PANEL SCHEDULE

VOLTS: 120/208 PHASE: 3 WIRE: 4 MARK P-1 MAINS: 225

CKT No.	DEVICE AMP TRIP	DEVICE POLES	DESCRIPTION	CONN. LOAD (WATTS) OA	CONN. LOAD (WATTS) OC	DEM %	DEM WATTS	COND	WIRE
1	20	1	E.ROOM LIGHTING			100			
3			SPARE			100			
5	20	1	H2O HEATER (9)			100			
7			SPARE			100			
9	20	1	PAY STATION (20–C)			100			
11	20	1	PAY STATION (20–C)			100			
13	20	1	PAY STATION (20–C)			100			
15	20	1	GATE (20–D)			100			
17	20	1	GATE (20–D)			100			
19	20	1	GATE (20–D)			100			
21	20	1	INPUT TERMINAL (20–B)			100			
23	20	1	RELAY BOX (20–)			100			
25	20	1	MENU SIGN (30–i)			100			
27	20	1	MENU SIGN (30–i)			100			
29	20	1	MENU SIGN (30–i)			100			
31	20	1	SERVER COMPUTER			100			
33			SPARE			100			
35	20	1	ENTRANCE SIGN (30–E)			100			
37	20	1	WAIT & GO (30–C)			100			
39			SPARE			100			
41			SPARE			100			

CKT No.	DEVICE AMP TRIP	DEVICE POLES	DESCRIPTION	CONN. LOAD (WATTS) OA	CONN. LOAD (WATTS) OC	DEM %	DEM WATTS	COND	WIRE
2	20	1	TUNNEL LIGHTING			100			
4	20	1	TUNNEL LIGHTING			100			
6	20	1	VACUUM LIGHTING			100			
8	20	1	VACUUM LIGHTING			100			
10	15	1	CONTROL_120V (1–AB)			100			
12			SPARE			100			
14	35	3	RECLAIM UNIT (1–A)			100			
16						100			
18						100			
20	15	3	OZONE UNIT (1–B)			100			
22						100			
24						100			
26	15	3	RO UNIT (1–D)			100			
28						100			
30						100			
32	15	3	RO REPRESSURIZER (1–E)			100			
34						100			
36						100			
38	15	3	RO REJECT PUMP (1–X)			100			
40						100			
42						100			

TOTALS

A.I.C. RATING (VERIFY)
MOUNTING SURFACE

TOTAL CONNECTED ________ WATTS
TOTAL DEMAND ________ WATTS
TOTAL AMPS ________ AMPS

PANEL SCHEDULE

VOLTS: 120/208 PHASE: 3 WIRE: 4 MARK P-2 MAINS: 200

CKT No.	DEVICE AMP TRIP	DEVICE POLES	DESCRIPTION	CONN. LOAD (WATTS) OA	CONN. LOAD (WATTS) OC	DEM %	DEM WATTS	COND	WIRE
1		1	EXHAUST FAN EQUIP RM.			100			
3	50	3	COMPRESSOR.7.5HP (10–A)			100			
5						100			
7						100			
9	50	3	COMPRESSOR.7.5HP (10–A)			100			
11						100			
13						100			
15		1	CAR WASH& ENTRY LGTS	840		100			
17		1	EQUIP. RM FLORESCENTS	800		100			
19		1	EXTERIOR WALL LIGHTS	875		100			
21		1	OIL CHANGE FLORESCENTS	1800		100			
23		1	OIL CHANGE DED OUTLET	220		100			
25		1	SPARE	220		100			
27		1	SPARE	220		100			
29		1	SPARE			100			

CKT No.	DEVICE AMP TRIP	DEVICE POLES	DESCRIPTION	CONN. LOAD (WATTS) OA	CONN. LOAD (WATTS) OC	DEM %	DEM WATTS	COND	WIRE
2		1	MONUMENT SIGN	220		100			
4	50	3	COMPRESSOR.7.5HP (10–A)			100			
6						100			
8						100			
10		1	PAY STATION LIGHT	200		100			
12	15	1	AIR DRYER (10–L)			100			
14		1	CANOPY LIGHTS	2600		100			
16	10	1	H2O SOFTENER (1–P)			100			
18		1	CAR WASH RECEPTACLES	1560		100			
20		1	OFFICE BATH & EXIT LGTS	1110		100			
22		1	OIL CHANGE OUTLETS	640		100			
24		1	OIL CHANGE DED OUTLET	220		100			
26		1	SPARE			100			
28		1	SPARE	220		100			
30		1	SPARE			100			

