ABBREVIATIONS

	ABBREV	IAT
AB		MA
AC A/C	ACOUSTICAL AIR CONDITIONING	ME MC
ACT	ACOUSTICAL TILE	ME
ADJ AFF	ADJUSTABLE; ADJACENT ABOVE FINISHED FLOOR	ME ME
ALT	ALTERNATE	MF
ALUM AP	ALUMINUM ACCESS PANEL	M⊦ MII
ARCH	ARCHITECTURAL;	MIS
AUTO	ARCHITECT AUTOMATIC	MN MC
BD	BOARD BEDROOM	MT
	BUILDING	MT N
BLKG		NIC NC
BM BOS	BEAM; BENCHMARK BOTTOM OF STRUCTURE	NC
BOT	BOTTOM BASEMENT	NR
BSIMI		NT
CAB		00
CB CFCI	CATCH BASIN CONTRACTOR FURNISHED,	OD OF
	CONTRACTOR INSTALLED	~
CFOI	CONTRACTOR FURNISHED, OWNER INSTALLED	OF
CHBD	CHALK BOARD CONTROL JOINT	OF
CJT CLG	CEILING	OZ PK
CLO	CLOSET	PL PL
CLR CMU	CLEAR CONCRETE MASONRY UNIT	PL
CO COL	CLEANOUT COLUMN	PO
	COMPOSITION	PR PR
	CONCRETE CONTINUOUS; CONTINUE	PT PT
CONTR	CONTRACTOR	PT
	CORRIDOR; CORRUGATED	пт
	CARPET CERAMIC TILE	PT PL
	DOUBLE	QT
DEPT	DEPARTMENT DRINKING FOUNTAIN	R RA
DIA	DIAMETER	RC
DIM DN	DIMENSION DOWN	RE RE
DR		RE
	DOWN SPOUT DETAIL	RE RE
DW	DISHWASHER	RM
	DRAWING DRAWER	RC R&
Е	EAST	S
	EACH EXISTING FIRE	SC SC
	GUISHER	SD SF
EL	CABINET ELEVATION	SG
ELEC	ELECTRIC(AL)	SH SH
ELEV EP	ELEVATOR É	SH
EQUIP	EQUIPMENT	SH SIN
	EXISTING EXPANSION FIRE ALARM	SN
FA FXT	FIRE ALARM EXTERIOR	SN
FB	EXTERIOR FIRE BLANKET; FLUSH BEAM	SC
	FLOOR DRAIN FOUNDATION	SS S/S
FE	FIRE EXTINGUISHER;	SP
FEC	FINISHED END FIRE EXTINGUISHER	ST
	CABINET	ST
FF FFHB	FINISHED FLOOR FROST-FREE HOSE BIBB	ST ST
FHC	FIRE HOSE CABINET	ST
FIN	FINISH(ED) FLOOR(ING)	SC SV
FLUOR	FLUORÈSCENT	Т
FOC FOS	FACE OF CONCRETE FACE OF STUD	SV TB
FR	FIREPLACE	ΤE
FS FT		T& TH
G	GAS FOOTING	ΤH
GA	GAGE; GAUGE	TO TP
GALV GB	GALVANIZED GRAB BAR	ΤV
GD	GARBAGE DISPOSAL	TY UH
GL GLULAI	GLASS; GLAZING M GLUE-LAMINATED (TIMBER)	U.1
GWB	GYPSUM WALL BOARD	UR V
GYP HB	GYPSUM HOSE BIBB	VA
HC	HOLLOW CORE	VB VE
HDR	HOLD DOWN HEADER	VG
HDW	HARDWARE	VC VT
	HOLLOW METAL HORIZONTAL	Ŵ
HT	HEIGHT	W/
HTG HVAC	HEATING HEATING VENTILATING	WC
	AIR CONDITIONING	W/
HDWD HWT	HARD WOOD HOT WATER TANK	W
ID	INSIDE DIAMETER	WE WE
IE IN	INVERT ELEVATION	W
INSUL	INSULAT(ED)(ION)	Wł WI
JAN JT	JANITOR JOINT	W/
	KNOCKOUT KEYPAD	WF WS
KPL	KICK PLATE	W
L	LONG; LENGTH LABORATORY	W
LAM	LAMINATE(D)	YD
LAV LF	LAVATORY LINEAL FOOT	
LT	LIGHT	
LUM	LUMINOUS	

1AX MAXIMUM BR MASTER BEDROOM MEDICINE CABINET ECH MECHANICAL 1ET METAL EZZ MEZZANINE FR MANUFACTURER MAGNETIC HOLD OPEN MINIMUM ISC MISCELLANEOUS NH MAN HOLE MASONRY OPENING TD MOUNTED MATERIAL; METAL NORTH NOT IN CONTRACT NUMBER OM NOMINAL RC NOISE REDUCTION COEFFICIENT NOT TO SCALE TS ON CENTER OUTSIDE DIAMETER FCI OWNER FURNISHED CONTRACTOR INSTALLED FOI OWNER FURNISHED, OWNER INSTALLED PG OPENING OUNCE POCKET LAM PLASTIC LAMINATE LAS PLASTER LBG PLUMBING OL POLISHED PAIR ROJ PROJECT(ED) PAINTED TD PAPER TOWEL DISPENSER TDR PAPER TOWEL DISPENSER AND RECEPTOR TN PARTITION LWD PLYWOOD QUARRY TILE RISER; RADIUS RETURN AIR RESILIENT CHANNEL REFERENCE EFR REFRIGERATOR EINF REINFORCED EQD REQUIRED EV REVIS(ED)(ION) ROOM ROUGH OPENING ROD AND SHELF &S SINK; SOUTH SOLID CORE CHD SCHEDULE SOAP DISPENSER SQUARE FOOT (FEET) GD SLIDING GLASS DOOR SHELF; SHELV(ES)(ING) HT SHEET HTG SHEATHING HWR SHOWER IM SIMILAR ND SANITARY NAPKING DISPENSER NR SANITARY NAPKIN RECEPTOR OG SLAB ON GRADE SERVICE SINK SK STAINLESS STEEL PEC SPECIFICATIONS TC SOUND TRANSMISSION COEFFICIENT TD STANDARD STEEL TO STORAGE T&V STAIN AND VARNISH SQUARE SWITCH THERMOSTAT; TREAD SHEET VINYL TOWEL BAR ELE TELEPHONE TONGUE AND GROOVE &G THICK ΗK HR THRESHOLD OS TOP OF STEEL; TOP OF SLAB TOILET PAPER HOLDER TELEVISION TYPICAL UNIT HEATER I.N.O. UNLESS NOTED OTHERWISE JR URINAL VOLT; VINYL AC VACUUM VAPOR BARRIER ERT VERTICAL VERTICAL GRAIN VINYL COMPOSTION TILE VINYL TILE WASTE; WEST; WIDTH; WATER; WATT WITH WATER CLOSET WASHER & DRYER //D STACKED UNIT WOOD DRB WARDROBE DO WINDOW WIRED GLASS WATER HEATER WINDOW WITHOUT 110 WATER RESISTANT SCT WAINSCOT WEIGHT WF WELDED WIRE FABRIC

YD YARD

GENERAL NOTES

The following are requirements of every project within Provo City. Compliance is req codes as amended by the state of Utah:

- 2018 International Building Code. 2018 International Residential Code.
- 2018 International Plumbing Code.
- 2018 International Mechanical Code.
- 2018 International Fuel Gas Code. 2018 International Energy Conservation Code.
- 2018 International Existing Building Code.
- 2017 National Electrical Code.
- 2018 International Fire Code. 2009 ICC/ANSI A117.1
- 1997 Uniform Code For Abatement of Dangerous Buildings.
- Any Construction details not specifically shown in these documents shall be built to the standards of the construction codes adopted by Provo City. Failure to identify all areas of non-compliance shall not relieve the contractor of the obligation to construct in accordance with minimum code requirements.
- Provo City and the State of Utah have adopted accessibility standards designed to comply with the Americans with Disabilities Act that went into effect January 25, 1992. All building permits issued after these dates must comply with current codes. The contractor shall be responsible to make sure of full compliance with the law.
- All exit access doors and exit doors shall be operable from the inside without the use of a key or any special knowledge or effort. Use of manual flushbolts, edge bolts, top or bottom bolts, etc. is prohibited.
- Tank type water closets shall have a maximum water usage of 1.6 gallons per flush. Showers shall have a maximum flow of 2.5 gallons per minute.
- Breaker panel circuits must be identified.
- Proper working clearances must be observed and maintained around electrical equipment.
- The project shall comply with all energy conservation requiments. The lighting load in the work areas must be reducible by fifty percent.
- Burning of waste construction material is prohibited at all times.
- Storage of equipment, soils, and construction materials on publicright-of-way or easement is expressly prohibited.
- 10. When fire sprinklers are required, shop drawings of the fire sprinkler system will be submitted for review, and approved by Provo City Fire Marshal prior to installation of the system. Fire sprinklers cannot be inspected without the approved plans.
- Comply with the requirements of the Provo City Fire Department. 12.
- Occupancy of this building is prohibited until a final inspection of the premises has been made and approval is given by Provo City and all other agencies involved. 13.
- This project must comply with all state and federal regulations. 14.
- Signs/Signage requires a separate building permit.

HANDICAP RAMP & DEVISING WALL for **GSP OPERATIONS UTAH**

1281 SOUTH 350 EAST PROVO, UTAH

quired.	Building	

PROJECT INFORMATION:	
ADDRESS OF PROJECT: BUILDING SEISMIC DESIGN: BUILDING OCCUPANCY: ZONE: CONSTRUCTION TYPE: MAX. ALLOWABLE AREA: MAX ALLOWABLE STORIES: MAX ALLOWABLE HEIGHT: ACTUAL AREA: ACTUAL STORIES: ACTUAL HEIGHT:	1281 SOUTH 350 EAS B, F-1 M2 V-B 41,760 SF AREA INCREASE AS F 2 60' 41,672 SF 1 24'-8"
OCCUPANCY SEPARATIONS:	NO SEPERATON REQ
FIRE RESISTIVE RATING FOR BUILD STRUCTURAL FRAME: BEARING WALLS EXTERIOR: BEARING WALLS INTERIOR: NON BEARING WALLS INTERIOR: FLOOR CONSTRUCTION: ROOF CONSTRUCTION:	DING ELEMENTS: 0 0 0 0 0 0
FIRE SEPARATION RATING PER DIS FIRE SEPARATION DISTANCE: <5 <10 <30 ≥30	TANCE: FIRE RATING: 2 1 0 0
FIRE SPRINKLERS.	PROVIDED AS REQUI
OCCUPANT LOADS: INDUSTRIAL AREAS: 39,405/100 = BUSINESS: 1,770/150 =	
DEFERRED SUBMITTALS REQUEST	ED:
EGRESS CAPACITY NUMBER OF EXITS REQUIRED: NUMBER OF EXITS PROVIDED: COMMON PATH OF TRAVEL: TRAVEL DISTANCE ALLOWED: NUMBER OF ENTRANCES: ACCESSIBLE ENTRANCES: PARKING:	2 5 100' 250' 1 1

SITE	TABULATION TABLE	

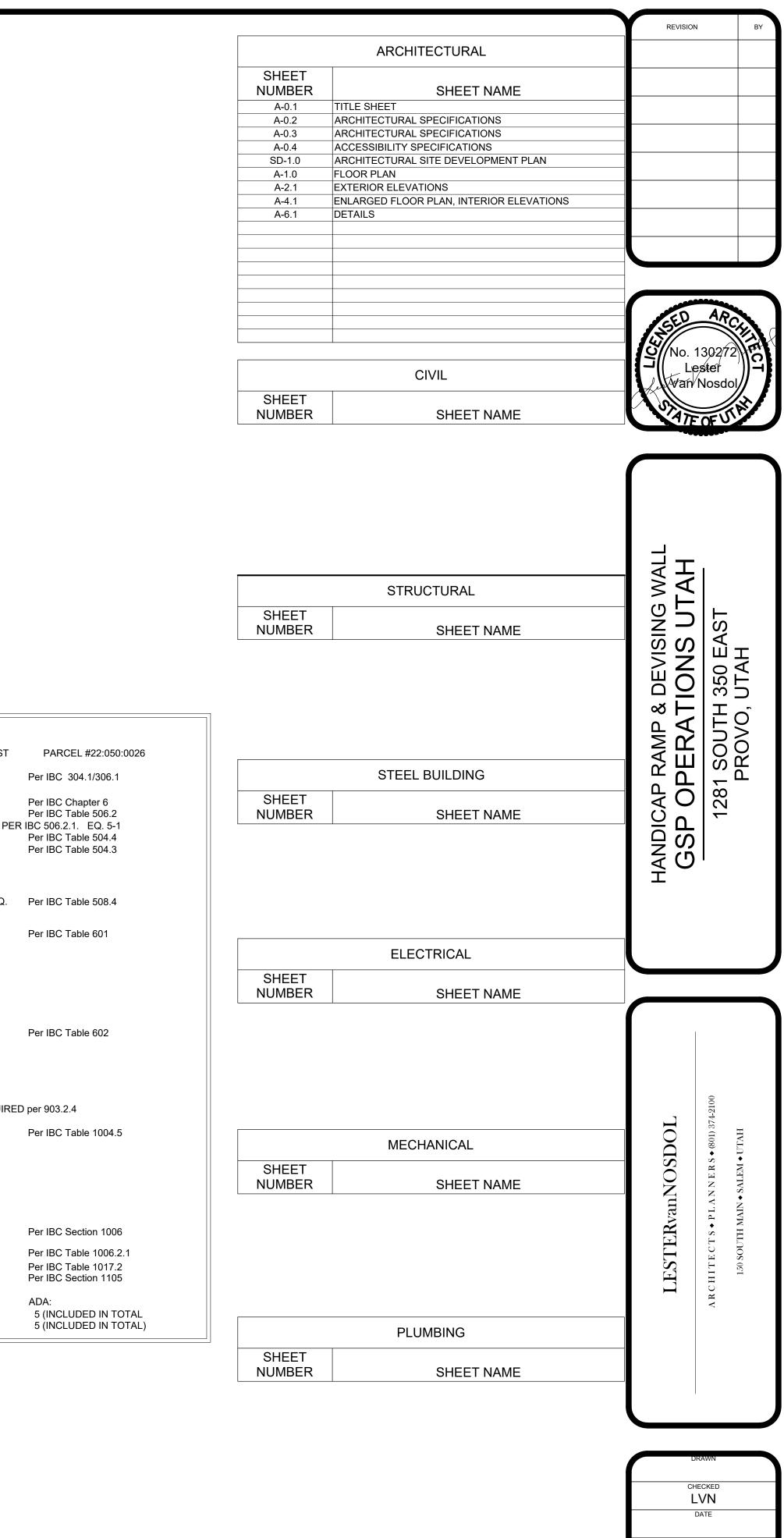
106

113

REQUIRED:

PROVIDED:

	AREA (SF)	PERCENTAGE
BUILDINGS	42,425	28
LANDSCAPE	2,050	01
HARDSCAPE	107,569	71
TOTAL SITE	152,044	100



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DIVISION 1: GENERAL REQUIREMENTS

BIDDER

This word is intended to mean any person, firm or corporation submitting a proposal or who enters into a contract with the Owner to supply labor and/or materials for any part of the work. If any bidder is in doubt as to the true meaning of any part of the Contract Documents, or finds errors, discrepancies or omissions in the documents, he shall at once request interpretation or correction thereof by the Architect. The Architect will promptly clarify the area in question and issue written instructions to all prospective bidders. Verbal instructions or interpretations will have no validity regardless of source. Request for such clarification must be in the office of the Architect a minimum of five days before bid opening.

