

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet and shall sign the Designer's statement for the appropriate portion. As required by G.S. 143-15133. **If energy cost budget method, state the annual energy cost budget vs allowable annual energy cost budget.**

CODE REQUIRED R-30 wood frame
CODE Allows: R-20 IF UNCOMPRESSED
R-20 EXTENDS OVER THE WALL TOP
PLATE AT EAVES

THERMAL ENVELOPE 2012NC ENERGY CONSERVATION CODE
TABLE 502.1.2 AND 502.2(1) CLIMATE ZONE 3 ROWAN
Method of Compliance: Prescriptive Performance Energy Cost Budget

CONVENTIONAL CONSTRUCTION -
Roof/Ceiling Assembly (each assembly): Roof - Attic 4 Other (Wood Framing)

Description of assembly Attic Air Space, R-30 BATT Insulation, 2X WD Trusses, 5/8" Susp. Acous. Tile Clg, Interior Air
Typical:

U-Value of total assembly $U=1/(.6+30+.04+.6)=.024$
R-Value of insulation MINIMUM *R-30

Exterior Walls (each assembly): Walls, Above Grade - Metal Framed. R13 + R15cl

Description of assembly EXTERIOR WALL COMPOSITE
U-Value of total assembly $U=1/((.17+.2+.68+.10cl+.19+.56+.68))=1/26.89 U=.037$
R-Value of insulation 2" Polystyrene Foam Insulation = R-5/inch = R-10cl and inside wall Batt Insulation = R-19
= R 19 + R 10cl

Openings (windows or doors with glazing):
U-Value of assembly U-50
shading coefficient 0.63 = Table 102.5.2 (3) SHGC(.55) / 0.87
projection factor NONE
low e required, if applicable N/A

Door R-Values R-3

Walls adjacent to unconditioned space (each assembly):
Description of assembly N/A
U-Value of total assembly N/A
R-Value of insulation N/A

Openings (windows or doors with glazing):
U-Value of assembly N/A
low e required, if applicable N/A

Door R-Values N/A

Walls below grade (each assembly):
Description of assembly N/A
U-Value of total assembly N/A
R-Value of insulation N/A

Floors over unconditioned space (each assembly):
Description of assembly N/A
U-Value of total assembly N/A
R-Value of insulation N/A

Floors slab on grade: Slab-on-Grade Floors - Unheated Slabs r-15 for 24 inches
Description of assembly 4" SLAB ON VAPOR RETARDER ON 4" GRAVEL WITH 3" THK. X 2'-0" WIDE PERIMETER INSUL.

U-Value of total assembly $U=1/15=0.067$
R-Value of insulation 3" Extruded Polystyrene Insulation = R-5/inch = R-15
Horizontal/vertical requirement for 24 inches slab heated NO

DESIGNER STATEMENT:
To the best of my knowledge and belief, the design of this building complies with the thermal envelope requirements of the North Carolina State Building Code, Volume X-Energy.

SIGNED: WILLIAM R. BURGIN/VA
NAME: ARCHITECT
TITLE: ARCHITECT

MECHANICAL SUMMARY - See Mechanical

ELECTRICAL SUMMARY - See Electrical

GENERAL PROJECT NOTES:

- WHERE ACRONYMS OR ABBREVIATIONS ARE USED ON THE PLANS, THEY ARE DEFINED TO MEAN THE RECOGNIZED NAME OF THE PERSON, OBJECT, MATERIAL, TYPICALLY USED IN THE CONSTRUCTION INDUSTRY. INCLUDED (BUT NOT LIMITED TO):
CM - CONCRETE MASONRY UNIT
GYP. BD. - GYPSUM BOARD
GC - GENERAL CONTRACTOR
ELECT. CONTR. - ELECTRICAL CONTRACTOR
PLUMB. CONTR. - PLUMBING CONTRACTOR
HVAC - HEATING, VENTILATING AND AIR CONDITIONING
W/F - WELDED WIRE FABRIC (ALSO W/M)
RE-BAR - REINFORCING BAR
W - WITH
@ x O.C. - AT "X" DISTANCE ON CENTER
UNO or UNON - UNLESS NOTED OTHERWISE
CI - CAST IRON
PVC - POLYVINYL CHLORIDE
MIL - METAL
NO. - NUMBER
FEC - FIRE EXTINGUISHING CABINET
HM - HOLLOW METAL
- SOIL BEARING CAPACITY OF 2000 PSF USED IN DESIGN. IF CONTRACTOR SUSPECTS LESSER BEARING CAPACITIES, PROMPTLY NOTIFY THE ARCHITECT.
- GRADE LINES AND SPOT ELEVATIONS SHOWN FOR PAVING, WALKS, FINISH FLOORS SHALL BE FINISH ELEVATIONS. GRADE CUT THICKNESSES OF GRAVEL, CONCRETE SLABS, PAVING, ETC. NOT USED.
- GENERAL CONTRACTOR TO ACT AS PROJECT COORDINATOR. SEE DIVISION 1 OF THE SPECIFICATIONS.
- CAULK ALL JOINTS AROUND DOOR AND WINDOW FRAMES AND OTHER POTENTIAL AIR, LIGHT AND WATER PASSAGES. TYPICAL AT INTERIOR AND EXTERIOR CONDITIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE VISITS REQUIRED TO THOROUGHLY FAMILIARIZE HIMSELF WITH THE SITE BUILDING CONDITIONS, VERIFY LOCATION OF ALL PROPERTY BOUNDARIES, ELEVATIONS, EXISTING UTILITIES, STORM LINES, CATCH BASINS, PRIOR TO SUBMITTING BID.
- APPLY FOR ALL PERMITS, FEES, ETC. AND DISPLAY PERMITS AS PER LOCAL ORDINANCES. BUILD AND DISPLAY CONSTRUCTION SIGN AS DIRECTED IN SPECS.
- CONSTRUCTION STAGING AREA SHALL BE LIMITED TO THE AREAS SHOWN. REMAINING SITE SHALL REMAIN UNENCUMBERED WITH CONSTRUCTION MATERIALS OR EQUIPMENT.
- ALL REFUSE FROM DEMOLITION AND/OR CONSTRUCTION SHALL BE REGULARLY REMOVED FROM THE SITE.
- REGRASS OR RESEED ALL AREAS OF THE SITE DAMAGED DUE TO CONSTRUCTION.
- PROVIDE BARRIERS AT ALL PLACES ON SITE WHERE REQUIRED TO PROTECT PEDESTRIANS.
- PITCH EXTERIOR WALKS/GRADE LINES FOR SURFACE WATER RUNOFF. SLOPE AWAY FROM BUILDING STRUCTURE.**
- THOROUGHLY TAMP ALL PIPE TRENCHES TO FORM SOLID BEARING.
- EACH TRADE IS RESPONSIBLE FOR MAKING PROVISIONS FOR NECESSARY FLOOR, WALL, AND ROOF PENETRATIONS REQUIRED FOR THEIR WORK, SUCH PENETRATIONS BEING COORDINATED WITH THE GENERAL CONTRACTOR. ROOFING SUB-CONTRACTOR SHALL MAKE ALL PENETRATIONS WATERTIGHT.
- DIMENSIONS ARE CALLED TO FACE OF GYPSUM BOARD AND MASONRY WALLS EXCEPT WHERE MASONRY WALLS ARE FURRED. IN THESE CASES, DIMENSIONS ARE TO FACE OF MASONRY.
- ALL DIMENSIONS REFERENCED TO EXTERIOR OF THE BUILDING ARE CALLED TO FACE OF MASONRY.
- INTERIOR WALLS SHALL BE 1/2" METAL STUD, INSULATION (F.G. GYP. BD.), TYPICAL UNLESS NOTED OTHERWISE OR SHOWN BY SYMBOLS TO BE OTHERWISE.
- BRACE ALL HOLLOW METAL FRAMES WITH STEEL ANGLES TO STRUCTURE AT MAXIMUM OF 4'-0" O.C.
- MINIMUM DIMENSION ON PULL SIDE OF DOORS (KNOB EDGE) IS 18" CLEAR FOR ONSHINING DOORS AND 12" CLEAR FOR OUTSHINING DOORS.
- ALL SIDEWALKS TYPICAL 4" THICK CONCRETE x WIDTH AND LENGTH SHOWN (SEE ALSO "SITE PLAN"). REINFORCE WITH 6x6-HL4x4x4 M/M AND PLACE ON FIRM GRADE.
- PROVIDE LINTELS FOR ALL MASONRY OPENINGS- INSTALL LINTEL APPROPRIATE FOR SPAN AND IMPOSED LOAD. (REFERENCE STRUCTURAL DWGS)
- PROVIDE SOLID WOOD BRACING 4" BLOCKING WITHIN ALL PARTITIONS AT WALL MOUNTED SHELVING, CHAIR RAILS, HANDICAPPED RAILS, TOILET ACCESSORIES, MARKER BOARDS, ETC. FIRE EXTINGUISHER CABINETS, DOOR STOPS, CORRIDOR HANDRAILS, ETC.
- NOT USED.
- ALL EXTERIOR WALLS SHALL BE SEALED TO ELIMINATE LIGHT AND AIR LEAKS. USE "INSUL-SAFE" BATT INSULATION AND/OR FIRE RATED CAULKING IN IRREGULAR VOIDS OR GAPS ABOVE GRADE AND AT ROOF LINE INTERSECTIONS.
- VERIFY ALL DIMENSIONS PRIOR TO INSTALLATION OF ANY WORK.
- WHERE GRILLES AND DIFFUSERS MUST SPLIT SUSPENDED GRID, COORDINATE WITH MAIN RUNNER REQUIREMENTS.
- PITCH CONCRETE SLABS "GENTLY" TOWARD FLOOR DRAINS.
- DO NOT APPLY CONCRETE SEALER ON FLOORS TO RECEIVE HARD TILE FINISHES.
- FILL SOLID WITH MORTAR ALL HOLLOW METAL HEADS/JAMBS INSTALLED IN MASONRY WALLS.
- PROVIDE HEEP HOLES ABOVE ALL THRU-WALL FLASHING CONDITIONS @ 32" O.C. SEE SECTION NOTES.
- ITEMS SHOWN ON SMALLER PLANS AND DETAILS THAT ARE NOT SHOWN ON LARGER PLANS AND DETAILS ARE REQUIRED. ONLY INFORMATION IN CONFLICT BETWEEN SMALL PLANS AND DETAILS AND LARGER PLANS AND DETAILS FOLLOWS THE "LARGER PLANS AND DETAILS RULE" THAT LARGER PLANS AND DETAILS SHALL DICTATE WORK.
- SEE SECTION FLOOR PLANS FOR FIRE EXT. CABINET LOCATIONS NOTED THIS * * * ON PLANS. FEC