TOTALS

A.I.C. RATING (VERIFY)
MOUNTING SURFACE

TOTAL CONNECTED ________ WATTS
TOTAL DEMAND ________ WATTS
TOTAL AMPS ________ AMPS

PANEL SCHEDULE

VOLTS: 120/208 PHASE: 3 WIRE: 4 MARK P-3 MAINS: 125

CKT No.	DEVICE AMP TRIP	DEVICE POLES	DESCRIPTION	CONN. LOAD (WATTS) OA	CONN. LOAD (WATTS) OC	DEM %	DEM WATTS	COND	WIRE
1		1	OIL CHANGE FLORESCENTS	1800		100			
3		1	OIL CHANGE DED OUTLET	220		100			
5		1	SPARE			100			
7		1	SPARE			100			
9		1	SPARE			100			
11		1	SPARE			100			
13		1	SPARE			100			
15		1	SPARE			100			
17		1	SPARE			100			
19		1	SPARE			100			
21		1	SPARE			100			
23		1	SPARE			100			

CKT No.	DEVICE AMP TRIP	DEVICE POLES	DESCRIPTION	CONN. LOAD (WATTS) OA	CONN. LOAD (WATTS) OC	DEM %	DEM WATTS	COND	WIRE
2		1	OIL CHANGE OUTLETS	640		100			
4		1	OIL DED OUTLET	220		100			
6		1	SPARE			100			
8		1	SPARE			100			
10		1	SPARE			100			
12		1	SPARE			100			
14		1	SPARE			100			
16		1	SPARE			100			
18		1	SPARE			100			
20		1	SPARE			100			
22		1	SPARE			100			
24		1	SPARE			100			

TOTALS

A.I.C. RATING (VERIFY)
MOUNTING SURFACE

TOTAL CONNECTED ________ WATTS
TOTAL DEMAND ________ WATTS
TOTAL AMPS ________ AMPS

GC= GENERAL CONTRACTOR
SCW = SONNYS (CARWASH INSTALLER)

11.16.05

ELECTRICAL SPECIFICATIONS
GENERAL CONTRACTOR

A. GENERAL PROVISIONS

1. THE WORK SHALL CONSIST OF FURNISHING LABOR, EQUIPMENT, AND MATERIALS TO PROVIDE THE COMPLETE INTEGRATED AND PROPER FUNCTIONING SYSTEMS AS SHOWN ON THE DRAWINGS.
2. SCOPE OF WORK INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, INSTALLING AND TERMINATING ALL 3 PHASE, 1 PHASE, COMPUTER/CONTROL POWER PER THESE DRAWINGS, AND SONNY'S INSTALLATION MANUALS.
3. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND ORDINANCES.
4. ALL EQUIPMENT AND MATERIALS PROVIDED SHALL BE NEW AND IN CONFORMANCE WITH APPLICABLE PROVISIONS OF N.E.M.A., A.N.S.I., U.L., ETC.
5. THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES SO AS TO AVOID INTERFERENCE.
6. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL LAYOUT OF ELECTRICAL SYSTEMS. FIELD VERIFICATIONS OF DIMENSIONS IS DIRECTED.
7. SECURE PERMITS AND INSPECTIONS REQUIRED BY STATE AND LOCAL LAWS AND ORDINANCES.
8. UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER CERTIFICATES OF FINAL INSPECTIONS AND APPROVALS FROM AUTHORITIES HAVING JURISDICTION.
9. ALL WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.

