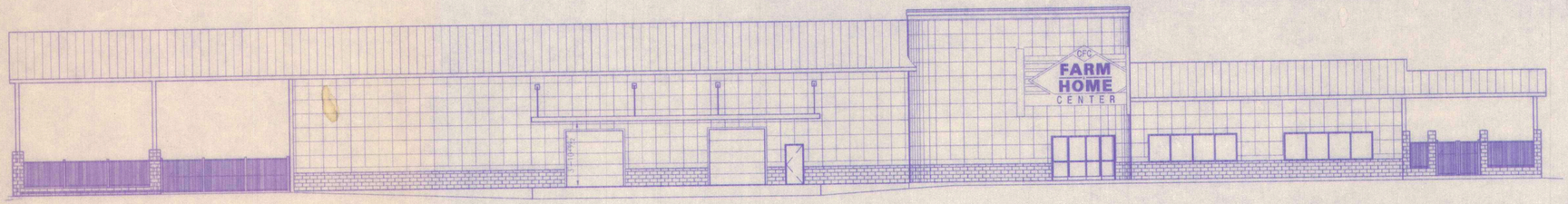


FRONT ELEVATION

TYPICAL ABBREVIATIONS

ABV	ABOVE
A.F.F.	ABOVE FINISHED FLOOR
APP.	APPROVED
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURE(AL)
BD.	BOARD
BLDG	BUILDING
BLW	BELOW
BM	BEAM
BRG.	BEARING
CANT.	CANTILEVER
CLG	CEILING
C.J.	CEILING JOIST
CJ	CONCRETE CONTROL JOINT
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CONSTR.	CONSTRUCTION
DEFL	DEFLECTION
DIA	DIAMETER
DIAG.	DIAGONAL
DIM	DIMENSION
D.J.	DECK JOIST
DTL	DETAIL
DWG	DRAWING
EIFS	EXTERIOR AND INTERIOR FINISH SYSTEM
ELEV., EL.	ELEVATION
ELEV.	ELEVATOR
ENG.	ENGINEER(ING)
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXIST	EXISTING
FT.	FEET
FIN.	FINISH
F.D.	FLOOR DRAIN
FL.	FLOOR
F.J.	FLOOR JOIST
FDN, FOUND.	FOUNDATION
GA.	GAGE OR GAUGE
GALV.	GALVANIZED
GYP.	GYPSUM
H.P.	HIGH POINT
HORIZ.	HORIZONTAL
HT.	HEIGHT
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
I.D.	INSIDE DIAMETER
IN.	INCHES
INSUL.	INSULATION
INT.	INTERIOR
ISOL. JT.	ISOLATION JOINT
JST	JOIST
JT	JOINT
LB	POUND
LIN.	LINEAR
L.P.	LOW POINT
LVL	LAMINATED VENEER LUMBER
LW	LIGHTWEIGHT
MANUF.	MANUFACTURER
MAX.	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MISC	MISCELLANEOUS
NOM.	NOMINAL
N	NORTH
NTS	NOT TO SCALE
NO.	NUMBER
O.A.	OVERALL
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPNG.	OPENING
OPP.	OPPOSITE
OPP.H.	OPPOSITE HAND
O.F.	OVERFRAMING
PR	PAIR
PERIM	PERIMETER
PL	PLATE
PCF	POUNDS PER CUBIC FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PREFAB	PREFABRICATED
PSL	PARALLEL STRAND LUMBER
PROJ	PROJECT
REF.	REFERENCE
REINF	REINFORCE
REQ'D	REQUIRED
RET	RETAIN(ING)
REV	REVISE(D), REVISION(S)
R.D.	ROOF DRAIN
SHT	SHEET
SIM.	SIMILAR
SQ.	SQUARE
STL	STEEL
STRUCT	STRUCTURAL
STWM	STORM WATER MANAGEMENT
THK.	THICK(NESS)
THRU	THROUGH
TJI	ENGINEERED JOIST
T.O.	TOP OF
T&G	TONGUE & GROOVE
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/	WITH
W/O	WITHOUT
WD.	WOOD
WT	WEIGHT
WWF	WELDED WIRE FABRIC

CFC FARM & HOME CENTER PROTOTYPE

PROPOSED BUSINESS/WAREHOUSE BUILDING

****

Entrance = 460 (gross) square feet
Showrooms = 5625 (gross) square feet
Warehouse = 13550 (gross) square feet
Covered Storage = 5000 (gross) square feet
Garden Area = 1250 (gross) square feet

Total Building Area = 25885 (gross) square feet

PERMIT SET
3-24-05

General Notes:

1. THESE DRAWINGS ARE PROVIDED FOR THE EXCLUSIVE USE OF THE CFC FARM & HOME CENTER. OWNER/ARCHITECT SERVICES AGREEMENT IS FOR ARCHITECTURAL DRAWINGS REQUIRED FOR PERMIT & APPROVAL ONLY. EXTENSIVE DRAWINGS & SPECIFICATIONS ARE NOT PART OF THE OWNER/ARCHITECT AGREEMENT. MECHANICAL & ELECTRICAL DESIGN, COORDINATION & CODE COMPLIANCE IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR OTHER CONSULTANTS.

2. IT IS AGREED THAT THE PROFESSIONAL SERVICES OF THE ARCHITECT DO NOT EXTEND TO OR INCLUDE THE REVIEW OR OBSERVATION OF THE CONTRACTOR'S WORK OR PERFORMANCE.

3. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTION. ANY VARIATIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO CONSTRUCTION.

4. ANY CHANGE OR FIELD ALTERATION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION.

5. ANY ITEMS NOT SPECIFICALLY SHOWN ON THE DRAWINGS, BUT WHICH ARE REASONABLY INCIDENTAL TO AND NECESSARY FOR THE SATISFACTORY COMPLETION OF THE PROJECT IN ACCORDANCE WITH INDUSTRY STANDARDS, ARE INCLUDED WITHIN THE INTENT OF THESE DRAWINGS.

6. BUILDING CODE COMPLIANCE, CONSTRUCTION DETAILING, AND COORDINATION RESULTING FROM THE USE OF THESE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

7. ALL EGRESS DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. ALL BOLTS, OR SIMILAR DEVICES SHALL BE USED IN ACCORDANCE WITH IBC BUILDING CODE 2000 EDITION.

8. FIRE SEPARATION WALLS ARE TO BE AS INDICATED ON THE DRAWINGS. BUILD TIGHT TO ROOF STRUCTURE TO PROVIDE A CONTINUOUS RATED ASSEMBLY BETWEEN TENANTS. ANY PENETRATIONS SHALL BE AS ALLOWED BY THE U.L. ASSEMBLY AND SHALL BE PROPERLY FIRE STOPPED WITH A MATERIAL WHICH WILL MAINTAIN THE RATED ASSEMBLY.

DRAWING INDEX

ARCHITECTURAL	
CS	COVER SHEET
CR	CODE REVIEW
SP1	GENERAL SPECIFICATIONS
SP2	GENERAL SPECIFICATIONS
A1	OVERALL FLOOR PLAN
A2	PARTIAL FLOOR PLAN
A3	PARTIAL FLOOR PLAN
A4	OVERALL ELEVATIONS
A5	FRONT & RIGHT ELEVATIONS
A6	REAR & LEFT ELEVATIONS
A7	A7 ROOF PLAN
A8	BUILDING CROSS SECTIONS
A9	BUILDING CROSS SECTIONS
A10	WALL SECTIONS
A11	WALL SECTIONS
A12	DETAILS
A13	DOOR, WINDOW, & FINISH SCHEDULES
	STRUCTURAL
S1	FOUNDATION PLAN

CONTRACTOR/OWNER NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, AND DIMENSIONS PRIOR TO PERFORMING THE WORK
2. NOTIFY ARCHITECT OF ANY DISCREPANCIES AND INCONSISTENCIES IN DIMENSIONS AND PLANS PRIOR TO PERFORMING THE WORK
3. DEVIATION FROM THESE DWGS W/O PRIOR NOTIFICATION OF ARCHITECT WILL VOID CERTIFICATION AND SEAL

COMMONWEALTH OF VIRGINIA
STEPHEN E. WAGNER
No. 011675
ARCHITECT

REVISIONS

THIS DRAWING IS THE PROPERTY OF
S. E. WAGNER ARCHITECT
6381 STUART AVE.
P.O. BOX 2199
THE PLAINS, VA 20198-0258
341 HWY. ONE STE. D
LEWES, DELAWARE 19958

CFC FARM & HOME CENTER
CARMEL CHURCH
COVER SHEET
CAROLINE COUNTY VIRGINIA

DWG. NO.
CFC - FP
3-24-05.DWG

DATE:
3-24-05

CS

CODE DATA

CODE REFERENCE:
The International Building Code, 2000.
Virginia Uniform Building Code

BUILDING #1

CONSTRUCTION CLASSIFICATION:
Type II-B Construction
Un-Sprinklered

USE & OCCUPANCY:
Group S-1

HEIGHT SECTION (503):
Maximum allowable height 55 feet (table 503)
Proposed Height 29'-6"±

ALLOWABLE AREA (503):
At = 17,500 S.F.
Proposed Area: 5,000 S.F.

FIRE RATINGS
Per Tables (601 & 602):
Type II-B Construction 0 (Hours)

BUILDING #2

CONSTRUCTION CLASSIFICATION:
Type II-B Construction
Un-Sprinklered

USE & OCCUPANCY:
Group S-1 and Group M
Separated Uses (section 302.2.3)
Building Area shall be such that the sum of the ratios of the floor area of each use divided by the allowable area for each use shall not exceed 1.
Group S-1 ratio: 11,944/17,500 = .68
Group M ratio: 8,694/12,500 = .69
Sum of ratios: = 1.37

HEIGHT SECTION (503):
Maximum allowable height 55 feet (table 503)
Proposed Height 31'-8"± (Entrance silo)

AREA MODIFICATION (507):
Frontage Increase
P = 721', F = 621', W = 30'
If = 100 [F/P - .25] W/30
If = 100 [621/721 - .25] 30/30
If = 61%

Adjusted Area Increase
Group S-1 (58% of Building Area)
At = 17,500 S.F.
Aa = 17500 + [17500 x 61/100]
Aa = 28,175 S.F.
28,175 S.F. (58%) = 16,342 S.F.

Group M (42% of Building Area)
At = 12,500 S.F.
Aa = 12500 + [12500 x 61/100]
Aa = 20,125 S.F.
20,125 S.F. (42%) = 8,453 S.F.

Allowable Area: 16,342 + 8,453 = 24,795 S.F.
Proposed Area: 20,634 S.F.

FIRE RATINGS
Per Tables (601 & 602):
Type II-B Construction 0 (Hours)

HANDICAPPED/AGED REQMTS:
Accessibility for the physically handicapped and aged shall be in accordance with ANSI A117.1, IBC 2000 and ADA 1998 Codes.

INTERIOR FINISHES WALLS/CEILINGS
Per (Table 803.4):
Group S-1
Vertical Exits/Exits/Passageways - Class B
Rooms/Enclosed Spaces - Class C
Group M
Vertical Exits/Exits/Passageways - Class A
Rooms/Enclosed Spaces - Class C

MAX. TRAVEL DISTANCE
Per (Table 1004.2.4):
Group S-1 - 200 ft
Group M - 200 ft

COMMON PATH OF TRAVEL:
75 ft

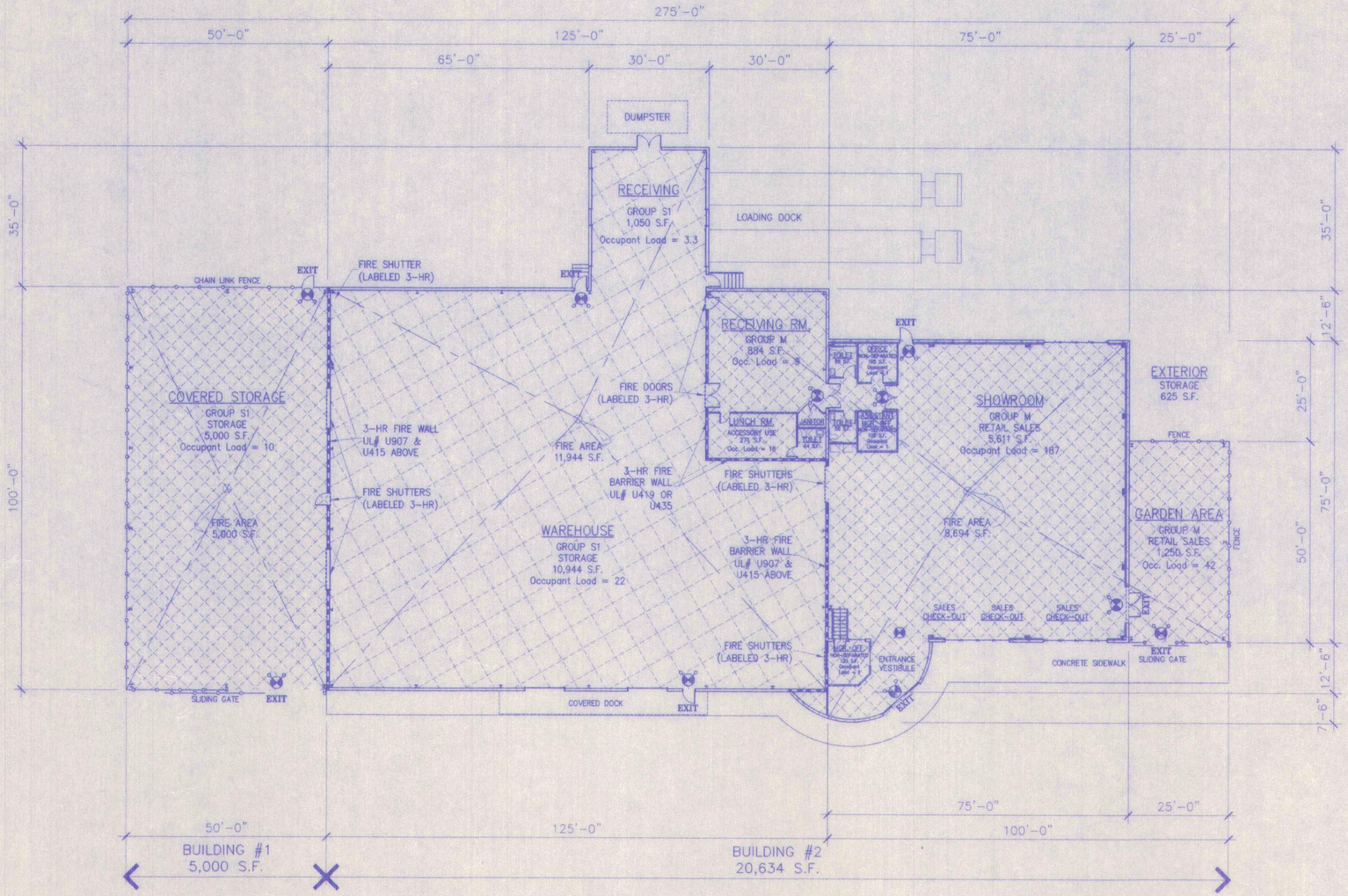
ELECTRICAL EQUIPMENT/SYSTEMS:
Shall be in accordance with chapter 27.

MECHANICAL EQUIPMENT/SYSTEMS:
Shall be in accordance with chapter 28.

PLUMBING EQUIPMENT/SYSTEMS:
Shall be in accordance with chapter 29.

SYMBOLS

FIRE EXTINGUISHER TYPE: 1-2A-10BC — FE
EMERGENCY LIGHTING
LUMINOUS EXIT SIGN
COMBINATION EMERGENCY / EXIT LIGHT



CODE PLAN

TOTAL BUILDING FOOTPRINT = 25,880 SF
SCALE: 1/16" = 1'-0"

REVISIONS

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CFC FARM & HOME CENTER
CARMEL CHURCH
CAROLINE COUNTY VIRGINIA
CODE PLAN

DWG. NO. CFC - 01
DATE: 3-24-05
CP

General Specifications
CFC Farm & Home Center – Caroline County, Virginia
Created 11/20/2004
Edited 3/24/2005

DIVISION 1 – GENERAL

A. GENERAL

1. These specifications are general in nature and are intended to set minimum standards for construction and materials. Quality of materials and details of installation shall, at a minimum, comply with established industry and product manufacturer's standards. Higher standards, where stated in these specifications, in submitted literature, or on Drawings shall govern. Workmanship shall be maintained at good quality by the General Contractor.
2. Design criteria:
   a. Roof Live Load 30 psf (snow)
   b. Wind 90 mph exposure B
   c. Soil Bearing 2,500 psf dead & live load

B. CODES AND STANDARDS

1. VA Uniform Building Code 2000 Edition International Building Code as amended by the State of Virginia.
2. Contractor to comply with all state and local codes, ordinances and standards.
3. Wherever codes, ordinances, standards, etc., are referred to in this Specification, it shall be assumed to be the latest edition unless otherwise specifically identified.

C. OPTIONS AND ALTERNATE MATERIALS

1. "Alternates" refer to bid instructions for "Alternates" requested with proposals. Contractors may also submit proposals for use of other alternate materials and methods for approval. Allow minimum of 5 days for review of proposed alternates.
2. "Options" shown of the Drawings may be used at Contractor's discretion.
3. See Instructions to Bidders for provisions relating to "substitutions". Do not include in bid proposals any substitutions not previously approved by the Engineer except as additional "Alternates", listed separately on the proposal forms.

D. GENERAL AND SPECIAL CONDITIONS

1. General Conditions as published by the American Institute of Architects (AIA Document No. 201) 1987 Edition, shall be part of the Contract the same as if bound herein. Copies are available at the Engineer's office.
2. Modifications of General Conditions (see also "Instructions to Bidders" under separate cover).
3. Wherever the word "Architect" is used, it shall be understood to mean Engineer.
4. Article 2.2.5. Drawings and Specifications. Twenty sets of Contract Documents will be provided to the successful Contractor. Extra sets desired by the Contractor shall be paid for by the Contractor.
5. Article 3.5. Contractor to warrant and guarantee all work within this Contract for a period of one year (or longer where indicated in these Specifications) from date of substantial completion as determined by Engineer. Nothing in these Documents shall be construed to reduce, abridge, or limit any other warranties, explicit or implied.
6. Article 3.7.1. Permits, fees, licenses. The Owner will pay the plan check fees and building permit fee. The Owner will also pay all system development charges, sewer connection and water meter fee. The Contractor shall obtain all licenses and pay all other fees and permit charges (such as electrical, plumbing, and HVAC permit and inspection charges, and connection costs).
7. Article 7.3.3.3. Reasonable allowance for overhead and profit shall not exceed 10 percent for Contractor or SubContractor performing work or supplying materials and shall not exceed 5 percent for Contractor or SubContractor passing cost along but not actually performing work.
8. Article 4.5. Arbitration shall be optional by either party on claims over $10,000.00.
9. Article 9. Payments and completion. Payments to the Contractor may be withheld by Owner during the course of the job if the project is not kept free of liens. Such payments will be promptly released upon removal of such liens.
10. Property Insurance. Article 11.3. Contractor shall maintain the builders all risk insurance as provided in Articles 11.3.1 and 11.3.1.1. Maximum deductible shall be not more than 1 percent of the Contract amount except that it need not be less than $5,000.00. Contractor shall be responsible for all losses (cost) due to deductible.

E. EXAMINATION OF SITE AND CONRTRACT DOCUMENTS

1. Bidders shall examine the site where the work is to be performed and ascertain for themselves all of the physical conditions and restrictions before submitting price quotations. They will also make careful examination of the Drawings, Specifications and other Contract Documents and inform themselves as to the quality of materials.
2. Bidders finding discrepancies, omissions or in doubt as to the true meaning of any part of the Drawings, Specifications and other Contract Documents, shall notify the Engineer in sufficient time to receive clarification prior to starting any work.
3. The Owner will not be responsible for any loss, or for any unanticipated costs which may be suffered by the Contractor in regards to conditions pertaining to the work, including conditions that can be seen on the site and/or are described in Drawings, Specifications, geotechnical reports, surveys, etc. that are available to the Contractor.
4. These Specifications may include material and/or performance specifications that may not be part of the Contract, but will be needed to coordinate work by others.
5. Contractor shall coordinate his work with the work by others to provide minimal delays to all parties.
6. The General Contractor is responsible to provide all design and engineering services, for design/build items noted. This includes coordination with other affected disciplines (mechanical, electrical, fire protections, structural, etc.) and all permit requirements (energy code compliance, etc.) necessary for a complete system design.

F. SHOP DRAWINGS AND SUBMITTALS

1. Submit shop drawings of portions of the work indicated in individual sections of this Specification. Submittals of items not indicated may or may not be reviewed at Engineer's option. Unless otherwise indicated shop drawings shall be provided on the following:
   a. Prefabricated structural members and components (Eg. Trusses, GLU-LAM Beams, etc.)
   b. Structural steel and miscellaneous steel.
   c. All reinforcing steel.
   d. Structural systems.
   e. Storefront.
   f. Overhead doors.
   g. Casework.
   h. Man-doors (door and frame).
   i. Finish hardware.
   j. Membrane roofing.
   k. Skylights/Smokevents.
   l. Ceiling system.
   m. Dock equipment.
   n. Elevator.
   o. Floor (S.O.G.)curing, sealant, and liquid hardener compounds.
   p. Epoxy joint filler.
   q. Fencing.
   r. Metal roofing and siding.
2. Submittals to be provided at least 3 weeks prior to beginning fabrication.
3. General Contractor to review submittals before transmitting to Engineer, and place his review stamp date and marks on master copy.
4. Submit one reproducible master copy and two copies of each sheet for review by Engineer. Sheets smaller than 11" x 17" may be on white paper suitable for copying. Master copy will be stamped and returned to General Contractor within two weeks for copying and distribution.

G. SPECIAL INSPECTION AND TESTS (ALSO SEE COVER SHEET OF DRAWINGS)

1. Special inspections and tests as required by Engineer or local jurisdictions are to be performed by an independent testing agency and paid for by the Owner. Contractor to verify requirements for testing with the Engineer prior to beginning project and will be responsible for contacting testing agency with adequate prior notice and to allow full access to work.
2. Provide Engineer with copy of all inspection and testing reports. Fax report on the same day if irregularities are noted.
3. Testing preformed at Contractor's option or re-testing of previously noted irregularities to be paid for by the Contractor.

H. TEMPORARY FACILITIES

1. Signs. Contractor shall provide a 4 foot x 8 foot sign constructed of 3/4 inch exterior plywood and supported by two 4 x 4 posts embedded in the ground to adequately support and brace the sign. The sign is to be painted and lettered as instructed by the Engineer (see Drawings). All other signs, posters, etc., are prohibited.
2. Utilities. The Contractor shall be solely responsible for all other temporary facilities including all sanitation, water, electric, etc. Contractor to pay costs of all utilities until the time of substantial completion.
3. Job shack. Contractor shall provide and maintain a job shack complete with lighting, ventilation, plan table, phone, and facsimile machine. Job shack shall be maintained and kept clean and usable for Owner and Engineer. "Record set" (permit set) of Contract Documents including all addenda and revisions shall be available in job shack.

I. TEMPORARY BRACING

1. Contractor shall be solely responsible for the design and installation of all temporary bracing, shoring, anchors, etc., including, but not limited to, wall and roof bracing, lifting and handling inserts and devices, trench shoring, forms, etc.
2. Contractor shall consider construction loads whenever such loads are in excess of normal design loads. Particular attention should be given to forklifts, workman, wheel loads, storage of materials, etc. Contractor shall be solely responsible for all shoring, bracing, cribbing, etc. required to support construction loads.

J. PROJECT HOUSEKEEPING

1. Contractor shall keep site and adjacent properties, streets, etc., clean and free of debris and organized to minimize effect on neighboring properties and tenants. The streets in particular shall be kept clean of mud, rock, etc.
2. Contractor shall provide access to the site and safety barricades, etc. in compliance with all safety requirements and regulations and good construction practice.
3. Vehicular traffic inside the buildings shall be restricted to such vehicles that are required to complete the work. Convenience parking of vehicles in partially completed buildings is prohibited.
4. Concrete slabs on grade shall be kept sufficiently clean to avoid the grinding and scratching damage. Whenever wheel traffic is required on the slabs on grade it shall be kept clean and free of gravel and other abrasive materials and construction debris.

K. PROJECT CLOSEOUT

1. Record Drawings.
   a. Maintain a record set on site during all phases of work.
   b. Accurately record all field changes as they occur. Show all concealed changes in the work and the final location of all utilities. Underground utility as-built Drawings (marked up blueprints) shall be submitted as soon as the work is completed and not later than the request for payment for the work.
   c. Deliver "record" set of Drawings to the Engineer on day of final completion.
2. Retention. A portion of the payment due to the Contractor will be withheld until all oaf the following are provided:
   a. As-built Drawings. (Payment for underground utilities will normally require as-built Drawings to be provided.)
   b. Equipment brochures and operating instructions.
   c. Lien waivers.
   d. Warranties and guarantees.
   e. Contractor and Owner punch list corrections complete.
   f. Certificate of occupancy from building official.
   g. List of Subcontractors with current phone and fax numbers.
3. Clean up: All areas of the building and site are to be finished, cleaned and suitable for occupancy and/or use. Remove foreign matter, marks, stains, foreign paint, fixtures, equipment, etc.
4. Prior to occupancy of the building, the General Contractor, Mechanical and Electrical Subcontractors shall schedule and conduct an orientation meeting with the Owner to demonstrate operation and maintenance of equipment and deliver operating manuals.
5. Prior to occupancy of building, deliver all keys and keying schedules to the Owner.
6. All corrective work and the "closeout" shall occur on a timely basis.

