



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 298-2017

ROSEHILL PARK FITNESS PATH

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 ROSEHILL PARK FITNESS PATH

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, April 21, 2017.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.
- B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B8.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B8.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B8.6 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B16.1(a).
- B8.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B8.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B8.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B9.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
 - (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.4.2 All signatures shall be original.
- B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DISCLOSURE

- B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full

disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B11.2 The Persons are:

- (a) Playgrounds R Us – Fitness Equipment
- (b) KGS Group – Catch Basin Engineer Drawing

B12. QUALIFICATION

B12.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>

B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

B12.4 Further to B12.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) or
 - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).

B12.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B12.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

B13.1 Bids will not be opened publicly.

B13.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B13.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).

B14. IRREVOCABLE BID

B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B14.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B15. WITHDRAWAL OF BIDS

B15.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.

B15.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B14.2 shall be liable for such damages as are

imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B16. EVALUATION OF BIDS

B16.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B12 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B16.2 Further to B16.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.

B16.4 Further to B16.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B16.4.1 Further to B16.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B17. AWARD OF CONTRACT

B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B17.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B17.2.1 Without limiting the generality of B17.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B16.

B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

B17.4 Notwithstanding C4, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

B17.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Construction*, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of the construction of an asphalt pathway and fitness equipment.

D2.2 The major components of the Work are as follows:

- (a) Excavation
- (b) Catch basin and lead connecting to existing manhole
- (c) Sub-drain installation
- (d) Grading
- (e) Asphalt pavement and structure
- (f) Fitness equipment installation
- (g) Sod
- (h) Removals

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Philip d'Auteuil, C.E.T.
Contract Administrator

Telephone No. 204 986 3781

Email Address pdauteuil@winnipeg.ca

D3.2 At the pre-construction meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D3.3 Bids Submissions must be submitted to the address in B8.

D4. CONTRACTOR'S SUPERVISOR

D4.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174
- D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155
- D6.1 Bids Submissions must not be submitted to the above facsimile numbers. Bids must be submitted in accordance with B8.**

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

- D7.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D8. SAFE WORK PLAN

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D8.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D9. INSURANCE

D9.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) all risks installation floater, carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.

D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D10. PERFORMANCE SECURITY

D10.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D10.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

D11. SUBCONTRACTOR LIST

D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D12. DETAILED WORK SCHEDULE

D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D12.2 The detailed work schedule shall consist of the following:

- (a) a Gantt chart for the Work
all acceptable to the Contract Administrator.

D12.3 Further to D12.2(a), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

SCHEDULE OF WORK

D13. COMMENCEMENT

D13.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

D13.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10;
 - (vi) the Subcontractor list specified in D11; and
 - (vii) the detailed work schedule specified in D12.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D13.3 The Contractor shall not commence the Work on the Site before July 3, 2017.

D13.4 The City intends to award this Contract by June 16 2017.

D13.4.1 If the actual date of award is later than the intended date, the dates specified for substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D14. SUBSTANTIAL PERFORMANCE

D14.1 The Contractor shall achieve Substantial Performance within twenty five (25) consecutive Working Days of the commencement of the Work as specified in D13.

D14.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted

during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

- D14.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D13.

- D15.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

- D15.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D16. LIQUIDATED DAMAGES

- D16.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City six hundred dollars (\$600) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.

- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.

- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D17. SCHEDULED MAINTENANCE

- D17.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:

(a) Sodding as specified in CW 3510;

- D17.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D18. JOB MEETINGS

- D18.1 Regular bi-weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.

D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D19. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D19.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

D20. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D20.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

MEASUREMENT AND PAYMENT

D21. PAYMENT

D21.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D22. WARRANTY

D22.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$_____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

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

BID OPPORTUNITY NO. 298-2017

ROSEHILL PARK FITNESS PATH

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D10)

(Date)

The City of Winnipeg
Legal Services Department
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 298-2017
ROSEHILL PARK FITNESS PATH

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgmt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
R-28D1	COVER SHEET AND LOCATION PLAN
R-28D2	ROSEHILL PARK – GRADING AND DRAINAGE PLAN SOCCER FIELD
R-28D3	ROSEHILL PARK – GRADING AND DRAINAGE PLAN BASEBALL FIELD
R-28D4	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 1+000 TO 1+060
R-28D5	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 1+060 TO 1+210
R-28D6	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 1+210 TO 1+350
R-28D7	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 1+350 TO 1+418
R-28D8	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 0+100 TO 0+189
R-28D9	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 0+200 TO 0+209
R-28D10	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 0+300 TO 0+341
R-28D11	ROSEHILL PARK HORIZONTAL AND VERTICAL ALIGNMENT STA 0+400 TO 0+438
R-28D12	ROSEHILL PARK DETAIL PLAN
16-0107-011	ROSEHILL PARK DRAINAGE IMPROVEMENTS - MUNICIPAL UNDERGROUND
C01	LAND DRAINAGE CATCHBASIN CONNECTION
SCD - 119	WASTE RECEPTACLE
SCD - 121A	TACHE BENCH COMPOSITE
SCD - 136A	ACCESSIBLE BENCH
SCD - 247	SANDBOX WITH WOOD SEAT
SCD – 650	ENGINEERED WOOD FIBRE
SCD – 651A	DOUBLE TIMBER EDGING WITH CAP
SCD - 659	MULTIFLOW DRAINAGE

E2. HAZARDOUS MATERIALS

- E2.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

E3. PROTECTION OF EXISTING TREES

- E3.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.