B. RACEWAYS

1. ALL WIRING SHALL BE INSTALLED IN APPROVED RACEWAYS UNLESS OTHERWISE INDICATED.
2. MINIMUM CONDUIT SIZE SHALL BE 1/2" TRADE SIZE.
3. USE FLEXIBLE CONDUIT FOR SHORT FINAL CONNECTIONS TO VIBRATING EQUIPMENT SUCH AS MOTORS AND TRANSFORMERS. LIQUID–TIGHT FLEXIBLE CONDUIT SHALL BE USED IN DAMP AND WET LOCATIONS. ALL BLOWERS CONNECTION MUST HAVE 24" SERVICE DRIP LOOP TO ALLOW MOVEMENT OR MAINTENANCE. FLEXIBLE CORDS SHALL BE USED WHERE CALLED FOR ON THE PLANS.
4. EXPOSED CONDUITS SHALL BE RUN PARALLEL TO BUILDING LINES.
5. DO NOT INSTALL CONDUITS LARGER THAN 1/3 THE SLAB THICKNESS IN CONCRETE SLABS.
6. PROVIDE APPROVED FIRE STOPPING MATERIALS AT ALL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS TO PREVENT THE PASSAGE OF SMOKE, FIRE, TOXIC GAS OR WATER THROUGH THE PENETRATION EITHER BEFORE, DURING, OR AFTER A FIRE, AS REQUIRED BY ARTICLE 300–21 OF THE N.E.C.
7. PROVIDE CABLE SUPPORTS IN ACCORDANCE WITH ARTICLE 300 OF THE N.E.C
8. PROVIDE EXPANSION FITTINGS IN CONDUIT RUNS CROSSING STRUCTURAL EXPANSION JOINTS.

C. CONDUCTORS

1. ALL WIRING SHALL BE COPPER.
2. CONDUCTORS SHALL BE RATED 600V. WITH TYPE THWN/THHN INSULATION.
3. WIRES SHALL BE STRANDED CONDUCTOR

D. CONNECTORS

1. ALL WIRE CONNECTIONS FOR 10HP MOTORS OR LARGER MUST BE SPLIT BOLT CONNECTORS OR EQUIVALENT APPROVED BY N.E.C AND/OR MANUFACTURER.

E. LIGHTING PANELS

1. PROVIDE LIGHTING PANELS AS INDICATED ON THE PLANS AND AS SPECIFIED HEREIN. ALL PANELS SHALL BE DEAD FRONT, CIRCUIT BREAKER TYPE. AND SHALL BEAR THE U.L. LABEL AS WELL AS MEET ALL APPLICABLE NEMA REQUIREMENTS.
2. UNLESS OTHERWISE NOTED, TOP OF PANELS SHALL BE MOUNTED 6'–0" A.F.F.
3. ALL PANELS SHALL HAVE TYPEWRITTEN CIRCUIT DIRECTORIES MOUNTED INSIDE OF DOOR.
4. PANELS SHALL BE SUITABLE FOR THE SERVICE RATING AND THE A.I.C. RATING INDICATED ON THE PANEL SCHEDULES.
5. ALL BREAKERS SHALL BE FULL SPACE, INDIVIDUAL FRAME TYPE. NO "PIGGYBACK" OR TANDEM BREAKERS WILL BE PERMITTED.

