



HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD
FEASIBILITY STUDY and CONCEPT DESIGN

Westmount Secondary School
39 Montcalm Drive, Hamilton, ON

November 2015

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SECTION 1 - EXECUTIVE SUMMARY

1.1 PURPOSE

The purpose of this study is to provide information and recommendations for subsequent decisions of the School Board related to the Hamilton-Wentworth District School Board (HWDSB) Secondary School Revitalization Program.

Over the next five years, HWDSB intends on **revitalizing** and **modernizing** the majority of its existing Secondary Schools.

The following areas have been examined for consideration of renovations and upgrades:

Instructional Spaces

- Science Labs & Prep Rooms
- Technological Shops
- Specialized Support Program Space
- Library
- Cafeteria

Operational Areas

- Operation Areas
- Administration Offices
- Student Services
- Staff Lounge and Work Areas
- Washrooms

1.2 METHODOLOGY

The study included a comprehensive review of the facilities in relation to enrolment, projected enrolment, educational adequacy and facilities adequacy. The design team included a team of experienced school architects and engineers lead by Hossack & Associates Architects and exp. The review focused on the ability of the facilities to provide a comprehensive modern educational experience for its students and the ability of the facility to provide a safe, comfortable and effective learning environment.

HWDSB’s vision for its ***Secondary Program Strategy (June 2013)*** was also reviewed and considered during the study for programming requirements based on the Tier 1 (*all schools – all students*), Tier 2 (*some schools – some students*) and Tier 3 (*few schools – few students*) programs identified within the 13 HWDSB secondary schools.

The Tier 3 programs and specialized interventions/supports are of particular interest in this study as they generally require specialized facilities, equipment or enhancements to the facilities in order to adequately support the program needs. Tier 3 programs are offered in a few school sites located strategically across the HWDSB, where transportation would be provided to students to a larger geographic area according to Board policy.

Self Directed – Self Paced Learning

Westmount Secondary School has a unique program of ***Self directed – Self paced learning*** that is available to all students of the Hamilton-Wentworth District School Board. In this learning environment, students are encouraged and required to take responsibility for their own learning. Westmount aims to develop independence and decision-making skills in its students.

Each credit course of study offered at the school is organized into twenty units that are packaged into Learning Guides. Students work through these Learning Guides in sequence at their own pace. Students who are able to fast-track are allowed to do so, and students who need additional time to complete work are also accommodated. Students attend school daily and participate at their own pace in lessons, presentations, group activities, assignments, tests, and individual study as outlined in the Learning Guides.

School policies are developed to accommodate and encourage continuous progress and accountability. As students accept greater responsibility for their work and their work habits, they can earn the opportunity to plan out parts of their school day and work in an area within the school where they can use the resources that they require, or receive the assistance that they might need.

In a self-directed, self-paced learning environment students are encouraged and required to take responsibility for their own learning to work through their credit course in sequence and at their own pace.

The Westmount Self-Paced program began in 1990, and continues to provide a unique, innovative program delivery to its ever-increasing student population. As a system school, Westmount attracts students who strive to develop goal-setting, effective time management, and independent learning skills in a Self Directed – Self Paced learning environment.

At Westmount, staff and administration deliver education within a Self Directed – Self Paced model that:

1. Encourages students to become community leaders/members who are socially aware and respectful of the uniqueness of all individuals
2. Supports the belief that students learn at different rates and therefore allows them to complete work at different times.
3. Supports the belief that students have differing learning styles and therefore allows students to direct various aspects of their own learning.
4. Encourages students to take responsibility for their own learning and behaviour.
5. Tracks, records and reports on student progress on a continuing basis.

1.3 OVERVIEW

Westmount Secondary School first opened in 1961 is located at 39 Montcalm Drive, Hamilton, ON L9C 4B1 in the south-east area of Hamilton. The school currently serves approximately 1,497 students. The forecasted enrolment projection for the year 2022 is approximately 1,064 students.

Several assumptions have been made in the program analysis and cost estimates as part of the development of this study. The analysis is based on the average costs for the different types of demolition and construction activities proposed. Both the program and the cost estimates will need to be refined during the schematic design phase as the project proceeds into design.

1.4 PROPOSED CONCEPT DESIGN

In this study renovations are proposed to provide the school with updated facilities to address the Self Directed – Self Paced Learning Program, as well as address facility needs for the programming outlined in the Boards Secondary Program Strategy.

Additional renovations are proposed to help the school better meet the current Ministry of Education standards with regards to space requirements.

Proposed renovations to the school includes renovations for the following new programs:

- Engineering Robotics

The following existing program spaces are proposed to be renovated:

- Automotive shop
- Science Labs and support spaces
- Construction Shops
- Communication Arts

Renovations of the following Support Spaces are also proposed:

- Cafeteria
- Library
- Main Office
- Staff lounge
- Washrooms

SECTION 2 - EXISTING CONDITIONS ASSESSMENT

Image 1 – School Main Entry



2.1 INTRODUCTION

Westmount Secondary School was constructed in 1961 and had subsequent renovation in 1963 as well as a few minor renovations throughout the years. The building is 13,676 m² (147,207 ft²) with two floors above grade. The building is configured around a main courtyard with one main corridor running the length of the school and a minor corridor.

2.2 SITE ASSESSMENT

Image 2 – Aerial Photo



Site Background

The school is located on Montcalm Drive in Hamilton. The site is shared with an Elementary School and a Community Centre. The site is 12 hectares in area. There are two parking lots for the school off Montcalm Drive as well as a smaller parking lot of Rolston Dr. at the rear of the school.

Accessibility

The main entrance to the school for vehicles and pedestrians is accessed from Montcalm Drive. Accessible parking is provided in the parking lot near a building entrance. The main entrance is accessible.

Parking & Service

There are two parking lots for the school, the smaller lot is to the north of the main entrance and the larger second parking lot is to the south of the building with access to the rear of the building. Access to both parking areas is off Montcalm Drive. Accessible parking is provided and clearly marked.

There is a third parking lot on the east side of the building off Rolston Drive which also provides a loading area to the school and vehicle access to the technology labs. There is a service loading area provided at the back of the building.

Pedestrian Circulation

Pedestrian access to the school is provided from Montcalm Drive as well as from the Community Centre to the North of the school.

Athletic Fields

The site has one large open grass field with two multipurpose field with goal posts.

2.3 BUILDING CONDITION

An “Existing Conditions Report” was completed by VFA Inc. for the Hamilton-Wentworth District School Board in 2013. This document is included in the appendices for reference. Some information is noted in summaries below*.

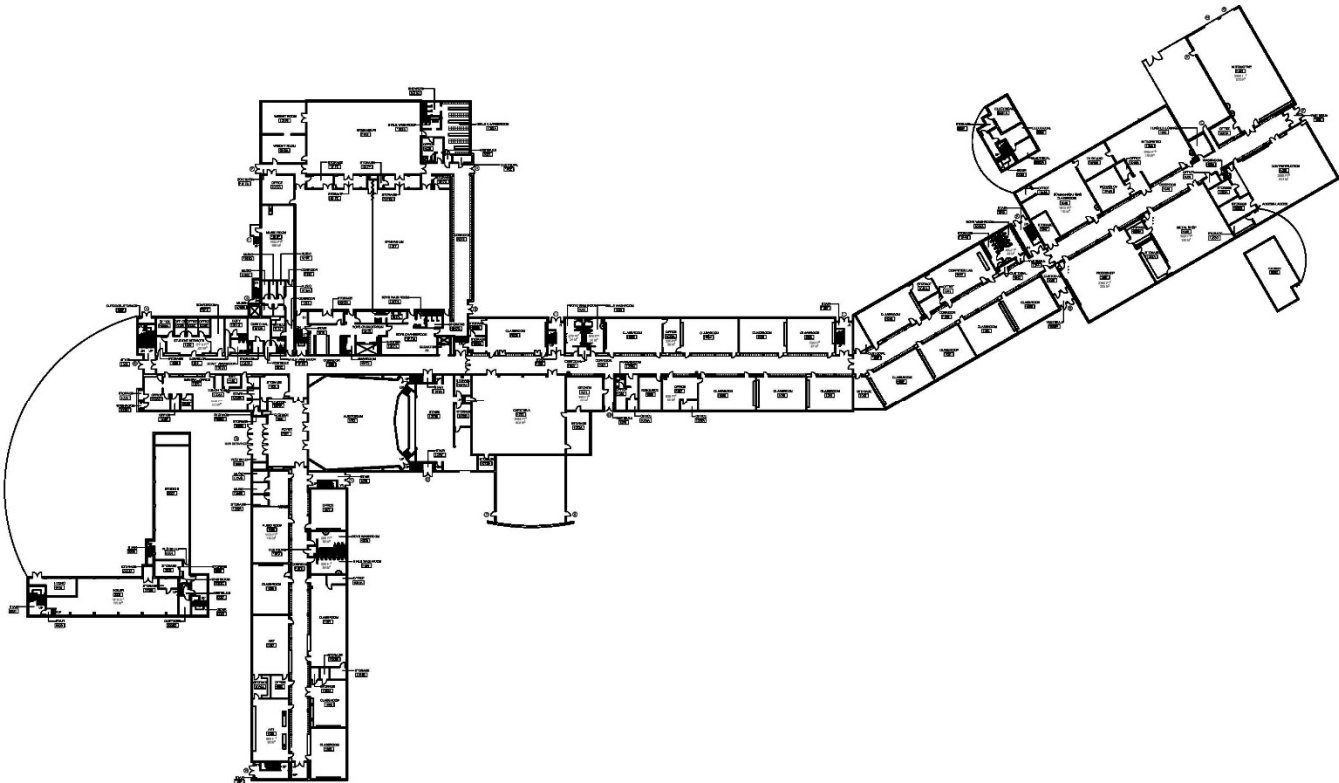


Image 3 – Ground Floor Plan

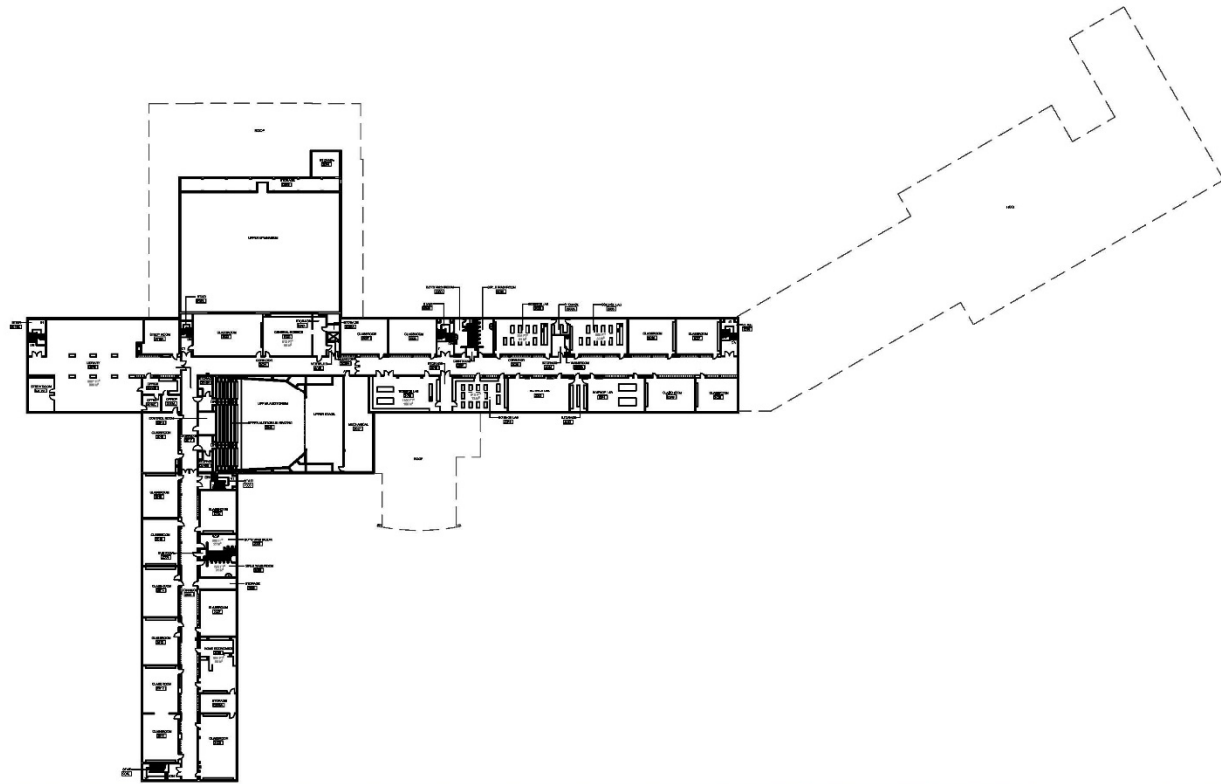


Image 4 – Second Floor Plan

2.3.1 Exterior Building Envelope

- Roof**
 The existing flat roofing is on metal roof decking on steel trusses. It is recommended in the *Existing Conditions Report* that all original building roof be replaced.*
- Exterior Walls**
 The building envelope consists of brick veneer on load bearing CMU masonry walls. The exterior masonry is in fair condition and is showing signs of mortar deterioration and efflorescence. It is recommended in the *Existing Conditions Report* that the mortar joints be repaired.*
- Exterior Doors and Windows**
 The exterior doors and windows were recently replaced and appear to be in good condition.

2.3.2 Interiors

- Floor Finishes**
 The existing floor finishes consist of terrazzo, mainly vinyl composite tiles, ceramic tiles, hard wood flooring and carpet. The *Existing Conditions Report* notes that most of the floor finishes are in fair condition in the original building but that they are showing signs of wear and should be replaced.*

- Interior walls**
 The existing interior walls are painted masonry and painted gypsum board. The *Existing Conditions Reports* notes that the walls are showing signs of wear and peeling and recommend re-finishing.*
- Ceilings**
 The existing ceilings consist of acoustic ceiling tiles, gypsum board ceilings and painted exposed structure. The *Existing Conditions Report* notes that the ceilings are all showing sign of age as well as areas with stains from past roof leaks. The report recommends that the ceiling be replaced.*
- Interior Doors and Hardware**
 The existing doors are a combination of hollow metal doors with paint finish and wood doors with a natural or paint finish and typically have a glazed lite in them. The *Existing Conditions Report* notes that the doors have past their life span and show signs of damage and recommend that the doors as well as all the hardware be replaced.*

2.4 BUILDING CODE ANALYSIS

The existing school is not sprinklered. A renovation would require a thorough review of the building under Part II of the Ontario Building Code (OBC) as a Basic Renovation.

2.5 BUILDING ACCESSIBILITY

The existing school meets most of the current accessible standards as noted in the *Existing Conditions Report*.

2.6 STRUCTURAL ANALYSIS

The existing building structure consists of CMU masonry load bearing walls, concrete on steel deck floors, steel duct roof with steel trusses and joists.*

SECTION 3 – CONCEPT PLANS

3.1 INTRODUCTION

The proposed renovations of Westmount Secondary School were determined based on numerous different factors. The proposed concept plan are the result of consideration of the following:

- HWDSB Secondary Program Strategy
- HWDSB Tier 3 Programs & Specialist High Skills Major Programs (including Appendices)
- Ministry of Education Space Template (recommendations)
- Hamilton Wentworth District School Board – Design Manual
- Existing and Projected student enrollment
- Conditions Assessment Report (by VFA Inc., 2013)

It was determined that Westmount Secondary School has a deficit of instructional spaces in relation to its Full Time Enrollment (FTE). It also has an excess of Large Tech Labs. It is lacking in Small Tech Labs based on the Ministry of Education Space Template.

Current Full Time Enrollment (FTE)	1,497 pupil places
Number of pupils existing building can support (based on 21 pupils per classroom)	1,176 pupil places
Deficit Instructional Space in school for approx.	321 pupil places excess
Based on Edu loading of 21 students per classroom, school has approx.	15 deficit classrooms

3.2 PHASING

Renovations may take place in several phases to reduce disruption to occupied building during the school year.

Phases could occur as follows:

Phase 1 – (Summer 1 and fall as required). Renovations to **Instructional Spaces** directly related to academic programs

Phase 2 – (Summer 2) **Cafeteria** and **Library**

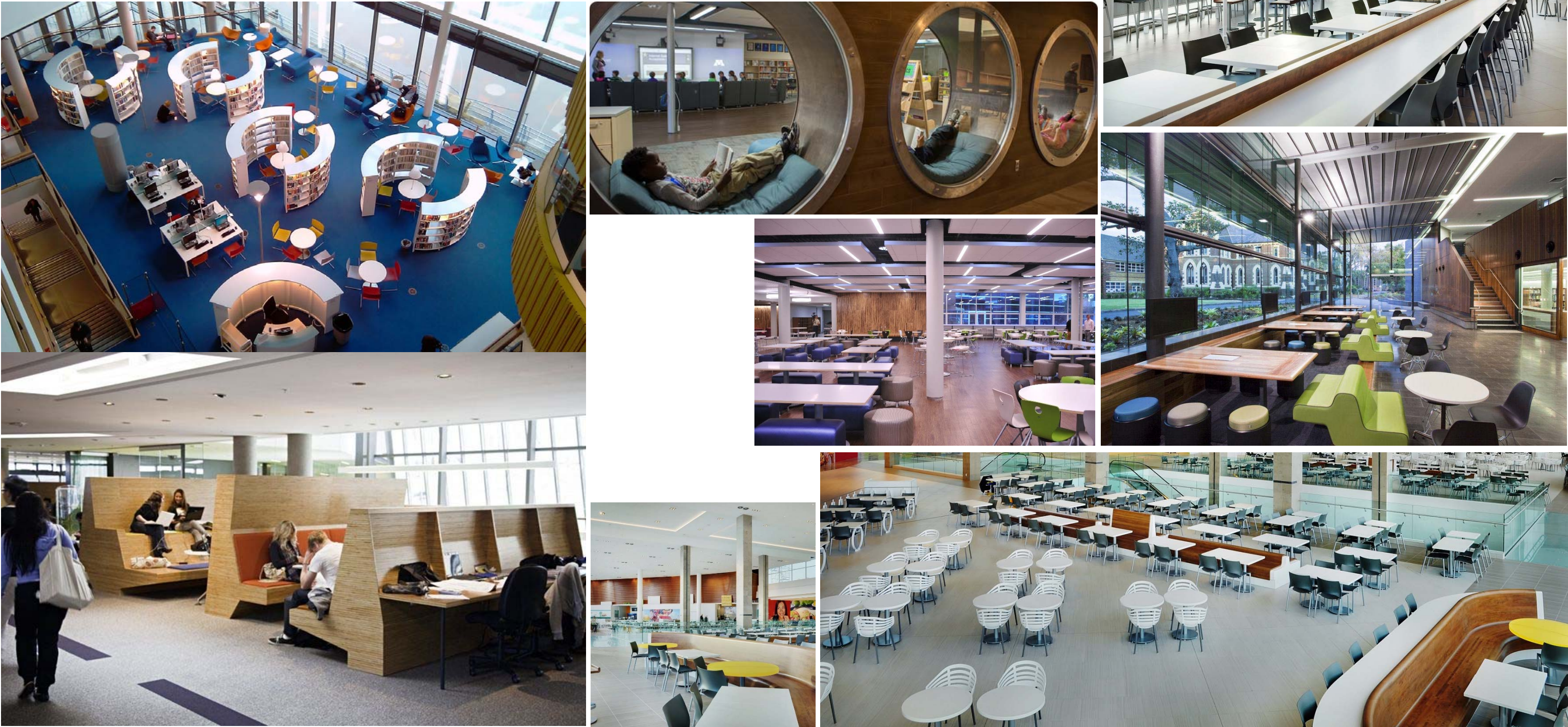
Phase 3 – (Summer 3) **Non-instructional Spaces** and **Washrooms**

Phase 4 – (summer 4) Additional work per ***Existing Conditions Assessment Report*** (refer to Appendix D).

The first three phases identified above relate to the colour coding on the proposed floor plans herein.

3.3 COMMUNAL SPACES

The school revitalization mandate is to create more communal student spaces, such as a ‘Student Forum’ or ‘Student Lounge’, in addition to updating existing common spaces such as the Learning Commons (Library) and Cafeteria areas. These areas are to be modernized with various forms of furnishings as well as the sufficient provision of power for devices to support project based group work and 21st Century Learning environments.



SECONDARY SCHOOL SPACE TEMPLATE
SAMPLE SCHOOL

School Board: Sample District School Board
Grade Range: Grade 9 to 12
Program: English, French or Dual Track
School Name: **Sample School**

Table 18: Secondary Model Program Sheet				
Expected Enrolment:				1,155
Credit Assumptions	%	Credits		Classes
				52
Regular	5%	4,418		20
Science	15%	7,229		8
Arts	10%	856		5
Business	5%	433		3
Technology	11%	856		5
Family Studies	3%	250		2
Physical Education	6%	520		

Instructional Spaces	#	Size		Floor Area		Load	OTG
		m²	ft²	m²	ft²		

Classroom	28	70	750	2,021	21,750	21	809
Science Laboratories	6	116	1,250	929	10,000	21	168
Science General (Avg Size)						21	
Science Biology (Avg Size)						21	
Science Chemistry (Avg Size)						21	
Science Physics (Avg Size)						21	

Total Music / Arts	5			573	6,170		105
Music Instrumental/Vocal	2	129	1,390	259	2,780	21	42
Graphic/Visual Arts	3	105	1,130	315	3,390	21	63
Theatre Arts						21	
Photography						21	
Media Arts						21	

Technical / Vocational	10			1,404	15,110		210
Business/Computer Room	3	97	1,040	281	3,120	21	63
Family Studies	2	114	1,230	225	2,450		42
Family Studies (Food)						21	
Family Studies (Textiles/Fashion)						21	
Family Studies (Nutrition)						21	
Technology Lab Large	2	222	2,500	465	5,000		42
Transportation						21	
Construction						21	
Design/Drafting						21	
Manufacturing						21	
Green Industries						21	
Welding						21	
Wood						21	
Integrated						21	
Technology Lab Small	2	149	1,610	421	4,520		63
Communications						21	
Computer Engineering						21	
Computer Laboratory						21	
Cosmetology						21	
Health Sciences						21	

Special Education / Resource Room				429	4,620		
Special Education Area						9	
Resource Area - Loaded (400-623 sf)						12	
Resource Area - Unloaded (<400 sf)							
Instructional Area Flexibility				429	4,620		

Other Spaces				1,105	11,895		
Ramp		139	1,500	139	1,500		
Library/Library Resource Centre		429	4,620	429	4,620		
Cafeteria/Cafeteria		537	5,775	537	5,775		
Lecture						21	
Seminar							
Chapel							

Gymnasium and Exercise Room				1,511	16,260		42
Gymnasium Area - Quadruple		1,483	16,000			63	
Gymnasium Area - Triple	1	1,115	12,000	1,115	12,000	42	42
Gymnasium Area - Double		1,115	12,000			21	
Gymnasium Area - Single		372	4,000				
Dance/Aerobics Studio							
Exercise Room							
Weight Room							
Change Rooms	4	64	800	256	2,760		
Gymnasium and Exercise Room Flexibility				123	1,500		

Total GFA and OTG of Instructional Area		7,971	85,505			1,134	
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Operational Areas	Per Pupil		Floor Area	
	m²	ft²	m²	ft²

General Office		0.2	2.3	247	2,657
Guidance Area		0.1	1.3	135	1,502
Cooperative Education Office				25	280
Staff Lounge					
Kitchen/Service		0.1	1.1	119	1,271
Custodial Areas		0.2	1.7	182	1,961
Staff Room and Teacher Work Rooms		0.3	3.5	375	4,043
Meeting Room				28	300
Academic Storage		0.1	1.0	107	1,155
Washrooms		0.3	3.2	343	3,696
Gymnasium Storage				74	800
Mechanical Spaces		0.3	2.8	615	6,661

HOSSACK & ASSOCIATES ARCHITECTS
exp.