THE OWNER

The Owner is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Owner means the Owner or his authorized representative. The Owner shall be responsible for purchasing and maintaining his own liability insurance and, at his option, may maintain such insurance as will protect him against claims which may arise from operations under the Contract. Also the Owner maintains the right to order the Contractor to stop the work, or any portion thereof, where cause has been enunciated.

SECURING CONTRACT DOCUMENTS

Drawings, specifications and other Contract Documents may be obtained from the office of Architectural Coalition, 1991 South State Street, Springville, Utah 84663, (801) 491-0275, Fax (801) 491-0329

SITE CONDITIONS

The location of the work, its general nature and extent, the form and general dimensions of the work to be performed are shown on the drawings. The drawings for the work show conditions as they are supposed or believed by the Architect to exist, but it is not intended, or to be inferred, that the conditions as shown thereon constitute a representation of the Architect, or Owner, that such conditions are actually existent, nor shall the Contractor be relieved of the liability under the Contract, or the Owner or the Architect be liable for any loss sustained by the Contractor as a result of any variance between conditions as shown on the drawings, or noted in the specifications, and the actual conditions revealed during the progress of the work. The Contractor shall have visited and examined the site of the work and shall have satisfied himself as to any and all of the actual conditions existing.

TAXES

The contractor shall comply with all Social Security Laws, Workman's Compensation Law and shall pay all land fill taxes, use taxes, sales tax as required by Law. He shall obtain all necessary permits and licenses stipulated by local, state and federal administrative authority.

SINGLE CONTRACT

The intent of these documents is that the Owner shall obtain a complete building, clean and ready for occupancy. All glass shall be cleaned and polished, floors swept broom clean, carpets vacuumed, fixtures washed, with all labels removed and exterior hand raked free of trash and debris. The Owner, even though he maintains the right to engage any separate contractor simultaneously with the General Contractor, shall look to the General Contractor and hold him totally responsible for all the work included in his contract. It is further understood that the Owner has no working arrangements with any subcontractor, nor will he attempt to personally nor through his agent the Architect to designate which subcontractor shall do any part of the work; but that the General Contractor shall be in charge of the work and shall assign the portions of the work as he sees fit.

DRAWINGS AND SPECIFICATIONS

Drawings and specifications are complementary and any work called for on the drawings and not mentioned in the specifications or vice versa, shall be furnished and performed as though fully set forth in both. Work not specifically mentioned, noted or detailed but implied by the drawings and specifications shall be supplied and performed. Substitutions in specified materials shall be submitted to the Architect for written approval prior to building or installation. If any ambiguities or differences occur on the drawings and specifications, or between drawings and specifications, concerning quality, style, type, etc. of any items, the Contractor shall base his bid on providing the most expensive choice shown or specified. The Architect shall have the right to choose the most expensive item without incurring any additional charge. Should there appear to be an error or discrepancy in or between the drawings and specifications, the Contractor shall refer the matter to the Architect for clarification before proceeding with the work. Should the Contractor proceed with the work without referring the matter to the Architect, he shall do so at his own responsibility and at his own expense. The Contractor should not scale dimensions from the drawings. Call the Architect for clarification.

GUARANTEE OF WORK

The Contractor, and the various subcontractors, guarantee their respective work for a period of one year from the date of filing a Notice of Completion (except where the specifications provide a longer period of guarantee) against any defective workmanship or materials. Such defects shall be promptly remedied upon notice by the Owner or Architect, or upon their becoming apparent.

LOSS AND DAMAGE

The Contractor shall furnish adequate protection and will be held responsible for any loss or damage due to acts of vandalism and for the loss of materials and/or equipment whether installed or stored in the building, or on the site, PERMITS AND LICENSES Each subcontractor shall obtain and pay for all permits and licenses necessary to complete his portion of the work. All requirements of the laws, ordinances, rules and regulations bearing on the work shall be complied with, with exceptions where the Contract Documents are more restrictive.

CODES

Wherever the term "Building Codes" is used, this term shall be construed to mean the current edition of the governing building code having jurisdiction over the work. The Contractor shall be responsible for the strict compliance with the building code, and all other applicable laws, rules, regulations, and ordinances for any work done by him or by any of his Subcontractors and/or vendors. A copy of the building code shall be kept available on the job at all times by the General Contractor.

SPECIFICATIONS:

SECTION 00507

CONTRACT REQUIREMENTS The Owner will provide an A.I.A. A101, 1997 edition contract. The general conditions of the contract shall be A.I.A. A201, 1997 edition.

SECTION 01001 GENERAL REQUIREMENTS

The work consists of the construction and completion of an interior remodeling, including all its appurtenances required or necessary, shown on the drawings, except only those items specifically shown, noted or specified as not in this contract (NIC).

Items noted 'NIC (Not In Contract) will be furnished and installed by the owner.

Refer to equipment schedules on drawings or owner-contractor agreement for additional items, not specifically listed.

CONSTRUCTION SCHEDULE;

The contractor shall prepare and submit to the owner's Rep. and Owner, a bar-chart type progress schedule for the entire project, within seven (7) days after award of the contract. Provide a separate bar for each work item listed in the schedule of values. Include appropriate time for the project mobilization, procurement of products, review and return of shop drawings, fabrication, installation, and testing, final cleanup and installation time for work under separate contracts. Identify each calendar day throughout the schedule. Highlight critical path elements of the schedule that are important to complete the work on time. Correlate the organization of the schedule with the date of substantial completion indicated in the Owner-Contractor Agreement.

PROJECT COORDINATION & ADMINISTRATION;

Coordinate the work of the complete project to assure an efficient and orderly sequence of installation of construction elements, and for installation of items furnished and installed by others, with provisions for accommodating installation of mechanical and electrical work, which are indicated diagrammatically on the drawings. Utilize space efficiently to maximize accessibility for other installations, and for maintenance.

PRE-CONSTRUCTION MEETING;

Meet with the owner's designated construction representative before starting construction. Discuss procedures and requirements for site access, work hours, and construction operations that may be offensive.

MAINTENANCE OF CONSTRUCTION DOCUMENTS;

The contractor shall maintain at the project site, a 'record set of construction documents' and the following related drawings or documents prepared by others: shop drawings and data sheets prepared by the manufacturers, fabricators, and suppliers, and exterior signage shop drawings, by the signage contractor. Do not construct any portion of the work related to these drawings at any time without such drawings being available at the project site.

SECTION 01010 APPLICATIONS FOR PAYMENT

Payment requests: The payment request cycle is to be monthly. Each application must be consistent with previous applications and payments. At substantial completion, and the final payment application involve additional requirements. Prior to submittal of initial application for payment, the following items shall be submitted: (1) listing of subcontractors and principal suppliers and fabricators, (2) The progress schedule, (3) Preliminary schedule of values, (4) Performance and/or payment bonds, if required, and (5) Copies of acquired building permits for performance of the work.

FORM & QUANTITY OF APPLICATION;

Submit 3 copies on A.I.A. form G702 and G703 application for payment and continuation sheet forms. Submit conditional lien releases with each application for payment, contingent upon receipt and bank clearance of the current invoiced amount. Submit unconditional lien releases covering the previously paid amount received by the general contractor and all sub contractors or material suppliers, with subsequent applications for payment.

SECTION 01010 GENERAL REQUIREMENTS (cont.) FORM & QUANTITY OF APPLICATION;

Submit 3 copies on A.I.A. form G702 and G703 application for payment and continuation sheet forms. Submit conditional lien releases with each application for payment, contingent upon receipt and bank clearance of the current invoiced amount. Submit unconditional lien releases covering the previously paid amount received by the general contractor and all sub contractors or material suppliers, with subsequent applications for payment.

PRELIMINARY SCHEDULE OF VALUES;

Before start of construction, submit a preliminary schedule of values. Support with back-up data to substantiate its accuracy upon request.

FINAL SCHEDULE OF VALUES;

At the completion of the work, and as a condition of final completion, submit a revised schedule of values, reflecting the final cost of the work, including all revisions or changes made during construction. Arrange schedule in order of work items listed above, and support schedule with backup data if requested.

SECTION 0101

CHANGE PROCEDURES STIPULATED PRICE CHANGE ORDERS:

Based on 'construction changed notice' and contractor's price quotation for itemized labor and material cost plus 10% overhead and profit as approved by the Owner's Rep.. The Contractor shall submit substantiating data for all costs acceptable to the architect.

UNIT PRICE CHANGE ORDER: Executed on a fix unit cost basis for predetermined unit prices and guantities. The Architect will take measurements and compute guantities accordingly. Provide and assist in the measurements. Provide a separate unit price on the bid form for item listed in the instructions to bidders. This price includes all related costs, profit, and overhead. This price is in addition to the price for the work in the contractor.

CHANGE ORDER FORMS A.I.A. G701 'change order'

SECTION 01020

SUBMITTAL PROCEDURES

Submit a form to identify the Project, Contractor, Subcontractor or Supplier and pertinent contract document references. Apply contractor's stamp, signed, certifying that products, and information is in accordance with the requirements of the work and contract documents. Identify variations from the contract documents or product and system limitations detrimental to successful performance of the completed work. Revise and resubmit submittals as required; identify all changes made since previous submittal. Submit the number of copies required by the contractor plus two copies that will be retained by the Owner's Rep..

PRODUCT DATA, SHOP DRAWINGS

Submitted to the Owner's Rep. for review for the limited purpose of checking for conformance with information given in the contract documents. After review, distribute in accordance with accordance with 'SUBMITAL PROCEDURES' article and for record documents purpose as specified. Mark each copy to identify applicable products, models, options and other data, supplement manufacturer's standard data to provide information unique to this project.

SECTION 01025

SAMPLES FOR REVIEW; Submitted to the Owner's Rep. for review for the limited purpose of checking for conformance with information given in the contract documents.

SAMPLES FOR SELECTION;

Submitted to the Owner's Rep. for aesthetic, color, or finish selection. Submit samples of finishes from the full range of manufacturer's colors, textures, and patterns. Submit samples to illustrate functional and aesthetic characteristics of the product.

SECTION 01032 TESTING AND INSPECTION SERVICES

Appoint, employ, and pay for specified services of an independent firm to perform testing and inspection. The independent firm will perform tests, inspections, and other services as required. Cooperate with the independent firm: furnish samples as requested. If a re-test is required because of non-conformance to specified requirement will be charged to the contractor.

SECTION 01036

EMPORARY FACILITIES/CONTROLS

companies, to provide for water, electrical power, lighting, heat and phone service, cost for such services shall be included in the base bid amount, unless otherwise indicated in bid instructions.

TEMPORARY_ELECTRICAL POWER;

Provide a grounded power distribution system with overload protection, sufficient to accommodate construction operations requiring power, use of power tools, electrical heating, lighting, and start-up testing of permanent electrical-powered equipment prior to its permanent connection to electrical system. Locate multiple outlets (minimum of 4-gang) spaced so that power tools on a single extension cord 50' maximum length can reach the entire area of construction.

TEMPORARY LIGHTING;

Provide temporary lighting fixtures for use during construction.

SANITARY FACILITIES:

Provide on-site toilet facility for the use of all workmen on the job site, until new facilities are in service. Provide separate facilities for male and female personnel when both sexes are working at a project site.

TEMPORARY HEAT AND VENTILATION;

Provide temporary equipment to maintain adequate environmental conditions to facilitate progress of the work, to meet specified minimum conditions for the installation and proper curing for materials, to project materials and finishes for damage due to temperature or humidity, and to prevent hazardous accumulations of dust, fumes, vapors or gases. Once new systems are operational, they may be for temporary heating and cooling only if: (1) All registers diffusers and filters are cleaned before substantial completion, and (2) warranty periods remain unchanged, starting from the date of substantial completion

TEMPORARY FIRE EXTINGUISHERS:

Provide type ABC extinguishers at locations reasonable effective in extinguishing fires, by personnel at project site. Comply with NFPA No. 10. Post warnings and quick-instructions at each number on each telephone at the project site.

SCAFFOLDING;

Provide all scaffolding and construction aids required, including guardrails, lights and platforms necessary for completion of the work, and for the protection of the workmen and the public.

PROGRESS CLEANING;

At all times, keep the project site free from accumulation of waste materials or rubbish caused by construction operations. Provide suitable waste receptacles for trash and construction debris, and provide adequate dumpster space.

SECTION 01055

PROUCTS & SUBSTITUTIONS

PRODUCTS; Means new material, components, equipment, fixtures, and system forming the work, but does not include machinery, components, and equipment used for preparation, fabrication, conveying, and erection of the work. Products may also include existing materials or components specifically intended for reuse.