F. SAFETY SWITCHES

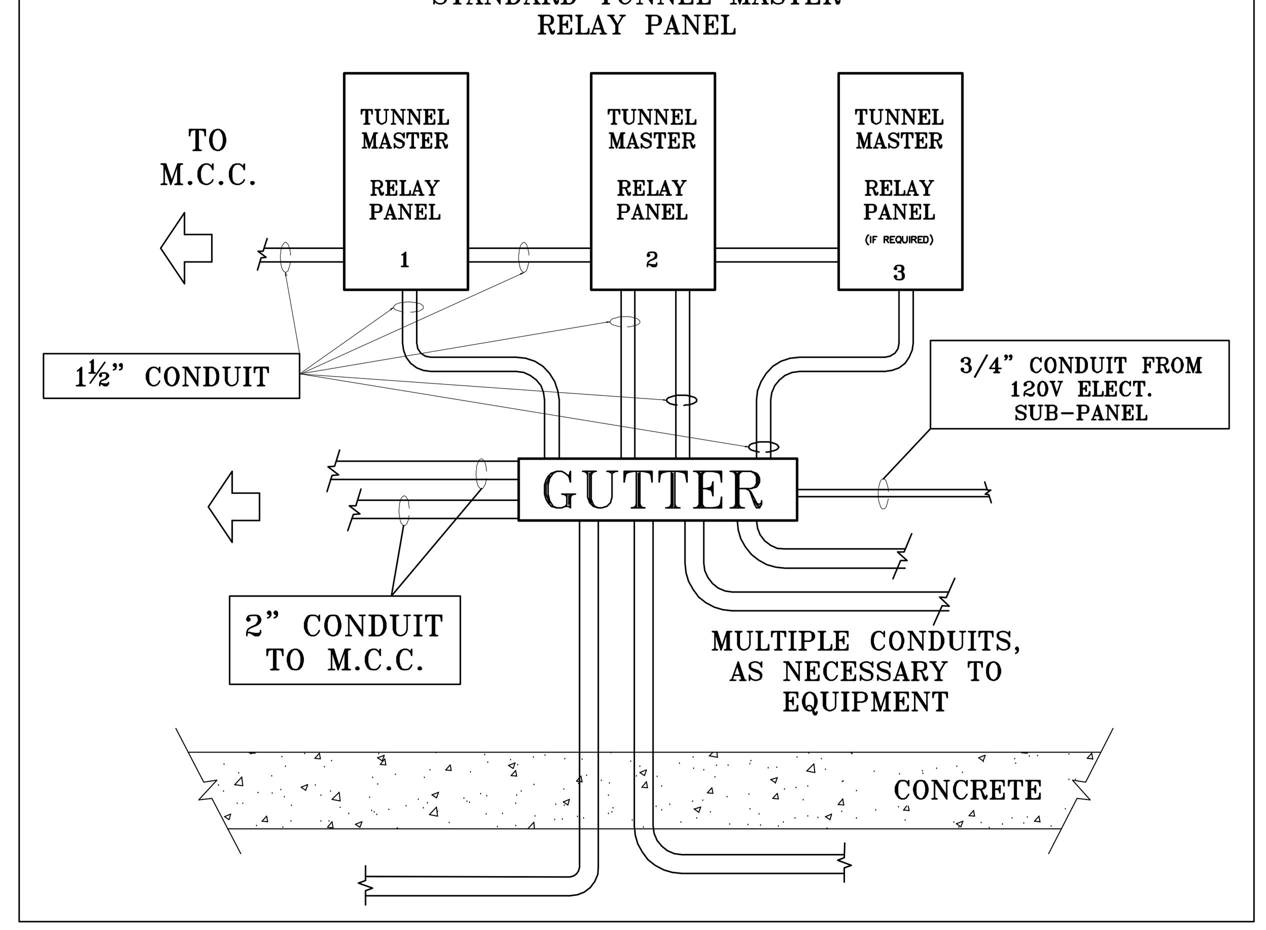
1. SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE NON–FUSIBLE WITH POLES, AMPERE AND SERVICE RATINGS AS INDICATED ON THE PLANS. LUGS SHALL BE U.L. LISTED FOR CU.–AL.
2. ENCLOSURES FOR SAFETY SWITCHES SHALL BE NEMA 1, EXCEPT FOR SWITCHES MARKED "WP" (WEATHERPROOF) SHALL BE NEMA 4X.