SECONDARY SCHOOL SPACE TEMPLATE
Westmount Secondary - Existing

School Board: HWCDSB
Grade Range: 9 to 12
Program:
School Name: **Westmount Secondary - Existing**

Current FTE	1497
FTE Projections (2016)	1294
Existing Pupil Places (current facility)	1,155

Instructional Spaces	#	Size		Floor Area		Load	OTG
		m²	ft²	m²	ft²		

Classroom	34	71	759	2,397	25,806	21	714
Science Laboratories	7			668	7,187		147
Science General (Avg Size)	1	85	913	85	913	21	21
Science Biology (Avg Size)	2	100	1,137	211	2,314	21	12
Science Chemistry (Avg Size)	2	83	1,000	186	2,030	21	42
Science Physics (Avg Size)	2	83	1,000	186	2,030	21	42

Total Music / Arts	4			459	4,936		84
Music Instrumental/Vocal	2	137	1,474	274	2,948	21	42
Graphic/Visual Arts	2	83	891	185	1,988	21	12
Theatre Arts						21	
Photography						21	
Media Arts						21	

Technical / Vocational	8			1,349	14,519		180
Business/Computer Room	1	84	907	84	907	21	21
Family Studies	1			83	884		21
Family Studies (Food)	1	83	894	83	884	21	21
Family Studies (Textiles/Fashion)						21	
Family Studies (Nutrition)						21	
Technology Lab Large	3			1,041	11,226		105
Transportation	1	272	2,930	272	2,930	21	21
Construction	1	241	2,590	241	2,590	21	21
Design/Drafting						21	
Manufacturing						21	
Green Industries						21	
Welding	1	185	1,992	185	1,992	21	21
Wood	1	185	1,990	185	1,990	21	21
Integrated	1	152	1,704	152	1,704	21	21
Technology Lab Small	1			140	1,512		21
Communications	1	140	1,512	140	1,512	21	21
Computer Engineering						21	
Computer Laboratory						21	
Cosmetology						21	
Health Sciences						21	

Special Education / Resource Room							
Special Education Area						9	
Resource Area - Loaded (400-623 sf)						12	
Resource Area - Unloaded (<400 sf)							
Instructional Area Flexibility							

Other Spaces				1,187	12,772		
Ramp	1	124	1,333	124	1,333		
Library/Library Resource Centre	1	558	6,007	558	6,007		
Cafeteria/Cafeteria	1	505	5,432	505	5,432		
Lecture						21	
Seminar							
Chapel							

Gymnasium and Exercise Room	4			1,498	16,000		42
Gymnasium Area - Quadruple						63	
Gymnasium Area - Triple	1	1,106	11,906	1,106	11,906	42	42
Gymnasium Area - Double						21	
Gymnasium Area - Single							
Dance/Aerobics Studio							
Exercise Room	1	58	603	58	603		
Weight Room	1	58	603	58	603		
Change Rooms	1	288	2,888	288	2,888		

Total GFA and OTG of Instructional Area		7,546	81,220			1,155	
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Operational Areas	Per Pupil		Floor Area	
	m²	ft²	m²	ft²

General Office			171	1,843
Guidance Area			100	1,075
Cooperative Education Office				
Staff Lounge				
Kitchen/Service				
Custodial Areas				
Staff Room and Teacher Work Rooms				
Meeting Room				
Academic Storage				
Washrooms				
Gymnasium Storage				
Mechanical Spaces				

SECONDARY SCHOOL SPACE TEMPLATE
Westmount Secondary - Proposed

School Board: HWCDSB
Grade Range: 9 to 12
Program:
School Name: **Westmount Secondary - Proposed**

Current FTE	1497
FTE Projections (2016)	1294
Proposed Pupil Places (current facility)	1,233

Instructional Spaces	#	Size		Floor Area		Load	OTG
		m²	ft²	m²	ft²		

Classroom	37	71	758	2,809	28,083	21	772
Science Laboratories	7			622	6,700		147
Science General (Avg Size)	1	84	900	84	900	21	21
Science Biology (Avg Size)	2	83	1,070	166	2,000	21	12
Science Chemistry (Avg Size)	2	83	1,000	186	2,000	21	42
Science Physics (Avg Size)	2	84	900	187	1,900	21	42

Total Music / Arts	4			459	4,936		84
Music Instrumental/Vocal	2	137	1,474	274	2,948	21	42
Graphic/Visual Arts	2	83	891	185	1,988	21	12
Theatre Arts						21	
Photography						21	
Media Arts						21	

Technical / Vocational	7			1,084	11,671		147
Business/Computer Room	1	84	907	84	907	21	21
Family Studies	1			83	884		21
Family Studies (Food)	1	83	894	83	884	21	21
Family Studies (Textiles/Fashion)						21	
Family Studies (Nutrition)						21	
Technology Lab Large	2			513	5,529		42
Transportation	1	272	2,930	272	2,930	21	21
Construction	1	241	2,590	241	2,590	21	21
Design/Drafting						21	
Manufacturing						21	
Green Industries						21	
Welding						21	
Wood						9	
Integrated						21	
Technology Lab Small	3			404	4,389		63
Communications & TV Studio	1	177	1,920	177	1,900	21	21
Computer Engineering & ROBOTICS	1	151	1,636	151	1,636	21	21
Computer Laboratory CADD	1	78	820	78	820	21	21
Cosmetology						21	
Health Sciences						21	

Special Education / Resource Room	4			177	1,900		36
Special Education Area GSP						9	
Resource Area - Loaded (400-623 sf)	2	51	550	153	1,650	12	36
Resource Area - Unloaded (<400 sf)	1	23	250	23	250		
Instructional Area Flexibility							

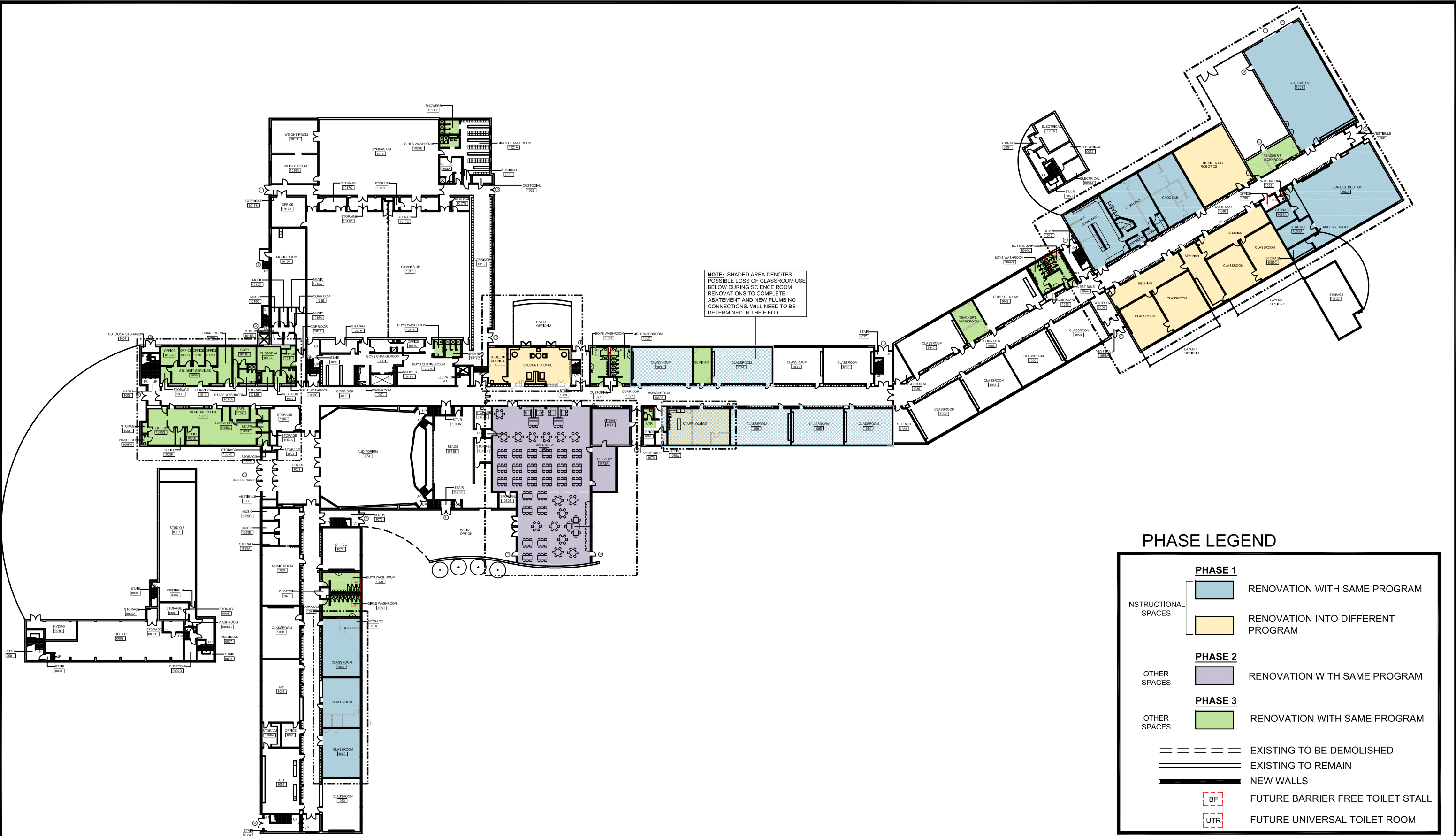
Other Spaces	3			1,187	12,772		
Ramp	1	124	1,333	124	1,333		
Library/Library Resource Centre	1	558	6,007	558	6,007		
Cafeteria/Cafeteria	1	505	5,432	505	5,432		
Lecture						21	
Seminar							
Chapel							

Gymnasium and Exercise Room	4			1,498	16,000		42
Gymnasium Area - Quadruple						63	
Gymnasium Area - Triple	1	1,106	11,906	1,106	11,906	42	42
Gymnasium Area - Double						21	
Gymnasium Area - Single							
Dance/Aerobics Studio							
Exercise Room	1	58	603	58	603		
Weight Room	1	58	603	58	603		
Change Rooms	1	288	2,888	288	2,888		

Total GFA and OTG of

3.5 PLANS

The following pages illustrate the **Existing Floor Plan** and subsequent **Proposed Floor Plan** for each level of the school.



WESTMOUNT SECONDARY SCHOOL

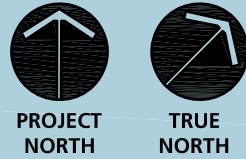
KEY PLAN - GROUND FLOOR

PROJ: 15108

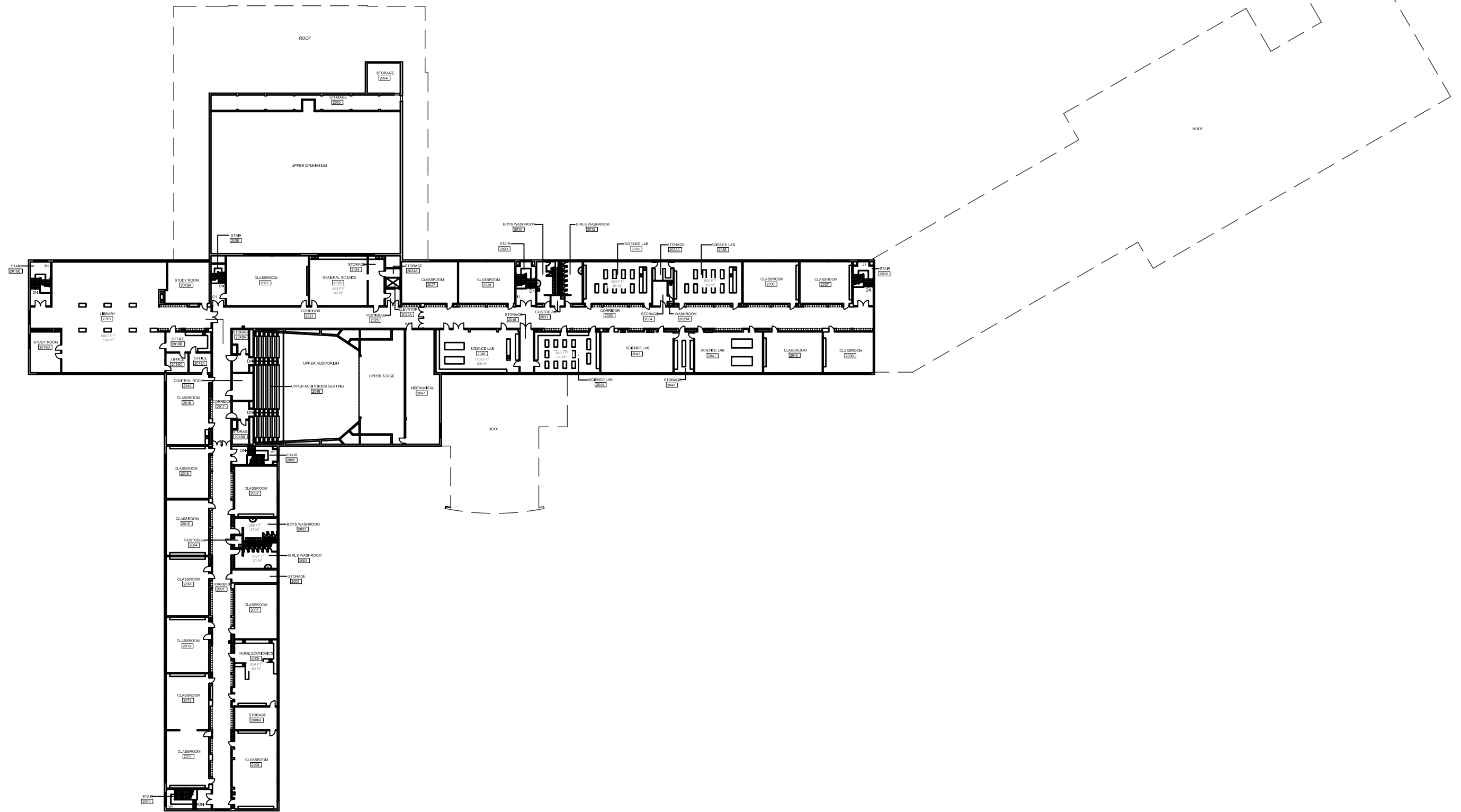
SCALE: NTS

DRAWN: SC

DATE: 15/04/08



A1



WESTMOUNT SECONDARY SCHOOL

EXISTING SECOND FLOOR

PROJ: 15108

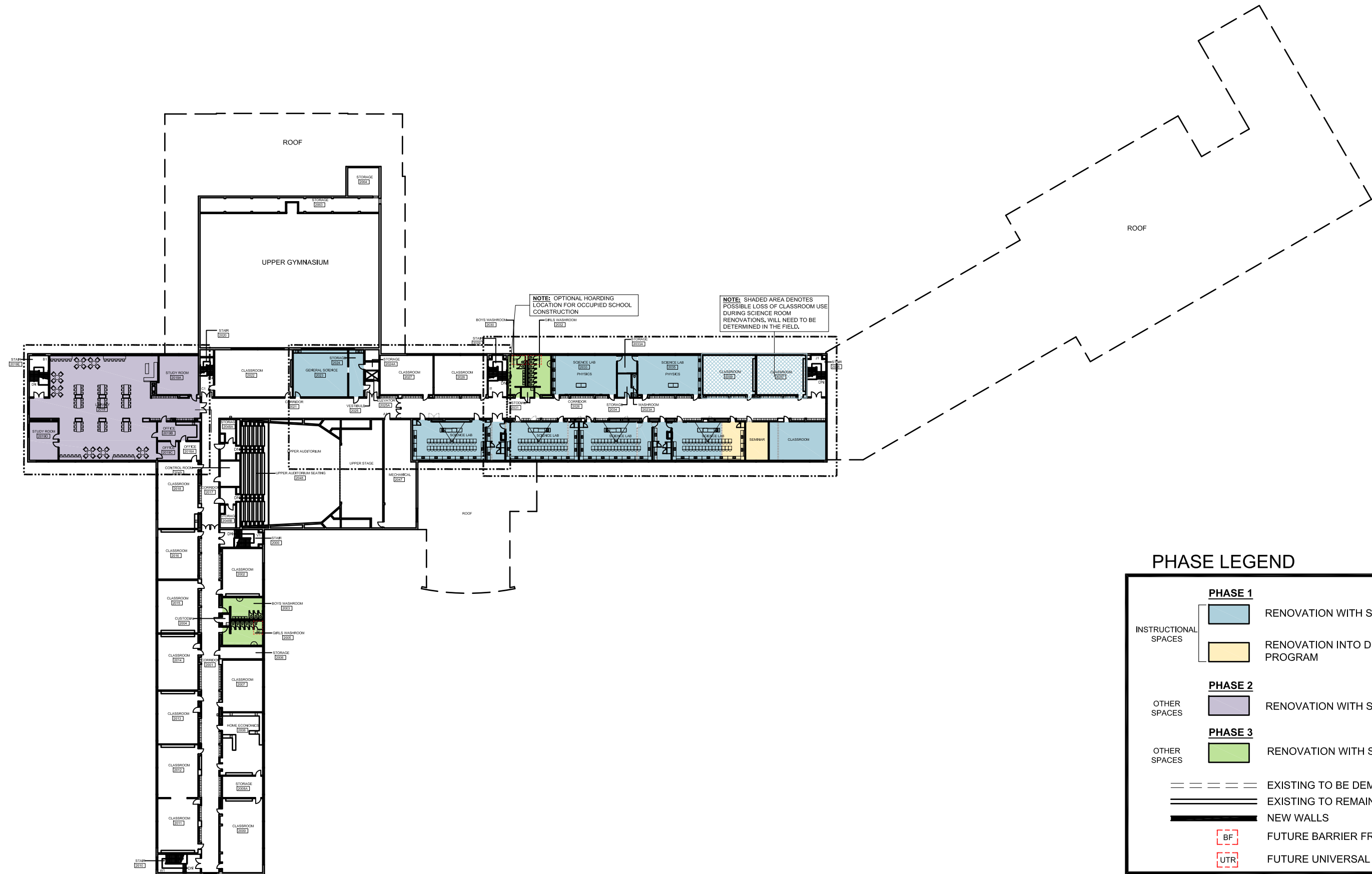
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E2



PHASE LEGEND

INSTRUCTIONAL SPACES

PHASE 1

RENOVATION WITH SAME PROGRAM

RENOVATION INTO DIFFERENT PROGRAM

OTHER SPACES

PHASE 2

RENOVATION WITH SAME PROGRAM

PHASE 3

RENOVATION WITH SAME PROGRAM

EXISTING TO BE DEMOLISHED

EXISTING TO REMAIN

NEW WALLS

BF

FUTURE BARRIER FREE TOILET STALL

UTR

FUTURE UNIVERSAL TOILET ROOM

DESCRIPTION

All spaces noted below are to be renovated to upgrade flooring, ceilings, painting and millwork as required.

3.6.1 PHASE 1 – Instructional Spaces and some Non-Instructional Spaces

All Spaces noted below are to be renovated to upgrade flooring, ceilings, painting and millwork as required.

GROUND FLOOR

COMMUNICATION ARTS

The existing Communication classroom and adjacent workshop and TV studio will continue to provide this program but will undergo a renovated to provide a new Communications Arts classroom and a TV Studio complete with storage and editing facilities.

ENGINEERING ROBOTICS

The existing Integrated Shop classroom will be renovated into a new Engineering Robotics classroom.

CADD LAB

A portion of the existing Integrated Shop classroom will be renovated into a new CADD lab.

AUTOMOTIVE SHOP

The existing Automotive Shop will be renovated with new floors, paint and equipment.

CONSTRUCTION SHOP

The existing Construction Shop will be renovated with new floors, paint and equipment.

CLASSROOMS AND SEMINAR ROOMS

The existing Wood Shop, Metal Shop and adjacent Storage rooms will be renovated into two new classrooms with three new adjoining seminar rooms. This school is greatly lacking in Seminar Rooms, which are especially in demand in a school with a Self Directed – Self Paced program.

STAFF LOUNGE

The existing offices and adjacent resource room will be renovated into a new Staff Lounge with new millwork. There is currently no communal Staff Lounge in this school.

STUDENT LOUNGE

The existing classroom and adjacent storage rooms will be renovated into a new Student Council and Student Lounge with new exterior doors to a possible patio. There is currently no Student Lounge in this school.

CLASSROOMS

Two oversized existing Classrooms with adjoining storage rooms with be renovated into three new standard classrooms.

SECOND FLOOR

SCIENCE LABS

All the existing Science Labs and adjoining space will be renovated in to new Science Labs with adjoining Prep Rooms. All existing millwork and plumbing will be replaced. Existing floors and ceilings will also be replaced and existing and new walls will receive new paint.

One existing Classrooms in the Science Corridor will be renovated into part of a new Science lab as the existing Science Labs are undersized. The remaining portion of the room will become a Seminar Room.

3.6.2 PHASE 2 – Cafeteria and Library

GROUND FLOOR

CAFETERIA AND KITCHEN

The existing Cafeteria and kitchen will be renovated. The Cafeteria will receive all new finishes, including floor, ceiling and wall paint.

SECOND FLOOR

LIBRARY

The existing Library will be renovated with all new finishes, floors, ceiling and wall paint, as well as reorganizing the layout to provide a lounge area.

3.6.3 Phase 3 – Non-Instructional Spaces and Washrooms

GROUND FLOOR

WASHROOMS

All existing ground floor washrooms are to be renovated. All plumbing fixtures to be removed and replaces. New floor, ceiling and wall finishes to be installed. New washroom partitions to be installed. Revise layout to include new Barrier free stall to meet O.B.C. requirements.

MAIN OFFICE

The existing Main Office area will be renovated with new floors, ceiling and wall finishes.

TEACHER’S WORKROOMS

An existing storage room and offices will be renovated into two new Teacher’s Workrooms with new floors, millwork, ceiling and wall finishes.

