

- B. Perform demolition in accordance with authorities having jurisdiction.
- C. Remove demolished materials from site, unless otherwise directed.
- 1. Remove from site, contaminated, vermin infested, and dangerous materials encountered and dispose of by safe means so as not to endanger health of workers or public.
- D. Remove tools and equipment upon completion of work, leave area in condition acceptable to Owner and Architect.
- E. Surfaces to remain, when cut, shall be carefully restored and refinished to provide continuous even finish to nearest intersections.
- 3.3 REPAIR
- A. Repair damage to adjacent construction caused as result of this work and demolition beyond that required.

END OF SECTION

DIVISION 03 - CONCRETE

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

- PART 1 - GENERAL
- 1.1 SUMMARY
- A. Section Includes: Provide cast-in-place concrete, and patching of existing concrete, including formwork, reinforcement, and accessories as required for complete installation.
- 1.2 ADMINISTRATIVE REQUIREMENTS
- A. Coordination: Coordinate concrete work with inserts being placed by others and where templates and direction for placement are to be provided by others.
- 1.3 SUBMITTALS
- A. Product Data: Submit literature for manufactured products.
- B. Shop Drawings: Submit detailed shop drawings of reinforcing steel for approval prior to fabrication.
- C. Show details and location of construction joints in concrete.
- D. Submit copies of delivery tickets from batching plant for each concrete load.

PART 2 - PRODUCTS

- 2.1 MATERIALS
- A. System Description: Provide cast-in-place concrete, with formwork, reinforcement, and accessories.
- B. Design Requirements: Comply with ACI 301, ACI 304, ACI 305, ACI 308, ACI 308.5, ACI 315, ACI 318, ACI 347, CRSI 88, CRSI 93, and AWS D1.4, unless modified by building code, and as specified otherwise.
- C. Regulatory Requirements: Comply with applicable code requirements for concrete construction.
- D. Forms: Unless otherwise indicated provide American Plywood Association (APA) Class 1, EKT, minimum 5/8" thick panels in accordance with U.S. Product Standard PS 1.
- E. Form Release Agent: Non-staining type that does not adversely affect concrete surface or materials tied to concrete.
- F. Reinforcing Bars: ASTM A615, Grade 60 for No. 5 and larger bars, Grade 40 for No. 4 and smaller, unless otherwise indicated.
- G. Welded Wire Fabric: ASTM A185; fiber fabric is not acceptable.
- H. Tie Wire: #16 AWG or heavier, black annealed.
- I. Cement: Portland cement, ASTM C150, Type 1, unless otherwise indicated; use one brand of cement throughout Project.
- J. Aggregates: ASTM C33, hard, durable material from established sources with proven record of successful use in producing concrete with minimum shrinkage.
- K. Water Reducing Admix: ASTM C494, Type A or D.
- L. Air Entrainment: ASTM C260, as required to produce air content of approximately 4%.
- M. Water: Potable, clean and free from deleterious material.
- N. Curing Compounds: ASTM C309, Type 1, and which will not discolor concrete or affect bonding of other finishes applied to concrete. Type which restricts loss of water to not more than 0.500 grams per sq. cm. of surface when tested per ASTM C156.
- O. Rewettable Bonding Compounds: Polyvinyl acetate, Euclid Chemical Co./Euco Yield, Larson Co./Weldcrete.
- P. Nonrewettable Bonding Compounds: Polymer modified bonding compound, Euclid Chemical Co./Euco-Bond.
- Q. Surface Hardener: Clear liquid hardener suitable for traffic; Sonneborn Division Rescrete Chemical Products, Inc./Speribond.
- R. Expansion Joints: Formed by premoistened bituminous joint material, non-extruding, conforming to ASTM D1751; Celotex Corp., Servoloid Products; W. R. Meadows, Inc.
- S. Slab-on-Grade Vapor Retarder: Provide vapor retarder system for below grade and slab-on-grade concrete, including sealing joints and protrusions through vapor retarder; Siga Industries/Siigo Wrap, Raven Industries/Vapor Block RVB 15, Fortifiber/Dura 15.
- 1. Vapor Retarder: ASTM E1748, Class A vapor retarder consisting of 15 mil polyethylene film.
- 2. Vapor Retarder Tape: 4' wide self-adhering type designed to maintain vapor retarder integrity and as recommended by vapor retarder manufacturer.
- T. Slab Curing Paper: Reinforced waterproofing paper conforming to ASTM C171, Type 1, non-staining.
- 2.2 FABRICATION
- A. Formwork, Design, erect, support, brace and align forms to support vertical and lateral loads, until concrete is cured and structures are placed.
- 1. Design formwork to be reusable, and without need for check or damage to form panels or plate surfaces, and self-aligning members.
- B. Reinforcing Steel: Manufacture, bend or cut, shapes detailed or specified by expert shop drawings, methods that will not injure concrete. Fabrication and placement in accordance with ACI 301.
- 2.3 MATERIALS
- A. Sections of concrete: Provide concrete of required quantities, slumps, aggregate sizes, and to have low shrinkage.
- 1. Slump: 3.000 psi minimum.
- B. Design mix: Provide and grading of aggregates to produce dense and uniform concrete free from rock pockets, honeycomb, and other irregularities.

