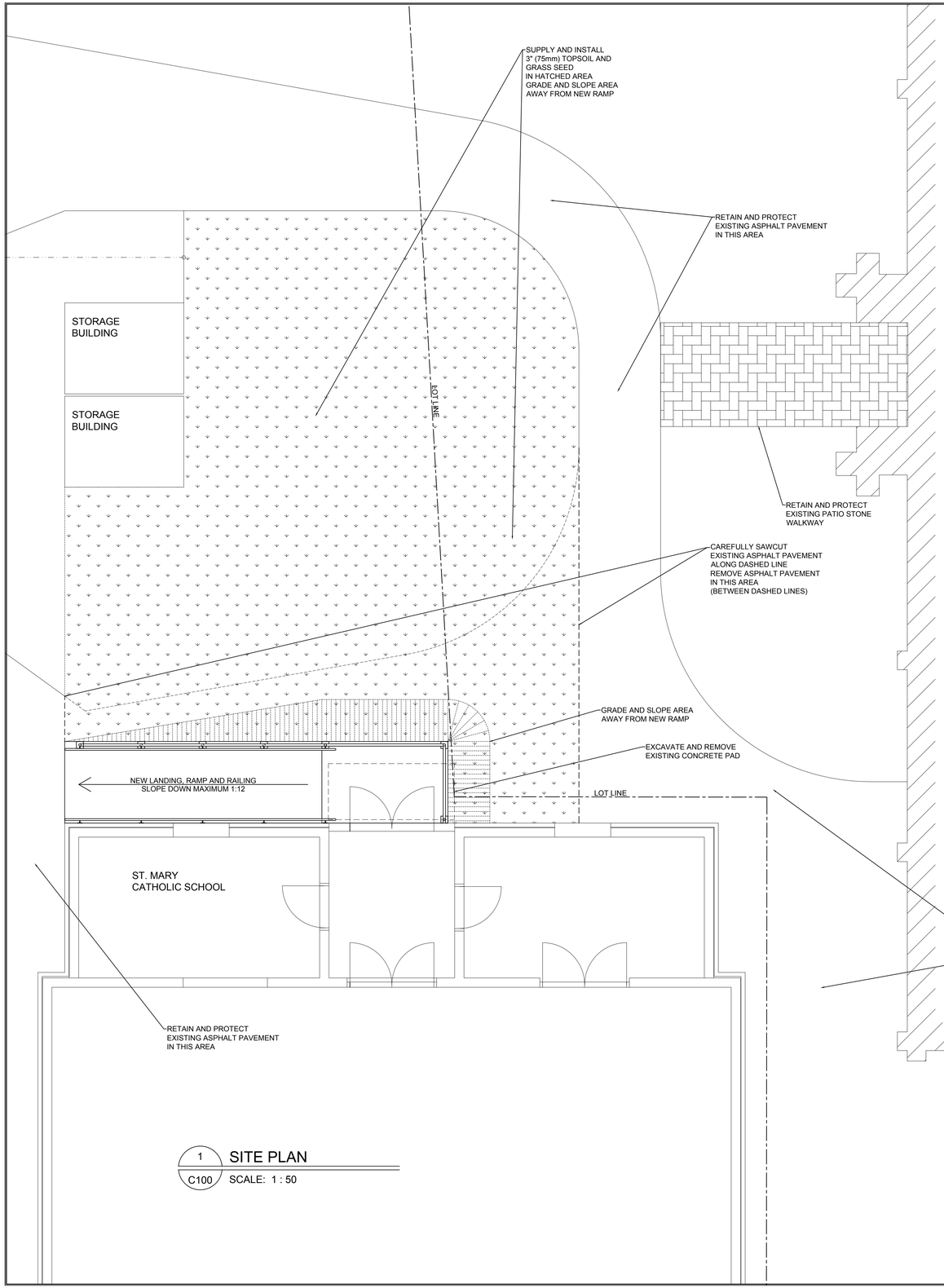


1 SITE PLAN
C100 SCALE: 1 : 50

SITE WORK

1 GENERAL:

.1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO START OF CONSTRUCTION.
.2 PRIOR TO COMMENCING WORK, CONTRACTOR SHALL VERIFY AND ESTABLISH THE LOCATION OF ALL BURIED SERVICES ON AND ADJACENT TO THE SITE.
.3 PROTECTION:
- .1 KEEP EXCAVATIONS CLEAN, FREE OF STANDING WATER, AND LOOSE SOIL.
- .2 RETAIN AND PROTECT NATURAL AND MAN-MADE FEATURES REQUIRED TO REMAIN UNDISTURBED.
- .3 PROTECT EXISTING LANDSCAPING AND TREES FROM DAMAGE.
- .4 PROTECT BURIED SERVICES THAT ARE REQUIRED TO REMAIN UNDISTURBED.

2 SITE PREPARATION:

.1 REMOVE OBSTRUCTIONS, FROM SURFACES TO BE EXCAVATED WITHIN LIMITS INDICATED.
.2 CUT PAVEMENT OR SIDEWALK NEATLY ALONG LIMITS OF PROPOSED EXCAVATION IN ORDER THAT SURFACE MAY BREAK EVENLY AND CLEANLY.
.3 REMOVE TREES, STUMPS, LOGS, BRUSH, SHRUBS, BUSHES, VINES, UNDERGROWTH, ROTTEN WOOD, DEAD PLANT MATERIAL, EXPOSED BOULDERS AND DEBRIS WITHIN AREAS DESIGNATED ON DRAWINGS.
.4 REMOVE STUMPS AND TREE ROOTS BELOW FOOTINGS, SLABS, AND PAVING.
.5 DISPOSE OF CLEARED AND GRUBBED MATERIAL OFF SITE DAILY TO DISPOSAL AREAS ACCEPTABLE TO AUTHORITY HAVING JURISDICTION.

3 EXCAVATION:

.1 STRIP TOPSOIL TO DEPTHS REQUIRED FOR PLACEMENT OF NEW MATERIALS.
.2 STRIP TOPSOIL OVER AREAS TO BE COVERED BY NEW CONSTRUCTION, OVER AREAS WHERE GRADE CHANGES ARE REQUIRED, AND SO THAT EXCAVATED MATERIAL MAY BE STOCKPILED WITHOUT COVERING TOPSOIL.
.3 STOCKPILE MATERIALS IN LOCATIONS AS DIRECTED BY PROJECT MANAGER.
.4 DO NOT DISTURB SOIL OR ROCK BELOW BEARING SURFACES.
.5 NOTIFY PROJECT MANAGER WHEN EXCAVATIONS ARE COMPLETE.
.6 IF BEARINGS ARE UNSATISFACTORY, ADDITIONAL EXCAVATION WILL BE AUTHORIZED IN WRITING AND PAID FOR AS ADDITIONAL WORK.
.7 EXCAVATION TAKEN BELOW DEPTHS SHOWN WITHOUT PROJECT MANAGER WRITTEN AUTHORIZATION, TO BE FILLED AT CONTRACTOR'S EXPENSE.

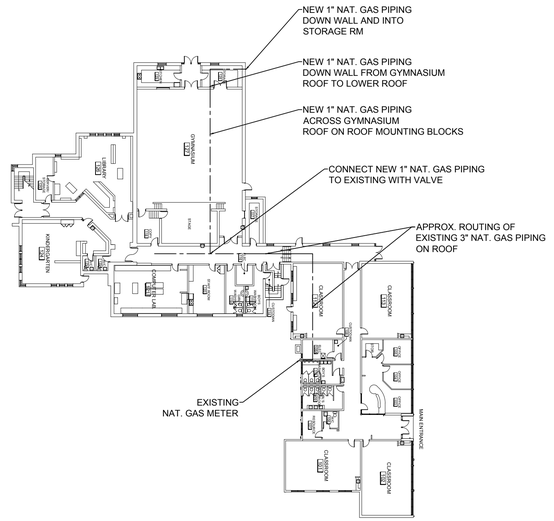
4 BACKFILLING:

.1 DO NOT COMMENCE BACKFILLING UNTIL FILL MATERIAL AND SPACES TO BE
.2 COMPACTION OF SUBGRADE: COMPACT EXISTING SUBGRADE UNDER WALKS, PAVING, AND SLABS ON GRADE, COMPACTION AS SPECIFIED.
.3 PLACE BACKFILL, FILL AND BASECOURSE MATERIAL IN 150 MM LIFTS. ADD WATER AS REQUIRED TO ACHIEVE SPECIFIED DENSITY.
.4 COMPACT EACH LAYER OF MATERIAL TO FOLLOWING DENSITIES FOR MATERIAL TO ASTM D698:
- .1 TO UNDERSIDE OF BASECOURSES: 95%.
- .2 BASECOURSES: 100%.
- .3 ELSEWHERE: 90%.

.5 UNDER SEEDED AND SODDED AREAS: USE SITE EXCAVATED MATERIAL TO BOTTOM OF TOPSOIL EXCEPT IN TRENCHES AND WITHIN 24" (600mm) OF FOUNDATIONS.
.6 AGAINST FOUNDATIONS (EXCEPT AS APPLICABLE TO TRENCHES AND UNDER SLABS AND PAVING): EXCAVATED MATERIAL OR IMPORTED MATERIAL WITH NO STONES LARGER THAN 4" (100mm) DIAMETER WITHIN 24" (600mm) OF STRUCTURES.

5 GRADING:

.1 GRADE SO THAT WATER WILL DRAIN AWAY FROM BUILDINGS, WALLS AND PAVED AREAS, TO CATCH BASINS AND OTHER DISPOSAL AREAS.
.2 GRADE TO BE GRADUAL BETWEEN FINISHED SURFACE AND SURROUNDING AREAS.
.3 SUPPLY ALL NECESSARY FILL TO MEET BACKFILLING AND GRADING REQUIREMENTS AND WITH MINIMUM AND MAXIMUM ROUGH GRADE VARIANCE.
.4 DISPOSE OF SURPLUS MATERIAL OFF SITE.



2 KEY PLAN
C100 SCALE: 1 : 400

MORRIS
Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-15	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

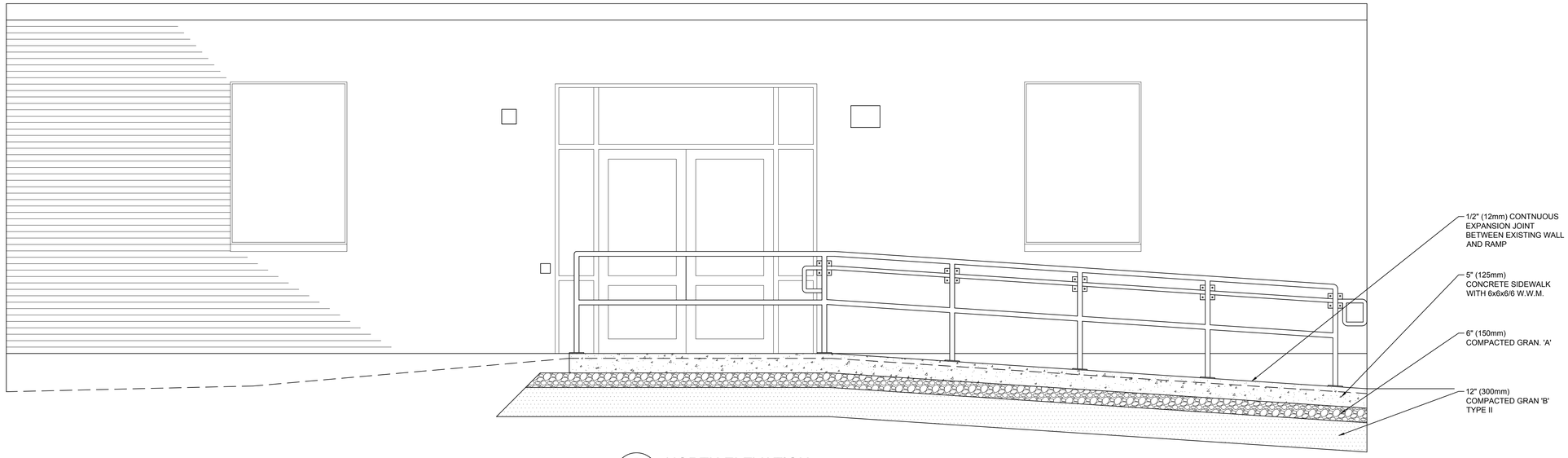
Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY
CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
SITE
Site Plan
Ramp
Key Plan

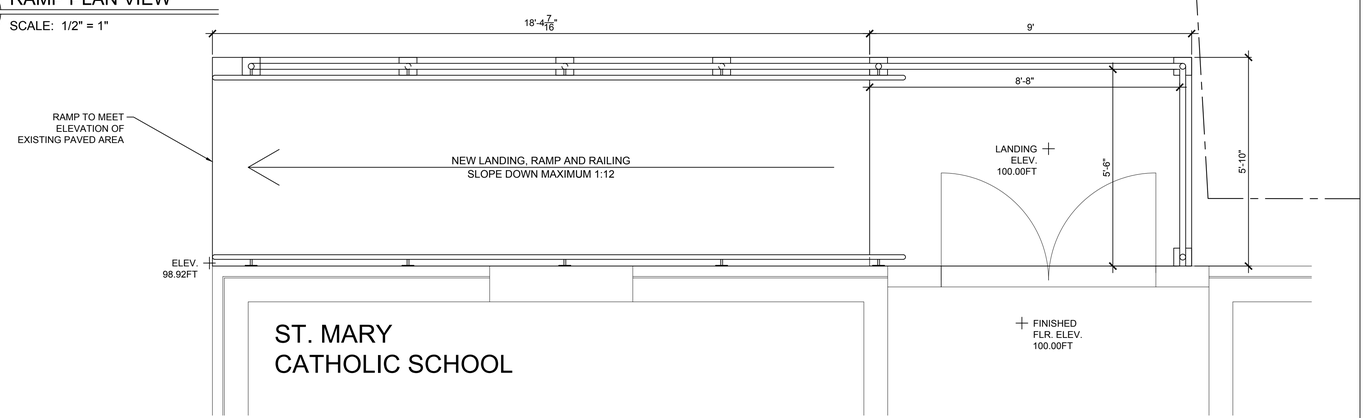
Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

C100



2 C101 NORTH ELEVATION
SCALE: 1/2" = 1"

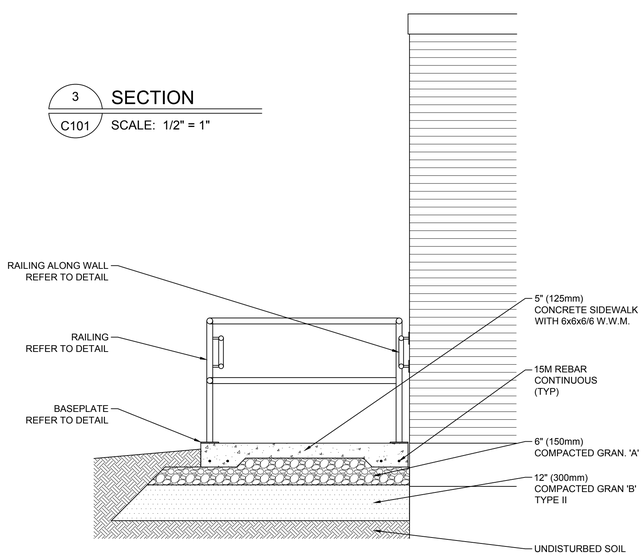
1 C101 RAMP PLAN VIEW
SCALE: 1/2" = 1"

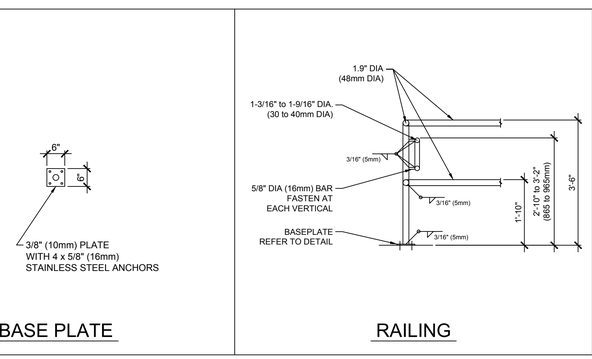


STRUCTURAL NOTES:

1. PRIOR TO PLACING CONCRETE FOR SLAB, PROJECT MANAGER OR ENGINEER TO INSPECT EXCAVATION, REBAR AND WIRE MESH.
2. CONCRETE WORK TO BE 32 MPa @ 28 DAYS WITH AN AIR CONTENT OF 6% ± 1% AT TIME OF PLACING AND A MAX. SLUMP OF 3-1/2".
3. CONCRETE MATERIAL AND CONSTRUCTION TO CAN. A23.1 AND CAN. A23.3.
4. WELDED WIRE FABRIC FOR CONCRETE REINFORCEMENT TO G30.5-M1983.
5. REINFORCING STEEL TO BE G30.12-M1977. GRADE 400 MPa.
6. CONCRETE COVER TO REINFORCING STEEL TO BE 3" WHERE IN CONTACT WITH SOIL AND 2" AT OTHER LOCATIONS.

3 C101 SECTION
SCALE: 1/2" = 1"





BASE PLATE | RAILING | RAILING ALONG WALL | RAILING

4 C101 RAILING DETAILS
SCALE: 1/2" = 1"

MORRIS
Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-15	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
SITE
Ramp & Details

Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

C101

GENERAL INSTRUCTIONS

1.1 GENERAL:
- .1 CONFORM WITH APPLICABLE REQUIREMENTS OF THE MINISTRY OF LABOUR, AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- .2 DO COMPLETE INSTALLATION IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
- .3 ARRANGE FOR INSPECTIONS AND TESTS, AND PAY ALL ASSOCIATED COSTS & FEES, UNLESS OTHERWISE NOTED.
- .4 CLEAN ALL AREAS OF WORK AT PROJECT COMPLETION.
- .5 COMPLETE AS-BUILT DRAWINGS SHOWING ALL CHANGES AS WORK PROGRESSES.

1.2 EXAMINATION:
- .1 THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH CONDITIONS AT THE SITE. EACH ONE SHALL BEAR COMPLETE RESPONSIBILITY FOR FAMILIARIZATION WITH CONDITIONS AND THE EFFECT THAT SAME MAY HAVE ON WORK.
- .2 EVERY SUB-CONTRACTOR SHALL EXAMINE THE CONTRACT DOCUMENTS. THE CONDITIONS ON SITE AND THE WORK IN PLACE PRIOR TO COMMENCING THE VARIOUS PORTIONS OF THIS WORK.
- .3 THE CONTRACTOR AND EACH SUB-CONTRACTOR SHALL REPORT IN WRITING TO THE ENGINEER AND THE CONTRACTOR ANY DEFECTS AFFECTING THE WORK OF THAT TRADE.
- .4 COMMENCEMENT OF WORK SHALL BE CONSTRUED AS EVIDENCE OF ACCEPTANCE OF UNDERLYING SURFACES, CONDITIONS, ARRANGEMENTS AND LOCATION AS SATISFACTORY.

1.3 SUPERVISION:
- .1 THE OVERALL SUPERINTENDENCE OF THE PROJECT, ENSURING THE COMPLETE PERFORMANCE OF ALL SUB-CONTRACTORS AND SUPPLIERS AS LAID DOWN IN THE SPECIFICATIONS, IS THE RESPONSIBILITY OF THE CONTRACTOR. A FULLY COMPETENT SITE SUPERINTENDENT SHALL BE IN CHARGE OF THE WORK AT ALL TIMES THROUGHOUT THE CONTRACT. THE SUPERINTENDENT SHALL STUDY THE PLANS AND SPECIFICATIONS IN DETAIL AND BE COMPLETELY FAMILIAR WITH THE PROJECT AT THE OUTSET. ONCE CONVERSANT WITH THE DOCUMENTS, THEY SHALL RELATE THEM TO THE EXISTING CONDITIONS. ANY ERRORS OR DISCREPANCIES IN DIMENSIONS, DETAILS, ETC. IN THE PLANS AND SPECIFICATIONS OR THEIR RELATIONSHIP TO THE EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER FOR CLARIFICATION OR CORRECTION BEFORE BEGINNING THE WORK. ALLOW ENGINEER TIME FOR CLARIFICATION OR CORRECTION AS REQUIRED.
- .2 ENSURE THAT ALL NECESSARY JOB DIMENSIONS ARE TAKEN AND ALL TRADES ARE COORDINATED FOR THE PROPER EXECUTION OF THE WORK. ASSUME COMPLETE RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF SUCH DIMENSIONS, AND FOR COORDINATION.
- .3 VERIFY THAT ALL WORK AS IT PROCEEDS IS EXECUTED IN ACCORDANCE WITH DIMENSIONS AND POSITIONS INDICATED, WHICH MAINTAIN LEVELS AND CLEARANCES TO ADJACENT WORK AS SET OUT BY REQUIREMENTS OF THE DRAWINGS; AND ENSURE THAT WORK INSTALLED IN ERROR IS RECTIFIED BEFORE CONSTRUCTION CONTINUES.
- .4 CHECK AND VERIFY ALL DIMENSIONS REFERRING TO THE WORK AND THE INTERFACING OF ALL SERVICES, VERIFY WITH THE TRADE CONCERNED ALL DIMENSIONS PERTAINING TO THE WORK OF OTHER TRADES.
- .5 ANY ERRORS, DISCREPANCIES, OR TRADE CONFLICTS ARISING DURING CONSTRUCTION SHALL, WHEN NECESSARY, BE REFERRED TO THE ENGINEER FOR CLARIFICATION AND/OR DECISION. ALLOW ENGINEER TIME FOR DELIBERATION AS REQUIRED.

