/2016

ST. LOUIS (North part bounded on the south by the south line of Ellsburg Township, extended east & west)

	Rates	Fringes
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ELECTRICIAN.....	\$ 35.60	71.72%
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ENGI0049-064 05/01/2016

	Rates	Fringes
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OPERATOR: Power Equipment		
Group 2.....	\$ 34.39	18.90
Group 3.....	\$ 33.84	18.90
Group 4.....	\$ 33.54	18.90
Group 5.....	\$ 30.50	18.90
Group 6.....	\$ 29.29	18.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

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

bituminous.

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

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

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

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

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

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

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

IRON0512-028 06/05/2016

	Rates	Fringes
IRONWORKER, STRUCTURAL AND REINFORCING.....	\$ 31.54	24.90

LABO1091-006 05/01/2016

ST LOUIS (South of T. 55 N)

	Rates	Fringes
LABORERS		
(1) Common or General.....	\$ 29.13	17.12
(2) Mason Tender		
Cement/Concrete.....	\$ 29.33	17.12
(6) Pipe Layer.....	\$ 31.63	17.12

LABO1091-007 05/01/2016

SOUTHERN ST. LOUIS COUNTY

Rates Fringes

LABORER

Common or General (Natural
Gas Pipeline only).....\$ 29.13 17.12

LABO1097-002 05/01/2014

NORTHERN ST. LOUIS COUNTY

Rates Fringes

LABORER

Common or General (Natural
Gas Pipeline only).....\$ 25.02 18.16

LABO1097-005 05/01/2014

ST LOUIS (North of T. 55 N)

Rates Fringes

LABORERS

(1) Common or General.....\$ 25.02 18.16
(2) Mason Tender
Cement/Concrete.....\$ 25.22 18.16
(6) Pipe Layer.....\$ 27.52 18.16

PLAS0633-036 05/01/2016

ST. LOUIS COUNTY (North of T 55N)

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 33.95 17.63

PLAS0633-039 05/01/2016

ST. LOUIS COUNTY (South of T 55N)

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 33.95 17.63

TEAM0160-018 05/01/2017

Rates Fringes

TRUCK DRIVER (DUMP)

(1) Articulated Dump Truck..\$ 30.25 16.60
(2) 3 Axles/4 Axles; 5
Axles receive \$0.30
additional per hour.....\$ 29.70 16.60
(3) Tandem Axles; & Single

Axles.....\$ 29.60 16.60

SUMN2009-072 09/28/2009

Rates Fringes

LABORER: Landscape.....\$ 12.88 4.61

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or

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

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

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

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

Washington, DC 20210

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

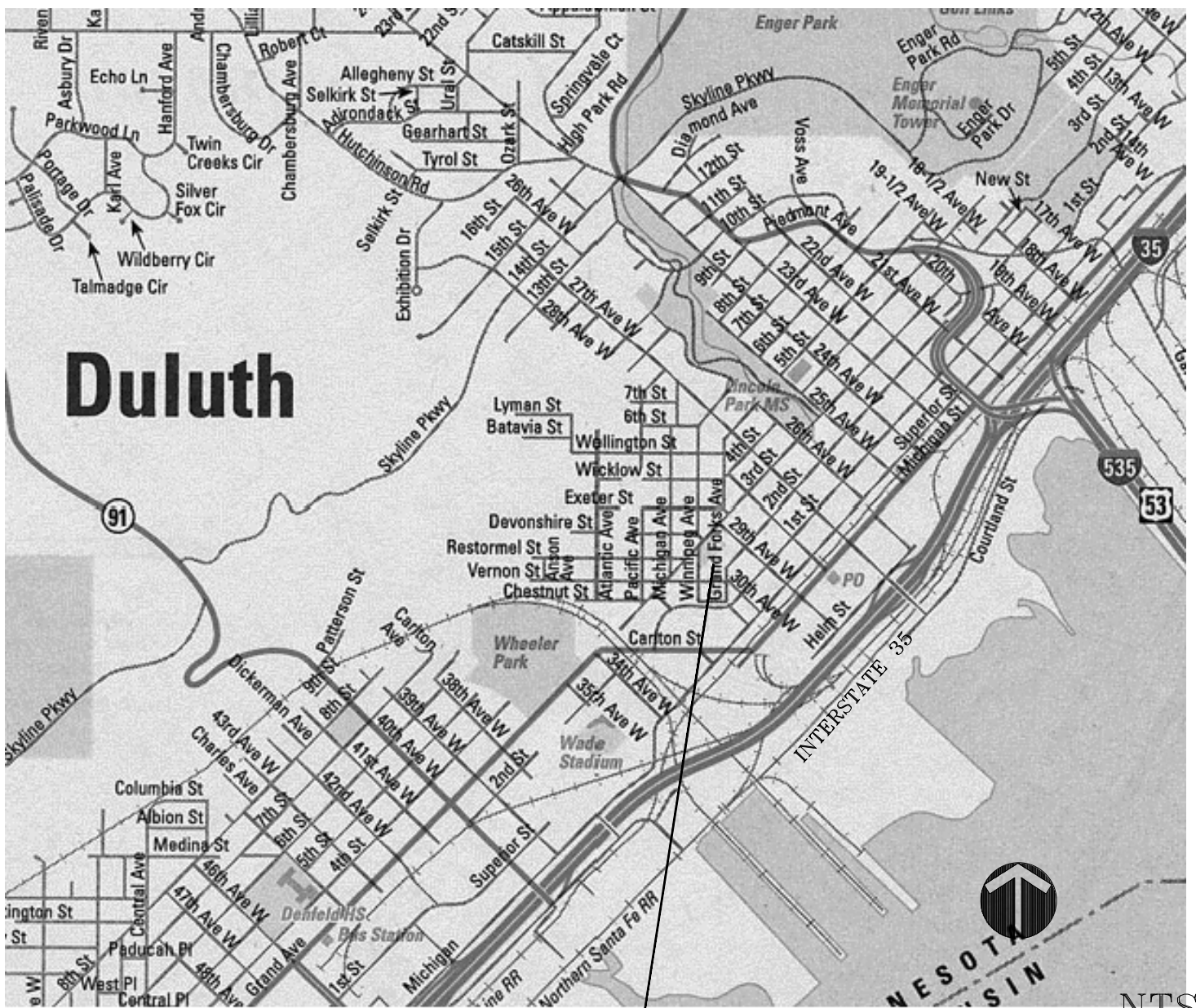
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END OF GENERAL DECISION

HARRISON RECREATION CENTER

3002 WEST THIRD STREET DULUTH, MN PHASE THREE JUNE 14, 2017

VICINITY MAP



SITE LOCATION

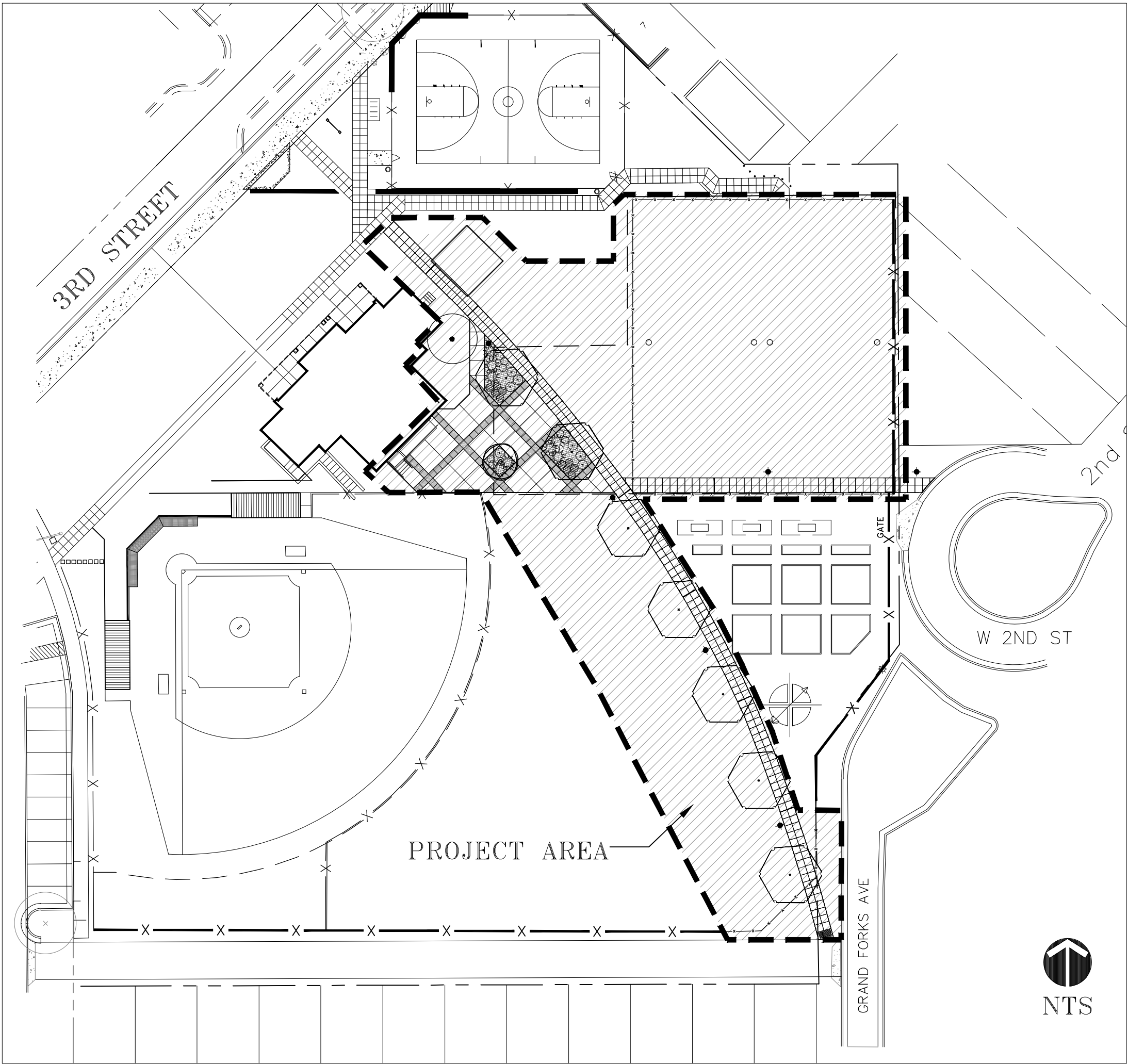
CONTACT LIST

OWNER
CITY OF DULUTH
DEPARTMENT OF
PARKS AND RECREATION
12 EAST FOURTH STREET
DULUTH, MN 55802
CITY CONTACT
LISA LOUKKALA
TEL. (218)730-5640 FAX (218)730-5920

LANDSCAPE ARCHITECT
SAS+ASSOCIATES 219 WEST FIRST STREET, SUITE 350
DULUTH, MN 55802
TEL. (218)391-1335 FAX (218)722-6697
LUKE@SASLANDARCH.COM
CONTACT: LUKE SYDOW, PLA

SHEET INDEX

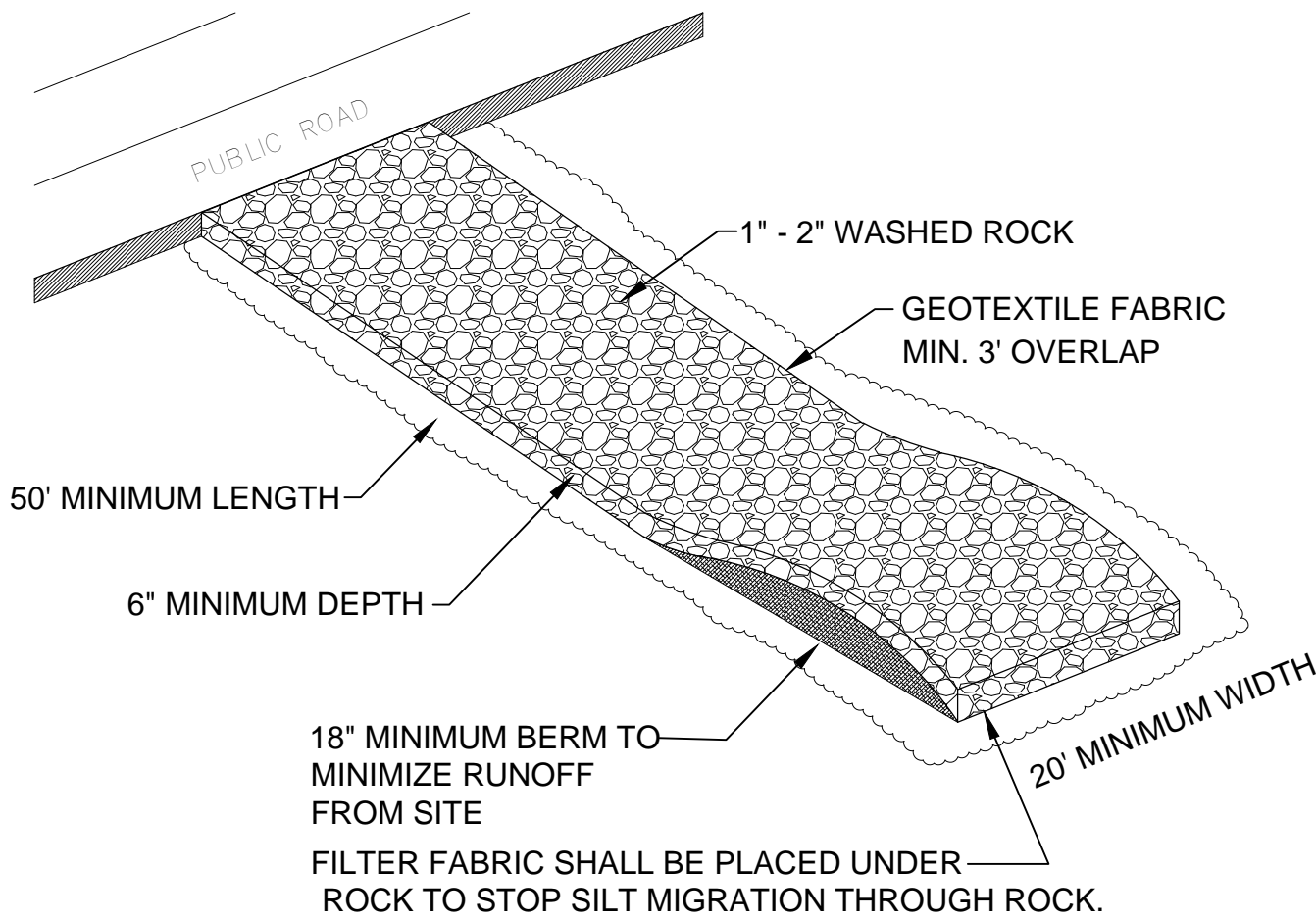
L-1	EROSION CONTROL
L-2	REMOVALS
L-3	LAYOUT
L-3.1	GRADING
L-4	PATIO
L-5	PLANTING PLAN
L-6	DETAILS
L-7	DETAILS
L-8	PATIO DETAILS



PROJECT NUMBER: 17040

SEQUENCE OF CONSTRUCTION

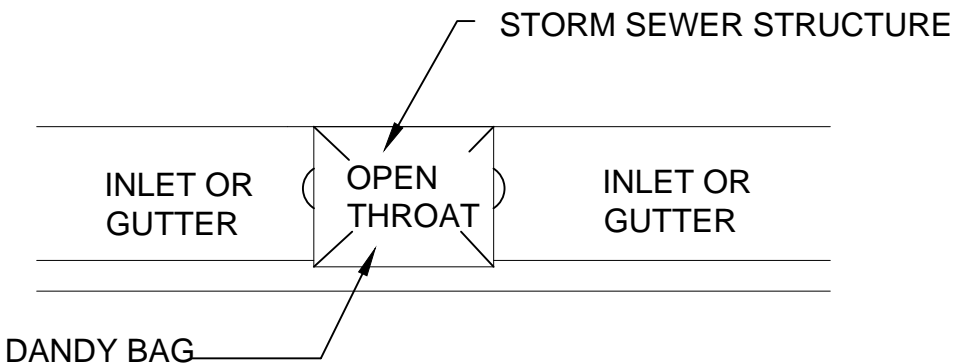
1. CONTRACTOR TO VERIFY THAT ALL PERMITS HAVE BEEN OBTAINED.
2. CONTRACTOR TO SCHEDULE FIELD MEETING WITH OWNER.
3. CONTRACTOR TO INSTALL ALL PERIMETER SEDIMENT CONTROL DEVICES, CONSTRUCTION ENTRANCES AND PROTECTIVE FENCING FOR TREES, DITCHES, EXISTING WATER BODIES AND AREAS TO REMAIN UNDISTURBED.
4. CONTRACTOR TO CONSTRUCT STORMWATER AND/OR TEMPORARY SEDIMENTATION BASINS.
5. CONTRACTOR TO CONTACT OWNER FOR APPROVAL OF SEDIMENT CONTROL DEVICES.
6. CONTRACTOR TO ROUGH GRADE SITE AND PROTECT UTILITIES.
7. CONTRACTOR TO INSTALL TEMPORARY EROSION CONTROL DEVICES AS NECESSARY. CONTRACTOR TO FILL TEMPORARY SEDIMENTATION BASINS, COMPACTING TO SPECIFIED DENSITIES. REMOVE ALL UNSUITABLE SEDIMENT PER RECOMMENDATION OF GEOTECHNICAL ENGINEER.
8. CONTRACTOR TO INSTALL SUBBASE AND BASE FOR PAVEMENT.
9. CONTRACTOR TO INSTALL EROSION CONTROL BLANKETS WITH PERMANENT SEED MIX.
10. CONTRACTOR TO REMOVE SEDIMENT CONTROL DEVICES WITHIN ONE WEEK OF FINAL ESTABLISHMENT / ACCEPTANCE.
11. SUBMIT NOTICE OF TERMINATION WITHIN 30 DAYS OF FINAL STABILIZATION.



* ROCK CONSTRUCTION ENTRANCE USED ONLY IF LARGE AMOUNTS OF MATERIAL ARE TO BE HAULED OFF-SITE. CONSULT WITH LANDSCAPE ARCHITECT OR OWNER FOR THE NEED OF A ROCK CONSTRUCTION ENTRANCE.

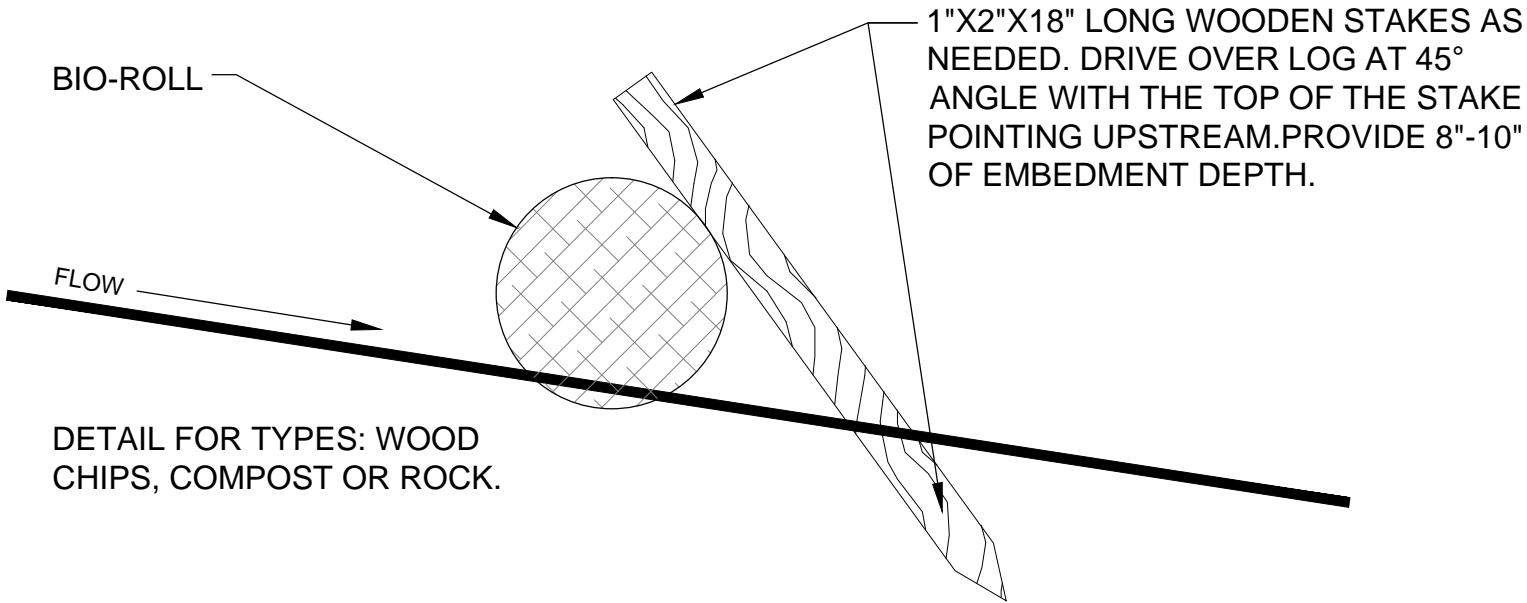
1. BACK-OF-CURB DOWN GRADIENT EROSION CONTROL SHALL BE INSTALLED PRIOR TO BASEMENT/FOUNDATION EXCAVATION. (BACK-OF CURB DOWN GRADIENT EROSION CONTROL MAY BE REMOVED FOR A TIME PERIOD NO LONGER THAN 48 HOURS FOR BUILDING EXCAVATION AND FOR FINAL GRADE PRIOR TO SOD)
2. ROCK ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
3. ALL STORM DRAIN INLETS THAT RECEIVE DISCHARGE FROM THE CONSTRUCTION SITE SHALL BE PROTECTED PRIOR TO SITE DISTURBANCE.
4. PERIMETER EROSION CONTROL SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE.
5. A TRUCK MOUNTED CONCRETE WASHOUT IS REQUIRED AND SHALL MEET THE PROPER BMP EROSION CONTROL PROVISIONS.
6. STREETS SHALL BE SWEEPED ONCE WEEKLY, EXCEPT DURING FROZEN GROUND CONDITIONS.
7. ROCK ENTRANCES SHALL BE INSTALLED FOR OFF STREET ACCESS TO SITE FOR PURPOSES OF STORING MATERIALS, SETTING DUMPSTERS OR PARKING.
8. ALL BMPS SHALL BE MAINTAINED UNTIL FINAL STABILIZATION.
9. BMPS MAY NOT BE IN PLACE DUE TO FROZEN GROUND CONDITIONS, BUT SHALL BE INSTALLED AFTER SPRING THAW.

DANDY BAG PROTECTION



TEMPORARY BARRIER USING DANDY BAGS TO PREVENT SEDIMENT-LADEN WATER FROM ENTERING THE STORM SEWER SYSTEM DURING CONSTRUCTION.

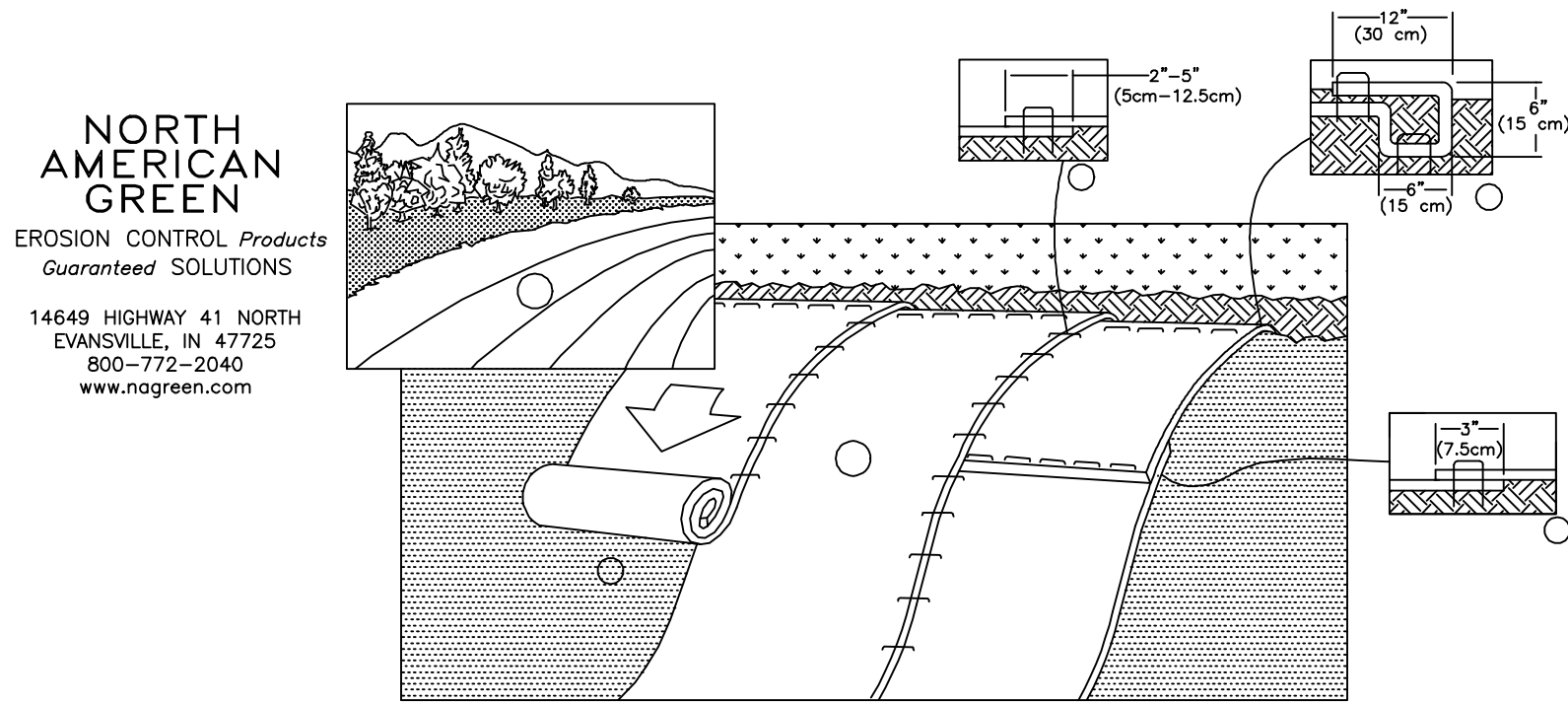
BIO-ROLL INSTALLATION



DETAIL FOR TYPES: WOOD CHIPS, COMPOST OR ROCK.

SLOPE PROTECTION

SLOPE INSTALLATION



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

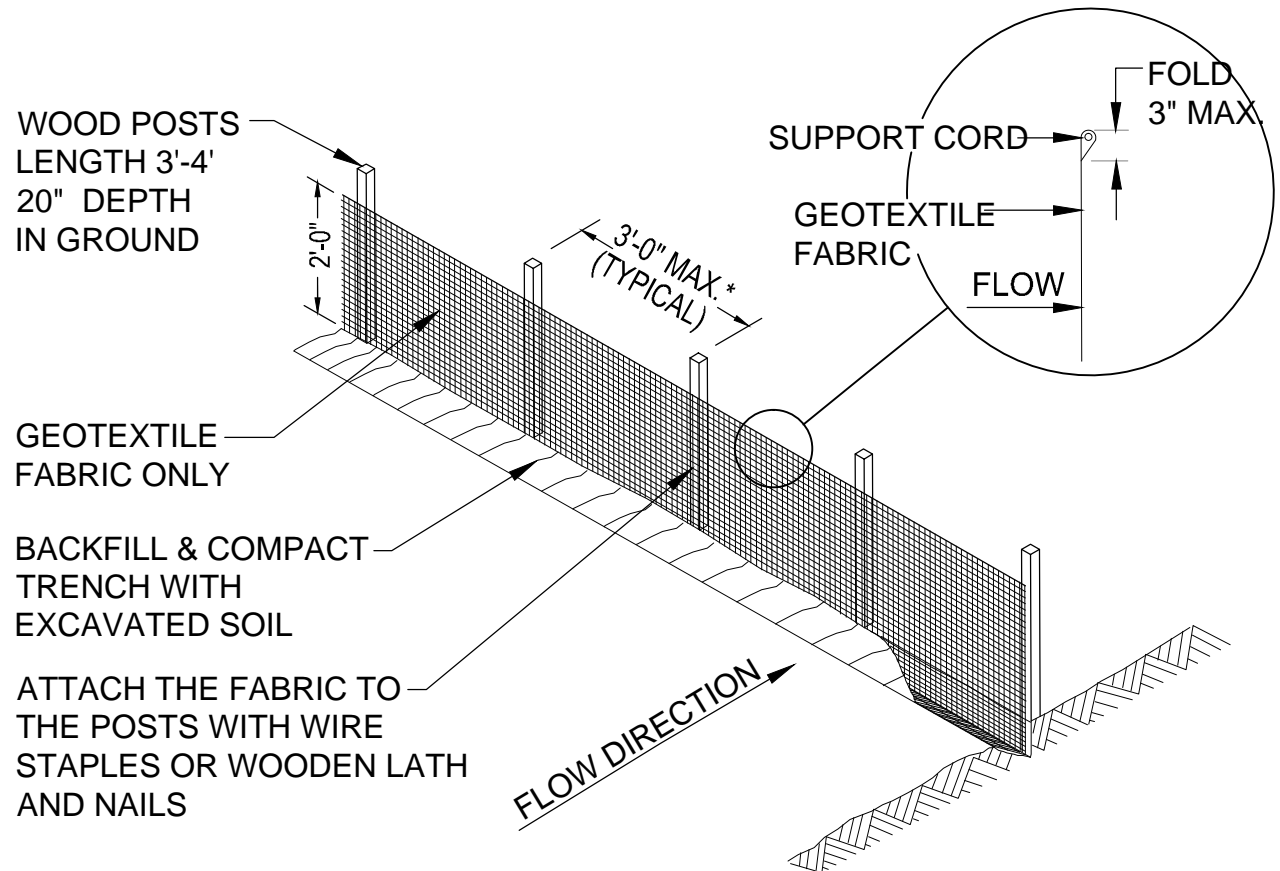
NOTICE OF TERMINATION

PERMITTEE MUST ENSURE FINAL STABILIZATION OF THE SITE AND SUBMIT THE N.O.T. WITHIN 30 DAYS OF FINAL STABILIZATION.