L. CONSTRUCTION SCHEDULE/FINAL INSPECTIONS

1. Contractors are required to submit a schedule for the completion of the work as part of their proposal. The completion of the work on a timely basis has a financial impact on the Owner and consultants.
2. At the point of substantial completion, Contractor shall notify Engineer (in writing) of the anticipated schedule for inspections. The Contractor shall complete his own final inspection and re-inspection to check off completed work. The Owner/Engineer will then make a final inspection using the Contractor's punch list.
3. Services to be reimbursed by Contractor:
   a. Time required by Owner/Consultants after 3 weeks beyond time provided by the Contractor in his proposal for achieving final completion.
   b. Re-inspection of punch list items that require more than one re-inspection.

DIVISION 2 – SITE WORK

A. GENERAL

1. Geotechnical Report. Foundation investigations have been completed and are available at the Engineer's office. All bidders shall familiarize themselves with the subsurface and site conditions.
2. Acceptance of site. The site is to be PAD-READY by others. Bidders shall inspect the site and survey to verify as-graded topo and be familiar with typical conditions in the area and the conditions under which the work is to be performed. The site shall be accepted in its existing condition and no claim shall be made for any visible condition not shown on the Drawings.
3. Construction use – Contractor shall:
   a. Exercise caution in the use of the site, particularly when subgrade materials are moisture sensitive and wet conditions exist in the subgrade.
   b. Make special provisions for construction access (haul roads will be required per Geotechnical report) consistent with the requirements of the project and so that work can proceed under normal weather conditions.
   c. Be responsible for correcting damage to the subgrade caused by construction activities.
   d. Be solely responsible (unless otherwise provided for in the Contract) for the methods and cost for construction of access roads, added provisions to specified systems to support construction loads and for correction to site conditions and/or installed work that is damaged by construction activities.
   e. Plan construction activities to prevent and/or mitigate damage to site.
   f. Site is susceptible to high water in wet conditions. Soil amendment may be required (see Geotechnical report).

B. QUALITY CONTROL

1. Contractor is to be experienced with the type of work and conditions where the work is to be performed. Contractor shall be responsible for the selection of the materials and methods for accomplishing the work. Special attention is directed to the conditions at the time the work is to be performed.
2. Finish subgrade for paving and concrete slab on grade to be within 0.06 foot of grades and contours shown on Drawings. Finish base rock for paving and slab on grade shall be plus or minus 0.04 foot. Verify compliance with Engineer before proceeding with next phase of work. Failure to do so will place responsibility for correction upon Contractor.
3. Place stakes at all locations of spot grades shown on Drawings.
4. Notify Engineer for observation of compliance of subgrade and fill with paragraph 2 above. Obtain approval prior to placement of subsequent fill and paving.

C. CLEARING AND STRIPPING

1. Review requirements for protecting existing vegetation (trees, etc.) before start of work.
2. Notify Engineer immediately if unusual conditions are encountered.
3. Site shall be cleared and stripped of all vegetation, topsoil, and organic materials. Remove and dispose off-site unless specifically provided otherwise on the site work Drawings. Stockpile topsoil on site that is needed for later use.
4. Remove all stumps and roots over 1 inch diameter from all topsoil for landscaping use.

D. EXCAVATION

1. Excavate for footings, piers and slabs to sizes and levels shown or required. Utilize straight edge bucket to minimize soil disturbance. Clean all footing excavations of loose material by hand.
2. All over-excavation shall be back-filled and compacted as "Engineered fill" or with concrete to same specifications as footing concrete.
3. If over-excavation is required to remove soft spots resulting from conditions beyond the control of the Contractor, the Contractor shall notify the owner before proceeding.
4. Soft spots created by the construction activities and special requirements for the construction process are the responsibility of the Contractor. (See paragraph "A" above)
5. Do not excavate closer than 2:1 slope below base of footings unless approved by Engineer.
6. All excavated material not approved or required for the project to be removed at no additional cost. Grade and cover stockpiled material as required to afford weather protection.
7. All footings shall be earth formed whenever possible.

E. FILL MATERIALS AND INSTALLATION

1. Notify Engineer prior to the start of all "Engineered fill" work so that the subgrade condition and fill material can be inspected. Obtain compaction tests if required.
2. "Engineered fills": on-site materials, free of organic material, may be used for structural fill (under buildings and paved areas) subject to maintenance of a proper moisture content and obtaining required compaction.
3. "Select Fill":
   a. Under building and footings: 1-1/2 inch minus well graded clean crushed rock (less than 5 percent passing 200 sieve).
   b. Under paving: Base course of 1-1/2 inch minus well graded clean crushed rock (less than 5 percent passing 200 sieve) of depth shown on Drawings.
   c. Trench backfill. Unless otherwise specified, all trench backfill shall be 3/4 inch minus well-graded clean crushed rock. (Less than 8 percent passing 200 sieve).
   d. Back fill where finish grade is above building floor: With free draining granular material, pea-gravel or round drainrock.
4. Top soil: Natural topsoil from on-site or as required by the plans, suitable for growing plants and free of limbs, roots, and rocks over 1 inch diameter. Remove any concrete or debris from planting areas. Cut and remove any paving more than 6 inches behind curb in planting areas.
5. Compaction:
   a. Selection of compaction equipment and processes shall be the sole responsibility of the Contractor.
   b. Prepare areas to receive "Engineered" or "Select" fill by compacting subgrade. If subgrade moisture content is not suitable, confer with Engineer and condition material to near "optimum" and compact.
   c. Install material (except topsoil) in lifts not to exceed 9 inches (loose) and compact with suitable equipment.
   d. Minimum density (per ASTM D698) as follows:

APPLICATION (See note 3 below)	COMPACTION
Beneath foundations	95%
Beneath floor slabs	95%
Beneath pavements (See Note 1 below)	95%
Retaining or basement wall backfill (see Note 2 below)	92%
Interior footing and wall backfill	95%
Utility Trench Backfill	
–Upper 3 ft beneath pavements, slabs or structures	95%
–Below 3 ft beneath pavements, slabs or structures	92%
In landscaped areas above pipe zone	90%
Landscape areas	90%

NOTE:
1. Special attention to base rock and A.C. Paving placed against concrete at overhead doors to ensure proper compaction is achieved.
2. Use lightweight, manually guided compactors within 3 feet of all walls.
3. Where conflicts occur between the above values, the highest percentage shall govern.

   e. Initial compaction tests will be provided by Owner. Contractor shall be responsible for all re-testing required by tests not meeting Specifications. Contractor shall assist in scheduling all tests.

F. GEOTEXTILE

1. Provide fabric (stabilization) where indicated on the Drawings. Notify Engineer prior to placement.
2. Material to be stabilization type fabric with minimum Mullen burst strength 300 PSI approved manufacturer/grades, MIRAFFI 500X, FIBERTEX (Grade 300) or as approved).
3. Area to receive geotextile fabric to be graded smooth without abrupt elevation change so fabric will stretch tight and lay smooth over subgrade. Anchor so material does not wrinkle or move during installation of fill. Provide adequate workmen to insure that geotextile is kept smooth as work progresses.

G. ASPHALTIC CONCRETE PAVING

1. Proof roll subgrade to verify stability. Notify Engineer to observe rolling. Remove and replace all soft sports encountered with compacted suitable material prior to rocking.
2. Base material to be select fill as specified above.
3. Check finished base rock for slope before starting paving. Notify Engineer before proceeding with paving if any site areas have insufficient slope. (Less than 1 percent)
4. Asphalt paving to be Class C mix (ODOT), Class B mix (WDOT), thickness shown on Drawings. Deliver and place asphalt paving in accordance with ODOT Standard Specifications unless otherwise approved.
5. Slope all asphalt paving minimum 1 percent to drainage (unless otherwise shown on Drawings).

H. STRIPING

1. Traffic and parking stripes to be 3 inch wide, color white. Paint word "COMPACT" in 1-1/2 inch x 6 inch lettering in stalls designated.
2. Provide signage at accessible (handicap) stalls to meet state and local standards. Cross-stripe landing area/walkway within stalls and accessible routes across traffic lane. Cross stripes to be 24 inches on center, color white.
3. Cross stripe all paved abrupt slopes exceeding 50 percent slope with safety yellow 3-inch wide stripes at 24 inches on center.

I. EXTRUDED CONCRETE CURBS

1. Curbs to be no-slump concrete with a minimum compressive strength of 3000 PSI at 28 days.
2. Spread epoxy bonding agent such as Concressive #1064 approved equal over surface to receive curb. Install curb within 20 minutes after applying bonding agent.
3. Provide joints as required.
4. Apply curing compound to all surfaces immediately following placement.
5. Use caution in starting work that requires traffic on fresh placed asphalt paving. Check condition of paving and verify schedule for start of work with Engineer.

J. SITE UTILITIES

1. General.
   a. The work to be provided by the Contractor shall consist of furnishing all labor, materials, permits, surveying, supervision, coordination, and equipment necessary for the proper installation of the storm drainage, sewer system, and the water systems that are indicated on these Drawings. The work is to be completed so as to provide properly functioning systems that are acceptable to the governing authorities and as indicated on these Drawings.
   b. Approvals: Different jurisdictions may prohibit the use of certain construction materials and/or procedures. Do no work without approval from the proper jurisdiction. Cost of changes incurred when work has proceeded without jurisdictional approval shall be the sole expense of the Contractor.
   c. Safety: the safety (as it relates to this construction project) of workers, neighbors, and passers-by is to be the responsibility of the Contractor. Unsafe conditions shall be identified and corrected or, identified and secured. Work methods that may case an unsafe condition to exist, shall be avoided at all costs.
   d. Drawings: Drawings provided are based on reported site conditions and dimensions. Actual site conditions, or dimensions, may vary and any such variation should be reported to the Engineer at the earliest opportunity. Unanticipated conditions may require the revision of a portion of these Drawings. All dimensions shall be verified in the field by the Contractor prior to fabrication or construction of any portion of the proposed work.
   e. Permits. The Contractor shall arrange and pay for permits, fees, service charges and inspections and shall present the Owner with a properly executed "Certificate of Inspection", prior to making application for payment for any portion of the work.
   f. Codes. All work methods and materials shall conform to all local, state and federal requirements, regulations, and laws.
2. Material: All materials used for the work shall be new. Trade names denote character and quality of equipment desired and substitutions may be approved. If in the opinion of the Engineer, the proposed substitution shall be the responsibility of the Contractor.
   a. Water lines.
      1. Copper Pipe: Hard drawn, (type L) underground piping, conforming to ASTM B-88. Fittings shall be wrought copper. Solder all joints and fittings.
      2. Ductile Iron Pipe (D.I.P.): Shall be cement-mortar lined and shall conform to ANSI A21.51, Class 52. All joints shall use O-ring rubber gaskets. Fittings shall be 125 pound class, meeting the requirements of ANSI C110.
      3. Polyvinyl Chloride (PVC) Pipe: Pipe and fittings shall be PVC, Schedule 40 and shall meet the requirements of ASTM D-3034.
      4. Water Service: Piping, valves, backflow prevention, vaults, meters, hydrants, and connection to main line shall be according to the requirements of the governing agencies.
      5. Alternate materials may be used if approved by the governing agency and the current State of Oregon Plumbing Specialty Code.
   b. STORM SEWER LINES – All storm sewer pipe shall be Polyvinyl Chloride (PVC) pipe unless specifically noted on plans or as approved by Engineer. Other materials may need to be a larger diameter than as shown.
      1. Polyvinyl Chloride (PVC) Pipe: Pipe and fittings shall be PVC and shall meet the requirements of ASTM D-3034, except where the pipe cover is to be less than 15 inches, use Schedule 40 PVC.
      2. Concrete Pipe: Non-reinforced bell and spigot pipe conforming to ASTM Standard Specification C-14 Class 3, with rubber gaskets in confined grooves.
      3. Soil Pipe: (Traffic areas where cover is less than 15 inches) hub and spigot cast iron pipe or Schedule 52 ductile iron bell and spigot with fittings conforming to ASTM A-74, with rubber O-ring gaskets in confined grooves or, with compression type gasket fittings.
      4. Perforated Pipe: Corrugated High Density Polyethylene (HDPE) perforated pipe and shall meet the requirements of ASTM F-405.
      5. Galvanized Steel Pipe: Shall conform to the requirements for ASTM A-102 Schedule 40, with a hot-dip galvanized coating inside and outside.
      6. Corrugated Metal Pipe (CMP): Shall be of the type, diameter, and gauge indicated on the Drawings. Pipe shall be helical corrugated. Pipe and fittings ends shall be annular for a distance of 12 inches. Pipes shall be connected with 12-inch wide annular corrugated coupling bands and 1/2 inch thick by 12 inch wide rubber gaskets.
      7. Corrugated Polyethylene (ADS N-12) Pipe: For pipe diameters less than 24 inches, conforming to AASHTO M294-851 and F677-85 Oregon Standard 1-A-86 and ASTM D-2321.
      8. Catch Basins: Shall be 24 inch square and minimum 30 inch high (see plan for sump requirements), unless otherwise indicated, with 28 inch square standard cast iron grate and hinged drain access plates for clean-outs, all as manufactured by the Lynch Company, Inc., or by Gratemaster Ironworks. Catch basins to be constructed of 10 gauge steel and to be asphalt coated after fabrication.
      9. Downspout Drains: Verify locations and special requirements with building elevation Drawings and with roof plans for downspout location. Adjust location as needed to assure plumb vertical downspout run. Notify Engineer of any discrepancy or other problem. Drains in paved areas to be cast iron soil pipe or Schedule 40 PVC.
      10. Drains in landscaped areas may be PW STORMDRAIN Series 46 with 80 percent compaction and with compaction verification. Provide clean-out at each downspout. Use branch fitting with threaded plug for clean-out.
      11. Manholes and Cleanouts: See Sanitary Sewer Lines.
   c. SANITARY SEWER LINES
      1. Concrete Pipe: Non-reinforced bell and spigot pipe conforming to ASTM Standard Specification C-14 Class 3, with rubber gaskets in confined grooves.
      2. Polyvinyl Chloride (PVC) Pipe: Pipe and fittings shall be PVC and shall meet the requirements of ASTM D-3034, except where the pipe cover is to be less than 15 inches, use Schedule 40 PVC.
      3. Concrete Manholes: Shall be fabricated per ASTM C-478 and shall be 48 inch diameter (minimum) with a 3 foot eccentric cone over standard sections. Where manhole depths are not adequate for cones, use 8-inch thick (State Highway) flat top slabs. Use standard cast iron frames and covers for storm and use watertight standard cast iron frames and covers for sanitary sewers.
      4. Corrugated Manholes: Shall be of the same material, gauge, and coating as the corrugated pipe.
3. Execution.
   a. Sewer Clean-Outs: Shall be installed in the storm and sanitary systems where noted on Drawings (CO) and where specifically required by the governing code. Clean-outs in exterior paved areas shall be JOSAM 58860 heavy duty cast iron access box with secured cover, anchoring flanges, and cast iron clean-out with serrated cut-off sections and threaded bronze plug. Provide an 18-inch square by 6 inch thick concrete pad around the clean-out.
   b. Bedding: Bed all piping on a 4 inch thick layer of sand or 3/4 inch minus crushed rock. Inspection of the excavated trench by the Engineer may provide for the use of compacted native material for bedding. Provide Owner with deductive alternate for use of native bedding material. Bedding shall be removed to the necessary depth for piping bells and couplings to maintain contact of the pipe on the bedding for its entire length.
   c. Pre-Cover: Cover the pipe to a minimum depth of 5 inches with compacted sand or 3/4 inch minus crushed rock. Inspection of the excavated trench by the Engineer may provide for the use of compacted native material pre-cover. Provide the Owner with deductive alternate for use of native pre-cover material.
   d. Back Fill: All back fill for site utilities shall be placed in layers and compacted as required by Division 2, Fill Materials and Installation.
   e. Grading: Following back filing, grade trenches to the level of surrounding soil. All excess soil shall be disposed of off-site, unless otherwise directed by the Engineer.

K. ACCESSIBLE (HANDICAP) SIGNAGE

1. Signs to be metal panels with permanent contrasting characters and background complying with state and local regulations and ADAAG requirements. (See Division 10, SIGNS, for additional information).
2. Provide freestanding sign on 1-1/2 inch diameter metal post (galvanized pipe) in landscape area adjacent to each accessible handicap parking space. Embed post in 6-inch diameter, 2-inch deep concrete fill. Top of footing at 3 inches below finish grade.

L. FENCING

1. Provide chain link fence as shown on Drawings. Submit layout and details for approval of Engineer prior to fabrication.
2. Material to be U.S.S. Cyclone or as approved with roll formed, galvanized terminal posts and line posts. Fabric to be P.V.C. color (black) coated 9 gauge 2 inch x 2-inch diagonal mesh with rolled selvage and top tension wire.
3. Provide all required bracing and coordinate inserts for posts in concrete walls.
4. Line posts to be 1.875 inches x 1.625 inch Roll formed C-section or 2 3/8 inches outside diameter standard steel pipe. Top and brace rails to be rolled channel or pipe section with minim vertical bending strength of 200 lbs. at 10-foot span.
5. Gates to be tubular framed with braces and trusses required to maintain rigidity, and non-removable locking hardware. Gate posts to be sized as required or shown on drawings.
6. Provide concrete footings for all line, gate and terminal posts allowing 3'-0" minimum embedment. Footings to be 10 inch minimum diameter at line posts. See notes on floor plan (A-1) for deeper footings at south dock area.

DIVISION 3 – CONCRETE AND REINFORCING

A. GENERAL

1. All work to comply with ACI codes and standards.
2. Inspections/testing.
   a. Owner will provide a part-time concrete inspector and will conduct laboratory tests as required to verify compliance with the project Specifications. Contractor shall be solely responsible for compliance with the Specifications.
   b. Contractor shall be responsible for any extra concrete sampling or testing such as field cured cylinders for determining strength for lifting panels, etc.
3. Tolerances:
   a. Floors: Maximum deviation from a 10 foot straightedge = 1/8 inch or finish to an Ff50/FL50 tolerance as measured by an approved calibrated instrument. Floor slab thickness minus 1/4 inch to plus 1 inch. Maintain smooth subgrade without abrupt changes in elevation.
   b. Walls, columns: Maximum deviation from plumb = 1/4 inch.
   c. Tilt wall alignment: Maximum deviation 1/4 inch (1/8 inch across joints).
4. Submit shop drawings of panel reinforcing.

B. FORMWORK AND SHORING

1. Contractor shall be solely responsible for providing the necessary formwork and shoring suitable for the conditions involved and compatible with the finished appearances.
2. Ground forms. To the extent practical all isolated footings should be ground formed or partially ground formed. Clean all ground formed footings by hand and use caution during concrete placing to avoid cave-ins.
3. Chairs for reinforcing steel shall be adequate to securely support and hold reinforcing steel in place. For concrete slab on grade and tilt wall panels reinforcing shall be supported at not less than 6'-0" on center for #5 bars or larger. For tilt wall panel reinforcing shown each face on Drawings, the top bar shall adequately be supported using metal chairs.

C. REINFORCING

1. All reinforcing to be ASTM A615 Grade 60 unless otherwise noted.
2. Use only A706 weldable rebar if rebar is to be welded. Use only low hydrogen electrodes. All welding to be in compliance with AWS D1.4.
3. Fabricate and install reinforcing steel according to the Manual of Standard Practice for Detailing Reinforced Concrete Structures-ACI Standard 315.
4. Provide 2'-0" x 2' 0" corner bars to match horizontal reinforcing in poured-in-pace walls at all corners and intersections.
5. Splices in wall reinforcing shall be lapped 40 diameters (2'-0" minimum) and shall be staggered at least 4 feet at alternate bars.
6. All openings smaller than 30 inches x 30 inches that disrupt reinforcing shall have an amount of reinforcing equal to the amount disrupted placed both sides of opening.
7. Provide the following reinforcing around wall openings larger than 30 inches x 30 inches.
   a. (2) #5 over opening x opening width plus 2' 0" each side.
   b. (2) #5 under opening x opening width plus 2' 0" each side.
   c. (2) #5 each side of opening x full story height.
   d. Provide 90 degree hook for bars at openings if required extension past opening cannot be obtained.
8. Provide (2) #4 continuous bars at top and bottom and at discontinuous ends of all walls.
9. Provide dowels from footings to match all vertical wall, pilaster and column reinforcing. (Poured in place columns and walls).
10. Lap all bars in intersecting footings 2' 0" or (40) diameter whichever is greater.
11. All vertical wall reinforcing to be placed in center of wall unless shown otherwise on Drawings.
12. Extend reinforcing to within 1 inch of wall and slab edges.
13. Contractor to design and provide additional reinforcing as required for lifting tilt wall.

D. CONCRETE MIX/MATERIAL

1. Strength: Average 28 day concrete strength determined by job cast lab cured cylinder to be as indicated below plus increase depending on the plant's standard deviation as specified in ACI 318. Provide mix designs to Engineer for all concrete to be used. Clearly label all mix designs for proposed area of use.
2. Minimum mix requirements:

LOCATION	MIN. COMP. STRENGTH PSI	SLUMP (c) INCHES	MIN. CEM. CONTENT POUNDS	ADMIXTURES
Footings	2,500	0–5	470	None
Interior Slab on Grade	3,500	2–4	517	(b), (d)
Exterior Slab on Grade	3,000	2–4	517	(b), (c), (d)
Interior Slab on Metal Deck	3,500	2–4	517	(b)
Walls & Columns	3,500	2–4	517	(b)
Miscellaneous	3,000	0–5	470	(b)

   a. Slump exceeding specified limits shall not be incorporated in the project except by written approval from Engineer.
   b. WRA = water reducing agent.
   c. AE = air entrainment
   d. Up to 1 1/2 percent calcium chloride allowed during cold weather.
   e. Pozzotec 20 required for concrete placed below 40 degrees farhenheit.
3. Use Type I Cement, per ASTM C-150 unless otherwise approved.
4. Aggregate ASTM C33. Size to be 1 1/2 inch minus for slabs on grade and tilt wall panels. All other concrete may use 3/4-inch maximum size aggregate. Do not use 3/4 inch minus aggregate in slabs on grade or tilt wall panels. Submit a combined gradation analysis for all slab on grade and tilt wall mix designs. 1 1/2 inch aggregate shall constitute a minimum of 5 percent in the gradation (i.e. 5 percent retained on the 1 1/2 inch sieve).
5. Water Reducing Agent (WRA) shall be Polyheed R-1 or Duracem 55 at 6 oz. Per 100 pounds cement. Comply with ASTM C-494.
6. Maximum water allowed in slab on grade and tilt wall mix designs is 250 pounds per cubic yard unless otherwise approved by Engineer.
7. Air entrainment (AE) shall comply with ASTM C-260 and shall be used only where specified and/or approved by Engineer.
8. Accelerators: Pozzotec 20 non-chloride for components exposed to weather in the completed structure (walls, exterior paving, etc.), calcium chloride in the interior slabs on grade. Quantity (dosage) to be determined by Contractor and approval obtained from Engineer before use of accelerators.

E. CONCRETE FINISHES

1. Interior slabs:
   a. Hard steel trowel finish use extreme care to tool formed panel edges. Use 1/8-inch radius edge tool only.
   b. Patch all holes such as tilt wall brace anchors, form anchors, etc.
   c. Avoid damaging finish. (See also Division 1, PROJECT HOUSEKEEPING). Avoid sliding tilt-up panels.
2. Exterior walks:
   a. Broom finish steel trowel surface then light finish across width of surface.
   b. Exposed aggregate steel trowel then wash to expose aggregate.
   c. Curb ramps finish as remainder of walk and cross score with tooled joins at 2 inch on center each way. Diamond pattern is acceptable.
3. Formed concrete: remove fins, patch voids. Grind and fill for smooth even appearance.
4. Tilt-up walls: panels placed inside face-up – light broom finish. Tool edges around openings. Grind and fill downside of panels for smooth, even final appearance. Repair chamfer edges and remove fins. Fill and smooth voids. After primer coat of paint, inspect and repair to remove any remaining defects of exposed surfaces.
5. Footings: screed smooth. Do not leave rough exposed surfaces.
6. Avoid concrete splatter on other building elements (i.e. columns and walls). Remove splatter where occurs and refinish to match original.
7. Slab edge projections for door and window sills, and those extending outside of building wall are to be smooth trowel finish. Examine and remove all laitance or other foreign materials from surface by grinding or other means. If roughness persists apply an approved concrete/masonry filler to produce a smooth surface. Apply clear sealer to all projection on surfaces following manufacturer's directions. (See Division 7, Concrete Sealer.)
8. Opening edges in tilt-up walls to accommodate door or window frames shall be smooth and free of loose material. Examine surfaces, and remove laitance and foreign material. Apply approved concrete/masonry filler to fill any pits or voids and produce smooth surface. Apply clear sealer to all edges per Division 7, Concrete Sealer.