1.4 COOPERATION AND COORDINATION:
- .1 IF THE SCHOOL IS OCCUPIED DURING THE CONSTRUCTION OR DEMOLITION, PROTECTION OF THE STUDENTS, STAFF AND PUBLIC IS OF UTMOST CONCERN TO THE OWNER. TAKE ALL PRECAUTIONS NECESSARY AND PROVIDE ALL MEANS NECESSARY TO ADEQUATELY PROTECT ALL PERSONS ON THE SITE. THIS WILL ENTAIL RESTRICTING CONSTRUCTION AND DELIVERY TRAFFIC WHEN SCHOOL BUSES AND STAFF, AND PARENT VEHICLES ARE ARRIVING AND LEAVING IN THE MORNING AND THE AFTERNOON.
- .2 COORDINATE ALL SUB-CONTRACTORS AND SUPPLIERS SO THAT WORK PROCEEDS SMOOTHLY WITHOUT INTERRUPTION AND IN STRICT ACCORDANCE WITH REVIEWED SCHEDULES. COORDINATE SO THAT WORK IS EXECUTED IN PROPER SEQUENCE, ITEMS TO BE BUILT-IN ARE BUILT-IN ON TIME. ERECTED WORK IS PROTECTED AGAINST DAMAGE FROM THE WORK OF OTHER TRADES AND DEFECTIVE WORK IS REMOVED AND MADE GOOD TO THE SATISFACTION OF THE ENGINEER.
- .3 STUDY ALL DOCUMENTS WHICH DESCRIBE, OR ARE RELATED TO, ANY OPERATION BEFORE COMMENCEMENT OF THAT OPERATION. REPORT DISCREPANCIES DISCOVERED BETWEEN ELEMENTS OF DOCUMENTATION AND OBTAIN RULING ON REQUIRED INTERPRETATION BEFORE BEGINNING WORK. ALLOW ENGINEER TIME TO MAKE RULING AS REQUIRED.
- .4 ENSURE THAT MATERIAL, EQUIPMENT, SERVICES AND OPERATIVES ARE BROUGHT TO SITE AT PROPER TIMES, IN SUFFICIENT QUANTITY AND QUALITY AND IN ACCORDANCE WITH REQUIREMENTS OF WORK.
- .5 CONTRACTOR SHALL ENSURE THAT EACH SUBCONTRACTOR INFORMS THEM OF REQUIREMENTS FOR SITE CONDITIONS AND SURFACES NECESSARY FOR THE EXECUTION OF THE WORK AND THAT THEY PROVIDE SETTING DRAWINGS, TEMPLATES AND ALL OTHER INFORMATION NECESSARY FOR THE LOCATION AND INSTALLATION OF MATERIAL, HOLES, SLEEVES, INSERTS, ANCHORS, ACCESSORIES, FASTENINGS, CONNECTIONS AND ACCESS PANELS. THE CONTRACTOR SHALL INFORM OTHER SUB-CONTRACTORS WHOSE WORK IS AFFECTED BY THESE REQUIREMENTS AND PREPARATORY WORK.
- .6 CONTRACTOR AND SUB-CONTRACTORS SHALL COOPERATE FULLY WITH OTHER CONTRACTORS AND SUB-CONTRACTORS WORKING ON THIS PROJECT. PERFORM NECESSARY COORDINATION TO INSTALL EQUIPMENT SUPPLIED, OR SUPPLIED AND INSTALLED BY OWNER.
- .7 REMOVE AND REPLACE CEILINGS AS REQUIRED TO ACCOMMODATE THE INSTALLATION OF WORK TO ALLOW FOR PROJECT COMPLETION.
- .8 ENGINEER'S NORMAL HOURS OF OPERATION ARE BETWEEN 7:30 A.M. AND 4:30 P.M. MONDAY TO FRIDAY. ACCOUNT FOR THESE HOURS OF OPERATION WHEN COMMUNICATING WITH THE ENGINEER, WHEN PROVIDING THE ENGINEER WITH SUFFICIENT NOTICE, AND/OR WHEN ALLOWING THE ENGINEER TIME FOR DELIBERATION AS REQUIRED.

1.5 SCHEDULING AND CONTRACTOR'S USE OF SITE:
- **.1 USE OF SITE: FOR EXECUTION OF THE WORK AND AS OTHERWISE NOTED OR INDICATED.**
- **.2 DATES AND HOURS OF WORK:**
  - **.1 JUNE 30, 2018 TO AUGUST 24, 2018, HOURS TO WORK ARE FROM 7:00AM.**
  - **.2 WEEKENDS ARE AVAILABLE FOR WORK.**
  - **.3 CUSTODIAN WORK HOURS DURING SCHOOL OPERATIONS IS FROM 7:00 AM TO 3:00 PM. CONTRACTOR WILL BE RESPONSIBLE TO ARM THE SECURITY SYSTEM EACH DAY IF AFTER 3PM.**
  - **.4 CONTRACTORS WORK HOURS ARE TO BE SCHEDULED AND COORDINATED WITH OWNER AND ENGINEER PRIOR TO CONSTRUCTION AT FIRST START UP MEETING.**
  - **.5 ARRANGE WITH PROJECT MANAGER FOR SECURITY CODES & ACCESS.**
- .3 CONFINE OPERATION, STORAGE, ACCESS AND PARKING TO OWNER'S DISCRETION.
- .4 DO NOT UNREASONABLY ENCUMBER SITE WITH MATERIALS OR EQUIPMENT.
- .5 MOVE STORED PRODUCTS OR EQUIPMENT WHICH INTERFERE WITH OPERATIONS OF OWNER OR OTHER CONTRACTORS.
- .6 OBTAIN AND PAY FOR USE OF ADDITIONAL STORAGE OR WORK AREAS NEEDED FOR OPERATIONS.
- .7 MAINTAIN PROJECT GROUNDS AND PUBLIC PROPERTIES FREE FROM ACCUMULATION OF WASTE MATERIALS AND RUBBISH.

1.6 DOCUMENTS REQUIRED:
- .1 MAINTAIN AT JOB SITE, COPIES OF CONTRACT DRAWINGS, SPECIFICATIONS, ADDENDA, REGULATORY AUTHORITY APPROVED DRAWINGS, PERMITS, ORDERS AND CHANGE ORDERS, SITE INSTRUCTIONS, OTHER MODIFICATIONS TO CONTRACT, FIELD TEST REPORTS, INSPECTION REPORTS, JOB MINUTES, REVIEWED SCHEDULE, MANUFACTURER'S INSTALLATION AND APPLICATION INSTRUCTIONS, MATERIAL SAFETY DATA SHEETS, SET OF DRAWINGS FOR AS-BUILTS, LATEST COPY OF ONTARIO BUILDING CODE, OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.

1.7 INSPECTION, TESTS AND APPROVAL:
- .1 AT LEAST FORTY-EIGHT HOURS NOTICE SHALL BE GIVEN TO THE ENGINEER IN ORDER THAT ALL INSPECTIONS AND TESTS CALLED FOR BY THESE SPECIFICATIONS MAY BE IMPLEMENTED. FAILURE TO GIVE SUCH NOTICE WILL RESULT IN COMPLETE RETESTING IF DEEMED NECESSARY BY THE ENGINEER. NO WORK SHALL BE COVERED UP UNTIL INSPECTION AND ACCEPTANCE BY THE ENGINEER OR INSPECTOR.

1.8 BUILDING AND OTHER PERMITS:
- .1 THE OWNER SHALL PAY FOR THE MAIN BUILDING PERMIT. APPLY FOR AND PAY ALL OTHER REQUIRED FEES SUCH AS ROAD CUT FEES, HYORO INSPECTION FEES, LANDFILL DUMPING FEES AND THE LIKE.
- .2 PROVIDE AUTHORITIES WITH SUCH PLANS AND INFORMATION AS MAY BE REQUIRED FOR THE ISSUANCE OF ACCEPTANCE CERTIFICATES.
- .3 OBTAIN ALL INSPECTION CERTIFICATES REQUIRED BY AUTHORITIES HAVING JURISDICTION. HAND OVER COPIES OF SAME TO ENGINEER.

1.9 SETTING OUT LINES AND LEVELS:
- .1 CONTRACTOR SHALL CONFIRM ALL ELEVATIONS AND/OR DIMENSIONS OF EXISTING CONDITIONS ON SITE AND ALLOW FOR SAME IN TENDERING PRICE.
- .2 VERIFY AND RECORD ON THE RECORD DRAWINGS, ELEVATION OF FOOTING BEARING SURFACES, TOP OF FOOTINGS, NEW SERVICES, EXISTING UTILITIES ENCOUNTERED; ALL RELATED TO FINISHED FLOOR ELEVATION OR GEODETIC ELEVATIONS.

1.10 CUTTING AND PATCHING:
- .1 EXECUTE CUTTING, FITTING AND PATCHING REQUIRED TO MAKE THE WORK FIT PROPERLY TOGETHER. CUT AND PATCH FOR PROCESS, MECHANICAL AND ELECTRICAL WORK.
- .2 COORDINATE WORK WITH OTHER TRADES SO THAT THERE IS A MINIMUM OF CUTTING, FITTING AND PATCHING.
- .3 DRILLING, CUTTING, FITTING AND PATCHING AND MAKING GOOD WHERE NECESSARY DUE TO FAILURE TO DELIVER ITEMS TO BE BUILT IN TIME OR INSTALLATION IN WRONG LOCATION, SHALL BE EXECUTED AS DIRECTED AT NO COST TO THE OWNER.
- .4 DRILLING AND CUTTING OF LOAD BEARING STRUCTURAL MEMBERS SHALL BE DONE ON PRIOR EXPRESS WRITTEN PERMISSION OF THE ENGINEER FOR EACH INSTANCE.
- .5 CUT HOLES ACCURATELY, WITH SMOOTH, TRUE, CLEAN EDGES. FIT UNITS TO TOLERANCES SPECIFIED OR SHOWN OR, IF NOT NOTED, TO BEST STANDARD PRACTICE FOR APPLICABLE WORK.
- .6 HOLES IN BLOCK WORK SHALL BE CUT NOT MADE WITH A HAMMER GUN.
- .7 PATCHED WORK SHALL BE INVISIBLE, SIZE HOLES AND OPENINGS FOR PIPES SO AS TO ALLOW FOR EXPANSION AND CONTRACTION OF SUCH PIPES.
- .8 EMPLOY TRADESMEN SKILLED IN THE WORK AND EXECUTE WORK TO STANDARDS SPECIFIED FOR THAT WORK ON THIS PROJECT.
- .9 PATCH AS REQUIRED TO MAINTAIN INTEGRITY OF FIRE SEPARATIONS, RATINGS AND ASSEMBLIES. PATCH AS REQUIRED TO MAINTAIN AIR AND MOISTURE TIGHTNESS OF CONSTRUCTION.

1.11 CONCEALMENT:
- .1 CONCEAL PIPES, DUCTS, AND WIRING IN WALL AND CEILING CONSTRUCTION EXCEPT WHERE INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS.

1.12 LOCATION OF EQUIPMENT AND FIXTURES:
- .1 LOCATION OF EQUIPMENT, FIXTURES AND OUTLETS INDICATED OR SPECIFIED ARE TO BE CONSIDERED AS APPROXIMATE UNLESS NOTED OTHERWISE.
- .2 LOCATE EQUIPMENT, FIXTURES AND DISTRIBUTION SYSTEMS TO PROVIDE MINIMUM INTERFERENCE AND MAXIMUM USABLE SPACE AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR SAFETY ACCESS AND MAINTENANCE.
- .3 INFORM ENGINEER OF IMPENDING INSTALLATION AND OBTAIN THEIR ACCEPTANCE FOR ACTUAL LOCATION.
- .4 SUBMIT FIELD DRAWINGS TO INDICATE RELATIVE POSITION OF VARIOUS SERVICES AND EQUIPMENT.

1.13 INSERTS, SLEEVES AND ANCHORS:
- .1 PROVIDE ALL SLEEVES, INSERTS, ANCHORS, HANGERS, SUPPORTS, ADHESIVES AND THE LIKE NECESSARY FOR EXECUTION OF THE WORK.
- .2 CO-ORDINATE WORK WITH OTHER TRADES, ARRANGE AND PAY FOR INSTALLATION OF SLEEVES, INSERTS, ANCHORS, ETC. BY APPROPRIATE TRADE.
- .3 EMPLOY WORKERS SKILLED IN THE WORK AND EXECUTE WORK TO THE STANDARDS SPECIFIED FOR THAT WORK ON THE PROJECT.

1.14 PUBLIC AND PRIVATE UTILITIES AND SERVICES
- .1 VERIFY LIMITATIONS IMPOSED ON PROJECT WORK BY PRESENCE OF UTILITIES AND SERVICES, AND ENSURE NO DAMAGE OCCURS TO THEM.
- .2 NOTIFY SERVICE AUTHORITIES CONCERNED SO THAT THEY PROTECT, REMOVE, RELOCATE, OR DISCONNECT THEM AS THEY MAY REQUIRE.
- .3 MAKE ARRANGEMENTS AND PAY FOR CONNECTION CHARGES FOR SERVICES REQUIRED FOR PROJECT WORK.
- .4 WHERE UNKNOWN SERVICES ARE ENCOUNTERED, IMMEDIATELY ADVISE ENGINEER AND CONFIRM FINDINGS.

1.15 WASTE AND RUBBISH:
- .1 SEPARATE AND RECYCLE WASTE MATERIALS.
- .2 DIVERT UNUSED METAL MATERIALS FROM LANDFILL TO METAL RECYCLING FACILITY.
- .3 REMOVE FROM SITE AND DISPOSE OF PACKAGING MATERIALS AT APPROPRIATE RECYCLING FACILITIES.
- .4 DO NOT BURN OR BURY RUBBISH AND WORK MATERIALS ON SITE.
- .5 DISPOSE OF RUBBISH AND SURPLUS MATERIAL OFF SITE.
- .6 DO NOT DISPOSE OF VOLATILE OR CORROSIVE MATERIALS IN SEWERS AND DRAINS.
- .7 DISPOSE OF WASTE IN A MANNER NOT DETRIMENTAL TO PUBLIC, PRIVATE OR OWNER'S PROPERTY, OR TO ANY PORTION OF THE WORK COMPLETED OR UNDER CONSTRUCTION.
- .8 EXCEPT IF EXPRESSLY STATED OTHERWISE, MATERIALS INDICATED FOR REMOVAL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE TAKEN FROM THE SITE.
- .9 DISPOSE OF RUBBISH AND WASTE IN ACCORDANCE WITH GOVERNING REGULATIONS.

1.16 SMOKING POLICY:
- .1 SMOKING IS NOT PERMITTED WITHIN THE BUILDING OR ON SCHOOL PROPERTY AT ANY TIME.

1.17 HAZARDOUS MATERIALS:
- .1 PRIOR TO STARTING OF DEMOLITION WORK, REFER TO THE "HAZARDOUS BUILDING MATERIALS ASSESSMENT" REPORT, SUPPLIED BY THE OWNER.
- .2 DESIGNATED SUBSTANCES SHALL BE HANDLED, REMOVED, TRANSPORTED AND DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF THE FEDERAL, PROVINICIAL AND LOCAL AUTHORITIES HAVING JURISDICTION.
- .3 SHOULD ANY DESIGNATED SUBSTANCES BE ENCOUNTERED IN THE AREA OF CONSTRUCTION, ALL WORK SHALL STOP IMMEDIATELY, AND THE OWNER AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

SUBMITTALS

1 GENERAL

1.1 GENERAL:
- .1 REFER TO INSTRUCTIONS TO TENDERERS AND SUPPLEMENTARY CONDITIONS FOR ADDITIONAL CONTRACTUAL INFORMATION CONCERNING SUBMITTALS.
- .2 REFER TO INDIVIDUAL SECTIONS OF SPECIFICATIONS FOR DETAILED INFORMATION ON SUBMITTAL REQUIREMENTS.
- .3 SCHEDULE SUBMISSIONS AT LEAST ONE (1) WEEK BEFORE DATES REVIEWED SUBMISSION WILL BE NEEDED.
- .4 DO NOT PROCEED WITH WORK UNTIL RELEVANT SUBMISSIONS ARE REVIEWED AND RETURNED.
- .5 SHOP DRAWINGS WHICH HAVE NOT BEEN REQUESTED WILL BE RETURNED TO THE CONTRACTOR WITH NO ACTION TAKEN BY THE ENGINEER. SHOP DRAWINGS TO WHICH THE ENGINEER'S STANDARD "RECEIVED" STAMP IS NOT AFFIXED, HAVE NOT BEEN REVIEWED BY THE ENGINEER.

2 IDENTIFICATION OF SUBMITTALS:

.1 ALL SHOP DRAWING SUBMITTALS TO BE IN ELECTRONIC FORM/FORMAT.

.2 IN THE TOP RIGHT HAND CORNER ON THE BODY OF EACH SUBMITTAL CLEARLY IDENTIFY THE PROJECT NAME, APPLICABLE SPECIFICATION SECTION NUMBER IN NMS FORMAT (EG. 19 91 23), DESCRIPTION OF CONTENTS (IE. PAINTING), THE OWNER'S NAME, ENGINEER'S NAME, CONTRACTOR'S NAME, SUB-CONTRACTOR'S NAME, SUPPLIER'S NAME, AND THE DATE OF SUBMISSION, ALL IN THAT ORDER, INDICATE ORIGIN AND INTENDED USE OF WORK.

.3 ACCOMPANY EACH SUBMITTAL WITH A TRANSMITTAL LETTER RECORDING THE INFORMATION LISTED ABOVE.

.4 PERMANENTLY IDENTIFY SAMPLES WITH THE INFORMATION LISTED ABOVE.

.5 FOR ELECTRONIC SUBMITTALS, PROVIDE ELECTRONIC FILE NAMES THAT IDENTIFY NAME OF PROJECT APPLICABLE SPECIFICATION SECTION NUMBER IN NMS FORMAT (EG. 09 91 23), DESCRIPTION OF CONTENTS WHERE APPLICABLE (EG. PAINTING) AND THE DATE (IE. YY/MM/DD), SEPARATING EACH FIELD WITH AN UNDERSCORE (EG.PROJECT NAME_DHS_PAINTING_099123.PDF).

3 DOCUMENTATION REQUIRED BEFORE CONSTRUCTION START:

.1 INSURANCE FORMS

.2 PERFORMANCE BOND WHERE REQUIRED.

.3 WSIB CLEARANCE CERTIFICATE FOR THE TYPE OF WORK REQUIRED.

4 STATUTORY DECLARATION:

.1 SUBMIT, WITH EACH MONTHLY PROGRESS CLAIM, A STATUTORY DECLARATION CERTIFYING THAT ALL PAYMENTS FOR ANY LIABILITY FOR WHICH OWNER MIGHT BECOME RESPONSIBLE IF UNPAID, HAVE BEEN PAID.

.2 STATUTORY DECLARATION SHALL BE A FORM CCDC 9A OR 9B.

5 WSIB CLEARANCE CERTIFICATES:

.1 SUBMIT WITH EACH MONTHLY PROGRESS CLAIM, WORKPLACE SAFETY AND INSURANCE BOARD CLEARANCE CERTIFICATE.

6 CONSTRUCTION SCHEDULE:

.1 CONFIRM CONSTRUCTION SCHEDULING WITH PROJECT MANAGER

7 SCHEDULE OF VALUES:

.1 CONFORM TO GC 5.2.4 AND RELEVANT SUPPLEMENTARY CONDITIONS.

8 SHOP DRAWINGS & PRODUCT DATA:

.1 SUBMIT SHOP DRAWINGS FOR OWNER'S AND ENGINEER'S REVIEW IN ACCORDANCE WITH GC-3.11.

.2 THE ENGINEER'S REVIEW IS FOR CONFORMITY TO THE DESIGN CONCEPT AND GENERAL ARRANGEMENT ONLY. THE ENGINEER'S REVIEW SHALL NOT RELIEVE THE CONTRACTOR, HIS SUB-CONTRACTORS AND SUPPLIERS OF THEIR RESPONSIBILITY FOR ERRORS OR OMISSIONS, OR FOR THE ENGINEER'S FAILURE TO OBSERVE ANY DEVIATIONS IN THE RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE SITE.

