

GENERAL LIGHTING LEGEND

SYMBOL	DESCRIPTION	MTG. HT. TO	SPEC. / WATTAGE
⊙	RECESSED DOWN LIGHT - INCANDESCENT	CEILING	LOW VOLTAGE SPOT - MR16
⊙ F	RECESSED DOWN LIGHT - FLUORESCENT	CEILING	
⊙ F	RECESSED WALL WASH - INCANDESCENT	CEILING	
⊙ F	RECESSED WALL WASH - FLUORESCENT	CEILING	
⊙ P	RECESSED PINSPOT LIGHT - INCANDESCENT	CEILING	
⊙ LV	RECESSED LOW VOLTAGE SPOT - MR16	CEILING	
⊙ F	SURFACE MOUNT PENDENT - FLUORESCENT	CEILING	LBL LIGHTING PFS490 (1)18W CFL QUAD G23-2 BASE
⊙ F	SURFACE MOUNT FIXTURE - INCANDESCENT	CEILING	
⊙ F	SURFACE MOUNT FIXTURE - FLUORESCENT	CEILING	
⊙ F	WALL MOUNT SCONCE - INCANDESCENT	80" AFF.(U.O.N)	
⊙ F	WALL MOUNT SCONCE - FLUORESCENT	80" AFF.(U.O.N)	
⊙ F	RECESSED DOWNLIGHT - WATERPROOF - INCANDESCENT	CEILING	
⊙ F	RECESSED FAN/LIGHT COMBO - FLUORESCENT	CEILING	
⊙ F	RECESSED FAN	CEILING	PI-25003 PANASONIC
⊙ F	UNDERCOUNTER FLUORESCENT LIGHT	BELOW UPpers	ALFACO LITTLE INCH 33" 1/75 13W
⊙ F	ABOVE CABINET FLUORESCENT LIGHT	BELOW UPpers	ALFACO LITTLE INCH 24" 2/75 8W
⊙ F	WALL MOUNTED FLUORESCENT BAR LIGHT	84" AFF.	
⊙ SP	SMOKE DETECTOR PER UBC SECTION 310.9.1.4	CEILING	
\$	SINGLE POLE SWITCH, NORMAL BRANCH	48" AFF.	
\$ D	SWITCH WITH DIMMER	48" AFF.-U.O.N	
\$ 3	THREE-WAY SWITCH	48" AFF.	
\$ 4	FOUR-WAY SWITCH	48" AFF.	
\$ MS	MOTION SENSOR CONTROLLED SWITCH (SEE NOTE 6)	48" AFF.	
\$ WP	EXTERIOR SWITCH	48" AFF.	
\$ T	SWITCH WITH TIMER	48" AFF.-U.O.N	
⊙	THERMOSTAT	SEE MECH.	

KITCHEN LIGHTING WATTAGE CALC:

- (4) RECESSED FLUORESCENT CANS: 4x26W = 104 WATTS
- (5) BELOW CABINET STRIP FLUORESCENT: 5x174W = 70 WATTS
- TOTAL FLUORESCENT WATTAGE = 174 WATTS