PRODUCT OPTIONS

Products specified by reference standards or by description only: any product meeting those standards or description. Manufacturers named and meeting specifications, no options or substitutions allowed. Products specified by naming one or more manufacturers with a provisions: substantiating data establishing that the substitution is equivalent in all respects to that specified.

CONTRACTOR'S SUBSTITUTION REPRESENATION:

By substitution of a material, product, equipment item or system, the contractor: (1) Represents that he has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified, (2) Will provide the same warranty for the substitution that the contractor would have provided for the specified product, (3) waives all claims for additional costs related to the substitution which subsequently become apparent; and (4) will coordinate the installation of the acceptable substitute, making such changes as may be required for the work to be complete in all respects.

APPLICATION/ACCEPTANCE:

Application of a material or equipment item to work installed by others constitutes acceptance of that work and assumption of full responsibility for satisfactory installation. Products in quantities shall be alike and interchangeable. Where additional amounts of a product are likely to be needed by the Owner at a later date for maintenance and repair, provide standard, domestically produced products which are likely to be available to the Owner at such later date. Supply products complete with all standard devices, trim finish, and all accessories indicated in the latest edition of manufacture's catalog or brochure published at the date of the award of the contract. Furnish such items complete with component parts necessary for the obvious and intended use and installation, whether or not descriptions or catalog numbers contain all supplemental information and/or numbers of such components.

Connect to the existing systems at the project site, and coordinate with applicable utility service

SECTION 01055 PRODUCTS & SUBSTITUTIONS (cont.)

EQUIPMENT NAMEPLATES: Provide permanent nameplates on each item of service-connected or power operated equipment. Indicate manufacturer, service-connected or power operated equipment. Indicate manufacturer, similar essential operating data. Locate nameplates on an easily accessible surface. Locate required labels and stamps on an accessible surface, which, in occupied spaces, is not conspicuous.

MANUFACTURER'S INSTRUCTIONS:

Whenever products are required to be installed and/or perform in accordance with a specified manufacture's instruction or procedure, procure, distribute and maintain at the site copies of such information. No allowance or consideration will be made for claimed ignorance as to what is cited reference standards contains, as each tradesman is considered to be experienced and familiar with the published standards of quality and workmanship for his own trade.

INSTALLERS INSPECTORS:

Before installation, inspection substrate material and the conditions under which the work will be preformed. Do not proceed until unsatisfactory conditions have been corrected. Application of material or equipment item to work installed by others constitutes acceptance of that work and assumption of responsibility for satisfactory installation. Inspect each item of material or equipment immediately prior to installation - reject damaged and defective items. Perform installation work by persons qualified to produce workmanship of specified quality, in accordance with manufacturer's printed instructions. Install work during conditions of temperature, humidity, exposure, forecast weather, and status of this project completion, which will ensure the best possible results for each unit of work. Isolate each unit of work from non-compatible work, as required to prevent deterioration. Make allowances for expansion, contraction, and building movements. Provide attachment and connection devices and methods for securing the work properly as it is installed, true to line and level. Provide uniform joint widths in exposed work, organized for best possible visual effect. Coordinate closing-in of work with required inspections as to minimize the necessity of uncovering completed work.

PROTECTION:

After installation, provide coverings to protect installed products from damage from traffic and construction operations, remove when no longer required. Repair and replace damaged items, at no additional cost to the Owner. Additional time required to secure replacements and to make repairs would not be considered to justify an extension of time to complete work.

SECTION 01059 PROJECT CLOSEOUT

FINAL CLEANING: Prior to Owner occupancy, clean all surfaces including fixtures and equipment, including Owner supplied equipment. Remove all traces of soil, stains, dirt, waste materials, smudges, and other foreign matter from all finished surfaces. Clean all equipment and fixtures to a sanitary condition. Clean transparent materials, including mirrors and glass in doors, windows, and casework, to a polished condition, free of dust, putty, films or similar substances that are noticeable as vision obscurina.

SUBSTANTIAL COMPLETION:

After final cleaning operations have been completed, and when the project is ready for owner occupancy, obtain an occupancy permit on behalf of the Owner, and approval by the other Governmental authorities having jurisdiction over the project. Submit originals of such approvals to the Owner for his records.

CERTIFICATE OF OCCUPANCY:

Contractor shall obtain certificate of occupancy, a copy to the owners project manager.

PUNCH LIST:

The General Contractor shall prepare a list of work items yet to be completed or corrected, complete with scheduled dates for completion. Submit this list to the owner's representative will then perform a final inspection, and will prepare a punch list of items which are incomplete, damaged, or otherwise not in conformance with the requirements of the construction documents. The failure to include any item on such list does not alter the responsibility of the contractor to complete all the work required by the construction documents. INSTRUCTION OF PERSONNEL

Fully instruct the Owner's designed personnel in the operation, adjustment, and maintenance of mechanical, plumbing, and electrical systems.

OPERATION & MAINTENANCE DATA:

Organize two (2) sets operating and maintenance data. Bind data into heavy-duty, 3-ring vinylcovered binders, properly identified and indexed. Include the following types of information in operation and maintenance manuals and emergency instructions for HVAC equipment furnished (if applicable), spare parts listing, copies of warranties, wiring diagrams, inspection procedures, air testing and balancing reports, subcontractor listing and similar appropriate items. Complete all work items as expeditiously as possible, providing labor at times when the project is not in operation, if necessary, coordinate with the owner's operations.

FINAL PAYMENT - CLOSEOUT SUBMITTALS:

Submit the following items to the Owner's Rep, upon application for final payment: (1) final occupancy permit and heath department approval, when required; (2) Lien Waiver; (3) Final schedule of values; (4) Extra construction documents sets, (5) Mark-up set of 'Record Documents' (including drawings and submittals); (6) Extra stock of finish material items; (7) Guaranties and manufacture's warranties; (8) A list of all subcontractors and suppliers that performed any part of the work, include description of responsibility, company name, address, phone number, and name of contact person; and (9) the punch list of incompletion, indicating actual completion dates for each item listed therein.

SECTION 02000 SITE WORK

Contractor shall provide necessary labor, materials, and equipment to perform all site work shown or specified in these documents. a. All stumps & roots shall be removed from the soil to a depth of I2" below the surface of the ground

in the area or the building. All trees designated on site plan shall be protected from damage of construction processes and machines.

b. Regrade drive and parking area and provide asphalt pavement on compacted bed of approved pit run gravel. See Civil drawings. Surface gravel to be washed and graded 3/4" to 1-1/2". c. Backfill operations are the responsibility of the contractor. Foundation walls shall be adequately braced before backfilling. All backfill materials shall be approved granular materials compacted to 90% proctor density.

d. Provide all exterior walks, steps, patios and other site amenities as shown on the site plan. These shall comply with SECTION 03000 of this specification.

e. All utility lines shall be extended from building to utility connection. Connection charges shall be included in cost of this work. f. All fill shall be granular material or equivalent under concrete slab areas.

g. Slopes, grades & dimensions on the Civil site plan and Architectural site plan comply with ADAAG and applicable local laws and regualtions, latest editions. If these slopes, grades and dimensions are not achievable, the Contractor is required to contact the Owner, Civil Engineer and Architect immediately and before moving forward with the work.

h. At least one accessible route shall be provided to connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

j. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets or sidewalks; and public transportation stops to the accessible entrance of the building or facility they serve.

SECTION 02105

STORM WATER MANAGMENT AND CONTROLS

Contractor shall acquire necessary government permits and provide necessary inspection reports, labor, materials, and equipment to perform all SWPPP work shown herein, and in civil plans, and geotechnical reports, and specified by government documents or project specific permits - including but not limited to the following:

- a. Provide storage area for top soil.
- b. Provide storage area for Excavated material. c. Provide a vehicle wash down area.
- d. Provide a subcontractor wash down area.
- e. Provide Straw bales and or silt fence as shown on documents. f. Protect existing and new storm drains from silt runoff.

SECTION 03000

CONCRETE (See structural specifications for additional information)

SECTION 03050

CONCRETE WORK (See structural specifications for additional information)

SECTION 033500 CONCRETE SEALER

Contractor shall provide necessary labor, materials and equipment to seal concrete.

- A. Submittals shall include 1) Product data, including manufacturer's Spec-Data sheet, installation instructions and technical bulletins for specified products.
- 2) Manufacturer's certification that the installer is acceptable.
- 3) Maintenance instructions, including precautions for avoiding staining after application. B. Quality Assurance: Installer acceptable to the manufacturer.
- C. Delivery, Storage and Handling:
- 1) Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- 2) Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
 - 3) Protect materials from dirt, corrosion, oil, grease and other contaminants.

SECTION 033500 CONCRETE SEALER (cont.)

Product Cure-Seal-Hardener; Ashford Formula

1) Manufacturer; Curecrete Distribution, Inc. www.ashfordformula.com 2) No substitutions allowed. E. Execution:

1) Manufacturer's Instruction; Comply with manufacturer's product data, including product technical

bulletins, product catalog installation instructions and product carton instructions for installation. 2) Examination; Do not begin installation until substrates have been properly prepared and are suitable for application of product. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

Preparation;

a. Clean surfaces thoroughly prior to installation. b. Prepare surfaces using the methods recommended by the manufacturer for achieving the best

result for the substrate under the project conditions. c. Do not use frozen material. Thaw and agitate prior to use. d. If construction equipment must be used for application, diaper all components that might drip oil, hydraulic fluid or other liquids.

SECTION 04100

SECTION 05000

SECTION 06100

INSTALLATION:

SHEATHING

SECTION 06200

INSTALLATION:

SECTION 07000

FINISH CARPENTRY

plugged int with exterior glue.

PRESERVATIVE TREATMENT:

perpendicular to framing members.

MISCELLANEOUS WOOD FRAMING & BLOCKING:

Construction grade #2 or better Douglas Fir or equal, S4S.

19% maximum moisture content for lumber and 15% for plywood.

accurately cut and fitted. Securely attach work to substrate.

THERMAL, MOISTURE, WEATHER PROTECTION

drawings, or approved by Architect. Minimum "R" values:

c. All flashing shall be 26-gage galvanized iron.

i. 2x4 walls; R=13

ii. 2x6 walls; R=19

iii. Roof: R=30

Installation; a. New concrete: Apply cure-seal heardener to new concrete as soon as the concrete is firm enough to work on after troweling. With colored concrete, wait a minimum of 30 days before application. 1. Spray on at rate of 200 square feet per gallon.

2. Keep surface wet with cure-seal-hardener for a minimum soak-in period of 30 minutes without allowing it to dry or become slippery. If slipperiness occurs before the 30 minute time period has elapsed, apply additional cure-seal-hardener, as needed, to keep the entire surface in a non-slippery state for the first 15 minutes; for the remaining 15 minutes, mist the surface as needed with water to keep the material in a non-slippery state. In hot weather conditions, follow manufacturer's special application procedures. 3. When the treated surface becomes slippery after this period, lightly mist with water until

slipperiness disappears 4. Wait for surface to become slippery again, and then flush entire surface with water to remove

all cure-seal-hardener residue. 5. Squeegee surface completely dry, flushing any remaining slippery areas until no residue

remains 6. Wet vacuum or scrubbing machines can be used in accordance with manufacturer's instructions to remove residue

- b. Existing concrete: Apply cure-seal hardener only to clean, bare concrete. 1. Thoroughly remove previous treatments, laitance, oil and other contaminants.
- 2. Saturate surface with cure-seal-hardener; respray or broom excess onto dry spots. 3. Keep surface wet with cure-seal-hardener for a minimum soak-in period of 30-40 minutes.
- 4. If most of the material has been absorbed after the 30 minute soak-in period, remove all
- excess material, especially from low spots, using broom or squeegee. 5. If most of the material remains on the surface after the 30 minute soak-in period, wait until the surface becomes slippery and then flush with water, removing all cure-seal-hardener residue.

Squeegee completely dry, flushing any remaining slippery areas until no residue remains. 6. If water is not available, remove residue using squeegee. F. Protection:

- 1) Protect installed floors for at least 3 months until chemical reaction process is complete.
- 2) Do not allow traffic on floors for 3 hours after application.
- 3) Do not allow parking of vehicles on concrete slab. 4) Do not allow temporary placement and storage of steel members on concrete slabs. 5) Clean up spills immediately and spot-treat stains with degreaser or oil emulsifier.
- 6) Clean floor regularly in accordance with manufacturer's recommendations.

MASONRY (See structural specifications for additional information)

STRUCTURAL STEEL (See structural specifications for additional information)

ROUGH CARPENTRY (See structural specifications for additional information) Provide and install blocking, plywood, sheathing, furring and miscellaneous light framing required for completion of the work, which is generally not exposed; where noted on the drawings, and as specified herein. Plywood backing in partitions & mounting panels for mounting equipment. Provide APA C-D

Provide preservative treated where indicated in the drawings, and as follows: wood cants, nailers, curbs, and blocking, furring, stripping and similar concealed members in contact with masonry or concrete. Preservative treatment shall be water borne material complying with AWPB LP-2, kiln-dried to

Set rough carpentry accurately to required levels and lines, with members plumb and true and

Place roof and wall sheathing with end joints. Staggered. Secure sheets over firm bearing. Maintain minimum 1/16 inch and maximum 1/8 inch spacing between joints of sheets on walls. Place

Provide miscellaneous finish carpentry items as shown on the drawings.

Install work plumb, level, true and straight with no distortions. Shim as required using concealed shims. Scribe and cut to fit adjoining work. Install with minimum number of joints possible, using fulllength to the greatest extent possible. Cope at inside corners, miter at outside corners, and use scarf joints for end-to-end joints, to provide tight fitting joints with full surface contact throughout length of joint. Anchor to blocking or directly to substrate with countersunk, concealed fasteners and blind nailing where possible. Anchor countertops securely to support systems as indicated. At drywall partitions, where blocking does not exist, use adhesive and pre-drilled countersunk trim-head sheet-metal screws to attached finish carpentry to metal studs. Fill recess to match surface color of wood.

