



**Acknowledgements**

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## EXECUTIVE SUMMARY

On Saturday March 28<sup>th</sup>, 2009 the University of Manitoba experienced the most destructive fire in its history. The electrical fire started in a laboratory holding over 250 types of chemicals on the fourth floor of the Duff Roblin Building. Over 38 emergency response units were on site. All occupants of the building were safely evacuated and no injuries were reported. The fire scorched a significant portion of the building's West side and there was extensive water and soot damage throughout the entire building. Following the fire, access to the building was restricted until it could be declared safe. Over 290 Faculty members, graduate students, administrative staff and technicians were significantly impacted by the fire. An Emergency Operations Centre was opened in University Centre and an Emergency Steering Committee with representatives from every department affected that includes Biological Sciences, Psychology, Anthropology, Textile Sciences and Human Nutritional Sciences was created. The first meeting was held on Sunday morning, March 29<sup>th</sup> and met almost daily in the weeks following the fire. Identifying and addressing the most critical teaching and research needs of these key groups was the first priority of the ESC. A general information session was held on Monday, March 30<sup>th</sup> for the benefit of faculty, students and staff who were impacted by the fire.

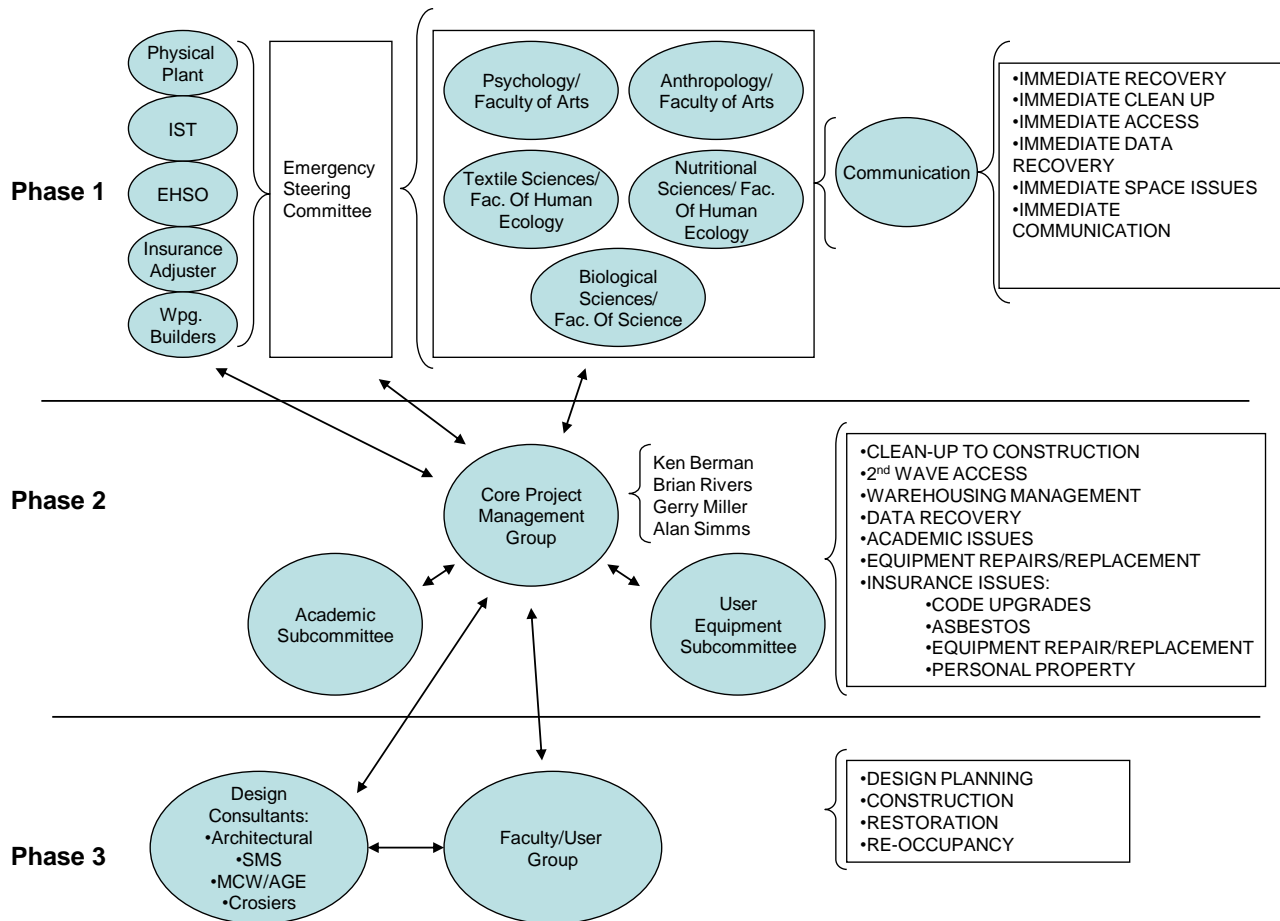
As could be expected, the needs of nearly 300 people directly affected by this fire have evolved over the past five months, creating demand for an adaptive and flexible strategy. A detailed document has been prepared which outlines those changing needs and provides an overview of the various agencies, departments, and consultants involved and the strategies employed. The report was produced with broad input from all key stakeholders, to whom the University of Manitoba is indebted for their strength, resourcefulness and commitment to those individuals most seriously affected by the fire.

In order to fund initial expenditures the University received \$1.5M from the Canadian Universities Reciprocal Insurance Exchange (CURIE). This was increased by an additional advance of \$800,000 which was used for the purchase of computers, research equipment, teaching and research materials and other expenses. To date, \$8M net of deductible has been recommended to Insurers of which \$5.85M has been received to date.

The total projected damage costs are expected to amount to between \$25 and 30M (exclusive of any code upgrades to the building). This insurance claim is estimated to be the largest single claim for a post-secondary institution in Canada.

The priority now is to collect and incorporate the design needs of each affected department as the University moves into an intense period of re-design of the West side and a rebuilding to its original state of the East side. Because the building is of 1970's vintage, code upgrades including a fire suppression system are currently being designed and installed, funded entirely by the University. The key priority in the immediate future - to return all individuals affected by the fire back to a building that is back to what it once was - a dynamic and exciting teaching and research facility.

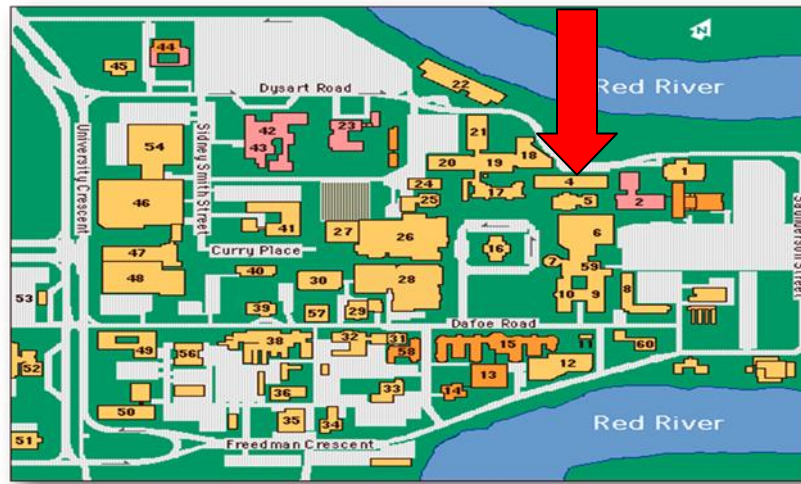
**Phase Overview**



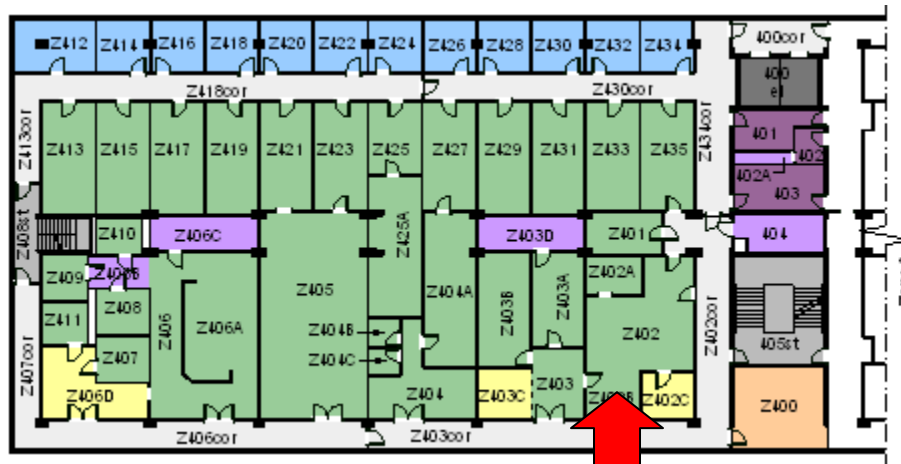
# 1. PHASE I –RESPONSE

## 1.1. Day of the Fire

On Saturday, March 28 the Duff Roblin Building suffered significant damage due to an electrical fire. All occupants were safely evacuated and no injuries were reported, however, the building – particularly the west wing sustained serious damage that affected its use for the remainder of the school term and beyond.



Location of Duff Roblin Building on Campus



Fire Location in Duff Roblin Building

Faculties and Departments directly impacted by the fire include:

- Arts: Anthropology, Psychology;
- Environment, Earth and Resources: Geography;
- Human Ecology: Human Nutritional Sciences, Textile Sciences;
- Science: Biological Sciences;
- as well as the Animal Holding Laboratory in the basement.

Total number of displaced academic and research Faculty, graduate students (including post-doctoral fellows), administrative staff, undergraduate students and technicians for all departments amounted to 290+.

Department	Academic Faculty & Research	Staff	Graduate Students & Post-doctoral Fellows	Other	Total
<b>Anthropology</b>	5	2	8	2 Undergraduate Researchers	<b>17</b>
<b>Biological Sciences</b>	23	11	28	7 Undergraduate Honours students 2 Course cancellations	<b>69</b>
<b>Geography</b>	1				<b>1</b>
<b>Human Nutritional Sciences</b>	7	9	20	10 Undergraduate lab spots	<b>46</b>
<b>Psychology</b>	42	10	45	54 Graduate & Undergraduate Researchers	<b>151</b>
<b>Textiles</b>	3		3		<b>6</b>
<b>Total</b>	<b>81</b>	<b>32</b>	<b>104</b>	<b>73</b>	<b>290</b>

This number only includes those people who occupied space in the Duff Roblin Building and does not include the displacement of hundreds of students enrolled in lectures and labs that were to have taken place in the facility.

The Animal Holding Facility and Lab was kept operational immediately after the fire allowing technicians to continue their work.

Collections affected include an extensive archeological anthropology collection, the Biological Sciences specimen collection (holding thousands of specimen bottles), a museum, stuffed birds and other animals, skeletons, bone samples, biological materials, and an extensive and valuable textile collection.

Please refer to Building Plans in the Appendix.

## 1.2. Interim

On March 28 a call was placed from the Powerhouse to University of Manitoba Environmental Health and Safety (EHSO) reporting a working fire in the Duff Roblin building. Within minutes City of Winnipeg Fire Department (COW WFD) apparatus and EHSO were on the scene. Winnipeg Fire Paramedic Service personnel on site included a Platoon Chief (Incident Commander), District Chiefs, Captains, Lieutenants, Hazardous Materials Technicians and Firefighters. According to the Winnipeg Sun, Chief Clark stated there were 80+ personnel from the Winnipeg Fire Paramedic Service on site. According to CTV, Chief Sumka stated that 20 pieces of apparatus were on the scene. These included pumper trucks, a ladder truck, hazardous materials units and at least one ambulance. Manitoba Conservation was onsite with 2 staff. Workplace Health and Safety chose not to attend.

EHSO worked closely with the fire department to provide expertise as it pertained to the site, building use and the hazardous materials involved in the fire. They ascertained that the lab where the fire originated had 250 different chemicals on its inventory possibly including 1 kilogram of water reactive chemicals. A representative from EHSO and Manitoba Conservation accessed the immediate fire area under full firefighting precautions (wearing fire protective clothing and self contained breathing apparatus). The immediate fire area was assessed to develop an ad hoc remediation strategy specific to the immediate hazmat issues. The fire investigator insisted that he would not enter the area until Manitoba Conservation and EHSO declared the area "safe".

