This Addendum shall become part of the Contract Drawings and Specifications issued for the above-named project, and supersede the previously issued documents as modified by this Addendum. Please acknowledge receipt of this Addendum on the Bid Form.

Township of Esquimalt Invitation to Bid 2024

Remove: Section 01 11 00 SUMMARY OF WORK, 1.9 SCOPE OF WORK: Cold Applied Mod. Bit

Add: Section 01 11 00 SUMMARY OF WORK, 1.9 SCOPE OF WORK: Torch Applied Mod. Bit

Township of Esquimalt Specifications 2024

Remove: Section 00 41 13: Part 1.2 – Stipulated Price Bid Form

Add: Section 00 41 13: Part 1.2 – New Stipulated Price Bid Form

Remove: Section 07 52 16.11 Modified Bituminous Membrane

Add: Section 07 52 16.13 Torch-Applied Modified Bituminous Membrane

PROJECT NOTES:

1. Stairway roofs included
2. Perimeters: Install Securock, base and granulated cap sheet
3. Field: Install Securock, base and non-granulated cap sheet, asphalt emulsion flood and gravel

To:
TOWNSHIP OF ESQUIMALT
1229 Esquimalt Rd.,
Esquimalt, BC V9A 3P1

Name of Company Phone Number

Address

WCB Registration Number

We acknowledge receipt of the following addenda to the tender documents:

Addendum No.: _____ Date: _____ Pages: _____

Addendum No.: _____ Date: _____ Pages: _____

Addendum No.: _____ Date: _____ Pages: _____

Addendum No.: _____ Date: _____ Pages: _____

Addendum No.: _____ Date: _____ Pages: _____

Addendum No.: _____ Date: _____ Pages: _____

1. Township of Esquimalt – City Hall - Cold Adhesive Roof Project Work as specified
Upper Roof Section - Cold Applied System

SUB: _____ Dollars ($_____)

GST: _____ Dollars ($_____)

TOT: _____ Dollars ($_____)

2. 5 year RCABC Guarantee (Optional)

SUB: _____ Dollars ($_____)

GST: _____ Dollars ($_____)

TOT: _____ Dollars ($_____)

ACCEPTANCE

.1 This Bid is open to acceptance for a period of ninety (90) days from the date of bid closing and is promised in consideration of the attached Bid Security.

.2 Having examined the Project site, the Specifications and Drawings, including Addenda, we hereby offer to perform the Work set forth in the aforesaid documents.

.3 Submission of this Bid implies acceptance of the existing conditions at the site.

.4 We understand that selected items may be deleted from the Project as represented in the Bid Form.

.5 In submitting this tender, we recognize and agree that the Owner reserves the right to accept any tender, to reject any or all tenders, to waive any irregularity or informality in a tender, and to negotiate with and award to one or more of the bidders after the Tender Closing. Without limitation, the Owner shall not be obligated to accept the lowest or any other tender, and by submitting a tender each bidder assumes all costs and risks associated therewith, and irrevocably releases any claim it may have against the Owner or any of its trustees, officers, employees or agents, whether based in contract, tort, legitimate expectation or any other principle of law, trade, custom or practice.

Name of Company

Date

Signature & Name of Company Official

1.1 GENERAL

1.2 WORK INCLUDED

.1 Fully adhered SBS modified bituminous membrane roofing over prepared substrate.

1.3 RELATED WORK

.1 Section 07 62 00 – Sheet Metal Flashing and Trim

1.4 REFERENCE STANDARDS

.1 All Reference Standards are latest editions, unless noted otherwise.

.2 CSA A123.3-M1979 (R1992). Asphalt or Tar Saturated Roofing Felt.

.3 CSA A123.4-M1979 (R1992). Bitumen for Use in Construction of Built-Up Roof Coverings and damp proofing and Waterproofing Systems.

.4 CSA A231.2-06 (R2010). Precast Concrete Paving Slabs.

.5 CSA 0151-M1978. Canadian Softwood Plywood.

.6 CAN/CGSB-37.5-M89. Cutback Asphalt Plastic Cement.

.7 CGSB 37-GP-9Ma-83. Primer, Asphalt, Unfilled, for Asphalt Roofing, Damp proofing and Waterproofing.

.8 CAN/CGSB-37.29-M89. Rubber-Asphalt Sealing Compound.

.9 CGSB 37-GP-56M. Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing.

.10 CAN/CGSB-51.33-M89. Vapour Barrier Sheet, Excluding Polyethylene, for Use in Building Construction.

