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Appendix J
Resolution Consultants Overseas Baseline Environmental Investigation Report

7 April 2016

620 John Paul Jones Circle, Suite 1100
Portsmouth, VA 23708-2103

OVERSEAS BASELINE ENVIRONMENTAL ASSESSMENT REPORT

OFFICE OF MILITARY COMMISSIONS
CAMP JUSTICE
NAVAL STATION GUANTANAMO BAY, CUBA

Revision: 0

Prepared for:

Department of the Navy
Naval Facilities Engineering Command Southeast
Building 135 North, P.O. Box 30
Jacksonville, Florida 32212-0030

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Contract Number N69470-11-D-8013
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7 April 2016

Paul Stoddard
Contract Task Order Manager

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List of Acronyms and Abbreviations

ACM	asbestos-containing material
AST	aboveground storage tank
AVGAS	aviation gasoline
BEEF	Base Engineer Emergency Force
BOS	Base Operation and Support
cc	cubic centimeter
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act of 1992
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNIC	Commander, Naval Installations Command
DCE	dichloroethene
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DFM	Diesel Fuel Marine
DoD	Department of Defense
DRO	diesel range organic
EI	Environmental Investigation
ELC	Expeditionary Legal Complex
°F	Degrees Fahrenheit
FFHC	Fit for Human Consumption
FFTA	Fire Fighter Training Area
FGS	Final Governing Standards
GRO	gasoline range organic
GTMO	Guantanamo Bay
Harmon	Harmon Engineering Associates, Inc.
HPRD	Historical Petroleum Releases Documentation
HVAC	heating, ventilating, and air conditioning
IAQ	Indoor Air Quality
IR	Installation Restoration
IUCN	International Union for Conservation of Nature and Natural Resources
JP	Jet Propellant
JTF	Joint Task Force
LBP	lead-based paint
LTA	Lighter-than-Air
MCL	Maximum Contaminant Level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mg/m^3	milligrams per cubic meter

List of Acronyms and Abbreviations (continued)

MIGOPS	migrant operations
MOC	Media Operations Center
MTBE	methyl tertiary-butyl ether
Navy	United States Navy
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command
NMCPHC	Navy and Marine Corps Public Health Center
NRHP	National Register of Historic Places
NS	Naval Station
O&M	Operations and Maintenance
OBEA	Overseas Baseline Environmental Assessment
OMC	Office of Military Commissions
OSHA	Occupational Safety and Health Administration
PAH	polynuclear aromatic hydrocarbon
PAO	Public Affairs Office
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
pCi/L	picocuries per liter
PCP	pentachlorophenol
PPI	Prime Projects, Inc.
PVC	polyvinyl chloride
PWD	Public Works Department
RCI	Ratcliff Construction, Inc.
RSL	Regional Screening Level
SDWA	Safe Drinking Water Act
SEARCH	Southeastern Archeological Research, Inc.
SPRP	Spill Prevention and Response Plan
SSO	Site Security Office
SVOC	semi-volatile organic compound
TCE	trichloroethylene
TPH	total petroleum hydrocarbons
TTHM	total trihalomethanes
TWA	time-weighted average
USAF	United States Air Force
USCG	United States Coast Guard
U.S. EPA	United States Environmental Protection Agency
USMC	United States Marine Corps
UST	Underground Storage Tank
VOC	volatile organic compound
WTP	Water Treatment Plant

1.0 INTRODUCTION

Resolution Consultants performed an Overseas Baseline Environmental Assessment (OBEA) of the Office of Military Commissions (OMC) Camp Justice, also known as Area of Operation Patriot, at Naval Station (NS) Guantanamo Bay (GTMO), Cuba. The OBEA was conducted at the request of Naval Facilities Engineering Command (NAVFAC) Southeast under Comprehensive Long-term Environmental Action Navy Contract No. N62470-11-D-8013, Contract Task Order JMB5, Statement of Work Number SCSR1501 (Modification 1).

1.1 Scope of Work

The Statement of Work and subsequent modification tasked Resolution Consultants with developing an environmental condition of property/environmental baseline survey to assist in determining if there are completed onsite or offsite pathways of exposure for chemicals of concern that could be related to past industrial chemicals, usage, storage, or disposal practices at Camp Justice. This OBEA was designed to assess Camp Justice based on existing environmental information related to storage, release, treatment, or disposal of hazardous substances and petroleum products or its derivatives, which may have a substantial impact on human health and safety, under the current land use and reasonably anticipated future land uses. Department of Defense (DoD) Instruction 4715.08 Remediation of Environmental Contamination Outside the United States (1 November 2013) defines substantial impact as, "a level of exposure that is occurring, or is about to occur within the next 3 to 5 years, and exceeds a generally established, published, and applied federal standard in the United States."

In accordance with the Final Work/Sampling Plan (Resolution Consultants 2015a), the OBEA included a site reconnaissance, review of available historical and environmental information, and interviews with parties identified as having knowledge of current and historical activities and environmental conditions at NS GTMO. Details of the assessment methodology are discussed in Section 2.

1.2 Background

In response to a complaint to the DoD Inspector General hotline, the Navy and Marine Corps Public Health Center (NMCPHC) conducted an investigation and issued a Public Health Review Report dated 21 August 2015. The NMCPHC investigation included epidemiology, industrial hygiene, drinking water, and habitability surveys of the OMC buildings, tents, and trailers at Camp Justice. The August 2015 report concluded, in concurrence with a 2013 NMCPHC Habitability Assessment Report, "that the buildings, tents, and trailers where people live and work are habitable for

occupancy. Administrative worksites are low hazard and have little potential for overexposures to current occupational health standards."

Although the buildings of concern were deemed habitable, environmental records (e.g., related to environmental site assessment and monitoring such as testing air, soil, drinking water, and/or groundwater) for Camp Justice were limited (NMCPHC 2015). The NMCPHC recommended additional environmental sampling and identified the following environmental data gaps:

- limited environmental assessment and monitoring records;
- limited historical information regarding former operations (e.g., hangar, maintenance, flight line activities) that occurred onsite; and
- limited information regarding potential sources, spills, or releases to the environment (e.g., locations of fuel tanks; use, storage, and disposal of solvents from work processes).

The historical and environmental information gathered during this OBEA was designed to fill environmental data gaps identified during the NMCPHC Public Health Review. Concurrent with the OBEA, Resolution Consultants conducted environmental sampling of air, soil, and drinking water, the results of which were issued under separate cover. Pertinent information from Indoor Air Quality (IAQ) Assessment (Resolution Consultants 2015b) and Environmental Investigation (EI) (Resolution Consultants 2015c) reports is discussed in this OBEA Report.

1.3 Naval Station Guantanamo Bay

NS GTMO is located in the southeast portion of Cuba at the entrance of Guantanamo Bay, 14 miles south of Guantanamo City (Figure 1). NS GTMO is the hub of United States military operations in the Caribbean Theater of Operations, providing logistics support to the United States Navy (Navy), United States Coast Guard (USCG), authorized air operations, and Joint Task Force (JTF) Guantanamo. Major units and tenant commands are JTF Guantanamo (Detention Center), United States Naval Hospital Guantanamo Bay, Marine Corps Security Force Company Guantanamo Bay, Personnel Support Activity, Naval Atlantic Meteorology and Oceanography Command Detachment, DoD Education Activity — W.T. Sampson Schools, International Organization for Migration, Naval Media Center Detachment, NAVFAC Southeast — Public Works Detachment, Fleet & Industrial Supply Center — Jacksonville Detachment, and USCG Aviation Detachment — Guantanamo Bay, Cuba.

Figure 1
Site Location
Office of Military Commissions - Camp Justice
Naval Station Guantanamo Bay, Cuba

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

Requested By: D. Fuehrer	Date: 12/8/2015
Drawn By: M. Senne	Task Order Number: XXXX

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NS GTMO population is comprised of nearly 6,000 United States service members, DoD and other government civilian employees, contract employees, and family members of all groups. The NS GTMO complex is divided into two distinct areas (termed the Windward and Leeward sides) by the 2.5-mile-wide Guantanamo Bay, and covers an area of approximately 45 square miles. The active airfield is located on the Leeward side and the main base is on the Windward side. A ferry service provides transportation between the Windward and Leeward sides, across Guantanamo Bay. The land portion of NS GTMO is enclosed by a 17.4-mile-long wire perimeter fence patrolled by the Marine Corps Security Force Company.

1.4 Camp Justice

The United States Air Force (USAF) 474th Expeditionary Civil Engineering Squadron, also known as the Base Engineer Emergency Force (BEEF), established Camp Justice at the abandoned McCalla Airfield between 2007 and 2008; the history of McCalla Field is detailed in Section 3.1.2. Camp Justice supports JTF Guantanamo by maintaining the Expeditionary Legal Complex (ELC) and OMC, and is comprised of approximately 150 structures including a courthouse, administrative support facilities, and an expeditionary lodging facility (Figure 2). Camp Justice has the capacity to temporarily berth up to 500 personnel billeted and assigned to the OMC, security guards, journalists, and logistics, operations, and maintenance staff.

Primary Navy operations impacting the future of NS GTMO are fleet and logistics support, migrant operations (MIGOPS), counter-drug operations support, detainee operations, and personnel support. Because the largest change at NS GTMO in recent years has been the introduction of the JTF Detention Mission, detainee operations are expected to have the most impact with respect to continuing activities at Camp Justice. The 2011 Final Master Plan indicated the JTF mission at Camp Justice would be reduced by 2016 but until policy decisions determine otherwise, JTF facilities at the airfield will likely remain in use for detainee/OMC operations.

Further, the 2011 Final Master Plan designates McCalla Airfield as a specific activity node for the purpose of organizing physical space with proposed demolition activity for buildings past their current use. The Final Master Plan also indicates the reasonably anticipated future use for the Camp Justice area as similar to current land use, with other potential future use associated with surplus MIGOPS (a second McCalla Airfield camp could house an estimated 15,000 migrants).

Figure 2
Site Layout
Office of Military Commissions - Camp Justice
Naval Station Guantanamo Bay, Cuba

NAVFAC Naval Facilities Engineering Command
RESOLUTION CONSULTANTS

Requested By: H. Brauer	Date: 12/9/2015
Drawn By: M. Senne	Task Order Number: JMB5

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1.5 Areas of Assessment

Camp Justice essentially comprises four permanent structures (Building AV-29, Bunker AV-31, Hangar AV-32, and Building AV-34), the secured ELC, Expeditionary Lodging Area (with tents and Cuzcos), and the Base Engineer Emergency Force (BEEF) Motor Pool and Support Area. To facilitate discussion in this OBEA Report, Camp Justice is divided into six assessment areas — McCalla Hill North, McCalla Hill South, Hangar Area, ELC, Expeditionary Lodging Area, and BEEF Motor Pool and Support Area — established based on physical layout, current and historical structure types, key features, uses, and occupants.[1] The assessment boundaries of these areas is shown on Figure 3, and Appendix A includes floor plans of permanent buildings and ELC structures, and layout diagrams of tents and Cuzcos.

1.5.1 McCalla Hill North

McCalla Hill North includes Building AV-34 and Bunker AV-31 and west-adjoining open grassy area, which are accessible from a driveway off McCalla Hill Road to the northwest and Huntington Road to the south, respectively. McCalla Hill North, in the northeast portion of Camp Justice, is bound on the north by historical United States Marine Corps (USMC)/McCalla Hill monuments, on the east by an open field, and on the west by McCalla Hill Road. The south border is the open paved area south of Bunker AV-31 along Huntington Road.

1.5.2 McCalla Hill South

McCalla Hill South includes Building AV-29, an administrative/communications trailer, and open field with miscellaneous structure remnants. The McCalla Hill South area is accessible from the north and south by Huntington Road, which originates from McCalla Hill Road approximately 350 feet southwest of Building AV-29.

1.5.3 Hangar Area

This area includes Hangar AV-32 and south- and west-adjoining paved areas, generally defined by the Camp Justice Gate access road/driveway to the north, McCalla Hill Road to the east, Buildings 2210 and 2211 and Florida Gate to the south, and Runway 1-19 to the west.

[1] These arbitrary boundaries are partly based on temporary mobile features (i.e., barricades) in place during the OBEA site reconnaissance.

Figure 3
Assessment Areas – General Boundaries
Office of Military Commissions – Camp Justice
Naval Station Guantanamo Bay, Cuba

Requested By: H. Brauer	Date: 12/8/2015
Drawn By: M. Senne	Task Order Number: XXXX

Google Earth Pro Imagery - 07/23/2014

1.5.4 Expeditionary Legal Complex

This area includes the fenced ELC, paved areas that extend east to McCalla Hill Road and south to the Expeditionary Lodging Area driveway, and grassy areas that extend west to Runway 1-19 and north to the driveway from the CN Gate entrance.

1.5.5 Expeditionary Lodging Area

The Expeditionary Lodging Area encompasses Runway 1-19 within Camp Justice barricades and includes tents, New Cuzcos, and Old Cuzcos for temporary berthing, and a grassy and gravel parking/equipment staging area.

1.5.6 Base Engineer Emergency Force Motor Pool and Support Area

The BEEF Motor Pool is in the southwest portion of Camp Justice, bound by security barricades on the north, west, and south, and Runway 1-19 on the east. This area includes tents, CONEX boxes, and metal storage lockers, grassy and gravel-covered areas, and the portion of Runway 10-28 north and west of Runway 1-19.

2.0 ASSESSMENT METHODOLOGY

In accordance with the Final Work/Sampling Plan (Resolution Consultants 2015a), the site reconnaissance, records review, and interview portions of the OBEA were conducted using (1) commonly recognized industry practices and (2) relevant guidance in ASTM International standards D5746-98 (2010) Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities and D6008-96 (Reapproved 2014) Standard Practice for Conducting Environmental Baseline Surveys.[2]

2.1 Site Reconnaissance

Resolution Consultants personnel mobilized to NS GTMO and visited Camp Justice and surrounding areas during two field events: an initial site visit for the IAQ Assessment from 25 to 29 September 2015 and a second for the EI and OBEA from 9 to 16 October 2015. Assessment area-specific observations made by Resolution Consultants personnel during those site visits are discussed throughout this OBEA Report and documented via photographs in Appendix B.

Camp Justice has scattered vegetated areas, with most on McCalla Hill North and South and in the BEEF Motor Pool and Support Area. Stressed vegetation from source(s) other than lack of water (e.g., due to chemical or petroleum product releases) was not evident. No strong chemical or petroleum odors was observed inside buildings. The only odors observed within Camp Justice during the OBEA site reconnaissance were petroleum fumes around running gasoline-operated mules/vehicles. Details are discussed in Sections 4.1 through 4.6.

2.2 Records Review

Table 1 compares the minimum level of information, sources, and effort recommended in ASTM International standards D5746 and D6008 with the corresponding scope of work conducted during this OBEA.

[2] The ASTM International standards are intended for use at DoD real property at a closing military installation with respect to the requirements of the Comprehensive Environmental Compensation, Response, and Liability Act of 1980 (CERCLA), as amended by the Community Environmental Response Facilitation Act of 1992 (CERFA). Although the purpose of this assessment was not to facilitate or support Findings of Suitability to Transfer or Findings of Suitability for Lease under CERCLA, or uncontaminated parcel determinations pursuant to the requirements of CERFA, the ASTM International standards provide commonly recognized industry practices and guidance useful for assessing DoD property and were used accordingly.

Table 1
Overseas Baseline Environmental Assessment Records Review

Required Source/Effort (ASTM International D5746 and D6008)	Available/ Conducted	Source(s) Reviewed[1]
Detailed search of available information and records in the possession of and made available by Department of Defense components or other involved Federal agencies including installation restoration program studies, surveys (e.g., radioactive materials, radon, asbestos, lead-based paint, and polychlorinated biphenyls), and investigations to determine if hazardous substances or petroleum products may be present on the property.	Yes	Reviewed the following environmental information available through the Naval Facilities Engineering Command Southeast and NS GTMO: • 2015 Environmental Investigation • 2015 Indoor Air Quality Assessment • 2015 Public Health Review Report • 2013 Guantanamo Bay Migrant Operations Archaeology Survey • 2012 and 2013 Limited Soil and Groundwater Sampling and Analysis reports for sites over 1 mile from Camp Justice • 2011 Final NS GTMO Master Plan • 2010 Final Spill Prevention and Response Plan — Volume I (Emergency Response Action Plan) — Volume II (Prevention, Control, and Training) — Volume III (Storage Tank Management Plan) • 2008 Historical Petroleum Releases Documentation • 2003 Regional Shore Infrastructure Plan • Excerpts from 1991 and 2003 asbestos and lead-based paint surveys • 2002 Oil Pollution Act of 1990 Facility Response Plan • 2000 Field Operations Guide Incident Command System • 1997 Polychlorinated Biphenyl Transformer Survey • 1994 Soil and Groundwater Investigation for diesel fuel release at the McDonald's Restaurant site, located approximately 1.5 miles from Camp Justice
Recorded chain-of-title documents regarding the real property	No	Not Applicable
Aerial photographs that may reflect prior uses of the real property and that are reasonably ascertainable through State or local government agencies	Yes	• Google Earth aerial imagery (2003-2014) • Aerial photographs at Leeward Airport • Aerial photographs in 2013 Archaeology Survey
Visual inspection of the real property and any buildings, structures, equipment, pipe, pipeline, or other improvements on the real property	Yes	Conducted a site reconnaissance of accessible Camp Justice improvements, buildings, and structures, and a windshield tour and limited reconnaissance of adjoining areas within NS GTMO, except where restricted by Joint Task Force/Camp Justice security
Visual inspection of properties immediately adjacent to the real property	Yes	Windshield tour and limited walkover
A physical inspection of property adjacent to the real property to the extent permitted by owners or operators of such property	Yes	Windshield tour and limited walkover
Reasonably obtainable Federal, state, and local government records of each adjacent facility where there has been a release of any hazardous substance or any petroleum product or its derivatives	No	Not Applicable

Table 1
Overseas Baseline Environmental Assessment Records Review

Required Source/Effort (ASTM International D5746 and D6008)	Available/ Conducted	Source(s) Reviewed(1)
Interviews with current or former employees involved in operations on the real property	Yes	Interviewed United States military, NS GTMO, and Naval Facilities Engineering Command personnel, Department of Defense contractors, and other government employees identified as having knowledge of current or historical activities; industrial chemical usage, storage, or disposal; and/or environmental conditions at NS GTMO. Former employees were not made available for interview or otherwise contacted.

Notes:
(1) Full report/document references are in Section 8.
NS GTMO = Naval Station Guantanamo Bay

2.3 Interviews

Table 2 lists personnel Resolution Consultants attempted to contact, interviewed, or exchanged correspondence with during the OBEA.

Table 2
Interview Summary

Name [1]	Title/Association [1]	Length of Time	Topics
	Director of Environmental Public Works Department	4 years at NS GTMO; 6 months as Director	History of releases, documentation (reports, lists, etc.) of investigations, tanks, hazardous substances, petroleum products
	Compliance Program Manager Public Works Department	1-2 years	History of releases, documentation (reports, lists, etc.) of investigations, tanks, hazardous substances, petroleum products
	Base Engineer Emergency Force United States Air Force	Unknown	Motor pool, hazardous substances and petroleum product storage; spills
	Deputy Director Joint Task Force Guantanamo Office of Military Commissions	8 years	Current and historical uses of Camp Justice and adjoining areas
	Assistant Fire Chief Fire Department	1-2 years	History of reported releases at McCalla Airfield/Camp Justice[2]
	Mass Communication Specialist NS GTMO Public Affairs Office	3 years	History at McCalla Airfield/Camp Justice
	Safety Specialist NS GTMO Safety Department	Unknown	History of reported releases

Notes:
[1] Full personnel references are in Section 8.
NS GTMO = Naval Station Guantanamo Bay
[2] On behalf of Resolution Consultants, interviewed non-military firefighting personnel who have been employed at NS GTMO for the longest periods of time (15 to 20 years) and the only occurrences recalled on or near the runway were small grass fires and a canister that washed ashore on a west-adjoining beach. The weapons/ordnance personnel removed the canister to a remote location where it was detonated.

3.0 NAVAL STATION GUANTANAMO BAY

3.1 General History

Most of the history of NS GTMO and McCalla Airfield discussed in this section was obtained from a series of figures, plans, maps, and schematics provided by NAVFAC and included in Appendix C. As a supplement to the drawings and schematics, some historical information was inferred from excerpts of a historical asbestos survey report (Harmon Engineering Associates [Harmon] 1991) and Guantanamo Bay MIGOPS archaeology survey (Southeastern Archaeological Research, Inc. [SEARCH], 2013).

3.1.1 Naval Station Guantanamo Bay

> *NS GTMO has occupied the same footprint for over a hundred years, resulting in the continuous occupation and re-use of the same spaces. The pulses of construction and activity apparent across the base have resulted in a situation where many of the base's historic resources have become part of the daily backdrop of base activities. These resources generally remain unrecorded.*
>
> **Source: MIGOPS Archaeological Survey (SEARCH 2013)**

NS GTMO, the oldest United States military base on foreign soil, was first established in 1903 following defeat of Spain in the Spanish-American War. A lease agreement was negotiated with Cuban government for 29,000 acres of land and water for United States military purposes and GTMO was transformed into the primary Caribbean coaling station to fuel and repair steam-powered ships for the Navy. Initial base construction took place between 1904 and 1907 on North Toro and South Toro Cays, located in the center of the bay and included multiple planned forts, one of which was Fort McCalla. The original base on the cays was abandoned in 1908 and the operations were rebuilt in their present location on the Windward side by 1913; it was not until the 1930s that McCalla Field played a role in aviation at NS GTMO.

After initial construction, there were several expansion periods of naval operations that occurred during each World War, in the 1950s during the Korean War, and in the 1960s when temporary structures originally built by the Construction Battalion (Seabees) were replaced with permanent facilities. Population and associated development/improvement at NS GTMO steadily decreased from the 1960s until terrorist attacks on 11 September 2001 and the subsequent Global War on Terrorism, when a new detainee operations mission was established.

3.1.2 McCalla Field

McCalla Field was undeveloped prior to 1931, when the Navy began using the location for experimenting with Lighter-than-Air (LTA) aircraft, commonly known as dirigibles and Zeppelins, which accompanied the Navy fleet. Improvements associated with the original LTA aircraft activities is discussed in Section 6.1.4.

The McCalla Hill Cemetery was established circa 1917, the time of the first recorded internment (Murphy 1953). A 1931 plan of the original Zeppelin mast site included with the 2013 MIGOPS survey shows a cemetery approximately 750 to 1,000 feet south of the McCalla Hill USMC monument, east-adjoining an unpaved road that appears to be in the general proximity of McCalla Hill Road and Huntington Road. The cemetery was transferred to what became the Naval Cemetery near Cuzco Beach in 1940 (Murphy 1953). Also formerly in this area was the Marine Ball Field (baseball field) and scoreboard.

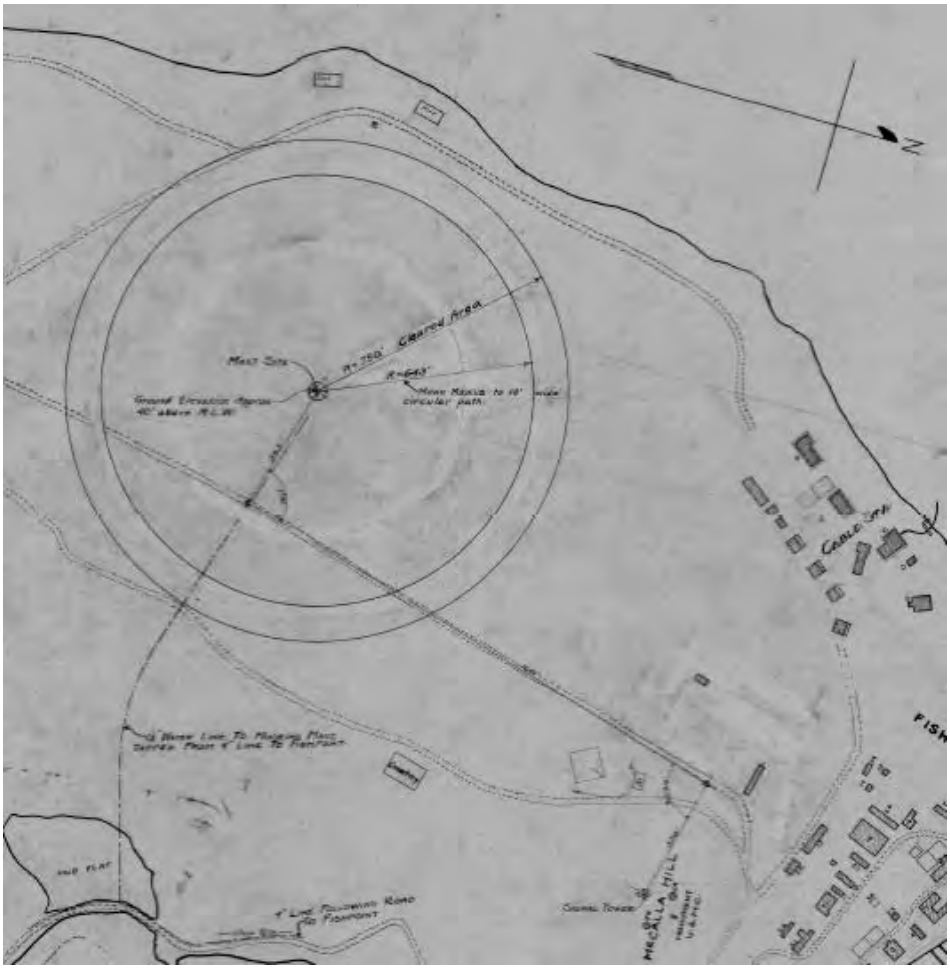


Image source: NS GTMO Public Works Department. Mast Site Location, 10 August 1931.

In the late 1930s, McCalla Field was extensively developed for the World War II effort, and became the centerpiece of what was then Naval Air Station (NAS) GTMO. Completed in February 1941, McCalla Field had three asphalt runways: the main runway 1-19 (measuring 300 by 4,600 feet long) and cross runways 10-28 and 14-32 (each measuring 200 feet by 2,300 feet). In 1943-1944, the Navy expanded McCalla Field to the limit of available land, which included a 300-foot extension of

the main runway to the south with an additional 400 feet of grading. Support areas included warm-up platforms, a taxiway, a hangar and utility building (Hangar AV-32), an administration and operations building (Building AV-34), magazines, quarters, barracks, and mess halls. Additional improvements in 1943 included drainage features and pavement around utilities buildings.

In the early 1940s, the Navy resumed use of smaller LTA aircraft. Two small circular mooring masts and fields, the footprints of both of which remain, were added to the west side of the McCalla Field runway circa 1943. One of those masts was within the Camp Justice boundaries and the other, discussed in Section 6.1.4, was to the southwest.

During the Korean War (1950-1953), when jet aircraft were introduced into the Navy's fleet, a landing strip suitable for that technology was developed at Leeward Point Field. McCalla Field then began to play a support role, handling maintenance and non-jet aircraft. The two mooring sites for LTA aircraft on the west side of the runway were refurbished circa 1959.

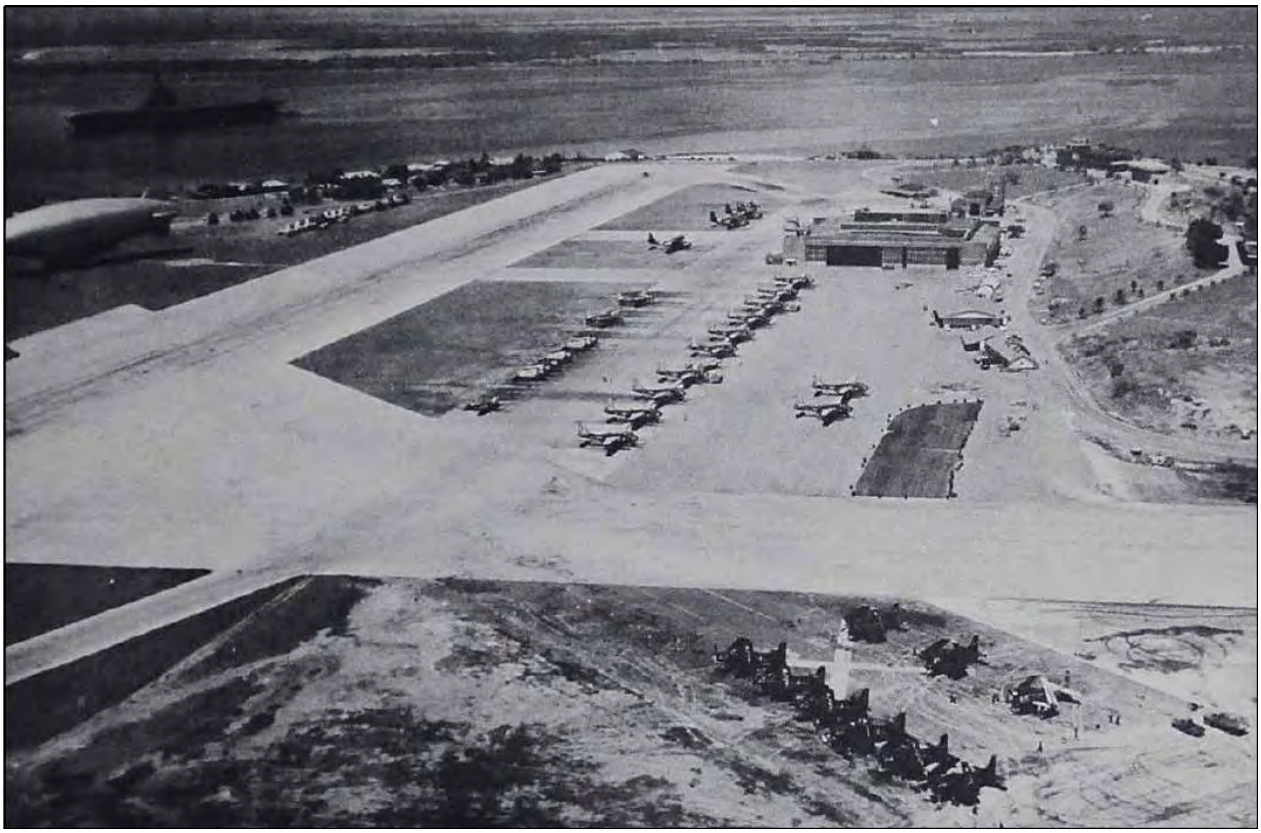


Photo source: U.S. Navy, 1956. McCalla Field as it appeared in 1956, facing north.

McCalla Field and the NAS played an important role in the Cuban Missile Crisis of the early 1960s by handling heavy air traffic involved with evacuation of nearly 3,000 dependents, civilians, and teachers and influx of troops, supplies, and equipment.

Jet aircraft were landed at McCalla Field for three months in the 1960s while Leeward Point Field was temporarily closed for repairs. To accommodate the approximately 350 reported jet landings, the Navy installed arresting gear on the runway at McCalla Field.

NAS GTMO continued its mission of fleet support into the 1970s including facilities, services, and material support for naval aviation operations and provided berthing, messing, and recreation facilities to tenant and transient aviation activities. On 1 May 1970, McCalla Field was designated an auxiliary landing field of the NAS with the bulk of aviation activities formally transferred to Leeward Point Field. Later in the 1970s, aviation uses of McCalla Field ended, although Runways 1-19 and 10-28 were retained for contingency operations and minimal fixed-wing aircraft use (Commander, Navy Region Southeast 2003).

Between 1994 and 1996, Guantanamo Bay became the temporary home of 50,000 refugees from Haiti and Cuba in what became known as Operation Sea Signal. During Operation Sea Signal, the airfield grounds became a vast refugee camp. Aerial photography of McCalla Field circa 1995 shows the paved runway of the airfield covered with tents and other infrastructure for MIGOPS.

Photo source: Pitts 1995. Aerial view of Operation Sea Signal showing tents on the paved runway of McCalla Field.

Photo source: Seabee Museum. McCalla Field during Operation Sea Signal, December 1994.

Material items associated with that operation included general purposes military tents, cots, razor wire, guard towers, portable light generators, and portable latrine and shower facilities. NAVFAC Public Works Department (PWD) layout plans in Appendix C show plumbing, water, sewer, electrical, personnel capacities, and other general site details of the McCalla Airfield Camps. By the end of Operation Sea Signal in February 1996, the tents and infrastructure were removed and the area was thoroughly cleaned (SEARCH 2013). As of 2003, there was no discernible remaining evidence of the operation.

3.2 Environmental Setting

3.2.1 Physical Setting

NS GTMO is situated within the Guantanamo Basin, a broad valley that is surrounded on three sides by high mountains. Vegetation in the basin consists of low-lying scrub and woody plants, as well as a variety of succulents capable of enduring the scarcity of water. The Windward side is topographically rugged with steep hills comprised of shale, sandstone, limestone, and metamorphic rocks, as well as exposed volcanic rock formations (SEARCH 2013). Topographically, NS GTMO is characterized by a chain of hills which roughly parallel the coast. The chain is bisected

by Guantanamo Bay estuary which extends north across a broad plain. The highest topographic point on NS GTMO is John Paul Jones Hill, which is approximately 450 feet above mean sea level.

Elevations do not vary widely across McCalla Airfield. The historical construction of the airfield includes documented grading in order to produce the extremely flat landscape present today. This is particularly noticeable in the southern end of Runway 1-19, where it has been built up above the terrain to the west. The maximum elevation is found along the southeast edge of Runway 1-19 at approximately 65 feet above mean sea level. The lowest elevation, 29 feet above mean sea level, is found along the western bluffs overlooking Guantanamo Bay. Building AV-34, Bunker AV-31, and Building AV-29 are on a topographic high (hill) that form the east side of Camp Justice; Building AV-34 is at the highest elevation (70 to 80 feet above mean seal level).

3.2.2 Geology and Hydrogeology

Guantanamo Bay is roughly 12 miles long and 6 miles wide. Islands, peninsulas, and coves are along the east side of the bay. The Guantanamo Valley lies west of the bay along the Sierra Maestra mountain range, which were formed by a series of tectonic events. The mountains display terraces and karstic marine limestone along their flanks. The basic geologic characterization of the region can be determined based on observations in the field of various bedrock outcrops and geomorphologic features (Baker Environmental 1994).

Geology

The bedrock underlying McCalla Field is classified as Pleistocene Coral Reef of the Jaimanitas Formation. At the south end of NS GTMO, the basal geological unit below the Jaimanitas Formation was visually identified as an olivine gabbro which dipped steeply northward (see photographs above and left).

The contact between the gabbro and the Jaimanitas Formation was uncomformable, and the Jaimanitas Formation showed evidence of repeated depositional sequences. The Jaimanitas limestone is also encountered in exposed road cuts, quarries, and rugged shoreline terraces fringing Guantanamo Bay and islands in the bay (Geological Society of America 2009).

The limestone typically consists of variable in-place shallow water deposits dominated by coral bioherms, massive beds of broken-up coral thickets, and abundant invertebrate fossils. Those fossils include mollusks, decapods, and echinoids. The Jaimanitas Formation varies in hardness depending on coral quantity, matrix type, and case-hardening. At several exposures, dark bits of rock (volcanoclastics) are intermixed and at other sites the reef terraces overlie thick-bedded conglomerates and swamp deposits. Coralline rock with large inclusions (average 1-foot diameter) of weathered, well-rounded basalt fragments were found at those uncomformities within the coral sequences. Overlying the coralline limestone is a poorly consolidated sandstone which appeared to be deltaic in origin and presentation.

There is only one mapped soil unit: red gravelly terrace soils on landforms with 2 to 12 percent slopes, but extensive alterations during construction of the airfield severely disturbed the soil stratification (SEARCH 2013). Where present, those soils tend to have low organic content with limited water retention capabilities. The red gravelly terrace soils were encountered during the EI as were other soils and residuum that appeared to consist of coralline intrazonal soils that are calcimorphic (contain free calcium carbonate). In many areas of Cuba, these include coastal rendzina (low available water capacity) soils (World Wildlife Federation 2015). In some areas, darker brown or gray to black soils that appeared to have more organic content were observed. Along with coral fragments, detrital rock fragments and sand from other igneous mafic and ultramafic rocks appeared to be present as well.

Radon

Radon is a radioactive gas released from the natural decay of elements such as uranium, thorium, and radium in underlying rocks and soil. Radon gas can be present in outdoor air and inside buildings (National Institute of Health 2015). Radon gas is most strongly associated with igneous and metamorphic rocks that underlie much of the North American continent and that are present in the central sections of Cuba. Other rock types, particularly carbonate limestones, present less potential for radon gas evolution. Despite the presence of igneous and metamorphic rocks in much of Cuba, the permanent buildings at Camp Justice are in a sedimentary terrain underlain by coastal limestone carbonates of the Jaimenitas Formation. Consequently, there should be a low potential for the formation of radon gas.

Hydrogeology

Limestone of the Jaimanitas Formation and poorly consolidated sandstone encountered at or near the surface are thought to allow infiltration of surface water to depth. Where present, surface soils consist of residuum from the parent materials or fill. The marine limestone beneath Camp Justice and the McCalla Airfield runway likely consists of competent fossiliferous limestone, with some interspersed marl (Froehling & Robertson, Inc., 2015). While the limestone is expected to be mostly dry with depth, perched groundwater may be encountered in more porous zones of limestone overlying more indurated sections. At approximately 40 to 50 feet below ground surface, the limestone may grade to consolidated and unconsolidated sand, clay, and cobbles, and boulders overlying marl and hard, dense bedrock (possibly shale, limestone, or gabbro). If present, first groundwater is expected to be encountered in the granular aquifer material above the bedrock.

Hydrogeologic information indicates that potable aquifers exist in the coralline limestone and the alluvial deposits in the valleys along the south coast, inland of NS GTMO (Baker Environmental 1994). These aquifers have been developed with wells producing fresh water; however, they are only practical for emergency supply. Groundwater near NS GTMO would likely flow toward Guantanamo Bay and the Caribbean Sea.

3.2.3 Climate

The climate is typical of a Caribbean country — hot and humid year-round. Guantanamo Bay is in a tropical savanna climate, which are prevalent in sections of Central America and North America, specifically in sections of Mexico and the state of Florida. Guantanamo Bay has a monthly mean temperature above 64 degrees Fahrenheit (°F) in every month of the year and typically a pronounced dry season (from November to April).

Guantanamo Bay, Cuba
(weatherbase.com)

Temperature
- Average temperature — 81.0°F
- Average high temperature — 88.0°F
- Warmest months — July and August — 84.0°F (average)
- Average low temperature — 73.0°F
- Coolest month — January — 77.0°F (average)
- Highest recorded temperature — 100°F (July)
- Lowest recorded temperature — 57°F (January)

Rainfall
- Annual average — 24.2 inches
- Average high rainfall — October (5.1 inches)
- Average low rainfall — February (0.9 inch)

(years on record: 51)

3.2.4 Cultural and Historical Resources

Archaeological surveys were conducted at NS GTMO by: Atlantic Division Naval Facilities Engineering Command in 2003; Geo-Marine, Inc., in 2004; and SEARCH in 2010 and 2013. Two surveys were conducted by SEARCH in 2013: one included seven parcels totaling 1,600 acres that encompassed

Cuzco Hills on the Windward side of NS GTMO (shown below as SEARCH 2013), and one (the MIGOPS survey) which included a portion of McCalla Field south of Camp Justice (shown as Project Area 2). Of the numerous historic sites documented within NS GTMO, most are structural remains dating to the early twentieth century (SEARCH 2013). The earliest are largely concentrated on North and South Toro Cays, where the original base was situated. Other historic sites have been identified possessing Spanish colonial artifacts (at Cuzco Beach) as well as early twentieth-century native small habitation sites. During the 2010 and 2013 surveys, historic resource groups identified consisted of a series of defensive features (bunkers, revetments, and gun emplacements) associated with World War II and Cuban Missile Crisis-inspired military build-ups that began in the early 1940s and 1962, respectively.

Image source: MIGOPS (SEARCH 2013). Project Area 2 and SEARCH 2013 area.

In July 2013, SEARCH conducted a Phase I archeological survey of approximately 250 acres on three survey parcels and investigated two historic research parcels within NS GTMO. The purpose of the archaeological survey was to identify and record all prehistoric and historic-period archaeological resources within the survey parcels and make preliminary significance determinations equivalent to National Register of Historic Places (NRHP) eligibility evaluations. The 2013 SEARCH fieldwork recorded three cultural resources (shown

Image source: MIGOPS (SEARCH 2013). Survey parcel with previously recorded cultural resources.

right) within one-half mile of Project Area 2: two historical roadways (the Crossroads route to Cuzco Valley and an old alignment of Sherman Avenue) and a small scatter of historic materials likely related to an early twentieth-century farm (Marine Farm).

McCalla Hill is located 500 meters northeast of Project Area 2. During the Spanish-American War Battle of Guantanamo Bay, the Marines had their headquarters at McCalla Hill. Over the four days leading up to the Battle of Cuzco Well on 14 June 1898, guerilla warfare activities occurred in the area between McCalla Hill and the Crossroads intersection. Other than troops using Old Sherman Avenue, there is no definite recorded activity relating to the Spanish-American War period within Project Area 2.

Though it has not been officially recorded, Fort McCalla is a 1906 fort consisting of two separate concrete sections each containing two small gun emplacements (SEARCH 2013). It is located on the northwest boundary of the project area. There is a potential for materials associated with the use of Fort McCalla to be present on Project Area 2.

The archaeological predictive model (GeoMarine 2004) classifies all of Project Area 2 as having Low probability for undisturbed resources. There are no known prehistoric sites in the vicinity of Project Area 2 and the potential to encounter such sites is low, in part due to the sheer bluffs that make up the shoreline in this area and limit canoe access. Construction of McCalla Field in 1939-1940 has modified the landscape significantly and likely disturbed any evidence of prehistoric exploitation of this area.

Surface indications of site disturbance are relatively few with the exception of junction boxes and manhole covers for access to subsurface utilities, which appear to be extensive. Active drainage features were noted across Project Area 2 and it is likely that the numerous ditches and culverts that cross McCalla Field are associated with its construction and maintenance. Very few historic features remain in the area surrounding McCalla Field due to active airfield operations over 40 years and the need to keep extraneous materials away from the runway.

However, historical analysis of McCalla Field illustrates how the McCalla facility has been an important part of the base dating back to its early (1931) development (SEARCH 2013). The four features associated with McCalla Field aviation facilities are at various stages of deterioration: (1) Rancho Chico (the 1941 to 1943 worker's camp) is destroyed, (2) the LTA aircraft mooring circle is intact but deteriorating, (3) the temporary metal runway east of the current paved runway is intact, and (4) one historic foundation near Fort McCalla is intact but deteriorating. The airfield has been

out of service since the 1970s and has been used for various projects including migrant operation camps since that time. The four Isolated Military Positions located at the southern end of Project Area 2 are individual examples of a common type of bunker and are in poor condition. These positions are not considered significant.

Although the McCalla Field complex as a whole has not been formally surveyed or evaluated, there is potential for the airfield to be a significant historical resource. The features identified within Project Area 2 are not individually significant, but may be contributing resources to the greater McCalla Field complex. The archaeological survey recommended that McCalla Field be formally evaluated utilizing World War II, Cold War-Era, and Military Airfield historic contexts, finding portions of Project Area 2 potentially significant and recommending avoidance or additional work.

3.2.5 Water and Wetland Resources

The name Guantanamo means *land among rivers*. The entire southeast region of Cuba is known for its extensive rural mountainous zones and river basins. Guantanamo Bay itself is 12 miles long and 6 miles wide, with islands, peninsulas, and coves on the east side of the bay. The Guantanamo Valley lies west of the bay along the Sierra Maestra mountain range. Its flat nature makes it ideal for Guantanamo's airfield.

The Guantanamo River drains into the southwest tip of the bay and crosses the Leeward portion of the base. Large areas of the base front the bay and consists of coastal wetlands made up of salt and mud flats, marshes, estuaries, and mangroves. Camp Justice is primarily developed land due to the presence of the runway, with sporadic areas of thorn scrub vegetation. Disturbance resulting from the airfield construction and ongoing landscaping efforts have reduced the vegetation across much of the parcel to grassland with intermittent small trees.

Prior to the construction of the airfield in 1939, the area was fairly flat and wooded, with no clearly evident drainage ditches but a general slope of the land toward the mouth of the bay. By 1939, the land clearing left much of the limestone bedrock exposed, which was not conducive to rainwater draining into soils and naturally dissipating, but instead created conditions for undesirable standing water or channelized drainages. Small drainage ditches and trenches are located along the west side of the airfield, primarily outside the Camp Justice boundaries.

3.2.6 Threatened and Endangered Species

Because most land on military installations remains in a largely natural state, many bases have become islands of protective habitat for threatened and endangered species. As a result of habitat destruction and land clearing activities, extraction of forest products, and invasive species, Caribbean dry tropical forests are one of the most endangered ecosystems on earth. Establishment of NS GTMO in 1903 resulted in the preservation and protection of critical dry forest habitat for a variety of threatened and endangered species, many of which are now declining in other parts of Cuba. Conservation of native species on the base not only preserves a unique assemblage of species, but also contributes toward the long-term health of a seriously threatened ecosystem.

The Final Governing Standards (FGS) in Cuba Chapter 13, Natural Resources and Endangered Species established standards which, used with the Federal List of endangered Species, developed an Official Threatened and Endangered Species List.[3] The International Union for the Conservation of Nature and Natural Resources (IUCN) identifies animals and plants of concern in its List of Species of Conservation Concern. Those animal species known to occur in Cuba include 30 classified as critically endangered and 38 classified as endangered. Plant species known to occur in Cuba include 23 classified as critically endangered and 57 classified as endangered.

Wildlife known to be present at NS GTMO are listed in Table 3 (Emergency Response Action Plan 2002), with those indicated to be threatened and endangered (NS GTMO 2011).

NS GTMO supports a variety of threatened and endangered species, some of the most ecologically significant of which are reptiles. Several projects have been conducted to survey ecologically critical reptile species at GTMO, particularly Cuban iguanas (Cyclura nubila), Cuban boas (Epicrates angulifer), and species of sea turtles: green turtle (Chelonia mydas), hawksbill turtle (Eretmochelys imbricata), loggerhead turtle (Caretta caretta), and leatherback turtle (Dermochelys coriacea). The following information about these species was obtained from websites that referenced those surveys.

[3] The FGS for Cuba contain the standards for environmental protection at DoD installations, facilities, and activities at Cuba. The current FGS for Cuba was put in place in 1994. FGS are based primarily upon generally accepted standards for DoD installations and activities in the United States (as contained in the Overseas Environmental Baseline Guidance Document) but also take into account United States obligations, as well as local enforcement practices and policies active at the time of FGS development. FGS do not apply to determination or conduct of remedial or cleanup actions to correct environmental problems caused by DoD's past activities. Such actions shall be determined and conducted in accordance with applicable international agreements, Status of Forces Agreements, and United States government policy.

Cuban Iguanas

The Cuban iguana is listed as threatened under the United States Endangered Species Act on Appendix I (highest level of protection) of the Convention on International Trade in Endangered because they are potentially important seed dispersers for many native plants, Cuban iguanas promote seedling regeneration and help to maintain healthy forests. In terms of density, the most important habitat type for iguanas at NS GTMO is undisturbed coastal limestone terrace (5.26 iguanas/hectare). Overall, the density of iguanas in coastal habitats is approximately 23 times as great as in inland areas. The estimated total population of iguanas on the base in 2001 was approximately 2,250 animals, about half of which were adults.

Table 3
Wildlife and Threatened and Endangered Species at Naval Station Guantanamo Bay, Cuba

Wildlife	Type
Birds	**Brown Pelican**(1), *Crested Audubon's Caracara*(2), Cuban Blackbird, Cuban Gnatcatcher, Cuban Grassquit, *Cuban Parrot*(3,4), Cuban Green Woodpecker, Cuban Pewee, Cuban Pygmy Owl, Cuban Tody, Cuban Vireo, Cuban Orient Warbler, **Everglade Snail Kite**(2), Plain Pigeon, Tawny-Shouldered Blackbird, White-Crowner Pigeon, White-Winged Dove, and Zenaida Dove
Fish	Groupers (Nassau, Graysby, Red Hind, Coney, Tiger, and Black) and Snappers (Gray, Cudera, Lane, and Yellowtail)
Mammals	**West Indian Manatee**(1)(5), Bottlenose Dolphin, **Humpback Whale**(1), **Sperm Whale**(1), White-Tailed Deer
Reptiles and Amphibians	*Green Sea Turtle*(1)(6), **Hawksbill Sea Turtle**(1)(7), **Leatherback Sea Turtle**(1)(7), *Loggerhead Sea Turtle*(1)(6), *American Crocodile*(1)(6), *Cuban Ground Iguana*(1)(6), and Cuban Boas
Molluscs and Crustaceans	**Queen Conch**, Milk Conch, Fighting Conch, Cowries, West Indian triton, West Indian Top Snail, Spiny Lobsters
Plants	**Key Tree Cactus**(3), *Coral Elkhorn*(8), *Coral Staghorn*(8)

Notes:
Species listed in **bold** font are endangered.
(1) U.S. federally listed threatened and endangered species known to occur at Naval Station Guantanamo Bay.
Species listed in *italic* font are threatened.
(2) U.S. federally listed threatened and endangered species known to occur at Naval Station Guantanamo Bay, but listing status does not apply to Cuban populations.
(3) U.S. federally listed threatened and endangered species including Cuban populations, but not known to occur at Naval Station Guantanamo Bay; however, historic range includes Cuba.
(4) World Conservation Union's list of species of conservation concern known to occur in Cuba — near threatened
(5) World Conservation Union's list of species of conservation concern known to occur in Cuba — vulnerable
(6) World Conservation Union's list of species of conservation concern known to occur in Cuba — endangered
(7) World Conservation Union's list of species of conservation concern known to occur in Cuba — critically endangered
(8) Proposed listing under Endangered Species Act

Cuban Boas

Cuban boas play a significant role in regulating mammal populations, particularly hutias (banana rats) and bats. The Cuban boa is listed on Appendix II of CITES and considered to be near threatened by IUCN. Outside of two protected areas, it is widely persecuted in Cuba by rural people who believe

that boas pose a threat to domestic poultry. Since 1995, when considerable habitat was cleared on the base to create temporary housing under Operation Sea Signal, a decrease in the number of boas was noted. Formal population surveys do not appear to have been conducted to compare how the potential decline in the boa population may contribute to the abnormally high concentration of hutias at NS GTMO.

For the limited number of boas captured, results indicated a preference for rocky habitats and an activity period that extends throughout the spring and summer (Santos 2001). Ultrasound examination of an adult female supported published accounts indicating that birth usually takes place every other year in November.

Sea Turtles

As both predators and prey, sea turtles represent a key link in the marine food chain. Sea turtles are declining worldwide as a result of hunting, degradation of nesting beaches, disease, and mortality incidental to the fishing, oil, and gas industries (National Research Council 1990). All species inhabiting United States waters are listed as threatened (green turtle, loggerhead turtle) or endangered (hawksbill turtle and leatherback turtle) under the U.S. Endangered Species Act. According to the IUCN Red List of Threatened Species, all four species are considered to be endangered, with hawksbills and leatherbacks classified as critical. Because they are relatively undisturbed and protected from hunting, beaches on the base are of significant regional importance for sea turtle conservation.

Sea turtles nesting at NS GTMO appear to prefer beach areas that have variable slope, moderate vegetation, sandy soil, little to no artificial light, no manmade structures, and few obstructions in the intertidal zone. Based on the number of body pits observed, the most important nesting beaches are Blue, Windmill, and Pebble beaches on the Windward side, and AMC beach at the end of the runway on the Leeward side. Together, these four beaches account for 87 percent of all observed sea turtle nesting activity on the base.

Endangered Birds

On the tidal flats a large array of shorebirds can be found during migration but Black-necked Stilts and Snowy Plovers remain to breed year-round. In Cuba, the Snowy Plover is considered an endangered species and NS GTMO is one of three locations in which it breeds in Cuba.

4.0 CAMP JUSTICE

The following is a general discussion of current and former structures, key features, uses, and occupants within Camp Justice, organized by Area of Assessment. Most of the former structures were identified from review of historical drawings and schematics. As a supplement to the drawings and schematics, some historical information was inferred from excerpts of the 1991 Harmon asbestos survey report and 2013 MIGOPS archaeological survey. Floor plans with building room numbers for current permanent structures (Building AV-34, Building AV-29, Bunker AV-31, and Hangar AV-32) and ELC modular trailers are in Appendix A.

4.1 McCalla Hill North

4.1.1 Bunker AV-31

The two-story, approximately 5,000-square-foot concrete bunker, constructed in 1942, was designed as a bombproof shelter but was never used for that purpose (Murphy 1953). The first floor has an open floor plan with a large multi-occupant room containing a conference table and desks, and offices, a vault, storage areas, and restrooms. Initial (1942) and modification/rehabilitation plans (1960, 1964, and 1969) show the first floor in the same general configuration with indications of some former uses (e.g., code room, crypto room) and various communications equipment (e.g., radio receivers, UHF/VHF antennas). A loudspeaker/intercom and other associated equipment are on the roof.

Hazardous Substances and Petroleum Products

The north half of the second floor is occupied by a 6,000-gallon aboveground storage tank (AST) mounted on saddles and the south half is mechanical room/equipment space. The AST formerly contained reserve supply diesel fuel marine (DFM) for emergency power generation but is no longer in use. The amount of residual material remaining, if any, is unknown. An emergency generator (AV-0031) south of Bunker AV-31 had a separate 275-gallon diesel fuel tank inside concrete containment. The generator was replaced with a contained unit with an integral AST of unknown size. A polychlorinated biphenyl (PCB) survey (EnSafe 1997) did not include Bunker AV-31 electrical transformers located south and west of the building; the PCB content is unknown.

Environmental Sampling

- Based on the building construction, the bunker is expected to have less air movement/poor ventilation with potential radon accumulation. Radon was detected at 0.9 ± 0.2 picoCuries per liter (PCi/L) in one air sample collected from a mechanical room within Bunker AV-31.

- Bunker AV-31 was not included in the 1991 Harmon or 2003 PWD asbestos surveys. Asbestos was detected in an air sample collected from the main multi-occupancy room during the EI. The concentration of asbestos detected (0.006 fibers/cubic centimeter [cc]) is less than the 0.1 fiber/cc Occupational Safety and Health Administration (OSHA) 8-hour time-weighted average (TWA).

- Air samples were collected (one using HAPSITE equipment and one using a Summa canister) from Bunker AV-31 for volatile organic compound (VOC) screening and analysis during the EI.[4] Background (outdoor/ambient air) samples were collected using Summa canisters from a Bus Stop Shelter (Building 1352), approximately 225 feet northwest of Bunker AV-31 at the base of the hill adjacent to McCalla Hill Road, and from approximately 200 feet north of Building AV-34 near the USMC monument flag pole. HAPSITE background (method blank) samples were collected from New Cuzcos Unit 50.

  Numerous VOCs were detected at low (often laboratory-estimated) concentrations in the Summa canister sample collected in Bunker AV-31. Detected compounds not comparably detected in background samples were 1,4-dioxane, 4-ethyltoluene, 4-methyl-2-pentanone, cyclohexane, isopropyl benzene, methylene chloride, styrene, PCE, and vinyl chloride. Two constituents — carbon tetrachloride and chloroform — were detected in the bunker at concentrations that exceeded United States Environmental Protection Agency (U.S. EPA) Residential Regional Screening Levels (RSLs) but were less than Industrial RSLs and were also detected in background samples. Ethanol was detected at an order of magnitude higher than background but an RSL has not been established for comparison purposes.

4.1.2 Building AV-34

Construction of the approximately 16,000-square-foot three-story Building AV-34 was completed in 1943 for use as the Naval Operating Base Administration Building. The building is a permanent wood structure with transite (asbestos cement) shingle siding, built-up roofing, and concrete foundation with a basement and partial crawl space. The interior finishes are carpeting, vinyl floor tile, and drop acoustical ceiling tiles. Building AV-34, used for overflow from the ELC since 2008, houses OMC Courtroom I and [redacted] A mechanical room

[4] The mobile HAPSITE gas chromatograph/mass spectrometer used during the EI provided broad-scale, semi-quantitative analysis for field screening purposes. The HAPSITE instrument was calibrated for 14 VOCs: vinyl chloride, 1,1-dichloroethene (DCE), cis- and trans-1,2-DCE, 1,1-dichloroethane (DCA), 1,1,1-trichloroethane, carbon tetrachloride, benzene, trichloroethylene (TCE), toluene, tetrachloroethylene (PCE), ethylbenzene, meta- and para-xylene, and ortho-xylene. Summa canisters were used concurrently to provide subsequent quantitative laboratory analysis of those and additional VOCs.

(with air conditioning unit and condenser), cooling tower (through 1963) are in a third- and fourth-floor penthouse structure on the roof, central to the front (west side) of the building. Photographs of Building AV-34 are included in Appendix B-2.

Hazardous Substances and Petroleum Products

Two emergency power generators — 1-GEN (west) and 2-GEN (east) — are situated side-by-side north of Building AV-34. The generators have integral ASTs with 188-gallon (1-GEN) and 312-gallon (2-GEN) capacities. Also north of Building AV-34, between the generators, is electrical transformer 8-29; a second transformer, 8-30, is south of Building AV-34. Both transformers were determined to be non-PCB-containing (EnSafe 1997). Room 14 ( ) contained lead-acid batteries . Heating, ventilating, and air conditioning (HVAC) is provided by electric window/wall-mounted units with and without exterior access and ceiling-mounted air conditioning units.

Environmental Sampling

- Building AV-34 has a basement which is an area expected to have less air movement/poor ventilation in which radon typically accumulates. Building AV-34 also has a crawl space under the southern two-thirds of the building that is vented to the outside air. Radon was detected at 0.9 ± 0.2 PCi/L in one air sample collected from the basement at the south end of Building AV-34.

- Air samples were collected (using HAPSITE equipment and four Summa canisters) from Building AV-34. The HAPSITE screening detected toluene, which was substantiated by analysis of Summa canister samples; the concentrations were below Residential RSLs. Numerous VOCs were detected frequently, consistently, and at low (often laboratory-estimated) concentrations in the samples collected using Summa canisters.

  — Compounds detected in at least half the sample locations and not comparably detected in background samples were 1,3-butadiene, 2,2,4-trimethylpentane, 4-ethyltoluene, 4-methyl-2-pentanone, cyclohexane, methylene chloride, ethanol, 2-propanol, styrene, PCE, trans-1,2-DCE, and TCE. Concentrations of 1,3-butadiene detected in samples collected from the north end of the hallway and the crawl space exceeded the Residential RSL but were below the Industrial RSL.

— Constituents detected in only one location each within Building AV-34 and not detected in background samples were: chlorobenzene (in the basement) and propylbenzene and vinyl chloride (in the crawl space). None of those constituents exceeded Residential RSLs.

— Constituents detected at concentrations exceeding Residential RSLs but also detected in background samples were benzene, carbon tetrachloride, and chloroform; none of those concentrations exceeded Industrial RSLs.

- Asbestos-containing material (ACM) in Building AV-34 includes 9-inch and 12-inch vinyl floor tile and transite shingle siding; suspect ACM includes Cuban floor tile and built-up roofing. In 1991, asbestos was detected in various colored 12-inch floor tile and underlying mastic, and wallboard, and is known to be a component of transite. Building materials sampled in 1991 and 2003 that did not contain asbestos were white floor tile and mastic, wall paint, drywall, ceiling tile, various sealing compounds, water cooler and wall insulation, gypsum board, vinyl cove base, and duct tape. The 2003 asbestos survey classified the 9-inch floor tile and transite in good condition, and the different 12-inch floor tiles as damaged or in fair condition. Wall paint contained trace amounts of asbestos; trace amounts are not considered ACM. During the IAQ Assessment, visible vinyl floor tile in offices and hallways appeared to be in good condition.[5] Analysis of air samples collected from the north and south ends of the first and second floors detected asbestos ranging from 0.006 to 0.01 fibers/cc, which are below the OSHA 8-hour TWA.

- During the IAQ Assessment, chipped and peeling paint was observed at certain locations on interior walls in Building AV-34. Renovations including exterior repainting have occurred since construction at Building AV-34. Lead-based paint (LBP) is assumed to be present at each permanent structure, albeit beneath non-LBP layers, based on construction dates (1940 to 1943). Six exterior and interior painted surfaces of Building AV-34 were field tested for the presence of lead by PWD in 2003; two samples (AV-34-3L — white exterior paint located beneath brown and yellow painted surfaces and AV-34-6L — multiple interior layers) tested positive for lead. Four surfaces — yellow, beige (top layer), brown (top and underlying layer) — tested negative.[6]

[5] Some rooms and areas were carpeted, which prevented viewing the underlying tile or flooring.
[6] The sample identification numbers for lead (AV34-16L, -17L, and -18L) shown on the Building AV-34 Sample Locations diagram did not match the identification numbers in the results table; therefore, the locations could not be determined.

4.1.3 Miscellaneous (Outdoor) Features

Paved areas surrounding Building AV-34 and Bunker AV-31 are used for vehicle access and parking. West of Bunker AV-31 is a gravel parking area and small utility features (e.g., transformer, telephone junction box, solar-powered light poles). Huntington Road provides vehicle access from Building AV-29 and joins McCalla Hill Road northwest of Building AV-34. A driveway provides vehicle access from Sherman Avenue to the east. The remainder of McCalla Hill North is a grassy hill that extends west from the edges of pavement west of the buildings to McCalla Hill Road. Bus Stop Shelter (Building 1352) is at the base of the hill west of Building AV-34.

Grid soil sampling conducted at McCalla Hill North during the EI included 12 nodes across approximately 4 acres (see Figure 4 for sample grid locations). The following are general interpretations of data from the EI based on analyte groups.

- Detections of the pesticides and herbicides dieldrin, 4,4'-dichlorodiphenyldichloroethylene (DDE), 4,4'-dichlorodiphenyltrichloroethane (DDT), pentachlorophenol (PCP), and alpha-chlordane were widespread within the McCalla Hill North area, with more elevated concentrations adjoining Building AV-34. The sole Industrial RSL exceedance of dieldrin at Camp Justice occurred from a sample collected west of the southwest corner (grid node M3) of Building AV-34. The concentration and distribution of these pesticides and herbicides appear indicative of general application and not a localized release.

  The only detections of 2,4-dinitrotoluene and 2,6-dinitrotoluene within Camp Justice were from grid node K1, at the CN gate (north entrance to Camp Justice); the concentration of 2,6-dinitrotoluene exceeded its Industrial RSL.

  Also detected consistently throughout McCalla Hill North were low concentrations of polynuclear aromatic hydrocarbons (PAHs) with only scattered Industrial RSL exceedances: benzo(a)pyrene and dibenz(a,h)anthracene at M3; benzo(a)pyrene at L3 (near McCalla Hill Road); and benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene northwest of Building AV-34 at grid node M2. Total petroleum hydrocarbons (TPH) diesel range organic (DRO) compounds were also detected at grid node M2. The widespread presence and low concentrations of PAHs and petroleum hydrocarbons suggest aerial distribution of combustion products from vehicles and other sources (e.g., emergency power generators) as would be expected at this location along the main road near the former airfield.

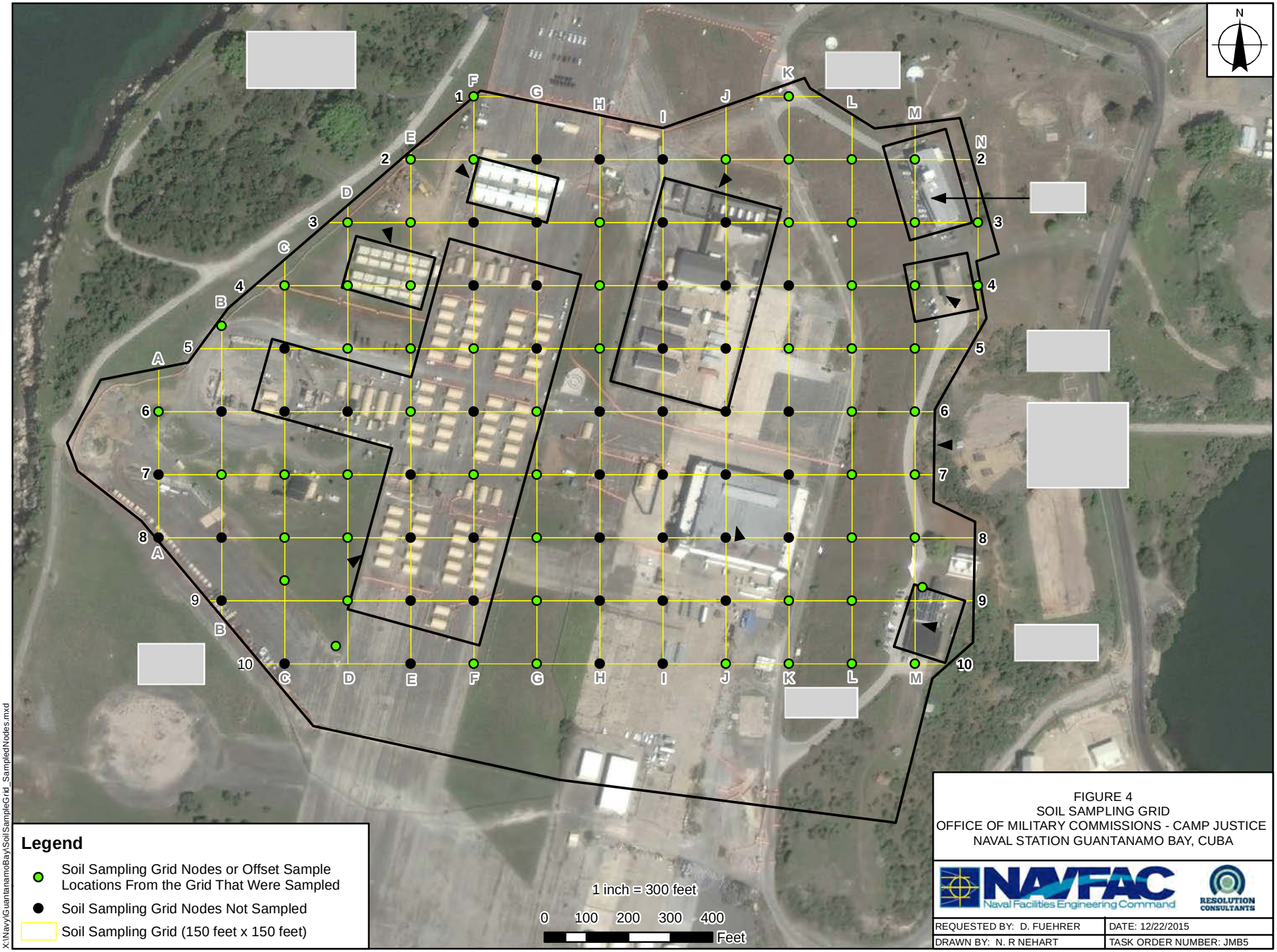


FIGURE 4
SOIL SAMPLING GRID
OFFICE OF MILITARY COMMISSIONS - CAMP JUSTICE
NAVAL STATION GUANTANAMO BAY, CUBA

Service Layer Credits: Google Earth Pro Imagery - 12/1/2013

- The metals arsenic, chromium, nickel, and zinc concentrations were higher in samples collected along the south end of McCalla Hill North and around Bunker AV-31. The highest chromium, mercury, nickel, and zinc detections and the sole arsenic concentration that exceeded its Industrial RSL within McCalla Hill North were from N4, east of Bunker AV-31.

  Given the nature of the soil observed (red, sandy soil with rock fragments) and the distribution patterns, metals are believed to be naturally occurring elements present from weathering of igneous rock sources; however, some higher detections found near roadways indicate a possible contribution from vehicle or airplane exhausts.

4.2 McCalla Hill South

4.2.1 Building AV-29

Building AV-29 is an approximately 10,000-square-foot, two-story permanent wood structure with transite shingle siding, built-up roofing, and concrete slab-on-grade foundation. Some floors were carpeted and some were tiled. The walls were painted plaster and many spaces had drop ceilings with tiles present in only a few offices. Photographs of Building AV-29, which is currently used by OMC personnel, are included in Appendix B-1.

In 1942, Building AV-29 was constructed for use as the NAS Aviation Dispensary with a lobby, administration and records offices, a laboratory, a pharmacy, an isolation ward, an X-Ray room, a dietary kitchen, 10-bed ward, staff officer quarters, a dressing room (with scrub area and sterilization room), a utility room, and restrooms on the first floor. The second floor had a dentist office, a phorometer room, an aviation examination office, restrooms, a storage room, and hospital corps quarters. Air conditioning was installed circa 1960. In 1970, the building was remodeled for use as a dental clinic.

The dental clinic, offering dental surgery and other services, moved from Bay Hill to the NAS Dispensary (which had operated since 1943) on McCalla Hill in July 1971 (Pomfret 1982). The dental clinic had examination rooms, a prosthetic laboratory, X-Ray and adjoining developing room, entrance and waiting room, administration rooms and offices, a supply closet, a laundry room, restrooms, a duty room, and operating rooms for general dentistry, prosthetics, crowns and bridges, orthodontics, and oral hygiene surgery. Flooring and exhaust systems were upgraded in 1981.

Building AV-29 appears to have remained a dental clinic until circa 2002. Ancillary equipment, including an oral evacuation system shed (Building AV-29A), east of Building AV-29, remain from the former dental clinic operations. Based on Building AV-29 drawings, the shed was installed between

1983 and 1984. All but one of the sink and water connections servicing the dental clinic have been capped (Resolution Consultants 2015b).

Building AV-29 has two central HVAC units (one in a mechanical space on the second floor and one outside, east of the building) with supplemental wall-mounted air conditioners in some rooms. The central HVAC air supply and returns are ducted through openings in the ceilings.

Hazardous Substances and Petroleum Products

Building AV-29 plans include information indicating compressed gases (oxygen and nitrogen) and propane were used in conjunction with dental clinic operations.

An emergency power generator with an integral AST (size unknown) is east of Building AV-29. Two electrical transformers (SS 24 and DP 24) are east of Building AV-29; DP 24 is labeled as non-PCB-containing but the PCB content of SS 24 is unknown. Former transformer (8-34) east of Building AV-29 was non-PCB containing (EnSafe 1997).

Historically, individual oral evacuation sinks installed in Building AV-29 discharged to a vacuum collection system in the aforementioned shed, approximately 7 feet from the east exterior wall. The system included two turbines and a 55-gallon vertical collection tank, all mounted on a concrete pad, which received wastewater from a pipe approximately 4 feet above ground surface. Solids settled in the tank and liquids were discharged to the sanitary sewer system. The vertical tank remains in the same location as shown on 1984 as-built diagrams but is currently mounted with a portion in a concrete pit beneath the ground surface and the pipe that discharged to the tank is within 1 foot of the ground surface (see photographs in Appendix B-1). Details of tank cleaning and waste disposal from this unit were not available from the records review or interviews conducted during the OBEA. The evacuation system/tank may contain hazardous waste from residual heavy metals (including mercury) collected from filling amalgams.

Environmental Sampling

- Because of the former use of Building AV-29 as a dental clinic, floor seams and other potential discharge features (e.g., wall pipes) were screened for the presence of residual mercury vapors from dental amalgams. Low-level (up to 0.006 milligrams per cubic meter [mg/m^3]) mercury vapors (well below occupational limits) were detected in the following locations: lobby, DV Room, and Rooms 2, 3, 10, 13, 14, 15, 16, 17, 23, and 28 (Resolution Consultants 2015c).[7]

[7] The American Conference of Governmental Industrial Hygienists 8-hour Threshold Limit Value for elemental mercury is 0.025 mg/m^3. The National Institute for Occupational Safety and Health 8-hour Recommended Exposure Limit is 0.05 mg/m^3 and OSHA 8-hour Permissible Exposure Limit is 0.1 mg/m^3.

- Air samples were collected (two using HAPSITE equipment and two using Summa canisters) from Building AV-29. The HAPSITE screening detected toluene, which was substantiated by analysis of Summa canister samples; the concentrations were below Residential RSLs. Numerous VOCs were detected at low (often laboratory-estimated) concentrations in samples collected using Summa canisters. All constituents detected in both Summa canister samples were also detected in at least one background sample.

  The following constituents were detected in at least one Summa canister air sample but were not comparably detected in a background sample: 1,3-butadiene, 2,2,4-trimethylpentane, methylene chloride, styrene, and trans-1,2-DCE. The detected concentration of 1,3-butadiene did not exceed the Industrial RSL. Detected concentrations of carbon tetrachloride (from both sample locations) and benzene (from the north-end hallway sample) were between Residential and Industrial RSLs.

- ACM in Building AV-29 includes 9-inch and 12-inch vinyl floor tile and transite shingle siding; suspect ACM includes Cuban floor tile and built-up roofing. The 2003 asbestos survey classified 9-inch floor tile and transite as in good condition, and the 12-inch floor tile as damaged and in fair condition. During the IAQ Assessment, floor tile appeared to be in good condition in the offices and hallways where the tile was visible; some rooms were carpeted and the floor substrate could not be observed. During the EI, air samples collected from the north and south ends of the first floor did not contain asbestos fibers; a sample collected from the first floor DV Room contained 0.005 fibers/cc. Samples collected from the north and south ends of the second floor hallway contained 0.003 and 0.004 fibers/cc, respectively. All asbestos fiber detections are below the OSHA 8-hour TWA.

- Two painted surfaces on the interior of Building AV-29 were field tested for the presence of lead in 2003. Both surfaces — blue (AV29-1L) and beige (AV-29-2L) tested negative. Sample AV-29-1L was collected from inside Room 18 and Sample AV29-1L was collected from the hallway outside (east) of Room 20. During the IAQ Assessment, chipped or peeling paint was observed at certain locations within interior walls in Building AV-29. Renovations including exterior repainting have occurred at Building AV-29 since 2003. LBP is assumed to be present beneath non-LBP layers based on the building's construction and renovation dates.

4.2.2 Buildings AV-106 and AV-107

Two bunkers were observed built into the east side of (and fronting) McCalla Hill Road at the base of the hill west (Building AV-106) and southwest (Building AV-107) of Building AV-29. The doors to the

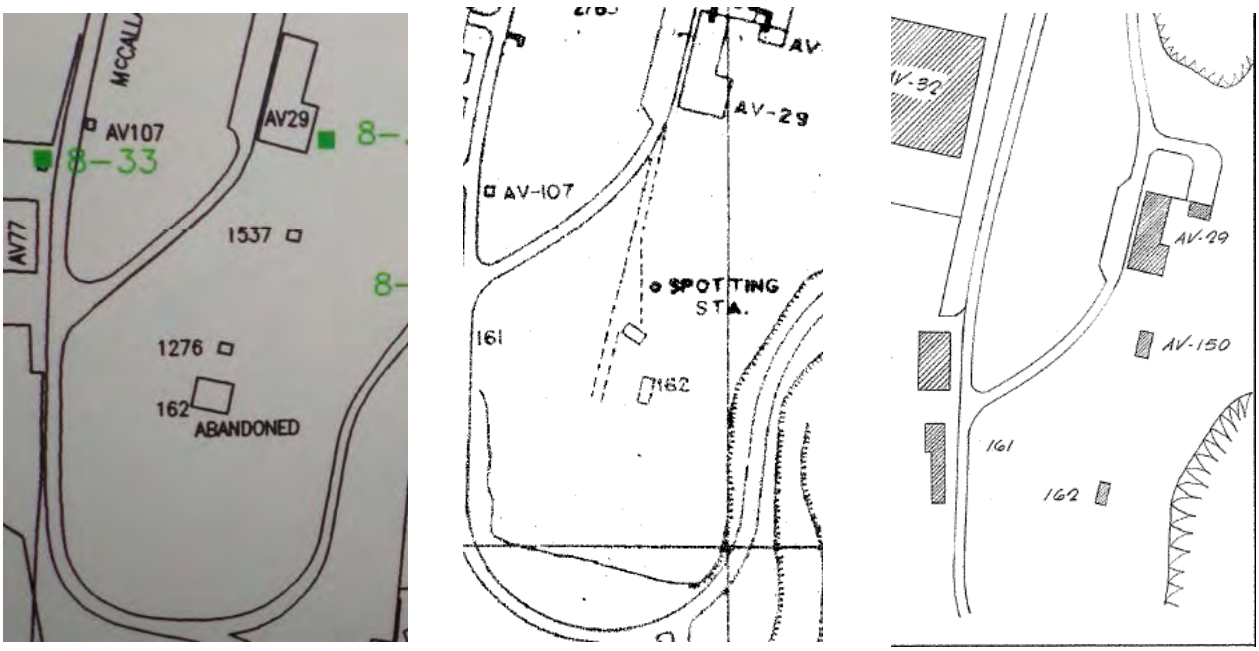
bunkers are visible from McCalla Hill Road, the ELC, and Hangar AV-32. The contents of the bunkers, or if they are currently used, were not determined from interviews or records review.

4.2.3 Former Building AV-28

This structure, east of Building AV-29, was demolished circa 1987. A demolition plan shows the building had two roll-up garage doors and a personal door on the south side. The L-shaped interior was formed by the garage space and had wood cabinets and counters. The building was constructed of wood siding covered by transite shingles, with a built-up roof. The building had underground electrical lines fed by a caged transformer substation. Water was supplied from a line off Building AV-29 and wastewater discharged offsite via a drain line on the east side of Building AV-28. The demolition plan indicated all water and wastewater lines would be removed and electrical lines would be abandoned in place. The former use(s) of Building AV-28 were not identified during records review or interviews conducted during the OBEA.

4.2.4 Former Structures South of Building AV-29

Remnants of several structures are in the field south of Building AV-29 (listed from north to south): a set of three square structures, an irregularly shaped structure (Spotting Station), and a rectangular orange-red structure (Building 162). These small structures are also shown on various maps and diagrams at different times (see below).



Photo/image sources: (Left) EnSafe Inc. PCB Inventory Diagrams, circa 1997; (Center) Public Works Center, Guantanamo Bay, Cuba, *Rehabilitation of Road, Shoulders & Drainage Structures*, 29 August 1962; (Right) Department of the Navy Bureau of Yards & Docks, Public Works Center, *Hangar Building AV-32 Emergency Power Electrical*, 29 March 1964.

Building AV-150/1537

In the current location (historically labeled as Building AV-150 and Building 1537) are a chain-link fence adjacent to an abandoned compressor room with electrical stub-up and pad, used for storing old range targets.

Building 162

Building 162 appears to be the location of an abandoned AST vault with three welded access hatches, shown right. The Historical Petroleum Releases Documentation (HPRD) (NAVFAC 2008) labels this area (north latitude 19° 54' 44.5" and west longitude 75° 09' 37.2") as W41 — McCalla Tanks. The W-41 discussion references Tanks AV-38 through AV-41 as aviation gasoline (AVGAS) ASTs removed prior to 1988; however, that information appears inaccurate because several other maps and reports document AV-38 through AV-41 as part of 10 USTs formerly located approximately 1,600 feet to the south-southeast at McCalla Hill/McCalla Field (see Section 6.2.1.1). The information presented in the W-41 report appears to more closely describe two or three inactive AVGAS ASTs at Building 162 that were reportedly closed, cleaned, and filled with sand slurry in 1996/1997.

Photo source: 2008 Historical Petroleum Releases Documentation (NAVFAC 2008)

4.2.5 Miscellaneous (Outdoor) Features

Paved areas surrounding Building AV-29 are used for vehicle access and parking spaces are on the west and south sides. A solid waste Dumpster is southeast of the building and solar-powered light poles are to the west. Huntington Road provides vehicle access to Building AV-29 and joins McCalla Hill Road at its southwest terminus. The remainder of McCalla Hill South is a grassy hill that extends west from the edges of pavement west of Building AV-29 to McCalla Hill Road. Bus Stop Shelter (Building 1354 or 1351) is at the base of the hill west of Building AV-29.

Grid sampling conducted at McCalla Hill South during the EI included 11 nodes across approximately 8 acres (see Figure 4). The following are general interpretations of data from the EI based on analyte groups.

- The highest concentrations of 4,4'-DDE and 4,4'-DDT were detected within this area of Camp Justice, with the sole Industrial RSL exceedance of 4,4'-DDE from grid node K10, near the Bus Stop Shelter approximately 150 feet north of the intersection of McCalla Hill Road and

Huntington Road. The concentration and distribution of these pesticides appear indicative of general application.

- PAHs were detected at lower concentrations and more sporadically when compared to the McCalla Hill North area. The PAHs were detected along the L6 through L10 grid nodes (hill between McCalla Hill Road and Huntington Road) but were generally not detected in M6 through M10 grid nodes (along/bordering Huntington Road) and Building AV-29. None of the PAH concentrations in the MaCalla Hill South area were indicative of localized spills or releases.

- One of the 10 locations where TPH DRO was detected within Camp Justice was at grid node M10, south of Building AV-29, approximately 50 feet west and downgradient of the solid waste Dumpster. The concentration detected (laboratory-estimated 61 milligrams per kilogram [mg/kg]) in the absence of a documented source is not indicative of a known localized release.

- Laboratory analysis indicated the highest average concentrations of the metals chromium, nickel, and mercury were detected within McCalla Hill South. Consistent with other Camp Justice locations, chromium was detected exceeding its Industrial RSL in each sample. Mercury and silver were detected at 4 mg/kg and 2.6 mg/kg, respectively, both one to two orders of magnitude higher than other locations throughout Camp Justice (but below their respective Industrial RSLs), at grid node M9, which adjoins Building AV-29 near the north hallway entrance/exit door. The presence of localized elevated mercury and silver in soil may be consistent with former dental clinic operations.

4.3 Hangar Area

4.3.1 Hangar AV-32

The approximately 65,700-square-foot, four-level concrete and steel hangar was constructed in 1941 with slab-on-grade foundation and flat built-up roof. Hangar AV-32 is the only permanent building from air operations that remains on the airstrip. The building is sometimes referred to as the Media Operations Center (MOC) because some hangar offices and three 20-foot by 40-foot modular trailers (Public Affairs Office [PAO] 1, PAO 2, and MOC Multimedia Center) situated in the east half of the hangar are used by media during commissions. The west interior portion of the hangar is fenced and used for warehouse storage. Mules and other permitted vehicles enter and park within the west portion of the hangar. The visible concrete floor inside the hangar appears to be in fair condition although cracks and some seam separation are evident. Localized staining was observed in some areas of the concrete floor within the hangar during the OBEA site reconnaissance.

Rooms historically used for offices, operational and repair shops, and storage are along the east and west sides of the first and second floors; the second floor offices are accessible via doors along a mezzanine accessible by stairwells near each quarter/corner of the hangar. Most of the offices along the west side of the hangar are currently open and vacant; some locked offices are used by military personnel. Offices along the east side of the hangar are carpeted and contain desks and workstations used primarily by media personnel. The air in the east-side (occupied) offices is conditioned by re-circulating wall-mounted air conditioning units (Resolution Consultants 2015b).

All three modular trailer interiors were carpeted with typical wall and ceiling finishes. PAO 1 and PAO 2 share a power source and HVAC units; the MOC Multimedia Center has its own power and dedicated HVAC unit (Resolution Consultants 2015b).

Inactive restrooms are in the northeast and northwest corners of the first floor and northeast, northwest, southeast, and southwest sides of the second floor. Active restrooms are in portable latrines outside, south of the hangar.

Parking is available on concrete and asphalt paved areas north and south of Hangar AV-32. Sets of metal bleachers are staged in a fenced area south of Hangar AV-32. Additional equipment, portable security towers, vehicles, and larger CONEX boxes are staged in fenced areas south and west of Hangar AV-32. Northwest of Hangar AV-32 are ELC-19 (a media tent) A 1964 plan shows aerology and flight control desks and equipment in the radio control tower with a weather television room in the northeast corner.

Hazardous Substances and Petroleum Products

Materials stored in the secured west portion of the hangar reportedly include vehicle and general facility maintenance chemicals (e.g., Round-Up, two-stroke oil) and equipment (light maintenance parts for mules/electric vehicles) used by BEEF. Mules and other vehicles are maintained and fueled offsite at the main NS GTMO motor pool and fueling station, respectively. A Base Operation and Support (BOS) contractor removes the vehicles from Camp Justice for repair and fueling.

Historical operations inside the hangar involved using a chain fall hoist suspension for repair and maintenance of aircraft with propellers and jet engines. Records reviewed for the OBEA did not indicate quantities or specific hazardous substance and petroleum product use, storage, or disposal within the hangar.

Historical drawings show transformer vault rooms near the center of the first floor, adjoining stairwells, on the east and west sides of Hangar AV-32. A 1942 plan, labeled soil and water supply lines, shows a 4-inch soil line in one (north, outside) corner of each vault that presumably contained electrical lines that extended outside. Later plans (circa 1962) show a detached transformer vault outside the west exterior wall, and one interior vault (on the west side) labeled a transformer room. Vault transformers 40-809, 40-810, 40-811, 40-812, 40-813, and 40-814 had unknown PCB content (EnSafe 1997). The vault/transformer room was not accessed during the OBEA site reconnaissance.

Formerly, an auxiliary airfield lighting generator and transformer building west of Hangar AV-32 (south of the current satellite holding facility) was connected to the west transformer room/vault via underground lines accessible through a manhole. The airfield lighting building included (from north to south) an equipment room, generator (inside), and 750-gallon AST (outside). Remnants of this building were not observed during the OBEA site reconnaissance.

In the mid-1960s, an existing 10-kilowatt generator building outside the south exterior hangar wall was removed and replaced with a 100-kilowatt generator building and associated 725-gallon AST. The tank was not observed during the OBEA site reconnaissance. The date the AST was removed was not available from records reviewed or interviewed, and is not referenced in the 2008 HPRD or 2010 Spill Prevention and Response Plan (SPRP). An emergency power generator with integral AST (size unknown), observed outside the southeast corner of Hangar AV-32 during the OBEA site reconnaissance, was installed between 2011 and 2013, based on review of aerial imagery.

Environmental Sampling

- Air samples were collected (using HAPSITE equipment and four Summa canisters) from Hangar AV-32. Benzene, toluene, and meta- and para-xylenes were detected at comparable concentrations from HAPSITE screening and analysis of Summa canister samples within Hangar AV-32. Benzene concentrations detected were between Residential and Industrial RSLs, and benzene was also detected in each background sample. Neither toluene nor meta- and para-xylenes concentrations exceeded an RSL.

Numerous VOCs were detected at low (often laboratory-estimated) concentrations in samples collected using Summa canisters. The following constituents were detected in more than half the Summa canister air samples but were not comparably detected in a background sample: 2,2,4-trimethylpentane, heptane, 2-hexanone, ethanol, 4-ethyltoluene, 2-propanol, 4-methyl-2-pentanone, styrene, methylene chloride, and PCE. The following constituents were detected in only one of four Summa canister samples from the hangar: carbon disulfide, isopropylbenzene, tetrahydrofuran, and propylbenzene. None of the above-referenced detections exceeded an RSL. Carbon tetrachloride (in four samples) and chloroform (in two samples) exceeded their respective Residential RSLs but did not exceed the Industrial RSL. Carbon tetrachloride was detected in both background samples at concentrations that exceeded the Residential RSL.

- Nonfriable window caulk, floor tile, flexible duct, friable steam pipe insulation, and wall paint contained asbestos (Harmon 1991). Suspect ACM was transite (nonfriable) and the built-up roof; those materials were not sampled to protect their integrity. Harmon recommended (1) isolation and repair of the damaged steam pipe insulation and wall paint and (2) placing the transite, built-up roof, and damaged window caulk, floor tile, and flexible duct under an Asbestos Operations and Maintenance (O&M) Program until removal. A copy of an O&M Plan was not provided for review during the OBEA. During the IAQ Assessment, Resolution Consultants observed floor tile in poor condition on the mezzanine hallway along the west side of the building. Some of the tiles were loose with broken fragments observed.

  Air samples collected from the Hangar AV-32 main floor and mezzanine did not contain asbestos fibers; the sample collected from Media Room 4 contained 0.002 fibers/cc, which is below the OSHA 8-hour TWA.

- Resolution Consultants observed paint chips on the hangar floor and paint scaling from the ceiling and some accessible wall surfaces. These painted surfaces were in poor condition, and the paint reportedly contains lead (NAVFAC PWD 2003). The mezzanine hallway and accessible offices on the east side of the building had painted concrete floors in good condition.

4.3.2 Former Building AV-77

Early (circa 1940s and 1950s) plans (see image on next page) identify Building AV-77 as the Ordnance Storehouse, constructed circa 1943 and razed between 1996 and 2003. The structure was 99 feet by 56 feet, with 80-square-foot and 200-square-foot canopies on the east side (PWD 1983)

and originally had a store room and locker room. Plans from 1959 and 1960 show the building with the following rooms: compressor, engineering and storage; a tire shop; machine shop, VU-10 Electronic Shop, welding shop, electric shop, battery storage, miscellaneous storage rooms, and NAS training and storage. The VU-10 Electronic Shop had test benches, a work bench, and fluorescent light fixtures along width of the north wall, which had a wide door opening outside of which were stairs. A transformer (8-33) formerly north of this building was non-PCB-containing (EnSafe 1997).

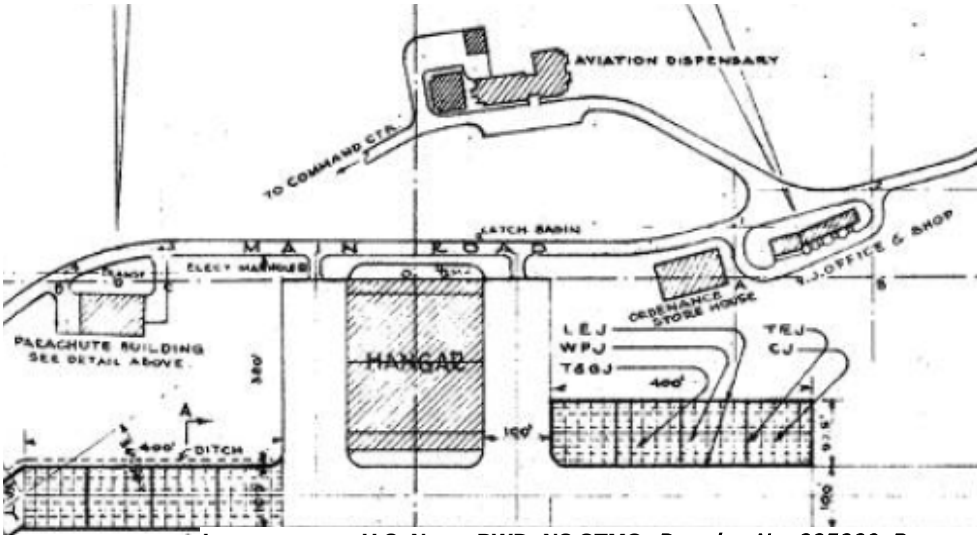


Image source: U.S. Navy, PWD, NS GTMO. ***Drawing No. 335220, Runway at McCalla Hill, Frederick Snare Corp., New York,*** **25 May 1943.**

Records review and interviews provided no information regarding manufacture, use, storage, or disposal of ordnance associated with aircraft, such as activators for emergency ejection, missile testing, and explosive bolts, etc., or starter chargers and igniters. The location is currently used to stage CONEX boxes and for outdoor equipment storage/staging; barricades restrict vehicle access to this area through the Florida Gate.

4.3.3 Former Buildings 1353, AV-137, and AV-138

Historical maps, dated 1943 to 1964, show these small structures on the west side of McCalla Hill. Buildings AV-137 and AV-138 were Quonset huts and Building 1353 was a bus shelter. A 1963 plan proposed replacing Buildings AV-137 and AV-138 with a "new Line Maintenance" building. No structures were evident in the area of Buildings AV-137 and AV-138 in post-1964 figures reviewed, suggesting they were removed but the proposed Line Maintenance building was not constructed.

Photo source: National Archives and Records Administration

4.3.4 Former Building AV-161

Former Building AV-161 was constructed in 1943, south of Building AV-77 and east of the airfield along McCalla Hill Road. The building was referred to as the V.J. Office and Shop (see below) and as the Line Maintenance structure. The building was roughly 140 feet long by 25 feet wide, with an awning on the north end of the west side and access ramps along the west side. Although the available plans for this structure did not indicate specific room uses, the 1963 plan (Section 4.3.3) for a new Line Maintenance structure north of Building AV-77 indicated it likely included a paint shop, general purpose shops, offices, and tool, parts, and equipment storage areas.

4.3.5 Fuel Pipelines — McCalla Hill/Gas Hill to AV-32

According to a 1943 drawing (included in Appendix C, an excerpt of which is shown on the following page), AVGAS and jet propellant (JP) fuel pipelines from McCalla Hill/Gas Hill extended within approximately 200 feet south and 100 feet west of Hangar AV-32.

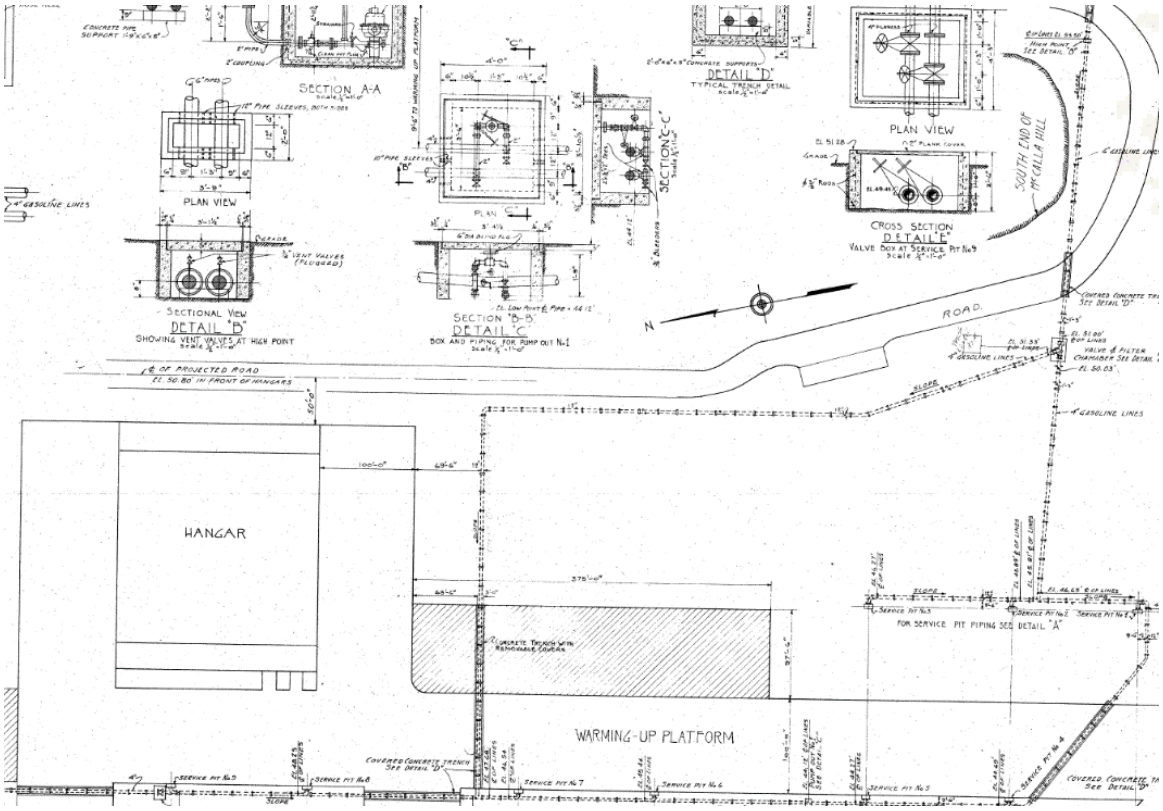


Image source: NS GTMO PWD. Frederick Snare Corp., Drawing No. J-11, Gasoline Supply Lines and Services Pits, Land, Plane Hangar, McCalla Hill, 31 August 1943.

Two 6-inch gasoline lines from McCalla Hill/Gas Hill south crossed McCalla Hill Road at two locations (covered with concrete trenches) to a valve and filter chamber from which two sets of two 4-inch gasoline lines extended. The valve and filter chamber where the 4-inch lines split from the main 6-inch lines had a dry well for draining water draw-off. A 1941 plan (see Appendix C) shows the detail for that chamber, which was designed with a pitch to the northeast to a 4-inch drain then a 4-foot by 4-foot sump pit outside the chamber.

One set of 4-inch lines traversed west to Service Pits 1, 2, and 3, then south and west to (from south to north) Service Pits 4, 5, 6, and 7. The second set of 4-inch lines, set 12 inches apart, traversed north, then west, then (north of Service Pit 7) north to Service Pits 8 and 9. The service pits appear to be locations where AVGAS/JP fuel was dispensed to resupply airplanes while parked along the warming-up platform and apron south of Hangar AV-32.

Service Pits 4 through 9 are shown along a warming-up platform that extended south along the west side of Hangar AV-32. According to the diagram, the approximately 4-foot by 10-foot service pits contained the fuel pipes, cleanout plugs, strainers, hose reels, flow meters, air chambers, and lights. The base of the approximately 3-foot deep pits are shown with concrete walls and floor. A 1962 plan showing rehabilitation of aircraft parking west of Former Buildings AV-161 and AV-77 and south of Hangar AV-32 included the following general notes: "The walls of three existing fuel pits shall be demolished, pits filled with good base material and paved to meet surrounding grade. Remove pipes and valves from pits. Existing underground fuel pipe lines to be abandoned in place." When compared with the 1943 drawing, an excerpt of which is shown on the previous page, the pits to be filled in 1962 were the southernmost Pits 4, 5, and 6. Additional details related to fuel pipelines outside the Camp Justice assessment area are in Section 6.2.2.

Documentation that other pipelines or pits were emptied, cleaned, capped, or removed was not available in records reviewed for the OBEA. The area is paved and used for parking and storage, and no evidence of subsurface features was noted during the OBEA site reconnaissance.

4.3.6 Soil Sampling

Soil sampling was limited by paved areas immediately surrounding Hangar AV-32. Surface soil was accessible from two grid nodes near Hangar AV-32: J10 (approximately 225 feet south of Hangar AV-32) and K9 (approximately 60 feet southeast of the hangar and 20 feet east of the fencing surrounding the portable latrines). The sample collected from grid node K9 contained sand and gravel. Five additional soil samples were collected from grid nodes G6-G10 in grassy areas west and south of the hangar area, east of former Runway 1-19, and south of the ELC.

- Arsenic was detected in samples collected near Hangar AV-32 (J10 and K9) but was not detected in any samples collected from the grassy area east of Runway 1-19. The K9 (7.1 mg/kg) and J10 detections (25 mg/kg) are the highest of any Camp Justice soil samples and exceed the 3 mg/kg Industrial RSL.

- The only pesticides detected in this area were 4,4'-DDE and 4,4'-DDT in samples collected from G6, G9, G10, J10, and K9. Concentrations detected did not exceed Industrial RSLs.

- PAHs were detected at low concentrations consistent with other Camp Justice assessment areas. Benzo(a)pyrene concentrations exceeded the Industrial RSL in four samples collected from G6-G8 and J10, and TPH DRO was detected in samples collected from G6 and G7. Neither semi-volatile organic compounds (SVOCs) nor PAHs were detected in the soil sample collected from G10.

- Within the hangar area, the concentrations of lead and zinc were higher relative to other Camp Justice areas and concentrations of chromium and nickel were somewhat lower; however, consistent with other Camp Justice locations, chromium was detected exceeding its Industrial RSL in each sample. Lead concentrations were generally higher in the samples collected adjacent to the taxiway and runway. Given the nature of the soil observed and the distribution patterns, the metals are believed to be naturally occurring elements present from weathering of igneous rock sources augmented by vehicle exhaust.

4.4 Expeditionary Legal Complex

4.4.1 Secured Area

The ELC is improved with several modular structures that house the high-security trials courtroom; OMC security, prosecution, and defense trailers; latrine, storage, and utility trailers; and defendant holding areas. Floor plans for select portable/modular structures within the ELC are in Appendix A; photographs were restricted. Modular structures/trailers include vinyl and carpeted floors. Current ELC modular structures listed below were installed by BEEF in 2008.

- **ELC-1 —** 6,000-square-foot modular building that houses multi-defendant OMC Courtroom II. The interior furnishings include carpet, chairs, and wooden desks. The structure has drop ceilings and sheetrock walls, and is equipped with a central HVAC system.

- **ELC-3 —** 3,072-square-foot modular trailer subdivided into legal personnel offices.

- **ELC-4 —** 3,072-square-foot modular trailer subdivided into legal personnel offices.
- **ELC-5 and 6 —** 240-square-foot and 400-square-foot Site Security Office (SSO) trailers.
- **ELC-7 through ELC-10 —** 200-square-foot CONEX boxes used for offices, [redacted] each has its own HVAC unit.
- **ELC-2 and ELC 11** (panel room) **—** 1,800-square-foot and 480-square-foot, respectively, modular trailers used by convening authority and support personnel.
- **ELC-12 —** 1,800-square-foot OMC security trailer occupied by DoD SSO personnel.
- **ELC-14 through ELC-18 —** [redacted]
- **ELC-20** — [redacted]
- **ELC-28 —** [redacted]
- **ELC-29 and ELC-30 —** 480-square-foot prosecution and defense witness trailers.

Modular trailers or portable metal latrines are situated within the ELC. Most utility piping (hard pipes, rubber hoses, etc.) within the ELC is above ground. Smoking shacks are located outside the secured ELC. Parking is available on paved (concrete, asphalt, and gravel) east of the ELC (in areas historically used for parking and formerly improved with structures). Personnel enter the ELC through the main Colorado Gate (Gates 7 and 8) from the parking lot.

Hazardous Substances and Petroleum Products

Emergency power generators with integral ASTs are north/northwest of the ELC and within the secured ELC, east of ELC-1.

Interviews indicate that pesticide application and building and equipment maintenance (including HVAC, generators, and transformers) within the ELC are handled by BOS contractors, which bring all necessary materials and removes all generated wastes. Hazardous materials, pesticides and herbicides, and petroleum products used by BOS contractors are staged in their compounds or at other offsite locations. The exceptions within the ELC observed during the OBEA site reconnaissance include small quantities of gasoline in jerry cans staged by the

Colorado Gate guard shack used for weed eaters and other touch-up grounds equipment used by ELC personnel.

Environmental Sampling

Air samples were collected for HAPSITE screening from rooms and areas within nine structures (ELC 1, ELC 2, ELC 3, ELC 4, ELC 5, ELC 8, ELC 11, ELC 29, and ELC 30) that had modular skirts or were in direct contact with the ground surface within the ELC. Air samples were collected using Summa canisters for laboratory analysis in ELC 1, ELC 2, ELC 3 Rooms 100 and 107, ELC 4 Main Room, and ELC 5.

- Toluene and meta- and para-xylenes were detected at comparable concentrations (below RSLs) from HAPSITE screening and analysis of Summa canister samples in ELC 5 and ELC 29. Numerous additional VOCs were detected consistently at low concentrations in each Summa canister sample, of which only styrene and PCE were not detected in background samples. Carbon tetrachloride was detected in each Summa canister air sample between Residential and Industrial RSLs but was also detected in both background samples. Benzene and 1,2-DCA were detected in ELC 3 Room 107 and ELC 5, respectively, between Residential and Industrial RSLs but were also detected in background samples.

- The following lists constituents only detected in specific ELC structures but not detected in background samples; none exceeded an RSL.

  — **ELC 1** — 1,4-dioxane, 2,2,4-trimethylpentane, cyclohexane, 1,1-DCA, and PCE

  — **ELC 2** — methyl tertiary-butyl ether (MTBE)

  — **ELC 3 Room 100** — 1,3-butadiene, 4-ethyltoluene, 4-methyl-2-pentanone, styrene, and MTBE

  — **ELC 5** — 1,3,5-trimethylbenzene, 4-ethyltoluene, 4-methyl-2-pentanone, and PCE

Soil Sampling

Soil samples were not collected around the ELC structures because they are physically situated on pavement (runway and tarmac). Soil was accessible at grid nodes within adjoining grassy areas. Samples were collected from one location north of the ELC (grid node J2) and three locations west of the ELC (grid nodes H3, H4, and H5).

- Arsenic was detected at laboratory-estimated concentrations at grid nodes H3, H5, and J2; the detection at H5 exceeded its Industrial RSL. Consistent with other camp Justice locations, chromium was detected exceeding its Industrial RSL in each sample. Concentrations of the metals lead, cadmium, copper, mercury, silver, sodium, and zinc detected at grid node H5 were elevated as compared to than other ELC locations but did not exceed an RSL.

- Pesticides/herbicides detected in this area were 4,4'-DDE (grid nodes H3, H5, and J2), 4,4'-DDT (grid nodes H3 and H5), and PCP (grid node H4). Based on the concentrations, these detections are likely the result of application for intended use of the products. Concentrations detected did not exceed Industrial RSLs and were lower than most other areas within Camp Justice.

- PAHs were detected at low concentrations consistent with other Camp Justice assessment areas. Benzo(a)pyrene exceeded the Industrial RSL in the sample collected from grid node H5. Benzo(a)pyrene was the only SVOC or PAH detected from the soil sample collected at grid node H3, which was the location of the only TPH gasoline range organic (GRO) compound detection within the ELC assessment area; both were low (laboratory-estimated) concentrations.

4.4.2 Former Structures

4.4.2.1 Building AV-33

Building AV-33, an approximately 7,000-square-foot building, was constructed in 1941 of concrete, steel, and wood frame with metal siding and a slab-on-grade foundation. As shown on the image below, the structure had an irregular configuration and multiple interior heights. The center of the building (north side) had a narrow (15-foot wide), tall (20-foot high) bay door. The structure was used as a parachute building (parachutes may have been installed in ejection seats in jet fighters and cargo airplanes, among others) circa 1943 and a contractor shop (dates and specifics unknown).

Photo source: U.S. Navy, Public Works Department, Naval Station Guantanamo Bay

A 1986 PWD plan for exterior repairs of various structures includes photographs and a layout of this former structure that show miscellaneous large metal parts and pipes, lift trucks, a propane cylinder cage, flatbed trailer, metals racks, portable lights, and other materials that could not be identified due to the limited quality of reproduced photographs. The building had a former electrical substation (transformer) outside the southeast corner. Building AV-33 was razed between 1997 and 2003, based on review of historical maps and aerial imagery, and the location is currently used for parking by the ELC.

4.4.2.2 Former Building AV-93

Building AV-93 was the NAS McCalla Airfield terminal and restaurant (Blue Caribe), constructed in the early to mid-1940s, with remodeling/upgrades in 1951, 1964, 1970, 1986, and 1988. Historical plans show various restaurant features including electric hot water heaters, a refrigerant tank/exchanger and condenser, exterior walk-in coolers, a grease trap, dry chemical cylinders (for fire suppression), and food service appliances and equipment. The terminal portion of the building contained offices, storage rooms, a ticket counter, and latrines. The building, which fronted the airfield, was originally 72 feet long, with 24 feet added in 1951; the building was roughly 40 feet wide.

The structure was razed between 1997 and 2003 and the location is currently used for ELC parking.

Photo source: U.S. Navy, 1956. McCalla Field, showing Building AV-34 and Bunker AV-31 and (from left to right) Former Building AV-93 (Terminal and Restaurant), Building AV-131 (Quonset hut), and Building AV-33 (Parachute Shop).

4.4.2.3 Former Building AV-131

This Quonset hut is shown between former Buildings AV-93 and AV-33 in plans and photographs dated 1952 to 1991 but no additional details regarding construction date, uses, or occupants were obtained from records review during the OBEA. The location is currently used for ELC parking.

4.4.2.4 Soil Sampling

Soil samples were collected from three locations (grid nodes K3, K5, and L5) accessible within the areas of former structures east of the ELC.

- The concentrations of arsenic detected within this portion of the ELC were higher than average for Camp Justice; all three detected arsenic concentrations exceed the Industrial RSL. Concentrations of most metals, including aluminum, chromium, lead, thallium, vanadium, and zinc detected at grid node L5 were higher than other ELC locations. Consistent with other Camp Justice locations, chromium was detected exceeding its Industrial RSL in each sample. Elevated concentrations of nickel, below RSLs, are consistent with concentrations detected on McCalla Hill North and South. Mercury was not detected at grid nodes K3 or K5.

- Neither pesticides nor herbicides were detected from grid node K5. The most widespread detected pesticides and herbicides were at grid node L5, and only 4,4'-DDE, 4,4'-DDT, and alpha-chlordane were detected at grid node K3. The concentrations of 4,4'-DDE and 4,4'-DDT were the lowest of all Camp Justice assessment areas. None of the pesticide or herbicide detections exceeded an RSL.

- PAHs were detected at low concentrations consistent with other Camp Justice assessment areas but with no Industrial RSL exceedances. Neither TPH GRO nor TPH DRO was detected in this portion of the ELC.

4.5 Expeditionary Lodging Area

4.5.1 Cuzcos

Cuzcos, also referred to as rigid-walled shelters or berthing modular trailers, were assembled in 2008 (Old Cuzcos) and 2012 (New Cuzcos) by NAVFAC contractors. When commissions are in progress, OMC civilian employees and contractors are allowed to berth in Cuzcos. Named after the nearby site of the Spanish-American War battle of Cuzco Well, the trailers are two-bedroom units (approximately 100 square feet per bedroom) connected by a central 30-square-foot bathroom. They are furnished similarly to a hotel and have utilities, wall-mounted air conditioning unit, refrigerator, and microwave. The Cuzcos are arranged in groups of 8 to 12 with covered, wooden walkways between the groups. Gravel parking areas are north and west of the New and Old Cuzcos. Numbered Cuzcos are shown on Figure 2 and on floor plans in Appendix A; photographs are included in Appendix B-4.

Environmental Sampling

- Air samples were not collected from Cuzcos; areas outside Cuzcos were used for collecting HAPSITE background samples. One sample, collected on 13 October 2015, contained toluene and xylene at concentrations below occupational limits and RSLs.

- Soil samples were collected along the northwest barriers (grid nodes F1, E2, and D3), adjoining Old Cuzcos Unit 12 (F2) and New Cuzcos Unit 50 (D4), in the gravel parking area north of the Old Cuzcos (E3), and north of New Cuzcos Unit 41 (E4).

- On average, metals concentrations detected within the Expeditionary Lodging Area were lower than any other Camp Justice assessment areas. Antimony, beryllium, selenium, and silver were detected in the same (E3 and E4) grid nodes. Arsenic and thallium were only detected at grid node E4 and cadmium was only detected at grid nodes E2 and E3. Consistent with

other Camp Justice locations, chromium was detected exceeding its Industrial RSL in each sample.

- Pesticides detected within the Cuzcos area were 4,4'-DDE (grid nodes D3, E2, E3, and F1), 4,4'-DDT (grid nodes E2 and F1), and PCP (grid node F2). None of the detections exceeded an RSL.

- PAHs were only detected at grid nodes F1 and F2 within the Cuzcos area, except for a detection of bis(2-ethylhexyl)phthalate (a common laboratory artifact) at grid node E2. PAH detections did not exceed RSLs. TPH GRO was also detected at low (laboratory-estimated) concentrations at grid nodes F1 and F2. Those grid nodes are along the northwest barrier, adjoining Moffet Field Road and parking lots/areas.

4.5.2 Tents

During commissions, OMC civilian employees and contractors, media, and non-governmental observers present for short terms during hearings berth in expeditionary tents. Installation of Camp Justice berthing tents was completed by 2008. Tents are primarily located in the central to west/southwest portion of Camp Justice. Numbered tents are shown on Figure 2 and on floor plans in Appendix A; photographs are included in Appendix B-4.

The tents — Alaska Structures, Inc., Small Shelter Systems — are energy-efficient, 640-square-foot billeting shelters officially used by the USAF. The tent structures are comprised of a lightweight aluminum frame wrapped in a polyvinyl chloride (PVC) fabric material. The PVC fabric is coated with powder to increase durability and product life by improving resistance to humidity, salt, oxidation, and humidity. Each berthing tent has multiple twin beds in individual sleeping quarters demarcated by plywood separations or fabric curtains. The tents are air-conditioned and have electricity, small refrigerator, and microwave.

Latrine, shower, and laundry facilities are in separate tents, some of which were installed on the asphalt runway and others are on built-up plywood floors/foundations. Various portable pumps are in use around latrine, shower, and laundry tents. During the OBEA site reconnaissance, localized staining was observed on asphalt beneath and around 55-gallon drums of diesel fuel formerly used with tent (latrine, shower, and laundry) hot water heaters, generators, and pumps, and on Runway 10-28.

Environmental Sampling

- Air samples were collected from 12 tents (10 used for berthing, one for storage, and one for laundry) and screened using HAPSITE equipment. VOCs were not detected in any tent.

- Air samples were collected from 14 tents (A2, A9, A13, B2, B14, C1, C7, C13, D1, D10, D11, L1 [latrine], and S1 and S3 [showers]) for quantitative analysis using Summa canisters. Numerous VOCs were detected in almost every sample collected and were comparably detected in background samples; those concentrations did not exceed RSLs. Carbon tetrachloride was detected between the Residential and Industrial RSLs in each sample collected but was also detected above the Residential RSL in both background samples. Constituents detected at concentrations that exceeded an RSL in at least one sample but were not similarly detected in both background samples are tabulated below.

Tent	Constituents	Exceeds U.S. EPA Regional Screening Level	
		Residential	Industrial
S1	Bromodichloromethane	Yes	Yes
	Bromoform	Yes	No
	Dibromochloromethane	Yes	Yes
	Chloroform	Yes	Yes
	Trichloroethylene	Yes	No
S3	Bromodichloromethane	Yes	Yes
	Dibromochloromethane	Yes	Yes
	Chloroform	Yes	Yes

Bromodichloromethane, dibromochloromethane, and chloroform are refrigerant compounds and may be attributed to air conditioning; those compounds were similarly detected (albeit at concentrations less than the Residential RSL) inside every structure within Camp Justice. The benzene is likely a result of exhaust from vehicles (including mules) that are driven throughout the tents area, and was detected in both outdoor (background) air samples.

Bromoform was historically used as a flame retardant and could be associated with material used to manufacture the tent structures. Bromoform is also naturally produced in the ocean, which is thought to be its predominant source in the environment (Palmer and Reason 2009). Bromorform also enters the environment as disinfection byproducts known as trihalomethanes when chlorine is added to drinking water to kill bacteria. Laboratory analysis of drinking water samples collected from latrine and shower tents detected total trihalomethanes (TTHM).

Soil Sampling

Soil sampling was limited because the tents are situated on Runway 1-19 on which little surface soil is accessible. Soil samples were collected from grid nodes E6 (between Tents D7 and D9), F5 (near Tent C4), F7 (near men's shower Tent S4), G6 (near Tent A6 and vehicle entrance to Camp Justice from Hangar AV-32), and F10 (at the east edge of Runway 1-19, southeast of Tent B17).

- On average, metals concentrations detected within the Expeditionary Lodging Area were lower than any other Camp Justice assessment areas. Antimony, arsenic, and beryllium were detected in the same (E6, F5, and F7) grid nodes. Cadmium was only detected in grid node F10, and selenium and silver were only detected in grid nodes F5 and F7. The arsenic concentration detected from the grid node F5 sample slightly exceeded the Industrial RSL. Consistent with other Camp Justice locations, chromium was detected exceeding its Industrial RSL in each sample.

- The only pesticides detected within the tent area were 4,4'-DDE (grid nodes E6, F5, F7, and F10) and 4,4'-DDT (grid nodes E6, G6, and F10); only the 4,4'-DDE detection from F10 exceeded the Industrial RSL.

- PAHs were generally detected at lower concentrations and with fewer constituents than other Camp Justice assessment areas; the only exceedance of an Industrial RSL was benzo(a)pyrene at grid node G6, from which the most PAHs were detected (within the Tents/Cuzcos assessment area). TPH DRO was detected in samples collected from grid nodes G6 and F10. Although the TPH DRO concentration at F10 was the highest detected at Camp Justice, fewer PAHs were detected and the concentrations were generally lower than other locations; none of the PAH concentrations exceeded an Industrial RSL.

4.5.3 Miscellaneous (Outdoor) Areas

Non-potable water is stored in three 5,000-gallon black vertical ASTs and water bladders with backflow preventers in the latrine tents areas; additional information regarding water supply to permanent structures, modular structures/trailers, Cuzcos, and tents is in Section 5.1.2.

Sanitary wastewater from the Old Cuzcos and latrine, shower, and laundry tents is pumped aboveground to two 20,000-gallon bladders (marked as containing non-potable-water) situated on former asphalt Runway 10-28 along the southwest portion of Camp Justice. An inactive aerator is staged in the same location. Sanitary wastewater from the New Cuzcos is pumped to partially buried

septic tanks. Wastewater generation and disposal is discussed in Section 5.2.2. Most utility piping (hard pipes, rubber hoses, etc.) within the Expeditionary Lodging Area is aboveground.

4.6 Base Engineer Emergency Force Motor Pool and Support Area

The BEEF staff work in tents (operating a motor pool and other activities) located within Camp Justice and, until 2011, berthed in tents as well. BEEF uses Tent A-5 (Work Control); additional specific-use tents are E-1 (Roads and Grounds Shop), E-2 (Structures Shop), E-3 (Utility Shop), E-4 (HVAC Shop), E-5 (Power Production Shop), and E-6 (Vehicle Maintenance). Numbered tents are shown on Figure 2 and on floor plans in Appendix A; photographs are included in Appendix B-4.

There is also an outdoor entertainment area with volleyball court, television, and open grassy area (referred to as the Stockyard); gravel driveways and parking; motor pool/heavy equipment vehicle parking; and equipment staging within the southwest portion of Camp Justice occupied by BEEF. An emergency power generator with integral AST (size unknown) is near the BEEF Stockyard.

Various unused, obsolete, and scrap material and equipment — including metal pipe, pieces, and boxes, cable hose reels, wood, and a transformer — are staged along the south boundary of Camp Justice. Localized staining was observed on the Runway 10-28 asphalt within the BEEF Assessment Area.

Hazardous Substances and Petroleum Products

Metal sheds and lockers and CONEX boxes of various sizes and configuration are used to store government- and contractor-owned equipment and support materials (e.g., laundry items, linens, cleaners, paper products, etc.) and privately owned equipment and belongings. Most of the sheds are in the west portion of Camp Justice and near the BEEF motor pool.

According to the 2010 SPRP, the BEEF Motor Pool (referred to as Air Force Expeditionary Group Camp Justice) stored hundreds of containers (up to 55-gallon capacities) of waste paint in CONEX boxes, and small and large lockers. During the OBEA site reconnaissance, Resolution Consultants observed the following materials neatly stored on shelving, in hazardous/flammable material storage lockers, and on spill containment units within tents in the Stockyard area.

- Consumer/household-type products including caulks, sealants, silicone, mastic/floor adhesives, wood glue, foam seal, bug spray, paint (spray and gallon), stains, paint/varnish remover, cleaners/degreasers, oils, and lubricants.

- Less than 10 55-gallon drums of coolant (antifreeze), oils, and lubricants for vehicles and equipment (including various pumps, motors, hot-water heaters, and small generators associated with laundry, latrine, and shower tents).

- Four 55-gallon drums of used oil and other waste fluids (labeled as non-hazardous). Used oil and hazardous waste is accumulated in the BEEF Motor Pool area and collected for transfer to the NS GTMO Hazardous Waste facility by a BOS contractor. Other occupants and uses of Camp Justice reportedly do not generate used oil or hazardous waste.

- Materials used for janitorial purposes and maintenance of Cuzcos and tents (including laundry, latrine, and showers) are maintained in dedicated storage lockers in the BEEF Stockyard area. Smaller quantities of commercial-type air fresheners, cleaners, disinfectants, etc., in use are kept inside the tents, Cuzcos, and janitor closets/latrines inside permanent structures.

Soil Sampling

Grid sampling conducted throughout the BEEF assessment area during the EI included 13 nodes (A6, B5, B7, C4, C7, C8, C9, D5, D7, D8, D9, D10, and E5) across approximately 11 acres. The following are general interpretations of data from the EI based on analyte groups.

- Pesticides 4,4'-DDE and 4,4'-DDT were detected at most grid locations within this area of Camp Justice, with scattered, low (laboratory-estimated) concentrations of alpha-chlordane (grid node D7), dieldrin (A6), and PCP (D9 and D10). Those detections did not exceed an RSL. The concentration and distribution of the pesticides are indicative of general application.

- Numerous PAHs were detected with no discernable pattern from grid nodes A6, C8, and D10; the detected concentrations of benzo(a)pyrene at those grid nodes were the only exceedances of Industrial RSLs. PAHs detected at those grid nodes but not found in other BEEF area locations included benzo(a)anthracene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, and phenanthrene.

- Four of the 10 locations where TPH DRO was detected within Camp Justice were within the BEEF Motor Pool and Support Area (at grid nodes B5, C8, D5, and D10). One laboratory-estimated concentration of TPH GRO was detected at grid node C4.

- Arsenic was detected at two locations (A6 and B5); the arsenic concentration at A6 slightly exceeded its Industrial RSL. Antimony, beryllium, cadmium, selenium, and silver were detected in roughly half the sample locations (grid nodes A6, B5, B7, C4, C8, and D5) and thallium was detected in grid node B5.

5.0 UTILIITES

Utilities are not obtained from the government of Cuba; NS GTMO is self-sufficient with the following.

- The Windward Desalinization Water Treatment Plant (WTP), which produces 3.4 million gallons of water per day is the sole water treatment and distribution system at NS GTMO (NMCPHC 2015).

- A Power Plant that produces more than 800,000 kilowatt-hours of electricity per day.

- Four 262-foot-tall, three-blade wind turbines (constructed in 2005) that produce, on average, 2 to 3 percent of the base's electric energy (950 kilowatts each) per day, saving approximately 250,000 gallons of diesel fuel per year. During the windiest months, the turbines provide the base with up to 25 percent of the power it consumes.

5.1 Potable and Non-Potable Water

5.1.1 Former

A Water Layout Plan from 1942 (see right) shows water lines from a 250,000-gallon AST in the same general location as Gas Hill, southeast of McCalla Airfield. The water was pumped via an 18-inch line to Hangar AV-32 from which 6-inch lines extended counter-clockwise around Hangar AV-32 and east across McCalla Hill Road to Building AV-29. Beyond Hangar AV-32, water was transported north along McCalla Hill Road via a 14-inch line from which lines branched to Building AV-33 and (as an 8-inch line) to Building AV-34. Bunker AV-31 also received water from a line off the 8-inch line to Building AV-34. The plan shows fire hydrants at the terminus of lines at Hangar AV-32 (four hydrants), Building AV-29 (two), Building AV-33 (one), and Building AV-34/Bunker AV-31 (one).

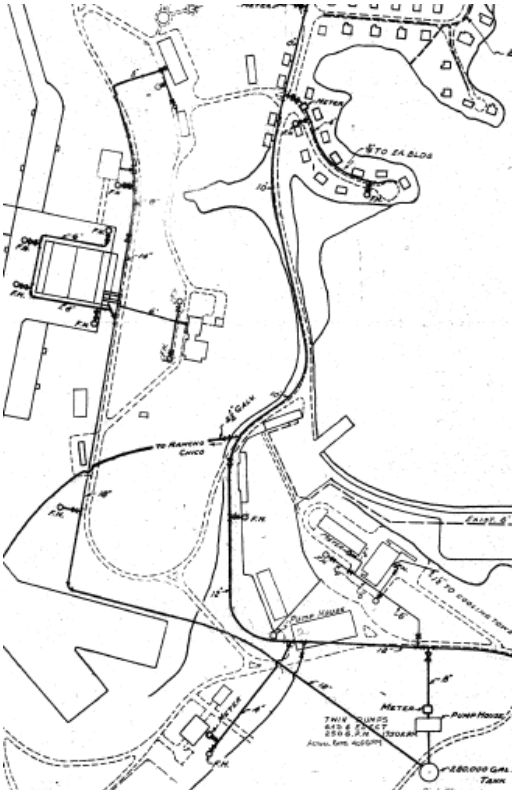


Image source: NS GTMO PWD, Water Layout McCalla Hill, Corinaso Point, Frederick Snare Corp. (24 November 1943).

According to SSO personnel interviewed, subsurface features (such as trenches, utility pipe runs, drains, etc.) within the ELC were filled and piping was installed above ground during construction in 2007-2008. Records review and interviews did not indicate the presence or status of other unused/inactive piping beneath the rest of Camp Justice.

5.1.2 Current

Water is delivered to and distributed throughout Camp Justice using the following methods (based on end use):

- hard plumbing connections directly from water mains (e.g., at Building AV-29, Building AV-34, and Hangar AV-32).
- hard plumbing connections (PVC) connected to drinking water risers/hydrants.
- flexible hoses connected directly to drinking water risers/hydrants.

All drinking water risers are installed and maintained by NS GTMO PWD personnel and BOS contractors.

Bladders for the tent latrine units are filled with water from the distribution system then isolated using backflow prevention. Once a bladder (typically 500-gallon capacity) is filled, the water is used in the tent latrine units only to flush the commodes and supply the hand wash stations. Their function is to ensure the two containment boxes, which hold 360 gallons each, do not overfill and create a raw sewage overflow or spillage situation. Camp Justice is supplied with three backflow devices that are part of BOS contractor assets and there are no test records or data to support testing, repair, or operation (NMCPHC 2015).

5.1.3 Environmental Sampling

All drinking water supplied to Camp Justice from the Windward Desalinization WTP is considered fit for human consumption (FFHC) as per Commander, Navy Installations Command (CNIC) Memorandum 5200 Ser N4/13U84375 2 AUG 13 (Determination of Fit for Human Consumption and Public Notification for the Navy Overseas Drinking Water Program) (NMCPHC 2015).[8] A

[8] The Public Health Review Report noted potential discrepancies (e.g., signs found throughout Camp Justice stating, "Do Not Drink the Water") and concerns (e.g., some temporary piping may or may not meet National Sanitation Foundation 61 standards for potable use) (NMCPHC 2015). Resolution Consultants understands that it is standard practice in expeditionary bases to note water as non-potable where being used for hygiene purposes.

Navy overseas drinking water system is approved as FFHC if it meets the required primary drinking water standards which are the health-based U.S. EPA Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (MCLs) as defined in host FGS and CNIC Instruction 5090.1. NAVFAC PWD tests water annually for U.S. EPA SDWA constituents at a point downstream from the plant, and before the first connection for distribution (NMCPHC 2015).

The major sources of lead in drinking water are corrosion of plumbing systems and erosion of natural deposits. Lead can leach into water from pipes, solder, fixtures, and faucets. The amount of lead in water can depend on the types and amounts of minerals in water, how long it stays in pipes, the amount of wear in the pipes, and the water's acidity and temperature. The MCL for lead is 0.015 milligrams per liter (mg/L). Records reviewed for this OBEA did not include analytical results for drinking water at points of distribution, or information related to the condition of drinking water conveyances (piping, fixtures, etc.). During the EI, drinking water samples collected at select locations throughout Camp Justice — including Building AV-29, Building AV-34, Hangar AV-32, Cuzcos, Tents, ELC modular structures, and a portable latrine — detected lead below 0.015 mg/L.

Chlorine concentrations were within acceptable ranges in all EI samples collected. Coliform was detected in two samples: one from Hangar AV-32 portable Male Latrine and Cuzco 23A. However, the duplicate sample collected from Cuzco 23A indicated total coliform was absent. *Presumptive positive* test results require validation using a confirmation media to prevent growth of non-target organisms and encourage growth of target organisms. Concentrations of haloacetic acids detected in water samples were all below MCLs. There was one exceedance of TTHM in a water sample collected from the ELC portable Male Latrine. Elevated concentrations are likely attributable to the water distribution system post-riser, as water is exposed to plastic and/or rubber hosing in the presence of heat and/or sunlight (Resolution Consultants 2015c).

5.2 Wastewater

5.2.1 Former

A 1942 plan (see the following page) shows the original sanitary sewer discharge lines at McCalla Hill. Building AV-31 discharged to a 6-inch line that joined an 8-inch line from Building AV-34. The 8-inch line turned west and south around Building AV-33 south to Hangar AV-32 where it joined a 6-inch line that traversed west from Building AV-29 across McCalla Hill Road. From a manhole junction outside the southwest corner of Hangar AV-32, an 8-inch sanitary sewer line discharged west across McCalla Airfield to a manhole junction where a 10-inch sanitary sewer line discharged northwest to the Caribbean Sea.

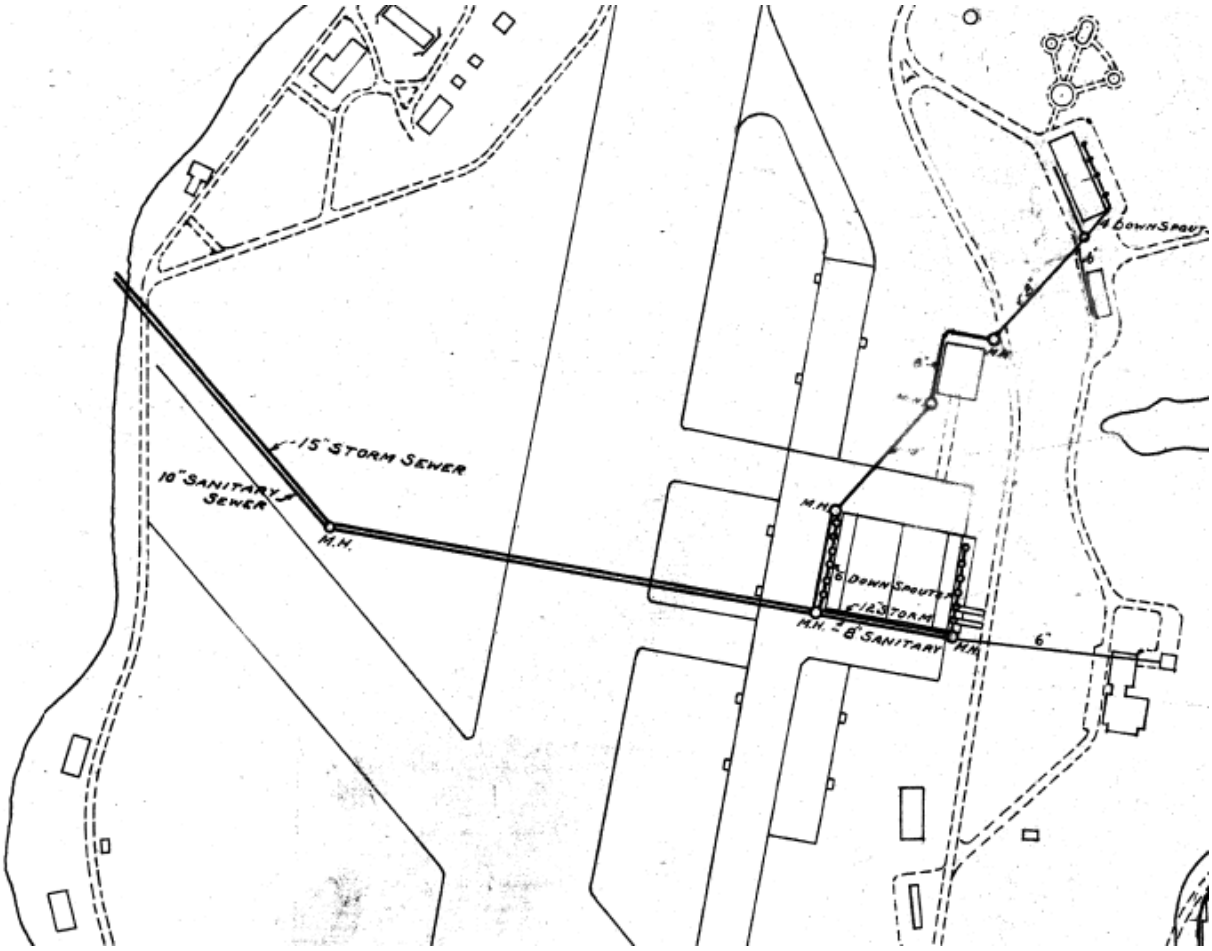


Photo source: NS GTMO PWD, *Sewer Layout McCalla Hill, Corinaso Point*, Frederick Snare Corp. (22 November 1943).

5.2.2 Current

Camp Justice has an onsite sanitary sewage system (the McCalla Field Sewage Trickling Filter Treatment Plant south of Hangar AV-32) but the system is not in working order (NMCPHC 2015). Wastewater generated from Old Cuzcos and shower, laundry and latrine tents is collected and pumped via above ground lateral surface lines that converge at a main wastewater line that caries waste to two 20,000-gallon vented wastewater collection bladders (labeled as non-drinking water). The number of gallons per day discharged depends on the fluctuating camp population. Wastewater discharged into the bladders is pumped daily by a BOS contractor and transferred to the NS GTMO wastewater treatment system. Partially buried septic tanks receive and settle sewage from the New Cuzcos. Wastewater is discharged to the bladders via aboveground piping and settled solids from the septic tanks are pumped out by a BOS contractor and transferred to the NS GTMO system.

Although not confirmed during interviews, sanitary sewage and wastewater discharges from the permanent structures (Building AV-34, Building AV-29, Bunker AV-31, and Hangar AV-32) is pumped directly via underground piping to the NS GTMO system. Floor drains were observed in latrines/wash rooms in Hangar AV-32 and Building AV-29. Process wastewater is not generated at Camp Justice.

5.3 Storm Water

No storm drains, pits, ponds, or lagoons were observed within Camp Justice or around the permanent structures (Buildings AV-29 and AV-34, Hangar AV-32, or Bunker AV-31). The 1943 sanitary sewer plan (see next page) shows storm sewer discharge lines that received rainwater from downspouts at Building AV-34 and Hangar AV-32. The 12-inch storm sewer line originated at the southeast corner of Hangar AV-32, joined the sanitary sewer line at the southwest corner of Hangar AV-32, and discharged west in parallel across McCalla Airfield then (as a 15-inch line) northwest to the Caribbean Sea.

5.4 Polychlorinated Biphenyls

Electrical transformers were observed throughout Camp Justice and surrounding the permanent structures; many were labeled non-PCB-containing. According to SSO personnel interviewed, a transformer change-out occurred within the past several years. The transformers were emptied of fluid (pumped into a tanker truck) and moved to contractor staging yard(s) south of Camp Justice. EnSafe conducted a transformer inventory in 1997; information form that report was discussed by OBEA Area of Assessment in Section 4. Resolution Consultants was unable to obtain a comprehensive list of current transformers, portable transformers, or switch gear within Camp Justice from sources interviews and records reviewed.

5.5 Waste

Camp Justice is not used for bulk waste accumulation, recycling, landfilling, burning, or other disposal activities. BOS contractors arrange for and handle all waste recycling and disposal activities. Solid waste and refuse is disposed of at the landfill near the northwest edge of NS GTMO where air curtain incinerators (burn boxes) are used to manage garbage generated from various waste streams (NMCPHC 2015).

In addition to assessment-area specific activities (e.g., used oil accumulation within the BEEF Motor Pool area) discussed in Sections 4.1 through 4.6, the following routine waste generation and accumulation activities were noted within Camp Justice during the OBEA site reconnaissance.

- Pre-manufactured recycling bins (for cans, bottles, and paper) are located throughout Camp Justice.

- Solid waste Dumpsters were observed in various locations throughout Camp Justice including west of the New Cuzcos, south of Hangar AV-32.

No information was available from records or interviews indicating radioactive waste disposal activities at Camp Justice.

6.0 SURROUNDING AREA

6.1 Adjacent Properties

As shown on Figure 5, the area adjoining Camp Justice to the west is essentially unused shoreline and areas to the north, east, and south are actively used by NS GTMO for various purposes not associated with Camp Justice/OMC activities. Table 4 summarizes current and historical uses of adjoining areas followed by more detailed discussions.

Table 4
Current and Former Uses of Surrounding Areas

Direction	Distance	Current Use(s)	Historical Use(s)
North	Adjoining	Parking for vehicles used during commissions and long-term parking	Airfield runway and McCalla Airfield Camps (temporary tent housing for Operation Sea Signal), Fisherman's Point
Northwest	Beyond Moffett Field Road	Vacant, overgrown, buildings razed with some foundations remaining	Ocean View Park residential area/ base quarters, Cable Station, and dirigible tower
Southwest	Adjoining	Vacant, overgrown with remnants of vault stairs formerly used to access underground utilities/features	Lighter-than-Air Aircraft mooring
Southwest			
South	Adjoining	Unused	Airfield runways 14-32 and 10-28, taxiways, aprons, aircraft fueling and repair
Southeast	Adjoining	Base Engineer Emergency Force/contractor K-Spans and laydown yards	Airfield runways 14-32 and 10-28, taxiways, aprons
East	Adjoining	Fire-fighter training area; appears overgrown and abandoned	Outdoor movie theater and parking
Northeast	Adjoining Building AV-34	Unused, grassy; McCalla Hill grassy hill	United States Marine Corps Monuments and United States Flag

The 2010 SPRP does not indicate ASTs, underground storage tanks (USTs), abandoned-in-place tanks, or bulk hazardous material/hazardous waste storage at areas adjoining Camp Justice.

6.1.1 North

The north end of former Runway 1-19 is used for parking during commissions and long-term parking. Unused grassy areas are north and east of the parking lot.

Figure 5
Surrounding Area
Office of Military Commissions - Camp Justice
Naval Station Guantanamo Bay, Cuba

Requested By: D. Fuehrer	Date: 12/22/2015
Drawn By: M. Senne	Task Order Number: XXXX

Google Earth Pro Imagery - 07/23/2014

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North of Building AV-34 are the USMC monument and other assorted structures currently or formerly numbered N53, N24, 1275, 549, and 79. Also just east of these structures were a former signal tower (Building 81).

6.1.2 Northwest

The property to the northwest, beyond Moffett Field Road, appears to be unoccupied and used only for recreational purposes (e.g., jogging, biking, picnics). Remnants of Ocean View Park, a former base housing area along the Guantanamo Bay shoreline, include building foundations, pads, and paved roads in various stages of deterioration; the remainder is overgrown vegetation with mature trees. Historical plans and drawings identify the following buildings, structures, and other features within Ocean View Park.

- Early to mid-1940s: Cable Station with numerous unnamed buildings. In 1907, the Central and South American Cable Company (renamed All-America Cables, Inc., in 1920 and All America Cables and Radio, Inc., in 1938) began laying the first cable from New York to Guantanamo Bay, where it built up cable facilities (occupied by a French company under Spanish concessions granted in 1887 and 1888 until they were cut during the Spanish-American War) that had existed near Fisherman's Point. The cable station was the only commercial (private) enterprise on the base at that time, which was necessary to ensure continuing communication between the Naval Station and outside world (including New York and Panama).

- 1980s and 1990s: OV-1, OV-2, OV-3, OV-4, OV-9 with adjoining slab, OV-10 with adjoining patio, OV-68, and a jungle gym.

- Late 1950s and early 1960s: administration building, offices, quarters, a garage, and four tanks, the contents of which are not indicated but are believed to have been water, based on their locations near quarters and the administration building. The configuration of these buildings appears different than the Cable Station.

6.1.3 West

The 1962 map also shows Building AV-35 at the end of a partially paved and gravel road off Moffett Field Road, south of Ocean View Park. The building was not present in 1941 photographs or maps but was evident in 1942 and 1943. In 1943, the building appeared to be associated with a safety switch to the dirigible tower. The demolition date of this building was not determined by review of files or interviews for this OBEA.

6.1.4 Southwest

Weapons Bunkers/Former 1906 Fort McCalla Batteries

Buildings 84 and 85 (batteries that comprised the 1906 Fort McCalla) remained when the airfield was constructed in 1931. The fort reportedly consisted of two separate concrete sections, each containing two small gun emplacements (SEARCH 2013). Signage in front (east) of the remaining batteries indicate they are operated by the Weapons Department.

Plans from 1955, 1962, and 1997 show Buildings T-26, AV-84 (A, B, and C), AV-85 (A, B, and C) (the 1906 Fort McCalla batteries), N-86, N-94, and N-95; SS-26 (electrical/transformer substation), and two huts (possibly AV-164 and AV-165) accessible from a paved road south of the northwest end of Runway 14-28. The 1962 plan labels Building N-94 as the E.M. (Enlisted Men's) Club, which reportedly operated from the 1950s to the 1980s and was replaced by Buildings 1624 and 1625 (SEARCH 2013).

This area was included in the MIGOPS archaeology survey. The survey identified one hut foundation that appeared to have been associated with use of the airfield and significant infrastructure associated with underground utilities in the former N-86 building location (SEARCH 2013). That study also identified five utility poles and conduit around the hut foundation suggestive of an underground power source.

Former LTA Aircraft Mooring

The Navy began using McCalla Field for experimenting with LTA aircraft in the late 1920s and 1930s. A mooring mast and track for the LTA aircraft, constructed in 1931, included a circular cleared area, the center of which was the location of the tie-down/mast site for the dirigibles with several surrounding unimproved roads. The circular track was 1,500 feet in diameter and was southwest of Camp Justice, east-adjoining the Fort McCalla weapons batteries. The track and mast site were removed in 1939 when construction of the McCalla Field runway began.

When the Navy resumed use of smaller LTA aircraft circa 1943, two small circular mooring masts and fields, the footprints of which are still evident today, were added to the west side of the McCalla Field runway. The mast outside the Camp Justice boundary to the southwest is evident on recent (2003 through 2015) aerial photography. This area was included in the MIGOPS archaeology survey. The historic features of the LTA mooring site identified were two central mast anchorages (SEARCH 2013).

6.1.5 South

The intersection of Runway 1-19 and Runway 14-32 and a contractor yard are south of Camp Justice.

Runway 14-32

The 2,300-foot-long Runway 14-32 is currently unused and in a somewhat deteriorated condition. This area was identified in the 2013 SEARCH archaeology survey but was excluded from the pedestrian and shovel tests conducted at other survey locations. The survey recommended the entire McCalla Field complex be formally evaluated for equivalency to NRHP eligibility utilizing World War II, Cold War-Era, and Military Airfield historic contexts (SEARCH 2013). The report concluded that future large-scale MIGOPS, such as that during Operation Sea Signal, should not have any adverse impact to the McCalla Field archaeological sites identified should it be found significant during future NRHP evaluation.

Contractor Yard

The contractor yard includes Building 2210 separated by a paved equipment laydown yard and K-spans (from west to east) 2190 through 2195, 2185 and 2184, and 2186, 2188, and 2189.[9] These structures were constructed between 1962 and the early 1990s. Photographs of miscellaneous material staged in this area, including transformers and other equipment, are in Appendix B-5. Records reviewed and interviews did not indicate specific uses of the structures in this location, which were not accessed during the OBEA site reconnaissance.

The 2010 SPRP lists Prime Projects, Inc. (PPI) — believed to be a BOS contractor — on a list of "Other Hazardous Material/Hazardous Waste Storage Facilities" with a supply stock of 100 5-gallon containers of virgin paint stored on the "Old Runway" at McCalla. The corresponding diagram included with the SPRP shows only a CONEX box with no surrounding features and is labeled "PPI Supply Stock (McColloch) Building Old Runway." The location of paint storage is not clear but may be in the contractor yard discussed in this section or at a former contractor yard evident at the southernmost end of Runway 1-19 in 2010 to 2013 aerial imagery.

[9] K-Span buildings are continuous arched steel panel buildings that are fabricated by means of a mobile trailer-mounted roll forming system. The individual fabricated panels are seamed together by means of an electrically driven hand operated seaming machine that connects the panels together into panel bays of 3- to 5-foot sections. These sectional bays are then raised and placed onto the foundation and joined to adjacent building sections and seamed together. The term K-Span is the patented name for the specific type of buildings made from either the Automatic Building Machine or Ultimate Building Machine systems manufactured by MIC Industries, Reston, Virginia.

6.1.6 East

6.1.6.2 Northeast

Northeast of Building AV-34 and the USMC monument were Corinaso Point and McCalla Hill base housing, shown as early as 1943; the structures nearest Camp Justice were Buildings 167 (A, B, and C), AV-15, 2512, and AV-60 through AV-73. Buildings further east but part of the same Corinaso Point and McCalla Hill housing complex were: AV-120, AV-121, AV-122, CO-53, CO-69, CO-71, CO-120, CO-121 through CO-123, CO-167, CO-320, CO-520, and 2177. Also shown during different years was a Telephone Building (1943), Radio Mast (1962), and a playground (1997). East of Bunker AV-31 were CO37 and CO75. Historical information reviewed did not indicate former uses of these buildings or when they were demolished prior to 2003 (the earliest available aerial imagery).

6.1.6.2 Southeast

The area to the east and southeast is a Fire Fighter Training Area (FFTA). The FFTA is at the base of a significant (approximately 40 feet) drop in elevation, level with and accessible from Sherman Avenue. During the OBEA site reconnaissance, approximately 12-inch diameter rusted steel piping was observed at the top of the hill. The piping was unlabeled. Two propane cylinders and various debris were observed at the FFTA. Records reviewed did not indicate details of FFTA activities such as the types of fuels, ignition sources, or extinguishing agents.

The area was formerly a cinema lyceum (see right). Foundations and portions of structures remain, including Buildings AV-109, AV-109A, AV-142, and AV-143 (a popcorn stand), and a rectangular paved parking lot at the south end. Historical plans show the lyceum comprised an unnumbered Cabana and Buildings AV-87 and AV-130.

Image source: NS GTMO Public Works Center, *McCalla Lyceum Parking Lot*, (1 January 1970).

The 2011 Final Master Plan recommended the Mobile Aircraft Fire Training Device be located at the former lyceum on McCalla Hill; that equipment was not observed during the OBEA site reconnaissance.

6.2 Surrounding Area Properties

NS GTMO areas surrounding Camp Justice with documented bulk use, storage, and disposal of hazardous substances and petroleum products include: McCalla Hill/McCalla Field and Gas Hill tank farms to the east-southeast and the Windward Desalination WTP to the north. Information obtained for those facilities based on review of available records is as follows.

6.2.1 Storage Tank Farms

The information needed to provide management standards applicable to storage tank management for environmental protection at DoD installations and facilities in Cuba are found in FGS Chapter 9 (Petroleum, Oil, and Lubricants), Chapter 18 (Spill Prevention and Response Planning), and Chapter 19 (Underground Storage Tanks). The most recent documents associated with storage tank management to comply with FGS Chapters 9, 18, and 19 available for review during the OBEA were the 2008 HPRD, and Volumes I (Emergency Response Action Plan), II (Prevention, Control, and Training), and III (Storage Tank Management Plan) of the 2010 SPRP. Additional information regarding fuels and storage tanks was obtained from historical plans, figures, and drawings provided by NAVFAC, which are in Appendix C.

Fueling is a vital mission at NS GTMO due to its location in the Caribbean and proximity to South America. DFM is used on Windward to run generators and to support the Windward Desalinization WTP, power plant, and service station. Currently, there are no active tank farms on or adjoining Camp Justice. The following subsections discuss current and former storage tanks and pipelines within the areas surrounding Camp Justice.

6.2.1.1 McCalla Hill/McCalla Field Tank Farm

Ten 25,000-gallon AVGAS USTs were in an approximately 2-acre area located at approximately 19°54 27.5" and 75° 09' 30.6" at the southwest edge of Gas Hill (see Section 6.2.1.2), approximately one-third mile southeast of the nearest Camp Justice boundary (grassy field south of Building AV-29). Figure 6 and the image (right) shows the location of the McCalla Hill/McCalla Field USTs.

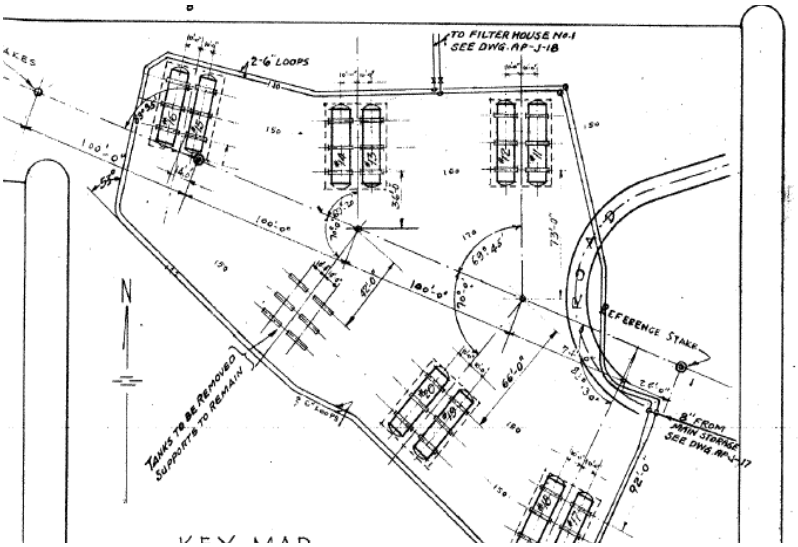

Image source: NS GTMO PWD. Frederick Snare Corp., New York. *Piping Arrangement for 25,000 Gal. Gas. Storage Tanks.* Drawing No. 335064, 10 March 1941.

USTs MF-1/AV-38, MF-2/AV-39, MF-3/AV-40, MF-4/AV-41, MF-5/AV-42, MF-6/AV-43, MF-7/AV-46, MF-8/AV-47, MF-9/AV-48, and MF-10/AV-49 were installed in the early 1940s. Basewide plans for tank removal and replacement (dated 1996) show the layout and topographic elevations (approximately 145 feet above mean sea level) of the USTs (see Appendix C). A 4 December 1996 Request for Proposal to Islands Mechanical Contractors (Appendix D) indicates McCalla Fields Tanks 1, 2, 4, 7, 8, 9, and 10 were to be filled (with cement slurry) and abandoned, and Tanks 3, 5, and 6 were to be cleaned, closed, and locked. Included with the 1996 Request for Proposal and plans are construction notes that indicate the following:

- Existing 4-inch vent/fill lines on each UST were to be removed.
- Each 25,000-gallon UST were to be cleaned and abandoned in place.
- Concrete access chambers and valve chambers were to be demolished to a minimum of 6 inches below grade.
- Remaining void space in chambers were to be filled.
- Disturbed areas were to be backfilled with a minimum of 6 inches of topsoil, and graded and seeded to match surrounding contours with no remnants of the existing chambers visible upon completion of site work.

Figure 6
McCalla Hill/Gas Hill Tank Farms
Office of Military Commissions - Camp Justice
Naval Station Guantanamo Bay, Cuba

NAVFAC Naval Facilities Engineering Command
RESOLUTION CONSULTANTS

Requested By: D. Fuehrer	Date: 12/22/2015
Drawn By: M. Senne	Task Order Number: XXXX

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Google Earth Pro Imagery - 07/23/2014

Neither the former UST chamber locations nor the tank locations are evident in aerial views dated 2003 to 2014, suggesting closure work was conducted.

6.2.1.2 Gas Hill

Gas Hill (aka Gasoline Hill) Tank Farm east-adjoined the former McCalla Hill/McCalla Field USTs at approximate north latitude 19°54'26.0" and west longitude 75°9'15.6" at an approximate topographic elevation of 260 feet above mean sea level. Gas Hill consisted of seven bulk storage tanks with a total capacity of 6.5 million gallons. The tanks with former contents they reportedly stored are listed below in order from west to east, as shown on Figure 5 and in photographs in the HPRD (Appendix D).

- UST TK-5/709 (AVGAS from 1942 to 1970)
- UST TK-6/710 (AVGAS from 1942 to 1970)
- UST TK-7/711 (AVGAS from 1942 to 1959 and JP-5 from 1960 to 1970)
- UST TK-8/712 (JP-5 from 1942 to 2002)
- UST TK-4/778 (JP-5 from 1942 to 1960 and motor gasoline from 1960 to 1994) — possibly the blending tank — 6,775 oil barrels (remained in service as of 1998 plan).
- UST TK-9/713 (JP-5 from 1942 to 1981)
- UST TK-10/714 (JP-5 from 1942 to 1954, JP-4 from July to October 1954, JP-5 from October 1954 to 1960, and motor gasoline from 1960 to 1993)

A 1998 plan for permanent petroleum storage tank closure indicated the interior of Tanks 709, 710, 713, 714, and 778 were to be filled with inert material (soil) up to the underside of the roof with material obtained from borrow pit. The tanks were closed in place by BOS contractors Ratcliff Construction, Inc. (RCI), and Islands Mechanical Contractors, which reportedly jack-hammered and pushed in the tops and bottoms. The tanks had leaks historically which were not documented (NAVFAC 2008). Tank 712 is reportedly open but does not contain fuel and is not in service, having been cleaned in 2002. Tank valve pits reportedly had earthen bottoms and past spills in pits were observed but not recorded (NAVFAC 2008). The valve pit for Tank 714 was converted to concrete in 2003 by a BOS contractor, which reported visible staining prior to repair.

The 2008 HPRD for Gas Hill indicated a reported spill "from the top of the hill" in 1997-1998 but did not identify documentation or other specifics. Overall, the discussion concluded that soil was impacted and groundwater believed to be impacted in some areas but no remedial efforts had occurred at the tank locations (NAVFAC 2008).

The 2008 HPRD information also included a report of a release at the RCI compound, shown as east of McCalla Hill/McCalla Field and Gas Hill tank farms. On 18 January 2003, a backhoe excavating soil on the RCI compound stripped a valve stem from a buried drain valve, causing a release of fuel. In response, a 10-inch JP-5 pipeline from Gas Hill that crossed the RCI compound (see Section 6.2.2) was evacuated of its contents and the valve stem was temporarily repaired by inserting a wooden plug with sealant compound placed into the bonnet of the valve (NAVFAC 2008). An estimated 50 gallons of fuel leaked from the pipeline into the ground surface within the excavation; some contaminated dirt was removed and placed into a drum provided by NS GTMO PWD Environmental (NAVFAC 2008). No additional details were available during the records review or interviews conducted for the OBEA.

6.2.2 Pipelines

Drawings (excerpts below) show three sets of fuel pipelines that crossed McCalla Airfield: one (underground) just south of Hangar AV-32, one (aboveground and underground) to a Fuel Loading Rack (M-56) constructed south of the Runway 10-28 and 14-32 runways circa 1957, and one (underground) that crossed McCalla Airfield approximately 1,800 feet south of Camp Justice to the Caribbean Sea shoreline, from which it extended across Guantanamo Bay to the Leeward side. Excerpts from drawings showing the overall pipeline extents are shown on the following page.

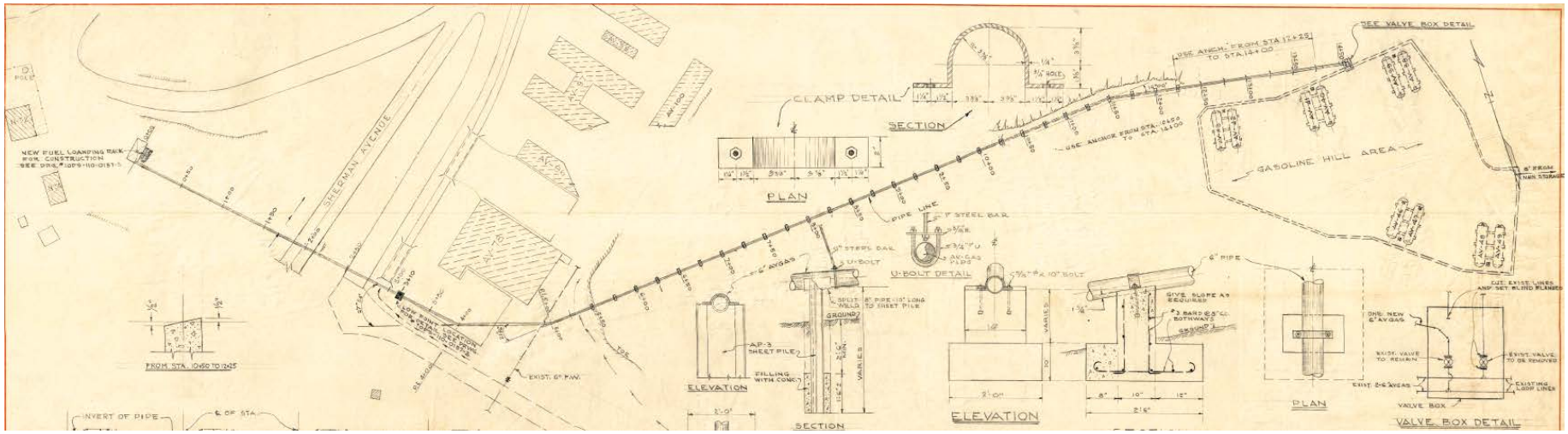


Image source: Department of the Navy, Bureau of Yards & Docks. ***Supply Line and Details for Fuel Loading Rack at McCalla Hill Field.*** **20 February 1957.**

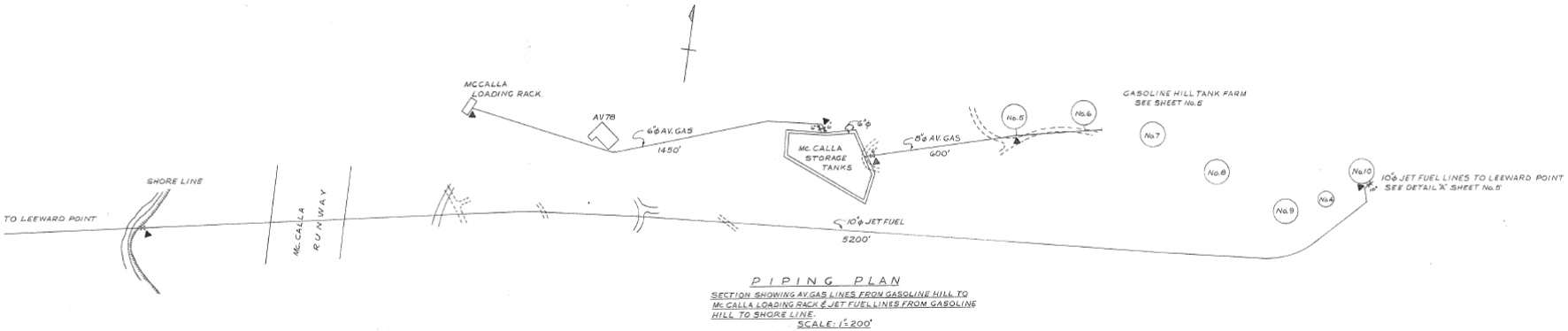
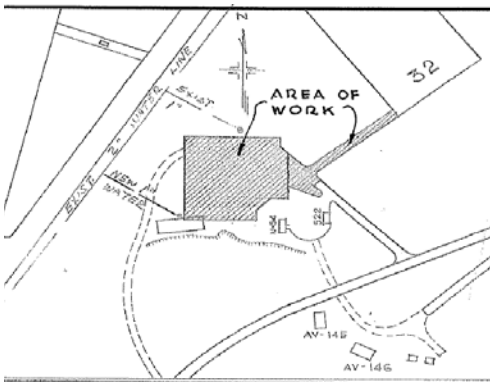


Image source: NS GTMO Public Works Division. ***Naval Supply Depot Piping Diagrams, McCalla Storage Tanks & Jet Fuel to Leeward.*** **8 September 1962.**

McCalla Hill / Gas Hill to Loading Rack

The pipeline extended aboveground west toward the south side of Building AV-78, then turned north-northwest (underground as needed to facilitate street and runway crossings) toward the fueling station to be constructed circa 1957 (see plans below).



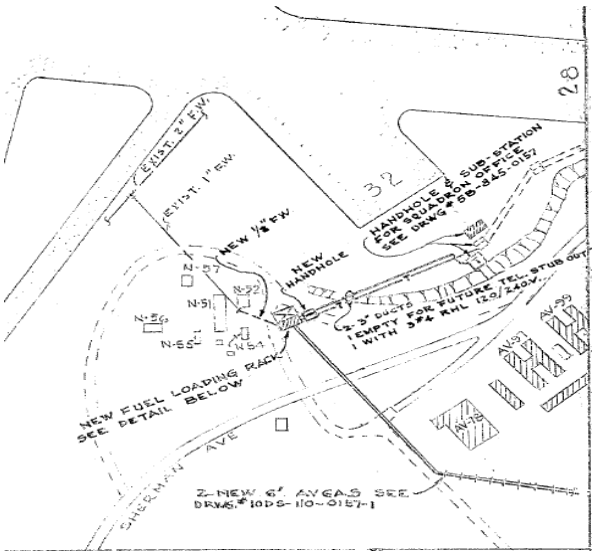


Image sources: Department of the Navy Bureau of Yards & Docks. (Left) ***Naval Air Station, McCalla Hill Field Gas Loading Rack, Parking Area Layout and Details,*** **16 May 1960. (Right)** ***Fuel Loading Rack at McCalla Hill Field,*** **12 February 1957.**

Included in Appendix D is an undated "Tank List From Prop. Record Located in Supply" that includes a handwritten document indicating lines from the McCalla Field tanks to filter houses and to pits at the field held a total of 10,000 gallons (two lines at 5,000 gallons each). The 1996 plans for removing and replacing USTs note that bulk fuel lines surrounding the McCalla Field tanks were not part of the tank system to be removed, and documents reviewed during the OBEA did not indicate what sections of pipelines were emptied, filled, closed, or removed. Evident during the OBEA site reconnaissance and in 2003 to 2014 Google Earth aerial imagery (shown right) is a section of the pipeline from McCalla Hill/Gas Hill to the loading rack.

Image source: NAVFAC ***Historical Petroleum Releases Documentation*****, W-01 Gas Hill Tanks, 2008.**

Jet Fuel Pipeline from Gas Hill to Leeward

A 10-inch pipeline (constructed circa 1943) carried JP-5 from Gas Hill Tank TK-10/714 to the Caribbean Sea shoreline along the west side of McCalla Airfield, then to Leeward.

6.2.3 Windward Desalinization Water Treatment Plant

The Windward Desalinization WTP is approximately 300 feet north of McCalla Hill and 500 feet north of Building AV-34, and roughly 30 to 40 feet topographically downgradient. Between McCalla Hill and the Windward Desalinization WTP are Moffett Field Road, a grassy hill, and Sherman Avenue. Table 5 lists storage tanks at the Windward Desalinization WTP based on the 2010 Storage Tank Management Plan; the WTP layout is shown on information from the 2008 HPRD included in Appendix D.

Table 5
Windward Desalinization Water Treatment Plant Aboveground Storage Tank Summary

Tank ID	Size (gallons)	Purpose	Installation Year	Construction Type
1650-A	44,000	Boiler	Unknown	Single Walled
1650-B	44,000	Boiler	Unknown	Single Walled
1650-C	44,000	Boiler	Unknown	Single Walled
1650-D1	500	Emergency power generation	Unknown	Single Walled
1650-D2	500	Emergency power generation	Unknown	Single Walled
1650-FOR-1	12,000	Emergency power generation	1997	Double Walled
1650-FOR-2	12,000	Emergency power generation	1997	Double Walled
1650-FOR-3	12,000	Emergency power generation	1997	Double Walled
1650-FOR-4	12,000	Emergency power generation	1997	Double Walled
1650-N5	600	Emergency power generation	Unknown	Double Walled
1605-N6	600	Emergency power generation	Unknown	Double Walled
1650-C1-GEN	400	Emergency power generation	Unknown	Double Walled
1650-C2-GEN	400	Emergency power generation	Unknown	Double Walled
1650-C3-GEN	400	Emergency power generation	Unknown	Double Walled
1650-C4-GEN	400	Emergency power generation	Unknown	Double Walled
1650-C5-GEN	400	Emergency power generation	Unknown	Double Walled
1650-G1-GEN	278	Emergency power generation	Unknown	Double Walled
1650-N1-GEN	400	Emergency power generation	Unknown	Double Walled
1650-N2-GEN	400	Emergency power generation	Unknown	Double Walled
1650-N3-GEN	400	Emergency power generation	Unknown	Double Walled
1650-N4-GEN	400	Emergency power generation	Unknown	Double Walled

The Windward Desalinization WTP Tanks 1650-A, B, and C are filled by a 5,200-foot-long, 6-inch diameter transfer pipeline (partially underground and partially aboveground) for DFM (F-76) from Building 107 (Oil Point Bulk Fuel Bunkered 2+-million-gallon USTs 105 and 106). According to the SPRP, the worst-case discharge/rate of flow for the bulk (44,000-gallon) ASTs is 733 gallons per minute (rupture) totaling 35,200 gallons each. The tanks are located within a concrete berm, and the tanks and transfer piping are monitored.

The following summarizes information for three documented releases at the Windward Desalinization WTP.

- While changing a fitting on a drain valve, approximately 100 gallons of a fuel-water mixture was released to the underlying concrete surface. Absorbent pads were used to abate the mixture. No soil or groundwater was said to be impacted. The entire area is presently concrete. No additional documentation, such as the date of release, was provided.

- Approximately 500 gallons of used oil was released on 22 September 2003 when a secondary containment valve was left open during daily bleeding of water from tank holding used oil and sea water. An approximately 500-foot by 50-foot sheen on Guantanamo Bay was contained within floating booms, and NavalKleen (bilge cleaner) solution was sprayed along the shoreline.

- Approximately 30 gallons of used oil was released on 22 July 2003 when a secondary containment valve was left open during daily bleeding of water from tank holding used oil and sea water. An approximately 200-foot by 5-foot light brown slick was contained to the immediate Guantanamo Bay shoreline. Floating booms were deployed, and absorbent booms and pads were used to remove oil. NavalKleen solution was sprayed along the shoreline.

Documentation indicates all the released material flowed north to Guantanamo Bay or was contained within the Windward Desalinization WTP boundary (NAVFAC 2008).

7.0 OVERSEAS BASELINE ENVIRONMENTAL ASSESSMENT SUMMARY

Resolution Consultants conducted this OBEA to assess Camp Justice using existing environmental information related to storage, release, treatment, or disposal of hazardous substances and/or petroleum products or its derivatives, which may have a substantial impact on human health and safety, under the current and reasonably anticipated future land uses. DoD Instruction 4715.08 defines substantial impact as, "a level of exposure that is occurring, or is about to occur within the next 3 to 5 years, and exceeds a generally established, published, and applied federal standard in the United States."

Resolution Consultants used information obtained from site reconnaissances, historical and environmental records review, and interviews to identify potential onsite or offsite pathways of exposure for chemicals of concern from past release(s) into building structures on the property or to environmental media that could be related to past industrial chemical use, storage, or disposal practices. NS GTMO has been the subject of few documented subsurface environmental investigations, of which the only documents provided to or reviewed by Resolution Consultants that included Camp Justice or immediately adjoining areas were the 2015 IAQ Assessment and EI.

7.1 Findings

For discussion purposes, Camp Justice is divided into six assessment areas — McCalla Hill North, McCalla Hill South, Hangar Area, ELC, Expeditionary Lodging Area, and BEEF Motor Pool and Support Area — established for this OBEA based on physical layout, current and historical structure types, key features, uses, and occupants.

7.1.1 McCalla Hill North

McCalla Hill North includes Building AV-34 and Bunker AV-31 and the west-adjoining open grassy area. Both buildings were co-developed with the airfield in the early 1940s and have been used since that time for administrative purposes (offices in Building AV-34 and communications/command center in Bunker AV-31). The following are findings for McCalla Hill North.

- Bunker AV-31 has an inactive 6,000-gallon DFM AST for emergency power generation; the quantity of any remaining contents is unknown.

- Low levels of radon were detected in both McCalla Hill North structures.

- Friable and nonfriable ACM and suspect ACM identified in Bunker AV-31 and Building AV-34 varies in condition from good to poor with some damage, which suggests an O&M Program

has not been implemented. Analysis of air samples collected from those buildings detected asbestos fibers at levels that did not exceed the OSHA 8-hour TWA.

- Chipped and peeling LBP was observed on interior walls in Building AV-34.

- Indoor air samples collected from Bunker AV-31 and Building AV-34 contained numerous, low-level VOCs, most of which were also detected throughout Camp Justice and in background samples. There were nine VOCs detected within Bunker AV-31 and 12 VOCs detected within Building AV-34 that were not similarly detected in background samples. None of the detected VOCs exceeded an Industrial RSL.

- Soil sampling conducted at McCalla Hill North detected widespread pesticides and herbicides (dieldrin, 4,4'-DDE, 4,4'-DDT, PCP, and alpha-chlordane) with higher concentrations adjoining Building AV-34, all indicative of typical pesticide applications. The sole Industrial RSL exceedances of dieldrin (southwest of Building AV-34) and 2,6-dinitrotoluene (at the CN gate) at Camp Justice occurred from samples collected within McCalla Hill North.

  Low concentrations of PAHs with scattered Industrial RSL exceedances of benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were also detected, all likely the result of the incomplete combustion of fuels.

  The highest chromium, mercury, nickel, and zinc detections and the sole arsenic concentration that exceeded its Industrial RSL within McCalla Hill North were from a sample collected east of Bunker AV-31.

7.1.2 McCalla Hill South

McCalla Hill South includes Building AV-29, an administrative/communications trailer, and an open field with miscellaneous structure remnants. Building AV-29 was developed in 1942 and used for medical activities (dispensary and dental clinic) until 2002, and has since been used for office space. The following are findings for McCalla Hill South.

- Indoor air samples collected from Building AV-29 contained numerous low-level VOCs also noted in at least one background sample. Five VOCs detected in air samples that were not comparably detected in a background sample did not exceed an Industrial RSL.

- Friable and nonfriable ACM and suspect ACM identified in Building AV-29 varies in condition from good to poor with some damage, which suggests an O&M Program has not been implemented. Analysis of air samples collected from Building AV-29 contained asbestos fibers below the OSHA 8-hour TWA.

- Chipped and peeling LBP was observed on interior and exterior walls of Building AV-29 and associated structures.

- Historical structures in the field south of Building AV-29 included Building 162, an abandoned vault that contains two or three inactive AVGAS ASTs that were reportedly closed, cleaned, and filled with sand slurry in 1996/1997.

- Historical activities in Building AV-29 included use of hazardous substances and petroleum products associated with X-rays, laboratories, and dental surgeries (prosthetics and fillings). Screening of air for releases from floor tile seams and other potential discharge features detected low-level mercury vapors below occupational limits in some Building AV-29 rooms.

  Soil sampling detected mercury and silver one to two orders of magnitude higher than other locations throughout Camp Justice (but below their respective Industrial RSLs) adjoining Building AV-29 near the north hallway entrance/exit door.

- Elevated concentrations of 4,4'-DDE and 4,4'-DDT were detected within McCalla Hill South, with the sole Industrial RSL exceedance of 4,4'-DDE in the field south of Building AV-29. However, the concentration and distribution of these pesticides appear indicative of general application.

- TPH DRO was detected south of Building AV-29, approximately 50 feet west and downgradient of the solid waste Dumpster. The low concentration detected coupled with few low-level PAH detections in the absence of a documented source does not appear indicative of a known localized release.

7.1.3 Hangar Area

This area includes Hangar AV-32 and south- and west-adjoining paved areas that formerly housed an Ordnance Shop, Line Maintenance Shop, and other aircraft support structures. Constructed in 1941, Hangar AV-32 is the only permanent building from air operations that remains on the airstrip. Findings for the hangar area are as follows.

- Current and historical operations within Hangar AV-32 likely involved the use and storage of hazardous substances and petroleum products and generation of used oil and hazardous wastes associated with aircraft, vehicle, and general maintenance. Historical drawings indicate PCB-containing transformers in vaults and emergency power generators for the hangar and auxiliary airfield lighting. The outside areas surrounding the hangar were historically used for aircraft maintenance, parking, taxiways, and fueling. Records reviewed for the OBEA did not indicate quantities or specific hazardous substance or petroleum product use, storage, or disposal within the hangar area.

- VOCs were detected at low concentrations in air samples collected within Hangar AV-32. Ten VOCs detected in more than half the air samples were not comparably detected in background samples and did not exceed Industrial RSLs. Hangar AV-32 was the only location where benzene was detected above the Industrial RSL, which was attributed to the presence of vehicles (gas-fueled mules and cars) that entered and parked inside the hangar.

- Friable and nonfriable ACM and suspect ACM identified in Hangar AV-32 varies in condition from good to poor with some damage, which suggests an O&M Program has not been implemented. One of three air samples from Hangar AV-32 contained asbestos fibers, albeit at levels that did not exceed the OSHA 8-hour TWA.

- LBP was observed in deteriorated condition throughout Hangar AV-32, particularly on ceilings and supporting components. One PCB arochlor was noted in the paint samples collected.

- Historical operations in prior structures south of the hangar that involved the use and storage of hazardous substances and petroleum products included various (tire, machine, electronic, welding, and paint) shops, battery storage, and tools, parts, and equipment storage. The Ordnance Shop may have involved the manufacture, use, storage, and/or disposal of ordnance associated with aircraft, such as activators for emergency ejection, missile testing, and explosive bolts, etc., or starter chargers and igniters.

- AVGAS and JP fuel pipelines from McCalla Hill/Gas Hill extended within approximately 200 feet south and 100 feet west of Hangar AV-32. Associated subsurface features included smaller pipelines, valve and filter chambers, sumps, and service pits from which AVGAS/JP fuel was dispensed to resupply airplanes while parked along the warming-up platform and apron south of Hangar AV-32. Records are incomplete as to pipeline closure and potential associated releases but indicate some pipelines were removed and some were abandoned in place.

- Soil sampling around Hangar AV-32 was limited by the presence of pavement and concrete surfaces. Two locations nearest the hangar contained the highest concentrations of arsenic detected within Camp Justice; both exceeded the Industrial RSL. Pesticides (4,4'-DDE and 4,4'-DDT) were detected throughout the hangar area below Industrial RSLs. PAHs were detected at low concentrations consistent with other Camp Justice assessment areas; benzo(a)pyrene concentrations exceeded the Industrial RSL in four samples, two of which also contained detectable concentrations of TPH DRO.

  Within the hangar area, the concentrations of lead and zinc in soil were higher relative to other Camp Justice areas. Lead concentrations were generally higher in the samples collected adjacent to taxiways and Runway 1-19. Given the nature of the soil observed and the distribution patterns, metals are believed to be naturally occurring elements present from weathering of parent rock sources augmented by vehicle and airplane exhaust.

7.1.4 Expeditionary Legal Complex

This area includes the fenced ELC, paved areas that extend east to McCalla Hill Road and south to the Expeditionary Lodging Area driveway, and grassy areas that extend west to Runway 1-19 and north to the driveway from the CN Gate entrance. The ELC has been improved with several modular structures to support JTF/OMC operations since 2008.

- Numerous VOCs were detected consistently in structures throughout the ELC at low concentrations of which only styrene and PCE were not detected in background samples. Neither those nor more sporadic detections of VOCs in specific structures exceeded Industrial RSLs. From soil samples collected at grassy locations around the ELC structures, arsenic exceeded its Industrial RSL at one location. Pesticides and herbicides detected in this area were lower than most other areas within Camp Justice and did not exceed Industrial RSLs. PAHs were detected at low concentrations consistent with other Camp Justice assessment areas; benzo(a)pyrene exceeded the Industrial RSL in one sample.

- Historically, the ELC area was improved with buildings (terminal/restaurant, Quonset hut, and parachute building/contractor shop) associated with airfield operations for which limited details were available regarding use and storage of hazardous substances and petroleum products. Soil samples were collected from three accessible locations within the area of former structures east of the ELC. The concentrations of arsenic detected within this portion of the ELC were higher than average for Camp Justice and exceeded the Industrial RSL. Pesticide and herbicide concentrations detected were the lowest of all Camp Justice assessment areas and did not exceed Industrial RSLs. PAHs were detected at low concentrations consistent with other Camp Justice assessment areas but with no Industrial RSL exceedances. Neither TPH GRO nor TPH DRO was detected in this portion of the ELC.

7.1.5 Expeditionary Lodging Area

The Expeditionary Lodging Area encompasses Runway 1-19 within Camp Justice barricades and includes tents, New Cuzcos, and Old Cuzcos for temporary berthing, and a grassy and gravel parking/equipment staging area.

- Numerous VOCs were detected in most every air sample collected from tents and were comparably detected in background samples; constituents did not exceed RSLs. Smaller quantities of commercial-type air fresheners, cleaners, disinfectants, etc., in use are kept inside the tents.

  Shower Tents S1 and S3 were the only locations with detected concentrations of VOCs that exceeded Industrial RSLs. Those compounds — bromodichloromethane, dibromochloromethane, and chloroform — are refrigerant compounds and may be attributed to air conditioning; those compounds were similarly detected (albeit at concentrations less than Residential RSLs) inside every structure within Camp Justice. Research identified several potential sources of bromoform including tent structure flame retardant material, disinfection byproducts, and trihalomethanes generated when chlorine is added to drinking water to kill bacteria. Laboratory analysis of drinking water samples collected from latrine and shower tents detected TTHM.

- Localized staining was observed on runway asphalt beneath and around 55-gallon drums of diesel fuel formerly used with tent (latrine, shower, and laundry) hot water heaters, generators, and pumps.

- PAHs were generally detected at lower concentrations and with fewer constituents than other Camp Justice assessment areas; the only exceedance of an Industrial RSL was benzo(a)pyrene from the same sample location from which the most PAHs were detected within the Expeditionary Lodging Area. Although the highest detection of TPH DRO within Camp Justice was from a sample collected within the Tent area, that sample contained fewer and lower concentrations of PAHs. Low concentrations of TPH GRO were noted in samples collected along the northwest barrier of the Expeditionary Lodging Area, adjoining Moffet Field Road and Cuzcos parking lots/areas.

  Metals detected within the Expeditionary Lodging Area were lower than any other Camp Justice assessment areas. Arsenic from one sample collected near the tents exceeded its Industrial RSL. One pesticide (4,4'-DDE) detection from a sample collected within the Tent area exceeded the Industrial RSL.

7.1.6 Base Engineer Emergency Force Motor Pool and Support Area

The BEEF Motor Pool and Support Area is in the southwest portion of Camp Justice, bound by security barricades on the north, west, and south, and Runway 1-19 on the east. This area includes tents, CONEX boxes, and metal storage lockers, grassy and gravel-covered areas, and the portion of Runway 10-28 north and west of Runway 1-19. The BEEF staff work in tents (operating a motor pool and several shops for roads and grounds, utilities, HVAC, and vehicle maintenance). Various unused, obsolete, and scrap material and equipment are staged along the south boundary of Camp Justice. Localized staining was observed on the Runway 10-28 asphalt within the BEEF Motor Pool and Support Area. The following are findings for the BEEF Assessment Area.

- The BEEF Motor Pool and Support Area is the only location within Camp Justice where commercial quantities of hazardous substances and petroleum products including paint, oils and lubricants, antifreeze, vehicle fluids, adhesives, cleaners/degreasers are used and stored in hazardous/flammable lockers, on spill containment units, and within CONEX boxes and metal storage units. Materials used for janitorial purposes and maintenance of Cuzcos and tents (including laundry, latrine, and showers) are maintained in dedicated storage lockers in the BEEF Stockyard area. Used oil and hazardous waste is accumulated in 55-gallon drums in the BEEF Motor Pool area for offsite disposal by BOS contractors.

- Arsenic was detected in soil at two locations, with one slight exceedance of its Industrial RSL. Pesticides 4,4'-DDE and 4,4'-DDT were detected at most grid locations within this area but none of the pesticide or herbicide detections exceeded Industrial RSLs. The

concentration and distribution of these pesticides are likely indicative of general application. Numerous PAHs were detected with no discernable pattern; some benzo(a)pyrene detections exceeded the Industrial RSL. TPH DRO was detected in four samples and one low (laboratory-estimated) concentration of TPH GRO was detected.

7.2 Conclusions

The primary environmental concern associated with Camp Justice is the 40-year history of McCalla Airfield during a time (1930s to 1970) and place (outside the United States) with limited environmental regulations, permit requirements, and local, state, or federal agency oversight. The FGS that address the protection of human health and the environment for NS GTMO were emplaced in the mid-1990s, over 20 years after aircraft-associated operations at McCalla Airfield ceased.

Aspects of aircraft operation, maintenance, and repair included the use, storage, and disposal of hazardous substances and petroleum products in bulk quantities. Common maintenance practices involved parts cleaning, stripping and painting metal surfaces, metal finishing, and lubrication and fluid changes. Those practices entailed the use of volatile organic and other solvents and generated hazardous waste, used petroleum products, and wastewater. Waste materials, in turn, required storage, discharge, or disposal, all of which had their own potential for releases. Despite best efforts and practices, solid and hazardous wastes, fluids, and vapors could have been released to the environment.

Fueling operations involved storage, transfer, and transport (via mobile tanks) of large quantities of petroleum products. Although bulk fuel storage tanks were not identified within Camp Justice in records reviewed, drawings and as-built plans showed underground pipelines capable of carrying large volumes (10,000 gallons or more) crossing the airfield on (south and west of Hangar AV-32) and within roughly one-third mile of (10-inch fuel pipeline from Gas Hill to the shoreline) Camp Justice. Supporting operations with the potential to have involved the use or release of hazardous substances and petroleum products are FFTAs (identified east-adjoining Camp Justice) and BOS and other contractor activities (identified south-adjoining Camp Justice).

Based on historical and environmental information reviewed for this OBEA, the environmental conditions identified appear acceptable under the current and reasonably anticipated future land uses at Camp Justice. The following — related to storage, release, treatment, or disposal of hazardous substances and petroleum products or its derivatives — have the potential for substantial impact on human health and safety.

- Evidence of failure to fully implement an O&M Program at buildings where ACM and suspect ACM has been identified. Limited air sampling conducted for asbestos during the EI detected the presence of airborne fibers at levels below OSHA 8-hour TWA. However, the source of asbestos fibers (friable, damaged, and deteriorating ACM and suspect ACM) that remain may have a substantial impact on human health and safety based on continued planned use of the permanent structures (for occupational purposes).

- Surface soil sampling identified widespread detections of hazardous substances and petroleum products with scattered exceedances of Industrial RSLs, however, none appear indicative of a localized release. The presence of many of the constituents identified in the EI appear related to the routine activities associated with historical airfield operations, including the general application of pesticides/herbicides and or the incomplete combustion of fuels.

Future development or demolition activities involving access of surface soil (in locations where sampling was not conducted) or subsurface soil on and adjoining runways, tarmacs, and taxiways and in areas where pipelines, fueling, and other aircraft operations occurred (particularly north and south of Hangar AV-32) may create potential pathways for exposure to hazardous substances and petroleum products, or its derivatives, that could lead to substantial impact.

7.3 Limitations and Exceptions

As a result of CERCLA, the Navy initiated the Installation Restoration (IR) Program in 1986 to conform with the U.S. EPA Superfund process.[10] The Navy IR Program is limited to the United States, its territories and possessions, and does not apply in foreign countries (CNIC Instruction 5090.1C, Chapter 18-1). Remediation of environmental contamination attributable to activities on DoD installations outside the United States is controlled in part by DoD Instruction 4715.08.

DoD Instruction 4715.08 requires the responsible in-theater component commander, after consultation with the appropriate DoD medical authority and DoD Lead Environmental Component, determine that environmental contamination poses a substantial impact to human health and safety. Such determination is to be supported by a health impact assessment, which was outside the scope of work of this project. This OBEA was intended to identify areas where hazardous substances and

[10] Retrieved from NAVFAC Environmental at http://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/installation_map/navfac_atlantic/midlant/cherry_point/resource_conservation_recovery_act/navy_irp.html.

petroleum products (and their derivatives) may have caused or contributed to environmental contamination.

The site reconnaissance, records review, and interview portions of the OBEA were conducted using commonly recognized industry practices and relevant guidance in ASTM International standards D5746-98 and D6008-96. The ASTM International standards are intended for use at DoD real property at a closing military installation with respect to the requirements of CERCLA, as amended by CERFA. Although the purpose of this assessment was not to facilitate or support Findings of Suitability to Transfer or Findings of Suitability for Lease under CERCLA, or uncontaminated parcel determinations pursuant to the requirements of CERFA, the ASTM International standards provide commonly recognized industry practices and guidance useful for assessing DoD property and were used accordingly. The following are limitations associated with those portions of the OBEA.

7.3.1 Site Reconnaissance Limitations

Access to buildings, rooms, and some areas within Camp Justice during the OBEA was limited because of security restrictions. Access was primarily provided for the following areas:

- Mechanical, electrical, telephone/computer, and HVAC rooms,
- Hazardous substance and petroleum product storage areas,
- Storage tank locations, and
- Restrooms.

Assessment area-specific observations made by Resolution Consultants personnel during the OBEA site reconnaissance provided limited information with respect to identifying areas where hazardous substances or petroleum products were released because of recent redevelopment (e.g., that filled utility or pipe trenches and covers former building foundations/areas) for current Camp Justice operations. Observations made by personnel conducting the IAQ Assessment and EI, and photographs obtained during those activities, were also used for this OBEA.

Photography and electronic devices were prohibited inside permanent structures and the ELC.

7.3.2 Records Review Limitations

Resolution Consultants requested historical building use and occupancy information from various NS GTMO resources including the PWD and PAO. Because of the short timeframes during which military and contractor personnel are typically assigned to the base, consistent long-term recordkeeping was unavailable and interviews were largely unproductive. As evidenced by

discussions in this OBEA report, only general information for Camp Justice and adjoining properties was available from review of records at NS GTMO. Historical and environmental records provided did not include specific information related to hazardous substance or petroleum product use, drum or tank storage, underground features (e.g., sumps, oil-water separators, access pits), buried/unexploded ordnance, or documented releases for any McCalla Airfield buildings or within Camp Justice.

7.3.3 Interview Limitations

Personnel interviewed were unable to provide historical information related to or that identified releases of hazardous substances or petroleum products at Camp Justice. This was primarily due to limited tenure at the base.

8.0 REFERENCES

Alaska Structures, Inc. (2015). Tent construction information retrieved at: http://www.alaskastructures.com.

ASTM International. D5746-98 (2010) *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities*.

— D6008-96 (Reapproved 2014) *Standard Practice for Conducting Environmental Baseline Surveys*.

Baker Environmental, Inc. *Final Site Characterization Report – McDonald's.* 12 July 1994.

— *Final Spill Prevention, Control, and Reporting Plan, Volume II, Storage Tank Management Plan.* July 2003.

Balog, David. (Interview). Compliance Program Management, Spill Prevention, Control, and Countermeasure, Integrated Solid Waste Management, and Emergency Management Systems. Naval Station Guantanamo Bay, NAVFAC Environmental. (757) 458-5623. David.Balog@gtmo.navy.mil.

Bryska, Chief. (2015). Mass Communications Specialist, Public Affairs Office, Naval Station Guantanamo Bay, Cuba. 011-53-99-4502. mcc@gtmo.navy.mil.

Bumpus, Tyrone. (Interview). Deputy Director, United States Department of Defense, Washington Headquarters Service, Office of Special Security — South, Guantanamo Bay, Cuba. Tyrone.A.Bumpus.civ@mail.mil.

Canty and Associates, LLC. (2015). Climate information retrieved at http://www.weatherbase.com.

Commander, Navy Installations Command. (2015). General Naval Station Guantanamo Bay information retrieved at http:www.cnic.navy.mil/.

Commander, Navy Region Southeast. (June 2003). *Regional Shore Infrastructure Plan for Commander Navy Region Southeast. Overview Regional Shore NAVBASE GTMO.*

Dillon, James. (Interview). Safety Specialist, Safety Department, Naval Station Guantanamo Bay, Cuba. 011-53-99-4526.

Department of Defense. Instruction 4715.08 *Remediation of Environmental Contamination Outside the United States.* 1 November 2013.

Environmental and Safety Designs, Inc. *PCB Inventory of All Oil-Filled Electrical Equipment, Commander Naval Base, GTMO, Cuba.* 5 November 1997.

Froehling & Robertson, Inc. *Report of Limited Soil and Groundwater Sampling and Analysis — Tank 126, Guantanamo Bay, Cuba*. F&R Project No. 61P-0032. Prepared for SBG, Inc. Ladson, South Carolina. 2012.

— *Report of Limited Soil and Groundwater Sampling and Analysis — Wharf Bravo Structural Repairs, Guantanamo Bay, Cuba*. F&R Project No. 61P-0248. Prepared for SBG, Inc. Ladson, South Carolina. 2013.

— Personal communication with John Sensabaugh at JSensabaugh@FandR.com. 2 September 2015.

Geological Society of America. *Upper Pleistocene Paleontological Resources of Guantanamo Bay Naval Station (GTMO), Cuba*. Geological Society of America, Southeastern Section Abstracts with Programs, Vol. 41, No. 1. Roger Portell. 2009.

Harmon Engineering Associates, Inc. (1991). Asbestos Survey Report (excerpts), Naval Station Guantanamo Bay, Cuba.

HDR. *Final Master Plan, Naval Station Guantanamo Bay, Guantanamo Bay, Cuba.* 25 January 2011.

Joint Task Force Guantanamo. (2015). General Camp Justice and Naval Station Guantanamo Bay information retrieved at http:www.jtfgtmo.southcom.mil/.

Martinez, Myrna. (Interview). Environmental Director, Naval Facilities Engineering Command Public Works Department, Naval Station Guantanamo Bay. 011-53-99-5624. Myrna.Martinez@gtmo.navy.mil.

Michael Baker, Jr., Inc. *Final Spill Prevention and Response Plan, Volume I of III, Emergency Response Action Plan for Naval Station Guantanamo Bay, Cuba.* March 2010.

— *Final Spill Prevention and Response Plan, Volume II of III, Prevention, Control, and Training for Naval Station Guantanamo Bay, Cuba.* March 2010.

— *Final Spill Prevention and Response Plan, Volume III of III, Storage Tank Management Plan for Naval Station Guantanamo Bay, Cuba.* March 2010.

Murphy, M.E. Rear Admiral, U.S. Navy, U.S. Naval Base, Guantanamo Bay, Cuba. *Naval Station Guantanamo Bay, Cuba.* First Edition (1494 to 1953). 5 January 1953.

National Institute of Health. (2015). *Radon and Cancer*. Internet: http://www.cancer.gov/about-cancer/causes-prevention/risk/substances/radon/radon-fact-sheet.

Naval Facilities Engineering Command Southeast. *Historical Petroleum Release Documentation, Naval Station Guantanamo Bay, Cuba.* 31 January 2008.

Naval History and Heritage Command. *Building the Navy's bases in World War II; history of the Bureau of Yards and Docks and the Civil Engineer Corps, 1940-1946.* Excerpt from Volume II (Part III): The Advance Bases, Chapter XVIII Bases in South America and the Caribbean Area, Including Bermuda. Guantanamo, Cuba. Washington: US Govt. Print. Off. 1947.

Navy and Marine Corps Public Health Center. *Public Health Review Report for Camp Justice*. 21 August 2015.

Office of Military Commissions. (2015). General Camp Justice information retrieved at http:www.mc.mil/.

Palmer C J and Reason C J. (2009). Relationships of surface bromoform concentrations with mixed layer depth and salinity in the tropical oceans, Global Biogeochemical Cycles, 23, GB2014.

(Interview). United States Air Force, Base Engineer Emergency Force, Camp Justice Motor Pool. Naval Station Guantanamo Bay.

Pitrat, Paul. (Interview). Assistant Fire Chief, Naval Station Guantanamo Bay Fire Department, Guantanamo Bay, Cuba, 011-52-99-4179.

Pomfret, John. Captain, U.S. Marine Corps, U.S. Naval Base, Guantanamo Bay, Cuba. *Naval Station Guantanamo Bay, Cuba.* Fourth Edition (1964 to 1982). 9 September 1982.

Resolution Consultants. *Final Work/Sampling Plan, Environmental Investigation, Office of the Military Commissions, Area of Operation Patriot, Naval Station Guantanamo Bay, Cuba.* 8 October 2015.

— *Indoor Air Quality Assessment Report, Environmental Investigation, Office of the Military Commissions, Area of Operations Patriot, Naval Station Guantanamo Bay, Cuba.* 29 October 2015.

— *Environmental Investigation Report, Office of Military Commissions, Camp Justice, Naval Station Guantanamo Bay, Cuba.* 4 December 2015.

Santos, Katherine. Critical Reptile Species Management on the U.S. Naval Base, Guantanamo Bay, Cuba. Agreement Number: 62470-00-M-5219. Retrieved from ResearchGate at: http://www.researchgate.net/publication/281628224_Critical_reptile_species_management_on_the_U.S._Naval_Base_Guantanamo_Bay_Cuba. October 2001.

Southeastern Archaeological Research, Inc. *Guantanamo Bay Migrant Operations (MIGOPS) Archaeological Survey, U.S. Naval Station, Guantanamo Bay, Cuba*. September 2013.

— Seabee Museum 1994 Seabees constructed tent city as part of Operation Sea Signal (photo). Seabee Museum, Port Hueneme, California.

— Pitts, W. Darren. Photograph, c. 1995. *A Guantanamo Diary: operation Sea Signal. Joint Force Quarterly.* Autumn. Pages 114-120.

Tageson Maritime. (2002). *OPA 90 Facility Response Plan, Naval Station Guantanamo Bay, Cuba, Volume I, FRP Front Matter & Response Planning Data.*

— *OPA 90 Facility Response Plan, Naval Station Guantanamo Bay, Cuba, Volume II, Emergency Response Action Plan,* 2002.

U.S. Department of the Navy. Request for Proposal for PCO# 000001, Contract N62470-96-C-6833; Remove and Replace Underground Storage Tanks, U.S. Naval Base, Guantanamo Bay, Cuba, to Islands Mechanical Contractors. 4 December 1996.

U.S. Department of the Navy. (various dates). Photographs, diagrams, and schematics on file and provided at the Public Works Department, Naval Station Guantanamo Bay, Cuba.

United States Environmental Protection Agency. Regional Screening Levels for Chemical Contaminants at Superfund Sites. Retrieved from http://www.epa.gov/risk/regional-screening-table. June 2015.

— *Profile of the Air Transportation Industry.* Enforcement and Compliance Assurance (2223A), Office of Compliance Sector Notebook, Washington, D.C. (1998).

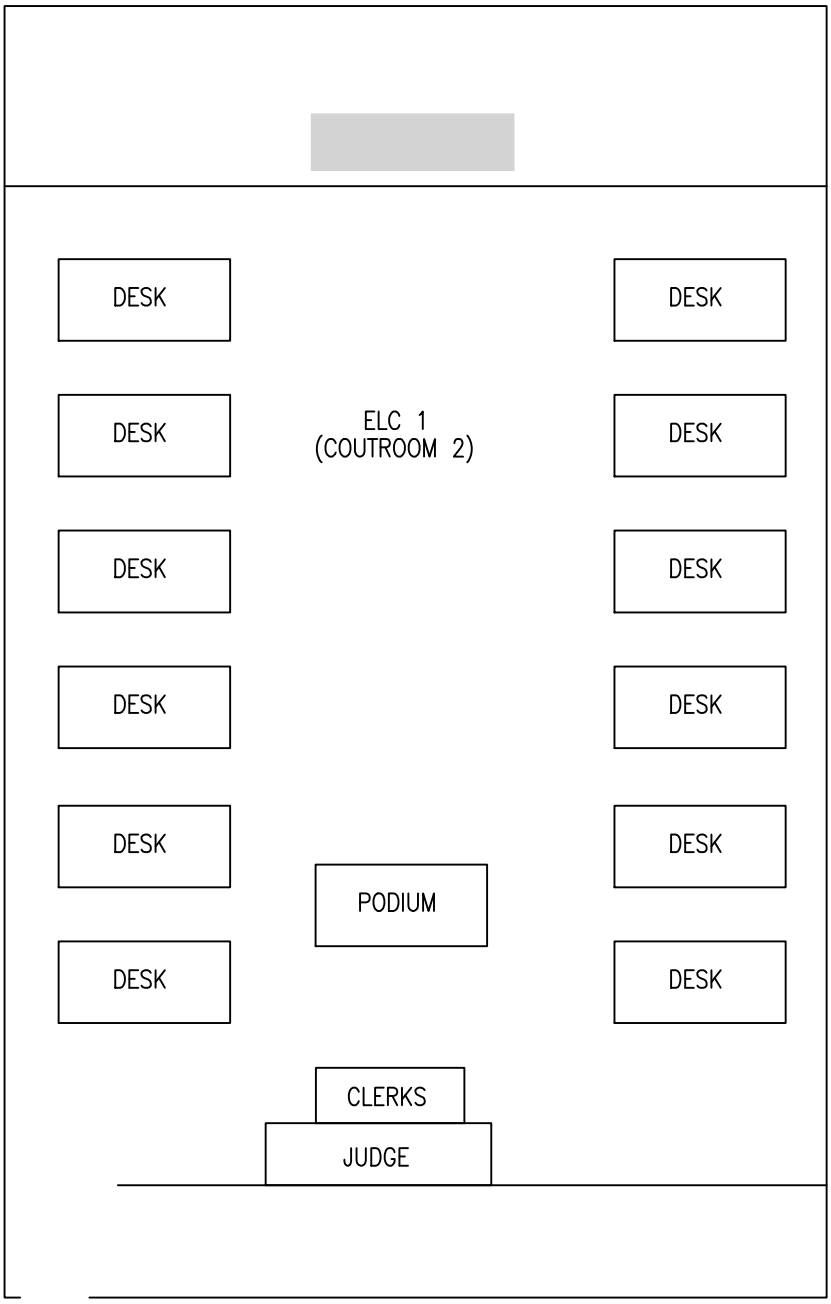
United States Coast Guard. (June 2000). *Incident Command System Oil Spill Field Operations Guide*.

United States Navy. (2015). General Naval Station Guantanamo Bay information retrieved at http:www.navy.mil/local/guantanamo/.

Varner, B.D. Commander U.S. Navy, U.S. Naval Base, Guantanamo Bay, Cuba. *Naval Station Guantanamo Bay, Cuba.* Third Edition (1953 to 1964). 1964.