Contractor shall provide all labor, materials, and equipment to install insulation, roofing, and waterproofing, building wrap, as detailed or specified in these documents.

a. General building insulation shall be a batt or cellulose insulation with the thickness or "R" value specified on drawings. The batt or cellulose insulation is to be used unless otherwise noted on

b. A 6 mil vinyl film moisture barrier shall be provided on the inside of all exterior frame walls.

d. Waterproofing for concrete walls for below grade shall be 0.060" self-adhering membrane of rubberized asphalt Bituthene manufactured by W.R. Grace & Co. or approved equal.

SECTION 072500 BUILDING WRAP

Contractor shall provide TYPAR MetroWrap applied as a water resistive barrier and air barrier assembly in exterior walls PART 1 GENERAL

A. Submittals shall include

1) Product data, including manufacturer's product data and installation instructions. 2) Manufacturer's certification that the installer is acceptable.

3) Samples: Submit 12 inch square sample for approval. B. Quality Assurance:

1) Manufacturer: Obtain primary materials from a single manufacturer regularly engaged in manufacturing building wraps. Obtain secondary materials from a source acceptable to the primary materials manufacturer.

2) Installer: Minimum 2 years experience with installation of similar building wraps.

C. Delivery, Storage and Handling: 1) Deliver materials and products in unopened factory labeled packages.

2) Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage. PART 2 - PRODUCTS

2.1 Materials

A. Building Wrap: TYPAR MetroWrap by Avintiv, Inc. 70 Old Hickory Boulevard, Old Hickory, TN 37318, www.typar.com. Material shall comply with the following: 1) Thickness: 0.121 inches average

- 2) Breaking Strength Test: 94 pounds mean value per ASTM D 5034.
- 3) Water Vapor Transmission: 9-15 perms per ASTM E96, dessicant method. 4) Pliability: No signs of cracking per AC38, Sec. 3.3.4.
- 5) Ultraviolet Exposure: Less than 10 months prior to exterior cladding coverage.
- 6) Accelerated Aging Cycling: No signs of failure at 21 days per AC38. 7) Water Resistance Test: Exceeds one hour per ASTM D779.
- Elongation: 1.9 inches mean value per ASTM D 5034, 4-inch wide sample.
- B. Manufacturer's Accessory Products: 1) Tape: TYPAR Construction Tape.
- 2) Sealant: Approved Sealant
- 3) Flashing: TYPAR Flashing Flex, TYPAR Peel & Stick Flashing and Flashing RA. PART 3 - EXECUTION

3.1 Examination

- A. Prior to start of installation, inspect existing conditions to ensure surfaces are suitable for installation of MetroWrap, including removal of sharp protrusions and that substrate is dry.
- 3.2 Installation of MetroWrap A. Installation: Comply with manufacturer's installation instructions including but not limited to the
- requirements specified in this section. Sequence construction such that MetroWrap is not exposed for more than 12 months before covering material is applied. B. Overlaps: Install shingle style to shed water, with minimum 2 inch overlap horizontally, 6 inch

overlap vertically, and 12 inches overlap at corners, at all locations where this is possible. C. Fasteners at Wood Studs: Use manufacturer's recommended fasteners with up to 2 inch plastic heads. Use 2 inch long plastic headed nails or plastic headed screws when 1/2 inch thick OSB sheathing is used.

D. Fasteners at Metal Studs: Use manufacturer's recommended fasteners with up to 2 inch plastic disk around shank of No. 10 stainless steel self-taping screws. Use 2 inch long screws when 1/2 inch thick gypsum board is used.

E. Fastening at Concrete Block and Poured Concrete: Adhesive recommended by manufacturer. F. Fastener Pattern: Attach one fastener or more every 24 inches in horizontal and vertical direction G. Edge Seal Where Material is Sealed to Itself: TYPAR Construction Tape.

H. Edge Seal Where Material is Sealed to Adjacent Material: Install approved sealant on the substra 1 inch to 2 inches back from the edge of the MetroWrap. Press MetroWrap into the sealant to seal to create air and water seal. If required by location of termination, provide furring strip to hold the MetroWrap in place.

I. Edge Seal at Penetrations: Install approved sealant on the substrate 1 inch back from the edge of the cut. Press MetroWrap into the sealant to create air and water seal. Install TYPAR Flashing Flex, TYPAR Peel & Stick Flashing or Flashing RA on the exterior of the MetroWrap to join the material to the penetration.

J. Final inspection of MetroWrap: When each section is complete, the installer shall visually inspect the installation and verify that all rows of material have overlapped the row below it, that all materials and components have been installed in a shingle fashion, that the fasteners are the proper ones, that the nailing pattern is correct, that all penetrations and terminations have been done correctly and that doors and windows have been properly flashed and integrated into the MetroWrap material. The installer sha repair any cuts or tears with TYPAR Construction Tape. K. Cover with exterior cladding within 6 months of installation.

SECTION 074113 METAL ROOF PANELS

PART 1 - GENERAL:

Contractor shall provide all labor, materials, and equipment to install preformed metal roofing and accessories, as detailed or specified in these documents. The metal roofing shall be 24 gage min. The fascia shall be 24 gage min. The soffit shall be a 'V' groove .019 if aluminum, or 26 gage if steel. 1.1 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Manufacturer shall have a minimum of three years experience in manufacturing metal roofing systems.

B. The installer shall meet the following minimum criteria: 1. Have received specific training in the proper installation of the specified system and will be present to supervise whenever material is being installed. 2. Have installed five projects of similar scope and magnitude that have been in service for a minimum of two years with satisfactory performance of the roof system.

1.2 SYSTEM PERFORMANCE REQUIREMENTS: A. Performance Testing

1. Metal roofing systems shall be tested in accordance with UL580, Class 90 rating. 2. Metal roof panel systems shall be tested in accordance with ASTM E1592 for negative loading. Capacity for gauge, span or loading other than those tested is permitted to be determined by interpolating between test values only.

3. Metal roof panel systems shall have a maximum air infiltration rate of 0.007 cfm per square foot a pressure differential of .24 psf. when tested in accordance with ASTM E1680. 4. Metal roof panel systems shall have no water leakage at a pressure differential of 6.24 psf when tested in acordance with ASTM E1646.

5. The panels and concealed anchor clips shall be capable of supporting a 300-pound temporary concentrated load at the panel mid-span in the installed condition. The load shall be applied over the entire panel width. The panels shall support this concentrated load without displaying permanent distortions that would affect the weathertightness of the SSSRS. 1.3 DESIGN REQUIREMENTS

The SSSRS shall be designed by the Manufacturer as a complete system. All components of the system shall be supplied or specified by the same manufacturer. 1.4 SUBMITTALS

A. Installation Drawings: Submit completed installation drawings and installation details by the manufacturer, to the Architect for review. Do not proceed with manufacture prior to review and architectural approval of installation drawings. B. Calculations:

1. All calculations shall be reviewed and sealed by a Licensed Professional Engineer. 2. Submit engineering calculations for cladding loads, clip loads, fasteners, uplift loads, drainage, thermal, floating clip, flashing, expansion/contraction effects.

C. Samples: Submit samples and color chips for all proposed finishes. D. Test Reports: Submit test reports showing compliance with ASTM E1592, ASTM E 1646 and ASTM E1680.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING A. Delivery: Deliver metal roofing system to job site properly packaged to provide protection against transportation damage

B. Handling: Exercise care in unloading, storing and installing metal roofing system to prevent bending, warping, twisting and surface damage.

C. Storage: Store all material and accessories above ground on well supported platforms. Store under waterproof covering. Provide proper ventilation of system to prevent condensation build-up between components.

PART 2 - PRODUCTS;

Standing seam panels, 1/4 in 12 minimum slope.

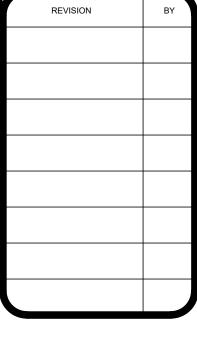
A. Metal Roof Panel; Profile, Seam Type, Thickness, material, Texture, Finish and Color to be selected by Architect. B. Anchor clips, fasteners, flashing, trim caps, gutters, downspouts & roof curbs shall be compatible

- with the roof panel and finished to match.
- C. Sealants: Shall be approved by the SSSRS Manufacturer. D. Pipe Flashings shall provide a weathertight joint at projections through the roof.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS A. Examination: The Contractor shall verify installed work of other trades that such work is complete

- to a point where the roofing system installation may commence. B. Discrepancies: In event of discrepancy, notify the Architect. Do not proceed with installation until
- discrepancies have been resolved.
- 3.2 INSTALLATION A. Install the SSRS in accordance with manufacturer's instructions and approved installation
- drawings B. Install the SSRS so that it is weathertight and allows for thermal movements.
- C. Avoid placing pipe penetrations through the panel seams.
- D. Do not allow panles or trim to come into contact with dissimilar materials.
- E. Comply with manufacturer's approved installation drawings for installation of roof curbs. 3.3 CLEANING, PROTECTION
- A. Dispose of excess roofing materials and remove debris from site.
- B. Clean work in accordance with manufacturer's recommendations.
- C. Protect work against damage until final acceptance. Replace or repair to the satisfaction of the architect, any work that becomes damaged prior to final acceptance.



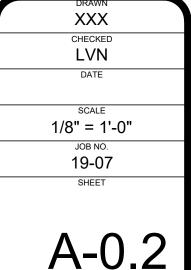


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CTION 07900

Provide and install sealants complying with requirements included herein, in order to establish and maintain airtight, vermin proof, and waterproof continuous seals on a permanent basis.

SEALANTS A. Acrylic emulsion latex (type C): ASTM C834, single component; color as selected; AC-20

manufactured by Pecora.

Butyl sealant (Type E): FS TT-S-1657, Type 1; single component, solvent release, non-skinning, nonsagging; black color; BC-158 manufactured by Pecora. B. Polyurethane sealant (Type G): ASTM C920, Type S, Grade NS, Class 25; single component, chemical curing, non-staining, non-bleeding, capable of continuous water immersion, non-sagging type; color as selected; Sikaflex-1A manufactured by Sika Corp.

1. Elongation capability - 25 percent

2. Service temperature range -40° to 165° F (-40° to 74° C) 3. Shore A hardness range - 35 to 45

C. Polyurethane sealant (Type H): ASTM C920, Type M, Grade NS, Class 25; multi-component, chemical curing, non-staining, non-bleeding, capable of continuous water immersion, non-sagging type; color as selected; Sikaflex-2C manufactured by Sika Corp.

1. Elongation capability - 25 percent 2. Service temperature range -40° to 165° F (-40° to 74° C)

3. Shore A hardness range - 20 to 30

D. Silicone Sealant (Type I): ASTM C920, Type S, NS Class 25, FDA approved; single component, solvent curing, non-sagging, non-staining, non-bleeding; color as selected; Construction 1201 manufactured by GE Silicones.

1. Elongation capability - 25 percent

2. Service temperature range -80° to 400° F (-62° to 204° C) 3. Shore A hardness range - 30

E. Silicone Sealant (Type J): ASTM C920, Type S, NS, Class 25; single component, fungus resistant, chemical curing, non-sagging, non-staining, non-bleeding; translucent white color; Sanitary 1700 manufactured by GE Silicones.

1. Elongation capability - 25 percent

2. Service temperature range -80° to 400° F (-62° to 204° C)

3. Shore A hardness range - 31 ACCESSORIES:

Primer: non-staining type, recommended by sealant manufacturer to suit application. Joint Cleaner: non-corrosive and non-staining type, recommended by sealant manufacturer; compatible

with joint forming materials Joint Backing: ASTM D1056; round, closed cell polyethylene foam rod; oversized 30 to 50 percent

larger than joint width; green rod manufactured by NMC. Inc. Bond Breaker: pressure sensitive tape recommended by sealant manufacturer to suit application.

INSTALLATION: Clean joint surfaces immediately before installation. Prime or seal joint surfaces as recommended by manufacturer. Comply with manufacturer's instructions. Fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and a vertical surface, fill joint to form a minimum $\frac{1}{4}$ " radius convex cove, so that joint will not trap moisture and dirt. Clean adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage.

SEALANT AT BASE OF DensShield: Provide ¹/₂" high continuous bead of silicone sealant between DensShield panels and concrete floors, prior to installation of floor and wall finishes.

SCHEDULE

This schedule is a list of principal areas only. Refer to drawing details for items not specifically scheduled.

To match frames

To match frames

As selected

To match masonry

Location
Window perimeter (interior)
Window perimeter (exterior)
Masonry joints
EIFS joints
Door frame/walls (interior)
Door frame/walls (exterior)
Under thresholds
Plumbing fixtures/cultured marble

Off-white To match masonry To match frames White Food service areas(food contact areas) White

SECTION 08000

DOORS, WINDOWS, AND GLASS

Contractor shall supply and install all doors, windows, and glazing as detailed, scheduled, and/or specified in these documents. a. All doors to be equipped with hardware as shown in the door schedule and selected by the Owner.

They shall all be operating snugly and smoothly. b. All exterior doors to be caulked and weather-stripped, and weather proof thresholds shall be furnished.

c. All windows shall be caulked and weather-stripped, sealed on all edges and surfaces and shall be operating snugly and smoothly

d. Window heads are recommended to be door height unless otherwise noted. e. Glass used in shower or tub enclosures shall be not less than 3/16" when fully tempered and 1/4"

thick when laminated. f. Glass in doors, fixed glass panels and all glass within 24" of any door and similar glazed openings subject to human impact shall comply with (IBC 2406.2.6).

g. Windows shall be insulated, double glazed, in aluminum frames

h. All doors shall be as shown on drawings i. Exterior doors shall be insulated steel doors and shall be as shown on drawings.

j. Exterior door and window openings shall be counterflashed.

SECTION 08110

STEEL DOORS & FRAMES

Provide exterior and interior metal doors and frames, where noted on the drawings and as specified herein. Comply with applicable requirements of the steel door institute 'recommended specifications: standard steel doors and frames'.

FRAMES: 16 gage. unless noted otherwise, hot-dipped galvanized cold-rolled steel, fully welded. Provide minimum of 4 galvanized wire type, corrugated sheet metal, or expansion type anchors per jamb. Provide floor angle anchors.

