WASO-422-MILLER

September 25, 1984

D22 (DSC-TSE)

NM
Repos

Memorandum

To: Regional Director, Southwest Region

From: Assistant Manager, Southeast/Southwest Team, DSC

Reference: Bandelier National Monument, Pkg. 224, Rehabilitate Decaying Wood Structural Members

Subject: Transmittal of Work Proposal

Enclosed for your review and approval are three copies of the referenced proposed work scheduled for FY 85 Denver Service Center day-labor construction.

Your prompt review will be appreciated. If there are any questions, please contact Project Manager George Thorson on FTS (303) 234-6080.

/s/ John W. Bright

John W. Bright

Enclosure (3)

cc: (ea. w/enc.)
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PKG 224, REHABILITATE DECAYING WOOD STRUCTURAL MEMBERS

Introduction

This report concerns the historic building complex located in lower Canyon de los Frijoles of Bandelier National Monument, Sandoval County, New Mexico. Excerpted from the Historic Structures Report (in progress), it addresses proposed construction activity for rehabilitating decaying wood members and installing insulated window sash scheduled for FY 85 Denver Service Center (DSC) day-labor construction. The primary emphasis for the proposed work is the buildings' canales and vigas. This work will halt ongoing deterioration and deter related deterioration to adjacent woodwork, the buildings' structural system and their interior fabric. This work is only one component of the current Development/Study Package Proposal No. 224. Other components include rehabilitating the water, sewer, electrical and gas services; rehabilitating flagstone and curbstone; and installing fire alarm and security systems. These latter components are scheduled for design and construction over a multi-year period through DSC and park contract and DSC and park day-labor and have/will receive individual design and compliance review.

A. Description (as it relates to proposed work)

Built between 1934 and 1942 under the auspices of the Civilian Conservation Corps (CCC), these thirty-one buildings serve as the administrative, interpretive, residential, maintenance and overall operational center for the park. To a large degree, they have maintained their original functional use (Illus. No. 1). With the exception of interior partition, color scheme(s), roofing and utility modifications and the growth of site vegetation over the years, the extant buildings are basically reflective of their historic appearance. The buildings are listed on the National Register of Historic Places and are currently being included on the park List of Classified Structures.

The buildings fall into four basic locational groupings--the headquarters, cabin, canyon and entrance road areas (Illus. No. 2). The only exception is the Comfort Station (Building No. 1) in the Juniper Campground area, west of the headquarters area. The latter group consists of the Fire Lookout (Building No. 30) and Entrance Station (Building No. 26), while the canyon area consists of five residential units (Building Nos. 7, 8, 10, 11 and 32) and the park stables (Building No. 25). The headquarters area consists of eight service-oriented buildings (Building Nos. 3, 4, 5, 6, 12, 13, 14 and 22), the Visitor Center/Museum (Building No. 2), Comfort Station (Building No. 9), Administrative Headquarters (Building No. 15/16), Curio Shop/Snack Bar (Building No. 17) and V.I.P. Quarters (Building No. 18). These latter two buildings historically belong with the remaining eight buildings (the cabin area) as they relate to the complex originally built as the Cabin/Hotel Development area. Today, three of these buildings (Building Nos. 19, 20 and 28) serve as residential quarters, Building Nos. 24 and 27 serve as combination residential/office use, Building Nos. 23 and 29 as offices while Building No. 21 is being converted to a laundry and storage facility. Discounting the two entrance road structures, the overall complex encompasses approximately eight acres. See attachment A for half-size reproductions of original construction drawings showing pertinent plans and elevations.

All of the buildings are reflective of vernacular southwest "puebloesque" architecture in both style and construction, the exception being the use of native stone rather than adobe brick. The typical construction consists of coursed ashlar tuff masonry walls, a pyroclastic igneous rock composed of compacted fragments of ash and gas-rich rock material broken and deposited through volcanic activity. Exterior walls have a slight batter, average 1'-9" thick with a rubble fill and were reportedly laid with a (1:3) sand and pojauque clay mortar. Originally a similar mud plaster partially coated the exterior to give an aged appearance. Those buildings with an entrance portal (Building Nos. 2, 15, 17, 18, 20, 23, 24, 28 and 29) as well as the patio/courtyard portals had their covered walls painted. On these portal areas and on Building No. 26, subsequent replastering has used a cement-based plaster mix.

The roof construction relects typical southwest architecture and its evolution from early timber-and-earth roof construction techniques. A primary system of peeled logs--vigas--provides the structural system with a secondary system of small logs--latias--overhead. These vigas average eight to ten inches in diameter, are spaced approximately 2'-6" apart, and in many cases are sawn on top to provide a wider bearing for the latias. Many originally extended through and beyond the wall, but most of the exposed vigas were merely "stubs." (Illus. 3A and B). Those vigas that had no extension were embedded within the wall and pinned into the adjacent masonry with a 3/4"x24" steel dowel (Illus. 3C). On those vigas which extended over a portal, a similar dowel pinned the viga to the adzed wood lintel. Running perpendicular or in a herringbone pattern to the vigas, the smaller aspen latias serve as the interior ceiling. Above these latias run 2x6 rafters with 1-inch solid sheathing which give the roof its finish slope. On several of the buildings, this area between the latias and the rafters has 12-inch square screened vents on the exterior walls opposite the viga bearing walls. Several of the maintenance-oriented buildings have no latias and the exposed sheathing rests directly on the vigas. A 4-ply built-up composition roof with metal flashing at the parapets formed the original finish roof (Illus. 4). Drainage was through channeled logs--canales--with metal flashing lining the channel and extending onto the parapet and roof. In a few areas, the viga itself became the canale. Most of these canales were independent from the viga, but in those areas where the two intersected the canale was notched to "sit" on the viga (Illus. 5). These canales extended beyond the wall similar to the vigas to assure that runoff was away from the wall.

Those buildings with a portal or a major facade opening requiring intermediate support had peeled log columns with a decorative corbel--zapata--cut from 8x8's supporting the 10-inch square lintel; both the corbel and the lintel were given an adzed finish on the exposed face(s). A 3/4" diameter pin tied the three wooden elements together. Adjoining lintel members had a half-lap joint.

Two basic window types exist, all being 1-3/8-inch thick casemate windows. The primary facade windows are predominately a pair of 6-lite windows while secondary facades are primarily a pair of 4-lite. All windows, many of which originally had screens, are set within the masonry opening without any decorative architrave. The lintel and window frame configurations vary; however, most of the lintels are composed of two wooden members with the outer face of the exterior member having an adzed finish. The interior masonry jamb openings are splayed and have a parged surface on the interior. A three-inch thick stone forms the exterior window sill.

B. Condition

The most critical deterioration problem on the buildings is deteriorating wood, primarily the canales and vigas. The initial application of preservatives has been lost over the years, and exposure to rain and snow has promoted an environment of fungal attack. Natural "checking" within log members only aggravates this condition. While most of this viga deterioration is isolated in the top and core of the exposed areas (Illus. 6-7), a number of vigas are deteriorated well into or through the wall and therefore rid the member of its structural load-carrying capacity (Illus. 8). Many of the original viga "stubs" have been periodically replaced and continue to be a major maintenance expenditure. The prevalent method of replacement has been to remove the exposed deteriorated area or "stub" and (re)install a new "stub," mortared in place; many of these are now loose and displaced (Illus. 9). On a number of buildings, they have been cut off and parged over (Illus. 10). One concern in this viga replacement is that the new log member match the original in diameter, particularly in the replacement over portals where both the original and the replacement are visible. Similar deterioration is occurring on the canales, portal columns, latias and window and door lintels (Illus. 11-14).

Most of the original composition roofs have been replaced (at least once) over the years and were again replaced in 1980, this time with a membrane roof coating. This work consisted of removal of the existing roofing material, installing a 4-inch thick layer of sprayed polyurethane foam insulation to the primed sheathing and the application of a spray-applied urethane elastomer coating over the roof and parapets. The most immediate concerns with these roofs relate to the lack of adequate quality control during installation. In at least one instance, Building 21, rotten sheathing was not replaced prior to installation and now its eventual replacement requires additional demolition work (Illus. 15). Similar conditions are suspected to exist elsewhere but are difficult to assess in a nondestructive manner. In addition, a sizeable number of pinhole leaks already exist allowing moisture penetration and exposure of the underlying foam to degradating ultraviolet light (Illus. 16 and 17). An additional warranty overspray is currently being coordinated through the regional maintenance division.

For the most part, the windows and doors are in sound condition. However, over the years these elements have lost their original color schemes. The original windows in the residential area buildings (Building Nos. 7, 8, 10, 11 and 32) were replaced with double glazed casemate windows in 1981, an unfortunate removal of historic fabric in addition to the change in the overall building character and scale due to substituting large single-pane windows for the original multi-pane units. Most of the doors and windows lack any weatherstripping. The proposed work as it relates to these features is in response to energy conservation mandate and is in concert with the approach undertaken on Building Nos. 2, 9 and 15/16 in 1983.

C. Proposed Treatment

The proposed work is scheduled for day-labor construction in FY 85 and will require the coordinative efforts of DSC, SWR, the park and private consultative services. This scope of work will address canales, vigas, exterior latias, columns, lintels, windows and doors (Illus. 18). An item of note in this regard: One item within the current Pkg. 214 (5/5/82) calls for rehabilitation of the existing corral (Building No. 25) in conjunction with other work (FY 86). It is proposed that this work element be combined with this Pkg. 224 work.

Canales

Replace all existing canales. This work will replace all canales on all buildings except Building Nos. 1 and 30. Building No. 1's roof drainage has been modified to a gutter type drainage off the rear elevation (Illus. No. 19), a condition proposed to remain. It is proposed however, that "false" canales be installed on the north (front) elevation where the originals have been removed. Building No. 30 never had canales. The proposed work will consist of removal of the roofing system as required (including deteriorated sheathing) and installing metal-lined (lead-coated copper), CCA-treated and stained canales to match the originals. The metal will extend over the sheathing and parapets to ensure proper flashing. The roofing material supplier/representative will instruct day-labor crew and park maintenance staff on the repair techniques for the polyurethane foam and elastomer membrane. The existing "Renovate Electrical and Gas System" project provides for electrical outlets to accommodate heat tape at the canales to deter ice build-up, the actual design and specification of which will be determined by DSC during construction.

Number of canales to be replaced - 130

Vigas

Due to the quantities of vigas and variety of deterioration severity, only minimal actual on-site investigation beyond that undertaken by DSC Structural Engineer R. Ohmstede in 1980 was undertaken to determine exact conditions. Instead, the design concept was to determine the range of existing conditions and treatment responses and, given the day-labor nature of the project, make actual viga-by-viga treatment determination during construction. The technique proposed is that similar to the system developed by Dr. Harrison Goodall of Conservation Services and one undertaken in a number of similar NPS projects. Negotiations are underway with Dr. Goodall to serve as a consultant on this project and periodically inspect the operations and progress of the work. The work will consist of removal of all deteriorated wood, applying a low-viscosity consolidant to the existing viga and installing a new stub. All exposed ends will be adzed to match the original configuration. This interface will occur approximately 2 inches beyond the wall face except where the decay extends further. A clay/sand mortar similar to the original will "pack" any resultant voids between the log and masonry. Illustration 20 portrays the condition types, treatment and approximate quantities. The new wood, CCA-treated and stained, will be connected to the original wood through the use of fiberglass rods set in structural epoxy. This work will occur on all deteriorated or missing vigas on all buildings except Nos. 1, 5, 6, 9, 21, 22, and 30, which either had no exposed vigas originally or involves related work as discussed below. Assessment of other alternatives will continue during the course of this work and any changes to this proposal will request specific review and compliance.

Related to this work are the following proposals:

1. Building No. 1: Inspect plastered-over viga ends on north elevation (removed during roof modification), consolidate as required and replaster. This proposal assumes that vigas have adequate sound material for structural bearing.

2. Building No. 2: Replace edge latias on rear portals (Illus. 13).

3. Building No. 6: Inspect plastered-over and cut-off viga ends on east (rear) elevation (Illus. 10), consolidate as required and replaster those currently plastered. The proposal assumes that vigas have adequate sound material for structural bearing. Grade as required (under archeological supervision) to provide proper drainage at northeast corner (Illus. 21).

4. Building No. 7: Repair vigas in-situ on north elevation at wood storage area (Illus. 22).

5. Building No. 23: Assess deterioration and if required, rebuild the two porch overhangs (Illus. 23) to match existing, original configuration, replacing deteriorated latias (Illus. 24) in kind and installing roof material similar to that proposed for Building No. 21 (below).

6. Building No. 26: Rebuild overhang areas to match existing, original configuration, replacing deteriorated vigas and latias (Illus. 25) in kind, and installing roof material similar to Building No. 21. Install new stubs to replace those previously removed (Illus. 26). These replacement stubs will be attached to the parged over vigas and extend a minimal distance to avoid damage from passing vehicles but sufficient to restore the building's original character and its aesthetic role as the initial visual element within the park.

Columns

Replace deteriorated columns at Building No. 2, 15/16/17 and 17/23 courtyard portals, and Building No. 13/14 portal. Inspect all other columns for deterioration and possible replacement. These CCA-treated and stained columns will be replaced in-kind, the only difference being that the columns will rest on a small (2" height) cement pad to isolate the column base from ground surface moisture.

Estimated number of columns to be replaced - 12.

Related to this work are the following proposals:

1. Evaluation by DSC structural engineers and if required, rebuild portal between Building Nos. 2 and 9 (Illus. 27). This area is exhibiting deformation of the masonry parapet from deterioration and resultant crushing of the column base. The area will be disassembled, the column and deteriorated latias replaced, existing lintel and corbel leveled and the masonry parapet rebuilt to match existing, original configuration. The roof will be replaced similar to Building No. 21.

2. Evaluation by DSC structural engineer of SWR proposal to install column/lintel support to Building Nos. 28 and 29 to prevent further sagging of the existing viga/parapet system. See Attachment B.

Wood Lintels

Existing window and door lintels will be inspected for deterioration by DSC and SWR day labor. Any found to be deteriorated to a point beyond treatment in-situ will be replaced in kind.

Other Wood Work

Building No. 21: Remove existing roof system as required to replace deteriorated sheathing (Illus. 15). As this roof removal exposes the viga framing, it is proposed that any deteriorated vigas be replaced in their entirety and that the roof skylight be restored to its original configuration. It is proposed that the replacement roof be an EPDM ballasted membrane roof system, installed under contract with those other areas previously mentioned (Building Nos. 23, 26, and 2/9 portal), rather than the urethane membrane system.

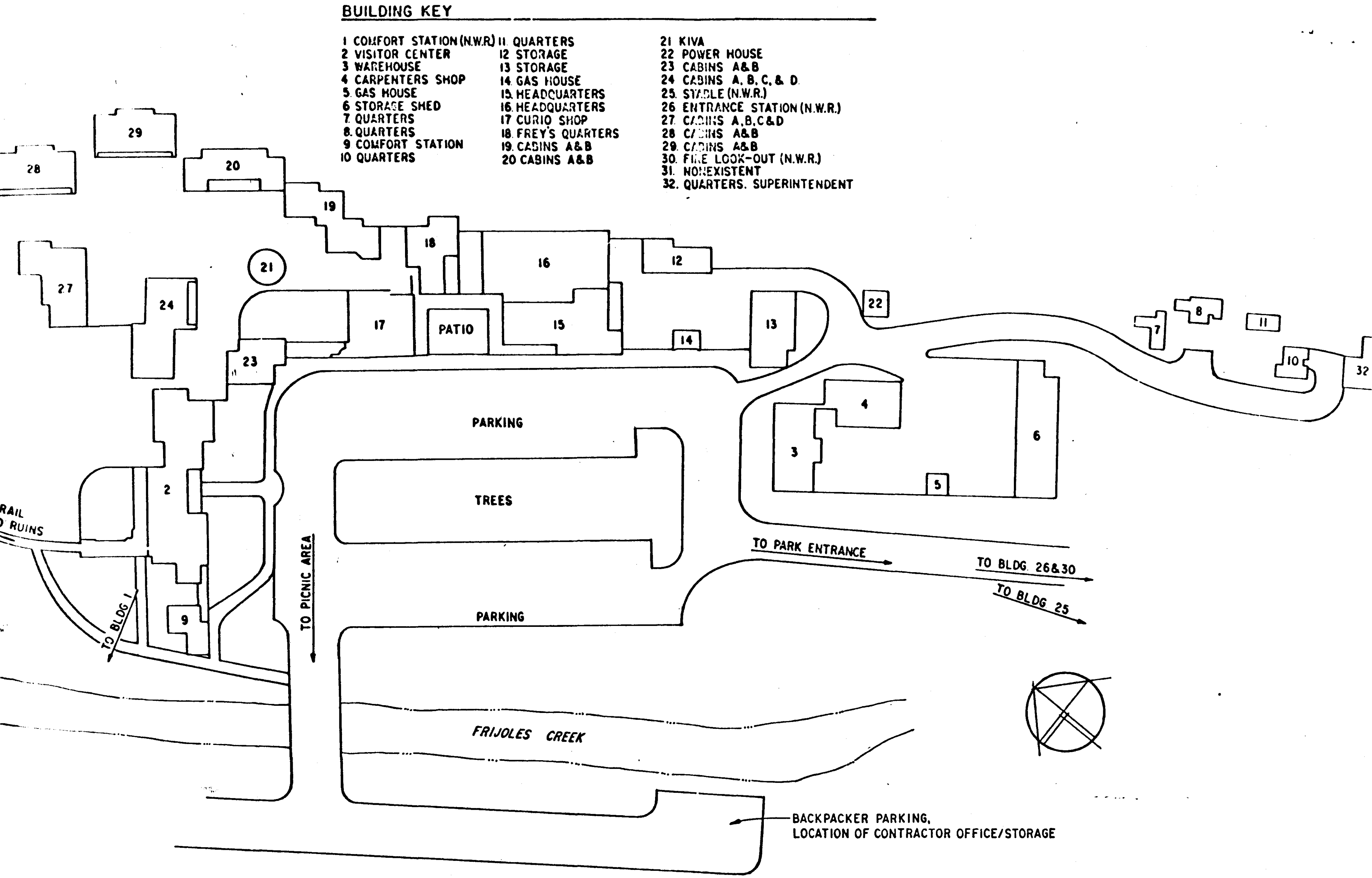
Inspect all other exposed sheathing.

Windows and Doors

Install glass panel to existing window sash to improve thermal performance to the following buildings: 3 (offices and toilet only), 12, 13, 17, 18, 19A and B, 20A and B, 23A and B, 24A, B, C and D, 27A and B, 28A and B and 29A and B. These panels will be similar to those previously installed to Building Nos. 2, 9 and 15/16, and as shown in Attachment C. Related to this work is installing weather-stripping to the windows and doors. This work leaves 10 buildings without any insulating "retrofit": Building Nos. 1, 26, and 30, due to their winter non-use, and Building Nos. 4, 5, 6, 14, 21, 22 and 25, due to the nature of their use. Currently, Building Nos. 3 and 4 have been proposed for alternate use (along with Building Nos. 6, 12, 23, 24C and D, and 29) in response to Pkg. 214. Should this change be approved, the remainder of Building No. 3 and Building No. 4 will receive similar energy conservation work.

ILLUSTRATION NO. 1

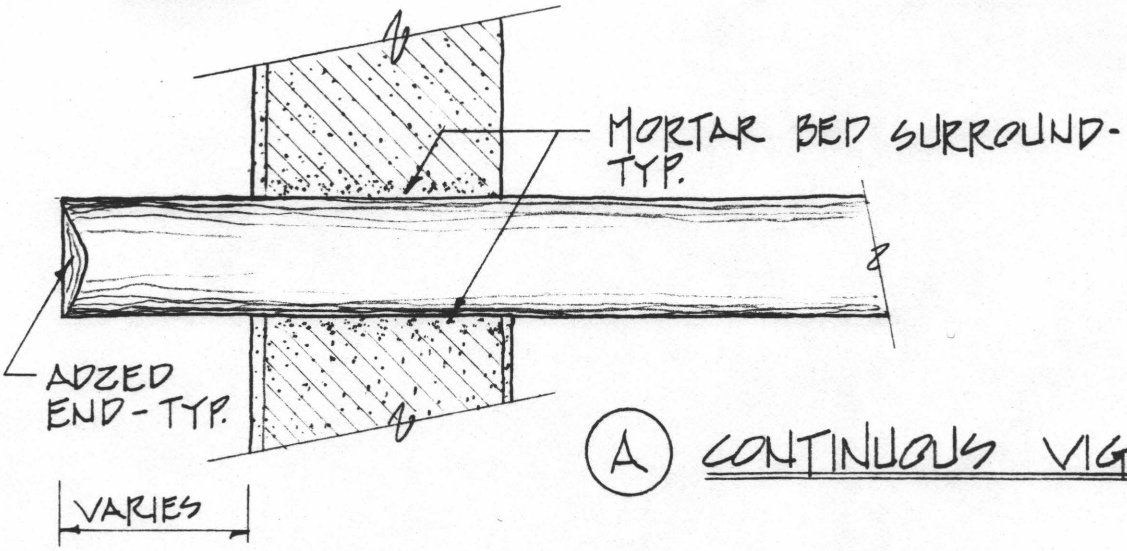
Bldg. No.	Constr. Date (Orig.)	Original Use	Current Use (1984)
1	1934	Comfort Station	Same
2	1935	Museum and Administation	Visitor Center/Museum
3	1935	Warehouse	Same
4	1936	Shop	Same
5	1935	Gas Station	Same
6	1936	Garage	Storage
7	1936	Quarters	Same
8	1937	Quarters	Same
9	1935	Comfort Station	Same
10	1937 & 39	Quarters, Garage and Laundry	Same
11	1937	Quarters	Same
12	1937	Storage	Same
13	1939	Garage and Shop	Training Room
14	1937	Gas House	Storage
15	1937	Dining Room and Kitchen	Administrative Hdqtrs.
16	1938	Dormitory	Administrative Hdqtrs.
17	1939	Lobby and Sales Room	Curio Shop/Snack Bar
18	1939	Operator's Residence	V.I.P. Quarters19
18	1939	Operator's Residence	V.I.P. Quarters
19	1939	Cabin Group "A"	Quarters (A and B)
20	1939	Cabin Group "B"	Quarters (A and B)
21	1939	Comfort Station and Boiler Room	Laundry (Proposed)
22	1939	Power House	Same
23	1940	Cabin Group "D"	Officers (A and B)
24	1939	Cabin Group "C"	Quarters (A and B); Offices (C and D)
25	1939	Stable	Same
26	1940	Entrance Station	Same
27	1940	Cabin Group "E-1"	Quarters (A and B); Darkroom (C)/ Storage (D)
28	1940	Cabin Group "E-2"	Quarters (A and B)
29	1940	Cabin Group "E-3"	Library (A); Storage (B)
30	1941	Fire Lookout	Same
32	1941	Quarters	Same (Superintendent)



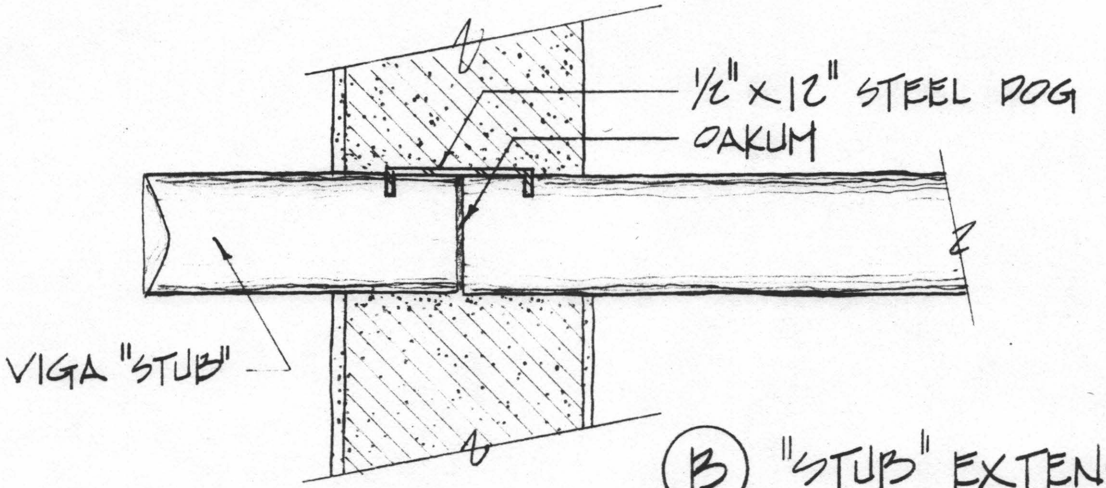
BUILDING KEY

1 COMFORT STATION (N.W.R)
2 VISITOR CENTER
3 WAREHOUSE
4 CARPENTERS SHOP
5 GAS HOUSE
6 STORAGE SHED
7 QUARTERS
8 QUARTERS
9 COMFORT STATION
10 QUARTERS
11 QUARTERS
12 STORAGE
13 STORAGE
14 GAS HOUSE
15 HEADQUARTERS
16 HEADQUARTERS
17 CURIO SHOP
18 FREY'S QUARTERS
19 CABINS A&B
20 CABINS A&B
21 KIVA
22 POWER HOUSE
23 CABINS A&B
24 CABINS A, B, C, & D
25 STABLE (N.W.R.)
26 ENTRANCE STATION (N.W.R.)
27 CABINS A,B,C&D
28 CABINS A&B
29 CABINS A&B
30 FIRE LOOK-OUT (N.W.R.)
31 NONEXISTENT
32 QUARTERS, SUPERINTENDENT

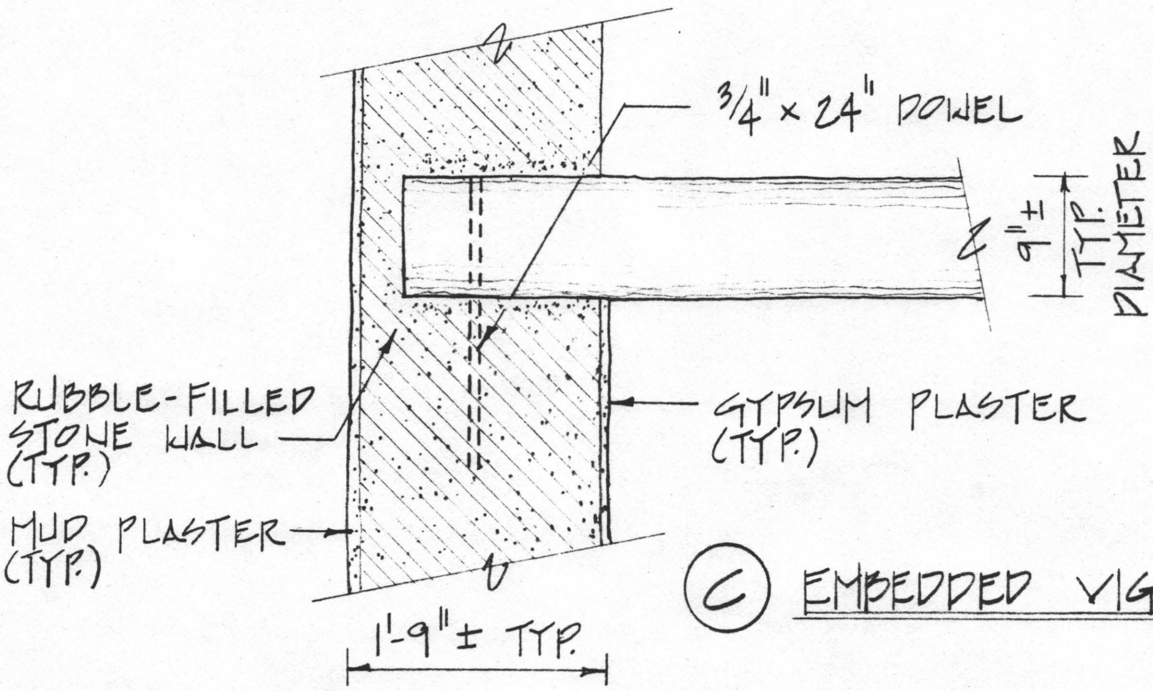
ILLUS. 2 — SITE PLAN



Ⓐ CONTINUOUS VIGA

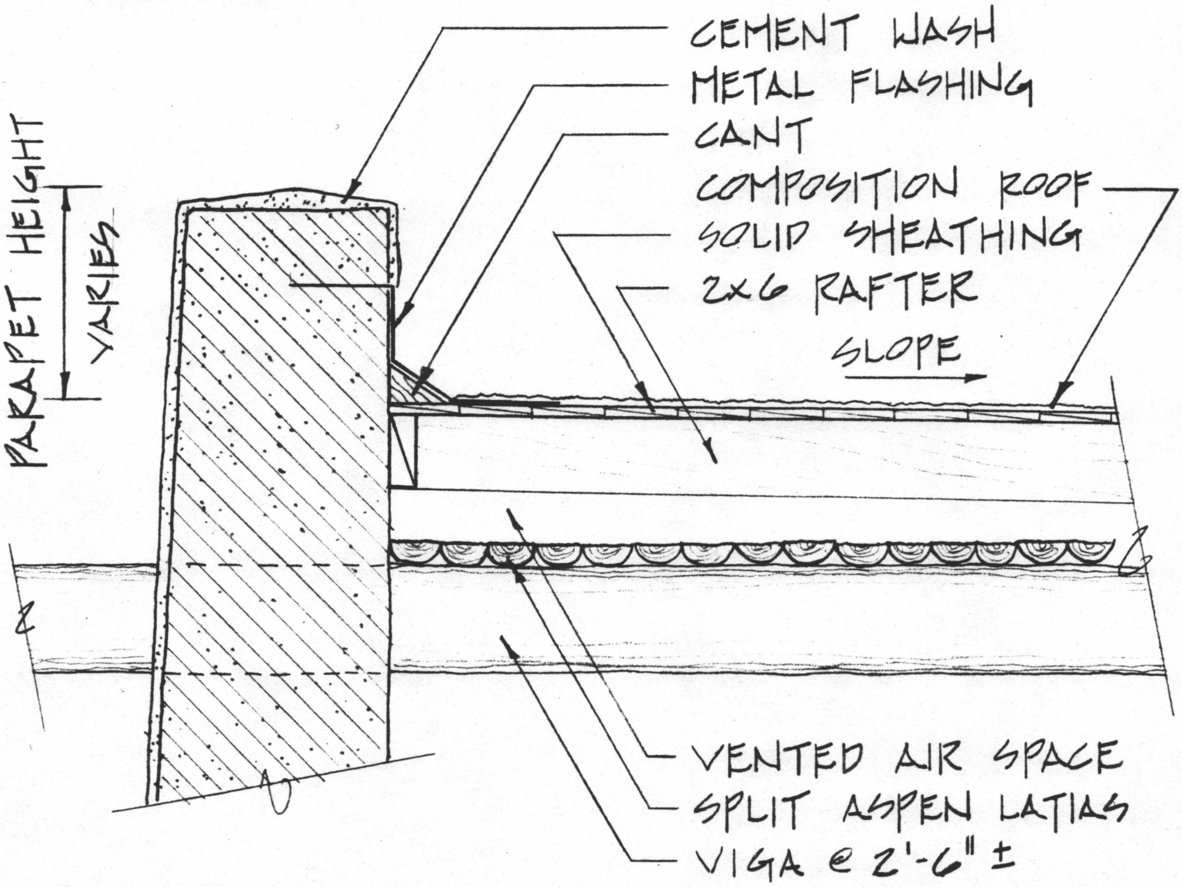


Ⓑ "STUB" EXTENSION

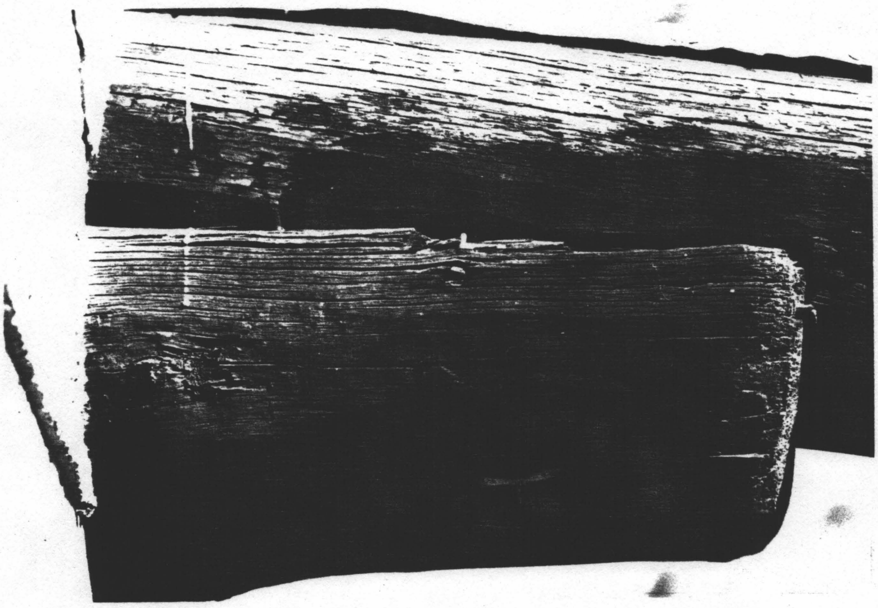


Ⓒ EMBEDDED VIGA

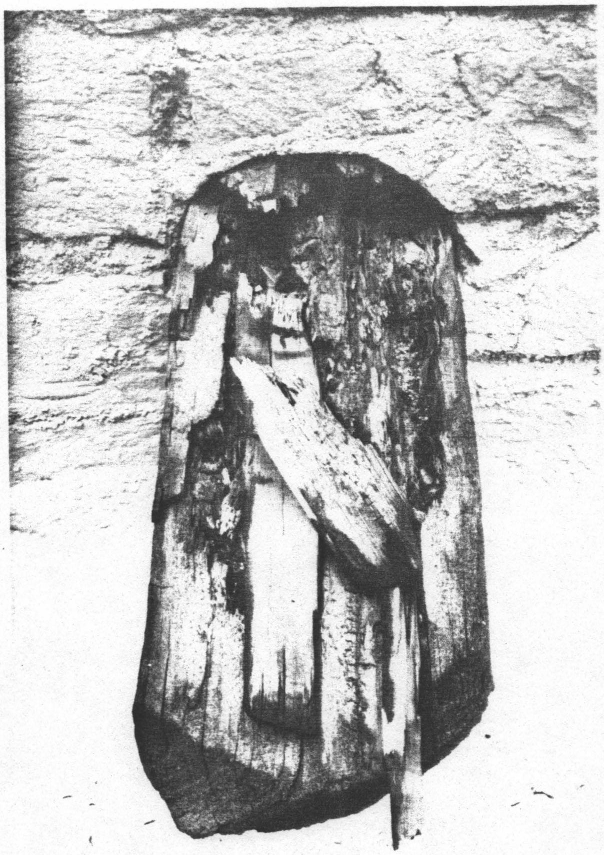
ILLUS. 3 – TYPICAL VIGA DETAILS (ORIGINAL)
SCALE: 3/4" = 1'-0"

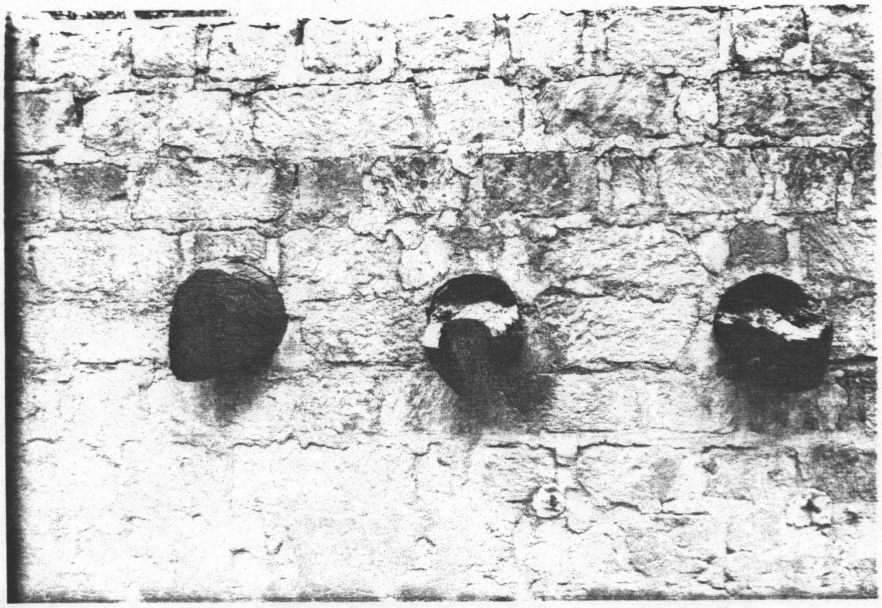


ILLUS. 4 – TYPICAL PARAPET DETAIL (ORIGINAL)
SCALE: 3/4" = 1'-0"

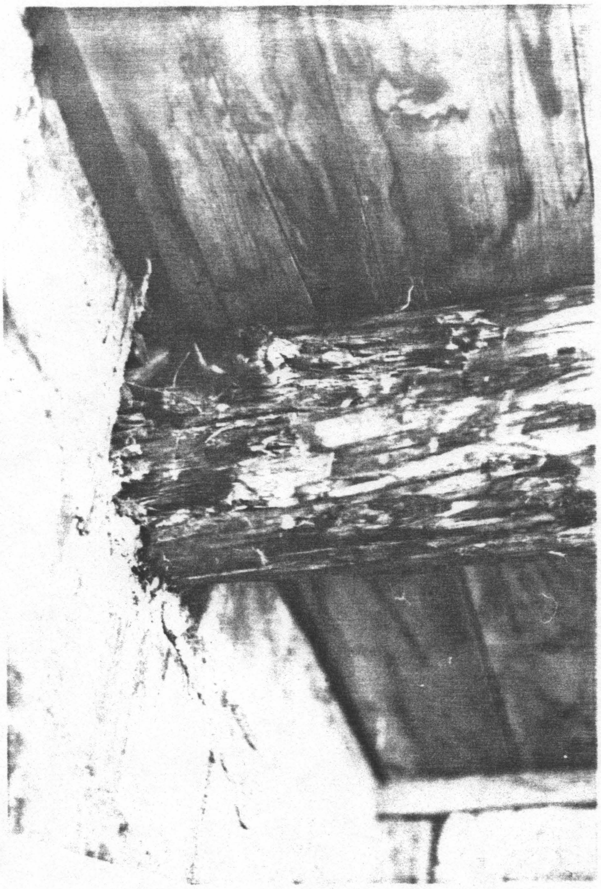


ILLUS. 5 – VIGA/CANALE INTERSECTION
NOTE CANALE NOTCH AND DIFFERENT END CONDITION ON VIGA.

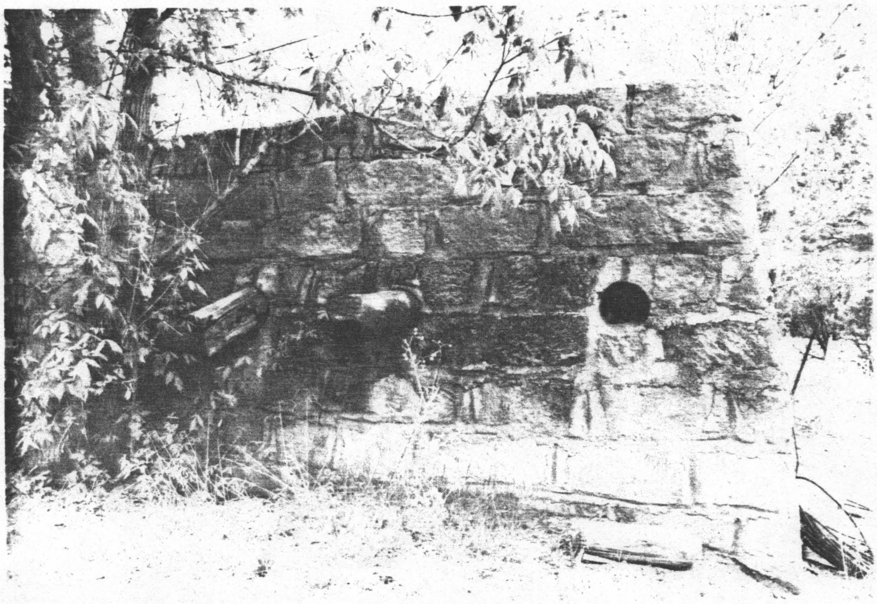




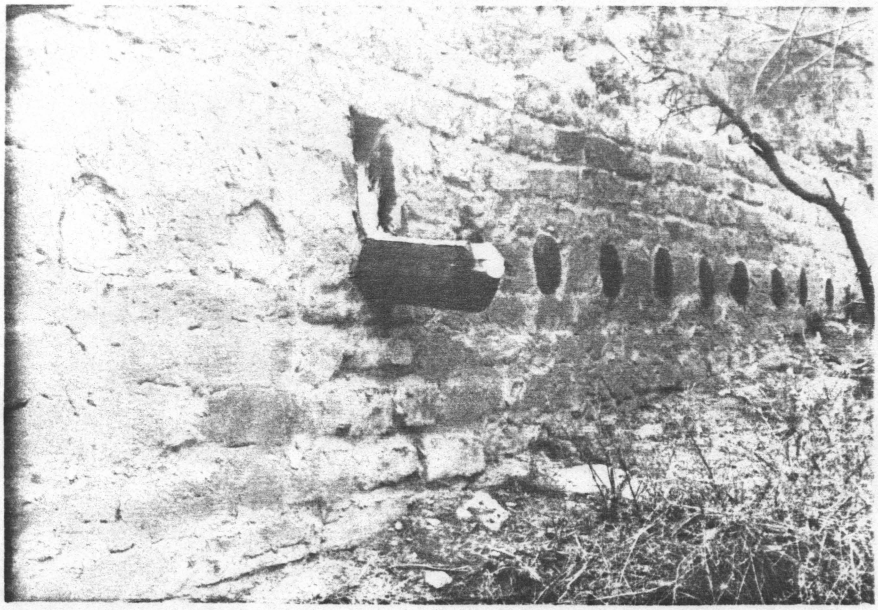
ILLUS. 6 & 7 - TYPICAL VIGA DETERIORATION



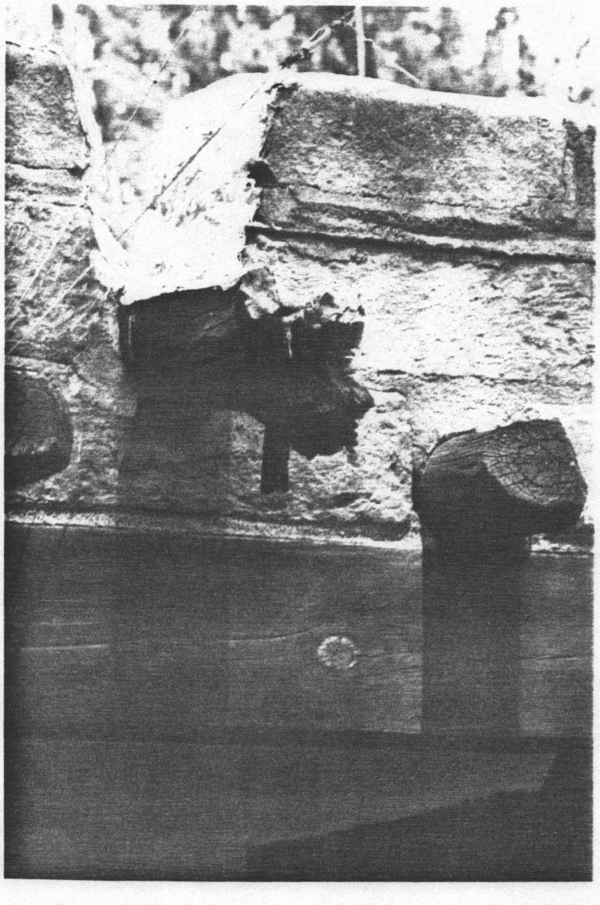
ILLUS. 8 - VIGA DETERIORATION THROUGH THE WALL AND POSING POTENTIAL FAILURE, BUILDING NO. 13



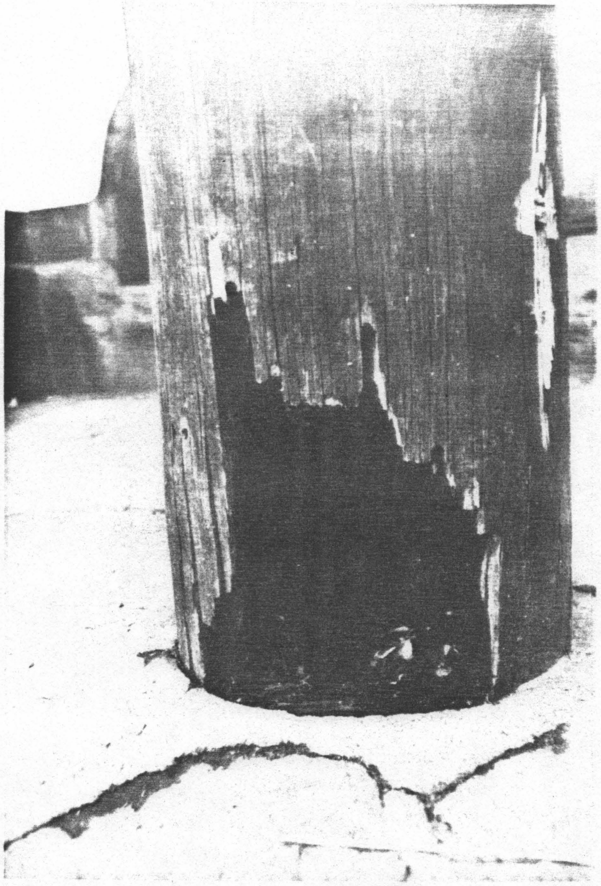
ILLUS. 9 - AREA OF VIGA "STUB" REPLACEMENT, BUILDING NO. 29. NOTE FALLEN AND DISPLACED "STUBS."