FINAL STABILIZATION CAN BE ACHIEVED IN THE FOLLOWING WAY:

1. ALL SOIL DISTURBING ACTIVITIES ARE COMPLETE AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE ENTIRE PVIOUS SURFACE HAS BEEN ACHIEVED INCLUDING:
 - STABILIZATION OF DITCHES AND SWALES.
 - REMOVAL OF ALL TEMPORARY SYNTHETIC & STRUCTURAL BMP'S.
 - REMOVAL OF SEDIMENTS FROM STORM WATER CONVEYANCES AND PERMANENT WATER QUALITY BASINS.

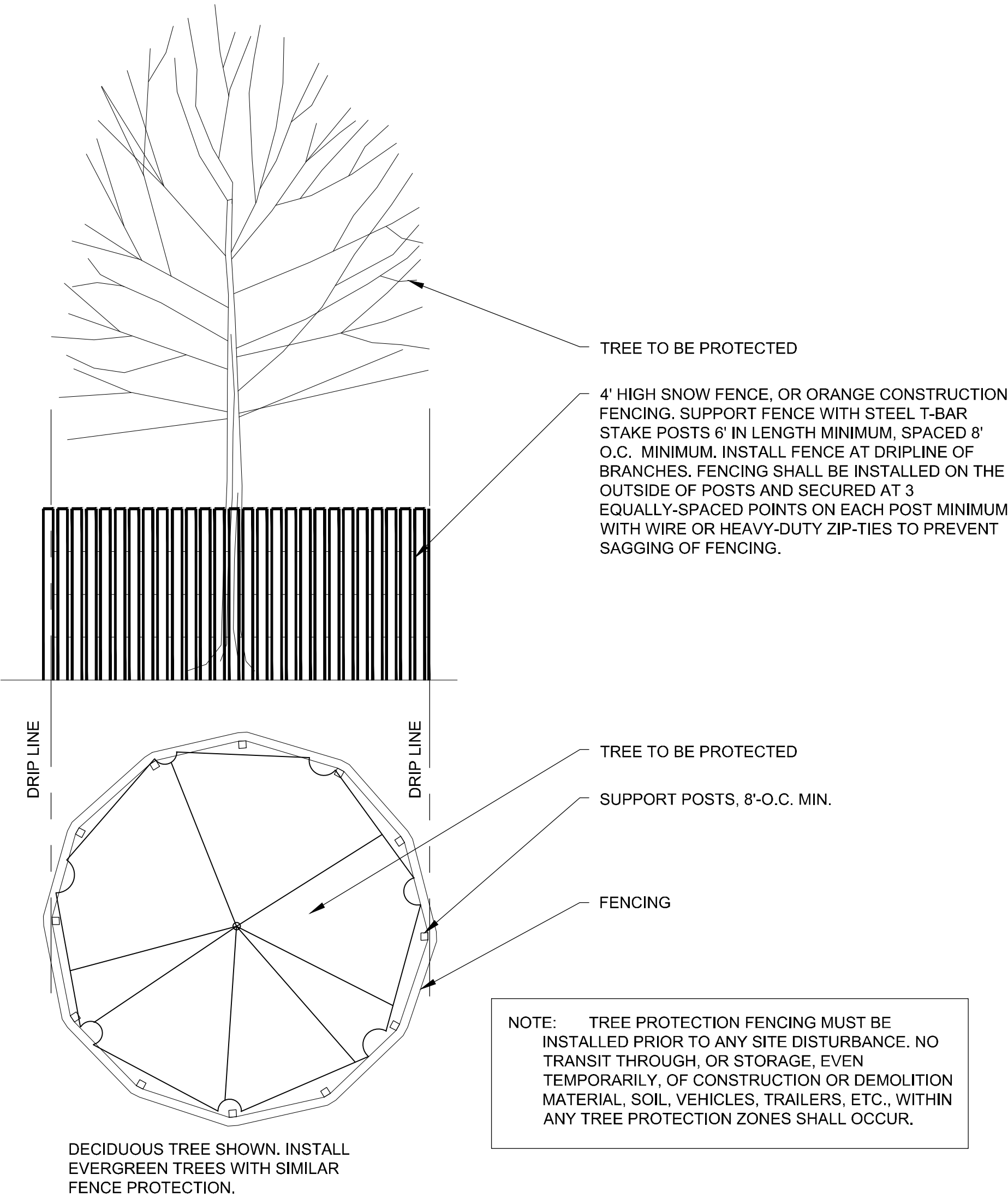
SILT FENCE



* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

TREE PROTECTION



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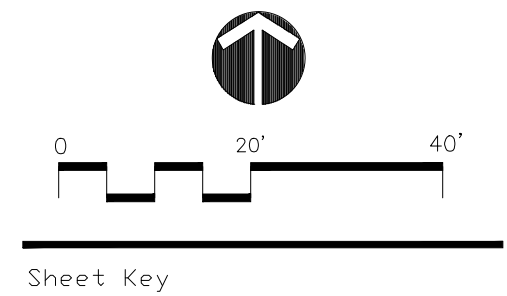
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DULUTH, MN 55802
(P) 218.391.1335
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Issue	Record/Revision	Date

HARRISON RECREATION CENTER

CITY OF DULUTH, MINNESOTA



Sheet Key

Sheet Title
EROSION CONTROL

Date: 6 /14/2017

Drawn By: MSD

Checked By: LWS


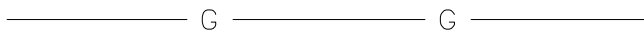








Project Number
17040

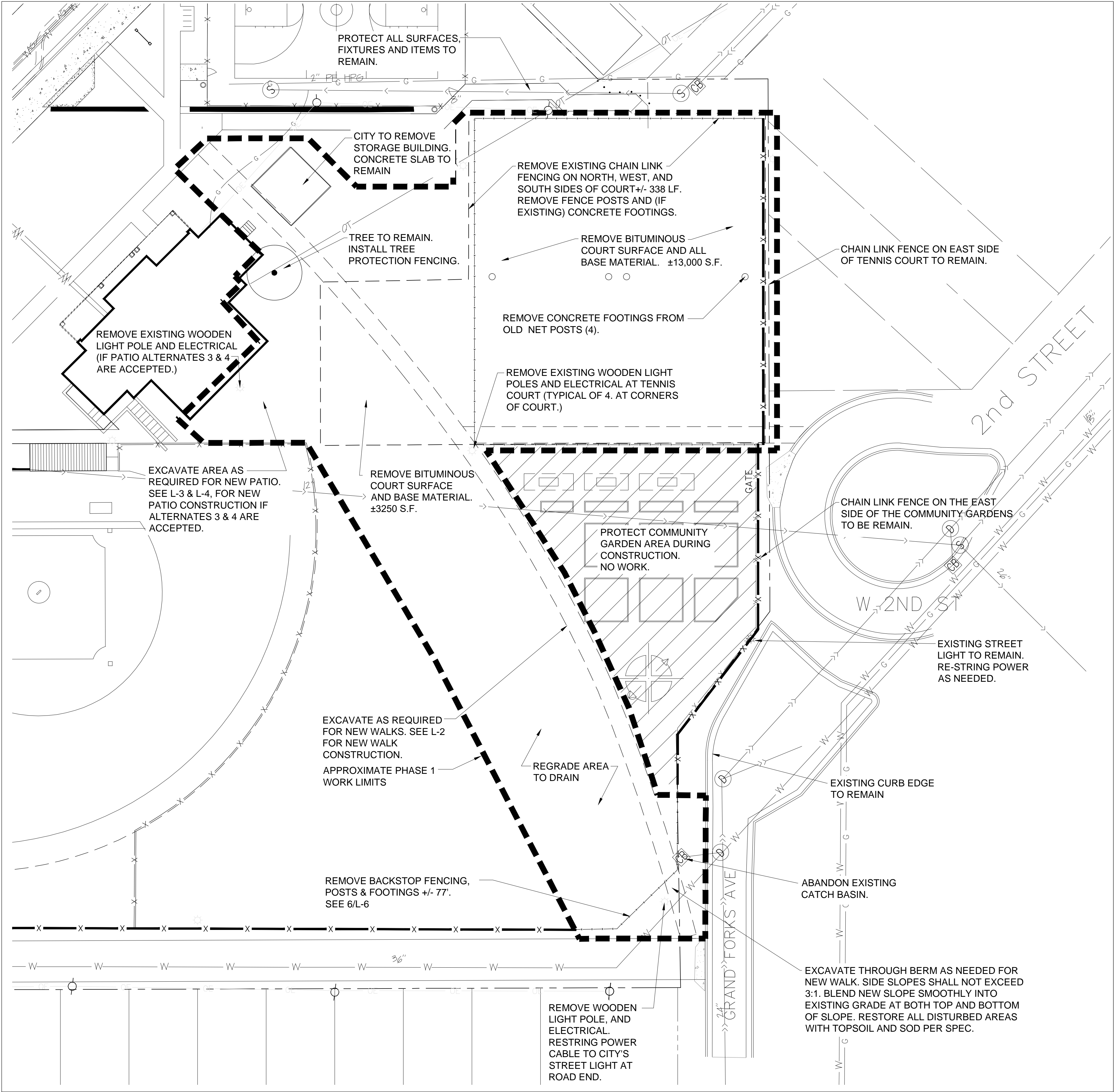
Sheet Number
L-1

SITE CONSTRUCTION NOTES:

- EXISTING PLAN FROM SITE SURVEY BY KRECH OJARD, DULUTH, MN. VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE PROJECT MANAGER IMMEDIATELY.
- THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. CALL GOPHER STATE ONE AT 811 FOR UTILITY LOCATE MINIMUM OF 72 HOURS PRIOR TO ANY SITE WORK.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND ON-GOING MAINTENANCE OF STORM WATER AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP) AND COMPLIANCE WITH ALL STATE OF MINNESOTA AND CITY OF DULUTH EROSION AND SEDIMENT CONTROL REGULATIONS. THIS CONTRACTOR SHALL CONDUCT THEIR WORK IN A MANNER TO LIMIT EROSION AND TO PRESERVE THE EROSION AND SEDIMENT CONTROL BMP MEASURES. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RE-ESTABLISHMENT AND RESTORATION THAT MAY BE NECESSARY DUE TO THEIR FAILURE TO CONDUCT THEIR WORK IN A CAREFUL RESPONSIBLE MANNER.
- PERIMETER SEDIMENT BMP'S SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION ACTIVITY. STORM INLET PROTECTION SHALL BE MAINTAINED ON ALL STORM DRAINAGE STRUCTURES.
- ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL REMAIN IN PLACE AND BE MAINTAINED AS OPERATIONAL UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED AND ALL PAVING IS COMPLETE. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL PROTECTION ITEMS FROM THE SITE AT THE COMPLETION OF THE PROJECT.
- FENCE ALL PORTIONS OF THE PROJECT FOR SAFETY WITH A 4'-0" ORANGE SNOW FENCE. SIGN CONSTRUCTION AND BUILDING ENTRY DURING CONSTRUCTION.
- IDENTIFY STAGING AREA FOR APPROVAL BY OWNERS REPRESENTATIVE.
- PROTECT ALL TREES TO REMAIN PER DETAIL.
- PROTECT EXISTING WALLS, POSTS, FOOTINGS, BUILDINGS, WALLS, ETC. THROUGHOUT CONSTRUCTION.
- ALL HORIZONTAL AND VERTICAL CONTROL POINTS SHALL BE ESTABLISHED AND MAINTAINED BY THE GENERAL CONTRACTOR.
- ALL GRADES AND ELEVATIONS SHOWN ARE FINISHED GRADES AND ELEVATIONS.
- RESTORE ALL AREAS DISTURBED BY CONSTRUCTION WITH TOPSOIL AND PLANTING BEDS/SOD/SEED/MULCH AS SPECIFIED AND INDICATED ON PLANS.
- ALL GRADES SHALL SLOPE AWAY FROM THE BUILDING AT A 2% MINIMUM SLOPE.
- ALL SIDEWALKS, CURB RAMPS, AND OTHER SITE ELEMENTS MUST CONFORM TO THE STATE OF MINNESOTA ACCESS CODES AND STANDARDS, AND WITH FEDERAL ADA GUIDELINES
- IN THE EVENT OF A DISCREPANCY WITH PLANT QUANTITIES, THE PLAN, NOT THE PLANT LIST SHALL GOVERN THE REQUIRED QUANTITIES.
- COORDINATE ALL WORK BETWEEN TRADES. NOTIFY THE PROJECT MANAGER IMMEDIATELY OF ANY CONFLICT THAT AFFECTS THIS SITE WORK.
- ALL CONCRETE SHALL BE A MINIMUM 4000 PSI WITH FIBERMESH REINFORCEMENT.
- PROTECT ALL FENCING THAT MAY BE SALVAGED AND REUSED. PROPERLY DISPOSE OF ALL UNUSABLE FENCING MATERIALS.
- CONTRACTOR TO OBTAIN CITY PERMITS AND APPROVALS PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION ENTRANCE AND STAGING AREA WITH THE CITY OF DULUTH PRIOR TO COMMENCING CONSTRUCTION.

UTILITY LEGEND

	WATER LINE
	GAS LINE
	OVERHEAD ELECTRIC
	OVERHEAD TELEPHONE
	SANITARY LINE
	STORM SEWER LINE
	MANHOLE
	CATCH BASIN
	POWER POLE
	LIGHT POLE



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+ ASSOCIATES

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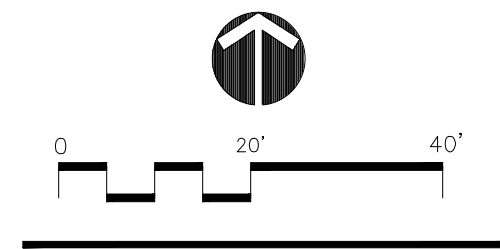
219 WEST FIRST STREET, SUITE 350
DULUTH, MN 55802
(P) 218.391.1335
(F) 218.722.6697

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Issue	Record/Revision	Purpose	Date

HARRISON RECREATION CENTER

CITY OF DULUTH, MINNESOTA



Sheet Key

Sheet Title
REMOVAL PLAN

Date: 6 /14/2017

Drawn By: MSD

Checked By: LWS

Project Number
17040

Sheet Number
L-2

Wednesday, June 14, 2017 10:11:26 AM P:\17040 - Harrison Phase\CDs\17040-B.dwg

UTILITY LEGEND

W

W

W

W

WATER LINE

G

G

G

G

GAS LINE

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OE

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OE

OVERHEAD ELECTRIC

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OT

OVERHEAD TELEPHONE

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SANITARY LINE

>>

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>>

>>

STORM SEWER LINE

⊙

MANHOLE

⊠

CATCH BASIN

⊕

POWER POLE

⊙

LIGHT POLE

The main site plan layout shows a complex arrangement of walkways, garden beds, and utility lines. Key features include:

- Walkways:** A network of paths with various radii (e.g., R703'-7", R498'-2", R707'-10") and lengths (e.g., 126'-5", 60', 7'-5", 79'-11", 72'-1", 104'-7", 76'-10", 95'-1", 48'-7").
- Garden Beds:** An existing raised community garden bed is shown, with a note advising to consult the owner if new walk alignment conflicts with it.
- Utilities:** Water lines (W), gas lines (G), overhead electric (OE), overhead telephone (OT), sanitary lines (>), and storm sewer lines (>>) are marked throughout the plan.
- Structures and Features:** A gate is located near the center-right. A catch basin is marked with a square symbol. A note indicates to "ABANDON EXISTING CATCH BASIN." A note at the bottom center states: "NOTE: CONTRACTOR TO STAKE WALK, CONCRETE LIGHT BASES AND TREE LOCATIONS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING."
- Other Notes:** A note at the top center says "STRAIGHTEN / RESET / REPLACE BENT OR DISPLACED FENCE POSTS WHICH ARE TO REMAIN." Another note at the top left says "ADD ALT 3 & 4."

1

LAYOUT

SCALE: 1"=20'

SAS

LANDSCAPE ARCHITECTURE

+ ASSOCIATES

WWW.SASLANDARCH.COM

219 WEST FIRST STREET, SUITE 350
DULUTH, MN 55802
(P) 218.391.1335
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Issue	Record/Revision	Date
	Purpose	

HARRISON RECREATION CENTER

CITY OF DULUTH, MINNESOTA

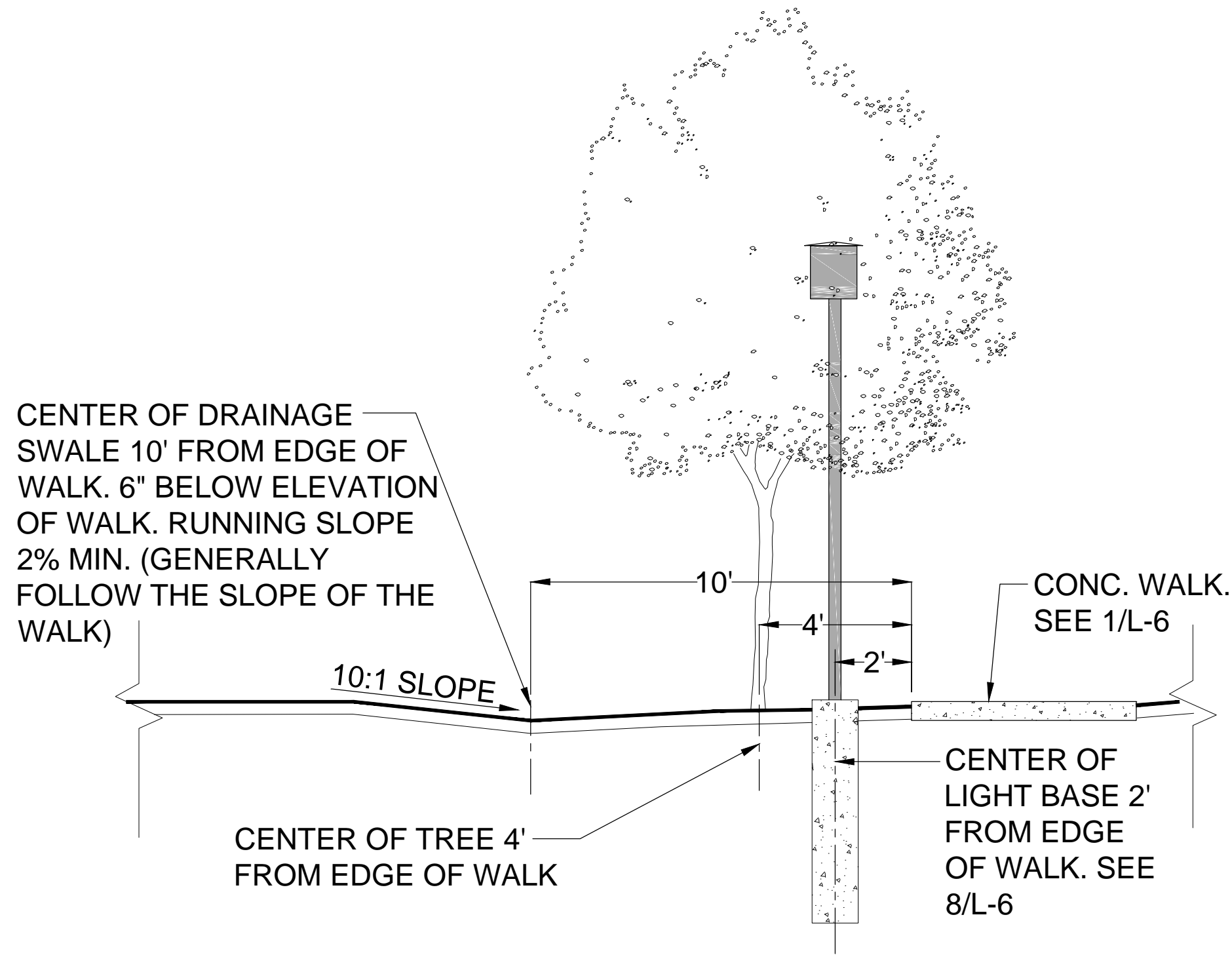
A north arrow pointing upwards and a graphic scale bar showing 0, 20, and 40 feet.

Sheet Key

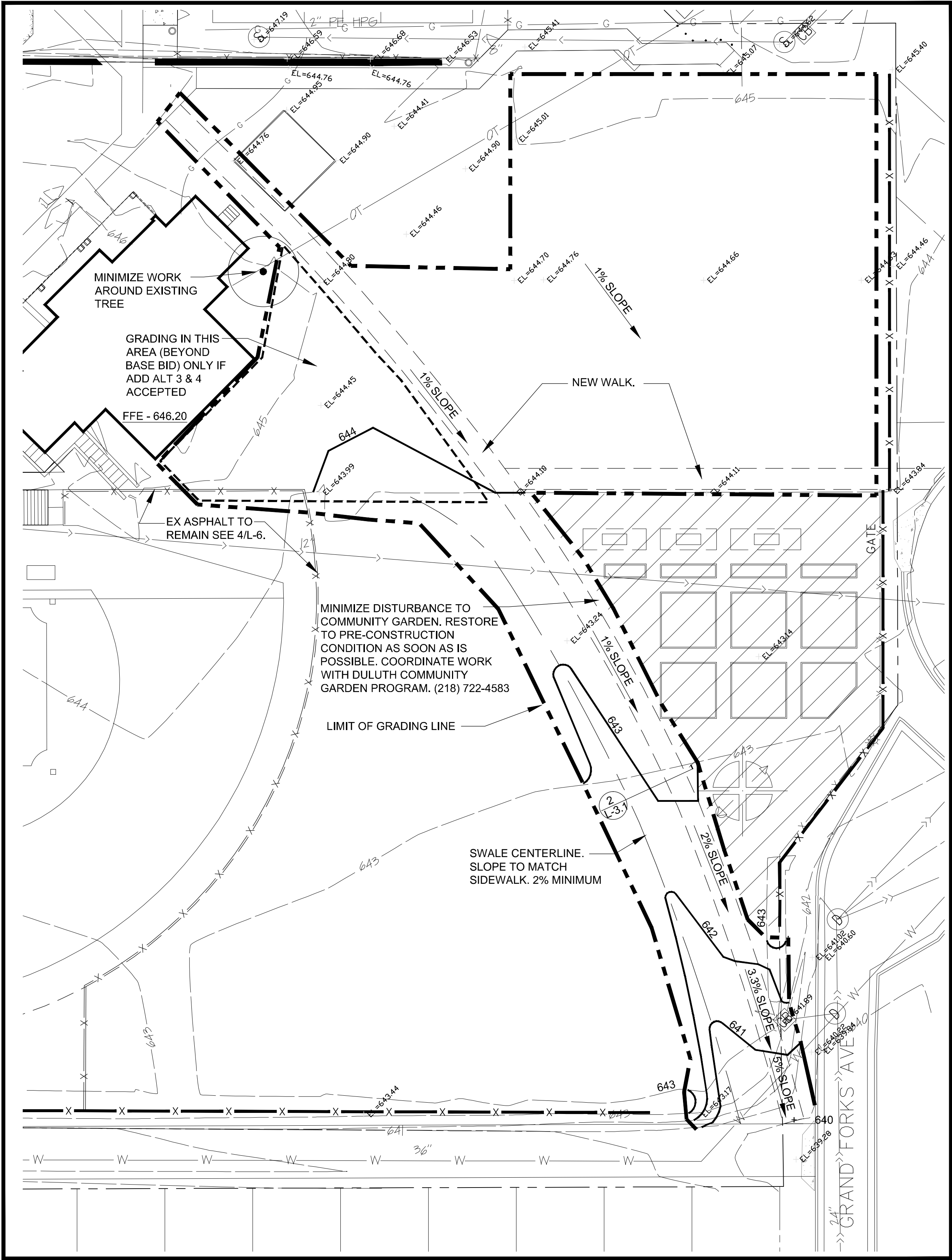
Sheet Title	LAYOUT
Date:	6 /14/2017
Drawn By:	MSD
Checked By:	LWS
Project Number	17040
Sheet Number	L-3

SITE CONSTRUCTION NOTES:

1. EXISTING PLAN FROM SITE SURVEY BY KRECH OJARD, DULUTH, MN. VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE PROJECT MANAGER IMMEDIATELY.
2. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. CALL GOPHER STATE ONE AT 811 FOR UTILITY LOCATE MINIMUM OF 72 HOURS PRIOR TO ANY SITE WORK.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND ON-GOING MAINTENANCE OF STORM WATER AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP) AND COMPLIANCE WITH ALL STATE OF MINNESOTA AND CITY OF DULUTH EROSION AND SEDIMENT CONTROL REGULATIONS. THIS CONTRACTOR SHALL CONDUCT THEIR WORK IN A MANNER TO LIMIT EROSION AND TO PRESERVE THE EROSION AND SEDIMENT CONTROL BMP MEASURES. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RE-ESTABLISHMENT AND RESTORATION THAT MAY BE NECESSARY DUE TO THEIR FAILURE TO CONDUCT THEIR WORK IN A CAREFUL RESPONSIBLE MANNER.
4. PERIMETER SEDIMENT BMP'S SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION ACTIVITY. STORM INLET PROTECTION SHALL BE MAINTAINED ON ALL STORM DRAINAGE STRUCTURES.
5. ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL REMAIN IN PLACE AND BE MAINTAINED AS OPERATIONAL UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED AND ALL PAVING IS COMPLETE. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL PROTECTION ITEMS FROM THE SITE AT THE COMPLETION OF THE PROJECT.
6. FENCE ALL PORTIONS OF THE PROJECT FOR SAFETY WITH A 4'-0" ORANGE SNOW FENCE. SIGN CONSTRUCTION AND BUILDING ENTRY DURING CONSTRUCTION.
7. IDENTIFY STAGING AREA FOR APPROVAL BY OWNERS REPRESENTATIVE.
8. PROTECT ALL TREES TO REMAIN PER DETAIL
9. PROTECT EXISTING WALLS, POSTS, FOOTINGS, BUILDINGS, WALLS, ETC. THROUGHOUT CONSTRUCTION.
10. ALL HORIZONTAL AND VERTICAL CONTROL POINTS SHALL BE ESTABLISHED AND MAINTAINED BY THE GENERAL CONTRACTOR.
11. ALL GRADES AND ELEVATIONS SHOWN ARE FINISHED GRADES AND ELEVATIONS.
12. RESTORE ALL AREAS DISTURBED BY CONSTRUCTION WITH TOPSOIL AND PLANTING BEDS/SOD/SEED/MULCH AS SPECIFIED AND INDICATED ON PLANS.
13. ALL GRADES SHALL SLOPE AWAY FROM THE BUILDING AT A 2% MINIMUM SLOPE.
14. ALL SIDEWALKS, CURB RAMPS, AND OTHER SITE ELEMENTS MUST CONFORM TO THE STATE OF MINNESOTA ACCESS CODES AND STANDARDS, AND WITH FEDERAL ADA GUIDELINES
15. IN THE EVENT OF A DISCREPANCY WITH PLANT QUANTITIES, THE PLAN, NOT THE PLANT LIST SHALL GOVERN THE REQUIRED QUANTITIES.
16. COORDINATE ALL WORK BETWEEN TRADES. NOTIFY THE PROJECT MANAGER IMMEDIATELY OF ANY CONFLICT THAT AFFECTS THIS SITE WORK.
17. ALL CONCRETE SHALL BE A MINIMUM 4000 PSI WITH FIBERMESH REINFORCEMENT.
18. PROTECT ALL FENCING THAT MAY BE SALVAGED AND REUSED. PROPERLY DISPOSE OF ALL UNUSABLE FENCING MATERIALS.
19. CONTRACTOR TO OBTAIN CITY PERMITS AND APPROVALS PRIOR TO BEGINNING WORK.
20. CONTRACTOR SHALL COORDINATE CONSTRUCTION ENTRANCE AND STAGING AREA WITH THE CITY OF DULUTH PRIOR TO COMMENCING CONSTRUCTION.



