ANDREWS KNITTING MILLS INC.

SCHEDULE OF DRAWINGS

Sht. # 1___ Site Plan / Roof Plan

Sht. # 2___ Landscaping Plan

Sht. # 3___ Footing and Foundation Plan

Sht. # 4___ Floor Plan

Sht. # 5___ Roof Framing Plan

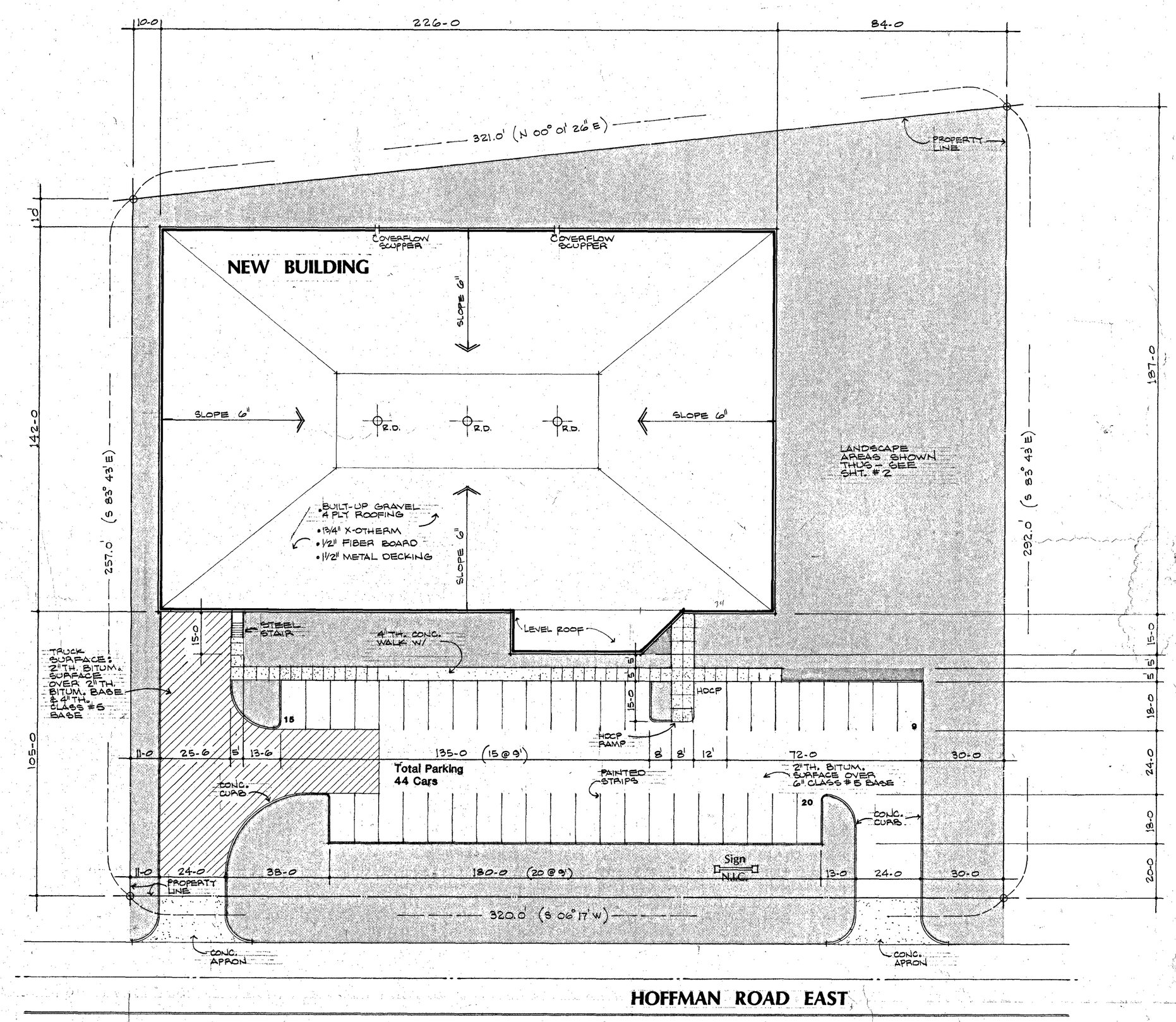
Sht. # 6___ Enlarged Entry Plan
Construction Details
Structural Notes

Sht. # 7___ Exterior Elevations

Sht. # 8___ Sections
Construction Details

Sht. # 9___ Construction Details
Frame / Door Types
Room / Door Schedules

Grading, Mechanical, and Electrical Drawings are done by others.