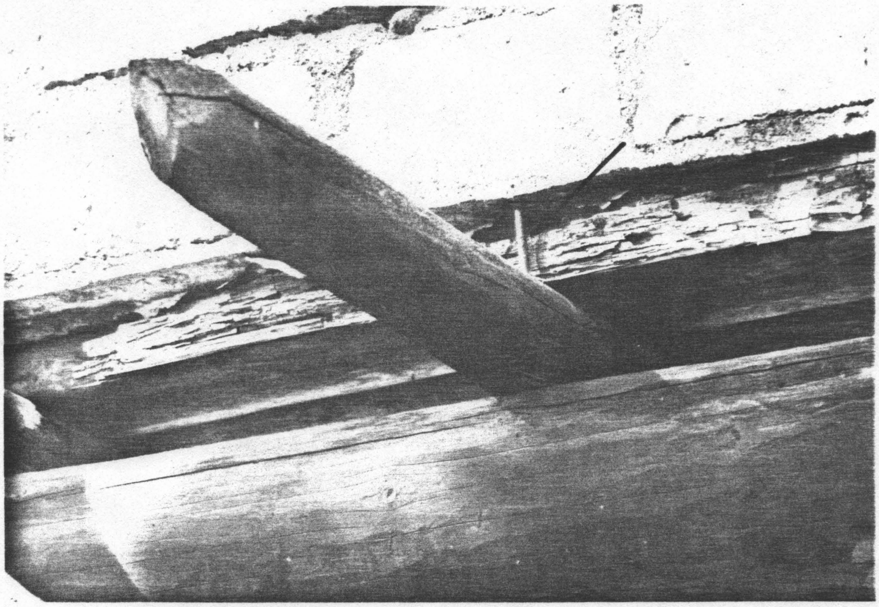
ILLUS. 10 – TWO TECHNIQUES OF ADDRESSING DETERIORATED VIGAS, BUILDING NO. 6: 1) CUTTING OFF EXPOSED AREA AND 2) CUTTING BACK EXPOSED AREA AND INFILLING WITH MUD MORTAR.



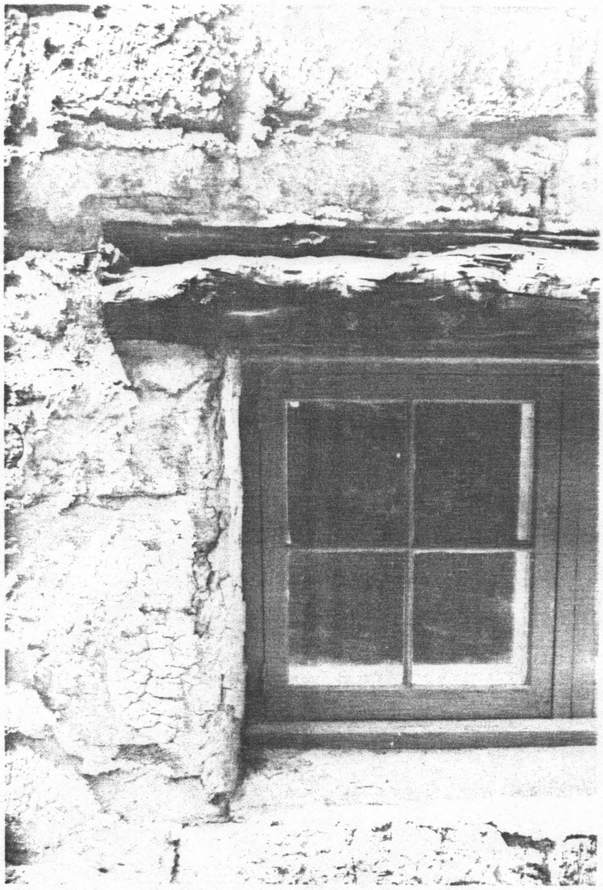
ILLUS. 11 – TYPICAL CANALE DETERIORATION



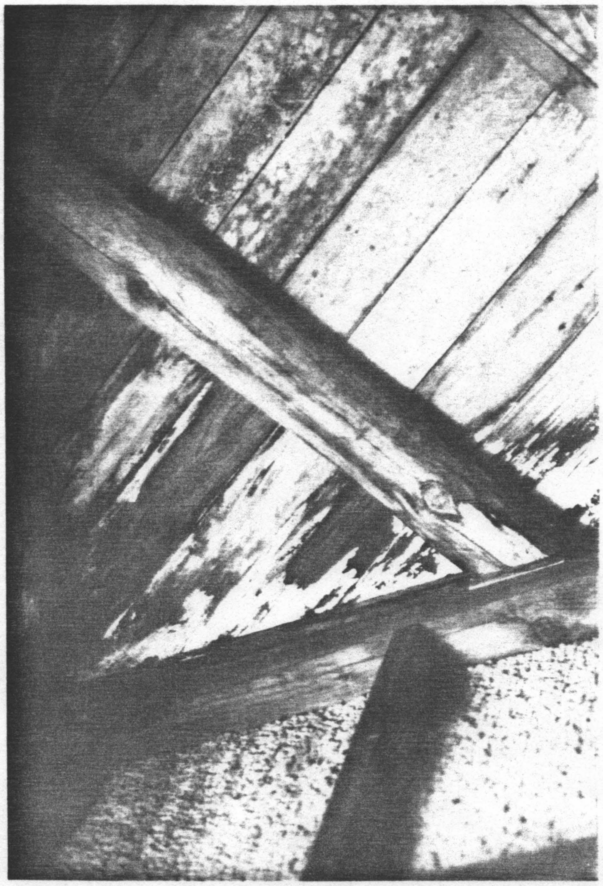
ILLUS. 12 – COLUMN BASE DETERIORATION, BUILDING NO. 17 PORTAL



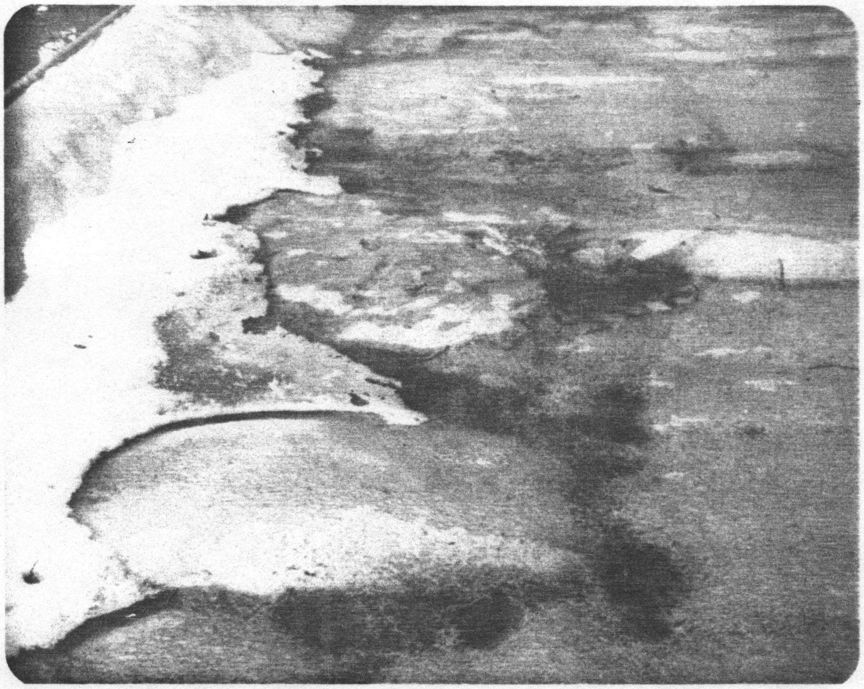
ILLUS. 13 – WOOD DETERIORATION IN PORTAL LATIAS, BUILDING NO. 2. NOTE SUPPORT PIN (ARROW).



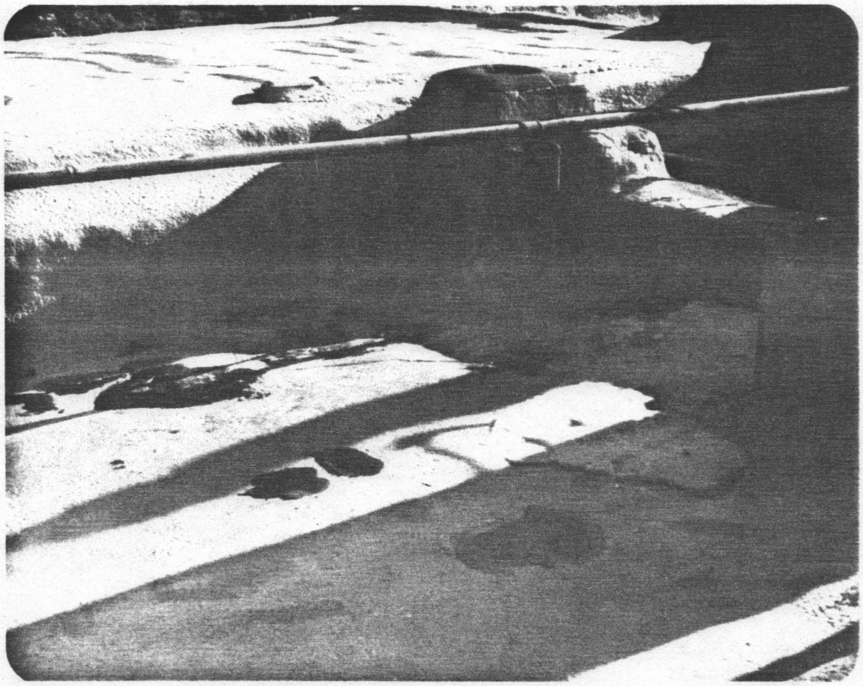
ILLUS. 14 – DETERIORATING WINDOW LINTEL, BUILDING NO. 25



ILLUS. 15 – UNDERSIDE OF ROOF SHEATHING, BUILDING NO. 21. NOTE DISCOLORATION INDICATING WOOD CELLULOSE UNDER FUNGAL ATTACK.



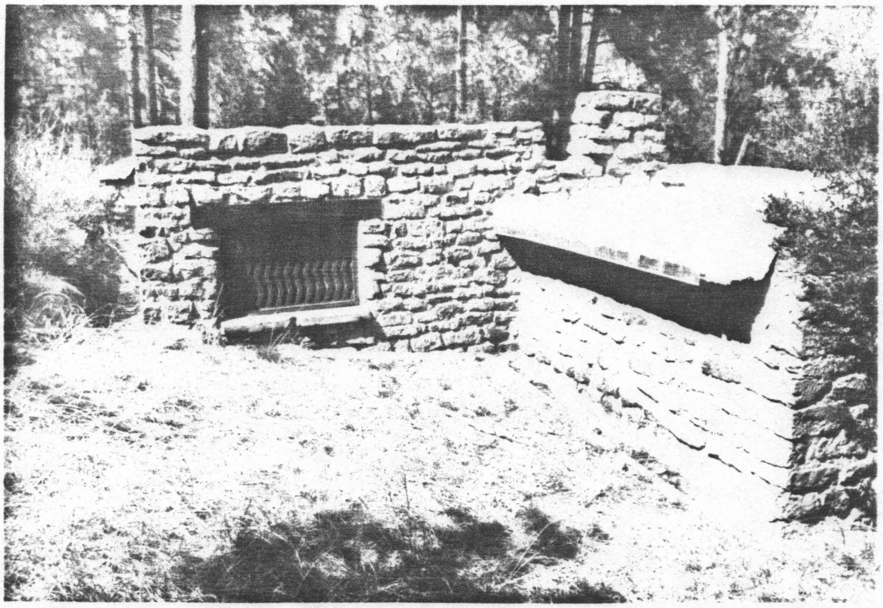
ILLUS. 16 - BLISTERING OF ROOF MEMBRANE DUE TO ENTRAPPED MOISTURE. INDICATATIVE OF MEMBRANE LEAK OR INSTALLATION OVER WET SUBSTRATE.



ILLUS. 17 - AREA OF BLDG. 15/16 ROOF SHOWING SEVERAL PARK EFFORTS AT SEALING LEAKS.

BUILDING NO.	REPLACE CANALES	REHAB VIGAS	REPLACE COLUMNS	INSPECT LINTELS	INSTALL WINDOW SASH	WEATHERSTRIP DOORS	NOTES
1	4 (FALSE)	24 (INSPECT)	—	6	—	—	
2	20	139	1-SEE NOTES	21	—	—	REPLACE EDGE LATIAS AT REAR PORTAL. INSPECT ALL OTHER COLUMNS (7)
2/9 PORTAL	0	SEE NOTES	SEE NOTES	1	—	—	REBUILD PORTAL, REPLACING COLUMNS AND LATIAS.
3	2	23	—	11	10	1	
4	3	17	SEE NOTE	9	—	—	INSPECT COLUMN
5	1	4	—	5	—	—	
6	3	30 (INSPECT)	SEE NOTE	2	—	—	INSPECT COLUMN (7)
7	7	20	—	12	—	—	
8	6	18	—	11	—	—	
9	2	0	—	7	—	—	
10	4	23	—	11	—	—	
11	10	25	SEE NOTE	12	—	—	INSPECT COLUMN (1)
12	2	12	—	3	—	—	
13	4	19	SEE NOTE	6	8	3	INSPECT COLUMNS (2)
13/14 PORTAL	2	11	2	2	—	—	
14	2	8	—	2	—	—	
15/16	8	40	SEE NOTE	24	—	—	INSPECT COLUMNS (4)
15/16/17 PORTALS	4	25	4-SEE NOTE	2	—	—	INSPECT ALL OTHER COLUMNS (6)
17	4	13	—	10	9	4	
17/23 PORTAL	2	11	2-SEE NOTE	2	—	—	INSPECT ALL OTHER COLUMNS (2)
18	4	29	SEE NOTE	15	18	3	INSPECT ALL COLUMNS (2)
19	4	35	—		18	4	
20	4	28	SEE NOTE	14	18	4	INSPECT COLUMNS (2)
21	3	SEE NOTE	—	5	—	—	REPLACE VIGAS AS REQ'D. W/ SHEATHING REPLACEMENT. RESTORE SKYLIGHT.
22	1	0	—	4	—	—	
23	3	13-SEE NOTES	SEE NOTES	8	14	2	INSPECT PORCH OVERHANGS. INSPECT COLUMN(1).
24	4	27	2	20	26	4	
25	3	12	SEE NOTE	12	—	—	INSPECT COLUMNS (9)
26	1	SEE NOTES	—	4	—	—	REPLACE MISSING STUBS (8); REBUILD OVERHANGS
27	4	30	—	15	23	4	
28	4	17	SEE NOTE	10	20	2	ASSESS FOR INSTALLING PORTAL SUPPORT
29	4	17	SEE NOTE	10	20	2	ASSESS FOR INSTALLING PORTAL SUPPORT
30	0	0	—	3	—	—	
32	4	21	—	16	—	—	

ILLUS. 18

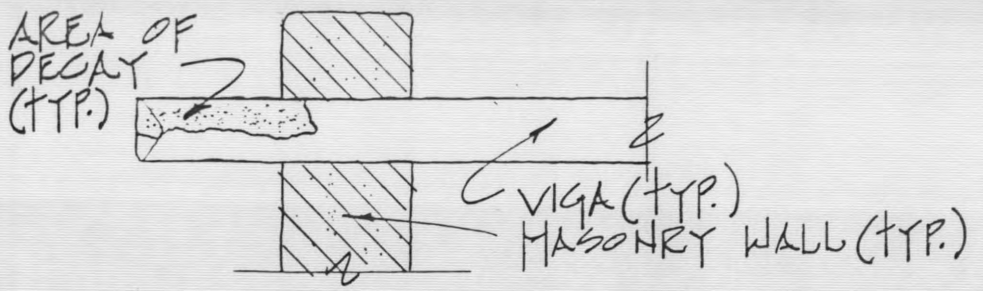


ILLUS. 19 – REAR (SOUTH) ELEVATION OF BUILDING NO. 1 SHOWING ROOF GUTTER MODIFICATION. VIGA ENDS TO BE INSPECTED ARE BELOW ROOF OVERHANG.

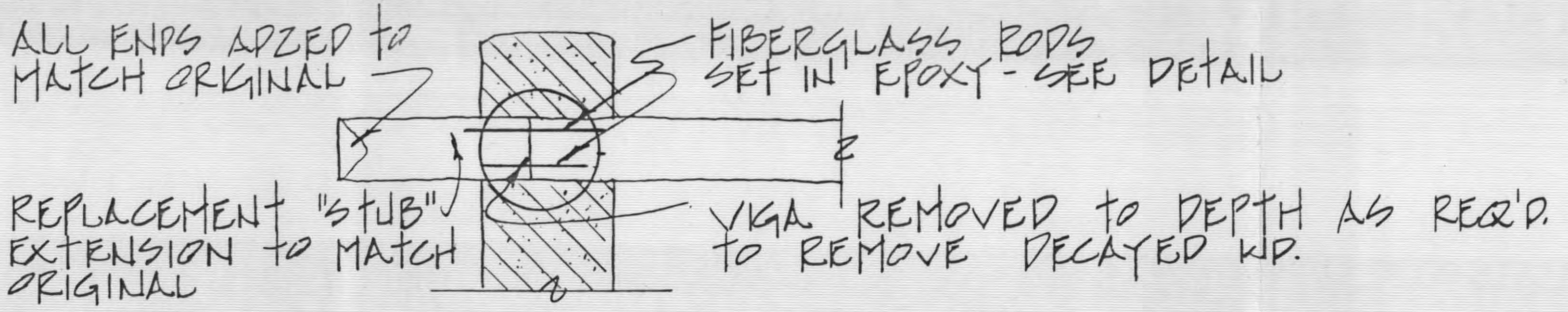
AS BUILT AND/OR EXIST. CONDITION

PROPOSED TREATMENT

EST. QUANTITY *

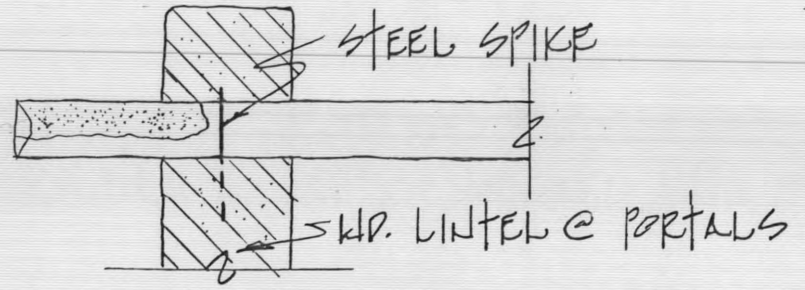


Ⓐ CONTINUOUS VIGA WITH NON-STRUCTURAL DECAY

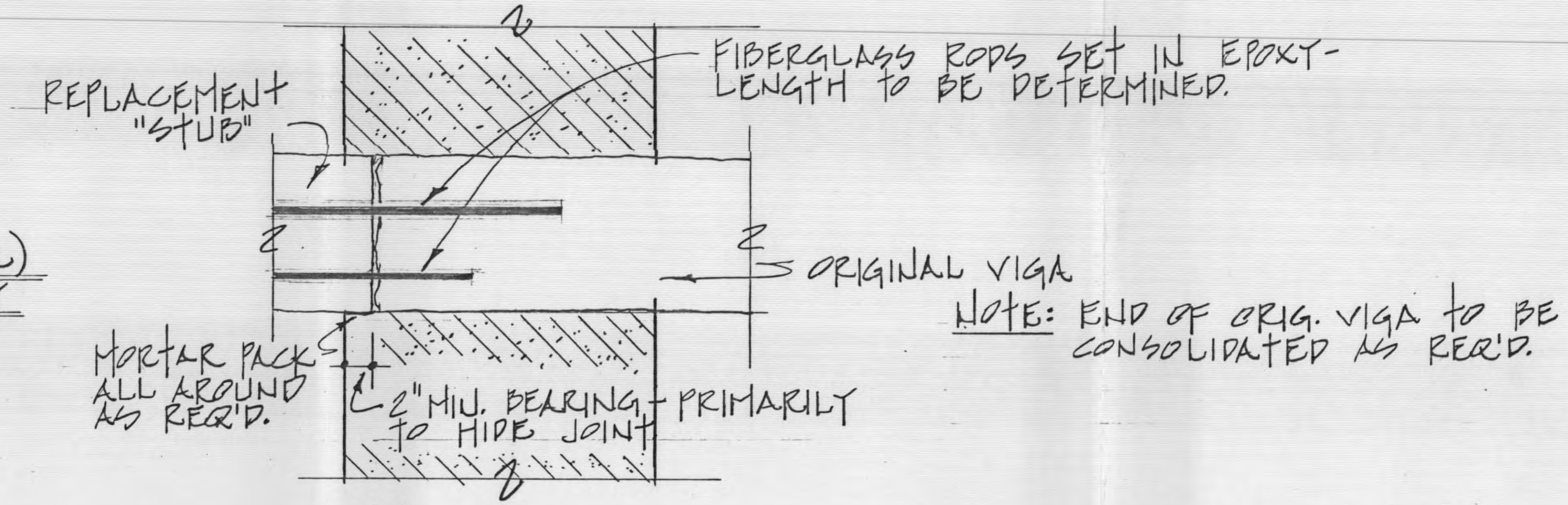

ALL ENDS ADZED TO MATCH ORIGINAL
FIBERGLASS RODS SET IN EPOXY - SEE DETAIL
REPLACEMENT "STUB" EXTENSION TO MATCH ORIGINAL
VIGA REMOVED TO DEPTH AS REQ'D. TO REMOVE DECAYED WD.

REPAIR FOR CONDITIONS A, B, C & E

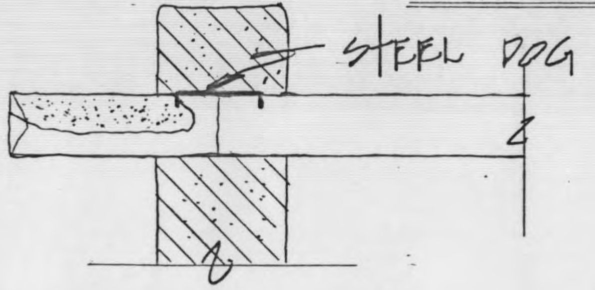
Ⓐ	210
Ⓑ	128
Ⓒ	30
Ⓔ	250



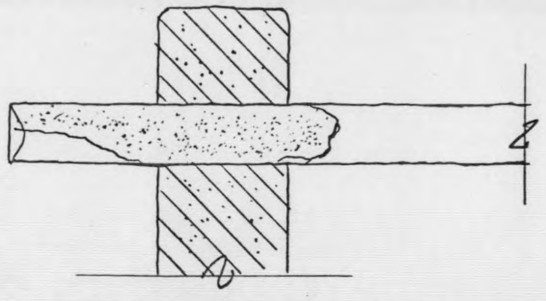
Ⓑ CONT. VIGA SPIKED INTO MASONRY (OR WD. LINTEL) WITH NON-STRUCTURAL DECAY


REPLACEMENT "STUB"
FIBERGLASS RODS SET IN EPOXY - LENGTH TO BE DETERMINED.
ORIGINAL VIGA
NOTE: END OF ORIG. VIGA TO BE CONSOLIDATED AS REQ'D.
MORTAR PACK ALL AROUND AS REQ'D.
2" MIN. BEARING - PRIMARILY TO HIDE JOINT

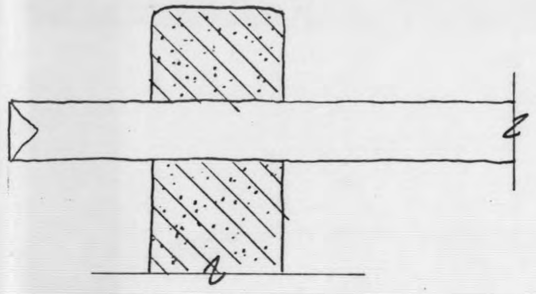
DETAIL



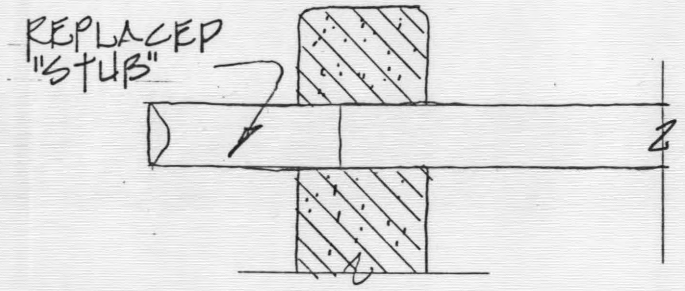
Ⓒ "STUB" DOGGED INTO VIGA WITH NON-STRUCTURAL DECAY



Ⓓ CONT. VIGA WITH STRUCTURAL DECAY



Ⓓ 15

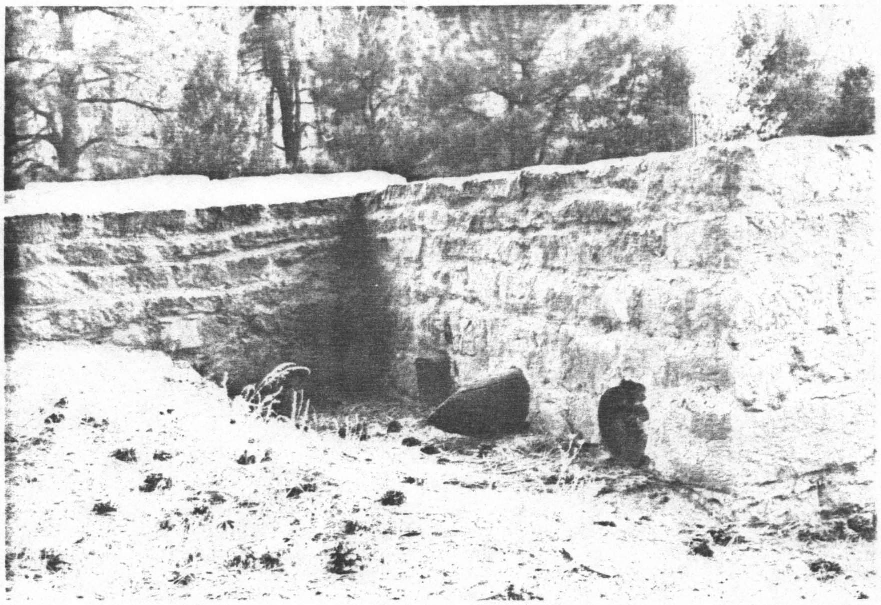


Ⓔ REPLACED (OR MISSING) "STUB"

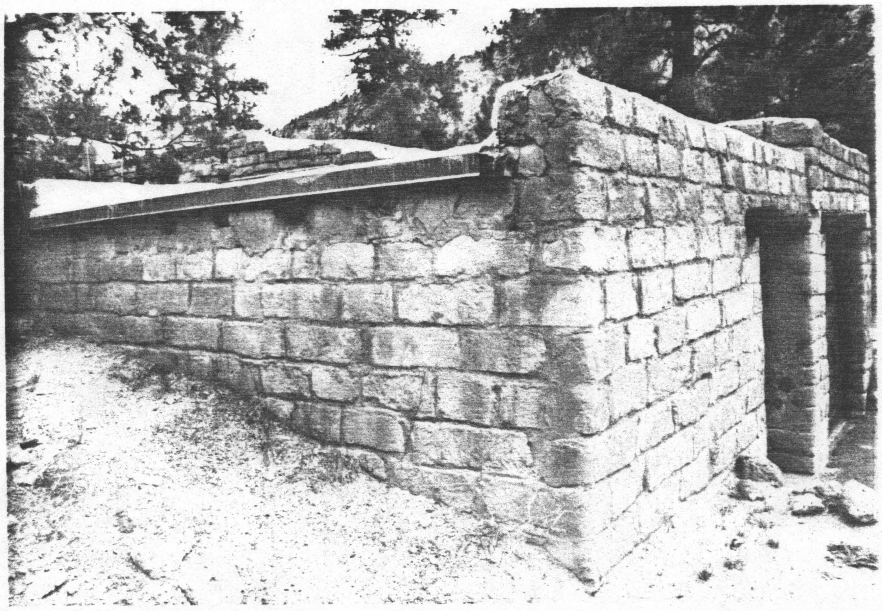
NOTE: ALL REPLACEMENT WOOD TO BE SIZED TO MATCH ORIGINAL, CCA-TREATED AND STAINED TO MATCH ORIGINAL.

* ESTIMATED QUANTITIES BASED ON VISUAL INSPECTION AND ASSUMPTION THAT QUANTIES OF EACH DETAIL TYPE IS AS SHOWN ON ORIGINAL CONSTRUCTION DRAWINGS. THEY ASSUME "WORST CASE SCENARIO" WHERE ALL ENDS WILL BE REPLACED. ACTUAL CONDITION AND QUANTITIES WILL BE DETERMINED IN FIELD AND RECORDED, BUILDING-BY-BUILDING.

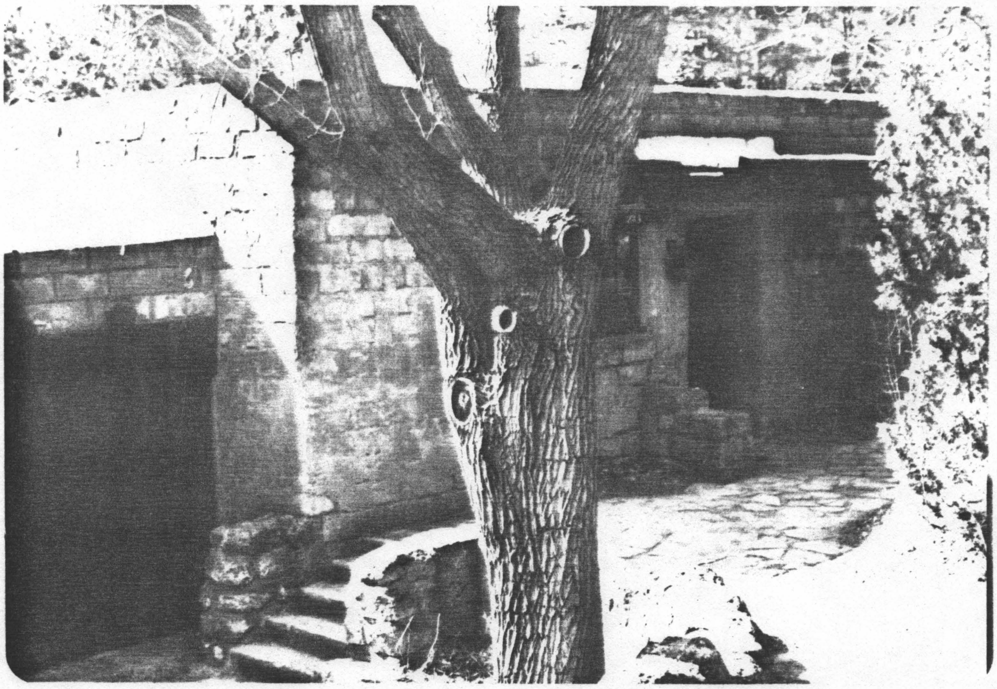
ILLUS. 20



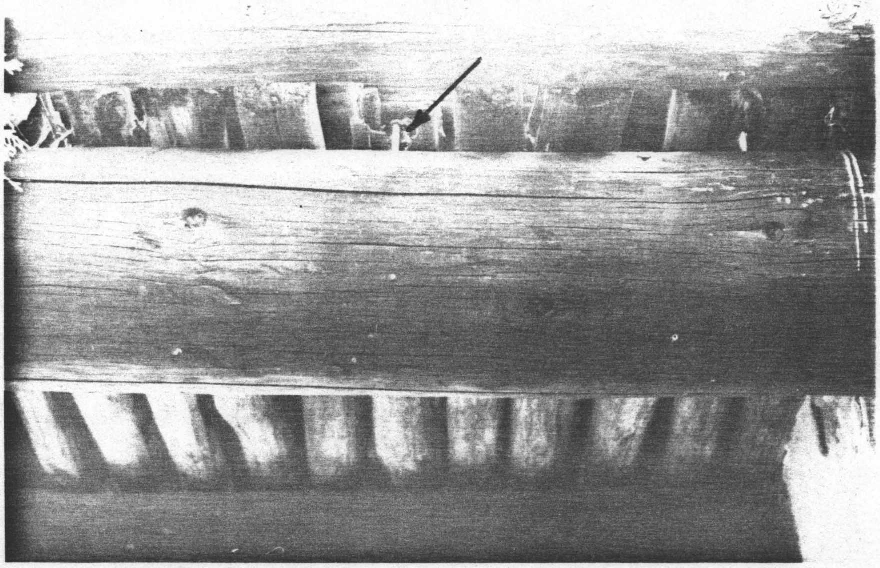
ILLUS. 21 – N.E. CORNER OF BUILDING NO. 6 SHOWING REQUIRED GRADING TO ENSURE RUNOFF AWAY FROM BUILDING AND BELOW EXPOSED WOOD.



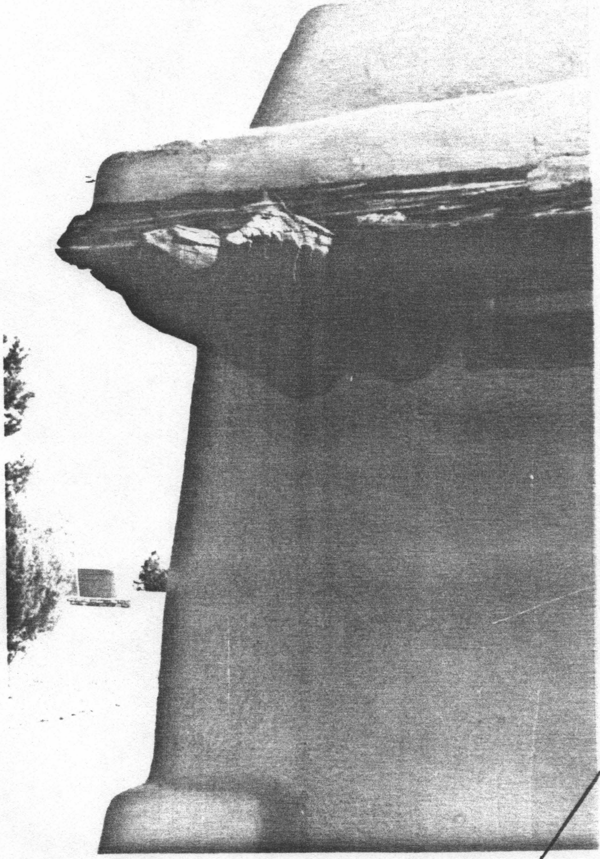
ILLUS. 22 – NORTH ELEVATION OF BUILDING NO. 7 SHOWING VIGAS TO BE REPAIRED IN SITU OR CUT BACK AND PLASTERD OVER, DEPENDING ON SEVERITY OF DETERIORATION



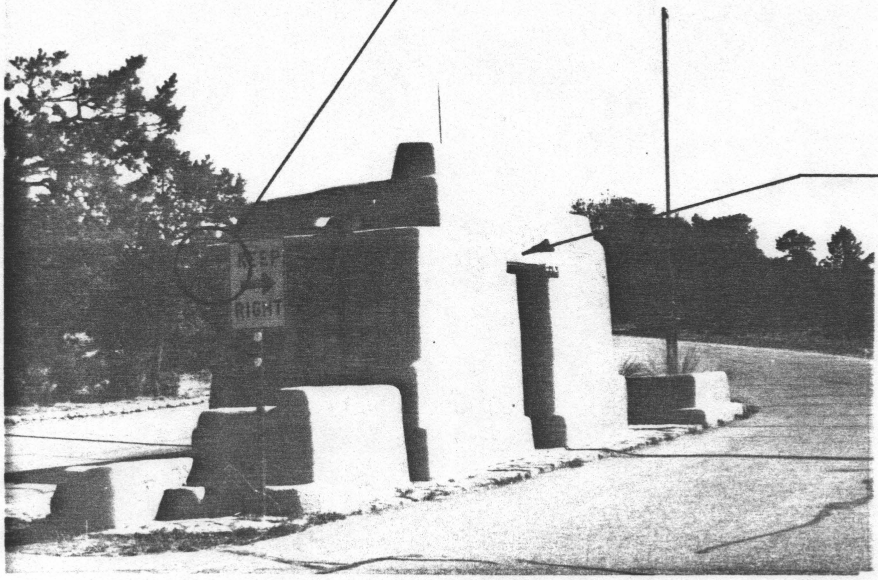
ILLUS. 23 - BUILDING 23A SHOWING ENTRY OVERHANG.



ILLUS. 24 - DETAIL OF BUILDING 23B ENTRY OVERHANG SHOWING LATIA DETERIORATION. NOTE SUPPORT PIN (ARROW).

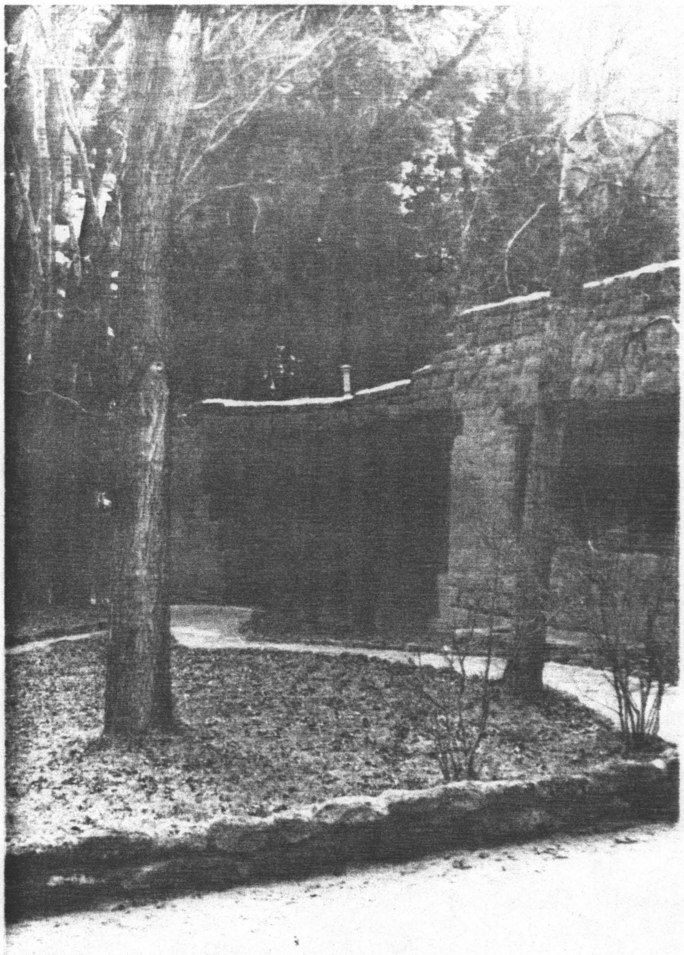


ILLUS. 25 - DETERIORATION OF EDGE LATIAS.



VIGAS MISSING ON THIS ELEV.

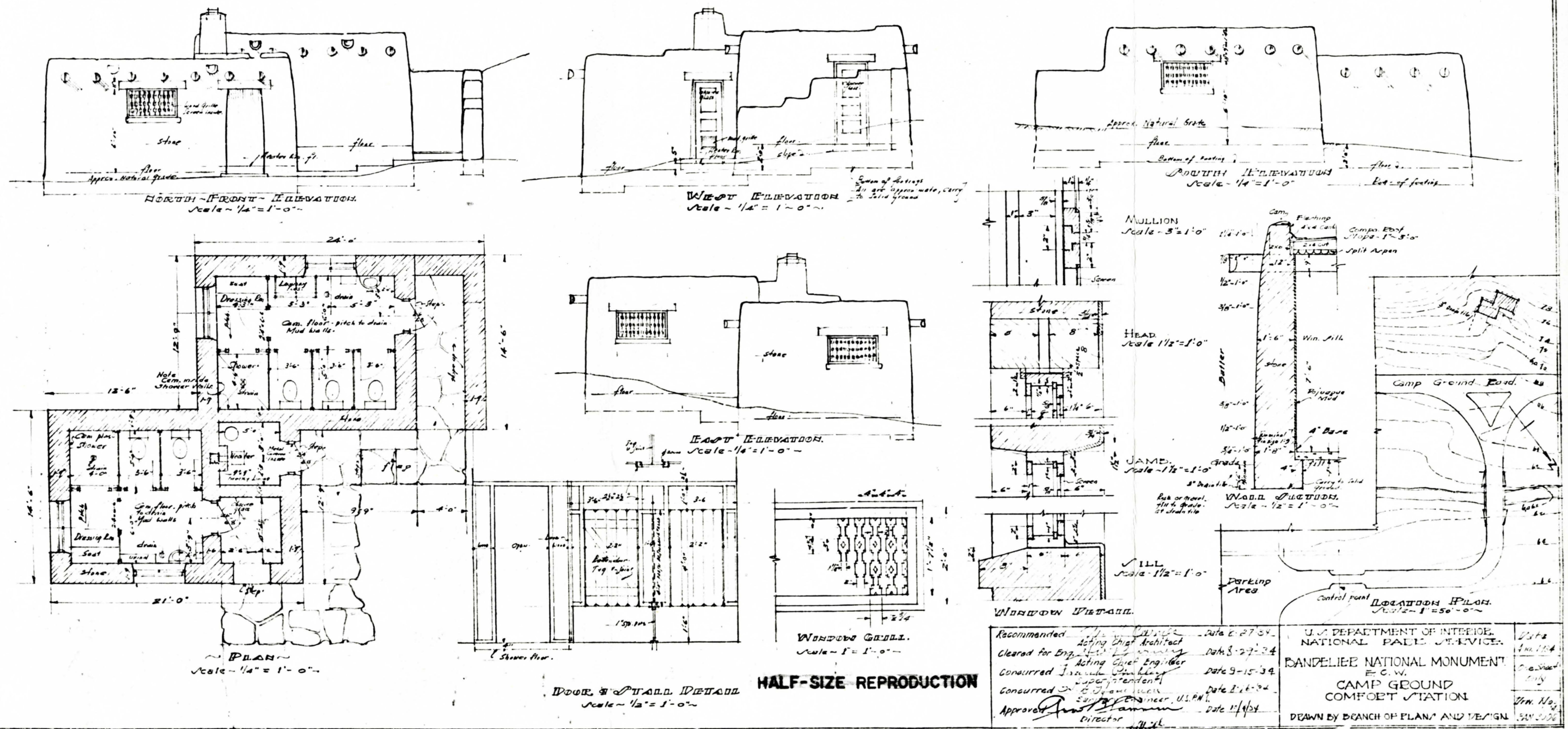
ILLUS. 26 - BUILDING NO. 26 SHOWING MISSING VIGA ENDS - OPPOSITE SIDE SIMILAR.



ILLUS. 27 – PORTAL BETWEEN BUILDING NOS. 2 & 9 SHOWING LINTEL/PARAPET DEFORMATION.

ATTACHMENT A

ORIGINAL CONSTRUCTION DRAWINGS OF BUILDINGS, WHERE AVAILABLE, SHOWING PLANS, ELEVATIONS & TYPICAL DETAILS.