EXTERIOR DOORS:

1-3/4" thick insulating assembly, with 18, unless noted otherwise, gage cold-rolled, hot dipped galvanized sheet steel faces, flush type with top, bottom and all edges fully welded and ground smooth. Provide weep holes at bottom to allow escape of entrapped moisture. Door panel shall provide thermal insulating resistance factor of not less than R-11. GENERAL FABRICATION:

Fabricate steel door units to be rigid, neat in appearance and free from defects, warp or buckle. Where possible, fit and assemble units in manufacturer's plant. Shop prime all hollow metal doors and frames.

HARDWARE PREPARATION:

All doors and frames shall be mortise and reinforced for hardware in the factory. Provide three silencers for single door frames. Install hollow doors and frames in accordance with manufacturer's recommendations. Set frames accurately in position, plumbed and aligned. Fit doors accurately within frames, sand smooth all rust or damaged areas of prime coat and apply touch-up coat of compatible primer

SECTION 08210 WOOD DOORS

Provide and install wood doors where noted on the drawings, as specified herein and in compliance with applicable requirements of NWWDA industry standard I.S. 1-A and AWI 'Architectural Woodwork Quality Standards'.

SECTION 08710

FINISH HARDWARE

Provide and install finish hardware throughout the work as needed for a complete installation and as indicated on drawings

Hardware shall not require pinching, tight grasping, or twisting of the wrist in order to operate. BLOCKING:

Coordinate with other sections to provide solid wood blocking at all locations where door stops are to be mounted to drywall partitions.

FASTENERS:

Provide necessary screws, bolts and other fasteners of suitable size and type to anchor hardware in position for long life under hard use. Provide concealed fasteners for hardware units which are exposed when door is closed. THRESHOLD SEAL:

Provide Butyl rubber sealant meeting FS TT-S-001657 for installation of thresholds, as manufactured by Pecora, Sonoborn, or Tremco.

Install hardware items at heights recommended by the door and hardware institue, except as specifically required to comply with local codes. Install hardware in compliance with the manufacturer's instructions and recommendations. Set units level, plumb and true. Adjust and check operation of every unit. Replace units which cannot be adjusted to operate freely and smoothly.

HARDWARE SCHEDULE: As indicated on the drawings.

Mounting heights for hardware from finished floor to center line of hardware item:

Locksets: 38 inches

Push-Pulls: 42 inches

Dead locks: 48 inches

Exit devices: 38 inches

All mounting heights shall conform to the requirements of ADA-AG.

ACCEPTABLE HARDWARE MANUFACTURERS: A. Entry Doors: Manufacturer's standard

B. Butts: McKinney; Hager; Stanley

C. Latch/lock sets; Mortise locks: Sargent; Schlage

D. Cylinder Locks: Schlage; Adams Rite; Best

E. Exit devices: Dorma; Von Duprin; American Device

F. Closers: LCN; Dorma

G. Thresholds: National Guard Products; Hager H. Gasketting: National Guard Products; Hager

I. Protection Plates: Hager; Ives J. Door stops: Hager; lves

ECTION 08800 GLAZING:

WORK INCLUDED: Provide and install glass and glazing as shown on the drawings, as specified herein, and as needed to meet the requirements of the construction. WARRANTY: Manufacturer's 5-year warranty including coverage for sealed glass units from failure, interpane dusting or misting, and replacement of same.

GLAZING STANDARDS: Comply with recommendations of Flat Glass Marketing Association (FGMA) 'Glazing Manual' and 'Sealant Manual' and SIGMA except where more stringent requirements are indicated. Refer to those publications for definitions of glass and glazing terms not otherwise defined in this section or other referenced standards. SAFETY GLAZING STANDARDS: Where safety glass is indicated or required by authorities having

jurisdiction, provide type of products indicated which comply with ANSI Z97.1 and testing requirements of 16 CFR part 1201 for Category II materials. FLOAT GLASS: Type FG-A, 1/4 inch thick minimum, clear unless otherwise indicated.

FLOAT GLASS: Type FG-B, 1/4 inch thick minimum, tempered, clear unless otherwise indicated. INSULATING GLASS UNITS (TYPE A): ASTM E774 and E773; double pane with glass elastomer edge seal; outer pane of low E glass, inner pane of low E glass; interpane space purged dry hermetic air; total unit thickness of 1 inch.

INSULATING SAFETY GLASS UNITS (TYPE B): ASTM 3774 and E773; double pane with glass elastomer edge seal; outer pane of low E glass, inner pane low E glass; interpane space purged dry hermetic air; total unit thickness of 1 inch. TEMPERED GLASS (TYPE C): (USE WHERE REQUIRED BY BUILDING CODE) Provide clear prime glass 1/4 inch thick minimum, which has been heat treated to strengthen glass in

bending to not less than 4.5 times annealed strength, conforming to ANSI Z97.1 and CPSG 16 CFR Glass stop assemblies (at interior window openings):'Kawneer' #69-275, " H x 1-" W, finish as indicated, at jambs (sides), top and bottom of all interior glazing.

Clean glazing channel and other framing members to receive glass, immediately before glazing. Remove coatings which are not firmly bonded to substrate. Remove lacquer from metal surfaces where elastomeric sealants are used.

Comply with FGMA 'Glazing Manual' and manufacturers instructions and recommendations. Use manufacturer's recommended spacers, blocks, primers, sealers, gaskets and accessories. Install glass with uniformity of pattern, draw, bow and roller marks. Install sealants to provide complete wetting and bond and to create a substantial wash away from glass. Install pressurized tapes and gaskets to protrude slightly out of channel, so as to eliminate dirt and moisture pockets. Remove and replace damaged glass and glazing. Wash and polish glass on both faces not more than 4

days prior to date scheduled for inspections intended to establish date of substantial completion. Comply with glass manufacturer's recommendations for cleaning. SECTION 09260

GYPSUM BOARD ASSEMBLIES

Provide and install screw-type metal support system, gypsum wallboard, and drywall finishing of partitions, furring, ceiling and soffit drops where shown or noted on the drawings and as specified

GYPSUM WALLBOARD: ASTM C36, type 'X', tapered edge, " thickness unless otherwise indicated; in maximum lengths available to minimize joints. Gypsum backing board may be utilized for multi-layer applications.

FIRE RATED GYPSUM WALLBOARD: ASTMC36 fire resistive, UL rated. DensShield: ASTM C630 eq " thick square cut ends, taped edges. CEMENTUOUS BOARD: Glass fiber reinforced Portland cement 'Durock' or DensShield or approved

TRIM ACCESSORIES: Provide manufacturer's standard galvanized steel trim with beads for concealment of flanges in joint compound. Use vinyl trim with DensShield. JOINT TREATMENT: ASTM C475, paper reinforcing joint tape, with ready mixed vinyl-type joint compound, multi-purpose grade.

Comply with 'Gypsum Construction Handbook' by United States Gypsum Co., Gypsum Association GA-216 'Recommended Specifications for the Application and Finishing of Gypsum Board' and ASTM C754 'Installation of Framing Members to Receive Screw Attached Gypsum Wallboard Board, or DensShield' for all installation work.

Install Gypsum board vertically to avoid end-butt joints where possible. If necessary, locate end-butt joints as far from center of walls and ceilings as possible, and stagger not less than 1'-0". Do not install imperfect, damaged or damp boards. Do not force in place. Locate joints over supports, with like-edges (tapered or cut) abutting. Form control joints with space between edges of boards, prepared to receive trim accessories.

DensShield:

Provide 1/2' gap between bottom of DensShield and floor surface for installation of continuous silicone sealant.

Install corner beads at all external corners of drywall work. Install edge trim at all edges where gypsum board is exposed or semi-exposed. Install control joints above door jambs, and as indicated on the drawings.

Apply joint treatment at all joints (both directions), metal trim flanges, penetrations, fastener heads, surface defects and elsewhere as required to prepare work for final finish. Apply joint compound in three (3) coats, and sand smooth between last two (2) coats and after last coat. Install acoustical insulation in partitions indicated on drawings to achieve STC ratings noted. Install acoustical insulation in partitions tight within spaces, around cut openings, behind, around and tight to penetrating items. Install acoustical sealant in accordance with manufacturer's instructions.

SECTION 09650

RESILIENT FLOORING

CLEANING:

Supply all labor, materials and equipment for the proper installation of floor coverings and wall base. SUBMITTALS:

Sample of each type of flooring and base indicated on the drawings. MATERIALS:

Floor patch and fillers shall be as recommended by the floor covering manufacturer. Wall base brands and color are given in the finish schedule to show exact color required. Provide pre-molded external corners. Unspecified brands of materials such as adhesives, etc. shall be pure and of the best quality obtainable. All materials shall be used only as specified by the wall base manufacturer. PREPARATION:

All surfaces to receive flooring shall be dry and free of dirt, dust or grit before installation is started. Fill low spots and other minor defects with floor filler recommended by the manufacturer. Vacuum clean substrate. Apply primer to all surfaces. INSTALLATION OF TILE MATERIAL:

Install in accordance with manufacturer's instructions. Spread adhesive and set tile in place. Press with heavy roller to attain full adhesion. Scribe to appurtenance to produce tight joints. Install edge strips where flooring ends.

INSTALLATION OF BASE MATERIAL Adhere base tight to wall surface. Fit joints tight and vertical. Miter internal corners. At exterior corners, use pre-molded units.

accordance with manufacturer's instructions.

Remove excess adhesive from surfaces without damage. Clean, seal, and wax surface in

SECTION 09900 PAINTS AND COATING

SCOPE: Supply all labor, materials and equipment necessary for the proper painting and finishing of the building

MATERIALS

Paint brands and colors are given in the finish schedule to show exact color required. Exact matches within the following brands are acceptable a. Benjamin Moore

b. Devoe

c. Kwal-Howells d. Sherwin Williams

Unspecified brands of materials such as shellac, turpentine, thinner, etc., shall be pure and of the best quality obtainable. All materials shall be used without alterations and only as specified by the paint manufacturer.

Putty and fillers shall be as recommended by the paint manufacturer. Caulking material shall be 'Mono' Acrylic Terpolymer Sealant, White color by Tremco Manufacturing Co., or approved equivalent.

WORKMANSHIP: All surfaces to be painted shall be clean and free of dirt, dust or grit before painting is started. Painting shall not be done when there is sweeping or excessive dust in the air. All pitch streaks, resin spots, etc., shall be cleaned of all residue and touched up with shellac before painting. Putty all nail holes, cracks, etc., in woodwork after the first coat is applied. Where the prime coat does not dry to a uniform sheen over the entire surface, spot prime the areas that indicate suction before applying finish coats. Under coats of paint shall be tinted to a color approximating the finish coats, with enough variation in

color to permit visual inspection of materials during this work. All materials shall be evenly spread and flowed on without runs, sap or excessive brush marks. STEEL DOORS, FRAMES, HANDRAILS, AND OTHER FREE-STANDING METAL ACCESSORIES: Pre-primed or painted: Two additional coats of Alkyd Enamel, spray applied, over fine sanded primer

Bare metal: Two coats Alkyd Enamel, spray applied, over tow coats fine sanded metal primer. Gypsum wallboard: (Pre-primed or painted): Two additional coats of acrylic latex over fine sanded or

(Bare wallboard): Two coats acrylic latex over one coat sanded wallboard primer. MISCELLANEOUS UNFINISHED SURFACES:

Miscellaneous unfinished surfaces not specified above or in finish schedule, except mill-finished aluminum, stainless steel, and natural finish materials, paint to match colors of adjacent surfaces with paint type as recommended by the manufacturer.

CAULKING Caulk at the junction of all steel door frames and walls, as well as intersections of cabinet work, sinks, hoods, shelving and counters with walls, etc., as needed to finish the job in the best manner.

SECTION 09110: METAL STUDS

Provide metal studs and accessories as indicated on the Drawings, as specified herein, and as needed for a complete and proper installation

a. Use adequate number of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

b. In addition to complying the pertinent codes and regulations of governmental agencies having urisdiction, comply with pertinent recommendations contained in "Specifications for Metal Lathing and Furring" published by the Metal Lath/Steel Framing Association. c. Submittals shall include;

1. Manufacturers' specifications and other data needed to prove compliance with the specified requirements

2. Manufacturers' recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work. d. METAL STUDS AND ACCESSORIES

1. Meet or exceed minimum requirements of Fed Spec QQ -S-698 and Fed Spec QQ-S-775d, class d, for the item and use intended. 2. At interior metal stud partitions, unless otherwise shown on the Drawings, provide standard

punched steel studs of the gages shown on the Drawings, either hot -dip galvanized or factory pre-painted 3. Use only one type throughout the Work, unless otherwise shown on the Drawings or

specifically approved in advance by the Architect. 4. Accessories: Provide all accessories including, but not necessarily limited to, tracks, clips, anchors, fastenings devices, sound attenuation pencil rods and resilient clips, and other accessories required for a complete and proper installation, and as recommended by the manufacturer of the steel

studs used. 5. GROUT Provide a good grade of commercial grout for leveling the floor runner member of steel stud partitions as required.

e. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

f. INSTALLATION 1. Accurately layout partition and wall lines from the dimensions shown on the Drawings. 2. Install metal studs and accessories in strict accordance with the manufacturer's is as approved by the Architect, anchoring all componen 3. Align partition and all assemblies to a tolerance of one in 200 horizontally and one in 500

vertically g. Coordination:

1. Space the studs as required for compliance with pertinent regulations, to give proper support for the covering material, and as indicated on the Drawings. 2. Coordinate and provide required backing and other support for items to be mounted on the

finished covering. 3. Coordinate requirements for pipes and other items designed to be housed within the partition and wall systems.

SECTION 102800 TOILET ACCESSORIES

Installation of toilet accessories furnished by others, provide toilet accessories as indicated in the drawings in all toilets, as specified herein, as required for a complete and proper installation. Notes: coordinate accessory locations, installation, and sequencing with other work to avoid interference with and ensure proper installation, operation, adjustments, cleaning, and service of toilet accessorv items

Contractor shall provide solid backing (wood if permitted by code) for anchorage of all accessories.

