

SELECTIVE DEMOLITION

GENERAL

A. SECTION REQUIREMENTS

- i. Unless otherwise indicated, demolished materials become Contractor's property.
- ii. Comply with EPA regulations and disposal regulations of authorities having jurisdiction.
- iii. Conduct demolition without disrupting Owner's occupation of the building.

EXECUTION

A. DEMOLITION

- i. Maintain and protect existing utilities to remain in service before proceeding with demolition, providing bypass connections to other parts of the building.
- ii. Locate, identify, shut off, disconnect, and cap off utility services to be demolished.
- iii. Employ a certified, licensed exterminator to treat building and to control rodents and vermin.
- iv. Conduct demolition operations and remove debris to prevent injury to people and damage to adjacent buildings and site improvements.
- v. Provide and maintain shoring, bracing, or structural support to preserve building stability and prevent movement, settlement, or collapse.
- vi. Protect building structure or interior from weather and water leakage and damage.
- vii. Protect remaining walls, ceilings, floors, and exposed finishes. Erect and maintain dustproof partitions. Cover and protect remaining furniture, furnishings, and equipment.
- viii. Promptly patch and repair holes and damaged surfaces of building caused by demolition. Restore exposed finishes of patched areas and extend finish restoration into remaining adjoining construction.
- ix. Promptly remove demolished materials from Owner's property and legally dispose of them. Do not burn demolished materials.
- x. Remove all existing trip hazards. Remove all abandoned electrical, and mechanical, plumbing systems from site & building.

SITE CLEARING

GENERAL

A. SECTION REQUIREMENTS

- i. Protect remaining site improvements from damage. Restore damaged work to condition existing before start of site clearing. Protect designated "endangered" trees and/or "protected" trees per state / local govt.
- ii. Protect remaining trees and shrubs from damage and maintain vegetation. Employ a licensed arborist to repair tree and shrub damage. Restore damaged vegetation. Replace damaged trees that cannot be restored to full growth, as determined by arborist.
- iii. Do not store materials or equipment or permit excavation within drip line
- iv. Determine location of existing utility services before site clearing. Comply with local utility service requirements.
- i. Install erosion and sedimentation control measures before site clearing.
- ii. Remove trees, shrubs, grass, and other vegetation, site improvements, or obstructions to permit installation of new construction. Removal includes digging out and off-site disposal of stumps and roots.
- iii. Strip topsoil. Stockpile topsoil that will be reused in the Work.
- iv. In areas not to be further excavated, fill depressions resulting from site clearing. Place and compact satisfactory soil materials in 6-inch (150-mm-) thick layers to density of surrounding original ground.
- v. Dispose of waste materials, including trash, debris, and excess topsoil, off Owner's property. Burning waste materials on-site is not permitted.

- i. Unauthorized excavation consists of removing materials beyond indicated subgrade elevations or dimensions without direction by Architect/Engineer. Unauthorized excavation and remedial work shall be at Contractor's

- ii. Do not interrupt existing utilities serving facilities occupied by Owner. Provide all temporary utility services within contract.

- i. Satisfactory Soil: ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM; free of rock or gravel larger than 2 inches (50 mm) in any dimension, debris, waste, frozen materials, vegetation, or other deleterious matter.

- ii. Unsatisfactory Soil: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.

- iii. Backfill and Fill: Satisfactory soil materials.

- iv. Subbase: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand, ASTM D 2940, with at least 95 percent passing a 1-1/2-inch (38-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

- v. Bedding: Subbase materials with 100 percent passing a 1-inch (25-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

- vi. Drainage Fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, ASTM D 448, Size 57, with 100 percent passing a 1-1/2-inch (38-mm) sieve and not more than 5 percent passing a