END OF SECTION

PART 3 - EXECUTION

- 3.1 FORMWORK
- A. General: Construct forms complying with ACI 347, to sizes, shapes, lines and dimensions shown, and as required to obtain accurate alignment, location, grades, level and plumb work finished structures.
- 1. Provide for openings, offsets, sinkages, keyways, recesses, chamfers, anchorages, pipe boots, and inserts and other features required.
- 2. Apply coating of approved release agent prior to formwork in accordance with release agent manufacturer's instructions.
- B. Leakage: Erect forms tight to prevent leakage of mortar; after erection seal cracks, holes, ribs, gaps and apertures in concrete forms so they will withstand pressure and will remain tight.
- C. Removal: Design and assemble forms for easy removal without hammering or prying against concrete surfaces.
- D. Corners: Form intersecting planes to provide true, clean-cut corners, with edge grain of plywood not exposed to form for concrete.
- E. Removing Forms: Prying against face of concrete is not allowed; use wooden wedges.
- 3.2 VAPOR RETARDER
- A. Vapor Retarder: Place, protect, and repair vapor retarder according to ASTM E1843 and manufacturer's written instructions. Seal penetrators, joints, penetrations, and tears in vapor retarder.
- 3.3 REINFORCING
- A. Secure reinforcing steel in place and inspect accuracy before doubling up or closing in forms. Securely tie all intersections and supports with wire, and in such a manner as to preclude displacement during pouring of concrete.
- B. Placing Tolerances: shall be in conformance with ACI 301.
- C. Splices: Provide sufficient lap to transfer the stress between bars by bend and shear. Stagger splices of adjacent bars where possible. Do not make laps of reinforcement at point of maximum stress.
- 3.4 CONCRETE INSTALLATION
- A. Construction Joints: Location of construction joints shall be as approved by Architect. Locate joints so as not to impair strength of structure.
- B. Clean and roughen horizontal and vertical construction joints, exposing clean aggregate solidly embedded in mortar matrix.
- C. Exposed reinforcing continuously through construction joints.
- D. Concrete: Ready-mixed concrete mixed and transported in accordance with ASTM C841 Specifications for Ready-Mixed Concrete.
- E. Concrete Workmanship: Conform to applicable code requirements for reinforced concrete, and ACI 318 for construction practices and workmanship.
- F. Hot Weather Placement: Conform with ACI 305 to reduce concrete temperature and water evaporation by proper attention to ingredients, production methods, handling, placing, protection and curing.
- G. Cold Weather Placement: Conform to ACI 306 to protect concrete work from physical damage or reduced strength which could be caused by frost, freezing, and low temperatures.
- H. Preparation: Secure reinforcement and other work to be embedded in concrete in position before casting. Accurately set anchor bolts to line and grade and securely fasten in position so they are not displaced while concrete is being poured.
- I. Concrete Installation: Carry on concrete, once started, as a continuous operation until section of acceptable size and shape is completed.
- J. Take care not to displace reinforcing, inserts, anchor bolts, welding plates, or any other item to be embedded in concrete.
- K. Thoroughly compact concrete by puddling with suitable tools during placing. Thoroughly work around reinforcement, around embedded fixtures, and into corners of forms.
- L. Vibrate concrete to maintain maximum density without segregation of aggregates; do not use vibrator to spread concrete.
- M. Bond new concrete to existing concrete by thoroughly cleaning old work and applying on specified or other approved concrete bonding agent evenly to the interfacing surface in accordance with manufacturer's instructions.
- N. Monolithic Slab Finishes: Comply with ACI 301, but not less than the following
- O. Float Finish: Apply float finish to monolithic slab surfaces that are recessed to receive bed set finishes.
- P. Steel Trowel Finish: Apply steel trowel finish, minimum 3 passes, to monolithic slab surfaces that are exposed to view, are recessed, and hardener treatment, and as required for this floor finish.
- Q. Flatness requirements: Overall FF 40, Local FF 25.
- R. Check and level surface to be within 1/4" in 10' and 1/8" in 10' feet when tested with a straight edge. Slip test shall be at least three times different angles.
- S. "Bridges" greater than 1/4" in 10' feet shall be filled, protruding shims and metal ties removed, and concrete patched and finished.
- T. Concrete on all exposed floors shall do not meet specified tolerances and self-leveling repair acceptable to Construction Project Manager.
- REPAIR OF SURFACES
- A. Repair exposed concrete surfaces, where possible, that contain defects which adversely affect appearance of finish or structural capabilities of concrete.
- B. Match adjacent concrete in form, texture and color and strength.
- C. Remove and replace concrete having defective surfaces if defects cannot be repaired to satisfaction of Architect.
- D. Surface Defects: Color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets and holes left by tie rods and bolts, fins and other deteriorations that cannot be removed by cleaning.
- 3.5 CURING AND PROTECTION
- A. Protect concrete during and after curing from damage during subsequent building construction operations.
- B. Seal surface of slabs against moisture loss immediately upon completion of finishing operation by application of a waterproof curing paper with edges taped and sealed with tape, and paper weighted down.