SITE PLAN / ROOF PLAN

1" = 20-0

8/15/85
DATE
5142
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NO.	DATE	

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of Minnesota.

DATE 8/15/85 REG. NO. 4583

SITE PLAN / ROOF PLAN

New Facility For:
ANDREWS KNITTING MILLS INC.
Vadnais Heights, Minnesota

Pope Associates Inc.
Architects • Engineers • Planners
524 Cleir Avenue • St. Paul, MN 55102 • 612/291-8894

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Structural Notes

DESIGN STRESSES

Structural Steel Fy	= 36,000 psi (A36) = 46,000 psi (A500 grade B) for structural tubing = 35,000 psi (A53 type E grade B) for pipes
Reinforcing Steel Fy	= 60,000 psi (A615 - Grade 60)
Concrete f'c	Compressive strength in 28 days = 4,000 psi air entrained for exterior concrete = 3,000 psi for footings, interior slab on grade, masonry core fill
Masonry f'm	= 1,500 psi unless noted

DESIGN LIVE LOADS

Roofs	= 40 psf + snow drifting in accordance with Minn. State Bldg. Code
Basic Windload	= 20 psf

DESIGN CODES - ALL CODES LATEST EDITION

Uniform Building Code
Minnesota State Building Code
American Institute of Steel Construction
American Concrete Institute
CRSI Manual of Standard Practice (for placing and detailing of all reinforcing)
American Welding Society Standards for Welding as modified by A.I.S.C. Spec.
Steel Joist Institute Specifications
Steel Deck Institute
National Concrete Masonry Association

COORDINATION - ARCHITECTURAL, MECHANICAL AND ELECTRICAL ITEMS

Recesses, depressions, dimensions, elevations, openings, equipment supports, and details shall be verified by reference to architectural and mechanical drawings. Mechanical or electrical openings, required but not shown, must be placed between structural members. Structural drawings shall be worked with architectural.

FOOTINGS

- Contractor to refer to soil report number 120-10978 prepared by Soil Exploration Co. and follow recommendations for subgrade preparation and construction procedures.
- Footings were designed for a maximum allowable soil bearing pressure of 3000 psf.
- All footings shall bear on natural undisturbed soil or suitable compacted fill.
- If soil at bottom of footing elevation shown is of questionable bearing value, the Architect's office shall be notified at once.
- Wall footings are continuous poured concrete with continuous reinforcing placed 3" clear of bottom and sides.

- Provide 24 dia. lap at splices and full crossing lap at corners and intersection. Unless otherwise noted, wall footings are centered under walls and column footings under columns.
- Unless noted, provide #4 x 3'-0" @ 12" dowels from footings into poured walls.
- Footing elevations shown on plan are to top of footing.

NON-BEARING WALL

Where no footing or foundation wall is shown under a masonry wall, floors under such wall shall include a thickened slab.

REINFORCED CONCRETE

- Code for reinforced concrete design and construction: ACI 318-83.
- Reinforced steel to be new billet steel (A615). All bars over #2 to be deformed.
- Were reinforcing bars are shown continuous, lap bars 30 dia. at splice, unless otherwise noted.
- Provide suitable wire spacers, chairs, etc., for supporting reinforcing steel in proper position while placing concrete. All bars shall be tied to prevent displacement during concreting. Fabricator shall submit a complete list of accessories and placing details with shop drawings.
- No horizontal construction joints shall be made in footings, walls or slabs.
- Temperature steel in 3" concrete slabs over steel joists shall be 6 x 6 - 10/10 welded wire fabric.
- Footing and thickness at slabs on ground shall be as shown on plans.
- Aluminum conduit or piping not permitted in concrete slabs or beams.
- Calcium chloride not permitted as a concrete additive.
- All vertical bars shall be dowelled to footing and project 30 dia. unless noted otherwise.

