

MATERIAL SPECIFICATIONS

GENERAL NOTES!

A. APPLICABLE CODE:

- 1. IBC 2006 - with GEORGIA amendments and as adopted by Gwinnett County, Georgia.

B. DESIGN LOADS:

- 1. Roof live load 0 - 200 sq. ft. 20 psf.
- 2. Collateral load 3 psf.
- 3. Roof dead load 2.4 psf.
- 4. Stair live load 100 psf.
- 5. Wind loads:
 - a. Basic velocity 90 mph
 - b. Velocity pressures - Ref - IBC Section 1609
 - c. Importance Factor I
 - d. Exposure B
 - e. Component & Cladding Adjustment Factor GCp as per ASCE 7-05 Fig. 6-11A & 6-11B.
- 6. Seismic criteria:
 - a. Ref IBC Section 1613
 - b. OCCUPANCY Category II
 - c. Importance Factor 1.0
 - d. Seismic Design Category D
 - e. Site Class C
 - f. Spectral Response Acceleration:
 - SS = 0.25g SI = 0.084
 - SDS = 0.269 SDI = 0.135
 - g. Response Modification Factor R = 3
 - h. Deflection Amplitude Factor Cd = 3
 - i. Analysis - Equivalent Lateral Force Procedure as per ASCE 7-05 Para. 12.8
- 7. Ground Snow - Pg 5 psf

C. FOUNDATIONS:

- 1. Contractor to obtain Soils Report from the Owner.
- 2. Footings are proportioned for placement on soil of 2500 psf min bearing capacity.
- 3. Site work and fill placement shall be performed in accordance with recommendations contained in the above referenced reports.
- 4. An independent, licensed Geotechnical Engineer, employed by the Owner, shall inspect footings prior to placement of concrete to verify suitable bearing capacity exists.
- 5. Maintain 3 inches clear for all rebars where footing concrete is placed in contact with soil.
- 6. Maintain continuity of longitudinal footing rebars, providing corner bars at the corners and at changes in direction and at intersections.
- 7. Tops of all perimeter and exterior footings shall be a minimum depth of 16" below finish grade.
- 8. Minimum width of footings supporting structural loads shall be 24". See details.

D. CONCRETE:

- 1. AC BUILDING CODE (318.05) applies.
- 2. All concrete except tilt panels & floor slab shall be f'c = 3000 psi @ 28 days. (Footings, walls, etc.) Floor slab concrete and tilt panel concrete shall be f'c = 4000 psi @ 28 days. See foundation plan for fiber mesh in floor slab.
- 3. Reinforcing steel shall conform to ASTM A615, Grade 60.
- 4. Welded wire fabric shall conform to ASTM A185 - 02.
- 5. Detail reinforcing as per ACI 315.
- 6. Concrete to be exposed to atmosphere shall contain 3% to 5% entrained air at time of placement.
- 7. Concrete cylinder reports shall be available at the Site.
- 8. Concrete mix designs shall be submitted to the SER for review prior to delivery of any concrete to the Site.
- 9. All CI and SI in floor slabs shall be cleaned and filled with a pliable joint filler.
- 10. All interior floor slabs shall receive steel trowel finish.
- 11. Frequency of concrete testing shall be as per Section 5.6.1 of ACI 318.05.
- 12. Five cylinders shall be made for each test, 1 @ 7 days, 2 @ 28 days & 2 for reserve.
- 13. Minimum lap splices for tension development of rebars shall be as per Table 5-3 (a), CRSI - 1996, Category 3. Lap in inches, #4 x 22' / #5 x 27' / #6 x 35' / #7 x 48'.

E. STRUCTURAL STEEL (Other than pre-engineered building)

- 1. AISC 1990 (WSD) applies.
- 2. Structural steel shall be:
 - a. Wide flange shapes ASTM A992, GRADE 50
 - b. Tubular (HSS) sections ASTM A500, GRADE B / Fy = 46ksi
 - c. Round (pipe columns) ASTM A53, GRADE or ASTM A501
 - d. Miscellaneous rolled shapes & plates ASTM A36
 - e. Anchor bolts ASTM A36
- 3. Welding shall conform to appropriate provisions of AWS Specifications D.1.1 and shall be performed by welders holding currently valid Certificate for the type weld being performed. Certificates shall be available for inspection at Site.
- 4. Typical weld shall be 3/16" fillet weld all around, UNQ.
- 5. Bolted framed connections shall conform to AISC requirements for ASTM A-325 HT Bolts.
- 6. Bearing, each end for steel to masonry or concrete shall be 8" for loose angle linteils and 12" for steel beam linteils.
- 7. Reference AISC Code of Standard Practice, March 18, 2005. Steel erector shall determine need, furnish and install temporary supports as required for stability until such time as structural steel and immediately adequately framing is completely and adequately installed.
- 8. Reference AISC Specifications Section M4.6. Field painting. The General Contractor shall be responsible for touch up painting and cleaning of structural steel.
- 9. Portions of structural steel to be embedded in concrete shall not be shop painted.

F. MISCELLANEOUS:

- 1. Detail for one condition or location shall apply at all locations where similar conditions occur.
- 2. Roof drainage system to be designed by others.
- 3. The General Contractor shall be responsible for bracing and shoring during construction to ensure stability.
- 4. The roof structure has not been designed to accommodate future installation of additional equipment such as HVAC units.
- 5. The SER will not be responsible for the Contractor's means, methods, techniques, sequences or procedures if construction, or safety precautions and programs incident thereto, and the SER will not be responsible for the Contractor's failure to perform or furnish the work in accordance with the Contract Documents.
- 6. The SER will not be responsible for the acts or omissions of the Contractor or of any Subcontractor, any Supplier, or of any person or organization performing or furnishing any of the Work.
- 7. Contractor shall coordinate all work with drawings from MBM. MBM is supplying, among other things, all structural steel, roof framing and roofing.
- 8. Reference IBC 2006 Chapter 17. The Owner shall be responsible for conformance with Section 1704.