.11 ASTM C578 Type VI. Rigid closed cell, Extruded Polystyrene.

.12 ASTM D1863, Specification for Mineral Aggregate Used as a Protective Coating for Roofing.

.13 ASTM D2824, Specification for Aluminum-Pigmented Asphalt Roof Coating.

.14 ASTM D5147, Test Method for Sampling and Testing Modified Bituminous Sheet Materials.

.15 ASTM D6162, Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements.

.16 ASTM D6163, Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements.

.17 Canadian Roofing Contractors Association (CRCA). Roofing Specification Manual.

.18 Roofing Contractors Association of British Columbia (RCABC). RGC Roofing Practices Manual.

1.5 SUBMITTALS

.1 Product Data: Provide data on material characteristics, performance criteria, limitations, and material samples.

.2 Submit copies of MSDS sheets on all products utilized.

.3 Submit test reports, prepared by an independent testing agency, for all modified bituminous sheet roofing, indicating compliance with CGSB 37-GP-56M or ASTM D5147, and that the materials meet the specified performance requirements.

.4 Submit inspection reports, for application compliance.

1.6 QUALIFICATIONS

.1 Company specializing in modified bituminous roofing installation with a minimum 5 years' experience and authorized by roofing system manufacturer as qualified to install manufacturer's roofing materials. Contractor must be a RCABC member in good standing as of 2017.

.2 Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work and at any time roofing work is in progress. Maintain proper supervision of workmen. Maintain a copy of the specifications in the possession of the Supervisor/Foremen and on the roof at all times.

.3 Immediately correct roof leakage during construction. If the Contractor does not respond within twenty four (24) hours, the Owner has the right to hire a qualified contractor and backcharge the original contractor.

1.7 PRECAUTIONS

.1 Proceed with roofing work only when existing and forecasted weather conditions will permit unit of work to be installed in accordance with manufacturer's recommendations and warranty requirements.

.2 Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.

.3 Roofing application shall not be carried out when materials are damp. Apply each part of roofing system only when surfaces are clean and dry.

.4 All adjacent parts of the building shall be protected from damage caused by roofing operations. Cover walls and other surfaces in the vicinity of hoisting apparatus with heavy canvas or other suitable protective material. Any damage caused under this contract shall be repaired to match the original materials and appearance.

.5 Locate equipment and materials well away from building in areas designated by the Owner.

.6 Conduct operations so as to leave deck exposed for minimum period of time. Protect, as required, to prevent water infiltration to building interior.

.7 Where work must continue over finished roofing membrane, protect surface with minimum 12.5 mm thick plywood sheets.

.8 Fire Extinguishers: Maintain at least one fully-charged fire extinguisher with shutoff nozzle, ULC labelled for A, B and C class per torch applicator, within 10 m of each torch applicator. Strictly adhere to all safety guidelines for the torching of modified bituminous membrane.

.9 Any sharp projections that may puncture the membrane shall be grounded smooth and flush.

.10 Fully complete all modified bituminous membrane roofing field assembly work each day. Phased application of the membrane plies will not be accepted.

1.8 DELIVERY, STORAGE AND HANDLING

.1 Deliver, store and maintain packaged materials with the manufacturer's seals and labels intact, dry and undamaged.

.2 Store and handle roofing sheets in a dry, well-ventilated, weather-tight place to ensure no possibility of significant moisture exposure. Store rolls of felt and other sheet materials on pallets or other raised surface on end.

.3 Immediately remove rejected materials from the Place of Work.

.4 Storage and handling of materials shall conform to the Workers' Compensation Board of British Columbia Regulations and the manufacturer's instructions.

.5 It is the responsibility of the contractor to secure all material and equipment on the job site. If any material or equipment is stored on the roof, the contractor must make sure that the integrity of the deck is not compromised at any time.

.6 All containers to be labelled in accordance with WHMIS regulations.

.7 Provide Material Safety Data Sheets (MSDS) if requested.

1.9 COMPATIBILITY

.1 Compatibility between all components of roofing system is essential.

.2 The Contractor shall be responsible for ensuring that all items elected for use are compatible with each other.

.3 Ensure compliance with RGC warranty standards and manufacturers installation recommendations.

1.10 STANDARDS

.1 In the event that the drawings and specifications differ from the manufacturer's printed instruction, to such a degree that the specified warranties may be affected, consult the Owners representative for instructions.