World Wildlife Federation. (2015). Southeastern Cuba — Deserts and Xeric Sublands. Retrieved at http://www.worldwildlife.org/ecoregions/nt1306

Appendix A
Floor Plans



LEGEND

NOT TO SCALE

ELC 1 (COURTROOM 2) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B002

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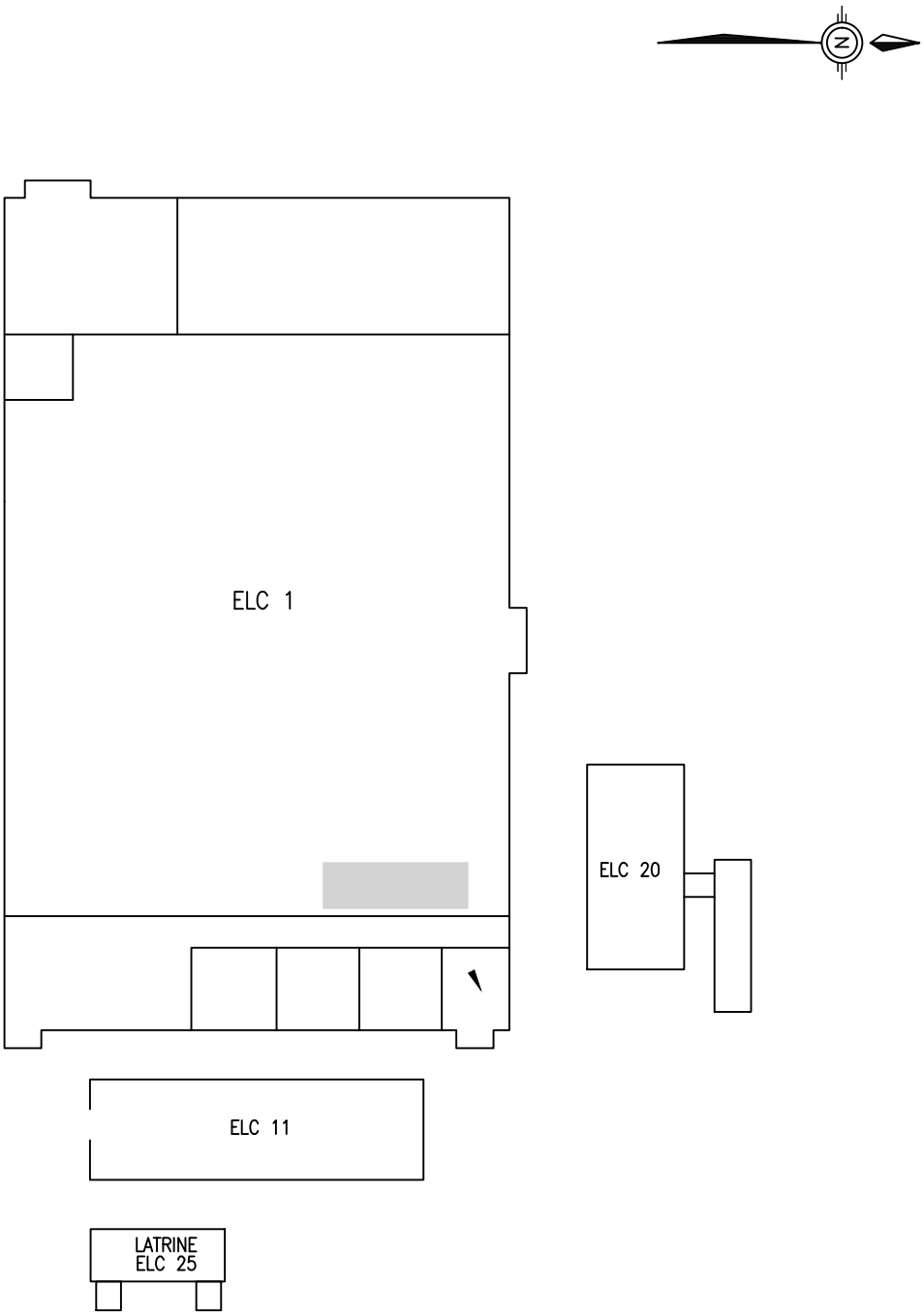

LEGEND

NOT TO SCALE

ELC 11 FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: D.FUEHRER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B002

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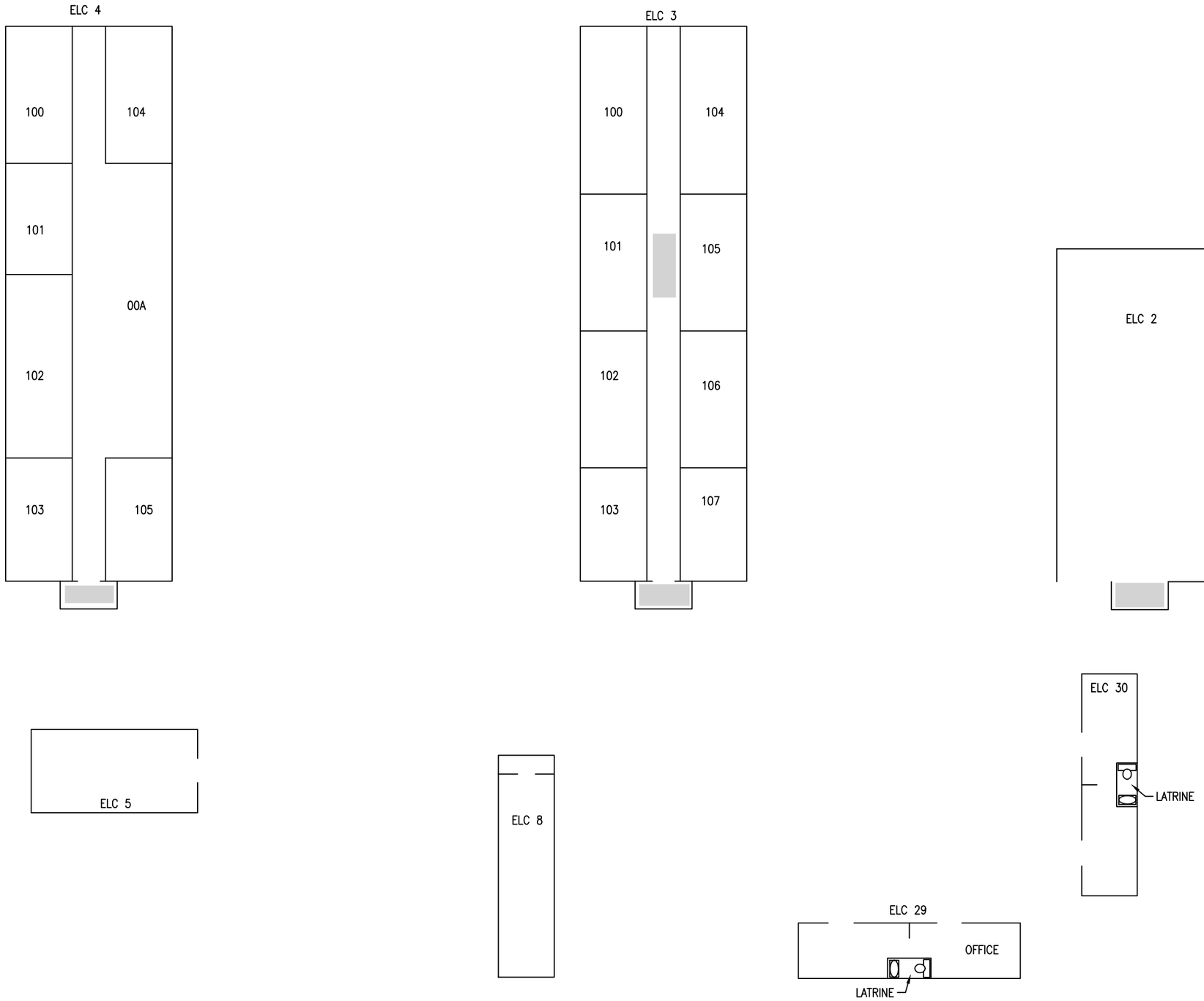

LEGEND

NOT TO SCALE

ELC 2, 3, 4, 5, 8, 29, AND 30 FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: D.FUEHRER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B002

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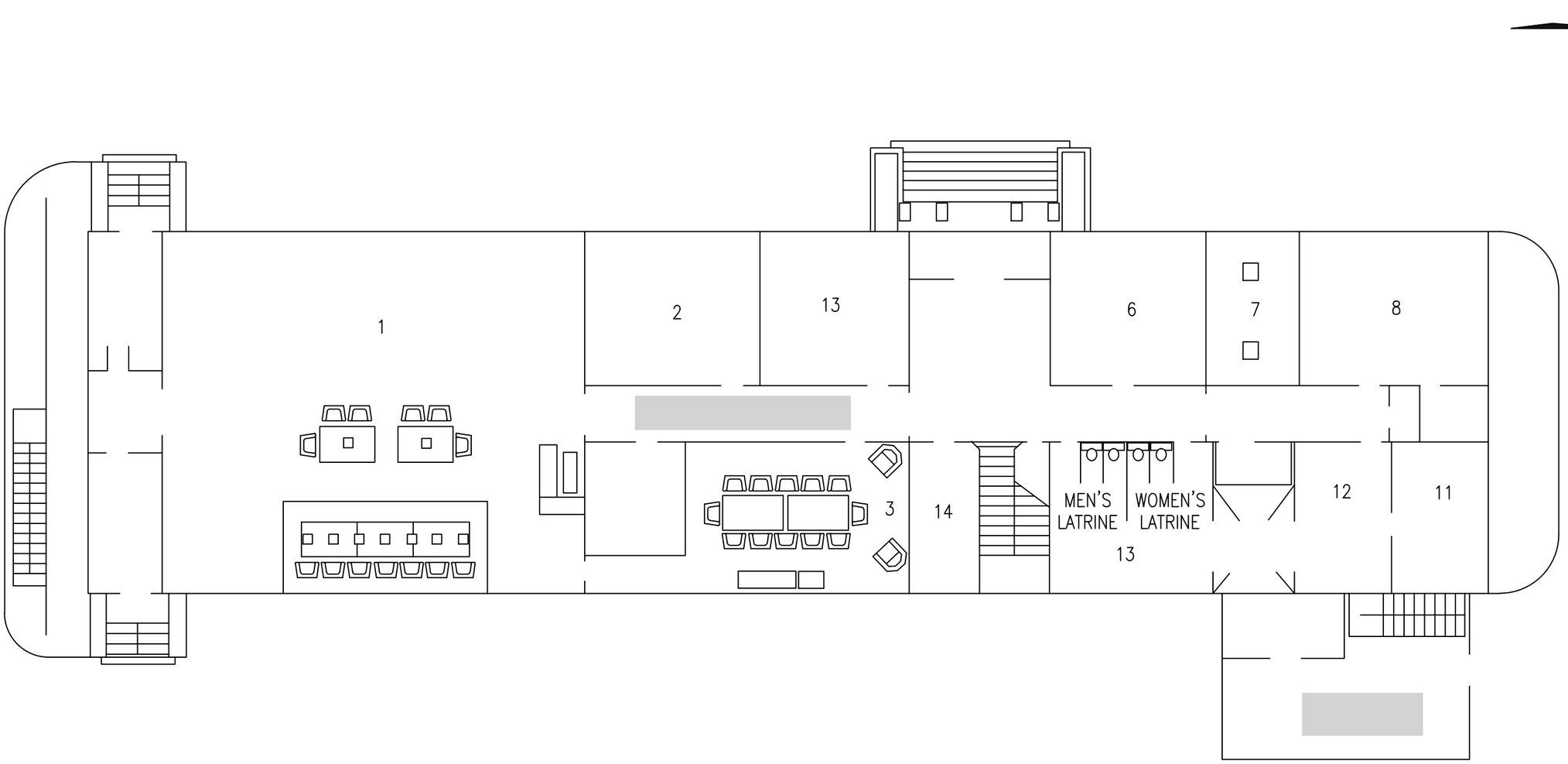

AV34 FIRST FLOOR

NOT TO SCALE

LEGEND

AV34 (FIRST FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B003

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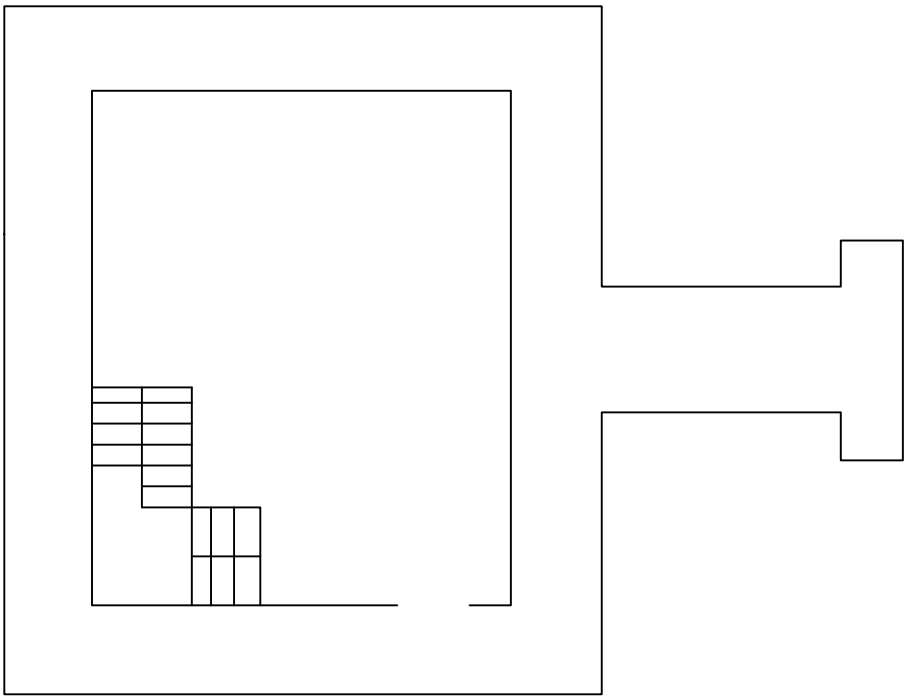

AV34 FOURTH FLOOR

AV34 (FOURTH FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

NOT TO SCALE

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B003

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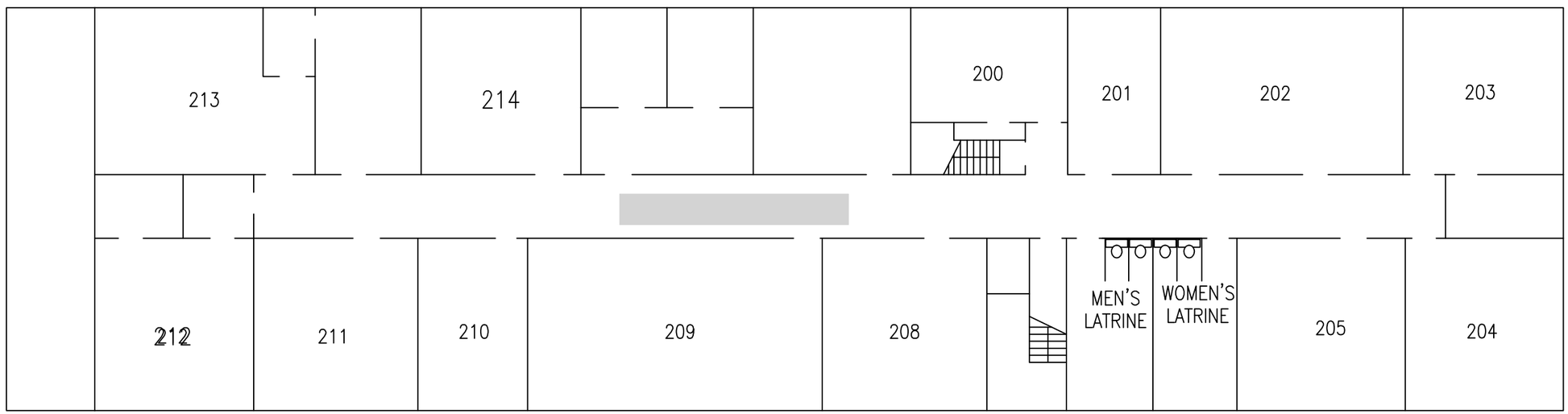

AV34 SECOND FLOOR

NOT TO SCALE

LEGEND

AV34 (SECOND FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B003

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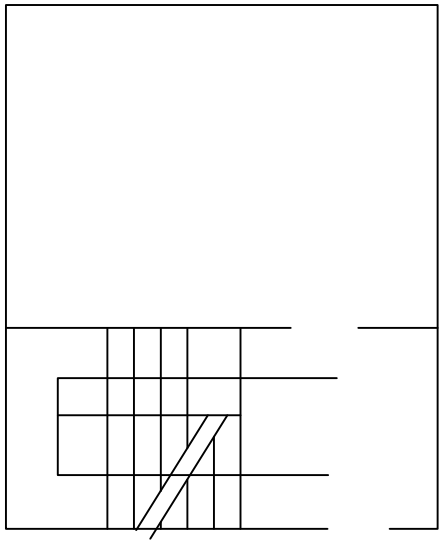

AV34 THIRD FLOOR

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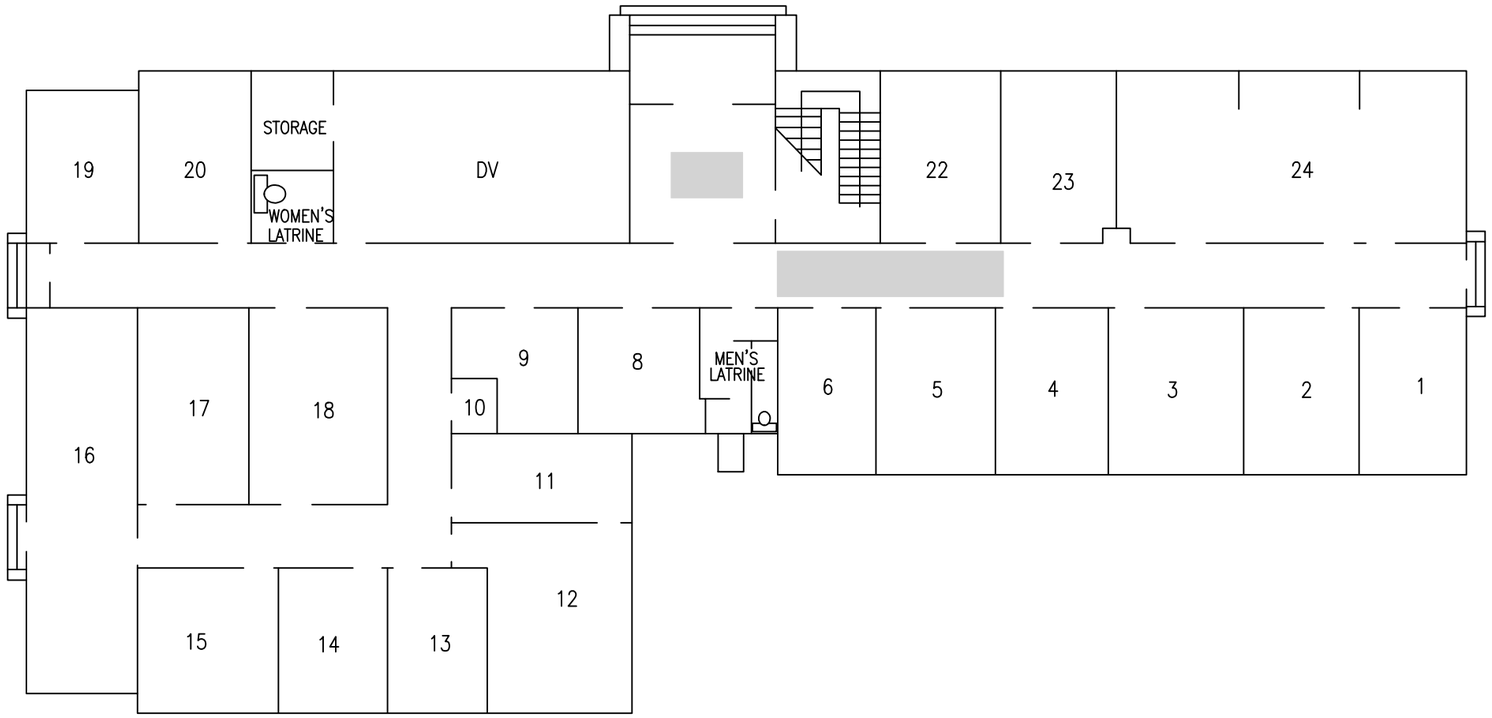
AV34 (THIRD FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

NOT TO SCALE

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B003



AV29 FIRST FLOOR

LEGEND

NOT TO SCALE

AV29 (FIRST FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B004

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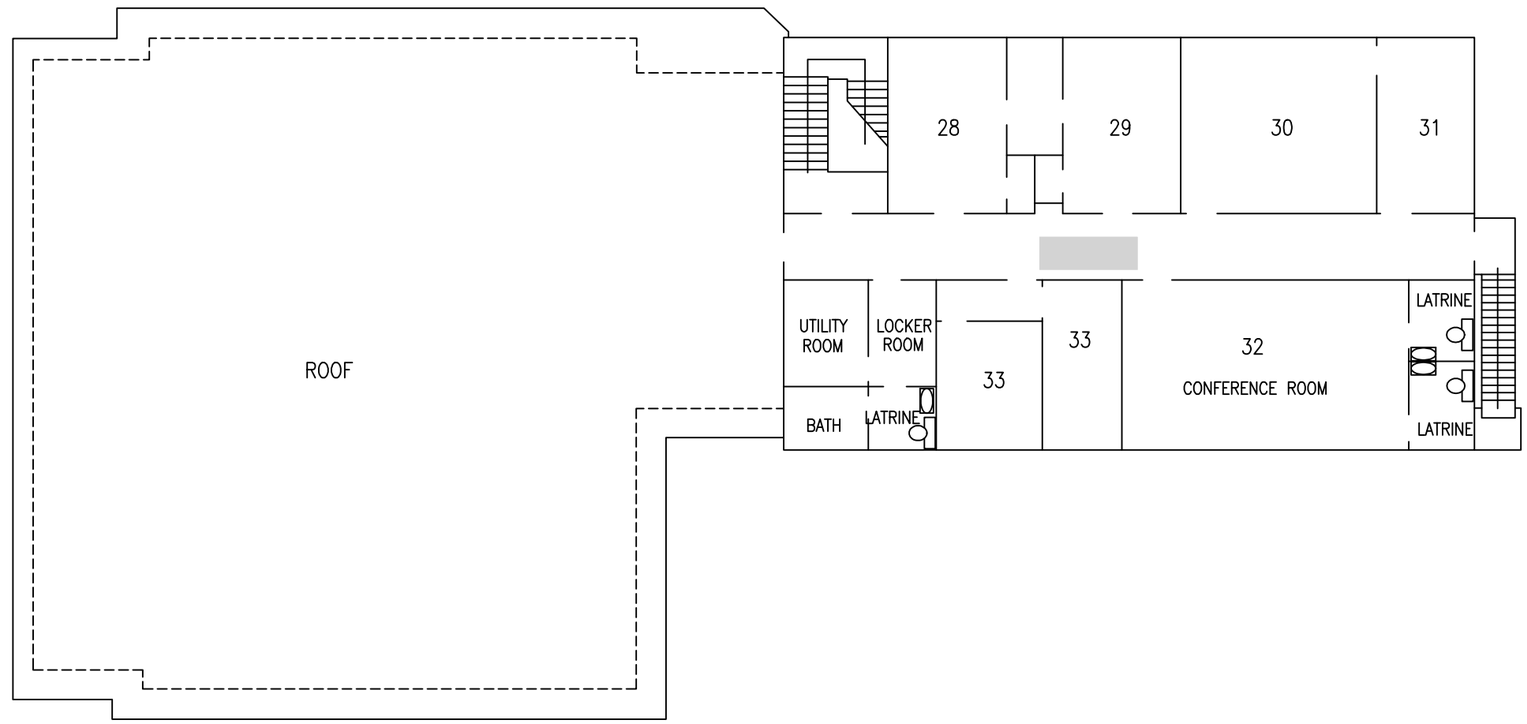

AV29 SECOND FLOOR

LEGEND

NOT TO SCALE

AV29 (SECOND FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B004

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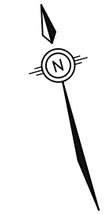
AV32 FIRST FLOOR



LEGEND

NOT TO SCALE

AV32 (FIRST FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B005

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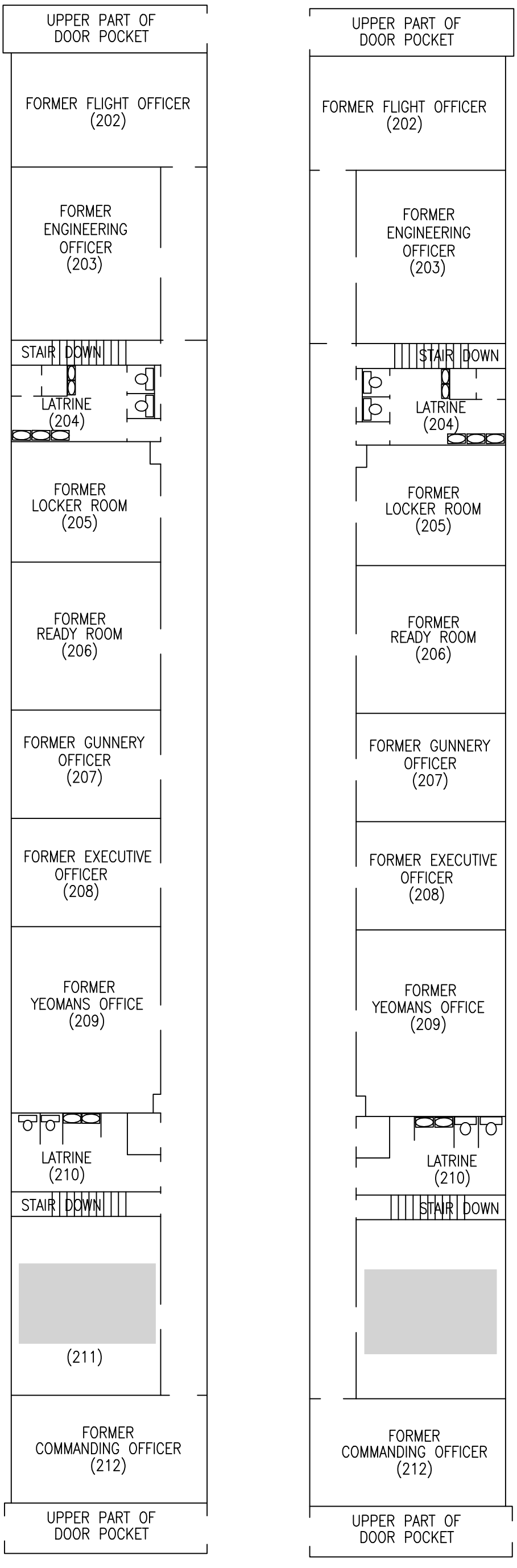
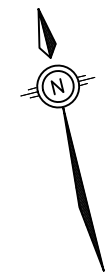


AV32 PARTIAL SECOND FLOOR



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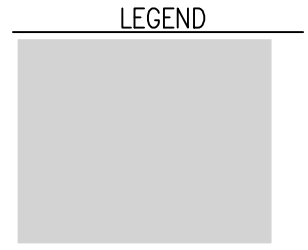

NOT TO SCALE

AV32 (PARTIAL SECOND FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B005

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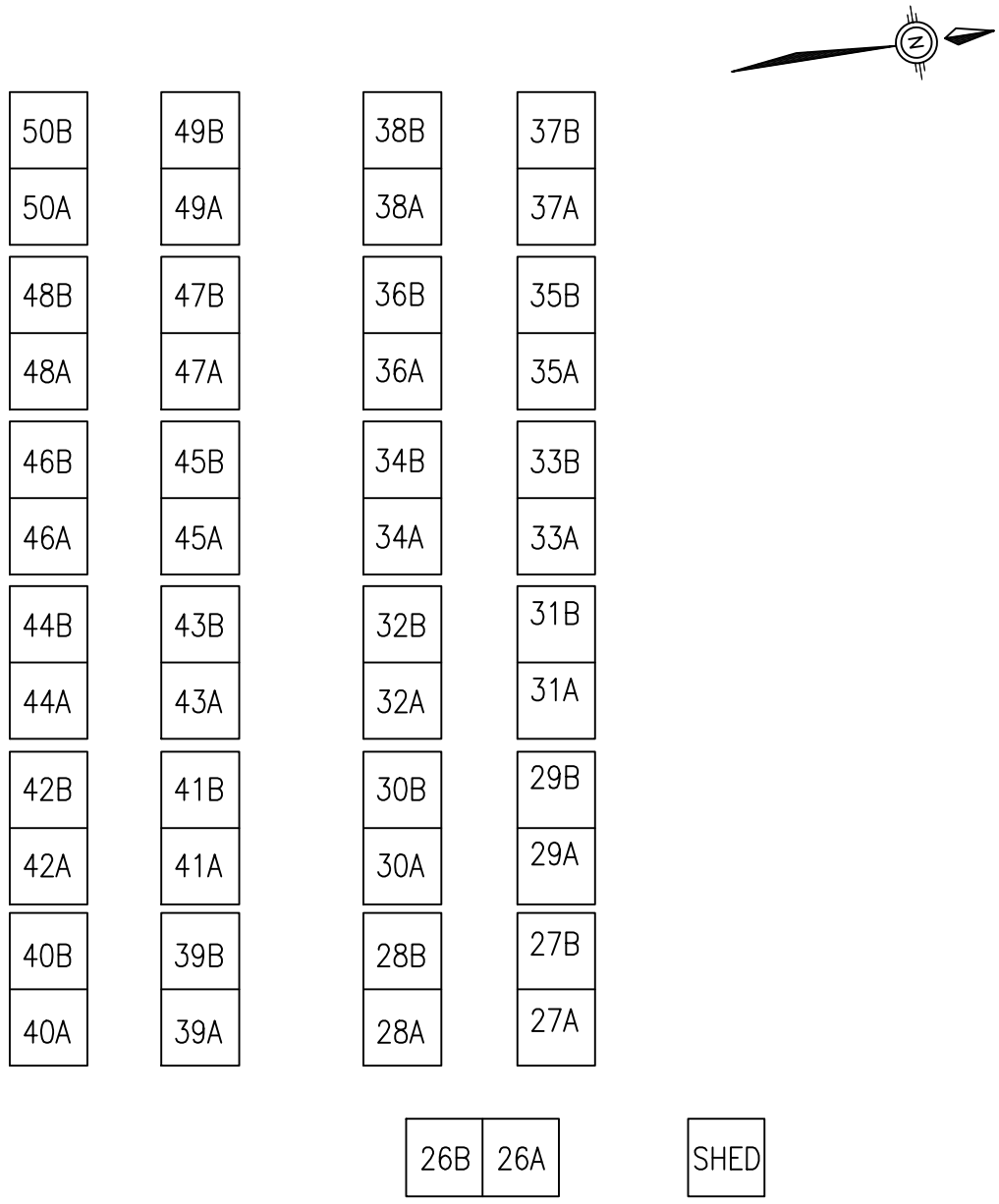

NEW CUZCOS

NOT TO SCALE

NEW CUZCOS
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 11/18/15
DRAWN BY: BRONSON	DWG NAME: 17816_B006

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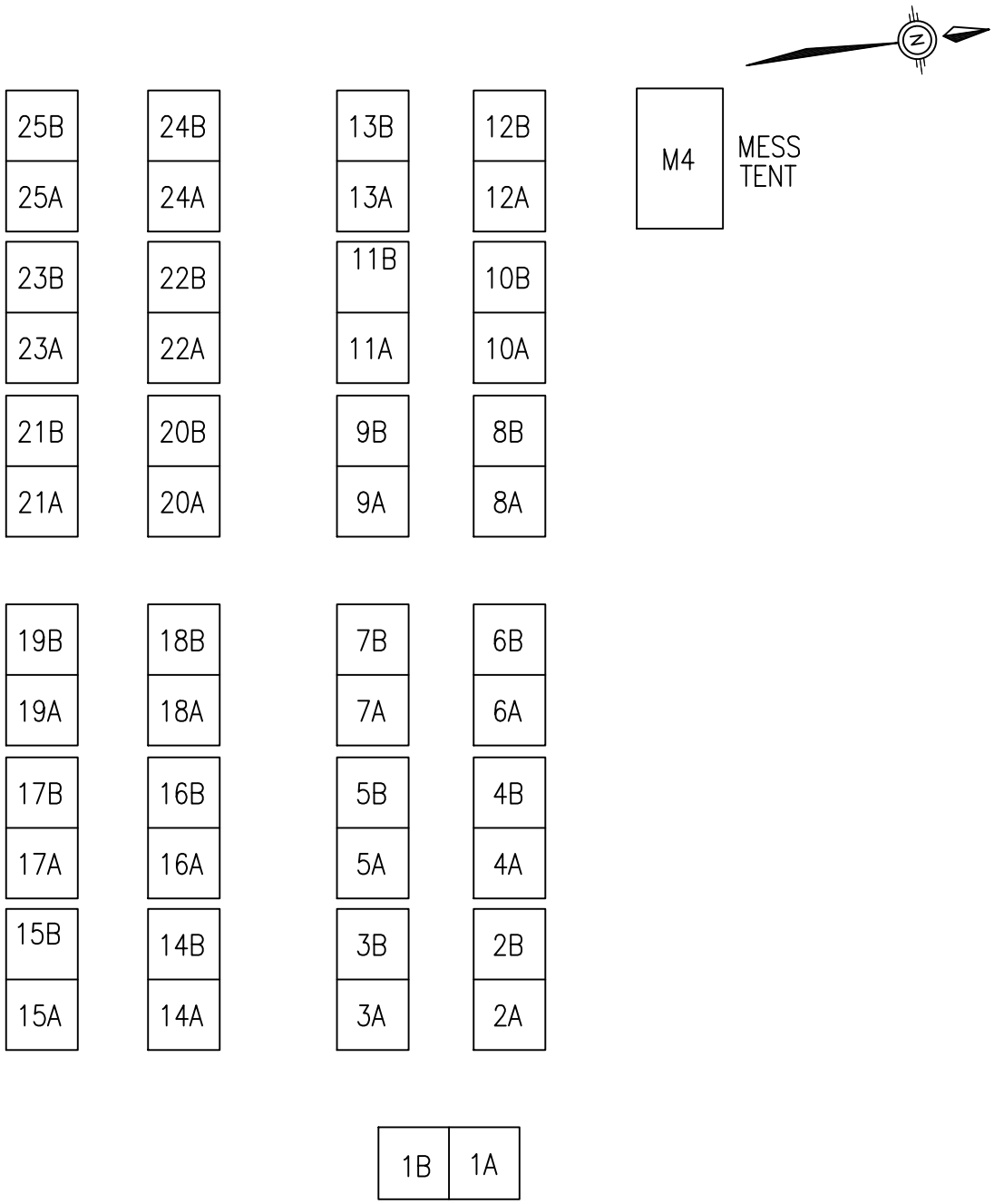

OLD CUZCOS

NOT TO SCALE

OLD CUZCOS
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 11/18/15
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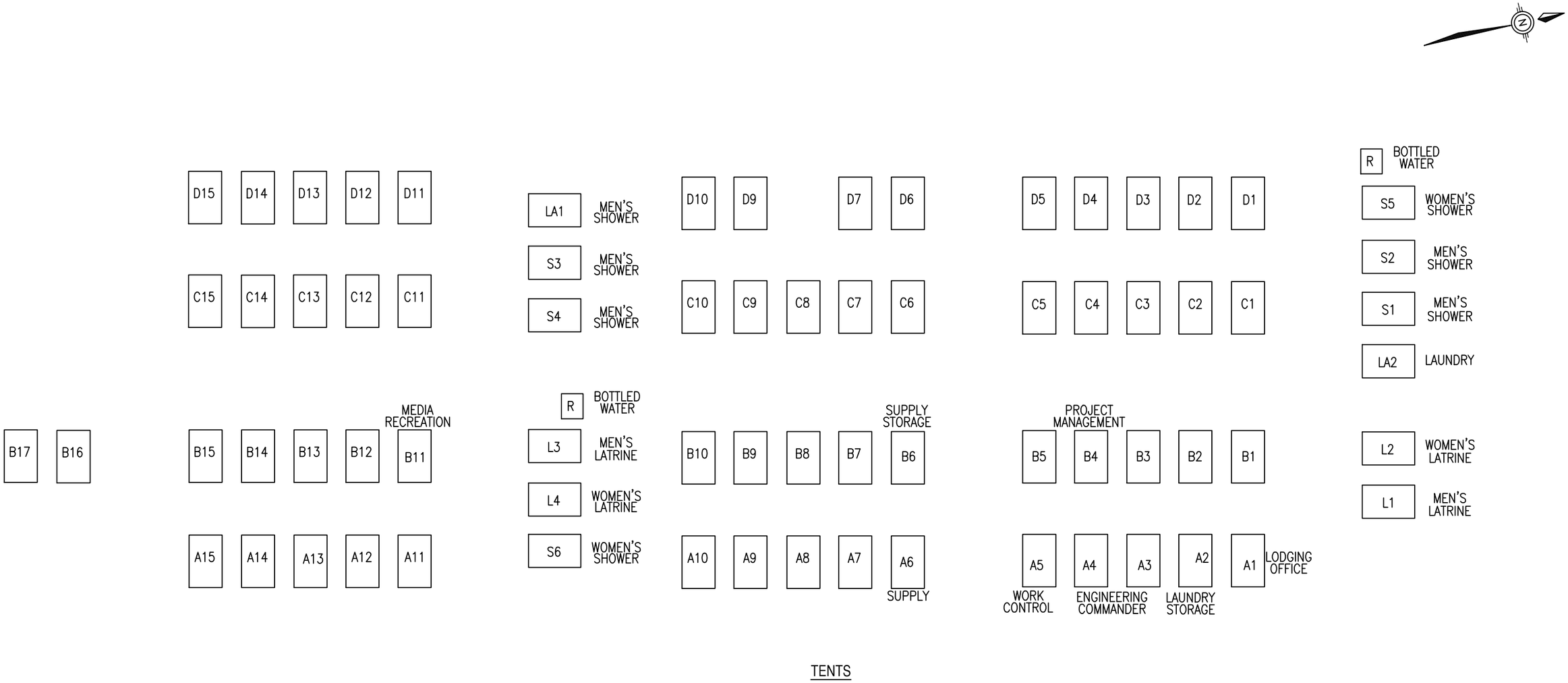

TENTS

NOT TO SCALE

TENTS
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B006

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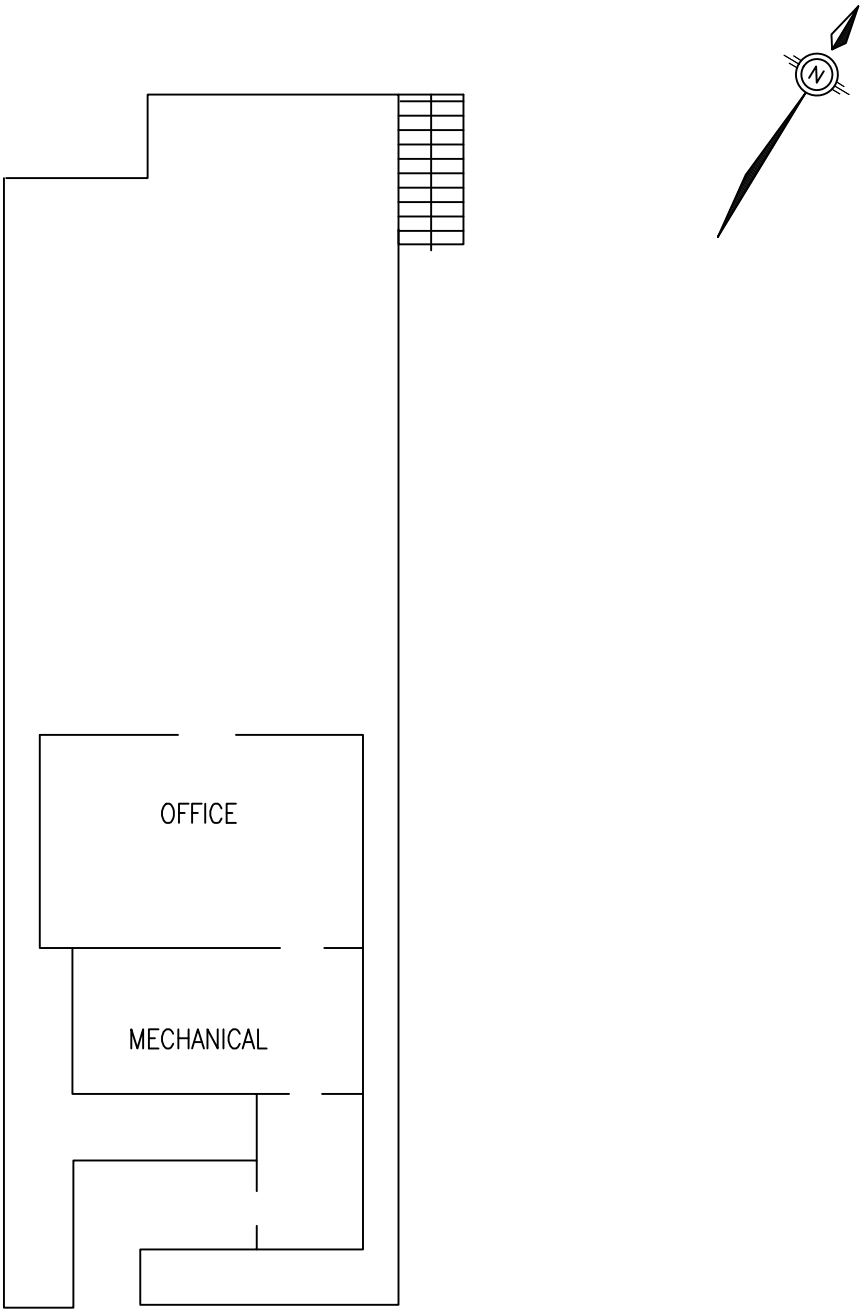

AV31 FIRST FLOOR

LEGEND

NOT TO SCALE

AV31 (FIRST FLOOR) FLOOR PLAN
NS GTMO – CAMP JUSTICE
GUANTANAMO BAY, CUBA

REQUESTED BY: H.BRAUER	DATE: 12/08/15
DRAWN BY: BRONSON	DWG NAME: 17816_B007

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Appendix B
Photo Logs

Appendix B-1
Building AV-29

Appendix B-1 — Building AV-29
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 1: AV-29 EAST SIDE EXTERIOR ND HVAC EQUIPMENT; FORMER ORAL EVACUATION EQUIPMENT SHED SHOWN IN CENTER

Photo 2: AV-29 EAST SIDE EXTERIOR HVAC EQUIPMENT AND ELECTRICAL ACCESS MANHOLE

Photo 3: AV-29 EAST SIDE EXTERIOR HVAC DUCTS

Photo 4: AV-29 EAST SIDE EXTERIOR MANHOLE/POSSIBLE CLEANOUT ASSOCIATED WITH FORMER ORAL EVACUATION VACUUM SYSTEM IN ADJOINING SHED

Photo 5: AV-29 EAST SIDE EXTERIOR FORMER ORAL EVACUATION SYSTEM VACUUM AND PUMPS IN SHED

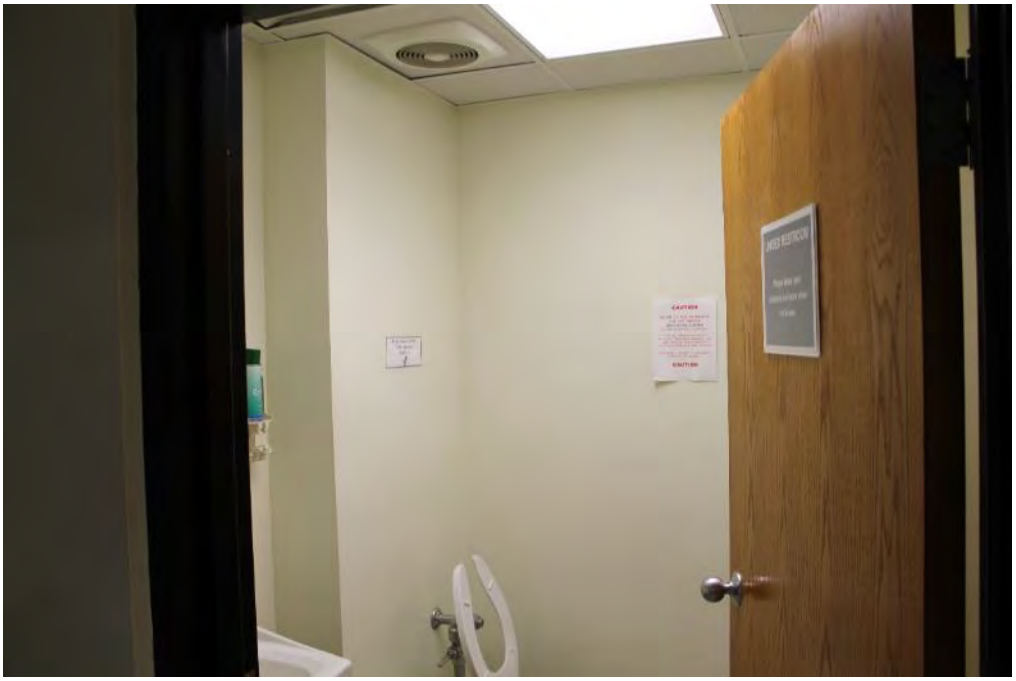


Photo 6: AV-29 FEMALE LATRINE (ROOM 21)

Appendix B-1 — Building AV-29
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 7: AV-29 ROOM 1

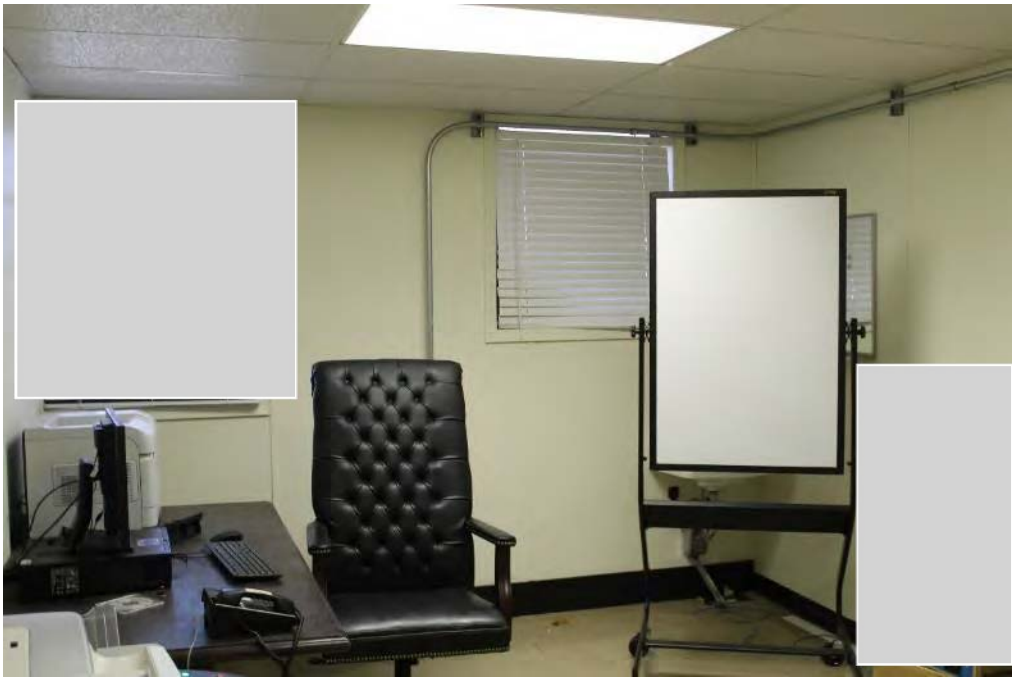


Photo 8: AV-29 ROOM 2

Appendix B-1 — Building AV-29
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 9: AV-29 ROOM 3

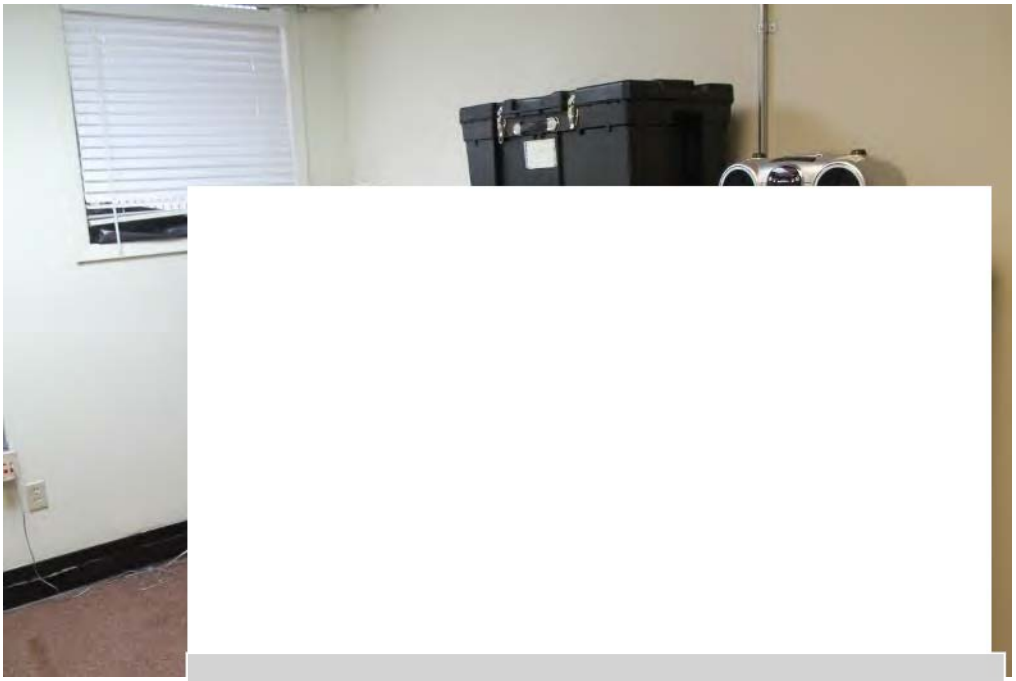


Photo 10: AV-29 ROOM 4

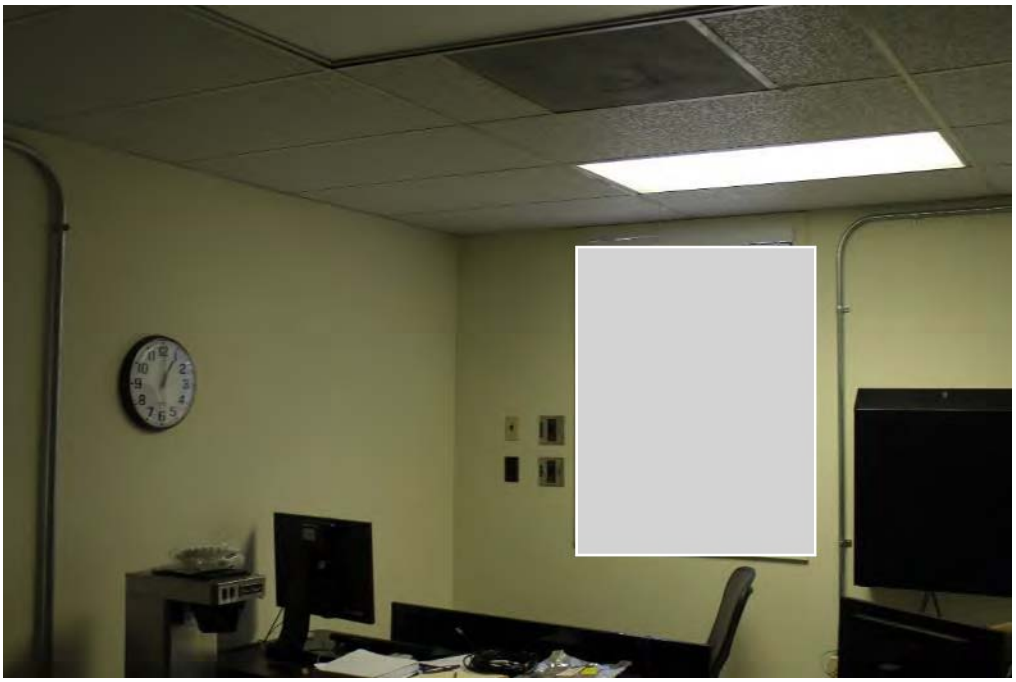


Photo 11: AV-29 ROOM 5

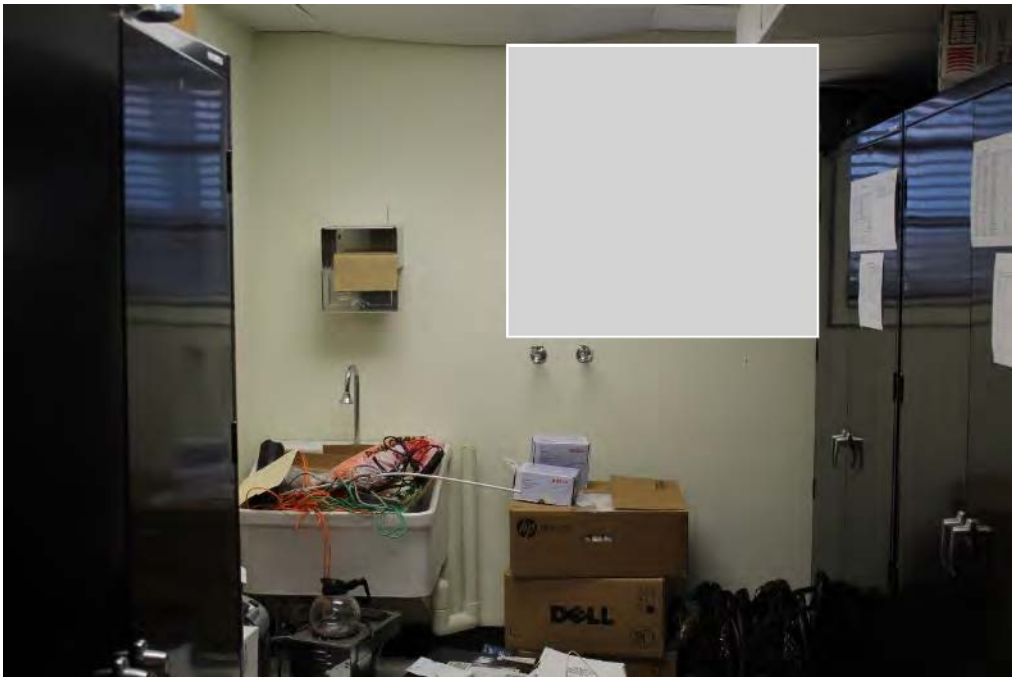


Photo 12: AV-29 ROOM 6

Appendix B-1 — Building AV-29
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 13: AV-29 ROOM 11

Photo 14: AV-29 ROOM 12

Appendix B-1 — Building AV-29
Camp Justice
Naval Station Guantanamo Bay, Cuba

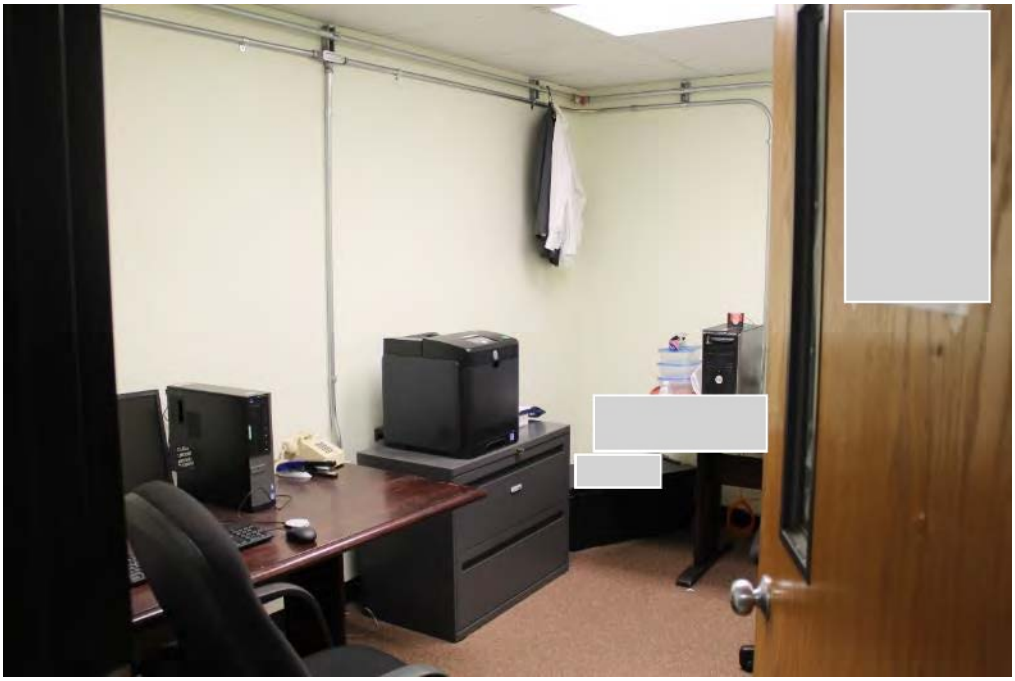


Photo 15: AV-29 ROOM 13

Photo 16: AV-29 ROOM 14

Appendix B-1 — Building AV-29
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 17: AV-29 ROOM 15

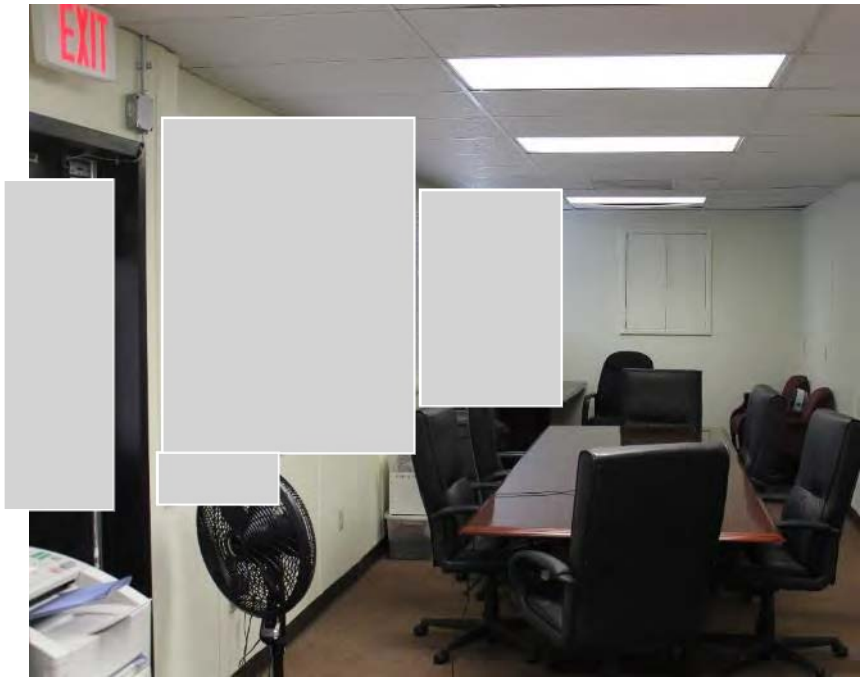


Photo 18: AV-29 ROOM 16

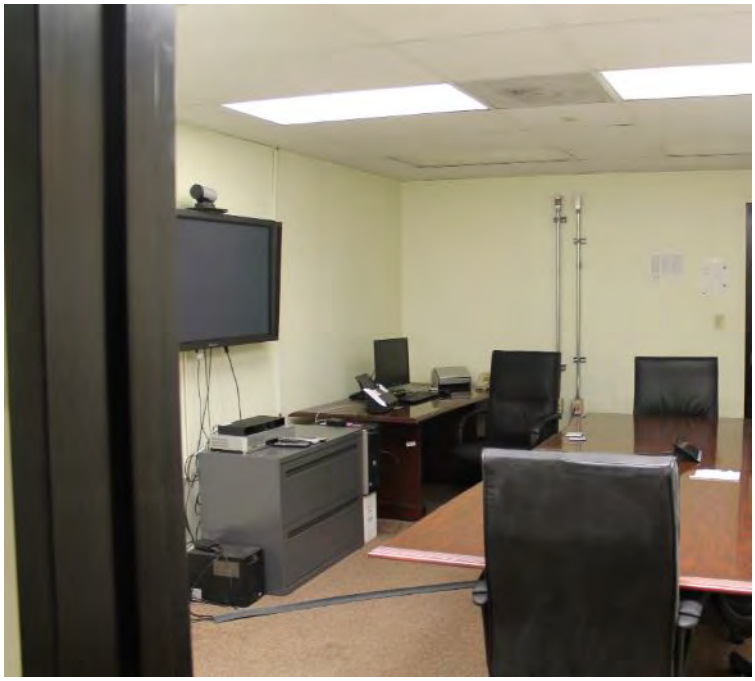


Photo 19: AV-29 ROOM 18

Photo 20: AV-29 ROOM 19

Photo 21: AV-29 ROOM 20

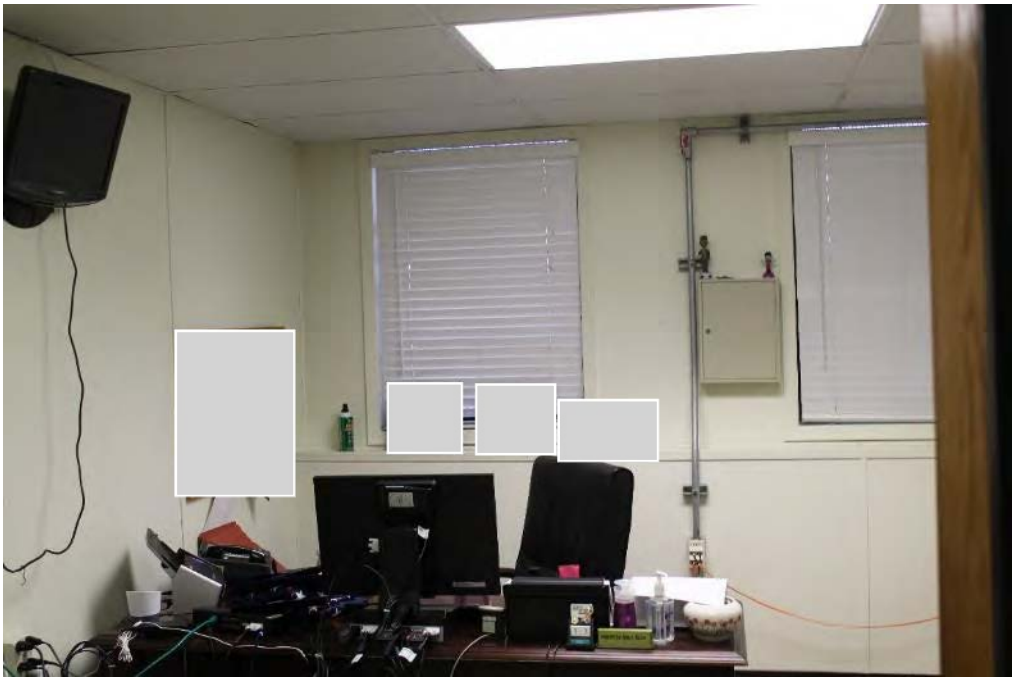


Photo 22: AV-29 ROOM 22

Appendix B-1 — Building AV-29
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 23: AV-29 ROOM 23

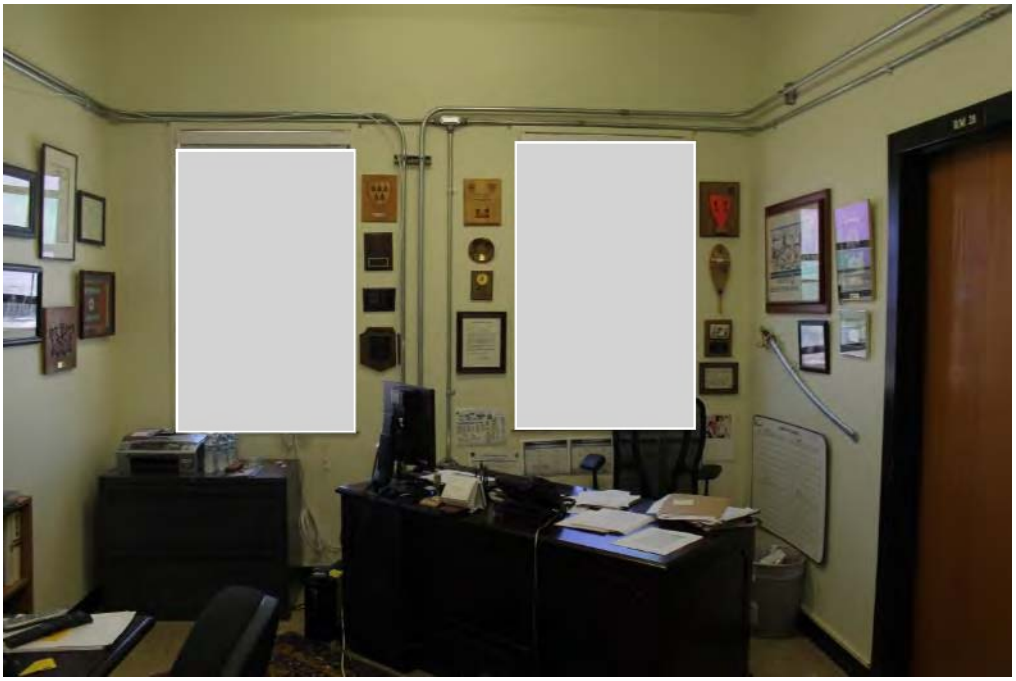


Photo 24: AV-29 ROOM 29

Photo 25: AV-29 ROOM 30

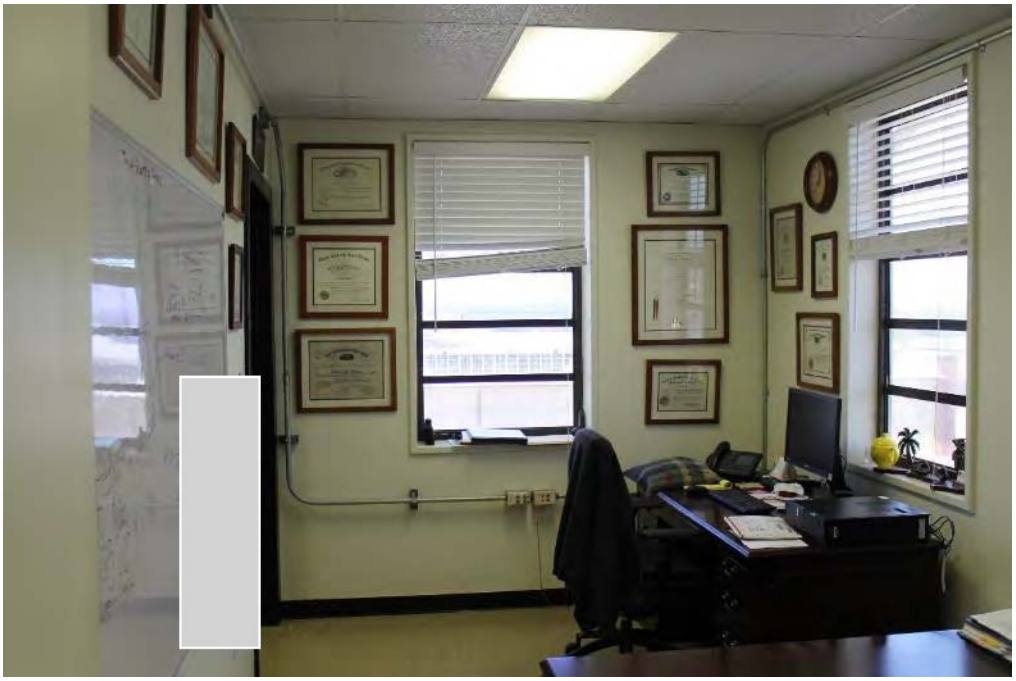


Photo 26: AV-29 ROOM 31

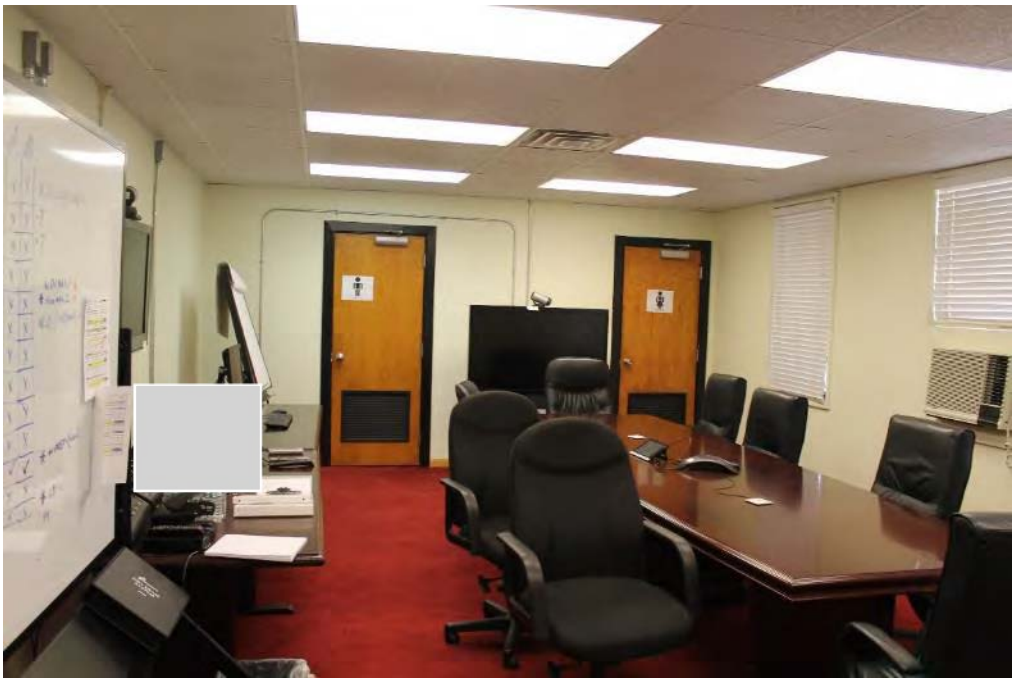


Photo 27: AV-29 ROOM 32 CONFERENCE ROOM

Photo 28: AV-29 ROOM 33-1

Photo 29: AV-29 ROOM 33-2

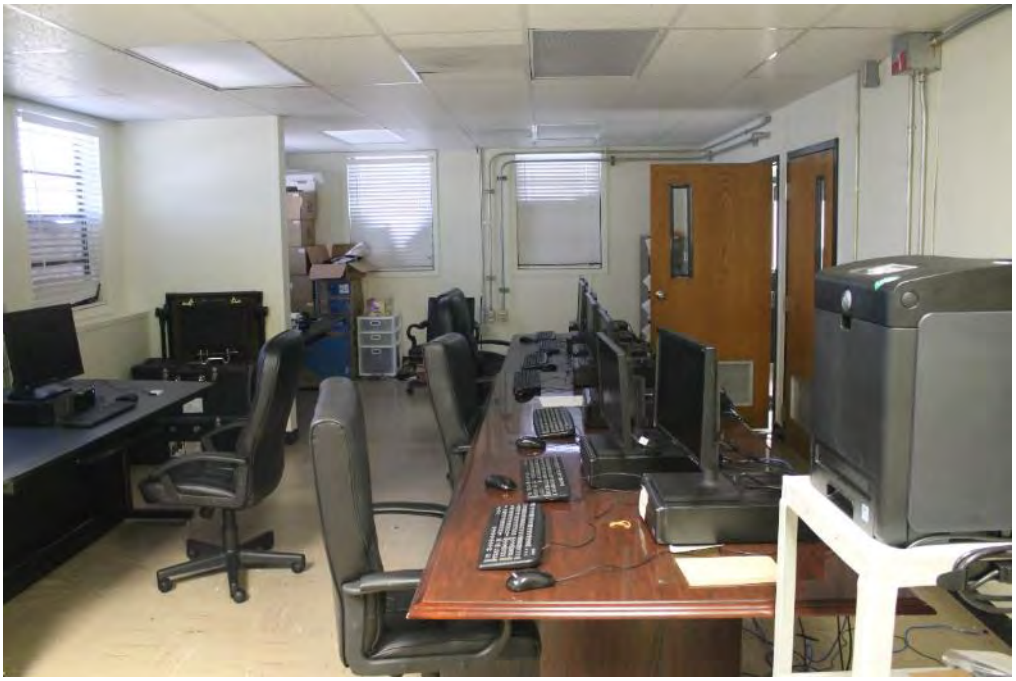


Photo 30: AV-29 ROOMS 24 AND 26

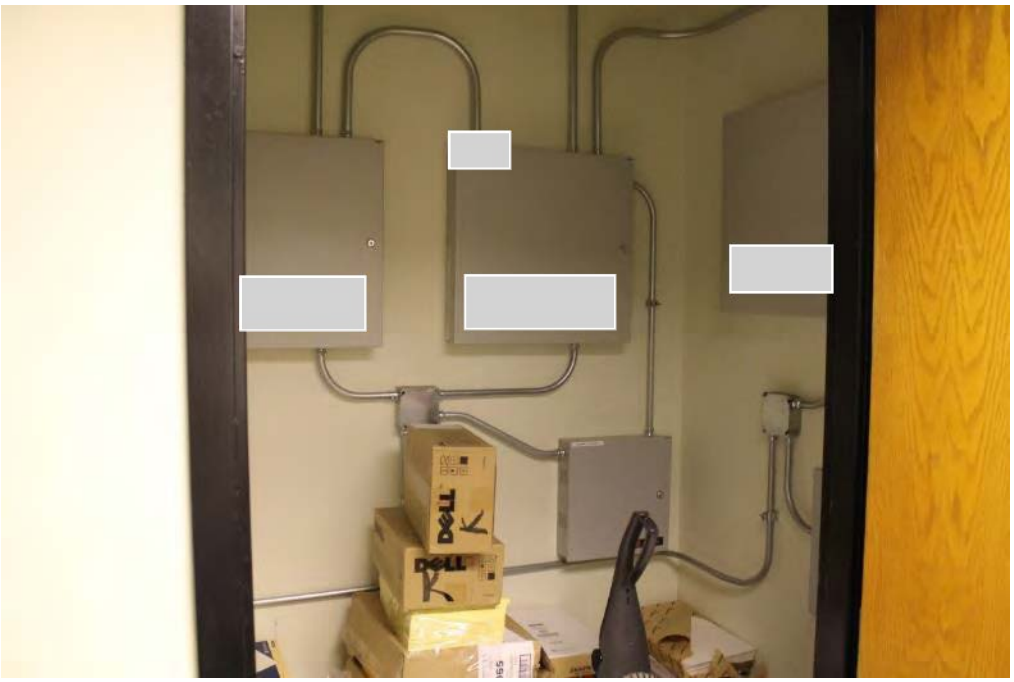


Photo 31: AV-29 UTILITY CLOSET ROOM 10

Photo 32: AV-29 VIEW FACING EAST ALONG SOUTH EXTERIOR

Photo 33: AV-29 VIEW FACING NORTH ALONG WEST EXTERIOR (FRONT)

Appendix B-2

Building AV-34

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

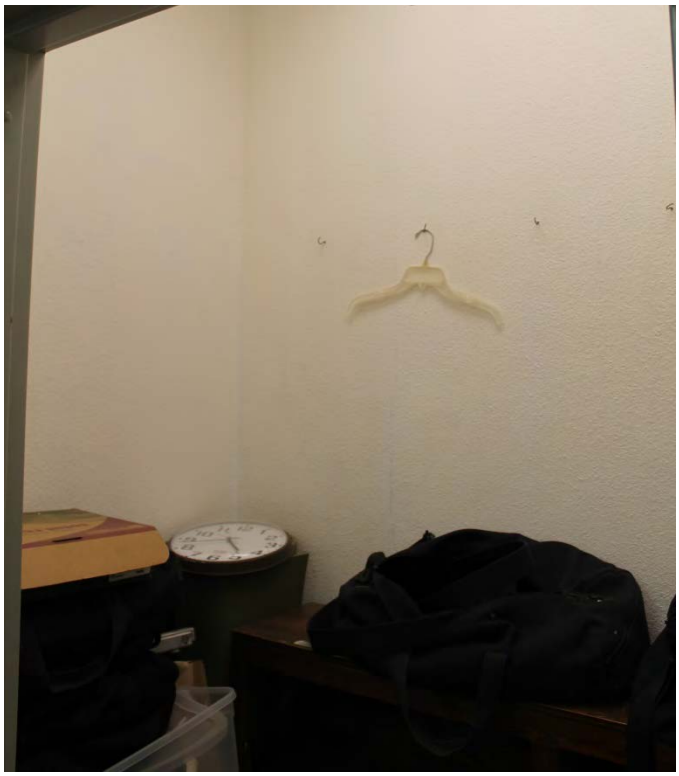


Photo 1: AV-34 CLOSET

Photo 2: AV-34 COURTROOM

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 3: AV-34 DOWNSTAIRS STORAGE

Photo 4: AV-34 HALLWAY FIRST FLOOR

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

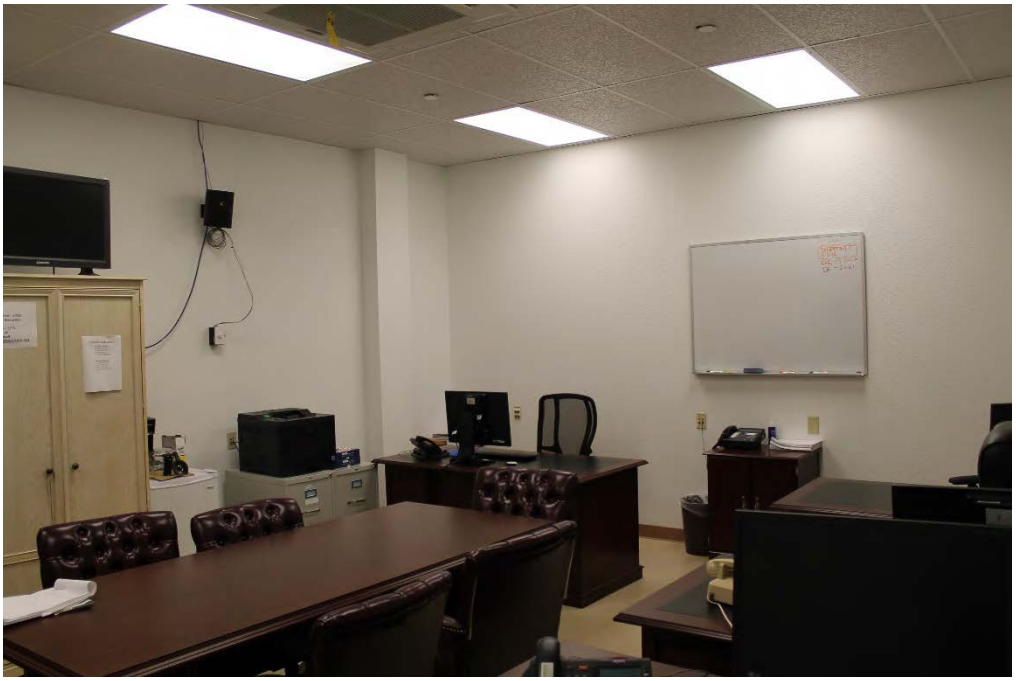


Photo 5: AV-34 JUDGES CHAMBERS

Photo 6: AV-34 MENS LATRINE

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 7: AV-34 MOLD IN HALL CLOSET

Photo 8: AV-34 MOLD IN HALL CLOSET-2

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 9: AV-34 SECONDEARY ENTRANCE ABOVE WHICH ARE LIGHT FIXTURES WITH POSSIBLE MOLD

Photo 10: AV-34 PAINT CHIPS IN ROOM 213B

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 11: AV-34 CEILING TILES WITH MOLD NEAR SECONDARY ENTRANCE

Photo 12: AV-34 ROOM 3

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

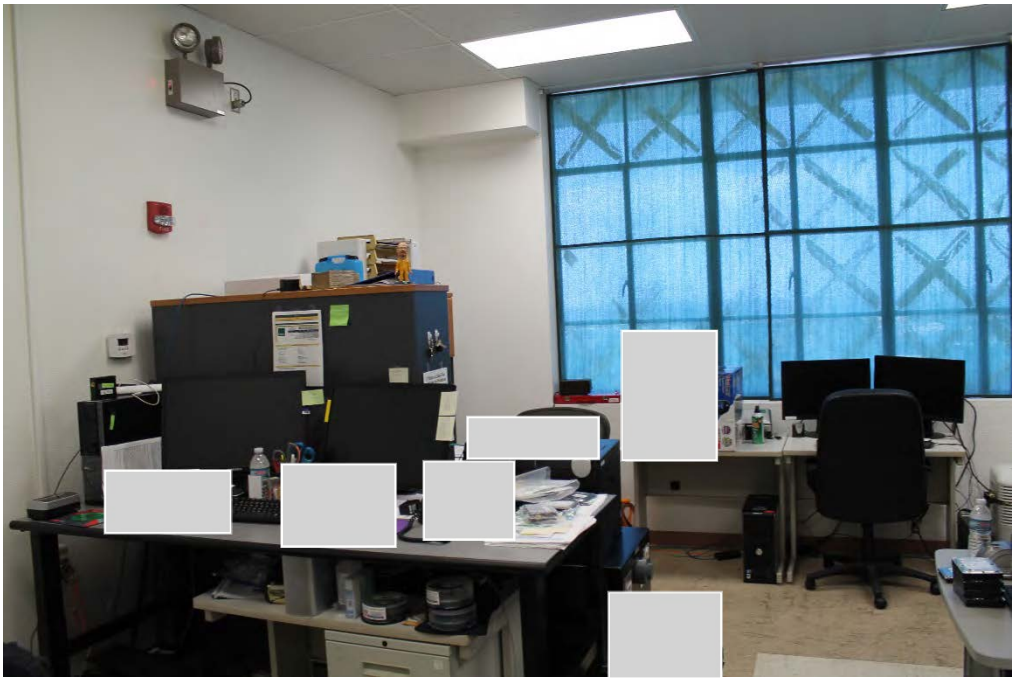


Photo 13: AV-34 ROOM 6 IT ROOM

Photo 14: AV-34 ROOM 7 RESTROOM FIXTURES

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 15: AV-34 ROOM 7 CEILING TILE WITH STAINING

Photo 16: AV-34 ROOM 7

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 17: AV-34 ROOM 8

Photo 18: AV-34 ROOM 13

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 19: AV-34 ROOM 14

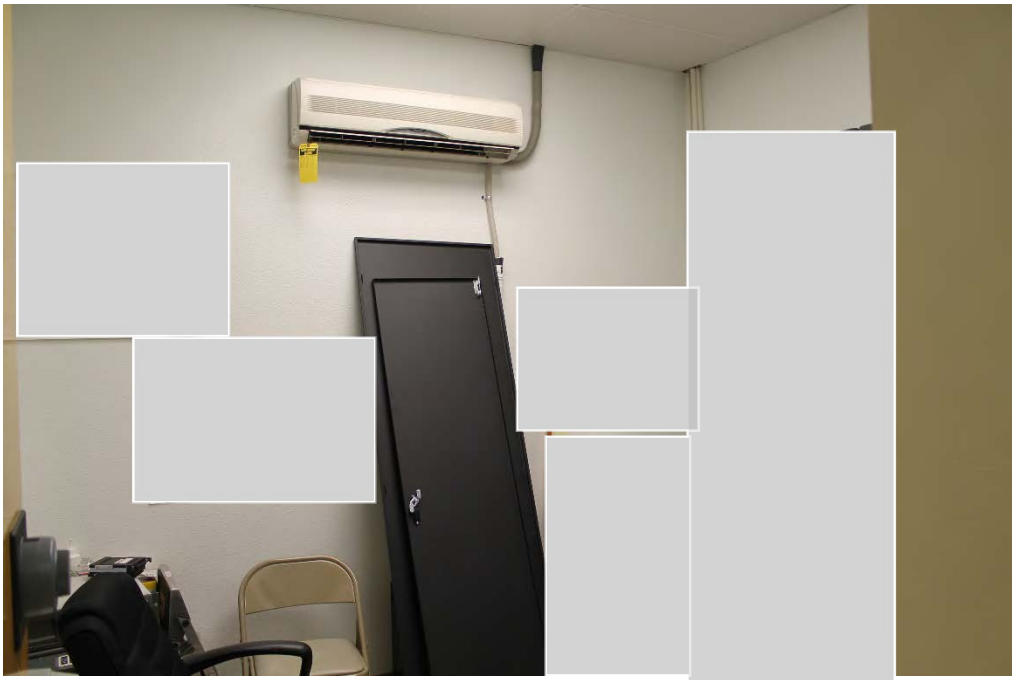


Photo 20: AV-34 ROOM 15

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

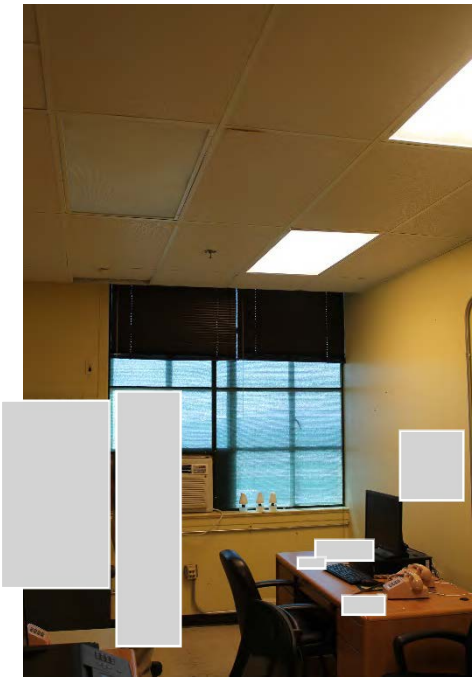


Photo 21: AV-34 ROOM 201

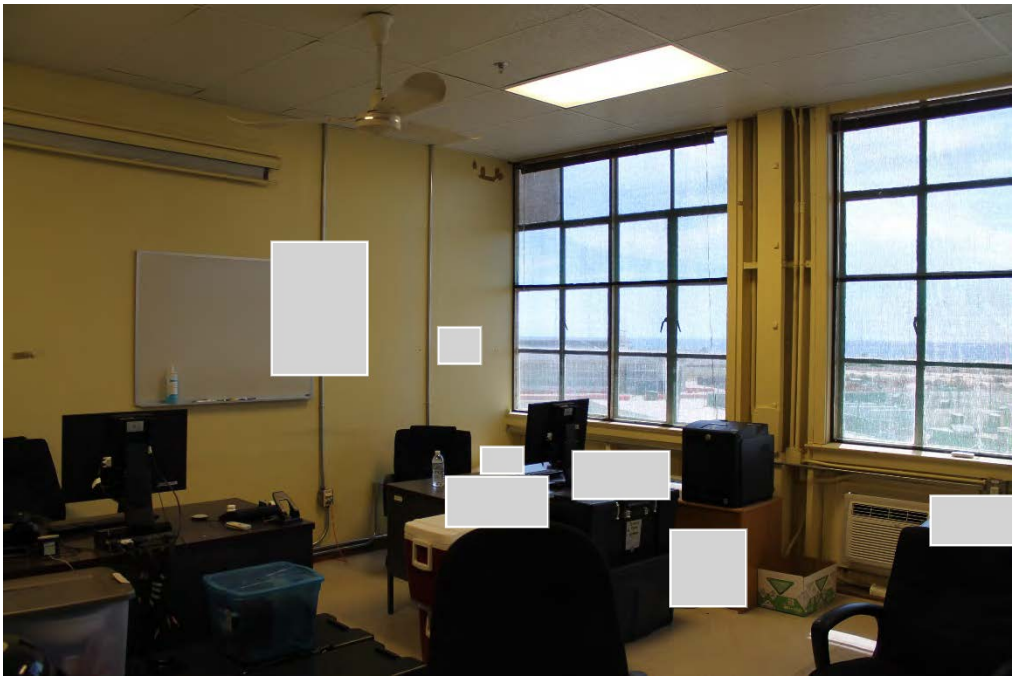


Photo 22: AV-34 ROOM 202

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 23: AV-34 ROOM 203 CEILING

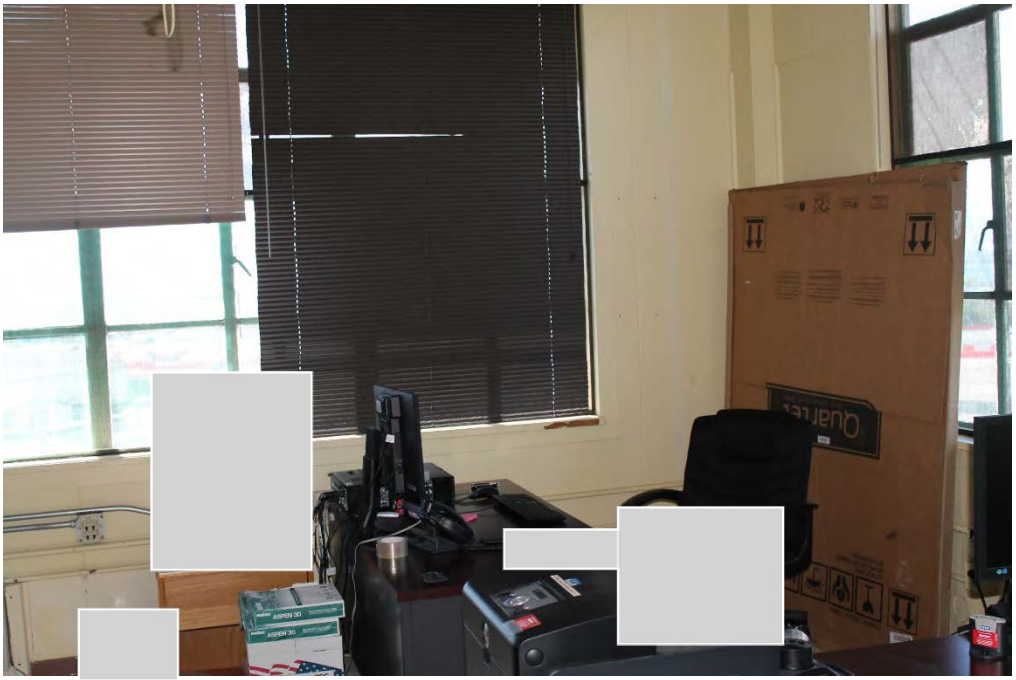


Photo 24: AV-34 ROOM 203-1

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 25: AV-34 ROOM 203-2

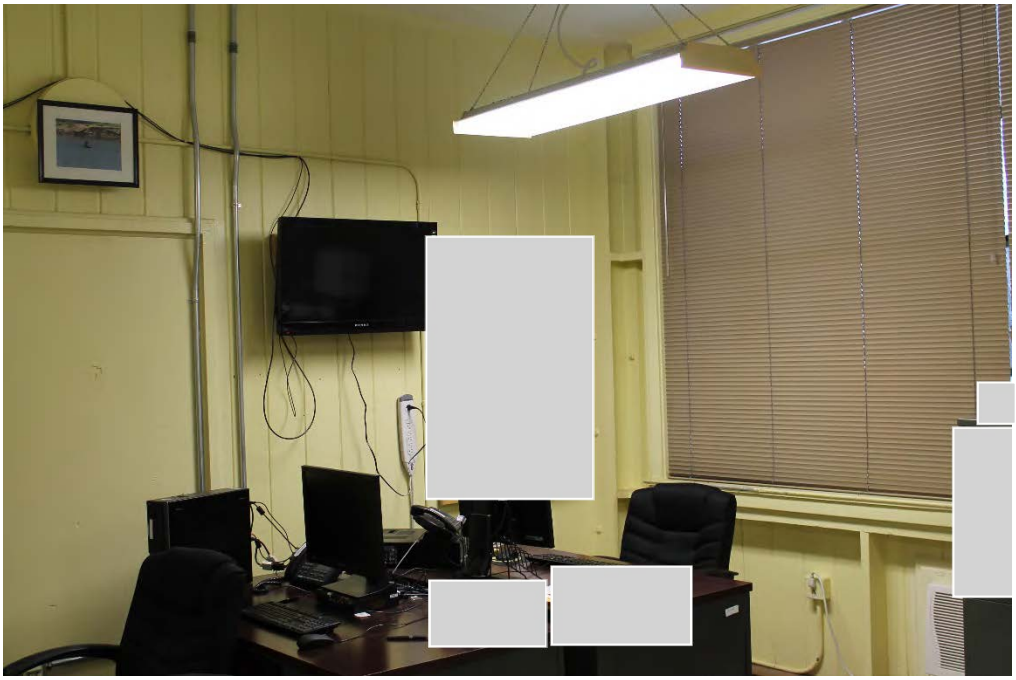


Photo 26: AV-34 ROOM 205

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

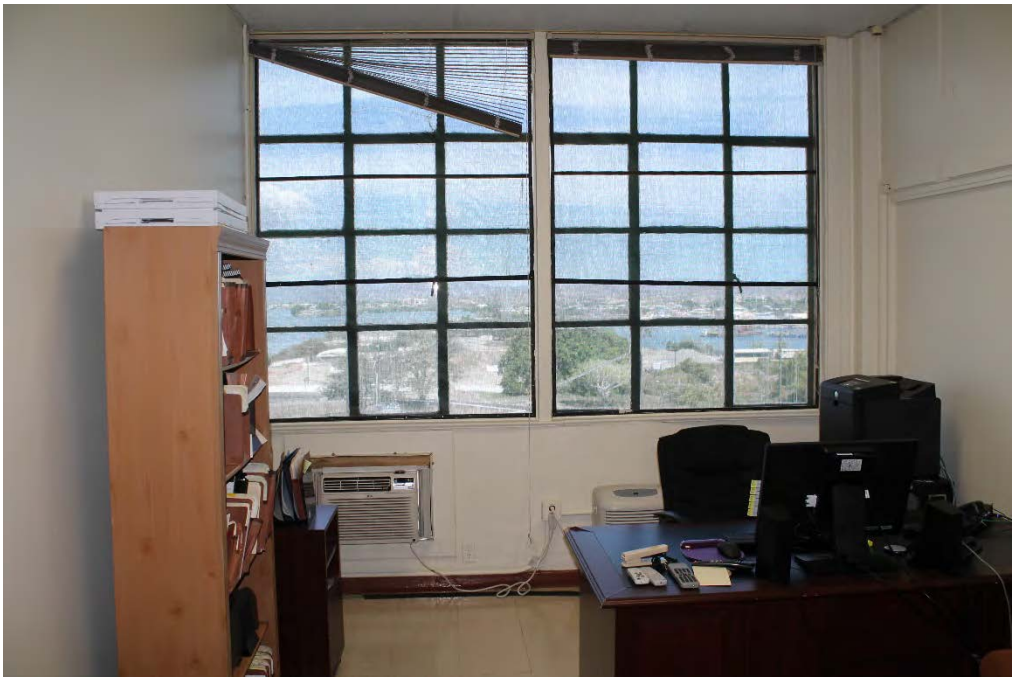


Photo 27: AV-34 ROOM 208

Photo 28: AV-34 ROOM 209

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 29: AV-34 ROOM 210 MOLD IN LIGHT

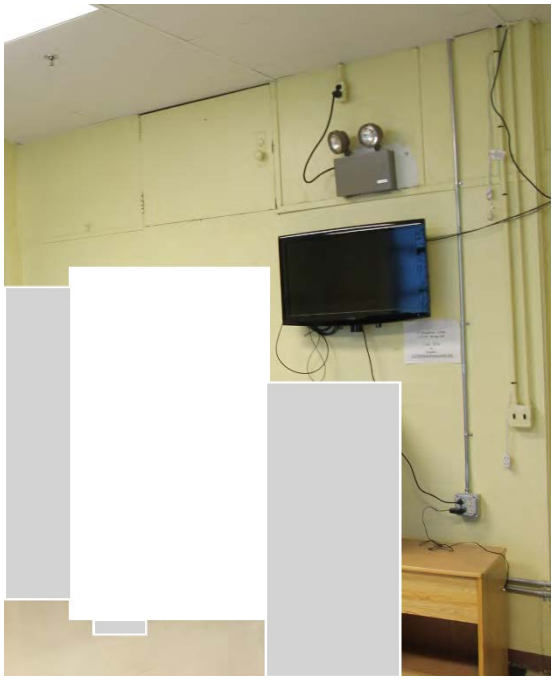


Photo 30: AV-34 ROOM 211

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

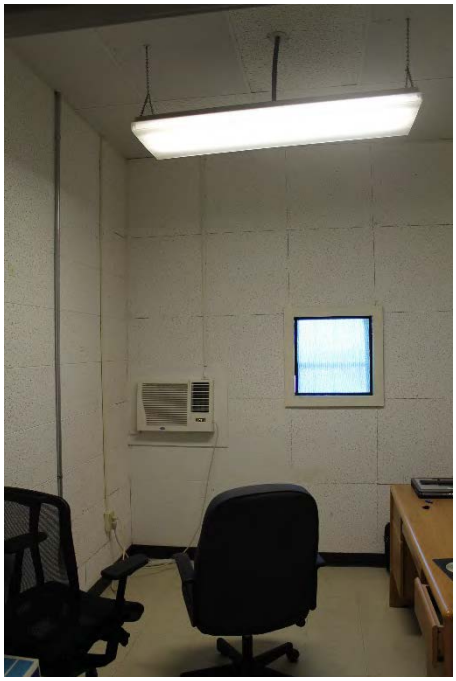


Photo 31: AV-34 ROOM 212

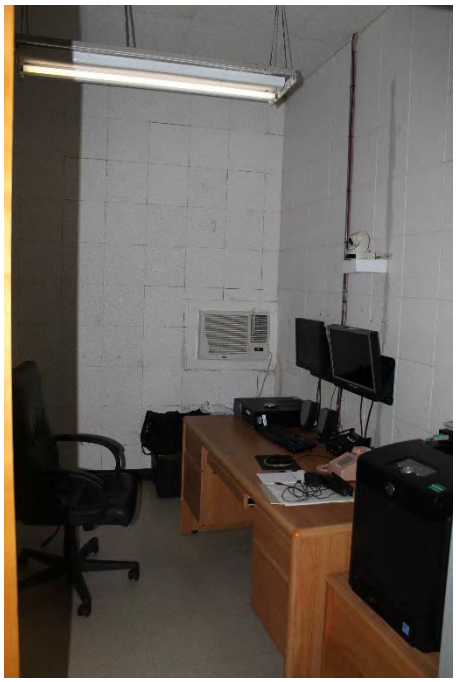


Photo 32: AV-34 ROOM 212-2

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

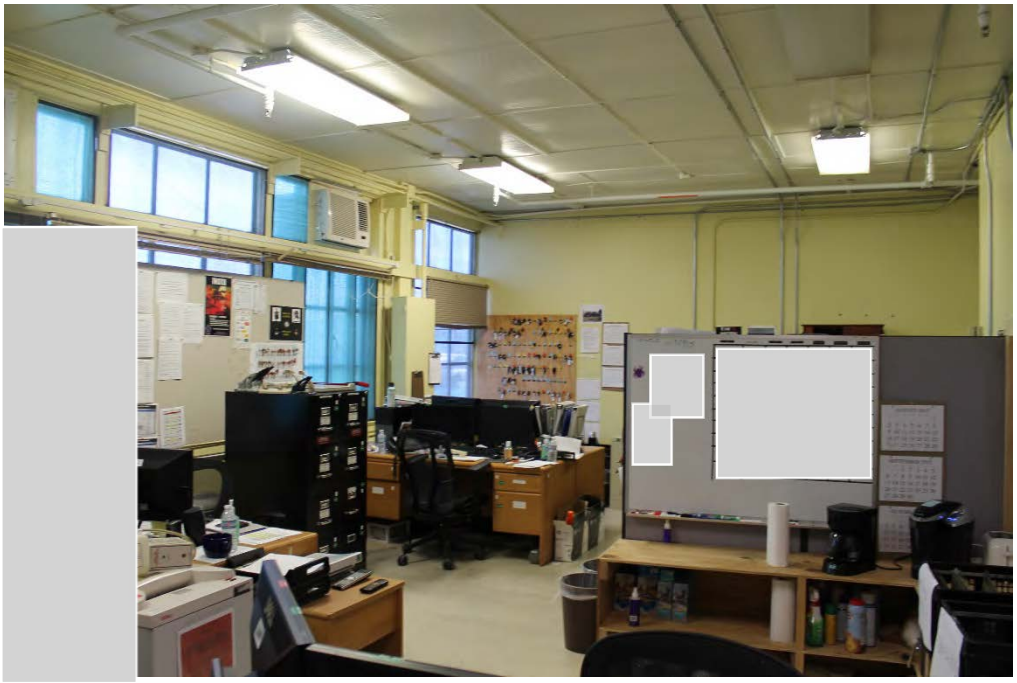


Photo 33: AV-34 ROOM 213

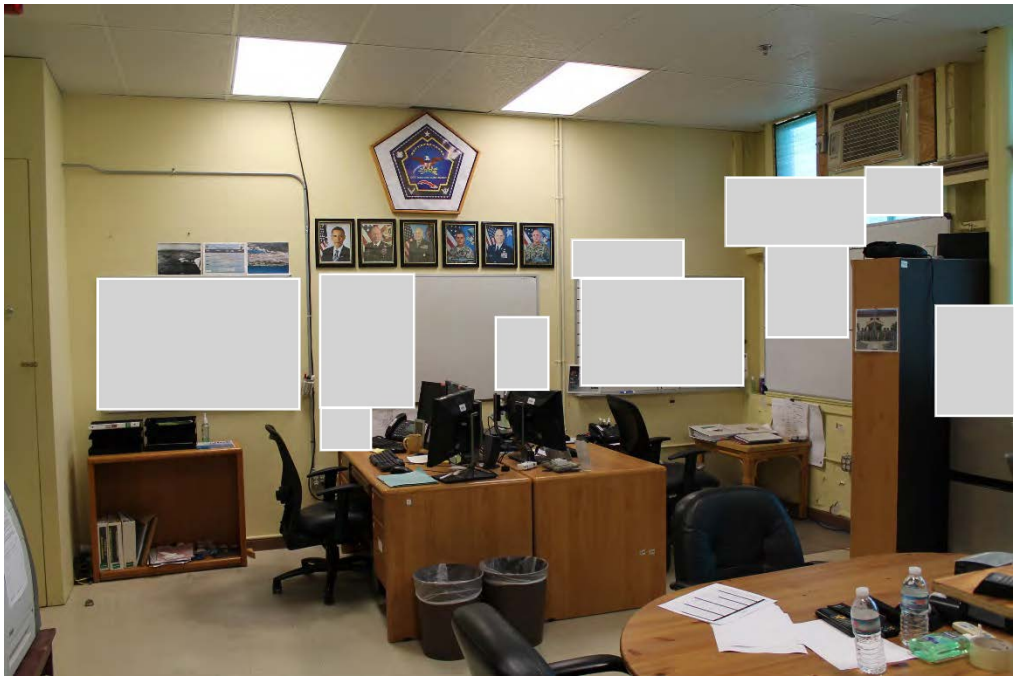


Photo 34: AV-34 ROOM 213

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 35: AV-34 ROOM 213A

Photo 36: AV-34 ROOM 213B

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

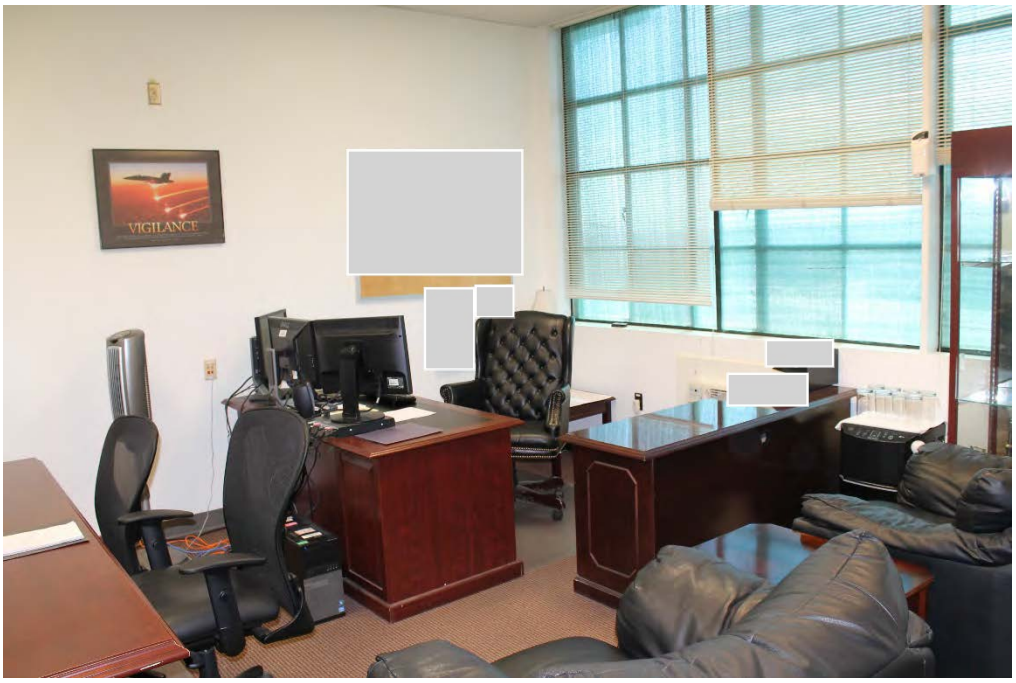
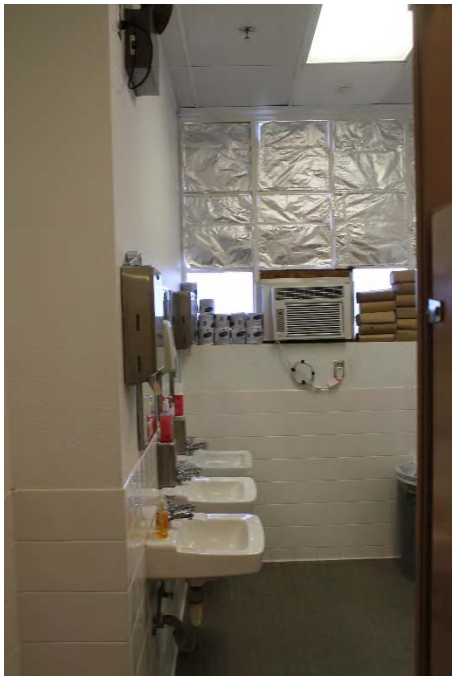


Photo 37: AV-34 ROOM 214

Photo 38: AV-34 ROOM 214 MOLD IN LIGHT PANEL

Appendix B-2 — Building AV-34
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 39: AV-34 ROOM 214



Photos 40 and 41: AV-34 STORAGE AREA BENEATH STAIRS AND WOMENS LATRINE

Appendix B-3

Hangar AV-32

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

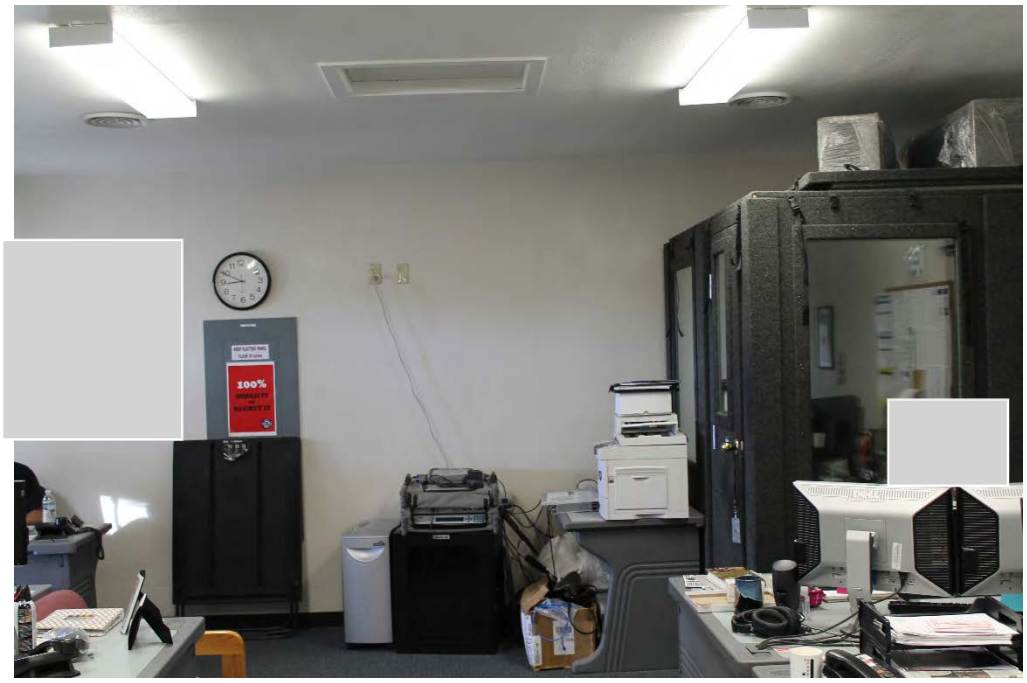


Photo 1: AV-32 — INSIDE MEDIA ROOM #2

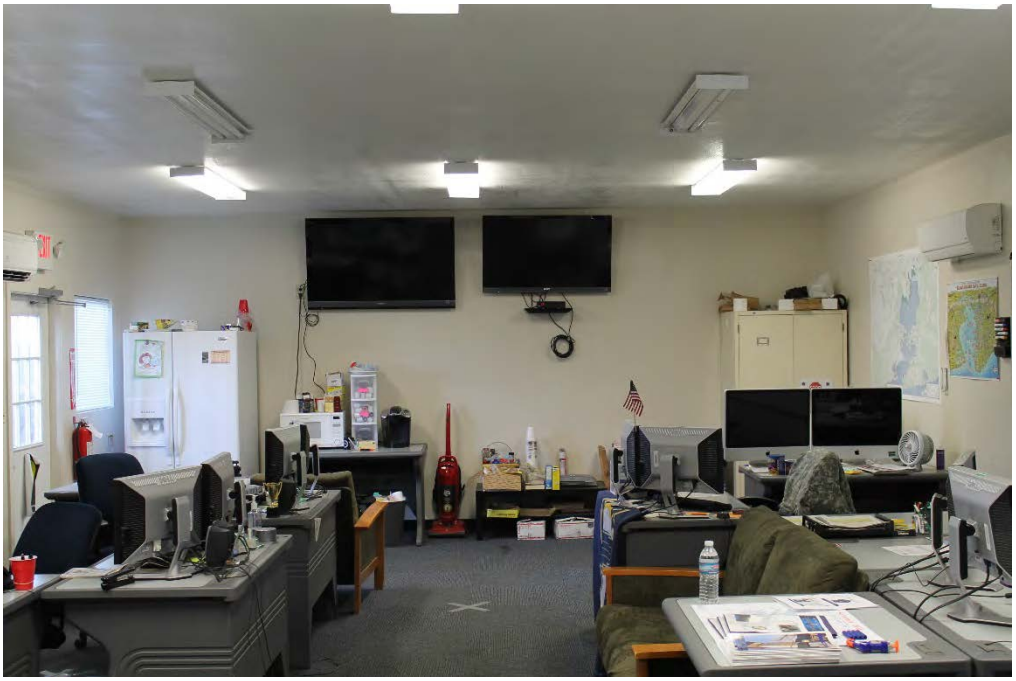


Photo 2: AV-32 — INSIDE MEDIA ROOM #2

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 3: AV-32 — PUBLIC AFFAIRS OFFICE/MEDIA ROOM #2 WTHIN HANGAR

Photo 4: AV-32 — PORTABLE LATRINE SOUTH OF HANGAR

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

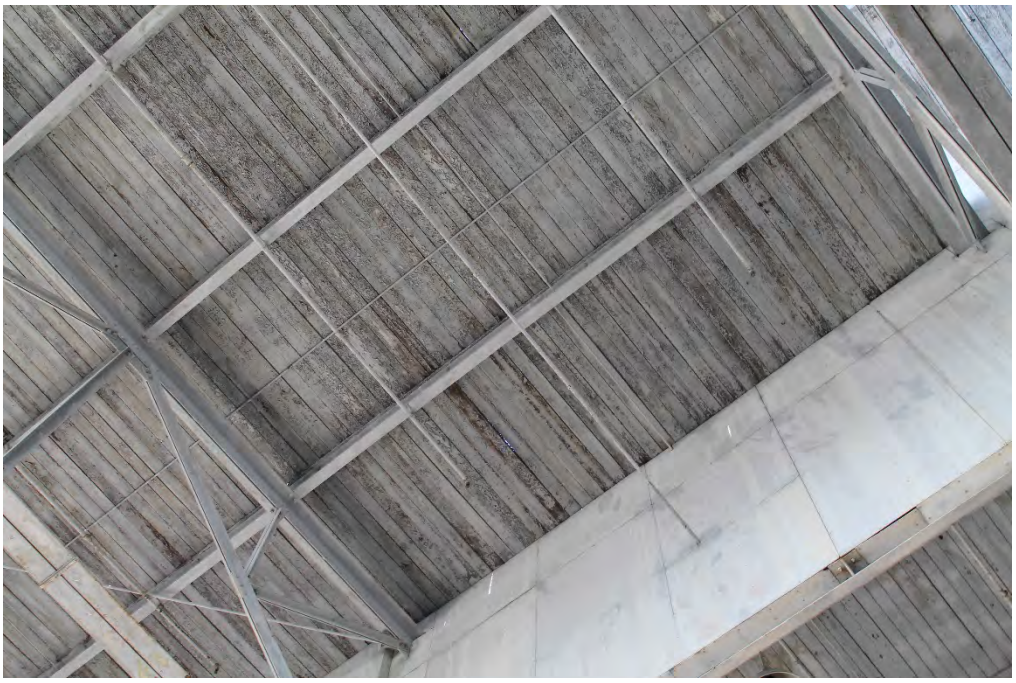


Photo 5: AV-32 — PEELING PAINT ON HANGAR CEILING

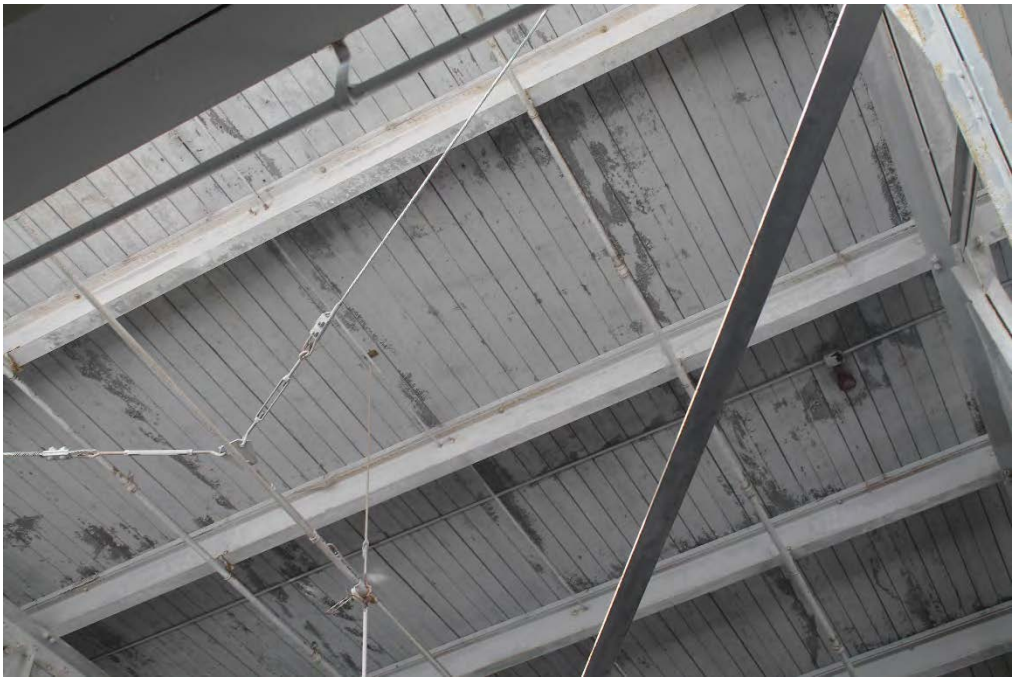


Photo 6: AV-32 — PEELING PAINT ON HANGAR CEILING

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 7: AV-32 — MEZZANINE HALL PROVIDING ACCESS TO SECOND FLOOR ROOMS ON EAST SIDE OF HANGAR

Photo 8: AV-32 — UPSTAIR ROOMS IN HANGAR

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 9: AV-32 — WATER SUPPLY TO PORTABLE LATRINE SOUTH OF HANGAR

Photo 10: AV-32 — MEDIA MULTI-PURPOSE ROOM (MODULAR STRUCTURE WITHIN HANGAR)

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 11: AV-32 — MEDIA OPERATIONS CENTER ROOM #4

Photo 12: AV-32 — PAINT CHIPS ON FLOOR

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 13: AV-32 — PORTABLE LATRINE ON SOUTH SIDE OF HANGAR

Photo 14: AV-32 — SEWAGE TRICKLING FILTER TREATMENT PLANT SOUTH OF HANGAR

Appendix B-3 — Hangar AV-32
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 15: AV-32 — SEWAGE TRICKLING FILTER TREATMENT PLANT SOUTH OF HANGAR

Photo 16: AV-32 — WATER LINE EAST OF PORTABLE LATRINES, OUTSIDE SOUTHEAST CORNER OF HANGAR

Appendix B-4

Camp Justice — Miscellaneous Photographs

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 1: 55-GALLON DRUM OF DIESEL FORMERLY USED TO FUEL SHOWER/LAUNDRY TENT HOT WATER HEATERS AND PORTABLE GENERATOR; THIS SYSTEM HAS BEEN DISCONTINUED

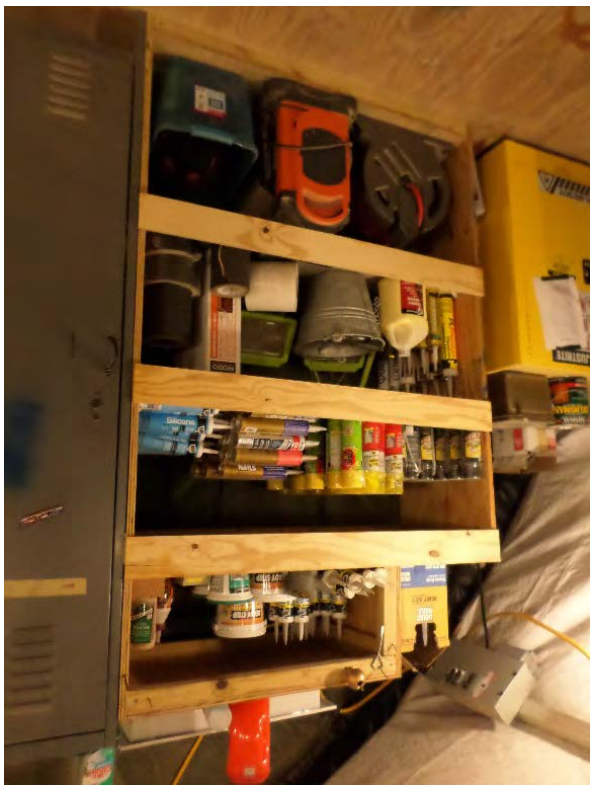


Photo 2: BEEF MOTOR POOL HAZARDOUS MATERIAL STORAGE

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 3: BEEF MOTOR POOL OIL/PETROLEUM PRODUCT DRUM STORAGE

Photo 4: BEEF MOTOR POOL TENT WITH HAZARDOUS/FLAMMABLE MATERIAL LOCKERS AND TIRES

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 5: BEEF MOTOR POOL USED OIL STORAGE

Photo 6: BEEF MOTOR POOOL NON-HAZARDOUS WASTE AND USED OIL ACCUMULATION AREA

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 7: BEEF STOCKYARD TENT

Photo 8: BEEF STOCKYARD UTILITY TRAILER

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 9: CUZCO INTERIOR

Photo 10: OLD CUZCOS

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 11: WASTEWATER COLLECTION BLADDERS NEAR STOCKYARD AERATOR AT SOUTH END OF CAMP JUSTICE

Photo 12: STAINING ON AND AROUND DIESEL FUEL DRUM CONTAINMENT NEAR HOT WATER HEATER FOR TENT SHOWERS AND LAUNDRY

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 13: STAINING ON AND AROUND DIESEL FUEL DRUM CONTAINMENT

Photo 14: TENT L1-1

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 15: TENT L1-2

Photo 16: TENT L1-3

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 17: TENT L1-4

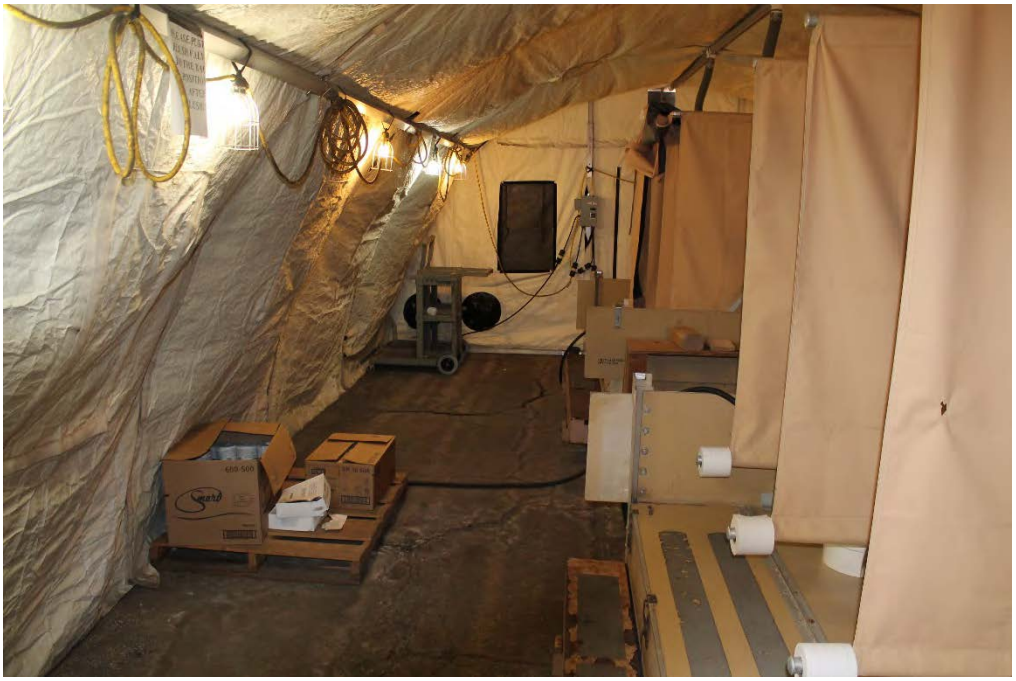


Photo 18: TENT L1-5

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 19: TENT SHOWER

Photo 20: TENTS AND NON-POTABLE WATER (FOR LATRINES AND SHOWERS) STORAGE TANK

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 21: VIEW FACING AERATOR AND WASTEWATER BLADDERS ALONG SOUTHWEST EDGE OF CAMP JUSTICE

Photo 22: VIEW FACING EAST ALONG NORTH SIDE OF TENTS S5, S2, AND S1

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 23: VIEW FACING EAST ALONG SOUTH BORDER OF CAMP JUSTICE AT SURPLUS STORAGE AREA

Photo 24: VIEW FACING EAST ALONG SOUTH SIDE OF TENTS LA1, S3, S4

Photo 25: VIEW FACING EAST AT OLD CUZCOS 24 AND 25

Photo 26: VIEW FACING EAST AT OLD CUZCOS 24 AND 25

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 27: VIEW FACING EAST-NORTHEAST AT HANGAR AV-32

Photo 28: VIEW FACING NORTH ALONG SOUTHWEST SIDE OF CAMP JUSTICE AT STOCKYARD, BEEF MOTOR POOL, AND AERATOR

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 29: VIEW FACING NORTH EAST

Photo 30: VIEW FACING NORTHEAST

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 31: VIEW FACING SOUTHEAST ALONG SOUTH END OF CAMP JUSTICE

Photo 32: VIEW FACING SOUTHEAST

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 33: VIEW FACING SOUTHWEST FROM CAMP JUSTUCE AERATOR AND BLADDERS

Photo 34: VIEW FACING SOUTHWEST

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 35: VIEW FACING WEST ALONG NORTH SIDE OF OLD CUZCOS AT MESS TENT M4

Photo 36: VIEW FACING WEST ALONG SOUTH SIDE OF NEW CUZCOS

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 37: VIEW FACING WEST ALONG SOUTHWEST BOUNDARY OF CAMP JUSTICE AT GRAVEL PILE

Photo 38: VIEW FACING WEST AT NORTH SIDE OF NEW CUZCOS

Appendix B-4 — Camp Justice Miscellaneous
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 39: VIEW FACING WEST BETWEEN TWO ROWS OF NEW CUZCOS

Photo 40: VIEW LOOKING NORTH TOWARD CUZCOS 15 AND 17 AT BLADDERS BETWEEN TENTS L2 AND L1

Photo 41: VIEW OF APRON CONNECTING RUNWAY 1-19 TO SOUTH SIDE OF HANGAR AV-32

Appendix B-5
Adjoining Properties

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 1: CONTRACTOR AREA — TRANSFORMER CHANGE-OUT STORAGE

Photo 2: CONTRACTOR AREA — BONEYARD STORAGE

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 3: CONTRACTOR AREA LAYDOWN YARD

Photo 4: CONTRACTOR AREA QUONSET HUT/K-SPAN

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 5: CONTRACTOR AREA QUONSET HUTS/K-SPANS

Photo 6: FIRE-FIGHTER TRAINING AREA DEBRIS AT BASE OF DRAINAGE FEATURE

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 7: FIRE FIGHTER TRAINING AREA ENTRANCE

Photo 8: PROPANE CYLINDERS AT FIRE-FIGHTER TRAINING AREA

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 9: FIRE FIGHTER TRAINING AREA SHED

Photo 10: UNIDENTIFIED PIPE ON HILL ABOVE (WEST OF) THE FIRE FIGHTER TRAINING AREA

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 11: UNIDENTIFIED PIPE ON HILL ABOVE (WEST OF) THE FIRE FIGHTER TRAINING AREA

Photo 12: VIEW OF FIRE FIGHTER TRAINING AREA FROM TOP OF HILL LOOKING EAST

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 13: VIEW OF FIRE FIGHTER TRAINING AREA FROM TOP OF HILL LOOKING SOUTHEAST

Photo 14: LOOKING NORTH FROM FIRE FIGHTER TRAINING AREA AT PIPELINE SOUTHEAST OF BUNKER AV-31

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 15: VIEW AT NORTH END OF FORMER OCEAN VIEW PARK; POSSIBLY ASSOCIATED WITH FORMER AIRFIELD LIGHTING/ELECTRICAL

Photo 16: FORMER OCEAN VIEW PARK

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 17: FORMER OCEAN VIEW PARK

Photo 18: VIEW FACING EAST ACROSS FIELD WITH SOUTH END OF CAMP JUSTICE AND ADJOINING CONTRACTOR STORAGE COMPLEX

Photo 19: VIEW FACING NORTH

Photo 20: VIEW FACING NORTHEAST ACROSS FIELD AND SOUTHWEST CAMP JUSTICE BARRIER

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 21: VIEW FACING NORTH-NORTHEAST ACROSS FIELD EAST OF TENTS

Photo 22: VIEW FACING SOUTH

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

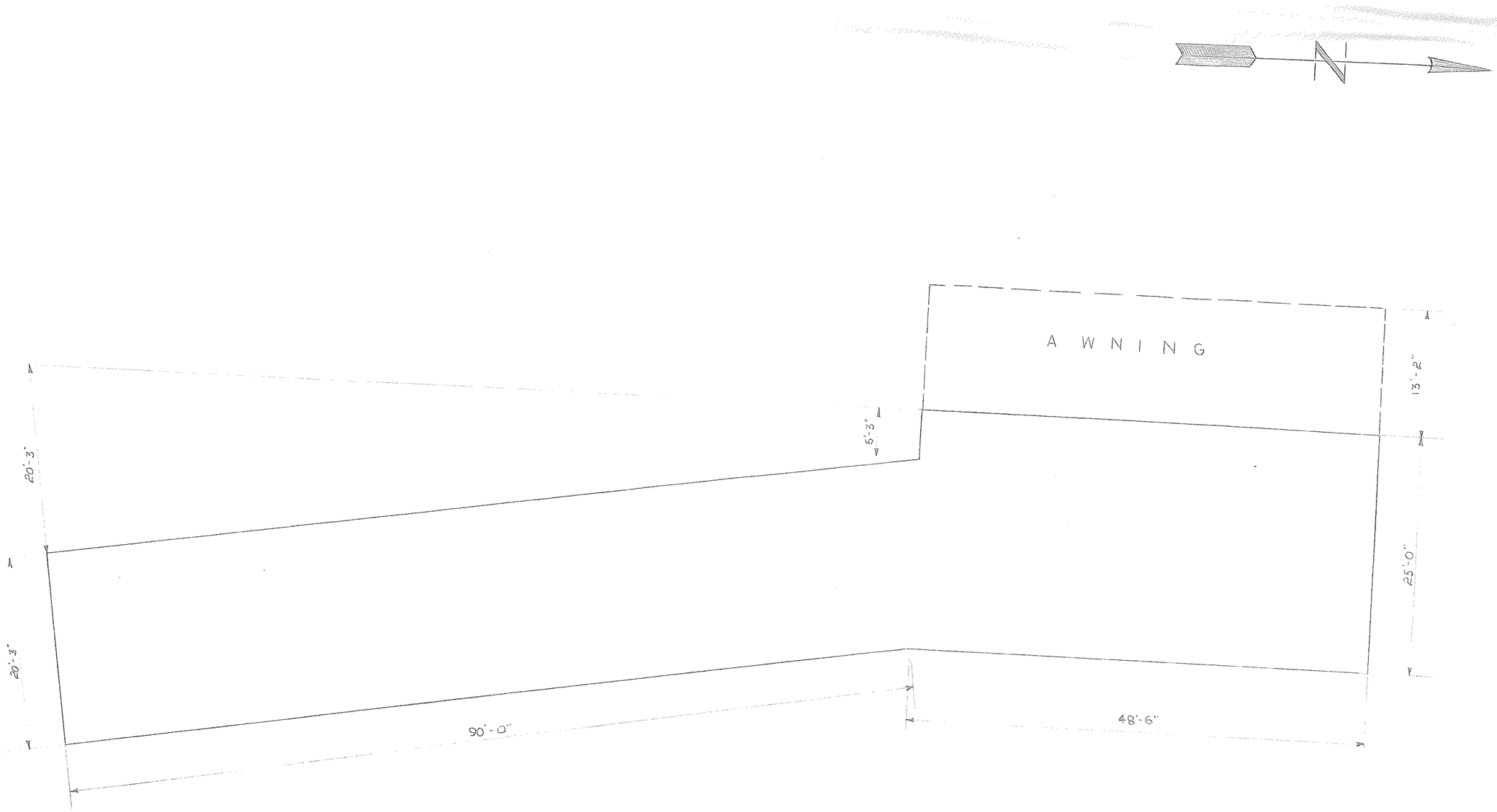
Photo 23:

Photo 24: VIEW FACING NORTH AT CAMP JUSTICE (BUILDING AV-34 IS EVIDENT IN BACKGROUND) FROM SOUTH PORTION OF RUNWAY 1-19

Appendix B-5 – Adjoining Properties
Camp Justice
Naval Station Guantanamo Bay, Cuba

Photo 25: VIEW FACING WEST ACROSS CORINASO COVE AT MCCALLA HILL

Appendix C
Historical Figures, Schematics, Plans, and Drawings



SCALE: 1/8" = 1'-0"

NOTE:
LOCATED EAST OF
McCALLA HILL AIRFIELD

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. BM-1689-0163

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN R. CAJKA
TR
CHK
SUPV
IN CHARGE
REVIEWED BY

BLDG. #161
LINE MAINTENANCE
FLOOR PLAN

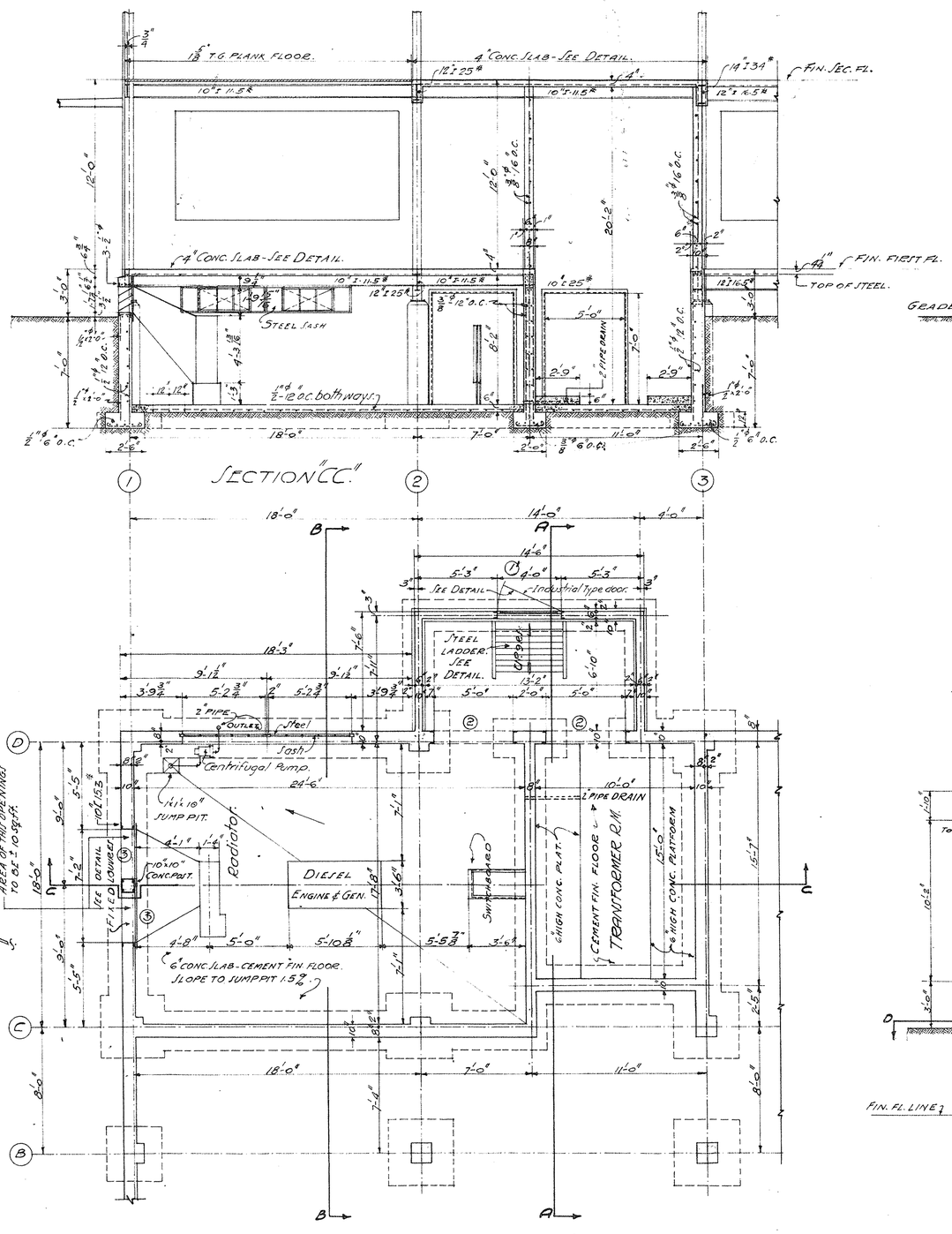
APPROVED — DATE
COMMANDING OFFICER PUBLIC WORKS CENTER

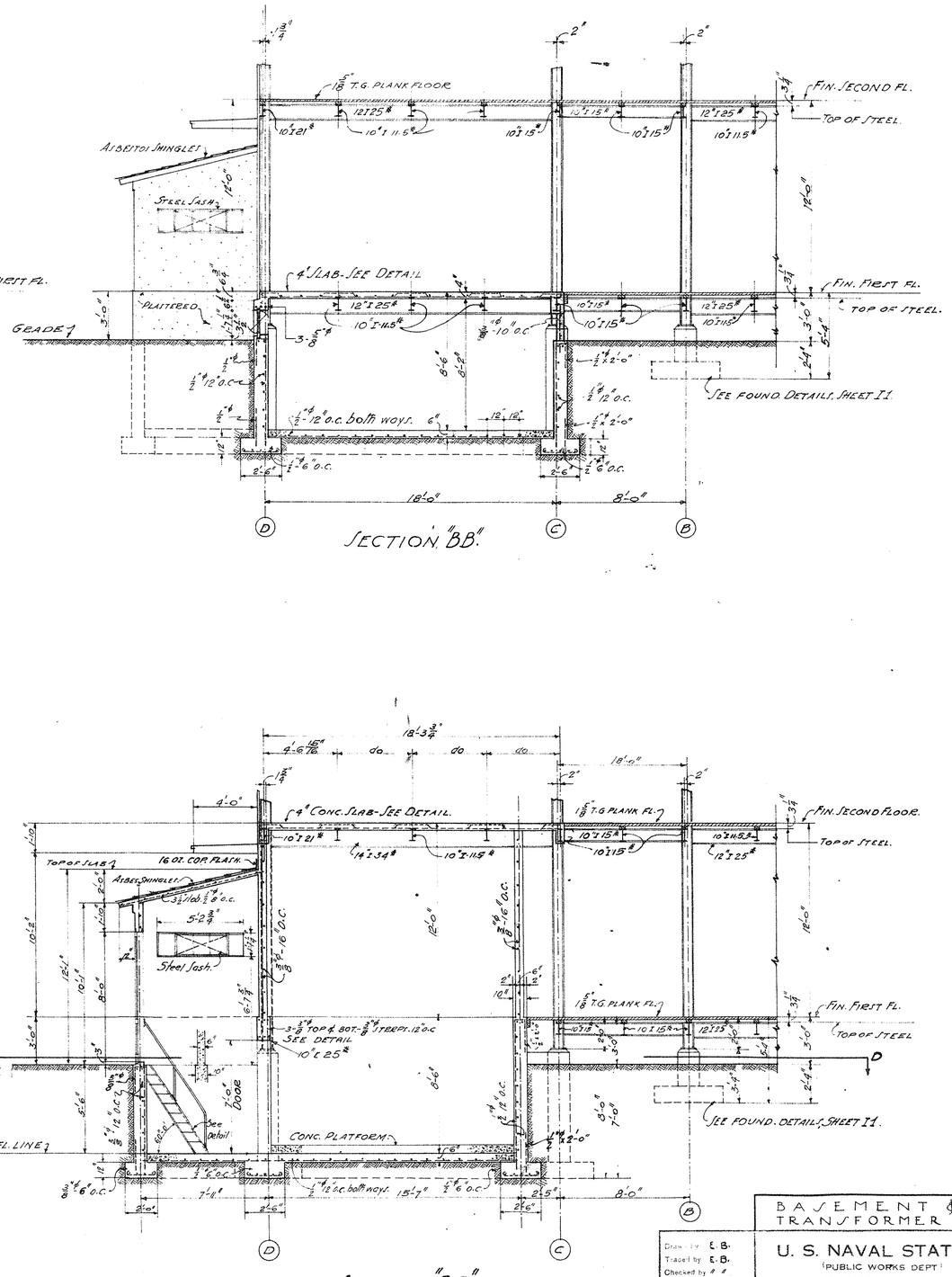
SATISFACTORY TO
DATE

SCALE AS NOTED — SPEC
SHEET 1 OF 1 NBY
Y & D DRAWING NO.

BANENE 195L TRACING PAPER 67924

NOTE. FOR DETAILS OF STEEL LADDER, LOUVERS, CONCRETE SLABS, STRUCTURAL STEEL AND FOOTINGS, SEE SHEET I-18.





NOTE. FLOOR SLAB SHALL NOT BE POURED UNTIL EXACT SIZE & LOCATION OF FOUNDATIONS FOR DIESEL ENGINE & EXHAUST FAN ARE DETERMINED.

NOTE. FOR FURTHER INFORMATION ABOUT DIESEL PLANT, SEE DRG. I 21

NEW BASEMENT AND TRANSFORMER ROOM.
SCALE: 1/4" = 1'-0".

BASEMENT & TRANSFORMER RM.

U. S. NAVAL STATION
(PUBLIC WORKS DEPT.)
GUANTANAMO BAY, CUBA

AVIATION PROJECT
ADMINISTRATION & OPERATIONS BUILDING.
FREDERICK SNARE CORP., NEW YORK
CONTRACTING ENGINEERS

Drawn by E. B.
Traced by E. B.
Checked by " "
Date May 31-41
REVISIONS

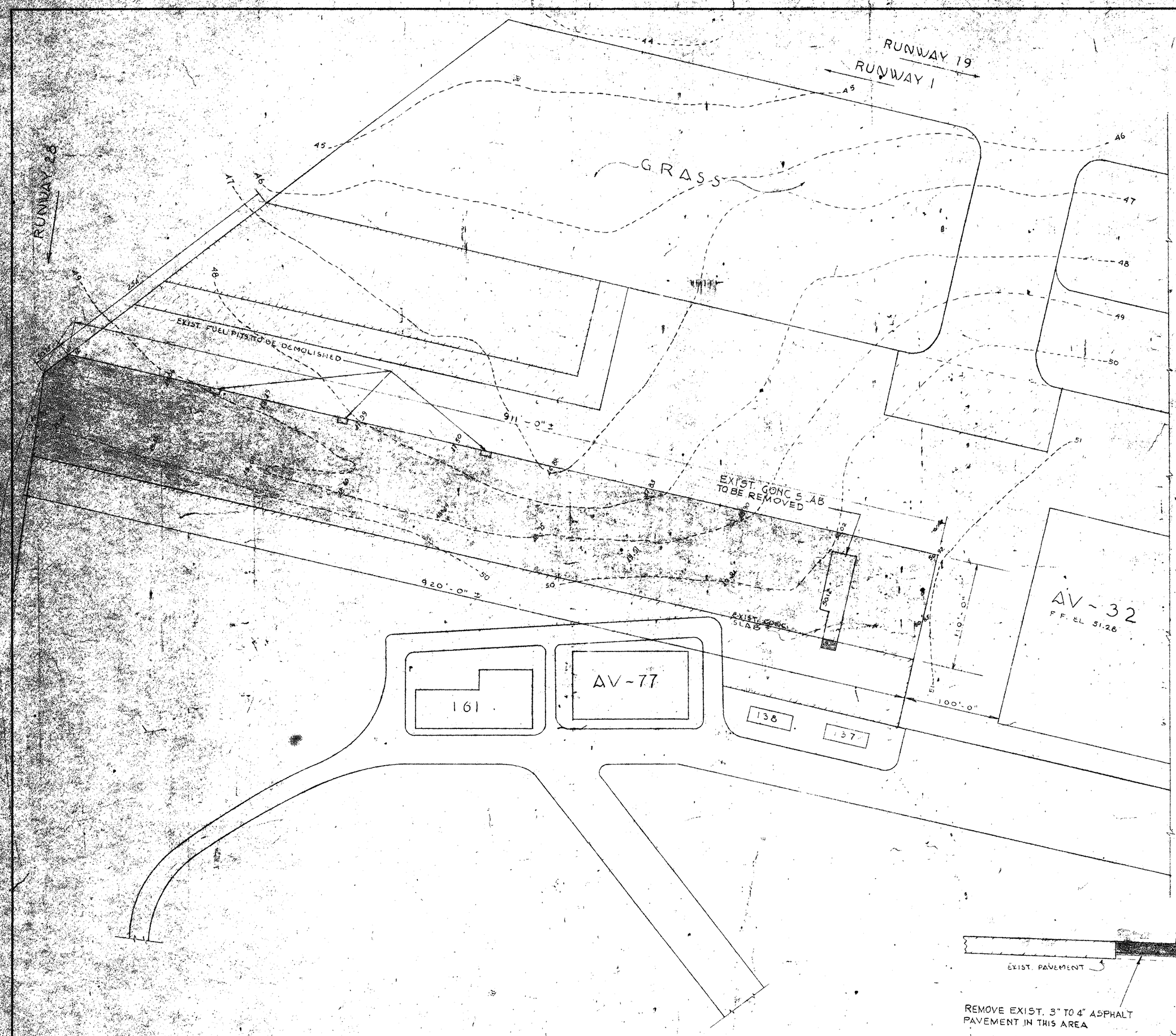
REFERENCES:
SPEC. NO.
P.W. DWG. NO.

CONTR. NO. NOy 4162
DRAW'G NO.
SERIAL: △.P
I-17

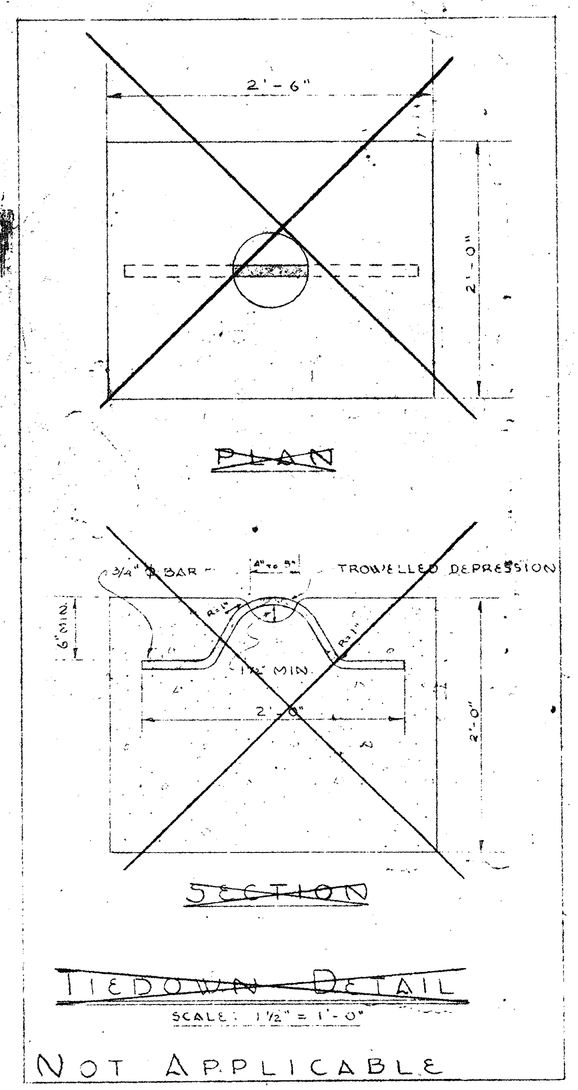
Y&D Drawing No. 335052

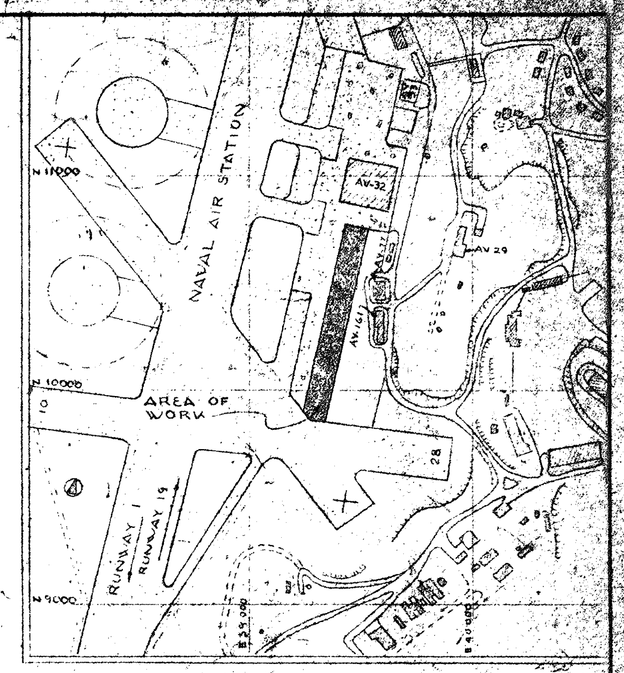
APPROVED 6-17-41 BY W. J. Williams, RESIDENT OFFICER IN CHARGE
APPROVED 6-18-41 BY H. G. Clark, P. W. OFFICER IN CHARGE

R&PL 1953 350-34-108

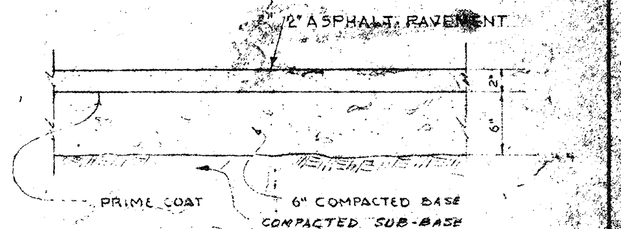


PLAN
SCALE: 1" = 100'-0"





LOCATION PLAN
SCALE: 1" = 400'



TYPICAL PAVING SECTION
SCALE: 1½" = 1'-0"

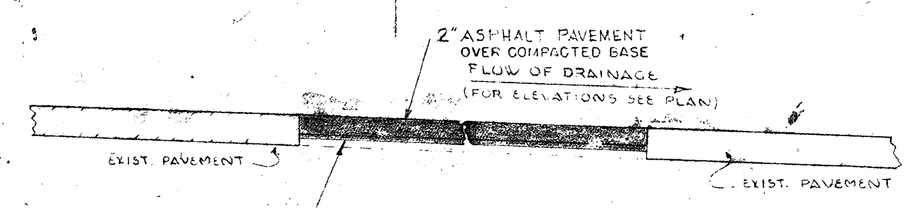
GENERAL NOTES

1. LOOSE SUBGRADE MATERIAL SHALL BE SCARIFIED AND RECOMPACTED, OR IF OF POOR QUALITY, SHALL BE REMOVED AND REPLACED WITH CORAL MATERIAL WHICH SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 6" IN DEPTH TO 90% MAXIMUM DENSITY. DO NOT EXCAVATE SUITABLE CORAL FOUND AT SITE.

2. ALL EXISTING TIEDOWNS AT THE REPAIRING AREA THAT ARE IN GOOD CONDITION SHALL BE RE-USED. THE NEW PAVEMENT AREA REQUIRES 150 TIEDOWNS.

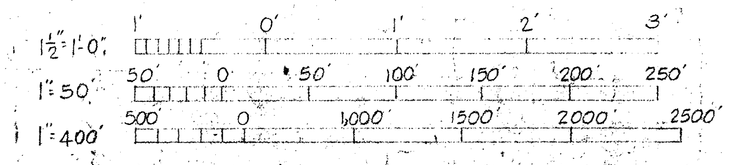
2. THE WALLS OF THREE EXISTING FUEL PITS SHALL BE DEMOLISHED, PITS FILLED WITH GOOD BASE MATERIAL AND PAVED TO MEET SURROUNDING GRADE. REMOVE PIPES & VALVES FROM PITS. EXISTING UNDERGROUND FUEL PIPE LINES TO BE ABANDONED IN PLACE.

3 - BASE COURSE SHALL BE GOVERNMENT FURNISHED SELECT BORROW MATERIAL COMPACTED TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT



JOINT - PAVEMENT DETAIL
SCALE: 1½" = 1'-0"

GRAPHIC SCALES



LEGEND

- NEW PAVEMENT
- EXIST. ASPHALT
- EXIST. ASPHALT OVER CONCRETE
- EXIST. CONCRETE
- EXIST. ELEVATION
- EXIST. CONTOUR

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

CATEGORY CODE NO | DESCRIPTION

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS

AREA PUBLIC WORKS OFFICE, CARIBBEAN
U.S. NAVAL STATION - SAN JUAN, P.R.

ASST FOR DESIGN: LCDR CEC USN
ENG DIR
BR MGR
PROJ MGR
DSGN PWC GTMO
DR J. Rosa
CHK

U S NAVAL AIR STATION - MAINSIDE
GUANTANAMO BAY, CUBA
McCALLA FIELD

REHABILITATION OF AIRCRAFT PARKING AREA PLANS & SECTIONS

CIVIL

APPROVED: APWO FOR CHIEF OF BUREAU — DATE 3/30/62

SATISFACTORY TO

DATE

SCALE AS SHOWN — SPEC 31765.62
SHEET 23 OF 24 — NBY 31765
Y&D DRAWING NO. 928116

ASBESTOS SURVEY OF 93 BUILDINGS

at the

U. S. NAVAL STATION
GUANTANAMO BAY, CUBA

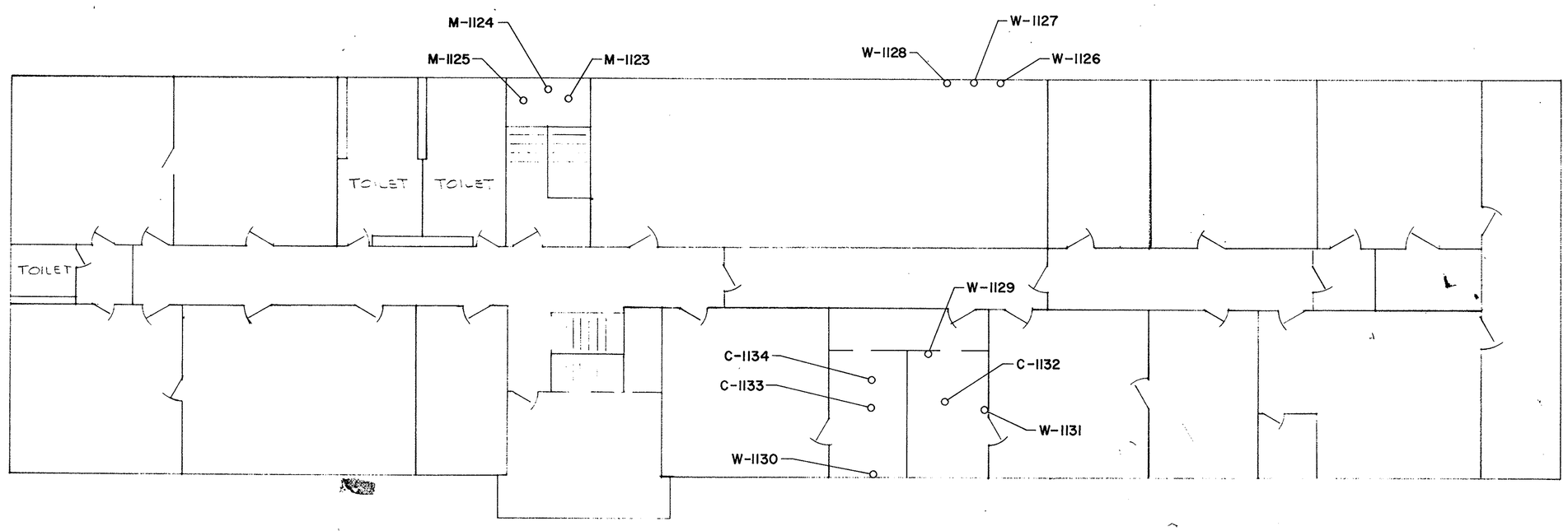
CONTRACT NO. N62470-90-D-7649
DELIVERY ORDER NO. 0002
HE PROJECT NO. 1093-023-110
JULY 1991

prepared by:

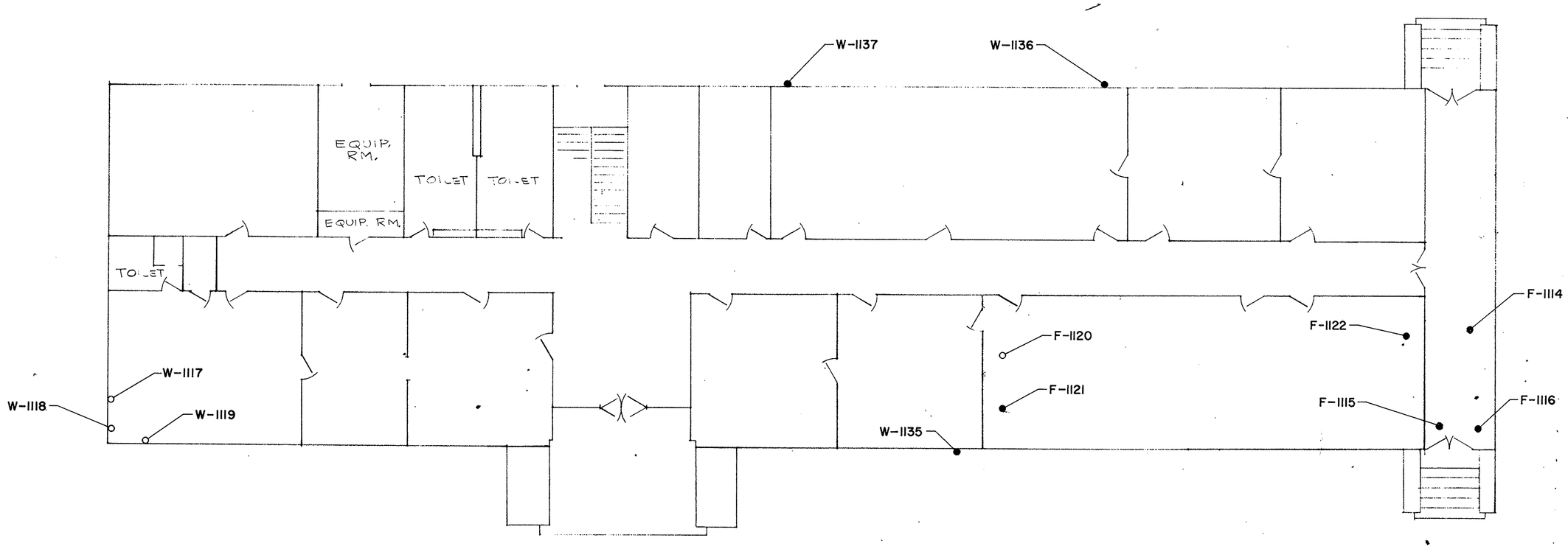
Harmon Engineering Associates, Inc.

CONSULTING ENGINEERS AND SCIENTISTS
1550 PUMPHREY AVE. AUBURN INDUSTRIAL PARK
AUBURN, ALABAMA 36830-4399 (205) 821-9250

DES	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND PUBLIC WORKS DEPARTMENT U. S. NAVAL STATION GUANTANAMO BAY, CUBA		
DRWN			
CHK			
SUPV			
ENG OFF	ASBESTOS SURVEY 93 BUILDINGS		
SATISFACTORY TO			
DATE			
APPROVED	SIZE F	CODE IDENT NO.	PWD DRAWING NO. 8M-3170-0791
PUBLIC WORKS OFFICER			SCALE: SHEET 1 OF 56



SECOND FLOOR PLAN
1/8" = 1'-0



FIRST FLOOR PLAN
1/8" = 1'-0

BUILDING: AV34				CEILING AND WALL MATERIALS	
HOMO NO.	MATERIAL	HAZ. RANK	RATING SCORE	RECOMMENDED RESPONSE	DELINEATION
2	GYP.BOARD/WALL	0	0	NONE REQUIRED	N/A
4	CEIL. TILE, 1X2	0	0	NONE REQUIRED	N/A
5	TRANSITE WALLS	1	15	O&M	●
6	WALL TILE, 1X1	0	0	NONE REQUIRED	N/A

BUILDING: AV34					
SAMPLE RESULTS TABLE					
SAMPLE NUMBER	HOMO NO.	CHY	AMO	OTHER	TOTAL % ASBESTOS
W 1117	2				0
W 1118	2				0
W 1119	2				0
W 1126	2				0
W 1127	2				0
W 1128	2				0
W 1129	6				0
W 1130	6				0
W 1131	6				0
C 1132	4				0
C 1133	4				0
C 1134	4				0
W 1135	5	20			20
W 1136	5	20			20
W 1137	5	20			20

BUILDING: AV34				FLOOR AND ROOF MATERIALS	
HOMO NO.	MATERIAL	HAZ. RANK	RATING SCORE	RECOMMENDED RESPONSE	DELINEATION
1	FLOOR TILE, 9X9	1	28	O&M	●
7	BUILLUP ROOFING	1	12	O&M	

BUILDING: AV34					
SAMPLE RESULTS TABLE					
SAMPLE NUMBER	HOMO NO.	CHY	AMO	OTHER	TOTAL % ASBESTOS
F 1114	1	2			2
F 1115	1	2			2
F 1116	1	2			2
F 1120	1			2	2
F 1121	1	2		2	4
F 1122	1	<1		4	4

BUILDING: AV34				TSI AND OTHER MATERIALS	
HOMO NO.	MATERIAL	HAZ. RANK	RATING SCORE	RECOMMENDED RESPONSE	DELINEATION
3	PAINT/INTERIOR	0	0	NONE REQUIRED	N/A

BUILDING: AV34					
SAMPLE RESULTS TABLE					
SAMPLE NUMBER	HOMO NO.	CHY	AMO	OTHER	TOTAL % ASBESTOS
M 1123	3				0
M 1124	3				0
M 1125	3				0

Harmon Engineering Associates, Inc.
CONSULTING ENGINEERS AND SCIENTISTS
1550 PUMPHREY AVE. AUBURN INDUSTRIAL PARK
AUBURN, ALABAMA 36830-4399 (205) 821-9250

ASBESTOS SURVEY - 93 BUILDINGS
JULY 1991 BUILDING: AV34

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

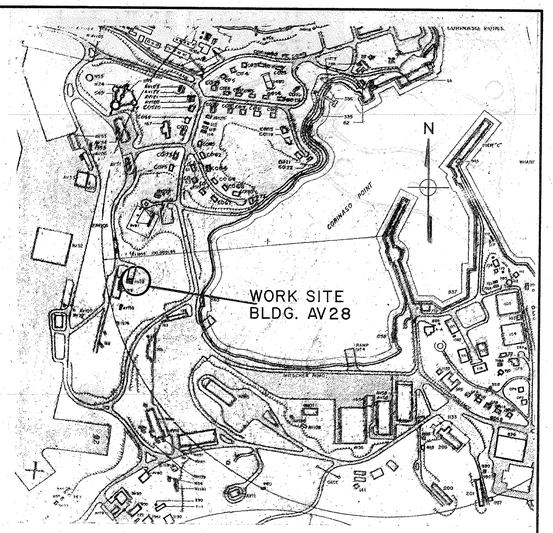
REVISIONS

DES
DRWN
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

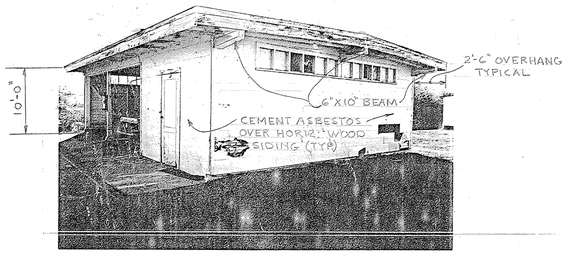
FLOOR PLAN
BLDG AV-34
CONDITION AS OF 4 FEB

SIZE F
CODE IDENT NO.
PWD DRAWING 8M-3215-0791
SCALE:

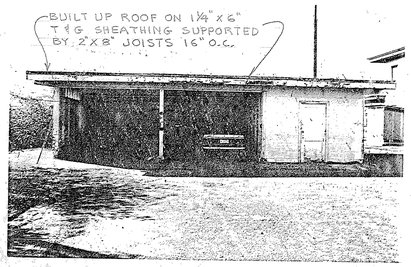


LOCATION MAP

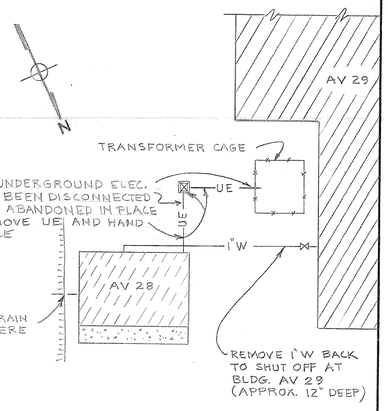
NOT TO SCALE



(B) BLDG AV 28

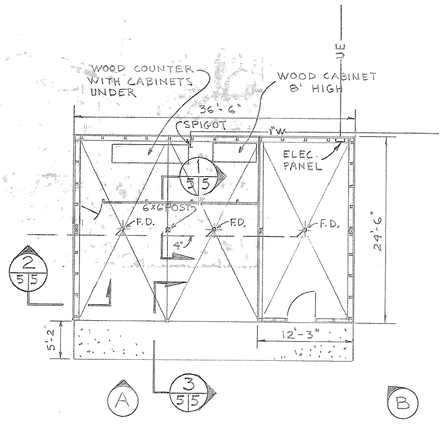


(A) BLDG AV 28



SITE PLAN

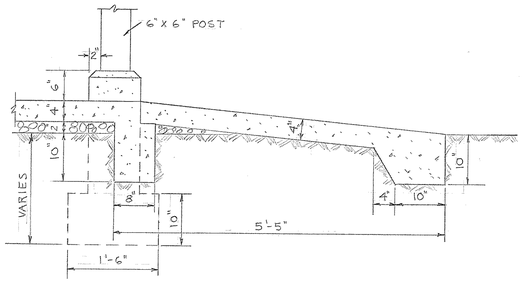
1" = 20'-0"



FLOOR PLAN

BLDG AV 28

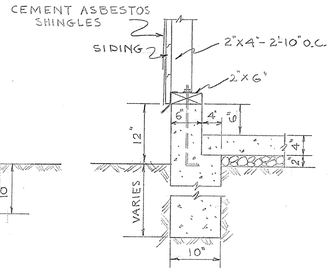
1/8" = 1'-0"



(3/5/5) SECTION

BLDG AV 28

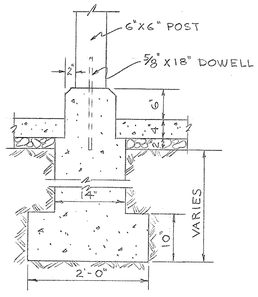
NOT TO SCALE



(2/5/5) SECTION

BLDG AV 28

NOT TO SCALE



(1/5/5) SECTION

BLDG AV 28

NOT TO SCALE

GRAPHIC SCALES

1" = 20'-0" 0 1 2 3 4 6 8 10

1/8" = 1'-0" 0 4 8 12 16 24 32 40

ER7-015

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES P. F. ANDERSON
DRWN P. F. ANDERSON
CHK J. GELPI
SUPV J. GELPI
ENG OFF TERRY RILEY
SATISFACTORY TO Wm. [illegible]
DATE 6-15-87
APPROVED [illegible]
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

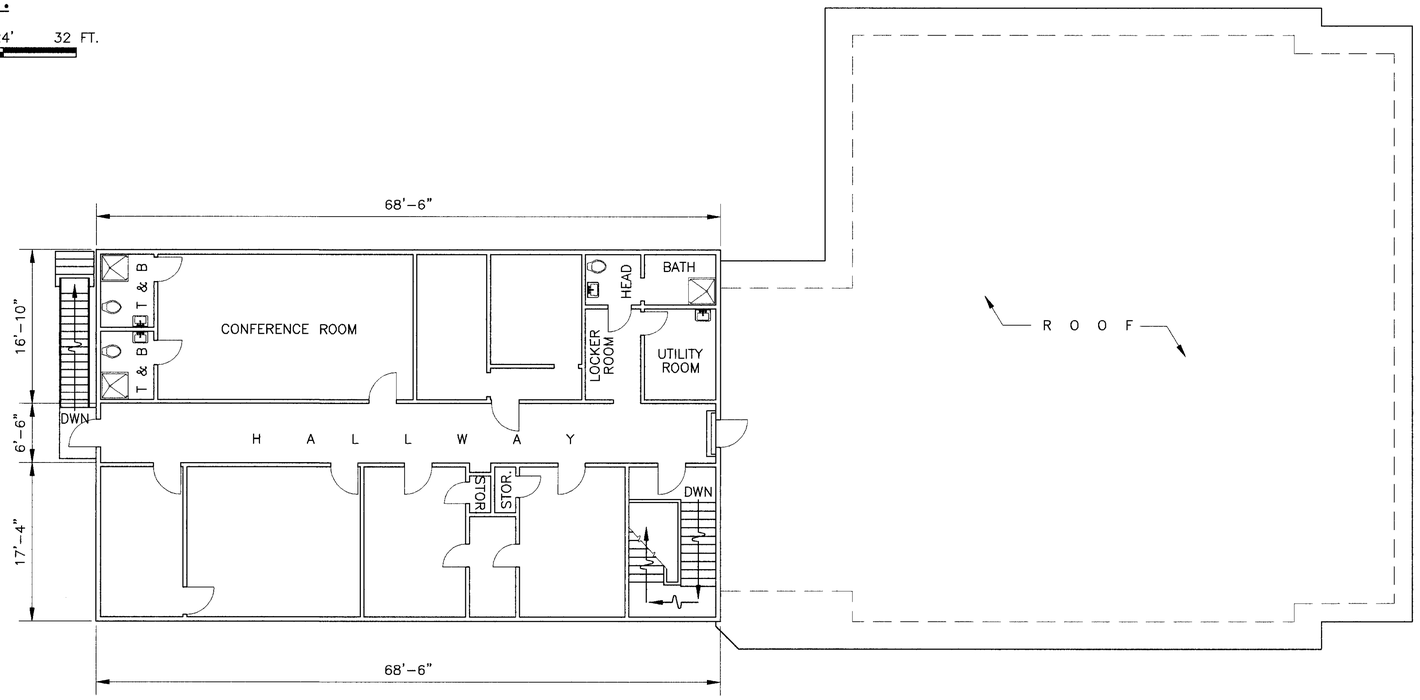
DEMOLITION OF VARIOUS BUILDINGS AND STRUCTURES
BLDG. AV 28

SIZE F | CODE IDENT NO. 80091 | NAVFAC DRAWING NO. 4140855
SCALE: AS NOTED | SHEET 5 OF 31

CONTRACT NO. N62470-87C-6908

GRAPHIC SCALE:

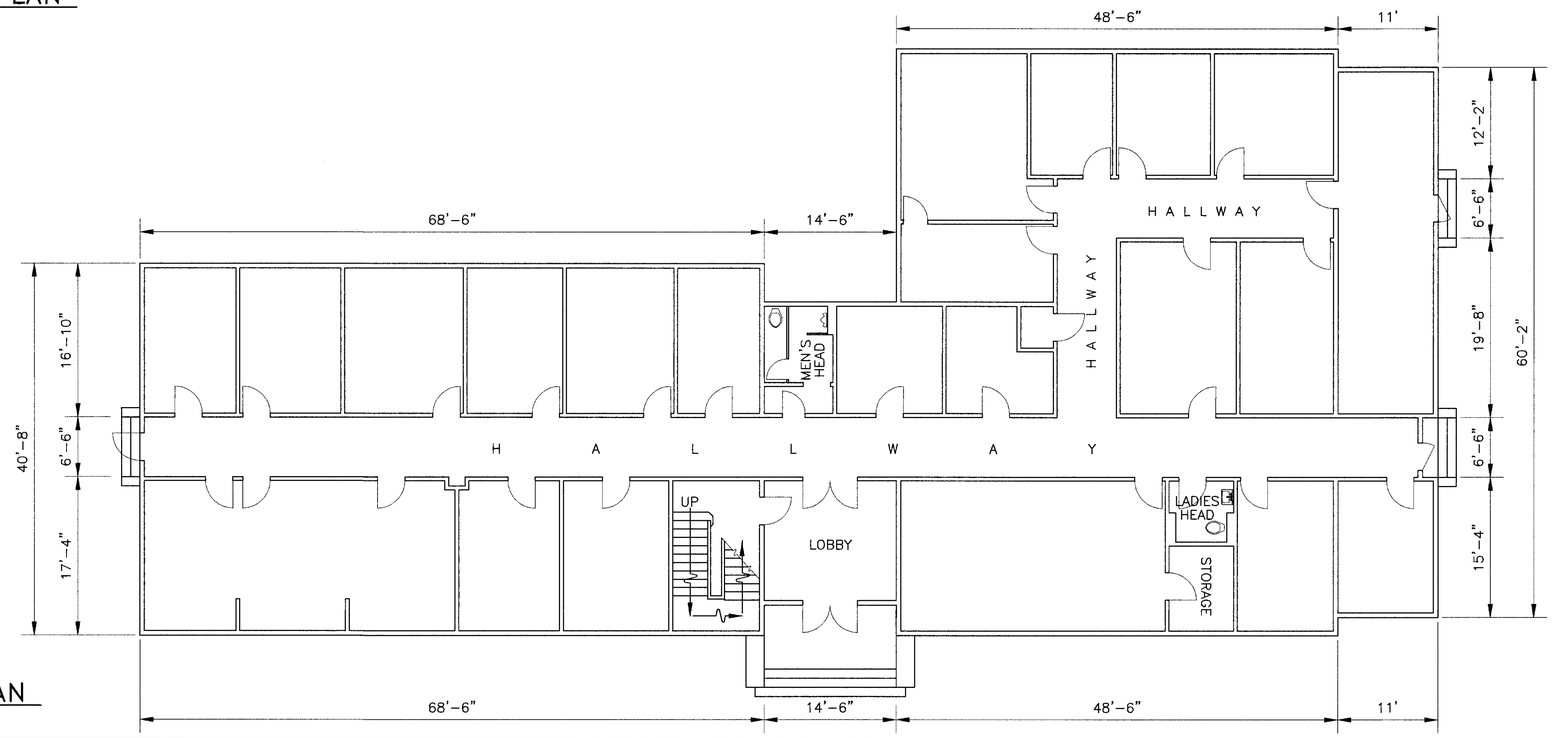
1/8" = 1' 0 4' 8' 16' 24' 32 FT.



NORTH

SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



NORTH

FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

STM.	DESCRIPTION	DATE	APPROVED
	AS BUILT	2/12/07	

REVISIONS

PUBLIC WORKS DEPARTMENT GUANTANAMO BAY, CUBA

SEAL

APPROVED

ACTIVITY - SATISFACTORY TO

DATE

APPROVED

PUBLIC WORKS OFFICER

DATE

NAVSTA GTMO

DESIGN AS BUILT

DRAWN R. A. CORPUZ

REVIEW

SUPV. C. W. SHERMAN

CHIEF ARCH./ ENGR.

PROJECT MANAGER

FIRE PROTECTION

BRANCH MANAGER

DESIGN DIRECTOR

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

U.S. NAVAL STATION — PUBLIC WORKS DEPARTMENT — GUANTANAMO BAY, CUBA

JOINT TASK FORCE HEADQUARTERS

FACILITY AV-29

FIRST AND SECOND FLOOR PLAN

CODE ID. NO. 80091 SIZE D

SCALE: GRAPHIC

EFD NO.

WRK. REQ. NO. —

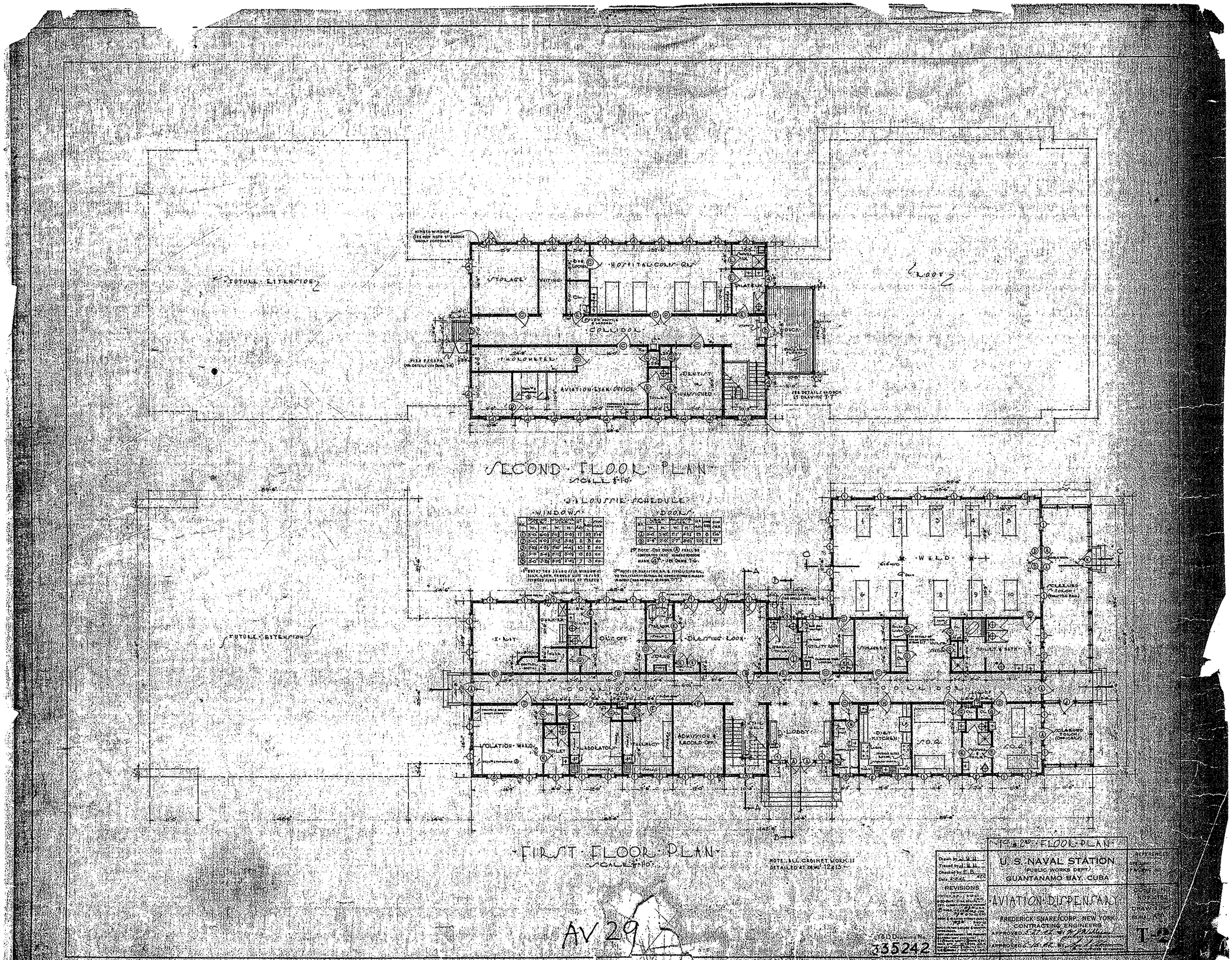
SPEC. NO. N/A

CONSTR. CONTR. NO. N/A

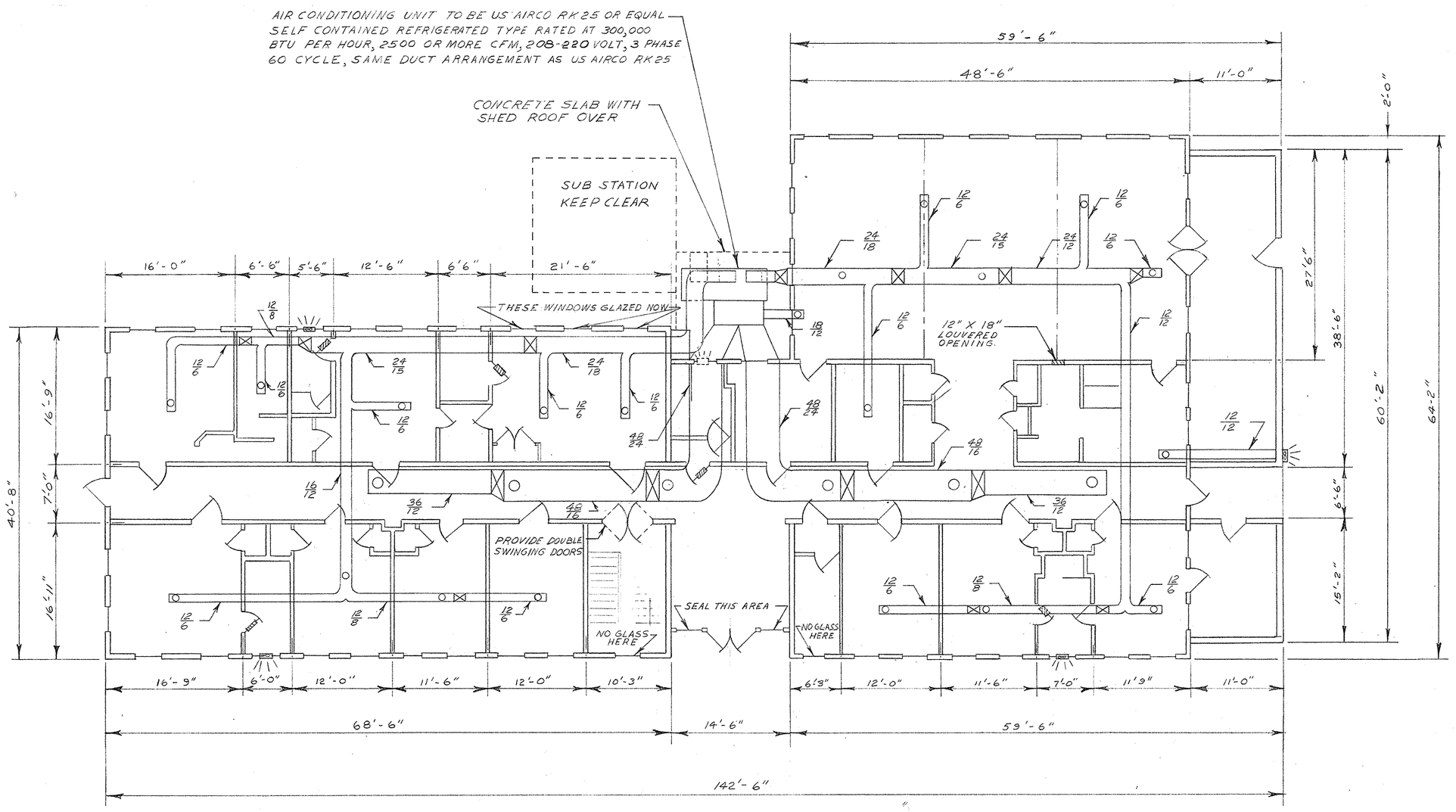
FWD DRAWING NO. 5B-3383-0207-1

SHEET 1 OF 1

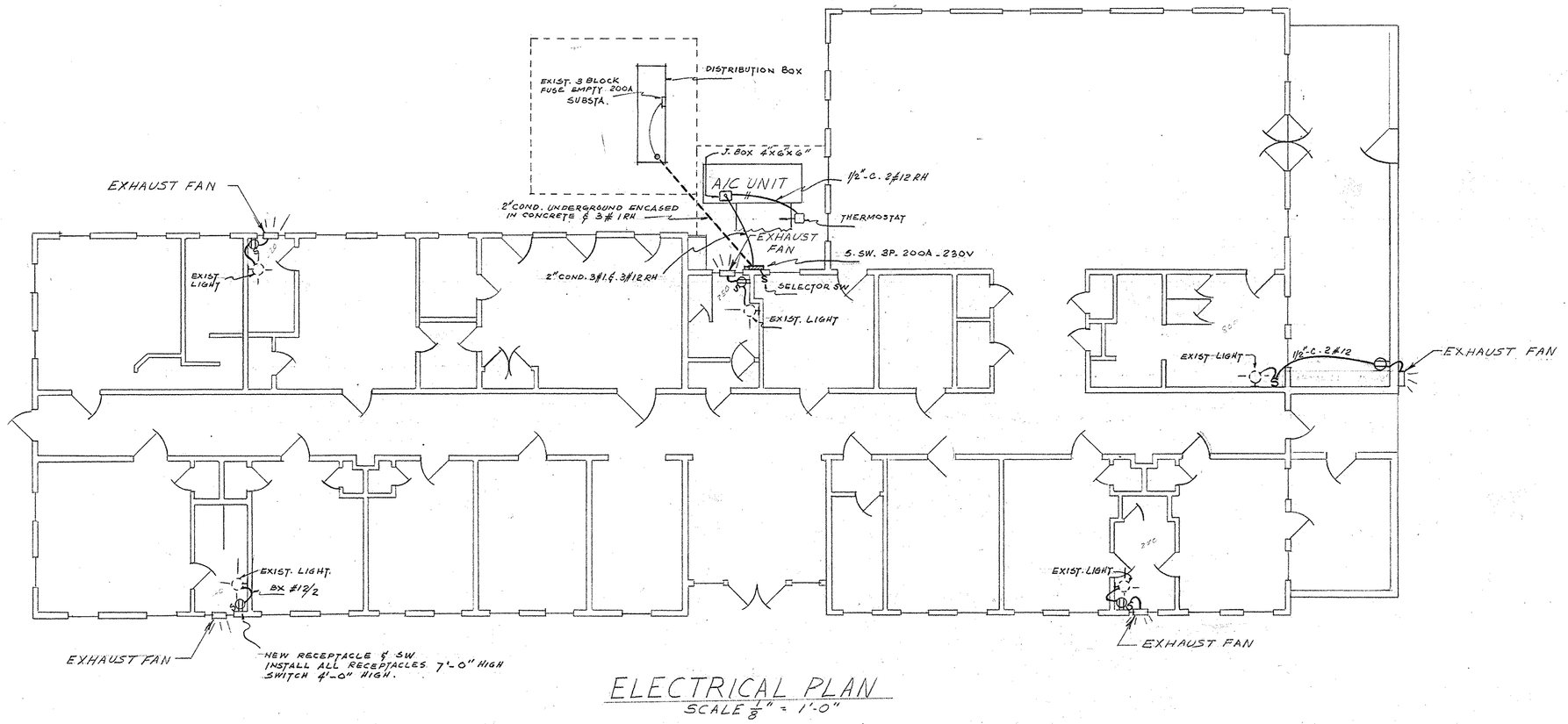
A-1



FUTURE EXTENSION
ROOF
STORAGE
WAITING
HOSPITAL CORPS QRS
CORRIDOR
PHOROMETER
AVIATION EXAM OFFICE
DENTIST
UNASSIGNED
TOILET
DOCK
SECOND FLOOR PLAN
SCALE 1/8"=1'-0"
JALOUSSIE SCHEDULE
WINDOWS
DOORS
WARD
X-RAY
DRESSING ROOM
UTILITY ROOM
TOILET & BATH
CORRIDOR
ISOLATION WARD
LABORATORY
ADMISSION & RECORD OFF
LOBBY
DIET KITCHEN
S.O.Q.
FIRST FLOOR PLAN
SCALE 1/8"=1'-0"
NOTE: ALL CABINET WORK IS DETAILED AT DRWG. 12 & 13
1ST & 2ND FLOOR PLAN
U. S. NAVAL STATION
(PUBLIC WORKS DEPT.)
GUANTANAMO BAY, CUBA
AVIATION DISPENSARY
FREDERICK SNARE CORP. NEW YORK
CONTRACTING ENGINEERS
REVISIONS
Y&D Drawing No.
335242
T-2
AV 29
350-31-24



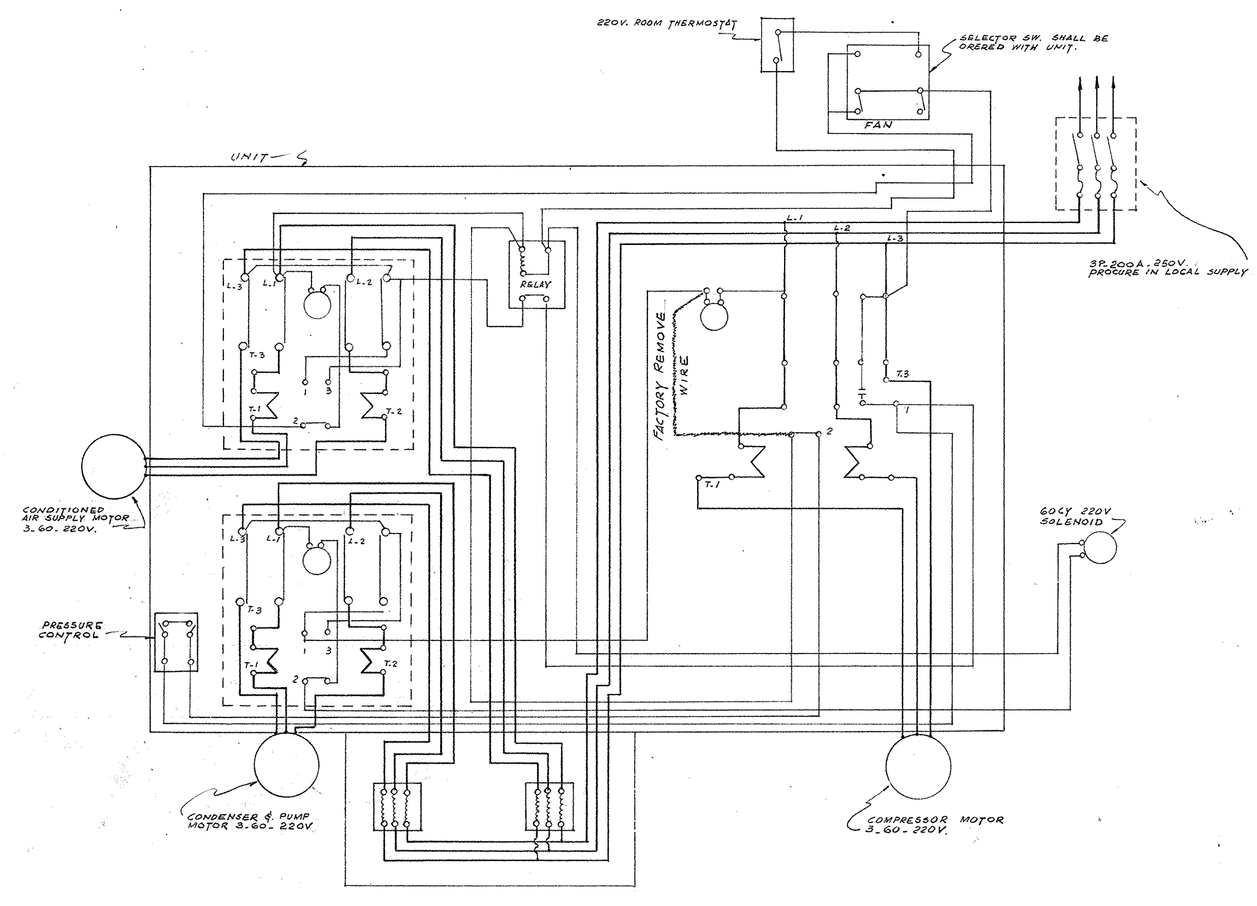
VENTILATION PLAN
SCALE: 1/8" = 1'-0"



ELECTRICAL PLAN
SCALE 1/8" = 1'-0"

NOTES:

1. SUPPLY DIFFUSERS TO BE DUCT MOUNTED, FITTED WITH DAMPERS AND DEFLECTORS, 10" SIZE, SIMILAR TO TUTTLE & BAILEY TYPE PS WITH NO. 4 DAMPER
2. RETURN AIR DIFFUSERS TO BE 16" DUCT MOUNTED SIMILAR TO TUTTLE & BAILEY TYPE PS
3. SUPPLY GLASS WINDOWS TO BE MOUNTED INSIDE EXISTING OPENINGS EXCEPT WHERE NOTED
4. WALL TYPE EXHAUST FAN NOT TO EXCEED 750 CFM



ELECTRICAL WIRING DIAGRAM

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1052-1259

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

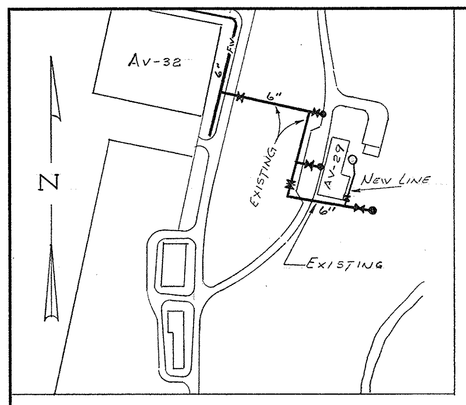
DES Elec. Barja
DRWN KEIL Elec. Dorocs
TR
CHK
SUPV
IN CHARGE
REVIEWED BY

AIR CONDITIONING AV-29
NAS DISPENSARY
GUANTANAMO BAY, CUBA

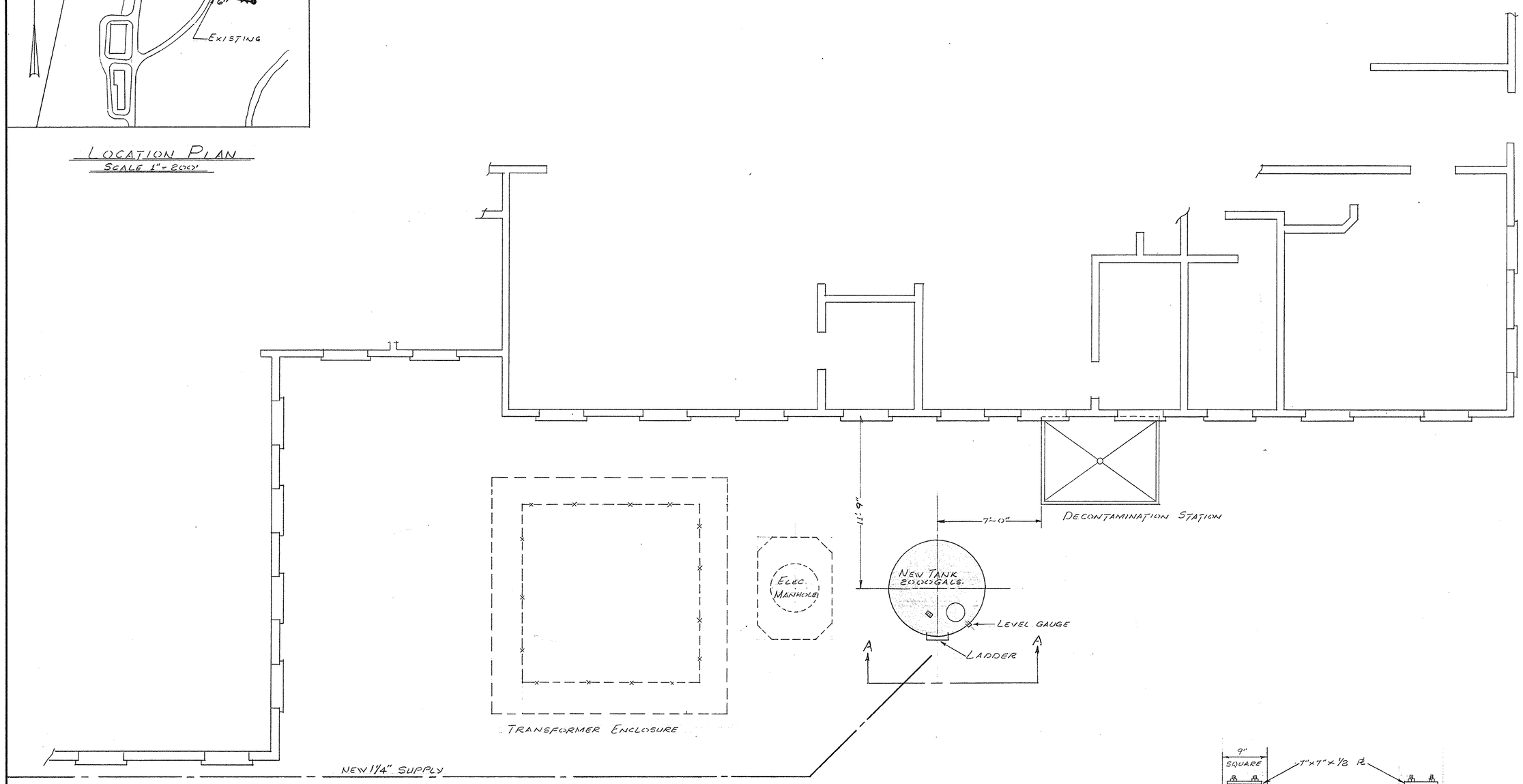
APPROVED R. S. Thomas Jr. for COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 1/6/60

SATISFACTORY TO — DATE 1/5/60

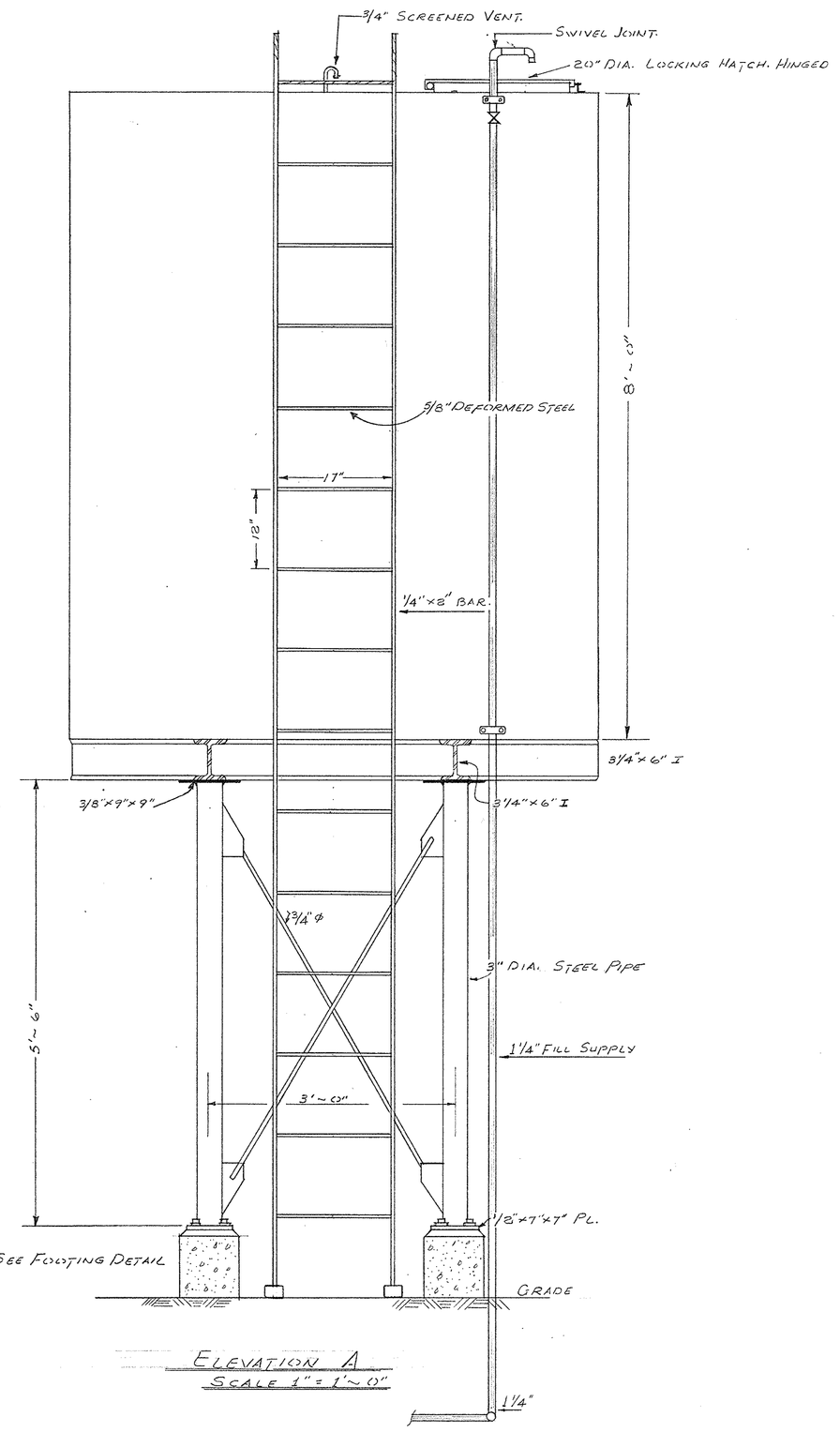
SCALE AS NOTED — SPEC
SHEET ___ OF ___ NBy ___
Y & D DRAWING NO. ___



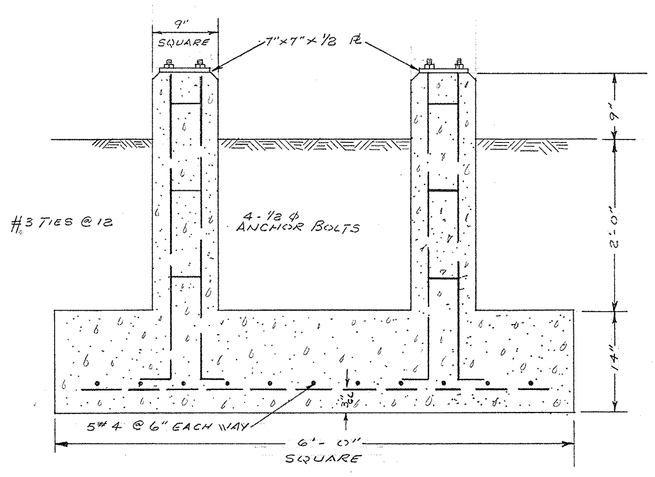
LOCATION PLAN
SCALE 1" = 200'



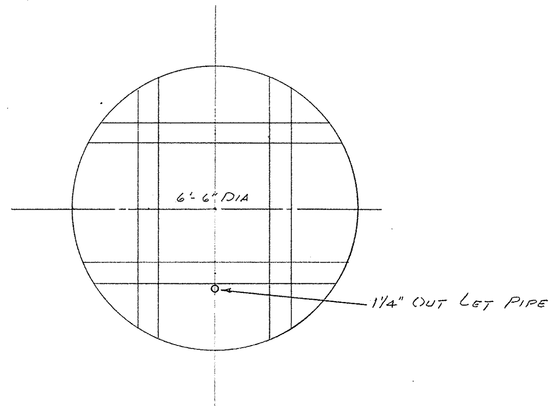
PART PLAN - AV-29
SCALE 1/4" = 1'-0"



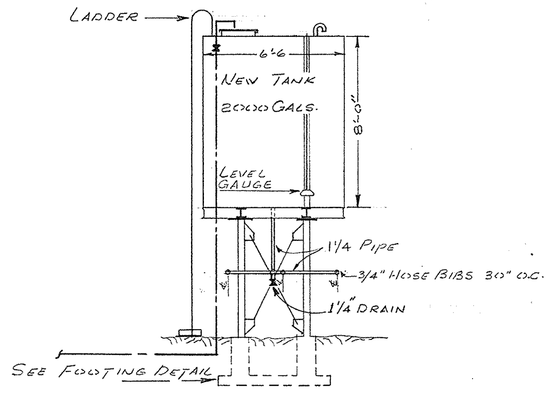
ELEVATION A
SCALE 1" = 1'-0"



FOOTING DETAIL
SCALE 1" = 1'-0"



BOTTOM VIEW OF TANK
SCALE 1/2" = 1'-0"



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

NOTES

1 — WATER SUPPLY LINES TO BE GALV. STEEL IN ACCORDANCE WITH NAV. DOCKS. 21Y
2 — WATER TANK TO BE WELDED CONSTRUCTION. 1/4 STEEL PLATE SIMILAR TO STD. 2000 GAL. EMERGENCY STORAGE TANKS LOCATED AV-27, AV-55 ETC.

PRELIMINARY.

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1913-0766

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES E ELDER.
DRWN KNIGHT
TR
CHK RAF
SUPV RAF
IN CHARGE
REVIEWED BY GCC

U.S. NAVAL AIR STATION
BLDG AV-29
EMERGENCY FRESH WATER TANK FOR DECONTAMINATION STATION

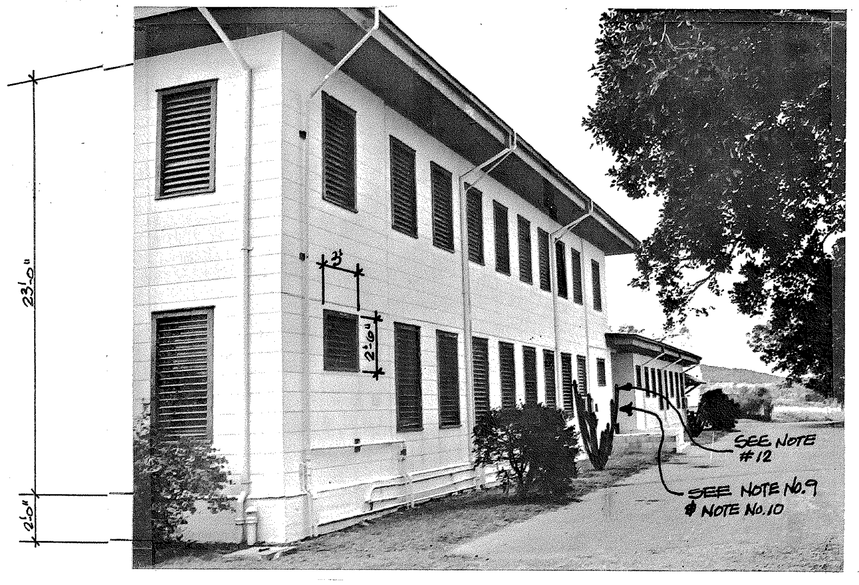
APPROVED [signature] DATE 8/23/66
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO [signature] LT CEC USN
DATE 8/11/66

SCALE AS SHOWN | SPEC
SHEET 1 OF 1 NBY
Y & D DRAWING NO.

E.S.R. 2526/6

A



B

C

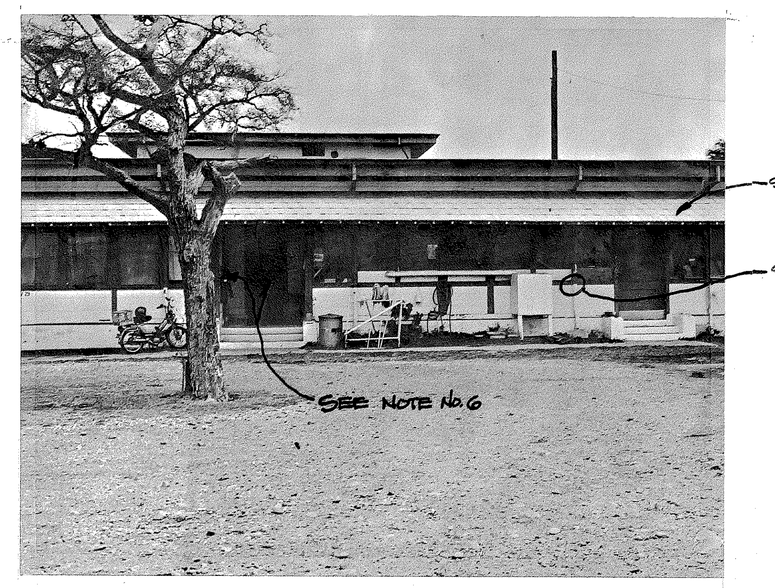
LIST OF REPAIRS & PAINTING FOR BUILDING NO. AV-29

1. REMOVE DETERIORATED PORTION OF EXISTING 3" DIA. C.I. DOWNSPOUT
   INSTALL APPROX. 9 LINEAL FT OF NEW 3" DIA. C.I. DOWNSPOUT
2. CAULK AROUND ALL PLUMBING PENETRATIONS THROUGH EXTERIOR BUILDING WALLS
3. REMOVE ABANDONED METAL BRACKET FROM FACIA. FILL RESULTING NAIL HOLES
4. REMOVE EXISTING CEMENT ASBESTOS SHINGLE ROOFING FROM SUNSHADE WHERE INDICATED ON PLANS & DEPOSIT CEMENT ASBESTOS SHINGLES IN DUMPSTER FURNISHED BY GOV'MT. FOR THAT PURPOSE. INSTALL NEW ASPHALT SHINGLE ROOF OVER ENTIRE SUNSHADE AREA. APPROXIMATELY 561 SQ. FT.
5. RESECURE LOOSE CLAMP AROUND DOWNSPOUT TO BUILDING.
6. INSTALL (2) 3'-0" x 7'-0" SOLID CORE WOOD DOORS (EXTERIOR), UTILIZING EXIST. HINGES, AND LOCKSETS.
7. REMOVE EXISTING TERMITE DAMAGED 3"x4" CORBEL.
   INSTALL NEW PRESSURE TREATED 3"x4" CORBEL TO MATCH EXISTING IN SIZE & DESIGN. APPROX. 13 LIN. FT. OF 3"x4"
8. REMOVE ALL EXISTING 1"x4" WOOD TRIM FROM AROUND ALL WINDOWS.
   INSTALL NEW
   PRESSURE TREATED 1"x4" WOOD TRIM AROUND ALL WINDOWS. APPROX. 1,800 LIN. FT.
9. REMOVE (2) FRONT ENTRANCE DOORS, DOOR JAMB, & TRIM BACK TO ROUGH FRAMING & FRAME IN NEW ROUGH OPNG. FOR NEW 6'-0" x 7'-6" ALUM. DOOR JAMB. PATCH INTERIOR & EXTERIOR WALLS AROUND NEW JAMB. TO MATCH EXISTING.
10. PROVIDE & INSTALL ALUMINUM ENTRANCE DOORS, MODEL 72 TYPE "X" AS MFG. BY ANALITE CO. OR APPROVED EQUAL, ALUM. FINISH, CLEAR ANODIZED AA-M10-C22-A41; GLASS, KIND FT, CONDITION A, TYPE I, CLASS 1, THICKNESS 3/8", HARDWARE, MANUFACTURERS STANDARD, INCLUDING ALUM. THRESHOLD.
11. REPLACE ALL BROKEN OR MISSING CEMENT ASBESTOS SHINGLE SIDING AT VARIOUS LOCATIONS
12. REPLACE (4) MISSING WOOD LOUVERS @ JALOUSIE WINDOWS
    THE CONTRACTOR TO VERIFY EXACT SIZE ON SITE
13. REMOVE ALL LOOSE FLAKING PAINT FROM ALL BUILDING SURFACES (BY SANDING, SCRAPING, OR BRUSHING (DO NOT SANDBLAST.)
14. ITEMS TO BE PAINTED INCLUDE: ALL WOOD ENT. DOORS, (BOTH SIDES & EDGES), ALL WOOD JALOUSIE WINDOWS (LOUVERS, FRAME & TRIM ONLY) ALL OVERHANGS, FACIA, EXTERIOR PLUMBING, & ELECTRICAL CONDUIT, CONC. FOUNDATION WALL, METAL STAIRS, LANDING, & HANDRAIL, ALL CEMENT ASBESTOS SHINGLE SIDING GUTTER & DOWNSPOUTS

COLOR SCHEDULE FOR BUILDING AV-29

1. USE POLAR WHITE: FED. STD. #595 #17875 ON ALL CEM. ASB. SHINGLE SIDING, EXT. PLUMB. PIPES, ELECT. CONDUITS, CONC. FOUND. WALLS & DOWNSPOUTS
2. USE GREEN: FED. STD. #595 # 24172 ON ALL WOOD JALOUSIE WINDOWS, & TRIM, ALL OVERHANGS, FACIA, ALL WOOD DOORS & WOOD DOOR TRIM, ALL CORBELS & WOOD TRIM AROUND ALL GLASS WINDOWS. METAL FIRE ESCAPE LANDING, STAIRS, & HANDRAILS., & GUTTERS,

D



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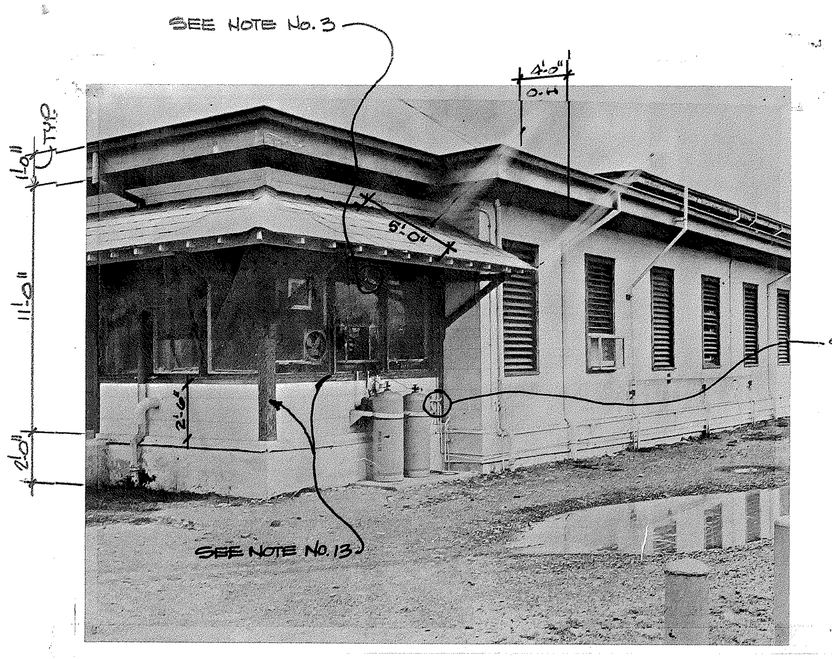

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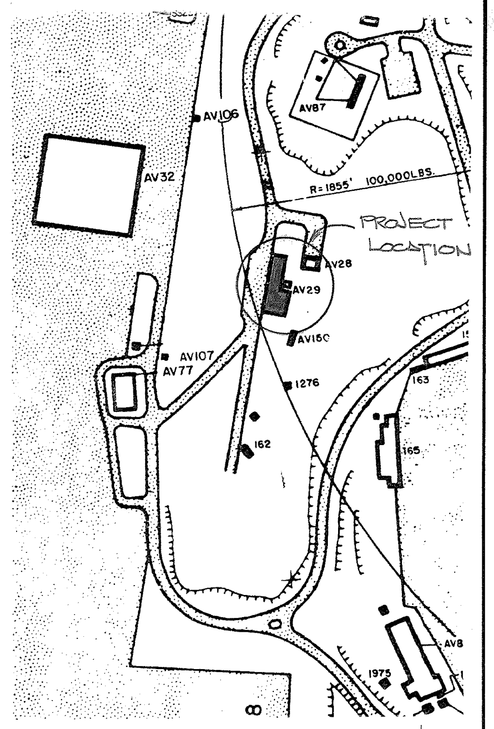
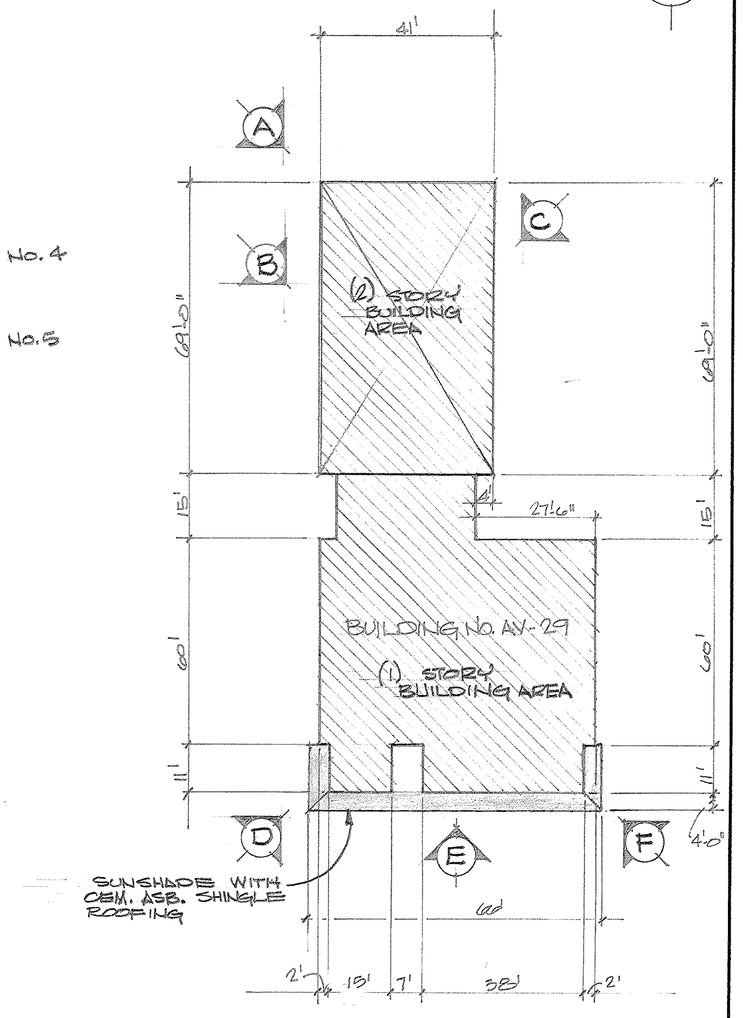


PROJECT LOCATION MAP
1" = 200'-0"



KEY PLAN
1" = 20'-0"

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES EV. IRVING
DRWN EV. IRVING
CHK R. EGBERT
SUPV
ENG OFF
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

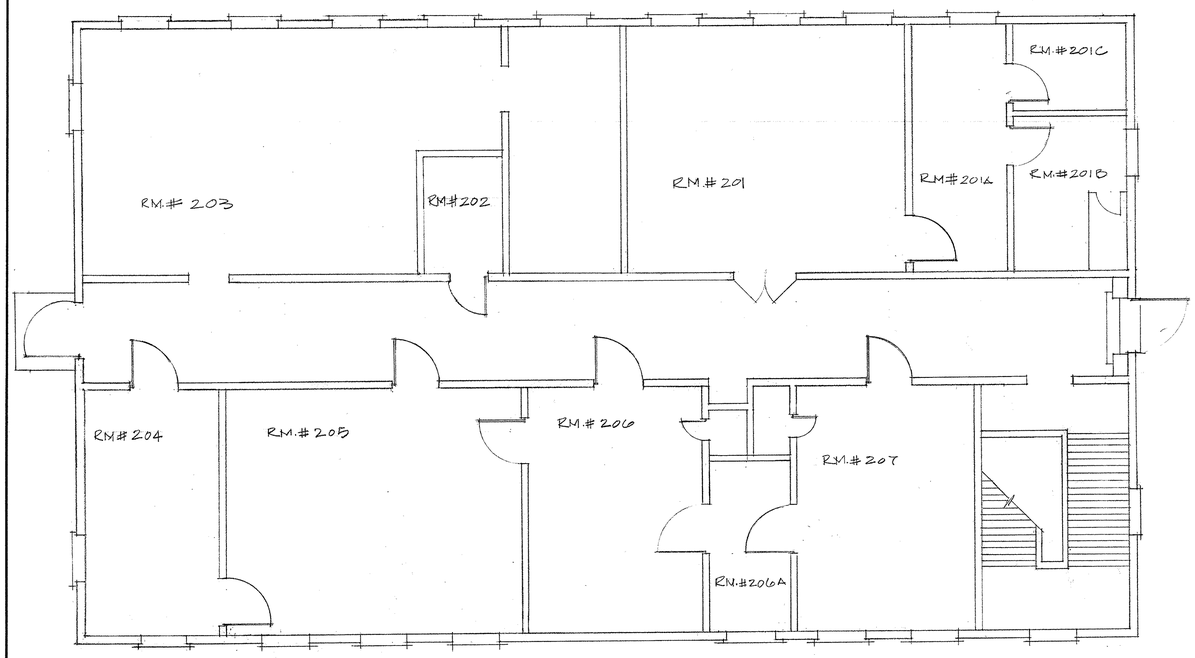
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

CHANGE ORDER TO CONT. NO. N62470-83-4108
EXT. PAINTING & REP. OF VARIOUS BLDGS PHASE II

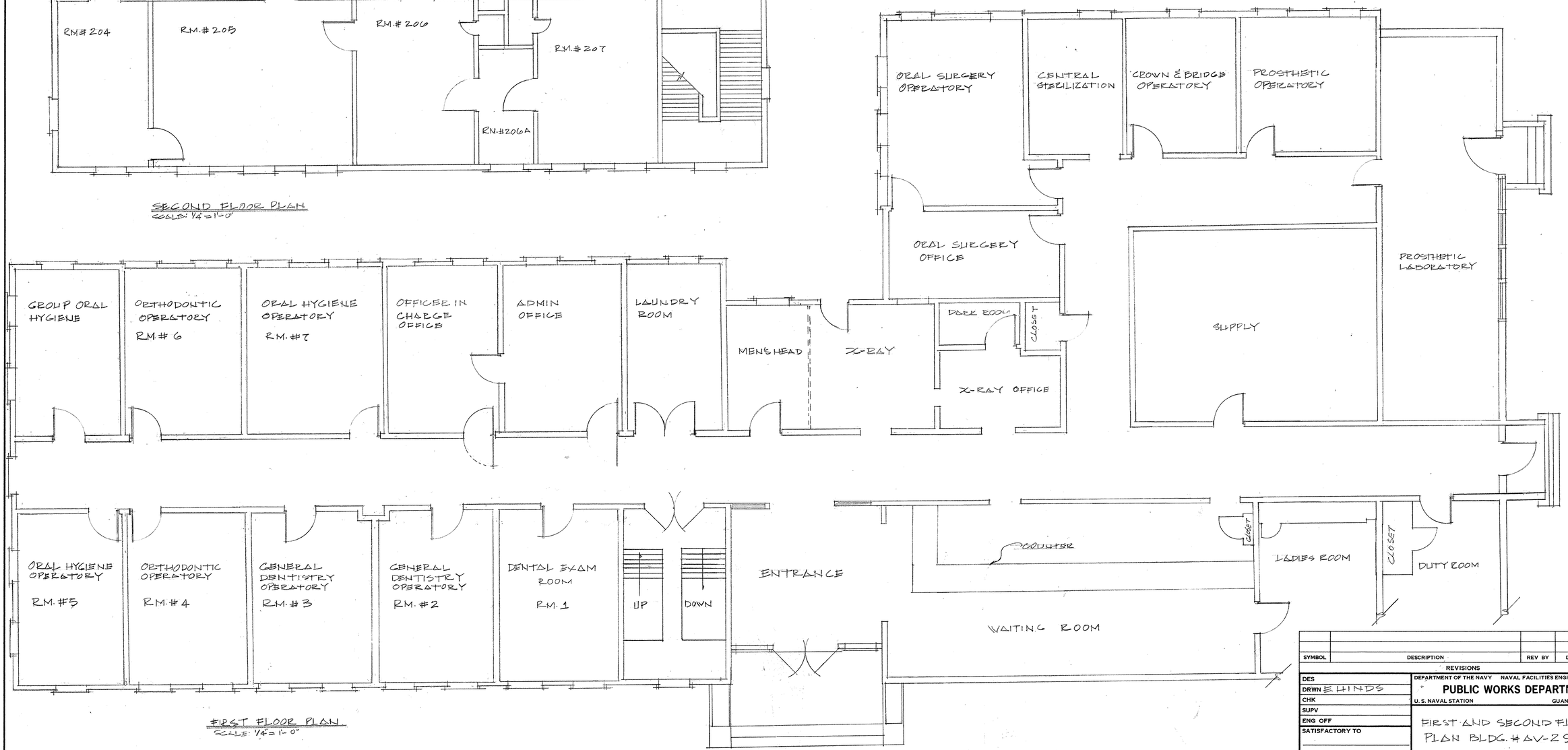
BUILDING NO. AV-29 (DENTAL CLINIC)

SIZE F | CODE IDENT NO. | DRAWING NO. 4104304 | SCALE: AS NOTED | SHEET | OF

CONT. NO. N62470-83-B-4108



SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"



FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

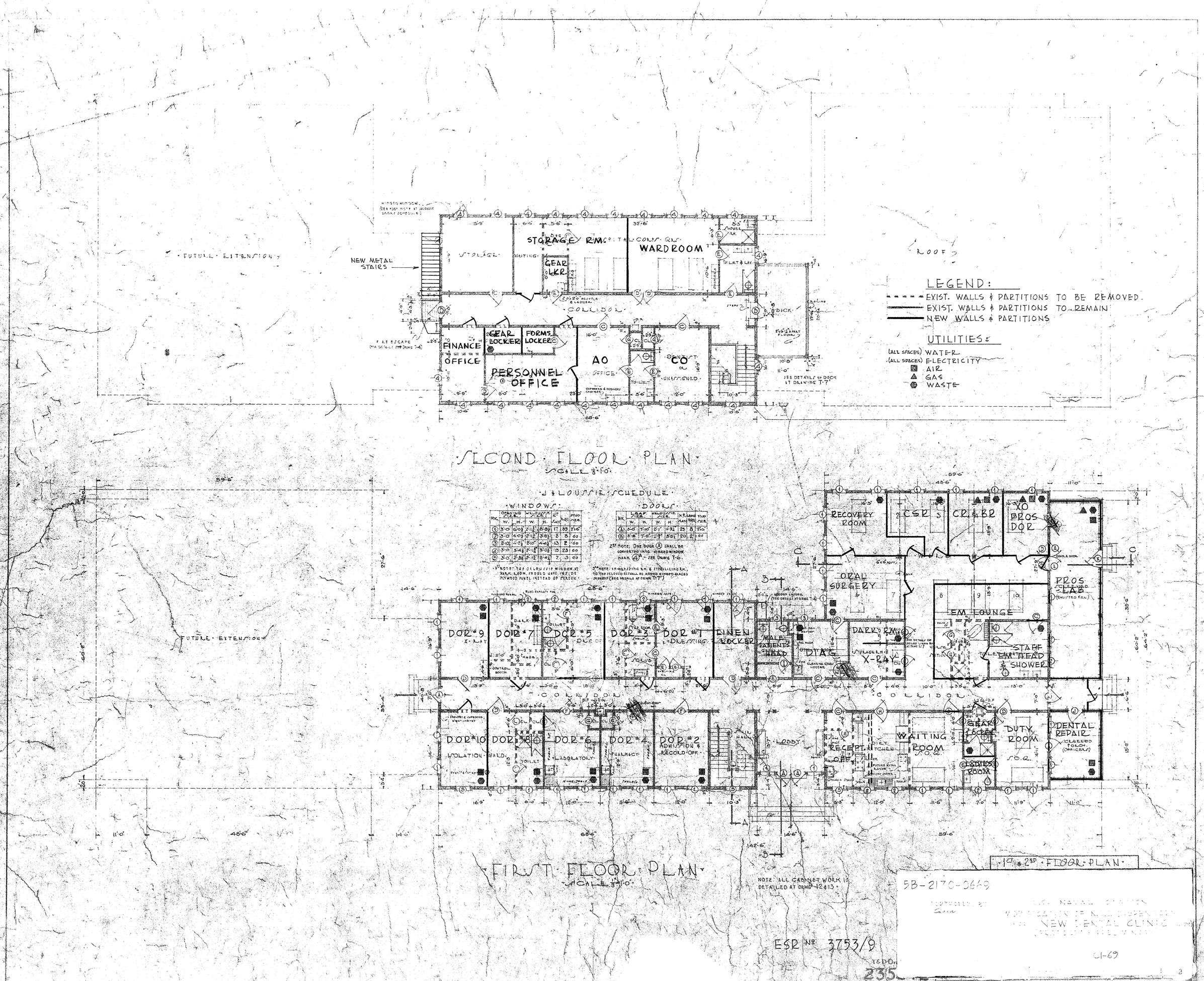
REVISIONS

DES
DRWN E. HINDS
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

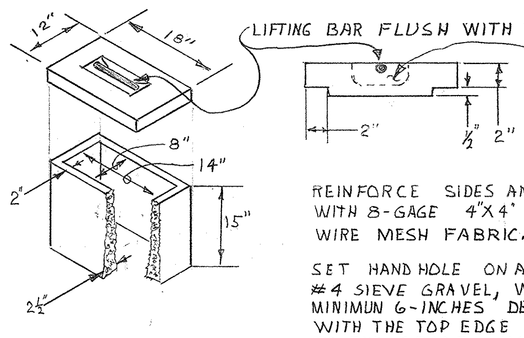
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

FIRST AND SECOND FLOOR PLAN BLDG. # AV-29

SIZE F | CODE IDENT NO. | PWD DRAWING NO. SD-2606-0382-1
SCALE: 1/4" = 1'-0" | SHEET 1 OF 1



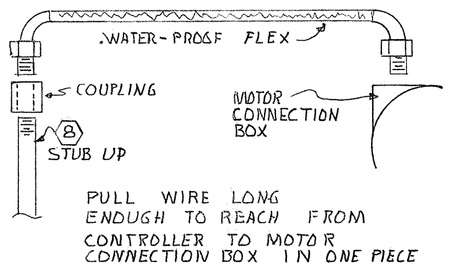
FUTURE EXTENSION
NEW METAL STAIRS
STORAGE RM.
WARDROOM
GEAR LKR.
CORRIDOR
FINANCE OFFICE
GEAR LOCKER
FORMS LOCKER
PERSONNEL OFFICE
AO
CO
ROOF
LEGEND:
EXIST. WALLS & PARTITIONS TO BE REMOVED.
EXIST. WALLS & PARTITIONS TO REMAIN
NEW WALLS & PARTITIONS
UTILITIES:
(ALL SPACES) WATER
(ALL SPACES) ELECTRICITY
AIR
GAS
WASTE
SECOND FLOOR PLAN
SCALE 1/8"=1'-0"
J & LOUSSIE SCHEDULE
WINDOWS
DOORS
RECOVERY ROOM
CSR
CR & BR
XO PROS DOR
ORAL SURGERY
PROS LAB
EM LOUNGE
STAFF EM HEAD & SHOWER
DOR #9
DOR #7
DOR #5
DOR #3
DOR #1
LINEN LOCKER
MALE PATIENTS HEAD
DIAG
DARK RM.
X-RAY
DOR #10
DOR #8
DOR #6
DOR #4
DOR #2
LOBBY
RECEPT. OFF.
WAITING ROOM
GEAR LOCKER
LADIES ROOM
DUTY ROOM
DENTAL REPAIR
FIRST FLOOR PLAN
SCALE 1/8"=1'-0"
NOTE: ALL CABINET WORK IS DETAILED AT DRWG 12 & 13
1ST & 2ND FLOOR PLAN
5B-2170-0669
NEW DENTAL CLINIC
C1-69
ESR No 3753/9
235



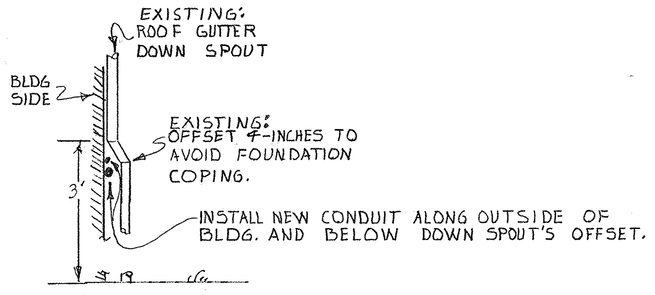
REINFORCE SIDES AND TOP WITH 8-GAGE 4'X4' STEEL WIRE MESH FABRIC.

SET HANDHOLE ON A BASE OF #4 SIEVE GRAVEL, WELL TAMPED, MINIMUN 6-INCHES DEEP; AND WITH THE TOP EDGE FLUSH TO THE GRADE. MAKE CONDUIT AND UG CABLE ENTRANCE/EXIT VIA THE GRAVEL -- THAT IS, UPWARD FROM UNDERGROUND: DO NOT PENETRATE THE SIDE OF THE HAND HOLE.

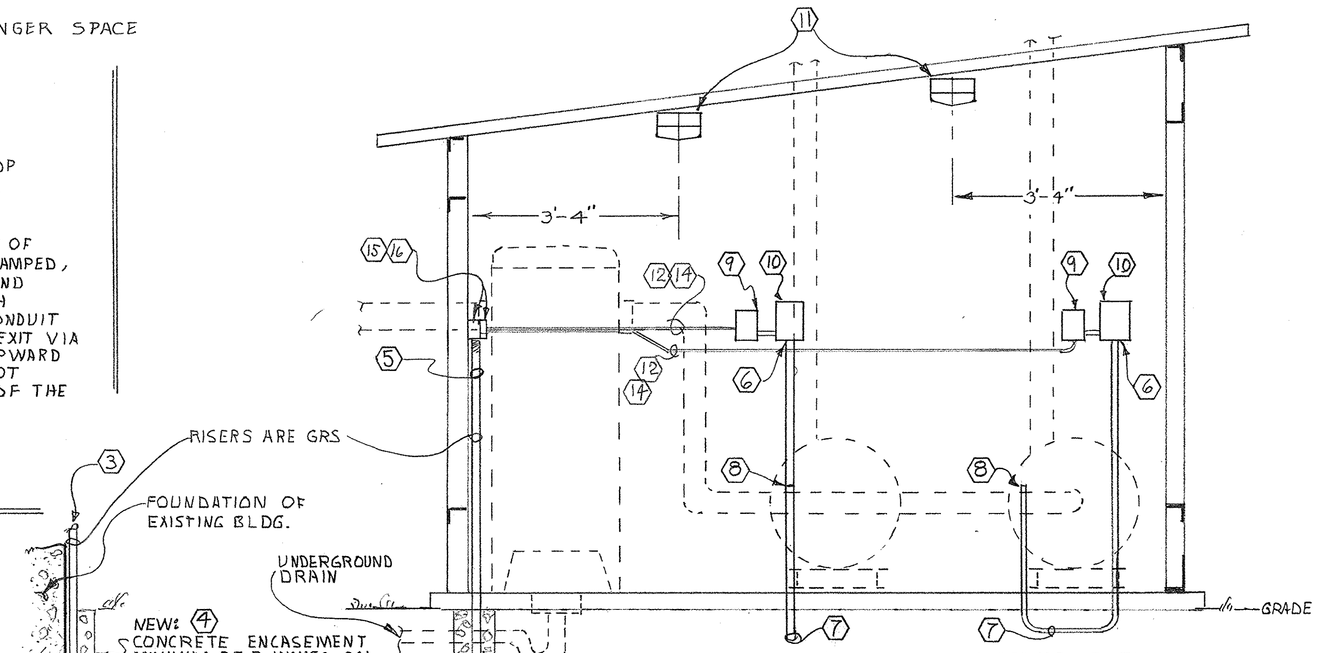
DETAIL -B
NEW HANDHOLE



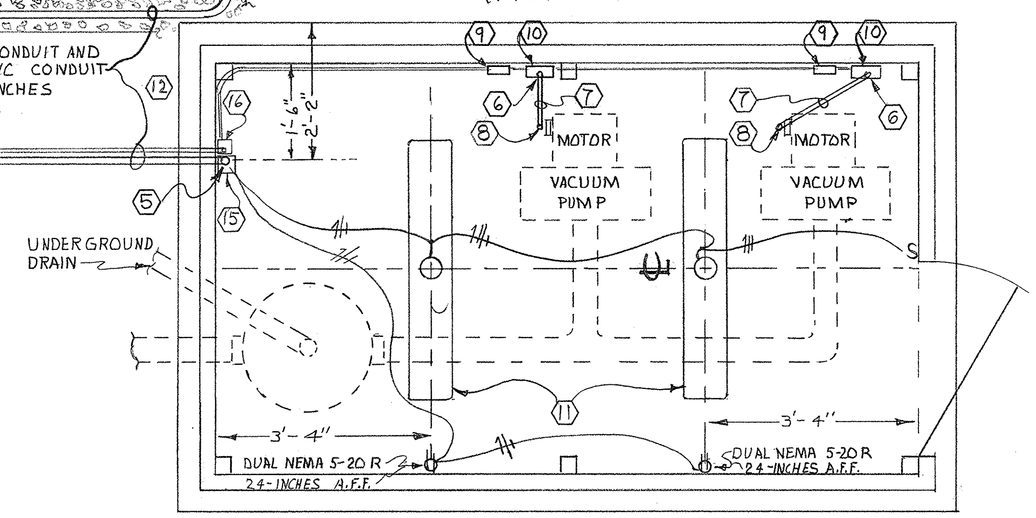
DETAIL - C
FLEX-CONDUIT FROM STUB-UP TO MOTOR



SECTION A-A
(NO SCALE)



NEW ENCLOSURE SHED - NORTH INTERIOR ELEV.
(3/4" = 1')



NEW ENCLOSURE SHED - PLAN VIEW
(3/4" = 1')

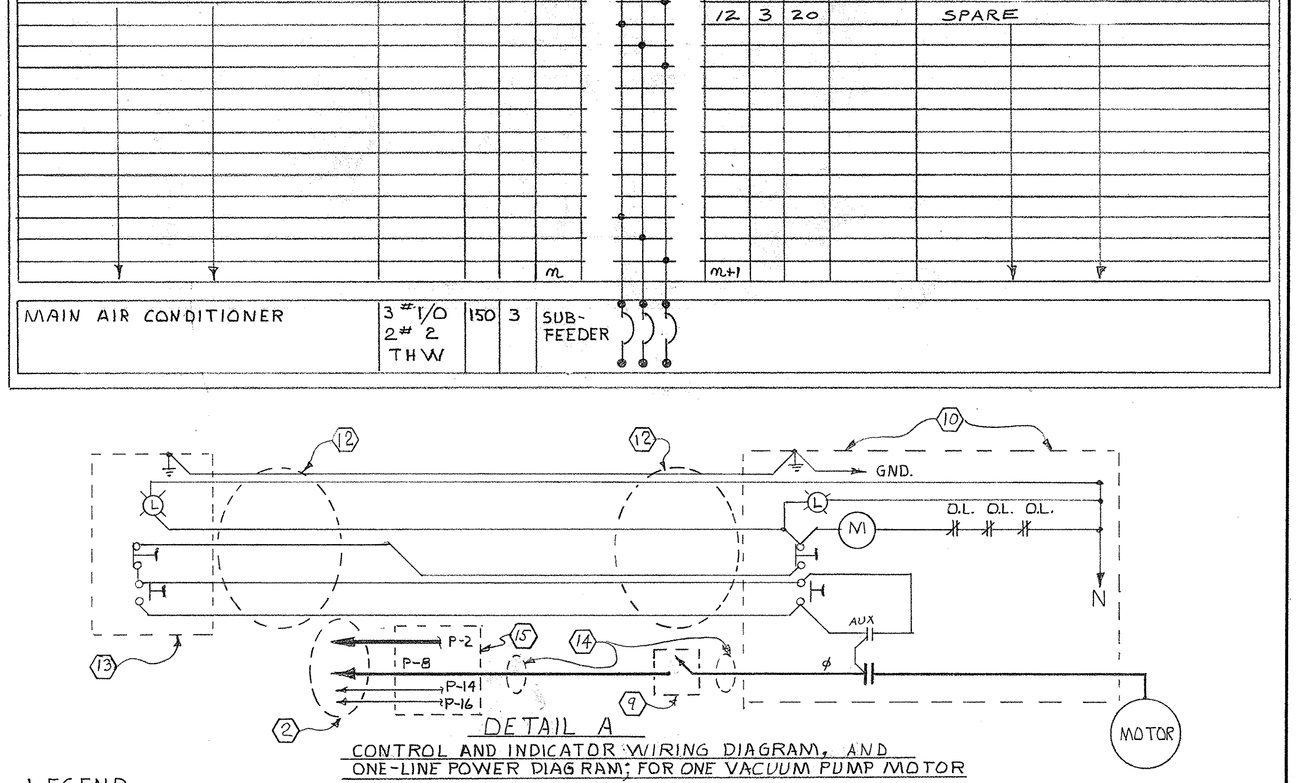
#=NOTES

1. P-3: NEW NEMA 3R CIRCUIT BREAKER PANEL (SHEET E-1, NOTE 12) MUST BE INSTALLED BEFORE WORK IS STARTED ON THE ORAL-EVAC NEW ENCLOSURE SHED ELECTRICAL TIE-IN TO THE MAIN POWER: PANEL MUST HAVE 400 AMP MAIN LUGS ONLY; 150 AMP SUB FEEDER BREAKER; BOLT ON BREAKERS; 3-PHASE, 4-WIRE; EQUIPMENT GROUND BAR; 42 SINGLE BREAKER SPACES (MINIMUM); FACTORY ASSEMBLED; WITH LISTED BRANCH BREAKERS -- SEE PANEL BOARD SCHEDULE.
2. 2-INCH GRS CONDUIT: RUN ON OUTSIDE OF BLDG (SEE SECTION A-A) THEN AS SHOWN TO STUB-UP AT "NOTE-5" LOCATION.
3. SEE NEW ENCLOSURE SHED PLAN & ELEVATION -- USE AN "LB" CONDUIT FITTING TO TURN DOWN AT THIS LOCATION: 2'-2" SOUTH OF THE NORTH EDGE OF THE PAD FOR THE NEW ENCLOSURE SHED.
4. RUN NOTE-2 AND NOTE-12 CONDUIT UNDER GROUND AND PARALLEL (AS SHOWN).
5. STUB-UP NOTE-2 AND NOTE-12 CONDUITS AS SHOWN: 4'-0" ABOVE F/F.
6. 1-INCH GRS CONDUIT FOR POWER TO VACUUM PUMP MOTOR: STUB UP 4'-6" (TYP. 2 PLACES).
7. 1-INCH GRS CONDUIT FOR POWER TO VACUUM PUMP MOTOR: RUN UNDER SLAB (TYP. 2 PLACES).
8. 1-INCH GRS CONDUIT FOR POWER TO VACUUM PUMP MOTOR: RISER TO MOTOR J-BOX (TYP. 2 PLACES): CONNECT TO MOTOR J-BOX WITH WATERPROOF FLEX: SEE DETAIL - C.
9. 3-PHASE SAFETY DISCONNECT SWITCH FOR VACUUM PUMP MOTOR & CONTROL CIRCUITRY (TYP. 2 PLACES)
10. 3-PHASE MAGNETIC CONTROLLER WITH BUILT-IN START/STOP SWITCH AND INDICATOR LIGHT, OVER LOAD HEATERS (23 AMP RATING) AND CONTACTS, AND AT LEAST ONE SET OF AUXILIARY CONTACTS -- SEE DETAIL A FOR SYSTEM HOOK UP (TYP. 2 PLACES): SIZE NEMA 1.
11. FLUORESCENT LIGHT FIXTURE: LANTDIV PLATE NL-8; SKETCH NFGS-16510-8 (TYP. 2 PLACES).
12. 1-INCH GRS CONDUIT FOR SIGNAL AND CONTROL WIRING; INSTALL, AS SHOWN, BETWEEN START/STOP SWITCH-INDICATOR (NOTE-13) AND THE "NOTE 5" STUB UP, AND THEN TO "NOTE-10" CONTROLLER.
13. REMOTE START/STOP SWITCH-INDICATOR: LOCATE IN DENTAL ADMINISTRATION OFFICE, IN THE AREA UNDER THE CLOCK, ON THE OUTSIDE WALL -- COORDINATE THE EXACT LOCATION WITH THE DENTAL CPO IN CHARGE (TYP. TWO PLACES).
14. 1" GRS BETWEEN DISCONNECT "9" AND CONTROLLER "10"; AND J-BOX "15".
15. 6"X6" J-BOX MOUNT ON TOP OF STUB-UP OF 2" GRS AT "5".
16. 4X4 J-BOX MOUNTED ON TOP OF STUB-UP OF 1" GRS AT "5".

PANEL BOARD SCHEDULE -- AUXILIARY POWER, BLDG. AV-29

NEMA 3R; 400A; LUGS ONLY; 150 AMP SUB-FEEDER BREAKER; 3φ; 4-W; BOLT ON; GND. BAR.
(SQUARE D TYPE NQOB-42 4L, WITH THE SPECIFIED OPTIONS AND LISTED BREAKERS; OR EQUIV.)

LOAD	WIRE SIZE	BREAKER AMP	POL	CKT NO.	φ A B C	CKT NO.	BREAKER POL	BREAKER AMP	WIRE SIZE	LOAD
ROOF AIR COND	3#4, 2#6	70	3	1		2	3	30	5#10	ORAL VAC. PUMP NO. 1
MAIN A.C. CONDENSER & 120V CONTRL.	5#10	30	3	3		4	3	30	5#10	ORAL VAC. PUMP NO. 2
TOOTH BRUSHING LAB.	3#10	20	1	5		6	1	20	3#10	VAC. PUMP SHED LIGHTS
SPARE		20	3	7		8	1	20	3#10	VAC. PUMP SHED OUTLETS
EMPTY SPACE						10	1	20		SPARE
						12	3	20		SPARE
				m		m+1				
MAIN AIR CONDITIONER	3#1/0, 2#2 THW	150	3	SUB-FEEDER						



DETAIL A
CONTROL AND INDICATOR WIRING DIAGRAM, AND ONE-LINE POWER DIAGRAM; FOR ONE VACUUM PUMP MOTOR

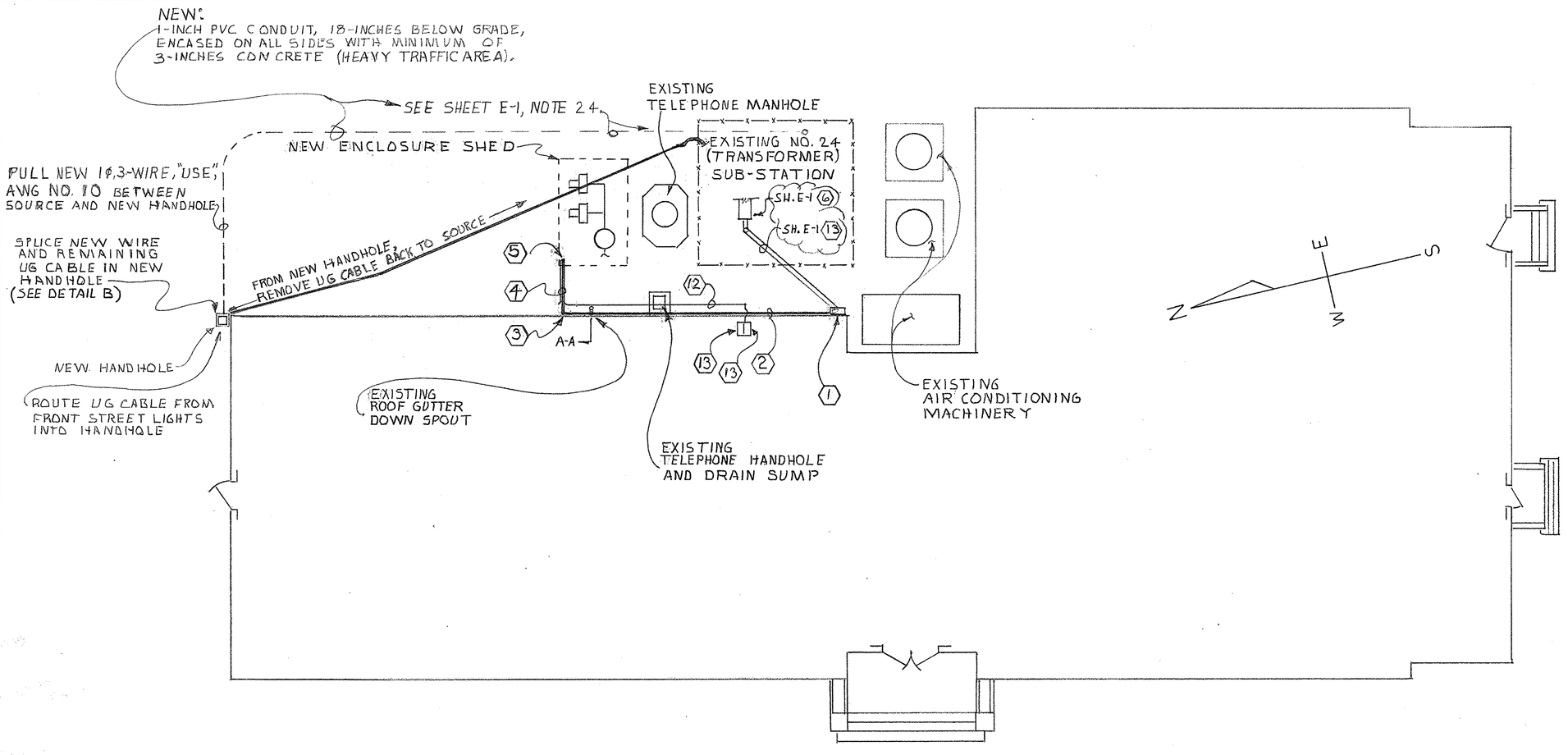
LEGEND

= INDICATOR LIGHT

= MOTOR STARTER SOLDNOID

= REFER TO THE NOTE THAT HAS THE SAME NUMBER AS THE NUMBER IN THE HEXAGON.

= DUAL OUTLETS, NEMA 5-20R



NEW ENCLOSURE SHED - SITE LOCATION
(1/8" = 1')

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
	GENERAL AS-BUILT		16-10-84	

REVISIONS

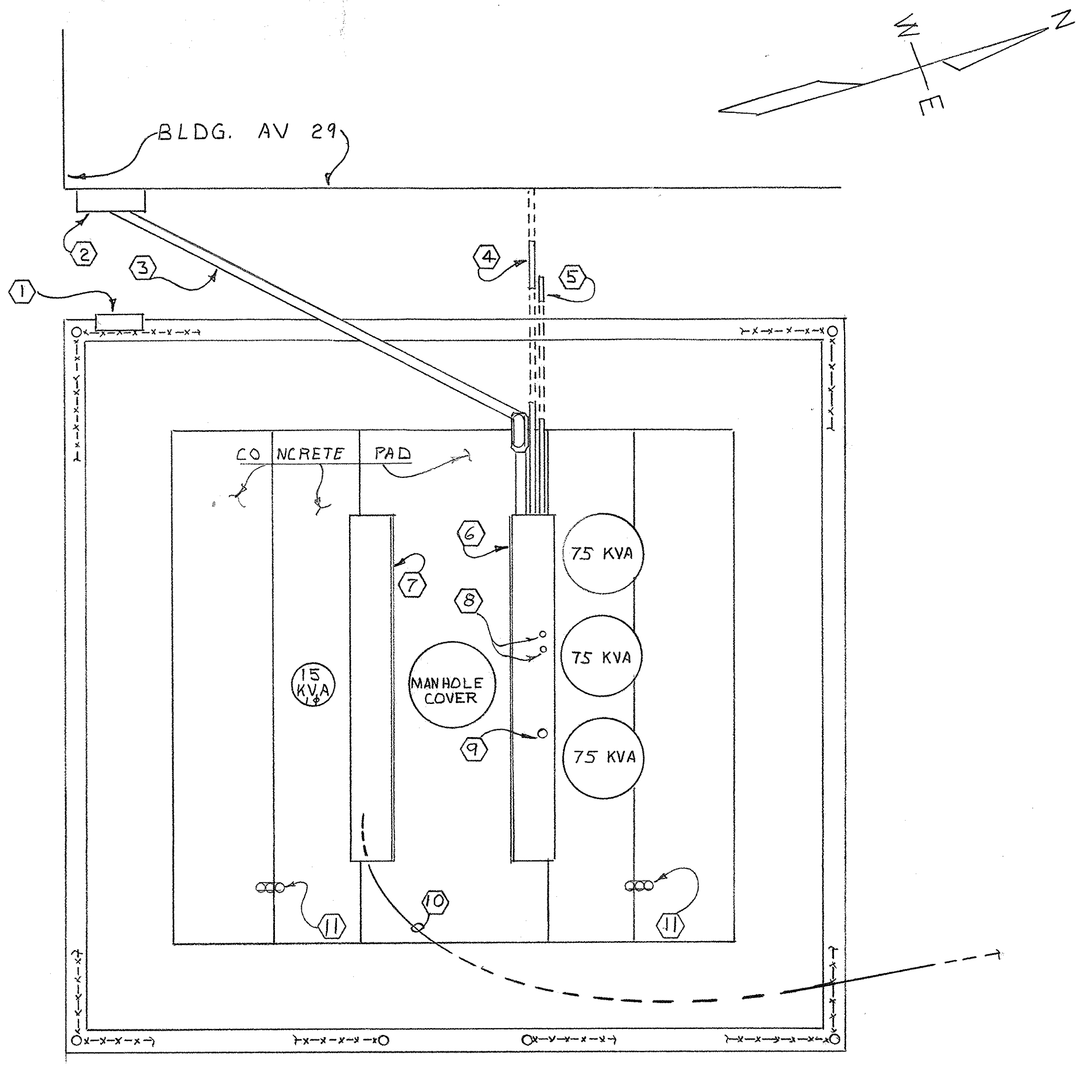
DES
DRWN
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE 7/1/83
APPROVED 7/3/83
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

DENTAL CLINIC; BLDG. AV-29
ORAL EVACUATION SYSTEM
ELECTRICAL PLAN

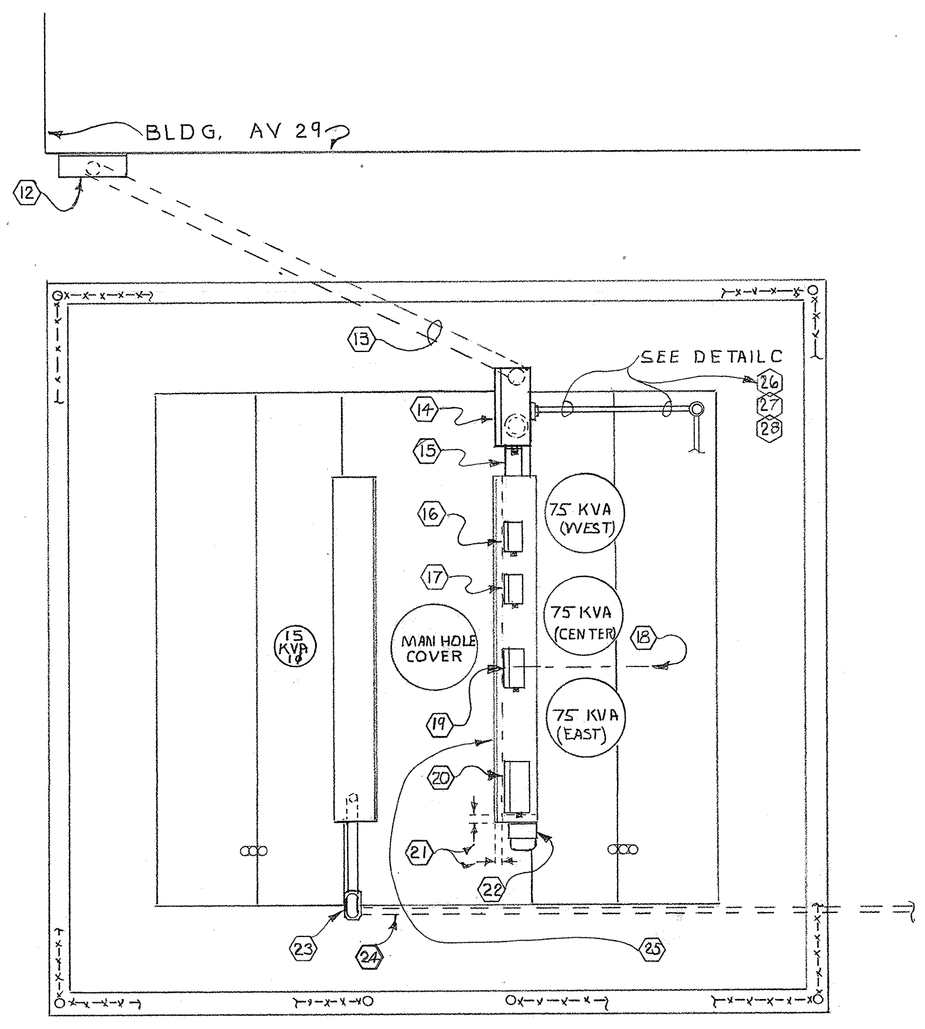
SIZE F | CODE IDENT NO. E-2 | NAVFAC DRAWING NO. 4096178
SCALE: AS NOTED | SHEET 3 OF 3.

N62470-83-B-4109



DETAIL A

SUB-STATION NO. 24 -- SIMPLIFIED PLAN VIEW (EXIST.)
(1½" = 1')



DETAIL B

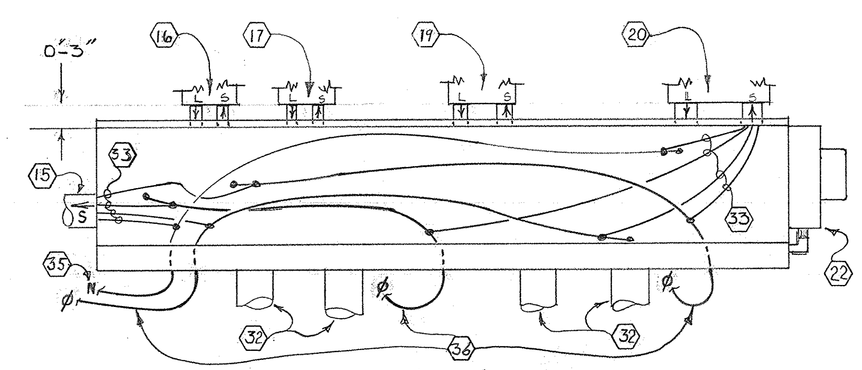
SUB-STATION NO. 24 -- SIMPLIFIED PLAN VIEW (NEW)
(1½" = 1')

NOTES: (#)

1. REMOVE EXISTING TRANSFER SWITCH.
2. REMOVE EXISTING CIRCUIT BREAKER CABINET.
3. REMOVE EXISTING BRANCH FEEDER AND CONDUIT.
4. REMOVE EXISTING, PARTIALLY EXPOSED, EMPTY CONDUIT.
5. REMOVE EXISTING, EXPOSED, CUT-OFF CONDUIT: IN THIS (WEST) END OF (6) WELD ALL HOLES CLOSED.
6. EXISTING GUTTER BOX FOR 120/208V SECONDARY OF THE THREE 75 KVA (3 X 75 KVA) TRANSFORMERS.
7. EXISTING GUTTER BOX FOR 120/240V 1-Ø 15 KVA TRANSFORMER.
8. TWO EXISTING HOLES (PLUGGED WITH DUCT-SEAL): WELD HOLES CLOSED.
9. REMOVE METER FROM THIS HOLE; REMOVE CONDUIT STUB-UP; WELD HOLE CLOSED
10. DIRECT BURIED CABLE; TOO SHALLOW AND PARTLY EXPOSED: DIG CABLE OUT OF GROUND BETWEEN 120/240V GUTTER BOX AND THE NORTHEAST CORNER OF BUILDING AV 24 -- INSTALL A HANDHOLE AT THIS NORTHEAST CORNER OF BLDG. AV 29: SEE SHEET E2, THE NEW ENCLOSURE SHED - SITE LOCATION DETAIL.
11. H.V. POTHEADS.
12. INSTALL NEW CIRCUIT BREAKER PANEL NEMA 3R CABINET: SEE SHEET E2; NOTE 1 AND PANEL BOARD SCHEDULE.
13. INSTALL NEW 4-INCH PVC, BURIED, ENCASED IN CONCRETE -- UNDERGROUND 90° ELBOWS GRC VERTICAL STUB-UPS TO BE GRS; ALSO SEE NOTE 31, AND DETAILS B & E.
14. NEW 400 AMP, FUSED, DISCONNECT; 3Ø, 4-WIRE; SUPPORTED BY CONDUIT -- NOTES 13 & 31, AND BACK-BRACE -- NOTE 28: SERVICE TO NEW PANEL, NOTE 12.
15. 4-INCH GRS NIPPLE; APPROX. 12-INCHES LONG: ADJUST LENGTH SO THAT EAST-RISER (13) ENTERS CABINET -- NOTE 14 -- NEAR TO WEST SIDE BUT WITH ENOUGH CLEARANCE FOR PROPER INSTALLATION OF CONDUIT LOCKWASHERS, BONDING JUMPER, BUSHING, ETC.
16. NEW 60 AMP, FUSED, DISCONNECT; 3Ø, 4-WIRE: SERVICE TO GARAGE (AV 28).
17. NEW 60 AMP, FUSED, DISCONNECT; 3Ø, 4-WIRE: SERVICE TO AIR COMPRESSORS (AV 29A).
18. CENTER LINE BETWEEN "CENTER" AND "EAST" 75 KVA TRANSFORMERS.
19. NEW 100 AMP, FUSED, DISCONNECT; 3Ø, 4-WIRE: SERVICE TO BLDG AV 29, UP-STAIRS PANEL. MOUNT ℄ OF PANEL ON CENTER LINE IN NOTE 18.
20. NEW 200 AMP, FUSED, DISCONNECT; 3Ø, 4-WIRE: SERVICE TO BLDG AV 29, DOWN STAIRS PANEL; SEE NOTE 21.

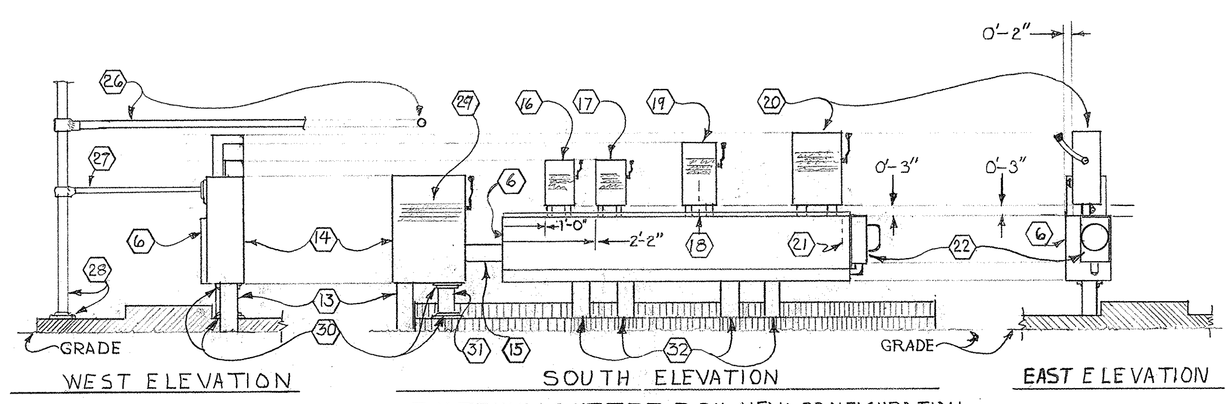
(NOTES 16, 17, 19 & 20: MOUNT 0'-3" ABOVE THE GUTTER BOX TOP: REQUIRED FOR DOOR CLEARANCE.)

21. DISTANCE EQUALS TWO-INCHES (0'-2"): FUSED DISCONNECT NO. 20 IS MOUNTED 2-IN. FROM THE EAST END OF THE GUTTER BOX (6); ALL FUSED DISCONNECTS ON TOP OF THE GUTTER BOX (DISCONNECTS 16, 17, 19 & 20) ARE MOUNTED WITH THEIR FRONT-COVER FRONT EXTREMITIES TWO-INCHES BACK FROM THE SOUTH FACE OF THE GUTTER BOX. REQUIRED FOR GUTTER BOX DOOR CLEARANCE.
22. THE METER REMOVED IN NOTE 9 IS TO BE INSTALLED IN THIS LOCATION (SEE DETAILS B C & D).
23. REFER TO NOTE 10 (ABOVE), REPLACE THE REMOVED DIRECT BURIED CABLE BETWEEN THE 120/240V 1Ø GUTTER BOX AND THE NEW HANDHOLE WITH 1" GRS WHERE IT IS SHOWN ABOVE GRADE: SEE NOTE 24.
24. REFER TO NOTES 10 AND 23 (ABOVE), UNDERGROUND CONDUIT TO BE 1" PVC ENCASED IN CONCRETE.
25. OPEN SIDE OF GUTTER BOX "6".
26. EXISTING HORIZONTAL PIPE BRACE FOR H.V. SUPPORT FRAME (TYP. ALL 4 SIDES). (ONE MFGR OF THIS TYPE HDW. IS GASCOIGNE LTD 77 RENSRO DRV. BUFFALO, N.Y. 14225.)
27. NEW BRACE, PIPE, 1-INCH MINIMUM, TO SUPPORT BACK OF 400 AMP DISCONNECT.
28. EXISTING VERTICAL PIPE BRACE FOR H.V. SUPPORT FRAME (TYP. ALL 4 CORNERS).
29. STENCIL THE FRONT COVER TO SHOW THE AMPERAGE OF THE FUSES AND THE BRANCH FEEDER THAT IS SERVED (SEE FUSE DISCONNECT SCHEDULE), TYP. 5 PLACES.
30. COMPANION FLANGE, 4-INCH; USED FOR PHYSICAL SUPPORT: ANCHOR INTO CONCRETE, BOLT TO CABINET (ONE TYPE-MFGR IS Mc MASTER-CARR, PO BOX 4355, CHICAGO, IL., 60680).
31. 4-INCH GRS CONDUIT USED WITH NOTE-30 FLANGES FOR PHYSICAL SUPPORT: ADJUST MOUNTING AND SUPPORTS SO THAT BOTTOM OF CABINET-14 IS LEVEL WITH BOTTOM OF GUTTER-BOX-6.
32. EXISTING CONDUIT BETWEEN GUTTER BOX AND UNDERGROUND MANHOLE; LOAD CABLES EXIT MANHOLE THRU THESE CONDUITS AND TAP POWER IN THE GUTTER BOX. EXISTING LOAD CABLES WILL NOT REACH INTO NEW FUSED DISCONNECTS; SPLICE THESE CABLES IN THE GUTTER BOX -- USE SOURCE-SIDE(S) AND LOAD-SIDE (L) CABLE SIZE TO-AND-FROM THE DISCONNECTS AS SHOWN IN THE PANEL SCHEDULE.
33. EACH TAP INTO THE TRANSFORMER SECONDARY BUS-CABLE IS MADE TO THAT BUS-CABLE; DO NOT PIGGY-BACK ONE TAP ONTO ANOTHER TAP; TWO TAPS ARE SHOWN: TYP FOR ALL TAPS.
34. IN EACH STRUCTURE STENCIL THE "P" NUMBER OF EACH PANEL ON THE COVER OF THAT PANEL.
35. NEW NEUTRAL CABLE FROM 3 X 75 KVA TRANSFORMER SECONDARIES TO GUTTER BOX -- USE "SE" 300 MCM CABLE.
36. NEW PHASE CABLES FROM 3 X 75 KVA TRANSFORMER SECONDARIES TO GUTTER BOX -- USE "SE" 500 MCM CABLE.
37. NOTE: ALL ELECTRICAL MAIN POWER SHUT-DOWNS WILL BE SCHEDULED DURING HOURS WHEN THE DENTAL FACILITY IS NORMALLY CLOSED.