Recommended [illegible] Date 8-27-34
Acting Chief Architect
Cleared for Eng. [illegible] Date 8-29-34
Acting Chief Engineer
Concurred Frank Pinkley Date 9-15-34
Superintendent
Concurred [illegible] Date 8-16-34
Sanitary Engineer, U.S.P.H.S.
Approved Arno B. Cammerer Date 10/9/34
Director

U. S. DEPARTMENT OF INTERIOR
NATIONAL PARK SERVICE

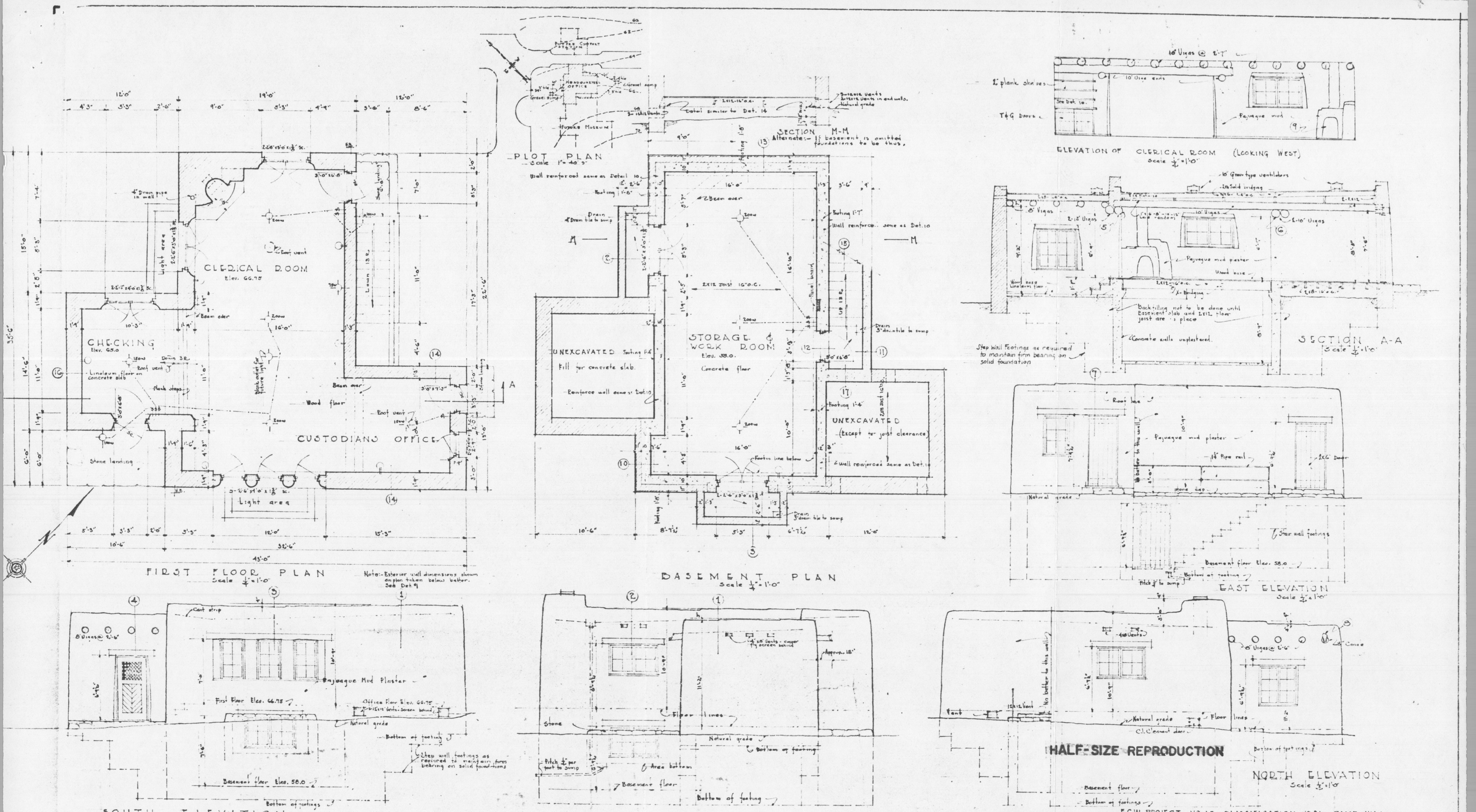
BANDELIER NATIONAL MONUMENT
E. C. W.
CAMP GROUND
COMFORT STATION

DRAWN BY BRANCH OF PLANS AND DESIGN

Date Aug. 1934
One Sheet Only
Drw. No. NM BAN 3006

HALF-SIZE REPRODUCTION

#1



E.C.W. PROJECT NO. 17 CLASSIFICATION NO. 21 CAMP NM-1

Recommended: W. G. Carnes Deputy Chief, Architect Date 2-23-35

Cleared for Eng: Act Chief Engineer Date 2-28-35

Concurred: See note sheet 3 Chief Forester Date 3-26-35

Concurred: Frank Pinkley Superintendent Date 3-19-35

Approved: Arno B. Cammerer Director Date 4-8-35

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BANDELIER NATIONAL MONUMENT

HEADQUARTERS OFFICE

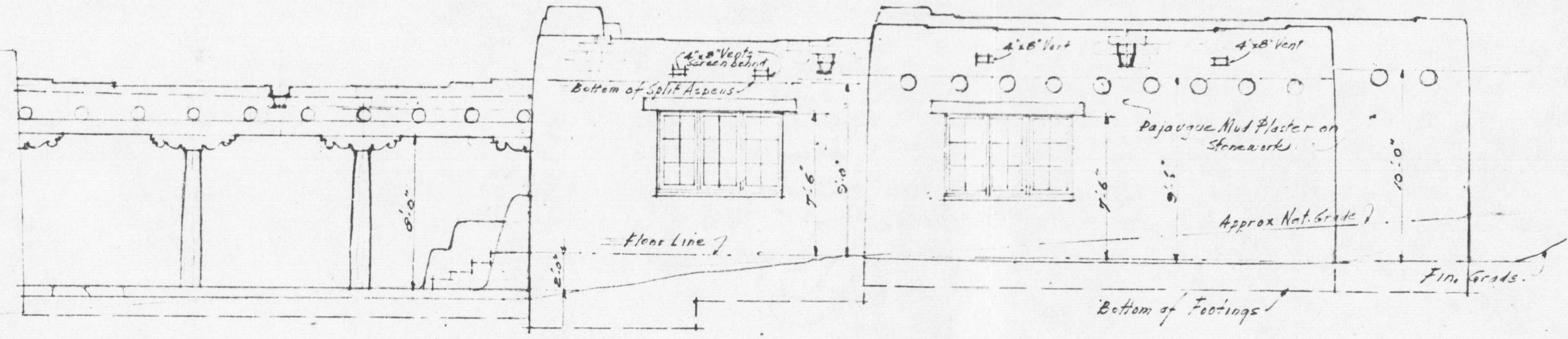
DRAWN BY BRANCH OF PLANS AND DESIGN

Date 1-31-35

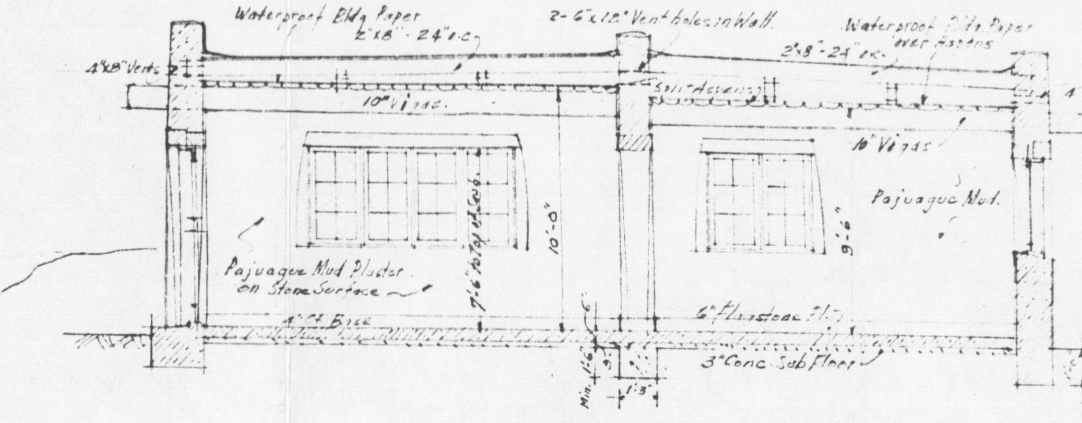
Sheet No. 1 of 3 Sheets

Drawing No. NM. BAN. 3008A

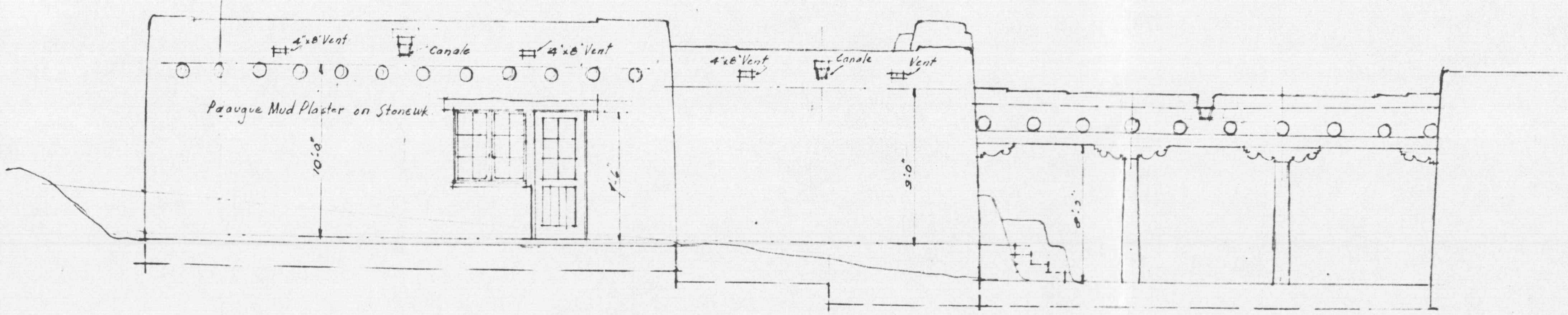
#2



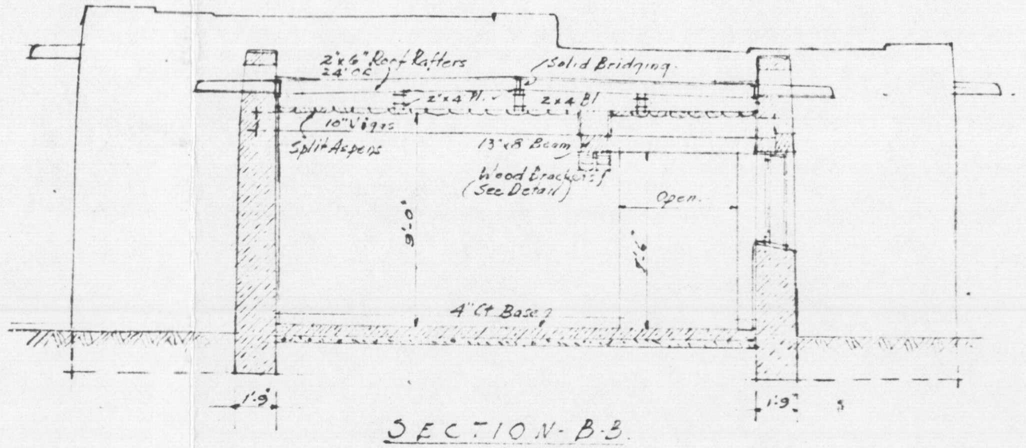
EAST · ELEVATION
Scale 1/4"-1'-0"



SECTION · A · A
Scale 1/4"-1'-0"



WEST · ELEVATION
Scale 1/4"-1'-0"

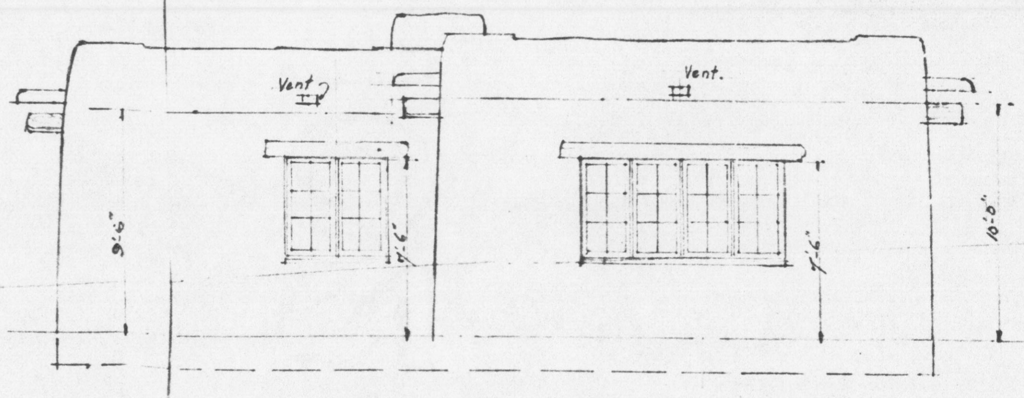


SECTION · B · B
Scale 1/4"-1'-0"

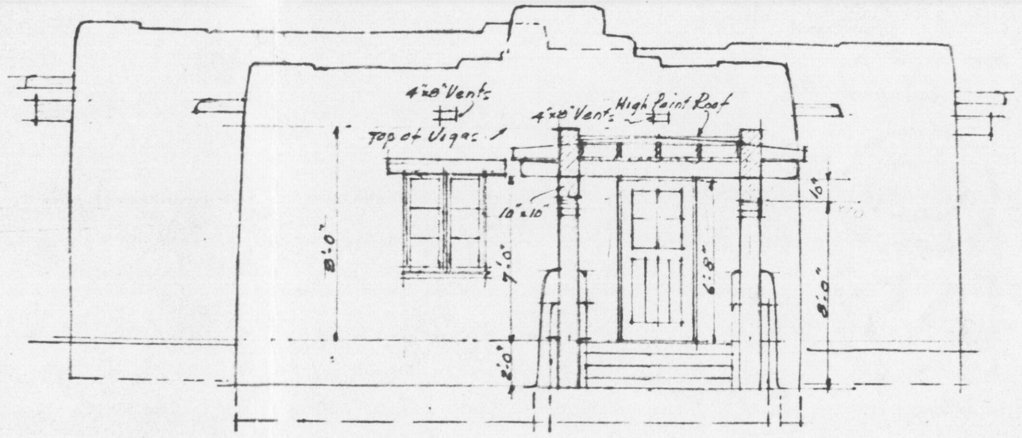
SPECIFICATION:

1) Concrete shall be a 1:2:4 mix, Cement shall conform to Fed Spec. SS-C-1.
(2) Mortar for stonework – Pajuague mud - Mortar for chimney - cement and lime 1:1:6.
(3) Viga sizes refer to dia at small end.
(4) Window Sash – White sash.
(5) Glass shall conform to Federal Specification DD-G-451, Type B, clear window glass, single strength, A quality. Glass in windows set with glazing points and putty. Glass in doors bedded in putty and held with wood stops.
(6) Flagstone floors shall be ground down with machine.
(7) Interior Walls – 2 Coats of Calsomine on all walls, over 1 coat of sizing.

Refer to Specification for Ban 3008 A for data not listed here.



NORTH · ELEVATION
Scale 1/4"-1'-0"



SOUTH ELEVATION
Scale 1/4"-1'-0"

E.C.W. PROJ 19 – CLASS 117 – CAMP NM-1-N – 6TH PER.

Concurred Ansel F. Hall Date 11-8-35
Chief Field Division of Education

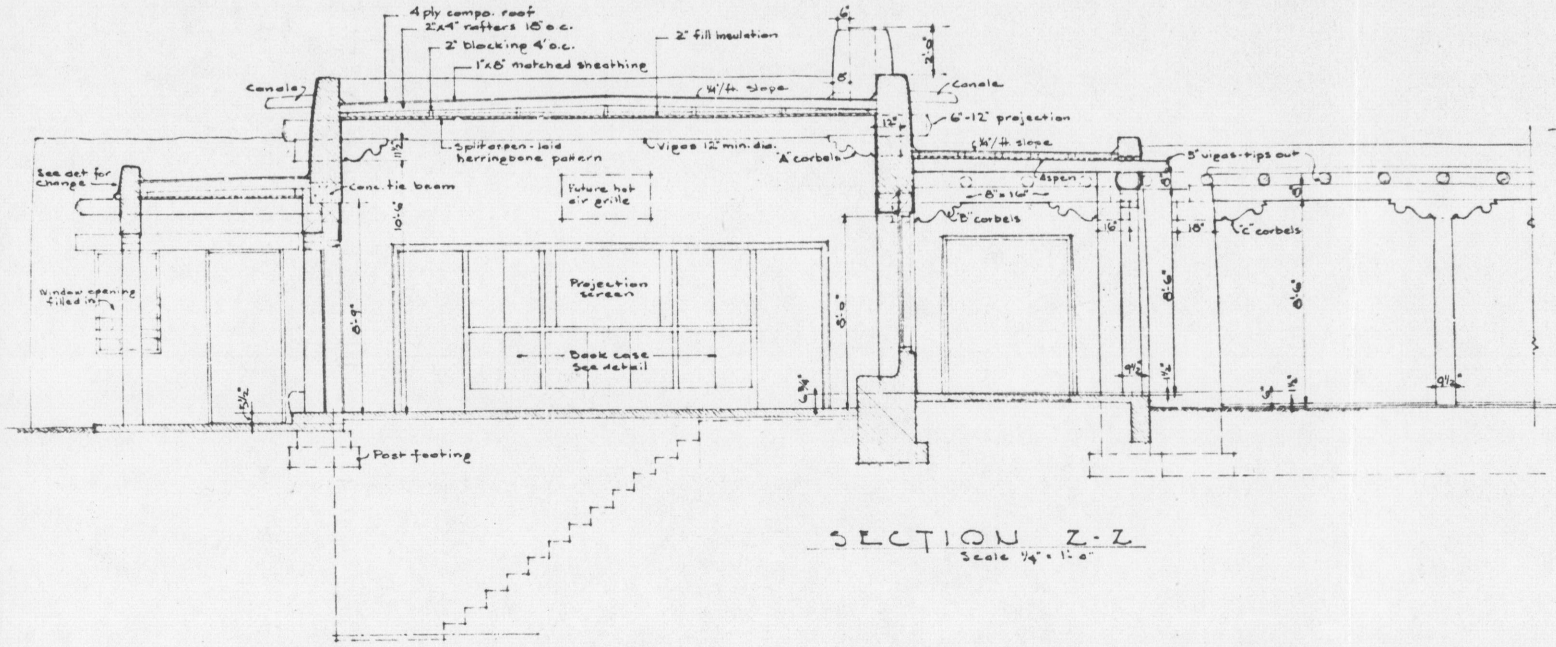
Recommended W. G. Carnes Deputy Chief Architect Date 11-8-35
Cleared for Eng. W. H. Hummell Actg Chief Engineer Date 11-8-35
Cleared for E.C.W. Frank A. Kittredge E.C.W. Officer Date 11-26-35
Concurred Chief Engineer Date 11-26-35
Concurred Frank Pinkley Supt. Date 11-11-35
Approved Arno B. Cammerer Director Date 12-6-35
C. F. Kroll

U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BANDELIER NATIONAL MONUMENT
MUSEUM
HEAD QUARTERS AREA
DRAWN BY BRANCH OF PLANS & DESIGN.

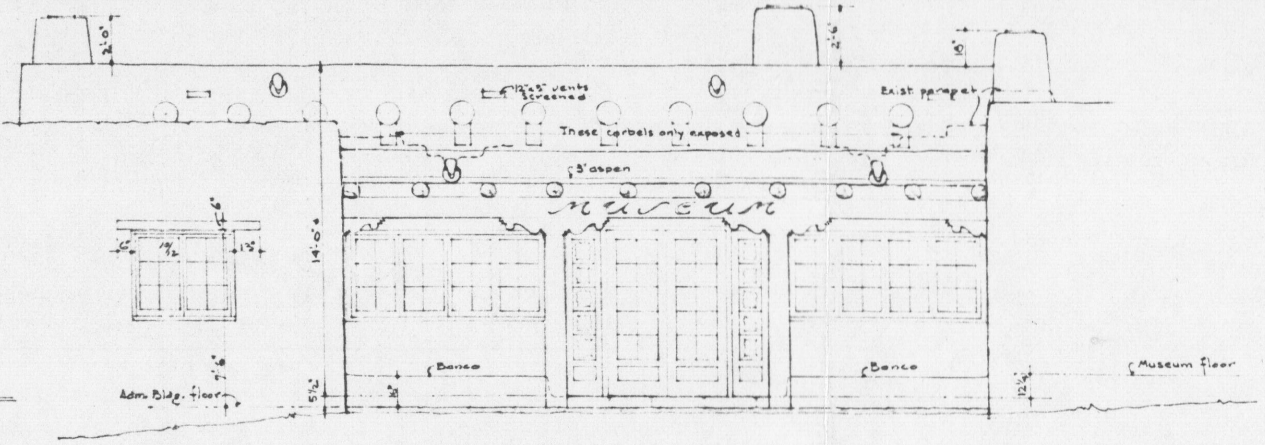
Dates 11-4-35
Sheet No. 2 of 3 Sheets
Drawing No. NM Ban. 3021

#2

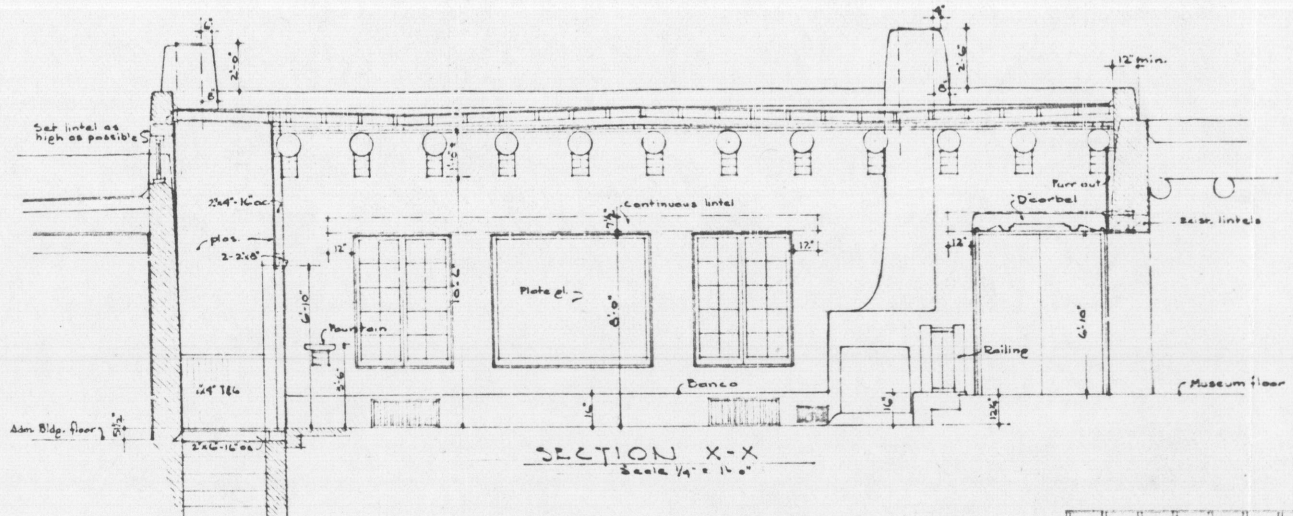
TRIM LINE



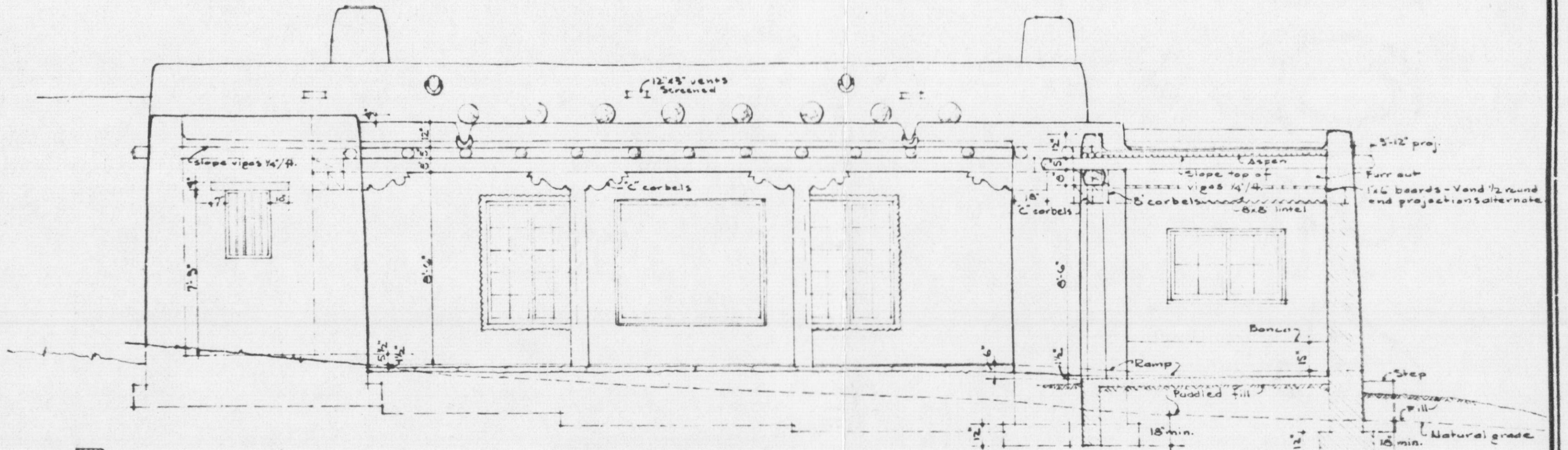
SECTION Z-Z
Scale 1/4" = 1'-0"



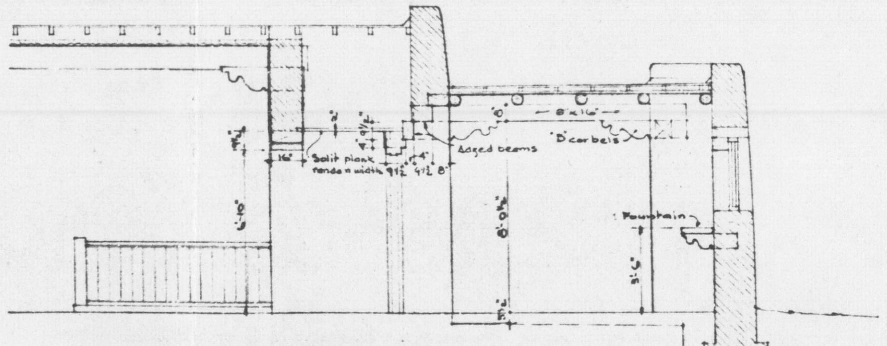
FRONT ELEVATION
Scale 1/4" = 1'-0"



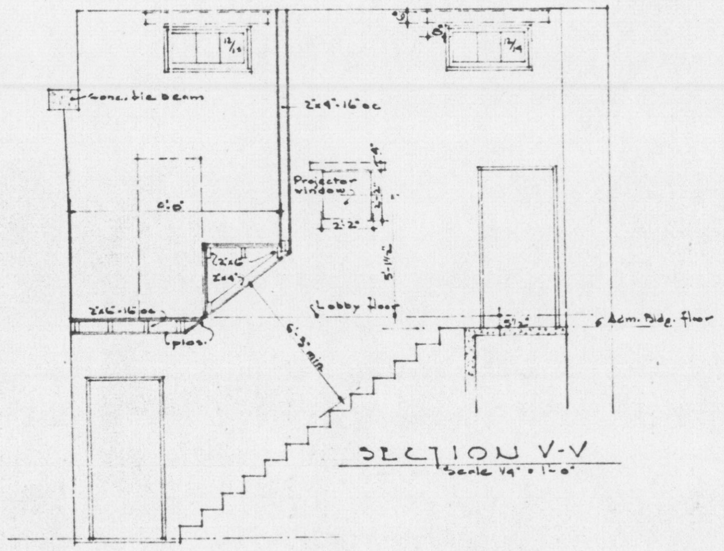
SECTION X-X
Scale 1/4" = 1'-0"



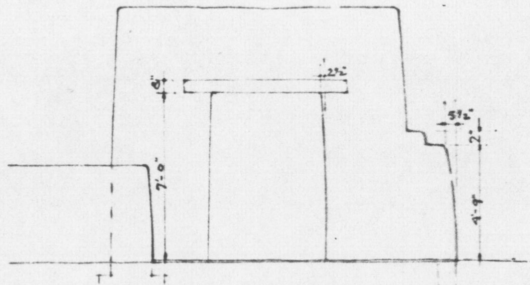
PATIO ELEVATION
Scale 1/4" = 1'-0"



SECTION T-T
Scale 1/4" = 1'-0"



SECTION V-V
Scale 1/4" = 1'-0"



ELEV. END of PORTAL
SCALE 1/4" = 1'-0

~~RECOMMENDED ____ CHIEF OF ____ DATE ____~~	UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE BRANCH OF PLANS & DESIGN PREPARED BY REGIONAL OFFICE OFFICE	REGION III
~~CONCURRED Frank Pinkley DATE 9-19-39~~		SHEET 3 OF 7
~~APPROVED ____ DIRECTOR DATE ____~~	ADM. BLDG. - MUSEUM LOBBY NAME OF JOB HD. QUARTERS AREA LOCATION BANDELIER NATIONAL MONUMENT NAME OF PARK OR MONUMENT	DRAWING NO. N.M. BAN-2134

CLEARED
Hugh A. Miller 9/25/39
REGIONAL DIRECTOR

REVIEWED
RECREATIONAL PLANNING AND STATE COOPERATION
RESEARCH AND EDUCATION
SANITATION
FORESTRY
HISTORY
PLANS AND DESIGN
ENGINEERING

DESIGNED BY
Prince II
DATE
9-11-39

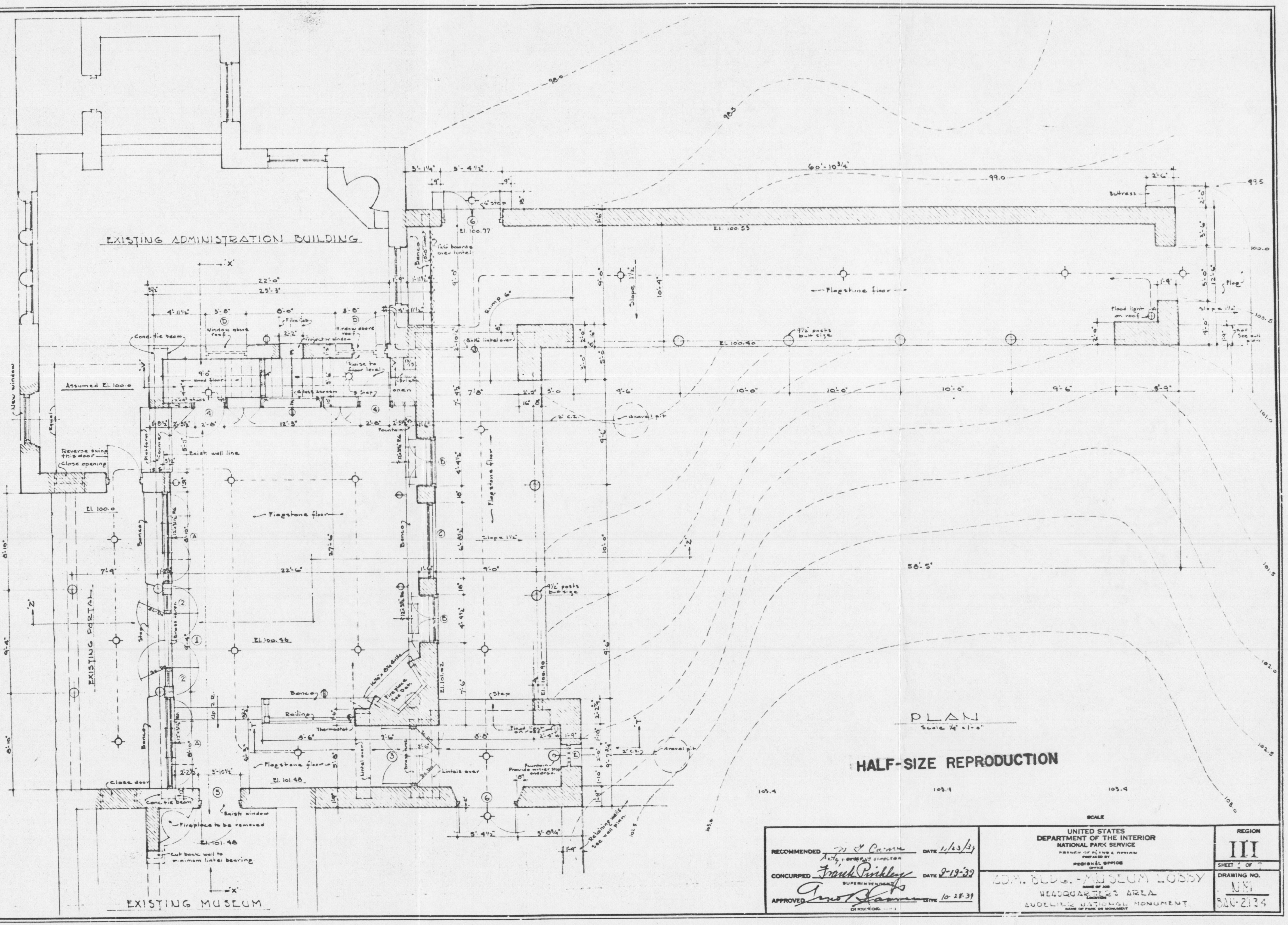
BASIC DATA

TRIM LINE

#2

TRIM LINE

9



PLAN
Scale ¼" = 1'-0"

HALF-SIZE REPRODUCTION

SCALE

RECOMMENDED M. F. Carmen DATE 11/23/39
Actg. Chief Arch. Director

CONCURRED Frank Pinkley DATE 9-19-39
SUPERINTENDENT

APPROVED Arno B. Cammerer DATE 10-28-39
DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS & DESIGN
PREPARED BY
REGIONAL OFFICE
OFFICE

ADM. BLDG. - MUSEUM LOBBY
NAME OF JOB
HEADQUARTERS AREA
LOCATION
BANDELIER NATIONAL MONUMENT
NAME OF PARK OR MONUMENT

REGION
III
SHEET 2 OF 7
DRAWING NO.
NM
BAN-2134

DESIGNED BY Dennie T
DATE 9-11-39

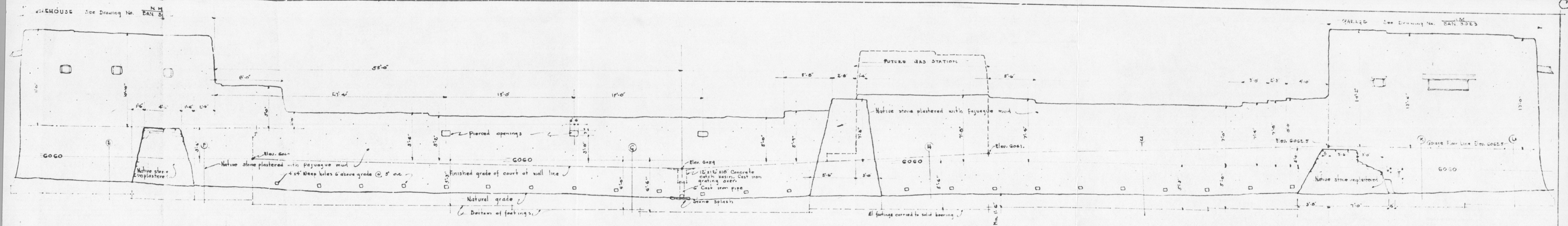
REVIEWED
PLANS AND DESIGN
J.B.H.
ENGINEERING John S. Case 10/30/39
FORESTRY
HISTORY
RESEARCH AND EDUCATION
SANITATION
PLANNING AND STATE COOPERATION
RECREATIONAL
W. Hagey 10/27/39

CLEARED
Hillory A. Tolson
REGIONAL DIRECTOR

BASIC DATA

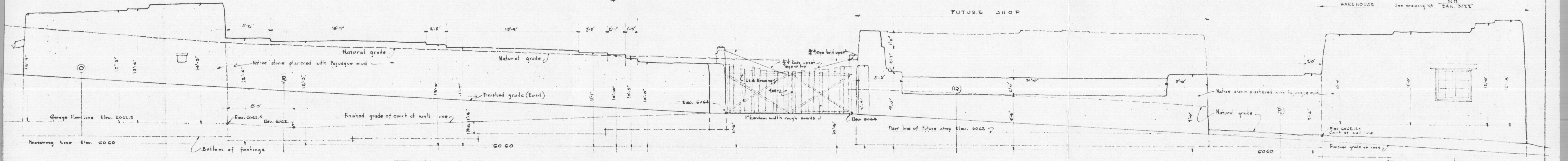
TRIM LINE

#2


WAREHOUSE See Drawing No. NM/BAN 3022
GARAGE See Drawing No. NM/BAN 3023
FUTURE GAS STATION
Pierced openings
Native stone plastered with Pajuague mud
Native stone unplastered
4"x4" Weep holes 6" above grade @ 5' o.c.
Finished grade of court at wall line
12"x12"x10" Concrete catch basin. Cast iron grating over
6" Cast iron pipe
Stone splash
Natural grade
Bottom of footings
All footings carried to solid bearing
Native stone unplastered
Garage Floor Line Elev. 6062.5
6060

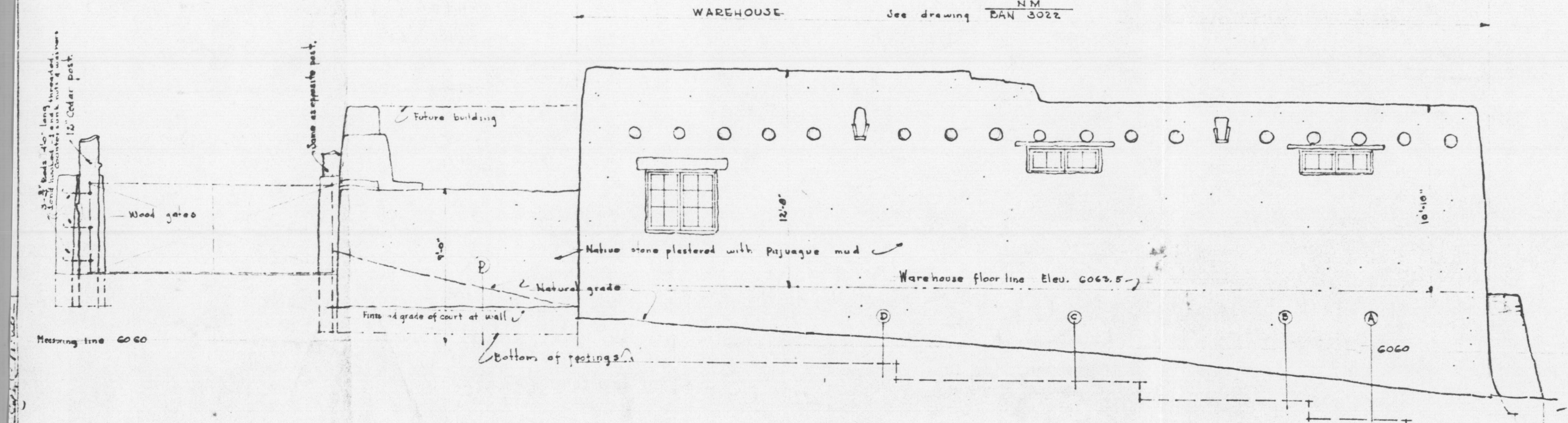
SOUTH ELEVATION

Scale 1/4" = 1'-0"


GARAGE See Drawing No NM/BAN 3023
FUTURE SHOP
WAREHOUSE See drawing No NM/BAN 3022
Natural grade
Native stone plastered with Pajuague mud
Finished grade (Road)
Garage Floor line Elev. 6062.5
Finished grade of court at wall line
Measuring Line Elev. 6060
Bottom of footings
1" Random width rough boards
Floor line of Future shop Elev. 6062
Finished grade at road
6060

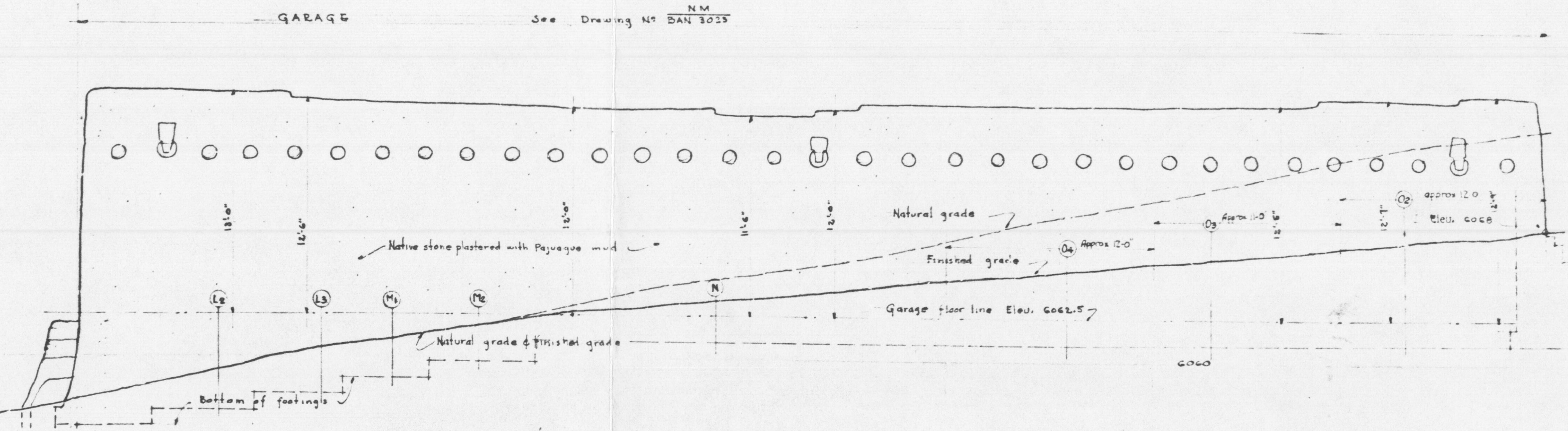
NORTH ELEVATION

Scale 1/4" = 1'-0"


WAREHOUSE See drawing NM/BAN 3022
Future building
Wood gates
Native stone plastered with Pajuague mud
Natural grade
Warehouse floor line Elev. 6063.5
Finished grade of court at wall
Measuring line 6060
Bottom of footings
6060

WEST ELEVATION

Scale 1/4" = 1'-0"


GARAGE See Drawing No NM/BAN 3023
Natural grade
Native stone plastered with Pajuague mud
Finished grade
Garage floor line Elev. 6062.5
Natural grade & Finished grade
Bottom of footings
6060

EAST ELEVATION

Scale 1/4" = 1'-0"

Note:- Building walls of Warehouse and Garage are parts of ECW Project #10 (Warehouse) and ECW Project #11 (Garage) and are shown on these drawings only to show how they tie in with other enclosure walls.