SLABS

- Unless noted otherwise, slabs on grade shall be placed in checkerboard or lane fashion. Pours not to exceed 2500 sq.ft. Distance between control joints shall not exceed 25 feet.
- Unless otherwise noted, place 6 x 6 - 10/10 W.W.M. in all concrete topping slabs.
- All slabs on grade unless noted otherwise to be reinforced with 6 x 6 - 10/10 W.W.M.

POURED CONCRETE WALLS

- Unless otherwise noted on plans or sections, reinforce poured concrete walls with #4 @ 12" o.c. horizontally, and #4 @ 12" o.c. vertically each face.
- Provide #4 x 4'-0" (2'-0" each leg) corner bars at 12" o.c. horizontal reinforcing at outside corner of wall with 3 - #4 vertical support bars.
- All openings in walls larger than 12" shall have 2 - #5 at all sides - extend 2'-0" beyond each edge of opening.
- Wall reinforcing is continuous through columns.

CONCRETE COVER ON REINFORCING

- Footings	- 3" clear bottom and sides
- Walls	- 1-1/2" clear outside face and 1" clear inside face
- Slab on grade and topping slab	- Center reinforcing in slab

PRECAST CONCRETE UNITS

-The design of all precast concrete units shall conform to A.C.I. 318-83. Prestress units maintain the live loads indicated in addition to all other dead load.
-Precast concrete walls shall be anchored to foundation walls, to all floor and roof levels, and to each other at stairs and corners. The anchorages shall provide a positive direct connection capable of resisting the design wind force but not less than 200 pounds per lineal foot of wall.
-Plank shall be prestressed hollow-core slabs, proportioned for the loads noted on the drawings.
-Upon installation, plank shall be essentially past the effects of deformation due to creep, and shall have camber not over 1/360 of the span. Such camber shall be uniform from plank to plank.
-Plank supplier shall provide standard headers if required.
-All headers at openings in precast to be furnished by precast suppliers. Place mechanical openings not shown on plans between webs in precast plant units.
-Submit complete shop drawings to architect for approval showing the erection plan, all bearing conditions, and anchorage details. Calculations certified by a professional engineer will be required for precast units and anchorages.

STRUCTURAL STEEL

- Code for structural steel design, fabrication and erection - A.I.S.C. 8th Edition.
- Beam connections shall be bolted or welded and shall conform to part 4 of the 8th Edition of the A.I.S.C. Manual of Steel Construction.
- Bolts shall be 3/4" ASTM A-325 except as otherwise shown.
- Provide web stiffeners at all beams framing over columns.
- Provide beam bearing plates at all beams bearing on masonry.
- Provide joist and deck bearing angles as required.
- All structural steel to receive one shop coat of rust inhibitive primer.
- All beam web copes must be made to a radius (1" minimum).
- All lintels bearing on masonry shall have a minimum of 8" of bearing each end.
- All expansion bolts shall be "Ex14-Bolt", "Wedg-It" or equal and shall be installed according to manufacturer's specifications.

STEEL JOISTS AND BRIDGING

- Steel joists shall be designed, detailed and furnished in accordance with A.I.S.C. and S.J.I. Standard Specifications of the latest adoption and fabricated in accordance with the latest edition of A.I.S.C. Specification.
- Field weld joists to supporting steel with a minimum of 3/16" x 1-1/2" fillet weld each side of bearing plate.
- Bridging shall be horizontal for "W" series joists and cross type bridging for "LH" series joists, conforming to S.J.I. Specifications.
- All bridging shall be positively anchored to walls and beams when beams are parallel to joists.
- Place wall and beam bridging anchorages after roof insulation is in place.
- Minimum top and bottom chord joist thickness - 1/8".
- Bridging ties to masonry at 1" wide x 1/4" bent plates, extend 3" vertical leg to center of wall and fill around with concrete.
- Joists at or nearest column centerlines shall be bolted to the beam to provide lateral stability during construction.
- Where noted on plans, extend bottom chord of joists framing into columns. Weld extensions to columns or beams after all roof dead load is in place.

- All joists and accessories to receive one shop coat of rust inhibitive primer.
- Provide ceiling extensions on joists in areas with finished ceilings.