- (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
- (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
- (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.

E3.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.

E3.3 No separate measurement or payment will be made for the protection of trees.

E3.4 Except as required in clause E3.1(c) and E3.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

E4. PEDESTRIAN SAFETY

E4.1 During the project, at Rosehill Park, a temporary snow fence shall be installed at the sidewalks into the construction area if necessary to safe guard the public around the construction site, to the satisfaction of the Contract Administrator.. The Contractor shall be responsible for maintaining the snow fence in a proper working condition. No measurement for payment shall be made for this work.

E4.2 During deliveries, a safety watch shall be employed when deliveries are being made inside the park.

E5. TRAFFIC MANAGEMENT

E5.1 Further to CW 1130, the Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while working near them. Any damage caused by the negligence of the Contractor or his Sub-Contractors to the adjacent Works or properties shall be promptly repaired by the Contractor at their expense, to the satisfaction of the Contract Administrator.

E5.2 Site access to Rosehill Park shall be from gated fence from Garton Avenue. The adjacent school yard access to the site is to remain accessible at all times. No construction vehicles are allowed to stage, park or utilize the school property to access the construction site.

E5.3 Signage, fencing and barricades are to be placed at the entrance of the gated fence indicating the construction access; to the satisfaction of the contract administrator.

E5.4 The contractor is to do their best to minimize damage to the grass and sod in adjacent boulevards and construction site.

E5.5 Temporary fencing shall be installed where necessary throughout the length of the project. The contractor shall be responsible for maintaining a snow fence or equivalent to the satisfaction of the contract administrator, in proper working condition. No measurement for payment shall be made for this work.

- E5.6 Further to clause 3.7 of CW 1130:
- (a) Single lane closures on intersecting and/or adjoining regional streets shall only be permitted during non-peak periods when required for construction activities when approved by the Traffic Management Branch. Storage/parking of materials, equipment or vehicles is not permitted on regional streets at any time unless approved by the Contract Administrator, in consultation with the Traffic Management Branch.
 - (b) On Garton Ave, maintain a minimum of one lane of traffic northbound and one lane of traffic southbound during construction at all times.
 - (c) Intersecting local street, median opening and private approach access shall be maintained at all times unless joint/slab repairs require temporary closure.
- E5.7 Flag persons may be necessary to maintain the flow of traffic during certain work operations.
- E5.8 Should the Contractor be unable to maintain pedestrian or vehicular access to a residence or business, he/she shall review the planned disruption with the business or residence and the Contract Administrator, and take reasonable measures to minimize the impact. The Contractor shall provide a minimum of 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.
- E5.8.1 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E6. TRAFFIC CONTROL

- E6.1 Further to clauses 3.6, 3.7 and 3.8 of CW 1130:
- (a) In accordance with the Manual of Temporary Traffic Control (MTTC) on City streets, the Contractor ("construction agency" in the manual) shall be responsible for placing, maintaining and removing the appropriate temporary traffic control devices as specified by the MTTC or by the Traffic Management Branch of the City of Winnipeg Public Works department. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by their own forces or subcontractor.
- E6.2 Not with standing E6.1, in accordance with the MTTC, the Contract Administrator shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place, maintain, and remove all regulatory signs and traffic control devices authorized and/or required by the Traffic Management Branch in the following situations:
- (a) Parking restrictions
 - (b) Stopping restrictions
 - (c) Turn restrictions
 - (d) Diamond lane removal
 - (e) Full or directional closures on a regional street
 - (f) Traffic routed across a median
 - (g) Full or directional closure of a non-regional street where there is a requirement for regulatory signs (turn restrictions, bus stop relocations, etc.) to implement the closure.
 - (h) Approved designated construction zones with a temporary posted speed limit reduction. Traffic Services will be responsible for placing all of the advance signs and 'construction ends' (tc-4) signs. The Contractor is still responsible for all other temporary traffic control including but not limited to barricades, barrels and tall cones.
- E6.3 Further to E6.2, where the contract administrator has determined that the services of the Traffic Services Branch are required, the City shall bear the costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

E7. WATER OBTAINED FROM THE CITY

- E7.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

E8. SURFACE RESTORATIONS

- E8.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.
- E8.2 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus excavation to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to equal or better condition and to the satisfaction of the Contract Administrator. The Contractor shall bear all costs associated with this Work.