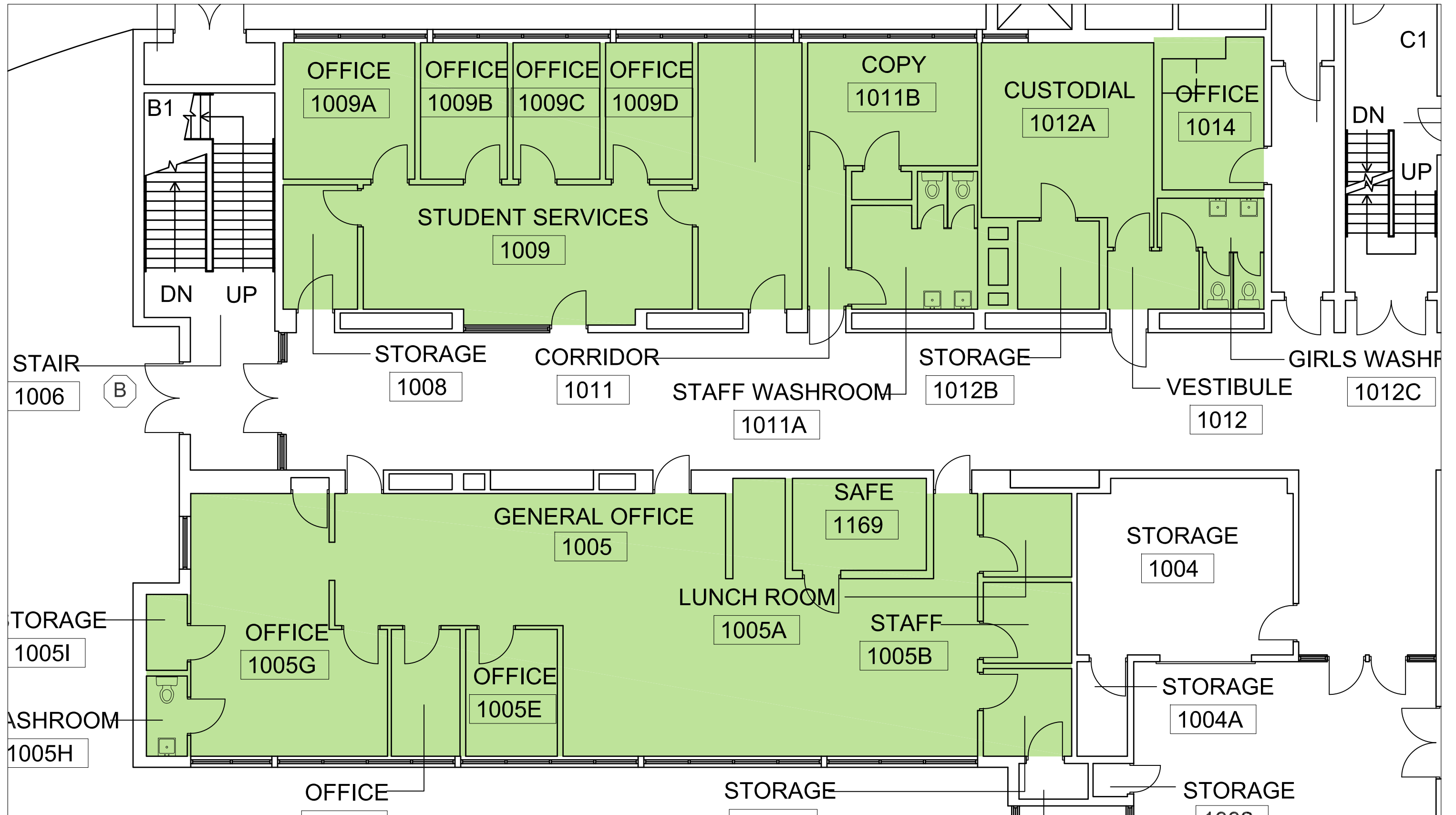
SEMINAR ROOM

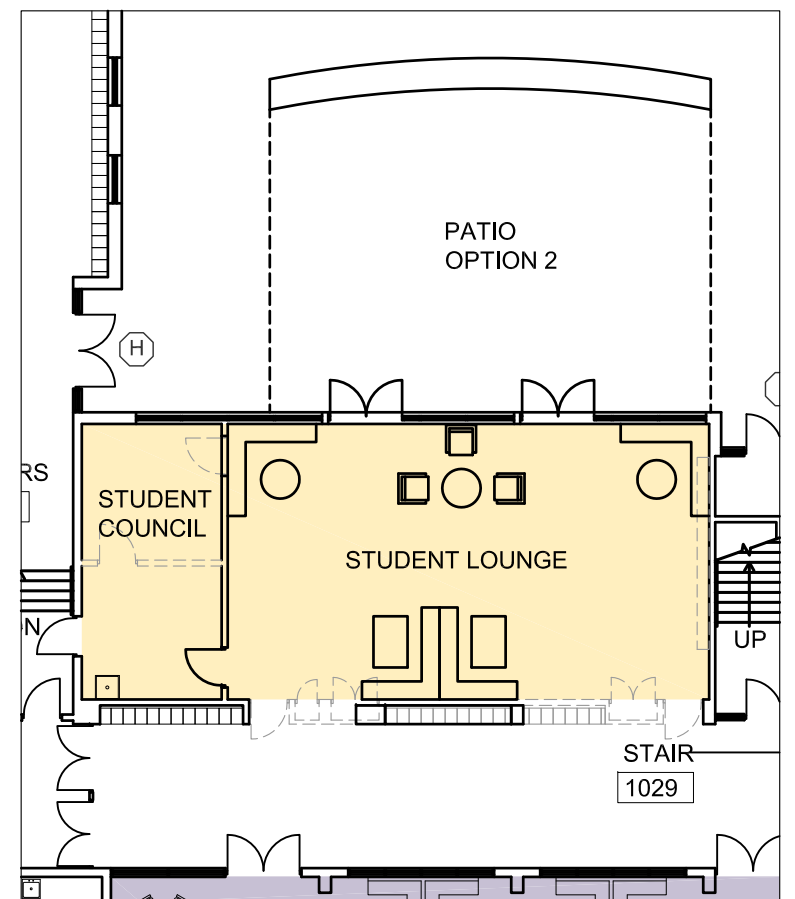
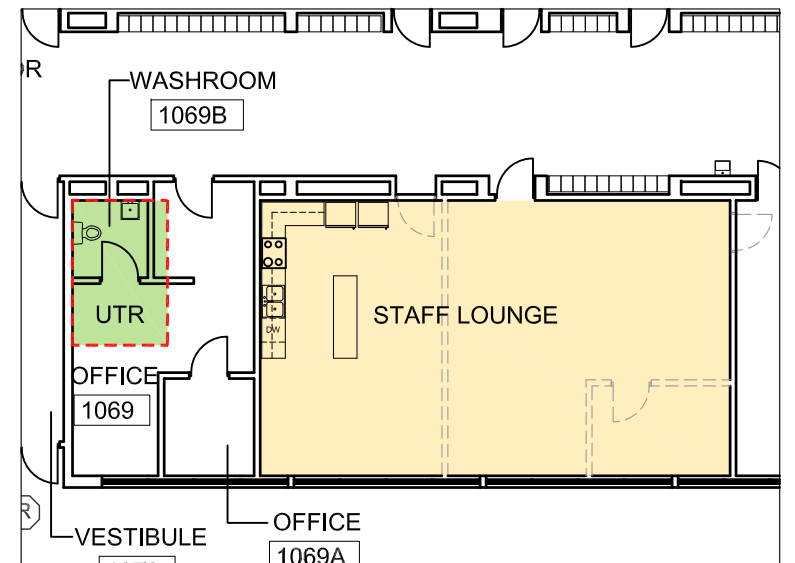
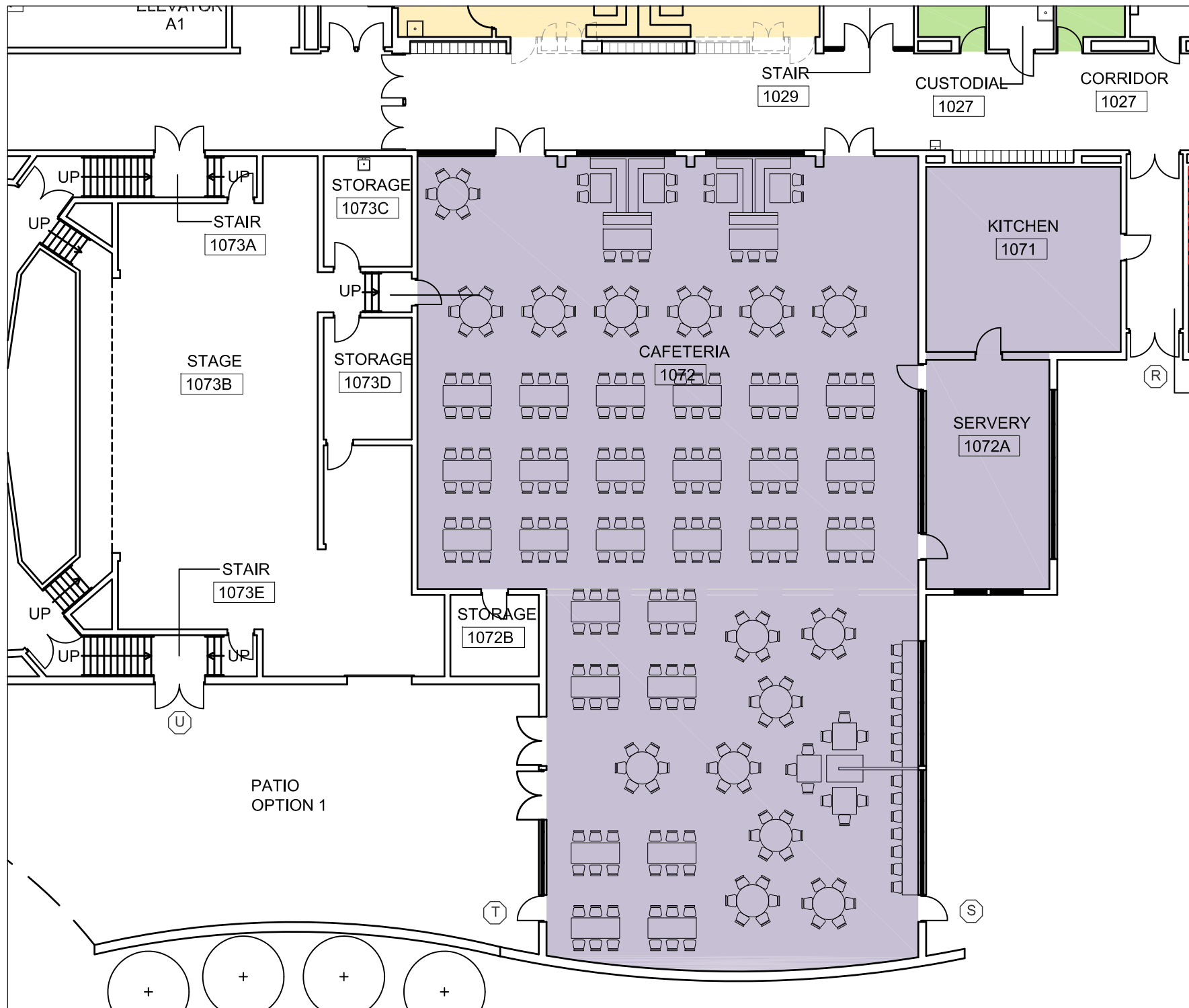
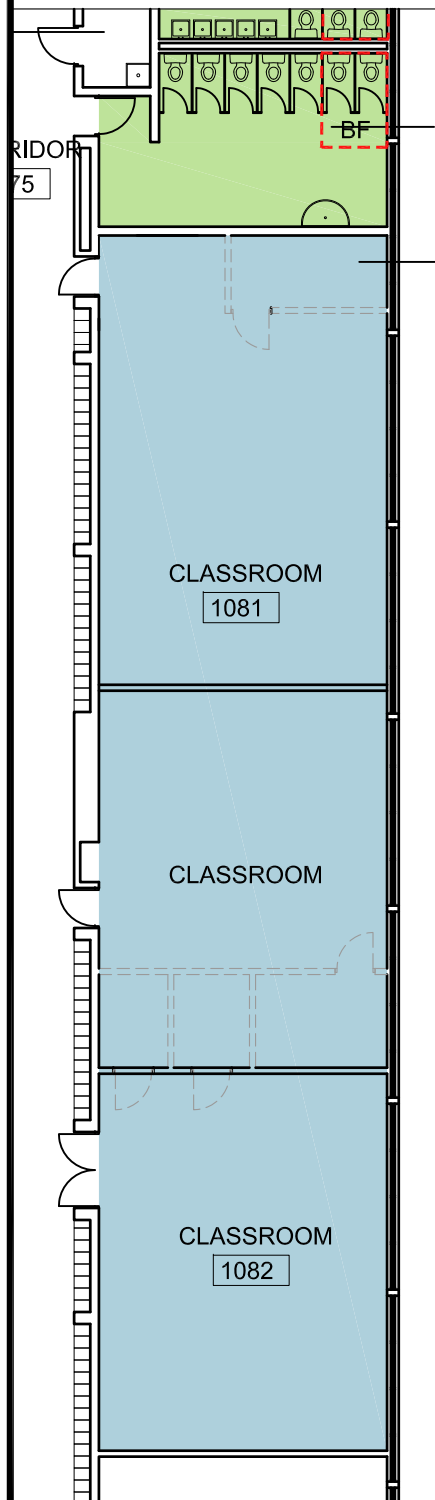
An existing office are will be renovated into a new Seminar room with new floors, millwork, ceiling and wall finishes.

SECOND FLOOR

WASHROOMS

All existing second floor washrooms are to be renovated. All plumbing fixtures are to be removed and replaced. New floor, ceiling and wall finishes are to be installed. New washroom partitions are to be installed. Revise layout to include new Barrier free stall to meet O.B.C. requirements.



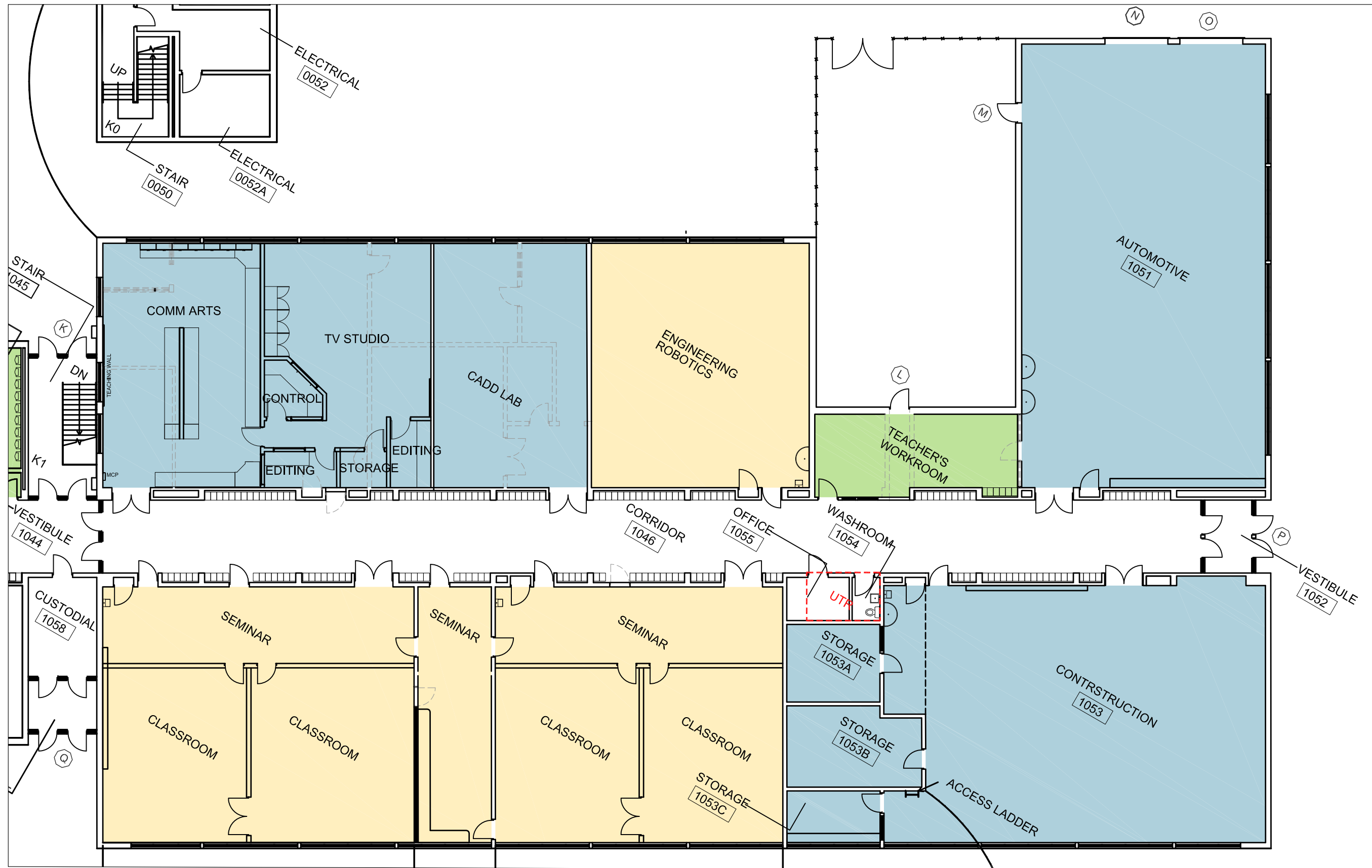


WESTMOUNT SECONDARY SCHOOL
GROUND FLOOR - ENLARGED PLANS

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 DATE: 15/04/08



A4

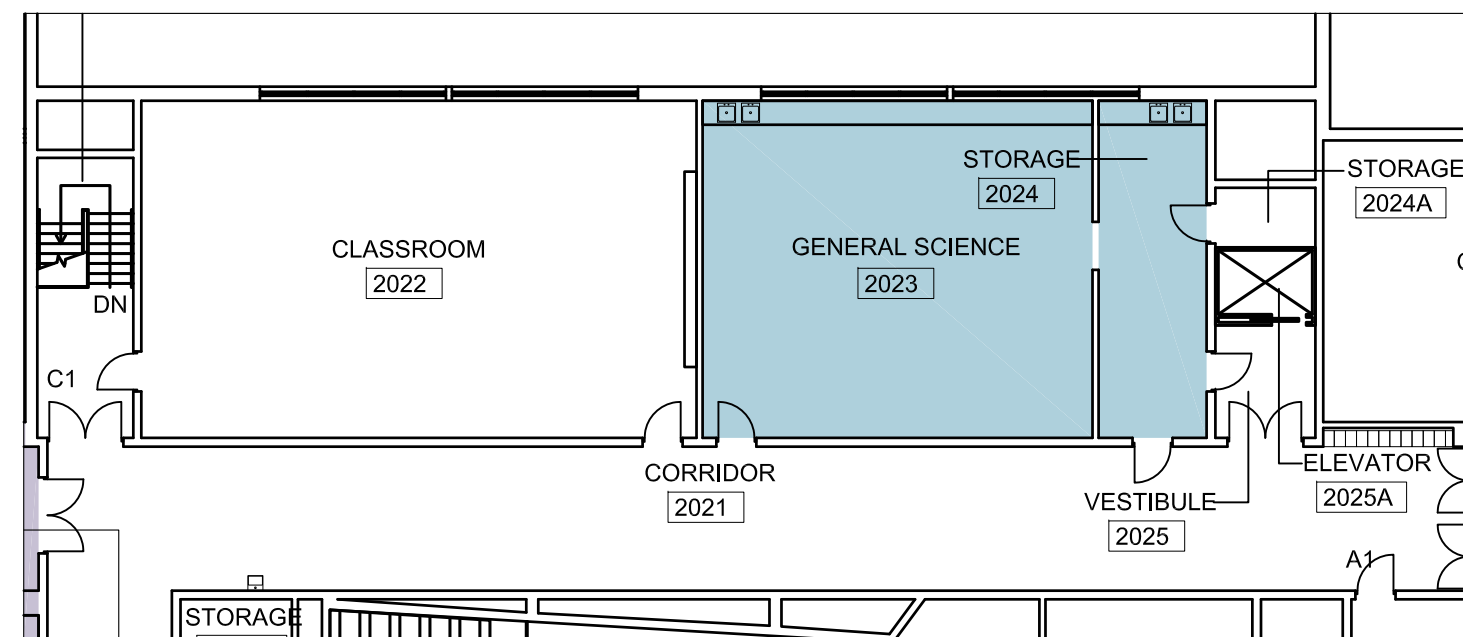
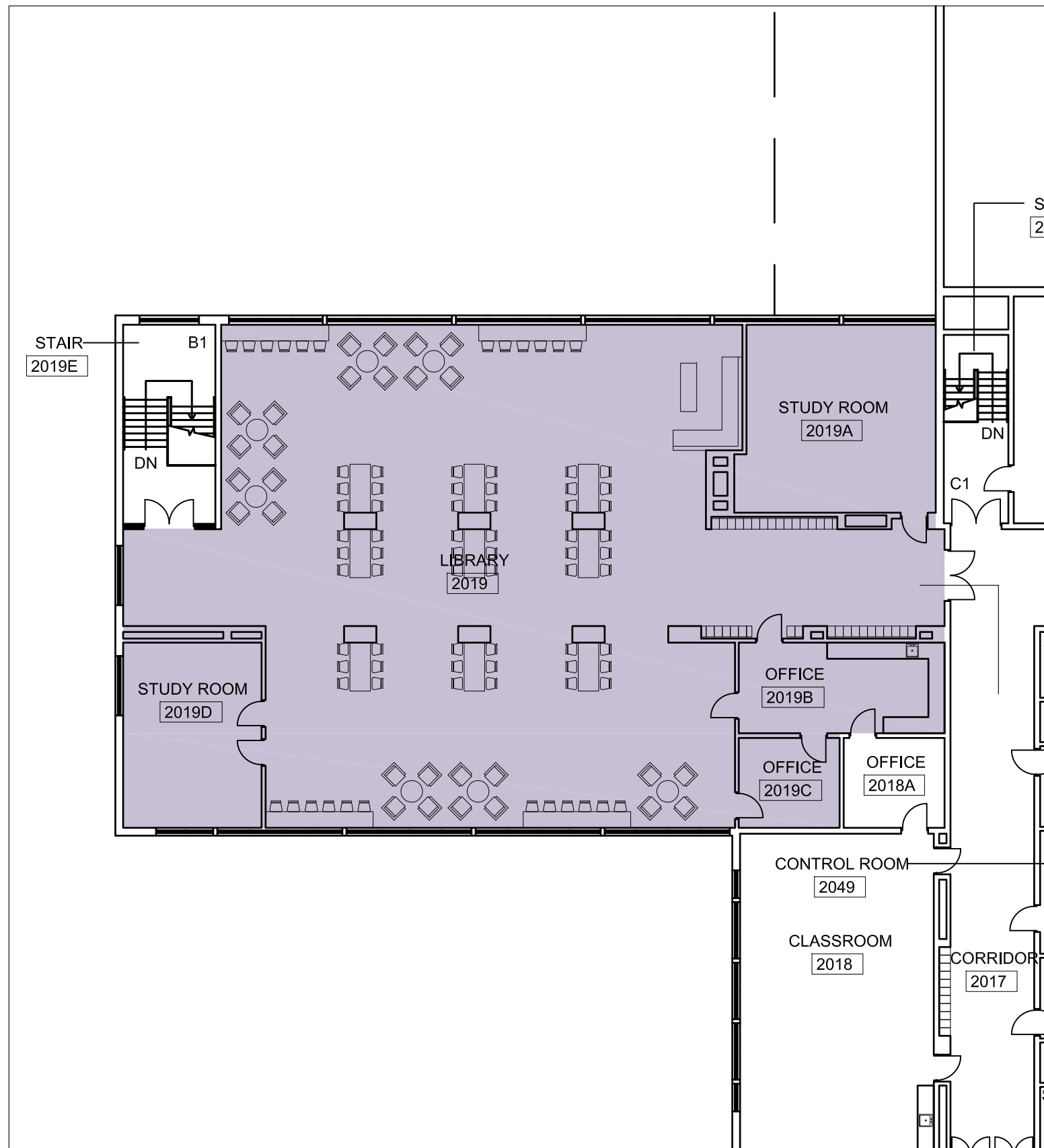