1.11 INSPECTIONS

.1 When the project is in progress, the Owner's representative will provide the following:

.1 Keep the Owner informed as to the progress and quality of the work as observed.
.2 Provide daily job site inspections during the roof assembly application.
.3 Report to the Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
.4 Confirm after completion that there are no application procedures in conflict with the specifications other than those that may have been previously reported and corrected.

1.12 WARRANTY

.1 Upon completion of installation, and acceptance by the Owner, the roofing Contractor shall issue a 5 year workmanship warranty for the modified bitumen membrane roof system on Contractor letterhead, signed, authorized and executed. In event any work related to roofing, flashing, or metal is found to be within Contractor's warranty term, defective or otherwise not in accordance with Contract Documents, Contractor to repair that defect at no cost to Owner.

.2 The roofing membrane manufacturer shall issue to the Building Owner a twenty (20) year, non-prorated, leak-free guarantee including workmanship and materials for the modified bitumen roof system.

2.1 <u>PRODUCTS</u>

2.2 ACCEPTABLE PRODUCTS

.1 When a particular trade name or performance standard is specified it shall be indicative of a standard required.

.2 Any item or materials submitted as an alternate to the specified products must comply in all respects as to the quality and performance. The Owner shall be the sole judge as to whether or not an item submitted as an equal is truly equal. Should the contractor choose to submit on the equal basis, he shall assume all risk involved, monetary or otherwise should the Owner find it unacceptable.

.3 Requests for approval must reach the Owners representative at least seven (7) working days prior to the bid closing. The Owners representative shall advise applicants of the status of their request three (3) working days prior to bid closing.

.4 Request for approval must be submitted by bidding contractors only, and shall include:

.1 Project name and number.
.2 Specification sections to which the product/system applied.
.3 Description of proposed substitution including manufacturer's material specifications, manufacturer's preparation and application requirements, manufacturer's inspection intervals, and manufacturer's warranties.
.4 Sample product indicating surface finish and material thickness to be applied under Contract.
.5 Independent test reports indicating compliance with specified product performance levels.
.6 Installation history of proposed alternative including:
.1 Projects and locations
.2 Approximate value of contract
.3 Approximate size of projects
.4 Number of years in use
.5 Type of usage
.6 Name of Owner and Consultant involved

.5 When submitting alternatives to materials or equipment specified, Bidders shall include in their Bid any changes in the work required to accommodate such alternatives. A later claim for addition to the Contract Price because of changes in the work necessitated by the use of alternatives will not be considered.

.6 An addendum will be issued prior to bid closing if an alternative is approved. No alternative materials or equipment will be considered after bid closing.

2.3 DESCRIPTION

.1 All labour, material, equipment and services to supply and install a two ply fully adhered roofing system as specified herein including but not limited to:

.1 One ply of SBS base sheet fully adhered.
.2 One ply of SBS cap sheet fully adhered.
.3 Gypsum board fully adhered to substrate with fire retardant tape at seams.
.4 Wood blocking, as required.
.5 Associated roof flashing and sheet metal.

2.4 ROOFING ASSEMBLY MATERIALS

.1 Base Sheet: One (1) ply SBS (Styrene-Butadiene-Styrene) 2.5 mm fiberglass reinforced membrane. ASTM D6163, Type III, Grade S. ASTM D5147 at 23°C Tensile MD/CMD 30 kN/m, Tear MD/CMD 1300 N, Elongation MD/CMD 5.0%, Low Temp Flex: Pass.

.2 Cap Sheet: One (1) ply SBS (Styrene-Butylene-Styrene) 4.5mm fiberglass and polyester composite scrim. ASTM D6162, Type III, Grade S. ASTM D5147 at 23°C Tensile MD/CMD 50 kN/m, Tear MD/CMD 2200 N, Elongation MD/CMD 5.0%, Low Temp Flex: Pass.

.3 Membrane Surfacing Adhesive: Cold process modified adhesive for adhesion of roofing aggregate.

.4 Roofing Aggregate: Clean roofing aggregate to conform to ASTM D-1863 in cold membrane surfacing adhesive.

.5 Overlay Board: Securock (1/4") water-resistant high performance board, Class A Fire Rating, Recycled Content 95%.

.6 Insulation Adhesive: 2-part adhesive compatible for use with substrate and insulation types specified, as recommended by the manufacturer.