F. CONTROL JOINTS AND EXPANSION JOINTS

1. Provide joints in exterior walks as follows unless otherwise shown:
   a. Heavy (3/4 inch) tooled joint at 5 feet on center.
   b. 1/2" premolded expansion joints at 30'-0" on center (u.n.o.).
2. Saw joints where required (see Drawings) to be sawn prior to cracking (Use Soffcut saw). Saw to 1/5 slab depth as soon as work can proceed without raveling. All saw joints are to be filled with a closed cell foam backer rod immediately following cutting of the joints (same day). Backer rod to be 3/8" diameter and installed flush with the top of the slab.
3. Keyed joints: Where keyed joints are required or allowed, follow precisely the key configurations. Use premolded plastic keys only if configuration is maintained.
4. Doweled joints: Where doweled joints are required or allowed, take precautions to maintain square alignment both horizontal and vertical. All dowels material to be saw cut or ground smooth to maintain cross-section at ends.
5. Epoxy Filled Control Joints: Fill all sawn floor slab control joints with epoxy.
   a. Manufactures: Versa Flex
   b. Installation instructions:
      1. Delay installation of epoxy joint filler material as long as practicable (minimum of 90 days following slab pour). Do not install epoxy joint filler until authorized to do so by the Engineer.
      2. Prior to filling joints, remove temporary backer rod, clean joint interior surfaces by re-sawing with dry blade; and blowing out all loose debris with compressed air, augmented by mechanical scraping as necessary to remove stubborn particulates.
      3. Install epoxy joint fillers as follows:
         (i) Do not fill joint with silica sand to seal off joint base unless specifically authorized by Engineer.
         (ii) Mix epoxy in quantities that can be used while remaining pourable.
         (iii) Install epoxy in clean joints (do not partially fill joint with sand or other fillers) to level near top of slab. Allow to sag into joint.
         (iv) Epoxy installation shall be completed in two separate passes with the first pass filling the joint to within one half inch of the floor surface. After a minimum of sixty minutes the second pass is installed, overfilling the joint to obtain a positive crown appearance.
         (v) Sand smooth using care not to scar slab. Leave top slightly above floor level (1/64 inch +/–).

G. CONCRETE CURING AND SEALER

1. Preparation: All forms and excavations to be moistened before placing concrete.
2. Curing compounds and liquid hardeners:
   a. Contractor shall submit proposed curing and sealing/hardener compounds for approval 2 weeks prior to initial Slab On Grade pour.
   b. Curing compound: Sparton Cote, Spartan Cote WBII (VOC), or safe seal HD (J-24 HD V.O.C.). Use of bond breakers for initial curing of slab subject to approval by Engineer Of Record.
   c. Liquid Hardener (Alternate # **, see bid instructions): Ashford Formula, Sure Hard (J-17 V.O.C.), Liquid Hard, or Euco Diamond Hard.
   d. Contractor to verify compatibility of all bond breakers, curing compounds and liquid hardeners with other finishes.
3. Execution:
   a. Slabs on Grade: Seal interior slabs with two coats curing compound. Apply first coat immediately after slab is finished. Spray edges as soon as forms are removed. Apply second coat perpendicular to first coat when all trades are finished just prior to occupancy. Floor is to be cleaned, hydro-washed, and/or mechanically scrubbed as required by final seal/hardener manufacturer before second coat.
   b. Walls (light broom finish): Seal concrete tilt wall panels with two coats curing compound. Apply first coat immediately after bleed water is gone. Apply second coat perpendicular to first coat after first coat has substantially dried. Apply curing compound to panel edges as soon as forms are removed.
   c. Footings: Single coat. Apply as soon as bleed water is gone.
4. Wet curing/membrane curing: Contractors option. Any concrete may be wet cured or membrane cured, subject to approval of the process by the Engineer. (Eg. Footings may be cured by covering tightly with visqueen.)
5. Hot weather/cold weather procedures. Take special precautions as appropriate during adverse weather conditions to achieve proper finish and curing. Review placing procedures with Engineer when 24 hour forecasted temperatures are below 40 degrees Fahrenheit or above 80 degrees Fahrenheit. In addition to ACI recommended procedures, provide water sprinkler on all slabs and flat work when temperatures exceed 80 degrees Fahrenheit.

DIVISION 4 – MASONRY

A. CONCRETE BLOCK

1. Design F'm 1500 psi.
2. All CMU units to be Grade N, Type 1, and lightweight units per ASTM C90 dry to intermediate humidity condition per Table No. 1.
3. Mortar to be Type S using the Property method per ASTM C270. Minimum strength of mortar to be 1500 psi.
4. Compliance with F'm shall utilize either the Unit Strength Method or the masonry prism testing method from the latest edition of the Uniform Building Code.
5. Grout to have a minimum 28 day strength of 1.25 times the compressive strength of the concrete masonry units. All grout mix designs to utilize a fluidifier admixture, Intrusion Aid by Specrete-IP or approved equal. Dosage to be per manufacturers recommendation.
6. Contractor to prepare and test (3) grouted masonry prisms and (3) ungrouted masonry prisms per every 5000 square feet of wall, during construction in accordance with UBC Standard 21-17.
7. Contractor to prepare and test three (3) grout prisms per every 5000 square feet of wall area during construction in accordance with UBC Standard 21-18.
8. All work shall conform to Section 2102 through Section 2111 of the latest edition of the Uniform Building Code.
9. Reinforcing for masonry to be ASTM A615 Grade 60 placed in centers of cells as follows (unless otherwise noted in Drawings):
   a. Vertical: (1) no. 5 at 48 inches on center plus (2) no. 5's full height each side of openings, unless otherwise noted on Drawings.
   b. Horizontal: (2) no. 4's at 48 inches on center for running bond, (2) no. 4's at 24 inches o.c. for stack bond plus (2) no. 4's at top of wall and at each intermediate floor level. Locate first bond beam at ground floor level.
   c. Lintels:
      1. Less that 4 feet wide (2) no. 4's in bottom of 8 inch deep lintel.
      2. 4 feet to 6 feet wide (2) no. 4's in bottom of 16 inch deep lintel.
   d. Corners and intersections: (1) no. 5 corner bar x 24 inches x 24 inches at each bond beam for 10 inch walls.
   e. Splices in vertical wall reinforcing and horizontal bond beams shall be lapped 52 diameters.
10. Electrical boxes, conduit and plumbing shall not be placed in any cell that contains reinforcing.
11. See Drawings for additional reinforcing.
12. All masonry to be special inspection.

DIVISION 5 – METAL

A. GENERAL

1. All structural members to be detailed, fabricated and erected in accordance with AISC Standards, latest edition. Submit shop drawings of columns and miscellaneous steel.
2. All bidder design structural systems to include plans and calculations stamped by an engineer registered in the governing jurisdiction.
3. See division 9 (paint) for painting of all steel roof joists, girders, columns and bottom of steel roof deck.

B. MATERIALS

1. All steel W sections to be ASTM A992 typical unless otherwise noted.
2. All steel plate, angles, channels, etc. to be ASTM A36 typical unless otherwise noted.
3. Pipe: Pipe ASTM A-53 (Fy=35 ksi), type E or S, or ASTM A501 (Fy=36 ksi).
4. Structural tubing to be ASTM A-500 Grade B fy-46 ksi.
5. Unless otherwise noted, bolts to be A325N for steel to steel connections and A307 for anchor bolts and connections with wood. Provide standard plate washers under all bolt heads and nuts in contact with wood.
6. Drilled expansion anchors/epoxy anchors:

Epoxy anchors:

Base Material	Product	I.C.B.O. No.
Concrete	Epcon Ceramic 6 Epoxy Anchor by ITW Ramset/Red Head	ER-4285
Concrete	Epoxy Tie ET Adhesive Anchor by Simpson Strong-Tie Company, Inc.	ER-4945
Concrete	Hilti HY-150 Adhesive Anchor by Hilti, Inc.	ER-5193
Concrete	Power-Fast Adhesive Anchor by Powers Fasteners, Inc.	ER-4514
Masonry	Hilti HY-150 Adhesive Anchor by Hilti, Inc.	ER-5193

Drilled expansion anchors:

Base Material	Product	I.C.B.O. No.
Concrete	Red Head Trubolt Wedge Anchor by ITW Ramset/Red Head	ER-1372
Concrete	Simpson Wedge-All Anchor by Simpson Strong-Tie Company, Inc.	ER-3631
Concrete	Hilti Kwik-Bolt II Anchor by Hilti, Inc.	ER-4627
Masonry	Hilti Kwik-Bolt II Anchor by Hilti, Inc.	ER-4627

Other anchors are acceptable only with prior written approval of Engineer. Install all anchors per manufacturer's instructions. Provide minimum embedment and spacing unless noted otherwise on Drawings. Special inspection of anchor installation is required unless specifically noted otherwise on Drawings.

7. Light gauge steel 16 gauge and heavier shall be formed from steel of ASTM A653 Grade D with Fy=50 ksi. Light gauge steel 18 gauge and lighter shall be formed from ASTM A653 Grade A with Fy=33 ksi. Detail and fabricate light gauge steel per AISI Standards.

C. WELDING

1. All welds to be made by certified welders to AWS standards with E70XX electrodes. Contractor shall pay special attention to the means and methods of construction they anticipate employing on the Project. Some welds shown as shop welds may need to be field welds to aid erection.

D. SHOP FINISH

1. Shop prime all exposed surfaces (not to be embedded in concrete) with Red Oxide Primer.
2. Do not paint metals within 1 inch of areas to be welded.
3. Touch up paint in field at welds or location where paint has been removed or damaged.
4. Any steel inserts protruding from concrete work to be ground flush, primed and painted.

E. STEEL JOIST

1. Steel joists shall be designed, fabricated and erected per SJI Standard Specification.
2. Camber all joists with standard cambers in accordance with the above standard specification unless noted otherwise on Drawings.
3. Provide bridging in accordance with the above specifications. Do not use slotted holes in bolted connections unless approved by Engineer.
4. Provide shop drawings and calculations that indicate joist sizes, loading, member sizes, panel point locations, cambers, bridging and any other information that may be pertinent to the job. Shop drawings shall be stamped by an engineer registered in the State of Oregon.
5. Provide inspection report prepared by the product engineer certifying that the joists have been fabricated according to the design assumptions and requirements. Report is to accompany the joists on delivery to the project.
6. Joist erector shall exercise extreme care during erection of joists to prevent the joists from buckling laterally. Use spreader bars for lifting joists and provide lateral bracing as necessary. Remove any damaged joists from the job site. Do not attempt to reinforce damaged joists.
7. All steel roof joists to be painted. See division 9 for paint.

F. STEEL FLOOR DECK

1. Steel floor deck to be Verco or prior approved equal. Deck properties and capacities shall be verified by a current ICBO report.
2. For unshored construction use minimum three span layup unless otherwise noted on Drawings.
3. Depth, gage and attachment to be as shown on Drawings.
4. Deck and all accessories shall conform to ASTM A653 – SS Designation, Grade 33.
5. Deck and all accessories shall be galvanized in accordance with ASTM A924, Class G60.
6. The metal deck supplier shall provide closure plates and all miscellaneous light gage metal necessary to complete the work.
7. All welding to be in conformance with AWS-D1.3.
8. Deck is to bear a minimum of 2 inches at all supporting members.
9. Hangers supported by steel deck with concrete fill shall be installed using ICBO approved anchorage systems. Such hangers may be used to support ductwork (54"x16" max), piping (4" diameter max) or ceilings. Larger ductwork or piping shall be supported by

Revisions	
DATE	DESCRIPTION

CONTRACTOR/OWNER NOTES
1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, AND DIMENSIONS PRIOR TO PERFORMING THE WORK
2. NOTIFY ARCHITECT OF ANY DISCREPANCIES AND INCONSISTENCIES IN DIMENSIONS AND PLANS PRIOR TO PERFORMING THE WORK
3. DEVIATION FROM THESE DWGS W/O PRIOR NOTIFICATION OF ARCHITECT WILL VOID CERTIFICATION AND SEAL

ARCHITECT

S. E. WAGNER
ARCHITECT
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LEWES, DELAWARE 19958
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CFC FARM & HOME CENTER
CARMEL CHURCH
CAROLINE COUNTY — CROSS SECTIONS — VIRGINIA

ISSUED FOR PERMIT
3-24-05

SCALE: 1/16"=1'-0"
REVISION *
DRAWN BY ARW
CHECKED BY
REVISED BY
DRAWING NUMBER SP-1

structural beams or columns.

G. STEEL ROOF DECK

1. Steel roof deck to be Verco or prior approved equal. Deck properties and capacities shall be verified by a current ICBO report.

2. Layup to be three span minimum unless otherwise noted on Drawings.

3. Depth, gage and attachment to be as shown on Drawings.

4. Deck and all accessories shall conform to ASTM A653 – SS Designation, Grade 33.

5. Deck and all accessories shall be galvanized in accordance with ASTM A924, Class G60.

6. The metal deck supplier shall provide closure plates and all miscellaneous light gage metal necessary to complete the work.

7. All welding to be in conformance with AWS-D1.3.

8. Deck is to bear a minimum of 2 inches at all supporting members.

8. Hangers supported by steel decking shall not carry loads greater than 120 pounds every 25 square feet. Hangers supporting higher loads may be permitted with prior approval from the Engineer.

9. The bottom of the steel roof deck is to be painted. See division 9 for paint.

H. LIGHT METAL BEARING STUD WALLS

1. All products are to be manufactured by the current members of the Steel Stud Manufacturers Association (SSMA). Installation shall be in accordance with the current ICBO report (ER-4934P).

2. Steel stud framing shall be installed in accordance with ASTM C754.

3. Metal stud wall tracks are to be attached to concrete floors with minimum 0.145 inch Dia. X 1 inch penetration powder-driven fasteners spaced at 24 inches on center.

4. Unless otherwise noted in Drawings, metal studs are to be 600S137-43 sections with minimum section properties (gross) as follows: Ix = 2.042 inches ^4, Sx = 0.681 inches ^3 and A = 0.413 inches ^2. Studs to bear on full width of top and bottom track.

5. Stud spacing to be 16 inches on enter or as indicated on Drawings.

6. Wall coverings to be attached per UBC Table 25-G or Table 25-H.

7. #8 Gauge screws to be used to connect metal framing except as noted on the Drawings. Welding is acceptable where indicated in the Drawings. All welds of galvanized steel shall be touched up with a zinc-rich paint.

10. Galvanized coating to be G60 minimum.

DIVISION 6 – CARPENTRY

A. ROUGH CARPENTRY

1. Lumber species and grades to be as follows unless otherwise shown on Drawings: (per Uniform Building Code)

a. Joists, beams and stringers	Douglas fir #2
6 inch nominal and greater	Douglas fir #1
b. Bucks, Blocking, Bridging and Misc.	Doug. Or Hem fir #3
c. Stripping	Doug. Fir #3
d. 2 x 4 studs	Doug. Fir studs
e. 2 x 6 studs	Douglas fir #2
f. Sills, Ledgers, Plates, Stripping, etc. in contact with concrete and wood curbs	Pressure Treated Hem fir #2
g. Posts, columns (sawn)	Douglas Fir #1

h. Roof, floor and wall sheathing to be APA rated sheathing. Exposure 1, conforming to APA Performance Standard PS 1-95 and except NER-108. See Drawings for required thickness of sheathing and/or span rating. Install roof and floor sheathing with long dimension perpendicular to supports unless otherwise noted. Use spacer to provide 1/8 inch end and edge joints (1/4 inch for jumbo panels) whenever sheathing is exposed to wet weather. Fill any joint spacing over 3/8 inch unless otherwise approved by Engineer. Install 2x4 or thicker blocking at unsupported joints in wall sheathing. Block roof or floor sheathing where noted on Drawings.

i. Gypsum sheathing to be 1/2 inch thick asphalted gypsum board.

2. Provide fire blocking as required and blocking for all specified wall mounted items including cabinets, door stops, etc.

3. Connectors:

a. Tie straps, framing anchors, hangers, stirrups, column caps, column bases, etc., to be Simpson as detailed, or as approved. Prime coat miscellaneous steel. Fully nail according to manufacturer's schedule using largest size shown. All beams and joists not bearing on another member to connect with U type hanger unless otherwise noted on Drawings.

b. Nailing all nails specified in the Drawings to be common nails unless otherwise noted. All nailing shall comply switch UBC Table 23-II-B-1, nailing schedule. Obtain Engineers approval of all proprietary nailing systems.

c. Nails at roof and wall diaphragms to be driven so that their head or crown is flush with the surface of the sheathing. Check and resink if needed, immediately before roofing.

4. Delivery and storage:

a. All lumber and sheathing delivered to the site, shall be piled off the ground and properly protected against weather.

5. Notify Engineer for observation of roof sheathing nailing. Obtain Engineer's approval prior to starting roof installation.

6. Cutting and notching of joists not allowed. 1-inch diameter hole may be drilled in the center 1/3 of the member depth. All other holes to be approved by Engineer.

7. Studs may be notched in the lower 1/5 of the height of the stud for electric and plumbing pipes, but no part of the notch is to be deeper than 25 percent of the width of the stud. Holes of diameters up to 1/3 of width of stud may be drilled in the stud.

B. FINISH CARPENTRY

1. Wood trim (exterior): Western Red Cedar. S4S K.D. A Grade.

2. Wood doorframes and trim (interior): B.G. Hemlock-Fir, C and better, K.D.

C. CASEWORK

1. SUBMITTALS:

a. Submit shop drawings of all casework and obtain Engineer's approval prior to starting fabrication. Verify dimensions and indicate discrepancies on shop drawings.

2. CONSTRUCTION

a. All casework shall be shop fabricated, plastic laminate faced with matching PVC edge banding.

3. MATERIALS

a. Countertops: C-C (plugged) grade plywood or particle board, 3/4 inch thick.

b. Vertical surfaces and shelves: Particle board per CS-236 Type I, Density B, Class 2 mat formed 3 ply construction.

c. Plastic laminate: High pressure: Colors and texture as selected per NRMA LD3.

d. Vertical surfaces and shelves: GP28

e. General purpose horizontal surfaces: Surfaces GP50.

f. Backing: Laminate manufacturer's standard balancing sheet.

g. Cabinet interiors: Melamine covered particle board. Color (white) unless directed by Owner otherwise.

4. HARDWARE

a. Hinges: Blum 75M 5-580-125 self closing hinge or approved equal.

b. Pulls: Stanley 4483 1/2 (US26D) or approved equal.

c. Shelf Clips: Metal spade type.

d. Drawer slides: Blum 230M 3/4 extension, Blum 430E full extension.

5. CONSTRUCTION

a. Flush overlay per A.W.I. Modular Casework Standards 1600B, C and D. Provide 4 inch high plastic laminate covered splash where tops abut walls.

DIVISION 7 – MOISTURE PROTECTION AND INSULATION

A. ROOFING SYSTEM

a) ROOF INSULATION – rigid system:

1) Material: Polyisocyanurate Board Insulation. Rigid type. Thermal Resistance to provide an R-value of 7 per inch. Thickness to be R-19.

2) Manufacturers: "Millox" by Apache, "AC Foam Composite" by Atlas "E'nrg'y 2 Composite" by NRG Barriers, or approved.

3) Installation: Install rigid insulation in two overlapping layers using mechanical fasteners in accordance with manufacturers instructions. Fastening system to also be in accordance with Factory Mutual FM I-90 requirements. Reference P-4 corners and perimeters documents for Factory Mutual I-90 fastening schedules. Also see FM Loss Prevention Data Sheets 1-28, 1-28S and 1-48.

b) PROTECTION BOARD:

1) Material: Perlite type protection board to meet ASTM C728. 1/2" thickness.

2) Manufacturers: Johns Manville or as approved.

3) Installation: Install protection board over rigid insulation. Stagger joints with insulation joints. Mechanically fasten board in accordance with manufacturers instructions. Mechanical fastening system to also be in accordance with Factory Mutual FM I-90 requirements.

c) FIBER CANT AND TAPERED EDGE STRIPS: Asphalt impregnated wood fiberboard, preformed, configuration as detailed. "FesCant" by Schuller, or approved.

d) EPDM SHEET ROOFING

1) General

a) Non-Ballasted, mechanically fastened EPDM sheet roofing membrane applied over rigid insulation with all necessary accessories.

2) Quality Assurance

a) The applicator shall be experienced with mechanically fastened single-ply materials, substrate preparation and methods of application.

b) The applicator shall be trained by and approved by manufacturer for installation of elastic sheet roofing system in writing prior to bid opening.

c) The applicator shall be qualified under manufacturer's Single-Ply Roof Systems Guarantee Program.

d) Owner may employ roofing inspector. SubContractor to coordinate schedule for inspector's visits.

e) Contractor to arrange a pre-roofing conference.

e) SITE CONDITIONS

1) Environmental requirements:

a) The ambient temperature shall be a minimum of 40 degrees and rising while installing the EPDM sheet roofing.

b) No installation work shall be performed during rainy or inclement weather.

2) Protection:

a) EPDM sheet roofing flashings and insulation shall be fastened and sealed in a watertight manner on the same day they are installed.

b) At the end of each working day, the incomplete installation shall be sealed along the edges to prevent water from entering the roof system or insulation.

c) Applications workmen shall wear clean, soft rubber-soled shoes for any application work where they may be walking on the in-place roofing membrane. Precautions shall be taken to protect the membrane and to maintain clean, undamaged surface.

f) WARRANTY

a) Provide written warranty addressed to the Owner, covering the roofing and sheet metal work for a period of ten years.

b) The Product Manufacturer shall also provide a standard written warranty to the Owner.

(1) Subject to the terms, conditions and limitations stated herein, manufacturer will repair leaks in the roofing system for the life of this warranty. The life of the warranty shall be 10 years commencing with the date of final inspection and acceptance of the roofing system installation by the manufacturer's representative.

(2) The warranty must be signed by an authorized representative of the roofing system's manufacturer.

g) PRODUCTS

1) Manufacturers

a) Rubbergard Roofing System by Firestone, using mechanically anchored system.

b) Substitutions: As approved.

2) Materials

a) All materials shall be furnished by roofing system manufacturer or approved by roofing manufacturer as compatible to system.

b) Membrane: Membrane shall be 45 mil overall thickness minimum.

c) Flashings:

(1) Flashing shall be same as membrane except 60 mil thickness and as otherwise noted.

(2) Vent stacks, pipes and corners flashed with unreinforced 60 mil thick uncured rubber.

d) Adhesive, Seam sealant, Primer and sealants:

(1) As furnished by manufacturer.

3) Insulation System

a) 1/2-inch thick, GWB applied to roof deck.

b) Rigid EPS Insulation Board, 3-inch thick, nominal 1.25 P.C.F. density.

c) Firtex Cover Board, 1/2-inch thick.

d) Crickets (on high side of roof top units and skylights): Rigid EPS Insulation Board, 1/2-inch taper per foot.

4) Mechanical Fasteners as furnished by manufacturer.

h) EXECUTION

1) PREPERATION

a) Work on the deck and insulation shall be completed and new curbs and other penetrations installed.

b) Beginning installation means acceptance of substrate.

2) PROTECTION

a) Protect building surface against damage from roofing work.

b) Where work must continue over roof membrane, protect surfaces.

3) INSULATION

a) Apply units of insulation with long joints continuous at right angles to the ribs of the metal roof deck.

b) All end joints staggered and each layer of material staggered above previous layer.

c) End joints shall be formed over solid bearing.

d) Cut and fit insulation boards where roof deck intersects a vertical surface. Cut board to fit maximum 1/8-inch away from vertical surface.

e) Install roof insulation boards using approved mechanical fasteners through metal plates. Fasteners and plates shall be placed as specified by manufacturer. Mechanically fasten insulation boards over roof surface for class 1 construction for U.L.-90 classification.

i) ROOFING SYSTEM INSTALLATION

1) General: Roofing assemblies shall be installed strictly according to the manufacturer's written recommendations.

2) Sheeting Installation:

a) Membrane is to be attached with screws and plates above previously fastened insulation.

b) Membrane to be laid out in approved pattern starting at low point, position the membrane square with the roof and provide sufficient material to facilitate flashing.

c) Fasteners to be placed per manufacturer's recommendations and meeting conditions herein before.

d) Install second and succeeding rolls of sheeting in some manner.

e) Membrane shall be overlapped and welded per manufacturer's written instructions.

f) Install mechanical fasteners according to Factory Mutual Loss Prevention data 1-28 for 1-90 uplift.

j) FLASHING INSTALLATION

1) Parapets, perimeters, curbs, vents, drains and other details shall be flashed in accordance with manufacturer's written instructions, details and as supplemented with the drawings.

k) QUALITY CONTROL

1) Final Inspection and Approval:

2) Formal final inspection of completed work shall be made by the Manufacturer's Representative, Contractor, Special Inspector and Architect/Engineer.

B. SHEET METAL AND FLASHING

1. Fabrication and installation of sheet metal items to comply with SMACNA Architectural Sheet Metal Manual latest edition.

2. Copings: Typical copings to be 24 gauge galvanized pre-painted with factory applied thermosetting acrylic, color as selected, or painted as noted on Drawings.

3. All down spouts, flashing, vents, etc., to be 26 gauge or as noted on Drawings, galvanized and shop primed or pre-painted.

4. Through wall scuppers to be 24 gauge stainless steel. Seal joint to wall all around. Visible portion of scupper to be painted after installation.

5. Contractor to guarantee water tightness of roof flashing, copings and scuppers for a minimum of two years.

6. All sheet metal work to be installed in manner to maintain weather tightness and provide a finished, smooth, unwrinkled appearance. Provide concealed clip at front (outer) face of copings.