WESTMOUNT SECONDARY SCHOOL
GROUND FLOOR - ENLARGED PLANS

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 DATE: 15/04/08



A5

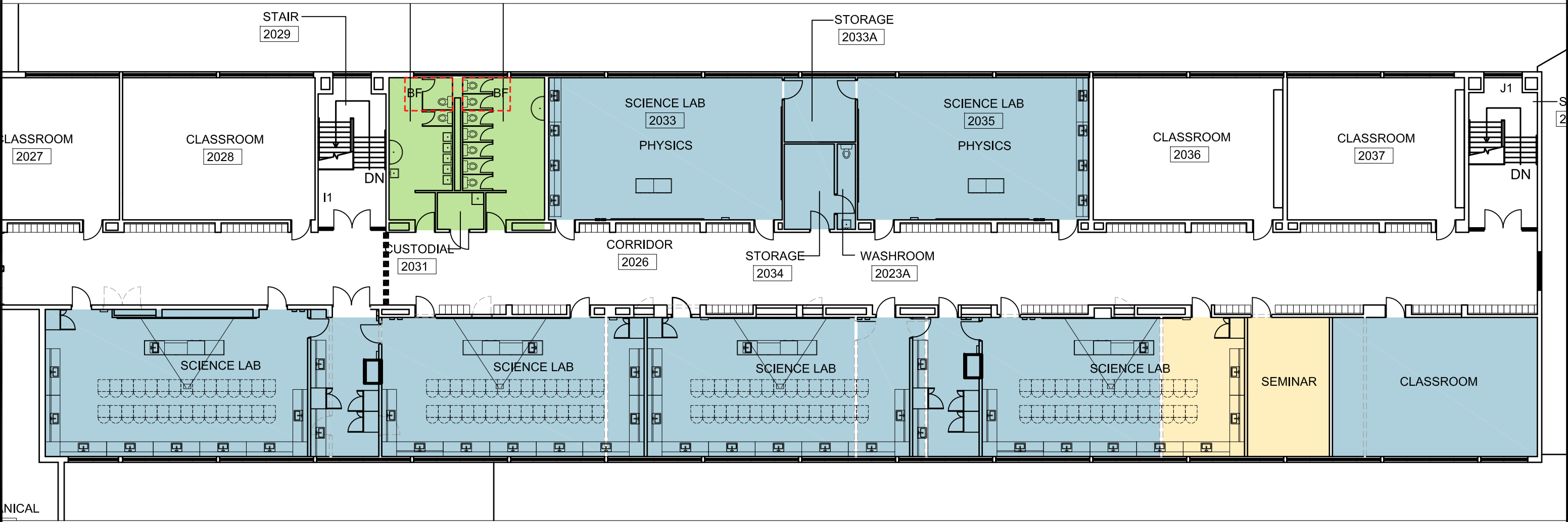


WESTMOUNT SECONDARY SCHOOL
SECOND FLOOR - ENLARGED PLANS

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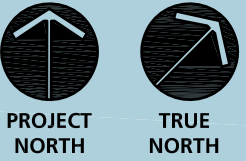


A6



WESTMOUNT SECONDARY SCHOOL
SECOND FLOOR - ENLARGED PLANS

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DATE: 15/04/08



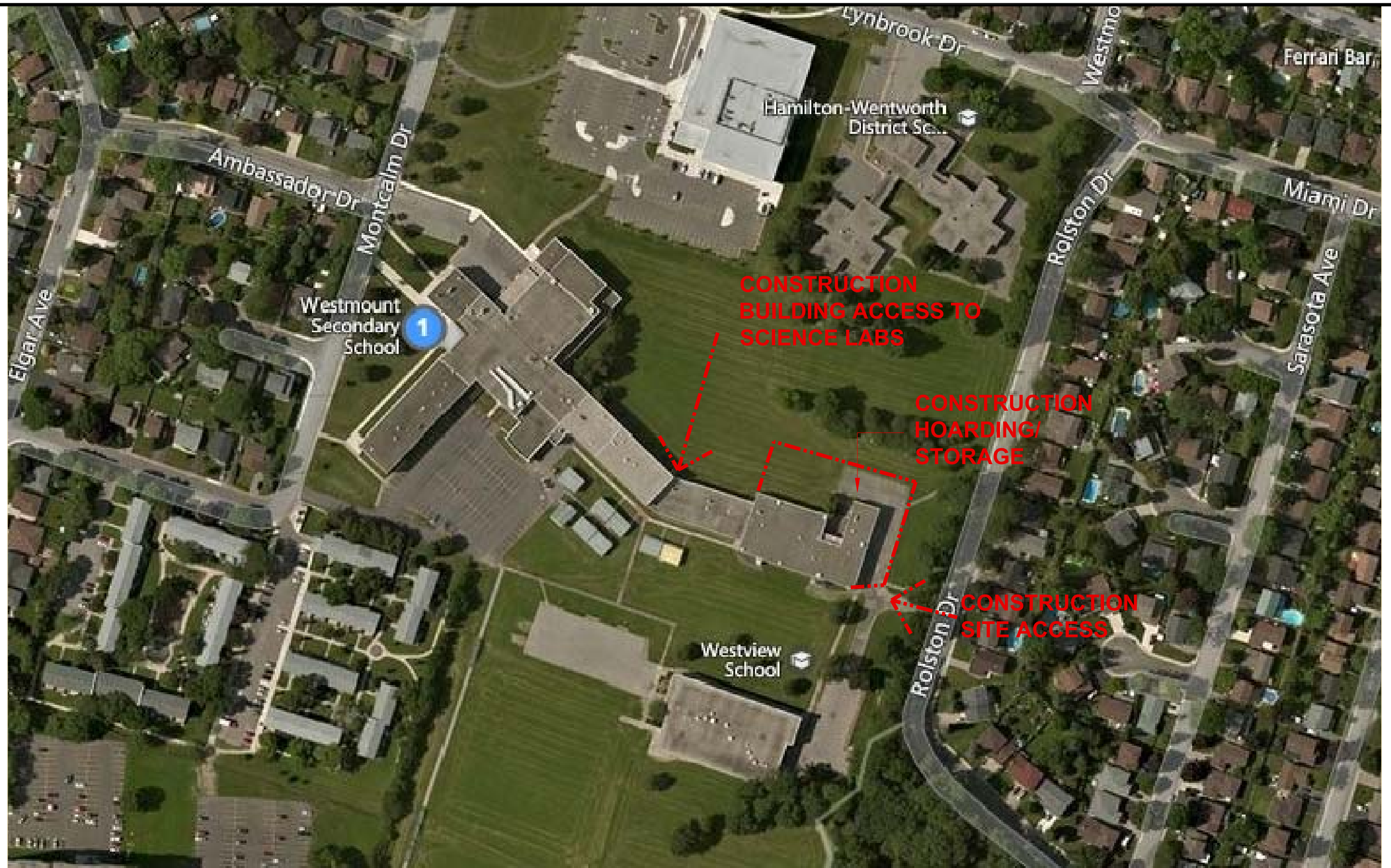
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ARCHITECTS**



A7

3.7 SITE PLAN – Construction Access

The parking lot has two entrance so one will be designated as the construction entrance with the second entrance remaining for staff and students. Refer to attached Site Plan for the proposed locations of the Construction Storage and Construction Building entrance.



WESTMOUNT SECONDARY SCHOOL

SITE PLAN

PROJ: 15108

SCALE: NTS

DRAWN: SC

DATE: 15/04/08



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SP1

SECTION 4 – SUSTAINABLE DESIGN STRATEGIES

The revitalization of Westmount Secondary School is proposed as a renovation to the existing building to repurpose existing space for the modern needs of the users. An addition is both costly and utilizes site area, which is limited in the urban setting of this school. Also, it has been identified that the existing building has sufficient space to accommodate the projected future enrollment population.

The intention is to renovate using sustainable design strategies such as the following:

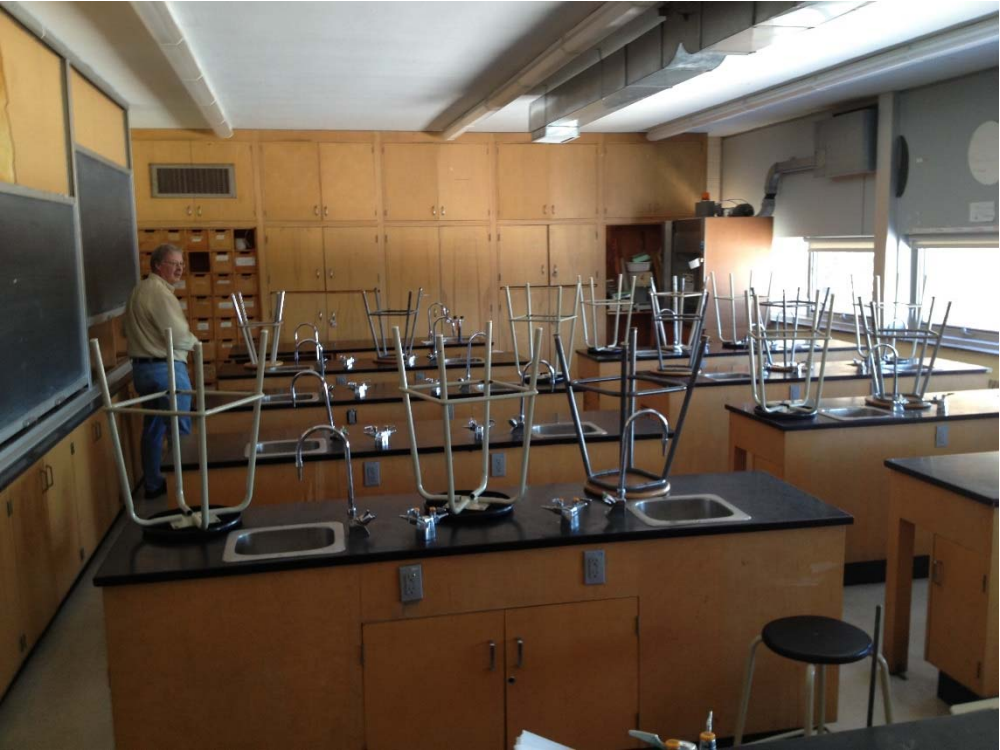
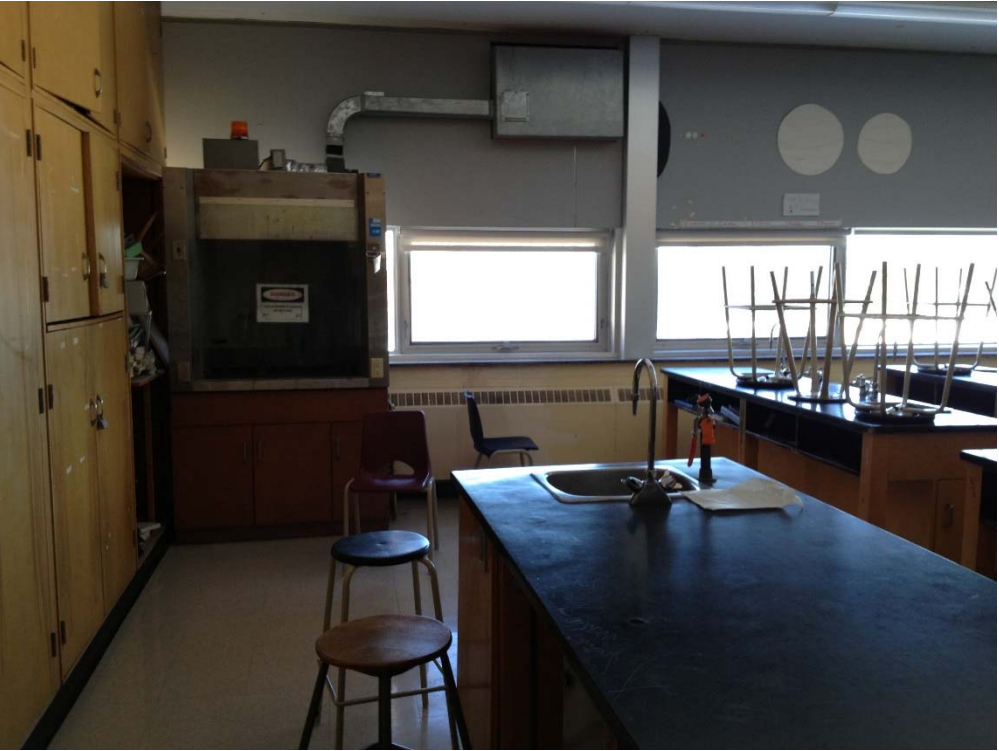
- Retain existing building components wherever possible (thus reducing material in landfill).
- Reuse existing building components wherever possible (reuse concrete block or brick veneer).
- Replace building components that do not promote energy efficient qualities (ie. poor windows and doors, mechanical, plumbing and electrical equipment).
- Use construction materials with recycled content wherever possible.
- Use local construction materials wherever possible.
- Incorporate building technologies which promote lower energy usages (ie. occupancies sensors for lighting).
- Items identified in the Existing Building Conditions Report to be replaced pertaining to building envelope or building systems are to be replaced with higher performance, energy efficient components, thus reducing energy use requirements.

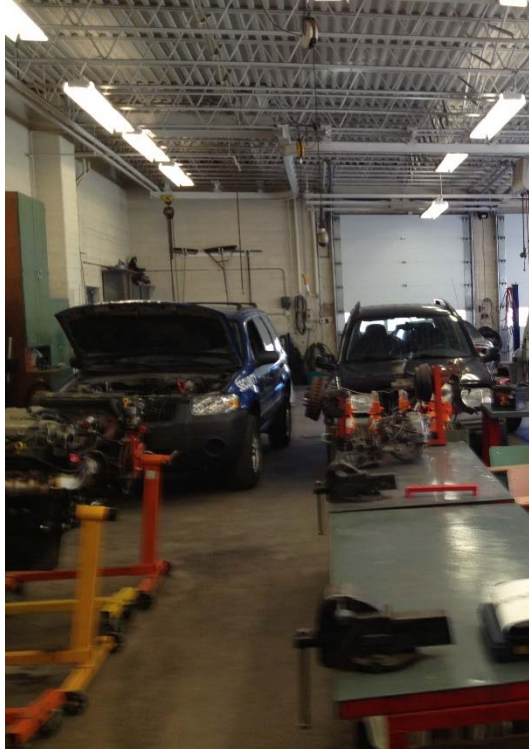
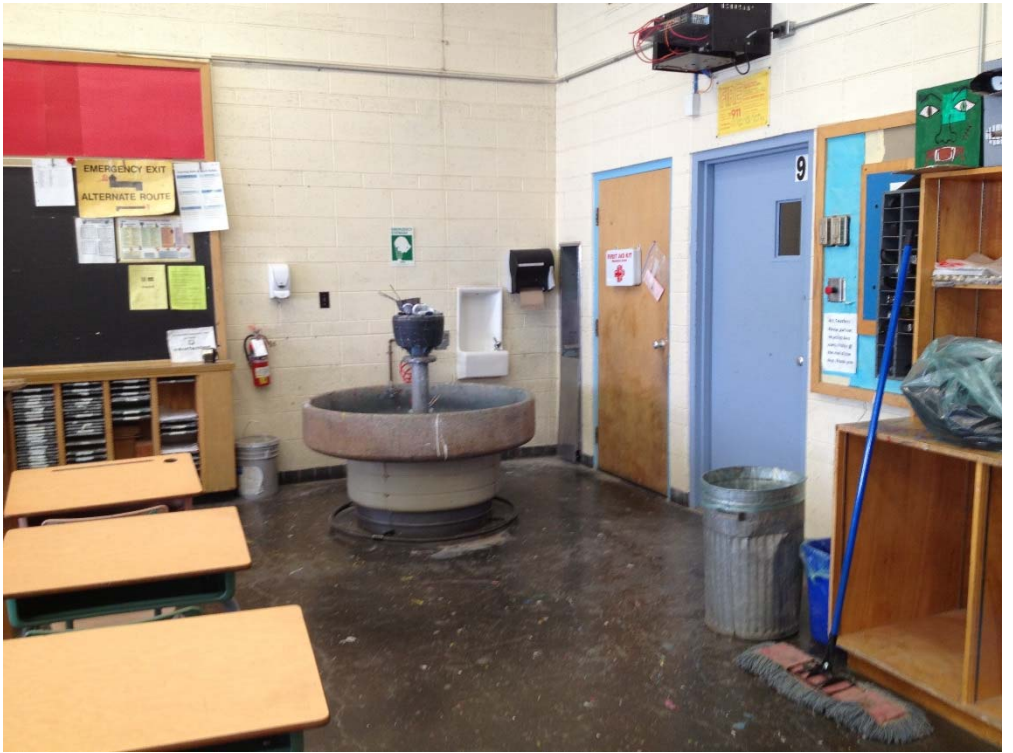
Efforts toward a school revitalization and renewal that embraces sustainable strategies is in keeping with the School Board mandate toward healthier environments for students, staff and the communities they serve.



APPENDIX A
EXISTING CONDITIONS PHOTOS

APPENDIX A - EXISTING CONDITIONS PHOTOS





APPENDIX B
MECHANICAL
FEASIBILITY STUDY &
CONCEPT DESIGN

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- **Hamilton Wentworth District School Board**

Westmount Secondary School

Mechanical Services Feasibility Study & Concept Design

Project Number
GR8-00014230-00

Prepared By:
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Erick Korthuis

Date Submitted
December 17, 2015

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1.0 INTRODUCTION

The existing Westmount Secondary School was opened in 1961 and is located at 39 Montcalm Drive in Hamilton, Ontario.

The Hamilton-Wentworth District School Board is proposing to renovate the existing Science Laboratories, Washrooms, Administration Office spaces, Technology Labs (Shops), Cafeteria/ Cafeteria Servery, Library, Student Lounge, TV Studio, Commercial Arts, Staff Room, CADD Lab, Teacher Workroom, Engineering/Robotics, Seminar Rooms and Classrooms by renovating existing space.

Some of the information in this Design Brief related to existing conditions is based on information from a site review completed in January, 2015. In addition, we have reviewed the building with Ms. Agnese De Fazio, Project Supervisor, Capital Projects.

This report documents the feasibility and the proposed mechanical systems that are consistent with, and anticipated for, the proposed renovations.

This report, prepared by **exp** Services Inc., is intended for the exclusive use of Hamilton-Wentworth District School Board and Hossack & Associates Architects Inc. None of **exp** Services Inc., Hamilton-Wentworth District School Board and Hossack & Associates Architects Inc. assume any liability for the use of this report, or for the use of any information disclosed in the report, or for damages resulting from the use of this report, by other parties.



2.0 CODES, STANDARDS & GUIDELINES

Guidelines and interpretations of the requirements of the latest editions of the following Codes, Standards will be addressed in the design of this project:

- Ontario Building Code (OBC)
- Ontario Fire Code (OFC)
- Ontario Gas Utilization Code
- ASHRAE 62.1, Ventilation for Acceptable Indoor Air Quality
- ASHRAE 90.1, Energy Efficient Design of New Buildings Except Low-Rise Residential Buildings
- NFPA 10, Portable Fire Extinguishers
- NFPA 13, Installation of Sprinkler Systems
- NFPA 14, Installation of Standpipe and Hose Systems
- Hamilton-Wentworth District School Board Design Guidelines



3.0 DESCRIPTION OF SCOPE APPLICABLE TO ALL PROPOSED AREAS OF RENOVATION

3.1 Existing Mechanical Conditions

- Plumbing fixtures and Science Lab sinks complete with associated trim, isolation valves, hot/cold water and sanitary drain pipes serving areas of renovation are to be removed from the site
- Existing buried sanitary and storm pipes serving area of renovation to be power flushed after all construction at the site is complete
- Existing supply air diffusers and/or grilles and a portion of existing ductwork serving areas of renovation are to be removed from the site
- After all construction at the site is complete, existing interior supply, return and exhaust ductwork, approximately 4500 mm from diffusers/grilles is to be power vacuumed
- Existing window air conditioning units and all accessories serving areas of renovation are to be removed from the site
- Existing local fan equipment serving the areas of renovation is to be removed from the site
- Existing unit ventilators that are being reused are to have the interiors cleaned, drain pans cleaned, motors lubricated, filters replaced and all dampers adjusted
- Redundant controls in areas of renovation are to be removed from site
- All existing heating equipment (unit heaters, cabinet heaters, heating coils) that are being reused are to be cleaned and lubricated
- New firestopping to be supplied and installed in gaps between existing pipes/ductwork and existing walls surrounding the renovated area
- Existing equipment being reused to be water and air balanced to match original design documents
- All existing fire extinguishers to be inspected and charged
- Existing wall radiation that is being reused shall be cleaned and enclosures replaced with similar style. New enclosures to be painted
- Existing floor drain grates to be replaced with new, similar in style
- Existing ductless split systems that are being reused are to have the interiors cleaned, drain pans cleaned, filters replaced, dampers adjusted and refrigerant levels checked and topped-up

Refer to Architectural Demolitions Plans for Rooms/Areas being renovated.

3.2 New Mechanical Requirements

- Type L Copper pipe for new domestic water pipes
- Schedule 40 steel pipe for new heating pipes
- Schedule 40 steel pipe for new gas pipes
- PVC plastic pipe for new sanitary and storm pipes
- DWV copper pipe for new vent pipes
- Type ACR copper piping for new refrigerant pipes
- Type M copper for new condensate pipes
- Borosilicate glass drain pipe for new Science Labs
- New double check valve backflow assembly in existing incoming domestic water and fire pipe
- New Washroom and Change Room supply, return and exhaust ducts are to be aluminum
- New supply, return and exhaust ductwork, unless otherwise noted, are to be galvanized steel fabricated to SMACNA Duct Construction Standards
- Extend existing supply, return and exhaust duct systems complete with new diffusers and grilles to suit the area of renovation, unless otherwise indicated
- New HVAC equipment to be connected to the existing Building Automation System (BAS)
- Supply and install new diffusers and/or grilles serving areas of renovation
- Supply and install additional fire extinguishers to meet the latest Codes and Standards



4.0 DESCRIPTION OF SCOPE APPLICABLE TO SPECIFIC ROOMS/AREAS OF RENOVATION

4.1 Washrooms - All Floors

- Existing wall radiation to be reused
- Existing exhaust system to be reused
- Install new plumbing fixtures as per Architectural Layout and School Board Standards
- Refer to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.2 Cafeteria

- Existing wall radiation to be reused
- Extend and/or relocate existing supply and return duct systems to suit new room layout. New ductwork to be connected to the existing building services
- Supply and install new sanitary sewer piping to serve new and relocated plumbing fixtures. Piping to be connected to the existing building sanitary system
- Supply and install new domestic hot, cold and recirculation pipe distribution system to all new and relocated plumbing fixtures. New pipes to be connected to the existing building systems complete with isolation valves and all accessories
- Refer to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.3 Seminar

- Remove all existing mechanical services beyond finished wall/floor/ceiling surfaces
- Supply and install a 1-1/2 Ton cooling /heating ductless split system complete with indoor fan coil unit, remote roof mounted condensing unit, refrigerant piping and condensate drains
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.4 General Offices

- Existing unit ventilators are to remain

- Supply and install a 7-1/2-Ton variable refrigerant flow (VRF) cooling system to serve individual offices and General Office. Supply six (6) dedicated indoor cooling fan coil units complete with refrigerant piping and condensate drains. Fan coil units to be sized to rooms served. Install remote condenser on finished grade
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.5 General Office - Guidance

- Existing wall radiation units are to remain
- Supply and install a 5-Ton variable refrigerant (VRF) cooling system to serve individual offices and student services. Supply seven (7) dedicated indoor fan coil units, refrigerant piping, condensate drains and remote condensing unit on finished grade
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.6 TV Studio

- Demolish and remove from site all existing supply, return and exhaust air ductwork and all accessories
- Existing facility supply and return ductwork serving the room are to be capped at the Corridor wall
- Demolish and remove from site existing baseboard heating equipment and associated heating pipes
- Supply and install a 7-1/2 Ton cooling and gas heating rooftop unit complete with associated ductwork, grilles, diffusers and controls
- Supply and install new perimeter building water heating pipes and baseboard heating equipment to suit new room layout. New pipes to be connected to existing building heating system
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - New Mechanical Requirements

4.7 Communication Arts

- Demolish and remove from the site all existing exhaust air systems and all accessories

- Demolish and remove from site existing ductless split system complete with indoor fan coil unit, remote roof mounted condensing unit, refrigerant piping and condensate drains
- Supply and install new building hot water heating pipes and baseboard heating to suit new room layout. New pipes to be connected to existing building heating system
- Existing facility supply and return ductwork serving the room are to be capped at the Corridor wall
- Supply and install a 7-1/2-ton cooling and heating rooftop unit complete with associated ductwork, grilles, diffusers and controls
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - New Mechanical Requirements

4.8 *Engineering/Robotics Classroom*

- Supply and install a new specialized exhaust air system complete with exhaust fan and associated ductwork and connect to Owner supplied equipment. Finishing exhaust system (800 CFM)
- Existing heating equipment and accessories are to remain
- Refer to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.9 *Automotive Shop*

- Demolish and remove from the site all existing exhaust air systems and all accessories
- Supply and install new specialized exhaust air systems complete with exhaust fan and associated ductwork and connect to Owner supplied equipment. i.e. Carbon monoxide system (500 CFM); Finishing exhaust system (800 CFM); Welding exhaust system (1500 CFM)
- Existing heating equipment and accessories are to remain
- Refer to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.10 *Student Lounge/Student Council*