For footing details A-B-C-D-E-F see drawing NM/BAN 3022

For footing details K-L1-L2-L3-M1-M2-N-O1-O2-O3-O4, see drwg. NM/BAN 3023

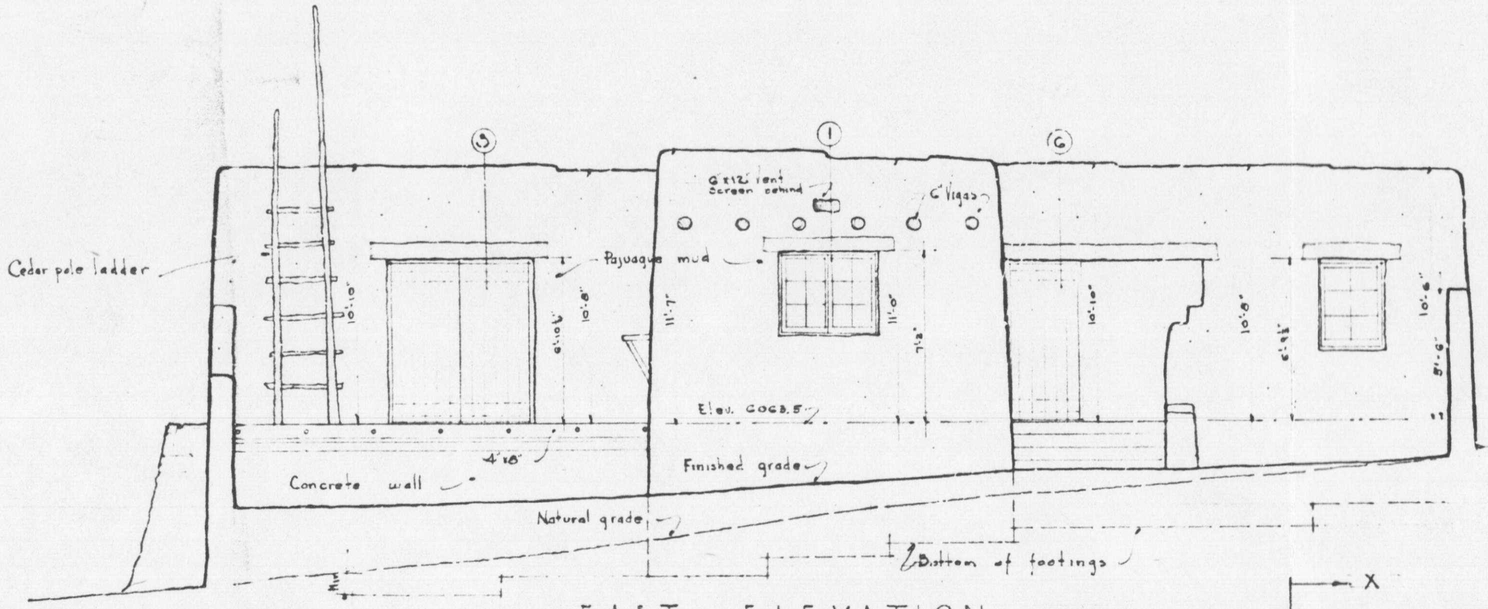
EXCAVATION PRIORITY Nº 33 ECW PROJECT Nº 7 CLASSIFICATION Nº 702 CAMP NM-1N
WALLS PRIORITY Nº 34 ECW PROJECT Nº 7 CLASSIFICATION Nº 154 CAMP NM-1N

Recommended W. G. Carnes Deputy Chief Architect	Date 5-21-35	U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE BANDELIER NATIONAL MONUMENT UTILITY AREA EXCAVATION AND WALLS DRAWN BY BRANCH OF PLANS AND DESIGN
Cleared for Eng: Chief Engineer	Date 5-29-35	Date May 23, 1935
Concurred: J. D. Coffman by F.L.A. Chief Forester	Date 6-26-35.	Sheet No. 2 of 2 Sheets
Concurred: Frank Pinkley Supt.	Date 6-5-35	Drawing No. NM/BAN 3024
Approved: Arno B. Cammerer Director	Date 7-8-35	

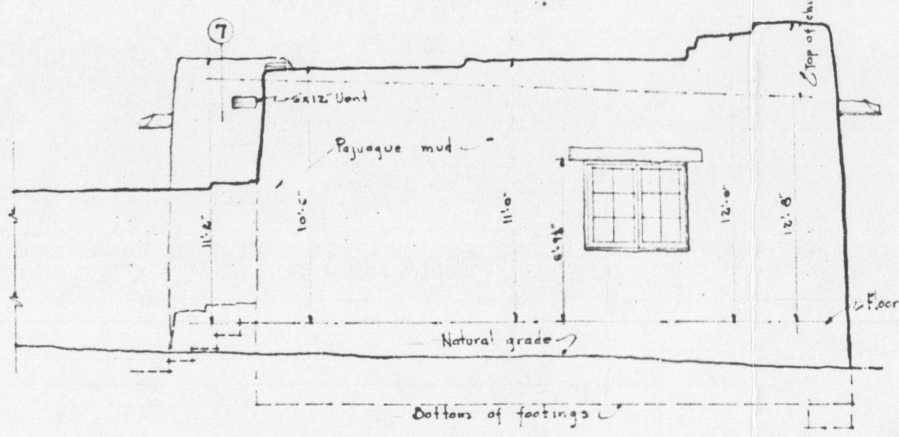
Note:- Preliminary Drawing No NM/BAN 3018

#3-6

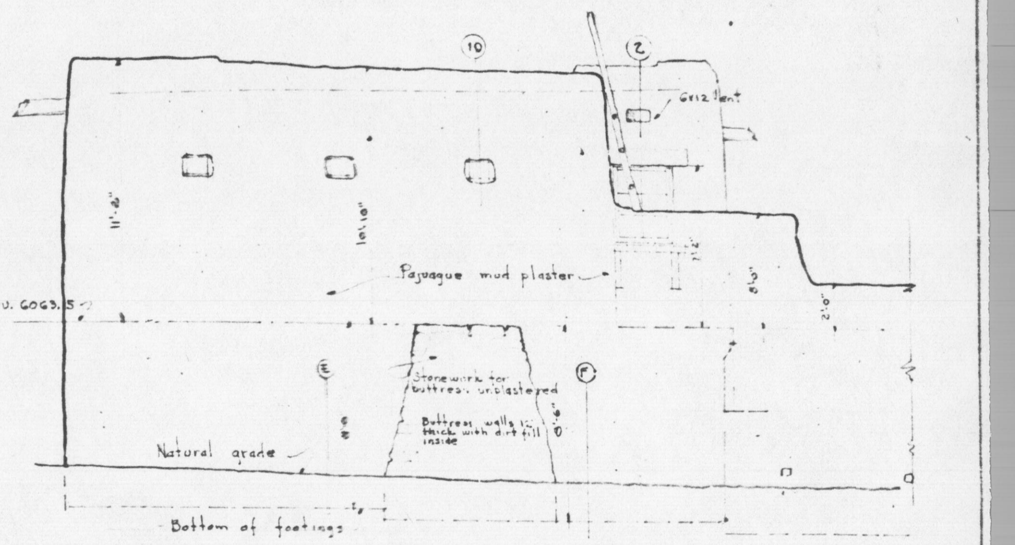
3



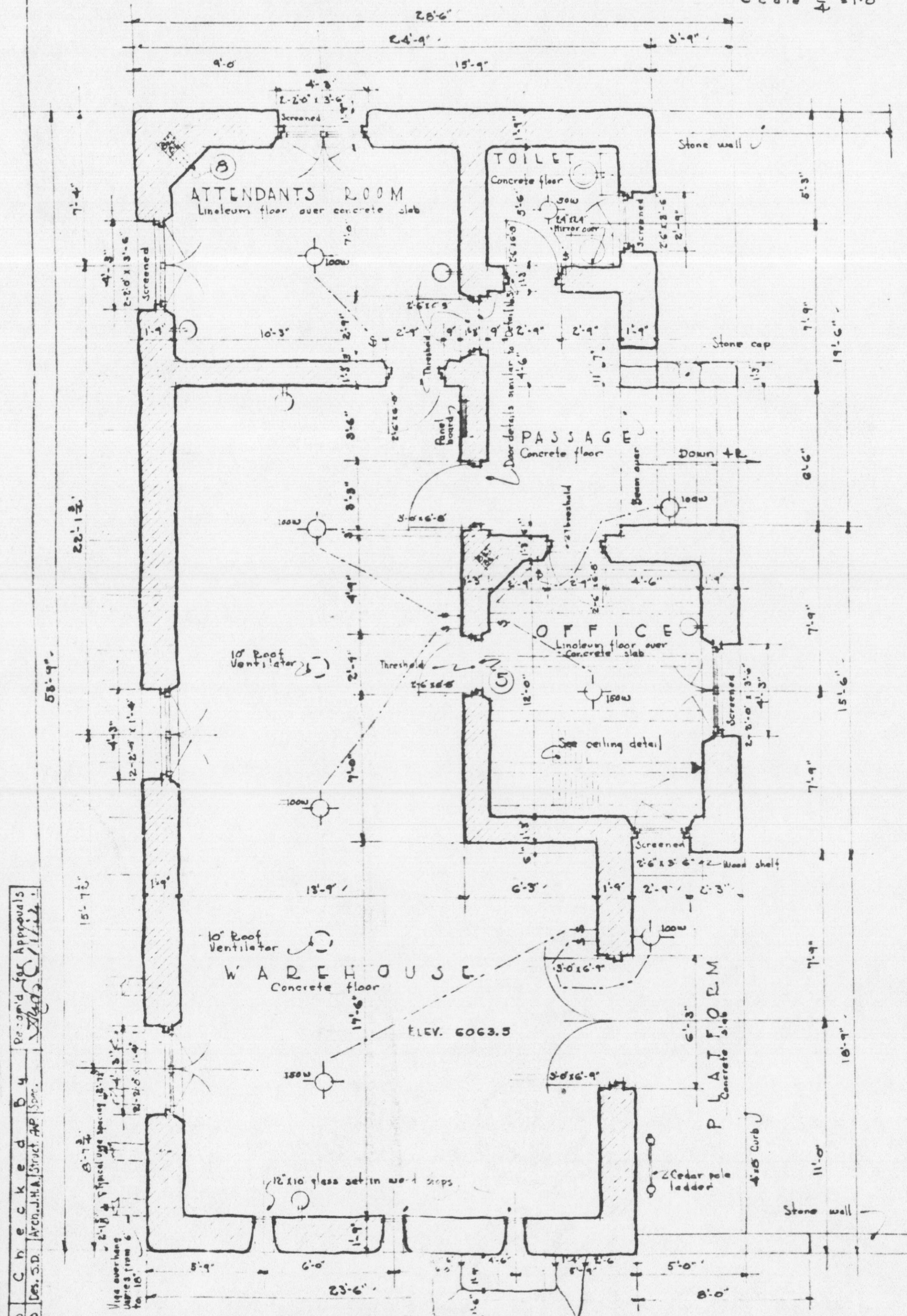
EAST ELEVATION
Scale 1/4"=1'-0"



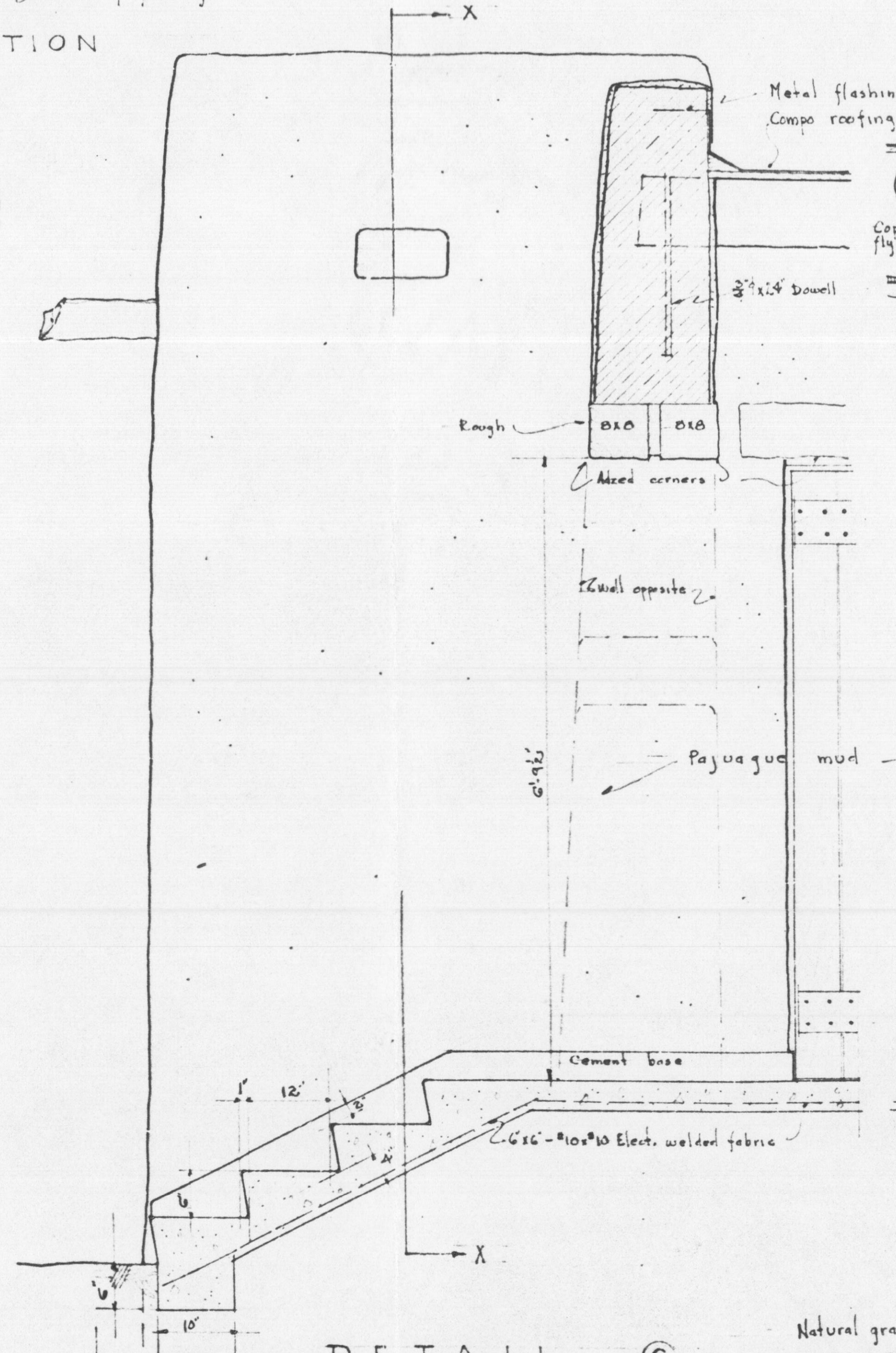
NORTH ELEVATION
Scale 1/4"=1'-0"


6x12 Vent
Pajuaque mud plaster
Stone wire for buttress unplastered
Buttress walls thick with dirt fill inside
Natural grade
Bottom of footings

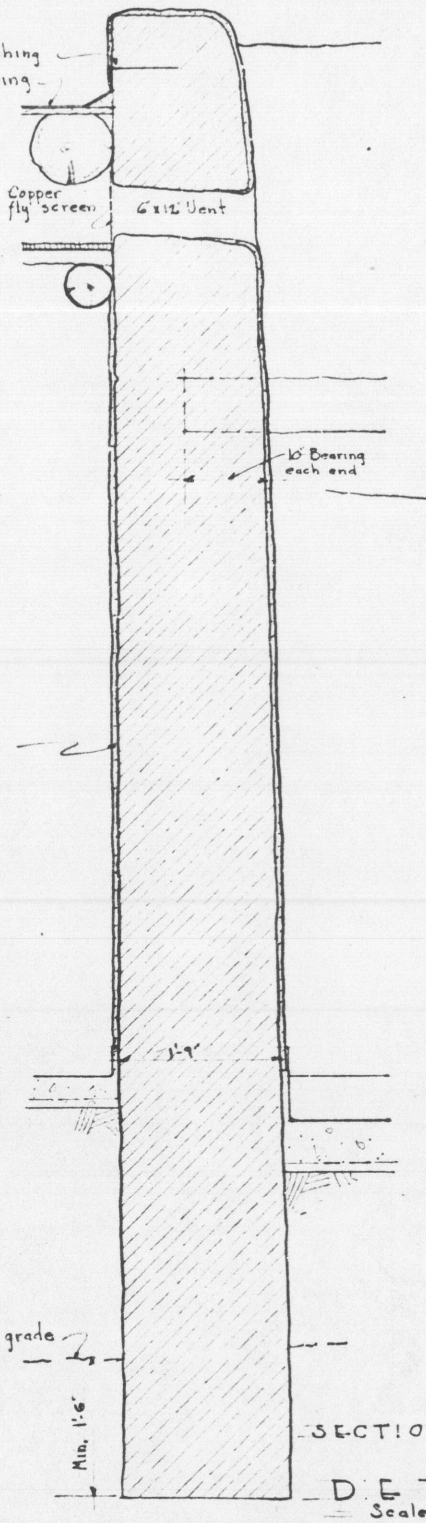
SOUTH ELEVATION
Scale 1/4"=1'-0"



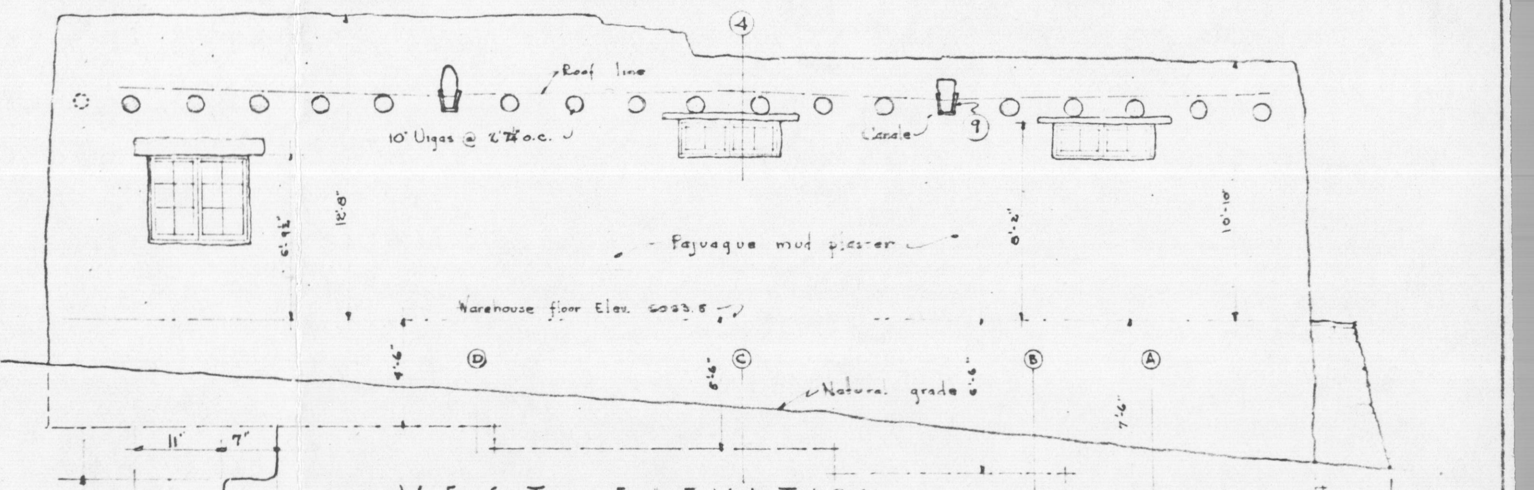
FLOOR PLAN
Scale 1/4"=1'-0"



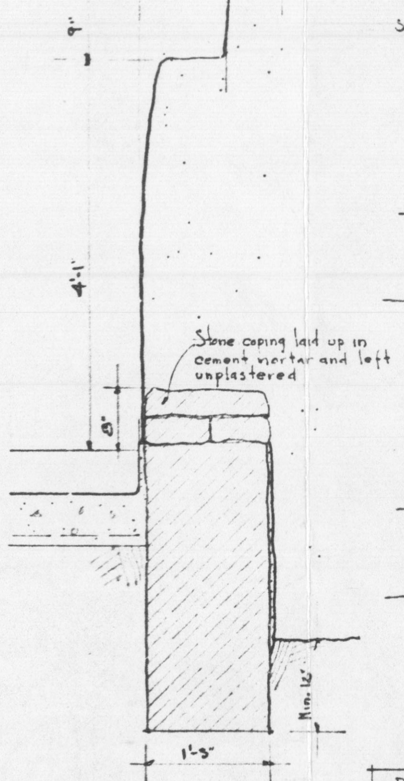
DETAIL ⑥
Scale 1"=1'-0"



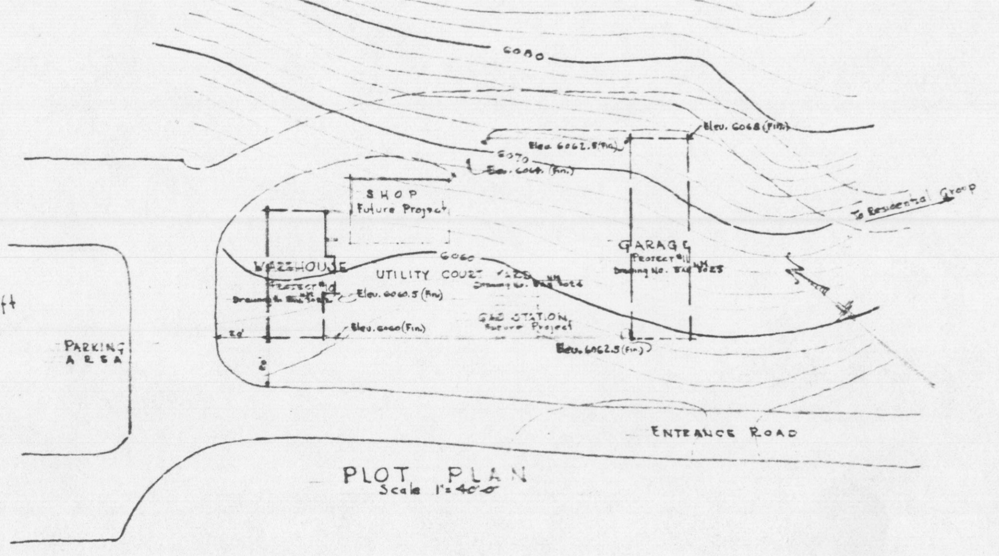
SECTION X-X



WEST ELEVATION
Scale 1/4"=1'-0"



DETAIL ⑦
Scale 1"=1'-0"



PLOT PLAN
Scale 1"=40'-0"

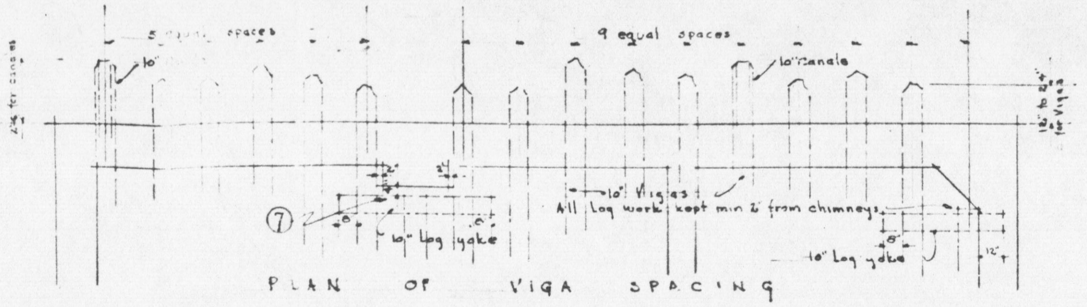
HALF-SIZE REPRODUCTION

ECW PROJECT Nº 10 CLASSIFICATION Nº 111 CAMP Nº NM-1N

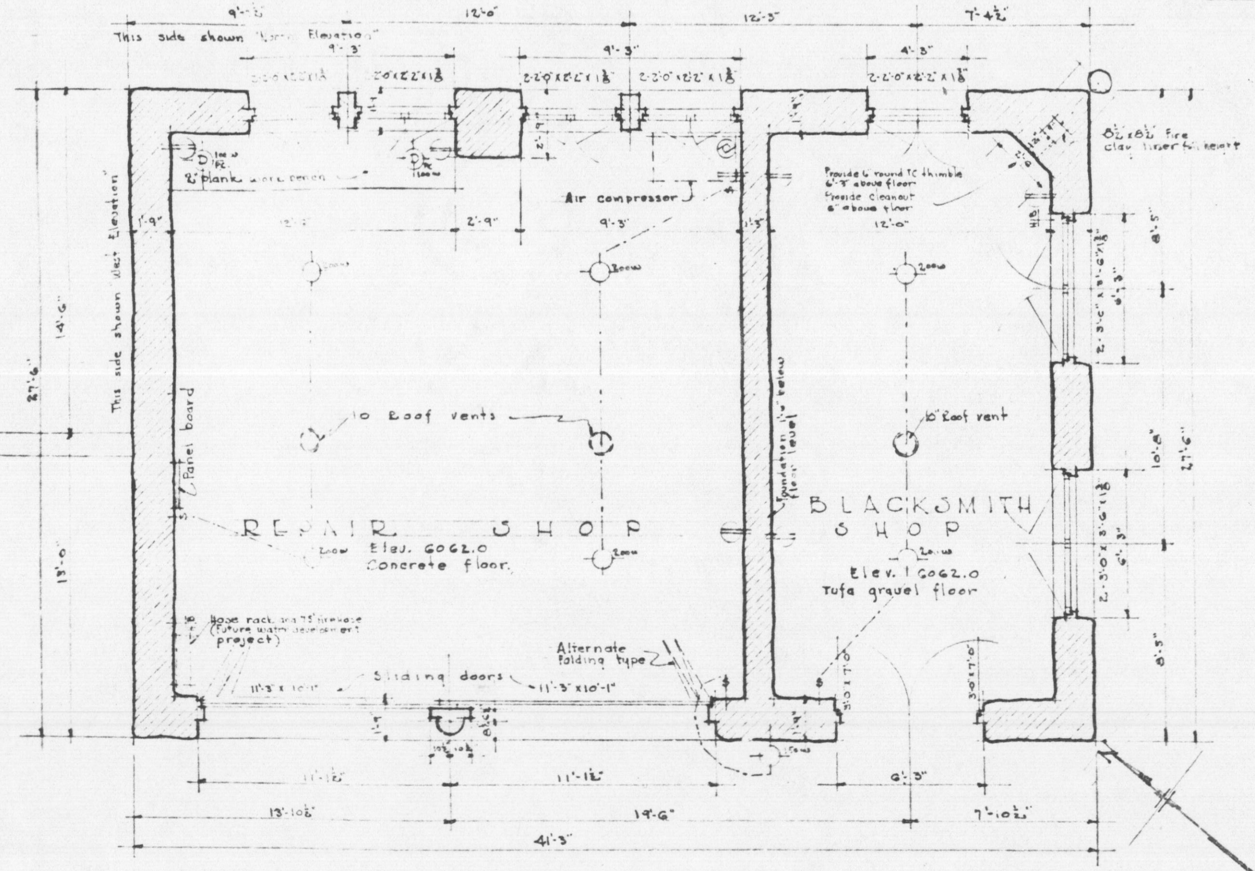
Recommended: W. G. Carnes Deputy Chief Architect	Date 5-20-35	U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE	Date MAY 11, 1935
Cleared for Eng: A. E. Demaray Chief Engineer	Date 5-22-35	BANDELIER NATIONAL MONUMENT	Sheet No 1 of 2 Sheets
Concurred: J. D. Coffman by F.L.A. Chief Forester	Date 6-26-35	WAREHOUSE UTILITY AREA	Drawing No. NM BAN. 3022
Concurred: Frank Pinkley	Date 6-6-35	DRAWN BY BRANCH OF PLANS AND DESIGN	
Approved: Arno B. Cammerer Director	Date 7-8-35		

Note:- Preliminary Drawing No. NM/BAN 3018

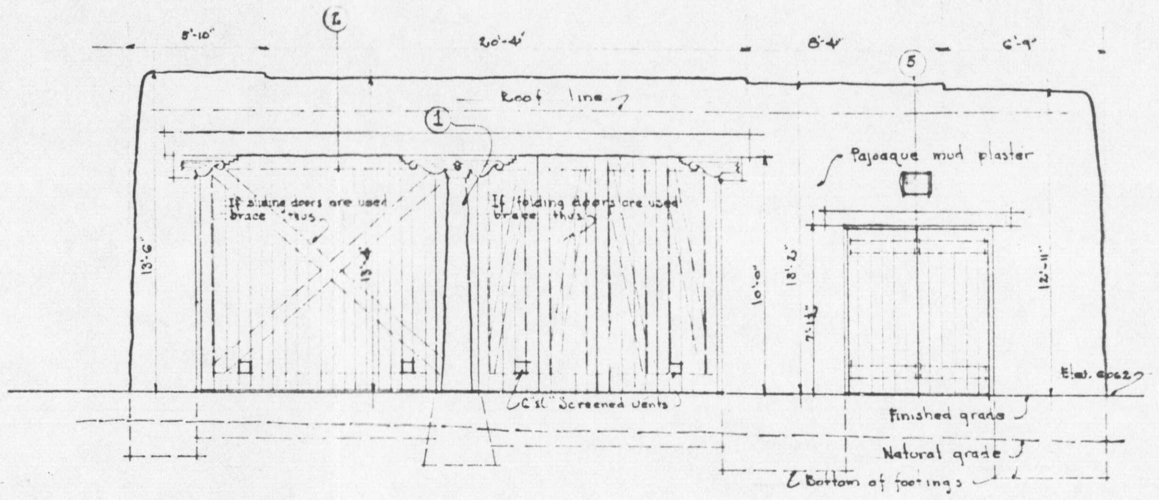
#3



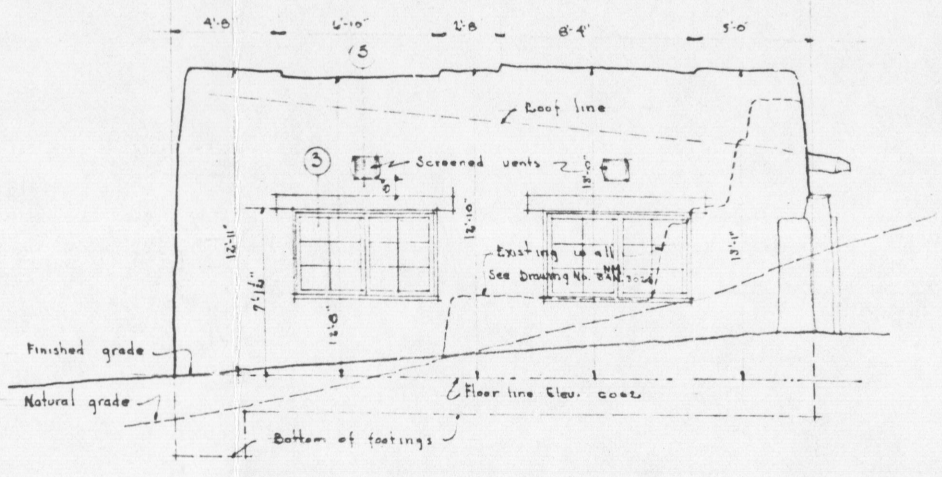
PLAN OF VIGA SPACING



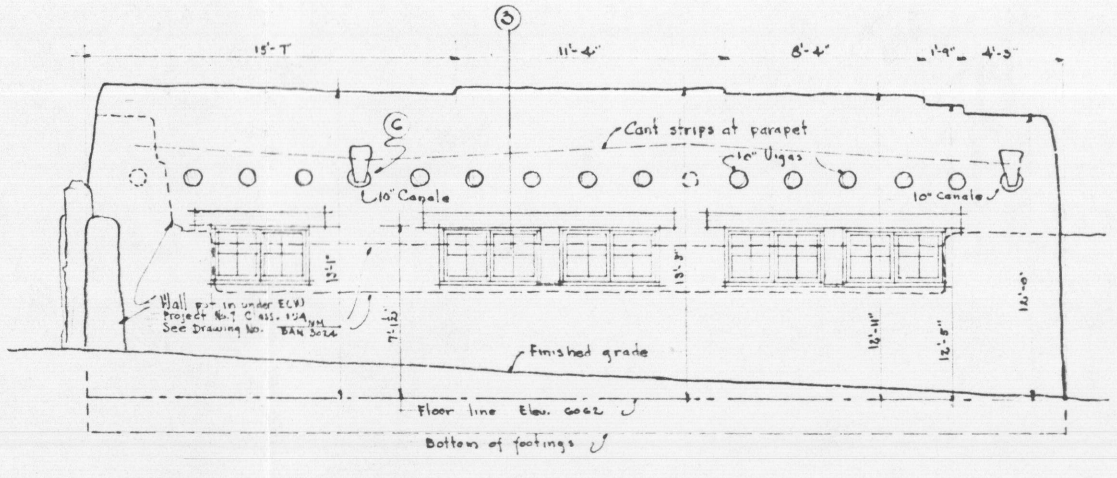
FLOOR PLAN
Scale $\frac{1}{4}$" = 1'-0"



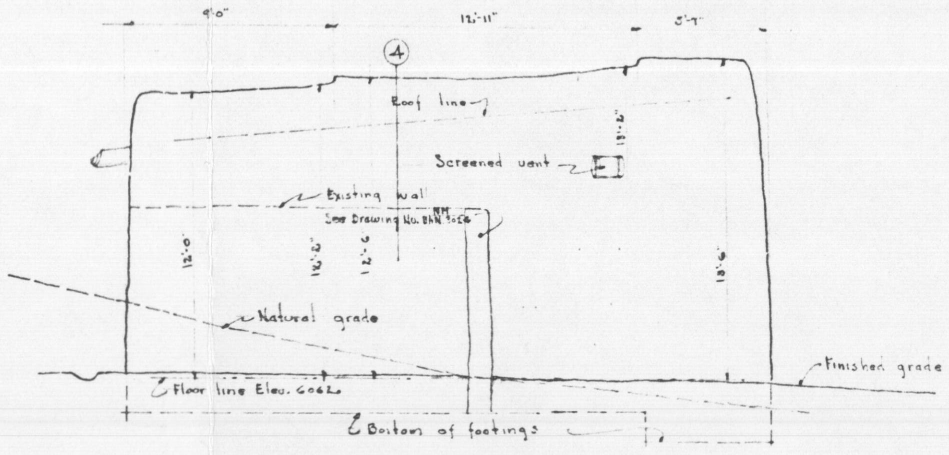
SOUTH ELEVATION
Scale $\frac{1}{4}$" = 1'-0"



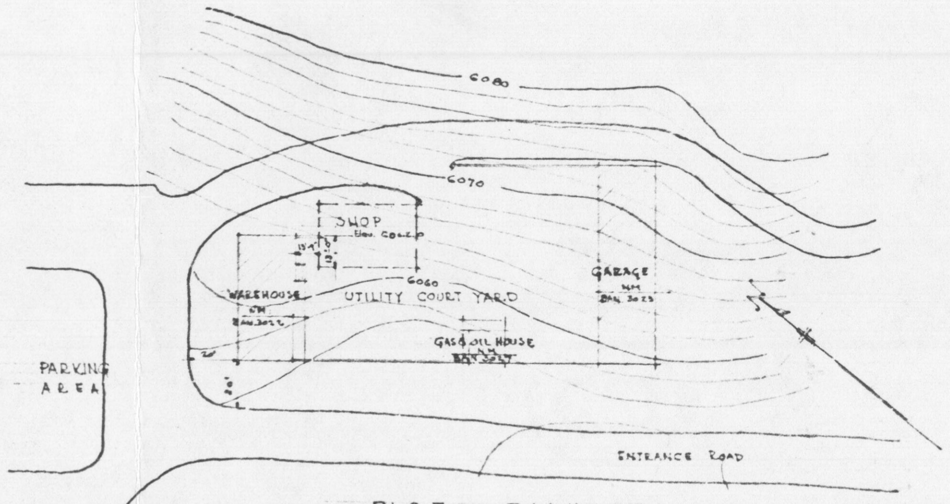
EAST ELEVATION
Scale $\frac{1}{4}$" = 1'-0"



NORTH ELEVATION
Scale $\frac{1}{4}$" = 1'-0"



WEST ELEVATION
Scale $\frac{1}{4}$" = 1'-0"



PLOT PLAN
Scale 1" = 40'-0"

HALF-SIZE REPRODUCTION

Revised July 31, 1935

ECW PROJECT NO. 31 CLASSIFICATION NO. 120 CAMP NM-1

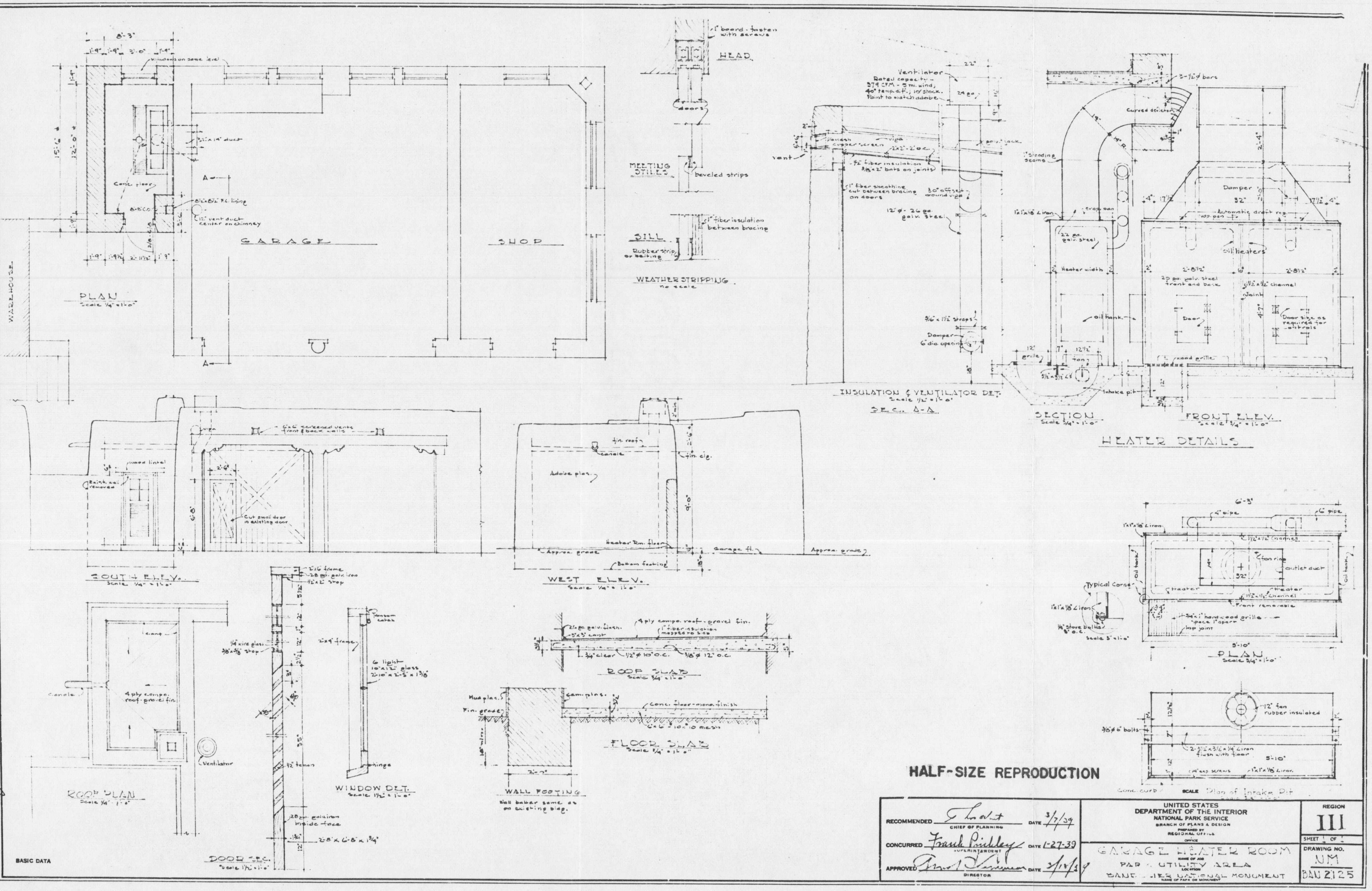
Recommended: W. G. Carnes Deputy Chief Architect	Date 6-28-35	U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE
Cleared for Eng: A. W. Burney Act Chief Engineer	Date 6-28-35	BANDELIER NATIONAL MONUMENT
Concurred: J. D. Coffman by F.L.K. Chief Forester	Date 8-9-35	S H O P
Concurred: Frank Pinkley Superintendent	Date 7-8-35	
Approved: A. E. Demaray Acting Director	Date 8-29-35	DRAWN BY BRANCH OF PLANS AND DESIGN

Date JUNE 25, 1935
Sheet No. 1 of 1 Sheets
Drawing No. NM BAN 3028

CFW

#4

TRIM LINE



HALF-SIZE REPRODUCTION

SCALE

RECOMMENDED F. Ludwt CHIEF OF PLANNING	DATE 3/7/39	
CONCURRED Frank Pinkley SUPERINTENDENT	DATE 1-27-39	
APPROVED [illegible] DIRECTOR	DATE 3/18/39	

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS & DESIGN
PREPARED BY
REGIONAL OFFICE
OFFICE

GARAGE HEATER ROOM
NAME OF JOB
PARK UTILITY AREA
LOCATION
BANDELIER NATIONAL MONUMENT
NAME OF PARK OR MONUMENT

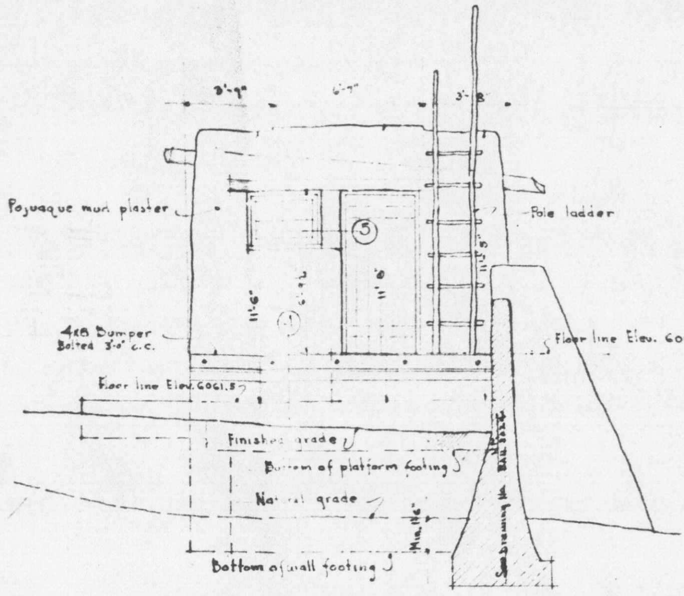
REGION
III
SHEET 1 OF 1
DRAWING NO.
NM
BAN 2125

DESIGNED BY Bennett
DATE 1/17/39
PLANS AND DESIGN D. Sutton 1/17/39
ENGINEERING John S. Cross 1/6/39
FORESTRY
HISTORY
REVIEWED
RESEARCH AND EDUCATION
SANITATION
PLANNING AND STATE COOPERATION
RECREATIONAL
W. Sage 3/10/39
CLEARED
Hillory A. Tolson 3/24/39
ACT. REGIONAL DIRECTOR

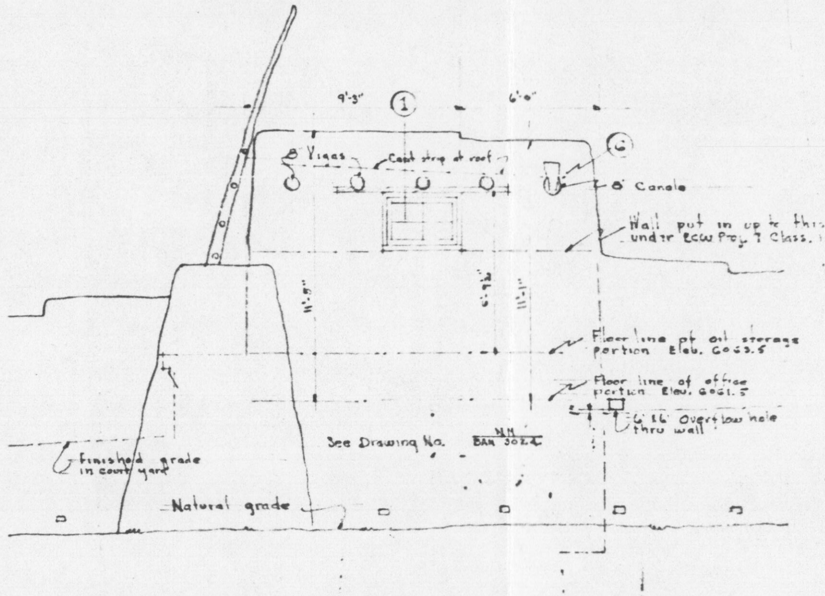
BASIC DATA

TRIM LINE

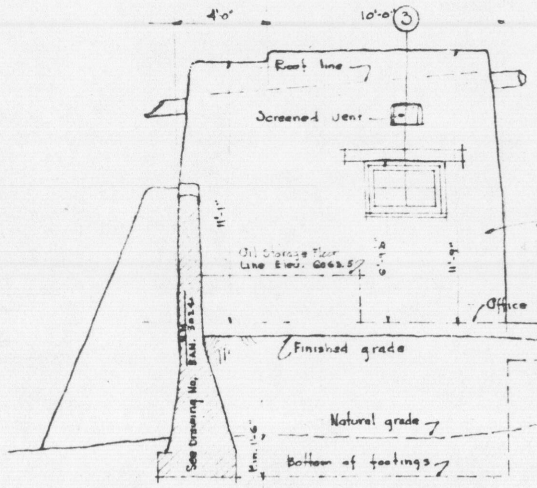
#4



WEST ELEVATION
Scale 1/4"=1'-0"

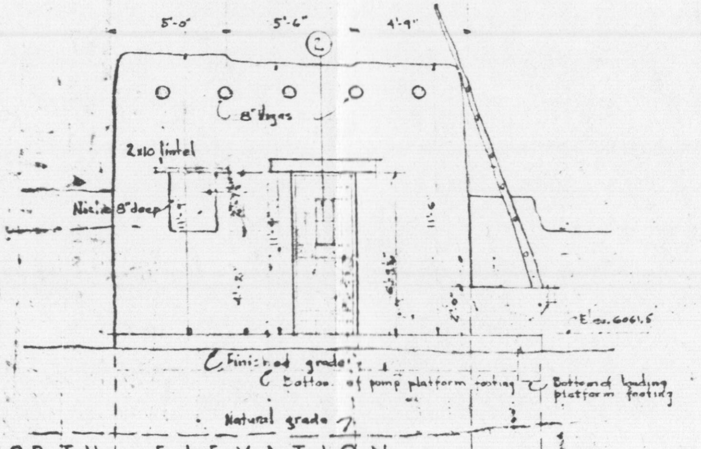

8" Vigas
Cant strip at roof
8" Canale
Wall put on up to this elevation under ECW Proj. 7 Class. 154.
Floor line at oil storage portion Elev. 6063.5
Floor line of office portion Elev. 6061.5
6x16 Overflow hole thru wall
See Drawing No. NM BAN 3026
Finished grade in court yard
Natural grade

SOUTH ELEVATION
Scale 1/4"=1'-0"

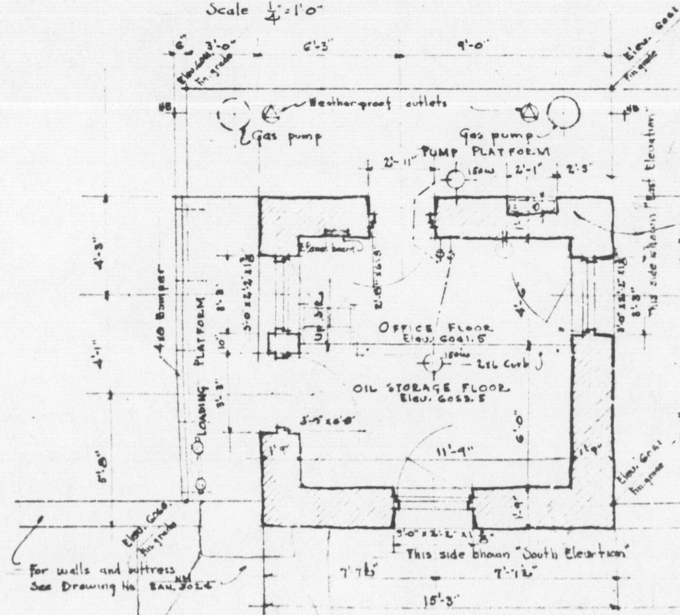

Roof line
Screened vent
Oil storage floor line Elev. 6063.5
Office floor line Elev. 6061.5
Finished grade
Natural grade
Bottom of footings
See Drawing No. NM BAN 3026