3 X 75 KVA GUTTER BOX (NOTE 6) SOUTH ELEVATION
POWER TAPS

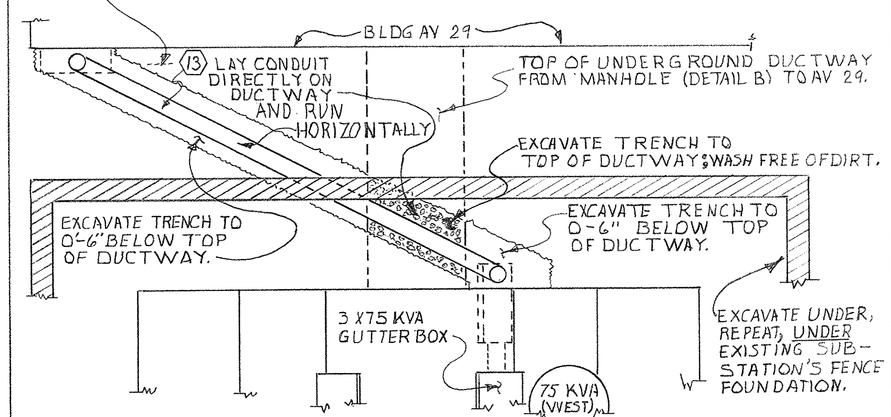
DETAIL D
(1" = 1')



3 X 75 KVA GUTTER BOX NEW CONFIGURATION

DETAIL C
(1½" = 1')

WARNING: THERE ARE UNRECORDED, BURIED SOIL LINES NEAR TO, AND PARALLEL TO THE BLDG AV 29 FOUNDATION.



INSTALLATION OF NEW 4-INCH GRS-PVC CONDUIT BETWEEN THE 3 X 75 KVA GUTTER BOX & AV 29
(NO SCALE)

DETAIL E

FUSED DISCONNECT SCHEDULE

NOTE REF. NO.	FUSE SIZE	SERVICE * (34)	WIRE SIZE	4-WIRE, S/N, NEMA 3R, FUSED, DISCONNECT SWITCH (SQUARE-D PART NUMBER -- FOR TYPE REFERENCE -- OR EQUIV.):
(14)	400 A	(12 OUTSIDE) P-3	THW 600 MCM	D 325 NR
(16)	60 A	GARAGE AV 28 P-5	THW NO. 6 AWG	D 322 NRB
(17)	60 A	AIR COMPRESSORS AV 29A P-4	THW NO. 6 AWG	D 322 NRB
(19)	100 A	(UP STAIRS) P-2	THW NO. 2 AWG	D 323 NRB
(20)	200 A	(DOWN STAIRS) P-1	THW 000 AWG	D 324 NRB

NOTE: PANEL BOARD SCHEDULE & TYPE ARE GIVEN ON SHEET E-2

*UNDER "SERVICE": NOTES IN PARENTHESES ARE FOR CLARIFICATION ONLY, AND NOT TO BE PAINTED ON THE DISCONNECT COVER, NOR CIRCUIT BREAKER PANEL

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
	GENERAL AS-BUILT		16 OCT 84	

REVISIONS

DES Lee
DRWN
CHK R.R.F. 3-29-82
SUPV R.R.F.
ENG OFF 6/30/83
SATISFACTORY TO R.C. King
DATE 7/1/83
APPROVED 7/3/83
PUBLIC WORKS OFFICER

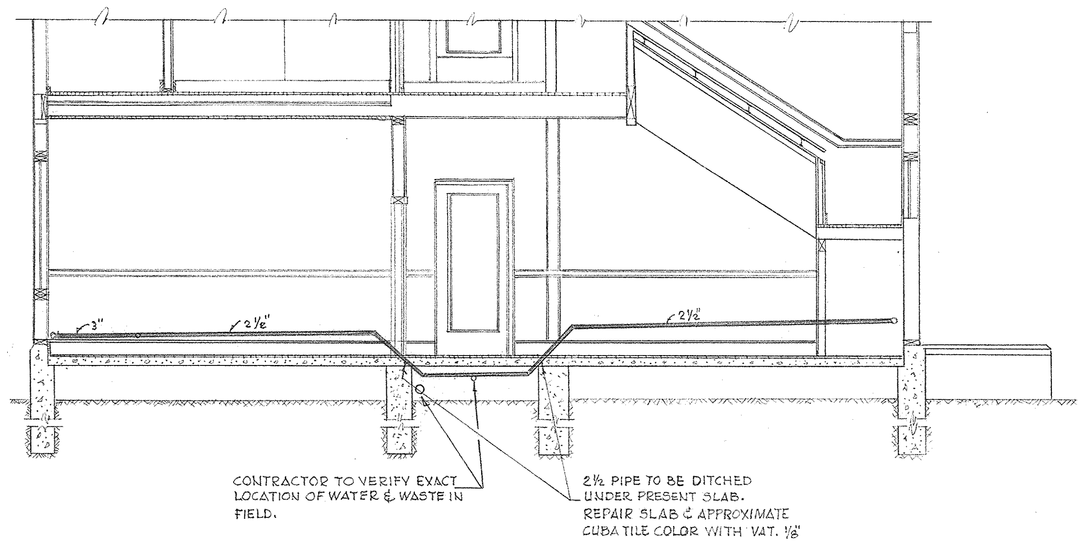
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

DENTAL CLINIC BLDG AV 29
ORAL EVACUATION SYSTEM

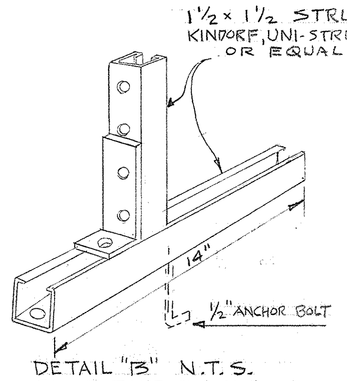
ELECTRICAL SITE WORK

SIZE F | CODE IDENT NO. E-1 | NAVFAC DRAWING NO. 4096177 | SCALE: AS SHOWN | SHEET 2 OF 3

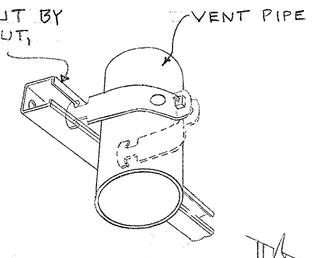
N62470-83-B-4109



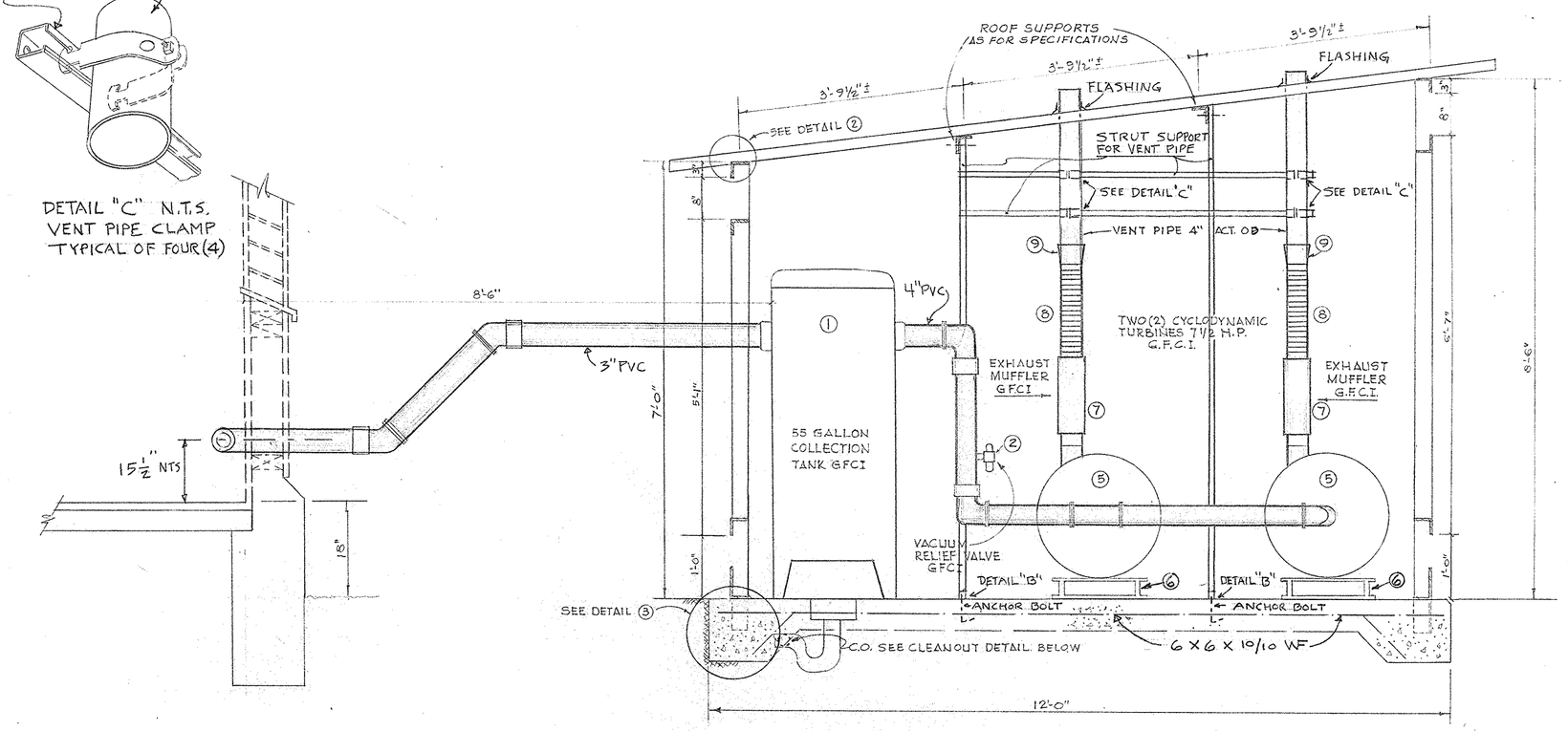
SECTION "A-A"
SCALE: ⅛"=1'0"



DETAIL "B" N.T.S.
FLOOR BASE FOR VERTICAL STRUT SUPPORTING VENT PIPES. TYPICAL OF TWO (2)

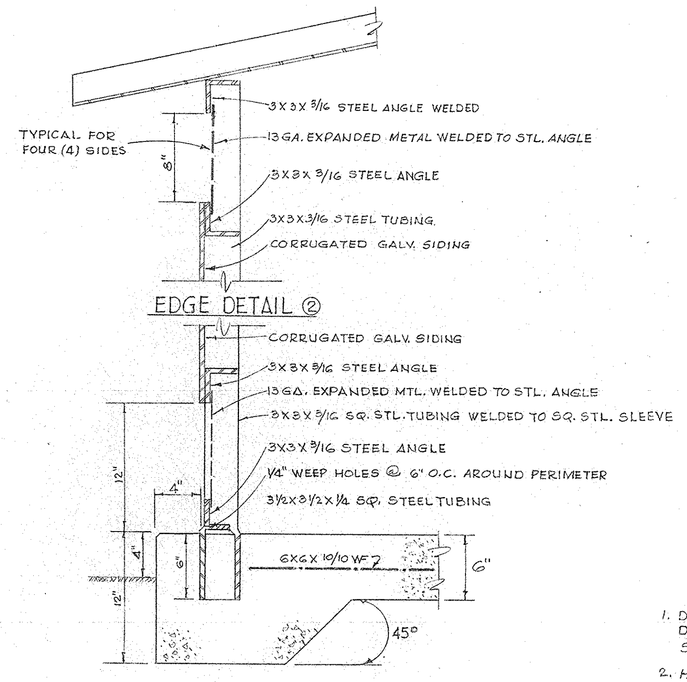


DETAIL "C" N.T.S.
VENT PIPE CLAMP
TYPICAL OF FOUR (4)



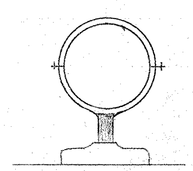
SECTION "B-B"
SCALE: ¾"=1'-0"

GOVERNMENT FURNISHED EQUIPMENT		
NUMBER	QUANTITY	DESCRIPTION
①	1	COLLECTION TANK
②	1	VACUUM RELIEF, ANTI-SURGE
③	2	FLEXIBLE TUBE 4½" X 12"
④	2	SWING CHECK VALVE
⑤	2	10 HP TURBINE
⑥	2	FLOATING STAND
⑦	2	MUFFLER
⑧	2	FLEXIBLE TUBE 3½" X 18"
⑨	2	ADAPTER-FLEX. TUBE TO VENT PIPE
⑩	10	WALL MOUNTED FILTER ASSEMBLY W/ MOUNTING PLATE

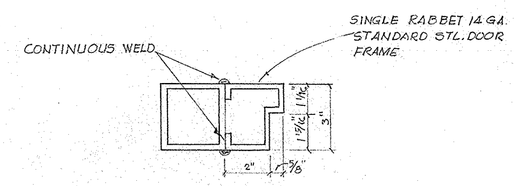


EDGE DETAIL ②

EDGE DETAIL ③
SCALE: 1½"=1'-0"



NEW HANGER DETAIL WALL MTD



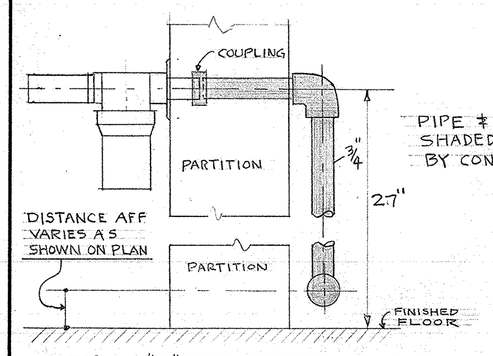
DOOR FRAME DETAIL ①
SCALE: 3"=1'-0"

NOTES:

1. DOOR TO BE FLUSH 20 GA. STEEL DOOR WITH GALVANIZED EMBOSSED STEEL SKIN 6'-8" X 3'-0" X 1¾"
2. HARDWARE TO INCLUDE 1½ PAIR HINGES 4½" X 4½" X NRPX 612 (ANSI STD. REF = A 2112) LOCK SET TO BE SERIES 8000 FUNCTION F 60.

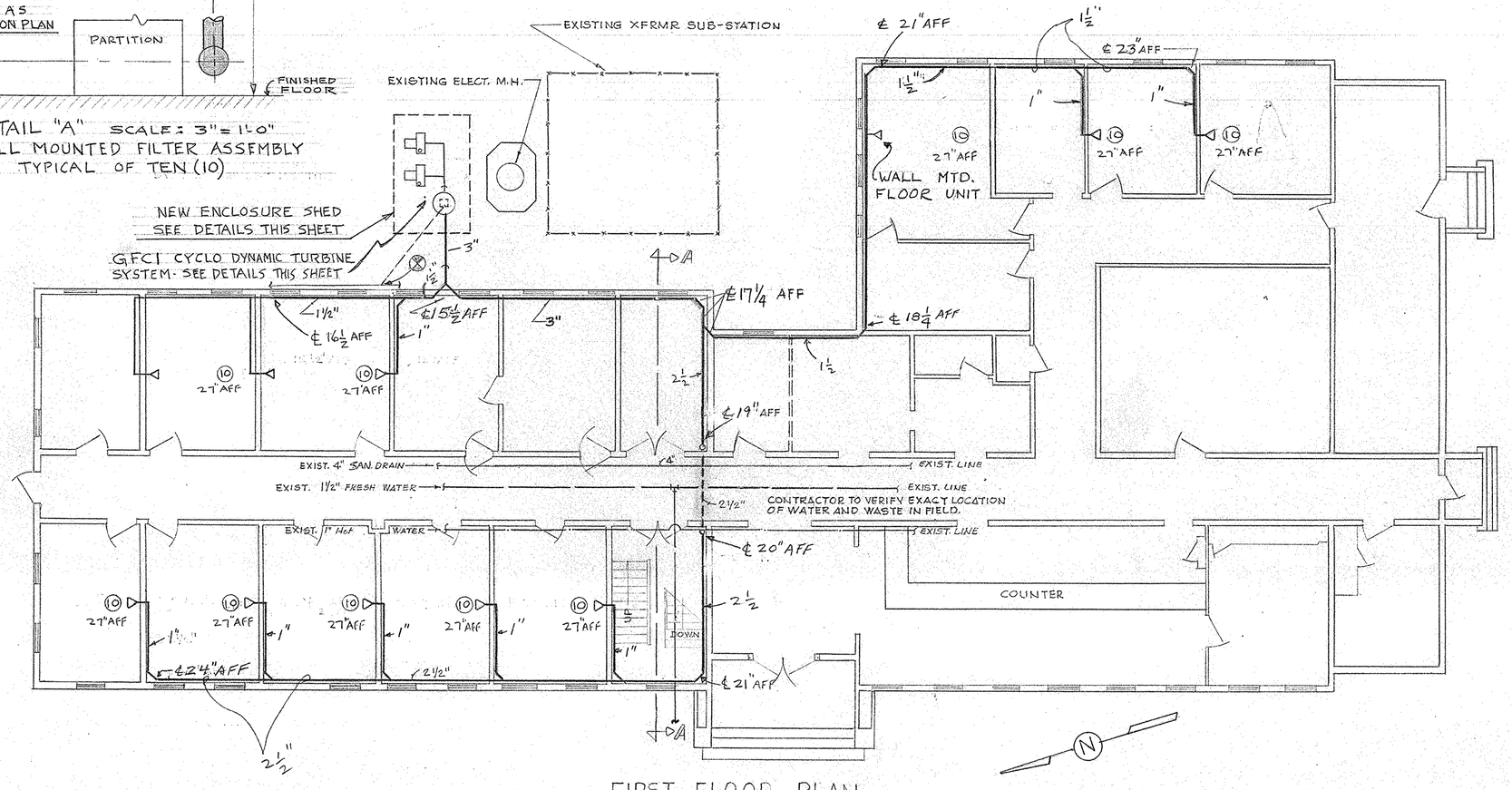
LEGEND:-

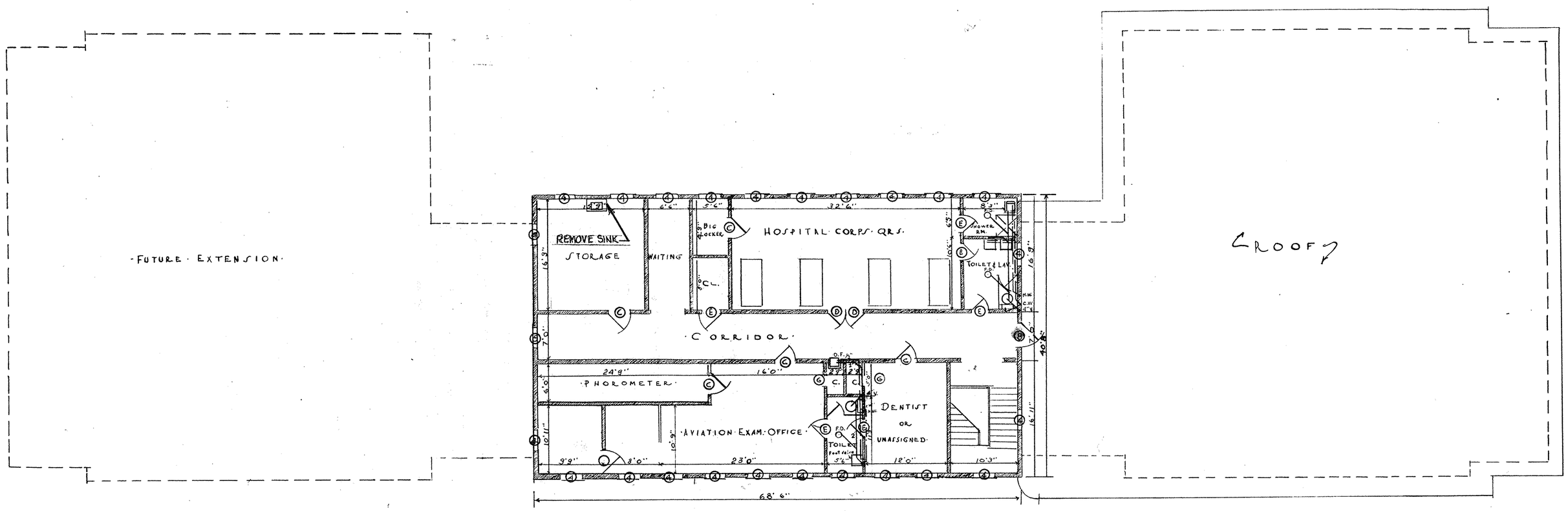
AFF	ABOVE FINISHED FLOOR
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
⊗	POINT OF CONNECTION-NEW TO EXISTING
----	NEW 3" PVC SANITARY DRAIN (BELOW GRADE)
——	NEW PVC WASTE PIPING
----	NEW PVC WASTE PIPING RUN BELOW FLOOR SLAB
VAT	VINYL ASBESTOS TILE ⅛" THICK
⊳	WALL MOUNTED FILTER ASSEMBLY W/ MOUNTING PLATE - GFCI TYP. OF TEN (10)
N.T.S.	NOT TO SCALE



PIPE & FITTINGS SHOWN SHADED TO BE SUPPLIED BY CONTRACTOR

DETAIL "A" SCALE: 3"=1'-0"
WALL MOUNTED FILTER ASSEMBLY
TYPICAL OF TEN (10)


EXISTING XFRMR. SUB-STATION
EXISTING ELECT. M.H.
NEW ENCLOSURE SHED SEE DETAILS THIS SHEET
GFCI CYCLO DYNAMIC TURBINE SYSTEM. SEE DETAILS THIS SHEET
℄ 21" AFF
℄ 23" AFF
1½"
1"
1"
27" AFF
27" AFF
27" AFF
WALL MTD. FLOOR UNIT
1½"
3"
1½"
℄ 15½" AFF
℄ 16½" AFF
℄ 17¼ AFF
℄ 18¼ AFF
℄ 19" AFF
℄ 20" AFF
℄ 21" AFF
℄ 24" AFF
EXIST. 4" SAN. DRAIN
EXIST. 1½" FRESH WATER
EXIST. LINE
CONTRACTOR TO VERIFY EXACT LOCATION OF WATER AND WASTE IN FIELD.
EXIST. 1" HOT WATER
COUNTER
DOWN
2½"
2½"
2½"

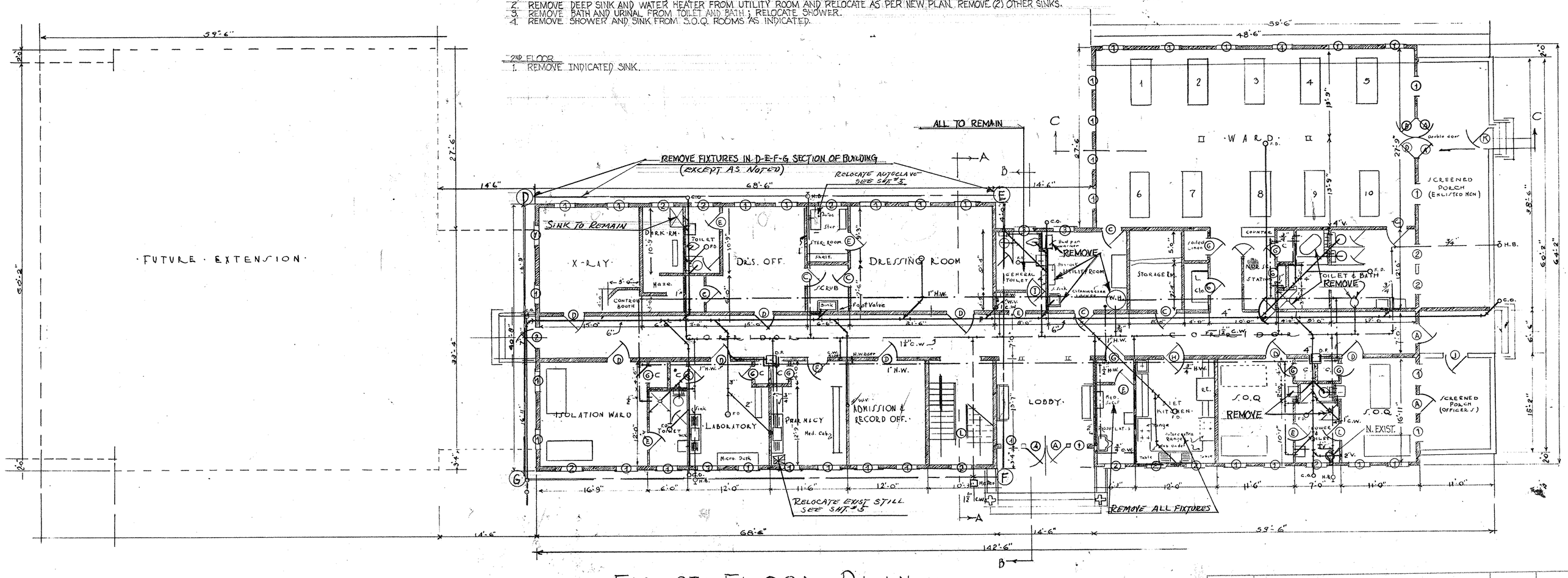


SECOND FLOOR PLAN
SCALE 1/8"=1'-0"

LISTING OF FIXTURES TO BE REMOVED

1ST FLOOR
1. REMOVE ALL FIXTURES WITHIN BOUNDARIES D-E-F-G, A 68'-6"X40'-8" AREA (EXCEPT AS NOTED)
2. REMOVE DEEP SINK AND WATER HEATER FROM UTILITY ROOM AND RELOCATE AS PER NEW PLAN. REMOVE (2) OTHER SINKS.
3. REMOVE BATH AND URINAL FROM TOILET AND BATH; RELOCATE SHOWER.
4. REMOVE SHOWER AND SINK FROM S.O.Q. ROOMS AS INDICATED.

2ND FLOOR
1. REMOVE INDICATED SINK.



FIRST FLOOR PLAN
SCALE 1/8"=1'-0"

HOT WATER LOOP SYSTEM
IN CIELING 80 GAL. BOILER

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO. 5B-2203-1269-3

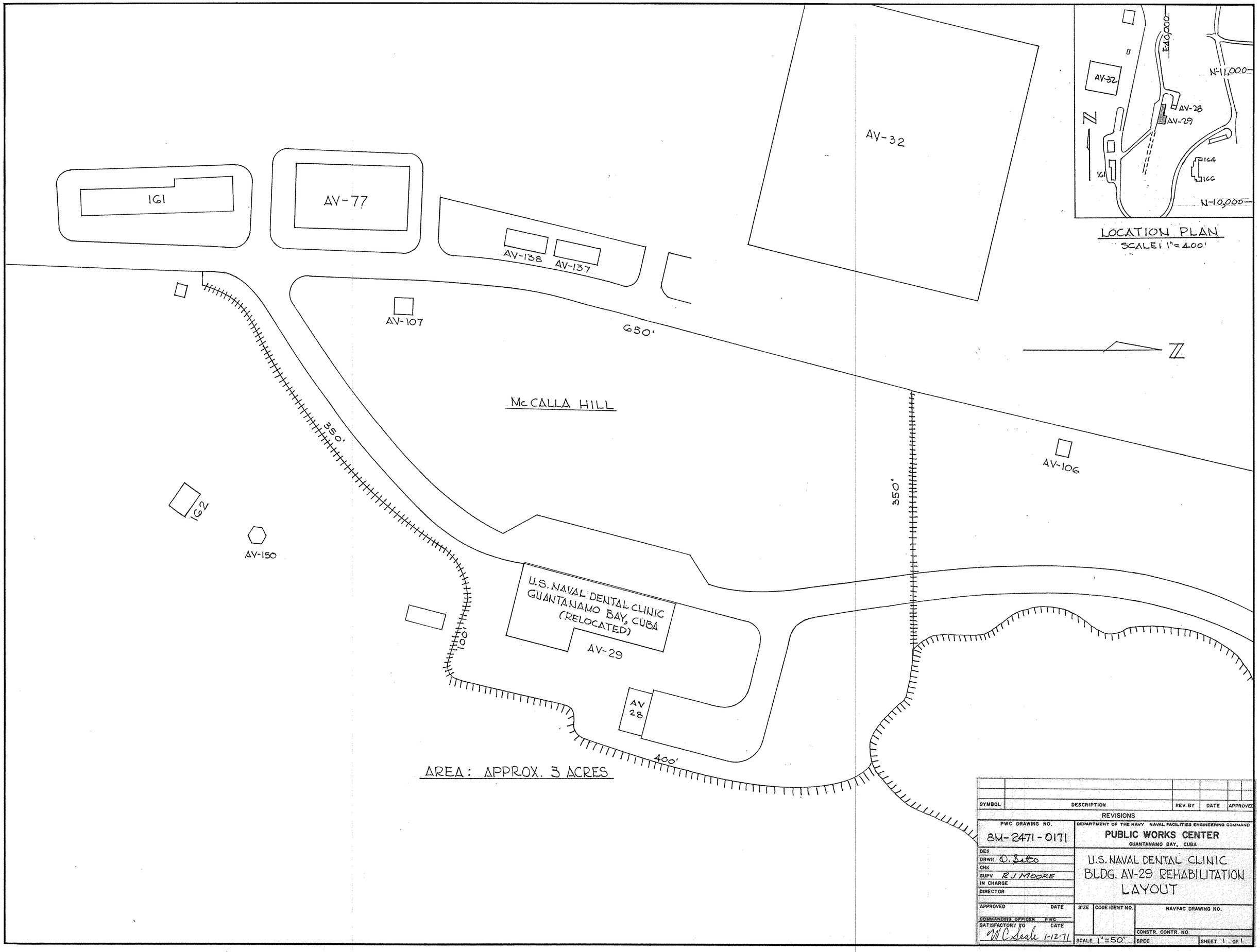
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN Hogan
CHK
SUPV F. Fitzgerald
IN CHARGE
DIRECTOR

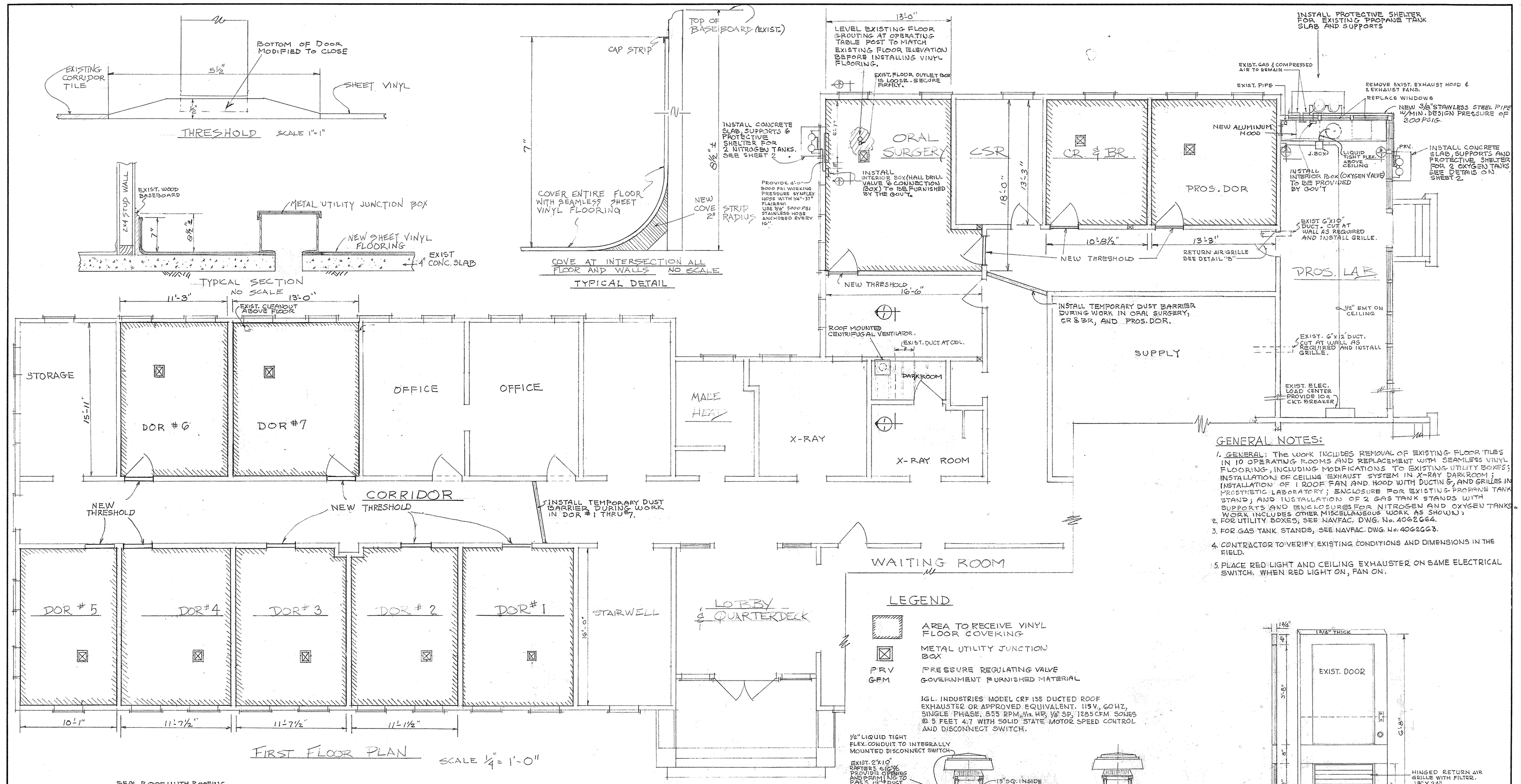
PLUMBING FIXTURES TO BE REMOVED FROM AV-29

APPROVED: R.E. Keppel Jr. 1/7/70
COMMANDING OFFICER, PWC
SATISFACTORY TO: C.H. Wilkes DATE 7 JAN 70

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO.
CONSTR. CONTR. NO.
SCALE AS SHOWN | SPEC | SHEET 3 OF 10



PRINTED BY C-T DIV. OF K&E. ARL., VA.



GENERAL NOTES:

1. GENERAL: The work includes removal of existing floor tiles in 10 operating rooms and replacement with seamless vinyl flooring, including modifications to existing utility boxes; installation of ceiling exhaust system in X-ray darkroom; installation of 1 roof fan and hood with ducting, and grilles in prosthetic laboratory; enclosure for existing propane tank stand; and installation of 2 gas tank stands with supports and enclosures for nitrogen and oxygen tanks. Work includes other miscellaneous work as shown.
2. For utility boxes, see NAVFAC. DWG. No. 4062664.
3. For gas tank stands, see NAVFAC. DWG. No. 4062663.
4. Contractor to verify existing conditions and dimensions in the field.
5. Place red light and ceiling exhauster on same electrical switch. When red light on, fan on.

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

S. IWATA REVISIONS

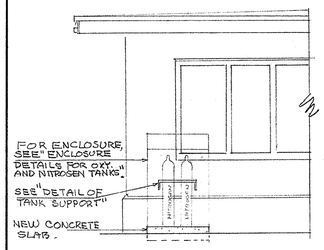
DES L. FISK & W. SLOAN P.E.
DRWN O.S./S.I.
CHK
SUPV S. IWATA
ENG OFF
SATISFACTORY TO
DATE 6-2-81
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

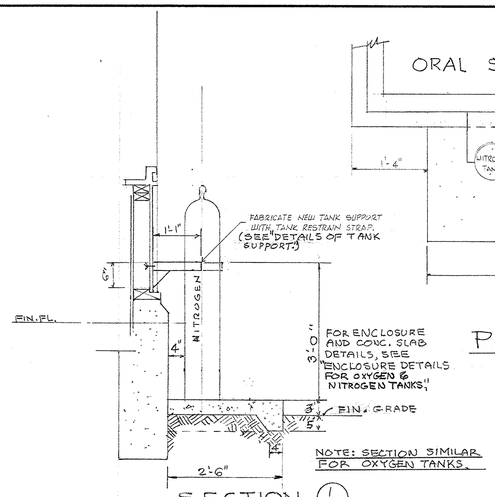
UPGRADE DENTAL CLINIC
BLDG. AV 29
VINYL FLOORING & EXHAUST SYS. - PLANS & DETAILS

SIZE F | CODE IDENT NO. | NAVFAC DRAWING NO. 4062662
SCALE: AS SHOWN | SHEET 1 OF 3

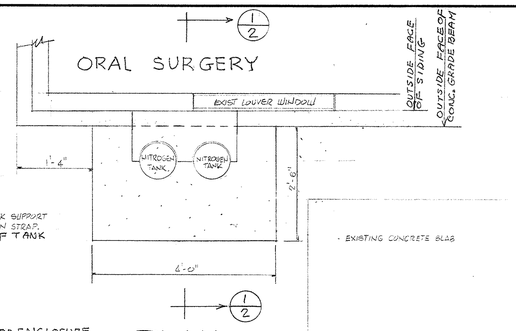
CONTRACT NO. N62470-81B-2151 SPEC NO. 05-81-2151



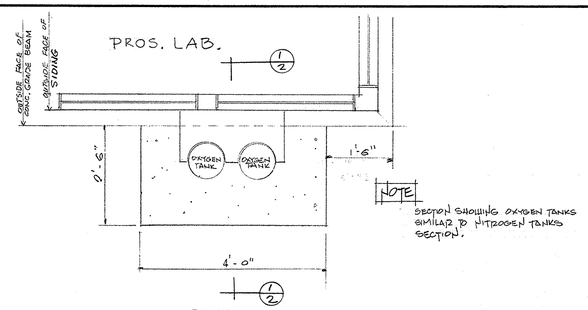
ELEVATION
SCALE: 1/4" = 1'-0"



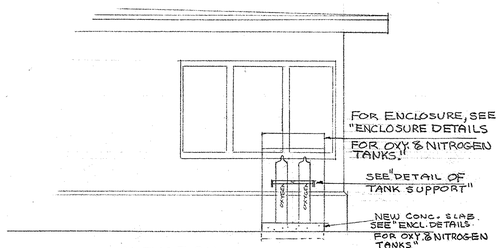
SECTION 1/2
3/4" = 1'-0"



PLAN
3/4" = 1'-0"



PLAN
3/4" = 1'-0"



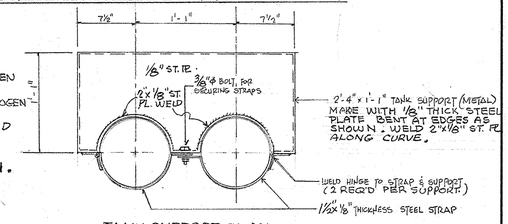
ELEVATION
1/4" = 1'-0"

NITROGEN TANKS INSTALLATION @ ORAL SURGERY RM.

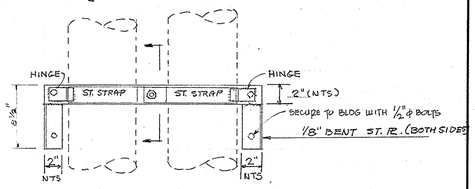
PLAN & ELEVATION - OXYGEN TANKS INSTALLATION

NOTES:

1. PROVIDE ENCLOSURE FOR EXISTING PROPANE TANK STAND AT PROSTHETIC LABORATORY.
2. PROVIDE ONE STAND WITH SUPPORTS AND ENCLOSURE FOR 2 OXYGEN TANKS AT PROSTHETIC LABORATORY.
3. PROVIDE ONE STAND WITH SUPPORTS AND ENCLOSURE FOR 2 NITROGEN TANKS AT SURGERY ROOM.
4. EXPANDED METAL SHEETS SHALL BE 3/4" SIZE, 10 Ga. GALVANIZED STEEL MESH. PAINTING NOT REQUIRED.
5. FOR GENERAL NOTES, SEE NAVFAC DWG 4062662 (SHEET 1)
6. PIPING FOR OXYGEN AND NITROGEN TANKS ARE SHOWN ON SHEET 1.

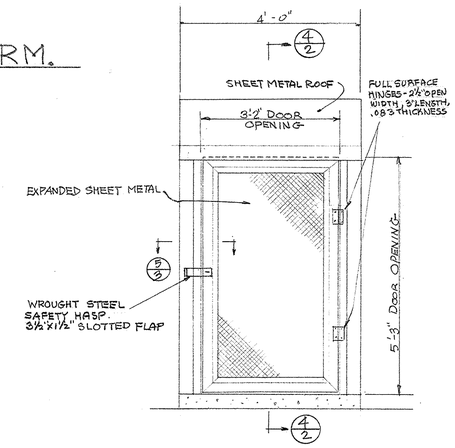


TANK SUPPORT PLAN
1 1/2" = 1'-0"

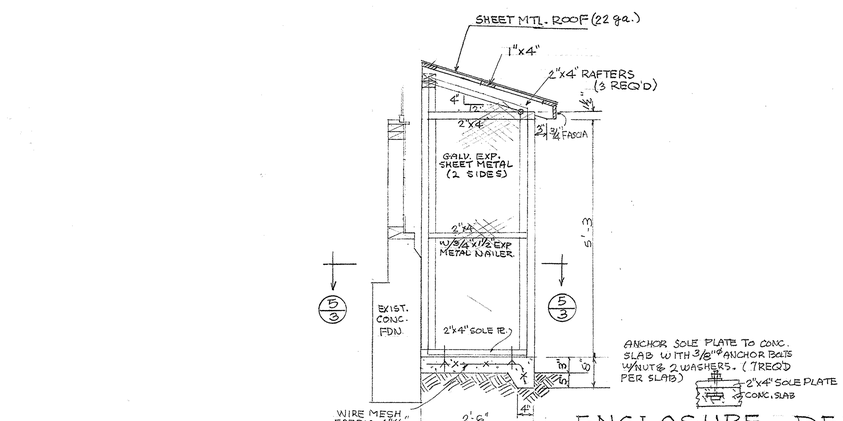


TANK SUPPORT ELEVATION
1 1/2" = 1'-0"

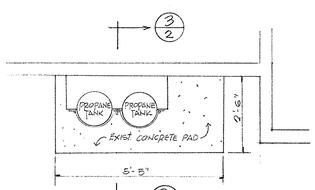
SECTION 4/2
3/4" = 1'-0"
(NOTE: OTHER SIDE SIMILAR)



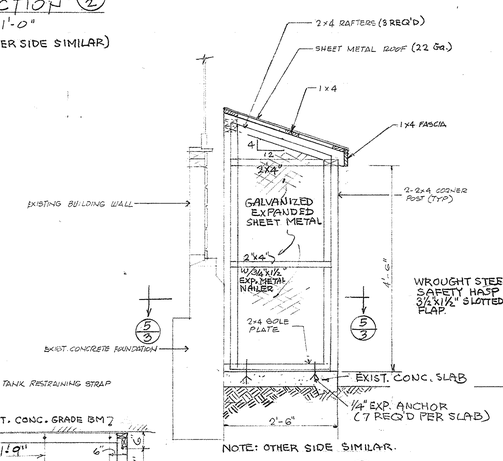
FRONT ELEVATION
3/4" = 1'-0"



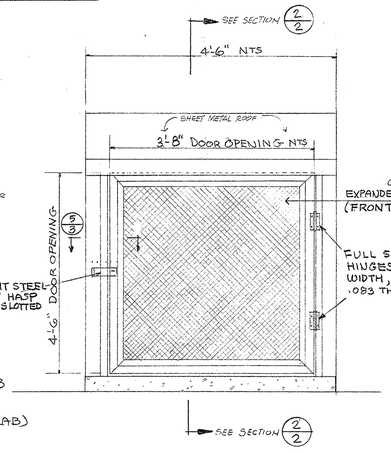
ENCLOSURE DETAILS FOR OXYGEN AND NITROGEN TANKS (TYP.)



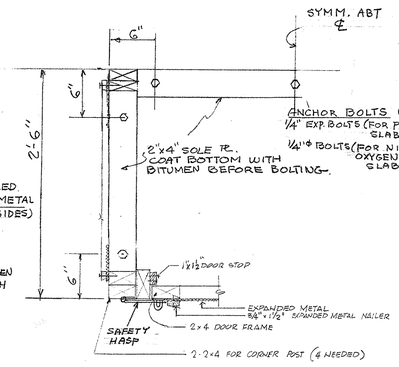
PLAN
SCALE: 1/2" = 1'-0"



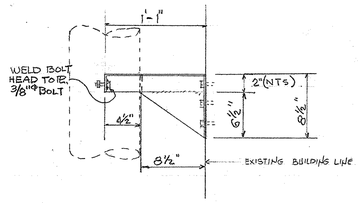
SECTION 2/2
3/4" = 1'-0"



FRONT ELEVATION
3/4" = 1'-0"



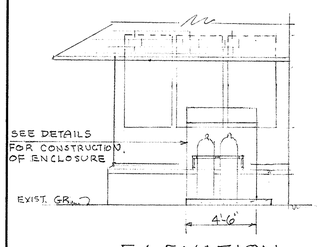
SECTION 5/3
1 1/2" = 1'-0"



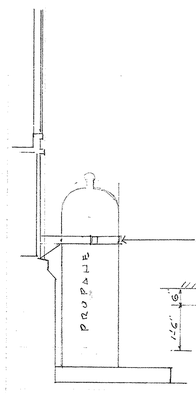
SECTION
1 1/2" = 1'-0"

DETAIL OF TANK SUPPORT (OXYGEN & NITROGEN)

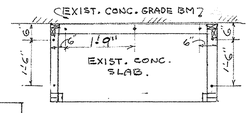
SCALE AS SHOWN



ELEVATION
SCALE: 1/4" = 1'-0"
(SHOWING PROPOSED ENCLOSURE)



SECTION 3/2
SCALE: 3/4" = 1'-0"



PLAN FOR INSTALLING 1/4" EXPANSION ANCHORS (PROPANE TANKS)

PROPANE TANKS - EXISTING CONDITION

ENCLOSURE DETAILS FOR PROPANE TANKS

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

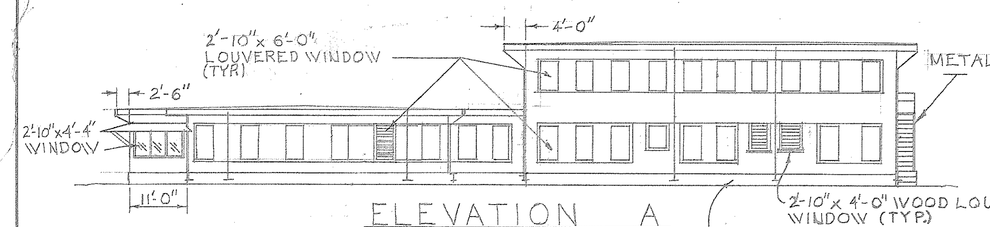
DES S. Iwata
DRWN L.D / S.I.
CHK
SUPV S. Iwata
ENG OFF
SATISFACTORY TO
DATE 6-2-81
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

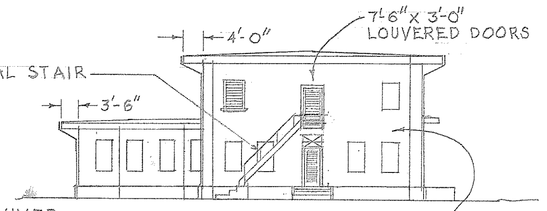
UPGRADE DENTAL CLINIC
BLDG. AV 29
GAS TANK STANDS - PLANS & DETAILS

SIZE F | CODE IDENT NO. | NAVFAC DRAWING NO. 4062663
SCALE: AS SHOWN | SHEET 2 OF 3

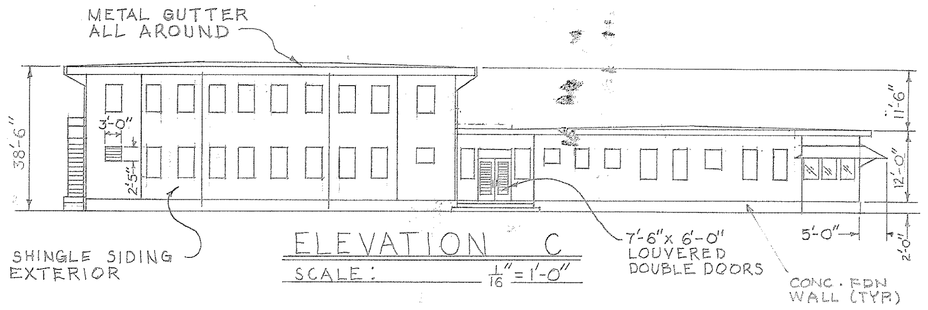
CONTRACT NO. N62470-81B-2151 SPEC. NO 05-81-2151



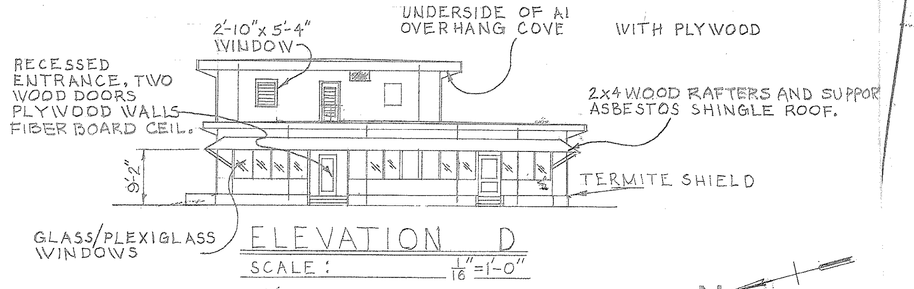
ELEVATION A
SCALE: 1/16" = 1'-0"



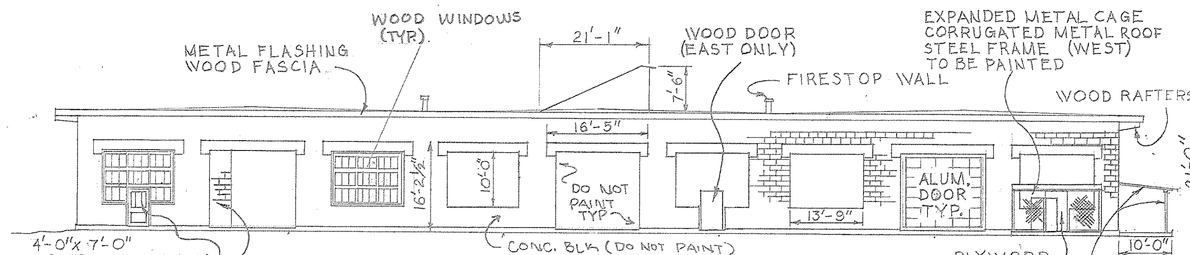
ELEVATION B
SCALE: 1/16" = 1'-0"



ELEVATION C
SCALE: 1/16" = 1'-0"



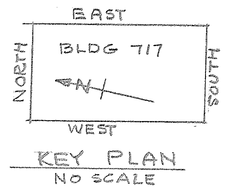
ELEVATION D
SCALE: 1/16" = 1'-0"



EAST ELEVATION
WEST ELEV. SIMILAR
SCALE: 1/16" = 1'-0"

∞SOUTH ELEVATION SIMILAR BUT SKYLIGHT REVERSED AND WITHOUT COVERED PORCH∞

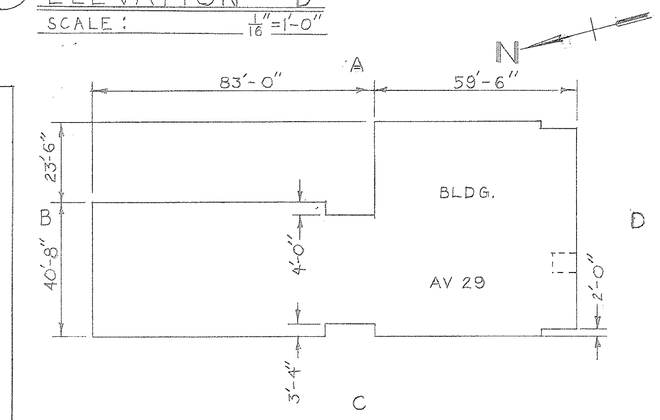
NORTH ELEVATION
SOUTH ELEV. SIMILAR
SCALE: 1/16" = 1'-0"



KEY PLAN
NO SCALE

NOTES:

1. PAINT TOP OF CORRIGATED METAL ROOFING STEEL FRAME AND EXPANDED METAL.
2. FOR COLOR SCHEME, SEE NAVFAC 4040031

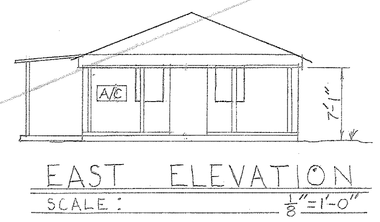


KEY PLAN
NO SCALE

NOTES:

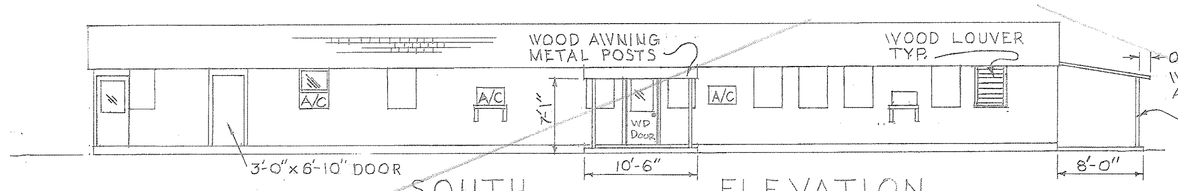
1. EXTERIOR WALLS: PAINTED ASBESTOS SHINGLE SIDING, WOOD LOUVERED WINDOWS, AND DOORS, EXCEPT AS NOTED. WOOD CONSTRUCTION ROOF OVERHANG AND CANOPY
2. SURFACES NOT TO BE PAINTED – CONCRETE FOUNDATION WALLS AND EXTERIOR ASBESTOS SHINGLE SIDING
3. FOR COLOR SCHEME, SEE NAVFAC 4040031

NORTH ELEVATION
SCALE: 1/8" = 1'-0"



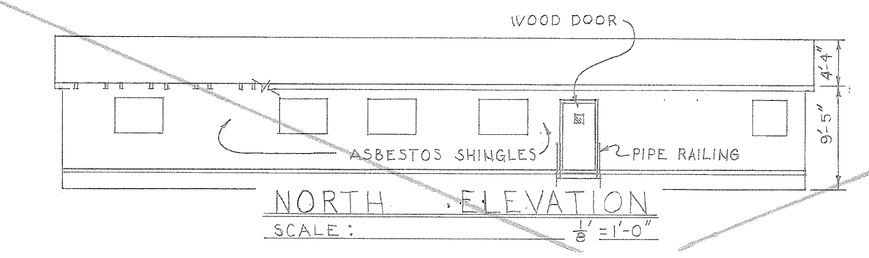
EAST ELEVATION
SCALE: 1/8" = 1'-0"

NOT IN CONTRACT

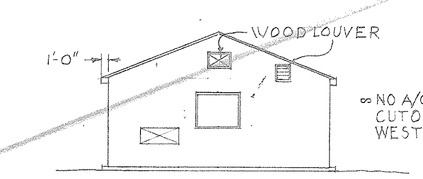


SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

WEST ELEVATION
SCALE: 1/8" = 1'-0"



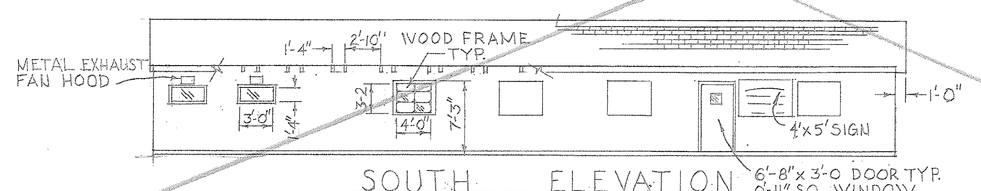
NORTH ELEVATION
SCALE: 1/8" = 1'-0"



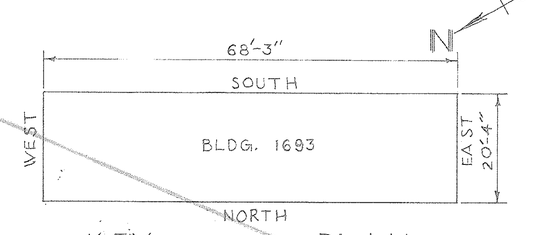
∞NO A/C DUCT CUTOUTS IN WEST ELEVATION∞

EAST ELEVATION
SCALE: 1/8" = 1'-0"

NOT IN CONTRACT

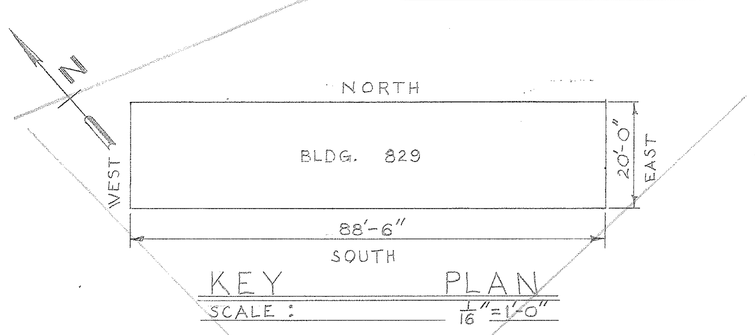


SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



KEY PLAN
SCALE: 1/8" = 1'-0"

FOR NOTES SEE LOWER LEFT HAND CORNER



KEY PLAN
SCALE: 1/16" = 1'-0"

NOTE:

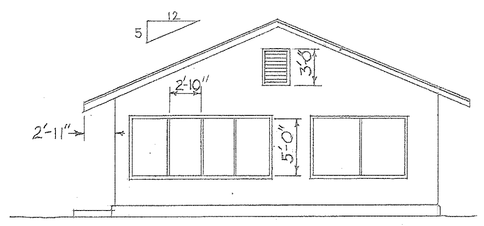
BLDG. 829 IS A WOOD FRAME STRUCTURE WITH ASBESTOS SHINGLE SIDING

1. CONDITION OF SURFACES TO BE PAINTED
   A. PEELING AND FLAKING UNDER AWNINGS
   B. SOME PEELING UNDER OVERHANG AND OTHER WOOD SURFACES.

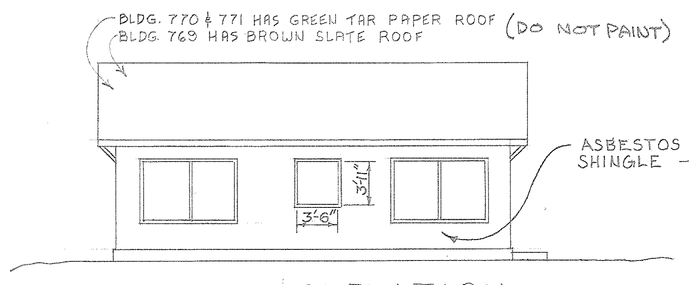
BLDG. 1683 IS A WOOD FRAME STRUCTURE WITH ASBESTOS SIDING.

1. CONDITION OF SURFACES TO BE PAINTED: SOME PEELING OF PAINT ON ROOF OVERHANG AND WINDOWS & DOORS, INCLUDING TRIM.

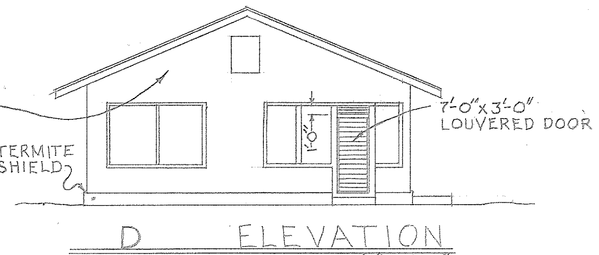
A ELEVATION
SCALE: 1/8" = 1'-0"



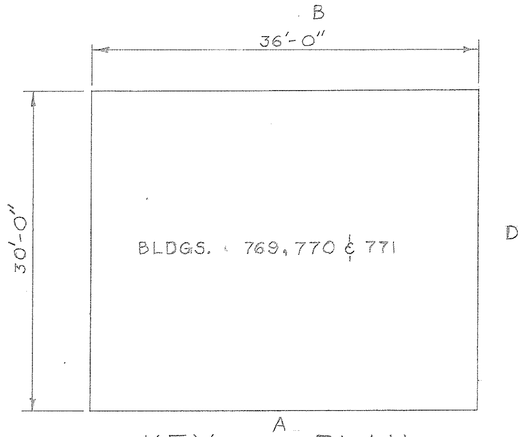
C ELEVATION
SCALE: 1/8" = 1'-0"



B ELEVATION
SCALE: 1/8" = 1'-0"



D ELEVATION
SCALE: 1/8" = 1'-0"



KEY PLAN
SCALE: 1/8" = 1'-0"

NOTE:

BLDG. AV. 29 IS A WOOD FRAME STRUCTURE WITH ASBESTOS SIDING, WOOD LOUVER WINDOWS.

1. CONDITION OF SURFACE TO BE PAINTED
   A. SOME PEELING AND FLAKING UNDER ROOF OVERHANG
   B. WINDOWS AND DOORS PEELING.

BLDG. 717 IS A CONCRETE BLOCK STRUCTURE WITH EXPOSED WOOD RAFTERS

1. CONDITION OF SURFACE TO BE PAINTED
   A. AT WINDOWS, FAIR
   B. FASCIA, & AT OVERHANG PEELING & FLAKING

BLDGS. 769, 770, & 771 ARE WOOD FRAME WITH ASBESTOS SIDING, WOOD LOUVERED WINDOWS AND DOORS.

1. CONDITION OF SURFACE TO BE PAINTED
   A. ALL WOOD SURFACES ARE PEELING AND FLAKING.
2. DO NOT PAINT SLATE ROOFING.
3. FOR COLOR SCHEME, SEE NAVFAC 4040031.

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES FISK
DRWN RUSS HOLT
CHK FISK
SUPV S.Z.
ENG OFF S. IWATA, P.E.
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

EXTERIOR BUILDING PAINTING
BLDG. NO. AV29, 717, 769, 770, 771,

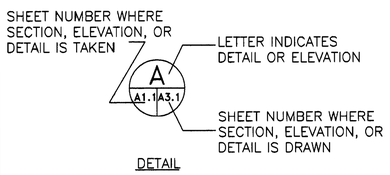
PLANS AND ELEVATIONS

SIZE F | CODE IDENT NO. | NAVFAC DRAWING NO. 4040032
SCALE: AS SHOWN | SHEET 2 OF 5

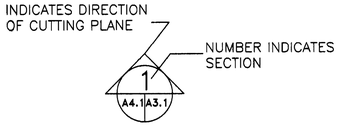
CONT. NO. N62470-79B-3405 SPEC. NO. 05-79-3405

D/B INSTALL DIESEL BACKUP GENERATOR AT AV31
NAVAL AIR STATION GUANTANAMO BAY, CUBA

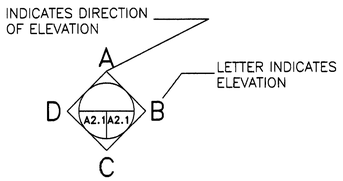
DETAIL NOTES



DETAIL



SECTION



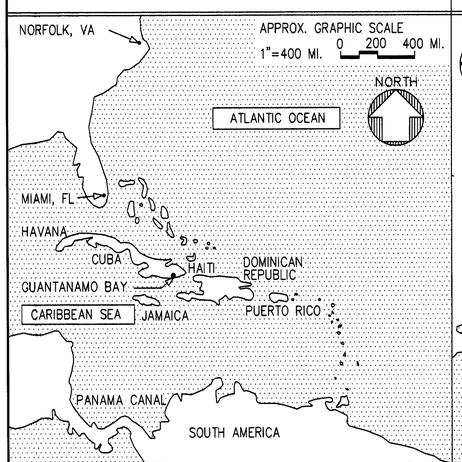
ELEVATION

INDEX OF DRAWINGS:

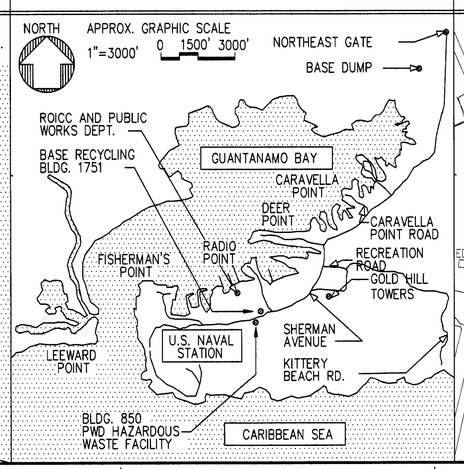
SHEET NO.	TITLE	PWD DWG. NO.
G-001	GENERAL NOTES, INDEX OF DWGS. & LOCATION MAPS	11ET-0493-0910-01
C-101	SITE PLAN, DETAILS AND NOTES	11ET-0493-0910-02
E-101	DEMO ELECTRICAL PLAN AND DEMO NOTES	11ET-0493-0910-03
E-102	LEGEND, NEW WORK ELECT'L PLAN, NOTES & GROUNDING DETAIL	11ET-0493-0910-04
E-103	1- LINE DIAGRAM SCHEDULE	11ET-0493-0910-05

INDEX OF DRAWINGS:

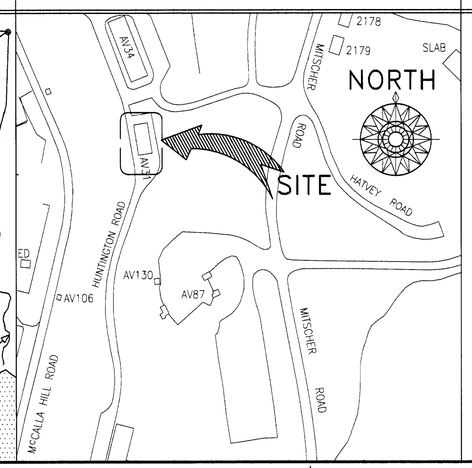
VICINITY MAP



AREA MAP



LOCATION MAP NOT TO SCALE



GENERAL NOTES

1. VERIFY ALL FIELD CONDITIONS, QUANTITIES, DIMENSIONS, AND EXISTING UTILITIES IN THE AREA PRIOR TO CONSTRUCTION, AND SHALL COORDINATE THE WORK OF ALL TRADES. ALL DISCREPANCIES SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER.

2. EXECUTE ALL WORK WITH CARE TO PROTECT ADJACENT NEW AND EXISTING SURFACES TO REMAIN, TO BE REUSED, OR TO BE REINSTALLED. ALL DAMAGE TO SUCH AREAS SHALL BE REPAIRED, REPLACED AND FINISHED TO MATCH ORIGINAL CONDITIONS AS STATED IN THE SCOPE OF WORK AND APPROVED BY THE CONTRACTING OFFICER.

3. ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH "THE SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" (29 CFR 1926), THE ARMY CORPS OF ENGINEERS PUBLICATION EM-385-1-1, THE NAVFACENGCOM ATLANTIC DIVISION PUBLICATION "GUANTANAMO BAY, CUBA DESIGN CRITERIA", ALL LOCAL REGULATIONS, AND ALL NAVFACENGCOM SPECIFICATIONS INCLUDED WITH THE CONTRACT DRAWINGS, IF APPLICABLE.

4. AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THE OPERATIONS. AT THE COMPLETION OF THE WORK, REMOVE ALL WASTE MATERIALS AND RUBBISH FROM AND ABOUT THE PROJECT, AS WELL AS TOOLS, MACHINERY AND SURPLUS MATERIALS.

5. VERIFY MATERIALS, EQUIPMENT, AND METHODS OF INSTALLATION AND EXECUTION OF WORK TO CONFORM WITH PROJECT'S GUIDE OF SPECIFICATIONS, IF APPLICABLE.

I CERTIFY THAT THIS AS BUILT DRAWING IS CORRECT & ACCURATE

QUALITY CONTROL MANAGER, BRSC — 26 MAY 201 DATE

AS BUILT DRAWING
24 MAY 2011

MINI-MACC TO#0019

AS BUILT DRAWING 5/24/2011

REVISIONS: SYM. | DESCRIPTION | DATE | APPROVED

BRDC Burns & Roe and dbi north america, LLC

SEAL

APPROVED
ACTIVITY - SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER
DATE

A/E DGC JBZ/JAS | PWD GTMO
DESIGN
DRAWN
REVIEW
QC
CHIEF ARCH./ ENGR.
PROJECT MANAGER
FIRE PROTECTION
BRANCH MANAGER
DESIGN DIRECTOR

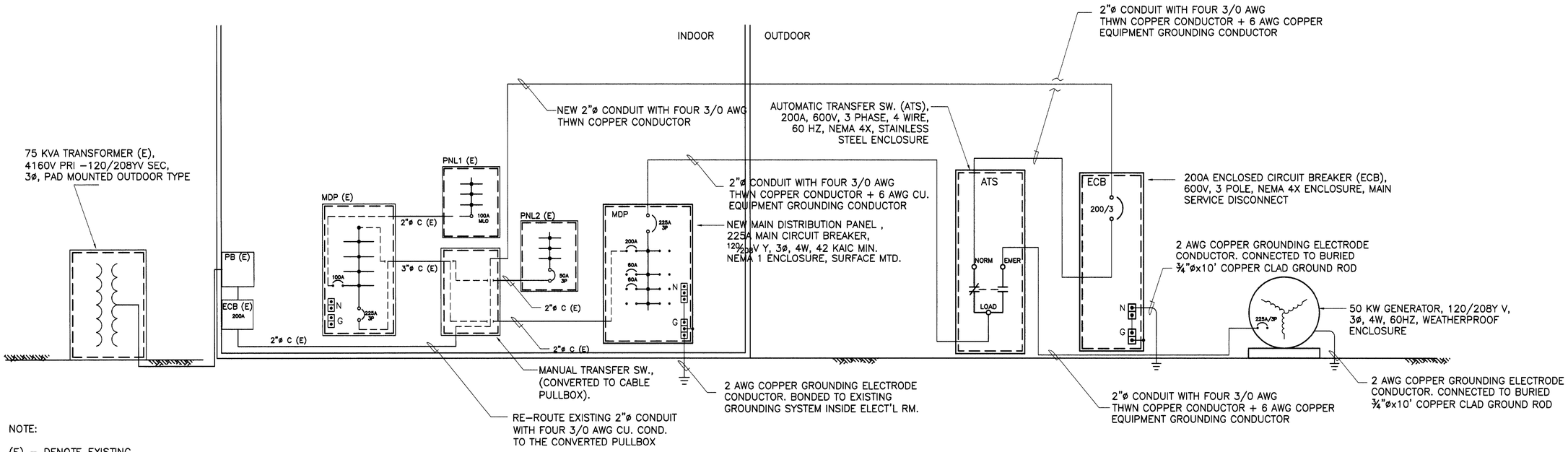
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
U.S. NAVAL STATION — PUBLIC WORKS DEPARTMENT — GUANTANAMO BAY, CUBA

D/B INSTALL DIESEL BACKUP GENERATOR AT AV31
CIVIL DRAWING

GEN. NOTES,INDEX OF DRAWINGS & LOCATION MAPS

CODE ID. NO. 80091 | SIZE D
SCALE: GRAPHIC
EFD NO.
WRK. REQ. NO. JF0021.0
SPEC. NO. N/A
CONSTR. CONTR. NO. N69450-08-R-1274
PWD DRAWING NO. 11ET-0493-0910-01
SHEET 1 OF 5
G-001

24 MAY 2011

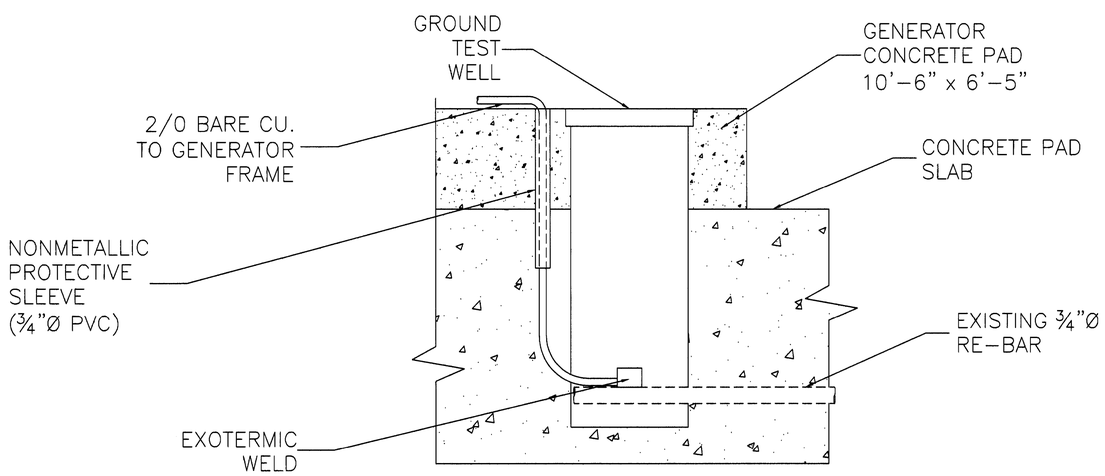


NOTE:

(E) – DENOTE EXISTING

1-LINE DIAGRAM

SCALE : NTS



GROUNDING WELL TEST SECTION INSTALLATION DETAIL

SCALE : NTS

I CERTIFY THAT THIS AS BUILT DRAWING IS CORRECT & ACCURATE

QUALITY CONTROL MANAGER, BRSC — 26 MAY 2011 DATE

AS BUILT DRAWING 24 MAY 2011

MINI-MACC TO#0019

AS BUILT DRAWING 5/24/2011

REVISIONS

BRDC Burns & Roe and dck north america, LLC

APPROVED

ACTIVITY – SATISFACTORY TO

DATE

APPROVED

PUBLIC WORKS OFFICER

DATE

A/E RCO DESIGN

DGC DRAWN

JBZ/JAS REVIEW

QC

CHIEF ARCH./ ENGR.

PROJECT MANAGER

FIRE PROTECTION

BRANCH MANAGER

DESIGN DIRECTOR

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

U.S. NAVAL STATION — PUBLIC WORKS DEPARTMENT — GUANTANAMO BAY, CUBA

D/B INSTALL DIESEL BACK-UP GENERATOR AT AV-31

ELECTRICAL DRAWINGS

1-LINE DIAGRAM

CODE ID. NO. 80091 SIZE D

SCALE: GRAPHIC

EFD NO.

WRK. REQ. NO. JF0021.0

SPEC. NO. N/A

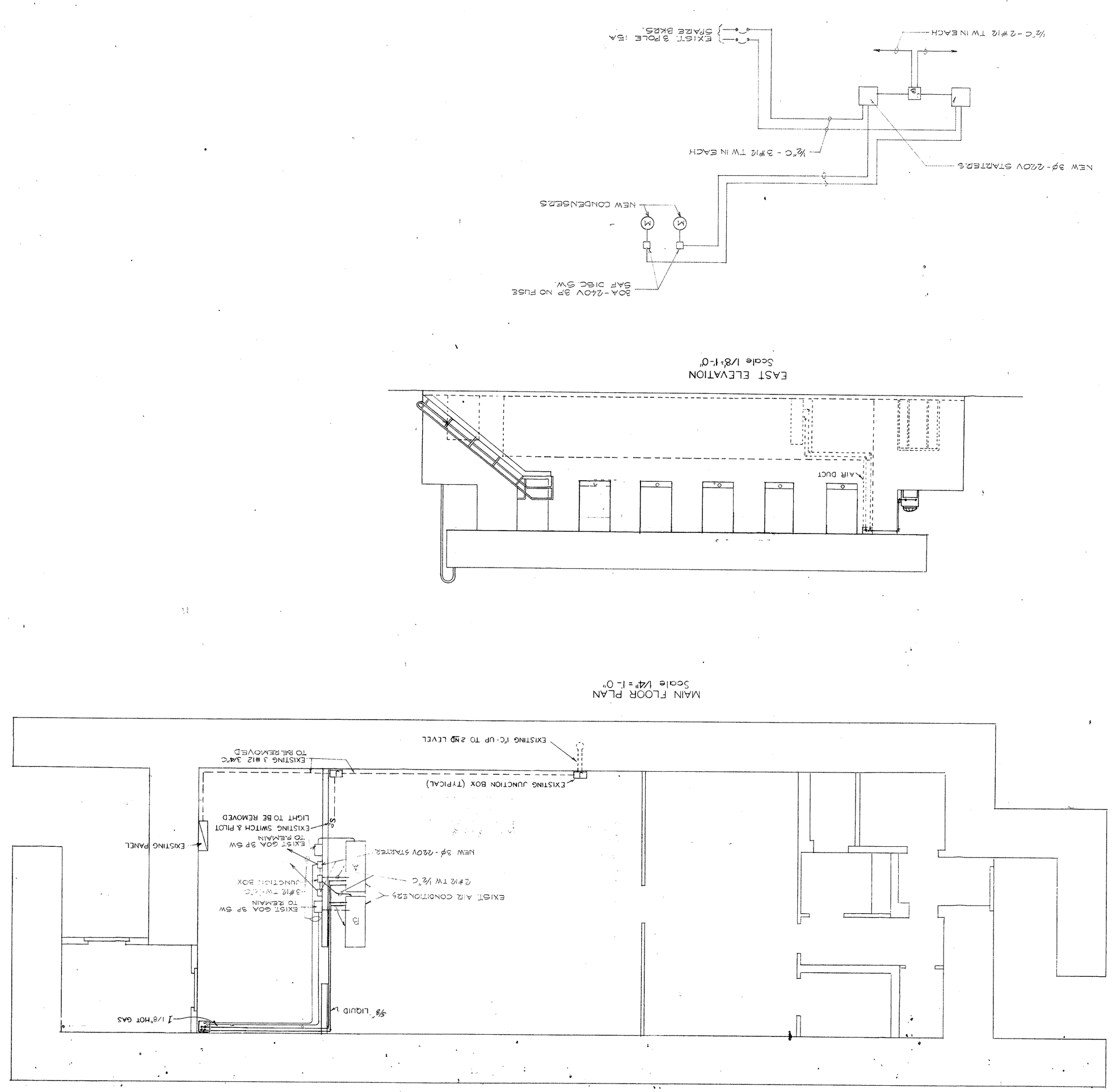
CONSTR. CONTR. NO. N69450-08-R-1274

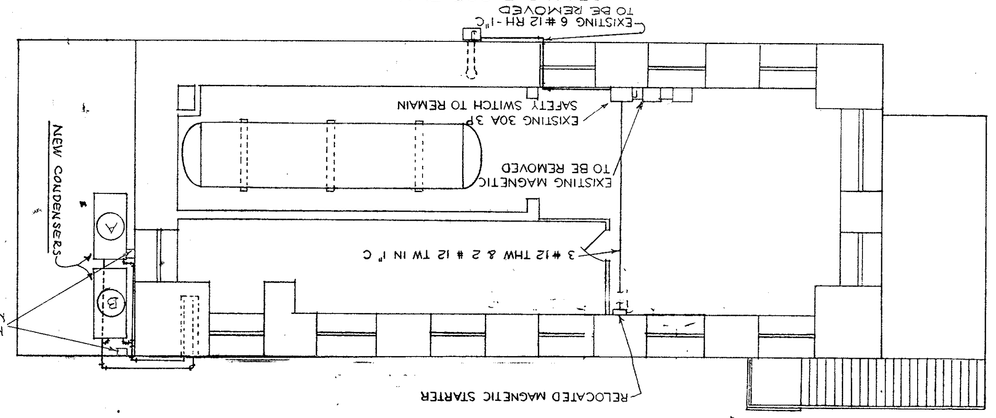
PWD DRAWING NO. 11ET-0493-0910-05

SHEET 5 OF 5

E-103

24 MAY 2011





NOTE
"RE-WIRE CONTROLS SO THAT WHEN A/C UNIT "A" START NEW CONDENSER "A" ALSO STARTS. RE-WIRE CONTROLS SO THAT WHEN A/C UNIT "B" START, NEW CONDENSER "B" ALSO STARTS.

EXISTING AIR CONDITIONING UNITS
ONE CHRYSLER MODEL 1005-1
ONE CHRYSLER MODEL 5SCA
TOTAL COOLING CAPACITY 160,000 BTU/HR.

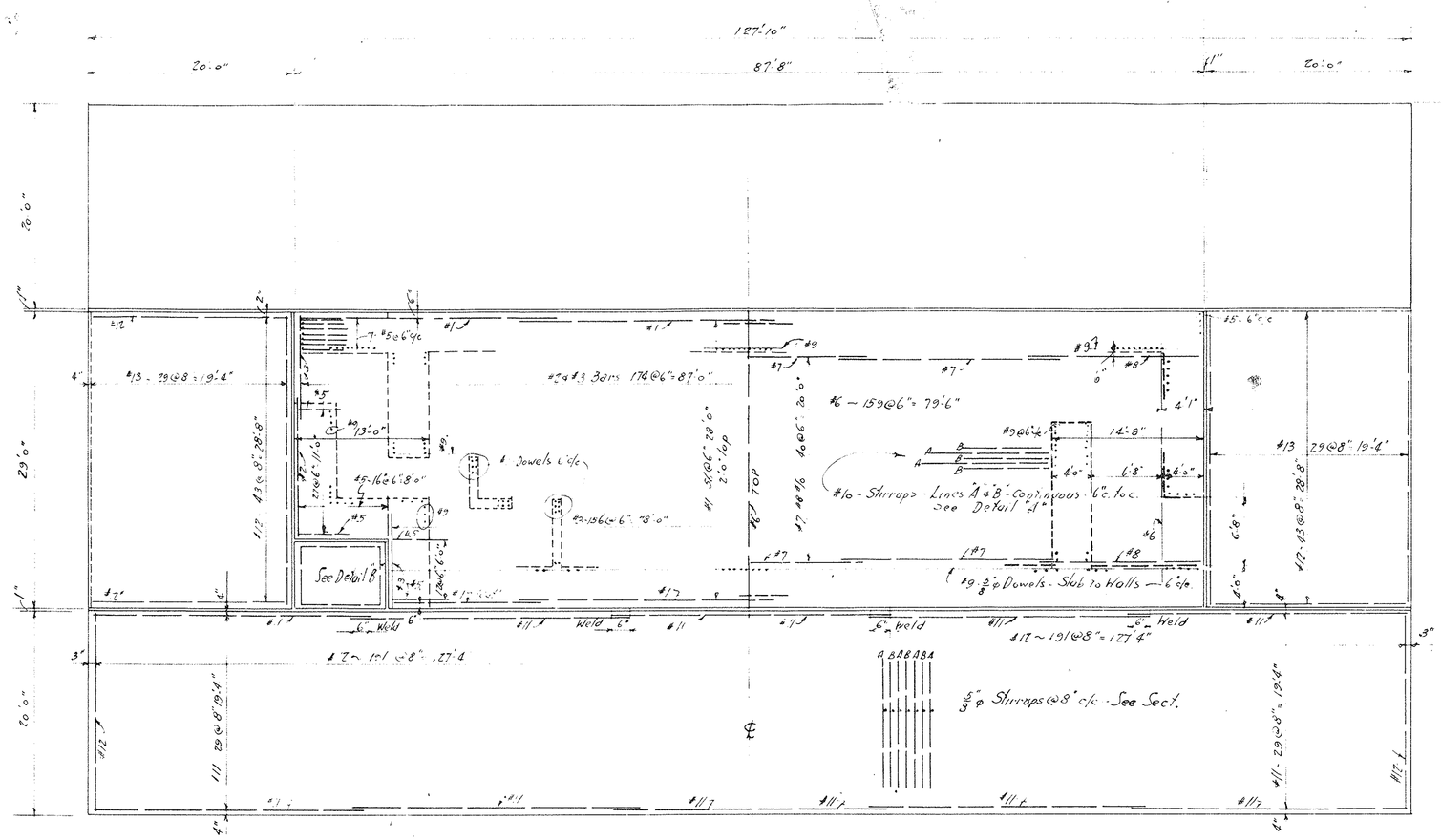
AIR COOLED CONDENSERS TO BE SIMILAR TO CARRIER MODEL 94A RATED @ 96000 BTU/HR WITH R-12, @ 25°TD. 220-3-60, 1-3/4 H.P. FAN. EACH (2-REQ'D).

SYMBOL	DESCRIPTION	DATE	APPROVED
NONE	GEN'L REVISION TO LOCATION & INSTALLATION	5/12/64	[illegible]

REVISIONS

CAT. CODE	BLDG. NO.	DEPARTMENT OF THE NAVY	BUREAU OF YARDS & DOCKS
DES J.L.M., L.A.L.		AREA PUBLIC WORKS OFFICE, CARIBBEAN	
DR J.L.M.		U.S. NAVAL STATION	SAN JUAN, PUERTO RICO
CHK		GUANTANAMO BAY, CUBA	
MGR		BOMB PROOF COMMAND POST- BLDG AV31	
PROJ ENG		AIR COOLED CONDENSER	
DIRECTOR		FOR A/C SYSTEM	
APPROVED FOR BUDOCKS	DATE		
ASST. APWO FOR FACILITY MGT.		CODE IDENT NO. 80091	SIZE F	Y & D DRAWING NO. 1007263
SATISFACTORY TO	DATE	SCALE	SPEC	NO.	SHEET	OF

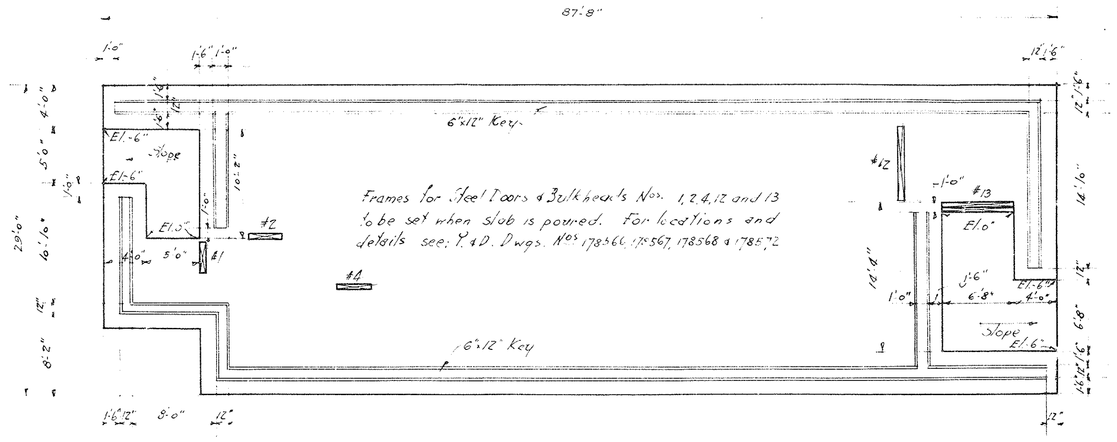
ESR U-1-254



HALF BOTTOM REINF. HALF TOP REINF.

REINFORCING FOR BOTTOM SLAB & APRONS

SCALE: 1/8" = 1'-0"

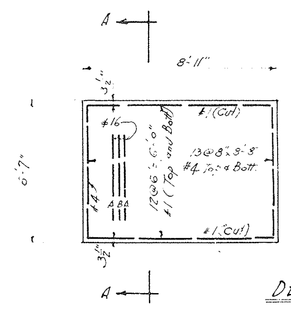


PLAN OF TOP OF AFT SLAB.

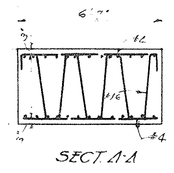
SCALE: 1/8" = 1'-0"

GENERAL NOTES

The essential purpose of this drawing is to give the locations, size and schedule of reinforcing steel for conduits, doors, bulkheads, general dimensions etc. see Y & D. Drawings #178560 to 178572 incl. The quality of concrete shall be Class E - 3000# concrete as called for on Y & D. Drawing #178565

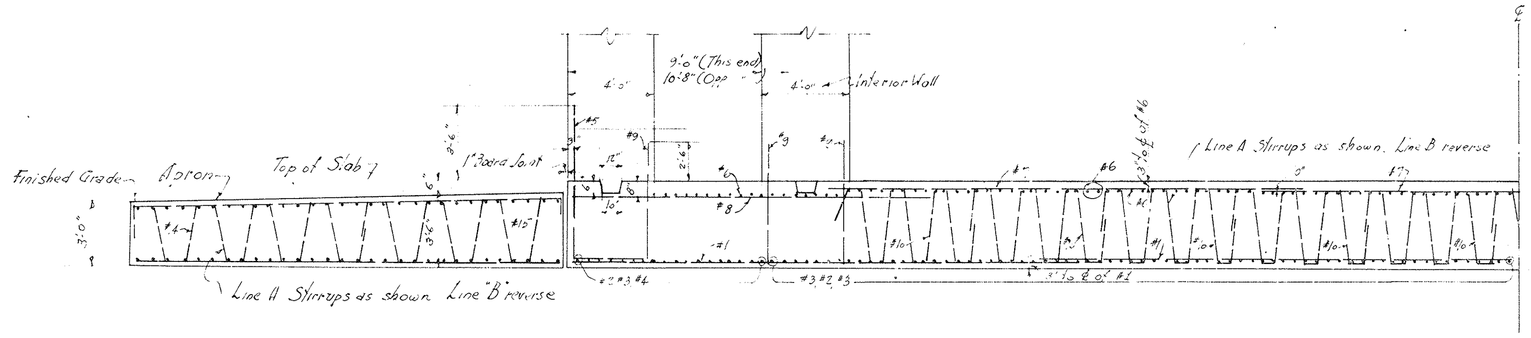


DETAIL "B"



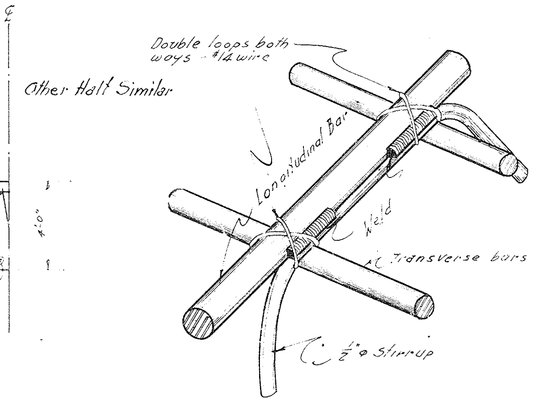
SECT. A-A

LINE A STIRRUPS AS SHOWN
" B " REVERSE

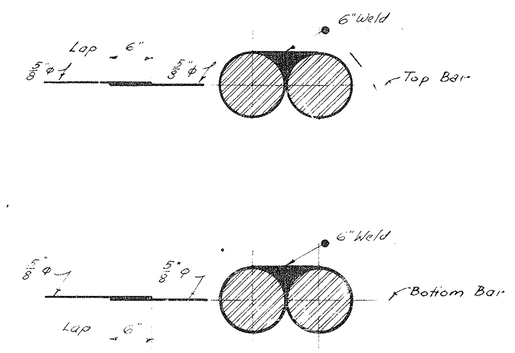


HALF LONGITUDINAL SECTION - SLAB AND APRONS

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

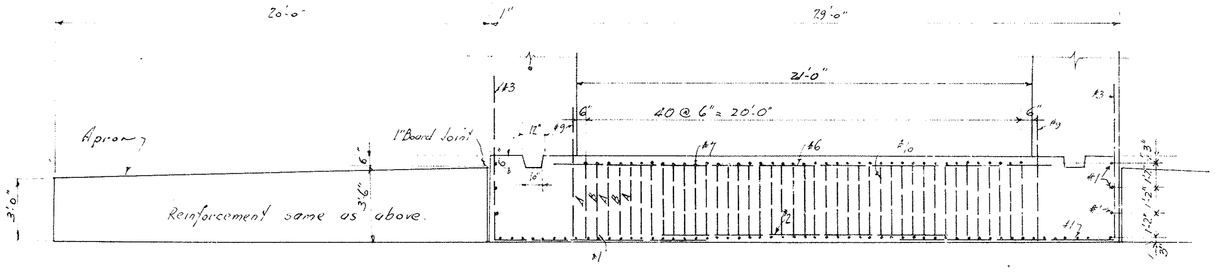


TYPICAL WIRING DETAIL



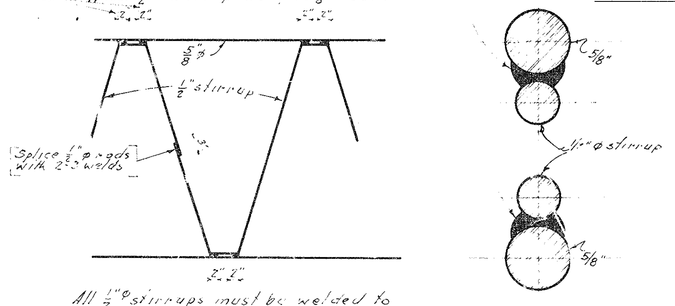
TYPICAL SPLICE FOR 5/8" φ BARS

FOR APRON ONLY



TYPICAL TRANSVERSE SECTION

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



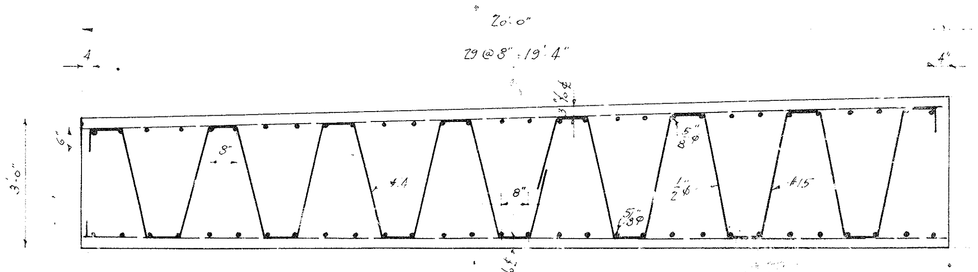
All 1/2" φ stirrups must be welded to 5/8" φ longitudinal bars as shown

DETAIL SHOWING WELDING OF 5/8" φ BAR TO 1/2" φ STIRRUP

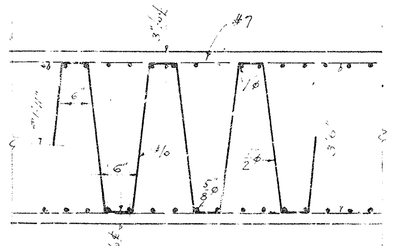
NOT TO SCALE

BAR SCHEDULE

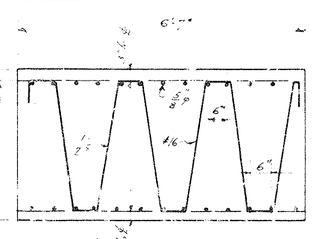
MARK	SIZE	No. REQ'D.	LENGTH		SHAPE
#1	5/8" φ	240	23'-3"	SLAB	Straight
#2	5/8" φ	175	13'-0"		"
#3	1" φ	331	17'-0"		7'-8" 9'-4"
#4	5/8" φ	28	6'-0"	APRONS	Straight
#5	5/8" φ	136	10'-3"		7'-8" 3'-0"
#6	1"	160	23'-0"		Straight
#7	5/8" φ	123	22'-0"	SLAB	"
#8	5/8" φ	82	16'-6"		"
#9	5/8" φ	620	6'-3"		"
#10	1/2" φ	410	25'-0"		See Detail
#11	5/8" φ	300	25'-10"		Straight
#12	5/8" φ	944	19'-6"		"
#13	5/8" φ	120	28'-8"	APRONS	"
#14	1/2" φ	472	27'-3"		See Detail
#15	1/2" φ	472	25'-0"		"
#16	1/2" φ	14	23'-6"		"



DETAIL OF STIRRUPS #14 AND #15



DETAIL OF STIRRUP #10



DETAIL OF STIRRUP #16

Drawn by Colbert
Traced by Urbina
Checked by
Oct. Nov. 22nd 1942

REVISIONS

Y&D Drawing No. 335267

U. S. NAVAL STATION
(PUBLIC WORKS DEPT.)
GUANTANAMO BAY, CUBA

COMMAND CENTER
BOTTOM SLAB & APRON DETAILS

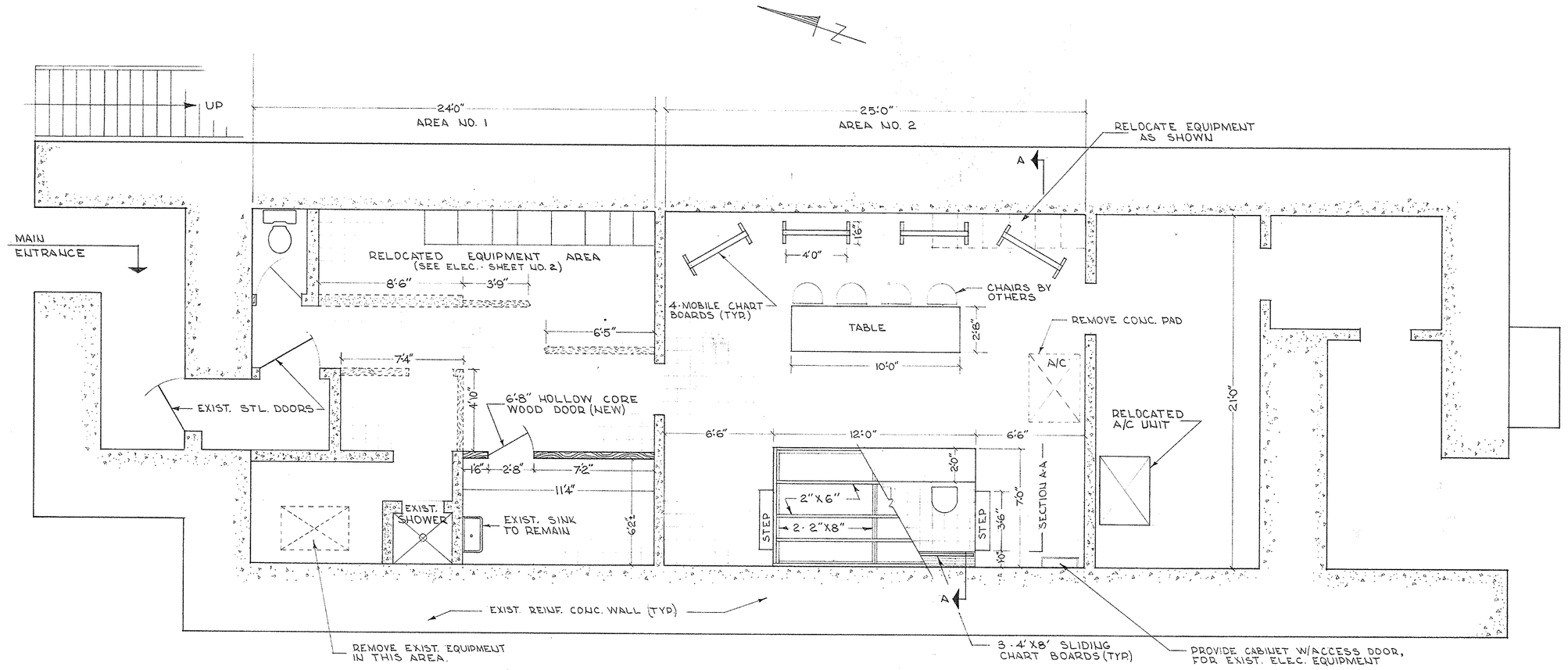
FREDERICK SNARE CORP., NEW YORK
CONTRACTING ENGINEERS
APPROVED 2-3-42 BY J. J. Williams
RESIDENT OFFICER IN CHARGE
APPROVED 2-3-42 BY H. G. Clark
P. W. OFFICER IN CHARGE

REFERENCES:
SPEC. NO.
P.W. DWG. NO.

CONTR. NO. NOy 4162
DRAW'G NO.
SERIAL: A. P.
W-3

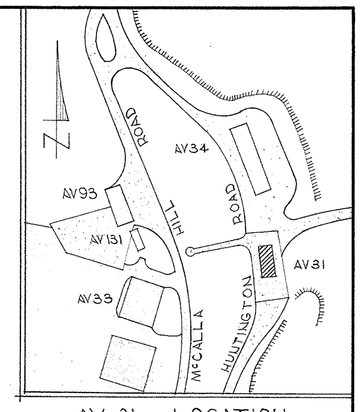
35D-34-139

W. & J. PROGRESS BLUE PRINT CO.



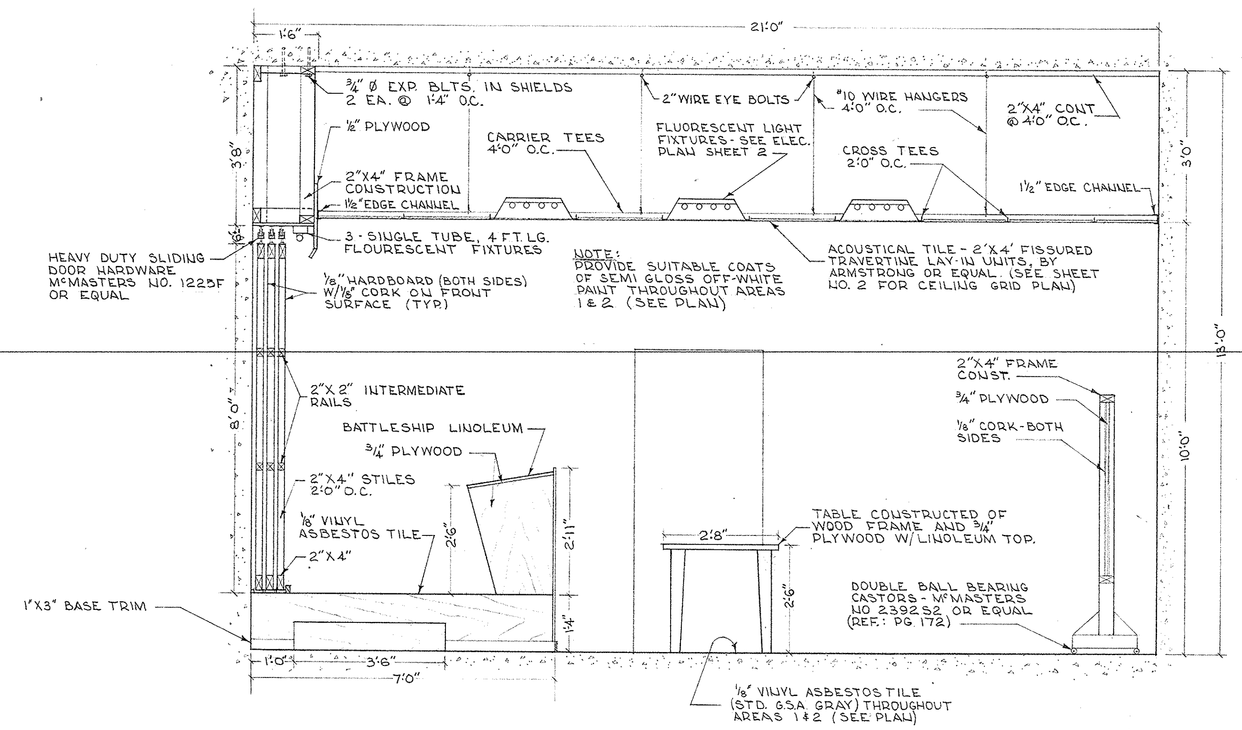
FLOOR PLAN

1/4" = 1'0"



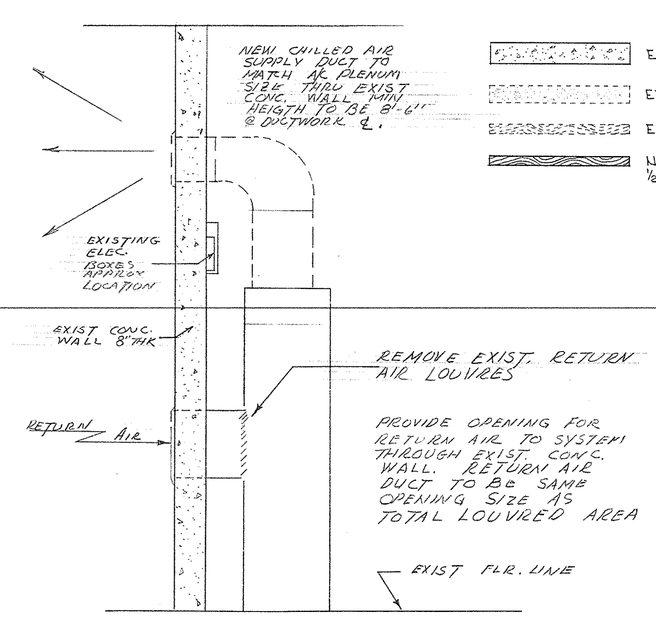
AV 31 LOCATION

1" = 200'



SECTION A-A

1/2" = 1'0"



ELEV. A/C NEW LOCATION
TYPICAL No Scale.

LEGEND

- EXIST. REINF. CONC. WALLS
- EXIST. MASONRY PARTITIONS TO BE REMOVED
- EXIST. FRAME PARTITIONS TO BE REMOVED.
- NEW FRAME PARTITIONS - 2"X4" 16" OC. WITH 1/2" GYP. BOARD BOTH SIDES.

PRELIMINARY

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO. 5B-2141-0269-1

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

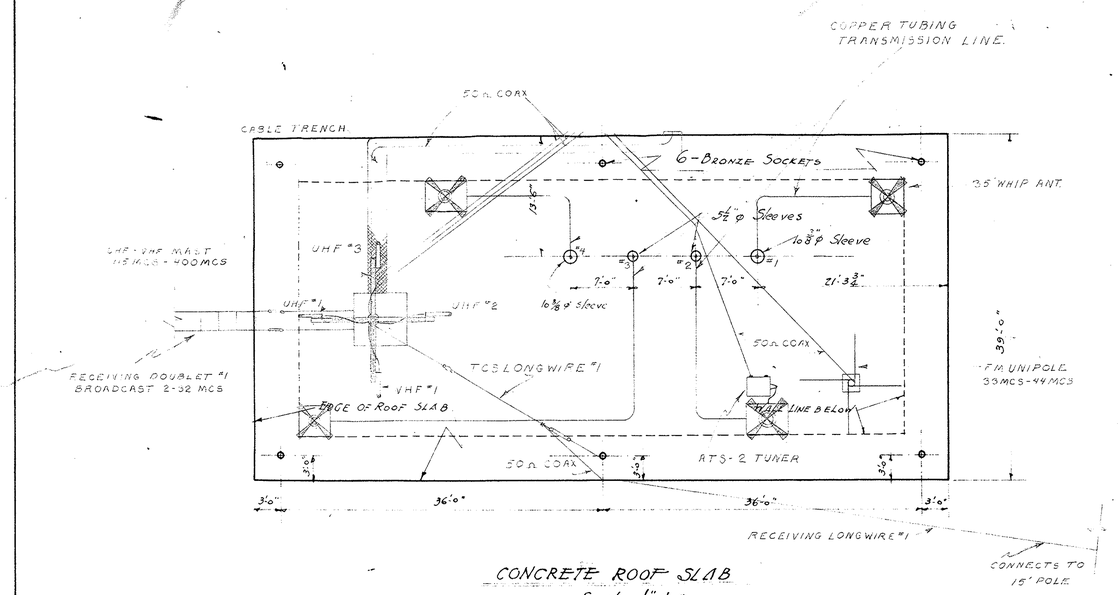
DES. PLB
DRWN. BERGUM
CHK. KM
SUPV. HARMON
IN CHARGE
DIRECTOR

U.S. NAVAL STATION
MODIFICATIONS TO COMMAND CENTER BLDG. AV-31
ARCH. PLAN, SECTION & LOCATION

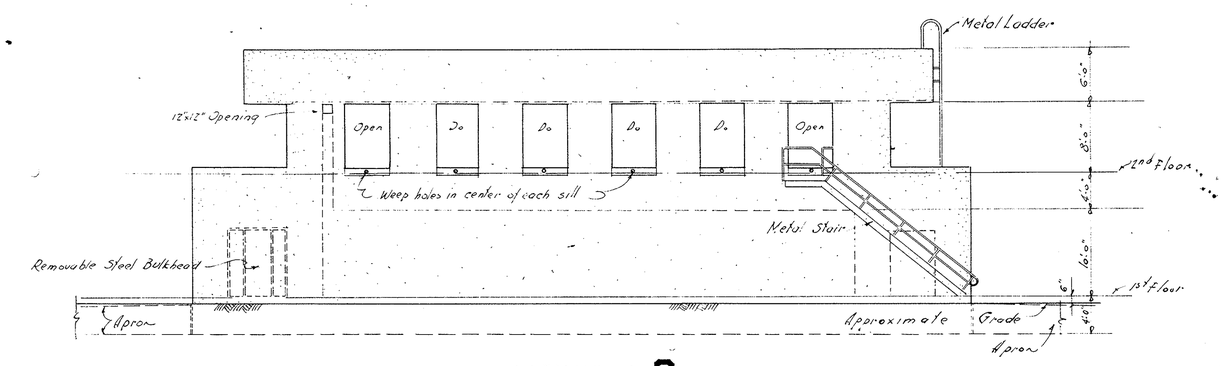
APPROVED — DATE
COMMANDING OFFICER PWC
SATISFACTORY TO J. HALTOM — DATE 3/4/69

SIZE: F | CODE IDENT. NO.: 80091 | NAVFAC DRAWING NO.
CONSTR. CONTR. NO.
SCALE AS SHOWN | SPEC | SHEET 1 OF 2

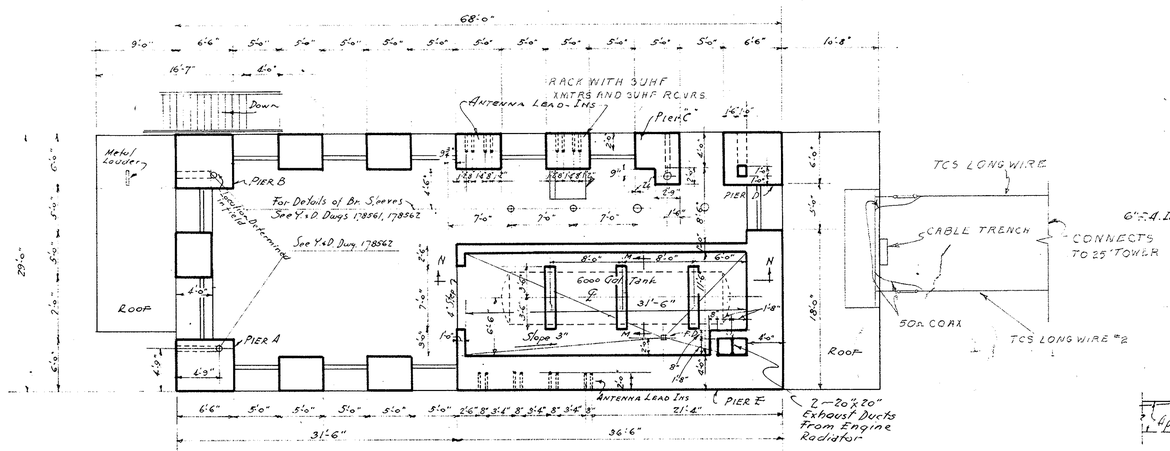
ESR-7214/9



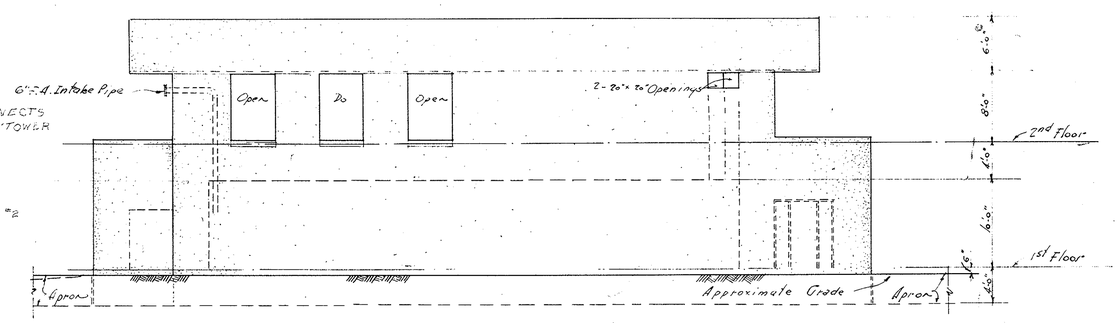
CONCRETE ROOF SLAB
Scale: ⅛"=1'0"



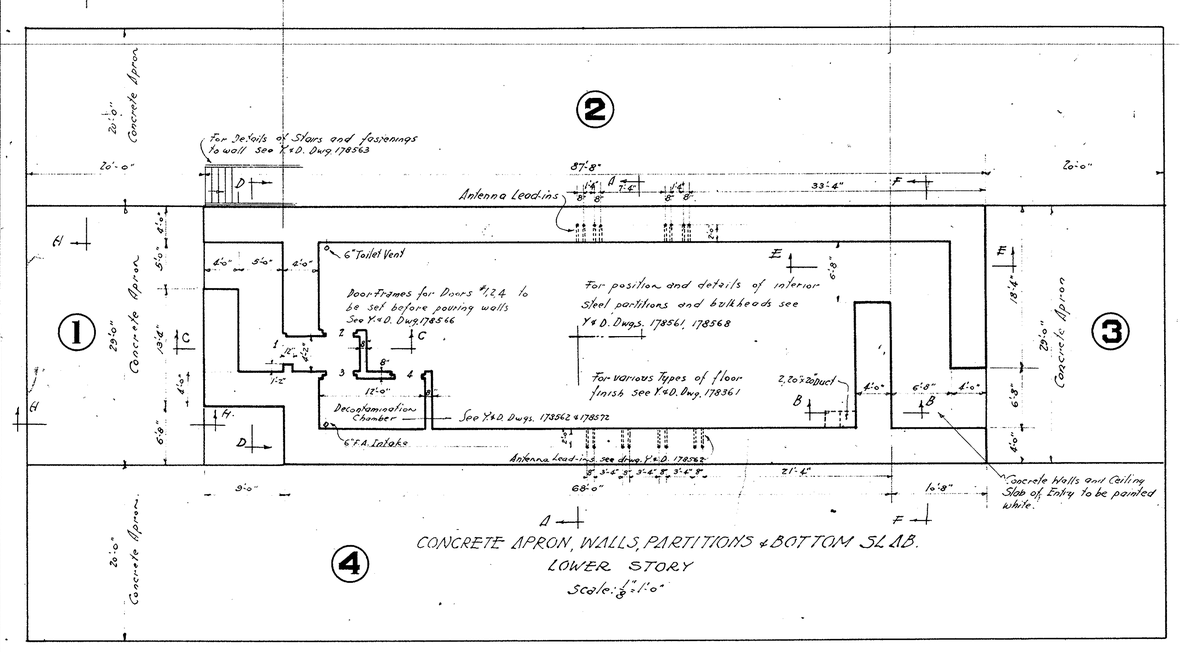
ELEVATION 2



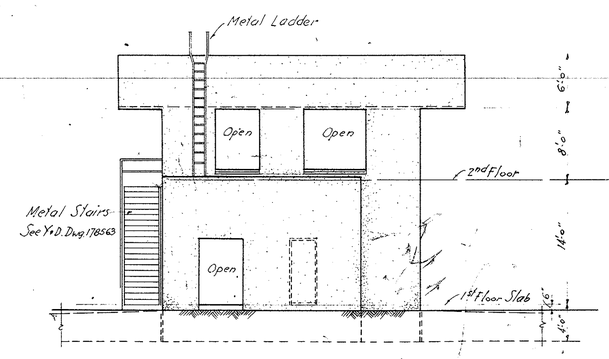
CONCRETE PIERS & PARTITIONS
UPPER STORY



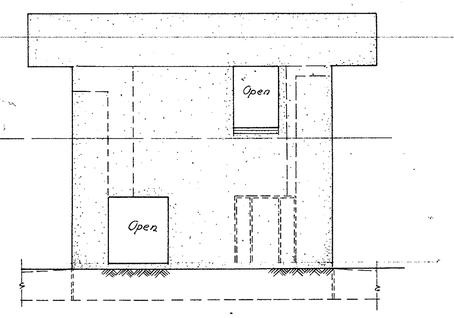
ELEVATION 4



CONCRETE APRON, WALLS, PARTITIONS & BOTTOM SLAB.
LOWER STORY
Scale: ⅛"=1'0"



ELEVATION 1



ELEVATION 3

FOR SECTIONS
FOR SECTIONS

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWC DRAWING NO. 58-1311-0862

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS

GUANTANAMO BAY, CUBA

DES
DRWN
TR
CHK
SUPV
IN CHARGE

COMMAND CENTER
PLAN & ELEVATIONS &
ANTENNA LAYOUT

APPROVED _____ DATE _____

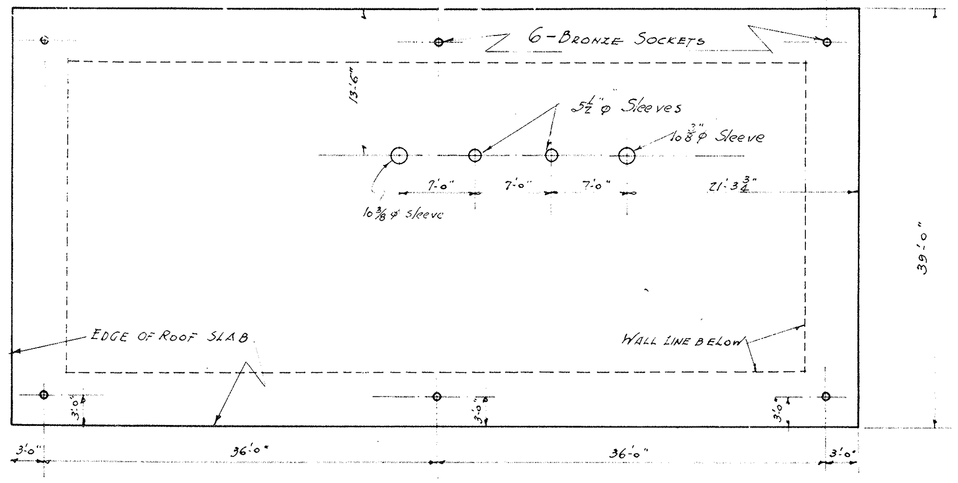
SATISFACTORY TO _____

DATE _____

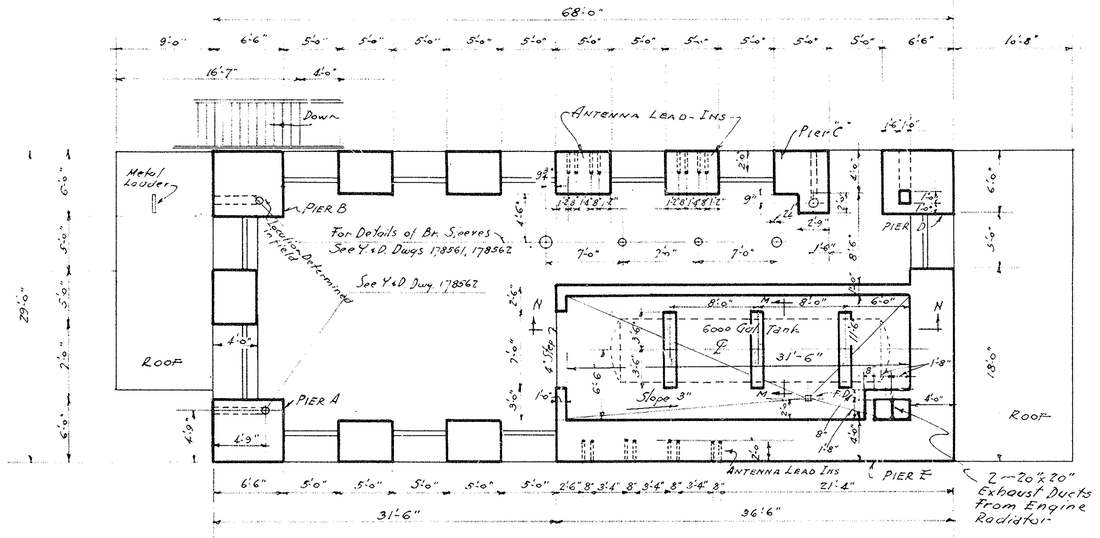
SCALE _____ SPEC _____

SHEET 1 OF 1 NOY _____

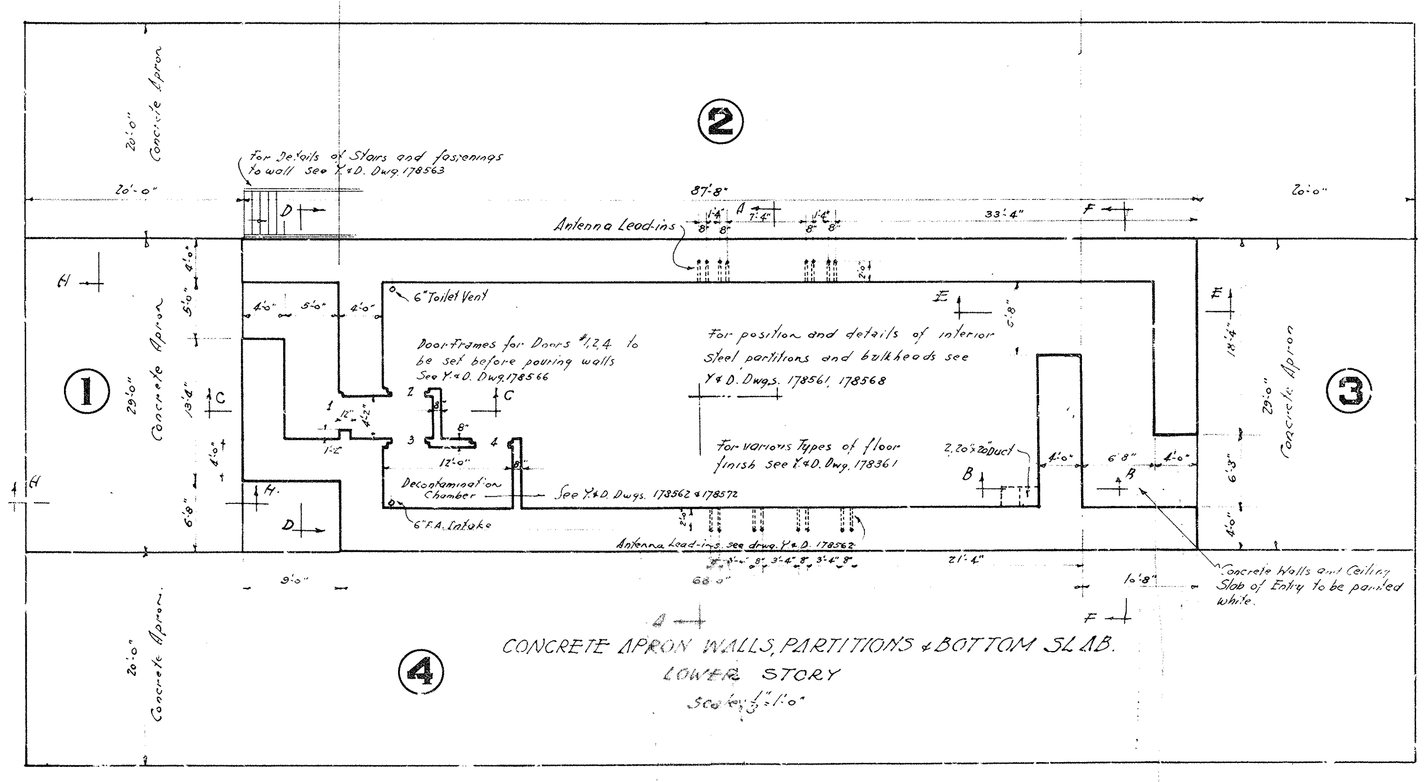
Y & D DRAWING NO. _____



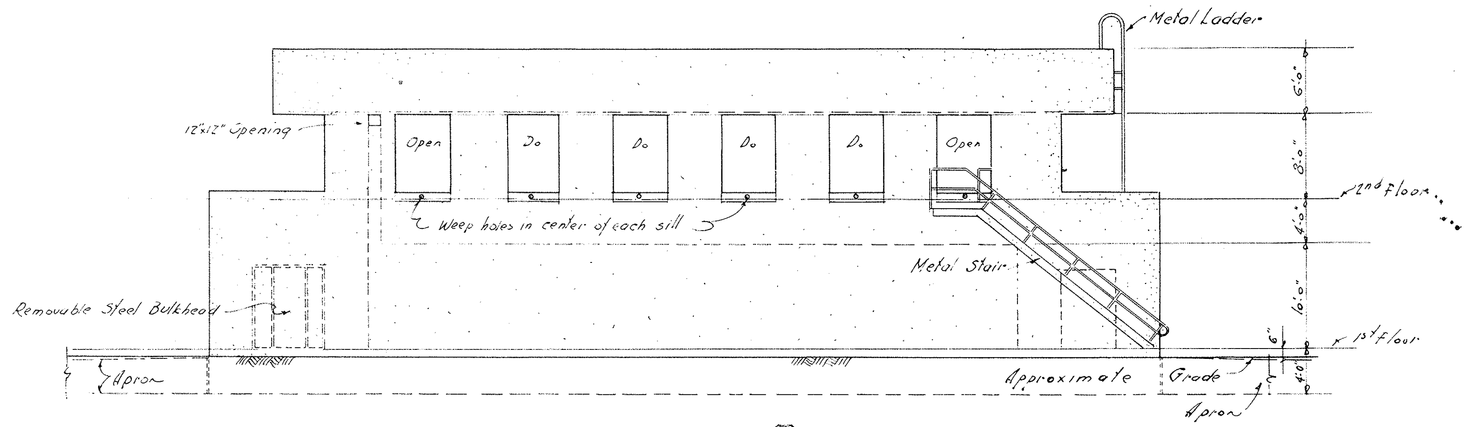
CONCRETE ROOF SLAB
Scale: ⅛"=1'-0"



CONCRETE PIERS & PARTITIONS
UPPER STORY



CONCRETE APRON WALLS, PARTITIONS & BOTTOM SLAB.
LOWER STORY
Scale: ¼"=1'-0"



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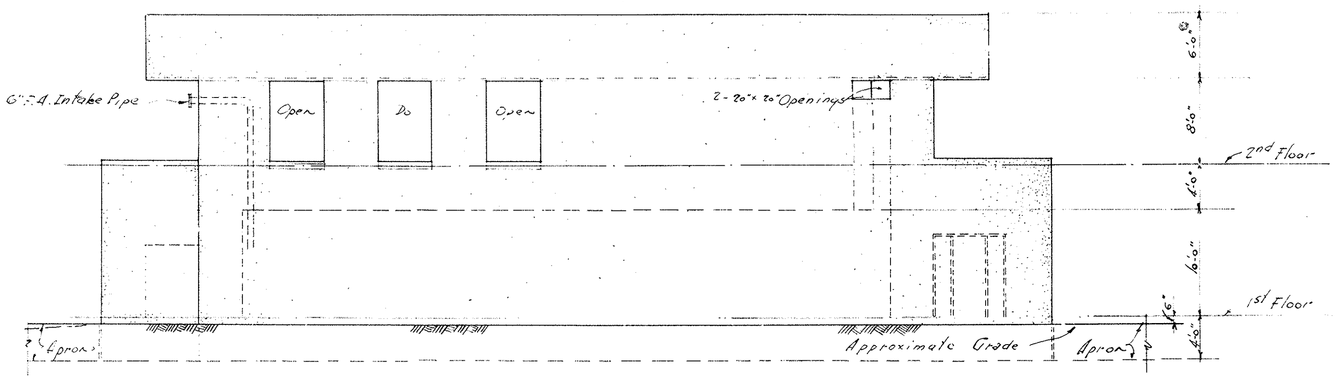
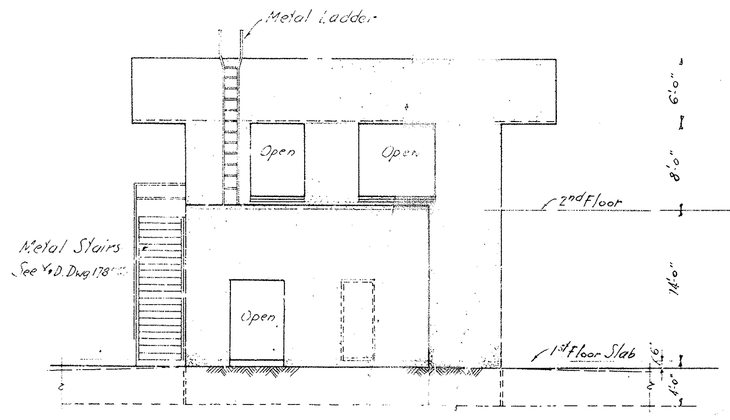
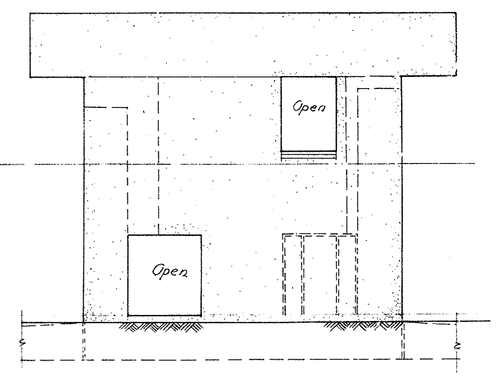


ELEVATION 4



ELEVATION 1

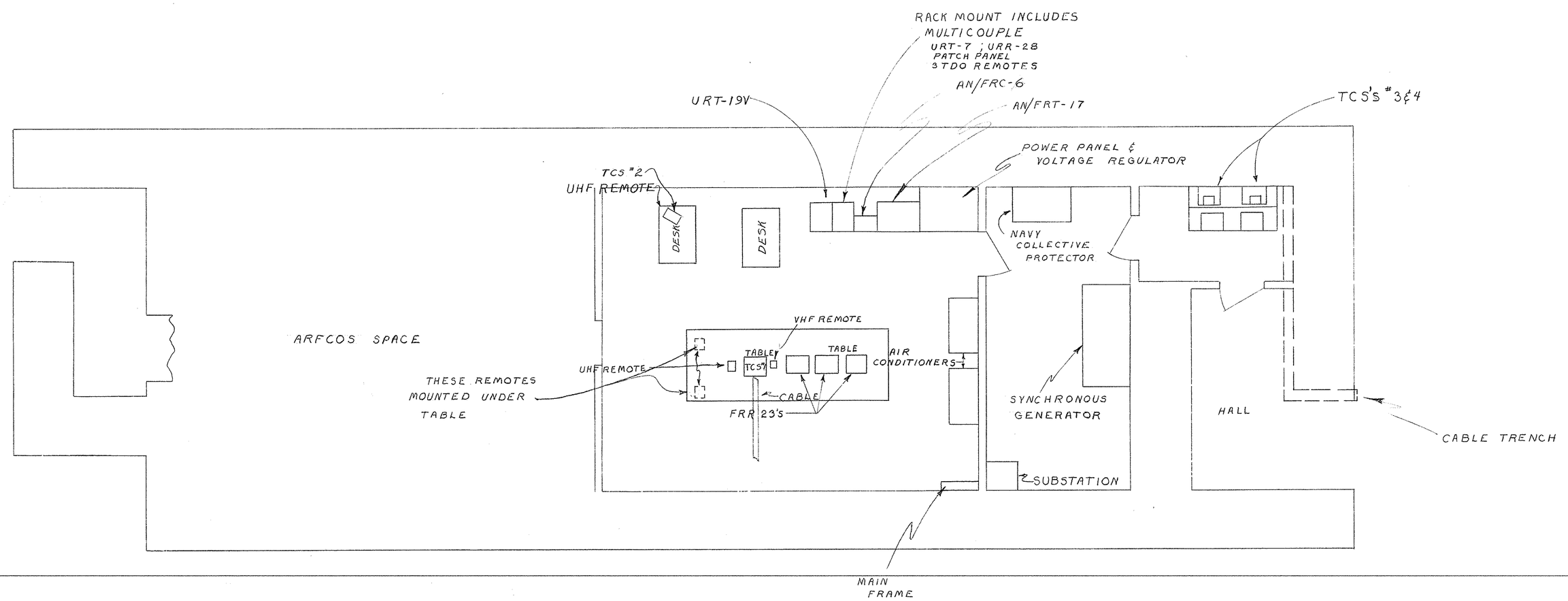


ELEVATION 3

FOR SECTIONS
FOR SECTIONS

Drawn by Kolberk Traced by Urbina Checked by Date 1-16-42 REVISIONS Y&D Drawing No. 178566	U. S. NAVAL STATION PUBLIC WORKS DEPT. GUANTANAMO BAY, CUBA COMMANDANT 10th NAVAL DISTRICT PLAN AND ELEVATIONS FREDERICK SNARE CORP. NEW YORK CONTRACTING ENGINEERS APPROVED 1-18-42 BY [illegible] REPRESENTATIVE OFFICER IN CHARGE APPROVED 1-20-42 BY [illegible] OFFICER IN CHARGE	REFERENCES: SPEC. NO. P.W. DWG. NO. CONTR. NO. NOy 4162 DRAWING NO. SERIAL A.P. W-2

339-344-138



SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 58-1313-0862-1

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS

PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

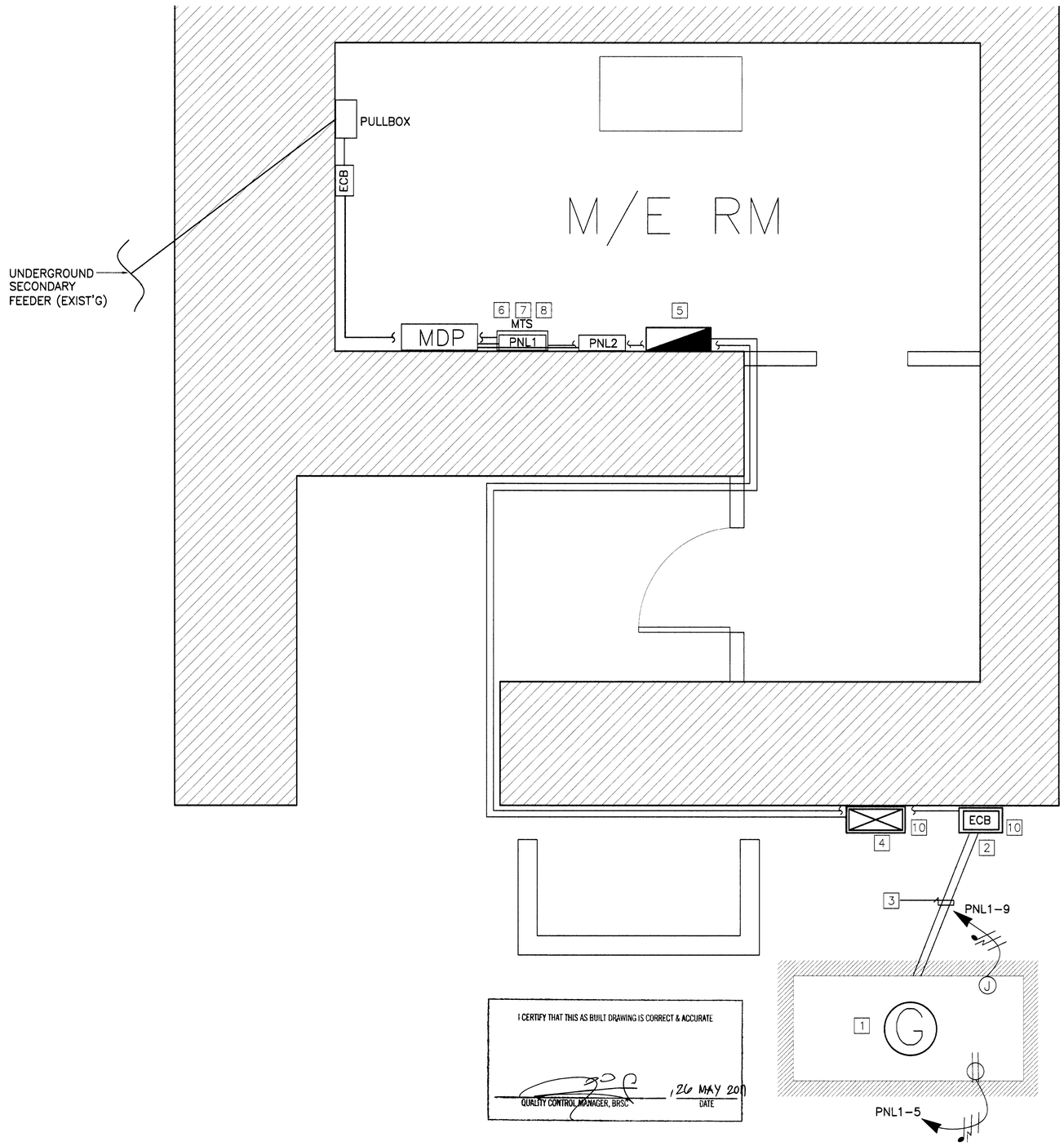
DES
DRWN
TR RCD
CHK
SUPV
IN CHARGE
REVIEWED BY

US NAVAL STATION
GUANTANAMO BAY, CUBA
OPNAV REPORT 2910-1
COMMUNICATIONS EQUIPMENT
ARRANGEMENT PLAN
EMERGENCY COMMAND CENTER

APPROVED _____ DATE _____
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO _____
DATE _____

SCALE 1/4" = 1'-0" SPEC
SHEET 1 OF 4 NBy _____
Y & D DRAWING NO. _____



I CERTIFY THAT THIS AS BUILT DRAWING IS CORRECT & ACCURATE

QUALITY CONTROL MANAGER, BRSC — 26 MAY 2011 DATE

ELECT'L NEW WORK PLAN

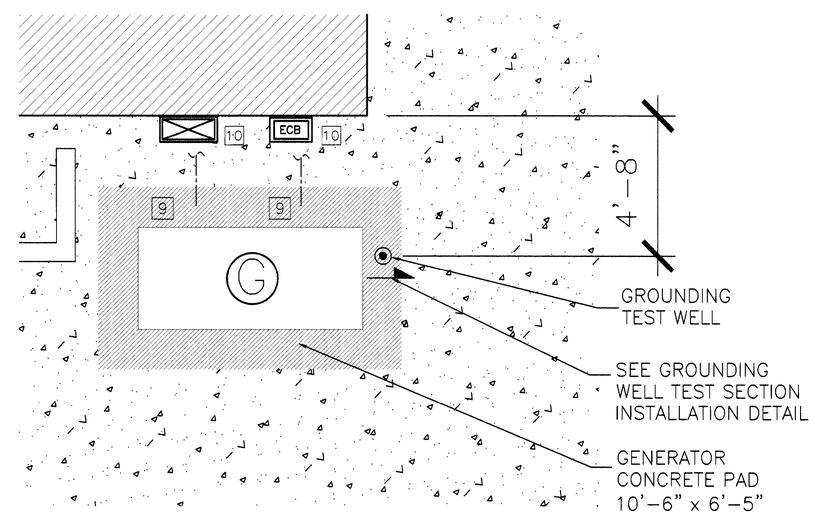
SCALE: 1/2" = 1'-0"

LEGEND:

- NEW 50 KW GENERATOR SET
- AUTOMATIC TRANSFER SWITCH (ATS)
- NEW ENCLOSED CIRCUIT BREAKER (ECB), NEMA 4X
- NEW MAIN DISTRIBUTION PANEL

NEW WORK NOTES:

1. PROVIDE AND INSTALL 50 KW DIESEL GENERATOR W/ SUB-BASE FUEL TANK & WEATHER ENCLOSURE. PROVIDE CONCRETE PAD.
2. PROVIDE AND INSTALL AUTOMATIC TRANSFER SWITCH (ATS), 200 AMP, 208 V, 3P, 4W, IN NEMA 4X STAINLESS STEEL ENCLOSURE.
3. PROVIDE EXPOSED FEEDER FROM GENERATOR TO ATS, FOUR-3/0 AWG THWN CU. CONDUCTOR + 6 AWG GROUNDING CONDUCTOR IN 2" ø CONDUIT AND TWO-12 AWG THWN IN 3/4"ø CONDUIT FOR CONTROL SYSTEM FROM GENERATOR TO ATS.
4. PROVIDE AND INSTALL ENCLOSED CIRCUIT BREAKER (ECB), 200 AMP, 3P, 600V, 42 KAIC (MIN) IN NEMA 4X STAINLESS STEEL ENCLOSURE.
5. PROVIDE AND INSTALL NEW MAIN DISTRIBUTION PANELBOARD, 225 AMP MCB, 3P, 120/208 V, 4W, 42 KAIC (MIN), IN NEMA-1 ENCLOSURE, SURFACE MTD.
6. PROVIDE BRANCH FEEDER FROM PANELBOARD (PNL1) BRANCH CIRCUIT BKR. 5 & 9 FOR POWER SUPPLY OF THE BATTERY CHARGER AND BLOCK HEATER, EACH W/ TWO-12 AWG THWN CU CONDUCTOR + ONE-12 AWG GND. WIRE IN 3/4" ø CONDUIT.
7. CUT AND RE-ROUTE EXISTING CONDUIT FROM EXISTING ECB TO DOUBLE THROW SWITCH INTO THE CONVERTED PULLBOX. PROVIDE NEW FEEDER UP TO THE NEW ECB LOCATED OUTSIDE THE BUILDING.
8. PROVIDE STEEL COVER FACE PLATE WHICH CAN BE REMOVED FOR INSPECTION OF THE CONDUCTORS. LABEL BOX WITH PLASTIC LABEL.
9. PROVIDE 2/0 BARE CU TO GROUND PAD/FRAME.
10. PROVIDE SIGNS BY USING PLASTIC LABEL ON THE NEW ATS AND ENCLOSED CIRCUIT BREAKER.



EQUIPMENT GROUNDING PLAN

SCALE: NTS

1' 0' 1' 2' 3' 4' 5'
GRAPHIC SCALE: 1/2"=1'-0"
1' 0 1' 5' 10'
3/8"=1'-0"

AS BUILT DRAWING
24 MAY 2011

MINI-MACC TO#0019

STM	DESCRIPTION	DATE	APPROVED
		5/24/2011	

AS BUILT DRAWING

REVISIONS

BRDC — Burns & Roe and dck north america, LLC

SEAL

APPROVED
ACTIVITY – SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER
DATE

A/E RCO — PWD OTMO
DGC DESIGN
JBZ/JAS DRAWN
REVIEW
QC
CHIEF ARCH./ ENGR.
PROJECT MANAGER
FIRE PROTECTION
BRANCH MANAGER
DESIGN DIRECTOR

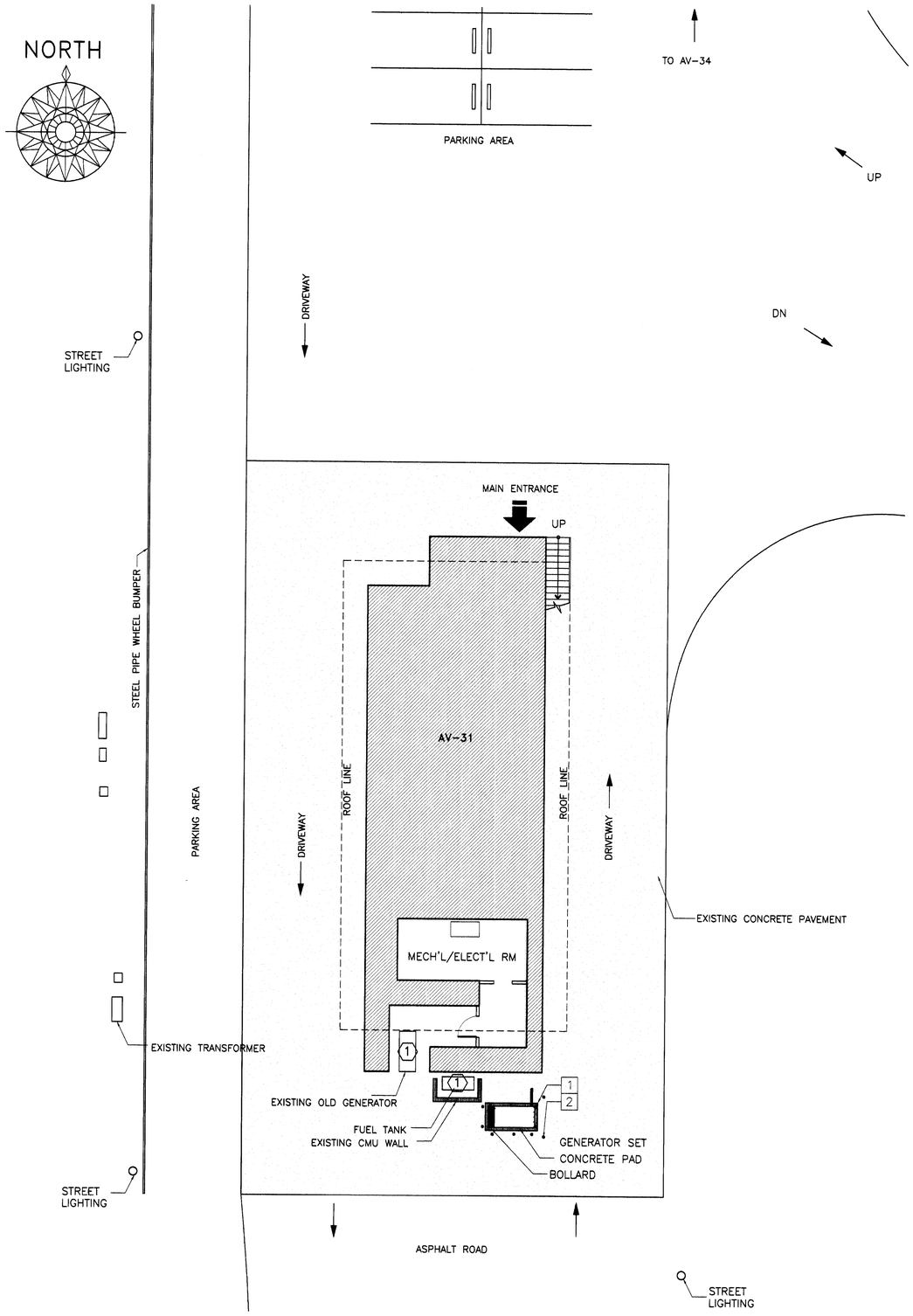
DEPARTMENT OF THE NAVY
U.S. NAVAL STATION
NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT GUANTANAMO BAY, CUBA

D/B INSTALL DIESEL BACK-UP GENERATOR AT AV-31
ELECTRICAL DRAWINGS

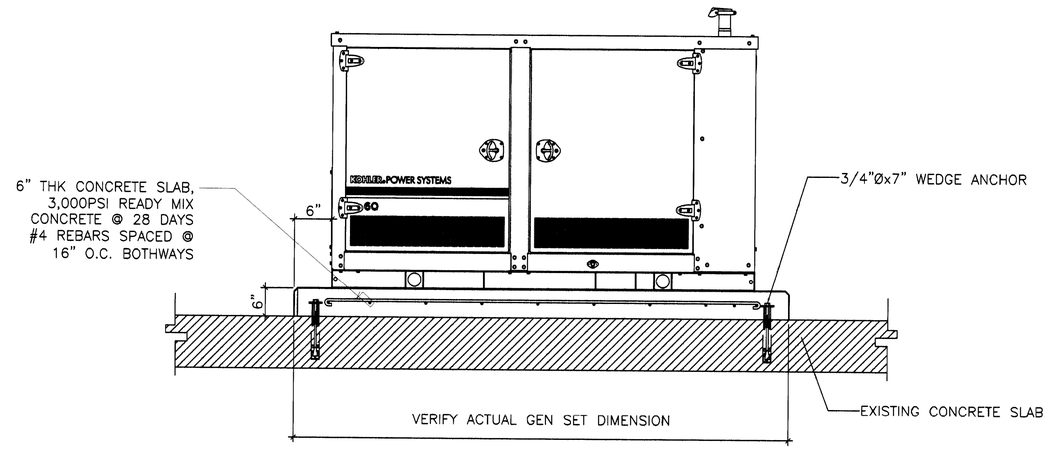
LEGEND, NEW WORK ELECT'L PLAN & NOTES

CODE ID. NO. 80091 — SIZE D
SCALE: GRAPHIC
EFD NO.
WRK. REQ. NO. JF0021.0
SPEC. NO. N/A
CONSTR. CONTR. NO. N69450-08-R-1274
PWD DRAWING NO. 11ET-0493-0910-04
SHEET 4 OF 5
E-102

24 MAY, 2011



1 SITE PLAN
C-101 C-101 SCALE 3/32" = 1'-0"



2 CONCRETE PAD DETAIL
C-101 C-101 SCALE 3/4" = 1'-0"

DEMOLITION NOTES:

1. DEMO EXISTING FUEL TANK AND OLD GENERATOR

NEW WORK NOTES:

1. PROVIDE 6" THICK CONRETE PAD, 3000 PSI @ 28 DAYS.
2. PROVIDE BOLLARDS.

STRUCTURAL NOTES:

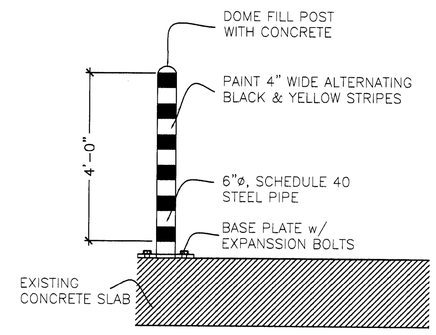
1. MATERIALS PROPERTIES:
   CONCRETE f'c – 3000 PSI
   STEEL REINFORCEMENT – fy – 60,000 PSI
2. CONCRETE PAD SHALL BE THE TROWEL FINISH.
3. APPLY CONCRETE EPOXY TO EXISTING SLAB PRIOR TO CONCRETE POURING.

LEGEND:

- DEMO WORK MARK
- NEW WORK MARK
- SPECIAL NOTES

I CERTIFY THAT THIS AS BUILT DRAWING IS CORRECT & ACCURATE

QUALITY CONTROL MANAGER, BRSC — 26 MAY 2011 DATE



3 BOLLARD DETAIL
C-101 C-101 SCALE 1/2" = 1'-0"

NOTE:
IF DRAWING PRINTED OTHER THAN "D" SIZE, USE GRAPHIC SCALES.

GRAPHIC SCALE: 3/32"=1'-0" (2' 0' 5' 10' 15')
GRAPHIC SCALE: 3/4"=1'-0" (1' 6" 0' 1' 2' 3')
GRAPHIC SCALE: 1/2"=1'-0" (1' 0' 1' 2' 3' 4' 5')

AS BUILT DRAWING
24 MAY 2011

MINI-MACC TO#0019

REVISIONS			
STAL	DESCRIPTION	DATE	APPROVED
AS BUILT DRAWING		5/24/2011	

BRDC — Burns & Roe and dck north america, LLC

SEAL

APPROVED
ACTIVITY – SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER
DATE

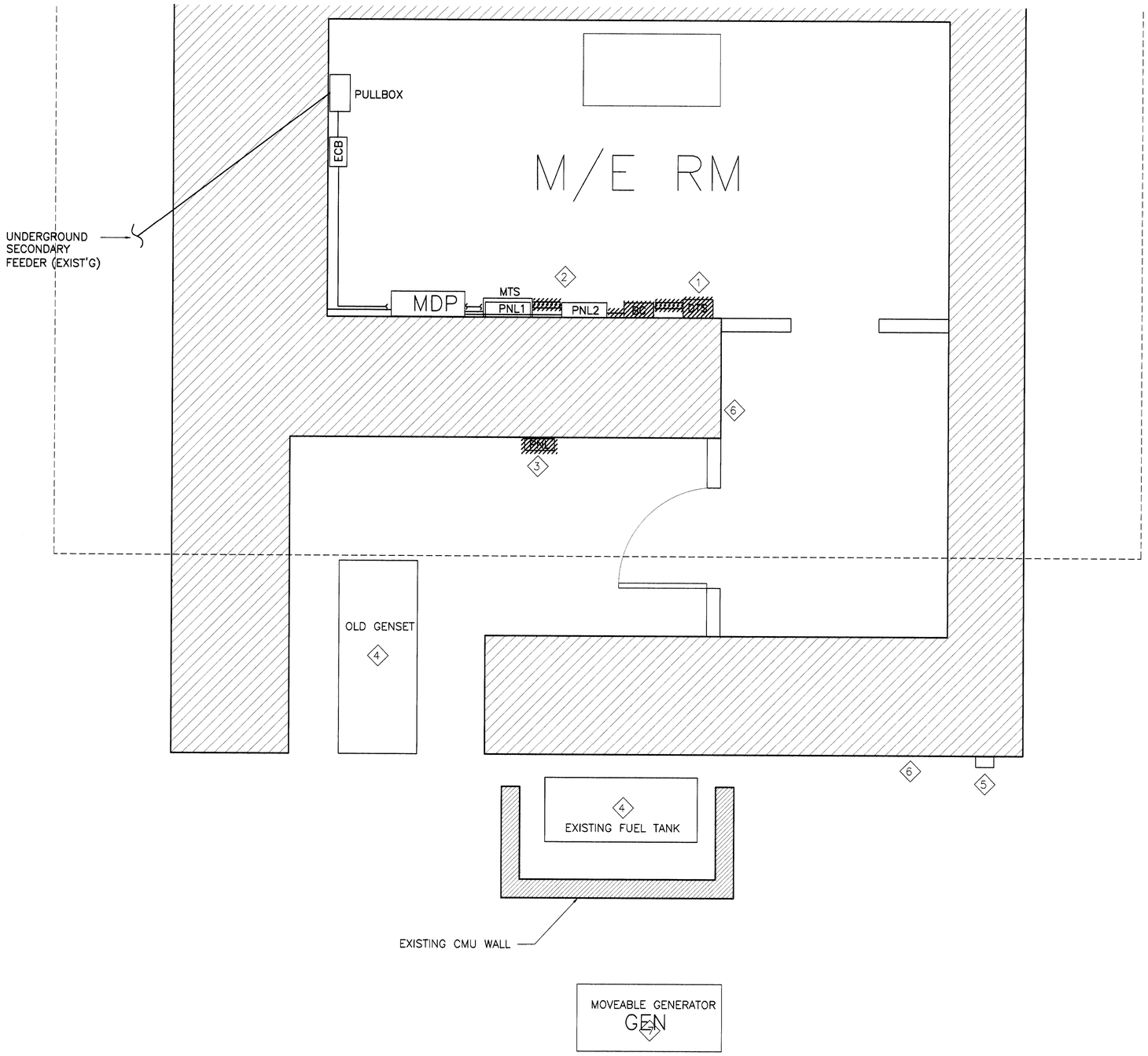
A/E EDO DESIGN; EDO DRAWN; JBZ/EQC REVIEW; OC; CHIEF ARCH./ENGR.; PWD GTMO
PROJECT MANAGER
FIRE PROTECTION
BRANCH MANAGER
DESIGN DIRECTOR

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT GUANTANAMO BAY, CUBA
U.S. NAVAL STATION

D/B INSTALL DIESEL BACKUP GENERATOR AT AV31
CIVIL DRAWINGS
SITE PLAN, DETAILS AND NOTES

CODE ID. NO. 80091 — SIZE D
SCALE: GRAPHIC
EFD NO.
WRK. REQ. NO. JF021.10
SPEC. NO. N/A
CONSTR. CONTR. NO. N69450-08-R-1274
PWD DRAWING NO. 11ET-0493-0910-02
SHEET 2 OF 5
C-101

24 MAY 2011



ELECT'L DEMO PLAN

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

LEGEND:

- EXISTING OLD ABANDONED 30 KW GENSET
- GEN — EXISTING MOVABLE 25 KW GENERATOR SET
- MTS — EXISTING MANUAL TRANSFER SWITCH (MTS)
- ECB — EXISTING ENCLOSED CIRCUIT BREAKER
- DTS — EXISTING DOUBLE THROW SWITCH (DTS)
- BC — EXISTING ABANDONED BATTERY CHARGER

DEMO NOTES:

1. DEMO EXISTING 200A DOUBLE THROW SWITCH AND ALL ASSOCIATED RACEWAY AND CONDUCTORS BACK TO THE SOURCE AND UP TO THE LOAD SIDE
2. CONVERT THE EXISTING MANUAL TRANSFER SWITCH INTO A CABLE PULLBOX. REMOVE ALL INTERIOR ASSEMBLIES.
3. REMOVE EXISTING PANEL AND ITS SERVICE FEEDER LOCATED OUTSIDE NEAR TO ABANDONED GENERATOR.
4. REMOVE AND DISPOSE OF EXISTING PERMANENTLY INSTALLED AND ABANDONED EMERGENCY GENERATOR INCLUDING RACEWAY, WIRING, PIPING, TANK, VALVES ETC.
5. REMOVE ONE EXISTING 60A DISCONNECT SWITCH AND ITS ASSOCIATED RACEWAY LOCATED OUTSIDE THE BLDG.
6. DEMO EXISTING ABANDONED CONDENSING LINES AND ITS METAL ENCLOSURE UP TO MECHANICAL ROOM ONLY.
7. MOVEABLE GENERATOR SET AND ITS POWER CABLE WILL BE REMOVED BY OTHERS (UTILITIES).

I CERTIFY THAT THIS AS BUILT DRAWING IS CORRECT & ACCURATE

QUALITY CONTROL MANAGER, BRSC — 26 MAY 2011

GRAPHIC SCALE: 1' 0' 1' 2' 3' 4' 5' — 1/2"=1'-0"

AS BUILT DRAWING 24 MAY 2011

MINI-MACC TO#0019

STAT.	DESCRIPTION	DATE	APPROVED
AS BUILT DRAWING		5/24/2011	

REVISIONS

BRDC — Burns & Roe and dck north america, LLC

SEAL

APPROVED — ACTIVITY – SATISFACTORY TO — DATE

APPROVED — PUBLIC WORKS OFFICER — DATE

A/E RCO; DGC; JBZ/JAS — PWD GTMO: DESIGN, DRAWN, REVIEW, QC, CHIEF ARCH./ ENGR.; PROJECT MANAGER; FIRE PROTECTION; BRANCH MANAGER; DESIGN DIRECTOR

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND — PUBLIC WORKS DEPARTMENT — U.S. NAVAL STATION GUANTANAMO BAY, CUBA

D/B INSTALL DIESEL BACK-UP GENERATOR AT AV-31

ELECTRICAL DRAWINGS

DEMO ELECT'L PLAN AND DEMO NOTES

CODE ID. NO. 80091 — SIZE D

SCALE: GRAPHIC

EFD NO.

WRK. REQ. NO. JF0021.0

SPEC. NO. N/A

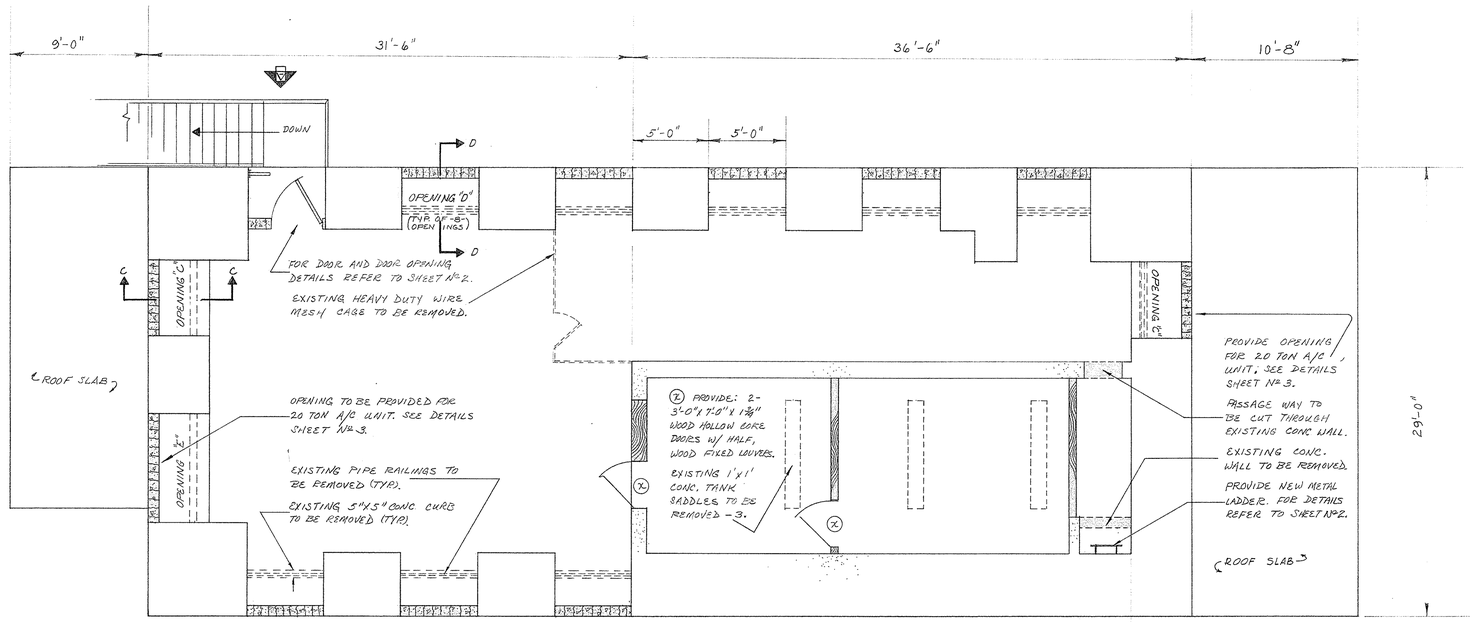
CONSTR. CONTR. NO. N69450-08-R-1274

PWD DRAWING NO. 11ET-0493-0910-03

SHEET 3 OF 5

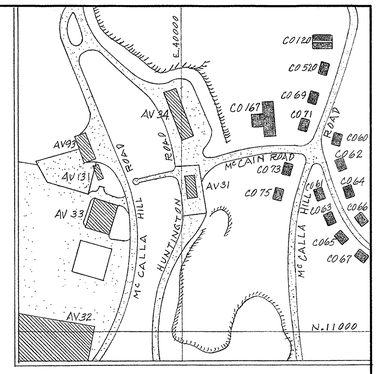
E-101

24 MAY, 2011



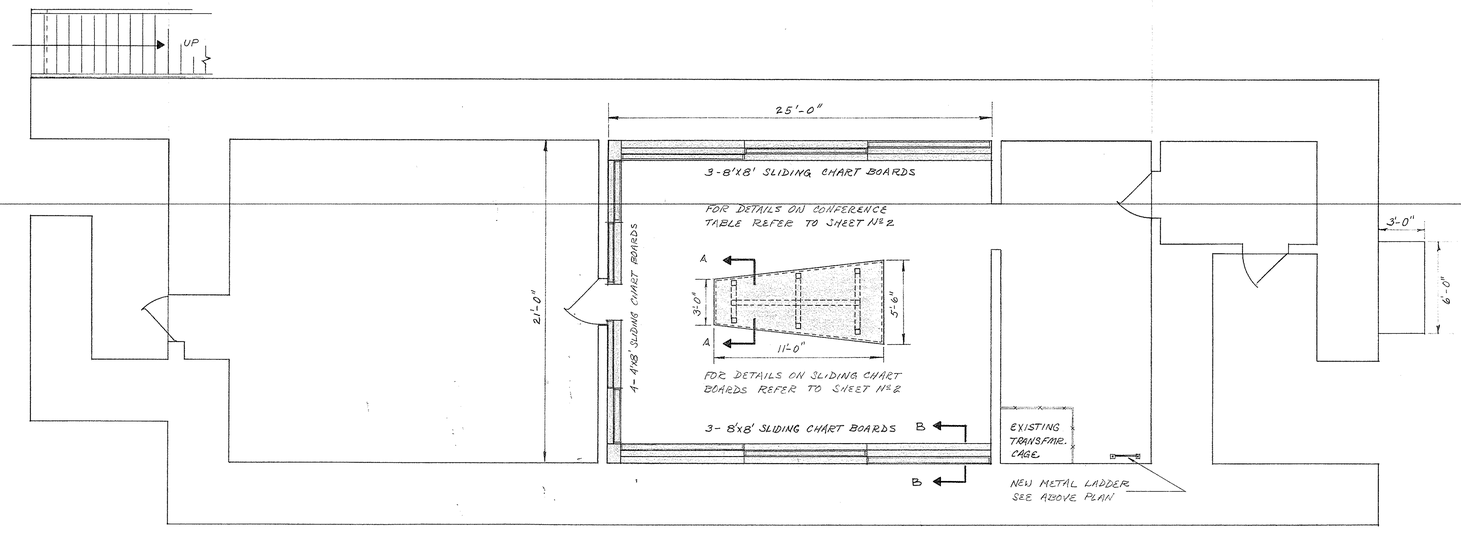
SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"



AV 31 LOCATION PLAN

SCALE 1" = 200'



FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

LEGEND

- NEW WORK
- NEW WOOD PARTITION
- EXISTING STRUCTURE TO BE REMOVED (EXCLUDING CONF. TABLE)
- NEW CONC. MASONRY UNIT CONSTRUCTION

THIS PROJECT IS 90% COMPLETE AND IS BEING CANCELLED UNTIL FURTHER NOTICE.

PRELIMINARY

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO. 5B-2024-0867-1

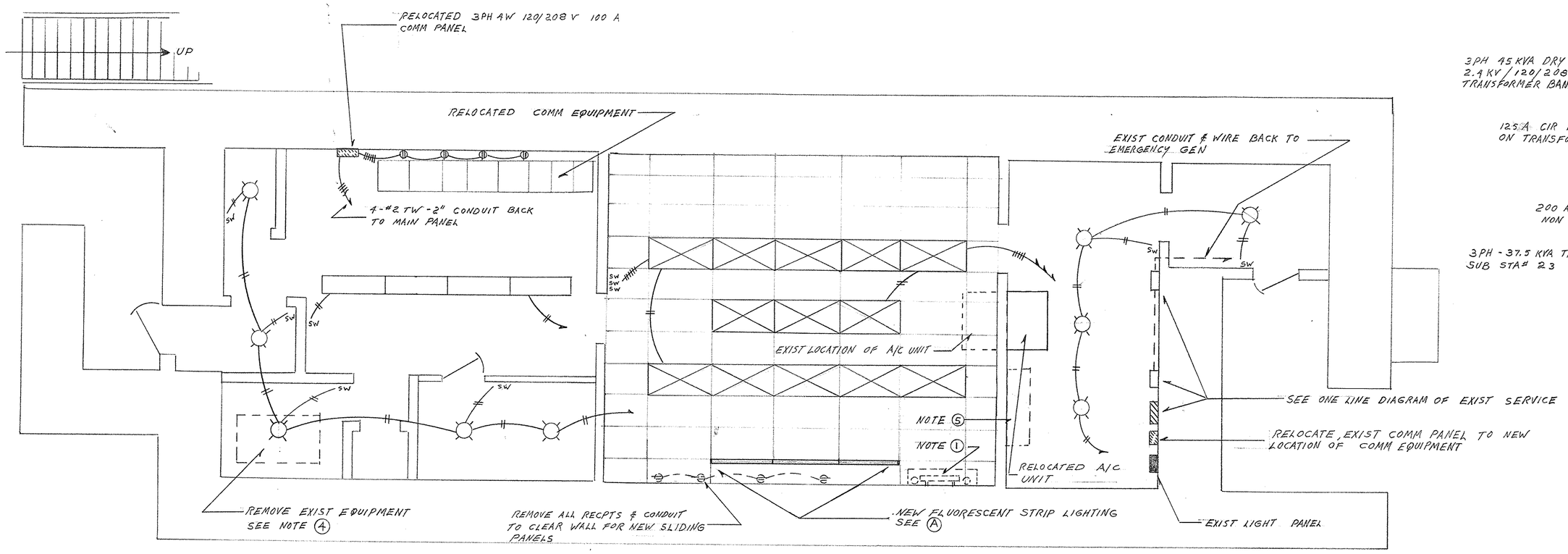
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN TE. ORTEGA
CHK
SUPV
IN CHARGE
DIRECTOR
APPROVED DATE
COMMANDING OFFICER PWC
SATISFACTORY TO DATE

U.S. NAVAL STATION
MODIFICATIONS TO COMMAND CENTER
BLDG. AV-31
ARCH. PLANS 1ST & 2ND DECKS

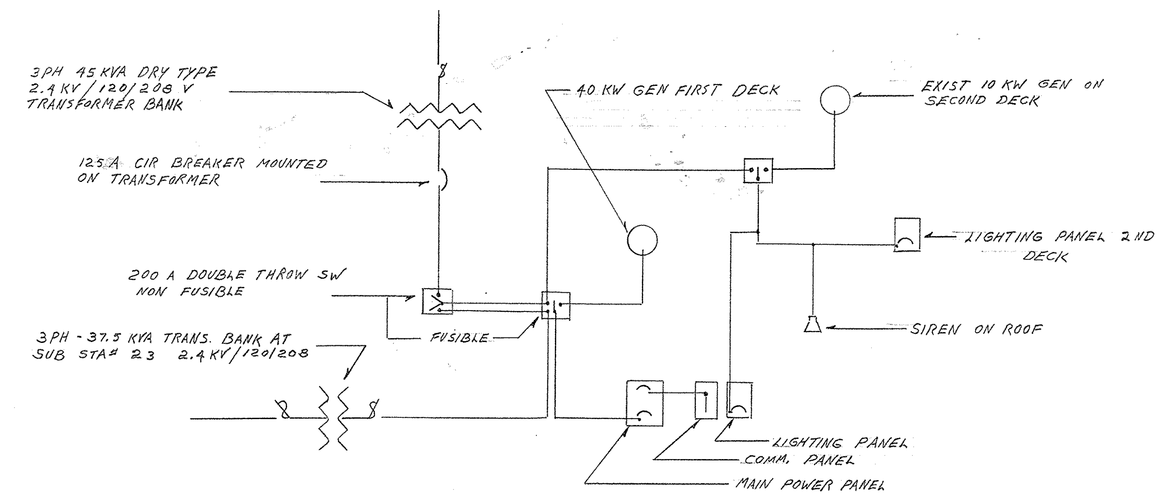
SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO.
CONSTR. CONTR. NO.
SCALE AS SHOWN | SPEC | SHEET 1 OF 4

ESR 5851/B



FIRST FLOOR PLAN

SCALE 1/4 = 1'

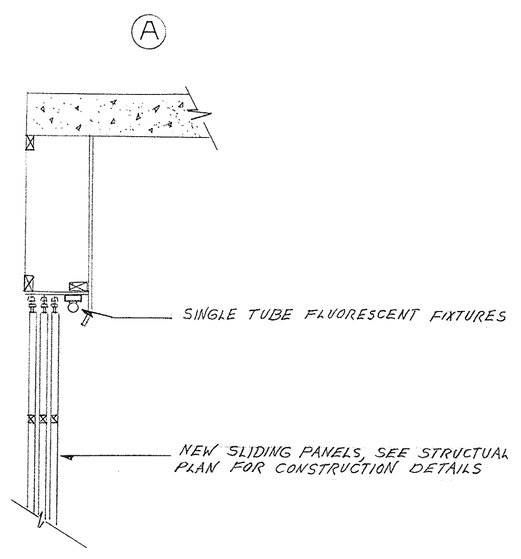


EXIST SERVICE

N.T.S.

NOTE'S

1. REMOVE UNUSED COMMUNICATIONS CABLE, UNDER DIRECTION OF BASE COMM PERSONELL. REROUTE AND TERMINATE REMAINING CABLES UNIFORMLY ON SPARE TERMINAL BLOCK REMOVE ALL EXCESSIVE CABLE SLACK, JCT BOXES & FITTINGS NO LONGER REQUIRED.
2. DISCONNECT AND REMOVE, ALL UNUSED SWITCHES, CONDUIT & WIRE THROUGH OUT FIRST FLOOR AREA. INSTALL NEW LIGHTING FIXTURES, AND RECPTS. AS SHOWN, CLEAR ALL CONDUIT & BOXES FROM PARTITIONS TO BE REMOVED. LOCATE NEW LIGHTING CIRCUIT SWITCHES, OPPOSITE TO HINGE OF DOORS.
3. ALL NEW RECPT CIRCUITS TO HAVE SEPARATE CONDUCTOR FOR GROUNDING
4. DISCONNECT, ELECTRICAL SERVICE, REMOVE ALL PIPE FITTINGS TO UNUSED AIR PURIFIER UNIT. REMOVE ALL COMPONENTS FROM BLDG
5. REMOVE UNUSED EXAUST FAN & DUCT



LEGEND

- INDICATES NEW WORK UNLESS NOTED
- EXIST UNLESS NOTED
- 2X4' FLUORESCENT TROFFER 40 WATT 4-TUBE HPF, FOR INSTALLING IN SUSPENDED TYPE CEILING
- 150 WATT INCANDESCENT FIXTURE SIMILAR TO 9Y4 # 12
- SINGLE 40 WATT FLUORESCENT STRIP LIGHTING FIXTURE
- 110 V RECPT POLARIZED GROUNDING TYPE
- 4-TUBE 40 W. FLUORESCENT, INSTALLED ON PENDENT HANGERS SIMILAR OR EQUAL TO FED STOCK # 6210-655-2301

ESR / 7214/9

ELECTRICAL PRELIMINARY

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO. 5B-2141-0269-2

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES HB
DRWN HB
CHK
SUPV
IN CHARGE PATTERSON
DIRECTOR

US NAVAL STATION
MODIFICATIONS TO BLDG AV-31

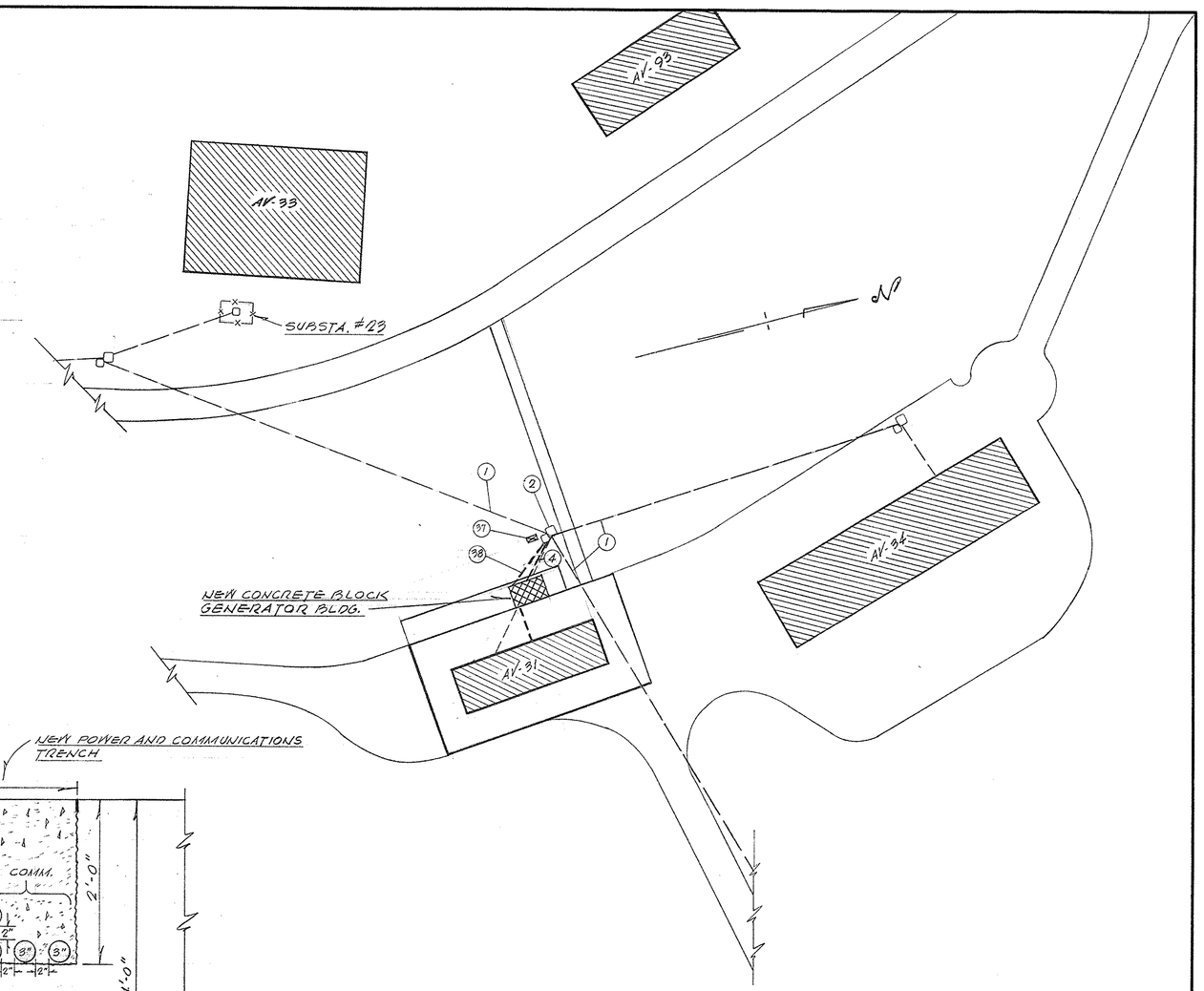
APPROVED DATE
COMMANDING OFFICER PWC
SATISFACTORY TO DATE
J. Hanson 3/4/69

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO.
SCALE AS SHOWN | SPEC | INSTR. CONTR. NO. | SHEET 2 OF 2

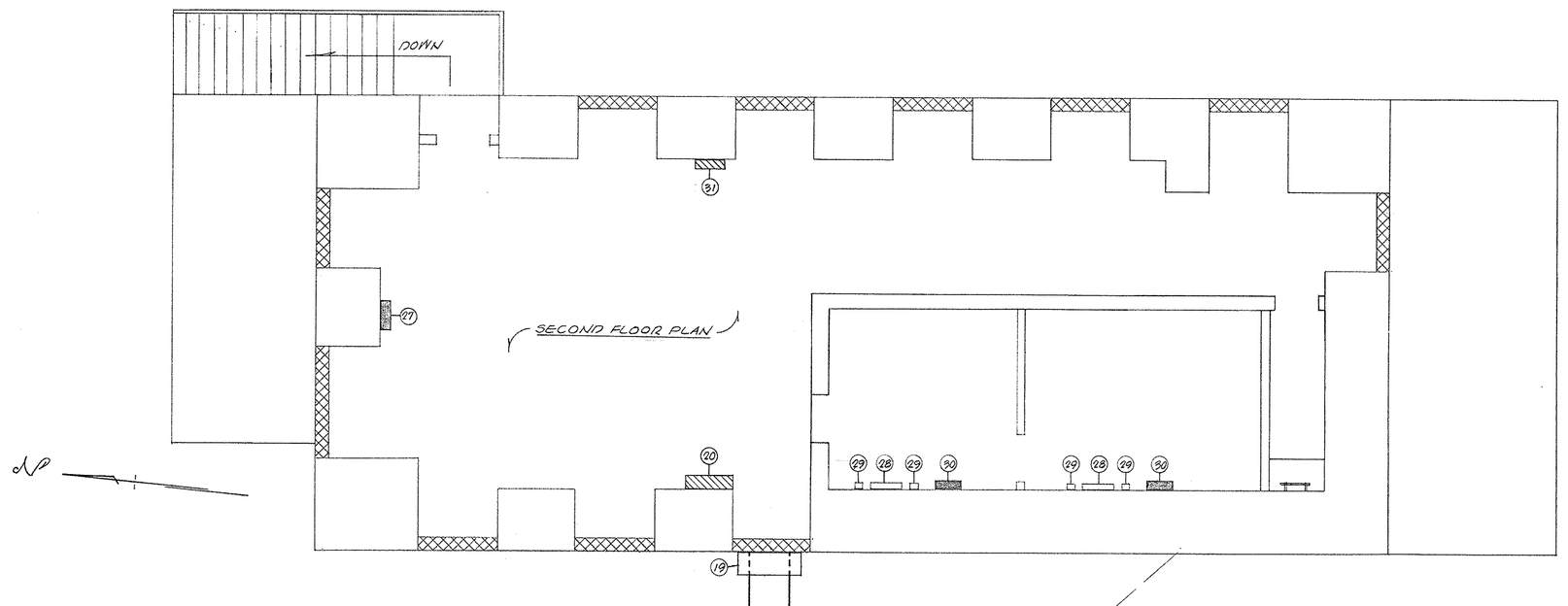
ONE LINE WIRING DIAGRAM SCHEDULE

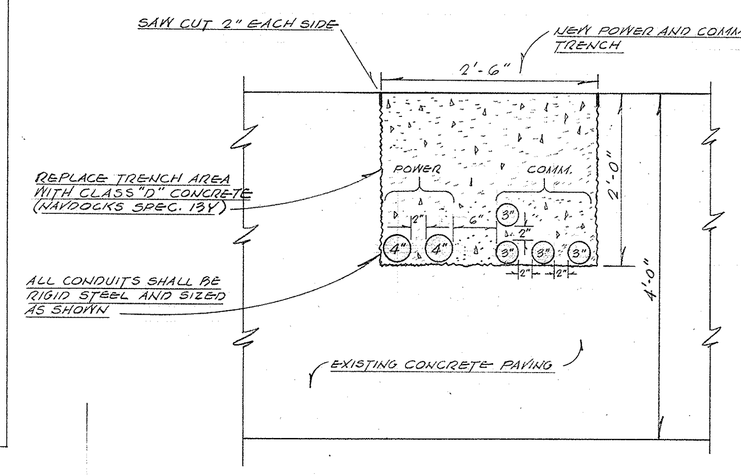
1. EXISTING PRIMARY CABLE #300 MCM, 2400 VOLT
2. EXISTING POWER MANHOLE P-26
3. PRIMARY SPLICE
4. PRIMARY CABLE, 3/c #300 MCM, 5KV, TYPE RQ IN 4" CONDUIT
5. GROUND ROD, 3/4" x 10'
6. GROUND CLAMP
7. GROUND CONDUCTOR #1/0 B.CU.
8. PAD MOUNTED TRANSFORMER
   - I HI-VOLTAGE COMPARTMENT:
     - 3/c, 5 KV POTHEAD
     - LOAD INTERRUPTER SW., 3 POLE, 2 POSITION, 5 KV, 100 AMP
     - 3-5KV CUTOUT FUSES, 100 AMP WITH 50 AMP FUSE LINKS
   - II TRANSFORMER COMPARTMENT:
     - 150 KVA, ASKAREL INSULATED, SELF COOLED, 3 ϕ, 60 ~, 4160/2400 DELTA, 208 V/120 VOLTS A.C. WITH 4-2½ % TAPS BELOW IN HI-VOLTAGE WINDING WITH EXTERNAL TAP CHANGING MECHANISM
   - III LOW VOLTAGE COMPARTMENT:
     - 600 AMP, 3 POLE, 240 VOLTS A.C. MAIN CKT. BKR., SET TRIP AT 500 A.
9. GENERATOR CKT. BKR.
10. DIESEL DRIVEN GENERATOR, FULLY AUTOMATIC, 125 KW, 3 ϕ, 4 W, 60 ~, 208 V/120 VOLTS A.C.
11. GENERATOR CONTROL PANEL
12. WIRE, 2-SETS, 4 #4/0 THW (PARALLEL) IN 3" CONDUIT
13. FLOOR TRENCH WITH STEEL COVER PLATE
14. WIRE, 2-SETS, 4 #250 MCM, THW (PARALLEL) IN 3" CONDUIT
15. ENGINE STARTING CKT.
16. AUTOMATIC TRANSFER SWITCH, 3 POLE, 600 AMP, 250 VOLTS A.C.
17. WIRE, 2-SETS, 4 #250 MCM, THW (PARALLEL) IN 3" CONDUIT
18. WIRE, 2-SETS, 4 #250 MCM, THW (PARALLEL) IN 4" CONDUIT
19. WEATHERPROOF JUNCTION BOX, 48" x 36" x 18"
20. MAIN DISTRIBUTION POWER PANEL, 3 ϕ, 4 W, S/N, 120/208 VOLTS A.C. WITH 600 AMP. MAIN LUGS ONLY AND BRANCH CKTS. AS FOLLOWS:
    - 2-3 POLE, 50 AMP
    - 2-3 POLE, 100 AMP
    - 2-3 POLE, 150 AMP
21. WIRE, 4 #2 THW IN 1½" CONDUIT
22. WIRE, 3 #2 THW IN 1¼" CONDUIT
23. WIRE, 4 #6 THW IN 1¼" CONDUIT
24. DISCONNECT SWITCH, NON-FUSIBLE, 200 AMP, 3 POLE, 240 VOLTS A.C. IN NEMA 1 ENCLOSURE
25. A.C. MAGNETIC STARTER, NEMA SIZE 3, 3 ϕ, 3 POLE, 208 VOLTS A.C. IN NEMA 1 ENCLOSURE
26. A/C UNIT
27. LIGHTING PANEL, 3 ϕ, 4 W, S/N, 120/208 VOLTS A.C. WITH 100 AMP. MAIN LUGS ONLY AND 24-1 POLE, 20 AMP. BRANCH CKT. BKRS.
28. SURFACE METAL RACEWAY, 4" x 4" x 4"
29. POWER LINE FILTERS, 4-100 AMPERE
30. LOAD CENTER, 3 ϕ, 4 W, S/N, 120/208 VOLTS A.C. WITH 50 AMP. 3 POLE MAIN CKT. BKR. AND 12-1 POLE, 20 AMP. BRANCH CKT. BKRS.
31. EQUIPMENT PANEL, 3 ϕ, 4 W, S/N, 120/208 VOLTS A.C. WITH 100 AMP MAIN LUGS ONLY AND 24-1 POLE, 20 AMP BRANCH CKT. BKRS.
32. GENERATOR ROOM LIGHTING PANEL - LOAD CENTER, 3 ϕ, 4 W, S/N, 120/208 VOLT A.C., 3 POLE 50 AMP MAIN CKT. BKR. AND 12-1 POLE, 20 AMP BRANCH CKT. BKRS.
33. WIRE, 4 #6 THW IN 1¼" CONDUIT
34. BATTERY CHARGER
35. WALL MOUNTED DAY TANK, 25 GAL., WITH 120 VOLT A.C. MOTOR DRIVEN PUMP AND FLOAT SWITCH
36. 1000 GAL. FUEL TANK BURIED 2' BELOW GRADE
37. EXISTING OUTDOOR TELEPHONE CABINET
38. TELEPHONE DUCTS, 4-4"

NOTE:
ALL EQUIPMENT OR MATERIALS NOT INDICATED AS EXISTING SHALL BE NEW.

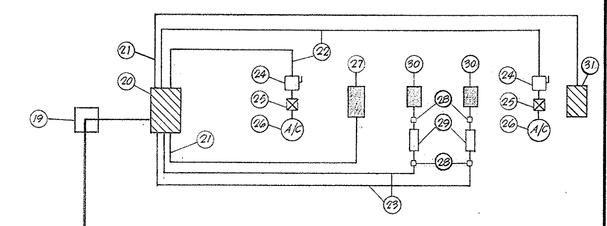


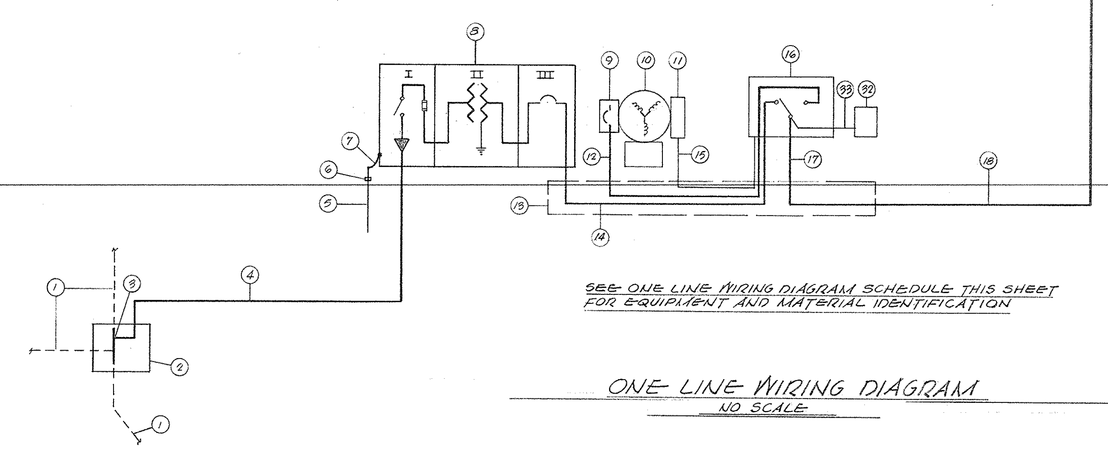
LOCATION PLAN
SCALE: 1" = 20'



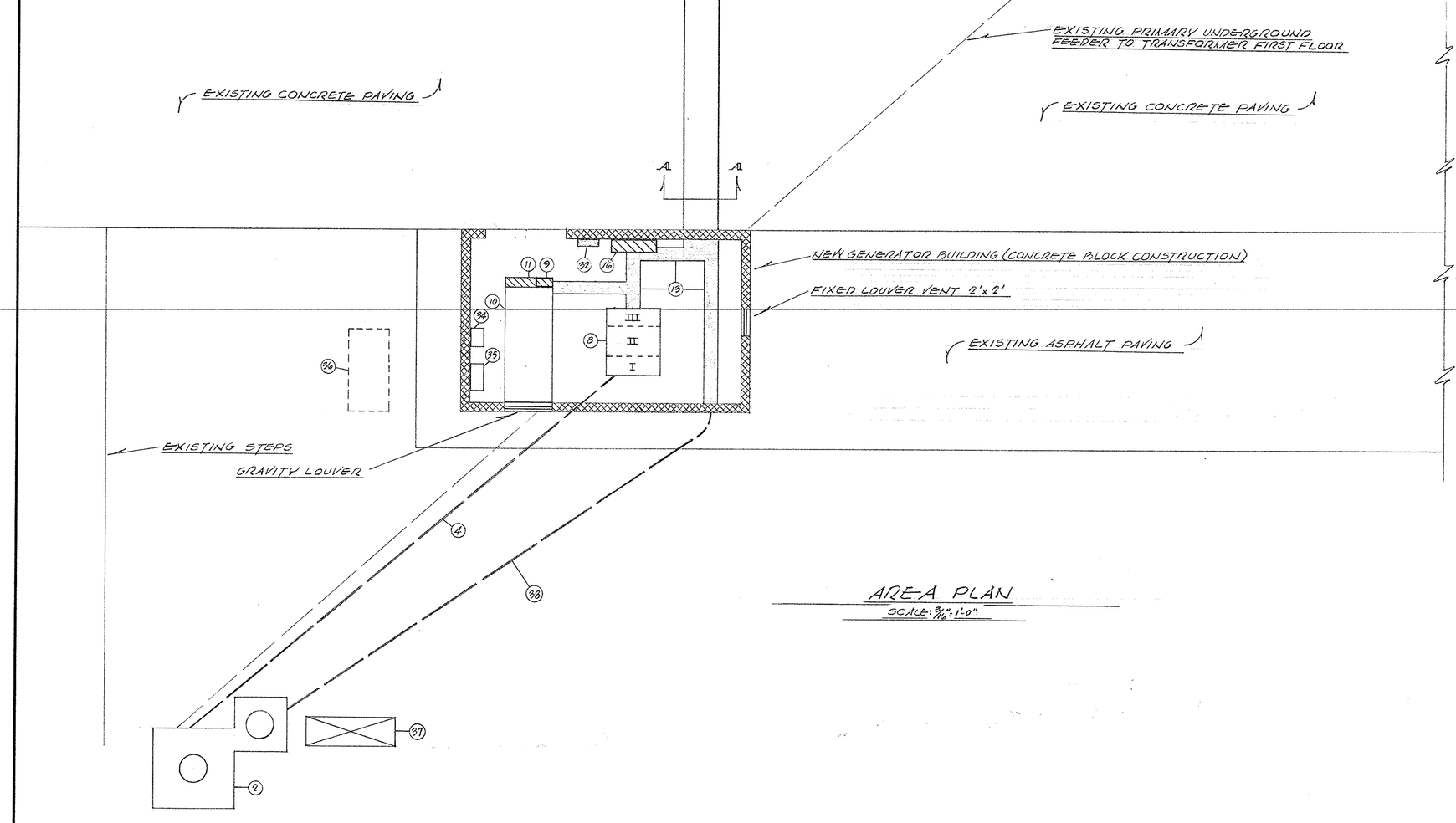


ELEVATION DETAIL "A-A"
SCALE: 1" = 1'-0"





ONE LINE WIRING DIAGRAM
NO SCALE



AREA PLAN
SCALE: 3/16" = 1'-0"

GRAPHIC SCALES

3/16" = 1'-0" 6' 0' 5' 10' 15' 20' 25'
1" = 1'-0" 1' 6" 0' 1' 2' 3' 4' 5'
1" = 50' 50' 0' 50' 100' 150' 200'

ESR 5851/8

PRELIMINARY

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED
	REVISIONS			

PWC DRAWING NO. 5B-2024-0867-4

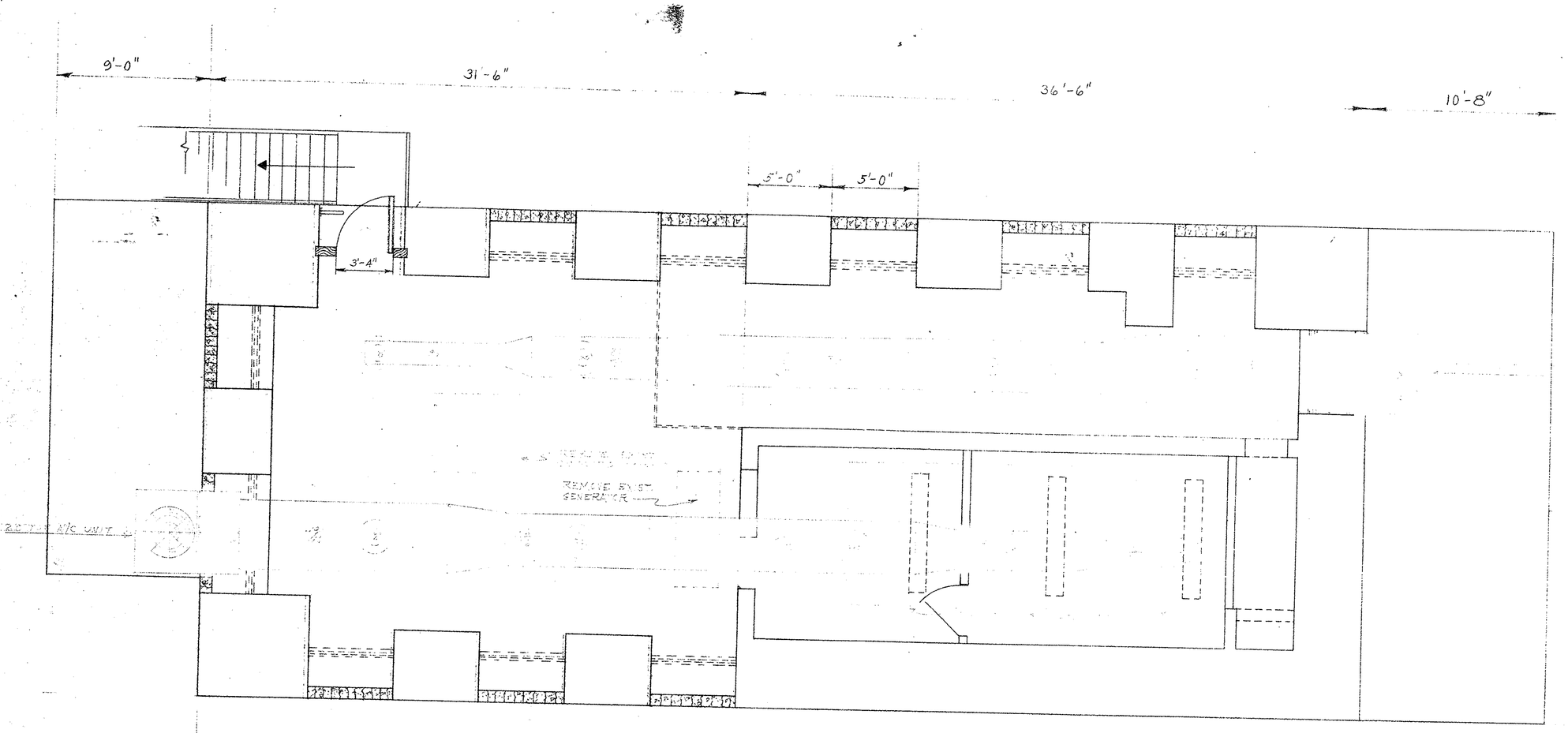
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES R.A. WHITE
DRWN R.A. WHITE
CHK R.A.W.
SUPV
IN CHARGE
DIRECTOR

U.S. NAVAL STATION
MODIFICATIONS TO COMMAND CENTER - BLDG. AV-31
ELECTRICAL PLAN

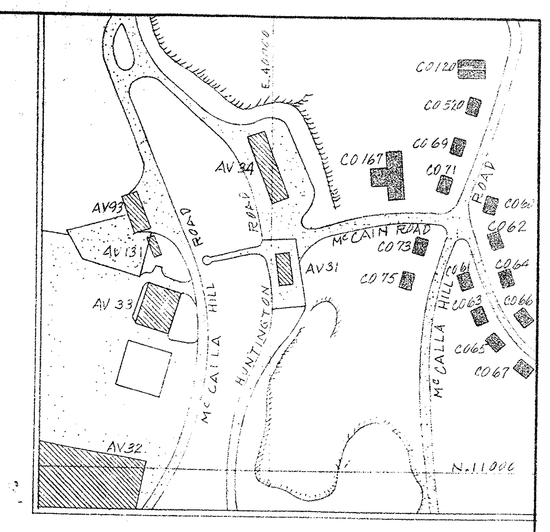
APPROVED DATE
COMMANDING OFFICER PWC
SATISFACTORY TO DATE

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO.
CONSTR. CONTR. NO.
SCALE NOTED | SPEC | SHEET 4 OF 4



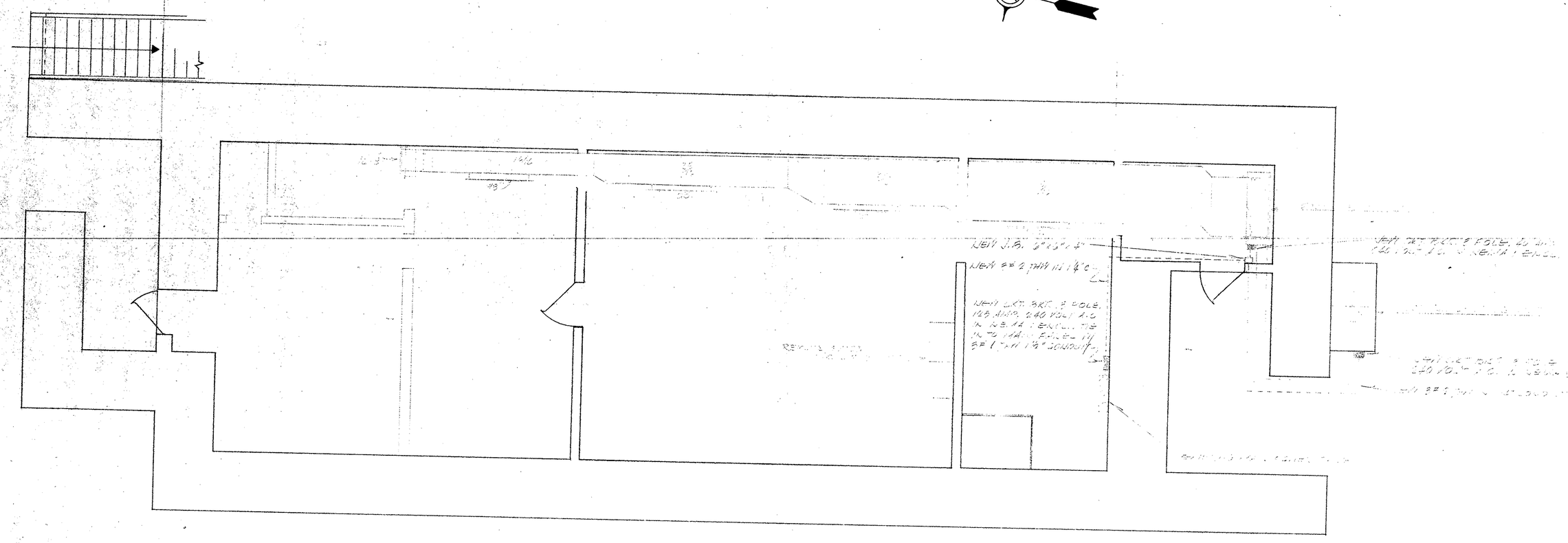
SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"



AV 31 LOCATION PLAN

SCALE 1" = 200'



FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

PRELIMINARY

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO. 5B-2024-0367-3

DES
DRWN
CHK
SUPV
IN CHARGE
DIRECTOR

APPROVED DATE
COMMANDING OFFICER PWC
SATISFACTORY TO DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

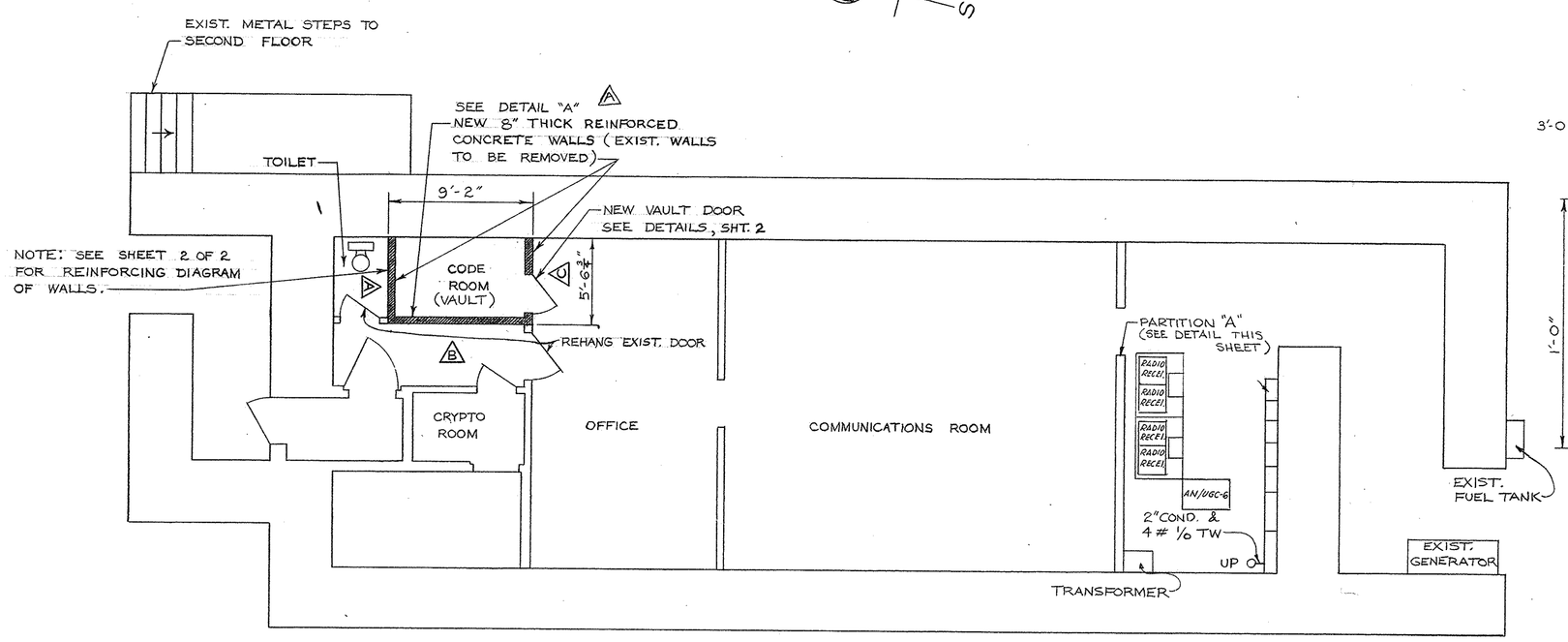
U.S. NAVAL STATION
MODIFICATION TO COMMAND CENTER
BLDG AV-3
MECHANICAL PLAN

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	

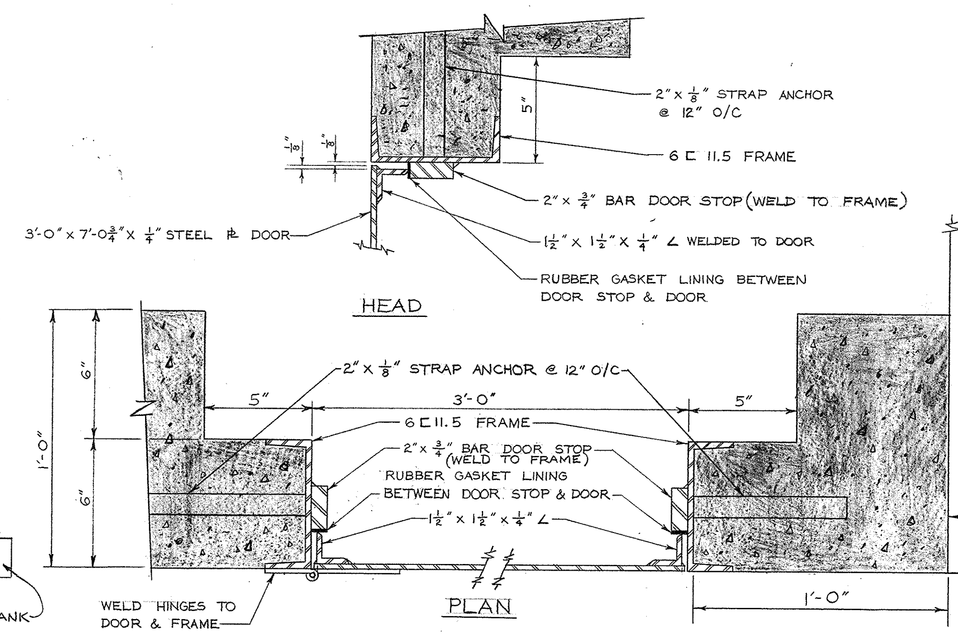
CONSTR. CONTR. NO.

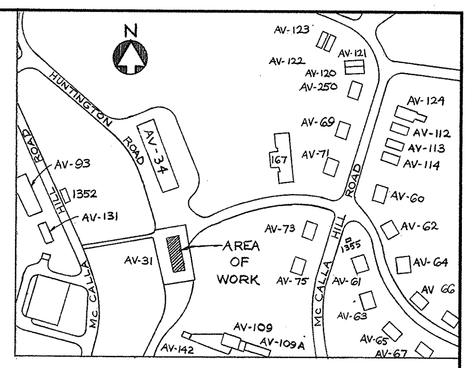
SCALE AS SHOWN | SPEC | SHEET OF

ESR 5851/8



FIRST FLOOR PLAN
SCALE 3/16" = 1'-0"

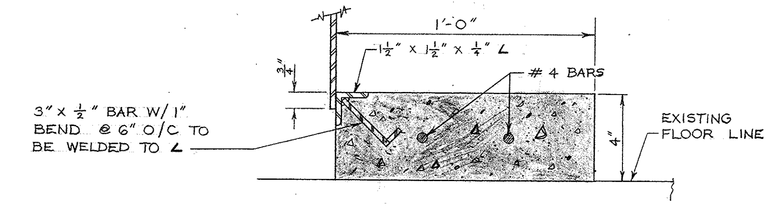




LOCATION PLAN
SCALE 1" = 200'

LEGEND

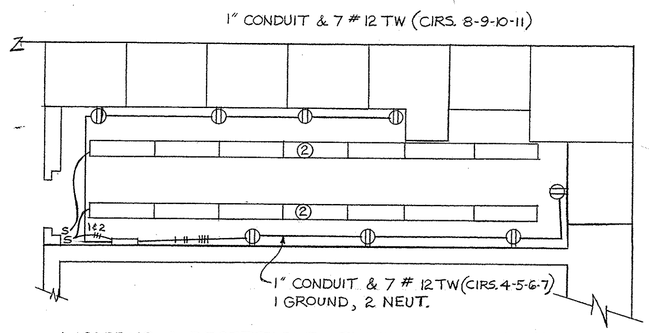
- NEW REINF. CONCRETE PARTION
- NEW REINF. CONCRETE WALL
- X/2 — DETAIL / SHEET NO.



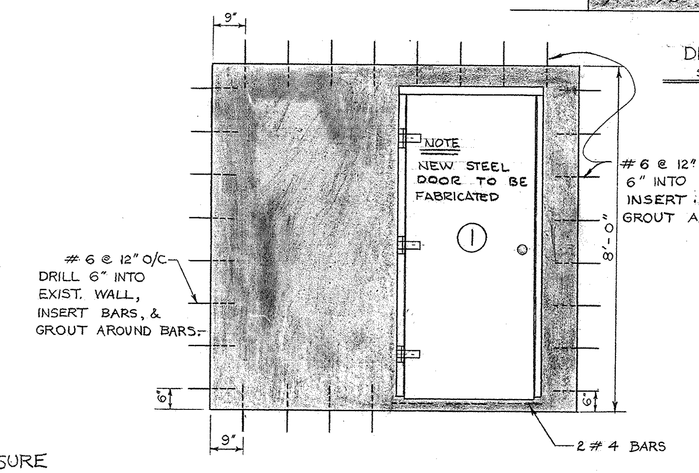
DETAILS - DOOR ①
SCALE 3" = 1'-0"

ELECTRICAL NOTES

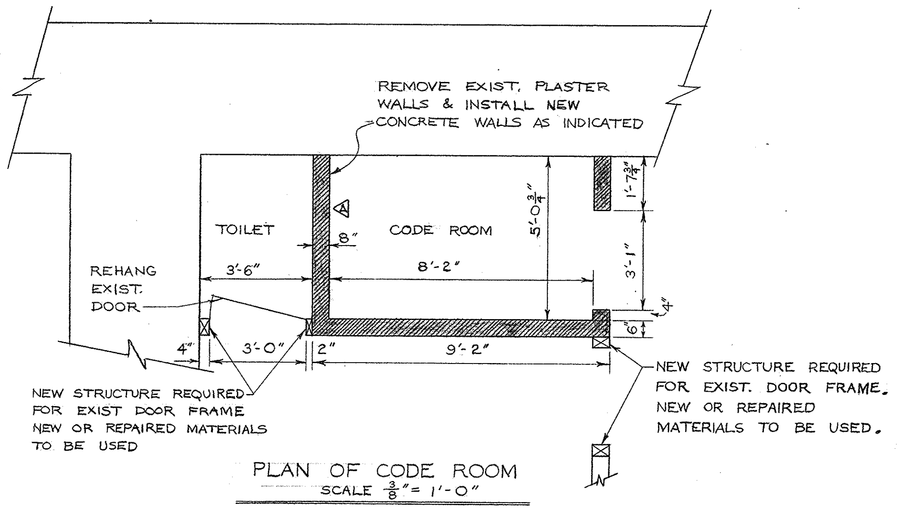
1. NEW PANEL TO BE (W) TYPE NDP, 150 AMP. MAIN BREAKER W/14 - 20A-1 P & 2 - 40A - 3P. BRANCH BREAKERS.
2. MAG (MAGNETIC CONTACTOR) FURNISHED WITH UNITS - ■
3. FLUORESCENT FIXTURES TO BE RAPID START, 2 TUBE, 40 WATT MOUNTED TO CEILING ON 4" BOXES (CONTINUOUS).
4. EQUIPMENT RACK TO BE MOUNTED ON 4" x 4" TREATED LUMBER.
5. FEED FROM PANEL TO BE OVERHEAD & DOWN INTO EQUIP. RACK UNITS FOR AC POWER.
6. ANTENNAE & ANTENNA WORK & CONNECTIONS BY OTHERS.
7. EXTEND TELEPHONE SERVICE IN 3/4" CONDUIT FROM EXIST. TERMINAL ON FIRST DECK. 11 PAIR PLASTIC.
8. A/C UNIT TO FEED OFF 40 AMP. BREAKER IN NEW PANEL.
9. NEW POWER TO FEED OFF EMERGENCY GENERATOR.



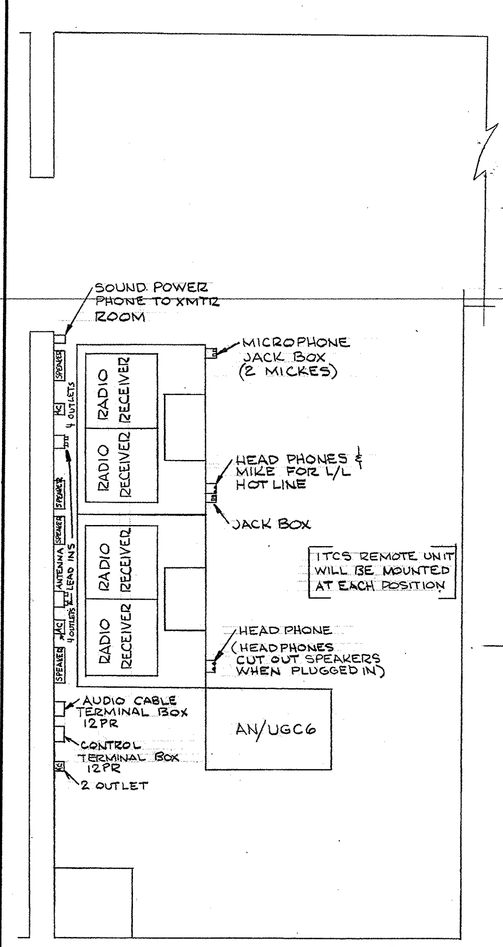
LIGHTING & RECEPTACLE PLAN, SECOND FLOOR ENCLOSURE
SCALE 3/16" = 1'-0"



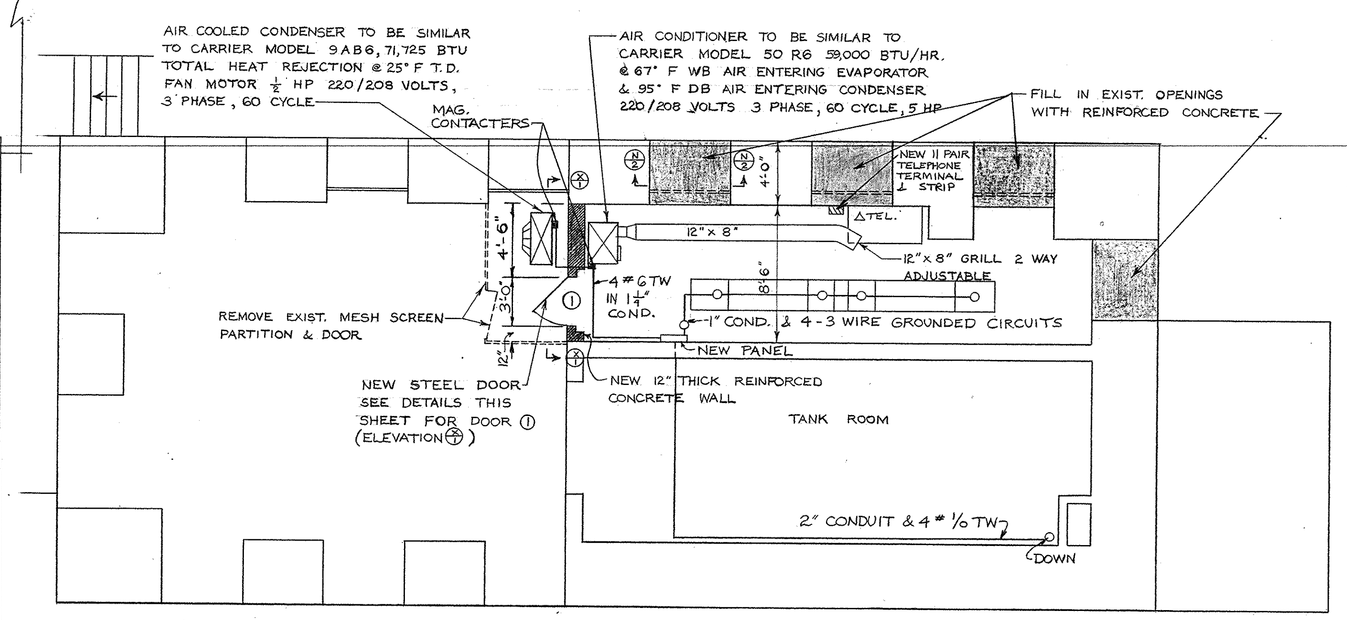
ELEVATION ⊕
SCALE 1/2" = 1'-0"



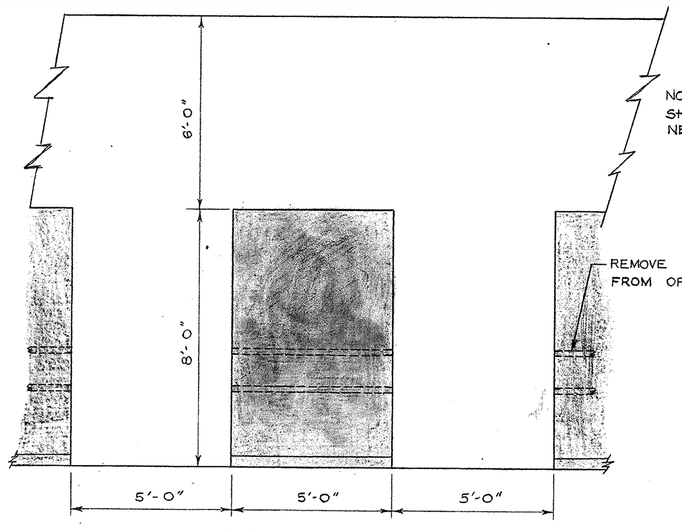
PLAN OF CODE ROOM
SCALE 3/8" = 1'-0"



PARTITION "A"
(FOR LOCATION SEE 1ST FLOOR PLAN)
SCALE 1/2" = 1'-0"



SECOND FLOOR PLAN
SCALE 3/16" = 1'-0"



TYPICAL EXIST. OPENING
SCALE 3/4" = 1'-0"

NOTE:
SHADED AREA REPRESENTS NEW REINF. CONCRETE POUR

REMOVE EXIST. PIPE RAILINGS FROM OPENINGS

SEE SHEET 2 OF 2 FOR GENERAL NOTES.

ESR 6828/4 & 5068/4

SYMBOL	DESCRIPTION	DATE	APPROVAL
△	VAULT ROOM CONC. WALL CHANGED TO 8"	11/66	[illegible]

REVISIONS

PWC DRAWING NO. 5B-1657-0764-1

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

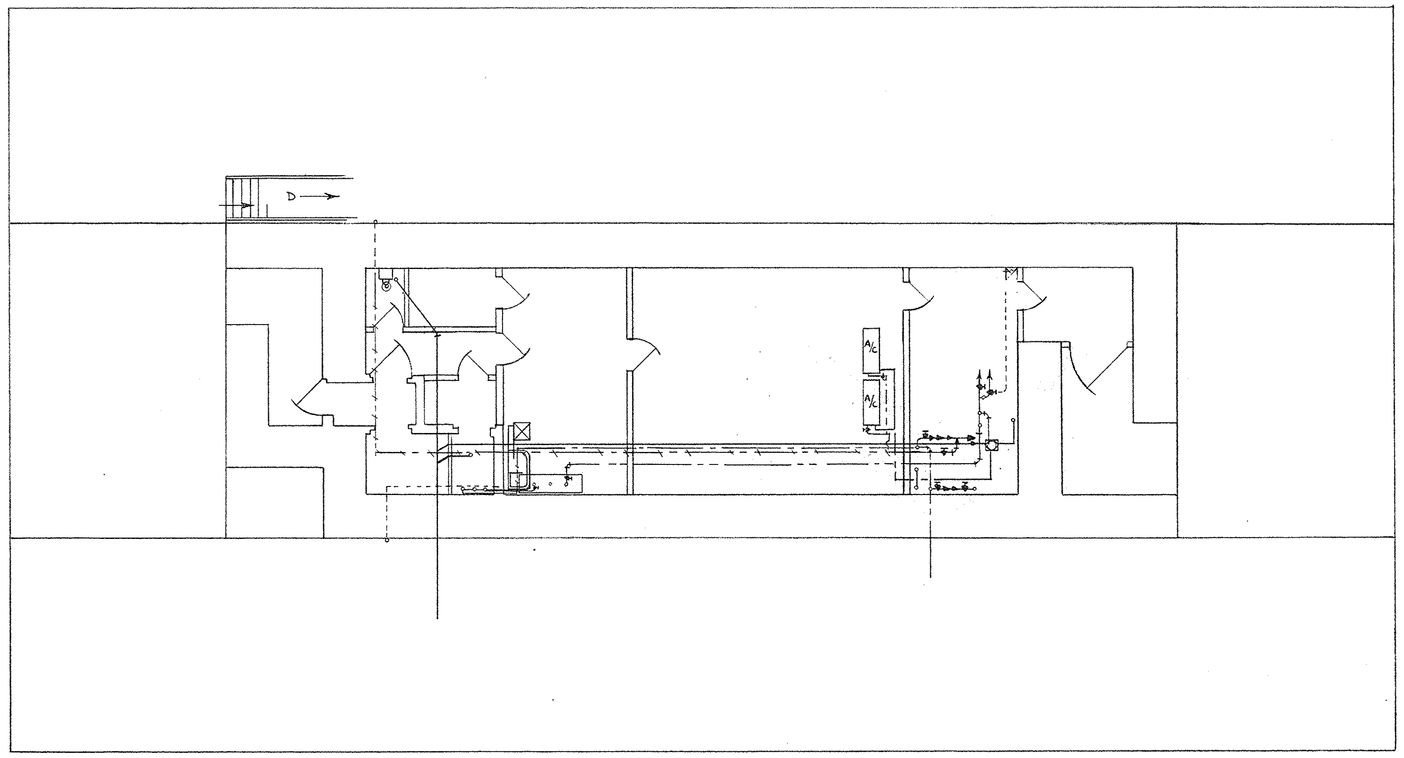
DES RYP-ELEC.
DRWN L. ELDER
TR
CHK RB
SUPV SCK
IN CHARGE SCK
REVIEWED BY [illegible]

U.S. NAVAL STATION - BLDG. AV-31
REHABILITATE 2ND DECK, RELOCATE COMMUNICATION EQUIPT., PROVIDE VAULT ROOM — FLOOR PLANS, ELEVS. & MISC. DETAILS

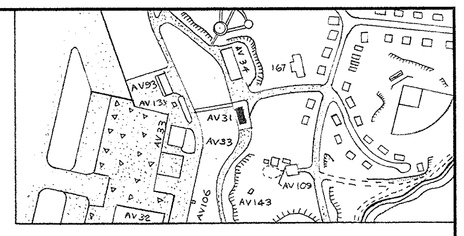
APPROVED [signature] COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 12/4/66

SATISFACTORY TO RB Rodriguez
DATE 10/20/66

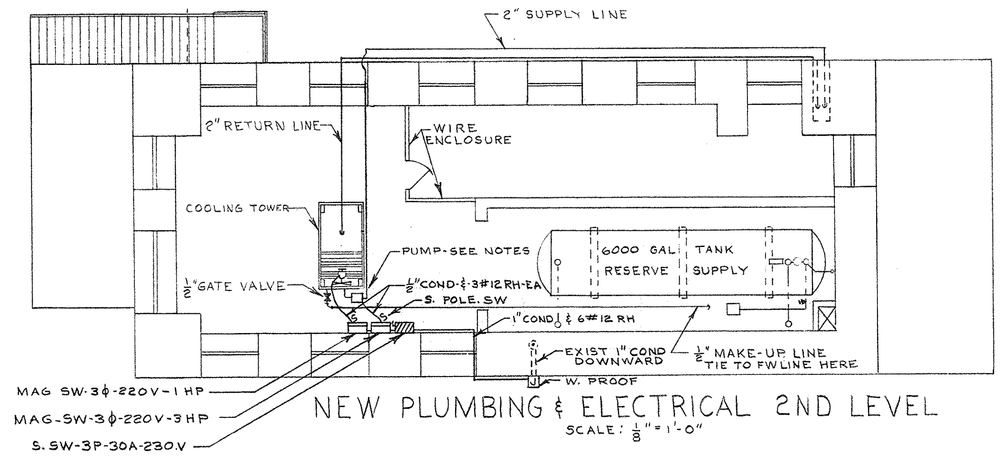
SCALE AS NOTED — SPEC
SHEET 1 OF 2 — NBY
Y & D DRAWING NO.



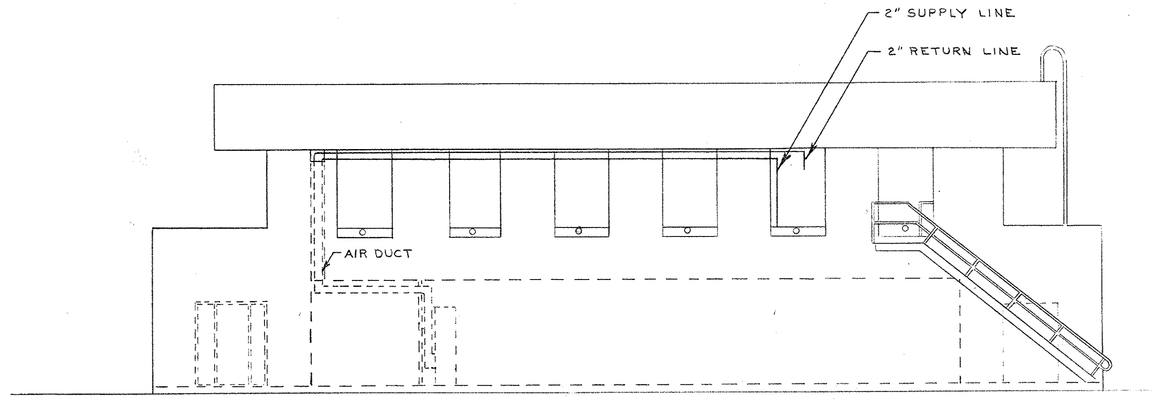
EXISTING PLUMBING MAIN FLOOR
SCALE: 1/8" = 1'-0"



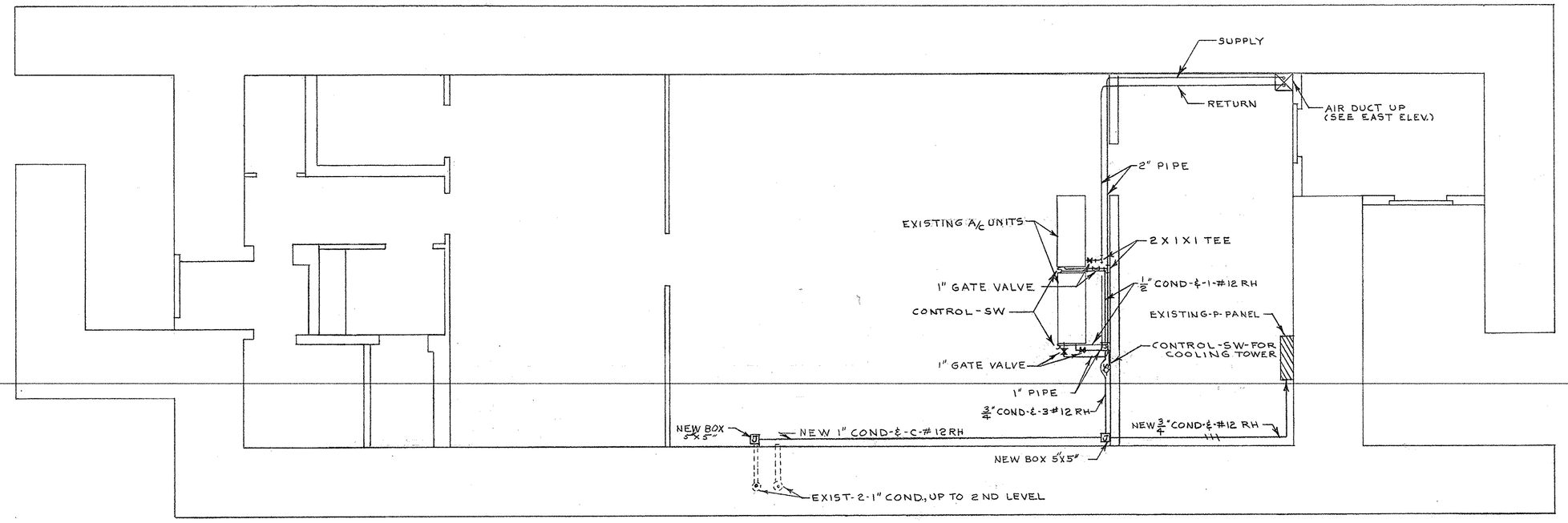
LOCATION PLAN
SCALE: 1" = 400'



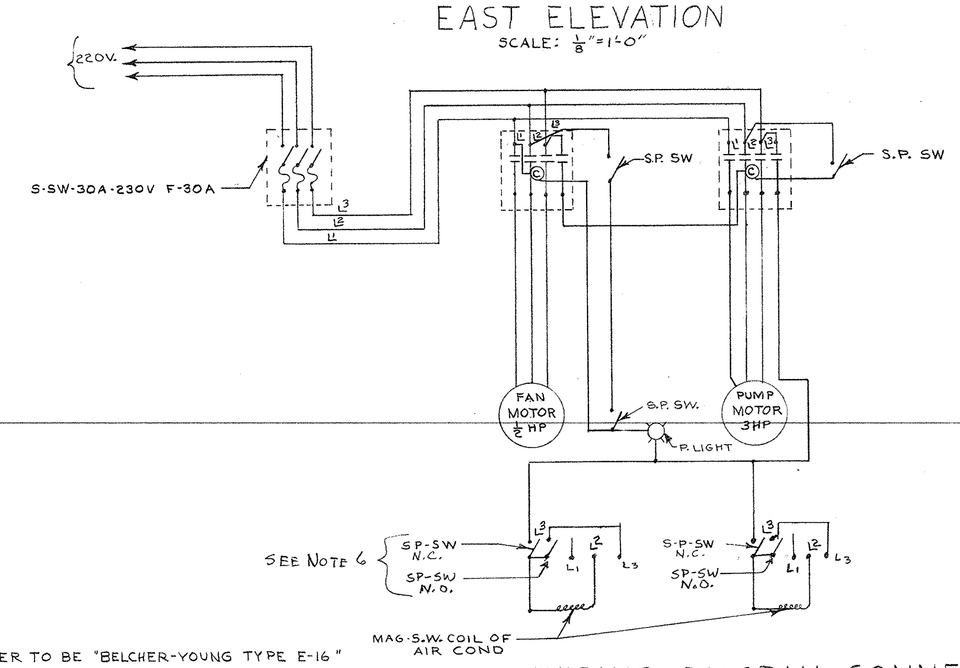
NEW PLUMBING & ELECTRICAL 2ND LEVEL
SCALE: 1/8" = 1'-0"



EAST ELEVATION
SCALE: 1/8" = 1'-0"



NEW PLUMBING & ELECTRICAL MAIN FLOOR
SCALE: 1/4" = 1'-0"



WIRING DIAGRAM CONNECTION

NOTES

1. COOLING TOWER TO BE "BELCHER-YOUNG TYPE E-16" OR EQUAL.
2. BLOWER FAN FURNISHED WITH TOWER IS 1/2 HORSEPOWER 208/220 V, 3φ, 60 CY.
3. PUMP ON COOLING TOWER NOT FURNISHED BY MANUFACTURER OF TOWER.
   PUMP TO BE 3 HORSEPOWER, 208/220V, 3φ, 60 CY, RATED AT 60 GPM AT 100 FOOT HEAD, 2" SUCTION, 2" DISCHARGE.
4. TWO-2" GATE VALVES TO BE INSTALLED; ONE, AT PUMP SUCTION; AND, ONE AT PUMP DISCHARGE.
5. EXISTING DRAIN SYSTEM TO REMAIN; VALVES WILL BE INSTALLED SO THAT IT WILL BE POSSIBLE TO REVERT TO EXISTING SYSTEM.
6. INSTALL SP. SW IN PARALLEL WITH SP. SW IN THE CIRCUIT OF MAG SWITCH OF AIR CONDITIONER. THIS SP. SW TO BE NORMALLY OPEN. THIS SWITCH TO BE CLOSED ONLY WHEN UNIT IS REQUIRED TO OPERATE UNDER EXISTING CONDITIONS, THAT IS WITHOUT COOLING TOWER.