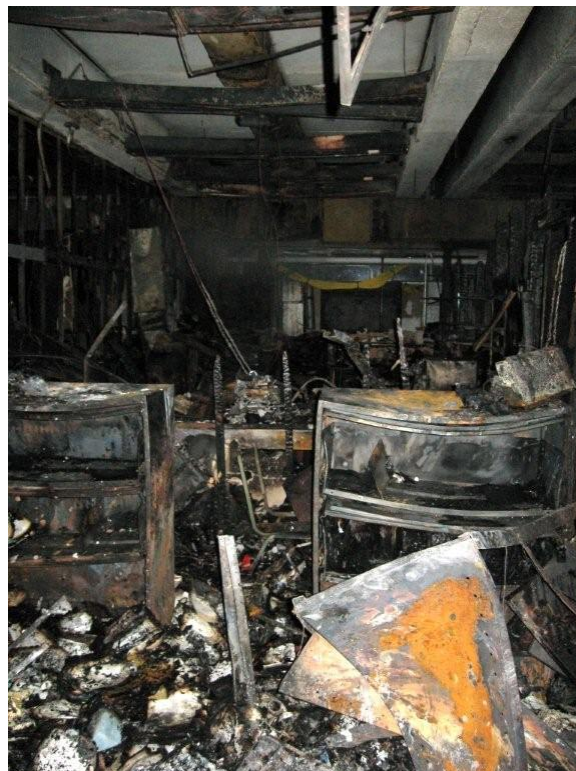
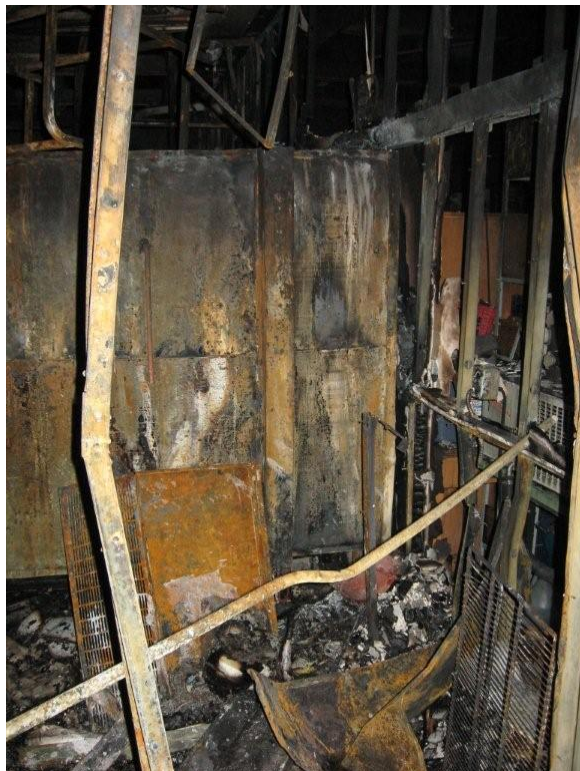
Initially there was some confusion as to where the fire was relative to the floor plan. Of primary concern was the 1 kg of water reactives indicated on the door sign. This meant that water could not be used to suppress the fire. Lack of specific information inhibited the firefighting efforts.

After more detailed information was received, and the fire was suppressed, no one was allowed to enter the building until it could be declared safe. Assisted by the WFD, members of EHSO entered the building and observed the following:

- Significant amounts of water flowing (waterfall style) down the center stairwell.
- CO levels of up to 300 ppm on the fire floor.
- Heavy smoke damage in corridor on the south east side of the west zone.
- Damaged gas cylinder in room Z403 which appeared to have a melted fusible link.
- Large amounts of paper, broken glass and partially burnt chemicals containers in Z403.
- 4 damaged gas cylinders of unknown content located in room Z402B.
- Areas marked radioactive in room Z404, Z404C and Z404B. These areas were affected by smoke but no radioactive concerns were visually apparent.
- Green coloured water in several areas on Level 400; the origin of the green coloration could not immediately be determined.
- Z402 had significant fire damage and compromised chemical containers.
- There was no access to level 500, the Penthouse or other areas as entry into the building was specific to assessing the immediate fire area and limited to the safety apparatus /PPE available at the time.

Based on the broken chemical containers in the area and the presence of the unidentified green water, a recommendation was made that the area should be treated as a Hazardous Materials contaminated site. After discussion, a decision was made that the most qualified contractor for assessment and clean up in Winnipeg was Clean Harbors based on manpower, experience and available equipment.





### 1.2.1. Engaging Clean Harbors

EHSO had the expertise required to perform the hazardous materials cleanup resulting from the fire. However it was obvious that EHSO did not have adequate human resources or some of the specialized equipment required. Specifically a vacuum truck and labourers were immediately required to begin collecting the green water on March 28. The sheer volume of hazardous waste that required disposal was also beyond the capabilities of the U of M hazardous waste program.

Any one of 3 local contractors could have been called upon to do the work. The University had experience with all 3 contractors and chose Clean Harbors based on the quality of their past work, customer service and available resources.

Types of chemicals in building:

- Examples of all types of “regular” hazardous wastes were found in the Duff Roblin Building. These included biological materials, corrosives, toxics, flammables, compressed gases, oxidizers and environmentally hazardous materials. EHSO also removed some radioactive materials and 2 containers of potentially explosive chemicals which EHSO will be disposed by EHSO in the fall.
- Clean Harbors removed all the fire debris in the immediate fire area and disposed of it as contaminated material. A total of 147 IBC bags or 9,408 ft<sup>3</sup> of debris were disposed. They also decontaminated the immediate fire area which required the removal and disposal of some building components such as walls, ducts and millwork.
- In total 192 drums and 53 pails of lab packed chemical waste were disposed. These 245 containers totaled 15,360 L/Kg, almost equivalent to the total amount of chemical waste disposed from all University of Manitoba locations in a typical year.

Protocols following the fire included:

- Incident reports were made to Workplace Health and Safety and Manitoba Conservation.
- Site safety plan developed by Clean Harbors on March 28 in consultation with EHSO.

- Initial air monitoring began on March 28; this was expanded to include additional parameters in the days after the fire.
- PPE requirements were posted on March 31 for anyone accessing the building; the level of PPE was dependant on the area being accessed with stricter requirements in place for the fire floor and floors immediately above/below.
- An industrial hygienist was contracted to validate the PPE requirements developed and implemented by EHSO.
- All green water on site was collected and held until analysis was completed by the Dept of Chemistry.
- Access to the immediate fire area was restricted to staff from EHSO or Clean Harbors; others were only permitted access under escort.
- Departmental Cadres were formed in the week following the fire to allow trained departmental staff to access the immediate fire area and floors immediately above and below.

Immediate concerns related to the chemicals in the building included:

- Badly damaged gas cylinder of unknown contents.
- Un-reacted water or air reactive chemicals damaged in the immediate fire area.
- Unknown factors related to the chemical contamination of the immediate fire area.
- Temperature sensitive chemicals stored in fridges and freezers that were experiencing elevated temperatures from the power loss.

John DeGroot, Manager of Clean Harbors was contacted and arrangements made for them to have a vacuum truck and a cleanup crew onsite within a few hours.

An improvised meeting of the Emergency Operations Centre in the Armes Building convened to discuss the incident and begin plans for the recovery phase. It was clear that the Animal Care group needed to enter the animal holding area to assess the condition of the animals. It was also clear that the animal holding area was on a separate HVAC system from the remainder of the building.

The magnitude of this incident was unprecedented at the University of Manitoba. Fortunately EHSO is in a unique position to respond to such an emergency. The unique EHSO response capability is best described as a “sum of all its parts”. Individual program areas cover very broad aspects of health and safety. The recent purchase of specialized equipment along with training initiatives related to hazardous materials (HazMat) and Incident Command have contributed to operationalizing existing core competencies into solid response capabilities.

This “emergency” is currently in the recovery phase and will continue to represent a significant workload for the Environmental Management Program for months. Issues related to mould, hazardous waste management, asbestos and transportation of dangerous goods will all require attention. The services of Clean Harbors of Canada and Pinchin Environmental were retained to assist in the recovery phase.

### 1.2.2. Security Services

On the day of the fire two officers responded and confirmed a fire was in progress. They attempted entry to ensure building evacuation, but were turned back by heavy smoke. In total approx 38 emergency response units were on site. Due to potential toxic smoke an evacuation radius of 3 to 5 miles was considered. Nine additional officers were called out including the Director and the Assistant Director of Security Services.

Resources were required to:

- Establish an inner perimeter around the fire scene for safety.
- Undertake vehicle and pedestrian traffic control.
- Prepare for possible evacuation of campus.
- Media control.
- Deal with potential non-fire related issues on campus.
- UM Security Services internal effects;
  - Considerable increase in telephone call volume and radio traffic:
  - Numerous notifications and enquiries from/to internal and external sources: one station duty officer handled approx 90 fire related calls between 12:04- 7:00 pm; 30 in the first hour.
  - 3 members worked 17 hours straight during and immediately after the fire.
  - Additional officer needed to assist.
  - In total over 200 hours of overtime was paid out.

Security arrangements were required for clean-up and relocation with contract security required to monitor access at both the fire site, and later, the warehouse facility. Counseling services were made available for students and staff who may have been emotionally impacted by the fire. Simultaneously, work continued with the Red River potential flood putting pressure on the campus dikes.

### **1.2.3. Emergency Steering Committee**

The University of Manitoba team worked with the hired contractors to create an effective plan to cope with the aftereffects of this fire. Academic and research work, even personal belongings, suffered damage due to fire, smoke or water. All efforts have been made for recovery, in the immediate aftermath and on an ongoing basis. The immediate priority was for the safe retrieval of materials required to facilitate the end of the academic term.

The university established an emergency operations centre in room 207 University Centre to act as an information hub for those affected by the fire and the building closure. This room was also equipped with computers, phones and copiers which were available for use by all Faculty, staff and graduate students of affected departments.

Alan Simms, Associate Vice-President (Administration) contacted Heads of Faculty, and the Directors of Security Services, Physical Plant, Public Affairs, Emergency Health and Safety Office (EHSO), the Associate Vice-President (External) and Vice-President (Administration) to coordinate a meeting Sunday morning, March 29<sup>th</sup> to assess the damage and review next steps. The meeting was attended by all key stakeholders, including the Heads of affected Departments, all Vice-Presidents, representatives from all contractors involved in the immediate recovery/clean process, and Dr. David Barnard, the President of the University. This group formed the Emergency Steering Committee (EOC). To review a complete list of all EOC members, please refer to Appendix 1.

Chaired by Alan Simms, the EOC met daily in the weeks following the fire, then every second day, then weekly, dependent upon the needs of the key stakeholders. The Fire Recovery Committee (now chaired by Mia Kinal, Fire Recovery Project Manager) is made up of representatives from university administration, the affected faculties, clean up and restoration companies, Environmental Health and Safety officials and others. This group gathers bi-weekly to share information and receive updates on the recovery efforts; an update communiqué is distributed on alternate weeks.

The university hosted an open information meeting on March 30 to update staff and students on the situation, followed by private, individual meetings for the units affected. The priority, beyond safety concerns, was to minimize, as much as possible, the impact on staff and student activities. The university committed to making it a priority to retrieve as many relevant teaching and research materials from the affected area as possible to ensure a successful completion to the current academic terms.

A second information meeting is scheduled for September 14, 2009 to provide current information for incoming students and the University community.



#### 1.2.4. Communications

Immediately after the fire, activities reached the point where measures needed to be taken to keep people away from the fire-affected building. University of Manitoba Public Affairs (PA) coordinated these efforts and worked with the City of Winnipeg Police Department to restrict access and reassure both the public and the University community. The first step was to call radio stations CJOB and CBC and ask them to report that the fire had taken place, was under control, that nobody was injured, and that the campus was closed off from visitors while the firefighting and damage assessment efforts continued.

Within the hour, PA joined the WPD communications staff on the perimeter of the campus, (on University Crescent at Markham Road) to establish a media staging area. Media were allowed to congregate, set up their cameras and conduct interviews. The Director of Public Affairs served as the spokesperson for the University of Manitoba. One scrum was organized where an update on the status of the fire was shared with media and then for another two hours PA and WPD communications staff were present to answer other occasional questions. The main message was that the fire was under control and that nobody had been injured. Along with those messages, details were shared such as the successful evacuation and the safety of animals in the building.