- Demolish and remove from site all existing wall radiation
- Supply and install new perimeter building hot water heating pipes and heating equipment to suit new room layout. New pipes to be connected to the existing building heating system

- Supply and install new supply and return air ducts, diffusers/grilles and accessories to serve new room layout. New ductwork to be connected to the existing building systems
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.11 Library/Study Rooms/Offices

- Existing wall radiation to be reused
- Existing ductless split systems complete with indoor fan coil units, remote condensing units, refrigerant piping and condensate drains to remain
- Supply and install new supply and return air ducts, diffusers/grilles and accessories to serve new room layout. New ductwork to be connected to the existing building systems
- Refer to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.12 New Classrooms - Ground Floor

- Demolish and remove from site existing baseboard heating equipment and associated heating piping
- Supply and install new building hot water heating piping and baseboard heating equipment to suit the new Classroom. New pipes to be connected to the existing building heating system
- Supply and install new supply and return air ducts, diffusers/grilles and accessories to serve new room layout. New ductwork to be connected to the existing building systems
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.13 Science Labs/Prep Rooms

- Demolish and remove from site existing baseboard heating equipment and associated heating piping
- Supply and install new building hot water heating piping and baseboard heating equipment to suit the new Classroom. New pipes to be connected to the existing building heating system
- Demolish and remove from site all existing sanitary, domestic water and natural gas piping serving the old Science Labs
- Demolish and remove from site all existing Instructor's Work Bench exhaust systems, exhaust fan and associated ductwork serving the old Science Labs

- Demolish and remove from site all existing fume hoods, complete with all accessories, serving old Science Labs
- Demolish and remove from site all existing emergency exhaust systems, fans and associated ductwork, serving the old Science Labs
- New Science Lab exhaust air extraction duct to be internally lined PVC coated, Class B negative pressure
- Supply and install new sanitary piping and connect to all new sinks, emergency shower,, fume hoods, and floor drains. Sanitary pipe to be connect to new neutralizing tank located on the Ground Floor. New pipe to be connected to the existing building sanitary system
- Supply and install new domestic hot, cold and recirculation water and natural gas pipes to serve new Instructor's Work Benches complete with isolation and solenoid valves. Install solenoid valves on new cold water and natural gas pipes serving Student Work Benches. New pipes to be connected to the existing systems complete with isolation valves and all accessories. Solenoid valve to be controlled by a key switch located at the Instructor's Work Bench and to an emergency panic button located on the wall beside the door leaving the Room.
- Supply and install new two-sided fume hoods (800 CFM each) complete with roof mounted exhaust fans, exhaust ductwork and air proving switch to serve new Lab layout.
- Supply and install emergency exhaust system (1500 CFM) complete with outdoor exhaust fan, ductwork and exhaust grille. Fan to be manually operated
- Supply and install new dedicated Classroom Instructor's Work Bench exhaust system complete with roof exhaust fan and associated exhaust ductwork. Fan to be manually operated from Instructor's Work Bench
- Supply and install one (1) floor type neutralizing tank (150 gallon capacity) complete with limestone chips to serve new Chemistry Labs. Neutralizing tanks to rest on Ground Floor
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.14 New Classroom - Second Floor

- Demolish and remove from site all existing wall radiation
- Supply and install new perimeter building hot water heating pipes and heating equipment to suit new room layout. New pipes to be connected to the existing building heating system
- Supply and install new supply and return air ducts, diffusers/grilles and accessories to serve new room layout. New ductwork to be connected to the existing building systems

- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.15 CADD Lab

- Remove all existing mechanical services beyond finished wall/floor/ceiling surfaces
- Supply and install a 5-Ton cooling /heating ductless split system complete with indoor fan coil unit, remote condensing unit, refrigerant piping and condensate drains
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.16 Teacher Workroom

- Existing wall radiation to be reused
- Demolish and remove from site a portion of existing supply duct, return duct, diffusers/grilles and accessories to serve new room layout. New ductwork to be connected to the existing building systems
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.17 Staff Lounge

- Demolish and remove from site existing baseboard heating equipment and associated heating piping
- Supply and install new perimeter heating building hot water heating piping and baseboard heating equipment to suit new room layout, New pipes to connect to existing building heating system
- Install new plumbing fixtures as per Architectural Layout and School Board Standards
- Supply and install new domestic hot, cold and recirculation pipe distribution system to all new plumbing fixtures. New pipe to be connected to the existing building systems complete with isolation valves and all accessories
- Supply and install new supply and return air ducts, diffusers/grilles and all accessories to serve new room layout. New ductwork to be connected to the existing building systems
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.18 Construction

- Demolish and remove from the site all existing exhaust air systems and all accessories
- Supply and install a new sawdust collector complete with spark arrestor system (6000 CFM), exhaust air system and connect to Owner supplied equipment
- Existing heating equipment and accessories are to remain
- Refer to General Scope Applicable to All Proposed Areas of Renovation - Existing and New Mechanical Requirements

4.19 Cafeteria Servery

- Supply and install new sanitary piping to serve new commercial kitchen equipment. Connect new piping to existing building sanitary system
- Supply and install new domestic hot, cold and recirculation pipe distribution system to all commercial kitchen equipment. New pipes to be connected to the existing building system complete with isolation valves and all accessories
- Supply and install a new 300 gallon (1350 L) grease interceptor
- Reroute existing above grade storm sewer piping to suit new room layout
- Supply and install new dishwater exhaust hood (500 CFM) complete with roof exhaust fan and associated exhaust ductwork
- Supply and install new cooking exhaust hood (4000 CFM) complete with roof exhaust fan and associated exhaust ductwork. New exhaust ductwork to be 16 gauge steel, fabricated and labelled to NFPA 96 complete with 2-hour rated non-combustible flexible fireproof wrap
- Supply and install cooking exhaust hood fire suppression system
- Supply and install a gas heating make-up air roof-top unit (3200 CFM) to serve the cooking exhaust hood
- Supply and install a 7-1/2 Ton cooling and gas heating rooftop unit complete with ductwork, grilles, diffusers and controls
- Supply and install refrigeration piping to serve new walk-in refrigerator and freezer units
- Supply and install an automatic gas shut-off valve serving the commercial kitchen equipment to Close upon fire alarm activation
- Refer also to General Scope Applicable to All Proposed Areas of Renovation - New Mechanical Requirements

APPENDIX C
ELECTRICAL
FEASIBILITY STUDY &
CONCEPT DESIGN

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- **Hamilton Wentworth District School Board**

Westmount Secondary School

Electrical Services Feasibility Study & Concept Design

Project Number
GR8-00014230-00

Prepared By:
George Matsis, P.Eng.
Michel Ouellet

Date Submitted
December 17, 2015

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1.0 INTRODUCTION

The existing Westmount Secondary School was opened in 1961 and is located at 39 Montcalm Drive, in Hamilton, Ontario.

The Hamilton-Wentworth District School Board is proposing to renovate the existing Classrooms, Science Laboratories, Washrooms, Administration Office spaces, Technology Labs (Shops), Cafeteria, Kitchen, Served, Library, and Commercial Art/TV Studio and to create new Classrooms, Seminar Rooms, Staff Room and Special Education Classrooms by renovating existing space.

This report documents the feasibility and the proposed electrical systems that are consistent with and anticipated for, the proposed renovations.

This report, prepared by **exp** Services Inc., is intended for the exclusive use of Hamilton-Wentworth District School Board and Hossack & Associates Architects Inc. None of **exp** Services Inc., Hamilton-Wentworth District School Board and Hossack & Associates Architects Inc. assume any liability for the use of this report, or for the use of any information disclosed in the report, or for damages resulting from the use of this report, by other parties.



2.0 CODES, STANDARDS & GUIDELINES

Interpretations of the requirements of the latest editions of the following Codes, Standards and Guidelines will be addressed in the design of this project:

- Ontario Building Code (OBC)
- Ontario Fire Code (OFC)
- Ontario Electrical Safety Code (OESC)
- IES Recommended Practices and Guidelines
- ASHRAE/IES 90.1, Energy Efficient Design of New Buildings Except Low-Rise Residential Buildings
- Hamilton-Wentworth District School Board Design Guidelines



3.0 GENERAL ELECTRICAL CONSTRUCTION SCOPE - ALL AREAS OF RENOVATIONS

3.1 Selective Demolition of Existing Electrical Systems

Unless noted otherwise, all existing electrical systems in the areas of renovation will be disconnected and removed. This includes all power distribution equipment and cabling, branch circuit wiring/conduit, selected fire alarm system devices, public address system, lighting, lighting controls, receptacles, communication outlets, clocks, music, security systems and wiring for mechanical equipment.

Existing electrical systems that are to be demolished will be disconnected and removed back to source. Where the removed devices are deemed suitable, they will be relocated/re-used.

Refer to Architectural Demolitions Plans for Rooms/Areas being renovated.

3.2 Electrical Power & Distribution

.1 Primary Power Supply

The proposed renovations are not expected to result in any net electrical peak demand load growth and as a result, the existing incoming electrical service supply will remain as is.

.2 Power Distribution

Refer to the selective demolition section of this Report.

Unless indicated otherwise, existing 600/347V and 120/208V power distribution, lighting and receptacle panelboards will remain.

New electrical panelboards will be provided in all new General Science Rooms, Science Labs, Technology Labs (Shops). Refer to Typical Room Specific Electrical Requirements section of this Report.

New panelboards will be fed from existing distribution panels.

All new panelboards will be complete with copper bus.

Conductors for all new feeders will be copper.

.3 *Branch Circuit Wiring*

Branch circuit wiring systems will be provided throughout all areas of renovation to all new loads as well as existing-to-remain loads as required. Conductors for all branch circuit wiring will be copper. Loads will typically be supplied with power from the nearest panelboard.

.4 *Receptacles*

Receptacles will be provided throughout the areas of renovation as required for equipment, housekeeping and convenience and also as required by Codes and Standards. Refer to the Typical Room-Specific Electrical Requirements section of this Report.

3.3 *Fire Alarm System*

Refer to Selective Demolition section of this Report.

The Building is equipped with an existing two-stage, non-addressable, Edwards fire alarm system complete with an Edwards control panel, remote annunciator, initiating devices and, audible signalling devices (bells).

Since the existing main Control Panel located in the existing Boiler Room cannot be upgraded to accept new devices, it will be replaced along with the existing annunciator panel with new panels.

Existing-to-remain fire detectors, pull stations, signalling devices, etc., outside of the renovated areas and not affected by the renovations will be reconnected to the new Control Panel. New devices (including strobe visual signalling devices) will be added as required in the areas of renovation, in order to ensure compliance with Codes, Standards and Guidelines, i.e.:

- Manual pull stations (2-stage) at all required exits
- Heat detectors in all Utility, Service and Storage Rooms
- Visual signal appliances (i.e. strobes) in all public areas and areas with high ambient sound levels
- The entire system will be tested and verified as per Code requirements

3.4 Lighting

Refer to the Selective Demolition section of this Report.

Unless noted otherwise, all existing lighting systems outside the areas of renovation and not affected by the renovations will remain. New lighting systems and controls will be provided as required in the areas of renovation,

Existing luminaires that are to be removed will be disconnected and removed from site. Lighting ballasts containing PCBs, if found during the Demolition phase, will be disposed of in accordance with Ministry of Environment regulations.

.1 New Lighting Systems - Interior

All new lighting will utilize energy efficient dimmable LED lamp technology in order to provide daylight harvesting where required and for dimming of classrooms lighting during Audio Visual presentations. High colour rendering, warm and neutral white LED's will be specified as appropriate to suit each application.

Luminaires suitable for use with a 120V power supply will be used.

In general, new interior lighting systems will be provided for the areas of renovation. Lighting systems will be integrated with the building architecture as much as possible. Luminaires that cannot be concealed within an architectural element will be well shielded using either a frosted white or prismatic refracting lens.

Refer to Typical Room Specific Electrical Requirements section of this Report.

.2 Lighting Controls

In general, lighting controls with multi-level control will be provided in accordance with the Codes, Standards and Guidelines.

Except for Washrooms, low voltage lighting control system comprised of switches, vacancy sensors and a dimmable daylight control strategy will be specified on all renovated Rooms/ Areas in accordance with ASHRAE/IES 90.1 Standards.

Washrooms will be equipped with occupancy sensors for automatic On/Off of the light fixtures.

.3 *Emergency Lighting and Exit signs*

Emergency Lighting and Exit signs will be provided in the areas of renovation as required in order to satisfy the requirements of the Ontario Building Code. Emergency lighting systems will consist of battery units and remote heads as required to meet Code requirements.

Exit signs will be LED "green running man" pictogram type.

3.5 *Miscellaneous Electrical Work*

.1 *Communication Cabling (IT/Voice)*

Refer to the Selective Demolition section of this Report.

Existing Network/Voice incoming service (fibre optic [FO] cable) will remain.

The existing horizontal copper cabling distribution is comprised of one (1) Main IT Closet on the Ground Floor and Satellite Racks with Network switches and patch panels located in various rooms throughout the School. The Main IT Closet will remain however any Satellite Racks located within the areas of renovation will be relocated and upgraded as required to accommodate the renovations and the new cabling requirements. Refer to Typical Room Specific Electrical Requirements section of this Report.

Existing wireless (Wi-Fi) access point devices, currently located throughout the School, including in Classrooms, Labs, Shops, Library and Cafeteria, will remain and be reused.

New Cat. 6e cables will be run from the new outlets that are required in the areas of renovation, to the IT Closet or nearest existing satellite rack located on the same floor as the outlet.

.2 *Clock Systems*

Refer to Selective Demolition section of this Report.

The building is currently equipped with a 120V wireless clock system. The existing system will remain, existing clocks will be reused, and new 120V wireless clocks will be added as required.

.3 *Emergency Call Systems (Washrooms)*

In accordance with the School Board Design Guidelines, an emergency call system (tone/visual type) will be provided for Staff Washrooms. An emergency call station located adjacent the toilet complete with corridor indicating light will be installed outside the Washroom. Calls will be annunciated at a new annunciator that will be located at the Ground Floor Main Office.

.4 *Public Address and Program Bell System*

Refer to the Selective Demolition section of this Report.

The School is currently equipped with an existing P/A & Program Bell System complete with speakers throughout the School that will remain and be upgraded as required in order to accommodate the work associated with the proposed renovations

The main control console is located in the Main Office on the Ground Floor.

New speakers complete with integral call switch will be provided in all new Classrooms, Labs, Staff Lounge, Teacher's Workrooms and Shops.

.5 *Wiring For Mechanical Equipment*

Refer to the Selective Demolition section of this Report.

Motor starters, variable frequency drives, disconnect switches, power and control wiring will be provided for any new mechanical equipment that is required. Refer to the Mechanical Services Feasibility Study and Concept Design Brief, for information regarding such equipment.

.6 Security System

Refer to the Selective Demolition section of this Report.

The School is currently equipped with a security system comprised of a main control panel located in the Custodial Office in the Basement, key pads and door status/monitoring contacts at exterior doors. This system will remain and be upgraded as required.

Unless noted otherwise, existing door status/monitoring contacts outside of areas of renovation and not affected the renovations will remain.

New door status/monitoring contacts will be added as required at Exterior Doors and Staff Rooms and connected to existing system.

.7 Closed-Circuit Television System (Security Cameras)

The School is not equipped with a system and a new system will not be required.

.8 Modular Control Panels

New surface mounted panels will be provided near each Room main entrance door complete with duplex receptacles, data and telephone outlets, public address speaker, light switches, clock, telephone handset and thermostat in all of the renovated Classrooms, Labs, Technology Labs (Shops), Seminar Rooms and Teacher's Workrooms.

.9 Seismic Restraint Systems

All electrical systems will be seismically braced to comply with the OBC if it is determined that it is required for this site/building. If seismic restraint systems are required, they shall include lateral supports for all suspended systems and lateral seismic resistance for all vibration isolation and fixed mounted equipment.

3.6 Typical Room-Specific Electrical Requirements

.1 Washrooms

All renovated Washrooms to be complete with the following:

- Surface mounted lighting fixtures
- Ceiling mounted occupancy sensors for automatic On/Off of lighting
- Infrared hands-free sinks, toilets and urinals
- One (1) hand dryer per four (4) stalls

.2 Showers

- Surface mounted lighting fixtures
- Controls from occupancy sensors in adjacent Change Rooms

.3 Office Spaces

- Recess mounted lighting fixtures

.4 Seminar Room

- Recessed lighting fixtures
- Receptacles and communication outlets along perimeter walls as required.

.5 Cafeteria

- Recessed lighting fixtures
- Receptacles, power connections for various equipment and communication outlets as required

.6 Cafeteria Servery/Kitchen

- Recessed lighting fixtures
- Dedicated 120/208V-3Ø-4W electrical panel for new Servery/Kitchen equipment
- Receptacles, power connections for Servery/Kitchen equipment and communication outlets as required

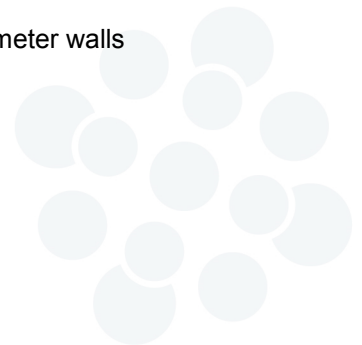
- Power connections for Kitchen Hoods
- Power connection for fire suppression system and interlock with fire alarm system for gas supply shut-off

.7 *Technology Labs (Shops)*

- Suspended direct/indirect linear light fixtures
- Spray Booth lighting and controls for Automotive Shop
- Dedicated 120/208V-3 phase-4 wire and 600V-3 phase-3 wire electrical panels complete with emergency Power-Off pushbuttons for Shop equipment only
- Power connection for motorized blinds
- Power and data cabling connection for motorized display screen, overhead projector and interactive board
- Power connections for overhead doors
- Power reels.
- Receptacles and data outlets perimeter walls as required
- Three (3) receptacles (20A/120V) at each student workstation

.8 *Staff Lounge*

- Recessed lighting fixtures
- Power Connections/Receptacle for the following equipment:
 - Dishwasher
 - Refrigerator
 - Stove (120/240V)
 - Three (3) Microwave Ovens
- Eight (8) receptacles and eight (8) data outlets along perimeter walls
- Receptacles and data outlets for the following:
 - Overhead Projector
 - Interactive Board
 - TV
 - Wireless (Wi-Fi) Access Point



.9 *Space/Robotics Classrooms*

- Refer to Technology Labs (Shops)

.10 *Communication Technology Lab (TV & Communication Art)*

- Recessed lighting fixtures and track lighting
- Ten (10) receptacles and ten (10) data outlets along perimeter walls
- Power and data connection of TV Studio equipment
- Receptacles and data outlets for the following:
 - Overhead Projector
 - Interactive Board/Monitor
 - Printers
- Two (2) receptacles and two (2) data outlets at Teacher's/Demo Desk
- One (1) receptacle at each Student Desk

.11 *Science Labs/Classrooms*

- Suspended direct/indirect light fixtures
- Dedicated 120/208V-3 phase-4 wire electrical panel complete with emergency Power-Off pushbuttons
- Eight (8) receptacles and eight (8) data outlets along perimeter walls
- Ground Fault Interrupter receptacles at each Lab Station and Teacher Desk/Demo Station. Power to receptacles to be controlled from Teachers Desk
- Power to Gas Shut-Off valve with interlock to Fire Alarm System
- Receptacles and data outlets for the following:
 - Overhead Projector
 - Interactive Board
- Two (2) receptacles and two (2) data outlets at Teacher's Desk
- One (1) data outlet at each Lab Station

.12 *Classrooms*

- Suspended direct/indirect linear lighting
- Eight (8) receptacles and eight (8) data outlets along perimeter walls

- Four (4) receptacles for Tablet charging.
- Six (6) floor-mounted receptacles.
- Receptacles and data outlets for the following:
 - Overhead Projector
 - Interactive Board/Monitor
- Two (2) receptacles and two (2) data outlets at Teacher's Desk.

.13 *Library*

- Recessed lighting fixtures
- Receptacle on perimeter walls at every 15 feet
- All mounted surface raceway complete with receptacles and data outlets to accommodate fifteen (15) computer stations
- Eight (8) receptacles and eight (8) data outlets at each Circulation Desk
- Power connection for motorized blinds
- Receptacles and data outlets for the following:
 - Overhead Projector
 - Interactive Board/Monitor
 - TV

.14 *Library Study Room*

- Recessed lighting fixtures
- One (1) receptacle and one (1) data outlet on each wall
- Receptacles and data outlets for the following:
 - Overhead Projector
 - Interactive Board/Monitor

.15 *General Science Rooms*

- See Classrooms

.16 *Teachers' Workroom*

- Recessed lighting fixtures.



- Receptacles and Communication Outlets along perimeter walls for general use.
- Two (2) Receptacles and two (2) Communication Outlets at each Workstation.
- Receptacles and communication outlets for the following
 - Overhead Projector
 - Interactive Board/Monitor
- Wireless (Wi-Fi) access point
- Modular control panel

.17 Storage Room

- Surface mounted lighting fixture
- Three (3) Receptacles

.18 Staff Washroom

- One (1) electric hand dryer
- One (1) GFCI Receptacle
- Public Address speaker in ceiling
- Recessed LED downlight for general lighting and LED cove lighting over Vanity and mirror as required.

.19 Student Lounge

- Recessed lighting fixtures
- Receptacles and communication outlets along perimeter walls as required
- Wireless (Wi-Fi) access point

.20 Student Council

- Recessed lighting fixtures
- Receptacles and communication outlets as required
- Wireless (Wi-Fi) access point



.21 CAAD Lab

- Suspended direct/indirect lighting fixtures.
- Receptacles and communication outlets along perimeter walls as required for general use
- Two (2) Receptacles and two (2) communication outlets at each Workstation.
- Receptacles and communication outlets for the following
 - Overhead Projector
 - Interactive Board/Monitor
- Wireless (Wi-Fi) access point
- Modular control panel



APPENDIX D

CONDITION ASSESSMENT

Hamilton-Wentworth District School Board

Condition Assessment

Westmount SS, Building ID 9117-1



Facility Name (SFIS)	Westmount SS
Ministry Building Number	9117-1
GFA (m2)	13676
Year Built by Original/Additions	1961
Replacement Value - OTG	\$29,155,700
Official FCI (%)	11.64
Comparable FCI (%)	22.01
Asset Address	39 Montcalm Drive
Asset City	Hamilton
Asset Postal Code	L9C 4B1

-- ACCESSIBILITY CHECKLIST --

Designated parking space	Yes
Path of travel to the main entrance door.	Yes
Designated entrances	Yes
Path of travel to all floors/elevations.	Yes
Elevator	Yes
Instructional spaces entrance doors.	No
Fire policy and fire safety plan	Yes
Fire alarm system with strobe and audible signals	No
Communal washrooms	Yes
Designated washroom	No

-- ENERGY CHECKLIST --

Energy efficient boiler	Yes
Energy audit report	No
Energy efficient domestic hot water heater	Yes
Energy efficient recovery system	No
Energy efficient HVAC pumps and fan motors	Yes
Energy efficient interior lighting	Yes
Building Automation System	Yes
Energy efficient faucets	No
Energy efficient urinals and toilets	No
Architectural and Site Assessor	Ramin Saeedi
Mechanical and Electrical Assessor	Mark Pantchevski

How to read the final report

The Final Report contains assessment information for 5 years for this facility.

Asset details reported are either populated from the SFIS system (e.g. GFA, year built etc) or calculated based on Ministry's criteria (e.g. Replacement Value – OTG, Official FCI, Comparable FCI etc).

Accessibility and Energy assessment lists are provided in a yes/no format. For a full description of accessibility/energy definitions please check the TCPS database, Asset Narratives, under the Narratives Tab.