SYMBOLS

- COLD WATER
- COLD WATER RESERVE
- HOT WATER
- SANITARY DRAINAGE
- VENT PIPING
- GATE VALVE
- CHECK VALVE

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1071-0360

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

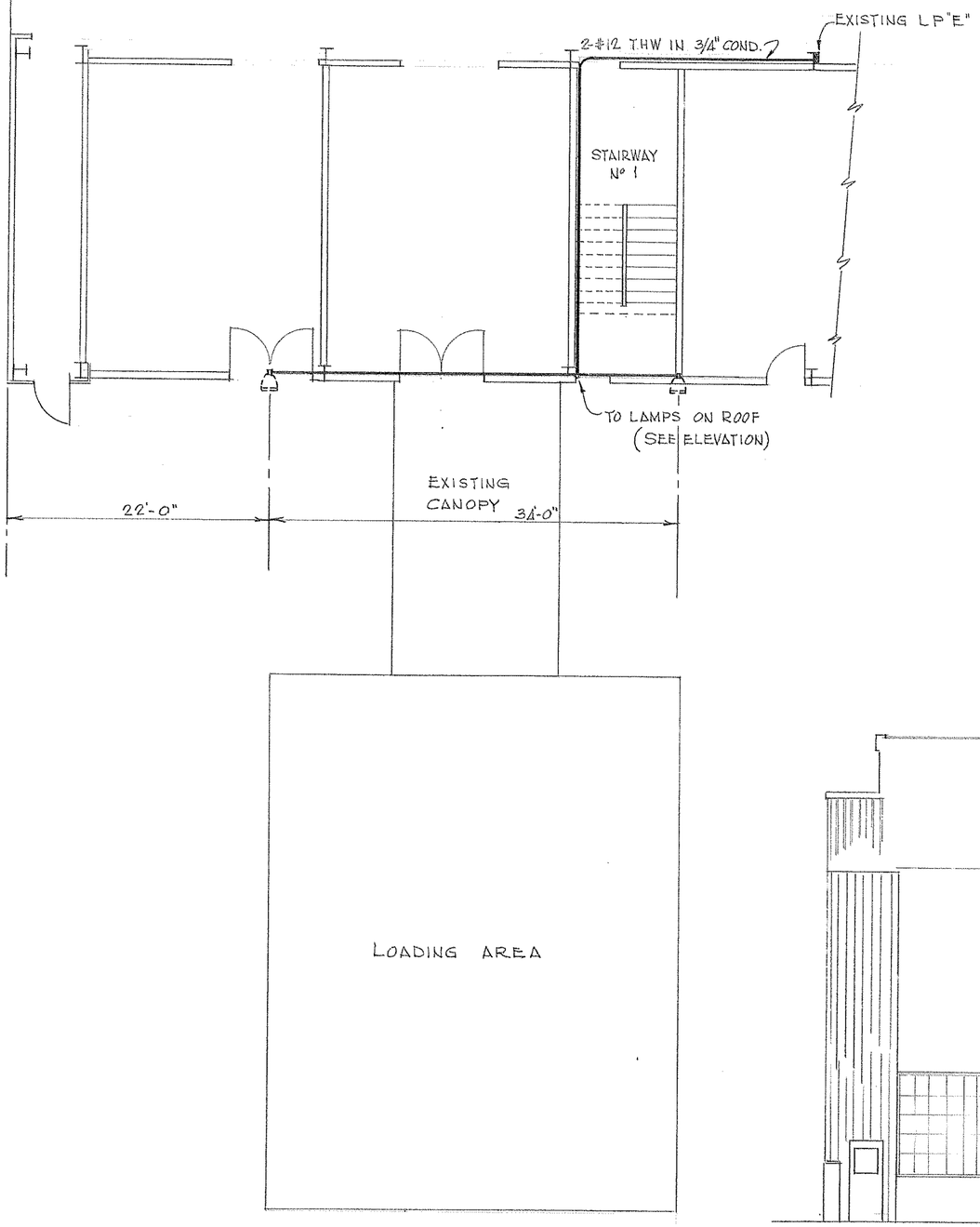
DES AWS BARJG
DRWN Keil
TR
CHK awg
SUPV awg
IN CHARGE WCPuley
REVIEWED BY TAS

WATER RECIRCULATING SYSTEM AND COOLING TOWER AIRCONDITIONING SYSTEM
BLDG. AV-31

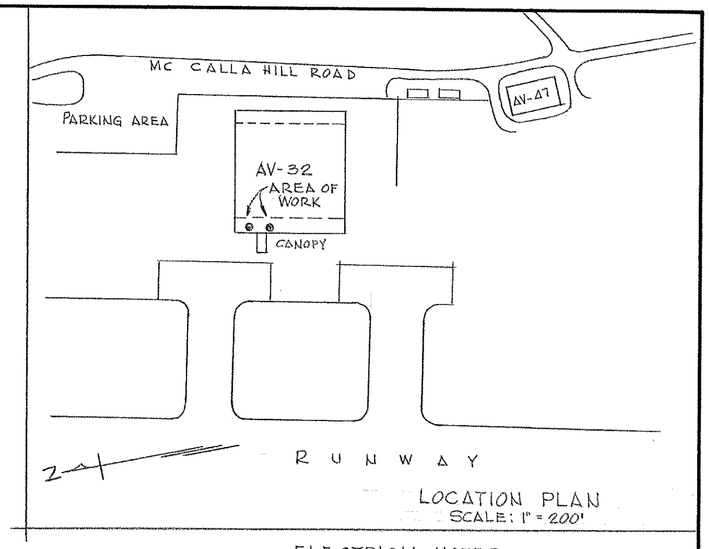
APPROVED W. J. Thompson — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 3-18-60

SATISFACTORY TO C. E. Miller, Jr.
DATE 3/9/60

SCALE — SPEC
SHEET ___ OF ___ NBy ___
Y & D DRAWING NO. ___



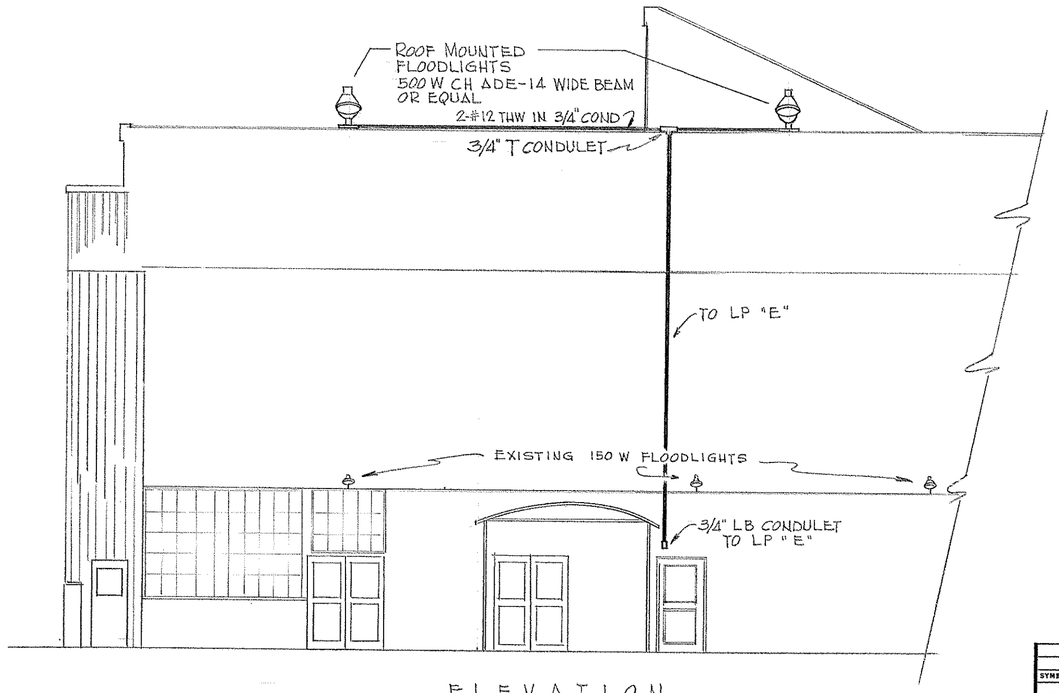
PLAN
SCALE: 1/8" = 1'-0"



LOCATION PLAN
SCALE: 1" = 200'

ELECTRICAL NOTES

1. INSTALL 20 A BREAKER FOR CIRCUIT # 1 OF LIGHTING PANEL "E"
2. MOUNT 2-500 W CROUSE & HINDS ADE-14 WIDE BEAM FLOODLIGHTS OR EQUIVALENT ON ROOF OF AV-32 AS SHOWN AND CONNECT TO CIRCUIT # 1 OF LIGHTING PANEL "E"



ELEVATION
SCALE: 1/8" = 1'-0"

PRELIMINARY

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWC DRAWING NO. 8M-2075-0565

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES J.H.
DRWN Scaca
TR
CHK CB
SUPV CB
IN CHARGE
REVIEWED BY GCC

NAVAL AIR STATION Mc CALLA
BLDG. AV-32

AIRCRAFT LOADING AREA

APPROVED [signature] DATE 6/11/65
COMMANDING OFFICER PUBLIC WORKS CENTER

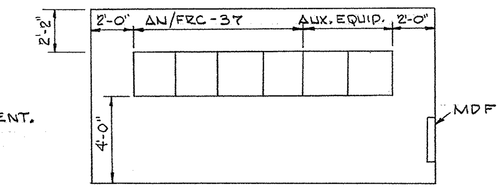
SATISFACTORY TO C. B. Uber
DATE 8 June 1965

SCALE AS SHOWN SPEC
SHEET 1 OF 1 NBy
Y & D DRAWING NO.

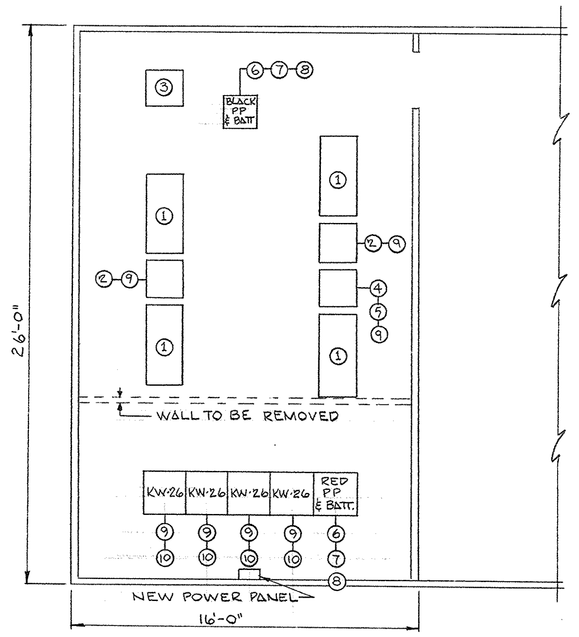
ESR 2554/5

K+E ALBANENE® TRACING PAPER 72670

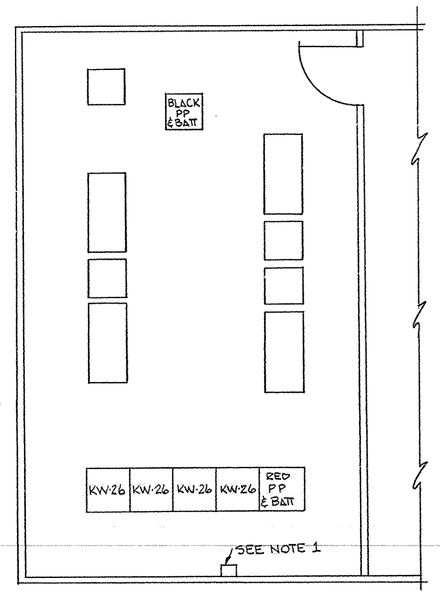
NOTE
#1. MINIMUM SPACE REQUIREMENT.



MICROWAVE INSTALLATION
AT THE ADMINISTRATION BLDG
SCALE: 1/4"=1'-0"

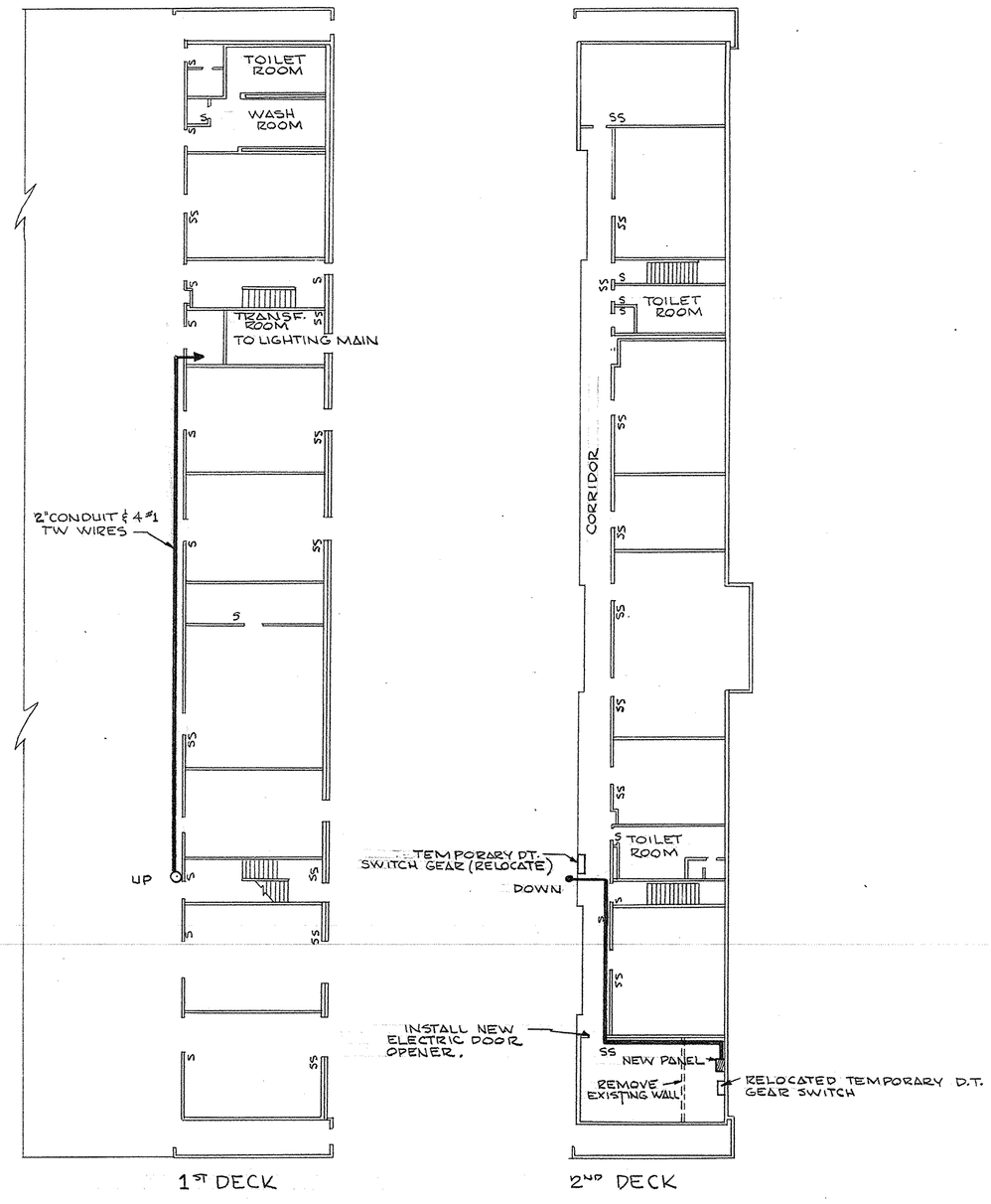


PARTIAL FLOOR PLAN
SCALE 1/4"=1'-0"



NOTE
#1. PROVIDE 4 WIRE 120-208 VOLT, 3 PHASE POWER, FUSED FOR 50 AMPS. IN 8"x8"x6" GALVANIZED JUNCTION BOX.

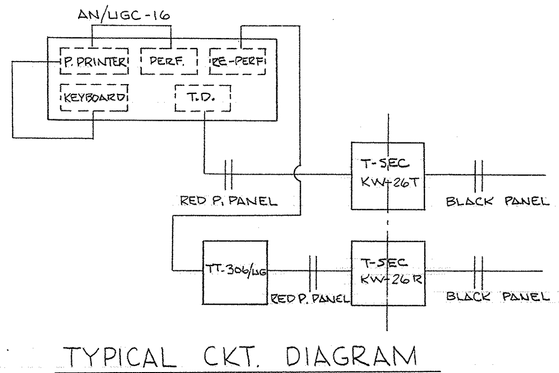
PARTIAL FLOOR PLAN
SCALE 1/4"=1'-0"



PARTIAL FLOOR PLAN
SCALE 1/16"=1'-0"

LEGEND

ITEM	GFE	CFE	QTY	DESCRIPTION
1	✓		4	AN/UGC-16 TTY MACHINES
2	✓		4	TT-306/UG PAGE PRINTER
3	✓		1	TT-47/UG OR TT-69/UG PRINTERS W/KEYBOARDS
4	✓		1	T-SEC/HW-10
5	✓		1	T-SEC/HW-19
6		✓	2	RW-6-D-666 REV. A PATCH BOARDS (AVAILABLE PRNC)
7		✓	5	REGULATED POWER SUPPLIES 60/60V PRNC #3493/MC-2
8		✓	2	CY-597 CABINETS
9		✓	6	6 PAR METAL OR EQUIV. NON STD. RACKS
10	✓		4	T-SEC/KW-26
○				



TYPICAL CKT. DIAGRAM

GENERAL NOTES

#1. POWER PANEL TO BE 3 Ø-4W-120/208 V AC WITH 125 AMP MAIN BRK. WITH 20-15 AMP CIRCUIT BRKS. SIMILIAR OR EQUAL TO ⓦ TYPE NLAB4-4L125.

#2. RELOCATE EXISTING TEMPORY DOUBLE THROW SWITCHES TO NEW PANEL AREA, TIE INTO NEW PANEL INSTALLATION AS TEMPORY MEASURE FOR BACK-UP POWER.

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1665-0864

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

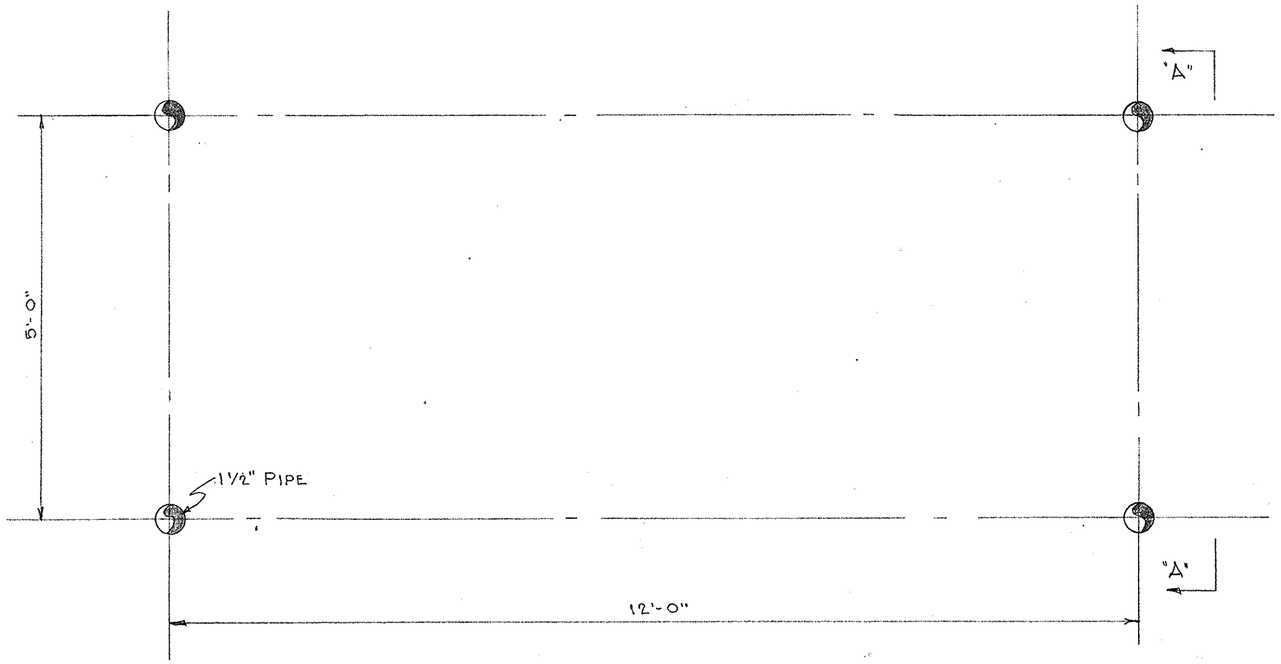
DES PTP
DRWN BROSS
TR BROSS
CHK JEFFRIES
SUPV SCK
IN CHARGE CCC
REVIEWED BY MM 8/11

ALTERATIONS & NEW POWER SOURCE FOR COMMUNICATION SPACES AV-372 HANGAR

APPROVED [signature] COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 8/14/64

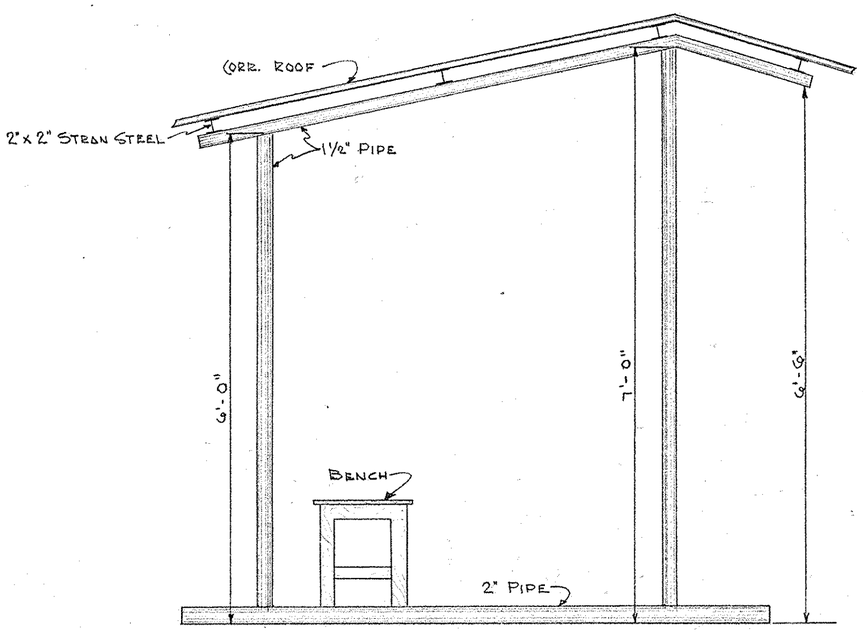
SATISFACTORY TO C.B. Ulen
DATE 10 AUGUST 1964

SCALE AS SHOWN | SPEC
SHEET 1 OF 1 NBy
Y & D DRAWING NO.



PLAN

SCALE: 3/4" = 1'-0"



SECTION "A-A"

SCALE: 3/4" = 1'-0"

SYMBOL	DESCRIPTION	DATE	APPRO
	REVISIONS		

PWC DRAWING NO. 8M-1550-0462

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DO
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN
TR K. BOADAS
CHK
SUPV
IN CHARGE
REVIEWED BY

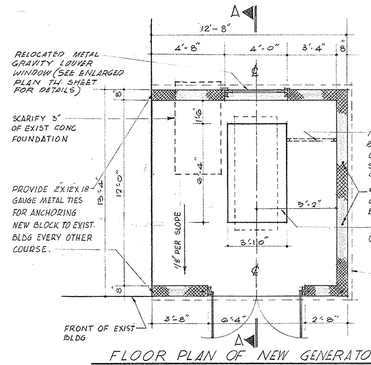
BUS STOP
AY-32

APPROVED. DATE
COMMANDING OFFICER PUBLIC WORKS CENTER

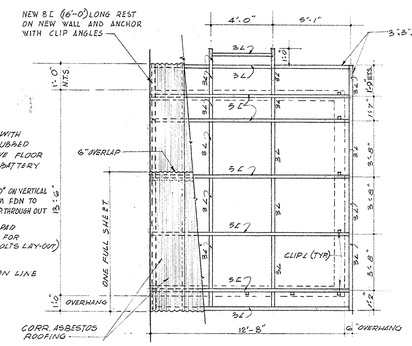
SATISFACTORY TO
DATE

SCALE SPEC
SHEET OF NBy
Y & D DRAWING NO.

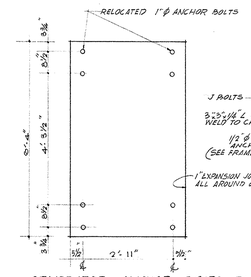
K&E ALBANENE 195L 67084



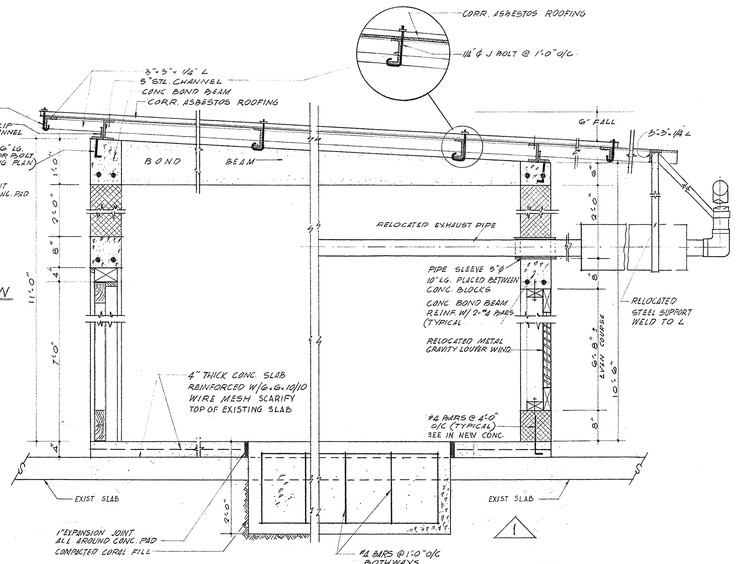
FLOOR PLAN OF NEW GENERATOR BLDG.
SCALE 1/4"=1'-0"



ROOF FRAMING PLAN
SCALE 1/4"=1'-0"

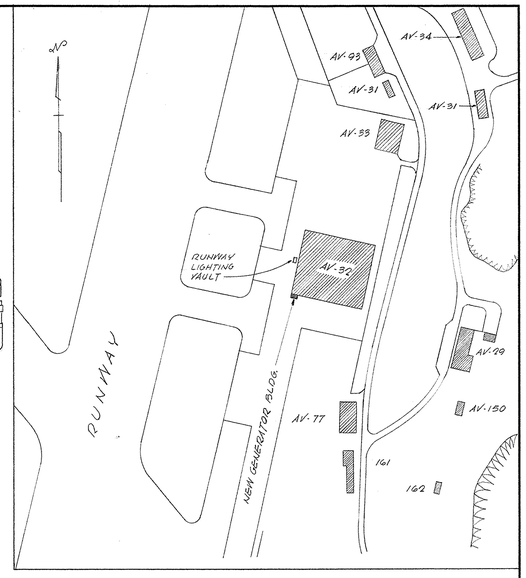


GENERATOR ANCHOR BOLTS PLAN
SCALE 1/2"=1'-0"

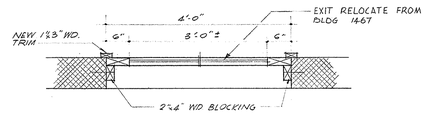


NOTE: 3" MIN COVER ON ALL REINF. STEEL

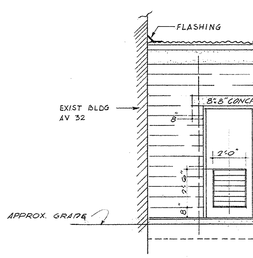
SECTION A-A
SCALE 3/4"=1'-0"



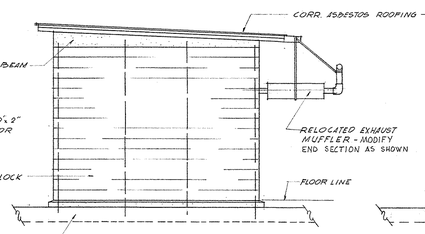
LOCATION PLAN
SCALE 1"=200'



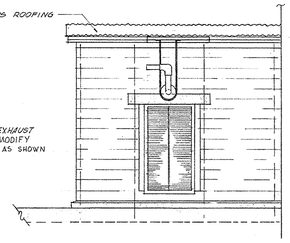
ENLARGED PLAN OF METL GRAVITY TYPE LOUVER WINDOW
SCALE 3/4"=1'-0"



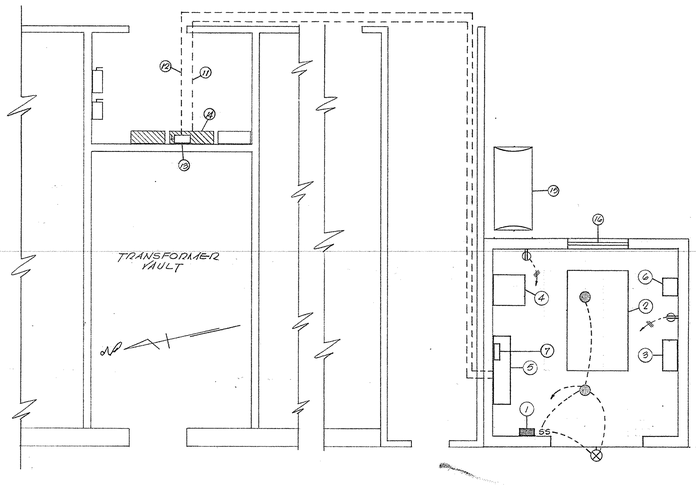
FRONT ELEVATION



SIDE ELEVATION
SCALE 1/4"=1'-0"



REAR ELEVATION



PART 1ST FLOOR PLAN (SHOWING REVISED CONDITIONS)
SCALE: 1/4"=1'-0"

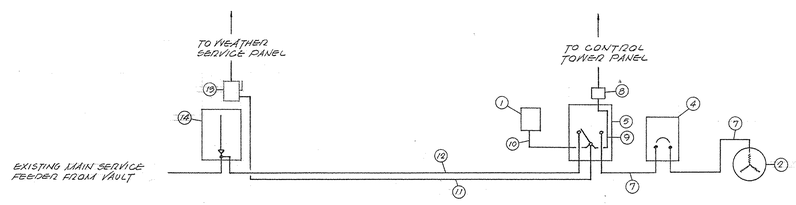
EQUIPMENT SCHEDULE

1. NEW LOAD CENTER, 3 ϕ, 4W, S/N, 120/208 VOLT A.C. WITH 3 POLE, 40 AMP MAIN CKT. BKR. AND 4-1 POLE 20 AMP. BRANCH CKT. BKRS.
2. * DIESEL DRIVEN GENERATOR, 50 KW, 3 ϕ, 60 H, 120/208 VOLT A.C.
3. * GENERATOR CONTROL PANEL
4. * GENERATOR MAIN CONTROL SWITCHBOARD
5. * AUTOMATIC TRANSFER SWITCH
6. * BATTERY CHARGER
7. NEW 4# 4/0 THW IN 3" CONDUIT
8. EXISTING JUNCTION BOX WITH CONTROL TOWER CKT.
9. NEW 4#6 THW IN 1 1/4" CONDUIT
10. NEW 4#8 THW IN 1" CONDUIT
11. NEW 4#2 THW IN 2" CONDUIT
12. NEW 4# 2/0 THW IN 2 1/2" CONDUIT
13. EXISTING FUSIBLE SWITCH, 3 POLE, 100 AMP., 240 VOLT A.C. (WEATHER SERVICE CKT.)
14. EXISTING MAIN POWER PANEL
15. FUEL TANK (250 GAL. CAPACITY)
16. METAL LOUVERS

* DENOTES EXISTING EQUIPMENT AVAILABLE AT BLDG. 1467 AND 1478 (OCEAN VIEW) EQUIPMENT SHALL BE REMOVED AND RELOCATED AS SHOWN

LEGEND

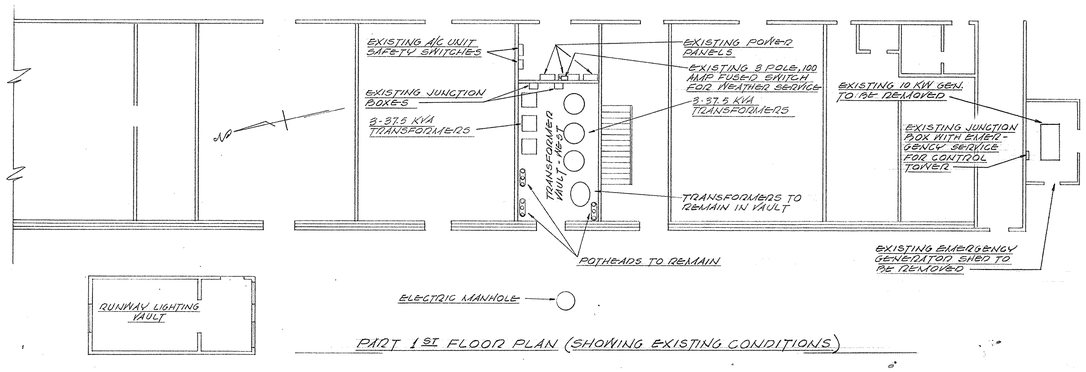
- POWER PANEL
- LOAD CENTER PANEL
- NEW LT. FIXTURE, 9'0" # 12 - 150 WATT
- NEW LT. FIXTURE, 9'0" # 28 - 200 WATT
- NEW DUPLEX RECEP. 15 AMP., 125 V.A.C., 3 WIRE GND. TYPE
- (2) EQUIPMENT IDENTIFICATION (SEE SCHEDULE)
- S NEW WALL SWITCH, 15 AMP., 125 V.A.C. ONLY
- ---→ INDICATES HOMERUN TO LOAD CENTER



ONE LINE WIRING DIAGRAM
NO SCALE

GENERAL NOTES (ARCHITECTURAL)

1. PROVIDE CONCRETE FLOOR & PAD W/ ANCHOR BOLTS. RELOCATE GENERATOR IN PLACE BEFORE PROCEEDING WITH OTHER WORK.
2. FILL ALL CONCRETE BLOCK VOIDS W/ CONC. WHERE BARS ARE INDICATED
3. VERIFY DIMENSIONS OF METL. LOUVER WINDOW IN THE FIELD.



PART 1ST FLOOR PLAN (SHOWING EXISTING CONDITIONS)

SYMBOLS

- 8"x8"x16" CONCRETE BLOCKS
- 5L 5" CHANNEL
- 3L 3" ANGLE IRON

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED
1	MODIFIED FOUNDATION, WALL & ROOF		7-3-68	

REVISIONS

PWC DRAWING NO. 5B-2068-0268

DEPARTMENT OF THE NAVY — PUBLIC WORKS CENTER, GUANTANAMO BAY, CUBA — NAVAL FACILITIES ENGINEERING COMMAND

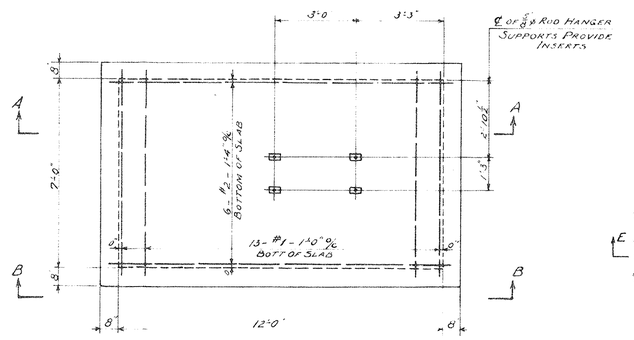
DES / DRWN / CHK / SUPV / IN CHARGE / DIRECTOR

U.S. NAVAL AIR STATION
EMERGENCY POWER FOR HANGAR AV-32
ELECTRICAL - STRUCTURAL DETAILS

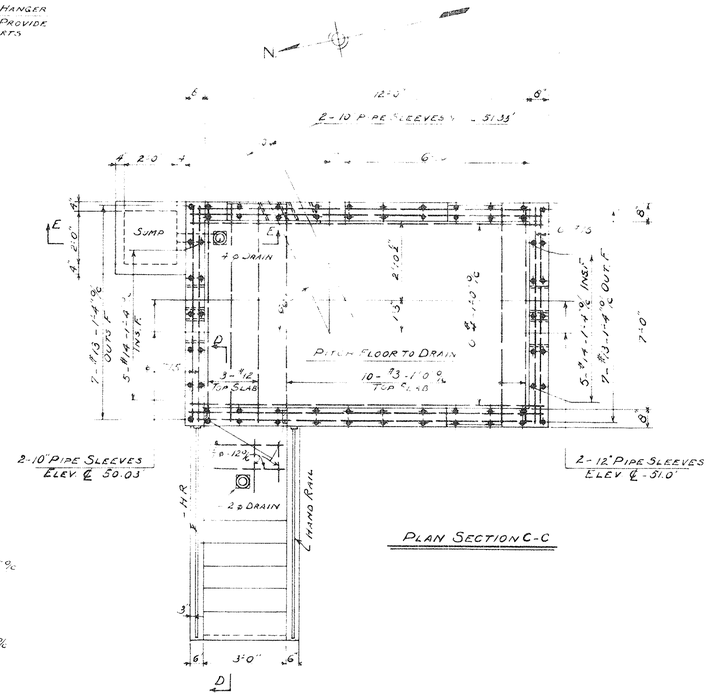
APPROVED — DATE
COMMANDING OFFICER, PWC
SATISFACTORY TO — DATE 2/19/68

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO.
CONSTR. CONTR. NO.
SCALE AS SHOWN | SPEC | SHEET 1 OF 1

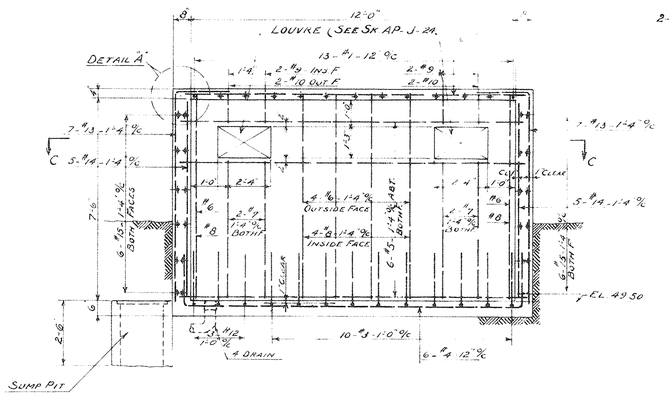
ESR 2049/8



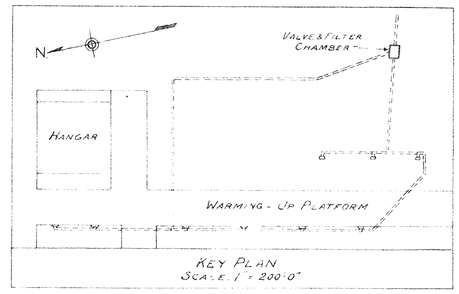
ROOF PLAN



PLAN SECTION C-C



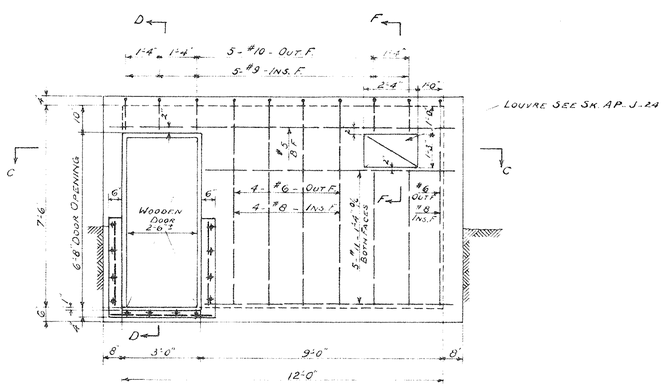
SECTION A-A



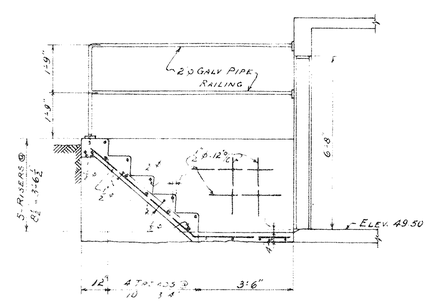
KEY PLAN
SCALE 1" = 200'-0"

BENDING SCHEDULE

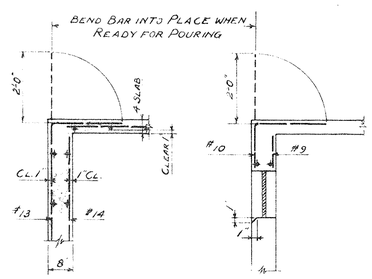
MARK	NO REQD	SIZE	LENGTH	SHAPE	REMARKS
#1	13	1/2 ø	7'-8"	STRAIGHT	
2	6	"	12'-8"	do	
3	10	5/8 ø	11'-3"	7'-3"	
4	6	1/2 ø	16'-3"	12'-3"	
5	12	"	13'-0"	STR	
6	12	"	9'-8"	7'-8"	
7	8	"	5'-0"	STR.	
8	12	"	7'-6	do.	
9	9	"	1'-1"	do	
10	9	"	3'-2"	do.	BENT AFTER BAR IS IN PLACE (SECT F-F)
11	10	"	9'-4"	do.	
12	3	5/8 ø	9'-7"	7'-7"	
13	14	1/2 ø	9'-8"	STR	BENT AFTER BAR IS IN PLACE (DETAIL A)
14	10	"	7'-3"	do.	
15	24	"	8'-0"	do.	
		1/2 ø	100'-0"	do.	CUT IN FIELD



ELEVATION B-B

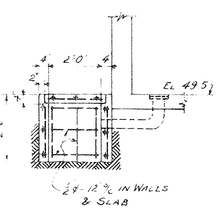


SECTION D-D



DETAIL "A"
SCALE 1/2" = 1'-0"

SECTION F-F



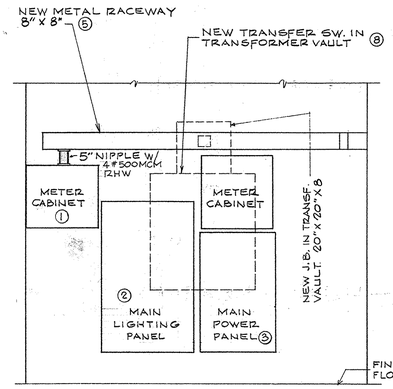
SECTION E-E
THRU SUMP PIT

GENERAL NOTES

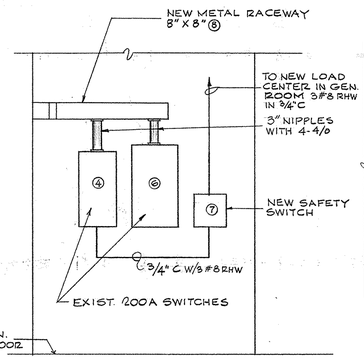
CONCRETE TO HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 LBS PER SQ INCH AT 28 DAYS 1-2-4 MIX
ALL REINFORCEMENT TO BE DEFORMED TYPE INTERMEDIATE GRADE OF NEW BILLET STOCK
AT SPLICES ALL BARS SHALL BE LAPPED AT LEAST 40 BAR DIAMETERS.
MINIMUM COVERING ON ALL REINFORCEMENT 1".
FOR LOCATION OF PIPES, HANGERS, ETC. SEE DWG. No. AP-J 11

SCALE 1/8" = 1'-0"

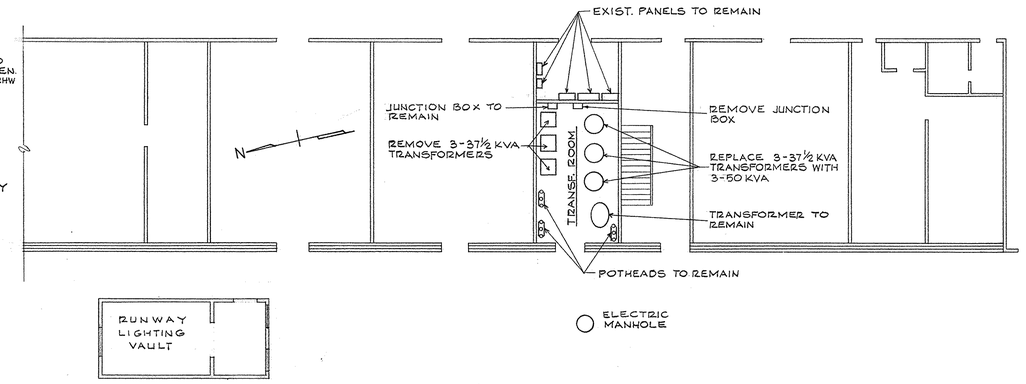
Drawn F.H. Traced A.S. Checked S.L. Date 4-25-41 REVISIONS	U. S. NAVAL STATION PUBLIC WORKS DEPT. GUANTANAMO BAY CUBA	REFERENCES
	VALVE & FILTER CHAMBER GASOLINE SUPPLY-LAND PLANE HANGAR MC CALLA HILL	CONTR. NO. NOy 4162
Y&D Drawing No. 335100	FREDERICK SNARE CORP. NEW YORK CONTRACTING ENGINEERS APPROVED 11-12-41 BY APPROVED 11-13-41 BY	DRAWING NO. SERIAL AP J-39



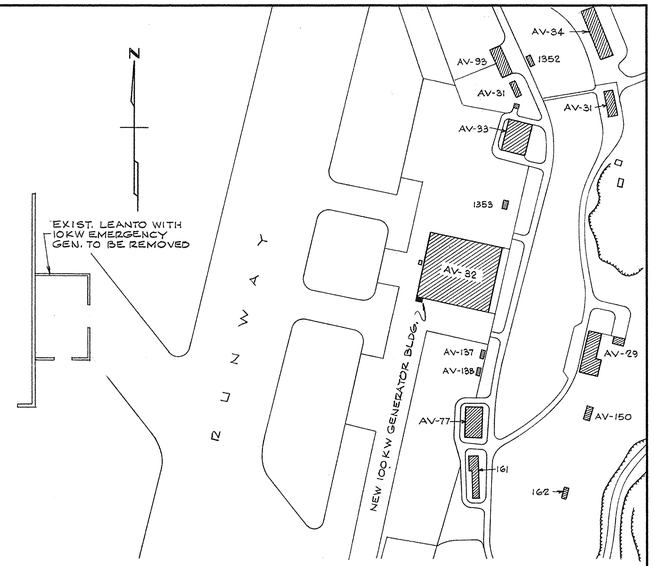
ELEVATION A-A
SCALE: 1/2" = 1'-0"



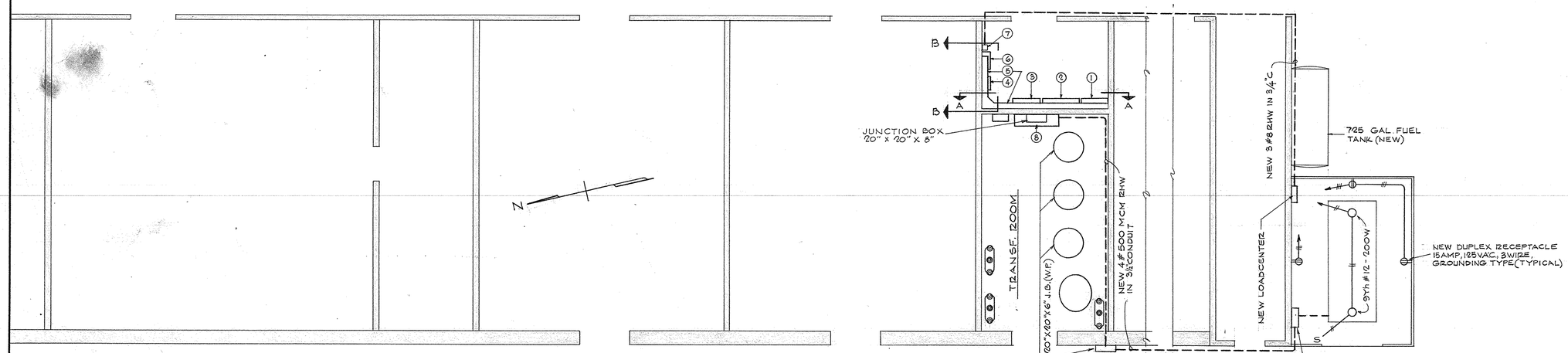
ELEVATION B-B
SCALE: 1/2" = 1'-0"



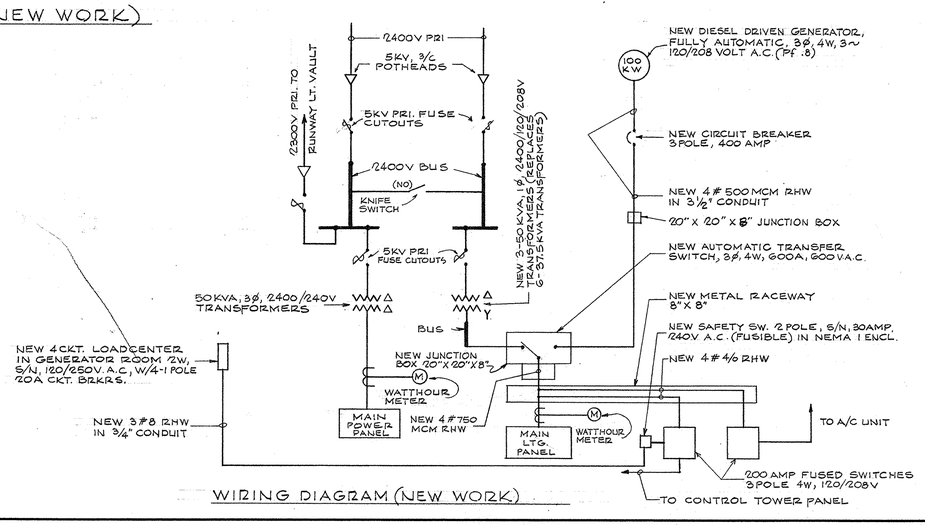
PART 1ST. FLOOR PLAN. (SHOWING EXIST. CONDITIONS)



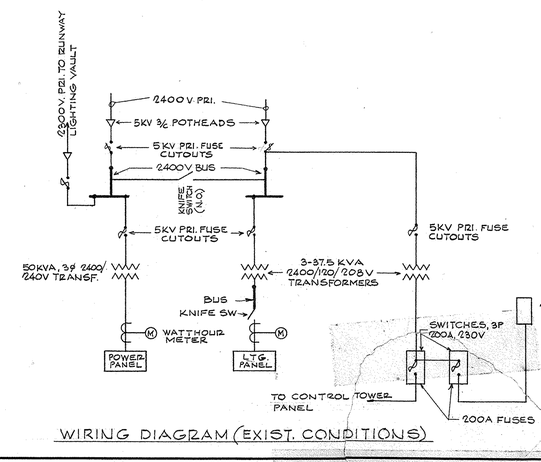
LOCATION MAP
SCALE: 1" = 200'



PART FLOOR PLAN (NEW WORK)
SCALE: 1/4" = 1'-0"



WIRING DIAGRAM (NEW WORK)



WIRING DIAGRAM (EXIST. CONDITIONS)

PRELIMINARY

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1605-0364-1

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES R.A. WHITE
DRWN Tony Covas
TR
CHK R.A.W.
SUPV J.L.G.
IN CHARGE
REVIEWED BY

U.S. NAVAL AIR STATION
McCALLA FIELD

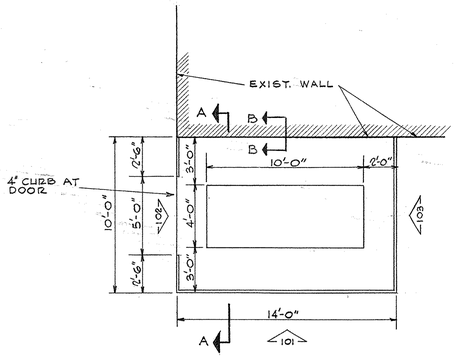
HANGAR BLDG AV-32
EMERGENCY POWER
ELECTRICAL

APPROVED — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE

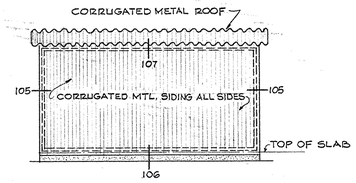
SATISFACTORY TO C B Ulm
DATE 29 MARCH 1964

SCALE VARIES — SPEC
SHEET 1 OF 2 — NBy
Y & D DRAWING NO.

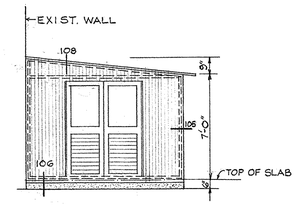
ESR 1886/3



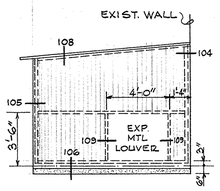
FLOOR PLAN
SCALE: 1/4" = 1'-0"



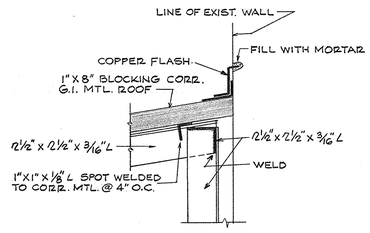
101 SIDE VIEW
SCALE: 1/4" = 1'-0"



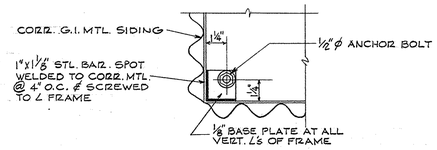
102 FRONT VIEW
SCALE: 1/4" = 1'-0"



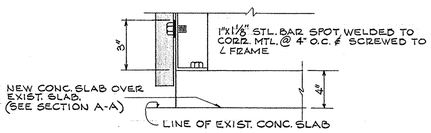
103 REAR VIEW
SCALE: 1/4" = 1'-0"



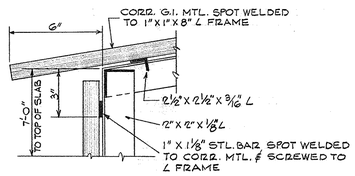
SECTION B-B
SCALE: 3" = 1'-0"



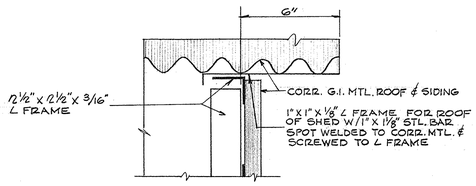
105 CORNER DETAIL
SCALE: 3" = 1'-0"



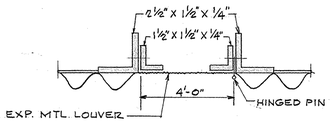
106 DETAIL AT BASE
SCALE: 3" = 1'-0"



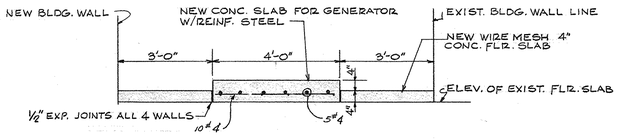
107 DETAIL
SCALE: 3" = 1'-0"



108 DETAIL
SCALE: 3" = 1'-0"



109 DETAIL @ WIRE MESH VENT
SCALE: 3" = 1'-0"



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

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1605-0364-2

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN Tony Covas
TR
CHK R.A.W.
SUPV J.L.G.
IN CHARGE JN
REVIEWED BY Baxter

U.S. NAVAL AIR STATION
McCALLA FIELD

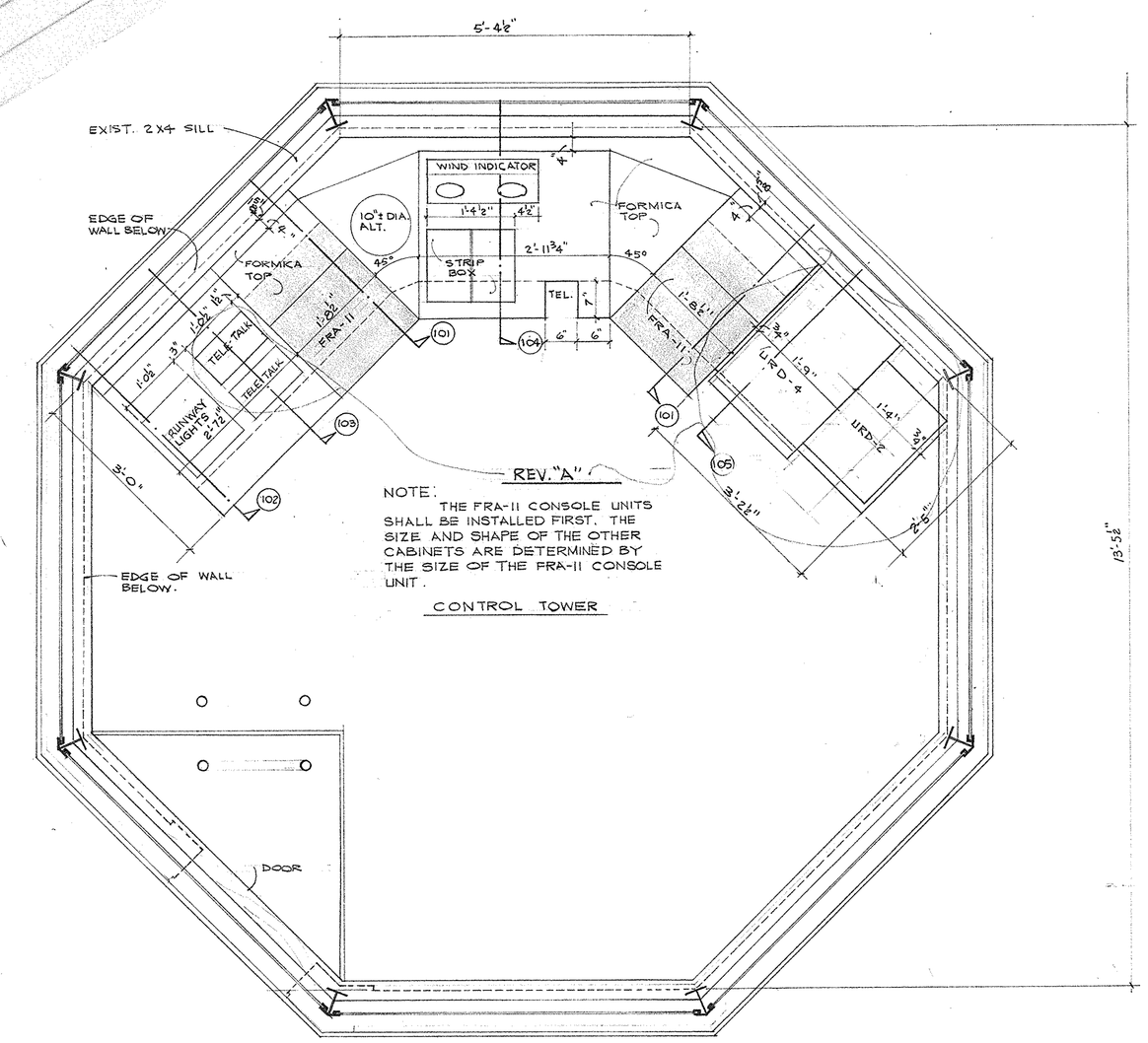
HANGAR BLDG AV-32
GENERATOR BLDG. DETAILS

APPROVED [signature] COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 4/16/64

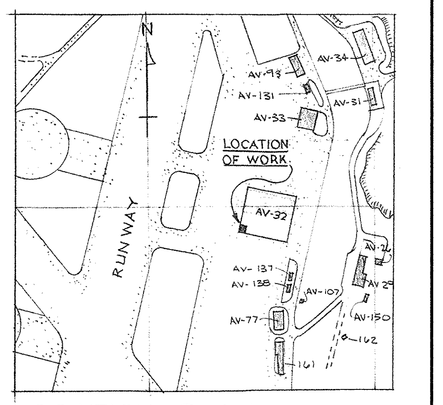
SATISFACTORY TO C. B. Wles
DATE 29 March 1964

SCALE VARIES — SPEC
SHEET 2 OF 2 — NBy
Y & D DRAWING NO.

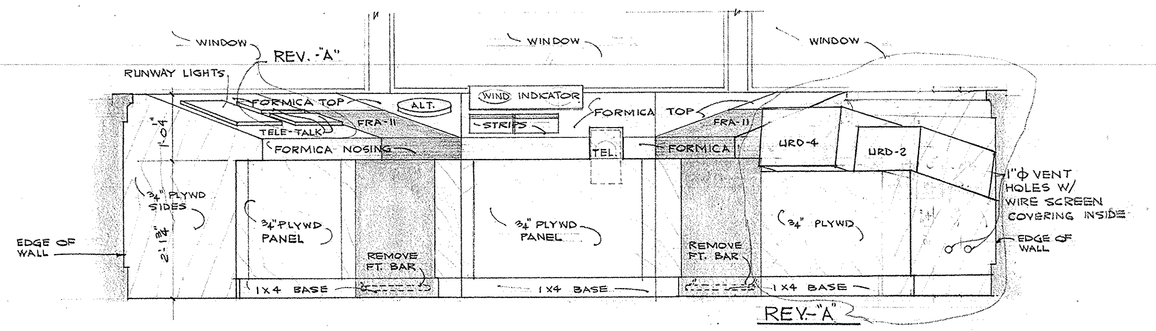
ESR 1886/3



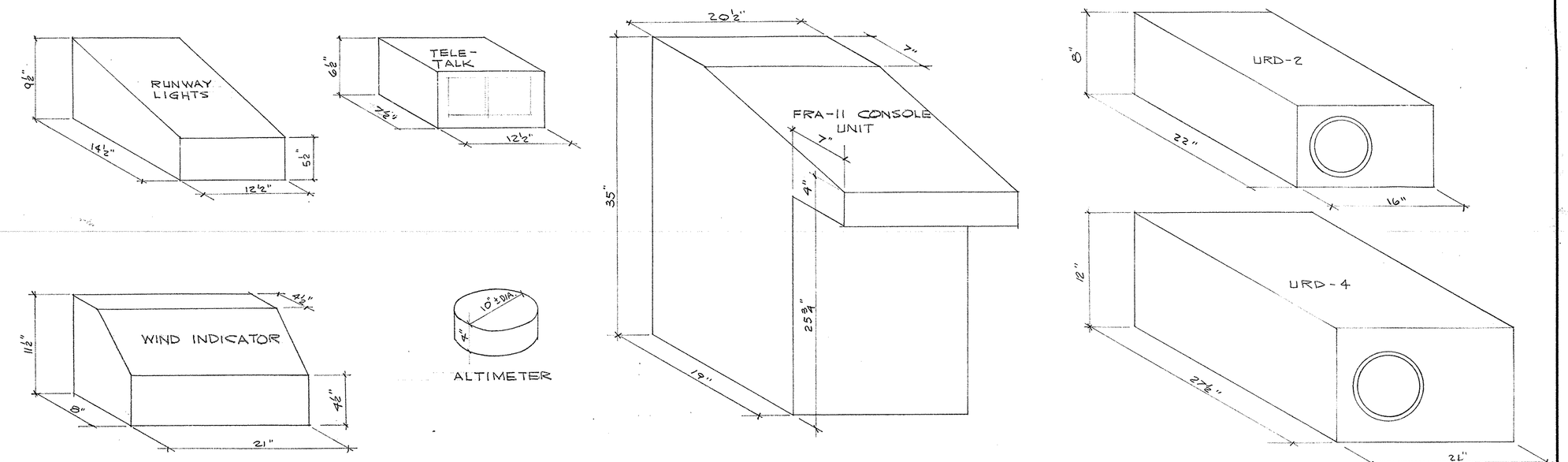
FLOOR PLAN SCALE: ¾"=1'-0"



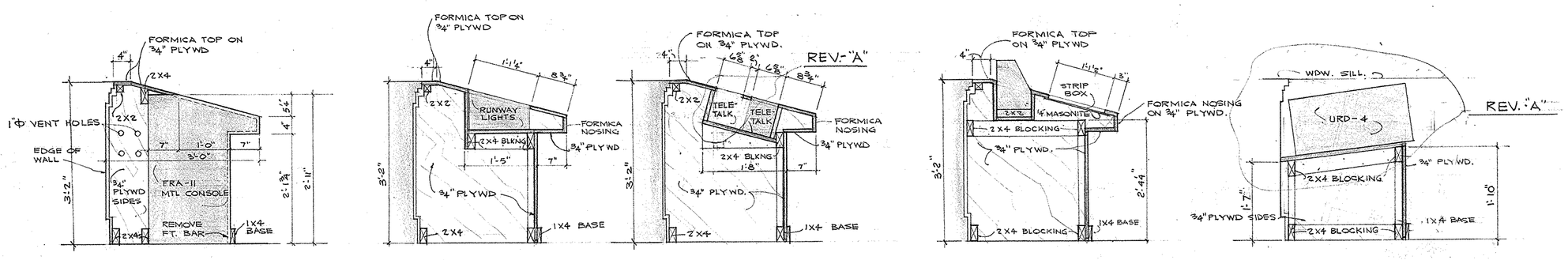
LOCATION PLAN SC.: 1"= 400'



FRONT ELEVATION SCALE: ¾"=1'-0"



EQUIPMENT TO BE INSTALLED IN CABINETS SCALE: 1½"=1'-0"



101 SECTION @FRA-11 SC.: ¾"=1'-0" 102 SECTION SC.: ¾"=1'-0" 103 SECTION SC.: ¾"=1'-0" 104 SECTION SC.: ¾"=1'-0" 105 SECTION SC.: ¾"=1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVAL
REV. "A"	REVISED URD-4 & URD-2 COUNTER. INST. 2-TELE-TALKS		HWS

REVISIONS

PWC DRAWING NO. 5B-1336-0962

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES R.Rocha
DRWN RICHARD ROCHA
TR RR
CHK SCK
SUPV SCK 9/62
IN CHARGE
REVIEWED BY

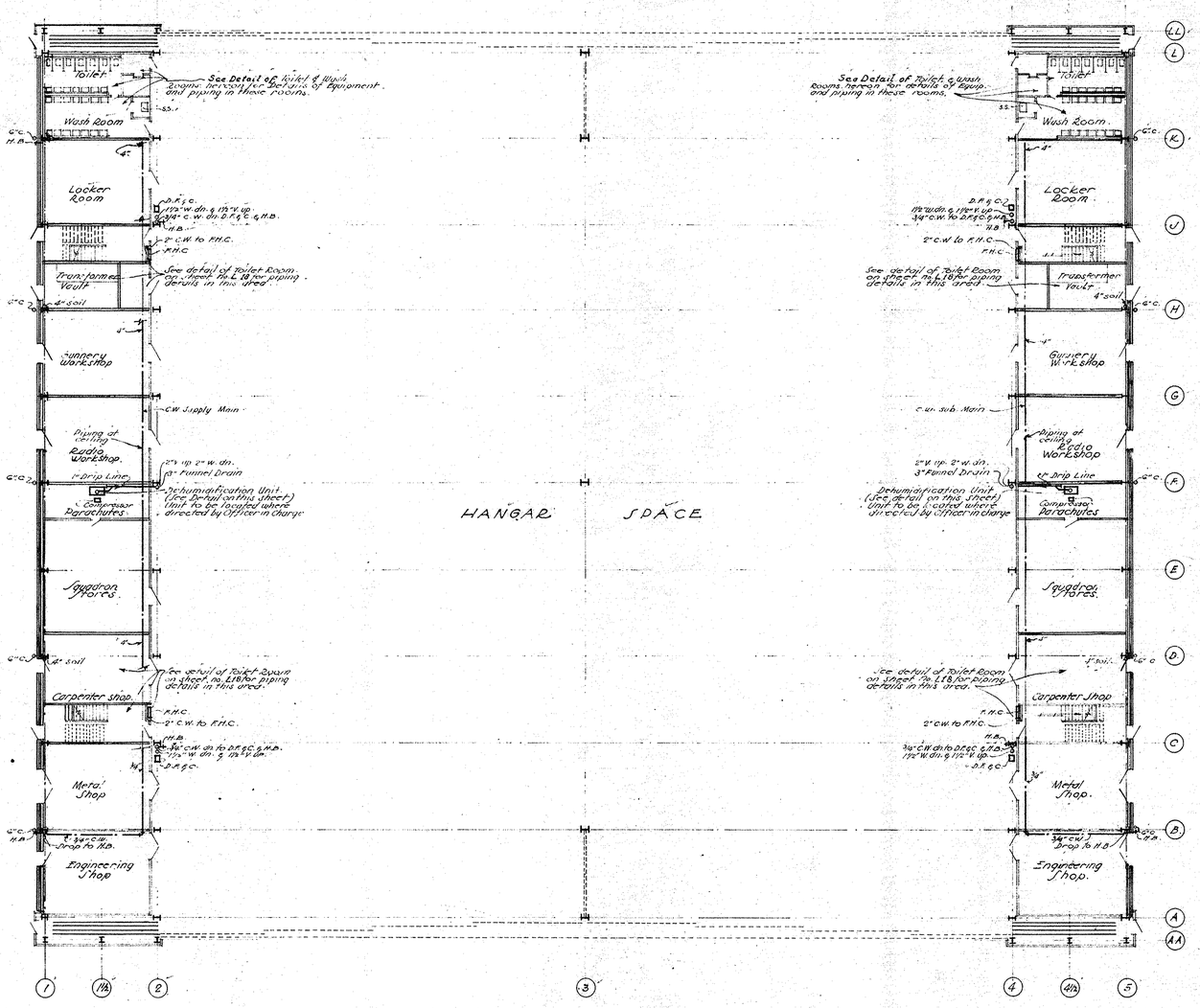
N.A.S. McCALLA FIELD
IMPROVEMENTS TO CONTROL TOWER, BLDG. NO. AV-32

APPROVED [signature] DATE 10/2/62
COMMANDING OFFICER PUBLIC WORKS CENTER

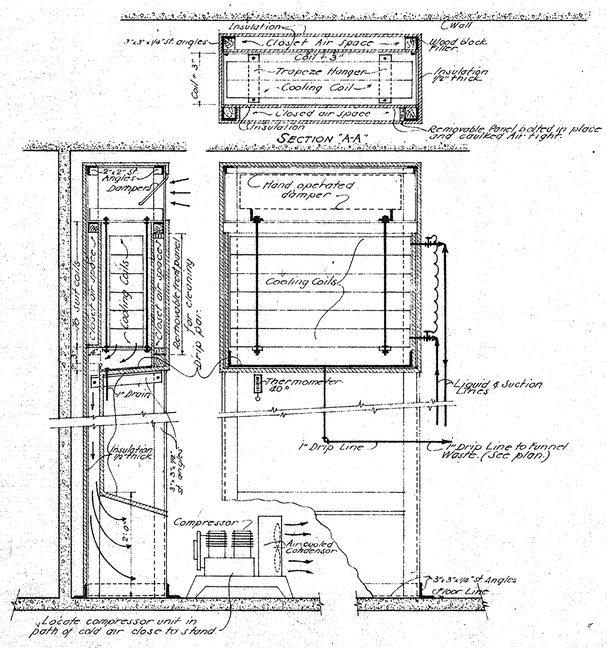
SATISFACTORY TO R.L. Winkler
DATE 21 SEP 1962

SCALE AS SHOWN SPEC
SHEET 1 OF 1 NBY
Y & D DRAWING NO.

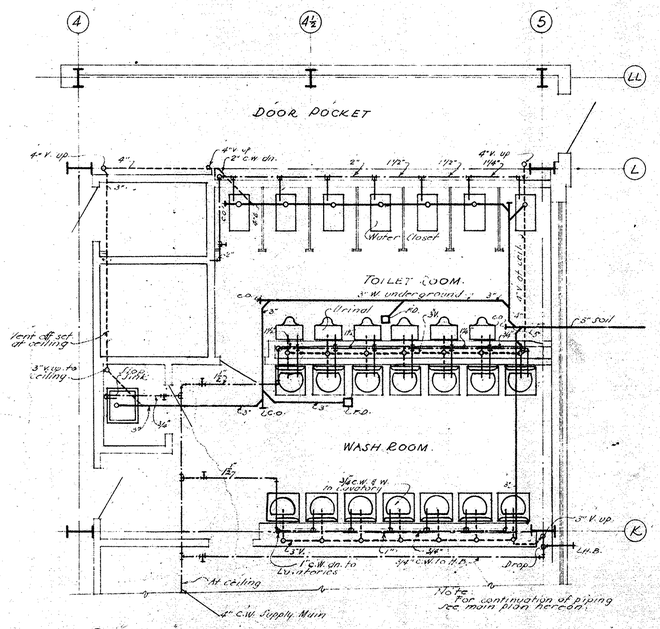
07066



FIRST FLOOR PLAN.
Scale 1/16" = 1'-0"



DETAIL OF DEHUMIDIFYING UNIT.
No Scale.



DETAIL OF TOILET AND WASH ROOMS.
Scale 1/4" = 1'-0"

Note: Left hand Toilet & Wash Room similar but opposite hand with piping.

NOTE:-

THIS PLAN IS A TRACING OF, AND SUPERSEDES SHEET No 135757 OF JACKSONVILLE LANDPLANE HANGAR PROJECT.

Scale: As Noted.

Drawn by STEINERT Traced by F.P. 6/30/41 Checked by A.S. Date 4-4-42 REVISIONS	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	AVIATION PROJECT LANDPLANE HANGARS MAC. CALLA HILL	CONTR. NO. NOy 4162
Y&D Drawing No. 335205	FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS APPROVED 7-22-42 BY [signature] RESIDENT OFFICER IN CHARGE APPROVED 7-22-42 BY [signature] P.W. OFFICER IN CHARGE	DRAW'G NO. SERIAL: AP L-17

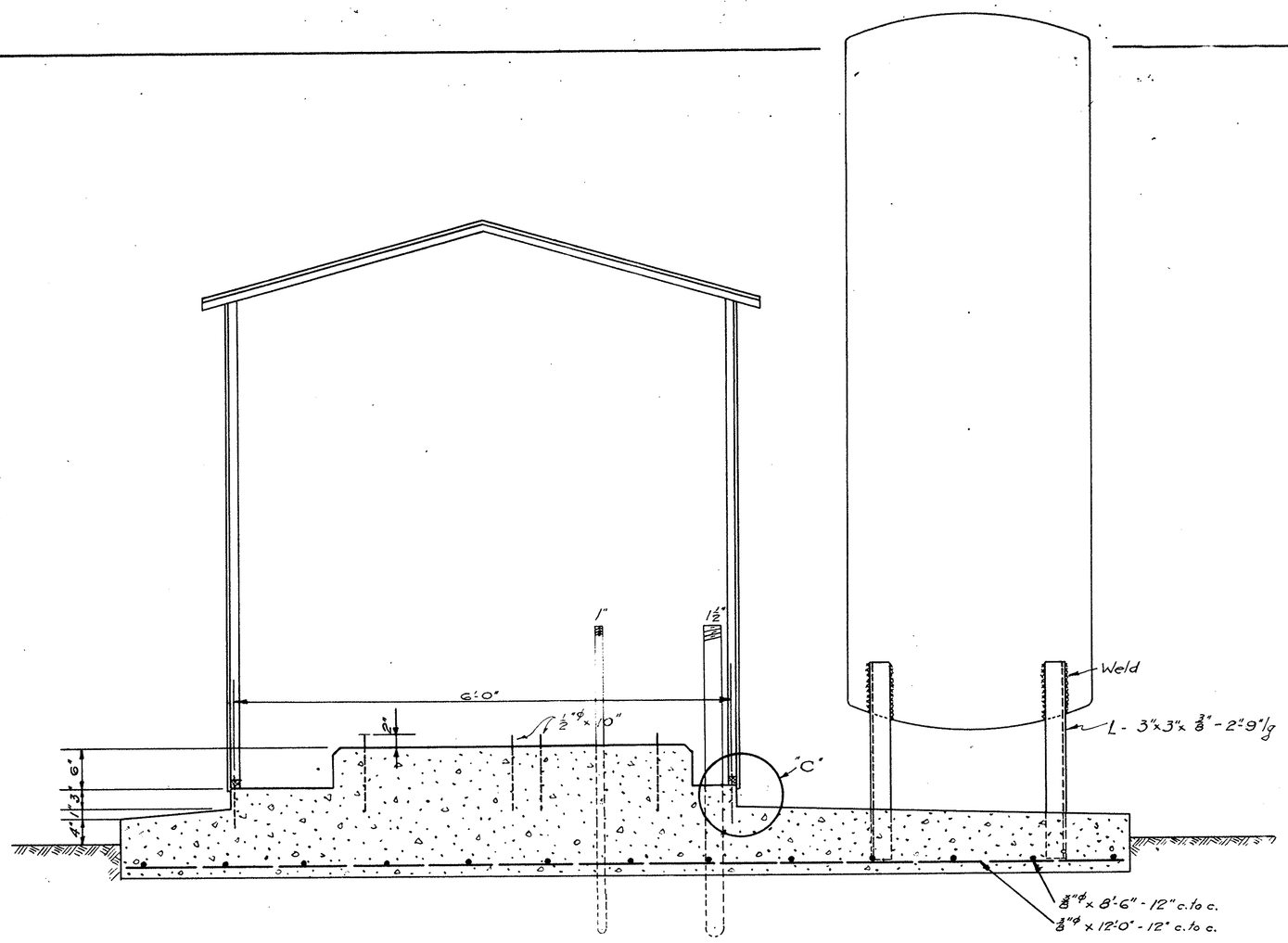
• SOIL & WATER SUPPLY LINES & DETAILS •

REPL. 1999

350-45-61

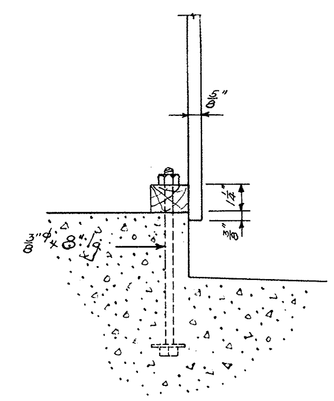
AV-32

DELVIN-PROGRESS BLUE PRINT CO.



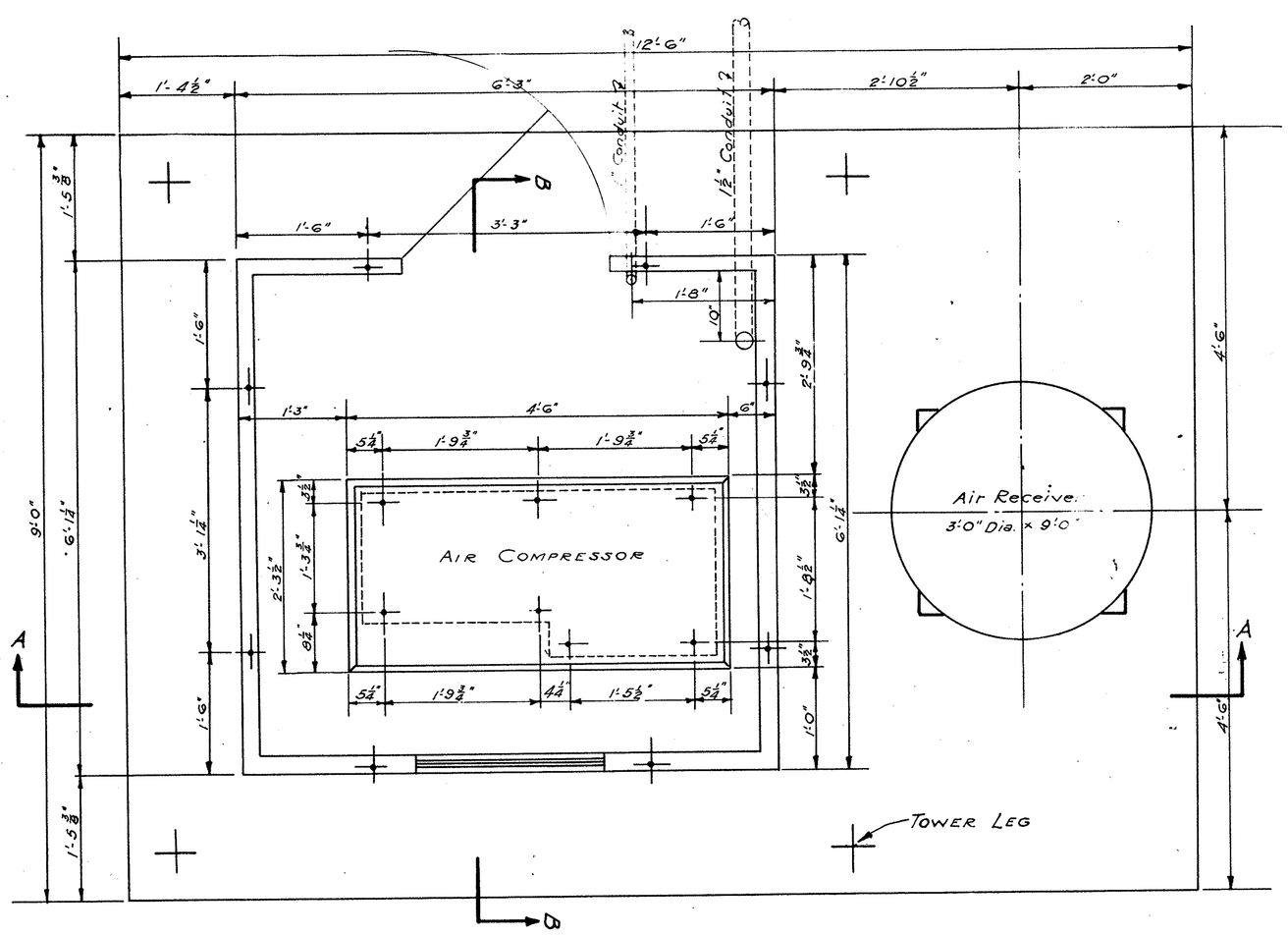
SECTION A-A

SCALE 1" = 1'-0"



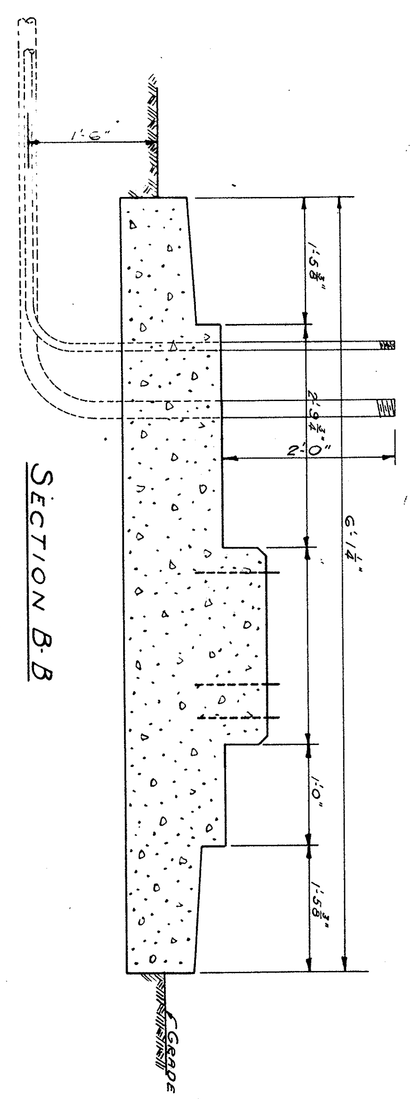
DETAIL "C"

SCALE: 3" = 1'-0"



PLAN

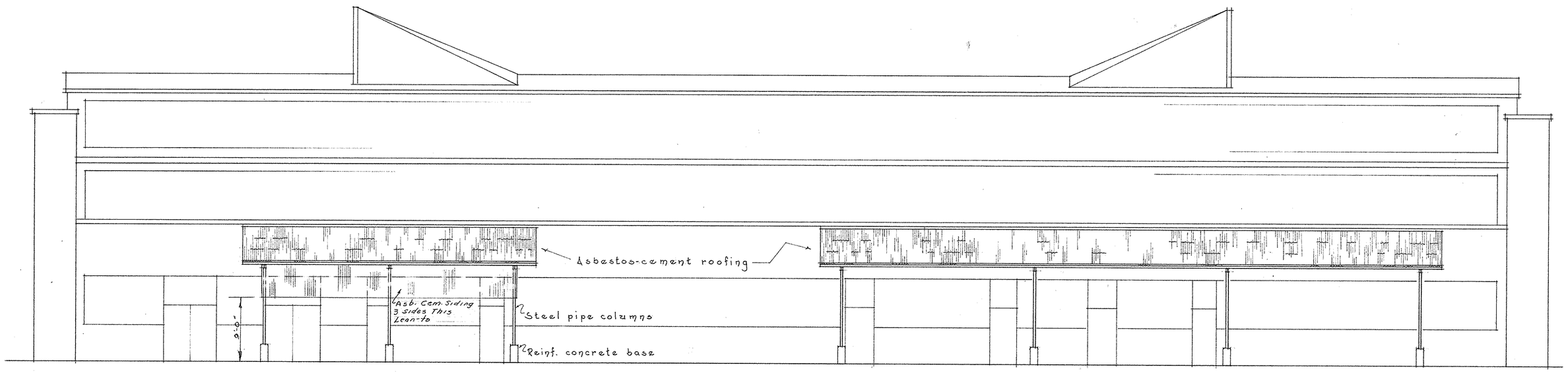
SCALE 1" = 1'-0"



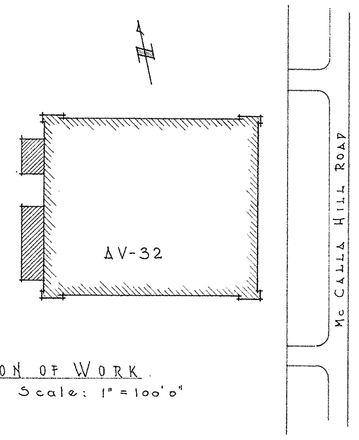
SECTION B-B

Mc Calla Hill Hangar
Radio Point Tower #1

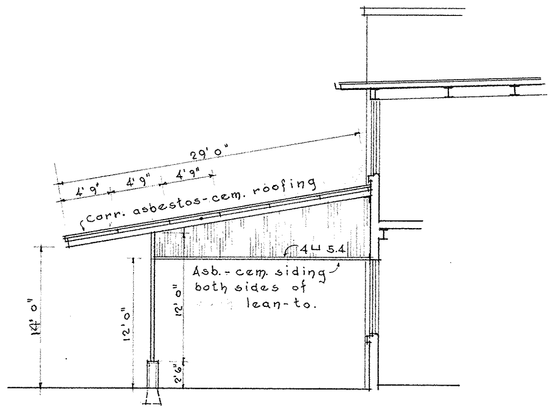
Drawn by R.H.I.C. Traced by R.H.I.C. Checked by W.H.J. Date 1-24-42 REVISIONS	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	PUBLIC ALARM SYSTEM DETAILS OF DIAPHONE STATIONS	CONTR. NO. NOy 4162
	FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS	DRAW'G NO. SERIAL: G.P.
Y&D Drawing No. 335664	APPROVED 1-26-42 BY W. H. Williams (RESIDENT OFFICER IN CHARGE) APPROVED 1-26-42 BY H. S. Quick (P. W. OFFICER IN CHARGE)	Q-20



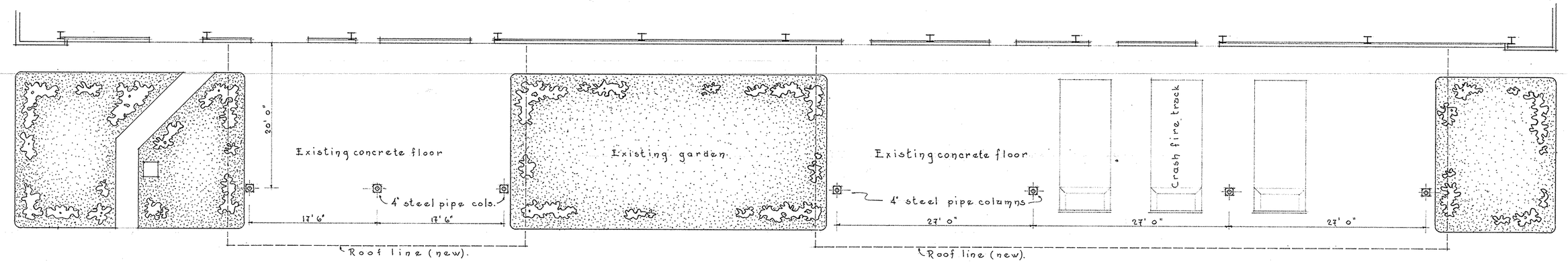
ELEVATION
Scale: 1/8" = 1'0"



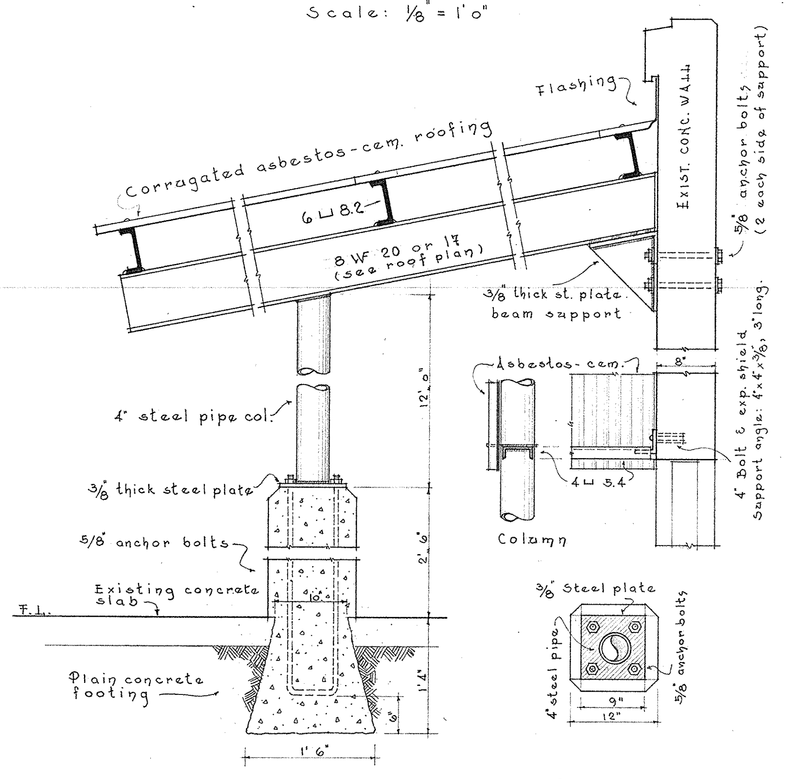
LOCATION OF WORK
Scale: 1" = 100'0"



SECTION
Scale: 1/8" = 1'0"

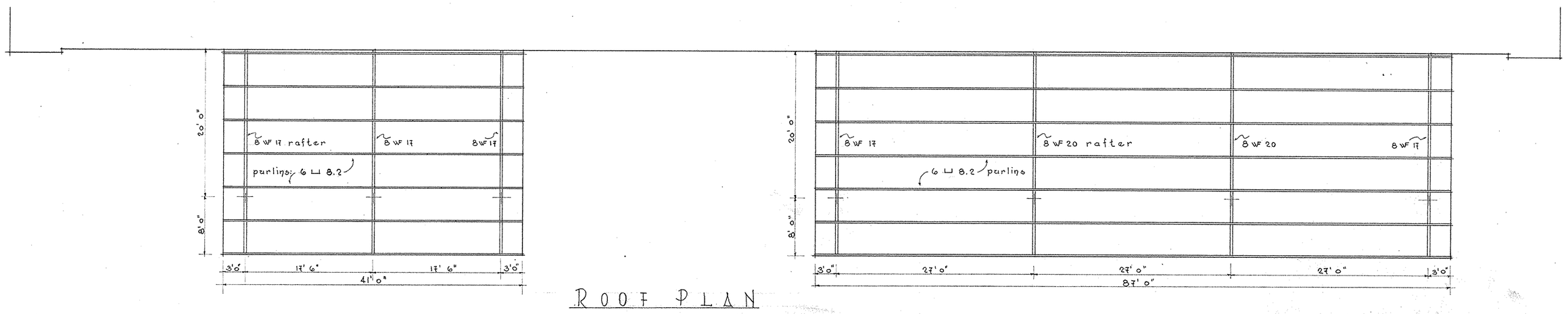


FLOOR PLAN
Scale: 1/8" = 1.00 m.



DETAIL OF SECTION
Scale: 1" = 1'0"

COL. BASE



ROOF PLAN
Scale: 1/8" = 1'0"

NOTE
Existing canopies in area of work to be removed.

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-995-0359

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

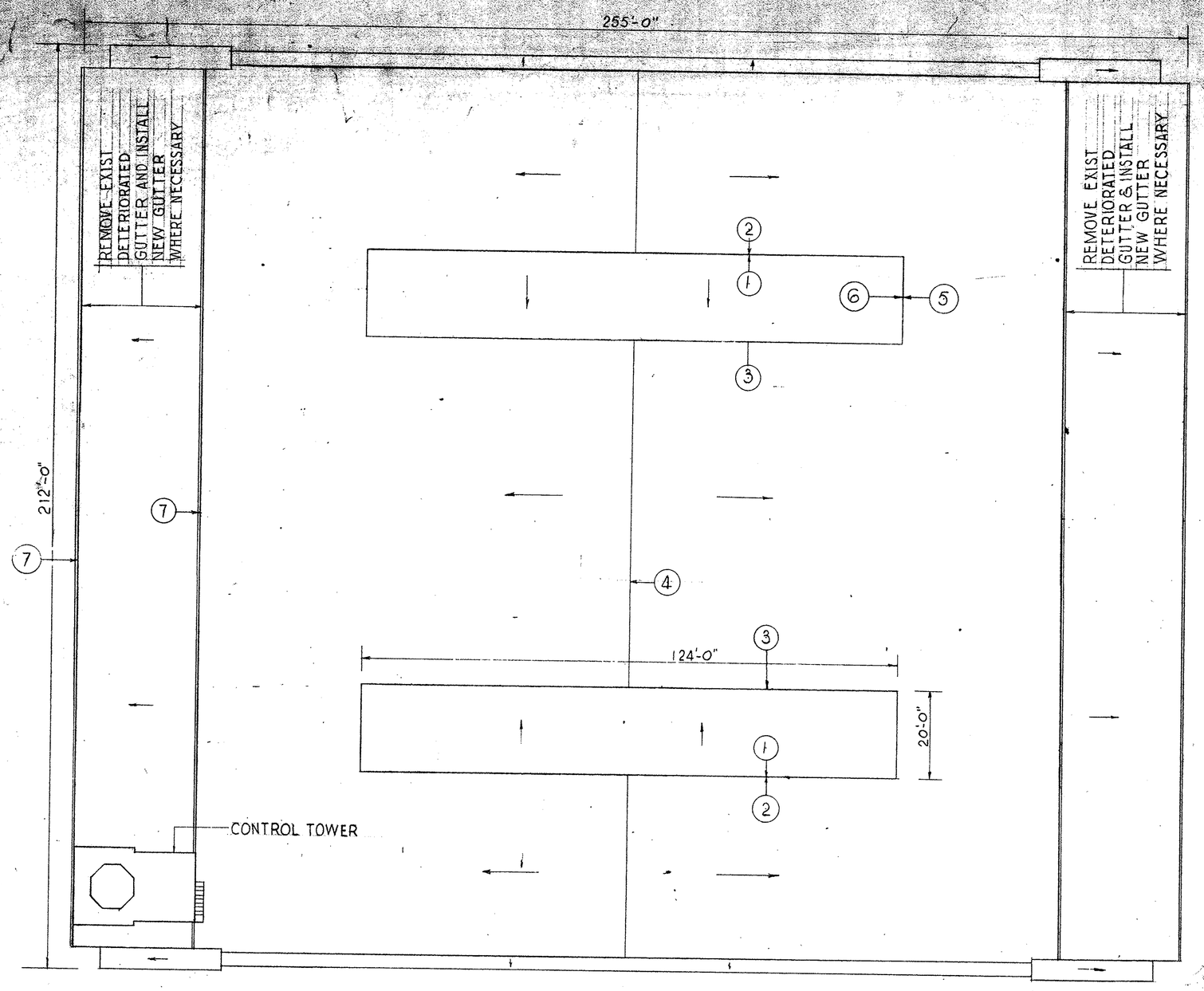
DES Alcolado
DRWN "
TR
CHK E.M.
SUPV
IN CHARGE McRuler
REVIEWED BY

PROPOSED LEAN-TO SHELTER ON WEST SIDE OF HANGAR AV-32 Mc CALLA HILL FIELD

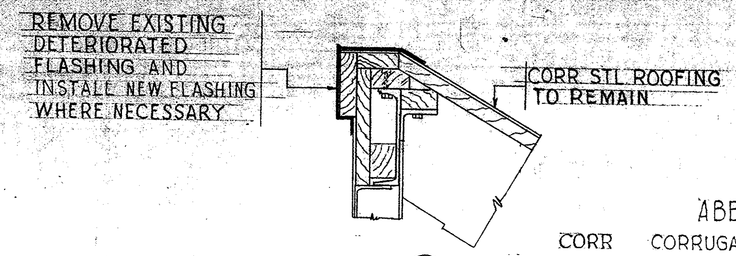
APPROVED W. J. Thompson DATE 3-13-59
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO E. A. Lewis Jr.
DATE 3/12/59

SCALE
SPEC
SHEET 1 OF 1 NBY
Y & D DRAWING NO.



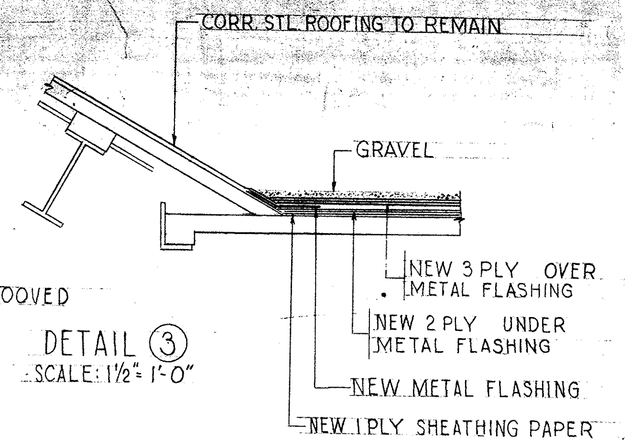
ROOF PLAN
SCALE: 1/16"=1'-0".



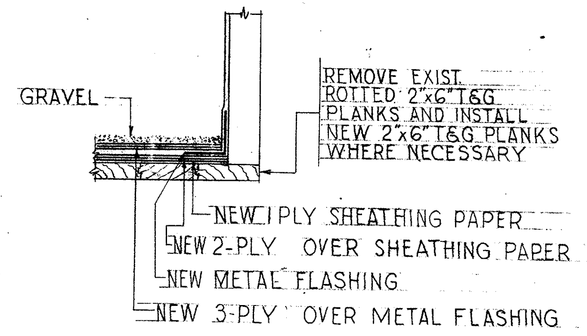
DETAIL 1
SCALE: 1 1/2"=1'-0"

ABBREVIATIONS

CORR	CORRUGATED	OZ.	OUNCE
EXIST	EXISTING	STL	STEEL
&	AND	T&G	TONGUED AND GROOVED



DETAIL 3
SCALE: 1 1/2"=1'-0"



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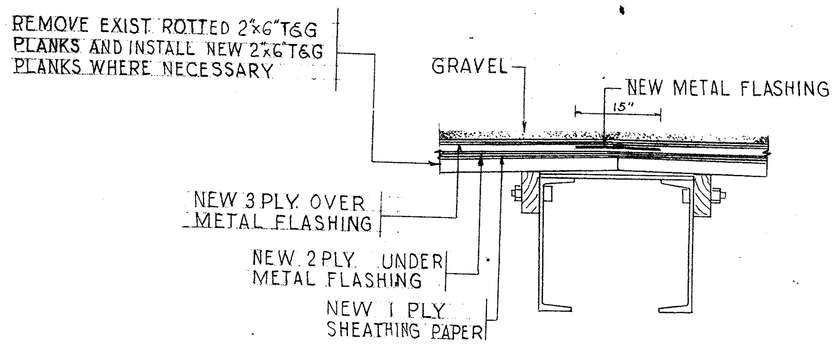
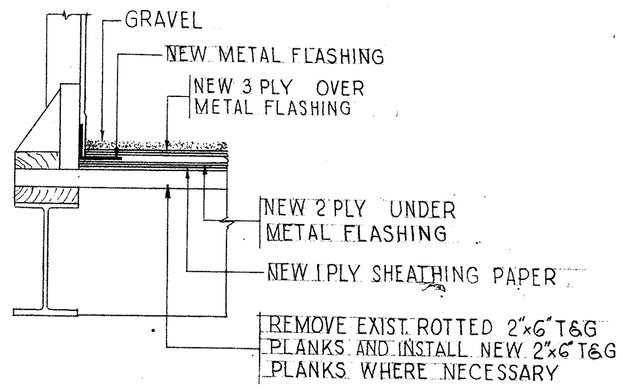
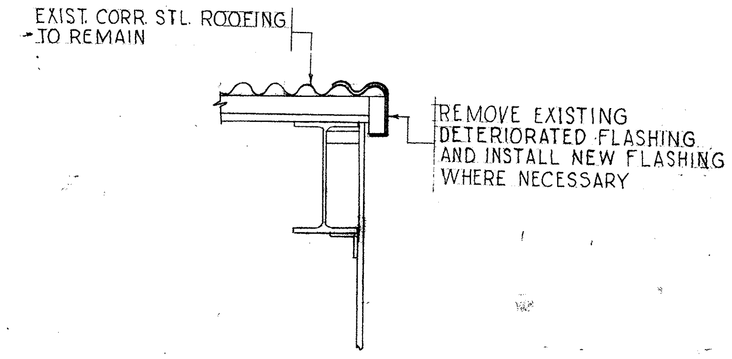
SCALE: 1 1/2"=1'-0"



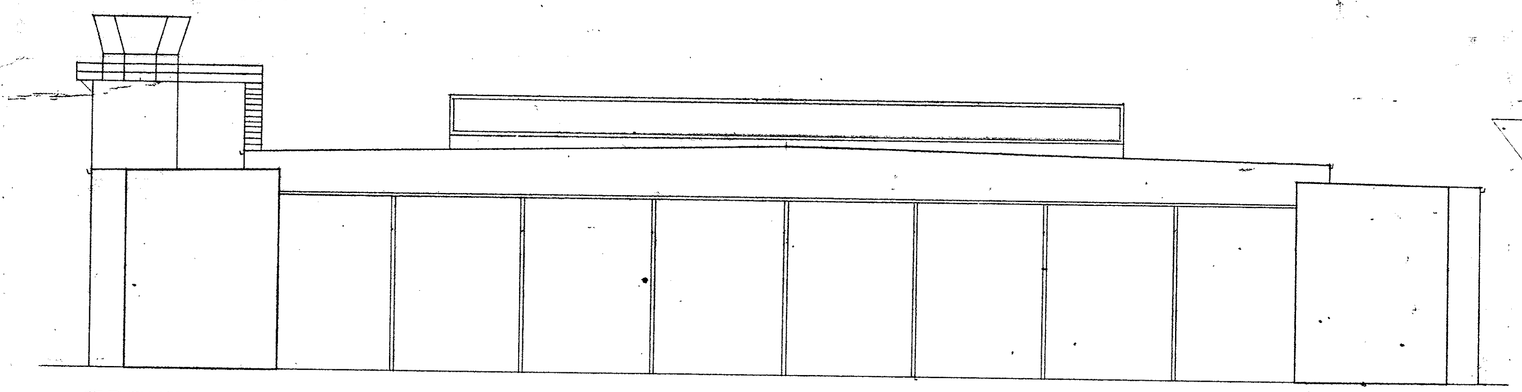
DETAIL 4
SCALE: 1 1/2"=1'-0"



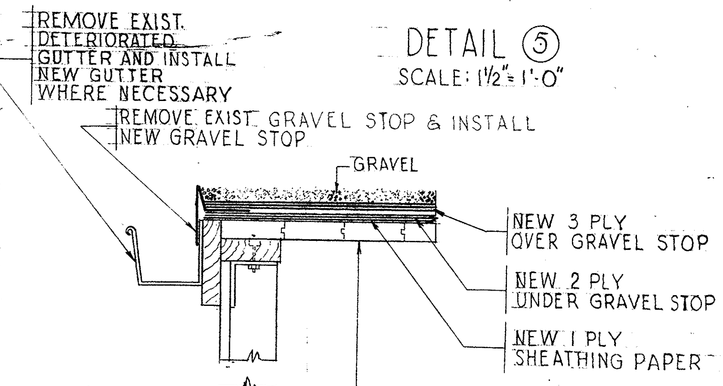
DETAIL 5
SCALE: 1 1/2"=1'-0"



DETAIL 6
SCALE: 1 1/2"=1'-0"

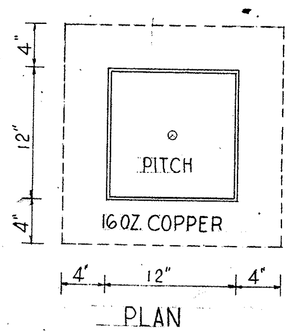


FRONT ELEVATION
SCALE: 1/16"=1'-0"

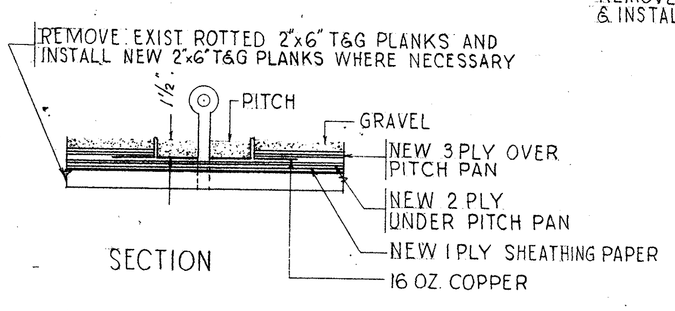


SCOPE OF WORK:

1- REMOVE EXISTING DETERIORATED 5 PLY BUILT-UP ROOF STOPS, FLASHING, GUTTERS AND DOWN SPOUTS.
2- REPLACE APPROXIMATELY 8000 B.F. OF 2"x6" T&G PLANKING AS REQUIRED.
3- INSTALL NEW 5 PLY BUILT-UP ROOF, FLASHING, GRAVEL STOPS, GUTTERS AND DOWN SPOUTS.



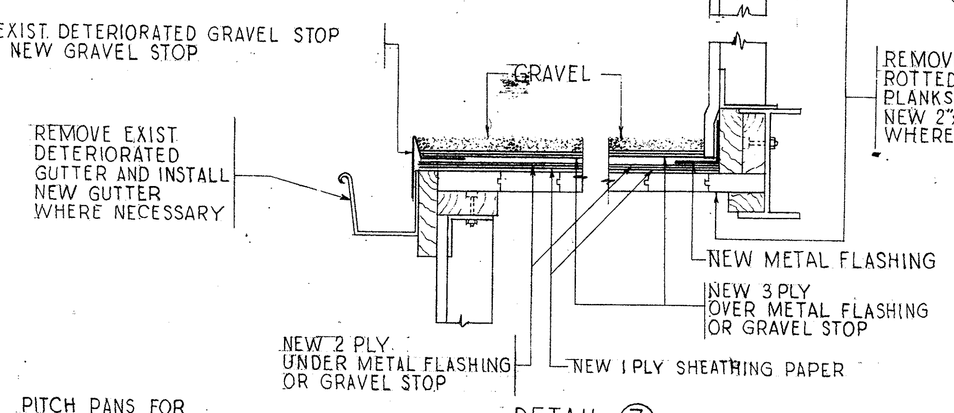
PLAN



SECTION

PITCH PAN DETAILS
SCALE: 1 1/2"=1'-0"

NOTE:
PROVIDE FLASHING AND PITCH PANS FOR ALL PROTRUSIONS THRU ROOF.
26 ANTENNAS AND 21 PAD EYES REQUIRE WATERPROOFING



DETAIL 7
SCALE: 1 1/2"=1'-0"

GRAPHIC SCALES

1/16"=1'-0" 10' 0' 10' 20' 30' 40' 50' 60'

1 1/2"=1'-0" 1' 9" 6" 3" 0" 1' 2'

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
AREA PUBLIC WORKS OFFICE CARIBBEAN
US NAVAL STATION - SAN JUAN, P.R.

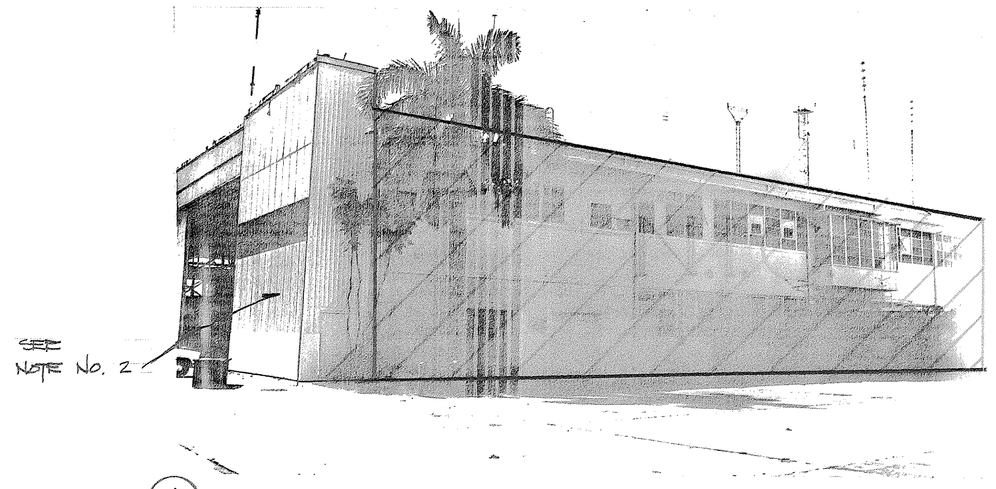
ASST FOR DESIGN: Jur L Hoffman
LCDR CEC USN
DSGN DIR: L. Bagley
BR MGR: Roy Langwell
PROJ MGR: Roy Langwell
DSGN PWC GTMO CUBA
DR: Carlos H Verdor
CHK: L Langwell

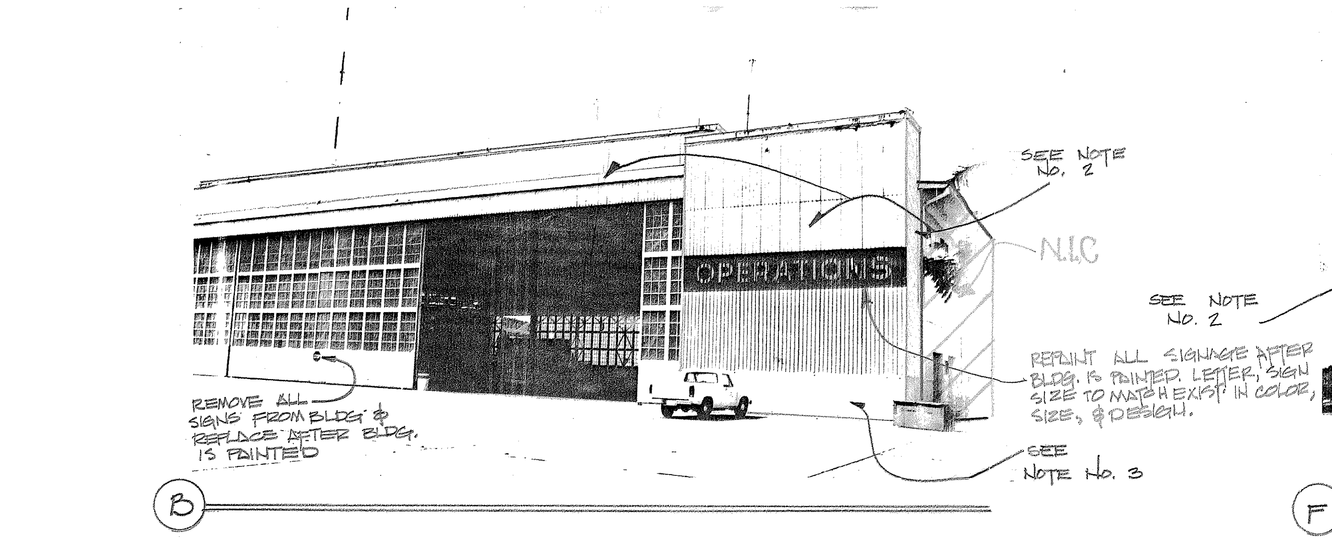
PUBLIC WORKS CENTER
US NAVAL BASE
GUANTANAMO BAY CUBA
REPAIR AND REROOF OF HANGAR
BLDG. NO. AV 32 (MAIN SIDE)

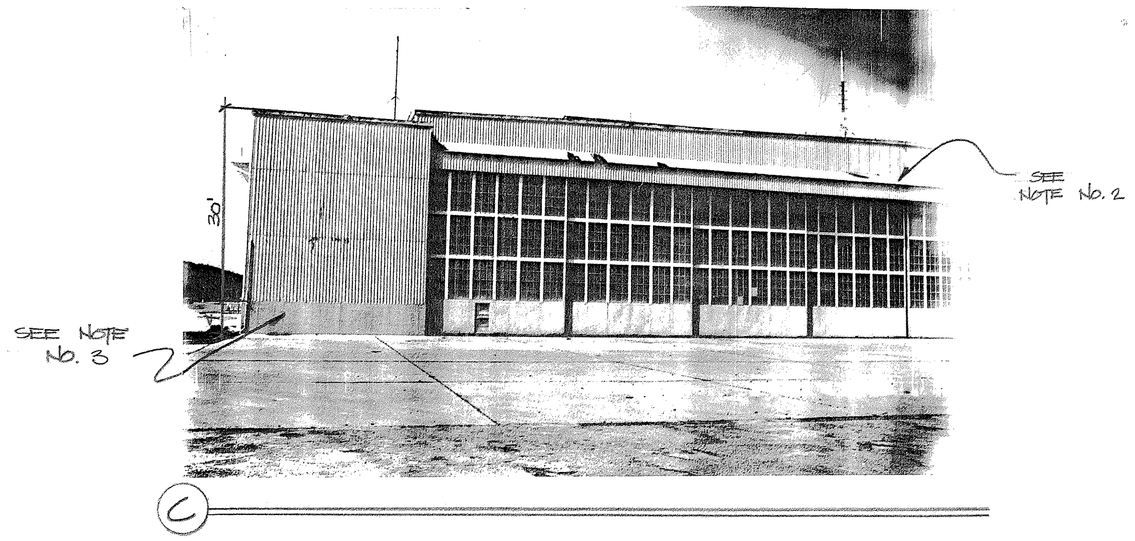
APPROVED: F. E. Grooms — APWO FOR CHIEF OF BUREAU — DATE 4/4/62

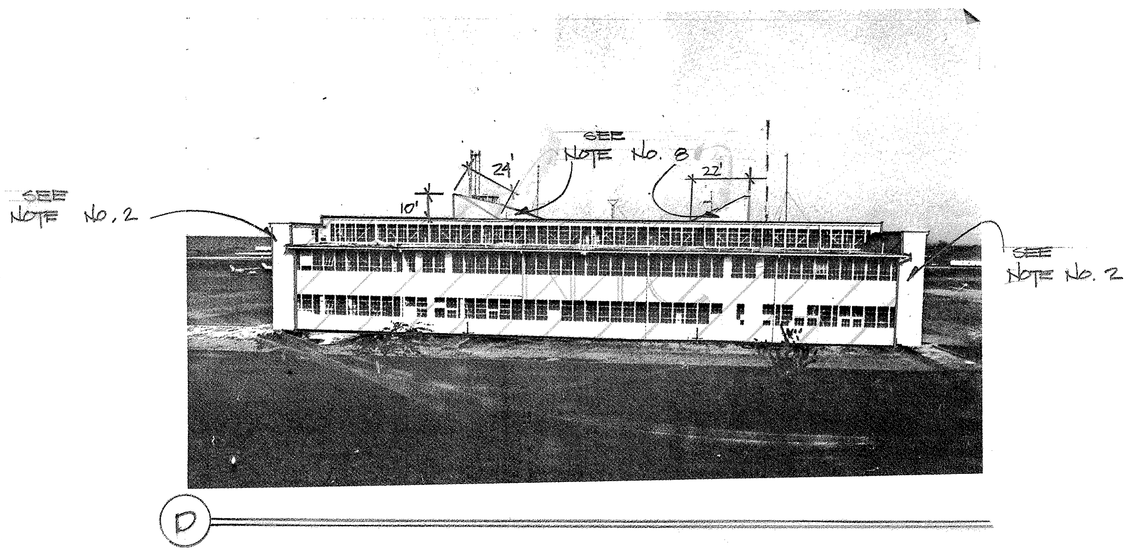
SATISFACTORY TO _____
DATE _____

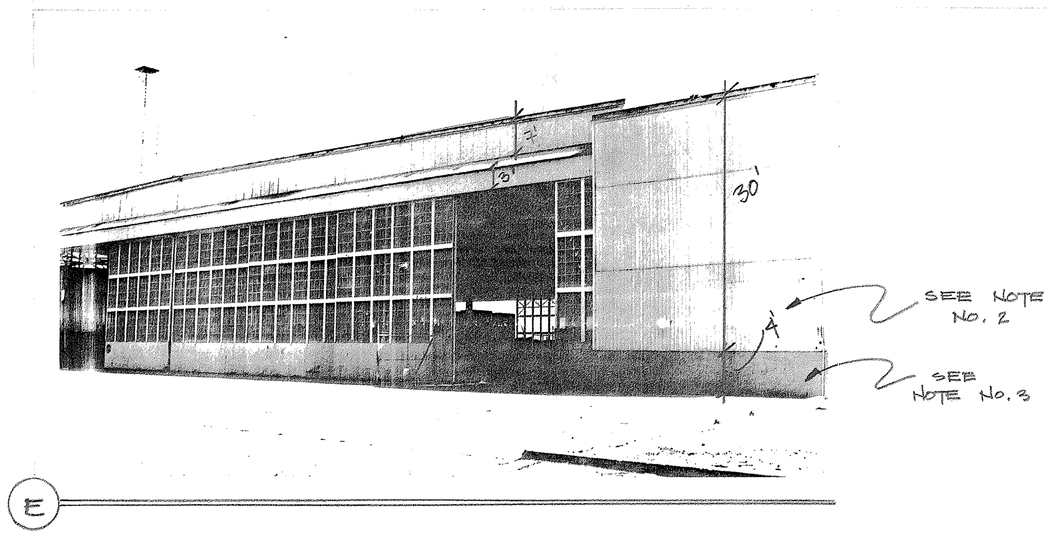
SCALE: AS SHOWN | SPEC 31765/62
SHEET 6 OF 24 NBy 31765
Y&D DRAWING Nº 928099

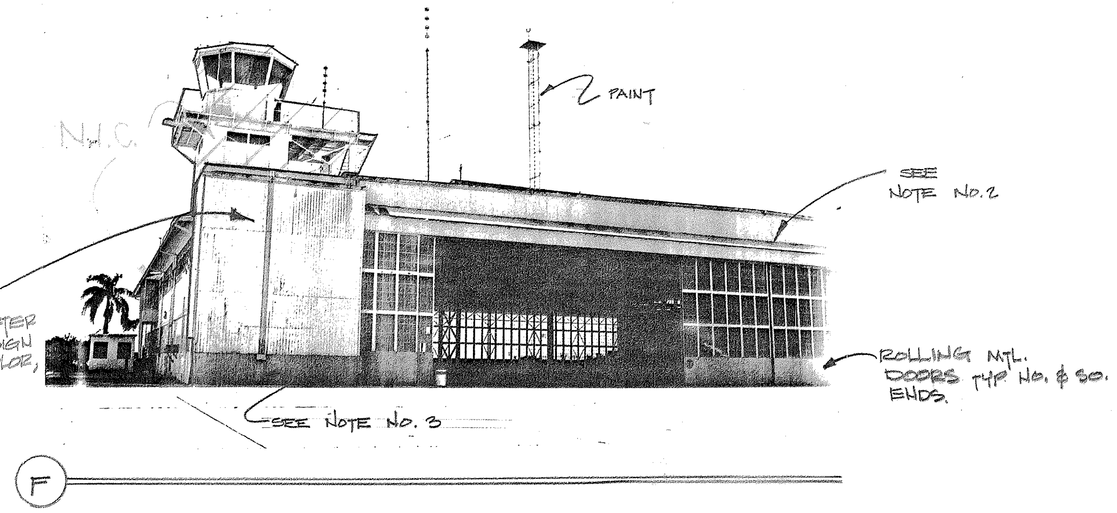


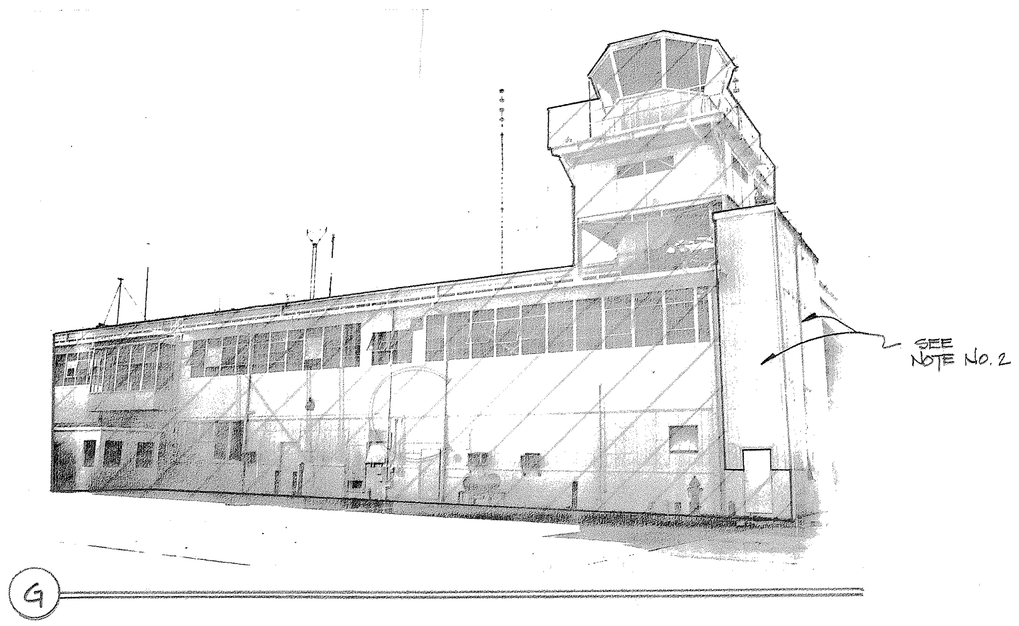


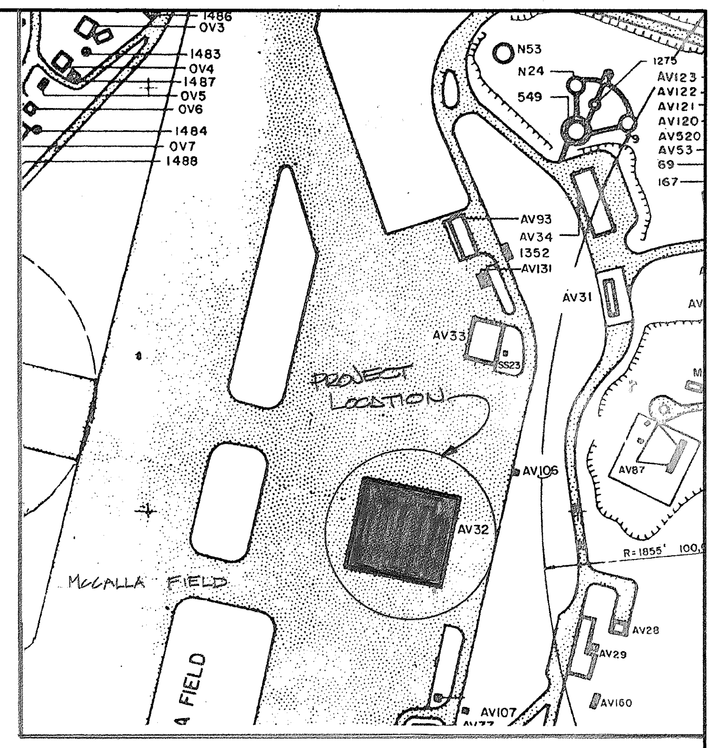












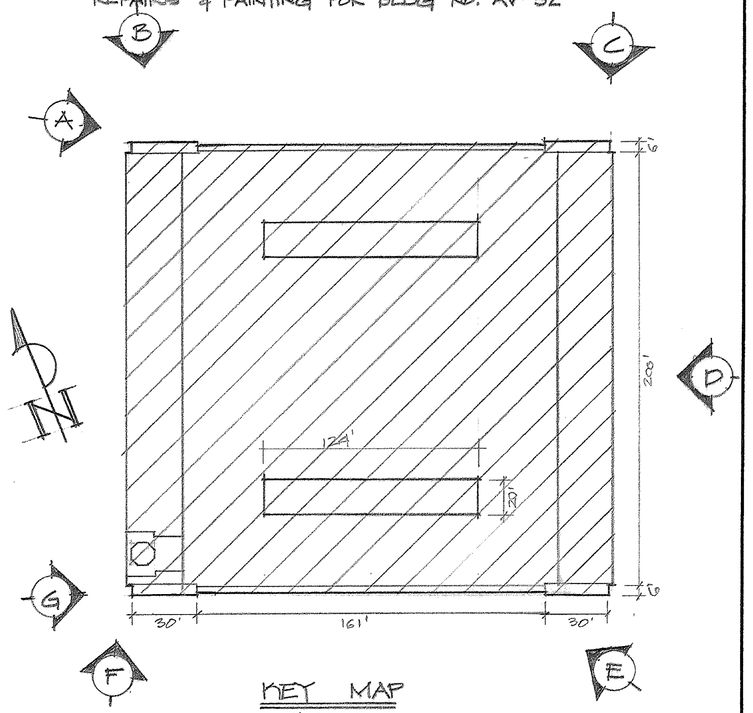
LOCATION MAP
1" = 200'

LIST OF REPAIRS AND PAINTING FOR BUILDING NO. AV-32

1. REPAIR AND PAINTING WORK TO OCCUR ONLY AT NORTH AND SOUTH ENDS OF BUILDING ONLY.
2. REMOVE ALL EXISTING CORRUGATED METAL SIDING AND ROOFING AT BOTH ENDS OF BUILDING AND INSTALL NEW CORRUGATED METAL SIDING AND ROOFING.
3. FILL ALL HOLES IN CONCRETE FOUNDATION WALLS AND PAINT.
4. REMOVE ALL LOOSE AND FLAKING PAINT FROM ALL SURFACES TO BE PAINTED.
5. (NOT USED)
6. ITEMS TO BE PAINTED INCLUDE: ALL CORRUGATED METAL ROOFING AND SIDING @ NORTH & SOUTH ENDS ONLY ALL CONCRETE FOUNDATION WALLS @ NORTH & SOUTH ENDS ONLY, ROLLING MTL. DOORS, ALL EXT. PLUMBING AND ELECTRICAL CONDUITS AND METAL WINDOW FRAMES AND MISC. TOWERS @ ROOF OF BUILDING.
7. SERVICE ALL LARGE SLIDING HANGAR DOORS TO BE OPERATIVE AND CLEAR ALL RUNNING TRACKS OF DEBRIS.
8. APPLY ALUMINUM PIGMENTED BITUMINOUS COATING TO SIDING & ROOFING OF SKYLIGHTS.

COLOR SCHEDULE

USE POLAR WHITE: FED. STANDARD # 595-#17875 ON ALL ITEMS LISTED IN NOTE NO. 6 OF LIST OF REPAIRS & PAINTING FOR BLDG NO. AV-32



KEY MAP
1" = 30'

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

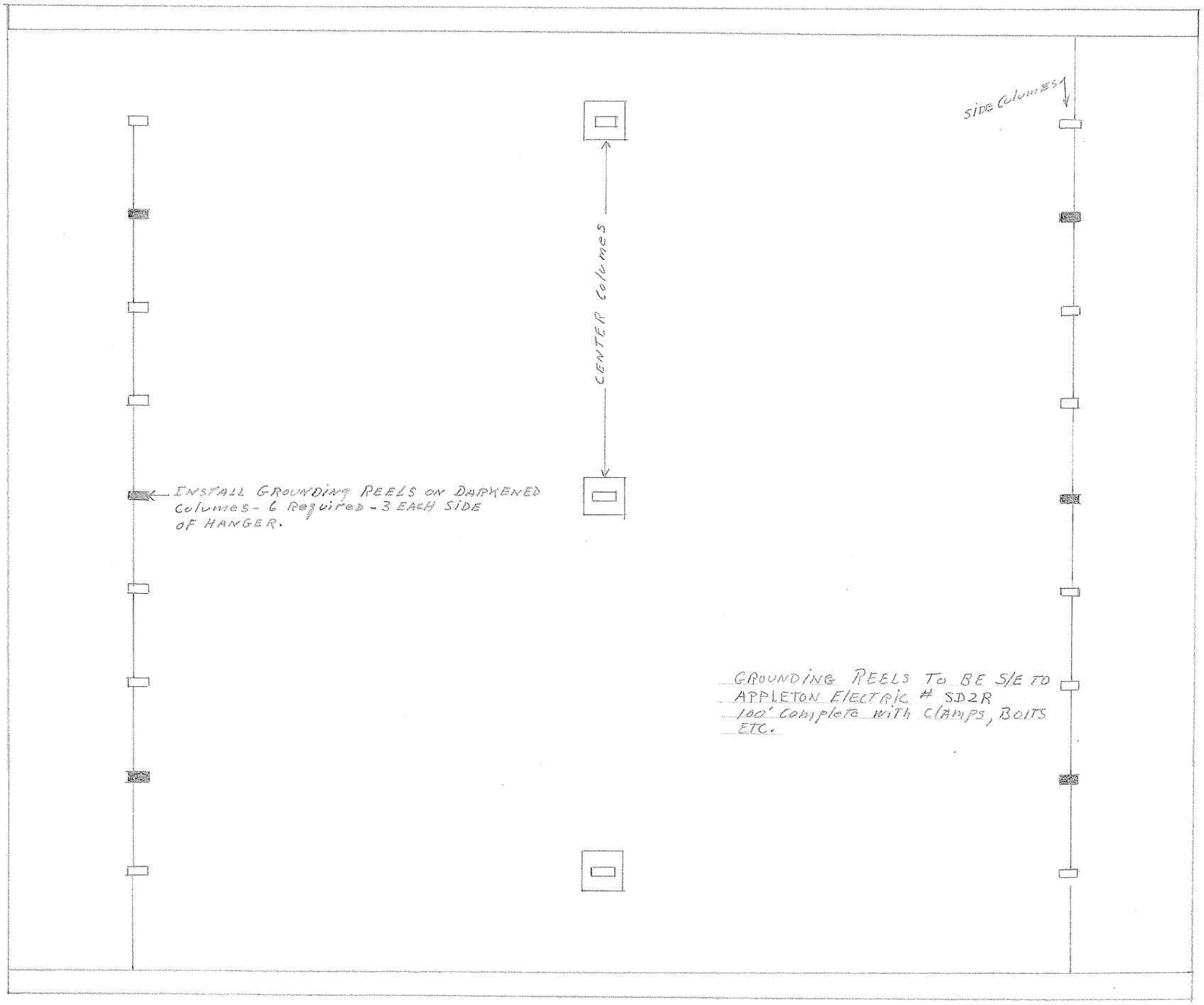
DES E. IRVING
DRWN G. FISCHER
CHK
SUPV R. EGBERT
ENG OFF
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

ROOFING, PAINTING, & SIDING REPAIRS OF VARIOS BLDGS.
BLDG. NO. AV-32

SIZE F | CODE IDENT NO. | PWD DRAWING NO. 4104339
SCALE: AS NOTED | SHEET 2 OF 44

CONT. NO. N62470-84-C-2163



FOUNDATION PLAN
SC: 1/16" = 1'-0"

NOTES

DRILL/TAP STEEL COLUME PER HOLE SIZE OF GROUNDING REEL MOUNTING PLATE. CLEAN COLUME SURFACE TO BARE METAL BEFORE MOUNTING.

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWC DRAWING NO. 8M-2107-1165

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES RTP
DRWN RTP
TR RTP
CHK RTP
SUPV RTP
IN CHARGE
REVIEWED BY

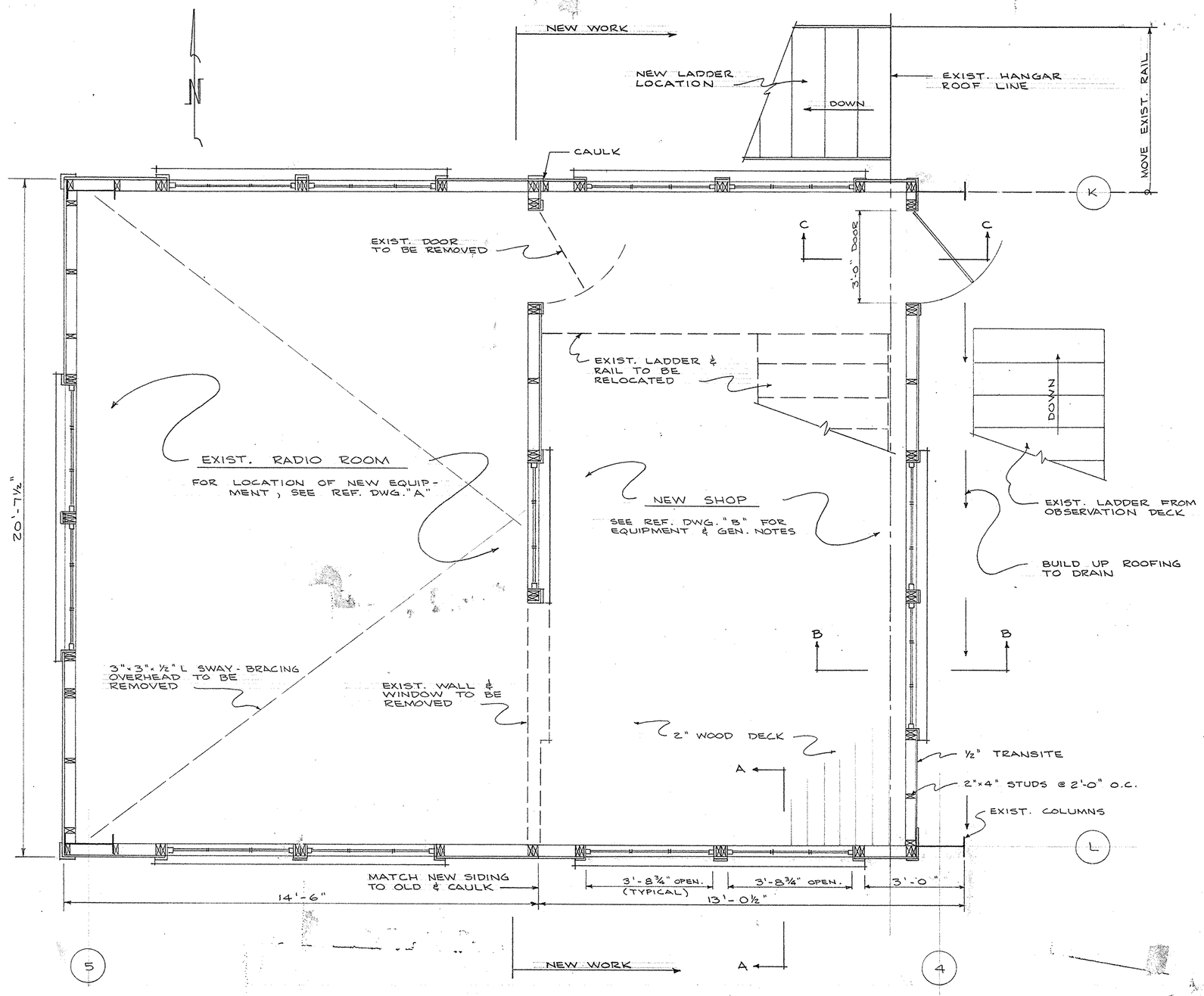
STATIC GROUNDING SYSTEM
HANGAR AV-32

APPROVED — DATE
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO
DATE

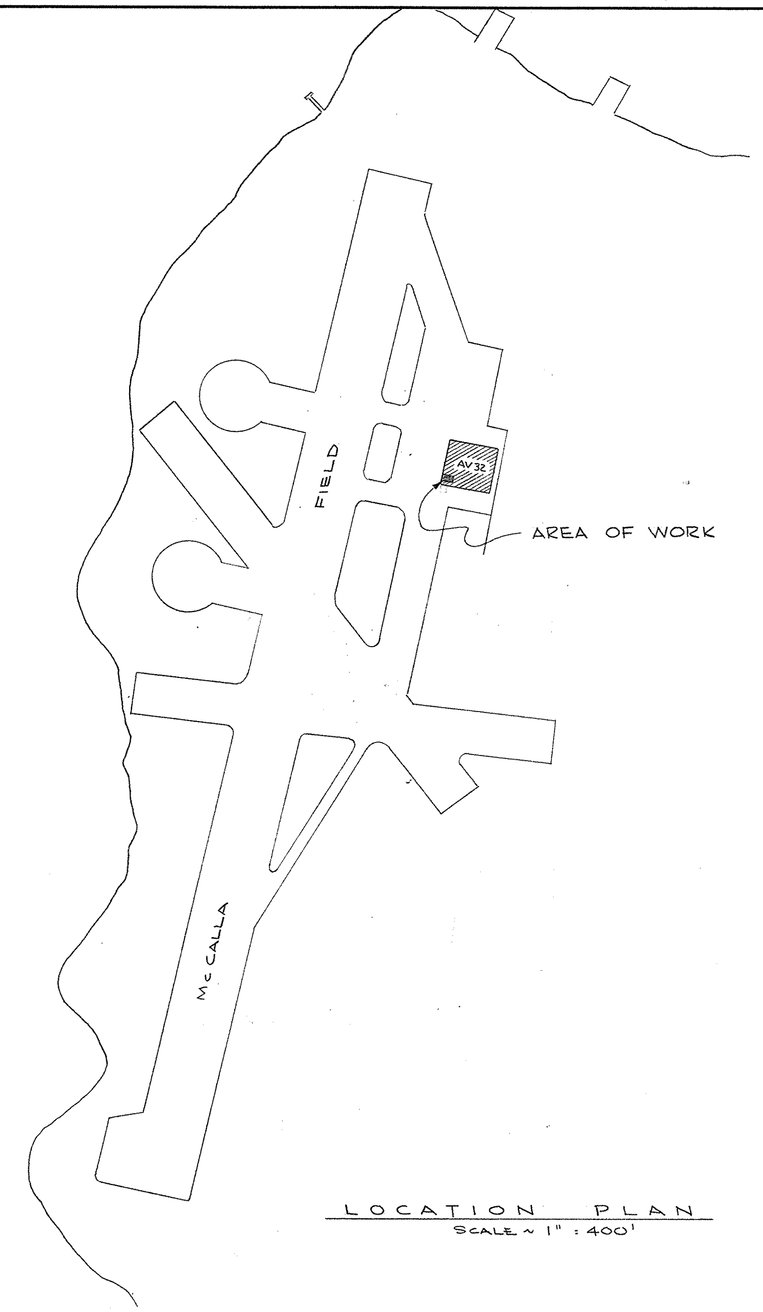
SCALE 1/16" = 1' — SPEC
SHEET 1 OF 1 — NBy
Y & D DRAWING NO.

K+E ALBANENE® TRACING PAPER 72944



FLOOR PLAN

SCALE ~ ½" = 1'-0"



LOCATION PLAN

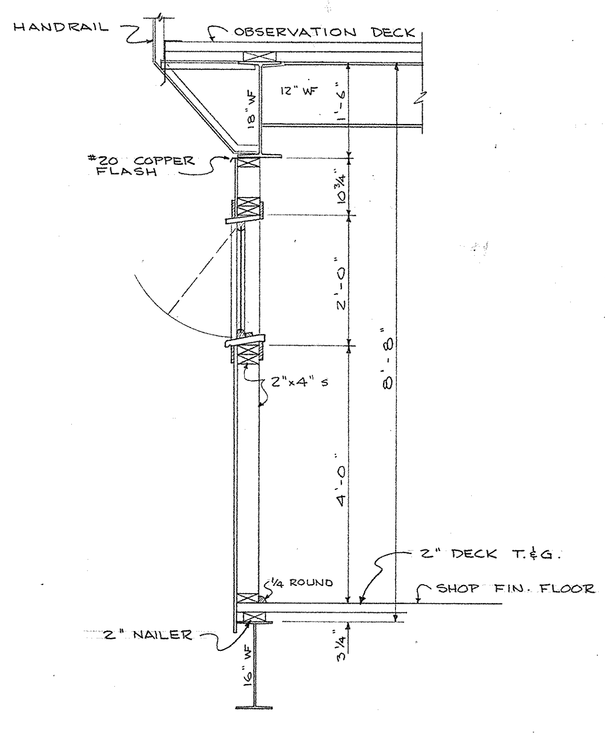
SCALE ~ 1" : 400'

NOTES:

- EXTERIOR PAINT OF NEW STRUCTURE TO MATCH THAT OF EXIST.
- ALL STEEL TO RECEIVE 2 COATS OF RUST-INHIBITOR PAINT.
- TIMBER : f = 1200 psi MIN.
  H = 120 psi MIN.
  c⊥ = 390 psi MIN.
- STEEL : f = 20,000 psi AISC PROPERTIES

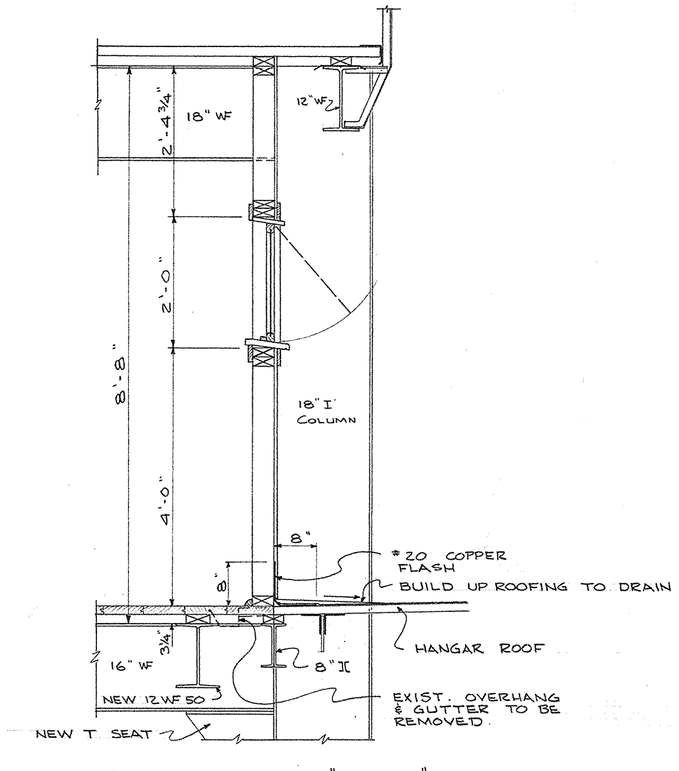
REFERENCE DRAWINGS

REF.	NO.	DESCRIPTION
A	INDMAN 10ND #600	EQUIPMENT LAYOUT, TOWER
B	AEMO DWG. SK-#16	SHOP LAYOUT
C	PWC 3B-468-0348-1	EXIST. TOWER STRUCTURE
D	" -2	" " "
E	" -3	" " "
F	" -4	" " "
G	" -5	" " "
H	" -6	" " "
I	" -7	" " "
J	" -8	" " "
K	" -9	" " "
L	" -10	" " "
M	" -11	" " "



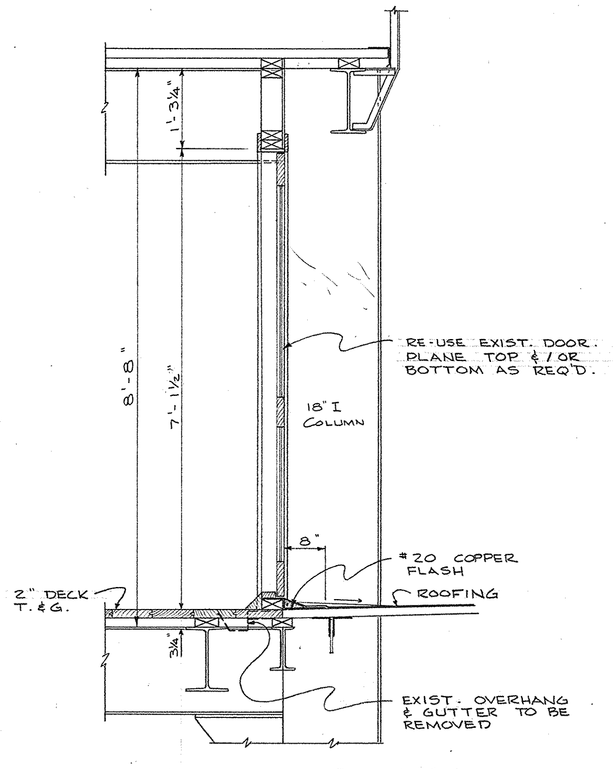
SECTION "A-A"

SCALE ~ ¾" = 1'-0"



SECTION "B-B"

SCALE ~ ¾" = 1'-0"



SECTION "C-C"

SCALE ~ ¾" = 1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVAL
"A"	ALTERATION "A" REVISED (SEE SHTS. 2 & 3)	10-9-62	

REVISIONS

PWC DRAWING NO. 5B-1316-0862-1

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES C. Lewis
DRWN C. Lewis
TR
CHK
SUPV
IN CHARGE
REVIEWED BY

TOWER MODIFICATIONS AV-32

APPROVED — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 8/27/62

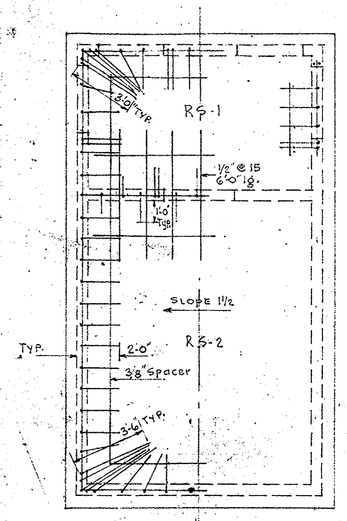
SATISFACTORY TO — DATE 16 AUG 1962

SCALE AS NOTED SPEC

SHEET 1 OF 3 NBy

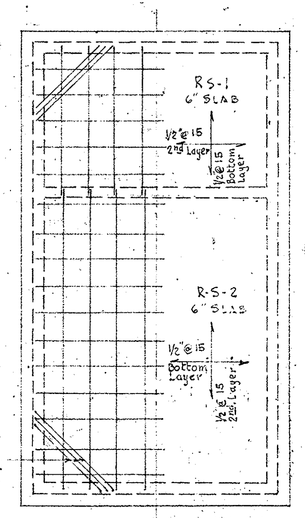
Y & D DRAWING NO.

ESR 07Q66



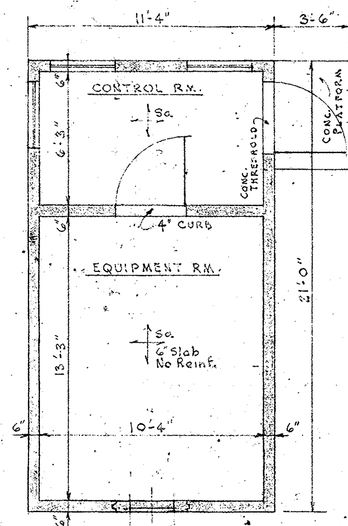
SYMMETRICAL ABOUT ℄ EXCEPT SHOWN

ROOF FRAMING PLAN
(TOP BARS)

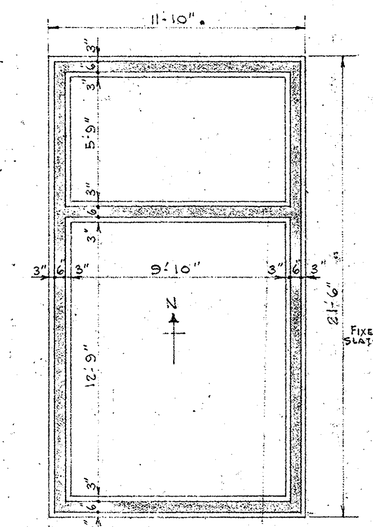


SYMMETRICAL ABOUT ℄

ROOF FRAMING PLAN
(BOTTOM BARS)
WALL REINF. NOT SHOWN

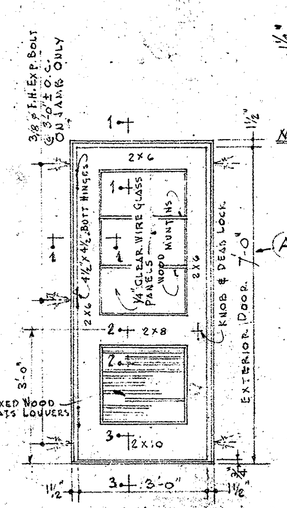


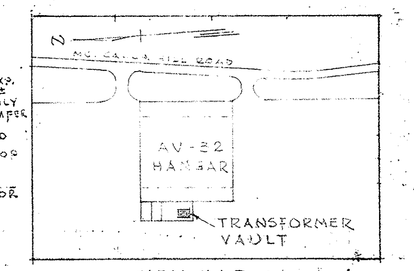
1ST FLOOR SLAB
FINISHED 1ST FLOOR, TOP OF SLAB ELEV. 51.50



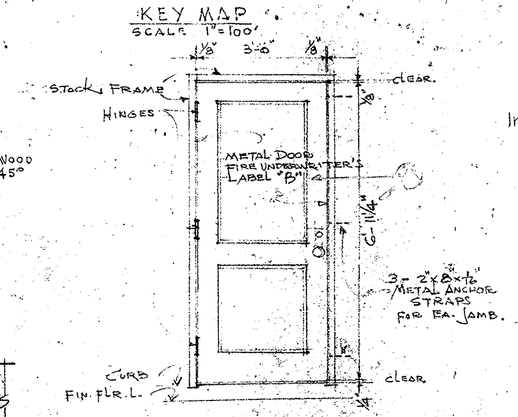
APPROX. 18"x24" STOCK GALV. IRON FIXED LOUVER, VENT.

FOUNDATION PLAN
BOTTOMS OF FOOTINGS AT ELEV. 49.50





KEY MAP
SCALE 1"=100'



ELEVATION OF INTERIOR DOOR
SCALE ½"=1'0"

GENERAL NOTES:

WALL REINFORCEMENT: ½"ø@12" o.c. VERT. & HORIZ. Unless Otherwise Shown.

REINF. AT WALL OPENINGS: 2-½" At Each Head, Jam and Sill, Unless Otherwise Shown.

DIAGONAL REINF. AT CORNERS OF OPENINGS: 2-½"ø Extending 2'-0" From Corner Of Opening

CONCRETE PROTECTIVE COVERING:
Roof Slab: Top Bars - 1"
Bottom Bars: bottom layer ¾"
2nd layer 1¼"
3rd layer 1¾"

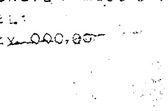
Walls: Horiz. Bars 1½", Vert. Bars 3" — From Exterior Face

CONSTRUCTION JOINT: Represented As "C.J."

CHAMFERS: Provide ¾x¾ Chamfer At All Exposed Interior Corners.

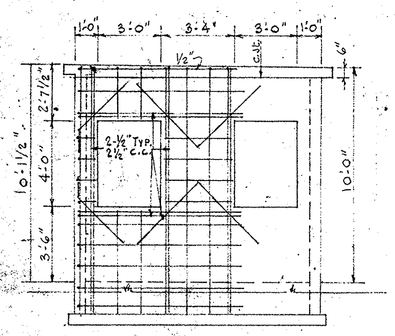
FILLETS: Provide ¾x¾ Fillet At All Wall Intersections And At Wall To Roof Slab

DESIGN DATA:
Soil Bearing Value: Four Tons PSF
Live Load: Roof 15 PSF, Floor 200 PSF
Earthquake: F=C(DL+½LL), Seismic Factor C=0.05
Wind: Basic 50 PSF

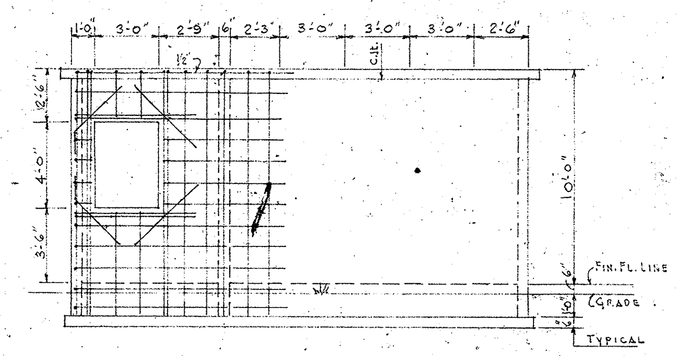


DISTRIBUTION OF WIND LOAD

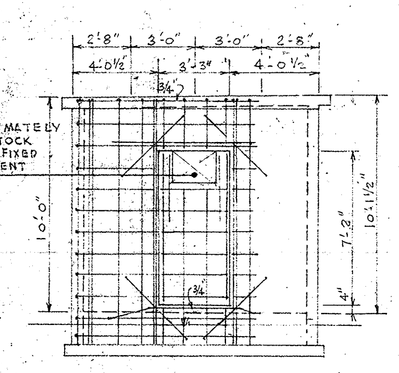
Concrete Designed In Accordance With Y&D. Std. Of Design 4Y6 And Addendum No 2, Dated October 1951.
Structural Concrete: Class D-1 2,500 PSI
Reinforcing Steel: 20,000 PSI
Datum: M.L.W. Elev. 000.00



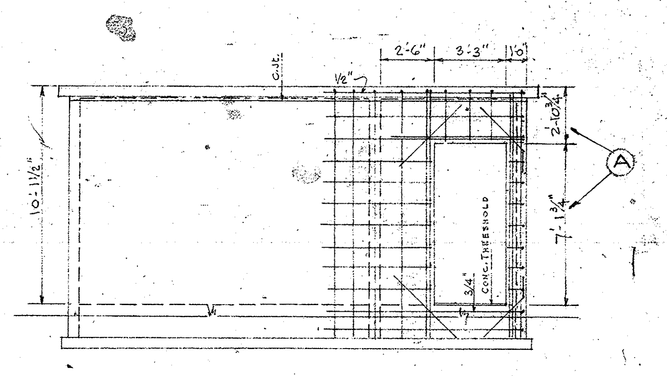
NORTH WALL ELEV.



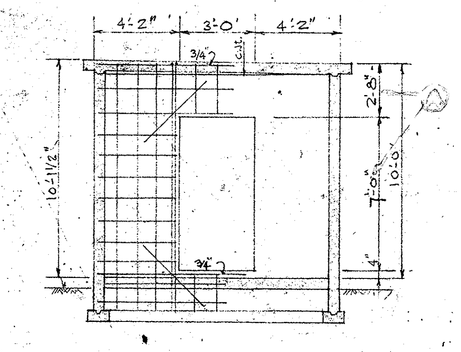
WEST WALL ELEV.



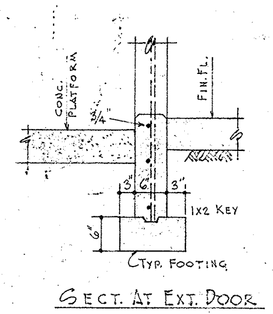
SOUTH WALL ELEV.



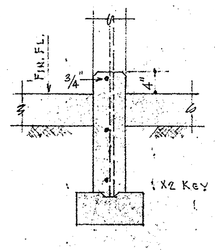
EAST WALL ELEV.



INTERIOR CROSS WALL



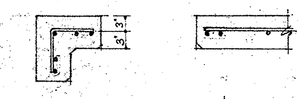
SECT. AT EXT. DOOR



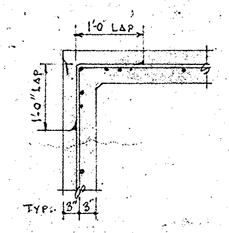
SECT. AT INT. DOOR

STRUCTURAL CONCRETE
PLANS AND WALL ELEVATIONS
SCALE 1/4"=1'0"
TYPICAL SECTIONS
SCALE 3/4"=1'0"

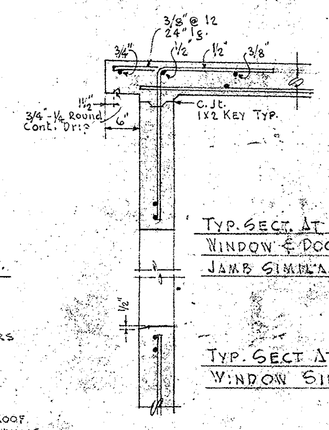
DOOR DETAILS



TYP. SECT. AT WINDOW & DOOR JAMBS

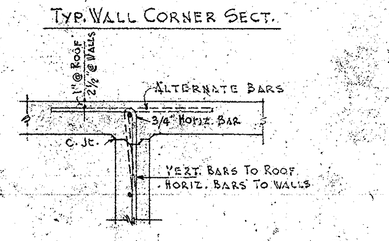


TYP. WALL CORNER SECT.

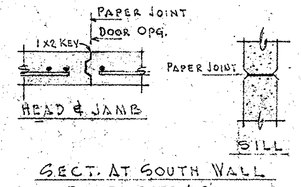


TYP. SECT. AT WINDOW & DOOR HEAD JAMB SIMILAR

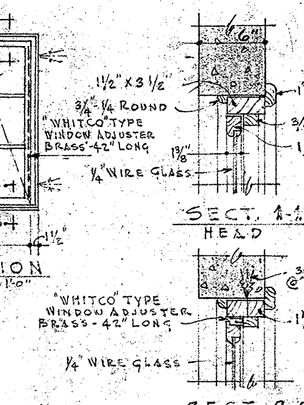
TYP. SECT. AT WINDOW SILL

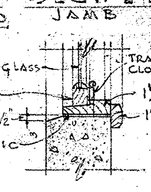


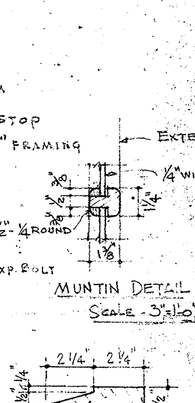
TYP. SECT. INT. WALL TO ROOF
INT. WALL TO EXT. WALL
AS NOTED

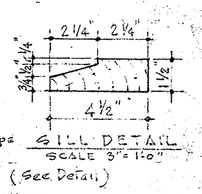


SECT. AT SOUTH WALL
FUTURE DOOR OPG.

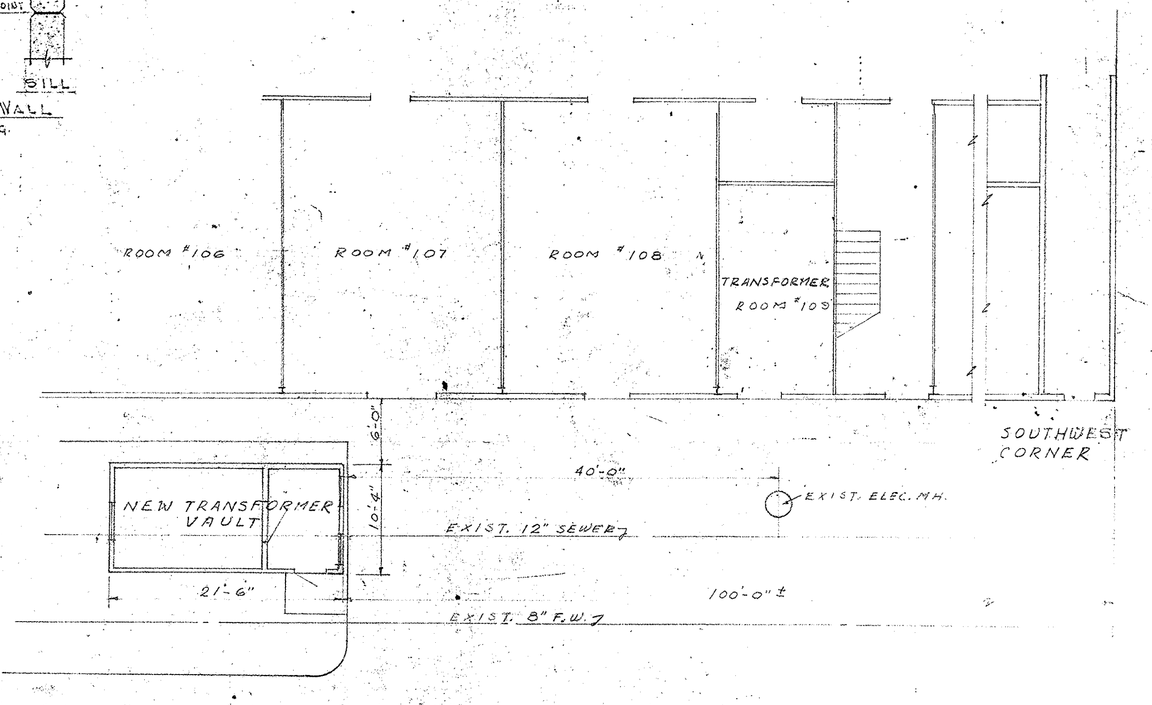








WINDOW DETAILS



LOCATION PLAN
SCALE: 1/8"=1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWC DRAWING NO. NFT-127 [illegible]

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES 10TH NAVAL DIST.
DRWN
TR
CHK
SUPV
IN CHARGE

N. A. S.
MC CALLA FIELD
AIRFIELD LIGHTING
TRANSFORMER VAULT
BLDG AV-32

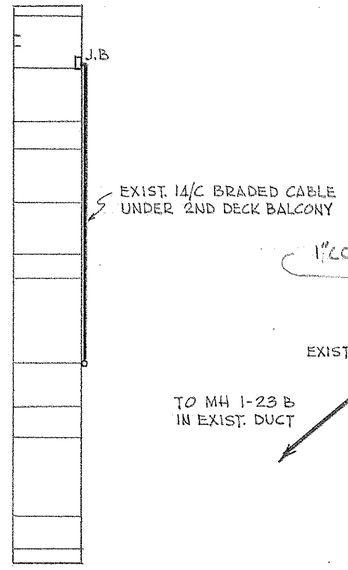
APPROVED (CAPTAIN, CEC, U.S. NAVY) OFFICER IN CHARGE — PUBLIC WORKS OFFICER — DATE

SATISFACTORY TO

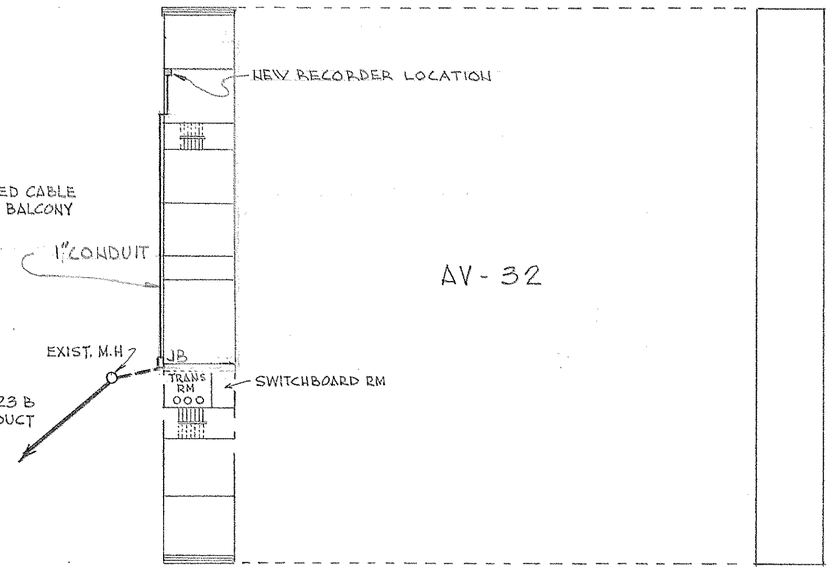
DATE

SCALE AS NOTED
SHEET 1 OF 1 NO.
Y & D DRAWING NO.

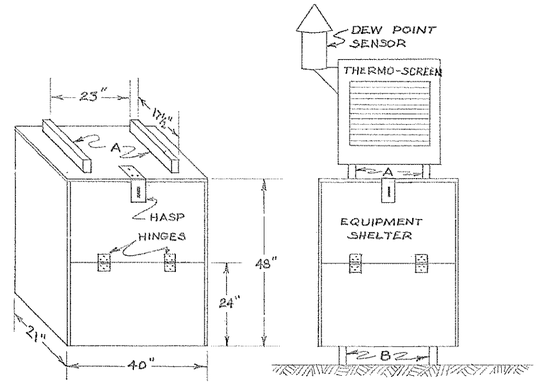
R-0-1168½

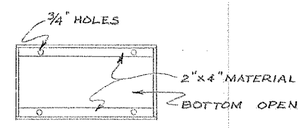


PARTIAL 2ND FLOOR PLAN



FIRST FLOOR PLAN

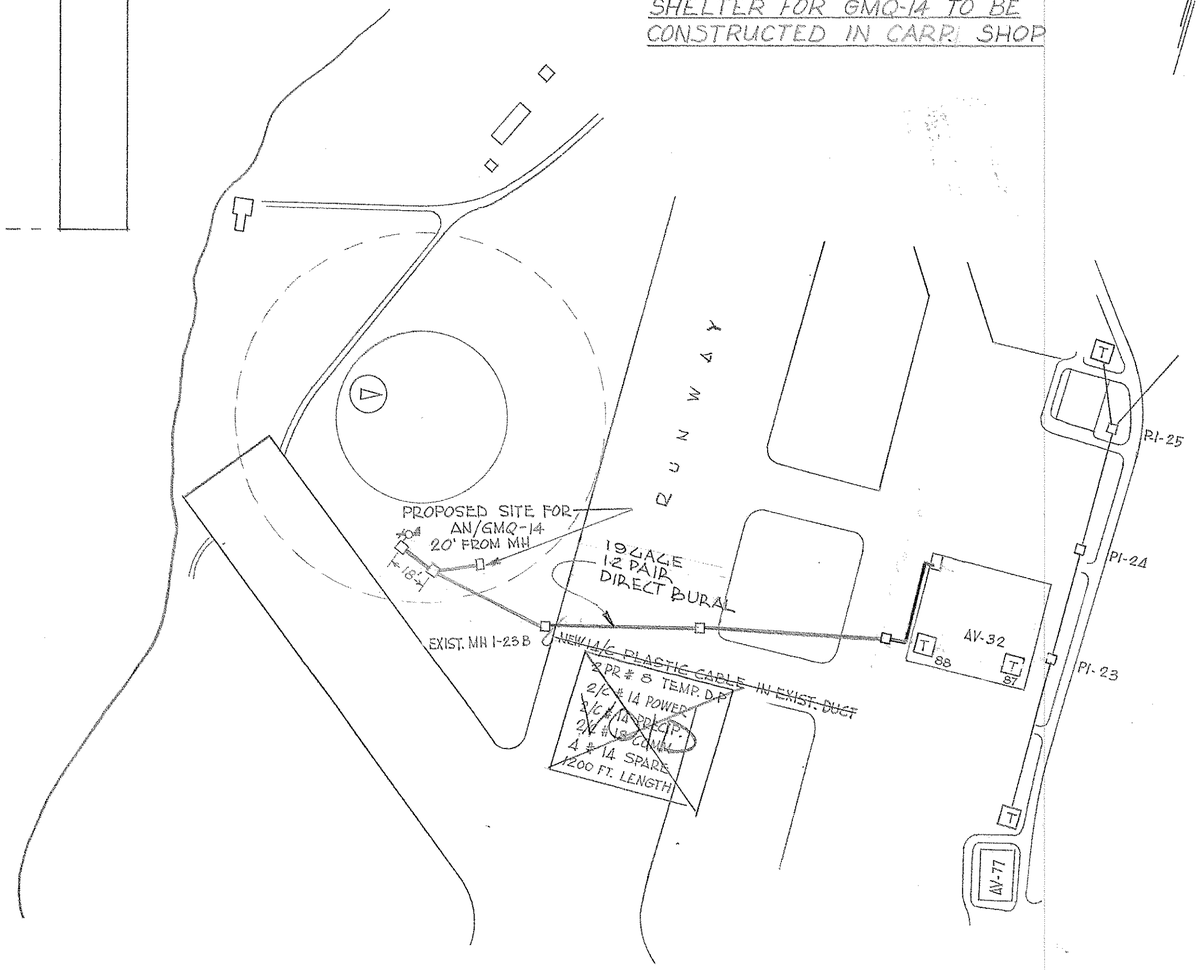




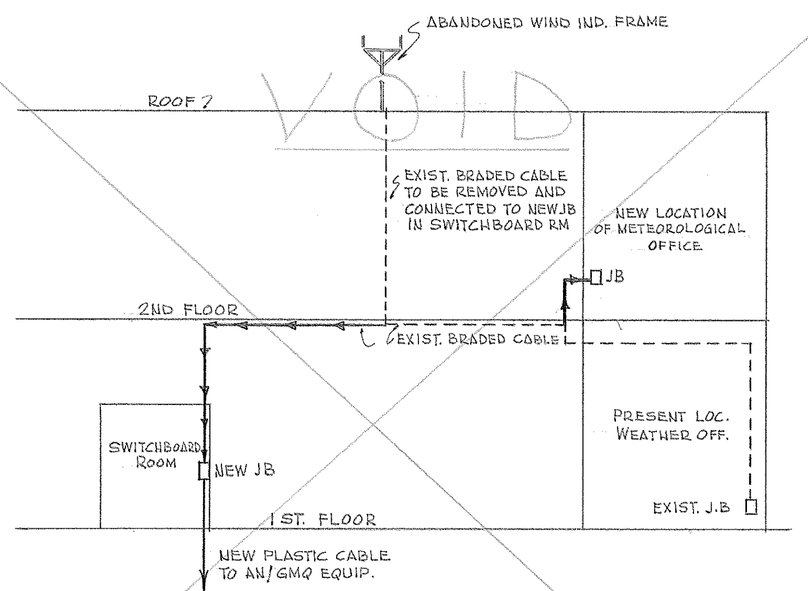
BOTTOM VIEW

NOTES:
A - 2"x4" MATERIAL.
B - 5" SPACERS MADE OF 2" PIPE.
1 - HINGES & HASP OF RUST-RESISTANT METAL.
2 - BOX CONSTRUCTED OF ¾" EXTERIOR PLYWOOD, PAINTED WHITE.

SHELTER FOR GMQ-14 TO BE CONSTRUCTED IN CARR SHOP



LOCATION PLAN
SCALE: 1" = 200'



RISER DIAGRAM

SYMBOLS
- - - - - EXIST. BRADED CABLE
EXIST. BRADED CABLE RELOCATED FROM WIND IND. FRAME
NEW 14/C PLASTIC CABLE

GENERAL NOTES

1. REMOVE EXIST. 14/C BRAIDED CABLE FROM FORMER WEATHER VAIN ON ROOF & RELOCATE TO NEW JB IN TRANSFORMER VAULT # 88 AS INDICATED
2. REMOVE POWER CABLE FROM TRANSF. VAULT # 88 TO MH # 1-23 B, CLEAN DUCT & INSTALL NEW PLASTIC INSULATED CABLE
3. REMOVE BRAIDED CABLE SECTION FROM 2ND DECK TO PRESENT LOCATION OF METEOROLOGICAL OFFICE IN 1ST DECK & CONNECT TO JB IN NEW LOCATION IN 2ND DECK.

VOID

SEE NEW DRAWING 8M-2260-0367

ESR 2173/6

PRELIMINARY

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWC DRAWING NO. 8M-2124-0166

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES LVC
DRWN SIRCA
TR
CHK
SUPV
IN CHARGE G.C.C.
REVIEWED BY
1/24
2/14/66

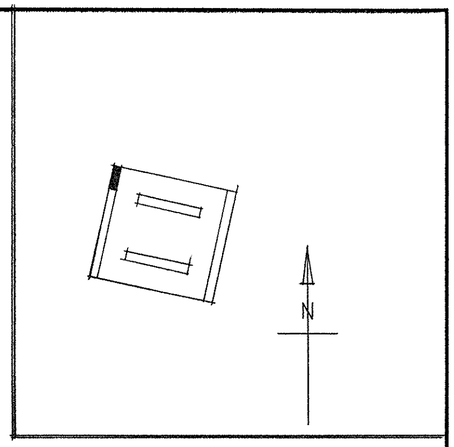
NAVAL AIR STATION
AV-32
INSTALL SEMI-AUTO METEOROLOGICAL STATION AN/GMQ-14 McCALLA

APPROVED G.R. Hepsand DATE 2/14/66
COMMANDING OFFICER PUBLIC WORKS CENTER

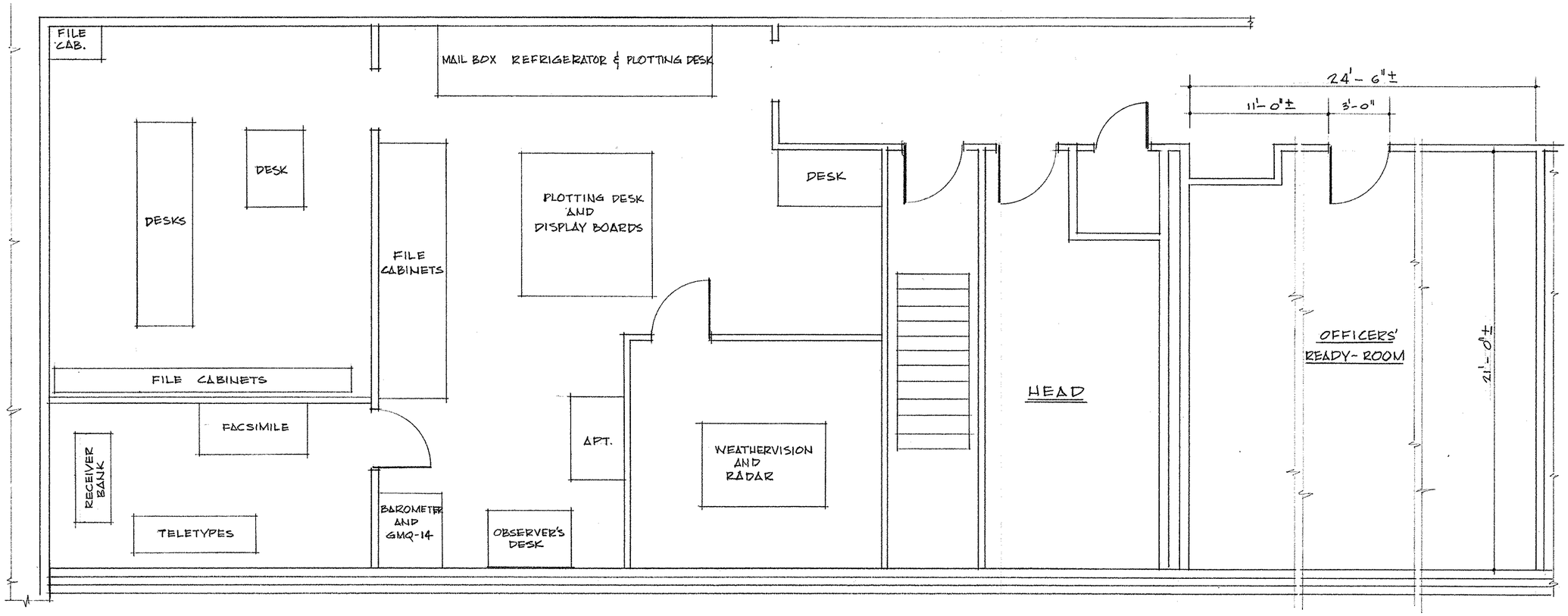
SATISFACTORY TO J.F. Bullington
DATE 1/25/66

SCALE AS NOTED SPEC
SHEET 1 OF 1 NBY
Y & D DRAWING NO.

K+E ALBANENE® TRACING PAPER 72944



LOCATION PLAN
SCALE: 1" = 200'-0"



PARTIAL SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO. 8M-2327-0468-

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

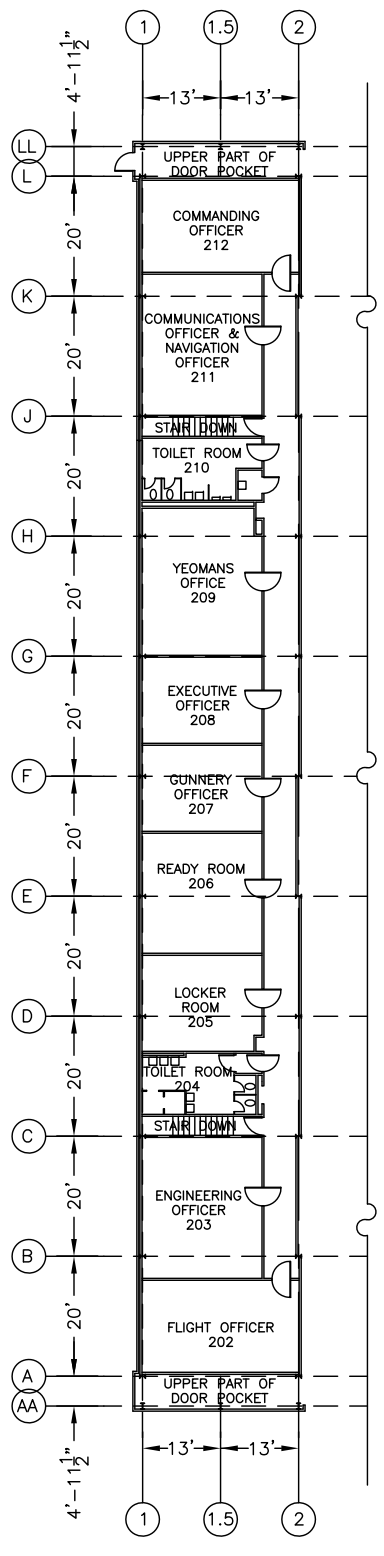
DES
DRWN Dingwall
CHK R.A.W.
SUPV Thomas
IN CHARGE
DIRECTOR Comninos

NAVAL AIR STATION
BLDG # AV-32
WEATHER SERVICE
AS BUILT

APPROVED DATE
COMMANDING OFFICER KWS
SATISFACTORY TO DATE

SIZE | CODE IDENT NO. | NAVFAC DRAWING NO.
CONSTR. CONTR. NO.
SCALE AS SHOWN SPEC SHEET OF

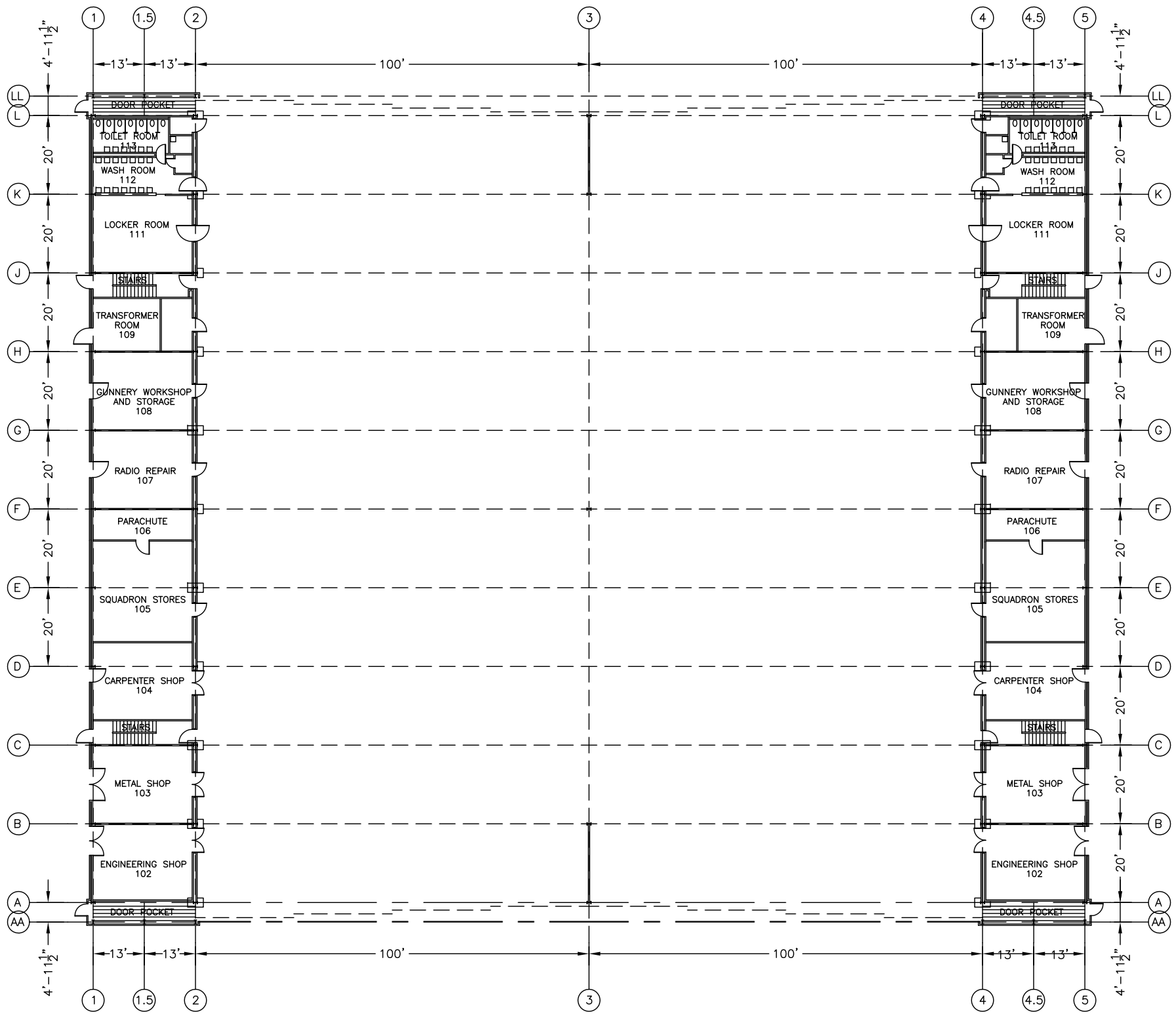
E.S.R # 2167/8



NORTH

PARTIAL SECOND FLOOR PLAN

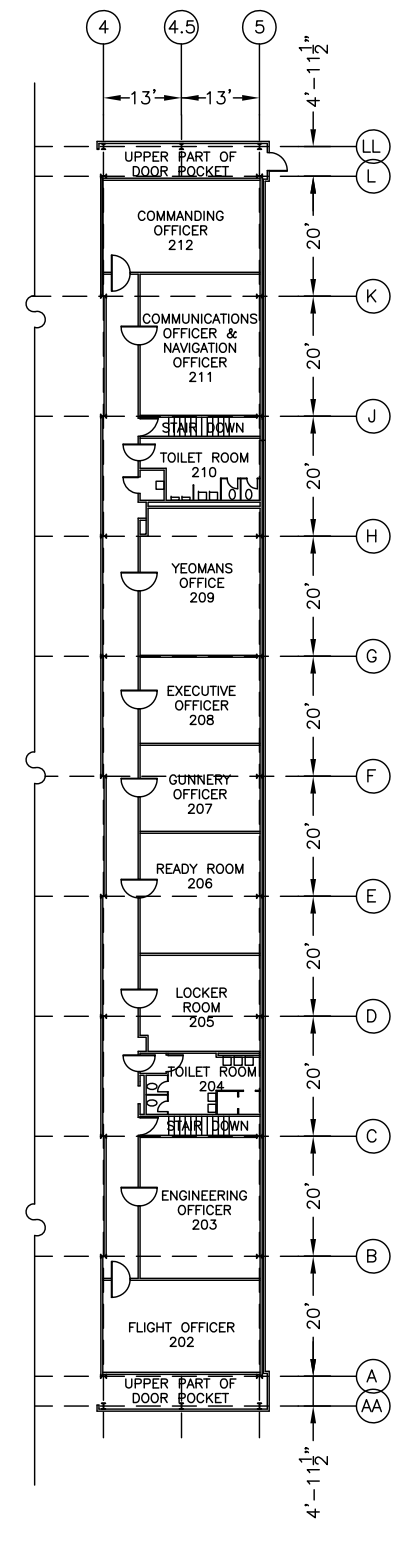
SCALE: 1/16"=1'-0"



NORTH

FIRST FLOOR PLAN

SCALE: 1/16"=1'-0"



NORTH

PARTIAL SECOND FLOOR PLAN

SCALE: 1/16"=1'-0"

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

PUBLIC WORKS DEPARTMENT GUANTANAMO BAY, CUBA

SEAL

APPROVED

ACTIVITY – SATISFACTORY TO

DATE

APPROVED

PUBLIC WORKS OFFICER

DATE

NAVSTA GTMO

DESIGN AS BUILT

DRAWN R. A. CORPUZ

REVIEW

SUPV. C. W. SHERMAN

CHIEF ARCH./ ENGR.

PROJECT MANAGER

FIRE PROTECTION

BRANCH MANAGER

DESIGN DIRECTOR

DEPARTMENT OF THE NAVY
U.S. NAVAL STATION
NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT GUANTANAMO BAY, CUBA

LANDPLANE HANGARS
BUILDING AV 32

FISRT AND SECOND FLOOR PLAN (EXISTING)

CODE ID. NO. 80091 | SIZE D

SCALE: GRAPHIC

EFD NO.

WRK. REQ. NO. 61253.2

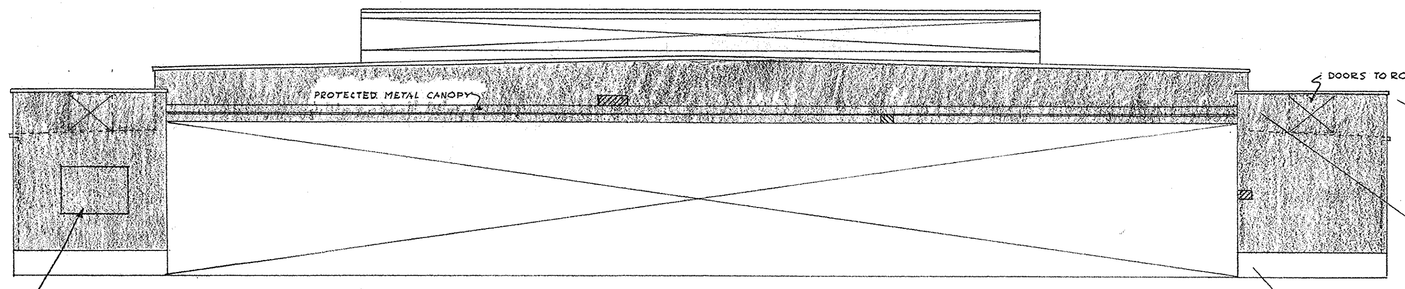
SPEC. NO. N/A

CONSTR. CONTR. NO. N/A

PWD DRAWING NO. XXXXXXXXXXXXX

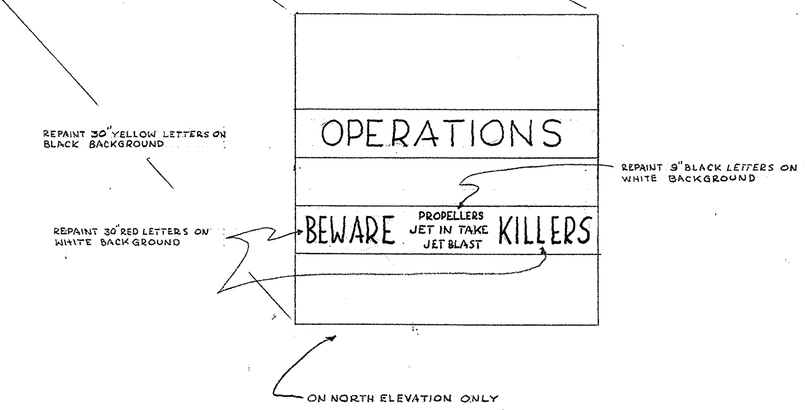
SHEET 1 OF 1

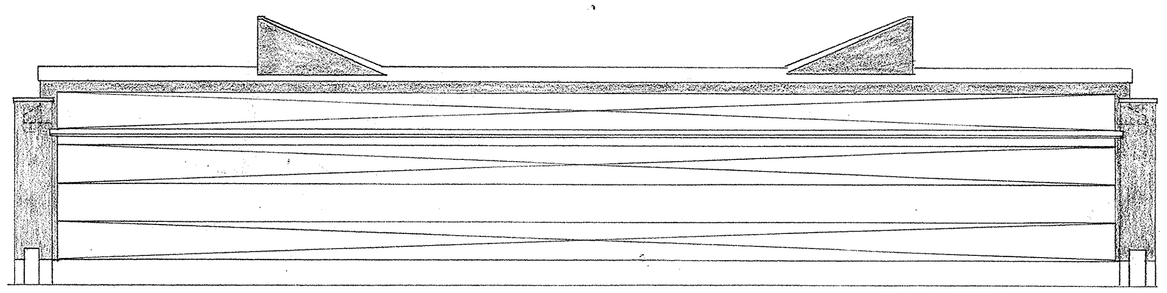
C-101



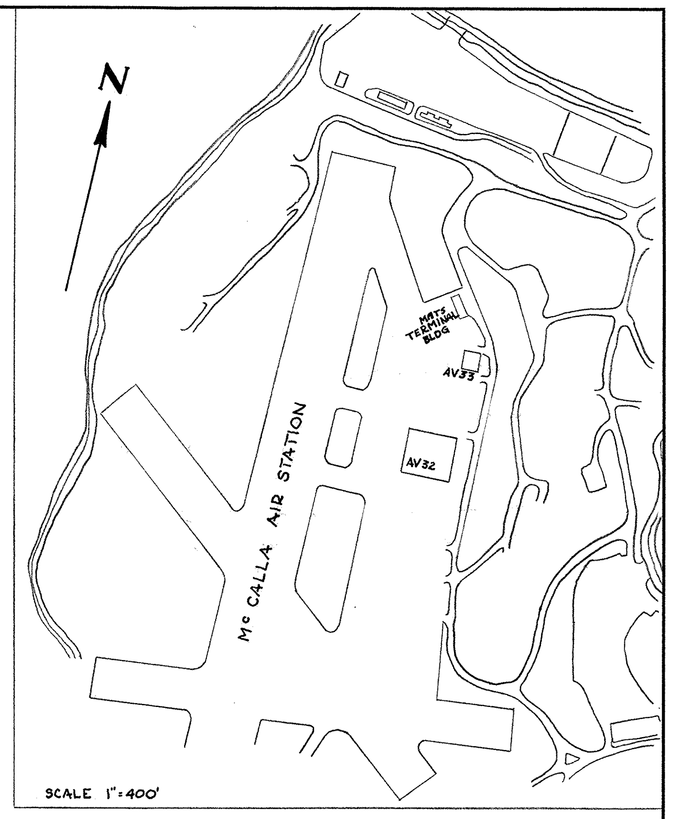
NORTH ELEVATION (AS SHOWN)
SOUTH ELEVATION (OPPOSITE HAND)

BLDG. #AV 32 SCALE 1/16" = 1'-0"

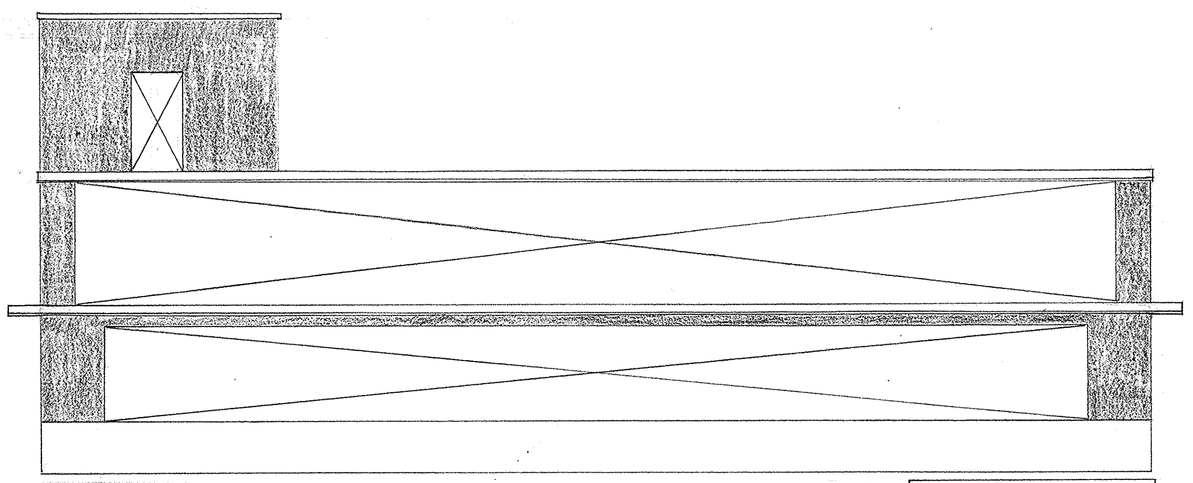




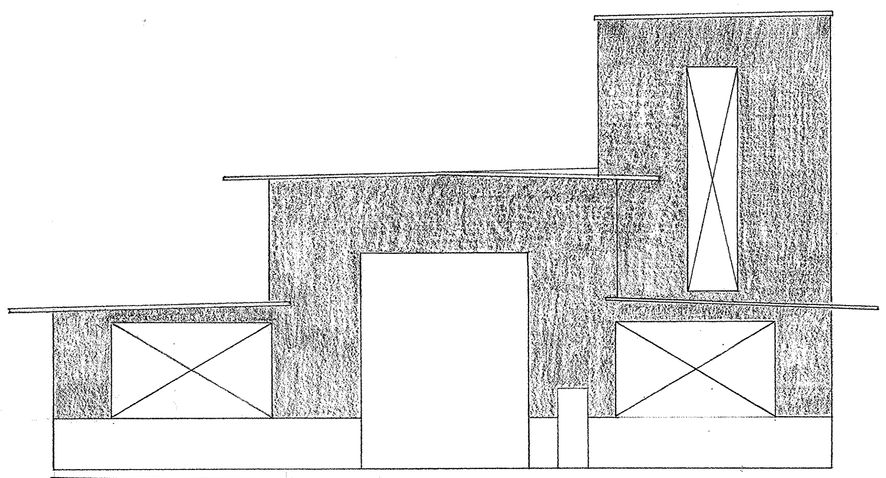
EAST ELEVATION (AS SHOWN)
WEST ELEVATION (OPPOSITE HAND)



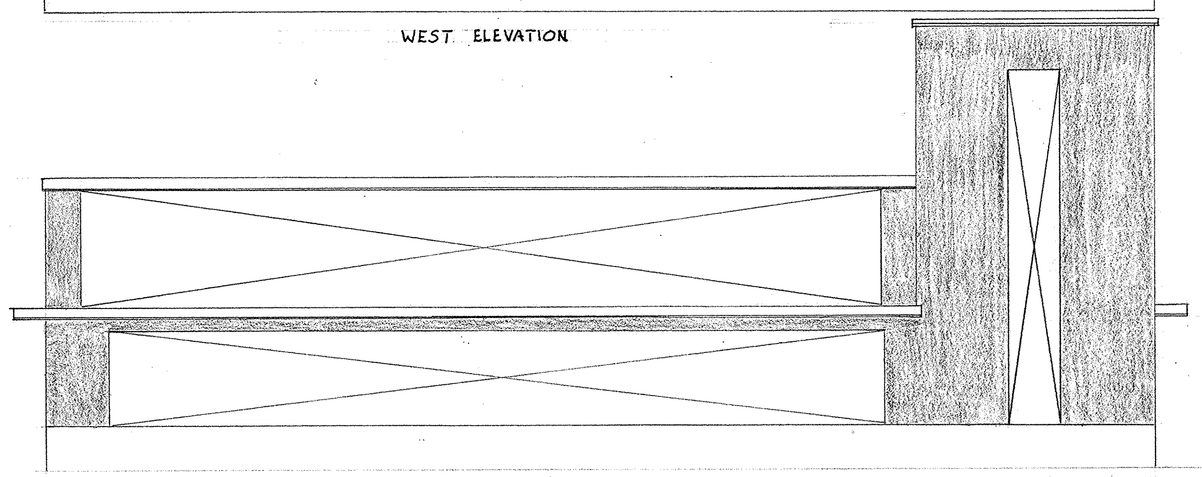
LOCATION PLAN



WEST ELEVATION

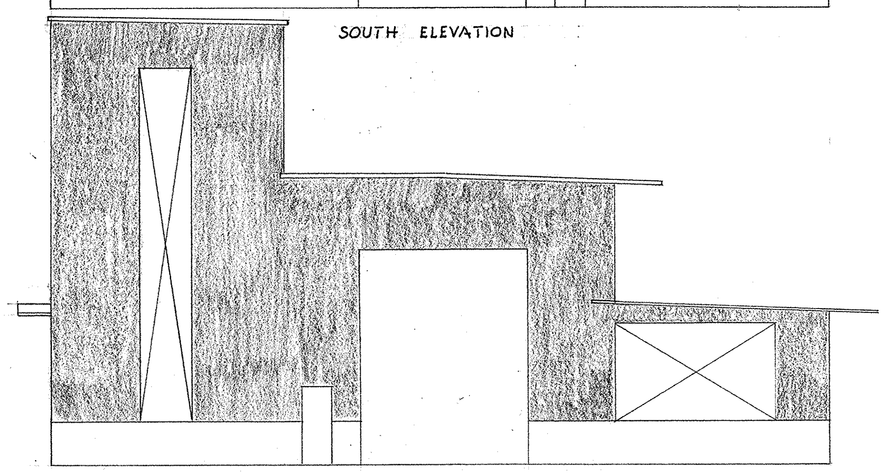


SOUTH ELEVATION



EAST ELEVATION

BLDG #AV33 SCALE 1/8" = 1'-0"



NORTH ELEVATION

THIS AREA IS FOR PROTECTED METAL TO BE CAULKED & FASTENED DOWN ON SOUTH ELEVATION BLDG. AV32

THIS AREA IS FOR PROTECTED METAL TO BE PULLED IN PLACE, CAULKED & FASTENED DOWN ON NORTH ELEVATION BLDG. AV32

ALL PROTECTED METAL TO BE PAINTED

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
OFFICER IN CHARGE OF CONSTRUCTION
GUANTANAMO BAY, CUBA

DES
DRWN C.A.D
TR C.A.D
CHK J.L.N.
SUPV J.L.N.
IN CHARGE S.R.S.
REVIEWED BY S.R.S.

EXTERIOR PAINTING OF PROTECTED METAL SIDING BUILDINGS - AV 32 & AV 33

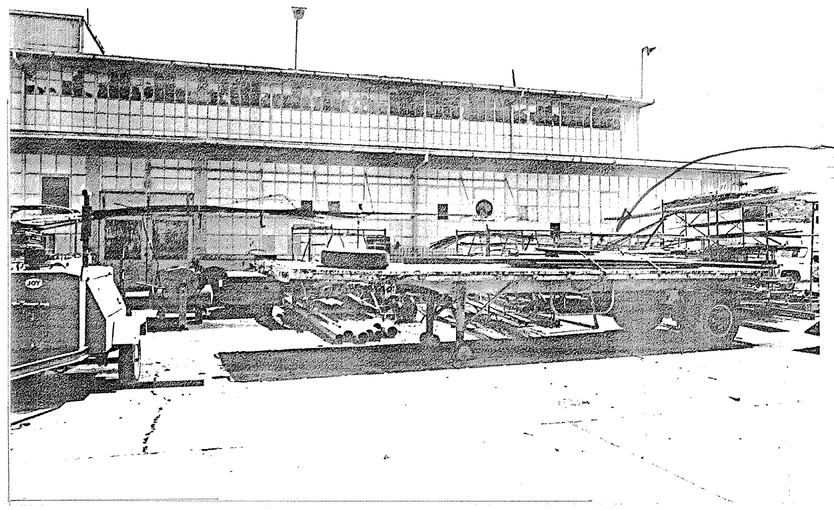
APPROVED G.R. Shepard — OFFICER IN CHARGE OF CONSTRUCTION — DATE 19 Jan '66

SATISFACTORY TO

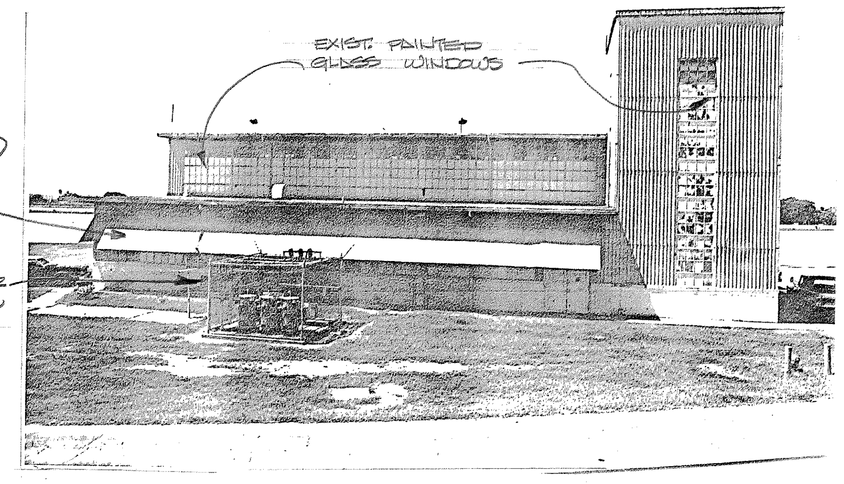
DATE

SCALE AS SHOWN — SPEC 63524/66 (SF)
SHEET 1 OF 1 — NBy 63524/66 (SF)
Y & D DRAWING NO. 888268

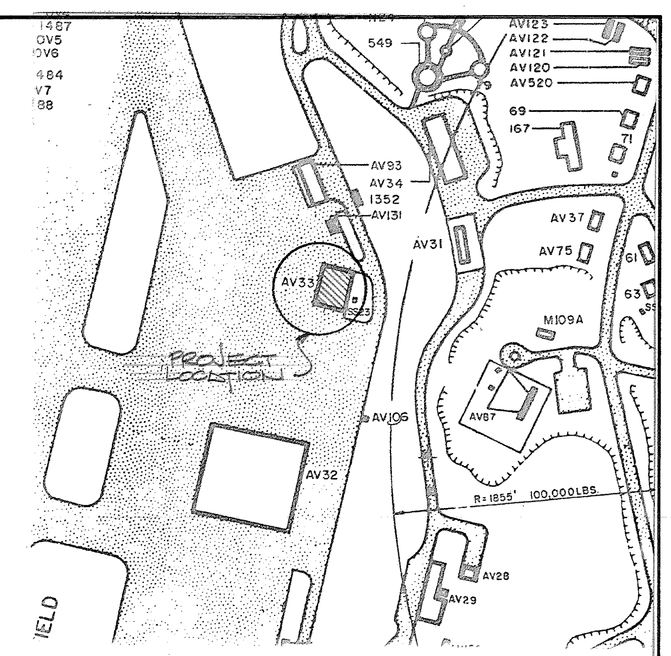
5B-2442-0166



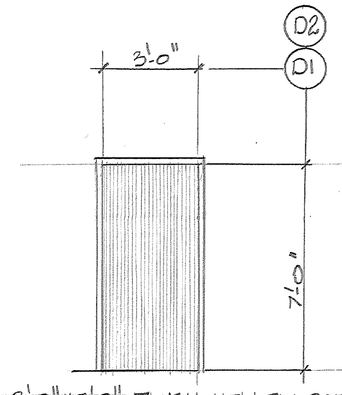
D



A

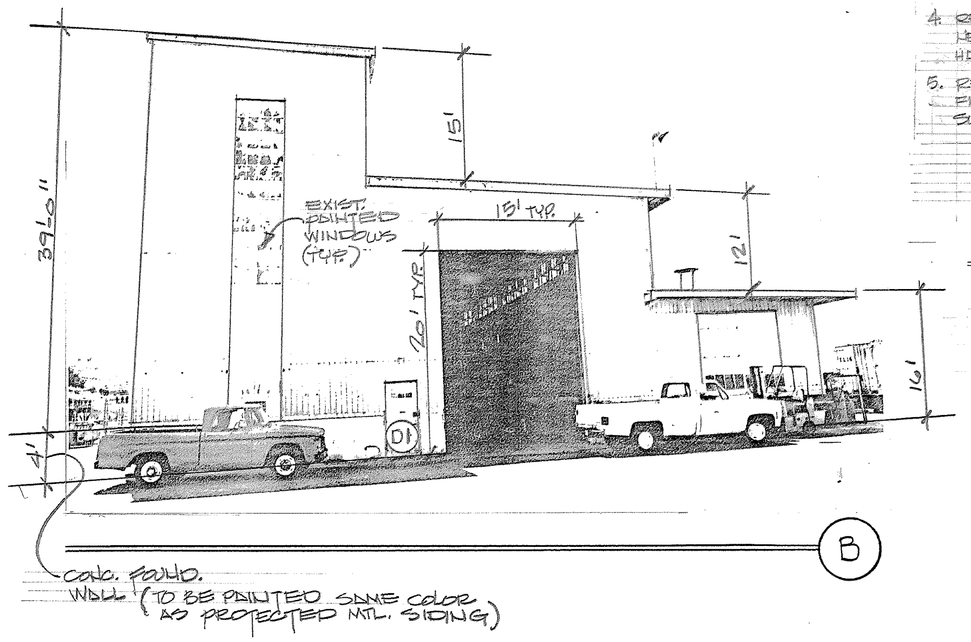


PROJECT LOCATION MAP
1" = 200'



3'-0" X 7'-0" FLUSH HOLLOW CORE METAL DOOR & METAL DOOR FRAME

DOOR SCHEDULE
3/8" = 1'-0"



B

LIST OF REPAIRS AND PAINTING FOR BLDG. AV-33

1. Remove all loose and flaking paint from all protected metal siding, concrete foundation walls, metal doors and door frames, glass windows and any miscellaneous wood trim.

2. Paint all glass windows that have been previously painted. (Polar White)

3. Building tenant to move all building material and equipment an adequate distance away from building, So workers can have access to all concrete and metal siding.

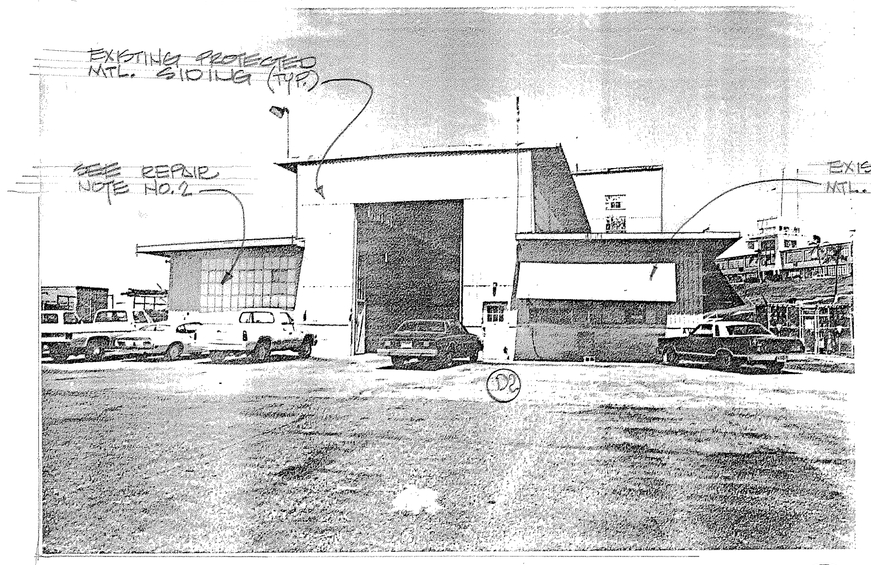
4. REMOVE DOORS NO. D1, D2, DOOR FRAMES & HARDWARE. INSTALL (1) NEW 3'-0" X 7'-0" HOLLOW CORE METAL DOOR, DOOR FRAME, TRIM, & HARDWARE AT DOORS NO. D1, D2.

5. REMOVE ABANDONED BLOWER AND ALL ASSOCIATED TRIM. FILL OPNG. APPROX. 30" X 40" WITH MTL. SIDING TO MATCH EXIST. SURROUNDING. SIDING. SEE PHOTO "A" FOR LOCATION

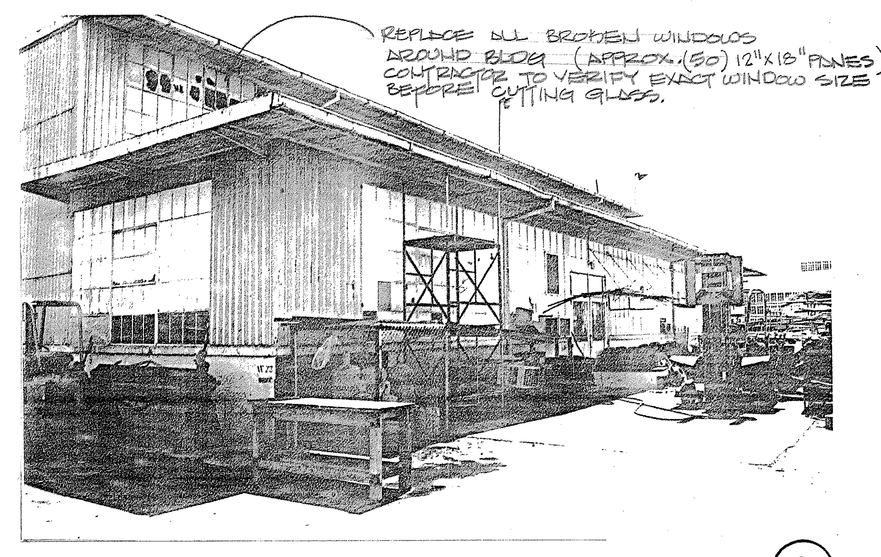
COLOR SCHEDULE FOR BLDG. NO. AV-33

A. USE FEDERAL STANDARD 595 NO. 27875 (POLAR WHITE) ON ALL EXPOSED BUILDING SURFACES AND ALL WALL MOUNTED ELECTRICAL CONDUITS AND PLUMBING PIPES

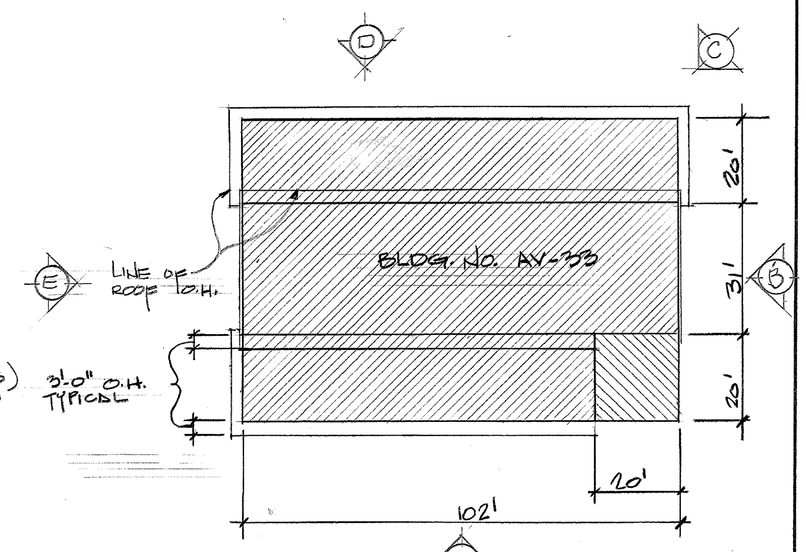
B. USE FEDERAL STANDARD 595 NO. 24272 (GREEN) ON BOTH FACES AND ALL EDGES OF ALL EXTERIOR PERSONNEL ENTRANCE DOORS.



E



C



KEY PLAN
1" = 20'

ER5-182

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
2	AS-BUILTS	JWB EA'		JW 1-91

REVISIONS

DES EV IRVING
DRWN EV IRVING
CHK TERRY RILEY
SUPV TERRY RILEY
ENG OFF [signature]
SATISFACTORY TO [signature]
DATE 3/3/86
APPROVED [signature]
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

EXTERIOR REPAIRS VARIOUS BLDG'S
LEEWARD POINT AND MAINSIDE

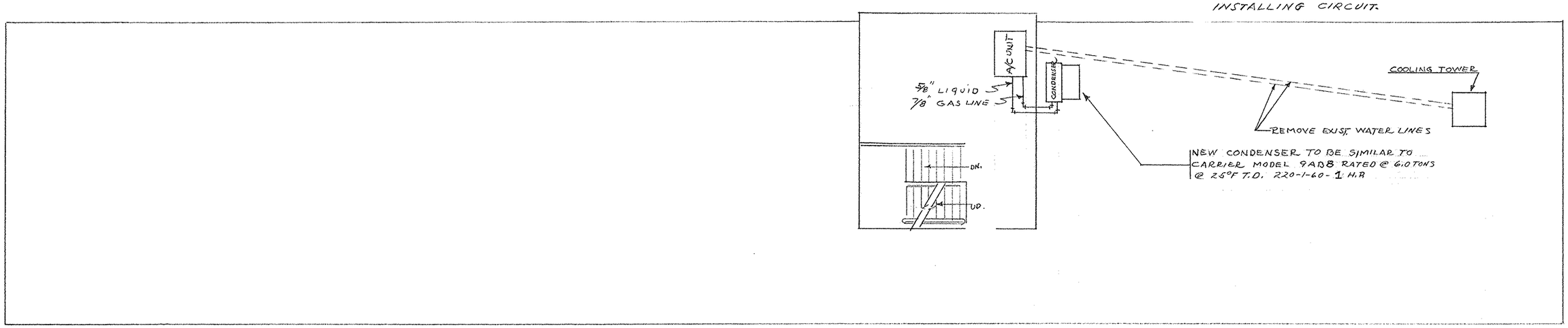
BUILDING NO. AV-33

SIZE F | CODE IDENT NO. | PWD DRAWING NO. 4116626
SCALE: AS NOTED | SHEET 3 OF 45

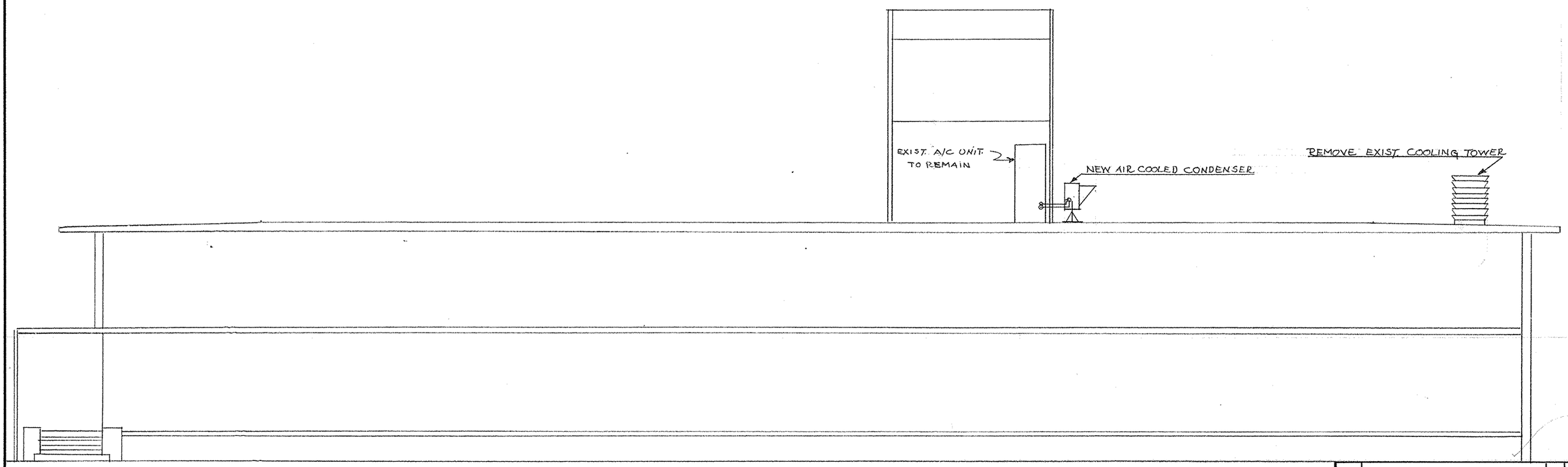
CONTRACT NO. N62470-86-C-7778

ELECTRICAL NOTES:

DISCONNECT EXISTING MOTOR CIRCUIT AT COOLING TOWER AND RECONNECT TO NEW CONDENSER MOTOR. IF MOTORS ARE NOT THE SAME SIZE CHECK WITH PWC DESIGN BEFORE INSTALLING CIRCUIT.



ROOF PLAN



ELEVATION

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 8M-1891-1163

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES DAF
DRWN
TR
CHK
SUPV
IN CHARGE
REVIEWED BY

COOLING TOWER REPLACEMENT
AV-34
N.A.S. ADMIN. BLDG.

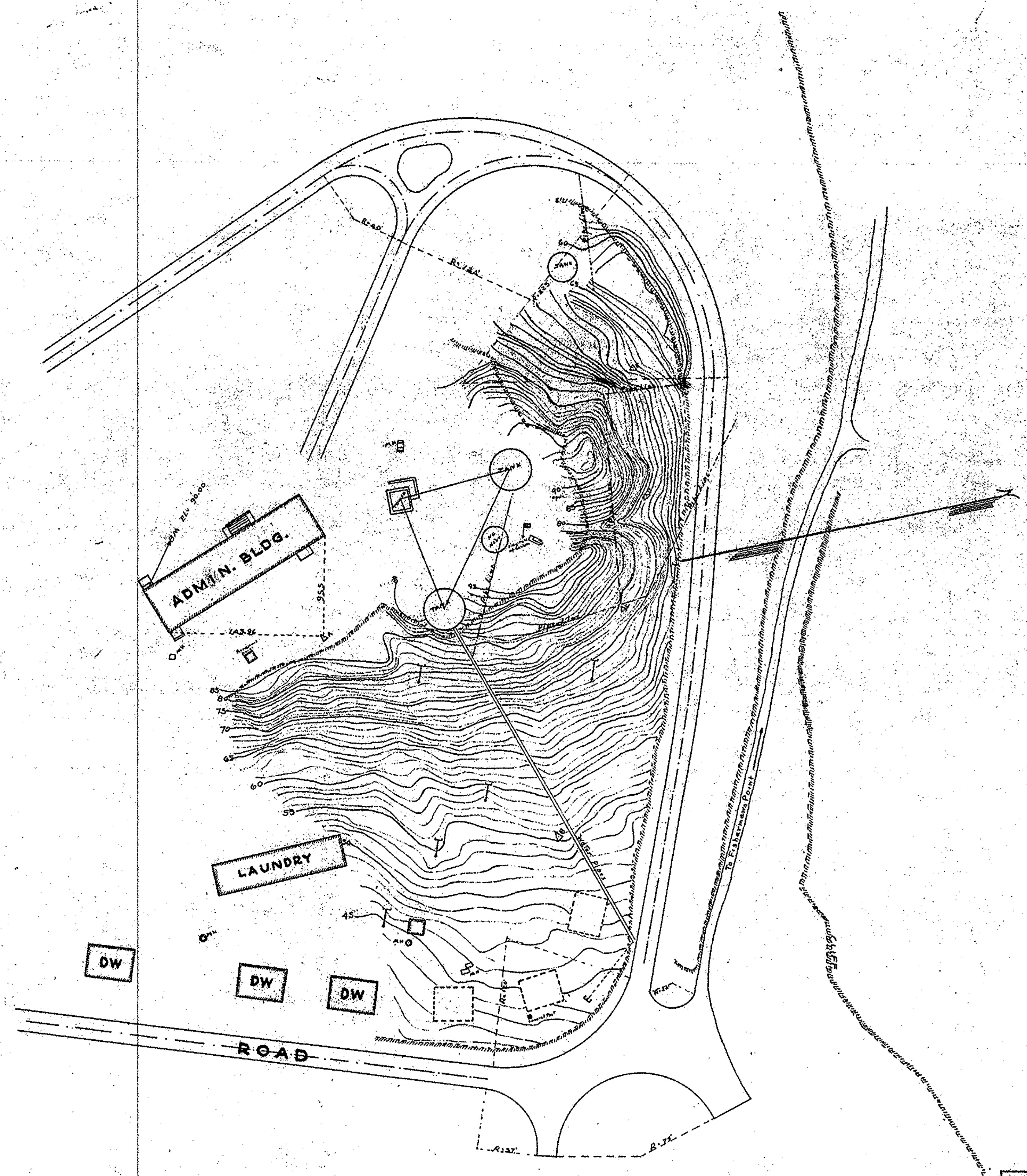
APPROVED — DATE 12/5/63
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO C. B. Ulley
DATE 2 December 1963

SCALE 1/8"=1'-0" SPEC
SHEET ___ OF ___ NO.
Y & D DRAWING NO.

ESR 2106/4

K+E ALBANENE® 71146

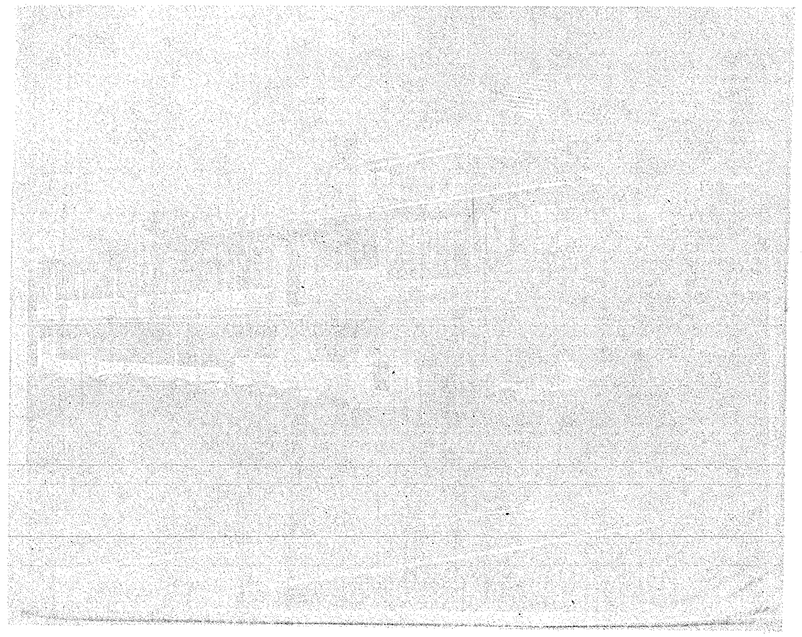


STATION	AZIMUTH	DISTANCE	MAG. BEARING
A	30°55'	292.52	N 40°55' E
B	296°08'	223.50	N 43°52' W
C	292°06'	106.77	N 47°54' W
D	275°57'	123.92	N 84°03' W
E			
FROM "A" TO N.E. CORNER OF ADM. BDG. AZIM. 282°50' DIST. 96.8			

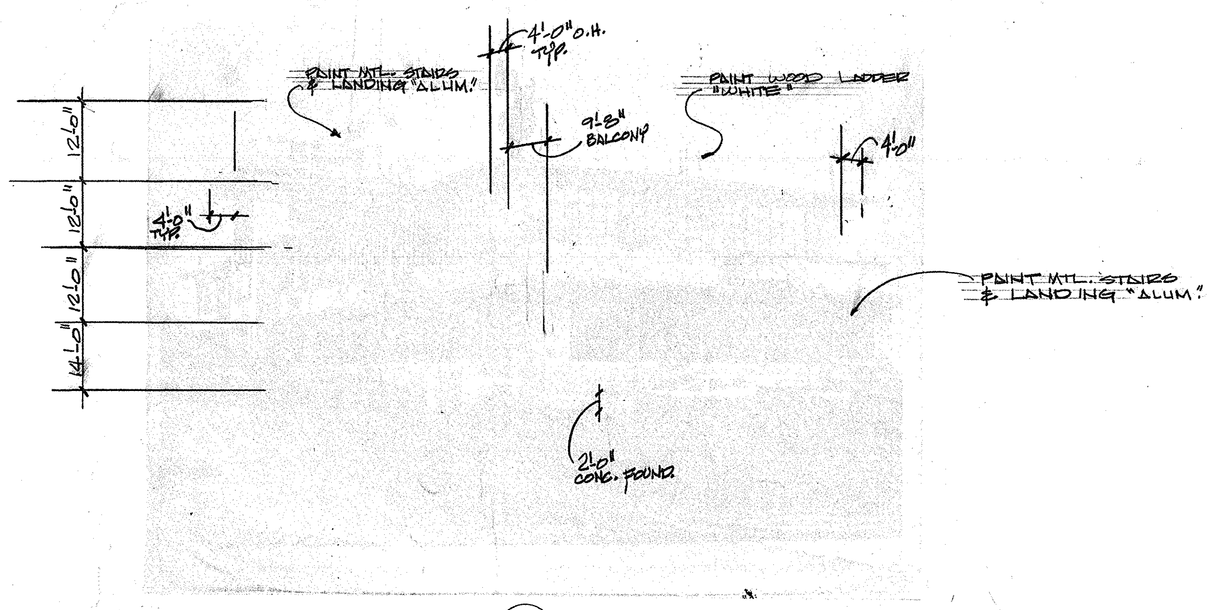
BM. - X ON HIGHEST STEP OF SW. STAIR OF ADM. BDG. - ELEV. 90.00

SCALE 1" = 50'

Drawn by ___ Traced by ___ Checked by HCC Date 10-5-43 REVISIONS	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES SPEC. NO. P.W. DWG. NO.
Y & D Drawing No. 335033	TOPOGRAPHY EAST OF N.A.S. ADMINISTRATION BUILDING FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS APPROVED 9 Oct. 43 BY [signature] RESIDENT OFFICER IN CHARGE APPROVED 10 Oct. 43 BY [signature] OFFICER IN CHARGE	CONTR. NO. NOY 4162 DRAW'G NO. SERIAL A.P. H-23



1



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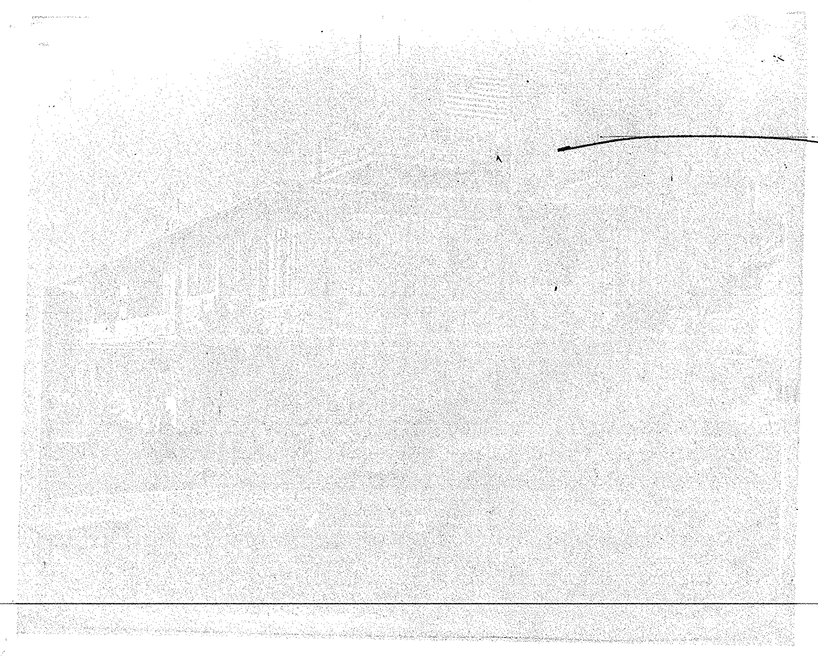
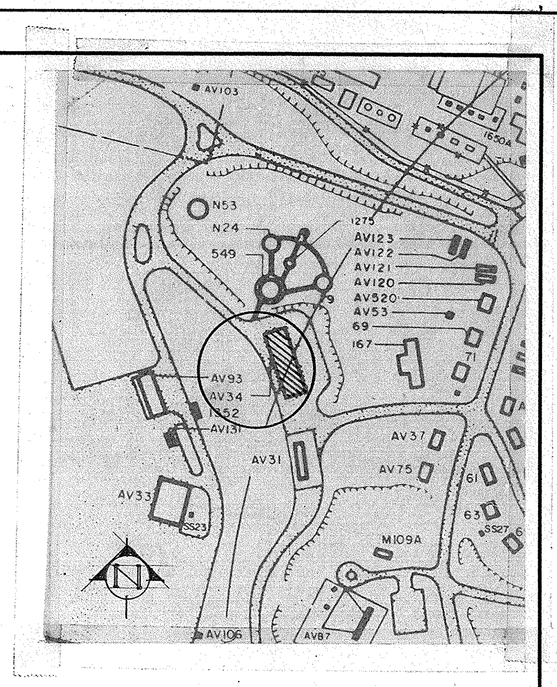
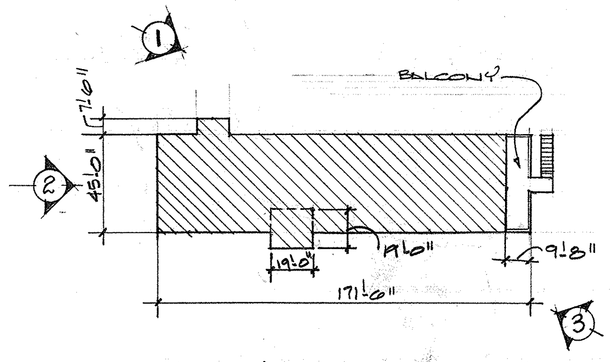


2



LOCATION MAP

1" = 200'-0"



KEY PLAN

1" = 40'-0"

BUILDING AV-34:

1. REMOVE EXISTING, INSTALL NEW WOOD FLOOR GRATE 8'-0" x 34'-6". PRESSURE TREATED 2" x 2" x 8'-0" @ 16" O.C. WITH PRESSURE TREATED 1" x 4" - 34'-6" w/1/2" SPACE BETWEEN 1" x 4"

NOTE: 2" x 2" = 208 LINEAL FT
1" x 4" = 759 LINEAL FT

2. INSTALL 1" x 4" TRIM AROUND WALL MOUNTED A.C. UNITS APPROX. 100 LINEAL FT.

3. REPLACE APPROX. 200 SQ. FT. DAMAGED CEMENT ASBESTOS SHINGLE SIDING.

4. REPLACE APPROX. 150 LINEAL FT. DAMAGED OR DETERIORATED RAIN GUTTER TO MATCH EXISTING.

5. REMOVE LOOSE, FLAKING PAINT FROM ALL WOOD TRIM, OVERHANG, DOORS, WINDOWS, AND WINDOW MULLIONS.

COLOR SCHEME

USE FED. STD. 595 #17178 ON ALL METAL STAIRS AND HANDRAIL.