SECTION 03 35 50 - DIAMOND POLISHING CONCRETE FLOORING

- PART 1 - GENERAL
- 1.1 SUMMARY
- A. Section Includes: Provide diamond polished concrete flooring using manufactured system including preparation of concrete, curing, densifying, grinding, and sealing/enhancing, as required for complete finished installation.
- 1. Completely remove existing tile, resilient floor finishes, carpet, coatings, and other finishes, underlayment, and adhesives as approved.
- 1.2 REFERENCES
- A. Terrazzo Technical Data, National Terrazzo and Mosaic Association, Inc. (NTMA).
- 1.3 ADMINISTRATIVE REQUIREMENTS
- A. Pre-Installation Meeting: Convene not less than one week prior to commencing pouring new concrete slabs or patching of existing concrete slabs at areas indicated to have a polished concrete floor finish.
- 1. Require attendance of those directly affecting work of this Section including those related to concrete materials, concrete forming and preparation, concrete pouring and finishing, concrete patching, concrete preparation for polishing, and polished concrete flooring.
- 2. Review concrete installation, patching, and finishing procedures and coordination required with related work and polishing requirements.
- 1.4 SUBMITTALS
- A. Product Data: Furnish manufacturer's literature for each type of material involved in polished concrete including methods for grinding and polishing.
- B. Samples: Furnish sample panels of polished concrete.
- C. Maintenance Instructions: Provide written instructions for recommended periodic maintenance.
- 1.5 QUALITY ASSURANCE
- A. Applicators: Firms with not less than ten years successful experience polishing concrete or terrazzo floor surfaces similar to that required for Project.
- B. Mock-Up: Erect minimum 100 square feet of diamond polished existing concrete flooring at location as approved. Approved mock-up may be incorporated into Project.
- PART 2 - PRODUCTS
- 2.1 SYSTEM MANUFACTURERS
- A. Prosoco/Consolidack L.S., Metzger McGuire/RS 65 Polyrusa, Hi-Tech Systems/HT-PE65, Questmark Flooring/3380 Grout Coating, Hi-Tech Systems/TX3.
- B. Ardex/PC-50, Ardex/Ardiseal Rapid Plus, Ardex/PC Finish.
- C. L & M Construction Chemicals/FGS Hardener Plus, L & M Construction Chemicals/Joint Tile 750, L & M Construction Chemicals/Petrorex.
- D. Ardex/PC-T, Ardex/PC-10, Ardex/EP 2000, Ardex/CP, Ardex SD-M, Ardex/Arifix, Ardex/PC Finish, Ardex/Ardiseal Rapid Plus.
- 2.2 MATERIALS
- A. System Description: Provide polished concrete flooring including preparation of concrete substrate, curing, densifying, grinding, polishing and sealing/enhancing.
- B. Regulatory Requirements, VOC Emissions: Comply with applicable limitations for volatile organic compound (VOC) emissions for integral color concrete materials.
- C. Accessibility Regulatory Requirements: Provide for accessibility for persons with disabilities in accordance with state and federal regulations for slip resistance.
- 1. Slip Resistance: Provide non-slip finish with minimum wet and dry value coefficient of friction of 0.60 when tested in accordance with ASTM C1028 or comparable test indicating compliance.
- D. Polished Concrete Flooring System: Provide system specified providing polished concrete floor to match Architect samples.
- E. Concrete Preparation Materials: Provide materials for concrete repairs compatible with substrate and manufacturer's polishing system, including following:
- 1. Concrete Patching Material.
- 2. Concrete Crack and Joint Filler: Fix cracks as small as 1/64" with product recommended by polished concrete materials manufacturer; color to match concrete floor.
- 3. Pin Hole and Micro-Topping.
- F. Leveling Material: Provide leveling slab surface variation exceeds 1/4" in 10'-0", apply topping materials applicable to substrate and to polished concrete finishing materials.