- (3) SURFACE MOUNT PENDANT:- INCANDESCENT 50W MR16 3x50 = 150 WATTS
- TOTAL INCANDESCENT WATTAGE = 150 WATTS

NOTE ON LIGHTING CALC: INCANDESCENT WATTAGE IN KITCHENS CAN NOT EXCEED FLUORESCENT WATTAGE

ELECTRICAL NOTES

1. ALL SWITCH AND OUTLET COVER PLATES TO BE THE SAME COLOR, AS DETERMINED BY OWNER.
2. VERIFY CLEARANCES FOR DOWNLIGHTS PRIOR TO ORDERING.
3. NOTIFY ARCHITECT AFTER LIGHT FIXTURE BOXES ARE SET FOR VERIFICATION OF LOCATIONS.
4. LIGHTS AND FIXTURES SHOWN IN MIDDLE OF ROOM TO BE CENTERED TYPICAL, U.O.N.
5. ALL BATH FANS SHALL BE ELECTRONIC BUTTON CONTROLLED TIMERS (OCCURA PLUS PRESET ELECTRONIC TIMER SWITCHES) WITH TIMING INTERVALS OF 5, 10, 15, 30 MINUTES.
6. A MANUAL-ON OCCUPANT SENSOR TURNS LIGHTING OFF AUTOMATICALLY WHEN NO ONE IS PRESENT. WHEN LIGHTING IS NEEDED IT MUST BE TURNED ON MANUALLY WITH A SWITCH.

SECTION 150(Q), RESIDENTIAL LIGHTING

1. HIGH EFFICACY LUMINAIRES FOR RESIDENTIAL LIGHTING SHALL CONTAIN ONLY HIGH EFFICACY LAMPS AND SHALL NOT CONTAIN A MEDIUM SCREW BASE SOCKET (E24/E26). A HIGH EFFICACY LAMP HAS A LAMP EFFICACY THAT IS NO LOWER THAN THE EFFICACIES CONTAINED IN TABLE 150-C. BALLASTS FOR LAMPS RATED 13 WATTS OR GREATER SHALL BE ELECTRONIC AND SHALL HAVE AN OUTPUT FREQUENCY NO LESS THAN 20 KHZ.
2. LIGHTING IN KITCHENS SHALL BE HIGH EFFICACY LUMINAIRES. EXCEPTION TO SECTION 150(Q)2 UP TO 50 PERCENT OF THE TOTAL RATED WATTAGE OF PERMANENTLY INSTALLED LUMINAIRES IN KITCHENS MAY BE IN LUMINAIRES THAT ARE NOT HIGH EFFICACY LUMINAIRES. PROVIDED THAT THESE LUMINAIRES ARE CONTROLLED BY SWITCHES SEPARATE FROM THOSE CONTROLLING THE HIGH EFFICACY LUMINAIRES. THE WATTAGE OF HIGH EFFICACY LUMINAIRES SHALL BE THE TOTAL NOMINAL RATED WATTAGE OF THE INSTALLED HIGH EFFICACY LAMPS(S). THE WATTAGE OF LUMINAIRES SHALL BE DETERMINED AS SPECIFIED BY SECTION 150 (C).
3. LIGHTING IN BATHROOM, PERMANENTLY INSTALLED LUMINAIRES SHALL BE HIGH EFFICACY LUMINAIRES. EXCEPTION TO SECTION 150(Q)3: PERMANENTLY INSTALLED LUMINAIRES THAT ARE NOT HIGH EFFICACY SHALL BE ALLOWED PROVIDED THAT THEY ARE CONTROLLED BY AN OCCUPANT SENSOR(S) CERTIFIED TO COMPLY WITH SECTION 119(D). SUCH MOTION SENSORS SHALL NOT HAVE A CONTROL THAT ALLOWS THE LUMINAIRE TO BE TURNED ON AUTOMATICALLY OR THAT HAS AN OVERRIDE ALLOWING THE LUMINAIRE TO BE ALWAYS ON.
4. LIGHTING OTHER THAN IN KITCHENS AND BATHROOMS, SHALL BE HIGH EFFICACY LUMINAIRES. EXCEPTION 1 TO SECTION 150(Q)4: PERMANENTLY INSTALLED LUMINAIRES THAT ARE NOT HIGH EFFICACY LUMINAIRES SHALL BE ALLOWED PROVIDED THEY ARE CONTROLLED BY A DIMMER SWITCH. EXCEPTION 2 TO SECTION 150(Q)4: PERMANENTLY INSTALLED LUMINAIRES THAT ARE NOT HIGH EFFICACY SHALL BE ALLOWED PROVIDED THAT THEY ARE CONTROLLED BY AN OCCUPANT SENSOR(S) CERTIFIED TO COMPLY WITH SECTION 119(D). SUCH MOTION SENSORS SHALL NOT HAVE A CONTROL THAT ALLOWS THE LUMINAIRE TO BE ALWAYS ON. EXCEPTION 3 TO SECTION 150(Q)4: PERMANENTLY INSTALLED LUMINAIRES THAT ARE NOT HIGH EFFICACY SHALL BE ALLOWED PROVIDED THAT THEY ARE CONTROLLED BY A MOTION SENSOR(S) WITH INTEGRAL PHOTOCONTROL CERTIFIED TO COMPLY WITH SECTION 119(D).