2 WALK & SWALE SECTION
SCALE: NTS



Wednesday, June 14, 2017 10:34:23 AM P:\17040 - Harrison Phase\ CDS\17040 - B&G.dwg

PLANTING NOTES:

THESE PLANTING NOTES APPLY TO ALL PLANT AND PLANT-RELATED ASPECTS OF THIS PROJECT. IF THIS PLAN SET CONTAINS A SEPARATE SET OF SPECIFICATIONS, THOSE SEPARATE SPECIFICATIONS SHALL GOVERN.

1) ALL SHRUBS TO BE A MINIMUM OF 3'-0" FROM ALL WALKS OR CURBS (MEASURED FROM THE CENTER OF THE PLANT)

2) ALL PLANTING BEDS TO BE EDGED WITH 5" TALL X 1/4" WIDE STEEL EDGER (BLACK) OR SPADE DUG EDGE.

3) EROSION CONTROL NETTING SHALL BE USED ON ALL SLOPES GREATER THAN 3:1

4) SOIL AMENDMENTS TO BE SPREAD EVENLY OVER AREA AT A RATE OF 4 CY./1,000 SF AND MIXED THOROUGHLY INTO SOIL SURFACE. PROVIDE OWNER/ LANDSCAPE ARCHITECT PROPOSED PRODUCT PRIOR TO INSTALLATION; INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

5) VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY. THE CONTRACTOR SHALL DETERMINE THE EXTENT OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE

6) GENERAL CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF BEST MANAGEMENT PRACTICES (BMP'S) AND COMPLIANCE WITH ALL STATE OF MINNESOTA SEDIMENT CONTROL REQUIREMENTS.

7) PERIMETER SEDIMENT BMP'S SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION ACTIVITY. STORM INLET PROTECTION SHALL BE MAINTAINED ON ALL STORM DRAINAGE STRUCTURES.

8) ALL EROSION CONTROL AND SEDIMENT BMP'S SHALL REMAIN IN PLACE AND BE MAINTAINED AS OPERATIONAL UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED AND ALL PAVING IS COMPLETE. CONTRACTOR TO REMOVE ALL EROSION CONTROL PROTECTION ITEMS (SILT FENCE, HAY BALES, ETC.)

9) ALL HORIZONTAL AND VERTICAL CONTROL AND LAYOUT TO BE ESTABLISHED AND MAINTAINED BY THE GENERAL CONTRACTOR UNDER THIS CONTRACT.

10) ALL GRADES AND ELEVATIONS SHOWN ARE FINISHED GRADES AND ELEVATIONS.

11) ALL GRADES SHALL BE SLOPED TO DRAIN AWAY FROM BUILDINGS AT 2% MINIMUM SLOPE.

12) IN THE EVENT OF A DISCREPANCY WITH PLANT QUANTITIES, THE PLAN, NOT THE PLANT LIST, SHALL GOVERN THE REQUIRED QUANTITIES. COORDINATE ALL WORK BETWEEN TRADES. NOTIFY THE PROJECT MANAGER OF ANY CONFLICTS AND DISCREPANCIES IMMEDIATELY THAT AFFECT THIS SITE WORK.

13) THE CONTRACTOR SHALL MAINTAIN A CLEAN SITE AT ALL TIMES AND SHALL BE RESPONSIBLE FOR REMOVING TRASH AND CONSTRUCTION DEBRIS FROM THE SITE ON A DAILY BASIS. THE TRACKING OF SOIL ONTO ADJOINING ROADWAYS, WALKS AND PARKING AREAS SHALL NOT BE ALLOWED.

14) ADD 3" OF SELECT PLANTING SOIL TO AREAS TO RECEIVE SOD. TILL PLANTING SOIL INTO EXISTING SOILS TO A DEPTH OF 6" PRIOR TO PLACEMENT OF PLANTING SOIL. REMOVE ALL STONES, STICKS AND OTHER DEBRIS MEASURING MORE THAN 1" FROM AREAS TO RECEIVE SOD.

15)CONTRACTOR TO APPLY FOR ALL NECESSARY PERMITS TO WORK WITHIN THE PUBLIC RIGHT OF WAY.

16)THE TREES/SHRUBS AND SOD/SEED AREAS ARE TO BE MAINTAINED (WATERING, MOWING, FERTILIZING) UNTIL THE OWNER ACCEPTANCE AND THE WARRANTY PERIOD BEGINS.

17)NOTIFY LANDSCAPE ARCHITECT 72 HRS. PRIOR TO START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING.

18)SUBMIT SHOP DRAWING FOR IRRIGATION SYSTEM IF IRRIGATION IS INCLUDED IN THIS PROJECT.

19) EVERGREEN AND DECIDUOUS TREES SHALL BE SUPPORTED WITH A SYSTEM OF HEAVY DUTY T-BAR STEEL POST STAKES, MINIMUM OF 6' IN LENGTH, WITH WHITE T-POST CAPS AND WITH 17-GAUGE GALVANIZED STEEL WIRE GUYS SECURED TO TREE WITH PROFESSIONAL-GRADE STRAPS (DARK GREEN OR BEIGE IN COLOR), SPECIFICALLY DESIGNED FOR TREE GUYING, ABOVE THE FIRST BRANCH OF DECIDUOUS TREES (4' ABOVE GRADE MINIMUM), 4' ABOVE TOP OF ROOT BALL ON EVERGREEN TREES. STAKES SHALL BE 3' MIN, 5' MAXIMUM FROM TRUNK OF TREE. TREE STRAPS TO BE USED SHALL BE SELECTED BASED ON MANUFACTURER'S RECOMMENDATION FOR THE SIZE TREE RECEIVING THE STRAPS. RUBBER HOSE SHALL NOT BE USED. WIRE TO BE TAUT BUT NOT OVER-TIGHT. TREE GUYING SHALL NOT PREVENT TREE FROM SLIGHT SWAYING UNDER NORMAL ENVIRONMENTAL CONDITIONS, WHICH HELPS DEVELOP ROOT AND TRUNK STRUCTURE. FLAG EACH WIRE WITH WHITE PLASTIC FLAGGING TAPE CENTERED ON WIRE. ADD ADDITIONAL FLAG ON WIRES GUYING EVERGREENS 12" ABOVE IN-GROUND STAKE.

20) CONFERS TO HAVE 2 STEEL POST STAKES, WIRES AND STRAPS FOR TREES 6' IN HEIGHT AND LESS, 3 STEEL POST STAKES, WIRES AND STRAPS FOR TREES ABOVE 6' IN HEIGHT. DECIDUOUS TREES TO HAVE 2 STEEL POST STAKES, WIRES AND STRAPS FOR TREES 2-1/2" CALIPER AND LESS, 3 STAKES, WIRES AND STRAPS ABOVE 2-1/2" CALIPER. ONE STAKE SHALL BE ORIENTATED IN THE DIRECTION OF THE PREVAILING WINDS. REMOVE STAKES, GUY WIRES, STRAPS, AND FLAGGING AFTER 1 YEAR FROM DATE OF INITIAL ACCEPTANCE, OR WHEN DIRECTED BY OWNER OR OWNER REPRESENTATIVE.

21) EACH TREE OR SHRUB, WHETHER CONTAINERIZED OR BALLED AND BURLAPPED, SHALL HAVE THE ROOT FLAIR EXPOSED AND SOIL ABOVE THE LEVEL OF THE ROOT FLAIR REMOVED. SET TREE IN PLANTING PIT WITH ROOT FLAIR 1" ABOVE SURROUNDING SOIL SURFACE. THE PLANTING PIT FOR EACH TREE OR PLANT SHALL BE MEASURED, DUG, VERIFIED AND MODIFIED AS NEEDED TO OBTAIN THE PROPER DEPTH FOR EACH INDIVIDUAL PLANT.

22) TREE SHALL ONLY BE MOVED BY THE BALL / WIRE BASKET. PLUMB TREE ONLY BY THE ROOT BALL. DO NOT PLUMB TREE BY OVERLY / AGGRESSIVELY PULLING OR PUSHING ON TRUNK OR BRANCHES.

23) CARE SHALL BE TAKEN TO INSURE BALL REMAINS INTACT WITH MINIMAL DISTURBANCE TO THE INTEGRITY OF THE SOIL BALL AND / OR TREE ROOTS. SOIL BALLS OF TREES WHICH ARE DEEMED BY THE OWNER OR OWNERS REPRESENTATIVE TO NOT BE OF ADEQUATE INTEGRITY, OR TRUNKS WHICH ARE LOOSE FROM THEIR SOIL BALLS, BEFORE OR AFTER BEING PLACED INTO THE PLANTING PIT, MAY BE REJECTED. CONTRACTOR SHALL PROMPTLY REMOVE REJECTED PLANT MATERIAL FROM SITE AND REPLACE WITH PLANT MATERIAL ORIGINALLY SCHEDULED. INSTALL AS ORIGINALLY SPECIFIED.

24) AFTER TREE HAS BEEN SET IN THE PLANTING PIT TO PROPER GRADE AND PLUMBED, REMOVE TOP 1/2 OF WIRE BASKET. REMOVE TWINE OR ROPE HOLDING BURLAP OR PLASTIC AROUND ROOT BALL. REMOVE AS MUCH PLASTIC WRAPPING OR TREATED BURLAP AS POSSIBLE. IF REGULAR BURLAP CONTAINS THE ROOT BALL, BACKFILL 1/2 OF PIT, REMOVE TOP 1/2 OF BURLAP AND COMPLETE BACKFILL. SOIL SHALL BE SETTLED AROUND ROOT BALL TO REMOVE LARGE AIR VOIDS WITH WATER. BACKFILL SHALL NOT BE PLACED ON TOP OF ROOTBALL.

25) STRIPPING: UNLESS OTHERWISE RECOMMENDED IN SOIL REPORT, STRIP TOPSOIL, IF EXISTING, FROM AREA(S) TO BE GRADED OR PLANTED, TO WHATEVER DEPTHS ENCOUNTERED IN MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER OBJECTIONABLE MATERIAL. STRIPPED TOPSOIL MAY BE RE-USED ON THIS PROJECT IF TESTING CONFIRMS IT IS IN COMPLIANCE WITH THE SPECIFICATIONS BELOW FOR LOAM TOPSOIL BORROW.

26) TOPSOIL (IMPORTED OR EXISTING REUSED ON SITE) SHALL CONFORM WITH TABLE BELOW, FOR LOAM TOPSOIL BORROW TO BE USED AS A TURF AND PLANT GROWING MEDIUM. COORDINATE FURNISHING AND PLACING WITH OTHER OPERATIONS.

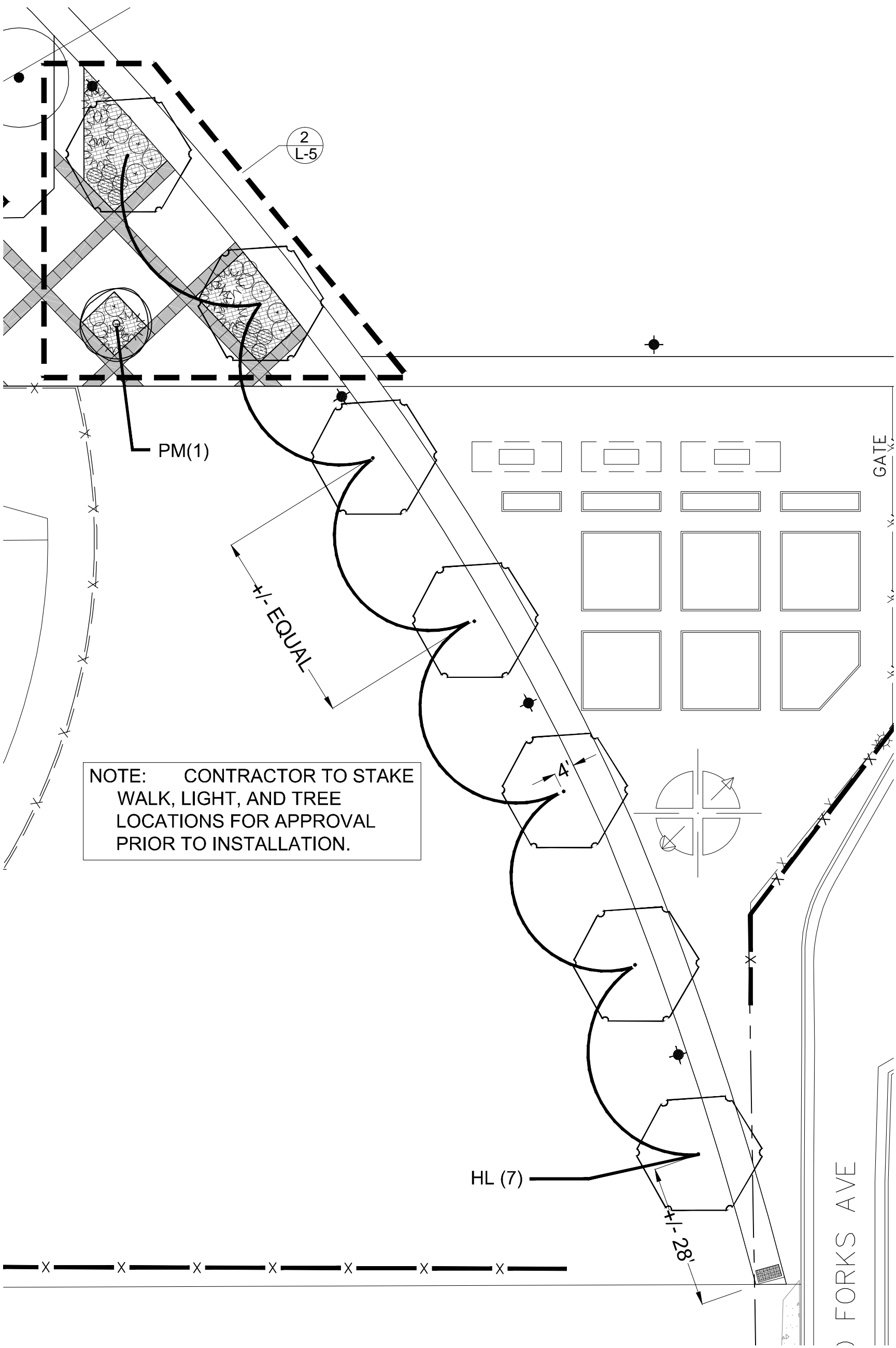
	MINIMUM	MAXIMUM
MATERIAL PASSING 3/4 IN (19.0 MM)	100%	
MATERIAL PASSING NO.4 (4.75 MM)	≥90%	
CLAY	5%	30%
SILT	10%	60%
SAND & GRAVEL	15%	60%
ORGANIC MATTER	8%	15%
PH	6.1	7.5

COORDINATE FURNISHING AND PLACING WITH OTHER OPERATIONS.

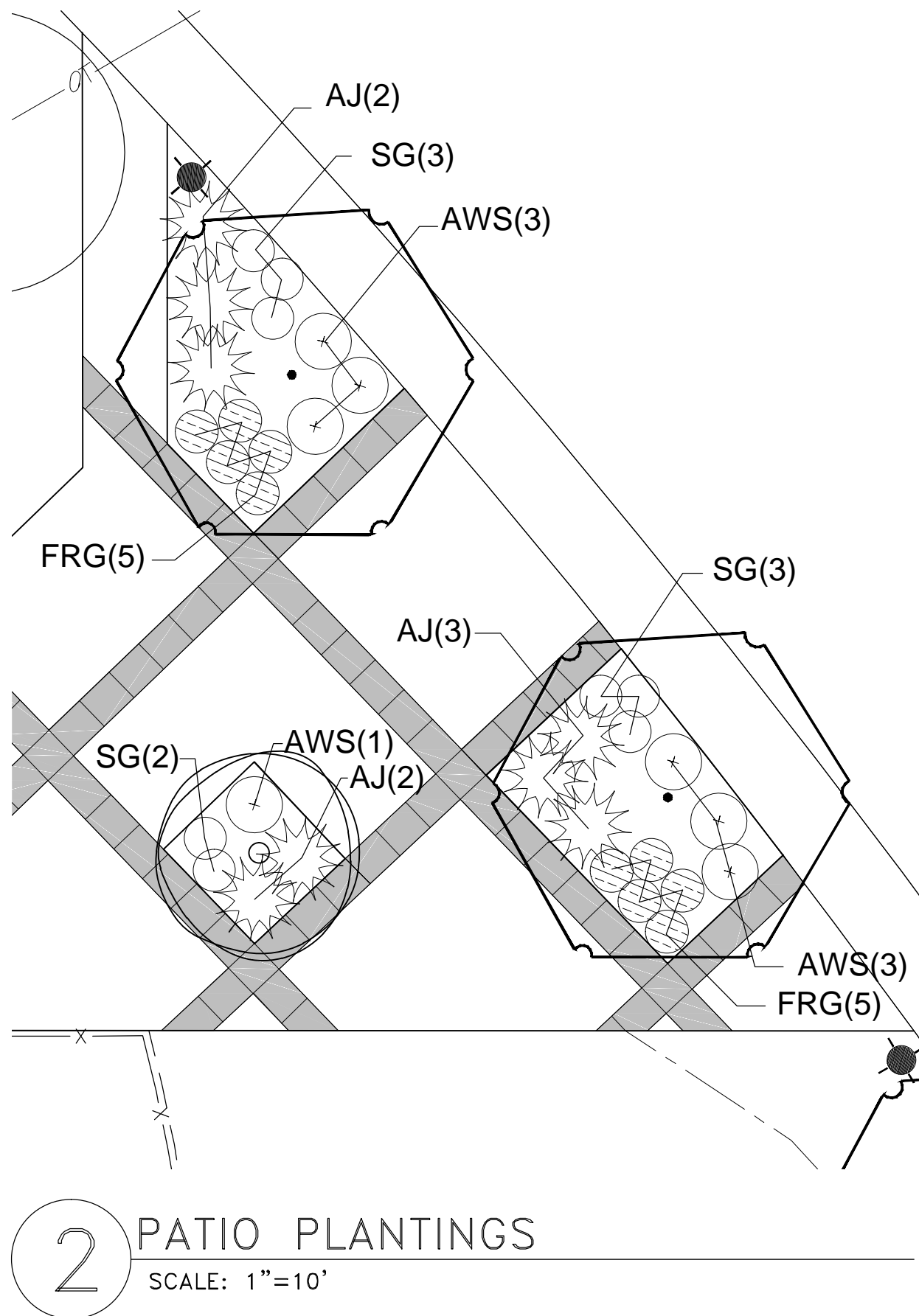
- UPON COMPLETION OF ROUGH GRADING, SUB-GRADE SHALL BE PREPARED. SURFACE SHALL BE LOOSENEED BY ROTOTILLING TO MINIMUM DEPTH OF 6", AND MATERIALS OVER 1" IN LARGEST DIMENSION SHALL BE REMOVED.
- AFTER COMPLETION OF SUB-GRADE PREPARATION, PLACE MINIMUM 4" SETTLED MEASURE DEPTH OF TOPSOIL OVER ENTIRE AREA TO RECEIVE SOD UNLESS OTHERWISE NOTED. SMOOTH GRADE TO WITHIN 1-3/4" OF FINISH GRADE AFTER SETTLEMENT TO ELIMINATE IRREGULARITIES. FINISHED GRADE SHALL BE SET SUCH THAT NEW SOD SURFACE IS 1" BELOW FINISHED SIDEWALK OR BACK OF CURB EDGE.
- INTERMIX TOPSOIL MIXTURE WITH LOOSENEED SUB-GRADE BY MEANS OF A ROTOTILLER.
- "PLANTING SOIL" FOR ALL PLANT MATERIAL (EXCLUDING SOD), SHALL BE 50% NATIVE SOIL THOROUGHLY INTERMIXED WITH 50% SPECIFIED TOPSOIL.

27) FABRIC WEED BARRIER - SHALL BE A 4 OZ. SPUNBONDED NON-WOVEN POLYESTER FABRIC, MIRAFI, INC. - MIRASCAPE LANDSCAPE FABRIC OR APPROVED EQUAL. PROVIDE SAMPLE TO OWNERS REPRESENTATIVE FOR APPROVAL. PERENNIAL AND GROUND COVER BEDS DO NOT RECEIVE WEED CONTROL FABRIC.

28) MULCH SHALL BE SHREDDED HARDWOOD MULCH AS NOTED ON PLAN AND/ OR DETAILS. SUBMIT SAMPLE FOR APPROVAL.



1 WALK PLANTINGS
SCALE: 1"=20'



2 PATIO PLANTINGS
SCALE: 1"=10'

PLANT MATERIALS LIST

DESIGNATION	QUANTITY	SIZE	ROOT	COMMENTS
TREES				
HL HONEYLOCUST GLEDITSIA TRIACANTHOS 'INERMIS'	7	2"	B&B	
PM AMUR CHERRY PRUNUS MAACKII	1	2"	B&B	
SHRUBS				
AWS ANTHONY WATERS SPIREA SPIREA BUMALDA 'ANTHONY WATERER'	7	5 GAL	POT	
AJ ARCADIA JUNIPER JUNIPERUS SABINA 'ARCADIA'	8	5 GAL	POT	
GRASSES				
SG SWITCHGRASS PANICUM VIRGATUM 'SHENANDOAH'	8	2 GAL	POT	
FRG FEATHERREED GRASS CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	10	2 GAL	POT	

*QUANTITIES SHOWN ARE FOR REFERENCE ONLY CONTRACTOR TO BID THE PLAN AS SHOWN.

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Purpose		

HARRISON RECREATION CENTER
CITY OF DULUTH, MINNESOTA



Sheet Key

Sheet Title

PLANTING PLAN

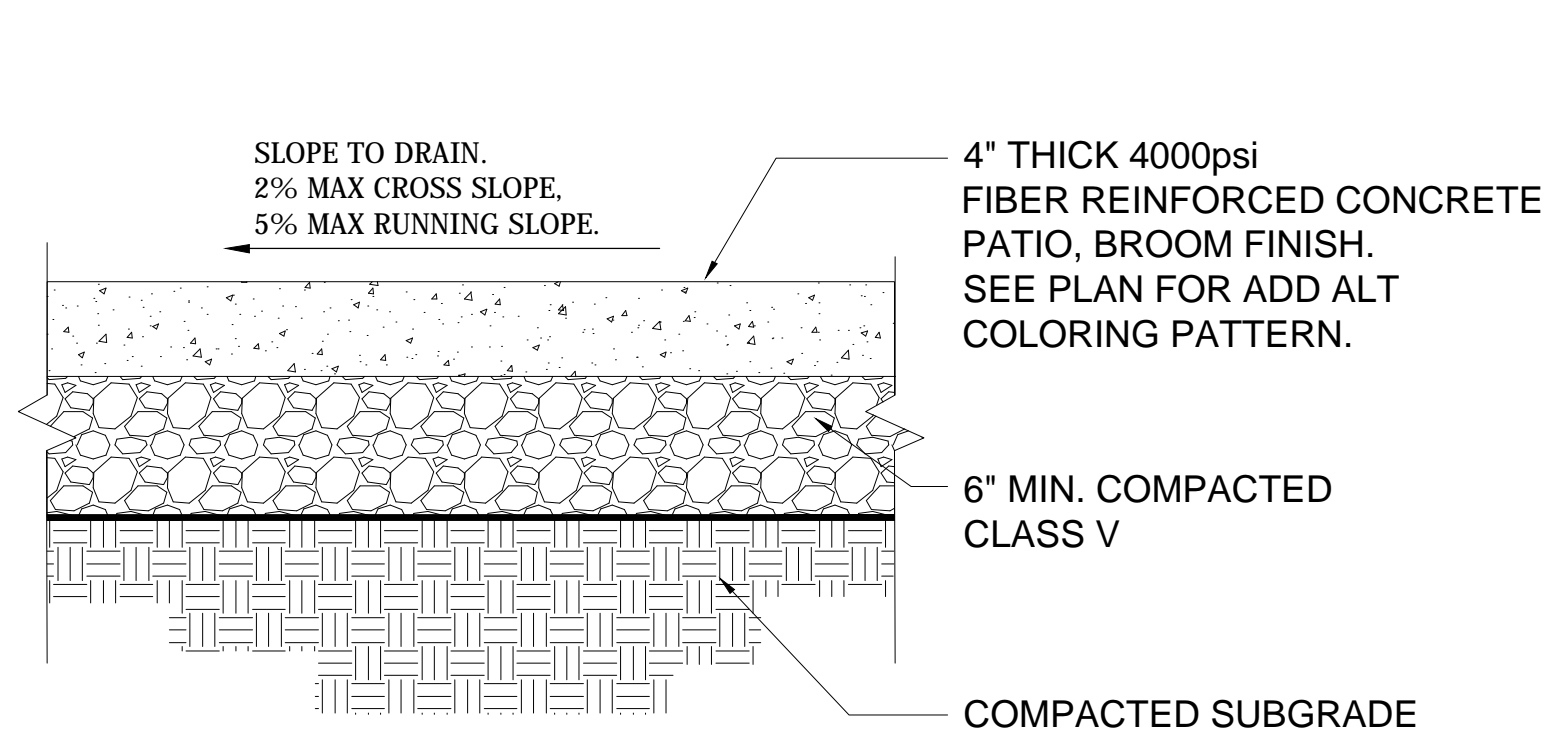
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Drawn By: MSD

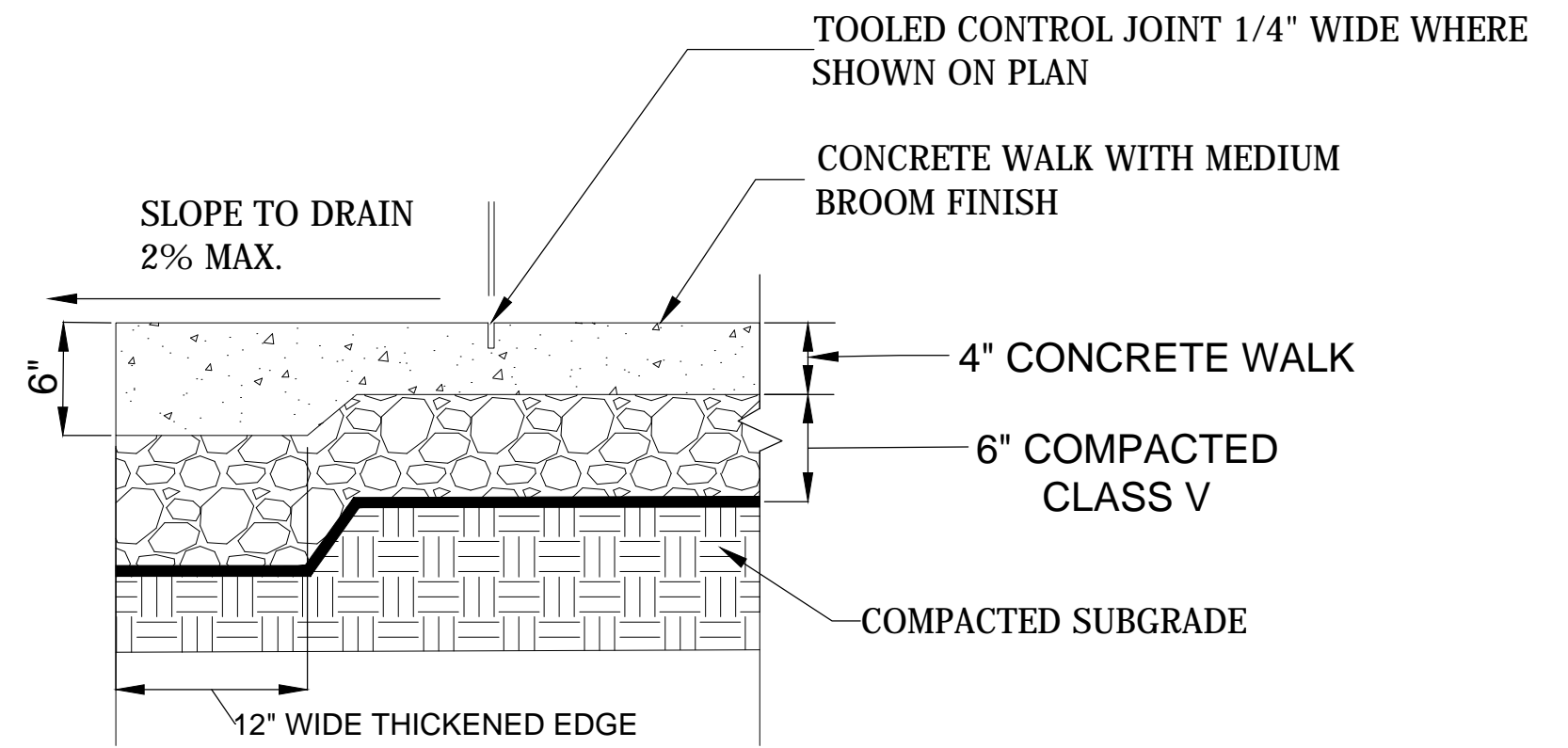
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Project Number 17040

