

ELECTRICAL SPECIFICATIONS (DIVISION 16)

- 1.0 GENERAL Requirements
 - 1.1 Comply with the requirements of the current edition of the Canadian Electrical Code (CSA 22.1) and amendments thereto, the Alberta Building Code, and the regulations of the Electrical Inspection Authorities.
 2. Obtain necessary permits, pay all applicable fees. On completion, have work inspected and approved by the local inspection Department.
 3. Supply all necessary labour, material and specifications for complete electrical installation per drawings and specifications.
 4. Examine the site and local conditions affecting trade before starting technical drawings and those of other sections for complete information and co-ordination.
 5. Unless otherwise noted, all material to be new, best quality, and bear CSA approval.
 6. Substitution of materials, equivalent to those specified, may be made before closing of tenders.
 7. Guarantee all work and equipment installed for twelve (12) months after completion. Replace without charge any defective items, provided that failure is not due to improper usage by others.
 8. Items, including distribution equipment and lighting fixtures, to be replaced, shall be approved by the Engineer.
 9. Maintenance Manuals: 3 required, 3 ring minimum 2" binders, indexed, include equipment brochures, shop drawings, names and addresses of suppliers.
 10. Record Drawings: during construction, on a set of white prints, mark any changes after tender. Submit approved marked prints to consultant on completion of project.
- 2.0 PRODUCTS
 1. Raceways and Equipment
 - 1.1 Raceways: metallic tubing and/or rigid galvanized steel conduit as indicated. Use AC-90 armored cable for hard runs only. Size: per Canadian Electrical Code. Motor connections: minimum 600 mm of PVC jacketed flexible steel conduit with liquid tight fittings. Exterior: rigid galvanized steel with threaded fittings.
 2. Conduits: rigid galvanized steel for branch circuits, R90 X-link insulation. Control wires: minimum #14 for 120 volts. Service conductors: RW90 insulation suitable for -40 deg. C. Low voltage control wiring, up to 50 volts, by Division 15.
 2. Receptacles and Switches
 1. Provide three receptacles: rated 15 amps, 125 volts, specification toggle switch: rated 15 amps, 125 volts, medium specification grade. Special receptacles and connections as indicated.
 3. Outlet Boxes
 1. For lighting fixtures: formed metal boxes 100 mm round or square. Special switches and connections as indicated.
 2. Outdoor outlet boxes and where indicated WP: cast metal with threaded hubs.
 4. Branch Circuit Panels
 1. Branch circuit panels 240 volts, 3 phase, 4 wire branch panels, 42 ckt. unless otherwise shown and as required complete with full size breakers as required. Typewritten directory inside door to have correct circuit information.
 2. Branch Circuit Breakers: Full size breakers to match panel manufacturer and interrupting capacity.
 3. Motor Starter: plywood backing behind panels, 1200x2400x19mm (4'x3'x3/4").
 5. Motor
 1. Manual motor overload protection switches: single or double pole, complete with pilot light and suitable "heaters".
 2. Automatic Magnetic Starters: 1, 2 or 3 pole, minimum EMAC 0, in EMAC 1 enclosure, CMA control transformer and auxiliary contacts as required. Motor starter shall be provided ready, with one pole per phase wire HQA selector and red running light.
 3. Motor starters may be in separate enclosures or may be mounted in modular starter assemblies as Westinghouse 4-Plex units or similar.
 6. Main Service and Distribution
 1. Incoming main distribution to come from Mall Distribution system.
 2. Main Service to tenancy: 200 amps, 600/347 volts, 3 phase 4-wire.
 3. Provide a 1200 x 2400 x 19mm (4' x 8' x 3/4") plywood backing for main distribution equipment.
 7. Service Ground
 1. Ground conductor from main distribution.
 8. Telephone Distribution System
 1. Service raceway: 100mm conduit from main telephone distribution to a GFS plywood backboard 1200mm x 2400mm x 19mm (4' x 8' x 3/4"). Provide pull rope in raceway.
 2. Supply and install the conduit system where shown.
 9. Lighting System
 1. Lighting fixtures: as shown on drawings complete with lamps and all necessary accessories for complete and proper installation. CSA approved ballasts to be energy saving type and lamps to be T-5 energy saving lamps.
 2. HID fixtures to be as indicated. Ballasts for exterior fixtures to be -30°C.
 3. Photo cell controlled exterior HID fixtures.
 4. Plastic Lenses: minimum 3/16" thick configuration as per schedule.
 5. Exit Lights
 1. Complete with LED lamps, metal housing, 6" high letters, 120V and 12V operation.
 2. Battery Operated Emergency Lighting - Combination Emergency/Exit Lighting: full automatic operation on power failure or 1172 volt operation with minimum 90 minutes of battery life. Units complete with battery rated at minimum 36 watts, fully automatic charger with automatic high and low rates, built-in test switch, remote and local 9w tungsten mini-lights (white) high rate charge indicator, remote and local 9w tungsten mini-lights (white) high rate charge indicator, stake indicator, mounting bracket, automatic disconnection of low-charge battery and 5 year guarantee.
 3. Disconnect Switches: non-lased, for motor driven equipment, EMAC 3 for exterior.