USE POLAR WHITE: FEDERAL STANDARD 595 #27875 ON ALL THE BUILDING EXCEPT AS NOTED

USE GREEN: FEDERAL STANDARD 595 #24172 ON ALL 1" x 4" WOOD TRIM AROUND WINDOWS & DOORS. DOORS, FACIA, AND WINDOW FRAMES.

BUILDING AV-34
ITEMS TO BE PAINTED:
WINDOWS MULLIONS, WOOD DOORS, DOOR FRAMES & TRIM, LOUVERED VENTS, ELECTRICAL CONDUIT TO MATCH BACKGROUND COLORS, CONCRETE FOUNDATION WALLS, ROOF OVER HANG, FACIA TRIM, HANDRAILS, STAIRS, & LANDING, WOOD ACCESS LADDER, CEMENT ASBESTOS SHINGLE SIDING AND A/C BRACKETS.

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES E.A. IRVING
DRWN IRVING/DEMEREY
CHK
SUPV
ENG OFF 12 Aug 82
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

EXTERIOR REPAIR & PAINTING OF VARIOUS BUILDINGS PHASE II

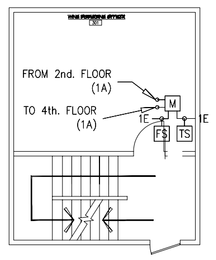
BUILDING AV-34

SIZE F | CODE IDENT NO. | PWD DRAWING NO. 4096254
SCALE: AS NOTED | SHEET 5 OF 57

N62470-83-B-4108

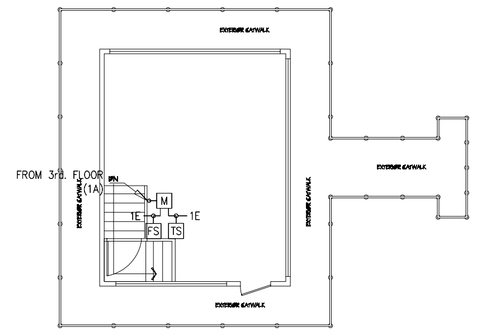
P. 22

AV-34



THIRD FLOOR
1/8" = 1'-0"

NORTH



FOURTH FLOOR
1/8" = 1'-0"

NORTH

FIRE ALARM DEVICE LEGEND

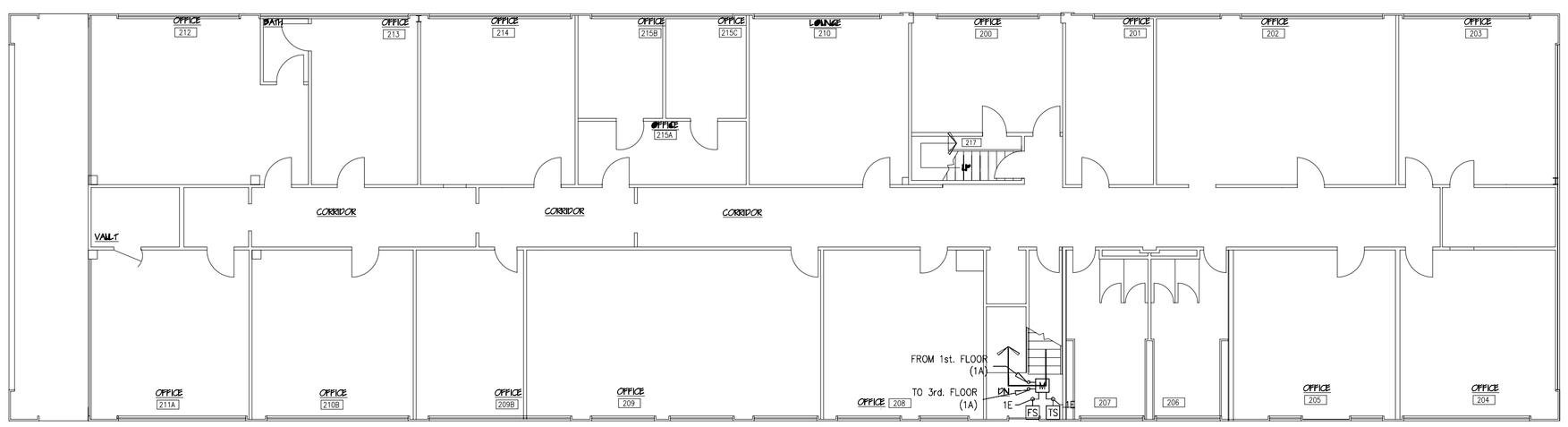
FACP	1	EXISTING FIRE ALARM CONTROL PANEL
XMTR	1	EXISTING RADIO TRANSMITTER
M	8	ADDRESSABLE MONITOR MODULE D = DUAL
FS	4	FLOW SWITCH
TS	7	TAMPER SWITCH

WIRING LEGEND

A – 18/2 FPLR TWISTED SHIELDED JACKETED	ADDRESSABLE LOOP	(RED)
B – 2#14 THHN	INTERFACE WIRING	(RED/BLACK)

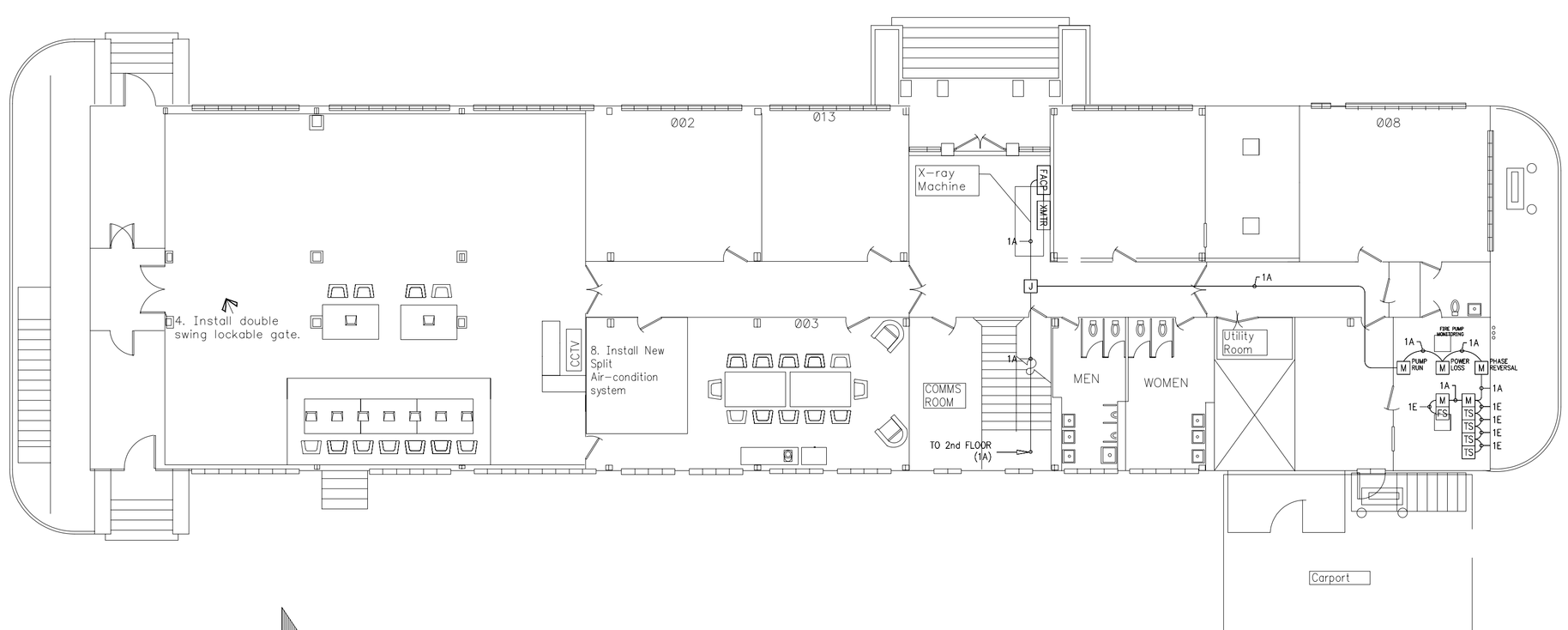
GENERAL NOTES

1. SYSTEM SHALL BE INSTALLED PER NFPA 72, NFPA 101, NFPA 90A, NEC AND ALL OTHER APPLICABLE STATE AND LOCAL CODES.
2. 120 VAC FACP POWER SHALL BE OBTAINED FROM A DEDICATED UNSWITCHABLE SOURCE, AND THE BREAKER SHALL BE PAINTED OR MARKED RED.
3. ALL WIRING SHALL BE IN CONDUIT UNLESS OTHERWISE SPECIFIED.



SECOND FLOOR
1/8" = 1'-0"

NORTH



FIRST FLOOR
1/8" = 1'-0"

NORTH

GRAPHIC SCALE:

1/8"=1'-0" 0' 5' 10' 20' 30'

PWD-11ET-0486-01A

ENGINEER'S SEAL

NO.	DATE	BY	REVISIONS
	08/07/2005		AS-BUILT DRAWING

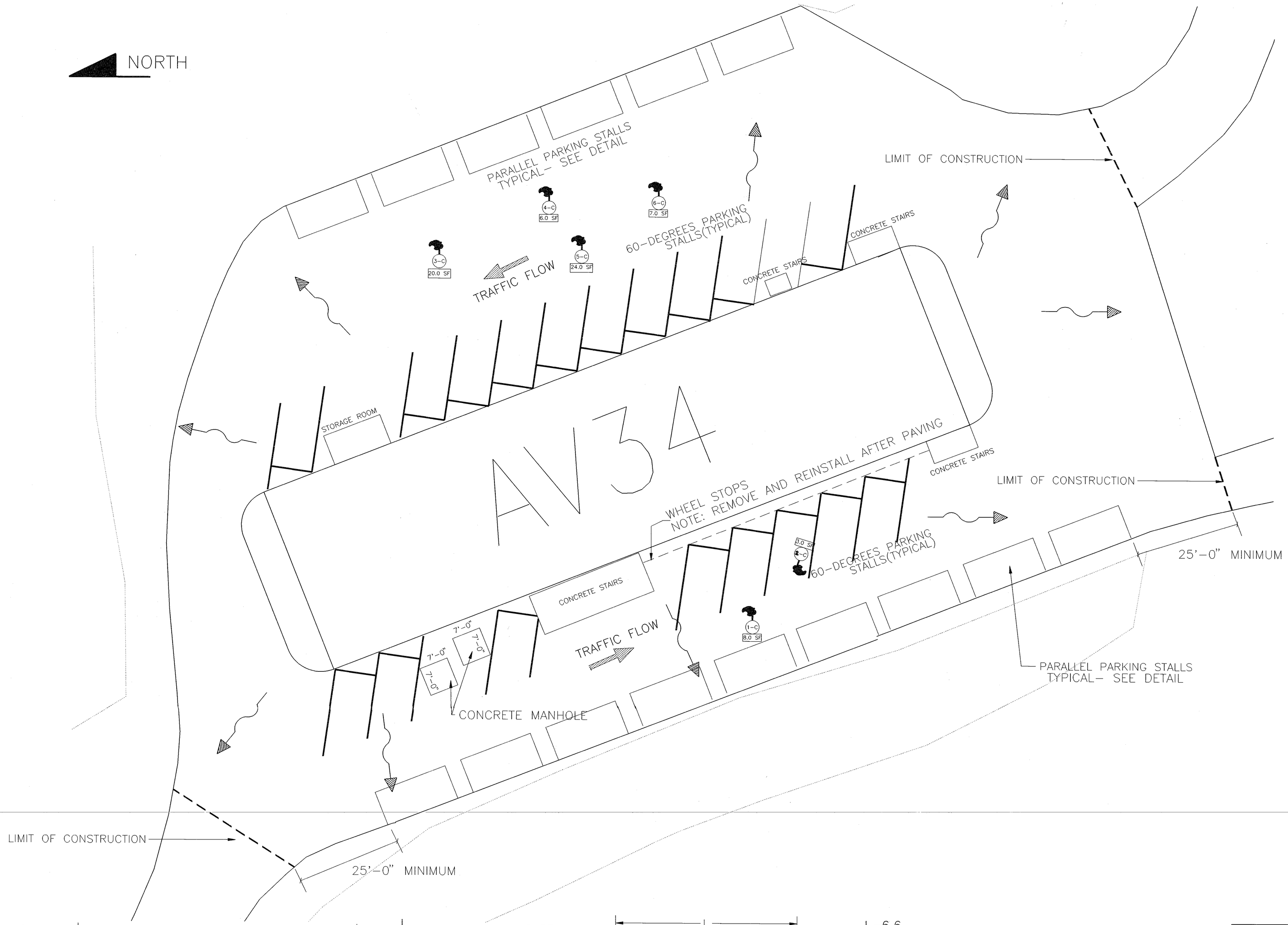
W.W. GAY
FIRE & INTEGRATED SYSTEMS, Inc.
522 STOCKTON STREET
JACKSONVILLE, FLORIDA 32204
Phone : (904) 394 7973
Fax : (904) 394 7261

PROJECT
PUBLIC WORKS DEPARTMENT
BLDG. AV-34 – FIRE ALARM
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

DESCRIPTION:
FIRE DETECTION / FLOOR PLAN DEVICE LAYOUT

Date: APR 20, 2005
Scale: AS NOTED
Drawing No. H-05019-4
Job No. FP-208504
Engineered By C. WALKER
Drawn By A. BUCK
Approved By A. RATAJCZYK
Sheet No. 1 OF 2

DWG: [X:\CLIENT\Drafting\Archives\2005 Drawings\av-34.dwg]
COPY ON: [Apr 20, 2005 - 11:44am]



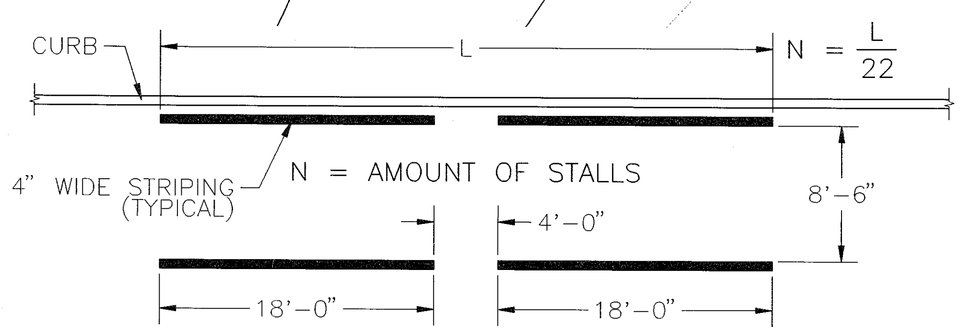
LEGEND:

PROPOSED RUNOFF WATER DIRECTION

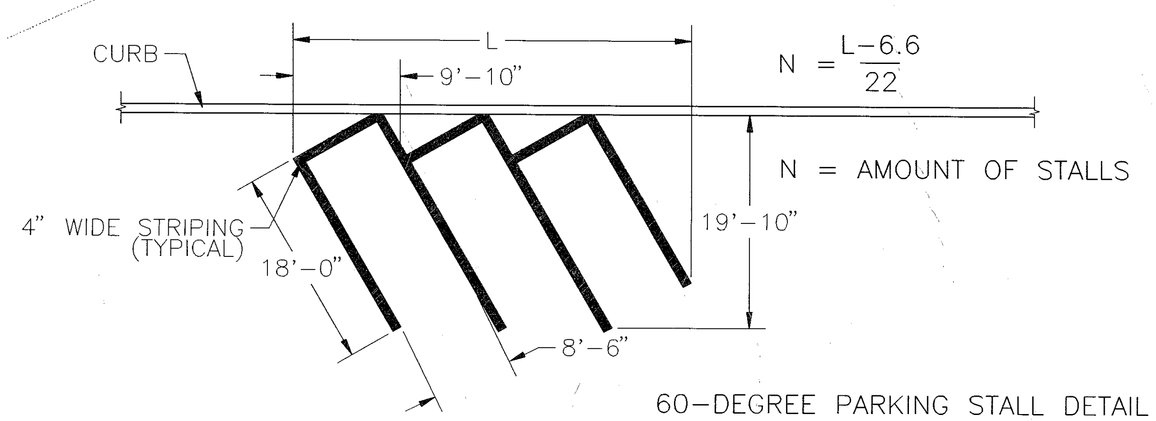
POTHOLES TO BE REPAIRED

GENERAL NOTES:

1. OVERLAY PARKING LOT (AREA-22,500 S.F.) WITH 2" THICK MINIMUM ASPHALT PAVEMENT MATERIAL ACCORDING TO REPAIR DETAIL "A".
2. REPAIR SIX(6) POTHOLES ACCORDING TO TYPE "C" PATCH.
3. NEW CONCRETE PAVEMENT MATERIAL SHALL MEET EXISTING ELEVATIONS OF SURROUNDING PAVEMENT.
4. A TOTAL OF APPROXIMATELY 2,651 LF OF PARKING STRIPING SHALL BE PROVIDED BY THE GOVERNMENT.
5. PROVIDE ADEQUATE DRAINAGE (AWAY FROM BUILDING) TO THE FINISH PAVEMENT SURFACE.



PARALLEL PARKING STALL DETAIL



60-DEGREE PARKING STALL DETAIL

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES ED BARRERAS — DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
DRWN EA1 RIVERA III
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE 4/27/95
APPROVED

PUBLIC WORKS DEPARTMENT

PAVEMENT REPAIRS TO BLDG. AV-34

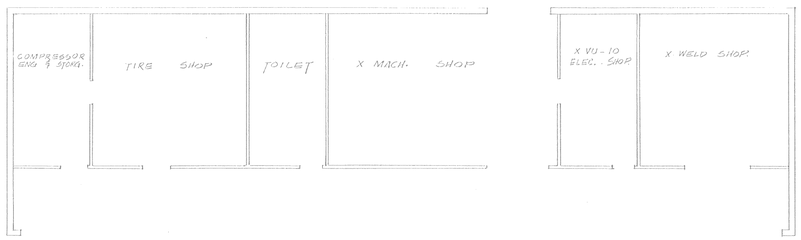
"SITE PLAN AND CONSTRUCTION DETAILS"

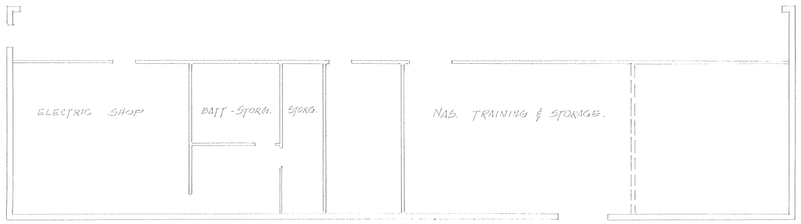
SIZE F

DRAWING NUMBER 8M-3424-0495

SCALE: NTS — SHEET 1 OF 1

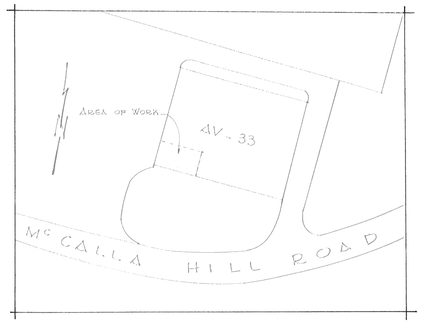
CONTRACT NO. N62470-95-C-2274 ENCL (1)





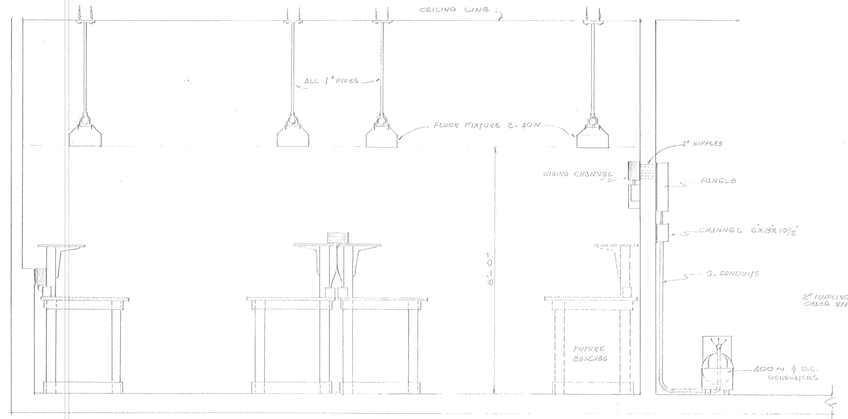
FLOOR PLAN OF BLDG. # AV-33

SC: 1/8" = 1'-0"



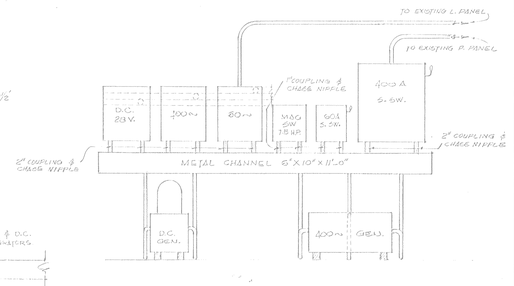
LOCATION PLAN

SC: 1" = 50'-0"



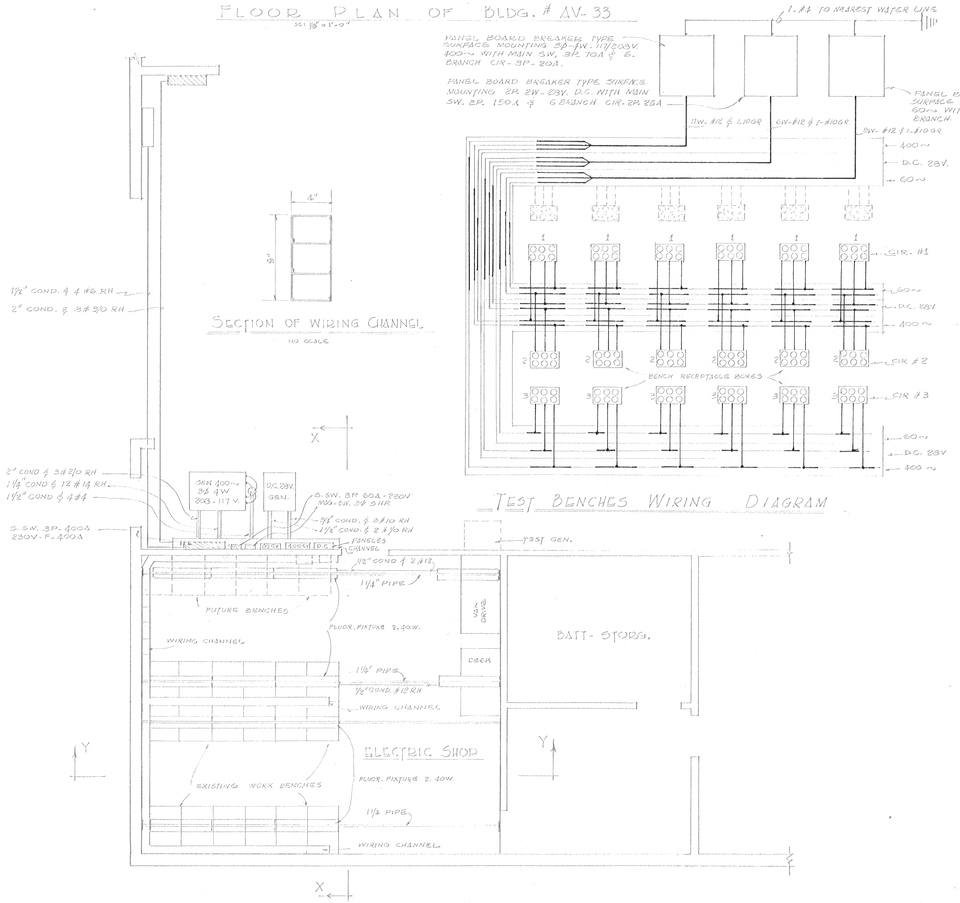
SECTION "X-X"

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



MOUNTING GEN. SW'S PANELS DETAIL

NO SCALE



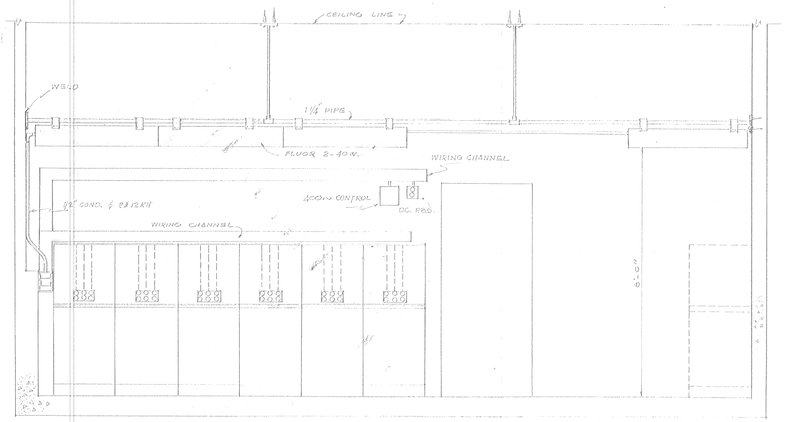
SECTION OF WIRING CHANNEL

NO SCALE

TEST BENCHES WIRING DIAGRAM

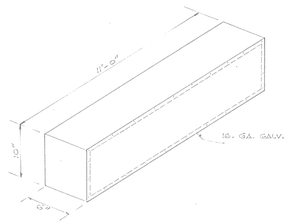
PARTIAL FLOOR & ELECTRIC PLAN

SC: 1/8" = 1'-0"



SECTION Y-Y

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



METAL CHANNEL DETAIL

NO SCALE

NOTE:

D.C. 28V. AND 400~ GENERATORS FURNISHED BY NAS.

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 58-1091-0560

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS

PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES A. BARJA
DRWN M. BARBOSA
TR
CHK A. BARJA
SUPV
IN CHARGE
REVIEWED BY

NAVAL AIR STATION
PROVIDE SECONDARY POWER FACILITIES, ELECTRIC SHOP, AIRCRAFT MAINTENANCE DEPARTMENT, McCALLA HILL FIELD

APPROVED R. B. Thomas Jr. — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 6-14-60

SATISFACTORY TO W. B. Lanning

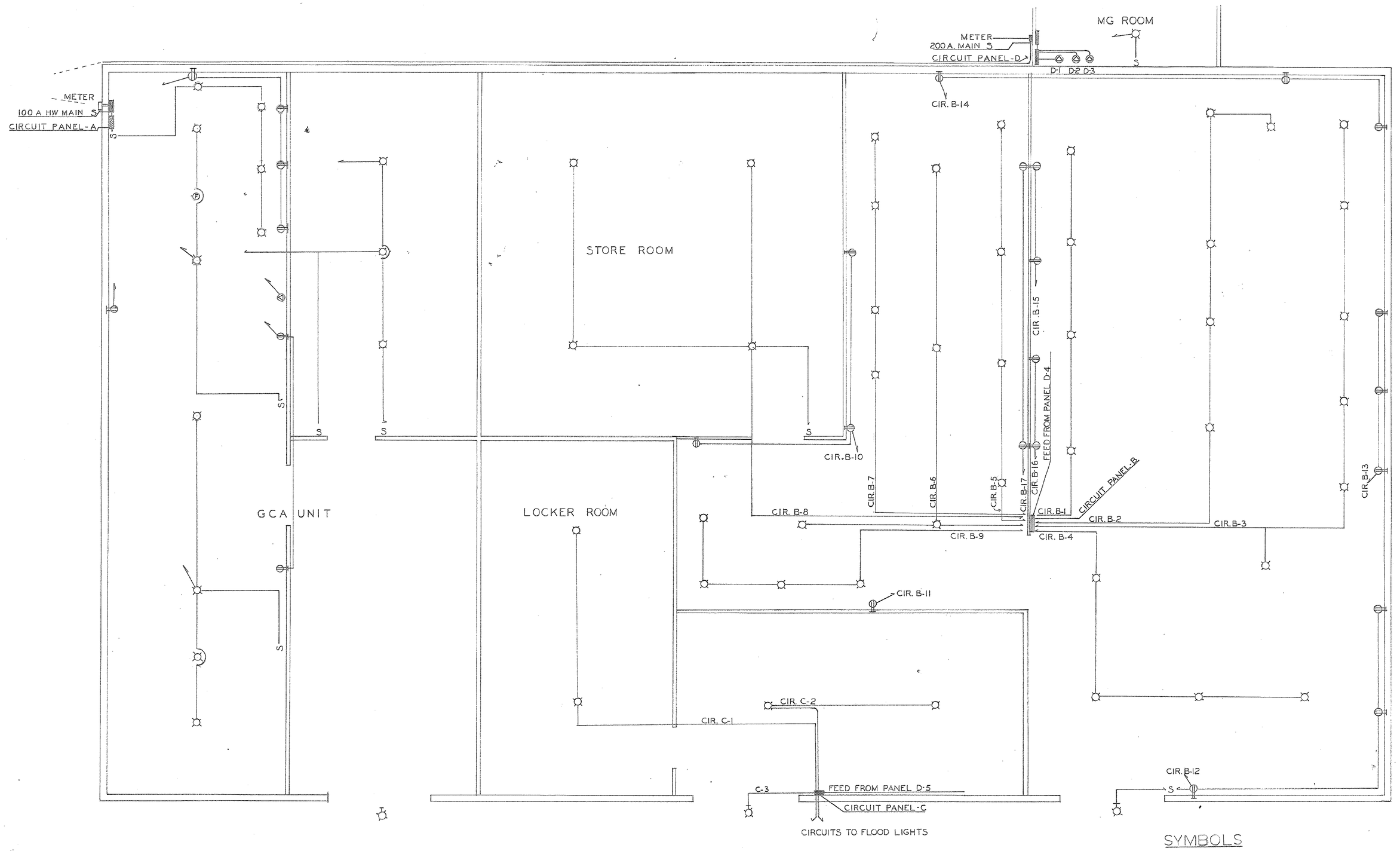
DATE 9 June 1960

SCALE AS SHOWN — SPEC

SHEET 1 OF 1 — NBy

Y & D DRAWING NO.

K+E ALBANENE 1881 TRACING PAPER 45184



ELECTRICAL PLAN

SYMBOLS

= DOUBLE CONVENIENCE OUTLET

= OVERHEAD LIGHT FIXTURE WITH ROUND REFLECTOR

REVISION	DATE	APPD	DESCRIPTION	BY

P. W. DRAWING NO. 4B-517-0349

DES
DRWN TR.
CHK
SUPV
IN CHARGE

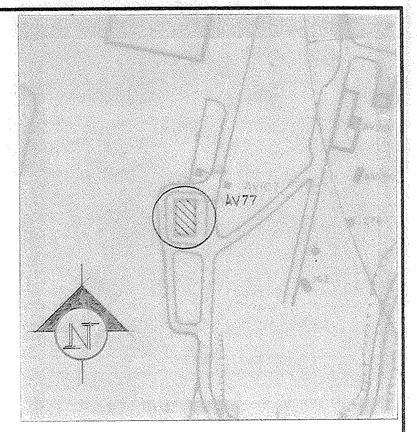
U. S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA

ELECTRICAL PLAN
BUILDING # AV-77

APPROVED
ASST. PUBLIC WORKS OFFICER
DATE 3/12/49

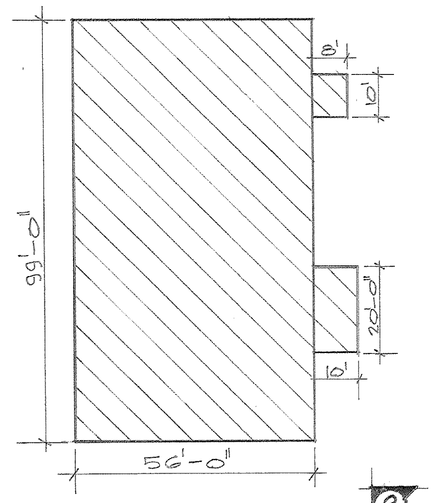
SATISFACTORY TO

SCALE: 1/4" = 1'-0"
SPEC
SHEET OF NO.
Y & D DRAWING NO.



LOCATION MAP
SCALE: 1" = 200'

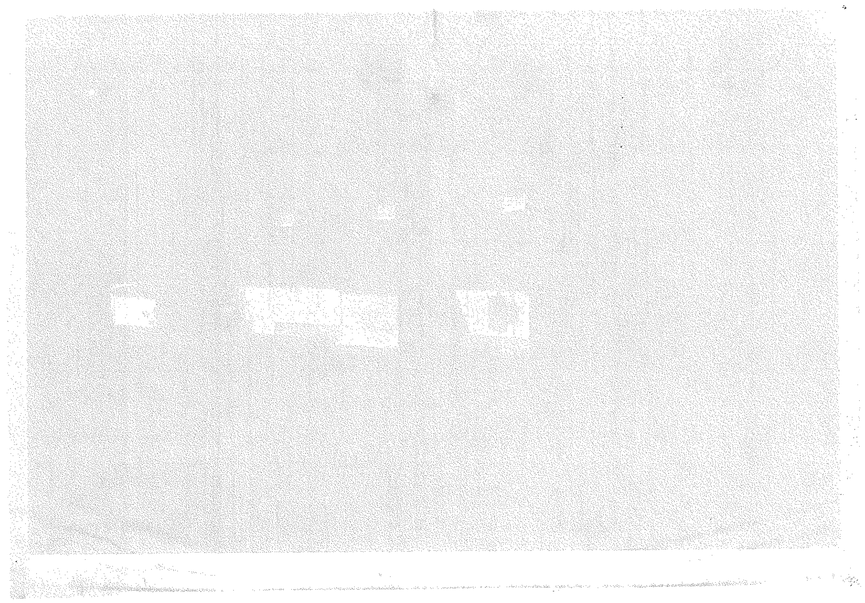
③



①

②

KEY PLAN
SCALE: 1" = 20'-0"



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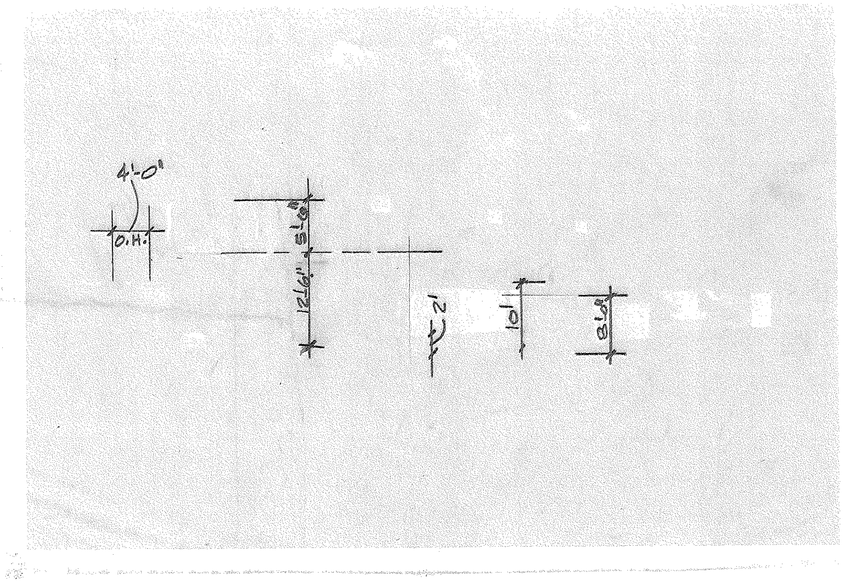

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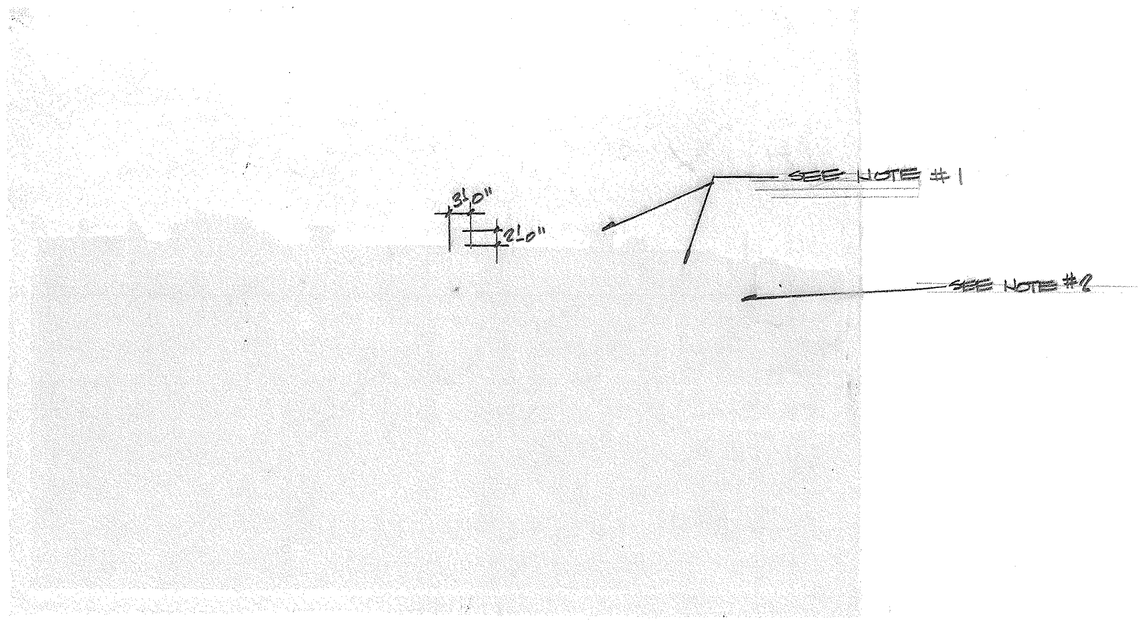


①

BUILDING AV-77:

1. SANDBLAST CORRUGATED METAL ROOF BACK TO BARE METAL, APPROX. 7,753 SQ. FT.
2. REMOVE ALL LOOSE AND FLAKING PAINT FROM CONCRETE FOUNDATION, LAPPED WOOD SIDING, TRIM, AND OVERHANG.

COLOR SCHEME

1. USE POLAR WHITE: FEDERAL STANDARD 595 #27875 ON ALL THE BUILDING EXCEPT THE ROOF
2. USE FEDERAL STANDARD 595 # 17178 ON ENTIRE CORRUGATED METAL ROOF AREA

BUILDING AV 77

ITEMS TO BE PAINTED: LAPPED WOOD SIDING, CORRUGATED METAL ROOF, ROOF OVER HANG, WOOD DOORS, DOOR FRAMES & TRIM, LOUVERED VENTS, ELECTRICAL CONDUIT TO MATCH BACKGROUND COLOR, CONCRETE FOUNDATION WALLS, METAL OR WOOD SUNSHADE, FACIA TRIM, AND ROOF DORMERS (COMPLETE)

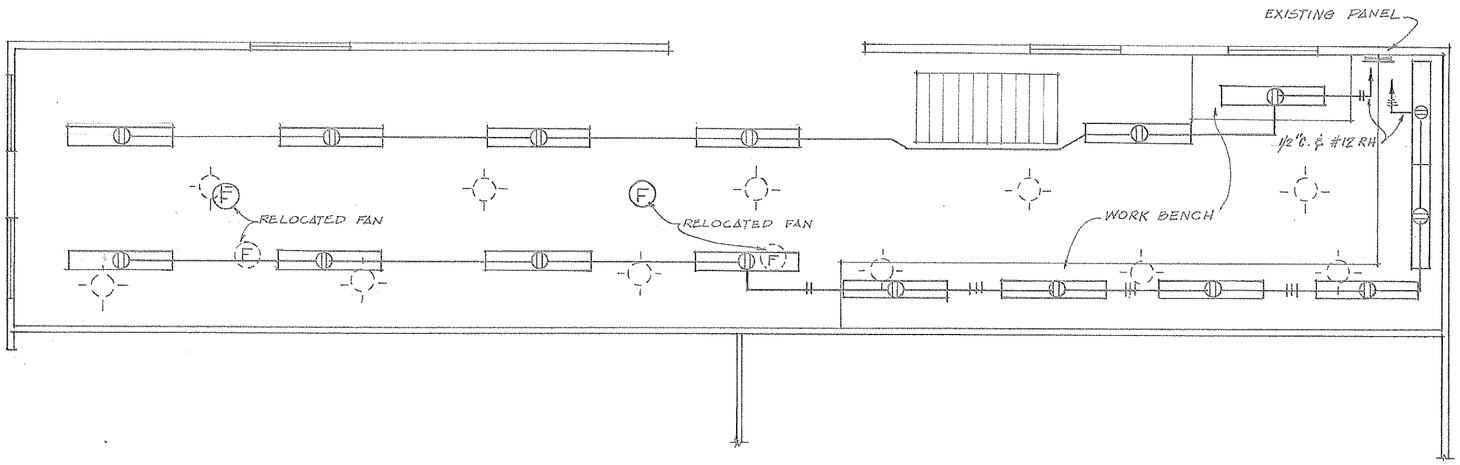
SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

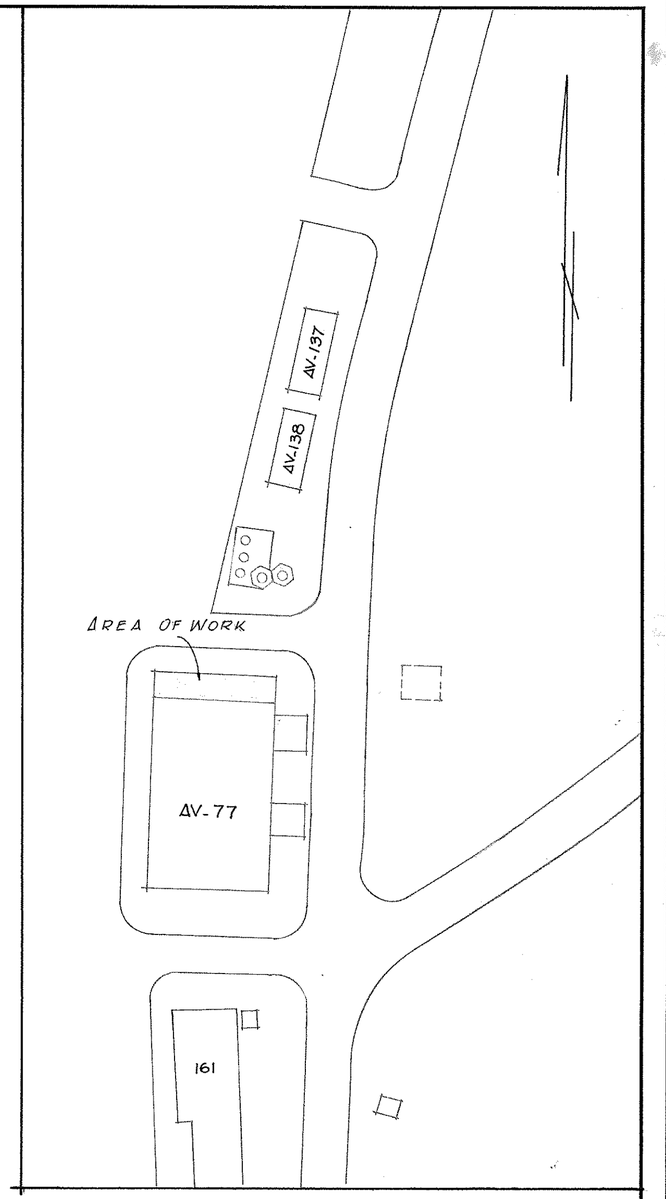
DES E. IRVING	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
DRWN Somerey / IRVING	PUBLIC WORKS DEPARTMENT
CHK	U. S. NAVAL STATION GUANTANAMO BAY, CUBA
SUPV	EXTERIOR REPAIR & PAINTING OF VARIOUS BUILDINGS PHASE II
ENG OFF 12 Aug 83	
SATISFACTORY TO	
DATE	BLDG. AV-77
APPROVED J.W. Thomas PUBLIC WORKS OFFICER	SIZE F · CODE IDENT NO. · PWD DRAWING NO. 40962160 · SCALE: AS NOTED · SHEET 11 OF 57

N62470-83-B-4108

P22



PART FLOOR PLAN OF AV. 77
(ELECTRIC PLAN)
SCALE 1/4 = 1'-0"



LOCATION PLAN
SC: 1" = 50'-0"

NOTE:
REMOVE EXIST. INCANDESCENT FIXTURES
& REPLACE WITH FLUORESCENT FIXTURES 2.40W
HANGING TYPE, INSTALL RECEPTACLE FOR EACH.
HANG FIXTURES 7'-6" HIGH FROM - FINISHED FLOOR

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. SM-1291-1060

DES BARJA
DRWN BARJA
TR
CHK BARJA
SUPV
IN CHARGE
REVIEWED BY

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

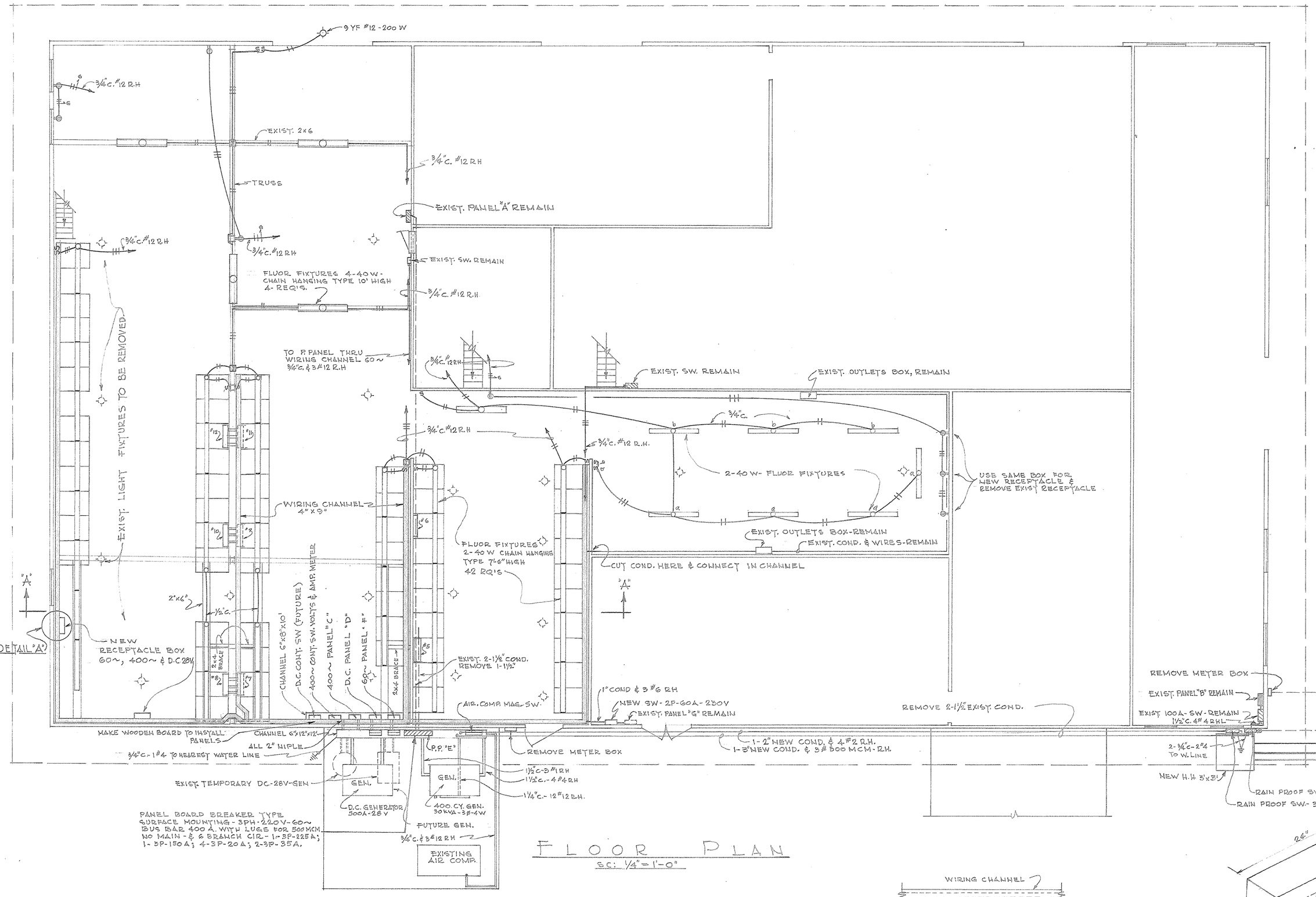
IMPROVEMENT OF THE LIGHTING SYSTEM IN SECTION OF BLDG. AV.77

APPROVED — COMMANDING OFFICER, PUBLIC WORKS CENTER — DATE 10-18-60

SATISFACTORY TO
DATE

SCALE AS SHOWN | SPEC
SHEET ___ OF ___ NBy ___
Y&D DRAWING NO. ___

E 196L TRACING PAPER 65134

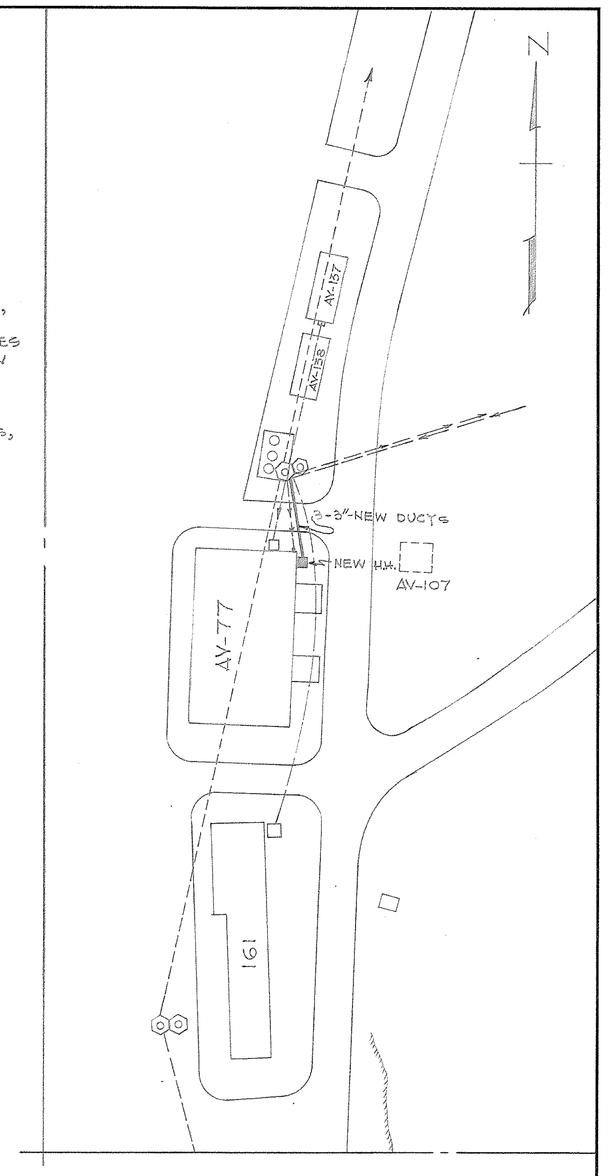


FLOOR PLAN
SC: 1/4" = 1'-0"

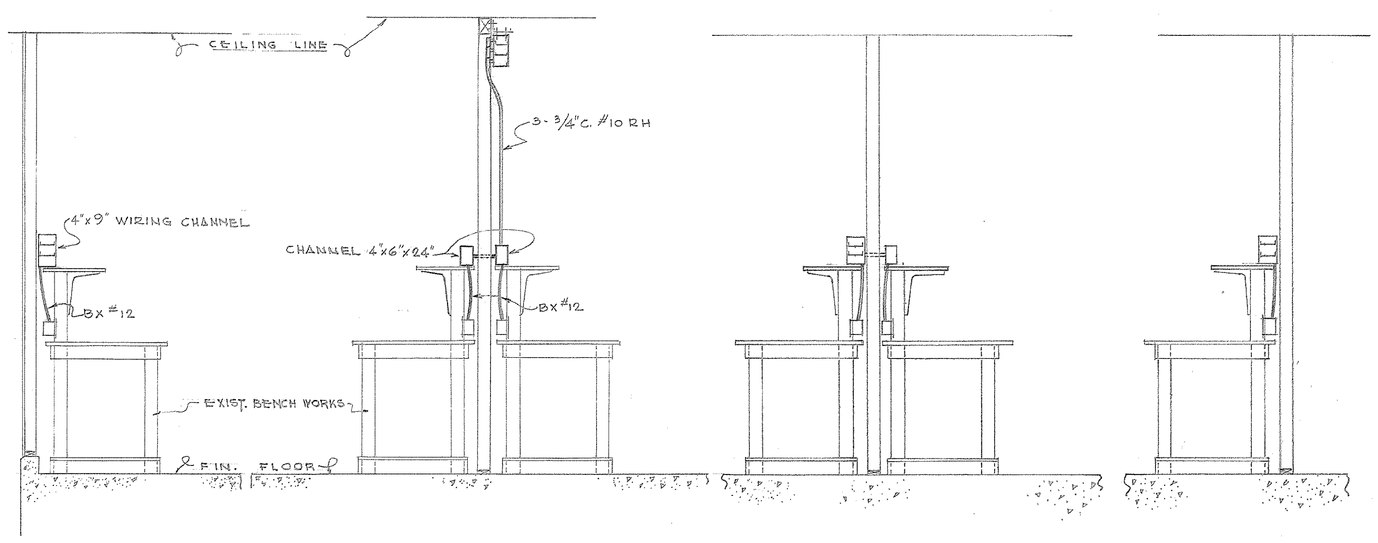
NOTES:

1- REMOVE ALL EXISTING LIGHT, FIXTURES, SWITCHES, PANELS, EXCEPT PANEL 'A'; ALL BENCH WIRING & ALL ELECTRIC LINES NOT IN USE & REWIRE NEW INSTALLATION ACCORDING WITH PLAN.

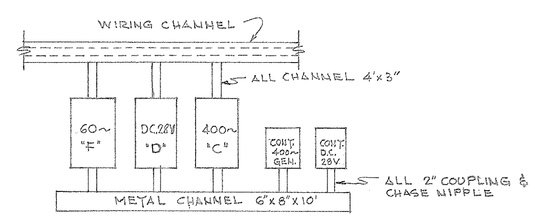
2- PROVIDE RECEPTACLE BOXES, 400~, 28 V DC, 60~ AC, IN BENCHES WHICH LACK THEM



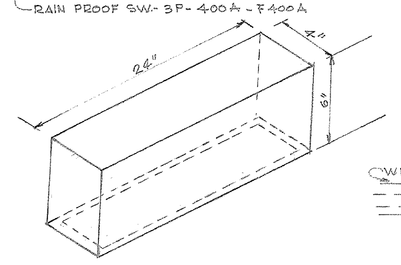
LOCATION PLAN
SC: 1" = 50'



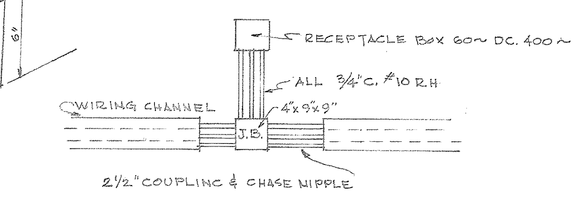
SECTION "A-A"
SCALE: 1/2" = 1'-0"



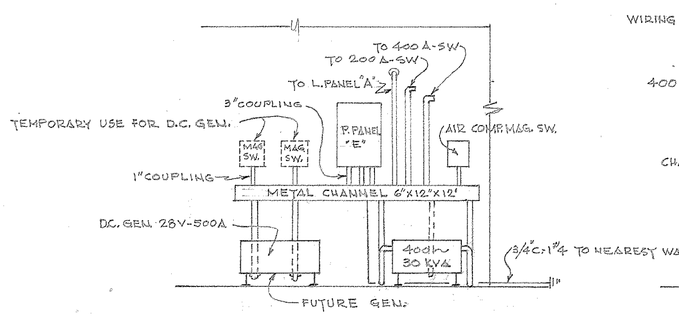
MOUNTING PANEL & SW'S DETAIL
NO SCALE



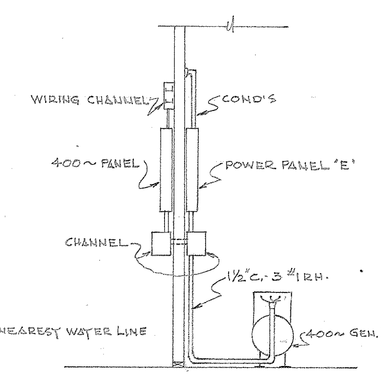
CHANNEL DETAIL



DETAIL "A"
NO SCALE



MOUNTING GEN, SW'S & P.P. DETAIL
NO SCALE



SIDE VIEW
NO SCALE

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 58-993-0359-1

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES A. Barry
DRWN H. Schmidt
TR
CHK A. Barry
SUPV
IN CHARGE
REVIEWED BY

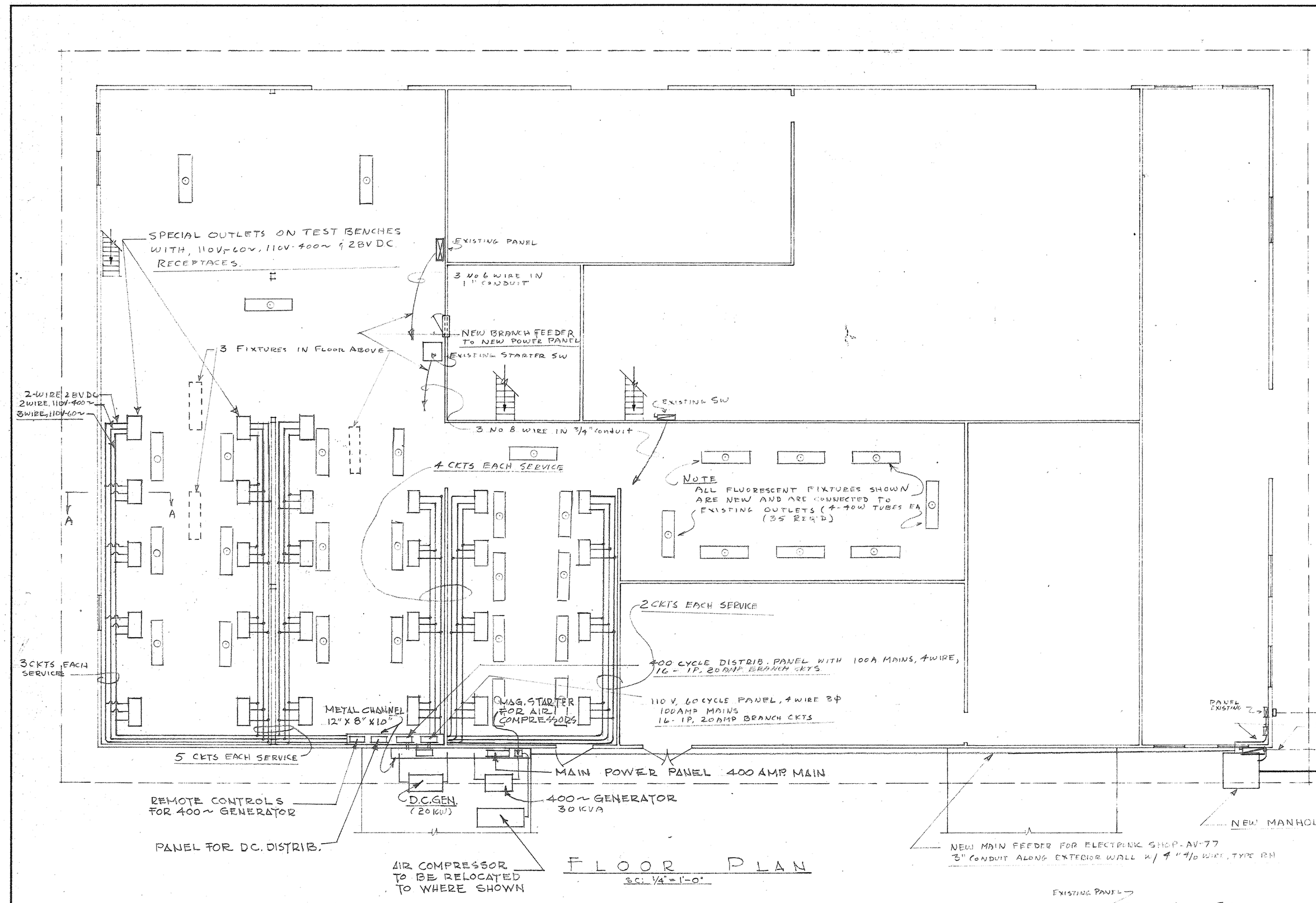
NAVAL AIR STATION
NEW ELECTRICAL DISTRIBUTION SYSTEM
IN ELECTRONIC SHOP VU-10
BLDG-AV-77

APPROVED W. J. Thompson DATE 3-12-59
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO
DATE 3/10/59

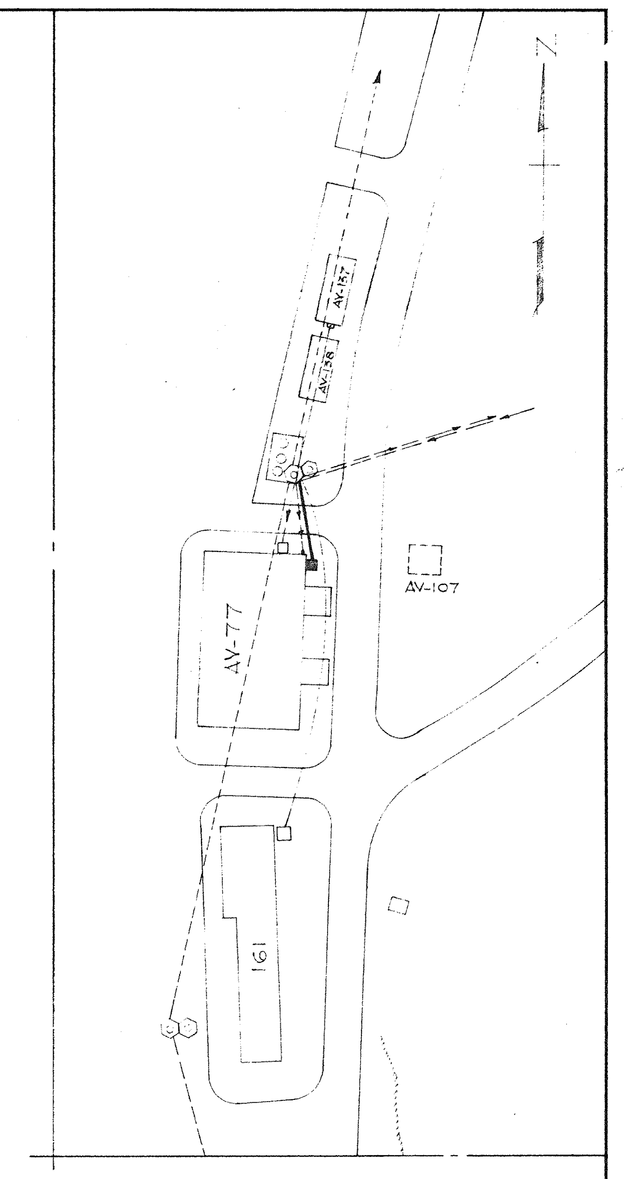
SCALE AS SHOWN | SPEC
SHEET 1 OF 2 | NBy
Y & D DRAWING NO.

58-993-0359-1



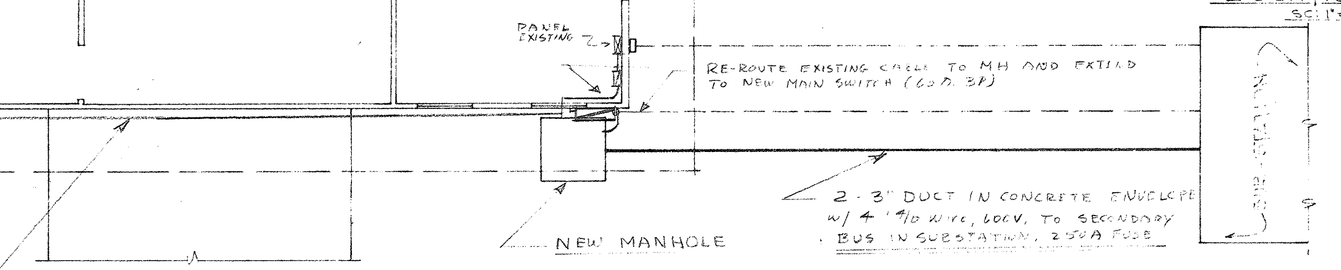
FLOOR PLAN

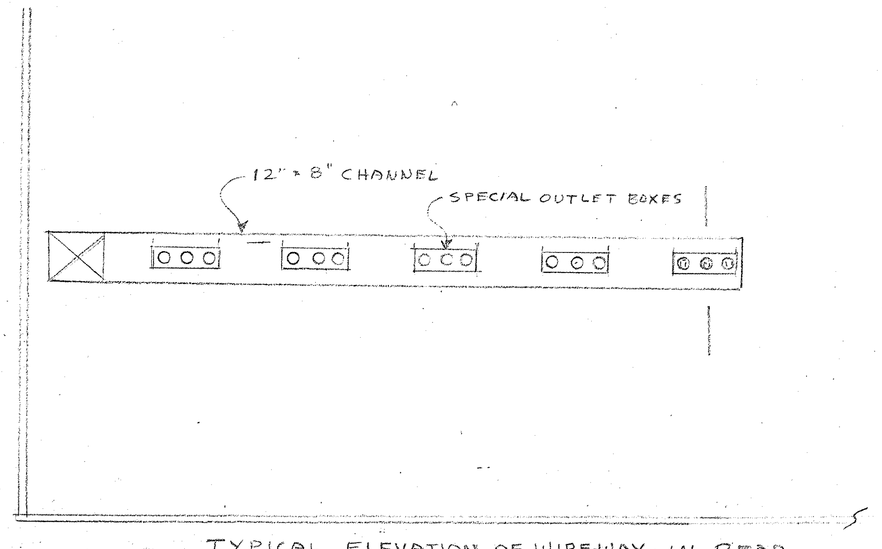
S.C.: 1/4" = 1'-0"



LOCATION PLAN

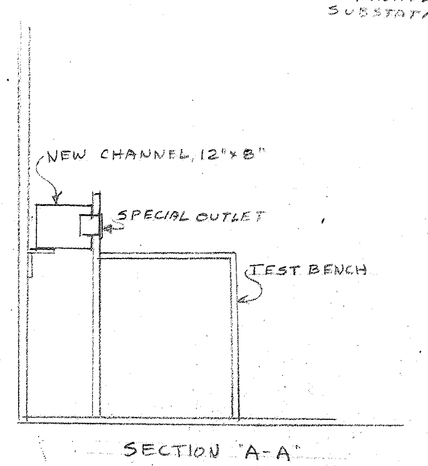
S.C.: 1" = 50'



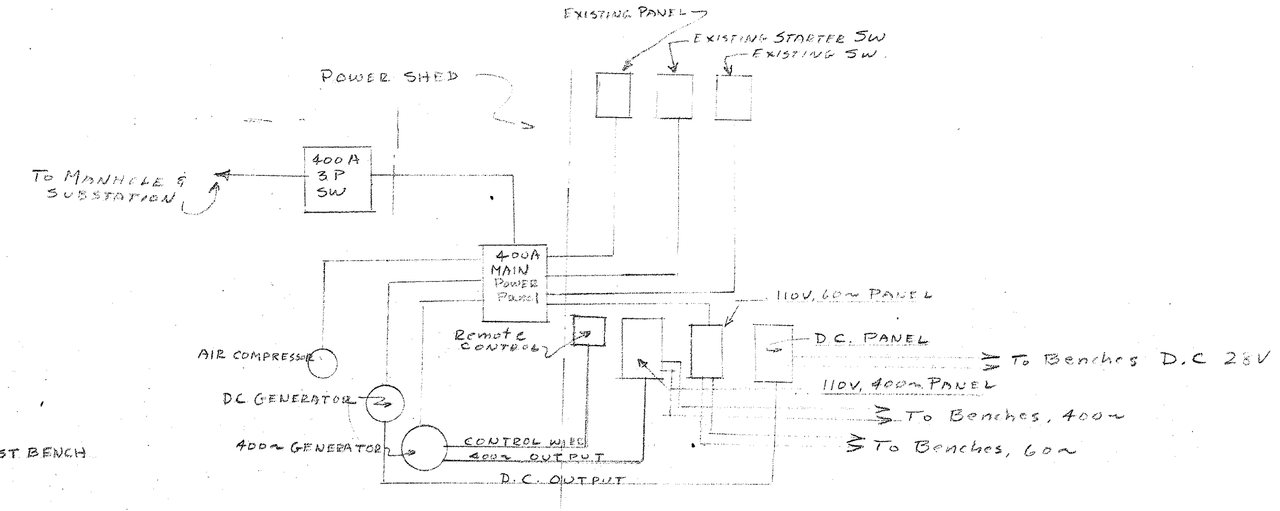


TYPICAL ELEVATION OF WIRE-WAY IN REAR OF TEST BENCHES WITH OUTLETS FOR 3-SERVICES

NO SCALE



SECTION "A-A"
TYPICAL VIEW



SCHEMATIC WIRING OF ELECTRICAL SERVICE

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-982-0259

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

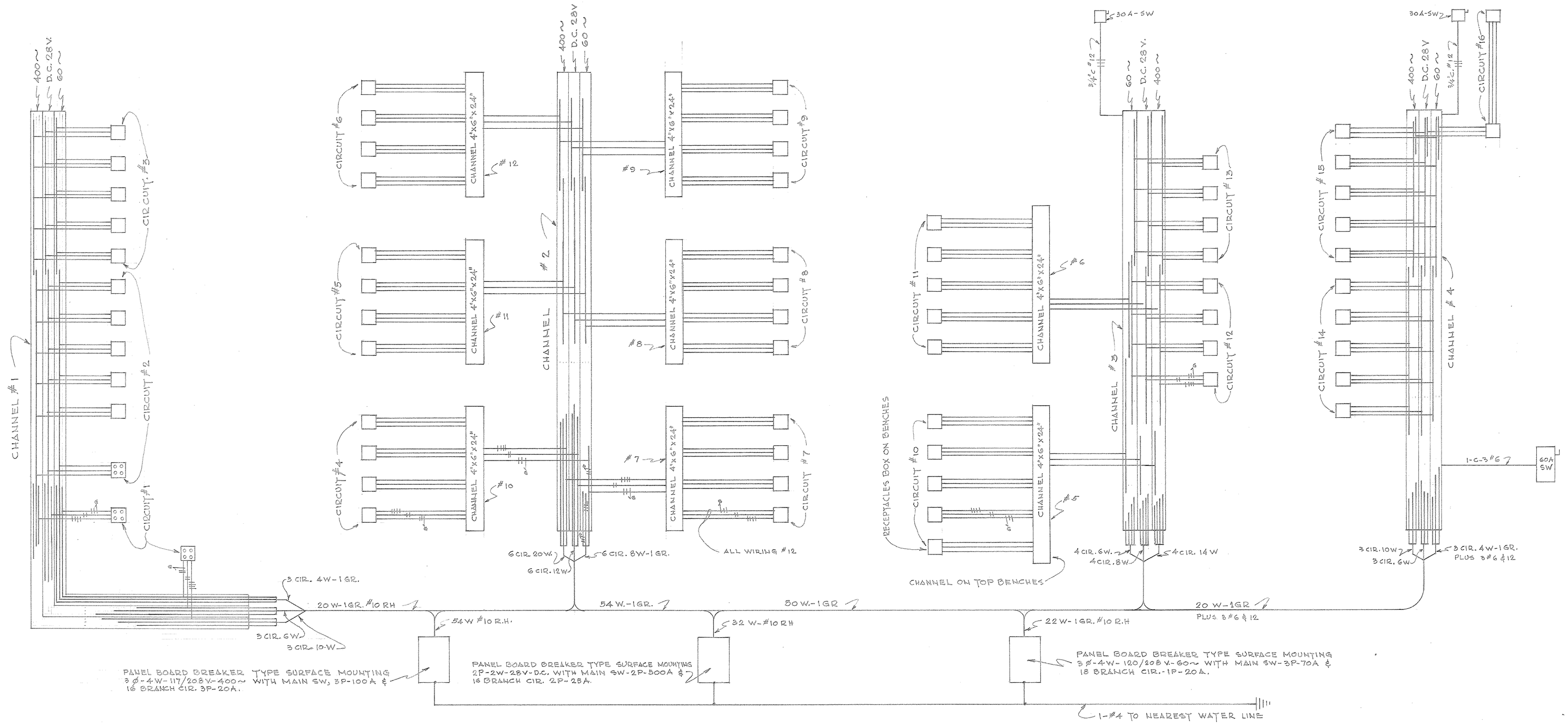
DES
DRWN
TR
CHK
SUPV
IN CHARGE
REVIEWED BY

PROPOSED SECONDARY POWER & DISTRIBUTION SYSTEM AND NEW LIGHTING IN ELECTRONIC SHOP — AV-77

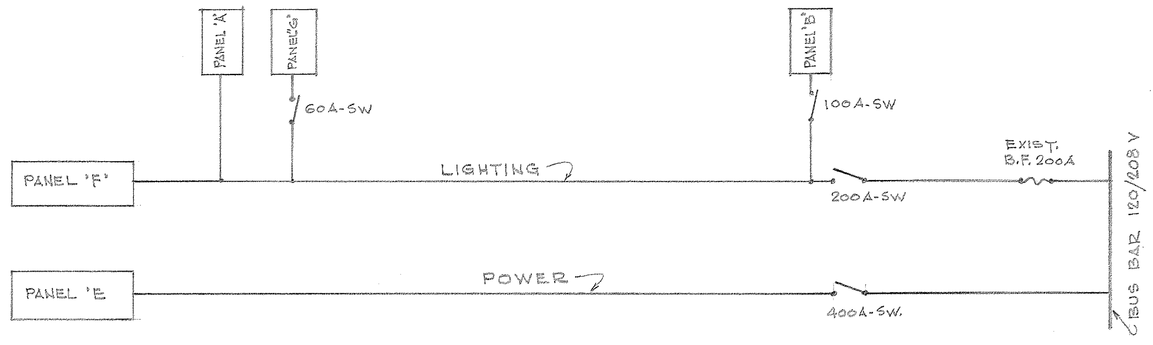
APPROVED — DATE
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO
DATE

SCALE — SPEC
SHEET 1 OF 1 — NBy
Y & D DRAWING NO.



TEST BENCHES WIRING DIAGRAM



LIGHT & POWER DISTRIBUTION.
ONE LINE DIAGRAM

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-993-0359-2

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES A. Barrio
DRWN H. Schroldt
TR
CHK A. Barrio
SUPV
IN CHARGE
REVIEWED BY

NAVAL AIR STATION
WIRING DIAGRAM FOR TEST BENCHES,
ELECTRONIC SHOP VU-10
BLDG-AV-77

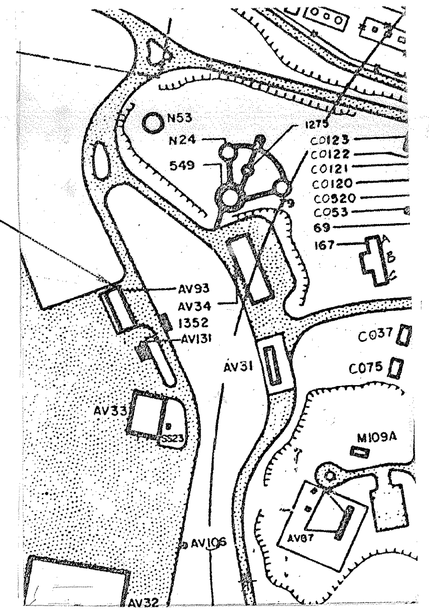
APPROVED W. J. Thompson, COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 3-12-59

SATISFACTORY TO — DATE 3/10/59

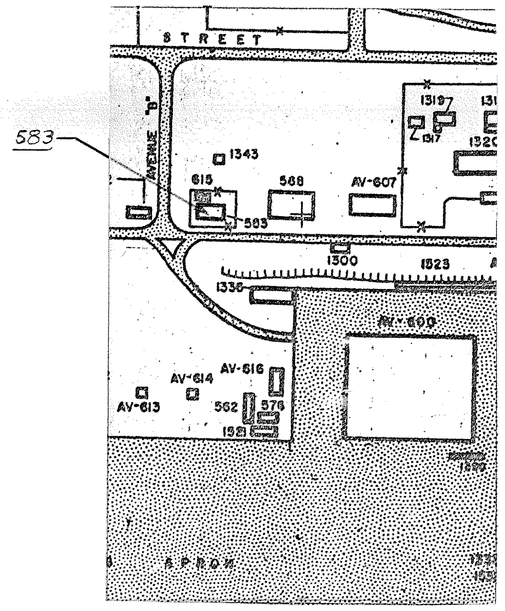
SCALE AS SHOWN — SPEC

SHEET 2 OF 2 — NBy

Y & D DRAWING NO.



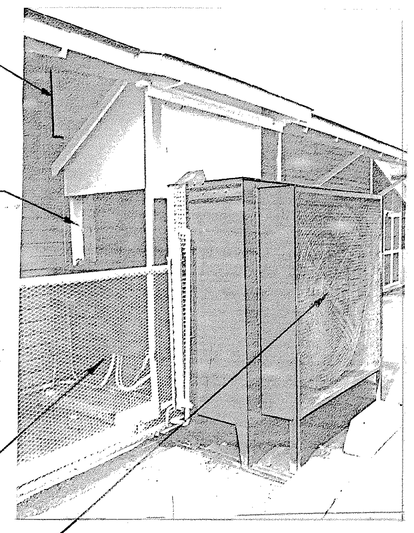
LOCATION MAP
BLDG AV 93 BLUE CARIBE



LOCATION MAP
BLDG 583 L/P TELEX 6

CONDITIONED AIR SUPPLY THRU-WALL TO AIR SUPPLY DUCT.

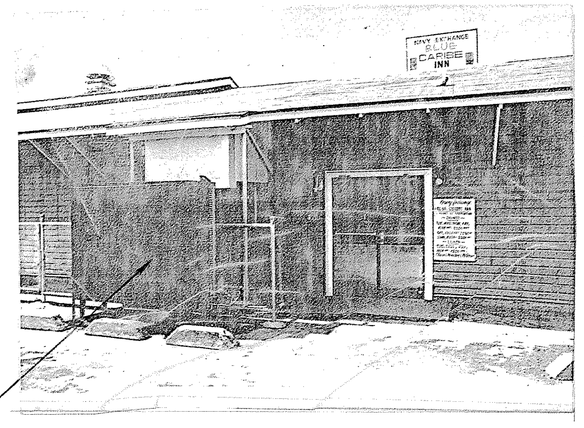
RETURN AIR FROM GRILL INSIDE BLDG. AV 93 THRU-WALL TO AIR HANDLER AIR RETURN



OUTSIDE BLDG. AV 93

AIR COOLED CONDENSER MOUNTED OUTSIDE BLDG. AV 93

AIR HANDLER WITH COMPRESSOR MOUNTED OUTSIDE BLDG. AV 93

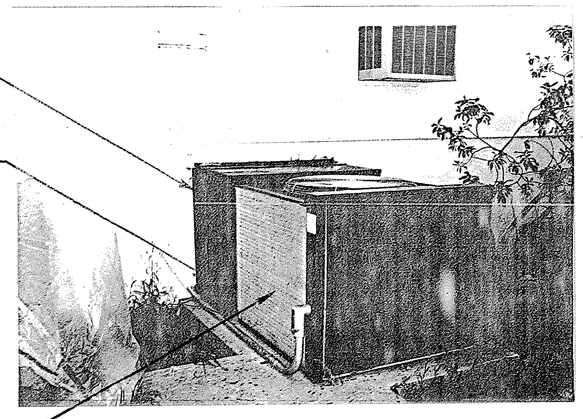


OUTSIDE BLDG. AV 93

BLDG. AV 93 AIR CONDITIONING SYSTEM

CONDITIONED AIR SUPPLY

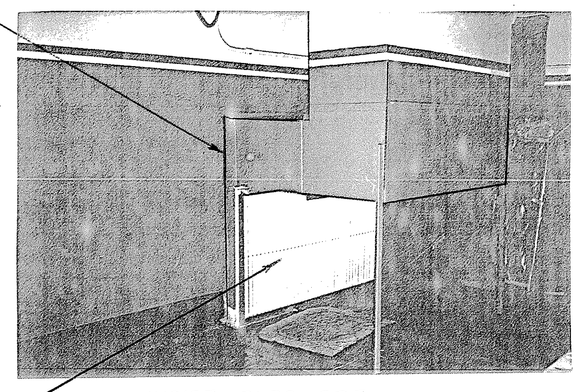
RETURN AIR



OUTSIDE BLDG. 583

UNITARY SELF-CONTAINED AIR CONDITIONER MOUNTED ON CONCRETE PAD OUTSIDE BLDG. 583

CONDITIONED AIR SUPPLY FROM UNITARY SELF-CONTAINED AIR CONDITIONER THRU WALL TO AIR SUPPLY DUCT.



INSIDE BLDG. 583

RETURN AIR FROM GRILL THRU WALL TO UNITARY SELF CONTAINED AIR CONDITIONER

SCOPE OF WORK

AV-93 NEX BLUE CARIBE

1. Remove existing condenser and 15 ton Typhoon model 156 SCAV self contained air conditioner from outside bldg. AV-93 and scrap.

2. Provide new replacement air condenser and self contained air conditioner that will provide 180,000 BTU/HR total cooling capacity and 8,000 CFM of air flow. The new units are to be suitable for use with other components of the system and for mounting in the same location as the existing units.

3. Mount new self contained air conditioner and condenser in the same location as existing units.

4. Connect air conditioner to existing ductwork. Provide outside air supply similar to existing system using a 12" x 16" sliding door.

5. Connect air conditioner to existing condensate drain. Provide a liquid trap at drain pan connection and run schedule 40 PVC or schedule 40 type L copper pipe, size at least as large as drain pan connection but no smaller than 1 inch nominal pipe size. Pitch condensate drain line from drain pan to drain. Secure condensate drain line in place. Liquid trap per mfg instructions, but not less than 2 inches.

6. Connect air conditioner and condenser to existing electric service.

7. Connect refrigerant supply and suction lines. Charge air conditioning system.

8. Provide new off/on cooling only room thermostat with range of at least 55-85° F. Normal operation: thermostat cycles compressors. Supply air fan runs continuous.

9. Mount thermostat in location of existing unit and connect to air conditioning system.

10. Place air conditioning system in service per contract specifications.

11. This is a repair by replacement project using new equipment similar to existing installation. The Contractor is required to make a site visit before purchasing new equipment to determine existing unit type, air distribution, nominal capacity, fan performance, power supply and other local site conditions.

SCOPE OF WORK

BLDG. 583 L/P TELEX 6

1. Remove existing 10 ton Typhoon model 105ACSC unitary self-contained air conditioner from outside bldg. 583 and scrap.

2. Provide new replacement unitary self-contained air conditioner that will provide 120,000 BTU/hr total cooling capacity. The new unit to be suitable for use with other components of the system and for mounting in the same location as the existing units.

3. Mount new self contained air conditioner in the same location as existing unit.

4. Connect air conditioner to existing ductwork.

5. Connect air conditioner to existing condensate drain. Provide a liquid trap at drain pan connection and run schedule 40 PVC or schedule 40 type L copper pipe, size at least as large as drain pan connection but no smaller than 1 inch nominal pipe size. Pitch condensate drain line from drain pan to drain. Secure condensate drain line in place. Liquid trap per mfg instructions, but not less than 2 inches.

6. Connect air conditioner to existing electric service.

7. Provide new off/on cooling only room thermostat with range of at least 55-85° F.

8. Mount thermostat in location of existing unit and connect to air conditioning system.

9. Place air conditioning system in service per contract specifications.

10. This is a repair by replacement project using new equipment similar to existing installation. The Contractor is required to make a site visit before purchasing new equipment to determine existing unit type, air distribution, nominal capacity, fan performance, power supply and other local site conditions.

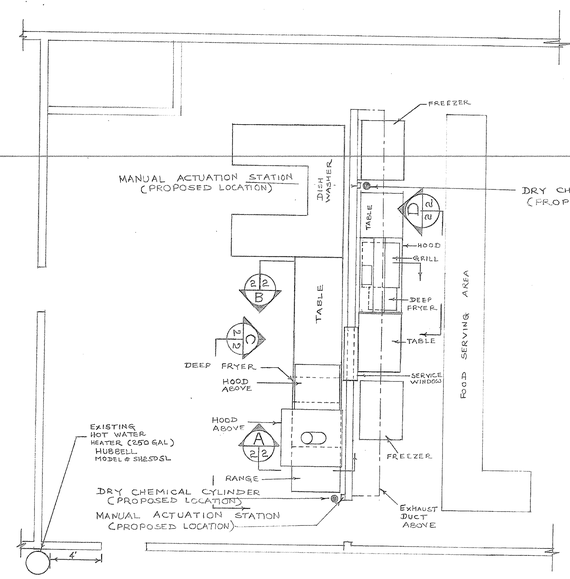
SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

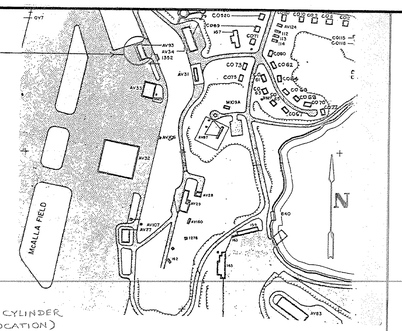
DES HL WINK	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
DRWN HL WINK	PUBLIC WORKS DEPARTMENT
CHK R HARRIS	U.S. NAVAL STATION GUANTANAMO BAY, CUBA
SUPV L Miron	AIR CONDITIONING EQUIPMENT
ENG OFF L Miron 11/28/86	REPLACEMENT AT VARIOUS LOCATIONS
SATISFACTORY TO D. H. Nielsen	AV 93 BLUE CARIBE
DATE	583 LP TELEX 6
APPROVED 1/30/86 PUBLIC WORKS OFFICER	SIZE F · CODE IDENT NO. · PWD DRAWING NO. 4116605
	SCALE: NONE · SHEET 2 OF 13

N62470-86-C-7779

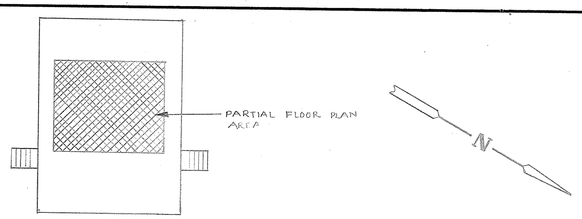
AF 478343



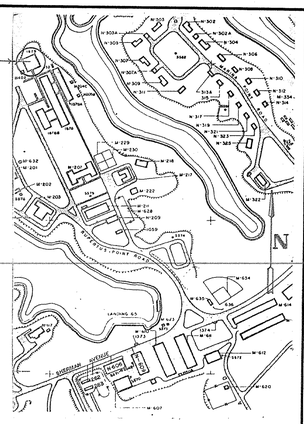
PARTIAL FLOOR PLAN BLUE CRIBE BLDG #AV-93
SCALE 1/4 = 1'



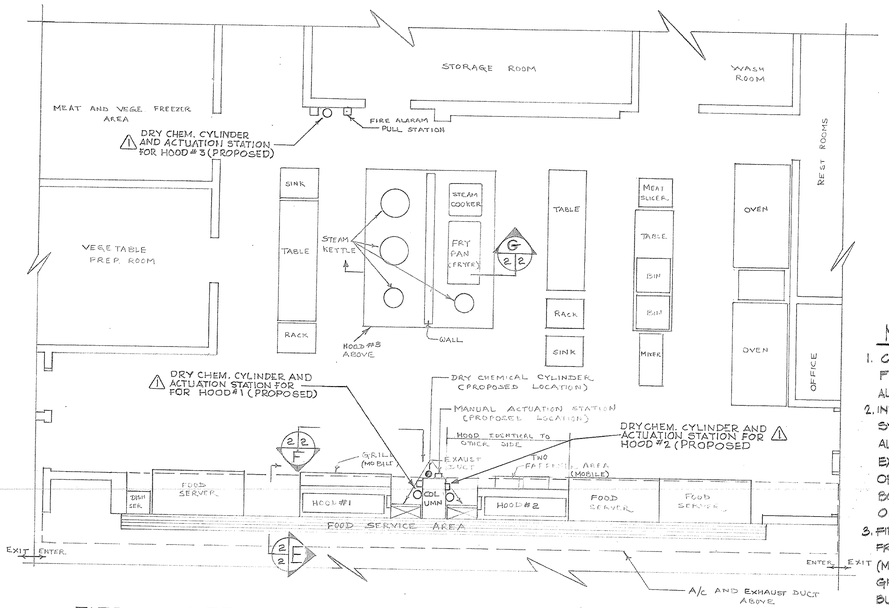
SITE PLAN
(N.T.S)



KEY PLAN
(N.T.S)



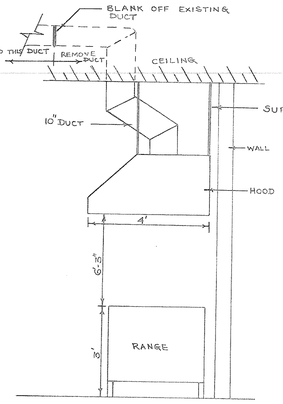
SITE PLAN
(N.T.S)



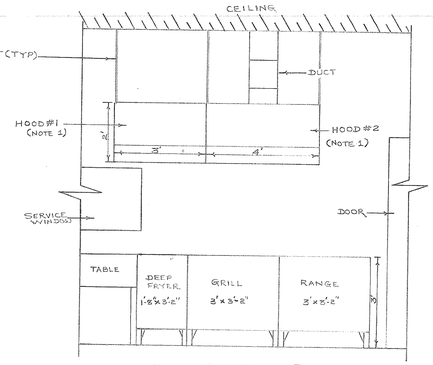
PARTIAL FLOOR PLAN MARINE GALLEY BLDG M-1679 SCALE 1/8" = 1'-0"

NOTES (2)

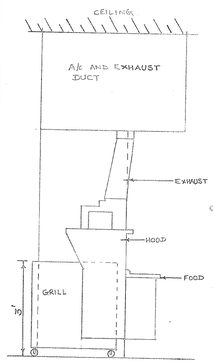
1. CONNECT THE CONTROL HEAD OF THE NEW DRY CHEMICAL FIRE EXTINGUISHING SYSTEM TO EXISTING LOCAL FIRE ALARM SYSTEM OF THE BUILDING.
2. INTEGRATE THE NEW DRY CHEMICAL FIRE EXTINGUISHING SYSTEM'S CONTROL HEAD AND THE EXISTING LOCAL FIRE ALARM SYSTEM OF THE BLDG. THEN CONNECT IT TO EXISTING CONTROL CABINET LOCATED IN THE LOBBY OF BLDG 1678B (MARINE BARRACKS) THAT SERVE MASTER BOX (STREET BOX) № 4134. (SEE SITE PLAN FOR BUILDING ORIENTATION)
3. FIELD VERIFY THE EXISTING CONDITION OF THE CABLE FROM MARINE GALLEY (M-1679) TO MARINE BARRACKS (M-1678B) THAT WAS PREVIOUSLY INSTALLED FOR INTEGRATING FIRE PROTECTION SYSTEM OF THE TWO BUILDINGS. VERIFY IF THIS CABLE IS CLEAR AND IF IT CAN BE USED FOR THIS PURPOSE.



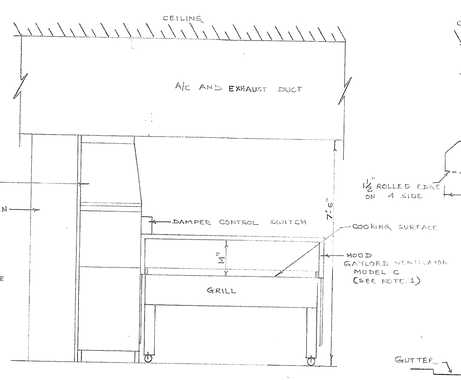
ELEVATION (A)
SCALE 1/2" = 1'



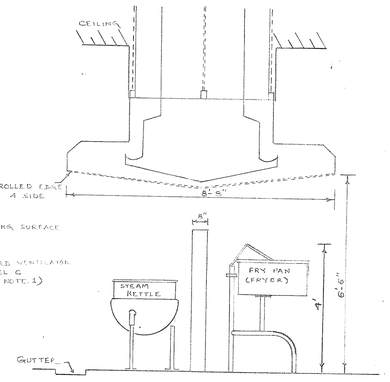
ELEVATION (C)
SCALE 1/2" = 1'



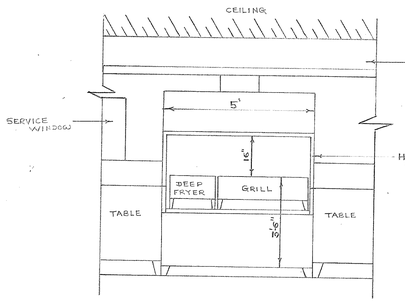
ELEVATION (E) (2 2)
SCALE 1/2" = 1'



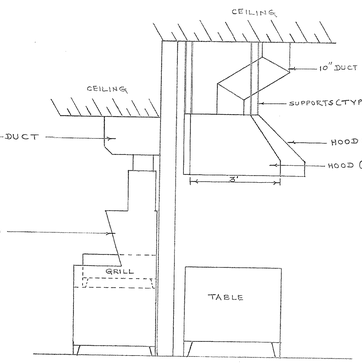
ELEVATION (F) (2 2)
SCALE 1/2" = 1'



ELEVATION (G) (2 2)
SCALE 1/2" = 1'



ELEVATION (D)
SCALE 1/2" = 1'



ELEVATION (B)
SCALE 1/2" = 1'

NOTES

1. REMOVE, HOOD #1 AND HOOD #2, BLANK OFF EXISTING DUCT AND REMOVE DUCT ON HOOD SIDE AS SHOWN ON ELEVATION A
2. DESIGN, PROVIDE AND INSTALL NEW DRY CHEMICAL SYSTEM ON ALL HOODS AS PER NFPA 17.
3. DESIGN, PROVIDE AND INSTALL NEW FOOD SERVICE EQUIPMENT IN PLACE OF HOOD #2 AND HOOD #3.
4. DESIGN, PROVIDE AND INSTALL NEW FIRE ALARAM SYSTEM AND INTERCONNECT WITH DRY CHEMICAL SYSTEMS.

ER 6-164

NOTES

1. DESIGN, PROVIDE AND INSTALL NEW DRY CHEMICAL SYSTEM ON ALL HOODS AS PER NFPA 17.
2. RAISE HOOD #1 AND HOOD #2, AS NECESSARY TO PROVIDE CLEARANCE REQUIRED FOR DRY CHEMICAL SYSTEM.
3. INTERCONNECT, DRY CHEMICAL SYSTEMS WITH EXISTING FIRE ALARAM SYSTEM

ER 7-093 ER 5-263

ER: 5-263, 7-093, 6-164, 6-028, AND 8-002

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
2	ADDED NOTES FOR BLDG. M-1679	FRI	25 JAN 90	RWH
1	ADDED TWO SYSTEMS	RWH	2 JAN. 90	

REVISIONS

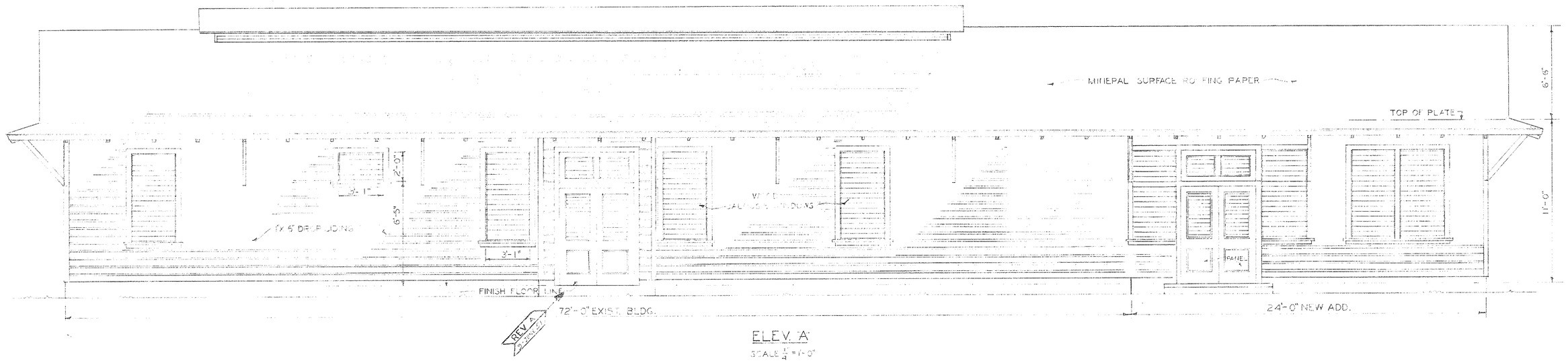
DES G.AMIN
DRWN G.AMIN
CHK R. HARRIS
SUPV
ENG OFF
SATISFACTORY TO Fire Inspector Charles Hockley
DATE 7-18-88
APPROVED 7/19/88
PUBLIC WORKS OFFICER APWD

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

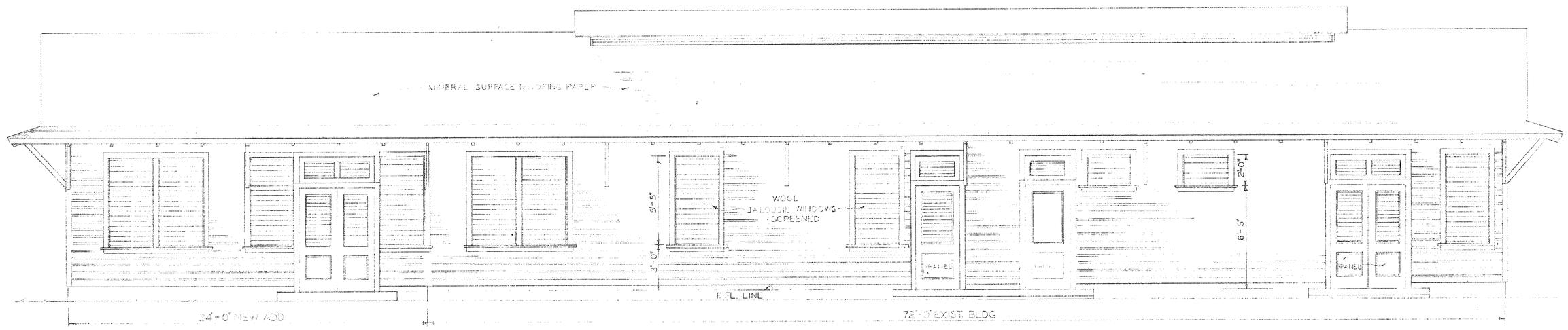
INSTALL DRY CHEMICAL SYSTEM VARIOUS BLDGS. BLDGS AV-93 AND M-1679

SIZE F | CODE IDENT NO. 80091 | PWD DRAWING NO. 4140994 | SCALE: AS SHOWN | SHEET 2 OF 6

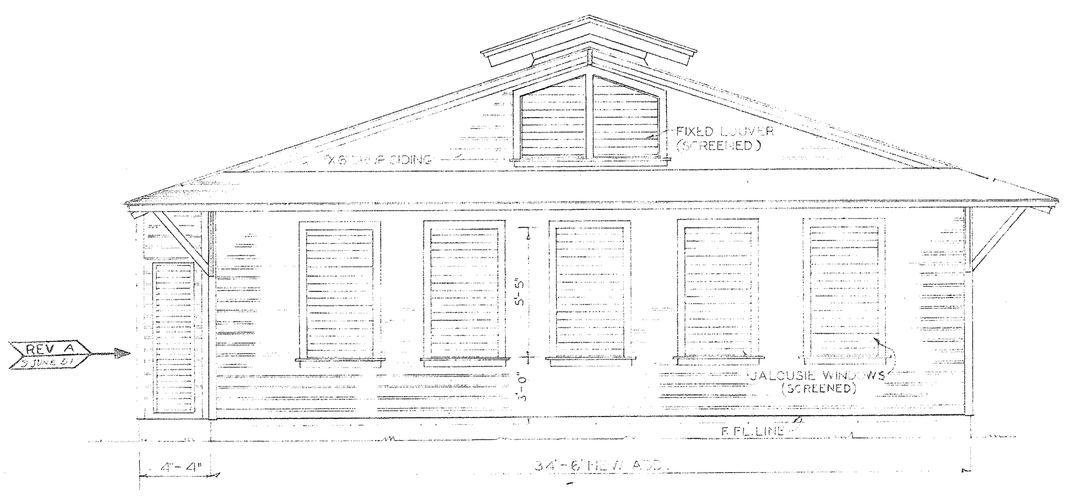
N 62470 - 88 - C - 6468



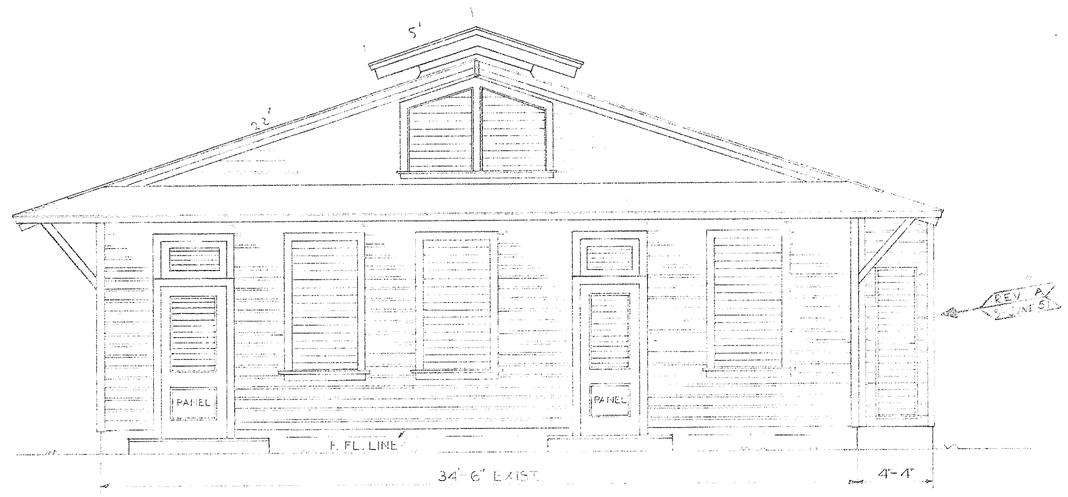
ELEV. "A"
SCALE 1/4" = 1'-0"



ELEV. "B"
SCALE 1/4" = 1'-0"



ELEV. "C"
SCALE 1/4" = 1'-0"



ELEV. "D"
SCALE 1/4" = 1'-0"

Approved by Base Fire Marshal P.D. Mahaney
Date 20 June 51

SATISFACTORY TO
NAVY EXCHANGE OFFICER
DATE 6-21-51

REVISION	DATE	APPD	DESCRIPTION	BY
A	3-JUN-51		ADD COMPRESSOR SHED	J.E.R.

P. W. DRAWING NO.
4B-597-0451-2

DES
DRWN
CHK
SUPV
IN CHARGE

U. S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA

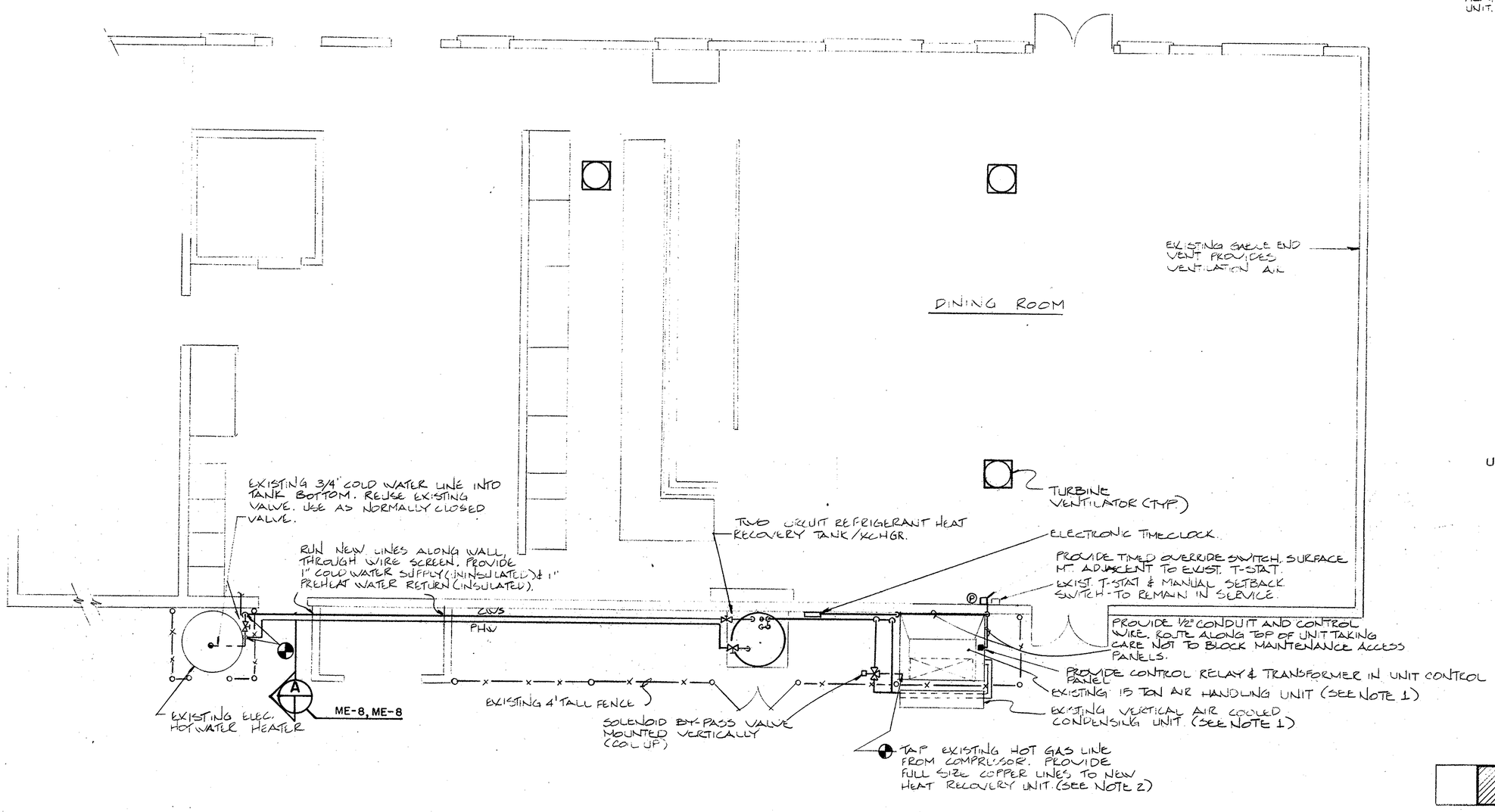
ELEVATIONS
N.A.S. TERMINAL AND RESTAURANT
BLDG No A/93

APPROVED Lewis M. Davis, Jr. DATE 22 JUNE 1951
PUBLIC WORKS OFFICER

SATISFACTORY TO L.E. Mensch
CO NAS
DATE 6-21-51

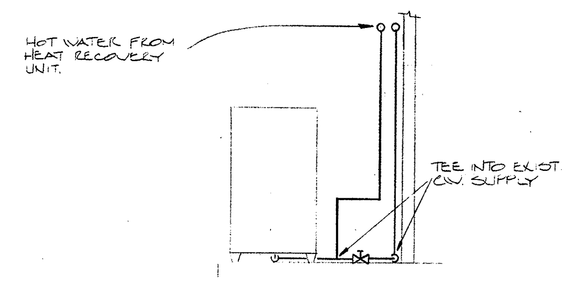
SCALE
SPEC
SHEET 2 OF 4 NO Y
Y & D DRAWING NO.

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED

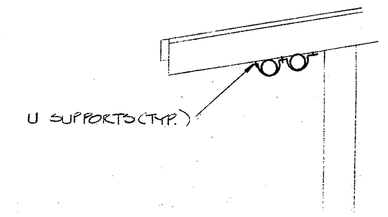


PARTIAL FLOOR PLAN - BUILDING AV-93

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

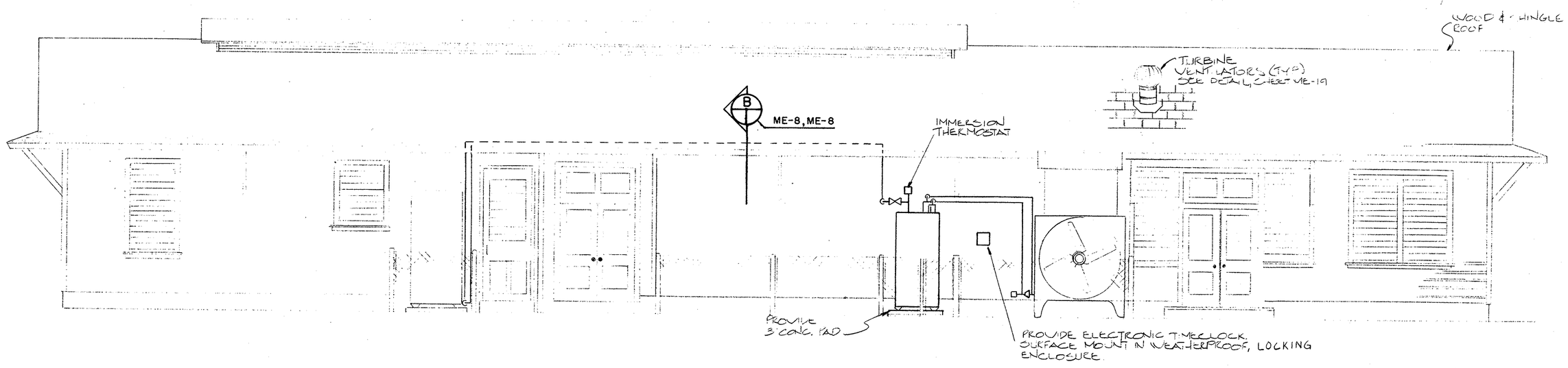


SECTION A
NO SCALE
ME-8, ME-8



SECTION B
WATER PIPE SUPPORTS
NO SCALE
ME-8, ME-8

KEY PLAN
N



EAST ELEVATION - BUILDING AV-93

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

GRAPHIC SCALE
4' 2' 0 4' 8FT
SCALE: 1/4" = 1'-0"

SCOPE OF WORK: BUILDING AV-93

1) ECO B-8: ATTIC VENTILATORS

PROVIDE TURBINE ATTIC VENTILATORS, WITH ADJUSTABLE BASES. CUT CIRCULAR HOLES IN ROOF & SHINGLES AT INDICATED LOCATIONS (APPROX.) TO FIT NECK DIAM. OF VENTILATOR AIRSHAFT. MOUNT VENTILATORS, ATTACHING ROOF MOUNTING FLANGE TO ROOF WITH MIN. OF 8 LARGE-HEAD ROOFING NAILS. APPLY SILICONE SEALANT TO NAILHEADS, SHINGLE EDGES OVERLAPPING FLANGE, TO EDGES OF ANY CUT SHINGLE, TO EXPOSED EDGE OF MOUNTING FLANGE, & TO SEAM WHERE ROOF JACK COLLAR MEETS MOUNTING COLLAR.

2) ECO C-9: SETBACK

MODIFICATIONS TO THE AIR HANDLING UNIT & COMPRESSOR CONTROL CIRCUITS TO PROVIDE NIGHT SETBACK CAPABILITIES. NEW CONTROLS SHALL ALLOW A MIN. OF 2 ON CYCLES AND 2 OFF CYCLES DAILY ON EACH OF SEVEN (7) SEPERATE DAYS FOR ONE CHANNEL. ON TIMES SHALL BE COORDINATED WITH THE BUILDING ENERGY COORDINATOR TO BE COINCIDENT WITH SPACE OCCUPANCY SCHEDULES. ON PERIODS FOR THE SPACE SHALL NOT EXTEND BEYOND 1 HOUR IN ADVANCE OF AND ONE HALF HOUR PAST POSTED OPERATING SCHEDULES. A SEPERATE TIMED SWITCH SHALL BE LOCATED AS SHOWN ON THE PLANS AND SHALL ALLOW FOR A TIMED OVERRIDE OF THE SETBACK SYSTEM FOR THE UNIT FOR 2 HOURS IN THE EVENT OF AN UNSCHEDULED OCCUPANCY PERIOD.

3) ECO R-12: REFRIGERATION HEAT RECOVERY

THE CONTRACTOR SHALL PROVIDE THE REFRIGERANT HEAT RECOVERY UNIT AS SHOWN ON DRAWINGS AND IN ACCORDANCE WITH SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.

SEQUENCE OF OPERATIONS: BUILDING AV-93

1) ECO C-9: SETBACK

OCCUPIED MODE: THE COMPRESSOR/AIR SYSTEM SHALL OPERATE INDEPENDENTLY FROM THE SETBACK SYSTEM UNDER ITS EXISTING CAPACITY CONTROLS.

NONOCCUPIED MODE: UPON REACHING A SETBACK PERIOD, THE SUPPLY AIR FAN SHALL SHUT DOWN & THE COMPRESSORS SHALL GO THROUGH A PUMP DOWN CYCLE & SHUT DOWN. UPON REACHING A STARTUP PERIOD, THE COMPRESSOR & THE AIR HANDLING UNIT SHALL RESTART PROVIDING COOLING TO SATISFY THE EXISTING THERMOSTAT. IN THE EVENT OF AN UNSCHEDULED OCCUPANCY AS INDICATED BY THE TIMED OVERRIDE, THE CONTROL OF THE UNIT SHALL REVERT TO OCCUPIED MODE & SHALL RESTART. IN THE EVENT THAT A MANUAL SHUTDOWN SWITCH IS SHUT DOWN FOR THE UNIT, THAT UNIT SHALL NOT RESTART UNTIL THE SWITCH IS RETURNED TO NORMAL MODE.

SEE SHEET ME-35 FOR CONTROL SCHEMATIC.

2) ECO R-12: REFRIGERATION HEAT RECOVERY

SEE SHEET ME-36

EQUIPMENT: BUILDING AV-93

1) ECO B-8: ATTIC VENTILATORS

1) TURBINE VENTILATORS - PROVIDE TURBINE ATTIC VENTILATORS AS PER SPECIFICATIONS.

2) ECO R-12: REFRIGERATION HEAT RECOVERY

1) TANK XCHR. CAP. - 100 GAL. MIN. RATING - 2 CIRC. @ 7 1/2 TONS EA. (SEE NOTE 3)

NOTES

1. EXISTING CONDENSER & UNITARY A/C WILL BE REPLACED UNDER SEPARATE CONTRACT. (NEW UNIT - WEATHERKING, MOD. # - FC-184L-FC) THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF VERIFYING REFRIGERANT PIPE CONNECTIONS AND LINE SIZES. THE HIGH PRESSURE LINE CONNECTION SHALL BE AS CLOSE AS PRACTICAL TO THE REFRIGERANT COMPRESSOR. HOWEVER, THIS CONNECTION SHALL BE MADE DOWNSTREAM OF ANY HOT GAS DEFROST VALVE, OIL SEPERATOR AND/OR MUFFLER. TWO SEPERATE DISCHARGE & RETURN LINES SHALL BE USED IF THE NEW A/C HAS (2) COMPRESSORS. (SEE SHEET ME-36)
2. VIBRATION ISOLATION SHALL BE PROVIDED AT COMPRESSOR BY PROVIDING A MIN. OF THREE DIRECTION CHANGES BETWEEN THE COMPRESSOR AND THE 1ST SUPPORT FOR THE CONDENSER LINES.
3. HEAT XCHR. RATING SHALL BE BASED ON REFRIGERATION EQUIPMENT TONNAGE. THE CONTRACTOR SHALL VERIFY TYPE OF REFRIGERANT USED BY NEW A/C.

ME-8

ARCH. & ENGR. SEAL

ENGINEERING SCIENCES, INC.
MEMPHIS, TENNESSEE
ARCHITECTS - ENGINEERS

DSGN. JMW DR. WMD CHK. SES
SUPV. MEP CH. ENGR. MEP
SUBMITTED BY DATE
FIRM MEMBER (TITLE) PRES.
EIC BRM BR HD. MAY 1986
FPE REL DIR. RLD
APPROVED DATE
OFFICER IN CHARGE
APPROVED DATE
EFD FOR COMMANDER NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION, NORFOLK, VIRGINIA

ENERGY IMPROVEMENTS TO VARIOUS FACILITIES
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

FLOOR PLAN / ELEVATION - BLDG. AV-93

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4169599
SCALE AS NOTED		CONSTR. CONTR. NO. N62470-86-B-6203
		SPEC. 05-86-6203 SHEET 12 OF 41

EFD DRAWING NO. 269599

LIST OF REPAIRS AND PAINTING FOR BLDG. NO. AV-93 (BLUE CARIBE RESTAURANT)

1. Remove all bug screen and expanded metal at enclosed patio. Approx. 1000 SF., expanded metal to be reused.

2. Install new bug screen, re-install existing expanded metal. Approx. 1000 SF.

3. Install new wood trim around all screened openings. Approx. 500 L.F. SEE DETAIL D 8/41

4. Remove existing door, door frames, and trim back to rough openings at door D1, install new pair of 3070 aluminum narrow stile entrance doors, aluminum door frame. See hardware schedule.

5. Remove existing door, door frame and trim back to rough openings at doors D4, D5,. Install new hollow core metal 3'-0" x 7"-0" door frame. See hardware schedule.

6. Remove all bug screen at doors D2, D3 and install new bug screen at same doors, reinstall existing expanded metal. Install new wood trim around bug screen to match existing trim in size and configuration. APPROX. 72 S.F.

6A. Nail down any loose siding and replace any rotten siding approx. 100 S.F.

7. Install new horizontal double 4" lapped vinyl siding complete with vinyl corner trim, window trim, and door trim similar to "gold bond" double 4" vinyl siding. Color to be similar to "gold bond" blue. SUBMIT vinyl siding and trim samples to OICC for approval prior to starting work on bldg. TYP. AROUND BLDG.

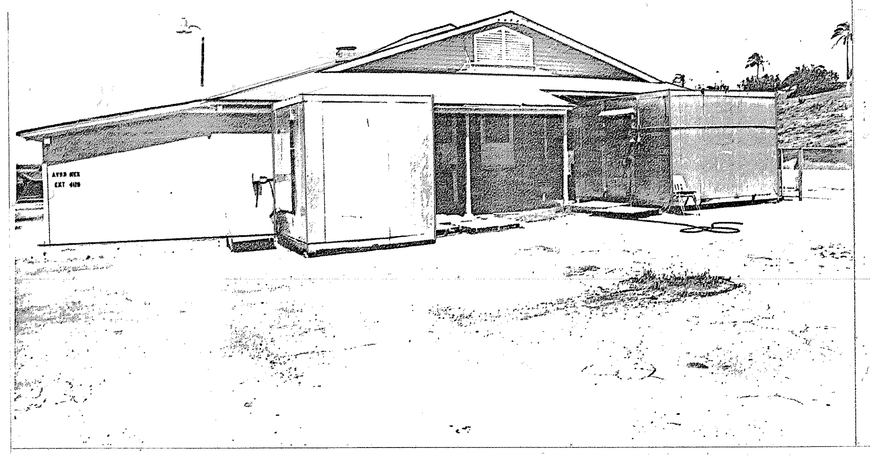
8. Prepare all Facia, overhang, wood trim, concrete foundation walls, new A,C, metal doors, door frames.

9. Remove exist. window, window frames & trim back to rough opening at W1, W2, W3, Fill openings & side over with 3/4" plywood so filled window openings are flush with exist. T&G. wood siding. Patch interior wall AT WINDOWS NO. W1, W2, W3, TO MATCH EXIST. SURROUNDING WALL

COLOR SCHEDULE FOR BLDG. NO. AV-93

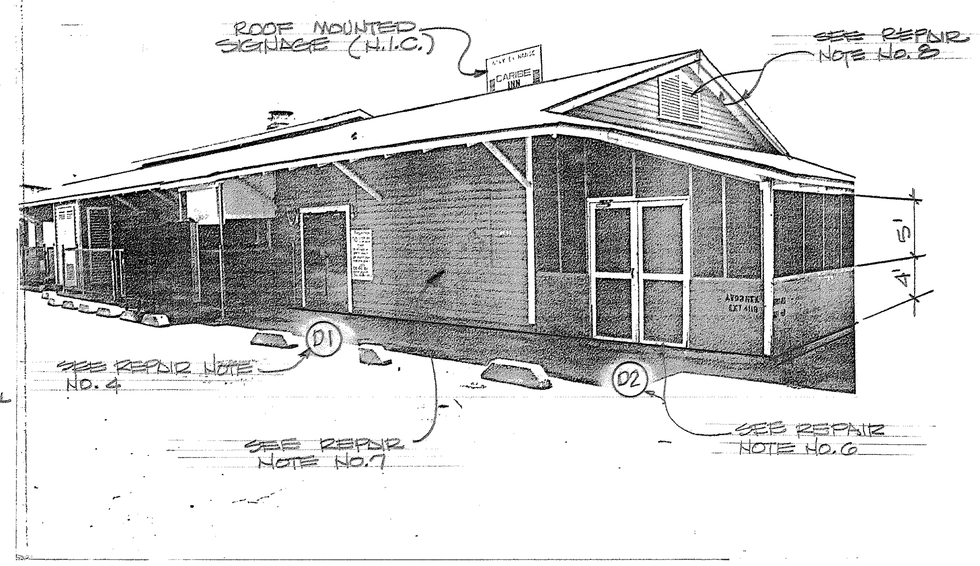
1. Use Fed. Std. 595 No. 25102 (blue) on both faces and all edges of doors and door frames at doors D2, D3, D4, D5, facia, and wood trim and louvered wood gable vents.

2. Use Fed. Std. 595 No. 25189 (blue) on all overhangs. BLDG. ROOF SUPPORTS, FACIA, AND ROOF SUPPORT COLUMNS.

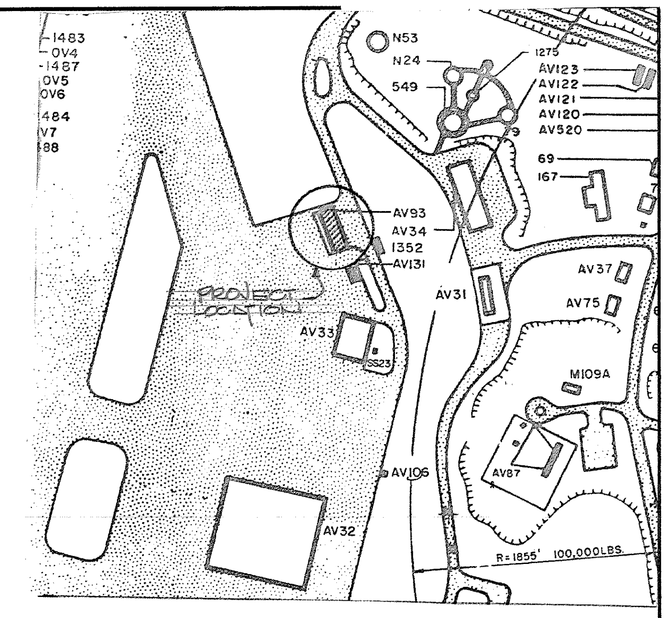


D

NOTE:
THE COUTRACTOR SHALL SCHEDULE WORKS ON BUILDING NO. 93 (BLUE CARIBE RESTAURANT) SO AS NOT TO INTERFERE WITH GOVERNMENT ACTIVITIES, UNLESS PREVIOUSLY APPROVED BY O.I.C.C.

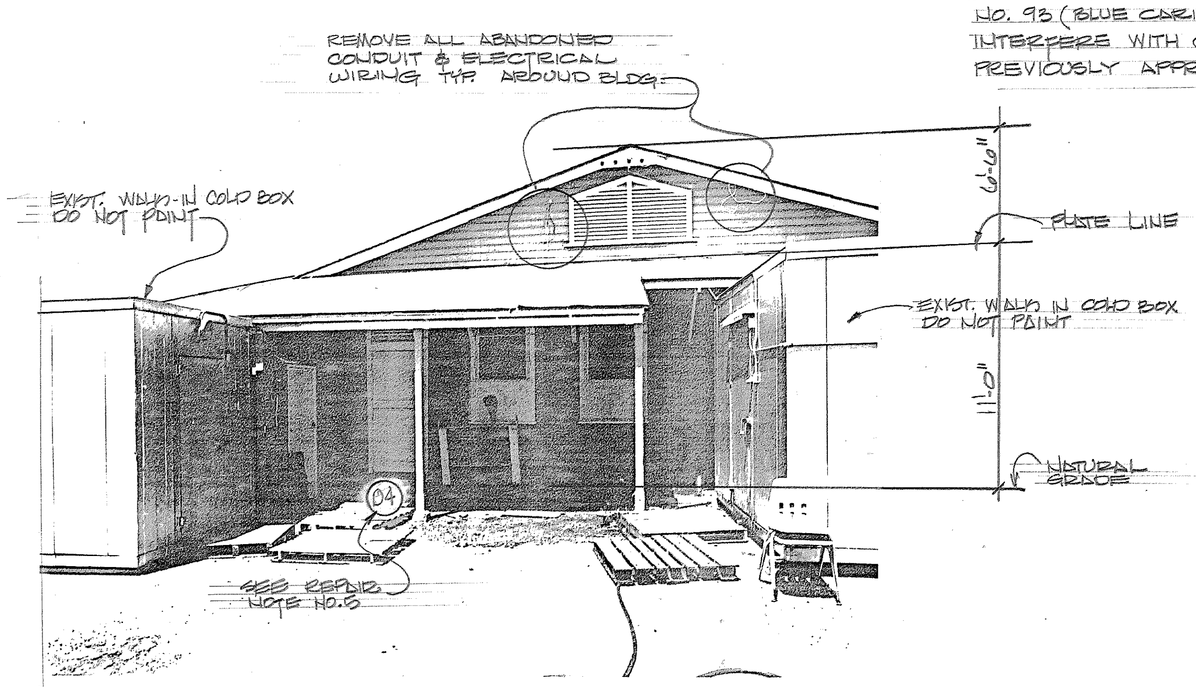


A



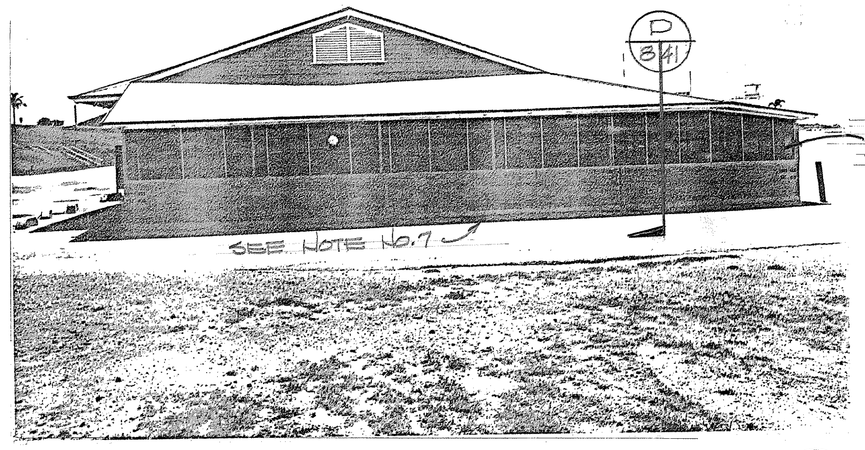
PROJECT LOCATION
1" = 200

NOTE:
SEE DETAIL D 8/41 FOR VERTICAL SECTION THRU EXIST. PLYWOOD & BUG SCREEN WALL AT ENCLOSED PATIO

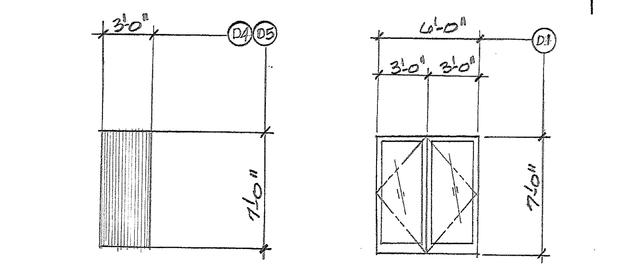


E

NOTE: FOR TYPICAL VINYL SIDING INSTALLATION NOTES SEE DRWG. No. 41100600



B

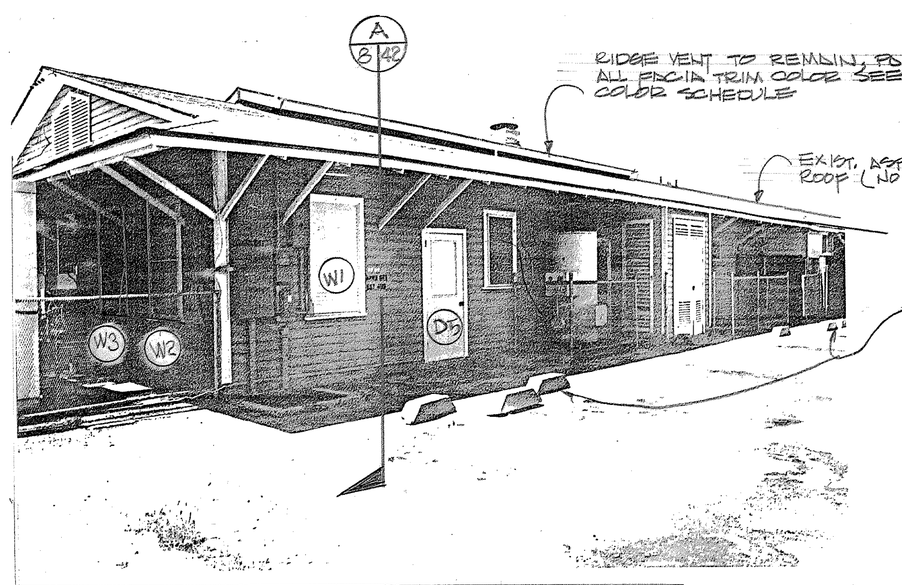


HOLLOW CORE FLUSH MTL. DOOR.

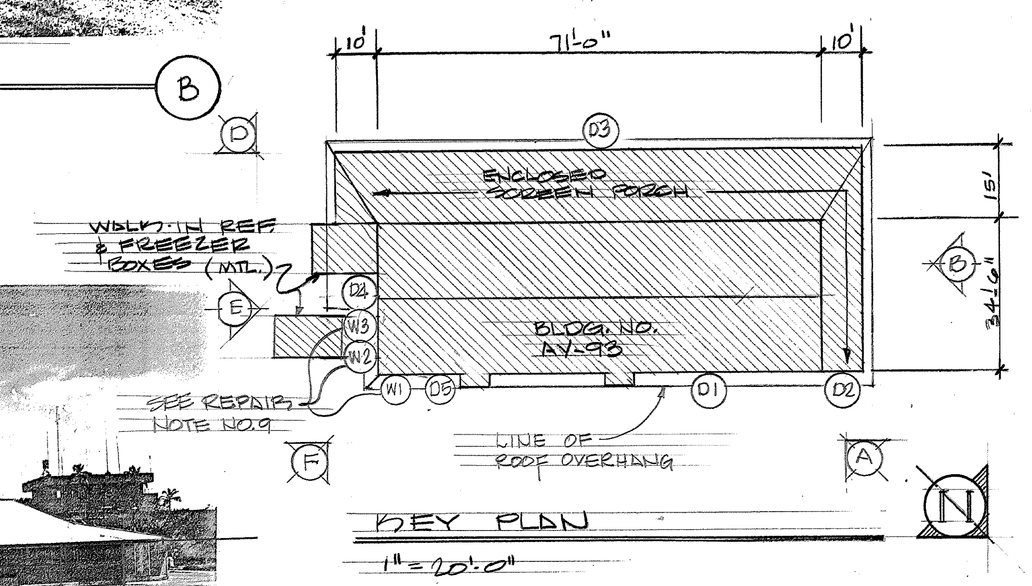
PAIR NARROW STILE ANODIZED ALUMINUM ENTRANCE DOORS WITH 1/4" THD. GLAZING.

DOOR SCHEDULE
3/16" = 1'-0"

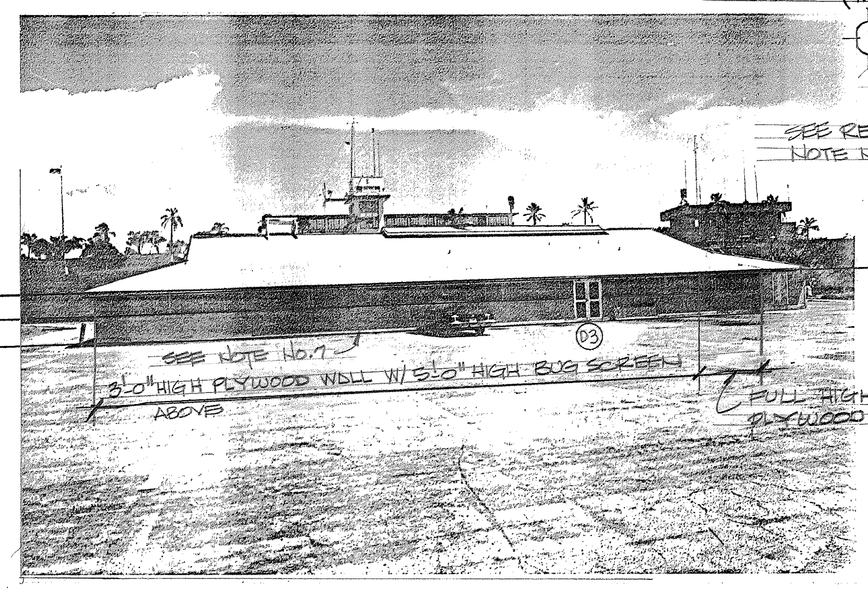
FOR EXIST. VERTICAL SECTION THRU EXTERIOR WALL, ROOF FRAMING, & ROOF VENTILATOR SEE DRWG. No. 41100605 DETAIL A 8/42



F



KEY PLAN
1" = 20'-0"



C

BLUE CARIBE RESTAURANT

CONTRACT No. N62470-86-C-7778

ER5-182

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
2	AS-BUILTS	JJB EA		JDJ 1-91

REVISIONS

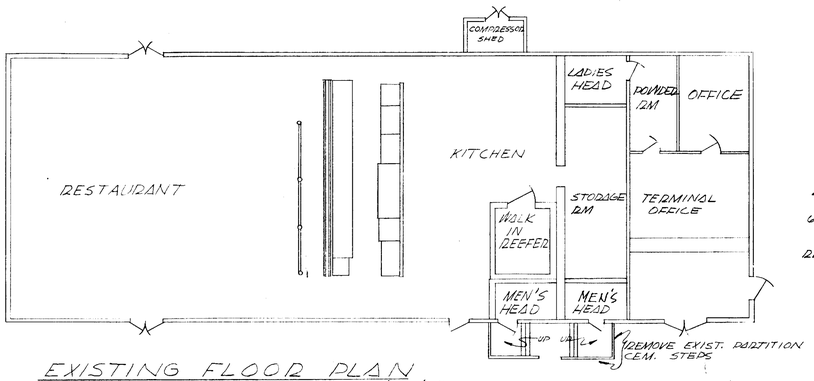
DES EV IRVING
DRWN EV IRVING
CHK TERRY RILEY
SUPV TERRY RILEY
ENG OFF
SATISFACTORY TO
DATE 3/3/86
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

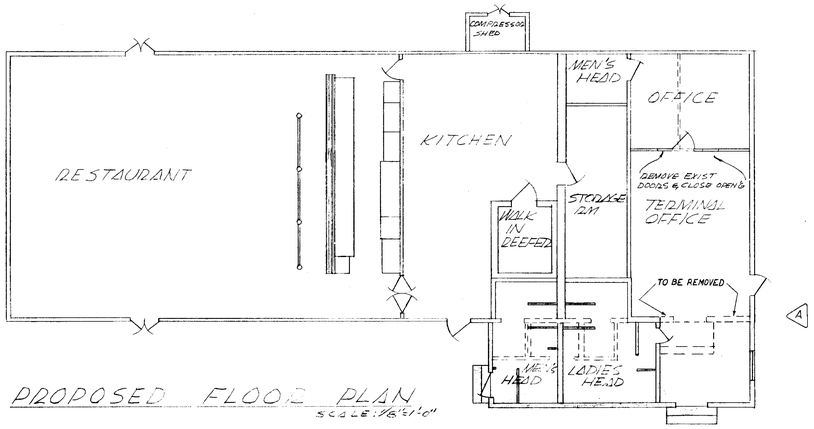
EXTERIOR REPAIRS VARIOUS BLDG'S LEEWARD POINT AND MAIN SIDE

BUILDING NO. AV-93

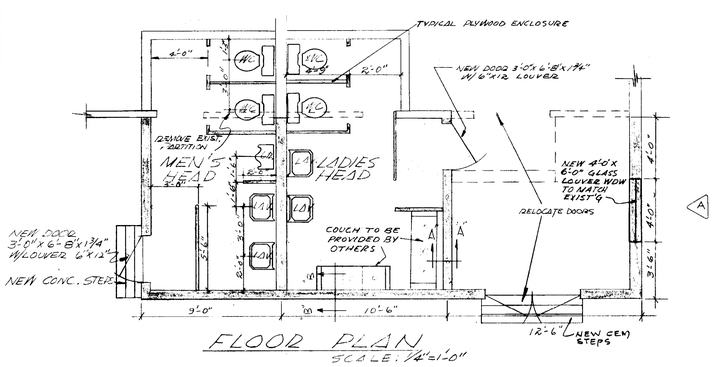
SIZE F | CODE IDENT NO. | PWD DRAWING NO. 41166631 | SCALE: AS NOTED | SHEET 8 OF 45



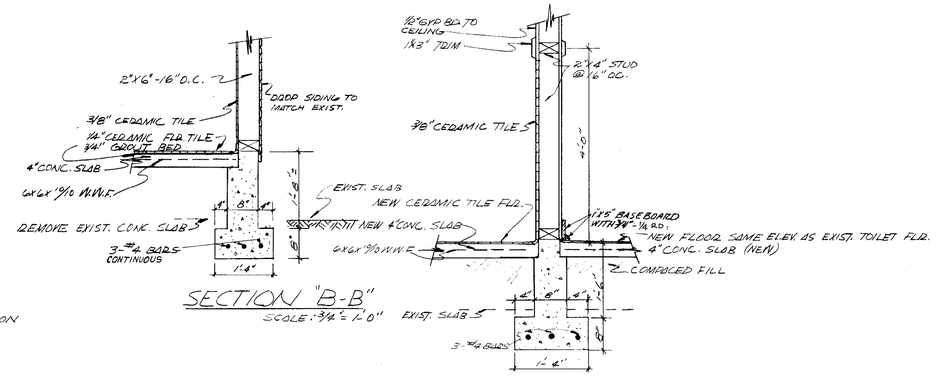
EXISTING FLOOR PLAN
SCALE: 1/8" = 1'-0"



PROPOSED FLOOR PLAN
SCALE: 1/8" = 1'-0"

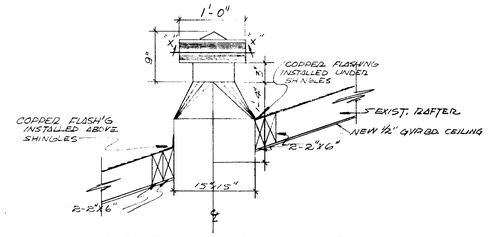


FLOOR PLAN
SCALE: 1/4" = 1'-0"

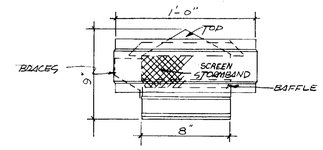


SECTION "B-B"
SCALE: 3/4" = 1'-0"

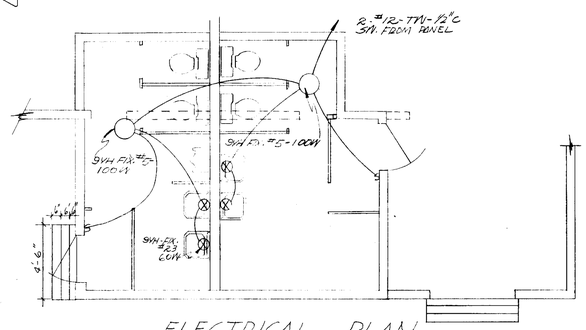
SECTION "A-A"
SCALE: 3/4" = 1'-0"



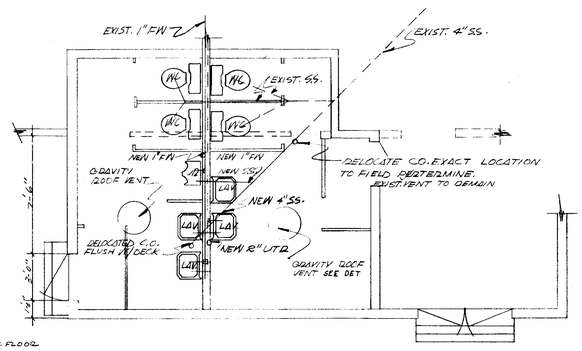
SECTION OF ROOF VENT
SCALE: 1" = 1'-0"



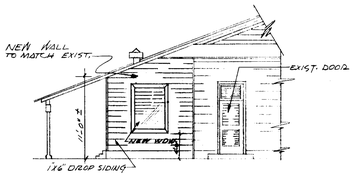
SECTION "X-X"
N.T.S.



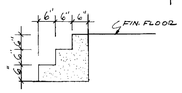
ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



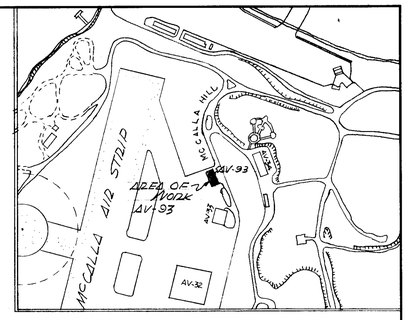
MECHANICAL PLAN
SCALE: 1/4" = 1'-0"



ELEV. "A"
SCALE: 1/8" = 1'-0"



TYP. EXTERIOR STAIRS
SCALE: 1/2" = 1'-0"



LOCATION PLAN
SCALE: 1" = 400'

GENERAL NOTES

1. IN REMOVAL OF EXISTING WORK, ALL DAMAGED WORK TO BE REPAIRED AND/OR REPLACED W/ NEW TO MEET FIELD CONDITIONS

2. MEN'S HEAD:
   TOILET PARTITIONS – WOOD
   WALLS – CERAMIC TILE, BRIGHT GLAZE, #877, 6'-0" HIGH W/ BULLNOSE OVER 1/2" PLYWOOD BACKING W/ 1/2" GYP BOARD ABOVE NEW TILE & PLYWOOD. PAINT GYP BOARD
   CEILING – NEW 1/2" GYP BOARD & PAINT
   FLOOR – UNGLAZED CERAMIC FLOOR TILE, COLOR DARK OATMEAL #173 W/ BASE
   WATER CLOSETS – 2 W.C. COMPLETE, ROCKWELL TYPE K-4252-ETA OR EQUAL W/ FLUSH VALVES W/ VACUUM BREAKERS, OLSONITE MOLDED SEATS AND PROPER ACCESSORIES.
   LAVATORIES – 2 LAVS. COMPLETE TYPE JUNEAU K-1624-A OR EQUAL W/ SUPPLY & DRAIN FITTINGS, SUPPLY PIPES, TRAP AND CHROME SOAP DISH UNIT IN WALL
   URINALS – 1 URINAL COMPLETE TYPE DEERFIELD K 5020-T VITROUS CHINA WALL HANGING FOR USE W/ FLUSH VALVES W/ 3/4" SPUD OUTLET W/ 1 1/2" O.D TAILPIECE.

3. LADIES HEAD:
   TOILET PARTITIONS – WOOD
   WALLS – CERAMIC TILE, BRIGHT GLAZE #875, 6'-0" HIGH W/ BULLNOSE OVER 1/2" PLYWOOD BACKING AND 1/2" GYP BOARD ABOVE NEW TILE & PLYWOOD. PAINT GYP BOARD
   CEILING – 1/2" GYP BOARD AND PAINT
   FLOORS – UNGLAZED CERAMIC FLOOR TILE COLOR LIGHT OATMEAL #171 W/ BASE
   WATER CLOSETS – WATER CLOSETS TO COMPLY W/ FED SPEC WW-P-541B FIG 10.03 OUTFIT VW9. SEAT TO BE FIG 1601 CLOSED FRONT W/ COVER.
   LAVATORIES – LAVATORIES SHALL BE AS SPECIFIED BY FED SPEC WW-P-571-B FIG 11.04 OUTFIT EL 24-F. PROVIDE CHROME SOAP DISH UNIT IN WALL.

4. OFFICES
   REMOVE EXIST WALL BOARD & CEILING MATERIALS IN EXIST OFFICES AND PROVIDE MASONITE WAINSCOT 4'-0" HIGH IN EXIST & NEW OFFICES W/ 1/2" GYP BOARD ABOVE AND NEW 1/2" GYP BOARD CEILING THRU OUT. PAINT NEW WORK.

5. PAINT SCHEDULE

WALL BOARD : (INTERIOR)	(1)	PRIMER TT-P-56
	(2)	FINISH COATS TT-P-47 OR EQUAL
WOOD (INTERIOR)	(1)	PRIMER TT-E-543
	(2)	FINISH COATS TT-E-508 (SEMI-GLOSS)
WOOD (EXTERIOR)	(1)	PRIMER TT-P-25
	(2)	FINISH COATS TT-P-53 (WHITE)

6. PROVIDE GRAVITY TYPE ROOF FAN IN EACH HEAD

7. DROP SIDING TO MATCH EXISTING (1"x6")
8. PROVIDE ONE 16"x22" MIRROR FOR EACH LAVATORY, EACH HEAD.

TO BE REMOVED
TO REMAIN
NEW WORK

PRELIMINARY

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1531-1163

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN WHITE, N.
TR
CHK SCH
SUPV GCK
IN CHARGE
REVIEWED BY

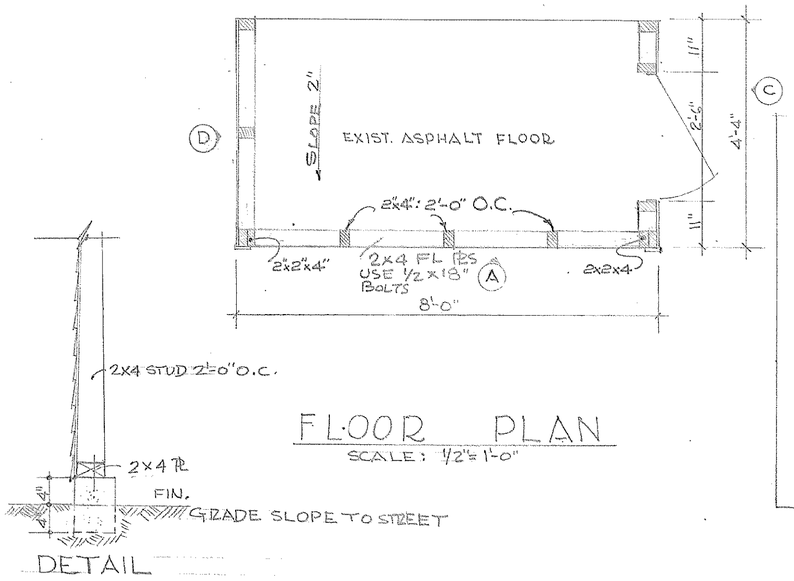
U.S. NAVAL AIR STATION
FLAW TERMINAL BLDG. #AV-93
IMPROVED HEAD FACILITY

APPROVED — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 2/4/64

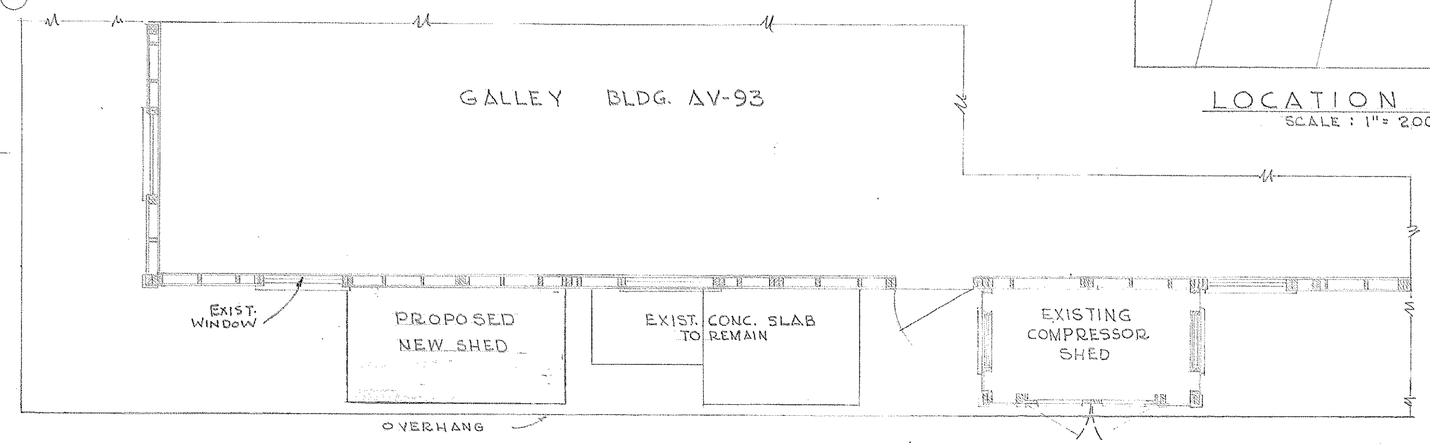
SATISFACTORY TO C.B. Wilson
DATE 27 January 1964

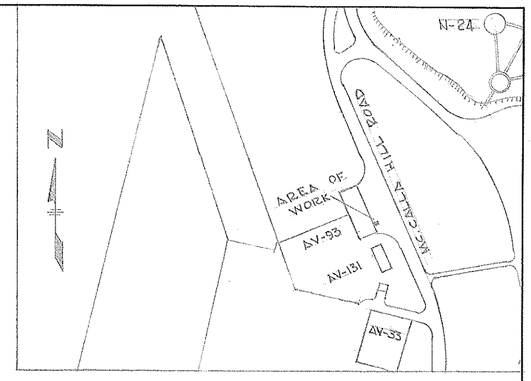
SCALE AS NOTED | SPEC
SHEET 1 OF 1 | NBy
Y & D DRAWING NO.

ESR 1889/3A

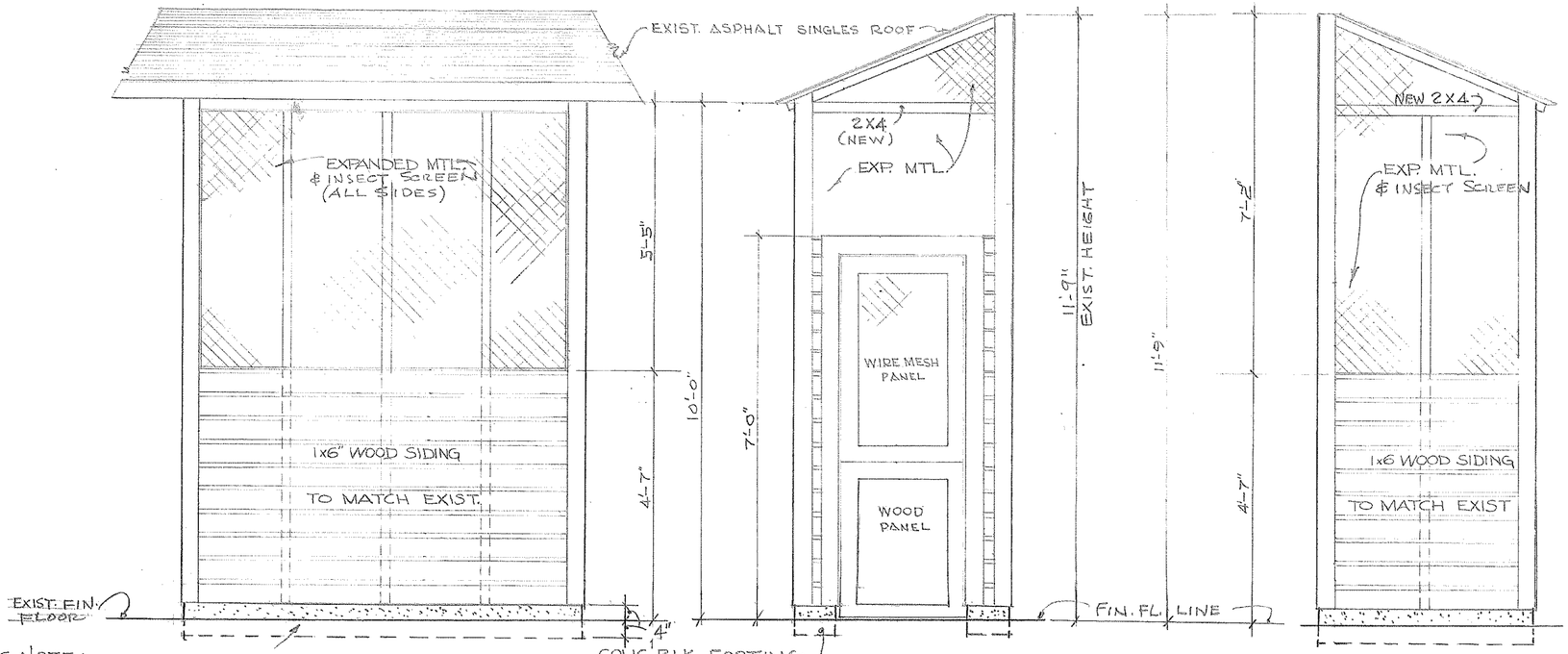


FLOOR PLAN
SCALE: 1/2" = 1'-0"





LOCATION PLAN
SCALE: 1" = 200



FRONT ELEVATION "A"
SCALE: 1/2" = 1'-0"

SIDE ELEVATION - "C"
SCALE: 1/2" = 1'-0"

SIDE ELEVATION - "D"
SCALE: 1/2" = 1'-0"

FOOTING NOTE:
PROVIDE (1) CONC. BLK (8"x8"x16")
FOOTING - EMBEDDED 4"
BELOW EXIST. FIN. FLOOR.
AS AN ALTERNATE PROVIDE
POURED CONC. FOOTING (W/1-1/2ϕ BAR)
8" BELOW FIN FL. ELEV AND 4"
ABOVE GRADE. 2"x4" PL TO BE
SECURED W/ 1/2ϕ - 24" O.C. TO NEW FOOTG.

GENERAL NOTES:

1. NEW WOOD SIDING TO MATCH EXISTING.
2. PROVIDE 1/2"ϕ BOLTS 2'-0" EMBEDDED 4" INTO CAVITY FILLED CONC. BLK, FOOTING 4" ABOVE CONC. BLK. ELEV. FOR FLR. PLATE SECURING.
3. EXIST. ROOF OVERHANG TO ACT. AS ROOF OF NEW STRUCTURE.
4. PAINT NEW WORK TO MATCH EXIST. WORK.
5. ELECTRICITY OR WATER NOT REQD.
6. PROVIDE SPRING TYPE HINGES ON DOOR.
7. PROVIDE LOCK SET FOR DOOR.
8. RELOCATE ROOF (EAVE) HANGING LIGHTS.

PRELIMINARY

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 8M-1779-0963

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES O.S.
DRWN O.S.
TR
CHK S.C.K.
SUPV S.C.K.
IN CHARGE
REVIEWED BY

U.S. NAVAL STATION
BLDG. AV-93 - FLAW TERMINAL
ENCL. FOR 61 CANS & SWAB RACK
PLAN, ELEV. & MISC. DETAIL

APPROVED FOR COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 6/14/63

SATISFACTORY TO — DATE 6/13/63

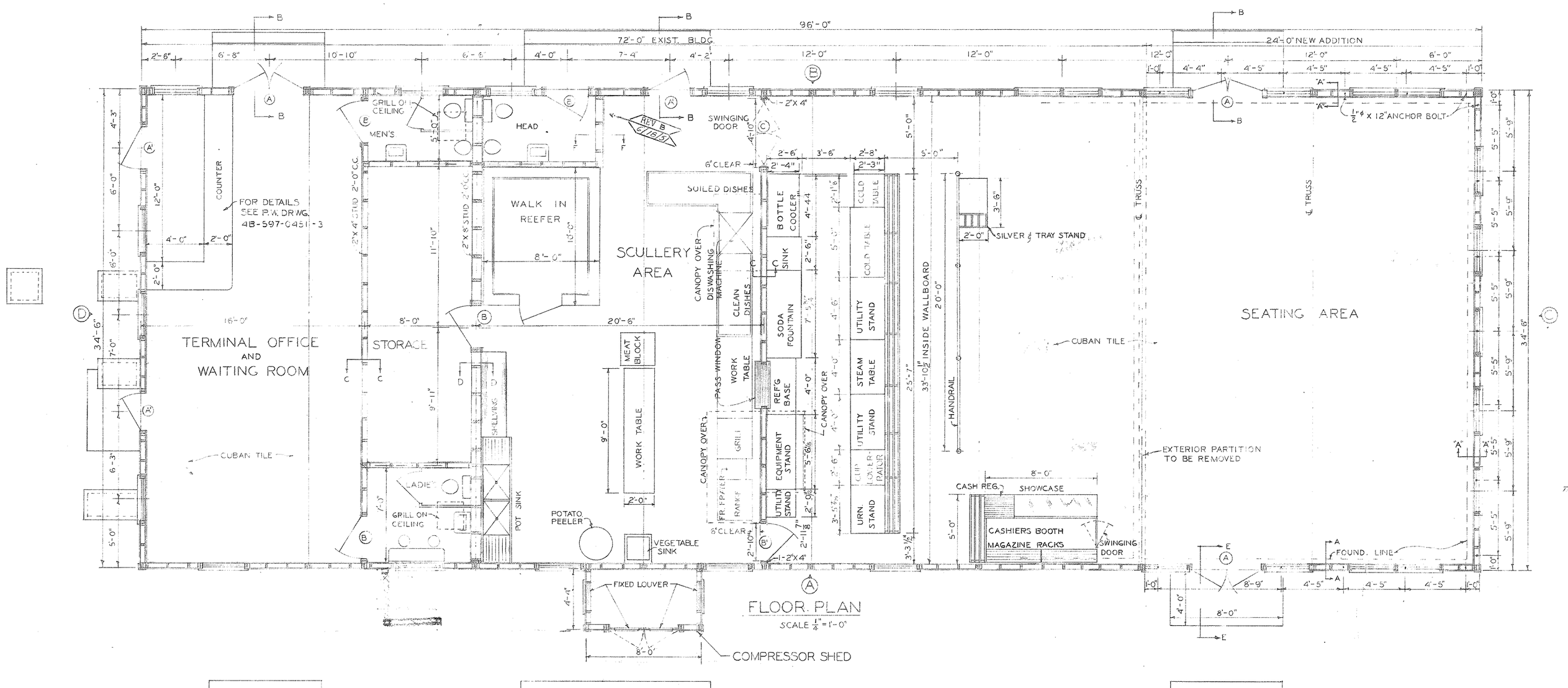
SCALE 1/2" = 1'-0" — SPEC

SHEET 1 OF 1 — NB

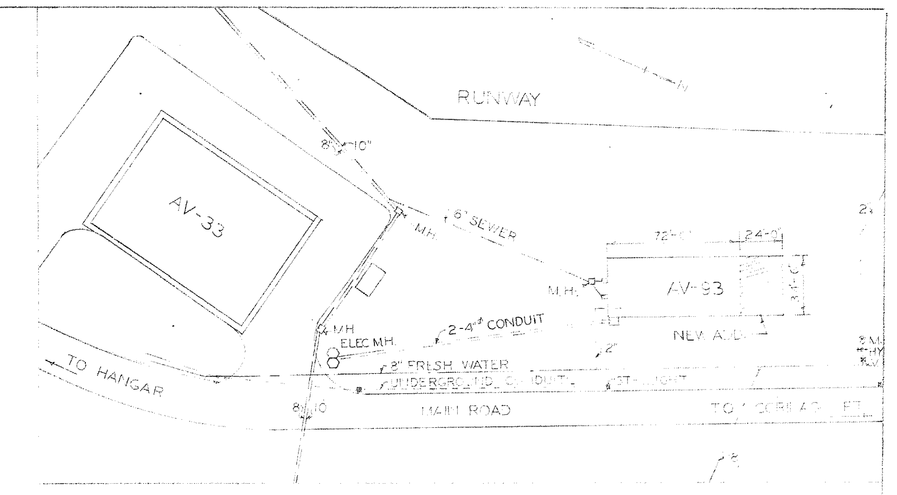
Y & D DRAWING NO.

ESR 0-5006/3

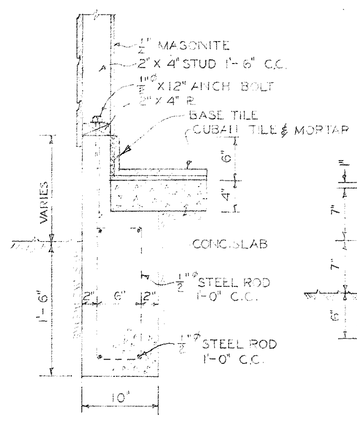
K+E HERCULENE® 70342 DRAFTING FILM



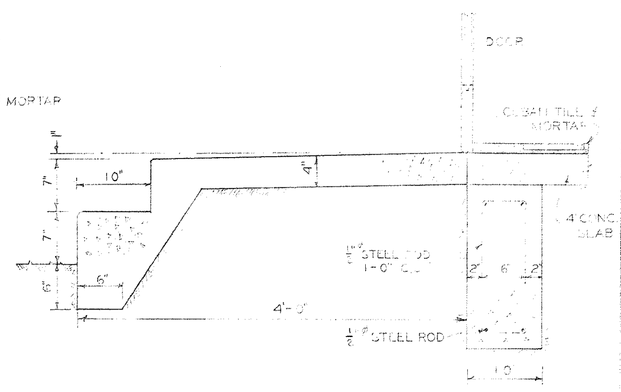
FLOOR PLAN
SCALE 1/4" = 1'-0"



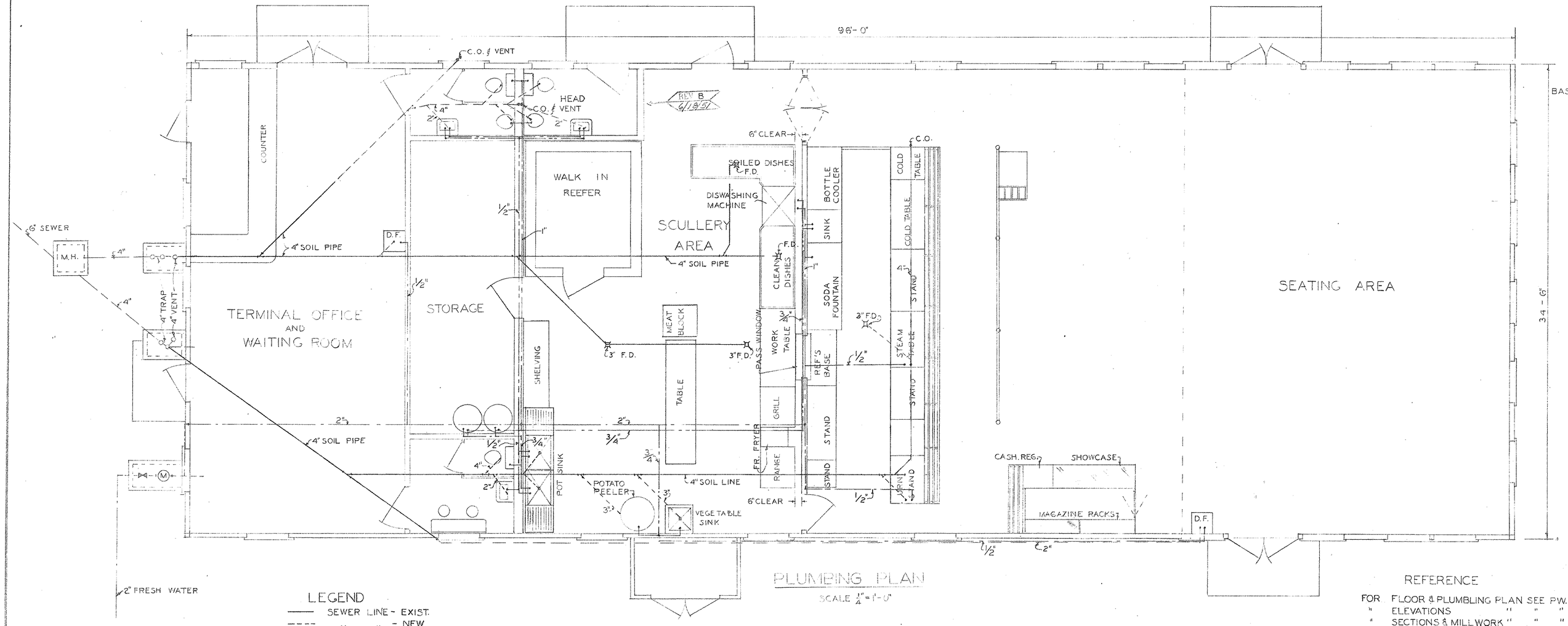
PLOT PLAN
SCALE 1" = 50'



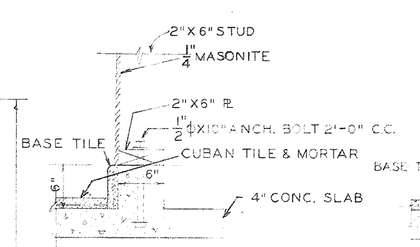
SECTION A-A
SCALE 1" = 1'-0"



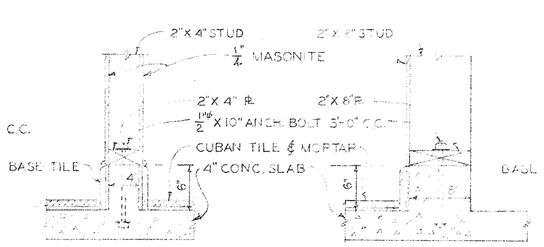
SECTION B-B
SCALE 1" = 1'-0"



PLUMBING PLAN
SCALE 1/4" = 1'-0"

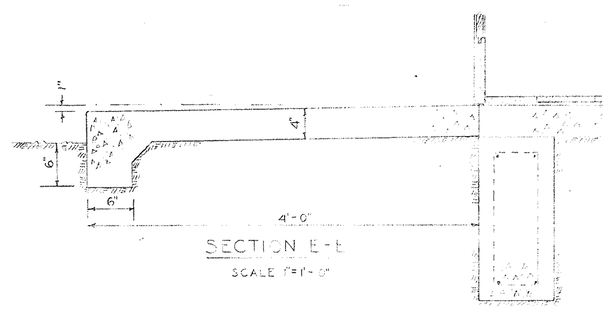


SECTION F-F
SCALE 1" = 1'-0"



SECTION G-G
SCALE 1" = 1'-0"

SECTION D-D
SCALE 1" = 1'-0"



SECTION E-E
SCALE 1" = 1'-0"

LEGEND

- SEWER LINE - EXIST.
- " " - NEW
- FRESH WATER LINE
- HOT " "

REFERENCE

FOR FLOOR & PLUMBLING PLAN SEE P.W. DRWG. 4B-597-0451-1
" ELEVATIONS " " " " " " -2
" SECTIONS & MILLWORK " " " " " " -3
" ELECTRICAL " " " " " -4
" CANOPY DETAILS " " " 8M-542-0551

Approved by Base Fire Marshal
Date 20 June 51

SATISFACTORY TO
NAVY EXCHANGE OFFICER
DATE 6-21-51

REVISION	DATE	APPD	DESCRIPTION	BY
"B"	6/18/51		INCREASE WALL TO 6"	N.J.B.
"A"	9-14-51		REARRANGED EQUIP. & ADD COMPRESS. SHED	J.L.H.

P.W. DRAWING NO. 4B-597-0451-1

REF
DRAWN
CHK
SUPV
IN CHARGE

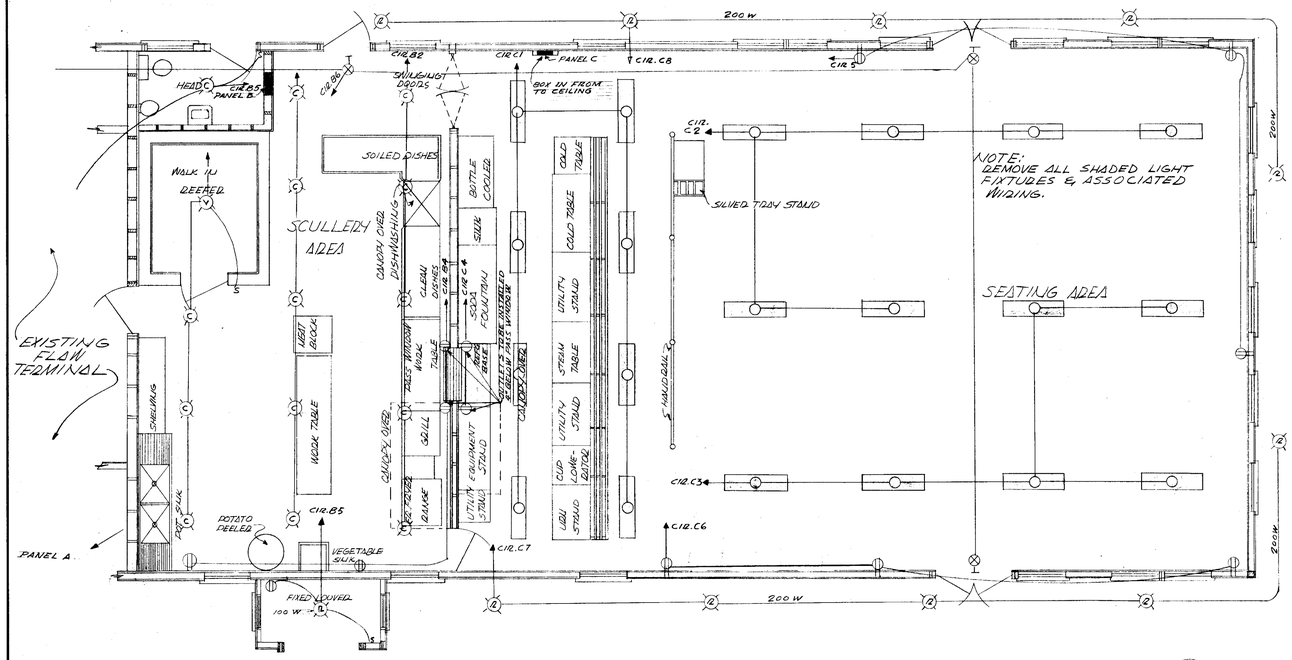
U. S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA

FLOOR, SECT., PLUMBING AND PLOT PLAN
NAS TERMINAL AIR TRANSIT RESTAURANT
PLOT PLAN

APPROVED Lewis M. Davis Jr. DATE 22 JUNE 1951
PUBLIC WORKS OFFICER

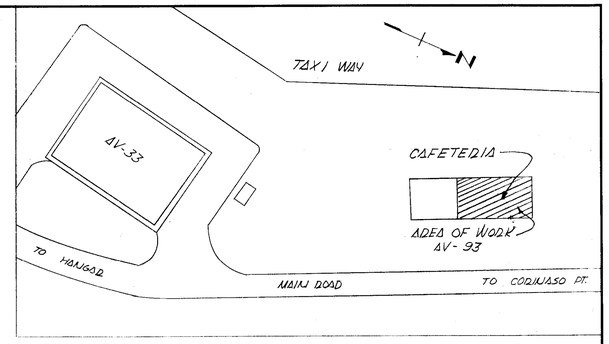
SATISFACTORY TO L. S. Gresh
C.O. NAS
DATE 6-21-51

SCALE SPEC
SHEET 1 OF 1 NO.
Y & D DRAWING NO.

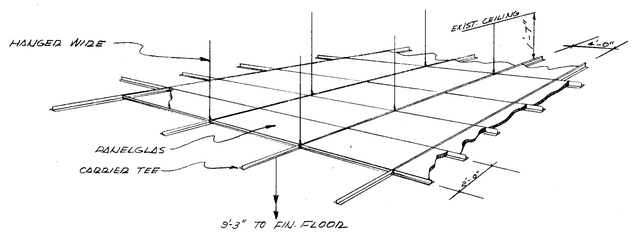


EXISTING FLOOD PLAN
SCALE: 1/4" = 1'-0"

THEORETICAL NORTH

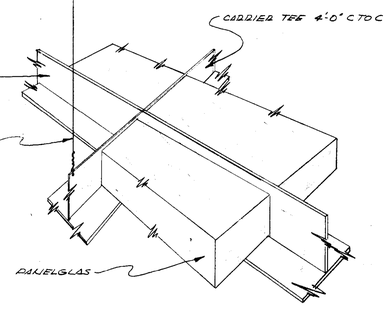


LOCATION PLAN
SCALE: 1" = 50'

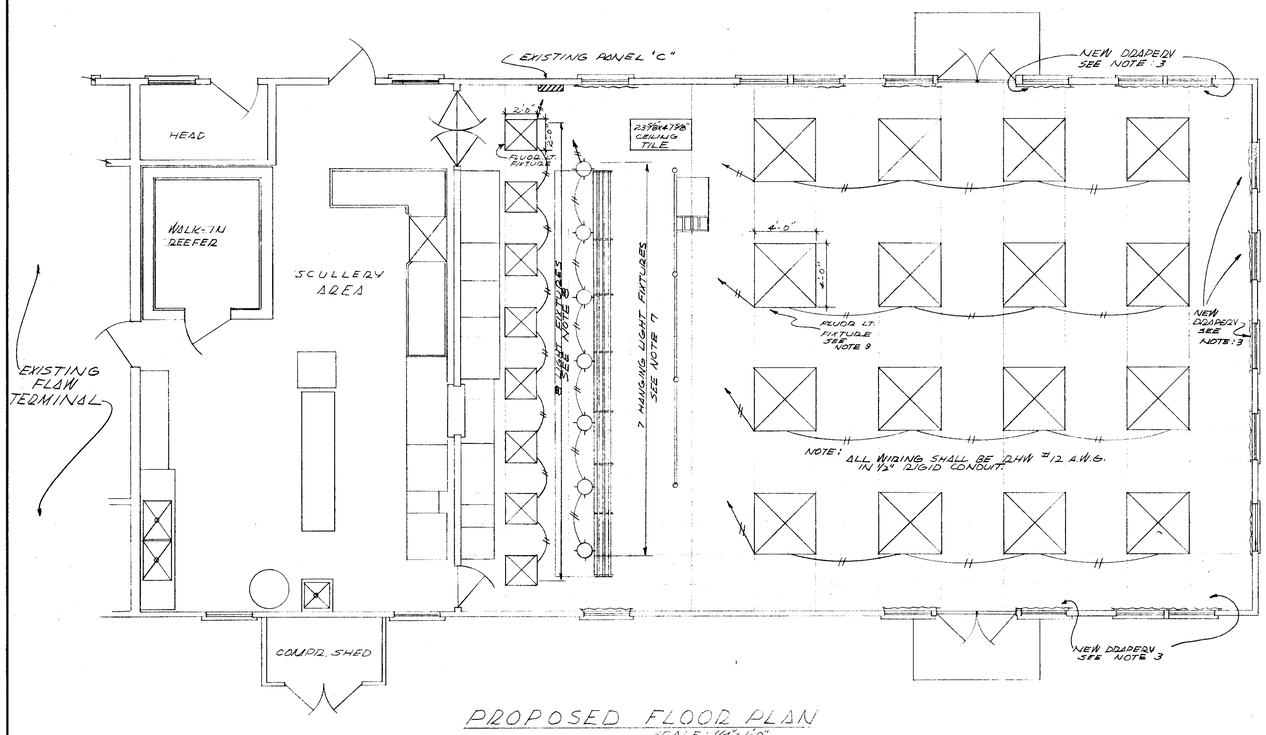


NEW CEILING DETAIL
SCALE: 1/4" = 1'-0"

NOTE:
REMOVE ALL EXISTING CEILING TILE WITH THE EXCEPTION OF THAT IN THE SCULLERY AREA.



DETAIL NEW CEILING
N.T.S.



PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"

GEN. NOTES:

1. FLOOR: "ARMSTRONG" TRAVERTEX™ EXCELON TILE 1/8" GUAGE #1131 "FROST WHITE."
2. WALLS: N.S. & E. WALLS - PANEL "MARLITE" #176 "AMERICAN WALNUT" W. WALL - PANEL "MARLITE" #954 "GREEN & GOLD"
3. DRAPERY: ALL WDW'S "SHERRIFF ASSOC. INC." #5088 (CASTER) COLOR #90 "RIVIERA."
4. CEILING TILE: SUSPENDED CEILING - 9'-3" Ht. "JOHNS-MANVILLE PRODUCTS" "PANELGLAS" 23"X 47"X8"
5. TABLES: "CHROMCRAFT" 30" SQ. TOP-FORMICA" #514 (MODERN WALNUT).
6. CHAIRS: "CHROMCRAFT" (FIBERGLAS) "EGGSHELL"
7. HANGING LIGHTS: "LIGHTOLIER" # 40605: POLISHED BRASS CYL. W/ MODIZ. SLOTTINGS. 5" W., 3 1/2" L (BODY) - TOT. LENGTH = 2'-3" - (7 EA.)
8. RECESSED FLOOR LIGHTING: "LIGHTOLIER", "DOMEX SERIES" 2'X2' 4 LT. - 20 W. (8 EA)
9. "RECESSED OPTIPLEX" 4'X4' 6 LT. - 40 W. (16 EA) (LIGHTOLIER)

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 5B-1527-1163

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN WHITE, W.
TR
CHK JCK
SUPV SEK/JL
IN CHARGE
REVIEWED BY

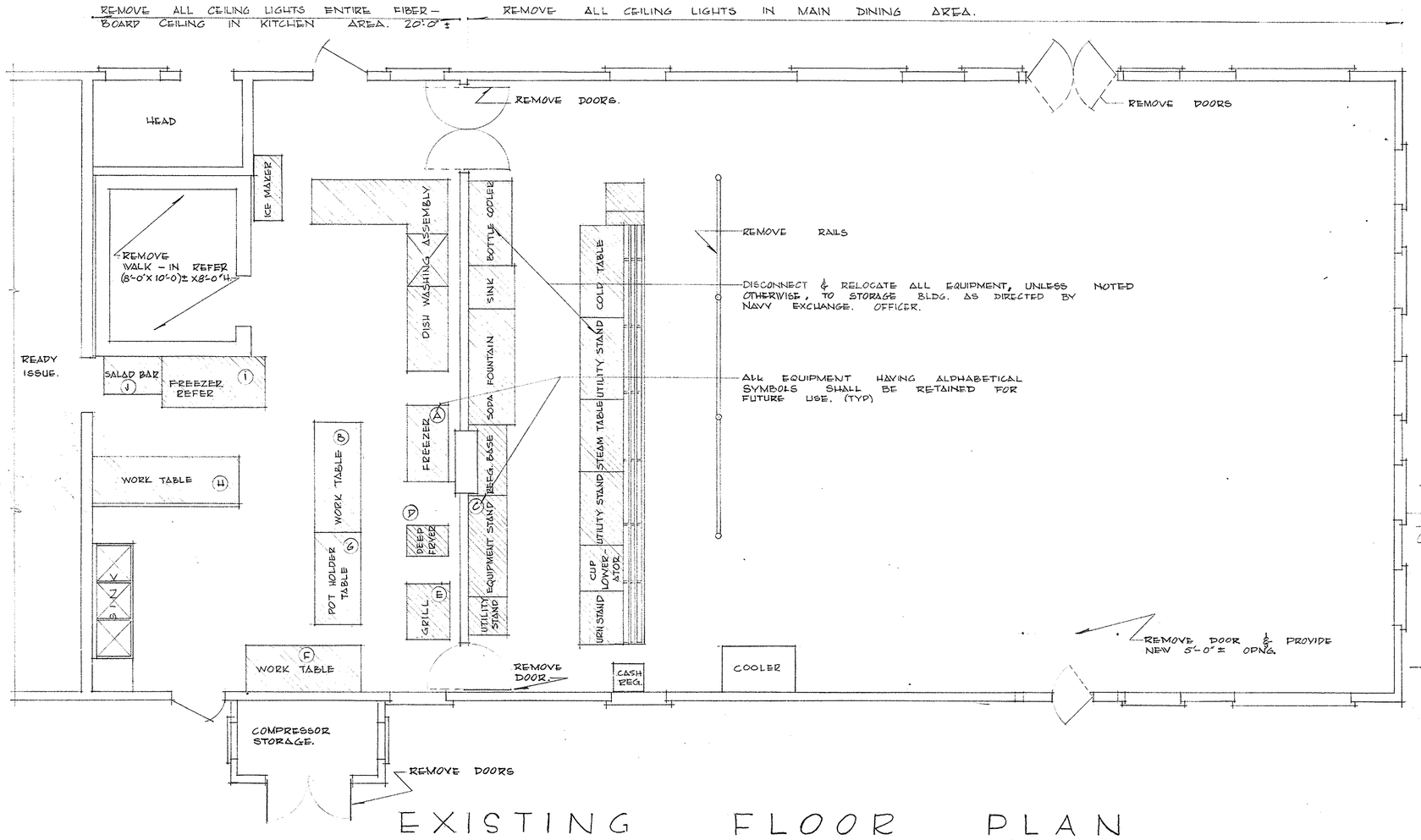
REMODEL
FLAW TERMINAL
AV-93
FLR. PLAN & ELEC.

APPROVED — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 4/10/64

SATISFACTORY TO B.B. Redmayne
DATE 4/2/64

SCALE AS NOTED — SPEC
SHEET ___ OF ___ NBY ___
Y & D DRAWING NO. ___

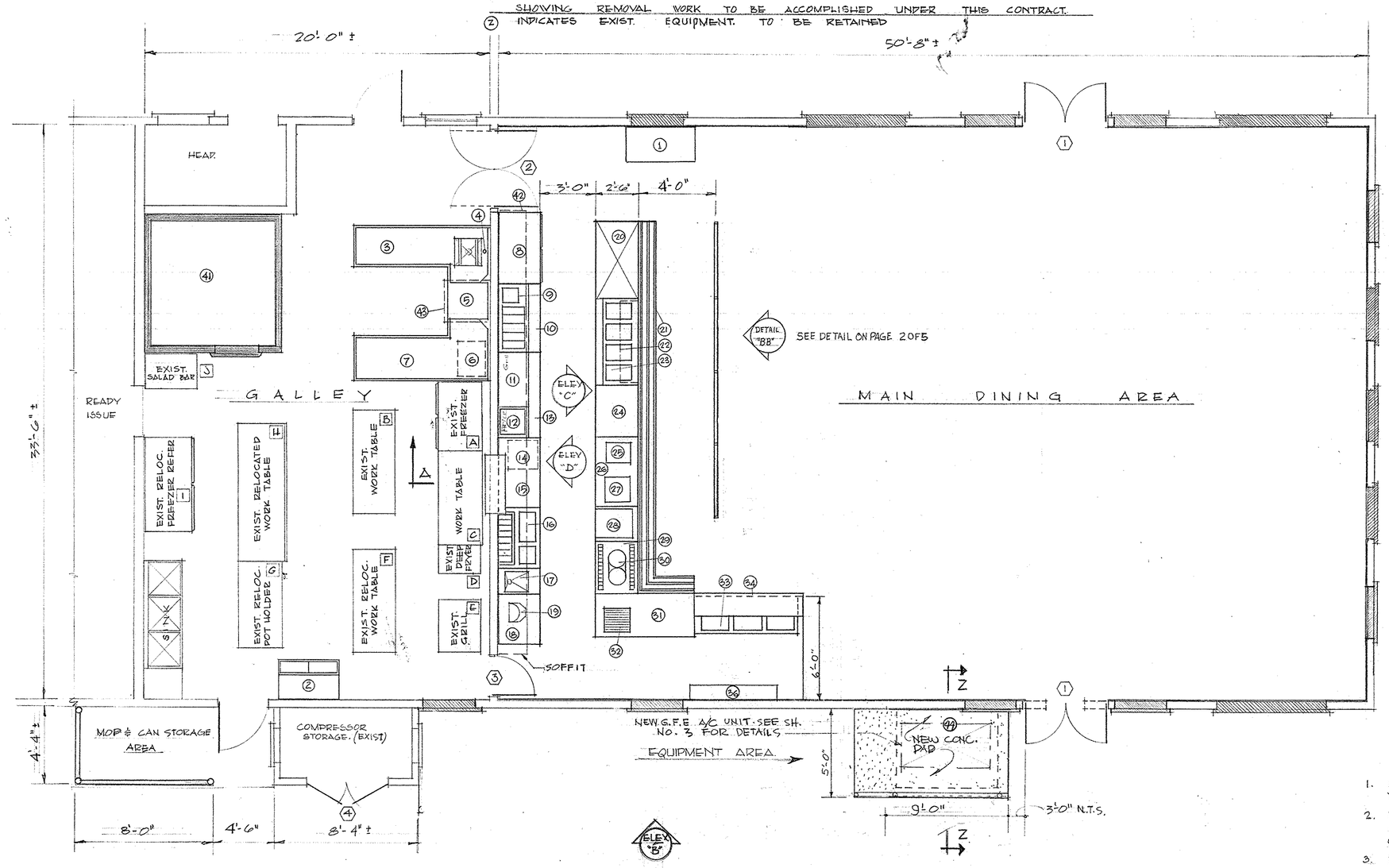
ESR-7554/4



EXISTING FLOOR PLAN

SCALE 1/4" = 1'-0"

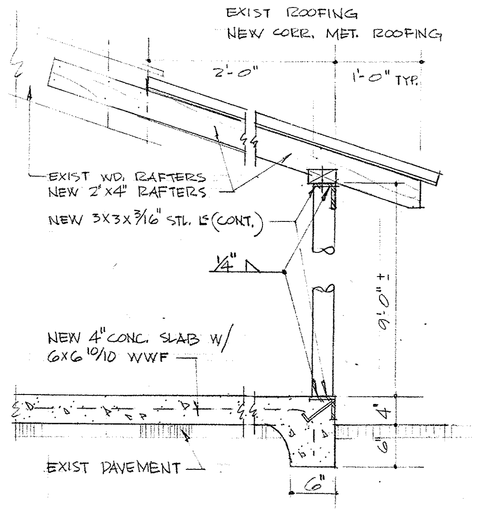
SHOWING REMOVAL WORK TO BE ACCOMPLISHED UNDER THIS CONTRACT.
(2) INDICATES EXIST. EQUIPMENT. TO BE RETAINED



NEW FLOOR PLAN

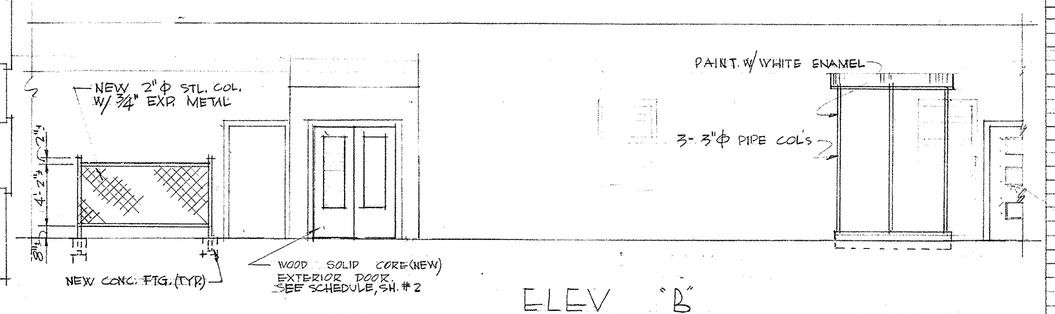
SCALE : 1/4" = 1'-0"

INDICATES WINDOWS TO BE BLOCKED IN - SEE SECT/ELEV "AA".
EXIST FRAME WALL W/NEW PANELING, EXCEPT AS INDICATED



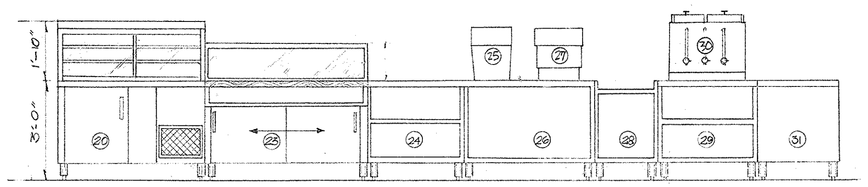
SECTION - ZZ

SC: 1" = 1'-0"



ELEV "B"

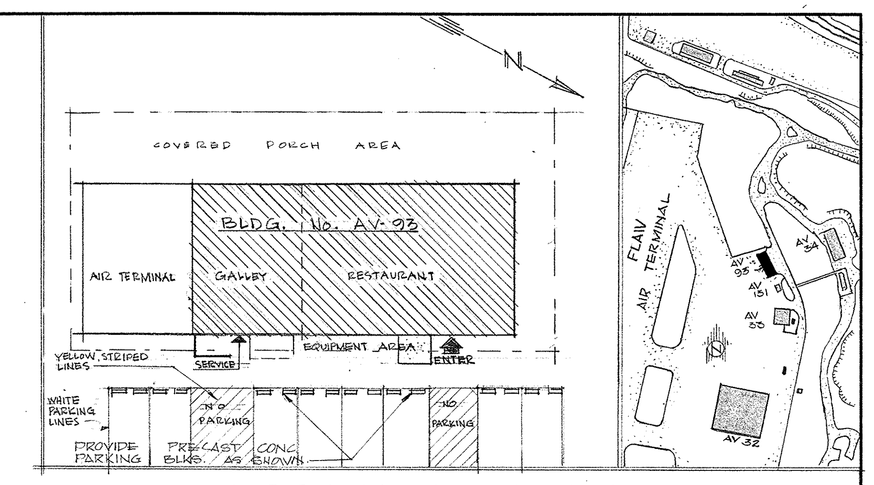
SCALE 3/16" = 1'-0



ELEV "C"

SCALE 1/4" = 1'-0"

SEE EQUIPMENT SCHEDULE THIS SH.



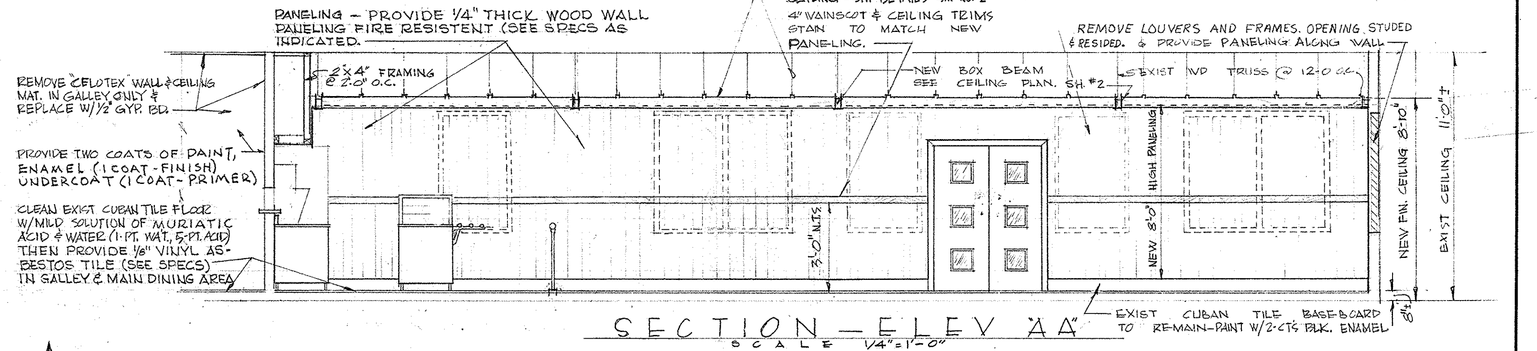
LOCATION PLAN

SCALE : 1" = 20'-0"

EQUIPMENT SCHEDULE (NEW)

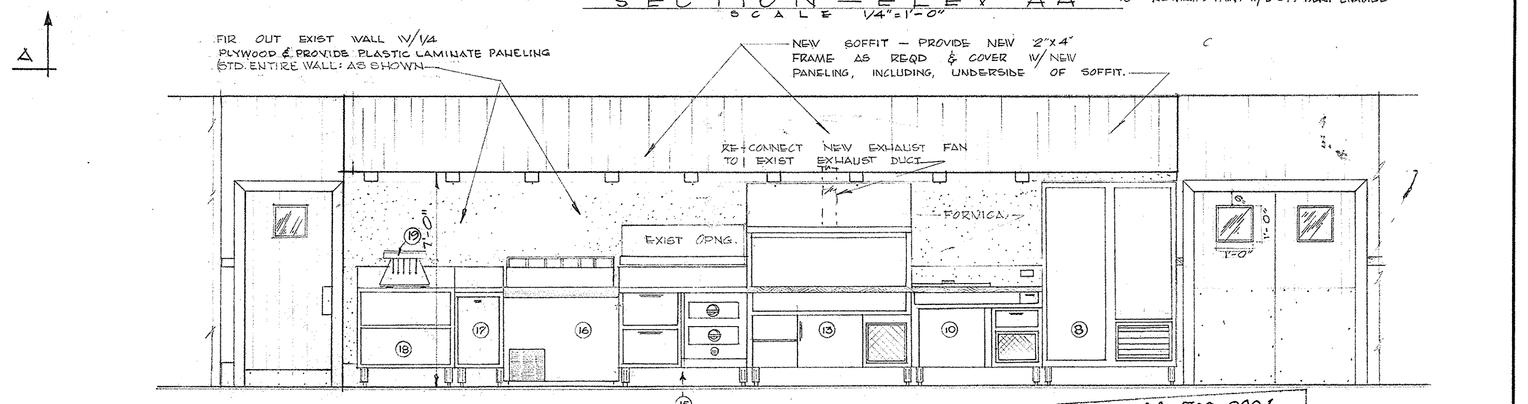
ITEM NO.	DESCRIPTION	HOT WATER	COLD WATER	WASTE	EXH	H.P.	VOLT/PHASE
1	DISH CART						
2	ICE MACHINE (SUPER CUBER)		1/4	1/8	1/5	1/4	115/1
3	SOILED DISH TABLE	1/2	1/2	1/2			
4	PRE RINSE SPRAY ASSEMBLY	3/4					
5	DISHWASHER	3/4		2	5		220/3
6	HOT WATER BOOSTER	3/4			12		220/3
7	CLEAN DISH TABLE	1/2	1/2	1/2			
8	DUAL TEMP. COMBINATION					1/3	115/1
9	TOASTER				26		115/1
10	SANDWICH UNIT						115/1
11	GRIDDLE				12		220/3
12	FRYER				12		220/3
13	REFRIGERATED EQUIP. STAND					1/3	115/1
14	ROLL WARMER				1		115/1
15	UTILITY CABINET						
16	ICE CREAM CABINET					1/2	115/1
17	SINK UNIT W/ DIPPER WELL	1/2	1/2	1/2			
18	UTILITY CABINET						
19	MULTIMIXER						115/1
20	COLD TABLE W/ REFRIG. DISPLAY				1	1/3	115/1
21	TRAY SLIDE						
22	PROTECTOR CASE						
23	STEAM TABLE	1/2			1	1/6	220/1
24	UTILITY CABINET						
25	JET-SPRAY BEVERAGE DISPENSER						
26	SERVICE STAND						
27	CARBONIC DISPENSER						
28	CUP STAND						
29	URN STAND		1/2	1/2	3		220/1
30	COFFEE URN						
31	SERVICE STAND						
32	CASH REGISTER						
33	BEVERAGE COOLER					1/4	115/1
34	COUNTER						
35	UNDER-COUNTER SINK	1/2	1/2	1/2			
36	STORAGE & DISPLAY CABINET						
37	CREAM DISPENSER						
38	CONDIMENT STAND						
39	GUARD-RAIL					1/4	115/1
40	SILVER & TRAY STAND						
41	WALK-IN REFRIG.					2	220/1
42	SOFFIT W/ LIGHTS						
43	DISHWASHING HOOD					1	220/1
44	15 TON AIR CONDITIONER					20	220/3

NOTE: ALL EQUIPMENT INDICATED IN THIS SCHEDULE IS NEW, FURNISHED BY N. EX. DEPT. (BLDG. #78) TO BE INSTALLED, INCLUDING ASSEMBLY & SERVICE CONNECTIONS, BY CONTRACTOR.



SECTION - ELEV "AA"

SCALE 1/4" = 1'-0"



ELEV "D"

SCALE 3/8" = 1'-0"

NOTES:

1. PROVIDE 2'-0" X 2'-0" X 3/4" THK. ACOUSTICAL TILE UNITS. (SEE SPECS)
2. PROVIDE TWO COATS OF FIRE RETARDANT PAINT ONE PRIMER (FLAT) AND ONE FINISH ENAMEL OFF WHITE (SEE SPECS) THROUGOUT GALLEY.
3. PANELING.- PROVIDE 1/4" THK. WOOD WALL PANELING FIRE RESISTENT (SEE SPECS) AS INDICATED
4. FILL ALL CRACKS AND CHIPPED AREAS WITH FLOORSTONE (SEE SPECS)

ESR # 7397/8

By N66144-70C-0001
CERTIFIED AS-BUILT
Resident Officer in Charge of Construction
5/24/71

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO. 5B-2110-0968-1

DES. K.M.
DRWN. Dingwall / Jackson
CHK. K.M.S.
SUPV. HARMON
IN CHARGE R.A. Tessendo
DIRECTOR

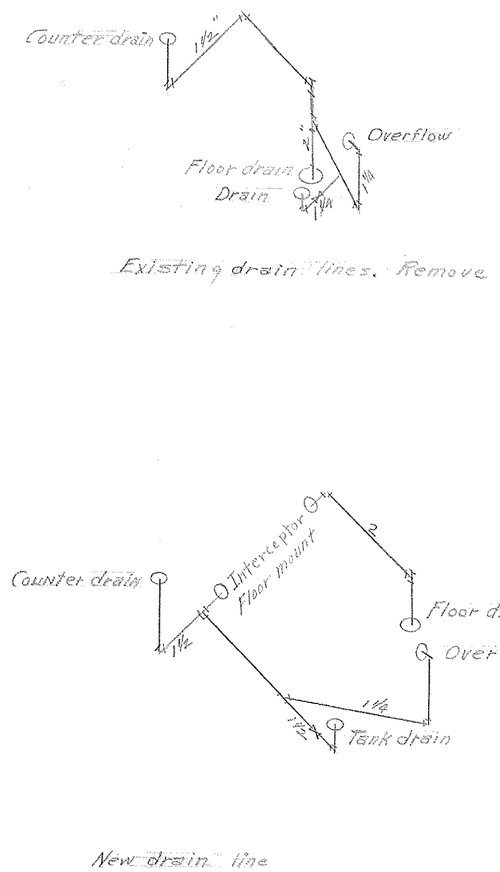
APPROVED Cornwell 5-19-70
OFFICER IN CHARGE OF CONSTRUCTION
SATISFACTORY TO DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
OFFICER IN CHARGE OF CONSTRUCTION
GUANTANAMO BAY, CUBA

US NAVAL STATION
REMODELLING OF FLAW TERMINAL RESTAURANT, BLDG # AV-93
ARCHITECTURAL

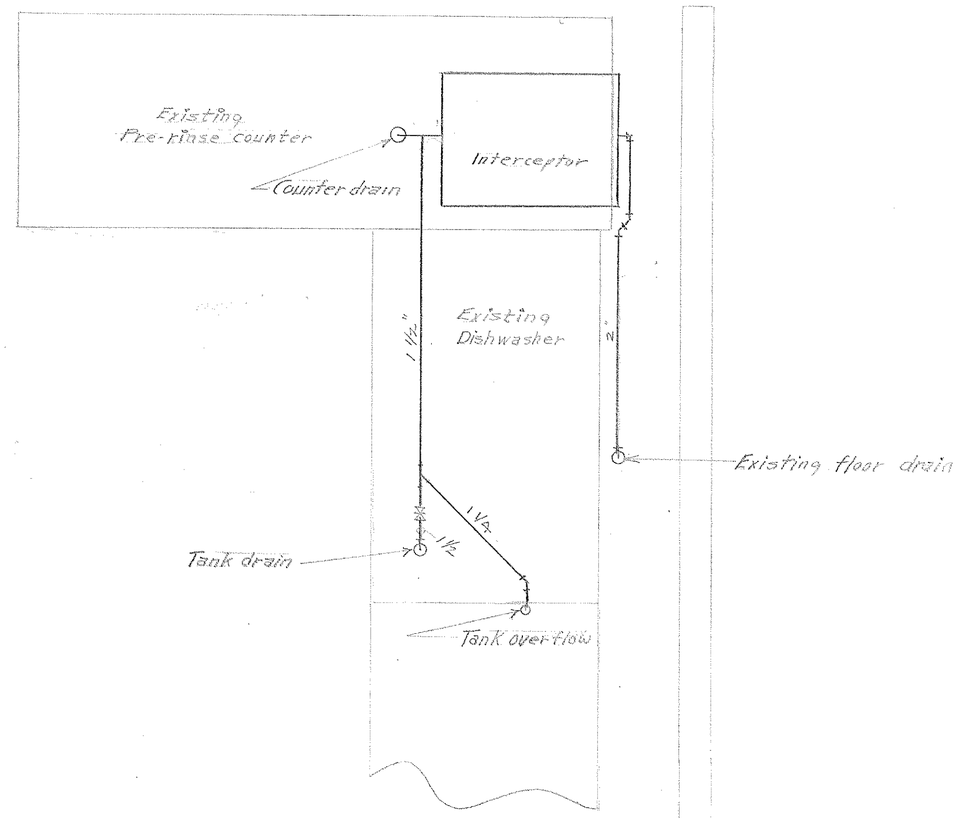
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	[redacted]
		CONSTR. CONTR. NO.
SCALE AS SHOWN	SPEC 0A-70-0001	SHEET 1 OF 5

EQUIPMENT SCHEDULE				
	GPM	CAP	Connections	Similar or Equal To
Grease Interceptor	15	30#	2" inlet & outlet	Josam Type JA 2



Existing drain lines. Remove

New drain line



PLAN VIEW
Indicating new drains & new interceptor

NOTE:

1. New drain line & interceptor to be installed below counter & dishwasher
2. Conform with Nav Spec. 31 Y6

ESR 2441/4

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 8M-2004-1064

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES AA
DRWN FE
TR
CHK AA
SUPV AA
IN CHARGE
REVIEWED BY GCC
[illegible] 9/11

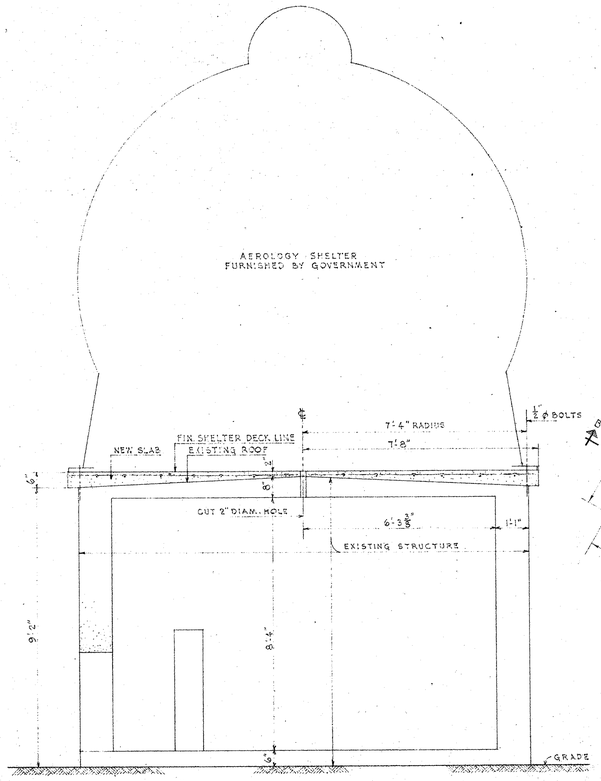
U.S. NAVAL AIR STATION
BUILDING AV-93
TERMINAL RESTAURANT
NEW GREASE TRAP

APPROVED [illegible] DATE [illegible]
COMMANDING OFFICER PUBLIC WORKS CENTER

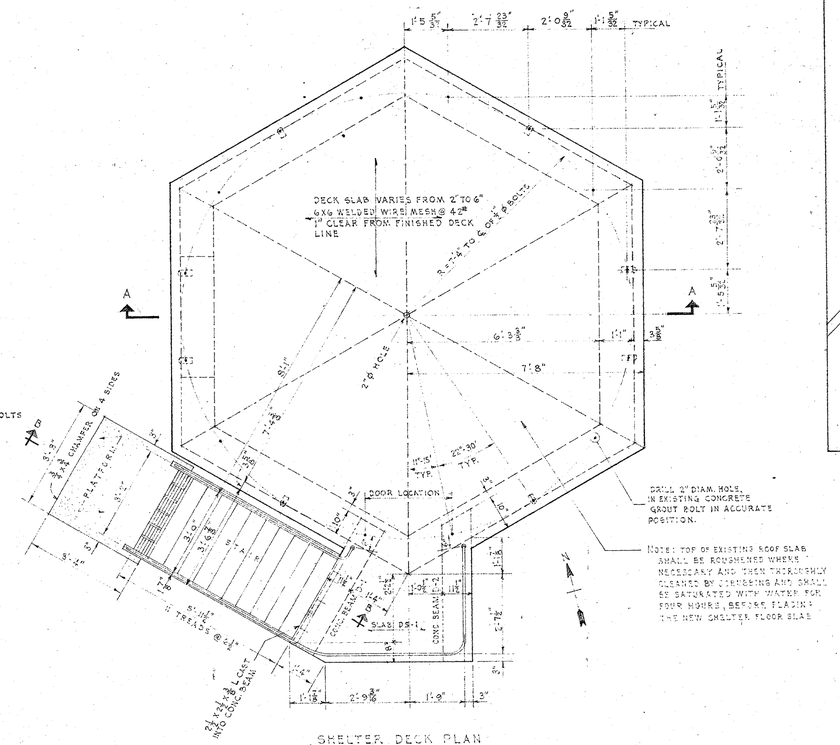
SATISFACTORY TO C. B. Uber
DATE 6 November 1964

SCALE 1"=1' SPEC
SHEET 1 OF 1 NO.
Y & D DRAWING NO.

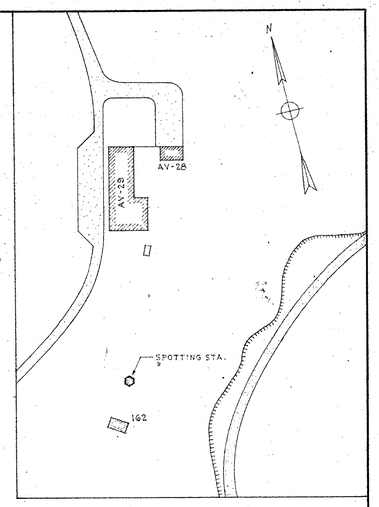
K+E ALBANENE® TRACING PAPER 72870



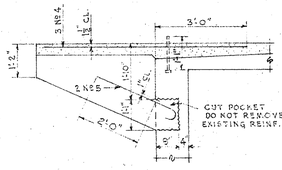
SECTION A-A
SCALE 1/2" = 1'-0"



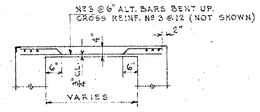
SHELTER DECK PLAN
SCALE 1/2" = 1'-0"



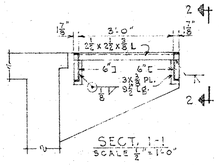
LOCATION PLAN
SCALE 1" = 100'



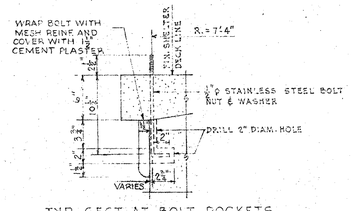
SECT. AT BEAMS D-1 & D-2
SCALE 1/2" = 1'-0"



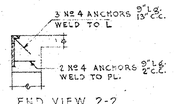
SECT. THRO' SLAB DS-1
SCALE 1/2" = 1'-0"



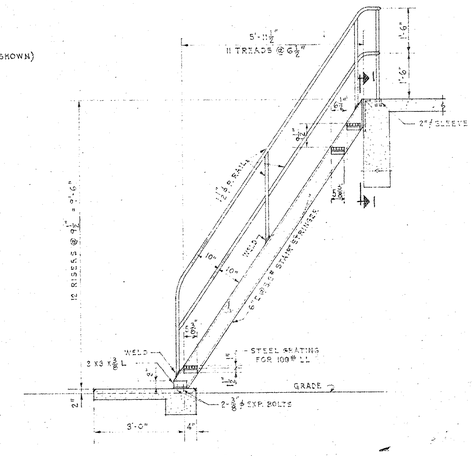
SECT. 1-1
SCALE 1/2" = 1'-0"



TYP. SECT. AT BOLT POCKETS
SCALE 1 1/2" = 1'-0"



END VIEW 2-2
SCALE 1/2" = 1'-0"



SECTION "B-B" THRO' STAIRS
SCALE 1/2" = 1'-0"

GRAPHIC SCALES

1/2" = 1'-0"
1 1/2" = 1'-0"
1" = 100'

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
DISTRICT PUBLIC WORKS OFFICE
TENTH NAVAL DISTRICT—SAN JUAN, P. R.

DESIGN & CONST. OFFICER: R. L. Stepper, LCDR CEC USN
IN CHG. Fendl. Ocean
DSGN. W. G. McFARLAND
FCO. SANCHEZ
DR. M. A. KERCADO
CHK. W. G. McFarland

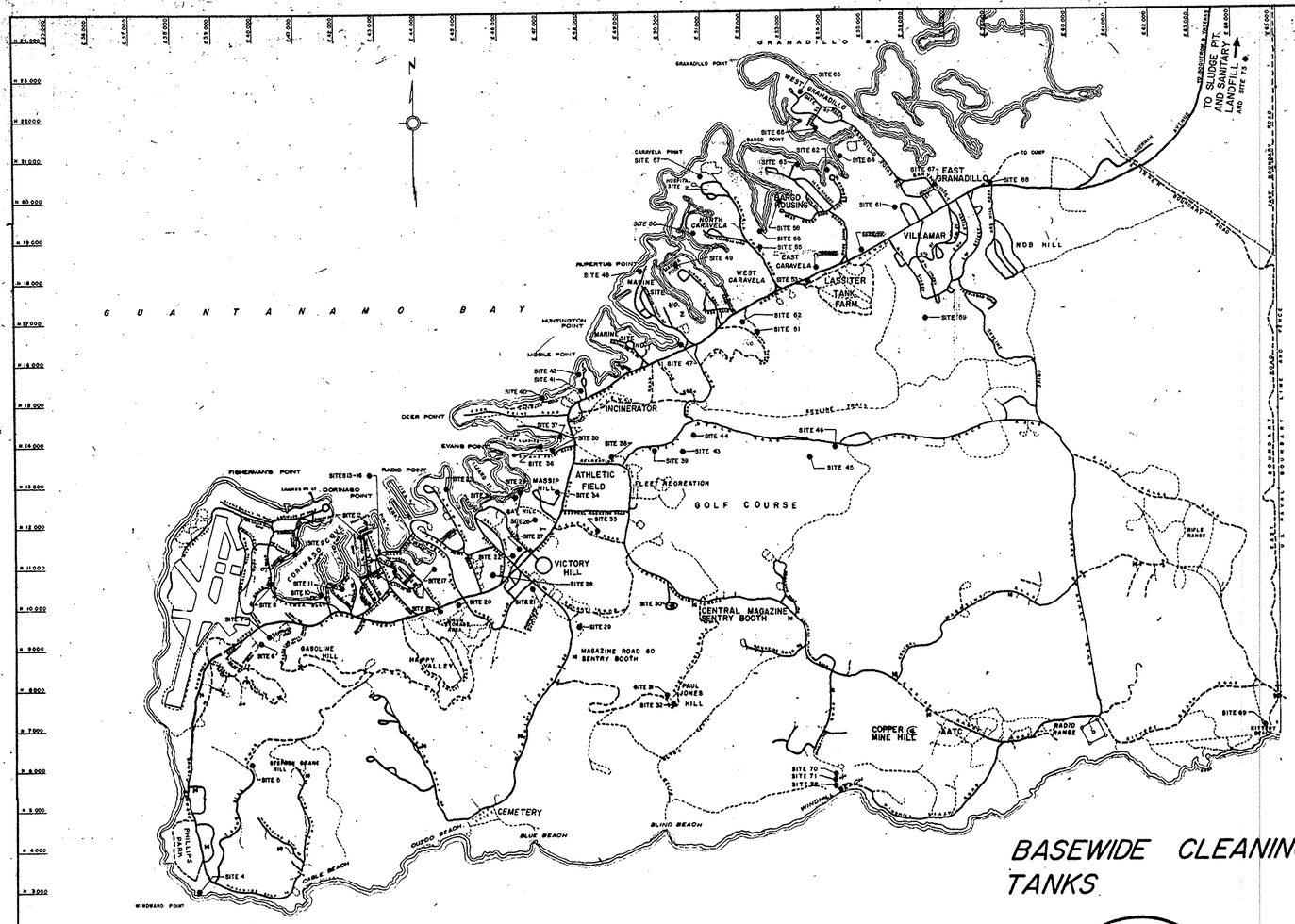
U.S. NAVAL AIR STATION
GUANTANAMO BAY, CUBA

SPOTTING STATION
AEROLOGY INSTALLATION
PLAN AND DETAILS
Bldg AV-150 (1276)

APPROVED: [signature], CAPT CEC USN DPW OFFICER
DATE: 24 JUNE '53

SCALE AS SHOWN — SPEC 38888
SHEET 1 OF 1 — NOy
Y & D DRAWING NO. 603368

5B-730-0653



INDEX OF DRAWINGS

SHEET 1 of WINDWARD PT. VICINITY MAP
SHEET 2 of LEEWARD PT. VICINITY MAP
SHEET 3 of SITES 1 THRU 16 SITE PLANS
SHEET 4 of SITES 17 THRU 34 SITE PLANS
SHEET 5 of SITES 35 THRU 46 SITE PLANS
SHEET 6 of SITES 47 THRU 64 SITE PLANS
SHEET 7 of SITES 65 THRU 73 SITE PLANS

NOTE: SEE SEPTIC TANK LISTING ON SHEET 4.

BASEWIDE CLEANING OF SEPTIC TANKS

LEGEND

- IMPROVED ROADS OR PAVED
- UNIMPROVED ROADS
- TRAILS
- GATES
- EMERGENCY PHONES
- SEPTIC TANK WORK SITE

SYMBOL	DESCRIPTION	REV BY

REVISIONS

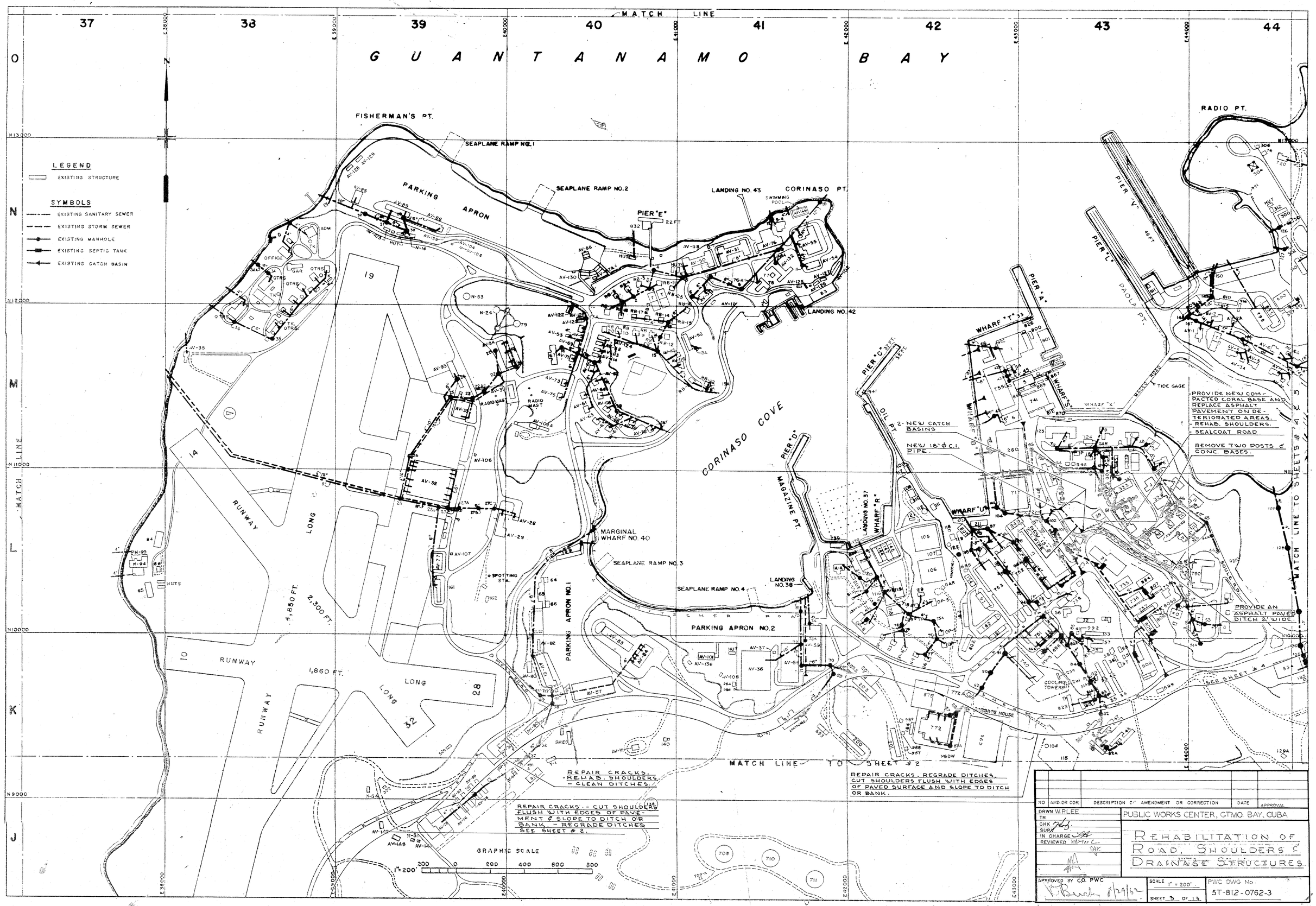
DEPARTMENT OF THE NAVY NAVAL FACILITIES
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION

BASEWIDE CLEANING OF SEPTIC TANKS
VICINITY MAP U.S. NAVAL
GUANTANAMO BAY, CUBA
WINDWARD POINT

DES
DRWN
CHK
SUPV
FNO OFF
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

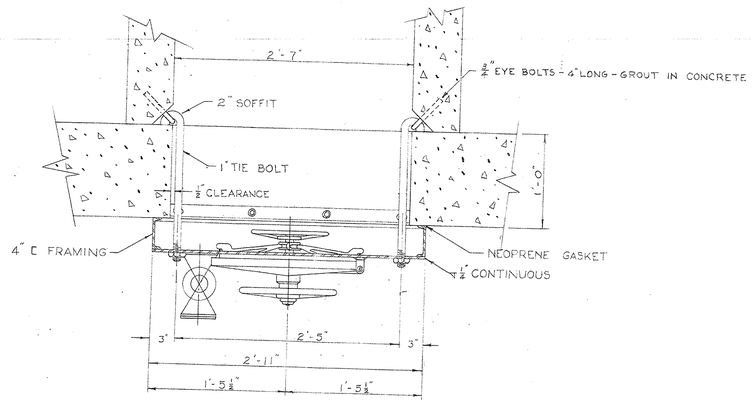
SIZE F | CODE IDENT NO. | NAVFAC 4232456 | SCALE: AS NOTED

CONTR. Nº N62470-91-C-7669 SPEC. Nº 05-91

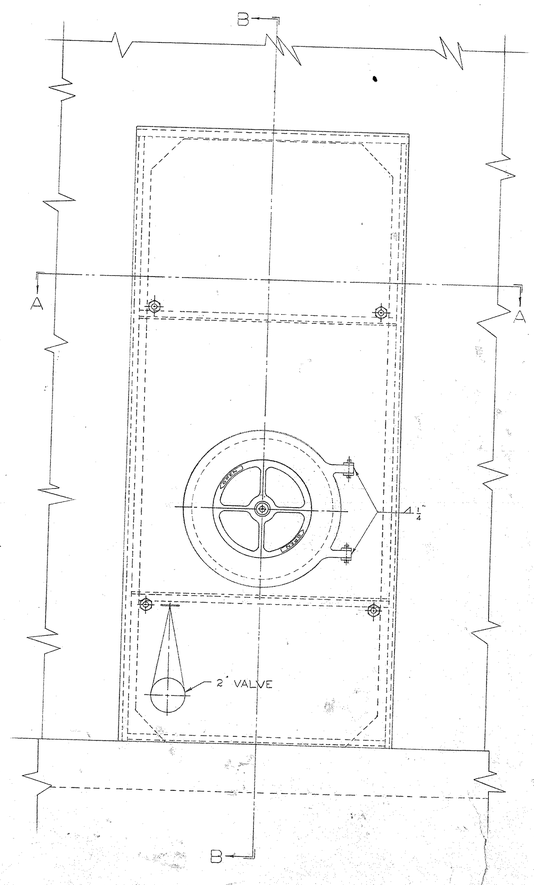


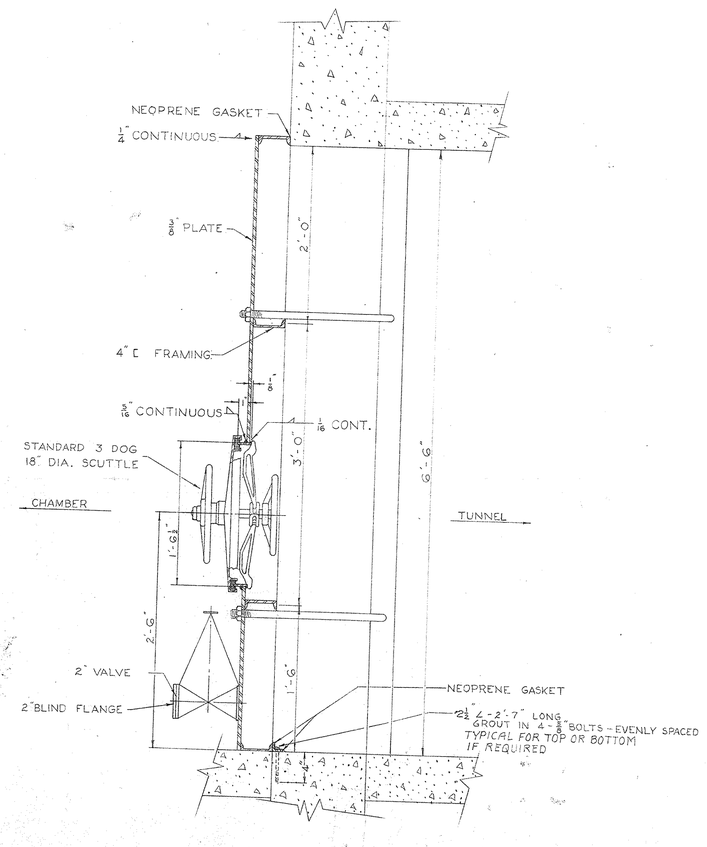
MATCH LINE
GUANTANAMO BAY
LEGEND
EXISTING STRUCTURE
SYMBOLS
EXISTING SANITARY SEWER
EXISTING STORM SEWER
EXISTING MANHOLE
EXISTING SEPTIC TANK
EXISTING CATCH BASIN
FISHERMAN'S PT.
SEAPLANE RAMP NO.1
SEAPLANE RAMP NO.2
PARKING APRON
PIER "E"
LANDING NO. 43
CORINASO PT.
LANDING NO. 42
RADIO PT.
PIER "V"
PIER "L"
PIER "A"
PAOLA PT.
WHARF "T"
WHARF "S"
WHARF "X"
PIER "C"
OIL PT.
CORINASO COVE
PIER "D"
MAGAZINE PT.
LANDING NO. 37
WHARF "R"
WHARF "U"
MARGINAL WHARF NO. 40
SEAPLANE RAMP NO.3
SEAPLANE RAMP NO.4
LANDING NO. 38
PARKING APRON NO.1
PARKING APRON NO.2
RUNWAY LONG
RUNWAY LONG
RUNWAY
4,850 FT.
2,300 FT.
1,860 FT.
SPOTTING STA.
RADIO MAST
TIDE GAGE
2- NEW CATCH BASINS
NEW 18" ϕ C.I. PIPE.
PROVIDE NEW COMPACTED CORAL BASE AND REPLACE ASPHALT PAVEMENT ON DETERIORATED AREAS.
- REHAB. SHOULDERS.
- SEALCOAT ROAD
REMOVE TWO POSTS & CONC. BASES.
PROVIDE AN ASPHALT PAVED DITCH 2' WIDE.
MATCH LINE TO SHEETS # 4 & 5
SEE SHEET # 4
MATCH LINE TO SHEET # 2
REPAIR CRACKS.
- REHAB. SHOULDERS.
- CLEAN DITCHES.
REPAIR CRACKS. REGRADE DITCHES. CUT SHOULDERS FLUSH WITH EDGES OF PAVED SURFACE AND SLOPE TO DITCH OR BANK.
REPAIR CRACKS. - CUT SHOULDERS FLUSH WITH EDGES OF PAVEMENT & SLOPE TO DITCH OR BANK. - REGRADE DITCHES SEE SHEET # 2.
GRAPHIC SCALE
1" = 200'
200 0 200 400 600 800
NO | AMD. OR COR. | DESCRIPTION OF AMENDMENT OR CORRECTION | DATE | APPROVAL
DRWN W.P. LEE
TR
CHK
SUPV
IN CHARGE
REVIEWED
PUBLIC WORKS CENTER, GTMO. BAY, CUBA
REHABILITATION OF ROAD, SHOULDERS & DRAINAGE STRUCTURES
APPROVED BY C.O. PWC
8/29/62
SCALE 1" = 200'
SHEET 3 OF 13
PWC DWG No. 5T-812-0762-3

ESR - 1026/2 - B



SECTION A-A





SECTION B-B

NOTE:

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWO DRAWING NO. 28-323-0852-3

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
U. S. NAVAL STATION
GUANTANAMO BAY, CUBA

DES
DRWN George Pollitt
TR
CHK H J Barnes
SUPV H J Barnes
IN CHARGE J Hamilton

BULKHEADS FOR ACCESS DOORS TO GASOLINE STORAGE TANKS 709 THROUGH 714

APPROVED J. Mackenzie Colt DATE 25 Aug 52
PUBLIC WORKS OFFICER

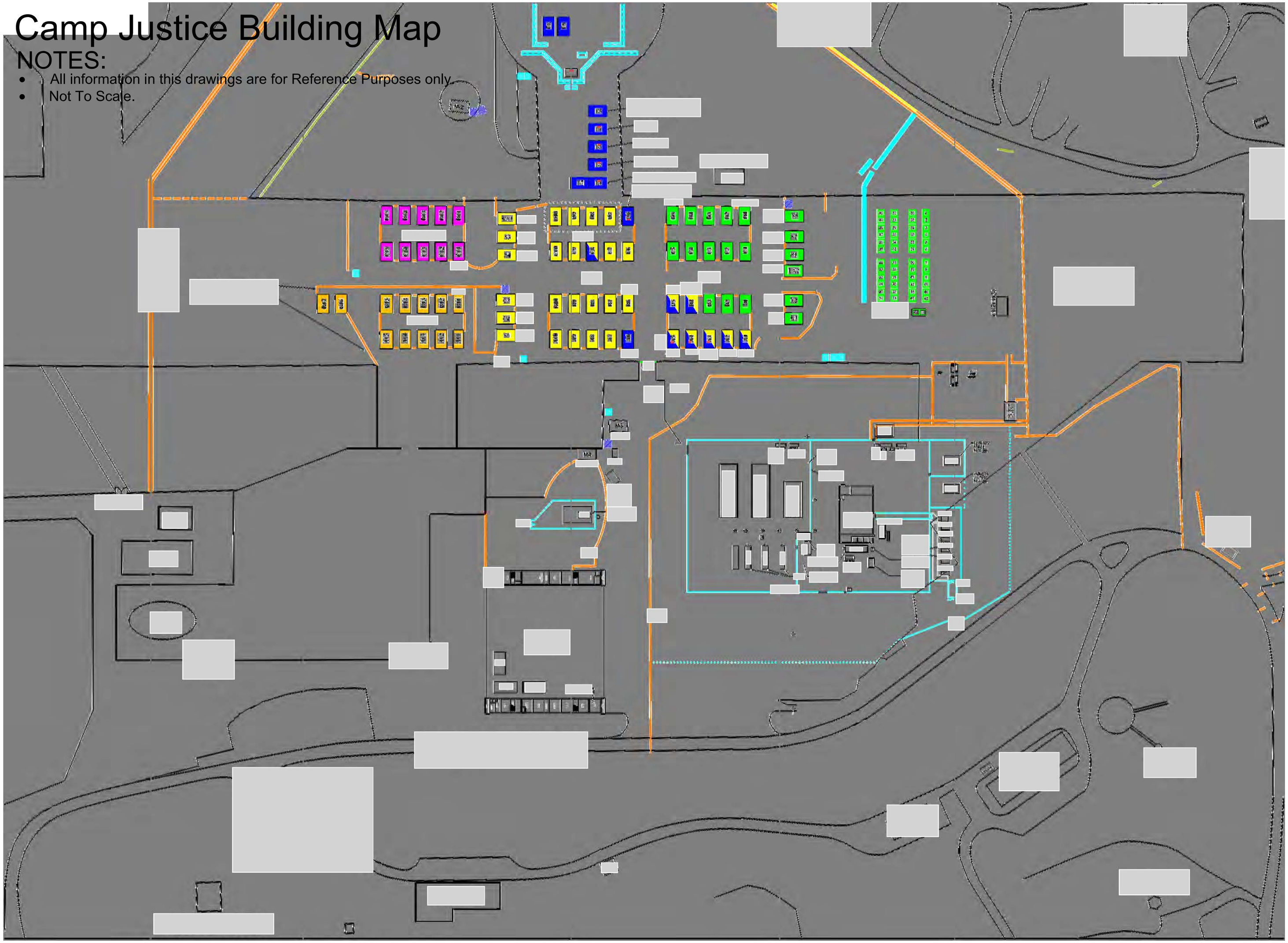
SATISFACTORY TO C.A. Nissen Lt Comdr
DATE 9/16/52

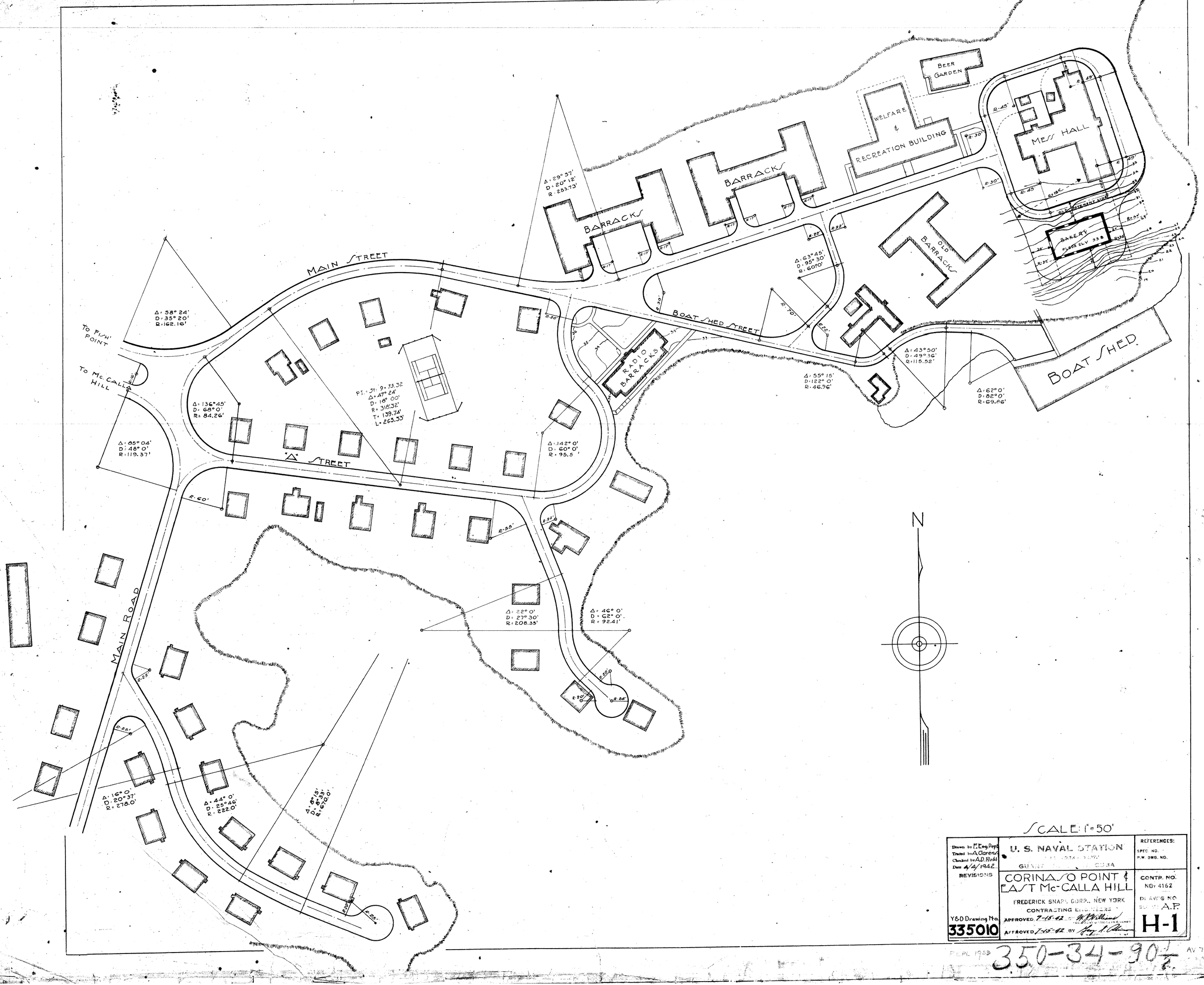
SCALE 1 1/2" = 1'-0" SPEC.
SHEET 3 OF 3 NO Y
Y & D DRAWING NO.