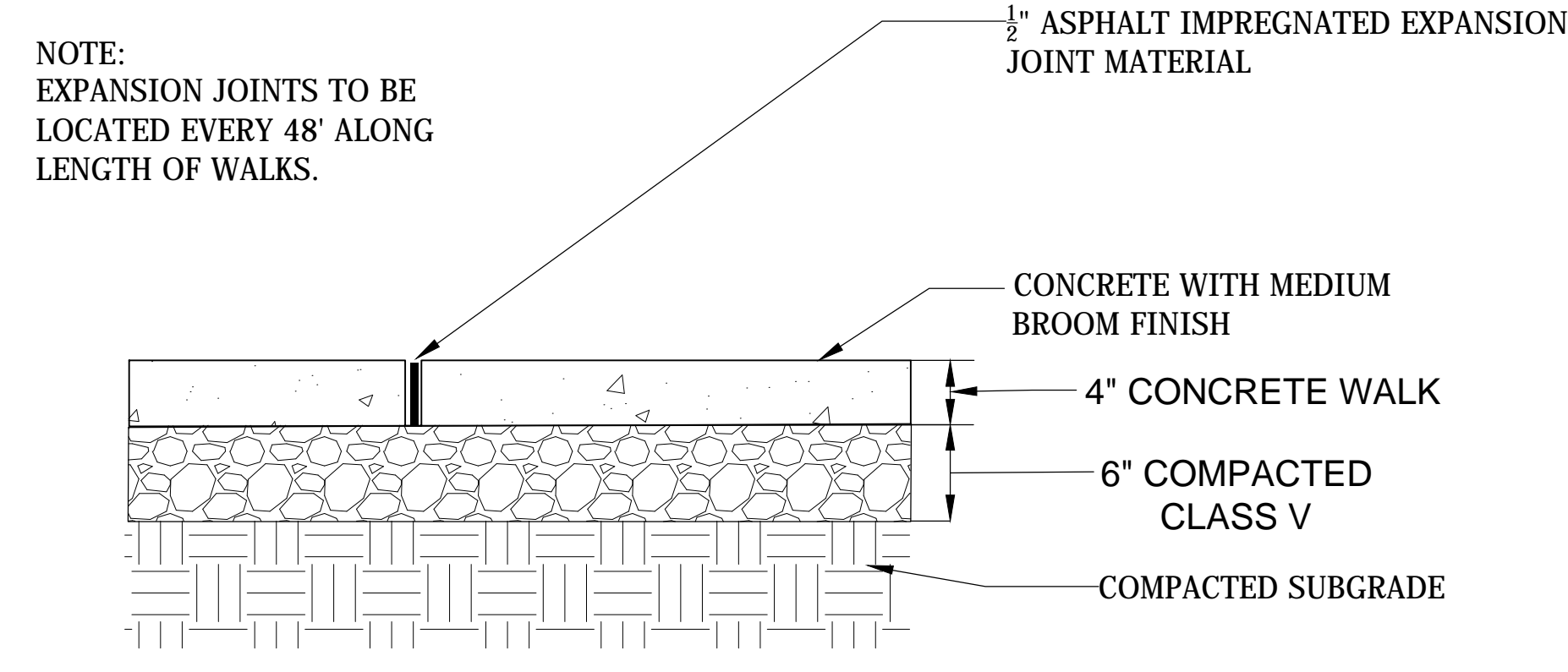
Sheet Number L-5



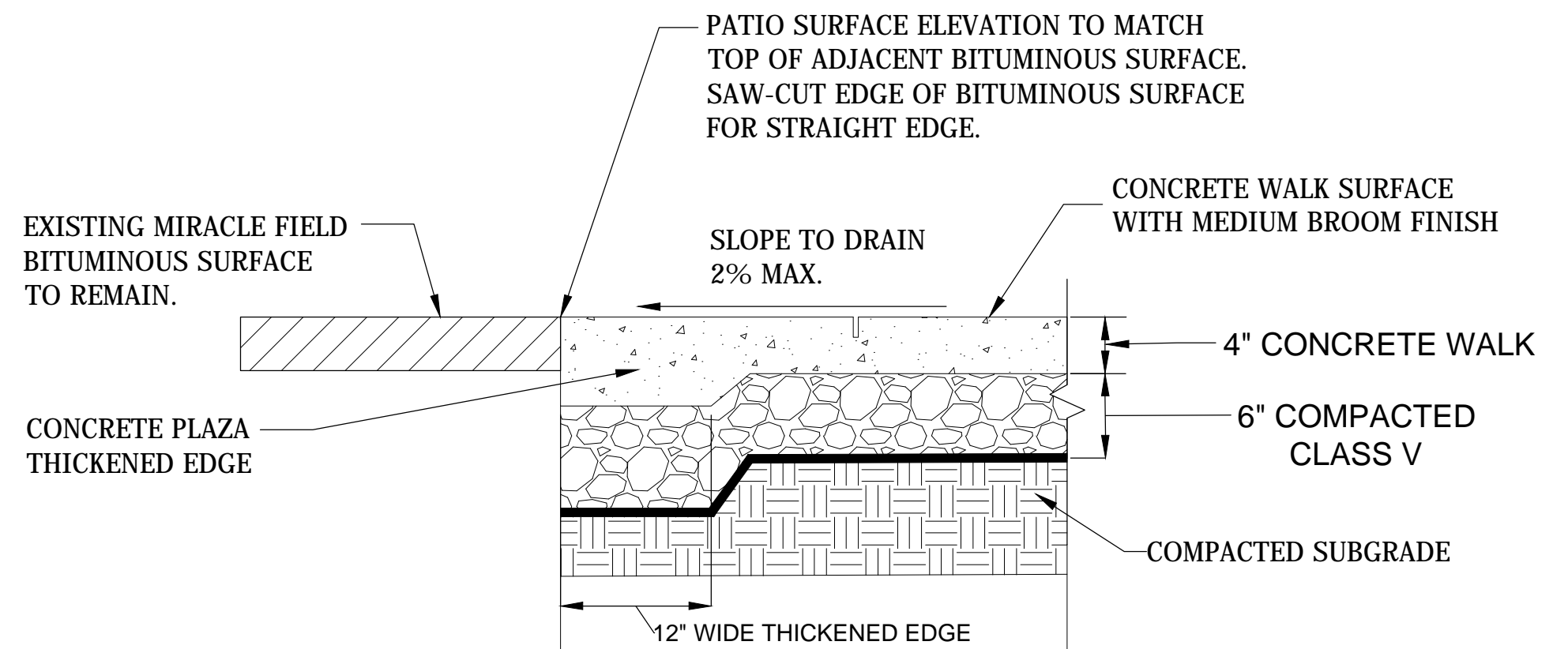
1 CONCRETE SIDEWALK SECTION
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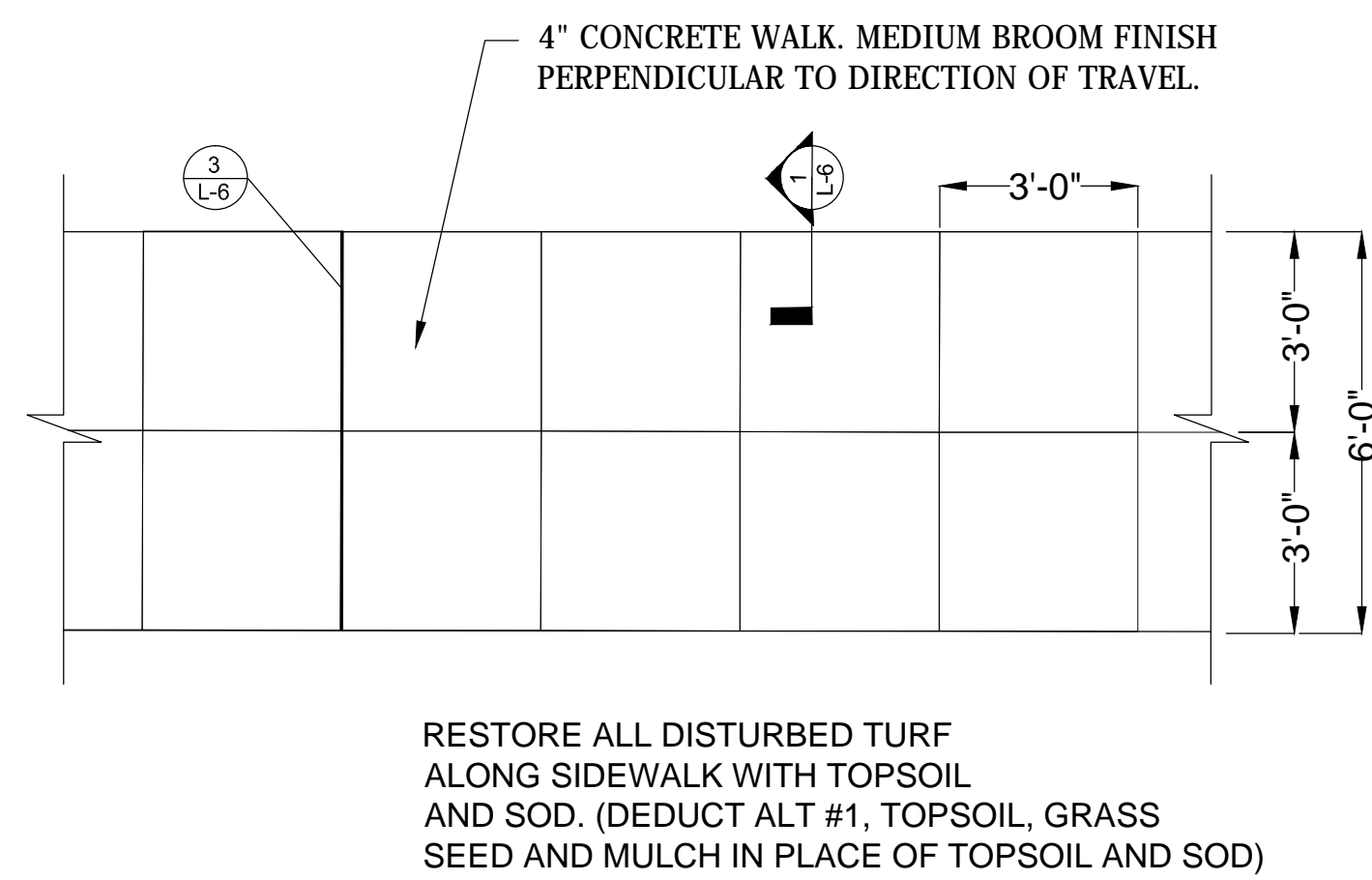
2 CONCRETE PATIO THICKENED EDGE
NTS



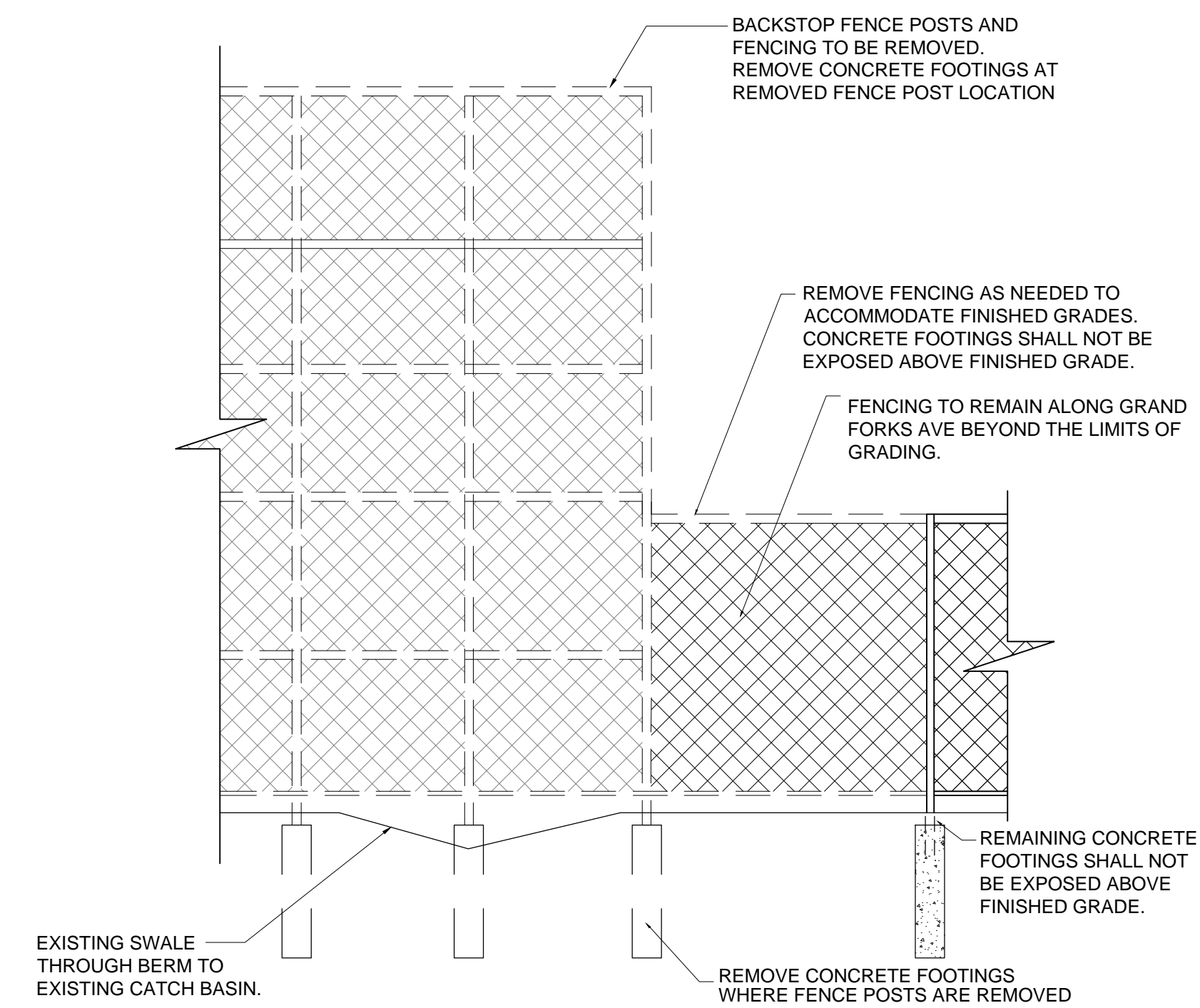
3 WALK / PATIO EXPANSION JOINT
NTS



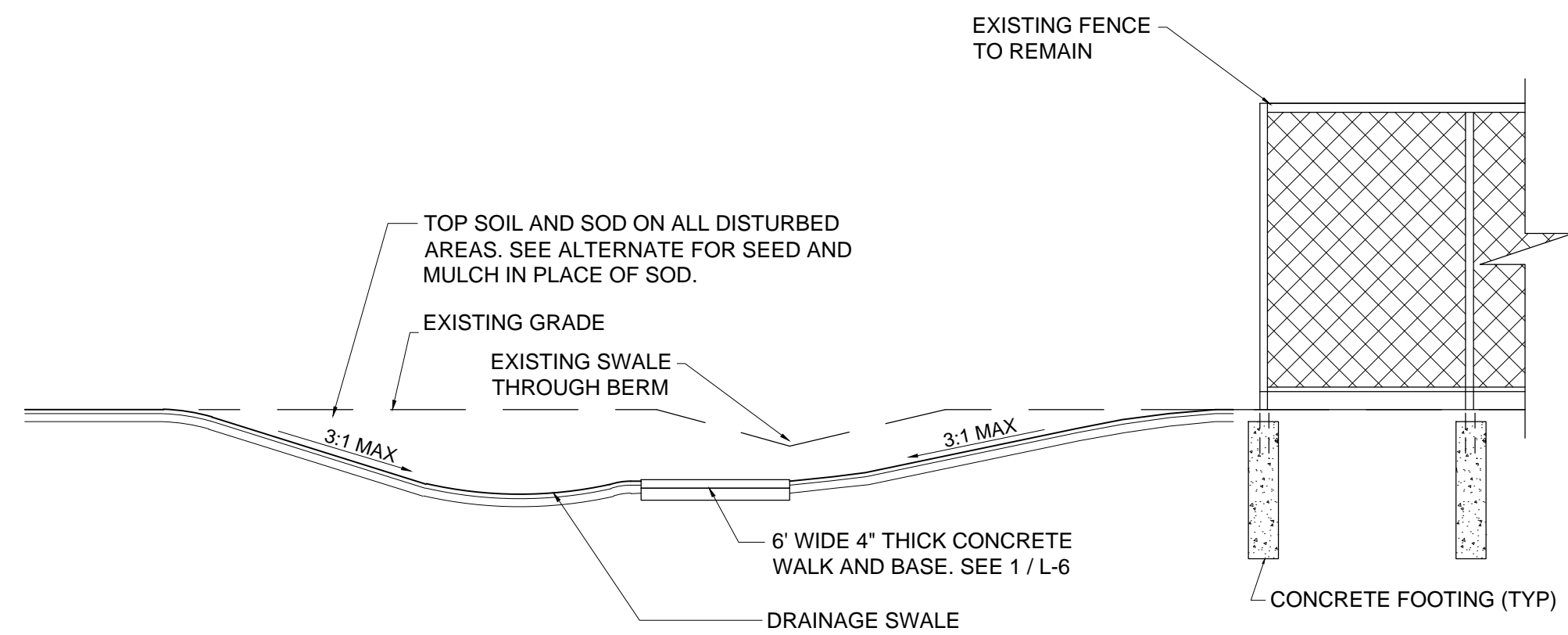
4 CONCRETE PATIO / BITUMINOUS PAVEMENT EDGE (ADD ALT 3)
NTS



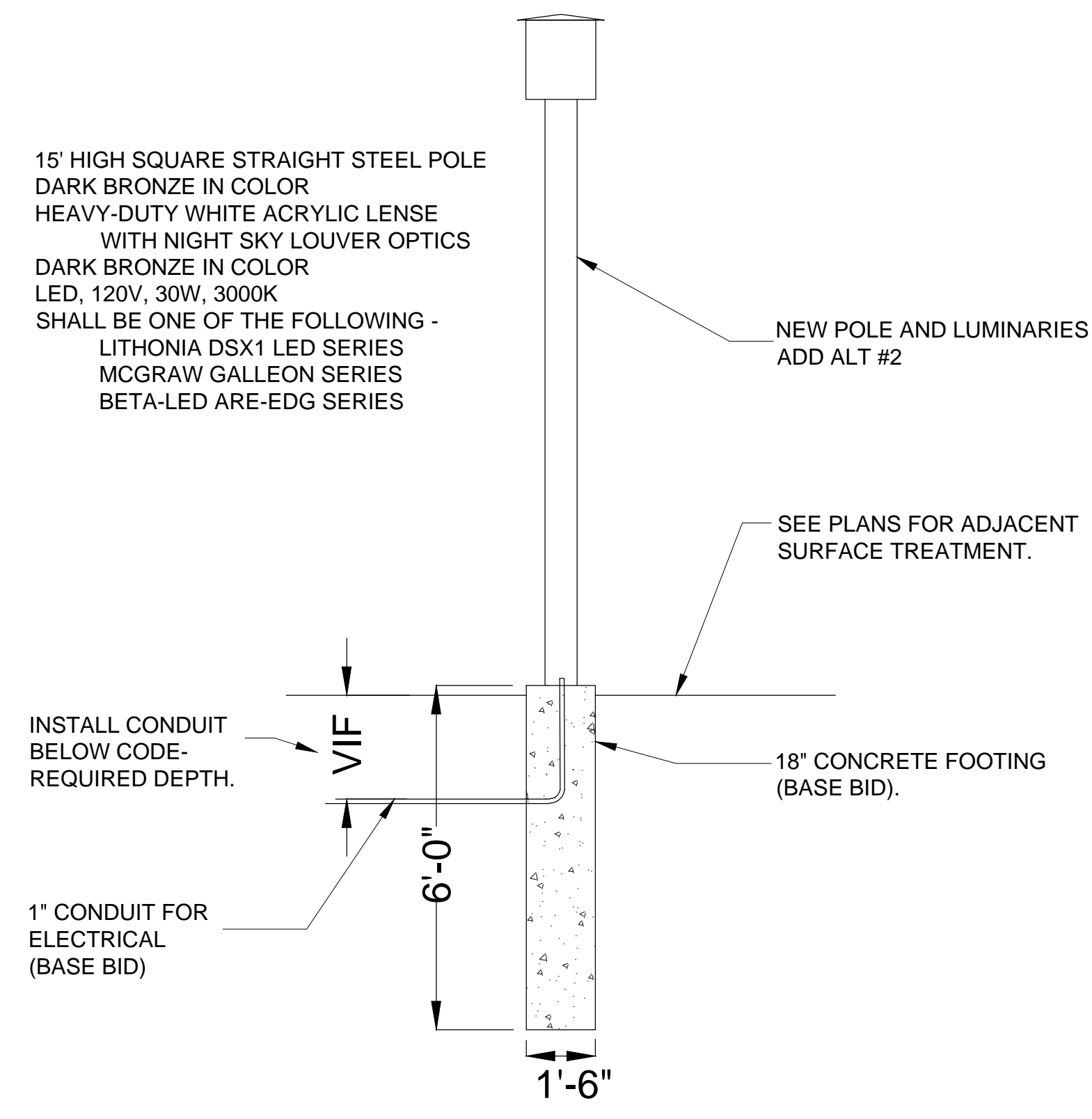
5 CONCRETE SIDEWALK SCORING
NTS



6 BACKSTOP FENCE REMOVAL
NTS



7 WALK THROUGH BERM
NTS



8 PEDESTRIAN LIGHT
NTS



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Issue	Record/Revision	Date
	Purpose	

HARRISON RECREATION CENTER
CITY OF DULUTH, MINNESOTA

Sheet Key

Sheet Title

DETAILS

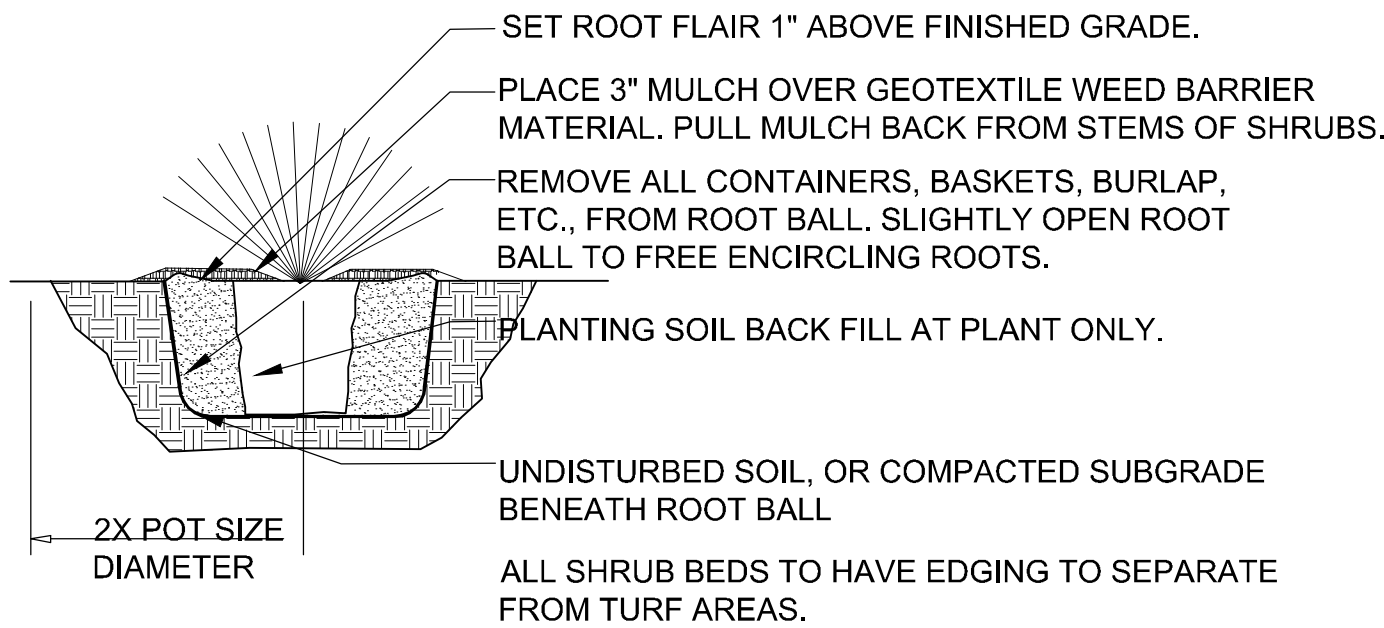
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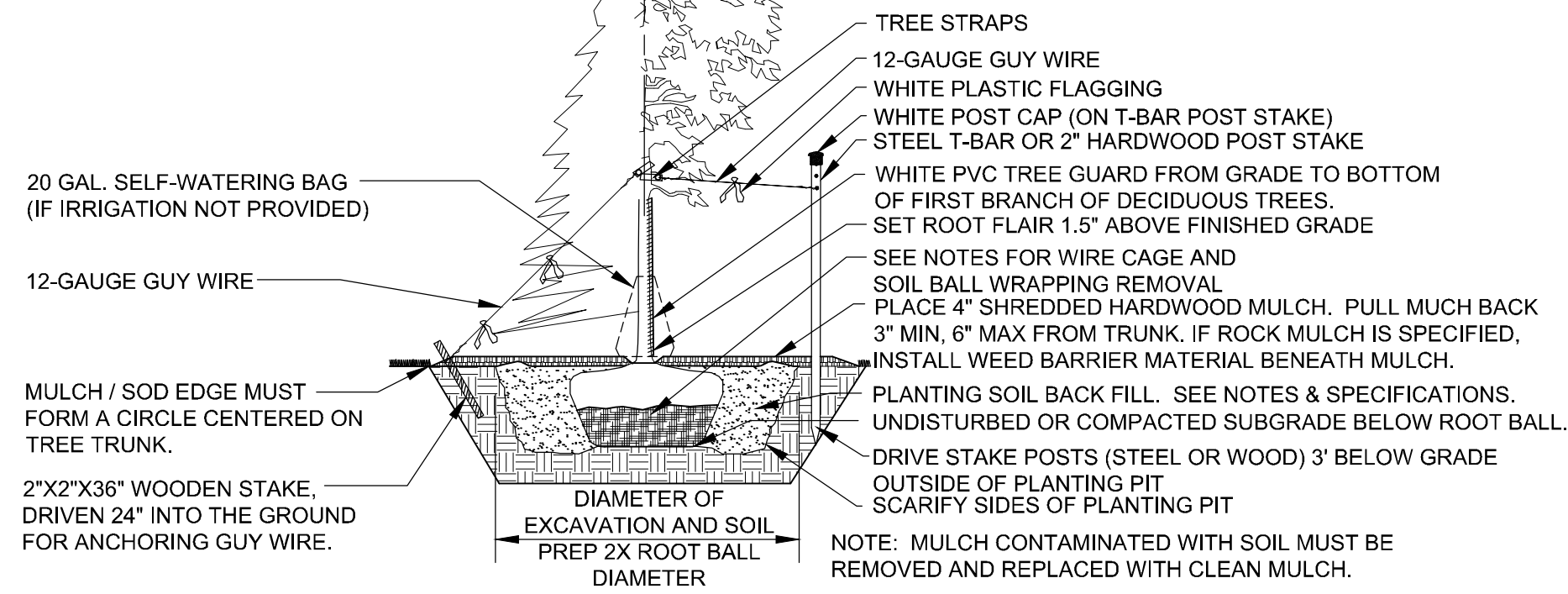
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Project Number 17040