5. LUMINAIRES RECESSED INTO INSULATED CEILING SHALL BE APPROVED FOR ZERO CLEARANCE INSULATION COVER (C) BY UNDERWRITERS LABORATORIES OR OTHER TESTING/RATING LABORATORIES RECOGNIZED BY THE ICB/O. AND SHALL INCLUDE A LABEL CERTIFYING AIR TIGHT (A) OR SIMILAR DESIGNATION TO SHOW AIR LEAKAGE LESS THAN 2.0 CFM AT 75 PASCALES (OR 1.57 lbf/ft²) WHEN TESTED IN ACCORDANCE WITH ASTM E283. AND SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND CEILING.
6. OUTDOOR LIGHTING: LUMINAIRES PROVIDING OUTDOOR LIGHTING AND PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINAIRES. EXCEPTION 1 TO SECTION 150(Q)6: PERMANENTLY INSTALLED OUTDOOR LUMINAIRES THAT ARE NOT HIGH EFFICACY SHALL BE ALLOWED PROVIDED THAT THEY ARE CONTROLLED BY A MOTION SENSOR(S) WITH INTEGRAL PHOTOCONTROL CERTIFIED TO COMPLY WITH SECTION 119(D).

7. COMMON AREAS OF LOW-RISE RESIDENTIAL BUILDINGS, PERMANENTLY INSTALLED LIGHTING IN THE ENCLOSED, NON-DWELLING SPACES OF LOW-RISE RESIDENTIAL BUILDINGS WITH FOUR OR MORE DWELLING UNITS SHALL BE HIGH EFFICACY LUMINAIRES. EXCEPTION TO SECTION 150(Q)7: PERMANENTLY INSTALLED LUMINAIRES THAT ARE NOT HIGH EFFICACY SHALL BE ALLOWED PROVIDED THAT THEY ARE CONTROLLED BY AN OCCUPANT SENSOR(S) CERTIFIED TO COMPLY WITH SECTION 119(D).

HYDRO MASSAGE TUBS SHALL BE U.L. OR I, A.P.M.O. RATED. PROVIDE GFCI OUTLET. LISTINGS SHALL BE PROVIDED PRIOR TO INSTALLATION. (SEE ARTICLE 680-70)

LIGHTING IN CLOSETS SHALL COMPLY WITH NEC SECTION 410-A. TYPICAL FOR ALL CLOSETS

DEDICATED 20 AMP LAUNDRY CIRCUIT

GFCI TYPE OUTLETS REQUIRED IN BATHROOMS, KITCHEN COUNTER TOPS, & EXTERIOR PER NEC 210-8.

NEW OUTLETS INSTALLED IN BEDROOMS SHALL BE PROVIDED WITH AN ARC FAULT CIRCUIT INTERRUPTER (AFCI) TYPE. ALL NEW DEFINITIVE OUTLETS AS RECEPTACLES, LIGHT FIXTURES AND SMOKE DETECTORS.