- G. Penetrating Hardener/Densifier: Compatible with substrate and manufacturer's polishing system.
- H. Cleaning Compounds: As recommended by NTMA and manufacturer for terrazzo use.
- 1. Cleaner: Free from crystallizing salts and water soluble alkaline salts, biodegradable and phosphate free, pH factor between 7 and 10.
- I. Joint Filler: Color to be matched as closely as possible using a Sherwin Williams color chart. Manufacturer to produce product to custom match color selection.
- J. Grout Coat: If required, as recommended by manufacturer, compatible with substrate and manufacturer's polishing system.
- K. Oil Repellent Sealer (If Applicable or Required by Owner): Ready to use, silane, siloxane and fluoropolymer's blended water based solution sealer, quick drying, low-odor, oil and water repellent, VOC compliant and compatible with chemically hardened floors.
- PART 3 - EXECUTION
- 3.1 EXAMINATION
- A. Ensure surfaces are clean and well cured.
- B. Do not commence work until surface conditions are within tolerances required for proper finishing.
- 1. Start of work indicates acceptance of conditions.
- 3.2 PREPARATION
- A. Clean concrete slab free from foreign matter and prepare concrete for polishing in accordance with system manufacturer recommendations. Acid etching and sweeping compounds are not permitted.
- B. Patch and repair existing concrete to provide substrate suitable for polished finish. Fill cuts and control joints to be flush with concrete surface; comply with material manufacturer recommendations and instructions for preparation and installation of joint filler.
- C. Apply grout coat in accordance with manufacturer recommendations.
- D. Where existing concrete slab surface variation exceeds 1/4" in 10'-0" apply topping materials in accordance with manufacturer recommendations and application instructions.
- 3.3 INSTALLATION
- A. Produce polished concrete finish surface in accordance with polished concrete flooring material manufacturer recommendations and instructions and as required to match approved samples and mock-up.
- 1. Grinding and Polishing: Follow manufacturer recommendations for finishing including grinding and polishing.
- B. Equipment: Use equipment recommended by system manufacturer and as required to achieve finish matching approved samples and mock-up.
- C. Diamond Finish: Follow NTMA recommendations for diamond finishing including grinding of perimeters and edges.
- 1. Burnishing: Progressively grind with Questmark Diamond Pads or HT/C/Twister Diamond Pads diamond grit burnishers of sizes 80, 100, 200, 400, 800, 1500, and 3000 as required to achieve approved polish and gloss.
- 2. Hardener/Densifier: Apply in accordance with manufacturer recommendations during burnishing operations.
- 3. Sealing/Enhancing: Apply sealer/enhancer in accordance with manufacturer recommendations and application instructions.
- D. Finish: Standard High gloss (HG-1), 1500 grit; concrete surfaces shall be as uniform in appearance as possible. Level of sheen of between 41 and 55 based on ASTM E430 and matching approved mock-up.
- 1. Aggregate Exposure: Salt and pepper aggregate exposure.
- 3.4 CLEANING
- A. Comply with system manufacturer recommendations.
- B. Use clean water and stiff bristle fiber brushes to clean polished concrete flooring.
- C. Do not use wire brushes, acid type cleaning agents, cleaning compounds with caustic or harsh fillers, or other materials or methods that could damage polished concrete.
- 3.5 PROTECTION
- A. Comply with system manufacturer recommendations. Keep surface dry for minimum 48 hours after application.
- B. Do not permit traffic on polished concrete floors for at least 72 hours.
- C. Protect finished floor until Substantial Completion.
- D. Repair or replace flooring system damaged prior to Substantial Completion.