At the same time, PA worked with IST and EHSO to post an emergency message on the website, conveying similar messages to those shared with the media. The website became the main conveyance of information for the University community.

In the days following the fire, external communications focused on matters relating to the fire, while internal communications focused on the resulting and required accommodations including relocation of

exams and department offices. Initial media reports had included “guesstimates” from non-University of Manitoba staff about the possible overall cost of the damage; these “guesstimates” had to be corrected. Although there were no hard numbers to provide the media, the media were told that the final overall cost would substantially exceed those initial unofficial “guesstimates.” The PA Director continued to serve as University of Manitoba spokesperson, conducting numerous radio, television and print interviews. The main message was that all efforts were being made to ensure the impact on students of the fire was mitigated.

The town hall served as a critical internal and also external communications vehicle. This event offered an opportunity to share the full extent of the damage with audiences, to assure people that mitigation and recovery efforts were underway and that everyone affected by the fire would have their needs met. The earlier, all-inclusive session was open to the media; the breakout sessions for individual departments were held in private with no media access. PA hosted the media and arranged for interviews and photos of the fire to be shared.

In the weeks following the fire, communications focused on widespread sharing of the cause of the fire (once it had been positively identified), correcting misconceptions of the overall damage costs, and outlining the full scope of fire recovery efforts. The Director of PA continued to be the spokesperson for the University, with the VP (Administration) also commenting to media, notably on recovery cost estimates.

Moving into late summer, communications are focusing predominantly on the Fall academic term, conveying information to students about class, lab and department administration locations. At this point, plans are to utilize the web site to the fullest extent possible, and also to allow individual departments to share information with their constituencies.

### 1.2.5. Environmental and Toxic Chemical Response

Immediately after the fire was extinguished by the City of Winnipeg Fire Department, Clean Harbors was on-site and entered the building. Their immediate task that day was to pump water from the interior of the building. This task continued for several days as the water continued to pool from walls and debris. On the second day, they began the task of assisting EHSO with identifying risks and hazards in the building resulting from the fire and water damage. This included gas cylinders, chemicals, biologicals/sharps, fire debris, fridges/freezers with chemicals and samples, and fume hoods with chemicals and samples. The initial focus was on the "ground-zero" fire area, expanding outward to include the West Wing of the Duff Roblin Building, followed by the East Wing (according to order of priority and risk of exposed hazardous materials).

Under the supervision of EHSO, a clean-up plan was developed. This included the development, approval and implementation of a Health & Safety Procedure for Clean Harbors employees for each task and location. Clean Harbors began to identify and prioritize all risks and hazards in the building. Priorities were ever-changing, particularly in the first days and weeks as new risks were identified and prioritized such as the:

- Continued removal of all fire-water from the building's interior.
- Removal of fire debris from key areas to enable access to electricians as they worked to restore power to fridges/freezers and illumination.
- Development of an inventory of all fridges/freezers in the building including identification of contents and hazards; followed by working with electrical crews to restore power to all units, and commencement of a monitoring program of all fridges/freezers to make sure any failures were handled quickly.
- Working with Principal Investigators (PIs) to move key samples to alternate new locations outside of the Duff Roblin Building; followed by cleaning and decommissioning of empty fridges and freezers (enabling transport to the warehouse).
- Clean-up and disposal of ground-zero fire debris beginning a few days after the fire. The task included collection of fire debris, dry-ice blasting of interior walls, floors and ceilings and the south-west exterior wall where smoke damage had occurred.
- Isolation of burned lab equipment followed by packaging and removal to isolated and contained storage trailers for later assessment and evaluation.
- Provision of assistance to PIs (mainly in west wing) including escort supervision into the building to identify and in some cases collect sensitive materials (including temperature sensitive samples; time sensitive documents, apparatus, and research materials).
- Provision of assistance and expertise to others working in the building, including LWG, electrical and plumbing crews, movers, the computer data recovery crew from IST. This involved both locating and gathering equipment, escorting crews into hazard zones, providing PPE and ensuring all workers were supervised in hazard zones throughout the building.

Clean Harbors was also involved with the provision of packing and moving services as required for specific, specialized items that were of a sensitive nature such as:

- Moving a valuable Biological Specimen Library to Chemical Storage Warehouse.
- Cleaning and returning to Faculty critical samples and/or apparatus including fragile and rare bird egg collections, skeletons, slides, historical specimens and water samples.

One of the major responsibilities was the collection, packaging and disposal of chemicals, sharps, biological materials, and cylinders. Sweeps were undertaken room by room, and floor by floor in both the West and East Wing. This was one of the larger tasks assigned to Clean Harbors, and included a

wide range of products and hazards. Chemicals were typical lab varieties and quantities, including flammables, corrosives, oxidizers, and poisons. There were occasional highly reactive, or temperature sensitive chemicals encountered which required specialized procedures and handling, as well as finding compromised cylinders in the ground-zero area, spilled mercury in several locations, and many unlabelled or unknown items.





### 1.2.6. Demolition

Winnipeg Building and Decorating (WBD) was called to the site by the Provincial Fire Commissioner to secure the site for their investigation. They also closed in windows to prevent damage from the elements. A crew was assembled to undertake emergency clean-up operations. The first consideration was safety and working with EHSO they ensured that ongoing operations were conducted in a responsible manner. Emergency stripping of drywall and wet carpets was carried out to minimize mould potential. This work continued for several weeks.

Key concerns were:

- What chemicals had been released and whether asbestos and any other hazardous materials may exist in the building.
- Safety of the West side with respect to structural damage and falling glass.
- Quick identification of life safety issues to enable ongoing work.
- Availability of the necessary safety equipment.
- Adequate power back up and restoration to save experimental research stored in fridges and minus 80°C freezers.
- Protection of all contents to prevent further damage.
- Determination of a suitable space to relocate contents.
- Assessment (with EHSO) of ways to safely restore and return tools required by all faculty and graduate students to enable continuing teaching and research.
- Privacy issues with respect to grades, research and other confidential or sensitive documents.
- Orderly removal and storage of contents to enable later location of specific items at the warehouse.
- Return of goods to temporary locations all over campus.

The work of WBD in the Duff Roblin Building in the three months following the fire was limited to:

- Demolition work to prevent mould.
- Supply of emergency power and heat.
- Provision of safe lighting levels.
- Preservation of experimental data, exhibits and collections.

### **1.2.7. Immediate Space Issues**

The immediate requirement made clear by all Department Heads was emergency access to the building to retrieve materials required to fulfill teaching duties until the end of term in April. On Monday, March 30<sup>th</sup> controlled access appointments were coordinated through the Office of the Vice-President (Administration) in coordination with EHSO, Clean Harbors, Winnipeg Building and Physical Plant. Access began in areas least affected first (Eastside), followed by more heavily damaged areas (Westside). Faculty, support staff and graduate students entering the building were assigned appointments, escorted, and asked to only retrieve paper materials and computer disks – no computers were to be turned on. Priority for access lists were requested and submitted.

With respect to immediate space needs, Department Heads indicated that their key concern was finding an immediate 'home' for their respective administrative/Head units to centralize operations. By Monday, March 30<sup>th</sup> Psychology was relocated to Chancellor's Hall and 80% of their phone lines were reconnected. Psychology academic staff relocated to Fletcher Argue, Elizabeth Dafoe Library, Isbister, Helen Glass Building, Drake Centre, Agriculture Building, St. John's College, Animal Science Building, Engineering, Crop Technology Centre, Human Ecology, Nursing, Plant Science, Sociology, and University College.

Human Ecology administration was moved to the Human Ecology building and two academics were allocated space at the St. Boniface Research Centre and one academic was relocated to the Richardson Centre for Nutraceuticals. All phone lines were reconfigured by Tuesday, March 31<sup>st</sup>. Two Human Nutritional Sciences PIs were assigned to CCARM and the Head of HNS relocated to the Animal Science Building. Four HNS PIs relocated to the RCFN and one HNS PI found lab space in CCARM. Two Textile Sciences PIs were relocated to the Parker Building.

Biological Sciences set up their main administrative office and Department Head office at 121 Machray by Monday March 30<sup>th</sup> and academics found temporary space in Parker, Buller, EITC, Basic Medical Sciences, Machray Hall and the Crop Technology Centre.

### **1.2.8. Data & Phone Recovery**

After the Duff Roblin fire, it became necessary to make a number of changes in a short period of time in telephone installations. These included:

- 101 phones relocated at various locations
- 18 phones forwarded to other existing numbers
- 70 phones were not replaced immediately. These were primarily “utility” type phones (20 Red Emergency Phones, 16 classroom phones, 1 Alarm phone, 4 Physical Plant phones (elevators) and 29 Departmental phones primarily for staff and/or graduate students who were not relocated elsewhere.
- 6 phones were left in service in the basement area (Animal Holding facility).

The decision was also made immediately to recover data from all hard drives in desktop and laptop machines which were in the building at the time of the fire. Many contained critical grade information, research results and data for theses defenses. A recovery centre was established in the services building and all hard drives removed from workstations were moved to that area. IST staff set up recovery stations and procedures. Data was recovered in the priority order established by the affected Departments. Recovered data was uploaded to the Novell file system enabling user access.

As of August 14 (less than one month after the fire) a total of 406 recovered PC drives, Mac drives, and External drive units had been recovered and uploaded onto Novell: 23 from Anthropology, 52 from Human Ecology, 209 from Psychology and 122 from Biological Sciences.

This represents the majority of all drives. A few are still in the recovery process because of problems with the age of the drive or special file formats. 36 drives are defective and not recoverable at this time.

To date IST has recovered 5.616 terabytes (5,616 gigabytes) of data in 27,323,856 files.

### **1.2.9. Insurance Adjusters**

Within the first week of the fire, Alan Simms distributed the “ABCs” of the Insurance Policy to relate information about coverage of personal property, relevant exclusions and miscellaneous items that would affect key stakeholders. Canadian Universities Reciprocal Insurance Exchange (CURIE) coverage for the University amounted to \$5.0M only – any claim beyond that amount would then involve excess carriers that became known as “the market”. Within the first week of the fire, CURIE supplied a cheque in the amount of \$600,000 to cover off immediate emergency expenses. Working with the University’s local insurance adjuster to identify immediate needs and longer term needs, CURIE issued a further \$1.7M, with total advances amounting to \$2.3 M by the end of May. Immediate costs included audio visual equipment, contractor fees, new phones, computer replacement (partial), warehouse rental and the purchase of new minus 80 freezers.

Beyond the \$2.3M issued by the end of May, it was reported that CURIE would require detailed reports from the adjusters before issuing the balance of their Primary Policy limits (\$2.7M). At this point, it was estimated that the claim had grown from \$2M (immediate aftermath of the fire) to over \$30M and thus excess carriers became involved, and the process for acquiring funds became more complicated. An international adjuster was assigned to the claim and the Insurers brought their own independent consultants in to examine every aspect of the recovery process (For a complete list of consultants and companies, please refer to Appendix II).

### **1.3. Scope of Insurance Coverage**

The University of Manitoba policy covers property of every kind and description, which meant the property of the Insured. The basis of loss settlement is replacement cost, which is defined in effect as the cost to repair, rebuild or replace (whichever amount is less) with new materials of "like kind and quality". This would become an important consideration in the weeks to come.

The Policy deductible is \$50,000 and the GST rebate recoverable is 67% .

#### **1.3.1. Exclusions**

The policy does not apply to:

- Any other property more specifically insured.
- Personal property of students.
- Fine art.
- Biological materials, including animals involved in research experiments.
- Extra Expense beyond \$5M, or the total cost of continuing the Insured's business over that which would have normally been incurred. In other words, an Extra Expense is an increased cost for carrying on normal operations.
- Compensation for Business Interruption.

#### **1.3.2. Specific Issues & Clause Explorations**

After considerable discussion over what could be construed as Extra Expense, the Insurer agreed to pay overtime costs associated with the work of Physical Plant staff, administrators and others involved in the recovery effort.

In addition they approved the hiring of a Project Manager whose sole focus is the recovery and restoration of the building and its contents. The project manager is also responsible for ensuring the temporary placement of staff, faculty and students during the rebuilding process and the smooth transition back into the building when clean up and construction is complete.