E9. INFRASTRUCTURE/CONSTRUCTION ACTIVITY SIGNAGE

- E9.1 The Contractor shall utilize construction activity signage at the entrance of the construction site to indicate construction access and activity. The Contractor shall mount each sign securely to a rigid backing material approved by the Contract Administrator. The Contractor shall fasten each sign to a suitable support and erect and maintain one sign at each street side as directed by the Contract Administrator. When the Contract Administrator considers the Work on the street complete, the Contractor shall remove the signs and supports. No measurement for payment will be made for performing all operations herein described and all other items incidental to the work described.

E10. PROTECTION OF SURVEY INFRASTRUCTURE

- E10.1 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions; Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.
- E10.2 Further to C:6.26 (g), at least 72 hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 918-1360 (8:00 am To 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.
- E10.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours' notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- E10.4 Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors must ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs.

E10.5 Where possible, amounts owed to the City in accordance with the above will be deducted from any payments to be made by the City to the Contractor.

E11. SITE ENCLOSURE

E11.1 Temporary Site enclosures, as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.

E11.2 Site enclosures shall be considered incidental to the Contract Work.

E12. REMOVAL OF CHAIN LINK FENCE AND POSTS

E12.1 DESCRIPTION

E12.2 In addition to CW 3550, this Specification shall cover the removal of existing chain link fence mesh and of existing posts designated for removal identified by the Contract Administrator if required for construction access.

E12.3 The Work to be done by the Contractor under this specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to satisfactory performance and completion of all Work as shown on the drawings as herein specified.

E12.4 CONSTRUCTION METHODS

E12.5 Removal Chain Link Fence

E12.6 Before commencement of any work, the Contractor shall consult with the Contract Administrator as to which sections of chain link fence shall be removed.

E12.7 The Contractor shall carefully remove chain link fence and posts designated for removal including any hardware, fasteners and concrete holding chain link fence and posts. The Contractor shall dispose of all material.

E12.8 MEASUREMENT AND PAYMENT

E12.9 Removal Chain Link Fence

E12.10 Removal of Chain Link Fence and Posts will be shall be considered incidental to this contract.

E12.11 No separate measurement or payment shall be made for the removal and disposal of any hardware or concrete bases.

E13. DITCH GRADING

E13.1 DESCRIPTION

(a) Grading of Ditches shall be done in accordance with specification CW 3110.

(b) Further to specification CW 3110, excavate to a depth up to 300 mm to meet the final ditch grade requirements. If sodding is required, excavate and/or place and compact fill to a depth up to 300 mm to meet the final grade 100 mm below finished ditch grade to allow placement of topsoil and sod to meet finished grade.

(c) Excavation in excess of 300 mm shall be treated as Excavation.

(d) Placement of backfill material over 300 mm in depth required to complete ditch grading will be treated as Fill Material – Placing of Suitable site Material CW 3170.

E13.2 MEASUREMENT & PAYMENT

E13.2.1 Ditch Grading

(a) As per specification CW 3110, ditch grading will be measured on an area basis and paid for at the Contract Unit Price per square meter for "Ditch Grading." The area to

be paid for will be the total number of square meters of ditch graded in accordance with specification CW 3110, accepted and measured by the Contract Administrator.

E14. INSTALLATION OF STRAW WATTLES

E14.1 DESCRIPTION

E14.2 Straw wattles are required to be installed as erosion control measures to mitigate any deleterious materials from entering the Land Drainage System. At a minimum these locations will include the perimeter of all riprap located at: ditch catch basins, subdrain outfalls, and ditch bottom pads.

E14.3 MATERIALS

E14.4 The straw wattles shall be Stenlog or other biodegradable straw wattles.

E14.5 CONSTRUCTION METHODS

E14.6 Install 300mm Stenlog or other straw wattle sediment control material in accordance with the manufacturer's specifications around all riprap areas related to drainage inlets and outlets, and catch basins within seeded areas.

E14.7 Install straw wattles so that no gaps exist between the soil and the bottom of the wattle, and the ends of adjacent wattles are overlapped 150mm minimum to prevent water and sediment passing. Achieve a tight seal between the wattle segments.

E14.8 Dogleg terminal ends of straw wattle up the slope to prevent channelling of sedimentation.

E14.9 Use 300mm wooden stakes to fasten straw wattle to the soil. Place stakes on each side of the straw wattle, lying across the natural fibre twine, spaced 1200mm on centre. Leave 30 to 50mm of wood stake exposed above the wattle.

E14.10 Avoid damage to wattles. Damaged areas of wattles should be cut and tied off, then treated as terminal ends.

E14.11 At the direction of the Contract Administrator, the Straw Wattle shall be removed after seeding has established and before the end of the Warranty Period.

E14.12 MEASUREMENT AND PAYMENT

E14.13 Installation of straw wattles will be considered incidental to the contract and no separate measurement for payment will be made.

E15. MATERIAL TESTING

E15.1 DESCRIPTION

E15.2 This specification shall cover material testing including proctor, density concrete and marshal testing of the sub-grade, sub-base, base course and rigid and flexible asphalts for the project.

