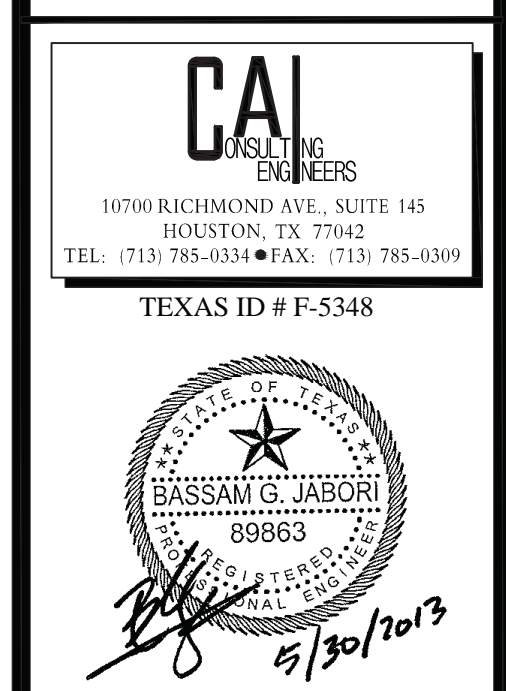


| ELECTRICAL SPECIFICATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------------|----------|----------|-----------|--------|-----------|---------|---------|----------|----------|----------|----------|----------|--|------|------|--------|--------------------|--------------------|--------|----------------------|----------------------|-------|----------------------|----------------------|-------|----------------------|----------------------|--|
| <p>1. GENERAL REQUIREMENTS AND CONTRACTOR QUALIFICATIONS</p> <p>A. The Contractor for this work shall be a specialist in this field, having the organization to provide trained, experienced and skilled personnel required to construct a practical and working system.</p> <p>B. Study all matters and conditions of the project and coordinate with the other Divisions of work to provide a complete and functioning system in accordance with the Contract Documents.</p> <p>C. Use only the specified materials, equipment and procedures in fabricating the systems.</p> <p>D. Notify the Engineer of any and all conflicts in ample time to avoid unwarranted changes in any work.</p> <p>E. Obtain all applicable permits and pay all fees charged by above authorities.</p> <p>F. Existing conditions</p> <ol style="list-style-type: none"> Prior to submitting a proposal, visit the job site to become familiar with existing conditions and equipment for the work to be accomplished. Verify exact location of existing electrical system. <p>G. The Electrical Systems in their entirety shall be installed in accordance with the NFPA 70, National Electrical Code, International Energy Code and all other governing Codes and Authorities. Modifications required by the above said authorities shall be made without additional charge to the owner.</p> <p>H. With submission of bid, Contractor shall give written notice to the Architect or Engineer of any materials or apparatus believed inadequate or unsuitable, in violation of laws, ordinances, rules and any necessary items or work omitted, in the absence of such written notice, it is mutually agreed the Contractor has included the cost of all required items in his proposal, and that he will be responsible for the approved satisfactory functioning of the entire system without extra compensation.</p> | <p>5. WIRING DEVICES</p> <p>A. Furnish and install all wiring devices for convenience outlets, telephone outlets, push buttons, conductor splices, and switches as shown on the drawings unless otherwise noted.</p> <p>B. Unless shown otherwise, convenience outlets shall be Hubbell #CRS5202R/WH.</p> <p>C. Unless shown otherwise, light switches shall be Hubbell #CS1221GR/WH/CS1222GR/WH/CS1223GR/WH/CS1224GR/WH.</p> <p>D. Dimmer – Incandescent: Lutron AY-6000-WH/AY-10P-WH Dimmer – Fluorescent: Lutron AYF-103P-WH</p> <p>D. Where shown on drawings, duplex receptacles designated with ground fault circuit interruption shall be HUBBELL #GFR3521 and weatherproof cover shall be HUBBELL CWP26H.</p> <p>E. The following are the ADA Accessibility Guidelines for switches, receptacles, telephone and outlets. Unless shown otherwise on the drawings, mounting heights to be as follows:</p> <ol style="list-style-type: none"> Wall switches – 4'-0" Wall switches at countertops 3'-8" to center of device or shown on drawings. Wall receptacles, telephone and data outlets – 1'-6" to center of device or shown on drawings. Wall receptacles, telephone and data outlets at countertops 3'-8" to center of device or shown on drawings. <p>F. Provide white wall/face plates for all interior areas unless otherwise noted on electrical and architectural floor plans or instructed by architect.