STEEL ROOF DECK

- Steel deck shall be of the type, size, gauge and finish as indicated on plans.
- Deck shall be manufactured in accordance with current specifications of the Steel Deck Institute (SDI).
- Deck erection and anchorage shall meet the minimum requirements published by the SDI unless otherwise noted on plans.

MASONRY

- Allowable design stresses based on the latest specification of the National Concrete Masonry Association.
- Concrete masonry units to be of sizes and shapes as shown on architectural drawings.
- Corefill for vertically reinforced masonry walls shall be 3000 psi concrete with 3/8" max. size aggregate.
- All masonry walls shall have horizontal reinforcing consisting of galvanized standard weight "Dur-O-Wall" or equal. This reinforcing shall be located as follows:
  - Brick or running bond - vertically reinforced walls - every 2nd course
  - vertically unreinforced walls - every 2nd course
- All masonry to be laid up with type "S" mortar.
- Vertical control joints occur on grids unless otherwise noted.

OPENINGS

- Verify size and location of all openings with architectural and mechanical drawings.
- Openings in floor and roof not shown on structural drawings must be placed between structural members.
- The contractor shall provide sleeves through slabs, joists and beams for all plumbing, spread beam and joist reinforcing as required to provide concrete cover for reinforcing. Verify exact location with mechanical drawings. Openings in steel deck between structural members shall have a L 3x3x1/4 each side connected to structural members.

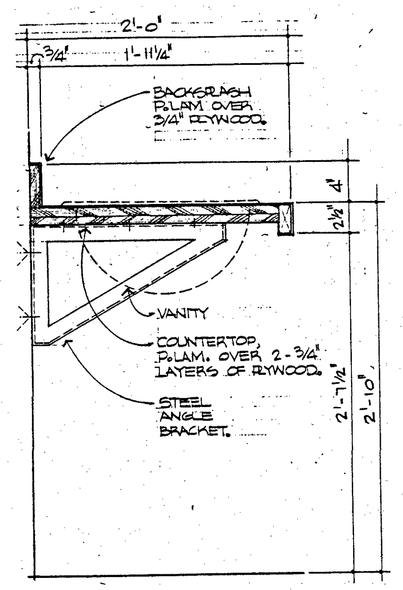
TEMPORARY BRACING

- Structural members including joists, slabs, beams, trusses, columns and walls are designed for "in place" loads. Contractor is responsible for bracing, without overstressing, all structural elements (as required at any stage of construction) until completion of this project.