AVG WIRE SIZE AND CIRCUIT RATING
 15AMP FOR 15AMP CIRCUIT
 10AMP FOR 30AMP CIRCUIT
 8AWG FOR 40AMP CIRCUIT
 BUILDING CONDUCTORS TO BE COPPER 60/75'

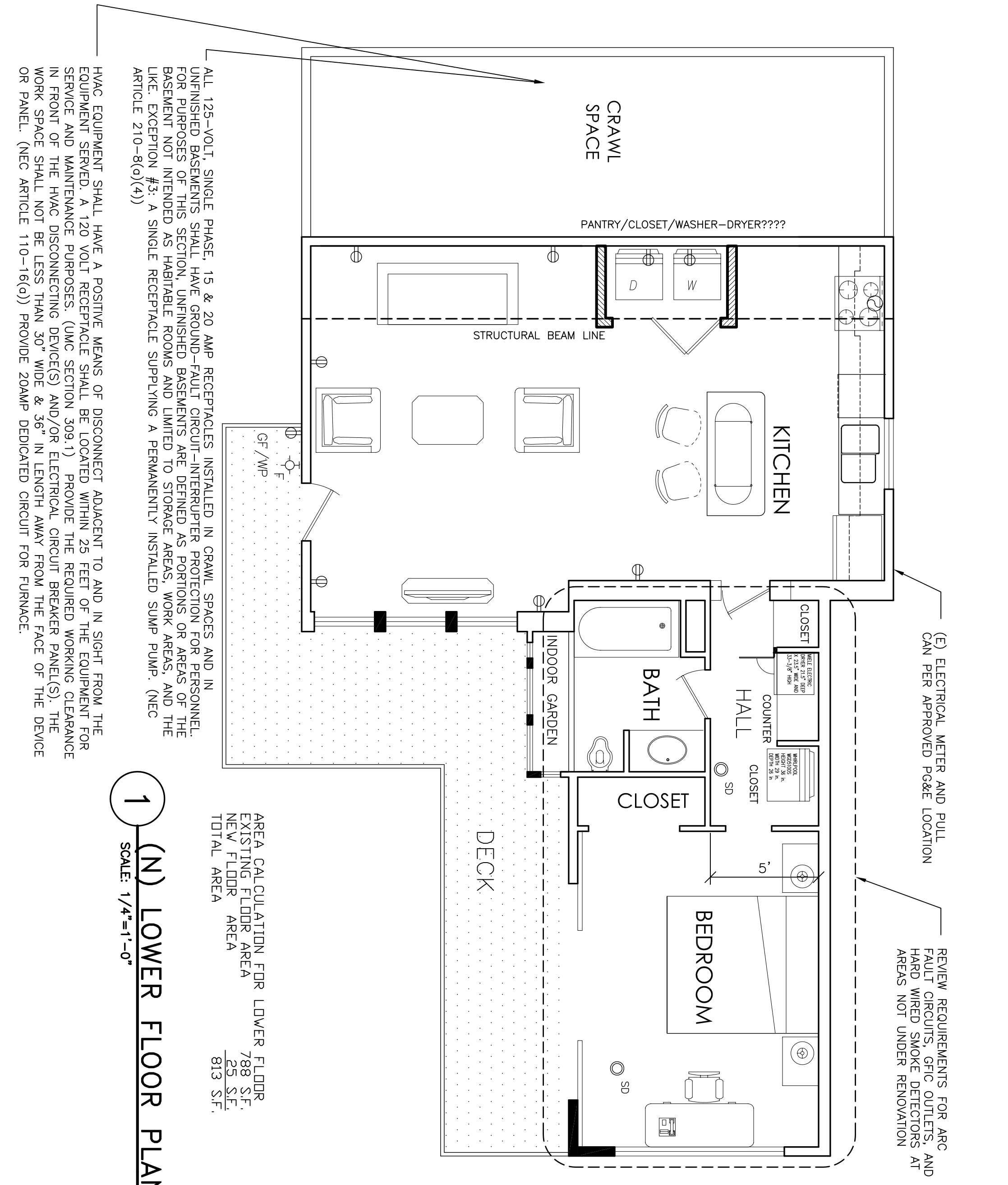
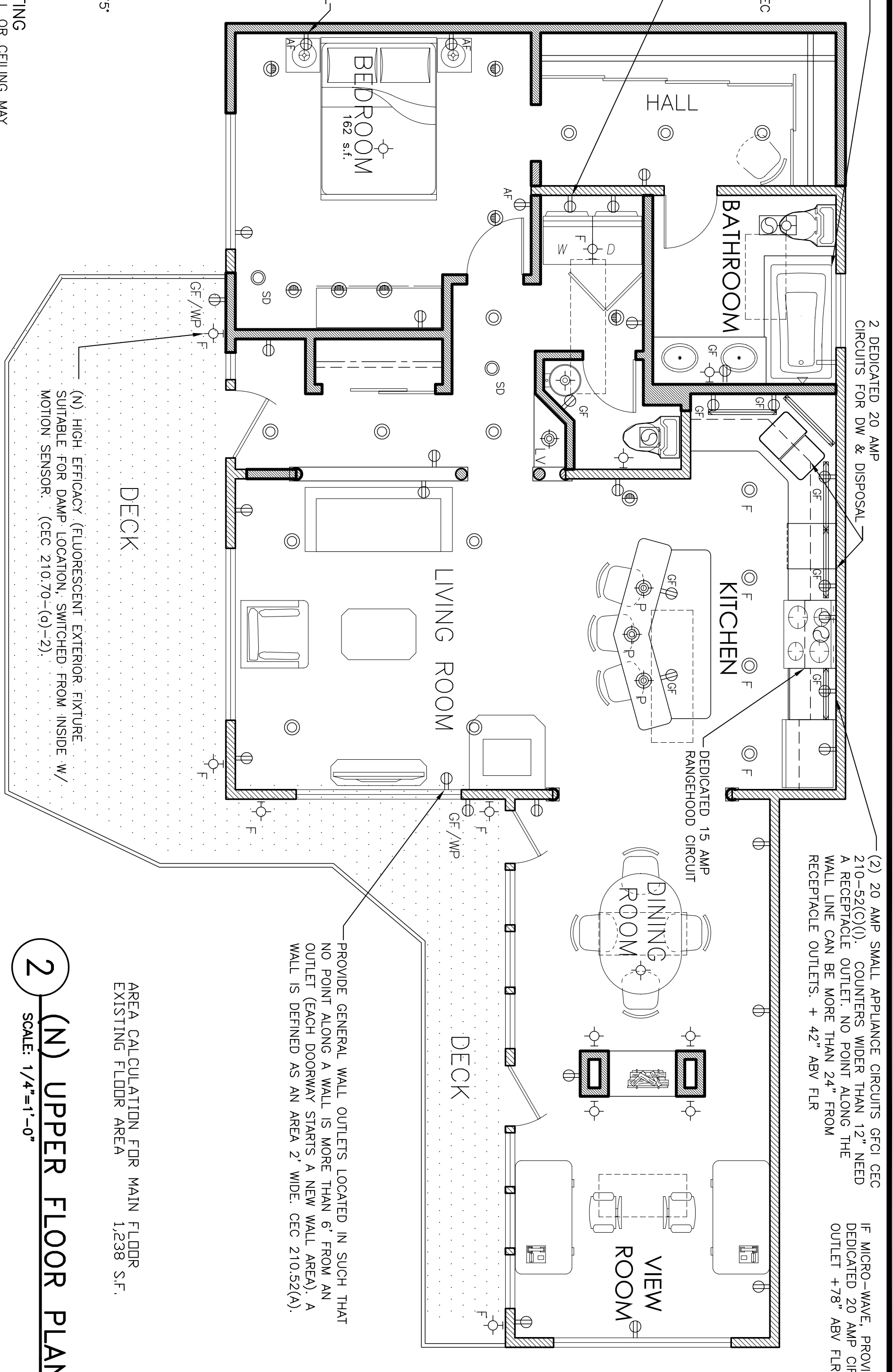
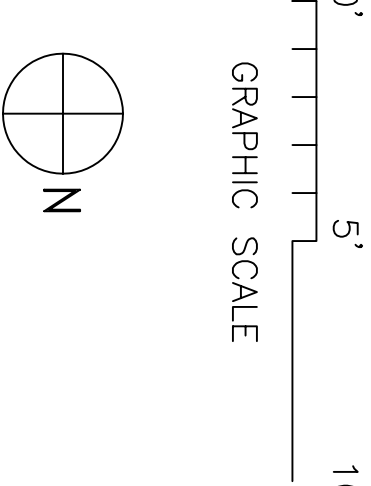
SECTION 314.20 AND 314.21