.3 FOR NON-CUSTOM ITEMS OF EQUIPMENT, MANUFACTURER'S PUBLICATIONS OR CATALOGUE EXCERPTS ARE ACCEPTABLE IF SUITABLY ANNOTATED IN INK, CROSSING OUT ALL NON-APPLICABLE INFORMATION, AND CLEARLY NOTING MODEL NAME, MODEL NUMBER, AND PERFORMANCE/POWER CRITERIA.

.4 IN THE TOP RIGHT HAND CORNER ON THE BODY OF EACH SHOP DRAWING SUBMITTAL CLEARLY IDENTIFY THE PROJECT NAME, CONTRACTOR'S NAME, APPLICABLE SPECIFICATION SECTION NUMBER IN NMS FORMAT (EG. 09 91 23) , DESCRIPTION OF MATERIALS AND ITEMS (EG. PAINTING), THE DATE OF SUBMISSION (YY/MM/DD) AND COMPLETE IDENTIFICATION OF ALL LOCATIONS IN WHICH MATERIALS/ITEMS ARE TO BE INSTALLED.

.5 ACCOMPANY SHOP DRAWINGS BY TRANSMITTAL LETTER CONTAINING INFORMATION OUTLINED ABOVE ALONG WITH THE NUMBER OF DRAWINGS IN THE SUBMISSION, THE TITLE OF EACH DRAWING, A DESCRIPTION OF EACH DRAWING AND OTHER PERTINENT DATA.

.6 FOR ALL ELECTRONIC SHOP DRAWING SUBMITTALS, PROVIDE ELECTRONIC FILE NAMES THAT IDENTIFY NAME OF PROJECT, APPLICABLE SPECIFICATION SECTION NUMBER IN NMS FORMAT, DESCRIPTION OF CONTENTS WHERE APPLICABLE (EG. METAL LOCKER) AND THE DATE (EG. YY/MM/DD), SEPARATING EACH FIELD WITH AN UNDERSCORE (EG. STLIHS_PAINTING_099123.PDF).

.7 SUBMITTED SHOP DRAWINGS WHICH HAVE NOT BEEN THOROUGHLY REVIEWED, COORDINATED, STAMPED, DATED AND SIGNED BY A RESPONSIBLE PERSON IN CONTRACTOR'S OFFICE WILL BE RETURNED WITHOUT REVIEW FOR RESUBMITTAL. SHOP DRAWINGS THAT ARE STAMPED, DATED AND SIGNED BY A RESPONSIBLE PERSON IN THE CONTRACTOR'S OFFICE BUT THAT CONTAIN ERRORS OR OVERSIGHTS THAT A THOROUGH REVIEW WOULD HAVE NOTED, AND/OR THAT DO NOT CONTAIN MARK-UPS THAT A THOROUGH REVIEW WOULD HAVE NOTED WILL BE RETURNED WITHOUT REVIEW FOR RESUBMITTAL.

.8 PRESENT SUBMITTALS IN SI METRIC UNITS; WHERE PRINTED MATERIAL IS PROVIDED IN IMPERIAL UNITS, CLEARLY CONVERT ALL VALUES TO METRIC.

.9 INDIVIDUAL SUBMISSIONS WILL NOT BE REVIEWED UNTIL ALL RELATED INFORMATION IS AVAILABLE. INCOMPLETE SUBMISSIONS WILL BE REJECTED AND RETURNED TO CONTRACTOR AND CONTRACTOR MAY BE CHARGED FOR ENGINEER'S TIME AND EXPENSE INVOLVED.

.10 DELETE PRODUCT DATA INFORMATION NOT RELEVANT TO PROJECT.

.11 SUPPLEMENT STANDARD INFORMATION TO PROVIDE DETAILS APPLICABLE TO PROJECT.

9 RECORD DRAWINGS:

.1 MAINTAIN CONTRACT DRAWINGS AT SITE OFFICE FOR RECORD PURPOSES. RECORD ACCURATELY DEVIATIONS FROM CONTRACT DOCUMENTS CAUSED BY SITE CONDITIONS, CHANGE ORDERS, SITE INSTRUCTIONS, AND ADDENDA. MARK IN RED INK. PROVIDE ONE TABLE FOR THIS SET TO BE PLACED ON.

.2 INCLUDE DEPTH OF VARIOUS ELEMENTS OF FOUNDATION, HORIZONTAL AND VERTICAL LOCATION OF NEW, MAINTAINED, RE-ROUTED AND ABANDONED UNDERGROUND UTILITIES CONCEALED IN CONSTRUCTION. ALL UNSEEN OR HIDDEN COMPONENTS MUST BE LOCATED BY DIMENSION.

.3 ENSURE THAT DRAWINGS ARE UP TO DATE AND IN GOOD CONDITION AT ALL TIMES.

.4 SUBMIT RECORD DRAWINGS IN ELECTRONIC CADD FORMAT AND IN HARD COPY TO ENGINEER JUST PRIOR TO SUBSTANTIAL COMPLETION.

.5 CONSULT MECHANICAL AND ELECTRICAL DIVISIONS FOR OTHER PARTICULAR REQUIREMENTS.

10 MANUALS OF INSTRUCTION AND MAINTENANCE:

.1 PRIOR TO SUBSTANTIAL PERFORMANCE, INSPECTION, SUBMIT TO ENGINEER, THREE (3) COPIES OF INSTRUCTION AND MAINTENANCE MANUALS AS FOLLOWS:
- .1 BIND DATA IN 215mm X 279mm, VINYL COVERED THREE - RING LOOSE - LEAF BINDERS.
- .2 ENCLOSE TITLE SHEET, LABELED "INSTRUCTION AND MAINTENANCE MANUAL" WITH PROJECT NAME, LIST OF CONTENTS, DATE AND NAME OF OWNER, ENGINEER, AND CONTRACTOR.
- .3 ORGANIZE CONTENTS INTO APPLICABLE SECTIONS OF WORK TO PARALLEL PROJECT SPECIFICATION BREAKDOWN. MARK EACH SECTION BY LABELED TABS PROTECTED WITH CELLULOID COVERS FASTENED TO HARD PAPER DIVIDING SHEETS.

.2 ALL OPERATION AND MAINTENANCE MANUALS TO BE SUBMITTED IN ENGLISH ONLY.

.3 NEATLY TYPE LISTS AND NOTES. USE CLEAR DRAWINGS, DIAGRAMS OR MANUFACTURER'S LITERATURE.

.4 CONTENTS:
- .1 AS CALLED FOR IN INDIVIDUAL SECTIONS OF THESE SPECIFICATIONS.
- .2 MAINTENANCE INSTRUCTIONS FOR EXTERIOR AND INTERIOR FLOOR, WALL, AND CEILING SURFACES AS WELL AS ALL INSTALLED FITTINGS AS PRINTED BY MANUFACTURER.
- .3 OPERATING AND MAINTENANCE INSTRUCTIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT, BOUND SEPARATELY.
- .4 COLOUR SCHEDULE; HARDWARE SCHEDULE.
- .5 COPIES OF ALL GUARANTEES AND WARRANTIES.
- .6 COMPLETE SET OF FINAL APPROVED SHOP DRAWINGS, BOUND SEPARATELY, INDICATING CORRECTIONS AND CHARGES MADE DURING FABRICATION AND INSTALLATION.
- .7 NAMES, ADDRESSES, AND PHONE NUMBERS OF SUB-CONTRACTORS AND SUPPLIERS.
- .8 WHMIS MANUAL, AS REQUIRED.

11 MAINTENANCE MANUALS:

.1 TURN OVER MATERIALS AND SPARE PARTS FOR ITEMS NOTED IN VARIOUS SECTIONS OF SPECIFICATIONS TO OWNER'S AUTHORIZED REPRESENTATIVE AND OBTAIN RECEIPT. SUBMIT RECEIPT TO ENGINEER. SUBMIT MATERIALS IN UNBROKEN CARTONS OR IF NOT AVAILABLE IN CARTONS, STRONGLY PACKED. IDENTIFY COLOUR, ROOM NUMBER, UNIT NUMBER OR AREA MATERIALS USED.

12 DOCUMENTS REQUIRED BEFORE SUBSTANTIAL PERFORMANCE:

.1 DOCUMENTS REQUIRED PRIOR TO SUBSTANTIAL PERFORMANCE INCLUDE:
- .1 RECORD DRAWINGS.
- .2 MANUALS OF INSTRUCTION AND MAINTENANCE INCLUDING:
  - .1 WARRANTIES
  - .2 FINAL APPROVED SHOP DRAWINGS
  - .3 SCHEDULES
  - .4 WHMIS MANUAL
- .3 MECHANICAL
  - .1 TESTING, ADJUSTING AND BALANCING (TAB) REPORTS
  - .2 OPERATION AND MAINTENANCE MANUAL
  - .3 DEMONSTRATION AND OPERATING AND MAINTENANCE INSTRUCTION
  - .4 INDIVIDUAL EQUIPMENT CERTIFICATION AND TRAINING SESSION OUTLINED IN MECHANICAL SECTIONS.
- .4 ELECTRICAL
  - .1 OPERATION AND MAINTENANCE MANUAL
  - .2 ELECTRICAL INSPECTION CERTIFICATE
  - .3 F/A VERIFICATION CERTIFICATE (WHERE APPLICABLE)
  - .4 DEMONSTRATION AND OPERATING AND MAINTENANCE INSTRUCTION. GENERAL INSTRUCTIONS SUBMITTALS

MORRIS
Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-15	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
ARCHITECTURAL
Notes
General Instructions
Submittals

Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

A100

GENERAL MATERIALS

1 SUSPENDED CEILING GRID:

.1 REFERENCES:
- .1 ASTM C 635, SPECIFICATIONS FOR THE MANUFACTURE, PERFORMANCE AND TESTING OF METAL SUSPENSION SYSTEMS FOR ACOUSTICAL TILE AND LAY-IN PANEL CEILINGS.
- .2 ASTM C 636, PRACTICE FOR INSTALLATION OF METAL CEILING SUSPENSION SYSTEMS FOR ACOUSTICAL TILE AND LAY-IN PANELS.

.2 DESIGN REQUIREMENTS - MAXIMUM DEFLECTION: 1/360th OF SPAN TO ASTM C 635 DEFLECTION TEST.

.3 MATERIALS:
- .1 INTERMEDIATE DUTY SYSTEM TO ASTM C635.
- .2 BASIC MATERIALS FOR SUSPENSION SYSTEM: COMMERCIAL QUALITY COLD ROLLED STEEL MILL FINISHED.
- .3 SUSPENSION SYSTEM: FIRE RATED, TWO DIRECTIONAL EXPOSED TEE BAR GRID SYSTEM.
- .4 EXPOSED TEE BAR GRID COMPONENTS: SHOP PAINTED SATIN SHEEN WHITE. COMPONENTS DIE CUT. MAIN TEE WITH DOUBLE WEB, RECTANGULAR BULB AND 25 MM ROLLED CAP ON EXPOSED FACE. CROSS TEE WITH RECTANGULAR BULB, WEB EXTENDED TO FORM POSITIVE INTERLOCK WITH MAIN TEE WEBS, LOWER FLANGE EXTENDED AND OFFSET TO PROVIDE FLUSH INTERSECTION.
- .5 HANGER WIRE: GALVANIZED, SOFT-ANNEALED STEEL WIRE 3.6mm (1/8") DIA. FOR ACCESS TILE CEILINGS.
- .6 HANGER BRACKETS: PURPOSE MADE FOR PROPER CONNECTION.
- .7 ACCESSORIES: SPLICES, CLIPS, WIRE TIES, RETAINERS AND WALL MOLDING FLUSH, TO COMPLEMENT SUSPENSION SYSTEM COMPONENTS, AS RECOMMENDED BY SYSTEM MANUFACTURER.

.4 INSTALLATION:
- .1 INSTALLATION IN ACCORDANCE WITH ASTM C636 EXCEPT WHERE SPECIFIED OTHERWISE.
- .2 INSTALL SUSPENSION SYSTEM TO MANUFACTURER'S INSTRUCTIONS.
- .3 DO NOT ERECT CEILING SUSPENSION SYSTEM UNTIL WORK ABOVE CEILING HAS BEEN INSPECTED BY ENGINEER.
- .4 SECURE HANGERS TO EXISTING OR NEW STRUCTURAL STEEL SUPPORTS.
- .5 INSTALL HANGERS SPACED AT MAXIMUM 1200mm (48") CENTRES AND WITHIN 150mm (6") FROM ENDS OF MAIN TEES.
- .6 LAY OUT CENTRE LINE OF CEILING BOTH WAYS, TO PROVIDE BALANCED BORDERS AT PERIMETER WITH BORDER UNITS NOT LESS THAN 50% OF STANDARD UNIT WIDTH, ALSO REFER TO REFLECTED CEILING PLAN.
- .7 ENSURE SUSPENSION SYSTEM IS CO-ORDINATED WITH LOCATION OF RELATED COMPONENTS.
- .8 INSTALL WALL MOLDING TO PROVIDE CORRECT CEILING HEIGHT.
- .9 COMPLETED SUSPENSION SYSTEM TO SUPPORT SUPER-IMPOSED LOADS, SUCH AS LIGHTING FIXTURES DIFFUSERS GRILLES AND SPEAKERS.
- .10 INTERLOCK ATTACH CROSS MEMBER TO MAIN RUNNER TO PROVIDE RIGID ASSEMBLY.
- .11 FINISHED CEILING SYSTEM TO BE SQUARE WITH ADJOINING WALLS AND LEVEL WITHIN 1:1000.
- .12 TOUCH UP SCRATCHES, ABRASIONS, VOIDS AND OTHER DEFECTS IN PAINTED SURFACES.

2 SUSPENDED CEILING TILE:

.1 REFERENCES:
- .1 ASTM C 423-02A, STANDARD TEST METHOD FOR SOUND ABSORPTION AND SOUND ABSORPTION COEFFICIENTS BY THE REVERBERATION ROOM METHOD.
- .2 ASTM E 1264-98, STANDARD CLASSIFICATION FOR ACOUSTICAL CEILING PRODUCTS.
- .3 CAN/CGSB 92.1-M89, SOUND ABSORPTIVE PREFABRICATED ACOUSTICAL UNITS.
- .4 CAN/ULC-S102-2003, SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS AND ASSEMBLIES.

.2 MATERIALS:
- .1 ACOUSTIC UNITS FOR SUSPENDED CEILING SYSTEM:
  - .1 TO CAN/CGSB-92.1 ASTM E 1264.
  - .2 610mm x 1220mm (24" x 48"), SQUARE EDGE, WHITE.
  - .3 ACCEPTABLE PRODUCT: CELOTEX PBT 197 BY CERTAINTEED.

.3 INSTALLATION:
- .1 DO NOT INSTALL ACOUSTICAL PANELS AND TILES UNTIL WORK ABOVE CEILING HAS BEEN INSPECTED BY ENGINEER.
- .2 INSTALL ACOUSTICAL PANELS AND TILES IN CEILING SUSPENSION SYSTEM.
- .3 SCRIBE ACOUSTIC UNITS TO FIT ADJACENT WORK. BUTT JOINTS TIGHT, TERMINATE EDGES WITH MOLDING.
- .4 CO-ORDINATE CEILING WORK TO ACCOMMODATE COMPONENTS OF OTHER SECTIONS, SUCH AS LIGHT FIXTURES, SPEAKERS, SMOKE DETECTORS, TO BE BUILT INTO ACOUSTICAL CEILING COMPONENTS.

3 WALL REPAIR & PATCH:

.1 REFERENCES:
- .1 MPI ARCHITECTURAL PAINTING SPECIFICATIONS MANUAL, 2004.

.2 MATERIALS:
- .1 PAINT MANUFACTURERS: SEE PAINT SPECIFICATIONS.
- .2 PROVIDE PAINT MATERIALS FOR PAINT SYSTEMS FROM SINGLE MANUFACTURER.
- .3 CONFORM TO LATEST MPI REQUIREMENTS FOR INTERIOR PAINTING WORK INCLUDING PREPARATION AND PRIMING.
- .4 MATERIALS (PRIMERS, PAINTS, ETC.) IN ACCORDANCE WITH MPI ARCHITECTURAL PAINTING SPECIFICATION MANUAL "APPROVED PRODUCT" LIST - SEE SPECIFICATION DRAWINGS FOR ACCEPTABLE PRODUCT LIST.
- .5 COLOURS TO MATCH EXISTING.

.3 INSTALLATION:
- .1 REPAIR AND PATCH OPENINGS IN PREPARATION FOR PAINT, WITH GROUT AND IN-FILL MATERIAL THAT MATCHES AND IS COMPATIBLE WITH SURROUNDING FINISHES.
- .2 CONCRETE HORIZONTAL SURFACES: FLOORS
  - .1 FLOOR ENAMEL G5 (TRADITIONAL SEMI-GLOSS) FINISH.
  - .2 CONCRETE VERTICAL SURFACES: WALLS AND CEILINGS.
    - .1 G5 (TRADITIONAL SEMI GLOSS) FINISH.
  - .3 CONCRETE BLOCK VERTICAL SURFACES: WALLS.
    - .1 G5 (TRADITIONAL SEMI GLOSS) FINISH.
  - .4 PLASTER AND GYPSUM BOARD: GYPSUM WALLBOARD, DRYWALL, "SHEET ROCK TYPE MATERIAL", AND TEXTURED FINISHES
    - .1 G3 (EGGSHELL FINISH, OVER LATEX SEALER).

4 DRYWALL:

.1 15.9mm ABUSE RESISTANT TYPE 'X' GYP. BOARD - FIBREROCK 15.9mm THICK, 1200mm WIDE x MAXIMUM PRACTICAL LENGTH, ENDS SQUARE CUT, EDGES BEVELED.

5 RUBBER BASE:

.1 RUBBER BASE TRIM: DURACOVE OR JOHNSONITE 100mm BLACK OR TO MATCH EXISTING. CONTRACTOR TO CONFIRM TRIM COLOUR & PROFILE OF EXISTING TRIM TO PROPERLY MATCH. AS REQUIRED - REPLACE ENTIRE SECTIONS OF TRIM AT DEMOLITION AREAS TO PREVENT UNSIGHTLY JOINTS AND SEAMS .

MILLWORK

GENERAL NOTES:

1. ENSURE THAT ALL WORK COMPLIES WITH LATEST REQUIREMENTS OF THE ONTARIO BUILDING CODE, CONSTRUCTION SAFETY ACT, LOCAL CODES AND BYLAWS, AND OTHER APPLICABLE REQUIREMENTS.
2. DO NOT SCALE MEASUREMENTS FROM THE DRAWINGS.
3. VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE, REPORT DISCREPANCIES TO PROJECT MANAGER, AND ADJUST DRAWINGS AS REQ'D TO SUIT.
4. PROVIDE BLOCKING IN EXISTING STUD SPACES AS REQ'D FOR INSTALLATION OF ALL ITEMS, INCLUDING (BUT NOT LIMITED TO): SINKS, VANITIES, COUNTERTOPS, WASHROOM ACCESSORIES, BENCHES, SHELVES, MILLWORK AND EQUIPMENT. REINSTATE AFFECTED SURFACES TO SEAMLESS APPEARANCE USING CGC VHI BOARD, THICKNESS AS REQ'D TO SUIT. WHERE EXISTING SURFACES ARE AFFECTED, PREPARE AND REPAINT ENTIRE SURFACE T.M.E. IN ACCORDANCE WITH M.P.I. PRINTED BEST PRACTICES.
5. COORDINATE WORK w/ MECH. & ELEC. SUBTRADES AS REQ'D.
6. MILLWORK MAY SPECIFIED IN EITHER MAPLE OR OAK FINISH. CONFIRM WITH OWNER PRIOR TO START OF PROJECT.

1 MATERIALS:

.1 HARDWOOD LUMBER: SELECT WHITE MAPLE SPECIES (CONFIRM WITH OWNER IF MAPLE OR OAK TO BE USED), MOISTURE CONTENT 6% OR LESS IN ACCORDANCE WITH:
- .1 NATIONAL HARDWOOD LUMBER ASSOCIATION (NHLA),
- .2 AWMAC CUSTOM GRADE, MOISTURE CONTENT AS SPECIFIED.

.2 HARDWOOD PLYWOOD: TO CSA 0115 VENEER CORE, FLAT CUT SELECT WHITE MAPLE (CONFIRM WITH OWNER IF MAPLE OR OAK TO BE USED).

.3 DOUGLAS FIR PLYWOOD: TO CSA 0121, STANDARD CONSTRUCTION G1S.

.4 EDGE FINISHING:
- .1 HARDWOOD VENEERED PLYWOOD: 6mm THICK MATCHING HARDWOOD EDGE, GLUED & NAILED. AT TOP OF LOW BOOKSHELVES PROVIDE 19x25 HARDWOOD TO MATCH, GLUED AND NAILED.