3.0 EXECUTION

1. All work to be of high quality. Clean up all debris from electrical installation. The installation to meet the latest requirements of the Canadian Electrical Code, Provincial, Municipal and Local Codes, and Local Inspection Department.
2. Provide branch circuit wiring for all lighting and power circuits.
3. Allow for a variation of 3000 mm from locations shown for outlets and switches without extra cost. Confirm final location prior to installation.
4. Identify the following electrical equipment with 3mm thick plastic, engraved black faced lamocod nameplates with mechanical fixings:
 1. Panels: identify breaker panels, as indicated on drawings and schedule.
 2. Enclosed breakers.
 3. Indicate equipment being controlled and voltage.
 4. On/Off switches: indicate onses being served.
5. Grounding:
 1. Use solderless type ground connectors. Maintain continuity of ground throughout system.
 2. Wiring of Mechanical Equipment, control wires, motors, fire-alarm equipment, electrical equipment, power and control wiring for mechanical equipment. This includes breakers, disconnects, starters, conduit, wiring and complete connection. Refer to Mechanical drawings, schedules and specifications. Confirm voltage, phase, and size of mechanical equipment; size breakers and heaters per O.E.C.
 7. Lighting System
 1. Lighting system, including wiring, per the schedule and as indicated, conduit system, wiring, hangers, and all necessary items required for a complete system including control (switches, contactors, etc) Run 120 volt AC and 12 volt DC power into exit lights.
 2. Cooperate with personnel of other divisions to determine the proper location of lights, switches, etc., to avoid conflict between mechanical and electrical trades. Confirm final location of lighting outlets in the layout, etc., determine exact position of lighting outlets in the mechanical area only after all mechanical layouts in these rooms have been finalized; ensure that fixtures suit the type of ceiling in or on which they are to be installed.
 8. Fire Alarm System shall be addressable and monitored.
 1. Re-install existing fire alarm system, and reconfigure to a complete system including control (switches, contactors, etc) Run 120 volt AC and 12 volt DC power into exit lights.
 2. Cooperate with personnel of other divisions to determine the proper location of lights, switches, etc., to avoid conflict between mechanical and electrical trades. Confirm final location of lighting outlets in the layout, etc., determine exact position of lighting outlets in the mechanical area only after all mechanical layouts in these rooms have been finalized; ensure that fixtures suit the type of ceiling in or on which they are to be installed.

NOTE: ELECTRICAL CONTRACTOR SHALL REVIEW DIVISION 15 PLANS AND SPECIFICATIONS TO DETERMINE THE COMPLETE SCOPE OF WORK REQUIRED TO CONNECT ALL MECHANICAL COMPONENTS TO THE BUILDING ELECTRICAL SYSTEM. ALL ELECTRICAL OUTLET PLUG SHALL BE LOCATED AT 12" A.F.F. UNLESS NOTE OTHERWISE. MAXIMUM OF FOUR (4) PLUGS PER 15 AMP BREAKER UNLESS NOTED OTHERWISE.

ELECTRICAL SYMBOL LEGEND

MISC. DEVICES	RECEPTACLES	FIRE ALARM DEVICES
<p>ELECTRICAL PANEL</p> <p>MOTOR DISCONNECT, NON-FUSED COMBINATION MOTOR STARTER</p>	<p>SIMPLEX DUPLEX GFI WEATHERPROOF DUPLEX DEDICATED FLOOR MOUNTED J.B. FLOOR MOUNTED J.B. REMOTE DESIGNE TO BE INSTALLED ABOVE COMPUTER</p>	<p>MANUAL PULL STATION BELL STROBE HORN/STROBE SMOKE DETECTOR DUCT SMOKE DETECTOR, FIXED TEMP. HEAT DETECTOR, RATE OF RISE SMOKE ALARM CONTROL PANEL</p>
<p>COMMUNICATIONS</p> <p>OUTLET, TELEPHONE OUTLET, DATA OUTLET, TELEVISION OUTLET, MICROPHONE OUTLET, SATELLITE SPEAKER</p>	<p>SINGLE 3-WAY 4-WAY DIMMER VARIABLE SPEED MANUAL MOTOR PROTECTION SWITCH</p>	<p>EXIT/EMERGENCY LIGHTING EXIT SIGN EMERGENCY LIGHTING, 2 HEAD REMOTE EMERGENCY LIGHTING, BATTERY PACK C/W 2 LAMPS EMERGENCY LIGHTING BATTERY PACK EMERGENCY LIGHTING, EXIT SIGN COMBO PACK</p>

DESIGN & INSTALL ALL MECHANICAL SYSTEMS TO THE FOLLOWING CODES AND STANDARDS:
 ALBERTA BUILDING CODE - 2006
 ALBERTA FIRE CODE - LATEST EDITION
 CANADIAN ELECTRIC CODE - LATEST EDITION
 NATIONAL BUILDING CODE - LATEST EDITION
 NATIONAL FIRE ALARM CODE - LATEST EDITION
 NFPA 13 & ALL OTHER APPLICABLE NFPA SECTIONS
 CANADIAN PLUMBING CODE - LATEST EDITION
 NATIONAL GAS INSTALLATION CODE CSA-B149
 SIMCOA

FIELD REVIEW:
 THE ENGINEERS HAVE BEEN RETAINED ONLY FOR PERIODIC SITE INSPECTIONS TO VERIFY THE WORK IS BEING DONE IN ACCORDANCE WITH THE PROJECT TO THE CONTRACT DOCUMENTS.
 THE ENGINEERS ASSUME NO RESPONSIBILITY FOR ON-SITE WORKER SAFETY FOR OTHER THAN THEIR OWN CONTRACTS. THE OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL PERSONNEL ON THE WORK SITE.
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 PLANS EXAMINATION:
 DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION UNTIL REVIEWED AND APPROVED BY THE ENGINEER. THE ENGINEER'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE DRAWINGS AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED THEREIN. THE ENGINEER'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE DRAWINGS AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED THEREIN.
 COPYRIGHTS:
 ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER. DRAWINGS AND DOCUMENTS ARE NOT TO BE USED FOR CONSTRUCTION UNLESS SOUGHT BY THE ENGINEER.
 DRAWING REVIEW:
 DRAWINGS MUST NOT BE SCALED. THE CONTRACTOR MUST CROSS-REFERENCE ALL DIMENSIONS TO THE DRAWING. DIMENSIONS MUST BE REFERENCED TO THE ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION AND NOT FROM THE WORK.
 PROFESSIONAL ENGINEER ALBERTA
 R. A. LAMONTAGNE
 AUGUST 22, 2012

NO.	DESCRIPTION	DATE	CR
1	ISSUED FOR BUILDING PERMIT	SEP 04 12	
2	ISSUED FOR TENDER	OCT 09 12	

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PROJECT
 GOODLIFE AND VISIONS BUILDINGS
 ST. ALBERT COMMERCIAL DEVELOPMENT
 525 ST. ALBERT TRAIL
 ST. ALBERT, AB

TITLE:
 SPECIFICATIONS

SCALE
 AS SHOWN

DATE
 AUG 13, 2012

DRAWN BY
 CHENGBAO BR

CHECKED BY
 TM

DATE
 AUG 13, 2012

JOB #
 1212

DWG.
 SPEC

REVISION:
 2

DRAWING NO.
 E1

DESIGN & INSTALL ALL MECHANICAL SYSTEMS TO THE FOLLOWING CODES AND STANDARDS.