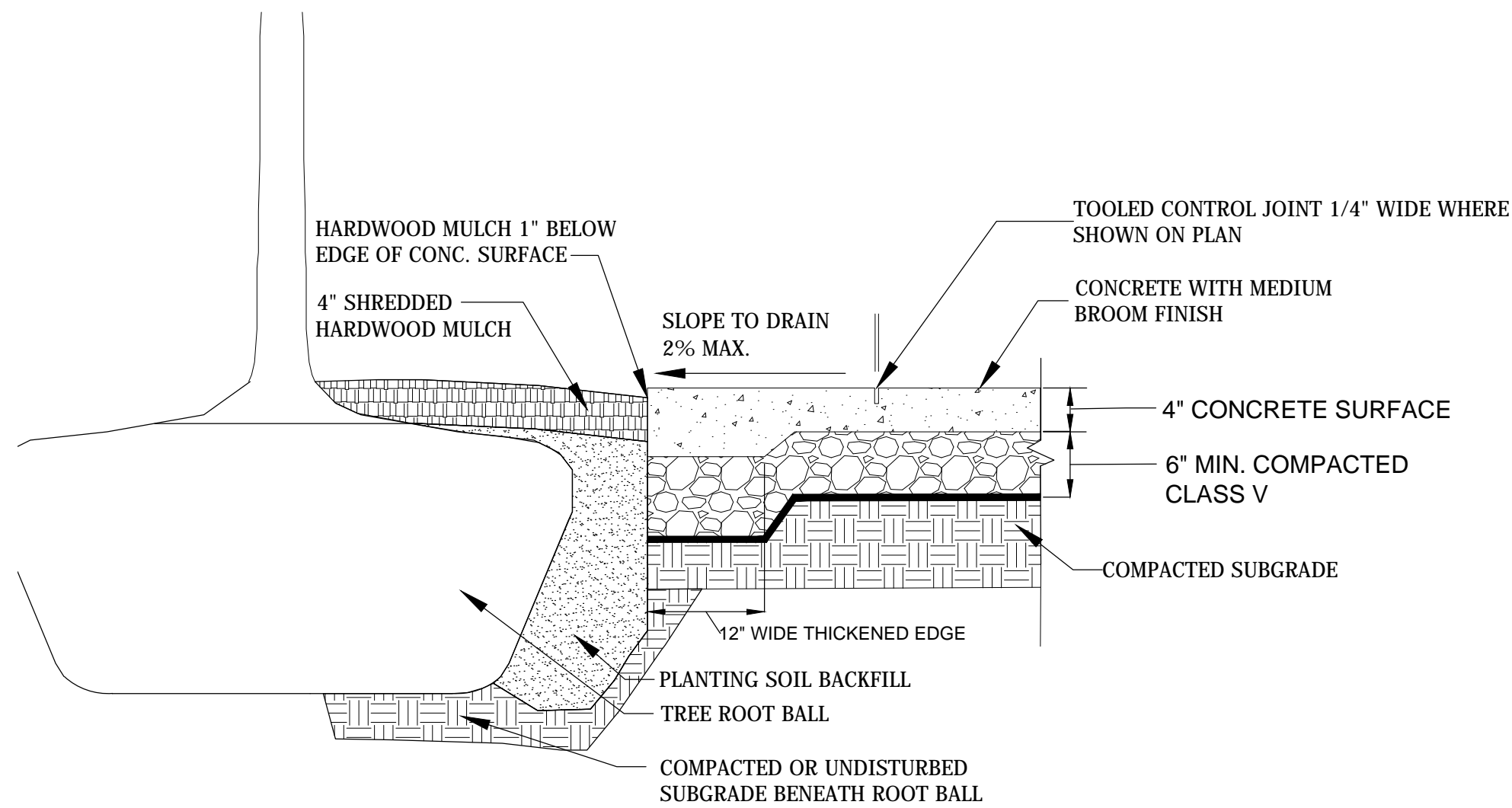
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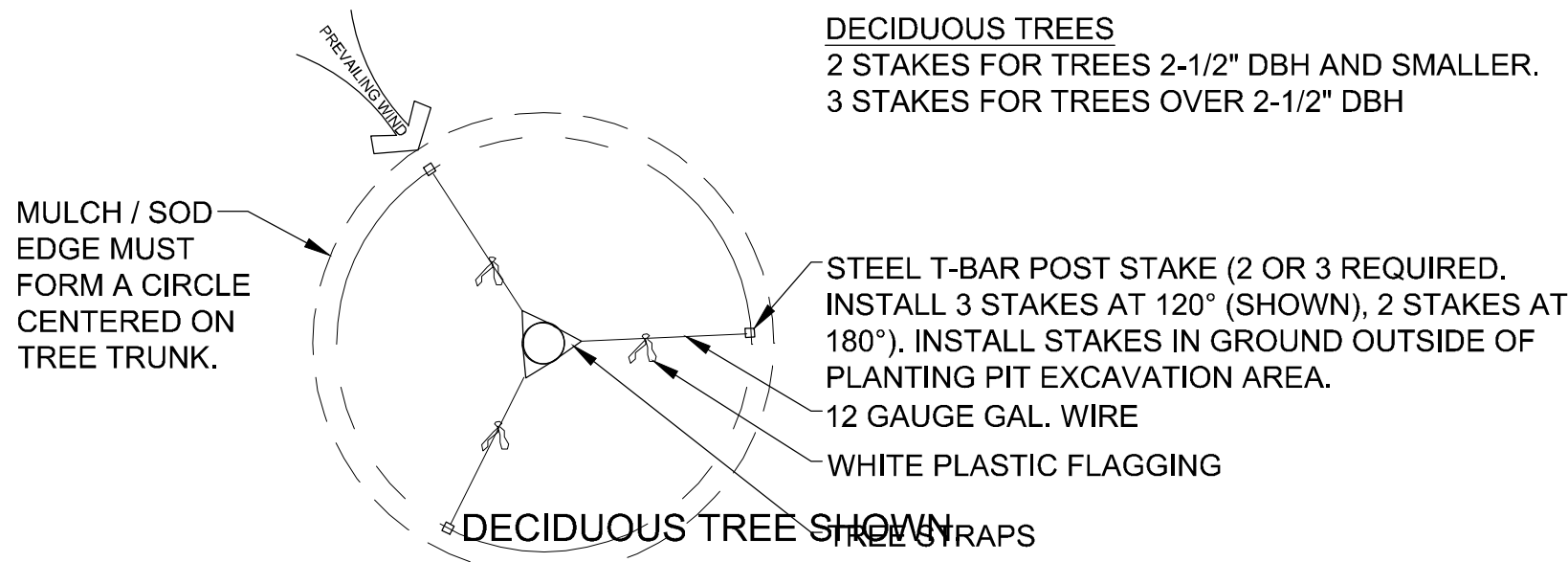
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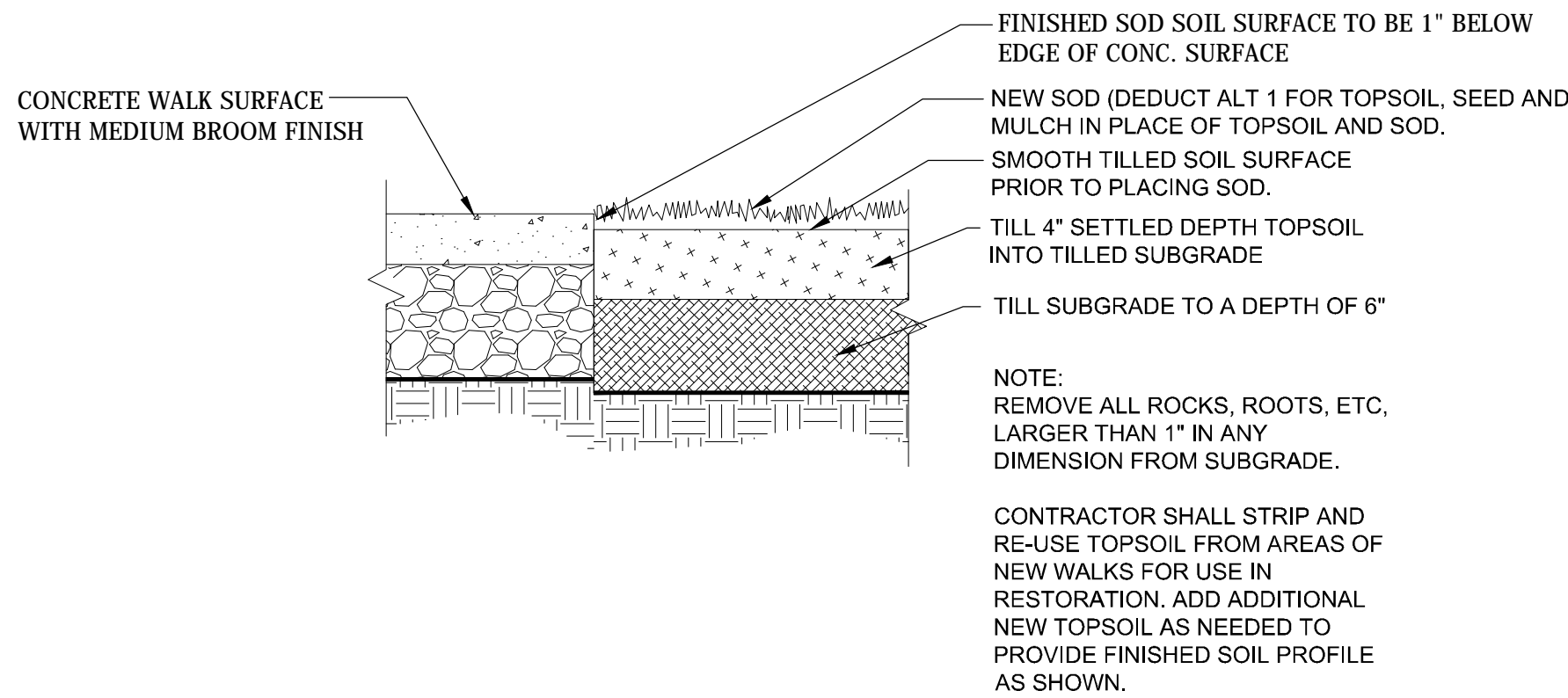
2 TREE PLANTING DETAIL
SCALE: NOT TO SCALE



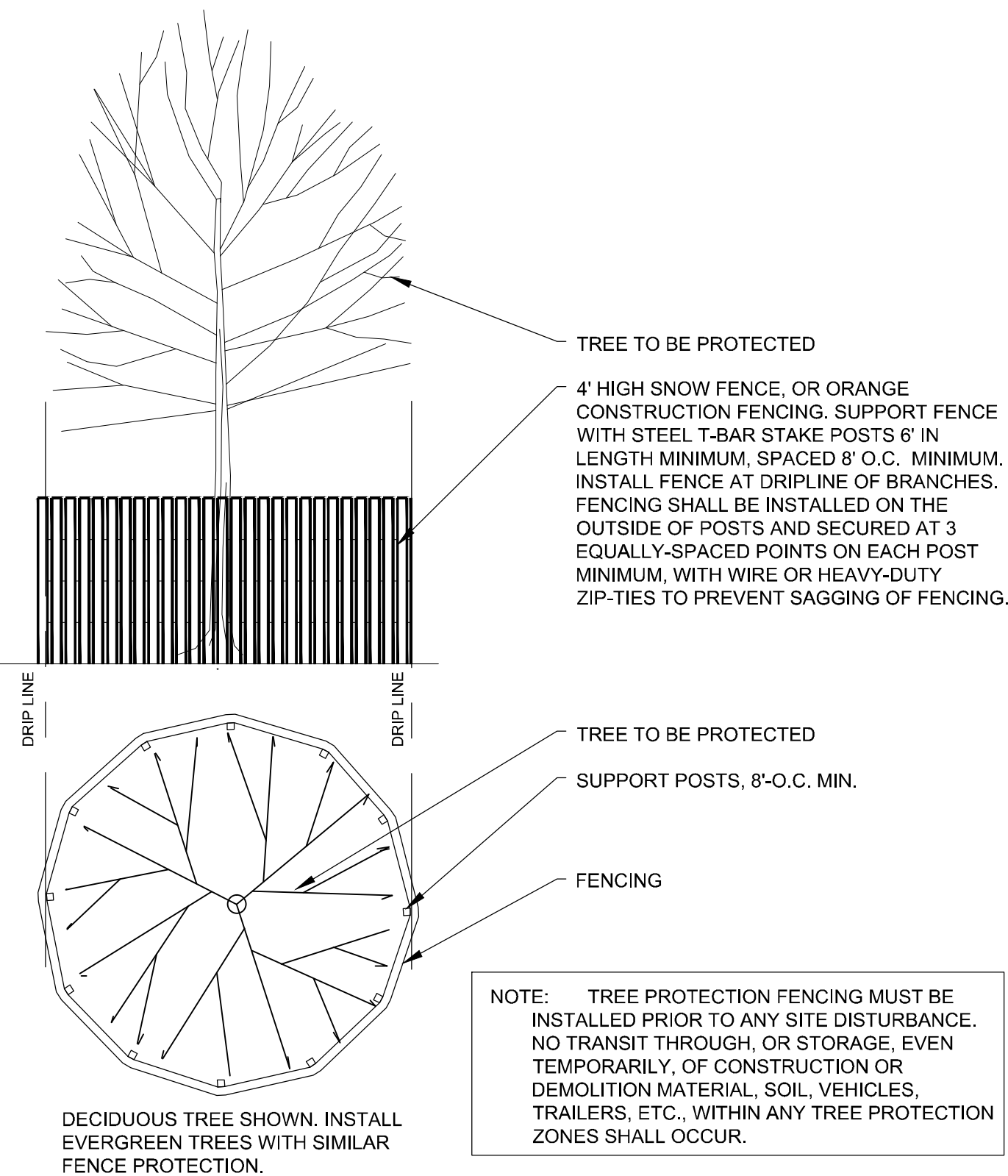
6 PLANTING IN PATIO
NTS



4 TREE GUYING DETAIL
SCALE: NOT TO SCALE



7 SOD / CONCRETE EDGE
NTS



5 TREE PROTECTION FENCING DETAIL
SCALE: NOT TO SCALE

NOTES:
THESE PLANTING NOTES APPLY TO ALL PLANT AND PLANT-RELATED ASPECTS OF THIS PROJECT. IF THIS PLAN SET CONTAINS A SEPARATE SET OF SPECIFICATIONS, THOSE SEPARATE SPECIFICATIONS SHALL GOVERN.

EVERGREEN AND DECIDUOUS TREES SHALL BE SUPPORTED WITH A SYSTEM OF HEAVY DUTY T-BAR STEEL POST STAKES. MINIMUM OF 6' IN LENGTH, WITH WHITE T-POST CAPS AND WITH 12-GAUGE GALVANIZED STEEL WIRE GUYS SECURED TO TREE WITH PROFESSIONAL-GRADE STRAPS (DARK GREEN OR BEIGE IN COLOR) SPECIFICALLY DESIGNED FOR TREE GUYING ABOVE THE FIRST BRANCH OF DECIDUOUS TREES (4' ABOVE GRADE MINIMUM), 4' ABOVE TOP OF ROOT BALL ON EVERGREEN TREES. STAKES SHALL BE 3' MIN, 5' MAXIMUM FROM TRUNK OF TREE. TREE STRAPS TO BE USED SHALL BE SELECTED BASED ON MANUFACTURER'S RECOMMENDATION FOR THE SIZE TREE RECEIVING THE STRAPS. RUBBER HOSE SHALL NOT BE USED. WIRE TO BE TAUT BUT NOT OVER-TIGHT. TREE GUYING SHALL NOT PREVENT TREE FROM SLIGHT SWAYING UNDER NORMAL ENVIRONMENTAL CONDITIONS, WHICH HELPS DEVELOP ROOT AND TRUNK STRUCTURE. FLAG EACH WIRE WITH WHITE PLASTIC FLAGGING TAPE CENTERED ON WIRE. ADD ADDITIONAL FLAG ON WIRES GUYING EVERGREENS 12\"/>

CONFERS TO HAVE 2 STEEL POST STAKES, WIRES AND STRAPS FOR TREES 6' IN HEIGHT AND LESS, 3 STEEL POST STAKES, WIRES AND STRAPS FOR TREES ABOVE 6' IN HEIGHT. DECIDUOUS TREES TO HAVE 2 STEEL POST STAKES WIRES AND STRAPS FOR TREES 2-1/2\"/>

EACH TREE OR SHRUB, WHETHER CONTAINERIZED OR BALLED AND BURLAPPED, SHALL HAVE THE ROOT FLAIR EXPOSED AND SOIL ABOVE THE LEVEL OF THE ROOT FLAIR REMOVED. SET TREE IN PLANTING PIT WITH ROOT FLAIR 1\"/>

TREE SHALL ONLY BE MOVED BY THE BALL / WIRE BASKET. PLUMB TREE ONLY BY THE ROOT BALL. DO NOT PLUMB TREE BY OVERLY / AGGRESSIVELY PULLING OR PUSHING ON TRUNK OR BRANCHES.

AFTER TREE HAS BEEN SET IN THE PLANTING PIT TO PROPER GRADE AND PLUMBED, REMOVE TOP 1/3 OF WIRE BASKET. REMOVE TWINE OR ROPE HOLDING BURLAP OR PLASTIC AROUND ROOT BALL. REMOVE AS MUCH PLASTIC WRAPPING OR TREATED BURLAP AS POSSIBLE. IF REGULAR BURLAP CONTAINS THE ROOT BALL, BACKFILL 1/3 OF PIT. REMOVE TOP 1/3 OF BURLAP AND COMPLETE BACKFILL. SOIL SHALL BE SETTLED AROUND ROOT BALL WITH WATER TO REMOVE LARGE AIR VOIDS. BACKFILL SHALL NOT BE PLACED ON TOP OF ROOTBALL.

CARE SHALL BE TAKEN TO INSURE BALL REMAINS INTACT WITH MINIMAL DISTURBANCE TO THE INTEGRITY OF THE SOIL BALL AND / OR TREE ROOTS. SOIL BALLS OF TREES WHICH ARE DEEMED BY THE OWNER OR OWNERS REPRESENTATIVE TO NOT BE OF ADEQUATE INTEGRITY, OR TRUNKS WHICH ARE LOOSE FROM THEIR SOIL BALLS, BEFORE OR AFTER BEING PLACED INTO THE PLANTING PIT, MAY BE REJECTED. CONTRACTOR SHALL PROMPTLY REMOVE REJECTED PLANT MATERIAL FROM SITE AND REPLACE WITH PLANT MATERIAL ORIGINALLY SCHEDULED. INSTALL AS ORIGINALLY SPECIFIED.

STRIPPING: UNLESS OTHERWISE RECOMMENDED IN SOIL REPORT, STRIP TOPSOIL, IF EXISTING, FROM AREA(S) TO BE GRADED OR PLANTED, TO WHATEVER DEPTHS ENCOUNTERED IN MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER OBJECTIONABLE MATERIAL. STRIPPED TOPSOIL MAY BE RE-USED ON THIS PROJECT IF TESTING CONFIRMS IT IS IN COMPLIANCE WITH THE SPECIFICATIONS BELOW FOR LOAM TOPSOIL BORROW.

TOPSOIL (IMPORTED OR EXISTING REUSED ON SITE) IS DEFINED AS FRIABLE LOAM SURFACE SOIL. SATISFACTORY TOPSOIL SHALL BE FREE OF SUBSOIL, LUMPS, STONES AND OTHER MATTER OVER 1\"/>

	MINIMUM	MAXIMUM
MATERIAL PASSING 1/2 IN (19.0 MM)	100%	
MATERIAL PASSING NO.4 (4.75 MM)	250%	
CLAY	5%	30%
SILT	10%	60%
SAND & GRAVEL	15%	60%
ORGANIC MATTER	8%	15%
PH	6.1	7.5

- COORDINATE FURNISHING AND PLACING WITH OTHER OPERATIONS.
- UPON COMPLETION OF ROUGH GRADING, SUB-GRADE SHALL BE PREPARED. SURFACE SHALL BE LOOSENEED BY ROTOTILLING TO MINIMUM DEPTH OF 6\", AND MATERIALS OVER 1\"/>
 - AFTER COMPLETION OF SUB-GRADE PREPARATION, PLACE MINIMUM 4\"/>
 - INTERMIX TOPSOIL MIXTURE WITH LOOSENEED SUB-GRADE BY MEANS OF A ROTOTILLER.
 - \"PLANTING SOIL\" FOR ALL PLANT MATERIAL (EXCLUDING SOD), SHALL BE 50% NATIVE SOIL THOROUGHLY INTERMIXED WITH 50% SPECIFIED TOPSOIL.

FABRIC WEED BARRIER - SHALL BE A 4 OZ. SPUNBONDED NON-WOVEN POLYESTER FABRIC, MIRAFI, INC. - MIRASCAPE LANDSCAPE FABRIC OR APPROVED EQUAL. PROVIDE SAMPLE TO OWNERS REPRESENTATIVE FOR APPROVAL.

MULCH SHALL BE SHREDDED HARDWOOD MULCH OR ROCK MULCH AS NOTED ON PLAN AND / OR DETAILS.

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Issue	Record/Revision	Purpose	Date

HARRISON RECREATION CENTER

CITY OF DULUTH, MINNESOTA

Sheet Key

Sheet Title

DETAILS

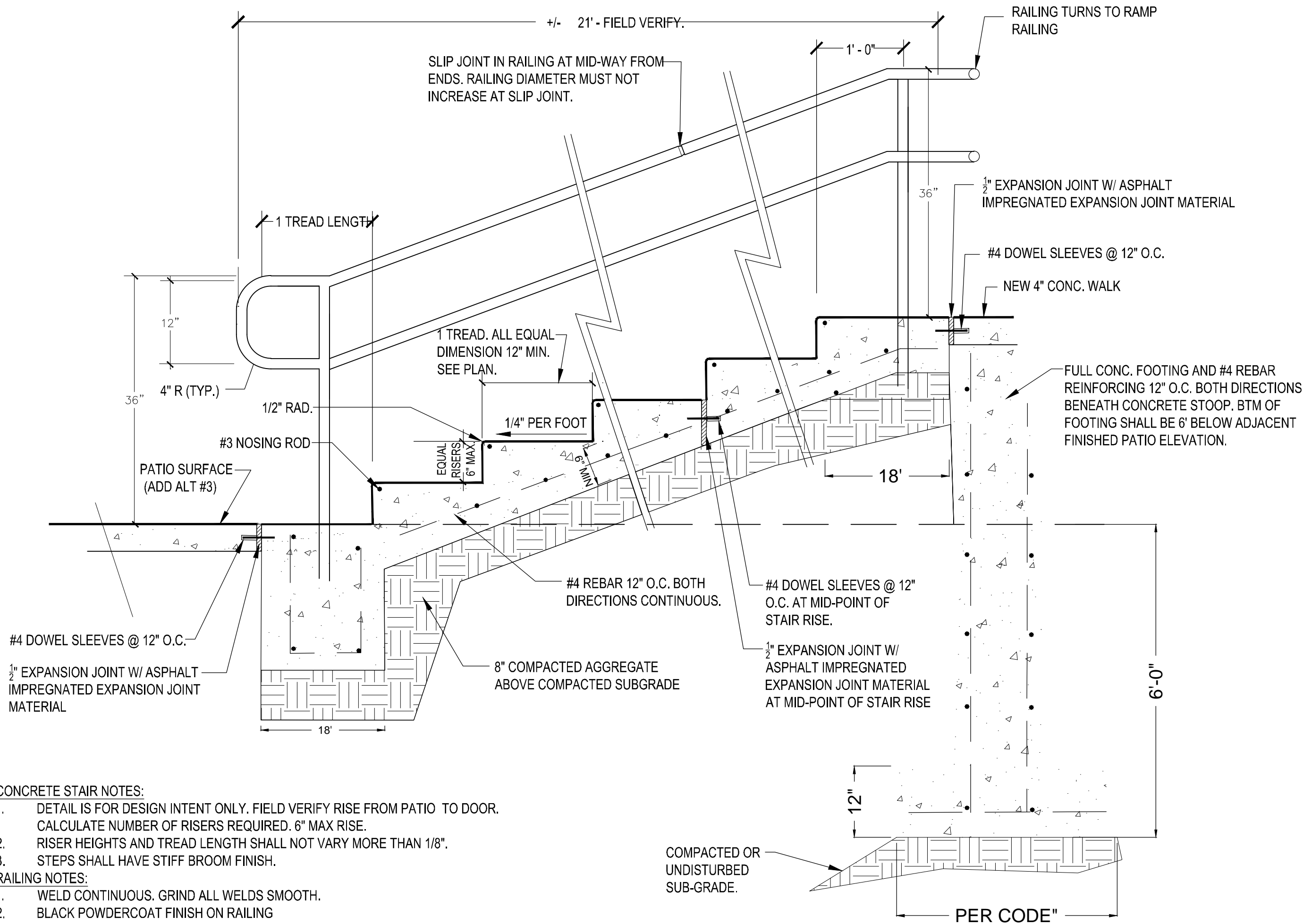
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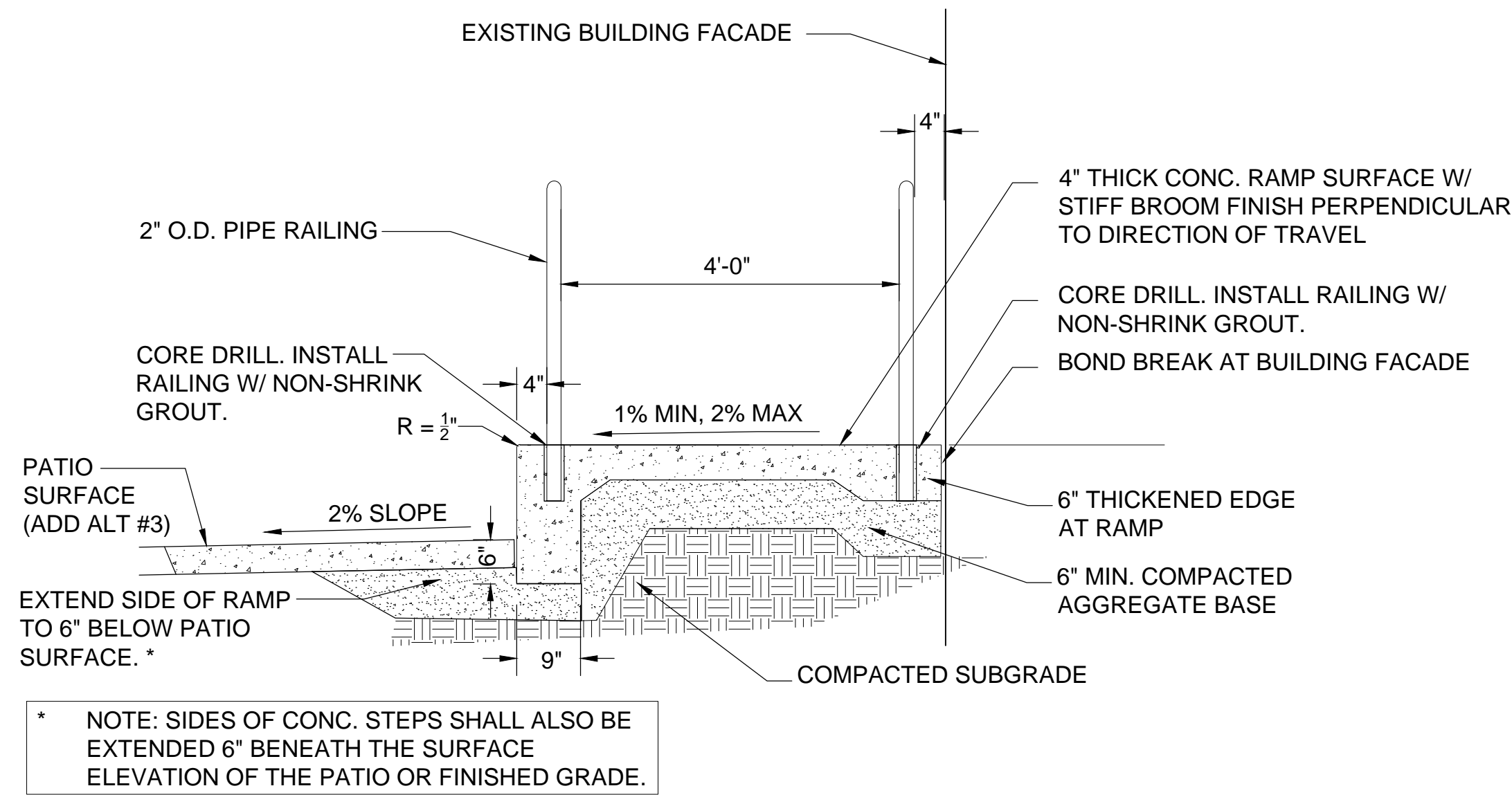
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Project Number: 17040