.5 LAMINATED PLASTIC FOR FLATWORK: TO CAN3-A172-M79, GRADE G.P., TYPE 1b, 1.6mm THICK, BASED ON FULL COLOUR RANGE WITH FURNITURE FINISH.

.6 LAMINATE PLASTIC FOR POSTFORMING WORK: TO CAN3-A172-M79, GRADE PF, TYPE 2A, 1.25MM THICK, BASED ON FULL COLOUR RANGE WITH FURNITURE FINISH.

.7 LAMINATED PLASTIC BACKING SHEET: GRADE BK, NOT LESS THAN 0.5mm THICK, SAME COLOUR AS FACE LAMINATE.

.8 NAILS AND STAPLES: TO CSA B111.

.9 WOOD SCREWS: STEEL PLAIN, TYPE AND SIZE TO SUIT APPLICATION.

.10 SPLINES: WOOD.

.11 SEALANT: CLEAR SILICONE.

.12 LAMINATED PLASTIC ADHESIVE: UREA RESIN ADHESIVE TO CSA O112.5:
- .1 TEST FOR ACCEPTABLE VOC EMISSIONS IN ACCORDANCE WITH ASTM D2369 AND ASTM D 2832
- .2 ACCEPTABLE MATERIALS: ECP-44.

2 MANUFACTURED UNITS:

.1 CASEWORK:
- .1 FABRICATE CASEWORKS TO AWMAC CUSTOM GRADE.
- .2 FURRING, BLOCKING, NAILING STRIPS, GROUNDS AND ROUGH BUCKS, AND SLEEPERS:
  - .1 S2S IS ACCEPTABLE FOR STRAPPING.
  - .2 BOARD SIZES: "STANDARD" OR BETTER GRADE.
  - .3 DIMENSION SIZES: "STANDARD" LIGHT FRAMING OR BETTER GRADE.
- .3 GABLES, END PANELS, DIVISIONS AND BOTTOMS: 19MM THICK BIRCH PLYWOOD CORE W/ HARDWOOD VENEER AND 6MM THICK HARDWOOD EDGING TO MATCH, GLUED AND NAILED.
- .4 LOW BOOK SHELF TOPS:19 HARDWOOD PLYWOOD CORE WITH 19X25 HARDWOOD EDGING TO MATCH, GLUED AND NAILED. PROVIDE P.LAM FINISH TO TOP, TOP OF P.LAM FLUSH W/ TOP OF HARDWOOD NOSING.
- .5 BACKS: 6MM THICK PLYWOOD CORE W/ HARDWOOD VENEER FINISH.
- .6 SHELVING:
  - .1 HARDWOOD VENEER ON 19MM THICK PLYWOOD CORE W/ 6MM THICK HARDWOOD TO MATCH ON ALL EDGES, GLUED AND NAILED.
  - .2 PROVIDE ADJUSTABLE SHELVING WITH FULLY RECESSED PILASTER STRIPS UNLESS NOTED OTHERWISE, AND PROVIDE NUMBER OF CONCEALED SHELVES IN MILLWORK UPPERS AND LOWERS AS INDICATED IN SECTION FOR EACH BANK.
- .7 TOE KICK SUPPORT: SOLID CONTINUOUS 38X100 SELECT S/P/F BLOCKING RIPPED TO SUIT (REFER TO MILLWORK DRAWINGS FOR DIMENSIONS)

.2 COUNTERS AND VANITIES:
- .1 POST FORMED LAMINATE, PROFILE TO MATCH BELANGER 2300.

.3 CASEWORK DOORS:
- .1 FABRICATE DOORS TO AWMAC CUSTOM GRADE SUPPLEMENTED AS FOLLOWS: 19MM THICK HARDWOOD PLYWOOD CORE W/ HARDWOOD VENEER FINISH AND 6MM THICK HARDWOOD EDGING TO MATCH, GLUED AND NAILED.

.4 HORIZONTAL DIVIDERS:
- .1 13MM THICK PLYWOOD CORE W/ HARDWOOD VENEER FINISH AND 6MM THICK HARDWOOD EDGING TO MATCH, GLUED AND NAILED.

3 HARDWARE LIST:

.1 PULLS: D-TYPE, 100MM WIDE, 7.9MM DIA, 33MM PROJECTION, BRUSHED NICKEL FINISH.

.2 CUPBOARD HINGES: FULLY CONCEALED 110DEG MODULAR OPENING, SELF CLOSING, HETTICH MODEL #742-T-42.

.3 CUPBOARD AND DRAWER LOCKS: INSTALL AT ADMINISTRATION ROOMS & FACULTY OFFICES ONLY - TIMBERLINE #232.12.302 (HAFELE) OR BOARD APPROVED EQUIVALENT, KEY ALIKE IN EACH ROOM, FOUR KEYS PER ROOM, FINISH TO MATCH ADJACENT HARDWARE.

.4 SURFACE BOLTS: HAFELE 900.17 SATIN NICKEL PLATED BRASS, ON ALL DOUBLE DOORS TO BE LOCKED.

.5 GROMMETS: 50MM DIA. (PROVIDE GROMMETS FOR WIRE HOLES IN COUNTERTOPS AS DIRECTED BY PROJECT MANAGER).

.6 PILASTER STRIPS: FULLY RECESSED, NICKEL PLATED STEEL WITH SHELF CLIPS TO MATCH.

.7 PIANO HINGE: STAINLESS STEEL PIANO HINGE.

4 FABRICATION:

.1 SET NAILS & COUNTERSINK SCREWS, APPLY WOOD FILLER (COLOUR TO MATCH HARDWOOD) TO INDENTATIONS, SAND SMOOTH & LEAVE READY TO RECEIVE FINISH.

.2 SHOP INSTALL CABINET HARDWARE FOR DOORS, SHELVES AND DRAWERS. RECESS SHELF STANDARDS UNLESS NOTED OTHERWISE.

.3 MAKE SHELVING FOR CABINETWORK ADJUSTABLE UNLESS NOTED OTHERWISE.

.4 PROVIDE CUTOUTS FOR PLUMBING FIXTURES, INSERTS, APPLIANCES, OUTLET BOXES AND OTHER FIXTURES.

.5 SHOP ASSEMBLE WORK FOR DELIVERY TO SITE IN SIZE EASILY HANDLED AND TO ENSURE PASSAGE THROUGH BUILDING OPENINGS.

.6 OBTAIN GOVERNING DIMENSIONS BEFORE FABRICATING ITEMS WHICH ARE TO ACCOMMODATE OR ABUT APPLIANCES, EQUIPMENT AND OTHER MATERIALS.

.7 ENSURE ADJACENT PARTS OF CONTINUOUS LAMINATE WORK MATCH IN COLOUR AND PATTERN.

.8 VENEER LAMINATED PLASTIC TO CORE MATERIAL IN ACCORDANCE WITH ADHESIVE MFR'S PRINTED INSTRUCTIONS. ENSURE CORE AND LAMINATE PROFILES COINCIDE TO PROVIDE CONTINUOUS SUPPORT AND BOND OVER ENTIRE SURFACE.

.9 WHERE P.LAM FINISH IS REQ'D, USE STRAIGHT SELF-EDGING LAMINATE STRIP FOR FLATWORK TO COVER EXPOSED EDGE OF CORE MATERIAL. CHAMFER EXPOSED EDGES UNIFORMLY AT APPROX. 20 DEGREES. DO NOT MITRE LAMINATE EDGES.

.10 APPLY LAMINATE BACKING SHEET TO REVERSE SIDE OF CORE OF PLASTIC LAMINATE SHEET.

.11 FOR HARDWOOD VENEER PLYWOOD OR MDF, APPLY 6MM HARDWOOD EDGING.

5 FINISHING:

.1 SET NAILS, APPLY WOOD FILLER (COLOUR TO MATCH HARDWOOD) TO OPEN GRAIN AND INDENTATIONS, SAND SMOOTH, AND LEAVE READY TO RECEIVE FINISH.

.2 EXCEPT AS NOTED OTHERWISE, ALL HARDWOOD AND HARDWOOD VENEER TO RECEIVE TWO COATS OF WATER-CLEAR GLOSS POLYURETHANE, AND ONE TOP COAT OF WATER-CLEAR SATIN POLYURETHANE FINISH, PREPARED AND INSTALLED IN ACCORDANCE W/ M.P.I.'S PRINTED BEST PRACTICES.

.3 FINISH WOOD & WOOD VENEERED MILLWORK IN PUBLIC CORRIDORS WITH ULC-RATED CRYSTAL-CLEAR CLASS "B" INTUMESCENT FIRE RETARDANT VARNISH SYSTEM SUITABLE FOR ITEMS SUBJECT TO CONSTANT SCUFFING &/OR FREQUENT WASHING ("FLAME CONTROL NO. 130" VARNISH OVERCOAT OVER "FLAME CONTROL NO. 129 BASE COAT" BY FLAME CONTROL COATINGS, LLC, OR BOARD APPROVED ALTERNATE). APPLY FINISHING SYSTEM IN ACCORDANCE W/ MFR'S PRINTED BEST PRACTICES AS REQ'D TO ACHIEVE FIRE RETARDANT RATINGS.

.4 FOR TOP OF HORIZONTAL HARDWOOD AND HARDWOOD VENEERED SURFACES (SHELVES, COUNTERTOPS, BENCHES, OTHER THAN THOSE LISTED IN 3 ABOVE) PROVIDE TWO COATS EASTERN RESINS CORP. GLAZE SHIELD HP 100% SOLIDS CLEAR EPOXY COATING (SUPPLIER RANDALL PAINTS).

.5 ALL HARDWOOD AND HARDWOOD VENEER TO HAVE CONCEALED FASTENINGS WHERE POSSIBLE, OTHERWISE RECESS SCREWS AND BOLTS AND PLUG HOLES WITH MIN. 6MM THICK WOOD PLUGS (SPECIES, COLOUR, GRAIN AND GRAIN ORIENTATION TO MATCH HARDWOOD). SAND PLUGGED AREAS SMOOTH TO RECEIVE FINISH. WHERE FINISHING NAILS ARE USED, INSET NAILS AT REGULAR INTERVALS IN STRAIGHT LINES FOR NEAT AND EVEN APPEARANCE. APPLY FILLER (COLOUR TO MATCH WOOD) AND SAND SMOOTH READY TO RECEIVE FINISH.

.6 FACTORY FINISH ALL HARDWOOD AND HARDWOOD VENEER ON ALL SURFACES, AND LIMIT ON-SITE WORK TO TOUCH-UPS ONLY.

6 EXECUTION:

.1 DO ARCHITECTURAL WOODWORK TO AWMAC QUALITY STANDARDS UNLESS SPECIFIED OTHERWISE.

.2 INSTALL PREFINISHED MILLWORK POSITIONED ACCURATELY, LEVEL, PLUMB AND STRAIGHT.

.3 FASTEN AND ANCHOR MILLWORK SECURELY. PROVIDE HEAVY DUTY FIXTURE ATTACHMENTS FOR WALL MOUNTED CABINETS.

.4 USE DRAW BOLTS IN COUNTERTOP JOINTS.

.5 SCRIBE AND CUT MILLWORK AS REQ'D TO FIT ABUTTING SURFACES, TO FIT TIGHTLY INTO RECESSES, AND TO ACCOMMODATE PIPING, COLUMNS, FIXTURES, OUTLETS AND/OR OTHER PROJECTING, INTERSECTING OR PENETRATING OBJECTS/SURFACES.

.6 APPLY WATER RESISTANT BUILDING PAPER BITUMINOUS COATING OVER WOOD FRAMING MEMBERS IN CONTACT WITH MASONRY OR CEMENTITIOUS CONSTRUCTION.

.7 FIT HARDWARE ACCURATELY AND SECURELY IN ACCORDANCE WITH MFR'S PRINTED INSTRUCTIONS.

7 CLEANING:

.1 CLEAN AFTER INSTALLATION TO REMOVE CONSTRUCTION DEBRIS & ACCUMULATED ENVIRONMENTAL DIRT.

.2 CLEAN IN ACCORDANCE WITH NEMA LD 3, ANNEX B.

.3 REMOVE ALL TRACES OF PRIMER, PAINT, CAULKING, EPOXY & FILLER MATERIALS. CLEAN DOORS AND FRAMES. CLEAN WORK AREA, AND ACCESS TO WORK AREA.

.4 PROTECT MILLWORK AND CABINET WORK FROM DAMAGE UNTIL FINAL INSPECTION.

METAL FABRICATIONS

GENERAL NOTES:

1. SUBMIT SHOP DRAWINGS OF METAL FABRICATIONS INDICATING MATERIALS, CORE THICKNESSES, FINISHES, CONNECTIONS, JOINTS, METHODS OF ANCHORAGE, NUMBER OF ANCHORS, SUPPORTS, REINFORCEMENT, DETAILS AND ACCESSORIES.
2. SUBMIT TO PROJECT MANAGER ONE SAMPLE OF EACH METAL FABRICATION REQUIRED FOR THE PROJECT FOR REVIEW AND COMMENT BEFORE FABRICATING THE BALANCE OF ITEMS REQUIRED.

1 MATERIALS:

.1 STEEL SECTIONS AND PLATES: TO CAN/CSA-G40.20/G40.21, GRADE 300W;

.2 WELDING MATERIALS: TO CSA W59;

.3 WELDING ELECTRODES: TO CSA W48 SERIES;

.4 BOLTS AND ANCHOR BOLTS: TO ASTM A 307;

2 FABRICATION:

.1 FABRICATE WORK SQUARE, TRUE, STRAIGHT AND ACCURATELY SIZED, W/ CLOSELY FITTING JOINTS.

.2 ENSURE SECURE INSTALLATION OF FABRICATIONS

.3 USE SELF-TAPPING SHAKE-PROOF FLAT HEADED SCREWS ON ITEMS REQUIRING ASSEMBLY BY SCREWS UNLESS NOTED OTHERWISE

.4 WHERE POSSIBLE, FIT AND SHOP ASSEMBLE WORK, READY FOR ERECTION.

.5 ENSURE EXPOSED WELDS ARE CONTINUOUS FOR LENGTH OF EACH JOINT. FILE OR GRIND EXPOSED WELDS SMOOTH AND FLUSH. REMOVE ALL WELD SPATTER. PREPARE METAL FABRICATIONS TO SMOOTH AND FLAT SURFACES WITH SEAMLESS APPEARANCES.

3 FINISHES:

.1 APPLY ONE SHOP COAT OF PRIMER TO METAL ITEMS (PRIMER TO CISC/CPMA 2075 QUICK DRYING PRIMER, LOW VOC)

.2 USE PRIMER UNADULTERATED, AS PREPARED BY MANUFACTURER. PAINT ON DRY SURFACES, FREE FROM RUST, SCALE, GREASE. DO NOT PAINT WHEN TEMPERATURE IS LOWER THAN 7 DEGREES CELSIUS.

.3 CONFORM TO LATEST MPI REQUIREMENTS FOR INTERIOR PAINTING WORK INCLUDING PREPARATION AND PRIMING

.4 MATERIALS (PRIMERS, PAINTS, COATINGS, FILLERS, SOLVENTS, THINNERS, ETC) SHALL BE IN ACCORDANCE WITH MPI PAINTING SPECIFICATION MANUAL "APPROVED PRODUCT" LISTING AND SHALL BE FROM A SINGLE MANUFACTURER FOR EACH SYSTEM USED.

.5 WHERE NOTED, PROVIDE SEMI-GLOSS POWDER COATED FINISH, COLOUR TO LATER DETERMINATION BY PROJECT MANAGER, OTHERWISE, FINISH METAL FABRICATIONS IN COLOUR SELECTED BY PROJECT MANAGER WITH MPI INT 5.1E ALKYD G3 (EGG'S SHELL): PRIMER COAT OVER SHOP PRIMER (MPI#76): ICI PAINTS (CANADA) DEVOE MULTI-PURPOSE TANK & STRUCTURAL PRIMER 4160-1000, TWO TOP COATS (MPI#151): ICI PAINTS (CANADA) GLIDDEN ULTRA INTERIOR ALKYD EGGSHELL, 95010.

.6 SHOP APPLY PAINTS BY SPRAY TO METAL FABRICATIONS PRIOR TO BRINGING METAL FABRICATIONS TO SITE. FIELD TOUCH UP FABRICATIONS AS REQ'D AFTER INSTALLATION. WHERE TOUCH UP IS REQ'D, REFINISH ENTIRE METAL FABRICATION.

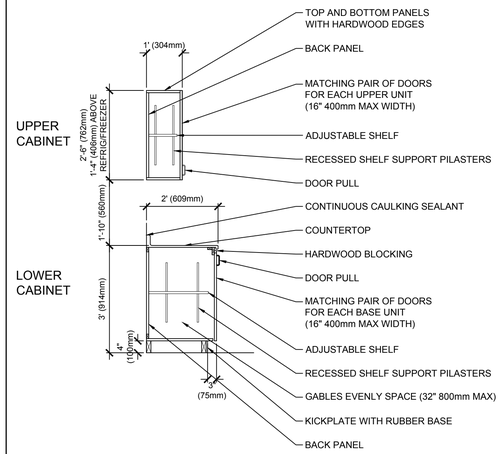
4 EXECUTION:

.1 DO WELDING WORK IN ACCORDANCE WITH CSA W59 UNLESS NOTED OTHERWISE

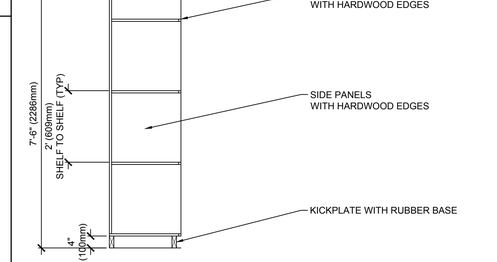
.2 CONSTRUCT MILLWORK SUPPORTS AND ACCESSORIES FOR ITEMS SUCH AS VANITY SUPPORTS, SHELF SUPPORTS, SEAT SUPPORTS, COAT HOOKS, AND SIMILAR ITEMS AS DETAILED.

.3 ERECT METAL FABRICATIONS SQUARE, PLUMB, STRAIGHT AND TRUE, ACCURATELY FITTED WITH TIGHT JOINTS AND INTERSECTIONS

.4 EXPOSED FASTENING DEVICES TO MATCH THE FINISH AND BE COMPATIBLE WITH THE MATERIAL THROUGH WHICH THEY PASS



1 / A101 — UPPER & LOWER CABINETS
SCALE: 1/2" = 1"



2 / A101 — SHELVING
SCALE: 1/2" = 1"

MORRIS Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-15	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
ARCHITECTURAL
Notes
General Materials
Millwork, Metal Fab.

Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

A101

PAINT & FINISHING

1 GENERAL:

.1 REFERENCES:
- .1 ARCHITECTURAL PAINTING SPECIFICATIONS MANUAL, MASTER PAINTERS INSTITUTE (MPI).
- .2 SYSTEMS AND SPECIFICATIONS MANUAL. SSPC PAINTING MANUAL, VOLUME TWO, SOCIETY FOR PROTECTIVE COATING (SSPC).
- .3 TEST METHOD FOR MEASURING TOTAL VOLATILE ORGANIC COMPOUND CONTENT OF CONSUMER PRODUCTS, METHOD 24 (FOR SURFACE COATINGS) OF THE ENVIRONMENTAL PROTECTION AGENCY (EPA).
- .4 NATIONAL FIRE CODE OF CANADA.
- .5 GS-11 GREEN SEAL ENVIRONMENTAL STANDARD - PAINTS.
- .6 GS-03 GREEN SEAL ENVIRONMENTAL STANDARD - ANTI-CORROSIVE PAINTS.