ALBERTA BUILDING CODE - 2006
 ALBERTA FIRE CODE - LATEST EDITION
 CANADIAN ELECTRIC CODE - LATEST EDITION
 NATIONAL BUILDING CODE - LATEST EDITION
 NATIONAL PLUMBING CODE - LATEST EDITION
 NFPA 70 & ALL OTHER APPLICABLE NFPA SECTIONS
 CANADIAN PLUMBING CODE - LATEST EDITION
 NATIONAL GAS INSTALLATION CODE CCA-8149
 SIMONA

FIELD REVIEW:
 THE ENGINEERS HAVE BEEN RETAINED ONLY FOR PERIODIC SITE INSPECTIONS TO THE PROJECT TO VERIFY THE WORK IS IN ACCORDANCE WITH THE DRAWING DOCUMENTS.

SITE SAFETY:
 THE ENGINEERS ASSUME NO RESPONSIBILITY FOR ON-SITE WORKER SAFETY FOR OTHER THAN THEIR OWN PROJECTS. THE OWNER AND/OR CONTRACTOR SHALL SAFELY ACT IN ACCORDANCE WITH THE CANADIAN OCCUPATIONAL HEALTH AND SAFETY ACT.

PLANS EXAMINATION:
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DRAWING REVIEW:
 DRAWINGS MUST NOT BE SCALED. THE CONTRACTOR MUST CROSS-REFERENCE ALL MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL DRAWINGS TO THE ARCHITECTURAL DRAWINGS. DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.



AUGUST 22, 2012

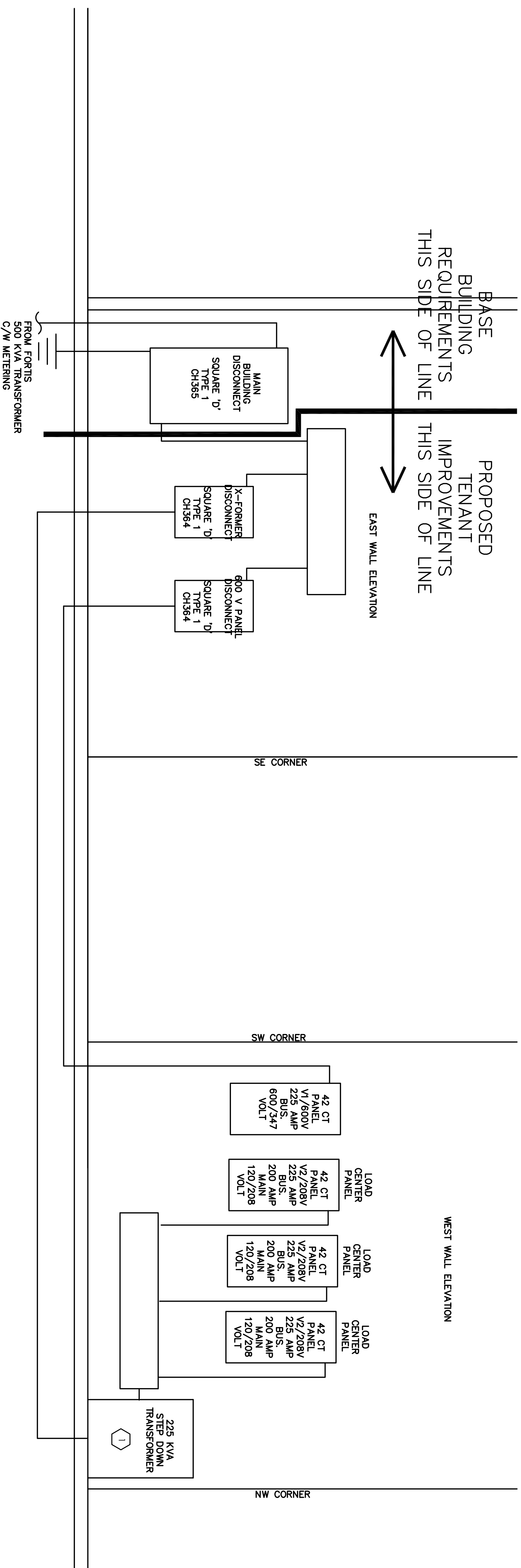
REVISIONS			
NO.	DESCRIPTION	DATE	CR
1	ISSUED FOR BUILDING PERMIT	SEP 04 12	
2	ISSUED FOR TENDER	OCT 09 12	

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PROJECT
 GOODLIFE BUILDING
 ST. ALBERT COMMERCIAL DEVELOPMENT
 525 ST. ALBERT TRAIL
 ST. ALBERT, AB

TITLE
 ELECTRICAL SERVICE ENTRY PLAN BLDG 1

SCALE	DATE	DRAWING NO.
AS SHOWN	AUG 13, 2012	E3
DRAMA BY	CHANGED BY	
DATE	DATE	REVISION: 2
JOB # 1212	DWG.	
PLOTTED:	OWNER:	



1
ELECTRICAL ROOM WALL ELEVATIONS
 N.T.S.

NOTE:
 ELECTRICAL CONTRACTOR SHALL REVIEW DIVISION 15 PLANS AND SPECIFICATIONS TO DETERMINE THE COMPLETE SCOPE OF WORK REQUIRED TO CONNECT ALL MECHANICAL COMPONENTS TO THE BUILDING ELECTRICAL SYSTEM.
 ALL ELECTRICAL OUTLET PLUG SHALL BE LOCATED AT 12" A.F.F. UNLESS NOTE OTHERWISE. MAXIMUM OF FOUR (4) PLUGS PER 15 AMP BREAKER UNLESS NOTED OTHERWISE.
 LOCATION OF SIGNAGE JUNCTION BOXES AND EXTERIOR BUILDING LIGHTING SHALL BE DETERMINED FROM THE ARCHITECTURAL PLANS, AND NOT FROM THE ELECTRICAL PLANS, THIS SHALL INCLUDE LOCATIONS ON EXTERIOR WALLS AND HEIGHT ABOVE GRADE.
TRANSFORMER SPECIFICATIONS

1 - TRANSFORMER DRY TYPE 225 KVA 600D208/120 - SQUARE D MODEL EE225T65H, D=35", HT=50", AND W=37" WT.=1,110 LBS.