7. Joints to be standing seam at copings, flat lock seam at back wall flashing. Joints at scuppers and leader heads to be fully soldered. Where required for thermal movement at other flashing, lap 3 inches and seal with Vulkum sealant.

C. METAL ROOFING AND SIDING

1. Roof and siding to be pre-finished performed standing seam panels with fully concealed and covered attachment. Butler MFG Products, MR-24 standing seam system, or as approved. All flashing and edges shall be of matching material with same gauge and finish.

2. Panels to be 26 gauge galvanized steel, roll formed to 1 inch minimum standing seam and lap spaced 19 inches on center. Form ends of panels to provide watertight flashing lap at walls, siding intersections, hips and valleys. Sealant to be compatible with panel finish and match color.

3. Finish to be of color selected from manufacturers full range. System to consist of .2 Mil baked-on epoxy base coat with .8 Mil finished with epoxy primer and backer coat.

4. Fabricator and installer to jointly guarantee weather and water tightness of entire assembly for a period of two years from date of substantial completion.

5. Submit shop drawings for approval showing all panels, joints, seams attachments and flashings. Fabricator to provide attachments sufficient to resist wind uplift.

6. Install panels over 30 pound asphalt impregnated felt lapped 4 inches at all seams.

D. CAULKING AND SEALING

1. Caulk all joints between concrete panels, wood siding panels, dissimilar materials, and around all door and window frames and all other locations as required for weather tightness.

2. Applier to examine joints prior to installation. Remove foreign material and moisture. Proceeding with work signals acceptance of surfaces.

3. Provide backup vinyl or rubber filler rods on all joints over 3/8 inches in depth. Backup rods to be minimum of 1-1/2 times joint width. Comply with caulking manufacturer's recommendations.

4. Caulking color to match adjacent materials. Obtain Engineer's color approval prior to ordering.

5. Apply exposed caulking after painting or mask caulking beads to prevent painting over except as noted at exterior plywood siding. Verify compatibility with paint if caulking applied after.

6. Materials:

a. Concrete and masonry wall joints: Low modulus, two-part non-sag Polyurethane rubber.

b. Door and window frames: Silicone rubber, non-acid, porous type at joints abutting concrete or masonry, acid non-porous type elsewhere.

c. Plywood siding: Silicone rubber, paintable, apply prior to painting and tool smooth.

d. Penetrations at fire walls: 3/8 inch gap around penetration, provide safing insulation and fire caulking, Thermafiber (USG) or approved.

E. CONCRETE SEALER (at window/door openings and slab edge)

1. Silane clear sealer with minimum 15 percent solids.

2. Manufacturers:

a. Bridgetech

b. Thoro Systems

c. Prior approved

3. Apply to all opening edges in concrete tilt-up panels for doors and windows, prior to frame installation.

4. Coordinate with paint manufacturer to verify adhesion between paint and concrete sealer, prior to applying.

5. Coordinate with window manufacturer to verify adhesion between window caulking and concrete sealer, prior to applying.

6. Notify Engineer of any discrepancies as to where application is required.

F. INSULATION – (FOR RIGID ROOF INSULATION SEE ROOFING ABOVE)

1. Exterior wall and soffit insulation: Fiberglass blanket with R-value as shown on Drawings (match wall thickness: 2 x 4 = R-11, 2 x 6 = R-19). Blanket to be faced on conditioned side with Kraft barrier where covered.

2. Interior insulation: Unfaced fiberglass blanket (faced where separating conditioned space from non-conditioned space) to match wall thickness at following locations and as noted on Drawings.

a. Office perimeter walls abutting warehouse space.

b. Restroom walls.

c. Verify with Milgard (office ceilings and conference rooms).

d. Floors of mezzanines between office and warehouse.

NOTE: Where faced insulation is required, vapor barrier to be placed toward conditioned side of wall or ceiling.

4. Stick Pin Insulation: Fiberglass Batt insulation with white vinyl vapor barrier at conditioned side. Insulation R- value as indicated on Drawings. Fasten to wall with stick pins with 1" square metal base glued to wall and 1" round pin cap. Apply pins on a 2'-0" square pattern in straight rows for neat appearance. Trim off excess stick pin wire. Fold joints in vapor barrier and seal with white vinyl tape.

H. VAPOR BARRIER

1. Detached Reinforced Polypropylene Vapor Barrier: NAIMA approved, composite polypropylene-scrim-kraft vapor barrier complying with applicable provisions of ASTM C 991, Type 1, and as follows:

a. Product: Lamtec WMP 10, or as approved.

b. Width: 96 inch rolls or maximum available.

c. Color: White.

d. Surface Burning Characteristics: Maximum flame spread and smoke developed values of 25 and 450, respectively.

2. Tape for Vapor Barrier: Pressure sensitive tape of type recommended by vapor barrier manufacturer for sealing joints and penetrations in vapor barrier.

3. Attached Vapor Barrier (Integral with insulation)

a. Product: Foil or Kraft Paper

b. Width: To match stud or joist spacing

c. Maximum flame spread and smoke developed values of 25 and 450, respectively.

I. BITUMINOUS DAMPROOFING

1. Provide at all walls where finish grade is above interior finished floors and where shown on Drawings. Extend from top of footing to line of finish grade.

2. Material to be semi-fibrate type mastic compound per FS SS-A-694, Celotex, Flintkote, Sonneborne or as approved.

3. Begin only after substrate and penetrations are completed. Apply dampproofing in weather conditions meeting manufacturers published recommendations. Apply two separate rolled or brushed coats with direction of second coat perpendicular to first.

J. PANEL WATERPROOFING

1. Provide at concrete walls where exterior grade is above floor and where indicated on Drawings. Extend from top of footings to line of finish grade.

2. Material to be corrugated Kraft panels with Sodium Bentonite fill, Volclay Type 1 panel system or as approved.

3. Installation to follow manufacturer's published directions and recommendations. Remove fins and protrusions exceeding 1/4 inch from wall surface. Fill open joints and surface indentations with Volclay Joint seal prior to installing panel.

4. Install panels with overlaps per manufacturer's directions and provide Volclay Hydrobar Tubes against panels on top of footing.

5. Protect panels from moisture contact prior to and after installation. Install backfill as soon as possible after placing panels.

6. Smoke/Heat vent:

a. ICBO approved only. U.L. listed or Factory Mutual approved for entire assembly.

b. Fusible link operation. Fusible link to be (1) temperature step above sprinkler head temperature setting (365 degrees Fahrenheit unless otherwise noted).

c. Double door units. Not a skylight.

d. Mill finish aluminum perimeter frame with welded corners and interior condensate gutter and center drainage channel for 2 x 10 wood curb.

e. Smoke vents to be of nominal sizes shown on Drawings.

f. Approved Manufacturers:

1. BILCO (GDSH)

2. DUR-RED (FMSH)

3. NO SUBSTITUTIONS

7. Attach smoke vent frames to curbs with gasketed screws.

DIVISION 8 – DOORS AND FRAMES

A. HOLLOW METAL DOORS AND FRAMES

1. Manufacturers:

a. Amweld,

b. Steelcraft,

c. Republic,

d. CECO

e. Curries

f. Or equal.

2. Frames:

a. 18 gauge full depth of wall with welded corners and anchors to suit wall structure.

3. Doors:

a. 20 gauge Flush panel bonded to non-warping core. Mortised and reinforced to receive hinges, locksets and closer. Provide exterior door with closed top and sealed.

b. Minimum insulation value R-0.20 for exterior doors.

4. Finish:

a. Factory baked on primer. Paint as noted on Drawings.

B. METAL FRAMES – INTERIOR ONLY

1. Office doorframes to be Raco-100 (aluminum frame). See door schedule (sheet A-5) NO substitutes.

C. WOOD DOORS

1. 1-3/4 inch thick solid core or particle board core as shown on Drawings and reinforced for hardware. Premium grade (stain grade) mahogany or birch face with hardwood edge bands. Doors to be labeled if noted at door schedule.

D. STOREFRONT

1. Framing system: Kawneer 451 Trifab II, U.S. Aluminum center glaze or as approved. 2 inch x 4 1/2 inch mullions. Class 2 Clear anodized finish. Class 1 Bronze anodized finish.

2. Verify with storefront manufacturer for All Glass System (AGS) at entry door (see elevations).

3. Doors: Kawneer, U.S. Aluminum or as approved. Narrow style door. Furnish complete single acting entrance with ADA approved threshold, offset pivots, push/pulls, closer and weatherstripping. Remainder of hardware as specified in finish hardware schedule.

4. Installation:

a. Installer to examine concrete surfaces to receive storefront for roughness, loose material, laitance and that opening edges have been filled and sealed. See Division 3, Concrete Finishes for patching and sealing requirements. Notify Contractor of defects observed and obtain correction before starting installation. Allow time to curing of fillers and sealers required.

b. Provide metal shims at perimeter frame to maintain a 3/16 inch – 5/16 inch sealant bead between frame and abutting surface.

c. Provide continuous sill flashing to match storefront. Set in double sealant bed. Provide "Tremco Expando-Flash" flashing at joints in flashing.

d. Provide aluminum end dams at head and sill channels. Seal joints around dam and over attachment fasteners. Provide splice sleeves and sealant at expansion joints.

e. Install backup rod at perimeter sealant joint. Continuously seal joint between perimeter frame and abutting wall. Do not spread sealant onto adjacent wall or frame face. Do not plug sill weepholes. Do not seal joint between sill flashing and storefront sill member.

5. Quality assurance:

a. Submit shop drawings showing all reinforcement attachment and edge conditions for Engineer's approval prior to fabrication.

b. Guarantee water and weather tightness of assembly including frames, edge sealant and glazing for two years.

c. In the presence of Engineer's and Owner's representatives, spray test all units to demonstrate water tightness of complete installation. Utilize full pressure stream from domestic water hose and nozzle, directing steam at head, sill, jamb and mullion members from 4-foot distance, perpendicular to glazing face. Allow a minimum of 30-second duration for each 4-foot section of window or storefront. Mark all observed leaks, correct defect and schedule retest for verification of correction.

E. GLASS (TO BE PROVIDED BY MILGARD MANUFACTURING)

1. Storefront and Windows: 1 inch insulating glass, tempered where required by code.

2. Exterior glazing color: Azurlite Reflective. Reflective surface is to be on #2 surface.

3. Doors: 1/4 inch tempered. Color: Clear or tinted to match windows.

4. No reflective glass in doors.

5. Relites: 3/16 inch clear, tempered where required by code.

6. U-Factor: maximum by assembly is 0.54 per energy code.

7. Shading Coeffienient: maximum of 0.57 per energy code.

8. Glass to be safety glazing at the following locations:

a. All doors.

b. Glazing within 24 inches of doors.

c. Panes over 9 square feet and less than 18 inches above the floor and top edge over 36 inches above floor and within 36 inches of walkway.

F. OVERHEAD COILING DOORS

1. Steel coiling door: 22 gauge, coiling door in hood.

2. Manufacturer: R & S Service Door.

3. Model number: DFM for minimum head clearance.

4. Installation: Per manufacturer's recommendations.

G. OVERHEAD SECTIONAL DOORS

1. Steel sectional door: 20 gauge 2 inch thick, flush sections, high lift (or vertical lift where indicated) with 1 1/4 inch rigid polystyrene insulation and vinyl back cover. Rails to overlap or be rabbeted for complete weather tightness. Doors to be maximum height allowed by roof structure, or vertical lift where possible.

2. Push-up operation for doors to 10 feet high, higher doors to be operated with smooth link chain. Chain to be free of protrusions. Furnish chain anchor to hold door at any height.

3. Minimum component U-Factor 0.20 for exterior doors .

4. Counter-balance with torsion spring. Spring type stops.

5. Locking device: dead bolt each jamb with padlock provision.

6. Finish: zinc coated and factory primed.

7. Weather stripping. Full bulb type seal at sill.

H. ROOF HATCH

1. BILCO or DUR-RED (no substitutions) 3'-0" x 2'-6" ladder access roof scuttle. Integral insulated curb. Flash for weather tight installation.

I. FINISH HARDWARE (Door hardware to be by Liberty Hardware, products to be similar to these listed below):

1. MATERIALS

a. Butts – Stanley

b. Closer – LCN

c. Locks – Schlage, Levon or Rhodes Design

d. Flush Bolts – Ives

e. Cylinder – Schlage

f. Stops – Ives

g. Thresholds & Weather strip – PEMCO

h. Push pulls & Kick plates – TICE

i. Coordinate butt size with requirements of Knock Down Frames.

j. All hardware to be U.S. 26D (626) finish (Satin Chrome) except where otherwise noted.

2. KEYING

a. Locks of all doors shall be master keyed to a single system.

b. Prepare a keying schedule and coordinate with Owner prior to keying locks.

c. Provide a minimum of 2 marked keys for each lock in buildings, each master and grand master. Deliver keys, with permanent keying schedule showing key marks and doors operated, to Owner prior to occupancy.

3. HARDWARE SCHEDULE (See Drawings)

DIVISION 9 – FINISHES

A. GYPSUM BOARD

1. Interior board: 5/8 inch thick, U.S. Gypsum or Kaiser.

a. Water resistant board: (Durarock) provide at restroom walls and within 4 feet of sinks.

b. Type X Board: at firewalls, separation walls and demising walls and as otherwise indicated.

2. Gypsum soffit board: United States Gypsum Exterior Gypsum Board, 1/2 inch thick.

3. Accessories: Provide metal corner beads and fasteners as required. Provide square metal edge beads at all exposed board edges and where abutting dissimilar materials.

4. Provide metal "L" bead at sill to storefront connection and caulk.

5. Provide 3/8-inch gap at all firewall penetrations for caulking.

6. Finish

a. Tape, fill and sand for smooth finish at all soffits and interior exposed surfaces except as noted below.

b. Interior walls at warehouse, electrical and riser rooms and walls above finish ceilings to be fire taped only.

B. PAINT

1. Manufacturers:

a. Parker Paint

b. Miller

c. Rodda

d. Pratt & Lambert

e. ICI Dulux

f. Olympic

g. Sherwin-Williams

2. All colors and sheen as selected. Conform to UBC Flame Spread requirement. Provide up to five 5-foot wide full building height paint-outs of exterior wall showing all colors for Engineer's approval before starting work.

3. Exterior:

a. Metals, Ferrous, Galvanized: prime: one coat rust inhibitive primer (omit if shop primed or prepainted); two coats exterior Alkyd Enamel, Semi-Gloss. Paint all weather exposed faces of flashing. Prefinished flashing on inside parapet walls (not visible from ground) do not require paint.

b. Hollow Metal Doors and Frames. Remove any rust or scale and spot prime as required. Two coats Exterior Alkyd Enamel, Semi Gloss at all surfaces.

c. Concrete, Gypsum Soffit – Painted: One coat 100 percent acrylic latex alkali proof primer-seal. Two coats 100 percent acrylic latex paint, low gloss. Final coat to be rolled on (sprayed and backrolled at Contractor's option.) Mask or cut to insure straight, smudge-free lines at paint pattern edges. (verify with Milgard regarding using Tnemec paint system).

d. Wood Trim: two coats semi-transparent oil base stain – Cuprinol, Olympic, Cabots. (see sheet A-9).

f. Copings: two coats exterior alkyd enamel – semi-gloss.

4. Interior:

a. General – two coats, airless spray (Interior Alkyd flat Dryfall, Parker Paint number 2050) on:

1. Inside face of the exterior concrete walls.

2. Gypsum board walls in the manufacturing including – manufacturing side of offices.

3. Riser room walls.

4. See sheet A-9 for office interior colors (finish schedule).

b. Gypsum board finished areas, except water resistant: Two coats of latex acrylic paint, eggshell. Gypsum board, water resistant. One coat acrylic primer, two coats interior alkyd enamel, semi-gloss.

c. Wood doors, frames and trim: First coat stain, two coats lacquer or varnish.

d. Metal Doors and Frames: Spot prime as necessary, two coats Alkyd Exterior Enamel, Semi-Gloss.

e. Steel roof joists, steel roof girders, steel roof columns and underside of steel roof deck: Dryfall white.

e. Note: Color of metal registers, grilles, ladders, railings, electrical cabinets, piping, conduit, etc., to match adjacent surfaces.

C. METAL LINEAR CEILINGS

1. System Description: Exterior linear metal ceiling system non-fire treated assemblies, consisting of pre-finished aluminum mounted to a carrier system (USG or approved).

2. Quality Assurance:

a. Subcontractor Qualifications: Installer shall have not less than 3 years of successful experience in the installation of similar to requirements specified.

b. Requirements of Regulatory Agencies: Codes and regulations of authorities having jurisdiction.

3. Submittals:

a. Samples: Submit representative sample of color and finish of all exposed materials.

b. Shop drawings:

1. Manufacturer's Data: Submit manufacturer's catalog cuts or standard drawings showing details of system with project conditions clearly identified and manufacturer's recommended installation instructions.

4. Delivery, Storage, and Handling:

a. Delivery of Materials: Deliver materials in original unopened packages clearly labeled with manufacturer's name and identification numbers.

5. Install per manufacturer's recommendations.

D. ACOUSTICAL CEILING SYSTEM

1. Armstrong Second Look II or as approved, non-directional fissure pattern, 2'-0" x 4'-0" with washable latex paint, 5/8 inch thick, metal T bar, exposed, pre-finished white.

2. Protect tiles from moisture or high humidity.

3. Suspension system shall conform to ASTM C635 and be installed in accordance with ASTM C635 and U.B.C. Standard No. 25-2. Installer shall install a lateral bracing system according to the above standards sand per detail on Drawings.

E. FLOOR COVERING (SEE FINISH SCHEDULE ON SHEET A-9)

DIVISION 10 – SPECIALTIES

A. DOCK BUMPERS

1. 36 inch x 10 inch laminated rubber bumper. 6 inch thick constructed with steel angle frames. Weld and/or bolt to wall with approved expansion anchors.

B. DOCK LEVELERS

1. Manufacturers:

a. Kelly Company, Inc., Model SF, in Self-Forming Pan

b. No substitutions

c. Accessories: Per manufacturers standards.

d. Coordinate style and installation with Owner.

C. DOCK SEALS/HOODS

1. Manufacturers:

a. Kelly Tufseal

b. Or as approved.

2. Provide complete side dock seals and hoods at dock doors indicated on Drawings.

3. Side seals to be wood frame beveled polyfoam units with 12-inch projection, 12-inch face width, 8 inch back width, 16 ounces per square yard. Hypalon cover and 8 exposure wear pleats.

4. Note: Where used in combination with edge of dock leveler, the head/seal is to project 18 inches.

5. Hoods to be standard head curtain with 40 inch drop, 16 ounces per square yard. Hypalon fabric and wear pleats to match side seals.

D. WINDOW COVERING

1. Type: Levelor Riviera 1 inch mini-blind or as approved.

2. Color: Selection from full range of colors.

3. Locations: At all windows and storefront (except at doors) full height of glass.

4. Mounting: To frame head, on inner face of frame.

E. TOILET ROOM ACCESSORIES (To be by Franklin Brass, similar to Bobrick numbers listed below):

1. Manufacturers:

a. Franklin Brass

b. NO Substitutions

2. Mirror (counter mounted lavatory) 36 inch high x length of counter. Stainless non-removable frame.

3. Soap dispenser (counter mounted lavatory)

a. Bobrick B-8221 or as approved at each lavatory.

4. Towel dispenser:

a. Bobrick B-279 or as approved. One per restroom, or as shown.

5. Towel disposal:

a. Bobrick B-279 or as approved. One per restroom.

6. Sanitary napkin disposal:

a. Bobrick B270 or as approved. One per water closet.

7. Toilet paper dispenser:

a. Bobrick B288 or as approved. One per water closet.

8. Grab bars: Stainless steel 1 1/2 inch diameter, 36 inch long at back wall, 42 inch long at side wall. Provide with support backing in wall at accessible water closet stall.

F. TOILET PARTITIONS

1. Construction: Floor mounted, overhead braced, baked enamel finish bonderized steel with honeycomb core. Provide with all required brackets, hardware and plinths.

2. Provide toilet compartments and wall hung urinal screens as shown. Comply with handicapped requirements where compartments are indicated as accessible.

3. Manufacturer: Accurate or approved.

G. LOCKERS

1. Double-tier metal lockers. Note: provide full height single lockers at storage room (number 145).

2. Manufacturer: Lyon Metal Products or approved.

3. Accessories: Z type bases, tamper-guard handles, coat hoods, continuous sloping hoods and aluminum number plates.

H. SIGNS

1. ENGRAVED PLASTIC DOOR PLAQUES: Follow requirements and use materials as required to comply with current ADAAG standards. Place ADAAG disabled symbol at all accessible toilet room doors per jurisdiction requirements. Manufacturer's standard 1-inch high letter style with message as indicated below:

a. Men's Restroom

b. Women's Restroom

c. Conference Room

d. General Manager

e. Janitor

2. POST MOUNTED ACCESSIBLE (HANDICAP) PARKING SIGNS: See DIVISION 2, ACCESSIBLE (HANDICAP) SIGNAGE.

3. At all exterior pedestrian doors that are not part of accessible route to building, provide sign mounted on door with legend: ACCESSIBLE ROUTE in 3-inch high letters and directional arrow toward nearest accessible door.

DIVISION 11 – EQUIPMENT

A. None

DIVISION 12 – FURNISHINGS

A. RECESSED FLOOR MATS

a. Manufacturer:

i. American.

ii. Cactus.

iii. Futurus.

iv. Pawling.

v. Tirex.

vi. As approved.

b. Materials:

i. Chenille Mat: Edge-grain-laminated cuts of tire walls. Chenille-buffed and bonded to backing sheet, 3/8-inch to 7/16-inch thick.

ii. Clear anodized aluminum frame surround: Coat aluminum surfaces, which are in contact with concrete/grout/mortar with zinc chromate protective paint.

iii. Glue: Designed for this installation and accepted by Mat manufacturer.

DIVISION 13 – SPECIAL CONDITIONS

A. None

DIVISION 14 – CONVEYING SYSTEMS

A. None

DIVISION 15 – MECHANICAL (COORDINATE ALL REQUIREMENTS WITH OWNER)

A. GENERAL

1. Provide complete and fully operational heating, plumbing and gas systems to serve buildings in compliance with criteria noted herein and all applicable codes.

2. Bidder to be responsible for design, sizing and layout of systems. Provide accurately scaled drawings for review and code approval. Obtain permits and approvals prior to beginning any work. Complete energy analysis forms required by prevailing jurisdictions.

3. In submitting a bid for this work, bidder certifies that system capacity will meet design criteria and codes and that all equipment and labor for work is included in submitted bid, and that entire installation is in compliance with codes and acceptable standards.

4. The selected bidder shall be responsible to coordinate and obtain all serving utilities for equipment and make all required connections.

5. Entire installation to be guaranteed for not less than one year from date of final completion of project.

B. HEATING

1. Provide calculations of heating equipment sizing, using ASHRAE procedures. Show on drawings or attach calculations to all sets.

2. Heating criteria: 40 degrees Fahrenheit inside at 10 degrees Fahrenheit outside.

3. Heating system to consist of roof hung gas fired unit heaters at locations shown on Drawings with remote fixed-set thermostats. Locate thermostats on building columns no lower than bottom of unit heaters.

4. Provide all required electrical connections, gas connections, shut offs, regulators and exhaust flues through roof.

5. Adjust and clean units and controls at completion of installation. Provide operation manuals to Owner prior to completion.

C. PLUMBING

1. Design and provide domestic cold water and sanitary system to serve buildings. Installation to be per layouts shown on Drawings and include all required connections.

2. Domestic water lines within buildings to be Type L hard copper per ASTM B-88 above slab. Install lines tight to bottom of roof framing. Provide tee and globe valve for each future office buildout as indicated.

3. Sterilize and flush potable water piping prior to completion per AWWA M20. Adjust pressure regulators as required.

4. Delta faucets and flush valves to be used.

E. NATURAL GAS SERVICE

1. Coordinate with servicing utility company and arrange for gas service, meter and regulator. Provide capped tees for future meters for tenant service as required.

2. Interior Systems: Black steel Schedule 40 pipe with threaded fittings. Shut-off valve at each component. Verify pressure with serving utility and modify line sizes as required.

3. Size piping for future HVAC at future office build-out. Provide tees in lines serving unit heaters to allow future connections.

DIVISION 16 – ELECTRICAL (COORDINATE ALL REQUIREMENTS WITH OWNER)

A. GENERAL

1. Design and provide fully operational electrical system to serve the building and site as described here, indicated on Drawings and as required by applicable codes and serving utility company. Verify service requirements of project and Utility Company prior to bidding.

2. Provide suitable electrical service for lighting, outlets and mechanical equipment as provided in this project.

3. Installation shall comply with the latest rules and regulations of the codes (including, but not limited to, the National Electrical Code, National Fire Code, Life Safety Code, Uniform Building Code, Occupational Safety and Health Administration) of the state and local authorities having jurisdiction and service utility companies. The Contractor shall furnish, without extra charge, any additional materials and labor that may be required for compliance with these laws, rules and regulations, even though the work is not mentioned in these Specifications or so shown on the Drawings and shall provide and pay for all permits required.

