



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 221-2009

SUPPLY AND INSTALLATION OF AN APPLE 8-CORE XEON 5500 SYSTEM

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 SUPPLY AND INSTALLATION OF AN APPLE 8-CORE XEON 5500 SYSTEM

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, April 8, 2009.

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. ENQUIRIES

B3.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.

B3.2 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 promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B3.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.

B3.4 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.

B3.5 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.

B3.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. ADDENDA

B4.1 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.

B4.2 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.

B4.2.1 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/bidopp.asp>

B4.2.2 The Bidder is responsible for ensuring that he 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.

B4.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B5. SUBSTITUTES

- B5.1 The Work is based on the materials, equipment, methods and products specified in the Bid Opportunity.
- B5.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B5.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least seven (7) Business Days prior to the Submission Deadline.
- B5.4 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 material, equipment, method or product 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 Contract;
 - (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 Contract.
- B5.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his 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.
- B5.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B5.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B5.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B5.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his 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 B13.
- B5.9 No later claim by the Contractor for an addition to the price(s) because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B5.10 Notwithstanding B5.2 to B5.9, and in accordance with B6.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B13.1(a).

B6. BID SUBMISSION

- B6.1 The Bid shall consist of the following components:

- (a) Form A: Bid;
- (b) Form B: Prices.

- B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.
- B6.3 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, to constitute a responsive Bid.
- B6.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B6.5 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
- B6.5.1 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.
- B6.6 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.7 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 B13.1(a).
- B6.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.
- B6.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B6.9 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B7. BID

- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 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 own name, his 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 own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B7.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.
- B7.3 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.

- B7.4 Paragraph 11 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 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 and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Bidder is carrying on business under a name other than his 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.

B7.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B7.5 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.

B8. PRICES

B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B8.1.1 Prices on Form B: Prices shall include:

- (a) duty;
- (b) freight and cartage;
- (c) Provincial and Federal taxes [except the Goods and Services Tax (GST) and Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable] and all charges governmental or otherwise paid;
- (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.

B8.2 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.

B8.3 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.

B9. QUALIFICATION

B9.1 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, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; 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.

B9.2 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>

- B9.3 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);
- B9.4 The Bidder shall submit, within five (5) 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.
- B9.5 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.

B10. OPENING OF BIDS AND RELEASE OF INFORMATION

- B10.1 Bids will not be opened publicly.
- B10.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements or evaluated prices) 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>
- B10.3 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>
- B10.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B11. IRREVOCABLE BID

- B11.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 10 of Form A: Bid.
- B11.2 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 10 of Form A: Bid.

B12. WITHDRAWAL OF BIDS

- B12.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B12.1.1 Notwithstanding C21, 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.
- B12.1.2 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 11 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

- B12.1.3 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 11 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B12.1.3(b), declare the Bid withdrawn.
- B12.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B11.2 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.

B13. EVALUATION OF BIDS

- B13.1 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 therefrom (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B5;
- B13.2 Further to B13.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission 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.
- B13.3 Further to B13.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B13.4 Further to B13.1(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.
- B13.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B13.4.2 Further to B13.1(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.
- B13.5 This Contract will be awarded as a whole.

B14. AWARD OF CONTRACT

- B14.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B14.2 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.
- B14.2.1 Without limiting the generality of B14.2, 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.

B14.3 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 B13.

B14.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

B14.4 Notwithstanding C4 and Paragraph 6 of Form A: Bid, the City will issue a purchase order to the successful Bidder in lieu of the execution of a Contract.

B14.5 The Contract Documents, as defined in C1.1(n) (ii), in their entirety shall be deemed to be incorporated in and to form a part of the purchase order notwithstanding that they are not necessarily attached to or accompany said purchase order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for the Supply and Delivery of Goods* (Revision 2008 05 26) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for the Supply and Delivery of Goods* 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 Supply of Goods*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for the Supply and Delivery of Goods*, 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 supply and installation of the Apple 8-Core Xeon 5500 system.

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

- (a) Supply and delivery of Apple System as specified in Section E
- (b) Installation of System as specified in Section E

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Craig Davill, C.P.P., C.I.M.
Winnipeg Police Service
Quartermaster Stores
472 Notre Dame Avenue
Winnipeg, Manitoba
R3B 1R5

Telephone No. (204) 986-6141
Facsimile No. (204) 986-6127

D4. NOTICES

D4.1 Notwithstanding C21.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Financial Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

SUBMISSIONS

D5. AUTHORITY TO CARRY ON BUSINESS

D5.1 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.