In addition approval was given to fund several Departmental positions for Biological Sciences and for Textile Sciences to help with the purchasing and equipment return process. In Biological Sciences, the individual is a retired Faculty member (Dr. Lane Graham), who is currently co-coordinating equipment return from restoration and also purchasing replacement equipment. Textiles has hired Judy Manness, who formerly ran the Textile Testing Service for the Faculty of Human Ecology, to serve as a technical resource and co-ordinate and oversee the purchase and replacement of their major textile collection and required samples ( all of which were deemed as Total Loss). Thousands of textile samples were damaged in the fire.

#### **1.3.3. Personal Property**

Personal property of officers and employees (including employees who are students) of the University is included while on the premises insured in the insurance coverage, and is subject to a maximum recovery of \$5000 per person, subject to exclusions and other insurance. Generally and with respect to personal property, coverage is limited to the excess if any beyond the amount which is or would have been payable under other applicable insurance (i.e. underlying homeowners' coverage). The personal property of students' is not covered; they have been directed to make a claim for replacement against their homeowners' insurance. Individual cases will be reviewed if a student is without insurance, or subject to a deductible.

#### 1.3.4. Biological Materials

There was considerable discussion over what was the definition of biological materials with respect to what would be covered under the insurance claim and what would not be covered.

Researchers indicated that anything that could be ordered from a supplier like Sigma or Roche would be considered a reagent, and should be replaced. This would mean that 'biological materials' for purposes of exclusion from the insurance coverage would be outside the reagents and 'chemicals' that could be ordered commercially, notwithstanding the items that were synthesized or purified from something biological (cells, animals, plants, bacteria, algae). It was also strongly argued by the University that the collections (biological specimens of fish, reptiles, mammals, birds, bones) and teaching materials (including wet or dried specimens, prepared microscope slides) should be covered, since those underpin the academic work of the university's teaching and research programs, although there are instances where an individual researcher's specimen collections (sometimes accumulated over 20-35 years) and stored in freezers may not be completely or even partially covered. Those would be irreplaceable in some instances, and would require considerable work to replace (by re-collection) in other instances.

Information received from the Insurers has confirmed that the Policy will not respond to such expenses.

The relevant Policy section and clauses state the following:

**“4.3 PROPERTY EXCLUDED**

*This policy does not apply to:*

- (j) *biological materials, including animals involved in research experiments;*

**4.5 BASIS OF VALUATION AND LOSS SETTLEMENT**

- (g) *Applicable to Research Experiments*

*The basis of loss settlement in respect of research experiments of whatever nature shall be limited to the cost to replace the direct physical loss or damage but no liability is assumed hereunder for the cost of reproducing the experiment or for the cost of gathering or assembling information or data for such reproduction.*

- (h) *Applicable to Animals*

*The basis of loss settlement for animals covered under this policy shall be cost to replace the animal with like kind, excluding any input cost and other costs of recreating conditions or unique properties specifically held by the lost animal.”*

The basis therefore of loss settlement in respect of research experiment of whatever nature is limited to the cost to replace the direct physical loss or damage and no liability is assumed for the cost of reproducing the experiment or data for such reproduction.

#### 1.3.5. Code Upgrades

The policy coverage indicates replacement or repair with like kind or quality. The Duff Roblin Building is of 1970's vintage, and as such does not meet today's Building Code requirements. In its discussion and negotiations with the Insurer regarding restoration work to be undertaken, the University presented the argument that there would be a requirement to ensure that the Duff Roblin Building comply with today's regulations and standards for life safety. The case was presented for the installation of a building wide sprinkler system that would be funded by the insurance coverage. However, as the City of Winnipeg views the work as a major restoration, not renovation, they will not enforce this requirement; leading to the Insurer denying coverage for the cost of this system as per the following:

*“Without increasing the amount insured, the Policy is extended to include coverage and indemnity for the increased cost of repairs, demolition or debris removal due to the enforcement of any “Law, By-law or Ordinance” regulating the construction or repair of “Buildings” – not equipment or contents. Coverage is limited to the increased costs of construction required to comply with the minimum requirements of such “Law, By-law or Ordinance”.*

*The Policy does not cover any increased cost or loss due to any “Law, By-law, or Ordinance” with which the University was required to comply had the loss not occurred. Changes to the Fire Code we understand to be effective retroactively and therefore the requirement or obligation to comply with the Fire / Safety laws or ordinances are considered to have been a pre-existing requirement prior to the fire and loss of March 28, 2009, even though no specific order may have been issued by the Authority Having Jurisdiction.*

*To what extent the University is required to incur any increased costs of construction to comply with any existing Law, By-law or Ordinance in the repair of the Building is still being evaluated and the potential increased cost quantified for compliance to meet such minimum requirement of any such applicable Law, By-law or Ordinance.”*

A fire suppression sprinkler system is being designed and will be installed, funded entirely by the University of Manitoba.

#### **1.3.6. Asbestos Abatement**

The policy covers the expense of removal of debris remaining as a result of the loss. All ceilings in the building needed to be removed either for repair, restoration or replacement. The University of Manitoba was aware of the presence of asbestos in some of the metal ceiling components, flooring tile and pipe wrapping. This material, also contaminated by soot and smoke, is being removed (through an approved Asbestos Abatement program under the supervision of the U of M Asbestos Co-ordinator) as part of the insured coverage.

#### **1.3.7. Consultants for the Insurers**

A variety of specialized consultants have been engaged by the Insurers to serve as overseers of the restoration and recovery process; this is to provide a level of comfort that all undertakings are in keeping with the Policy. These consultants are involved in computer restoration assessment; forensic accounting and financial verification; equipment and contents restoration review; and review of the re-design and construction process. The intention was that this work would run parallel to and not inhibit or delay the restoration process. However, in some cases, the work was protracted and prolonged as multiple reviews and multi-layered approvals were required to proceed.

#### **1.3.8. Asset Draw & Total Expected Loss**

In order to fund initial expenditures in the aftermath of the fire, two separate installments totaling \$1.5M were provided. This was increased by an additional advance of \$800,000. The University used this as an amount to draw on as initial purchases and expenses were incurred.

As of the writing of this report, 8M net of deductible has been recommended to Insurers of which 5.85M has been received to date.

CURIE - Primary: \$5,000,000.00 CAD

Insurer	Insures	Amount
CURIE – Canadian Universities Reciprocal - received	100.00%	\$ 5,000,000.00
Total	100.00%	\$ 5,000,000.00

EXCESS LAYER: \$3,000,000.00 CAD

Insurer	Insures	Amount
American Home Assurance	28.00%	\$ 840,000.00
GCAN Insurance Company - received	12.50%	\$ 375,000.00
Arch Insurance (Canada)	10.00%	\$ 300,000.00
Lloyd's of London c/o Price Forbes Ltd	9.00%	\$ 270,000.00
Allianz Global Risk US Insurance Co - received	8.50%	\$ 255,000.00
ACE INA Insurance	7.50%	\$ 225,000.00
SCOR Canada Reinsurance Company - received	7.00%	\$ 210,000.00
Syndicate 2003 at Lloyds c/o Catlin Canada	7.00%	\$ 210,000.00
St. Paul Fire & Marine Insurance Company	5.50%	\$ 165,000.00
Temple Insurance Company	5.00%	\$ 150,000.00
Total	100.00%	\$ 3,000,000.00

It is estimated that the total loss and claim may amount to approximately 25M (exclusive of any code upgrades to the building). This occurrence is one of if not the largest single claim for a post-secondary institution in Canada. Understanding that the assessment is incomplete, that the valuation is continuing and there are still a number of variables to be identified, resolved and quantified, the recoverable final loss is tentatively projected as:

Line of Coverage	Estimated Replacement	Incurred a/o Committed incl 37% GST	Projected Loss Exposure
Emergencies / Demo & Debris / Temp Clean-up		724,653	2,000,000
Building - Restore 'As Was'	50,000,000	615,003	3,500,000
Potential Minimum Required By-Law & Code Upgrades & Contingency			6,500,000
Equipment - Electronic / Computers	9,169,370	3,198,483	5,000,000
Furniture & Fixtures	16,000,000	2,989,692	7,500,000
Extra Expenses		953,653	2,500,000
Professional Fees			300,000
<b>Sub-Total</b>		<b>8,481,483</b>	<b>27,299,999</b>
Less Deductible		(50,000)	(50,000)
<b>Sub-Total</b>		<b>8,431,483</b>	<b>27,249,999</b>
Less Primary Occurrence Limit		(8,000,000)	(8,000,000)
<b>Net Incurred / Projected Exposure</b>		<b>431,483</b>	<b>19,249,999</b>



## **1.4. Specialized Considerations**

### **1.4.1. Equipment**

As a direct result of the fire specialized research equipment located throughout the Duff Roblin Building was contaminated and damaged by fire, soot, smoke and water. If not a total loss, the condition of the equipment would continue to deteriorate because of the contamination. It was determined that specialized consultants should be engaged for timely and professional equipment decontamination and restoration in order to minimize downtime and subsequent effort of lost productivity, teaching ability and research. LWG Consulting was recommended by the Insurer and hired by the University of Manitoba, and over the course of five months, undertook:

- Pre-restoration equipment inspection.
- Preliminary surface cleaning, wrapping and detailed assessment of all equipment, electronic items and Peripherals as Total Loss, Salvage or Restorable.
- Equipment Inventory and Status Tracking.
- Co-ordination and supervision of specialty movers.
- Detailed cleaning and restoration.
- Post-restoration equipment inspection.

The original equipment locations encompassed:

- Equipment located on the East side of the Building and Level 200 (teaching labs) on the Westside.
- Equipment designated as minimally contaminated restorable, restorable, and under \$2000 in value located on Levels 300, 400 & 500 on the Westside.
- Equipment located in Level 100 Animal Holding Facility.

Their work is covered by a one year limited warranty which will take effect on individual pieces as they are returned to use, plus an additional three months for those items in long term storage until building re-occupancy. Restoration work was completed at the end of August. There are a variety of pieces that require being returned to vendors for recalibration and testing. However, as more items are returned to use, end users are identifying issues with respect to inadequate cleaning and decontamination, breakage and missing components, damage and lack of performance not previously identified by LWG.

These issues are being dealt with on an individual, case by case basis. In some cases, this has or will result in a previously restorable item being declared total loss, dependant on the age and value of the equipment in question relative to the cost effectiveness of restoration versus replacement.

### **1.4.2. Archaeological & Zoological Materials**

#### **Anthropology Collections**

These collections are located on the 300 Level, Eastside and consist of a wide variety of archeological, historical and teaching materials relative to the study of Anthropology. Replaceable and teaching materials have been relocated for storage, safekeeping and restoration to the Warehouse. Irreplaceable and sensitive items have remained in their existing storage units in the Duff Roblin Building. They have been wrapped for protection during re-construction, and restoration work will commence at a suitable time following re-occupancy.

**Fish and Herpetology Collections**

These collections were located in Z205 (Westside) of the Duff Roblin Building. Due to the nature of the collections, a variety of handling methods were required. A complete inventory was undertaken in June, followed by an assessment of condition, and recommendations as to long term storage until the West side is re-occupied. The majority of liquid preserved specimens were packaged and removed to offsite storage by Clean Harbours. Due to the fragile nature of other items such as skeletons, buffalo heads, stuffed birds, etc, a decision was made to protect those items on site from construction work, and undertake restoration in situ after re-occupancy.

**Artifact Damage Assessment and Restoration Plan by Parks Canada**

Conservation staff from Parks Canada and the Association of Manitoba Museums was called to the Duff Roblin Building at the University of Manitoba on May 8, 2009 to determine the extent of damage to the zoological and archaeological collections following the fire. A second visit was made on June 4, 2009 to take some additional measurements.

The archaeological collections are housed on the third floor of the Duff Roblin Building in closed cabinets, mobile shelving units, or on open shelves. The zoological collections are on the second floor and kept in sealed cabinets, open shelves, glass display cases, or mounted on the walls. They were not burnt by the fire, however; soot and smoke damage is present. One area on the second floor was also water damaged. All of the objects were examined visually and with the use of Webril Wipes.

It is estimated that 100% of the archaeological objects require cleaning and/or repackaging. Some objects may have more soot than others, but they all have some degree of soot contamination. Objects which were bagged, wrapped, or boxed only have contamination on the packaging materials. Once the packaging is replaced, the artifacts are okay. The objects uncovered on shelves or in drawers will have to be individually cleaned. The majority of the work does not require a conservator. A team composed of an archaeological technician and a group of students would be adequate. The initial training in object cleaning for the technician and students could be done in about an hour by a Parks Canada conservator. The techniques are straight forward and easy to learn in a demonstration. The exception will be the aboriginal skeletal remains which will require an elder along with the professor. The elder will have to be consulted to find out what would be appropriate.

