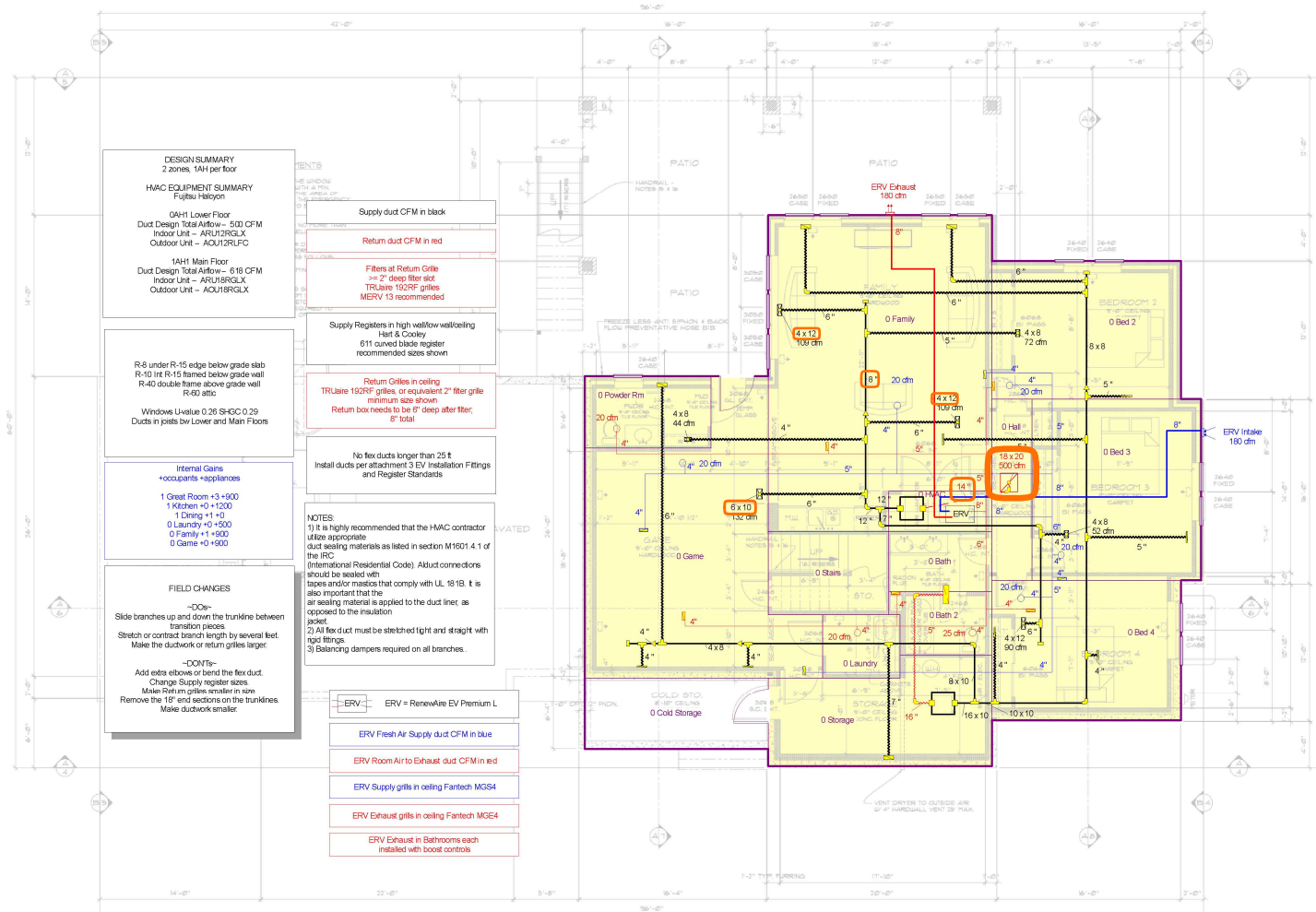




0 Lower Floor



DESIGN SUMMARY
2 zones, 1st per floor

HVAC EQUIPMENT SUMMARY
Furnace/ERV

0AH1 Lower Floor
Duct Design Total Airflow = 500 CFM
Indoor Unit - ARU2RGLX
Outdoor Unit - ACU1RPLFC

1AH1 Main Floor
Duct Design Total Airflow = 618 CFM
Indoor Unit - ARU1BRGLX
Outdoor Unit - ACU1BRGLX

R-8 under R-10 edge below grade slab
R-10 in R-10 framed below grade wall
R-40 double frame above grade wall
R-90 attic

Windows U-value 0.26 SHGC 0.29
Ducts in pits b/w Lower and Main Floors

Internal Gains
+occupants/respirators
1 Great Room +3 +500
1 Kitchen +0 +1200
1 Dining +1 +0
0 Laundry +0 +500
0 Family +1 +500
0 Game +0 +500

FIELD CHANGES
-DO-
Slide branches up and down the trunkline between transition pieces.
Stretch or contract branch length by several feet.
Make the ductwork or return grilles larger.