EAST ELEVATION
Scale 1/4"=1'-0"

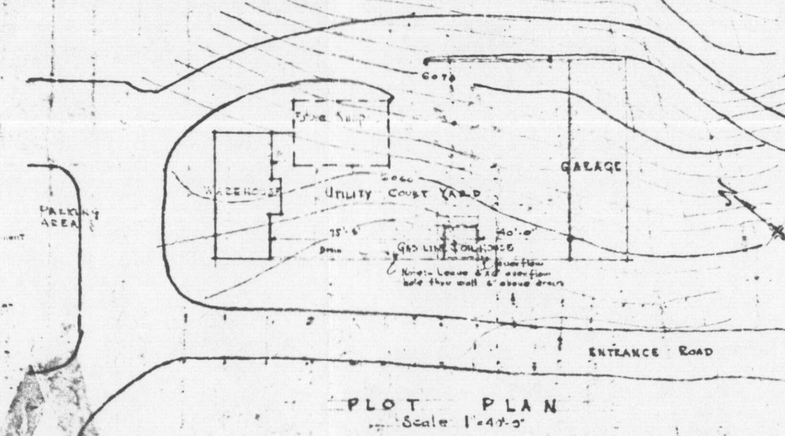
Pojuaque mud plaster


8" Vigas
2x10 lintel
Niche 8" deep
Elev. 6061.5
Finished grade
Bottom of pump platform footing
Bottom of loading platform footing
Natural grade
Bottom of building footing
Edge

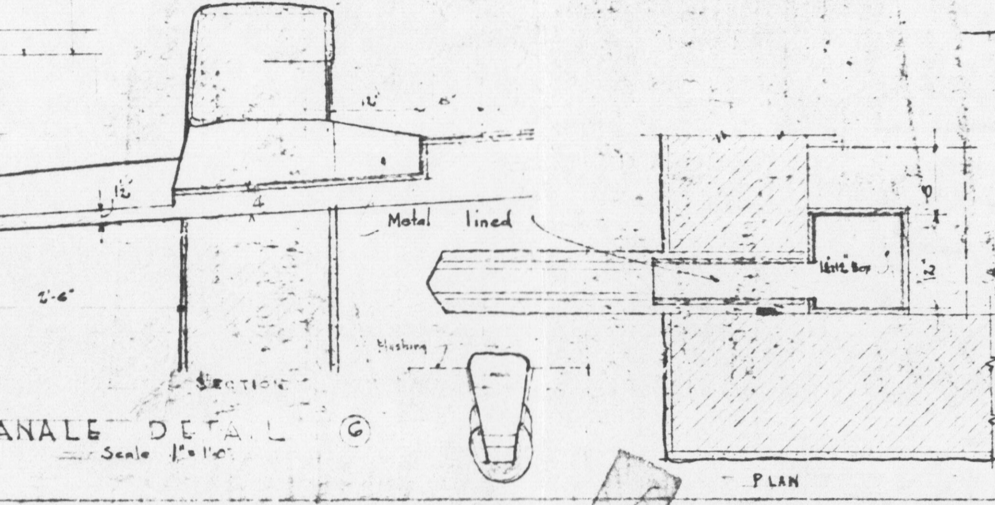
NORTH ELEVATION
Scale 1/4"=1'-0"


Weatherproof outlets
Gas pump
Gas pump
PUMP PLATFORM
4x8 Bumper
LOADING PLATFORM
OFFICE FLOOR Elev. 6061.5
OIL STORAGE FLOOR Elev. 6063.5
2x6 Curb
This side shown "South Elevation"
East Elevation
For walls and buttress See Drawing No. BAN 3026

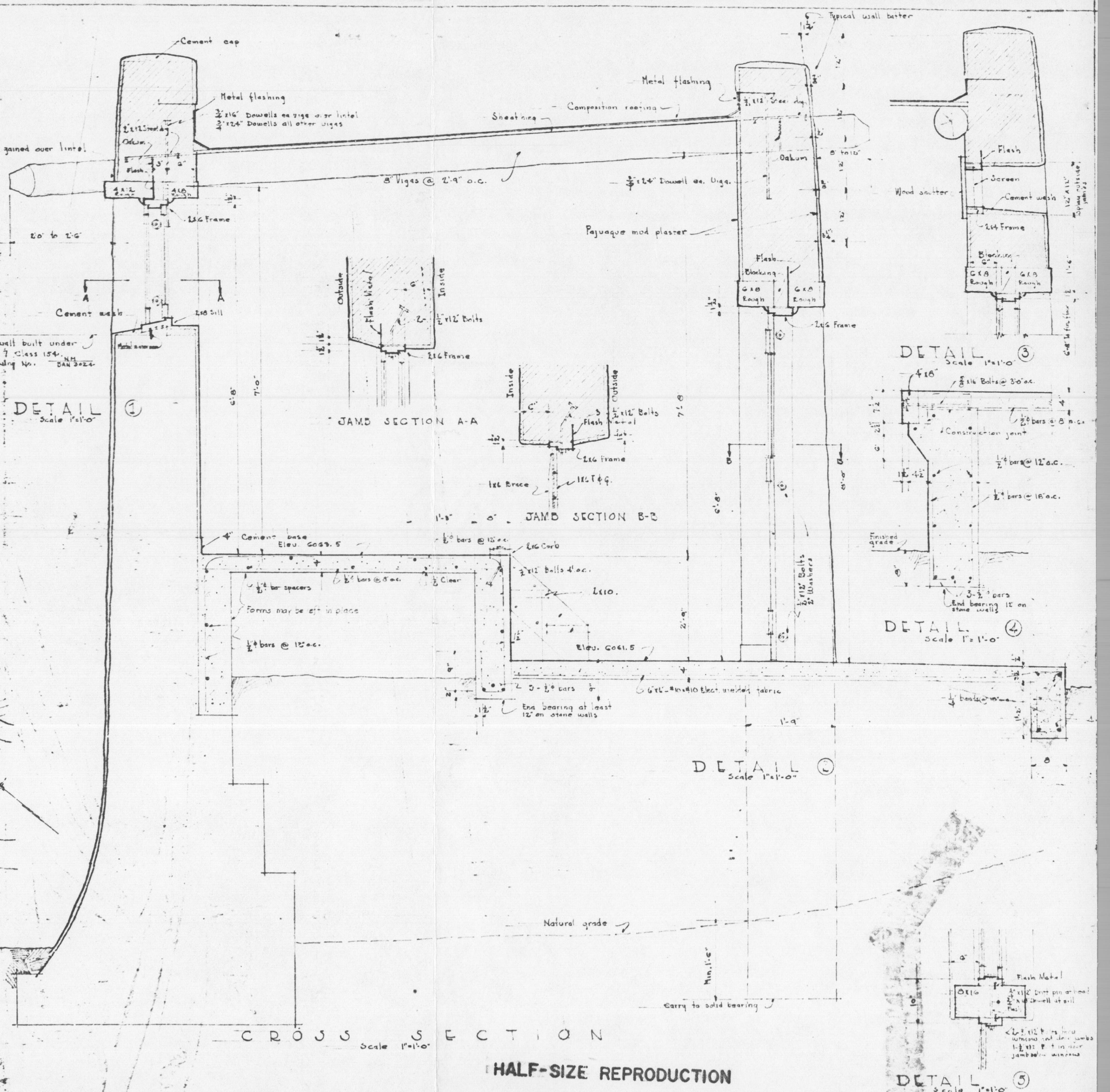
PLAN
Scale 1/4"=1'-0"



PLOT PLAN
Scale 1"=40'-0"



CANALE DETAIL ⑥
Scale 1"=1'-0"



DETAIL ①
Scale 1"=1'-0"

DETAIL ②
Scale 1"=1'-0"

DETAIL ③
Scale 1"=1'-0"

DETAIL ④
Scale 1"=1'-0"

DETAIL ⑤
Scale 1"=1'-0"

CROSS SECTION
Scale 1"=1'-0"

HALF-SIZE REPRODUCTION

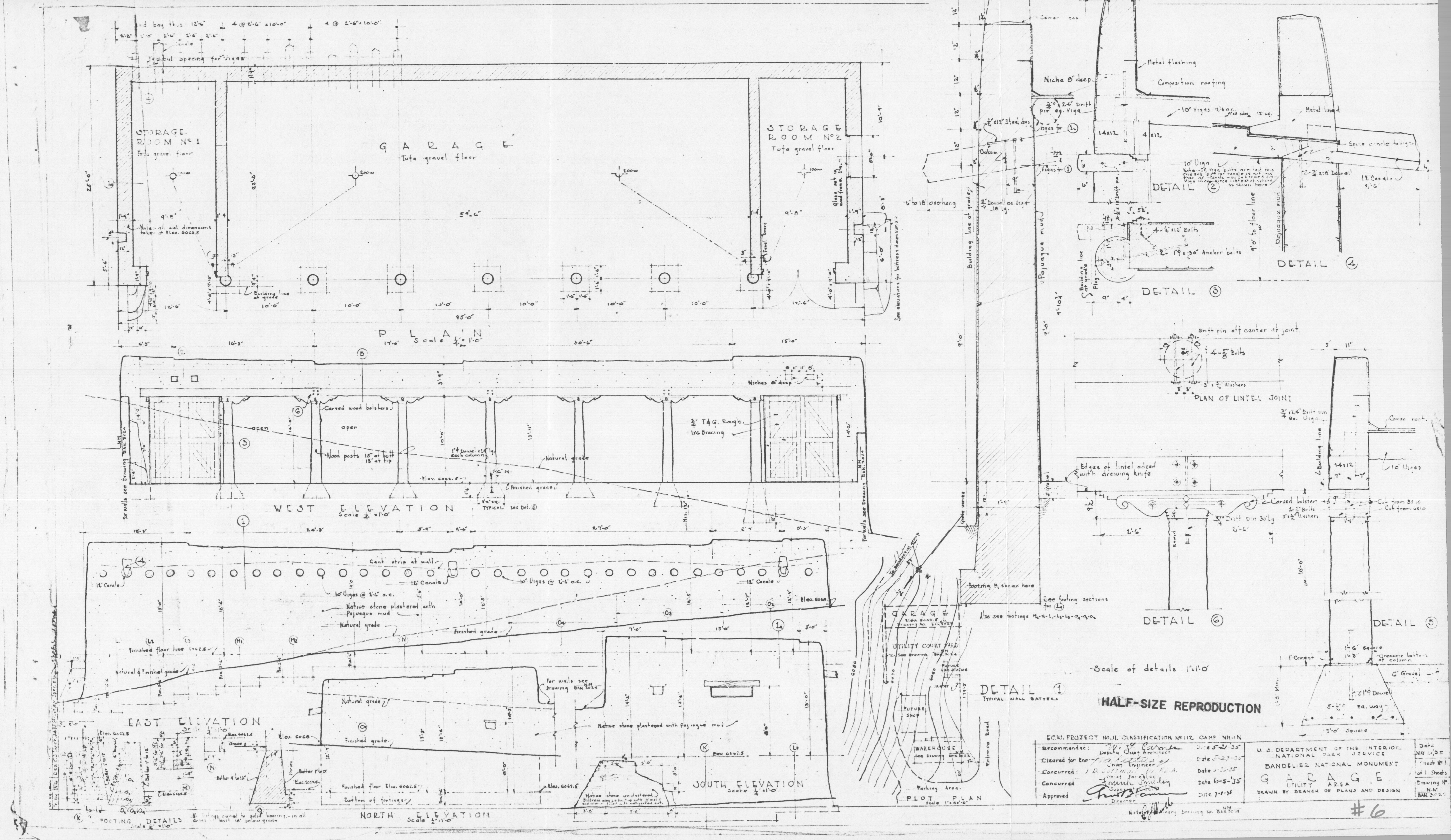
ECW PROJECT NO. 32 CLASSIFICATION NO. 111 CAMP NO. NM-1

Recommended: W. G. Carnes Deputy Chief Architect	Date 6-22-35	U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE	Date JUNE 18, 1935
Cleared for Eng.: Act. Chief Engineer	Date 6-22-35	BANDELIER NATIONAL MONUMENT	Sheet No. 1 of 1 Sheets
Concurred: J. D. Coffman by FLA Chief Forester	Date 8-14-35	GASOLINE & OIL HOUSE	Drawing No. NM BAN. 3027
Concurred: Frank Pinkley Superintendent	Date 6-28-35	DRAWN BY BRANCH OF PLANS AND DESIGN	
Approved: A. E. Demaray Acting Director	Date 8-29-35		

C. F. Wirth

#5

Checked
Dr. by NB
Tr. by NB
Des. S.D.
Arch. A.T.H.
Rec.
Recomd. for approval



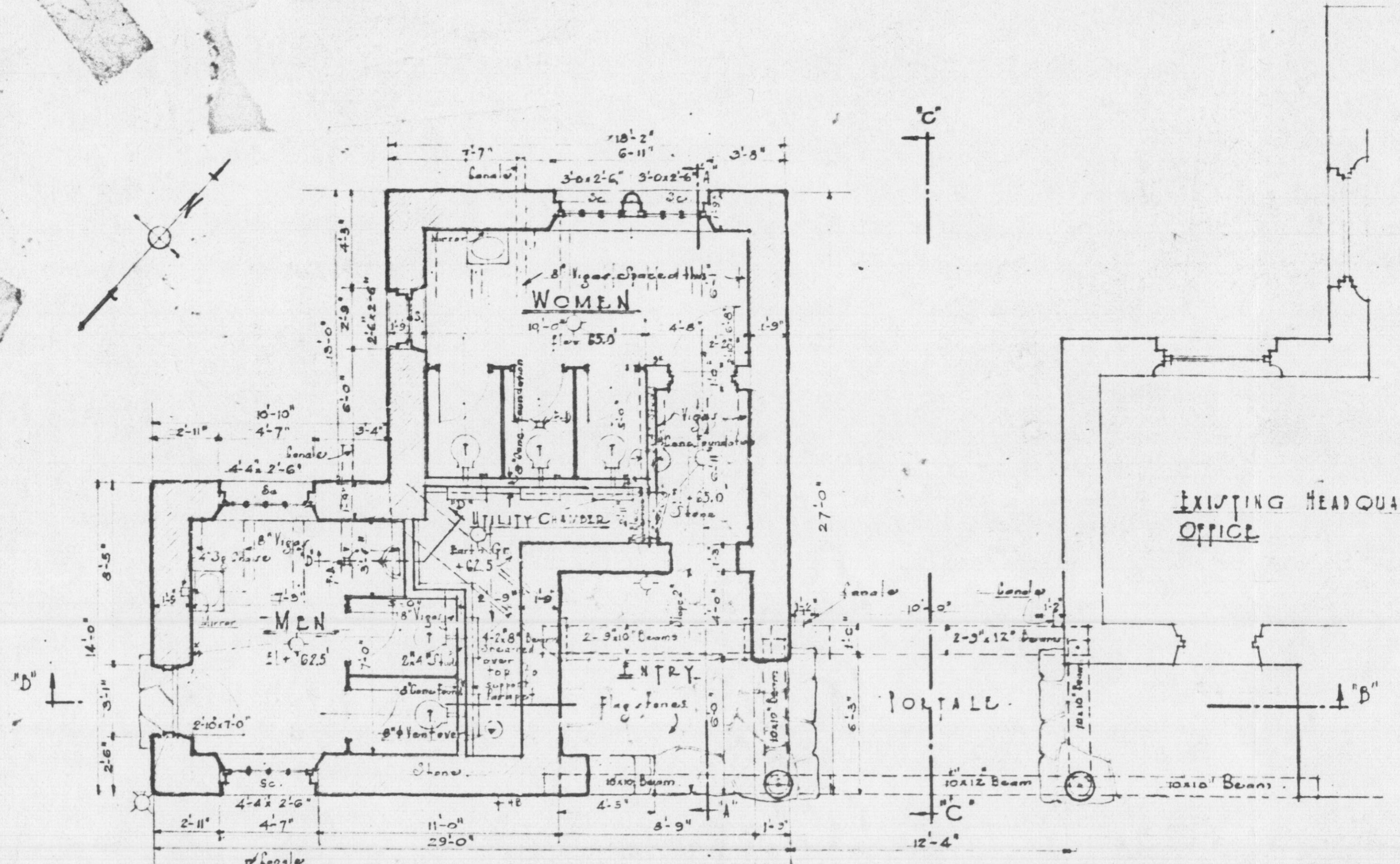
HALF-SIZE REPRODUCTION

E.C.W. PROJECT NO. 11. CLASSIFICATION Nº 112 CAMP NM-1N

Recommended: W. G. Carnes Deputy Chief Architect	Date 5-21-'35	U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE BANDELIER NATIONAL MONUMENT GARAGE UTILITY AREA DRAWN BY BRANCH OF PLANS AND DESIGN	Date MAY 6, 35
Cleared for Eng: Chief Engineer	Date 5-29-35		Sheet Nº 1 of 1 Sheets
Concurred: J. D. Coffman by F.L.A. Chief Forester	Date 5-26-35		Drawing Nº NM BAN. 3023
Concurred: Frank Pinkley Superintendent	Date 6-5-'35		
Approved: Director	Date 7-1-35		

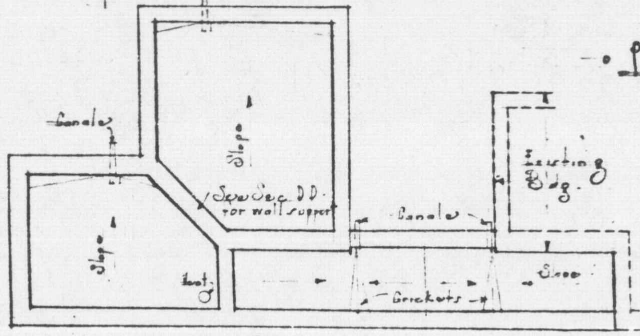
Note: Preliminary Drawing No. NM BAN 3018

#6

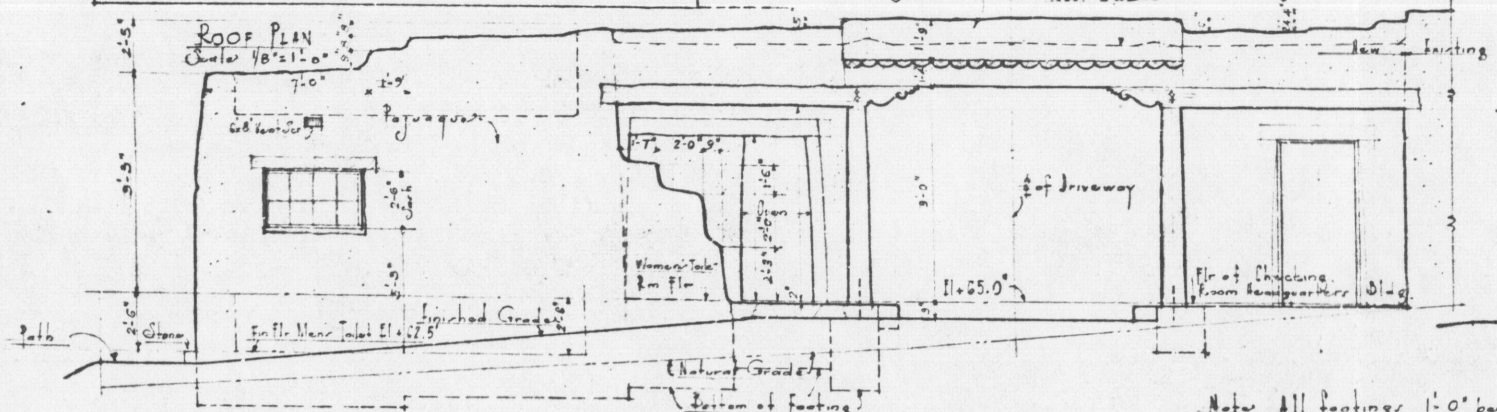


· PLAN ·

Scale 1/4" = 1'-0"



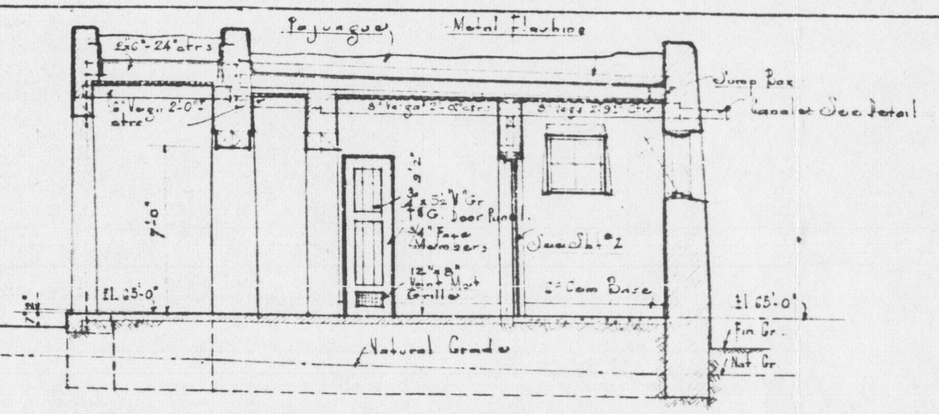
ROOF PLAN
Scale 1/8" = 1'-0"



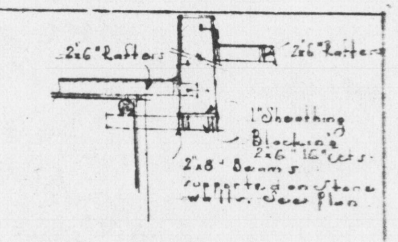
Note: All footings 1'-0" below natural grade and to solid bearing soil.

· SOUTH · ELEVATION ·

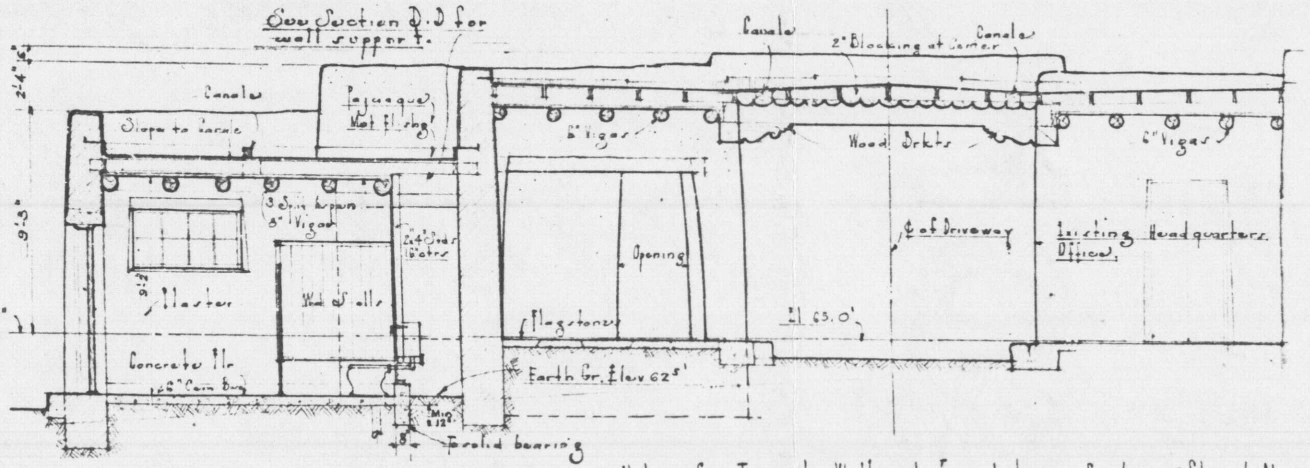
Scale 1/4" = 1'-0"



- SECTION · A · A -

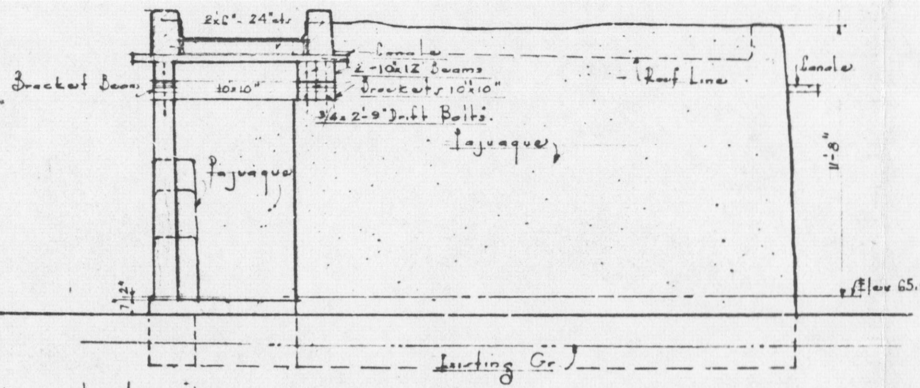


· SECTION D-D ·

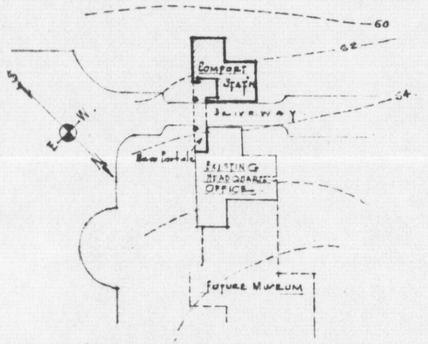


Note: See Typical Wall and Foundation Section Sheet No 2.

- SECTION · B · B -



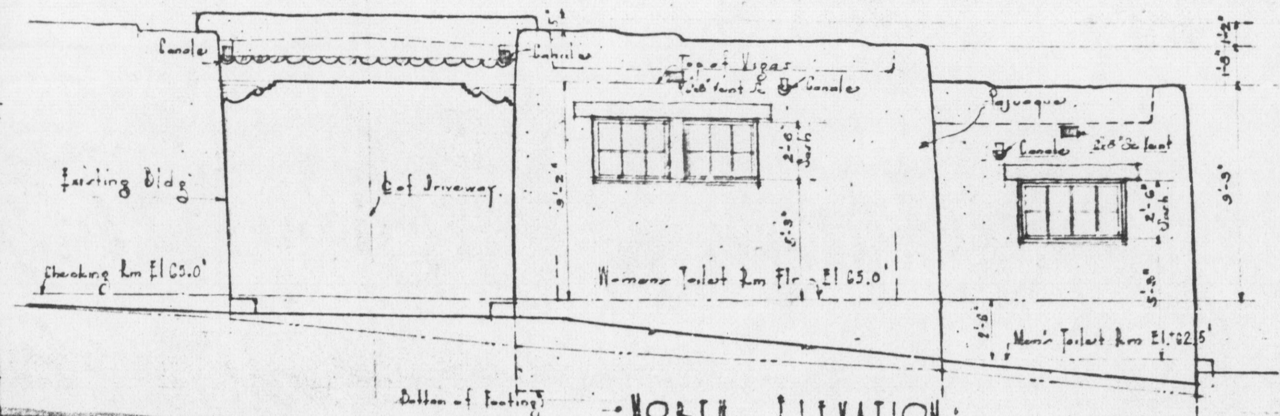
· SECTION - C C ·



· PLOT · PLAN ·
Scale 1" = 40'-0"

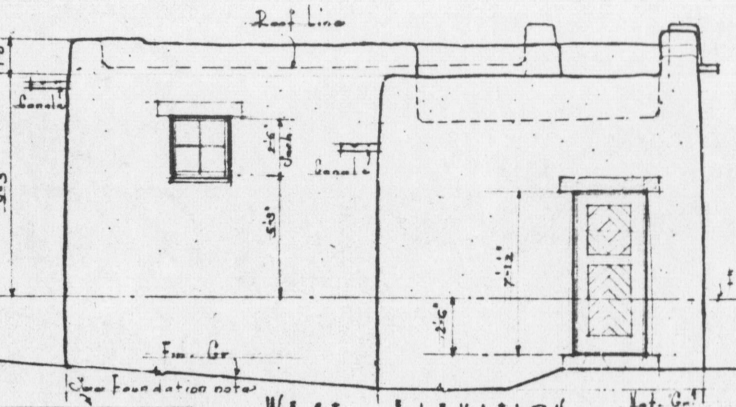
HALF-SIZE REPRODUCTION

Note: Place 4" T.C. Drain Tile at portions of building where floor is below finished grade. Drain to South Slope of grade.



· NORTH · ELEVATION ·

Scale 1/4" = 1'-0"



· WEST · ELEVATION ·

E.C.W. PROJECT #8 CLASSIFICATION #113 CAMP No. NM-IN

Recommended	W. G. Carnes Deputy Chief Architect	Date 5-23-35
Cleared for Eng.	Chief Engineer	Date 5-25-35
Concurred	O. G. Hopkins Acting Sanitary Engineer	Date 5-27-35
Concurred		Date 6-5-35
Approved	Director	Date 7-8-35

Ahern 5-26-35

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BANDELIER NATIONAL MONUMENT
· COMFORT STATION · (HEADQUARTERS)
DRAWN BY BRANCH OF PLANS AND DESIGN

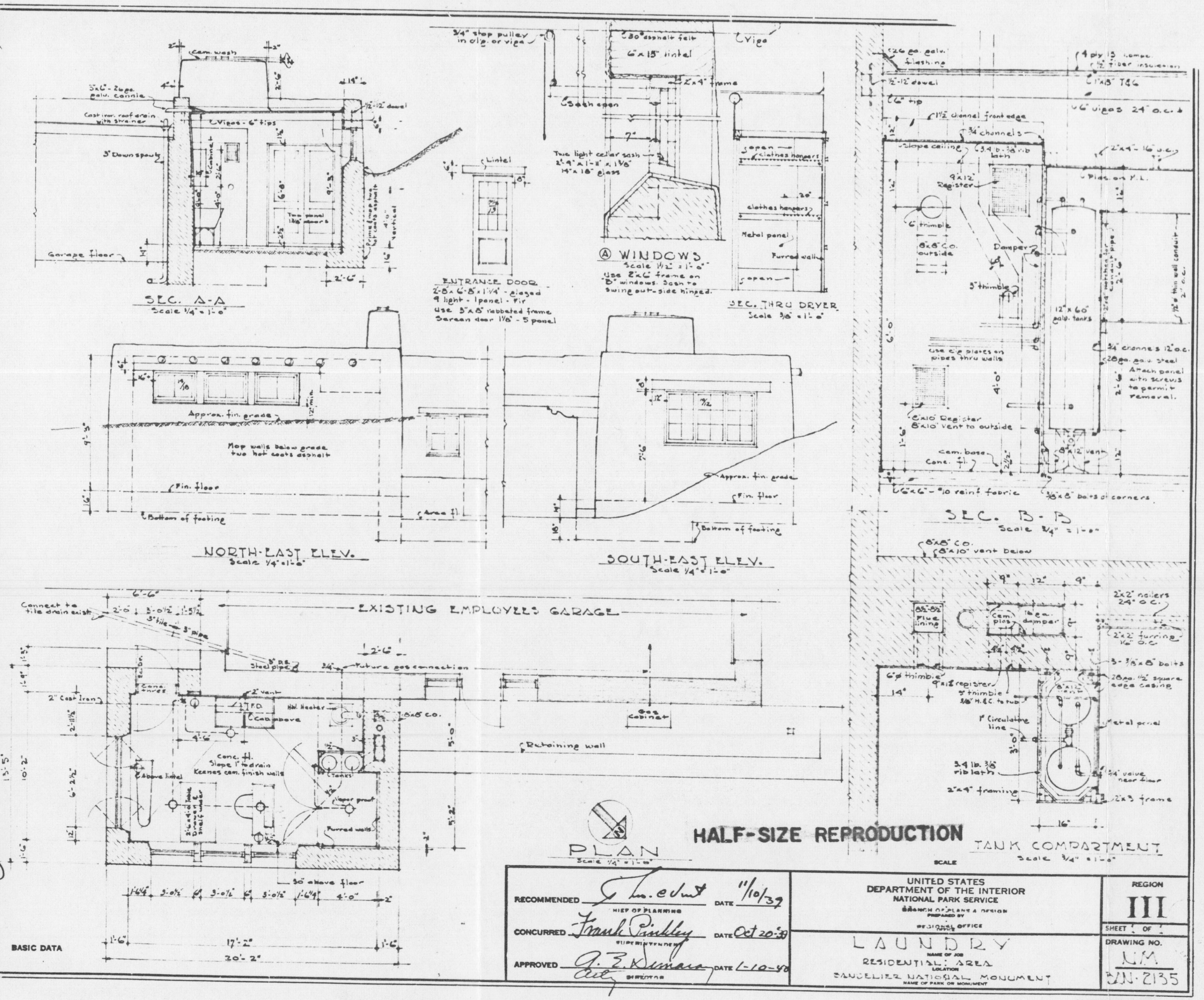
Date 5-20-35
Sheet No. 1 of 2 Shts
Drawing No. NM
BAN 3017A

by AJJ Checked by
by AJJ Drw S.D. Arch J.N.S.

#9 b
2/9 PORTAL

TRIM LINE

DESIGNED BY	PLANS AND DESIGN	ENGINEERING	REVIEWED			CLEARED
Bennett	Frazell Arthur N. Gore 11/9		FORESTRY	RESEARCH AND EDUCATION	RECREATIONAL PLANNING AND STATE COOPERATION	
DATE 10-10-39	J.E.H.	John S. Chase 11/16/39	HISTORY	SANITATION	H. Maier 1/10/40	Actg REGIONAL DIRECTOR



BASIC DATA

HALF-SIZE REPRODUCTION

RECOMMENDED T. C. Vint CHIEF OF PLANNING	DATE 11/10/39	UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE BRANCH OF PLANS & DESIGN PREPARED BY REGIONAL OFFICE
CONCURRED Frank Pinkley SUPERINTENDENT	DATE Oct 20-39	LAUNDRY NAME OF JOB
APPROVED A. E. Demaray Acty DIRECTOR	DATE 1-10-40	RESIDENTIAL: AREA LOCATION BANDELIER NATIONAL MONUMENT NAME OF PARK OR MONUMENT

REGION III

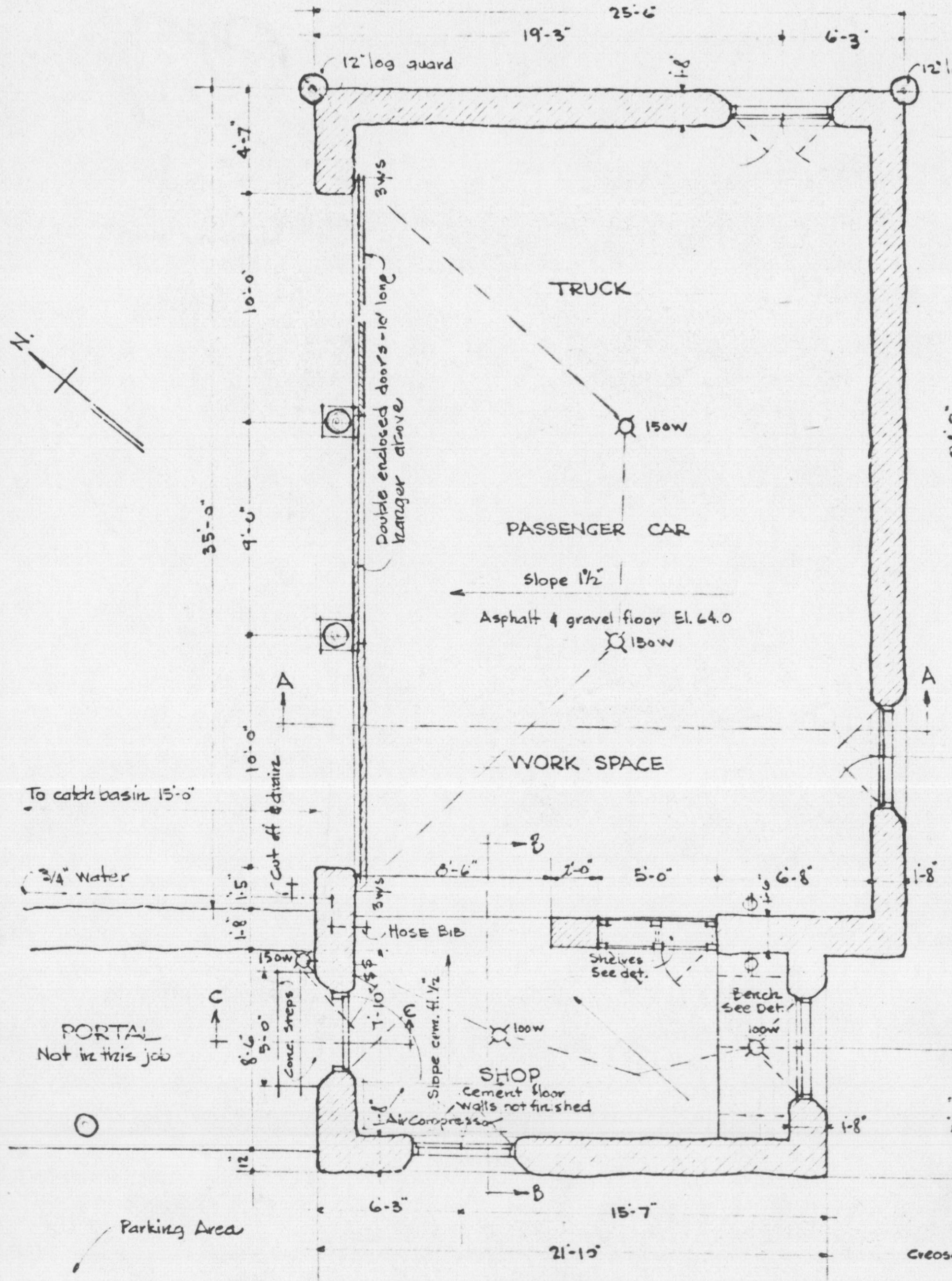
SHEET 1 OF 1

DRAWING NO. N.M. BAN-2135

TRIM LINE

#10A

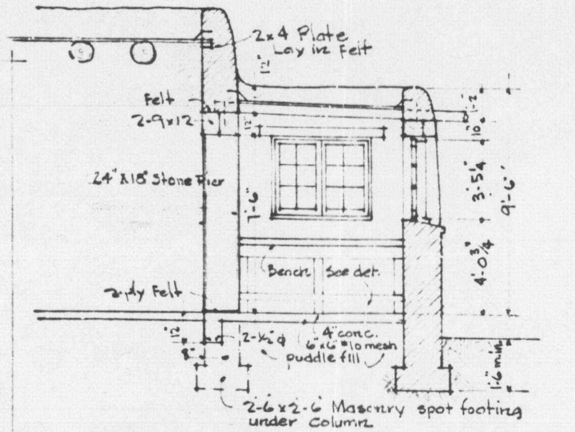
TRIM LINE



FLOOR PLAN

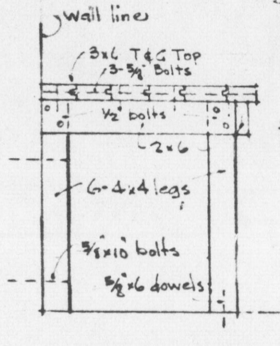
¼" = 1'-0"

Note - All wall dimensions are maximum width.



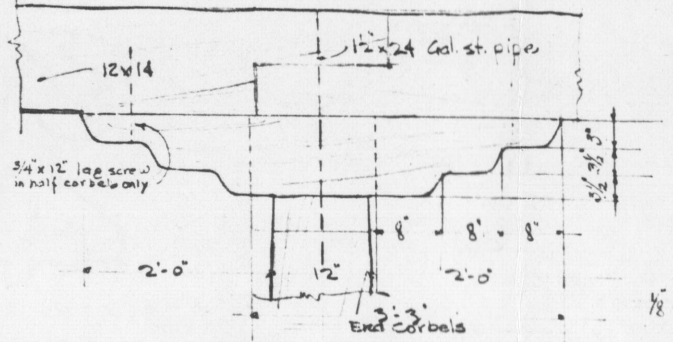
SECTION B-B

¼" = 1'-0"



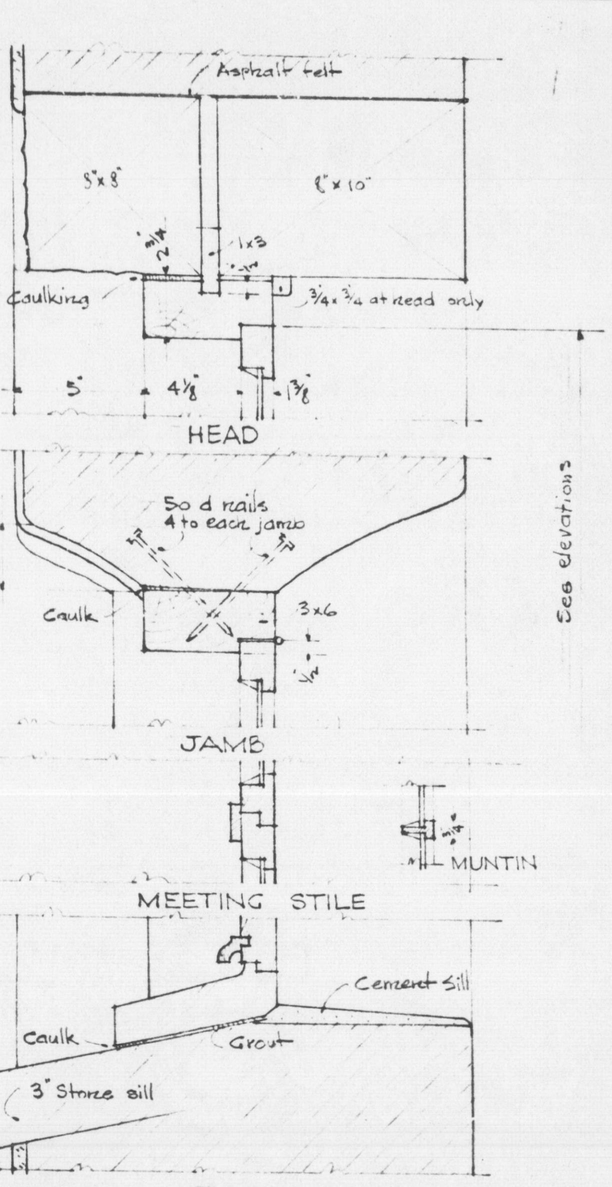
SECTION THRU BENCH

¾" = 1'-0"



CORBEL DETAIL

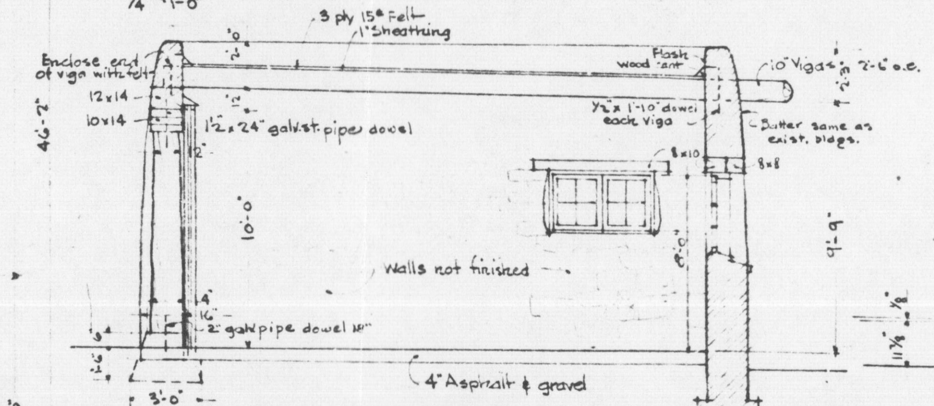
1" = 1'-0"



WINDOW DETAILS

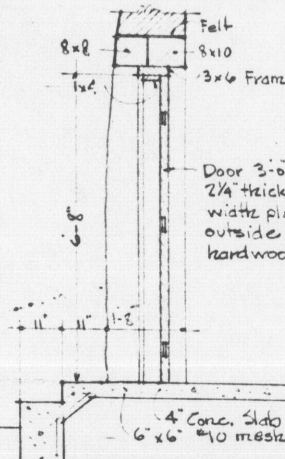
3" = 1'-0"

Note - All sash 2-0¼" wide



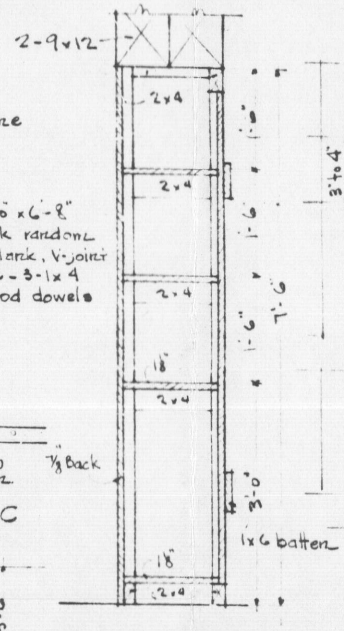
SECTION A-A

¼" = 1'-0"



8x8
Felt
8x10
3x6 Frame
Door 3'-0"x6'-8"
2¼" thick random width plank, V-joint outside - 3-1x4 hardwood dowels
4" Conc. Slab
6"x6" 10 mesh
⅛ Back

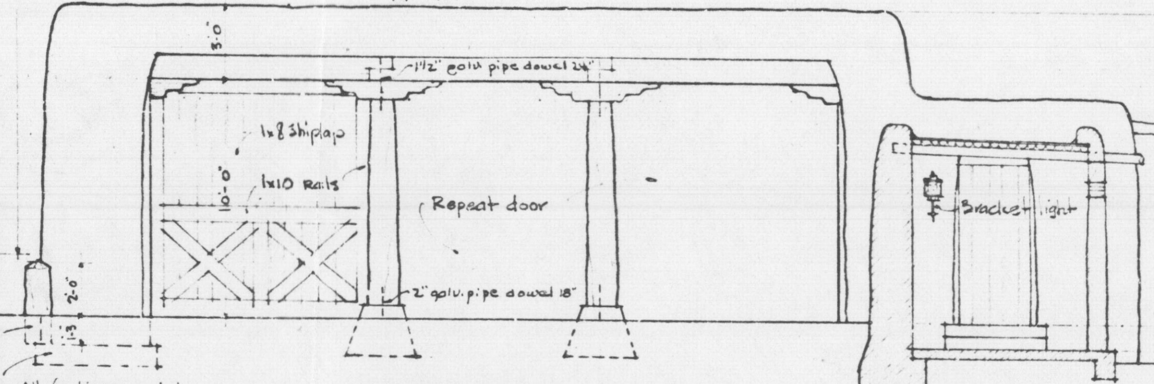
SECTION C-C



SHELF DETAIL

¾" = 1'-0"

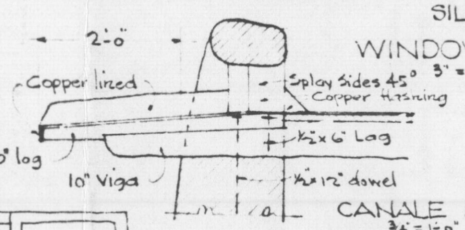
Doors 2'-0½" x 7'-4¾"
1" T&G - 2-1x6 battens
& 3-6" T-hinges per door



Note - All footings carried down to a minimum of 1'-6" below natural grade.