The zoological collections in the museum were not affected by the soot and smoke except for the stuffed mammals and the whale bone. The glass display cases provided adequate protection. Similarly, the birds in the gasket -sealed cabinets are undamaged. However, the birds on shelves and cabinets in Z201A have soot damage which will require a conservator for cleaning. The specimens in room Z201D were both soot and water damaged. The damage is extensive on some of the specimens. A taxidermist should be consulted to find out if they can be restored. They should be assessed for their value to the collection relative to the amount of damage they sustained. They will be costly to repair, requiring the expertise of a taxidermist. New replacements may be easier and cheaper to obtain. The mammal specimens without water damage and the whale bone can be cleaned by a zoological technician and students. Again, the initial training could be done by a Parks Canada conservator in about an hour.

During the building renovations, the collections will have to be sealed in plastic. Construction dust, particularly from drywall, is very hard to remove from artifacts. Absolutely every area housing objects must be sealed with plastic. The renovations will take some time in the building. High humidity may be a problem during the summer. The areas enclosed in plastic should be monitored for relative humidity levels. Humidity test strips could be taped to the shelving units where they can be viewed through the plastic. If the relative humidity readings exceed 65%, dehumidification will be necessary to prevent mould growth.

Room N303 has a few organic, ethnographic artifacts which should be individually wrapped in tissue prior to the building construction. These pieces are very difficult to clean in the event that some construction dust penetrates the plastic barriers. It is more cost effective to wrap them before the damage occurs.

The cost of the equipment and materials for the clean-up is estimated to be \$11,000 before taxes and shipping. This does not include salary dollars which is estimated at \$47,000. Cleaning and restoration methodology is detailed in the appendices.

#### **1.4.3. Animal Holding Facility**

One of the major concerns was for the safety and well being of the animals housed in the 100 level of the Duff Roblin Building. This area contains over 2000 animals, reptiles and fish (2000 Sturgeon, 100 assorted fish, 9 turtles, 10 snakes, 2 gekkos, 30-40 rats, and 100 mice). These animals are part of ongoing research for the Departments of Biological Sciences and Psychology. In the aftermath of the fire, approximately 250 small Sturgeon and 3 large Sturgeon succumbed to the effects of the fire. Since it was determined that the facility would remain operational in the building, clean up and access became a key priorities. In order to return to regular operations as soon as possible, much of the clean up work was undertaken by Animal Holding staff, under the leadership of Terry Smith.

#### **1.4.4. Start-Up Kits, Wet/Dry Labs & Equipment Priority Lists**

Wet and dry labs were located in the Duff Roblin Building. The Principal Investigators working in each department were asked to identify what they required immediately in order to restart their research in their new lab areas. \$20,000 was allocated for wet labs and \$10,000 for dry labs, which did not include computers. 19 wet labs and 3 dry labs were issued starter kit funds by April 9<sup>th</sup>, 2009. These allocations were intended to cover purchases including minor equipment, consumables, glassware, reagents, chemicals, plastic ware and general supplies. Funds were transferred to the Departmental Fire FOAPS.

#### **1.4.5. Computers (Specialized and General Use)**

After the fire, all computers were tagged and moved to one staging area within Duff Robin. IST worked continuously to recover the hard drives from all computers in the building. They then uploaded those hard drives onto the main University server so faculty, department administration and graduate students could access their data. This process moved quickly and efficiently. A week after the fire, it was agreed in consultation with the Insurer that all computers would be replaced. IST issued a statement of four standard configurations that would be purchased to replace all computers in the building (531 total). This configuration included two standard desktop models (Dell and Mac) and two standard laptop models. Taking into consideration the fact that the Bookstore could only process a limited number of orders at one time, only 75 computers were ordered initially. These computers were assigned to priority users identified by each Department.

This process is now replicating relative to peripheral equipment such as printers and scanners

## 2. PHASE II - FIRE RECOVERY MANAGEMENT

### 2.1. Core Project Management Group

In the aftermath of the fire, and through the recovery process management has been undertaken by a core group consisting of:

- Alan Simms, Wendy Parker, Brian Rivers, Gerry Miller from the University of Manitoba.
- David MacAngus from WBD/WFS.
- Bob Krywiak and Randy LaBrash from Crawford Technical Services representing the Insurers.
- As of June 18, this group was joined by Mia Kinal, who was hired as Project Manager for the University.

### 2.2. Temporary Space

When it became evident that a September 2009 re-occupancy would be impossible, and that not all of the previously borrowed space on campus would continue to be available, arrangements were made to have modular trailer units brought on to campus to accommodate Department of Psychology laboratory space. These trailers make up a 12,000 SF modular office building that is located “B” parking lot (east of the Fletcher Argue Building), and are being utilized by upwards of 100 faculty and graduate students, including members of the Department of Biological Sciences.

The delivery and installation was accomplished in less than 8 weeks, an extremely short period of time. They are now in place and operational (September 2009). Several meters at the southwest end of “B” lot were temporarily hooded and several rows of staff parking temporarily barricaded to accommodate the installation of the trailers. Some of these spaces have since been returned to use. Accessible parking stalls will remain available in their current location; however, the 24-hour reserved staff parking area will be relocated east of the trailer village.

In addition, the University community responded quickly to a plea from Todd Mondor, Department of Psychology Head for additional space required until a Spring 2010 re-occupancy. Administrative offices for the Psychology Department will continue to be housed in Chancellor’s Hall until Duff Roblin is ready for re-occupancy.

Office and laboratory space for the other affected faculties (Anthropology, Biological Sciences, Human Nutritional Sciences and Textile Sciences) has been established in existing facilities on campus and at the St. Boniface Research Centre.

**2.3. Controlled Access Protocols**

University Administration, working in collaboration with the departments affected established an Access Plan to allow immediate limited and supervised access to the affected parts of the building to retrieve teaching and research materials. Affected staff, teaching assistants and graduate students were assigned specific access days and times. Throughout the access window EHSO monitored building air quality on an ongoing basis. The access protocol allowed entry for 30 to 45 minute assigned periods 12 hours daily, with one controlled access point. Identification and sign-in protocols were set up; personal protective gear was mandatory. The type of PPE was dependant on building location. These precautions were based on the conditions which were present at various locations / levels of the building as determined by the University’s environmental consultant (Pinchin Environmental).

The following were the MIMIMUM Personal Protective Equipment requirements:

Level	PPE	Requirement
All Levels	Nitrile Gloves Safety footwear	Mandatory
P-100, Z-100	Not applicable	--
P-200, P-300,P-400,P-500 Z-200, Z-300	N-95 Respirator	Optional
Z-400, Z500 Level 600	Half-face respirator (Combined Organic & minimum N-95 Tyvek Suit/Coverall	Mandatory



The second wave of access to the Duff Roblin building began on Monday, April 13, 2009. There were four main stages to the process. These stages were organized around a priority list of critical needs that took into consideration the issues of safety, sensitive equipment and urgent access to teaching and research materials. The stages were not necessarily consecutive and did take place concurrently within the building.

Fit testing for respiratory masks was required of all entrants for Westside Levels 300-500; in addition all PIs and researchers who supervised the cleaning and removal of

sensitive equipment by LWG were fit tested. The main objective was to surface clean and map research equipment in preparation for transport offsite for a full cleaning.

All contents of Level 200 teaching labs was cleaned and relocated to the Buller building before the end of April for Spring session teaching.

Department representatives identified for tagging all priority materials needed for the summer. They were first moved to a staging area within the building, and then transported to the warehouse for cleaning.

Levels 200 and 300 Museum Collections and the Special Artifacts Anthropology Labs were left in situ. These spaces were sealed and cleaning assessment was undertaken by Parks Canada.

In order to speed recovery efforts, all office contents and equipment on the Eastside were surface cleaned, packed and moved to the warehouse. Every office and lab space was mapped out at the warehouse and all contents will be carefully boxed and transported to the corresponding site by Winnipeg Furniture/Builders. At the warehouse all staff and graduate students had the opportunity to access their materials. Prior to return, all materials are properly decontaminated and stored in a secure and safe environment.

## 2.4. The Warehouse



Negotiating a warehouse for the storage of Duff Roblin contents was a challenging process. Initially, it was difficult to estimate the size of warehouse required, and secondly, it was challenging to find a warehouse within close proximity to the University. Once a warehouse was found, various safety and environmental health issues arose that delayed the process of securing a site. For example, the Canadian Food Inspection Agency had to confirm if any animal feces would be present in the warehouse. Consultants Pinchin Environmental had to provide a detailed list of chemicals that would possibly be moved to the warehouse and an assurance that no animal feces would be transferred to the rented space. Also, the negotiations with Goodyear Inc. and the landlords of the warehouse were complicated and difficult. While boxes were ready for transport, the University had not been able to secure a site. Once the warehouse at 11 Fultz Bay was secured for \$60,000 per month, decanting of the building began. The 140,000 SF warehouse was rented for a six month period (May 1 2009 -November 1 2009) but has recently been extended for a further six months to May 2010.

Moving and restoration of the contents of the Duff Roblin Building (exclusive of electronic equipment) was contracted to Winnipeg Furniture Services Ltd. This project is the largest content restoration project in recent Manitoba history. Their work involved the complete packing of all contents, removal to the temporary warehouse location and the restoration of goods and documents. When the building was decanted all boxes were marked with their room number and their location in the room even to the shelf where it came from. The warehouse floor has a floor key that identifies the location of items by room and PI name.

Security and access to the Warehouse is controlled at a central entrance, manned by a security guard from 8 a.m. until 4:30 p.m. The security guard also undertakes regular foot patrols around the building and site. The facility is secured with an alarm system. Sign in and sign out protocols are in place. All appointments for access to review contents and equipment must be arranged in advance; admission is denied if this has not been pre-arranged. As a safety concern, the University requires that everyone accessing the Warehouse be escorted by either a WFS or LWG representative.

Management of the contents is handled by several form application processes that ensure priority is established for cleaning and return. This is controlled in coordination with the Project Manager.

Priority was given to all materials required by faculty and graduate students so their work could continue. This work requires the complete hand hepa-vacuuuming of all items, hand cleaning of every item with the appropriate chemical, ozone deodorizing, and re-packing into clean boxes. Boxes and items are then stored or delivered to temporary locations as requested. Currently there are in excess of 15, 000 boxes located at the warehouse which does not include large items and furniture. There has

been a 95% success rate on restoration of contents from the Eastside exclusive of electronic equipment. The Westside, due to heavier damage is presenting more challenges.

Books and documents undergo a thorough cleaning process and specific protocols are dictated by the nature of the damage. In some cases, items are wiped and cleaned and the original material is returned. For more heavily damaged paper, items are wiped and then completely photocopied. Originals are then destroyed; to date WFS has shredded over 400 boxes of confidential documents. The University has leased two large photocopiers, and utilization rate is approximately 15,000 copies per machine, per month; this translates to 150,000 copies as of the end of August.

As people reviewed the contents, they were asked to purge any unwanted items. There have been 15 large truckloads sent for disposal.

The electronic equipment portion of the restoration process has been handled by LWG Consulting, in a dedicated area of the Warehouse under their supervision. The assessment and restoration process has been unduly lengthy, and complicated as there are well over 4000 items in this category, not including minor peripherals (keyboards, mice, etc.). Equipment has been assessed several times, with some equipment changing categories from Total Loss to Restorable, and back to Total Loss. This has caused considerable confusion for the University in terms of asset management, and purchasing, and more than considerable frustration for the affected Faculty and students. After a prolonged period, and receipt of many iterations of an equipment inventory, LWG completed their work at the end of August. Currently the University is awaiting receipt of an accurate, complete and final inventory. This will enable the final verification of returns, restorations and new purchases.

At the University's request, WFS is now managing the return of electronic equipment. This was precipitated by a lack of organization and verifiable, accurate inventory from LWG. Since this transition, the electronic equipment area has been re-organized and labeled, enabling easier location for items to return to the end user.



**2.5. Finance and Purchasing**

Given the magnitude of the insurance claim, it was imperative to establish a process that would closely track all costs. It was determined that one Fund (and different Orgs) would be established. Integral to the process was the proper recording to the right fund of all costs related to the fire. All expenses must be recorded as accurately as possible.