EXECUTION

A. EARTHWORK

- i. Protect subgrades and foundation soils from softening and damage by water, freezing temperatures, or frost.
- ii. Explosives: Do not use explosives.
- iii. Excavate to subgrade elevations regardless of character of materials and obstructions encountered.
- iv. Excavate for structures, building slabs, pavements, and walkways. Trim subgrades to required lines and grades.
- v. Utility Trenches: Excavate trenches to indicated slopes, lines, depths, and invert elevations. Maintain 12 inches (300 mm) of working clearance on each side of pipe or conduit.
 - (1) Place, compact, and shape bedding course to provide continuous support for pipes and conduits over rock and other unyielding bearing surfaces and to fill unauthorized excavations.
 - (2) Place and compact initial backfill of satisfactory soil material or subbase material, free of particles larger than 1 inch (25 mm), to a height of 12 inches (300 mm) over the utility pipe or conduit. Place and compact final backfill of satisfactory soil material to final subgrade.
- vi. Plow strip or break up sloped surfaces steeper than 1 vertical to 4 horizontal to receive fill.
- vii. When subgrade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface, pulverize, moisture-condition or aerate soil, and recompact.
- viii. Place backfill and fill in layers not more than 8 inches (200 mm) in loose depth at optimum moisture content. Compact each layer under structures, building slabs, pavements, and walkways to 95 percent of maximum dry density according to ASTM D 1557; elsewhere to 90 percent.
- ix. Grade areas to a smooth surface to cross-sections, lines, and elevations indicated. Grade lawns, walkways, and unpaved subgrades to tolerances of plus or minus 1-1/4 inch (32 mm) and pavements and areas within building lines to plus or minus 1/2 inch (13 mm).
- x. Under pavements and walkways, place subbase course material on prepared subgrades and compact at optimum moisture content to required grades, lines, cross-sections, and thicknesses.
- xi. Under slabs-on-grade, place drainage fill on prepared subgrade and compact to required cross-section and thickness.
- xii. Allow testing agency to inspect and test each subgrade and each fill or backfill layer and verify compliance with requirements.
- xiii. Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

TERMITE CONTROL

GENERAL

A. SECTION REQUIREMENTS

- i. Submit Product Data.
- ii. Engage a licensed professional pest control operator to apply termite control solution.
- iii. Use only termiticides that bear a federal registration number of the U.S. EPA.

PRODUCTS

A. TERMITICIDES

- i. Provide a working solution in concentrations recommended by manufacturer.

EXECUTION

A. INSTALLATION

- i. Prepare surfaces and apply treatment at rates and concentrations recommended in manufacturer's written instructions.
- ii. Apply termite control to all areas of new construction.
- iii. Post signs in areas of application warning workers that soil termiticide treatment has been applied. Remove signs when areas are covered by other construction.
- iv. Reapply soil termiticide treatment solution to areas disturbed by subsequent excavation or other construction activities following application.

CAST-IN-PLACE CONCRETE

GENERAL

A. SECTION REQUIREMENTS

- i. Submit Product Data
- ii. Comply with ASTM C 94; ACI 301, "Specifications for Structural Concrete for Buildings"; ACI 318, "Building Code Requirements for Structural Concrete"; and CRSI's "Manual of Standard Practice."
- iii. Engage a qualified independent testing agency to test concrete mixes.

PRODUCTS

A. MATERIALS

- i. Deformed Reinforcing Bars: ASTM A 615, Grade 60 (ASTM A 615M, Grade 420).
- ii. Welded Steel Wire Fabric: ASTM A 185, flat sheets, not rolls. 6X6, #10/#10
- iii. Portland Cement: ASTM C 150, Type 1.
- iv. Fly Ash: ASTM C 618, Type F. Max. 20% of total of cement & fly ash.

- v. Aggregates: ASTM C 33, Class 4S.
- vi. Fiber Reinforcement: ASTM C 1116, Type III, engineered polypropylene fibers.
- vii. Air-Entraining Admixture: ASTM C 260.
- viii. Chemical Admixtures: ASTM C 494
- ix. Water Stops: Flat dumbbell or center-bulb type, of either rubber (CRD C 513) or PVC (CRD C 572).
- x. Vapor Retarder: Clear 6-mil- (0.2-mm-) thick polyethylene.
- xi. Liquid Membrane-Forming Curing Compound: ASTM C 309, clear, Type I, Class B, waterborne.
- xii. Nonslip Aggregate: Factory-produced, rustproof, nonglazing, fused aluminum-oxide granules or crushed emery, unaffected by freezing, moisture, and cleaning materials.
- xiii. Dry-Shake Color Hardener: Packaged, dry combination of materials consisting of portland cement, graded quartz aggregate, nonfading mineral-oxide coloring pigments, and plasticizing admixture. Color as selected by Engineer.
Note: For all exterior walks use dry-shake color hardener u.o.n. in place of plain concrete.
- B. MIXES
 - i. Proportion normal-weight concrete mixes to provide the following properties:
 - (1) Compressive Strength: See Structural General Notes in the Structural Plans.
 - (2) Slump Limit: Per approved Design Mix.