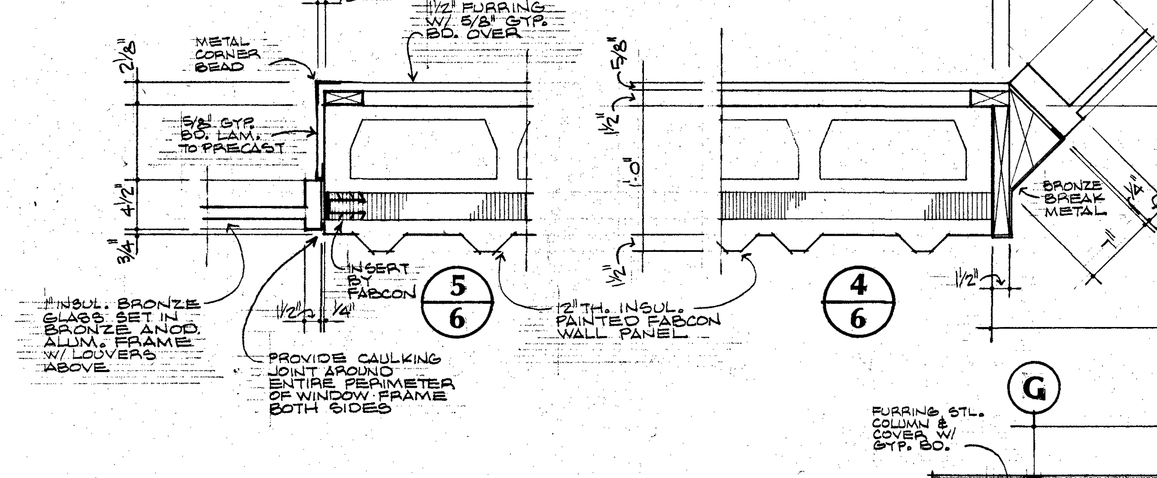
EXISTING CONDITIONS

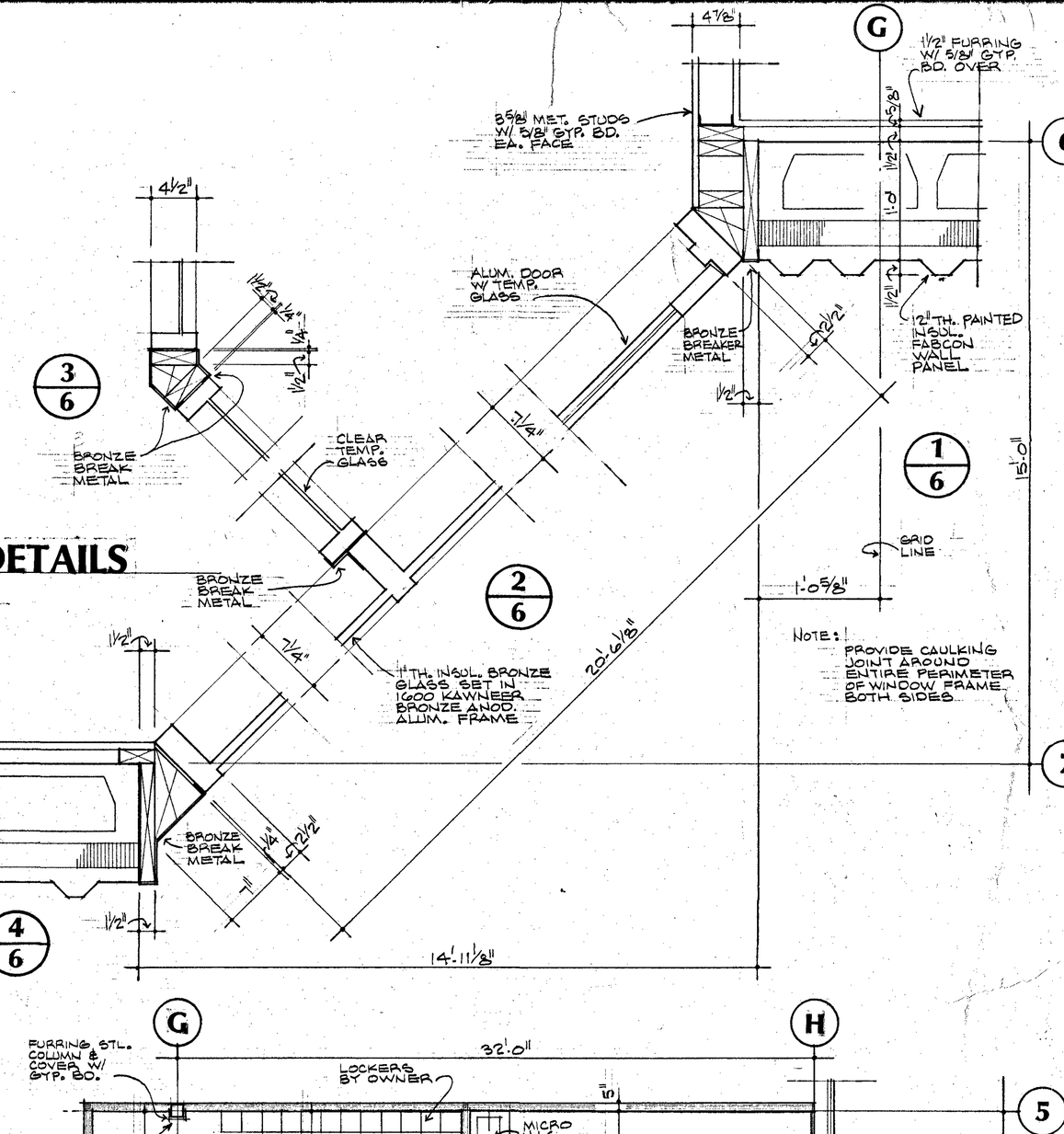
- Verify all dimensions, elevations, and detail of existing structure where they affect this construction. Notify engineer if there are any deviations from the contract documents.