.7 Screws, Bolts, Nails and Fasteners: Non-ferrous metal or galvanized steel compatible with adjacent surfaces, except that hard copper nails shall be used with copper; aluminum or stainless steel nails shall be used with aluminum; and stainless steel nails shall be used with stainless steel. All fasteners must conform to the RGC Guarantee Standards. Fasteners in contact with pressure treated wood must be 304 or 316 stainless steel.

.8 Cant Strip: Cant strips are required at all 90° transitions for modified bitumen work.

.9 Mastic Compound: V.O.C. compliant, ASTM D2822, Type II. Trowel grade fibered mastic.

.10 Fiberglass Scrim: SBR coated reinforced fiberglass reinforcement scrim meeting ASTM D-1668-86 Type III.

.11 Caulking Compound: One part, non-sag sealant with the following characteristics;

.1	Tensile Strength (ASTM D412)	250 psi
.2	Elongation (ASM D412)	950%
.3	Hardness, Shore A (ASTM C920)	35
.4	Adhesion-in-Peel (ASTM C920)	30 pli

.12 Non-Shrink Grout: Use an all-weather fast setting chemical action concrete material to fill pitch pans.

1.	Flexural Strength (ASTM C-78 (modified))	7 days 1100psi
2.	High Strength (ASTM C-109 (modified))	24 days 8400lbs (3810kg)

.13 Pitch Pocket Sealer: Two part, 100% solids, self-leveling, polyurethane sealant for filling pitch pans as recommended and furnished by the membrane manufacturer.

1.	Durometer (ASTM D2240)	40-50 Shore
2.	Elongation (ASTM D 412)	250%
3.	Tensile Strength (ASTM D 412)	200 @ 100 mil

.14 Vents and Breathers: Heavy gauge aluminum and fully insulated vent that allows moisture and air to escape but not enter the roof system as recommended by the membrane manufacturer.

.15 Roof Drains: Retrofit clamp-tite drain with u-flow seal and aluminum dome strainer.

.16 Pitch pans, Rain Collar 24 gauge stainless or 20oz (567gram) copper. All joints should be welded/soldered watertight. See details for design.

.17 Plumbing stacks should be spun aluminum meeting CSA Standard B79 with vandal-proof caps.

.18 Sheet Metal Flashings: 24 gauge completed in accordance with accepted RGC Guarantee Standards and drawings conforming to ASTM A653 / A653M-06 CS Type B, Z275 (G90) coating. Colour to be chosen by owner.

.19 Asphalt Primer: Asphalt emulsion based primer to prepare surfaces for torch applied membranes.

.20 Liquid Flashing: Shall be composed of polyester fleece reinforcement encapsulated with a polymethel methacrylate (PMMA) resin.

2.5 SCOPE OF WORK

.1 Set up work site with appropriate disposal equipment and place plywood on adjacent roof areas (having roofer traffic) so that existing membrane does not get damaged.

.2 Remove existing metal counterflashings within replacement areas and dispose to an authorized dumpsite.

.3 Remove existing roofing membrane (skim) down to the fiberboard overlay.

.4 Check the existing insulation and replace all wet areas (extra).

.5 Adhere 1/4" Securock to the substrate with 2-part adhesive (as per adhesive manufacturer's recommendations).

.6 Install new fiberglass cant strips in cold adhesives (as per adhesive manufacturer's recommendations) at all horizontal to vertical transitions, including sleepers.

.7 Tape all seams.

.8 Install one layer of SBS Torch Base Sheet to a properly prepared substrate. Shingle in proper direction to shed water on each area of roofing.

.9 Install 1 ply of cap sheet modified membrane. Seams for the top layer of modified membrane will be staggered over the SBS Torch Base Sheet seams.

.10 Prepare the perimeter walls and prime the surfaces with asphalt primer. Install new flashings surrounding and within area with SBS base and cap sheet. Flashings to extend minimum 8" above cant, and 8" onto field. SBS cap sheet at perimeter to extend above and over top of raised edge and terminated along outer edge with cap nails 8" O.C. All other tops of flashings to be completed with termination bar (fasteners every 8" O.C.) and rubberized mastic mastic along top edge.

.11 Membrane on the slopped perimeters shall be granulated.

.12 Waterproof the large concrete parapet with high temp self adhering membrane, seal all seams and clad with colour matching counter flashing.

.13 All counter flashing terminations at the brick wall must be reglet joints.

.14 Install new copper span drain with blue-seal connectors.