E15.3 CONSTRUCTION METHODS

E15.4 The Contractor shall arrange for all material testing and provide results to the Contract Administrator for approvals.

E15.5 The Contractor is responsible to submit a sample of their construction material to be used in the pavement structure for proctor analysis prior to beginning the project. Material testing shall be performed by an accredited independent laboratory with the experience and knowledge to perform the tasks as approved by the Contract Administrator.

- E15.6 Material testing is required on each lift of the pavement structure including sub-grade, sub-base, base-course, asphalt and concrete pavements. At a minimum, these shall include three field density tests by nuclear gauge, performed on each lift as defined in the Winnipeg Construction Specifications CW 3110, CW 3310 and CW 3410 for each material type. Concrete sampling including, air content and slump tests, casting of cylinders and pick up of cylinders from the project site after initial curing, moist cure and test for compressive strength. All tests to be completed to the satisfaction of the Contract Administrator.
- E15.7 Field test results must meet specifications set out in CW 3110, CW 3310 and CW 3410 for acceptance by the Contract Administrator, Additional field tests shall be performed until each lift of the pavement structure has uniformly met City of Winnipeg proctor minimums, slump and air entrainment as defined in the City of Winnipeg's Construction Specifications and to the satisfaction of the Contract Administrator.
- E15.8 A copy of each test result and location of the tests shall be submitted to the Contract Administrator for approval. The Contract Administrator may direct as required, the Contractors testing authority to provide additional tests at no additional cost to the City of Winnipeg until satisfied.
- E15.9 A minimum of one complete Marshal analysis of Type 1A asphaltic concrete paving mix, includes asphalt content, stability, flow, density, air voids, VMA, gradation and crushed content of extracted aggregates is to be completed for the project.
- E15.10 A minimum of one complete set of concrete samples that include tests with:
- (a) Air content
 - (b) Slump tests
 - (c) 3 cast cylinders for compressive strength results
- E15.11 The Contractor shall submit the results of all tests to the Contract Administrator for approval.
- E15.12 MEASUREMENT AND PAYMENT
- E15.13 Material Testing will be measured on a lump sum basis and paid for at the Contract Unit Price for "Material Testing." The number to be paid for will be the lump sum for material testing in accordance with this Specification, accepted and measured by the Contract Administrator.

E16. SODDING AMENDMENT

E16.1 DESCRIPTION

E16.2 This Specification shall cover the supply and placing of cultivated turfgrass sod in park areas and in boulevard and median areas adjacent to the pavement. The Contractor shall adhere to CW-3510 except as amended in this specification

E16.3 BASIS OF PAYMENT

E16.4 Sodding

E16.5 Supply, placement and maintenance of sod will be paid for at the Contract Unit Price per square metre for the "Items of Work" listed here below, measured as specified herein, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification. Payment for sodding shall be in accordance with the following:

- (a) - Seventy-five (75%) of quantity following supply and placement
- (b) - Remaining twenty-five (25%) of quantity following termination of the maintenance period.

E16.6 Items of Work:

E16.7 Sodding

E17. REMOVE BENCH PILES

E17.1 DESCRIPTION

E17.2 This Specification shall cover the removal of piles designated for removal by the Contract Administrator.

E17.3 CONSTRUCTION METHODS

E17.3.1 Removal of piles

- (a) Before commencement of any work, the Contractor shall consult with the Contract Administrator as to which piles shall be removed.
- (b) The Contractor shall remove all piles designated for removal including any concrete bases to one metre below proposed grade. The Contractor shall load and haul all materials from the site and dispose of these materials at dumps located by the Contractor and approved by the Contract Administrator.

E17.4 MEASUREMENT AND PAYMENT

E17.4.1 Removal of Piles

- (a) Removal of piles will be considered incidental to this contract.
- (b) No separate measurement or payment shall be made for the removal and disposal of any concrete bases.

E18. REMOVAL OF TREES

E18.1 TREE REMOVAL

E18.2 This Specification shall cover the removal of living or dead trees designated for removal by the Contract Administrator.

E18.3 Construction Methods

E18.4 Before commencement of any work, the Contractor shall consult with the Contract Administrator as to which trees and/ or shrubs shall be removed. All other trees and shrubs shall be protected against damage from all construction activity in accordance with E3.

E18.5 Trees to be removed are to be felled so as to land within the limits of the works. The Contractor shall take all precautions to prevent damage to traffic, structures, pole lines, adjacent property and to trees and shrubs designated to be saved, and he shall be liable for any damages occurring in the performance of this work.

E18.6 The Contractor shall cut down all trees and shrubs designated for removal and grub out all stumps and roots, and remove stumps of trees felled by others. The Contractor shall load and haul all trees, stumps, roots, logs, brush, rubbish and all other surface litter from the site and dispose of these materials at dumps located by the Contractor and approved by the Contract Administrator.

E18.7 Measurement and Payment

E18.8 Measurement for payment for tree removal shall be measured on an individual basis.