NOTE:
 DIVISION 16 SHALL BE RESPONSIBLE FOR THE POWER SUPPLY TO ALL DIVISION 15 EQUIPMENT REQUIRING POWER CONNECTIONS. THE DIVISION 16 CONTRACTOR SHALL REVIEW THE DIVISION 15 PLANS TO DETERMINE THE POWER REQUIREMENTS FOR ALL DIVISION 15 EQUIPMENT, AND PROVIDE POWER AS SPECIFIED IN THE DIVISION 15 PLANS.

DESIGN & INSTALL ALL MECHANICAL SYSTEMS TO THE FOLLOWING CODES AND STANDARDS:

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- ALBERTA FIRE CODE - LATEST EDITION
- CANADIAN ELECTRICAL CODE - LATEST EDITION
- NATIONAL BUILDING CODE - LATEST EDITION
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70
- MEPLA 1 & 4 - OTHER APPLICABLE NFPA SECTIONS
- CANADIAN PLUMBING CODE - LATEST EDITION
- NATIONAL GAS INSTALLATION CODE CGA-8149
- SIMCOA

FIELD REVIEW:
THE ENGINEERS HAVE BEEN RETAINED ONLY FOR PERIODIC SITE INSPECTIONS TO THE PROJECT TO VERIFY THE WORK IS BEING CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DOCUMENTS.

SITE SAFETY:
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CONTRACTORS:
CONTRACTORS AND RELATED CONTRACTORS ARE THE AGENTS OF THE ENGINEER. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

DRAWING REVIEW:
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PROFESSIONAL ENGINEER
R. A. LAMONTAGNE
ALBERTA
AUGUST 22, 2012

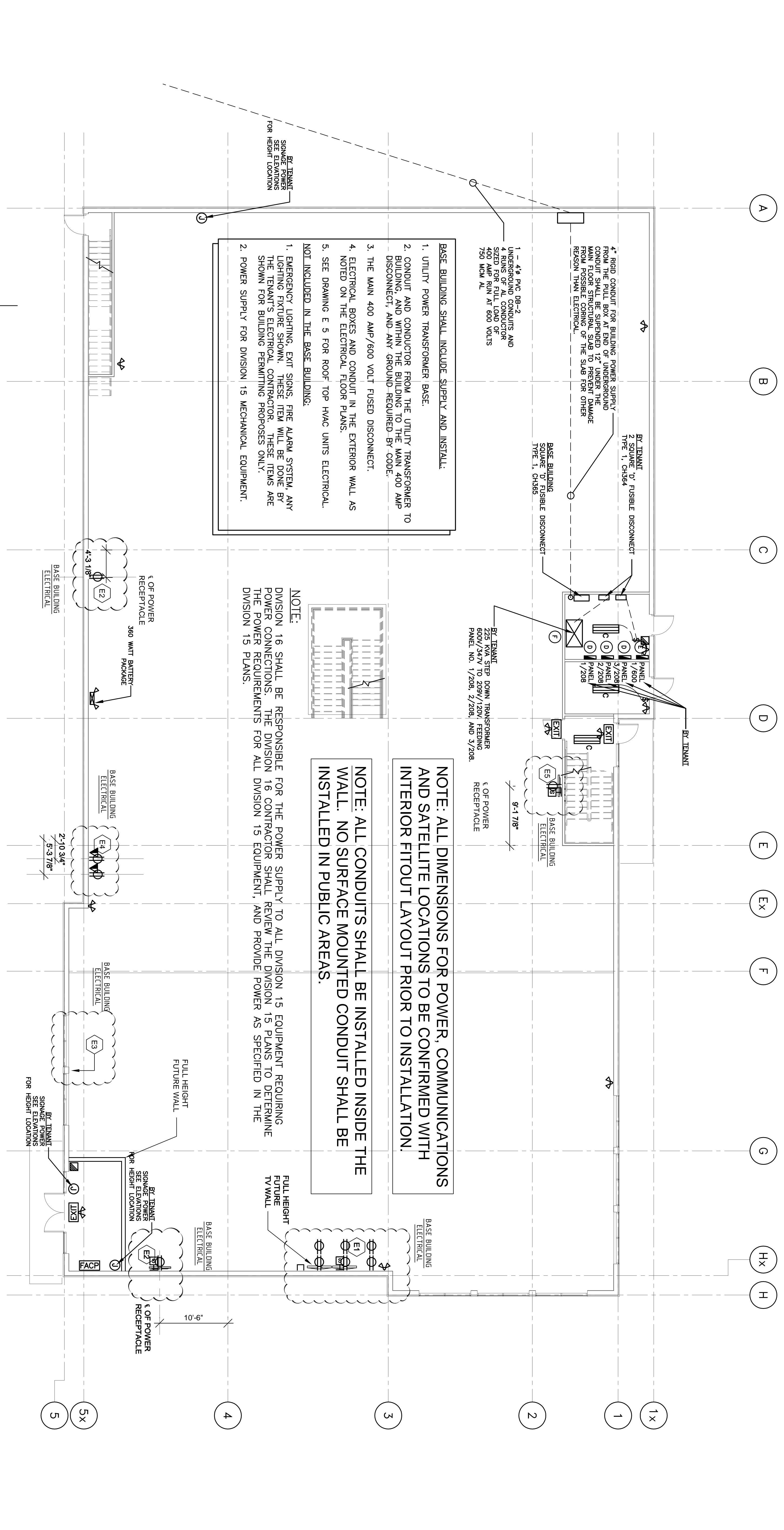
REVISIONS		
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1	ISSUED FOR BUILDING PERMIT	SEP 04 12
2	ISSUED FOR TENDER	OCT 09 12

