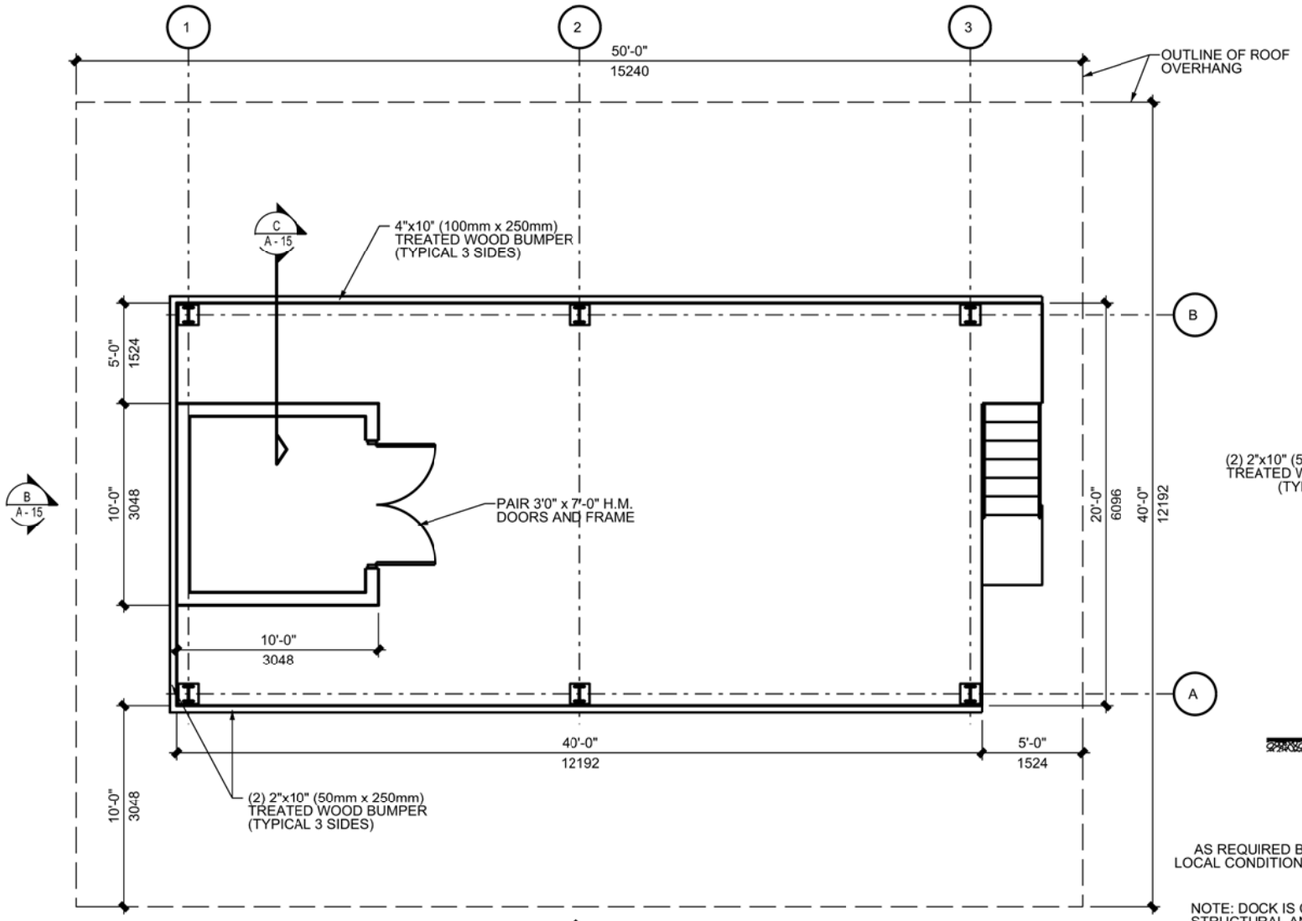
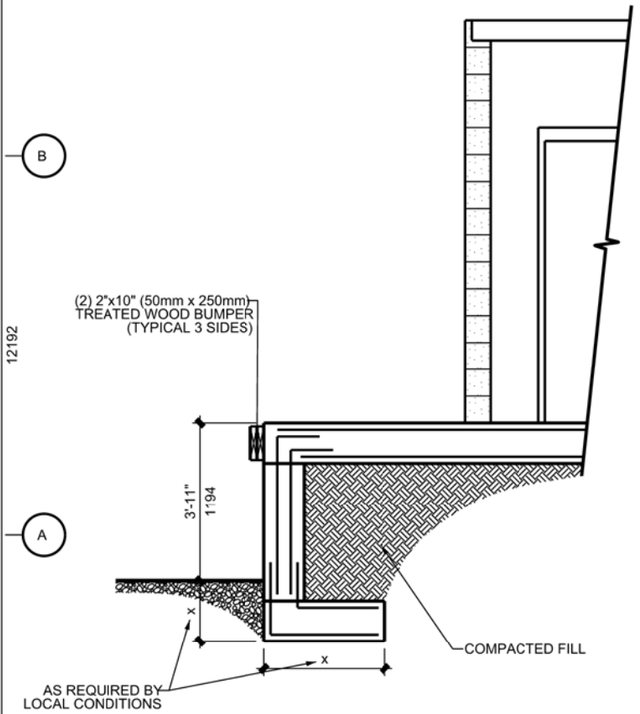