Asset Narratives include the following:

- Architectural & Structural Summary –a brief summary of the asset including construction dates and areas of the original and additions. A brief description of the structure, the exterior wall system, the roof assembly system and the building interiors.
- Mechanical Summary – a brief summary of the mechanical systems.
- Electrical Summary – a brief summary of the Electrical systems.
- Site Summary – a brief summary of the Site systems.
- Limitations – a summary of the scope of work and the Tactical Planning Window.

Building Elements listed are only the ones that require replacement in the next 5 years; their condition is Critical if failed or risk of imminent failure is observed, or Poor if it is not functioning as intended with significant repairs within the next two (2) years, or Fair if normal deterioration and minor distress is observed requiring repairs within three (3) to five (5) years.

2011-2015 Cost and Year information is a snapshot from the assessment and cannot be edited in TCPS.

2011-2015 Priority is the value of the Event priority calculated when the assessment data was imported in TCPS and stored in this read-only field.

Estimated Cost and Fiscal Year are values that can be edited at any time by end users.

Event Priority is a field populated with labels like Urgent, High, Medium and Low based on the Event Priority Value. This value is calculated based on the Element Type and Element Condition.

Photos are provided at the event level: old photos are suffixed with the word "Old", new photos are suffixed with the date of assessment.

A copy of this report in PDF format is saved in the TCPS database. You can access it by selecting the Asset Instance in Data Manager and opening this report in PDF format from the Document Tab.

1. Architectural & Structural Executive Summary

Westmount SS Building ID-9117-1 was assessed on May 14, 2013 by VFA is located at 39 Montcalm Drive, Hamilton, Ontario. The original facility is a two-story structure of block construction without basement. The original building is constructed in 1961. Addition one was completed in 1963.

The total size of the building is 13,676 square meters. The building sits on a 12 hectares site. Where visible, mainly in the GYM, workshops, and Cafeteria, the structure of the school are of Metal roof decking, steel trusses, steel joists and load bearing masonry. It was indicated that the roof coverings has been replaced in 15 years.

The interior finishes consist of terrazzo, mainly ceramic tiles and, vinyl composite tiles, hard wood flooring, painted gypsum board walls and, gypsum board acoustic ceilings.

The exterior walls of the school are brick veneer finished assembly.

Typical spaces in the school include auto shops, wood shop, library/resource center, music room, theater art class, auditorium, gymnasiums, computer rooms, science labs, administration office, and mechanical service space and general instructional classrooms.

2. Mechanical Executive Summary

2013 - Overall, the mechanical equipment is in fair condition.

Heating for Westmount Secondary School is provided by six gas fired hot water boilers updated in 2010. The boilers provide hot water to perimeter fin tube radiators, force flow heaters, unit ventilators and air handler heating coils. There are four central air handlers which supply heating and ventilation to the auditorium cafeteria and gym. Suspended ceiling air handlers provide HVAC for the shop classes. One Make-up air handler services the kitchen. Multiple split system condensing units are located on the roofs and provides cooling for the school. The remaining ventilation is provided by rooftop exhaust fans and various internal exhaust fans.

Domestic hot water is provided by a gas fired boiler and two water storage tanks, which service the entire school.

The HVAC system is controlled by a building automation system with pneumatic and Direct Digital Controls.

The school has one elevator serving three floors and is in good condition.

Fire protection for the school is provided by a standpipe system and fire extinguishers.

Comments on exceptions: Based on age of components and observed site conditions the following mechanical equipment has exceeded their theoretical useful life and will require replacement within the tactical planning window.

- Plumbing fixtures age aged and in fair condition.
- Domestic water distribution is aged in fair condition and a study is recommended.
- Sanitary waste distribution is aged in fair condition and a study is recommended.
- Rain water drainage distribution is aged in fair condition and a study is recommended.
- The exterior section of the gas piping is corroded and in fair condition.
- The make-up air handler is aged and in fair condition.
- Exhaust fans are aged and in poor condition.
- Terminal units are original and in fair condition.
- Standpipe system and hoses in the school are aged and in poor condition.

3. Electrical Executive Summary

2013 - Electrically Westmount Secondary School is in fair condition. The switchgear has a 1200 Amp capacity. The fire alarm panel and end devices are in good condition. Emergency lighting is provided by wall mounted battery pack units. The interior lighting within the building is in good condition with CFLs and T8 lamps with electronic ballasts. Exterior lighting is provided by LED fixtures. Exit lighting is in good condition. Security system includes a panel, motion detectors, sensors and keypads. The communications system is in good condition. Comments on exceptions: Based on age of components and observed site conditions the following electrical equipment has exceeded their theoretical useful life and will require replacement within the tactical planning window. - The secondary switchgear is aged and in poor condition. - Branch wiring in the school is original, in fair condition and a study is recommended. - The security system is aged and in fair condition. - The emergency power system is aged and in fair condition.

4. Site Summary

2013-The site - Westmount SS is bounded by Lynbrook Drive from north .Kendale Crest to the South side of the site Rolston Drive on the east and, Montclam Drive on west side of the site.

Typical walkways service the site, with asphalt concrete landing or stairs at most building entrances.

There is two wall mounted sign on top of the building facing west of the building which displays school name; the building access off Montclam Drive and there are paved parking on the south and, west sides of the site.

Definitions for Energy Checklist

Energy audit report: An ASHRAE Level I energy audit report was completed within the last three years.

Energy efficient boiler: The energy efficient boiler provided is a condensing boiler installed within the last five years or is energy star rated.

Energy efficient domestic hot water heater: The energy efficient domestic hot water heater provided is direct or power vented natural gas fired or has an electric heat coil.

Energy efficient recovery system: The building is provided with a Heat Recovery Unit (HRU).

Energy efficient HVAC pumps and fan motors: The energy efficient HVAC pumps and fan motors are reportedly provided with a variable frequency drive.

Energy efficient interior lighting: The provided interior lighting is controlled by motion sensors or building automation system and/or the interior light fixtures are provided with T8 or T5 fluorescent lamps and electronic ballast.

Building Automation System: The building has a comprehensive Direct Digital Control (DCC) automation system to monitor and control the mechanical system.

Energy efficient faucets: Approximately 50% of the lavatory faucets are provided with aerators and motion sensors.

Energy efficient urinals and toilets: Approximately 50% of the urinals and toilets are provided with a low flow flush valve (less than 1.6 gpf)

Definitions for Accessibility Checklist

Designated parking space: The provided designated Barrier Free Accessible parking space is a minimum 2,400 mm wide and is clearly marked with an accessibility sign.

Path of travel to the main entrance door: The provided accessible path of travel from the designated Barrier Free Accessible parking space to an accessible building entrance is a minimum 910 mm wide and includes curb cuts and ramps

Designated entrances: The provided designated Barrier Free Accessible entrance is a minimum 850 mm wide to allow a mobility device, clearly marked with an accessibility sign and is provided with an automatic door open device.

Path of travel to all floors/elevations: The Barrier Free Accessible path of travel is provided with either an accessible ramp or a vertical transportation device where a floor or an elevation difference exists.

Elevator: The provided Barrier Free Accessible Elevator has the following: clear audible communication indicating floors and up/down direction; doors, which open long enough and a minimum 900 mm wide; and a control panel, which is provided with Braille and an

emergency call system and where the top is at a maximum height of 1,400 mm above floor.

Instructional spaces entrance doors: The instructional spaces are provided with an entrance door which is a minimum of 850 mm wide.

Fire policy and fire safety plan: Fire policy and fire safety plans are reportedly in place for the evacuation of people with disabilities.

Fire alarm system with strobe and audible signals: Fire alarm system is reported to include strobe lights and audible signals

Communal washrooms: There is a Barrier Free Accessible washroom stall, which is a minimum of 1,500 x 1,500 mm, in the each boys and girls washroom on each accessible floor.

Designated washroom: A designated Barrier Free Accessible washroom is provided on each floor, and is equipped with the following: an automatic door open device; grab bars; emergency call button; lever handle or motion sensor faucets; and a lavatory, where an insulated knee space is provided and the height of lavatory top is a maximum of 815 mm above the floor.

Limitations

This report has been prepared to meet the Ministry of Education (EDU) objectives for the Condition Assessment Program for Educational Facilities in Ontario. The purpose of the Condition Assessment Program was to assess the current physical condition of the schools and associated site features, and to validate information currently contained in the online capital renewal database software Total Capital Planning Solution (TCPS).

The validation of data was limited to a five year period, which is defined as the current assessment year plus four years. Information contained in the database beyond this period was not validated or reviewed.

The provided event costs are intended for global budgeting purposes only. The event costs were adjusted to include regional factors and were based on an approved unit cost list. Actual event costs for the work recommended may differ since the event costs can only be determined after preparation of tender documents, which would consider: specific design conditions, site restrictions, effects of ongoing building operations and construction schedule. The approved cost threshold for the Condition Assessment Program is \$ 10,000.

Barrier Free Accessibility and Energy Conservation Measures assessments were limited to a preapproved checklist presented on Page 2. The assessment of portables (classrooms not integrated with the building envelope), solar photovoltaic panels, other solar energy collectors, wind turbines, sheds, less than 45 sq.m., play-equipment/structures, score boards, goal posts and flag poles, fire extinguishers, decommissioned swimming pools, window coverings, black/white boards, benches, gymnastic equipment and the appropriateness of room space were excluded from the scope of work. Information related to these components contained in the database was not updated to reflect condition observed. Information related to events which are either planned or in progress, and currently locked were not updated.

All Elements**B SHELL****B20 Exterior Enclosure****B2010 Exterior Walls**

Element Instance : B2010 Exterior Walls - Original Building

Description 2013 - Exterior brick veneer wall and CMU backup walls.

Condition Assessment 2013 - At the time of the assessment the exterior walls were in fair condition, there was visible signs of mortar deterioration and efflorescence was found on the surface,

Last Replacement Year 1961

Theoretical Life 75

Technical Condition Fair

Major Repair [B2010 Exterior Walls - Original Building]

Event Type: Major Repair Priority: High

Brief Description Major Repair [B2010 Exterior Walls - Original Building]

Estimated Cost \$124,032

Fiscal Event Year 2015

2011-2015 Cost \$124,032

2011-2015 Priority High

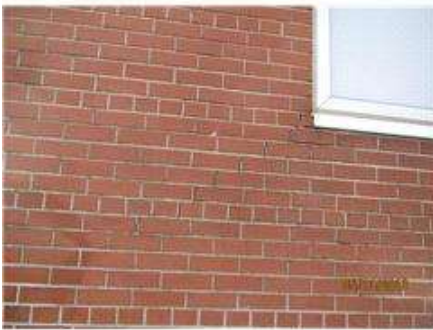
2011-2015 Year 2015

Recommendation 2013 - Repairs to the deteriorated mortar joints should be done as soon as possible to avoid any further damage to the building envelope.

May 2013- Evidence of efflorescence on the surface of exterior brick wall.



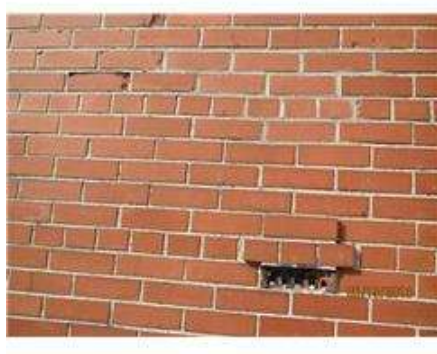
May 2013- Sign of cracks on the surface of the exterior brick wall.



May 2013- Deteriorating Mortar on the surface of the brick wall.



May 2013- Spalling exterior bricks.



B30 Roofing

B3010 Roof Coverings

Element Instance : B3010 Roof Coverings - Original Building - Section 503

Description

2013 - Roof sections 503 are covered with a torch-on modified bitumen roof assembly system. The waterproofing membranes are likely installed over rigid insulation. The presence of a vapor barrier is unknown.

Condition Assessment

2013 - The condition of the assembly system of roof sections 503 is consistent with its age and is in fair overall condition, with patches, blisters, ridging, discoloration, wind scour and cracking of the cap sheet noted at the time of the assessment. Roof leaks have been reported to date/roof leaks were reported which are unresolved.

Last Replacement Year 1961

Theoretical Life 28

Technical Condition Fair

Replacement [B3010 Roof Coverings - Original Building - Section 503]

Event Type: Replacement Priority: High

Brief Description Replacement [B3010 Roof Coverings - Original Building - Section 503]

Estimated Cost \$69,666

Fiscal Event Year 2016

2011-2015 Cost \$69,666

2011-2015 Priority High

2011-2015 Year 2016

Recommendation

2013 - The built up roof covering of section 503 is showing signs of displaced ballast and blueberries. Replacement planning of the roof is recommended.

May 2013- Blueberries on roof covering of section 503.



C INTERIORS

C10 Interior Construction

C1010 Partitions

Element Instance : C1010 Partitions - Addition 1

Description 2013 - Moveable folding in the music room 1141.

Condition Assessment 2013 - The moveable folding partition in the music room is has surpassed its expected useful life.

Last Replacement Year 1963

Theoretical Life 20

Technical Condition Fair

Replacement [C1010 Partitions - Addition 1]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C1010 Partitions - Addition 1]

Estimated Cost \$68,748

Fiscal Event Year 2015

2011-2015 Cost \$68,748

2011-2015 Priority Medium

2011-2015 Year 2015

Recommendation 2013 - The moveable partition in the music room 1141 has surpassed its expected useful life. Replacement recommended.

May 2013- Movable partition in music room 1141.



May 2013- Movable partition in music room 1141.



Element Instance : C1010 Partitions - Original Building

Description 2013 - Moveable folding gym partition wall.

Condition Assessment 2013 - The moveable folding partition in the gymnasium has surpassed its expected useful life. Replacement is recommended.

Last Replacement Year 1961

Theoretical Life 20

Technical Condition Fair

Replacement [C1010 Partitions - Original Building]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C1010 Partitions - Original Building]

Estimated Cost \$110,160

Fiscal Event Year	2015
2011-2015 Cost	\$110,160
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation

2013 - The moveable partition in the gymnasium has surpassed its expected useful life. Replacement is recommended.

May 2103- Movable partition in the Gymnasium.



May 2103- Worn movable partition in the Gymnasium.

**C1020 Interior Doors**

Element Instance : C1020 Interior Doors - Addition 1

Description

2013 - These include all doors within the building except for those through the perimeter walls are Interior Doors. They are constructed of hollow metal with a paint finish, wood with a natural, or paint or plastic laminate finish. They are often provided with glazed vision or half panels.

Condition Assessment

2013 - At the time of the assessment the interior doors were in fair condition, they were showing signs of age and they had past expected useful life.

Last Replacement Year	1963
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Theoretical Life 25

Technical Condition Fair

Replacement [C1020 Interior Doors - Addition 1]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C1020 Interior Doors - Addition 1]

Estimated Cost \$248,166

Fiscal Event Year 2015

2011-2015 Cost \$248,166

2011-2015 Priority Medium

2011-2015 Year 2015

Recommendation

2013 - The interior doors have exceeded their effective design rated life with the majority of the doors exhibiting damage. Replacement of the interior doors is recommended.

May 2013- Damaged interior wood door.



Element Instance : C1020 Interior Doors - Addition 1

Description 2013 - Interior door hardware featuring classroom knob locksets, door pulls, hinges, door closer and floor stops.

Condition Assessment 2013 - The interior door hardware is original and has exceeded its effective rated design life. The components are appearing worn with reports of some reliability issues.

Last Replacement Year 1963

Theoretical Life 15

Technical Condition Fair

Replacement [C1020 Interior Doors - Addition 1]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C1020 Interior Doors - Addition 1]
 Estimated Cost \$87,516
 Fiscal Event Year 2015
 2011-2015 Cost \$87,516
 2011-2015 Priority Medium
 2011-2015 Year 2015

Recommendation

2013 - Recommend replacing all interior door hardware at the same time the doors are replaced.

May 2103- Typical interior door hardware.



Element Instance : C1020 Interior Doors - Original Building

Description

2013 - These include all doors within the building except for those through the perimeter walls are Interior Doors. They are constructed of hollow metal with a paint finish, wood with a natural, or paint or plastic laminate finish. They are often provided with glazed vision or half panels.

Condition Assessment

2013 - At the time of the assessment the interior doors were in fair condition, they were showing signs of age and they had past expected useful life.

Last Replacement Year 1961
 Theoretical Life 25

Technical Condition

Fair

Replacement [C1020 Interior Doors - Original Building]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C1020 Interior Doors - Original Building]

Estimated Cost	\$321,096
Fiscal Event Year	2015
2011-2015 Cost	\$321,096
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation

The original interior wood doors jam and do not close poorly. The doors have reached their theoretical service life. Replacement is recommended.

May 2103- Typical interior doors.

**C1030 Fittings**

Element Instance : C1030 Fittings- Millwork

Description

2013 - Classroom fittings include cabinetry, millwork items, counters and countertops with associated accessories and anchoring devices.

Condition Assessment

2013 - At the time of the assessment all cabinetry, millwork items, counters and countertops were in a fair condition

Last Replacement Year	1961
Theoretical Life	22
Fittings Type	Unspecified

Technical Condition

Fair

Replacement[C1030-Millwork-Original Building]

Event Type: Replacement Priority: Medium

Brief Description	Replacement[C1030-Millwork-Original Building]
Estimated Cost	\$146,880
Fiscal Event Year	2015

2011-2015 Cost	\$146,880
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation

2013 - As all the cabinetry, millwork items, counters and countertops have exceeded their expected useful life and are in fair condition the recommendation is to replace them

May 2013- Typical millwork fitting in the science classrooms.



May 2013- Worn millwork fitting in the science classroom.



C30 Interior Finishes
C3010 Wall Finishes

Element Instance : C3010 Wall Finishes - Original Building

Description

2013 - The typical painted wall finishes on CMU and GWB

Condition Assessment

2013 - At the time of the assessment the typical painted wall finish on CMU and GWB walls was stained.

Last Replacement Year 1961

Theoretical Life	10
Wall Finishes Type	Unspecified

Technical Condition

Poor

Replacement [C3010 Wall Finishes - Original Building]

Event Type:	Replacement	Priority:	High
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Brief Description	Replacement [C3010 Wall Finishes - Original Building]
Estimated Cost	\$197,083
Fiscal Event Year	2015
2011-2015 Cost	\$197,083
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - The painted wall finishes throughout the school are starting to look worn from normal day to day use with some faded and peeling areas and, in isolated area specially in the basement there is signs of water stain. Refinishing of the school is recommended.

May 2013- Stained paint wall covering in the basement.



May 2013- Peeling paint wall covering.



Element Instance : C3010 Wall Finishes - Original Building

Description 2013 -Glazed wall coatings situated in some of the staircases of the building.

Condition Assessment 2013 - The glazed wall coating in the Stair cases are stained.

Last Replacement Year	1961
Theoretical Life	10
Wall Finishes Type	Unspecified

Technical Condition Fair

Replacement [C3010 Wall Finishes - Original Building]

Event Type:	Replacement	Priority:	Medium
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Brief Description	Replacement [C3010 Wall Finishes - Original Building]
Estimated Cost	\$58,242
Fiscal Event Year	2015
2011-2015 Cost	\$58,242
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation 2013 - The glazed wall tiles are stained. Full replacement is warranted.

May 2013- Stained glazed wall covering in the stair case 1150.



C3020 Floor Finishes

Element Instance : C3020 Floor Finishes - Addition 1

Asset Assessment Program 2011-2015

Description

2013 - Vinyl Asbestos 9" x 9 " floor tile and vinyl base.

Condition Assessment

2013 - The VAT floor finish is aged beyond its effective design rated life and is exhibiting moderate signs of wear.

Last Replacement Year

1963

Theoretical Life

20

Floor Finishes Type

Unspecified

Technical Condition

Fair

Replacement [C3020 Floor Finishes - Addition 1]

Event Type:

Replacement

Priority:

Medium

Brief Description

Replacement [C3020 Floor Finishes - Addition 1]

Estimated Cost

\$277,134

Fiscal Event Year

2015

2011-2015 Cost

\$277,134

2011-2015 Priority

Medium

2011-2015 Year

2015

Recommendation

2013 - The VAT floor finish has exceeded its effective design rated life and is in fair to poor condition. Replacement of the VAT floor finish is recommended as to update the appearance and mitigate any potential health concerns.

May 2013- Worn and damaged VAT in the science classrooms.



May 2013- Worn VAT floor covering in the corridor of the second floor.



Element Instance : C3020 Floor Finishes - Original Building

Description 2013 - Expansion joint situated in corridors of the school.

Condition Assessment 2013 - At the time of assessment the expansion joint in corridors are showing signs of wear and cracks.

Last Replacement Year	1961
Theoretical Life	25
Floor Finishes Type	Unspecified

Technical Condition Fair

Replacement [C3020 Floor Finishes - Original Building]

Event Type:	Replacement	Priority:	Medium
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Brief Description	Replacement [C3020 Floor Finishes - Original Building]
Estimated Cost	\$162,384
Fiscal Event Year	2015
2011-2015 Cost	\$162,384
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation 2013 - The expansion joint located in the corridors subjected to frequent foot traffic. Excessive wear was evident. Repair of expansion joints are recommended.

C3030 Ceiling Finishes

Element Instance : C3030 Ceiling Finishes - Addition 1

Description 2013 - Gypsum board ceilings

Condition Assessment 2013 - At the time of the assessment the gypsum board ceilings were in fair condition

Last Replacement Year	1963
Theoretical Life	30
Ceiling Finishes Type	Unspecified

Technical Condition Fair

Replacement [C3030 Ceiling Finishes - Addition 1]

Event Type:	Replacement	Priority:	Medium
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Brief Description	Replacement [C3030 Ceiling Finishes - Addition 1]
Estimated Cost	\$46,614
Fiscal Event Year	2015
2011-2015 Cost	\$46,614
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation 2013 - Gypsum board ceilings are original and have passed there EUL and should be replaced
OLD-Water damages to the gypsum ceilings were observed in localised areas. Replacement is recommended.

May 2013- Worn gypsum board ceiling.



Element Instance : C3030 Ceiling Finishes - Addition 1

Description 2013 - Acoustical 12"x12" ceiling tile system on substrate secured to the structure above.

Condition Assessment

2013 - The 12" x 12": acoustic ceiling tile is original to the building and additions. There is some signs of staining and damage, and the ceiling system has exceeded its useful life expectancy.

Last Replacement Year	1963
Theoretical Life	25
Ceiling Finishes Type	Unspecified

Technical Condition

Fair

Replacement [C3030 Ceiling Finishes - Addition 1]

Event Type:	Replacement	Priority:	Medium
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Brief Description	Replacement [C3030 Ceiling Finishes - Addition 1]
Estimated Cost	\$240,618
Fiscal Event Year	2015
2011-2015 Cost	\$240,618
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation

2013 - The 12" x 12" acoustic tile ceiling system has exceeded its useful life and is known to contain asbestos materials. Replacement planning is recommended as to update the appearance of the facility and remove any potential health concerns.

May2013- Won and stained 12"x12" acoustic ceiling tile in the second floor classroom.



Element Instance : C3030 Ceiling Finishes - Original Building

Description

2013 - Acoustical 12"x12" ceiling tile system on substrate secured to the structure above.

Condition Assessment

2013 - The 12" x 12": acoustic ceiling tile is original to the building and additions. There is some signs of staining and damage, and the ceiling system has exceeded its useful life expectancy.

Last Replacement Year	1961
Theoretical Life	25
Ceiling Finishes Type	Unspecified

Technical Condition

Fair

Replacement [C3030 Ceiling Finishes - Original Building]

Event Type: Replacement Priority: Medium

Brief Description	Replacement [C3030 Ceiling Finishes - Original Building]
Estimated Cost	\$262,779
Fiscal Event Year	2015
2011-2015 Cost	\$262,779
2011-2015 Priority	Medium
2011-2015 Year	2015

Recommendation

2013 - The 12" x 12" acoustic tile ceiling system has exceeded its useful life and is known to contain asbestos materials. Replacement planning is recommended as to update the appearance of the facility and remove any potential health concerns.