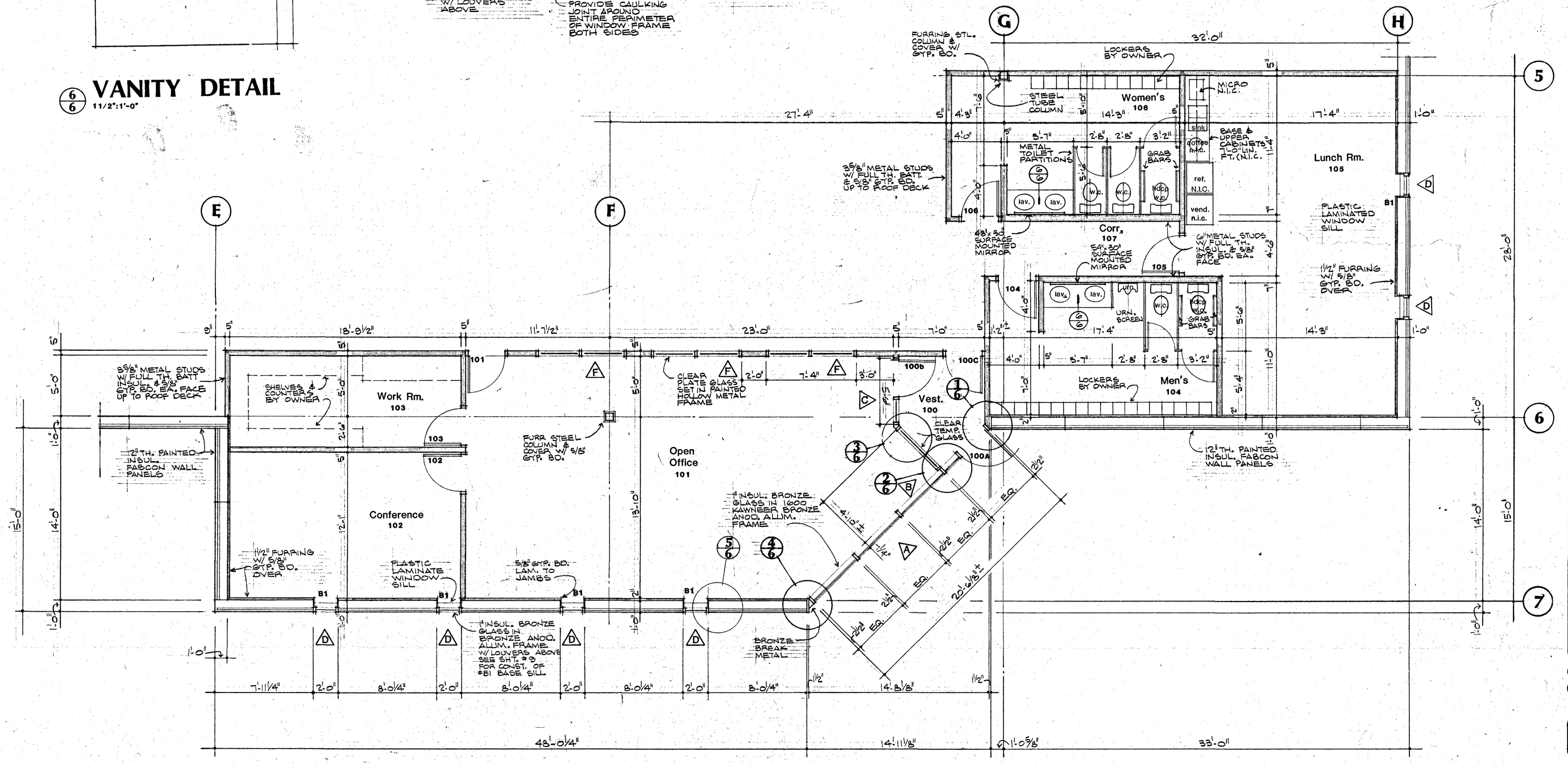
CONSTRUCTION DETAILS



6/6 VANITY DETAIL
11/2":1'-0"