For purposes of asset management and to reconcile with the insurance claim, all replacement documentation must refer to original items being replaced. Back up documentation is required for every expense processed through the various departmental FOAPs. Considerable documentation is compiled regularly for submittal to the external forensic accountant hired by the Insurers for verification of the claim. Each Department has been charged with monthly reconciliation of fire related expenditures prior to submission to the Financial Services Department and the Comptroller’s Office.

In order to ensure control of the recovery and replacement work and purchases, designated signing authorities were identified for each Organizational Unit. Only these designates could sign off on Requisitions to Purchase. This information was communicated to all affected parties and those assisting.

Through the Aurora System, all expenses, commitments and revenue are tracked and broken down by Organizational Unit/Department/ Account/Expense Code.

A snapshot of the financial picture for Expenditures is:

Fund 124282 Duff Roblin Fire Acct 600:799 -- Blank -- Fund Type 01 Acct Type 60:90 Period Ending:Aug-2009					
Code	Title	Aug-2009 Month Actual	Aug-2009 YTD Actual	O/S Commitments	YTD Total Activity
<b>124282-Duff Roblin Fire</b>					
124282-113012	Phys Plant Duff Roblin Fire Damage	732,015.35	2,267,520.32	1,205,212.45	3,472,732.77
124282-113014	Phys Plant Duff Roblin Trailer Park	24,335.01	24,335.01	112,718.36	137,053.37
124282-316200	Anthropology	85.78	1,560.88	0	1,560.88
124282-317500	Psychology	1,741.53	7,413.11	10,293.37	17,706.48
124282-317505	Top up Psychology	0	496.46	0	496.46
124282-336000	Deans-Human Ecology	0	2,663.91	0	2,663.91
124282-336001	Gen.Fac.Human Ecology	0	765.61	0	765.61
124282-336002	Human Ecology Duff Roblin Fire Dmg	22,474.19	319,352.59	265,273.26	584,625.85
124282-336100	Textile Sciences	0	0	3,851.27	3,851.27
124282-336200	Family Social Sciences	0	3,305.15	0	3,305.15
124282-336300	Human Nutritional Sciences	1,340.70	2,559.39	3,851.26	6,410.65
124282-352019	Fac of Science Duff Roblin Fire Dmg	24,028.31	287,369.14	145,937.97	433,307.11
124282-352900	Zoology	0	6,623.73	15,512.69	22,136.42
124282-500000	VP (Administration)	7,013.10	44,040.18	52,699.38	96,739.56
124282-520402	EHSO Duff Roblin Fire 2009	1,543.24	9,767.87	0	9,767.87
124282-530001	IST Central Admin - General	270,710.27	387,027.63	275,263.60	662,291.23
124282-540000	Associate VP (Administration)	0	425,940.00	0	425,940.00
	<b>Subtotal</b>	<b>1,085,287.48</b>	<b>3,790,740.98</b>	<b>2,090,613.61</b>	<b>5,881,354.59</b>
	<b>Total</b>	<b>1,085,287.48</b>	<b>3,790,740.98</b>	<b>2,090,613.61</b>	<b>5,881,354.59</b>

A snapshot of the financial picture for Revenues and Expenditures as of the end of August:

Fund 124282 Duff Roblin Fire Fund Type 01 Period Ending:Aug-2009					
Code	Title	Aug-2009 Month Actual	Aug-2009 YTD Actual	O/S Commitments	YTD Total Activity
<b>124282-Duff Roblin</b>					

Fund 124282 Duff Roblin Fire Fund Type 01 Period Ending:Aug-2009					
Code	Title	Aug-2009 Month Actual	Aug-2009 YTD Actual	O/S Commitments	YTD Total Activity
<b>Fire</b>					
124282-100000	University Revenues & Transfers	255,000.00	2,555,000.00	0	2,555,000.00
124282-113012	Phys Plant Duff Roblin Fire Damage	-732,015.35	-2,267,520.32	-1,205,212.45	-3,472,732.77
124282-113014	Phys Plant Duff Roblin Trailer Park	-24,335.01	-24,335.01	-112,718.36	-137,053.37
124282-316200	Anthropology	-85.78	-1,560.88	0	-1,560.88
124282-317500	Psychology	-1,741.53	-7,413.11	-10,293.37	-17,706.48
124282-317505	Top up Psychology	0	-496.46	0	-496.46
124282-336000	Deans-Human Ecology	0	-2,663.91	0	-2,663.91
124282-336001	Gen.Fac.Human Ecology	0	-765.61	0	-765.61
124282-336002	Human Ecology Duff Roblin Fire Dmg	-22,474.19	-319,352.59	-265,273.26	-584,625.85
124282-336100	Textile Sciences	0	0	-3,851.27	-3,851.27
124282-336200	Family Social Sciences	0	-3,305.15	0	-3,305.15
124282-336300	Human Nutritional Sciences	-1,340.70	-2,559.39	-3,851.26	-6,410.65
124282-352019	Fac of Science Duff Roblin Fire Dmg	-24,028.31	-287,369.14	-145,937.97	-433,307.11
124282-352900	Zoology	0	-6,623.73	-15,512.69	-22,136.42
124282-500000	VP (Administration)	-7,013.10	-44,040.18	-52,699.38	-96,739.56
124282-520402	EHSO Duff Roblin Fire 2009	-1,543.24	-9,767.87	0	-9,767.87
124282-530001	IST Central Admin - General	-270,710.27	-387,027.63	-275,263.60	-662,291.23
124282-540000	Associate VP (Administration)	0	-425,940.00	0	-425,940.00
	<b>Subtotal</b>	-830,287.48	-1,235,740.98	-2,090,613.61	-3,326,354.59
	<b>Total</b>	-830,287.48	-1,235,740.98	-2,090,613.61	-3,326,354.59

All purchases over \$2,000 must be reconciled with the asset tag or property number that is listed on the MASTER CAPITAL ASSET INVENTORY LIST. This list was originally distributed in early June; many updates and variations have followed due to a complicated restoration process.

It is crucial that all purchases over \$2,500 are reconciled back to this master list.

Assistance to all Departments with Purchasing was provided by Ellowyn Nadeau, Assistant Manager for Purchasing Services. This assistance involved help for PIs and technicians to gather quotes for new equipment. Items under \$10,000 only require a single source quote but must show that this new piece of equipment is replacing "of like kind and quality."

The volume of work for Purchasing Services increased during the months of May and June, but has tapered off. We anticipate a continuing flow of purchases as equipment is replaced.

There was a specific protocol established for purchases which follows the current Purchasing processes. It is only the identification of additional asset information that makes this protocol unique:

- It is the responsibility of the researcher (or requisitioner) to establish the "like for like" comparison for purchases where the previous make/model is no longer available.

- **For items less than \$2,500 (inclusive of net taxes, \$2,300 exclusive of taxes):** consideration is given to purchase through a systems contract supplier. Where a systems contract supplier is available or desirable, items are directly purchased using the Visa Purchasing Card (PCard) or Low Dollar Payment (LDP) form to order the item.
- **For items between \$2,500 and \$10,000 (inclusive of taxes):** Items are requested on a Requisition to Purchase accompanied by a vendor quotation. Justification is provided if an item requested is not of "like kind and quality". Purchasing reviews all information and makes an assessment of Fair Market Value (FMV) at which point they may request a second quotation.
- **For items between \$10,000 and \$100,000:** The process is similar to under \$10,000. Purchasing reviews all information and prepares a Request for Quotation (RFQ) or a Request for Proposal (RFP) for a formal competitive bid opportunity.
- **For items over \$100,000:** The only difference for items of this value the bidding opportunities are national.

## **2.6. Academic Sub-Committee**

An academic sub-committee was established two weeks after the fire to address specific concerns related to tenure, grant programs and applications and ongoing funding issues, co-chaired by Joanne Keselman (VP Academic) and Digvir Jayas (VP Research). See Appendix 1 for a list of members.

It was crucial in the early days of the recovery process to review the various research agreements between affected PIs and granting agencies. Once reviewed, legal counsel, in consultation with Dr. Digvir Jayas, VP Research, drafted a letter informing granting agencies of the fire, with the caveat that there may be a possible delay in providing research deliverables or in carrying out responsibilities under the agreements. This letter described the destructive impact of the fire on research labs and offices, and warned of possible delays in delivery dates under the various Grant agreements. A total of 18 research contracts were identified and addressed.

NSERC grants have provided extensions to research programs but no additional funding.

It was also agreed that another letter would be written in the Fall of 2009 indicating that the circumstances for each researcher would be assessed on a case by case basis.

Template letters to NSERC and SSERC were drafted and supplied to Department Heads.

With respect to tenure, discussion continues regarding how delays in research deliverables will impact applications for tenure. There was discussion about whether Graduate Studies should give special consideration for those PIs up for tenure in 2009. However, some Department Heads questioned the equity and fairness of granting special consideration only to those impacted in 2009, and suggested extending consideration to those applicants through to 2011. It was agreed that the committee would seek further advice from the Faculty Association to ask for an extension of the probationary period for 2009/2010 applicants, and later applicants still to be determined. A template was developed and issued to department heads to help identify more specific information about research deliverables from each researcher. This examination of academic issues by the sub-committee is ongoing.

## 2.7. Computers

### 2.7.1. Confusion with Adjuster

Immediately following the fire, LWG, in consultation with the Winnipeg representative of Crawford Insurance Adjusters, agreed that it would be more cost-effective to replace all computers in Duff Roblin rather than attempt cleaning/restoration. The effects of smoke, soot and water simply rendered all machines damaged and would be too costly to clean, with no guarantee of full functionality longer term. It is important to note that LWG was the consultant hired by the Insurer as the 'expert of record' to help assess cleaning/replacement protocols. It was agreed between LWG, Crawford and the University that replacement orders should proceed. Replacement orders applied to standard desktop and laptop configurations, not specialty computer research equipment.

IST identified four standard configurations, and computers destroyed had to be traced back to original inventory lists of each department. It was made clear from the Insurer that "like, kind and quality" should apply to replacement models. IST reviewed these replacement models with the Insurer, who agreed to the configuration and granted permission to begin the order.

Replacements were ordered through Computers On Campus, who indicated they could only manage a limited number of orders at one time. IST ordered 75 computers to meet priority demand supplied by each department. At this time, all computers were located in Room 208 Duff Roblin and had not been individually inventoried.

### 2.7.2. Consultant hired by Adjuster

Shortly after the first order was processed, the Insurers halted the process. They indicated that they now disagreed with the decision to replace all computers, and felt that many of the computers could be cost-effectively restored. They hired the consultants Relectronics out of Calgary to inventory and assess for possible restoration all computers that were located in Duff Roblin. This delayed the ordering of computers considerably and caused frustration among academic staff. Relectronics was mandated to provide the Insurers with three lists, to provide the insurers with a "like, kind and quality" assessment:

- Computers that were total loss.
- Computers that were recoverable but not cost-effective to clean.
- Computers that were recoverable and cost-effective to clean.

The University had two primary concerns at this point. Any computer deemed 'recoverable' and potentially cleaned would not necessarily function properly longer term and would delay further the wait for computers. Yet, the University could not proceed with ordering new computers if the funds would not be recouped. Therefore the University had no choice but to wait for the results of the electronics consultants and reach a monetary settlement with the Insurers.

Relectronics delivered these detailed lists by the end of May, 2009. They identified 188 restorable computers, 112 total loss desktop computers, 99 restorable (but not economical to restore) desktops, and all laptops (82) were considered total loss. Based on these lists the Insurers offered a cash settlement of \$438,000, a sum that included the cost of replacement orders (configurations specified by Relectronics, not IST which were not comparable), and the cost and labour of cleaning 188 computers.

### **2.7.3. Ordering Issues**

However it was soon discovered that the cost of the original 75 computers was not included in the cash settlement amount, necessitating a further reconciliation of all spreadsheets with those original purchases was conducted. This further delayed the purchasing process. An additional \$130,000 was recovered through this reconciliation. The final cash settlement agreement (not established until the end of June) totalled \$634,833.34 for 536 computers.

Based on this valuation, the University outlined a number of critical issues. The cost to restore these machines nearly matched the initial replacement value once labour costs were included. Assigning University technicians to complete the labour required to restore these machines after they have been cleaned was not a viable option for an already overburdened IST Department. Having systems that don't allow for the installation of standard images was unacceptable to the University. Expecting researchers to work on machines with no warranty that were structurally compromised was also unacceptable.