May 2013- Stained 12x12 ceiling tiles.

**D SERVICES****D20 Plumbing****D2010 Plumbing Fixtures**

Element Instance : D2010 Plumbing Fixtures

Description

2013 - The washroom plumbing fixtures include vitreous china water closets, lavatories, urinals, wash basins and showers in the change rooms. Classroom and lab sinks and drinking fountains are also provided in various locations.

Condition Assessment

2013 - The majority of the plumbing fixtures appear to be functioning, but are in fair condition. Some fixtures (15%) have been replaced overtime. The majority of the fixtures have surpassed their normal service life and are inefficient.

Last Replacement Year 2008

Theoretical Life 25

Technical Condition

Fair

Replacement - Science Lab Sinks

Event Type: Replacement Priority: Medium

Brief Description Replacement - Science Lab Sinks

Estimated Cost \$20,400

Fiscal Event Year 2016

2011-2015 Cost \$20,400

2011-2015 Priority Medium

2011-2015 Year 2016

Recommendation

2013 - The science room lab sinks are aged and many are stained and due for replacement.

May 2013 - Science Lab Sinks



May 2013 - Science Lab Sinks



Replacement [D2010 Plumbing Fixtures]

Event Type: Replacement Priority: Medium

Brief Description	Replacement [D2010 Plumbing Fixtures]
Estimated Cost	\$250,000
Fiscal Event Year	2017
2011-2015 Cost	\$250,000
2011-2015 Priority	Medium
2011-2015 Year	2017

Recommendation 2013 - Replacement of the original and aged plumbing fixtures in the building (85%) is recommended based on the age, condition and remaining useful life.

May 2013 - Aged Urinals



May 2013 - Aged Bradley Basins - Washrooms



May 2013 - Aged Bradley Basins - Shops



May 2013 - Aged Shower Fixtures



May 2013 - Wall Mounted Water Closets

**D2020 Domestic Water Distribution**

Element Instance : D2020 Domestic Water Distribution - Original Building

Description

2013 - The building domestic water system includes a main line, water meter, pressure reducer and associated piping and insulation. At the time of assessment the domestic water distribution system was estimated to be original to the dates of construction of the addition and original building.

Condition Assessment

2013 - The domestic piping system is mostly concealed and therefore the current condition is not fully known. However due to the age, the expected wear and the theoretical useful life, the system is assessed as being in fair condition.

Last Replacement Year	1961
Theoretical Life	37
Domestic Water Distribution Type	Unspecified

Technical Condition	Fair
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Replacement [D2020 Domestic Water Distribution - Original Building]

Event Type:	Replacement	Priority:	Medium
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Brief Description	Replacement [D2020 Domestic Water Distribution - Original Building]
Estimated Cost	\$408,000
Fiscal Event Year	2016
2011-2015 Cost	\$408,000
2011-2015 Priority	Medium
2011-2015 Year	2016

Recommendation

2013 - Based on the age and theoretical useful life of the domestic water piping system replacement is recommended. A study is recommended to determine the current condition, remaining service life, current service requirements and the cost of replacement.

May 2013 - Aged Domestic Water Distribution Piping

**Study**

Event Type: Study Priority: Medium

Brief Description	Study
Estimated Cost	\$10,200
Fiscal Event Year	2014
2011-2015 Cost	\$10,200
2011-2015 Priority	Medium
2011-2015 Year	2014

Recommendation

2013 - An in depth study is recommended to determine the condition of the domestic water piping system, the required recommended scope of work and the cost for system renewal.

D2030 Sanitary Waste

Element Instance : D2030 Sanitary Waste

Description

2013 - The sanitary waste distribution system for the school is provided by various types of piping. The majority of the piping is reported to be aged or original to the construction dates of the school.

Condition Assessment

2013 - Much of the sanitary waste water distribution system is concealed with only small areas of the system being visible during the assessment. The visible sections of the piping were observed to be functional but aged. The waste water distribution system is past its rated useful life of 37 years.

Last Replacement Year 1961

Theoretical Life 37

Technical Condition Fair

Replacement

Event Type: Replacement Priority: Medium

Brief Description Replacement

Estimated Cost \$306,000

Fiscal Event Year 2016

2011-2015 Cost \$306,000

2011-2015 Priority Medium

2011-2015 Year 2016

Recommendation

2013 - Planned replacement of the waste water distribution system is recommended based on age and condition.

May 2013 - Aged Sanitary Waste Piping



Study

Event Type: Study Priority: Medium

Brief Description Study

Estimated Cost \$10,200

Fiscal Event Year 2014

2011-2015 Cost \$10,200

2011-2015 Priority Medium

2011-2015 Year 2014

Recommendation

2013 - A study is recommended to determine the condition of the sanitary waste piping system, the required recommended scope of work and the cost for system renewal.

D2040 Rain Water Drainage

Element Instance : D2040 Rain Water Drainage

Description

2013 - Rain water drainage for the school is provided by roof drains and cast iron distribution piping and is reported to be original to the construction dates of the school.

Condition Assessment

2013 - Much of the rain water drainage system is concealed with only small areas of the system being visible during the assessment. The visible sections of the rain water piping were observed to have minor corrosion. The rain water drainage system is past its rated useful life of 37 years.

Last Replacement Year 1961

Theoretical Life 37

Technical Condition Fair

Replacement

Event Type: Replacement Priority: Medium

Brief Description Replacement

Estimated Cost \$102,000

Fiscal Event Year 2016

2011-2015 Cost \$102,000

2011-2015 Priority Medium

2011-2015 Year 2016

Recommendation

2013 - Planned replacement of the rain water drainage system is recommended based on age and condition.

May 2013 - Original Rain Water Drainage Piping



Study

Event Type: Study Priority: Medium

Brief Description Study
 Estimated Cost \$10,200
 Fiscal Event Year 2014
 2011-2015 Cost \$10,200
 2011-2015 Priority Medium
 2011-2015 Year 2014

Recommendation

2013 - A study is recommended to determine the condition of the rainwater drainage distribution system, the required recommended scope of work and the cost for system renewal.

D30 HVAC**D3010 Energy Supply**

Element Instance : D301002 Gas Supply System - Original Building

Description

2013 - The building includes a natural gas supply and distribution system for the boilers, kitchen, science rooms and rooftops.

Condition Assessment

2013 - The exterior sections of the gas piping located on the rooftops is showing signs of rust over the majority of the pipe run. The piping is nearing the end of its anticipated service life and consideration of renewal is recommended.

Last Replacement Year 1961
 Theoretical Life 35

Technical Condition Fair

Replacement [D301002 Gas Supply System - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [D301002 Gas Supply System - Original Building]
 Estimated Cost \$30,000
 Fiscal Event Year 2017
 2011-2015 Cost \$30,000
 2011-2015 Priority High
 2011-2015 Year 2017

Recommendation

2013 - Replacement of the corroded gas piping is recommended. Event deferral may result in pipe corrosion and leaks.

May 2013 - Aged Gas Piping - Roof



D3020 Heat Generating Systems
D302099 Other Heat Generating Systems

Element Instance : D302099 Other Heat Generating Systems - Make-Up Air Handler

Description

2013 - The HVAC system includes a Make-Up AHU located on the roof and services the kitchen.

Condition Assessment

2013 - The MUAs age and exposure to the elements has caused corrosion to the shell of the unit. The unit is in fair condition.

Last Replacement Year	1990
Theoretical Life	25
Other Heat Generating System Type	Unspecified

Technical Condition

Fair

Replacement

Event Type:	Replacement	Priority:	High
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Brief Description	Replacement
Estimated Cost	\$10,200
Fiscal Event Year	2016
2011-2015 Cost	\$10,200
2011-2015 Priority	High
2011-2015 Year	2016

Recommendation

2013 - Replacement of the MUA is recommended based on age and condition.

May 2013 - Aged Rooftop Make-Up Air Handler - Minor Corrosion



May 2013 - Aged Rooftop Make-Up Air Handler - Minor Corrosion



D3040 Distribution Systems
D304007 Exhaust Systems

Element Instance : D304007 Exhaust Systems

Description

2013 - Various rooftop and internal exhaust fans service classrooms, washrooms and the general building providing ventilation to the building. There are a total of 37 aged and original roof top exhaust fans.

Condition Assessment

2013 - The exhaust fans are typically original to the building, many had worn and weathered casings. The fans are well maintained but are well past their intended useful life and are in poor to fair condition overall.

Last Replacement Year 1961

Theoretical Life 25

Technical Condition Poor

Replacement [D304007 Exhaust Systems]

Event Type: Replacement Priority: High

Brief Description	Replacement [D304007 Exhaust Systems]
Estimated Cost	\$153,000
Fiscal Event Year	2015
2011-2015 Cost	\$153,000
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - The exhaust fans are operating past their expected useful lives and will likely require replacement as most are in poor to fair condition.

May 2013 - Typical Aged Rooftop Exhaust Fan



May 2013 - Typical Aged Rooftop Exhaust Fan



D3050 Terminal & Package Units

Element Instance : D3050 Terminal & Package Units - Original Building

Description

2013 - The building is equipped with hot water perimeter fin tube radiators and forced flow heaters which are original to the building construction dates.

Condition Assessment

2013 - Although the fin tube radiation units have been properly maintained, the system has degraded in condition over the years. Due to age and wear the units will require replacement soon.

Last Replacement Year 1961

Theoretical Life 25

Technical Condition

Fair

Replacement [D3050 Terminal & Package Units - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [D3050 Terminal & Package Units - Original Building]

Estimated Cost \$510,000

Fiscal Event Year 2016

2011-2015 Cost \$510,000

2011-2015 Priority High

2011-2015 Year 2016

Recommendation

2013 - Replacement of the aged fin tube radiation units and forced air units is recommended based on condition and theoretical life.

May 2013 - Original Fin Tube Radiators



May 2013 - Aged Forced Flow Heater - Entrances



May 2013 - Original Forced Flow Heater - Stairwells



May 2013 - Unit Ventilators - Office



D40 Fire Protection

D4020 Standpipe Systems

Element Instance : D4020 Standpipe Systems - Original Building

Description

2013 - The standpipe system in the school is original and consists of standpipes and fire hoses housed in fire cabinets.

Condition Assessment

2013 - The standpipe system is generally in fair condition, but is past its useful life. The fire hoses are stamped with a manufactured date of 1966. No deficiencies were reported during the assessment.

Last Replacement Year 1961

Theoretical Life 47

Technical Condition Fair

Replacement [D4020 Standpipe Systems - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [D4020 Standpipe Systems - Original Building]

Estimated Cost \$178,500

Fiscal Event Year 2016

2011-2015 Cost \$178,500

2011-2015 Priority High

2011-2015 Year 2016

Recommendation

2013 - Replacement of the standpipe system is recommended based on the age and theoretical useful life of the system. Planning for renewal is recommended to maintain functionality during and emergency.

May 2013 - Original Standpipe System



May 2013 - Original Standpipe Fire Hose -1966



May 2013 - Original Standpipe Connection in Stairwells



May 2013 - Original Standpipe System Piping



D50 Electrical

D5010 Electrical Service & Distribution

D501003 Main Switchboards

Element Instance : D501003 Main Switchboards

Description

2013 - The secondary switchgear and other assemblies including distribution panels, breaker, fuses and meters are original in the building construction date.

Condition Assessment

2013 - Although maintained properly, the secondary switchgear and other assemblies including distribution panels, breaker, fuses and meters has exceeded the rated useful life and should be replaced due to age and condition.

Last Replacement Year 1961

Theoretical Life 40

Technical Condition

Poor

Replacement [D501003 Main Switchboards]

Event Type: Replacement Priority: Urgent

Brief Description Replacement [D501003 Main Switchboards]

Estimated Cost \$510,000

Fiscal Event Year 2015

2011-2015 Cost \$510,000

2011-2015 Priority Urgent

2011-2015 Year 2015

Recommendation

2013 - Replacement of the aged secondary switchgear and other assemblies including distribution panels, breaker, fuses and meters of the building is recommended.

May 2013 - Typical Classroom Breaker Panel



May 2013 - Aged Panel Boards



May 2013 - Original Secondary Switchgear



D5020 Lighting & Branch Wiring

D502001 Branch Wiring

Element Instance : D502001 Branch Wiring - Original Building

Description

2013 - The branch wiring system consists of cabling, raceways, conduit, wiring, bus ducts and wiring terminal devices. Flexible conduit and cabling is provided to motors and other mechanical equipment.

Condition Assessment

2013 - Apart from minor renovations the majority of the branch wiring system in the original building and additions 1 are original. The branch wiring is in poor to fair condition and is past its theoretical useful life.

Last Replacement Year 1961

Theoretical Life 40

Technical Condition Fair

Replacement [D502001 Branch Wiring - Original Building]

Event Type: Replacement Priority: Medium

Brief Description	Replacement [D502001 Branch Wiring - Original Building]
Estimated Cost	\$1,020,000
Fiscal Event Year	2016
2011-2015 Cost	\$1,020,000
2011-2015 Priority	Medium
2011-2015 Year	2016

Recommendation

2013 - Based on the age of the branch wiring, replacement is recommended. An in depth study should be conducted to determine the current condition, remaining useful life cost of replacement.

May 2013 - Original Branch Wiring

**Study**

Event Type: Study Priority: Medium

Brief Description	Study
Estimated Cost	\$10,200
Fiscal Event Year	2014
2011-2015 Cost	\$10,200
2011-2015 Priority	Medium
2011-2015 Year	2014

Recommendation

2013 - A study is recommended and would provide a more detailed condition, remaining useful life and cost of replacement or repair of the branch wiring system.

D5030 Communications & Security**D503008 Security Systems**

Element Instance : D503008 Security Systems

Description

2013 - The building's security system includes an alarm panel, door contacts, motion detectors, conduit and wiring. The school doesn't have a surveillance system.

Condition Assessment

2013 - The security system is currently functioning as intended, with no major deficiencies reported. Overall, due to age and electrical wear the system is in fair condition.

Last Replacement Year 1961

Theoretical Life 25

Technical Condition

Fair

Replacement [D503008 Security Systems]

Event Type: Replacement Priority: Medium

Brief Description Replacement [D503008 Security Systems]

Estimated Cost \$61,200

Fiscal Event Year 2016

2011-2015 Cost \$61,200

2011-2015 Priority Medium

2011-2015 Year 2016

Recommendation

2013 - Based on age and theoretical useful life the planned replacement of the security system is recommended.

May 2013 - Aged Security System - Keypad

**D5090 Other Electrical Services****D509002 Emergency Lighting & Power**

Element Instance : D509002 Emergency Lighting & Power

Description

2013 - An emergency generator is installed in the school and provides power to the emergency lighting, exit lighting and pull stations in case of power failure to the school.

Condition Assessment

2013 - The emergency generator and associated emergency power equipment is aged and in fair condition.

Last Replacement Year	1961
Theoretical Life	30

Technical Condition	Fair
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Replacement [D509002 Emergency Lighting & Power]

Event Type:	Replacement	Priority:	High
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Brief Description	Replacement [D509002 Emergency Lighting & Power]
Estimated Cost	\$60,000
Fiscal Event Year	2017
2011-2015 Cost	\$60,000
2011-2015 Priority	High
2011-2015 Year	2017

Recommendation

2013 - Replacement of the aged generator and automatic transfer switch for the emergency power system is recommended.

May 2013 - Emergency Lighting & Power - Emergency Generator



May 2013 - Emergency Lighting & Power - Automatic Transfer Switch



G BUILDING SITEWORK**G20 Site Improvement****G2010 Roadways**

Element Instance : G2010 Roadways - Site

Description 2013 - Asphalt paved roadway circling the school.

Condition Assessment 2013 - The asphalt paved roadway is exhibiting alligator cracking and some depressed areas.

Last Replacement Year 1961

Theoretical Life 20

Technical Condition Poor

Replacement [G2010 Roadways - Site]

Event Type: Replacement Priority: High

Brief Description Replacement [G2010 Roadways - Site]

Estimated Cost \$233,580

Fiscal Event Year 2015

2011-2015 Cost \$233,580

2011-2015 Priority High

2011-2015 Year 2015

Recommendation 2013 - The asphalt paved roadway is showing signs of alligator cracking. Replacement planning is warranted.

May 2013- Evidence of alligator cracking on surface of the roadway.



May 2013- Cracked and damaged roadway.



G2030 Pedestrian Paving

Element Instance : G2030 Pedestrian Paving - Site

Description		2013 - Concrete and Asphalt Paved sidewalks situated around the perimeter of the building on the North and West sides.
Condition Assessment		2013 - The asphalt and concrete paved surfaces are showing signs of uneven and cracked surfaces with signs of vegetation growth and isolated areas of spalling and deteriorated concrete.
Last Replacement Year		1961
Theoretical Life		22
Technical Condition		Critical
Replacement [G2030 Pedestrian Paving - Site]		
Event Type:	Replacement	Priority: High
Brief Description	Replacement [G2030 Pedestrian Paving - Site]	
Estimated Cost	\$87,593	
Fiscal Event Year	2015	
2011-2015 Cost	\$87,593	
2011-2015 Priority	High	
2011-2015 Year	2015	
Recommendation		2013 - The concrete and asphalt paved sidewalks are showing signs of deterioration and have exceeded their effective design rated life. Replacement planning recommended.

May 2013- Asphalt paved pedestrian on north side of the building.



May 2013- Cracked concrete paved pedestrian.



Hamilton-Wentworth District School Board

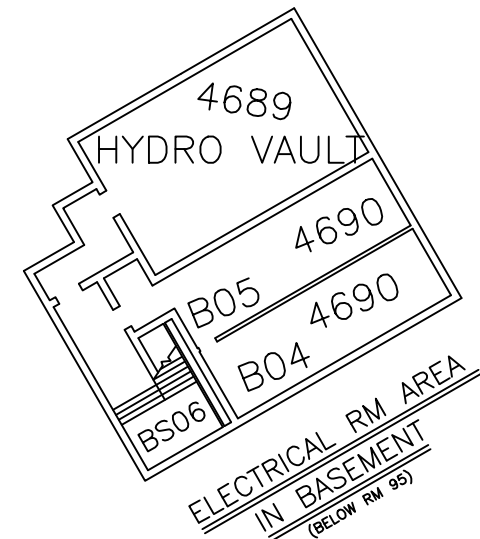
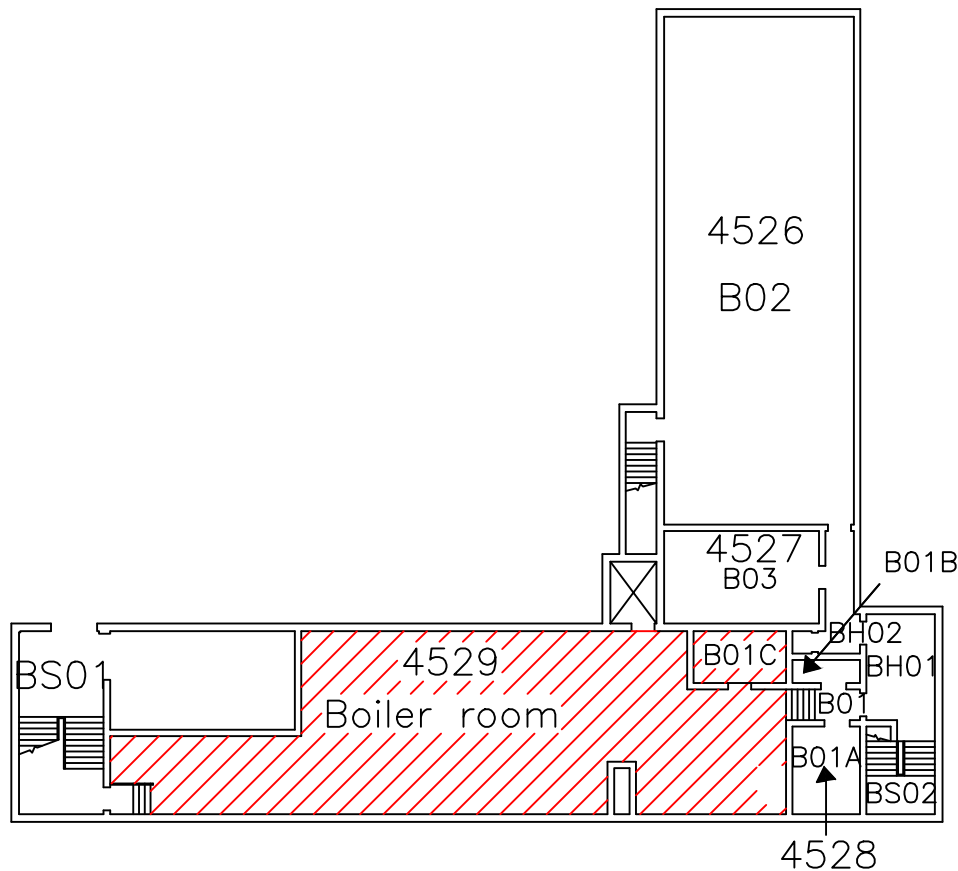
Report Summary


Saved Report Name	Final Report Template mod1
User Name	william lo
Report Type	Text With Pictures
Report Name	Condition Assessment
Start Year	2013
Number of Years	5
Priority	Default
Structure / Instance	Westmount SS, Building ID 9117-1
Filter	Parent Criteria Summary: Structure parent - A SUBSTRUCTURE OR Structure parent - B SHELL OR Structure parent - C INTERIORS OR Structure parent - D SERVICES OR Structure parent - G BUILDING SITEWORK - where the detail criteria for the parent node is - Technical Condition <> Not Assessed ;
Asset Photos	Default Photos Only
Current Backlog FCI	No
Element Photos	No Photos
Include Element ACL Criteria	No
Exclude Elements Without Events	Yes
Include Event level details	Yes
Event Photos	All Photos
Include Costlines	No
Printed Date	10/30/2013