Revisions

DATE	DESCRIPTION

CONTRACTOR/OWNER NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, AND DIMENSIONS PRIOR TO PERFORMING THE WORK

2. NOTIFY ARCHITECT OF ANY DISCREPANCIES AND INCONSISTENCIES IN DIMENSIONS AND PLANS PRIOR TO PERFORMING THE WORK

3. DEVIATION FROM THESE DWGS W/O PRIOR NOTIFICATION OF ARCHITECT WILL VOID CERTIFICATION AND SEAL

ARCHITECT

S. E. WAGNER

ARCHITECT

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THE PLAINS, VA 20198
(540) 253-9770

CFC FARM & HOME CENTER

CARMEL CHURCH

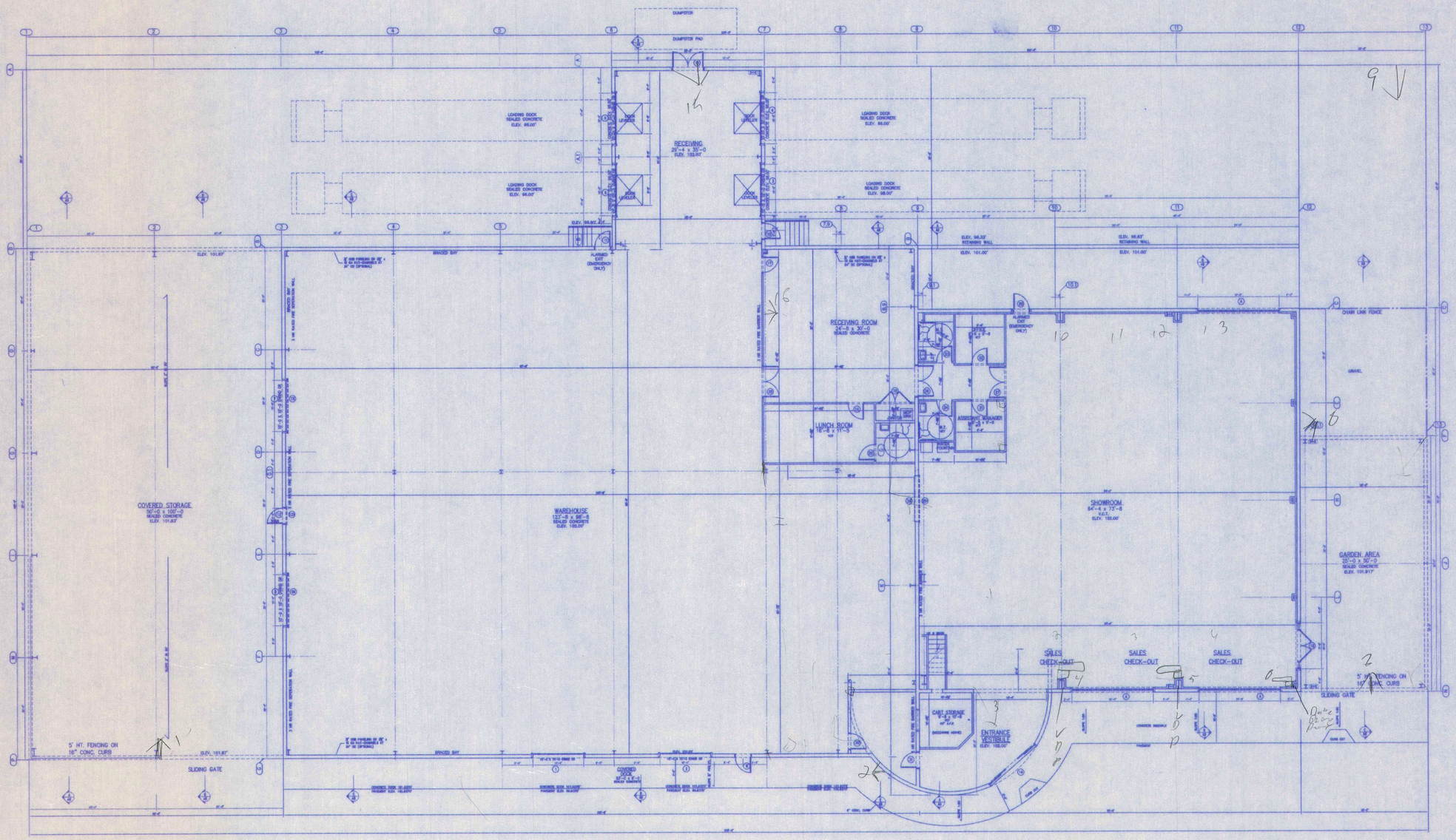
CAROLINE COUNTY CROSS SECTIONS VIRGINIA

ISSUED FOR PERMIT

3-24-05

SCALE: 1/16"=1'-0"
REVISION *
DRAWN BY ARW
CHECKED BY
REVISED BY

DRAWING NUMBER SP-2



OVERALL FLOOR PLAN

SCALE: 3/32"=1'-0"

PERMIT SET
3-24-05

REVISIONS

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LEWES, DELAWARE 19958

CFC FARM & HOME CENTER
CARMEL CHURCH

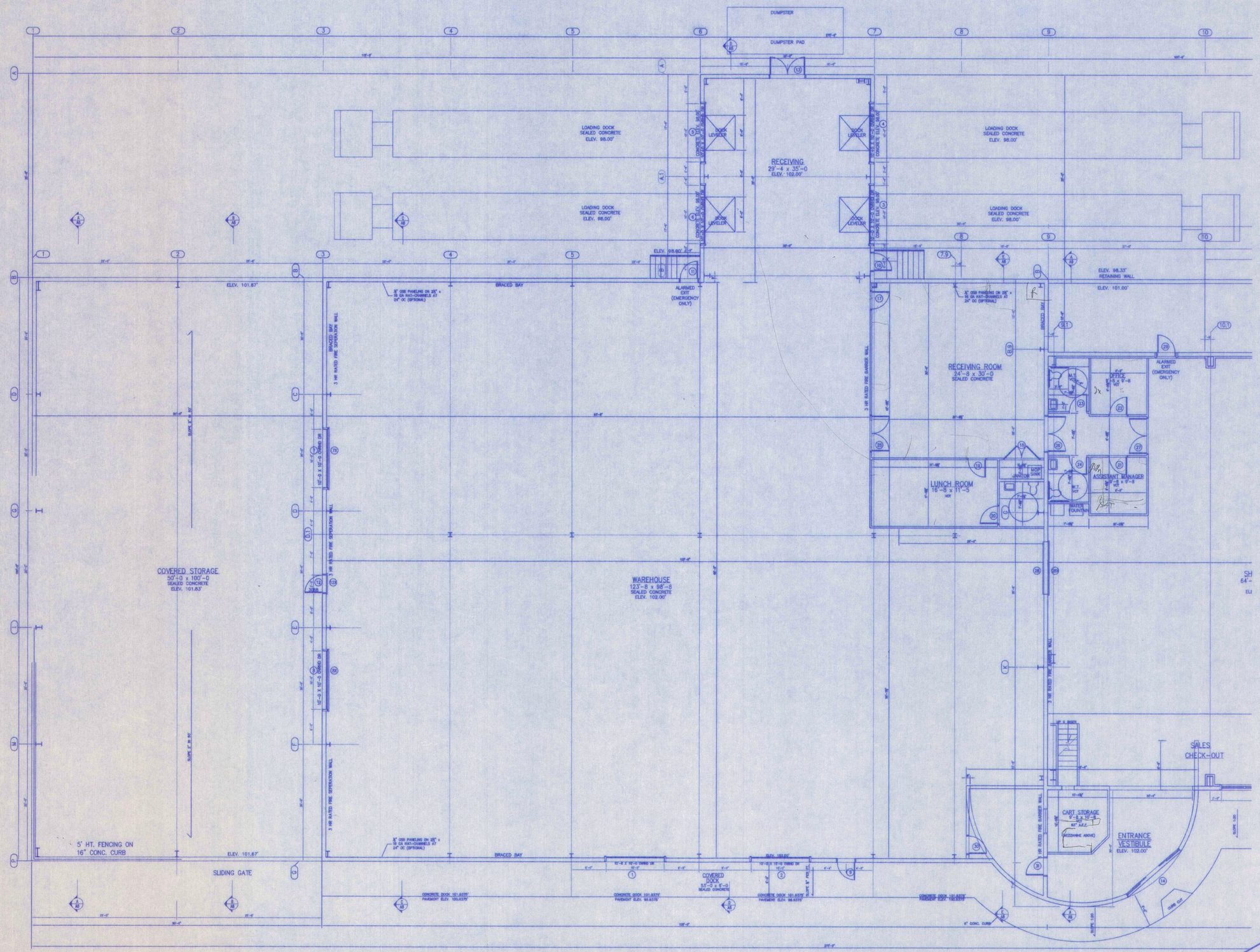
OVERALL FLOOR PLAN

CAROLINE COUNTY VIRGINIA

DWG. NO.
CFC - FFP
3-24-05.DWG

DATE:
3-24-05

A1



PARTIAL FLOOR PLAN

SCALE: 1/8"=1'-0"

PERMIT SET
3-24-05

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CFC FARM & HOME CENTER
CARMEL CHURCH

PARTIAL FLOOR PLAN

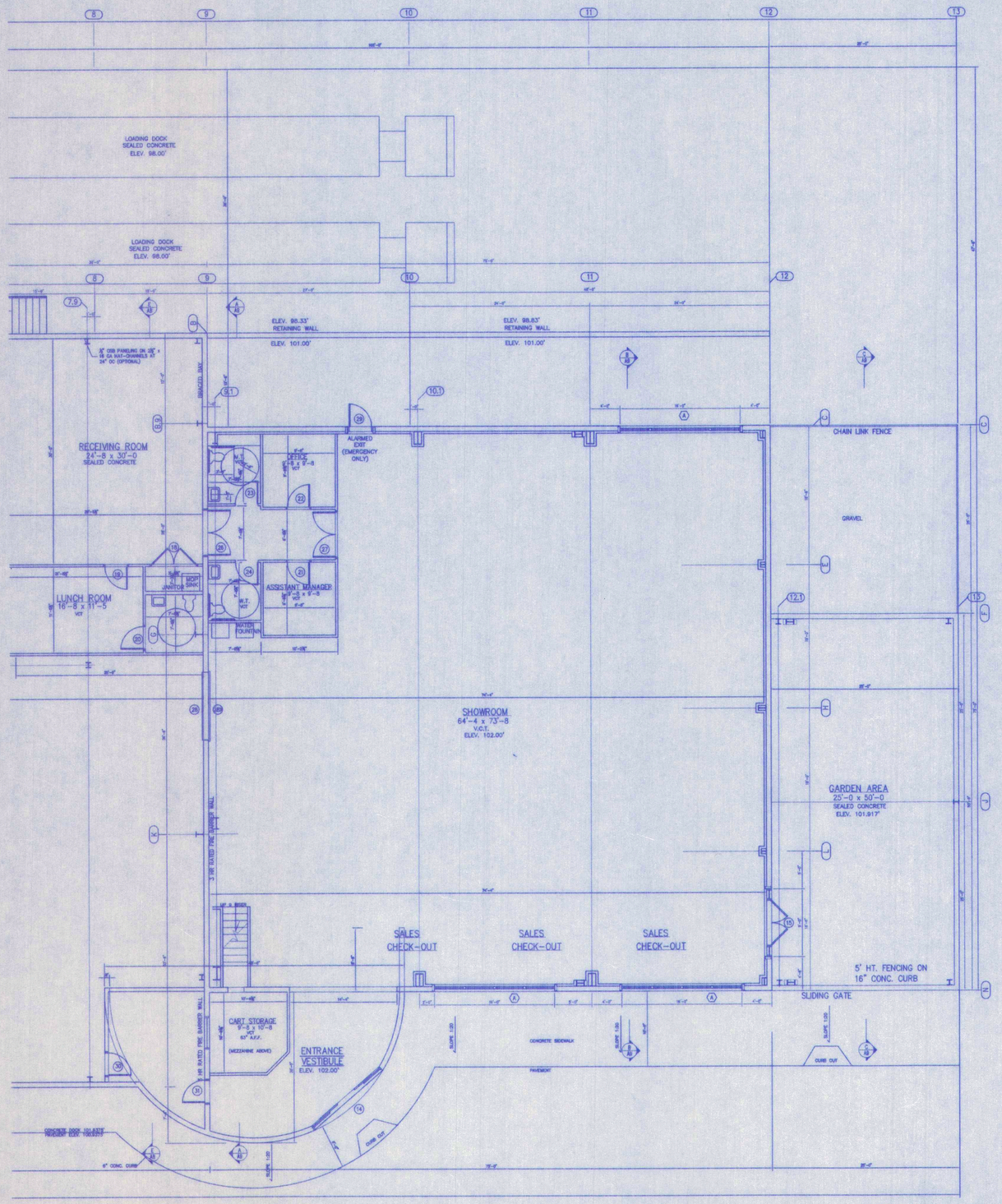
VIRGINIA

CAROLINE COUNTY

DWG. NO.
CFC-FPP
3-24-05.DWG

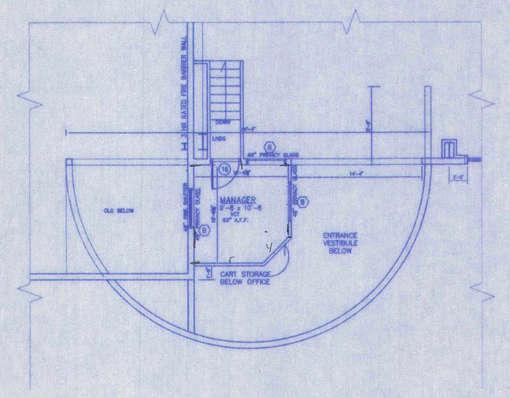
DATE:
3-24-05

A2



PARTIAL FLOOR PLAN

SCALE: 1/8"=1'-0"



MEZZANINE FLOOR PLAN

SCALE: 1/8"=1'-0"

PERMIT SET
3-24-05

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CFC FARM & HOME CENTER
CARMEL CHURCH

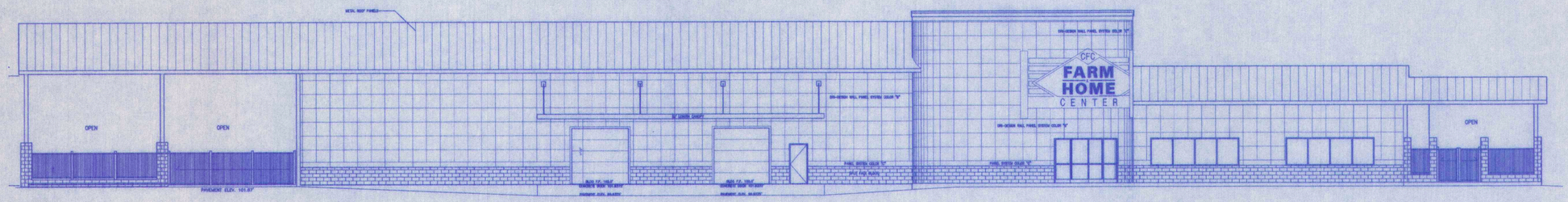
PARTIAL FLOOR PLAN & MEZZANINE PLAN

CARONLINE COUNTY VIRGINIA

DWG. NO.
CFC-FPP
3-24-05.DWG

DATE:
3-24-05

A3



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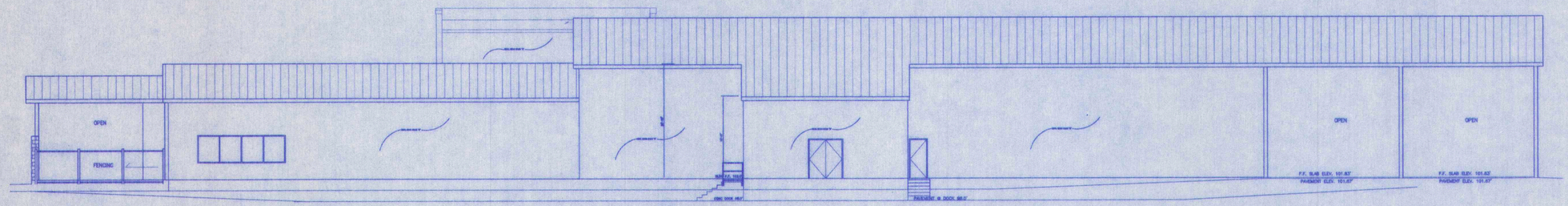

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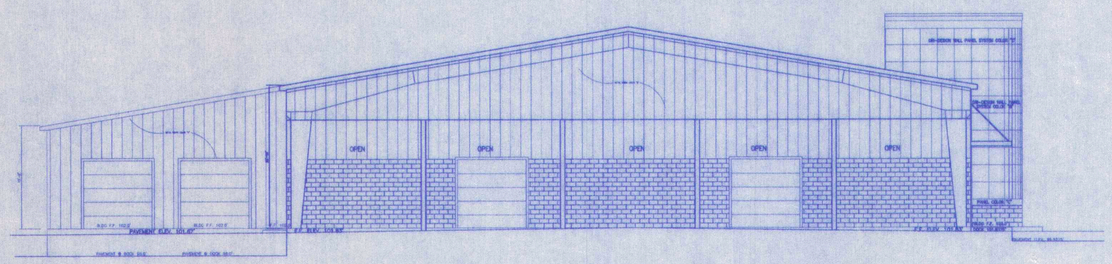

LEFT SIDE ELEVATION
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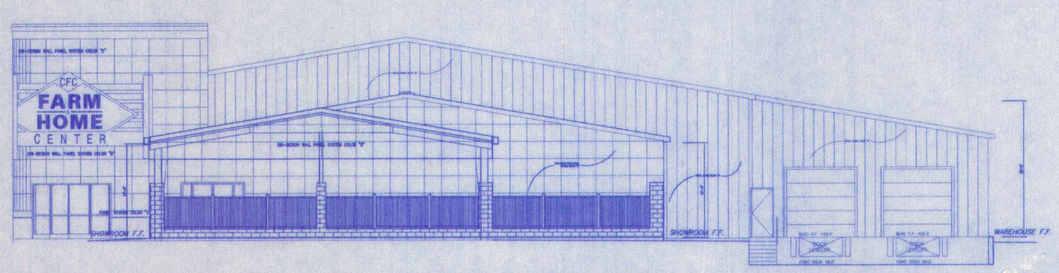

RIGHT SIDE ELEVATION
SCALE: 3/32"=1'-0"

PERMIT SET
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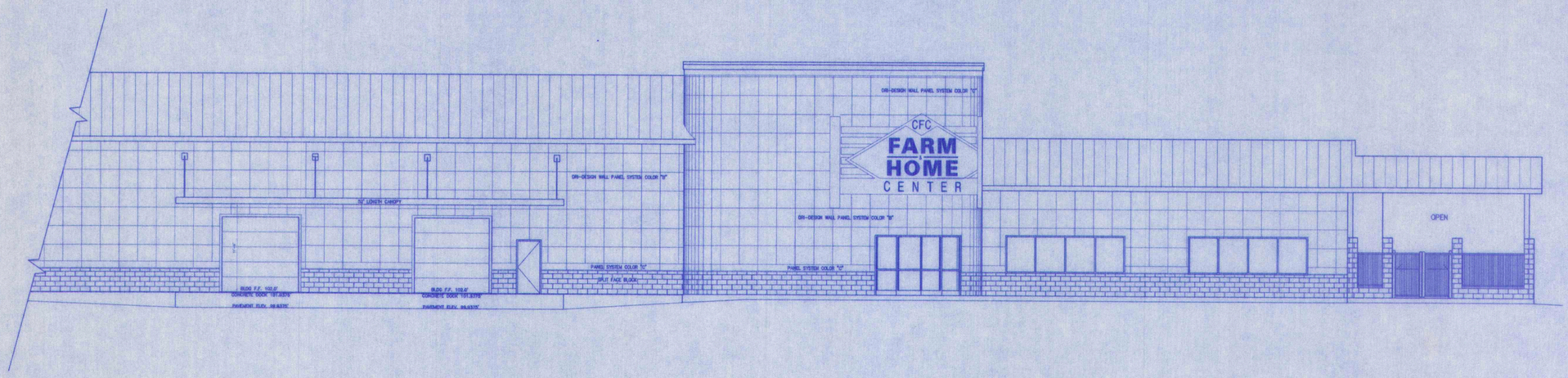
CFC FARM & HOME CENTER
CARMEL CHURCH
OVERALL ELEVATIONS
CAROLINE COUNTY VIRGINIA

DWG. NO.
CFC-1FP
3-24-05.DWG
DATE:
3-24-05
A4



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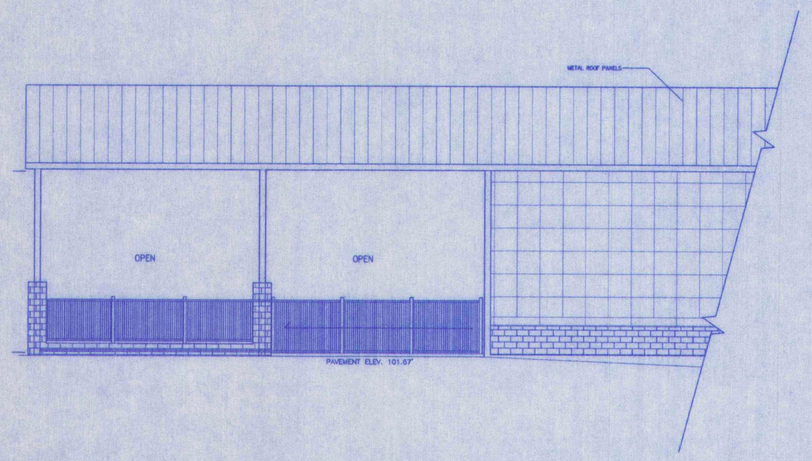

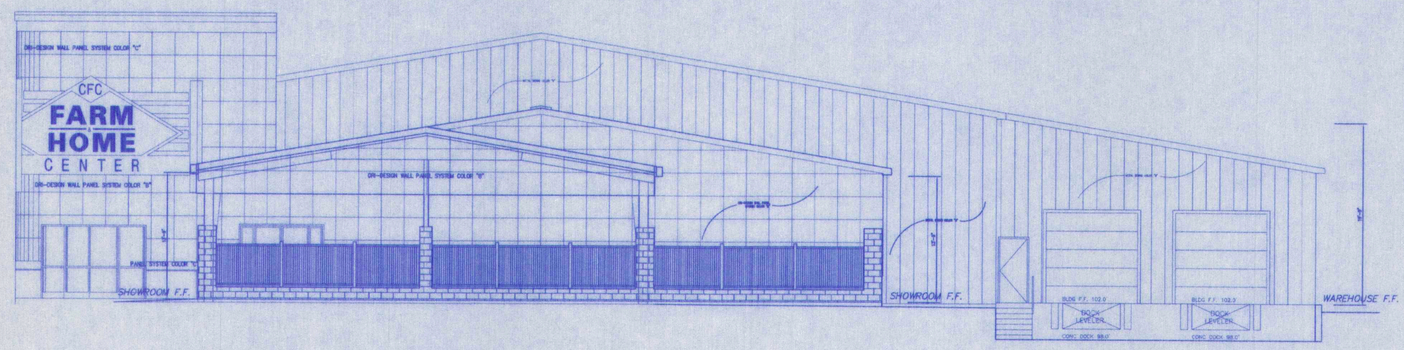

RIGHT SIDE ELEVATION
SCALE: 1/8"=1'-0"

PERMIT SET
3-24-05

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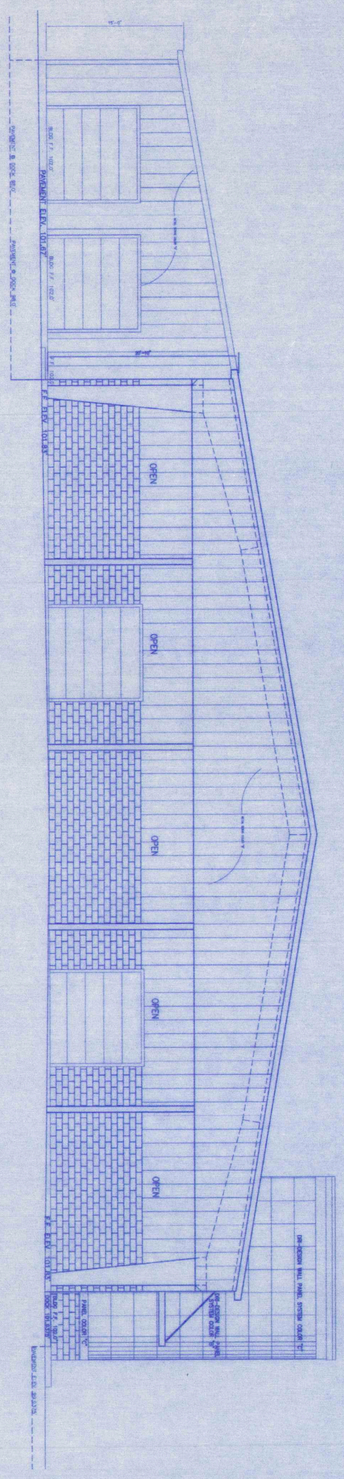
CFC FARM & HOME CENTER
CARMEL CHURCH
FRONT & R. SIDE ELEVATIONS
CAROLINE COUNTY VIRGINIA