END OF SECTION

SECTION 03 54 00 - INTERIOR TOPPING

- PART 1 - GENERAL
- 1.1 SUMMARY
- A. Section Includes: Provide pour-in-place topping intended as a finished traffic surface suitable for interior flooring installations with accessories as required for complete installation. Topping to be substrate or proper bonding on interior floor topping.
- 1.2 SUBMITTALS
- A. Product Data: Submit manufacturer's literature.
- B. Shop Drawings: Submit shop drawings for items of work not clearly indicated or detail in manufacturer's product data.
- C. Test Reports: Submit test results; not less than one test per 1000 square feet and not less than one test per floor.
- 1.3 QUALITY ASSURANCE
- A. Qualification of installers: Installation shall be by approved applicator using approved mixing/placement equipment.
- 1.4 DELIVERY, STORAGE, AND HANDLING
- A. Deliver materials in original unopened packages, protected from exposure to elements; remove damaged or deteriorated materials from premises.
- 1.5 SITE CONDITIONS
- A. Before, during and after installation, building interior shall be enclosed and maintained at temperature above 50 degrees F until structure and subfloor temperatures are stabilized.
- B. Provide continuous heat and adequate ventilation to rapidly remove moisture until underlayment is dry; provide mechanical ventilation if necessary.
- PART 2 - PRODUCTS
- 2.1 SYSTEMS MANUFACTURERS
- A. Ardex, Inc./SD-T.
- B. Substitutions: Refer to Section 01 25 00.
- 2.2 MATERIALS
- A. System Description: Provide poured cementitious type floor topping intended as a finished traffic surface.
- B. Performance Criteria: Compressive strength minimum 6000 psi at 28 days, ASTM C190.
- C. Interior Topping: Ardex/SD-T pourable cementitious, high-strength, fast-setting, non-shrink, self-leveling interior topping.
- 1. Primer: Ardex/EP 2000 Epoxy Primer.
- D. Existing Slab Moisture Control: Ardex/MC moisture control system.
- E. Aggregates: Washed mason, mortar or plaster sand, and other clean nondeleterious aggregates as recommended by underlayment manufacturer as required for indicated thickness of underlayment.
- F. Water: Clean and free from impurities and substances deleterious to underlayment.
- G. Sealer: As recommended by topping manufacturer; both primer and sealer are required.
- PART 3 - EXECUTION
- 3.1 PREPARATION
- A. Inspect subfloor for structurally sound condition required for type of interior topping and conditions under which work will be performed.
- 1. Start of work indicates acceptance of conditions.
- B. Prepare slabs to produce sound, dry surface as required for proper bonding of underlayment. Where moisture in slab exceeds topping system manufacturer recommendations apply existing slab moisture control in accordance with system manufacturer recommendations and application instructions.
- 1. Blast substrate prior to application of moisture control materials to remove surface contaminants and to prepare substrate for interior topping.