NORTHWEST ELEVATION

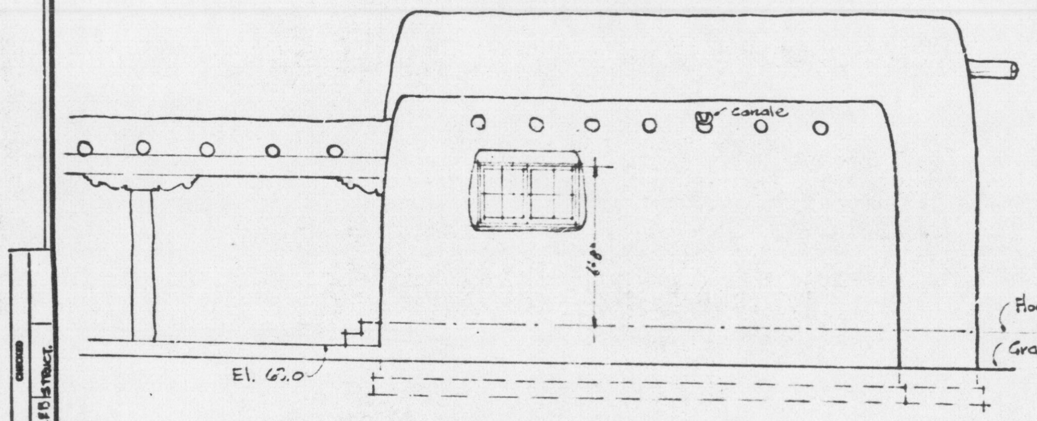
¼" = 1'-0"



CANALE DETAIL

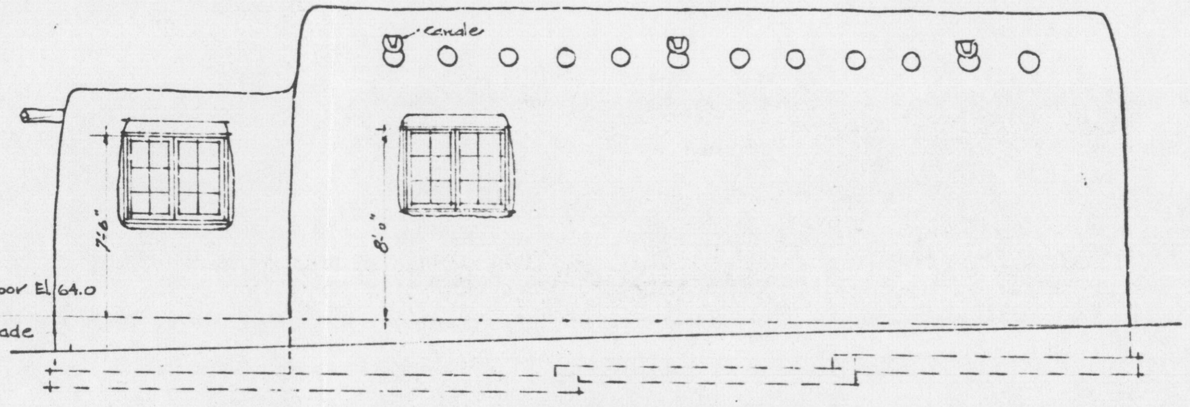
¾" = 1'-0"

Note. Over shop cut canale from 6" Log.



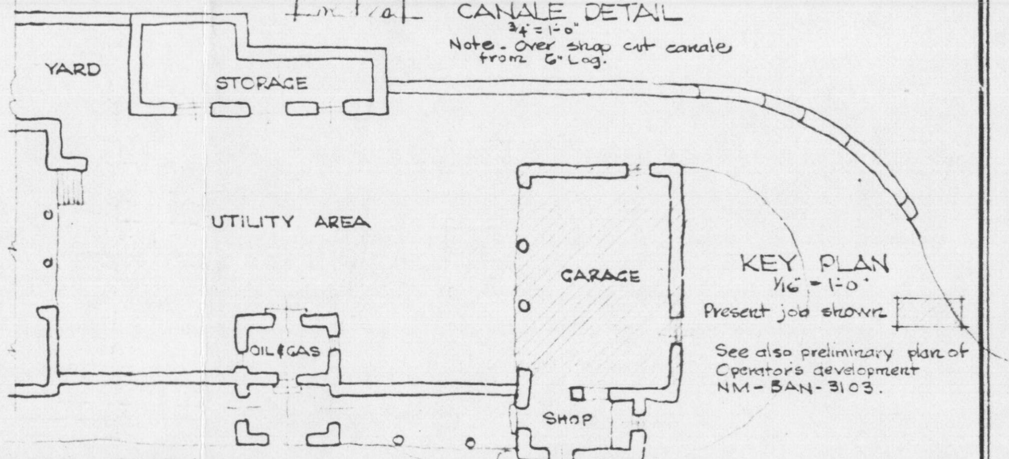
SOUTHWEST ELEVATION

¼" = 1'-0"



SOUTHEAST ELEVATION

¼" = 1'-0"



KEY PLAN

1/16" = 1'-0"

Present job shown.

See also preliminary plan of Operators development NM-BAN-3103.

ECW JOB 49 CLASS 112 - CAMP NM-1-N.

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
REGION III DISTRICT B

Drawn by R.W.T.
Traced by K.W.T.
Checked Arch. L.F.D. Struct.

GARAGE - OPERATOR'S DEVELOPMENT

BANDELIER NATIONAL MONUMENT

HALF-SIZE REPRODUCTION

3.11.37

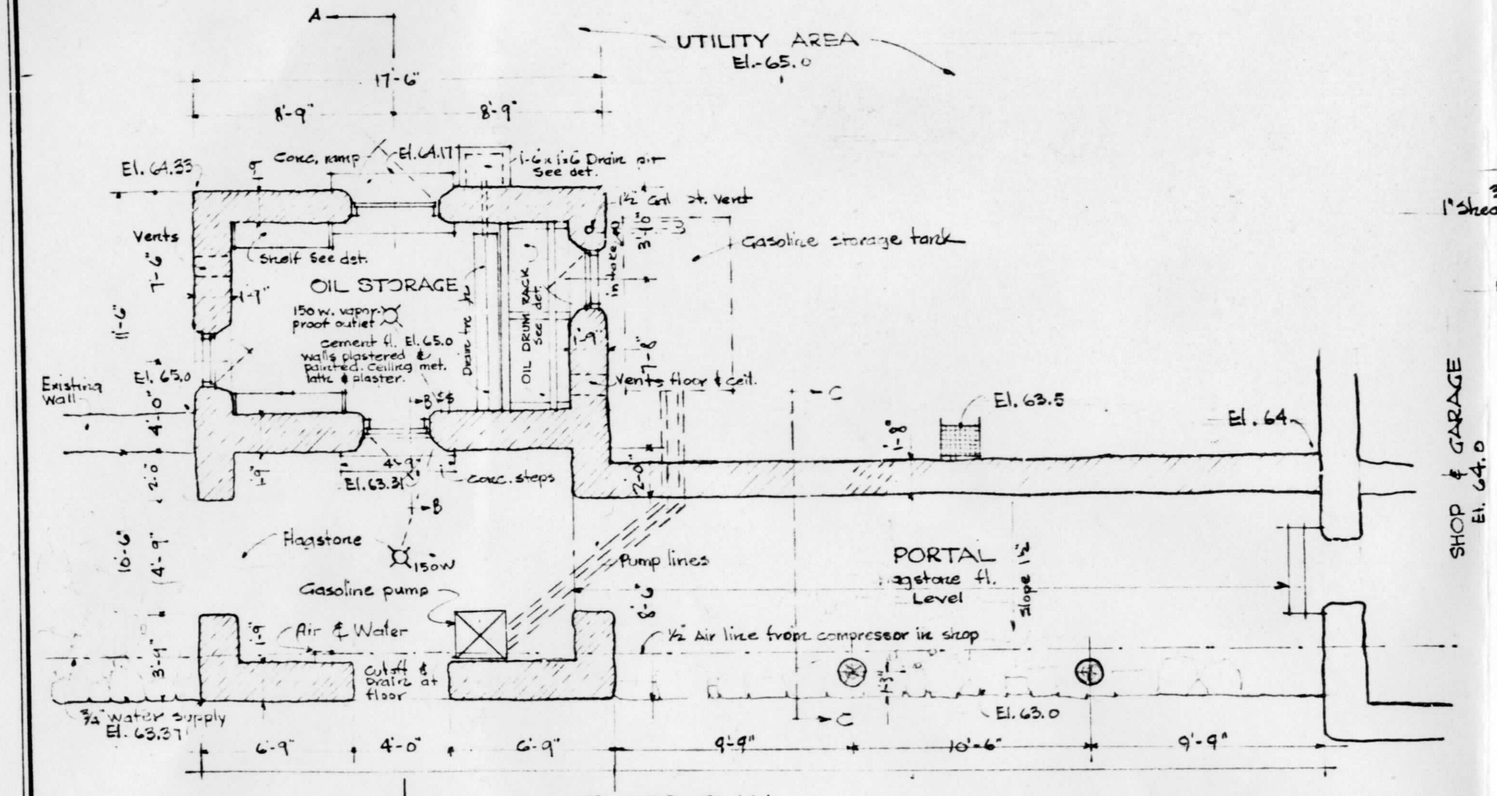
Prepared by 4-9-37
3-29-37
4-19-37

Drawing No. NM BAN 2029
Sheet 1 of 1 Sheets

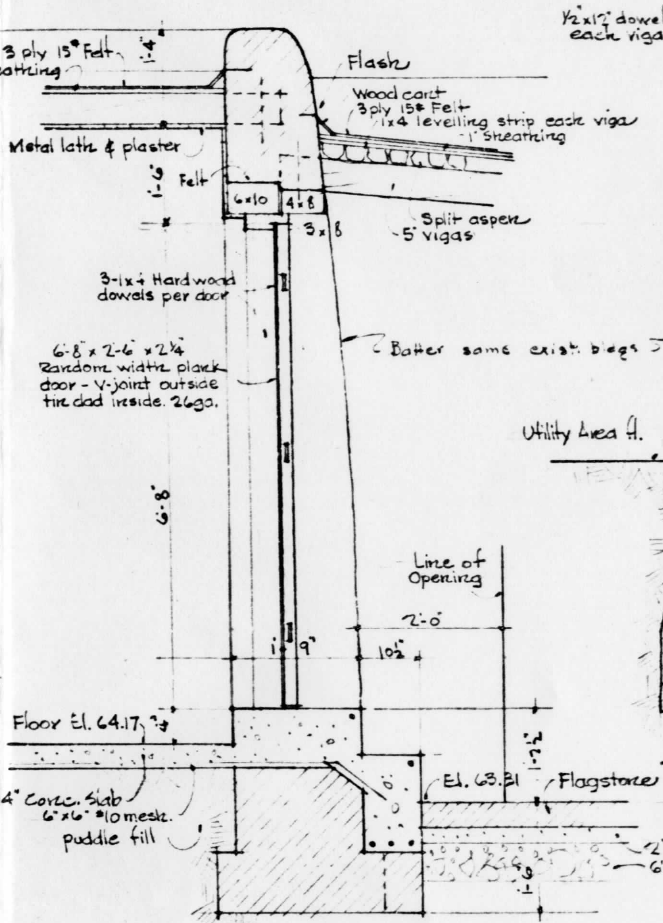
TRIM LINE

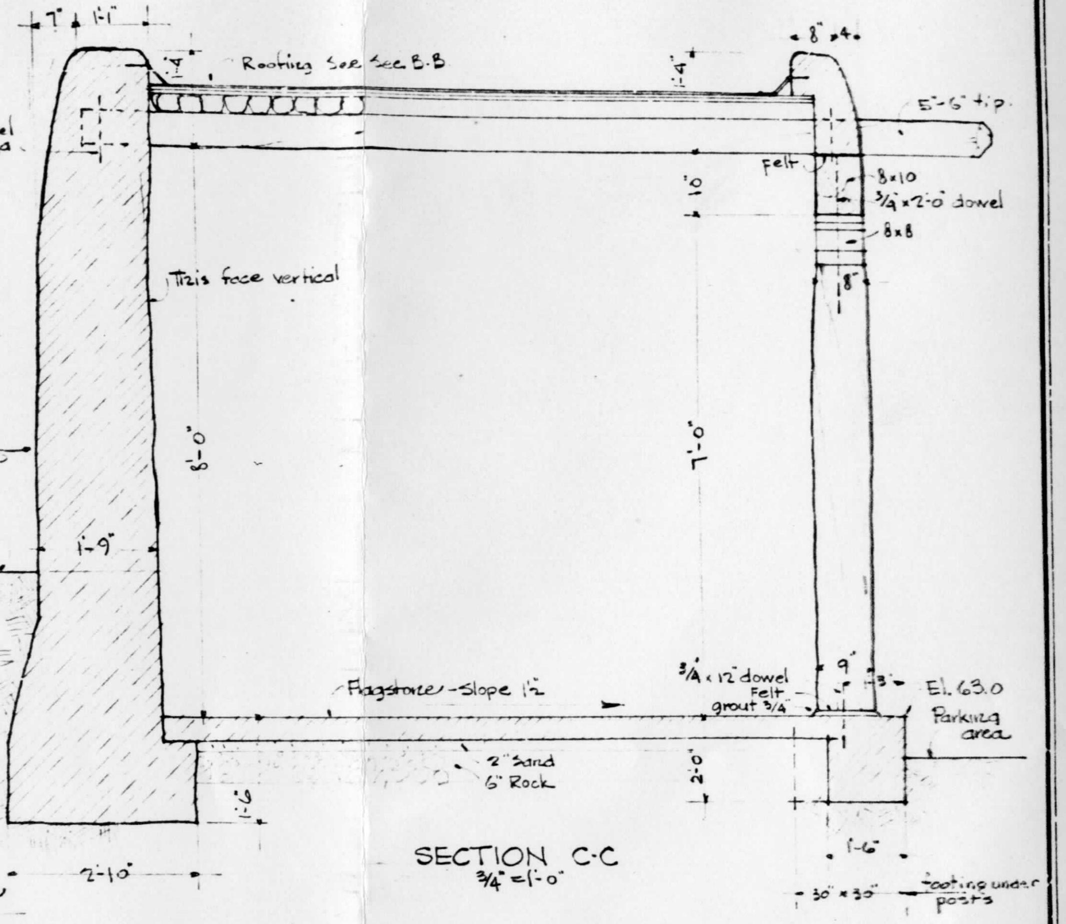
#13

TRIM LINE

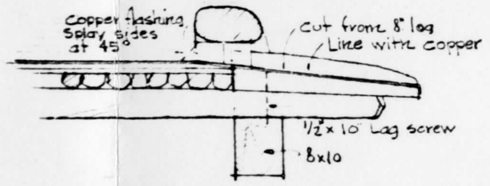


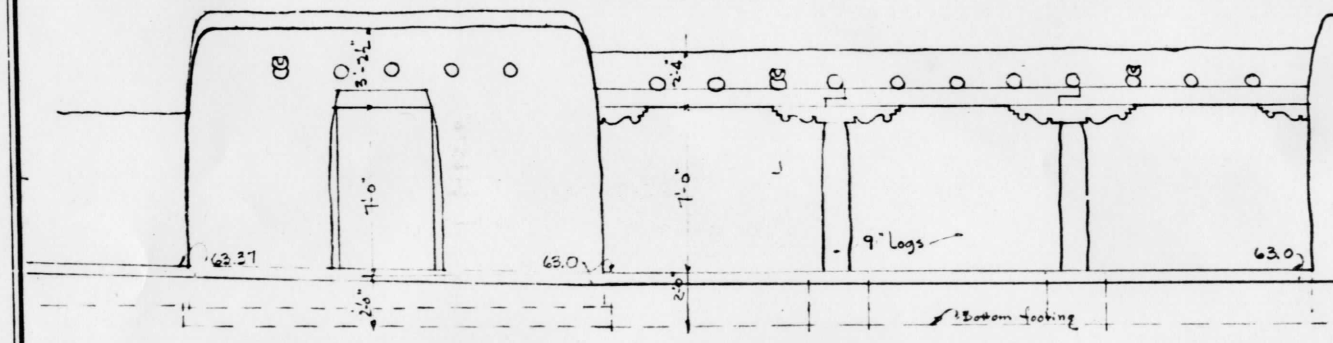
FLOOR PLAN
¼" = 1'-0"
Note - wall dimensions are max. width





SECTION C-C
¾" = 1'-0"

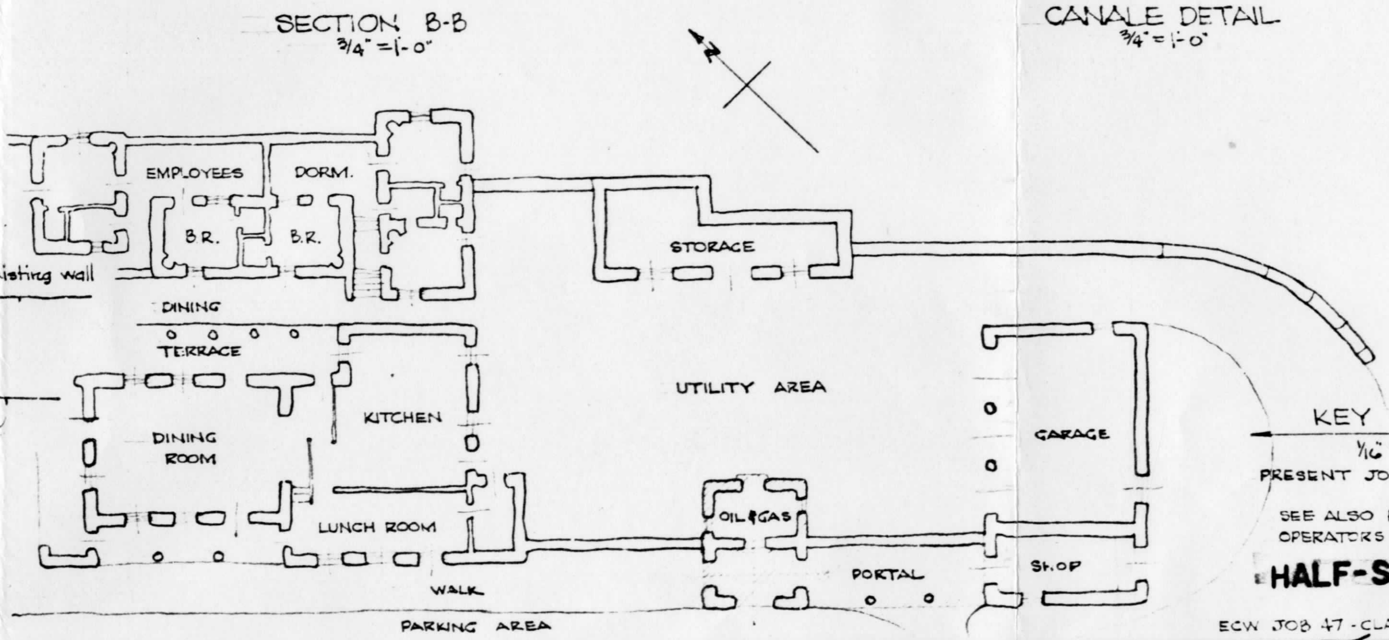


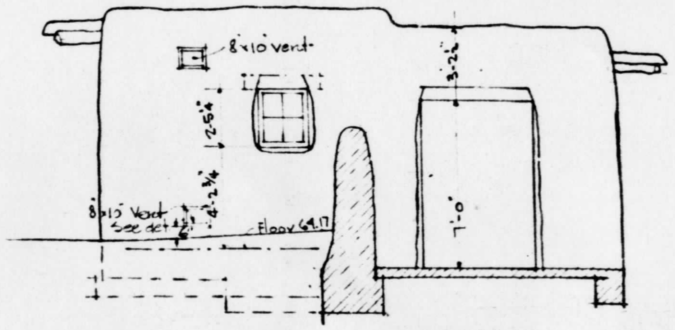


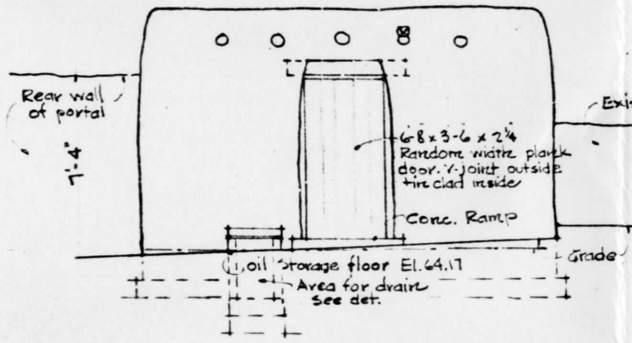
SECTION B-B
¾" = 1'-0"

CANALE DETAIL
¾" = 1'-0"

SOUTHWEST ELEVATION
¼" = 1'-0"






Rear wall of portal
6-8 x 3-6 x 2¼ Random width plank door. V-joint outside tin clad inside
Conc. Ramp
Oil storage floor El. 64.17
Area for drain See det.
Grade
7'-0"

NORTHWEST ELEVATION
¼" = 1'-0"

NORTHEAST ELEVATION
¼" = 1'-0"

KEY PLAN
1/16" = 1'-0"
PRESENT JOB SHOWN THUS ☐

SEE ALSO PRELIMINARY PLAN OF
OPERATORS DEVELOPMENT - NM-BAN-3103

HALF-SIZE REPRODUCTION

ECW JOB 47 - CLASS III - CAMP NM-1-N

DRAWN BY	TRACED BY	CHECKED
R.W.T.	R.W.T.	ARCH. L.F.B. STRUCT.

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
REGION III DISTRICT B

NAME AND LOCATION OF PROJECT
OIL & GAS HOUSE -- OPERATOR'S DEVELOPMENT
NAME OF PARK OR MONUMENT
BANDELIER NATIONAL MONUMENT

3-8-37

PREPARED BY BRANCH OF PLANS & DESIGNS	Thos. C. Vint CHIEF ARCHITECT	4-9-37 DATE
RECOMMENDED	SUPERINTENDENT	3-30-37 DATE
APPROVED	F. B. Dimmitt Acting DIRECTOR	4-17-37 DATE

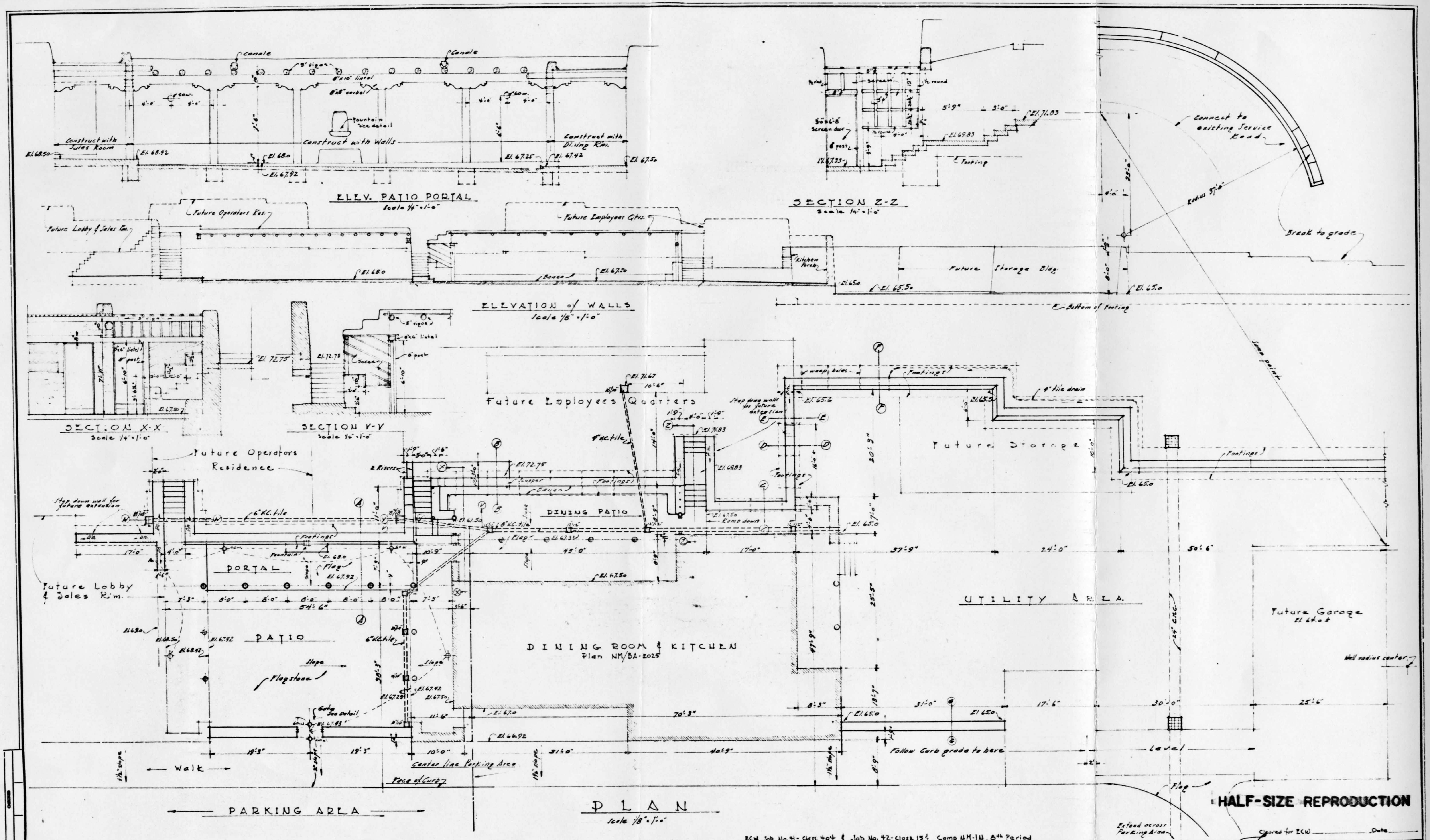
DRAWING NO. NM BAN-2028
SHEET 1 OF 2 SHEETS

TRIM LINE

U. S. GOVERNMENT PRINTING OFFICE

#14 & 13/14 PORTAL

TRIM LINE



HALF-SIZE REPRODUCTION

Cleared for ECW ________ Date ________

ECW Job No. 41 - Class. 404 & Job No. 42 - Class. 15¼ Camp NM-1N, 8th Period

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
REGION III - DISTRICT B

NAME AND LOCATION OF PROJECT
STONE WALLS — CHANNELS & DITCHES — OPERATORS DEV.
NAME OF PARK OR MONUMENT
BANDELIER NATIONAL MONUMENT

11-30-36

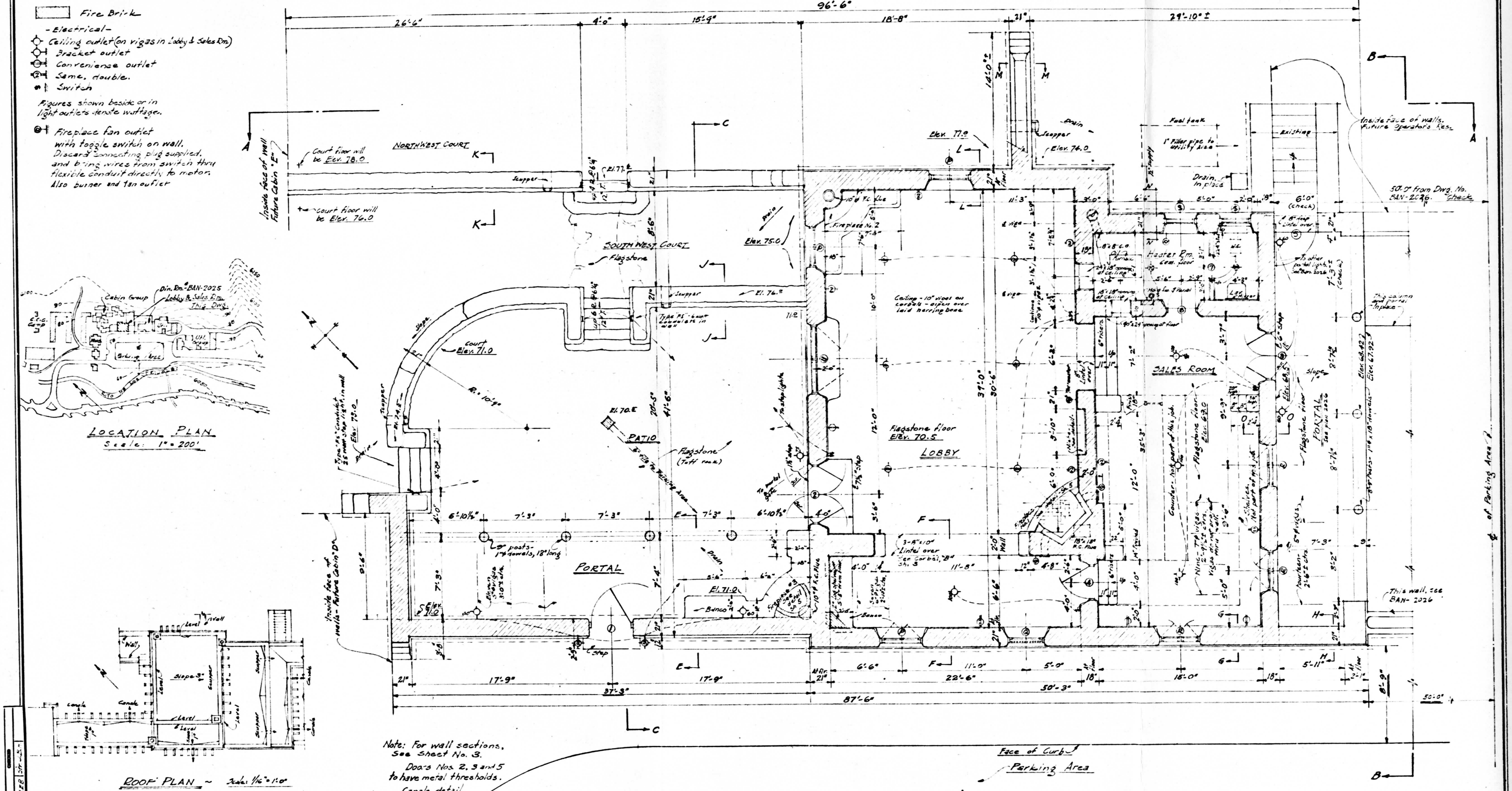
PREPARED BY Thos C Vint BRANCH OF PLANS & DESIGN 12/14/36
Frank Pinkley 12/8/36
APPROVED Arno B Cammerer 12/15/36

DRAWING NO. NM BAN-2076
SHEET 1 OF 3 SHEETS

Traced by L.E.B. Drawn by L.E.B.

#15 & 15/17 PORTAL

TRIM LINE



LEGEND

▨ Stone

☐ Brick

☐ Fire Brick

-Electrical-

Ceiling outlet (on vigas in Lobby & Sales Rm.)

Bracket outlet

Convenience outlet

Same, double.

Switch

Figures shown beside or in light outlets denote wattage.

Fireplace fan outlet with toggle switch on wall. Discard connecting plug supplied, and bring wires from switch thru flexible conduit directly to motor. Also burner and fan outlet

LOCATION PLAN
Scale: 1" = 200'

ROOF PLAN ~ Scale: 1/16" = 1'-0"

Note: For wall sections, see Sheet No. 3.
Doors Nos. 2, 3 and 5 to have metal thresholds.
Canale detail. See Sheet #4

E.C.W. Job No. 69 Class 120. Camp NM-1-N. 9th Per

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
SANTA FE, N. M.

Drawn by RVA Traced by RVA Checked Archer 57-25

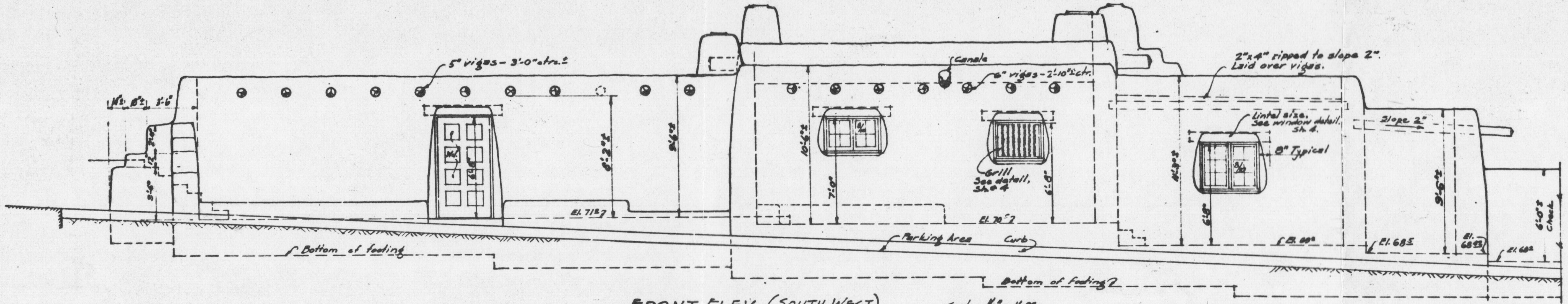
LOBBY AND SALES ROOM ~ UNIT NO. 2 ~ OPERATOR'S DEVELOPMENT
BANDELIER NATIONAL MONUMENT

July 28, 1937

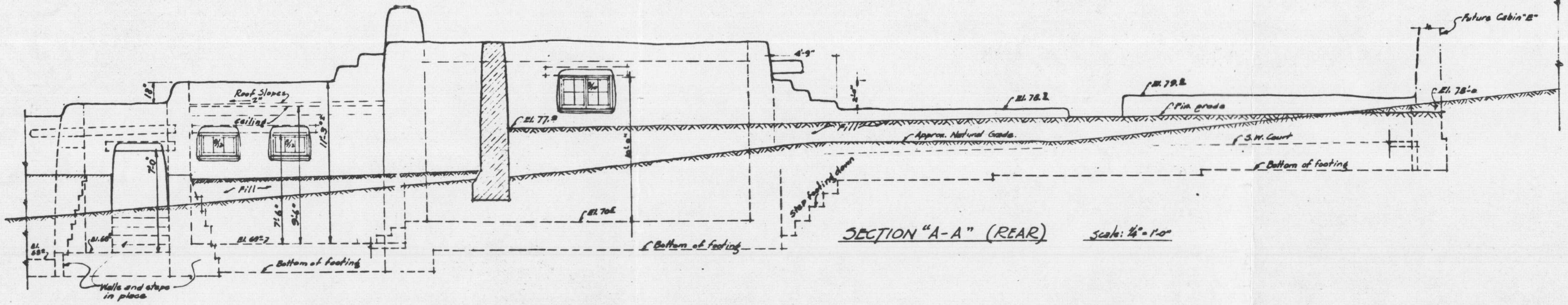
Prepared by		11-23-37
Recommended	Frank Pinkley	Oct 7 37
Approved		11-30-37

Drawing No. NM BAN-2030
Sheet 1 of 5 Sheets

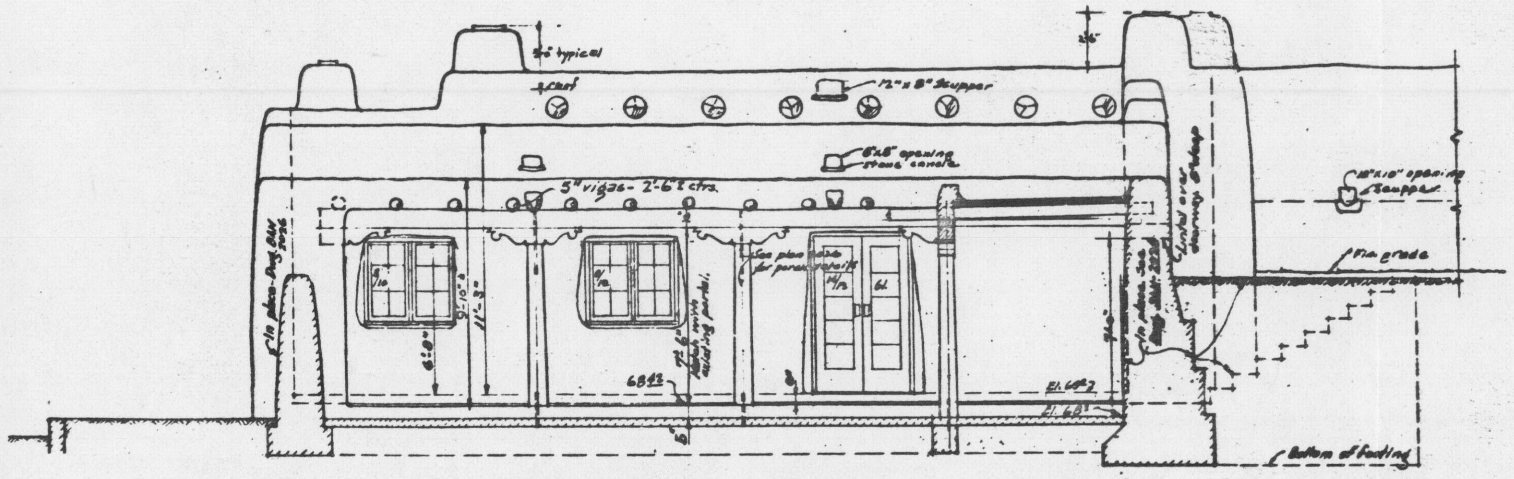
#17 & 17/23 PORTAL



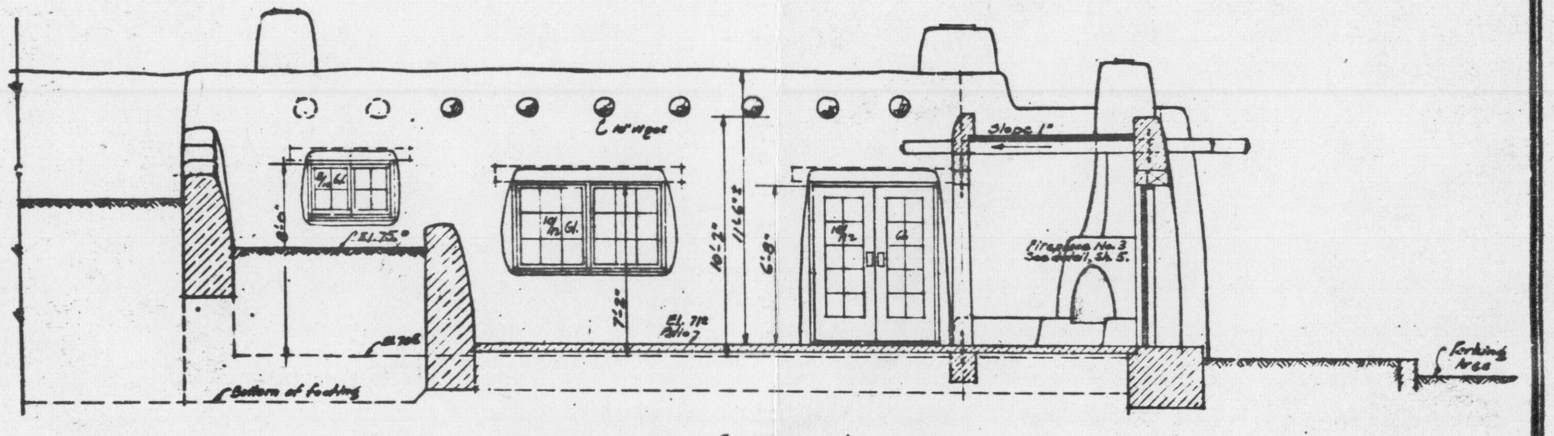
FRONT ELEV. (SOUTH WEST) Scale: 1/8" = 1'-0"



SECTION "A-A" (REAR) Scale: 1/8" = 1'-0"



SECTION "B-B" (SOUTH EAST) Scale: 1/8" = 1'-0"



SECTION "C-C" (NORTHWEST) Scale: 1/8" = 1'-0"

Traced by RWA
Drawn by RWA
Checked: Arch. L.E.B.St.

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
SANTA FE, N. M.

LOBBY AND SALES ROOM ~ UNIT NO. 2 ~ OPERATOR'S DEVELOPMENT
BANDELIER NATIONAL MONUMENT

July 28, 1937

E.C.W. Job 451, Class 120, Camp NM-N-1, 9th Per.

Prepared by: T. Lee O. Vint 11-23-37
Recommended: Frank Pinkley Oct 27 '37
Approved: A. E. Demaray 11-30-37

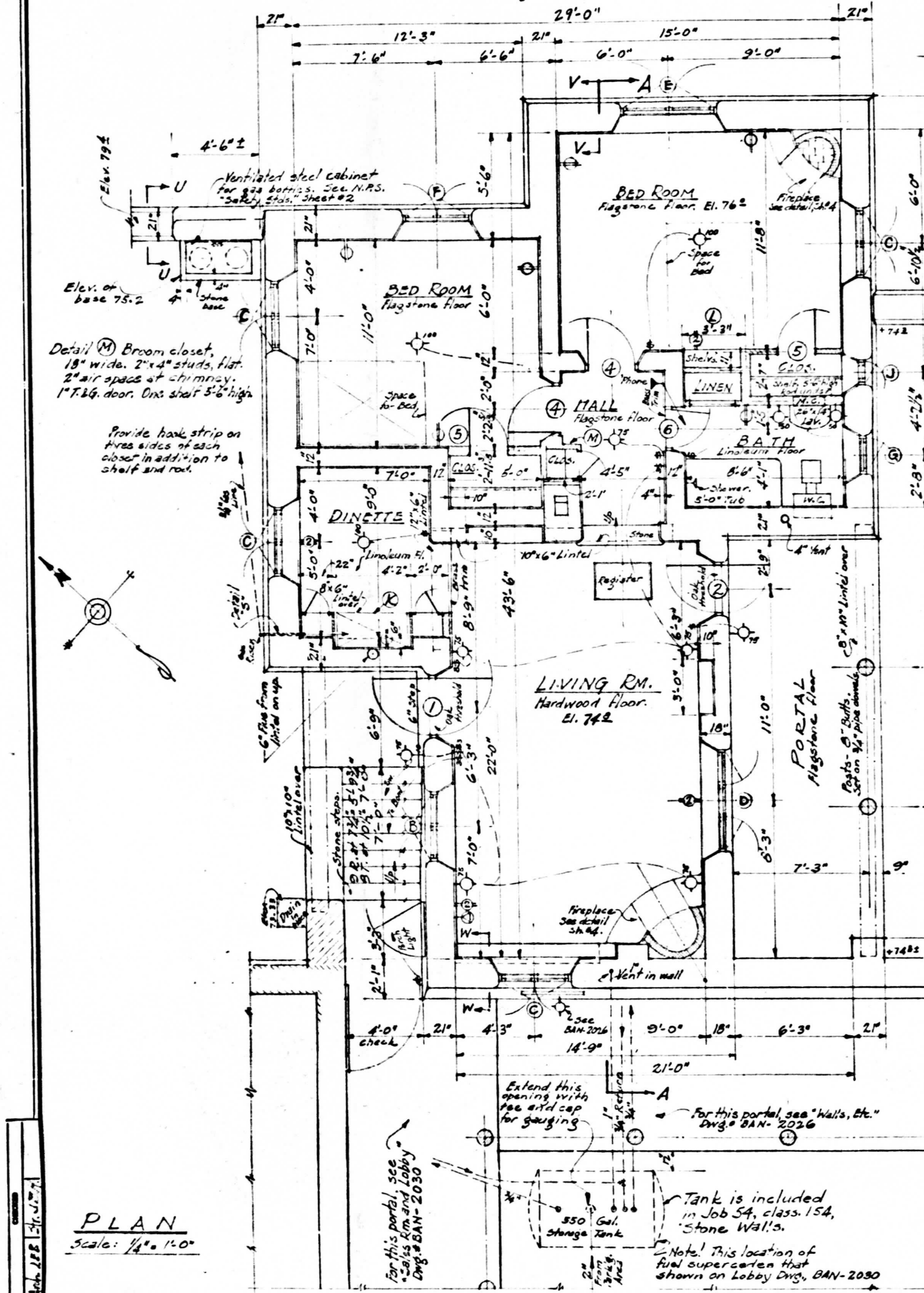
N.M.
BAN-2030
Sheet 2 of 5

#17 &
17/23 & 15/16/17 Portals

TRIM LINE

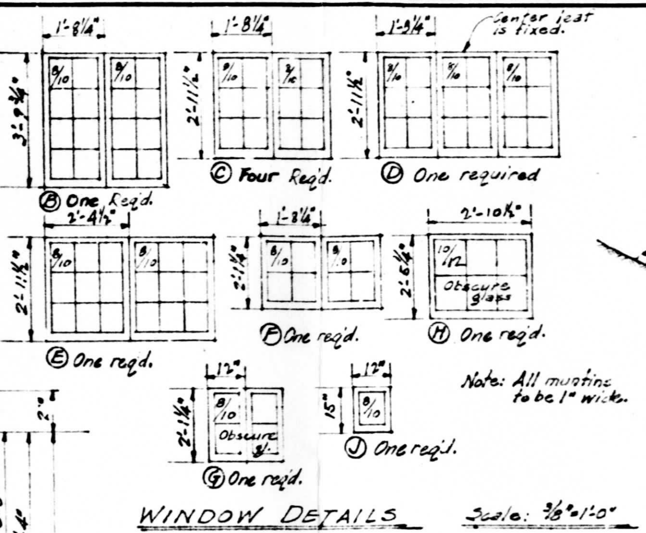
LEGEND

▨	New stone walls.
▭	Existing stone walls or other drawings.
▭	2"x 4" Stud walls.
▭	Same, studs flat.
▭	Brick
⊕	Ceiling Light (Elec.)
⊕	Bracket Light
⊖	Convenience Outlet
②	Same, double
Ⓡ	Radio outlet
●	Power outlet for oil burner
▶	Telephone
•—	Switch
③	Three-way switch.