.2 QUALITY ASSURANCE:
- .1 CONTRACTOR SHALL HAVE A MINIMUM OF FIVE YEARS PROVEN SATISFACTORY EXPERIENCE. WHEN REQUESTED, PROVIDE A LIST OF LAST THREE COMPARABLE JOBS INCLUDING, JOB NAME AND LOCATION, SPECIFYING AUTHORITY, AND PROJECT MANAGER.
- .2 QUALIFIED JOURNEYMAN WHO HAVE A "TRADESMAN QUALIFICATION CERTIFICATE OF PROFICIENCY" SHALL BE ENGAGED IN PAINTING WORK. APPRENTICES MAY BE EMPLOYED PROVIDED THEY WORK UNDER THE DIRECT SUPERVISION OF A QUALIFIED JOURNEYMAN IN ACCORDANCE WITH TRADE REGULATIONS.
- .3 CONFORM TO LATEST MPI REQUIREMENTS FOR INTERIOR PAINTING WORK INCLUDING PREPARATION AND PRIMING.
- .4 MATERIALS (PRIMERS, PAINTS, COATINGS, VARNISHES, STAINS, LACQUERS, FILLERS, THINNERS, SOLVENTS, ETC.) SHALL BE IN ACCORDANCE WITH WITH MPI PAINTING SPECIFICATIONS MANUAL "APPROVED PRODUCT" LIST AND SHALL BE FROM A SINGLE MANUFACTURER FOR EACH SYSTEM USED.
- .5 OTHER PAINT MATERIALS SUCH AS LINSEED OIL, SHELLAC, TURPENTINE, ETC. SHALL BE THE HIGHEST QUALITY PRODUCT OF AN APPROVED MANUFACTURER LISTED IN MPI PAINTING SPECIFICATION MANUAL AND SHALL BE COMPATIBLE WITH OTHER COATING MATERIALS AS REQUIRED.
- .6 RETAIN PURCHASE ORDERS, INVOICES AND OTHER DOCUMENTS TO PROVE CONFORMANCE WITH NOTED MPI REQUIREMENTS WHEN REQUESTED BY THE ENGINEER.
- .7 STANDARD OF ACCEPTANCE:
  - .1 WALLS: NO DEFECTS VISIBLE FROM A DISTANCE OF 1000mm AT 900mm TO SURFACE.
  - .2 CEILINGS: NO DEFECTS VISIBLE FROM FLOOR AT 450mm TO SURFACE WHEN VIEWED USING FINAL LIGHTING SOURCE.
  - .3 FINAL COAT TO EXHIBIT UNIFORMITY OF COLOUR AND UNIFORMITY OF SHEEN ACROSS FULL SURFACE AREA.

.3 SITE REQUIREMENTS:
- .1 HEATING, VENTILATION AND LIGHTING:
  - .1 PERFORM NO PAINTING WORK UNLESS ADEQUATE AND CONTINUOUS VENTILATION AND SUFFICIENT HEATING FACILITIES ARE IN PLACE TO MAINTAIN AMBIENT AIR AND SUBSTRATE TEMPERATURES ABOVE 10 DEG.C FOR 24 HOURS BEFORE, DURING AND AFTER PAINT APPLICATION UNTIL PAINT HAS CURED SUFFICIENTLY.
  - .2 WHERE REQUIRED, PROVIDE CONTINUOUS VENTILATION FOR SEVEN DAYS AFTER COMPLETION OF APPLICATION OF PAINT.
  - .3 COORDINATE USE OF EXISTING VENTILATION SYSTEM WITH THE CONTRACTOR AND ENSURE ITS OPERATION DURING AND AFTER APPLICATION OF PAINT AS REQUIRED.
  - .4 PROVIDE TEMPORARY VENTILATING AND HEATING EQUIPMENT WHERE PERMANENT FACILITIES ARE NOT AVAILABLE OR SUPPLEMENTAL VENTILATING AND HEATING EQUIPMENT IF VENTILATION AND HEATING FROM EXISTING SYSTEM IS INADEQUATE TO MEET MINIMUM REQUIREMENTS.
  - .5 PERFORM NO PAINTING WORK UNLESS A MINIMUM LIGHTING LEVEL OF 323LUX IS PROVIDED ON SURFACES TO BE PAINTED.
- .2 TEMPERATURE, HUMIDITY AND SUBSTRATE MOISTURE CONTENT LEVELS:
  - .1 UNLESS SPECIFICALLY ACCEPTED BY THE OWNER, ENGINEER AND THE APPLIED PRODUCT MANUFACTURER, PERFORM NO PAINTING WORK WHEN:
    - .1 AMBIENT AIR AND SUBSTRATE TEMPERATURES ARE BELOW 10 DEG.C.
    - .2 SUBSTRATE TEMPERATURE IS OVER 32 DEG.C., UNLESS PAINT IS SPECIFICALLY FORMULATED FOR APPLICATION AT HIGH TEMPERATURES.
    - .3 SUBSTRATE AND AMBIENT AIR TEMPERATURES ARE EXPECTED TO FALL OUTSIDE MPI OR PAINT MANUFACTURER'S PRESCRIBED LIMITS.
    - .4 THE RELATIVE HUMIDITY IS ABOVE 85% OR WHEN THE DEW POINT IS LESS THAN 30 DEG.C. VARIANCE BETWEEN THE AIR/SURFACE TEMPERATURE.
    - .5 RAIN OR SNOW ARE FORECAST TO OCCUR BEFORE PAINT HAS THOROUGHLY CURED OR WHEN IT IS FOGGY, MISTY, RAINING OR SNOWING AT SITE.
  - .2 PERFORM NO PAINTING WORK WHEN THE MAXIMUM MOISTURE CONTENT OF THE SUBSTRATE EXCEEDS:
    - .1 12% FOR PLASTER AND GYPSUM BOARD.
    - .2 CONDUCT MOISTURE TESTS USING A PROPERLY CALIBRATED ELECTRONIC MOISTURE METER, EXCEPT TEST CONCRETE FLOORS FOR MOISTURE USING A SIMPLE "COVER PATCH TEST".
    - .3 TEST CONCRETE, MASONRY AND PLASTER SURFACES FOR ALKALINITY AS REQUIRED.
- .3 SURFACE AND ENVIRONMENTAL CONDITIONS:
  - .1 APPLY PAINT FINISH ONLY IN AREAS WHERE DUST IS NO LONGER BEING GENERATED BY RELATED CONSTRUCTION OPERATIONS OR WHEN WIND OR VENTILATION CONDITIONS ARE SUCH THAT AIRBORNE PARTICLES WILL NOT AFFECT QUALITY OF FINISHED SURFACE.
  - .2 APPLY PAINT ONLY TO ADEQUATELY PREPARED SURFACES AND TO SURFACES WITHIN MOISTURE LIMITS NOTED HEREIN.
  - .3 APPLY PAINT ONLY WHEN PREVIOUS COAT OF PAINT IS DRY OR ADEQUATELY CURED.
- .4 ADDITIONAL INTERIOR APPLICATION REQUIREMENTS:
  - .1 APPLY PAINT FINISHES ONLY WHEN TEMPERATURE AT LOCATION OF INSTALLATION CAN BE SATISFACTORILY MAINTAINED WITHIN MANUFACTURER'S RECOMMENDATIONS.

2 PRODUCTS:

.1 MATERIALS:
- .1 PAINT MATERIALS LISTED IN THE MPI APPROVED PRODUCTS LIST (APL) ARE ACCEPTABLE FOR USE ON THIS PROJECT. PRODUCTS PROVIDED IN FOLLOWING SPECIFICATION ARE ICI/GLIDDEN/DEVOE PRODUCTS. BENJAMIN MOORE PRODUCTS THAT WHEN COMBINED MEET THE SAME MPI APPROVALS FOR EACH APPLICATION ARE APPROVED ALTERNATES.
- .2 PAINT MATERIALS FOR PAINT SYSTEMS SHALL BE PRODUCTS OF A SINGLE MANUFACTURER.

.2 COLOURS:
- .1 COLOURS TO BE LATER SELECTION BY OWNER AND APPROVED "ACCENT" COLOUR BY SAME PAINT MANUFACTURER. ONLY PAINT FROM MANUFACTURERS APPROVED BY OWNER SHALL BE USED.
- .2 SELECTION OF COLOURS WILL BE FROM MANUFACTURER'S FULL RANGE OF COLOURS.
- .3 WHERE SPECIFIC PRODUCTS ARE AVAILABLE IN A RESTRICTED RANGE OF COLOURS, SELECTION WILL BE BASED ON THE LIMITED RANGE.
- .4 SECOND COAT IN A THREE COAT SYSTEM TO BE TINTED SLIGHTLY LIGHTER COLOUR THAN TOP COAT TO SHOW VISIBLE DIFFERENCE BETWEEN COATS.

.3 MIXING AND TINTING:
- .1 PERFORM COLOUR TINTING OPERATIONS PRIOR TO DELIVERY OF PAINT TO SITE. ON-SITE TINTING OF PAINTING MATERIALS IS ALLOWED ONLY WITH THE ENGINEER PRESENT.
- .2 PASTE, POWDER OR CATALYZED PAINT MIXES SHALL BE MIXED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- .3 WHERE THINNER IS USED, ADDITION SHALL NOT EXCEED PAINT MANUFACTURER'S RECOMMENDATIONS. DO NOT USE KEROSENE OR ANY SUCH ORGANIC SOLVENTS TO THIN WATER-BASED PAINTS.
- .4 THIN PAINT FOR SPRAYING IN STRICT ACCORDANCE WITH PAINT INSTRUCTIONS IN WRITING FROM MANUFACTURER AND PROVIDE COPY OF INSTRUCTIONS TO THE ENGINEER.
- .5 RE-MIX PAINT IN CONTAINERS PRIOR TO AND DURING APPLICATION TO ENSURE BREAK-UP OF LUMPS, COMPLETE DISPERSION OF SETTLED PIGMENT, AND COLOUR AND GLOSS UNIFORMITY.

.4 GLOSS/SHEEN RATINGS:
- .1 PAINT GLOSS SHALL BE DEFINED AS THE SHEEN RATING OF APPLIED PAINT, IN ACCORDANCE WITH THE FOLLOWING VALUES:

GLOSS LEVEL CATEGORY	UNITS AT 60 DEG	UNITS AT 85 DEG
G1 - MATTE FINISH	0 TO 5	MAX. 10
G2 - VELVET FINISH	0 TO 10	10 TO 35
G3 - EGGSHELL FINISH	10 TO 25	10 TO 35
G4 - SATIN FINISH	20 TO 35	MIN. 35
G5 - SEMI-GLOSS FINISH	35 TO 70	
G6 - GLOSS FINISH	70 TO 85	
G7 - HIGH GLOSS FINISH	> 85	

- .2 GLOSS LEVEL RATINGS OF PAINTED SURFACES SHALL BE AS SPECIFIED HEREIN AND AS NOTED ON FINISH SCHEDULE.

.5 INTERIOR PAINTING SYSTEMS:
- .0 PAINT SPEC IS BASED ON GLIDDEN/ICI, BENJAMIN MOORE – ADVANCE WATERBORNE, PARA - PREMIUM HYBRID WATERBORNE ALKYD, SHERWIN WILLIAMS - PROMAR 200 WATERBORNE ALKYD & DULUX - XPERT INTERIOR WATERBORNE ALKYD - ALKYD / WATERBORNE ALKYD FINISH PAINT ONLY.
- .1 CONCRETE MASONRY UNITS (MPI INT. 4.2):
  - .1 BLOCK WALLS G3 (EGG'S SHELL):
    - .1 PRIMER COAT : ICI PAINTS (CANADA), ICI X-PERT INT/EXT LATEX BLOCKFILLER, 36250.
    - .2 TWO TOP COATS : BENJAMIN MOORE ADVANCE WATERBORNE INTERIOR ALKYD PAINT 792, PEARL FINISH, OR DULUX XPERT INTERIOR WATERBORNE ALKYD PAINT, 22010, MELAMINE FINISH..
  - .2 HOLLOW METAL DOORS AND FRAMES (OVER NON-CEMENTITIOUS PRIMER) G5 (SEMI-GLOSS):
    - .1 PRIMER COAT: RUST-OLEUM SIERRA PERFORMANCE GRIPTEC MULTI-SURFACE PRIMER 208029.
    - .2 TWO TOP COATS : BENJAMIN MOORE ADVANCE WATERBORNE INTERIOR ALKYD PAINT 792, SEMI-GLOSS FINISH, OR DULUX XPERT INTERIOR WATERBORNE ALKYD PAINT, 22010, SEMI-GLOSS FINISH.
  - .3 PLASTER AND GYPSUM BOARD:
    - .1 WALLS (EGG'S SHELL):
      - .1 PRIMER COAT: ICI PAINTS (CANADA) GLIDDEN SPEEDWALL INTERIOR LATEX SEALER, 8130.
      - .2 TWO TOP COATS : BENJAMIN MOORE ADVANCE WATERBORNE INTERIOR ALKYD PAINT 792, PEARL FINISH, OR DULUX XPERT INTERIOR WATERBORNE ALKYD PAINT, 22010, MELAMINE FINISH.
  - .4 CONCRETE SURFACES (INCLUDING CEILINGS):
    - .1 PRIMER COAT: ICI PAINTS (CANADA) GLIDDEN SPEEDWALL INTERIOR LATEX SEALER 8130.
    - .2 TWO TOP COATS: BENJAMIN MOORE ADVANCE WATERBORNE INTERIOR ALKYD PAINT 792, FLAT FINISH, OR DULUX XPERT INTERIOR WATERBORNE ALKYD PAINT, 22010, FLAT FINISH.
  - .5 WOOD CABINETRY AND MILLWORK:
    - .1 STEP 1: OPEN PORES BY WETTING BARE WOOD WITH 50/50 MIX OF DENATURED ALCOHOL AND DISTILLED WATER, THEN LET DRY.
    - .2 STEP 2: BASE STAIN COAT APPLIED 50/50 MIX OF MINWAX OIL STAIN "COLONIAL MAPLE" #223 "GOLDEN PECAN" #245 WITH LAMBWOOL APPLICATORS BRUSH AS REQUIRED TO SPREAD EVENLY. LET SIT ONE MINUTE AND REMOVE WITH 100% COTTON LINT FREE CLOTHS. LET DRY AS PER MANUFACTURER'S RECOMMENDATIONS.
    - .3 STEP 3: SANDING SEALER COAT APPLY 1 LB. CUT OF DEWAXED SHELLAC SANDING SEALER (ZINSSER BULLS EYE SEALCOAT UNIVERSAL SANDING SEALER) WITH DENATURED ALCOHOL. LET DRY 3 HOURS. SCUFF SAND SEALER TO A DULL FINISH WITH 220 GRIT PAPER. VACUUM SANDED SURFACES CLEAN. WIPE WITH A TACK CLOTH.
    - .4 STEP 4: TOP COAT APPLY 2 COATS GLOSS POLYURETHANE, 1 TOP COAT OF SATIN POLYURETHANE.
  - .6 PRODUCTS LIST ABOVE ARE FROM ICI PAINTS (CANADA). AN ACCEPTABLE APPROVED ALTERNATE PAINT MANUFACTURER THAT CAN BE USED IS THE EQUIVALENT PAINT.
  - .7 IF ALTERNATIVE PAINTS ARE USED, CONTRACTOR TO SUBMIT PAINT NAME AND PAINT NUMBER OF ALTERNATIVE PRODUCTS ALONG WITH THE CORRESPONDING MPI NUMBER TO MATCH MPI NUMBERS LISTED IN 2.5, PARAGRAPHS 2.5.1 TO AND INCLUDING 2.5.5.

3 EXECUTION:

.1 GENERAL:
- .1 PERFORM PREPARATION AND OPERATIONS FOR INTERIOR PAINTING IN ACCORDANCE WITH MPI PAINTING SPECIFICATIONS MANUAL EXCEPT WHERE SPECIFIED OTHERWISE.
- .2 APPLY PAINT MATERIALS IN ACCORDANCE WITH PAINT MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.

.2 EXISTING CONDITIONS:
- .1 INVESTIGATE EXISTING SUBSTRATES FOR PROBLEMS RELATED TO PROPER AND COMPLETE PREPARATION OF SURFACES TO BE PAINTED. REPORT TO THE ENGINEER DAMAGES, DEFECTS, UNSATISFACTORY OR UNFAVOURABLE CONDITIONS BEFORE PROCEEDING WITH WORK.
- .2 CONDUCT MOISTURE TESTING OF SURFACES TO BE PAINTED USING A PROPERLY CALIBRATED ELECTRONIC MOISTURE METER, EXCEPT TEST CONCRETE FLOORS FOR MOISTURE USING A SIMPLE "COVER PATCH TEST" AND REPORT FINDINGS TO THE ENGINEER. DO NOT PROCEED WITH WORK UNTIL CONDITIONS FALL WITHIN ACCEPTABLE RANGE AS RECOMMENDED BY MANUFACTURER.

.3 MAXIMUM MOISTURE CONTENT AS FOLLOWS:
- .1 PLASTER AND GYPSUM BOARD: 12%.
- .2 CONCRETE: 12%.

.3 PROTECTION
- .1 PROTECT EXISTING BUILDING SURFACES AND ADJACENT STRUCTURES FROM PAINT SPATTERS, MARKINGS AND OTHER DAMAGE BY SUITABLE NON-STAINING COVERS OR MASKING, IF DAMAGED, CLEAN AND RESTORE TO THE SATISFACTION OF THE ENGINEER.
- .2 PROTECT ITEMS THAT ARE PERMANENTLY ATTACHED SUCH AS FIRE LABELS ON DOORS AND FRAMES.
- .3 PROTECT FACTORY FINISHED PRODUCTS AND EQUIPMENT.
- .4 REMOVAL OF ELECTRICAL COVER PLATES, LIGHT FIXTURES, SURFACE HARDWARE ON DOORS, BATH ACCESSORIES AND OTHER SURFACE MOUNTED EQUIPMENT, FITTINGS AND FASTENINGS SHALL BE DONE PRIOR TO UNDERTAKING ANY PAINTING OPERATIONS BY THE CONTRACTOR. ITEMS SHALL BE SECURELY STORED AND RE-INSTALLED AFTER PAINTING IS COMPLETED BY THE CONTRACTOR.
- .5 MOVE AND COVER FURNITURE AND PORTABLE EQUIPMENT AS NECESSARY TO CARRY OUT PAINTING OPERATIONS. REPLACE AS PAINTING OPERATIONS PROGRESS.
- .6 AS PAINTING OPERATIONS PROGRESS, PLACE "WET PAINT" SIGNS IN OCCUPIED AREAS TO ACCEPTANCE OF THE ENGINEER.

.4 CLEANING AND PREPARATION:
- .1 CLEAN AND PREPARE SURFACES IN ACCORDANCE WITH MPI PAINTING SPECIFICATION MANUAL REQUIREMENTS. REFER TO MPI MANUAL IN REGARD TO SPECIFIC REQUIREMENTS AND AS FOLLOWS:
  - .1 REMOVE DUST, DIRT AND OTHER SURFACE DEBRIS BY VACUUMING, WIPING WITH DRY, CLEAN CLOTHS OR COMPRESSED AIR.
  - .2 WASH SURFACES WITH A BIODEGRADABLE DETERGENT AND BLEACH WHERE APPLICABLE AND CLEAN WARM WATER USING A STIFF BRISTLE BRUSH TO REMOVE DIRT, OIL AND OTHER SURFACE CONTAMINANTS.
  - .3 RINSE SCRUBBED SURFACES WITH CLEAN WATER UNTIL FOREIGN MATTER IS FLUSHED FROM SURFACE.
  - .4 ALLOW SURFACES TO DRAIN COMPLETELY AND ALLOW TO DRY THOROUGHLY.
  - .5 PREPARE SURFACES FOR WATER-BASED PAINTING, WATER-BASED CLEANERS SHOULD BE USED IN PLACE OF ORGANIC SOLVENTS.
  - .6 USE TRIGGER OPERATED SPRAY NOZZLES FOR WATER HOSES.
- .2 PREVENT CONTAMINATION OF CLEANED SURFACES BY SALTS, ACIDS, ALKALIS, OTHER CORROSIVE CHEMICALS, GREASE, OIL AND SOLVENTS BEFORE PRIME COAT IS APPLIED AND BETWEEN APPLICATIONS OF REMAINING COATS. APPLY PRIMER, PAINT, OR PRETREATMENT AS SOON AS POSSIBLE AFTER CLEANING AND BEFORE DETERIORATION OCCURS.
- .3 WHERE POSSIBLE, PRIME NEW WOOD SURFACES BEFORE INSTALLATION. USE SAME PRIMERS AS SPECIFIED FOR EXPOSED SURFACES.
  - .1 APPLY VINYL SEALER TO MPI #36 OVER KNOTS, PITCH, SAP AND RESINOUS AREAS.
  - .2 APPLY WOOD FILLER TO NAIL HOLES AND CRACKS.
  - .3 TINT FILLER TO MATCH STAINS FOR STAINED WOODWORK.
- .4 SAND AND DUST BETWEEN COATS AS REQUIRED TO PROVIDE ADEQUATE ADHESION FOR NEXT COAT AND TO REMOVE DEFECTS VISIBLE FROM A DISTANCE UP TO 1000mm.
- .5 CLEAN METAL SURFACES TO BE PAINTED BY REMOVING RUST, LOOSE MILL SCALE, WELDING SLAG, DIRT, OIL, GREASE AND OTHER FOREIGN SUBSTANCES IN ACCORDANCE WITH MPI REQUIREMENTS. REMOVE TRACES OF BLAST PRODUCTS FROM SURFACES, POCKETS AND CORNERS TO BE PAINTED BY BLOWING WITH CLEAN DRY COMPRESSED AIR, OR VACUUM CLEANING.
- .6 TOUCH UP OF SHOP PRIMERS, WITH PRIMER AS SPECIFIED IN APPLICABLE SECTION. MAJOR TOUCH-UP INCLUDING CLEANING AND PAINTING OF FIELD CONNECTIONS, WELDS, RIVETS, NUTS, WASHERS, BOLTS, AND DAMAGED OR DEFECTIVE PAINT AND RUSTED AREAS, SHALL BE BY SUPPLIER OF FABRICATED MATERIAL.
- .7 DO NOT APPLY PAINT UNTIL PREPARED SURFACES HAVE BEEN ACCEPTED BY THE ENGINEER.