</p> <p>G. Occupancy Sensors:</p> <ol style="list-style-type: none"> Wall mounted: Greengate-Cooper Model OMW-D-1001-MV-W/ OSM-DT-0601 120/277 VAC and white color. Ceiling mounted: Greengate-Cooper Model OMC-DT-2000-R/ DT2000 120/277 VAC and white color. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>2. LIGHTING AND POWER CIRCUITS AND SWITCHES</p> <p>A. Provide a luminaire for each luminaire symbol shown on the drawings and install all luminaires complete with lamps.</p> <p>B. Install luminaires complete with all materials, devices, parts, cables, hardware, hangers, supports, frames and equipment required for a complete, safe and fully operational installation.</p> <p>C. Furnish and install all conduit and conductors necessary for complete circuiting of general power and lighting and for light switching.</p> | <p>6. LIGHT FIXTURES AND LIGHTING CONTROLS</p> <p>A. Furnish and install all lighting fixtures in accordance with the fixture designation, light fixture schedule or indicated on drawings.</p> <p>B. Lighting system controls areas that are controlled by an Novar controls device shall comply with International Energy Conservation Code and City of Greenville requirements. Install override switches for lighting as shown on plans.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>3. SHOP DRAWINGS AND PRODUCT DATA</p> <p>A. Submit manufacturer's printed product literature for all components of the electrical systems prior to purchase and installation.</p> | <p>7. TELEPHONE, VIDEO AND DATA CONDUIT SYSTEM REQUIREMENT</p> <p>A. Where shown on drawings, at each telephone, video and data outlet location, furnish and install recessed wall or floor boxes with 3/4" empty conduit and pull string extending to 6" above ceiling. Provide ivory plastic cover plate over wall box if not in used.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>4. BRANCH CIRCUITS FOR POWER AND LIGHTING</p> <p>A. Conduit systems shall be U.L. labeled EMT with U.L. labeled compression or die cast type fittings.</p> <ol style="list-style-type: none"> Minimum 3/4" for homeruns. 1/2" for switchlegs. <p>B. Branch circuit conductors to be soft drawing annealed copper having a conductivity of not less than 95% of pure copper.</p> <ol style="list-style-type: none"> Type "THHN" (interior), or "THHW" (exterior) solid conductor. <p>C. All feeders, service conductors and branch circuit wiring shall be copper only. Conduit through slab shall be galvanized.</p> <p>D. Use flexible conduit for light fixture wiring where length is within limits as prescribed by NEC and Local Codes.</p> <p>E. Conduit interconnection of lighting fixtures shall be from joint level. Do not extend runs horizontally from fixture to fixture.</p> <p>F. Except where wiring and conduits is routed exposed in electrical room, all wiring and conduits must be concealed within floors, walls or partitions. Confirm with architectural sections and elevations the locations of gypsum board walls and requirements prior to submit bidding. Route all conduits concealed through gypsum board walls.</p> <p>G. Color coding of wire larger than No. 6 AWG and other types of wire accomplished by means of self-adhesive, wrap around type markers of solid colors.