E18.9 Removal of live trees or standing deadfall will be paid for at the Contract Unit Price for "Tree Removal", measured as specified herein, which price shall be payment in full for removing and disposing all tree materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E18.10 Measurement for payment for stump removal for trees removed by the contractor or others shall be incidental to this contract.

E19. SITE FURNITURE AND FITNESS EQUIPMENT

E19.1 Description

E19.1.1 This specification shall cover the pick-up and installation of two (2) benches, two (2) waste receptacles and the supply and install of eight (8) pieces of fitness equipment.

E19.1.2 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work as shown on Drawings and specified herein.

E19.2 Materials

E19.2.1 All materials supplied under this specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

E19.2.2 Concrete foundations shall be as per E20.

E19.2.3 Site Furniture shall be:

- (a) Waste Receptacle – Metal Slant Type - galvanized, as per SCD-119, **Product # 52501063GLV** (metal slat WR) and **Product # 52501058GLV** (Wire Basket) or approved substitute in accordance with B7.
- (b) Backed Bench – Tache Style Composite Bench with Arm Rests – galvanized, w/ extra arm, as per SCD-121A, **Product # 52501085GLV**, or approved substitute in accordance with B7.

- (i) For ordering Site furniture please email: pwd-cps-orderdesk@winnipeg.ca

Fitness Equipment shall be:

Healthbeat Ab Crunch/Leg Lift;
Healthbeat Assisted Row/Push-Up;
Healthbeat Balance Steps;
Healthbeat Parallel Bars;
Healthbeat Pull-Up/Dip;
Healthbeat Stretch;
Healthbeat Hand Cyclor, and;
Healthbeat Squat Press.

- (ii) Contact for Fitness Equipment:

Matthew Lacroix @ 204-414-2990

Playgrounds R Us

Email: matt@pru.ca

- (iii) Colour to be determined by the Contract Administrator before ordering

E19.3 Construction Methods

- (a) All Work is to be located and installed in accordance with the Drawings, SCDs, and following manufacturer's instructions, using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work;

- (b) All furnishings and fixtures to be installed plumb and true to correct elevations and location, as directed by the Contract Administrator. The Contractor shall confirm proposed locations of all site furnishings with Contract Administrator prior to installation;
- (c) All furnishings and fixtures to be carefully handled so that no parts will be bent, broken or otherwise damaged. Hammering is prohibited;
- (d) Bench and Fitness Equipment shall be in-ground mounted. Install as per manufacturer's instructions and the attached drawings.

E19.4 Method of Measurement and Basis of Payment

E19.4.1 Method of Measurement shall be as follows:

- (a) Site Furniture and Fitness Equipment will be measured on a per unit basis for the following items:
 - (i) "Pick Up and Install Benches"; and
 - (ii) "Pick Up and Install Waste Receptacles" on Form B: Prices.

Site Furniture will be measured on a lump sum basis for the following items:

- "Healthbeat Ab Crunch/Leg Lift";
- "Healthbeat Assisted Row/Push-Up";
- "Healthbeat Balance Steps";
- "Healthbeat Parallel Bars";
- "Healthbeat Pull-Up/Dip";
- "Healthbeat Stretch";
- "Healthbeat Hand Cyclor", and;
- "Healthbeat Squat Press" on Form B: Prices

E19.4.2 Basis of Payment shall be as follows:

- (a) Site Furniture and Fitness Equipment will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E20. FOUNDATIONS

E20.1 General Description

E20.1.1 All fitness equipment posts, bases and anchors are to be set in concrete footings or piles to ensure stability and prevent frost heaving. The current Standard Construction Specifications of the City of Winnipeg, CW 2160 –latest revision - Concrete to be used in Underground Works, is to be utilized in the installation of the concrete works for all below ground components.

E20.2 Materials

E20.2.1 The specific concrete requirements shall be:

- (a) Sulfate resistant, Type 50 Cement;
- (b) 28 day compressive strength of 30 Mpa;
- (c) maximum aggregate size of 20mm, nominal;
- (d) slump 80 +/- 20mm;
- (e) maximum water/cement ratio 0.49.

E20.3 Installation

- E20.3.1 All posts and supports shall be centred in the concrete footing such that there is a complete collar of concrete around each post and support. Where posts are not perfectly centred there should be a minimum of 2" concrete at any point around the post.
- E20.3.2 All concrete footings for play equipment shall be a **minimum of 3' depth**, or in accordance with Manufacturer's specifications, whichever is greater.

E20.4 Method of Measurement and Basis of Payment

- E20.4.1 Method of Measurement shall be as follows:
- (a) Foundations shall be incidental to the measurement of Fitness Equipment and Site Furniture listed above and as shown on Form B: Prices.
- E20.4.2 Basis of Payment shall be as follows:
- (a) No separate payment shall be made for fitness equipment and site furniture foundations.