.5 APPLICATION:

.1 METHOD OF APPLICATION TO BE AS ACCEPTED BY THE ENGINEER, APPLY PAINT BY BRUSH OR ROLLER. CONFORM TO MANUFACTURER'S APPLICATION INSTRUCTIONS UNLESS SPECIFIED OTHERWISE.

.2 BRUSH AND ROLLER APPLICATION:
- .1 APPLY PAINT IN A UNIFORM LAYER USING BRUSH AND/OR ROLLER OF TYPES SUITABLE FOR APPLICATION.
- .2 WORK PAINT INTO CRACKS, CREVICES AND CORNERS.
- .3 PAINT SURFACES AND CORNERS NOT ACCESSIBLE TO BRUSH USING SPRAY, DAUBERS AND/OR SHEEPSKINS. PAINT SURFACES AND CORNERS NOT ACCESSIBLE TO ROLLER USING BRUSH, DAUBERS OR SHEEPSKINS.
- .4 BRUSH AND/OR ROLL OUT RUNS AND SAGS, AND OVER-LAP MARKS. ROLLED SURFACES SHALL BE FREE OF ROLLER TRACKING AND HEAVY STIPPLES UNLESS ACCEPTED BY THE ENGINEER.
- .5 REMOVE RUNS, SAGS AND BRUSH MARKS FROM FINISHED WORK AND REPAINT.

.3 USE DIPPING, SHEEPSKINS OR DAUBERS ONLY WHEN NO OTHER METHOD IS PRACTICAL IN PLACES OF DIFFICULT ACCESS AND ONLY WHEN SPECIFICALLY ACCEPTED BY THE ENGINEER.

.4 APPLY COATS OF PAINT AS A CONTINUOUS FILM OF UNIFORM THICKNESS. REPAINT THIN SPOTS OR BARE AREAS BEFORE NEXT COAT OF PAINT IS APPLIED.

.5 ALLOW SURFACES TO DRY AND PROPERLY CURE AFTER CLEANING AND BETWEEN SUBSEQUENT COATS, FOR MINIMUM TIME PERIOD AS RECOMMENDED BY MANUFACTURER.

.6 SAND AND DUST BETWEEN COATS TO REMOVE VISIBLE DEFECTS.

.7 FINISH SURFACES BOTH ABOVE AND BELOW SIGHT LINES AS SPECIFIED FOR SURROUNDING SURFACES, INCLUDING SUCH SURFACES AS TOPS OF INTERIOR CUPBOARDS AND CABINETS AND PROJECTING LEDGES.

.8 FINISH CLOSETS AND ALCOVES AS SPECIFIED FOR ADJOINING ROOMS.

.9 FINISH TOP, BOTTOM, EDGES AND CUTOUTS OF DOORS AFTER FITTING AS SPECIFIED FOR DOOR SURFACES.

.6 MECHANICAL/ELECTRICAL EQUIPMENT:
- .1 UNLESS OTHERWISE SPECIFIED, PAINT FINISHED AREA EXPOSED, CONDUITS, PIPING, HANGERS, DUCTWORK AND OTHER MECHANICAL AND ELECTRICAL EQUIPMENT WITH COLOUR AND FINISH TO MATCH ADJACENT SURFACES, EXCEPT AS NOTED OTHERWISE.
- .2 BOILER ROOM, MECHANICAL AND ELECTRICAL ROOMS: PAINT EXPOSED CONDUITS PIPING, HANGERS, DUCTWORK AND OTHER MECHANICAL AND ELECTRICAL EQUIPMENT.
- .3 OTHER UNFINISHED AREAS: LEAVE EXPOSED CONDUITS, PIPING, HANGERS, DUCTWORK AND OTHER MECHANICAL AND ELECTRICAL EQUIPMENT IN ORIGINAL FINISH AND TOUCH UP SCRATCHES AND MARKS.
- .4 TOUCH UP SCRATCHES AND MARKS ON FACTORY PAINTED FINISHES AND EQUIPMENT WITH PAINT AS SUPPLIED BY MANUFACTURER OF EQUIPMENT.
- .5 DO NOT PAINT OVER NAMEPLATES.
- .6 PAINT INSIDE OF DUCTWORK WHERE VISIBLE BEHIND GRILLES, REGISTERS AND DIFFUSERS WITH PRIMER AND ONE COAT OF MATT BLACK PAINT.
- .7 PAINT DISCONNECT SWITCHES FOR FIRE ALARM SYSTEM AND EXIT LIGHT SYSTEMS IN RED ENAMEL.
- .8 PAINT BOTH SIDES AND EDGES OF BACKBOARDS FOR TELEPHONE AND ELECTRICAL EQUIPMENT BEFORE INSTALLATION. LEAVE EQUIPMENT IN ORIGINAL FINISH EXCEPT FOR TOUCH-UP AS REQUIRED, AND PAINT CONDUITS, MOUNTING ACCESSORIES AND OTHER UNFINISHED ITEMS.
- .9 DO NOT PAINT INTERIOR TRANSFORMERS AND SUBSTATION EQUIPMENT.

.7 FIELD QUALITY CONTROL:
- .1 ADVISE THE ENGINEER WHEN SURFACES AND APPLIED COATING IS READY FOR INSPECTION. DO NOT PROCEED WITH SUBSEQUENT COATS UNTIL PREVIOUS COAT HAS BEEN ACCEPTED.
- .2 CO-OPERATE WITH INSPECTION PERSONNEL AND PROVIDE ACCESS TO AREAS OF WORK.

.8 RESTORATION:
- .1 CLEAN AND RE-INSTALL ALL HARDWARE ITEMS REMOVED BEFORE UNDERTAKEN PAINTING OPERATIONS.
- .2 REMOVE PROTECTIVE COVERINGS AND WARNING SIGNS AS SOON AS PRACTICAL AFTER OPERATIONS CEASE.
- .3 REMOVE PAINT SPLASHINGS ON EXPOSED SURFACES THAT WERE NOT PAINTED. REMOVE SMEARS AND SPATTER IMMEDIATELY AS OPERATIONS PROGRESS, USING COMPATIBLE SOLVENT.
- .4 PROTECT FRESHLY COMPLETED SURFACES FROM PAINT DROPPINGS AND DUST TO ACCEPTED OF THE ENGINEER. AVOID SCUFFING NEWLY APPLIED PAINT.
- .5 RESTORE AREAS USED FOR STORAGE, CLEANING, MIXING AND HANDLING OF PAINT TO CLEAN CONDITION AS ACCEPTED BY THE ENGINEER.

MORRIS
Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-15	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

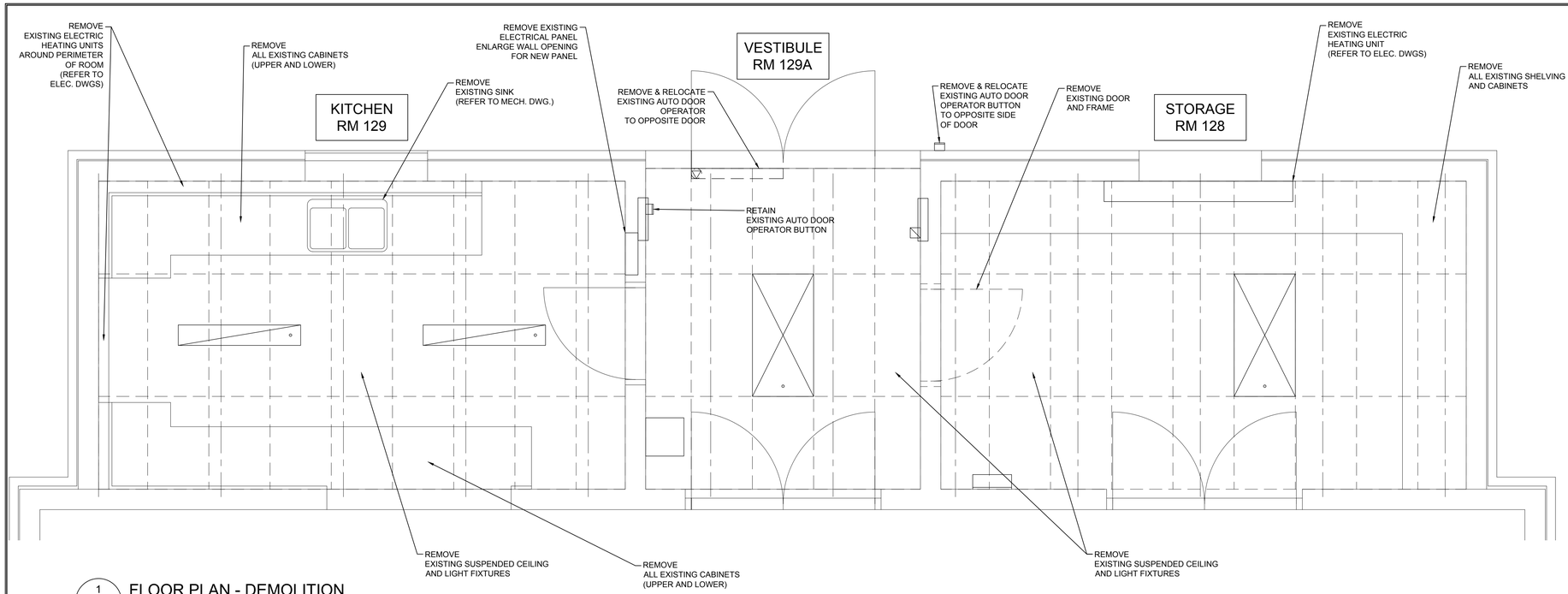
Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
ARCHITECTURAL
Notes
Paint & Finishing

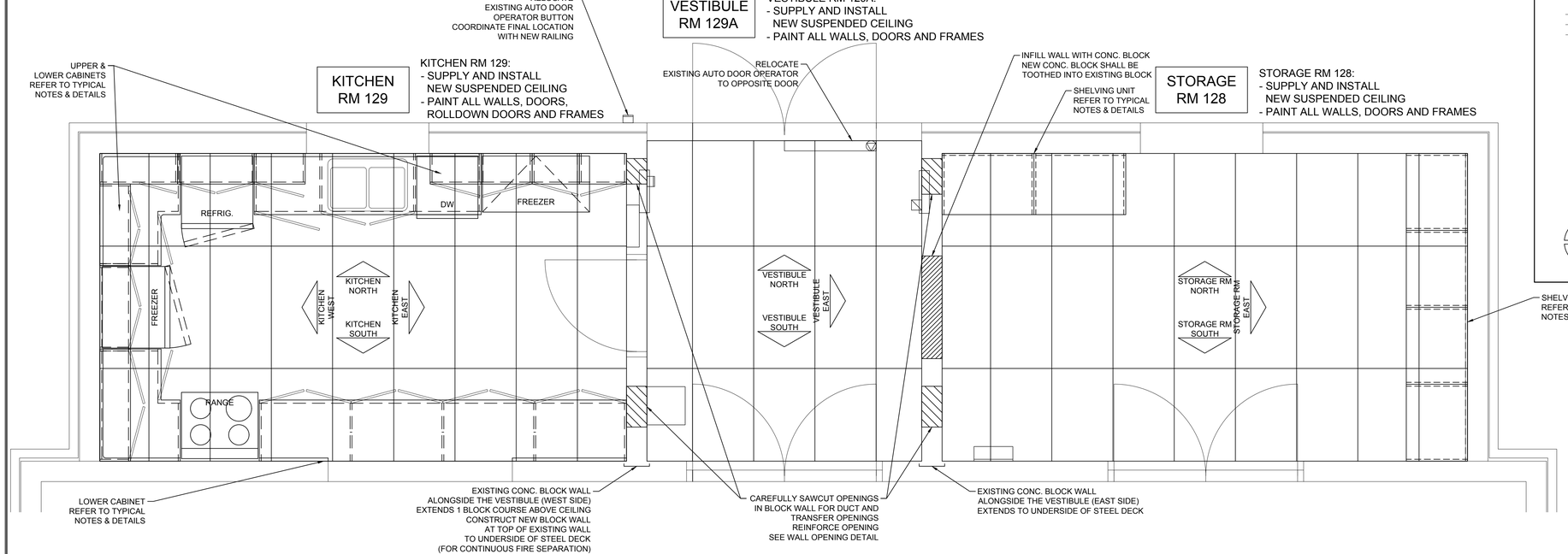
Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

A102



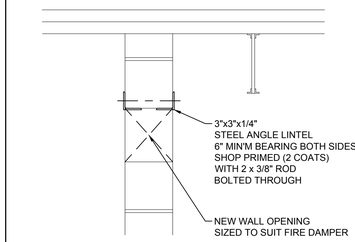
1 / A103 FLOOR PLAN - DEMOLITION

SCALE: 1/2" = 1"



2 / A103 FLOOR PLAN - NEW CONSTRUCTION

SCALE: 1/2" = 1"



3 / A103 WALL OPENING DETAIL

NTS

ROOM FINISH SCHEDULE

ROOM NO.	NAME	FLOOR		BASE		NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING				NOTES
		MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	HEIGHT	FIRE RATING	
128	STORAGE ROOM	EXISTING	-	RUBBER BASE	ALL WALLS	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PRIME, PATCH & PAINT	NEW SUSP. CLG	NEW ACOUSTIC CEILING TILE	EXISTING - 9'-10.75" NEW - 9'	-	CEILING HEIGHT TO BE APPROVED BY PROJECT MANAGER
129	KITCHEN	EXISTING	-	RUBBER BASE	ALL WALLS	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	NEW SUSP. CLG	NEW ACOUSTIC CEILING TILE	EXISTING - 9'-3.75" NEW - 9'-4"	-	COORDINATE FOLLOWING FINAL LOCATION FOLLOWING INSTALLATION OF FURNACE AND DUCT
129A	VESTIBULE	EXISTING	-	RUBBER BASE	ALL WALLS	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PRIME, PATCH & PAINT	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	EXISTING CONC. BLOCK	REPAIR, PATCH AND PAINT	NEW SUSP. CLG	NEW ACOUSTIC CEILING TILE	EXISTING - 9'-3" NEW - 9'4"	-	

MORRIS Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-15	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

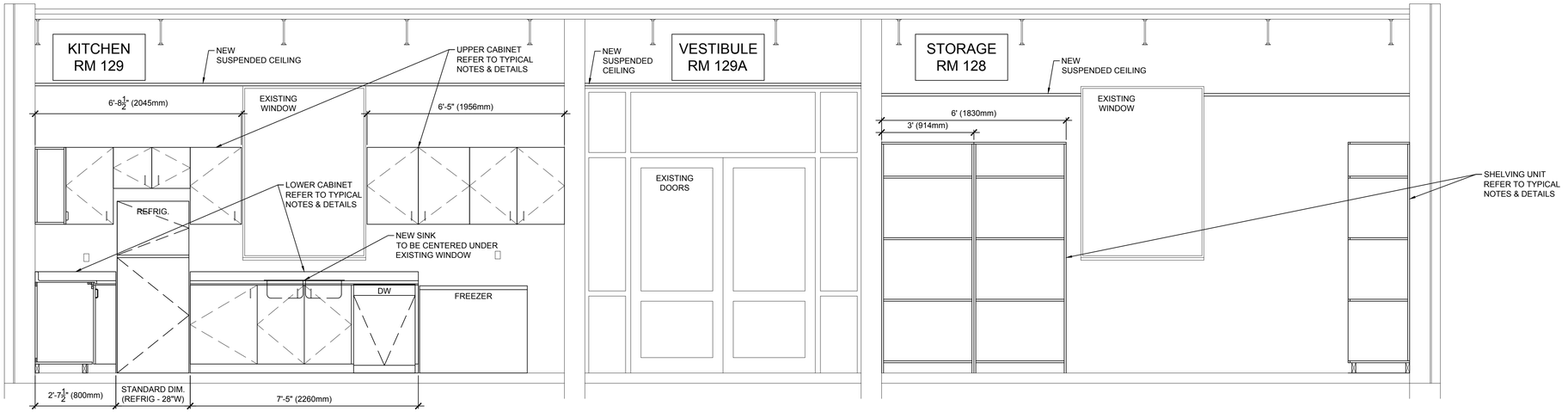
Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

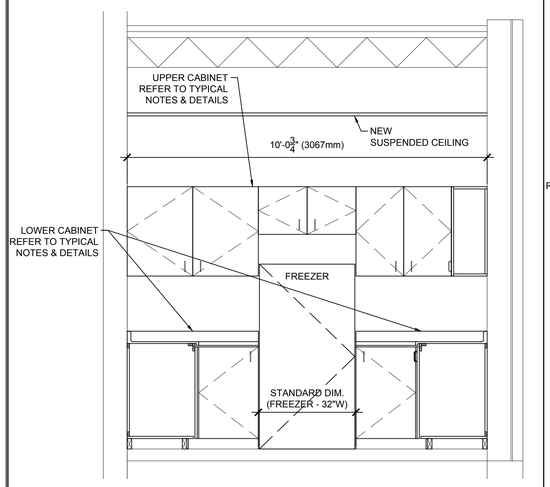
Drawing:
ARCHITECTURAL
Floor Plans
Demolition &
New Construction

Design: M.MORRIS
Drawn: A.M.
Date: APR 2018
Project: 363
Scale: AS SHOWN

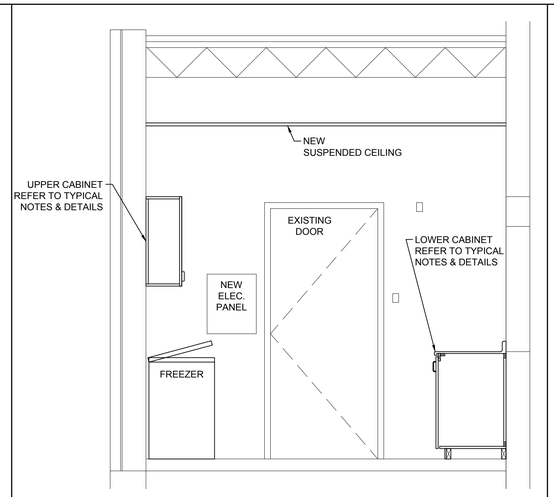
A103



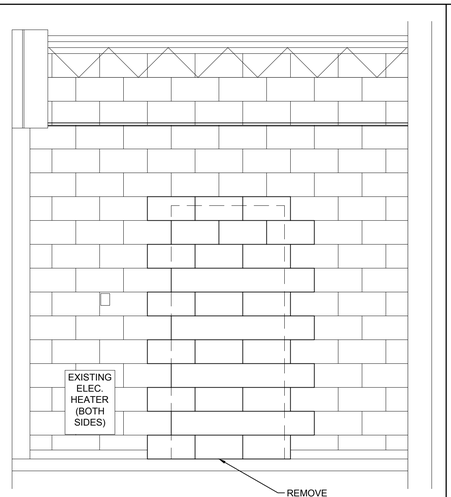
1 A104 NORTH WALL
SCALE: 1/2" = 1"



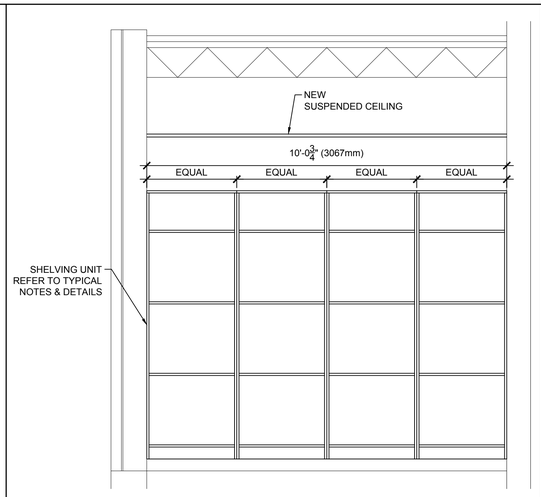
3 A104 KITCHEN WEST WALL
SCALE: 1/2" = 1"



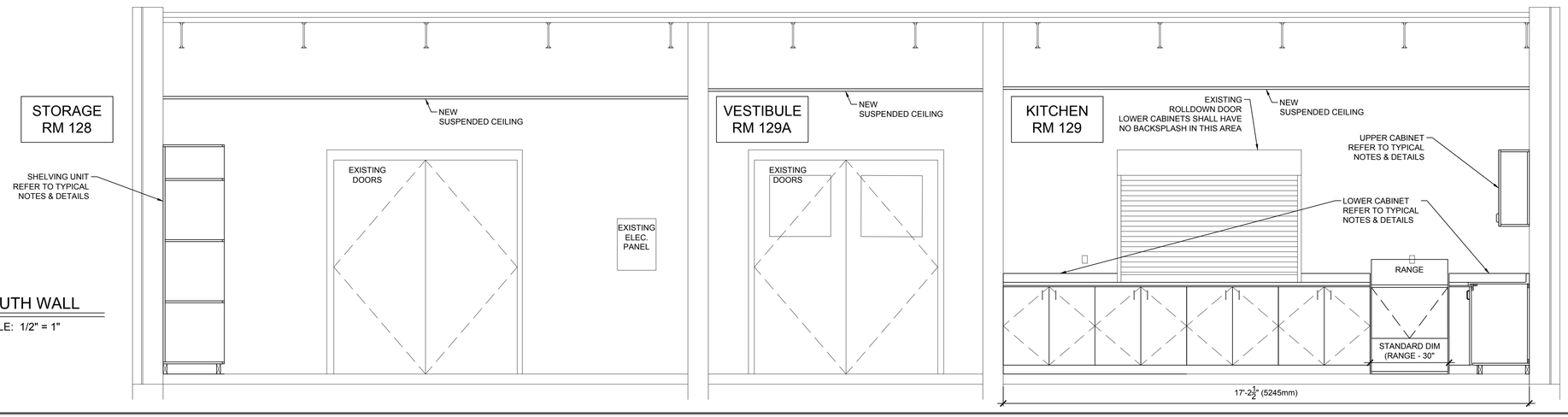
4 A104 KITCHEN EAST WALL
SCALE: 1/2" = 1"



5 A104 VESTIBULE EAST WALL
SCALE: 1/2" = 1"



6 A104 STORAGE RM EAST WALL
SCALE: 1/2" = 1"



2 A104 SOUTH WALL
SCALE: 1/2" = 1"

MORRIS
Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-15	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
ARCHITECTURAL
Elevations

Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

A104

ELECTRICAL NOTES

ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS FOR THIS PROJECT.