-DON'T-
Add extra elbows or bend the flex duct.
Change Supply register sizes.
Make Return grilles smaller in size.
Remove the 15' and sections on the trunklines.
Make ductwork smaller.

LEGEND

Supply duct CFM in black

Return duct CFM in red

Filters at Return Grille
≥ 2" deep filter slot
TR/Laire 1020F grilles
MERV 13 recommended

Supply Registers in high wall/low wall/ceiling
Felt & Cooley
611 coned blade register
recommended sizes shown

Return Grilles in ceiling
TR/Laire 1020F grilles, or equivalent 2" filter grille
minimum size shown
Return box needs to be 6" deep after filter,
6" total

No flex ducts longer than 25 ft
Install ducts per attachment 3 EV Installation Fittings
and Register Standards

NOTES:
1) It is highly recommended that the HVAC contractor utilize appropriate duct sealing materials as listed in section M1601.4.1 of the IRC (International Residential Code). All duct connections should be sealed with tapes and/or mastics that comply with UL 181B. It is also important that the air sealing material is applied to the duct liner, as opposed to the insulation jacket.
2) All flex duct must be stretched tight and straight with top flange.
3) Balancing dampers required on all branches.

ERV = RenewWare EV Premium L

ERV Fresh Air Supply duct CFM in blue

ERV Room Air to Exhaust duct CFM in red

ERV Supply grilles in ceiling Fantech MGS4

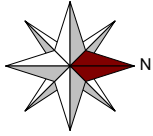
ERV Exhaust grilles in ceiling Fantech MGE4

ERV Exhaust in Bathrooms each installed with boost controls

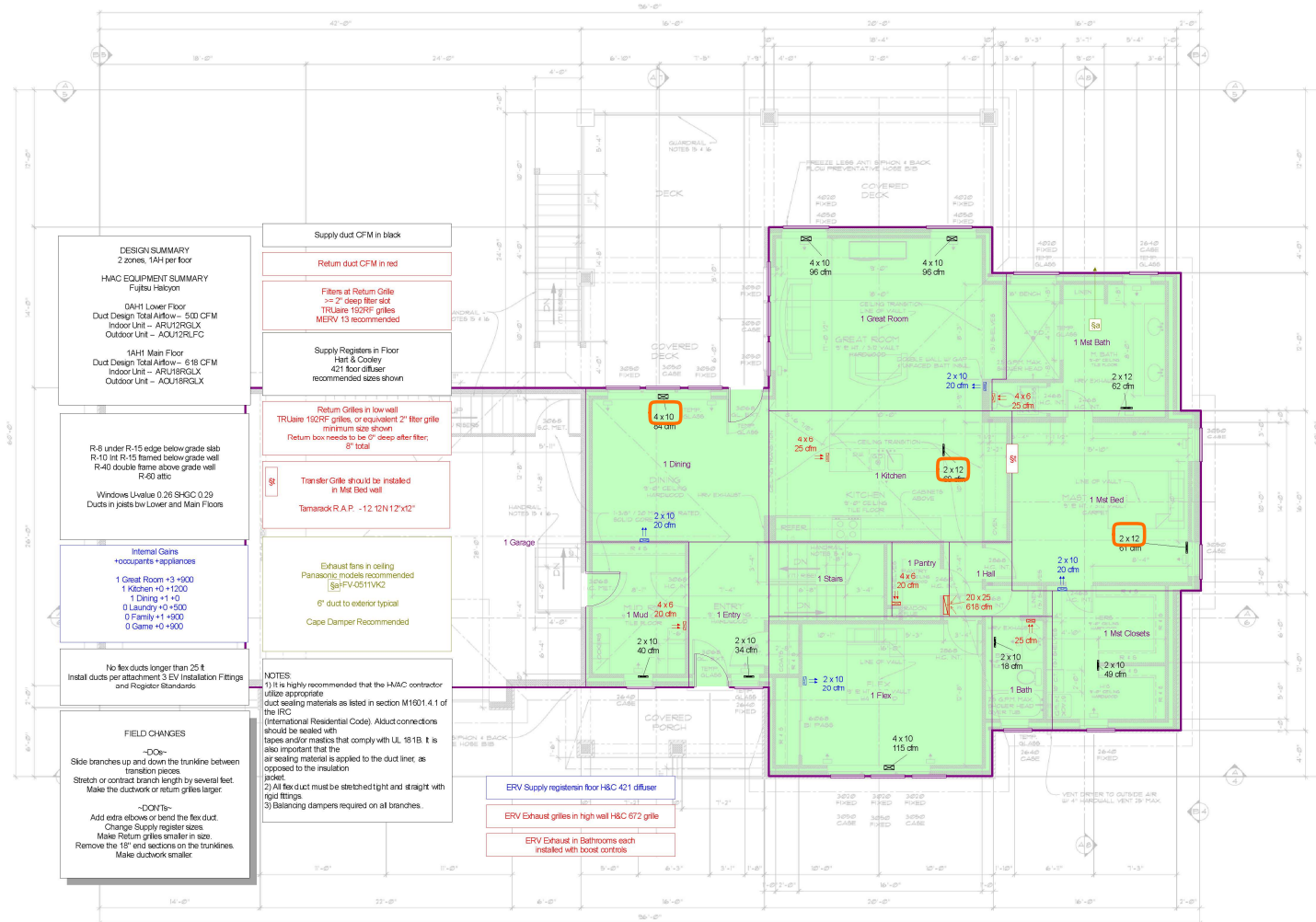
Job #: JSJT-V Matt Potter
Performed by Jeffrey Sauls for:
Matt Potter
3325 Corner Canyon Rd
Erda, UT 84074
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1 Main Floor