FLOOR PLAN

SCALE: 1/4" = 1'-0"



NOTE: DOCK IS CONSTRUCTED SIMILAR TO AMMO LOADING DOCK. SEE A-13
STRUCTURAL AND FOUNDATION DESIGN MUST BE VERIFIED FOR LOCAL CONDITIONS.

SECTION

SCALE: 1/2" = 1'-0"

General

The Vehicle Instrumentation Dock provides an area where player units are installed on the vehicles. The facility is normally programmed with the unit of measure of each (EA), however, the size should not exceed what is shown on this drawing. Size Calculation; 50' x 40' x 1/2 plus 10' x 10' x 1/2 equals 1050 sf (97.5sm).

Site Adaptation

This standard definitive design should be adapted to local conditions such as climate, topography, seismic zone, available construction materials and techniques and the existing character of surroundings building. These factors may affect plans, elevations and building systems. The building foundation must be designed based on the results of a geotechnical investigation.

Reference Criteria

The design and construction must comply with applicable codes and standards including: technical instruction TI 800-01, "Design Criteria": Department of the Army regulations, technical manuals, handbooks, standards, and specifications.

Functional Requirements

All dimensions not labeled are in feet and inches. Ice guards may be necessary in northern climates. The floor is sloped from the center to the perimeter to provide drainage. The Vehicle Instrumentation Dock is accessed only by able-bodied personnel and does not require ADA compliance unless dictated by local criteria.

Mechanical

No mechanical systems are required for the Vehicle Instrumentation Dock.

Electrical

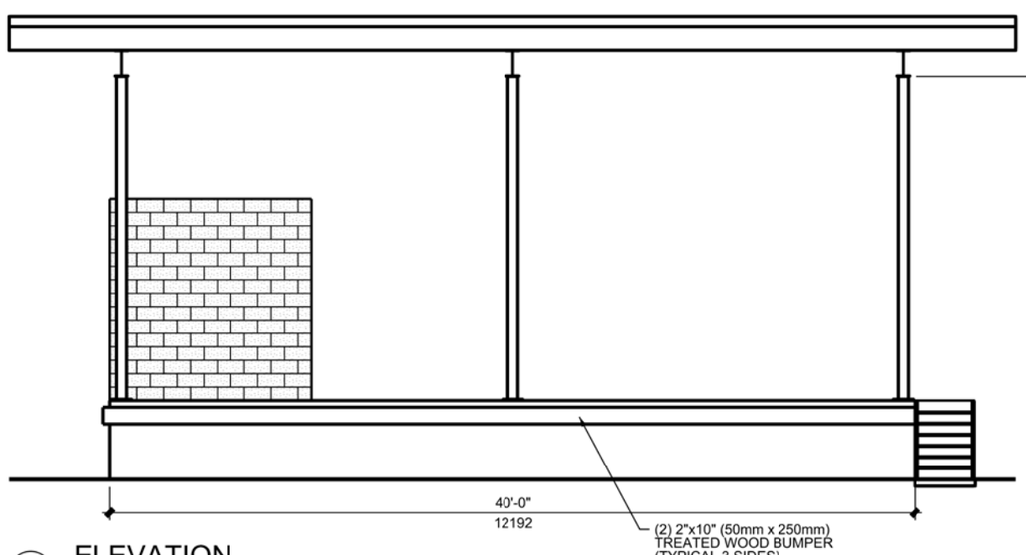
The Vehicle Instrumentation Dock shall be served by 120/240V, 1 phase, 3-wire secondary power. Rigid Steel conduit shall extend a minimum of 5' (1524mm) outside the building for power and communication circuits entering and leaving the building. Voltage drop shall comply with NEC standards and Army technical manuals. Grounding will be installed in accordance with NFPA 70, the NEC, and other applicable standards. Receptacles shall be general purpose; GFCI weatherproof, 120V, 20A duplex mounted a minimum of 24"(450 mm) above the finished floor on each column and one inside the storage room. Illumination levels will be designed in accordance with IES. Lighting shall consist of white and red lamps for lower level night light if required. Separate switching shall be provided for white lamps and red lamps. The emergency electrical system shall comply with NFPA 70 and NFPA 101. Provide lightning protection in accordance with NFPA 780.