</p> <ol style="list-style-type: none"> Mark each wire at panelboards, junction boxes, pull boxes, and outlets. Color Code or use building standard installation. <table border="1"> <tr> <td>480/277V</td> <td>208/120V</td> </tr> <tr> <td>A. brown</td> <td>A. black</td> </tr> <tr> <td>B. purple</td> <td>B. red</td> </tr> <tr> <td>C. yellow</td> <td>C. blue</td> </tr> <tr> <td>N. grey</td> <td>N. white</td> </tr> <tr> <td>G. green</td> <td>G. green</td> </tr> <tr> <td>SL. pink</td> <td>SL. pink</td> </tr> </table> <p>H. Motor circuit conductors shall be continuous throughout their entire length.</p> <p>I. Splices and joints in branch circuit wiring shall be made only in accessible junction boxes and shall be made with compression type solderless connectors. Connectors of the nonmetallic screw type are not approved.</p> <p>J. Minimum wire size shall be no less than #12 AWG unless otherwise noted on plans.</p> <p>K. Minimum wire size 20 amp branch circuit shall be AWG listed size per distance shown below unless otherwise noted on plans. Distance shall be measured from the panelboard circuit breaker to the furthest outlet.</p> <table border="1"> <tr> <td></td> <td>120V</td> <td>277V</td> </tr> <tr> <td>A. #12</td> <td>Less than 100 feet</td> <td>Less than 175 feet</td> </tr> <tr> <td>B. #10</td> <td>Between 100-150 feet</td> <td>Between 175-300 feet</td> </tr> <tr> <td>C. #8</td> <td>Between 150-250 feet</td> <td>Between 300-450 feet</td> </tr> <tr> <td>D. #6</td> <td>Between 250-375 feet</td> <td>Between 450-700 feet</td> </tr> </table> | 480/277V | 208/120V | A. brown | A. black | B. purple | B. red | C. yellow | C. blue | N. grey | N. white | G. green | G. green | SL. pink | SL. pink | | 120V | 277V | A. #12 | Less than 100 feet | Less than 175 feet | B. #10 | Between 100-150 feet | Between 175-300 feet | C. #8 | Between 150-250 feet | Between 300-450 feet | D. #6 | Between 250-375 feet | Between 450-700 feet | <p>8. CUTTING AND PATCHING</p> <p>A. The contract shall do all cutting and patching of the existing construction work which may be required for the proper installation of the electrical work. All patching shall be of the same materials, workmanship and finish as, and shall accurately match all surrounding work.</p> <p>9. FIRE ALARM, SMOKE DETECTION AND SECURITY SYSTEMS</p> <p>A. Installation of new fire alarm devices shall comply with the current applicable provisions of NFPA 70, NFPA 71, NFPA 72/72E, NFPA 101, local and state building codes, and all requirements of the local authority having jurisdiction.</p> <p>B. Furnish and install new security devices with all necessary equipment, wiring, conduits, boxes, etc. required to ensure a fully operational system.</p> <p>C. It shall be the responsibility of the Electrical Contractor to provide all conduit systems, standard electrical boxes, and operating power for the fire alarm/security system as outlined on the project drawings or as required by the Fire Alarm/Security System Contractor. Verify all requirements prior to installation of conduit and wall boxes.</p> <p>D. Wiring and installation shall be in accordance with standard professional security system engineering practices and Texas State Board of Private Investigators. All installation and service personnel working on this project shall be "Registered" Alarm System Installers.</p> <p>10. PANELBOARDS, CBs, DISCONNECT SAFETY SWITCHES & MOTOR STARTERS</p> <p>A. Furnish and install at locations as shown on the drawings and shall be of the type approved by owner, indicated or specified.