DESIGN SUMMARY
2 zones, 1AH per floor

HVAC EQUIPMENT SUMMARY
Fujiitsu Halcyon

DAH1 Lower Floor
Duct Design Total Allow - 500 CFM
Indoor Unit - ARU12RGLX
Outdoor Unit - AQU12RFLC

1AH1 Main Floor
Duct Design Total Allow - 819 CFM
Indoor Unit - ARU19RGLX
Outdoor Unit - AQU19RGLX

R-8 under R-15 edge below grade slab
R-10 int R-15 framed below grade wall
R-40 double frame above grade wall
F-60 attic

Windows Uvalue 0.29 SHGC 0.29
Ducts in joists b/w Lower and Main Floors

Internal Gains
+occupants +appliances
1 Great Room +3 +900
1 Kitchen +0 +1200
1 Dining +1 +0
0 Laundry +0 +500
0 Family +1 +900
0 Game +0 +900

No flex ducts longer than 25 ft
Install ducts per attachment 3 EV Installation Fittings
and Register Standards

FIELD CHANGES

-DO-
Slope branches up and down the trunkline between
transition pieces.
Stretch or contract branch length by several feet.
Make the ductwork or return grilles larger.

-DON'T-
Add extra elbows or bend the flex duct.
Change Supply register sizes.
Make Return grilles smaller in size.
Remove the 18" end sections on the trunklines.
Make ductwork smaller.

Supply duct CFM in black

Return duct CFM in red

Filters at Return Grille
≥ 2" deep filter slot
TRUaire 152RF grilles
MERV 13 recommended

Supply Registers in Floor
Hall & Corridor
421 floor diffuser
recommended sizes shown

Return Grilles in low wall
TRUaire 152RF grilles, or equivalent 2" filter grille
minimum size shown
Return box needs to be 6" deep after filter,
8" total

Transfer Grille should be installed
in Mat Bed wall
Tamarack R.A.P. - 12, 12N 12x12"

Exhaust fans in ceiling
Panasonic models recommended
@EFV-0511VK2
6" duct to exterior typical
Cape Damper Recommended

NOTES
1) It is highly recommended that the HVAC contractor
utilize appropriate
duct sealing materials as listed in section M1501.4.1 of
the IRC
(International Residential Code). A duct connections
should be tested with
leakage and/or mastic that comply with UL 181B. It is
also important that the
air sealing material is applied to the duct liner, as
opposed to the insulation
jacket.
2) All flex duct must be stretched tight and straight with
rigid fittings.
3) Balancing dampers required on all branches.

ERV Supply registers in floor HSC 421 diffuser

ERV Exhaust grilles in high wall HSC 672 grille

ERV Exhaust in Bathrooms each
installed with boost controls

Job #: JSDD-V Matt Potter
Performed by Jeffrey Sauls for:
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