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PROJECT
GOODLIFE BUILDING
525 ST. ALBERT COMMERCIAL DEVELOPMENT
525 ST. ALBERT TRAIL
ST. ALBERT, AB

TITLE:
BASE BUILDING 1 ELECTRICAL PLAN

SCALE	DATE	DRAWING NO.
AS SHOWN	AUG 13, 2012	F4
DRAMA BR	CHANGED BR	
dl	TM	
JOB # 1212	DWG.	REVISION: 2
PLOTTED:	DATE:	



LIGHTING FIXTURE SPECIFICATIONS

- A** PARKING LOT LIGHT 2 HEAD STANDARD - SPAULDING LIGHTING, DISTRIBUTED BY EECOL ELECTRIC, EXTERIOR LIGHT, CIMARRON SERIES, PRODUCT NUMBER - CR1-H40-HE-F-T-DB, ARM MOUNT CONSTRUCTION, LENS-FLAT, FINISH-DARK BRONZE, 16'-0" STEEL HOLLOW SQUARE SECTION POST MOUNTED ON OWNER SUPPLIED 24" DIAMETER BY 5'-0" HIGH CONCRETE PILE.
- B** EXTERIOR SECURITY LIGHTING, DISTRIBUTOR: EECOL ELECTRIC, VALUELIGHT, COMOS SM-727-H40-120, 400 WATT METAL HALIDE LAMP, COLOUR-DARK BRONZE.
- C** SERVICE ROOMS/STAIRWELLS LIGHTS - VALUELIGHT 3-T-5 LAMPS, MODEL 1144A-3F32-120, SURFACE MOUNT C/W SUSPENSION KIT AND SUSPEND AT 12'-0" AFF.

STEP DOWN TRANSFORMER

- F** TRANSFORMER DRY TYPE 225 KVA 600D208/120 SQUARE D MODEL EE225165H, D=35", HT=50", AND W=37" WT.=1,110 LBS.

- D** SQUARE D 42 CIRCUIT LOAD CENTER PANEL WITH 200 AMP MAIN BREAKER, 225 AMP BUSES, 208/120 VOLT.
- E** SQUARE D 42 CIRCUIT, 225 AMP BUSES, 600/347 VOLT.

FIELD REVIEW:
 THE ENGINEERS HAVE BEEN RETAINED ONLY FOR PERIODIC SITE INSPECTIONS TO THE PROJECT TO VERIFY THE PROGRESS OF THE WORK AND TO CORRECT ANY DISCREPANCIES TO THE DRAWING DOCUMENTS.

SITE SAFETY:
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PLANS EXAMINATION:

PLANS ARE NOT TO BE USED FOR CONSTRUCTION UNTIL REVIEWED AND APPROVED BY THE ENGINEERS. THE ENGINEERS ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THE PLANS. THE ENGINEERS ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THE PLANS. THE ENGINEERS ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THE PLANS.

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DRAWING REVIEW:

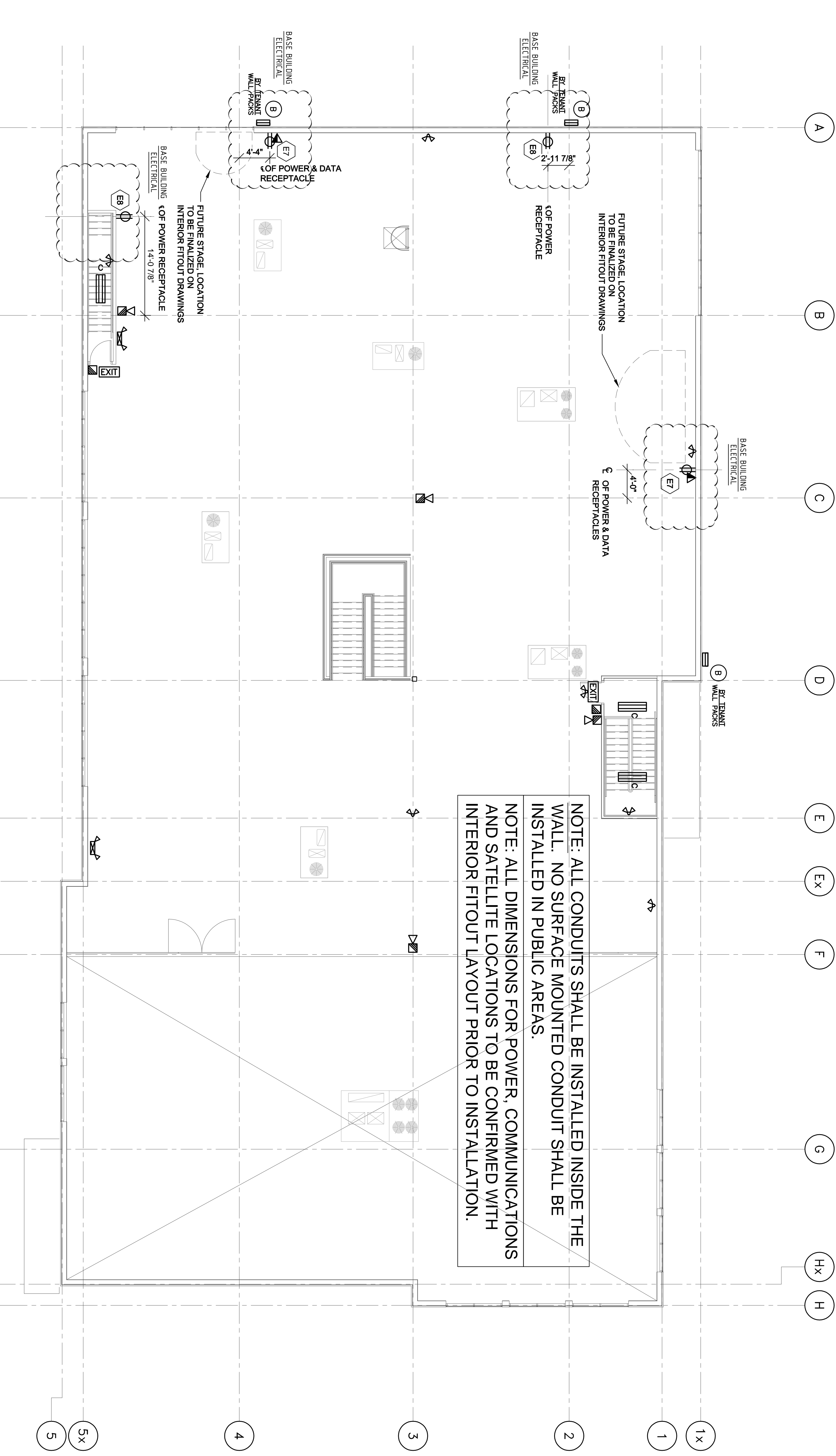
DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK. THE ARCHITECT/ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE PLANS.