DWG. NO.
CFC-EFP
3-24-05.DWG
DATE:
3-24-05
A5



LEFT SIDE ELEVATION
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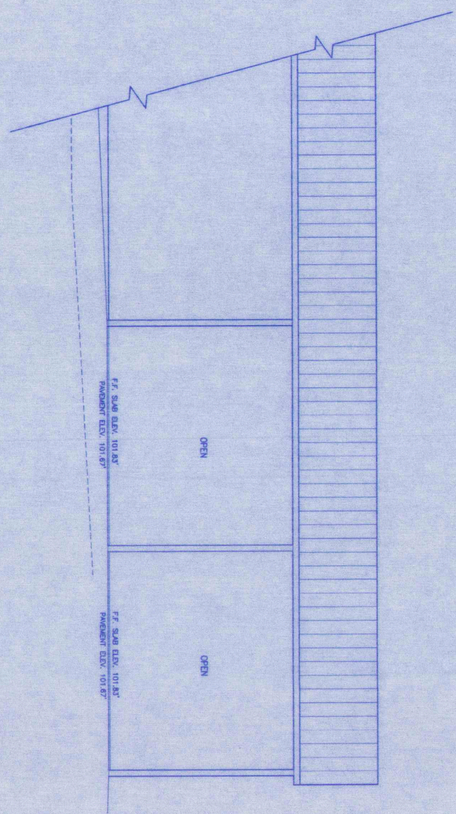

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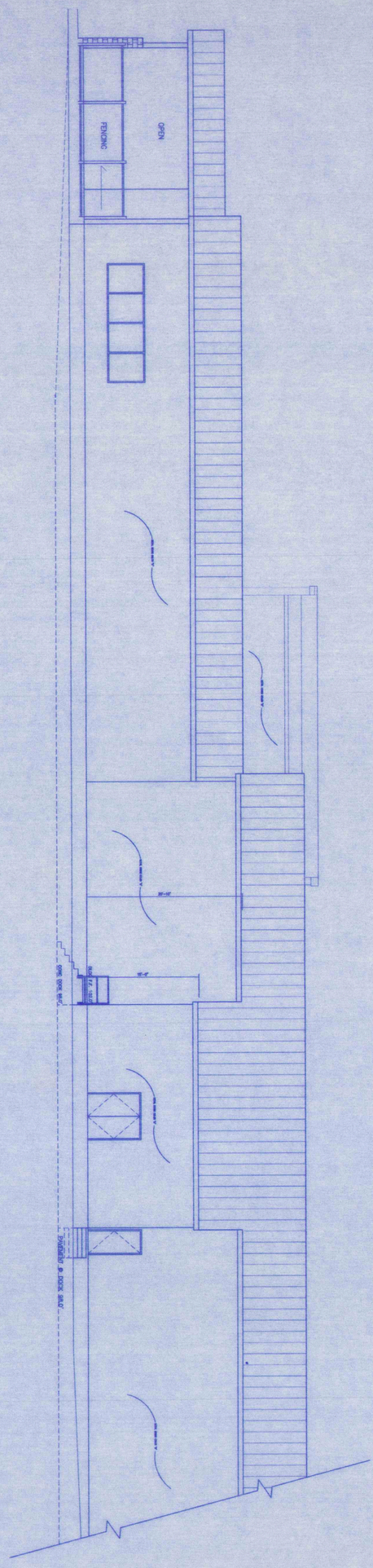

PERMIT SET
3-24-05

CFC FARM & HOME CENTER
CARMEL CHURCH
REAR & L. SIDE ELEVATIONS

CAROLINE COUNTY VIRGINIA

DATE: 3-24-05

A6

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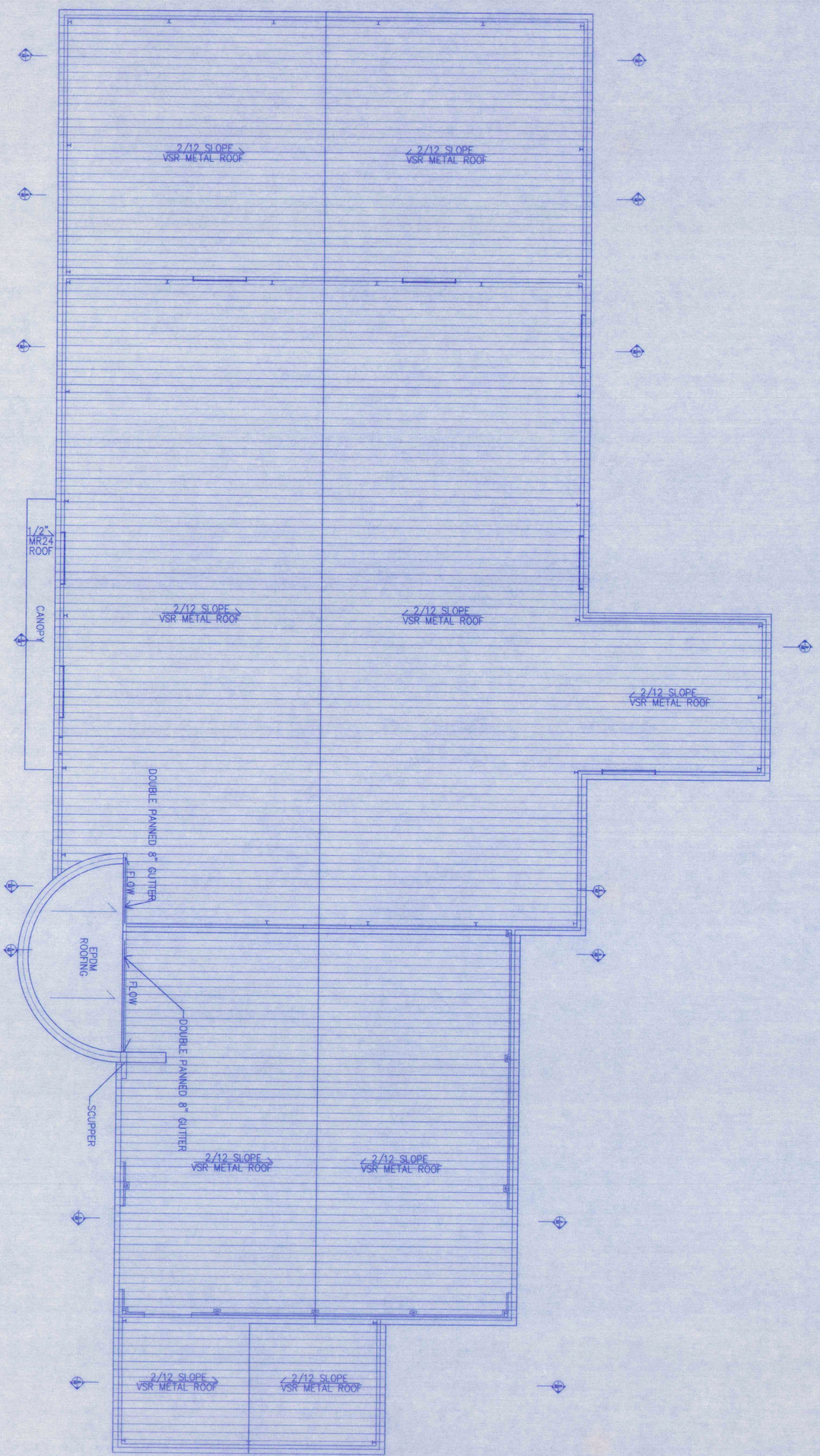

ROOF PLAN

SCALE: 3/32"=1'-0"

PERMIT SET
3-24-05

DATE
3-24-05

A7

CFC FARM & HOME CENTER
CARMEL CHURCH

ROOF PLAN

CAROLINE COUNTY VIRGINIA

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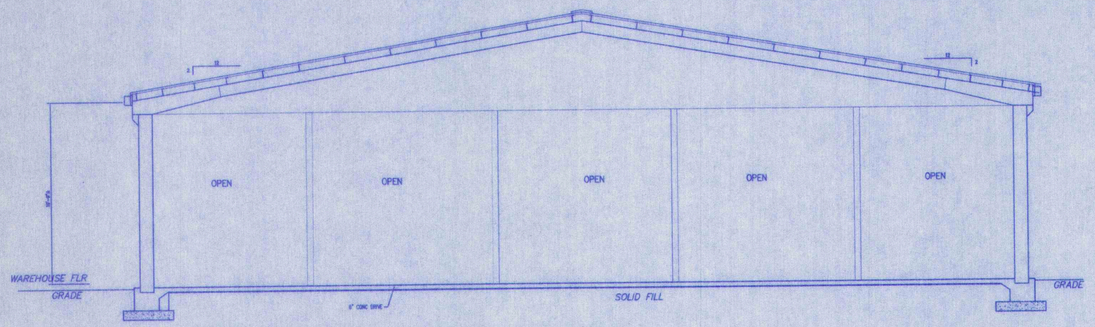
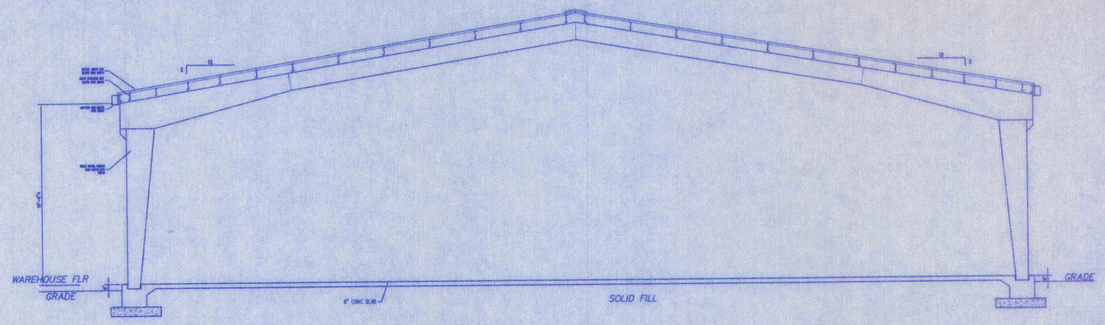
REVISIONS



A/A8 CUT SECTION THRU COVERED STORAGE AT ENDWALL
1/8"=1'-0"



B/A8 CUT SECTION THRU COVERED STORAGE AT GRID 2
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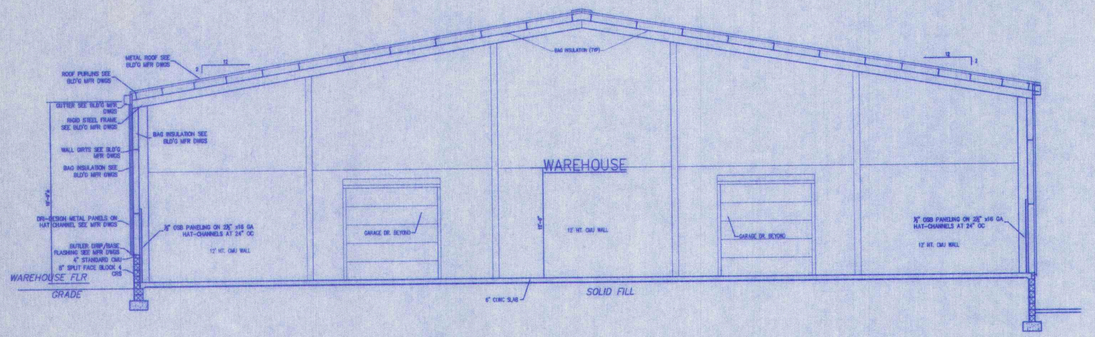

C/A8 CUT SECTION THRU WAREHOUSE
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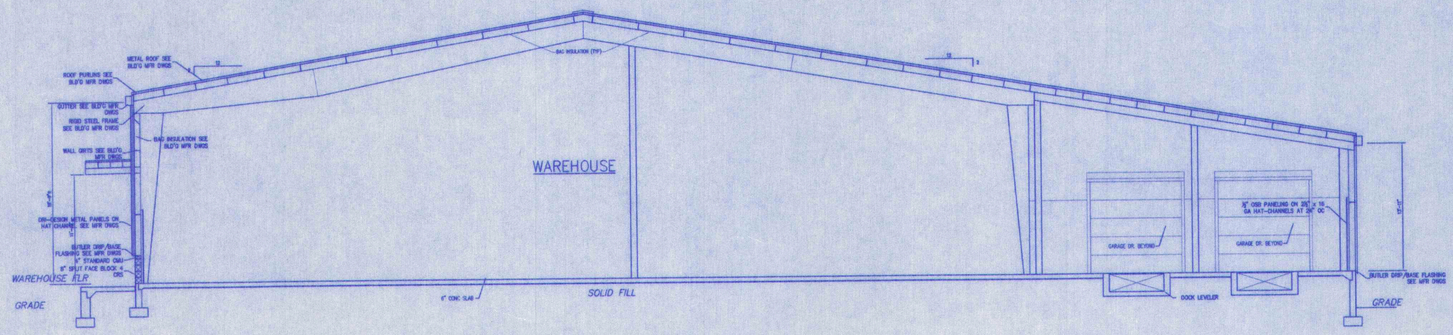

D/A8 CUT SECTION THRU WAREHOUSE/DOCK
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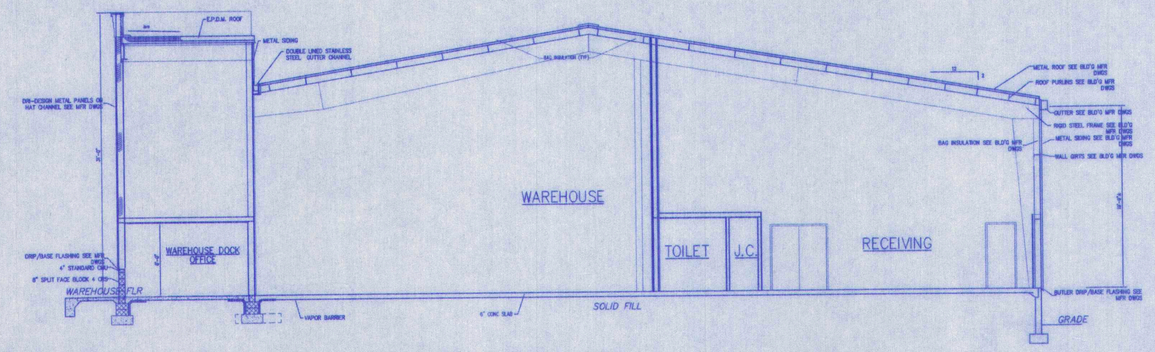

E/A8 CUT SECTION THRU ENTRANCE/WAREHOUSE/REC.
1/8"=1'-0"

PERMIT SET
3-24-05

REVISIONS

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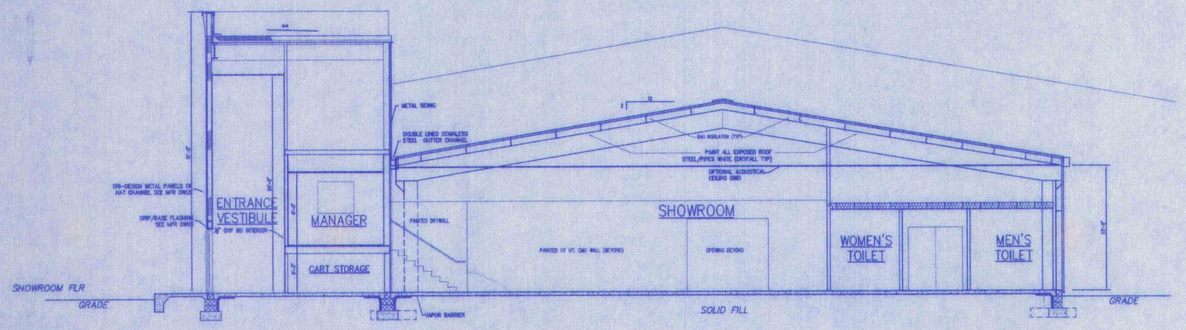
LEWES, DELAWARE 19958

CFC FARM & HOME CENTER
CARMEL CHURCH
CROSS SECTIONS
CAROLINE COUNTY VIRGINIA

DWG. NO.
CFC - HFP
3-24-05.DWG

DATE:
3-24-05

A8



A/A9 CUT SECTION THRU SHOWROOM
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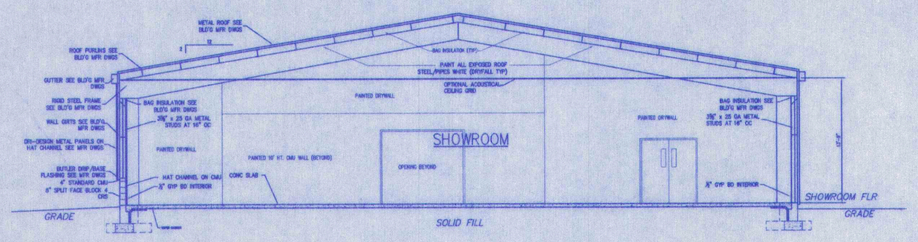

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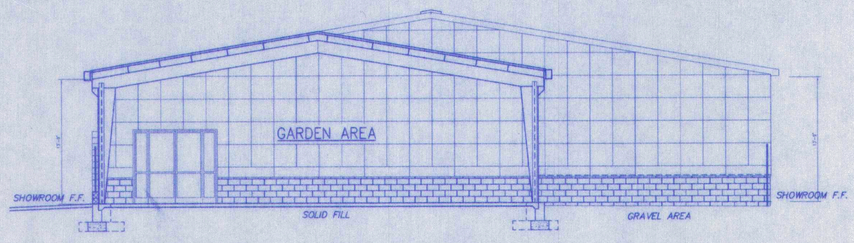

C/A9 CUT SECTION THRU GARDEN AREA
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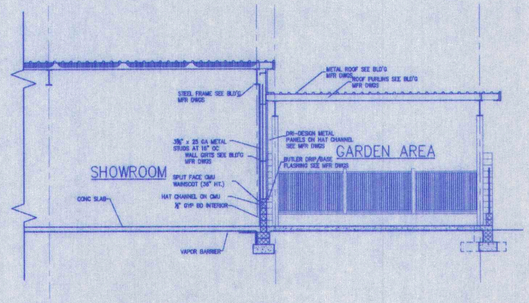

D/A9 CUT SECTION THRU SHOWROOM/GARDEN AREA
1/8"=1'-0"

PERMIT SET
3-24-05

REVISIONS

THIS DRAWING IS THE PROPERTY OF
S. E. WAGNER
ARCHITECT
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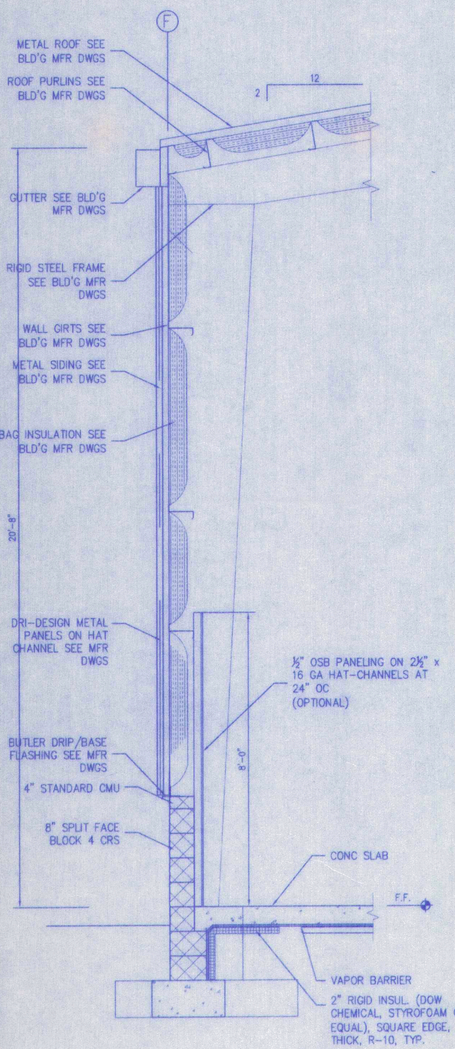
341 HWY. ONE STE. D
LEWES, DELAWARE 19958

CFC FARM & HOME CENTER
CARMEL CHURCH
CROSS SECTIONS
CAROLINE COUNTY VIRGINIA

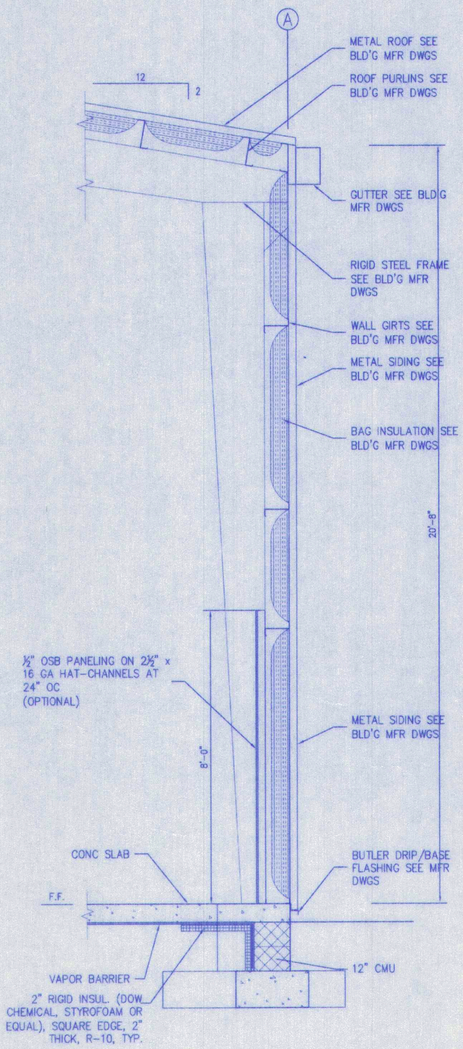
DWG. NO.
CFC - IFP
3-24-05.DWG

DATE
3-24-05

A9



1 A10 WALL SECTION
SCALE: 1/2"=1'-0"



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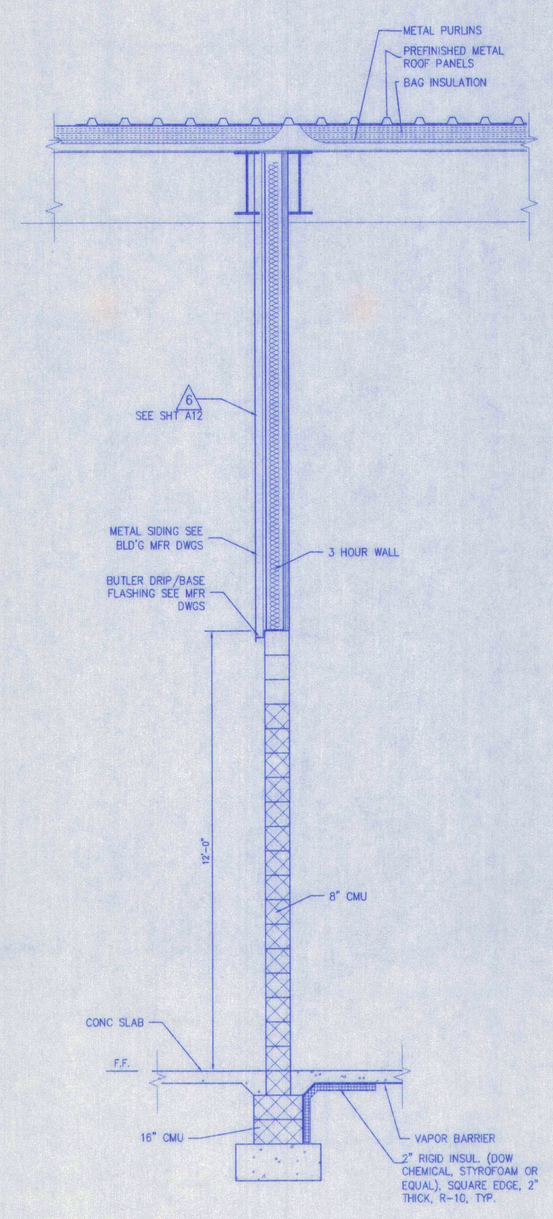

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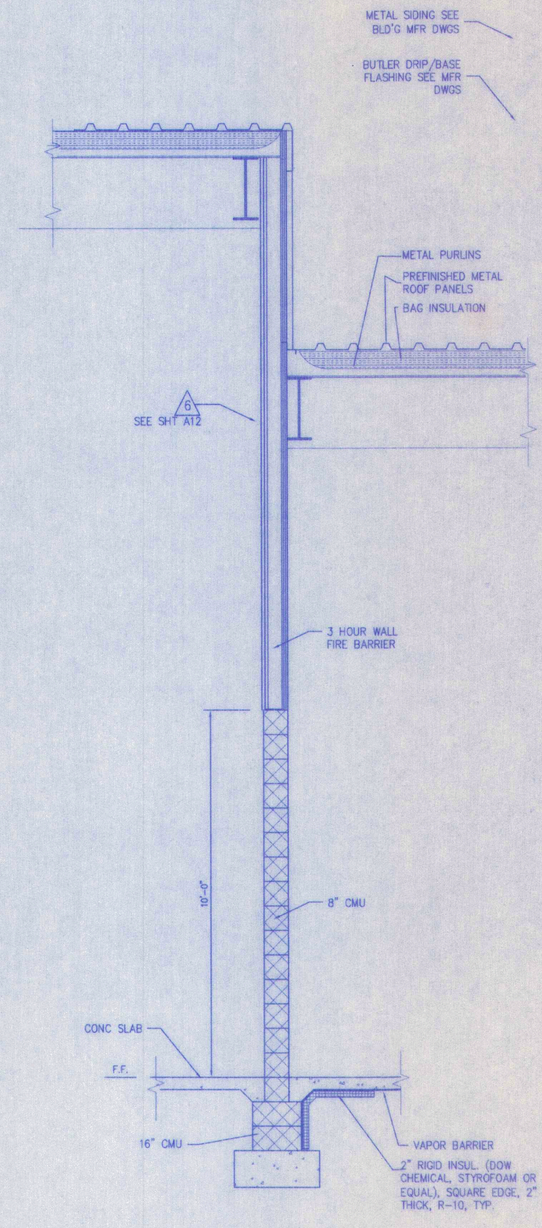