1 GENERAL:
.1 CONFORM WITH APPLICABLE REQUIREMENTS OF THE MINISTRY OF LABOUR, AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
.2 DO COMPLETE INSTALLATION IN ACCORDANCE WITH THE FOLLOWING: ONTARIO ELECTRICAL SAFETY CODE; ELECTRICAL SAFETY AUTHORITY.
.3 SUBMIT TO ELECTRICAL SAFETY AUTHORITY NECESSARY NUMBER OF DRAWINGS AND SPECIFICATIONS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
.4 COORDINATE AND OBTAIN ELECTRICAL SERVICE LAYOUT FROM THE SUPPLY AUTHORITY.
.5 PAY ALL ELECTRICAL PERMIT AND INSPECTION FEES.
.6 GROUND COMPLETE SYSTEM IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE AND ELECTRICAL SAFETY AUTHORITY.
.7 IDENTIFICATION AND LABELLING:
.1 IDENTIFY ELECTRICAL EQUIPMENT WITH LAMICOID NAMEPLATES, INCLUDING AMPERAGE, VOLTAGE, PHASE AND POWER SOURCE.
.2 PROVIDE TYPEWRITTEN PANEL DIRECTORIES.
.3 PROVIDE ADHESIVE LABEL ON ALL SWITCH, RECEPTACLE AND DEVICE COVER PLATES INDICATING SUPPLY CIRCUIT DESIGNATION.
.8 PROVIDE THREE COPIES OF COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS FOR EQUIPMENT FURNISHED UNDER THIS CONTRACT.
.9 CLEAN ALL ELECTRICAL SYSTEMS AT PROJECT COMPLETION.
.10 COMPLETE AS-BUILT DRAWINGS SHOWING ALL CHANGES AS WORK PROGRESSES.

2 CONTRACTOR QUALIFICATIONS:
.1 ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE "TRADES QUALIFICATION AND APPRENTICESHIP ACT" AND REGULATIONS, BY PERSONS WHO HOLD THE FOLLOWING CERTIFICATES OF QUALIFICATION (AS APPLICABLE):
.1 ELECTRICIAN: CONSTRUCTION & MAINTENANCE.
.2 ALL FIRE ALARM SYSTEM WORK SHALL BE PERFORMED BY PERSONS WHO HOLD ELECTRICIAN QUALIFICATIONS (ABOVE), AND IN ADDITION, WHO HOLD THE FOLLOWING CURRENT REGISTRATION WITH THE CANADIAN FIRE ALARM ASSOCIATION (CFAA):
.1 FIRE ALARM TECHNICIAN.

3 EXISTING FACILITIES AND DEMOLITION:
.1 LOCATE AND PROTECT ALL EXISTING EXTERIOR SITE SERVICES.
.2 RETAIN AND PROTECT ALL EXISTING INTERIOR SERVICES AND BUILDING FABRIC. MAKE GOOD ANY AND ALL DAMAGE RESULTING FROM THIS WORK.
.3 CONNECTIONS TO EXISTING SERVICES SHALL BE COORDINATED WITH THE OWNER.
.4 EXECUTE WORK WITH LEAST POSSIBLE INTERFERENCE OR DISTURBANCE TO NORMAL USE OF THE EXISTING BUILDING.

4 FIXTURES AND EQUIPMENT:
.1 PROVIDE SHOP DRAWINGS AND PRODUCT DATA FOR ALL ELECTRICAL FIXTURES AND EQUIPMENT FOR APPROVAL, PRIOR TO PROCUREMENT.
.2 INSTALL ALL ELECTRICAL FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
.3 EQUIPMENT AND MATERIAL TO BE CSA CERTIFIED. WHERE THERE IS NO ALTERNATIVE TO SUPPLYING EQUIPMENT WHICH IS NOT CSA CERTIFIED, OBTAIN SPECIAL APPROVAL FROM ELECTRICAL SAFETY AUTHORITY.

5 EQUIPMENT SUPPLIED BY OTHERS:
.1 MAKE ALL ELECTRICAL SERVICE CONNECTIONS TO EQUIPMENT SUPPLIED BY OTHERS.
.2 CONFIRM ALL SERVICE CONNECTIONS WITH MANUFACTURER AND SUPPLIER, PRIOR TO INSTALLATION. THIS SHALL INCLUDE ALL CONNECTION SIZES, LOCATIONS AND DETAILS, AND SHALL TAKE INTO ACCOUNT EQUIPMENT CLEARANCES AND INSTALLATION REQUIREMENTS.

6 CONDUITS:
.1 RIGID GALVANIZED STEEL, WITH THREADED FITTINGS, WHERE SUBJECT TO MECHANICAL INJURY, IN SERVICE AREAS ONLY.
.2 ELECTRICAL METALLIC TUBING (EMT), HOT DIPPED GALVANIZED STEEL, WITH THREADED CONNECTORS AND COUPLINGS, WHERE NOT SUBJECT TO MECHANICAL INJURY, IN SERVICE AREAS ONLY.
.3 RIGID PVC CONDUIT BELOW FLOOR AND IN CORROSIVE AREAS.

7 WIRES AND CABLE:
.1 VOLTAGE DROP:
.1 FEEDER CONDUCTORS SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 2% AT DESIGN LOAD.
.2 BRANCH CIRCUIT CONDUCTORS SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 3% AT DESIGN LOAD.
.2 BUILDING WIRES:
.1 COMMERCIAL PROJECTS - IN CONDUIT SYSTEMS TO BE STRANDED COPPER CONDUCTORS FOR 10 AWG AND LARGER, MINIMUM SIZE 12 AWG, TYPE RW90.
.3 BUILDING WIRES IN CONCEALED LOCATIONS TO BE COPPER, MINIMUM SIZE 12 AWG, TYPE AC90.
.4 ALL WIRING SHALL BE CONCEALED IN WALLS AND CEILINGS, UNLESS OTHERWISE NOTED OR APPROVED. SURFACE-MOUNTED WIRING IS NOT PERMITTED.

8 SERVICE EQUIPMENT:
.1 ELECTRICAL SERVICE EQUIPMENT, PANELBOARDS AND DISCONNECT SWITCHES SHALL BE PRODUCT OF ONE MANUFACTURER THROUGHOUT PROJECT – SQUARE D TO MATCH EXISTING.
.2 CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.

9 WIRING DEVICES:
.1 WIRING DEVICES OF ONE MANUFACTURER THROUGHOUT PROJECT – HUBBELL OR LEVITON.
.2 COMMERCIAL PROJECTS:
.1 HEAVY DUTY SWITCHES, 20A/120V, SINGLE POLE, AND THREE-WAY, AS APPLICABLE. COLOUR SELECTED BY OWNER.
.2 EXTRA HARD USE DUPLEX RECEPTACLES, CSA TYPE 5-15 R, 15A/125V. COLOUR SELECTED BY OWNER.
.3 STAINLESS STEEL COVER PLATES.

10 LIGHTING:
.1 GENERAL LIGHTING:
.1 SUPPORT ALL LIGHTING IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE AND BULLETINS.
.2 LIGHT FIXTURES SUPPORTED BY SUSPENDED CEILING SYSTEMS SHALL HAVE ADDITIONAL SUPPORT TO BUILDING STRUCTURE IN ACCORDANCE WITH ONTARIO ELECTRICAL SAFETY CODE BULLETIN #30-4-11.

11 FIRE ALARM SYSTEM:
.1 FIRE ALARM SYSTEM SHALL BE ALTERED IN ACCORDANCE WITH CAN/ULC-S524, "INSTALLATION OF FIRE ALARM SYSTEMS".
.2 FIRE ALARM SYSTEM SHALL BE VERIFIED IN ACCORDANCE WITH CAN/ULC-S537, "VERIFICATION OF FIRE ALARM SYSTEMS".

12 FIRE PROTECTION:
.1 ALL CABLING AND CONDUIT SHALL BE TIGHTLY FITTED AND SEALED WITH FIRESTOPPING MATERIAL AT ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
.2 PLENUMS (OBC 3.6.4.3): ALL MATERIALS WITHIN THE PLENUM SHALL A FLAME-SPREAD RATING NOT MORE THAN 25 AND A SMOKE DEVELOPED CLASSIFICATION NOT MORE THAN 50.

13 EARTHQUAKE LOAD:
.1 ALL ELECTRICAL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE EARTHQUAKE LOAD AND EFFECTS REQUIRED BY THE ONTARIO BUILDING CODE.
.2 ELECTRICAL ELEMENTS AND COMPONENTS (FIXTURES, EQUIPMENT, CONDUIT, ETC.), AND THEIR CONNECTIONS TO THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SMACNA/ANSI SEISMIC RESTRAINT MANUAL OR OTHER GUIDELINE REFERENCED IN THE ONTARIO BUILDING CODE.

14 EQUIPMENT SUPPORT:
.1 ALL ELECTRICAL EQUIPMENT, CONDUIT, WIRING, LIGHTING, DEVICES, AND RELATED ITEMS SHALL BE SECURELY SUPPORTED, ATTACHED AND FASTENED TO BUILDING STRUCTURE.
.2 HANGERS AND SUPPORTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MSS STANDARD SP-58, PIPE HANGERS AND SUPPORTS – MATERIALS, DESIGN, MANUFACTURE, SELECTION, APPLICATION, AND INSTALLATION.

15 COORDINATION:
.1 INFORMATION INVOLVING ACCURATE DIMENSIONING OF THE BUILDING SHALL BE TAKEN FROM SITE BY CONTRACTOR.
.2 DRAWINGS ARE IN DIAGRAMMATIC FORM, INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL ARRANGEMENT FOR EQUIPMENT. COORDINATE PHYSICAL LOCATION OF ALL EQUIPMENT WITH OTHER TRADES AND ALLOW FOR ANY ADDITIONAL CONDUIT, WIRING, FITTINGS, SUPPORTS, ETC., IN ORDER TO AVOID INTERFERENCE AND FACILITATE THE WORK.
.3 CONTRACTOR TO MAKE ANY NECESSARY MODIFICATIONS OR ADDITIONS, WITHOUT CHARGE, TO ACCOMMODATE SITE CONDITIONS AND COORDINATION.
.4 COORDINATE AND VERIFY ALL ELECTRICAL BRANCH CIRCUIT REQUIREMENTS FOR EQUIPMENT SUPPLIED BY OTHERS, PRIOR TO MATERIAL PROCUREMENT OR INSTALLATION.
.5 PROVIDE ALL WIRING TO ALL MECHANICAL EQUIPMENT, INCLUDING WIRING BELOW 50V. COORDINATE ALL MECHANICAL EQUIPMENT WIRING WITH MECHANICAL TRADES.
.6 ALL DEVICE AND OUTLET LOCATIONS SHALL BE CAREFULLY COORDINATED WITH THE GENERAL CONTRACTOR OR OWNER, TO ACCOMMODATE ALL FEATURES, INCLUDING PLUMBING FIXTURES, EQUIPMENT AND MILLWORK.

16 START-UP, COMMISSIONING AND TRAINING:
.1 START-UP AND COMMISSION THE FOLLOWING SYSTEMS:
.1 MAIN ELECTRICAL SERVICE EQUIPMENT;
.2 GENERAL LIGHTING;
.3 FIRE ALARM.
.2 PERFORM SYSTEMATIC TESTS, PROCEDURES AND CHECKS ON SYSTEMS, AS FOLLOWS:
.1 TO VERIFY OPERATION IN ACCORDANCE WITH CONTRACT DOCUMENTS, DESIGN CRITERIA AND INTENT, AND MANUFACTURER'S REQUIREMENTS;
.2 TO ENSURE APPROPRIATE DOCUMENTATION IS PROVIDED;
.3 TO EFFECTIVELY TRAIN BUILDING OPERATIONAL STAFF.
.3 SYSTEMS ARE TO BE OPERATED AT FULL CAPACITY, WITH CORRECTION OF ALL DEFICIENCIES AND ADJUSTMENTS TO MEET OPTIMUM PERFORMANCE.
.4 PROVIDE WRITTEN REPORT AT END OF COMMISSIONING OUTLINING EQUIPMENT OPERATIONAL CONDITIONS AND PARAMETERS.

LIGHTING CONTROL SCHEDULE

UNIT	DESCRIPTION	ELECTRICAL	ACCEPTABLE PRODUCT	NOTES
	MOTION SENSOR		LEVITON	PASSIVE INFRARED (PIR) AND ULTRASONIC (U/S)
	WALL SWITCH		#OSSMT-MAW	120 VAC

LIGHT FIXTURE SCHEDULE

UNIT	DESCRIPTION	NOM. DIM'N (in)	LAMP	LENS	BALLAST	WATTS	MEAN LUMENS	VOLTAGE	ACCEPTABLE PRODUCT	NOTES
F1	LED	W - 24	LED	ACRYLIC	DRIVER	39	4000	120	BJ TAKE #BLR	MOTION SENSOR
	RECESSED	L - 48		HINGED						
									OR APPROVED EQUAL	

ELECTRICAL PANEL 'P-1'

Location: KITCHEN — Mounting: RECESSED
Rated Amp: 100 — Mains Amp: 100
Voltage: 120/208 — Phase: 3

Load Watts	Load Description	Description	Breaker Amp	Breaker Pole	Breaker No.	Breaker No.	Breaker Pole	Breaker Amp	Description	Load Description	Load Watts
500		LIGHTS	15	1	*1*	*2*	1	15	LIGHTS		500
250	AC,GFI	RECEP - COUNTER	20	1	*3*	*4*	1	20	RECEP - COUNTER	AC,GFI	250
250	AC,GFI	RECEP - COUNTER	20	1	*5*	*6*	1	20	RECEP - COUNTER	AC,GFI	250
250	AC,GFI	RECEP - COUNTER	20	1	*7*	*8*	1	20	RECEP - COUNTER	AC,GFI	250
					9	*10*					
					11	*12*					
					13	*14*					
					15	*16*					
250		DISHWASHER	15	1	*17*	*18*					
500		FREEZER	15	1	*19*	*20*	1	15	WATER HEATER		1500
500		FREEZER	15	1	*21*	*22*	2	40	RANGE		6000
500		REFRIGERATOR	15	1	*23*	*24*					
3	kW	CONNECTED LOAD							CONNECTED LOAD	kW	8.75
									TOTAL CONNECTED LOAD	kW	11.75

NOTES:
1. DEVICE QUANTITIES ARE APPROXIMATE
DEVICES SHOWN ON FLOOR PLANS SHALL SUPERSEDE.
2. PROVIDE NEW PANEL LABEL AND TYPEWRITTEN CIRCUITING LEGEND.
3. EQUIPMENT SHALL BE SQUARE D.
4. PANEL SHALL BE COMPLETE WITH BOLT-ON BREAKERS, LOCKABLE DOOR, TRIM.
5. ELECTRICAL REQUIREMENTS FOR EQUIPMENT SUPPLIED BY OTHERS ARE APPROXIMATE.
COORDINATE ALL EQUIPMENT WIRING WITH OTHER TRADES.

MORRIS Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-11	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

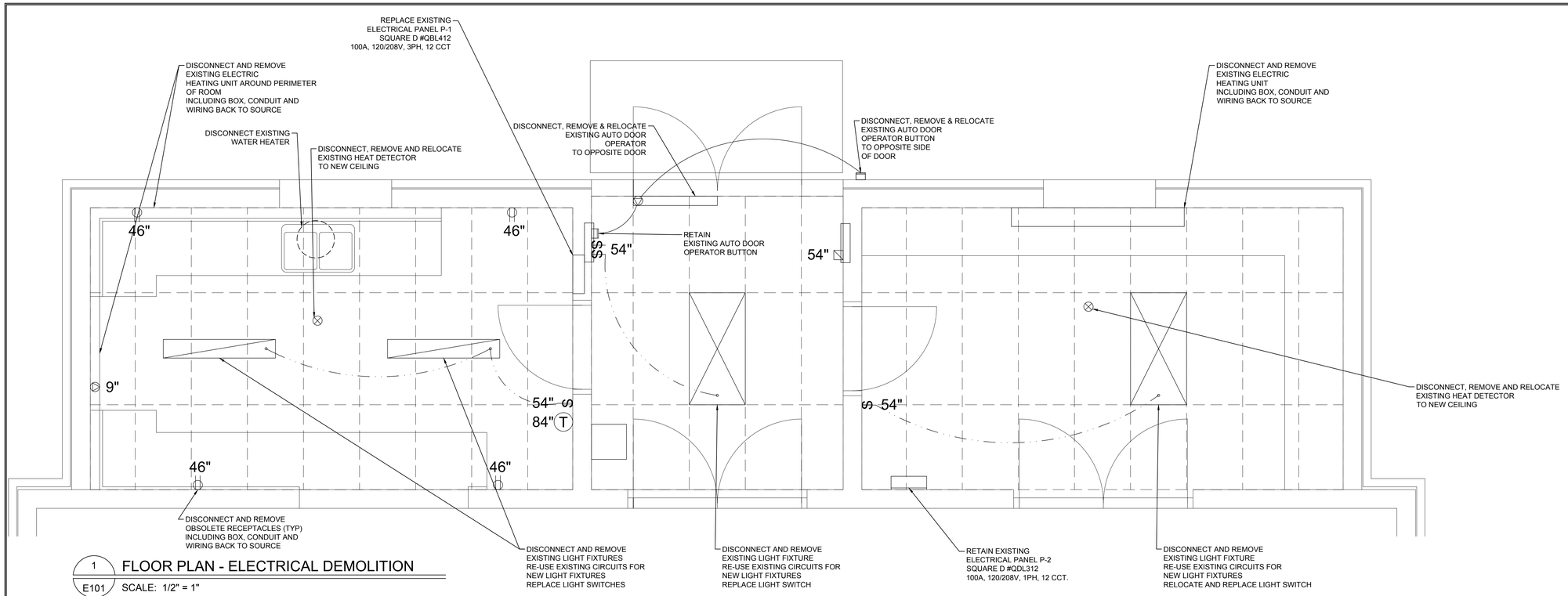
Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
ELECTRICAL
Notes & Schedules

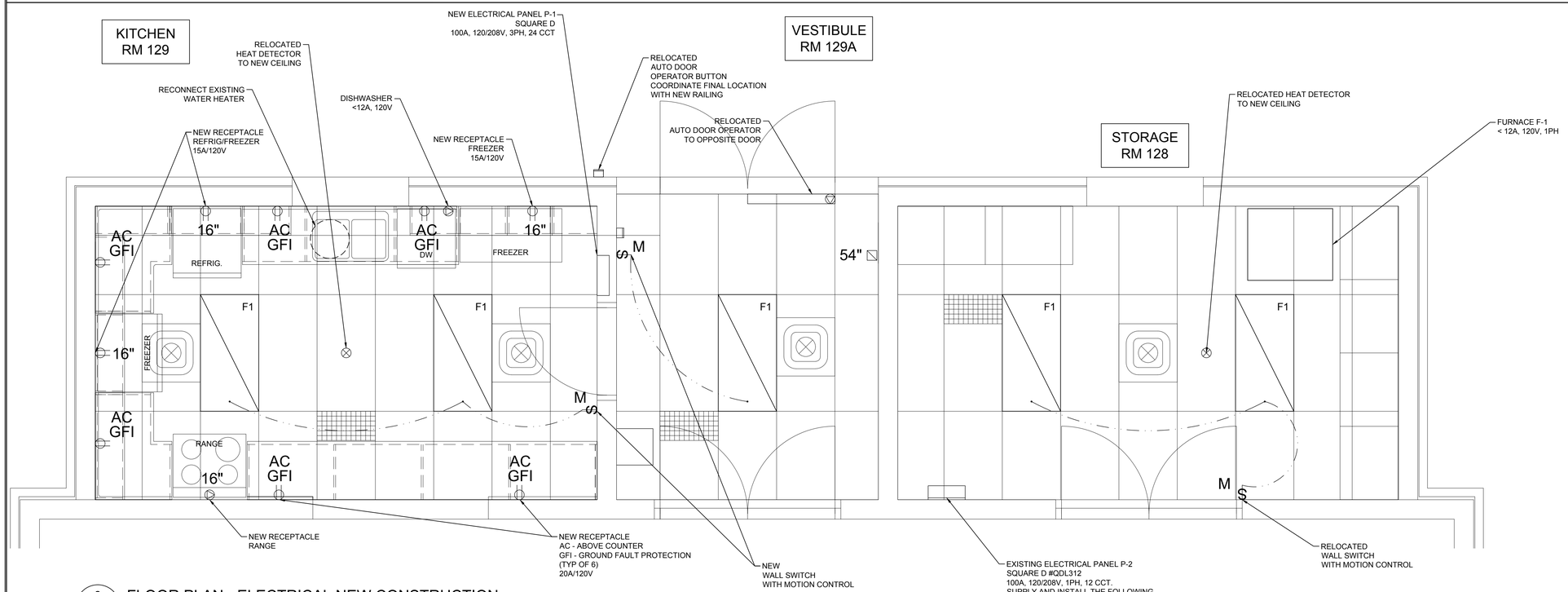
Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

E100



1 / E101 FLOOR PLAN - ELECTRICAL DEMOLITION

SCALE: 1/2" = 1"



2 / E101 FLOOR PLAN - ELECTRICAL NEW CONSTRUCTION

SCALE: 1/2" = 1"

MORRIS
Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-11	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
ELECTRICAL
Floor Plans
Demolition &
New Construction

Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

E101

MECHANICAL NOTES

MECHANICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS FOR THIS PROJECT.