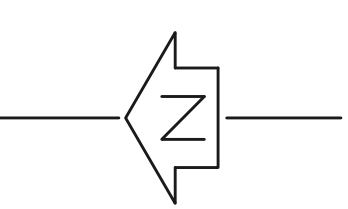
REVISIONS		
NO.	DESCRIPTION	DATE
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2	ISSUED FOR TENDER	OCT 09 12

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TITLE:		BASE BUILDING 1 ELECTRICAL PLAN
PROJECT:		GOODLIFE BUILDING ST. ALBERT COMMERCIAL DEVELOPMENT 525 ST. ALBERT TRAIL ST. ALBERT, AB
SCALE:	DATE:	DRAWING NO.:
AS SHOWN	AUG 13, 2012	E5
DRAWN BY:	CHECKED BY:	REVISION:
TM	TM	2
JOB #:	DWG.:	EXTD.:
1212		



1 BASE BUILDING 1, LEVEL 2, POWER
 1/8"=1'-0"



NOTE:
 DIVISION 16 SHALL BE RESPONSIBLE FOR THE POWER SUPPLY TO ALL DIVISION 15 EQUIPMENT REQUIRING POWER CONNECTIONS. THE DIVISION 16 CONTRACTOR SHALL REVIEW THE DIVISION 15 PLANS TO DETERMINE THE POWER REQUIREMENTS FOR ALL DIVISION 15 EQUIPMENT, AND PROVIDE POWER AS SPECIFIED IN THE DIVISION 15 PLANS.

NOTE: DIVISION 16 CONTRACTOR SHALL SUPPLY AND INSTALL CONDUITS, CONDUCTORS, AND SAFETY SWITCHES FOR ALL 7 ROOF TOP HVAC UNITS, LEAVING ENOUGH CONDUCTOR TO CONNECT TO THE 600 VOLT FUTURE 200 A SERVICE PANEL IN THE ELECTRICAL ROOM. SEE DIVISION 15 PLAN FOR EQUIPMENT SPECIFICATIONS.

DESIGN & INSTALL ALL MECHANICAL SYSTEMS TO THE FOLLOWING CODES AND STANDARDS:

ALBERTA BUILDING CODE - 2006
 ALBERTA FIRE CODE - LATEST EDITION
 CANADIAN ELECTRIC CODE - LATEST EDITION
 NATIONAL BUILDING CODE - LATEST EDITION
 NATIONAL PLUMBING CODE - LATEST EDITION
 NFPA 70 & ALL OTHER APPLICABLE NFPA SECTIONS
 CANADIAN PLUMBING CODE - LATEST EDITION
 NATIONAL GAS INSTALLATION CODE CCA-8149
 SIMCOA

FIELD REVIEW:
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SITE SAFETY:
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PLANS EXAMINATION:

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AUGUST 22, 2012

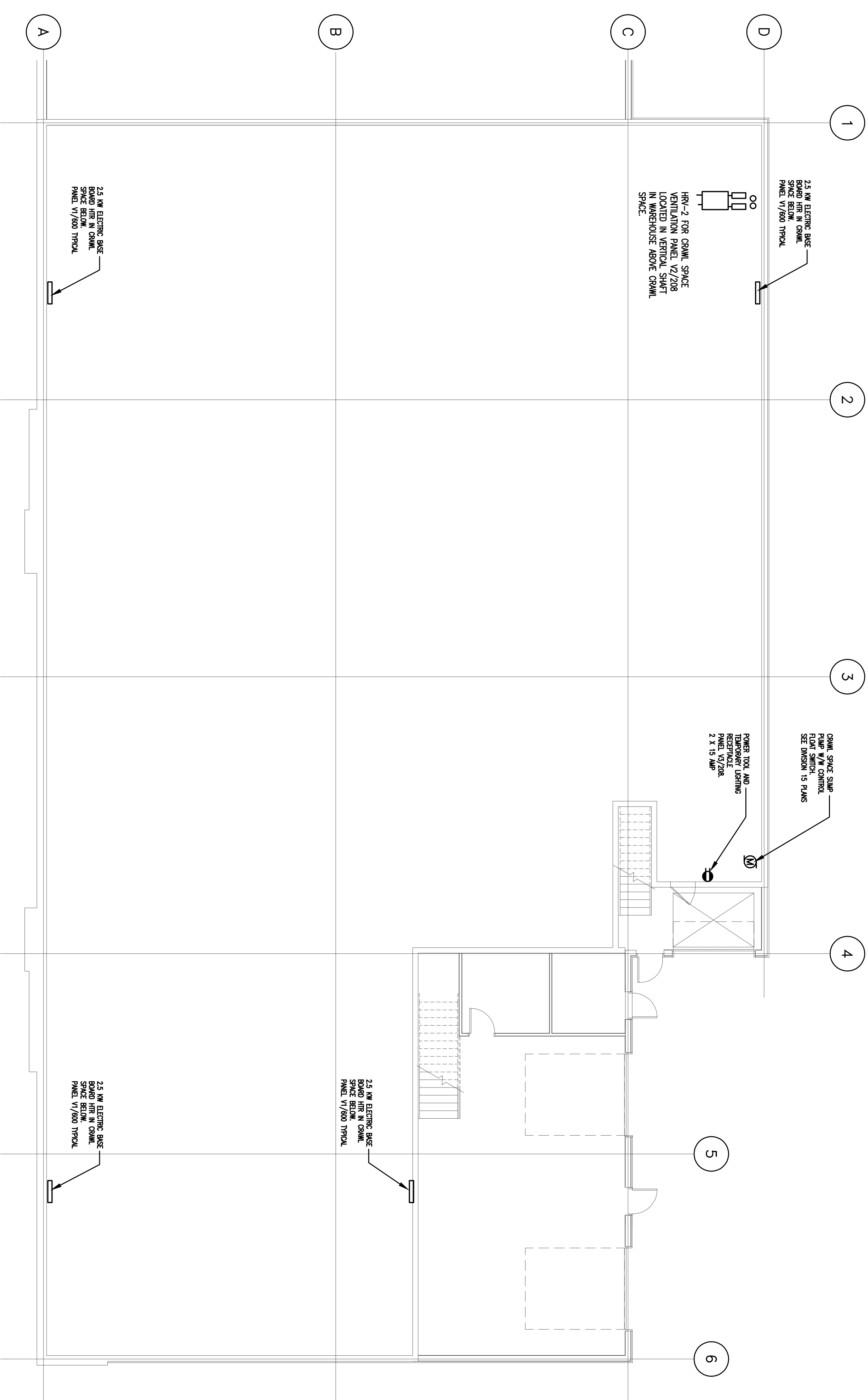
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2	ISSUED FOR TENDER	OCT 09 12	