D6. SECURITY CLEARANCE

- D6.1 The City will conduct a Level One Security Clearance Check, for any individual proposed to perform Work under the Contract at Winnipeg Police Service facilities.
- D6.2 The Contractor shall provide the Contract Administrator with a list of individuals proposed to perform Work under the Contract at Winnipeg Police Service facilities:
- (a) within five (5) Business Days of the Award of Contract; or
 - (b) in the case of additional or replacement individuals during the term of the Contract, at least thirty (30) Calendar Days before each individual is proposed to commence Work at Winnipeg Police Service facilities.
- D6.3 Each individual shall submit the required information and forms to the Winnipeg Police Service Division 30 Clerk at Main Floor, 151 Princess Street:
- (a) A completed Form P-608: Security Clearance Check authorization form.
 - (a) Signature of Witness shall be signed by the contact person stated on Paragraph 3 of Form A: Bid.
 - (b) Identification - driver's license (with photo), birth certificate or social insurance number (SIN).
 - (a) Photocopies of the identification must be legible, signed as true copies and witnessed by the contact person stated on Paragraph 3 of Form A: Bid.
- D6.4 Any individual for whom a satisfactory Level One Security Clearance is not obtained will not be permitted to perform any Work within Winnipeg Police Service facilities.
- D6.5 Any satisfactory Security Clearance obtained thereby will be deemed valid for two (2) years from the date of clearance, subject to a repeated Security Clearance Check as hereinafter specified.
- (a) Each individual doing Work in a Winnipeg Police Service Facility shall provide identification upon entry to verify they have received a Level One security clearance.
- D6.6 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require a further Security Clearance Check. Any individual who fails to obtain a satisfactory Security Clearance Check as a result of a repeated Security Clearance Check will not be permitted to continue to perform Work under the Contract at Winnipeg Police Service Facilities.
- D6.7 Any individual who fails to obtain a satisfactory Security Clearance Check may request reconsideration by writing to:
- Winnipeg Police Service
Division 30
Service Security
Attn: Service Security Officer
151 Princess Street
Winnipeg, Manitoba
R3B 1L1

SCHEDULE OF WORK

D7. COMMENCEMENT

- D7.1 The Contractor shall not commence any Work until he is in receipt of a notice of award from the City authorizing the commencement of the Work.
- D7.2 The Contractor shall not commence any Work until:
- (a) the Contract Administrator has confirmed receipt and approval of:

- (i) evidence of authority to carry on business specified in D5;
 - (ii) evidence of the workers compensation coverage specified in C6.16; and
 - (iii) the security clearances specified in D6.
- (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

D8. DELIVERY

D8.1 Goods shall be delivered within thirty (30) Calendar Day(s) of the placing of an order, f.o.b. destination, freight prepaid to:

Grant Johnson.
Winnipeg Police Service
Training Division
130 Allard Avenue
Winnipeg, Manitoba
R3K 0T4

D8.2 The Contractor shall confirm each delivery with the Contract Administrator or his/her designate, at least two (2) Business Days before delivery.

D8.3 Goods shall be delivered between 8:30 a.m. and 4:30 p.m. on Business Days.

D8.4 The Contractor shall off-load goods as directed at the delivery location.

MEASUREMENT AND PAYMENT

D9. PAYMENT

D9.1 Further to C10, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D10. PAYMENT SCHEDULE

D10.1 Further to C10, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

WARRANTY

D11. WARRANTY

D11.1 Warranty is as stated in C11.

D11.2 Notwithstanding C11, the warranty period for Items 3 and 9 shall begin on the date of delivery and shall expire three (3) years thereafter unless extended pursuant to C11.3, in which case it shall expire when provided for thereunder.

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B5.