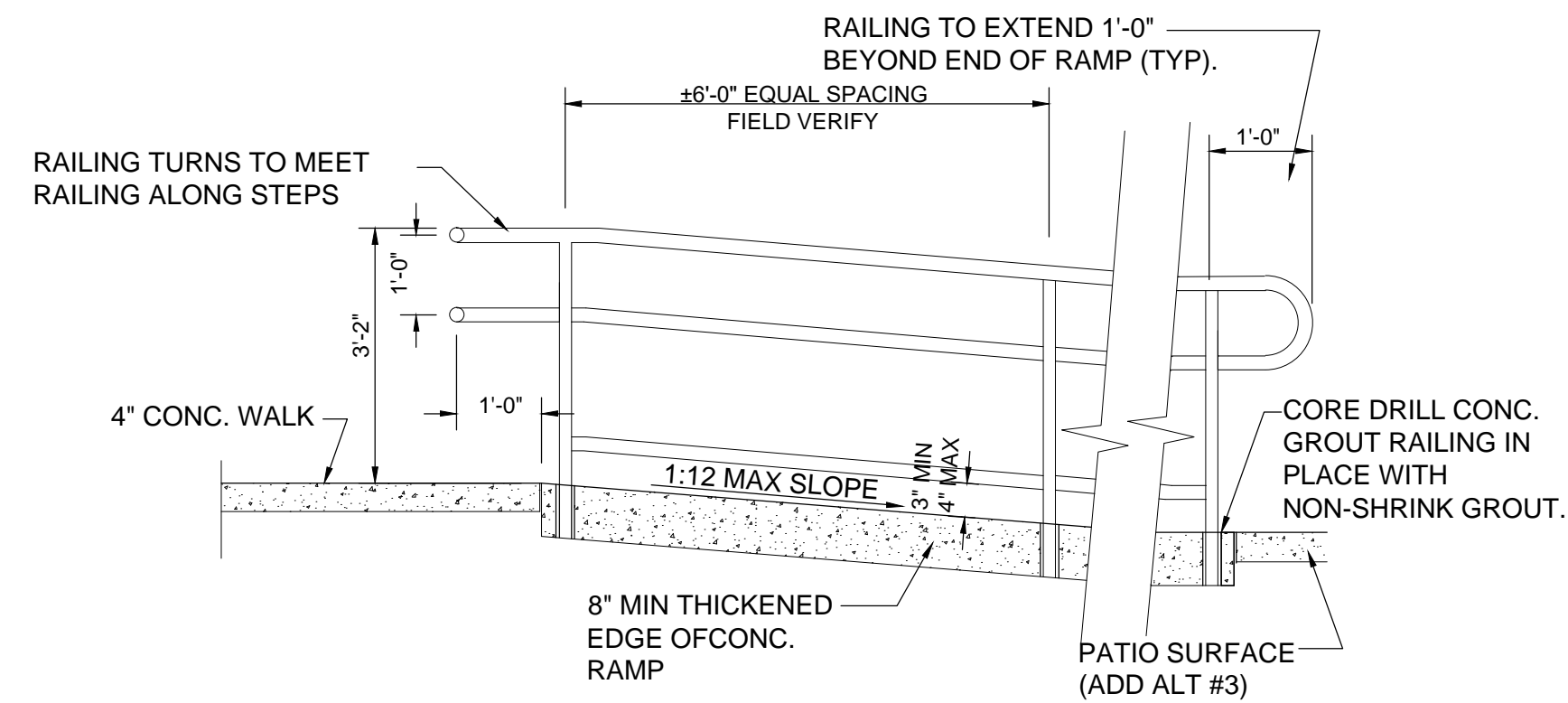
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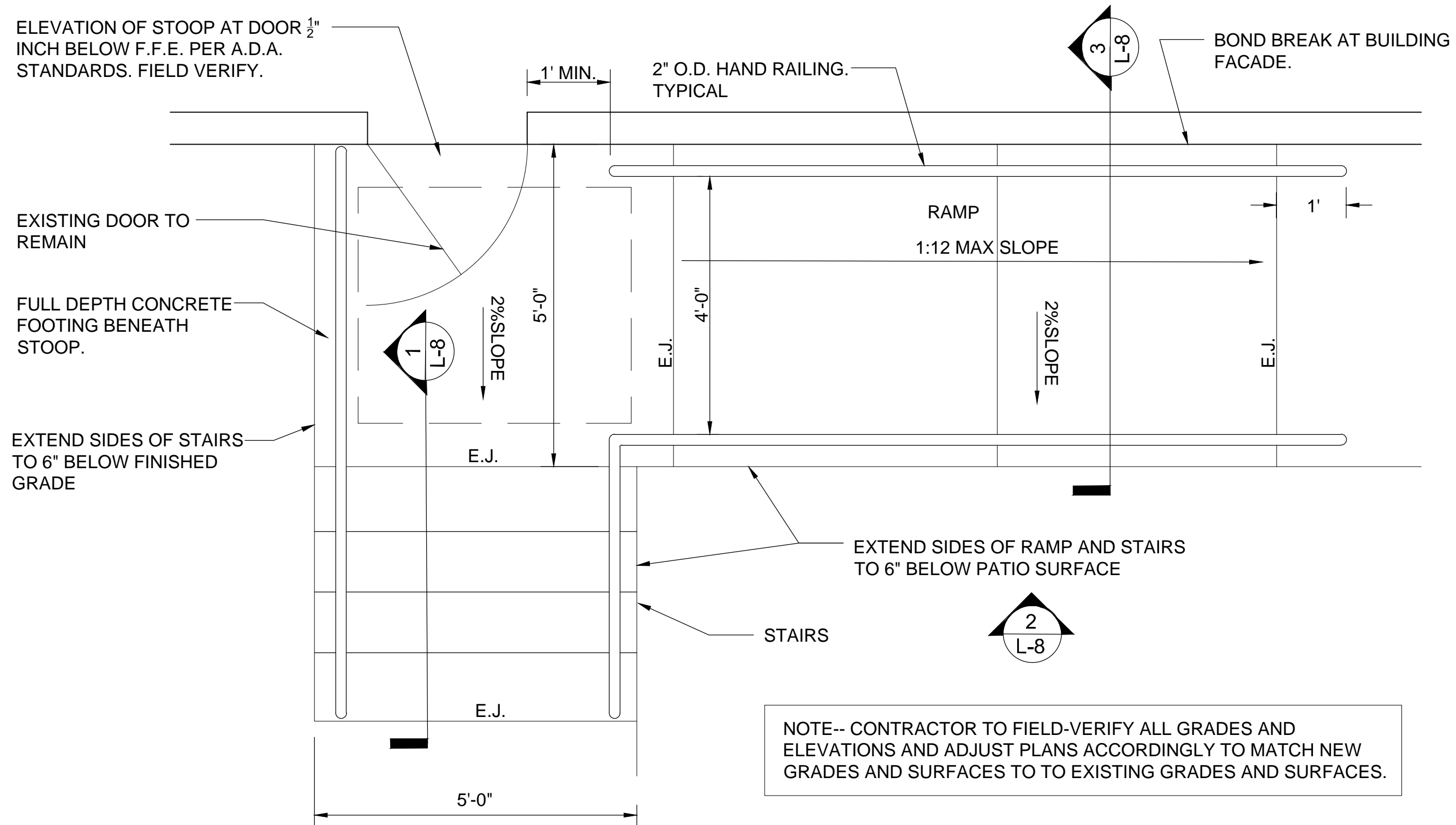
1 STAIR ELEVATION (ADD ALT 4)
SCALE: NTS



3 RAMP SECTION (ADD ALT 4)
SCALE: NTS



2 RAMP ELEVATION (ADD ALT 4)
SCALE: NTS



4 RAMP & STAIR PLAN (ADD ALT 4)
SCALE: 1"=5'

NOTE: CONTRACTOR TO FIELD MEASURE AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION OF HANDRAILS AND GUARDRAILS
ALL RAILINGS AND POSTS TO BE FABRICATED FROM 2" O.D. SCHEDULE 40 PIPE, PRIMED AND PAINTED AS PER SPEC. PIPES SHALL BE COPED TO FIT AND WELDED CONTINUOUS. GRIND ALL WELDS SMOOTH. CENTER OF ALL POSTS TO BE SET 6" FROM EDGE OF CONCRETE. CORE DRILL RAMP SLAB FOR POST AND GROUT IN PLACE W/ NON-SHRINK GROUT.

ALL RAMPS, STAIRS AND RAILING SHALL MEET THE MOST CURRENTLY ENFORCED STANDARDS FOR ACCESSIBILITY UNDER CITY, STATE OR FEDERAL GUIDELINES.

SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

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HARRISON RECREATION CENTER
CITY OF DULUTH, MINNESOTA

Sheet Key

Sheet Title

Patio Details

Date: 6/14/2017

Drawn By: MSD

Checked By: LWS

Project Number 17040

Sheet Number **L-8**

CONSTRUCTION SPECIFICATION

Date: 14 June, 2017

SAS Project Number: 17040

Bid Due Date: July 7, 2017 @ 2:00 p.m. CST

Project Completion Date: Oct 15, 2017

City of Duluth

Harrison Park Improvements

Duluth, Minnesota

I hereby certify that this plan was prepared by me or
under my direct supervision and that I am a duly licensed
Landscapes Architect under the laws of the State of
Minnesota



Luke W. Sydow
Landscape Architect
Minnesota Registration # 25866

SAS+Associates
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F (218) 722.6697
E-mail mail@saslandarch.com

SECTION 00300**PRE-BID MEETING: June 28, 2017 at 2:00 PM at Harrison Park****CONTRACTOR'S BID PROPOSAL FORM****HARRISON PARK IMPROVEMENTS**

BID OPENING: 7 July 2017 2:00 City Hall, Rm 100
Day Month YR Time Location

PART 1: BID SCHEDULE

1.01 The following bid items are to include materials, labor, profit, taxes and overhead for the complete system in place.

Harrison Park Improvements

Base Bid Item #	Description	Amount
1.	General Requirements / Mobilization	\$_____
2.	Site Preparation/Restoration	\$_____
3.	Bituminous Court and Base Removals	\$_____
4.	Site Grading for Walks and Drainage	\$_____
5.	Abandon Catch Basin	\$_____
6.	Sidewalks	\$_____
7.	Concrete Bases for Walk Lighting (6)	\$_____
8.	Fence Removal	\$_____
9.	Topsoil and Sod	\$_____
10.	Light Pole and electrical removal	\$_____
11.	Topsoil and Seed (in lieu of item 9 sod)	\$_____ DEDUCT ALT #1
12.	Walk Lighting Poles, Fixtures & Electrical (6)	\$_____ ADD ALT #2
13.	Excavation, Grading and Concrete Patio	\$_____ ADD ALT #3
14.	Excavation, Concrete Steps, Ramp, Railing from building to patio	\$_____ ADD ALT #4
15.	Tree & Shrub Planting	\$_____ ADD ALT #5

TOTAL – HARRISON PARK BID ITEMS #1-10 \$_____

WRITTEN**SUPPLEMENTAL SCHEDULE OF UNIT PRICES**

A. All items are to be filled in by all Bidders. Failure to complete this portion of the Bid Proposal may result in disqualification of the bid.

B. The following prices are intended to be the basis for **additions or deletions** to the work for items bid as lump sums, if required, the value of such changes to be determined by the quantities involved at the time of Award and/or throughout the contract duration. All unit price amounts for each of the items listed below shall include its pro rata share of materials, labor, profit, taxes, overhead, etc. for the item in place. Unit prices are to be valid for the life of the contract.

Item #	Description (Furnish and Install)	Unit	Unit Amount
1.	4" Sidewalks per detail (includes grading)	SF	\$ _____
2.	4" Topsoil	SF	\$ _____
3.	Sod	SF	\$ _____
4.	Tree	EA	\$ _____
5.	Common Excavation	CY	\$ _____

1.03 PRE-APPROVED SUBSTITUTIONS: If a **pre-approved** substitution(s) is proposed, specify brand and model number below.

Substitution	Deduct/Add Amount (List in Complete Detail)
_____	_____
_____	_____

SECTION 01800

DEFINITION OF BID ITEMS –HARRISON PARK IMPROVEMENTS

PART 1 - G E N E R A L

- 1.01 - INCLUDED - The following describes the scope of work for this contract and is further clarified through limit-of-work lines, notes on the Drawings, and the Specifications. The following summary is provided to briefly describe the project, is not intended to be a complete description of the work required to complete the project, and does not in any way supersede the information contained in the Drawings and Specifications. The work described may contain work from one or more technical Specification sections. The Contractor shall refer to the technical Specifications which apply to the individual components. Items may be listed in the Specifications which are not part of this construction contract. Items shall include a pro rata share of materials, labor, protection of existing improvements, testing, guarantees, profit, taxes, bonds, overhead, and all other related, incidental work or costs necessary for completion.

Contractor shall provide unit pricing for all items as per unit price sheet.

A. BID ITEMS HARRISON PARK IMPROVEMENTS

Bid Item #1

General Requirements/Mobilization. Payment shall include the mobilization of equipment, personnel, and materials at the project site in preparation for work on the project. This item shall also include the establishment of the Contractor's offices, necessary facilities, related temporary utilities, and such other costs as may be incurred in preparing to perform the Work. The cost of required bonds and permits is included in this item.

The removal of the Contractor's equipment, temporary fencing, supplies, offices and temporary utilities, and cleanup of the site are also included in this item.

Total amount for this bid item shall not exceed three percent (3%) of the total Base Bid. Measurement for payment shall be on a lump sum basis.

Bid Item #2

Site Preparation/Restoration. Construction layout and surveys; location of new site elements and protection of existing structures, walks, recreational equipment, retaining walls, utilities and trees to remain. Contractor to restore all disturbed areas with 4" of topsoil and sod. Measurement for payment will be on a lump sum basis.

Bid Item #3

Bituminous Court and Base Removal. Installation of construction fence, silt fence and other erosion control measures, temporary drainage control and drainage of excavations, necessary grading, removal and off-site disposal of stripped asphalt surface and aggregate base. Measurement for payment will be on a lump sum basis. If in conformance with the specifications for base material for walks, existing excavated base material beneath bituminous surface may be re-used in new construction areas.

Bid Item #4

Site Grading for Walk and Drainage

Includes all site grading including cutting and filling of surface as needed to attain proper drainage and elevations of finished grades and surfaces. Includes excavation for new walk construction including

removal of a portion of the berm at the current backstop fencing location for the installation of the concrete sidewalk.

Bid Item #5

Abandon Catch Basin

Includes removal and proper disposal of catch basin inlet grate and top of (or entire) catch basin structure, removing / grouting closed pipe connecting catch basin to manhole, backfilling with granular fill, compacting and surface treatment per plan (sod/seed or sidewalk).

Bid Item #6

Sidewalks

Includes fine grading for ADA compliant site walks and ramp, miscellaneous excavation, hauling and disposal of excess excavation (if necessary), re-grading of area to finished grade after walks are installed, clean up, and all related work. 4" Sidewalk-Includes class V base and base compaction, 4" of 4000 psi concrete walks, finishing and connections as necessary to meet ADA requirements, form work, fiber mesh reinforcement and accessories, expansion joints, concrete placement and finishing, tooled joints, curing, hauling, clean up, and all related work. Measurement for payment will be on a lump sum basis.

Bid Item #7

Concrete Bases for Walk Lighting

Includes the excavation of the footings per details. Hauling and disposal of excess excavation, installation of 4000 psi concrete footings, rebar and accessories, 1" electrical conduit installation, clean up, and all related work. Measurement for payment will be on a lump sum basis.

Bid Item #8

Fence Removal

Includes the removal and proper disposal of all chain link fencing and fence posts and footings as indicated on plan. Includes backfilling holes at removed post / footing locations, and restoration of surface.

Bid Item #9

Topsoil and Sod

Includes surface prep, topsoil, fertilizing and sod installation. Includes warranty and maintenance per specifications.

Bid Item #10

Light Pole and Electrical Removal

Remove existing wooden light poles indicated on plans along with associated lighting and electrical. Remove electrical back to source. Includes backfilling holes at removed pole locations, and restoration of surface.

ALTERNATES

Bid Item #11 (Deduct Alternate #1)

Topsoil, Seed and Mulch in Lieu of Bid Item #9 above

Includes surface prep, topsoil, fertilizing seed installation and mulch. Includes warranty and maintenance per specifications.

Bid Item #12 (Add Alternate #2)

Walk Lighting Poles, Fixtures (6) and Electrical System

Includes installation of conduit, light poles, luminaires and all electrical wiring, connections and controllers.

Bid Item #13 (Add Alternate #3)

Excavation, Grading, and Concrete Slab for Patio

Includes excavation, grading and placement of class V for concrete patio, miscellaneous excavation, hauling and disposal of excess excavation, grading of area to finished grade prior to installing concrete, clean up, and all related work. Measurement for payment will be on a lump sum basis.

Bid Item #14 (Add Alternate #4)

Excavation, Footing for Stoop, Concrete Steps, Ramp, and Railings from Building to Patio

Includes fabrication and installation of metal railing Excavation, sub base compaction, pouring of 4000 psi concrete, form work, fiber mesh and steel reinforcement and accessories, expansion joints, concrete placement and finishing, tooled joints, curing, hauling, grading, seeding, clean up, and all related work. Adjust retaining wall as required to install stair system, including new blocks. Measurement for payment will be on a lump sum basis.

Bid Item #15 (Alternate #5)

Tree & Shrub Planting

Includes excavation, plant material, planting soil backfill, mulch, stakes, guy wires, watering and clean-up of area. Also includes maintenance and warranty per specifications.

SECTION 02100
SITE PREPARATION

PART 1 - GENERAL

1.01 SCOPE:

- A. INCLUDED: Work included in this spec section generally includes all materials, labor, equipment, and incidentals for the completion of work shown on the Drawings, Specification and/or otherwise required herein.
- B. Site preparation includes but is not limited to existing survey, examination of site, marshaling and access, construction layout, clearing, grubbing, topsoil stockpiling, erosion control, dust control, site protection and protection of all site elements remaining.

1.02 RELATED: General Requirements Division One of this Project Manual governs and is hereby made a part of this section.

- A. FINISH GRADING is Spec SECTION 02210.

PART 2 - PRODUCTS

2.01 NOT APPLICABLE - Products do not apply to this Section of the work.

PART 3 - EXECUTION

3.01 EXAMINATION OF THE SITE: The Contractor shall visit, inspect and thoroughly familiarize himself with the site and with the scope of work to be done under his Contract.

3.02 ACCESS: The Contractor shall meet with the Owner's Representative to determine the point of access and areas to be utilized in executing the work. The Contractor shall limit his access to the job site to approved areas.

3.03 PREPARATION: Before commencement of any excavation operations this contractor shall remove from the site organic material, trash and debris, to the extent existing on the construction areas; however, payment request(s) will not be recognized for unauthorized clearing and grubbing in or outside of the construction limits defined on the Drawings.

3.04 CONSTRUCTION LAYOUT:

- A. Contractor shall refer to Construction Documents for all layout work. This includes but is not limited to sidewalks, railings, gates, and site furnishings.
- B. The Contractor shall establish and record all necessary boundary points, lines, elevation, grades and bench marks on site for proper control, coordination with subcontractors and execution of the work. The Contractor or his surveyor shall verify all furnished survey and topographic data and all points, lines and elevations, including elevations at the bases of existing trees which are to remain; the Contractor shall notify the Owner's Representative of any discrepancies between information given on drawings and actual site or field condition and shall not proceed with any affected work until the Owner's Representative issues instructions.

3.05 TOPSOIL: Topsoil is defined as friable loam surface soil found to a depth approximating 4". Satisfactory

topsoil is reasonably free of subsoil, lumps, stones and other objects over 1" in diameter; without weeds, roots, other objectionable material. Landscape Architect to approve the topsoil to be reused.

- A. STRIPPING: Unless otherwise recommended in Soil Report, strip topsoil, if existing, from area(s) to be graded, to whatever depths encountered in manner to prevent intermingling with underlying subsoil or other objectionable material.
- B. STOCKPILING: Stockpile topsoil in storage piles in on-site areas where directed by the Owner's Representative, for use in sod and planting areas. Construct storage piles to freely drain surface water. Prevent / contain erosion from water by covering and erection of silt fencing around stock piles. Cover storage piles if required to prevent windblown dust.

3.06 JOB SITE CONDITIONS:

- A. WORK BY OTHERS: Primary electric, gas and telephone service is normally provided by the local utility companies; however, contractor(s) involved with these particular services shall verify, coordinate and assume responsibility with local Utility Company or Department for provision of proper and adequate temporary and permanent utility service.
- B. PROTECTION:
 - 01. PEOPLE AND PROPERTIES: Contractor(s) shall, in accord with local laws and regulations, adequately protect persons and properties from being damaged by work of this contract. Contractor(s) shall provide proper and sufficient barricades for safety and protection of persons for this work and adjacent properties during and after work hours.
 - 02. TREES AND SHRUBS: Existing trees and shrubs to remain or to be relocated shall be protected from operations related to site construction work.
 - a. Trees to remain are to be protected with approved fencing. Fencing for both deciduous and evergreen trees to include all areas within the drip lines.
 - b. Areas within the drip line of existing or relocated trees shall not have any stockpiling of materials, equipment or machinery. Grading shall not be allowed unless indicated on plans; nor will the passage of equipment such as trucks, compressors or heavy wheel driven machinery be allowed.
 - c. Damage & Repair - Retained trees or shrubs that are damaged or disturbed shall be immediately repaired or replaced if necessary by and at cost to the party responsible for the damage.
- C. DUST CONTROL: Work of this contract includes dust control as required for alleviation or prevention of dust nuisance on or about the site. Contractor(s) shall assume all liability, including court costs of codefendants, for claims related to dust or windblown materials that are attributable to this work.
- D. DRAINING: Contractor(s) shall provide for surface drainage during construction period in manner to avoid creating a nuisance to adjacent areas. Excavations, pits, trenches and sub-grade area(s) shall be kept free of water during entire progress of the work by providing and operating pumps or other equipment necessary to drain. Water shall not be discharged onto adjacent public or private properties without written permission from adjacent property owner(s).
- E. CLEANUP shall be in accord with the General Conditions and Requirements.
 - 01. ROADWAYS: Public or private ways, highways, roads, streets, alleys, drives, parking areas used as access or egress to or from the site shall be kept free from materials falling from trucks or carried to such ways on tires. Cleaning of roadways shall be done promptly and to satisfaction of Owner's Representative and public or private authority having jurisdiction.

END OF SECTION

**SECTION 02150
AGGREGATE BASE**

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Conditions of the Contract and the Provisions of Division 01 apply to all work of this Section.
- B. This Section includes all labor, materials and equipment necessary to furnish place and compact aggregate base for exterior pavement structures where shown on drawings and specified herein.
- C. Related Work Specified Elsewhere:
 - 1. Site Preparation - Section 02100
 - 2. Concrete Flatwork - Section 02520

1.02 SUBMITTALS

- A. TESTS: The following tests shall be made by an independent testing laboratory. The Contractor shall pay for all tests. One set of the following tests shall be performed during construction of the Aggregate Base Course:
 - 1. Gradation..... ASTM C136-76 and C117-76
 - 2. Abrasion..... ASTM C131-76
 - 3. Spall Material..... ASTM C123-69
 - 4. Standard Proctor Density..... ASTM D698

Field density tests shall be made in conformance with ASTM D1556-64. Test compaction of base course at locations not more than 50 feet on center.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Aggregate shall conform to MnDOT specifications for Aggregate Base (or approved equal) using Class 5 aggregate.

PART 3 - EXECUTION

3.01 CONSTRUCTION REQUIREMENTS

- A. Coordinate with work under other Sections to confirm prepared subgrade elevations and conditions prior to placing aggregate base.
- B. Conform with MnDOT specifications to place layers not more than 3" in compacted thickness; Base course under all walks and paving shall be 6" compacted thickness unless otherwise noted on drawings.
- C. Compact the full thickness of each layer of aggregate base to 95% of standard Proctor density. Compaction tests are described in Article 1.02 above.

END OF SECTION

SECTION 02210
FINISH GRADING

PART 1 - GENERAL

- 1.01 INCLUDED: Work of this Spec Section generally includes finish grading for sodded or otherwise planted areas.
- 1.02 RELATED: General and Supplemental Conditions and all of Division One Sections govern and are hereby made a part of all work of this Section.
- A. SITE PREPARATION: Spec SECTION 02100.
 - B. SODDING: Spec SECTION 02934.
 - C. TOPSOIL: Spec SECTION 02910
- 1.03. JOB CONDITIONS:
- A. Examine the site, determine the nature of conditions to be encountered and accept the site as found upon the examination.
 - B. PROTECTION:
 - 01. Carefully maintain and protect all bench marks, corner monuments and other points; if disturbed or destroyed, replace as directed and at the Contractor's expense.
 - 02. Report to the Owner's Representative any underground utilities which may be encountered.
 - 03. Provide for surface drainage during construction.
 - 04. Appropriate protective measures shall be taken to reduce dust, noise and damage.
 - 05. Have all utility lines and appurtenances located by the utility companies prior to beginning work.
 - 06. Coordinate with the Owner's Representative on earthwork sequencing and operations. Give advance notification to other contractors, utility companies and the Owner's Representative when doing work that affects their operations.
 - 07. All existing pavements, utilities, vegetation and structures to remain shall be protected at all times. Any damage caused by the Contractor shall be reported to the Owner's Representative. The damaged item or items shall be repaired or removed at the expense of the Contractor and shall be approved by the Owner's Representative.
 - 08. Maintain clean pavement for all adjacent parking lots, sidewalks and roads during entire project.

PART 2 - PRODUCTS

- 2.01 NOT APPLICABLE: Products do not apply to this Section of the work.

PART 3 - EXECUTION

- 3.01 GRADING:
- A. The Contractor shall do all finish grading on site in all planting areas as indicated on Drawings. Where no elevations are provided on the Drawings, the Contractor shall match the existing grade.
 - B. Excavated and filled sections and adjacent transition areas shall be reasonably smooth, compacted and free from irregular surface changes.
 - C. Obtain Owner's Representative's approval of the subgrade before commencing further improvements.

Tolerances shall not exceed 3/4" above or below desired subgrade elevations in all areas to be graded.

END OF SECTION

SECTION 02315
EXCAVATION AND BACKFILL

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Conditions of the Contract and the Provisions of Division 01 apply to all work of this Section.
- B. This Section shall include furnishing all labor, material and equipment necessary to do all excavating and backfilling for the building, and do any work related to the earthwork construction.
- C. Related Work Specified Elsewhere:
 - 01. Site Preparation - Section 02100
 - 02. Aggregate Base - Section 02150
 - 03. Concrete Flatwork, Paving - Section 02520
 - 04. Subsurface Drainage - Section 02620
 - 05. Topsoil - Section 02910
- D. All trenching and other miscellaneous excavation designated under other sections of these specifications shall be in accordance with this section.
- E. **Unit Prices - Contractor shall state in the appropriate spaces on the Bid Form, Unit Prices for the following items as defined herein:**
 - 01. Rock Excavation - per cubic yard.
 - 02. Granular fill under floor slabs and footings - per cubic yard.
 - 03. Mass Excavation - per cubic yard.
 - 04. Hand Excavation - per cubic yard.

1.02 DEFINITIONS

- A. Rock - Is defined as stone or hard shale in original ledge, boulders 2 cu. yd. in volume or greater, masonry or concrete that cannot be broken and removed by normal job equipment without the use of explosives and drills. This classification does not include materials such as loose rock, concrete or other materials that cannot be removed by means other than drilling and blasting and wedging, but which, for reasons of economy in excavating, the Contractor prefers to remove by drilling or blasting.
- B. Earth - Material to be excavated that can be removed by hand shoveling, power shovel, bulldozer or other normal equipment but not requiring the use of drills shall be defined as earth removal, mass excavation or hand excavation.

1.03 TESTING

- A. Owner shall hire and pay an independent testing laboratory to verify soil conditions and do compaction tests on all backfill materials.
- B. This contractor shall cooperate with testing laboratory in developing a testing schedule.

1.04 UTILITIES

- A. Rules and regulations governing the respective utilities shall be observed in executing all work under

this Section.

- B. Active utilities shown on the drawings shall be adequately protected from damage and removed and relocated only as indicated or specified. Where active utilities are encountered but are not shown on the drawings, the City/Owners Representative shall be advised; the work shall be adequately protected, supported or relocated as directed by the City/Owners Representative; the contract price will be adjusted for such additional work.
- C. This contractor shall contact the local governing utility for assistance in locating utilities.
- D. If you are doing any digging, state law requires you to notify Gopher State One Call of your intent to work, and to contact them at least three working days in advance.