ENLARGED PLAN
1/4":1'-0"

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• Enlarged Entry Plan
• Construction Details
• Structural Notes

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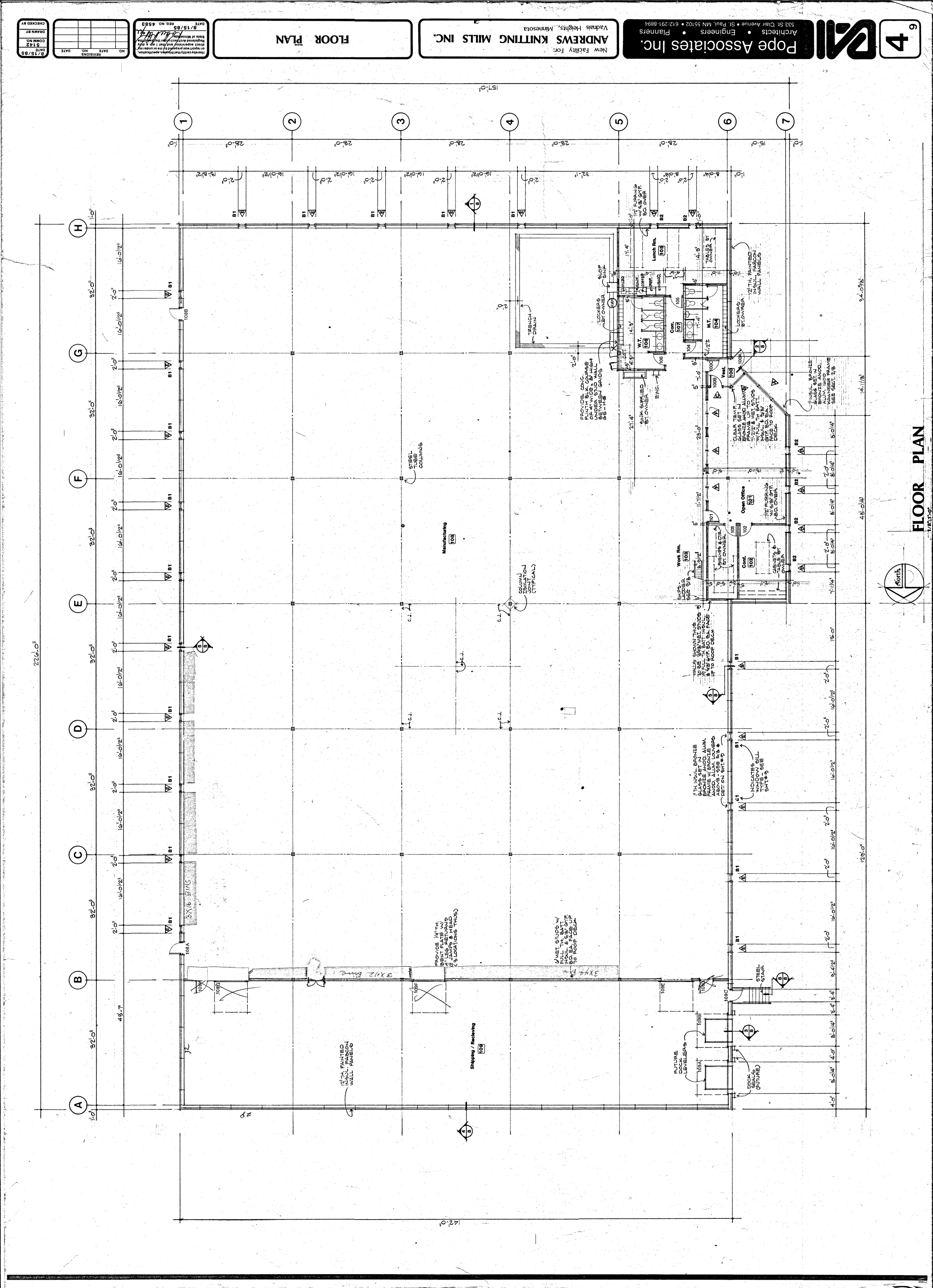

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FLOOR PLAN

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