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PROJECT
 VISIONS BUILDING
 ST. ALBERT COMMERCIAL DEVELOPMENT
 525 ST. ALBERT TRAIL
 ST. ALBERT, AB

TITLE:
 BASE BUILDING 2 ELECTRICAL PLAN

SCALE	DATE	DRAWING NO.
AS SHOWN	AUG 13, 2012	
DRAMA BY	CHANGED BY	E7
DATE	DATE	REVISION: 2
JOB # 12112	DWG.	
PLOTTED:	COMD:	



BASE BUILDING 2 CRAWL SPACE POWER
 1/8"=1'-0"

LIGHTING FIXTURE SPECIFICATIONS

- (A) PARKING LOT LIGHT 2 HEAD STANDARD - SPALLING LIGHTING, DISTRIBUTED BY ECOL ELECTRIC, EXTERIOR LIGHT, GIMARRON SERIES, PRODUCT NUMBER - CR1-H40-HE-F-T-DB, ARM MOUNT CONSTRUCTION, LENS-FLAT, FINISH-DARK BRONZE, 16-0" STEEL HOLLOW SQUARE SECTION POST MOUNTED ON OWNER SUPPLIED 24" DIAMETER BY 5-0" HIGH CONCRETE PILE.
- (B) EXTERIOR SECURITY LIGHTING, DISTRIBUTOR: ECOL ELECTRIC, VALUELIGHT: COMOS SM-727-H40-120, 347V BALLASTS, 400 WATT METAL HALIDE LAMP, COLOUR-DARK BRONZE.
- (C) SERVICE ROOM LIGHTS - VALUELIGHT 3-T-5 LAMPS, MODEL 1144A-3F32-120, SURFACE MOUNT C/W SUSPENSION KIT AND SUSPEND AT 12'-0" AFF.

NOTE:
 DIVISION 16 SHALL BE RESPONSIBLE FOR THE POWER SUPPLY TO ALL DIVISION 15 EQUIPMENT REQUIRING POWER CONNECTIONS. THE DIVISION 16 CONTRACTOR SHALL REVIEW THE DIVISION 15 PLANS TO DETERMINE THE POWER REQUIREMENTS FOR ALL DIVISION 15 EQUIPMENT, AND PROVIDE POWER AS SPECIFIED IN THE DIVISION 15 PLANS.

DESIGN & INSTALL ALL MECHANICAL SYSTEMS TO THE FOLLOWING CODES AND STANDARDS.

ALBERTA BUILDING CODE - 2006
 ALBERTA FIRE CODE - LATEST EDITION
 CANADIAN ELECTRICAL CODE - LATEST EDITION
 NATIONAL BUILDING CODE - LATEST EDITION
 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70
 NFPA 71 & ALL OTHER APPLICABLE NFPA SECTIONS
 CANADIAN PLUMBING CODE - LATEST EDITION
 NATIONAL GAS INSULATION CODE CGA-8149
 SIMCOA

FIELD REVIEW:
 THE ENGINEERS HAVE BEEN RETAINED ONLY FOR PERIODIC SITE INSPECTIONS TO THE PROJECT TO VERIFY THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEERS AND TO CORRECT ANY ERRORS. THE ENGINEERS ASSUME NO RESPONSIBILITY FOR ON-SITE WORKER SAFETY FOR OTHER THAN THEIR OWN CONTRACTORS. THE OWNER AND/OR CONTRACTOR SHALL SAFELY ACT IN ACCORDANCE WITH THE CANADIAN OCCUPATIONAL SAFETY AND HEALTH ACT.

PLANS EXAMINATION:
 DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION UNTIL REVIEWED AND APPROVED BY THE ENGINEERS. THE ENGINEERS WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE MADE BY THE CONTRACTOR OR OTHER PERSONS IN CONNECTION WITH THE CONSTRUCTION OF THE PROJECT.

COPYRIGHTS:
 DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE PROPERTY OF THE ENGINEERS. PERMISSION IS GRANTED TO THE OWNER AND/OR CONTRACTOR TO REPRODUCE THESE DRAWINGS FOR THE PROJECT ONLY. NO OTHER REPRODUCTION OR TRANSMISSION OF ANY KIND IS PERMITTED WITHOUT THE ENGINEERS' PERMISSION. DRAWINGS AND DOCUMENTS ARE NOT TO BE USED FOR CONSTRUCTION UNLESS SHOWN BY THE ENGINEERS.

DRAWING REVIEW:
 DRAWINGS MUST NOT BE SCALE. THE CONTRACTOR MUST CROSS-REFERENCE ALL MECHANICAL, STRUCTURAL, FOUNDATION, ELECTRICAL AND MECHANICAL DRAWINGS TO THE PROJECT DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS MUST BE REPORTED TO THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK.