1 GENERAL:

.1 CONFORM WITH APPLICABLE REQUIREMENTS OF THE MINISTRY OF LABOUR, AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.

.2 DO COMPLETE INSTALLATION IN ACCORDANCE WITH THE FOLLOWING: ONTARIO BUILDING CODE (OBC); NATURAL GAS AND PROPANE INSTALLATION CODE (GAS CODE); ASHRAE; SMACNA; NFPA; ALL OTHER RELEVANT CODES AND STANDARDS, AS APPLICABLE.

.3 OBTAIN ALL PERMITS REQUIRED FOR THE INSTALLATION OF MECHANICAL TRADES WORK, ARRANGE FOR INSPECTIONS AND TESTS, AND PAY ALL FEES AND COSTS FOR THE PERMITS, INSPECTIONS AND FEES. OBTAIN PERMITS IMMEDIATELY AFTER NOTIFICATION OF AWARD OF CONTRACT.

.4 PROVIDE THREE COPIES OF COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS FOR EQUIPMENT FURNISHED UNDER THIS CONTRACT.

.5 CLEAN ALL MECHANICAL SYSTEMS AT PROJECT COMPLETION.

.6 COMPLETE AS-BUILT DRAWINGS SHOWING ALL CHANGES AS WORK PROGRESSES.

2 CONTRACTOR QUALIFICATIONS:

.1 ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE "TRADE QUALIFICATION AND APPRENTICESHIP ACT" AND REGULATIONS, BY PERSONS WHO HOLD THE FOLLOWING CERTIFICATES OF QUALIFICATION (AS APPLICABLE):
- .1 PLUMBER;
- .2 REFRIGERATION & AIR CONDITIONING SYSTEMS MECHANIC;
- .3 RESIDENTIAL AIR CONDITIONING SYSTEMS MECHANIC;
- .4 SHEET METAL WORKER;

.2 ALL FUELS-RELATED WORK TO BE CARRIED OUT IN ACCORDANCE WITH TSSA REQUIREMENTS AND ONTARIO REGULATION 215/01, "FUEL INDUSTRY CERTIFICATES" BY PERSONS WHO HOLD THE APPROPRIATE CERTIFICATES FOR THE WORK BEING PERFORMED.

3 EXISTING FACILITIES AND DEMOLITION:

.1 LOCATE AND PROTECT ALL EXISTING EXTERIOR SITE SERVICES.

.2 RETAIN AND PROTECT ALL EXISTING INTERIOR SERVICES AND BUILDING FABRIC. MAKE GOOD ANY AND ALL DAMAGE RESULTING FROM THIS WORK.

.3 CONNECTIONS TO EXISTING SERVICES SHALL BE COORDINATED WITH THE OWNER.

.4 EXECUTE WORK WITH LEAST POSSIBLE INTERFERENCE OR DISTURBANCE TO NORMAL USE OF THE EXISTING BUILDING.

4 FIXTURES AND EQUIPMENT:

.1 PROVIDE SHOP DRAWINGS AND PRODUCT DATA FOR ALL MECHANICAL FIXTURES AND EQUIPMENT FOR APPROVAL, PRIOR TO PROCUREMENT.

.2 INSTALL ALL MECHANICAL FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

.3 LOCATE ALL EQUIPMENT WITH CLEARANCES, AS REQUIRED BY THE MANUFACTURER, THE FUEL CODES, AND ALL OTHER CODES AND REGULATIONS, INCLUDING THE FOLLOWING CLEARANCES:
- .1 TO PERMIT PROPER EQUIPMENT OPERATION;
- .2 TO PERMIT SUFFICIENT AIRFLOW AROUND EQUIPMENT;
- .3 FOR EQUIPMENT SERVICE;
- .4 SUFFICIENT DISTANCE FROM COMBUSTIBLE MATERIAL;
- .5 WITH SUFFICIENT VENT CLEARANCES;
- .6 SUFFICIENT DISTANCE FROM ROOF EDGES OR OTHER HAZARDS.

5 WATER SERVICE AND WATER SUPPLY PIPING:

.1 ABOVE GROUND: COPPER TUBE, HARD DRAWN, TYPE L. CAN. OR US MANUFACTURE, INCLUDING FITTINGS. LEAD-FREE SOLDER.

.2 ALL PIPING SHALL BE CONCEALED IN CABINETS UNLESS OTHERWISE NOTED.

.3 ISOLATE ALL EQUIPMENT, FIXTURES AND BRANCHES WITH VALVES.

.4 TEST WATER SYSTEM AT 1½ TIMES SYSTEM OPERATING PRESSURE OR MINIMUM 860 KPA, WHICHEVER IS GREATER. TEST PRESSURE AND TIMEFRAME SHALL BE AS REQUIRED BY OBC 7.3.7.2.

6 DRAINAGE, WASTE AND VENT PIPING:

.1 ABOVE GROUND: COPPER, TYPE DWV.

.2 PROVIDE CLEANOUTS AS REQUIRED BY THE ONTARIO BUILDING CODE.

.3 VENT COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.

7 NATURAL GAS PIPING:

.1 STEEL PIPE, SCHEDULE 40, SEAMLESS, SCREWED FITTINGS.

.2 SLOPE PIPING DOWN IN DIRECTION OF FLOW TO LOW POINTS.

.3 TEST SYSTEM IN ACCORDANCE WITH NATURAL GAS AND PROPANE INSTALLATION CODE.

8 DUCTWORK:

.1 RECTANGULAR DUCT:
- .1 RIGID GALVANIZED STEEL, LOCK FORMING QUALITY TO ASTM A653/A653M
- .2 THICKNESS, FABRICATION, REINFORCEMENT AND SUPPORT/ATTACHMENT TO ASHRAE OR SMACNA.

.2 ROUND DUCT:
- .1 RIGID GALVANIZED STEEL, LOCK FORMING QUALITY TO ASTM A653/A653M
- .2 THICKNESS, FABRICATION, REINFORCEMENT AND SUPPORT/ATTACHMENT TO ASHRAE OR SMACNA.

.3 SEAL CLASSIFICATION:
- .1 CLASS A: LONGITUDINAL SEAMS, TRANSVERSE JOINTS, DUCT WALL PENETRATIONS AND CONNECTIONS MADE AIRTIGHT WITH SEALANT AND TAPE.

.4 ALL DUCT AND SEAL MATERIALS TO HAVE A FLAME SPREAD RATING OF LESS THAN 25 AND A SMOKE DEVELOPED CLASSIFICATION OF LESS THAN 50.

9 MECHANICAL FIRE PROTECTION:

.1 ALL PIPING SHALL BE TIGHTLY FITTED AND SEALED WITH FIRESTOPPING MATERIAL AT ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.

.2 FIRE DAMPERS:
- .1 FIRE DAMPERS SHALL BE CAN/ULC-S112 (STANDARD METHOD OF FIRE TEST OF FIRE DAMPER ASSEMBLIES) LISTED AND LABELLED.
- .2 SUPPLY AND INSTALL TIGHTLY-FITTED ACCESS DOOR IN DUCT TO ACCESS, INSPECT AND RESET FIRE DAMPER.
- .3 TYPES: DYNAMIC, 1-1/2 HR (30MIN TO 2HR FIRE RESISTANCE RATING).
- .4 FIRE DAMPER AND DUCT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS, AND SHALL BE SEALED WITH FIRESTOPPING MATERIAL.

.3 ALL MECHANICAL MATERIALS USED WITHIN CEILING RETURN AIR PLENUMS SHALL FLAME-SPREAD RATING NOT MORE THAN 25 AND SMOKE DEVELOPED CLASSIFICATION NOT MORE THAN 50 PER CAN/ULC-S102.2.

10 EARTHQUAKE LOAD:

.1 ALL MECHANICAL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE EARTHQUAKE LOAD AND EFFECTS REQUIRED BY THE ONTARIO BUILDING CODE.

.2 MECHANICAL ELEMENTS AND COMPONENTS (EQUIPMENT, PIPES, DUCTS, ETC.), AND THEIR CONNECTIONS TO THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SMACNA/ANSI SEISMIC RESTRAINT MANUAL OR OTHER GUIDELINE REFERENCED IN THE ONTARIO BUILDING CODE.

11 EQUIPMENT AND MATERIALS SUPPORT:

.1 ALL MECHANICAL EQUIPMENT, PIPING, DUCTWORK, AND RELATED ITEMS SHALL BE SECURELY SUPPORTED, ATTACHED AND FASTENED TO BUILDING STRUCTURE.

.2 PIPE HANGERS AND SUPPORTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MSS STANDARD SP-58, PIPE HANGERS AND SUPPORTS – MATERIALS, DESIGN, MANUFACTURE, SELECTION, APPLICATION, AND INSTALLATION.

.3 PLATFORMS SHALL BE FABRICATED FROM STRUCTURAL GRADE STEEL MEETING THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, INCLUDING CSA STANDARD W59 WELDED STEEL CONSTRUCTION, AND THE REQUIREMENTS OF THE CANADIAN WELDING BUREAU.

12 COORDINATION:

.1 INFORMATION INVOLVING ACCURATE DIMENSIONING OF THE BUILDING SHALL BE TAKEN FROM SITE BY CONTRACTOR.

.2 DRAWINGS ARE IN DIAGRAMMATIC FORM, INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL ARRANGEMENT FOR EQUIPMENT. COORDINATE PHYSICAL LOCATION OF ALL EQUIPMENT WITH OTHER TRADES AND ALLOW FOR ANY ADDITIONAL PIPING, DUCTING, FITTINGS, SUPPORTS, ETC., IN ORDER TO AVOID INTERFERENCE AND FACILITATE THE WORK.

.3 CONTRACTOR TO MAKE ANY NECESSARY MODIFICATIONS OR ADDITIONS, WITHOUT CHARGE, TO ACCOMMODATE SITE CONDITIONS AND COORDINATION.

.4 COORDINATE ALL MECHANICAL EQUIPMENT WIRING, INCLUDING LOW VOLTAGE CONTROL WIRING, WITH ELECTRICAL TRADES.

.5 WALLS HAVE BEEN SHOWN TO BE CONSTRUCTED ABOVE THE CEILING TO THE UNDERSIDE OF ROOF STRUCTURE, TO CREATE A CEILING RETURN AIR PLENUM. THESE WALLS AND ALL OPENINGS SHALL BE **INDICATED ON THE ARCHITECTURAL DRAWINGS.**

13 START-UP, COMMISSIONING AND TRAINING:

.1 COMMISSIONING:
- .1 START-UP AND COMMISSION THE FOLLOWING SYSTEMS:
  - .1 PLUMBING FIXTURES;
  - .2 HVAC.
- .2 PERFORM SYSTEMATIC TESTS, PROCEDURES AND CHECKS ON SYSTEMS, AS FOLLOWS:
  - .1 TO VERIFY OPERATION IN ACCORDANCE WITH CONTRACT DOCUMENTS, DESIGN CRITERIA AND INTENT, AND MANUFACTURER'S REQUIREMENTS;
  - .2 TO ENSURE APPROPRIATE DOCUMENTATION IS PROVIDED;
  - .3 TO EFFECTIVELY TRAIN BUILDING OPERATIONAL STAFF.
- .3 SYSTEMS ARE TO BE OPERATED AT FULL CAPACITY, WITH CORRECTION OF ALL DEFICIENCIES AND ADJUSTMENTS TO MEET OPTIMUM PERFORMANCE.
- .4 PROVIDE WRITTEN REPORT AT END OF COMMISSIONING OUTLINING EQUIPMENT OPERATIONAL CONDITIONS AND PARAMETERS.

.2 TESTING, ADJUSTING AND BALANCING:
- .1 TEST, ADJUST AND BALANCE (TAB) ALL PLUMBING AND HVAC EQUIPMENT AND SYSTEMS.
- .2 TAB PROCEDURE SHALL BE COMPLETED IN ACCORDANCE WITH ASHRAE STANDARD 111, MEASUREMENT, TESTING, ADJUSTING AND BALANCING OF BUILDING HVAC SYSTEMS.
- .3 PROVIDE DETAILED REPORT AT END OF TAB, IN ACCORDANCE WITH THE REPORTING PROCEDURES OF ASHRAE STANDARD 111.

PLUMBING FIXTURE SCHEDULE

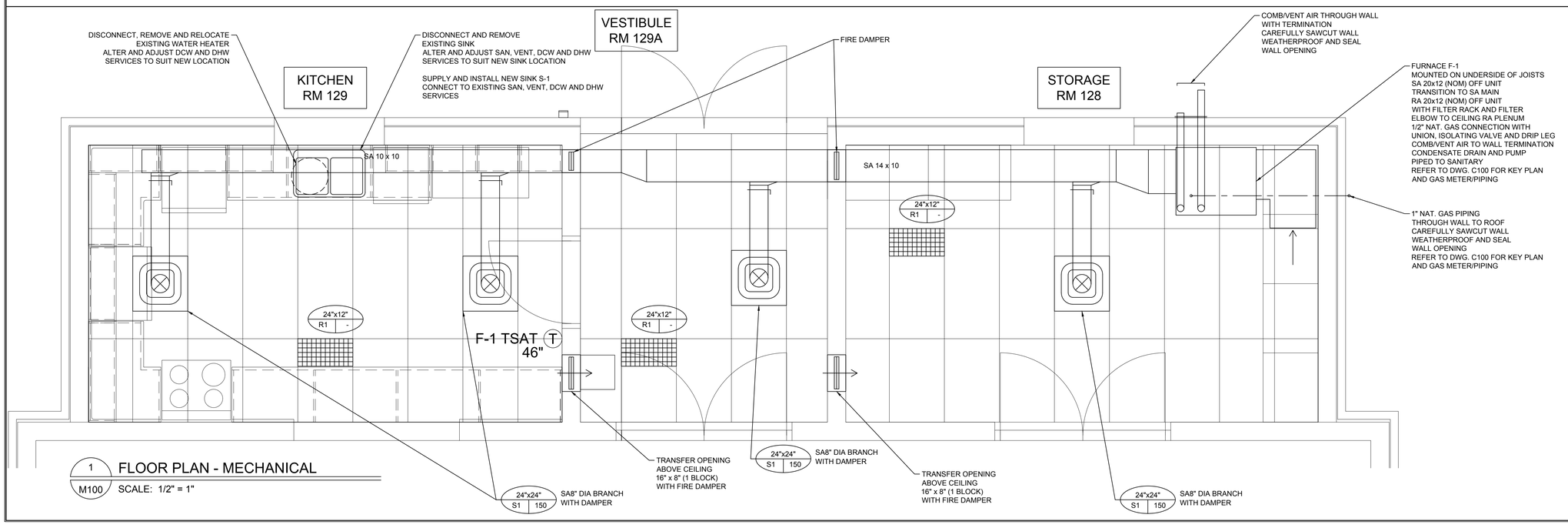
UNIT	DESCRIPTION	PIPE SIZE					ACCEPTABLE PRODUCT	NOTES
		TRAP (in) (mm)	WASTE (in) (mm)	VENT (in) (mm)	DCW (in) (mm)	DHW (in) (mm)		
S-1	KITCHEN SINK	1-1/2"	1-1/2"	1-1/4"	1/2"	1/2"	FRANKE KINDRED #LBD6407 SINK	STAINLESS STEEL, LEVER HANDLES
	DOUBLE BOWL WITH LEDGE	38	38	32	13	13	AMERICAN STANDARD #6270 FAUCET	OVERALL DIM - W x FTB x D - 794 x 520 x 178mm, 31.25 x 20.5 x 7 in
								BOWL DIM - W x FTB x D - 355 x 406 x 178mm, 14 x 16 x 7 in
							OR APPROVED EQUAL	MAX. WATER CONSUMPTION - 8.35 Lpm, 2.2 gpm

FURNACE SCHEDULE

UNIT	DESCRIPTION	FAN			HEATING				ELECTRICAL				ACCEPTABLE PRODUCT	NOTES
		AIR FLOW (cfm)	ESP (in)	HP	INPUT (Mbtu/hr)	OUTPUT (Mbtu/hr)	EFF (%)	GAS (in)	VOLT (V)	PHASE (PH)	MCA (A)	MOCP (A)		
F-1	FURNACE GAS-FIRED, DIRECT VENT HORIZONTAL	800		1/2	40	39	97.5%	1/2	120	1	7.5	15	CARRIER #59TP5A	- TWO STAGE HEATING - MATCHING EVAPORATOR COIL - CONCENTRIC VENT TERMINATION WALL - RETURN AIR FILTER RACK - 7-DAY DIGITAL PROGRAMMABLE THERMOSTAT TO MEET ASHRAE 90.1: - 7 DAY SCHEDULE - 10 HR POWER LOSS - 2 HR MANUAL OVERRIDE - SETBACK TO 55F (13C) - SETUP TO 90F (32C)

REGISTER, GRILLE & DIFFUSER SCHEDULE

UNIT	DESCRIPTION	CONSTRUCTION	CONFIGURATION			FRAME	FINISH	ACCEPTABLE PRODUCT
			PATTERN	BLADE SPACING	DEFLECTION (deg)			
S1	SA DIFFUSER CEILING SQUARE CONE	STEEL	4 CONE FIXED AIR PATTERN	-	-	LAY-IN INVERTED T	WHITE	EH PRICE #SCD STEEL OR APPROVED EQUAL
R1	EGG CRATE RA CEILING	ALUMINUM	FIXED GRID	12x12x25mm, 1/2x1/2x1in	0	LAY-IN INVERTED T	WHITE	EH PRICE #81 OR APPROVED EQUAL



1 FLOOR PLAN - MECHANICAL
M100 SCALE: 1/2" = 1"

MORRIS
Engineering Ltd.
Brockville, Ontario 613-349-0555

No.	Date	REVISION
1	2018-06-06	FINAL REVIEW
0	2018-05-11	FOR REVIEW

CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Educating and inspiring... heart, mind, body, and soul

Client:
CATHOLIC DISTRICT SCHOOL BOARD OF EASTERN ONTARIO
Kemptville, Ontario

Project:
ST. MARY CATHOLIC SCHOOL
4 Hawthorne Ave.
Carleton Place, Ontario

Drawing:
MECHANICAL
Floor Plan
Notes & Shedules

Design:	M.MORRIS
Drawn:	A.M.
Date:	APR 2018
Project:	363
Scale:	AS SHOWN

M100