MATERIALS: FASTENERS

Screw, bolt and other devices of same material as accessory unit, or of galvanized steel where concealed

Accessories furnished by Owner and installed by Contractor U.N.O.:

- Toilet tissue dispenser, paper towel dispenser, soap dispenser Accessories provided by Contractor (Bradley or approved equivalent):
- a. Towel Dispenser to be Bradley 2291 or equal
- b. Soap Dispenser to be Bradley 6542 or equal c. Mirrors to be Bradley 781- or equal
- d. Sanitary Napkin Dispenser to be Bradley 428 or equal
- e. Grab Bars to be Bradley 812 Series
- f. Seat Cover Dispenser to be Bradley 582 or equal
- g. Toilet tissue Dispenser to be Bradley 8402 or equal
- h. Coat hook Bradley 915 stainless steel i. Hand dryer to be Xlerator XL-SB Eco or equal
- INSTALLATION:

Install toilet accessory units according to manufacturer's installation instructions, using fasteners appropriate to substrate as recommended by unit manufacturer. Install units plumb and level, firmly anchored in locations and at heights indicated. Secure mirrors to walls in concealed, tamperproof manner with special hanger, toggle bolts, or screws. Set units plumb, level and square at locations indicated according to manufacturer's instructions for type of substrate involved. Install grab bars to withstand a downward load of at least 250 lb. Per ASTM F 446. ADJUSTING:

adjust toilet accessories for proper operation and verify that mechanisms function smoothly. Replace damaged or defective items.

CLEANING Clean and polish all exposed surfaces strictly according to manufacturer's recommendations after removing temporary labels and protective coatings.

SECTION 104400 FIRE PROTECTION SPECIALTIES

Provide fire extinguishers in locations indicated on the drawings. PRODUCT DATA:

Provide data on product, accessories, and cabinets (as indicated).

- WARRANTY:
- Provide manufacturer's standard warranty. FIRE EXTINGUISHERS:
- Dry chemical type; red enamel steel tank, with pressure gage, 10#, in accordance with requirements of NFPA 10.

FIRE EXTINGUISHER CABINET: Manufacturer's standard recessed steel cabinet; shop primer painted, with locking glass door.

MANUFACTURERS: General Fire Extinguisher Corp.; J.L. Industries, Div. of J.N. Johnson Corp.; W.D. Allen Manufacturing Co.

INSTALLATION:

Verify that surfaces and internal wall blocking are ready to receive work as indicated on installation instructions Install extinguishers and cabinets level and plumb in accordance with manufacturer's instructions

EQUIPMENT & FURNISHING INSTALLATION

WORK INCLUDED: Install owner furnished equipment and furnishings, where shown on the drawings, as specified herein, and as needed for a complete and proper installation. Coordinate for delivery, receive at the site, unload, protect, set-in-place, and coordinate final connections. RELATED WORK:

Plumbing and electrical work required in connection with the equipment is included as design build. QUALITY ASSURANCE: In addition to complying with requirements of governmental agencies having jurisdiction, installation

of all food service equipment shall comply with:

National Sanitation Foundation (NSF) Underwriters Laboratory (UL) for items with electrical components

ANSI standards for vacuum breakers and air gaps National Fire Prevention Association (NFPA) National Electrical Manufacturers Association (NEMA)

COORDINATION:

other safety devices prior to operation of system.

c. All lavatories shall be Vitreous China.

f. Faucets to shall be single lever type.

d. All tubs shall be baked on enamel over cast iron.

e. Kitchen Sink shall be baked on enamel over cast iron.

e. See Mechanical Drawings for additional information.

of all fixtures and appliances, motors, fans and controls.

a. See Electrical Drawings for additional information.

Extinguishers are best placed adjacent to exterior exit doors.

sprinkler system shall activate the building fire alarm system.

shall incled but not be limited to, all of the following:

c. Alarm control and trouble signaling equipment

j Details of ceiling height and construction

K. The interface of fire saftey control functions.

b Locations of alarm-initiating and notification appliances

of this code, it shall be activated by one of the following:

under contract to a subscriber by one of the following:

specifications shall be provided at an approved location.

protected to completion of work.

HEATING AND VENTILATION:

International Mechanical Code.

INTERNATIONAL FIRE CODE

as per the International Fire Code.

review may be required

electronically supervised.

a. A floor plan

d. Annunciation

installed.

e. Power connection

f. Conductor type and sizes

h. Voltage drop calculations

a. Automatic fire detectors

c. Manual fire alarm boxes

b. Sprinkler waterflow devices

d. Automatic fire extinguishing systems.

station with its own personel. (907.15)

NFPA 72. (907.8)

SECTION 16000

ELECTRICAL

b. Furnaces shall be gas fired.

Verify and coordinate rough-in locations of electrical and plumbing connections. Examine and inspect rough-in services, and installation of floor, ceiling or other conditions under which the equipment is to be installed - verify that dimensions of such items are acceptable before installation of the work. Do not proceed until unsatisfactory conditions have been corrected. INSTALLATION:

Set each item of non-mobile and non-portable equipment securely in place, leveled and adjusted to correct height. Anchor to supporting substrate where indicated and where required for sustained operation and use without shifting or dislocation. Conceal anchorages where possible. ADJUST AND CLEAN:

Test each item of operational equipment to determine that it is operating properly. Coordinate repair or replacement of equipment found to be defective with the owner's representative. Remove protective coverings, if any, and clean items, ready for use.

SECTION 15000 MECHANICAL

PLUMBING

EQUAL.

Contractor shall provide all labor, materials, and equipment necessary to install plumbing, related fixtures, ventilation, roof and floor drains and , heating and air conditioning equipment. All work shall comply with state and local codes and ordinances. Subcontractors shall coordinate work with all utilities as required. Contractor shall install and check all pressure reducing valves, pop off valves, and

a. All plumbing fixtures to be American Standard, Kohler, or equal, in unmarred condition, and

b. All water closets shall be vitreous china, low flush type, maximum 1.6 gallons per flush.

g. Gas hot water heater shall be State PRV-40-NRT, 40 gallon quick recovery 35,000 BTUH OR

h. Showers shall have a maximum flow of 2.6 gallons per minute.

a. All heating, air conditioning, and ventilating equipment shall be installed in accordance with the

c. Duct work shall be sheet metal at all above slab locations. d. Compressors for Air Conditioning shall be mounted on a 4" concrete pad as located on the

Contractor shall provide and install all labor, materials and equipment necessary to install wiring, related fixtures, electrical heat elements, and controls. All work shall comply with state and local codes and ordinances. Subcontractor shall coordinate work with all other trades. Terminal hookup is required

Minimum rated 2A 10BC fire extinguishers shall be provided in accordance with IFC Section 906 so that travel distance from any point inside the building to an extinguisher does not exceed 75 feet.

Remodeling shall be done soas to not obstruct any existing sprinkler heads and shall be maintained

Please submit sprinkler plans for TI's (tenant improvements) to the City Fire Marshall . A third party During construction, one approved portable fire extinguisher shall be provided at each stairwell on all

floor levels where combustable materials have been accumulated. An approved portable fire extinguisher shall be provided in every storage and construction shed. Unless exempted by Section 903.4 of the International Fire Code, all valves controlling the water supply for automatic sprinkler systems and water flow switches on all sprinkler systems shall be

Unless exempted by Section 903.4.1 of the International Fire Code, alarms, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved central station, remotes upervising station or proprietary supervising station as defined in NFPA 72 or, when approved by the Code Offical, shall sound an audible signal at a constantly attended location. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivelent to the flow of a single sprinkler of the smallest orfice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed activation of the automatic

An approved manual fire alarm system shall be designed, installed and maintained in accordance with section 907 of the International Fire Code and NFPA 72. Construction documents for the fire alarm system shall be submitted to an approved engineering firm and then subsequently to the Orem Fire Prevention Bureau for review and approvalprior to system installation. Construction Documents

i Manufacturers, model numbers, and listing information for equipment, devices, and materials

The system and its components shall be listed and approved for the purpose for which they are

Occupant notifiaction systems. (907.6) A fire alarm system shall annunciate at the panel and shall initiate-occupant notifiaction upon activation. Where a fire alarm system is required by another section

Where required by Chapter 9 of the International Fire code, an approved supervising station in accordance with NFPA 72 shall monitor the fire alarm system. Where an approved central station service is provided, the following requirements of NFPA 72 apply

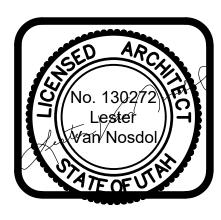
The central station consists of the following elements: installation of fire alarm transmitters, alarm, guard, supervisory, trouble signal monitoring, and runner service. These services shall be provided

a. A listed central station of the elements of central station service with its own facilities and personnel. b. A listed central station that provides, as a minimum the signal monitoring, retransmition, and associated record keeping and reporting to a listed central station. The required runner service shall be provided by the listed fire alarm service-local company with its own personnel or the listed central

Upon compeletion of the installation of the fire alarms system, alarm notification appliances and circuits, alarm-initiating devices and circuts, supervisory-signal initiating devices and circuts, signalingline circuts, and primary and secondary power supplies shall be tested in accordance with

A record of completion verifying that the system has been installed in accordance with NFPA 72 and the approved plans and specifications shall be provided. (907.8.2) Operating, testing and maintenance instructions and record drawings ("as builts") and equipment

Installation personnel shall be supervised by persons who are qualified and experienced in the installation, inspection, and testing of the fire alarm systems. Examples of qualified personnel shall include, but not be limited to, the following: 1) Factory trained and certifiedpersonnel, 2) National Institute of Certification in Engineering Technologies (NICET) Fire Alarm Level II Certified personnel. REVISION





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ACCESSIBILITY SPECIFICATIONS

305 Clear Floor or Ground Space

305.3 Size. The clear floor or ground space shall be 30 inches minimum by 52 inches minimum.

306 Knee and Toe Clearance

306.2 Toe Clearance

Space under an element between the finish floor or ground and 9 inches above the finish floor or ground, and shall extend 25 inches maximum under an element and minimum 17 inches. Toe clearance be 30 inches wide minimum.

306.3 Knee Clearance.

Space under an element between 9 inches and 27 inches above the finish floor or ground, and shall extend 25 inches maximum under and element at 9 inches above the finish floor or ground. Minimum knee clearance shall be 11 inches deep minimum at 9 inches above finished floor or ground and 8 inches deep minimum at 27 inches above the finish floor or ground. Knee clearance reduction between 9 inches and 27 inches, clearance shall be permitted to

reduce at a rate of 1 inch in depth for each 6 inches in height. Knee clearance shall be 30 inches wide minimum.

307 Protruding Objects

307.2 Protrusion limits.

Objects with leading edges more than 27 inches and not more than 80 inches above the floor shall protrude 4 inches maximum horizontally into a circulation path. Protruding objects shall not reduce the clear width required for accessible routes.

402 Accessible Routes

402.2 Components

Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doors and doorways, gates, ramps, curb ramps excluding the flared sides, blended transitions, elevators and platform lifts.

403.5.1 General Walking Surfaces. The clear width of an interior accessible route shall be 36 inches minimum. The clear width of and exterior accessible route shall be 48 inches. 404 Doors, Doorways and Gates

404.2.1 Double-leaf doors and gates.

At least one of the active leaves of doorways with two leaves shall comply with clear width requirements and maneuvering clearances. 404.2.2 Clear width.

Doorways shall have a clear opening width of 32 inches minimum. Clear opening width of doorways with swinging doors shall be measured between the face of door and stop, with the door open 90 degrees. Openings more than 24 inches in depth at door and doorways without doors shall provide a clear opening width of 36 inches minimum.

404.2.3 Maneuvering clearances.

Maneuvering clearances shall include the full clear opening width of the doorway and the required latch-side or hinge-side clearance. The floor surface within the maneuvering clearances shall have a slope not steeper than 1:48

and shall comply with 302. Swinging doors and gates shall have maneuvering clearances complying with Table 404.2.3.2.

Doorways without doors or gates that are less than 36 inches in width shall have maneuvering clearances complying with Table 404.2.3.4.

TABLE 404.2.3.2 – MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS

TYPE OF USE		Maneuvering Clearances at Manual Swinging Doors	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway
			(beyond latch unless noted)

From front	Pull	60 inches	18 inches
From front	Pull	60 inches	18 inches
From front	Push	52 inches	0 inches
From hinge side	Pull	60 inches	36 inches
From hinge side	Pull	54 inches	42 inches
From hinge side	Push	42 inches	22 inches
From latch side	Pull	48 inches	24 inches
From latch side	Push	42 inches	24 inches

TABLE 404.2.3.4 – MANEUVERING CLEARANCES FOR DOORWAYS WITHOUT DOORS OR GATES

Approach Direction	MINIMUM MANEUVERING CLEARANCES
	Perpendicular to Doorway
From front	52 inches
From side	42 inches

Where any obstruction within 18 inches of the latch side of a doorway projects more than 8 inches beyond the face of the door or gate, measured perpendicular to the face of the door or gate, maneuvering clearances for a forward approach shall be provided.

404.2.6 Door and gate hardware.

Handles, pulls, latches, locks and other operable parts on doors and gates shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching or twisting of the wrist to operate. The operational force to retract latches or disengage devices that hold the door or gate in a closed position shall be as follows: Hardware operation by a forward, pushing or pulling motion: 15 pounds maximum.

Hardware operation by a rotational motion: 28 inch-pounds maximum.

Operable parts of such hardware shall be 34 inches minimum and 48 inches maximum above the floor. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

Door and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door or gate to an open position of 12 degrees shall be 5 seconds minimum. Door and gate spring hinges shall be adjusted so that from an open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

405 Ramps

405.2 Slope.

Ramp runs shall have a running slope greater than 1:20 and not steeper than 1:12.

TABLE 405.2-Allowable Ramp Dimensions In Existing Sites, Bldgs and Facilities

Slope	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches
Steeper than 1:10 but not steeper than 1:8	3 inches
Steeper than 1:12 but not steeper than 1:10	6 inches

405.3 Cross Slope.

Cross slope of ramp runs shall not be steeper than 1:48. Surfaces shall comply with Section 302. 405.3 Cross Slope.