E21. TIMBER EDGING

E21.1 General Description

- E21.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the drawings and specifications.
- E21.1.2 This specification shall cover the supply and installation of one (1), two (2), three (3), four (4), five (5) and six (6) tier timber edging including vertical support posts to contain the wood fibre safety surfacing in the new fitness equipment nodes as per Drawings.

E21.2 Materials and Method

- E21.2.1 Cap and screws shall be as per SCD-651A.
- E21.2.2 All wood shall be pressure treated spruce, pine or fir, No. 2 or better, no wane, bark, checking or splitting permitted. Wood shall be smooth and free of rough areas. All timbers to be 140 x 140mm with a minimum length of 1200mm. All ends and cuts shall be treated with preservative before being secured. Clear coat for above grade applications and ACQ green for below grade applications. Use longest lengths possible.
- E21.2.3 Edging material shall be cut neatly for a proper fit with no spaces or gaps between. Finished elevations shall ensure that all edging material is smooth, level, set plumb and spaced uniformly. Joints to be butt joints. Joints in straight runs are to be lapped over timber by a minimum of 600mm.
- E21.2.4 Vertical support posts shall be set plumb and true and shall abut edges of horizontal timbers such that no gaps exist between the two. Hardware shall be 16mm galvanized bolt countersunk c/w nuts and washers. Posts to be set every 1.855m such that 8 posts aid in retaining 5 and 6 tier timber edging.
- E21.2.5 Turf shall be repaired as required around edging in accordance with City of Winnipeg Standard Specifications for Topsoil and Sodding.

E21.3 Method of Measurement and Basis of Payment

- E21.3.1 Method of Measurement shall be as follows:
- (a) Timber Edging will be measured on a linear metre basis for:
- (i) "1 tier timber edging",
- (ii) "2 tier timber edging",
- (iii) "3 tier timber edging"
- (iv) "4 tier timber edging",

- (v) "5 tier timber edging", and;
- (vi) "6 tier timber edging" on Form B: Prices.

No separate measurement will be made for vertical support post installation as this incidental to the work herein for 5 and 6 tier timber edging.

E21.3.2 Basis of Payment shall be as follows:

- (a) Timber edging will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

No separate payment will be made for vertical support post installation as this incidental to the work herein for 5 and 6 tier timber edging.

E22. SUB-SURFACE DRAINAGE

E22.1 Description

E22.1.1 This Work shall consist of providing and placing a geocomposite prefabricated drain system to drain the fitness areas, and connection to other multifold lines and eventually to a Catch Basin as shown on Drawings.

E22.1.2 This Work shall include:

- (a) Subsurface drainage to drain new fitness are surfacing, and swales as described in the plans and as per SCD-650 and SCD-659.

E22.2 Material

E22.2.1 Drainage pipe will be Multi-Flow or approved substitute in accordance with B7. Drainage pipe will 150 mm (6"). The manufacturer will size and approve all fittings for use with Multi-Flow or approved substitute drainage pipe.

E22.2.2 The drain conduit shall be of flexible, prefabricated, rounded rectangular shaped, composite product. The drain conduit will be wrapped with a non-woven geotextile and will be a non-woven needle-punched construction and consist of long-chain polymeric fibres composed of polypropylene, polyethylene or polyamide. The fibres will be oriented into a multi-directional stable network whereby they retain their positions relative with each other and allow the passage of water as specified. The fabric will be free of any chemical treatment or coating, which reduces permeability and will be inert to chemical commonly found in soil. The geotextile will conform to the following minimum average roll values.

Weight	ASTM D-3776	3.0 - 4.0
Tensile Strength	ASTM D-4632	100 - 130
Elongation %	ASTM D-4632	50 - 70
Puncture, lb	ASTM D-751	35 - 60
Mullen Burst, psi	ASTM D-3786	110 - 215
Trapezoidal Tear, lb	ASTM D-4533	40 - 42
Coefficient of Permeability	ASTM D-4491	.2 - .4 cm/sec
Flow Rate, gpm/ft2	ASTM D-4491	100 - 140
Permittivity, 1/sec	ASTM D-4491	1.3 - 2.0
Apparent Opening Size	ASTM D-4751	60/70 Max. US Std Sieve Opening
Seam Strength, lb/ft	ASTM D-4595	100
Fungus	ASTM G-21	No Growth

E22.2.3 The drainage core shall be made of a high-density polyethylene. The core shall be constructed using interconnected corrugated pipes that define and provide the flow channels and structural integrity of the drain. The geotextile shall function only as a filter. The core of the edge drain shall conform to the following physical property requirements.

Thickness, inches	ASTM D-1777	1.0
Flow Rate, gpm/ft*	ASTM D-4716	29
Compressive Strength, psf	ASTM D-1621 (modified sand method)	6000
Pipe Stiffness, pii	ASTM D-2412	100

* At gradient = 0.1, pressure = 10 psi for 100 hours.

E22.2.4 Fittings

- (a) The fittings used with the edge drain shall be of a snap together design. In no case shall any drainage product be joined without the use of the manufacturers connector designed specifically for the purpose. Cleanouts will be provided as indicated on the drawing.