.15 Seal all vertical laps of flashing membrane with a three-course application of trowel-grade mastic and fiberglass mesh. Reinforce all vertical seams with Mastic / Mesh / Mastic**.**

.16 Phased roofing not permitted. Clean entire project of debris and remove all equipment.

.17 Metal counter-flashings on perimeter are to extend down from coping cap to field of roof.

3.0 EXECUTION

3.1 EXAMINATION

.1 Verify that surfaces and project conditions are ready to receive work of this section.

.2 Verify that deck is supported and secured to structural members.

.3 Verify that the surface is clean and smooth, free of depressions, projections or ripples, and is properly sloped to valleys and drains.

.4 Verify that the substrate is dry and free of snow or ice.

.5 Verify that openings, curbs, pipes, conduit, sleeves, ducts, and other items which penetrate the roof are set solidly, and that cant strips, nailing strips and reglets are set in place.

3.2 GENERAL INSTALLATION REQUIREMENTS

.1 Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing the roof system.

.2 Insurance/Code Compliance: Where required by code, install and test the roofing system to comply with governing regulation and specified insurance requirements.

.3 Protect other work from spillage of roofing materials and prevent materials from entering or clogging drains and conductors. Replace or restore other work damaged by installation of the modified bituminous roofing system.

.4 Coordinate installation of roofing system components so that insulation and roofing plies are not exposed to precipitation or left exposed overnight. Provide cut-offs at end of each day's work to cover exposed ply sheets and insulation. Remove cut-offs immediately before resuming work.

.5 Cant strips are required at all 90° transitions for modified bitumen work.

.6 Utilize approved flame barrier over combustible materials when utilizing a torch.

.7 Apply roofing materials as specified by manufacturer's instructions. Keep roofing materials dry before and during application.

.8 Fully complete all modified bituminous membrane roofing field assembly work each day. Phased application of the membrane plies will not be accepted.

3.3 OVERBOARD

.1 Adhere 3/8" Securock in two-part adhesive, as per adhesive manufacturer's instructions. Joints are to be offset or staggered 300 mm (12") from adjacent layers and rows. A minus offset tolerance of 50 mm (2") maximum will be permitted to compensate for variance in manufactured tolerance of differing insulation board widths and lengths.

3.4 SBS BASE PLY

.1 Ensure base sheet is unrolled to enable membrane to relax prior to installation. Time required for relaxation will vary with weather conditions.

.2 Apply asphalt primer to gypsum surface and allow to dry.

.3 Install one layer of SBS torch base sheet to a properly prepared substrate. Shingle in proper direction to shed water on each area of roofing.

.4 To a suitable substrate, lay out the roll in the course to be followed and unroll six (6) feet (1.8m).

.5 Using a roofing torch, heat the surface of the coiled portion until the burn-off backer melts away and a puddle of asphalt develops at the base of the roll. At this point, the material is hot enough to lay into the substrate. Progressively heat and unroll the sheet into the continuous puddle of asphalt.

.6 After the major portion of the roll is bonded, re-roll the first six (6) feet (1.8m) and bond it in a similar fashion.

.7 Repeat this operation with subsequent rolls with side laps of four (4) inches (101mm) and end laps of eight inches.

.8 Give each lap a finishing touch by passing the torch along the joint and spreading the melted bitumen evenly with a rounded trowel to insure a smooth, tight seal.

.9 Extend underlayment two (4) inches (100mm) beyond top edges of cants at wall and projection bases.

.10 Install base flashing ply to all perimeter and projections details, extending 6” onto the field.

3.5 SBS CAP PLY

.1 Both base and cap membrane plies must be installed the same day.

.2 Ensure cap sheet is unrolled to enable membrane to relax prior to installation. Time required for relaxation will vary with weather conditions.

.3 Over the SBS base sheet, lay out the roll in the course to be followed and unroll six (6) feet. Plan membrane application so that laps are not superimposed over laps of the base sheet. Mark a chalk line where the first course is to start. Unroll 2.0 m to 3.0 m of the membrane and line it up to the chalk line or to selvage edge. Reroll and commence application. If the roll goes out of line by more than 12 mm, cut and realign.

.4 Using the same methodology as the base sheet, install the cap sheet, ensuring that the membrane is unrolled into a consistent puddle of asphalt.

.5 Extend membrane two (2) inches (50mm) beyond top edge of all cants.

.6 Trowel check sidelaps and endlaps.

3.6 FLASHING MEMBRANE INSTALLATION

.1 Prepare all walls, penetrations, expansion joints and where shown to be flashed with asphalt primer. Allow primer to dry tack free.