</p> <p>11. GROUNDING OF ELECTRICAL SYSTEMS</p> <p>A. Grounding of the electrical systems shall conform to the requirements of the latest National Electrical Code and other governing local codes.</p> <p>12. BUILDING ENERGY MANAGEMENT SYSTEM</p> <p>A. Furnish and install all conduits, conductors, connectors, relays and low voltage cables in accordance with Novar controls requirements. Building management system vendor shall install, calibrate and/or program new Novar components and splices, current transformer and watts transducer, bypass and phase loss modules, and supply and install all sensors, controls and modules equipment in accordance with Marshall's requirements.</p> <p>B. Novar controls will be responsible to make final terminations and configuration of all control cables furnished by electrical contractor which includes HVAC control, sensors and alarm interface.</p> <p>C. Electrical contractor to confirm and coordinate with all trades all Building management system requirements. Contact Bob Langan of Novar Controls at (214) 882-1600 Ext. 1324 for requirements.</p> |
| 480/277V | 208/120V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. brown | A. black | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. purple | B. red | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C. yellow | C. blue | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N. grey | N. white | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G. green | G. green | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SL. pink | SL. pink | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 120V | 277V | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. #12 | Less than 100 feet | Less than 175 feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. #10 | Between 100-150 feet | Between 175-300 feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C. #8 | Between 150-250 feet | Between 300-450 feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D. #6 | Between 250-375 feet | Between 450-700 feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ELECTRICAL NOTES | |
|------------------|--|
| 11 | COORDINATE EXACT LOCATION OF ALL LIGHT FIXTURES WITH ACTUAL CEILING GRID SYSTEMS AND OPEN STRUCTURES. REFERENCE ARCHITECTURAL REFLECTED CEILING PLAN, SECTIONS AND ELEVATIONS. |
| 12 | CONNECT ALL EXIT SIGNS, EMERGENCY LIGHTS AND EMERGENCY EGRESS LIGHTS TO CIRCUIT W-1 IS NOT CONTROLLED BY NOVAR CONTROLS PANEL. |
| 13 | CONNECT ALL NIGHT LIGHT FIXTURES AND STORE TO CIRCUIT W-2. NIGHT LIGHT FIXTURES ARE HARDWIRED/UNSWITCHED AND NOT CONTROLLED BY NOVAR CONTROLS PANEL. FIELD WITH NOVAR CONTROLS SYSTEM INSTALLER. |
| 14 | INSTALL JUNCTION BOX AT 42" AFF AND CONNECT TO CIRCUIT AS INDICATED FOR LIGHTED MIRROR. FIELD CONFIRM EXACT LOCATION AND REQUIREMENTS WITH GENERAL CONTRACTOR PRIOR TO MAKE FINAL INSTALLATION. |
| 15 | INSTALL 4-GANG JUNCTION BOX WITH CIRCUIT AS INDICATED ON INTERIOR WALL FOR BUILDING SIGN. FIELD CONFIRM EXACT LOCATION, MOUNTING HEIGHT AND REQUIREMENTS WITH GENERAL CONTRACTOR PRIOR TO MAKE FINAL INSTALLATION. |
| 16 | INSTALL (1)-2" EMPTY CONDUIT WITH PULL STRING FROM 1'-6" BELOW CEILING UP TO ROOF TERMINATED WITH GOSSENCK CONDUIT FACE DOWN 12" AWAY FROM ROOF WITH FIELD COORDINATE EXACT TERMINATION AND LOCATION WITH GENERAL CONTRACTOR PRIOR TO FINAL INSTALLATION. SEAL WATER/TIGHT ROOF PENETRATION. |