OUTLET BOXES FOR FLUSH MOUNTING A BOX INSTALLED IN A NONCOMBUSTIBLE WALL OR CEILING MAY BE SET BACK FROM THE SURFACE NO MORE THAN 1/4 INCH. A BOX INSTALLED IN A PLASTER OR PLASTERBOARD WALL MUST HAVE ANY DAMAGED OR MISMATCHED SURFACE REPAIRED SO THAT THERE ARE NO GAPS GREATER THAN 1/8 INCH AT THE EDGE OF THE BOX.

N.M. CABLE SHALL BE STAPLED (SUPPORTED) EVERY 4.5' (NEC 336-18) AND WITHIN 8" OF SINGLE GANG BOX W/O CLAMPS (NEC 370-17 (C)) AND WITHIN 12" OF BOX WITH CLAMPS (NEC 336-18). N.M. CABLE THROUGH BORED HOLES AND NOTCHES WITH LESS THAN 1-3/4" OF WOOD COVER REQUIRE PROTECTION (NEC 300-4(A)). 6' FREE CONDUCTOR REQUIRED AT BOXES (NEC 300-1(A))

ALL SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY SOURCE OF POWER FROM THE BUILDING WIRING WITH BATTERY BACKUP. SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 310.9. SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND LOCATE:

- IN THE IMMEDIATE VICINITY OF THE BEDROOMS
- IN ALL BEDROOMS
- IN THE CENTER OF A DWELLING UNIT, INCLUDING BASEMENTS AND ATTICS, BUT NOT INCLUDING GARAGE SPACES AND UNINHABITABLE ATTICS
- ANY SMOKE DETECTOR LOCATED WITHIN 20 FEET OF A KITCHEN OR BATHROOM CONTAINING A TUB OR SHOWER MUST BE A PHOTOELECTRIC TYPE
- SMOKE DETECTORS IN A ROOM WITH A CEILING SLOPED GREATER THAN ONE FOOT IN EIGHT FEET HORIZONTALLY, SHOULD BE LOCATED ON THE HIGH SIDE OF THE CEILING
- SMOKE DETECTORS SHOULD NOT BE LOCATED WITHIN 3' OF A DOOR TO A BATHROOM CONTAINING A TUB OR A SHOWER OR FOR DEAD AIR SPACES. SMOKE DETECTORS CAN BE LOCATED ON THE CEILING WITH THE SIDE OF THE DETECTOR GREATER THAN 4" FROM THE WALL OR ON THE WALL OF A ROOM WITH THE TOP OF THE DETECTOR LOCATED 4" TO 12" DOWN FROM THE CEILING
- ALL SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION AND BE UL LISTED.



ONDA ROSA

Architecture
 Engineering
 Surveying
 Interior Design

129 JASPER PLACE
 S.F., CA 94133
 415-562-7441
 ONDAROSA@SBCGLOBAL.NET

FRIDL / TOYAMA HOUSE

222 CLEVELAND AVE.

MILL VALLEY
 CA, 94941

APN: 051-171-05
 LOTS 7 & 8 BLK 29
 MARIN HEIGHTS
 SUBDIVISION 'A'

PERMIT SUBMITTAL	4/03/08
NO	Date
2008.02	1/4"=1'-0"
Drawn by	Scale
BN	
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