E22.2.5 Pipe

- (a) Pipe for drain outlet laterals will be either 75 mm (3") PVC pipe meeting the requirements of ASTM D-2729 or ASTM F-949, or high-density polyethylene pipe meeting the requirements of AASHTO M252.
- (b) A rodent screen made of 0.3 inch by 0.3-inch square opening size, 0.063-inch gauge, stainless steel or galvanized, welded wire mesh shall be installed in each outlet lateral line. When using galvanized welded wire mesh, the rodent screen shall be galvanized after it has been formed to the shape and dimensions shown on the plans or specified by the Contract Administrator.

Emitter

Shall be a 3" polyolefin pop-up drainage emitter with elbow joint, product reference no. NDS# 620 or approved substitute in accordance with B7. Multiflow shall be connected to emitter by using manufacturer's adaptor for connecting drainage pipe to 75mm or 100mm round orifice on appropriate hardware.

Contact for Emitter:

Consolidated Turf
 986 Powell Avenue
 Winnipeg, Manitoba
 R3H 0H6
 Tel: 1-204-633-7276

E22.3 Backfill for Trenches

- (a) As per SCD-659

E22.4 Methods

E22.5 Installation of Subdrain is not to proceed until after the excavation/grading has been approved by the Contract Administrator.

E22.6 The layout of the subdrain is to be marked on Site and approved by the Contract Administrator prior to trenching.

E22.7 Trenches are to be excavated with a trenching machine or by hand. Locations, where the trench crosses existing utilities, irrigation pipes and all other sub-surface pipes or fixtures, are to be

excavated by hand. The amount of trench excavated at any time shall not exceed the amount of drain that can be set and backfilled completely prior to the end of that Working Day. Trench width shall be as specified on the Drawings.

- E22.8 The bottom surface of the trench is to be free of loose particles and is to have the slope minimum of 1.5% or as indicated in the drawings. Over excavation in the bottom of the trench shall be backfilled to the proper grade with the excavated material or sand prior to the placement of the drain. Where sand or excavated material is used to fill the trench to the proper elevation that material shall be compacted to 95% of standard proctor density using appropriate means. Where the trench is to pass through an area of existing turf, backfill shall be removed from the Site daily and disposed of legally.
- E22.9 Multi-Flow drain pipe is to be placed in the trench using a Multi-Flow centering device. Trench is to be backfilled with coarse sand to the surface. Backfill shall be placed in maximum of 45 cm loose lifts. Backfill is to be lightly tamped into place and watered.
- E22.10 Subdrain within the fitness areas is to be laid on the prepared surface to facilitate cross movement of water. Subdrain shall be installed below geotextile and in conformance with details provided.
- (a) Fitness areas to be graded to drain towards subdrain. This subdrain is to be used in conjunction with the appropriate wood fibre drainage layer to bring excess water out of the fitness area.
 - (b) Where indicated, swale area(s) to be graded to drain towards subdrain and longitudinally towards the asphalt pathways as indicated on the Plans.
- E22.11 Fittings for the drain will be installed in accordance with the manufacturer's recommendations and Specification.
- E22.12 Any damaged edge drain or outlet lateral will be replaced or repaired by splicing in an undamaged section of drain at the Contractor's expense. The repair must be in accordance with the manufacturer's specification and to the satisfaction of the Contract Administrator.
- E22.13 Contractor is to protect subdrain from excessive weight during the duration of construction and to repair and make good any pipe collapsed prior to acceptance.
- E22.14 The Contractor shall be responsible for restoration of any surfaces damaged during the Work under this section.
- E22.15 The top of the trench is to be finished as shown on the Drawings.
- E22.16 The sand backfill is to be installed to meet existing grades and seeded with grass seed where the trench is located in existing turf.
- E22.17 The Multi-Flow drain system is to be connected to a solid pipe in accordance with manufacturer's recommendations and the pipe is then connected to the catch basin.
- E22.18 Connecting to existing catch basin will be done as outlined in CW 2130 – item 3.15 – “Connecting New Sewers an Catch Basin Leads to Existing Manholes, Catch Basins and Catch Pits”.
- E22.19 Trenches are to be inspected by the Contract Administrator prior to backfilling.
- E22.20 Method of Measurement and Basis of Payment
- E22.20.1 Method of Measurement shall be as follows:
- (a) Sub-surface Drainage shall be measured on a lineal metre basis for:
 - (i) “Installation of Subdrains” on Form B: Prices.
- E22.20.2 Basis of Payment shall be as follows:

- (a) Subdrains will be paid for at the Contract Unit Prices on Form B: Prices. The amount to be paid for shall be the total lineal number of units including tees, couplers, endcaps, side outlets, connectors, wyes, crosses, bends, outlet pipe and connection to manhole measured as specified herein, which price shall be for full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E23. PROTECTIVE SURFACING

E23.1 General Description

E23.2 This specification shall cover the supply and install of wood fibre safety surfacing, including granular drainage layer.