| 17 | INSTALL (2)4"x8"x3/4" GRADE PLYWOOD IN COMMUNICATION ROOM FOR TELEPHONE/NOVAR BOARD. PAINT TO MATCH WALL COLOR. PROVIDE AND CONNECT GROUNDING WITH #6 GROUND CONDUCTORS HOMERUN TO TRANSFORMER'S GROUNDING/GROUND ROD. INSTALL (2)-3" EMPTY CONDUITS WITH PULL STRINGS FROM TELEPHONE BOARD UP WALL TO JOIST STRUCTURE. FIELD CONFIRM EXACT TERMINATION AND LOCATION WITH GENERAL CONTRACTOR PRIOR TO SUBMIT BIDDING. |
| 18 | INSTALL CONDUCTORS, CONDUIT SYSTEM AND WALL/JUNCTION BOXES FOR DOOR BELL AND REAR DOOR ALARM SYSTEMS. CONFIRM EXACT LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO MAKE FINAL INSTALLATION. |
| 19 | LOCATE RECEPTACLE BEHIND ELECTRIC WATER COOLER ENCLOSURE. FIELD COORDINATE EXACT LOCATION WITH EQUIPMENT SYSTEM INSTALLER/PLUMBING CONTRACTOR. |
| 20 | INSTALL FLUSH MOUNTED JUNCTION BOX AT 48" AFF FOR HAND DRYER FURNISHED AND INSTALLED BY OTHERS. FIELD CONFIRM EXACT LOCATION WITH GENERAL CONTRACTOR. |
| 21 | INSTALL TWO COMPARTMENT ALUMINUM TELE-POWER POLE WITH COMPLETE FELD FITTINGS, TRIM PLATES AND GRIPPER. FIELD CUT EXACT LENGTH AS REQUIRED. CONFIRM EXACT LENGTH, COLOR AND REQUIREMENTS WITH OWNER/ARCHITECT PRIOR TO SUBMIT BIDDING. |
| 22 | INSTALL CONDUIT SYSTEMS AS SHOWN AND NOTED. FIELD CONFIRM EXACT INSTALLATION, TERMINATION AND REQUIREMENTS WITH OWNER PRIOR TO MAKE FINAL INSTALLATION. |
| 23 | FIELD COORDINATE AND CONFIRM EXACT LOCATION OF RECEPTACLES WITH MILLWORKS AND CASERWORK OF CASH REGISTER'S PRIOR TO MAKE FINAL INSTALLATION. |
| 24 | INSTALL JUNCTION BOXES AND CONDUIT SYSTEM FOR SENSORS/SECURITY SYSTEM. FIELD COORDINATE AND CONFIRM EXACT REQUIREMENTS WITH OWNER'S SECURITY SYSTEM INSTALLER PRIOR TO MAKE FINAL INSTALLATION. |
| 25 | INSTALL JUNCTION BOX WITH POWER CIRCUIT AS INDICATED FOR AUTOMATIC SLIDING DOORS. MAKE ELECTRICAL CONNECTION AS REQUIRED. FIELD COORDINATE EXACT REQUIREMENTS. |
| 26 | INSTALL ONE GANG DEEP WALL BOX WITH APPROPRIATE COVER PLATE FOR DATA, VOICE, VIDEO AND/OR TECHNOLOGY OUTLETS WITH 3/4" EMPTY CONDUIT UP WALL TO 6" ABOVE ACCESSIBLE CEILING OR ABOVE JOISTS WITH BUSHING. FIELD CONFIRM EXACT REQUIREMENTS WITH OWNER'S TECHNOLOGY SYSTEM INSTALLER PRIOR TO MAKE FINAL INSTALLATION. |
| 27 | INSTALL WALL AND/OR BACK BOX WITH 3/4" EMPTY CONDUIT WITH PULL STRING UP WALL TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING FOR NEW FIRE ALARM AND SECURITY DEVICES. CONFIRM ALL REQUIREMENTS WITH FIRE ALARM AND SECURITY SYSTEMS INSTALLER. ALL LOCATIONS AND REQUIREMENTS OF SECURITY SYSTEM MUST BE CONFIRMED AND COORDINATED WITH OWNER'S VENDOR AND GENERAL CONTRACTOR. |
| 28 | FIELD CONFIRM EXACT LOCATION OF WALL TEMPERATURE ZONE SENSORS THAT CONTROLS CONTROLS RTU's AND UNIT HEATERS. PROVIDE 3/4" EMPTY CONDUIT WITH PULL FROM JUNCTION BOX UP TO THE JOIST AND/OR 6" ABOVE ACCESSIBLE CEILING WITH BUSHING. FIELD COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL SYSTEM INSTALLER, DIVISION 15 AND NOVAR CONTROLS INSTALLERS. |
| 29 | INSTALL CONDUCTORS, CONDUIT SYSTEMS AND WALL/JUNCTION BOXES AS REQUIRED FOR DOOR SECURITY SYSTEM IN CASH ROOM. FIELD CONFIRM EXACT REQUIREMENTS WITH OWNER'S SECURITY SYSTEM INSTALLER PRIOR TO MAKE FINAL INSTALLATION AND/OR SUBMIT BIDDING. |
| 30 | DISCONNECT SAFETY SWITCH AND WP/200 DUPLEX RECEPTACLE FURNISHED AND INSTALLED BY ROOFTOP UNIT MANUFACTURER. MAKE CONNECTION AS REQUIRED. FIELD COORDINATE WITH MECHANICAL CONTRACTOR. |
| 31 | ROUGH-IN AND MAKE FINAL CONNECTIONS TO EQUIPMENT SPECIFIED IN OTHER DIVISIONS, OR FURNISHED BY OWNER. FIELD CONFIRM WITH EQUIPMENT SUPPLIER AND/OR INSTALLER EXACT REQUIREMENTS PRIOR BIDDING AND INSTALLATION. |