To notify of your intent to dig:

- Call **811** or
- Visit Gopher State One Call (800)-252-1166 or (651)-454-0002
- <http://www.gopherstateonecall.org/submit>

PART 2 - PRODUCTS

2.01 FILL OUTSIDE THE BUILDING

- A. Exterior backfill material shall be excavated material free from concrete, brick, broken masonry, stone, rock, wood, clay lumps, frozen earth, soft and unstable material which does not compact readily by tamping and rolling.
- B. Additional fill required to bring up to design grades shall be furnished under this contract. Fill shall meet the requirements set forth in the above paragraphs.

2.02 FILL AT DRAINTILE

- A. Pea Rock - Shall be a uniform grade of 3/8" diameter rocks.

2.03 COMPACTION CRITERIA

- A. Compaction criteria for this construction shall meet the following based on ASTM D1557:
- | Sub-grade Fills: | Minimum Percent Compaction |
|------------------|----------------------------|
|------------------|----------------------------|

Below Footings	95
Below Slabs-on-Grade	95
Below Pavements	95

Subbase Fills:

Below Footings	95
Below Slabs-on-Grade	95
Below Pavements	95
Aggregate Base Course (MDOT 22A or approved equal)	95
Non-Structural Fills	85

PART 3 - EXECUTION

3.01 EXCAVATION FLATWORK

- A. Provide barricades, fences and protective devices as required for safety around all excavations.
- B. Excavate all material of any nature to the lines and grades required by the drawings. Excavation shall be confined generally to the building lines allowing sufficient space for removal of form work, application of damp-proofing and similar foundation work.
- C. Where concrete slabs are to be placed on grade, all loam organic material or other undesirable soil shall be removed to its full depth. In any case, soil shall be removed to a point at least six inches below the bottom of the slab.
- D. When excavations have reached the required depth, make at least 4 borings, 2 inches in diameter and 3 feet deep where directed. If material disclosed is satisfactory to Owners Representative, the holes shall be filled with concrete. If foundations require greater depth because of latent soil or other unusual conditions, adjustments will be made in the contract. No concrete shall be poured until soil at footing level has been examined and approved by the Owners Representative.
- E. Roll proof the exposed material beneath the building, paved areas and walks using a tractor drawn vibratory compactor. Compaction shall be to 95% of the Modified Proctor Density beneath the building and 95% beneath paved areas and walks.
- F. Protect bottom of excavation against freezing by means of blankets or straw as required. No fill or footings shall be placed over frozen ground and no frozen fill material shall be placed.

3.03 ROCK EXCAVATION

- A. Material to be excavated is assumed to be earth and other materials that can be removed by power shovel, bulldozer or other normal equipment to excavation work, but not requiring the use of explosives or drills. If rock, as herein defined, is encountered within the limits of excavation, the contract price will be adjusted. When the rock is encountered, the Contractor shall immediately notify the Owners Representative and shall not proceed further until instructions are given and measurements made for the purpose of establishing volume of rock excavation.
- B. Before placing concrete or masonry on rock surfaces, the surfaces shall be leveled off or shelved to a slope not exceeding 1" per foot.
- C. Payment for rock excavation, as defined above, shall be at the agreed unit price per cu. yd. Final computations will be made in a vertical plane from the lowest point from which rock is excavated.

3.04 PUMPING

- A. This Contractor shall provide and operate all pumping equipment necessary to maintain dry conditions.

Operate pumps as necessary to keep excavated spaces clear of water during construction.

3.05 FILL OUTSIDE THE BUILDING AREA

- A. Excavated material that is clean granular material free of contaminates, organic matter or other materials specified to be removed in Section 02100 may be used for backfill.
- B. Any excavated material may be used for backfilling and for berms. Compaction to be 95% standard proctor.

3.06 ROUGH GRADING

- A. Rough grading shall be a reasonably smooth surface approximately four inches below final grade. If

sufficient material is not available at the site to raise grades to the contours shown, additional fill material shall be brought in. Fill material shall be sand or clean earth. Grade shall be sloped in such a manner that will insure drainage away from the building at all points.

- B. Grading shall be done to grade stakes placed not less than 50 feet on center each way over the area to be graded. After fill and backfill have settled fill in shallow areas to bring them to the proper grade.

3.07 FINISH GRADING

- A. Surface tolerances, uniformly smooth grading shall be accomplished on all areas, including excavated and fill sections and adjacent transition areas. The finished surface shall be reasonably smooth, compacted and free from all building debris and rubbish. The degree of finish shall be that ordinarily obtainable from blade-grade operations, except as otherwise specified. The finished surface shall be not more than 0.10 foot above or below the established grade or approved cross section. All ditches and gutters shall be finished so as to drain readily. The surface of areas to be top soiled shall be finished so as to drain readily. The surface of areas to be top soiled shall be finished as to a smoothness suitable for the placing of 4" of topsoil.
- B. Protection: Protect newly graded areas from the actions of the elements. Any settlement or washing that occurs prior to acceptance of the work shall be repaired and grades reestablished to the required elevation and slopes. Fill to required subgrade levels any areas where settlement occurs.

3.08 SETTLEMENT

- A. Fill and backfill shall be compacted sufficiently to prevent future settlement or displacement of lawns. Particular emphasis shall be directed to utility trenches or deep excavations. If settlement does occur within the one year guarantee period, contractor shall correct the settlement conditions including replacement of sidewalks and blacktopping at no expense to the Owner.

END OF SECTION

SECTION 02520
CONCRETE FLATWORK, PAVING

PART 1 _ GENERAL

- 1.01 INCLUDED: Work of this Section generally includes provision of on-site concrete curbs, walks, ramps and paved seating and pedestrian plazas.
- 1.02 RELATED: General Requirements Division One of the Project Manual pertains to and is hereby made a part of the work of this Section.
- A. FORMWORK: Spec SECTION 03100.
- B. REINFORCING STEEL: Spec SECTION 03200.
- C. CONCRETE ACCESSORIES: Spec SECTION 03250.
- 1.03 QUALITY ASSURANCE: Materials, items, accessories, manufacturers, proprietary, are listed in Part 2 - PRODUCTS and Part 3 - EXECUTION of this Spec Section.
- A. TESTING AGENCY QUALIFICATION: Field testing, including taking of cylinders and cones, loading or coring if required, shall be by independent testing laboratory engaged by the contractor.
- 1.04 REFERENCES: Comply with requirements of manufacturer, codes, specifications, standards, cited in this Spec Section, except where more stringently shown or specified comply with construction documents.
- A. American Concrete Institute (ACI):
01. ACI 211.1-77 Recommended Practice for Selecting Proportions for Normal and Heavyweight Concrete.
02. ACI 301-84 Specifications for Structural Concrete for Buildings.
03. ACI 302-69 Recommended Practice for Concrete Floor and Slab Construction.
04. ACI 306R-88 Cold Weather Concreting.
05. ACI 318-77 Building Code Requirements for Reinforced Concrete.
06. ACI 305R-89 Hot Weather Concreting.
- B. American Society for Testing and Materials (ASTM):
01. ASTM C31_69 (1980) Making and Curing Concrete Test Specimens in the Field.
02. ASTM C33_81 Spec for Concrete Aggregates.
03. ASTM C150_81 Spec for Portland Cement.
04. ASTM C260_77 Spec for Air-Entraining Admixtures for Concrete.
05. ASTM C309_81 Spec for Liquid Membrane-Forming Compounds for Curing Concrete.
06. ASTM C494_80 Spec for Chemical Admixtures for Concrete.
07. ASTM E329_77 Rec Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction.
- C. U.S.A. Federal Specifications (FS):
01. FS TT-C-800A(2) 23 Jun 77, Curing Compound, Concrete, For New and Existing Surfaces.
- D. ADA Handbook for walks, ramps and curb ramps.
- E. City of Duluth Engineering standards.
- 1.05 SUBMITTALS shall be made in compliance with 1.03.
- 1.06 CONCRETE HANDLING TIME: No more than 90 minutes shall be allowed to elapse between the time the concrete is loaded on the truck to the time that it is placed on site.
- 1.07 JOBSITE CONDITIONS

- A. ENVIRONMENTAL REQUIREMENTS:
01. COLD WEATHER: When outside temperature is below 40°F (5°C) or likely to fall below 40°F during 24-hour period before or after placing, supplier and installer(s) shall employ equipment and means for heating materials and keeping materials from freezing. Frozen materials or materials containing ice shall not be used. Temperatures of separate materials when placed in mixer shall not exceed 140°F. Temperature of concrete when placed shall be above 40°F.
 02. HOT WEATHER: When outside ambient temperature is above 75°F or likely to rise above 75°F supplier and installer shall take precautions to prevent water evaporation and subsequent pre-hardening of mixed materials.
 03. INCLEMENT WEATHER: Protect completed in-place erected work from rain, hail, snow, freezing, blowing acts of nature. Maintain minimum temperature of 40°F around newly placed items for minimum 48-hours by use of supplementary heat, electric blankets or infrared lamps.

PART 2 - PRODUCTS

2.01 MATERIALS & ITEMS:

- A. CONCRETE: Ready-mixed concrete, conforming to ASTM C94. Six sack mix (540 lbs) 4,000 p.s.i. at 28 days, 2" to 4" slump, air-entrained to 6% to 7% with no additional additives and no additional water added on site.
- B. CEMENT: Six sack per cubic yard minimum, conforming to ASTM C150, Type I or II.
- C. FINE AGGREGATE: Sand, natural or manufactured; well graded, clean, hard; conforming to ASTM C33; free from clay, loam, mica, sticks, organic matter, other impurities.
- D. COARSE AGGREGATE: Same as fine aggregate except gravel or crushed stone, well graded 1/4" (6mm) to 1-1/2" (4cm) for caissons and footings; maximum 3/4" (2cm) for slabs, walls, other structural elements.
- E. WATER: Fresh, clear, clean, free from oil, acid, chemicals, animal or vegetable matter, alkalies or other material(s) or impurities harmful to cement; potable, suitable for domestic consumption. If heated, 100°F (38°C) maximum. No water added to concrete on site.
- F. PLASTICIZER: Master Builders POZZOLITH, Protex PDA, Sika PLASTIMENT, conforming to ASTM C494, retarded or normal formula as required by weather conditions and desired workability.
- G. AIR-ENTRAINMENT: Protex, Master Builders, Sika, Gifford-Hill AEA, in foundations and exterior flatwork only, conforming to ASTM C260, controlled at 6% plus/minus 1% at installation.
- H. ACCELERATORS: Calcium chloride or any other salt, salt-like or chloride-like admixture shall not be used in cast-in-place concrete work.
- I. HARDENER-SEALER: Over exterior flatwork, and slabs-on-grade provide National Expansion Joint Co. TECHKOTE 1020, Symons CURE & SEAL, L&M DRESS & SEAL #18, one-coat clear concentrate conforming to ASTM C309 and FS TT-C-800; may also be used as curing agent for exterior concrete other than flatwork.
- J. SLEEVES: Sleeves under paved areas shall be PVC Schedule 40 unless specified otherwise sized and located as shown on Drawings.
- K. FIBROUS REINFORCING: "Fibermix" by Fibermesh Company of Chattanooga, TN, or pre-approved substitute.
 01. Physical characteristics:
 - Specific Gravity: 0.91
 - Tensile Strength: 70 to 100 ksi
 - Fiber Lengths: 1/2 inch, 3/4 inch

PART 3 - EXECUTION

3.01 SCHEDULE OF CONCRETE MIXES:

- A. Exterior Concrete Flatwork
 - 01. Compressive strength at 28 days 4,000 psi
 - 02. Minimum Cement 6 sacks
 - 03. Maximum aggregate size 3/4 inches
 - 04. Air Entrainment 5 to 7 percent
 - 05. Maximum Water Cement Ratio 0.50
 - 06. Fibrous Reinforcement 1.5 lb/cy

3.02 CONTROL & CONSTRUCTION JOINTS not shown or noted will be located and formed in accord with ACI 318, Spec SECTION 03250, this spec section and the drawings.

3.03 INSTALLATION:

- A. DISTRIBUTION: Distribute concrete evenly in the forms to produce a homogeneous composition free of air pockets, honeycombs, pouring joints and other imperfections. Use mechanical vibrators operated by experienced personnel in walls only. Do not over-vibrate or drag vibrator to cause segregation of material. Place concrete in maximum 24" lifts; no drop greater than 36".
- B. CURING: Cure on-site cast concrete finish work. Curing compound, if used, should be clear concentrate material.
- C. PATCHING: Immediately after removing forms grout flush with Portland cement grout, 1 part cement to 4 parts sand, minor honeycombing in exposed to view walls and paving. Major honeycombing in exposed areas shall be cause for removal of section to nearest construction joint. In unexposed areas, honeycombing shall be removed to solid concrete and patched to insure structural requirements.
- D. FINISHING: All surfaces of exposed concrete are to be finished to be approved by Owner's Representative. Do not use dry cement or mixture of dry cement and sand on any setting concrete surfaces to absorb moisture or stiffen mix. Do not trowel if free water is present. Do not add water to concrete on site. Do not overwork/over-trowel concrete so as to weaken surface layer and allow spalling after concrete has cured.
- E. WALKS: Minimum 4" thick with fibrous reinforcing (except where otherwise noted on the Drawings), with expansion joints at intervals of approximately 25 ft. and tooled control joints at intervals as shown on the plans. (space joints equally in run). Tool edges to rounded profile and finish as noted herein or shown on the Drawings. Pitch walks 1/4" per ft. for drainage unless otherwise indicated.
- F. RAMPS: Construct ramps similar to walks. Maximum allowable slope not to exceed 1 ft. vertical in 12 ft. horizontal, with maximum rise not to exceed 30" between level landings. Provide an 8" thickened edge along both sides of ramp as shown on the drawings for anchoring of metal hand railings.
- G. CURBS: Construct to profiles indicated as shown in Drawings. Provide expansion joints at 30 ft. o.c. maximum.
- H. JOINTS:
 - 01. Expansion Joints: Construct expansion joints at spacing indicated or specified herein, at joints between concrete curbs and sidewalks, and joints between walls or paving and manholes or fixed structures. Form joints with 1/2" thick x full depth compressible filler material; form upper 1/2" of joints with removable plastic "void strip" where joints are to be sealed.
 - 02. Sidewalk Joints: Divide sidewalk into sections by installing tooled dummy joints at intervals indicated on the Drawings. Joint dimensions shall be approximately 1/8" wide x

- 1/3 the concrete depth.
03. Provide bond break between concrete walk and building surfaces.

3.04 FINISHING, PROTECTION AND CURING

- A. FINISHES: Unless otherwise indicated or noted on the Drawings, provide the following finishes on concrete flatwork and paving:
- 01. Walks: Medium broom, non-slip finish, with uniform striations perpendicular to long dimension of walk or ramp.
 - 02. Paving: medium broom, non-skid finish, with striations in opposite directions in alternate panels defined by expansion or control joints.
 - 03. Curbs: Medium broom or brush finish, perpendicular to long dimension.
 - 04. Ramps: Heavy broom non-slip finish,
 - 05. Steps: Heavy broom non-slip finish, perpendicular to long dimension.
 - 06. Edges: Edge all outside edges of concrete sidewalks, paving and other flatwork with a 1/5" radius edging tool.
- B. PROTECTION:
- 01. Provide barricades or other suitable barriers to prevent pedestrian or vehicular traffic until concrete has sufficiently hardened.
 - 02. Remove and replace flatwork and other concrete work defaced by vandals, at no additional cost to the Owner.
- C. CURING: Comply with applicable provisions of Section 03300.

3.05 CLEANUP shall be accomplished in accord with paragraph 1.32 of Spec SECTION 02100.

- A. ROADWAYS & SITE - Concrete contractor(s) shall keep the site and public and private ways (streets and roads) used as access or egress from the site free from materials falling from concrete trucks or other vehicles associated with the work and carried to such ways on wheels, tires, cleats, etc. Cleaning of site and roadways shall be done promptly and to satisfaction of Owner's Representative and public or private authority having jurisdiction.

END OF SECTION

02620
SUBSURFACE DRAINAGE

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Conditions of the Contract and the Provisions of Division 01 apply to all work of this Section.
- B. This section includes all labor, material, equipment and services necessary to furnish and install all drain pipe, as indicated in accordance with the drawings and the specifications, for a complete installation.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Gravel, pearock, and fill material, See Section 02315 Excavation & Backfilling.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Draintile - 4" diameter corrugated polyethylene, perforated tubing with integral polypropylene protective fabric wrap, conforming to ASTM F405, as manufactured by Advanced Drainage System Inc., ADS-Green Stripe Drain Guard 4" No. 472 or equal.
- B. Draintile Accessories - Provide all couplings, elbows and tees required to install new draintile to existing draintile shown on drawings. Accessories shall be from same manufacturer as draintile.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install draintile according to manufacturer's instructions. Connect draintile to existing draintile as shown on drawings. Provide an evenly sloping grade from existing draintile high point to low point and make a secure connection with existing.
- B. Provide a 2" minimum bed of gravel below draintile at the necessary elevations.

END OF SECTION

SECTION 02910
TOPSOIL

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Conditions of the Contract and the Provision of Division 01 apply to all work of this Section.
- B. This Section includes all labor, material and equipment necessary for furnishing and placing topsoil borrow within areas to receive plantings.
- C. Related Work Specified Elsewhere:
 - 1. SITE PERPARATION -- 02100
 - 2. PLANTING: Spec SECTION 02900

1.02 SUBMITTALS

Submit 1/8 cubic foot sample of topsoil to be used for Owners Representative approval prior to placing any topsoil.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Select Topsoil Borrow - conform with MnDOT (or approved equal) requirements for Select Topsoil Borrow to be used as a growing medium. Coordinate furnishing and placing with other operations.
- C. Coordinate furnishing and placing with other operations.
 - 01. CONTRACTOR shall provide following information:
 - a. TEST RESULTS showing mixture of composition and analysis.
 - b. LOADING TICKETS showing amounts of topsoil delivered to the site.
 - c. TESTS shall be by qualified soils laboratory, in accord with accepted soils amendments testing procedures, and shall be at Contractor expense.

1.1 TOPSOIL

- A. ASTM D5268, natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity that produces heavy growth. Topsoil shall have a pH range of 5.5 to 7.4 percent, free from subsoil, objectionable weeds, litter, sods, stiff clay, stones larger than 1-inch in diameter, stumps, roots, trash, herbicides, toxic substances, or any other material which may be harmful to plant growth or hinder planting operations. Top soil shall contain fifteen (10) percent, organic material (+/- 2%).
- B. Imported Topsoil:
 - 1. Obtain topsoil displaced from naturally well-drained sites where topsoil occurs at least 6 inches deep; do not obtain from agricultural land, bogs, or marshes.
 - 2. Verify borrow and disposal sites are permitted as required by state and local regulations. Obtain written confirmation that permits are current and active.
- C. Amend existing and imported topsoil as indicated in part 3 below.

1.2 ORGANIC SOIL AMENDMENTS

- A. *Garden Green* Compost available through the Western Lakes Sanitary Sewer District or approved equivalent.

- B. Compost: Decomposed organic material including leaf litter, manure, sawdust, plant trimmings and/or hay, mixed with soil.

PART 3 - EXECUTION

3.01 EXAMINATION OF SURFACES

- A. Before starting any work under this section this contractor shall examine the areas that are to receive his materials and report any deficiencies to the Owners Representative in writing. Examination shall look for any irregular or settled subgrade surfaces, soft spots or settlements causing unsatisfactory surface drainage. Such deficient areas shall be corrected by the General Contractor before any work begins. Starting of any work by this contractor shall imply his acceptance of the surfaces as suitable to receive his materials.

3.02 INSTALLATION

- A. Conform with
 - 01. Coordinate furnishing and placing with other operations.
 - 02. Upon completion of rough grading, soil surface shall be loosened by rototilling to minimum depth of 6" (**not under trees**), and materials over 1" in diameter shall be removed.

END OF SECTION

SECTION 02920
SOIL PREPARATION

PART 1 - GENERAL

- 1.01 INCLUDED - Work of this Spec Section generally includes provisions for soil preparations on areas to be sodded, or otherwise planted as part of earthwork operations.
- 1.02 RELATED - General and Supplemental Conditions and all of Division One Sections govern and are hereby made a part of the work of this Section.
- A. FINISH GRADING: Spec SECTION 02210
 - B. TOPSOIL: Spec SECTION 02910
 - C. SODDING: Spec SECTION 02934.
- 1.03 DELIVERY/STORAGE/HANDLING - Deliver, unload, store, and handle materials and products in dry, weatherproof, waterproof condition in manner to prevent damage, breakage, deterioration, intrusion, ignition, or vandalism. Deliver materials and products in original unopened packaging containers prominently displaying manufacturer name, proprietary, volume, quantity, contents, instructions, conformance to local, state, and federal law. Remove and replace, at the Contractor's cost: cracked, broken, spoiled, or contaminated items; and corrosive elements prematurely exposed to moisture, inclement weather, snow, ice, temperature extremes, fire or jobsite damage.
- A. SOIL AMENDMENT shall be delivered to site in bulk, measured on volume basis.
 - B. DELIVERY & INSPECTION - Notify Owner's Representative of delivery schedule in advance so material may be inspected upon arrival at jobsite. Unaccepted material shall be removed immediately from jobsite.
- 1.04 SUBMITTALS:
- A. A sample of the proposed soil amendment shall be submitted to the Owner's Representative for approval.
 - B. Soil test results

PART 2 - PRODUCTS

- 2.01 SOIL AMENDMENTS:
- A. CHEMICAL FERTILIZER – Fertilizer shall be in slow-release granular form.
 - 01. Contractor shall apply fertilizer in strict conformance with manufacturer's instructions.
 - 02. Add fertilizer to topsoil and planting areas at a rate as recommended by the results of the required soil tests.
 - 03. Mix into topsoil or planting soil as instructed.
 - 04. Any fertilizer falling on paved areas shall be promptly cleaned up.
 - 05. Contractor shall clean up any spills immediately.

PART 3 - EXECUTION

- 3.01 PREPARATION & TILLING OF BLUEGRASS SOD AREAS - Upon completion of rough grading, soil surface shall be loosened by rototilling to minimum depth of 6", and materials over 1" in diameter shall be removed. Spread 4" topsoil evenly over sod area and mix thoroughly into soil surface to minimum depth of 6" by means of rototiller or soil mixer (rippers, discs, chisel plows, are not acceptable). After completion of soil loosening and mixing, spread chemical fertilizers evenly over surface at rate recommended by the soil test results and lightly mixed into soil surface. Surface shall then be finish graded to appropriate elevations and compaction. (Refer to SECTION 02930 for soil preparation in tree and shrub plantings.)

END OF SECTION

SECTION 02934
TURF AREAS

PART 1 - GENERAL

- 1.01 INCLUDED - Work of this Spec Section generally includes provision for bluegrass sod in all areas disturbed by construction.
- 1.02 RELATED - General and Supplemental Conditions and all of Division One Sections govern and are hereby made a part of all work of this Section.
- A. FINISH GRADING: SECTION 02210.
 - B. SOIL PREPARATION: SECTION 02920.
 - C. TOPSOIL: SECTION 02910
- 1.03 QUALITY ASSURANCE - Materials, items, accessories, manufacturers, processes, proprietary, are listed in Part 2 - PRODUCTS (and Part 3 - EXECUTION) of this Spec Section.
- A. QUALITY OF MATERIALS - Sod materials shall be subject to inspection and approval. Owner's Representative reserves the right to reject at any time or place prior to final acceptance, work and sod which in the Owner's Representative's opinion fails to meet these Specifications. Inspection is primarily for quality; however, other requirements are not waived even though visual inspection results in approval. Sod may be inspected where growing, but inspection at the place of growth shall not preclude right of rejection at site. Rejected sod shall be promptly removed from site. Inspection shall be made periodically during laying of sod, at completion and at end of guarantee periods by Owner's Representative.
- 1.04 REFERENCES - Comply with requirements of manufacturer, codes, specifications, and standards cited in this Spec Section, except where more stringently shown or specified, comply with the construction documents.
- A. STANDARDS - U.S. Department of Agriculture Rules and Regulations under Federal Seed Act and equal quality to standards for Certified Seed.
 - B. Cut sod using an approved method, in accordance with local governing American Sod Producers Association.
- 1.05 SUBMITTALS:
- A. CERTIFICATES OF INSPECTION FOR MATERIALS - State, Federal, or other inspection certificates shall accompany invoice for materials showing source or origin. File with Owner's Representative prior to acceptance of material.
 - B. MAINTENANCE INSTRUCTIONS - At completion of work, furnish three copies of written maintenance instructions to Owner's Representative for maintenance and care of installed sod through its full growing season. Maintenance will be responsibility of Sodding Contractor until final acceptance of project. Owner will be responsible for maintenance after that date.
- 1.06 PRODUCT DELIVERY/STORAGE/HANDLING:
- A. Deliver sod properly loaded on vehicles and protected from exposure to sun, wind, heating, in accord with standard practice and labeled in accord with Federal Seed Act.
 - B. CHEMICAL FERTILIZER - Deliver chemical fertilizer to site in original unopened container bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark and conformance to State Law, bearing name and warranty of producer.
 - C. SOD ROLLS shall not be dropped from loading carts, trucks or sod pallets. Sod damaged in transit or storage will not be accepted. Notify Owner's Representative of delivery schedule in

advance so material may be inspected upon arrival at jobsite. Unacceptable material shall be removed immediately from jobsite.

- 1.07 JOB CONDITIONS - Sodding Contractor shall be responsible for proper repair of lawn watering system, other underground pipe or electric wiring damaged by operations under this Section. Repairs will be made by contractors designated by the Owner's Representative with cost being charged to contractor responsible for damages.
- A. DAMAGED AREAS shall be repaired to re-establish grade and condition prior to sodding.
 - B. SOD DESTRUCTION - Responsibility for vandalized sod will be determined per PLANT MAINTENANCE AND ACCEPTANCE, PART 3, Section 02930. Sodding Contractor shall install barriers for proper protection and traffic control.
- 1.08 GUARANTEE -Sod shall be guaranteed for one growing season to be in a healthy, vigorous growing condition. During guarantee period, sod areas that die due to natural causes, or that are in Owner's Representative's opinion, unhealthy, shall be replaced at once, and at expense of the Sodding Contractor. Such replacements shall be installed as originally specified and guaranteed.

PART 2 - PRODUCTS

2.01 SOD / FERTILIZER / SEED :

- A. SOD shall be Minnesota- grown 100% Kentucky bluegrass sod comprised of at least three improved varieties, or approved substitute.
 - 01. SOD SHALL HAVE VIGOROUS ROOT SYSTEM, been regularly fertilized, watered, mowed, free of weeds and objectionable grasses, and provide a thick turf. Note supply source and mixture on Bid form. Each piece of sod will have a sandy-loam soil base that will not break, crumble or tear during sod installation. Sod shall be cut in strips 18" (50cm) wide (minimum), with a soil base not less than 5/8" (1.75cm), nor more than 3/4" (2cm) thick. Sod shall be cut no more than 24 hours prior to delivery, kept damp on pallets at the site, and laid in place within 24 hours of delivery.
- B. CHEMICAL FERTILIZER
 - 01. One initial application to topsoils. Materials shall be ureaform or nitroform fertilizer delivered in original unopened containers with the analysis, type and trade name attached to each container. Analysis shall be: nitrogen 10%, phosphorus 10% and potash 10%. Rate of fertilizer application shall be 10 lbs. per 1,000 sq. ft.
- C. LAWN SEED
 - 01. Conform with MnDOT Seeding Manual, most current edition, for turf establishment. Lawn seed mix shall be MnDOT 25-151. Requirements and conditions for maintenance includes all maintenance and establishment measures necessary to fully establish turf materials controlling erosion and anchoring soils. Reseed and mulch areas at no extra costs to the Owner where seed areas fail to become established or where erosion loss occurs. Maintain until established.
 - 02.. Seeds shall be of high quality and vitality and shall conform to the MnDOT requirements regarding noxious weed content. Deliver seed in original sealed packages which bear guaranteed analysis by recognized authority. Various seed ingredients shall be thoroughly mixed before sowing. Seed shall be pre-mixed. Commercial seed mixtures having small deviations to above mix will be accepted. Submit samples and data showing mix and germination for approval.

03. Conform with MnDOT Specifications for seed materials, furnishing mixture and blend of grass seed similar to materials options listed for sod, under this section. Rate of seed application shall be 5 lbs. per 1,000 sq. ft.
04. Mulch shall be type 1 (grain straw, hay, cuttings) per MnDOT Section 3882 and applied and anchored as described under MnDOT Section 2575, Turf Establishment for uniform placement. Rate may be reduced to below 2 tons per acre on election of the contractor and approved by the Landscape Architect.