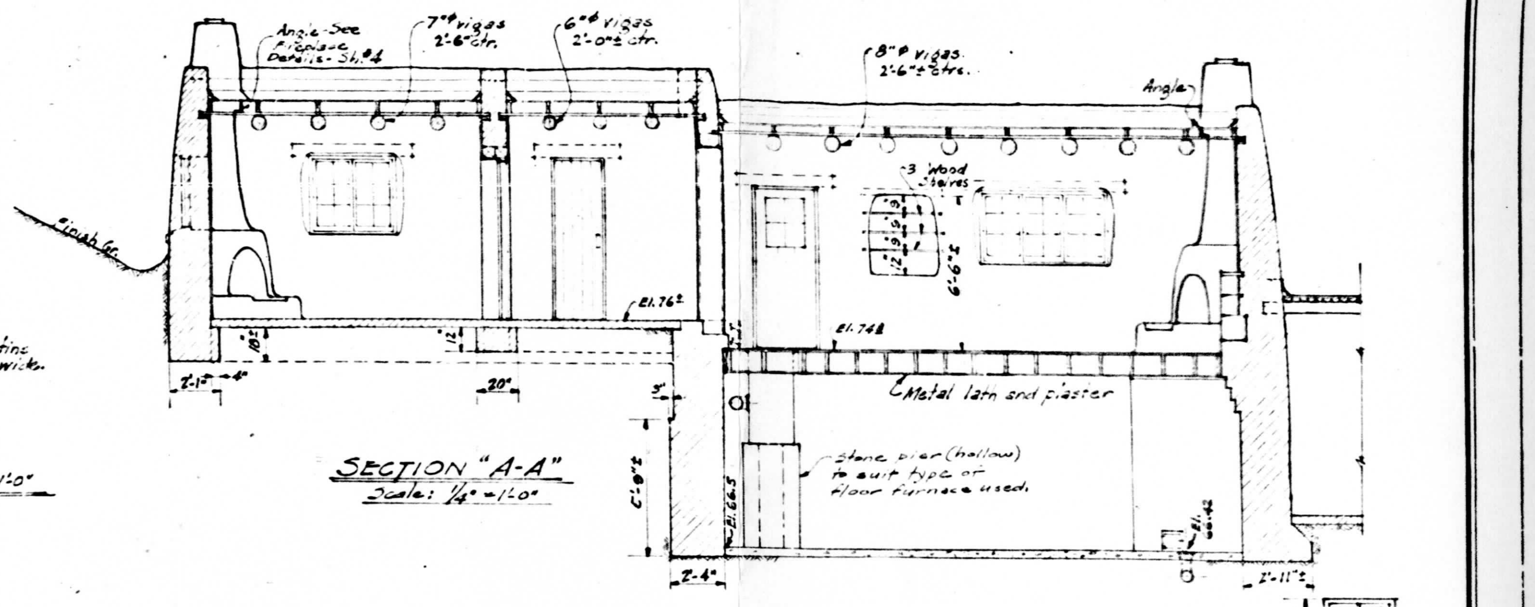

29'-0"
21"
12'-3"
7'-6"
6'-6"
6'-0"
15'-0"
9'-0"
V
A
E
U
Elev. 79±
4'-6"±
Ventilated steel cabinet for gas bottles. See N.P.S. "Safety Stds." Sheet #2
F
Elev. of base 75.2
Stone base
Detail M Broom closet, 18" wide. 2"x4" studs, flat. 2" air space at chimney. 1" T.&G. door. One shelf 5'-6" high.
Provide hook strip on three sides of each closet in addition to shelf and rod.
BED ROOM
Flagstone floor
Space for Bed
BED ROOM
Flagstone floor. El. 76²
Space for Bed
Fireplace See detail Sh. #4
HALL
Flagstone floor
LINEN
Shelves
BATH
Linoleum floor
Shower 5'-0" Tub
W.C.
Lav.
Clos.
DINETTE
Linoleum Fl.
K
Register
Oil Heater
10"x6" Lintel
Stone
LIVING RM.
Hardwood floor. El. 74²
PORTAL
Flagstone floor
Posts 8" Butts
Fireplace See detail Sh. #4
Vent in wall
6" Flue from boiler
10"x10" Lintel over
Stone steps
W
C
See BAN-2026
4'-0"
21"
4'-3"
9'-0"
18"
6'-3"
14'-9"
21'-0"
Extend this opening with tee and cap for gauging
For this portal, see "Walls, Etc." Dwg. # BAN-2026
For this portal, see "Ca'ls Rm and Lobby" Dwg. # BAN-2030
350 Gal. Storage Tank
Tank is included in Job 54, class 154, "Stone Walls."
Note! This location of fuel supercedes that shown on Lobby Dwg. BAN-2030
43'-6"
37'-3"
22'-0"
11'-0"
7'-3"
6'-10"

PLAN

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

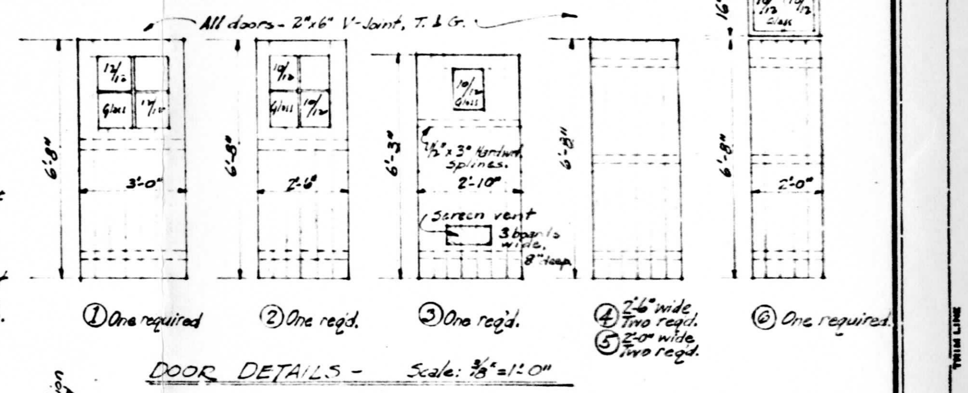


WINDOW DETAILS Scale: 3/8" = 1'-0"

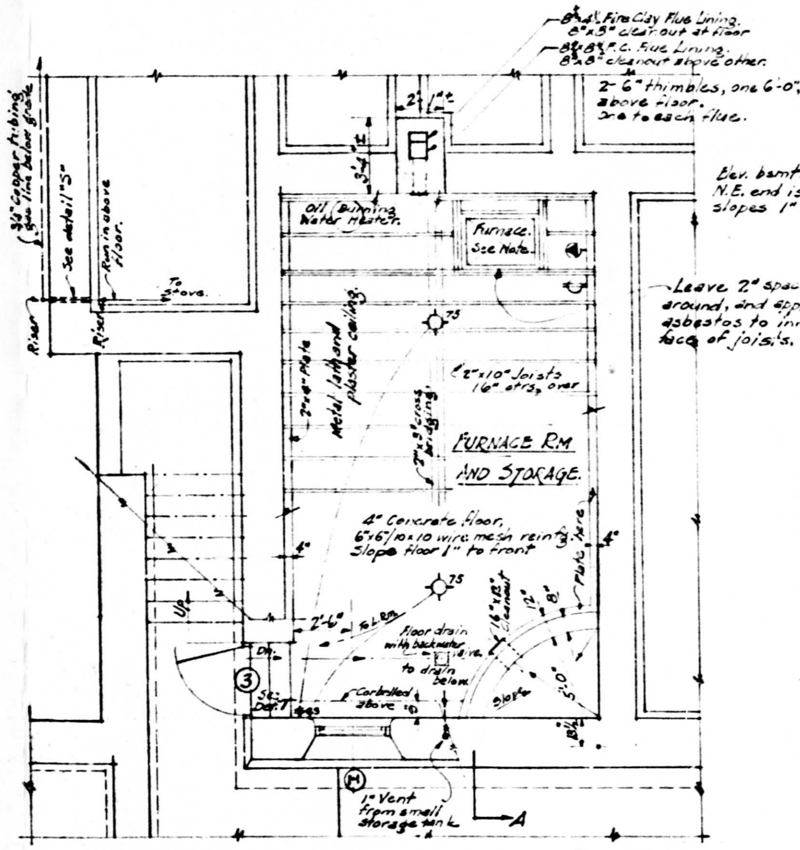


SECTION "A-A"

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

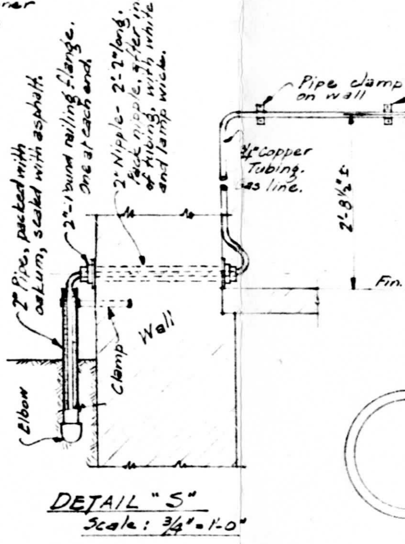


DOOR DETAILS - Scale: 3/8" = 1'-0"


8"x4" Fire Clay Flue Lining. 8"x8" clean out at floor
8"x8" F.C. Flue Lining. 8"x8" cleanout above other.
2-6" thimbles, one 6'-0", one 5'-0" above floor. One to each flue.
Elev. bsmt. floor at N.E. end is 66.5, slopes 1" to drain.
Leave 2" space all around, and apply asbestos to inner face of joists.
3/4" copper tubing gas line below grade.
See detail "S"
Run in above floor.
To stove.
Riser
Oil Burning Water Heater.
Furnace. See Note.
Metal lath and plaster ceiling.
2"x10" Joists 16" ctrs. over
2"x3" cross bridging.
FURNACE RM AND STORAGE.
4" Concrete floor, 6"x6"/10x10 wire mesh reinf. Slope floor 1" to front
Floor drain with backwater valve to drain below
Controlled above
1" Vent from small storage tank
M
A

BASEMENT PLAN

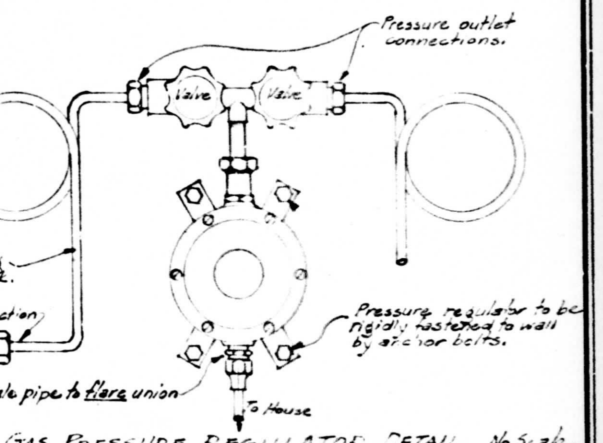
Scale: 1/4" = 1'-0"


2" Pipe, packed with oakum, sealed with asphalt.
2"-1 round railing flange. One at each end.
2" Nipple - 2'-2" long. Back nipple, after insertion of tubing, with white lead and lamp wick.
Pipe clamps on wall
To Stove
3/4" Copper Tubing. Gas line.
2'-8½"±
Fin. Floor
Wall
Clamp
Elbow

DETAIL "S"

Scale: 3/4" = 1'-0"

See "N.P.S.-Safety Standards, Sheet No 2", for cabinet details and all other details and data pertaining to installation of gas.


Pressure outlet connections.
Valve
Valve
Copper tubing from gas tank.
Press. outlet connection
Pressure regulator to be rigidly fastened to wall by anchor bolts.
Male pipe to flare union
To House

HALF-SIZE REPRODUCTION

GAS PRESSURE REGULATOR DETAIL. No Scale.
Traced from "N.P.S.-Safety Sts. No. 2"

Sheet #1 revised. Jan 18, 1938.
Destroy earlier print.

Job No 53, Class 110, 10th Par

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
REG. III SANTA FE, N. M.

OPERATOR'S RESIDENCE ~ UNIT No 4 ~ OPERATOR'S DEVELOPMENT
BANDELIER NATIONAL MONUMENT

Nov. 8, 1937

Prepared by: Branch of Plans and Design		12/16/37
Recommended:	Frank Pinkley	11/30/37
		3/15/38

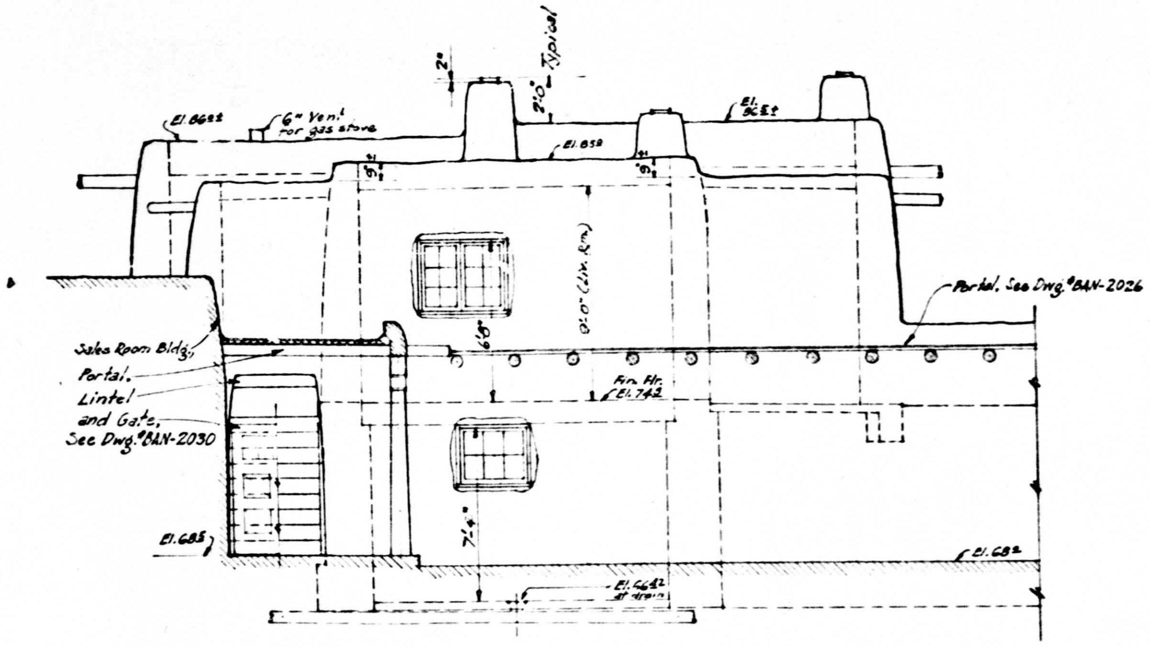
Drawing No. NM BAN-2032
Sheet 1 of 4 Sheets

KWA KWA Feb. 1938 Jan. 1937

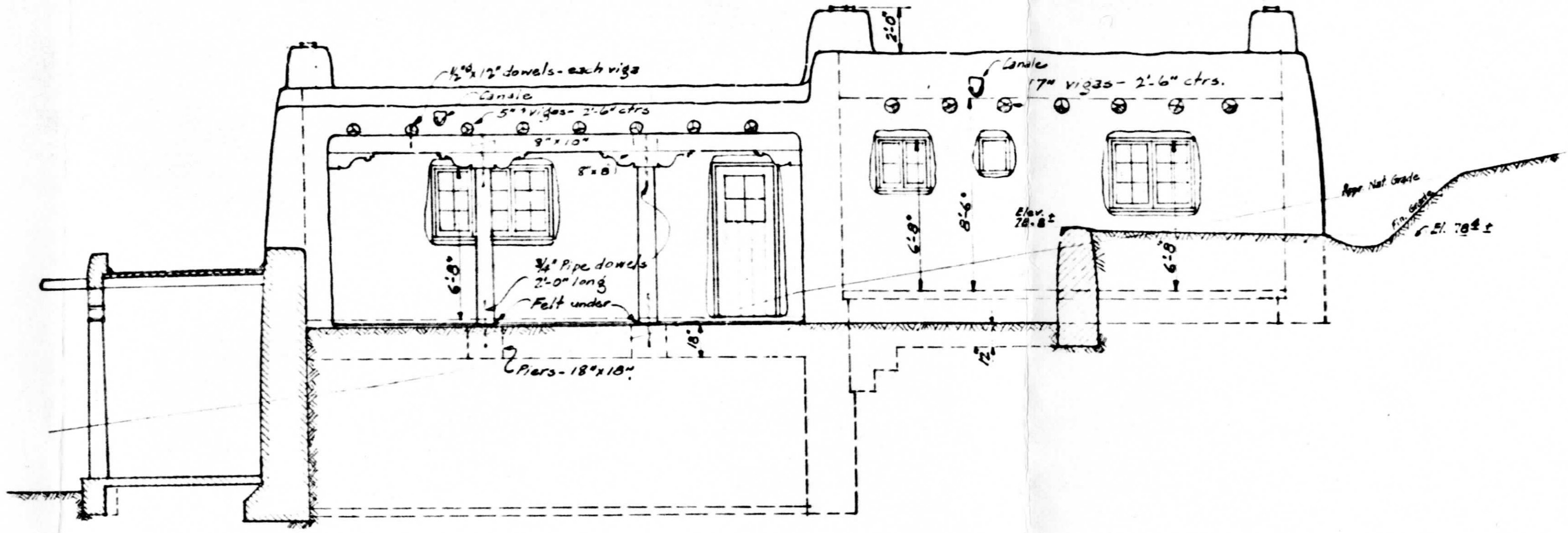
TRIM LINE

20 Colcis Tad 23" Wire 30" High

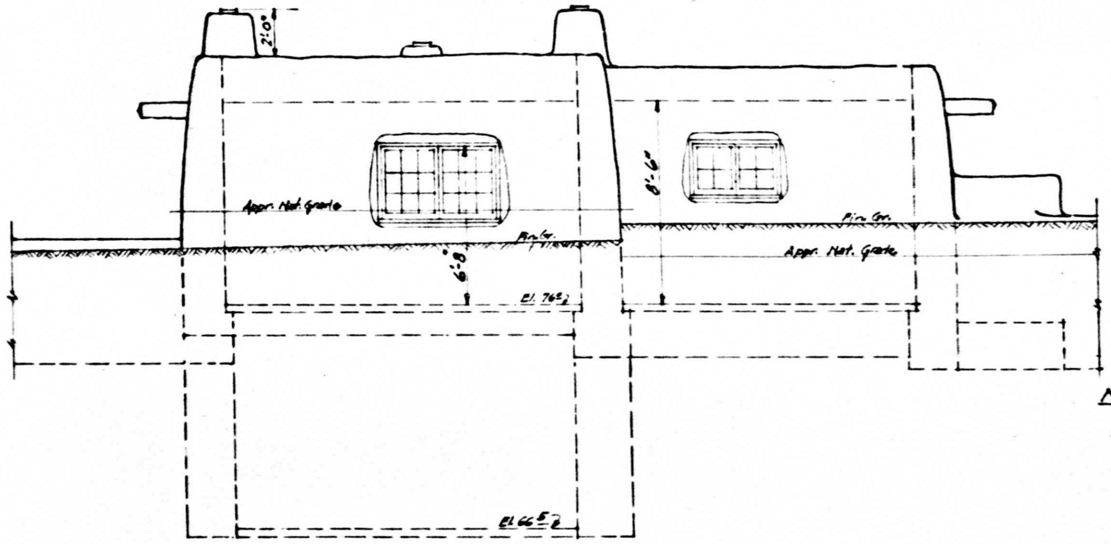
#18



S. W. (FRONT) ELEV. Scale: 1/4" = 1'-0"

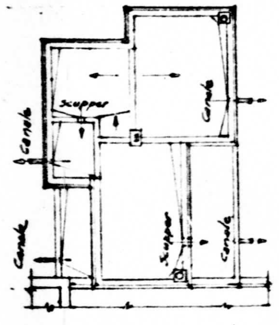


S. E. ELEV.



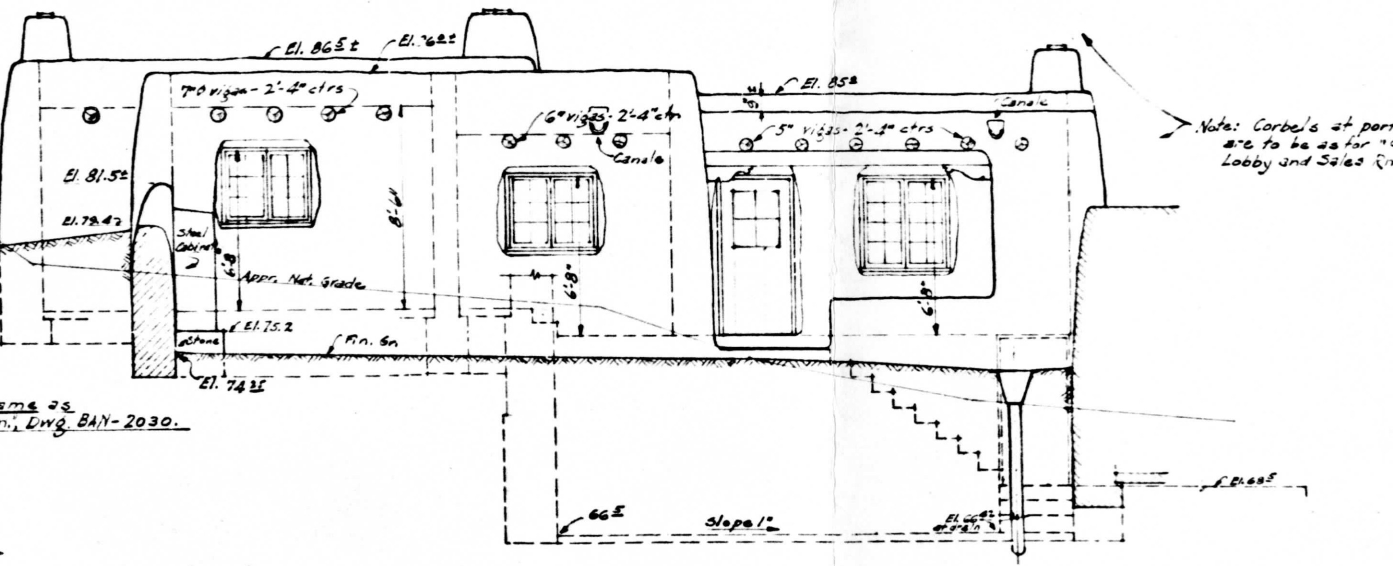
N.E. ELEV.

Note: Canales are to be same as shown for "Lobby and Sales Rm.", Dwg. BAN-2030.



ROOF PLAN 1/16" = 1'-0"

Note: Vigas are not shown.



Note: Corbels at portal and porch are to be as for "Corbel A" on Lobby and Sales Rm. Dwg., BAN-2030.

N.W. ELEV. Scale: 1/4" = 1'-0"

Sheet 2, revised. Jan 18, 1938.
Destroy earlier print.

Job No 53, Class 110, Camp NM-1N, 9th Per.

Drawn by	
Traced by	RWA
Checked	Arch. LLS / Fr. J.P.

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
REG III SANTA FE, N. M.

Name and location of project
OPERATOR'S RESIDENCE ~ UNIT Nº 4 ~ OPERATOR'S DEVELOPMENT
Name of park or monument
BANDELIER NATIONAL MONUMENT

Nov 8, 1937

Prepared by Branch of Plans & Design		12-16-37
Recommended	Frank Pinkley	11/10/37
Approved		3/15/37

Drawing No.
NM
BAN-2032
Sheet 2 of 4 Sheets

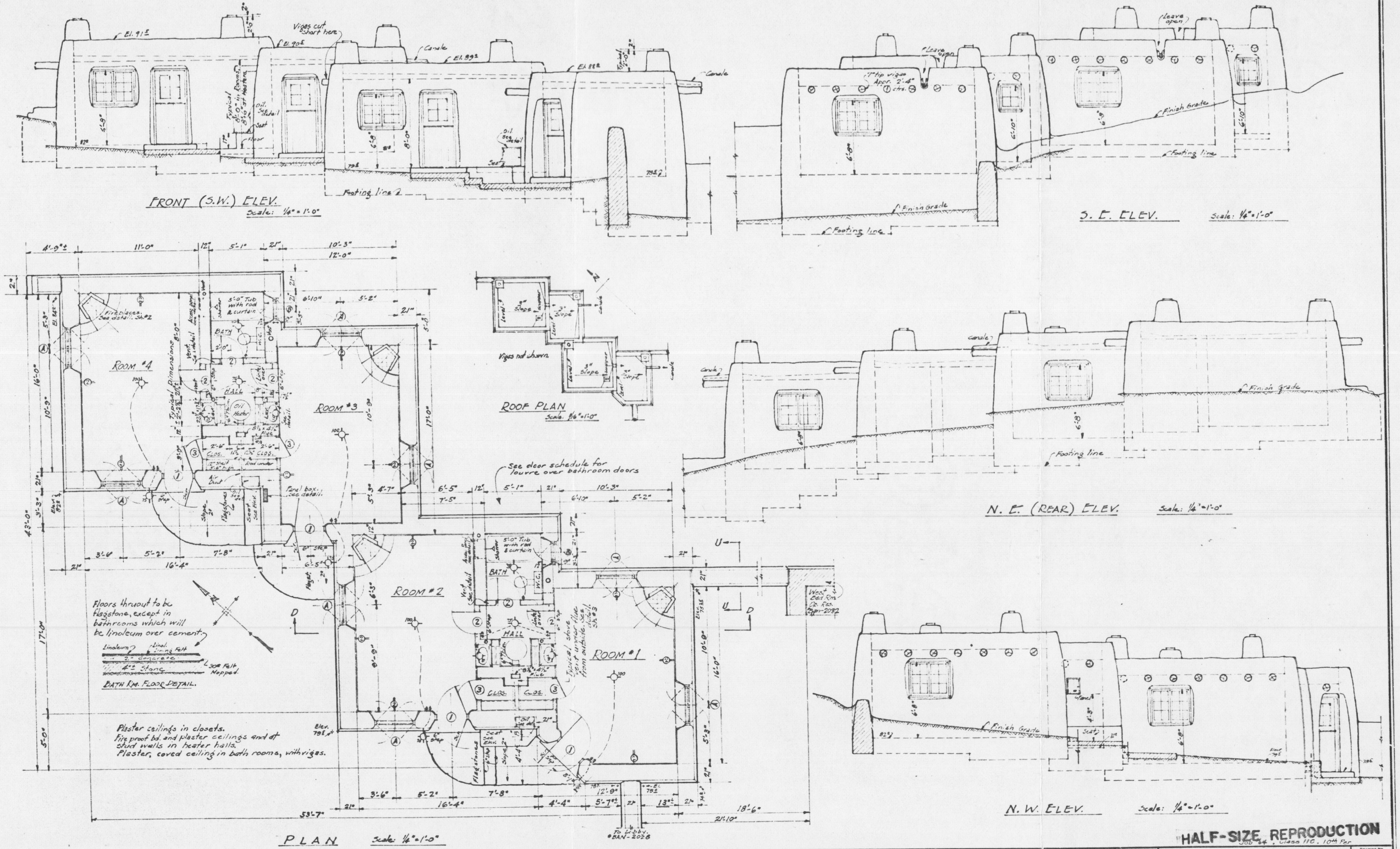
#18

DESIGNED BY BENNETT
DATE FEB. 9, 1938

REVIEWED
1 C.A.R. PLANS & DESIGN J.E.B.
2 J.S.C. ENGINEERING John S. Cross 4/1/38
3 FORESTRY
HISTORY
RESEARCH & EDUCATION
SANITATION
PLANNING & STATE CO-OP.
RECREATIONAL W. A. Sagy

CLEARED
E. Gonnon
ACT'G. REGIONAL DIRECTOR

DRAWN BY RWA
TRACED BY RWA
CHECKED



FRONT (S.W.) ELEV. Scale: 1/4" = 1'-0"

S. E. ELEV. Scale: 1/4" = 1'-0"

ROOF PLAN Scale: 1/16" = 1'-0"

See door schedule for louvre over bathroom doors

N. E. (REAR) ELEV. Scale: 1/4" = 1'-0"

Floors thruout to be flagstone, except in bathrooms which will be linoleum over cement.

Linoleum
Linol. Lining Felt
2" Concrete
4"± Stone
30# Felt Mopped.

BATH RM. FLOOR DETAIL.

Plaster ceilings in closets.
Fire proof bd. and plaster ceilings and at stud walls in heater halls.
Plaster, coved ceiling in bath rooms, with vigas.

N. W. ELEV. Scale: 1/4" = 1'-0"

PLAN Scale: 1/4" = 1'-0"

HALF-SIZE REPRODUCTION
Job 64, Class IIC, 10th Per

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
PREPARED BY REGIONAL OFFICE

NAME AND LOCATION OF PROJECT
CABIN "A" ~ UNIT Nº 10 ~ OPERATOR'S DEVELOPMENT
NAME OF PARK OR MONUMENT
BANDELIER NATIONAL MONUMENT

REGION III

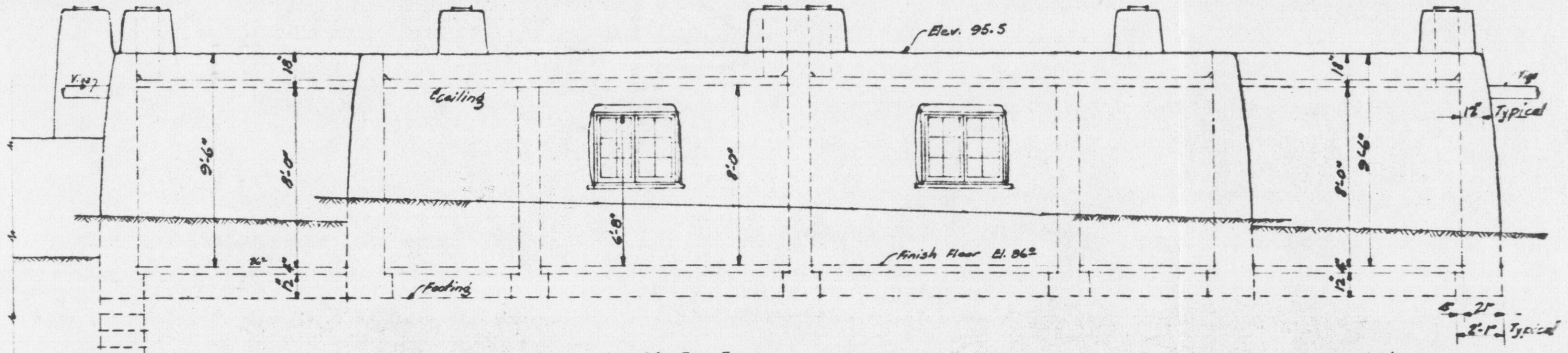
RECOMMENDED
CONCURRED Frank Pinkley 3/23/38
APPROVED A. E. Demaray Acting 5/10/38

DRAWING NO. NM BAN-2033
SHEET 1 OF 3 SHEETS

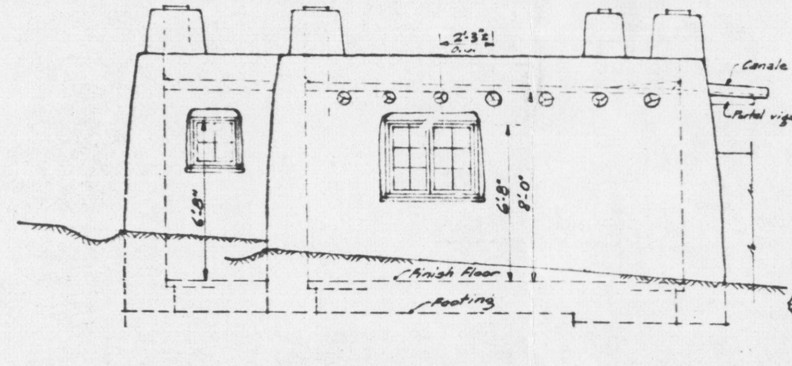
U. S. GOVERNMENT PRINTING OFFICE

#19

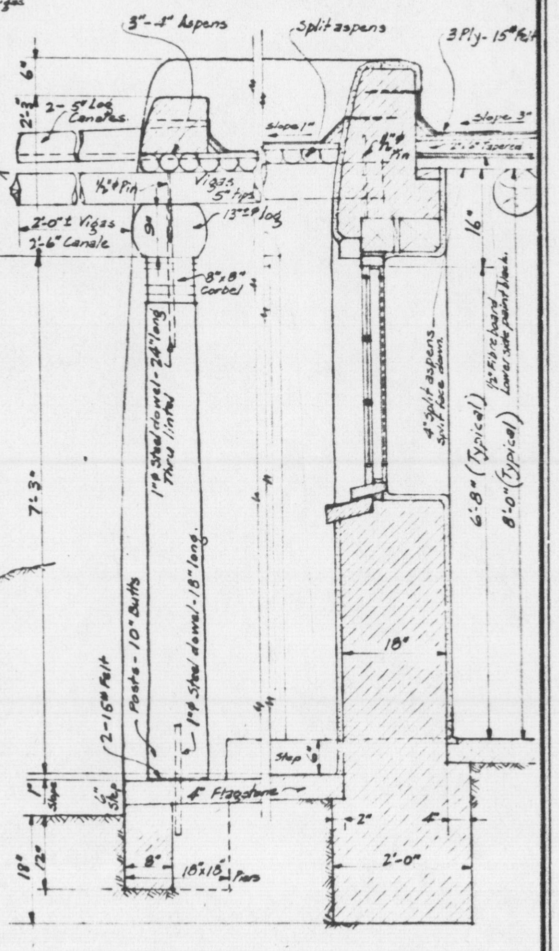
TRIM LINE



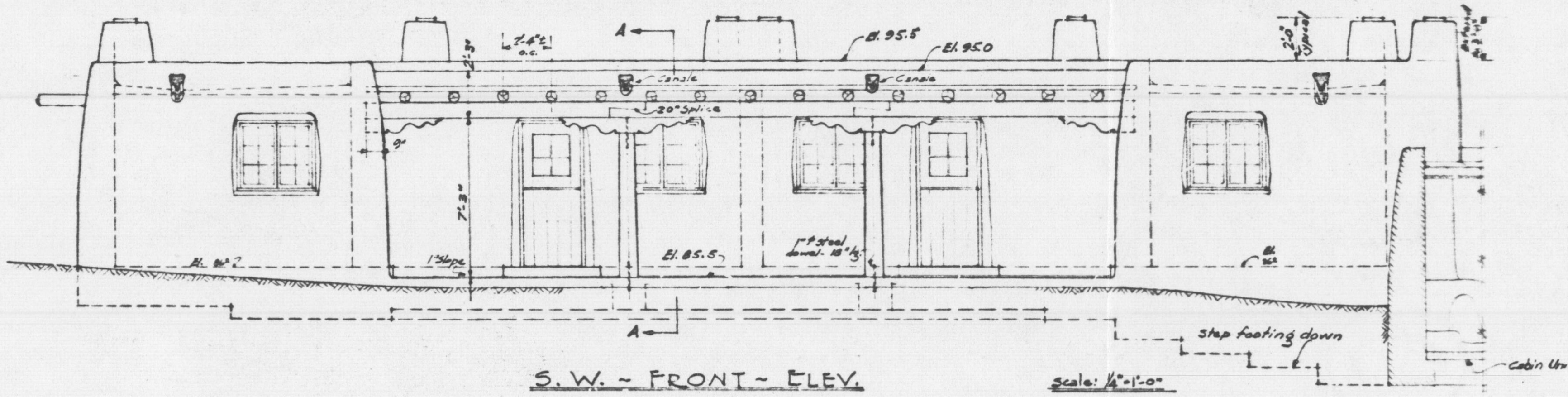
N.E. ELEV. Scale: 1/8" = 1'-0"



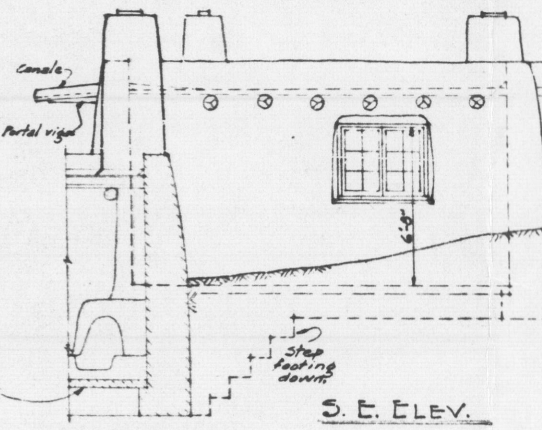
N.W. ELEV.



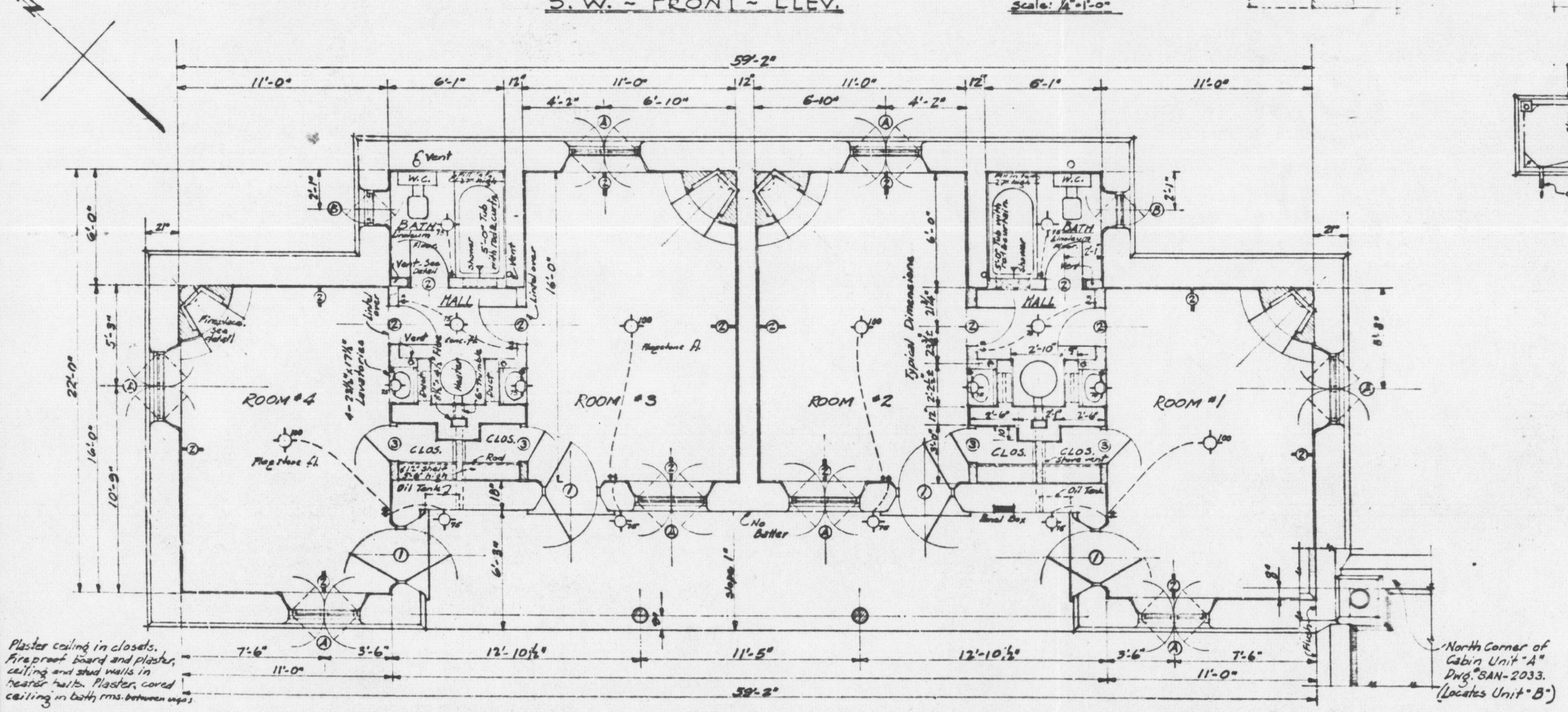
SECTION "A-A" Scale: 3/8" = 1'-0"



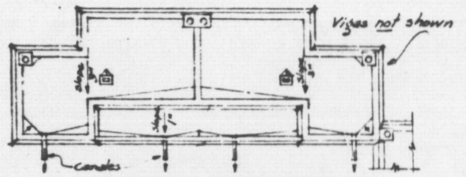
S.W. ~ FRONT ~ ELEV. Scale: 1/8" = 1'-0"



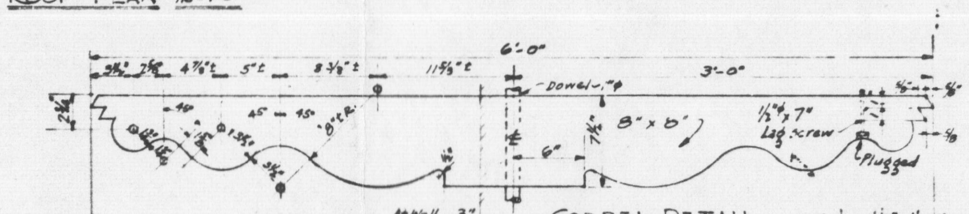
S.E. ELEV.



Plaster ceiling in closets. Fireproof board and plaster, ceiling and stud walls in heater halls. Plaster, cored ceiling in bath rms. between vigas

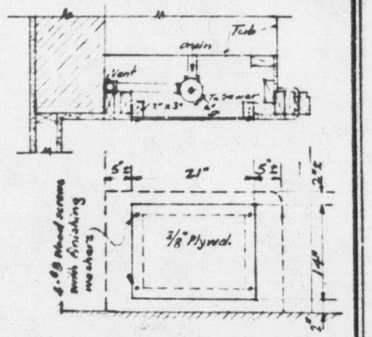


ROOF PLAN 1/16" = 1'-0"



CORBEL DETAIL Scale: 1 1/2" = 1'-0"

NOTE:
The following details as shown on Dwg. No. BAN-2033, for Cabin Unit "A", will be identical for this job, Cabin Group "B":
Doors, Door Frames, Windows, Window Frames, Typical Base, Oil Tank Recess, Plumbing Diagram (similar), Air Duct to Heater, Lavatory and Heat Ducts, Fireplace and Grills, Bath Room Vent, Canale, Typical Wall Section, Bath Room Floor.



ACCESS PANEL TO BATH TUB Scale 3/4" = 1'-0"

HALF-SIZE REPRODUCTION

Job No , Class 110, 11th Par.