AUGUST 22, 2012

REVISIONS		
NO.	DESCRIPTION	DATE
1	ISSUED FOR BUILDING PERMIT	SEP 04 12
2	ISSUED FOR TENDER	OCT 09 12

R. Lamontagne, P. Eng.
 P.O. Box 2531
 Didsbury, Alberta, T0M 0W0
 Tel: (403) 703 6161
 E MAIL: rdlamont@shaw.ca

PROJECT:
 VISIONS BUILDING
 ST. ALBERT COMMERCIAL DEVELOPMENT
 525 ST. ALBERT TRAIL
 ST. ALBERT, AB

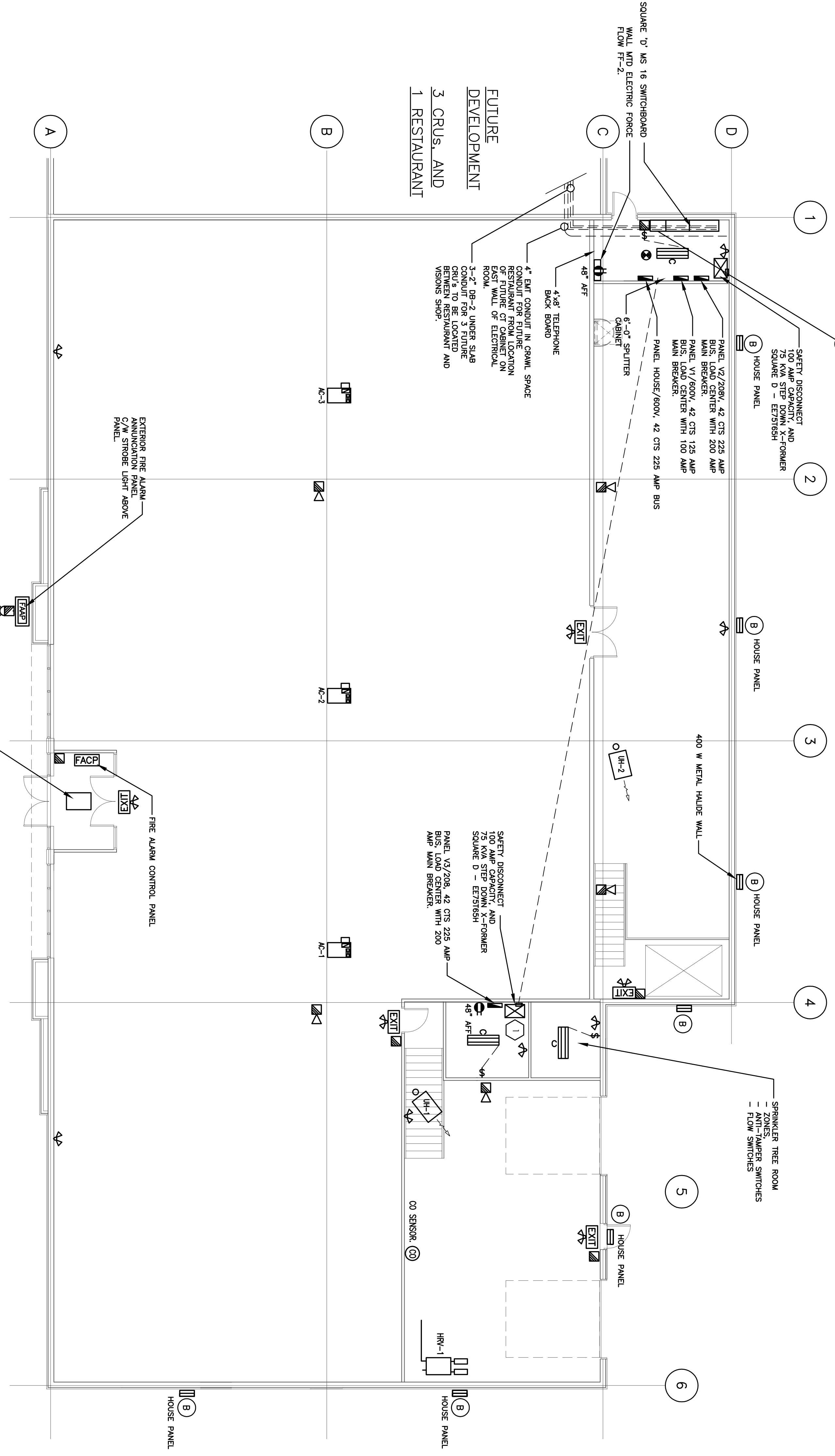
TITLE:
 BASE BUILDING 2 ELECTRICAL PLAN

SCALE	DATE	DRAWING NO.
AS SHOWN	AUG 13, 2012	F8
DRAMA BY	CHANGED BY	
JOB # 1212	DWG.	REVISION: 2

TRANSFORMER NO. 2
 750 KVA
 SEC. 600/347 VOLTS

2 - 4* PVC BR-2
 UNDERGROUND CONDUITS AND
 2 RINGS OF ALL CONDUCTOR
 300 AMP EACH RUN AT 600 VOLTS
 500 MCM AL

BASE BUILDING 2 MAIN FLOOR POWER
 1/8"=1'-0"



NOTE:
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MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE			
RUU	AC-1 AC-2 AC-3	575V/3/60 575V/3/60 575V/3/60	
UNIT HEATER	UH-1 UH-2	120V/1/60 120V/1/60	
ELECTRIC FORCE FLOW	FF-1 FF-2	208/240/1/60 208/240/1/60	
ELECTRIC BRGE BOARD	1.3KW 4 - 2.5KW	208/240/1/60 347/1/60	
HEAT RECOVERY VENTILATOR	HRV-1 HRV-2	120/1/60 120/1/60	
GRM. SPACE SUMP PUMP		120/1/60	

NOTES:
 REFER TO MECHANICAL DRAWINGS FOR LOCATIONS & ADDITIONAL FIRE PROTECTION SPRINKLER SYSTEM TO HAVE FLOW & TAMPER AS REQUIRED BY CODE.
 THE CO DETECTION SYSTEM IS TO BE PROVIDED WITH A 120V SOURCE COORDINATE WITH MECHANICAL CONTRACTOR.