Camp Justice Building Map

NOTES:

- All information in this drawings are for Reference Purposes only.
- Not To Scale.

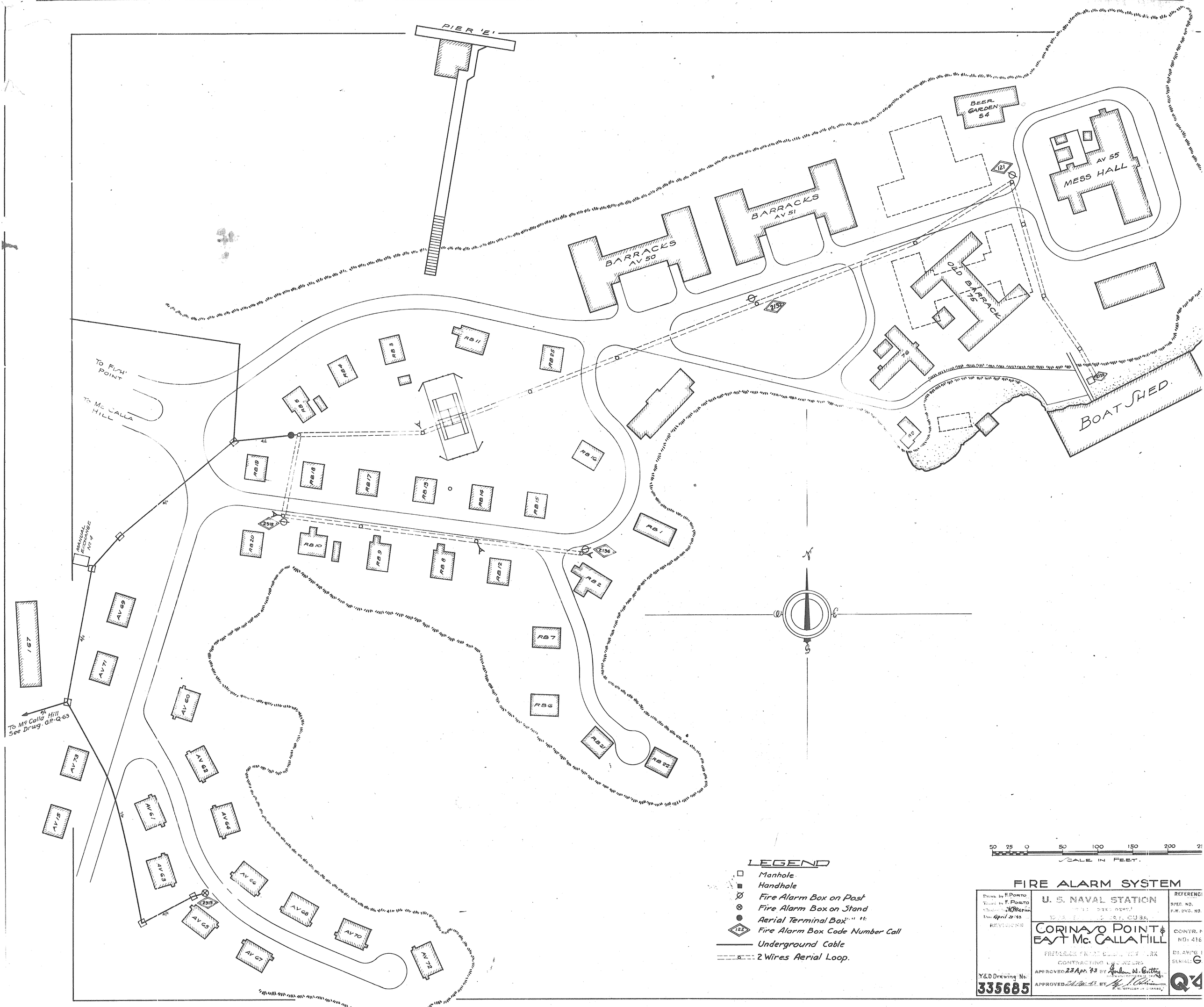


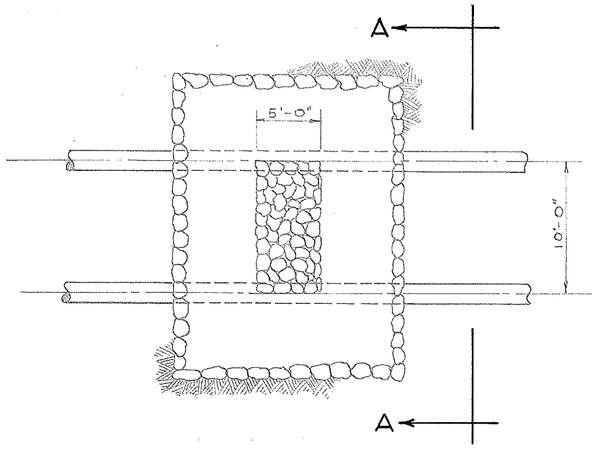


SCALE: 1" = 50'

Drawn by F. Eng. Dept Traced by A. Clarens Checked by A.D. Rudd Date 4/4/1942 REVISIONS	U. S. NAVAL STATION GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	CORINASO POINT & EAST Mc-CALLA HILL	CONTR. NO. NOy 4162
	FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS APPROVED 7-15-42 BY H. P. Williams APPROVED 7-15-42 BY [illegible]	DRAWING NO. SHEET NO. A.P. H-1
Y&D Drawing No. 335010		

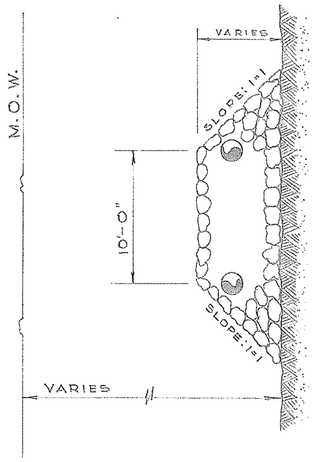
REPL 1953 350-34-90 1/2 AV 70


PIER 'E'
BEER GARDEN S4
AV 55
MESS HALL
BARRACKS AV 51
BARRACKS AV 50
OLD BARRACK 75
BOAT SHED
TO FISH POINT
TO McCALLA HILL
MANUAL EXCHANGE No 4
To McCalla Hill See Drwg. G.P.-Q-63
RB 1
RB 2
RB 3
RB 4
RB 5
RB 6
RB 7
RB 8
RB 9
RB 10
RB 11
RB 12
RB 13
RB 14
RB 15
RB 16
RB 17
RB 18
RB 19
RB 20
RB 21
RB 22
RB 25
AV 60
AV 61
AV 62
AV 63
AV 64
AV 65
AV 66
AV 67
AV 68
AV 69
AV 70
AV 71
AV 72
AV 73
AV 15
167
2132
2136
2312
2319
121
LEGEND
Manhole
Handhole
Fire Alarm Box on Post
Fire Alarm Box on Stand
Aerial Terminal Box
Fire Alarm Box Code Number Call
Underground Cable
2 Wires Aerial Loop.
50 25 0 50 100 150 200
SCALE IN FEET.
FIRE ALARM SYSTEM
Drawn by F. PORTO
Traced by F. PORTO
Checked by
Date April 21-43
REVISIONS
U. S. NAVAL STATION
CORINASO POINT & EAST Mc. CALLA HILL
FREDERICK CHARLES DUNN, NEW YORK
CONTRACTING ENGINEERS
APPROVED 23 Apr. '43 BY Gordon W. Bentley
APPROVED 24 Apr. 43 BY
Y&D Drawing No.
335685
REFERENCE
SPEC. NO.
P.W. DWG. NO.
CONTR. NO. 416
DRAWING SERIAL G
Q4

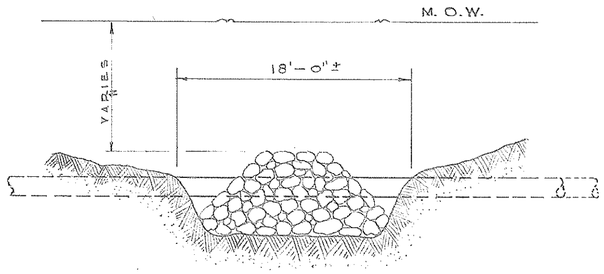


PLAN

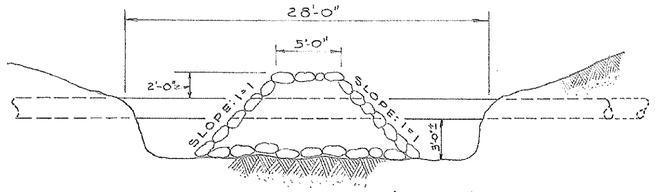
SCALE: 1/8" = 1'-0"



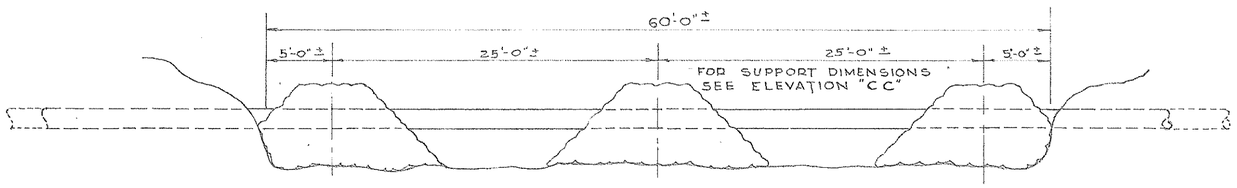
SECTION "A A"



ELEVATION "B B"



ELEVATION "C C"



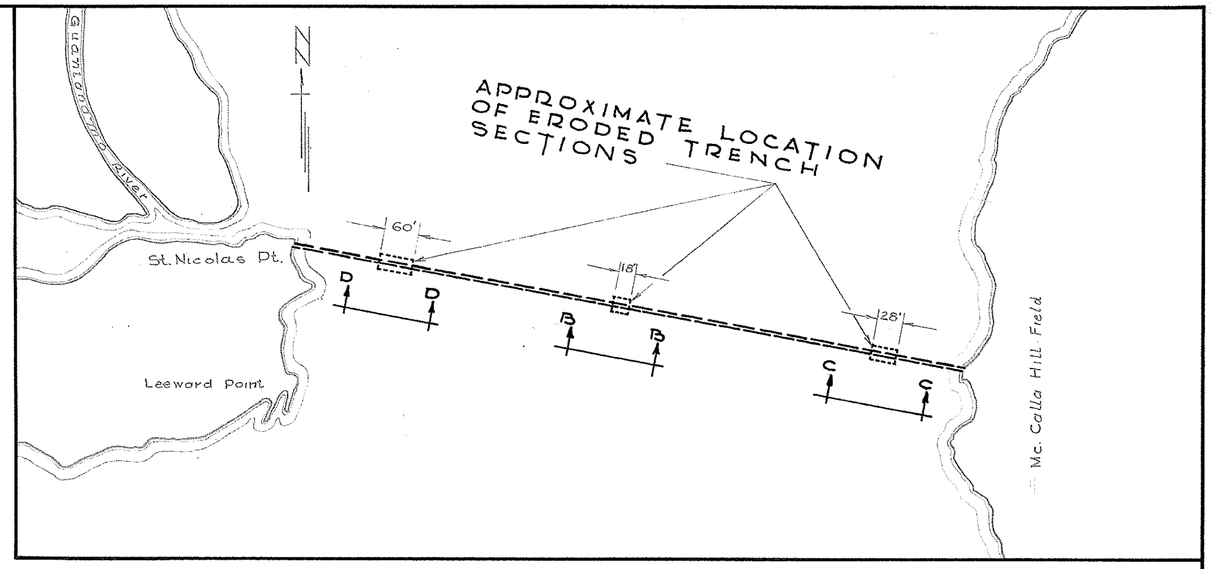
ELEVATION "D D"

SCALE: 1/8" = 1'-0"

DETAILS TYPICAL PIPE SUPPORT

NOTE:

PIPE SUPPORTS SPACED APPROXIMATELY 25'-0" O.C.



LOCATION PLAN

SCALE: 1 = 15,000

GENERAL NOTES

FILL JUTE BAGS WITH 3:1 SAND-CEMENT MIX AND PLACE UNDER SUBMERGED PIPES FOR SUPPORT AND ANCHORAGE

SYMBOL	DESCRIPTION	DATE	APPROVAL

PWC DRAWING NO. 8M-1267-0660

DEPARTMENT OF THE NAVY BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES Moore
DRWN Fitzgerald
TR "
CHK
SUPV Moore
IN CHARGE
REVIEWED BY

NAVAL AIR STATION

SUPPORT FOR CROSS BAY WATER AND FUEL LINE IN ERODED AREAS

APPROVED DATE

COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO

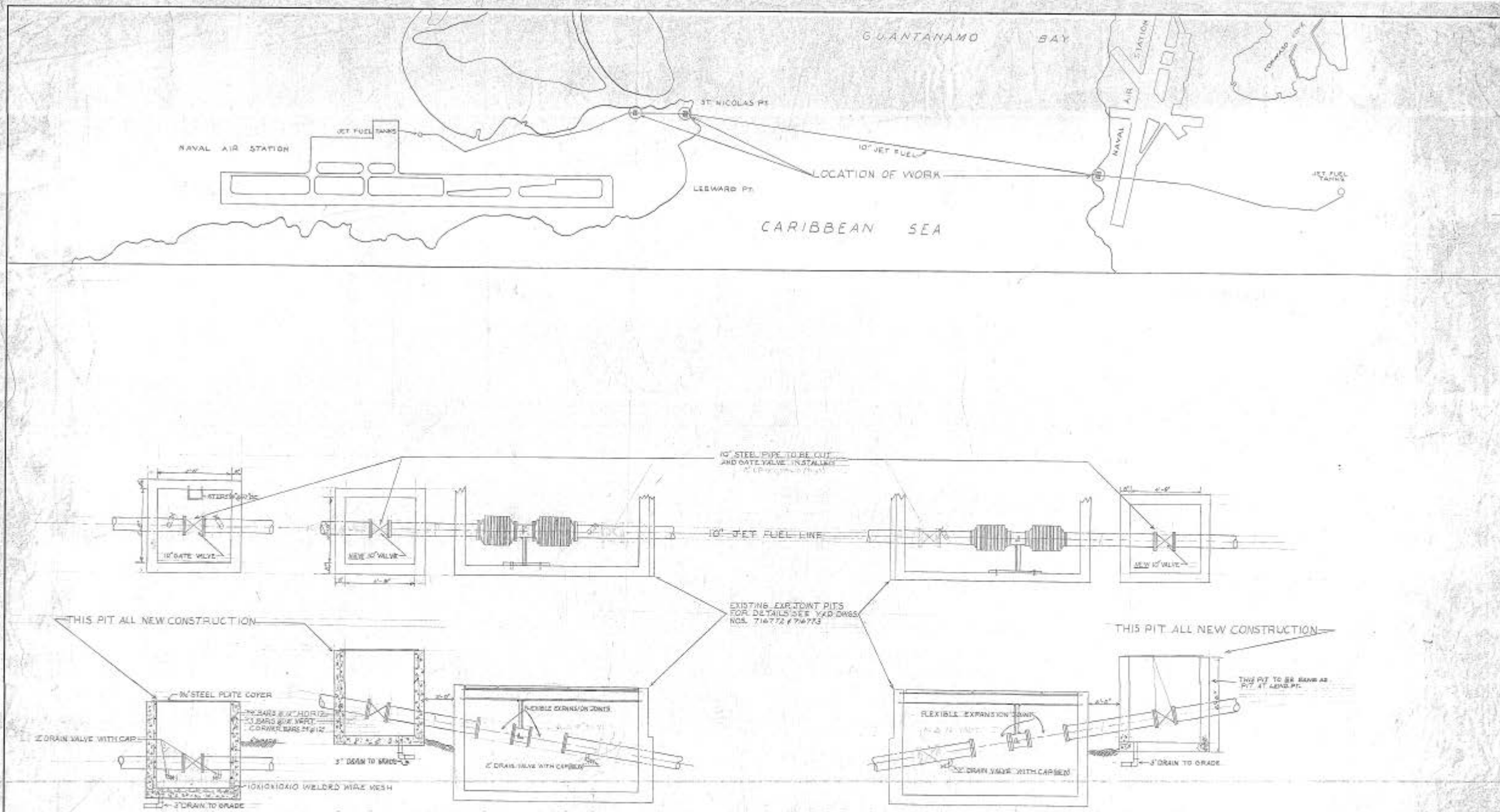
DATE

SCALE AS SHOWN SPEC

SHEET ___ OF ___ NBY ___

Y & D DRAWING NO.

K+E ALBANENE 195L GRAPHING PAPER 61850



NOTE: FOR LOCATION OF 'LOW POINT' SEE Y&D DWG. NO. 716754; STA. 20+50

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

P.W.C. DRAWING NO. 1003-121-0880

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS

PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES.
DRWN.
TR.
CHK.
SUPV.
IN CHARGE
REVIEWED BY

CROSS BAY JET FUEL LINE
ADDITIONAL VALVES
INSTALLATION OF

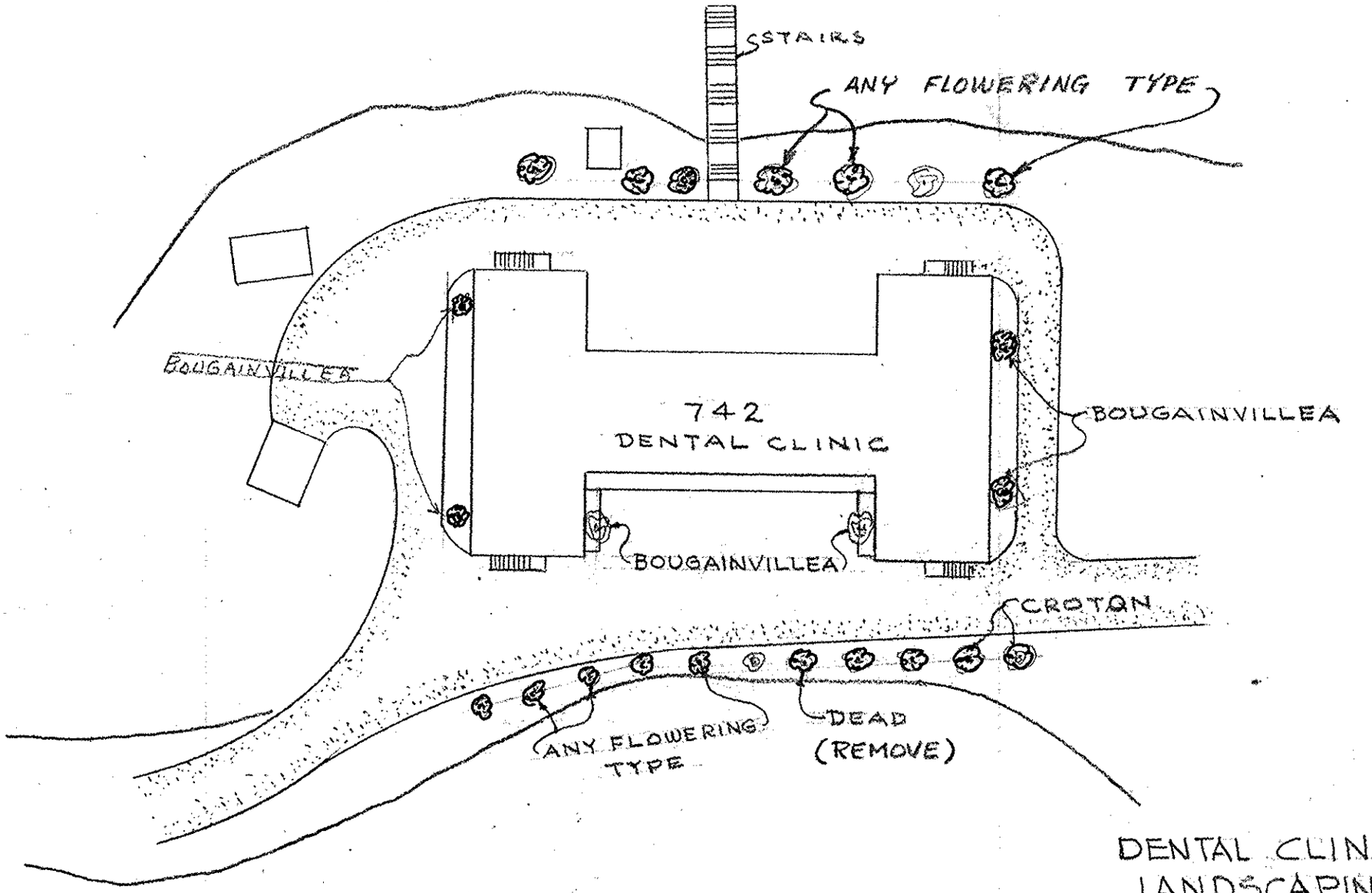
APPROVED — DATE
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO

DATE 3/1/61

SCALE 3/8"=1'-0" — SPEC.
SHEET ___ OF ___ No.
Y & D DRAWING NO.

1003-121-0884



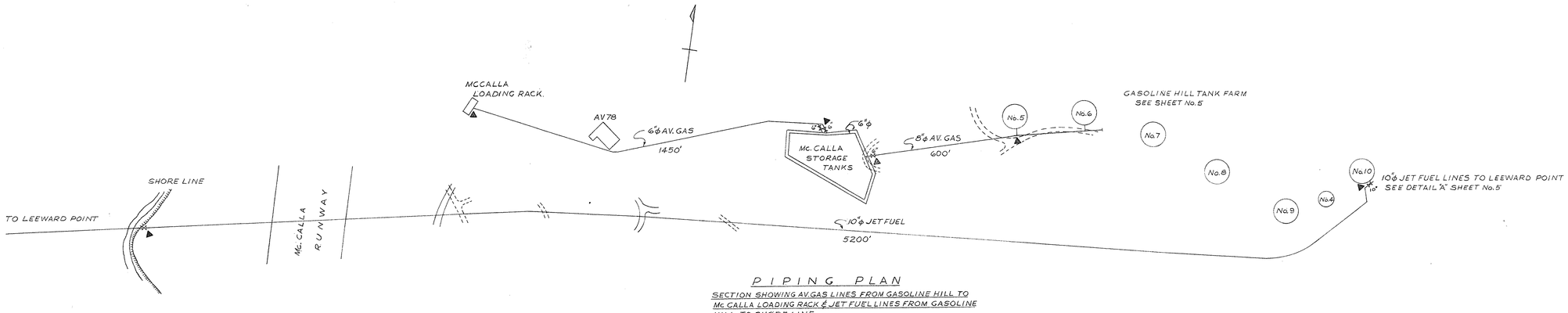
DENTAL CLINIC LANDSCAPING

SATISFACTORY
To DENTAL CLINIC W G Marsh Jr
By direction

DRAWN BY: [illegible] DATE: APR. 10-1957

SK. No.: 8M-881-0457 APPROVED: _____

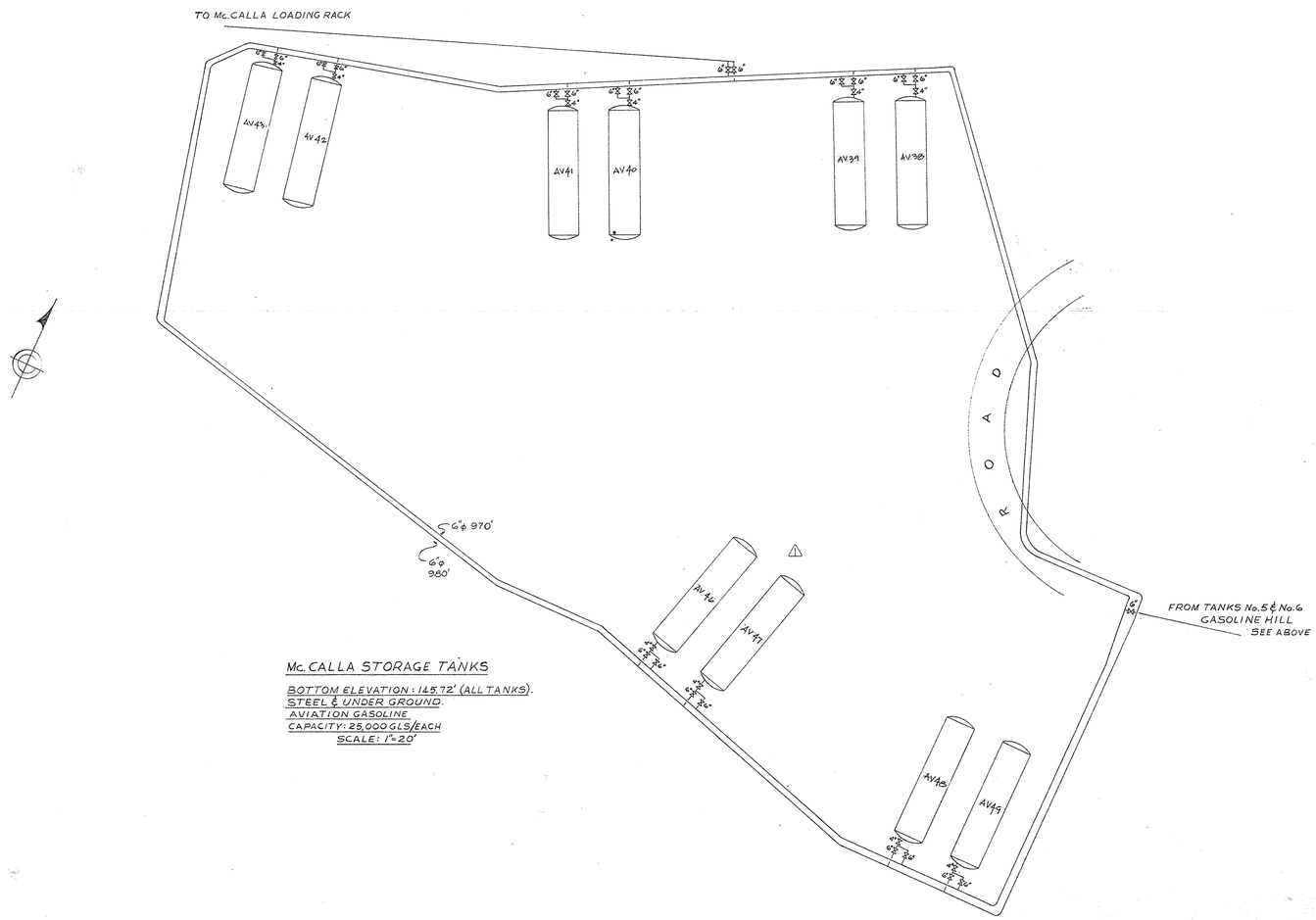
IN CHARGE: _____



PIPING PLAN

SECTION SHOWING AV.GAS LINES FROM GASOLINE HILL TO Mc CALLA LOADING RACK & JET FUEL LINES FROM GASOLINE HILL TO SHORE LINE.

SCALE: 1"=200'



Mc. CALLA STORAGE TANKS

BOTTOM ELEVATION: 145.72' (ALL TANKS).
STEEL & UNDER GROUND.
AVIATION GASOLINE
CAPACITY: 25,000 GLS/EACH
SCALE: 1"=20'

SYMBOL	DESCRIPTION	DATE	APPROVAL
1	CHANGED TO REFLECT AS BUILT CONDITIONS	3/26/62	

REVISIONS

PWC DRAWING NO. 1005-141-0862-7

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN J.S.
TR J.S.
CHK H.E.B.
SUPV
IN CHARGE
REVIEWED BY

NAVAL SUPPLY DEPOT
PIPING DIAGRAMS
Mc. CALLA STORAGE TANKS & JET FUEL TO LEEWARD

APPROVED — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 9/8/62

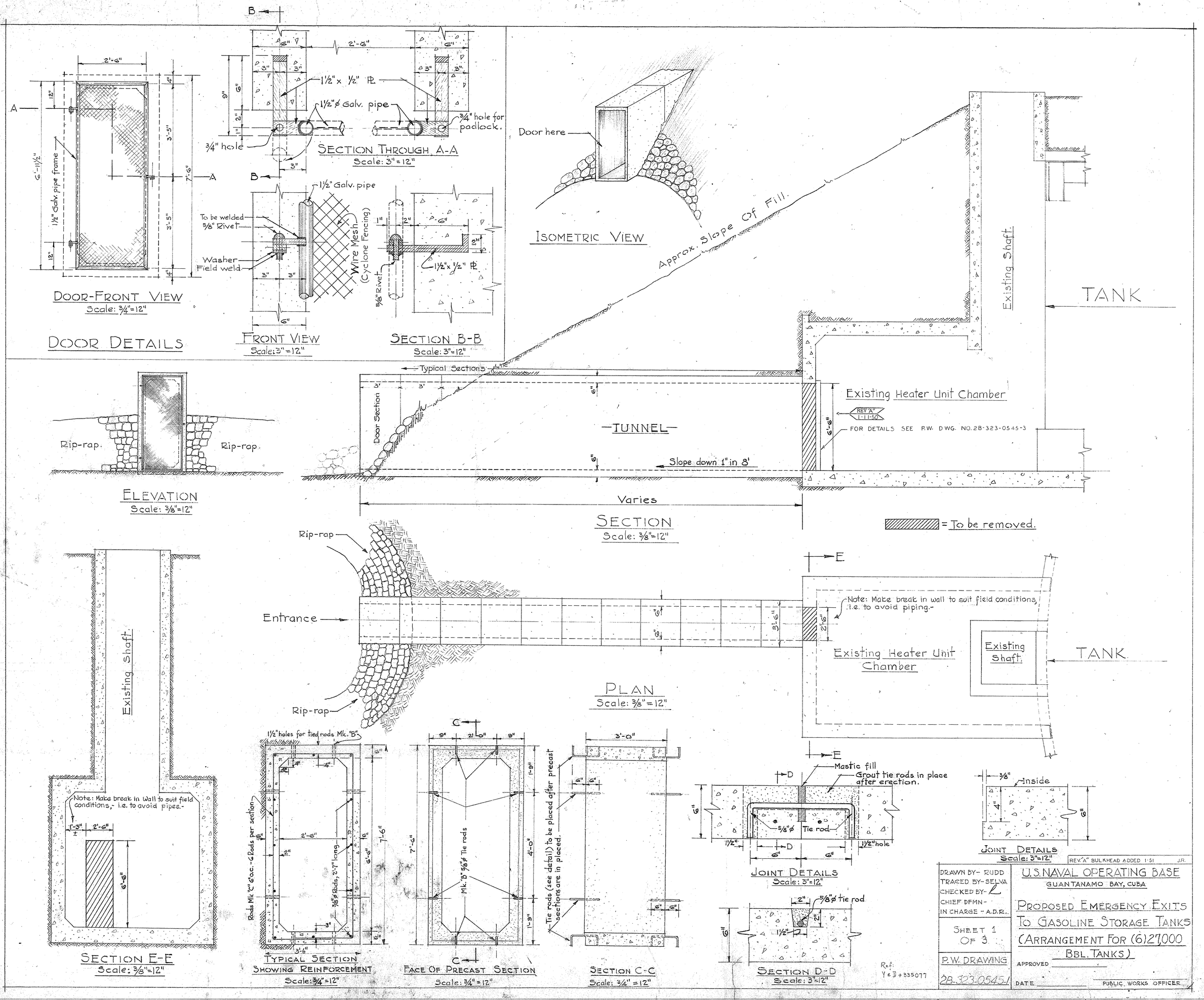
SATISFACTORY TO — DATE

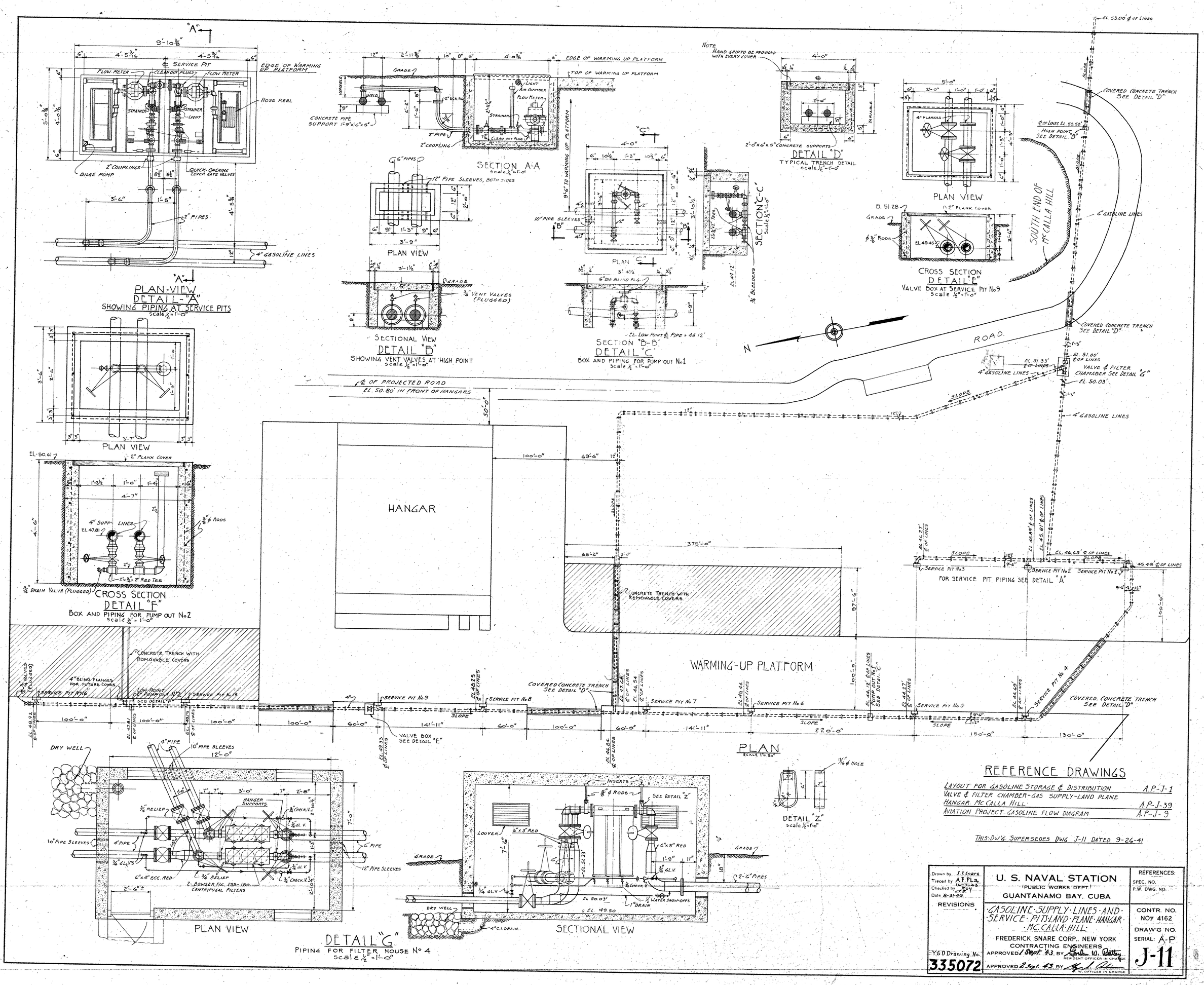
SCALE AS NOTED — SPEC

SHEET 7 OF 7 — NBy

Y & D DRAWING NO.

17/9/2


DOOR DETAILS
DOOR-FRONT VIEW
Scale: 3/4"=12"
1½" Galv. pipe frame
FRONT VIEW
Scale: 3"=12"
To be welded
5/8" Rivet
Washer
Field weld
Wire Mesh (Cyclone Fencing)
SECTION THROUGH A-A
Scale: 3"=12"
1½"x ½" PL
1½"ø Galv. pipe
¾" hole
¾" hole for padlock.
SECTION B-B
Scale: 3"=12"
5/8" Rivet
ISOMETRIC VIEW
Door here
Approx. Slope Of Fill.
Existing Shaft
TANK
Typical Sections
Door Section
TUNNEL
Slope down 1" in 8'
Varies
SECTION
Scale: 3/8"=12"
Existing Heater Unit Chamber
REV "A" 1-11-50
FOR DETAILS SEE P.W. DWG. NO. 2B-323-0545-3
= To be removed.
ELEVATION
Scale: 3/8"=12"
Rip-rap.
Rip-rap
Entrance
Note: Make break in wall to suit field conditions, i.e. to avoid piping.-
Existing Heater Unit Chamber
Existing Shaft
TANK
PLAN
Scale: 3/8"=12"
Existing Shaft
Note: Make break in wall to suit field conditions,- i.e. to avoid pipes.-
SECTION E-E
Scale: 3/8"=12"
1½" holes for tied rods Mk. "B"
Rods Mk. "C" 6" o.c. - 6 Rods per section
3/8"ø Rods, 2'-7" long
TYPICAL SECTION SHOWING REINFORCEMENT
Scale: 3/4"=12"
Mk. "B" 5/8"ø Tie rods
FACE OF PRECAST SECTION
Scale: 3/4"=12"
Tie rods (see detail) to be placed after precast sections are in placed.
SECTION C-C
Scale: 3/4"=12"
Mastic fill
Grout tie rods in place after erection.
5/8"ø Tie rod
1½" hole
JOINT DETAILS
Scale: 3"=12"
Inside
JOINT DETAILS
Scale: 3"=12"
5/8"ø tie rod
SECTION D-D
Scale: 3"=12"
Ref: Y&D #335077
REV "A" BULKHEAD ADDED 1-51 J.R.
DRAWN BY- RUDD
TRACED BY- SELVA
CHECKED BY-
CHIEF DFMN-
IN CHARGE - A.D.R.
SHEET 1 OF 3
P.W. DRAWING
2B-323-0545-1
U.S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA
PROPOSED EMERGENCY EXITS TO GASOLINE STORAGE TANKS (ARRANGEMENT FOR (6) 27,000 BBL. TANKS)
APPROVED
DATE
PUBLIC WORKS OFFICER
Tanks #709 thru #714

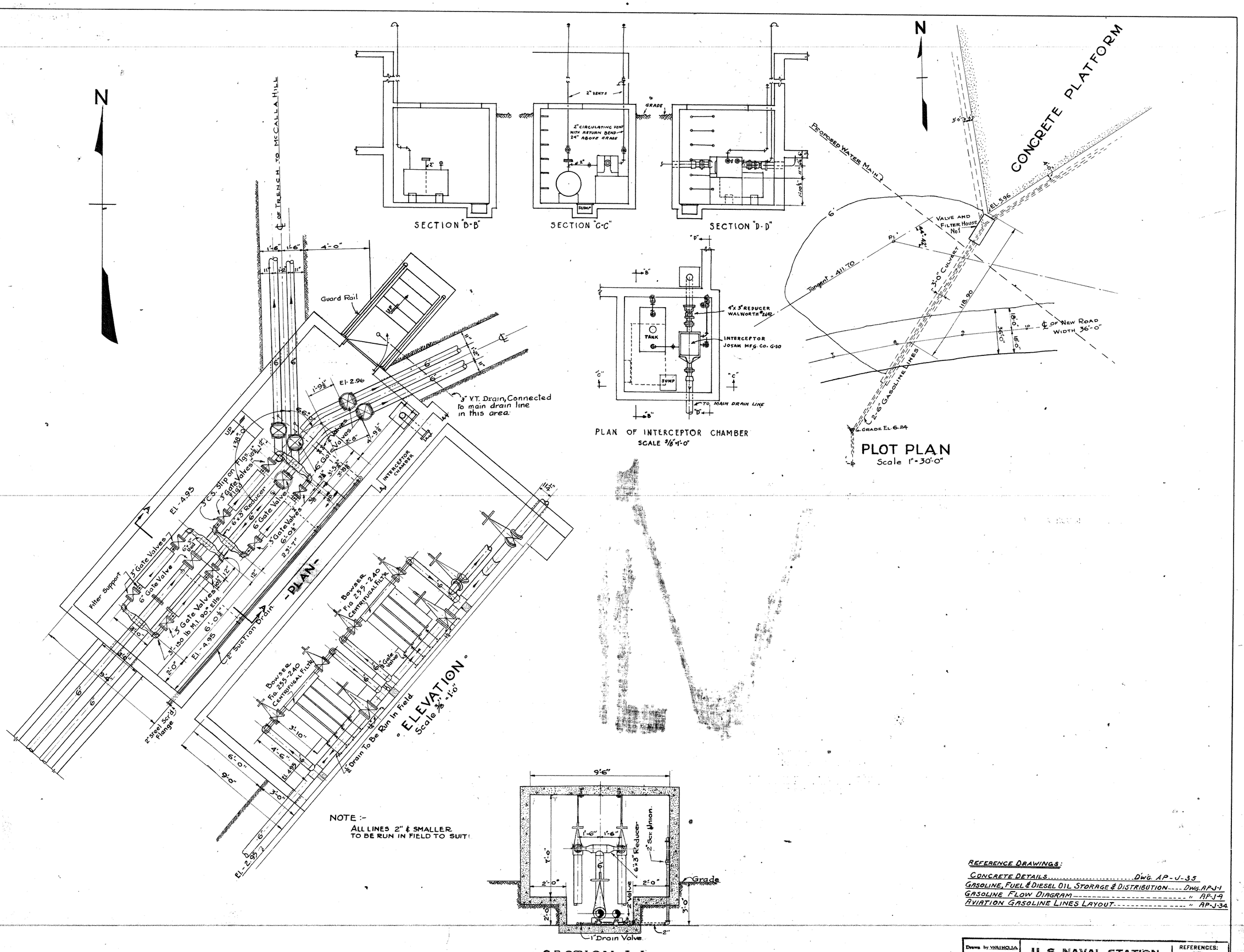


REFERENCE DRAWINGS

LAYOUT FOR GASOLINE STORAGE & DISTRIBUTION	A.P.-J-1
VALVE & FILTER CHAMBER-GAS SUPPLY-LAND PLANE HANGAR McCALLA HILL	A.P.-J-39
AVIATION PROJECT GASOLINE FLOW DIAGRAM	A.P.-J-9

THIS DWG SUPERSEDES DWG J-11 DATED 9-26-41

Drawn by J.T. Snare Traced by A.F.P.L. Checked by Roy Date 8-31-43 REVISIONS	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	GASOLINE SUPPLY LINES AND SERVICE PITS LAND PLANE HANGAR McCALLA HILL FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS	CONTR. NO. NOy 4162 DRAW'G NO. SERIAL: A-P
Y&D Drawing No. 335072	APPROVED 1 Sept. 43 BY [signature] RESIDENT OFFICER IN CHARGE APPROVED 2 Sept. 43 BY [signature] P.W. OFFICER IN CHARGE	J-11

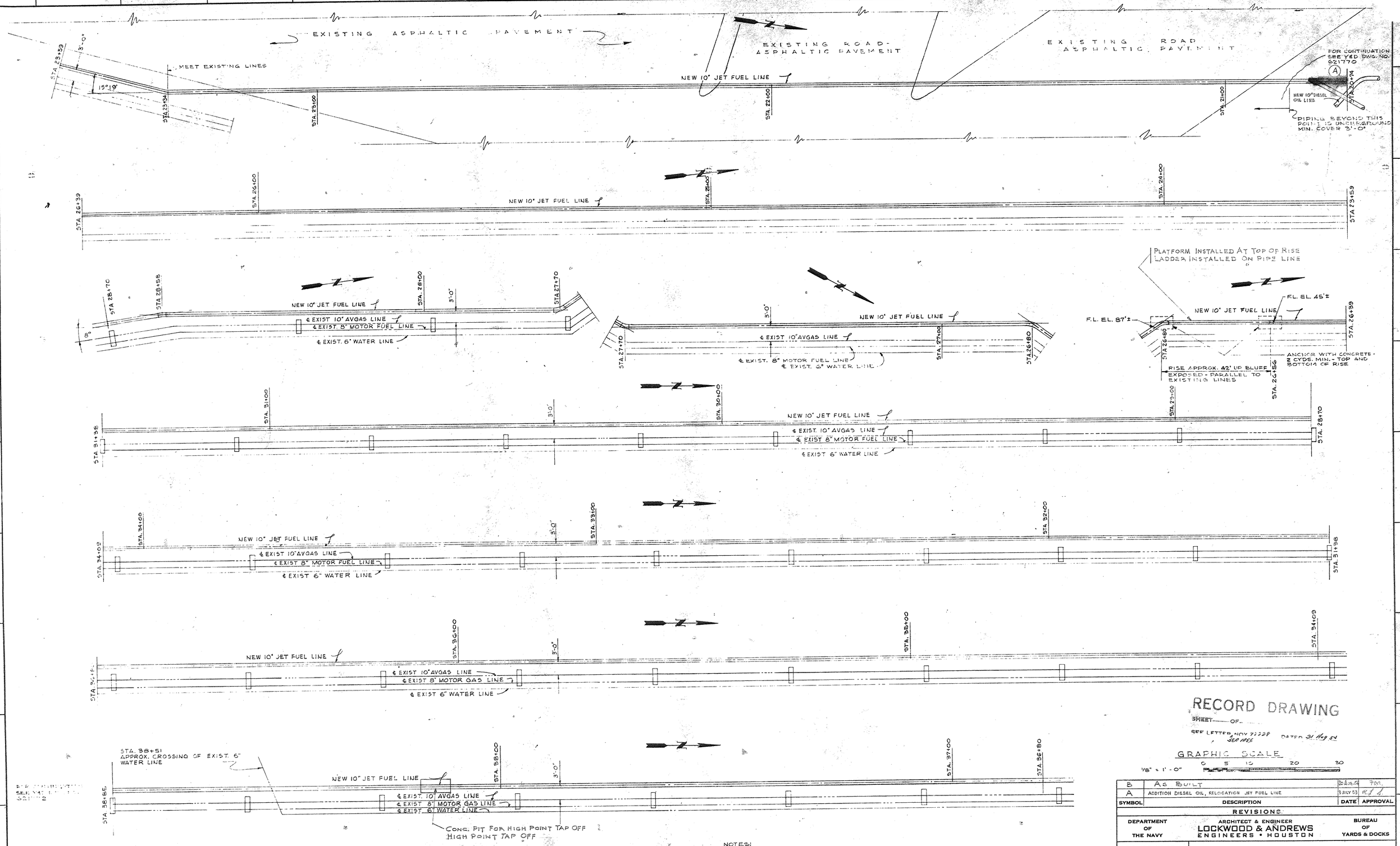


REFERENCE DRAWINGS:

CONCRETE DETAILS ..... DWG. AP-J-35
GASOLINE, FUEL & DIESEL OIL STORAGE & DISTRIBUTION ---- DWG. AP-J-1
GASOLINE FLOW DIAGRAM ---------- " AP-J-9
AVIATION GASOLINE LINES LAYOUT ---------- " AP-J-34

Drawn by WATHOJA Traced by SHEEN Checked by [illegible] Checked by J.C.M.L.H. Date ..... REVISIONS ADDED INTERCEPTOR CHAMBER 3-19-42.	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	GASOLINE PIPING AT FILTER HOUSE No.1 AT BRANCH TO MC. CALLA HILL FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS APPROVED 7-7-41 BY [illegible] RESIDENT OFFICER IN CHARGE APPROVED 7-8-41 BY H.S. Crawford P.W. OFFICER IN CHARGE	CONTR. NO. NOy 4162 DRAW'G NO. SERIAL: A.P. J-32
Y6-D Drawing No. 335093		

350-43-216



RECORD DRAWING

SHEET ___ OF ___

SEE LETTER NOV 72228 SER 1056 DATED 31 Aug 54

NOTES:

1. ALL PIPING THIS SHEET IS UNDERGROUND EXCEPT AS NOTED. MINIMUM COVER 3'-0".
2. PIPE TO SLOPE UP HILL FROM EL. 87 AT STA. 26+80 TO EL. 208' AT STA. 39+66
3. ALL STATIONING IS SCALED ALONG NEW 10" JET FUEL LINE, AND WAS TAKEN FROM RECORD DRAWINGS OF PREVIOUSLY CONSTRUCTED LINES. STATIONING AS SHOWN IS TO BE USED ONLY AS A GUIDE. EXACT LOCATIONS OF ALL OFFSETS AND FITTINGS TO BE DETERMINED IN FIELD.

SYMBOL	DESCRIPTION	DATE	APPROVAL
B	AS BUILT	20 Aug 54	FOR.
A	ADDITION DIESEL OIL, RELOCATION JET FUEL LINE	3 JULY 53	K.J.L.

REVISIONS

DEPARTMENT OF THE NAVY — ARCHITECT & ENGINEER LOCKWOOD & ANDREWS ENGINEERS • HOUSTON — BUREAU OF YARDS & DOCKS

A&E JOB NO. 87-43
A&E DWG. NO. 5317
DRAWN: C.L.J.
CHECKED: D.T.S.
APPROVED: W.M.A.

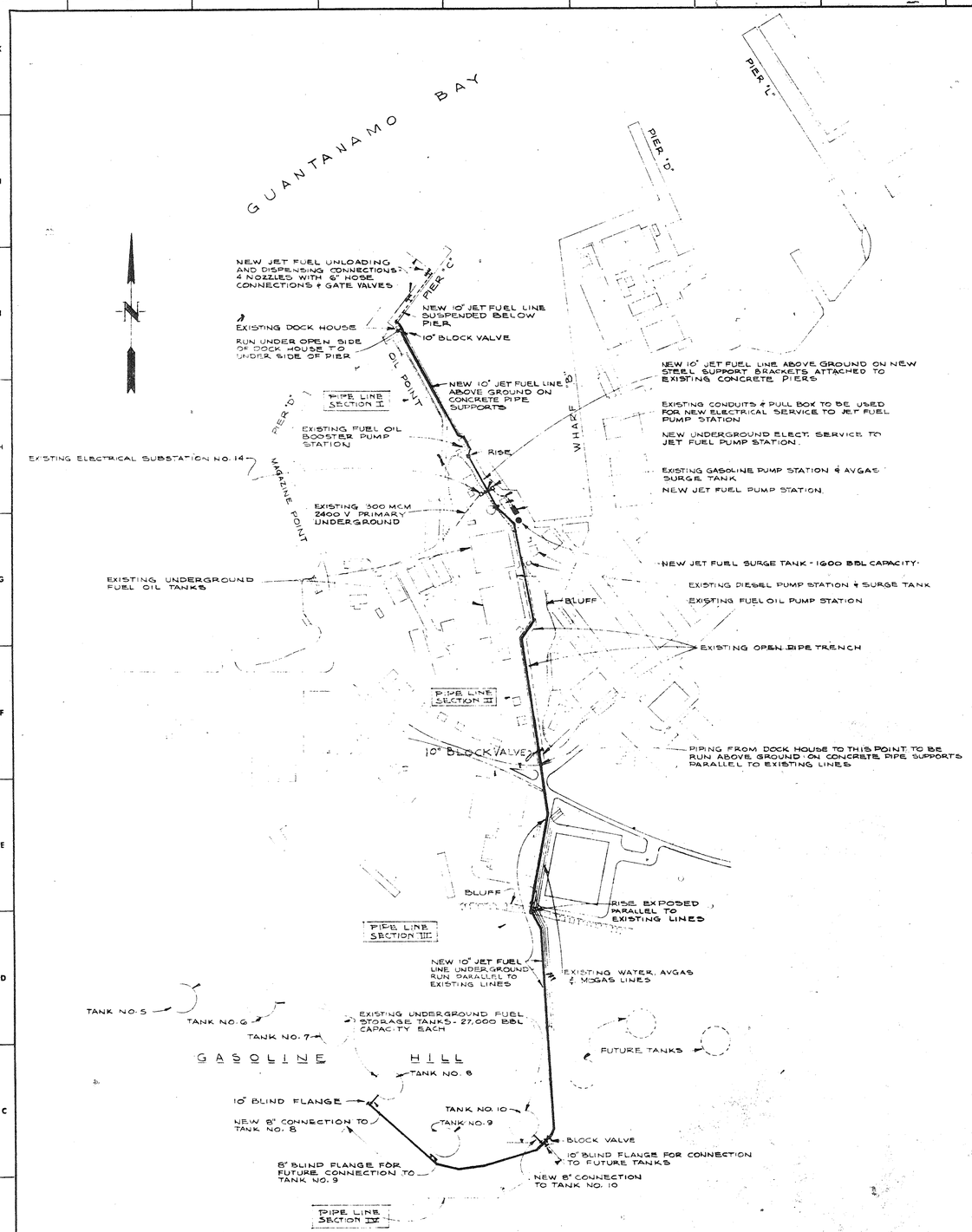
U.S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA
JET FUEL STORAGE FACILITIES
PIPELINE LAYOUT — SECTION III

APPROVED: Thomas J. Dumont FOR OFFICER IN CHARGE — DATE 19 MAY 1953

SCALE: 1/8" = 1'-0" — SPEC. NO. 40444

SHEET 4 OF 10 — NOV CHANGE A 72228

Y & D DRAWING NO. 621771



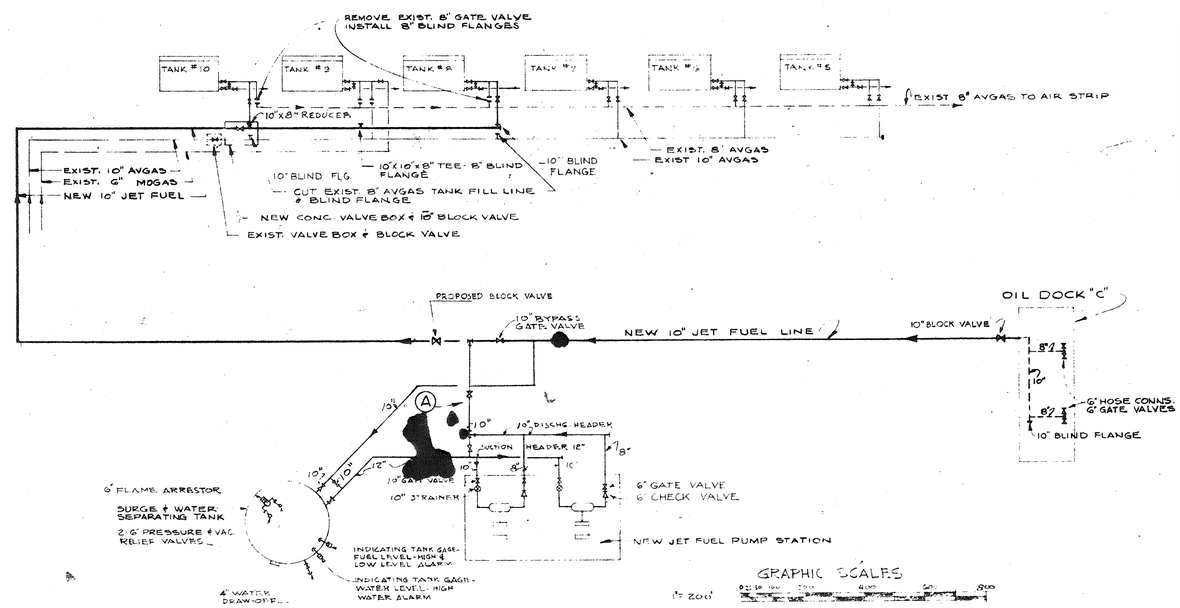
PLOT PLAN
SCALE 1" = 200'

U.S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA

JET FUEL STORAGE FACILITIES

LIST OF DRAWINGS

Y&D DWG. NUMBER	SHEET NUMBER	TITLE
621768	1	GENERAL ARRANGEMENT PLAN
621769	2	PIPELINE LAYOUT - SECTION I
621770	3	PIPELINE LAYOUT - SECTION II
621771	4	PIPELINE LAYOUT - SECTION III
621772	5	PIPELINE LAYOUT - SECTION IV
621773	6	PUMP STATION - MECHANICAL PLAN & DETAILS
621774	7	MISCELLANEOUS PIPING DETAILS
621775	8	PUMPHOUSE PLAN & DETAILS
621776	9	SURGE TANK DETAILS
621777	10	PUMP STATION - ELECTRICAL PLAN & DETAILS



SCHEMATIC PIPING DIAGRAM
NOT TO SCALE

RECORD DRAWING
SHEET ____ OF ____
SEE LETTER NOV 72228 DATED 31 Aug 54
SEQ 1056

SYMBOL	DESCRIPTION	DATE	APPROVAL
B	AS BUILT	20 Aug. 54	
A	CHANGE BY-PASS CONNECTION, RELOCATE VALVES	5 Nov 53	

REVISIONS

DEPARTMENT OF THE NAVY

ARCHITECT & ENGINEER
LOCKWOOD & ANDREWS
ENGINEERS • HOUSTON

BUREAU OF YARDS & DOCKS

A&E JOB NO. 87-43
A&E DWG. NO. 5314
DRAWN: D.W.M.
CHECKED: D.T.S.
APPROVED: W.M.A.

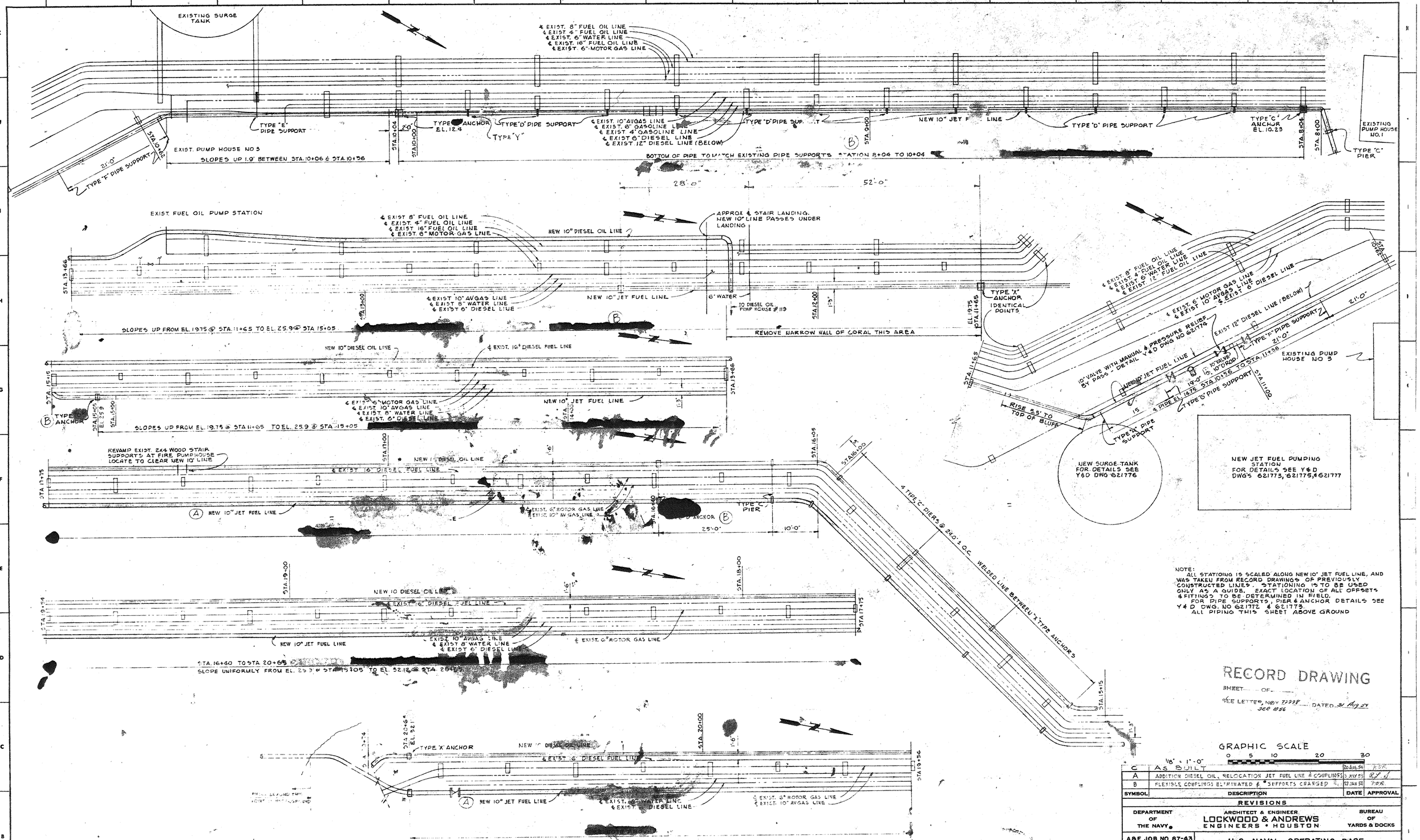
U.S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA
JET FUEL STORAGE FACILITIES

GENERAL ARRANGEMENT PLAN

APPROVED: Thomas J. Dunnet
FOR OFFICER IN CHARGE
DATE 19 MAY 1953

SCALE: NOTED
SPEC. NO. 40444
CHANGE A
SHEET 1 OF 10 NOV. 72228
Y & D DRAWING NO. 621768

908,909



NOTE:
ALL STATIONING IS SCALED ALONG NEW 10" JET FUEL LINE, AND WAS TAKEN FROM RECORD DRAWINGS OF PREVIOUSLY CONSTRUCTED LINES. STATIONING IS TO BE USED ONLY AS A GUIDE. EXACT LOCATION OF ALL OFFSETS & FITTINGS TO BE DETERMINED IN FIELD.
FOR PIPE SUPPORTS, PIER & ANCHOR DETAILS SEE Y & D DWG. NO 621772 & 621773.
ALL PIPING THIS SHEET ABOVE GROUND

RECORD DRAWING
SHEET ___ OF ___
SEE LETTER, NOV 72228 DATED 31 Aug 54
SCR 1056

GRAPHIC SCALE
0 5 10 20 30
1/8" = 1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVAL
C	AS BUILT	20 AUG 54	F.J.P.
A	ADDITION DIESEL OIL, RELOCATION JET FUEL LINE & COUPLINGS	3 NOV 53	R.J.K.
B	FLEXIBLE COUPLINGS ELIMINATED & "B" SUPPORTS CHANGED	27 JAN 54	F.O.R.

REVISIONS

DEPARTMENT OF THE NAVY

ARCHITECT & ENGINEER
LOCKWOOD & ANDREWS
ENGINEERS • HOUSTON

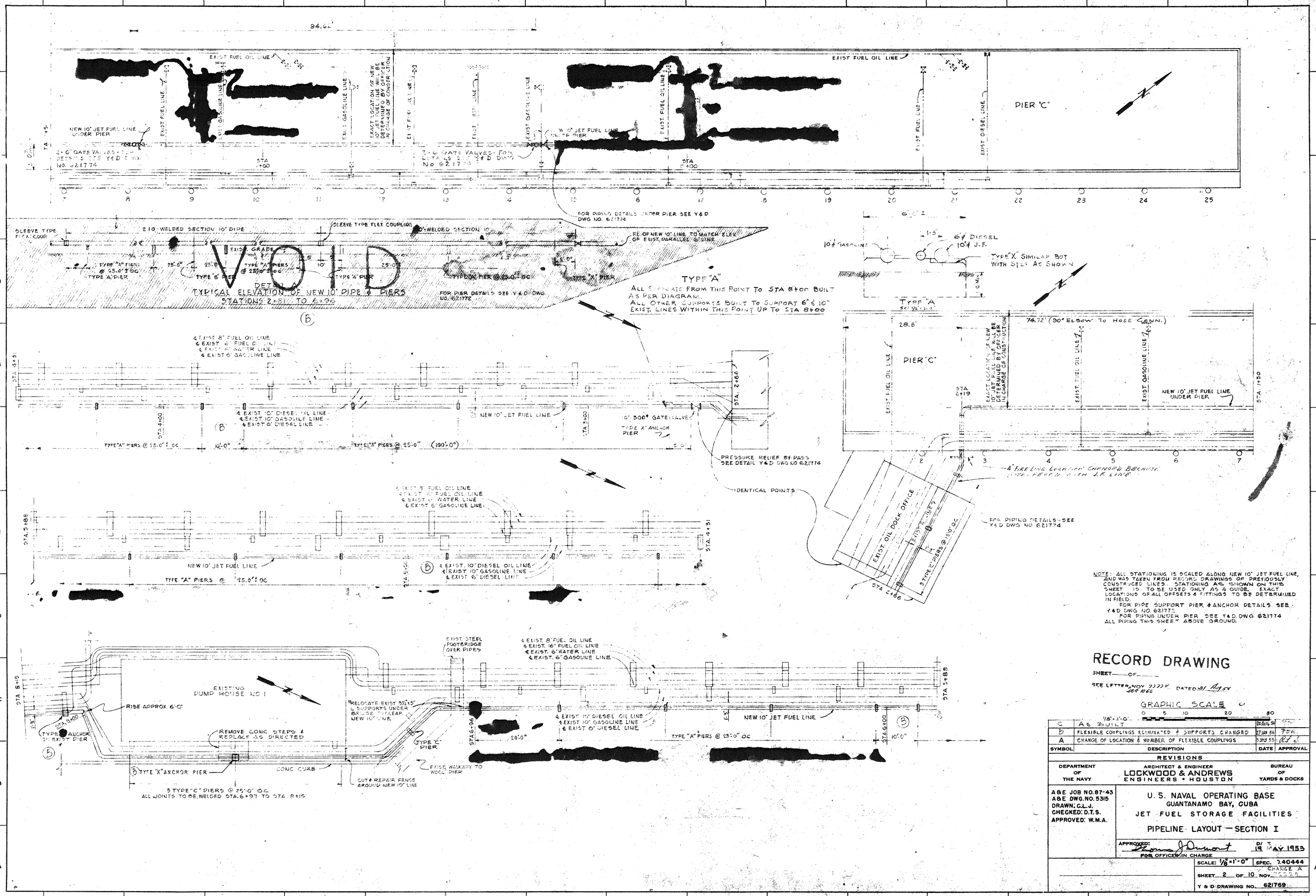
BUREAU OF YARDS & DOCKS

A&E JOB NO. 87-43
A&E DWG. NO. 5316
DRAWN: C.L.J.
CHECKED: D.T.S.
APPROVED: W.M.A.

U.S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA
JET FUEL STORAGE FACILITIES
PIPELINE LAYOUT — SECTION II

APPROVED: Thomas J. Dumont
FOR OFFICER IN CHARGE
DATE 19 MAY 1953

SCALE: 1/8" = 1'-0"
SPEC. NO. 40444 CHANGE A
SHEET 3 OF 10 NOV. 72228
Y & D DRAWING NO. 621770



NOTE: ALL STATIONING IS SCALED ALONG NEW 10" JET FUEL LINE, AND WAS TAKEN FROM RECORD DRAWINGS OF PREVIOUSLY CONSTRUCTED LINES. STATIONING AS SHOWN ON THIS SHEET IS TO BE USED ONLY AS A GUIDE. EXACT LOCATIONS OF ALL OFFSETS & FITTINGS TO BE DETERMINED IN FIELD.
FOR PIPE SUPPORT PIER & ANCHOR DETAILS SEE Y&D DWG NO 621772
FOR PIPING UNDER PIER SEE Y&D DWG 621774
ALL PIPING THIS SHEET ABOVE GROUND.

RECORD DRAWING

SHEET ___ OF ___

SEE LETTER NOV 72225 DATED 31 Aug 54
SEE 1066

GRAPHIC SCALE 1/8"=1'-0" 0 5 10 20 30

SYMBOL	DESCRIPTION	DATE	APPROVAL
C	AS BUILT	20 AUG. 54	
B	FLEXIBLE COUPLINGS ELIMINATED & SUPPORTS CHANGED	27 JAN 54	FDK
A	CHANGE OF LOCATION & NUMBER OF FLEXIBLE COUPLINGS	3 JULY 53	

REVISIONS

DEPARTMENT OF THE NAVY

ARCHITECT & ENGINEER
LOCKWOOD & ANDREWS
ENGINEERS • HOUSTON

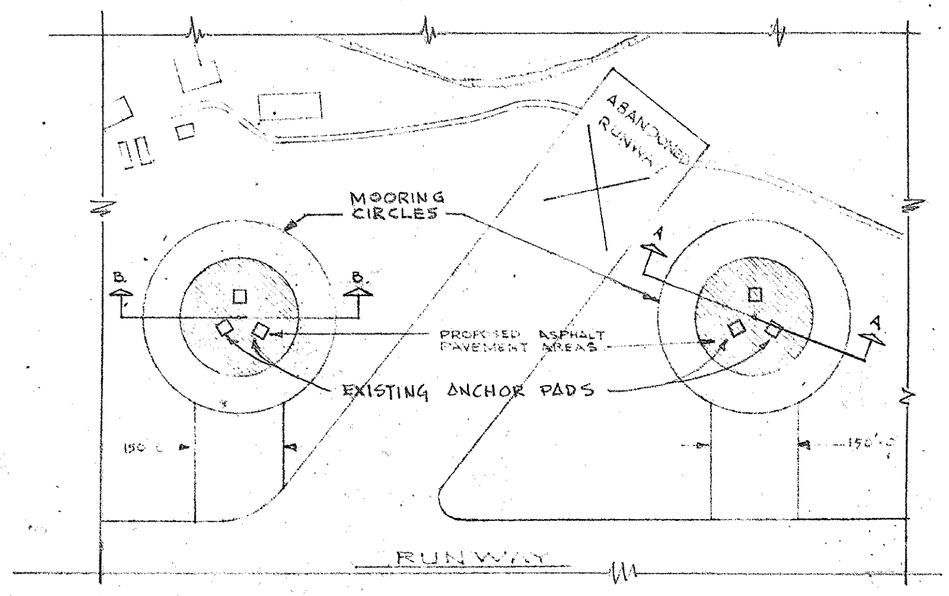
BUREAU OF YARDS & DOCKS

A&E JOB NO. 87-43
A&E DWG. NO. 5315
DRAWN: G.L.J.
CHECKED: D.T.S.
APPROVED: W.M.A.

U. S. NAVAL OPERATING BASE
GUANTANAMO BAY, CUBA
JET FUEL STORAGE FACILITIES
PIPELINE LAYOUT — SECTION I

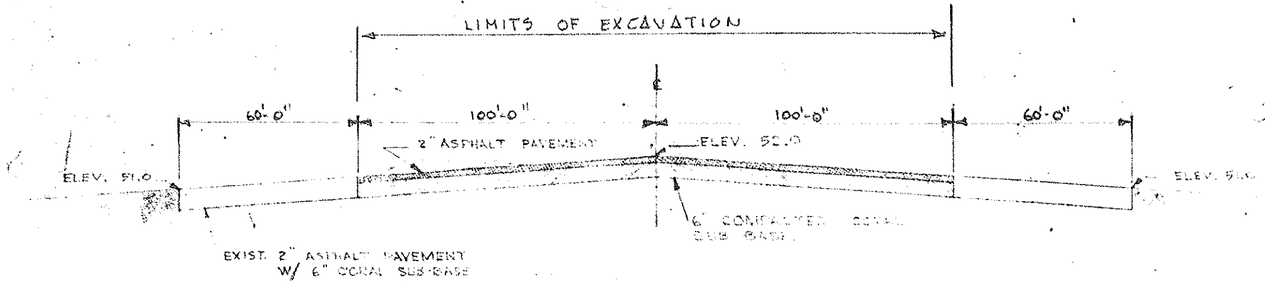
APPROVED: Thomas J. Dumont
FOR OFFICER IN CHARGE
DATE 19 MAY 1953

SCALE: 1/8"=1'-0"
SPEC. 740444
CHANGE A
SHEET 2 OF 10 NOV 72225
Y & D DRAWING NO. 621769

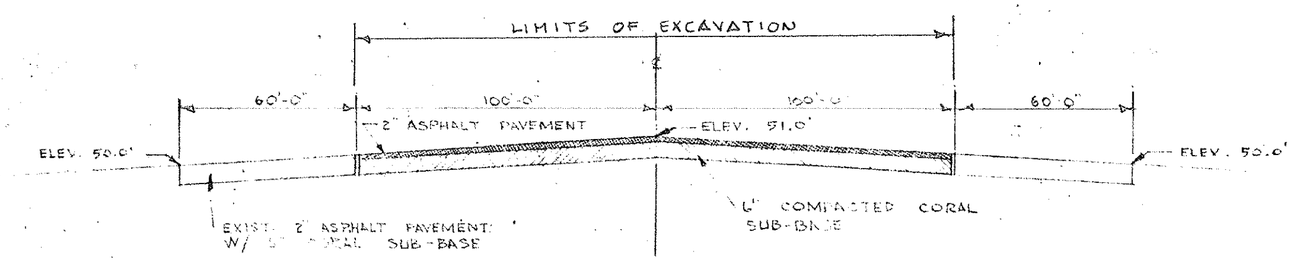


PLAN – L.T.A. MOORINGS SCALE: 1" = 200'

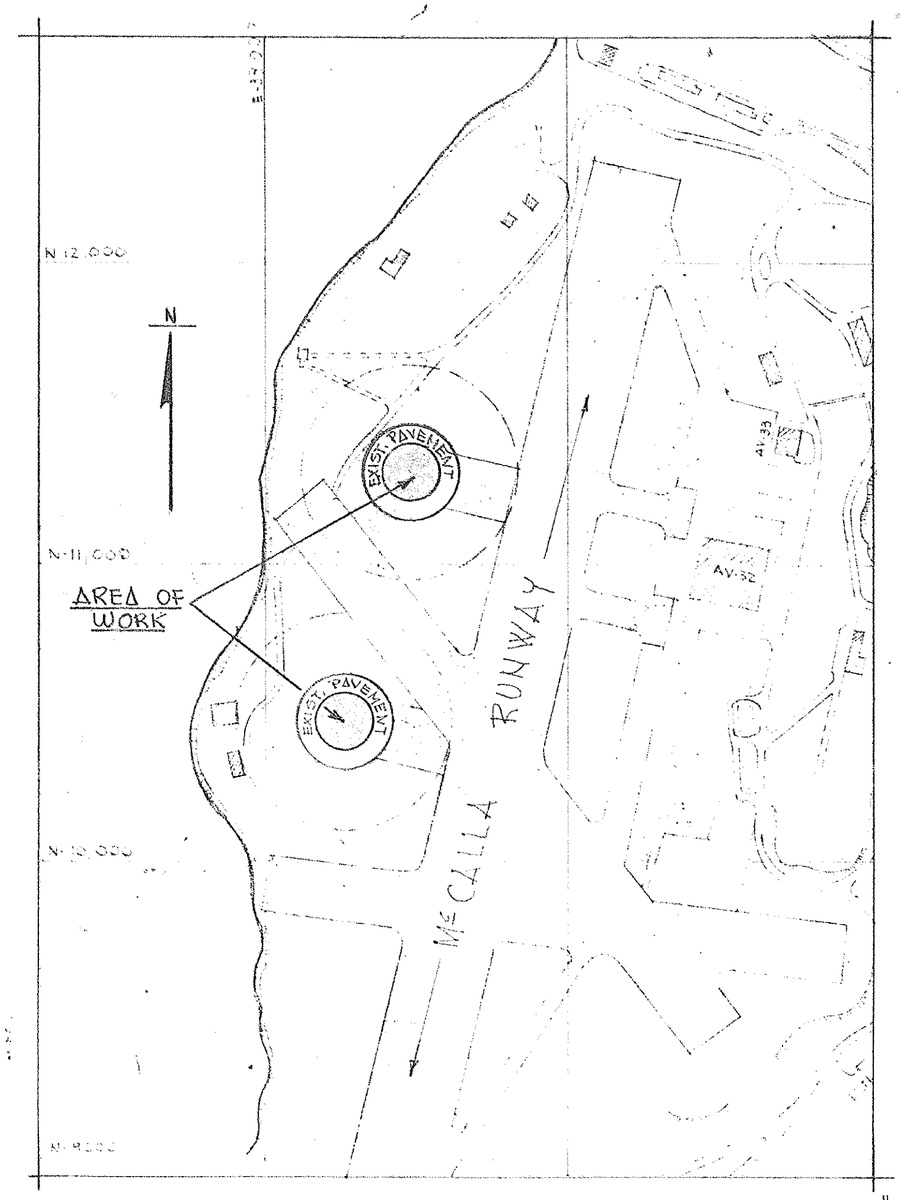
NOTE:
CONCRETE ANCHOR PADS FOR MOORING MASTS TO REMAIN THE SAME.



SECTION A-A SCALE: VERT. 1" = 4.0' HORIZ. 1" = 40.0'



SECTION B-B SCALE: VERT. 1" = 4.0' HORIZ. 1" = 40.0'



LOCATION PLAN SCALE: 1" = 400'

SYMBOL	DESCRIPTION	DATE	APPROVAL

PWC DRAWING NO. 8M-1147-0559

DEPARTMENT OF THE NAVY BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

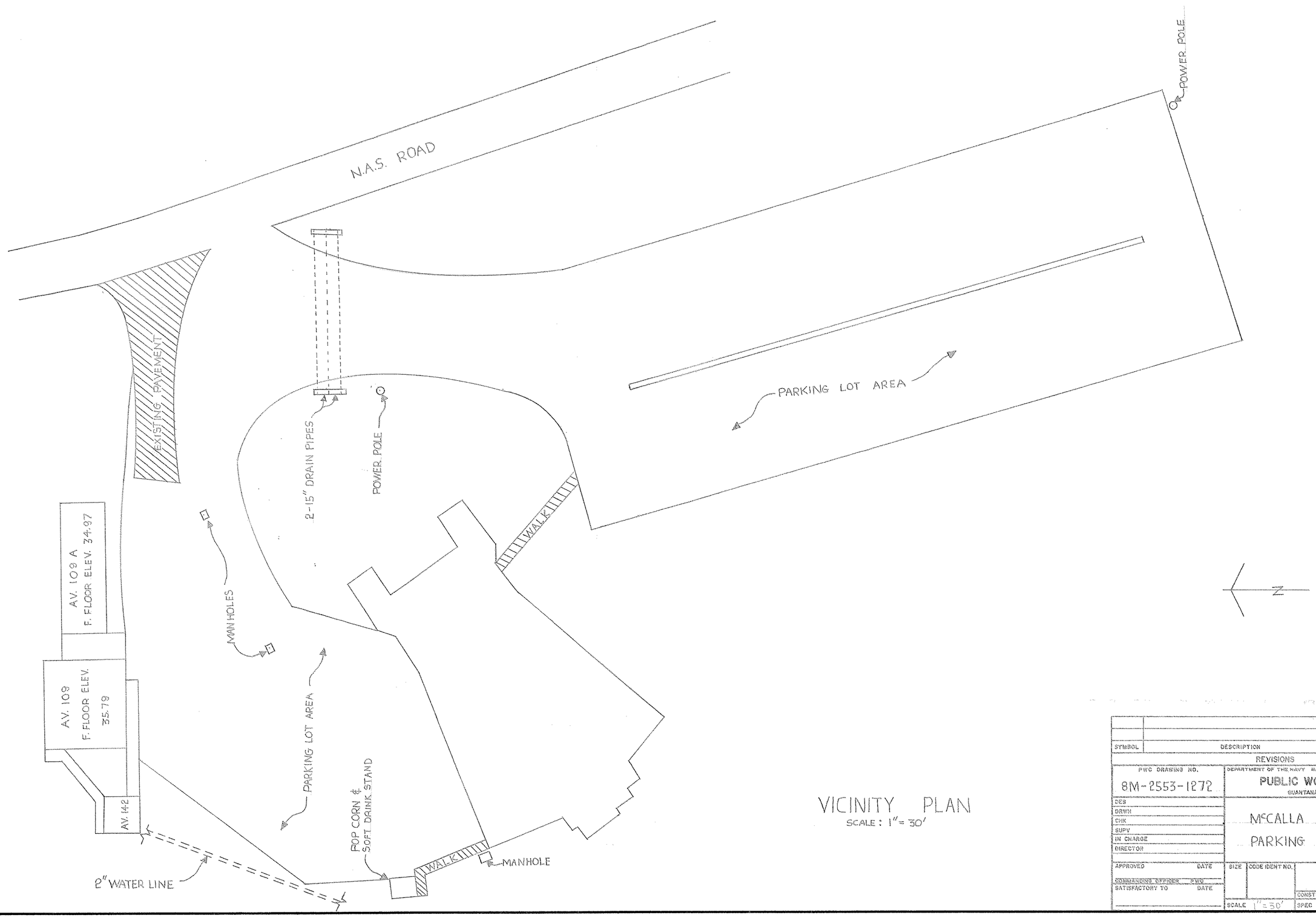
DES
DRWN
TR Poyato
CHK
SUPV L.A. [illegible]
IN CHARGE [illegible]
REVIEWED BY [illegible]

U.S. NAVAL AIR STATION
PROPOSED PAVEMENT OF L.T.A. MOORING CIRCLES CENTERS
— Mc CALLA HILL —

APPROVED [illegible] DATE 8-12-59
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO F.H. LEWIS, LT. C.E.C. PWO - N.A.S.
DATE 10/3/58

SCALE AS NOTED SPEC
SHEET 1 OF 1 NDY
Y&D DRAWING NO.



VICINITY PLAN
SCALE : 1" = 30'

SYMBOL	DESCRIPTION	REV. BY	DATE	APPROVED

REVISIONS

PWC DRAWING NO.
8M-2553-1272

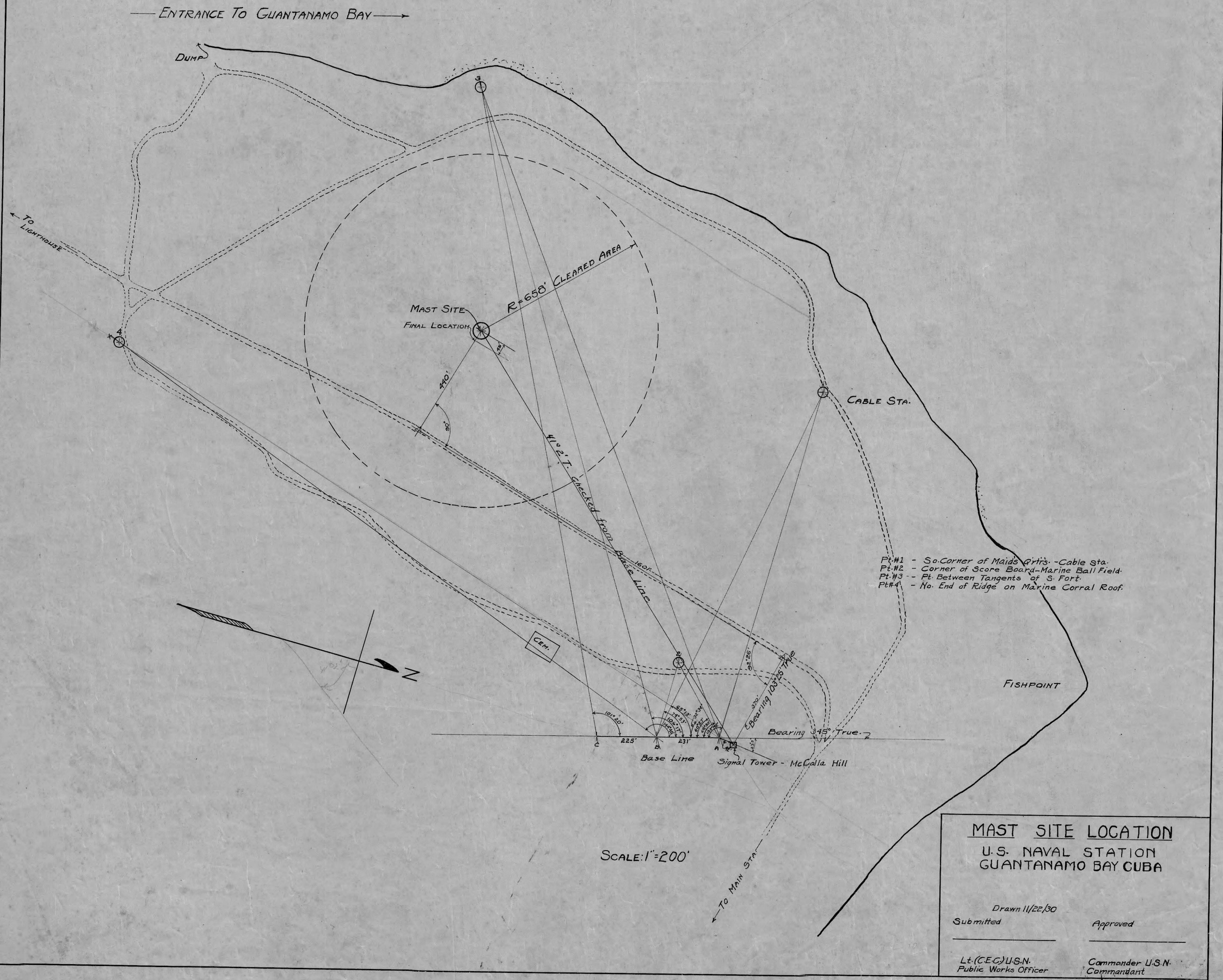
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN
CHK
SUPV
IN CHARGE
DIRECTOR

McCALLA LYCEUM
PARKING LOT

APPROVED DATE
COMMANDING OFFICER PWC
SATISFACTORY TO DATE

SIZE | CODE IDENT NO. | NAVFAC DRAWING NO.
CONSTR. CONTR. NO.
SCALE 1" = 30' | SPEC | SHEET OF



MAST SITE LOCATION

U.S. NAVAL STATION
GUANTANAMO BAY CUBA

Drawn 11/22/30

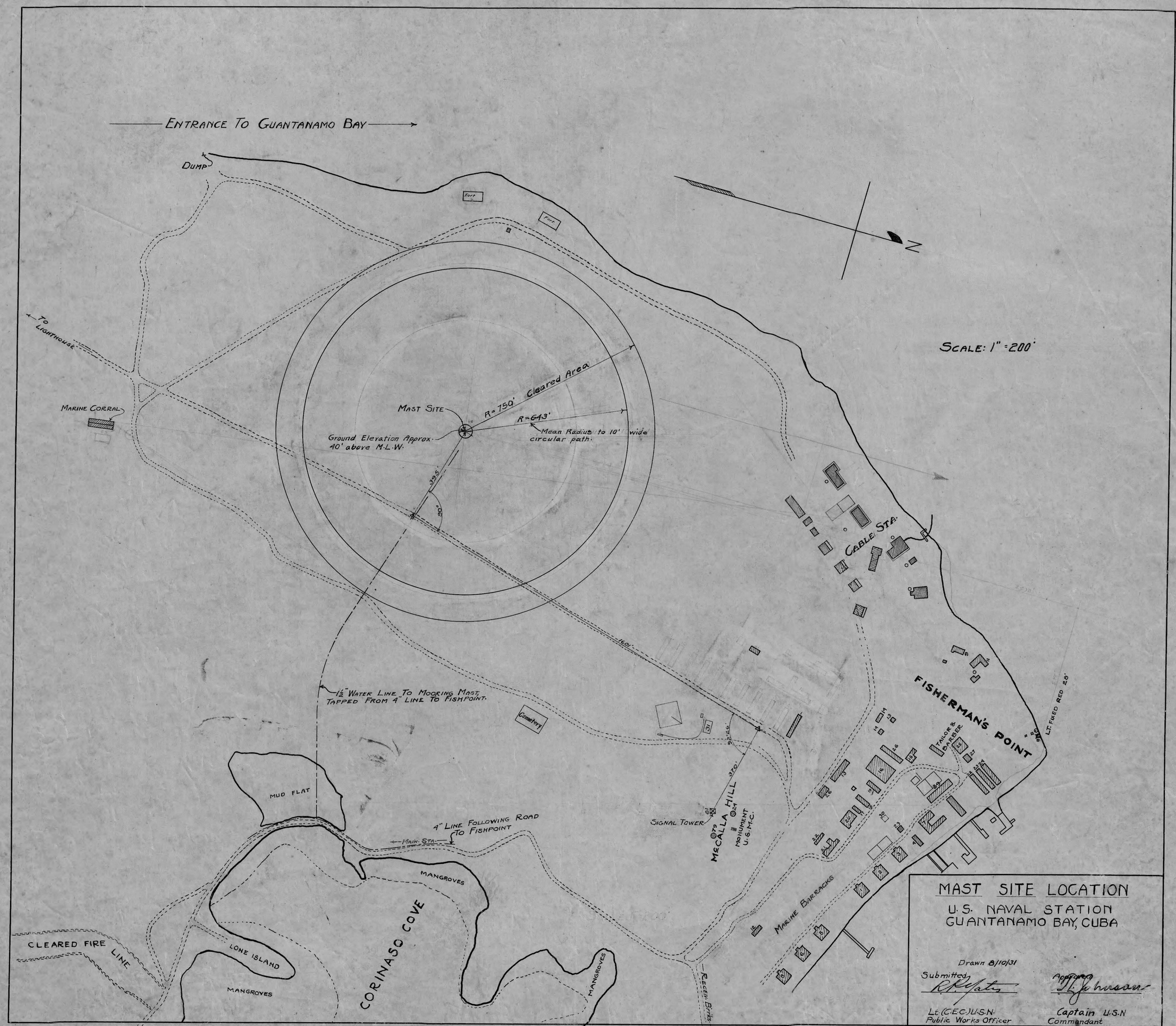
Submitted

Lt. (C.E.C.) U.S.N.
Public Works Officer

Approved

Commander U.S.N.
Commandant

4T-21-1130



MAST SITE LOCATION
U.S. NAVAL STATION
GUANTANAMO BAY, CUBA

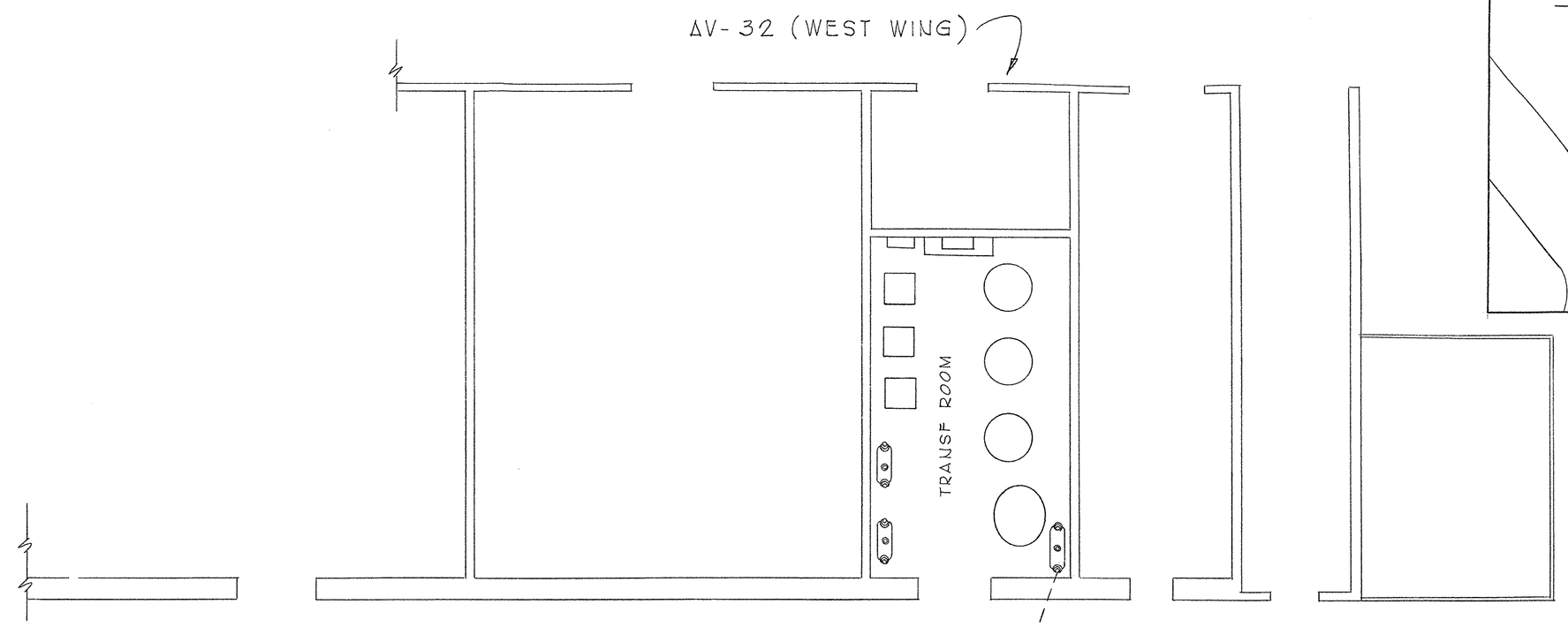
Drawn 8/10/31

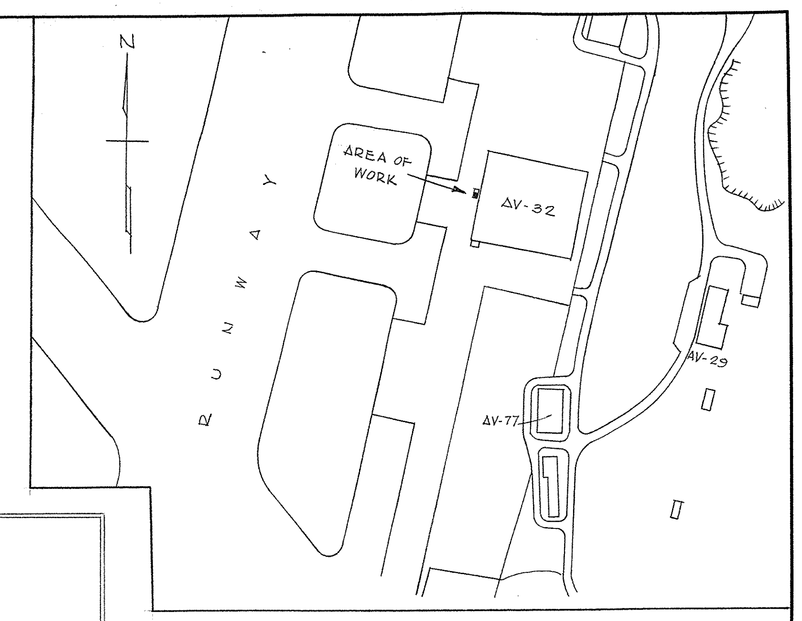
Submitted, R.K. Gates
Lt. (C.E.C.) U.S.N.
Public Works Officer

Approved, T. Johnson
Captain U.S.N.
Commandant

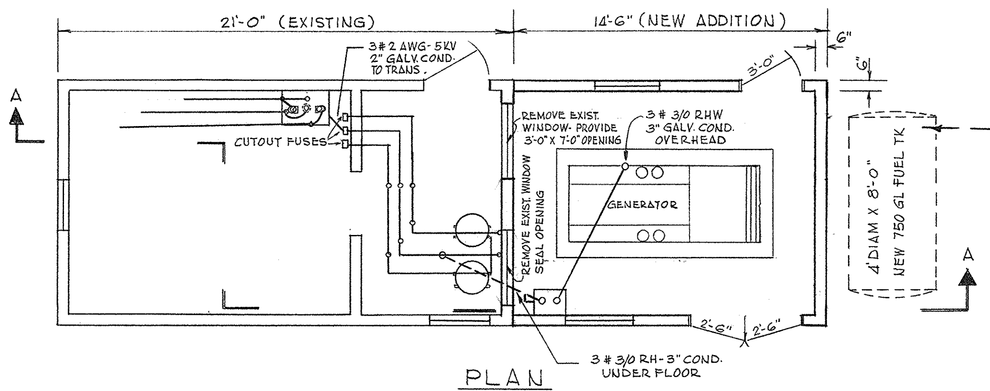
Revised 1/2/33

4T-22-0233

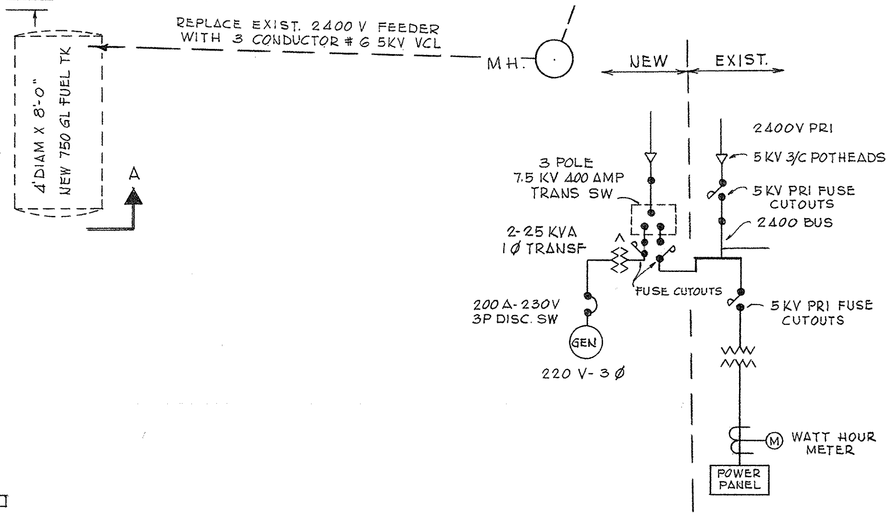




LOCATION PLAN
Scale: 1" = 200'



PLAN
Scale: 1/4" = 1'-0"

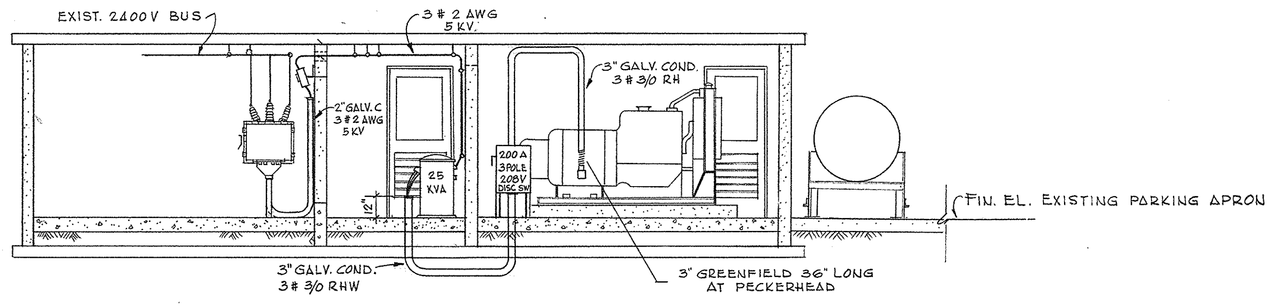


LINE DIAGRAM

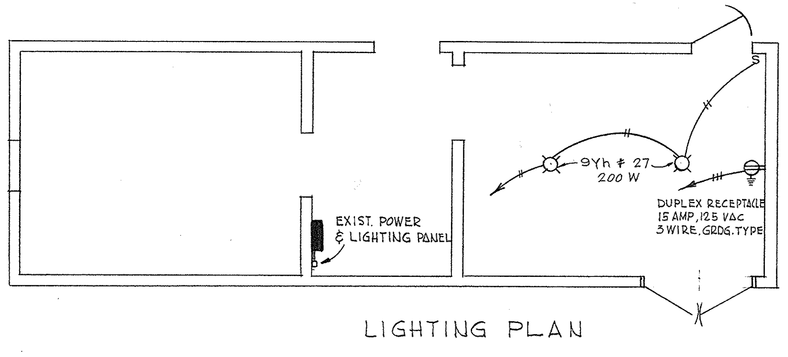
NOTES:

1) DIESEL ENGINE GENERATOR TO BE UNITED STATES MOTORS CORP. MODEL 50 D12 50 KW, 62.5 KVA, 1200 RPM, 240-3 WIRE, 60 CYCLE OR EQUAL

2) TRANS. SW TO BE G & W ELECTRIC SPECIALTIES TYPE "RAP-P" BREAK OIL SWITCH, 3 WAY DOUBLE THROW, 3 POLE-400 AMP 7,500 VOLTS



SECTION A-A
Scale: 1/4" = 1'-0"



LIGHTING PLAN

PRELIMINARY

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. 11ET-167-0265

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

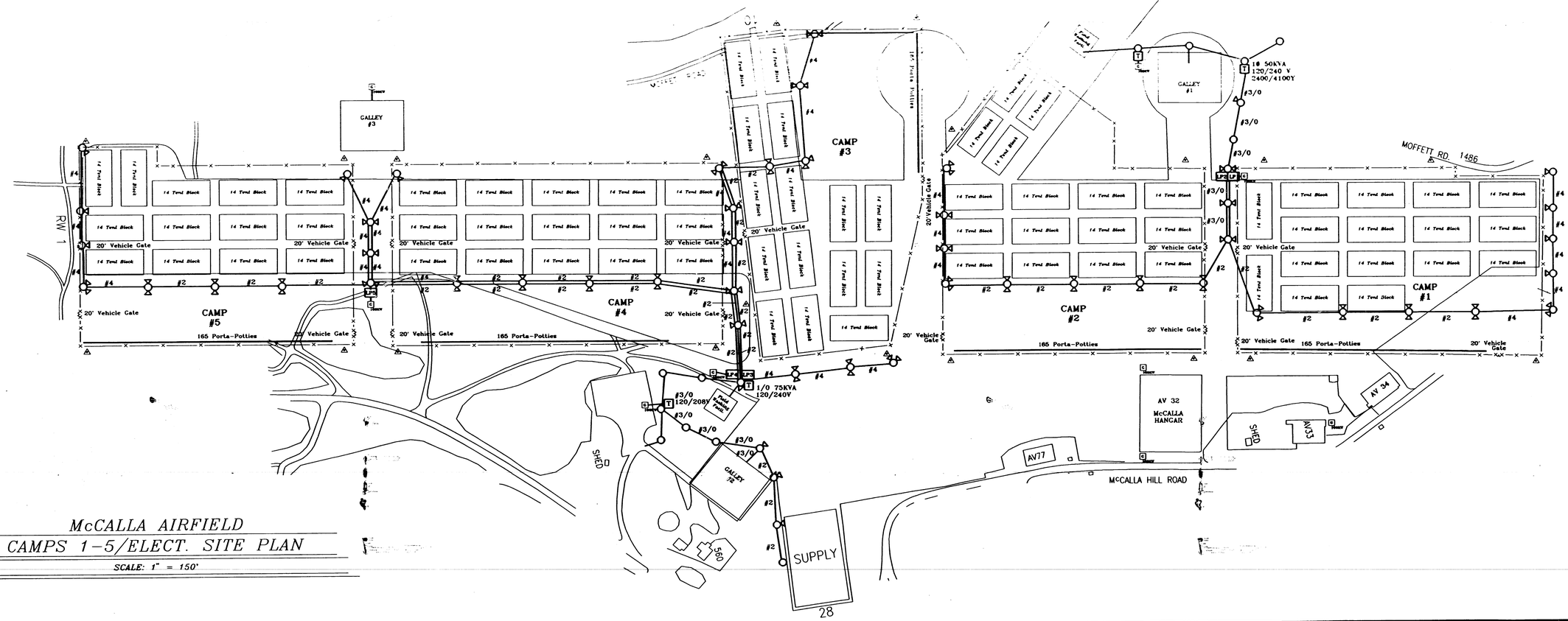
DES CHB
DRWN
TR
CHK
SUPV J.L.G
IN CHARGE
REVIEWED BY CCC

MC CALLA AIRFIELD
AUX. AIRFIELD LIGHTING
GEN & TRANS. SW

APPROVED — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 3/4/65

SATISFACTORY TO C. B. Ulen
DATE 3 MARCH 1965

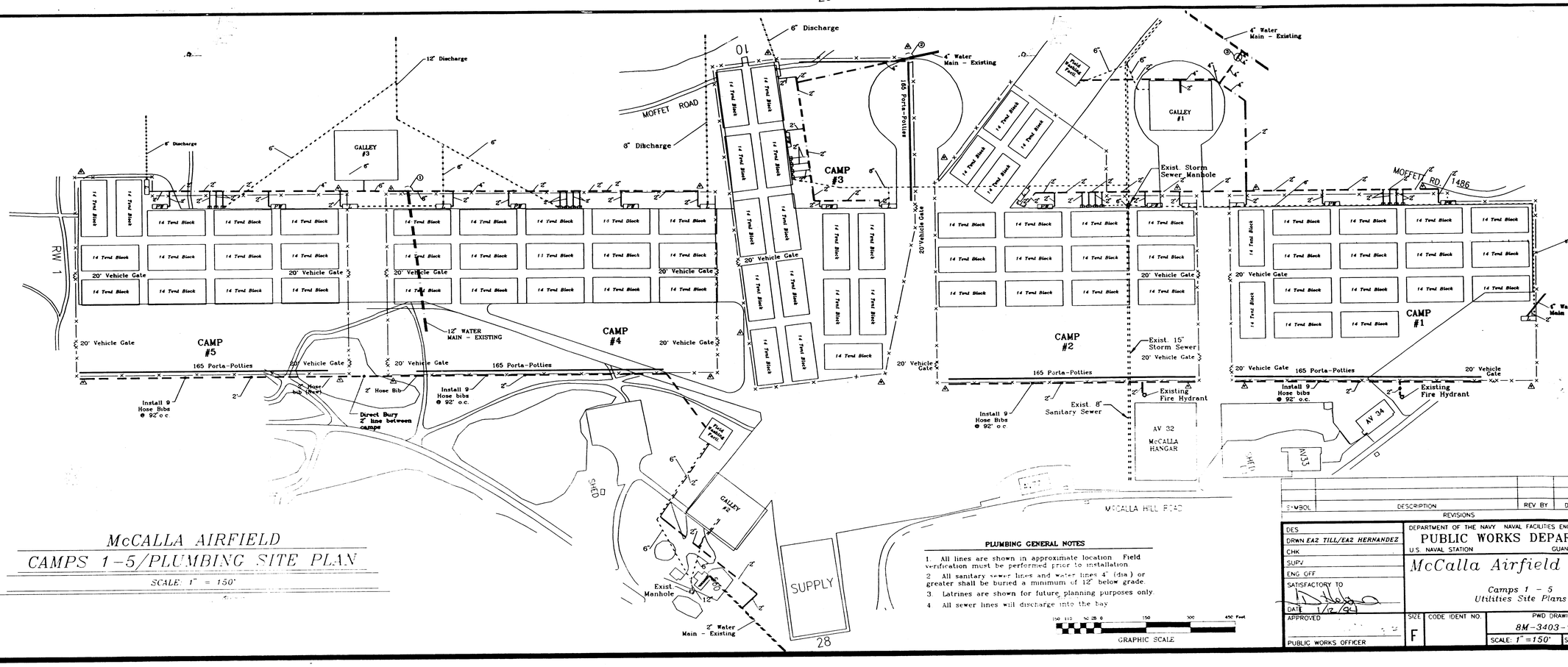
SCALE AS NOTED — SPEC
SHEET ___ OF ___ NBY ___
Y & D DRAWING NO. ___



McCALLA AIRFIELD

CAMPS 1-5/ELECT. SITE PLAN

SCALE: 1" = 150'



McCALLA AIRFIELD

CAMPS 1-5/PLUMBING SITE PLAN

SCALE: 1" = 150'

PLUMBING GENERAL NOTES

1. All lines are shown in approximate location. Field verification must be performed prior to installation.
2. All sanitary sewer lines and water lines 4" (dia.) or greater shall be buried a minimum of 12" below grade.
3. Latrines are shown for future planning purposes only.
4. All sewer lines will discharge into the bay.

GRAPHIC SCALE

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES
DRWN EA2 TILL/EA2 HERNANDEZ
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE 1/12/94
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

McCalla Airfield Camps

Camps 1 - 5
Utilities Site Plans

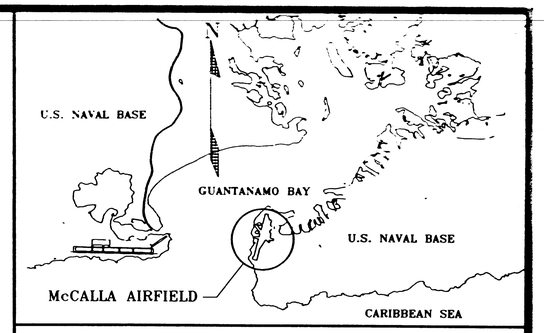
SIZE F | CODE IDENT NO. | PWD DRAWING NO. 8M-3403-1293-02

SCALE: 1"=150' | SHEET 2 OF 4

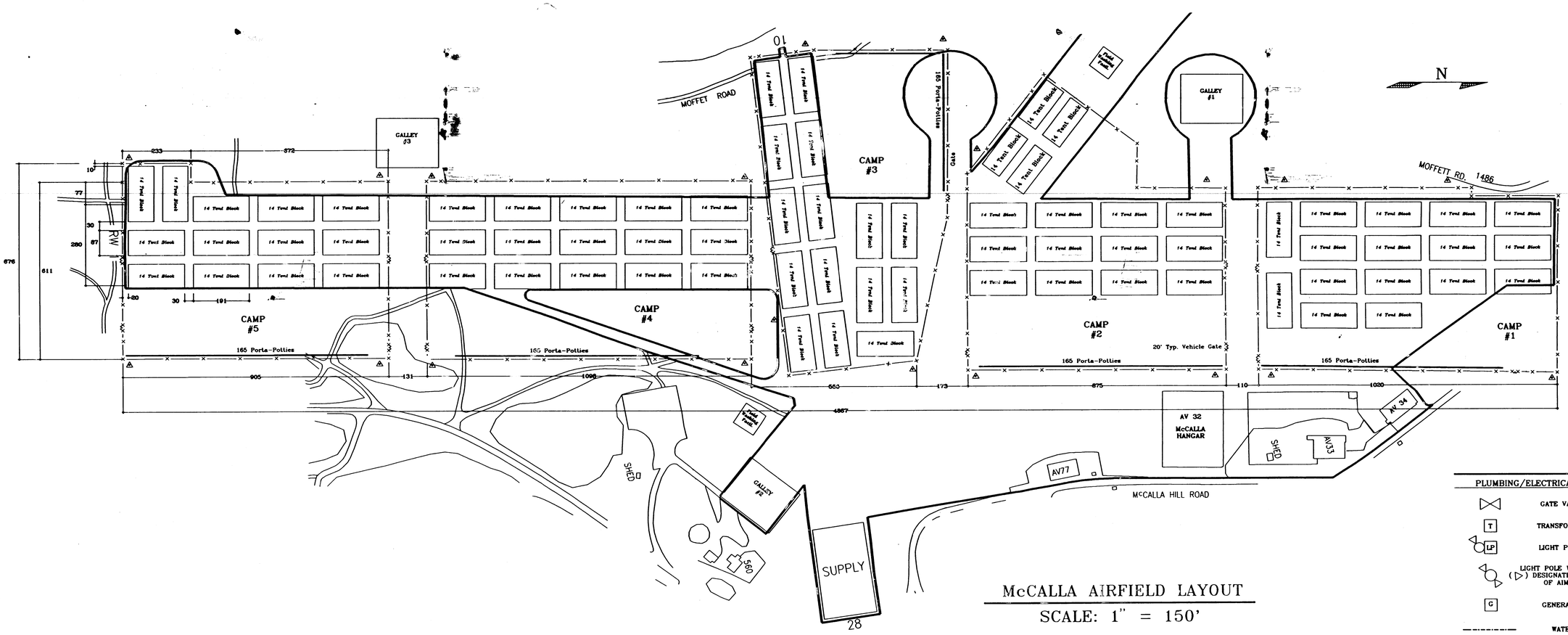
PWD GTMO

McCALLA AIRFIELD CAMPS

GUANTANAMO BAY, CUBA



LOCATION MAP

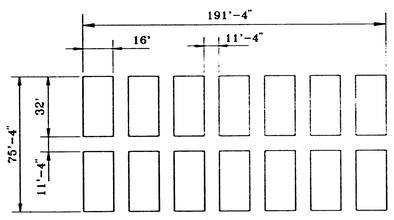


McCALLA AIRFIELD LAYOUT

SCALE: 1" = 150'

LEGEND

PLUMBING/ELECTRICAL		GENERAL SITE	
	GATE VALVE		LATRINE
T	TRANSFORMER	PW	POTABLE WATER
LP	LIGHT PANEL	W	WASH BASIN
	LIGHT POLE W/ LIGHTS (▷) DESIGNATES DIRECTION OF AIMING	S	SHOWER
G	GENERATOR	G	GUARD TOWER
— — — —	WATER		16'x32' TENT
— · · —	SEWER	x—x——x	FENCELINE
		x—x—x—x	20' VEHICLE GATE



TYP. 14 TENT CAMP/210 CAPACITY

NTS

PERSONNEL CAPACITY CHART

* ALL MAX. RATINGS BASED ON 15 MEN PER TENT/210 PER TENT BLOCK

CAMP 1 MAX. = 3,360

CAMP 2 MAX. = 3,360

CAMP 3 MAX. = 3,150

CAMP 4 MAX. = 3,150

CAMP 5 MAX. = 2,730

TOTAL MAX. = 15,750

150 110 50 30 0 150 300 460 Feet

GRAPHIC SCALE

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES
DRWN EA2 HERNANDEZ/EA2 TILL
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE 11/12/94
APPROVED
PUBLIC WORKS OFFICER

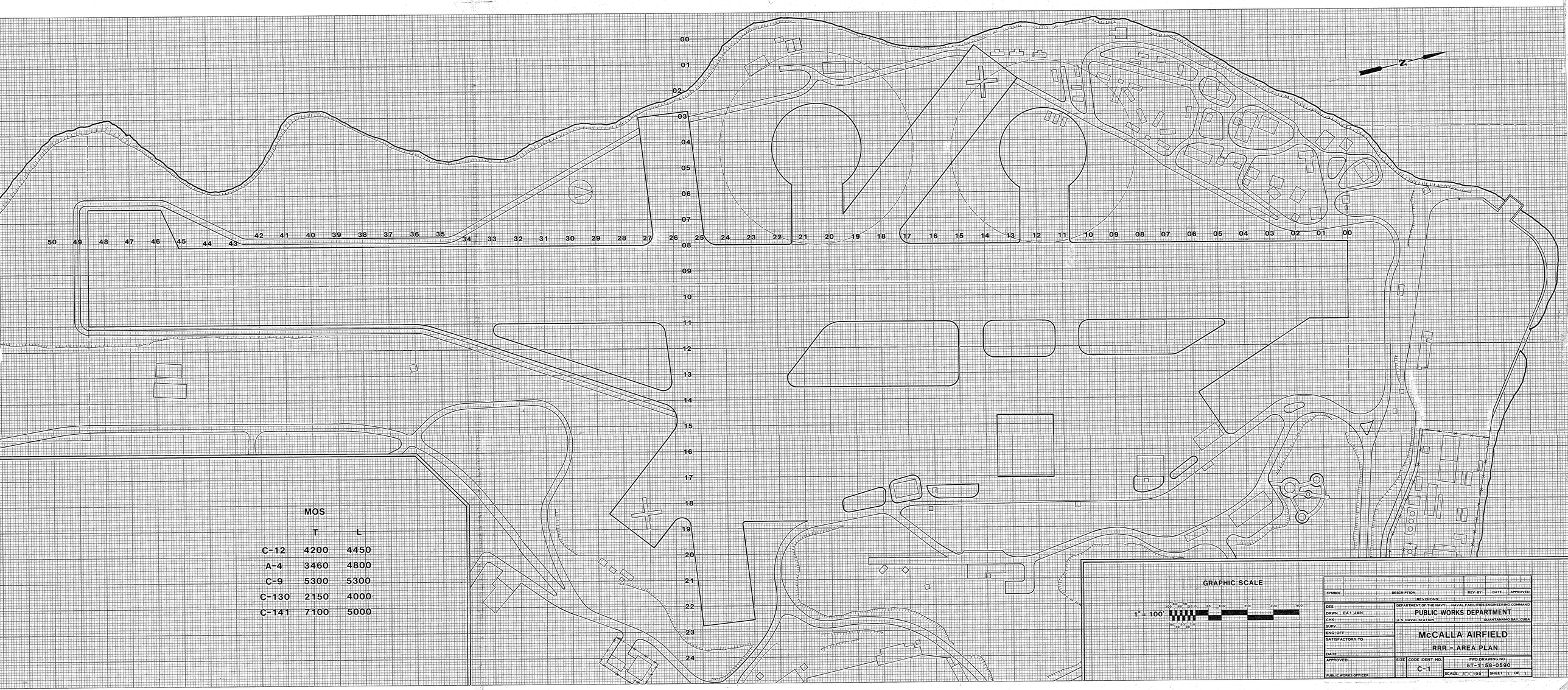
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

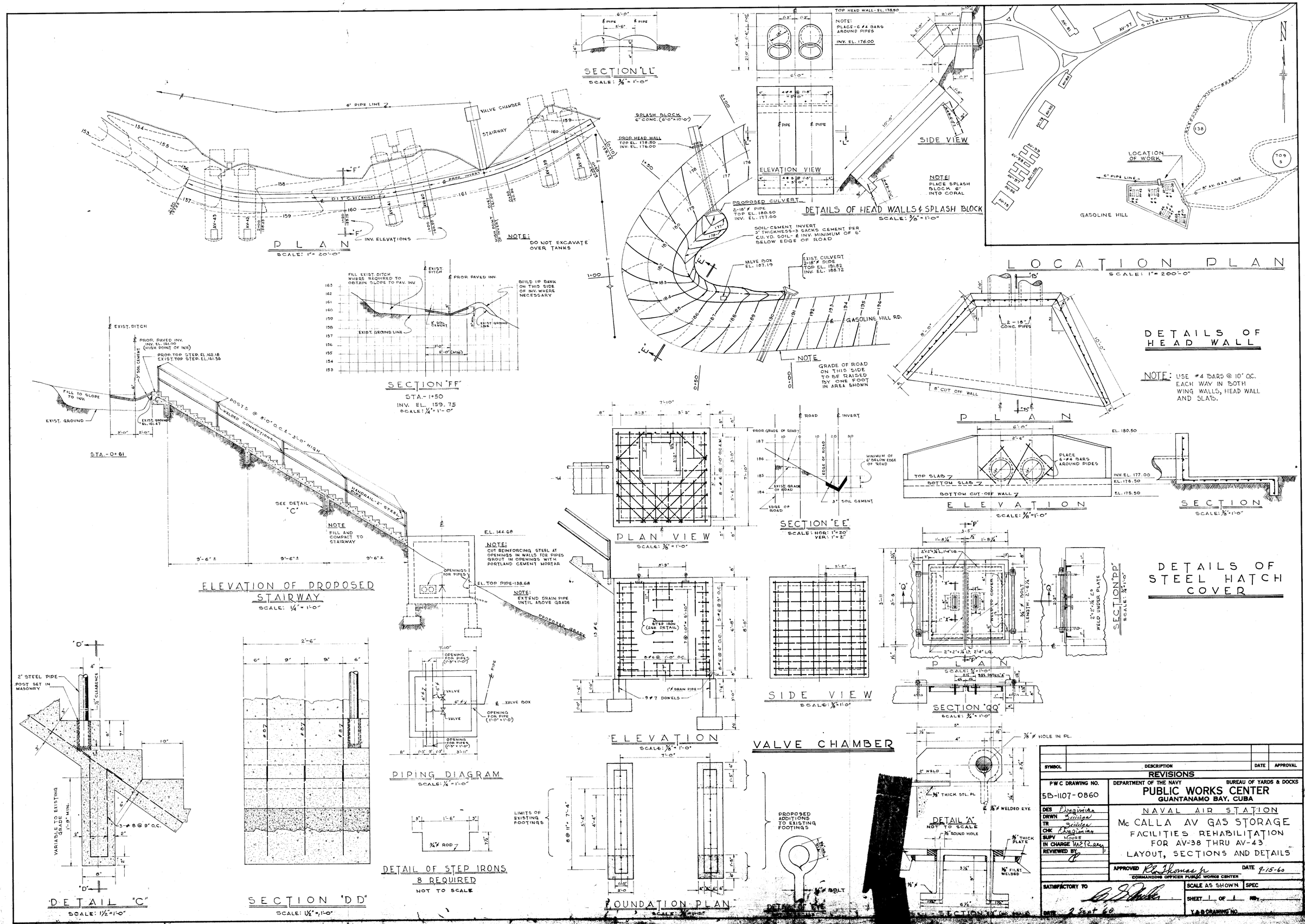
MCCALLA LAYOUT & DETAILS

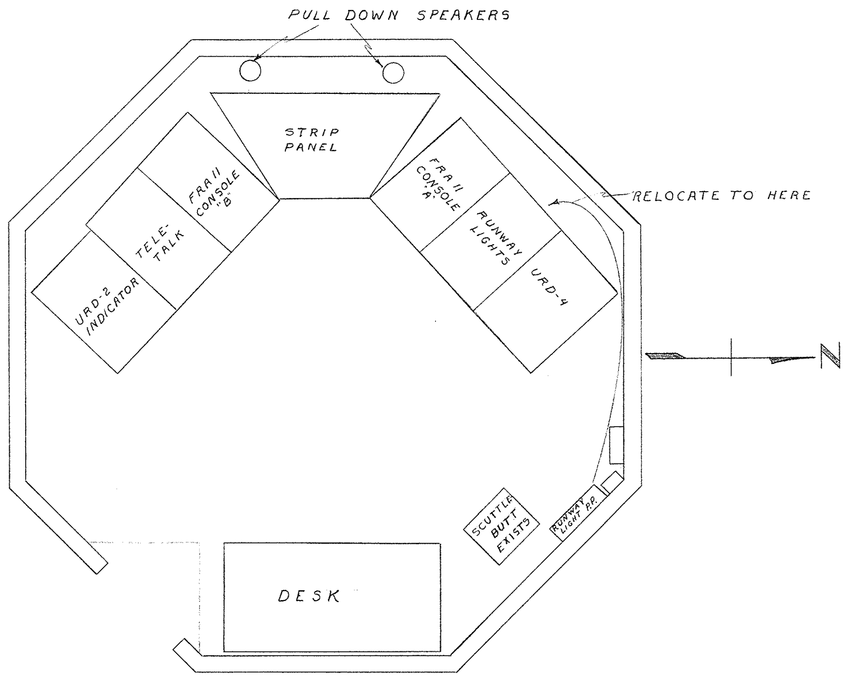
LAYOUT PLAN & DETAILS

SIZE F | CODE IDENT NO. | PWD DRAWING NO. 8M-3403-1293-01

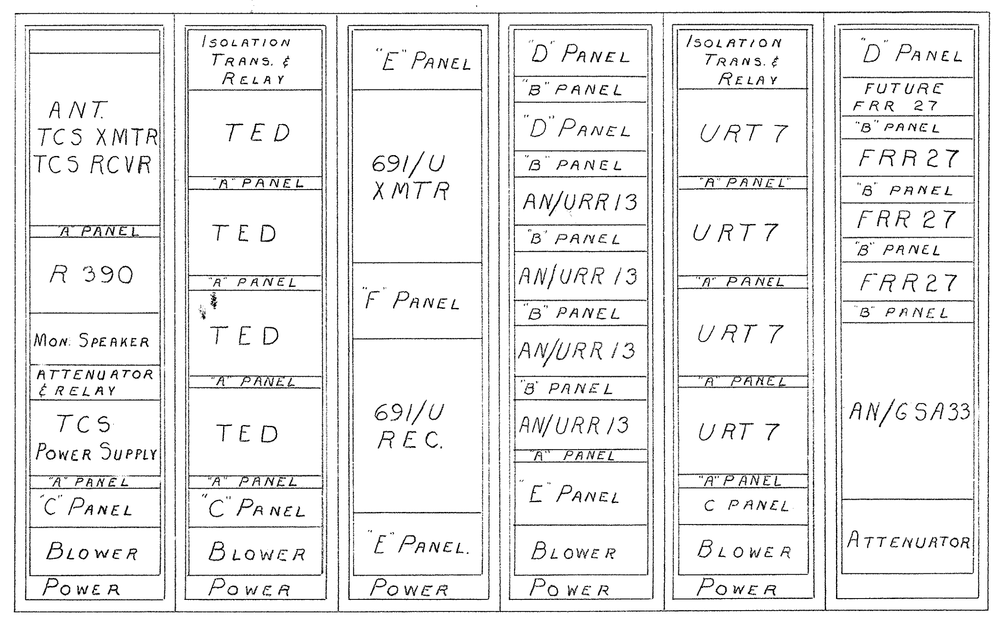
SCALE: As Shown | SHEET 1 OF 4


00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 00
N
MOS
T L
C-12 4200 4450
A-4 3460 4800
C-9 5300 5300
C-130 2150 4000
C-141 7100 5000
GRAPHIC SCALE
1" = 100'
SYMBOL DESCRIPTION REV. BY DATE APPROVED
REVISIONS
DES
DRWN EA1 JMN
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA
McCALLA AIRFIELD
RRR - AREA PLAN
SIZE CODE IDENT NO
C-1
PWD DRAWING NO
5T-1158-0590
SCALE 1" = 100'
SHEET 1 OF 1


SECTION "LL"
SCALE: 3/8" = 1'-0"
PLAN
SCALE: 1" = 20'-0"
6" PIPE LINE
VALVE CHAMBER
STAIRWAY
PROP. INVERT
DI T"CH (EXIST)
INV. ELEVATIONS
NOTE: DO NOT EXCAVATE OVER TANKS
DETAILS OF HEAD WALLS & SPLASH BLOCK
SCALE: 3/8" = 1'-0"
TOP HEAD WALL - EL. 178.50
NOTE: PLACE-6 #4 BARS AROUND PIPES
INV. EL. 176.00
ELEVATION VIEW
SIDE VIEW
SPLASH BLOCK 6" CONC. (6'-0" x 10'-0")
PROP. HEAD WALL TOP EL. 178.50 INV. EL. 176.00
PROPOSED CULVERT 2-18" ø PIPE TOP EL. 180.50 INV. EL. 177.00
SOIL-CEMENT INVERT 3" THICKNESS-3 SACKS CEMENT PER CU. YD. SOIL- & INV. MINIMUM OF 6" BELOW EDGE OF ROAD
VALVE BOX EL. 187.19
EXIST. CULVERT 2-18" ø PIPE TOP EL. 191.82 INV. EL. 188.72
GASOLINE HILL RD.
NOTE: PLACE SPLASH BLOCK 6" INTO CORAL
NOTE: GRADE OF ROAD ON THIS SIDE TO BE RAISED BY ONE FOOT IN AREA SHOWN
LOCATION PLAN
SCALE: 1" = 200'-0"
SHERMAN AVE
LOCATION OF WORK
6" PIPE LINE
6" ø AV. GAS LINE
GASOLINE HILL
SECTION "FF"
STA. - 1+50
INV. EL. 159.75
SCALE: 1/4" = 1'-0"
FILL EXIST. DITCH WHERE REQUIRED TO OBTAIN SLOPE TO PAV. INV.
BUILD UP BANK ON THIS SIDE OF INV. WHERE NECESSARY
EXIST. DITCH
PROP. PAVED INV.
EXIST. GROUND LINE
ELEVATION OF PROPOSED STAIRWAY
SCALE: 1/4" = 1'-0"
EXIST. DITCH
PROP. PAVED INV. INV. EL. 161.00 (HIGH POINT OF INV.)
PROP. TOP STEP. EL. 162.18
EXIST. TOP STEP. EL. 161.55
FILL TO SLOPE TO INV.
EXIST. GROUND
EXIST. GROUND EL. 161.47
STA. - 0+61
POST 5 @ 8'-0" O.C. & 3'-0" HIGH
WELDED CONNECTIONS
HANDRAIL-2" STEEL
SEE DETAIL "C"
NOTE: FILL AND COMPACT TO STAIRWAY
E.L. 144.68
NOTE: CUT REINFORCING STEEL AT OPENINGS IN WALLS FOR PIPES GROUT IN OPENINGS WITH PORTLAND CEMENT MORTAR
OPENINGS FOR PIPES
EL. TOP PIPE-138.68
NOTE: EXTEND DRAIN PIPE UNTIL ABOVE GRADE
PROPOSED GRADE
PROP. GRADE OF ROAD
ROAD
INVERT
MINIMUM OF 6" BELOW EDGE OF ROAD
EXIST. GRADE OF ROAD
EDGE OF ROAD
3" SOIL CEMENT
SECTION "EE"
SCALE: HOR: 1" = 20' VER: 1" = 2'
DETAILS OF HEAD WALL
NOTE: USE #4 BARS @ 10" O.C. EACH WAY IN BOTH WING WALLS, HEAD WALL AND SLAB.
2 - 18" CONC. PIPES
8" CUT OFF WALL
PLAN
ELEVATION
SCALE: 3/8" = 1'-0"
EL. 180.50
PLACE 6-#6 BARS AROUND PIPES
TOP SLAB
BOTTOM SLAB
BOTTOM CUT-OFF WALL
INV. EL. 177.00
EL. 176.50
EL. 175.50
SECTION
SCALE: 3/8" = 1'-0"
PLAN VIEW
SCALE: 3/8" = 1'-0"
ELEVATION
SCALE: 3/8" = 1'-0"
9 #7 DOWELS
1" DRAIN PIPE
STEP IRON (SEE DETAIL)
SIDE VIEW
SCALE: 3/8" = 1'-0"
VALVE CHAMBER
PIPING DIAGRAM
SCALE: 1/4" = 1'-0"
OPENING FOR PIPES (1'-9" x 1'-0")
VALVE
VALVE BOX
OPENING FOR PIPE (1'-0" x 1'-0")
DETAIL OF STEP IRONS
8 REQUIRED
NOT TO SCALE
3/4" ø ROD
FOUNDATION PLAN
SCALE: 3/8" = 1'-0"
LIMITS OF EXISTING FOOTINGS
PROPOSED ADDITIONS TO EXISTING FOOTINGS
DETAILS OF EYE
1/2" BOLT
DETAILS OF STEEL HATCH COVER
PLAN
SCALE: 3/4" = 1'-0"
SECTION "PP"
SCALE: 3/4" = 1'-0"
SECTION "QQ"
SCALE: 3/4" = 1'-0"
WELD UNDER PLATE
WELD TO COVER
BOLT LENGTH, 2'-9 1/4"
2" x 2" x 1/4" L, 2'-4" LG.
SEE DETAIL "A"
DETAIL "A"
NOT TO SCALE
7/8" ø HOLE IN PL.
7/8" THICK STL. PL.
7/8" ø WELDED EYE
7/8" ROUND HOLE
7/8" THICK PLATE
7/8" FILLET WELDED
SECTION "XX" (NO SCALE)
DETAIL "C"
SCALE: 1 1/2" = 1'-0"
2" STEEL PIPE
POST SET IN MASONRY
1/2" CLEARANCE
VARIABLE TO EXISTING GRADE 1'-9" MIN.
3 - #8 @ 9" O.C.
SECTION "DD"
SCALE: 1 1/2" = 1'-0"
SYMBOL | DESCRIPTION | DATE | APPROVAL
REVISIONS
P.W.C. DRAWING NO. 5B-1107-0860
DEPARTMENT OF THE NAVY
BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA
DES Draughon
DRWN Bridges
TR Bridges
CHK Draughon
SUPV Moore
IN CHARGE
REVIEWED BY
NAVAL AIR STATION
Mc CALLA AV GAS STORAGE FACILITIES REHABILITATION FOR AV-38 THRU AV-43
LAYOUT, SECTIONS AND DETAILS
APPROVED
COMMANDING OFFICER PUBLIC WORKS CENTER
DATE 9-15-60
SATISFACTORY TO
DATE 2 Sept 60
SCALE AS SHOWN
SPEC
SHEET 1 OF 1
Y & D DRAWING NO.



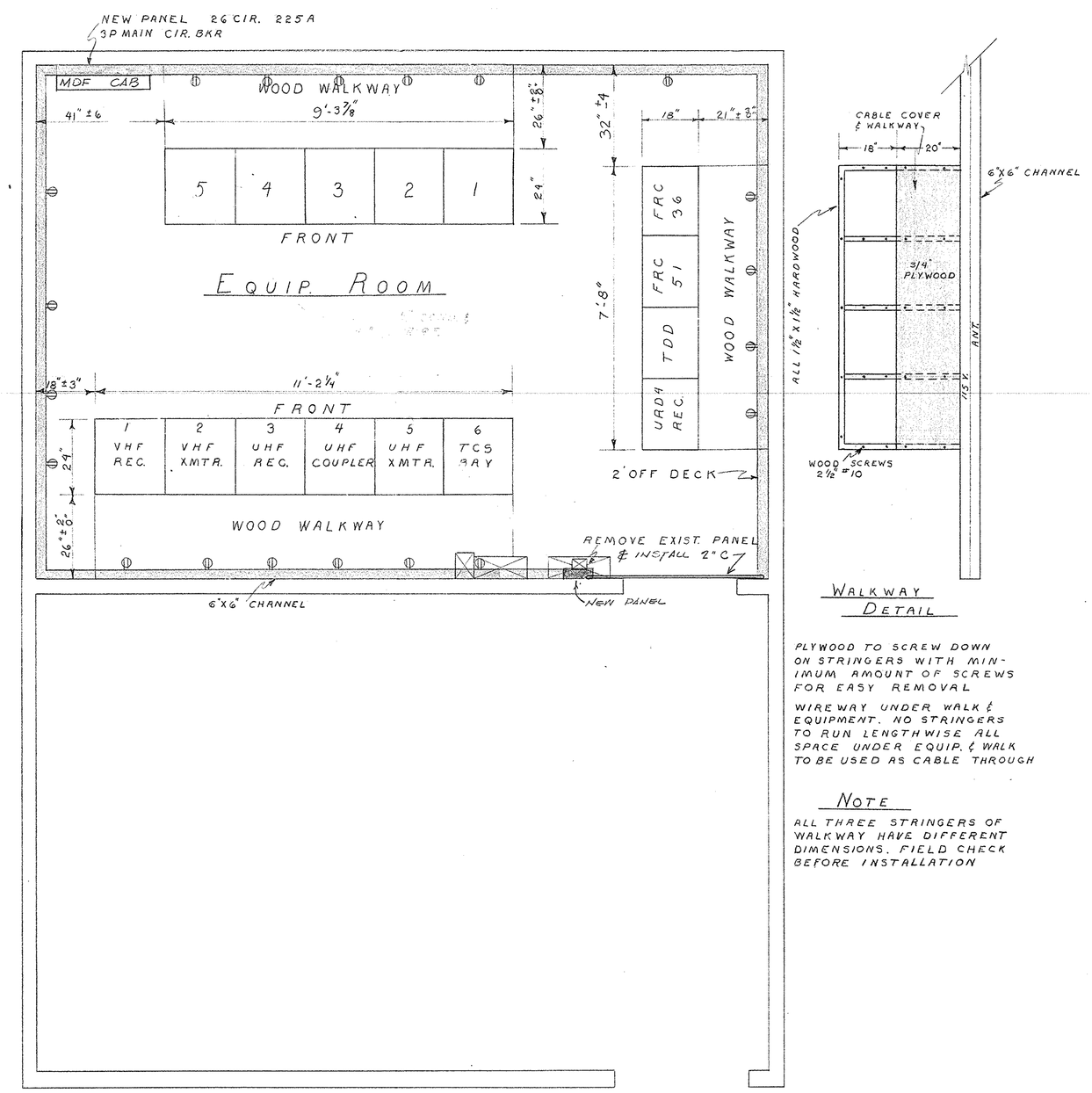
FLOOR PLAN LAYOUT (CONTROL TOWER)
SCALE: 1/2" = 1'-0"



ELEVATION
EAST SIDE CABINETS

BKR PANEL SCHEDULE (CABINETS)

CAB No.	BKR. No.	CAP.	INSTALLED CAPACITY	LOAD	DUTY CYCLE
1	#1	30A	11A	11A	CONT.
2	#2	15A	4A	4A	CONT.
3	#3	15A	4A	4A	CONT.
4	#4	30A	14A	14A	CONT.
5	#5	30A	12A	12A	CONT.
6	#6	20A	7A	7A	CONT.
7	#7	30A	24A	15A	5A. CONT 24A. INT.
8	#8	15A	UTILITY OUTLETS	UTILITY LIGHT	INTERMITTENT
9	#9	30A	12A	12A	CONT
10	#10	30A	24A	15A	5A. CONT. 24A. INT.
11	#11	15A	4A	4A	CONT.
EQUIPMENT					
URN-5	12	15A	27A	27A	
FRN-24 MONITORS	13	15A			
URD 4	14	15A	3.4A	3.4A	CONT
TELETALK	15	15A	3A	3A	CONT
CLOCK OUTLET	16	15A	NEGLIGIBLE		
FRC-51	17	15A	7A	7A	INTERMITTENT
FRC-36	18	15A	7A	7A	"
URD-2	19	15A	1.2A	1.2A	CONT.
TDD	20	15A	4A	4A	INTERMITTENT
SPARE	21	15A	10A	10A	10
SPARE	22	15A	10A	10A	10
SPARE	23	15A	10A	10A	10
SPARE	24	20A	10A	10A	10
SPARE	25	20A	10A	10A	10



FLOOR PLAN LAYOUT (EQUIP. ROOM)
SCALE: 1/2" = 1'-0"

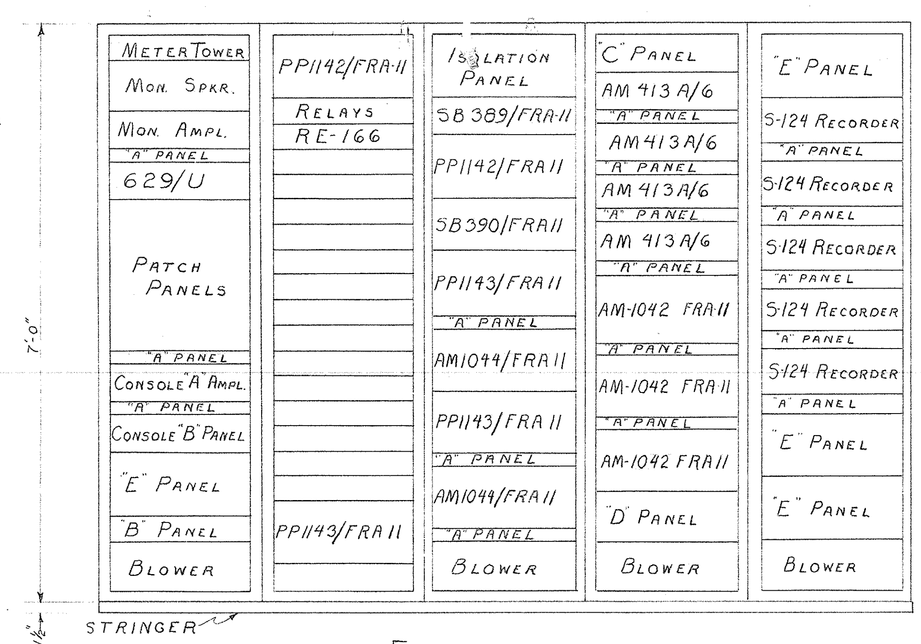
WALKWAY DETAIL

PLYWOOD TO SCREW DOWN ON STRINGERS WITH MINIMUM AMOUNT OF SCREWS FOR EASY REMOVAL

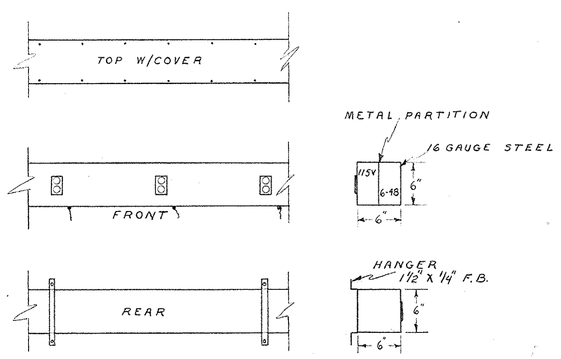
WIREWAY UNDER WALK & EQUIPMENT. NO STRINGERS TO RUN LENGTHWISE ALL SPACE UNDER EQUIP. & WALK TO BE USED AS CABLE THROUGH

NOTE

ALL THREE STRINGERS OF WALKWAY HAVE DIFFERENT DIMENSIONS. FIELD CHECK BEFORE INSTALLATION



ELEVATION
WEST SIDE CABINETS



CHANNEL DETAIL
SCALE: 1" = 1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

P.W.C. DRAWING NO. 5B-1323-0862

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN
TR
CHK
SUPV
IN CHARGE
REVIEWED BY

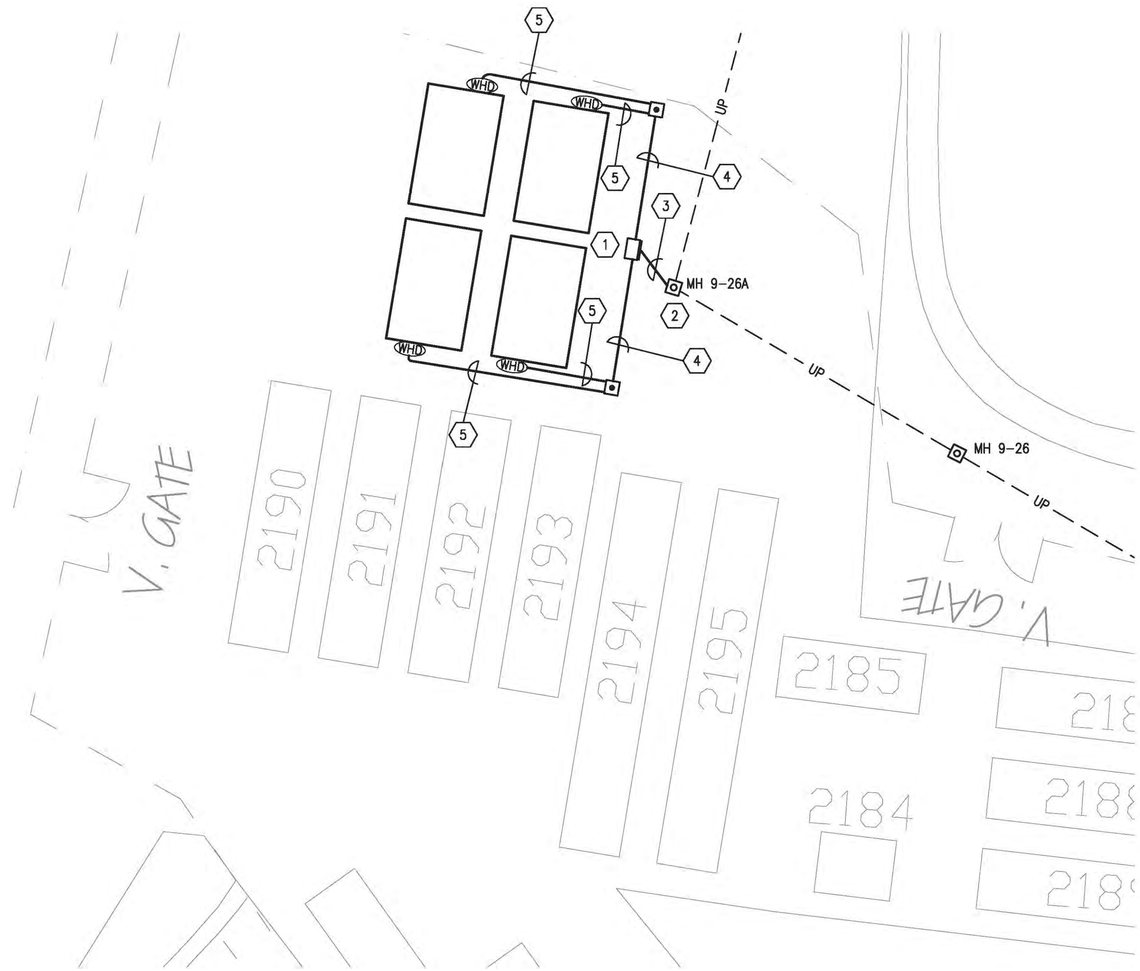
McCALLA FIELD
CONTROL TOWER
EQUIPMENT LAYOUT

APPROVED — COMMANDING OFFICER PUBLIC WORKS CENTER — DATE 8/27/62

SATISFACTORY TO
DATE 24 AUG 1962

SCALE AS SHOWN — SPEC
SHEET ___ OF ___ NBy ___
Y & D DRAWING NO.

07066



McCALLA FIELD SITE – ELECTRICAL SITE PLAN

SCALE : 1" = 50'-0"

N

NOTES

1. PAD MOUNT XFMR, 50 KVA, 1 PHASE, 4,160 GRD.Y/2,400 – 240/120 V.
2. FOR DUCT BANK CONNECTION TO THE EXISTING MANHOLE, BREAK THE MANHOLE WALL OUT TO THE DIMENSIONS REQUIRED AND PRESERVE THE STEEL IN THE MANHOLE WALL. EXTEND THE STEEL INTO THE DUCT BANK ENVELOPE PRIOR TO CONCRETE PLACEMENT.
3. 1–#1/0 AWG (5 KV) AND 1–#1#0 AWG (600 V) NEUTRAL IN 4" CONCRETE ENCASED CONDUIT. PROVIDE ONE SPARE 4" CONCRETE ENCASED CONDUIT. CONDUCTORS SHALL BE SINGLE–CONDUCTOR, EPR INSULATED, PVC JACKETED, THAT CONFORM TO UL 1072 AND NEMA WC 74. INSULATION THICKNESS SHALL BE 90 MILS AND JACKET THICKNESS SHALL BE 60 MILS. NEUTRAL CONDUCTOR SHALL EMPLOY THE SAME INSULATION AND JACKET MATERIALS AS PHASE CONDUCTORS EXCEPT THAT A 600 VOLT INSULATION RATING IS ACCEPTABLE. CONNECT TO EXISTING 4.16 KV CIRCUIT WITH Y–SPLICES IN MANHOLE 9–26A. CABLE TERMINATIONS AND SPLICES SHALL BE COLD–SHRINK TYPE.
4. 3–1/C #3/0 AWG (600 V) IN 2" CONCRETE ENCASED CONDUIT. PROVIDE ONE SPARE 2" CONCRETE ENCASED CONDUIT. SECONDARY CONDUCTORS SHALL CONFORM TO UL 854, TYPE USE.
5. 3–1/C #2 AWG (600 V) IN 2" CONCRETE ENCASED CONDUIT. SERVICE ENTRANCE CONDUCTORS SHALL CONFORM TO UL 854, TYPE USE. CONNECT TO NEW SECONDARY CONDUCTORS WITH Y–SPLICES IN THE NEW HANDHOLES. CABLE SPLICES SHALL BE COLD–SHRINK TYPE.

GRAPHIC SCALE

1"=50' 0' 50' 100' 150' 200' 250'

SYM	DESCRIPTION	DATE	MAP

NAVFAC

SEAL

A/E LOGO

SAT–TO

APPROVED

FOR COMMANDER NAVFAC

DES	WEW	DR	WEW
CHK	HTO	QC	

PM/DM

CHIEF ENG/ARCH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVFAC ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
NAVAL STATION – NORFOLK, VIRGINIA
U.S. NAVAL STATION GUANTANAMO BAY, CUBA
GB8-839 - CONSTRUCT (8) KSPANS
BLDG 2310 & McCALLA FIELD
McCALLA FIELD SITE – ELECTRICAL SITE PLAN

CODE ID. NO. 80091 | SIZE D

SCALE: AS NOTED

NCF NO. GB8–839

STA. PROJ. NO.

SPEC. NO.

CONSTR. CONTR. NO.

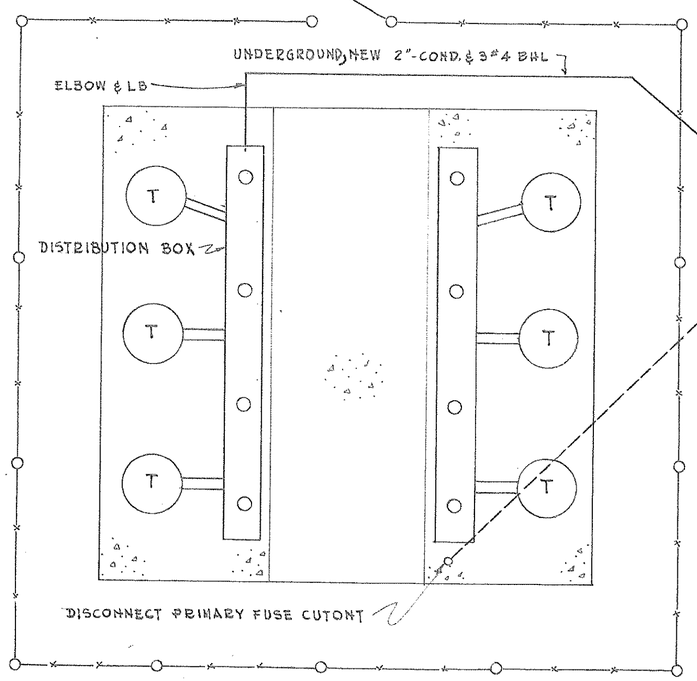
NAVFAC DRAWING NO. 15016314

SHEET 12 OF 19

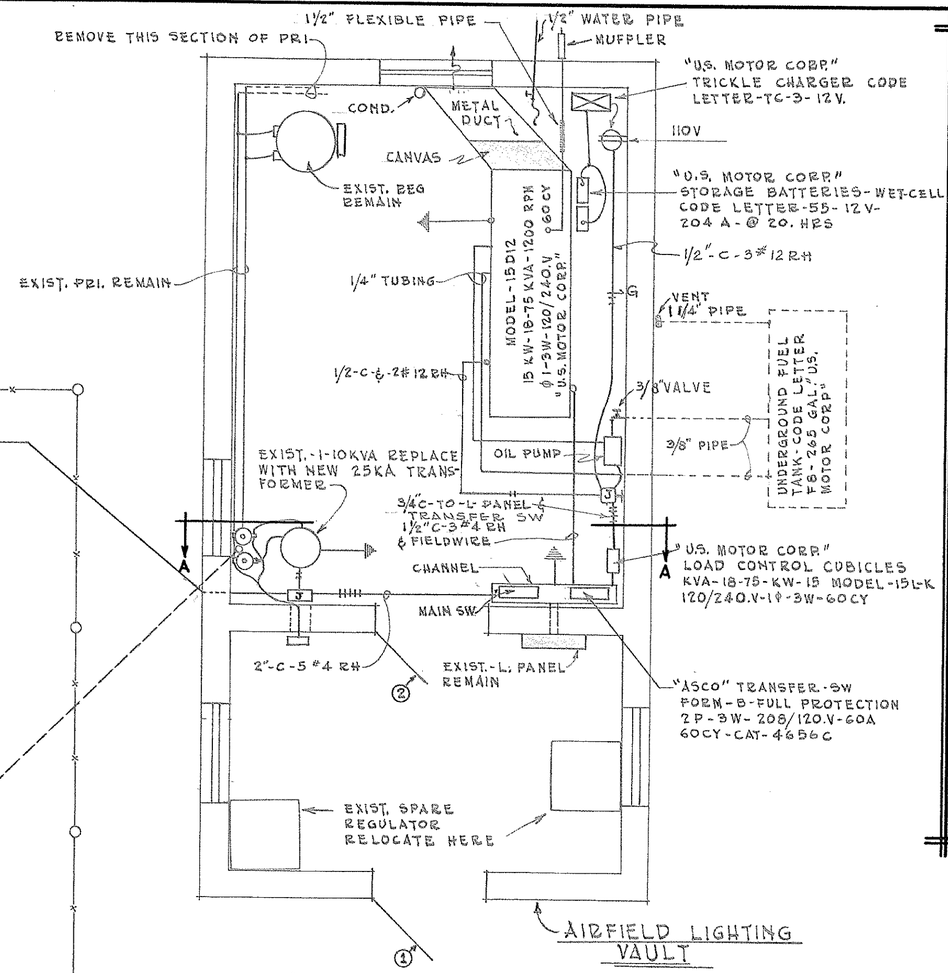
ES101

DRAWFORM REVISION: 15 JANUARY 2008

REVDATE: FILE NAME: Z:\Projects\SeaBee GTMO Projects May 2008\22nd & 25th NCR GTMO designs – Summer 2008\GB8-839 4 KSPANS Windward Port\CAD\E\GB8-839_ES101.dwg LAYOUT NAME: ES101 PLOTTED: Wednesday, October 22, 2008 – 11:17am

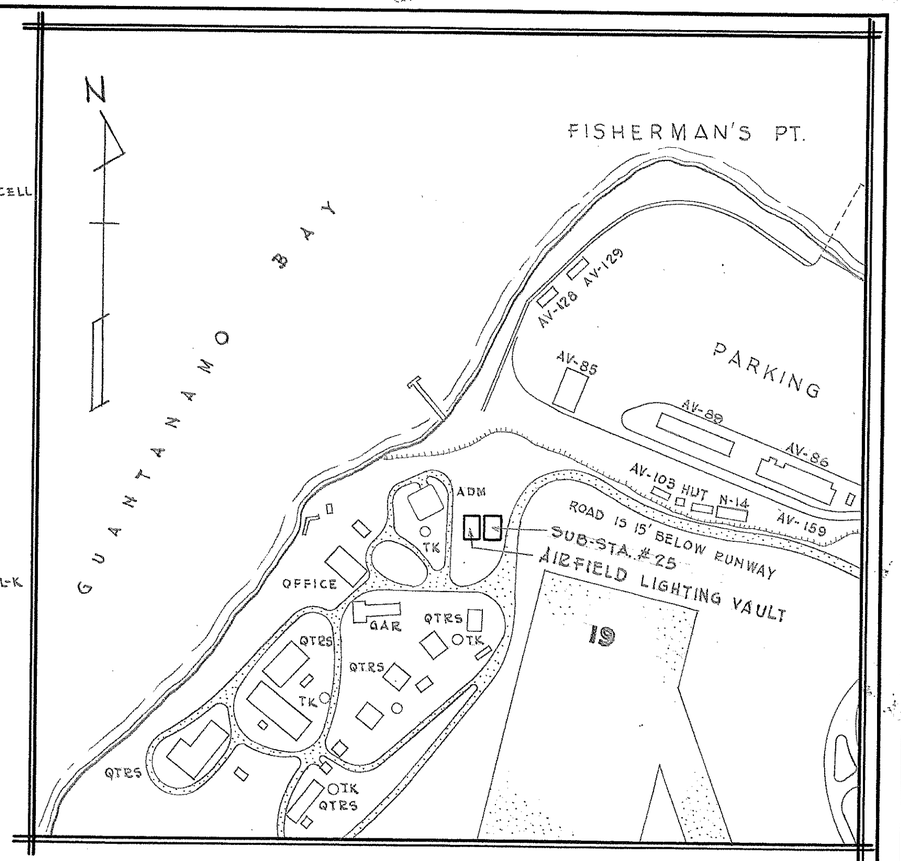


SC. 3/8" = 1'-0"



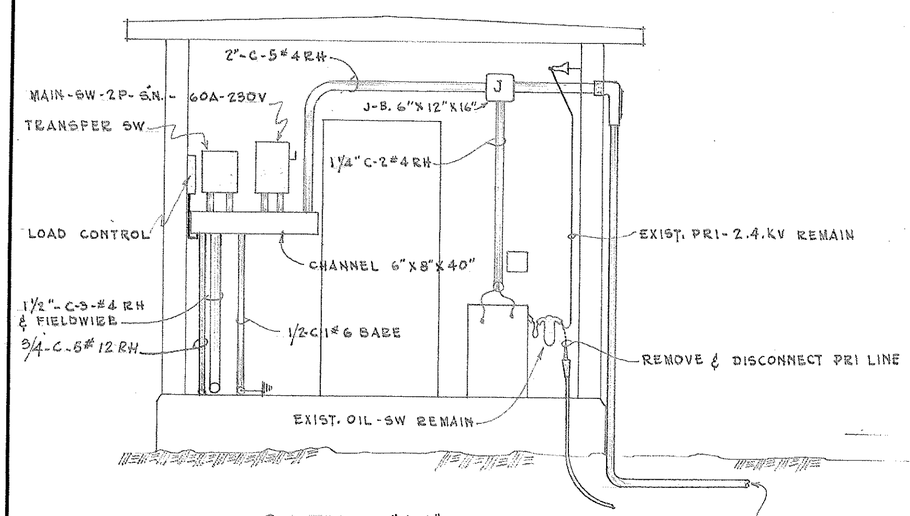
FLOOR-PLAN

SC. 3/8" = 1'-0"



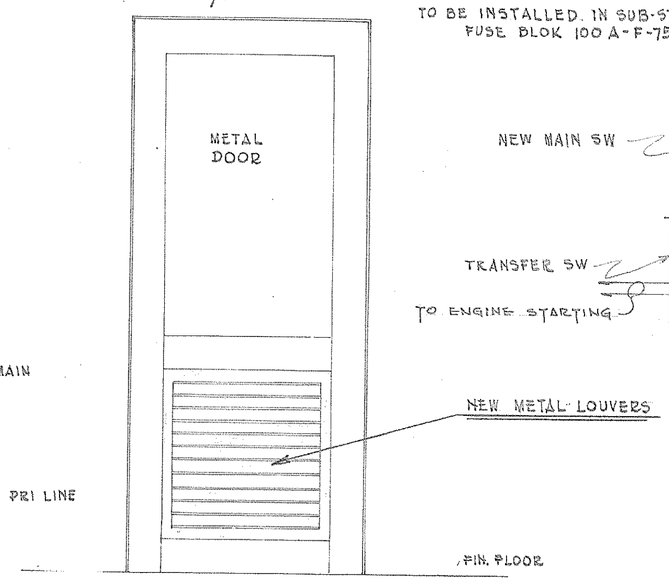
LOCATION PLAN

SC. 1" = 200'

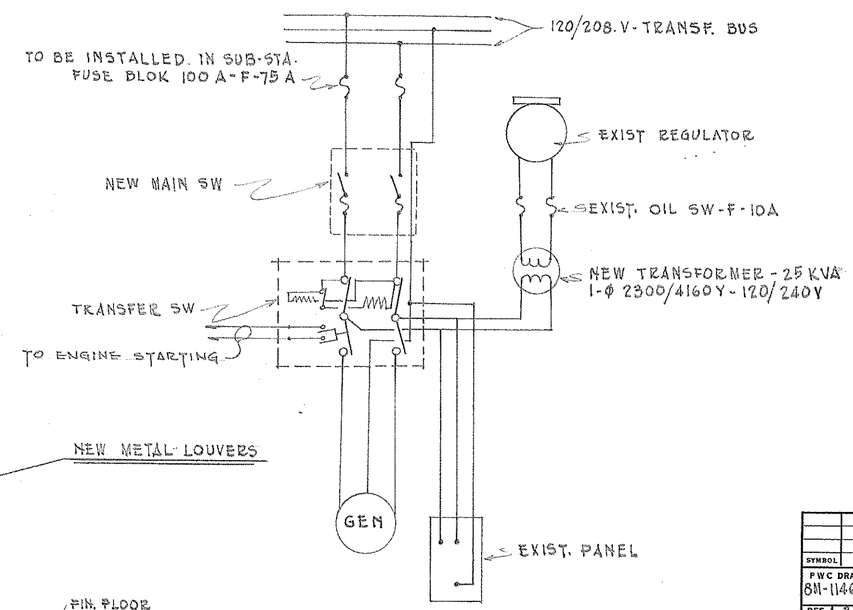


SECTION "AA"

SC. 3/8" = 1'-0"



TYPICAL DETAIL FOR DOORS #1 & 2



SCHEMATIC WIRING DIAGRAM

SYMBOL	DESCRIPTION	DATE	APPROVAL

PWC DRAWING NO. 8M-1146-0859

DEPARTMENT OF THE NAVY BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES A. BARJA
DRWN W. CASTRO
TR
CHK A. BARJA
SUPV
IN CHARGE
REVIEWED BY

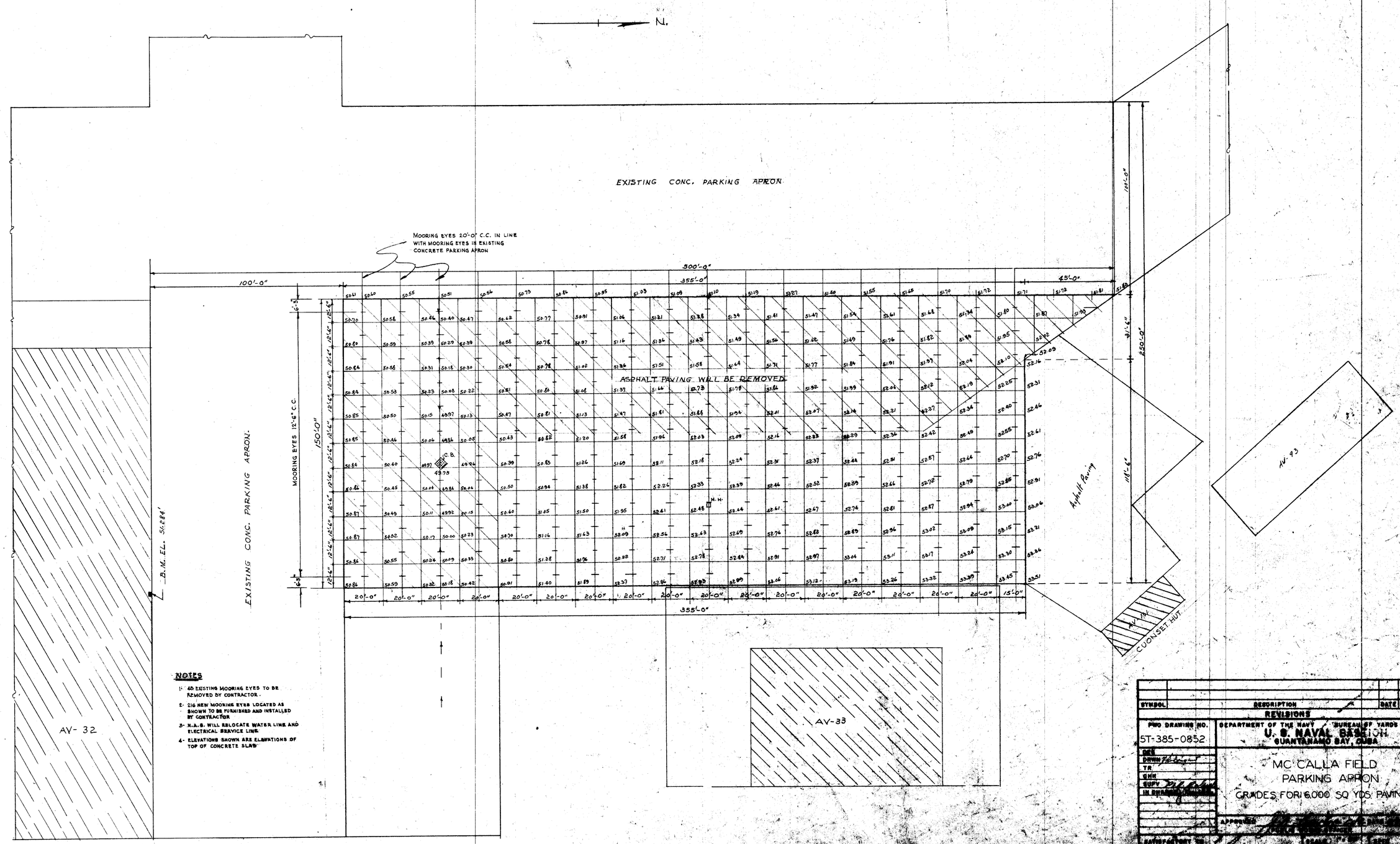
NAVAL AIR STATION
MC-CALLA FIELD
EMERGENCY GENERATOR FOR
AIRFIELD LIGHTING SYSTEM

APPROVED DATE 8-12-59
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO
DATE 8/5/59

SCALE SPEC
SHEET 1 OF 1 NBY
Y & D DRAWING NO.

K+E ALBANENE 195L TRACING PAPER 61050



NOTES

1- 48 EXISTING MOORING EYES TO BE REMOVED BY CONTRACTOR.

2- 216 NEW MOORING EYES LOCATED AS SHOWN TO BE FURNISHED AND INSTALLED BY CONTRACTOR

3- N.A.S. WILL RELOCATE WATER LINE AND ELECTRICAL SERVICE LINE.

4- ELEVATIONS SHOWN ARE ELEVATIONS OF TOP OF CONCRETE SLAB

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWO DRAWING NO. 5T-385-0852

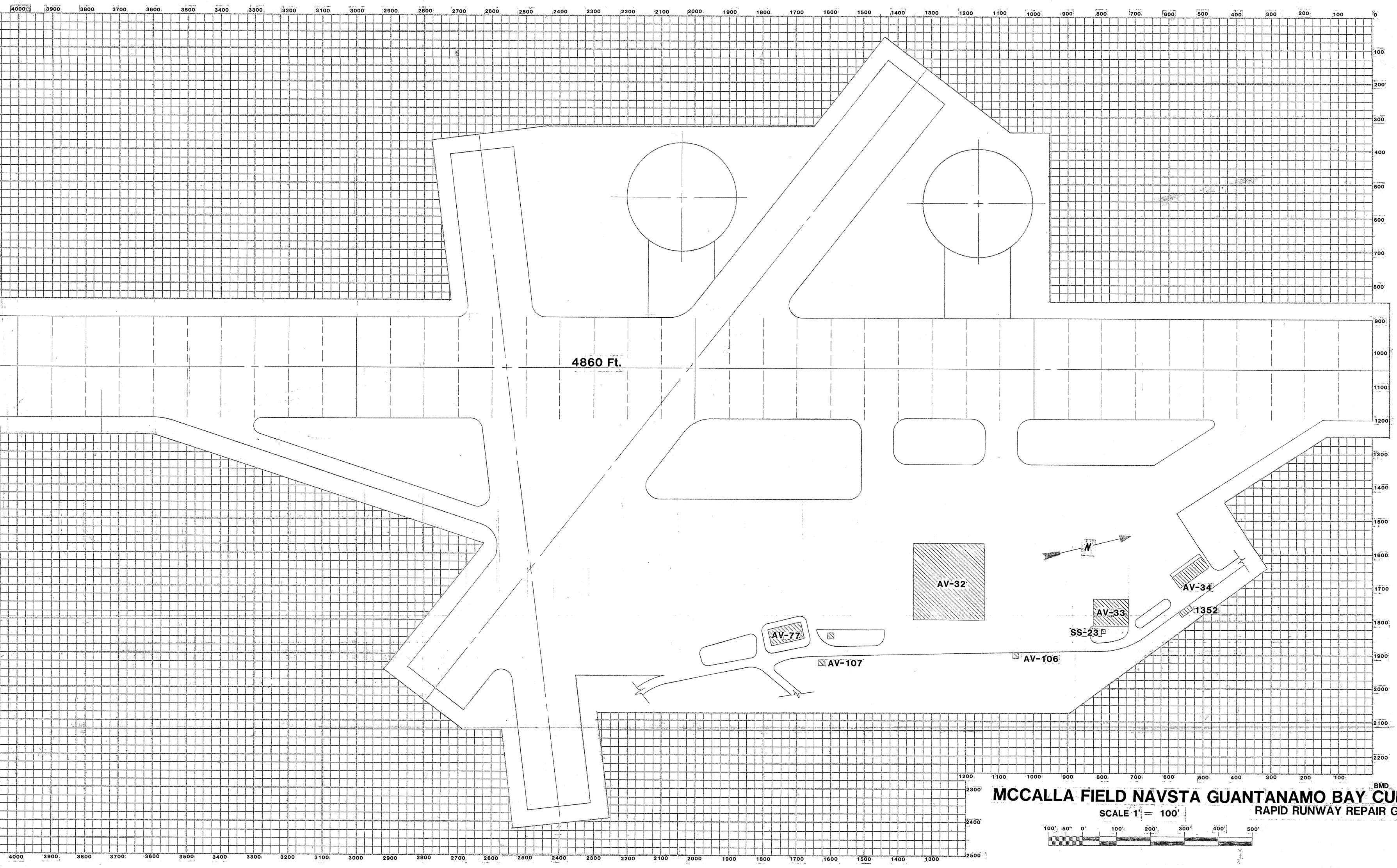
DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
U. S. NAVAL BASE
GUANTANAMO BAY, CUBA

DES
DRWN
TR
CHK
SUPV
IN CHARGE

MC CALLA FIELD
PARKING APRON
GRADES FOR 6,000 SQ YDS PAVING

APPROVED

SATISFACTORY TO

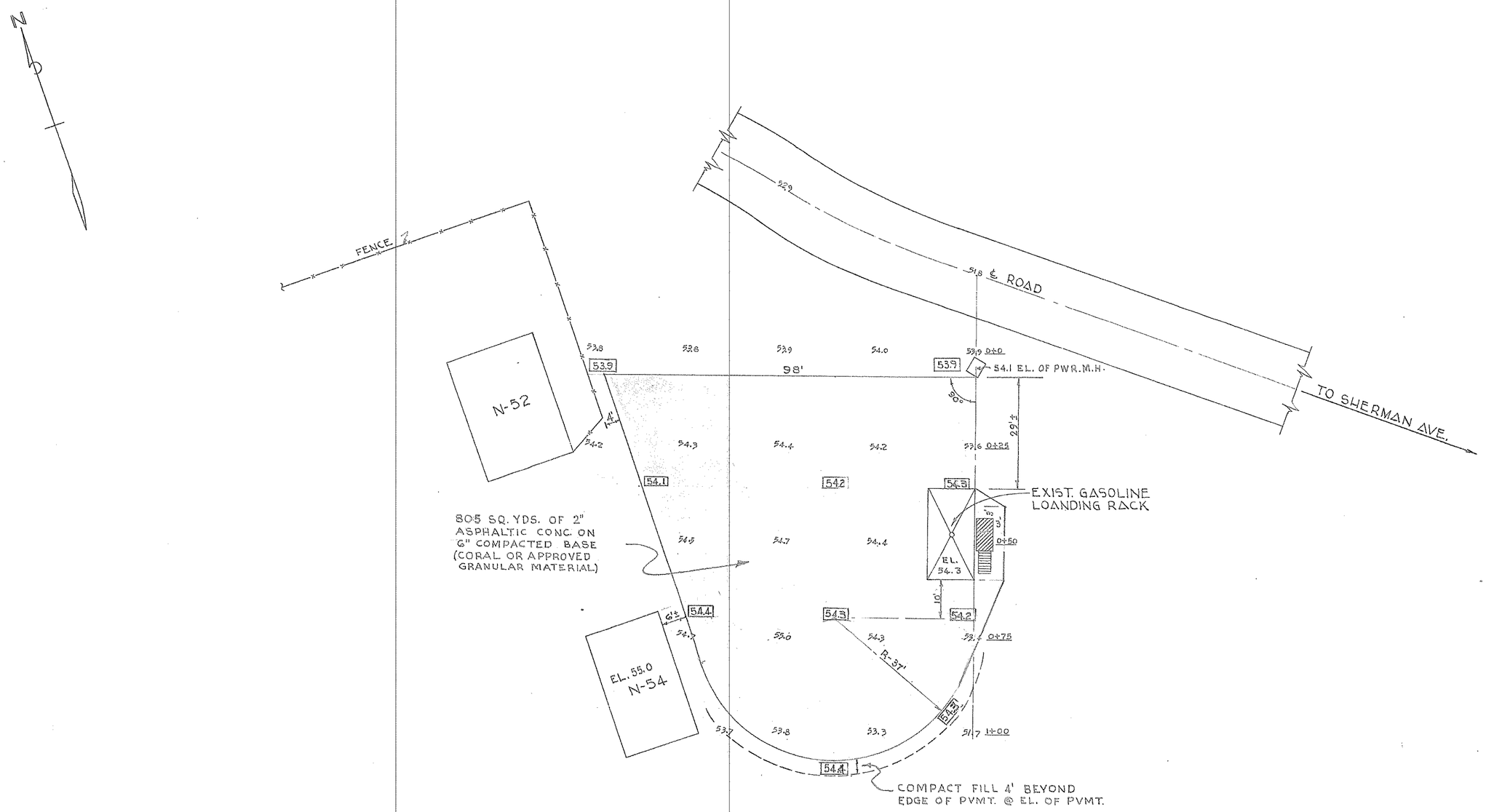


MCCALLA FIELD NAVSTA GUANTANAMO BAY CUBA

SCALE 1" = 100'

RAPID RUNWAY REPAIR GRID

8M-3109-1289-1



0.0 EXIST'G. GRADE
$\boxed{0.0}$ NEW PVMT. GRADE

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

PWC DRAWING NO. SM-929-0757

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS

PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES
DRWN O. SOTO
TR O. SOTO
CHK I. CASTRO
SUPV
IN CHARGE
REVIEWED BY

U.S. NAVAL AIR STATION
PAVING PLAN OF
McCALLA FIELD TANK
TRUCK LOADING RACK

APPROVED H. J. Johnson
COMMANDING OFFICER, PUBLIC WORKS CENTER — DATE 7/20/57

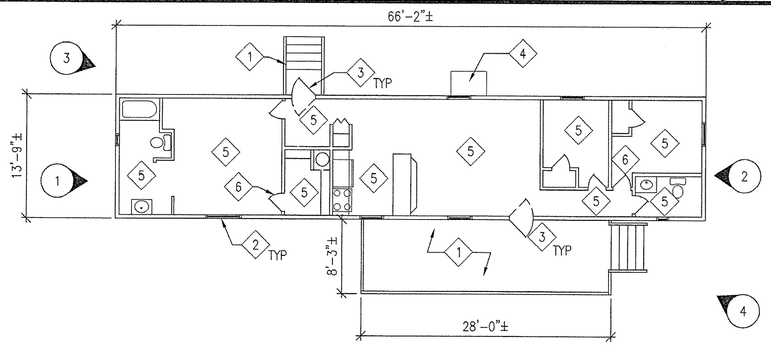
SATISFACTORY TO T. E. Burke
DATE 7/19/57

SCALE 1" = 20' — SPEC

SHEET ___ OF ___ — NBY

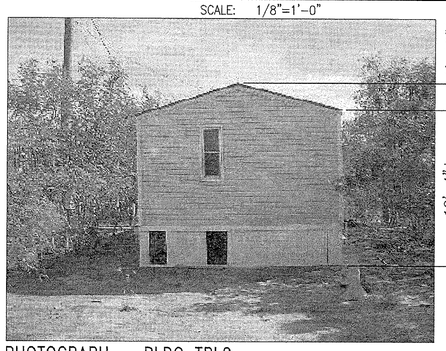
Y & D DRAWING NO.

K+E ALBANENE 195L TRACING PAPER 19745

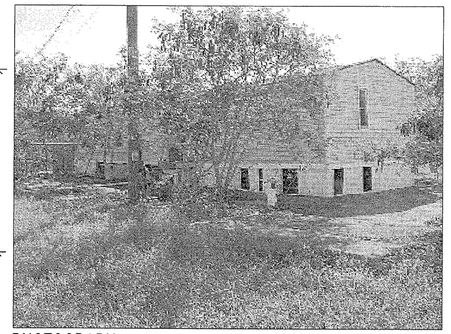


DEMOLITION PLAN – BLDG TPL-2

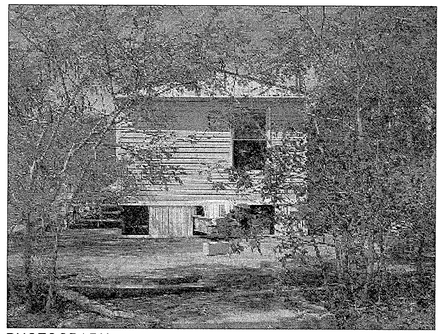
SCALE: 1/8"=1'-0"



PHOTOGRAPH – BLDG TPL2 (1)



PHOTOGRAPH (3)



PHOTOGRAPH (2)

PHOTOGRAPH (4)

DEMOLITION NOTES – BLDG TPL-2: (THIS SHEET ONLY)

REMOVE BLDG TPL-2 IN ITS ENTIRETY INCLUDING BUT NOT LIMITED TO: PREFEBRICATED WOOD STRUCTURE, ASPHALT SHINGLES, WOOD ROOF FRAMING, WOOD WALL FRAMING W/ GYPSUM WALLBOARD, ALL INTERIOR CASEWORK, PLYWOOD SUBFLOOR, ALL FINISHES, EXTERIOR SKIRT AND STEEL TRAILER FRAME.

REMOVE ALL ELECTRICAL EQUIPMENT & DEVICES, PANEL BOARDS, DISCONNECT SWITCHES, LIGHTING FIXTURES, TOGGLE SWITCHES, RECEPTACLES, WIRING AND CONDUIT. DISCONNECT AND REMOVE MAIN SERVICE EQUIPMENT.

REMOVE ALL PLUMBING FIXTURES, MECH EQUIP, DUCTWORK, DIFFUSERS, FANS AND GRILLES.

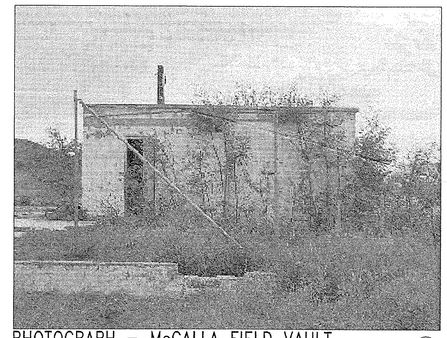
1. REMOVE EXIST WD FRAME PORCH & STEPS
2. REMOVE EXIST METAL WINDOWS & FRAMES (TYP)
3. REMOVE EXIST HOL MTL DOORS & FRAMES
4. REMOVE EXIST CONDENSING UNIT
5. REMOVE EXIST ASBESTOS SHEET VINYL MASTIC
6. REMOVE EXIST HOL CORE WOOD DOOR AND FRAME (TYP)

CAUTION

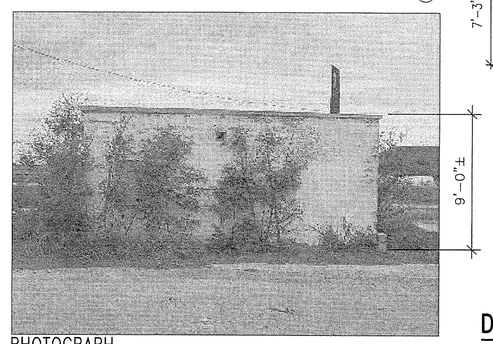
THE CONTRACTOR SHALL PRESUME THAT ALL EXISTING PAINTED SURFACES CONTAIN DETECTABLE LEVELS OF LEAD PAINT. WASTESTREAMS SHALL BE CLASSIFIED AS NON-HAZARDOUS. DISPOSE OF ALL ITEMS AS REGULAR CONSTRUCTION DEBRIS. THE CONTRACTOR SHALL INSURE WORKER PROTECTION DURING ALL CONSTRUCTION ACTIVITIES.

CAUTION

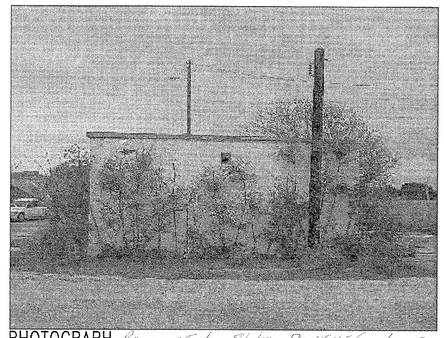
ASBESTOS HAS BEEN IDENTIFIED IN THE FORM OF SHEET VINYL MASTIC. THE CONTRACTOR SHALL PROVIDE FOR WORKER PROTECTION DURING ALL CONSTRUCTION ACTIVITIES. DISPOSE OF ALL ASBESTOS ITEMS AS DEFINED IN SPEC SECTION 13281.



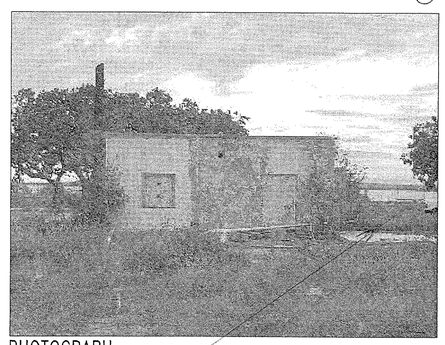
PHOTOGRAPH – McCALLA FIELD VAULT (5)



PHOTOGRAPH (6)

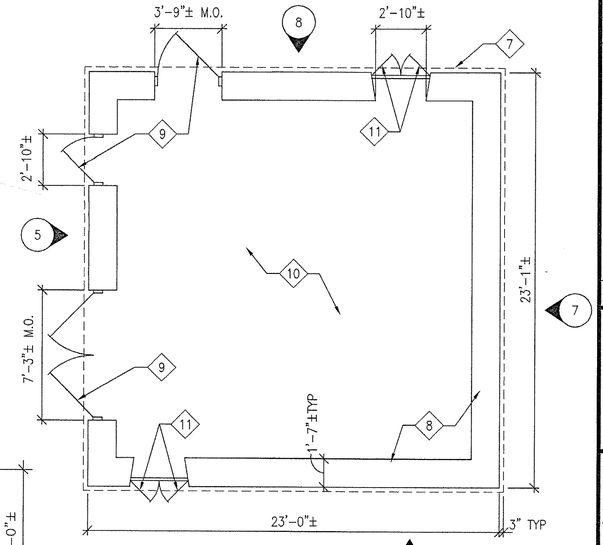


PHOTOGRAPH Remove Extra Slabs - Backfill & Grade (7)



PHOTOGRAPH (8)

EXTRA Slab



DEMOLITION PLAN– McCALLA FIELD VAULT

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

DEMOLITION NOTES – McCALLA FIELD VAULT:

(THIS SHEET ONLY)

REMOVE McCALLA FIELD SMALL ARMS AMMUNITION STORAGE BLDG INCLUDING BUT NOT LIMITED TO: ±8"THICK REINFORCED CONCRETE ROOF SLAB, ±1'-7"THICK REINFORCED CONCRETE WALLS, PR 3'-0" X ±8'-0"HIGH STEEL VAULT DOOR & FRAME, 3'-0" X ±6'-8" STEEL VAULT DOOR & FRAME AND 2'-6" X 6'-8" HOLLOW METAL DOOR AND FRAME, 2-PR ±3'-0" X ±3'-0" STEEL SHUTTERS, ±2'-6"WIDE X 1'-0"THICK REINFORCED CONCRETE FOOTING.

REMOVE ALL ELECTRICAL EQUIPMENT & DEVICES, PANEL BOARDS, DISCONNECT SWITCHES, LIGHTING FIXTURES, TOGGLE SWITCHES, RECEPTACLES, WIRING AND CONDUIT. DISCONNECT AND REMOVE MAIN SERVICE EQUIPMENT.

7. REMOVE EXIST ±4" THICK REINFORCED CONC ROOF SLAB
8. REMOVE EXIST REINFORCED CONC WALLS (TYP)
9. REMOVE EXIST STEEL BLAST DOORS & FRAMES (TYP)
10. REMOVE EXIST ±8" THICK REINFORCED CONC SLAB
11. REMOVE EXIST SWING STEEL BLAST WINDOWS & FRAMES (TYP)

CAUTION

THE CONTRACTOR SHALL PRESUME THAT ALL EXISTING PAINTED SURFACES CONTAIN DETECTABLE LEVELS OF LEAD PAINT. WASTESTREAMS SHALL BE CLASSIFIED AS NON-HAZARDOUS. DISPOSE OF ALL ITEMS AS REGULAR CONSTRUCTION DEBRIS. THE CONTRACTOR SHALL INSURE WORKER PROTECTION DURING ALL CONSTRUCTION ACTIVITIES.

GRAPHIC SCALES:

1/8"=1'-0" 0 4' 8' 16' 24'

1/4"=1'-0" 0 2' 4' 8' 12'

APPR	DATE	DESCRIPTION	STAL

Cederquist
Rodriguez
Ripley
Maddux
THE ARCHITECTURAL ASSOCIATES
Architecture/Planning/Interiors
129 W Virginia Bch Blvd
Norfolk, VA 23510
(757)622-2826 / fax (757)622-2430

COMMONWEALTH OF VIRGINIA
ARNOLD C. RODRIGUEZ
No. 4147
1/24/01
ARCHITECT
SEAL

APPROVED
ACTIVITY – SATISFACTORY TO
DATE
APPROVED
FOR EFD FOR COMMANDER NAVFAC
3/1/01
DATE

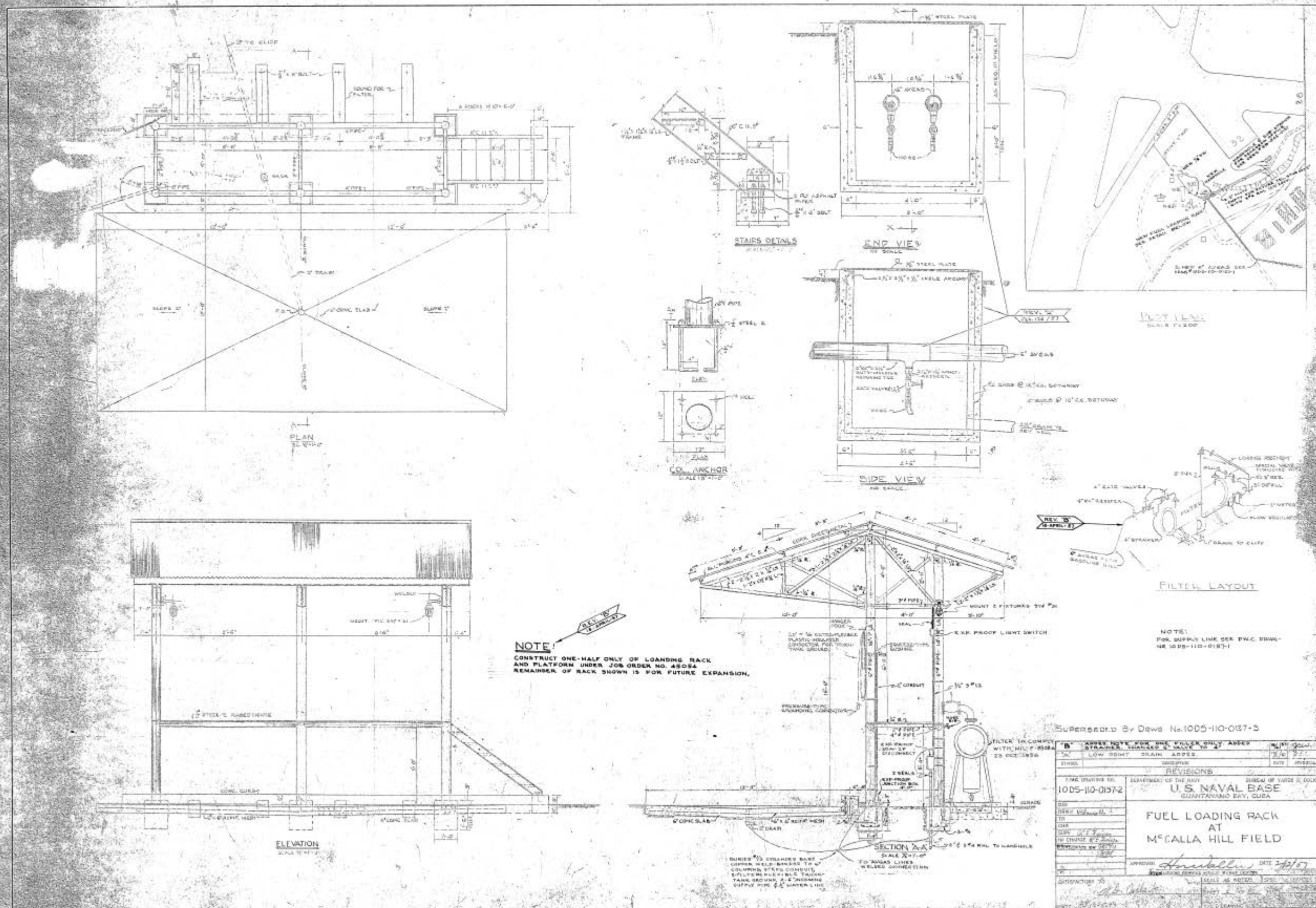
A/E	EFD	
LJR		DESIGN
LJR		DRAWN
ACR	JHS	REVIEW
KTB		QC
ACR		CHIEF ARCH./ ENGR.

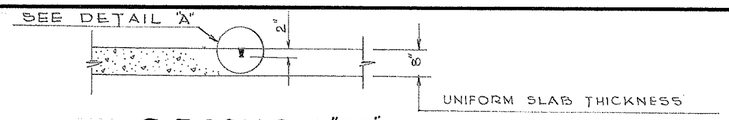
PROJECT MANAGER
FIRE PROTECTION
BRANCH MANAGER
DESIGN DIRECTOR

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
NAVAL STATION
U.S. NAVAL STATION
GUANTANAMO BAY, CUBA
DEMOLISH VARIOUS STRUCTURES
DEMOLITION PLANS & PHOTOGRAPHS
– BLDGS TPL-2 & McCALLA FIELD VAULT

CODE ID. NO. 80091 | SIZE D
SCALE: AS NOTED
EFD NO.
STA. PROJ. NO. R086
SPEC. NO. 05-00-0120
CONSTR. CONTR. NO. N62470-00-B-0120
NAVFAC DRAWING NO. 4433816
SHEET 35 OF 35
D-27

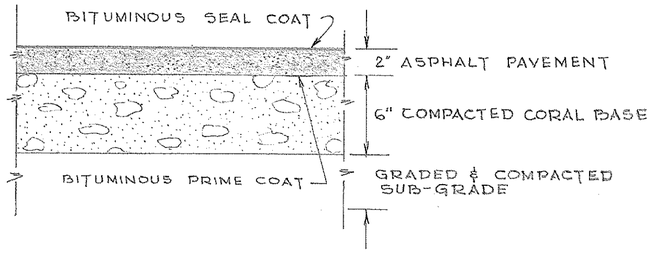
AS-BUILT


PLAN
STAIRS DETAILS
END VIEW
SIDE VIEW
COL. ANCHOR
PLOT PLAN
FILTER LAYOUT
ELEVATION
SECTION A-A
NOTE:
CONSTRUCT ONE-HALF ONLY OF LOADING RACK AND PLATFORM UNDER JOB ORDER NO. 45054
REMAINDER OF RACK SHOWN IS FOR FUTURE EXPANSION.
NOTE:
FOR SUPPLY LINE SEE P.W.C. DRWG. NO. 10D5-110-0157-1
SUPERSEDED BY DRWG. No. 10D5-110-0157-3
"B" ADDED NOTE FOR ONE FILLER ONLY. ADDED STRAINER. CHANGED 6" VALVE TO 4"
"A" LOW POINT DRAIN ADDED
REVISIONS
10D5-110-0157-2
DEPARTMENT OF THE NAVY
BUREAU OF YARDS & DOCKS
U.S. NAVAL BASE
GUANTANAMO BAY, CUBA
FUEL LOADING RACK
AT
McCALLA HILL FIELD
APPROVED
DATE 2/12/57
SCALE AS NOTED



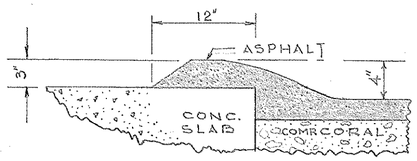
SECTION "CC"

SCALE: 3/8" = 1'-0"



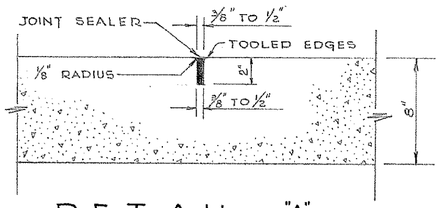
TYPICAL SECTION

NO SCALE



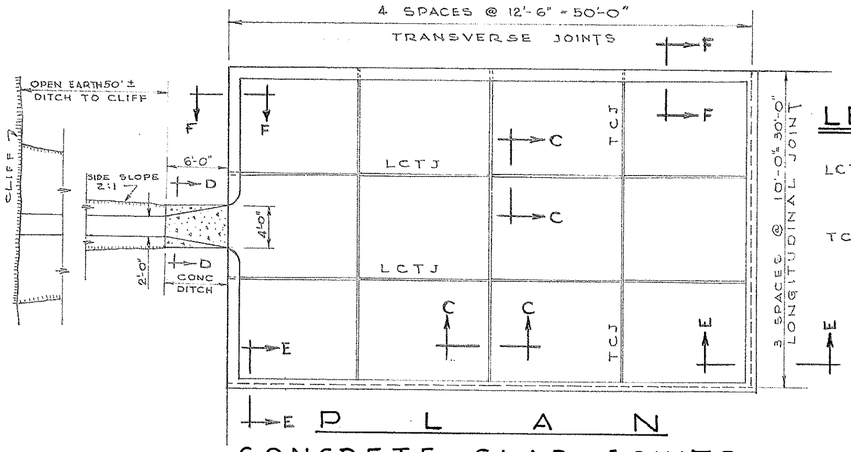
SECTION "E-E"

SCALE: 1" = 1'-0"



DETAIL "A"

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



PLAN

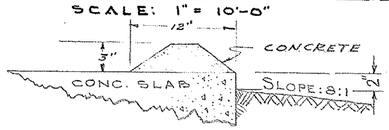
CONCRETE SLAB JOINTS

SCALE: 1" = 10'-0"

LEGEND

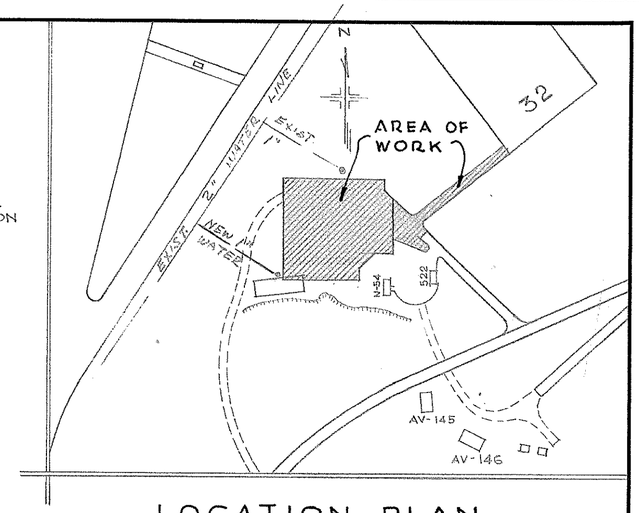
LCTJ - LONGITUDINAL CONSTRUCTION JOINT.

TCJ - TRANSVERSE CONTRACTION JOINT.



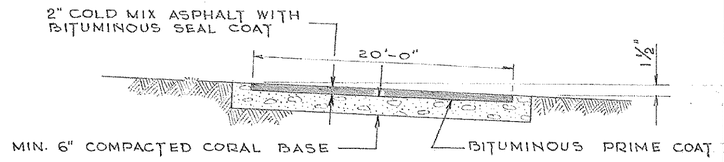
SECTION "FF"

SCALE: 1" = 1'-0"



LOCATION PLAN

SCALE: 1" = 200'



SECTION "AA"

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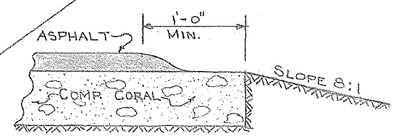
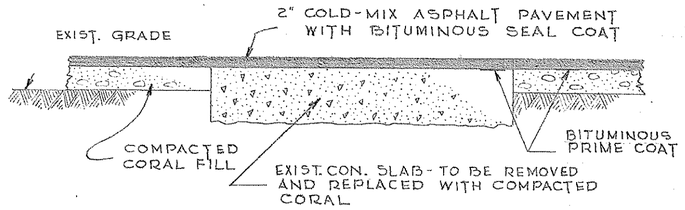


SECTION "GG"

SCALE: 1" = 1'-0"



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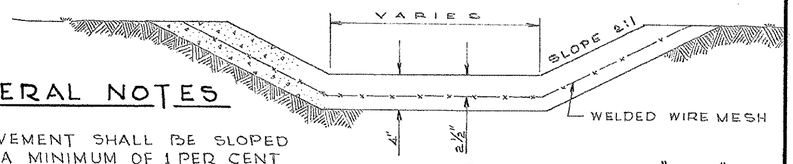
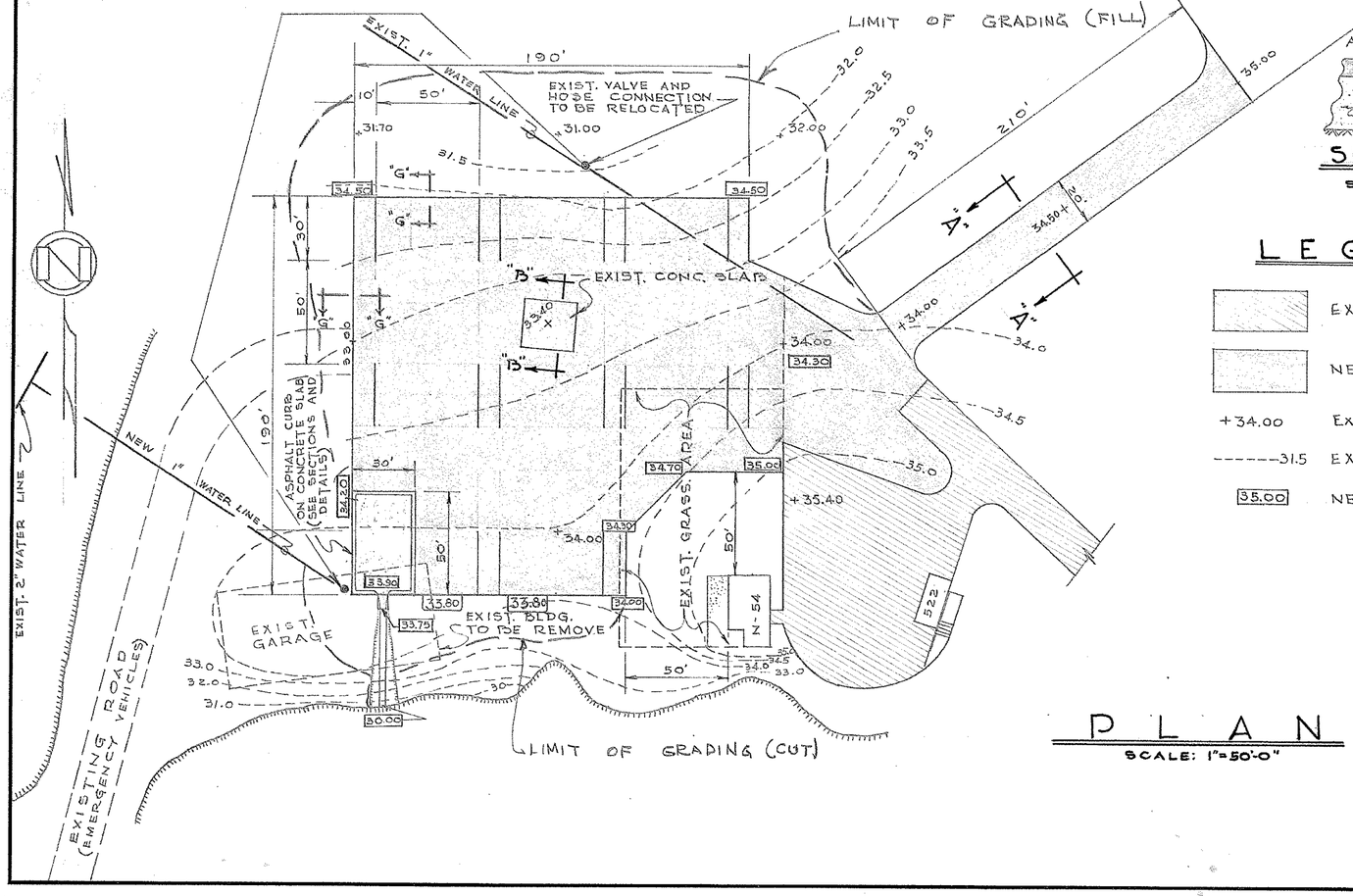


SECTION "DD"

SCALE: 1" = 1'-0"



PLAN

SCALE: 1" = 50'-0"

LEGEND

	EXIST. ASPHALT PAVE.
	NEW ASPHALT PAVE
+34.00	EXIST. ELEVATIONS
------31.5	EXIST. CONTOURS
35.00	NEW ELEVATIONS

GENERAL NOTES

1 - ALL NEW PAVEMENT SHALL BE SLOPED DOWNWARD A MINIMUM OF 1 PER CENT AND A MAXIMUM OF 2 PER CENT TO THE EXISTING DRAINAGE NORTHWEST OF THE PAVEMENT.

2 - LOOSE SUBGRADE MATERIAL SHALL BE SCARIFIED AND RECOMPACTED OR, IF OF POOR QUALITY, SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIAL WHICH SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 6" IN DEPTH.

3 - REMOVE PORTION OF GRASS AREA AS DIRECTED

SYMBOL	DESCRIPTION	DATE	APPROVAL

PWC DRAWING NO. 8M-1232-0460

DEPARTMENT OF THE NAVY BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES MOORE
DRWN Suliga
TR "
CHK MOORE
SUPV MOORE
IN CHARGE MOORE
REVIEWED BY TAS

NAVAL AIR STATION
Mc. CALLA HILL FIELD
GAS LOADING RACK
PARKING AREA
LAYOUT AND DETAILS

APPROVED R. E. Thomas DATE 5-17-60
COMMANDING OFFICER PUBLIC WORKS CENTER

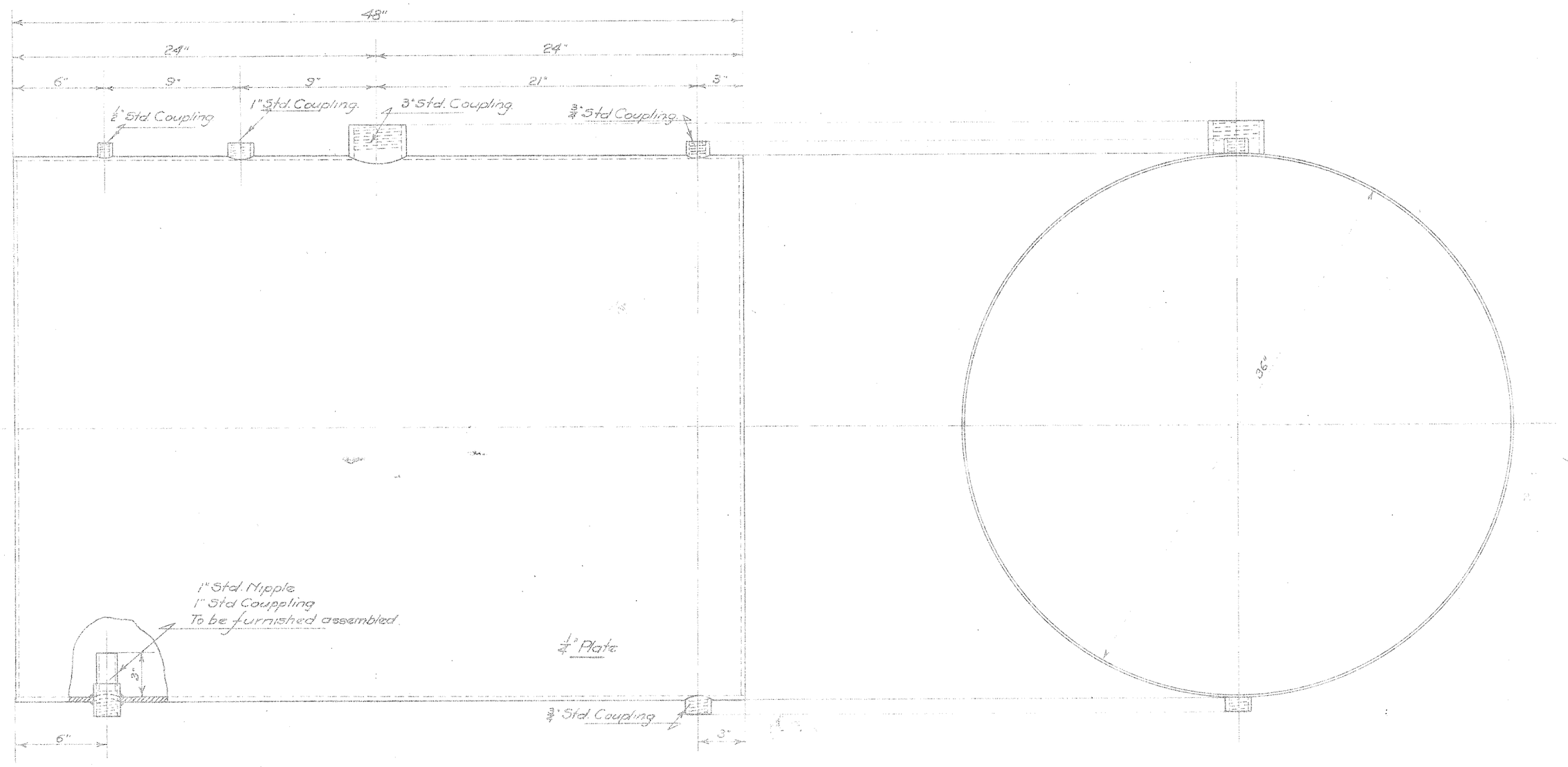
SATISFACTORY TO
DATE 5/16/60

SCALE AS SHOWN | SPEC

SHEET ___ OF ___ NBy ___

Y & D DRAWING NO. ___

K+E ALBANENE 195L TRACING PAPER 61850

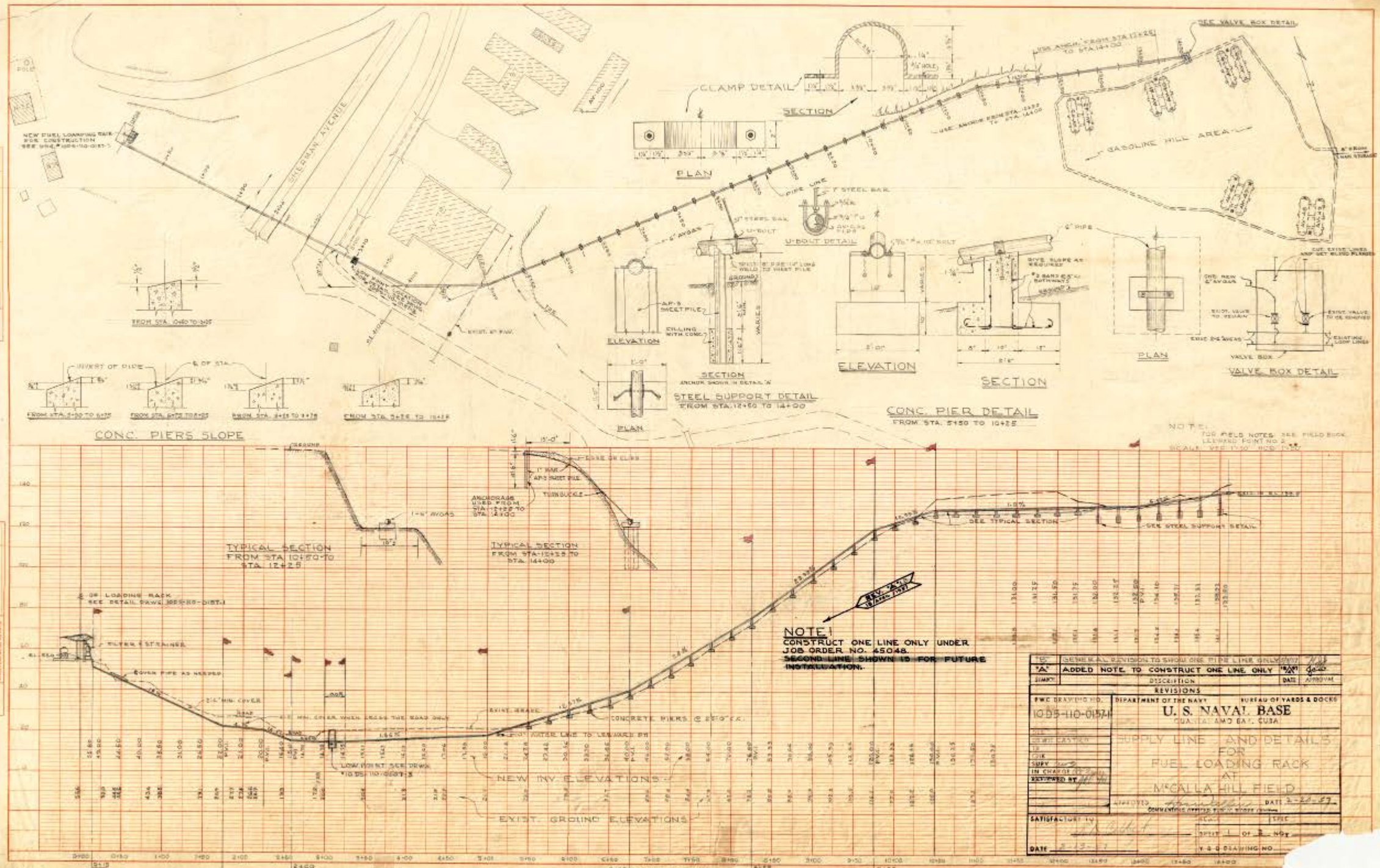


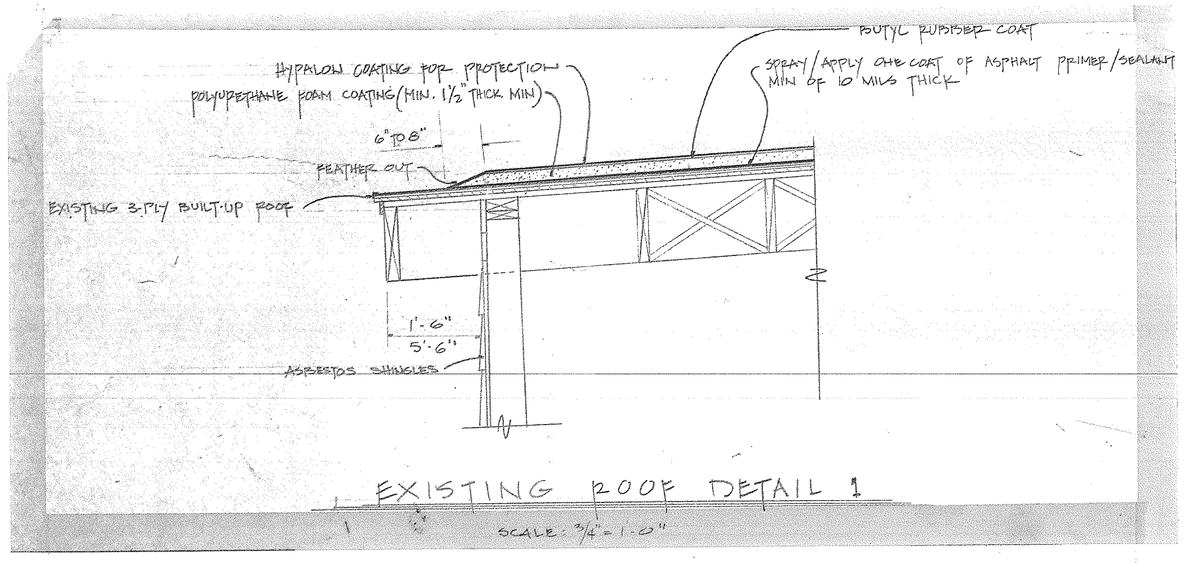
NOTES:-
All seams and connections to be Electrically Welded.
Tank to be tested at 50# per □" Hydrostatic Pressure.

WELDED STEEL FUEL OIL TANK 200 GAL CAP

Drawn by V.M. Garcia Traced by V.M.G. Checked by [illegible] Date Feb 2-1942. REVISIONS	U. S. NAVAL STATION (PUBLIC WORKS DEPT) GUANTANAMO BAY CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	AVIATION PROJECT —McCALLA HILL—	CONTR. NO. NOy 4162 DRAW'G NO. SERIAL A.P.
Y&D Drawing No. 335061	FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS APPROVED 2-2-42 BY [signature] RESIDENT OFFICER IN CHARGE APPROVED 2-3-42 BY [signature] P.W. OFFICER IN CHARGE	I-26

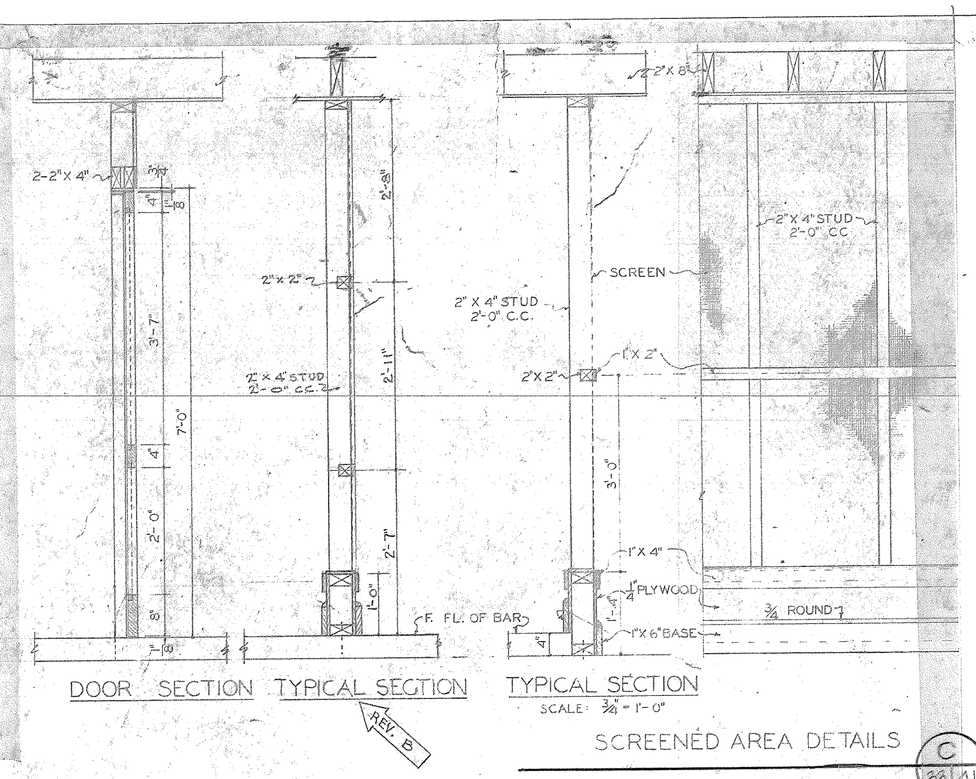
250-43-185


CLAMP DETAIL
SECTION
PLAN
U-BOLT DETAIL
ELEVATION
SECTION
STEEL SUPPORT DETAIL
FROM STA. 12+60 TO 14+00
ELEVATION
SECTION
CONC. PIER DETAIL
FROM STA. 5+50 TO 10+25
PLAN
VALVE BOX DETAIL
GASOLINE HILL AREA
SEE VALVE BOX DETAIL
CONC. PIERS SLOPE
TYPICAL SECTION
FROM STA. 10+50 TO STA. 12+25
TYPICAL SECTION
FROM STA. 12+25 TO STA. 14+00
SEE TYPICAL SECTION
SEE STEEL SUPPORT DETAIL
NOTE:
CONSTRUCT ONE LINE ONLY UNDER JOB ORDER NO. 45048.
SECOND LINE SHOWN IS FOR FUTURE INSTALLATION.
NEW INV. ELEVATIONS
EXIST. GROUND ELEVATIONS
CONCRETE PIERS @ 8'-0" C.C.
GENERAL REVISION TO SHOW ONE PIPE LINE ONLY
ADDED NOTE TO CONSTRUCT ONE LINE ONLY
REVISIONS
DEPARTMENT OF THE NAVY
BUREAU OF YARDS & DOCKS
U. S. NAVAL BASE
GUANTANAMO BAY, CUBA
SUPPLY LINE AND DETAILS FOR FUEL LOADING RACK AT McCALLA HILL FIELD
DATE 2-20-57



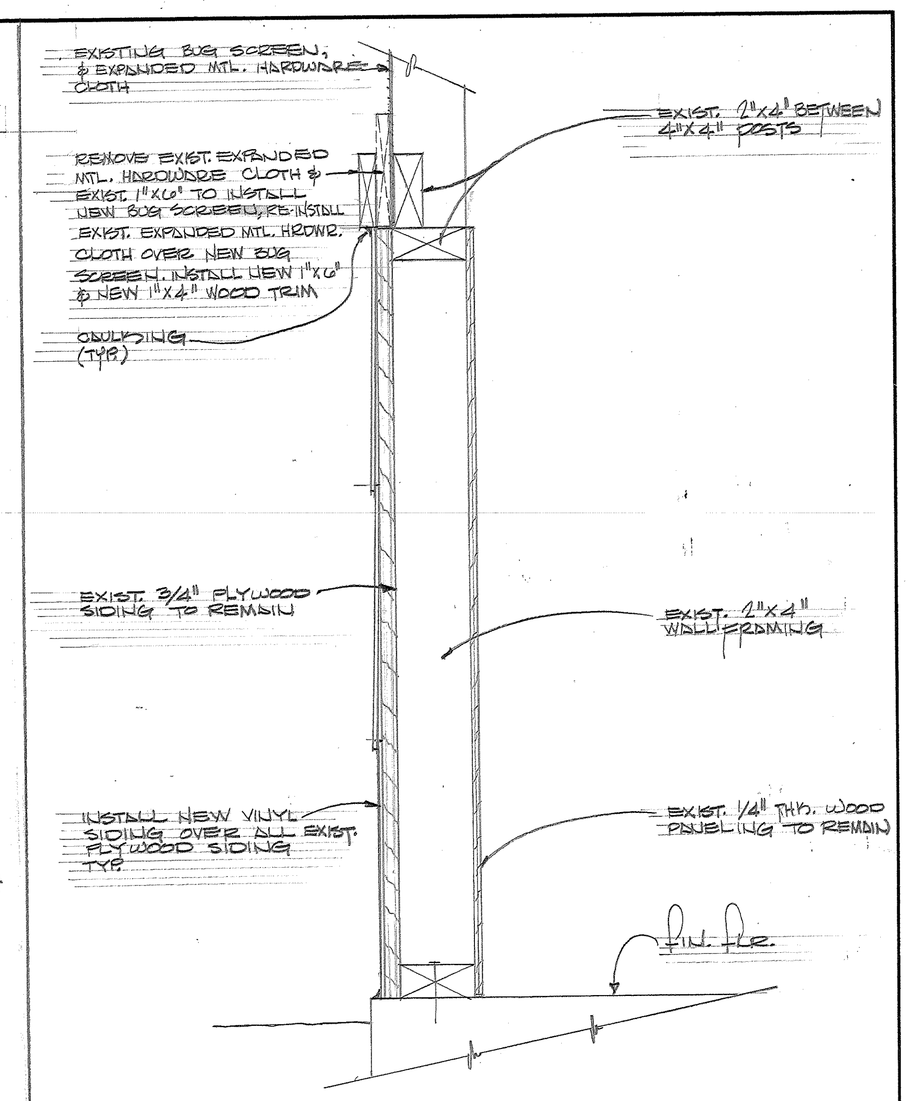
EXISTING ROOF DETAIL 1

A 21/41 VERTICAL SECTION THRU EXTERIOR WALL & ROOF AT BLDG. NO. N-609



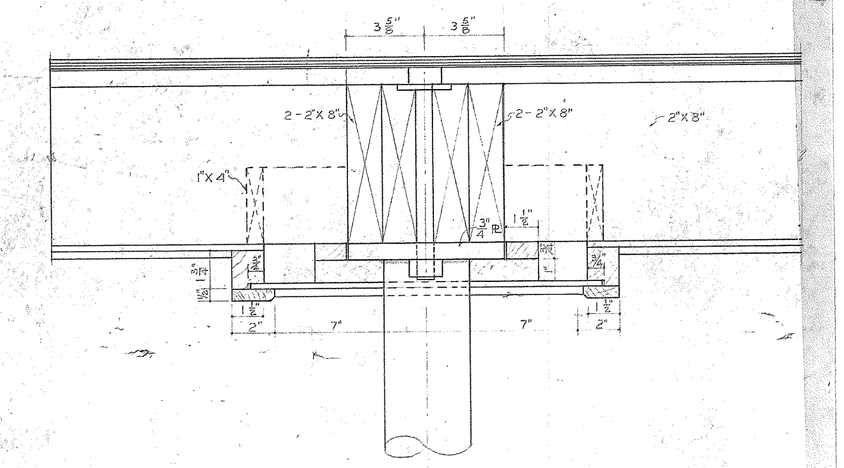
SCREENED AREA DETAILS

C 23/41

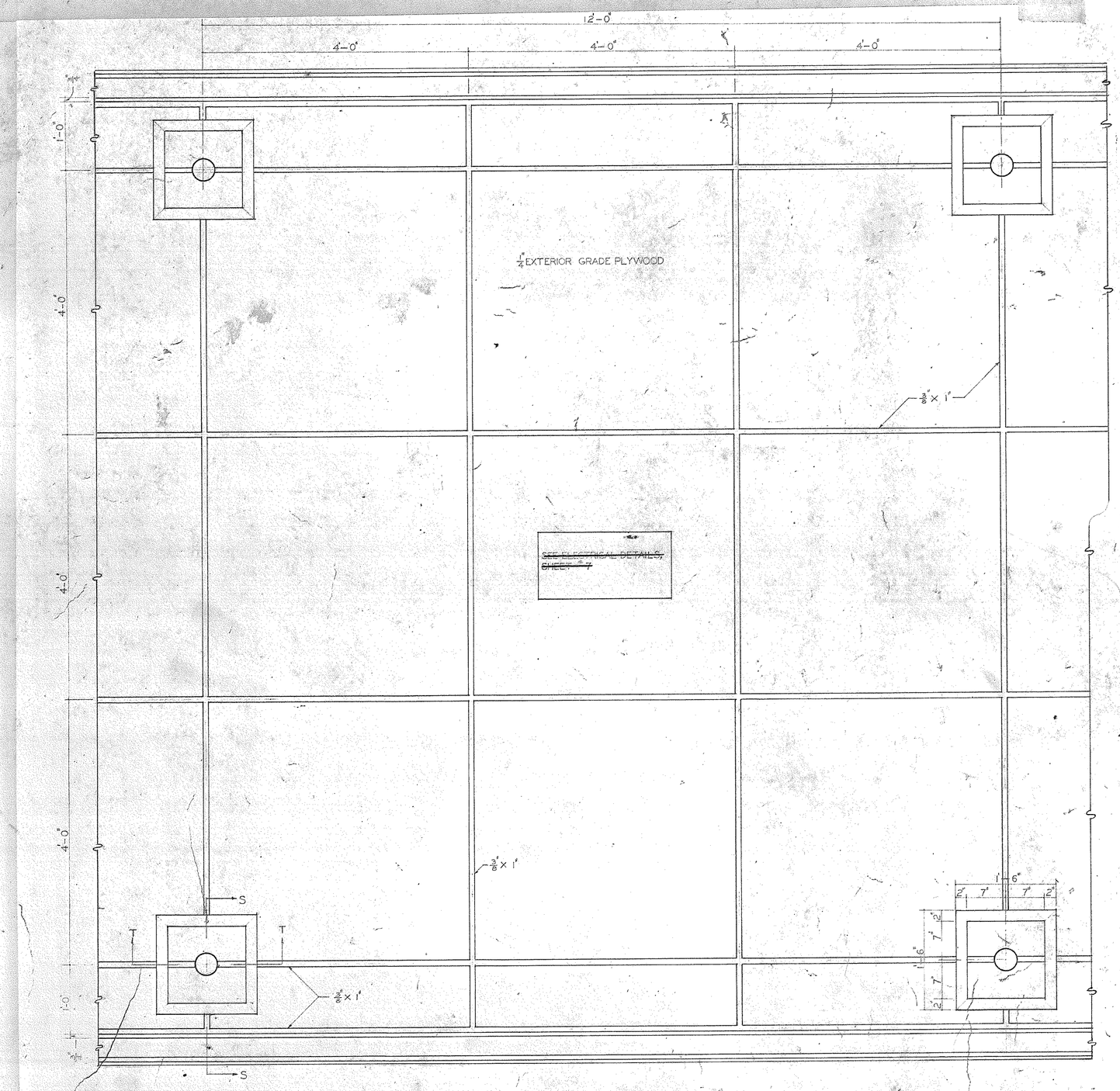


EXISTING DETAIL AT PATIO WALL
BUILDING NO. AV-93
3" = 1'-0"

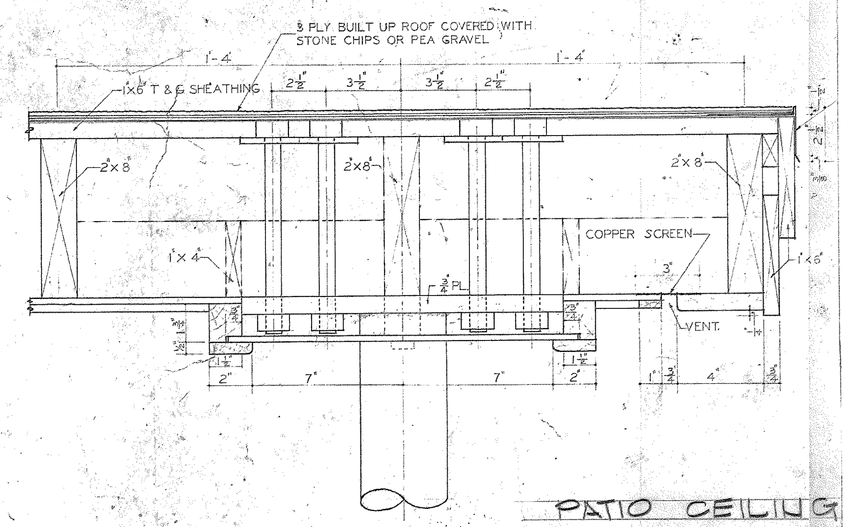
D 8/41



SECTION T-T
SCALE 3" = 1'-0"



CEILING-TYPICAL PANEL
SCALE 1" = 1'-0"



SECTION S-S
SCALE: 3" = 1'-0"

PATIO CEILING PLAN & DETAILS AT BLDG. NO. 1114

SCALE AS NOTED

B 39/41

GRAPHIC SCALES

1" = 1'-0" 0 1' 2' 3' 4' 5' 6'

3" = 1'-0" 0 1' 2' 3' 6' 9' 1' 2'

ERS-182

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
2	AS-BUILTS	JUB EAI		1/11/91

REVISIONS

DES EV IRVING
DRWN EV IRVING
CHK TERRY RILEY
SUPV TERRY RILEY
ENG OFF
SATISFACTORY TO
DATE 3/3/86
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

EXTERIOR REPAIRS VARIOUS BLDGS
LEEWARD POINT & MAINSIDE

MISCELLANEOUS DETAILS

SIZE F | CODE IDENT NO. | PWD DRAWING NO. 4116664 | SCALE: AS NOTED | SHEET 41 OF 45

CONTRACT NO. N62470-86-C-7778

ASPHALT SHINGLE ROOF

CEMENT ASBESTOS SHINGLES

WOOD FRAME CONST.

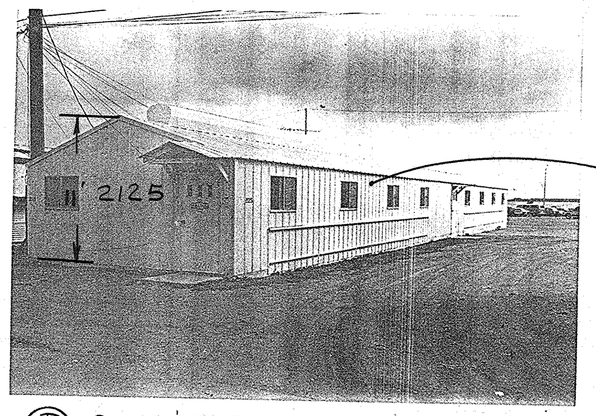
6" PIPE BUMPER STOP ALONG FRONT OF BLDG.