EXECUTION

A. CONCRETING

- i. Construct formwork and maintain tolerances and surface irregularities within ACI 117 limits of Class A for concrete exposed to view and Class C for other concrete surfaces.
- ii. Set water stops where indicated to ensure joint watertightness.
- iii. Place vapor retarder on prepared subgrade, with joints lapped 6 inches (150 mm) and sealed.
- iv. Accurately position, support, and secure reinforcement.
- v. Install construction, isolation, and control joints.
- vi. Place concrete in a continuous operation and consolidate using mechanical vibrating equipment.
- vii. Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placing, and curing.
- viii. Formed Surface Finish: Smooth-formed finish for concrete exposed to view, coated, or covered by waterproofing or other direct-applied material; rough-formed finish elsewhere.
- ix. Unformed Slab Finishes: Scratch finish for surfaces to receive mortar setting beds. Float finish surfaces for interior steps and ramps and surfaces to receive waterproofing, roofing, or other direct-applied material. Troweled finish for floor surfaces and floors to receive floor coverings, paint, or other thin film-finish coatings. Trowel and fine broom finish for surfaces to receive thin-set tile. Nonslip broom finish to exterior concrete platforms, steps, and ramps.
- x. Uniformly spread 25 lb/100 sq. ft. (1.5 kg/sq. m) of dampened nonslip aggregate over float-finished paving surface, tamp, and expose nonslip aggregate.
- xi. Apply dry-shake color hardener to float finished surface, repeating float finishing to embed each application. Apply final trowel finish.
- xii. Cure formed surfaces by moist curing until forms are removed.
- xiii. Begin curing unformed concrete after finishing. Keep concrete continuously moist for at least 7 days.
- xiv. Owner will engage a testing agency to perform tests and to submit test reports.
- xv. Protect concrete from damage. Repair surface defects in concrete.

ROUGH CARPENTRY

GENERAL

A. SECTION REQUIREMENTS

- i. Submit model code evaluation reports for engineered wood products.

PRODUCTS

A. LUMBER, GENERAL

- i. Dressed lumber, S4S, 19 percent maximum moisture content for 2-inch (38-mm) thickness or less, marked with grade stamp of inspection agency.

B. TREATED MATERIALS

- i. Preservative-Treated Materials: AWPAC2 lumber and AWPAC3 plywood, labeled by an inspection agency approved by ALSC's Board of Review. After treatment, kiln-dry lumber and plywood to 19 and 15 percent moisture content, respectively. Treat indicated items and the following:
 - (1) Wood members in connection with roofing, flashing, vapor barriers, and waterproofing.
 - (2) Concealed members in contact with masonry or concrete.
 - (3) Wood framing members less than 18 inches (460 mm) above grade.
 - (4) Wood floor plates installed over concrete slabs directly in contact with earth.
- ii. Fire-Retardant-Treated Materials: AWPAC20 lumber and AWPAC27 plywood, interior Type A treatment, labeled by a testing and inspecting agency acceptable to authorities having jurisdiction.

- (1) Use treated lumber and plywood with bending strength, stiffness, and fastener-holding capacities that are not reduced below values published by manufacturer of chemical formulation under elevated temperature and humidity conditions.

C. LUMBER

- i. Dimension Lumber: The following grades per inspection agency indicated.
 - (1) Non-Load-Bearing Interior Partitions: Standard, Stud, or No. 3 grade; Mixed southern pine: SPIB
 - (2) Framing Other Than Non-Load-Bearing Partitions: Construction or No. 2 grade; Southern pine: SPIB
 - (3) Exposed Framing: Select Structural grade, hand-selected: Southern pine: SPIB
- ii. Timbers 5-inch Nominal (117-mm Actual) Size and Thicker: Southern pine, No. 1 Dense per SPIB rules
- iii. Concealed Boards: 19 percent maximum moisture content: Mixed southern pine: No. 2 per SPIB rules
- iv. Miscellaneous Lumber: No. 3 or Standard grade of any species for nailers, blocking, and similar members.