Data

Data should be fed to the Vehicle Instrumentation Loading Dock via a 6strand single mode fiber optic cable from the ROC Communications Room. The fiber optic cable shall be terminated on a 6 port "SC" type connector patch panel installed inside a 24"x 12"NEMA 4 enclosure. The enclosure shall contain a metallic back plate, the fiber optic patch panel, a duplex receptacle (not GFI), and be grounded via a minimum #6 AWG ground conductor back to power grounding electrode. The enclosure shall be installed inside the storage room and should be of the same type as a Master Target Data Panel (MTDP).

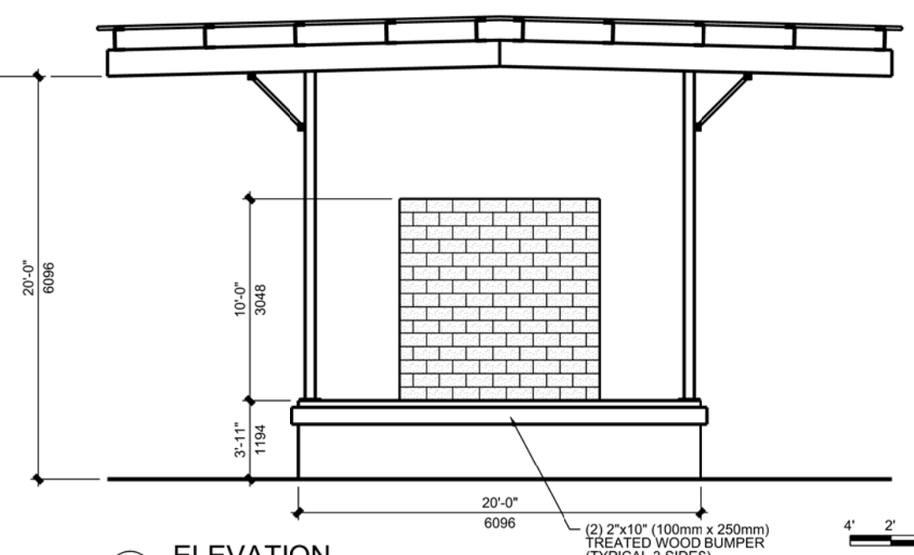
Fire Protection

Fire protection is not required per fire codes for this building. The fire alarm shall be a local audible alarm. Fire extinguisher's and cabinets are required per NFPA. Consult local Fire Marshall for compliance with local requirements. Provide a Mass Notification system per UFC.



ELEVATION

SCALE: 1/4" = 1'-0"



ELEVATION

SCALE: 1/4" = 1'-0"

4' 2' 0 4' 8' 12'
GRAPHIC SCALE: ¼"=1'-0"

2' 1' 0 2' 4' 6'
GRAPHIC SCALE: 1/2"=1'-0"

US Army Corps of Engineers

Rev.	Description	Date	Approved
Rev. 1			

Designed by: | Date: | Rev.
Dwn by: | Ckd by: | Design file no.
Reviewed by: | Drawing code:
Submitted by: | File name: Pwg. number: Pwg. scale:

U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

SEPTEMBER 2010

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL

VEHICLE INSTRUMENTATION DOCK

Sheet reference number:
A–17