SYMBOLS

- CRUSHED STONE or GRAVEL
- CONCRETE
- CONCRETE BLOCK (in section)
- CONG. BLOCK (in plan)
- BRICK
- STEEL
- GYPSUM BOARD WALLS (shown open on floor plans)
- HOLLOW METAL
- BATT INSULATION
- WOOD FRAMING or BLOCKING
- FINISH WOOD
- PLYWOOD

ABBREVIATIONS

- RD - ROOF DRAIN
- ES. - EMERGENCY SCUPPER
- DS. - DOWNSPOUT
- YCO. - YARD CLEANOUT
- VTR - VENT THRU ROOF
- RCP - REINF. CONCRETE PIPE
- T.O.G. - TOP OF GRATE
- T.O.W. - TOP OF WALL
- CG - CURB AND GUTTER
- EF - EXHAUST FAN (SEE MECH)
- R.H. - RELIEF HOOD (SEE MECH)
- R.T.U. - ROOF TOP UNIT (SEE MECH)
- (SEE SHEET CIVIL DWGS)
- D.I. - DROP INLET
- C.B. - CATCH BASIN
- Y.I. - YARD INLET
- G.I. - CURB INLET
- STORM PIPE
- J.B. - JUNCTION BOX

LEGEND & SYMBOLS

- RELIEF HOODS (SEE MECH DWGS)
- VTR (VENT THRU ROOF) (SEE PLUMBING DWGS)
- SITE LIGHTING (SEE ELECTRICAL DWGS)
- SPOT ELEVATION
- MISC. SYMBOLS
- ROOM NO. FIRST FLOOR ELEV. 613.50'
- DOOR NO.
- WINDOW TAG
- "ELEVATION" DIRECTION SHEET NO. - AI-01 DETAIL NO.
- "SECTION" DIRECTION SHEET NO. - AI-01 DETAIL NO.
- "CABINET ELEVATION" DIRECTION SHEET NO. - AI-01 DETAIL NO.

GENERAL PROPERTY INFORMATION:

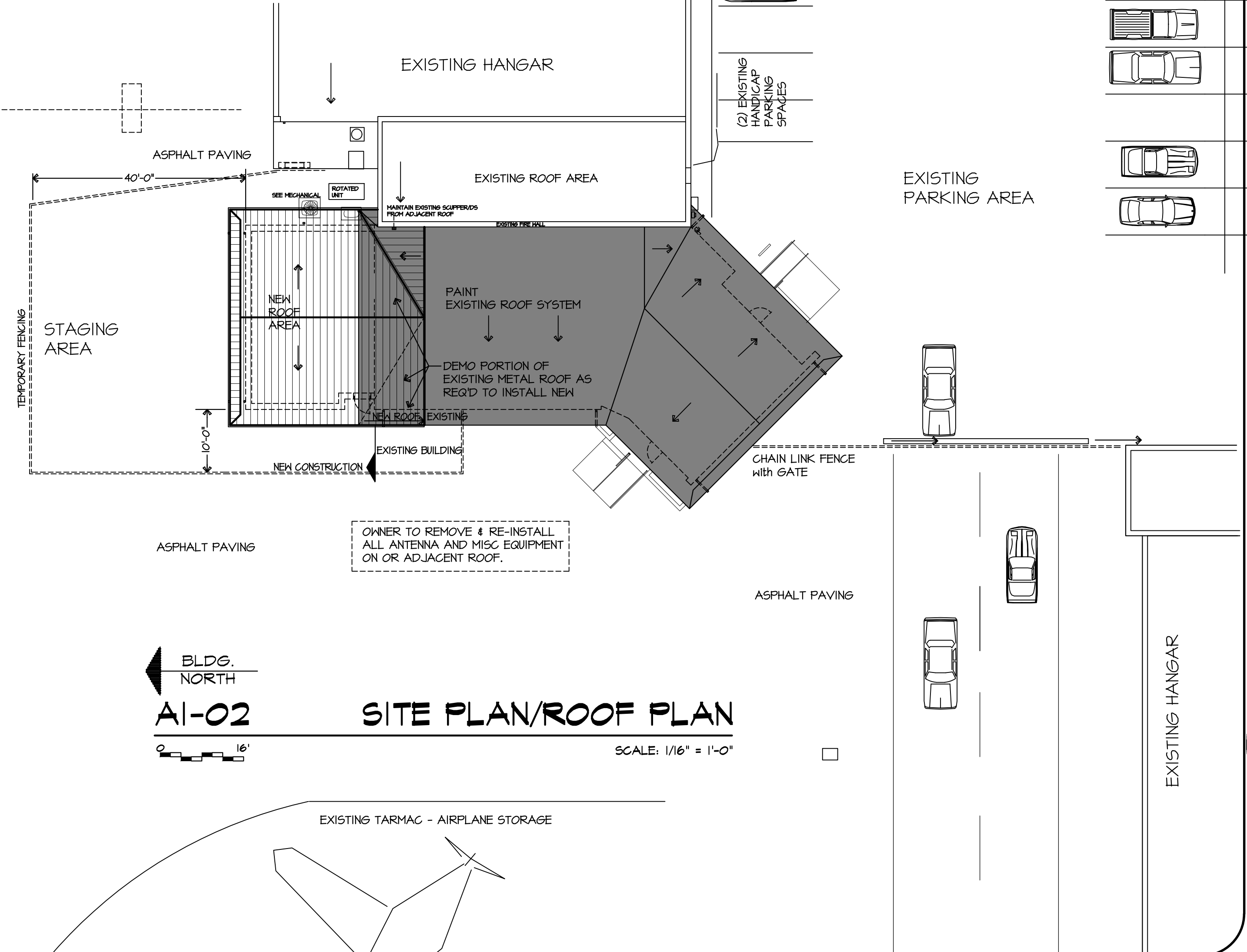
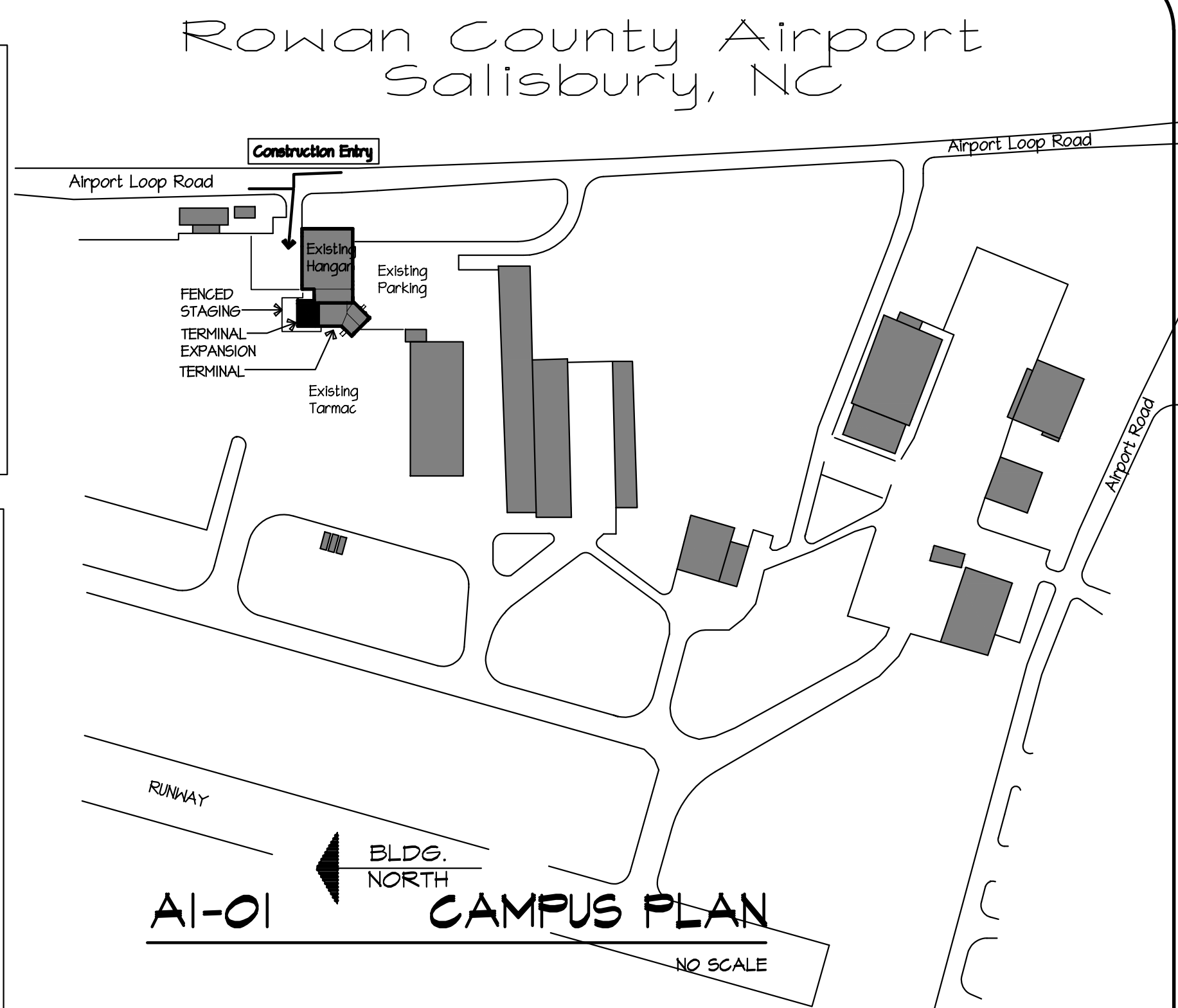
ADDRESS: 3650 AIRPORT LOOP ROAD
PARCEL #: AIRPORT CAMPUS Parcel PID 410 - 001
PROJECT TITLE: ROWAN COUNTY AIRPORT - TERMINAL EXPANSION
ACREAGE: N/A
PROPOSED: NEW CONSTRUCTION & RENOVATION
BUSINESS OCCUPANCY
EXISTING TERMINAL = 2153 sf
NEW ADDITION = 812 sf
TOTAL = 3625 sf
CITY OF SALISBURY - LDO
ZONING: ETJ
PARKING: EXISTING