E23.3 Wood Fibre Surfacing

E23.3.1 Materials

- (a) Wood Fibre product shall be either Zeagar Woodcarpet system 1 or Fibar FibarSystem **200** or substitute in accordance with B7.
- (i) **Only the Fibar System 200 with granular drainage layer will be acceptable, not the drainage strips as used in fibar system 300.**
- (b) Wood Fibre surfacing shall be supplied by an authorized distributor and delivery slips and/or a warranty certificate from an authorized supplier are to be submitted to the Contract Administrator prior to installation.
- (i) Contact for Woodcarpet:
Zeagar Bros. Inc.
4000 East Harrisburg Pike ·
Middletown, PA 17057
USA
Ph: (1-888) 346-8524 or (717) 944-7481 ·
Fax (717) 944-7681
sales@zeager.com
- (ii) Contact for FibarSystem **200**:
The Fibar Group LLC
80 Business Park Drive, Suite 300
Armonk, NY 10504-1705
USA
Ph: (800) 342-2721
Fax: (914) 273-8659
info@FibarPlaygrounds.com
- (c) If substitute to Zeagar Woodcarpet or Fibar FibarSystem 200 is proposed, it must meet the following conditions:
- (i) materials must be IPEMA certified Engineered Wood Fiber
- (ii) material must consist of random-sized, clean, engineered hardwood chips. Standard wood chips or bark mulch are not acceptable.
- (iii) materials must meet or exceed ASTM F1292 standards for impact attenuation
- (iv) materials must be certified by the CSA and approved for playground use

- (v) materials must comply with ASTM F1951 for accessibility under the Canadians with Disabilities Act
- (vi) materials must be covered by \$10,000,000.00 product liability insurance as well as provide a minimum 10 year warranty against loss of resiliency

(d) Wood Fibre surfacing shall include wood fibre, filter cloth and granular drainage layer.

E23.3.2 Construction Methods

- (a) Wood Fibre shall be installed within the fitness nodes, as defined by the timber edging to a **minimum depth of 300 mm** (after compaction).
- (b) The installation of the Wood Fibre shall be done immediately after the play equipment has been installed.
- (c) Installation of entire system, including fibre, filter cloth and subsurface drainage shall be done according manufacturer's instructions. Adequate drainage within fitness equipment nodes must be ensured as per same.
- (d) Mud grade of fitness nodes shall be graded to drain to one edge of the fitness area, and area cleared of any debris which inhibit proper drainage or installation of products. Drainage pipe shall be installed from the subsurface drainage system within the fitness area to run outside of the fitness area perimeter to drain into an existing catch basin. The cost of this shall be included in the price for the wood fibre supply and installation.
- (e) Filter fabric must be cut and fit around fitness equipment footings and overlap seams by 300mm.
- (f) Installation shall be done by equipment sized to suit the Work being done and the Wood Fibre shall be spread by hand as necessary in the immediate vicinity of the fitness equipment so as not to damage same. The fitness equipment shall be swept clean to the satisfaction of the Contract Administrator after installation of the Wood Fibre.

E23.4 Method of Measurement and Basis of Payment

E23.4.1 Method of Measurement shall be as follows:

- (a) Protective Surfacing will be measured on a square metre basis for:
 - (i) "Engineered Wood Fibre Safety Surfacing" on Form B: Prices.

E23.4.2 Basis of Payment shall be as follows:

- (a) Protective Surfacing will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E24. RELOCATE SANDBOX

E24.1 DESCRIPTION

E24.2 This Specification shall cover the relocation of the sandbox designated for relocation by the Contract Administrator.

E24.3 CONSTRUCTION METHODS

E24.3.1 Relocation of Sandbox

- (a) Before commencement of any work, the Contractor shall consult with the Contract Administrator as to the sandbox that shall be relocated.
- (b) The Contractor shall remove all materials, including sand, timber, edging, fasteners, safety surfacing and other materials designated for relocation by the Contract

Administrator. The Contractor shall move all materials from the existing locations to the proposed site location.

- (c) Install the sandbox in its relocated position and to its previous configuration using existing material where possible. Top up sand or playing surface as per SCD-247 and to the satisfaction of the Contract Administrator
- (d) The Contractor shall dispose of all damaged materials including timber, fasteners, safety surfacing, sand, and replace with new construction material as per SCD-247 and to the satisfaction of the Contract Administrator.
- (e) The Contractor shall dispose of these materials at dumps located by the Contractor and approved by the Contract Administrator.

E24.4 MEASUREMENT AND PAYMENT

E24.4.1 Relocate Sandbox

- (a) Relocation of Sandbox will be measured on a lump sum basis and paid for at the Contract Unit Price for "Relocate Sandbox." The number to be paid for will be the dismantling, relocation and installation of the Sandbox and disposal of damaged material in accordance with this Specification, accepted and measured by the Contract Administrator.
- (b) No separate measurement or payment shall be made for the removal and disposal of any concrete bases.