END OF SECTION

SECTION 04 - MASONRY (NOT USED)

- DIVISION 05 - METALS
- SECTION 05 40 00 - COLD-FORMED METAL FRAMING
- PART 1 - GENERAL
- 1.1 SUMMARY
- A. Section Includes: Provide cold-formed non-load bearing metal framing, 18 gage and heavier, with anchorage and bracing, and with accessories as required for complete installation.
- 1. Light gage metal framing, 20 gage and lighter, is in Section 09 21 00 - Gypsum Board Assemblies.
- 1.2 ADMINISTRATIVE REQUIREMENTS
- A. Delegated Design Requirements: Provide special engineering to ensure compliance with applicable codes and Contract Documents.
- 1. Wall Mounted Merchandising: Specified deflection limits shall include loads from wall mounted merchandising systems which support up to 375 pounds per linear foot, both on partial height walls and on walls anchored at head and sills only with not intermediate structural supports.
- 2. Coordinate stud sizes and layouts with the work of the various trades. Where ductwork, conduit, piping, casework, and other such items exceed indicated available space, increase stud sizes or make other minor modifications as necessary to accommodate the work at no change in cost of the Work.
- 3. Coordinate details and requirements of other Work which adjoins or fastens to studs and requires backing or special support framing included in this Section. Obtain Architect's approval of backing method proposed to satisfy requirements of this Section which differs from methods noted or shown.
- B. Pre-Installation Meeting: Prior to fabrication of components, meet at Project with installers of casework, doors, windows, mechanical, and electrical work to review areas of potential interference and conflicts.
- 1.3 SUBMITTALS
- A. Product Data: Submit manufacturer's literature.
- 1. Submit ICC-ES Reports for stud gage and spacing for wall conditions.
- B. Shop Drawings: Indicate component details, framing of openings, and welds, type and location of mechanical fasteners and accessories, and items required of other work for complete installation.
- C. Delegated Design Certificates: Submit certification signed by structural engineer, licensed at Project location, indicating compliance with Contract Documents and code requirements.
- D. Experience of installer if requested.
- 1.4 QUALITY ASSURANCE
- A. Welder Qualifications: Use qualified welders and comply with AWS D1.3.
- PART 2 - PRODUCTS
- 2.1 SYSTEM MANUFACTURERS
- A. Clark/Dietrich Building Systems; CEMCO; United Metal Products; or Steel Stud Manufacturers Association Members.
- B. Substitutions: Refer to Section 01 25 00.
- 2.2 MATERIALS
- A. System Description: Provide non-load bearing metal framing, 18 gage and heavier, with anchorage and bracing, and with accessories as required for complete installation.
- B. Regulatory Requirements, Loads: Comply with loads as required by applicable building code including loads on framing from other systems.
- C. Design Requirements: Calculate structural properties of metal framing system in accordance with American Iron and Steel Institute (AISI) "Specification for Design of Cold-Formed Steel Structural Members." 1. Deflection: Provide for maximum L/240 typical, L/360 where plaster or where fire is indicated.
- 2. Seismic Requirements: Comply with code requirements for seismic bracing where Project is located in area defined by applicable code as seismic area.