SITE PLAN NOTES:

CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
CONTRACTOR SHALL PATCH/RE-PAVE ALL AREAS DISTURBED OR DAMAGED DURING CONSTRUCTION.
ACCESS TO SITE SHALL BE VIA ENTRANCE JUST NORTH OF TERMINAL/EXISTING HANGAR BLDG - OFF AIRPORT LOOP ROAD
STORAGE AND STAGING AREA SHALL BE AS INDICATED ON SITE PLAN. STAGING AREA SHALL BE CONTINUOUSLY FENCED USING 6 FOOT TALL TEMPORARY FENCING - SECURED TO TARMAC.
NOTE OF AIRPLANES STORED ON ADJACENT TARMAC.
EARTHWORK:
DEMOLISH ASPHALT PAVING AS REQUIRED FOR NEW CONSTRUCTION.
UNDER BUILDING SLAB - 100% COMPACTION.
CONTRACTOR SHALL FILL TO VAPOR BARRIER WITH ABC STONE.
SEE WALL SECTIONS FOR DETAILS REGARDING ASPHALT PATCH.

BUILDING ROOF AND STORM DRAINAGE NOTES:

EXISTING METAL ROOF SYSTEM TO BE PAINTED - SEE SPECS.
NEW METAL ROOF INSTALLED (CUSTOM COLOR MATCH) WITH TRANSITION FLASHING "EXISTING TO NEW" - SEE SPECS.
SEE ALTERNATES FOR DEMO/REPLACE OF EXISTING METAL ROOF SYSTEM.
ALUMINUM GUTTER to -DS
3x4 ALUMINUM DOWN SPOUTS
DOWNSPOUTS TO SPILL ON GRADE.



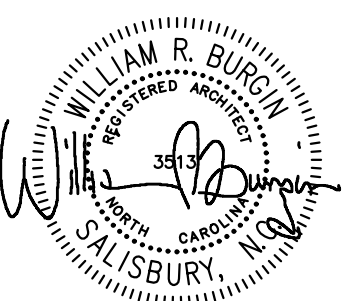
RAMSAY BURGIN SMITH ARCHITECTS
225 NORTH MAIN STREET - SUITE 501
SALISBURY, NORTH CAROLINA 28144
Phone: (704) 633-3121 Fax: (704) 633-5361
Email: rbsa@rbsaarch.com (www.rbsaarch.com)

PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS THEREFROM MUST BE WITH THE WRITTEN CONSENT OF THE ARCHITECT

SITE PLAN

General Project Notes
Energy Code Summary

ROWAN COUNTY AIRPORT
TERMINAL EXPANSION



DJS
DRAWN BY
HRS
CHECKED BY
APRIL 2017
DATE
S1625
CONCL. NO.

SHEET NO.
AI
OF 5