3' CONC. FILLED POST & CHAIN 12' O.C. (31 TOTAL)

NOTE: WINDOWS IN BLDG. AV89 SHALL BE CAREFULLY REMOVED AND THEN OVER TO PWD FOR SALVAGE
CONTACT LEE HEAD PH. 4871

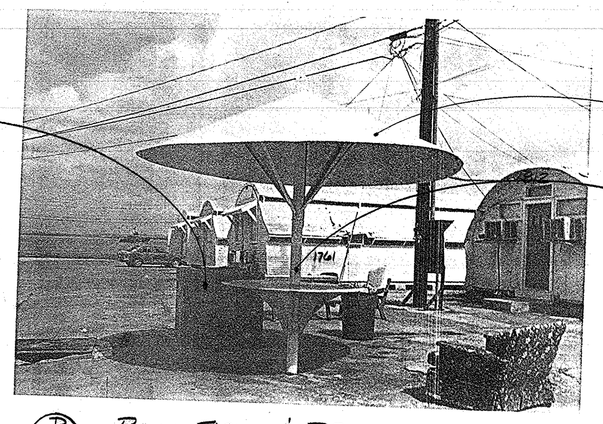
P 1/2 NORTH & EAST SIDE BLDG. AV89

(* ADDITIVE BID ITEM 1)



"BUTLER BLDG." METAL ROOF & SIDES ON 8" CONCRETE SLAB

P 2/2 SOUTH & EAST SIDE BLDG. 2125

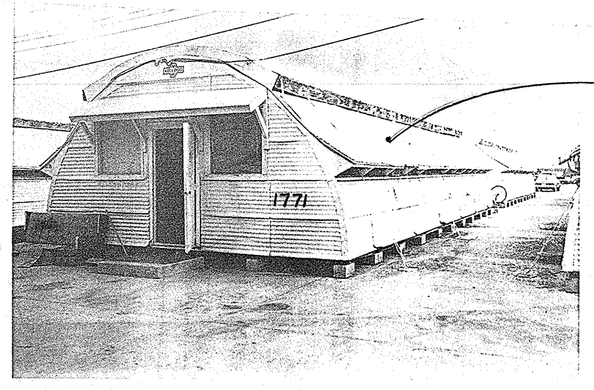


CNU BBQ PIT

SHEET METAL ROOF

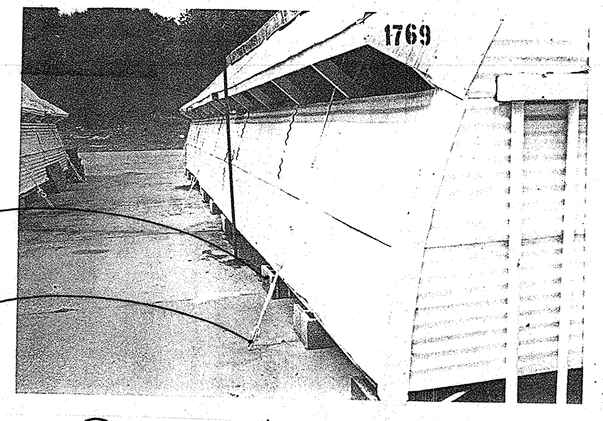
6" Ø DIA. PIPE, CUT FLUSH W/ GROUND & FILL W/ CONC.

P 3/2 PICNIC TABLE & BBQ



CORRUGATED METAL QUONSET HUT TYP. CONSTRUCTION FOR 14 UNITS

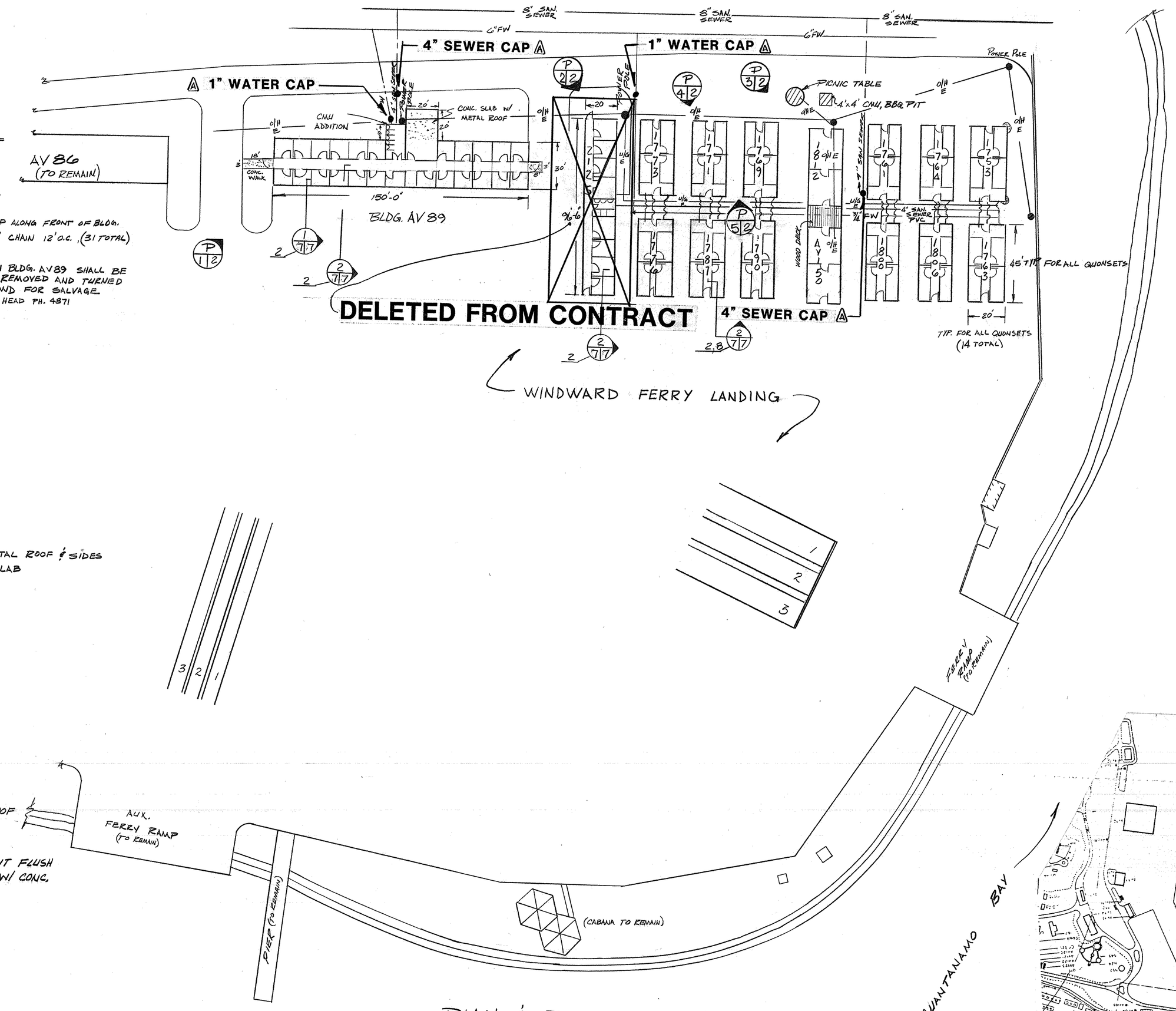
P 4/2 TYP. FOR UNITS AV150, 1753, 1761, 1763, 1764, 1769, 1771, 1773, 1776, 1787, 1790, 1800, 1806, 1812



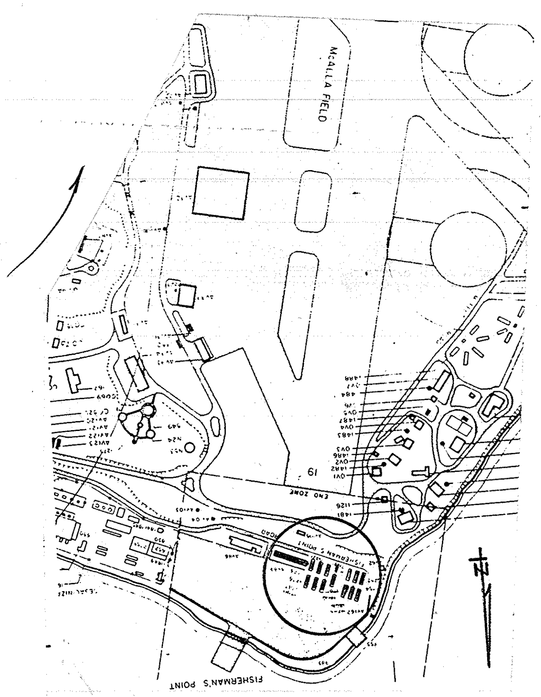
TYP. QUONSET HUT CNU FND.

TYP. QUONSET HUT TIE DOWN TO BE CUT FLUSH W/ GRADE

P 5/2 TYP. FND. & HURRICANE TIE DOWN



PLAN & DETAILS SCALE 1"=30'-0"



SITE 1

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
A	AS BUILT		11-9-90	

REVISIONS

ER3-168

DES R. BROWN
DRWN R. BROWN
CHK M.D.B.
SUPV
ENG OFF
SATISFACTORY TO B.R. Jones FOR
DATE 7-5-89
APPROVED 7/10/89
PUBLIC WORKS OFFICER

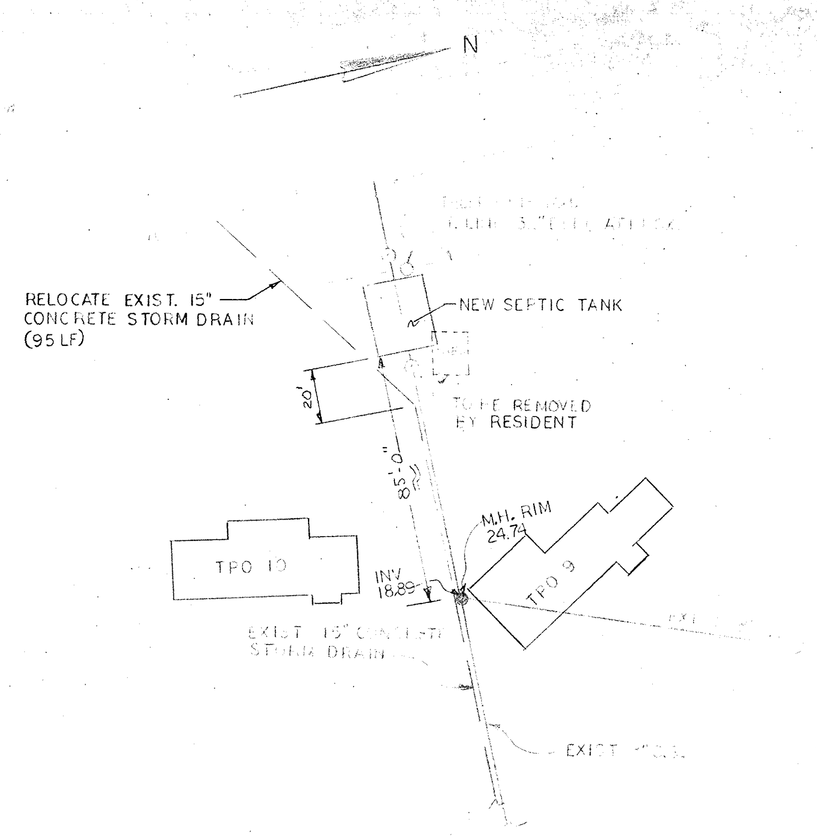
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

DEMOLITION OF VARIOUS BLDGS.
AV89, AV150, 1753, 1761, 1763, 1764, 1769, 1771, 1773, 1776, 1787, 1790, 1800, 1806, 1812, 2125

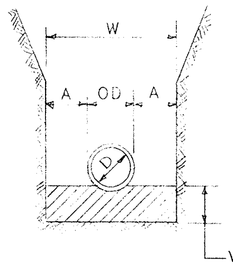
PLAN & DETAILS

SIZE F | CODE IDENT NO. | NAVFAC DRAWING NO. 4173060 | SCALE: 1"=30'-0" | SHEET 2 OF 11

CONTRACT NO. N62470-89-C-3076



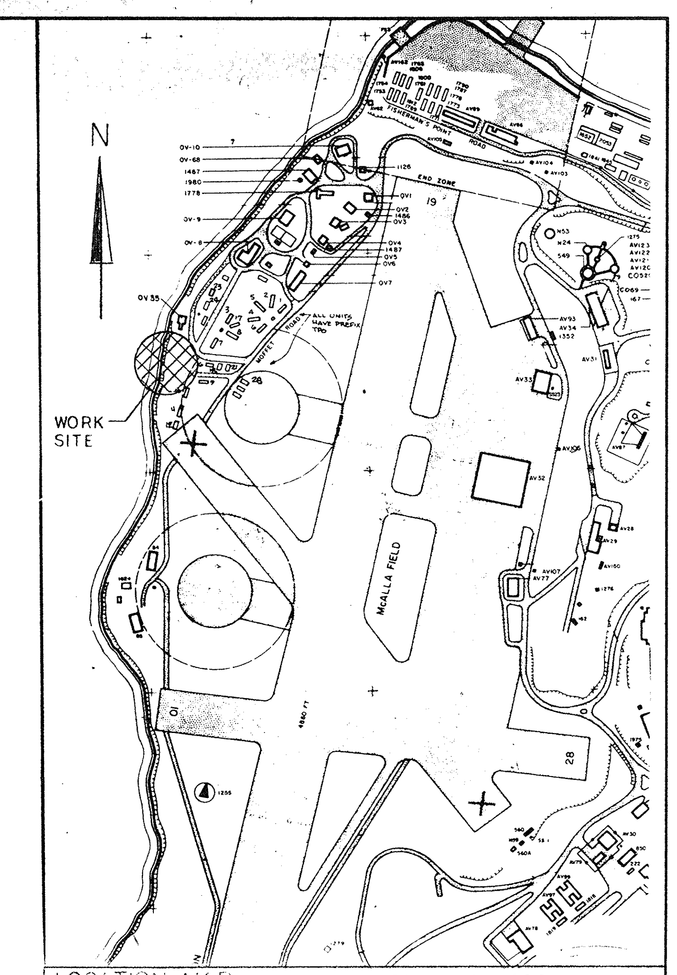
SITE PLAN
SCALE: 1"=30'



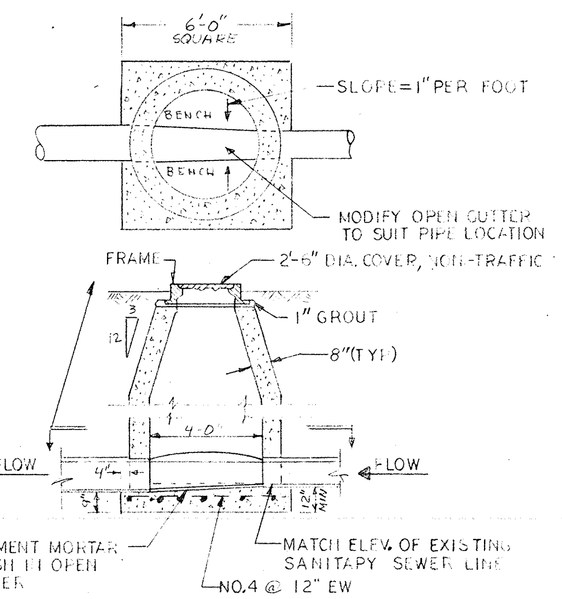
PIPE DIA. "D"	MAX. "A"
6" TO 15"	8"
16" TO 21"	10"

NOTE: PROVIDE BEDDING PER SPECIFICATIONS

TRENCH DETAIL (TYP)
NTS

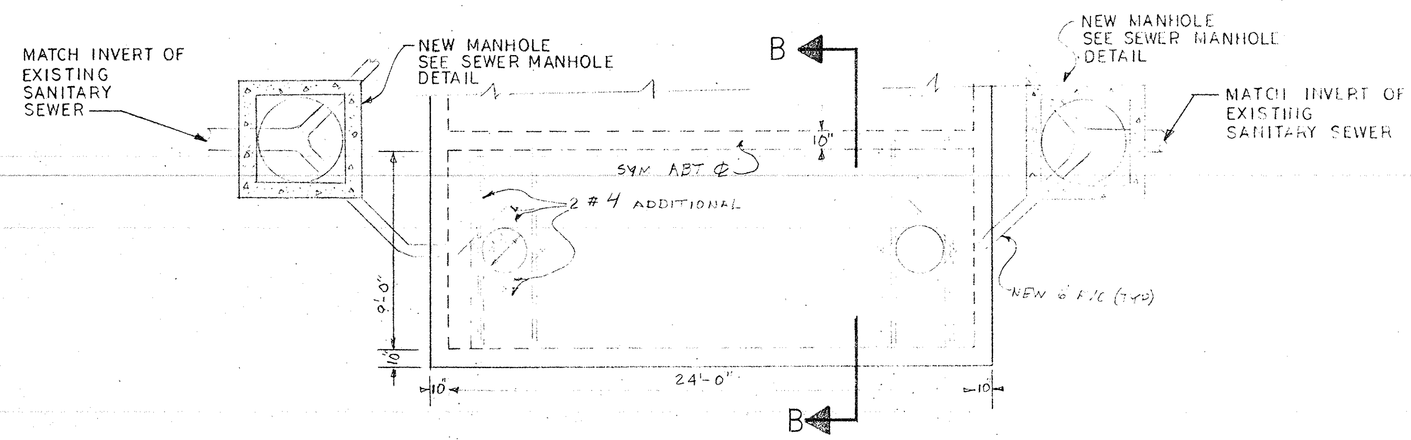


LOCATION MAP SCALE: 1"=400'

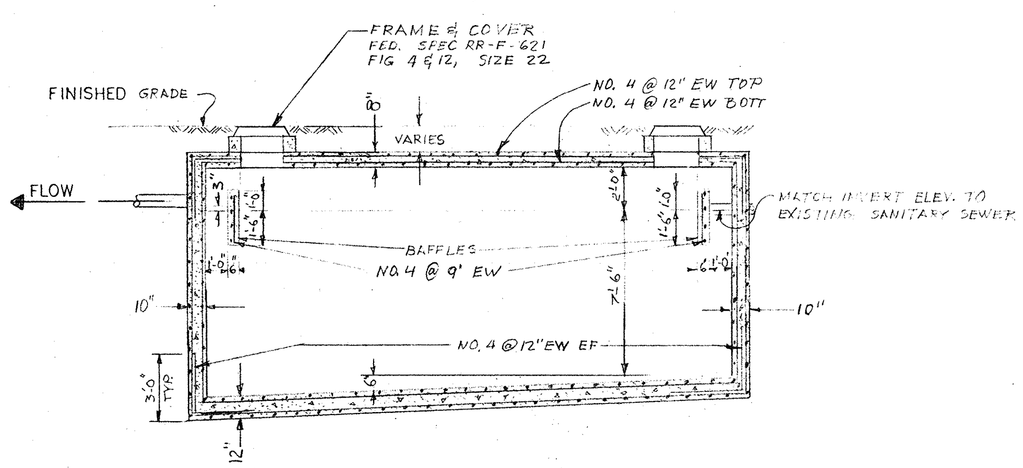


SEWER MANHOLE
TYPICAL DETAILS
NOT TO SCALE

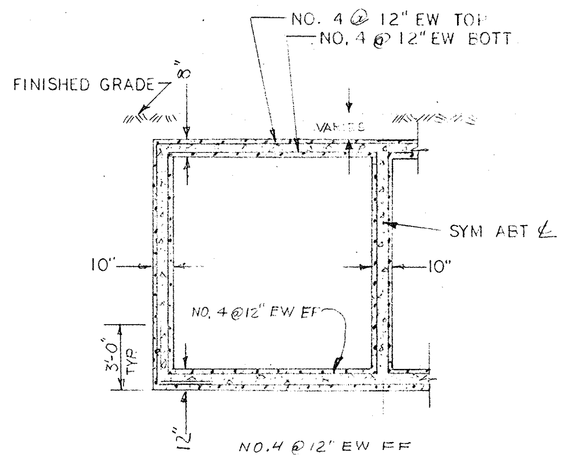
NOTES:



SEPTIC TANK – HALF PLAN
SCALE: 1/4"=1'-0"



SEPTIC TANK – ELEVATION
SCALE: 1/4"=1'-0"



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

LEGEND:

- 8" S.S. — EXISTING SANITARY SEWER
- EXISTING MANHOLE
- EXISTING STORM DRAIN
- NEW MANHOLE

GRAPHIC SCALES

1"=30'-0"

1/4"=1'-0"

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

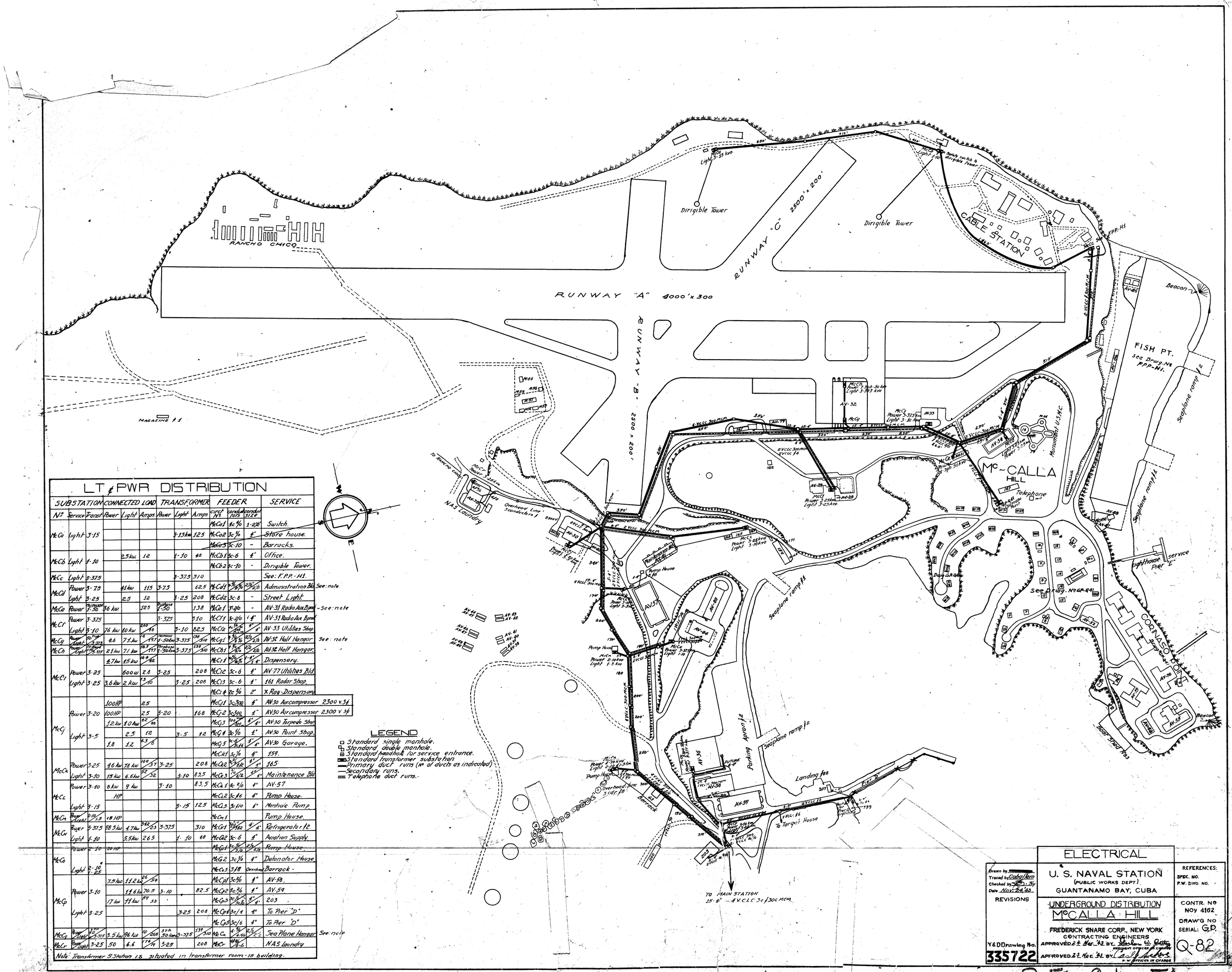
DES
DRWN
CHK
SUPV
ENG OFF
SATISFACTORY TO
DATE
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

INSTALLATION OF SEPTIC TANK
OCEAN VIEW TRAILER PARK

SIZE F | CODE IDENT NO. | DRAWING NO. 4232825
SCALE: | SHEET 1 OF 1

SPECIFICATION NO. 05-92-093- CONSTRUCTION CONTRACT-NO. N62470-92-G-093



LT & PWR DISTRIBUTION

SUBSTATION			CONNECTED LOAD			TRANSFORMER			FEEDER			SERVICE
No	Service	Transf	Power	Light	Amps	Power	Light	Amps	circ't No	conduit 1ph 3ph	conduit 3120	
McCa	Light	3-15					3-15 kw	125	McCa1	4c 4/0	1-2½"	Switch.
									McCa2	3c 4/0	4"	Store house.
									McCa3	3c-10	-	Barracks.
McCb	Light	1-10		2.5 kw.	12		1-10	48	McCb1	3c-6	4"	Office.
									McCb2	3c-10	-	Dirigible Tower.
McCc	Light	3-37.5					3-37.5	310				See: F.P.P.-H1.
McCd	Power	3-75		41 kw	115	3-75		62.5	McCd1	4c 4/0 / 4c 4/0	2½" / 2½"	Administration Bld. See: note.
	Light	3-25		2.5	12		3-25	208	McCd2	3c-8	-	Street Light.
McCe	Power	1-30	36 kw		125	Triplex 1-30		138	McCe1	3c 2/0	-	AV-31 Radio Aux Bldg. See: note
McCf	Power	3-37.5				3-37.5		310	McCf1	3c 2/0	4"	AV-31 Radio Aux Bldg.
	Light	3-10	76 kw	10 kw	260 / 48		3-10	82.5	McCf2	4c 1/0 / 4c 4/0	4" / 4"	AV-33 Utilities Shop
McCg	Power / Light	50-3-37.5	4.6	71 kw	16 / 197	Triplex 1-30 kw	3-37.5	130 / 310	McCg1	3c 3/0 / 4c 4/0	2½ / 2½	AV-32 Half Hangar. See: note
McCh	Power / Light	Triplex 1-30 / 3-37.5	21 kw	71 kw	58.5 / 197	Triplex 1-50 kw	3-37.5	138 / 310	McCh1	3c 3/0 / 4c 4/0	2½ / 2½	AV-32 Half Hangar.
McCi			4.7 kw	15 kw	16.4 / 82				McCi1	4c 4/0 / 4c 4/0	4" / 4"	Dispensary.
	Power	3-25		600 w	2.8	3-25		208	McCi2	3c-6	4"	AV-77 Utilities Bld.
	Light	3-25	3.6 kw	2 kw	15 / 16		3-25	208	McCi3	3c-6	4"	161 Radar Shop.
									McCi4	2c 4/0	2"	X Ray-Dispensary.
McCj			100 HP		25				McCj1	3c 300	4"	AV-30 Aircompressor 2300 v 3φ
	Power	3-20	100 HP		25	3-20		168	McCj2	3c 500	4"	AV-30 Aircompressor 2300 v 3φ
			12 kw	10 kw	42 / 46				McCj3	3c 500 / 3c 500	4" / 4"	AV-30 Torpedo Shop
	Light	3-5		2.5	12		3-5	42	McCj4	3c 4/0	4"	AV-30 Paint Shop.
			1.8	1.2	6.3 / 6				McCj5	2c 4/0 / 2c 4/0	4" / 4"	AV-30 Garage.
McCk									McCk1	3c 4/0	4"	159.
	Power	3-25	46 kw	78 kw	160 / 37	3-25		208	McCk2	4c 4/0 / 3c 4/0	4" / 4"	165.
	Light	3-10	15 kw	6.6 kw	52 / 32		3-10	83.5	McCk3	4c 4/0 / 3c 4/0	4" / 4"	Maintenance Bld.
McCl	Power	3-10	8 kw	9 kw		3-10		83.5	McCl1	4c 4/0	4"	AV-57
			HP						McCl2	3c 4/0	4"	Pump House.
	Light	3-15					3-15	125	McCl3	3c 4/0	4"	Manhole Pump.
McCm	Power / Light	2-10 / 1-5	15 HP						McCm1			Pump House.
McCn	Power	3-37.5	98.5 kw	17 kw	348 / 23	3-37.5		310	McCn1	4c 4/0 / 3c 4/0	4" / 4"	Refrigerator #2
	Light	1-10		5.5 kw	26.5		1-10	48	McCn2	3c-6	4"	Aviation Supply.
McCo	Power	2-10	20 HP						McCo1	3c 4/0 / 3c 4/0	2½ / 2½	Pump House.
									McCo2	3c 4/0	4"	Detonator House.
	Light	2-10 / 1-25							McCo3	3/8	Overhead	Barrack.
McCp			7.5 kw	11.2 kw	26 / 54				McCp1	3c 4/0	4"	AV-58.
	Power	3-10		11.6 kw	70.5	3-10		82.5	McCp2	3c 4/0	4"	AV-59.
			17 kw	11 kw	89 / 53				McCp3	3c 4/0 / 3c 4/0	4" / 4"	203.
	Light	3-25					3-25	208	McCp4	3c/1	4"	To Pier "D"
									McCp5	3c/6	4"	To Pier "D"
McCq	Power / Light	3-37.5 / 3-37.5	3.5 kw	96 kw	10 / 268	3 x n 70 kw	3-37.5	139 / 310	McCq	4c 4/0 / 4c 4/0	2½ / 2½	Sea Plane Hangar. See: note
McCr	Power / Light	3-25	50	6.6	174 / 14	3-25		208	McCr	4c 4/0 / 4c-6		NAS Laundry

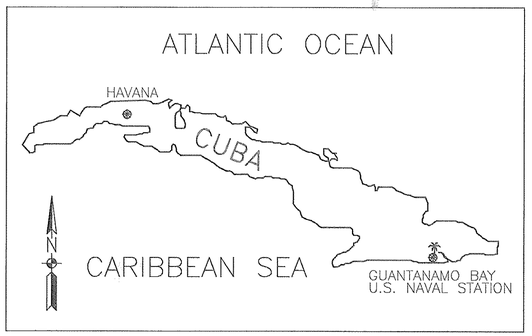
Note: Transformer Station is situated in transformer room-in building.

Drawn by	ELECTRICAL
Traced by Cabalero	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA
Checked by	REFERENCES: SPEC. NO. / P.W. DWG. NO.
Date Nov. 24, 43	
REVISIONS	UNDERGROUND DISTRIBUTION McCALLA HILL
	FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS
Y&D Drawing No. 335722	APPROVED 24 Mar '42 BY Stanley W. Arthur, Assistant Officer in Charge
	APPROVED 23 Nov '42 BY Carl Ackers, P.W. Officer in Charge
	CONTR. No NOy 4162 / DRAW'G NO SERIAL: G.D. Q-82

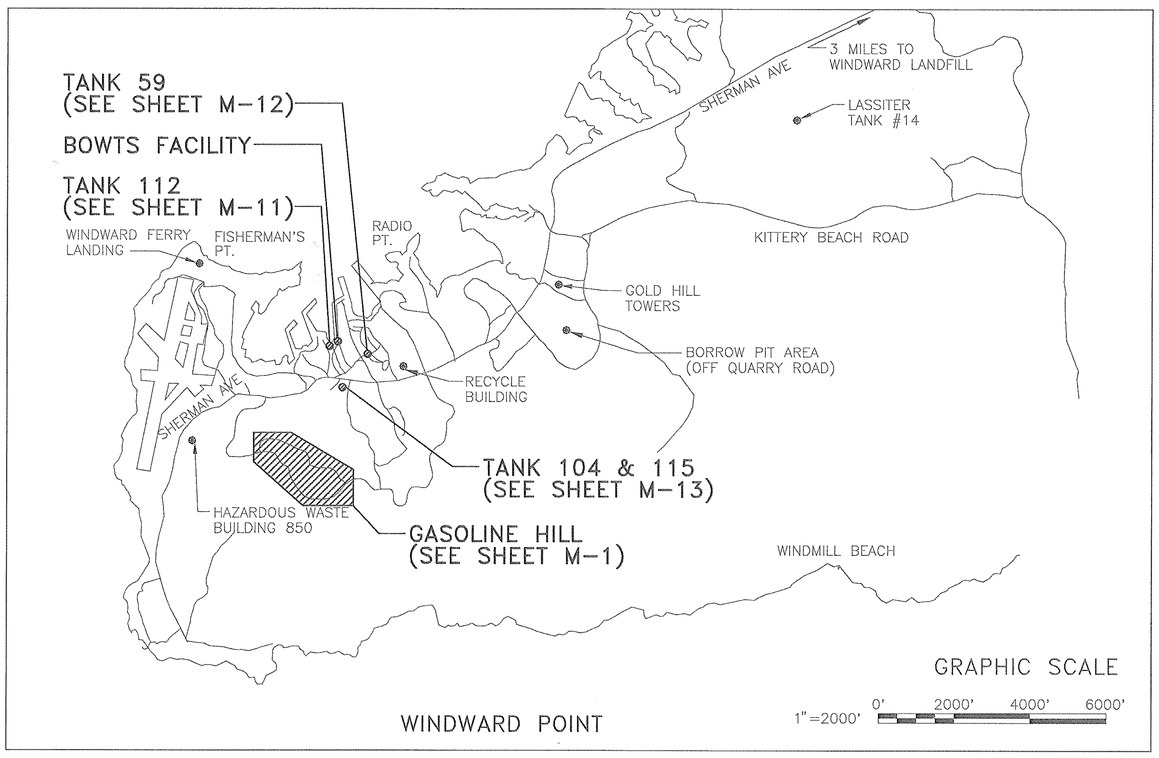
REPL 1953 330-21-50

PERMANENTLY CLOSE BULK PETROLEUM STORAGE TANKS AT NAVAL STATION GUANTANAMO BAY, CUBA

U.S. NAVAL STATION, GUANTANAMO BAY, CUBA



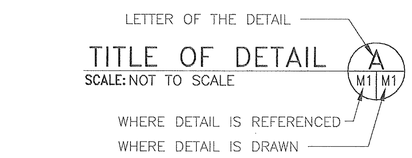
LOCATION MAP – CUBA



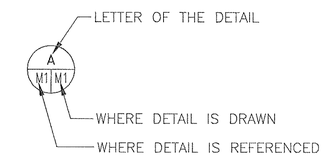
VICINITY MAP – GUANTANAMO BAY

INDEX OF DRAWINGS

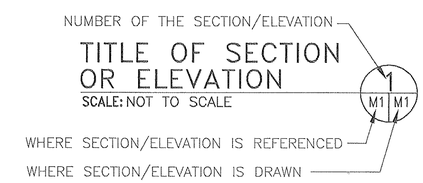
EFD DWG. NO.	NAVFAC DWG. NO.	SHEET NO.	DRAWING TITLE
483205	4383205	T–1	COVER SHEET, DRAWING INDEX, AND LOCATION MAP
483206	4383206	M–1	SITE PLAN – GASOLINE HILL
483207	4383207	M–2	TANK & PIPING PLAN – GASOLINE HILL
483208	4383208	M–3	VALVE VAULTS – SECTION
483209	4383209	M–4	TANK 709 – DEMOLITION
483210	4383210	M–5	TANK 710 – DEMOLITION
483211	4383211	M–6	TANK 711 – DEMOLITION
483212	4383212	M–7	TANK 713 – DEMOLITION
483213	4383213	M–8	TANK 714 – DEMOLITION
483214	4383214	M–9	TANK 778 – DEMOLITION
483215	4383215	M–10	TANK 778 – VALVE VAULT
483216	4383216	M–11	TANK 112 – DEMOLITION
483217	4383217	M–12	TANK 59 – DEMOLITION
483218	4383218	M–13	TANKS 104 & 115 – SITE PLAN AND SECTIONS
483219	4383219	M–14	TANK 104 – DEMOLITION
483220	4383220	M–15	TANK 115 – DEMOLITION
483221	4383221	M–16	ISOLATION VALVE PIT – PHOTOS
483222	4383222	M–17	GASOLINE HILL TANKS – PLAN AND SECTION



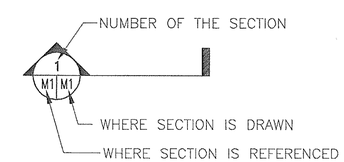
DETAIL BUBBLE



DETAIL REFERENCE



SECTION/ELEVATION BUBBLE



SECTION CUT

REVISIONS

DESCRIPTION	DATE	APPROVED

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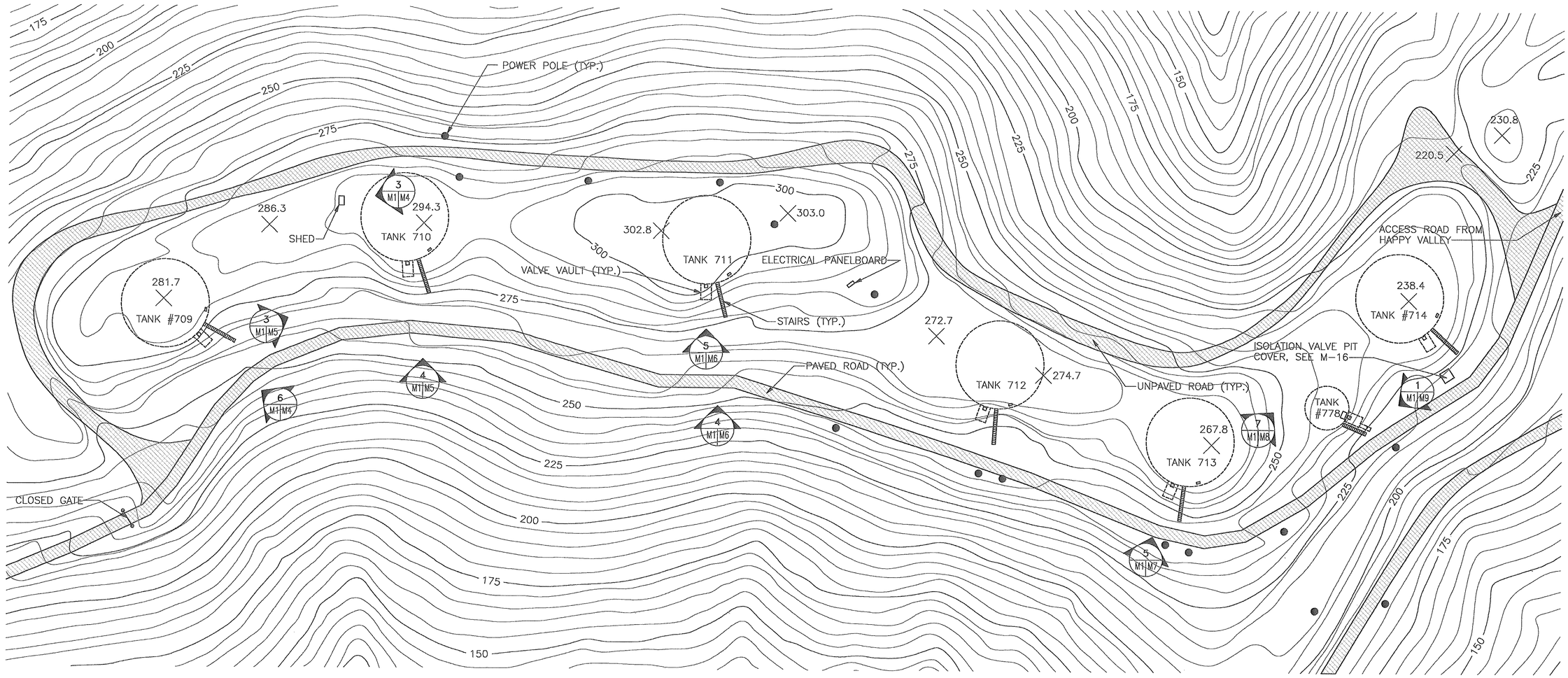
Engineers • Architects

APPROVED DATE 8/6/98
ACTIVITY – SATISFACTORY TO DATE 8/7/98
FOR EFD SOUTH COMMAND USWG

EFD: DESIGN JCE; DRAWN USA; REVIEW SEH; QC JFF; CHIEF ARCH/ ENGR. JFF; PROJECT MANAGER; PRE PROTECTION; BRANCH MANAGER; DESIGN DIRECTOR

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
NAVAL STATION
GUANTANAMO BAY, CUBA
PERMANENTLY CLOSE BULK PETROLEUM STORAGE TANKS AT NAVAL STATION GUANTANAMO BAY, CUBA
COVER SHEET, DRAWING INDEX, AND LOCATION MAP

CODE ID. NO. 80091	SIZE D
SCALE: NONE	
EFD NO. 483205	
STA. PROJ. NO. V-037	
SPEC. NO. 05-98-8800	
CONSTR. CONTR. NO. N62470-98-C-8800	
NAVFAC DRAWING NO. 4383205	
SHEET 1 OF 18	
T–1	



NOTES: (SHEET M-1 ONLY)

1. TOPOGRAPHY AND PLAN INFORMATION TAKEN FROM DRAWING AT NS GUANTANAMO BAY, CUBA, TITLED "SECTOR – 40, GENERAL DEVELOPMENT MAP, EXISTING CONDITIONS" NOT DATED. GENERAL SITE INFORMATION FIELD VERIFIED JANUARY, 1998.

SITE PLAN – GASOLINE HILL

SCALE: 1" = 60'-0"

1"=60' 0' 60' 120' 180' 240' 300'

REVISIONS			
STAL	DESCRIPTION	DATE	APPROVED

A/E JCE DESIGN
BEK DRAWN
SEH REVIEW
JFF CC
JFF CHIEF ARCH/ ENGR.
PROJECT MANAGER
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ARMOUR CAPP & POND
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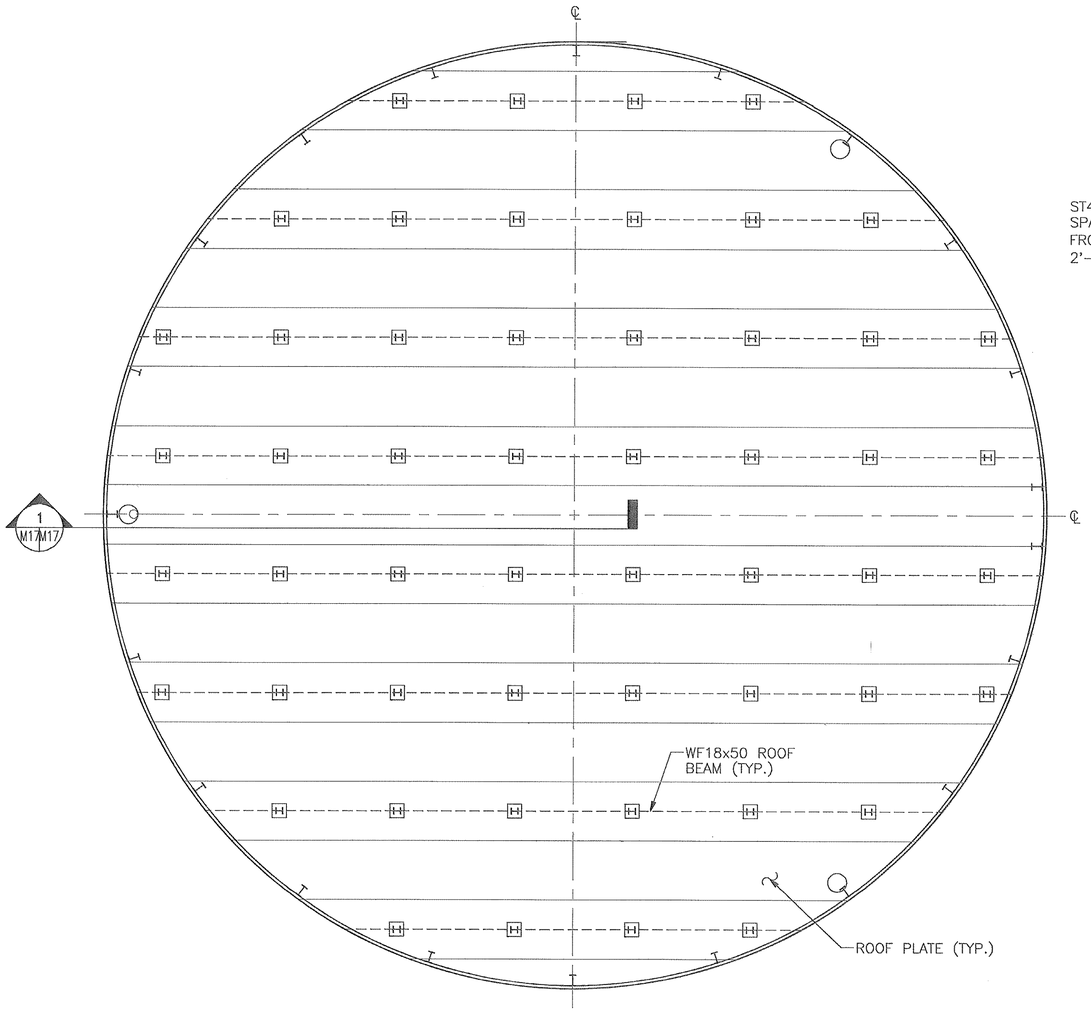
APPROVED DATE
ACTIVITY – SATISFACTORY TO DATE
APPROVED
FOR EFD FOR COMMANDER NAVFAC

GEORGIA REGISTERED PROFESSIONAL ENGINEER JOHN CALHOUN CAPP 5/27/98 SEAL

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
NAVAL STATION
GUANTANAMO BAY, CUBA
NAVAL STATION
PERMANENTLY CLOSE BULK PETROLEUM STORAGE TANKS
AT NAVAL STATION GUANTANAMO BAY, CUBA
SITE PLAN – GASOLINE HILL

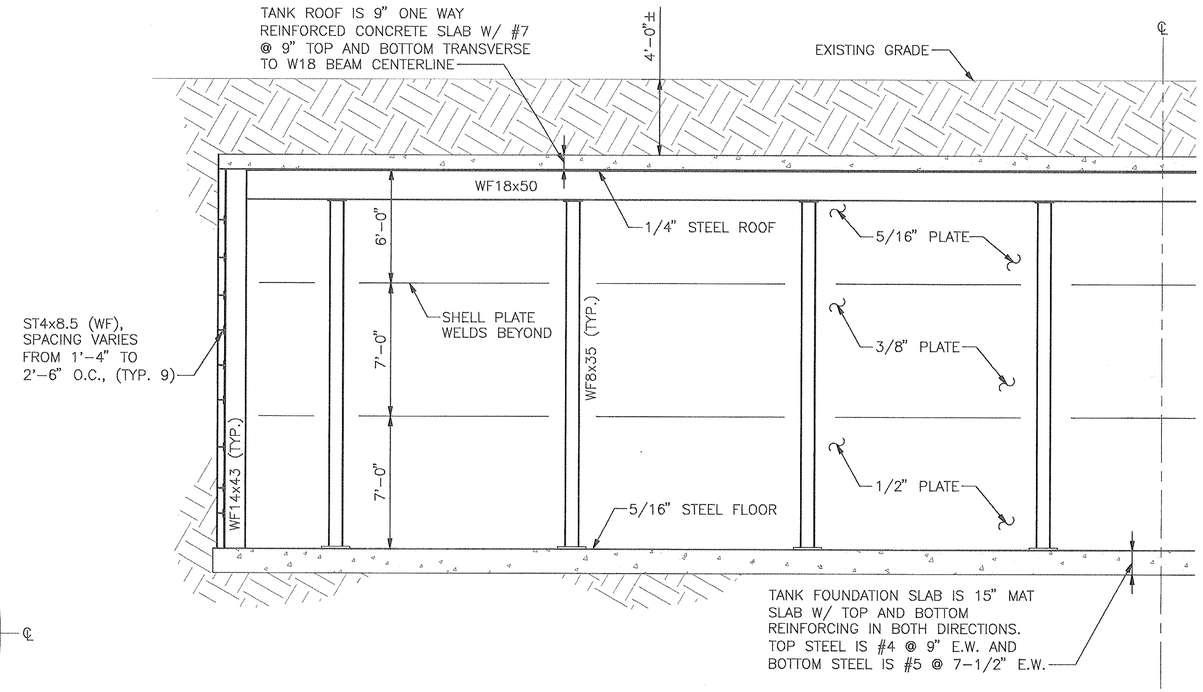
CODE ID. NO. 80091	SIZE D
SCALE: 1" = 60'	
EFD NO. 483206	
STA. PROJ. NO. V-037	
SPEC. NO. 05-98-8800	
CONSTR. CONTR. NO. N62470-98-C-8800	
NAVFAC DRAWING NO. 4383206	
SHEET 2 OF 18	
M-1	



NOTE: PLAN AND SECTION SHOWN ARE TYPICAL OF GASOLINE HILL TANKS 709, 710, 711, 713, & 714. TANK 778 IS A 50' DIAMETER TANK OF SIMILAR CONSTRUCTION.

TANK PLAN

SCALE: 1/8"=1'-0"



TANK SECTION 1 M17M17

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

NOTES:

FILLING GASOLINE HILL TANK #'S 709, 710, 711, 713, 714, AND 778 WITH INERT MATERIAL:

1. INTERIOR OF TANKS SHALL BE FILLED WITH SOIL UP TO UNDERSIDE OF ROOF. ANY AREAS EXCAVATED TO PERFORM THESE OPERATIONS SHALL BE BACKFILLED TO THE ORIGINAL EXISTING GRADE.
2. FILL MATERIAL MAY BE OBTAINED FROM BORROW PIT AS LOCATED ON SHEET T-1.
3. ALL EXISTING GRASSED SURFACES WHICH ARE DISTURBED DURING WORK SHALL BE RESEEDED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. CONTRACTOR SHALL LOCATE ALL ACTIVE FUEL PIPELINES PRIOR TO COMMENCEMENT OF WORK. EXTRA CARE MUST BE TAKEN SO AS NOT TO DISTURB OR OVERBURDEN THE ACTIVE LINES.
5. CONTRACTOR SHALL DEVELOP WORK PLAN FOR THIS EFFORT AND SUBMIT TO CONTRACTING OFFICER FOR APPROVAL PRIOR TO COMMENCING WORK. PLAN SHALL OUTLINE ALL PROPOSED WORK TASKS INCLUDING EQUIPMENT TO BE USED AND SAFETY PROCEDURES TO BE FOLLOWED. CONTRACTOR SHALL ENSURE THAT PROPER WORK TASKS ARE IMPLEMENTED SUCH THAT EXISTING FUEL LINES OR OTHER UTILITIES ARE NOT DAMAGED AND ENSURE THAT EMPLOYEES ARE NOT ENDANGERED.
6. PAINTED SURFACES CONTAIN DETECTABLE LEVELS OF LEAD, REFER TO SPECIFICATION 13283.

1/8"=1'-0" 0' 5' 10' 20' 30'

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

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Fax: 325-5458

ARMOUR CAPE & POND
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DRAWN BEK
REVIEW SEH
QC JFF
CHIEF ARCH/ ENGR. JFF
PROJECT MANAGER
FIRE PROTECTION
BRANCH MANAGER
DESIGN DIRECTOR

ACTIVITY – SATISFACTORY TO
APPROVED
DATE 6/17/98

FOR EFD FOR DRAWINGS WORKING

SEAL

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
NAVAL STATION
GUANTANAMO BAY, CUBA
PERMANENTLY CLOSE BULK PETROLEUM STORAGE TANKS AT NAVAL STATION GUANTANAMO BAY, CUBA
GASOLINE HILL TANKS – PLAN AND SECTION

CODE ID. NO. 80091	SIZE D
SCALE: 1/8" = 1'-0"	
EFD NO. 483222	
STA. PROJ. NO. V-037	
SPEC. NO. 05-98-8800	
CONSTR. CONTR. NO. N62470-98-C-8800	
NAVFAC DRAWING NO. 4383222	
SHEET 18 OF 18	

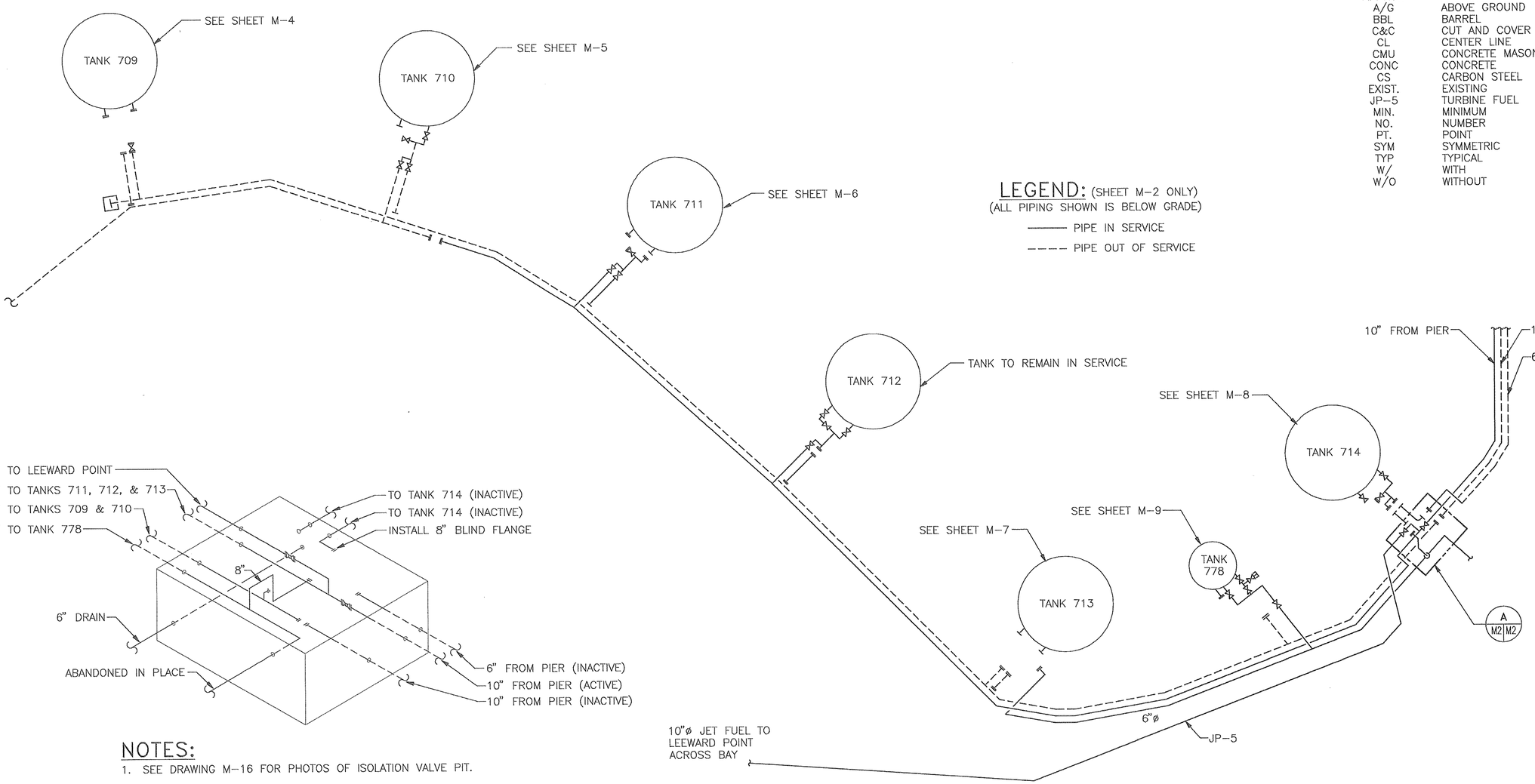
M-17

TANK SCHEDULE

TANK NO.	TYPE	VOLUME	LOCATION	PRODUCT	STATUS
59	CONCRETE A/G	8,900 BBL	MARTI RD. /CESPEDES RD.	TANK SLUDGE	IN SERVICE
112	STEEL C&C VERTICAL	2,000 BBL	OIL POINT	AVGAS	OUT OF SERVICE
104	VERTICAL A/G STEEL	1,666 BBL	HAPPY VALLEY ANNEX	MOGAS	OUT OF SERVICE
115	VERTICAL A/G STEEL	2,095 BBL	HAPPY VALLEY ANNEX	MOGAS	OUT OF SERVICE
709	STEEL C&C VERTICAL	27,000 BBL	GASOLINE HILL	AVGAS	OUT OF SERVICE
710	STEEL C&C VERTICAL	27,000 BBL	GASOLINE HILL	AVGAS	OUT OF SERVICE
711	STEEL C&C VERTICAL	27,000 BBL	GASOLINE HILL	JP–5	OUT OF SERVICE
713	STEEL C&C VERTICAL	27,000 BBL	GASOLINE HILL	JP–5	OUT OF SERVICE
714	STEEL C&C VERTICAL	27,000 BBL	GASOLINE HILL	MOGAS	OUT OF SERVICE
778	STEEL C&C VERTICAL	6,775 BBL	GASOLINE HILL	JP–5	IN SERVICE

LEGEND & ABBREVIATIONS

⋈	GATE VALVE
–‖	BLIND FLANGE
–⊃	PIPE TURN DOWN
–○	PIPE TURN UP
——	ABOVE GROUND
- - -	UNDERGROUND
◐	LIMIT OF DEMOLITION
←	ARROW IN DIRECTION OF WORK
&	AND
ø	DIAMETER
#	POUND
PL	PLATE
APPROX	APPROXIMATE
A/G	ABOVE GROUND
BBL	BARREL
C&C	CUT AND COVER
CL	CENTER LINE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CS	CARBON STEEL
EXIST.	EXISTING
JP–5	TURBINE FUEL
MIN.	MINIMUM
NO.	NUMBER
PT.	POINT
SYM	SYMMETRIC
TYP	TYPICAL
W/	WITH
W/O	WITHOUT



LEGEND: (SHEET M–2 ONLY)
(ALL PIPING SHOWN IS BELOW GRADE)

——— PIPE IN SERVICE

– – – – PIPE OUT OF SERVICE

NOTES:

1. SEE DRAWING M–16 FOR PHOTOS OF ISOLATION VALVE PIT.

ISOLATION VALVE PIT (A / M2 M2)

SCALE: NO SCALE

TANK AND PIPING PLAN – GASOLINE HILL

SCALE: NOT TO SCALE

NOTES: (SHEET M–2 ONLY)

1. THIS DRAWING IS FOR INDICATION OF EXISTING CONDITIONS. SEE DRAWINGS M–3 THRU M–10 AND SPECIFICATIONS FOR WORK TO BE DONE.

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

EFD
DESIGN
DRAWN
REVIEW
QC
CHIEF ARCH / ENGR.
PROJECT MANAGER
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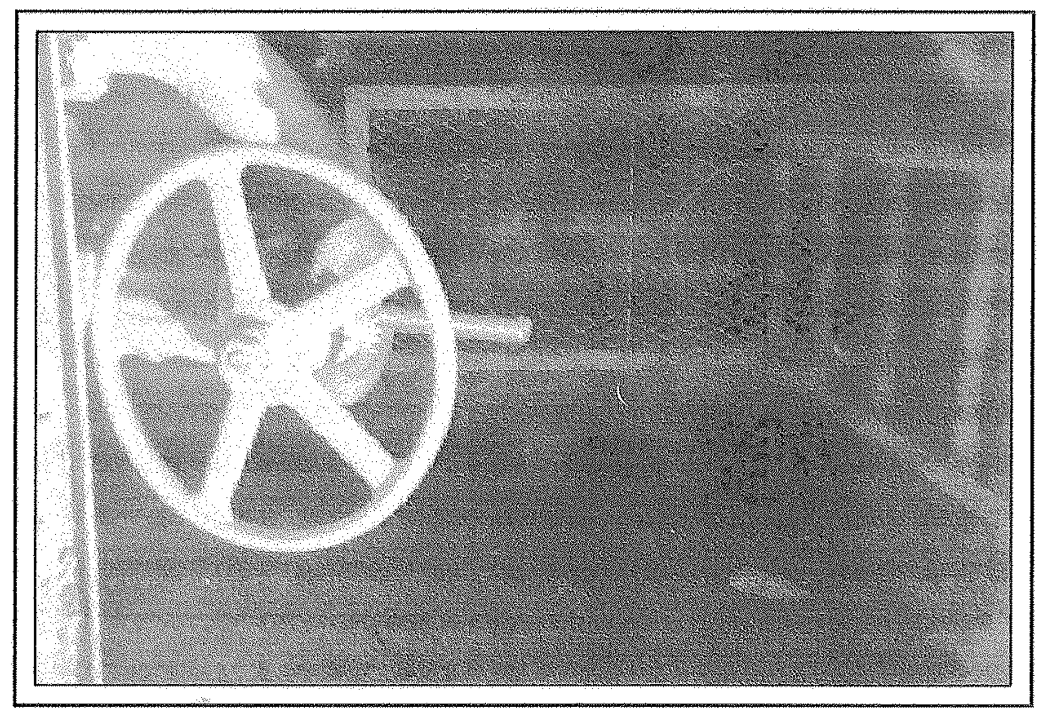
Engineers • Architects
APPROVED DATE

ACTIVITY – SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

SEAL

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
NAVAL STATION
GUANTANAMO BAY, CUBA
NAVAL STATION
PERMANENTLY CLOSE BULK PETROLEUM STORAGE TANKS
AT NAVAL STATION GUANTANAMO BAY, CUBA
TANK & PIPING PLAN – GASOLINE HILL

CODE ID. NO. 80091 | SIZE D
SCALE: 1" = 60'
EFD NO. 483207
STA. PROJ. NO. V–037
SPEC. NO. 05–98–8800
CONSTR. CONTR. NO. N62470–98–C–8800
NAVFAC DRAWING NO. 4383207
SHEET 3 OF 18
M–2



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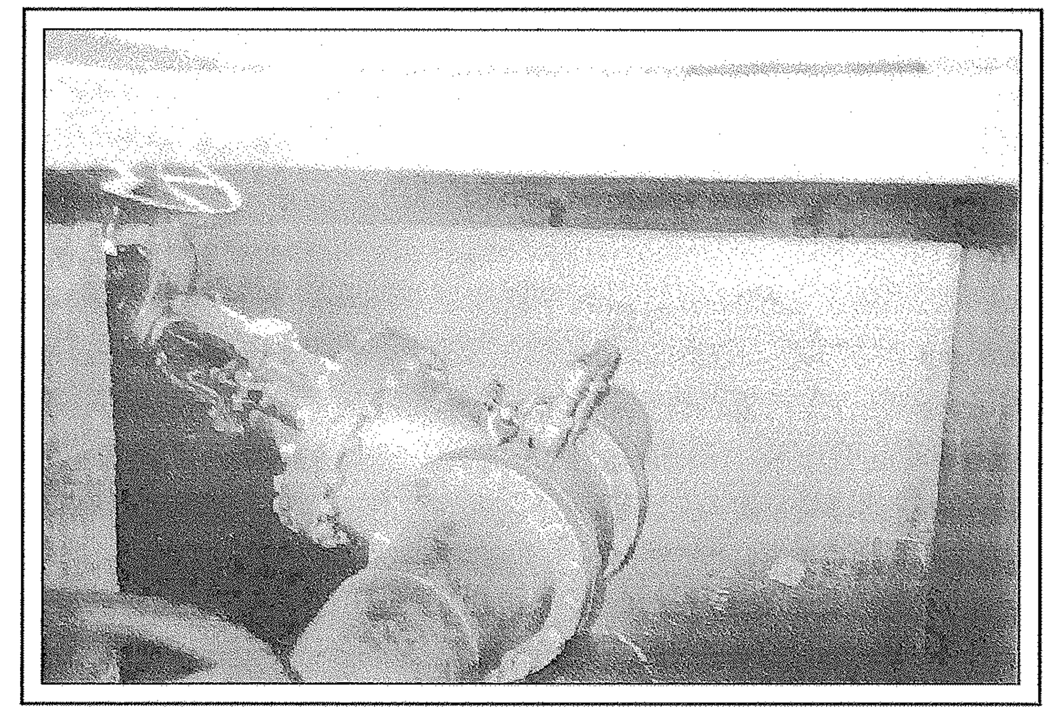
M16 M16



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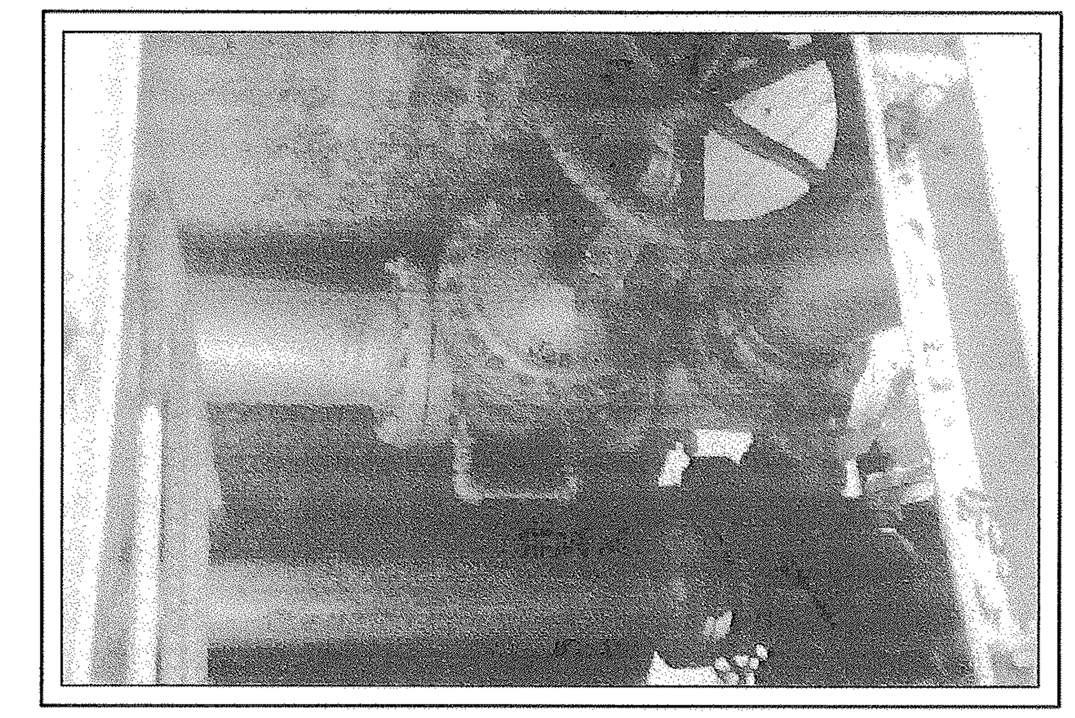
M16 M16



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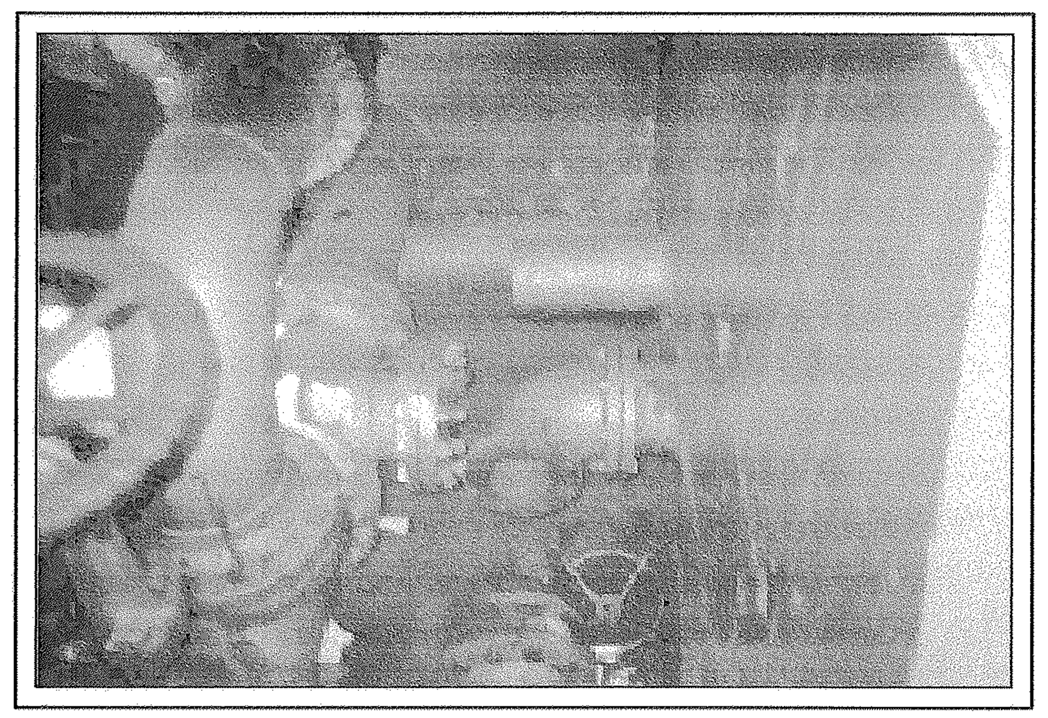
M16 M16



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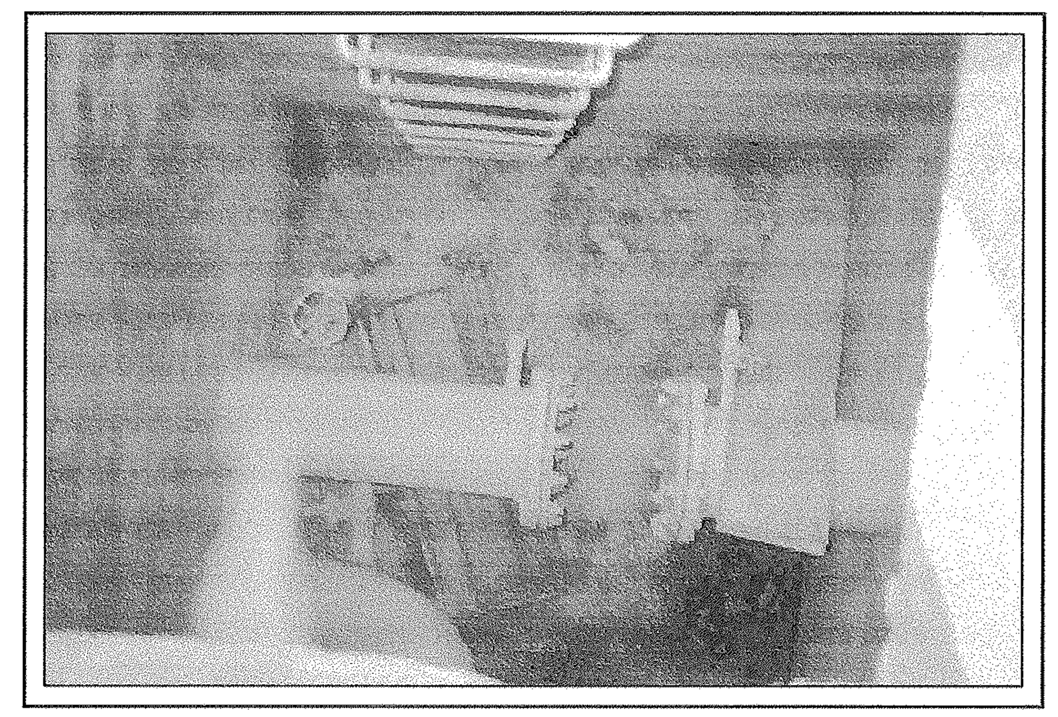
M16 M16



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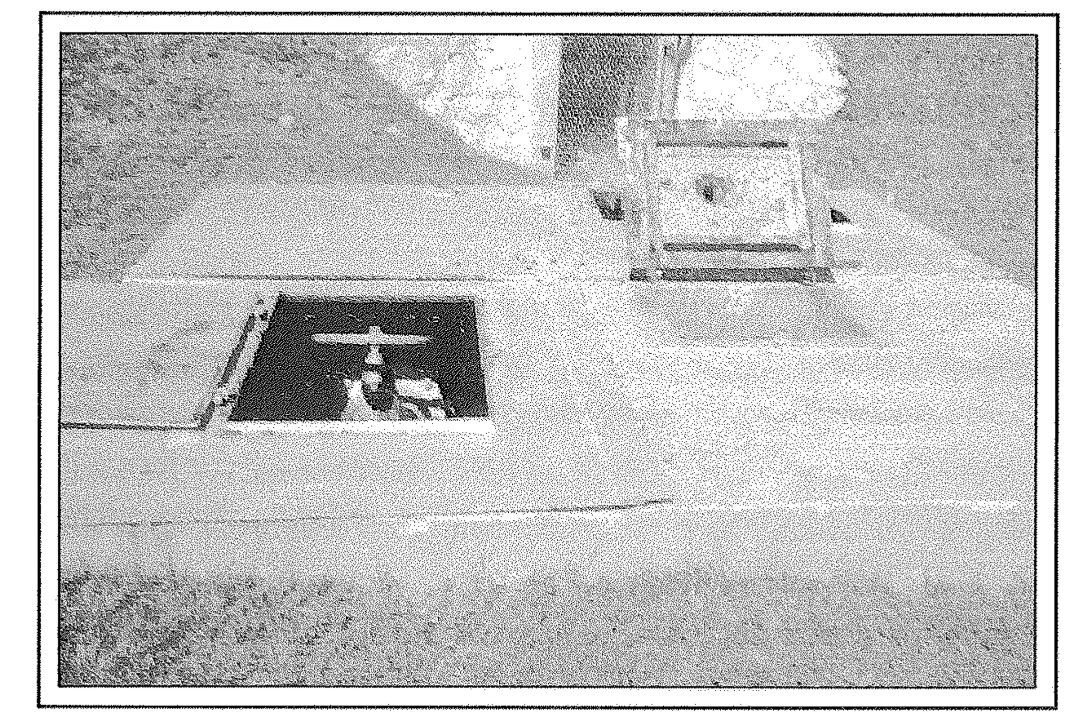
M16 M16



6
M16 M16

7
M16 M16

8
M16 M16

ISOLATION VALVE PIT – PHOTOS

SCALE: NONE

NOTES:

1. NO DEMOLITION OR REMOVAL IS REQUIRED AT THE ISOLATION VALVE PIT. THIS DRAWING IS FOR INFORMATION ONLY. SEE M-2 FOR ISOLATION VALVE PIT PIPING SCHEMATIC.

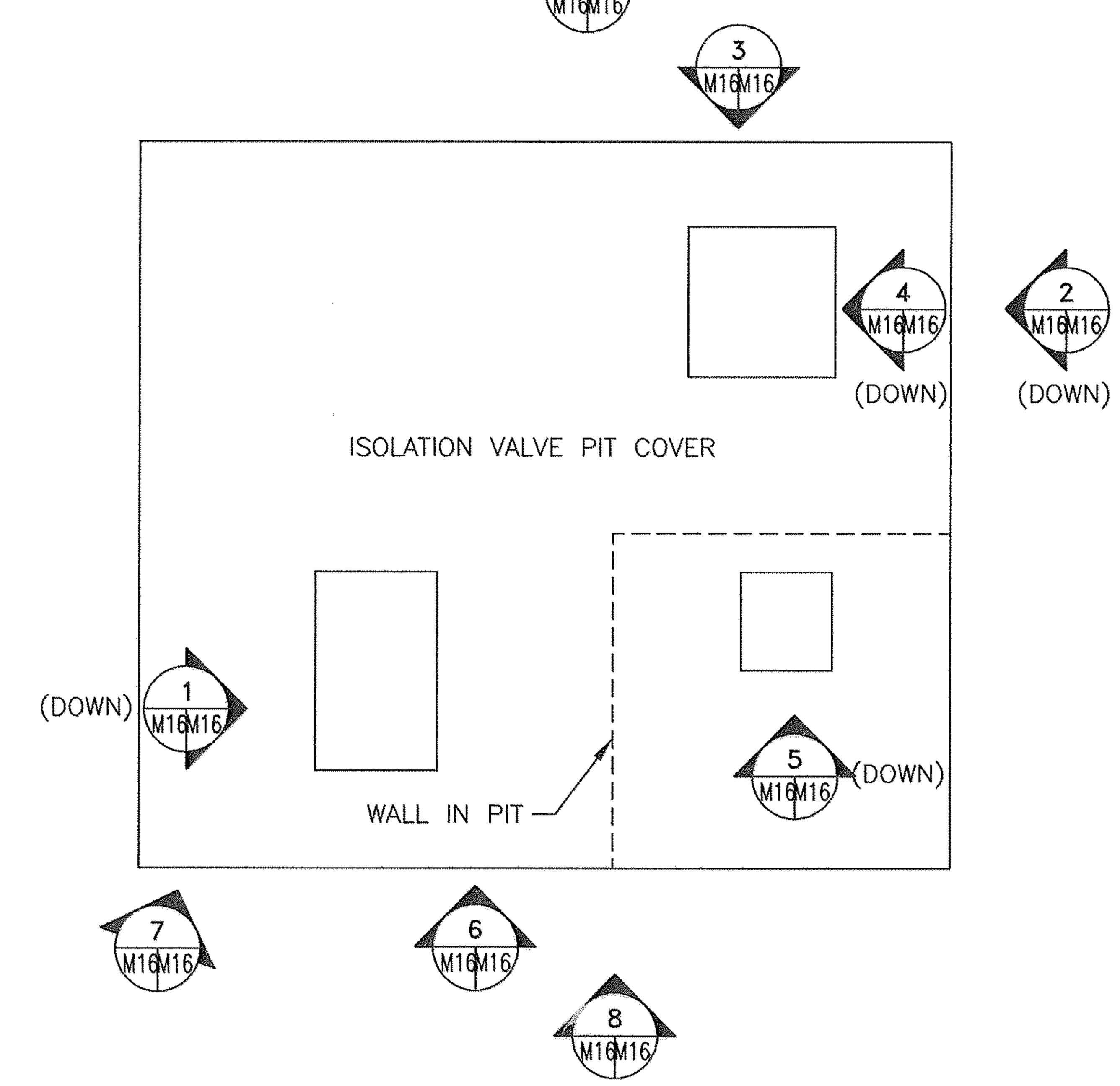


PHOTO KEY

SCALE: NONE

SYM.	DESCRIPTION	DATE	APPROVED
	REVISIONS		

A/E EFD
JCE DESIGN
JSA DRAWN
SEH REVIEW EPK
JFF QC
JFF CHIEF ARCH./ ENGR.
PROJECT MANAGER
FIRE PROTECTION
BRANCH MANAGER JTM
DESIGN DIRECTOR

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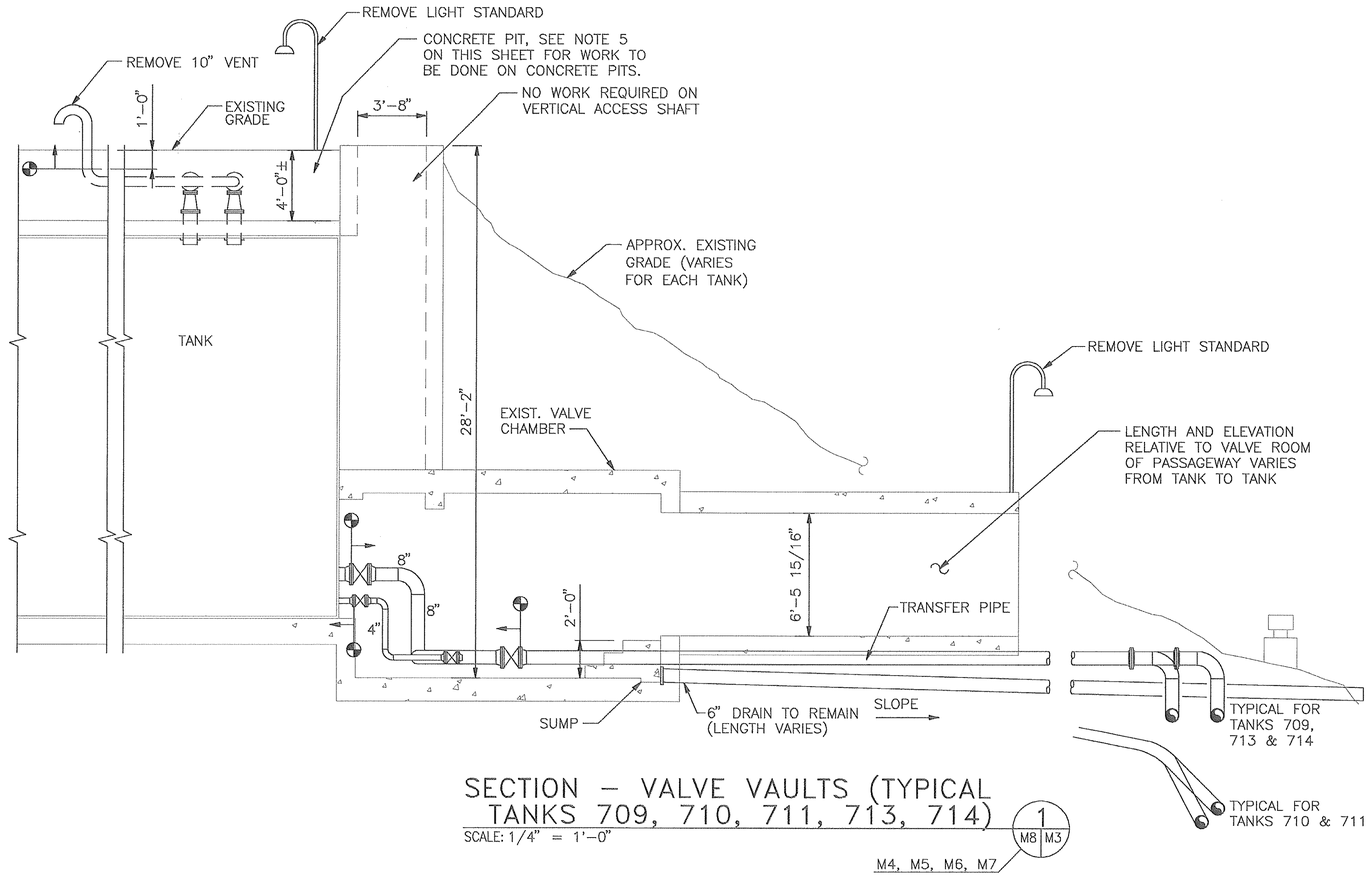
APPROVED DATE
ACTIVITY – SATISFACTORY TO
APPROVED DATE 8/17/98
FOR EFD FOR COMMANDER NAVFAC

SEAL 5/20/98

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
NAVAL STATION GUANTANAMO BAY, CUBA
PERMANENTLY CLOSE BULK PETROLEUM STORAGE TANKS
AT NAVAL STATION GUANTANAMO BAY, CUBA
ISOLATION VALVE PIT – PHOTOS

CODE ID. NO. 80091	SIZE D
SCALE: NONE	
EFD NO. 483221	
STA. PROJ. NO. V-037	
SPEC. NO. 05-98-8800	
CONSTR. CONTR. NO. N62470-98-C-8800	
NAVFAC DRAWING NO. 4383221	
SHEET 17 OF 18	
M-16	

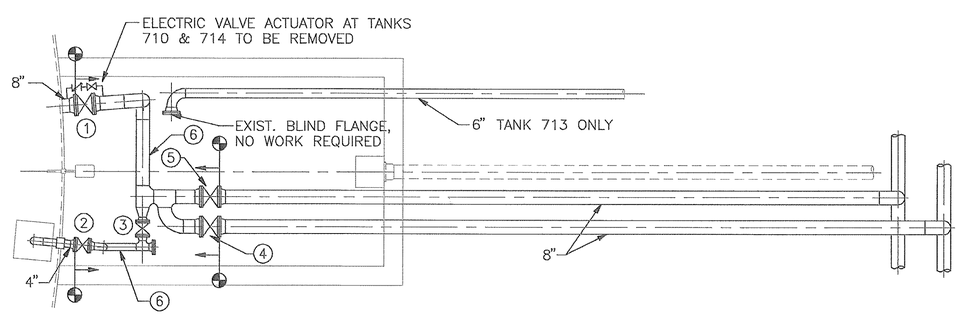
8 7 6 5 4 3 2 1
D C B A



SECTION – VALVE VAULTS (TYPICAL TANKS 709, 710, 711, 713, 714) 1 M8 | M3

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

M4, M5, M6, M7



PART PLAN – VALVE VAULTS (TYPICAL TANKS 709, 710, 711, 713, 714) A M3 | M3

SCALE: NO SCALE

NOTES: (TYPICAL TANKS 709, 710, 711, 713, 714, & 778)

1. REMOVE ALL VALVES IN VALVE VAULT PIPING. REMOVE PIPING FROM TANK NOZZLES TO TRANSFER PIPE FLANGES IN VAULTS. BOLT BLIND FLANGES TO REMAINING FLANGES AND TACK WELD AT PERIMETER MINIMUM 2" LENGTH, AT 4 PLACES ON EACH.
2. REMOVE ALL ELECTRICAL JUNCTION BOXES, LIGHT FIXTURES, EXPOSED CONDUIT, CONDUIT FITTINGS, SUPPORTS, AND CONDUCTORS AT VALVE VAULTS. REMOVE CONDUCTORS FROM BELOW GRADE CONDUIT BETWEEN EACH VALVE VAULT AND PANELBOARD EAST OF TANK 711. CUT CONDUITS OFF ONE FOOT BELOW GRADE AT EACH END AND BACKFILL.
3. REMOVE VENTS TO 1'-0" BELOW GRADE. WELD SHUT WITH FLAT PLATE, 1/4" STEEL, AND BACKFILL TO GRADE.
4. BOLT MANHOLE COVERS TO NOZZLES, TACK WELD 4" LENGTH, AT 4 PLACES EACH, AND BACKFILL TO GRADE. MANHOLE DEPRESSIONS ARE APPROXIMATELY 3' DEEP, 4' DIAMETER AT BOTTOM AND 10' DIAMETER AT GRADE.
5. IN CONCRETE PITS BOLT AND WELD MANHOLES AS DESCRIBED ABOVE. REMOVE GAUGING SYSTEM PIPE AND APPURTENANCES AND VENTS. CAP OR PLUG REMAINING NOZZLES. SAWCUT CONCRETE WALLS TO ONE FOOT BELOW GRADE AND BACKFILL PIT TO GRADE.
6. ALL FLANGES USED AS BLINDS SHALL BE 150# CARBON STEEL.
7. ALL TANKS AND VAULTS ARE CONFINED SPACES.
8. TANK 712 AND PIPING SERVING IT ARE TO REMAIN IN SERVICE AT ALL TIMES. CONTRACTOR SHALL PROVIDE WORK PLAN.
9. DISTURBED SOIL SHALL BE RESTORED/RESEEDED AS DIRECTED BY CONTRACTING OFFICER.
10. SITE HAS NO ELECTRICAL SERVICE. CONTRACTOR MUST PROVIDE FOR ALL WORK.
11. PAINTED SURFACES CONTAIN DETECTABLE LEVELS OF LEAD, REFER TO SPECIFICATION 13283.

GASOLINE HILL
TABLE OF EXISTING VALVES AND PIPING

TANK NO.	1	2	3	4	5	6
709	R	R	R	R	E	R
710	E	R	E	E	E	E
711	E	R	E	A	E	E
713	R	R	R	R	R	R
714	E	E	E	R	R	E

E – EXISTING TO BE REMOVED.
R – HAS BEEN REMOVED PREVIOUSLY.
A – VALVE WILL NOT BE REMOVED. REMOVE PIPE SECTION 6 AND BOLT BLIND FLANGE TO VALVE.
PROVIDE BLIND FLANGE BOLTED AND WELDED TO EXISTING PIPE OR NOZZLE FLANGE AT E & R TYPE LOCATIONS WHERE CIRCLED.

1/4"=1'-0" 1' 0' 1' 5' 10' 15'

REVISIONS

DESCRIPTION	DATE	APPROVED

DESIGN JCE | DRAWN JSA | REVIEW FPK | QC JFF | CHIEF ARCH./ ENGR. JFF | PROJECT MANAGER | FIRE PROTECTION | BRANCH MANAGER JTJ | DESIGN DIRECTOR

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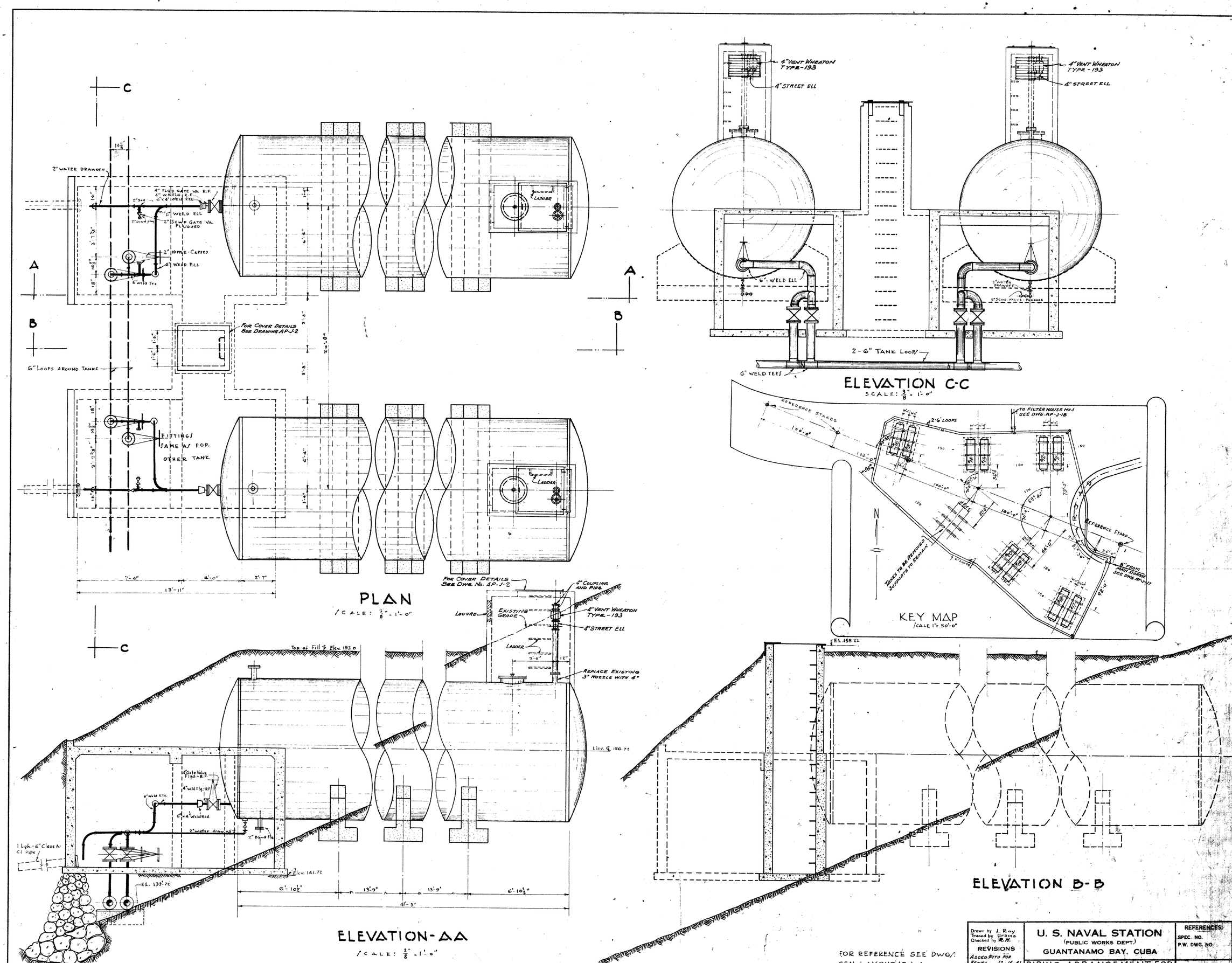
APPROVED DATE 8/17/98
ACTIVITY – SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

SEAL

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
NAVAL STATION
GUANTANAMO BAY, CUBA
NAVAL STATION
PERMANENTLY CLOSE BULK PETROLEUM STORAGE TANKS AT NAVAL STATION GUANTANAMO BAY, CUBA
VALVE VAULTS – SECTION

CODE ID. NO. 80091	SIZE D
SCALE: 1/4" = 1'-0"	
EFD NO. 483208	
STA. PROJ. NO. V-037	
SPECI. NO. 05-98-8800	
CONSTR. CONTR. NO. N62470-98-C-8800	
NAVFAC DRAWING NO. 4383208	
SHEET 4 OF 18	

M-3



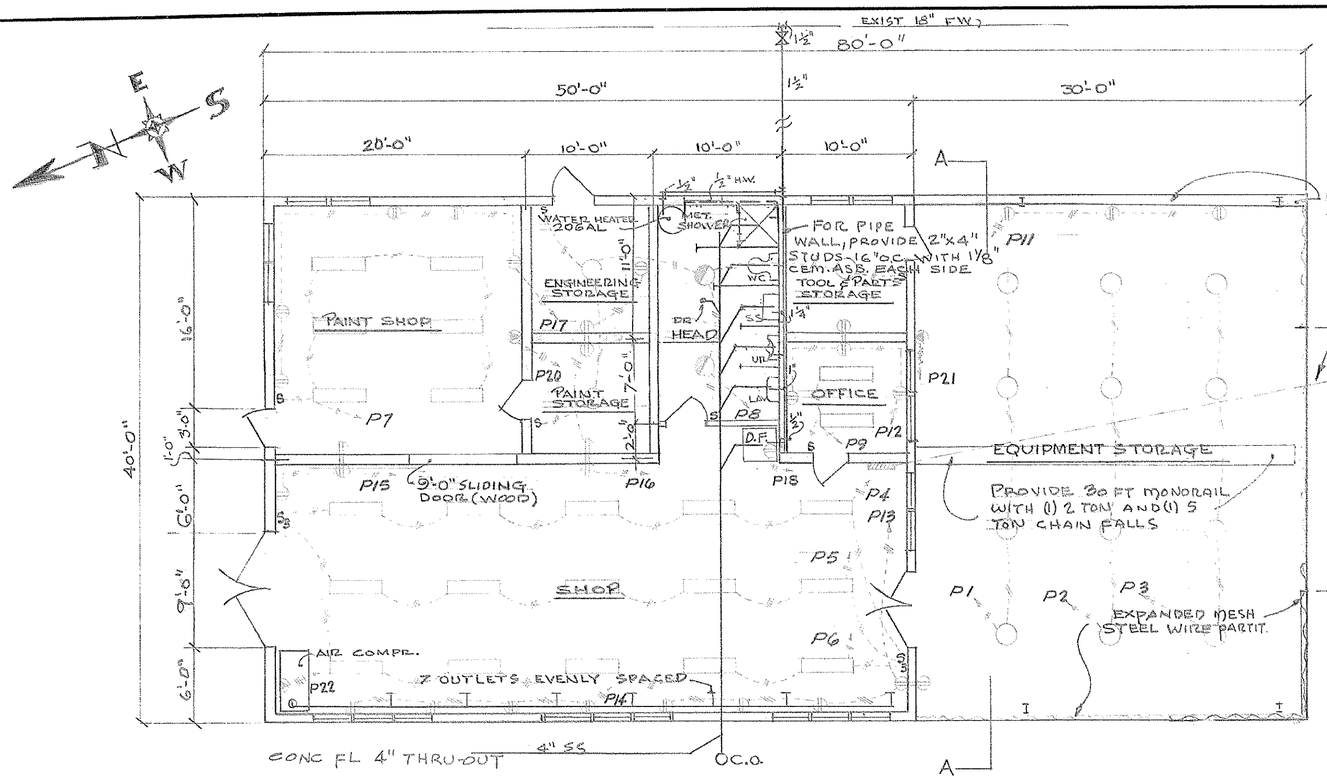
NOTE:
THE TOTAL STORAGE CONSISTS OF 10 TANKS
THE TANKS ARE IN GROUPS OF TWO.
THIS DRAWING SHOWS THE PIPING FOR ONE GROUP OF TWO TANKS ONLY.

FOR REFERENCE SEE DWGS:
GEN. LAYOUT: AP-J-1
FOUNDATION: AP-J-2
GASOLINE FLOW DIAGRAM AP-J-9

Ref: 28-323-0545-2

Drawn by J. Ray Traced by Urbina Checked by R.H. REVISIONS ADDED PITS FOR VENTS 12-16-41	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	PIPING ARRANGEMENT FOR 25,000 GAL. GAS. STORAGE TANKS. FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS	CONTR. NO. NOy 4162 DRAWG NO. SERIAL: A.R.
Y&D Drawing No. 335064	APPROVED 3-10-41 BY W. J. Wallrance, RESIDENT OFFICER IN CHARGE APPROVED 3-10-41 BY [signature], P.W. OFFICER IN CHARGE	J-3

REPL 1951 350-43-188



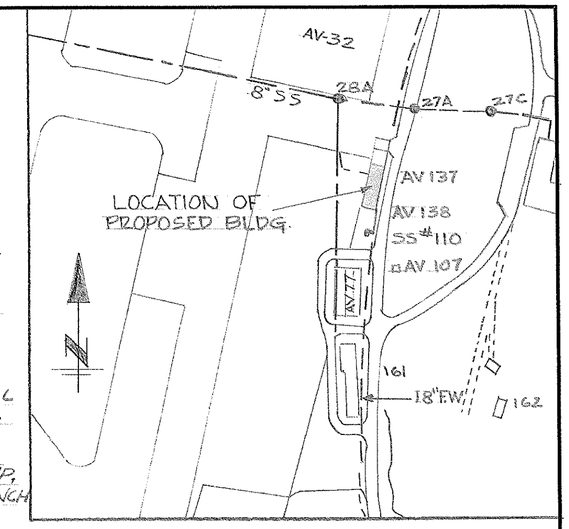
FLOOR PLAN

SC: 1/8" = 1'-0"

NEW 4#2 RHW(N) IN 2" RIGID GALVANIZED STEEL CONDUIT INCASED IN CONCRETE TO EXISTING SUBSTATION #110, INSTALL NEW SAFETY SW., 3 POLE, 100 AMP, 240 V.A.C. FUSIBLE

NOTE:

NEW POWER PANEL "P" SHALL BE 3Φ, 4W, S/N, 120/208 V.A.C. WITH 3 POLE 100 AMP MAIN CKT. BRKR. WITH 18-1 POLE 20 AMP AND 2-2 POLE 30 AMP, AND 2-3 POLE 30 AMP BRANCH CIRCUIT BREAKERS



LOCATION PLAN

SC 1" = 200 FT.

NOTE

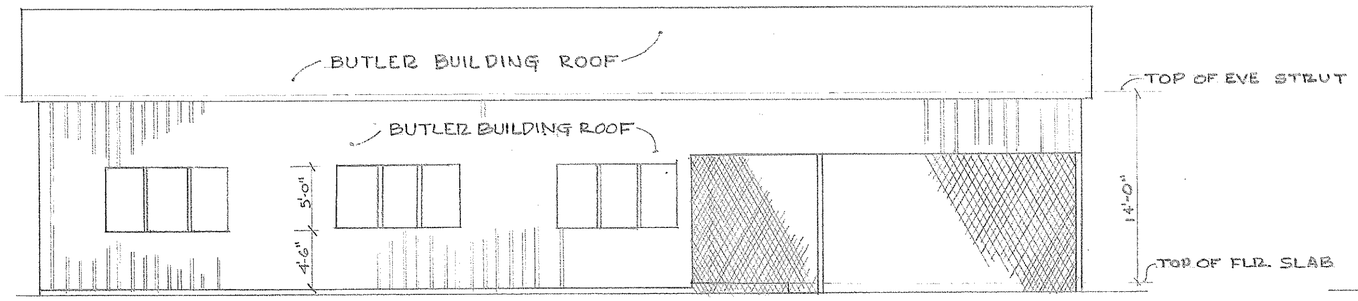
EXIST. QUONSET HUT BLDGS. NO. AV-137 & AV-138 TO BE REMOVED

EXCEPT AS NOTED, ALL INTERIOR PARTITIONS TO BE 1 1/8" CEM. ASB. 8'-0" HIGH

ELECTRICAL LEGEND

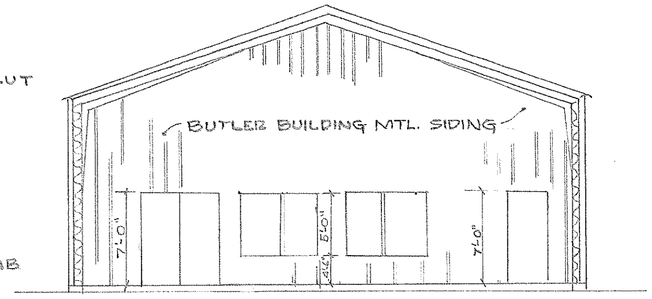
- FLUORESCENT FIXTURE, 3 TUBE, 40 WATT, 48" SLIMLINE
- FIXTURE #25 - 9Yh - 100 WATT
- FIXTURE #12 - 9Yh - 100 WATT
- DUPLEX OUTLET, 15 A., 125 V.A.C., 3W., GRD. TYPE
- OUTLET, 30 AMP, 250 V.A.C., 4 WIRE, GRD. TYPE
- POWER PANEL "P"
- UNDERGROUND SERVICE INCASED IN CONCRETE
- CONDUIT EXPOSED ON WALLS OR CEILING

NO WIRE SMALLER THAN #12 A.W.G. SHALL BE USED



WEST ELEVATION

SC: 1/8" = 1'-0"



SECTION A-A

SC 1/8 = 1'-0"

PRELIMINARY

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

PWC DRAWING NO. BM-1667-0263

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS
PUBLIC WORKS CENTER
GUANTANAMO BAY, CUBA

DES RAF RAW
DRWN AVILA, RAW
TR
CHK J.J.G. SCK
SUPV J.J.G. SCK
IN CHARGE
REVIEWED BY

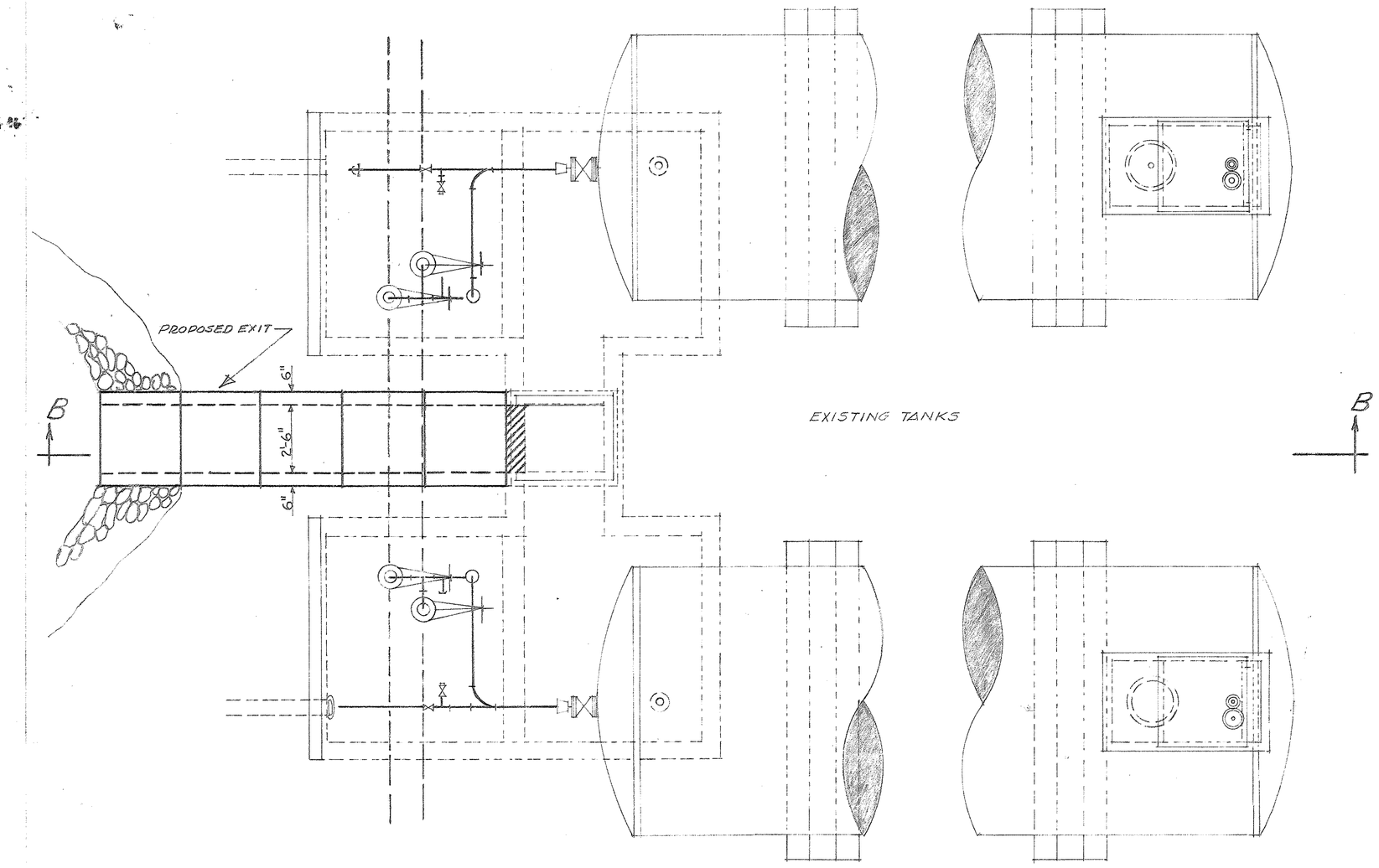
NAVAL AIR STATION - McCALLA FIELD
PROPOSED LINE MAINTENANCE BLDG (BUTLER TYPE)
PLAN & ELEVATIONS

APPROVED [signature] DATE 3/22/63
COMMANDING OFFICER PUBLIC WORKS CENTER

SATISFACTORY TO [signature]
DATE 20 MAR 1963

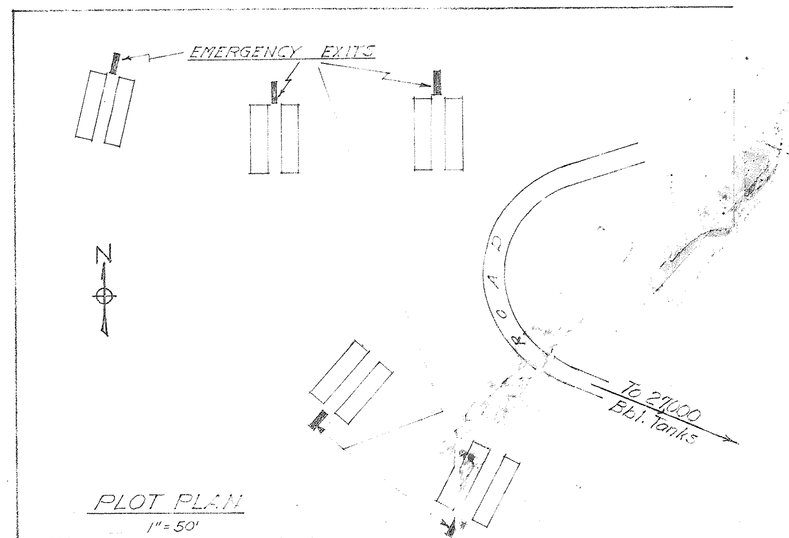
SCALE AS NOTED SPEC
SHEET 1 OF 1 NBY
Y & D DRAWING NO.

ESR 1547/3

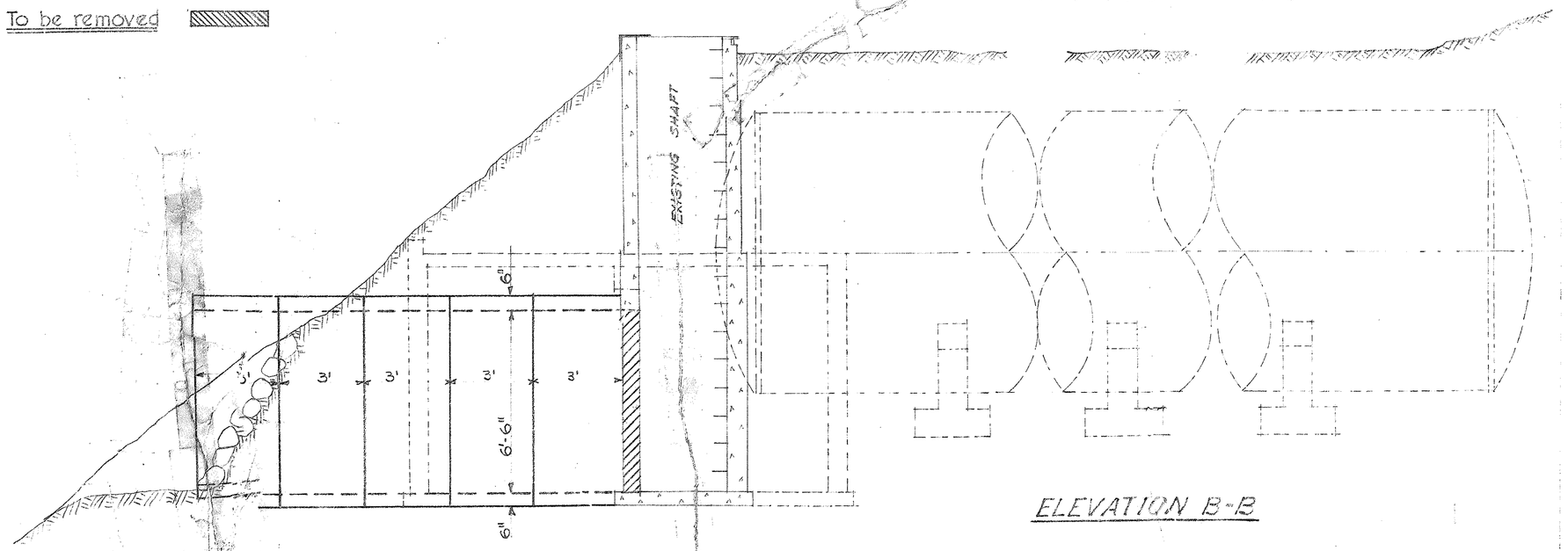


PLAN
3/8" = 1'

To be removed



PLOT PLAN
1" = 50'

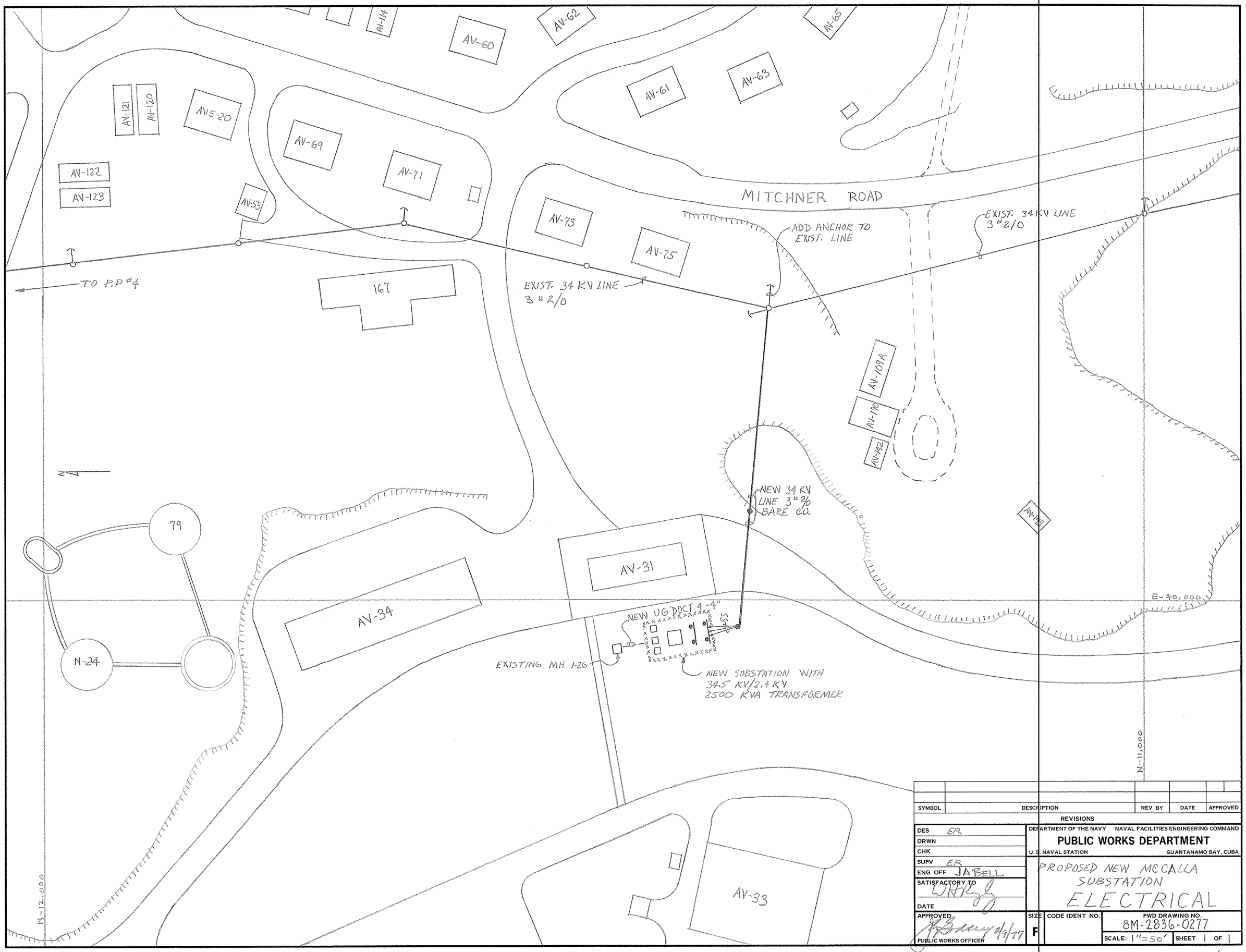


ELEVATION B-B

NOTE FOR OTHER DETAILS SEE SHEET #1.

DRAWN BY-	U.S. NAVAL OPERATING BASE GUANTANAMO BAY, CUBA
TRACED BY-	PROPOSED EMERGENCY EXITS TO GASOLINE STORAGE TANKS (ARRANGEMENT FOR 25,000 GAL. TANKS)
CHECKED BY-	
CHIEF DFMN- IN CHARGE-	
SHEET 2 OF 3	
P.W. DRAWING 2B-323-545-2	APPROVED _____ DATE _____ PUBLIC WORKS OFFICER

Ref. V&D #58064



SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

DES ER
DRWN
CHK
SUPV ER
ENG OFF JABELL
SATISFACTORY TO WHZ
DATE
APPROVED 2/9/77
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND

PUBLIC WORKS DEPARTMENT

U. S. NAVAL STATION GUANTANAMO BAY, CUBA

PROPOSED NEW MCCALLA SUBSTATION

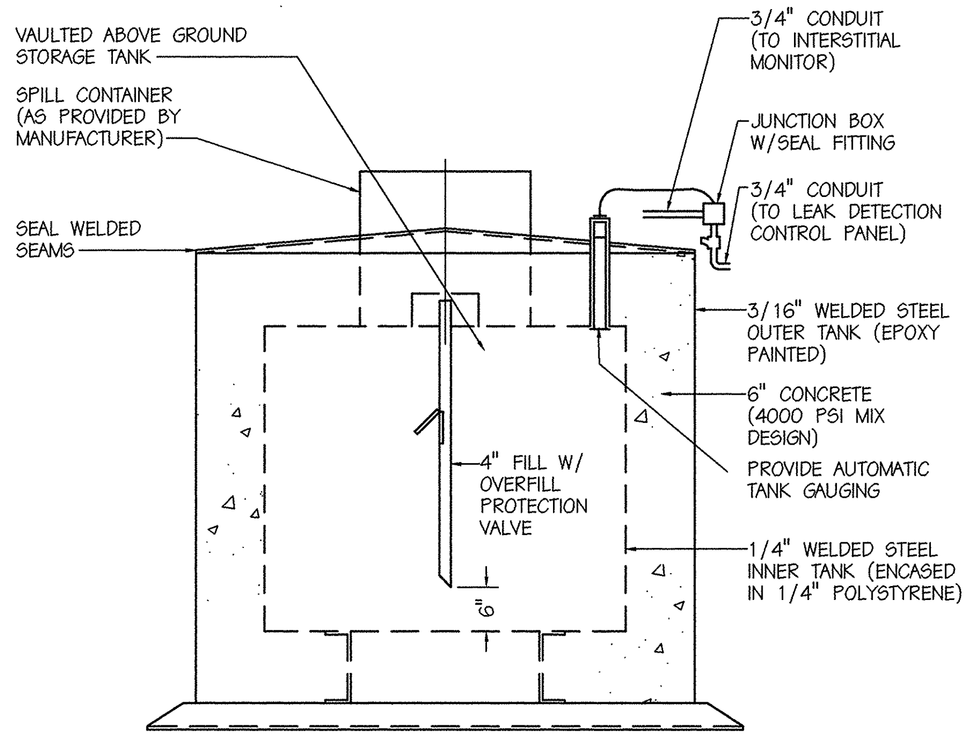
ELECTRICAL

SIZE F | CODE IDENT NO. | PWD DRAWING NO. 8M-2836-0277

SCALE: 1" = 50' | SHEET 1 OF 1

N6192

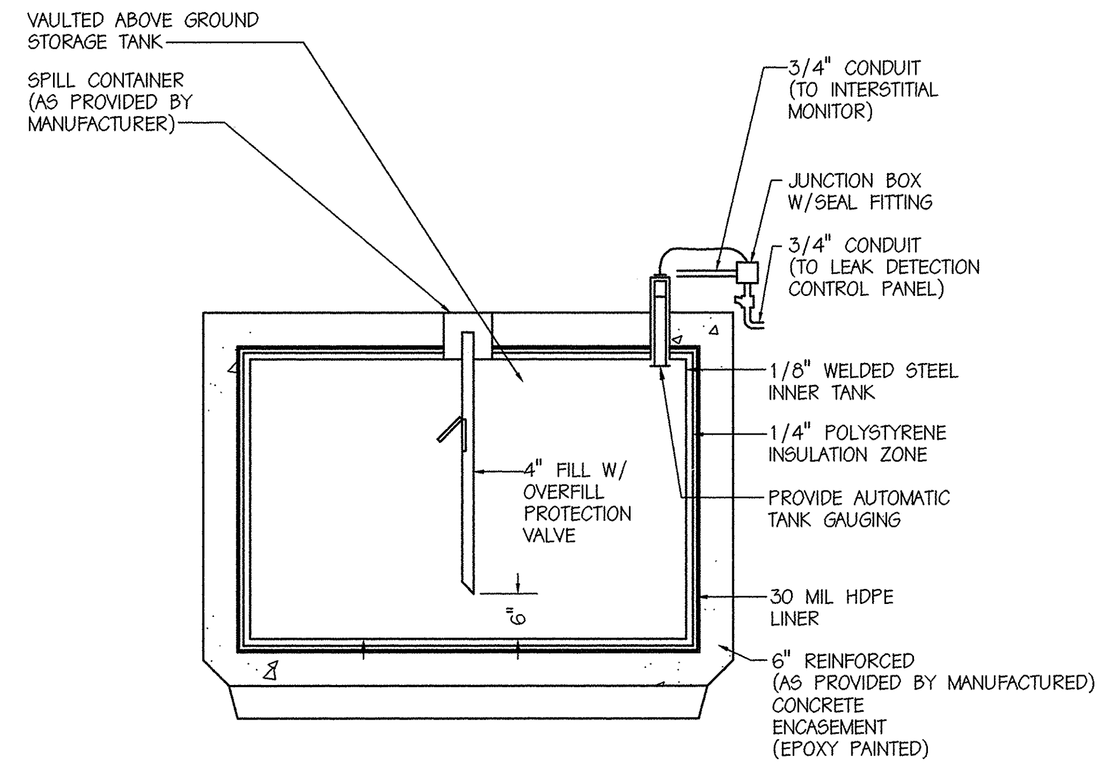
6833M001.DWG



TYPE I VAULTED ABOVE GROUND STORAGE TANK (A / M5)

TYPICAL TANK CONSTRUCTION
NOT TO SCALE

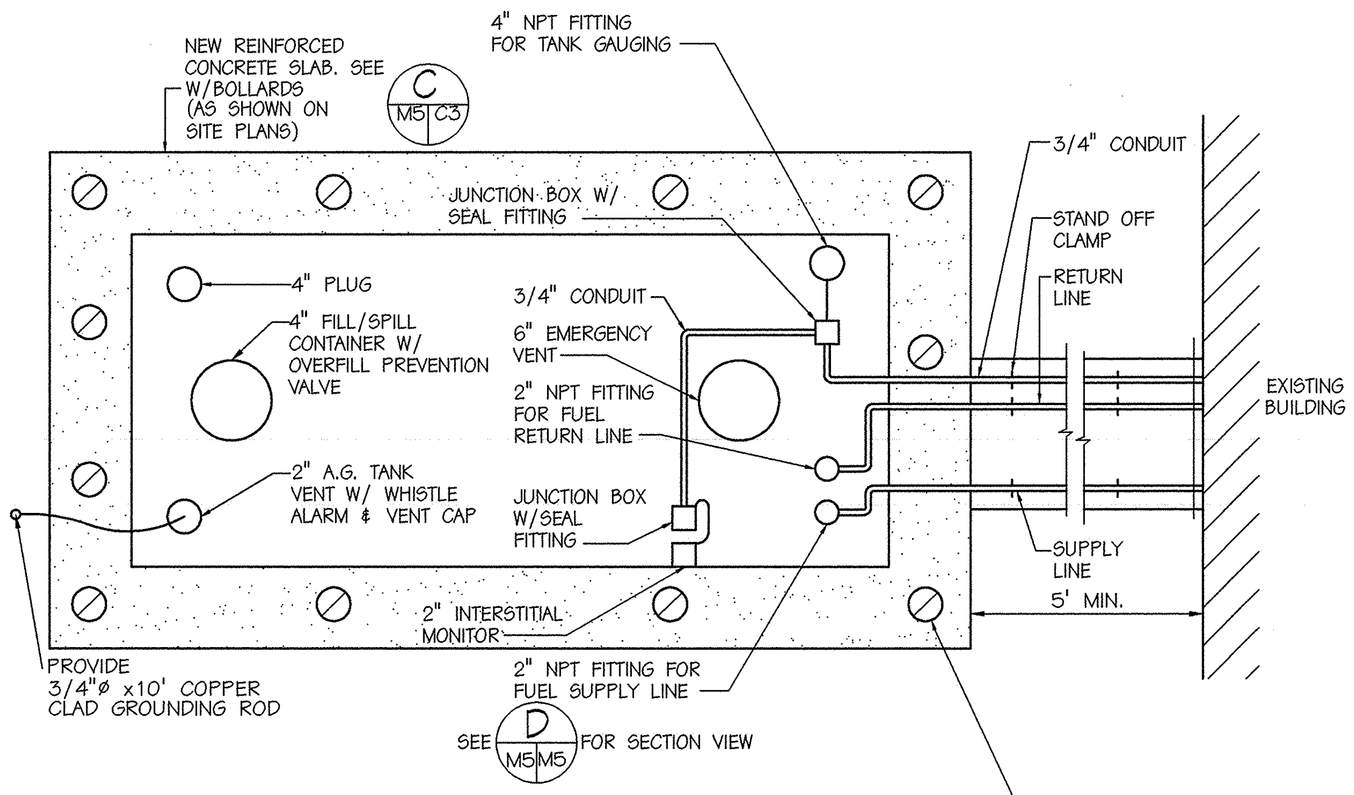
CM4	CM5	CM6	CM7	CM8	CM9	CM10	CM11
CM12	CM13	CM14	CM15	CM16	CM17	CM18	
CM19	CM20	CM21	CM22	CM23	CM24	CM25	
CM26	CM27	CM28	CM29	CM30	CM31	CM32	
CM33	CM34	CM35					



TYPE II VAULTED ABOVE GROUND STORAGE TANK (B / M5)

TYPICAL TANK CONSTRUCTION
NOT TO SCALE

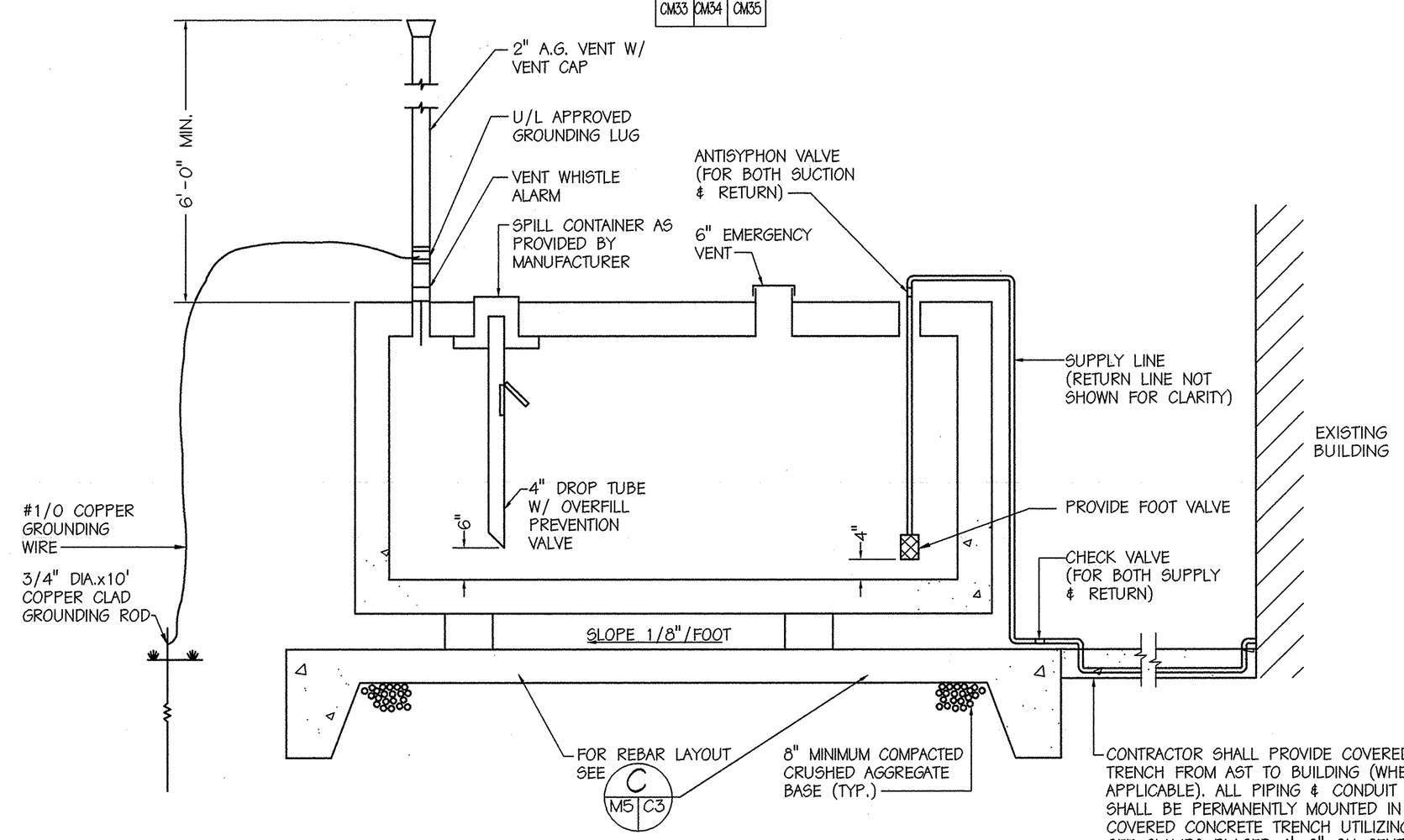
CM4	CM5	CM6	CM7	CM8	CM9	CM10	CM11
CM12	CM13	CM14	CM15	CM16	CM17	CM18	
CM19	CM20	CM21	CM22	CM23	CM24	CM25	
CM26	CM27	CM28	CM29	CM30	CM31	CM32	
CM33	CM34	CM35					



TYPICAL FITTING CONFIGURATION FOR VAULTED AST (C / M5 M5)

NOT TO SCALE

CM9	CM10	CM11	CM13	CM14	CM15	CM16
CM18	CM19	CM20	CM21	CM22	CM24	CM25
CM26	CM27	CM28	CM29	CM31	CM32	CM33
CM34	CM35					



TYPICAL FITTING APPLICATION FOR VAULTED AST SECTION VIEW (D / M5 M5)

NOT TO SCALE
(BOLLARDS NOT SHOWN FOR CLARITY)

STA.	DESCRIPTION	DATE	APPROVED

REVISIONS

A/E DESIGN: EFD
ARCHITECT DRAWN: MWB
REVIEW: RPG
CHIEF ARCH./ENGR.
PROJECT MANAGER: FIRE PROTECTION
QUALITY CONTROL
BRANCH MANAGER
DESIGN DIRECTOR

DAMES & MOORE
2807 NORTH PARHAM ROAD, RICHMOND, VA 23294 PHONE (804) 886-2000
A/E CONTRACT NO. N62470-93-D-4034
APPROVED DATE
ACCEPTED AS SATISFACTORY TO FOR EFD FOR COMMANDER NAVFAC DATE 7/31/96

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER SEAL
GRACE E. WOOD NO. 021005

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
U.S. NAVAL STATION GUANTANAMO BAY, CUBA
REMOVE AND REPLACE UNDERGROUND STORAGE TANKS
AST DETAILS - SECTION VIEWS\CONCRETE TRENCH APPLICATION

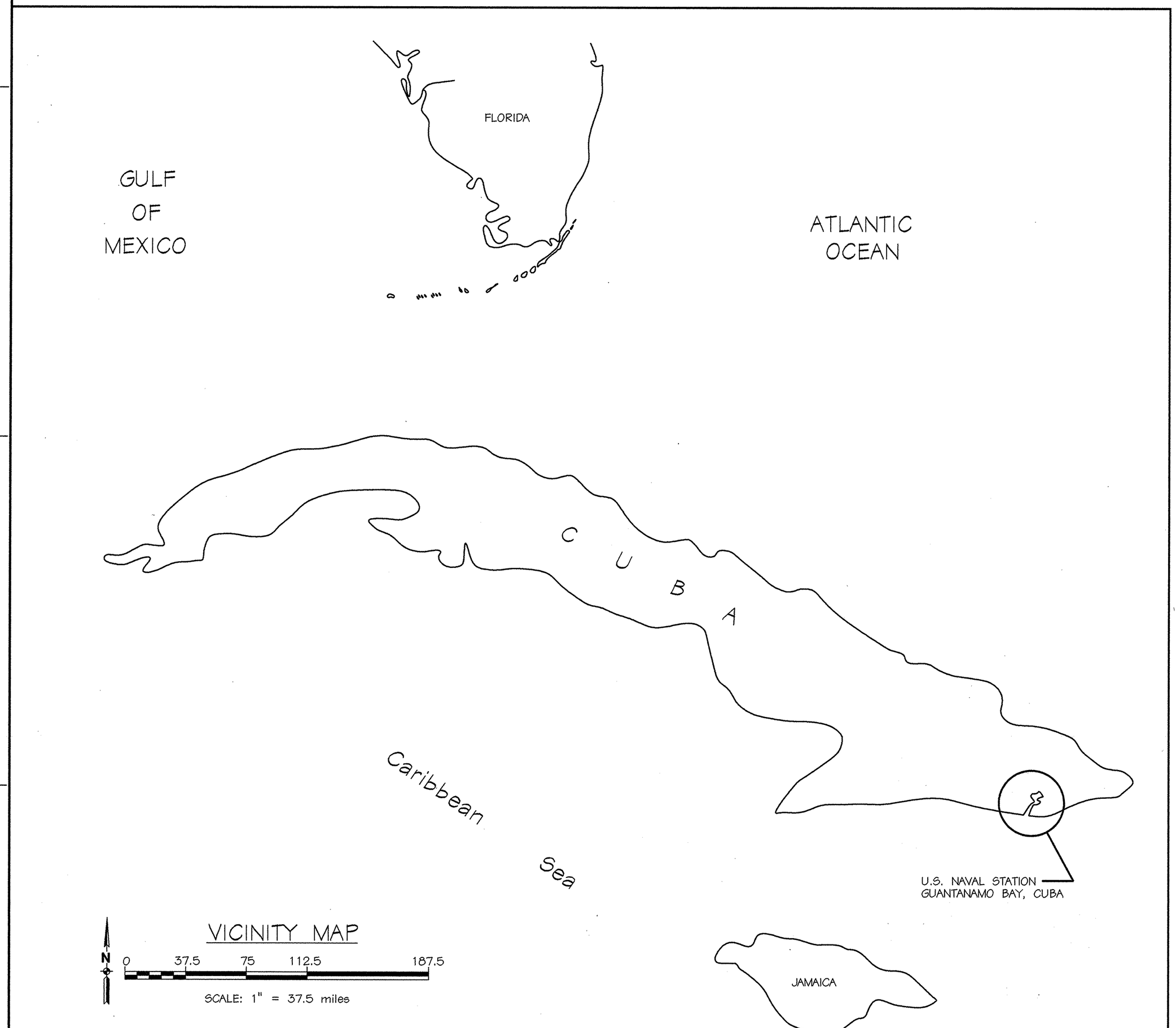
CODE ID. NO. SIZE D
SCALE: AS SHOWN
EFD NO. 443563
STA. PROJ. NO. L201
SPEC. NO. 05-98-6833
CONSTR. CONTR. NO. N62470-96-B-6833
NAVFAC DRAWING NO. 4343563
SHEET 49 OF 73
M-5

6833T001.DWG

REMOVE AND REPLACE UNDERGROUND STORAGE TANKS

U.S. NAVAL STATION

GUANTANAMO BAY, CUBA



VICINITY MAP

CAUTION: EXCEPT WHERE DIMENSIONS ARE INDICATED, GRAPHIC SCALES MUST BE USED - ALL SHEETS. ALL DIMENSIONS IN FEET/INCHES.

LEGEND KEY:

(APPLIES TO SHEETS CM-1 THROUGH M-8)

DESCRIPTION	EXISTING	NEW
ABANDONED ELECTRIC SERVICE	-X----EUE-X----X-	
ABOVE GROUND WATER LINE	E AG W	
ALARM BEACON		
BITUMINOUS PAVEMENT (SECTION VIEW)		
BITUMINOUS PAVEMENT		
BOLLARDS		
BROKEN ASPHALT (PLAN VIEW)		
BROKEN ASPHALT (SECTION VIEW)		
BUILDING (BLDG.)	BLDG.	
BULK FUEL LINES	------- BF ------	
CHILLER LINES	------- C -------	
CONCRETE (CONC.)		
CONTOUR LINE	------- 98 -------	—— 98 ——
ELECTRIC SERVICE		—— E ——
EXISTING MECHANICAL UNIT		
EXISTING WATER	-------- W --------	
FENCE	—x——x—	—x——x—
FIRE WATER	-------FW-------	
FUEL SUPPLY	-------FS-------	——FS——
FUEL RETURN	-------FR-------	——FR——
FLOOD LIGHT		
GAUGE LINE	------- G -------	
GRASS (SECTION VIEW)		
GRAVEL		
GUARD RAIL		
LEAK DETECTION SYSTEM CONDUIT		——L——
LIGHT POLE		
LIMITS OF EXCAVATION		
MANHOLE (MH.)	E. MH.	
OVERHEAD (OH.) ELECTRIC (ELEC.)	----------EOE---	
POINT OF CONNECTION/DISCONNECTION FOR NEW & EXISTING PIPING		
POINT OF DISCONNECTION OF EXISTING PIPING		
REMOTE FILL	------- RF ------	
SANITARY SEWER	E. SAN	
SOIL/BACKFILL (SECTION VIEW)		
SPILL DRAIN LINE	------ SD ------	
SPOT ELEVATION		+10.6
STORM (S.) SEWER	E. S.	
TEMPORARY BENCHMARK		
TEMPORARY FUEL SUPPLY		——TFS——
TEMPORARY FUEL RETURN		——TFR——
TOP OF BANK	——TOB——	
TOE OF SLOPE	——TOS——	
UNDERGROUND (UG.) ELECTRIC (ELEC.)	-------EUE-------	
VENT LINE	--------V--------	

NOTE: FOR SHEET INDEX SEE SHEET T-2

QUALITY CONTROL REVIEW
SIGNATURE 7/19/96 DATE

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

A/E DRT DESIGN EFD
MGB DRAWN
RPL REVIEW JAG
CHIEF ARCH./ENGR.
PROJECT MANAGER
FIRE PROTECTION
QUALITY CONTROL
BRANCH MANAGER
DESIGN DIRECTOR

DAMES & MOORE
2807 NORTH PARHAM ROAD, RICHMOND, VA 23294 PHONE (804) 965-0000
A/E CONTRACT NO. N62470-93-D-4034
APPROVED FAC. MGMT. ENGR. DIR. JOHN WALKER, FAX DATED 7/22/96
ACTIVITY SATISFACTORY TO
APPROVED DATE 7/31/96
FOR EFD FOR COMMANDER NAVFAC

COMMONWEALTH OF VIRGINIA
GRACE E. WOOD
NO. 021005
PROFESSIONAL ENGINEER
SEAL

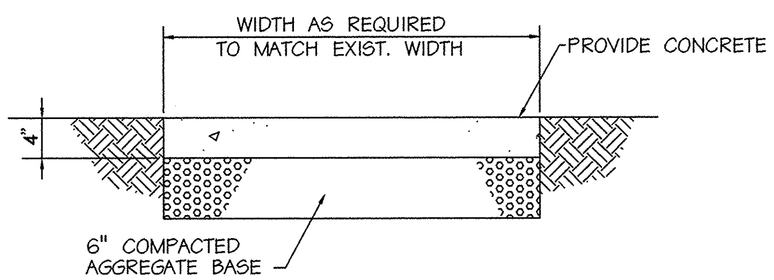
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
U.S. NAVAL STATION
GUANTANAMO BAY, CUBA
REMOVE AND REPLACE UNDERGROUND STORAGE TANKS
COVER SHEET/LEGEND KEY FOR CIVIL AND MECHANICAL SHEETS

CODE ID. NO. SIZE D
SCALE: AS SHOWN
EFD NO. 443515
STA. PROJ. NO. L201
SPEC. NO. 05-96-6833
CONSTR. CONTR. NO. N62470-96-B-6833
NAVFAC DRAWING NO. 4343515
SHEET 1 OF 73
T-1

8 7 6 5 4 3 2 1

D C B A

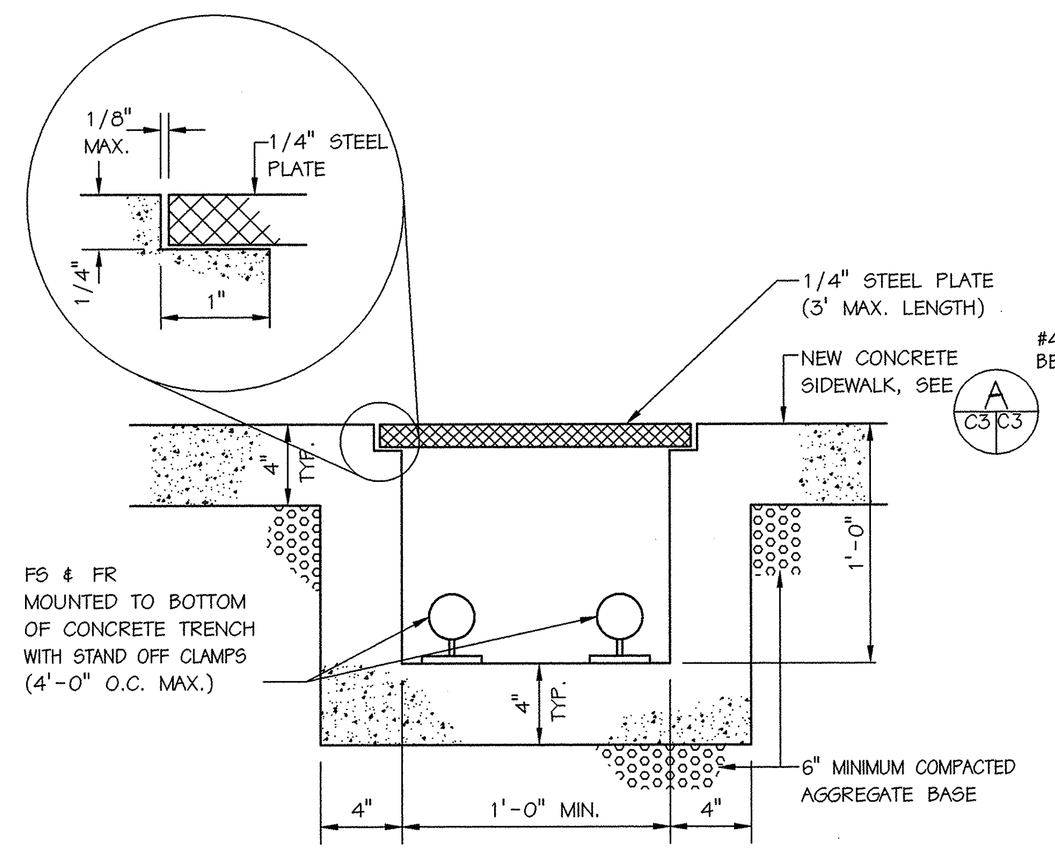
6833C003.DWG



CONCRETE SIDEWALK DETAIL (A)

NOT TO SCALE

CM6	CM7	CM8	CM10	CM11 C3
CM17	CM21	CM23	CM30	CM31
CM33	CM35	C3	M6	

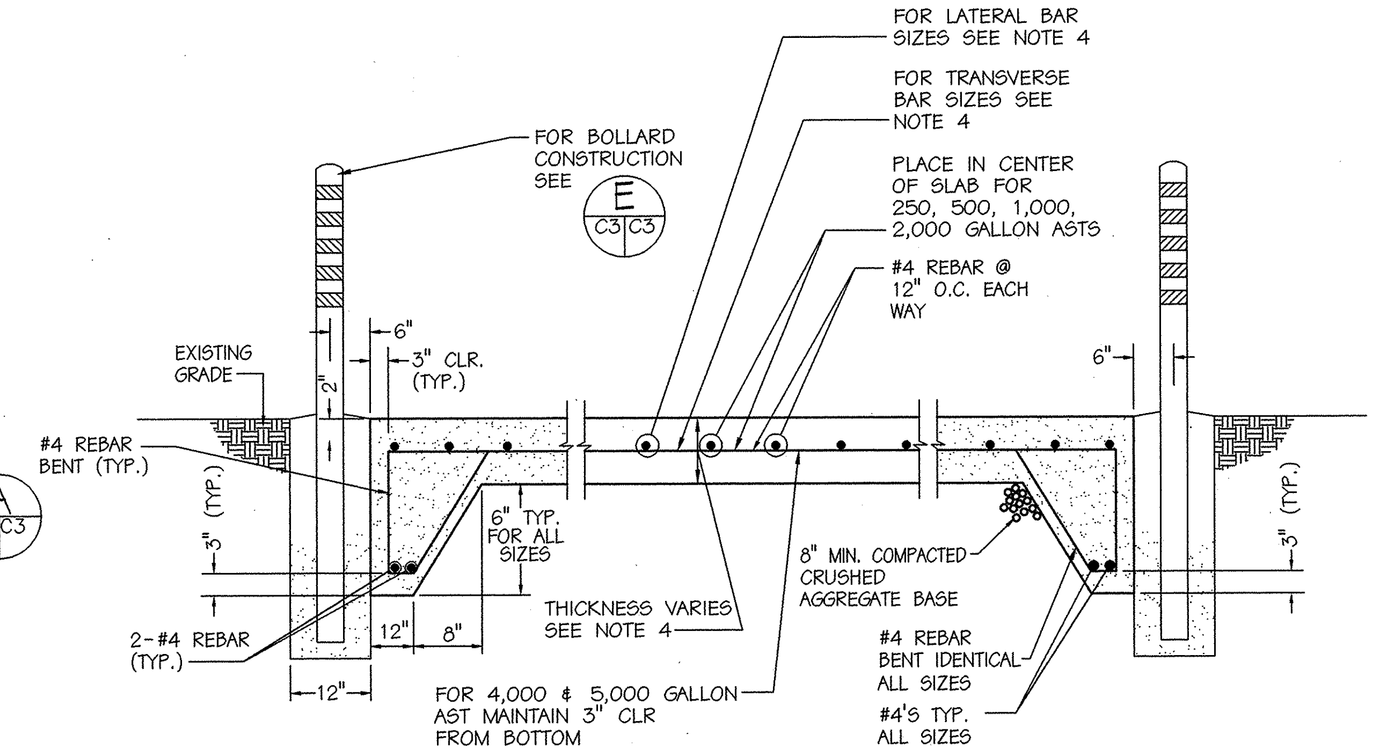


COVERED PIPING TRENCH DETAIL (B)

NOT TO SCALE

CM4	CM5	CM6	CM9	CM10	CM13	CM14 CM15 C3
CM16	CM17	CM18	CM19	CM20	CM21	CM22
CM26	CM27	CM28	CM29	CM31	CM32	CM33
CM34	CM35	C1	M3	M5	CM6	

1 B CM6 C3



NOTES:

1. CONCRETE SLAB SHALL EXTEND A MINIMUM OF 18" ON ALL SIDES FROM SIDE OF TANK.
2. LENGTH & WIDTH OF SLAB NOT SHOWN DUE TO VARIATION IN VAULTED AST CONSTRUCTION (SLAB SIZE WILL BE VARIED DEPENDENT UPON MANUFACTURER).
3. TURN DOWN EDGES SHALL BE PLACED AS SHOWN ON ALL SIDES OF SLAB.
4. SLAB THICKNESS & REBAR SIZE ARE AS FOLLOWS:

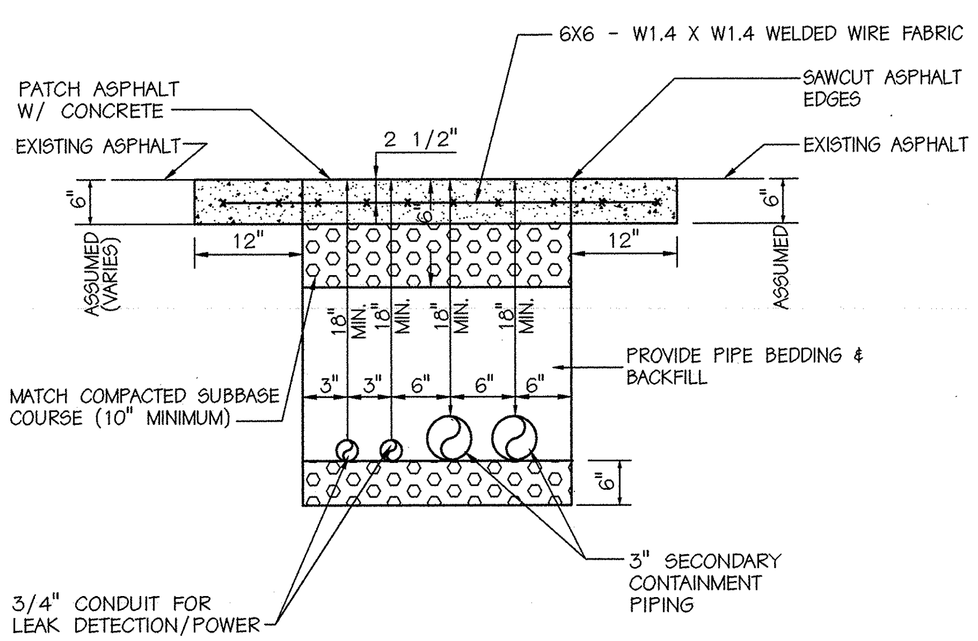
TANK CAPACITY	LATERAL REBAR SIZE	TRANSVERSE REBAR SIZE	SLAB THICKNESS
250 GALLON	#4'S @ 12" O.C.	#4'S @ 12" O.C.	6"
500 GALLON	#4'S @ 12" O.C.	#4'S @ 12" O.C.	6"
1,000 GALLON	#4'S @ 12" O.C.	#4'S @ 12" O.C.	6"
2,000 GALLON	#4'S @ 12" O.C.	#4'S @ 12" O.C.	6"
4,000 GALLON	#5'S @ 10" O.C.	#5'S @ 10" O.C.	12"
5,000 GALLON	#5'S @ 10" O.C.	#5'S @ 10" O.C.	12"

5. CONCRETE SLAB SHALL BE CONSTRUCTED WITH LATERAL & TRANSVERSE CROSS SLOPES OF 1/8"/FOOT.
6. CONCRETE AND REINFORCING STEEL SHALL BE IN COMPLIANCE WITH SPECIFICATIONS.

REINFORCED CONCRETE SLAB FOR NEW AST (C)

NOT TO SCALE

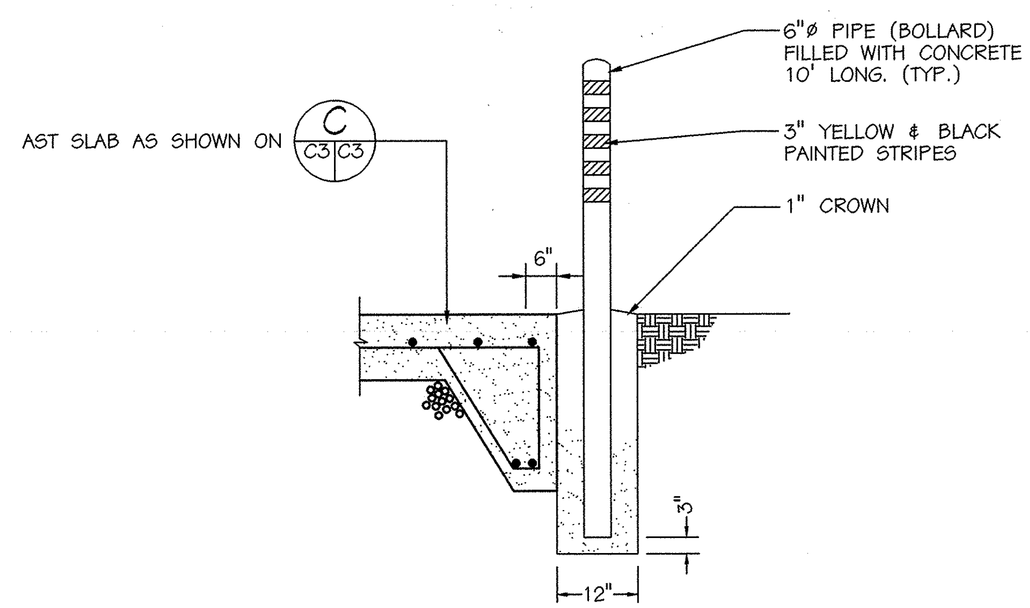
CM6	CM7	CM8	CM9	CM10	CM11	CM12	CM13	CM14	C3
CM15	CM16	CM17	CM18	CM19	CM20	CM21	CM22	CM23	
CM24	CM25	CM26	CM27	CM28	CM29	CM30	CM31	CM32	
CM33	CM34	CM35	C3	M5	M6				



CONCRETE PATCH AND UNDERGROUND PIPE TRENCH DETAIL (D)

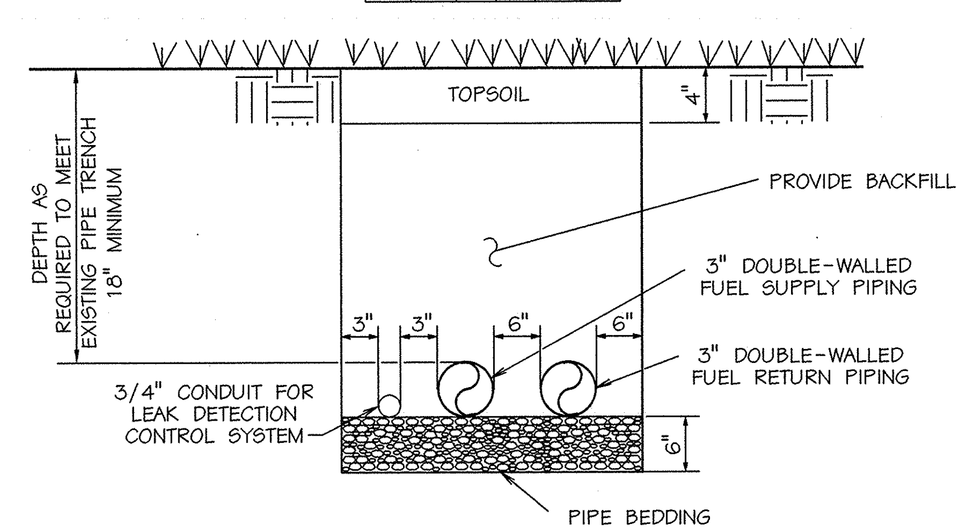
NOT TO SCALE

CM1	CM7	CM26	CM34	C3



BOLLARD DETAIL (E)

NOT TO SCALE



UNDERGROUND PIPE TRENCH DETAIL (F)

NOT TO SCALE

CM6	CM7	CM24	CM25	CM33 C3

REVISIONS					
DESCRIPTION	DATE	APPROVED			
ADD CM6 - B3	8-9-96				

A/E DIRT. DESIGN EFD
MGB DRAWN
RPL REVIEW
CHIEF ARCH./ENGR.
PROJECT MANGER
FIRE PROTECTION
QUALITY CONTROL
BRANCH MANAGER
DESIGN DIRECTOR

DAMES & MOORE
3907 NORTH FRENWA ROAD, RICHMOND, VA 23294 PHONE (804) 285-2000
A/E CONTRACT NO. N62470-93-D-4034
APPROVED
DATE
ACCEPTED AS SATISFACTORY TO
FOR USE ON THE COMMERCIAL WORKS
DATE 7/31/96

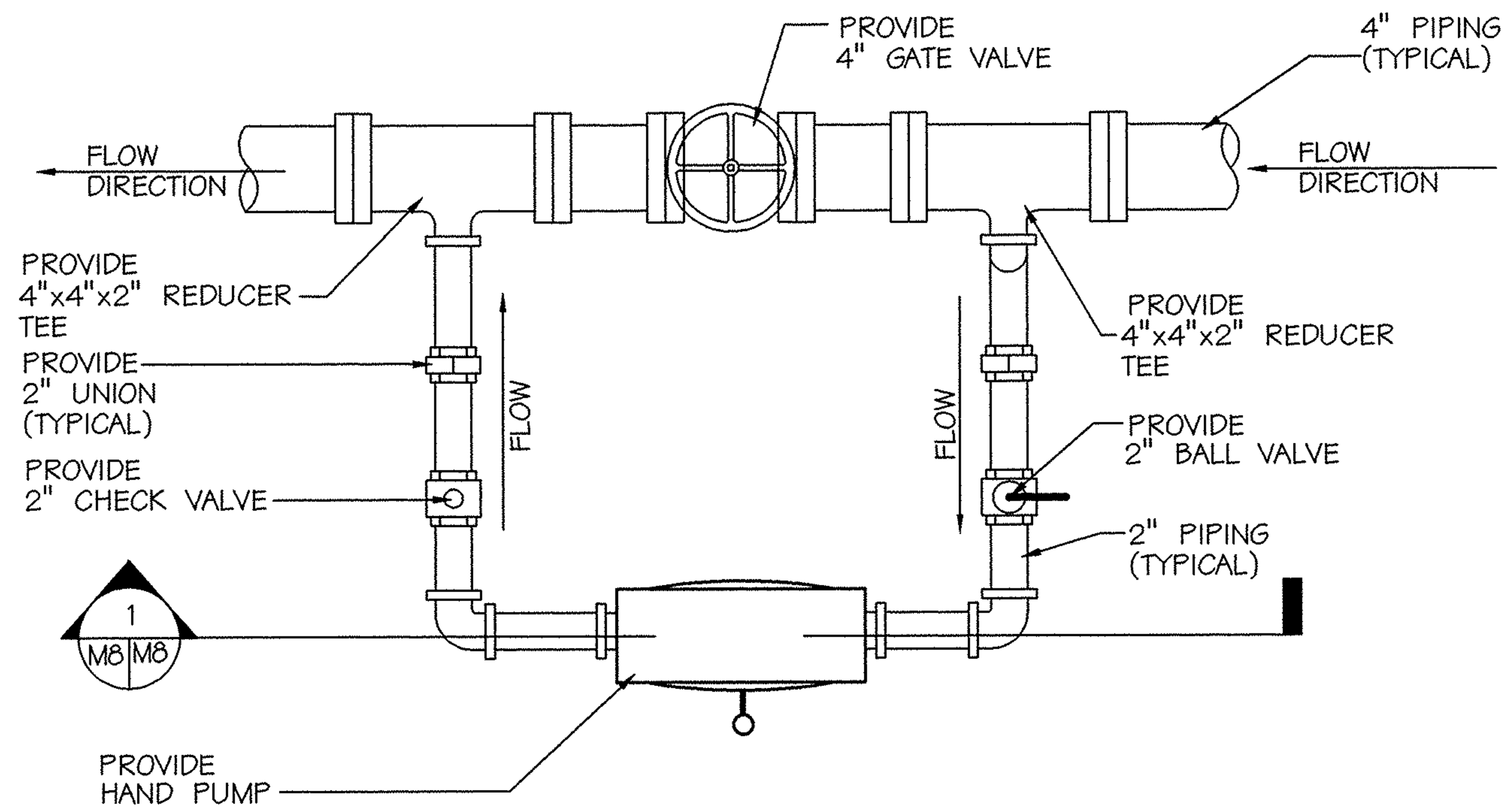
COMMONWEALTH OF VIRGINIA
GRACE E. WOOD
NO. 021005
REGISTERED PROFESSIONAL ENGINEER

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
U.S. NAVAL STATION
GUANTANAMO BAY, CUBA
REMOVE AND REPLACE
UNDERGROUND STORAGE TANKS
CONSTRUCTION DETAILS

CODE ID. NO.	SIZE D
SCALE:	AS SHOWN
EFD NO.	443557
STA. PROJ. NO.	L201
SPEC. NO.	05-96-6833
CONSTR. CONTR. NO.	N62470-96-B-6833
NAVFAC DRAWING NO.	4343557
SHEET	43 of 73

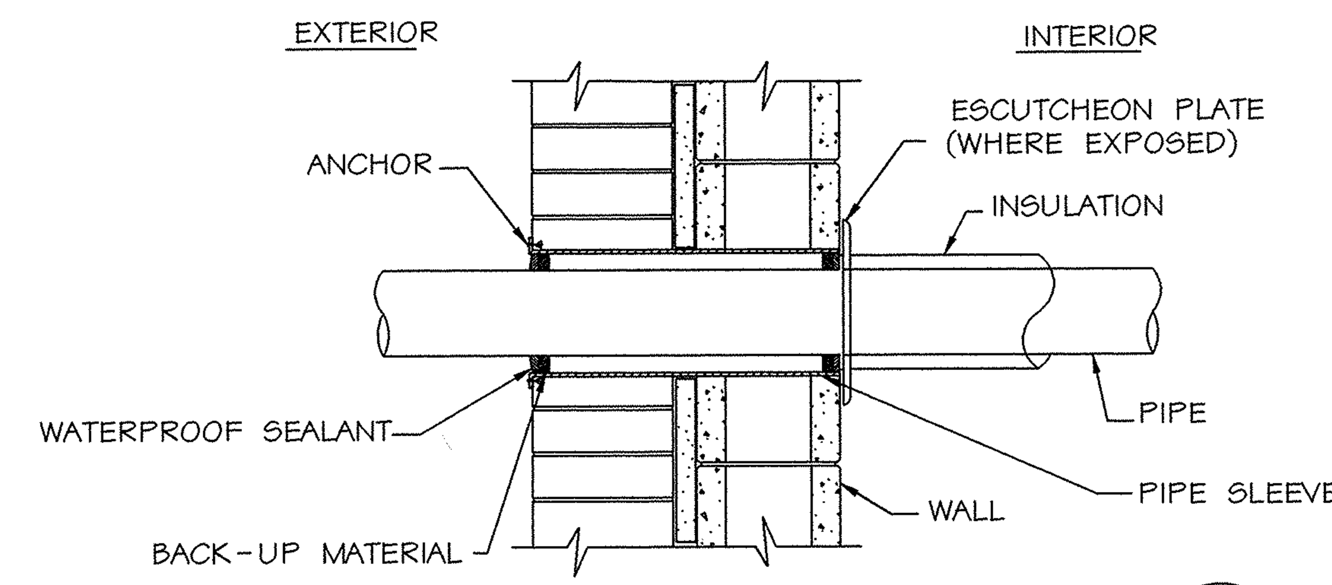
C-3

6833M008.DWG



HAND PUMP PLAN VIEW (A) M1 M2 M8

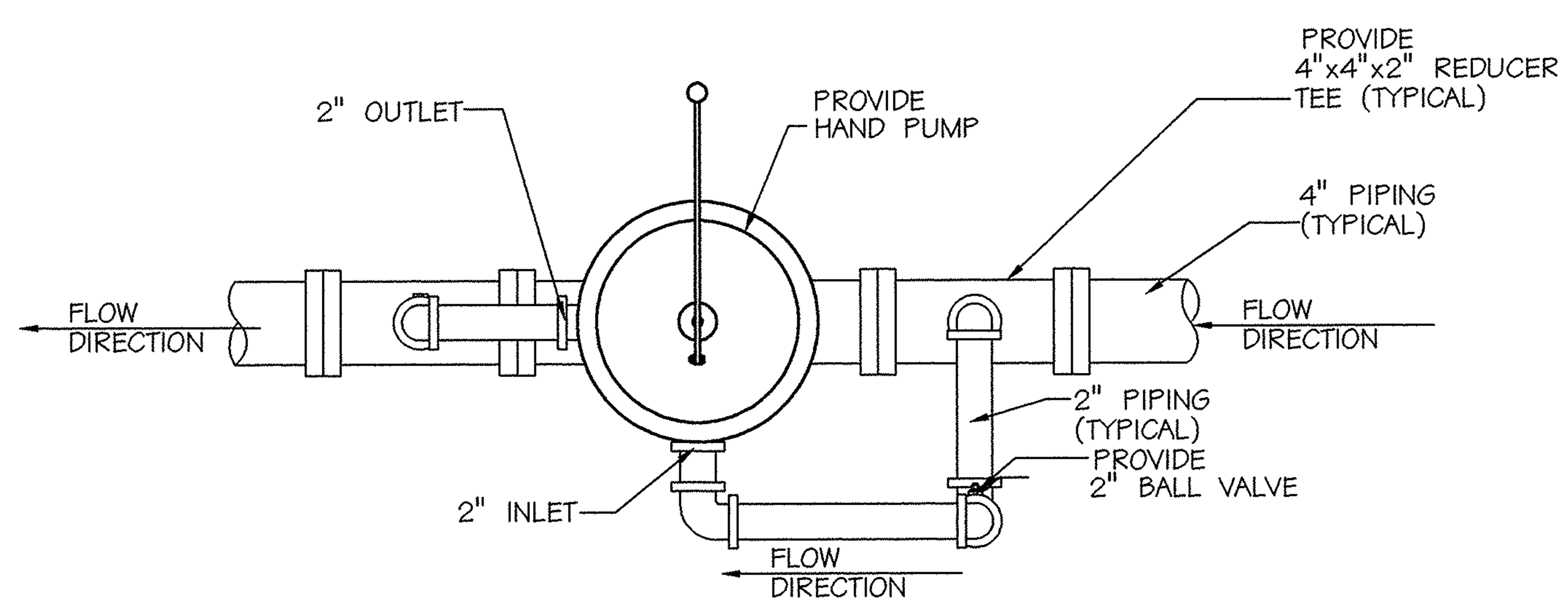
NOT TO SCALE



PIPE SLEEVE THRU EXTERIOR WALL (B) CM26 M8

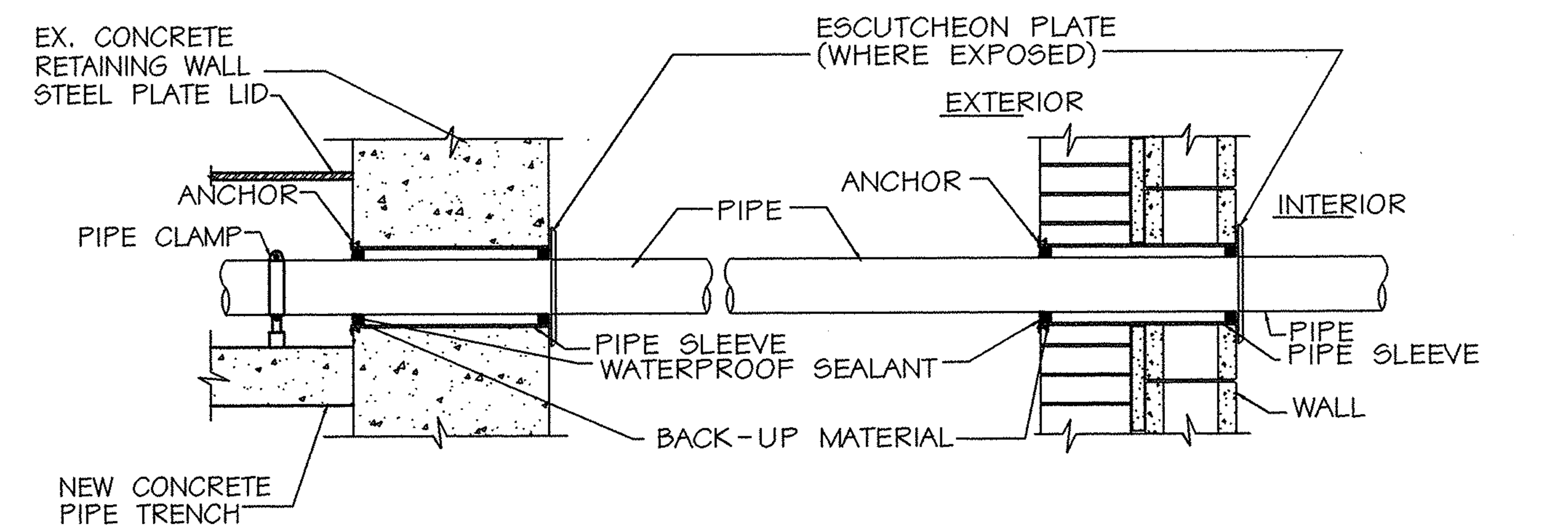
NOT TO SCALE

CM6	CM8	CM11	CM12	CM13	CM26
CM31	CM34	CM35	M7		



HAND PUMP SECTION VIEW (1) M8 M8

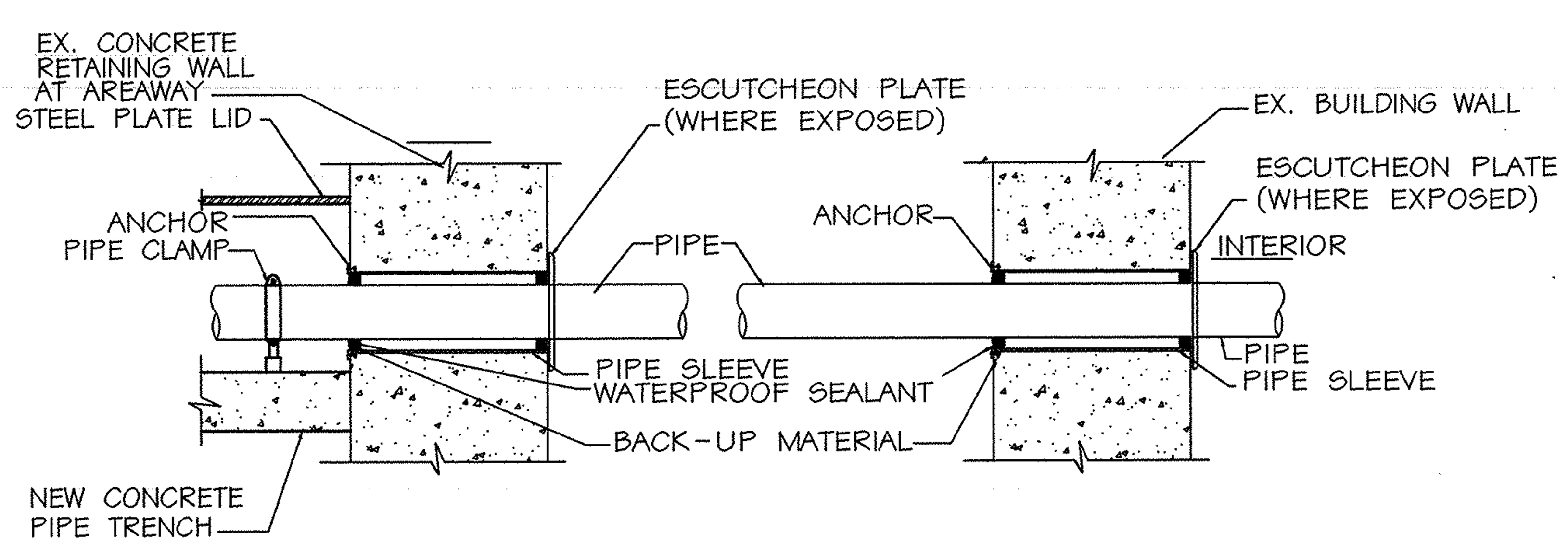
NOT TO SCALE



PIPE SLEEVE THRU EXTERIOR WALL (C) CM21 M8

AT BUILDING 279

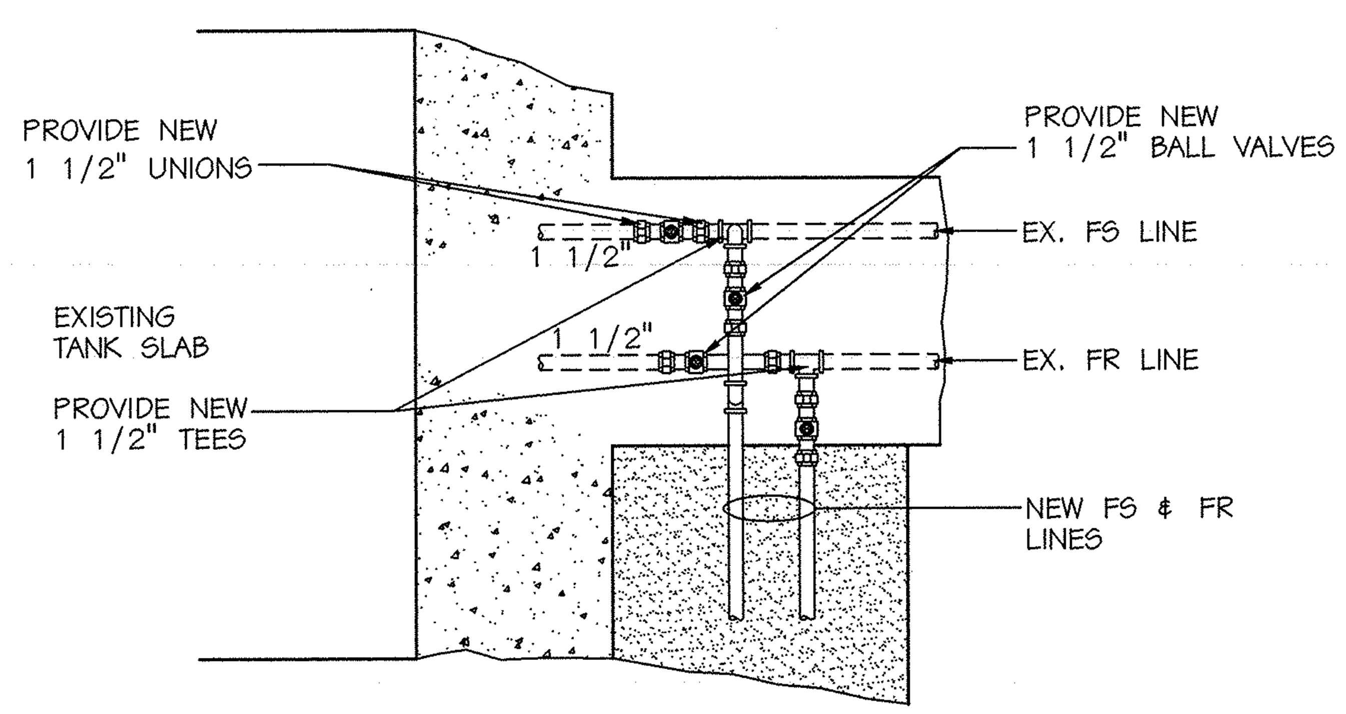
NOT TO SCALE



PIPE SLEEVE THRU EXTERIOR WALL (D) CM10 M8

AT BUILDING AV-525

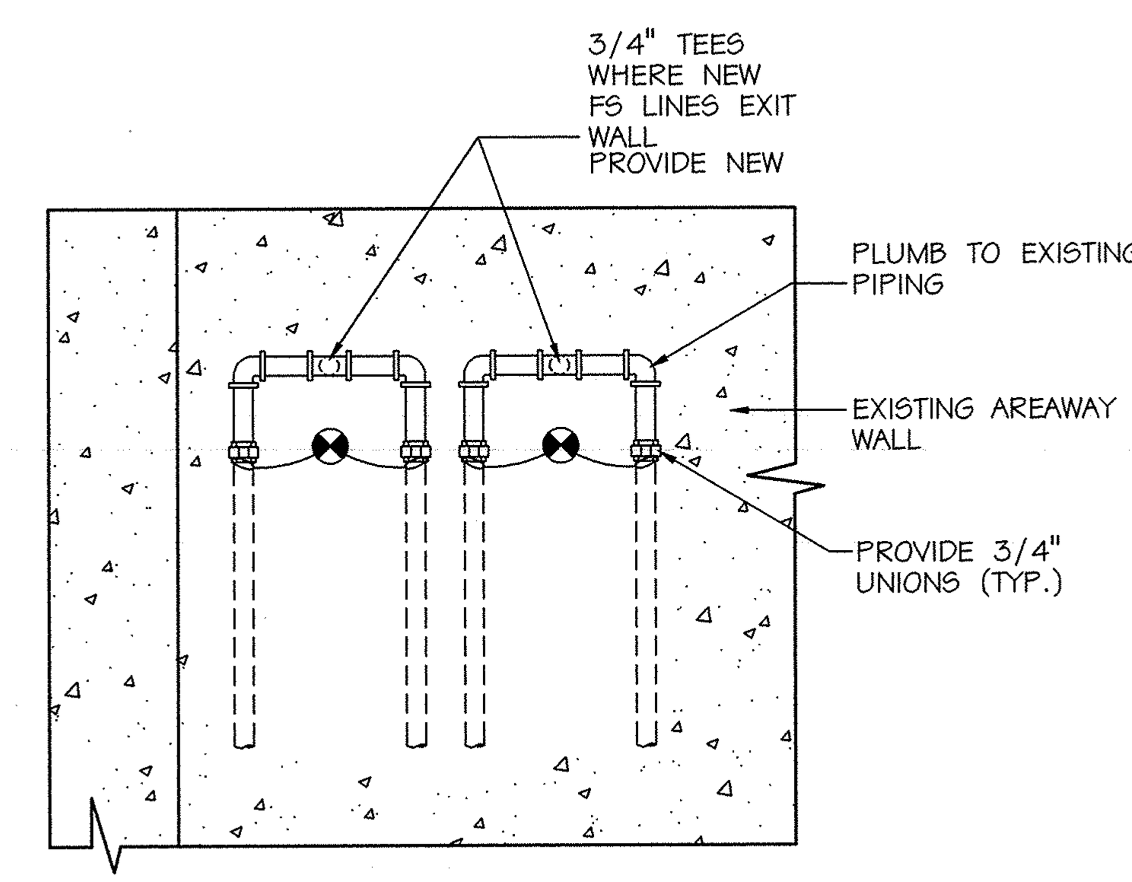
NOT TO SCALE



NEW PIPING MANIFOLD (E) CM6 M8

AT BUILDING H-1

NOT TO SCALE



PIPING CONNECTION (F) CM10 M8

AT BUILDING AV-525

NOT TO SCALE

SYM.	DESCRIPTION	DATE	APPROVED
	REVISIONS		

A/E DRT DESIGN; MGB DRAWN; RPL REVIEW JAG; EFD; CHIEF ARCH./ENGR.; PROJECT MANGER; FIRE PROTECTION; QUALITY CONTROL; BRANCH MANAGER; DESIGN DIRECTOR

DAMES & MOORE

2807 NORTH PARHAM ROAD, RICHMOND, VA 23294 PHONE (804) 965-9000

A/E CONTRACT NO. N62470-93-D-4034

APPROVED DATE

ACTIVITY - SATISFACTORY TO

APPROVED DATE 7/31/96

FOR EFD FOR COMMANDER NAVFAC

COMMONWEALTH OF VIRGINIA GRACE E. WOOD NO. 021005 PROFESSIONAL ENGINEER SEAL

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NORFOLK, VIRGINIA

U.S. NAVAL STATION — GUANTANAMO BAY, CUBA

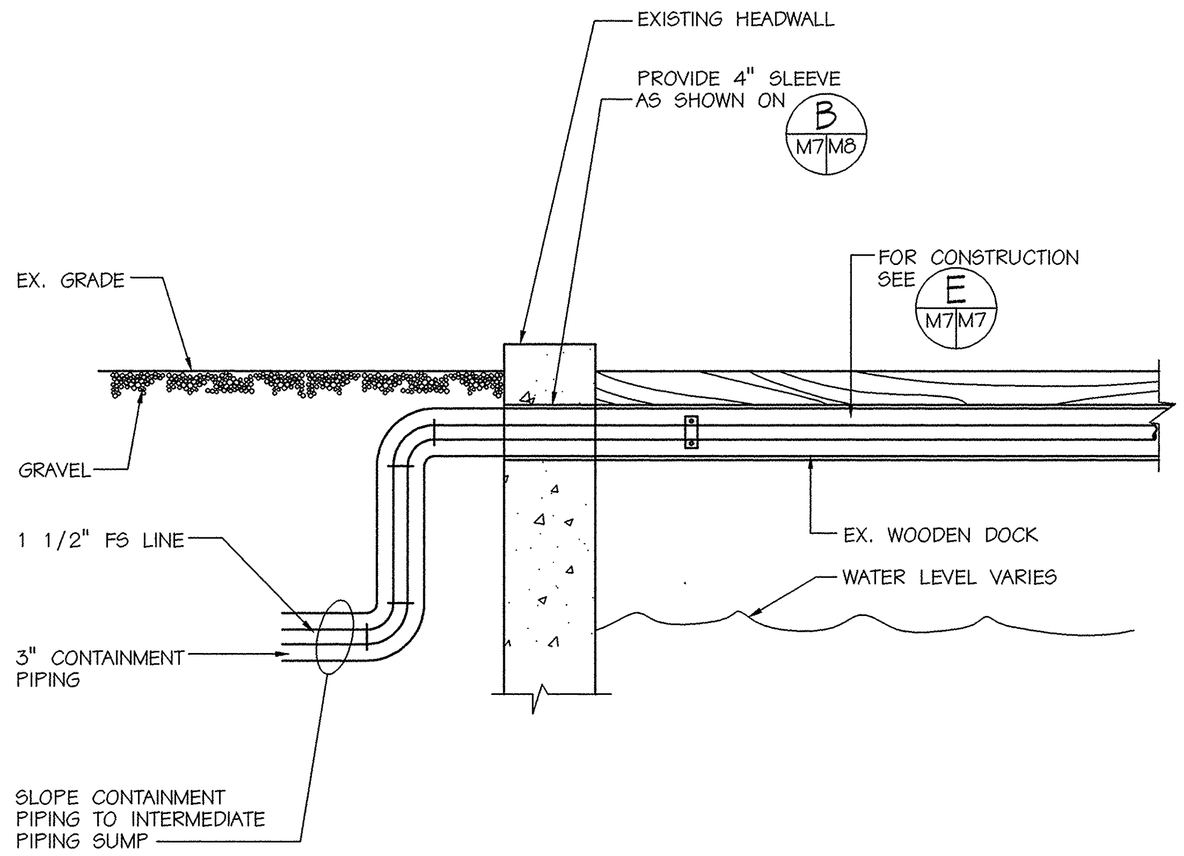
REMOVE AND REPLACE
UNDERGROUND STORAGE TANKS

MISCELLANEOUS DETAILS

CODE ID. NO. — SIZE D
SCALE: AS SHOWN
EFD NO. 443566
STA. PROJ. NO. L201
SPEC. NO. 05-96-6833
CONSTR. CONTR. NO. N62470-96-B-6833
NAVFAC DRAWING NO. 4343566
SHEET 52 OF 73

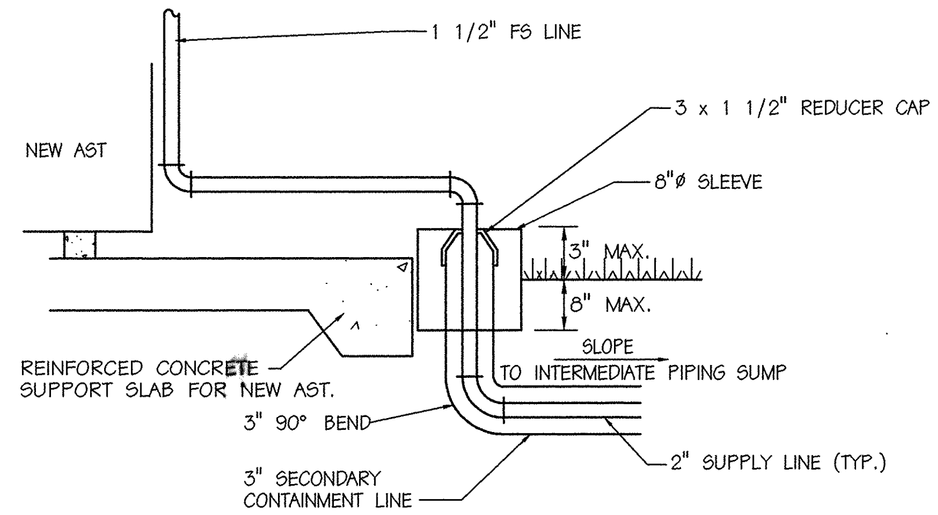
M-8

6833M007.DWG



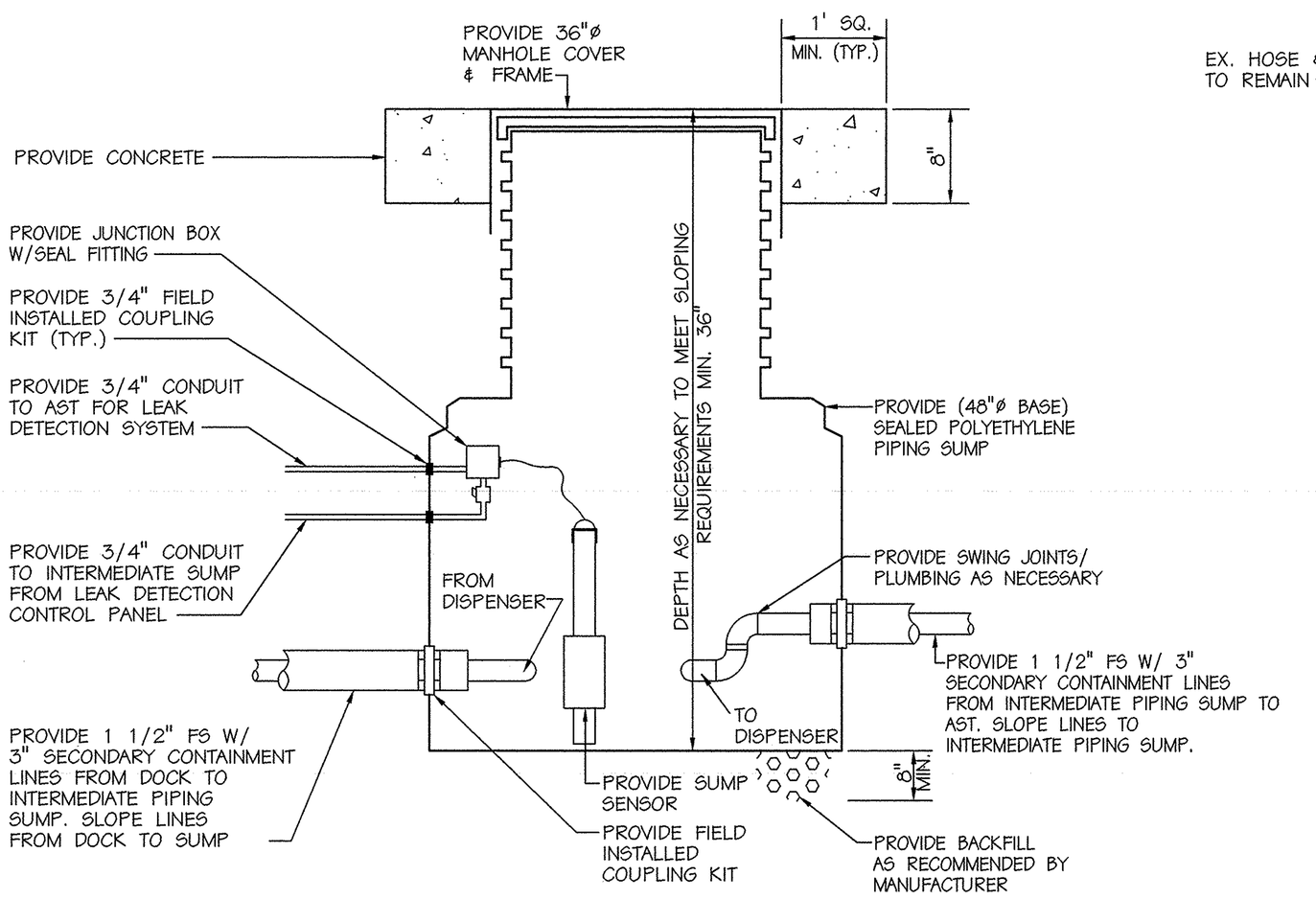
PIPING TRANSITION AT HEADWALL OF MARINA (A CM7|M7)

NOT TO SCALE



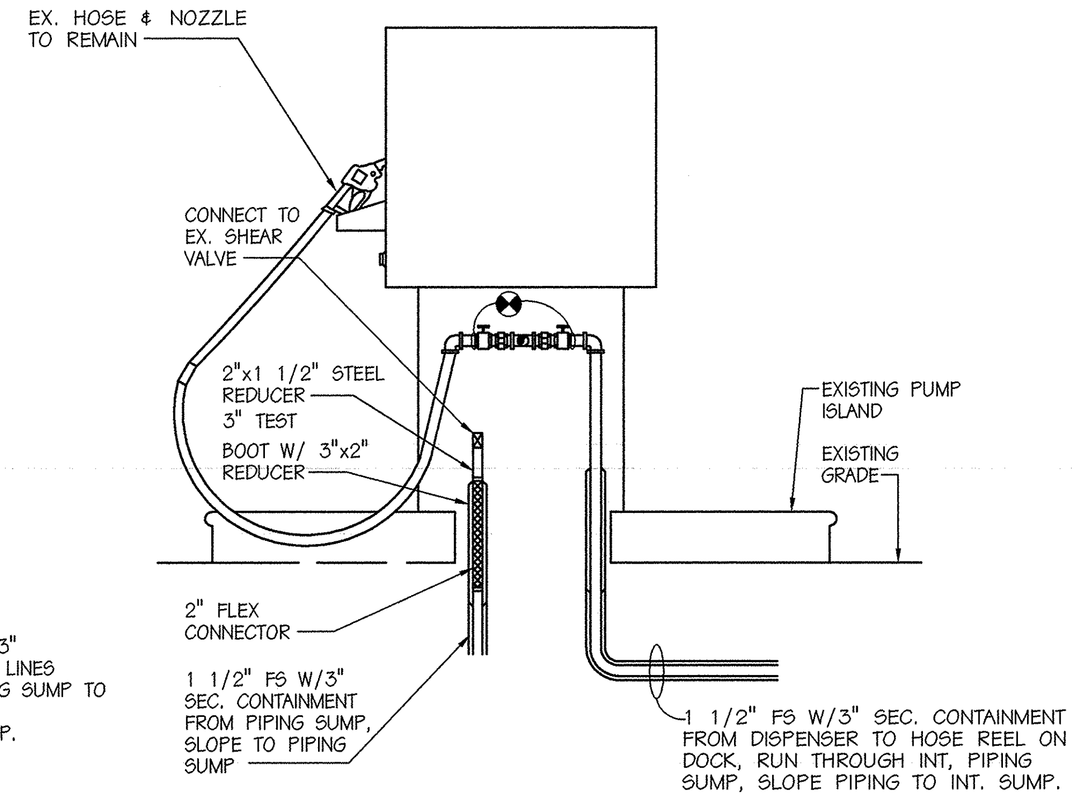
CONTAINMENT PIPING TRANSITION FOR NEW AST AT MWR-2 (B CM7|M6|M7)

NOT TO SCALE



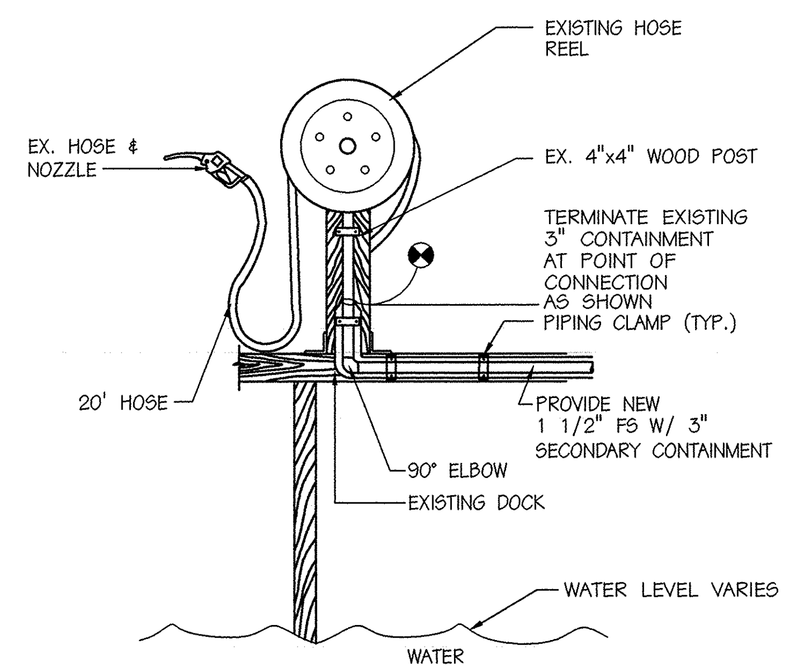
INTERMEDIATE PIPING SUMP DETAIL (C CM7|M7)

NOT TO SCALE



PUMP ISLAND RETROFIT DETAIL (D CM7|M7)

NOT TO SCALE



NEW DOCK PIPING (E CM7|M7|M7)

NOT TO SCALE

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

A/E DIRT — EFD DESIGN; MEB DRAWN; RPL REVIEW; CHIEF ARCH./ENGR.; PROJECT MANAGER; FIRE PROTECTION; QUALITY CONTROL; BRANCH MANAGER; DESIGN MANAGER; DESIGN INSPECTOR

DAMES & MOORE
2002 NORTH PARHAM ROAD, RICHMOND, VA 23294 PHONE (804) 355-2000
A/E CONTRACT NO. N62470-93-D-4034
APPROVED — DATE
ACCEPTANCE RECOMMENDED TO APPROVAL — DATE 7/31/96
FOR ICD FOR COMMERCE MARINE

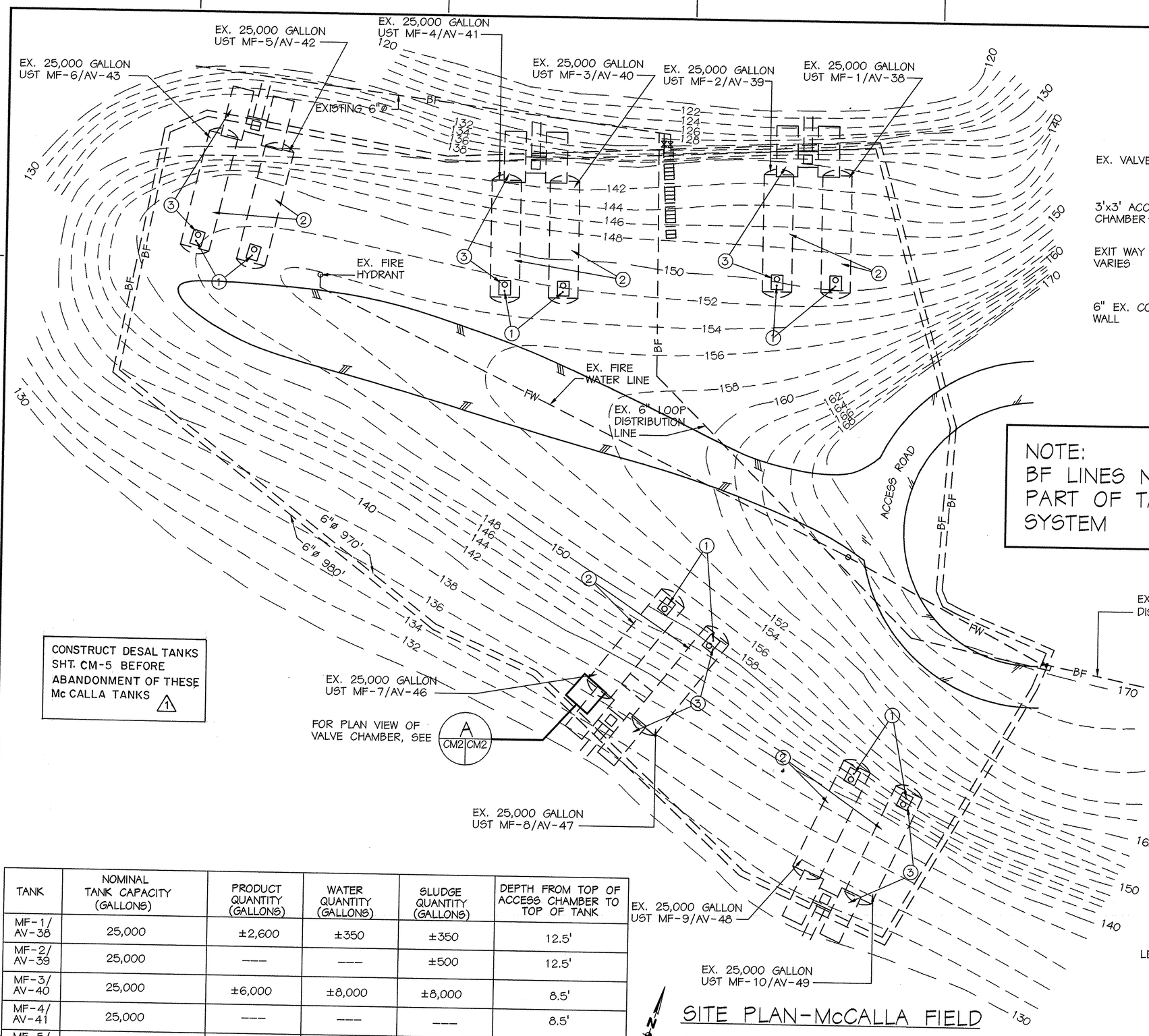
COMMONWEALTH OF VIRGINIA — GRACE E. WOOD — NO. 021005 — PROFESSIONAL ENGINEER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION — NORFOLK, VIRGINIA
U.S. NAVAL STATION — GUANTANAMO BAY, CUBA
REMOVE AND REPLACE UNDERGROUND STORAGE TANKS
PIPING DETAILS

CODE ID. NO.	SIZE D
SCALE:	AS SHOWN
EFD NO.	443565
STA. PROJ. NO.	L201
SPEC. NO.	05-96-6833
CONSTR. CONTR. NO.	N62470-96-B-6833
NAVFAC DRAWING NO.	4343565
SHEET	51 OF 73

M-7

6833CM02.DWG



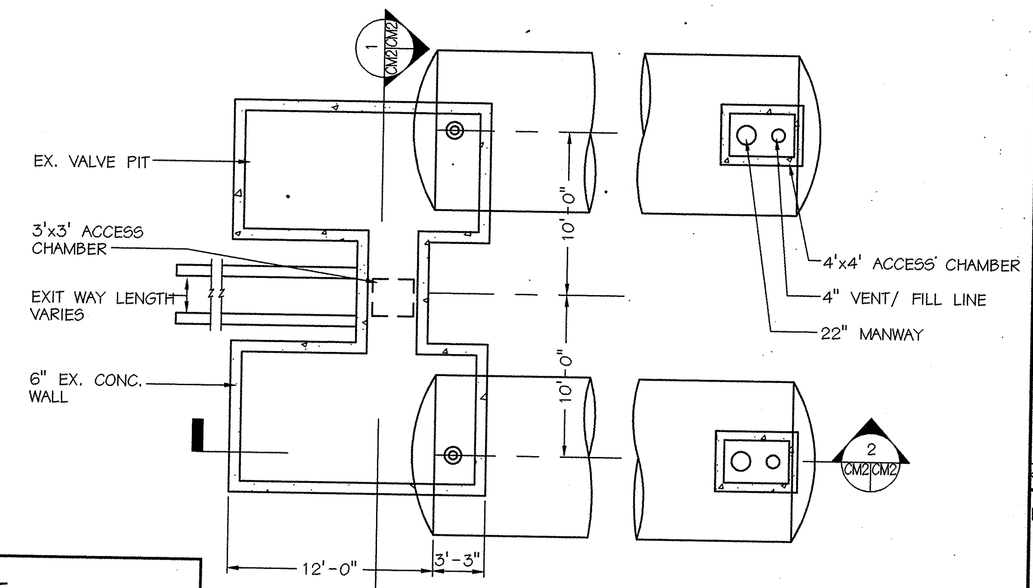
CONSTRUCT DESAL TANKS SHT. CM-5 BEFORE ABANDONMENT OF THESE Mc CALLA TANKS 1

NOTE: BF LINES NOT PART OF TANK SYSTEM

SITE PLAN-McCALLA FIELD

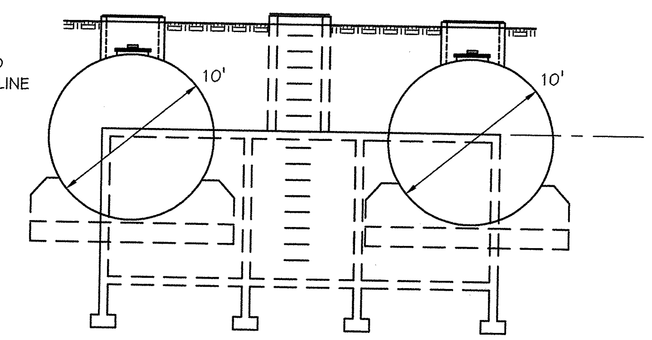
0 20 40 60 100

SCALE: 1" = 20'



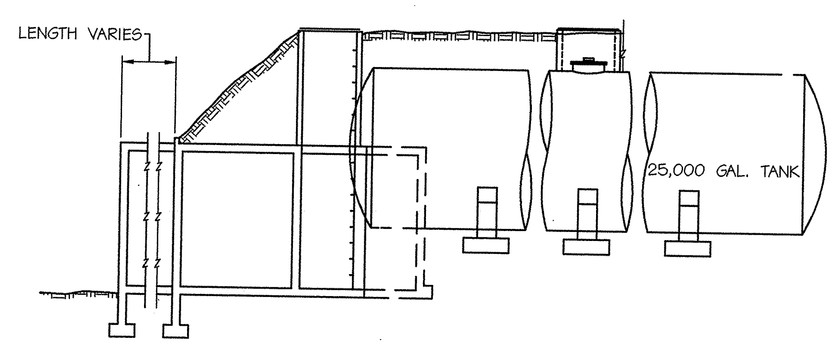
PLAN VIEW A CM2 CM2

NOT TO SCALE



END ELEVATION 1 CM2 CM2

NOT TO SCALE



SIDE VIEW 2 CM2 CM2

NOT TO SCALE

TANK	NOMINAL TANK CAPACITY (GALLONS)	PRODUCT QUANTITY (GALLONS)	WATER QUANTITY (GALLONS)	SLUDGE QUANTITY (GALLONS)	DEPTH FROM TOP OF ACCESS CHAMBER TO TOP OF TANK
MF-1/ AV-38	25,000	±2,600	±350	±350	12.5'
MF-2/ AV-39	25,000	---	---	±500	12.5'
MF-3/ AV-40	25,000	±6,000	±8,000	±8,000	8.5'
MF-4/ AV-41	25,000	---	---	---	8.5'
MF-5/ AV-42	25,000	±5,100	±3,700	±2,200	8.5'
MF-6/ AV-43	25,000	±12,500	±12,500	---	6.5'
MF-7/ AV-46	25,000	±14,550	±1,200	±1,900	8.5'
MF-8/ AV-47	25,000	±1,500	---	---	8.5'
MF-9/ AV-48	25,000	---	---	---	6.5'
MF-10/ AV-49	25,000	---	---	---	6.5'

CONSTRUCTION NOTES:

1. REMOVE EXISTING 4" VENT/FILL LINES ON EACH UST.
2. CLEAN AND ABANDON EACH 25,000 GALLON UST IN PLACE.
3. DEMOLISH CONCRETE ACCESS CHAMBER AND VALVE CHAMBER TO MINIMUM OF 6" BELOW GRADE. FILL REMAINING VOID SPACE IN CHAMBERS WITH BACKFILL. BACKFILL DISTURBED AREAS W/MINIMUM OF 6" OF TOPSOIL, GRADE & SEED TO MATCH SURROUNDING CONTOURS. NO REMNANTS OF THE EXISTING CHAMBERS SHALL BE VISIBLE UPON COMPLETION OF SITE WORK.

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED
1	ADD SCHEDULE NOTE	8-17-98	

A/E CONT. DESIGN SPD; DRAWN MGB; REVIEW RPL; CHIEF ARCH./ENGR.; PROJECT MANAGER; FIRE PROTECTION; QUALITY CONTROL; BRANCH MANAGER; DESIGN DIRECTOR

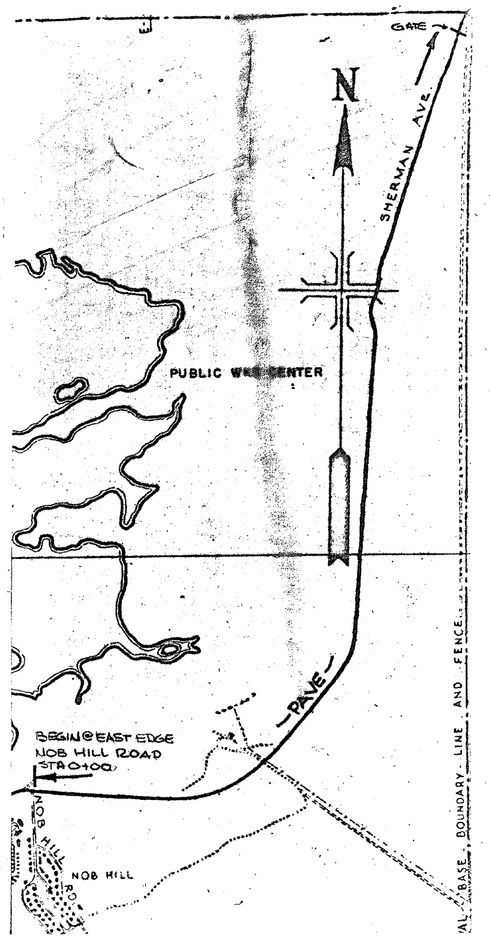
DAMES & MOORE
2807 NORTH PARHAM ROAD, RICHMOND, VA. 23294 PHONE (804) 285-8000
A/E CONTRACT NO. N62470-93-D-4034
APPROVED DATE
ACCEPTED AS SATISFACTORY TO THE STA. CONTRACTOR NAVFAC DATE 7/31/96

COMMONWEALTH OF VIRGINIA GRACE E. WOOD NO. 021005 REGISTERED PROFESSIONAL ENGINEER SEAL

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
U.S. NAVAL STATION
GUANTANAMO BAY, CUBA
REMOVE AND REPLACE UNDERGROUND STORAGE TANKS
SITE PLAN-McCALLA FIELD

CODE ID. NO. SIZE D
SCALE: AS SHOWN
EFD NO. 443521
STA. PROJ. NO. L201
SPEC. NO. 05-96-6833
CONSTR. CONTR. NO. N62470-96-B-6833
NAVFAC DRAWING NO. 4343521
SHEET 7 OF 73
CM-2

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED
(A)	REVISED AS-BUILT	7/13/82	WEG



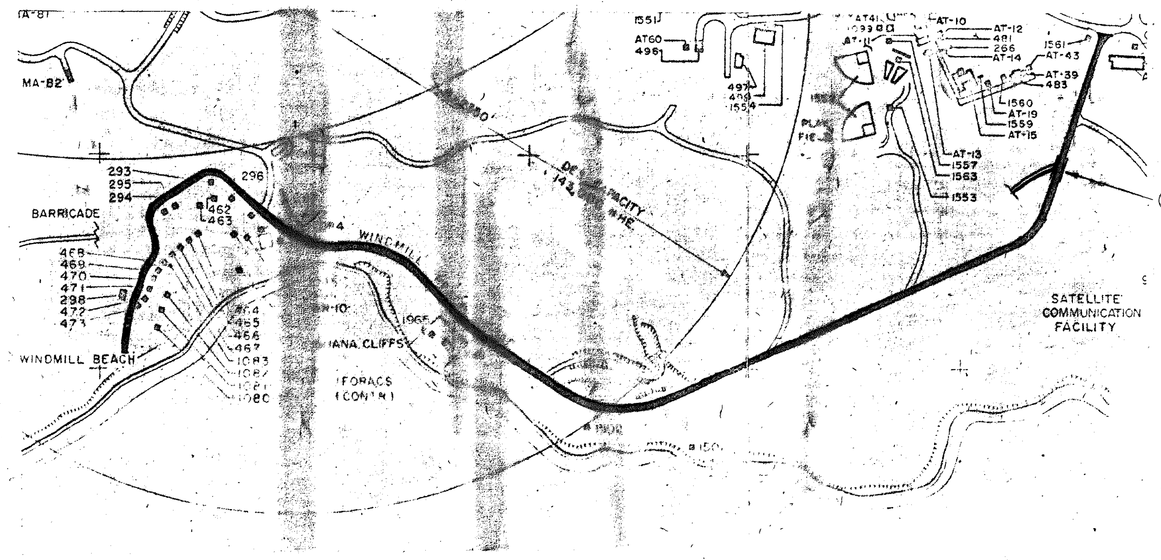
SHERMAN AVENUE

LENGTH: 16,182'
WIDTH: 22'

STA 0+00 TO 73+00 SINGLE PASS, SLURRY SEAL
STA 73+00 TO 161+82 DOUBLE PASS, SLURRY SEAL

PATCHING

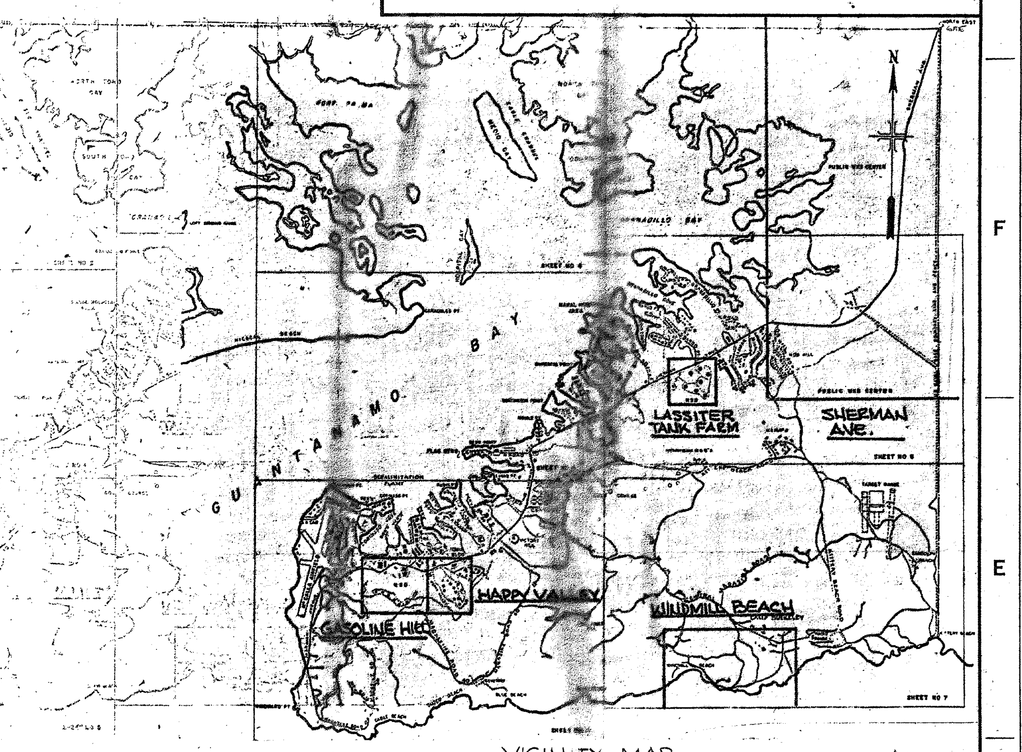
STATION	SIZE SQYD	TYPE (SEE DETAIL)
59+20	1	BASE
68+07	3	"
68+37	3	"
68+36	45	"
70+85	3	"
73+09	11	"
75+80	34	"
79+50 to 80+52	114	"
85+29	11	"
85+73	3	"
86+39	3	"
94+95	1	"
95+96 to 97+01	117	"
102+29 to 103+32	115	"
112+85 to 113+74	83	"
115+22 to 115+82	147	FULL ROAD WIDTH
116+17 to 116+89	80	BASE
117+57	39	"
119+68 to 120+05	88	FULL ROAD WIDTH
123+92	11	BASE
125+14	11	"
126+50 to 127+41	112	"
135+88 to 136+48	80	"
136+87 to 137+84	129	"
139+65	5	"
155+71	11	"
TOTAL	1260	



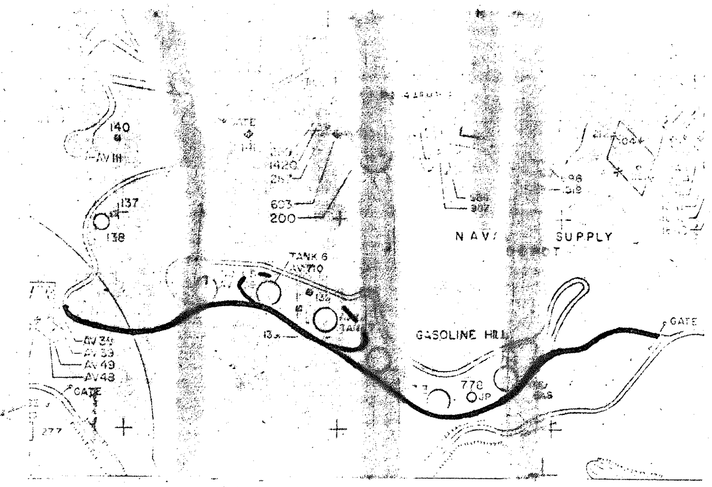
(A) CLAY BASE REMOVED, CORAL BASE ADDED & CUT DITCH TO CANYON

WINDMILL BEACH ROAD

LENGTH: 6338' WIDTH: 20' - SINGLE PASS, SLURRY SEAL
THERE ARE 400± ea 1'x1'x1' SURFACE PATCHES REQUIRED (50±SY)

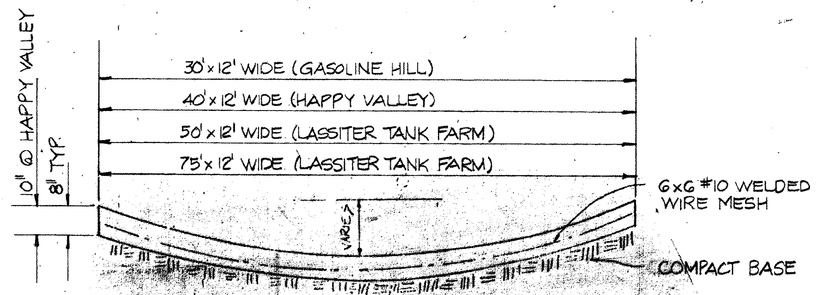


VICINITY MAP

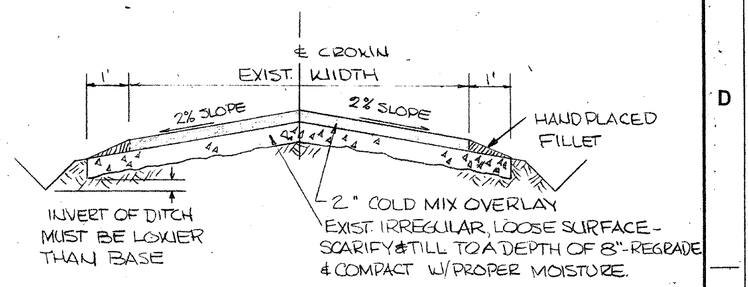


GASOLINE HILL

LENGTH: 3276' WIDTH: 10' = 3640 SY
FULL ROAD WIDTH REPAIR

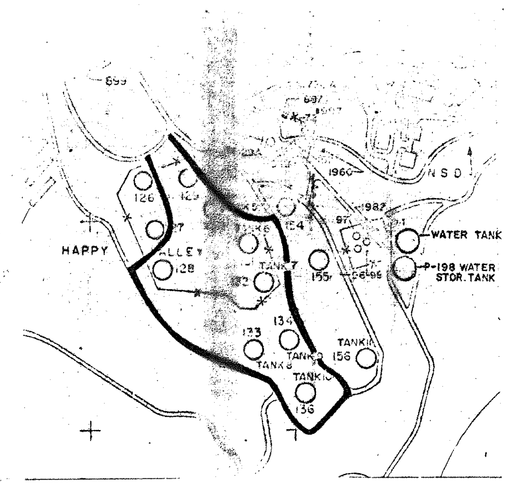


(A) DETAIL OF NEW CONC. SWALE
NOT TO SCALE



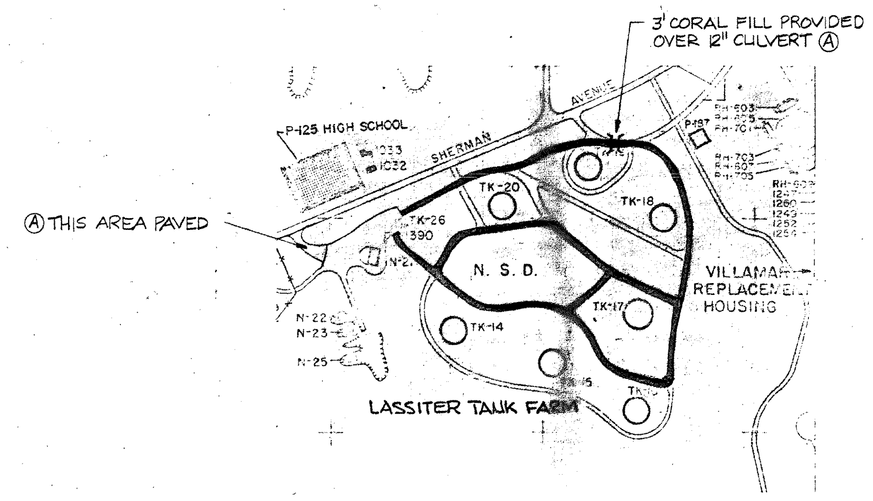
FULL ROAD WIDTH REPAIR

NO SCALE



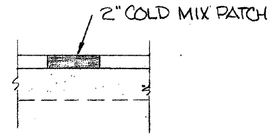
HAPPY VALLEY

LENGTH: 3164' WIDTH: 10' = 3516 SY
FULL ROAD WIDTH REPAIR



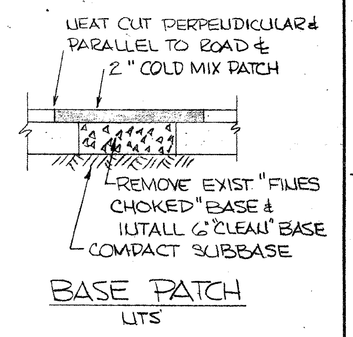
LASSITER TANK FARM

LENGTH: 5573' WIDTH: 10' = 6192 SY
FULL ROAD WIDTH REPAIR



SURFACE PATCH

NTS



BASE PATCH

NTS

RECORD DRAWING LETTER DATED 12 APR 1982

C-1

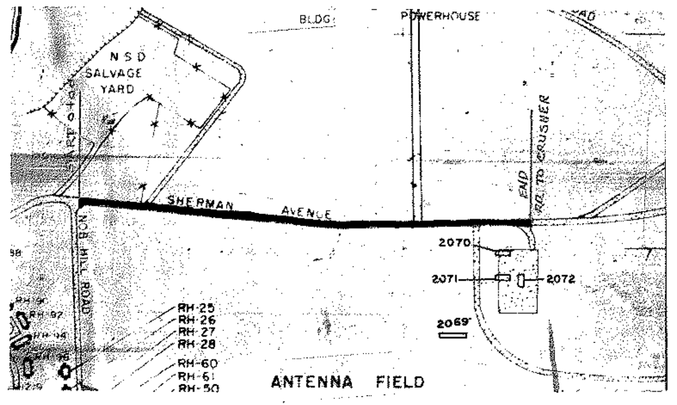
EFD DWG. NO.	147127
JOB ORDER NO.	340 09112
DES	W.R. GIBBINGS PE
DRWN.	WRG 1/31/79
TR.	
CHK.	EGC F.P.
BR. MGR.	HK
DES. DIR.	
SATISFACTORY TO	DATE
APPROVED	DATE
	FOR EFD FOR COMMANDER NAVFAC

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.
U.S. NAVAL STATION GUANTANAMO BAY, CUBA

ROAD REPAIRS

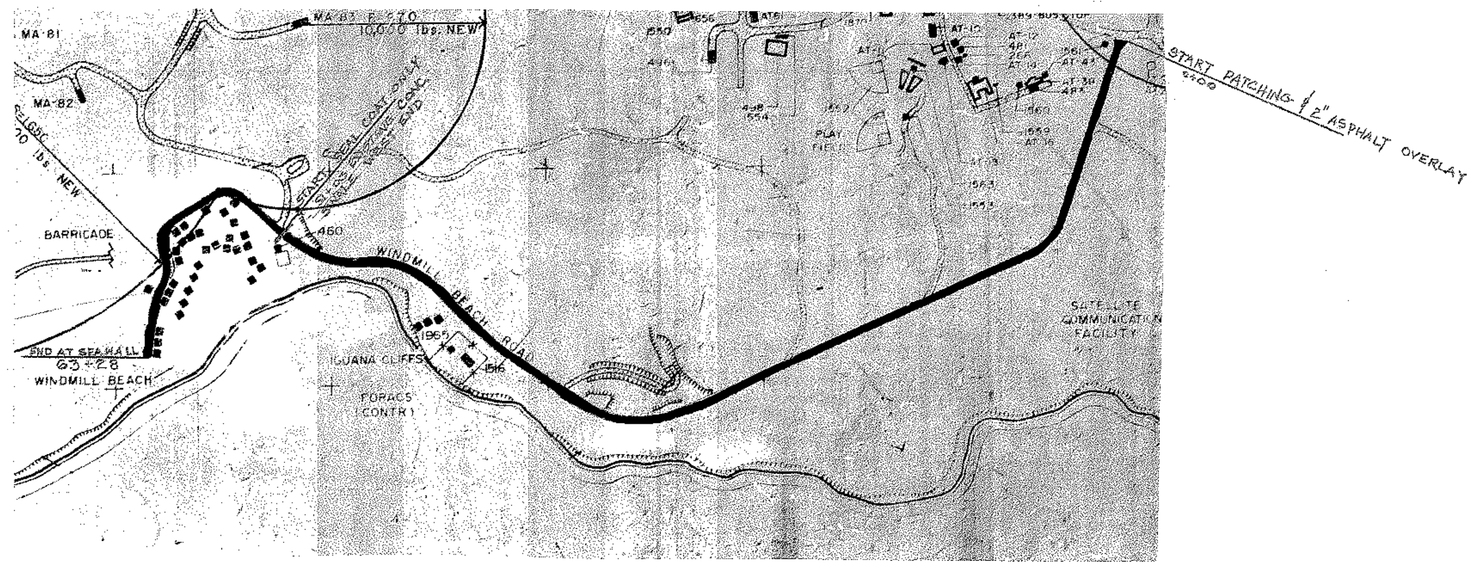
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4047127
		CONSTR. CONTR. NO. N62470-79-B-9112
SCALE NONE	SPEC. 05-79-9112	SHEET 1 OF 1

1080 PWD #



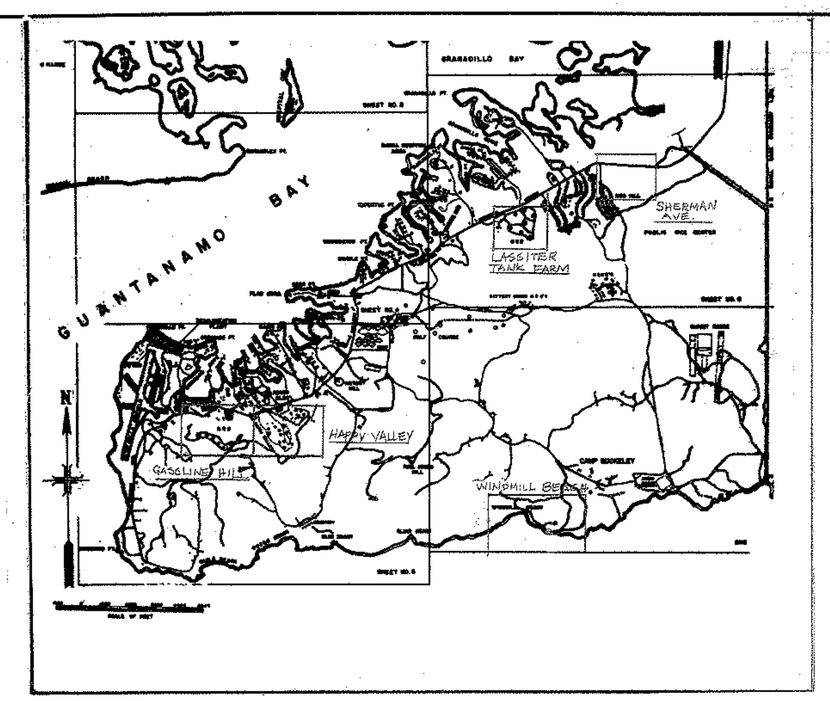
SHERMAN AVENUE
LENGTH 2965'
WIDTH 22'

PRIORITY 4



WINDMILL BEACH ROAD
LENGTH WIDTH 20' ±

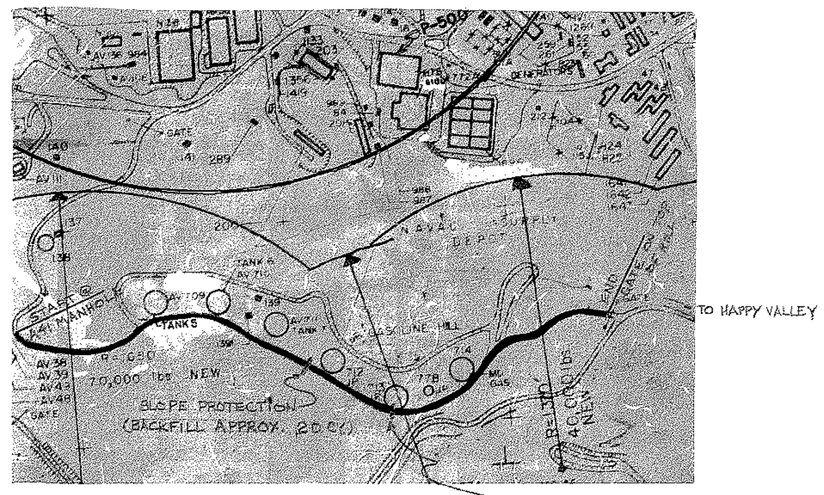
PRIORITY 5



VICINITY MAP

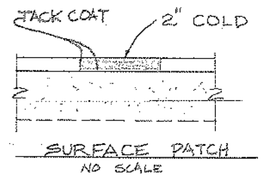
LOCATION		DESCRIPTION	TYPE	QUANITY
STA 0+38 TO STA 0+53		4' WIDE, NORTH EDGE OF RD	BASE	7SY.
" 1+07 " "	1+88	3' WIDE, NORTH OF CENTER LINE	"	27SY.
" 13+22 " "	13+38	2' WIDE, SOUTHSIDE EDGE OF RD.	"	4 SY.
" 13+82 " "	13+96	3' WIDE, " " " " "	"	5 SY.
" 19+78 " "	21+70	5' WIDE, NORTH OF CENTER LINE.	"	107 SY.
" 20+15 " "	21+70	5' WIDE, SOUTH EDGE OF RD.	"	86 SY
" 22+27 " "	23+46	½ OF ROAD	"	155 SY
" 24+10 " "	24+47	4' WIDE NORTH EDGE OF RD	"	17 SY
" 24+47 " "	24+62	1' WIDE NORTH EDGE OF RD	"	2 SY
" 25+20 " "	25+29	2' WIDE NORTH SIDE OF RD	"	2 SY
" 27+85 " "	28+64	2' WIDE NORTH OF CENTERLINE	"	18 SY
" 28+55 " "	29+65	1' WIDE NORTH OF CENTERLINE.	"	13 SY
~~STA 0+00 " " 29+65~~		~~22' WIDE (TOTAL ROAD)~~	~~SLURRY SEAL 7240 SY.~~	△ OMIT

OMIT △ STA 0+00 TO 81+03 REPAIR 1900' SURFACE PATCHES (APPROX. 156 SY.)
" 0+00 TO 51+03 2" ASPHALT OVERLAY
~~" 51+03 TO 63+38 SINGLE PASS SLURRY SEAL~~

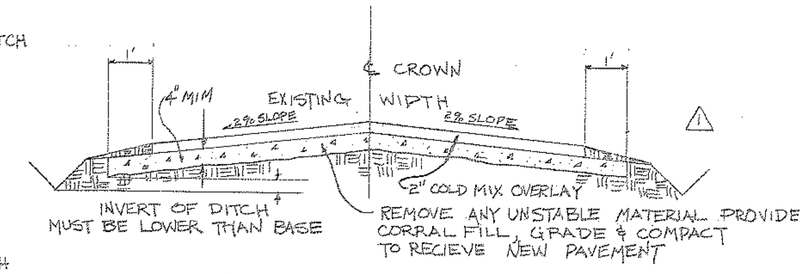


GASOLINE HILL
LENGTH 3276, WIDTH 10' = 3640 SY
FULL ROAD WIDTH REPAIRS

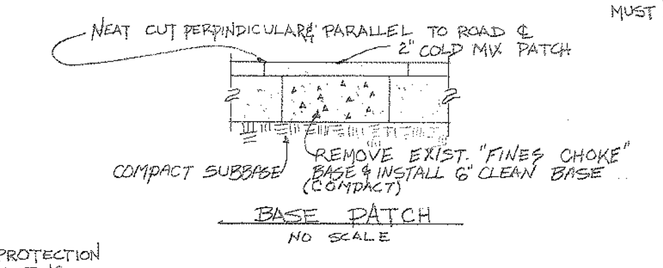
PRIORITY 1



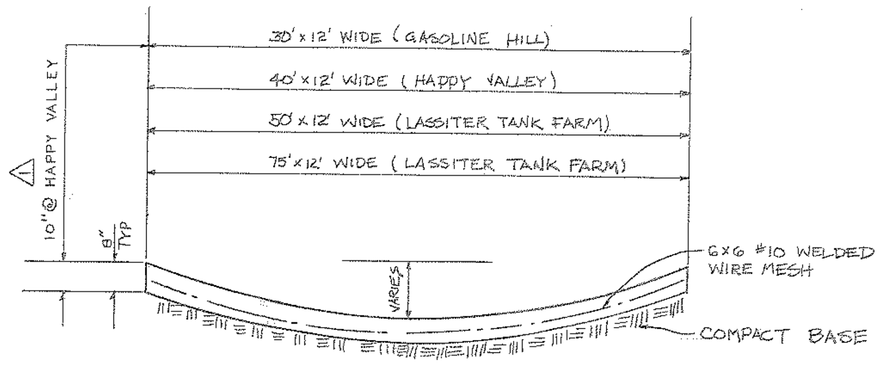
SURFACE PATCH
NO SCALE



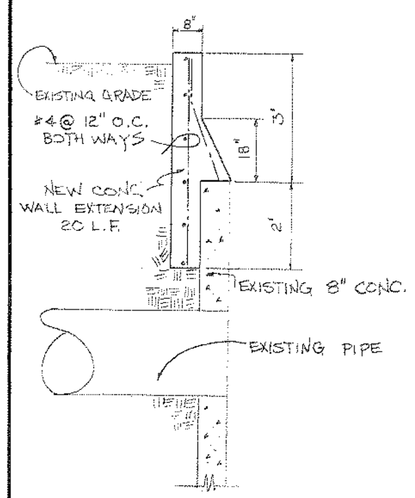
FULL ROAD WIDTH REPAIR
NO SCALE



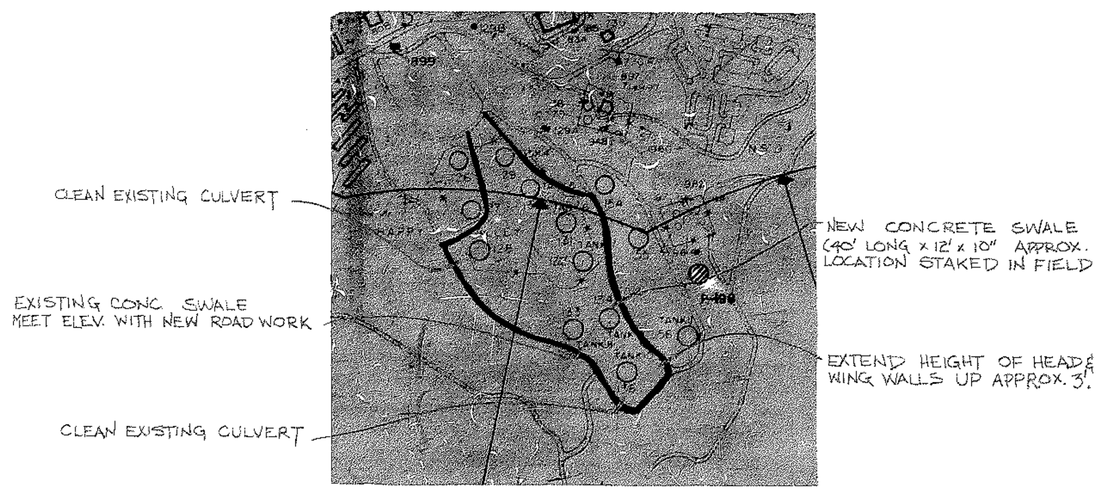
BASE PATCH
NO SCALE



DETAIL OF NEW CONC. SWALE
NOT TO SCALE

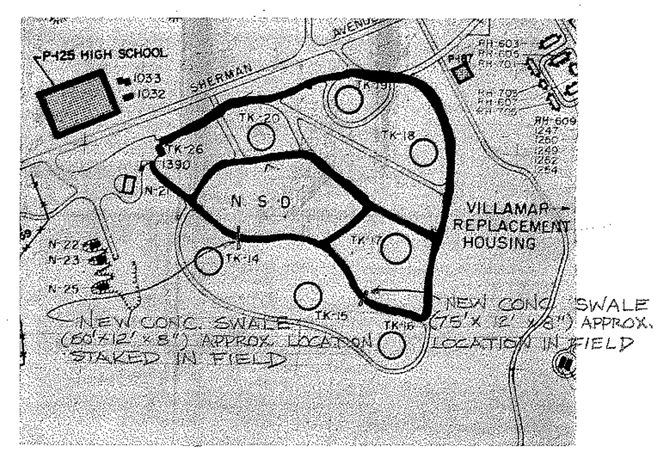


SECTION OF HEADWALL
NO SCALE



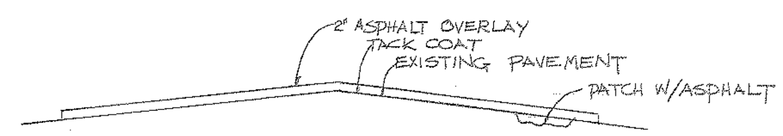
HAPPY VALLEY
LENGTH 3164', WIDTH 10' = 3516 SY.
FULL ROAD WIDTH REPAIR

PRIORITY 2



LASSITER TANK FARM
LENGTH 5573' WIDTH 10' = 6192 SY
FULL ROAD WIDTH REPAIR

PRIORITY 3



DETAIL OF OVERLAY
NOT TO SCALE

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED
△	NEGOTIATED REVISIONS	J.L.N.	6/8/81	

REVISIONS

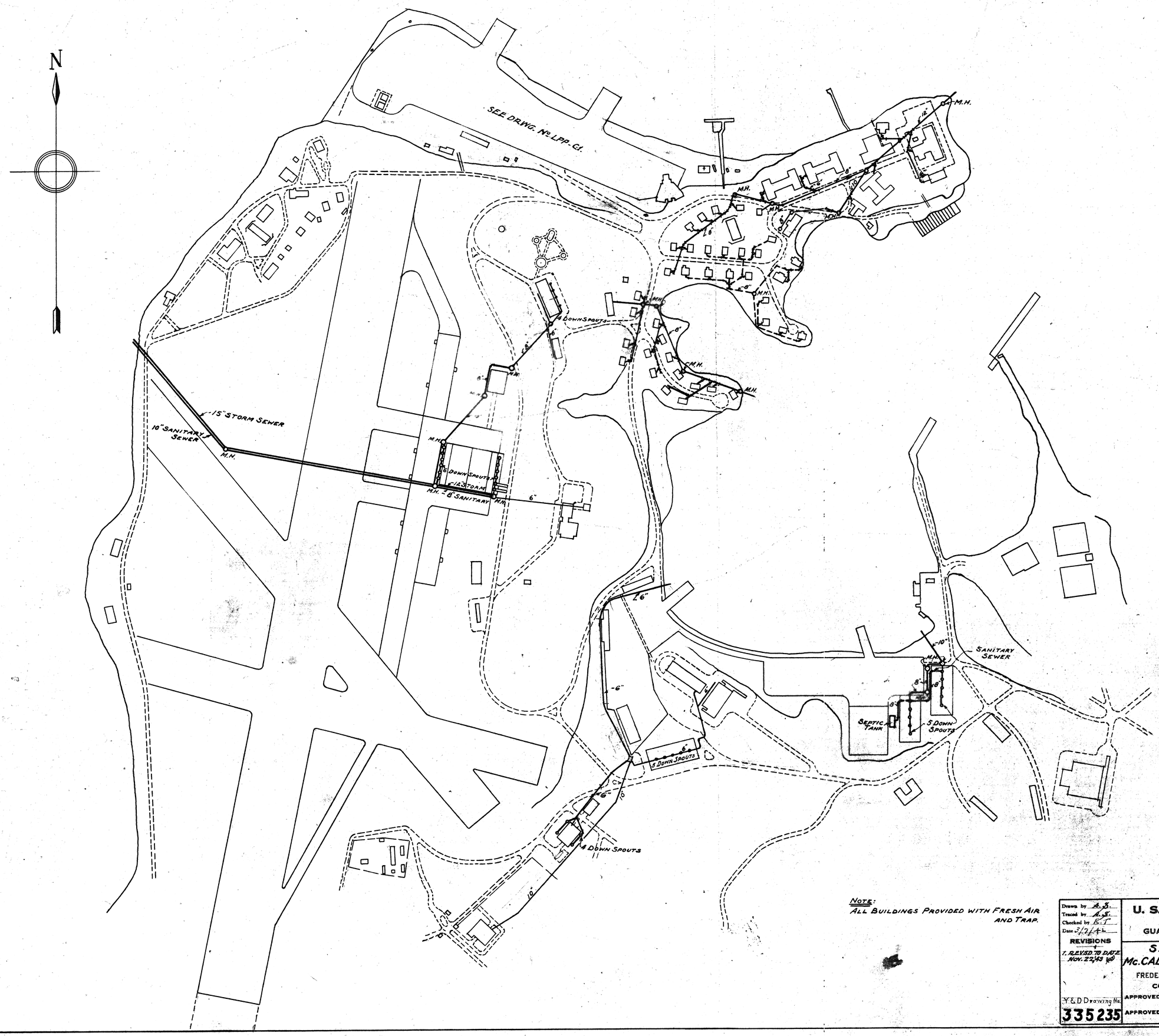
DES C. FISH
DRWN FOSTER
CHK DWF
SUPV
ENG OFF
SATISFACTORY TO
DATE
APPROVED — PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U.S. NAVAL STATION — GUANTANAMO BAY, CUBA

REVISION TO ROAD REPAIRS
(CONTRACT N62470-79B-9112)

SIZE F | CODE IDENT NO. | NAVFAC DRAWING NO. 4062601
SCALE: NONE | SHEET 1 OF 1

CONT. N62470-79B-9112 REVISED



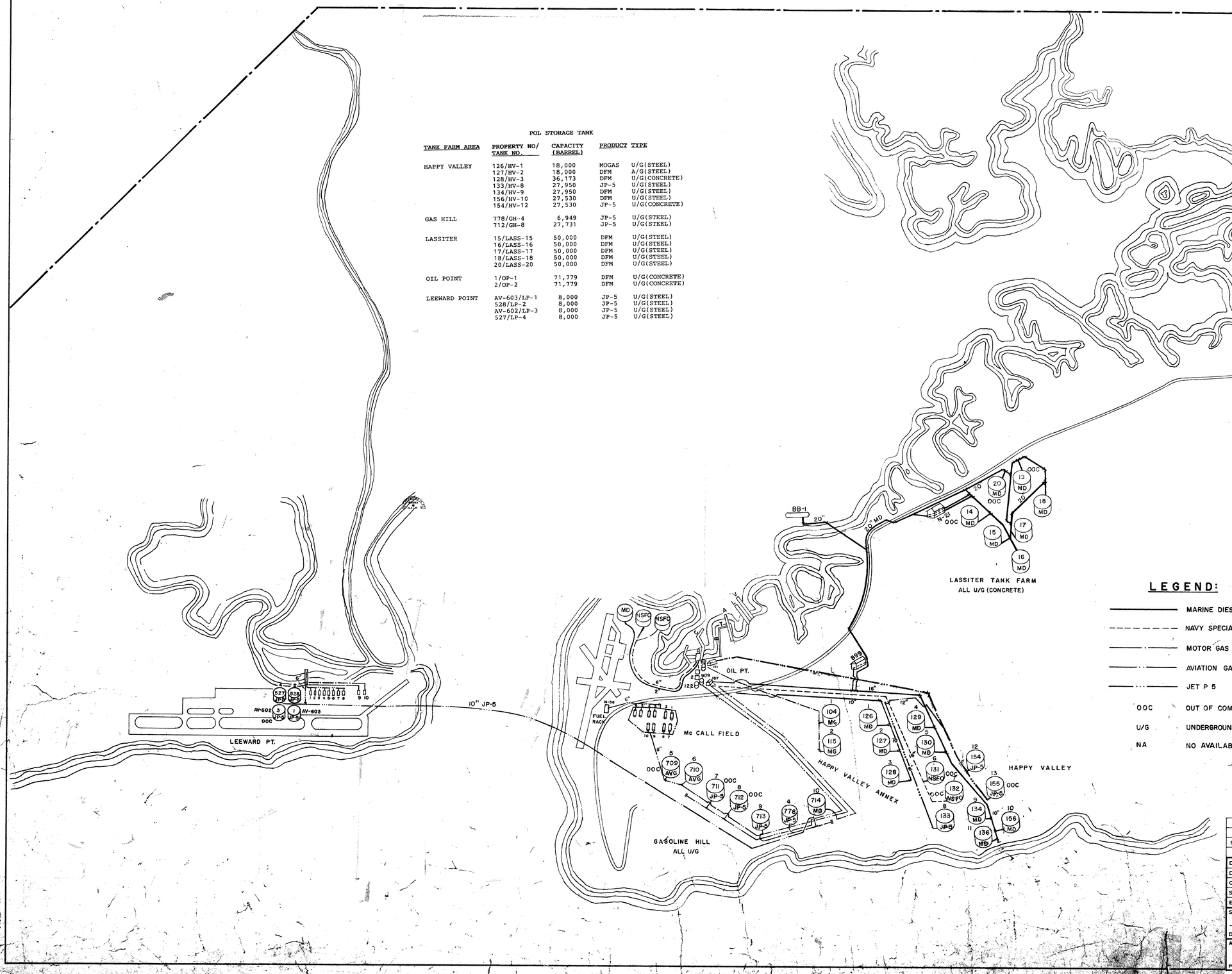
NOTE:
ALL BUILDINGS PROVIDED WITH FRESH AIR AND TRAP.