PART 3 - EXECUTION

3.01 PREPARATION:

- A. LAYOUT of sodded areas is indicated on landscape drawing(s). Sodding Contractor shall verify locations on-site prior to starting operation.
- B. PREPARATION - Sodded areas shall be prepared per Spec SECTION 02920 and shall be free of debris, and/or rocks larger than 1" which may hinder tilling, sodding, finish grading or subsequent operations. Accumulated debris shall be disposed of at direction of the Owner's Representative. Sodding Contractor shall perform finish grading required by drawings, to maintain drainage into catch basins, drainage structures, etc., and to provide a smooth, well-contoured surface prior to proceeding.
 01. FINISH GRADES - It shall be Sodding Contractor's responsibility to assure finished grades of sod are such that drainage of storm and irrigation waters will occur and ponding of water will be prevented. Refer to Spec SUBSECTION 02210.
 02. BASE PREPARATION - Soil shall be prepared in accordance with Spec SECTION 02920 (Soil Preparation). No sod will be laid until Owner's Representative has examined and approved base preparations.
- C. TILLAGE - Sodded areas shall be thoroughly tilled to an average depth of 6" until soil is sufficiently pulverized per Spec SECTION 02920. Work shall not be performed when conditions will not provide satisfactory results.
- D. FERTILIZING - Distribute chemical fertilizer uniformly at rate recommended by the results of the soil tests and in conformance with manufacturer's instructions. Incorporate uniformly to a minimum depth of 2 to 4 inches. Coordinate with other operations to avoid compaction and grade disturbance.

- 3.03 SODDING - Soil on which sod is laid shall be lightly moist, sod ends and sides shall be butted tightly together, laid with longest dimensions parallel to contours and continuous rows. Vertical joints between sod strips shall be staggered, and the sod shall be compacted by rolling, so it will be incorporated with ground surface insuring tight joints between adjacent pieces. All rows terminating on designated property lines will be cut equal to a straight line. Topsoil shall be added along exposed edges to match adjacent grade. Feather topsoil out approximately 1' from edge of sod. Sod shall be laid flush with adjacent walks, curbs, etc.
 - A. Secure sod on slopes of 3:1 or more with wood pegs as required to prevent slippage.
 - B. Sod laid adjacent to existing bluegrass turf shall be installed so there is no noticeable transition.

- 3.04 WATERING - Sod shall be initially watered upon completion of convenient work areas until installation is complete and irrigation system can be operated under full control. The Contractor shall work with the Owner to coordinate the operation of the irrigation system to assure water is available to sodded areas in the amounts required. If permanent irrigation is not available through fault of the Contractor, the Contractor shall provide temporary irrigation as necessary and at no additional cost to the Owner. Water sod sufficiently to moisten subsoil at least 4" deep, in a manner not to cause erosion or damage to adjacent finished surfaces. Any damage or erosion to adjacent areas as a result of watering of sodded areas shall be the sole responsibility of the Contractor with no additional cost to the Owner.
- 3.05 MAINTENANCE & ACCEPTANCE - Maintenance period shall begin immediately after each area is sodded, and continue until final acceptance of all project work. During this time Sodding Contractor shall be responsible for watering, mowing, spraying, weeding and related work as necessary to insure that sodded areas are in vigorous growing condition until final acceptance. Owner's Representative will direct Sodding Contractor on what sod areas need to be replaced during this period.
- 3.06 CLEAN-UP - Pallets, unused sod, and other debris shall be removed from site, and paved areas over which operations have been conducted shall be cleaned. Paved areas are to be broomed and washed with water.

END OF SECTION

03200

CONCRETE REINFORCEMENT

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Conditions of the Contract and the Provisions of Division 01 apply to all work of this Section.
- B. This Section includes all labor, material, equipment and services necessary to furnish and install all reinforcing steel and accessories as specified herein or shown on the drawings. All work shall be done in accordance with the latest A.C.I. Code unless otherwise detailed.
- C. Related Work Specified Elsewhere:
 - 01. Concrete Flatwork, Paving - Section 02520
 - 02. Cast-In-Place Concrete - Section 03300

1.02 REFERENCE STANDARDS

- A. ASTM A615 - Reinforcing Bars
- B. ASTM A185 - Welded Wire Fabric
- C. ACI 315 – Details and Detailing of Concrete Reinforcement
- D. ACI 318 - Building Code Requirements For Structural Concrete
- E. ACI 301 – Standard Specifications for Structural Concrete
- F. CRSI – Manual of Standard Practice

1.03 SUBMITTALS

- A. Submit shop drawings to the Owners Representative for approval in accordance with the requirements of Division 01. No material shall be fabricated until such drawings have been approved.
- B. List and mark bars, showing sizes, lengths, location, bending numbers and ASTM designation.
- C. Show location, type and quantities of bolsters, spacers, chairs support bars and bar dowels.

1.04 TESTS

- A. Any concrete reinforcing field welded on the site shall be inspected by the City. Contractor shall pay for special inspections of welded reinforcing.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Reinforcing steel shall be shop fabricated to conform to the approved shop drawings. All bars shall be free from mill scale, excessive rust or other coating which would reduce or destroy the bond with the concrete.
- B. After fabrication, all bars shall be bundled before delivery to the job. Each bundle shall be identified by attaching metal tags bearing the bars marks.
- C. Reinforcing steel, after delivery to the job, shall be stored clear of the ground and protected from damage and rusting.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All reinforcing steel shall be from domestic mills. No foreign or imported steel will be permitted. All materials shall bear manufacturers standard rolled-on identification grade markings.
- B. Reinforcing bars shall be deformed bars conforming to ASTM A-615, Grade 60 for straight bars and Grade 60 for bent bars, with identification marks rolled in the bars. Furnish all tiles, spacers, chairs,

- bolsters and similar accessories required for assembling, placing and supporting the reinforcing. Reinforcing shall be clean and free from loose rust, scale and other coatings that will reduce bond.
- C. Reinforcing mesh shall be welded wire fabric conforming to ASTM-A- 185. Mesh not otherwise indicated shall be fabricated from 10-gauge wire spaced 6" each way (6/6 x 10/10).

2.02 DETAILING

- A. Reinforcing steel shall be detailed in accordance with the above-mentioned ACI "Building Code" and CRSI "Manual of Standard Practice", unless specifically shown otherwise. The number, type and spacing of supports and other accessories shall be as recommended in the CRSI "Manual of Standard Practices".

2.03 FABRICATION

- A. Shop fabricate reinforcing bars to conform to required shapes and dimension, with fabrication tolerances complying with ACI 315. In case of fabricating errors, do not rebend or straighten reinforcement in a manner that will injure or weaken the material.
- B. Bend all bars cold.
- C. Do not use bars with kinks or bends not shown on the drawings or on the approved shop drawings.
- D. Do not bend or straighten steel in a manner that will injure the material.

PART 3 - EXECUTION

3.01 PLACING REINFORCING STEEL

- A. All reinforcing steel shall be placed strictly in accordance with the approved shop drawings. Accessories shall be furnished in sufficient quantity for proper location of all reinforcement in position shown on the drawings. Accessories shall be sufficient to hold bars securely in position in spite of construction traffic and to insure against displacement during placement of concrete.
- B. Reinforcing bars shall be protected by the thickness of concrete indicated on the drawings. Where not otherwise shown, this thickness shall be as follows:
- Footings, Bottom..... 3"
- Walls..... 1-1/2"
- Slabs, Self-supporting..... 3/4"
- C. Welded wire mesh reinforcing shall be placed at mid-height of concrete slabs.
- D. Reinforcing steel shall be inspected in the forms and approved by the City before the concrete is poured.
- E. Splicing:
01. Splicing of bars, bar spacings and concrete cover should conform to "Building Code Requirements for Structural Concrete (ACI 318)", published by the American Concrete Institute of recommended practices in "Splicing Reinforcing Bars" by the CRSI.
02. Use "L" dowels to carry all horizontal reinforcing in walls and footings around corners. Diameter of dowels to be equal to the diameter of the reinforcing bars being extended.
03. Splices in bond beam reinforcing shall be 2'-6" minimum.
04. Splices shall be Class "B" lap splices minimum unless indicated otherwise.
05. Splicing by welding of reinforcing bars shall not be permitted.
06. Splicing with dowel bar substitution and splicing system shall be performed in strict accordance with the manufacturer's instructions.
- F. Obstructions - In the event conduits, piping, inserts, sleeves or any other items interfere with placing reinforcement and indicated on the drawings, or as otherwise required, immediately consult the Owners Representative and obtain approval of new procedure before placing concrete.

3.02 INSPECTION OF STEEL IN PLACE

- A. The City will inspect the reinforcing steel in place prior to the pouring of the concrete for each section. Contractor shall also contact the Building Official for any inspections required.
- B. Do not pour concrete until approval has been obtained from the City. Notify the City sufficiently in advance of the scheduled time for pouring of the concrete to allow the inspection to be made and corrections completed, where required. Correction shall be made by the Contractor at his expense.
- C. Exposed reinforcing steel, indicating the bars are not properly located, after the concrete has been placed will be sufficient cause for the rejection, removal and replacement of the concrete section.

END OF SECTION

03300

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The conditions of the contract and the provisions of Division 01 apply to all work of this section.
- B. This section includes all labor, materials, equipment and services necessary to mix, place and cure all concrete in accordance with the drawings, schedules and this specification.
- C. Build into concrete the following materials as required, which may be supplied under other sections of this Specification:
 - 01. Reinforcing steel.
 - 02. Sleeves and thimbles for pipes and conduit.
 - 03. Inserts, hangers and anchors for work of all trades.
 - 04. Items of structural, miscellaneous iron or ornamental metals which occur in concrete.
- D. Related work specified elsewhere:
 - 01. Concrete Flatwork, Paving - Section 02520
 - 02. Concrete Form Work - Section 03100
 - 03. Concrete Reinforcement - Section 03200

1.02 REFERENCE STANDARDS

- A. The current issue of the following specifications, test methods and recommended practices shall govern except where superseded by particular requirements of this specification.
 - 01. Specifications for Ready-Mixed Concrete, ASTM C-94.
 - 02. Specifications for Portland Cement, ASTM C-150.
 - 03. Specifications for Concrete Aggregates, ASTM C-33.
 - 04. Method of Test for Slump of Portland Cement Concrete, ASTM C-143.
 - 05. Method of Sampling Fresh Concrete, ASTM C-172.
 - 06. Method of Making and Curing Concrete Compression and Flexure Test, ASTM C-31.
 - 07. Method of Test for Compressive Strength of Molded Concrete Cylinders, ASTM C-39.
 - 08. Specification for Air-Entraining Admixtures for Concrete, ASTM C-260.

1.03 TESTS

- A. LABORATORY- All tests shall be by a recognized testing laboratory approved by the City/Owners Representative.
- B. Owner shall pay for all tests performed on concrete and concrete materials.
- C. Provide the following tests:
 - 01. Slump as per ASTM C-143, One for each pour.
 - 02. Compression as per ASTM C-39, 3 cylinders for each pour.
- D. The contractor shall secure samples and shall provide safe storage for them pending their removal to the testing laboratory. The contractor shall provide shipping containers as required for transporting cylinders to the testing laboratory.
- E. To conform to the requirements of this specification, every twenty-eight (28) day test representing each mix must be equal to or greater than the specified minimum strength without exception. If a specimen shows manifest evidence of improper sampling, molding or testing, it will be disregarded. Note, however, that the anticipated strength for all mixes is appreciably above the specified minimum strength, due to quality required by the minimum cement content specified.
- F. Slump tests shall be made from the same batch from which strength tests are made. The contractor shall provide a standard slump cone for this testing. If the measured slump falls outside the limits specified, a check test will be made immediately on another portion of the same sample. In the event

- of a second failure, the concrete will be considered to have failed to comply with the specification.
- G. Air content tests shall be made from the same batch from which strength tests are made. If the measured air content falls outside the limits specified, a check test will be made immediately on another portion of the same sample. in the event of a second failure, the concrete will be considered to have failed to comply with the specification.
 - H. City/Owners Representative may require additional testing of concrete, including cement content or chloride presence. Tests which comply with the specification shall be paid for by the Owner. Tests which fail to comply with the specifications will be paid for by the contractor.
 - I. Two (2) copies of test results shall be forwarded directly from the testing laboratory to the City/Owners Representative.

1.04 SUBMITTALS

- A. Submit concrete mix designs to the City/Owners Representative for approval in accordance with the requirements of Division 01.
- B. Mix design shall state proportions of all materials used in the concrete mixture; source and gradation of aggregate; manufacturer of cement and manufacturer of all admixtures to be used.

1.05 QUALITY ASSURANCE

- A. The current issue of the following American Concrete Institute (ACI) requirements and recommended practices shall govern except where supersede by particular requirements of this specification:
 - 01. Building Code Requirements for Structural Concrete ACI-318.
 - 02. Standard Practice for Selecting Proportions for Concrete, ACI-211.
 - 03. Standard Specifications for Cold Weather Concreting, ACI-306.1.
 - 04. Standard Specifications for Structural Concrete for Buildings, ACI-301.

1.06 DELIVERY STORAGE AND HANDLING

- A. Cement shall be stored in a weatherproof building on pallets approximately 6" above the floor.
- B. Aggregates fine, medium and coarse shall be stored separately and in such a manner as to prevent segregation of size and to avoid the inclusion of dirt and other foreign materials.

PART 2 - PRODUCTS

2.01 CONCRETE MATERIALS

- A. AGGREGATES: Conform to ASTM C-33.
 - 01. Course Aggregate Material: Strong, clean crushed granite or limestone gravel, are subject to approval as to use, other inert material having similar characteristics, free from adherent coatings and injurious amount of friable or fragile pieces, flake organic matter, or other deleterious substances, all meeting the following gradation requirements:
 - a. Footings 1-1/2"
 - b. Slabs on grade, structural slabs, foundations, columns and beams 3/4"
 - c. Bond Beams, concrete topping 3/8"
 - 02. Fine Aggregate Material: Clean, strong, natural are subject to approval and authorization as to use, other inert material suitable for the work to be done, having characteristics similar to natural sand, free of frozen materials, all meeting the following grading limits:
 - a. Passing No. 4 Sieve 95% to 100%
 - b. Passing No. 14 Sieve 45% to 80%
 - c. Passing No. 50 Sieve 10% to 30%
 - d. Passing No. 100 Sieve 2% to 10%

- B. CEMENT - Conforming to ASTM C-150, Type I.
- C. WATER - Clean, free from oil, acids and injurious amounts of vegetable matter, alkalis or other salt, and of drinkable quality.
- D. No admixtures shall be used except with specific written approval of the City/Owners Representative. CALCIUM CHLORIDE OR MATERIALS CONTAINING CHLORIDES OR NITRATES WILL **NOT** BE PERMITTED IN ANY CASE AND WILL NOT BE KNOWINGLY APPROVED. USE OF SUCH MATERIALS, WITH OR WITHOUT APPROVAL, WILL ALLOW THE CITY/OWNERS REPRESENTATIVE TO REQUIRE REMOVAL AND REPLACEMENT OF ALL CONCRETE CONTAINING OR TREATED WITH, SAME.
- E. Colored concrete banding shall be a surface-applied concrete coloring system.
 - a. Manufacturer of coloring system shall be Bomanite Corporation, P.O. Box 599, Madera, CA 93639-0599 (559) 673-2411 or approved equal.
 - b. Coloring is to be applied in strict accordance with manufacture's specification
 - c. Color to be selected by City/Owners Representative

2.02 CONCRETE ADDITIVES

- A. Air Entrainment Agent: Conform to ASTM C260 to produce air entrainment of 5% to 7%. Air entrainment admixture shall be used in strict accordance with the manufacturer's recommendations and shall be one of the following or approved equal:
 - 01. W.R. Grace - Darex AEA
 - 02. Protex Industries - Pro-Air
 - 03. W.R. Meadows - Sealtight Air Entrainment Agent
 - 04. Sika - Sika AER
 - 05. Euclid - Air Mix

2.03 CONCRETE JOINT MATERIALS

- A. BOND BREAKER: at juncture concrete slabs and adjacent footings shall be 15 lb. felt with adhesive on one side.
- B. CONTROL JOINT FORMER: shall be a one piece plastic insert with removable top cap. Joint former shall be sized to 1/3 the depth of the slab. Joint former shall be as follows or approved equal:
 - 01. Greenstreak Plastic Products - Zipcap
 - 02. Progress Unlimited - Crack Inducer
 - 03. DeMay - Zipstrip
- C. Expansion Joint Filler: shall be an asphalt, vegetable fibers and mineral filler joint formed under heat and pressure between two asphalt felt liners conforming to ASTM D994. It shall be resistant to oil, solvents, ozone and weathering. Joint Filler shall be as manufactured by one of the following or approved equal:
 - 01. W.R. Meadows, Inc. - Sealtight Asphalt Expansion Joint Filler

2.04 CONCRETE MIXES

- A. All concrete used throughout this construction shall be ready-mixed concrete furnished by a well established mixing plant.
- B. Concrete shall be furnished in accordance with the following schedule:

Class of Concrete	Compressive Strength @ 28 days	Maximum aggregate size	Cement Type
A	4000	1-1/2"	Non-Air Entrained
B	4000	3/4"	Non-Air Entrained
C	4000	3/4"	Non-Air Entrained
D	3000	3/8"	Non-Air Entrained
E	4000	3/4"	Air Entrained

- C. The class of concrete to be used for various conditions shall be as follows:
 - 01. Footing - Class A
 - 02. Foundations - Class B
 - 03. Slab on Grade - Class B
 - 04. Columns & Beams - Class C
 - 05. Exterior Concrete - Class E
- D. Where mechanical vibrators are used in placing the concrete, the slump shall not exceed 3" in any case. Where mechanical vibrators are not used, the slump may vary between the limits noted.

PART 3 - EXECUTION

3.01 MIXING AND DELIVERY

- A. Ready-Mixed concrete shall be mixed and delivered to the job site by the means and standards set forth in ASTM C-94.
- B. No water shall be added on the job unless authorized by the City in writing. If added, the amount of water added shall be recorded on all copies of the delivery ticket hereinafter described. If water is added to mixed concrete on arrival at the job, an additional mixing of twenty revolutions of the drum will be required.
- C. Concrete delivered in outdoor temperatures lower than 40 degrees F., shall arrive at the site of the work having a temperature not less than 60 degrees F., nor greater than 90 degrees F. unless otherwise specified or permitted by the City.
- D. With each load of concrete delivered to the job, there shall be furnished by the ready-mixed concrete producer, duplicate delivery tickets, one for the contractor and one for the City. Delivery tickets shall provide the following information:
 - 01. Date
 - 02. Name of Ready-Mixed concrete plant
 - 03. Contractor
 - 04. Job Location
 - 05. Type and brand of cement
 - 06. Class and specified cement content in bags per cubic yard of concrete.
 - 07. Maximum size of aggregate

- 08. Water added at job, if any
- 09. Truck number
- 10. Time Dispatched
- 11. Amount of concrete, in load, in cubic yards.

3.02 PLACING CONCRETE

- A. Before placing any concrete Engineer shall be notified in sufficient time to allow inspection of concrete reinforcing in place.
- B. Before placing concrete, excavation shall be dry, forms and reinforcement shall be clean, and reinforcement shall be securely tied into place. Forms shall be treated with releasing agent.
- C. Concrete shall be transported from the mixer to the place of final deposit as rapidly as practicable by methods which will prevent the separation of ingredients or displacement of reinforcement. It shall be deposited as nearly as possible in its final position to avoid rehandling or flowing. Deposit concrete in such a fashion that free fall of concrete will not exceed 3 feet.
- D. Concrete shall be placed before initial set has occurred and in no case after it has contained its water more than 30 minutes.
- E. The Contractor shall provide sufficient labor to thoroughly spade, or by internal mechanical vibration, work the coarse aggregate away from the forms and avoid air pockets or voids in exposed sections, and leave solid, homogenous and smooth uniform surface after forms are removed. Concrete for slabs on fill shall be mixed and placed with as little water as possible, and shall be compacted by spading and tamping.
- F. For slabs on grade, check compaction of fill and determine proper grade. Moisten subgrade thoroughly just before exterior slabs are cast.

3.03 TOLERANCES

- A. ACI Standards shall govern concrete work except where specified differently.
- B. Allowable Tolerances -
 - 01. Variation from plumb:
 - a. 0 to 10 feet - 1/4" maximum
 - b. 20 feet or more - 3/8" maximum
 - 02. Variation in thickness - 1/4" to 1/2" standard, 5% for footings
 - 03. Variation in grade:
 - a. 0 to 10 feet - 1/4" standard, 1/8" for floors
 - b. 10 to 20 feet - 3/8" standard, 1/4" for floors
 - c. 40 feet or more - 3/4" standard, 3/8" for floors
 - 04. Variation in plan:
 - a. 0 to 20 feet - 1/2"
 - b. 40 feet or more - 3/4" standard, plus 1/2" for footings
 - 05. Variation in eccentricity: - 2% for footings
 - 06. Variation in openings:
 - a. Size - plus 1/8"
 - b. Location - 1/4"

3.04 CONSTRUCTION AND CONTROL JOINTS IN FLAT WORK

- A. Provide construction joints as shown on drawings, at the end of all pours, where placing operations are stopped for 1/2 hour or more and in no case to exceed 30 feet in any direction. Construction joints shall be formed with a 2x4 tapered keyway. Reinforcing shall run through joint.
- B. City/Owners Representative may direct additional control joints to be cut in concrete slabs after approximately two (2) weeks curing time if the concrete shows evidence of cracking. Joints shall be saw cut and shall be 1/3 the depth of the slab.

- C. Provide expansion joints where exterior slabs abut a wall or other fixed object or at intervals not to exceed 30 feet. Expansion joint filler material shall be placed at its top 1/4" below the finished surface of the concrete and the edge of the concrete shall be eased with a rounding tool. When concrete has cured top of joint shall be sealed with joint sealer installed as per manufacturer's instructions.

3.05 PROTECTION IN COLD AND FREEZING WEATHER

- A. In cold weather, concrete shall be mixed and placed only when the temperature is 40°F, and rising, unless permission for placement of concrete is obtained from the City/Owners Representative. In freezing weather, the mixing water and aggregates shall be heated, and freshly placed concrete shall be protected by adequate housing of cover and heating.
- B. Contractor shall have on job, ready to install, adequate equipment for heating the materials and freshly placed concrete and for enclosing work in accordance with requirements specified herein.
- C. Concrete when placed in the form shall have a temperature of not less than 60°F. Concrete and the surrounding air shall be maintained at a temperature of 50°F, or greater for a period of 7 days immediately after placing. The method of protection and curing shall be such as to prevent evaporation of moisture from the concrete for a period of not less than 7 days.
- D. Heat shall be removed gradually from the concrete to avoid thermal shock. Covering shall be left in place until concrete reaches surrounding outside temperature.
- E. Salts, chemicals or other foreign materials shall not be mixed with the concrete to prevent freezing. Concrete work which has been damaged by freezing will be rejected.

3.06 CURING

- A. All concrete shall be protected from premature drying and freshly placed concrete shall be protected against wash by rain, flowing water, freezing, mechanical injury, etc.
- B. Concrete of walls, piers, etc., shall be cured by leaving the forms in place as long as possible, 2 DAYS MINIMUM.
- C. Exposed concrete floor slabs, etc, shall be cured by covering with the specified, or approved curing agent.

3.07 REMOVAL OF FORMS

- A. Forms shall be removed in such a manner as to insure the complete safety of the structure. Footing and foundation wall forms may be removed after 48 hours, providing the concrete is sufficiently hard to not be damaged thereby.
- B. The Contractor shall assume responsibility for all damage due to the removal of the forms. It shall be contractor's duty to consult with the City/Owners Representative before the removal of any forms.

3.08 SURFACE FINISH OF CONCRETE (EXCEPT FLOORS)

- A. Immediately after removing forms, remove all projections, loose materials, and cut back all metal form ties, and point up all voids with cement mortar, 1:2 mix. Rub areas thus repaired with carborundum to a smooth, even finish to match adjacent surfaces.
- B. All formed concrete exposed to view, whether painted or unpainted, shall be finished in the manner noted above.

END OF SECTION

05500

MISCELLANEOUS METAL

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Conditions of the Contract and the Provisions of Division 01 apply to all work of this Section.
- B. Furnish all labor, materials and equipment to install all miscellaneous metal work indicated or required for a complete installation of all work under this contract.
- C. All items furnished shall be supplied with all devices required for properly and permanently securing them in their appropriate location.
- D. Items identified on the drawings or listed in this specification as Miscellaneous Metal are intended only as a guide to the Contractor, but this shall in no way relieve the Contractor of the responsibility to include all items required. The Contractor is cautioned to thoroughly examine all drawings for all items of Miscellaneous Metal work required under this contract.
- E. Unless otherwise indicated, all work shall be in accordance with the best recommendations of the Architectural Metal Handbook.
- F. All steel angles, channels, etc., where indicated as to size on the architectural drawings, shall be included in Miscellaneous Metal.
- G. Related Work Specified Elsewhere:
 - 1. Cast-In-Place Concrete - Section 03300

1.02 REFERENCES

- A. ASTM A36 - Structural Steel
- B. ASTM A123 - Zinc Coating on Iron and Steel Products
- C. ASTM A153 - Standard Specification for Zinc Coating on Iron and Steel Hardware
- D. ASTM F1083 - Specification for Pipe, Steel, Black and Hot-Dipped Zinc Coated Welded and Seamless, for Fence Structures.
- E. ASTM F1234 - Standard Specification for Protective Coatings on Steel Framework and Fences.

1.03 SUBMITTALS

- A. Shop Drawings: Prepare and submit shop drawings to Engineer for approval in accordance with the requirements of Division 01. Shop Drawings shall include placing plans and detailed drawings of each item. For stock items requiring no modification or special fabrication to fit the requirements of this job manufacturer's literature and installation instructions will be accepted in lieu of shop drawings. No materials shall be fabricated until such drawings have been approved by the Architect.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to site at such intervals to insure uninterrupted progress of work.
- B. Store steel members off ground using pallets, platforms or other supports. Protect steel members and packaged materials from erosion and deterioration.
- C. Do not store material on structure in a manner that might cause distortion or damage to members or supporting structures. Repair or replace damaged materials or structures as directed.
- D. Store materials to permit easy access for inspection and identification.

1.04 WARRANTY

- A. All railing materials and workmanship shall be guaranteed for a period of one year from the date of substantial completion.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All materials shall be free from defects impairing strength, durability, appearance, and of the best commercial quality for the purposes indicated. Structural proportions shall be such as to withstand safely all strains and stresses to which they will be normally subjected.
- B. Structural steel shapes and plates shall conform to ASTM A36. All accessories and connections for steel, unless otherwise indicated, shall be of steel.
- C. Materials for other miscellaneous metal items shall be as specified.
- B. General - All pipe and fittings shall be pressed steel or malleable iron with a minimum 1.8 oz. hot-dipped galvanized coating.

2.02 FABRICATION

- A. Insofar as possible, all work shall be shop fitted and assembled ready for erection. Work shall be executed in strict accordance with approved shop drawings.
- B. Shop connections, unless otherwise indicated, shall be welded. All welding shall conform to the current edition of the "D1.1 Structural Welding Code – Steel" of the American Welding Society. All welds shall be of adequate strength and durability, with all exposed welds ground flush with the base metal and finished clean and smooth.
- C. Field Connections, unless otherwise indicated, shall be made with steel bolts or machine screws of adequate size. Provide any necessary reinforcing plates at connections or fittings.

2.03 PAINTING

- A. Do not paint anchors to be set in concrete. Paint all other items with one shop applied coat of rust-inhibitive red oxide paint. Field paint bollards as indicated on drawings.

2.04 HAND RAILINGS

- A. Hand railings shall be 2" 40 pipe of length as shown on the drawings. Height as shown on drawings, railing shall be hot dipped galvanized steel pipe with a wall thickness of .154". Railings shall be fabricated from 50,000 psi steel with a Section modulus of .506.

2.05 METAL ANCHORS

- A. Anchor plates and bolts for shelter posts shall be as indicated on drawings

PART 3 - EXECUTION

3.01 INSTALLATION - GENERAL

- A. All metal items to be built into concrete or masonry are to be set by the concrete or masonry contractors and shall be furnished promptly so that they may be built in as the work progresses, as no cutting of same afterwards will be permitted.
- B. Holes in concrete or masonry, required for mounting miscellaneous metal items, shall not be larger than necessary to insert the required anchoring devices. ALL HOLES SHALL BE DRILLED.
- C. Clean all items as required to receive finish paint.
- D. Railings shall be installed level and plumb in strict accordance with the drawings and in accordance with all local, state and national codes.

3.08 INSTALLATION - RAILINGS

- A. Railings shall be installed plumb and level in the locations shown on the drawings. Grind to remove any exposed sharp or protruding metal edges of railing. Prime and paint as per spec.

END OF SECTION