END OF SECTION

SECTION 05 50 00 - METAL FABRICATIONS

- PART 1 - GENERAL
- 1.1 SUMMARY
- A. Section Includes: Provide stock and custom fabricated metal items scheduled at end of this Section, complete in respect to function as intended. Metal fabrications includes items made from iron and steel shapes, plates, bars, strips, tubes, pipes and castings which are not a part of structural steel or metal systems specified elsewhere.
- B. Decorative metal items are in Section 05 70 00 - Decorative Metals.
- 1.2 ADMINISTRATIVE REQUIREMENTS
- A. Coordination: Coordinate installation of anchorages, furnish setting drawings, diagrams, templates, and directions for installing anchorages, sleeves, inserts, anchor bolts, and items with integral anchors, embedded in concrete.
- 1.3 SUBMITTALS
- A. Product Data: Submit manufacturer's literature for products used in metal fabrications, including paint, grout and manufactured items.
- B. Shop Drawings: Submit for fabrication and erection of metal fabrications. Indicate profiles, sizes, anchorage, reinforcing and anchorage. Provide templates for anchorage installation by others. Where metal fabrications are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on shop drawings.
- C. Certifications: Submit certifications for each welder.
- PART 2 - PRODUCTS
- 2.1 MATERIALS
- A. System Description: Provide stock and custom fabricated metal items.
- B. Steel Shapes, Plates and Bars: ASTM A36 or CAN/CSA 640.21M87 for Canada.
- C. Structural Steel Sheet: Hot rolled, ASTM A1011; or cold rolled, ASTM A1008, Class 1; of grade required for section loading.
- D. Steel Pipe: ASTM A53, Type S seamless, grade as selected by fabricator and as required for section loading; minimum standard weight, STD or Schedule 40.
- E. Steel Tubing: Cold formed ASTM A500; or hot rolled, ASTM A501; minimum Grade B; seamless where exposed.
- F. Castings: Gray iron, ASTM A48, Class 30; malleable iron, ASTM A47.
- G. Concrete Inserts: Threaded or wedge type; galvanized ferrous castings, either malleable iron ASTM A47, or cast steel ASTM A27. Provide bolts, washers and shims as required, hot-dip galvanized, ASTM A153.

NEW STORE



WAP INC.
CORPORATE ARCHITECTURE
HARRISBURG STREET
FRANCONIA, CA 94105

REPS. I.D.: 000054156
STORE NUMBER: 4458
STORE LOCATION: VINELAND
8331 VINELAND AVENUE
SUITE 2151
ORLANDO, FLORIDA 32821

DESIGN TYPE: P3
GENERATION: 17Q12
PROTOYPE DATE: 07/18/16
OPENING: 2017

CONSULTANT INFO:

PART 3 - EXECUTION

- 3.1 INSTALLATION
- A. Install metal framing systems in accordance with manufacturer's printed instructions. Comply with connection and erection recommendations of NAAMM ML/SFA 540, "Lightweight Steel Framing Systems Manual."
- B. Align top and bottom tracks, locating to wall layout; secure in place with screws or welding at maximum 16" centers.
- 1. Where connected to building structure provide systems capable of preventing structure deflection and movement from transferring into cold-formed metal framing.
- C. Erect studs, brace, and reinforce to develop full strength. Place studs not more than 2" from abutting walls and at each side of openings; connect studs to tracks in accordance with manufacturer's instructions.
- D. Construct corners using minimum three studs; double studs at openings.
- E. Install intermediate studs above and below openings to match wall spacing.
- F. Install cross stud channels for items anchored to walls and attachment of mechanical and electrical items.
- G. Assure framing provides true and flat surfaces, ready to receive finish, with maximum variation of 1/8" in 10'-0".
- H. Touch-up protective coating during handling and installation.
- 1. Exterior Framing: Use zinc-rich galvanizing repair paint for galvanized surfaces.
- 2. Interior Framing: Use compatible primer for prime coated surfaces.

PROFESSIONAL STAMP:

ARCHITECT INFO:



ARCHITECT OF RECORD: BRR ARCHITECTURE, INC.
6700 ANTIPOCH PLAZA, SUITE 300, HERRISBURG, KANSAS 66044

ISSUE TYPE:

PERMIT/BID: 04/07/17

REVISIONS:

DRAWN BY: EE

A/E JOB NUMBER: 65013011

TITLE SHEET: SPECIFICATIONS

SHEET NUMBER: A13-3