Cross slope of ramp runs shall not be steeper than 1:48. Surfaces shall comply with Section 302.

405.5 Clear Width The clear width of a ramp run shall be 36 inches minimum. Handrails and handrail supports that are provided on the ramp run shall not project into the required clear width of the ramp run.

405.6 Rise.

The rise for any ramp run shall be 30 inches maximum.

405.7 Landings

Ramps shall have landings at the bottom and top of each ramp run. Clear width of landings shall be at least as wide as the widest ramp run leading to the landing. Landings shall have a clear length of 60 inches minimum. Ramps that change direction between runs at landings shall have a clear landing 60 inches

minimum by 60 inches minimum.

Ramp runs with a rise greater than 6 inches shall have handrails complying with Section 505.

405.9 Edge Protection.

Edge protection complying with Section 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings. **405.9.1** The floor surface of ramp runs and ramp landings shall extend 12 inches minimum beyond the inside face of a railing complying with Section 505. **405.9.2** A curb complying with 405.9.2.1 or a barrier complying with 405.9.2.2 shall be

provided 405.9.2.1 Curb. A curb shall be a minimum of 4 inches in height. **405.9.2.2 Barrier.** Barriers shall be constructed so that the barrier prevents the passage of a 4 inch diameter sphere where any portion of the sphere is within 4 inches of the floor.

405.10 Wet Conditions

406 Curb Ramps And Blended Transitions

406.6 Detectable Warnings. Where detectable warning surfaces are provided, they shall comply with Section 705.

406.6.2 Locations for Detectable Warning Surfaces. Detectable warning surfaces shall be provided at the following locations on pedestrian access routes and at transit stops:

Curb ramps and blended transitions at pedestrian street crossings, Pedestrian refuge islands Pedestrian at-grade rail crossings not located within a street or highway,

Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or quards and Boarding and alighting areas at sidewalk or street-level transit stops for rail vehicles where the side of the boarding and alighting areas facing the rail vehicles is not protected by screens or guards.

504 Stairways

504.3 Open risers. Open risers shall not be permitted.

504.4 Tread surface.

504.5 Nosings.

Nosings shall comply with the following:

Nosings within a stairway shall be uniform If rounded, the radius of curvature at the leading edge of the tread shall be ½ inch maximum. If beveled, the bevel at the leading edge shall slope at 45 degrees to the plane of the top

surface of the tread and landing and extend for a horizontal distance of $\frac{1}{2}$ inch maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled.

Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical

The permitted projection of the nosing shall be 1 ½ inches maximum over the tread or floor below

504.6 Visual contrast.

Visual contrast shall comply with one of the following: The leading 1 to 2 inches of every tread and landing measured horizontally from the leading edge of the nosing, shall consist of a solid color having visual contrast of dark-on-light or light-on-dark from the remainder of the tread. The contrasting marking shall be durable and shall extend from one side of each tread to the other side of each tread. Durable distinctive warning markings required by the adopted building code or ANSI safety

standard.

504.8 Wet Conditions. Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water

504.10/11 Tactile signage

Stair level identification signs in raised characters and braille complying with Sections 703.3 and 703.4 shall be located at each floor level landing in all enclosed stairways adjacent to the door leading from the stairwell into the corridor to identify the floor level. The exit door discharging shall have a sign with raised characters and braille stating "EXIT". A sign stating EXIT shall be provided adjacent to an area of refuge providing direct access to a stairway, an exterior area for assisted rescue, an exit stairway, an exit ramp, an exit passageway and the exit discharge.

505 Handrails 505.1 General.

Handrails required for ramps, stairs, pool sloped entries and pool stairs shall comply with Section 505.

505.2 Location.

Handrails shall be provide on both sides of stairs and ramps. 505.3 Continuity

Handrails shall be continuous within full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs or ramps shall be continuous between flights or runs.

505.4 Height

Top of gripping surfaces of handrails shall be 34 inches minimum and 38 inches maximum vertically above stair nosings, ramp surfaces and walking surfaces. Handrails shall be at a consistent height above stair nosings, ramp surfaces and walking surfaces.

505.5 Clearance. Clearance between handrail gripping surface and adjacent surfaces shall be 1 ½ inches minimum.

505.6 Gripping Surface.

Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions.

505.7 Cross Section. Handrails with circular cross section shall have a perimeter dimension of 1 1/4 inches minimum

and 2 inches maximum

Noncircular cross section shall have a perimeter dimension of 4 inches minimum and 6 1/4 inches maximum, and a cross-section dimension of 2 1/4 inches maximum.

505.8 Surfaces

Handrails, and any wall or other surfaces adjacent to them, shall be free of any sharp or abrasive elements. Edges shall be rounded.

505.9 Fittings. Handrails shall not rotate within their fittings.

505.10 Handrail extensions. Ramp and stair handrails shall extend horizontally above the landing for 12 inches minimum.

Stair handrails shall extend to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

602 Drinking Fountains and Bottle Filling Stations

602.2 Drinking fountains for persons using wheelchairs. A clear floor space positioned for a forward approach to the drinking fountain shall be provided. Knee and toe space complying with Section 306 shall be provided. The clear floor space shall be centered on the drinking fountain.

Spout outlets of drinking fountains shall be 36 inches maximum above the floor. Spout shall be located 15 inches minimum from the vertical support and 5 inches maximum from the front edge of the drinking fountain, including bumpers.

603 Toilet and Bathing Rooms

603.2 Clearances Turning space shall be provided within the room. The required turning space shall not be provided within a toilet compartment. Doors shall not swing into the clear floor space or clearance for any fixture.

405.8 Handrails.

Landings subject to wet conditions shall be designed to prevent the accumulation of water.

Stair treads shall comply with Section 302 and shall have a slope not steeper than 1:48.

607 Bathtubs

607.2 Clearance A clearance in front of bathtubs extending the length of the bathtub and 30 inches minimum in

depth. Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches minimum beyond the wall at the head end of the bathtub.

Grab bars shall be provided on the rear wall and on the side wall closest to the water closet

Fixed side-wall grab bars shall include a horizontal bar comply with Section 604.5.1.1 and a

Horizontal grab bar 42 inches minimum in length shall be located 12 inches maximum from the

Vertical grab bar 18 inches in length shall be mounted with the bottom of the bar located 39

Rear-wall grab bar shall be 36 inches minimum in length, be located 6 inches maximum from

Minimum area of a wheelchair accessible toilet compartment shall be 60 inches minimum in

Wheelchair accessible toilet compartment doors, including door hardware, shall comply with

Farthest edge of the wheelchair accessible toilet compartment door opening shall be located in

width measured perpendicular to the side wall, and 56 inches minimum in depth for wall hung water

closets, and 59 inches minimum in depth for floor mounted water closets measured perpendicular to the

Section 404. The door shall be self-closing. A pull shall be placed on both sides of the door near the

the front wall or partition or in the side wall or partition as required by Table 604.9.3.1.

Clear floor space positioned for forward approach shall be provided.

latch. Wheelchair accessible toilet compartment doors shall not swing into the required minimum area

Wheelchair accessible toilet compartments shall be arranged for left-hand or right-hand

Urinals shall be of the stall type or shall be of the wall hung type with the rim at 17 inches

Clear floor space positioned for forward approach, shall be provided as per 303.3 (52 inches

Front of lavatories and sinks shall be 34 inches maximum above the floor, measured to the

Water supply and drainpipes under lavatories and sinks shall be insulated or otherwise

configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories

Faucets shall comply with Section 309. Hand-operated metering faucets shall remain open for

maximum above the floor. Urinals shall be 13 ½ inches minimum in depth measured from the outer

inches minimum and 41 inches maximum above the floor, and with the center line of the bar located 39

Horizontal grab bar 24 inches minimum in length shall be provided on the control end wall beginning near the front edge of the bathtub and extending toward the inside corner of the bathtub. Vertical grab bar 18 inches minimum in length shall be provided on the control end wall 3

Bathtub with removable seats, grab bars complying with Section 607.4.2 shall be provided.

608.2.1 Transfer-type shower compartments

604 Water Closets & Toilet Compartments

vertical grab bar comply with Section 604.5.1.2.

rear wall and extend 54 inches minimum from the rear wall.

inches minimum and 41 inches maximum from the rear wall.

604.9 Wheelchair accessible toilet compartments.

face of the urinal rim to the finished wall surface.

minimum in length and 30 inches minimum in width).

the side wall, and extend 42 inches minimum from the side wall.

604.5 Grab Bars

0

rear wall.

605 Urinals

of the compartment.

approach to the water closet.

605.2 Height and depth.

606 Lavatories and Sinks

higher of the rim or counter surface.

606.2 Clear floor space

10 seconds minimum.

and sinks.

inches measured at the center point of opposing sides. An entry of 36 inches minimum in width. A clearance of 52 inches minimum in length and 36 inches minimum in depth shall be provided adjacent to the open face of the compartment. The length of the clear floor space shall be measured perpendicular from either the control wall or from 4 inches behind the control wall. Folding or non-folding seat complying with Section 610 shall be provide on the wall opposite

608.2.2 Standard roll-in-type shower compartments.

Standard roll-in-type shower compartments shall have a clear inside dimension of 60 inches minimum in width and 30 inches minimum in depth, measured at the center point of opposing sides. An entry 60 inches minimum in width shall be provided A clearance of 60 inches minimum in length adjacent to the 60 inches width of the open face of

A folding seat complying with Section 610 shall be provided on an end wall.

Horizontal grab bars shall be provided across the control wall and on the back wall to a point 18 inches from the control wall.

inches minimum and 6 inches maximum above the horizontal grab bar, and 4 inches maximum inward from the front edge of the shower.

A grab bar shall be provided on the back wall beginning at the edge of the seat. The grab bars 0 shall not be provided above the seat. The back-wall grab bar shall extend the length of the wall and extend within 6 inches maximum from the adjacent inside wall opposite the seat.

Where a sidewall is provided opposite the seat within 72 inches of the seat wall a vertical grab bar shall be provided. A vertical grab bar 18 inches minimum in length shall be provided on the end wall 3 inches minimum and 6 inches maximum above the horizontal grab gar, and 4 inches maximum inward from the front edge of the shower.

Grab bars with circular cross section shall have an outside diameter of 1 ¼ inch minimum and

Grab bars with noncircular cross section shall have a cross section dimension of 2 inches Space between the wall and the grab bar shall be 1 ½ inches. The space between the grab

Grab bars shall be installed in a horizontal position, 33 inches minimum and 36 inches maximum above the floor measured to the top of the gripping surface. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements. Edge shall be rounded. Grab bars shall not rotate within their fittings.

Allowable stresses shall not be exceeded for materials used where a vertical or horizontal force of 250 pounds is applied at any point on the grab bar, fastener mounting device, or supporting structure.

802 Assembly Areas

802.2 Floor surfaces.

The floor surface of wheelchair space locations shall have a slope not steeper than 1:48 and shall comply with Section 302.

A single wheelchair space shall be 36 inches minimum in width.

802.4.1 New buildings and facilities.

In new buildings and facilities, where a wheelchair space is entered from the front or rear, the wheelchair space shall be 52 inches minimum in depth. Where a wheelchair space is only entered from the side, the wheelchair space shall be 60 inches minimum in depth.

802.4.2 Existing buildings and facilities.

In existing buildings and facilities, where a wheelchair space is entered from the front or rear, the wheelchair space shall be 60 inches minimum in depth.

803 Dressing, Fitting and Locker Rooms

803.1 General

Turning space shall be provided within the room. Doors shall not swing into the room unless a clear floor space complying with Section 305.3 is provided within the room, beyond the arc of the door swing.

607.4 Grab bars

inches minimum and 6 inches maximum inward from the front edge of the bathtub.

608 Shower Compartments

Transfer-type shower compartments shall have a clear inside dimension of 36 inches by 36

the control wall.

the shower compartment, and 30 inches minimum in depth, shall be provided.

608.3 Grab bars

Transfer-type showers.

Vertical grab bars 18 inches minimum in length shall be provided on the control end wall 3

Standard roll-in-type showers

609 Grab Bars

609.2 Cross Section.

2 inches maximum.

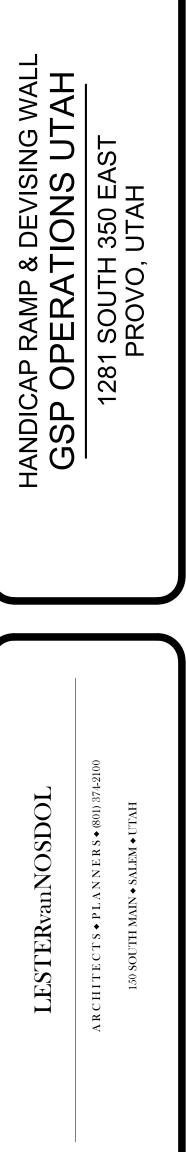
maximum, and a perimeter dimension of 4 inches minimum and 4.8 inches maximum. bar and projecting objects below and at the ends of the grab bar shall be 1 1/2 inches minimum. The space between the grab bar and projecting objects above the grab bar shall be 12 inches minimum.