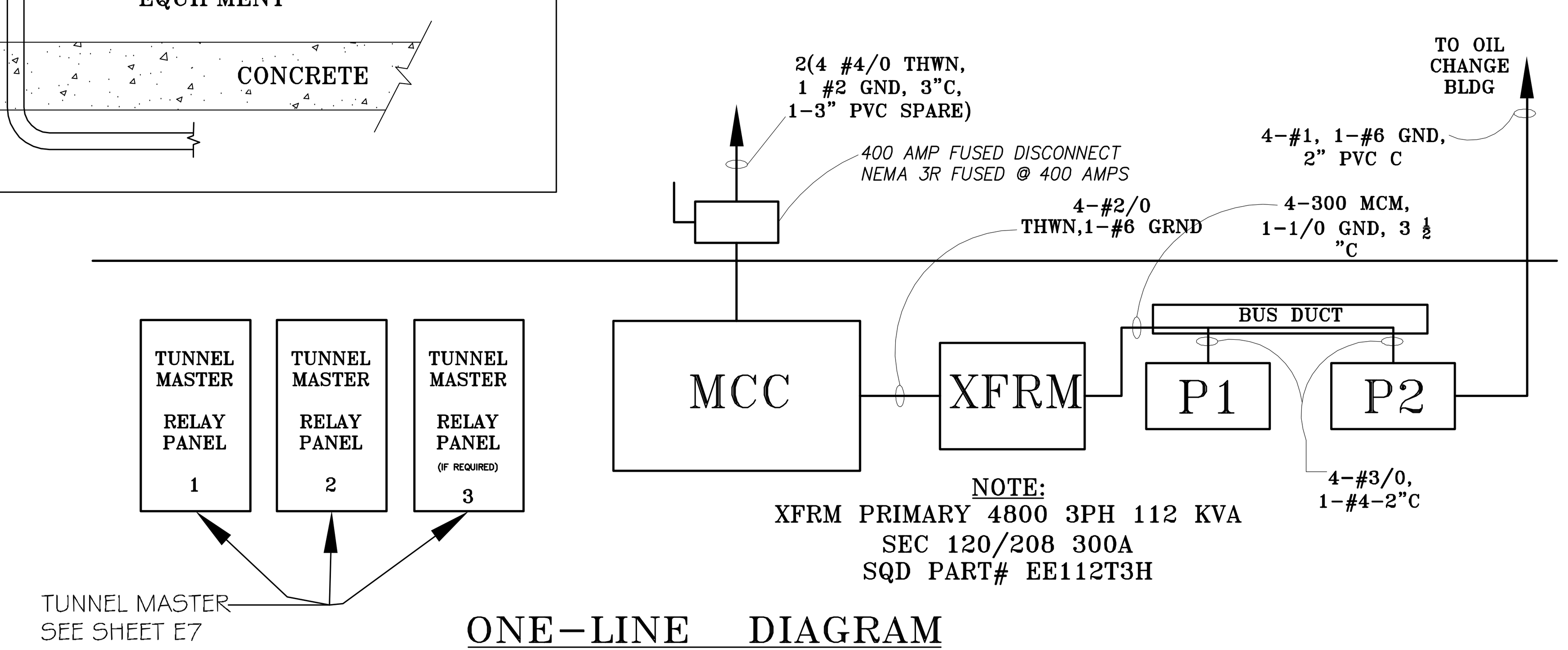
2.A ( )–DISCONNECTS TO BE MOUNTED IN TUNNEL OR OTHER AREAS NOT WITHIN 50 L.F. OR L.O.S. OF MCC IN CONFORMANCE WITH N.E.C. AND/OR LOCAL CODES..ALSO TO BE TYPE 4X NON–METALLIC ENCLOSURES, NON–FUSED SIZED FOR LOAD. DISCONNECTING MEANS SHALL NOT BE REQUIRED WHERE SUCH A LOCATION OF THE DISCONNECTING MEANS IS IMPRACTICABLE OR INTRODUCES ADITIONAL OR INCREASED HAZARDS TO PERSON OR PROPERTY. N.E.C. (ARTICLE 430.102–B–a)

LEGEND:

–SURFACE MOUNTED Counduit
–CONCEALED Counduit
–WIRED TO CBP
–WIRED TO CBP (3P) Disconnect Required
–WIRED TO CBP (3P)
–WIRED TO MCC
–WIRED TO MCC Disconnect Required
–JUNCTION BOX

STANDARD TUNNEL MASTER RELAY PANEL





NOTE:
XFRM PRIMARY 4800 3PH 112 KVA
SEC 120/208 300A
SQD PART# EE112T3H

ONE–LINE DIAGRAM

RAINFOREST CARWASH

5026 HARDY ST.
HATTIESBURG, MISSISSIPPI

REVISIONS		
#	DESCRIPTION	DATE
A	ADDED RESTROOMS	07-19-13

JOB No: 2176 DATE: 06-28-2013
DRAWN BY: JCT CHECKED BY: CD

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ELEC. PANEL SCHEDULE SPECS AND NOTES

SHEET No: 18 OF 22

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