4 A10 WALL SECTION
SCALE: 1/2"=1'-0"

PERMIT SET
3-24-05

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CFC FARM & HOME CENTER
CARMEL CHURCH

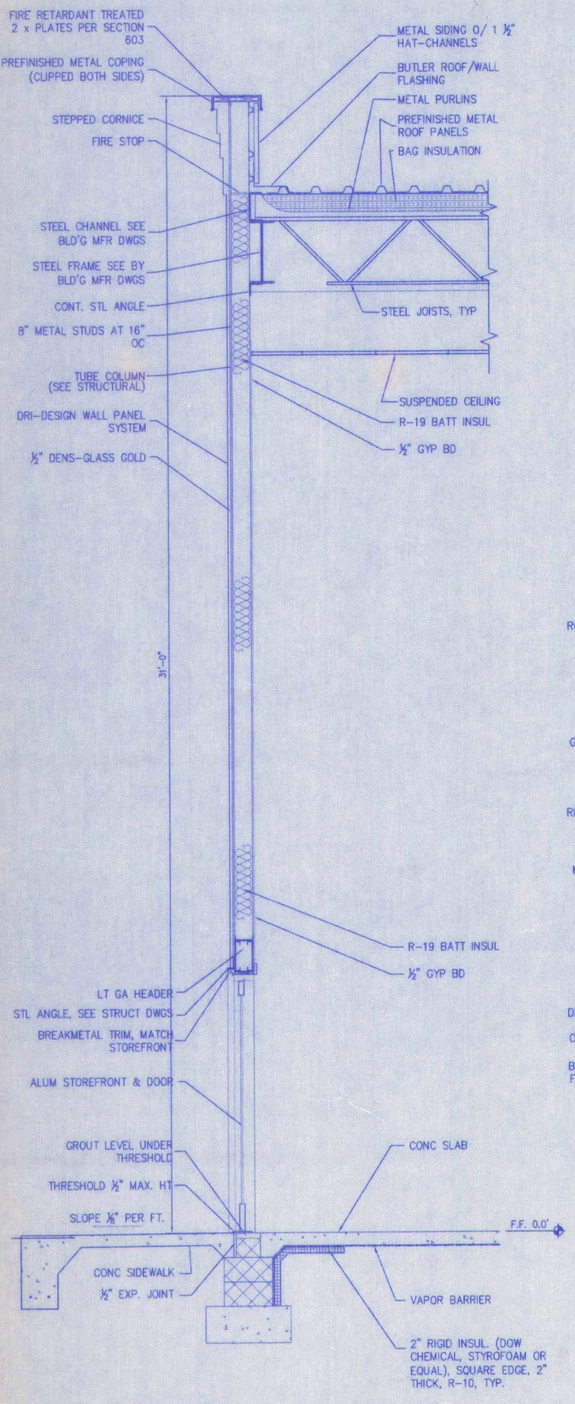
WALL SECTIONS

CAROLINE COUNTY VIRGINIA

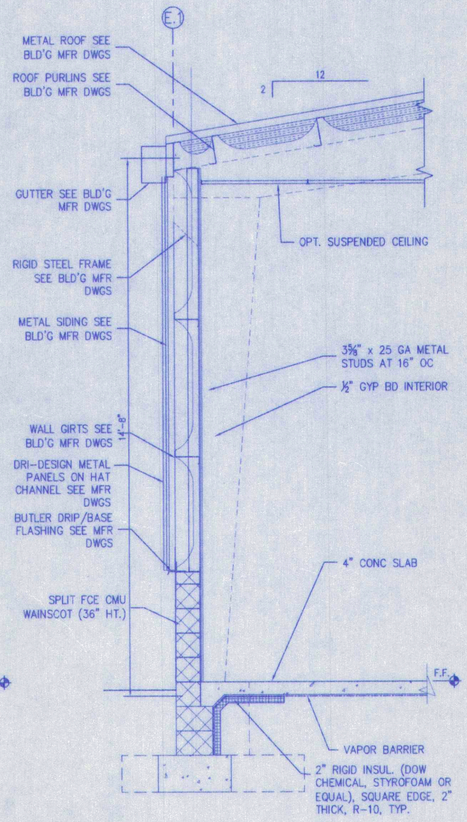
DWG. NO. CFC - IFP 3-24-05.DWG

DATE: 3-24-05

A10



1/A11 WALL SECTION
SCALE: 1/2"=1'-0"



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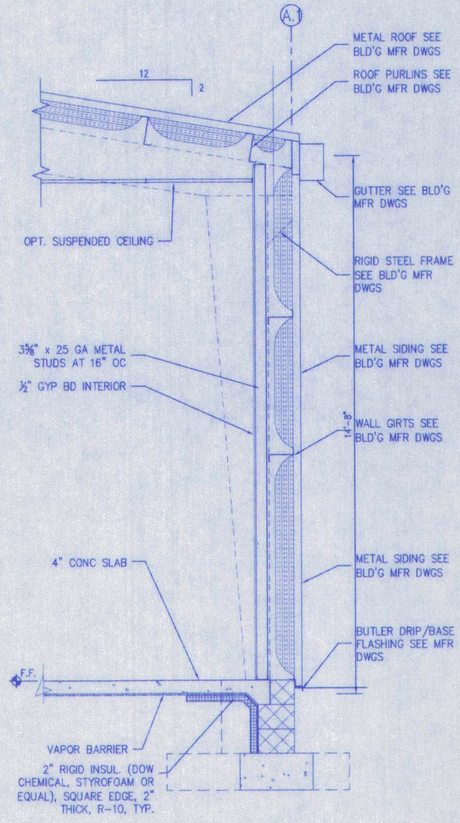

3/A11 WALL SECTION
SCALE: 1/2"=1'-0"

PERMIT SET
3-24-05

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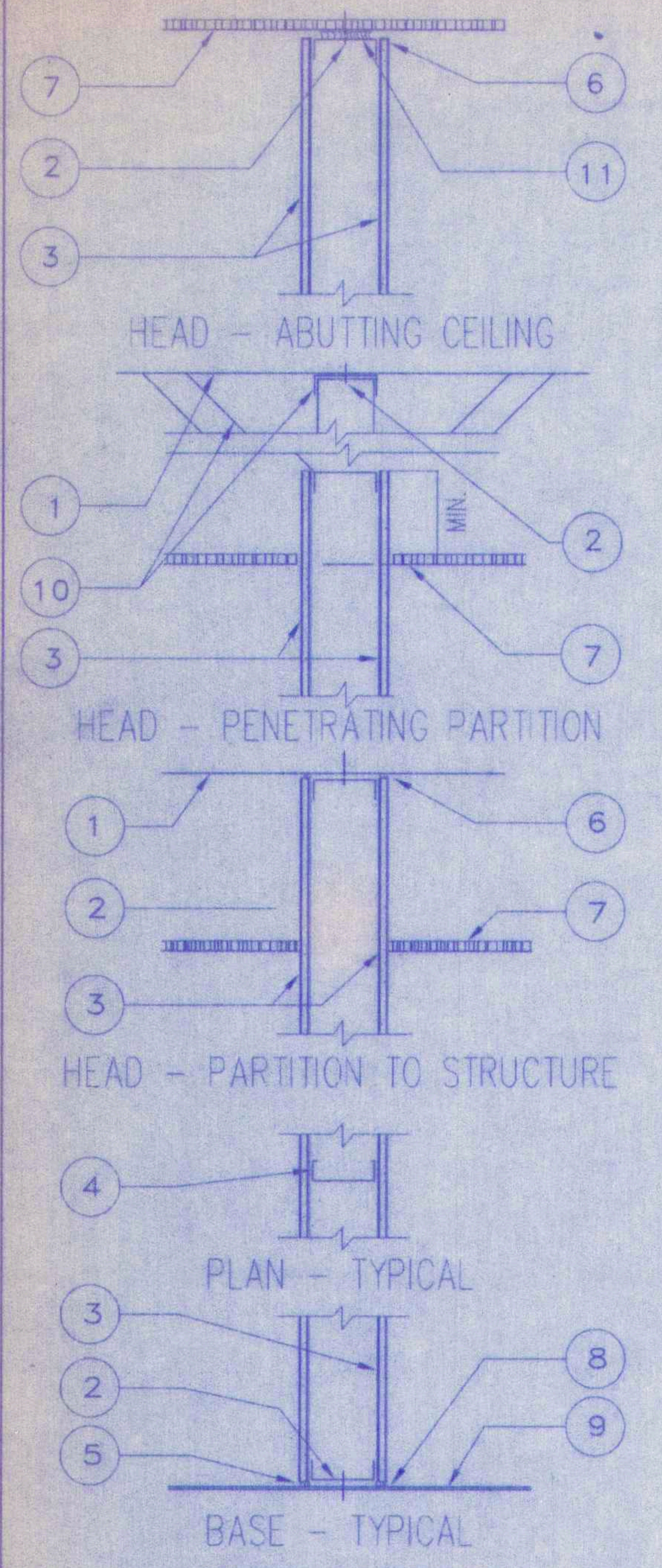
CFC FARM & HOME CENTER
CARMEL CHURCH
WALL SECTIONS
CAROLINE COUNTY VIRGINIA

DWG. NO. CFC - EFF 3-24-05.DWG
DATE: 3-24-05
A11

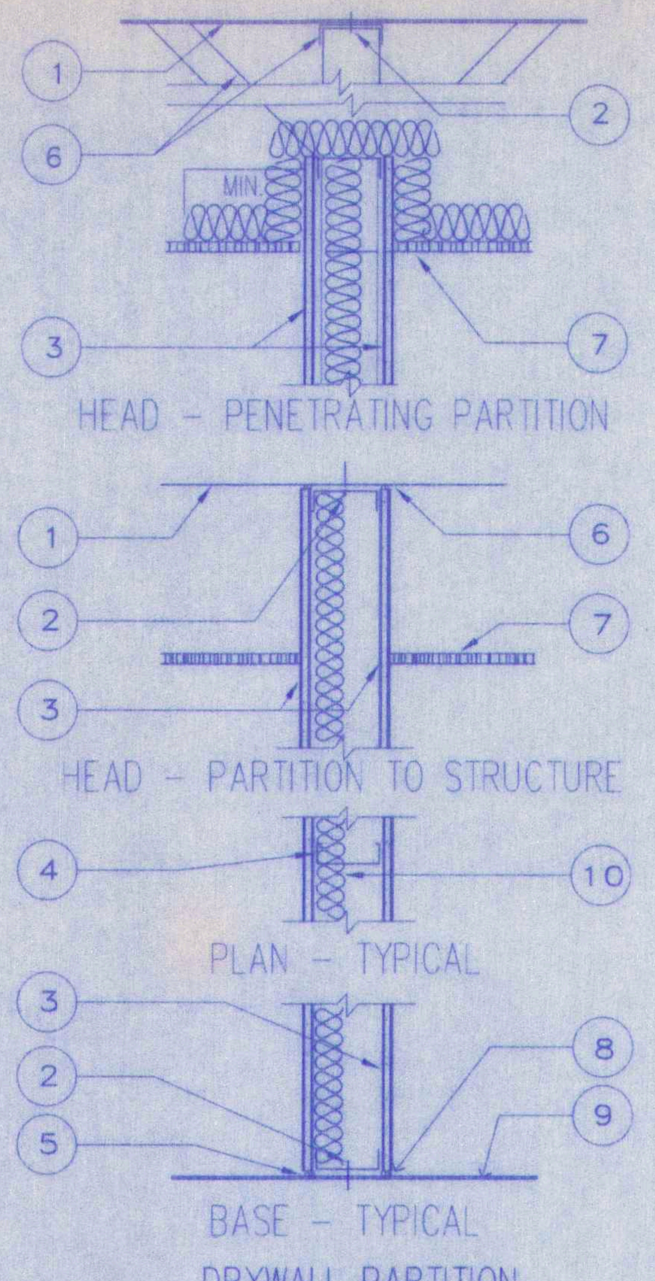


DRYWALL PARTITION

1. UNDERSIDE OF STRUCTURE DECK.
2. ANCHOR STUD TRACK TO BUILDING STRUCTURE.
3. 1/2" GYPSUM BOARD
4. 25 GA. 3 5/8" METAL STUD. 24" O.C
5. HOLD GYPSUM BOARD 1/8" MINIMUM ABOVE FLOOR BUT NOT MORE THAN 1/2". REMOVE SHIMS.
6. CASING BEAD AT ALL ABUTTING CONDITIONS WHERE JOINT WILL REMAIN VISIBLE.
7. SEE FINISH SCHEDULES FOR ANY REQUIRED CEILING AND HEIGHT.
8. CLOSE VOIDS GREATER THAN 1/4" WITH MINERAL FIREPROOFING AT RATED PARTITIONS. AT SOUND BARRIER PARTITIONS CLOSE ALL HEAD AND BASE JOINTS WITH SOUND SEAL MASTIC.
9. SEE FINISH SCHEDULES FOR BASE AND FLOOR TYPE
10. BRACE PARTITION TO STRUCTURE BY EITHER EXTENDING ALL STUDS TO DECK OR BY MEANS OF DIAGONAL BRACES ON ALTERNATE SIDES (WHERE CLEARANCE PERMITS) ON 4 FT. CENTERS MAXIMUM.
11. SOUND SEAL TAPE. CONTINUOUS UNDER PARTITION HEAD.

A1 A PARTITION TYPE

N.T.S. TYPE A - STANDARD PARTITION
N.T.S. TYPE A1 - ABUTTING TO CEILING

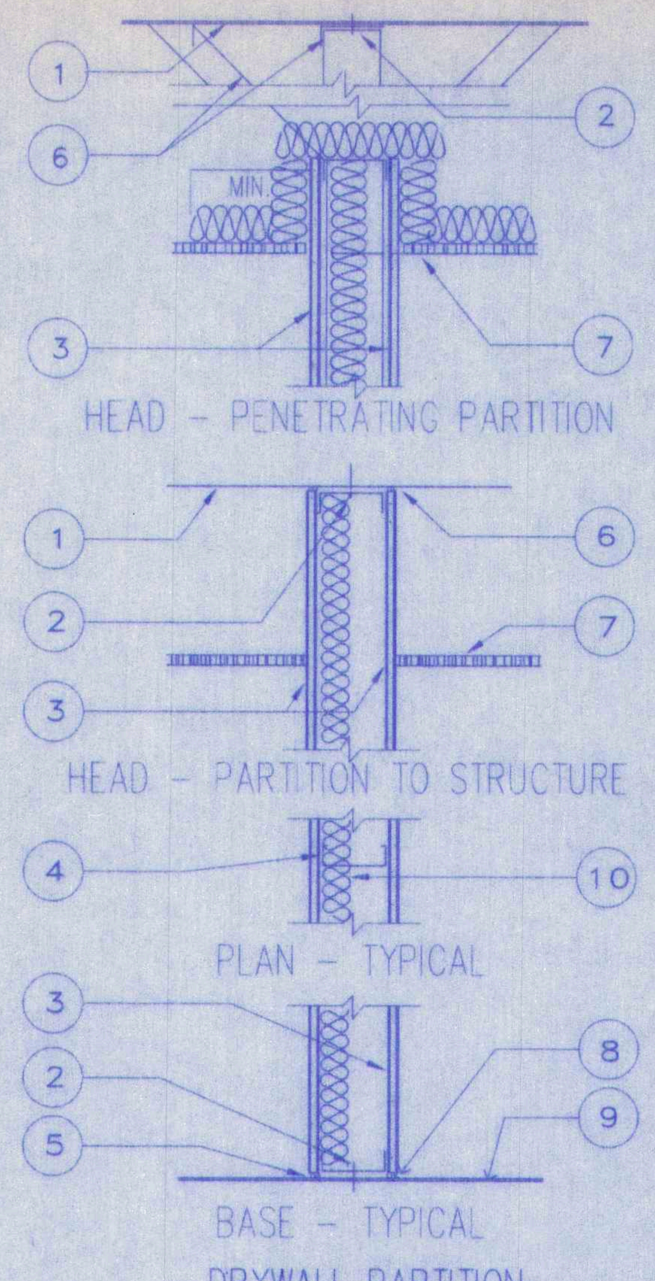


DRYWALL PARTITION
INSULATED

1. UNDERSIDE OF STRUCTURE DECK.
2. ANCHOR STUD TRACK TO BUILDING STRUCTURE.
3. 1/2" GYPSUM BOARD
4. 25 GA. 3 5/8" METAL STUD. 24" O.C
5. HOLD GYPSUM BOARD 1/8" MINIMUM ABOVE FLOOR BUT NOT MORE THAN 1/2". REMOVE SHIMS.
6. BRACE PARTITION TO STRUCTURE BY EITHER EXTENDING ALL STUDS TO DECK OR BY MEANS OF DIAGONAL BRACES ON ALTERNATE SIDES (WHERE CLEARANCE PERMITS) ON 4 FT. CENTERS MAXIMUM.
7. SEE FINISH SCHEDULES FOR ANY REQ'D CEILINGS AND HEIGHT.
8. CLOSE VOIDS GREATER THAN 1/4" WITH MINERAL FIREPROOFING AT RATED PARTITIONS. AT SOUND BARRIER PARTITIONS CLOSE ALL HEAD AND BASE JOINTS WITH SOUND SEAL MASTIC.
9. SEE FINISH SCHEDULES FOR BASE AND FLOOR TYPE
10. SOUND INSULATION. SEE SPECIFICATIONS FOR REQUIREMENTS.

B PARTITION TYPE

N.T.S.

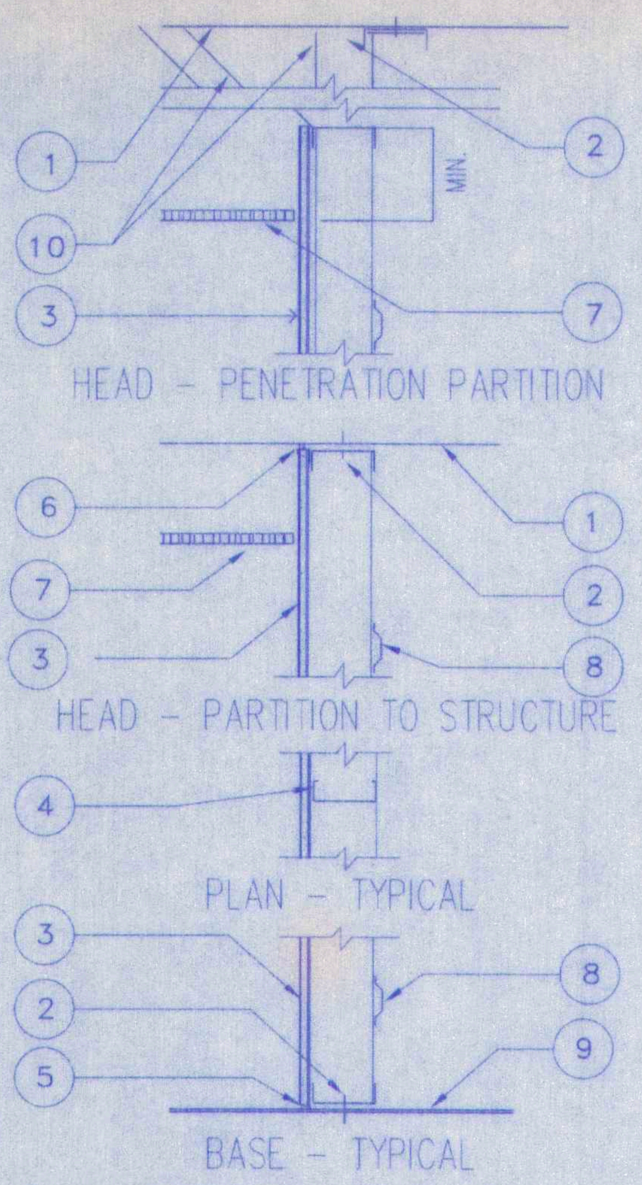


DRYWALL PARTITION
INSULATED

1. UNDERSIDE OF STRUCTURE DECK.
2. ANCHOR STUD TRACK TO BUILDING STRUCTURE.
3. AT WAREHOUSE SIDE ONLY PROVIDE 7/16" OSB. SUBSTITUTE STRUCTURAL LOAD BEARING STUD IF REQ.'D. PROVIDE 1/2" GYP. BD. 10'-6" A.F.F. AT WAREHOUSE AREA AND 1/2" GYP. BD. AT ROOM INTERIOR SIDE.
4. 20 GA. 6" METAL STUD. 16" O.C
5. HOLD GYPSUM BOARD 1/8" MINIMUM ABOVE FLOOR BUT NOT MORE THAN 1/2". REMOVE SHIMS.
6. BRACE PARTITION TO STRUCTURE BY EITHER EXTENDING ALL STUDS TO DECK OR BY MEANS OF DIAGONAL BRACES ON ALTERNATE SIDES (WHERE CLEARANCE PERMITS) ON 4 FT. CENTERS MAXIMUM.
7. SEE FINISH SCHEDULES FOR ANY REQ'D CEILINGS AND HEIGHT.
8. CLOSE VOIDS GREATER THAN 1/4" WITH MINERAL FIREPROOFING AT RATED PARTITIONS. AT SOUND BARRIER PARTITIONS CLOSE ALL HEAD AND BASE JOINTS WITH SOUND SEAL MASTIC.
9. SEE FINISH SCHEDULES FOR BASE AND FLOOR TYPE
10. SOUND INSULATION. SEE SPECIFICATIONS FOR REQUIREMENTS.

C PARTITION TYPE

N.T.S.

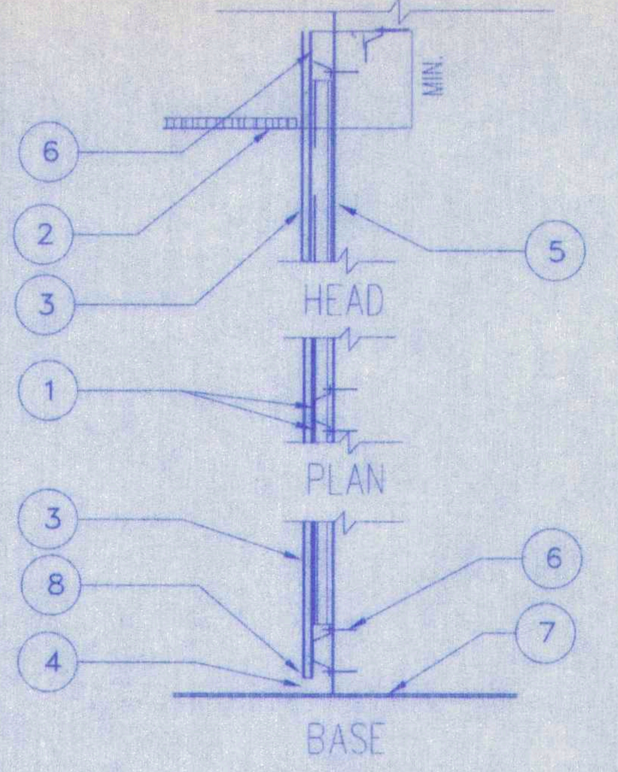


DRYWALL PARTITION

1. UNDERSIDE OF STRUCTURE DECK.
2. ANCHOR STUD TRACK TO BUILDING STRUCTURE.
3. 1/2" GYPSUM BOARD
4. 25 GA. 2 1/2" METAL STUD. 24" O.C
5. HOLD GYPSUM BOARD 1/8" MINIMUM ABOVE FLOOR BUT NOT MORE THAN 1/2". REMOVE SHIMS.
6. CASING BEAD AT ALL ABUTTING CONDITIONS WHERE JOINT WILL REMANE VISIBLE.
7. SEE FINISH SCHEDULES FOR ANY REQUIRED CEILING AND HEIGHT.
8. METAL FURRING CHANNEL, CONTINUOUS, AT 24" O.C.
9. SEE FINISH SCHEDULES FOR BASE AND FLOOR TYPE
10. BRACE PARTITION TO STRUCTURE BY EITHER EXTENDING ALL STUDS TO DECK OR BY MEANS OF DIAGONAL BRACES ON ALTERNATE SIDES (WHERE CLEARANCE PERMITS) ON 4 FT. CENTERS MAXIMUM.