609.4 Position of grab bars.

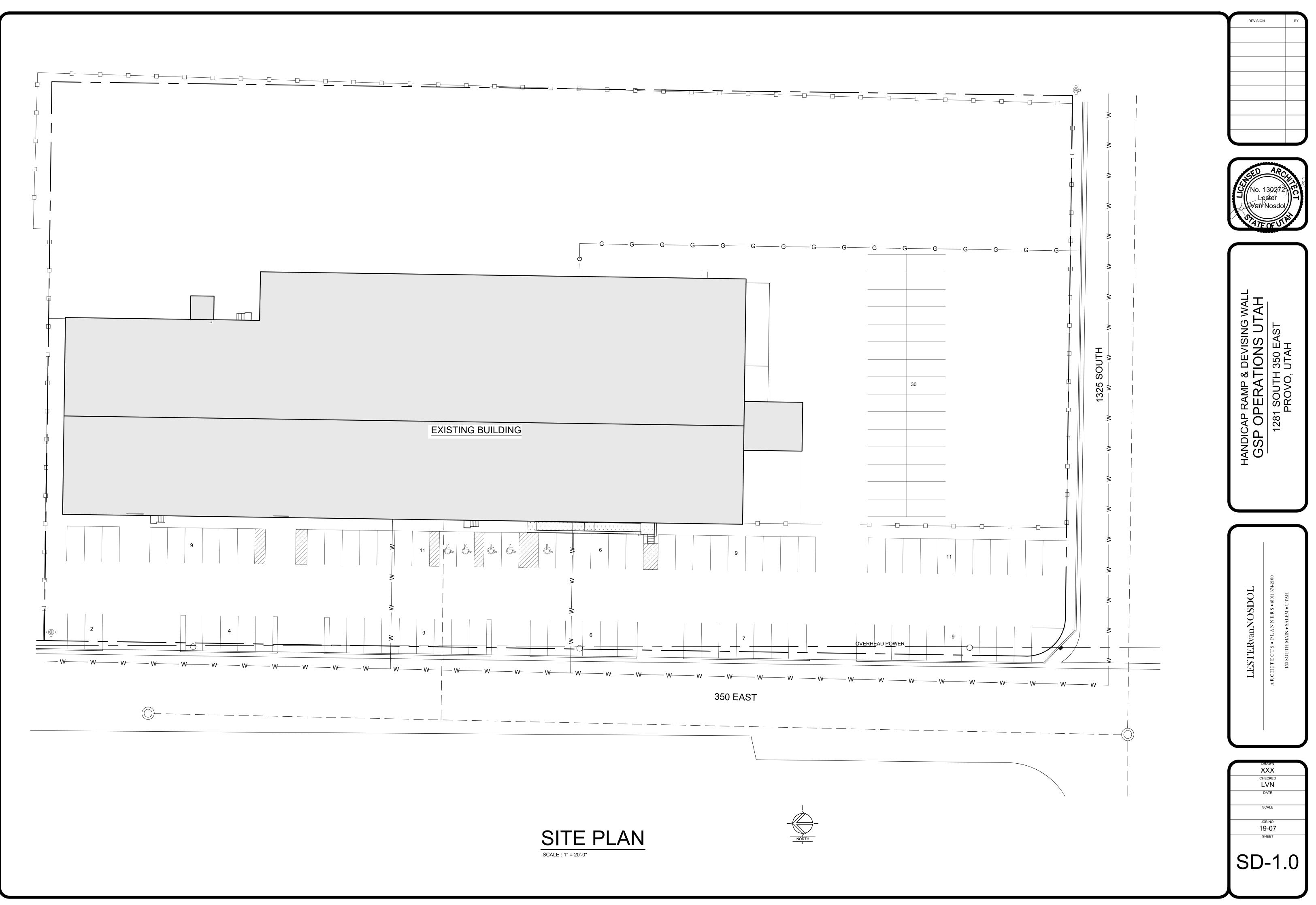
802.3 Width

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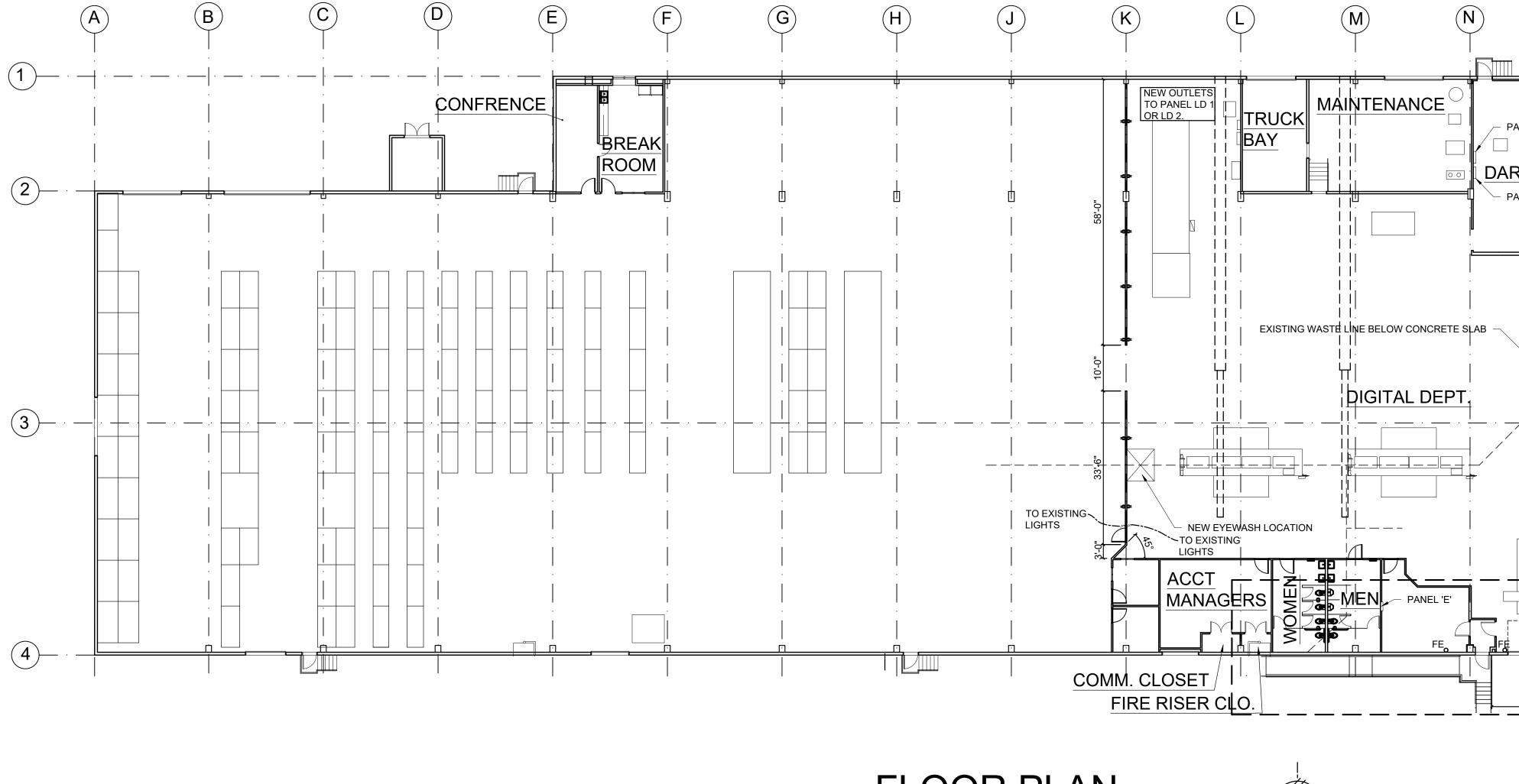




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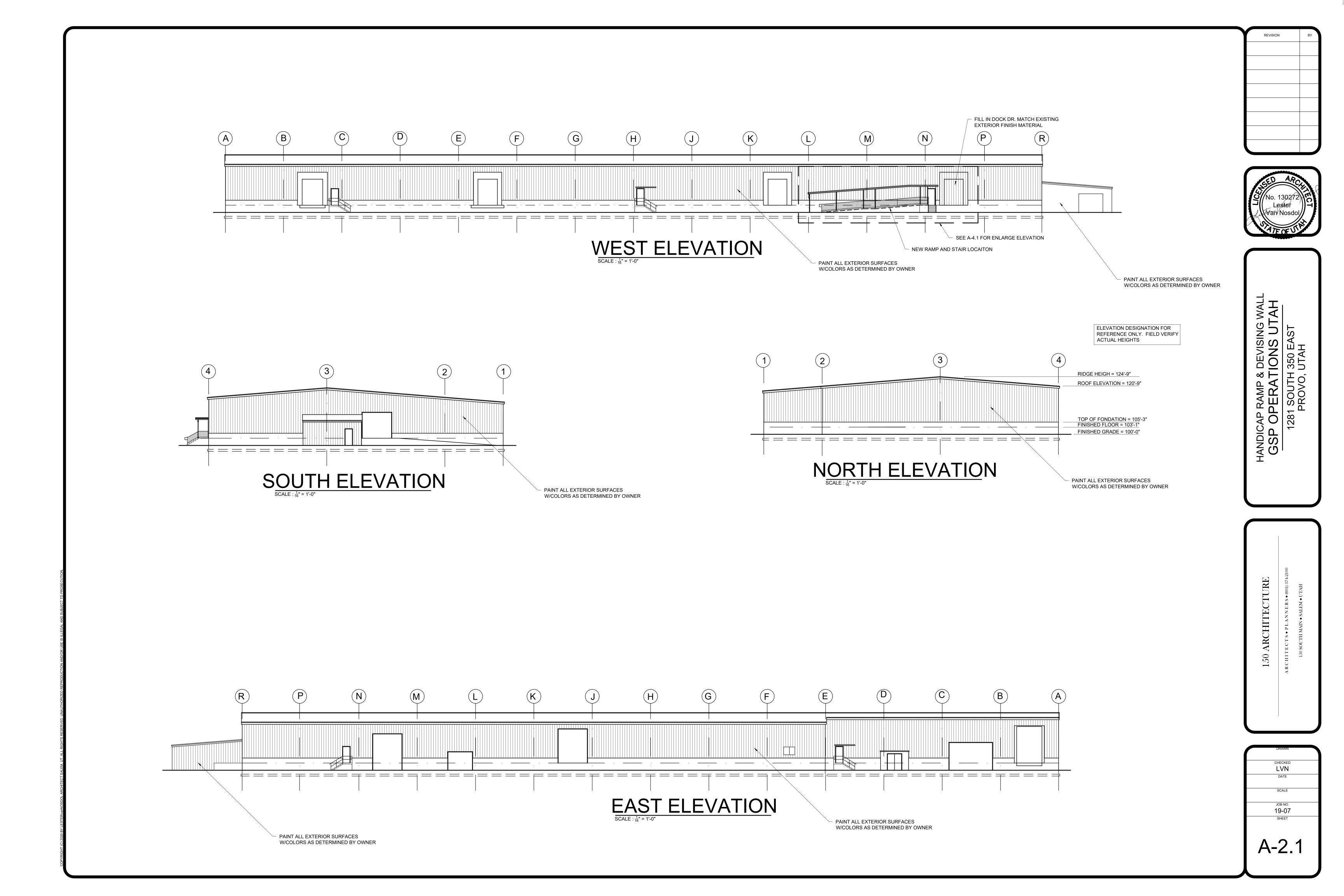


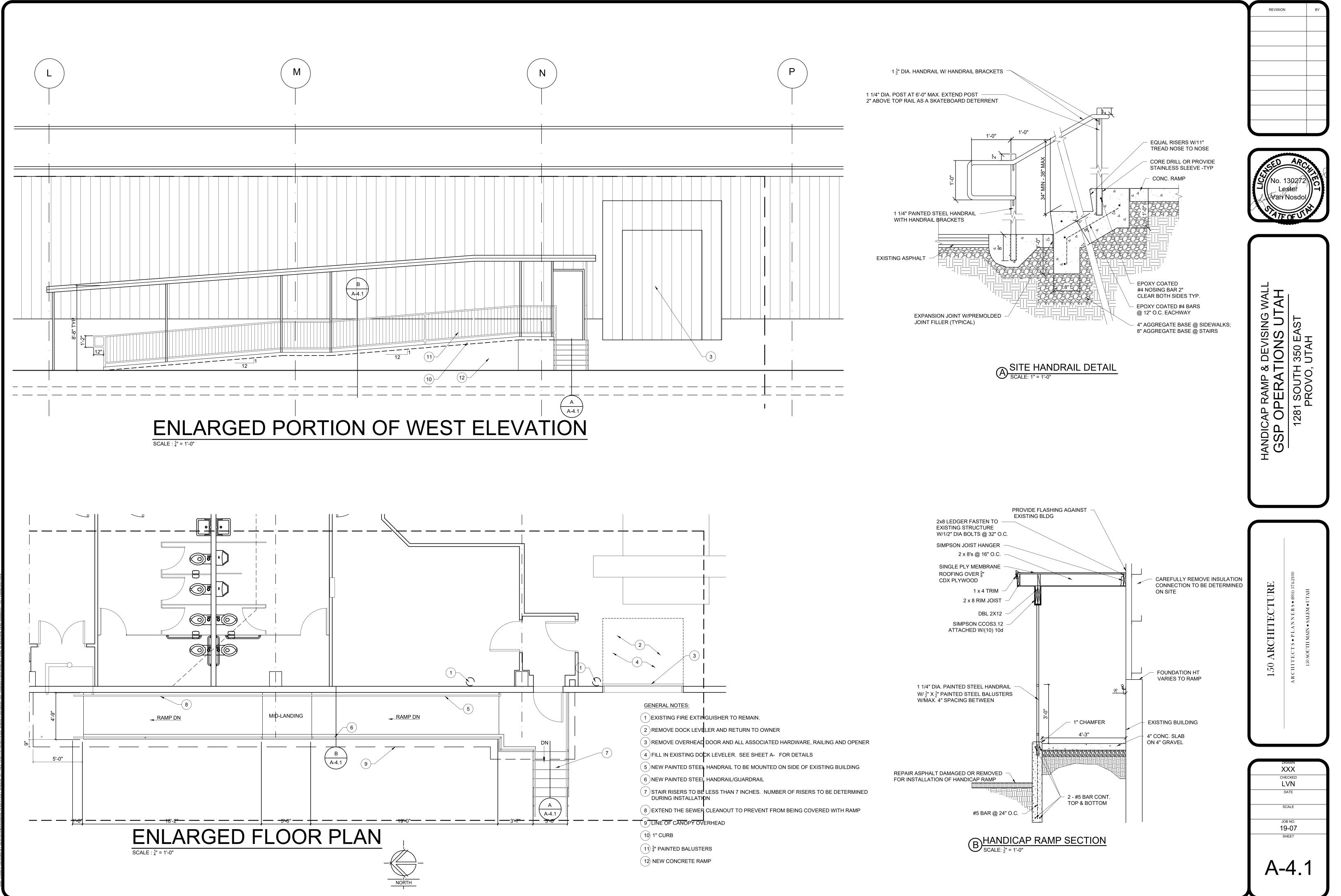




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