### **2.7.4. Computer Reconciliation Issues**

Crawford/CURIE has agreed to pay for the 75 computers already purchased based on the original consent given. Those 75 computers were included in the Relectronics inventory list with a variety of values attached to each unit, depending on recoverable or replacement status. However, we have already paid for these computers which were purchased at a cost based on our original configurations. For example, a computer valued at \$900 by Relectronics may have been purchased at a cost of \$1,200. This would result in a dramatic discrepancy between what we have valued to be the worth of those 75 computers and what we have actually paid

Our inventory list "total number of units" does not match the Relectronic total number (536 vs. 528 respectively). We have reconciled the two lists and found that a number of burnt computers not recorded by Relectronics. We have records of those computers and will attach the estimated amount to those units based on Relectronics evaluations. For example, if Relectronics valued a Dell Optiplex at \$1,100 replacement value, we will assign that estimate to the destroyed unit.

### **2.7.5. Key Issues Resolved**

It was decided that the University would replace all computers despite the recommendations and cash sum allowance for the cleaning of 188 computers. The risk of restored computers failing was significant enough to justify replacement, despite the added cost to the University. IST worked with Computers on Campus to reduce the cost of replacement computers. To date all computers have been replaced, and at no extra cost to the University, attributed to reduced costs based on bulk orders. This process did not include the purchase of any specialized computer research equipment, which was processed entirely separately on a case by case basis.

The final settlement was \$634,833.34 for 536 computers.

### 3. Phase III – BUILDING RESTORATION

#### 3.1. Statement of Overall Damage

The degree and type of damage to the Building was entirely dependent on proximity to the epicenter of the fire (Z402, Z403 and Z404 on the Westside):

- Both sides of Level 100 sustained minimal water damage.
- Eastside Levels 200-600 on the sustained water and minor soot damage.
- Westside Levels 400 sustained major fire, soot, smoke and water damage.
- Westside Levels 300 (partial), 500 & 600 sustained major water, smoke and soot damage.
- Westside Levels 200 & 300 (partial) sustained water, soot and smoke damage.

This resulted in the recommendations that the entire Eastside would be restored to pre-fire condition, with cleaning restoration, and replacement of damaged materials with those of like kind and quality. Drywall removal and therefore replacement on the Eastside was limited to those walls that were water damaged and had approximately 24” of material removed at the wall base. Flooring will be replaced where damaged by water and soot only. All ceilings will be replaced.

Level 200 and part of Level 300 on the Westside will be dealt with in a similar fashion to the Eastside.

The balance of space on the Westside, Level 300 (partial), 400 & 500 will require more extensive demolition and construction including removal of all built in cabinetry and millwork. This has provided an opportunity to re-design these areas, mindful of the “like kind & quality” requirement for restoration and replacement.

Level 600 is a service floor consisting of mechanical and electrical services. Work will be undertaken to repair and replace damaged equipment and ducting, and to clean concrete surfaces to an acceptable level of use.

#### 3.2. Sprinkler Installation

As previously stated, the University of Manitoba has determined that installation of a Sprinkler System is required for life and safety considerations. As this work was deemed ‘not required’ and thus denied insurance coverage, full funding will be provided by the University. Design and specification work is proceeding on what will be an extremely complicated process for both design and installation due to the nature of the Duff Roblin Building structure and configuration. Final system design is dependant on both functional space requirements and use; and controlled substances that may be utilized, within the various spaces.

### **3.3. Second Elevator**

The Duff Roblin Building is an 180,000 SF facility that has functioned with one elevator for passenger and service use. The inefficiencies of this became evident throughout the process of decanting the building contents after the fire; this prolonged process took over three months, and was only accomplished in that time period by authorization for double shifts, 6 days a week.

An analysis was undertaken to determine the cost and time effectiveness of the installation of a second elevator into an existing and empty shaft for use during restoration and re-occupancy and beyond. Surprisingly, the projected cost difference was minimal. As the installation of an additional elevator will be of long term benefit to the University, and not only to the restoration process, the costs will be shared by the University and the Insurers.

### **3.4. Design & Construction**

Construction company PCL Constructors Canada Ltd. has been hired as Construction Manager tasked with the restoration of the Duff Roblin Building. This process is just underway with the development of construction schedules, budgets, design and tender packages for the Eastside (ceilings, drywall, flooring, windows, and sprinkler system). Design and specifications are being undertaken by Affinity Architecture Inc. as Prime Consultant with CKP Engineering, SMS and MCW/AGE responsible for the structural, mechanical and electrical portions of the work respectively.

It is assumed that re-occupancy of the Building will be by those Departments and functions inhabiting the spaces prior to the fire. The Eastside User Group is represented by the Department Head Todd Mondor and Mary Kuzmeniuk, Administrative Assistant; in consultation with Dean of Arts Richard Sigurdson and Associate Dean Mark Lawall. For the Westside, a working group consisting of the Heads of the Departments of Biological Sciences, Human Nutritional Sciences and Textile Sciences has been meeting in anticipation of a call for input regarding re-design. In the early discussions the User Group will consist of the Heads (Judy Anderson, Jim House, and Tammi Feltham) as they will be seeking and collating input from colleagues as the re-design process begins. It is anticipated that the Westside re-design work will commence in October, with a meeting held with the larger users' group towards the end of September, in order to examine opportunities for efficiencies and shared space utilization.

Construction work will begin with the demolition and removal of materials from the Westside, to avoid further contamination as restoration work proceeds on the Eastside. The work plan and schedule will be developed according to floors and areas beginning with initial focus on the Eastside restoration, and Levels 200 & 300 (partial) on the Westside. It is anticipated that restoration work on the Eastside will be completed in the Winter of 2010. Re-occupancy on the Eastside will occur at the end of the term, to minimize disruption to teaching and research activities. A projected re-occupancy date for the Westside will be determined once the design process is underway and the full extent of work identified.



#### 4. NEXT STEPS

While we are still in the recovery process, it is premature to draw conclusions and make recommendations. A comprehensive After Action Report is under preparation by Kenton Friesen, Emergency Management Coordinator. Compilation of this document includes interviews with affected stakeholders, contractors and consultants. It is expected that the Draft report will be completed in late Fall/early Winter.

However, it is possible to identify some of the lessons learned, particularly those from the early stages of the incident.

- The University of Manitoba must work towards making better use of the Incident Command System and improving communications between response groups.
- During the recovery phase EHSO purchased one self contained breathing apparatus (SCBA). This apparatus was required during the recovery phase to deal with issues related to the unknown gas cylinder in room 403. EHSO has used SCBAs in the past to perform work related to the hazardous waste program and to enter the hot zone during HazMat operations with the fire department. EHSO should have at least one more SCBA to allow any future work to be done in pairs. Ideally EHSO would have 4 units to staff both main campuses.
- Fire suppression was hindered greatly by the absence of sprinklers in the building. The fire department response was also complicated by the possible presence of water reactive chemicals. This resulted in the fire being allowed to free burn for a significant amount of time, causing major smoke and soot damage to the fire floor and floors above. Fire Department suppression activities consisted of a defensive exterior fire attack where massive amounts of water were delivered from aerial apparatus. This resulted in major water damage to the fire floor and all lower floors.
- An incident occurrence of this magnitude and the resulting recovery require dedicated Project Management for effective communication, documentation and operations.

While some equipment and contents will remain in long term storage until re-occupancy of the Duff Roblin Building, the processing of returning contents and equipment to use in temporary locations will continue for the foreseeable future.

Design, specification and tendering of construction packages for the Eastside will be completed in early Fall, followed by the commencement of reconstruction work. We anticipate completion of the Eastside in February 2010. To minimize disruption to Faculty and students alike, the re-occupancy move will not occur until the end of the 2009/2010 Academic year ( in early May 2010).

As considerable more restoration work is required for the Westside, we anticipate the process to take a longer period. Detailed discussions with representative user groups will commence in October of this year; we expect the design phase will extend into the late winter of 2010. It would be imprudent to project a re-occupancy date Until the design process is completed,.

## APPENDICES

### Appendix 1: Committees

#### Emergency Operations Committee as of April 2009

First Name	Last Name	Faculty / Admin. Department	Unit / Office Name	Position Title
John	Alho	Office of the VP (External)	Government Relations	Assoc VP (External)
Judy	Anderson	Faculty of Science	Biological Sciences	Head
Eric	Badertscher	LWG Consulting	Contractor	Equipment Restoration
David	Barnard	Office of the President	Office of the President	President
Joey	Bellino	Office of the VP (Admin.)	EHSO	Asst Enviro Mgmt Coord
Ken	Berman	Office of the VP (Admin.)	Physical Plant	Project Coordinator
Chris	Bohonis	Office of the VP (Admin.)	Security Services	Office Assistant
John	Danakas	Office of the VP (External)	Public Affairs	Director
John	deGroot	Clean Harbors	Contractor	Account Manager
Tammi	Feltham	Faculty of Human Ecology	Textile Sciences	Head (Acting) /Assoc Prof
Barry	Ferguson	Faculty of Arts	Faculty of Arts	Assoc Dean/Prof
Kenton	Friesen	Office of the VP (Admin.)	EHSO	Emergency Mgmt Coord
Michael	Grimes	Winnipeg Building and Decorating Ltd.	Contractor	Project Manager
Jim	Hare	Faculty of Science	Biological Sciences	Assoc Head/Prof
Andrea	Hilderman	Office of the VP (Admin.)	Physical Plant	Architect
Rob	Hoppa	Faculty of Arts	Anthropology	Head
James	House	Faculty of Human Ecology	Human Nutritional Sciences	Head
Leah	Janzen	Office of the VP (External)	Public Affairs	Communications Mgr
Digvir	Jayas	Office of the VP (Research)	Vice-Pres (Research)	Acting Vice-President (Research)
Aubrey	Kehler	Office of the VP (Admin.)	Security Services	Asst Director
Harvey	Keselman	Faculty of Arts	Psychology	Head / Prof
Joanne	Keselman	Office of the VP (Academic) & Provost	Vice - Pres (Acad) & Provost	Interim VP (Acad) & Provost
Randall	Kinley	Office of the VP (Admin.)	Physical Plant	Project Domino Coordinator
Mary	Kuzmeniuk	Faculty of Arts	Psychology	Admin Asst
Randy	LaBrash	Crawford	Insurer	Branch Manager/Adjuster
Linda	Lavallee	Office of the VP (Admin.)	Security Services	Director
David	MacAngus	Winnipeg Building and Decorating Ltd.	Contractor	President
Neil	Marnoch		Registrar's Office	Registrar
Deborah	McCallum	Office of the VP (Admin.)	Vice - Pres (Administration)	VP (Admin)
Grant	McCaughey	Office of the VP (Admin.)	EHSO	Dir Enviro Hlth & Safety
Kerry	McQuarrie Smith	Office of the VP (Admin.)	Office of the President	Exec Asst to the President
Rudy	Mejia	Office of the VP (Admin.)	Physical Plant	Asst Director
Gerry	Miller	Office of the VP (Admin.)	IST - Central Admin	Exec Director
Wendy	Parker	Office of the VP (Admin.)	Vice - Pres	Exec Asst to Assoc VP
Edward	Peterson	LWG Consulting	Contractor	Equipment Restoration
Paul	Richards	Office of the VP (Admin.)	EHSO	Fire Marshall/Construct Safety

First Name	Last Name	Faculty / Admin. Department	Unit / Office Name	Position Title
Janice	Ristock	Faculty of Arts	Faculty of Arts	Assoc Dean
Brian	Rivers	Office of the VP (Admin.)	Physical Plant	Director
Roy	Roshko	Faculty of Science	Faculty of Science	Assoc Dean/Prof
Trevor	Schultz	Faculty of Science	Office of the Dean	Executive Assistant to the Dean
Gustaaf	Sevenhuysen	Faculty of Human Ecology	Human Nutritional Sci	Dean/Professor
Alan	Simms	Vice - Pres (Administration)	Vice - Pres	Associate VP
Jonathon	Sopotiuk	University of Manitoba Students Union (UMSU)	Executive	President
Terry	Voss	Office of the VP (Admin.)	Human Resources	Executive Director
Mark	Whitmore	Faculty of Science	Office of the Dean	Dean/Prof