SCALE: 1" = 200'

Drawn by A.J. Traced by A.J. Checked by R.T. Date 3/2/42 REVISIONS 1. REVSD TO DATE NOV. 22/43	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
	SEWER LAYOUT Mc. CALLA HILL, CORINASO POINT FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS APPROVED 4-6-42 BY W. J. Williams, RESIDENT OFFICER IN CHARGE APPROVED 4-6-42 BY [illegible], P. W. OFFICER IN CHARGE	CONTR. NO. NDy 4162 DRAW'G NO. SERIAL: A.P R-8
Y&D Drawing No. 335235		

POL STORAGE TANK

TANK FARM AREA	PROPERTY NO/ TANK NO.	CAPACITY (BARREL)	PRODUCT	TYPE
HAPPY VALLEY	126/HV-1	18,000	MOGAS	U/G(STEEL)
	127/HV-2	18,000	DFM	A/G(STEEL)
	128/HV-3	36,173	DFM	U/G(CONCRETE)
	133/HV-8	27,950	JP-5	U/G(STEEL)
	134/HV-9	27,950	DFM	U/G(STEEL)
	156/HV-10	27,530	DFM	U/G(STEEL)
	154/HV-12	27,530	JP-5	U/G(CONCRETE)
GAS HILL	778/GH-4	6,949	JP-5	U/G(STEEL)
	712/GH-8	27,731	JP-5	U/G(STEEL)
LASSITER	15/LASS-15	50,000	DFM	U/G(STEEL)
	16/LASS-16	50,000	DFM	U/G(STEEL)
	17/LASS-17	50,000	DFM	U/G(STEEL)
	18/LASS-18	50,000	DFM	U/G(STEEL)
	20/LASS-20	50,000	DFM	U/G(STEEL)
OIL POINT	1/OP-1	71,779	DFM	U/G(CONCRETE)
	2/OP-2	71,779	DFM	U/G(CONCRETE)
LEEWARD POINT	AV-603/LP-1	8,000	JP-5	U/G(STEEL)
	528/LP-2	8,000	JP-5	U/G(STEEL)
	AV-602/LP-3	8,000	JP-5	U/G(STEEL)
	527/LP-4	8,000	JP-5	U/G(STEEL)



ER # PW422-90

SYMBOL	DESCRIPTION	REV BY	DATE	APPROVED

REVISIONS

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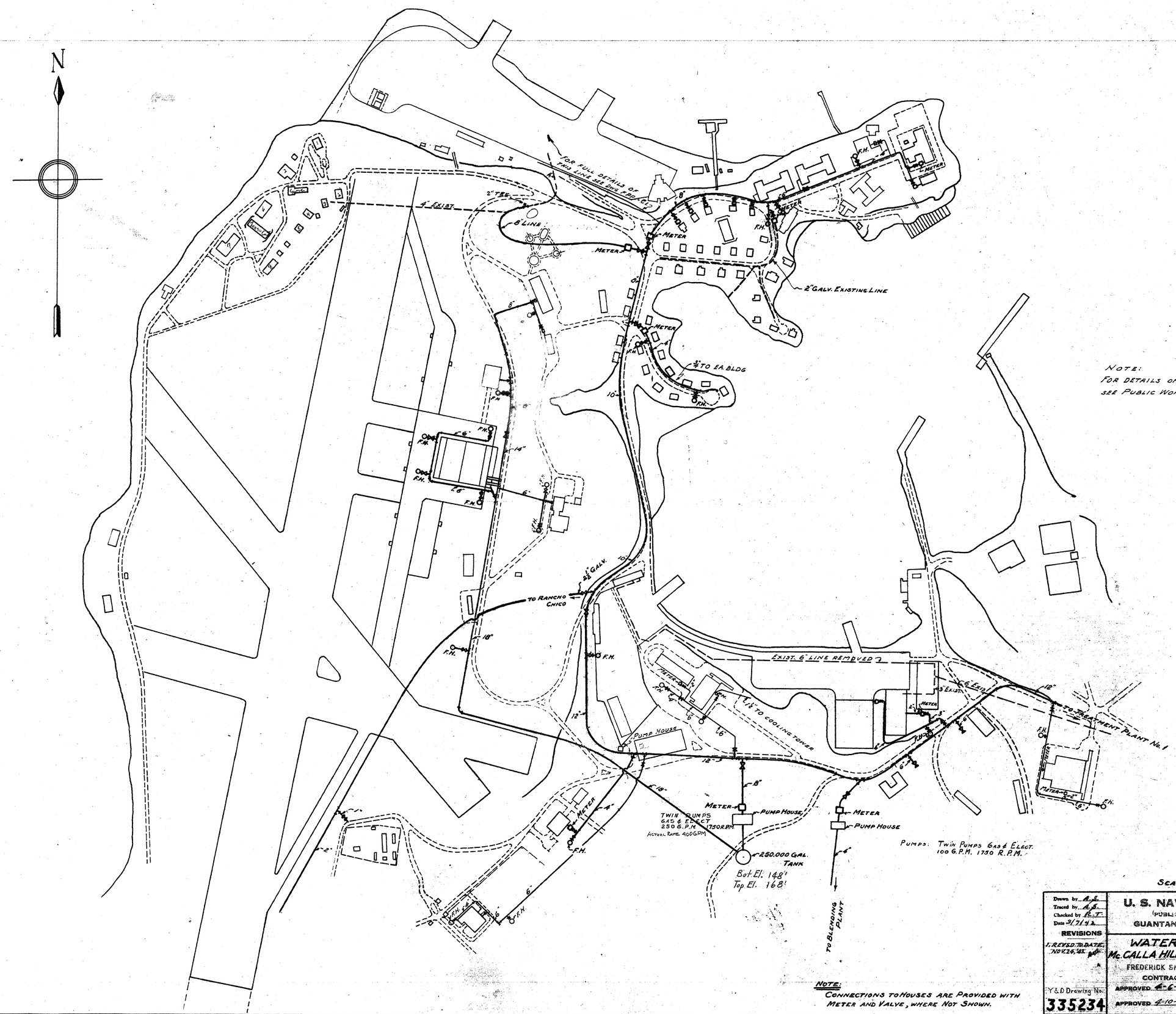
DATE
APPROVED
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
U. S. NAVAL STATION GUANTANAMO BAY, CUBA

TANK FARM LOCATION
NAS AND NAVSTA
GTMO BAY CUBA

SIZE F | CODE IDENT NO. | NAVFAC DRAWING NO. 4178 05 | SCALE: NTS | SHEET OF



NOTE:
FOR DETAILS OF EXISTING WATER LINES
SEE PUBLIC WORKS FRESH WATER PLAN 156-M-1

PUMPS: TWIN PUMPS 6 HP & ELECT.
100 G.P.M. 1750 R.P.M.

NOTE:
CONNECTIONS TO HOUSES ARE PROVIDED WITH METER AND VALVE, WHERE NOT SHOWN.

SCALE: 1" = 200'-0"

Drawn by A.S. Traced by A.S. Checked by R.T. Date 3/7/42	U. S. NAVAL STATION (PUBLIC WORKS DEPT.) GUANTANAMO BAY, CUBA	REFERENCES: SPEC. NO. P.W. DWG. NO.
REVISIONS 1. REVSD. TO DATE. NOV. 24, '42.	WATER LAYOUT Mc. CALLA HILL, CORINASO POINT FREDERICK SNARE CORP., NEW YORK CONTRACTING ENGINEERS	CONTR. NO. NDy 4162 DRAWING NO. SERIAL: A.P
Y&D Drawing No. 335234	APPROVED 4-6-42 BY [signature] ASSISTANT OFFICER IN CHARGE APPROVED 4-10-42 BY [signature] P. W. OFFICER IN CHARGE	R-7

Appendix D
Environmental Records

GENERAL INFORMATION

Site Visit Date: 12/15/2008

Facility:	PPI Supply Stock (McColloch)
Building Number:	Old Runway
Facility Point of Contact:	
Phone Number:	

HM/HW INFORMATION

Hazardous Material:	Paint (Virgin)
Number of Containers:	100
Container Sizes:	5 gallons

SPILL INFORMATION

Spill Flow Direction:	North
Nearby Receptors:	Bay

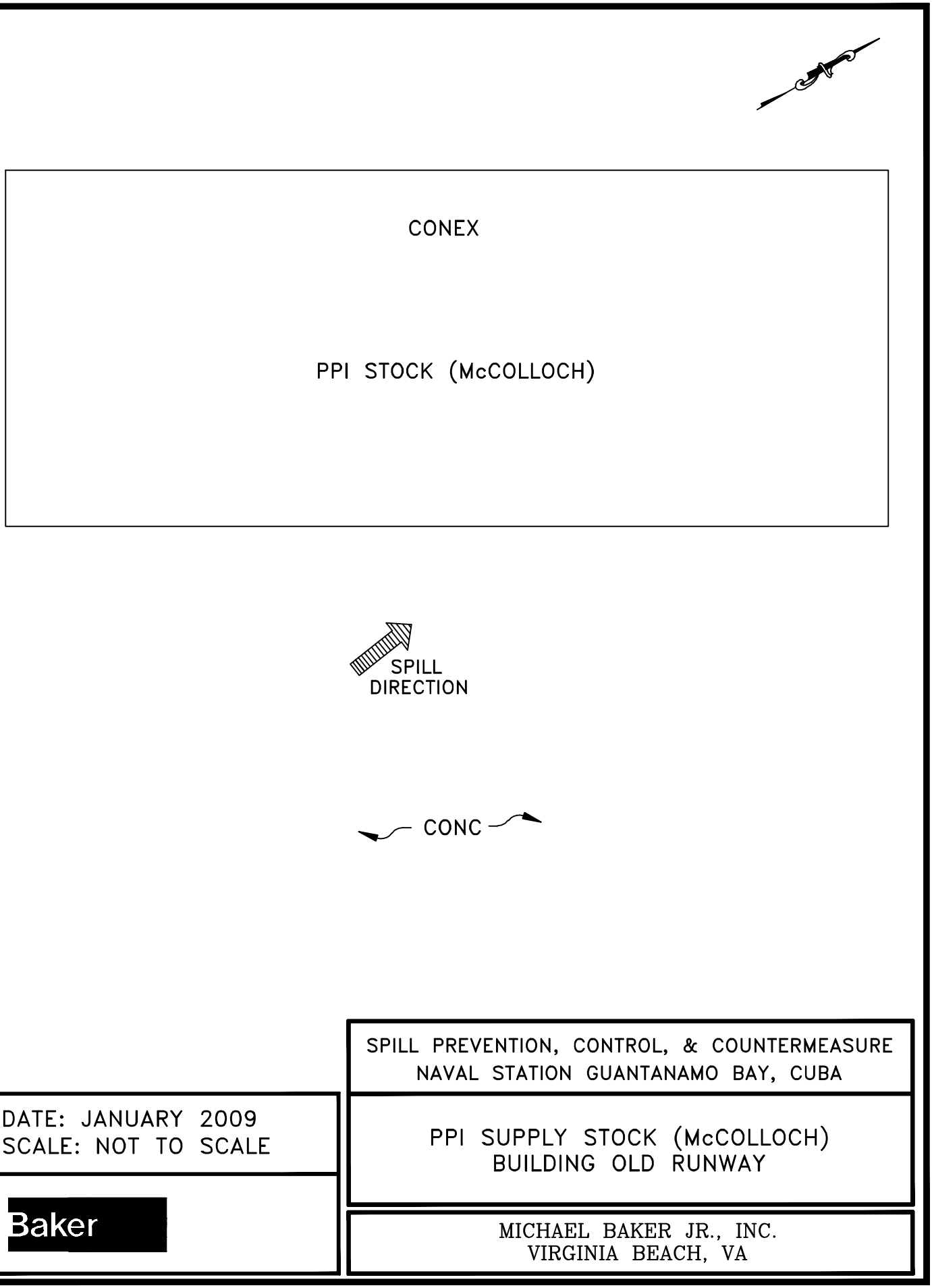
Comments:

N/A

HM/HW CHECKLIST INFORMATION

Evidence Incompatible Reactions:	No	Spill Control Kits:	No
Containers Properly Labeled:	Yes	Fire Extinguishers:	Yes
Ignitable Containers Protected:	N/A	Eye Wash:	No
Containers Outdoors:	No	MSDSs Available:	Yes
Containers Corroded:	Yes	Procedures Posted:	No
Drums Elevated:	N/A	Security:	Yes
Pallet in Good Condition:	N/A	Facility Inspected:	No
Container Spacing Adequate:	Yes	Secondary Containment:	No
Outdoor Protection:	Yes		
Collision Protection:	Yes		

Recommendations:	Ensure site has spill control kits ($750), eye wash ($1800), secondary containment, containers are free of corrosion, and posted spill procedures.
Inspection Recommendations:	Ensure routine inspections are performed by the appropriate oversight authority and that inspection records are maintained for one year.



SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: JANUARY 2009
SCALE: NOT TO SCALE

PPI SUPPLY STOCK (McCOLLOCH)
BUILDING OLD RUNWAY

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA

Table 2-14 Other HM/HW Storage Facilities

Facility	Building Number	Hazardous Material	Number of Containers	Container Sizes	Spill Flow Direction	Nearby Receptors
NEX Dry Cleaners	0776	Pictin (TCE), Cleaners, Paint	20+	1 pint to 1 gallon and 55 gallons	N/A	Bay
Oil Point- BOWTS	119	ECA 1350	1 (Tank OP-3)	200 gallons	North	Bay
Oil Point- BOWTS	119	ECA-2PA	1 (Tank OP-2)	200 gallons	North	Bay
Oil Point- BOWTS	119	NAOH	1 (Tank OP-1)	200 gallons	North	Bay
PPI (inside Camp America)	Camps	Waste Paint, Used Oil, Paint, Lube, Gas	50+	1 pint to 155 gallons	East	None
PPI Supply Stock (McCalla)	Old Runway	Paint (Virgin)	100	5 gallons	North	Bay
Print Shop	1842	Photo Developing Chemicals, Oil	25+	1 pint to 1 gallon	N/A	Bay
PWD HAZMAT Storage (NAVFAC)	AV-0080	Corrosives, Batteries, Oil	100+	55 gallons	North	Bay
RCI Main Yard	50017	Waste Oil, Lube Oil	4	55 gallons	East	None
Seabees (1)	AV-0061	Paints, Adhesives, Fuel, Grease, Lube, Antifreeze - See Inventories	80+	1 gallon to 55 gallons	North	Bay
Seabees (2)	0160	Fuel, Grease, Lube, Antifreeze - See Inventories	80+	1 gallon to 55 gallons	North	Bay
Vertex	AV-0600	Solvents, Grease, Oils, Paints	>50	1 quart to 55 gallons	N/A	Floor Drain / Bay
Vet Clinic	GC87	X-ray Chemicals, Alcohol	40+	1 pint to 5 gallons	N/A	None
		Oils, Polish, Thinner, CLP, Moly B (Grease)	<10	1 quart to 1 gallon	North	Bay
		Fuel	6	1 gallon to 5 gallons	North	Bay

Table 2-15 Hazardous Material/Hazardous Waste Storage Facility Recommendations

Facility	Building Number	Recommendations
NAVSTA FD#4 Camp America	1452	Ensure site has spill control kits ($750), eye wash ($1800), and posted spill procedures. Protect from incompatible reactions, properly label containers, protect containers, and adequately spaced containers.
		Ensure site has spill control kits ($750), eye wash ($1800), secondary containment, and posted spill procedures.
		Ensure site has eye wash ($1800), and posted spill procedures.
NAVSTA Supply Warehouse Paperclips 1	0187	Ensure site has eye wash ($1800) and posted spill procedures.
NAVSTA Supply Warehouse Re-Use	0186	Ensure site has properly labeled containers.
NCTAMS N606	N-606 / N-609 (Office)	Ensure site has fire extinguishers ($200), eye wash ($1800), and security.
NCTAMS N609	N-609 / N-607	Ensure site has spill control kits ($750).
NEX Dry Cleaners	0776	Ensure site has secondary containment.
PPI (inside Camp America)	Camps	Ensure site has secondary containment, and posted spill procedures.
PPI Supply Stock (McCalla)	Old Runway	Ensure site has spill control kits ($750), eye wash ($1800), secondary containment, containers are free of corrosion, and posted spill procedures.
Print Shop	1842	Ensure site has posted spill procedures.
PWD HAZMAT Storage (NAVFAC)	AV-0080	Ensure site has eye wash ($1800).
RCI Main Yard	50017	Ensure site has spill control kits ($750), eye wash ($1800), MSDSs available and posted spill procedures.
Seabees (1)	AV-0061	Ensure site has secondary containment and posted spill procedures.
Vertex	AV-0600	Ensure site has posted spill procedures.
Vet Clinic	GC87	Ensure site has spill control kits ($750) .
		Ensure site has spill control kits ($750), eye wash ($1800), MSDSs available, posted spill procedures, and security.
		Ensure site has spill control kits ($750), MSDSs available, posted spill procedures, corrosion protection, and security.
WIT (Transportation Shed)	AV-0058	Ensure site has spill control kits ($750), fire extinguishers ($200), eye wash ($1800), posted spill procedures, secondary containment, outdoor protection, properly labeled containers, adequately space containers, and security.

SITE W37: DESALINATION PLANT TANKS

While changing a fitting on a drain valve, a fuel water-mixture of approximately 100 gallons was released. Absorbent pads were used to abate the mixture. No soil or groundwater was said to be impacted. The entire area is presently concrete. No documentation was available. Three 44,000 gallon ASTs have stored DFM for the boilers and emergency generators at the Diesel Plant. Four 12,000 gallon vaulted ASTs have also been installed.

Tank sizes and Content stored:
NA

In Service/ Out of Service?
See Tank list

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
N 1955 04.1
W 0750934.5

# of visible wells:
None

Soil and/or groundwater impact:
None reported.

Visible sheen on nearby surface waters?
None observed.

Past clean-up efforts used:
Absorbent pads

Name & date of Report generated for past clean-up; Report Location?
None identified.

Findings of Tank/Pipeline testing Report review:
NA

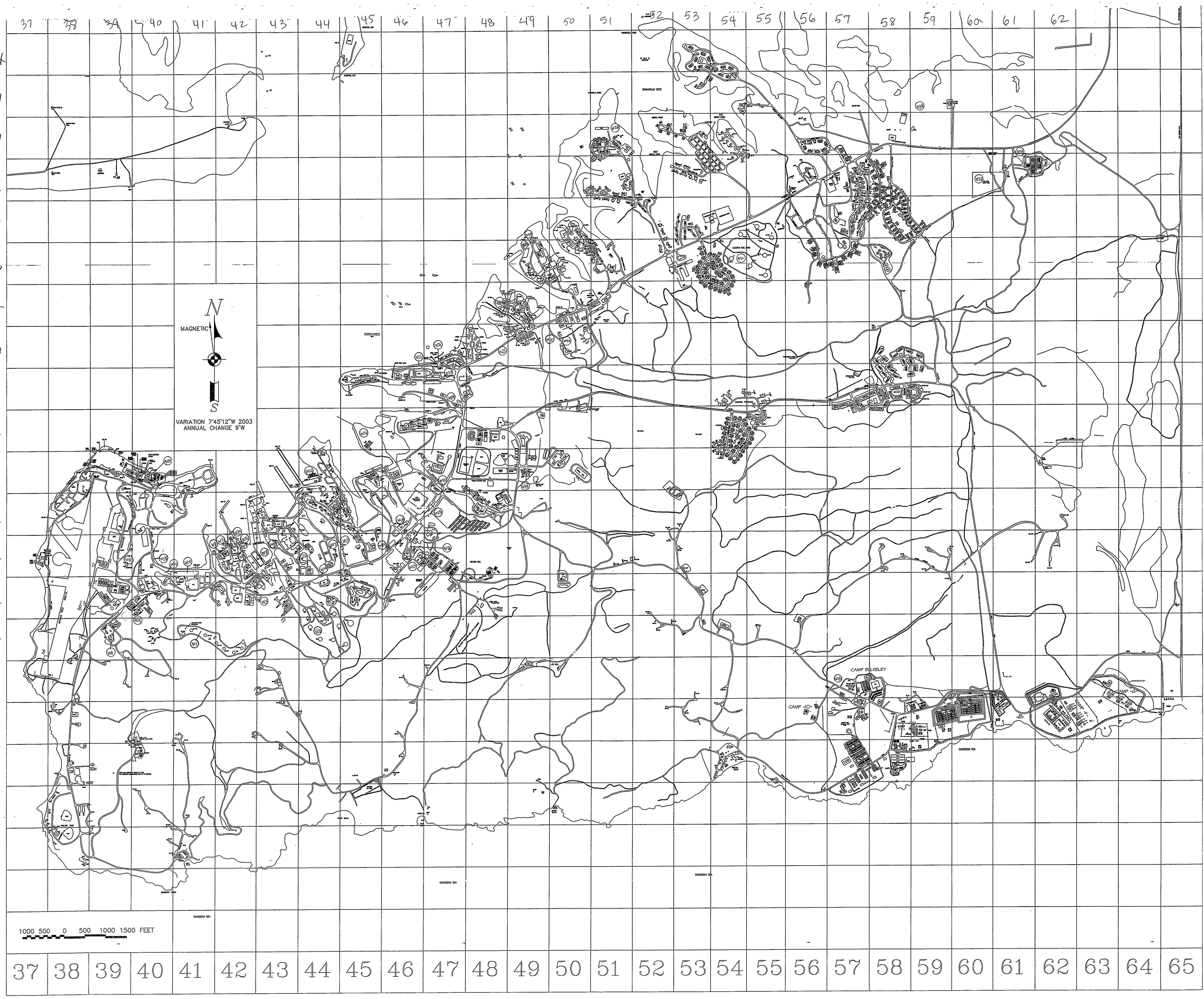
Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

Photos:

General shot of Desal Plant


MAGNETIC
N
S
VARIATION 7°45'12"W 2003
ANNUAL CHANGE 9'W
CAMP BULKELEY
CAMP -10-
CARIBBEAN SEA
1000 500 0 500 1000 1500 FEET

Sites included in this Report Are:

WINDARD

- SITE W: PAINT REMOVAL SYSTEM AT DIVE LOCKER
- SITE W: TRANSFORMERS
- SITE W: WINDWARD LANDFILL
- SITE W01: GAS HILL TANKS
- SITE W02: HAPPY VALLEY TANKS
- SITE W03: HAPPY VALLEY ANNEX AND TRUCK RACK
- SITE W04: PARKING LOT PIPELINE BREAK NEXT TO BLDG 752
- SITE W05: POV PARKING AREA AND TANK 59
- SITE W06: WHARF U
- SITE W07: OIL POINT TANKS
- SITE W08: TRUCK PARKING AREA NEAR BLDG 715
- SITE W09: BOWTS TANK,ORIGINAL LOCATION FOR TANK 122
- SITE W10: TRANSPORTATION AREA
- SITE W11: RCI AREA
- SITE W12: BLACK BEACH AREA NEAR DIVE LOCKER
- SITE W13: CPOOL
- SITE W14: VALVE PIT Across from LYNX on Sherman Avenue
- SITE W16: NEX GAS STATION
- SITE W17: GOVERNMENT GAS STATION
- SITE W18: NEX LAUNDRY & DRYCLEANING SHOP
- SITE W19: HW FACILITY
- SITE W20: VALVE PIT Leak Across From BOQ.
- SITE W21/22: MWR MARINA FUELING AREAS & PIT THAT SUPPLIES FUEL PIER
- SITE W23: NEX AUTO PORT
- SITE W24: MWR AUTO HOBBY SHOP
- SITE W24: MWR AUTO HOBBY SHOP
- SITE W25: VALVE PIT #21 SPILL SITE (Lassiter Pipeline)
- SITE W27: LOW POINT BEHIND SEABEE SELFHELP
- SITE W28: NEX STORE SPILL SITE
- SITE W29: MIA SPILL SITE AT VALVE PIT 26
- SITE W31: LASSITER FUEL FARM
- SITE W32: MWR METAL DUMP
- SITE W33: ASPHALT PLANT NEAR CAMP XRAY
- SITE W34: OLD METAL DUMP NEAR HSG WASTEWATER PLANT
- SITE W34: WASTEWATER PLANT AT HOUSING
- SITE W35: McDONALDS SPILL SITE
- SITE W36: LIZARD ISLAND
- SITE W37: DESALINATION PLANT TANKS
- SITE W38: COAST GUARD RAMP AND SECURITY BOAT SHED
- SITE W39: MWR MAINTENANCE YARD
- SITE W40: USTs BEHIND SEABEE SELF HELP BLDG
- SITE W41: McCALLA TANKS
- SITE W42: MARINE SITE GALLEY
- SITE W43: CAMP BUCKELEY

SITE W01: GAS HILL TANKS

Gas Hill consisted of seven bulk storage tanks with a total capacity of approximately 6.5 million gallons. These tanks have been closed in place and had historical leaks per personnel interviews (Apr 07). Personnel indicate this is the highest point in the area, thus fuel would have migrated down gradient. The tanks reportedly stored AVGAS, MOGAS, and JP-5.

RCI and Islands Mechanical were the contactors that closed these tanks. (Contract N62470-98-C-8800)(NAVFAC Drawing: 4383205)
Tanks were closed in place. Jack hammered top and bottom and pushed them in. Only Tank 712 is open, but does not contain any fuel and is not in service. It was cleaned in 2002. GAS Hill Spill - Someone thought there was a spill about 10 years ago from top of hill. No documentation found and sketchy details.

Tank valve pits have earthen bottoms. Past spills in pits were observed but not recorded.

The valve pit for Tank 714 was converted to concrete in 2003 by Bayside Mechanical, Inc. Stains were visible prior to repair.

Tank Sizes and Content stored:
See Tank History List
Tank 709 - AVGAS
Tank 710 – AVGAS
Tank 711 – AVGS, JP5
Tank 712 – JP5
Tank 713 – JP5
Tank 714 – JP5, JP4, JP5, MOGAS
Tank 715 – NSFO, Distilate, Diesel

In Service/ Out of Service?
See Tank History List
Tank 709 - Demolished
Tank 710 – Demolished
Tank 711 – Demolished
Tank 712 – Demolished
Tank 713 – Demolished
Tank 714 – Demolished
Tank 715 – Demolished

Estimated Size of Contaminated Area:
Various

GPS Coordinates:
Tank 709 - 0483449, 2201260
Tank 710 – 0483720, 2201260
Tank 711 – 0483787, 2201214
Tank 712 – 0486019, 2203371
Tank 713 – None taken
Tank 714 – 0486019, 2203371
Tank 715 – None taken

# of visible wells:
None

Soil and/or groundwater impact:
Soil impacted. Groundwater believed to be impacted in some areas.

Visible sheen on nearby surface waters?
NA

Past clean-up efforts used:
No remedial efforts occurred at the tanks.

Name & date of Report generated for past clean-up; Report Location?
No Reports were generated.

Findings of Tank/Pipeline testing Report review:
None available

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

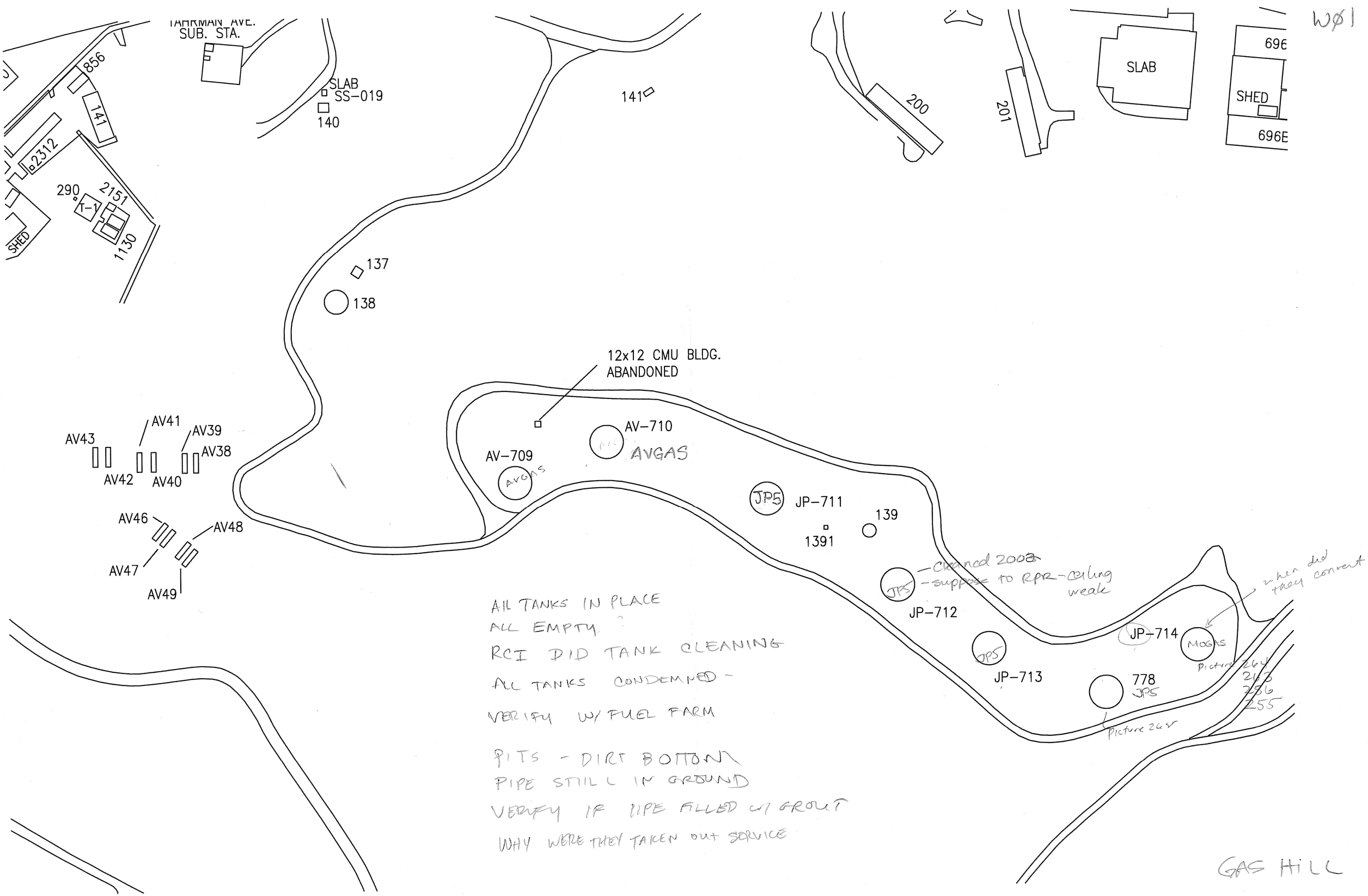
Points Of Contact:

References & Drawings:

RCI and Islands Mechanical were the contactors that closed these tanks. (Contract N62470-98-C-8800)(NAVFAC Drawing: 4383205)

Tank Management Plan , AST
Tank Management Plan, UST

Photos:



- Cleaned 2002
- suppose to RPR - ceiling weak

ALL TANKS IN PLACE
ALL EMPTY
RCI DID TANK CLEANING
ALL TANKS CONDEMNED -
VERIFY W/ FUEL FARM

PITS - DIRT BOTTOM
PIPE STILL IN GROUND
VERIFY IF PIPE FILLED W/ GROUT
WHY WERE THEY TAKEN OUT SERVICE

Gas Hill looking from top of tank 714 toward the back of gas hill

Gas Hill

Gas Hill Tank 711 (Tank 7)

Gas Hill Tank 710 (Tank 6)

Fuel hose discarded on hill side. Between tank 710 and 709

Gas Hill tank 709 (Tank 5)

Gas Hill Tank 714 Inside walkway to shell of tank

Gas Hill

Gas Hill Pipeline view from RCI looking up to hill

Gas Hill Pipeline view from RCI looking up to hill

Gas Hill Tank 712

Gas Hill Tank 712

Gas Hill tank 709 (Tank 5)

Gas Hill

Gas Hill Pipeline view from RCI looking up to hill

Gas Hill Tank 714 Valve Pit

Gas Hill Pipeline view from RCI looking up to hill

Pipeline from Gas Hill. Standing next to RCI taking picture looking up to Gas Hill

SITE W11: RCI AREA

RCI hit a fuel line while clearing an area in their compound. There was a spill. They dug up the soil and installed a valve box at the point where they hit the line. They believe they removed the dirty soil, but there's no documentation to verify this.

Tank sizes and Content stored:
NA

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
0483788/2201211

# of visible wells:
None

Soil and/or groundwater impact:
Unknown

Visible sheen on nearby surface waters?
NA

Past clean-up efforts used:
None reported.

Name & date of Report generated for past clean-up; Report Location?
None identified.

Findings of Tank/Pipeline testing Report review:
NA

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

Photos:

PHOTOS NOT AVAILABLE

w11

Loop, Patricia K. (NAVSTAGTMO n2033)

From: [redacted]
Sent: Saturday, January 18, 2003 3:06 PM
To: [redacted]
Cc:
Subject: FUEL SPILL RCI COMPOUND

At approximately 0750 (Jan. 18, 2003) [redacted] notified me of fuel bubbling up at their excavation site at the RCI compound. I recommend to her to call the Fire Department for initial response. In the interim KW would divert its vacuum truck from the line evacuation at Pipeline Alley to the RCI compound.

At approximately 0830 KW started evacuating the 10" JP5 pipeline at the RCI compound. At 1500 the Pipeline between Gas Hill and the RCI compound was evacuated of its contents. System secure.

Approximately 50 gallons may have leaked from the pipeline into the earth at the excavation site. Some of the contaminated dirt remove from the site was placed into a drum provided by Environmental.

Cause of leak: During excavation the back hoe stripped off the valve stem from a buried drain valve. A temporary repair was made by removing the bent valve stem and inserting a wooden plug with sealant compound into the bonnet of the existing valve.

[redacted]

SITE W41: McCALLA TANKS

In 1996 and 1997 some tanks were closed, cleaned, and filled with sand slurry. Three (3) AVGAS tanks remain but are inactive. No known spills were reported. No pipe breaks since the 1940's. Aboveground storage tanks (AST) AV-38 thru AV-41 were removed prior to 1988. Remaining tanks are filled with sand slurry.

Tank size and Content stored:
Tanks AST AV-38 thru AV-41 – Removed

In Service/ Out of Service?
Removed. See Tank History list.

Estimated Size of Contaminated Area:
None reported

GPS Coordinates:
Supply Pipes: N 19° 54'46.3", W 075°09'06.2"
AVGAS Tanks: N 19° 54'44.5", W 075°09'37.2"

# of visible wells: None observed

Soil and/or groundwater impact:
No

Visible sheen on nearby surface waters?
No

Past clean-up efforts used:
No history of past clean-ups.

Name & date of Report generated for past clean-up; Report Location?
Findings of Tank/Pipeline testing Report review:
None known.

Name and date of MILCON or other significant construction project planned in vicinity:
None identified.

POINTS OF CONTACT:

References & Drawings:
None known

Photos:

is standing on some UST's at McCalla Field which were used to supply fuel to the Sea Plane Squadron

is standing on some UST's at McCalla Field which were used to supply fuel to the Sea Plane Squadron

in front of two AST's at McCalla Field in that same area

SITE W37: DESALINATION PLANT TANKS

While changing a fitting on a drain valve, a fuel water-mixture of approximately 100 gallons was released. Absorbent pads were used to abate the mixture. No soil or groundwater was said to be impacted. The entire area is presently concrete. No documentation was available. Three 44,000 gallon ASTs have stored DFM for the boilers and emergency generators at the Diesel Plant. Four 12,000 gallon vaulted ASTs have also been installed.

Tank sizes and Content stored:
NA

In Service/ Out of Service?
See Tank list

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
N 1955 04.1
W 0750934.5

# of visible wells:
None

Soil and/or groundwater impact:
None reported.

Visible sheen on nearby surface waters?
None observed.

Past clean-up efforts used:
Absorbent pads

Name & date of Report generated for past clean-up; Report Location?
None identified.

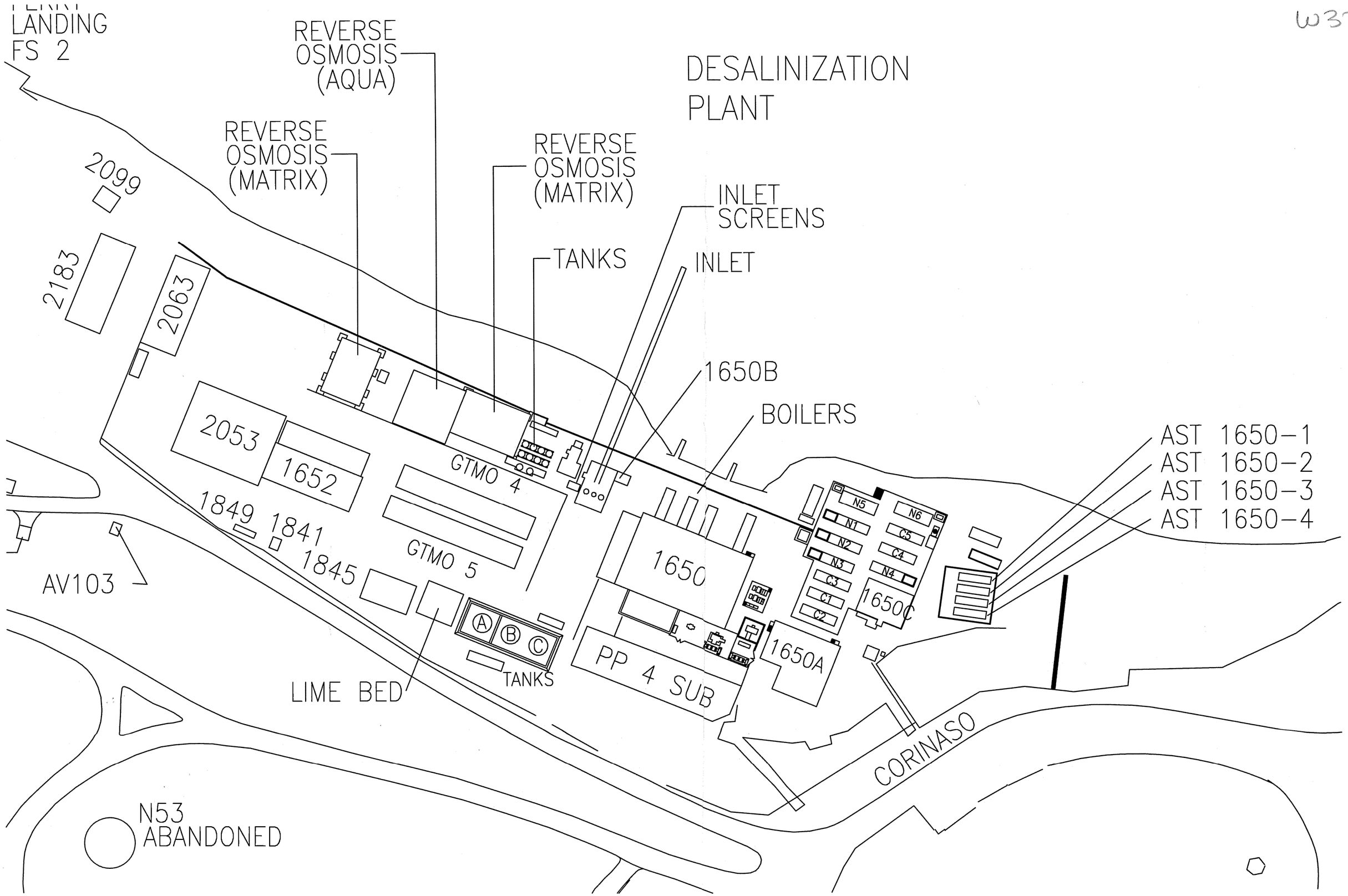
Findings of Tank/Pipeline testing Report review:
NA

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

W37


LANDING
FS 2
REVERSE OSMOSIS (AQUA)
DESALINIZATION PLANT
REVERSE OSMOSIS (MATRIX)
REVERSE OSMOSIS (MATRIX)
INLET SCREENS
TANKS
INLET
2099
2183
2063
1650B
BOILERS
2053
1652
GTMO 4
AST 1650-1
AST 1650-2
AST 1650-3
AST 1650-4
1849
1841
1845
GTMO 5
1650
N5
N6
N1
N2
N3
N4
C5
C4
C3
C1
C2
1650C
AV103
A
B
C
TANKS
PP 4 SUB
1650A
LIME BED
CORINASO
N53
ABANDONED

Photos:

General shot of Desal Plant

SITE W19: HW FACILITY

Pictures from 1993 show signs of stains on dirt and gravel. There were many stains in the HW compound in April 1996. Over the years, crush and run has been added.

Tank sizes and Content stored:
NA

In Service/ Out of Service?
NA

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
None taken

# of visible wells:
None

Soil and/or groundwater impact:
Unknown

Visible sheen on nearby surface waters?
NA

Past clean-up efforts used:
NA

Name & date of Report generated for past clean-up; Report Location?
None identified.

Findings of Tank/Pipeline testing Report review:
NA

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

Photos:

H W Facility

1993

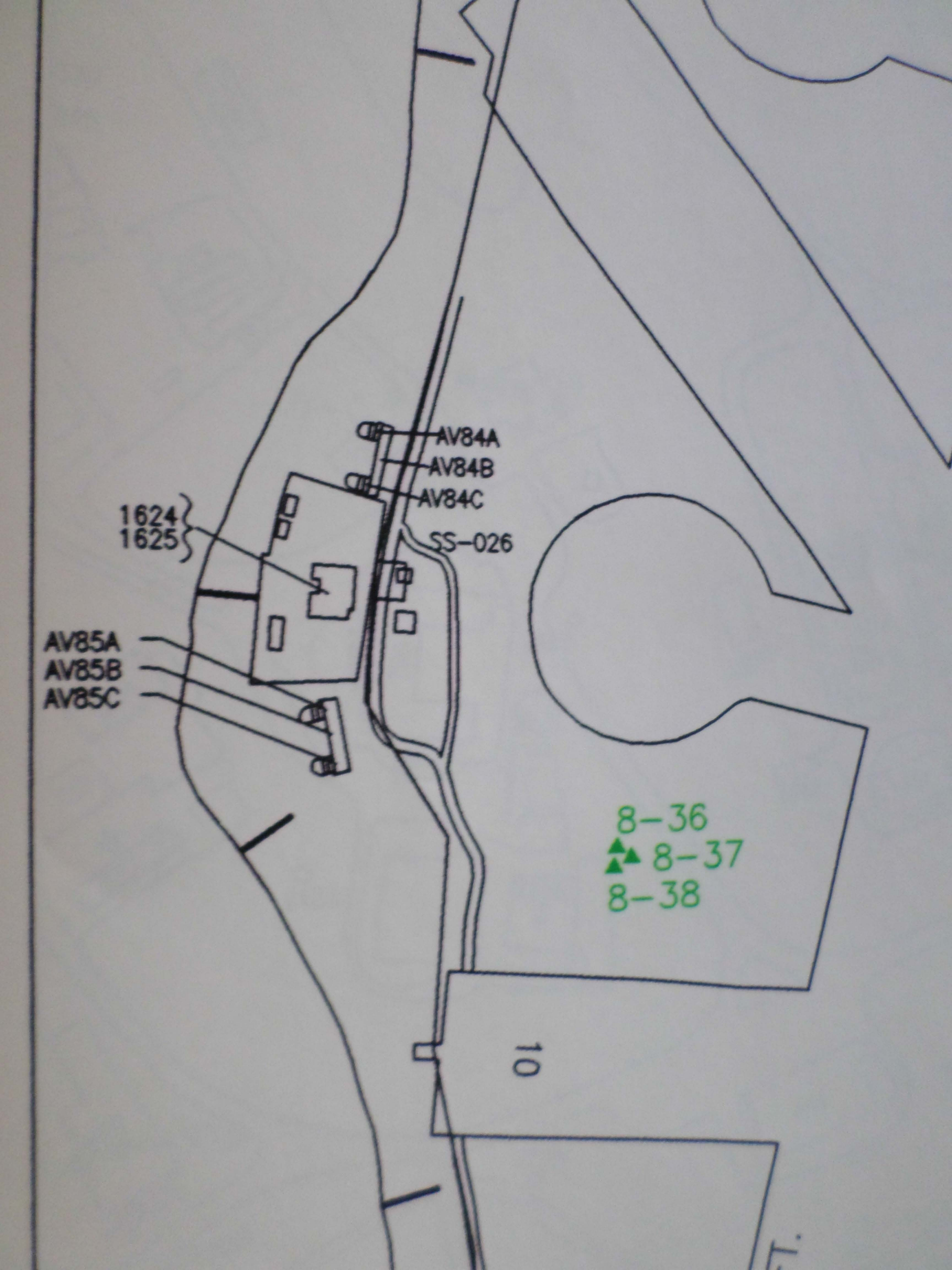
HW FACILITY
1993

H W Facility
1993

WIND SOCK
FERRY LANDING FS 3
1983
NAV AID
1985
FERRY LANDING 2134
2099
2183
2063
GTMO 3
REVERSE OSMOSIS
TANKS
INLET SCREENS
INLET
DESALINIZATION PLANT
1650B
8-14 31-708
8-15 8-19(OS)
8-16 8-20(OS)
8-17 8-21(OS)
8-18
8-09
8-10
8-11
8-12
8-13
AV162
AV105
AV86
AV104
AV103
2053
1652
GTMO 4
GTMO 5
1849
1841
1845
BOILERS
1650
PP 1 SUB
LIME BED
CORINASO
PATIO
OV10
OV68
1778
OV1
OV2
OV3
OV4
OV9
SLAB
JUNGLE GYM
8-06
8-07
8-08
8-03
8-04
N53 ABANDONED
N24
1275
549
PLAYGROUND
8-29
8-30
8-31
8-32
8-27
8-28
2177
2178
2179
C069
C073
C075
40-82
P. GATE
CATALINA RD.

AV84A
AV84B
AV84C
SS-026
1624
1625
V85A
V85B
V85C
8-36
8-37
8-38
10
4860 FT.
8-32
SHED
40-809(VR)
40-811(VR)
40-813(VR)
NP214222
AV106
AV130
AV87
C075
40-82
AV107
8-33
8-34
AV77
1537
159
163
8-35
1276
162
ABANDONED
165
2154
2207
160
SHED
2211
2210
TFS
MG
2190
2191
2192
2193
2194
2195
2185
2186
2188
2189
2184
28
V. GATE
8-39
2222
2221
560
SS 120
8-40
8-42
1975
AV81
2174
2152
AV-2149
AV139
AV80
856
AV30
AV79
850
222
SHED
290
2151
SHEDS

4860 FT.
8-39
2185
2186
2184
2188
2189
2222
2221
8-40
8-42
560
SS 120
AV79
850
222
SHED
MC 1
MR 1
MR 2
MC 2
MR 4
MR 3
MR 5
1282
1283
AV78
8-44
40-802
8-45
8-46
MA-35
MA-33


AV84A
AV84B
AV84C
1624
1625
SS-026
AV85A
AV85B
AV85C
8-36
8-37
8-38
10

8-14 31-708
8-15 8-19(OS)
8-16 8-20(OS)
8-17 8-21(OS)
8-18
2099
2183
2063
PCB2881-01
8-13
2053
31-710
31-709
1652
GTMO 4
GTMO 5
1849
1841
1845
AV103
1650B
BOILERS
1650
PP 1 SUB
TANKS
1650A
C3
C1
C2
NAV AID
(X37)
31-6
AV 76
(X37)
(X37)
8-22
(X37)
8-23
AV54
8-24
8-25
77
76A
83
82
1273
335
8-26
336
76B
C011
C025
C03
C04
C05
8-27
C016
C019
C018
C013
C014
C015
C020
8-28
C010
C09
C08
C012
2178
2179
C0115
C0116
C021
C022
31-2
2177
C0520
C069
C071
8-31
C060
8-29
8-30
N53
ABANDONED
N24
1275
549
C073
C075
C061
C063
C064
C066
C068
C070
C072
PIER
941

SHED
40-809(VR)
40-810(OS)
40-811(VR)
40-812(VR)
40-813(VR)
40-814
NP214222
8-131
8-132
8-133
8-134(OS)
8-135(OS)
8-136(OS)
8-137(OS)
40-710
40-711(BC)
40-712
40-713
40-714
40-715
40-716
8-138
8-33
8-34
8-35
1537
159
163
165
1276
162
ABANDONED
2154
2207
160
SHED
8-124
8-125
8-126
2174
8-127
PIPE RACKS
2152
8-128
1975
8-129
SLAB
2229
2173
2210
TPS
MG
2190
2191
2192
2193
2194
2195
2185
2186
2188
2189
2184
8-39
8-123
856
8-130
SLAB
SS-019
140
141

8-47	8-66	8-83	8-103
8-48	8-67	8-84	8-104
8-49	8-68	8-85	8-105
8-50	8-69	8-86	8-106
8-51	8-70	8-87	8-107
8-52	8-71	8-88	8-108
8-53	8-72	8-89	8-109
8-54	8-73	8-90	8-110
8-55	8-74	8-91	8-111
8-56		8-92	
8-57		8-93	8-112
8-58	8-75	8-94	8-113
8-59		8-95	8-114
8-60	8-76	8-96	8-115(RC)
8-61	8-77	8-97	
8-62	8-78	8-98	8-116
	8-79	8-99	8-117
8-63	8-80	8-100	8-118
8-64	8-81		8-119
8-65	8-82	8-102	8-120
			40-931

GENERAL INFORMATION

Site Visit Date: 12/15/2008

Facility:	AF Exp. Camp Justice
Building Number:	Camp Justice
Facility Point of Contact:	
Phone Number:	

HM/HW INFORMATION

Hazardous Material:	Waste Paint
Number of Containers:	100's
Container Sizes:	up to 55 gallons

SPILL INFORMATION

Spill Flow Direction:	Varies
Nearby Receptors:	Bay - Not Level Ground

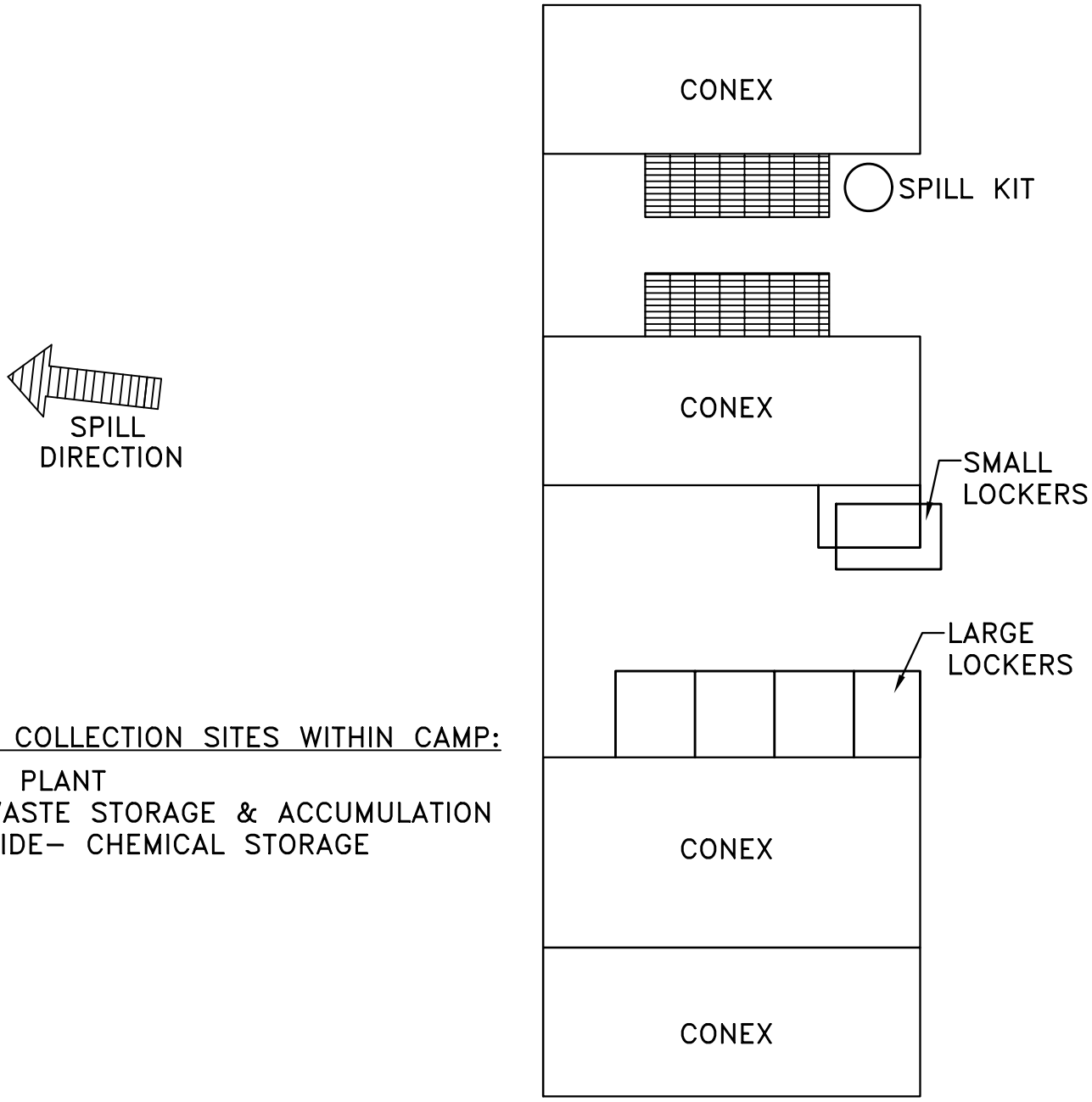
Comments:

Many other areas within Camp Justice.

HM/HW CHECKLIST INFORMATION

Evidence Incompatible Reactions:	No	Spill Control Kits:	Yes
Containers Properly Labeled:	Yes	Fire Extinguishers:	Yes
Ignitable Containers Protected:	Yes	Eye Wash:	Yes
Containers Outdoors:	Yes	MSDSs Available:	Yes
Containers Corroded:	No	Procedures Posted:	No
Drums Elevated:	Yes	Security:	Yes
Pallet in Good Condition:	Yes	Facility Inspected:	No
Container Spacing Adequate:	Yes	Secondary Containment:	Yes
Outdoor Protection:	No		
Collision Protection:	Yes		

Recommendations:	Ensure site has posted spill procedures.
Inspection Recommendations:	Ensure routine inspections are performed by the appropriate oversight authority and that inspection records are maintained for one year.



OTHER COLLECTION SITES WITHIN CAMP:

1. POWER PLANT
2. HAZ WASTE STORAGE & ACCUMULATION
3. PESTICIDE– CHEMICAL STORAGE
4. FUELS

SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: JANUARY 2009
SCALE: NOT TO SCALE

AF EXP. CAMP JUSTICE
BUILDING CAMP JUSTICE

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA

NAVSTA Guantanamo Bay HM/HW Sites Photo Log

by Michael Baker Jr., Inc.

Baker

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

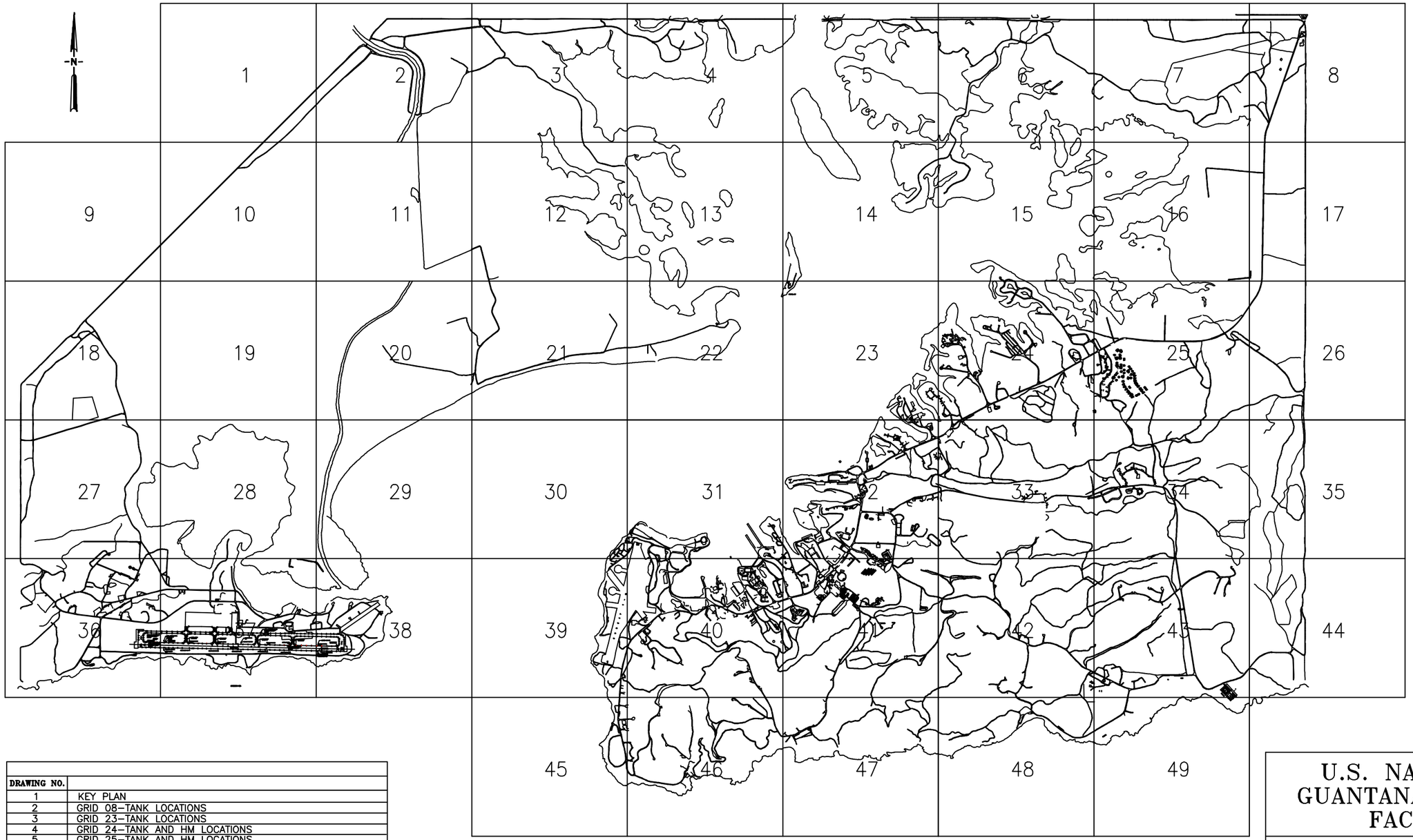
B&R Blast Area

B&R BRSC/BREMCOR/Eastern Safety Office

B&R BRSC/BREMCOR/Eastern Safety Office

APPENDIX A

Facility Maps



DRAWING NO.	
1	KEY PLAN
2	GRID 08–TANK LOCATIONS
3	GRID 23–TANK LOCATIONS
4	GRID 24–TANK AND HM LOCATIONS
5	GRID 25–TANK AND HM LOCATIONS
6	GRID 31–TANK AND HM LOCATIONS
7	GRID 32–TANK AND HM LOCATIONS
8	GRID 33–HM LOCATIONS
9	GRID 36–TANK AND HM LOCATIONS
10	GRID 37–TANK AND HM LOCATIONS
11	GRID 38–TANK AND HM LOCATIONS
12	GRID 40–TANK AND HM LOCATIONS
13	GRID 41–TANK AND HM LOCATIONS
14	GRID 42–TANK LOCATIONS
15	GRID 43–TANK AND HM LOCATIONS
16	GRID 46–TANK LOCATIONS
17	GRID 49–TANK LOCATIONS

2000 0 2000 4000

SCALE: 1" = 4000'

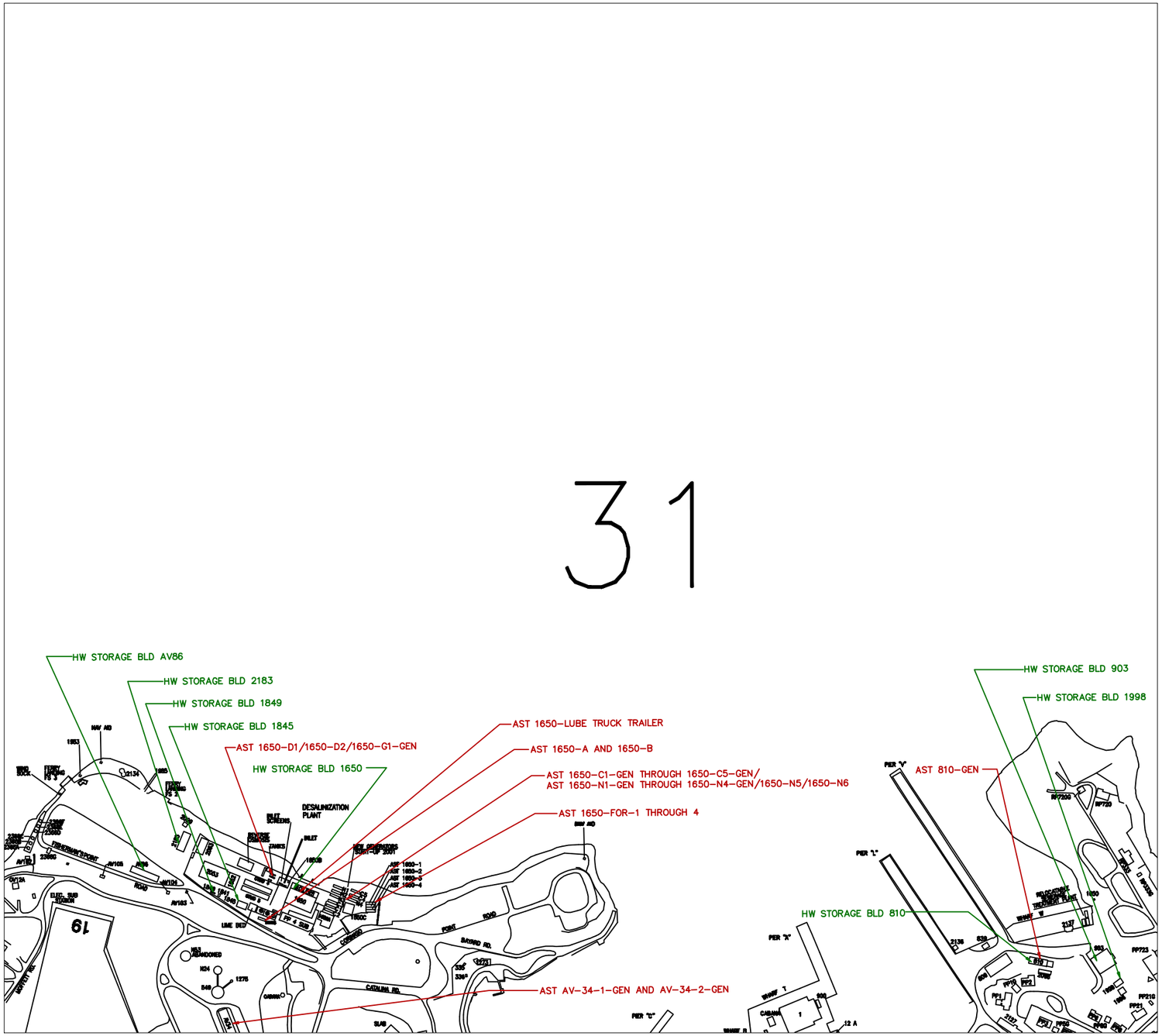
U.S. NAVAL STATION GUANTANAMO BAY, CUBA FACILITY MAP

DRAWING 1 – GB–KEY

DATE	SCALE	SHEET
12/08/09	1"=4000'	1 of 17

Baker

MICHAEL BAKER JR., INC.



0 300 600 900

SCALE: 1" = 600'

LIST OF ASTS

AST 810-GEN

AST 1650-A AND 1650-B

AST 1650-C1-GEN THROUGH C5-GEN

AST 1650-D1 AND 1650-D2

AST 1650-FOR-1 THROUGH 4

AST 1650-G1-GEN

AST 1650-LUBE TRUCK TRAILER

AST 1650-N1-GEN THROUGH N4-GEN

AST 1650-N5 AND 1650-N6

AST AV-34-1-GEN AND AV-34-2-GEN

LIST OF HAZARDOUS MATERIAL STORAGE LOCATIONS

BUILDINGS 810
BUILDINGS 903
BUILDING 1650
BUILDING 1845
BUILDING 1849
BUILDING 1998
BUILDING 2183
BUILDING AV86

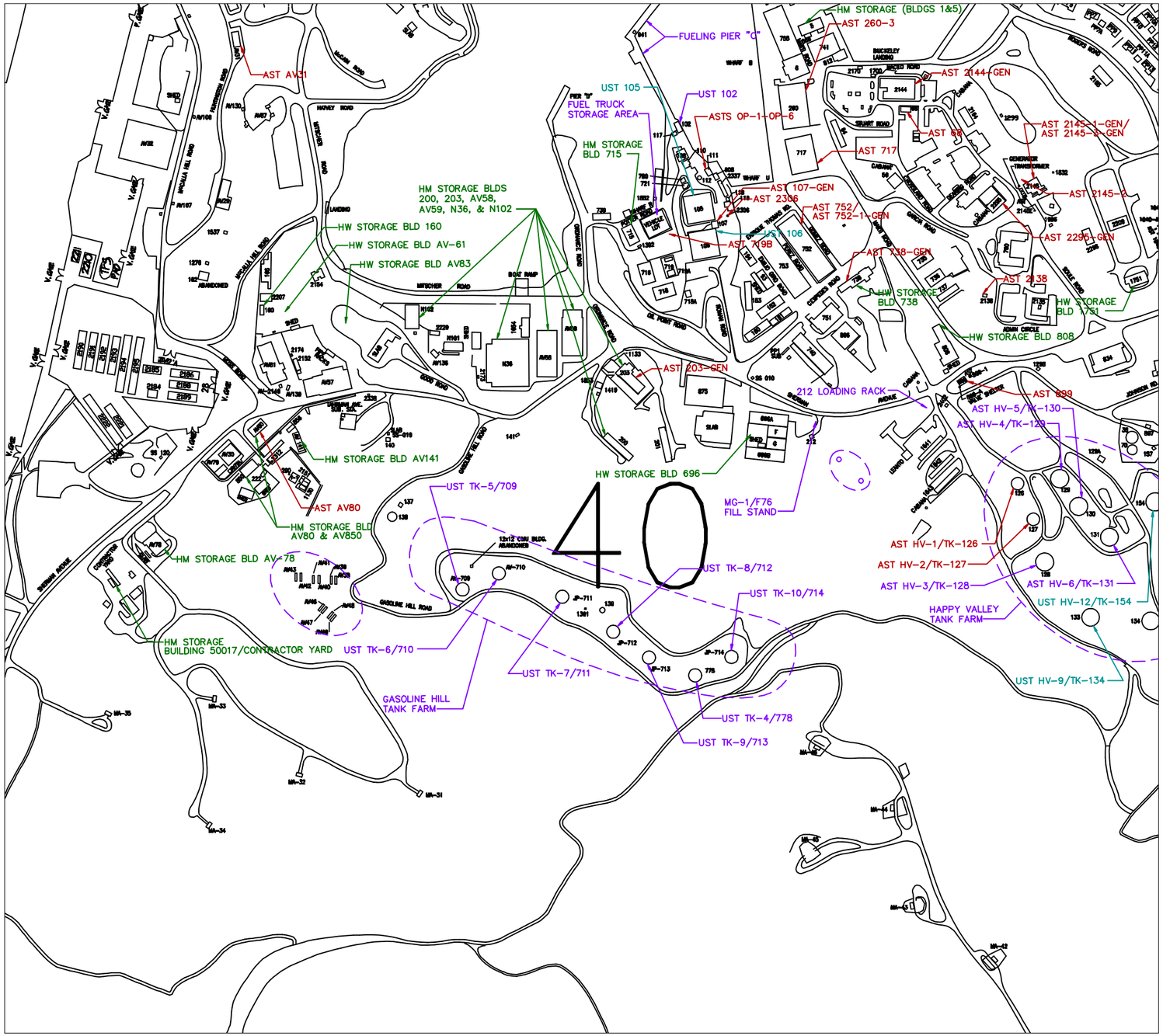
U.S. NAVAL STATION GUANTANAMO BAY, CUBA FACILITY MAP

DRAWING 6 – GRID 31

DATE	SCALE	SHEET
12/08/09	1"=600'	6 of 17

Baker

MICHAEL BAKER JR., INC.



LIST OF ASTS

AST 68
AST 107-GEN
AST 203-GEN
AST 260-3
AST 717
AST 719 B
AST 738-GEN
AST 752/752-1-GEN
AST 899
AST 2138
AST 2144-GEN
AST 2145-1-GEN/AST 2145-3-GEN
AST 2145-2
AST 2295-GEN
AST 2306
AST AV80
AST AV31
AST HV-1/TK-126
AST HV-2/TK-127
AST OP-4, OP-5, AND OP-6

LIST OF USTS

UST 105
UST 106
UST HV-9/TK-134
UST HV-12/TK-154

LIST OF ABANDONED IN PLACE TANKS

AST HV-3/TK-128
AST HV-4/TK-129
AST HV-5/TK-130
AST HV-6/TK-131
AST HV-8/TK-133
UST TK-4/778
UST TK-5/709
UST TK-6/710
UST TK-7/711
UST TK-8/712
UST TK-9/713
UST TK-10/714
UST 102

LIST OF HAZARDOUS MATERIAL STORAGE LOCATIONS

BUILDING 1 & 5
BUILDING 160
BUILDING 200, 203, AV58, AV59, N36, & N102
BUILDING 696
BUILDING 715
BUILDING 738
BUILDING 808
BUILDING 1751
BUILDING AV61
BUILDING AV78
BUILDING AV80/AV850
BUILDING AV83
BUILDING AV141
BUILDING 50017/CONTRACTOR YARD
AST OP-1, OP-2, AND OP-3

U.S. NAVAL STATION GUANTANAMO BAY, CUBA FACILITY MAP

DRAWING 12 – GRID 40

DATE	SCALE	SHEET
12/08/09	1"=600'	12 of 17

Baker

MICHAEL BAKER JR., INC.

Quick Find

Status: Active

GENERAL SYSTEM INFORMATION

Tank ID:	AV-0031	Grid	40	Installation Year:	Unknown
Tank Type:	AST	Location	Windward		
Capacity:	275	Facility Organization	Unknown		
Contents:	Diesel	Facility	Communications		
Current Use	Emergency Power Generation	Nearest Building	AV-31		

COMPLIANCE STATUS

OEBGD Regulated:	Not Compliant

LABELING AND CODING

Tank ID Label:	No	Capacity Label:	No
Contents Label:	Yes	Fill Port Color Code	N/A

TANK INFORMATION

Construction type:	Single Walled	Tank Condition:	Good	Tank Color:	Silver
Construction Material	Steel			Tank Manifolded:	No
Tank Shape	Horizontal Cylinder	Corrosion Protection	Paint		
Tank Dimension:	324 x 72"	Tank Manufacturer:	Unknown		
Lining:	Unknown	Model Number	Unknown		

SPILL AND OVERFILL PROTECTION

Overfill Protection:	None	Area Lighting:	Unknown	Collision Barrier	Adequate
Liquid Level Gauge Type:	None	HLA Type:	None		
Gauge Manufacturer:	N/A	HLA Manufacturer:	N/A		
Gauge Model:	N/A	HLA Model:	N/A		
Last Gauge Calibration:	N/A	Tank Leak Detection:	Visual		
Next Gauge Calibration:	N/A	Tank LD Manfuacturer:	N/A		
Pump Starter Control:	At Generator	Tank LD Model:	N/A		
Valves Surface Security:	Locked fenced are	Spill Catchment:	None		

PIPING SYSTEM

Piping Exposure:	Aboveground			Pipe Construction Material:	Unknown
Pipe Condition:	Unknown	Pipe Length:	Unknown	Pipe Corrosion Protection:	Unknown
Supply Pipe Diameter:	Unknown	Pipe Sumps:	N/A	Piping Leak Detection:	Visual
Return Pipe Diameter:	Unknown			Pressurized Piping Line Leak Detectors:	N/A
Delivery System:	Suction			Annual Line Leak Detectors Testing:	N/A

SECONDARY CONTAINMENT SYSTEM

Tank Secondary Containment:	None	Containment Dimensions:	N/A
Drain Mechanism:	N/A	Containment Volume:	N/A
Drainage Outfall:	N/A	Drain Security:	N/A
Loading/UnLoading Containment	N/A		
Loading/Unloading Containment Recommendations	N/A		

Continuation of Tank ID: AV-0031

DISPENSNG TANK SYSTEMS

Dispenser:	N/A	VRS Stage 1:	N/A	Hose Retractor:	N/A
Number of Dispensers	0	VRS Stage 2:	N/A	Shear Valve:	N/A
Nozzles per Dispensers:	0	Emergency Shutoff:	N/A	Nozzle Swivel Connector:	N/A
				Break Away Coupling:	N/A

SPILL RESPONSE INFORMATION

Initial Spill Direction	East	Probablity of Reaching Water:	Low
Initital Receptor:	In building	Spill Equipment:	Unknown
Intitial Conveyance:	Surface flow	Ultimate Discharge	Corinaso Cove
Worst Case Discharge/Rate of Flow:	220 gallons, 75 gal per min (overfill)		

OEBGD Required Upgrades:

Install secondary containment ($500), install overfill protection ($200), spill catchment ($100), apply tank labeling ($100) and verify area lighting and piping corrosion protection.

BMP Recommendations:

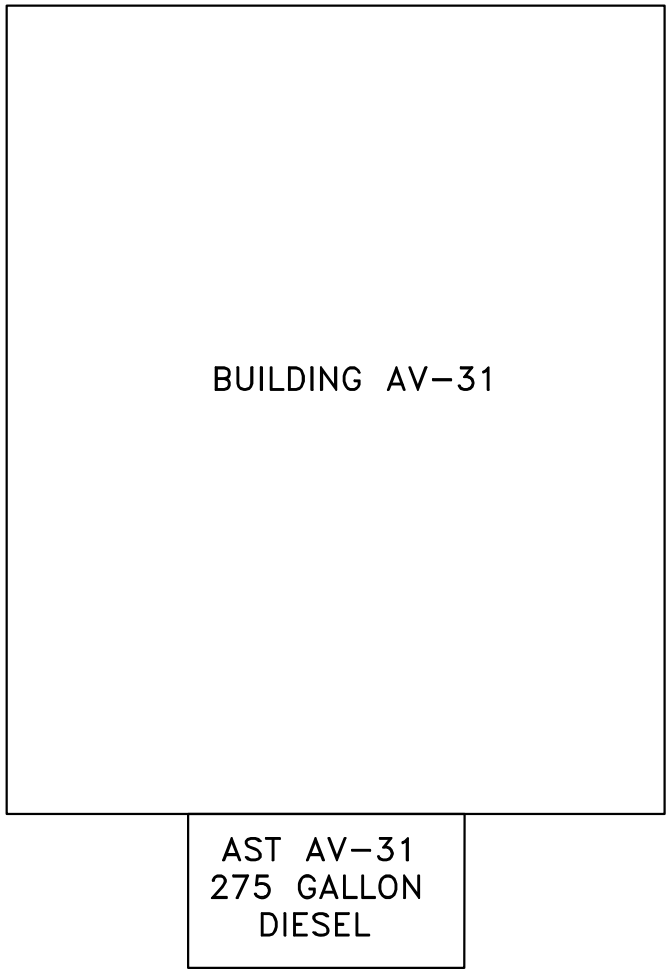
None

Notes:

None

INSPECTIONS, TESTING, AND MAINTENANCE

Routine Inspection Frequency:	Monthly	Last Formal External API 653:	N/A
Monthly Leak Detection Monitoring:	Monthly	Next Formal External API 653:	N/A
CP Bimonthly System Check:	N/A	Last Formal Internal API 653:	N/A
Last CP Test:	N/A	Next Formal Internal API 653:	N/A
Next CP Test:	N/A	STI Inspection Category:	1
Last Spill Bucket Test:	N/A	STI Inspection Schedule:	Periodic
Next Spill Bucket Test:	N/A	STI Internal Inspection	N/A
Last Containment Sump Test:	N/A	STI External Inspection:	N/A
Next Containment Sump Test:	N/A	Last STI Inspection:	N/A
		Next STI Inspection:	N/A



SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: DECEMBER 2009
SCALE: NOT TO SCALE

AST AV-31
BUILDING AV-31

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA

AST AV-31

Quick Find

Status: Active

GENERAL SYSTEM INFORMATION

Tank ID:	AV-0034-1-GEN	Grid	31	Installation Year:	Unknown
Tank Type:	AST Integral	Location	Windward		
Capacity:	188	Facility Organization	JTF		
Contents:	Diesel	Facility	Camp Justice		
Current Use	Emergency Power Generation	Nearest Building	AV-34		

COMPLIANCE STATUS

OEBGD Regulated:	Not Compliant

LABELING AND CODING

Tank ID Label:	No	Capacity Label:	No
Contents Label:	No	Fill Port Color Code	N/A

TANK INFORMATION

Construction type:	Double Walled	Tank Condition:	Good	Tank Color:	Black
Construction Material	Steel			Tank Manifolded:	No
Tank Shape	Rectangular	Corrosion Protection	Paint		
Tank Dimension:	86.5 x 41 x 24"	Tank Manufacturer:	Kohler		
Lining:	No	Model Number	N/A		

SPILL AND OVERFILL PROTECTION

Overfill Protection:	Visible Gauge	Area Lighting:	Inadequate	Collision Barrier	Adequate
Liquid Level Gauge Type:	Dial Gauge	HLA Type:	None		
Gauge Manufacturer:	Unknown	HLA Manufacturer:	N/A		
Gauge Model:	Unknown	HLA Model:	N/A		
Last Gauge Calibration:	Unknown	Tank Leak Detection:	Visual		
Next Gauge Calibration:	2009	Tank LD Manfuacturer:	N/A		
Pump Starter Control:	At Generator	Tank LD Model:	N/A		
Valves Surface Security:	N/A	Spill Catchment:	None		

PIPING SYSTEM

Piping Exposure:	N/A			Pipe Construction Material:	N/A
Pipe Condition:	N/A	Pipe Length:	N/A	Pipe Corrosion Protection:	N/A
Supply Pipe Diameter:	N/A	Pipe Sumps:	N/A	Piping Leak Detection:	N/A
Return Pipe Diameter:	N/A			Pressurized Piping Line Leak Detectors:	N/A
Delivery System:	Suction			Annual Line Leak Detectors Testing:	N/A

SECONDARY CONTAINMENT SYSTEM

Tank Secondary Containment:	DW Steel	Containment Dimensions:	N/A
Drain Mechanism:	N/A	Containment Volume:	125%
Drainage Outfall:	N/A	Drain Security:	N/A
Loading/UnLoading Containment	N/A		
Loading/Unloading Containment Recommendations	N/A		

Continuation of Tank ID: AV-0034-1-GEN

DISPENSNG TANK SYSTEMS

Dispenser:	N/A	VRS Stage 1:	N/A	Hose Retractor:	N/A
Number of Dispensers	0	VRS Stage 2:	N/A	Shear Valve:	N/A
Nozzles per Dispensers:	0	Emergency Shutoff:	N/A	Nozzle Swivel Connector:	N/A
				Break Away Coupling:	N/A

SPILL RESPONSE INFORMATION

Initial Spill Direction	Northwest	Probablity of Reaching Water:	Moderate
Initital Receptor:	Ground at tank	Spill Equipment:	Unknown
Intitial Conveyance:	Surface flow	Ultimate Discharge	Guantanamo Bay
Worst Case Discharge/Rate of Flow:	188 gallons, 75 gal per min (overfill)		

OEBGD Required Upgrades:

Install area lighting ($500) or provide routine security patrol inspections, apply tank labeling ($100) and provide spill kit on delivery truck for spill catchment.

BMP Recommendations:

None

Notes:

None

INSPECTIONS, TESTING, AND MAINTENANCE

Routine Inspection Frequency:	Monthly	Last Formal External API 653:	N/A
Monthly Leak Detection Monitoring:	Monthly	Next Formal External API 653:	N/A
CP Bimonthly System Check:	N/A	Last Formal Internal API 653:	N/A
Last CP Test:	N/A	Next Formal Internal API 653:	N/A
Next CP Test:	N/A	STI Inspection Category:	1
Last Spill Bucket Test:	N/A	STI Inspection Schedule:	Periodic
Next Spill Bucket Test:	N/A	STI Internal Inspection	N/A
Last Containment Sump Test:	N/A	STI External Inspection:	N/A
Next Containment Sump Test:	N/A	Last STI Inspection:	N/A
		Next STI Inspection:	N/A

Quick Find

Status: Active

GENERAL SYSTEM INFORMATION

Tank ID:	AV-0034-2-GEN	Grid	31	Installation Year:	Unknown
Tank Type:	AST Integral	Location	Windward		
Capacity:	312	Facility Organization	JTF		
Contents:	Diesel	Facility	Camp Justice		
Current Use	Emergency Power Generation	Nearest Building	AV-34		

COMPLIANCE STATUS

OEBGD Regulated:	Not Compliant

LABELING AND CODING

Tank ID Label:	No	Capacity Label:	No
Contents Label:	No	Fill Port Color Code	N/A

TANK INFORMATION

Construction type:	Double Walled	Tank Condition:	Good	Tank Color:	Black
Construction Material	Steel			Tank Manifolded:	No
Tank Shape	Rectangular	Corrosion Protection	Paint		
Tank Dimension:	126 x 41 x 24"	Tank Manufacturer:	Kohler		
Lining:	No	Model Number	N/A		

SPILL AND OVERFILL PROTECTION

Overfill Protection:	Visible Gauge	Area Lighting:	Inadequate	Collision Barrier	Adequate
Liquid Level Gauge Type:	Dial Gauge	HLA Type:	Unknown		
Gauge Manufacturer:	Unknown	HLA Manufacturer:	Unknown		
Gauge Model:	Unknown	HLA Model:	Unknown		
Last Gauge Calibration:	Unknown	Tank Leak Detection:	Visual		
Next Gauge Calibration:	2009	Tank LD Manfuacturer:	N/A		
Pump Starter Control:	At Generator	Tank LD Model:	N/A		
Valves Surface Security:	N/A	Spill Catchment:	None		

PIPING SYSTEM

Piping Exposure:	N/A			Pipe Construction Material:	N/A
Pipe Condition:	N/A	Pipe Length:	N/A	Pipe Corrosion Protection:	N/A
Supply Pipe Diameter:	N/A	Pipe Sumps:	N/A	Piping Leak Detection:	N/A
Return Pipe Diameter:	N/A			Pressurized Piping Line Leak Detectors:	N/A
Delivery System:	Suction			Annual Line Leak Detectors Testing:	N/A

SECONDARY CONTAINMENT SYSTEM

Tank Secondary Containment:	DW Steel	Containment Dimensions:	N/A
Drain Mechanism:	N/A	Containment Volume:	126%
Drainage Outfall:	N/A	Drain Security:	N/A
Loading/UnLoading Containment	N/A		
Loading/Unloading Containment Recommendations	N/A		

Continuation of Tank ID: AV-0034-2-GEN

DISPENSNG TANK SYSTEMS

Dispenser:	N/A	VRS Stage 1:	N/A	Hose Retractor:	N/A
Number of Dispensers	0	VRS Stage 2:	N/A	Shear Valve:	N/A
Nozzles per Dispensers:	0	Emergency Shutoff:	N/A	Nozzle Swivel Connector:	N/A
				Break Away Coupling:	N/A

SPILL RESPONSE INFORMATION

Initial Spill Direction	Northwest	Probablity of Reaching Water:	Moderate
Initital Receptor:	Ground at tank	Spill Equipment:	Unknown
Intitial Conveyance:	Surface flow	Ultimate Discharge	Guantanamo Bay
Worst Case Discharge/Rate of Flow:	312 gallons, 75 gal per min (overfill)		

OEBGD Required Upgrades:

Install area lighting ($500) or provide routine security patrol inspections, apply tank labeling ($100) and provide spill kit on delivery truck for spill catchment.

BMP Recommendations:

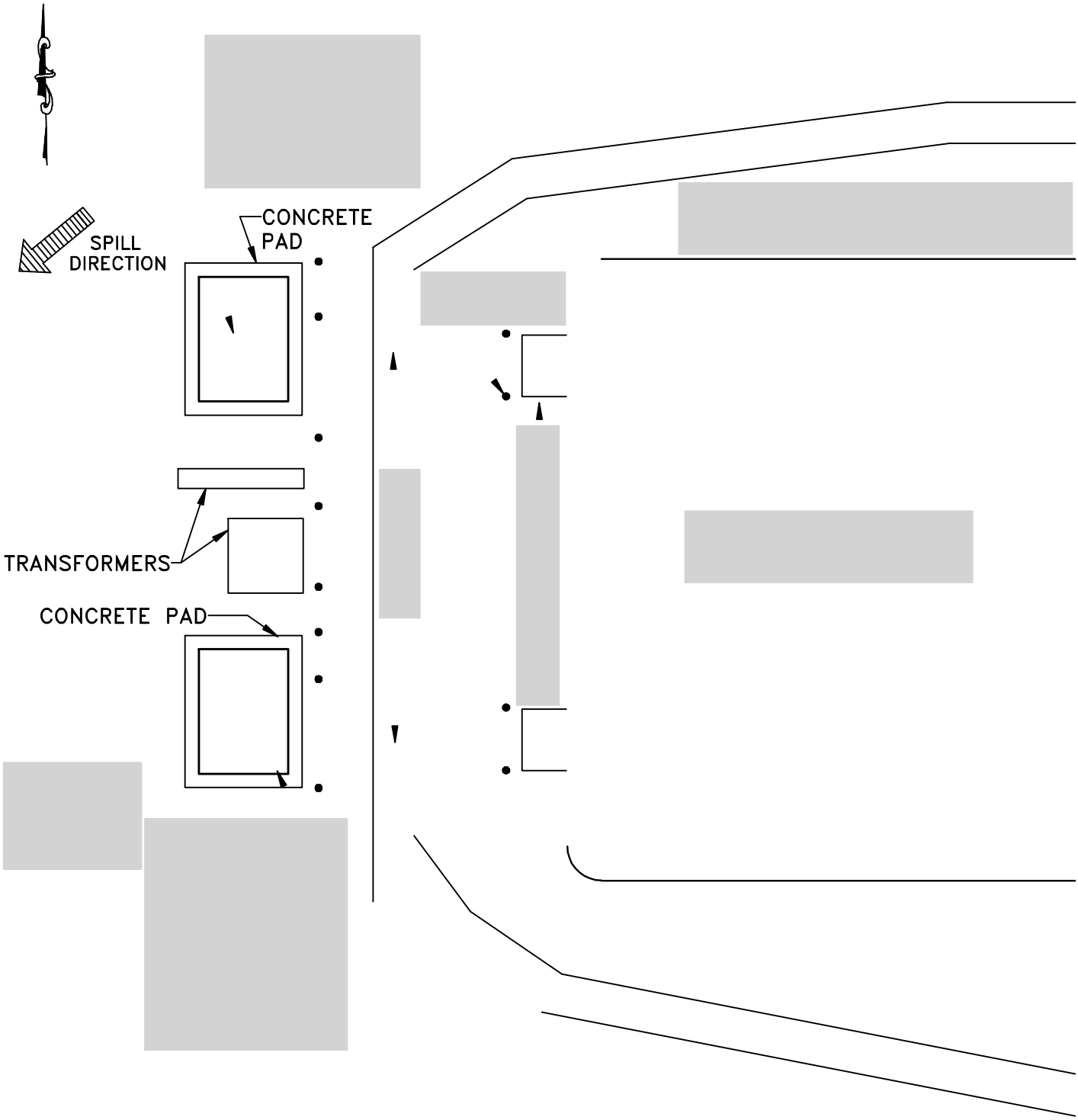
None

Notes:

None

INSPECTIONS, TESTING, AND MAINTENANCE

Routine Inspection Frequency:	Monthly	Last Formal External API 653:	N/A
Monthly Leak Detection Monitoring:	Monthly	Next Formal External API 653:	N/A
CP Bimonthly System Check:	N/A	Last Formal Internal API 653:	N/A
Last CP Test:	N/A	Next Formal Internal API 653:	N/A
Next CP Test:	N/A	STI Inspection Category:	1
Last Spill Bucket Test:	N/A	STI Inspection Schedule:	Periodic
Next Spill Bucket Test:	N/A	STI Internal Inspection	N/A
Last Containment Sump Test:	N/A	STI External Inspection:	N/A
Next Containment Sump Test:	N/A	Last STI Inspection:	N/A
		Next STI Inspection:	N/A



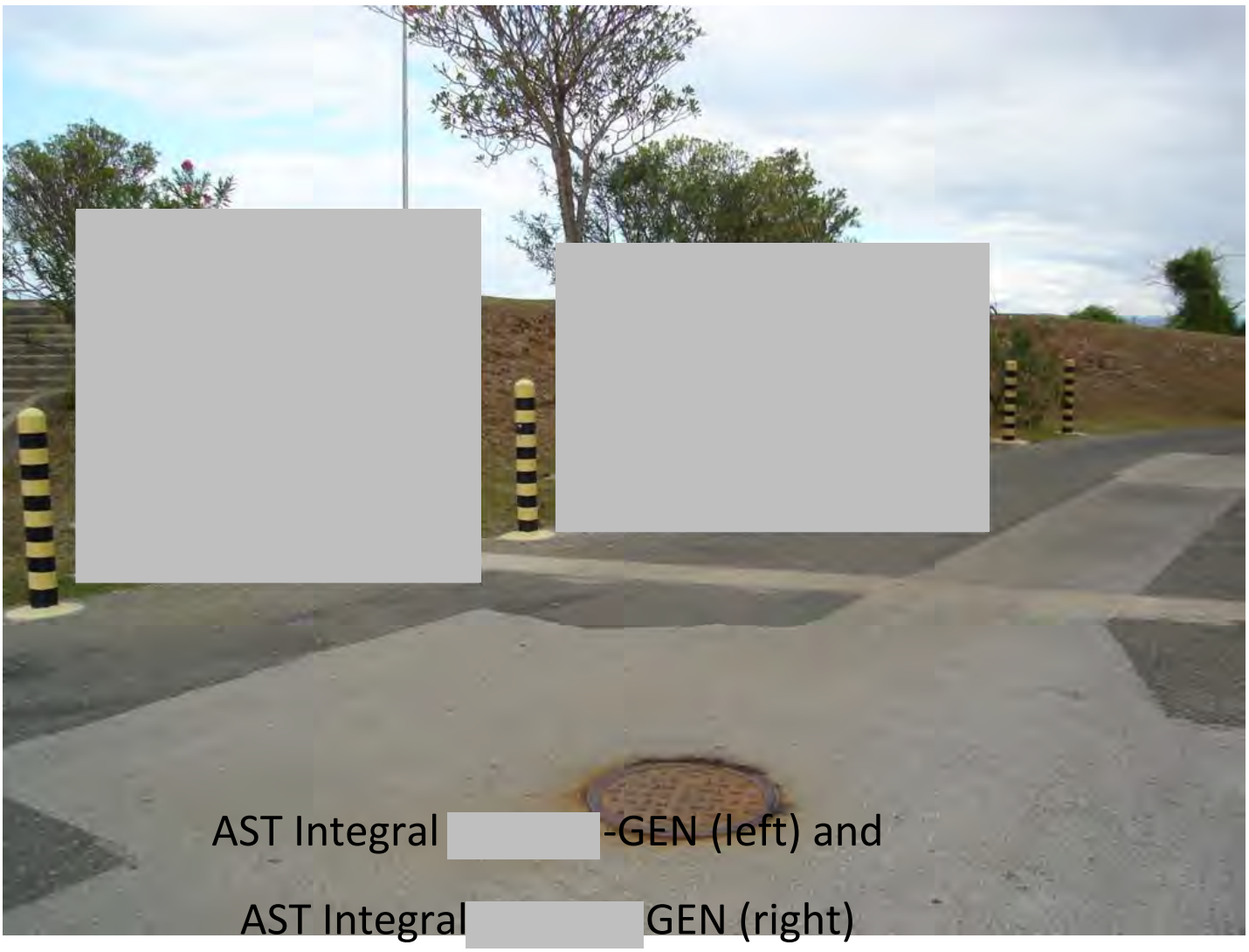
SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: DECEMBER 2009
SCALE: NOT TO SCALE

AST INTEGRAL AV-34-1-GEN
AST INTEGRAL AV-34-2-GEN
BUILDING AV-34

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA



AST Integral -GEN (left) and

AST Integral GEN (right)

W31

FM COMNAVBASE GUANTANAMO BAY//N20//

TO COMNAVREG SE JACKSONVILLE FL//N46E/46EL//

INFO CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMLANTFLT NORFOLK VA//N46//
COMNAVREG SE JACKSONVILLE FL//N00/N3PL//
NFESC PORT HUENEME CA//424//
LANTNAVFACENGCOM NORFOLK VA//182//1114//
NAVPETOFF ALEXANDRIA VA//NPO/JJJ//
NAVY JAG WASHINGTON DC//31//

USCINCSO MIAMI FL//JJJ//
COMUSNAVASO/JJJ//

CJTF GTMO

UNCLAS//N60514//

MSGID/GENADMIN/COMNAVBASE GTMO//

SUBJ/OIL SPILL REPORT, 500 GALLONS, COMNAVBASE GUANTANAMO BAY//
POC/ PATRICIA LOOP/ENVIRONMENTAL/60515/LOC:GTMO CU/TEL:660-2998-4493//

RMKS/1. RELEASE DISCOVERED AT 0700 ON 22 SEP 03//

2. ACTIVITY ORIGINATING SPILL: BURNS AND ROE SERVICES CORPORATION (CONTRACTOR RESPONSIBLE FOR OPEATION OF UTILITIES PLANT) ON GUANTANAMO BAY, CUBA//

3. SPILL LOCATION: DESALINIZATION PLANT//

4. VOLUME SPILLED: 500 GALLONS//

5. TYPE OF OIL SPILLED: USED OIL//

6. OPERATION UNDER WAY WHEN SPILL OCCURRED: DAILY BLEEDING OF WATER FROM TANK HOLDING USED OIL/SEAWATER. VALVE INADVERTENTLY LEFT OPEN. VALVE TO SECONDARY CONTAINMENT

IN ADVERTENTLY LEFT OPEN, SPILLING APPROXIMATELY 500 GALLONS OF USED OIL//

7. CAUSE OF RELEASE: VALVE ON OILY WATER TANK LEFT OPEN TOO LONG AND LEFT UNATTENDED//

8. SLICK DESCRIPTION: SHEEN 500 FEET X 50 FEET, CONTAINED WITHIN BOOM//

9. SPILL ENVIRONMENT: CLEAR, 85 DEGREES//

10. AREAS DAMAGED OR THREATENED: GUANTANAMO BAY. RELEASE CONTAINED WITHIN FLOATING BOOM//

11. TELEPHONIC REPORT TO NRC WAS NOT MADE, AREA OUTSIDE "CONUS". NO OUTSIDE ASSISTANCE WAS REQUIRED//

12. SAMPLES WERE NOT TAKEN//

13. CONTAINMENT METHOD: SPILL WAS CONTAINED WITHIN FLOATING BOOM. ABSORBENTS WERE USED TO CAPTURE RELEASE. NAVALKLEEN SOLUTION SPRAYED ALONG SHORELINE//

14. SPILL REMOVAL METHOD: FLOATING BOOM AND ABSORBENT MATERIALS WERE USED TO CONTAIN AND CAPTURE SPILL. CLEANUP COMPLETE AT 1045//

15. VOLUME OF PRODUCT RECOVERED: NO PURE PRODUCT RECOVERED//

16. PARTIES PERFORMING RESPONSE ACTIVITIES: BURNS AND ROE SERVICES CORPORATION PERSONNEL (PORT OPS CONTRACTOR) AND PWD ENVIRONMENTAL PERSONNEL//

17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT: N/A//

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS: NO ADDITIONAL ASSISTANCE REQUIRED//

19. LESSONS LEARNED: RETRAIN PERSONNEL ON ESTABLISHED STANDARD OPERATING PROCEDURES. ENSURE VALVE ON SECONDARY CONTAINMENT IS CLOSED AT ALL TIMES. INVESTIGATE INSTALLING OIL/WATER SEPEATOR TO IMPROVE THE OPERATION//

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: PATRICIA LOOP, CODE N2033, COM 011 53 99 4662, DSN 660-2998 4662//

W37

[redacted]

From: [redacted]
Sent: Friday, July 25, 2003 1:33 PM
To: [redacted]
Subject: FW: OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//

AUDITTR.TXT

FYI

-----Original Message-----
From: [redacted]
Sent: Tuesday, July 22, 2003 1:12 PM
To: [redacted]
Subject: FW: OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//

FYI

-----Original Message-----
From: Message Dissemination (NAVSTAGTMO)
Sent: Tuesday, July 22, 2003 11:55 AM
To: MDSALL
Subject: OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//

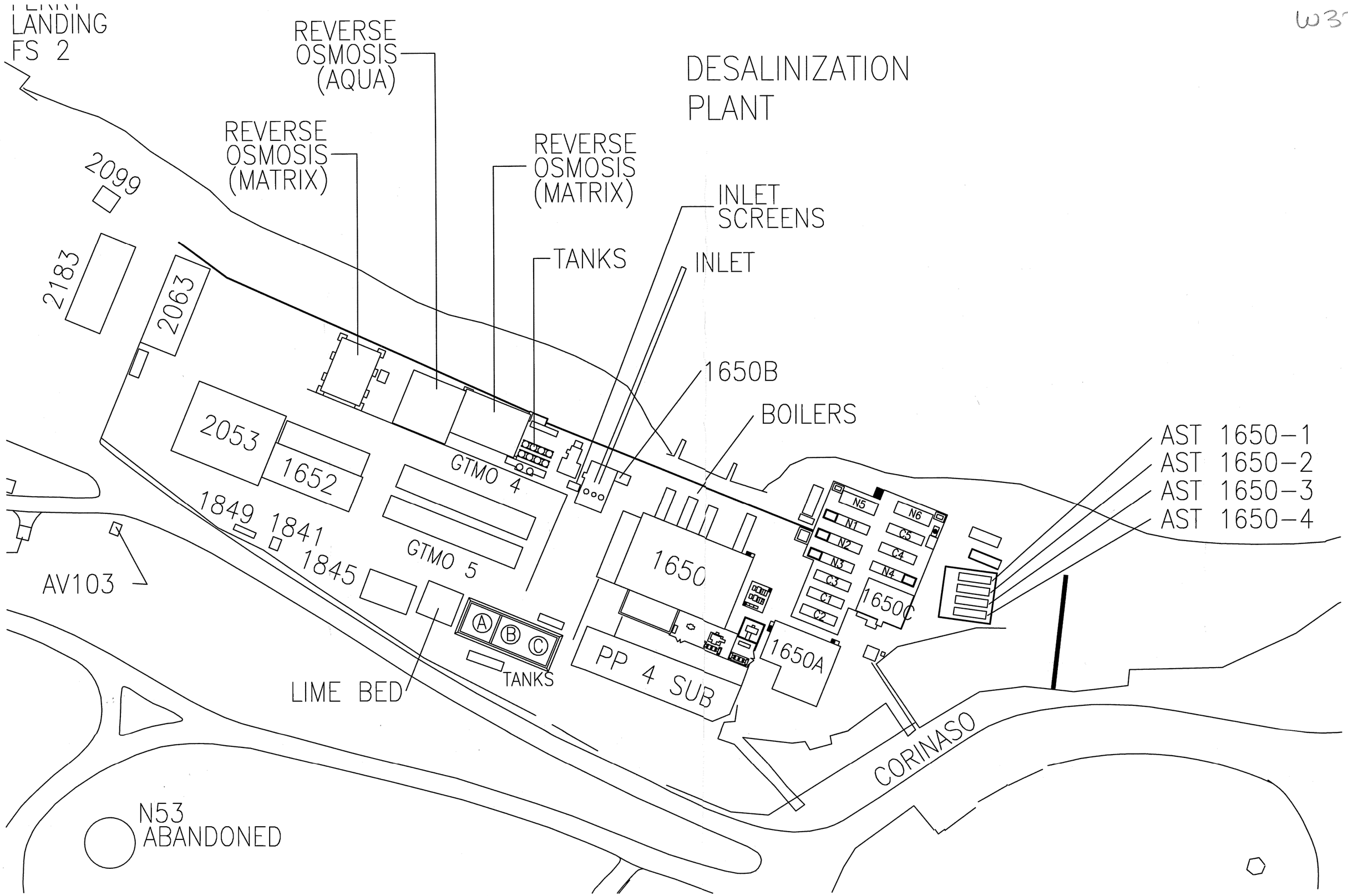
RTTUZYUW RUCOGCA0752 2031501-UUUU--RUCOGCA.
ZNR UUUUU
R 221501Z JUL 03 PSN 095803I25
FM COMNAVBASE GUANTANAMO BAY CU//N20//
TO COMNAVREG SE JACKSONVILLE FL//46E/46EL//
INFO CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMLANTFLT NORFOLK VA//N46//
COMNAVREG SE JACKSONVILLE FL//N00/N3PL//
NFESC PORT HUENEME CA//N424//
LANTNAVFACENGCOM NORFOLK VA//182/1114//
NAVPETOFF ALEXANDRIA VA//NPO/JJJJ//
NAVY JAG WASHINGTON DC//31//
CDR USSOUTHCOM MIAMI FL
COMUSNAVSO
COMDT COGARD WASHINGTON DC
CCGDSEVEN MIAMI FL
COGARD AIRSTA MIAMI FL
COGARD AV DET GUANTANAMO BAY CU
CJTF GTMO
BT
UNCLAS
MSGID/GENADMIN/COMNAVBASE GUANTANAMO BAY CU//
SUBJ/OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//
POC/PAUL SCHOENFELD/ENVIRONMENTAL/60514/LOC:GTMO CU/TEL:660-2998-4493

RMKS/1. RELEASE DISCOVERED AT 220710ZJUL03/
2. ACTIVITY ORIGINATING SPILL. BURNS AND ROE SERVICES CORPORATION (CONTRACTOR RESPONSIBLE FOR OPERATION OF DESALINIZATION PLANT) ON COMNAVBASE GUANTANAMO BAY, CU)

3. SPILL LOCATION: DESALINIZATION PLANT.
4. VOLUME SPILLED IN GALLONS: APPROXIMATELY 30 GALLONS.
5. TYPE OF OIL SPILLED: USED OIL.
6. OPERATION UNDERWAY: DAILY BLEEDING OF WATER FROM TANK HOLDING USED OIL/SEAWATER. VALVE INADVERTENTLY LEFT OPEN SPILLING ABOUT 30 GALLONS OF USED OIL.
7. SPILL CAUSE: VALVE LEFT OPEN TOO LONG AND LEFT UNATTENDED.
8. SLICK DESCRIPTION AND MOVEMENT: 5X200, LIGHT BROWN.
9. SPILL ENVIRONMENT: CLEAR, 80F.
10. AREA DAMAGED OR THREATENED: GUANTANAMO BAY, CU.
11. TELEPHONE REPORT TO NRC WAS NOT MADE. COMNAVBASE GUANTANAMO BAY IS LOCATED OUTSIDE OF CONUS.
12. SAMPLES WERE NOT TAKEN.
13. CONTAINMENT METHOD USED: FLOATING BOOM DEPLOYED TO CONTAIN SPILL, ABSORBENT BOOM AND PADS USED TO REMOVE OIL. NAVAL CLEAN SOLUTION SPRAYED ALONG ENTIRE SHORELINE.
14. SPILL REMOVAL METHOD USED: ABSORBENT MATERIAL AND NAVAL CLEAN SOLUTION (SPILL CONTAINED TO IMMEDIATE SHORELINE AREA, WATER TOO SHALLOW FOR SKIMMER AND INACCESSIBLE TO VACUUM TRUCK).
15. VOLUME OF PRODUCT RECOVERED IN GALLONS: NONE.
16. PARTIES PERFORMING SPILL REMOVAL: BURNS & ROE SERVICES PERSONNEL (PORT OPERATIONS CONTRACTOR) AND PWD ENVIRONMENTAL PERSONNEL.
17. FEDERAL, STATE OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT: N/A.
18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS: NO ADDITIONAL ASSISTANCE REQUIRED.
19. LESSONS LEARNED: ENSURE PERSONNEL ATTEND TO BLEED VALVE WHEN BLEEDING OIL/SEAWATER TANK AND SECURE VALVE BEFORE OIL LEAVES TANK. RECOMMEND INSTALLING VALVES IN DESALINIZATION PLANT DRAINS AND KEEP VALVES CLOSED. MANUALLY OPEN VALVES TO DRAIN RAIN WATER FROM DESAL PLANT WHEN NECESSARY, THEN CLOSE VALVES. RECOMMEND PRIMARY CONTAINMENT CONSTRUCTED AROUND OIL/SEAWATER TANK IN LIEU OF USING DESAL PLANT FOR CONTAINMENT.
20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION:

BT
#0752
NNNN
RTD:000-000/COPIES:

W37


LANDING
FS 2
REVERSE OSMOSIS (AQUA)
DESALINIZATION PLANT
REVERSE OSMOSIS (MATRIX)
REVERSE OSMOSIS (MATRIX)
INLET SCREENS
TANKS
INLET
2099
2183
2063
1650B
BOILERS
2053
1652
GTMO 4
AST 1650-1
AST 1650-2
AST 1650-3
AST 1650-4
1849
1841
1845
GTMO 5
1650
N5
N6
N1
N2
N3
N4
C5
C4
C3
C1
C2
1650C
AV103
A
B
C
TANKS
PP 4 SUB
1650A
LIME BED
CORINASO
N53
ABANDONED

TANK
REMOVAL /
CLOSURE

DEPARTMENT OF THE NAVY
OFFICER IN CHARGE OF CONSTRUCTION
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
NAVAL FACILITIES ENGINEERING COMMAND CONTRACTS
PSC 1005 BOX 37
FPO AE 09593-0137

TELEPHONE NO
COM
011 53 99 4162/4814/4630
A/V 564 4063 EXT 4162/4814/4630
FAX 011 53 99 4896

IN REPLY REFER TO

N62470-96-C-6833
Ser: 2008/092
December 4, 1996

ISLANDS MECHANICAL CONTRACTORS
526 STOCKTON STREET
JACKSONVILLE FL 32204

Subj: CONTRACT N62470-96-C-6833; REMOVE AND REPLACE UNDERGROUND STORAGE TANKS, U.S. NAVAL BASE, GUANTANAMO BAY, CUBA - RFP FOR PCO# 000001

In accordance with the contract clause FAR 52.243-4 titled "Changes," we propose the following change(s):

PC # 000001: REDUCED SCOPE (PLAN)

TYPE 1: NO CHANGE IN SCOPE

1. Building 905 NEX Gas Station 905-1, 905-2; NAVFAC Drawing 4343520 (CM-1)

2. Camp Bulkeley (CB-1); NAVFAC Drawing 4343520 (CM-1)

3. Desalination Plant; NAVFAC Drawings 4343524 (CM-5) and 4343568 (E-2)

4. Leeward Point Tank Farm (New work): NAVFAC Drawings 4343523 (CM-4) and 4343567 (E-1)

5. MWR Marina WR12; NAVFAC Drawings 4346526 (CM-7) and 4343570 (E-4)

6. Radio Hill Marine OP AV 585; NAVFAC Drawings 4343531 (CM-12) and 4343573 (E-7)

7. AAWC Radar Station, 279; NAVFAC Drawings 4343540 (CM-21) and 4343578 (E-12)

8. AAWC Radar Station, 1631; NAVFAC Drawings 4343545 (CM-26) and 4343580 (E-14)

TYPE 2: Clean and abandon certain tanks in place by filling with cement slurry per specifications. Clean and lock certain tanks, with all piping intact for future use.

1. McCalla Fields; Fill and abandon tanks 1,2,4,7,8,9, and 10. Clean, close and lock tanks 3,5, and 6. NAVFAC Drawings 434351 (CM-2).

2. Leeward Point Tank Farm: Fill and abandon tanks 3,4,5,6,7,8,9, and 10. Clean, close and lock tanks 1 and 2. NAVFAC Drawing 4343522 (CM-3).

TYPE 3: At contractor's option, clean and abandon in place utilizing cement slurry fill as specified or remove and structurally backfill and compact. Provide new AST.

1. Airfield Tower AV605: NAVFAC Drawings 4343532 (CM-13) and 4343574 (E-8).

2. PWD Maintenance 972: NAVFAC Drawings 4343541 (CM-22) and 4343578 (E-12).

3. Airfield Generator 1132; NAVFAC Drawings 4343542 (CM-23) and 4343579 (E-13).

TYPE 4: At contractor's option, existing UST's may be removed or abandoned in place by removing tops and filling from designated borrow pits. Provide new AST's as shown.

1. Hospital H1-1 and H1-2: NAVFAC Drawings 4343525 (CM-6) and 4343569 (E-3).

2. Leeward Police Station AV572A: NAVFAC Drawings 4343530 (CM-11) and 4343573 (E-7).

3. NAVCOMDET 2145: NAVFAC Drawings 4343552 (CM-33) and 4343585 (E-19)

TYPE 5: DELETE all work for the following UST's:

1. Gymnasium WR-23: NAVFAC Drawing 4343527 (CM-8). Delete NAVFAC Drawing 4343571 (E-5).

2. Leeward JP-5 Pumphouse AV524: NAVFAC Drawing 4343528 (CM-9). Delete AV524 portion of NAVFAC Drawing 4343569 (E-3).

3. Leeward BEQ AV 525: NAVFAC Drawing 4343529 (CM-10). Delete NAVFAC Drawing 4343572 (E-6)

4. Leeward BEQ AV620: NAVFAC Drawing 4343533 (CM-14). Delete the AV620 portion of NAVFAC Drawing 4343574 (E-8).

5. Leeward BEQ AV 621: NAVFAC Drawing 4343534 (CM-15). Delete NAVFAC Drawing 4343575 (E-9).

6. Leeward BEQ AV623: NAVFAC Drawing 4343535 (CM-16). Delete NAVFAC Drawing 4343575 (E-9) as above.

7. Leeward BEQ AV624: NAVFAC Drawing 4343536 (CM-17). Delete NAVFAC Drawing 4343576 (E-10)

8. Leeward Dispensary AV627A: NAVFAC Drawing 4343537 (CM-18). Delete NAVFAC Drawing 4343576 (E-10) as above.

9. Leeward Galley AV630A: NAVFAC Drawing 4343538 (CM-19). Delete NAVFAC Drawing 4343577 (E-11).

10. Leeward BOQ AV640: NAVFAC Drawing 4343539 (CM-20). Delete NAVFAC Drawing 4343577 (E-11) as above.

11. PWD Garage 1320: NAVFAC Drawing 4343534 (CM-24). Delete the 1320 portion of NAVFAC Drawing 4343579 (E-13)

12. NEX Auto Hobby Shop 1546/1601: NAVFAC Drawing 4343544 (CM-25). Delete the 1601 portion of NAVFAC Drawing 4343580 (E-14).

13. Gold Hill BEQ 1660A: NAVFAC Drawing 4343546 (CM-27). Delete NAVFAC Drawing 4343581 (E-15).

14. Gold Hill BEQ 1660B: NAVFAC Drawing 4343547 (CM-28). Delete NAVFAC Drawing 4343582 (E-16)

15. Gold Hill BEQ 1661: NAVFAC Drawing 4343548 (CM-29). Delete NAVFAC Drawing 4343583 (E-17).

16. Flagship Mess (Gold Hill Galley) 1662A: NAVFAC Drawing 4343549 (CM-30). Delete NAVFAC Drawing 4343584 (E-18).

17. Deer Point BOQ 1670: NAVFAC Drawing 4343550 (CM-31). Delete NAVFAC Drawing 4343584 (E-18) as above.

18. Elementary School 1681: NAVFAC Drawing 4343551 (CM-32). Delete the 1681 portion 4343585 (E-19).

19. Senior Gold Hill BEQ 2146: NAVFAC Drawing 4343553 (CM-34). Delete Drawing 434586 (E-20).

20. Senior Gold Hill BEQ 2147: NAVFAC Drawing 43435 (CM-35). Delete Drawing 434586 (E-20) as above.

TYPE 6: Add the following work.

1. Leeward Filling Station 5000 gallon tank AV 595; not shown on contract drawings - **additive work**, but shown on ROICC GTMO Sketch No. 6833-PCO-1-01 attached. At contractor's option, remove tank or abandon in place by cutting off top and filling with earth from designated borrow. **No new AST.**

NOTES:

1. Unit price item quantities are being revised and will be to you as soon as possible.

2. Resultant modification will contain marked up contract drawings with applicable drawings deleted and changes to specifications outlined herein.

3. CIH will not be required on site at all times. An IH/qualified person under the supervision of a CIH may perform testing and functions required. The CIH will prepare the confined space entry plan and visit site at least once. The IH/qualified person shall have training in confined space entry in accordance with 29 CFR 1910.146. Training and qualifications for the IH/qualified persons training and qualifications shall be submitted as a separate submittal with the CIH's confined space entry plan.

Your proposal should include a detailed breakdown as required by the contract clause titled "Modification Proposals - Price Breakdown." Use of LANTDIV Form 4330/43 (New 8/88) front page only, is requested to simplify the analysis of your proposal (use your own format for information shown on back page of form). Please include in your proposal estimate man-hours for each line item of work as well as labor rates.

If you feel additional contract time will be required to accomplish the changed work, your proposal should contain a substantiated time extension request. This request must specifically identify what construction activities will be affected and demonstrate the impact of the proposed change on the current contract completion date.

Please send your proposal to the attention of the Contracting Officer, at the earliest possible date but no later than 11 December 1996 to allow for review prior to negotiations. After receipt of your proposal, you will be contacted by TIFFANY Z. MONACO, to establish the specific time for negotiations.

Subj: CONTRACT N62470-96-C-6833; REMOVE AND REPLACE UNDERGROUND STORAGE TANKS, U.S. NAVAL BASE, GUANTANAMO BAY, CUBA - RFP FOR PCO# 000001

Please send your proposal to the attention of the Contracting Officer, at the earliest possible date but no later than 11 December 1996 to allow for review prior to negotiations. After receipt of your proposal, you will be contacted by TIFFANY Z. MONACO, to establish the specific time for negotiations.

This letter is not a Notice to Proceed with the above changes. Direction to proceed will be issued after the price of this changed work is finalized.

Sincerely

[redacted]

Contract Specialist

Enclosure:
(1) Sketch

Copy to:
Islands (local) w/enclosure
ROICC GTMO (Code 00, 09, 053) w/enclosure
PWD (Code 44) w/enclosure
File w/enclosure

441
444
445

GENERAL INFORMATION

Site Visit Date: 12/15/2008

Facility:	PPI Supply Stock (McColloch)
Building Number:	Old Runway
Facility Point of Contact:	
Phone Number:	

HM/HW INFORMATION

Hazardous Material:	Paint (Virgin)
Number of Containers:	100
Container Sizes:	5 gallons

SPILL INFORMATION

Spill Flow Direction:	North
Nearby Receptors:	Bay

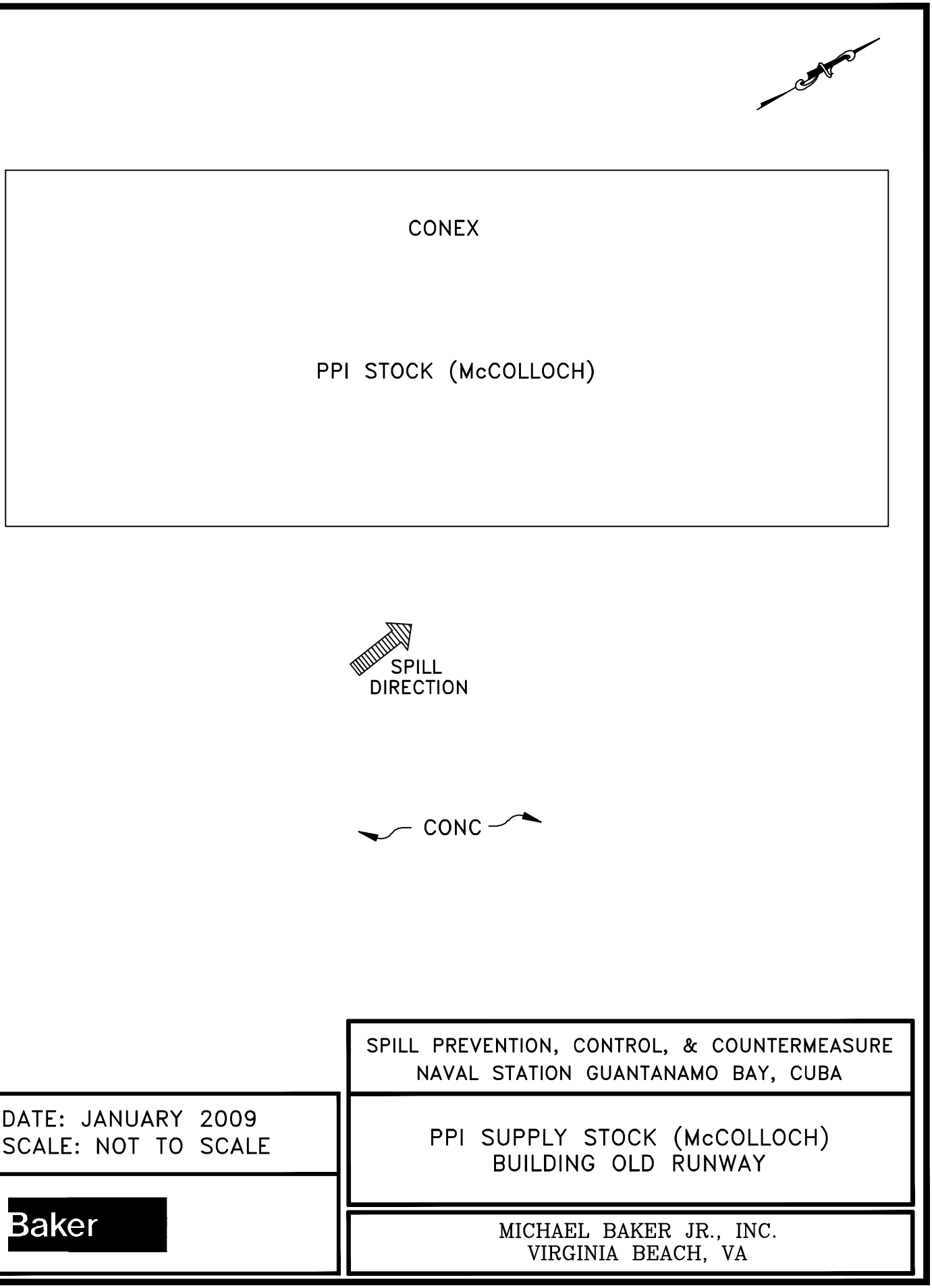
Comments:

N/A

HM/HW CHECKLIST INFORMATION

Evidence Incompatible Reactions:	No	Spill Control Kits:	No
Containers Properly Labeled:	Yes	Fire Extinguishers:	Yes
Ignitable Containers Protected:	N/A	Eye Wash:	No
Containers Outdoors:	No	MSDSs Available:	Yes
Containers Corroded:	Yes	Procedures Posted:	No
Drums Elevated:	N/A	Security:	Yes
Pallet in Good Condition:	N/A	Facility Inspected:	No
Container Spacing Adequate:	Yes	Secondary Containment:	No
Outdoor Protection:	Yes		
Collision Protection:	Yes		

Recommendations:	Ensure site has spill control kits ($750), eye wash ($1800), secondary containment, containers are free of corrosion, and posted spill procedures.
Inspection Recommendations:	Ensure routine inspections are performed by the appropriate oversight authority and that inspection records are maintained for one year.



SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: JANUARY 2009
SCALE: NOT TO SCALE

PPI SUPPLY STOCK (McCOLLOCH)
BUILDING OLD RUNWAY

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA

Table 2-14 Other HM/HW Storage Facilities

Facility	Building Number	Hazardous Material	Number of Containers	Container Sizes	Spill Flow Direction	Nearby Receptors
NEX Dry Cleaners	0776	Pictin (TCE), Cleaners, Paint	20+	1 pint to 1 gallon and 55 gallons	N/A	Bay
Oil Point- BOWTS	119	ECA 1350	1 (Tank OP-3)	200 gallons	North	Bay
Oil Point- BOWTS	119	ECA-2PA	1 (Tank OP-2)	200 gallons	North	Bay
Oil Point- BOWTS	119	NAOH	1 (Tank OP-1)	200 gallons	North	Bay
PPI (inside Camp America)	Camps	Waste Paint, Used Oil, Paint, Lube, Gas	50+	1 pint to 155 gallons	East	None
PPI Supply Stock (McCalla)	Old Runway	Paint (Virgin)	100	5 gallons	North	Bay
Print Shop	1842	Photo Developing Chemicals, Oil	25+	1 pint to 1 gallon	N/A	Bay
PWD HAZMAT Storage (NAVFAC)	AV-0080	Corrosives, Batteries, Oil	100+	55 gallons	North	Bay
RCI Main Yard	50017	Waste Oil, Lube Oil	4	55 gallons	East	None
Seabees (1)	AV-0061	Paints, Adhesives, Fuel, Grease, Lube, Antifreeze - See Inventories	80+	1 gallon to 55 gallons	North	Bay
Seabees (2)	0160	Fuel, Grease, Lube, Antifreeze - See Inventories	80+	1 gallon to 55 gallons	North	Bay
Vertex	AV-0600	Solvents, Grease, Oils, Paints	>50	1 quart to 55 gallons	N/A	Floor Drain / Bay
Vet Clinic	GC87	X-ray Chemicals, Alcohol	40+	1 pint to 5 gallons	N/A	None
		Oils, Polish, Thinner, CLP, Moly B (Grease)	<10	1 quart to 1 gallon	North	Bay
		Fuel	6	1 gallon to 5 gallons	North	Bay

Table 2-15 Hazardous Material/Hazardous Waste Storage Facility Recommendations

Facility	Building Number	Recommendations
NAVSTA FD#4 Camp America	1452	Ensure site has spill control kits ($750), eye wash ($1800), and posted spill procedures. Protect from incompatible reactions, properly label containers, protect containers, and adequately spaced containers.
		Ensure site has spill control kits ($750), eye wash ($1800), secondary containment, and posted spill procedures.
NAVSTA Supply Warehouse	0696	Ensure site has eye wash ($1800), and posted spill procedures.
NAVSTA Supply Warehouse Paperclips 1	0187	Ensure site has eye wash ($1800) and posted spill procedures.
NAVSTA Supply Warehouse Re-Use	0186	Ensure site has properly labeled containers.
NCTAMS N606	N-606 / N-609 (Office)	Ensure site has fire extinguishers ($200), eye wash ($1800), and security.
NCTAMS N609	N-609 / N-607	Ensure site has spill control kits ($750).
NEX Dry Cleaners	0776	Ensure site has secondary containment.
PPI (inside Camp America)	Camps	Ensure site has secondary containment, and posted spill procedures.
PPI Supply Stock (McCalla)	Old Runway	Ensure site has spill control kits ($750), eye wash ($1800), secondary containment, containers are free of corrosion, and posted spill procedures.
Print Shop	1842	Ensure site has posted spill procedures.
PWD HAZMAT Storage (NAVFAC)	AV-0080	Ensure site has eye wash ($1800).
RCI Main Yard	50017	Ensure site has spill control kits ($750), eye wash ($1800), MSDSs available and posted spill procedures.
Seabees (1)	AV-0061	Ensure site has secondary containment and posted spill procedures.
Vertex	AV-0600	Ensure site has posted spill procedures.
Vet Clinic	GC87	Ensure site has spill control kits ($750) .
		Ensure site has spill control kits ($750), eye wash ($1800), MSDSs available, posted spill procedures, and security.
		Ensure site has spill control kits ($750), MSDSs available, posted spill procedures, corrosion protection, and security.
WIT (Transportation Shed)	AV-0058	Ensure site has spill control kits ($750), fire extinguishers ($200), eye wash ($1800), posted spill procedures, secondary containment, outdoor protection, properly labeled containers, adequately space containers, and security.

SITE W37: DESALINATION PLANT TANKS

While changing a fitting on a drain valve, a fuel water-mixture of approximately 100 gallons was released. Absorbent pads were used to abate the mixture. No soil or groundwater was said to be impacted. The entire area is presently concrete. No documentation was available. Three 44,000 gallon ASTs have stored DFM for the boilers and emergency generators at the Diesel Plant. Four 12,000 gallon vaulted ASTs have also been installed.

Tank sizes and Content stored:
NA

In Service/ Out of Service?
See Tank list

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
N 1955 04.1
W 0750934.5

# of visible wells:
None

Soil and/or groundwater impact:
None reported.

Visible sheen on nearby surface waters?
None observed.

Past clean-up efforts used:
Absorbent pads

Name & date of Report generated for past clean-up; Report Location?
None identified.

Findings of Tank/Pipeline testing Report review:
NA

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

Photos:

General shot of Desal Plant

TANK
REMOVAL /
CLOSURE

DEPARTMENT OF THE NAVY
OFFICER IN CHARGE OF CONSTRUCTION
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
NAVAL FACILITIES ENGINEERING COMMAND CONTRACTS
PSC 1005 BOX 37
FPO AE 09593-0137

TELEPHONE NO
COM
011 53 99 4162/4814/4630
A/V 564 4063 EXT 4162/4814/4630
FAX 011 53 99 4896

IN REPLY REFER TO

N62470-96-C-6833
Ser: 2008/092
December 4, 1996

ISLANDS MECHANICAL CONTRACTORS
526 STOCKTON STREET
JACKSONVILLE FL 32204

Subj: CONTRACT N62470-96-C-6833; REMOVE AND REPLACE UNDERGROUND STORAGE TANKS, U.S. NAVAL BASE, GUANTANAMO BAY, CUBA - RFP FOR PCO# 000001

In accordance with the contract clause FAR 52.243-4 titled "Changes," we propose the following change(s):

PC # 000001: REDUCED SCOPE (PLAN)

TYPE 1: NO CHANGE IN SCOPE

1. Building 905 NEX Gas Station 905-1, 905-2; NAVFAC Drawing 4343520 (CM-1)

2. Camp Bulkeley (CB-1); NAVFAC Drawing 4343520 (CM-1)

3. Desalination Plant; NAVFAC Drawings 4343524 (CM-5) and 4343568 (E-2)

4. Leeward Point Tank Farm (New work): NAVFAC Drawings 4343523 (CM-4) and 4343567 (E-1)

5. MWR Marina WR12; NAVFAC Drawings 4346526 (CM-7) and 4343570 (E-4)

6. Radio Hill Marine OP AV 585; NAVFAC Drawings 4343531 (CM-12) and 4343573 (E-7)

7. AAWC Radar Station, 279; NAVFAC Drawings 4343540 (CM-21) and 4343578 (E-12)

8. AAWC Radar Station, 1631; NAVFAC Drawings 4343545 (CM-26) and 4343580 (E-14)

TYPE 2: Clean and abandon certain tanks in place by filling with cement slurry per specifications. Clean and lock certain tanks, with all piping intact for future use.

1. McCalla Fields; Fill and abandon tanks 1,2,4,7,8,9, and 10. Clean, close and lock tanks 3,5, and 6. NAVFAC Drawings 434351 (CM-2).

2. Leeward Point Tank Farm: Fill and abandon tanks 3,4,5,6,7,8,9, and 10. Clean, close and lock tanks 1 and 2. NAVFAC Drawing 4343522 (CM-3).

TYPE 3: At contractor's option, clean and abandon in place utilizing cement slurry fill as specified or remove and structurally backfill and compact. Provide new AST.

1. Airfield Tower AV605: NAVFAC Drawings 4343532 (CM-13) and 4343574 (E-8).

2. PWD Maintenance 972: NAVFAC Drawings 4343541 (CM-22) and 4343578 (E-12).

3. Airfield Generator 1132; NAVFAC Drawings 4343542 (CM-23) and 4343579 (E-13).

TYPE 4: At contractor's option, existing UST's may be removed or abandoned in place by removing tops and filling from designated borrow pits. Provide new AST's as shown.

1. Hospital H1-1 and H1-2: NAVFAC Drawings 4343525 (CM-6) and 4343569 (E-3).

2. Leeward Police Station AV572A: NAVFAC Drawings 4343530 (CM-11) and 4343573 (E-7).

3. NAVCOMDET 2145: NAVFAC Drawings 4343552 (CM-33) and 4343585 (E-19)

TYPE 5: DELETE all work for the following UST's:

1. Gymnasium WR-23: NAVFAC Drawing 4343527 (CM-8). Delete NAVFAC Drawing 4343571 (E-5).

2. Leeward JP-5 Pumphouse AV524: NAVFAC Drawing 4343528 (CM-9). Delete AV524 portion of NAVFAC Drawing 4343569 (E-3).

3. Leeward BEQ AV 525: NAVFAC Drawing 4343529 (CM-10). Delete NAVFAC Drawing 4343572 (E-6)

4. Leeward BEQ AV620: NAVFAC Drawing 4343533 (CM-14). Delete the AV620 portion of NAVFAC Drawing 4343574 (E-8).

5. Leeward BEQ AV 621: NAVFAC Drawing 4343534 (CM-15). Delete NAVFAC Drawing 4343575 (E-9).

6. Leeward BEQ AV623: NAVFAC Drawing 4343535 (CM-16). Delete NAVFAC Drawing 4343575 (E-9) as above.

7. Leeward BEQ AV624: NAVFAC Drawing 4343536 (CM-17). Delete NAVFAC Drawing 4343576 (E-10)

8. Leeward Dispensary AV627A: NAVFAC Drawing 4343537 (CM-18). Delete NAVFAC Drawing 4343576 (E-10) as above.

9. Leeward Galley AV630A: NAVFAC Drawing 4343538 (CM-19). Delete NAVFAC Drawing 4343577 (E-11).

10. Leeward BOQ AV640: NAVFAC Drawing 4343539 (CM-20). Delete NAVFAC Drawing 4343577 (E-11) as above.

11. PWD Garage 1320: NAVFAC Drawing 4343534 (CM-24). Delete the 1320 portion of NAVFAC Drawing 4343579 (E-13)

12. NEX Auto Hobby Shop 1546/1601: NAVFAC Drawing 4343544 (CM-25). Delete the 1601 portion of NAVFAC Drawing 4343580 (E-14).

13. Gold Hill BEQ 1660A: NAVFAC Drawing 4343546 (CM-27). Delete NAVFAC Drawing 4343581 (E-15).

14. Gold Hill BEQ 1660B: NAVFAC Drawing 4343547 (CM-28). Delete NAVFAC Drawing 4343582 (E-16)

15. Gold Hill BEQ 1661: NAVFAC Drawing 4343548 (CM-29). Delete NAVFAC Drawing 4343583 (E-17).

16. Flagship Mess (Gold Hill Galley) 1662A: NAVFAC Drawing 4343549 (CM-30). Delete NAVFAC Drawing 4343584 (E-18).

17. Deer Point BOQ 1670: NAVFAC Drawing 4343550 (CM-31). Delete NAVFAC Drawing 4343584 (E-18) as above.

18. Elementary School 1681: NAVFAC Drawing 4343551 (CM-32). Delete the 1681 portion 4343585 (E-19).

19. Senior Gold Hill BEQ 2146: NAVFAC Drawing 4343553 (CM-34). Delete Drawing 434586 (E-20).

20. Senior Gold Hill BEQ 2147: NAVFAC Drawing 43435 (CM-35). Delete Drawing 434586 (E-20) as above.

TYPE 6: Add the following work.

1. Leeward Filling Station 5000 gallon tank AV 595; not shown on contract drawings - **additive work**, but shown on ROICC GTMO Sketch No. 6833-PCO-1-01 attached. At contractor's option, remove tank or abandon in place by cutting off top and filling with earth from designated borrow. **No new AST.**

NOTES:

1. Unit price item quantities are being revised and will be to you as soon as possible.

2. Resultant modification will contain marked up contract drawings with applicable drawings deleted and changes to specifications outlined herein.

3. CIH will not be required on site at all times. An IH/qualified person under the supervision of a CIH may perform testing and functions required. The CIH will prepare the confined space entry plan and visit site at least once. The IH/qualified person shall have training in confined space entry in accordance with 29 CFR 1910.146. Training and qualifications for the IH/qualified persons training and qualifications shall be submitted as a separate submittal with the CIH's confined space entry plan.

Your proposal should include a detailed breakdown as required by the contract clause titled "Modification Proposals - Price Breakdown." Use of LANTDIV Form 4330/43 (New 8/88) front page only, is requested to simplify the analysis of your proposal (use your own format for information shown on back page of form). Please include in your proposal estimate man-hours for each line item of work as well as labor rates.

If you feel additional contract time will be required to accomplish the changed work, your proposal should contain a substantiated time extension request. This request must specifically identify what construction activities will be affected and demonstrate the impact of the proposed change on the current contract completion date.

Please send your proposal to the attention of the Contracting Officer, at the earliest possible date but no later than 11 December 1996 to allow for review prior to negotiations. After receipt of your proposal, you will be contacted by TIFFANY Z. MONACO, to establish the specific time for negotiations.

Subj: CONTRACT N62470-96-C-6833; REMOVE AND REPLACE UNDERGROUND STORAGE TANKS, U.S. NAVAL BASE, GUANTANAMO BAY, CUBA - RFP FOR PCO# 000001

Please send your proposal to the attention of the Contracting Officer, at the earliest possible date but no later than 11 December 1996 to allow for review prior to negotiations. After receipt of your proposal, you will be contacted by [redacted] to establish the specific time for negotiations.

This letter is not a Notice to Proceed with the above changes. Direction to proceed will be issued after the price of this changed work is finalized.

Sincerely,

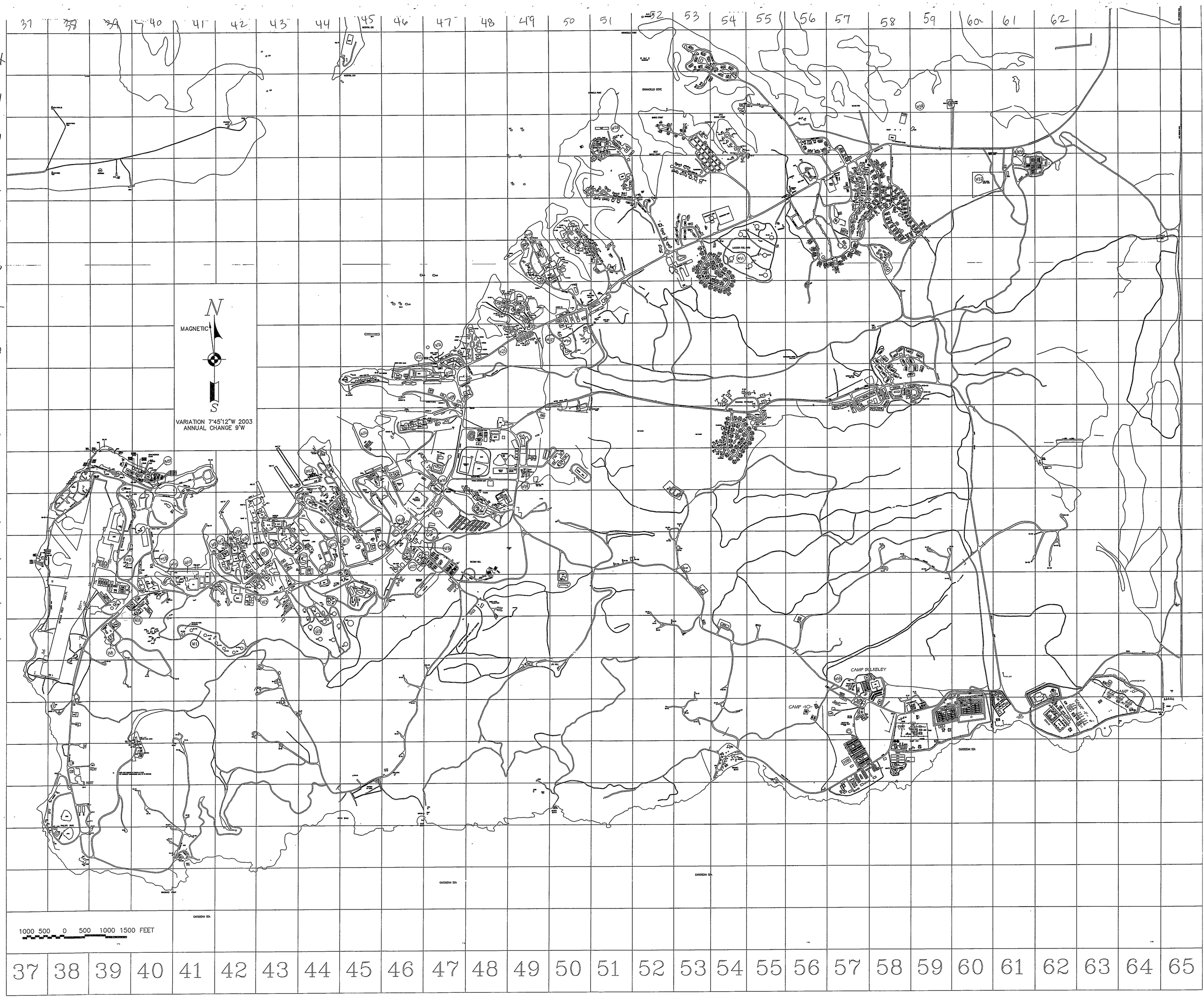
[redacted]

Contract Specialist

Enclosure:
(1) Sketch

Copy to:
Islands (local) w/enclosure
ROICC GTMO (Code 00, 09, 053) w/enclosure
PWD (Code 44) w/enclosure
File w/enclosure

441
444
445


MAGNETIC
N
S
VARIATION 7°45'12"W 2003
ANNUAL CHANGE 9'W
CAMP BULKELEY
CAMP -10-
CARIBBEAN SEA
1000 500 0 500 1000 1500 FEET

Sites included in this Report Are:

WINDARD

- SITE W: PAINT REMOVAL SYSTEM AT DIVE LOCKER
- SITE W: TRANSFORMERS
- SITE W: WINDWARD LANDFILL
- SITE W01: GAS HILL TANKS
- SITE W02: HAPPY VALLEY TANKS
- SITE W03: HAPPY VALLEY ANNEX AND TRUCK RACK
- SITE W04: PARKING LOT PIPELINE BREAK NEXT TO BLDG 752
- SITE W05: POV PARKING AREA AND TANK 59
- SITE W06: WHARF U
- SITE W07: OIL POINT TANKS
- SITE W08: TRUCK PARKING AREA NEAR BLDG 715
- SITE W09: BOWTS TANK,ORIGINAL LOCATION FOR TANK 122
- SITE W10: TRANSPORTATION AREA
- SITE W11: RCI AREA
- SITE W12: BLACK BEACH AREA NEAR DIVE LOCKER
- SITE W13: CPOOL
- SITE W14: VALVE PIT Across from LYNX on Sherman Avenue
- SITE W16: NEX GAS STATION
- SITE W17: GOVERNMENT GAS STATION
- SITE W18: NEX LAUNDRY & DRYCLEANING SHOP
- SITE W19: HW FACILITY
- SITE W20: VALVE PIT Leak Across From BOQ.
- SITE W21/22: MWR MARINA FUELING AREAS & PIT THAT SUPPLIES FUEL PIER
- SITE W23: NEX AUTO PORT
- SITE W24: MWR AUTO HOBBY SHOP
- SITE W24: MWR AUTO HOBBY SHOP
- SITE W25: VALVE PIT #21 SPILL SITE (Lassiter Pipeline)
- SITE W27: LOW POINT BEHIND SEABEE SELFHELP
- SITE W28: NEX STORE SPILL SITE
- SITE W29: MIA SPILL SITE AT VALVE PIT 26
- SITE W31: LASSITER FUEL FARM
- SITE W32: MWR METAL DUMP
- SITE W33: ASPHALT PLANT NEAR CAMP XRAY
- SITE W34: OLD METAL DUMP NEAR HSG WASTEWATER PLANT
- SITE W34: WASTEWATER PLANT AT HOUSING
- SITE W35: McDONALDS SPILL SITE
- SITE W36: LIZARD ISLAND
- SITE W37: DESALINATION PLANT TANKS
- SITE W38: COAST GUARD RAMP AND SECURITY BOAT SHED
- SITE W39: MWR MAINTENANCE YARD
- SITE W40: USTs BEHIND SEABEE SELF HELP BLDG
- SITE W41: McCALLA TANKS
- SITE W42: MARINE SITE GALLEY
- SITE W43: CAMP BUCKELEY

SITE W01: GAS HILL TANKS

Gas Hill consisted of seven bulk storage tanks with a total capacity of approximately 6.5 million gallons. These tanks have been closed in place and had historical leaks per personnel interviews (Apr 07). Personnel indicate this is the highest point in the area, thus fuel would have migrated down gradient. The tanks reportedly stored AVGAS, MOGAS, and JP-5.

RCI and Islands Mechanical were the contactors that closed these tanks. (Contract N62470-98-C-8800)(NAVFAC Drawing: 4383205)
Tanks were closed in place. Jack hammered top and bottom and pushed them in. Only Tank 712 is open, but does not contain any fuel and is not in service. It was cleaned in 2002. GAS Hill Spill - Someone thought there was a spill about 10 years ago from top of hill. No documentation found and sketchy details.

Tank valve pits have earthen bottoms. Past spills in pits were observed but not recorded.

The valve pit for Tank 714 was converted to concrete in 2003 by Bayside Mechanical, Inc. Stains were visible prior to repair.

Tank Sizes and Content stored:
See Tank History List
Tank 709 - AVGAS
Tank 710 – AVGAS
Tank 711 – AVGS, JP5
Tank 712 – JP5
Tank 713 – JP5
Tank 714 – JP5, JP4, JP5, MOGAS
Tank 715 – NSFO, Distilate, Diesel

In Service/ Out of Service?
See Tank History List
Tank 709 - Demolished
Tank 710 – Demolished
Tank 711 – Demolished
Tank 712 – Demolished
Tank 713 – Demolished
Tank 714 – Demolished
Tank 715 – Demolished

Estimated Size of Contaminated Area:
Various

GPS Coordinates:
Tank 709 - 0483449, 2201260
Tank 710 – 0483720, 2201260
Tank 711 – 0483787, 2201214
Tank 712 – 0486019, 2203371
Tank 713 – None taken
Tank 714 – 0486019, 2203371
Tank 715 – None taken

# of visible wells:
None

Soil and/or groundwater impact:
Soil impacted. Groundwater believed to be impacted in some areas.

Visible sheen on nearby surface waters?
NA

Past clean-up efforts used:
No remedial efforts occurred at the tanks.

Name & date of Report generated for past clean-up; Report Location?
No Reports were generated.

Findings of Tank/Pipeline testing Report review:
None available

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

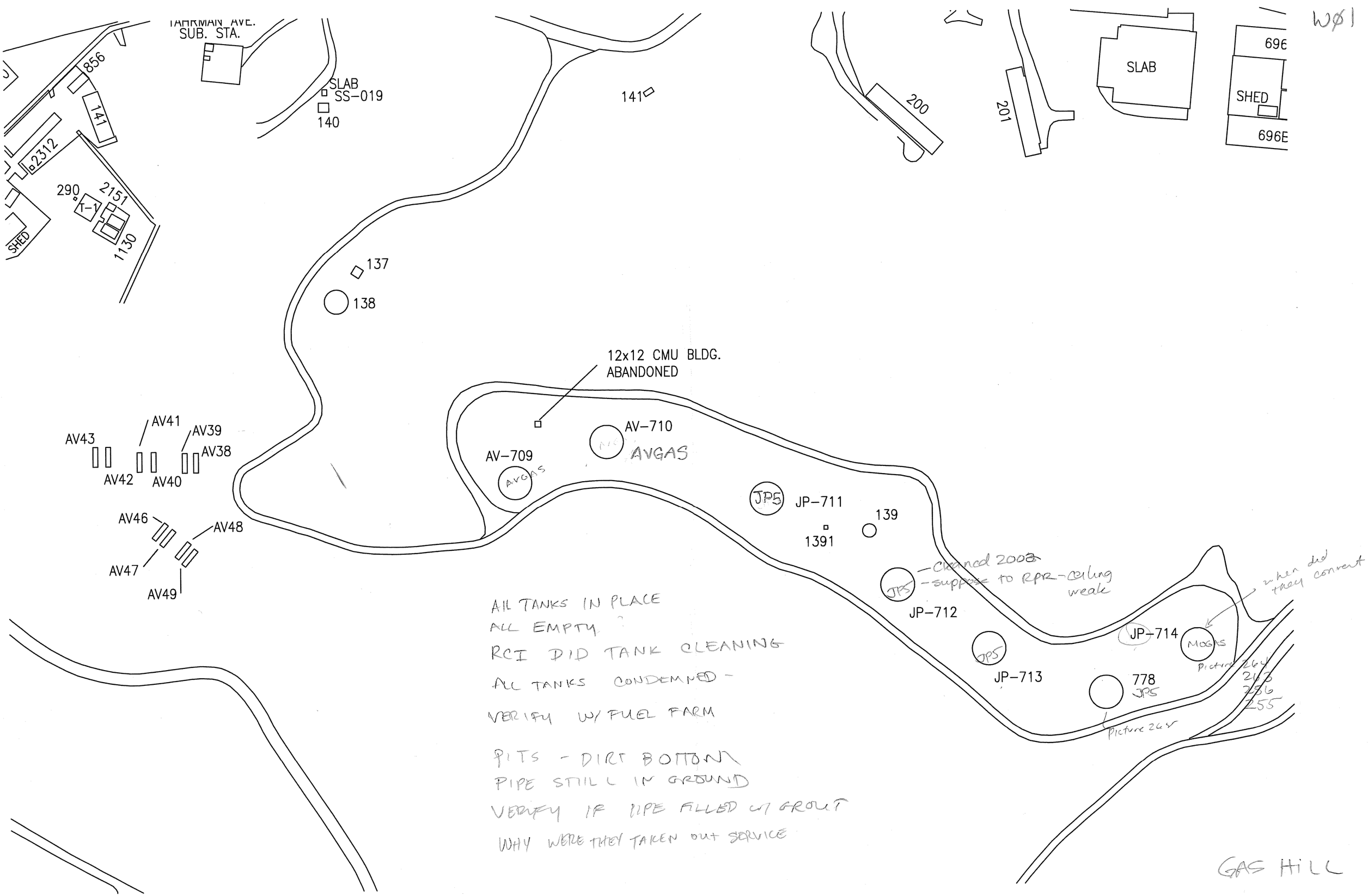
Points Of Contact:

References & Drawings:

RCI and Islands Mechanical were the contactors that closed these tanks. (Contract N62470-98-C-8800)(NAVFAC Drawing: 4383205)

Tank Management Plan , AST
Tank Management Plan, UST

Photos:



- Cleaned 2002
- suppose to RPR - ceiling weak

ALL TANKS IN PLACE
ALL EMPTY
RCI DID TANK CLEANING
ALL TANKS CONDEMNED -
VERIFY W/ FUEL FARM

PITS - DIRT BOTTOM
PIPE STILL IN GROUND
VERIFY IF PIPE FILLED W/ GROUT
WHY WERE THEY TAKEN OUT SERVICE

Gas Hill looking from top of tank 714 toward the back of gas hill

Gas Hill

Gas Hill Tank 711 (Tank 7)

Gas Hill Tank 710 (Tank 6)

Fuel hose discarded on hill side. Between tank 710 and 709

Gas Hill tank 709 (Tank 5)

Gas Hill Tank 714 Inside walkway to shell of tank

Gas Hill

Gas Hill Pipeline view from RCI looking up to hill

Gas Hill Pipeline view from RCI looking up to hill

Gas Hill Tank 712

Gas Hill Tank 712

Gas Hill tank 709 (Tank 5)

Gas Hill

Gas Hill Pipeline view from RCI looking up to hill

Gas Hill Tank 714 Valve Pit

Gas Hill Pipeline view from RCI looking up to hill

Pipeline from Gas Hill. Standing next to RCI taking picture looking up to Gas Hill

SITE W11: RCI AREA

RCI hit a fuel line while clearing an area in their compound. There was a spill. They dug up the soil and installed a valve box at the point where they hit the line. They believe they removed the dirty soil, but there's no documentation to verify this.

Tank sizes and Content stored:
NA

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
0483788/2201211

# of visible wells:
None

Soil and/or groundwater impact:
Unknown

Visible sheen on nearby surface waters?
NA

Past clean-up efforts used:
None reported.

Name & date of Report generated for past clean-up; Report Location?
None identified.

Findings of Tank/Pipeline testing Report review:
NA

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

Photos:

PHOTOS NOT AVAILABLE

w11

Loop, Patricia K. (NAVSTAGTMO n2033)

From: [redacted]
Sent: Saturday, January 18, 2003 3:06 PM
To: [redacted]
Cc: [redacted]
Subject: FUEL SPILL RCI COMPOUND

At approximately 0750 (Jan. 18, 2003) [redacted] notified me of fuel bubbling up at their excavation site at the RCI compound. I recommend to her to call the Fire Department for initial response. In the interim KW would divert its vacuum truck from the line evacuation at Pipeline Alley to the RCI compound.

At approximately 0830 KW started evacuating the 10" JP5 pipeline at the RCI compound. At 1500 the Pipeline between Gas Hill and the RCI compound was evacuated of its contents. System secure.

Approximately 50 gallons may have leaked from the pipeline into the earth at the excavation site. Some of the contaminated dirt remove from the site was placed into a drum provided by Environmental.

Cause of leak: During excavation the back hoe stripped off the valve stem from a buried drain valve. A temporary repair was made by removing the bent valve stem and inserting a wooden plug with sealant compound into the bonnet of the existing valve.

[redacted]

SITE W41: McCALLA TANKS

In 1996 and 1997 some tanks were closed, cleaned, and filled with sand slurry. Three (3) AVGAS tanks remain but are inactive. No known spills were reported. No pipe breaks since the 1940's. Aboveground storage tanks (AST) AV-38 thru AV-41 were removed prior to 1988. Remaining tanks are filled with sand slurry.

Tank size and Content stored:
Tanks AST AV-38 thru AV-41 – Removed

In Service/ Out of Service?
Removed. See Tank History list.

Estimated Size of Contaminated Area:
None reported

GPS Coordinates:
Supply Pipes: N 19° 54'46.3", W 075°09'06.2"
AVGAS Tanks: N 19° 54'44.5", W 075°09'37.2"

# of visible wells: None observed

Soil and/or groundwater impact:
No

Visible sheen on nearby surface waters?
No

Past clean-up efforts used:
No history of past clean-ups.

Name & date of Report generated for past clean-up; Report Location?
Findings of Tank/Pipeline testing Report review:
None known.

Name and date of MILCON or other significant construction project planned in vicinity:
None identified.

POINTS OF CONTACT:

References & Drawings:
None known

Photos:

is standing on some UST's at McCalla Field which were used to supply fuel to the Sea Plane Squadron

is standing on some UST's at McCalla Field which were used to supply fuel to the Sea Plane Squadron

in front of two AST's at McCalla Field in that same area

SITE W37: DESALINATION PLANT TANKS

While changing a fitting on a drain valve, a fuel water-mixture of approximately 100 gallons was released. Absorbent pads were used to abate the mixture. No soil or groundwater was said to be impacted. The entire area is presently concrete. No documentation was available. Three 44,000 gallon ASTs have stored DFM for the boilers and emergency generators at the Diesel Plant. Four 12,000 gallon vaulted ASTs have also been installed.

Tank sizes and Content stored:
NA

In Service/ Out of Service?
See Tank list

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
N 1955 04.1
W 0750934.5

# of visible wells:
None

Soil and/or groundwater impact:
None reported.

Visible sheen on nearby surface waters?
None observed.

Past clean-up efforts used:
Absorbent pads

Name & date of Report generated for past clean-up; Report Location?
None identified.

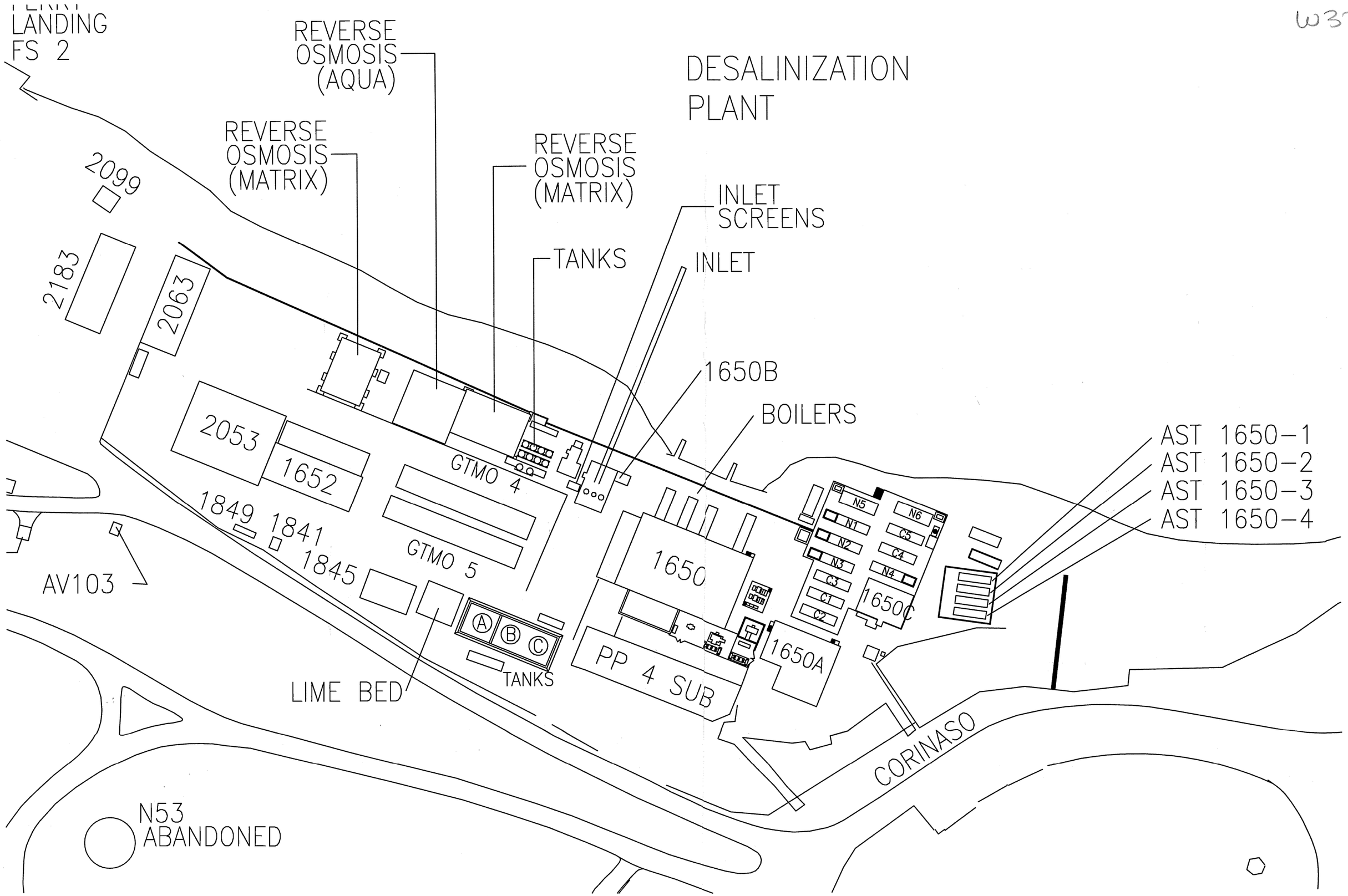
Findings of Tank/Pipeline testing Report review:
NA

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

W37


LANDING
FS 2
REVERSE OSMOSIS (AQUA)
DESALINIZATION PLANT
REVERSE OSMOSIS (MATRIX)
REVERSE OSMOSIS (MATRIX)
INLET SCREENS
TANKS
INLET
2099
2183
2063
1650B
BOILERS
2053
1652
GTMO 4
AST 1650-1
AST 1650-2
AST 1650-3
AST 1650-4
1849
1841
1845
GTMO 5
1650
N5
N6
N1
N2
N3
N4
C5
C4
C3
C1
C2
1650C
AV103
A
B
C
TANKS
PP 4 SUB
1650A
LIME BED
CORINASO
N53
ABANDONED

Photos:

General shot of Desal Plant

SITE W19: HW FACILITY

Pictures from 1993 show signs of stains on dirt and gravel. There were many stains in the HW compound in April 1996. Over the years, crush and run has been added.

Tank sizes and Content stored:
NA

In Service/ Out of Service?
NA

Estimated Size of Contaminated Area:
Unknown

GPS Coordinates:
None taken

# of visible wells:
None

Soil and/or groundwater impact:
Unknown

Visible sheen on nearby surface waters?
NA

Past clean-up efforts used:
NA

Name & date of Report generated for past clean-up; Report Location?
None identified.

Findings of Tank/Pipeline testing Report review:
NA

Name and date of MILCON or other significant construction project planned in vicinity:
None identified

POINTS OF CONTACT:

References & Drawings:
NA

Photos:

H W Facility

1993

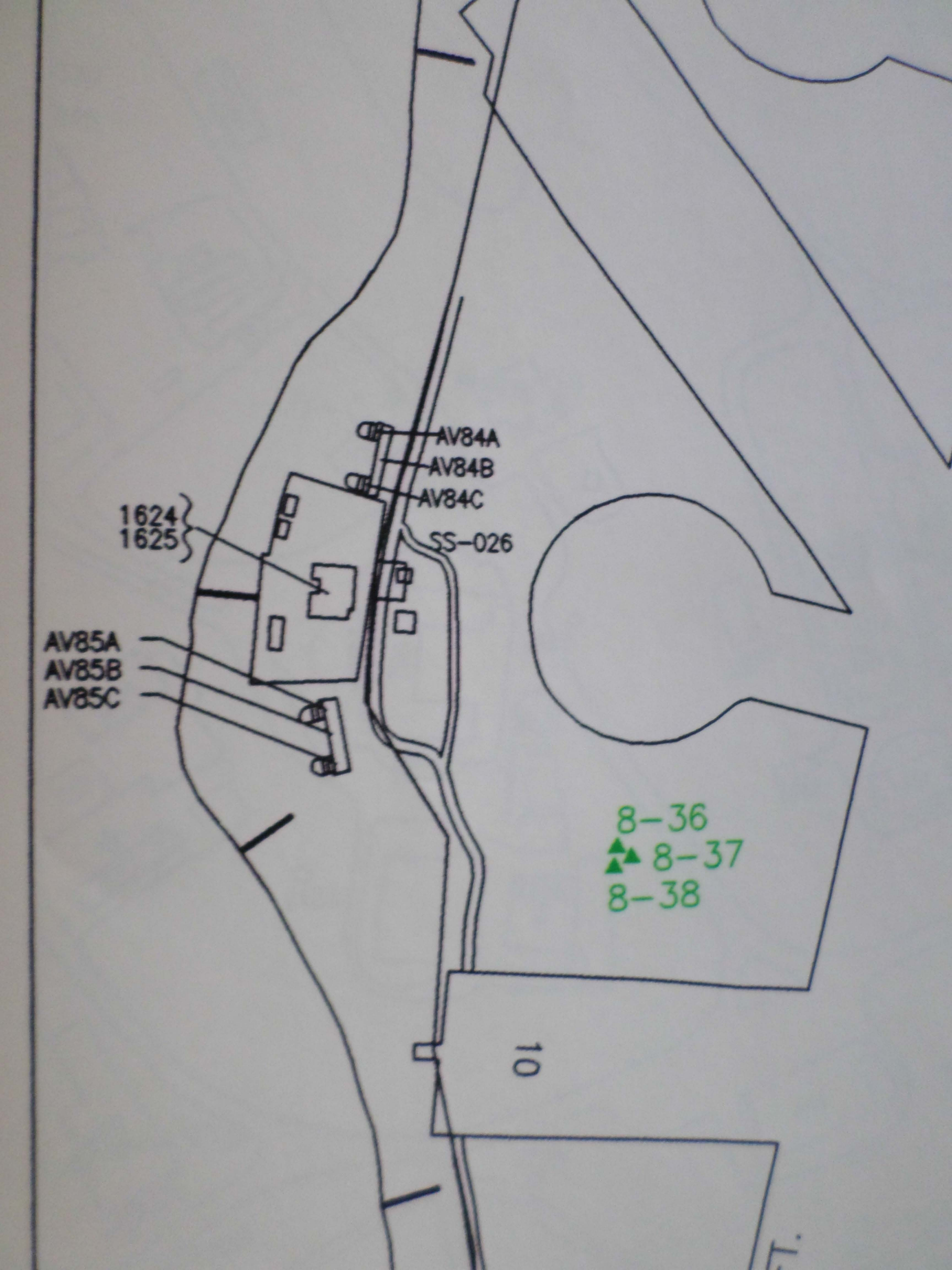
HW FACILITY
1993

H W Facility
1993

WIND SOCK
FERRY LANDING FS 3
1983
NAV AID
1985
FERRY LANDING 2134
2099
2183
2063
GTMO 3
REVERSE OSMOSIS
TANKS
INLET SCREENS
INLET
DESALINIZATION PLANT
1650B
8-14 31-708
8-15 8-19(OS)
8-16 8-20(OS)
8-17 8-21(OS)
8-18
8-09
8-10
8-11
8-12
8-13
AV162
AV105
AV86
AV104
AV103
2053
1652
GTMO 4
GTMO 5
1849
1841
1845
BOILERS
1650
PP 1 SUB
LIME BED
CORINASO
PATIO
OV10
OV68
1778
OV1
OV2
OV3
OV4
OV9
SLAB
JUNGLE GYM
8-06
8-07
8-08
8-03
8-04
N53 ABANDONED
N24
1275
549
PLAYGROUND
8-29
8-30
8-31
8-32
8-27
8-28
2177
2178
2179
C069
C073
C075
40-82
P. GATE
CATALINA RD.

AV84A
AV84B
AV84C
SS-026
1624
1625
V85A
V85B
V85C
8-36
8-37
8-38
10
4860 FT.
8-32
40-82
SHED
AV130
AV87
AV106
40-809(VR)
40-811(VR)
40-813(VR)
NP214222
AV107
8-33
8-34
AV77
1537
8-35
159
163
1276
162
ABANDONED
165
2154
2207
160
SHED
2211
2210
TFS
MG
2190
2191
2192
2193
2194
2195
2185
2186
2188
2189
2184
28
V. GATE
8-39
2222
2221
560
SS 120
V. GATE
8-40
8-42
AV80
AV30
AV79
850
222
SHED
SHED
2312
290
2151
SHEDS
1975
AV81
2174
2152
AV-2149
AV139
856

4860 FT.
8-39
2185
2186
2184
2188
2189
2222
2221
8-40
8-42
560
SS 120
AV79
850
222
SHED
MC 1
MR 1
MR 2
MC 2
MR 4
MR 3
MR 5
1282
1283
AV78
8-44
40-802
8-45
8-46
MA-35
MA-33


AV84A
AV84B
AV84C
1624
1625
SS-026
AV85A
AV85B
AV85C
8-36
8-37
8-38
10

8-14 31-708
8-15 8-19(OS)
8-16 8-20(OS)
8-17 8-21(OS)
8-18
2099
2183
2063
PCB2881-01
8-13
2053
31-710
31-709
1652
GTMO 4
GTMO 5
1849
1841
1845
AV103
1650B
BOILERS
1650
PP 1 SUB
TANKS
1650A
C3
C1
C2
NAV AID
(X37)
31-6
AV 76
(X37)
(X37)
8-22
(X37)
8-23
AV54
8-24
8-25
77
76A
83
82
1273
335
8-26
336
76B
C011
C025
C03
C04
C05
8-27
C016
C019
C018
C013
C014
C015
C020
8-28
C010
C09
C08
C012
2178
2179
C0115
C0116
C021
C022
31-2
2177
C0520
C069
C071
8-31
C060
8-29
8-30
N53
ABANDONED
N24
1275
549
C073
C075
C061
C063
C064
C066
C068
C070
C072
PIER
941

SHED
40-809(VR)
40-810(OS)
40-811(VR)
40-812(VR)
40-813(VR)
40-814
NP214222
8-131
8-132
8-133
8-134(OS)
8-135(OS)
8-136(OS)
8-137(OS)
40-710
40-711(BC)
40-712
40-713
40-714
40-715
40-716
8-138
8-33
8-34
8-35
1537
159
163
165
1276
162
ABANDONED
2154
2207
160
SHED
8-124
8-125
8-126
2174
8-127
PIPE RACKS
2152
8-128
1975
8-129
SLAB
2229
2173
2210
TPS
MG
2190
2191
2192
2193
2194
2195
2185
2186
2188
2189
2184
8-39
8-123
856
8-130
SLAB
SS-019
140
141

8-47	8-66	8-83	8-103
8-48	8-67	8-84	8-104
8-49	8-68	8-85	8-105
8-50	8-69	8-86	8-106
8-51	8-70	8-87	8-107
8-52	8-71	8-88	8-108
8-53	8-72	8-89	8-109
8-54	8-73	8-90	8-110
8-55	8-74	8-91	8-111
8-56		8-92	
8-57		8-93	8-112
8-58	8-75	8-94	8-113
8-59		8-95	8-114
8-60	8-76	8-96	8-115(RC)
8-61	8-77	8-97	
8-62	8-78	8-98	8-116
	8-79	8-99	8-117
8-63	8-80	8-100	8-118
8-64	8-81		8-119
8-65	8-82	8-102	8-120
			40-931

GENERAL INFORMATION

Site Visit Date: 12/15/2008

Facility:	AF Exp. Camp Justice
Building Number:	Camp Justice
Facility Point of Contact:	
Phone Number:	

HM/HW INFORMATION

Hazardous Material:	Waste Paint
Number of Containers:	100's
Container Sizes:	up to 55 gallons

SPILL INFORMATION

Spill Flow Direction:	Varies
Nearby Receptors:	Bay - Not Level Ground

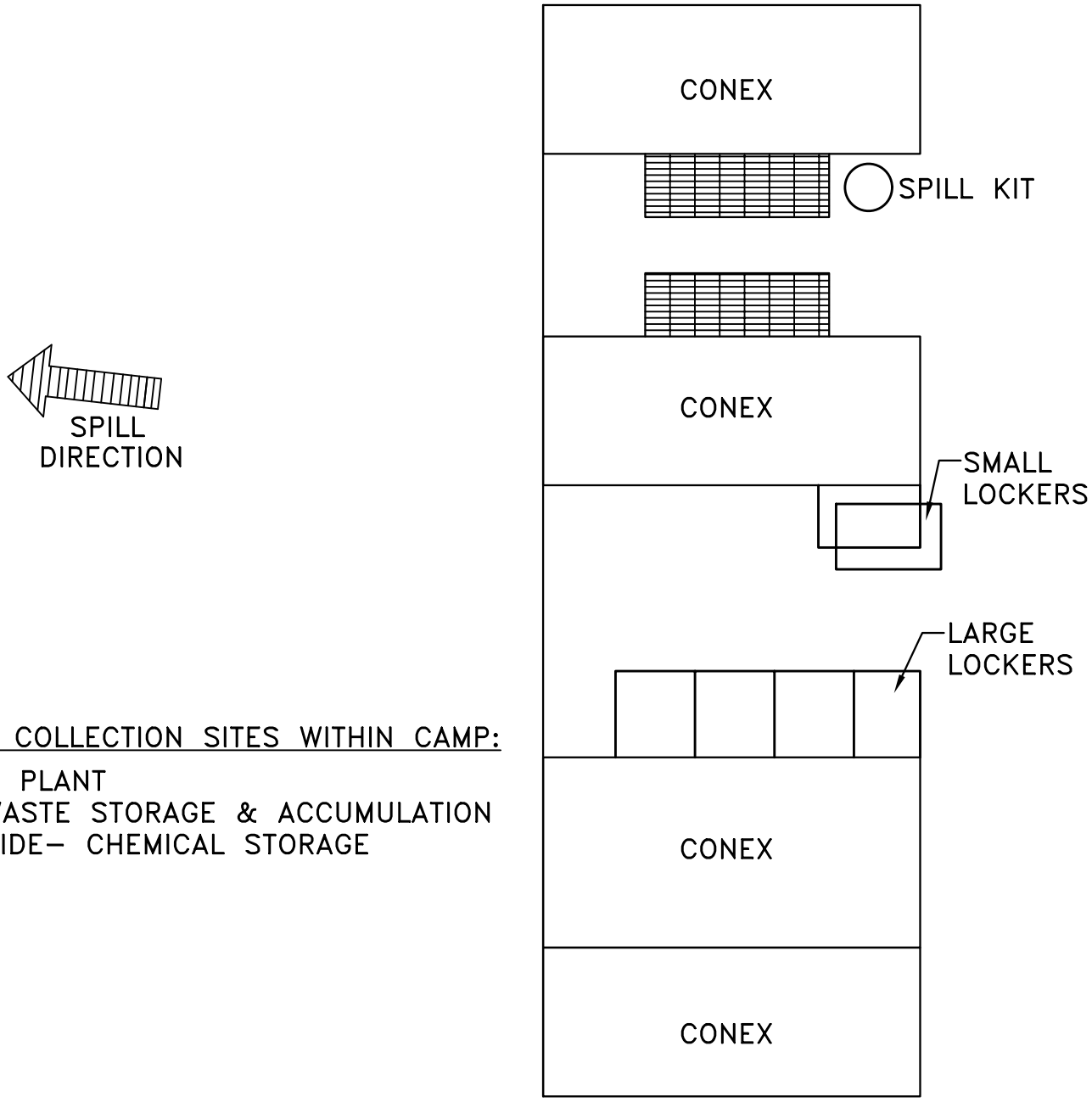
Comments:

Many other areas within Camp Justice.

HM/HW CHECKLIST INFORMATION

Evidence Incompatible Reactions:	No	Spill Control Kits:	Yes
Containers Properly Labeled:	Yes	Fire Extinguishers:	Yes
Ignitable Containers Protected:	Yes	Eye Wash:	Yes
Containers Outdoors:	Yes	MSDSs Available:	Yes
Containers Corroded:	No	Procedures Posted:	No
Drums Elevated:	Yes	Security:	Yes
Pallet in Good Condition:	Yes	Facility Inspected:	No
Container Spacing Adequate:	Yes	Secondary Containment:	Yes
Outdoor Protection:	No		
Collision Protection:	Yes		

Recommendations:	Ensure site has posted spill procedures.
Inspection Recommendations:	Ensure routine inspections are performed by the appropriate oversight authority and that inspection records are maintained for one year.



OTHER COLLECTION SITES WITHIN CAMP:

1. POWER PLANT
2. HAZ WASTE STORAGE & ACCUMULATION
3. PESTICIDE– CHEMICAL STORAGE
4. FUELS

SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: JANUARY 2009
SCALE: NOT TO SCALE

AF EXP. CAMP JUSTICE
BUILDING CAMP JUSTICE

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA

NAVSTA Guantanamo Bay HM/HW Sites Photo Log

by Michael Baker Jr., Inc.

Baker

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

AF Exp. Camp Justice (NAVFAC)

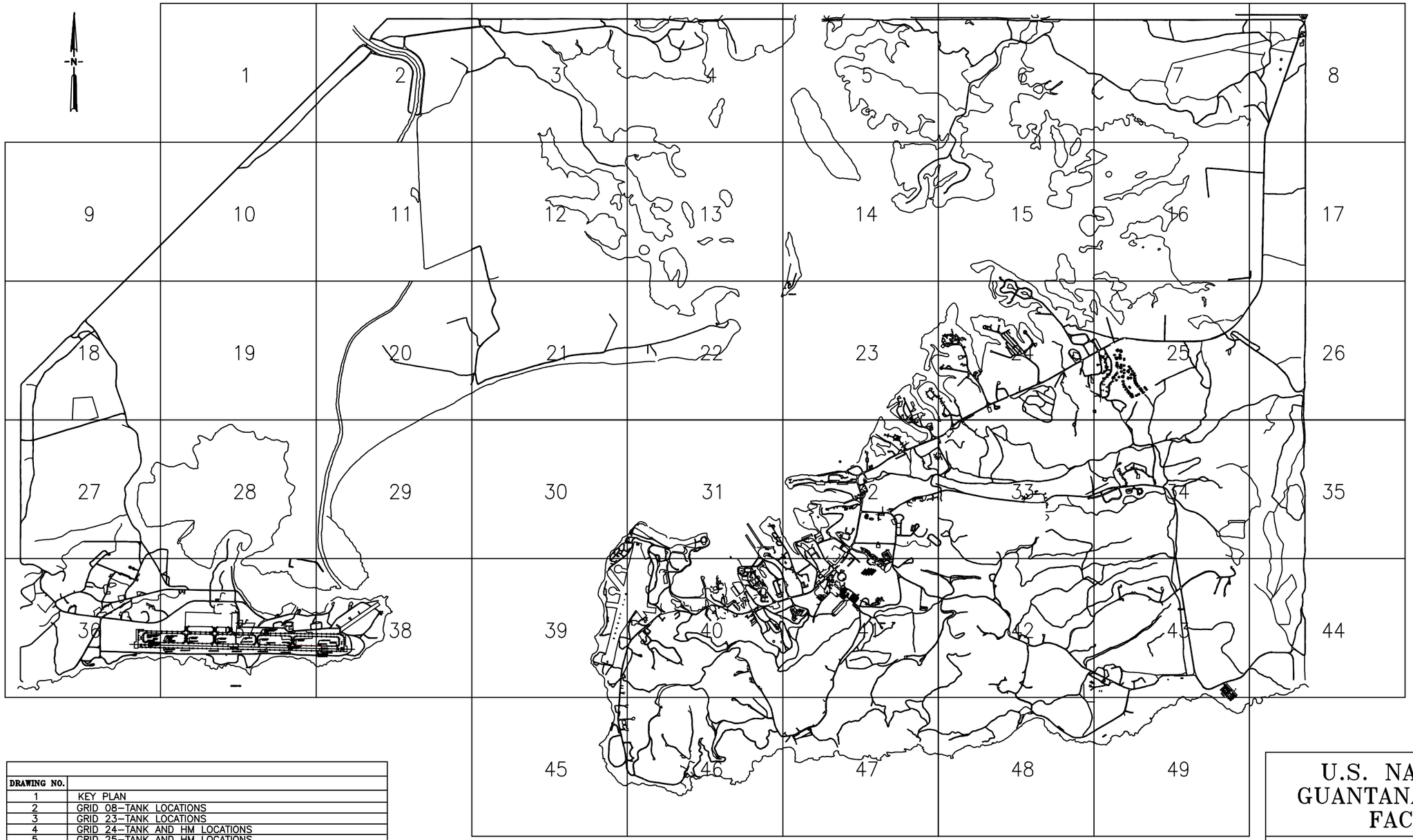
B&R Blast Area

B&R BRSC/BREMCOR/Eastern Safety Office

B&R BRSC/BREMCOR/Eastern Safety Office

APPENDIX A

Facility Maps



DRAWING NO.	
1	KEY PLAN
2	GRID 08–TANK LOCATIONS
3	GRID 23–TANK LOCATIONS
4	GRID 24–TANK AND HM LOCATIONS
5	GRID 25–TANK AND HM LOCATIONS
6	GRID 31–TANK AND HM LOCATIONS
7	GRID 32–TANK AND HM LOCATIONS
8	GRID 33–HM LOCATIONS
9	GRID 36–TANK AND HM LOCATIONS
10	GRID 37–TANK AND HM LOCATIONS
11	GRID 38–TANK AND HM LOCATIONS
12	GRID 40–TANK AND HM LOCATIONS
13	GRID 41–TANK AND HM LOCATIONS
14	GRID 42–TANK LOCATIONS
15	GRID 43–TANK AND HM LOCATIONS
16	GRID 46–TANK LOCATIONS
17	GRID 49–TANK LOCATIONS

2000 0 2000 4000

SCALE: 1" = 4000'

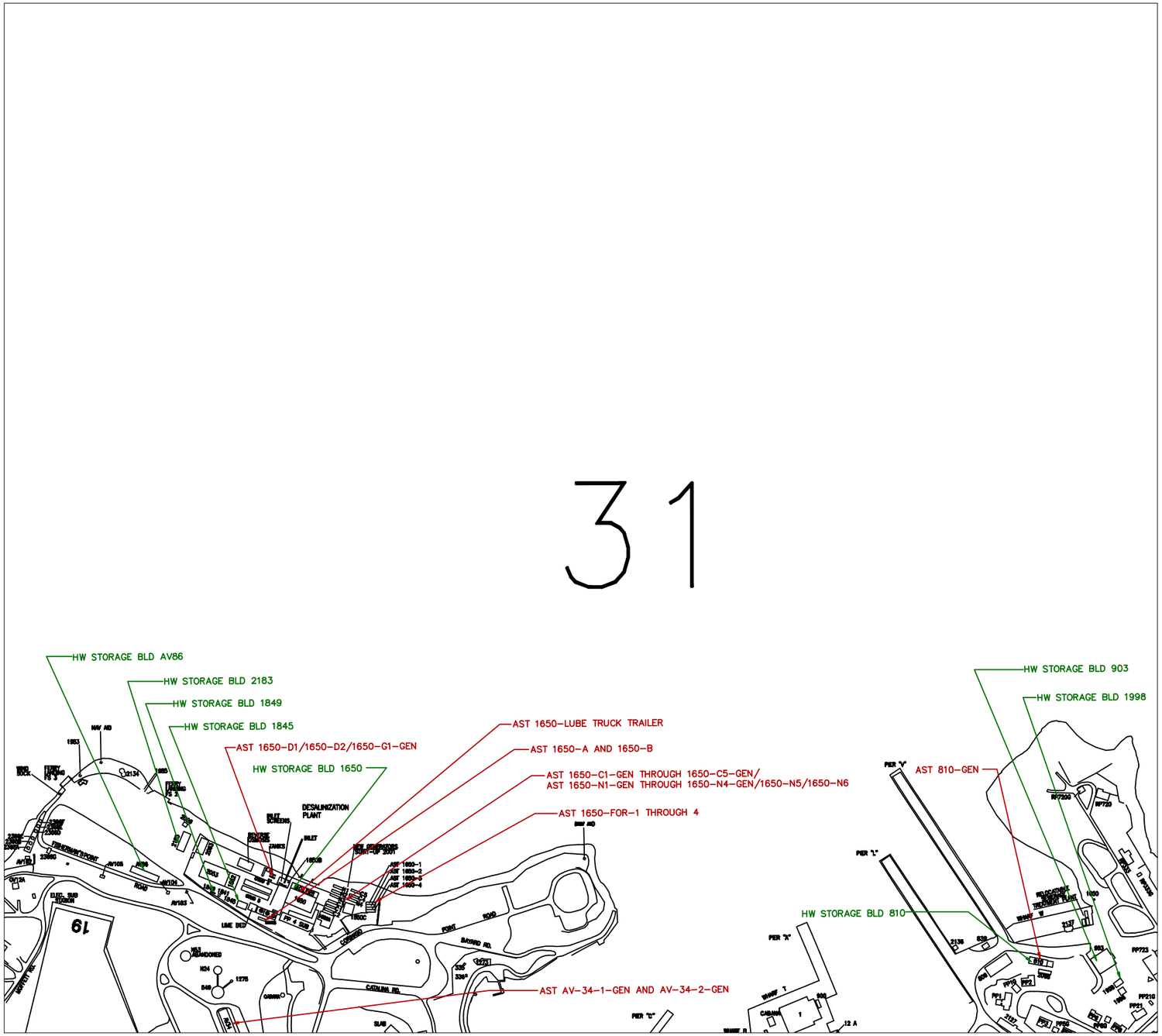
U.S. NAVAL STATION GUANTANAMO BAY, CUBA FACILITY MAP

DRAWING 1 – GB–KEY

DATE	SCALE	SHEET
12/08/09	1"=4000'	1 of 17

Baker

MICHAEL BAKER JR., INC.



0 300 600 900

SCALE: 1" = 600'

LIST OF ASTS

AST 810-GEN

AST 1650-A AND 1650-B

AST 1650-C1-GEN THROUGH C5-GEN

AST 1650-D1 AND 1650-D2

AST 1650-FOR-1 THROUGH 4

AST 1650-G1-GEN

AST 1650-LUBE TRUCK TRAILER

AST 1650-N1-GEN THROUGH N4-GEN

AST 1650-N5 AND 1650-N6

AST AV-34-1-GEN AND AV-34-2-GEN

LIST OF HAZARDOUS MATERIAL STORAGE LOCATIONS

BUILDINGS 810
BUILDINGS 903
BUILDING 1650
BUILDING 1845
BUILDING 1849
BUILDING 1998
BUILDING 2183
BUILDING AV86

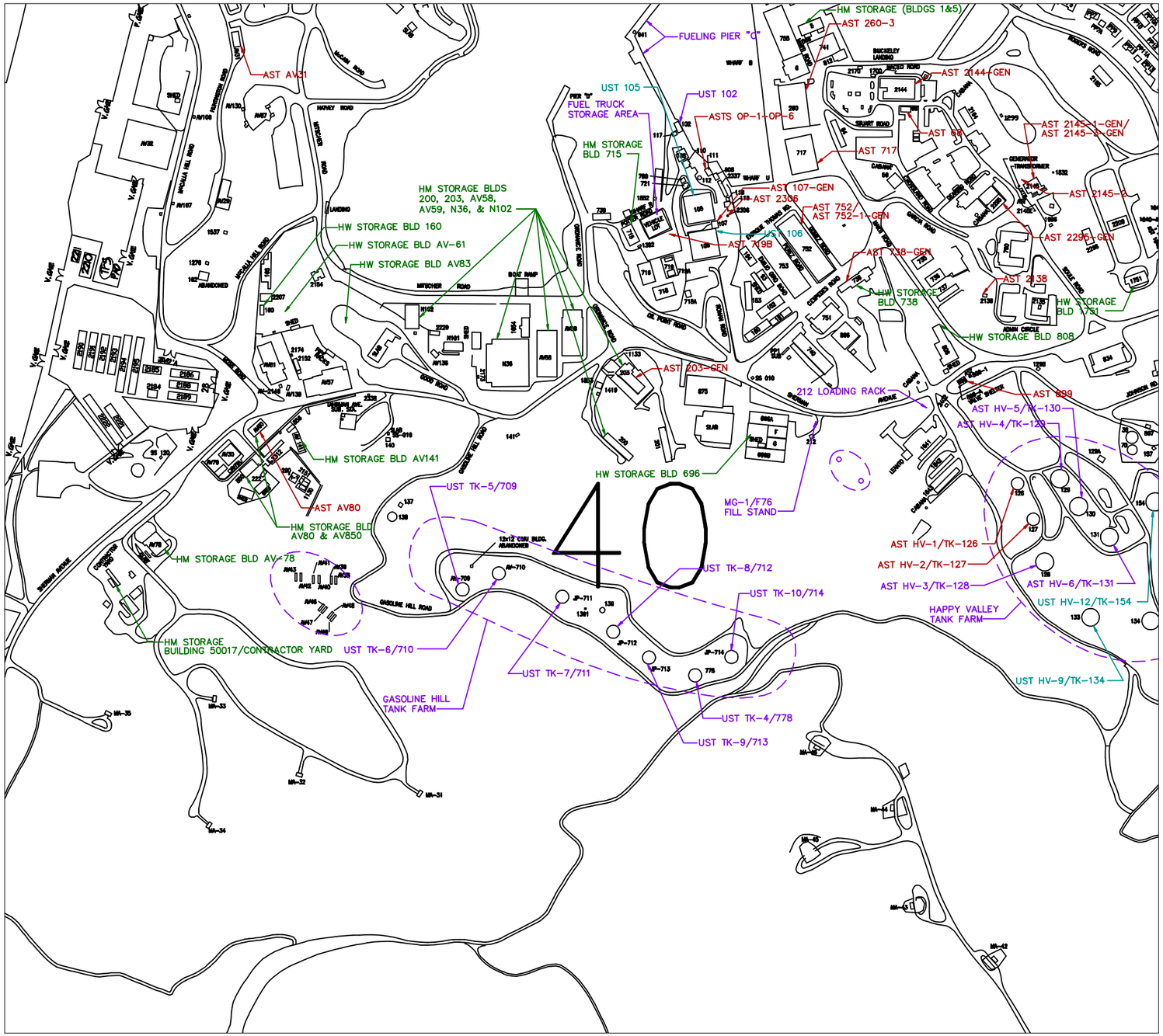
U.S. NAVAL STATION GUANTANAMO BAY, CUBA FACILITY MAP

DRAWING 6 – GRID 31

DATE	SCALE	SHEET
12/08/09	1"=600'	6 of 17

Baker

MICHAEL BAKER JR., INC.



LIST OF ASTS

AST 68
AST 107-GEN
AST 203-GEN
AST 260-3
AST 717
AST 719 B
AST 738-GEN
AST 752/752-1-GEN
AST 899
AST 2138
AST 2144-GEN
AST 2145-1-GEN/AST 2145-3-GEN
AST 2145-2
AST 2295-GEN
AST 2306
AST AV80
AST AV31
AST HV-1/TK-126
AST HV-2/TK-127
AST OP-4, OP-5, AND OP-6

LIST OF USTS

UST 105
UST 106
UST HV-9/TK-134
UST HV-12/TK-154

LIST OF ABANDONED IN PLACE TANKS

AST HV-3/TK-128
AST HV-4/TK-129
AST HV-5/TK-130
AST HV-6/TK-131
AST HV-8/TK-133
UST TK-4/778
UST TK-5/709
UST TK-6/710
UST TK-7/711
UST TK-8/712
UST TK-9/713
UST TK-10/714
UST 102

LIST OF HAZARDOUS MATERIAL STORAGE LOCATIONS

BUILDING 1 & 5
BUILDING 160
BUILDING 200, 203, AV58, AV59, N36, & N102
BUILDING 696
BUILDING 715
BUILDING 738
BUILDING 808
BUILDING 1751
BUILDING AV61
BUILDING AV78
BUILDING AV80/AV850
BUILDING AV83
BUILDING AV141
BUILDING 50017/CONTRACTOR YARD
AST OP-1, OP-2, AND OP-3

U.S. NAVAL STATION GUANTANAMO BAY, CUBA FACILITY MAP

DRAWING 12 – GRID 40

DATE	SCALE	SHEET
12/08/09	1"=600'	12 of 17

Baker

MICHAEL BAKER JR., INC.

Quick Find

Status: Active

GENERAL SYSTEM INFORMATION

Tank ID:	AV-0031	Grid	40	Installation Year:	Unknown
Tank Type:	AST	Location	Windward		
Capacity:	275	Facility Organization	Unknown		
Contents:	Diesel	Facility	Communications		
Current Use	Emergency Power Generation	Nearest Building	AV-31		

COMPLIANCE STATUS

OEBGD Regulated:	Not Compliant

LABELING AND CODING

Tank ID Label:	No	Capacity Label:	No
Contents Label:	Yes	Fill Port Color Code	N/A

TANK INFORMATION

Construction type:	Single Walled	Tank Condition:	Good	Tank Color:	Silver
Construction Material	Steel			Tank Manifolded:	No
Tank Shape	Horizontal Cylinder	Corrosion Protection	Paint		
Tank Dimension:	324 x 72"	Tank Manufacturer:	Unknown		
Lining:	Unknown	Model Number	Unknown		

SPILL AND OVERFILL PROTECTION

Overfill Protection:	None	Area Lighting:	Unknown	Collision Barrier	Adequate
Liquid Level Gauge Type:	None	HLA Type:	None		
Gauge Manufacturer:	N/A	HLA Manufacturer:	N/A		
Gauge Model:	N/A	HLA Model:	N/A		
Last Gauge Calibration:	N/A	Tank Leak Detection:	Visual		
Next Gauge Calibration:	N/A	Tank LD Manfuacturer:	N/A		
Pump Starter Control:	At Generator	Tank LD Model:	N/A		
Valves Surface Security:	Locked fenced are	Spill Catchment:	None		

PIPING SYSTEM

Piping Exposure:	Aboveground			Pipe Construction Material:	Unknown
Pipe Condition:	Unknown	Pipe Length:	Unknown	Pipe Corrosion Protection:	Unknown
Supply Pipe Diameter:	Unknown	Pipe Sumps:	N/A	Piping Leak Detection:	Visual
Return Pipe Diameter:	Unknown			Pressurized Piping Line Leak Detectors:	N/A
Delivery System:	Suction			Annual Line Leak Detectors Testing:	N/A

SECONDARY CONTAINMENT SYSTEM

Tank Secondary Containment:	None	Containment Dimensions:	N/A
Drain Mechanism:	N/A	Containment Volume:	N/A
Drainage Outfall:	N/A	Drain Security:	N/A
Loading/UnLoading Containment	N/A		
Loading/Unloading Containment Recommendations	N/A		

Continuation of Tank ID: AV-0031

DISPENSNG TANK SYSTEMS

Dispenser:	N/A	VRS Stage 1:	N/A	Hose Retractor:	N/A
Number of Dispensers	0	VRS Stage 2:	N/A	Shear Valve:	N/A
Nozzles per Dispensers:	0	Emergency Shutoff:	N/A	Nozzle Swivel Connector:	N/A
				Break Away Coupling:	N/A

SPILL RESPONSE INFORMATION

Initial Spill Direction	East	Probablity of Reaching Water:	Low
Initital Receptor:	In building	Spill Equipment:	Unknown
Intitial Conveyance:	Surface flow	Ultimate Discharge	Corinaso Cove
Worst Case Discharge/Rate of Flow:	220 gallons, 75 gal per min (overfill)		

OEBGD Required Upgrades:

Install secondary containment ($500), install overfill protection ($200), spill catchment ($100), apply tank labeling ($100) and verify area lighting and piping corrosion protection.

BMP Recommendations:

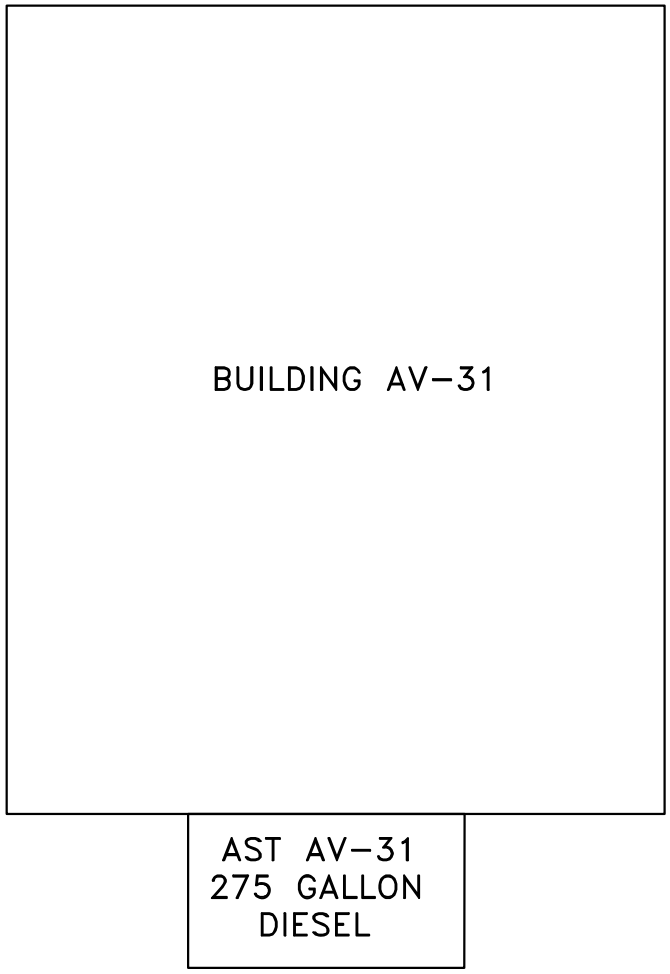
None

Notes:

None

INSPECTIONS, TESTING, AND MAINTENANCE

Routine Inspection Frequency:	Monthly	Last Formal External API 653:	N/A
Monthly Leak Detection Monitoring:	Monthly	Next Formal External API 653:	N/A
CP Bimonthly System Check:	N/A	Last Formal Internal API 653:	N/A
Last CP Test:	N/A	Next Formal Internal API 653:	N/A
Next CP Test:	N/A	STI Inspection Category:	1
Last Spill Bucket Test:	N/A	STI Inspection Schedule:	Periodic
Next Spill Bucket Test:	N/A	STI Internal Inspection	N/A
Last Containment Sump Test:	N/A	STI External Inspection:	N/A
Next Containment Sump Test:	N/A	Last STI Inspection:	N/A
		Next STI Inspection:	N/A



SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: DECEMBER 2009
SCALE: NOT TO SCALE

AST AV-31
BUILDING AV-31

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA

AST AV-31

Quick Find

Status: Active

GENERAL SYSTEM INFORMATION

Tank ID:	AV-0034-1-GEN	Grid	31	Installation Year:	Unknown
Tank Type:	AST Integral	Location	Windward		
Capacity:	188	Facility Organization	JTF		
Contents:	Diesel	Facility	Camp Justice		
Current Use	Emergency Power Generation	Nearest Building	AV-34		

COMPLIANCE STATUS

OEBGD Regulated:	Not Compliant

LABELING AND CODING

Tank ID Label:	No	Capacity Label:	No
Contents Label:	No	Fill Port Color Code	N/A

TANK INFORMATION

Construction type:	Double Walled	Tank Condition:	Good	Tank Color:	Black
Construction Material	Steel			Tank Manifolded:	No
Tank Shape	Rectangular	Corrosion Protection	Paint		
Tank Dimension:	86.5 x 41 x 24"	Tank Manufacturer:	Kohler		
Lining:	No	Model Number	N/A		

SPILL AND OVERFILL PROTECTION

Overfill Protection:	Visible Gauge	Area Lighting:	Inadequate	Collision Barrier	Adequate
Liquid Level Gauge Type:	Dial Gauge	HLA Type:	None		
Gauge Manufacturer:	Unknown	HLA Manufacturer:	N/A		
Gauge Model:	Unknown	HLA Model:	N/A		
Last Gauge Calibration:	Unknown	Tank Leak Detection:	Visual		
Next Gauge Calibration:	2009	Tank LD Manfuacturer:	N/A		
Pump Starter Control:	At Generator	Tank LD Model:	N/A		
Valves Surface Security:	N/A	Spill Catchment:	None		

PIPING SYSTEM

Piping Exposure:	N/A			Pipe Construction Material:	N/A
Pipe Condition:	N/A	Pipe Length:	N/A	Pipe Corrosion Protection:	N/A
Supply Pipe Diameter:	N/A	Pipe Sumps:	N/A	Piping Leak Detection:	N/A
Return Pipe Diameter:	N/A			Pressurized Piping Line Leak Detectors:	N/A
Delivery System:	Suction			Annual Line Leak Detectors Testing:	N/A

SECONDARY CONTAINMENT SYSTEM

Tank Secondary Containment:	DW Steel	Containment Dimensions:	N/A
Drain Mechanism:	N/A	Containment Volume:	125%
Drainage Outfall:	N/A	Drain Security:	N/A
Loading/UnLoading Containment	N/A		
Loading/Unloading Containment Recommendations	N/A		

Continuation of Tank ID: AV-0034-1-GEN

DISPENSNG TANK SYSTEMS

Dispenser:	N/A	VRS Stage 1:	N/A	Hose Retractor:	N/A
Number of Dispensers	0	VRS Stage 2:	N/A	Shear Valve:	N/A
Nozzles per Dispensers:	0	Emergency Shutoff:	N/A	Nozzle Swivel Connector:	N/A
				Break Away Coupling:	N/A

SPILL RESPONSE INFORMATION

Initial Spill Direction	Northwest	Probablity of Reaching Water:	Moderate
Initital Receptor:	Ground at tank	Spill Equipment:	Unknown
Intitial Conveyance:	Surface flow	Ultimate Discharge	Guantanamo Bay
Worst Case Discharge/Rate of Flow:	188 gallons, 75 gal per min (overfill)		

OEBGD Required Upgrades:

Install area lighting ($500) or provide routine security patrol inspections, apply tank labeling ($100) and provide spill kit on delivery truck for spill catchment.

BMP Recommendations:

None

Notes:

None

INSPECTIONS, TESTING, AND MAINTENANCE

Routine Inspection Frequency:	Monthly	Last Formal External API 653:	N/A
Monthly Leak Detection Monitoring:	Monthly	Next Formal External API 653:	N/A
CP Bimonthly System Check:	N/A	Last Formal Internal API 653:	N/A
Last CP Test:	N/A	Next Formal Internal API 653:	N/A
Next CP Test:	N/A	STI Inspection Category:	1
Last Spill Bucket Test:	N/A	STI Inspection Schedule:	Periodic
Next Spill Bucket Test:	N/A	STI Internal Inspection	N/A
Last Containment Sump Test:	N/A	STI External Inspection:	N/A
Next Containment Sump Test:	N/A	Last STI Inspection:	N/A
		Next STI Inspection:	N/A

Quick Find

Status: Active

GENERAL SYSTEM INFORMATION

Tank ID:	AV-0034-2-GEN	Grid	31	Installation Year:	Unknown
Tank Type:	AST Integral	Location	Windward		
Capacity:	312	Facility Organization	JTF		
Contents:	Diesel	Facility	Camp Justice		
Current Use	Emergency Power Generation	Nearest Building	AV-34		

COMPLIANCE STATUS

OEBGD Regulated:	Not Compliant

LABELING AND CODING

Tank ID Label:	No	Capacity Label:	No
Contents Label:	No	Fill Port Color Code	N/A

TANK INFORMATION

Construction type:	Double Walled	Tank Condition:	Good	Tank Color:	Black
Construction Material	Steel			Tank Manifolded:	No
Tank Shape	Rectangular	Corrosion Protection	Paint		
Tank Dimension:	126 x 41 x 24"	Tank Manufacturer:	Kohler		
Lining:	No	Model Number	N/A		

SPILL AND OVERFILL PROTECTION

Overfill Protection:	Visible Gauge	Area Lighting:	Inadequate	Collision Barrier	Adequate
Liquid Level Gauge Type:	Dial Gauge	HLA Type:	Unknown		
Gauge Manufacturer:	Unknown	HLA Manufacturer:	Unknown		
Gauge Model:	Unknown	HLA Model:	Unknown		
Last Gauge Calibration:	Unknown	Tank Leak Detection:	Visual		
Next Gauge Calibration:	2009	Tank LD Manfuacturer:	N/A		
Pump Starter Control:	At Generator	Tank LD Model:	N/A		
Valves Surface Security:	N/A	Spill Catchment:	None		

PIPING SYSTEM

Piping Exposure:	N/A			Pipe Construction Material:	N/A
Pipe Condition:	N/A	Pipe Length:	N/A	Pipe Corrosion Protection:	N/A
Supply Pipe Diameter:	N/A	Pipe Sumps:	N/A	Piping Leak Detection:	N/A
Return Pipe Diameter:	N/A			Pressurized Piping Line Leak Detectors:	N/A
Delivery System:	Suction			Annual Line Leak Detectors Testing:	N/A

SECONDARY CONTAINMENT SYSTEM

Tank Secondary Containment:	DW Steel	Containment Dimensions:	N/A
Drain Mechanism:	N/A	Containment Volume:	126%
Drainage Outfall:	N/A	Drain Security:	N/A
Loading/UnLoading Containment	N/A		
Loading/Unloading Containment Recommendations	N/A		

Continuation of Tank ID: AV-0034-2-GEN

DISPENSNG TANK SYSTEMS

Dispenser:	N/A	VRS Stage 1:	N/A	Hose Retractor:	N/A
Number of Dispensers	0	VRS Stage 2:	N/A	Shear Valve:	N/A
Nozzles per Dispensers:	0	Emergency Shutoff:	N/A	Nozzle Swivel Connector:	N/A
				Break Away Coupling:	N/A

SPILL RESPONSE INFORMATION

Initial Spill Direction	Northwest	Probablity of Reaching Water:	Moderate
Initital Receptor:	Ground at tank	Spill Equipment:	Unknown
Intitial Conveyance:	Surface flow	Ultimate Discharge	Guantanamo Bay
Worst Case Discharge/Rate of Flow:	312 gallons, 75 gal per min (overfill)		

OEBGD Required Upgrades:

Install area lighting ($500) or provide routine security patrol inspections, apply tank labeling ($100) and provide spill kit on delivery truck for spill catchment.

BMP Recommendations:

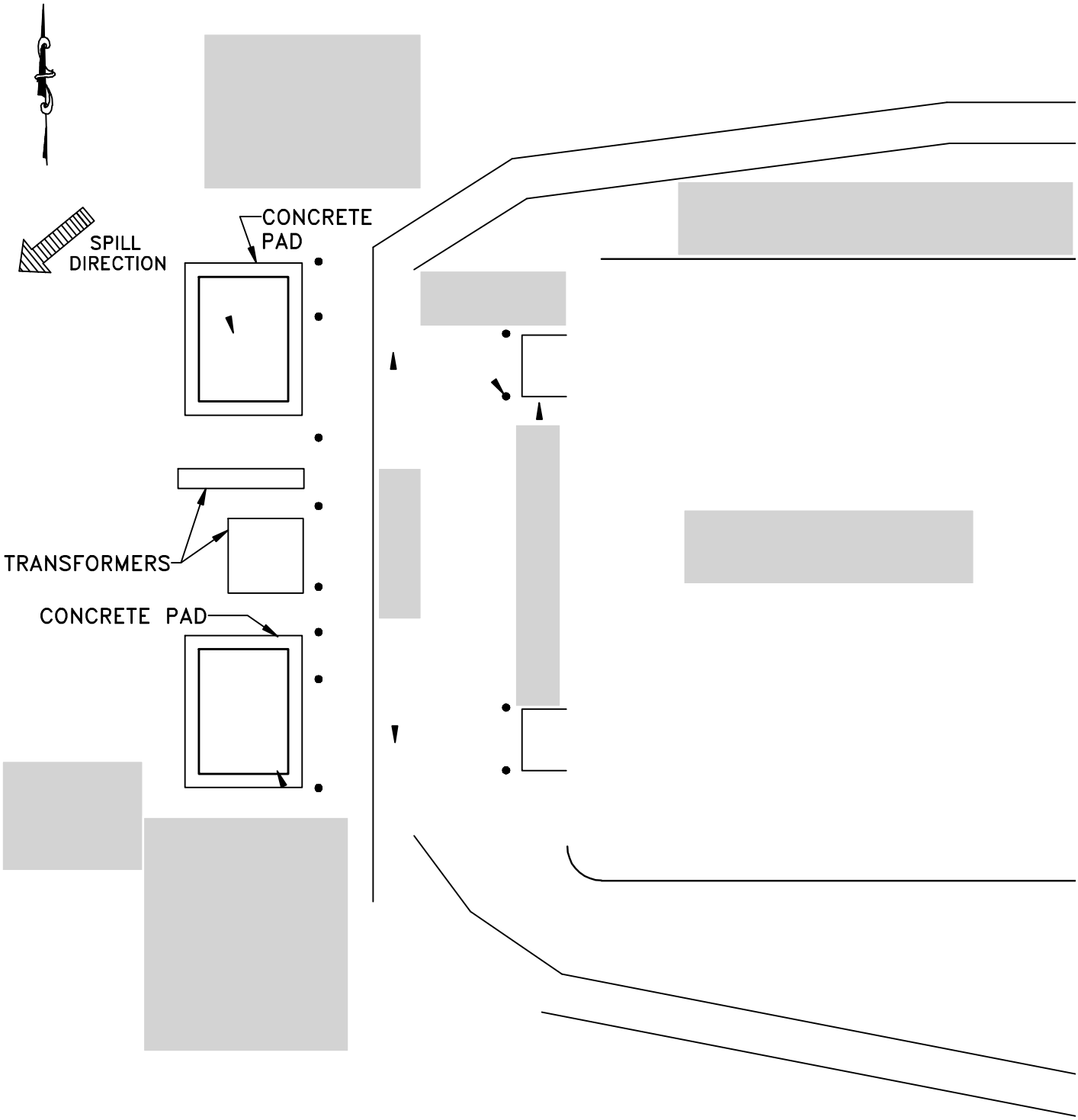
None

Notes:

None

INSPECTIONS, TESTING, AND MAINTENANCE

Routine Inspection Frequency:	Monthly	Last Formal External API 653:	N/A
Monthly Leak Detection Monitoring:	Monthly	Next Formal External API 653:	N/A
CP Bimonthly System Check:	N/A	Last Formal Internal API 653:	N/A
Last CP Test:	N/A	Next Formal Internal API 653:	N/A
Next CP Test:	N/A	STI Inspection Category:	1
Last Spill Bucket Test:	N/A	STI Inspection Schedule:	Periodic
Next Spill Bucket Test:	N/A	STI Internal Inspection	N/A
Last Containment Sump Test:	N/A	STI External Inspection:	N/A
Next Containment Sump Test:	N/A	Last STI Inspection:	N/A
		Next STI Inspection:	N/A



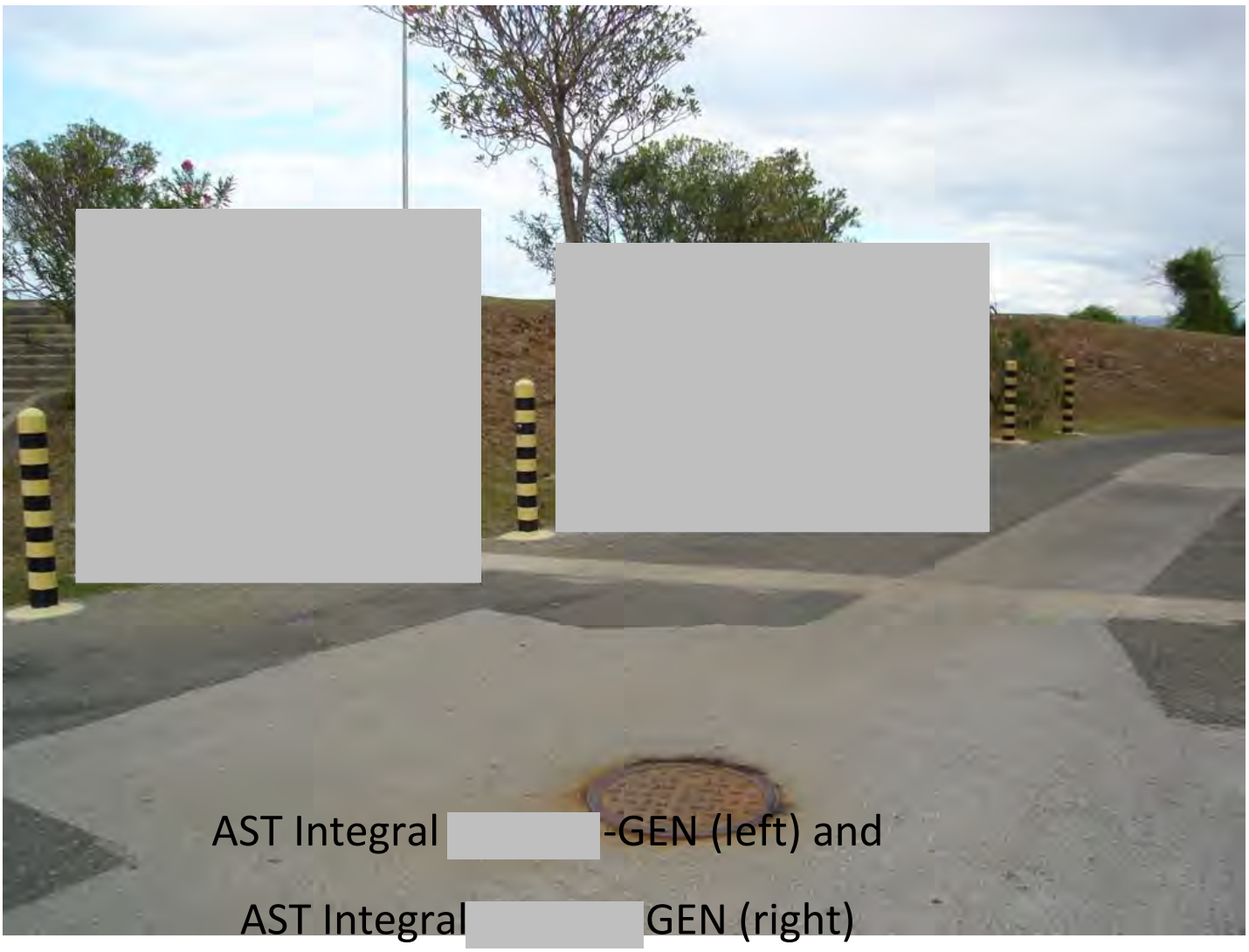
SPILL PREVENTION, CONTROL, & COUNTERMEASURE
NAVAL STATION GUANTANAMO BAY, CUBA

DATE: DECEMBER 2009
SCALE: NOT TO SCALE

AST INTEGRAL AV-34-1-GEN
AST INTEGRAL AV-34-2-GEN
BUILDING AV-34

Baker

MICHAEL BAKER JR., INC.
VIRGINIA BEACH, VA



AST Integral -GEN (left) and

AST Integral GEN (right)

W31

FM COMNAVBASE GUANTANAMO BAY//N20//

TO COMNAVREG SE JACKSONVILLE FL//N46E/46EL//

INFO CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMLANTFLT NORFOLK VA//N46//
COMNAVREG SE JACKSONVILLE FL//N00/N3PL//
NFESC PORT HUENEME CA//424//
LANTNAVFACENGCOM NORFOLK VA//182//1114//
NAVPETOFF ALEXANDRIA VA//NPO/JJJ//
NAVY JAG WASHINGTON DC//31//

USCINCSO MIAMI FL//JJJ//
COMUSNAVASO/JJJ//

CJTF GTMO

UNCLAS//N60514//

MSGID/GENADMIN/COMNAVBASE GTMO//

SUBJ/OIL SPILL REPORT, 500 GALLONS, COMNAVBASE GUANTANAMO BAY//
POC/ PATRICIA LOOP/ENVIRONMENTAL/60515/LOC:GTMO CU/TEL:660-2998-4493//

RMKS/1. RELEASE DISCOVERED AT 0700 ON 22 SEP 03//

2. ACTIVITY ORIGINATING SPILL: BURNS AND ROE SERVICES CORPORATION (CONTRACTOR RESPONSIBLE FOR OPEATION OF UTILITIES PLANT) ON GUANTANAMO BAY, CUBA//

3. SPILL LOCATION: DESALINIZATION PLANT//

4. VOLUME SPILLED: 500 GALLONS//

5. TYPE OF OIL SPILLED: USED OIL//

6. OPERATION UNDER WAY WHEN SPILL OCCURRED: DAILY BLEEDING OF WATER FROM TANK HOLDING USED OIL/SEAWATER. VALVE INADVERTENTLY LEFT OPEN. VALVE TO SECONDARY CONTAINMENT

IN ADVERTENTLY LEFT OPEN, SPILLING APPROXIMATELY 500 GALLONS OF USED OIL//

7. CAUSE OF RELEASE: VALVE ON OILY WATER TANK LEFT OPEN TOO LONG AND LEFT UNATTENDED//

8. SLICK DESCRIPTION: SHEEN 500 FEET X 50 FEET, CONTAINED WITHIN BOOM//

9. SPILL ENVIRONMENT: CLEAR, 85 DEGREES//

10. AREAS DAMAGED OR THREATENED: GUANTANAMO BAY. RELEASE CONTAINED WITHIN FLOATING BOOM//

11. TELEPHONIC REPORT TO NRC WAS NOT MADE, AREA OUTSIDE "CONUS". NO OUTSIDE ASSISTANCE WAS REQUIRED//

12. SAMPLES WERE NOT TAKEN//

13. CONTAINMENT METHOD: SPILL WAS CONTAINED WITHIN FLOATING BOOM. ABSORBENTS WERE USED TO CAPTURE RELEASE. NAVALKLEEN SOLUTION SPRAYED ALONG SHORELINE//

14. SPILL REMOVAL METHOD: FLOATING BOOM AND ABSORBENT MATERIALS WERE USED TO CONTAIN AND CAPTURE SPILL. CLEANUP COMPLETE AT 1045//

15. VOLUME OF PRODUCT RECOVERED: NO PURE PRODUCT RECOVERED//

16. PARTIES PERFORMING RESPONSE ACTIVITIES: BURNS AND ROE SERVICES CORPORATION PERSONNEL (PORT OPS CONTRACTOR) AND PWD ENVIRONMENTAL PERSONNEL//

17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT: N/A//

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS: NO ADDITIONAL ASSISTANCE REQUIRED//

19. LESSONS LEARNED: RETRAIN PERSONNEL ON ESTABLISHED STANDARD OPERATING PROCEDURES. ENSURE VALVE ON SECONDARY CONTAINMENT IS CLOSED AT ALL TIMES. INVESTIGATE INSTALLING OIL/WATER SEPEATOR TO IMPROVE THE OPERATION//

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: PATRICIA LOOP, CODE N2033, COM 011 53 99 4662, DSN 660-2998 4662//

W37

From: [redacted]
Sent: Friday, July 25, 2003 1:33 PM
To: [redacted]
Subject: FW: OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//

AUDITTR.TXT

FYI

-----Original Message-----
From: [redacted]
Sent: Tuesday, July 22, 2003 1:12 PM
To: [redacted]
Subject: FW: OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//

FYI

-----Original Message-----
From: Message Dissemination (NAVSTAGTMO)
Sent: Tuesday, July 22, 2003 11:55 AM
To: MDSALL
Subject: OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//

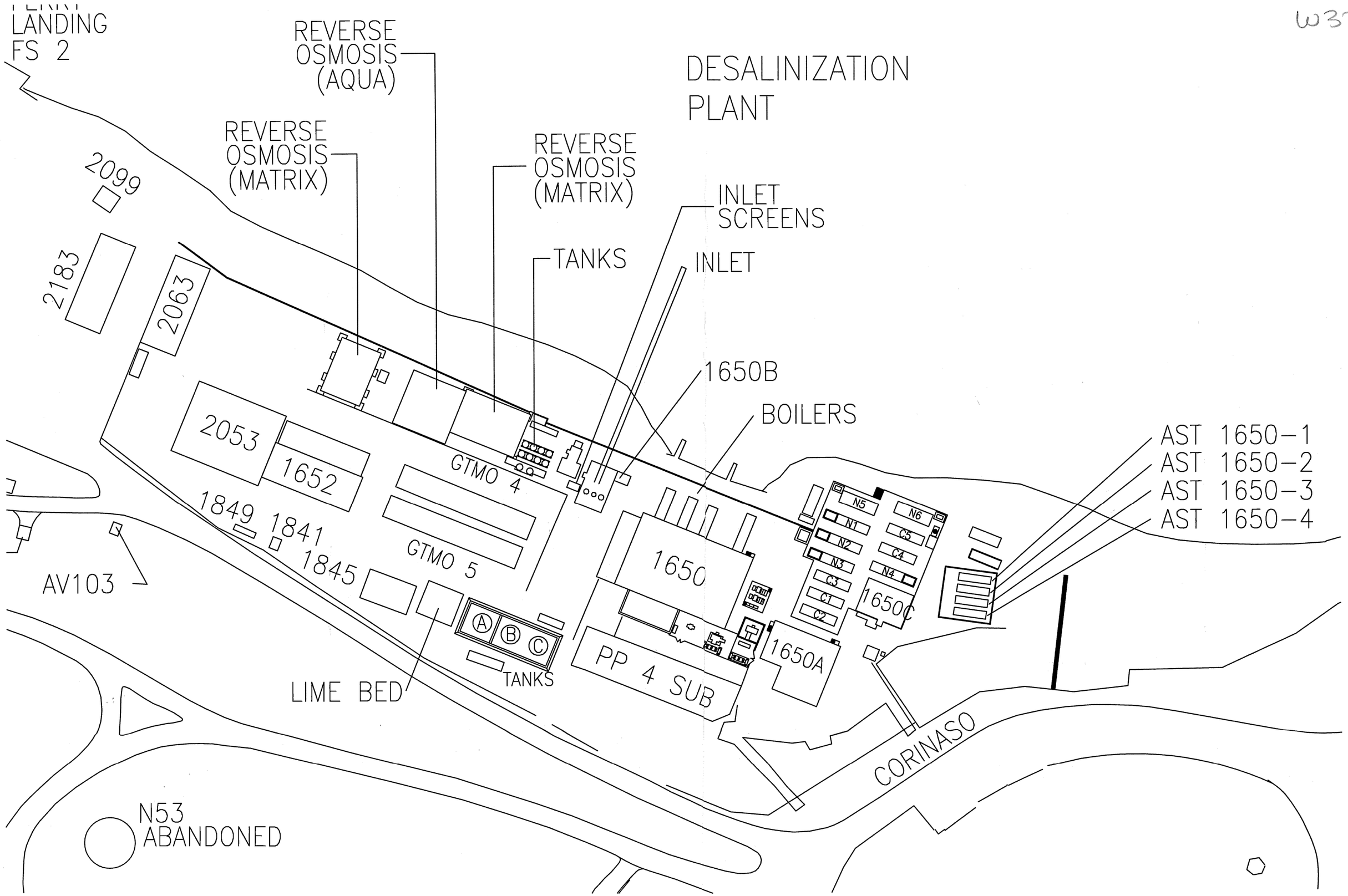
RTTUZYUW RUCOGCA0752 2031501-UUUU--RUCOGCA.
ZNR UUUUU
R 221501Z JUL 03 PSN 095803I25
FM COMNAVBASE GUANTANAMO BAY CU//N20//
TO COMNAVREG SE JACKSONVILLE FL//46E/46EL//
INFO CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMLANTFLT NORFOLK VA//N46//
COMNAVREG SE JACKSONVILLE FL//N00/N3PL//
NFESC PORT HUENEME CA//N424//
LANTNAVFACENGCOM NORFOLK VA//182/1114//
NAVPETOFF ALEXANDRIA VA//NPO/JJJJ//
NAVY JAG WASHINGTON DC//31//
CDR USSOUTHCOM MIAMI FL
COMUSNAVSO
COMDT COGARD WASHINGTON DC
CCGDSEVEN MIAMI FL
COGARD AIRSTA MIAMI FL
COGARD AV DET GUANTANAMO BAY CU
CJTF GTMO
BT
UNCLAS
MSGID/GENADMIN/COMNAVBASE GUANTANAMO BAY CU//
SUBJ/OIL SPILL REPORT, 30 GALLONS, COMNAVBASE GUANTANAMO BAY//
POC/PAUL SCHOENFELD/ENVIRONMENTAL/60514/LOC:GTMO CU/TEL:660-2998-4493

RMKS/1. RELEASE DISCOVERED AT 220710ZJUL03/
2. ACTIVITY ORIGINATING SPILL. BURNS AND ROE SERVICES CORPORATION (CONTRACTOR RESPONSIBLE FOR OPERATION OF DESALINIZATION PLANT) ON COMNAVBASE GUANTANAMO BAY, CU)

3. SPILL LOCATION: DESALINIZATION PLANT.
4. VOLUME SPILLED IN GALLONS: APPROXIMATELY 30 GALLONS.
5. TYPE OF OIL SPILLED: USED OIL.
6. OPERATION UNDERWAY: DAILY BLEEDING OF WATER FROM TANK HOLDING USED OIL/SEAWATER. VALVE INADVERTENTLY LEFT OPEN SPILLING ABOUT 30 GALLONS OF USED OIL.
7. SPILL CAUSE: VALVE LEFT OPEN TOO LONG AND LEFT UNATTENDED.
8. SLICK DESCRIPTION AND MOVEMENT: 5X200, LIGHT BROWN.
9. SPILL ENVIRONMENT: CLEAR, 80F.
10. AREA DAMAGED OR THREATENED: GUANTANAMO BAY, CU.
11. TELEPHONE REPORT TO NRC WAS NOT MADE. COMNAVBASE GUANTANAMO BAY IS LOCATED OUTSIDE OF CONUS.
12. SAMPLES WERE NOT TAKEN.
13. CONTAINMENT METHOD USED: FLOATING BOOM DEPLOYED TO CONTAIN SPILL, ABSORBENT BOOM AND PADS USED TO REMOVE OIL. NAVAL CLEAN SOLUTION SPRAYED ALONG ENTIRE SHORELINE.
14. SPILL REMOVAL METHOD USED: ABSORBENT MATERIAL AND NAVAL CLEAN SOLUTION (SPILL CONTAINED TO IMMEDIATE SHORELINE AREA, WATER TOO SHALLOW FOR SKIMMER AND INACCESSIBLE TO VACUUM TRUCK).
15. VOLUME OF PRODUCT RECOVERED IN GALLONS: NONE.
16. PARTIES PERFORMING SPILL REMOVAL: BURNS & ROE SERVICES PERSONNEL (PORT OPERATIONS CONTRACTOR) AND PWD ENVIRONMENTAL PERSONNEL.
17. FEDERAL, STATE OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT: N/A.
18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS: NO ADDITIONAL ASSISTANCE REQUIRED.
19. LESSONS LEARNED: ENSURE PERSONNEL ATTEND TO BLEED VALVE WHEN BLEEDING OIL/SEAWATER TANK AND SECURE VALVE BEFORE OIL LEAVES TANK. RECOMMEND INSTALLING VALVES IN DESALINIZATION PLANT DRAINS AND KEEP VALVES CLOSED. MANUALLY OPEN VALVES TO DRAIN RAIN WATER FROM DESAL PLANT WHEN NECESSARY, THEN CLOSE VALVES. RECOMMEND PRIMARY CONTAINMENT CONSTRUCTED AROUND OIL/SEAWATER TANK IN LIEU OF USING DESAL PLANT FOR CONTAINMENT.
20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION:

BT
#0752
NNNN
RTD:000-000/COPIES:

W37


LANDING
FS 2
REVERSE OSMOSIS (AQUA)
DESALINIZATION PLANT
REVERSE OSMOSIS (MATRIX)
REVERSE OSMOSIS (MATRIX)
INLET SCREENS
TANKS
INLET
2099
2183
2063
1650B
BOILERS
2053
1652
GTMO 4
AST 1650-1
AST 1650-2
AST 1650-3
AST 1650-4
1849
1841
1845
GTMO 5
1650
N5
N6
N1
N2
N3
N4
C5
C4
C3
C1
C2
1650C
AV103
A
B
C
TANKS
PP 4 SUB
1650A
LIME BED
CORINASO
N53
ABANDONED