General Notes:

- 01. Fire Department code reference 1995 Gwinnett County Ordinance for fire protection and life safety, the current edition of the NFPA codes and Standards as adopted and modified by the State Fire Marshal, NFPA 101 Life Safety code 2000 edition, International Fire Code 2003 edition, OCGA Titles 25 and 30 Georgia Accessibility Code.
- 02. Contact the Gwinnett County Fire Marshal's (inspection request line) at (678) 518 6102 for inspections at 50%, 80% and 100% completion. Note: (50%) inspection includes all new buildings coming out of the ground and inspection of floor ceiling penetrations; (80%) inspection of any fire rated barriers, floor and ceiling; (100%) Final inspection: All systems, equipment installed and operating, ready for occupancy. The inspection request must be phoned in before 2:00 pm the day prior to the date the inspection is needed.
- 03. A sign clearly stating that smoking is prohibited shall be conspicuously posted within each building and at each building entrance for compliance with Gwinnett County Clean Indoor Air Ordinance. Acceptable signs shall display either "NO SMOKING" or the international "NO SMOKING" symbol consisting of a pictorial representation of a burning cigarette enclosed in a red circle with a red bar across it.
- 04. The "u" factor and SHGC for each glazed fenestration product (door, window, skylight) shall be determined in accordance with National Fenestration Rating Council NFRC 100-97 (procedure for determining fenestration product U-factor) and nfrc 200-96 (Procedure for determining fenestration product solar heat gain coefficients at normal incidence).
- 05. Signs are not approved within the scope of this building permit. A separate sign location permit is required for each sign.
- 06. Complete shop drawings for construction of all applicable specialty items including but not limited to architectural precast concrete, curtain wall glazing systems, light gage steel framing, ornamental guardrails, canopies, skylights and stairs shall be sealed and signed by a professional engineer licensed in the State of Georgia and shall be available at the job site during the times of inspection.
- 07. All insulating material in the building shall have a flame spread index of not more than 25 and a smoke developed index of not more than 450 as determined by ASTM E 84.

NOTE TO BIDDERS / GENERAL CONTRACTORS.

01:
THESE DRAWINGS REPRESENT A BUILDING ADDITION WHICH HAS A METAL BUILDING FRAME AND ROOF. FRAME TO BE DESIGNED AND FURNISHED BY A METAL BUILDING MANUFACTURER (MBM). WHEN A LOW BIDDER HAS BEEN SELECTED, THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL BE FURNISHED THE DESIGN LOADS AND DETAILS BY THE CONTACTOR & METAL BUILDING MANUFACTURER TO VERIFY THE FOOTING DESIGN, THE BUILDING ATTACHMENT DESIGN, AND ANY OTHER INFORMATION THE MBM CAN SUPPLY TO COMPLETE THE DESIGN OF THE BUILDING PER CODE WITH REGARD TO THE METAL BUILDING SELECTED.

02:
ALL REVISIONS TO 'A', 'S' & 'E' DRAWINGS AS A RESULT OF COORDINATION WITH METAL BUILDING MANUFACTURER DRAWINGS WILL BE MARKED ON THE DRAWINGS FOR PERMITTING AND CONSTRUCTION.

03:
THESE DRAWINGS ARE FOR BIDDING ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION.

A.0 COVER / SPECIFICATIONS

A.1 FLOOR PLAN

A.2 ELEVATIONS

S.1 FOUNDATION PLAN

S.2 DETAILS

S.3 PANELS

S.4 PANELS

S.5 PANELS

E.1 ELECTRICAL SPECS/LEGEND

E.2 ELECTRICAL FLOOR PLAN

E.3 ELEC. RISER / SCHEDULES

TOTAL 11 SHEETS

APPLICATION GENERAL NOTES:

- 01. OCCUPANCY GROUP / STORAGE S.1
- 02. OCCUPANCY LOAD / FROM EXISTING BUILDING / 2 TO 4 ADDITIONAL.
- 03. NET NEW FLOOR AREA = 20,000 SQ FT
- 04. EXISTING BUILDING FLOOR AREA = 30,566 SQ FT.
- 05. TOTAL SQ FOOTAGE = 50,566 SQ FT.
- 06. TYPE OF CONSTRUCTION = IIB
- 07. BUILDING IS TO BE SPRINKLERED TO MATCH EXISINT BUILDING.
- 08. BUILDING IS ONE (1) STORY / HEIGHT = 36' / CODE HEIGHT = 55'. COUNTY ZONING HEIGHT = 40'
- 09. FLOOR LIVE LOAD = 125#.
- 10. ROOF LIVE LOAD = 20#.

METAL BUILDING MANUFACTURER

678.333.9844
678.482.3870
678.482.3346

Each manufacturer

James M. Webb

1547 Parkway Circle NE Atlanta, GA 30315

20,000 SQ FT ADDITION TO BUILDING FOR HARDWARE RESOURCES

1221 HURRICANE SHOALS ROAD (BLDG B)

GWINNETT PROGRESS CENTER, LAWRENCEVILLE, GA 30043

GWINNETT CO. GA.

COVER / SPECS

OWNER'S REPRESENTATIVE

MR. MARK LOWE

PROGRESSIVE STAMPING AND PLATING, INC
4319 MARLENA STREET
BOSSIER CITY, LA 71111

job no: 0708

date: 19 MAR 2007

sheet

A.0

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DO NOT SCALE DRAWINGS

16 FEB 2007