E2. GOODS

- E2.1 The Contractor shall supply and deliver an APPLE 8-Core Xeon 5500 System in accordance with the requirements hereinafter specified.
- E2.2 Item No. 1 – Apple MacPro Xeon (MB535LL/A) complete with:
- (a) two (2) 2.26 Ghz Quad Core Intel Xeon 5500 processors
 - (b) Memory upgrade to 8GB:
 - (i) 240 pin DIMM DDR3 PC3-8500, ECC
 - (c) 3TB RAID-0 Volume upgrade a minimum of:
 - (i) Three (3) Seagate 11th generation Barracuda drives with 7200RPM 32MB cache, better for video editing, configured for RAID-0 for ProRes422 HD capture/playback capability in Bays 2,3,4n broken down as follows:
 - (i) 1,000 GB HD in Bay 2;
 - (ii) 1,000 GB HD in Bay 3;
 - (iii) 1,000 GB HD in Bay 4;
 - (d) NVIDIA GeForce GT 512MB;
 - (e) Mini DisplayPort to DVI adapter (dual link);
 - (f) 2 x 18x Superdrives (one standard, one additional).
- E2.3 Item No. 2 – Apple Cinema Display 30" HD (M9179LL/A).
- E2.4 Item No. 3 – Apple Care 3year Warranty (MA516LL/A) to include monitor and CPU.
- E2.5 Item No. 4 – Final cut Studio v.2 Video Editing Software.
- E2.6 Item No. 5 – Apple Extreme Base Station.
- E2.7 Item No. 6 – BluRay Drive external with software upgrade.
- E2.8 Item No. 7 – 10-pack 25GB Bluray Media BD-R.
- E2.9 Item No. 8 – AJA KONA Lhe (HiDef Video Card) shall be . HD/SDI 10-bit digital, 12-bit analog Capture and output PCIe card and contain:
- (a) PCIe (PCI Express) interface, 4-lane;
 - (b) 10-bit HD-SDI/SDI Digital I/O;
 - (c) 12-bit HD Component Analogue Video I/O;
 - (d) 12 bit SD Component/Composite/S-video Analog video I/O;
 - (e) Real-Time hardware based 10-bit HD/SD broadcast quality down conversion;
 - (f) Hardware Acceleration for HDV codec, DVCPROHD codec;
 - (g) Hardware Acceleration for Apple's Dynamic RT Extreme;

- (h) 24-bit 2-ch AES/EBU Digital audio I/O via XLR, input AES sample rate conversion;
- (i) 24-bit 2-ch Balanced Analog audio I/O via XLR;
- (j) 24-bit 8-ch Embedded Audio Input and Output;
- (k) Genlock, breakout cable standard, KL-Box-LH;
- (l) Breakout cable standard, KL-Box-LH optional;
- (m) RS-422 Machine Control;
- (n) AJA Quicktime Driver, AJA Quicktime Driver;
- (o) Support for Apple Final cut Pro, Soundtrack Pro, Motion 2, after Effects, and Photoshop.

E2.10 Item No. 9 – AJA KL-Box-LH shall include .

- (a) 1RU External Breakout Box for KONA LH, KONA Lhe, KONA Lse;
- (b) Connection cables to KONA LH, KONA Lhe, KONA Lse;
- (c) 3-year parts and labour warranty.

E2.11 Item No. 10 – G-Technology G-Speed 4TB eS System (921004-02) shall be .

- (a) 4TB eSATA system with PCIe RAID card;
- (b) Support RAID 0, 1, 5m, 10 and JBOD configurations when combined with G-TECH Raid Controller;
- (c) Supports multi-stream SD, Apple ProRes 422, and HD;
- (d) Up to 16TB of storage, single cable connection;
- (e) Hot-swappable drives;
- (f) Extra drive modules for online editing and archiving;
 - (i) RAID 0 config, READ 230MB/s, WRITE 207.5 MB/s;
 - (ii) RAID 5 config, READ 158 MB/s, WRITE 172 MB/s.

E2.12 Item No. 11 – Spare 1TB Drive Module (921104-01) shall be:

- (a) Hot swap drive module.

E3. INSTALLATION

- E3.1 The Contractor shall install an APPLE 8-Core Xeon 5500 System in accordance with the requirements hereinafter specified.
- E3.2 Configuring of internal drives in MacPro to RAID 0.
- E3.3 Installation of Final Cut Studio 2 software and updates for software from web.
- E3.4 Installation of AJA Kona LHe card and breakout box.
- E3.5 Installation of AJA latest driver software.
- E3.6 Test of software presets of Kona card and Final Cut Pro software.
- E3.7 Installation of eSata card.
- E3.8 Configuration and formatting of external RAID Drives for RAID-5.
- E3.9 Networking of the 2 editing systems for file sharing.
- E3.10 Hook up of Betacam SP editing VTR to Kona card through component cables and analogue audio cables (supplied).
- E3.11 Test recording of Betacam SP footage through Kona card (various compression rates).

- E3.12 Test recording of U-Matic vtr deck through Kona card.
- E3.13 Instruction to end-users on above procedures, i.e.
 - (a) file sharing;
 - (b) Kona card digitization procedure through Final Cut;
 - (c) Kona control panel operation;
 - (d) workflow procedure and backup scenarios.
- E3.14 Hook up of studio monitor.
- E3.15 Hook up of existing audio system to Kona audio monitors.
- E3.16 BluRay external drive setup, software installation, and archival procedure test.
- E3.17 Connecting cables as required.
- E3.18 Registration of all Apple warranties.