D. ENGINEERED WOOD PRODUCTS

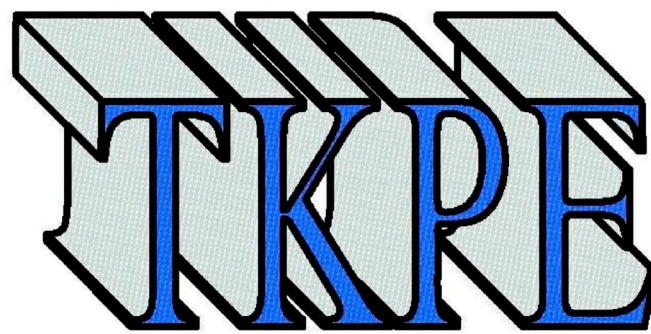
- i. Engineered wood products acceptable to authorities having jurisdiction and with allowable design stresses, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be demonstrated by comprehensive testing.
- ii. Laminated-Veneer Lumber: Laminated with an exterior-type adhesive complying with ASTM D 2559, with grain of veneers parallel to their lengths.
 - (1) Extreme Fiber Stress in Bending: 2500 psi (17 MPa) for 12-inch nominal- (286-mm actual) depth members.
 - (2) Modulus of Elasticity: 2,000,000 psi (13 800 MPa).
- iii. Microlam Beams: Laid out from wood strands with exterior-type adhesive complying with ASTM D with grain of strands parallel to their lengths.
 - (1) Extreme Fiber Stress in Bending: 2900 psi (20 MPa) for 12-inch nominal- (286-mm actual) depth members.
 - (2) Modulus of Elasticity: 2,000,000 psi (13 800 MPa).
 - (3) Fy = 285 psi
- iv. Prefabricated Wood I-Joists: Made from stress-graded lumber flanges and wood-based structural-use panel webs with exterior-type adhesive complying with ASTM D 2559.
 - (1) Structural Capacities: Establish and monitor structural capacities according to ASTM D 5055.
- i. Wood-Based Structural-Use Panels: DOC PS 2. Provide plywood complying with DOC PS 1, where plywood is indicated.

E. PANEL PRODUCTS

- (1) Factory mark panels evidencing compliance with grade requirements.
- (2) Panels with span ratings required by support spacing indicated.
- (3) Combination Subfloor-Underlayment: APA-rated Sturd-I-Floor, Exposure 1.
- (4) Subflooring: APA-rated sheathing, Exposure 1.
- (5) Wall Sheathing: APA-rated Sheathing, Exposure 1.
- (6) Roof Sheathing: APA-rated Sheathing, Exterior.
- (7) Plywood Underlayment for Resilient Flooring: APA B-C Underlayment Exterior plywood panels with fully sanded face.
- (8) Plywood Underlayment for Ceramic Tile: APA-rated, Underlayment grade, exterior plywood, 5/8 inch (15.9 mm) thick.
- (9) Plywood Underlayment for Carpet: APA Underlayment Exposure 1 plywood panels with fully sanded face.
- ii. Particleboard underlayment: ANSI A208.1, Grade PBU.
- iii. Hardboard Underlayment: ANSI/AHA A135.4, Class 4 (Service), S1S; with back side sanded.
- iv. Fiberboard Sheathing: ANSI/AHA A194.1, Type IV, Class 1, 1/4 inch (13 mm) thick.
- v. Gypsum Sheathing Board: ASTM C 79, water-resistant core.
- vi. Glass-Fiber-Surfaced Gypsum Sheathing Board: ASTM C 79, water-resistant coating.
- vii. Extruded Cellular Polystyrene Sheathing: ASTM C 578, Type IV, with T & G or shiplap long edges.

F. MISCELLANEOUS PRODUCTS

- i. Air-Infiltration Barrier: ASTM D 226, Type I, No. 15 asphalt felt, unperforated
- ii. Fasteners: Size and type indicated. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with a hot-dip zinc coating per ASTM A 153 or of Type 304 stainless steel.
 - (1) Power-Driven Fasteners: CABO NER-372.
 - (2) Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.
- iii. Metal Framing Anchors: Hot-dip galvanized steel of structural capacity, type, and size indicated.
- iv. Sill-Sealer: Glass-fiber insulation, 1-inch (25-mm) thick, compressible to 1/32 inch (0.8 mm).
- v. Adhesives for Field Gluing Panels to Framing: APA AFG-01.



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Proposed Residence

General Notes 1

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|----------------|-------------|
| Project number | 24-045 |
| Date | 12/10/2024 |
| Drawn by | A.O. |
| Checked by | T.K. |
| A100.1 | |
| Scale | 12" = 1'-0" |

THESE DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE DESIGN INTENT ONLY. THEY DO NOT SHOW EVERY MINOR DETAIL OF CONSTRUCTION. ALL TRADES ARE RESPONSIBLE FOR FURNISHING COMPLETE BUILDING SYSTEMS AND ALL ITEMS THAT WOULD NORMALLY BE CONSIDERED INCIDENTAL TO THEIR INSTALLATION.