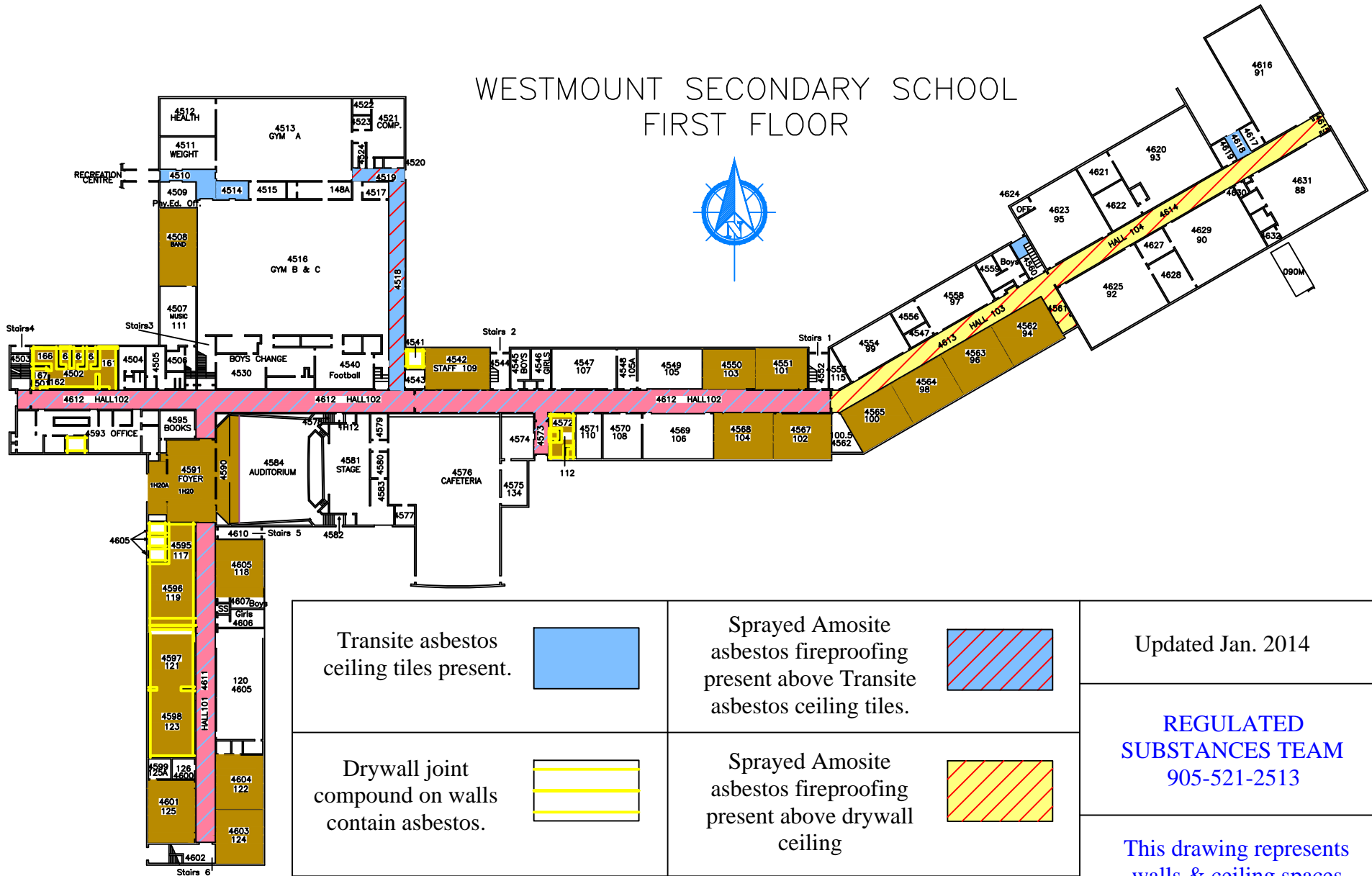
APPENDIX E
ASBESTOS SURVEY


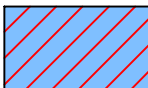
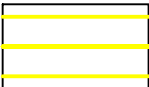





WESTMOUNT SECONDARY SCHOOL BASEMENT

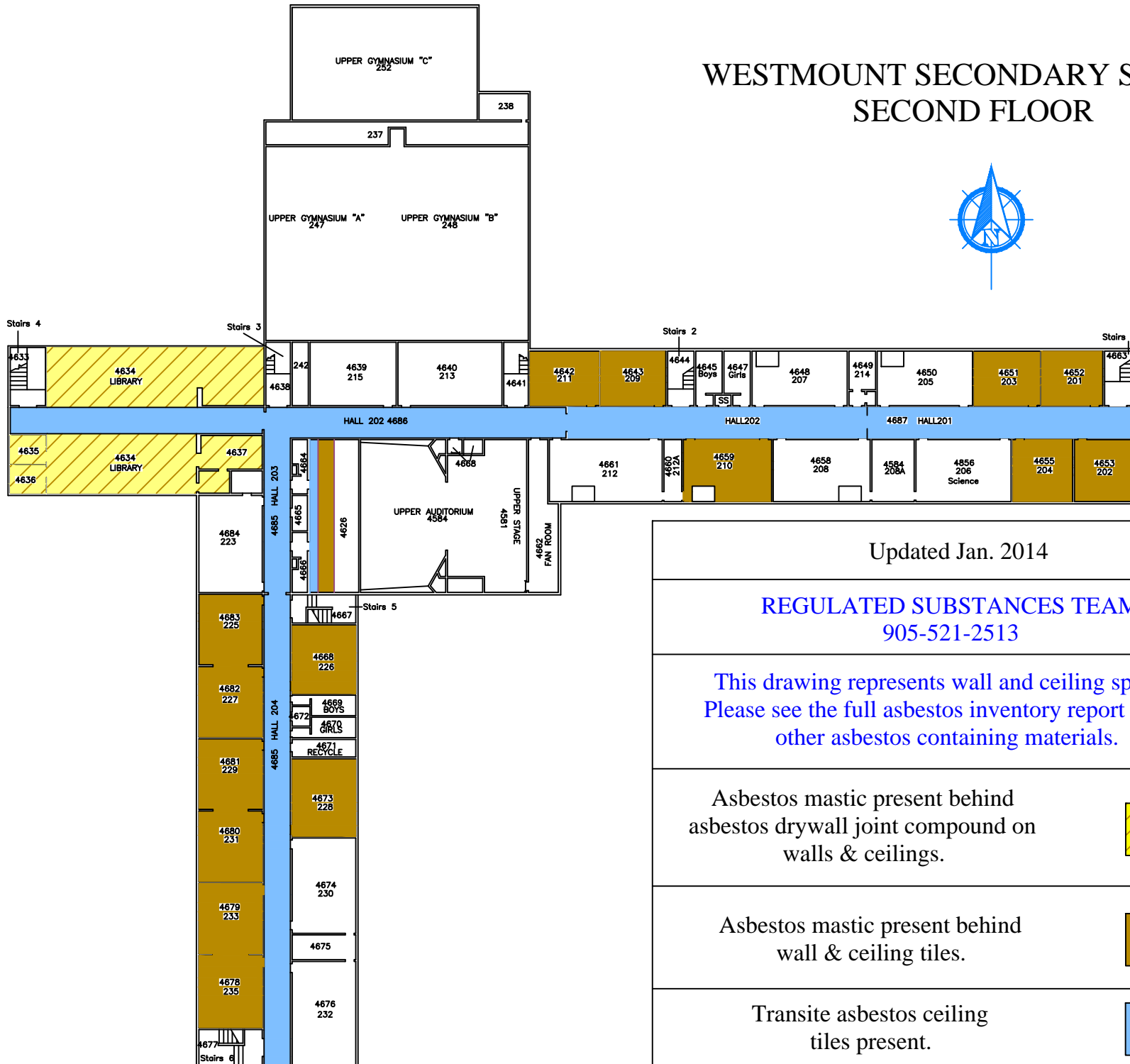


Updated Jan. 2014	REGULATED SUBSTANCES TEAM 905-521-2513	This drawing represents walls and ceiling spaces only. Please see the full asbestos inventory report for all other asbestos containing materials.	Amosite asbestos sprayed fireproofing present on ceiling. 
Original Const: 1961 Addition: 1963			



Transite asbestos ceiling tiles present.		Sprayed Amosite asbestos fireproofing present above Transite asbestos ceiling tiles.		<p>Updated Jan. 2014</p> <p>REGULATED SUBSTANCES TEAM 905-521-2513</p> <p>This drawing represents walls & ceiling spaces only. Please see the full asbestos inventory for all other asbestos containing materials.</p>
Drywall joint compound on walls contain asbestos.		Sprayed Amosite asbestos fireproofing present above drywall ceiling		
Asbestos mastic present behind wall & ceiling tiles.		Asbestos present on mechanical insulation above Transite asbestos ceiling tiles.		

WESTMOUNT SECONDARY SCHOOL SECOND FLOOR



Updated Jan. 2014

REGULATED SUBSTANCES TEAM
905-521-2513

This drawing represents wall and ceiling spaces.
Please see the full asbestos inventory report for all
other asbestos containing materials.

Asbestos mastic present behind
asbestos drywall joint compound on
walls & ceilings.



Asbestos mastic present behind
wall & ceiling tiles.



Transite asbestos ceiling
tiles present.



SUMMARY PAGE

The following designated substances are present in the school:

Asbestos (*samples taken to-date are attached to this report*)

Lead (*Assume **Lead** is present in older paints. Samples taken to-date are attached to this report. **Lead** based paints are those containing greater than 0.5% **Lead** by weight*)

ASBESTOS

Vinyl Asbestos floor tiles, assume leveling coat present underneath

Assume asbestos insulation present behind wall cavity and/or lockers
(Asbestos insulation definition: mechanical, thermal, electrical and sound transmission)

New PK boilers installed in 2011

New windows and all entrance doors installed in summer 2011

Sprayed Amosite asbestos fireproofing present above ceilings in boiler room, gym and shops hallways. Cleaning or removing of air handling equipment is restricted to Type 3 asbestos procedures. Filters changes are restricted to Type 2 asbestos procedures.

All fire rated fire doors contain asbestos (for non-asbestos fire doors, please see tag on door spine)
Drywall and joint compound contain asbestos
Ceiling and wall tile mastic contains asbestos

Some incandescent light fixtures may contain heat-deflecting paper with an asbestos paper backing. This is a pre-manufactured product and not considered hazardous unless worked on using power tools

Assume roof drains and/or collars contain asbestos
Assume asbestos gaskets present behind old black and old tack boards
Assume green/beige resin chairs and desks contain asbestos
Assume radiators, old window putty/caulking and black acid resistant vinyl counter tops contain asbestos

Spray booths/paint booths/welding booths, fume hoods, cabinet linings, counter tops, back splash, sink underling, duct work, kilns, floor trenches, Transite panel walls and exhaust system (when present) contain asbestos

Portables – when present are asbestos free

OIL TANK: Buried oil tank removed

NOTE: Please contact the Regulated Substance Team at 905-521-2513 to co-ordinate site specific assessment & sampling of products that contain Asbestos or Lead including but not limited to wall or ceiling plaster, floor leveler, ceiling tiles etc. This specific assessment & testing must be done prior to construction or maintenance work, which will disturb materials.

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Boiler room	4529	<i>Sprayed Amosite asbestos fireproofing present above drywall ceiling</i> * Asbestos insulation present behind wall cavity <i>Fire rated doors contain asbestos</i>
Aud. - Stage supply room 1		* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Aud. - Stage supply room 2		* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Auditorium	4584	<i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Transite asbestos wall panels present on balcony</i> <i>1x1 tiles mastic on balcony contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i>
Auditorium - Balcony	4590	<i>Transite asbestos wall panels present on balcony</i> <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i>
Auditorium - fan room		<i>Asbestos present on mechanical insulation below ceiling</i> * Asbestos insulation present behind wall cavity <i>* Fire rated doors contain asbestos</i>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Auditorium - Stage	4581	<p><i>Asbestos present on mechanical insulation below ceiling</i></p> <p><i>Fire curtain contains asbestos</i></p> <p>* Sprayed beam on stage contains asbestos</p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p>
Book Store (by main office)	4595	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Cafeteria	4576	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Cafeteria - Fan room		<p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p>
Cafeteria - Kitchen	4574	<p>* Asbestos insulation present behind wall cavity or above ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Elevator area (across auditorium)	4641	<p>* Asbestos insulation present behind wall cavity</p> <p>* Old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Foyer (main)	4591	1x1 ceiling tiles mastic contains asbestos * Asbestos insulation present behind wall cavity or above 1x1 ceiling * Fire rated doors contain asbestos
Gym - Boy's change room	4530	* Asbestos insulation present behind wall cavity or above plaster ceiling * Fire rated doors contain asbestos
Gym - Equipment room 1	4515	Vinyl asbestos floor tiles - * leveling coat present underneath * Asbestos insulation present behind wall cavity Fire rated doors contain asbestos
Gym - Equipment room 2		Vinyl asbestos floor tiles - * leveling coat present underneath * Asbestos insulation present behind wall cavity Fire rated doors contain asbestos
Gym - Football room	4540	* Asbestos gaskets present behind old black/tack boards * Asbestos insulation present behind wall cavity or above plaster ceiling * Fire rated doors contain asbestos
Gym - Girl's Change room		* Asbestos insulation present behind wall cavity or above plaster ceiling * Fire rated doors contain asbestos

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
 (For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Gym - Phys. Ed. Office	4509	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Gym A - Computer room	4521	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Gym A - Health room	4512	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p><i>Asbestos present on mechanical insulation below ceiling</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Gym A - Weight room	4511	<p><i>Asbestos present on mechanical insulation below ceiling</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Gymnasium B & C	4516	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos Fire rated doors contain asbestos NOTE: Sprayed Amosite asbestos fire proofing present above gym hallway ceiling (loc. ID # 4518 & 4519)</p>
Gymnasium A	4513	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos Fire rated doors contain asbestos NOTE: Sprayed Amosite asbestos fire proofing present above gym hallway ceiling (loc. ID # 4518 & 4519)</p>
Hallway - Gyms	4518/4519	<p>Transite asbestos ceiling tiles present * Asbestos insulation present behind wall cavity or behind lockers * Radiator and old window putty/caulking contain asbestos Fire rated doors contain asbestos Sprayed Amosite asbestos fire proofing present above ceiling</p>
Hallway 101 (between rm. 117 to 124)	4611	<p>1x1 Transite asbestos ceiling tiles present Asbestos present on mechanical insulation above ceiling tiles * Asbestos insulation present behind wall cavity or behind lockers * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos Fire rated doors contain asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Hallway 102 (across main office to rm. 101)	4612	<p>1x1 Transite asbestos ceiling tiles present</p> <p>Asbestos present on mechanical insulation above ceiling tiles</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or behind lockers * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <p>Fire rated doors contain asbestos</p>
Hallway 103 (across rm. 100 to boy's W/R)	4613	<p>Sprayed Amosite asbestos fireproofing present on deck and beams above drywall ceiling</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or behind lockers * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <p>Fire rated doors contain asbestos</p>
Hallway 104 (across tech. wing)	4614	<p>Sprayed Amosite asbestos fireproofing present on deck and beams above drywall ceiling</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or behind lockers * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <p>Fire rated doors contain asbestos</p>
Hallway 201 (across rm. 201 to 208A)	4687	<p>1x1 Transite asbestos ceiling tiles present</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or behind lockers * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <p>Fire rated doors contain asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Hallway 202 (across library to rm. 208)	4686	<p>1x1 Transite asbestos ceiling tiles present</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or behind lockers * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <p>Fire rated doors contain asbestos</p>
Hallway 203 (across rm. 223 to 233)	4685	<p>1x1 Transite asbestos ceiling tiles present</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or behind lockers * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <p>Fire rated doors contain asbestos</p>
Library (room divided)	4634	<p>Vinyl asbestos floor tiles present under carpet - * leveling coat present underneath</p> <p>1x1 tiles mastic on ceiling contain asbestos</p> <p>1x1 Transite asbestos ceiling tiles present</p> <p>Drywall and joint compound on walls and ceiling contain asbestos</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or above ceiling * Roof drain and/or collar contain asbestos * Fire rated doors contain asbestos * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos
Office - Caretaker's (across main office)	4505	<p>Vinyl asbestos floor tiles present - * leveling coat present underneath</p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity or above plaster ceiling <p>Fire rated doors contain asbestos</p> <ul style="list-style-type: none"> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Office - Main	4593	<p><i>Drywall and joint compound on walls contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p>
Office - Principal		<p>* Asbestos insulation present behind wall cavity</p> <p><i>Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p>
Office - Vice-Principal		<p>* Asbestos insulation present behind wall cavity</p> <p><i>Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p>
Room 100	4565	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on walls and ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Room 100.5	4562	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 101	4551	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 102	4567	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 103	4550	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 104	4568	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 105	4549	<ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * Roof drain and/or collar contain asbestos * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Room 105A	4548	<i>Asbestos present on mechanical insulation below ceiling</i> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * Roof drain and/or collar contain asbestos * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Room 106	4569	<ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Room 107	4547	<ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Room 108	4570	<ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 109A - Kitchen	4543	<i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity or above plaster ceiling <i>Fire rated doors contain asbestos</i>
Room 109B - Storage	4541	<i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound on walls contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling * <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos
Room 110	4571	<i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Room 111 - Music (by gym)	4507	<i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 111A - Band room	4508	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling * Roof drain and/or collar contain asbestos * <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 112 - Health & Co-op Office	4572	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound contains asbestos</i> <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling * <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 117	4595	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound contains asbestos</i> <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling * <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 118	4609	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound contains asbestos</i> <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 119	4596	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound contains asbestos</i> <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 120 - Art	4605	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 121	4597	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound contains asbestos</i> <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 122	4604	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 123	4598	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound contains asbestos</i> <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 124	4603	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 125 - Arts	4601	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors and black acid resistant counter tops contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 126 - Arts Office	4600	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 201	4652	<p><i>1x1 tiles mastic on ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Room 202	4653	<p><i>1x1 tiles mastic on ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Room 203	4651	<p><i>1x1 tiles mastic on ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Room 204	4655	<p><i>1x1 tiles mastic on ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 205 - Science	4650	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Fire rated doors contain asbestos</p> <p>Fume hood lined with Transite asbestos panels</p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 206 - Science	4656	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Fire rated doors contain asbestos</p> <p>Fume hood lined with Transite asbestos panels</p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 207	4648	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Fire rated doors contain asbestos</p> <p>Fume hood lined with Transite asbestos panels</p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 208	4658	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Fire rated doors contain asbestos</p> <p>Fume hood lined with Transite asbestos panels</p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 208A - Supply room	4657	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p><i>Fume hood lined with Transite asbestos panels</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 209	4643	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on walls and ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 210	4659	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on walls and ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 211	4642	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 212	4661	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> <i>Fume hood lined with Transite asbestos panels</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 212A - Supply room	4660	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 213	4640	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p><i>Black acid resistant counter tops contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 214 - Prep. Room (between rm. 205/207)	4649	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p><i>Fume hood lined with Transite asbestos panels</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Cabinet lining, black acid resistant counter tops, kilns and exhaust system contains asbestos</p>
Room 215	4639	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 223	4684	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 225	4683	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 226	4668	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 227	4682	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 228	4673	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 228A - Recycle room	4671	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Room 229	4681	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Room 230	4674	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Room 231	4680	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 232	4676	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 233	4679	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 235	4678	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>1x1 tiles mastic on ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Room 88 - Construction	4631	<p><i>Asbestos present on mechanical insulation below ceiling</i> * Radiator and old window putty/caulking contains asbestos * Asbestos insulation present behind wall cavity <i>Fire rated doors contain asbestos</i></p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 90 - Manufacturing	4629	<p><i>Asbestos present on mechanical insulation below ceiling</i></p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contains asbestos</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 90A - Supply room 1	4627	<p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 90B - Supply room 2	4628	<p><i>Asbestos present on mechanical insulation below ceiling</i></p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 91 - Autoshop	4616	<p><i>Asbestos present on mechanical insulation below ceiling</i></p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * <i>Fire rated doors contain asbestos</i> * Old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Roof drain and/or collar contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and transite asbestos panel walls and exhaust system contains asbestos
Room 91A - Storage	4617	<p><i>Asbestos present on mechanical insulation below ceiling</i></p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Roof drain and/or collar contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns, transite asbestos wall panels and exhaust system contains asbestos
Room 92 - Design & Tech.	4625	<p><i>Asbestos present on mechanical insulation below ceiling</i></p> <ul style="list-style-type: none"> * Asbestos insulation present behind wall cavity * <i>Fire rated doors and fume hood contains asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contains asbestos * Roof drain and/or collar contain asbestos * Spray/paint/welding booths, cabinet lining, counter tops, kilns, transite asbestos wall panels and exhaust system contains asbestos

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 93 - Woodshop	4620	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Asbestos present on mechanical insulation below ceiling</i> * Asbestos insulation present behind wall cavity <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 93A - Tech Office	4619	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Asbestos present on mechanical insulation below ceiling</i> * Asbestos insulation present behind wall cavity or above plaster ceiling <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Roof drain and/or collar contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns, transite asbestos wall panels and exhaust system contains asbestos</p>
Room 93B - Printing room	4621	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Asbestos present on mechanical insulation below ceiling</i> * Asbestos insulation present behind wall cavity <i>* Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns, transite asbestos wall panels and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 93C - Electrical storage	4622	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>Asbestos present on mechanical insulation below ceiling</i></p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns, transite asbestos wall panels and exhaust system contains asbestos</p>
Room 94	4562	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>Asbestos present on mechanical insulation below ceiling</i></p> <p><i>Drywall and joint compound contains asbestos</i></p> <p><i>1x1 tiles mastic on walls and ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 94A - Supply room	4561	<p><i>Transite asbestos ceiling tiles present</i></p> <p>* Asbestos insulation present behind wall cavity</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns, transite asbestos wall panels and exhaust system contains asbestos</p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 95	4623	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Asbestos present on mechanical insulation below ceiling</i> * Asbestos insulation present behind wall cavity * <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos</p>
Room 95A - Office	4624	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity * <i>Fire rated doors contain asbestos</i> * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns, transite asbestos wall panels and exhaust system contains asbestos</p>
Room 96	4563	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Asbestos present on mechanical insulation below ceiling</i> <i>Drywall and joint compound contains asbestos</i> <i>1x1 tiles mastic on walls and ceiling contain asbestos</i> * Asbestos insulation present behind wall cavity or above plaster ceiling * <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 97	4558	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Asbestos gaskets present behind old black/tack boards</i></p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Room 97A - Storage	4556	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Room 97B - Storage	4557	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Room 98	4564	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on walls and ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 99	4554	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Room 99A - Pie room	4553	<p><i>Vinyl asbestos floor tiles</i> - * leveling coat present underneath</p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Radiator and old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Room109 - Staff room	4542	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath</p> <p><i>1x1 tiles mastic on walls and ceiling contain asbestos</i></p> <p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p><i>* Fire rated doors contain asbestos</i></p> <p>* Asbestos gaskets present behind old black/tack boards</p> <p>* Radiator and old window putty/caulking contain asbestos</p>
Slop sink (2nd floor by across rm. 227)	4672	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling</p> <p>* Roof drain and/or collar contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>
Stairwell 1 (by rm. 101/201)	4552/4663	<p>* Asbestos insulation present behind wall cavity</p> <p>* Old window putty/caulking contain asbestos</p> <p><i>Fire rated doors contain asbestos</i></p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Stairwell 2 (by rm.107/209)	4544/4644	* Asbestos insulation present behind wall cavity * Old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Stairwell 3 (by gym/library)	4638	* Asbestos insulation present behind wall cavity * Old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Stairwell 4 (by library/guidance office)	4503/	* Asbestos insulation present behind wall cavity * Old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Stairwell 5 (by rm. 118/226)	4667/4610	* Asbestos insulation present behind wall cavity * Old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Stairwell 6 (by rm. 135/235)	4677/4602	* Asbestos insulation present behind wall cavity * Old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Student Services - Office (across main office)	4502	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath <i>Drywall and joint compound contains asbestos</i> <i>Ceiling tile mastic contains asbestos</i> * Asbestos insulation present behind wall cavity or above ceiling <i>Fire rated doors contain asbestos</i> * Old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards</p>
Student Services - Photocopy room	4504	<p><i>Vinyl asbestos floor tiles present</i> - * leveling coat present underneath * Asbestos insulation present behind wall cavity or above plaster ceiling <i>Fire rated doors contain asbestos</i> * Asbestos gaskets present behind old black/tack boards * Radiator and old window putty/caulking contain asbestos</p>
Washroom - Boy's (across rm. 94)	4559	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i></p>
Washroom - Boy's (by rm. 107)	4545	<p>* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i></p>

Confirmed asbestos items are highlighted

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(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Washroom - Boy's (by rm. 118)	4607	* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Washroom - Boy's (by rm. 210)	4640	* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Washroom - Boy's (by rm. 226)	4669	* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Washroom - Girls' (by rm. 107)	4546	* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Washroom - Girl's (by rm. 120)	4606	* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>
Washroom - Girls' (by rm. 207)	4647	* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos <i>Fire rated doors contain asbestos</i>

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
(For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Washroom - Girl's (by rm. 228)	4670	* Asbestos insulation present behind wall cavity or above plaster ceiling * Radiator and old window putty/caulking contain asbestos Fire rated doors contain asbestos
Washroom - Men staff (across main office)		* Asbestos insulation present behind wall cavity or above plaster ceiling Fire rated doors contain asbestos
Washroom - Women (across main office)		Vinyl asbestos floor tiles - * leveling coat present underneath * Asbestos insulation present behind wall cavity or above plaster ceiling Fire rated doors contain asbestos

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff
 (For non-asbestos doors, please see tag on door spine)