D PARTITION TYPE

N.T.S. FURRING W/ MTL. STUDS

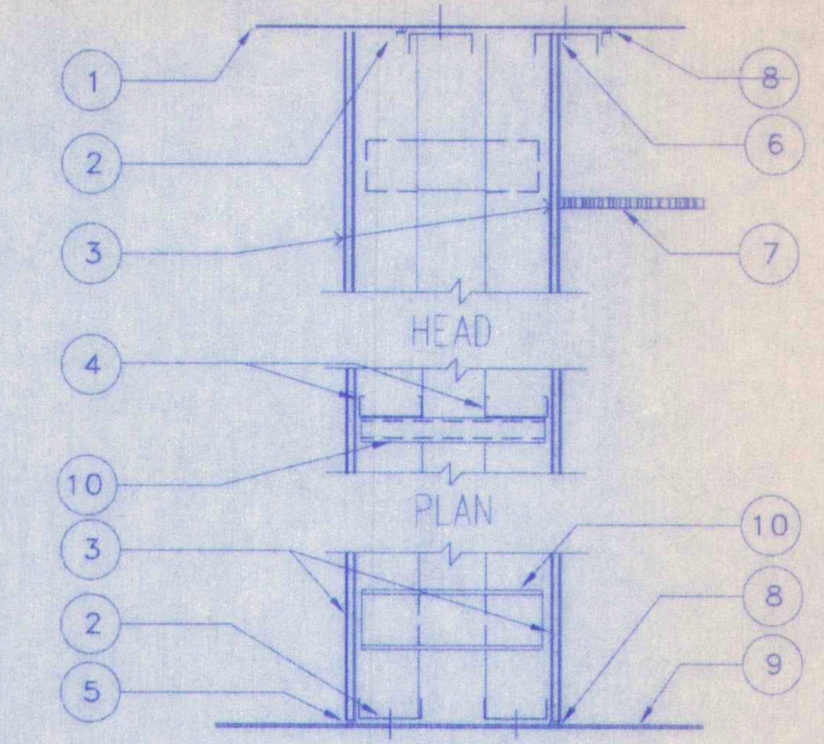


DRYWALL PARTITION

1. METAL FURRING CHANNEL. RUN HORIZONTALS CONTINUOUS AT PARTITION HEAD AND BASE, WITH CONTINUOUS VERTICAL IN BETWEEN SPACE AT 24" O.C.
2. SCHEDULED CEILING FINISH AND HEIGHT.
3. 1/2" GYPSUM BOARD
4. HOLD GYPSUM BOARD 1/8" MINIMUM ABOVE FLOOR BUT NOT MORE THAN 1/2". REMOVE SHIMS.
5. SUPPORTING CONSTRUCTION. SEE PLANS AND CODE TO PARTITION TYPES FOR DESCRIPTION.
6. SECURE METAL FURRING CHANNELS TO MASONRY BY MEANS OF SPECIAL MASONRY SCREWS, MASONRY NAILS, OR EXPANSION FASTENERS. USE SHOT-FASTENERS ONLY WHERE PRIOR APPROVAL IS GIVEN.
7. FLOOR SLAB/PARTITION BASE.
8. SEE FINISH SCHEDULES FOR BASE AND FLOOR TYPE

E PARTITION TYPE

N.T.S. DRYWALL FURRING

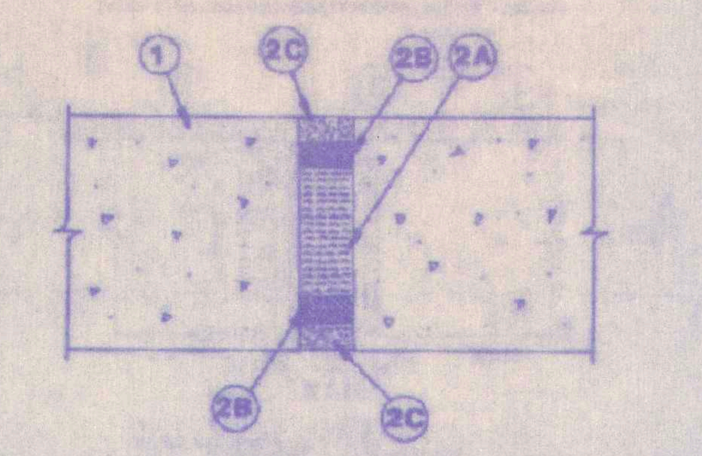


1. UNDERSIDE OF STRUCT. DECK.
2. ANCHOR STUD TRACK TO BUILDING STRUCTURE.
3. 1/2" GYPSUM BOARD
4. 25GA. 3 5/8" METAL STUD, 16"O.C.
5. HOLD GYPSUM BOARD 1/8" MINIMUM ABOVE FLOOR BUT NOT MORE THAN 1/2". REMOVE SHIMS.
6. CASING BEAD AT ALL ABUTTING CONDITIONS WHERE JOINT WILL REMAIN VISIBLE.
7. SEE FINISH SCHEDULES FOR ANY REQUIRED CEILINGS AND HEIGHT.
8. CLOSE VOIDS GREATER THAN 1/4" WITH MINERAL FIREPROOFING AT RATED PARTITIONS. AT SOUND BARRIER PARTITIONS CLOSE ALL HEAD AND BASE JOINTS WITH SOUND SEAL MASTIC.
9. SEE FINISH SCHEDULES FOR WALL COVERING, BASE AND FLOOR TYPE
10. HORIZONTAL BRIDGING AT 4'-0" MAXIMUM CENTERS. PROVIDE ALT. FRAMING WHERE REQUIRED BY OBSTRUCTING PLUMBING, ETC.

F PARTITION TYPE

N.T.S. CHASE ASSEMBLY

Design No. U900X
Assembly Rating—3 Hr.



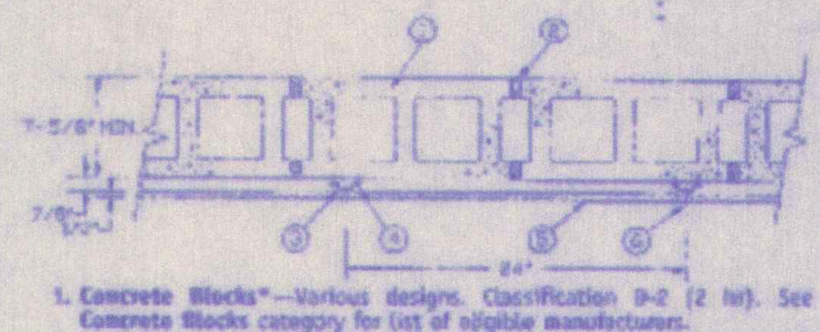
1. **Wall Assembly**—Min 4-1/2 in. thick lightweight or normal weight (100-150 pcf) concrete wall or min 7-5/8 in. thick masonry wall having a min 3 h fire resistance rating. Wall may also be constructed of any UL Classified Concrete Blocks*. Max width of joint in wall shall be 1 in. See Concrete Blocks (CAZT) category in Fire Resistance Directory for names of manufacturers.
2. **Joint Treatment System**—The joint treatment system shall consist of the following:
   A. **Packing Material**—Min 2-1/2 in. thickness of mineral wool insulation material having a min density of 4.0 pcf tightly packed into joint opening. The packing material is centered in walls mid-depth and recessed min 1 in. from each surface of wall assembly.
   B. **Joint Treatment Material***—Min 1/2 in. thickness of caulk material applied within the joint on both sides of packing material, recessed a min of 1/2 in. from each surface of wall assembly.
   Chemie Linz Ges.m.b.H.—Intumex MW.
   C. **Joint Treatment Material***—Min 1/2 in. thickness of caulk material applied within the joint on both sides of wall, flush with each surface of the wall assembly.
   Chemie Linz Ges.m.b.H.—Intumex S.

*Bearing the UL Classification Marking

G PARTITION TYPE

N.T.S. 3-HR RATED PARTITION - U900X

Design No. U914
Bearing Wall Rating—3 HR.
Nonbearing Wall Rating—3 HR.



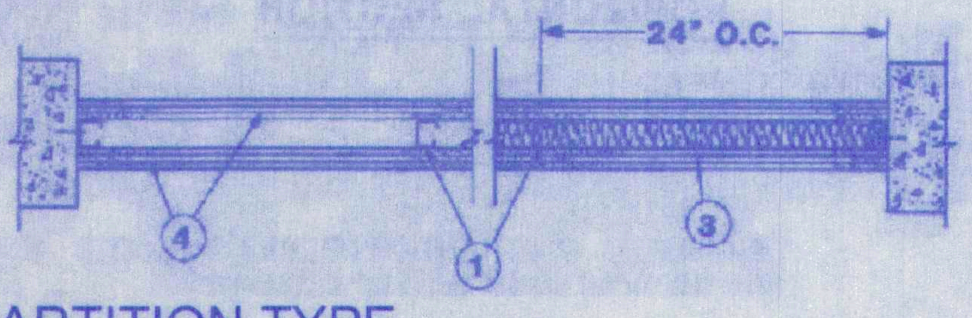
1. **Concrete Blocks***—Various designs. Classification D-2 (2 hr). See **Concrete Blocks** category for list of eligible manufacturers.
2. **Mortar**—Blocks laid in full bed of mortar, nom 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
3. **Furring Channels**—Min 0.019 in. thick (25 gauge) galv steel. 1-3/8 in. wide on top and 2-3/4 in. wide at bottom by 7/8 in. deep. Spaced 24 in. OC perpendicular to floor with a channel parallel to and approximately 3 in. above floor and 3 in. below ceiling. Clearance between vertical and horizontal channels 1/2 in.
4. **Channel Fasteners** 1-1/4 in. long masonry screws with 3/16 in. body and 5/16 in. diameter head. Fasteners spaced 24 in. O.C. with the fasteners staggered on each long leg of the furring channel.
5. **Wallboard, Gypsum***—1/2 in. thick, 4 ft wide, secured to furring channels with wallboard fasteners (Item 6). Gypsum plaster not more than 1/16 in. thick may be applied to wallboard in addition to joint treatment.
   American Gypsum Co.—Type AG-C.
   Boral Gypsum Inc.—Type BG-C.
   Canadian Gypsum Company—Types C, IP-X2.
   Continental Gypsum Company—Types CG-C, CGS-5, CGFC-C.
   G-P Gypsum Corp.—Type 5.
   James Hardie Gypsum Inc.—Type Max"C".
   Lafarge Gypsum, A Div. of Lafarge Corp.—Type LGFC-C.
   Pabco Gypsum Co.—Type PG-C.
   Republic Gypsum Co.—Type RG-C.
   Standard Gypsum Corp.—Type SG-C.
   Temple-Inland Forest Products Corp.—Type TG-C.
   United States Gypsum Co.—Types C, IP-X2.
   Yeso Panamericano SA de CV—Types C, IP-X2.
6. **Wallboard Fasteners**—1 in. long, self-drilling, self-tapping steel screws with bugle heads. Fasteners attached to each furring channel and spaced 8 in. OC at butt joints and 12 in. OC in the field of the board parallel with furring channels. Clearance between fasteners and edges of wallboard 3/4 in.
7. **Joint System**—(Not shown)—Paper tape embedded in cementitious compound over joints. Paper tape and exposed screw heads covered with two layers of compound. Edges of compound feathered out.

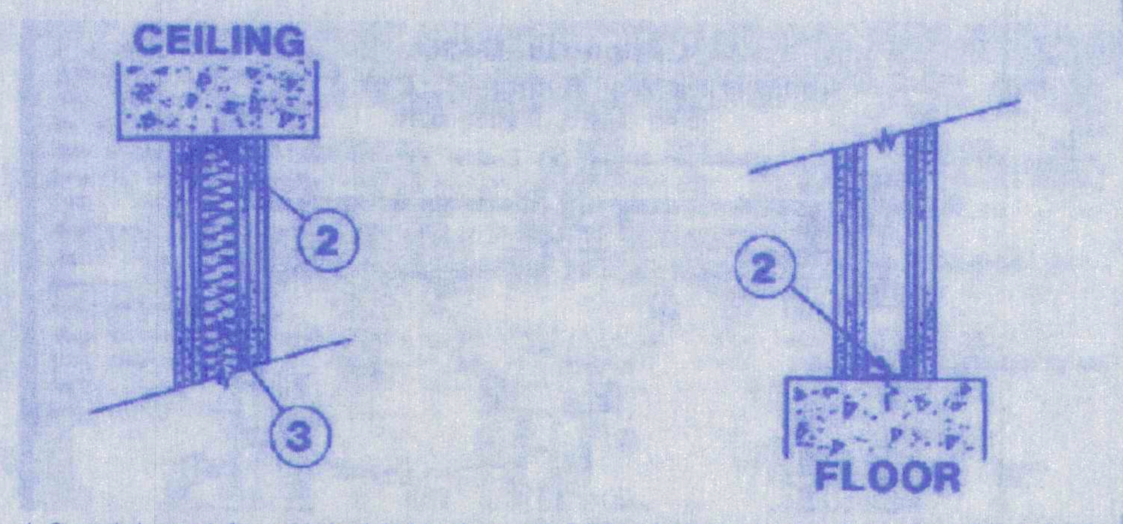
*Bearing the UL Classification Marking

J PARTITION TYPE

N.T.S. 3-HR RATED PARTITION - U914

Design No. U435
Assembly Rating—3 Hr or 4 Hr (See Item 4)
Nonbearing Wall





1. Cannel shapped, 6 in. wide by 1 1/4 in. deep, with 5 /16 in. folded back return flangw legs. Fabricated from No. 25 MSG galvanized steel. Stud spacing 18 or 24 in O.C. Studs to be cut 1 in. less than assembly height.
2. **Floor and Ceiling Runners**—Channel-shaped runners, 1-5/8 in. wide by 1-1/4 in. deep, fabricated from No. 25 MSG galvaniized steel. Attached to floor and ceiling with fasteners spaced 24 in. O.C. max.
3. **Batts and Blankets***—(optional) – Mineral wool insulation, partially or completely filling stud cavity.
   USG Interiors Inc.
   United States Gypsum Co.

For 3 Hr Rating – Three layers of wallboard to be used. Inner layers to be applied vertically with joints centered over studs. Outer layer may be applied vertically or horizontally. First layer fastened to each stud with 1 in. long, Type S, self-tapping steel screws. Second layer fastened to each stud through the first layer with 1⅝ in. long, Type S, self-tapping steel screws. Third layer fastened to each stud through the first and second layers with 2¼ in. long, Type S, self-tapping steel screws. First and second layer screws shall be locate 4 and 3 in. from top and bottom of wall, respectively, with a maximum spacing of 48 in. O.C. vertically. The third layer screws shall be located 2 in. from top and bottom of wall with a maximum spacing of 12 in. O.C. vertically. Each third layer horizontal board end shall be centered over and secured to the stud with Type S, self-tapping steel screws spaced 1/2 in. from end joint and 12 in. O.C. vertically. Third layer, also secured to the first and the second layers with 1-1/2 in. long, Type G, Self-tapping steel screws located midway between studs and 1 in. from the horizontal joint. Board end joints shall be staggered. Vertical board joints to be staggered from the joints in the adjacent layer and on opposite sides of studs.
   Canadian Gypsum Co., Ltd.—Type C.
   Celotex Corp.—Type FRP.
   Domtar Gypsum—Type 5.
   Georgia-Pacific Corp., Gypsum Div.—Type GPFS-C.
   Paboo Gypsum Co.—Type PG-C.
   United States Gypsum Co., Type C or IP-X2

For 3 hr rating—Two layers of 3/4 in. thick, 4 ft wide applied to each side of the steel studs. Inner layers to be applied vertically with joints centered over studs and staggered on opposite sides of studs. Outer layers to be applied horizontally with vertical butt joints staggered from inner layer joints or vertically with joints centered over studs and staggered on opposite sides of studs.
Inner layer secured with 1-1/4 in. long Type S self-drilling, self-tapping steel screws spaced 24 in. OC along the perimeter and in the field. Outer layer, when secured horizontally, secured with 2-1/4 in. long Type S self-drilling, self-tapping steel screws spaced 24 in. OC along the perimeter and in the field along the horizontal joints of the outer layer, 1-1/2 in. long Type G self-drilling, self-tapping steel screws to be applied midway between the studs (24 in. OC) and 1 in. from the longitudinal joint. Outer layer, when secured vertically, secured with 2-1/4 in. long Type S self-drilling, self-tapping steel screws spaced 24 in. OC along the perimeter and in the field.
   United States Gypsum Co.—Type ULTRACODE or IP-X3.
5. **Joint Tape and Compound** – Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads. Paper tape, 2 in. wide, embedded in first layer of compound over all joints.

Bearing the UL Classification Marking

H PARTITION TYPE

N.T.S. 3-HR RATED PARTITION - U435

Revisions	
DATE	DESCRIPTION

CONTRACTOR/OWNER NOTES
1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, AND DIMENSIONS PRIOR TO PERFORMING THE WORK
2. NOTIFY ARCHITECT OF ANY DISCREPANCIES AND INCONSISTENCIES IN DIMENSIONS AND PLANS PRIOR TO PERFORMING THE WORK
3. DEVIATION FROM THESE DWGS W/O PRIOR NOTIFICATION OF ARCHITECT WILL VOID CERTIFICATION AND SEAL

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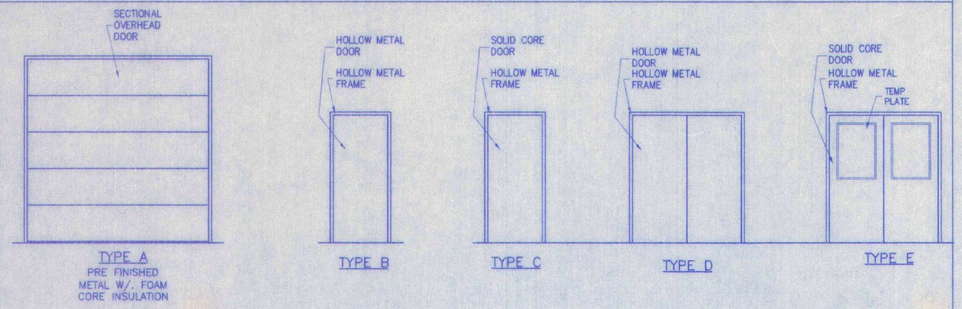
CFC FARM & HOME CENTER
CARMEL CHURCH
WALL DETAILS
CAROLINE COUNTY VIRGINIA

ISSUED FOR PERMIT
3-24-05

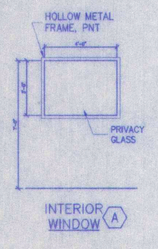
REVISION *
DRAWN BY SEW
CHECKED BY
REVISED BY

DRAWING NUMBER
A12

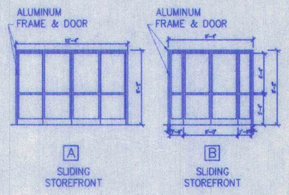
DOOR TYPES



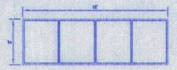
INTERIOR WINDOW SCHEDULE



STOREFRONT DOORS



STOREFRONT WINDOWS



EXTERIOR WINDOW
ALUMINUM STOREFRONT WINDOW

DOOR SCHEDULE

DOOR No.	DOOR TYPE	DOOR SIZE W.	H.	D.	GLAZING	DOOR MAT.	DOOR FINISH	FRAME MAT.	FRAME FINISH	PANIC HARDWARE	OFFICE LOCKSET	CLOSER	WEATHER STRIPPING	THRESHOLD	LABELED ASSEMBLY	HARDWARE NOTE	LOCATION/REMARKS
(1)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	WAREHOUSE/EXTERIOR
(2)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	WAREHOUSE/EXTERIOR
(3)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	RECEIVING/EXTERIOR
(4)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	RECEIVING/EXTERIOR
(5)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	RECEIVING/EXTERIOR
(6)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	RECEIVING/EXTERIOR
(7)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	WAREHOUSE/EXTERIOR
(7X)	TYPE-I	10'-4"	10'-2"	–	–	STL	GALV	STL	GALV	–	–	–	–	–	–	–	WAREHOUSE/AUTO CLOSING
(8)	TYPE-A	10'-0"	10'-0"	2"±	–	MFC	PF	STL	GALV	–	–	–	–	–	–	–	WAREHOUSE/EXTERIOR
(8X)	TYPE-I	10'-4"	10'-2"	–	–	STL	GALV	STL	GALV	–	–	–	–	–	–	–	WAREHOUSE/AUTO CLOSING
(9)	TYPE-K	3'-0"	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	–	YES	YES	YES	YES	–	–	WAREHOUSE/EXTERIOR
(10)	TYPE-B	3'-0"	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	–	YES	YES	YES	YES	–	–	RECEIVING/EXTERIOR
(11)	TYPE-B	3'-0"	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	–	YES	YES	YES	YES	–	–	WAREHOUSE/EXTERIOR
(12)	TYPE-B	3'-0"	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	–	YES	YES	YES	YES	3 HR	–	WAREHOUSE/EXTERIOR
(13)	TYPE-D	3'-0" PAIR	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	–	YES	YES	YES	YES	–	–	RECEIVING/EXTERIOR
(14)	TYPE-B	3'-0"	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	–	YES	–	–	–	–	–	WAREHOUSE/INTERIOR
(15)	TYPE-B	3'-0"	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	–	YES	–	–	–	–	–	ENTRANCE VESTIBULE/INTERIOR
(16)	TYPE-G	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	YES	–	–	–	–	–	MANAGER/INTERIOR
(17)	TYPE-C	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	YES	–	–	–	3 HR	–	RECEIVING ROOM/INTERIOR
(18)	TYPE-J	3'-0" PAIR	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	YES	–	–	–	–	–	JANITOR/INTERIOR
(19)	TYPE-G	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	YES	–	–	–	–	–	LUNCH ROOM/INTERIOR
(20)	TYPE-C	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	–	YES	–	–	–	–	TOILET ROOM/INTERIOR/PRIVACY LOCK
(21)	TYPE-G	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	YES	–	–	–	–	–	ASSISTANT MANAGER/INTERIOR
(22)	TYPE-G	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	YES	–	–	–	–	–	OFFICE/INTERIOR
(23)	TYPE-C	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	–	YES	–	–	–	–	MEN'S TOILET ROOM/INTERIOR/PRIVACY LOCK
(24)	TYPE-C	3'-0"	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	–	YES	–	–	–	–	WOMEN'S TOILET ROOM/INTERIOR/PRIVACY LOCK
(25)	TYPE-D	3'-0" PAIR	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	–	–	–	–	3 HR	–	RECEIVING ROOM/INTERIOR
(26)	TYPE-E	3'-0" PAIR	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	–	–	–	–	–	–	RECEIVING ROOM/INTERIOR
(27)	TYPE-E	3'-0" PAIR	7'-0"	1 3/4"	–	SC	PNT	HM	PNT	–	–	–	–	–	–	–	SHOWROOM/INTERIOR
(28)	TYPE-A	9'-0"	8'-0"	2"±	–	SC	PNT	HM	PNT	–	–	–	–	–	–	–	SHOWROOM/INTERIOR
(28X)	TYPE-I	9'-4"	8'-2"	–	–	STL	GALV	STL	GALV	–	–	–	–	–	–	–	SHOWROOM/AUTO CLOSING
(29)	TYPE-B	3'-0"	7'-0"	1 3/4"	–	HM	PNT	HM	PNT	YES	YES	YES	YES	YES	–	–	SHOWROOM/EXTERIOR/EMERGENCY EXIT ONLY

ABBREVIATIONS:
SC = SOLID CORE, PAINT GRADE, BIRCH VENEER, FLUSH DOOR
HM = HOLLOW METAL
ANDZ = ANODIZE
ALUM = ALUMINUM
PF = MANUFACTURER PREFINISH
PG = PLEXIGLAS
MFC = PRE FINISHED METAL W/. FOAM CORE INSULATION
STL = STEEL
GALV = GALVANIZED
PNT = PAINT

ROOM FINISH SCHEDULE

ROOM	FLOOR	BASE	WALLS	CEILING	REMARKS
WARHOUSE	SEALED CONCRETE		8' HT. PAINTED OSB	EXPOSED STEEL	–
RECEIVING	SEALED CONCRETE		8' HT. PAINTED OSB	EXPOSED STEEL	–
RECEIVING ROOM	SEALED CONCRETE	VINYL	8' HT. PAINTED OSB	EXPOSED STEEL	–
LUNCH ROOM	VCT	VINYL		PAINTED GYP BD	–
TOILET ROOM	VCT	VINYL	5' HT. FRP/GYP BD	PAINTED GYP BD	–
JANITORS CLOSET	VCT	VINYL	PAINTED GYP BD	PAINTED GYP BD	–
MEN'S TOILET ROOM	VCT	VINYL	5' HT. FRP/GYP BD	PAINTED GYP BD	–
WOMEN'S TOILET ROOM	VCT	VINYL	5' HT. FRP/GYP BD	PAINTED GYP BD	–
OFFICE	VCT	VINYL	PAINTED GYP BD	PAINTED GYP BD	–
ASSISTANT MANAGER	VCT	VINYL	PAINTED GYP BD	PAINTED GYP BD	–
SHOWROOM	VCT	VINYL	PAINTED GYP BD	PAINTED STEEL & OPT. CEILING GRID	–
ENTRANCE VESTIBULE	VCT	VINYL	PAINTED GYP BD	PAINTED STEEL & OPT. CEILING GRID	–
MANAGER	VCT	VINYL	PAINTED GYP BD	GYP BD	–

ABBREVIATIONS:
VCT VINYL COMPOSITION TILE
FRP FIBER REINF. PLASTIC PANELS

PERMIT SET
3-24-05

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REVISIONS

CFC FARM & HOME CENTER
CARMEL CHURCH
DOOR, WINDOW, & FINISH SCHEDULES
CAROLINE COUNTY VIRGINIA

DWG. NO. CFC-DFF 3-24-05.DWG
DATE: 3-24-05
A13