**Academic & Research Sub-Committee as of April 2009**

First Name	Last Name	Faculty / Admin. Department	Unit / Office Name	Position Title
Gary	Anderson	Faculty of Science	Biological Sciences	Associate Professor
Judy	Anderson	Faculty of Science	Biological Sciences	Head
Jay	Doering	Faculty of Graduate Studies	Office of the Dean	Dean
Tammi	Feltham	Faculty of Human Ecology	Textile Sciences	Head (Acting) /Assoc Prof
Barry	Ferguson	Faculty of Arts	Faculty of Arts	Assoc Dean/Prof
Kenton	Friesen	Office of the VP (Admin.)	EHSO	Emergency Mgmt Coord
Karen	Grant	Office of the VP (Academic) & Provost	Vice - Pres (Acad) & Provost	Vice-Provost (Academic Affairs)
Jim	Hare	Faculty of Science	Biological Sciences	Assoc Head/Prof
Rob	Hoppa	Faculty of Arts	Anthropology	Head
James	House	Faculty of Human Ecology	Human Nutritional Sciences	Head
Digvir	Jayas	Office of the VP (Research)	Office of the VP (Research)	Acting Vice-President (Research)
Harvey	Keselman	Faculty of Arts	Psychology	Head / Prof
Joanne	Keselman	Office of the VP (Academic) & Provost	Vice - Pres (Acad) & Provost	Interim VP (Acad) & Provost
Mary	Kuzmeniuk	Faculty of Arts	Psychology	Admin Asst
Todd	Mondor	Faculty of Arts	Psychology	Associate Head
Wendy	Parker	Office of the VP (Admin.)	Vice - Pres	Exec Asst to Assoc VP
Janice	Ristock	Faculty of Arts	Faculty of Arts	Assoc Dean
Roy	Roshko	Faculty of Science	Faculty of Science	Assoc Dean/Prof
Trevor	Schultz	Faculty of Science	Office of the Dean	Executive Assistant to the Dean
Gustaaf	Sevenhuysen	Faculty of Human Ecology	Faculty of Human Ecology	Dean/Professor
Alan	Simms	Vice - Pres (Administration)	Vice - Pres	Associate VP
Mark	Whitmore	Faculty of Science	Office of the Dean	Dean/Prof

**Equipment Committee as of April 2009**

First Name	Last Name	Faculty / Admin. Department	Unit / Office Name	Position Title
Judy	Anderson	Faculty of Science	Biological Sciences	Head
Ken	Berman	Office of the VP (Admin.)	Physical Plant	Project Coordinator
Kevin	Campbell	Faculty of Science	Biological Sciences	Associate Professor
Tammi	Feltham	Faculty of Human Ecology	Textile Sciences	Acting Head/Assoc Prof
Kenton	Friesen	Office of the VP (Admin.)	EHSO	Emergency Mgmt Coord
Phil	Gerson	Faculty of Arts	Psychology	IT
Michael	Grimes	Winnipeg Building and Decorating Ltd.	Contractor	Project Manager
Jim	Hare	Faculty of Science	Biological Sciences	Assoc Head/Prof
John	Hicks	LWG Consulting	Contractor	Project Manager - Complex Loss
Rob	Hopa	Faculty of Arts	Anthropology	Head
James	House	Faculty of Human Ecology	Human Nutritional Sci	Head
Erwin	Huebner	Faculty of Science	Biological Sciences	Professor
Digvir	Jayas	Office of the VP (Research)		Acting Vice-President (Research)
Harvey	Keselman	Faculty of Arts	Psychology	Dept Head/Prof
Mary	Kuzmeniuk	Faculty of Arts	Psychology	Admin Asst
Dennis	Labossiere	Faculty of Human Ecology	Human Nutritional Sci	Technician
Randy	LaBrash	Crawford	Insurer	Branch Manager/Adjuster
David	MacAngus	Winnipeg Building and Decorating Ltd.	Contractor	President
Grant	McCaughey	Office of the VP (Admin.)	EHSO	Dir Enviro Hlth & Safety
Gerry	Miller	Office of the VP (Admin.)	IST - Central Admin	Exec Director
Wendy	Parker	Office of the VP (Admin.)	Vice - Pres	Exec Asst to Assoc VP
Paul	Richards	Office of the VP (Admin.)	EHSO	Fire Marshall/Construct Safety
Alan	Simms	Vice - Pres (Administration)		Associate VP
Wen	Zhong	Faculty of Human Ecology	Textile Sciences	Associate Professor

**Appendix 2: Building Plans**

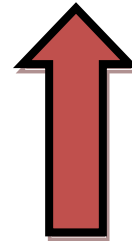
**Functional Legend**

CLASSROOM
COMPUTER ROOM
CONFERENCE/LUNCH
CORRIDOR
DORMITORY
ELEVATOR
FOOD SERVICE
GARAGE
GREENHOUSE
LABORATORY
LIBRARY
MECH/ELECT.
MULTIPURPOSE
OFFICE
RECREATION
STAIRS
STORAGE
UNUSABLE
WASHROOM/JANITOR
WORKSHOP
WORSHIP

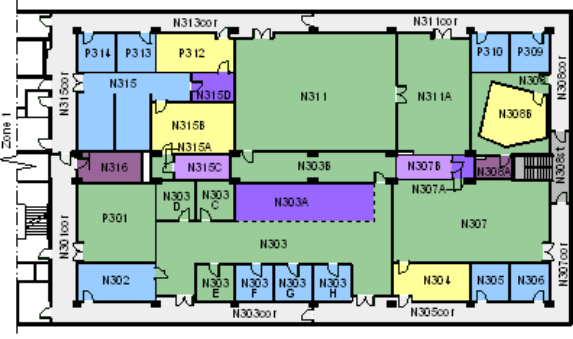
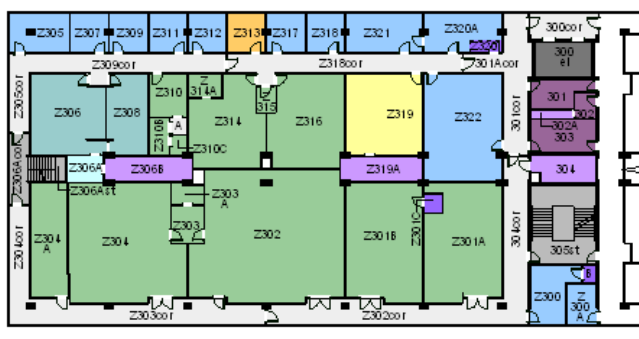
**Department Legend**

H	Human Ecology (Textiles)
H	Human Ecology (HNS)
N	Anthropology
P	Psychology
Z	Biological Sciences

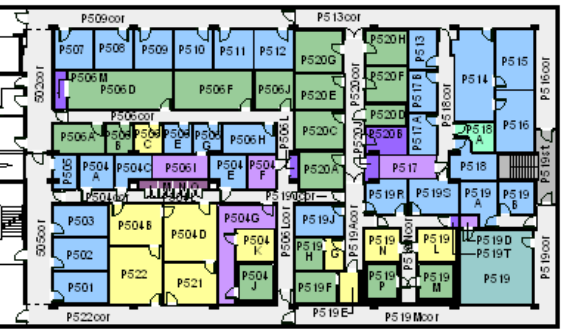
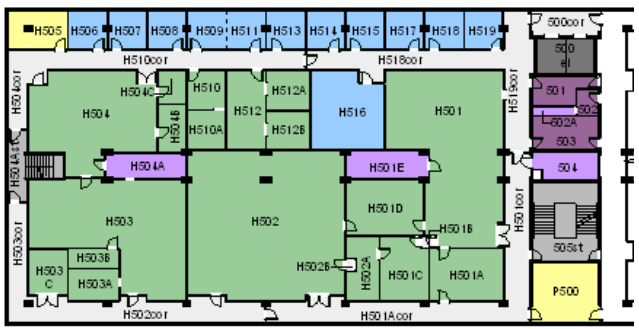
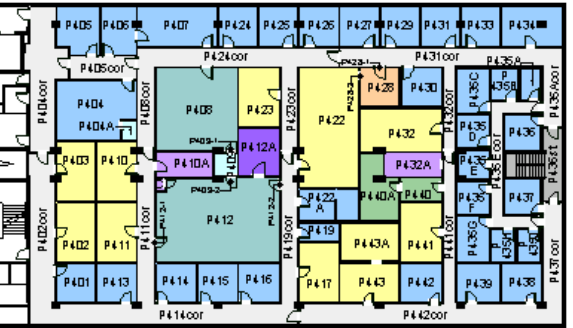
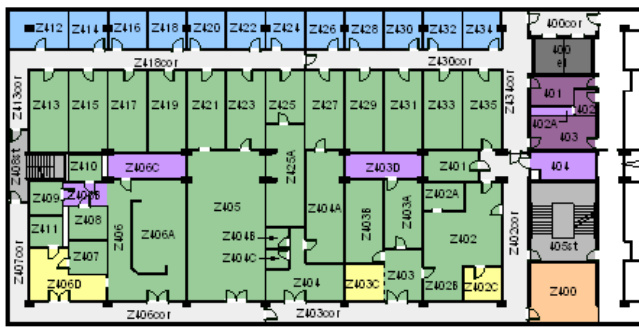
**Note North arrow for following plans**



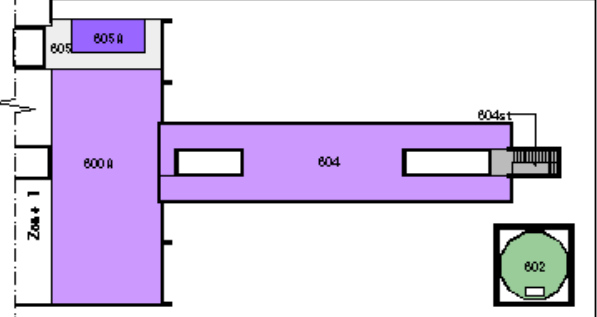
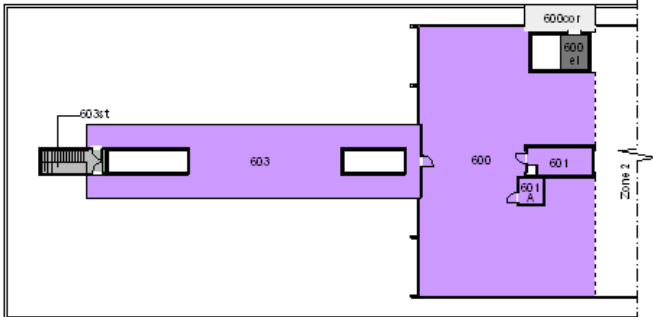




Level 300



Level 400



Level 500  
Level 600

**Appendix 3: Consultants & Contractors**

<b>To the University of Manitoba:</b>		
<b>Firm</b>	<b>Location Base</b>	<b>Service Provided</b>
Affinity Architecture Inc.	Winnipeg, MB	Architectural, Interior Design & Specification
CKP Engineering	Winnipeg, MB	Structural design & specification
Clean Harbours Environmental Services Canada Inc.	Winnipeg, MB	Environmental and Hazardous Cleaning & Material Handling
LWG Consulting	Chicago, IL	Electronic Equipment Assessment & Restoration
MCW/AGE Engineering	Winnipeg, MB	Electrical design & specification
Modspace	Winnipeg, MB	Supply & installation of modular trailers
Oliver Yaskiw & Associates	Winnipeg, MB	Warehouse security
PCL Constructor Canada Inc.	Winnipeg, MB	Construction Management
Pinchin Environmental	Winnipeg MB	Environmental monitoring & safety recommendations
Quick Transfer	Winnipeg, MB	Moving
SMS Engineering	Winnipeg, MB	Mechanical design & specification
Winnipeg Building & Decorating Ltd.	Winnipeg, MB	Demolition
Winnipeg Furniture Services Ltd.	Winnipeg, MB	Contents Handling, assessment, cleaning & restoration; warehouse management
Winnipeg Moving	Winnipeg, MB	Specialty moving

<b>To the Insurers:</b>		
<b>Firm</b>	<b>Location Base</b>	<b>Service Provided</b>
Crawford Global Technical Services	Toronto, ONT Winnipeg, MB	Insurance Adjuster
Matson, Driscoll & Damico Ltd.	Toronto, ONT	Insurance Loss & Forensic Accounting
MKA Canada Inc.	Calgary, AB	Construction Consultation
Relectronics	Calgary, AB	Computer Assessment
St. Amour Inc.	Laval, PQ	Equipment & Contents Assessment
Paul Wagner	Toronto, ONT	Building Code Consultant