.2 Install SBS base flashing ply to all perimeter and projection details. Solidly adhere the entire sheet of flashing membrane to the substrate. Base flashing ply to extend past the cant on the field of the roof 6".

.3 Adhere the SBS cap flashing ply to the SBS base flashing ply. Stagger overlaps of cap ply from base ply. Cap flashing ply to extend past the cant on the field of the roof 9".

.4 Trowel check sidelaps and endlaps.

.5 Base and cap plies to extend up and over perimeter and be secured to the outside face. Flashings that are not run up and over shall be secured with a termination bar and sealed at the top with flashing cement. On high wall locations, high temperature self-adhering membrane is to be installed in shingle fashion to overlap termination bar and be utilized to seal the wall.

.6 Apply three course of mastic and fiberglass mesh at vertical flashing seams. Extend reinforcement from leading edge of flashing membrane to the top of the flashing membrane.

.7 Seal all curb, wall and parapet flashings with an application of mastic and fiberglass on a daily basis. Do not permit conditions to exist that will allow moisture to enter behind, around or under the roof or flashing membrane.

.8 Coordinate counter flashing, cap flashings, expansion joints, and similar work with modified bitumen roofing work.

.9 Coordinate roof accessories, miscellaneous sheet metal accessory items, including piping vents and other devices with the roofing system work.

.10 Apply liquid reinforced flashing at all otherwise unfinished terminations of the membrane.

3.7 APPLICATION OF SURFACING

.1 Apply 5 gallons/ square of cold emulsion to the dry membrane and gravel with 500 lb of round 5/8 pea gravel.

3.8 PROJECT NOTES

.1 Roofing Contractor to verify all dimensions, sizes, product requirements, and current roof system composition including insulation thickness and deck type.

.2 The disconnection and reconnection/installation of all mechanical and HVAC equipment is to be completed by a mechanical contractor on behalf of the Owner. Coordination of work between contractors will be required.

.3 The roofing contractor is responsible for keeping drains and vents clear of construction debris during the project and at project completion.

.4 At areas of paver installation, install pavers evenly so not to create tripping hazards.

.5 Sump drains in 4’ x 4’ area by shaving insulation and overlay board to create a small taper.

.6 Perform rough carpentry as required to meet guidelines and replacement design. Curbs which are below minimum height of 8” are to be raised to meet RGC Guarantee standard.

.7 Install new 24 gauge metal counter flashings. Colour is to be chosen by and acceptable to the owner. All metal must be done in strict accordance to RGC standards.

.8 All sheet metal coping cap / cap flashing joints to be standing seams.

.9 If not present, install overflow scuppers at section perimeters to allow flow off of the building or onto adjacent roof section if drains become plugged.

.10 Caulk all rain collars, flashings, and open metal seams with urethane sealant.

3.9 COMPLETION OF DAY’S WORK

.1 Install water cutoffs at the end of each day’s work; remove completely prior to continuing further roofing applications.

.2 Inspect all laps of the membrane application to ensure they are properly bonded. Repair any deficiencies prior to leaving the site for the day.

.3 Provide fire watch at the end of each day when a torch has been utilized. Review the production area for hot spots.

3.10 CLEANING

.1 Remove drippings from all walls, windows, floors, ladders and finished surfaces.

.2 In areas where finished surfaces are soiled by asphalt or any other sources of soiling

caused by work of this section, consult manufacturer of surfaces for cleaning instructions and conform to their instructions.

.3 Repair or replace defaced or disfigured finishes caused by work of this section.

.4 Splices in delivered rolls of membrane are to be removed. Cut back the roll 450 mm (16”) on both sides of the splices and remove prior to installation.

3.11 FINAL INSPECTION

.1 At completion of roofing installation and associated work, meet with Contractor, installer, installer of associated work, Owner, Owner’s representative, and other representatives directly concerned with performance of roofing system.

.2 Walk roof surface areas of the building, inspect perimeter building edges as well as flashing of roof penetrations, walls, curbs and other equipment. List all items requiring correction or completion and furnish copy of list to each party in attendance.

.3 If core cuts verify the presence of damp or wet materials, the Contractor shall be required to replace the damaged areas at his own expense.

.4 Repair or replace deteriorated or defective work found at time above inspection as required to a produce an installation which is free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

.5 Notify the Owner and other representatives upon completion of corrections.

END OF SECTION