| 32 | ALL LOCATIONS OF ELECTRICAL AND TECHNOLOGY DEVICES MUST BE CONFIRMED WITH ARCHITECTURAL SECTIONS, ELEVATIONS, MILLWORKS AND CASERWORK PRIOR TO MAKE FINAL INSTALLATIONS. ALL CHANGES DUE TO CONFLICT OF LOCATIONS AND/OR LACK OF ARCHITECTURAL SHEETS COORDINATION SHALL BE MADE WITHOUT ADDITIONAL EXPENSE TO THE OWNER. |
| 33 | ALL CONDUIT PENETRATIONS AT FIRE RATED WALLS MUST BE PROVIDED WITH SCHEDULE 40 GALVANIZED CONDUIT SLEEVE SECURED TO PARTITION WITH GREAT AND CALK ANNULAR SPACE BETWEEN CONDUIT AND SLEEVE WITH FIRE RETARDANT SEALANT. WHERE CONDUIT IS EXPOSED AT FINISH WALLS, PROVIDE FLUSH MOUNTED SLEEVE AND STRAINLESS STEEL EIGHTHOEN PLATES. AT NON-FIRE RATED INTERIOR WALLS, CALK ANNULAR SPACE BETWEEN CONDUIT AND SLEEVE WITH 1 LB. DENSITY FIBERGLASS AND SEAL ENDS WITH LOW CORNING 732 RTV OR EQUAL. |

| ELECTRICAL SYMBOLS | |
|--------------------|---|
| | REFERENCE TO DETAIL AND SHEET NUMBER |
| | NEW SURFACE MOUNTED PANEL |
| | FLUORESCENT LIGHT FIXTURE |
| | FLUORESCENT NIGHT LIGHT FIXTURE |
| | EMERGENCY LIGHT WITH BATTERY BACKUP |
| | CANOPY MOUNTED LIGHT FIXTURE |
| | WALL MOUNTED LIGHT FIXTURE |
| | WALL MOUNTED EGRESS EMERGENCY LIGHT |
| | CEILING MOUNTED EXIT LIGHT FIXTURE |
| | WALL MOUNTED EXIT LIGHT FIXTURE |
| | WALL MOUNTED DOCK LIGHT |
| | TRACK LIGHT |
| | NEUTRAL CONDUCTOR |
| | PHASE CONDUCTOR |
| | GROUND CONDUCTOR |
| | GROUND & IG CONDUCTORS |
| | SWITCH LEG AND/OR BRANCH CIRCUIT |
| | BRANCH CIRCUIT |
| | HOME RUN TO PANELBOARD |
| | SWITCH, 48" AFF |
| | THREE-WAY SWITCH, 48" AFF |
| | KEY OPERATED START-STOP CONTROL SWITCH, 48" AFF |
| | MOTOR RATED SWITCH |
| | SWITCH WITH PILOT LIGHT, 48" AFF |
| | OCCUPANCY SENSOR SWITCH, 48" AFF |
| | SPEED CONTROL SWITCH, 48" AFF |
| | MOTOR |
| | DISCONNECT SAFETY SWITCH |
| | SPECIAL PURPOSE OUTLET AND/OR CONNECTION |
| | DEDICATED SINGLE RECEPTACLE AT 18" AFF UNLESS OTHERWISE NOTED ON PLANS. |
| | DUPLEX RECEPTACLE AT 18" AFF |
| | ISOLATED GROUND DUPLEX RECEPTACLE AT 18" AFF |
| | DUPLEX RECEPTACLE WITH MOUNTING HEIGHT |
| | WEATHER PROOF DUPLEX RECEPTACLE |
| | GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE |
| | DEDICATED DUPLEX RECEPTACLE AT 18" AFF |
| | DOUBLE DUPLEX RECEPTACLE, 18" AFF |
| | DEDICATED DOUBLE DUPLEX RECEPTACLE, 18" AFF |
| | DOUBLE DUPLEX RECEPTACLE, 18" AFF |
| | DOUBLE DUPLEX RECEPTACLE WITH MOUNTING HEIGHT |
| | JUNCTION BOX |
| | POWER & TECHNOLOGY POLE |
| | BLANKED OUTLET. HEIGHT NOTED ON PLANS |
| | THERMOSTAT |
| | WALL MOUNTED TELEPHONE OUTLET |
| | TELEPHONE OUTLET - DESK SET |
| | RECESSED WALL MOUNTED EMERGENCY TELEPHONE |
| | DOOR CHIME, 90" AFF |
| | PUSH BUTTON, HEIGHT NOTED ON PLANS. |
| | TECHNOLOGY OUTLET, 18" AFF |
| | DATA/VOICE OUTLETS, 18" AFF |
| | DOOR ELECTRIC STRIKE |
| ABBREVIATIONS | |
| A | AMPERES |
| AIC | AMPS INTERRUPTING CURRENT |
| AFF | ABOVE FINISHED FLOOR |
| BMS | BUILDING MANAGEMENT SYSTEM |
| C | CONDUIT |
| CU | COPPER |
| CB | CIRCUIT BREAKER |
| EW | ELECTRIC WATER COOLER |
| FD | FUSED DISCONNECT SAFETY SWITCH |
| GND | GROUND CONDUCTOR |
| IG | ISOLATED GROUND |
| KVA | KILOVOLT-AMPS |
| MLO | MAIN LUGS ONLY |
| MCB | MAIN CIRCUIT BREAKER |
| NEC | NATIONAL ELECTRICAL CODE |
| NFD | NON-FUSED DISCONNECT SAFETY SWITCH |
| e | PHASE |
| V | VOLTS |
| WP | WEATHERPROOF |



MARSHALLS BUILD-OUT
CROSSROADS MALL
GREENVILLE, TEXAS
GREENVILLE PROPERTIES LTD.
GREENVILLE, TEXAS

| | | | |
|-------------|------------|------------|-----|
| DATE | 5/15/2015 | BY | ELL |
| PROJECT NO. | 08-12-0114 | DATE | |
| DRAWN BY | | CHECKED BY | |

ELECTRICAL NOTES, SYMBOLS & SPECIFICATIONS