CLEARED
RECREATIONAL PLANNING & ST. COOR. W. L. Hager
M. McColm ACTG. REGIONAL DIRECTOR

REVIEWED
3 FORESTRY
1 C.A.R. PLANS & DESIGN
2 J.B.H. ENGINEERING W. P. Fisher

DESIGNED BY Boovett
DATE May 25, 1938
DRAWN BY RWA
TRACED BY RWA
CHECKED

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN
PREPARED BY REGIONAL OFFICE

NAME AND LOCATION OF PROJECT
CABIN "B" ~ UNIT No. 11 ~ OPERATOR'S DEVELOPMENT
NAME OF PARK OR MONUMENT
BANDELIER NATIONAL MONUMENT

REGION III
RECOMMENDED Dudley C. Bayliss 6-23-38
CONCURRED June 9, 1938
APPROVED ACTING 6-28-38

DRAWING NO. NM BAN-2041
SHEET 1 OF 1 SHEETS

TRIM LINE

#20

TRIM LINE

REGION III

DESIGNED BY Bauer DATE 5-27-38

C.A.R. PLANT DESIGN

J.B.H. ENGINEERING

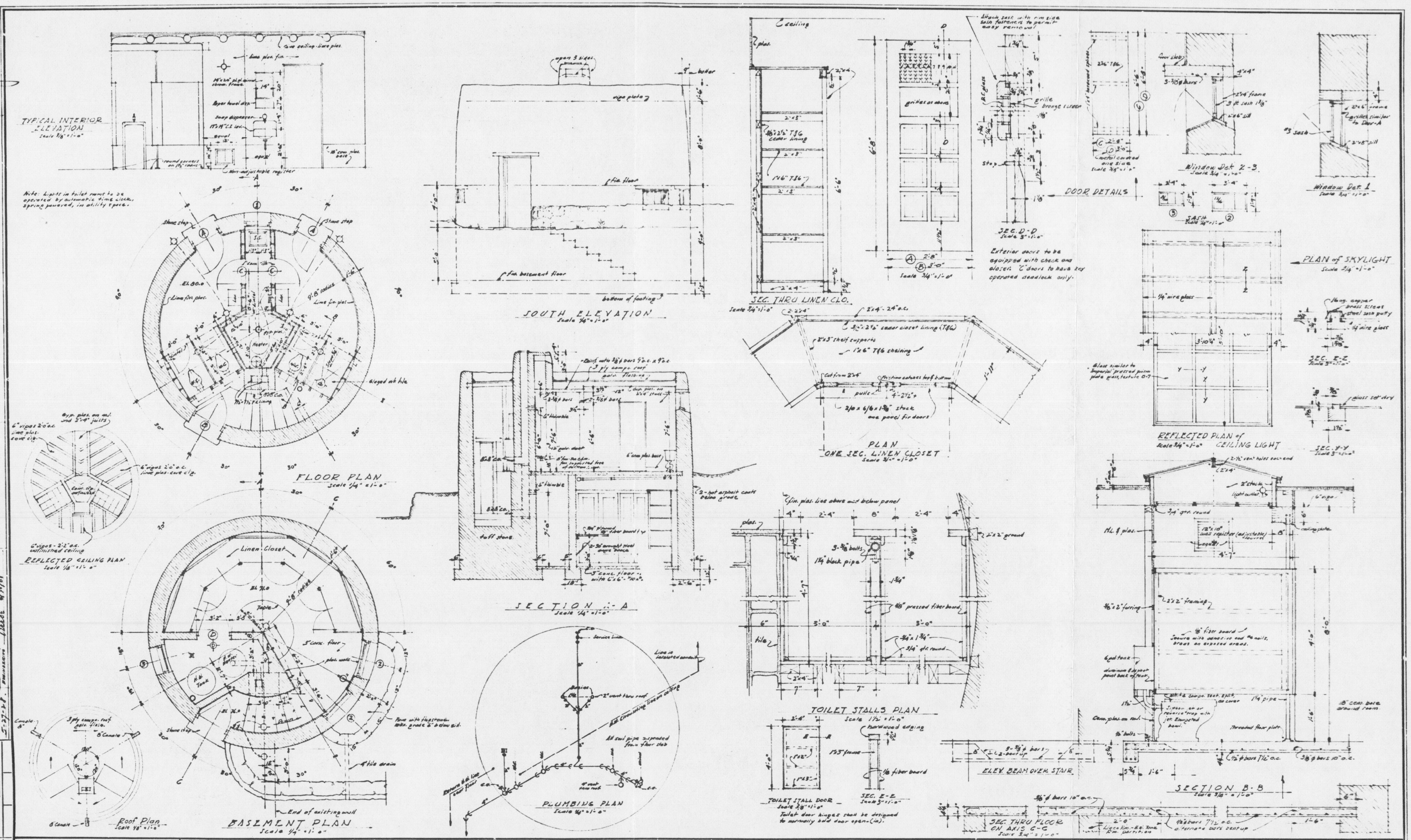
REVIEWED

SANITATION

W. G. Ager

CLEARED

W. M. McColm ACTING REGIONAL DIRECTOR


TYPICAL INTERIOR ELEVATION Scale 3/8" = 1'-0"
Note: Lights in toilet rooms to be operated by automatic time clock, spring powered, in utility space.
SOUTH ELEVATION Scale 1/4" = 1'-0"
SEC. THRU LINEN CLO. Scale 3/4" = 1'-0"
Scale 3/4" = 1'-0"
SEC. D-D Scale 3" = 1'-0"
Exterior doors to be equipped with check and closer. "C" doors to have key operated deadlock only.
DOOR DETAILS
Window Det. 2-3 Scale 3/4" = 1'-0"
Window Det. 1 Scale 3/4" = 1'-0"
SASH Scale 3/4" = 1'-0"
PLAN of SKYLIGHT Scale 3/4" = 1'-0"
SEC. E-E Scale 3" = 1'-0"
SEC. Y-Y Scale 3" = 1'-0"
REFLECTED PLAN of CEILING LIGHT Scale 3/4" = 1'-0"
Glass similar to Imperial pressed prism plate glass, texture O-7
FLOOR PLAN Scale 1/4" = 1'-0"
REFLECTED CEILING PLAN Scale 1/8" = 1'-0"
SECTION A-A Scale 1/4" = 1'-0"
PLAN ONE SEC. LINEN CLOSET Scale 3/4" = 1'-0"
TOILET STALLS PLAN Scale 1 1/2" = 1'-0"
TOILET STALL DOOR Scale 3/8" = 1'-0"
SEC. Z-Z Scale 3" = 1'-0"
Toilet door hinges shall be designed to normally hold door open-(in).
SEC. THRU FLOOR ON AXIS C-C Scale 3/4" = 1'-0"
ELEV. BEAM OVER STAIR
SECTION B-B Scale 3/4" = 1'-0"
BASEMENT PLAN Scale 1/4" = 1'-0"
PLUMBING PLAN Scale 1/8" = 1'-0"
Roof Plan Scale 1/8" = 1'-0"
Linen Closet
End of existing wall
4" tile drain

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN

NAME AND LOCATION OF PROJECT

COMFORT STATION: UNIT 15 - OPERATORS DEV.

NAME OF PARK OR MONUMENT

BANDELIER NATIONAL MONUMENT

HALF-SIZE REPRODUCTION

RECOMMENDED Dudley C. Bayliss 6-27-38

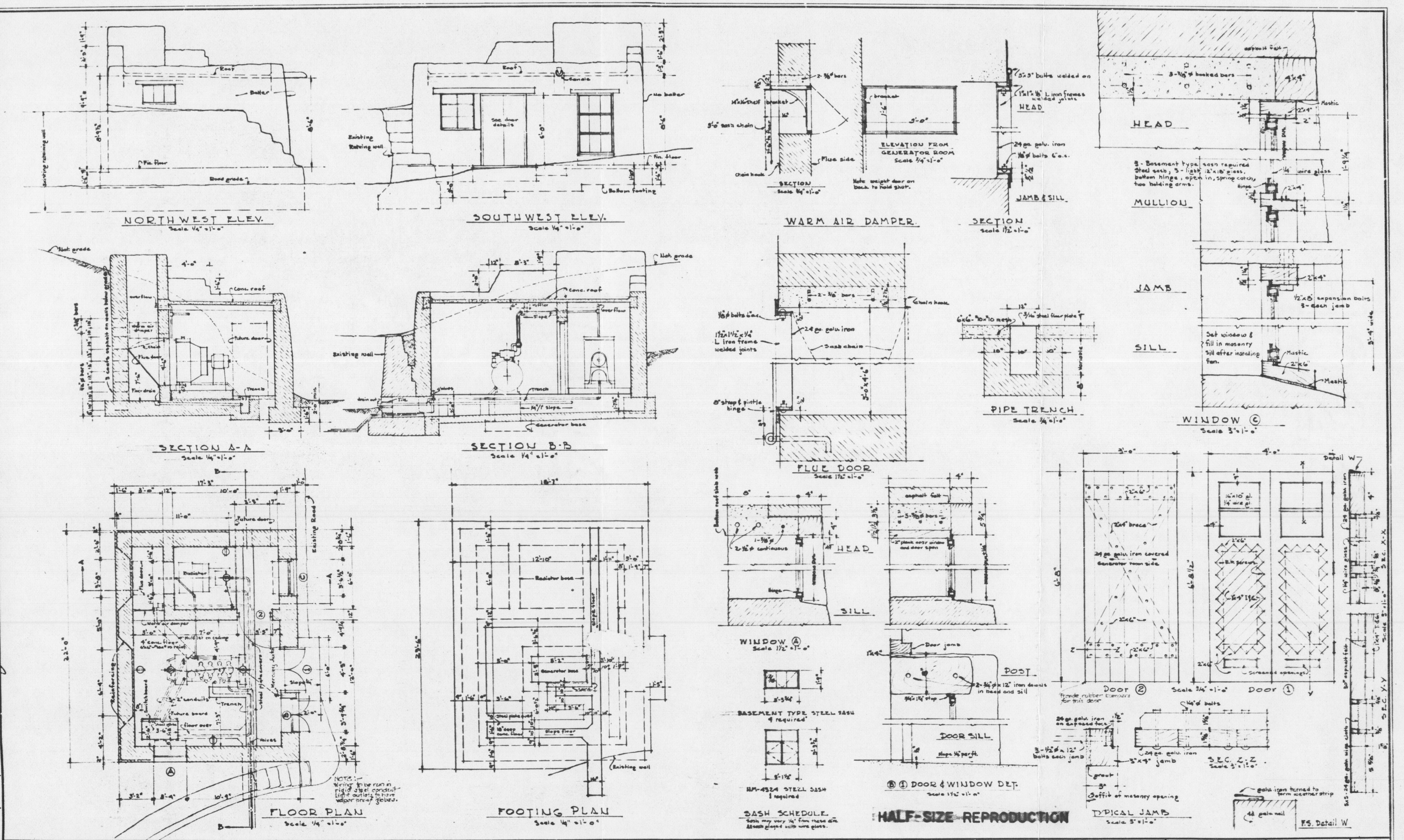
APPROVED

DRAWING NO. NM 315-034

SHEET 1 OF 1 SHEETS

TRIM LINE

#21



CLEARED

M. J. McColm
ACTING REGIONAL DIRECTOR

REVIEWED

Conrad L. Wirth

PLANS & DESIGN JCD 3/31/38

FORESTRY

ENGINEERING John S. Cass 4/6/38

HISTORY

DESIGNED BY DEVULT

DATE 3/21/38

REGION III

DRAWN BY | TRACED BY | CHECKED

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS AND DESIGN

NAME AND LOCATION OF PROJECT

POWER HOUSE

NAME OF PARK OR MONUMENT

BANDELIER NATIONAL MONUMENT

Revised 4/19/38

RECOMMENDED	CHIEF ARCHITECT	DATE 3-31-38
CLEARED FOR ENGINEERING	CHIEF ENGINEER	DATE
CONCURRED	SUPERINTENDENT	DATE 3-22-38
APPROVED	DIRECTOR	DATE 4/7/38

DRAWING NO. N.M. BAN-2040

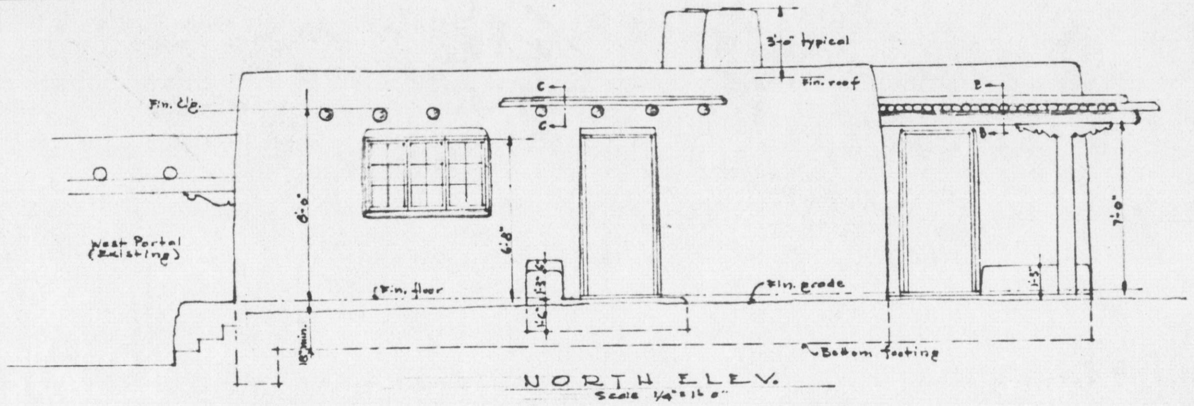
SHEET 1 OF 2 SHEETS

TRIM LINE

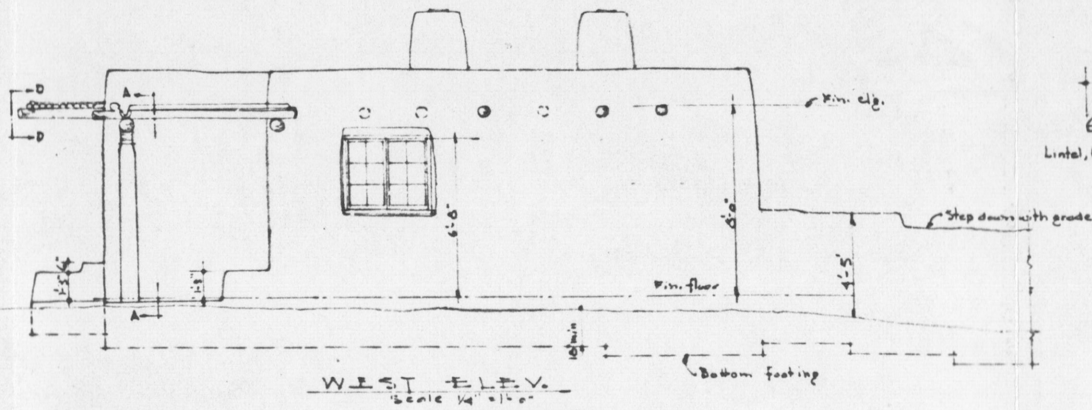
U. S. GOVERNMENT PRINTING OFFICE

#22

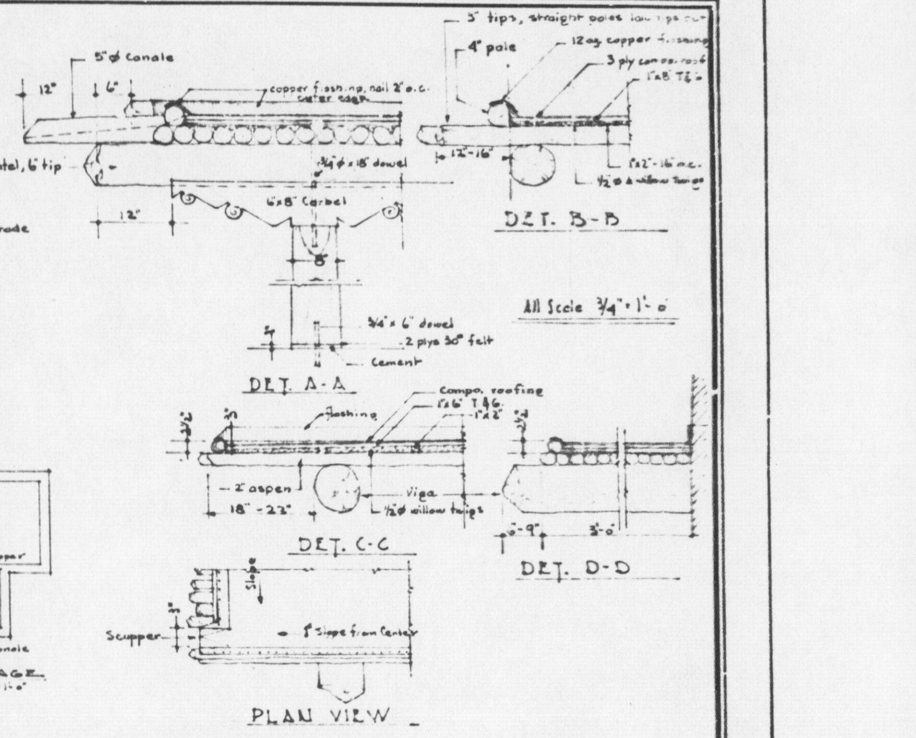
TRIM LINE



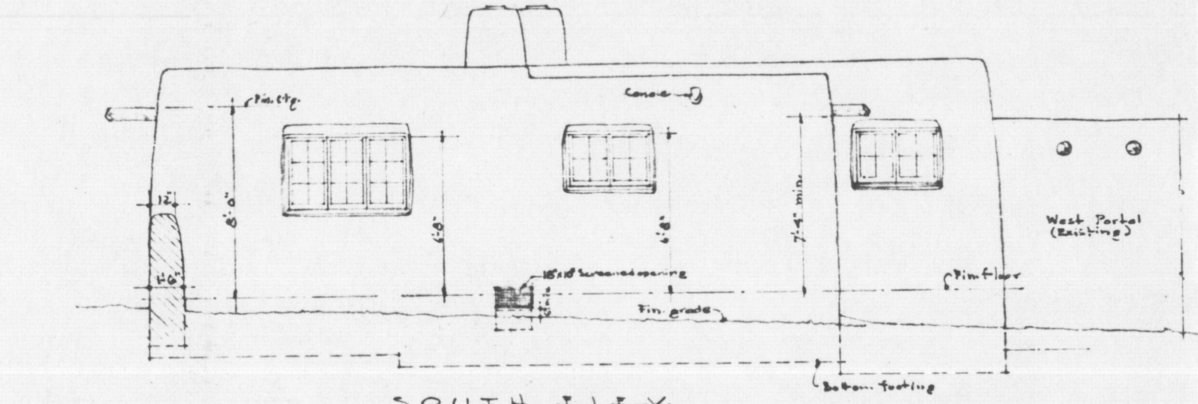
NORTH ELEV.
Scale 1/4" = 1'-0"



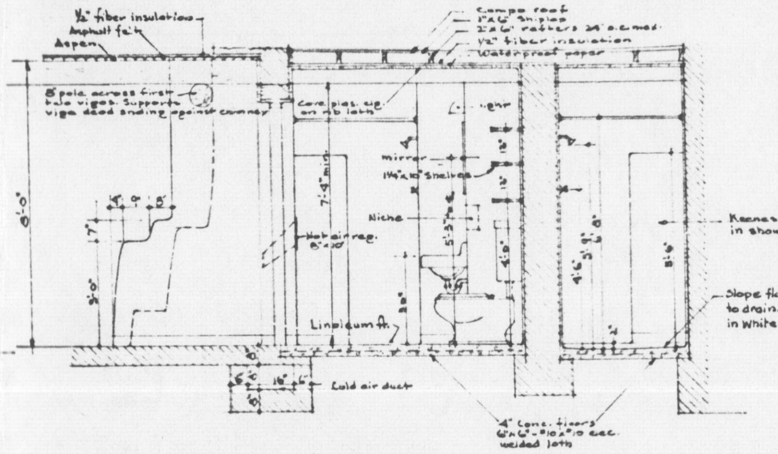
WEST ELEV.
Scale 1/4" = 1'-0"



DET. B-B
DET. A-A
DET. C-C
DET. D-D
PLAN VIEW

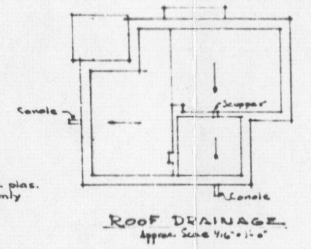


SOUTH ELEV.
Scale 1/4" = 1'-0"

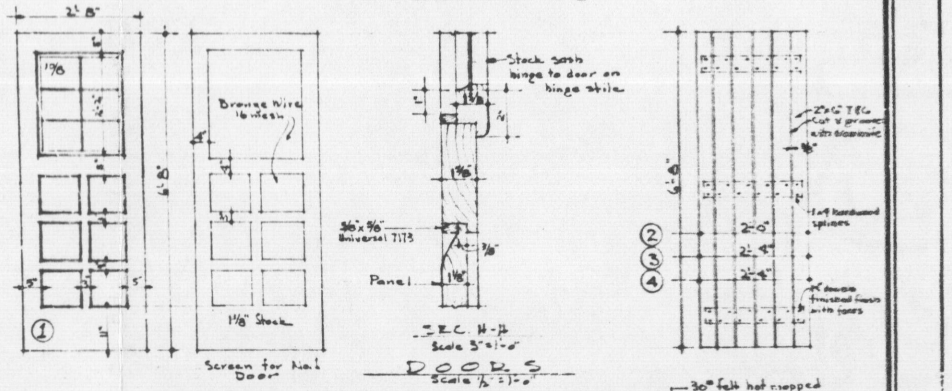


1/2" fiber insulation
Asphalt felt
Aspen
Compo roof
Keenes cem. plas. in shower only
Slope floor 1/4" to drain. Finish in white cement
Linoleum
Cold air duct

SEC. Z-Z THRU BATH
Scale 3/8" = 1'-0"

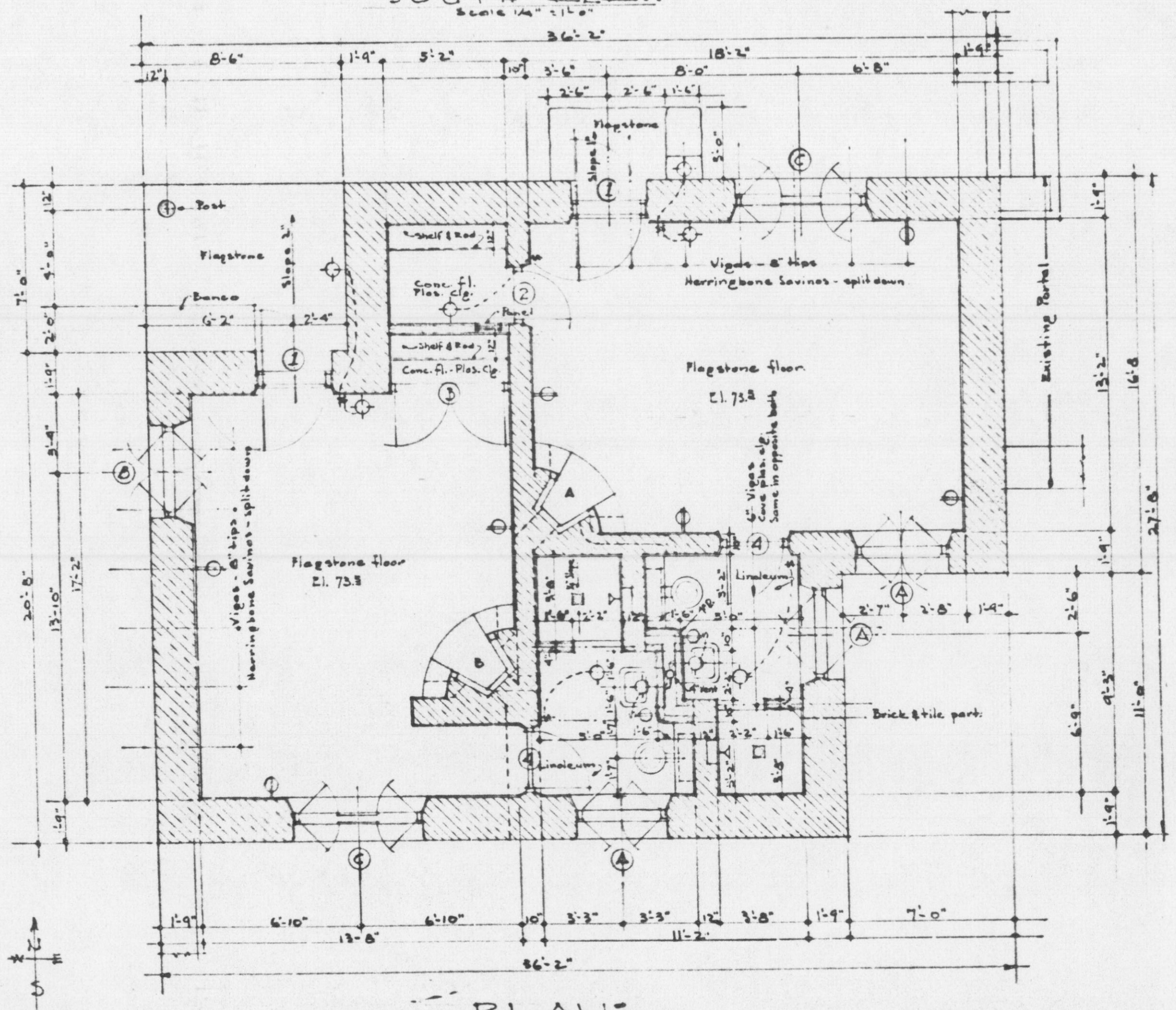


ROOF DRAINAGE
Approx. Scale 1/16" = 1'-0"

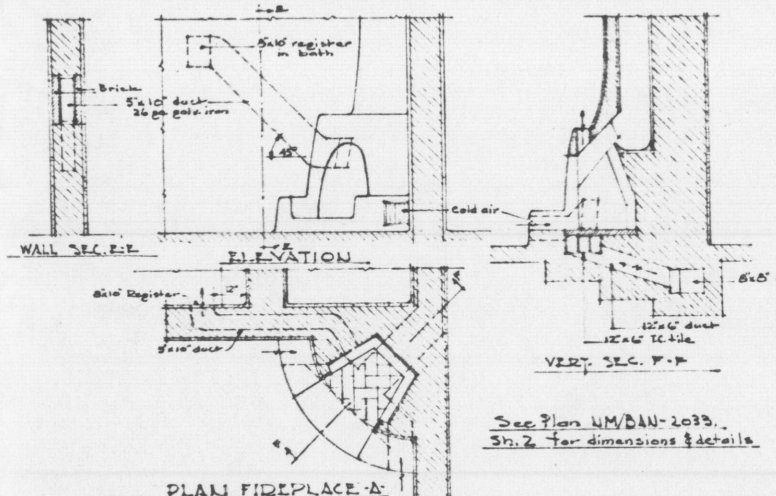


SEC. H-H
Scale 3" = 1'-0"

DOORS
Scale 1/2" = 1'-0"

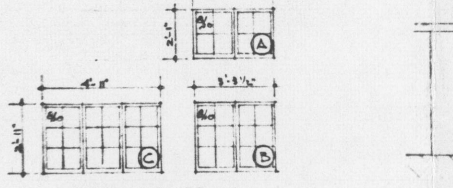


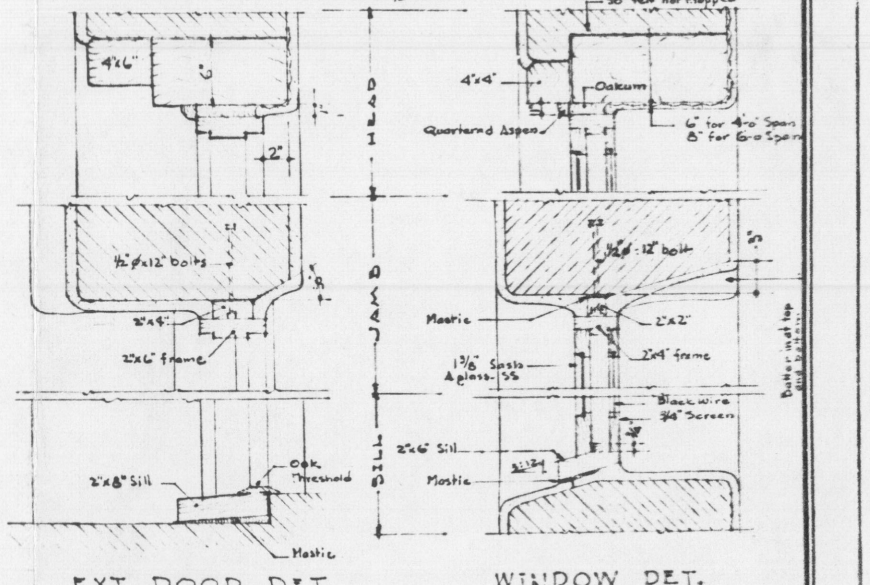
"PLAN"
Scale 1/4" = 1'-0"



WALL SEC. Z-Z
ELEVATION
VERT. SEC. F-F
PLAN FIREPLACE "A"
All Det. Scale 3/8" = 1'-0"

See Plan UM/BAN-2033, Sh. 2 for dimensions & details

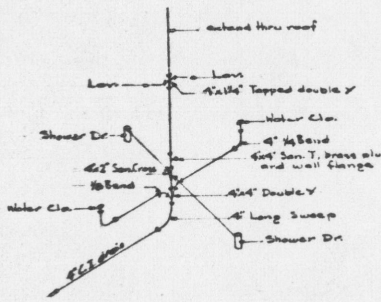

WINDOW SCHEDULE
Scale 1/4" = 1'-0"



EXT. DOOR DET.
Scale 1 1/2" = 1'-0"

WINDOW DET.
Scale 1 1/2" = 1'-0"

Int. doors similar except 2"x4" frames. Both jambs battered, int. oak thresholds except at closets, no sill.



PLUMBING DIAGRAM

HALF-SIZE REPRODUCTION

RECOMMENDED W. G. Carnes Act. Chief of Planning	DATE 11-10-38	UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE BRANCH OF PLANS AND DESIGN PREPARED BY OFFICE	REGION III
CONCURRED Frank Pinkley Superintendent	DATE 10-22-38	CABINS - GROUP "D" NAME OF JOB OPERATOR'S AREA LOCATION BANDELIER NATIONAL MONUMENT NAME OF PARK OR MONUMENT	SHEET 1 OF 1
APPROVED Director	DATE NOV 17 1938		DRAWING NO. UM BAN-2043

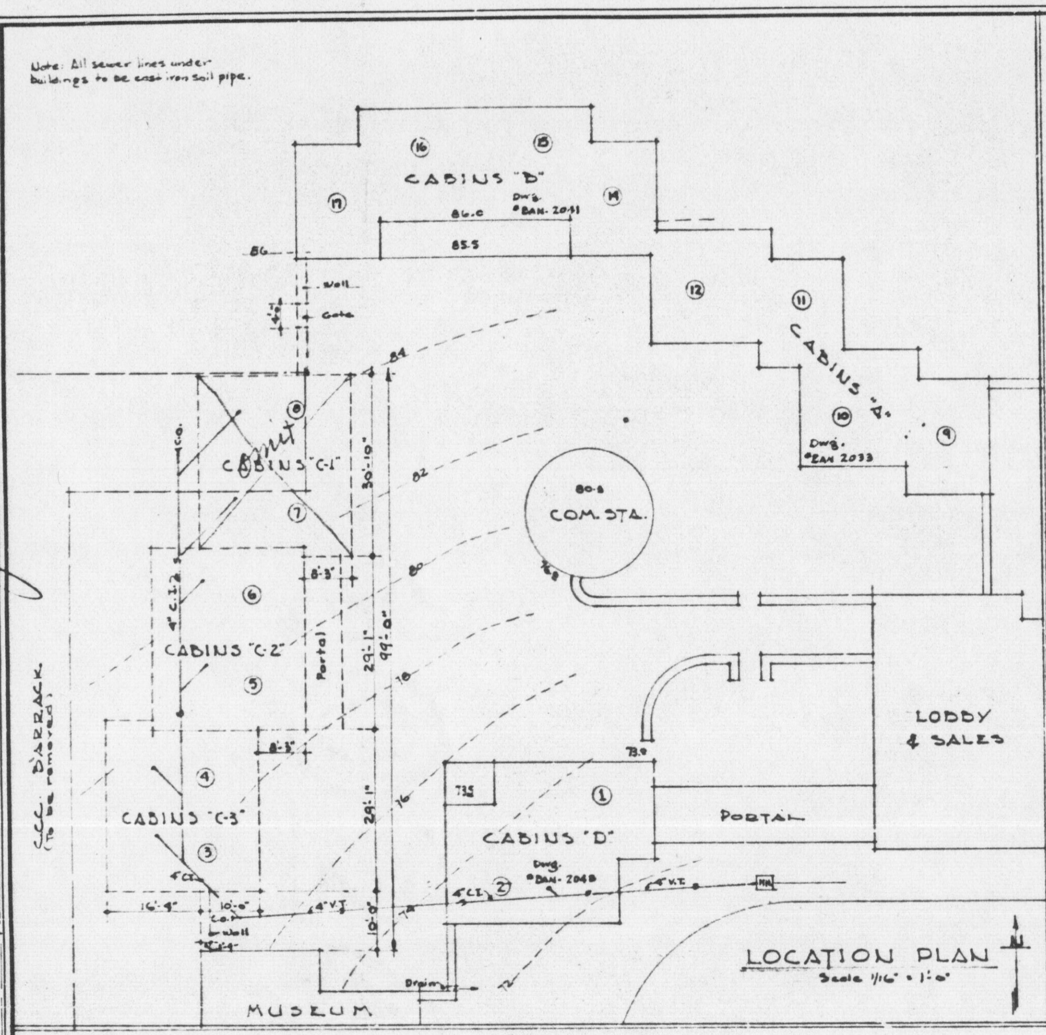
DESIGNED BY Bennett
DATE 10-10-38
PLANS AND DESIGN
ENGINEERING 11/16/38
FORESTRY
HISTORY
REVIEWED
RESEARCH AND EDUCATION
SANITATION
PLANNING AND STATE COOPERATION 11/17
RECREATIONAL
CLEARED
Act. Regional Director

BASIC DATA

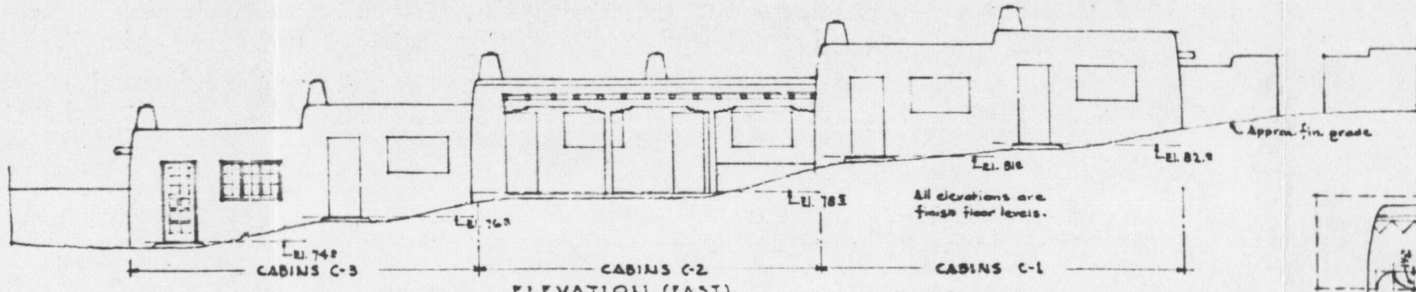
TRIM LINE

#23

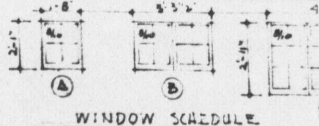
Note: All sewer lines under buildings to be cast iron soil pipe.



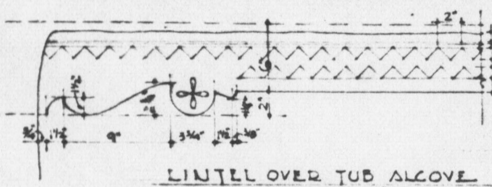
LOCATION PLAN
Scale 1/16" = 1'-0"



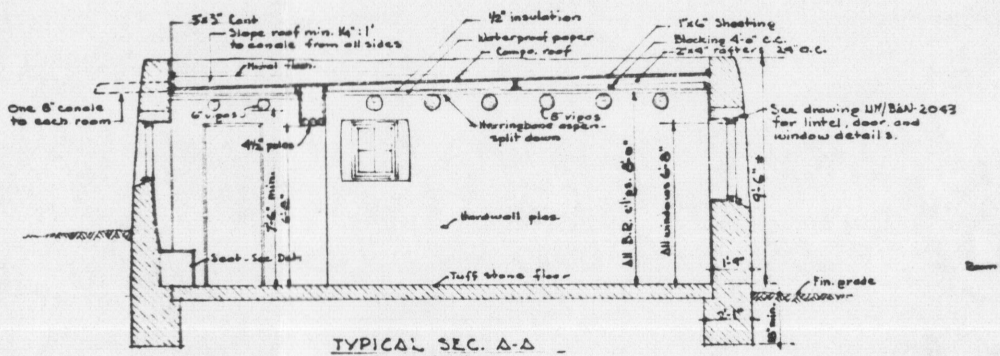
ELEVATION (EAST)
Scale 1/8" = 1'-0"



WINDOW SCHEDULE
Note: Door to be same as shown on plan NM/BAN-2043

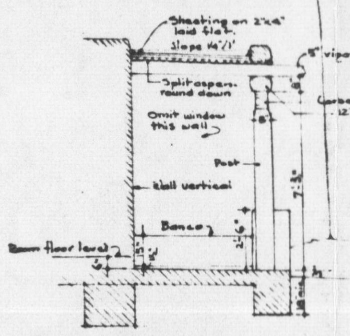


LINTEL OVER TUB ALCOVE
Scale 1 1/2" = 1'-0"

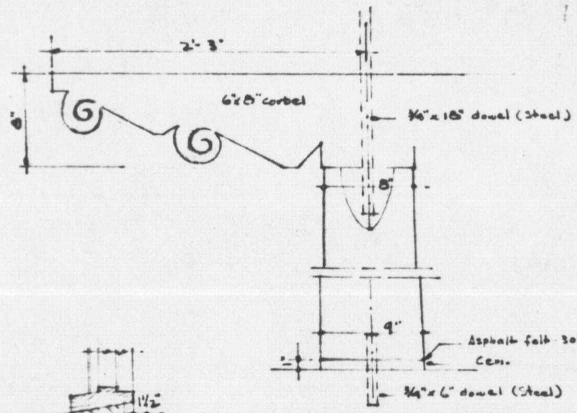


Slope roof min. 1/4" = 1' to canale from all sides
1/2" insulation
Waterproof paper
Compo. roof
1"x6" Sheathing
Blocking
2"x6" rafters 24" O.C.
One 6" canale to each room
Herringbone aspen - split down
6" vigas
See drawing NM/BAN-2043 for lintel, door and window details.
Hardwall plas.
Tuff stone floor
Fin. grade

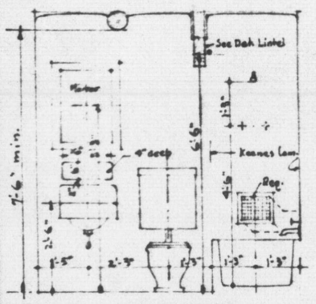
TYPICAL SEC. A-A
Scale 1/4" = 1'-0"



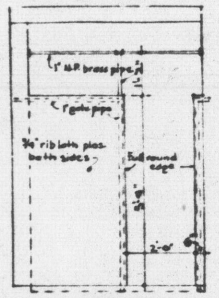
SEC. B-B
Scale 1/4" = 1'-0"



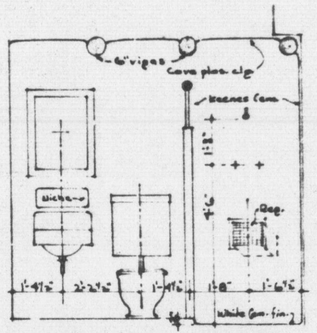
CORBEL DET.
Scale 1 1/2" = 1'-0"



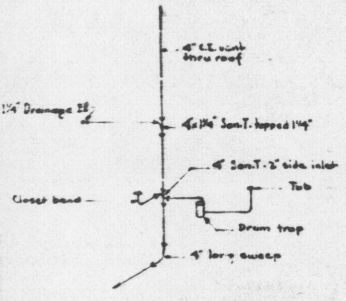
ELEV. of BATH WITH TUB



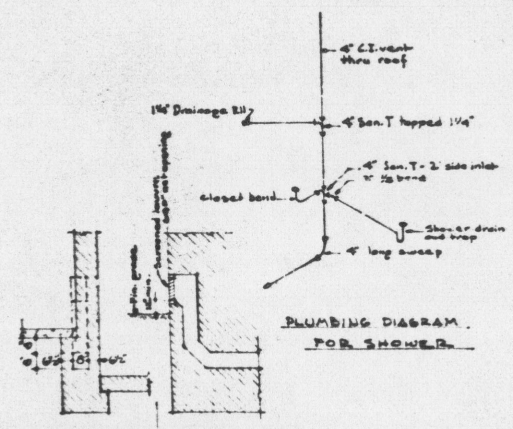
SHOWER PART.
Scale 3/8" = 1'-0"



ELEV. of BATH WITH SHOWER

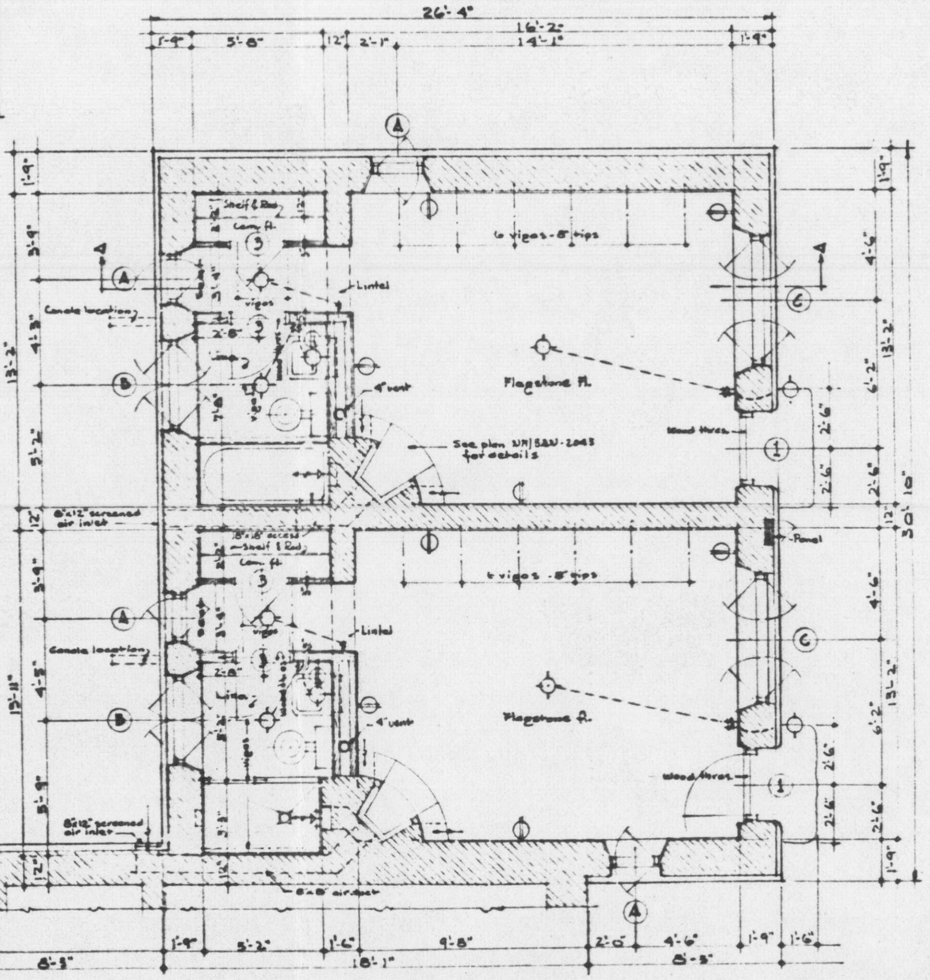


PLUMBING DIAGRAM FOR TUB

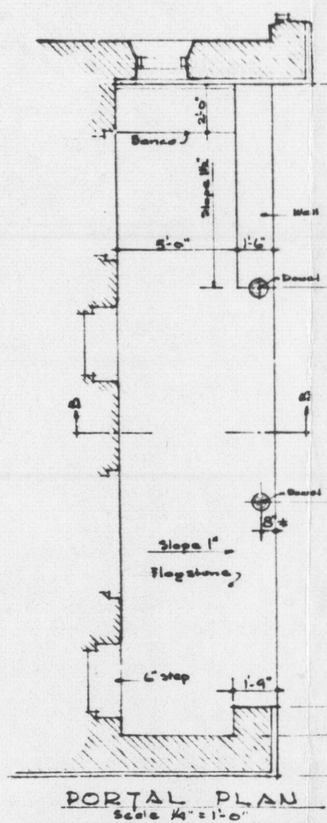


PLUMBING DIAGRAM FOR SHOWER

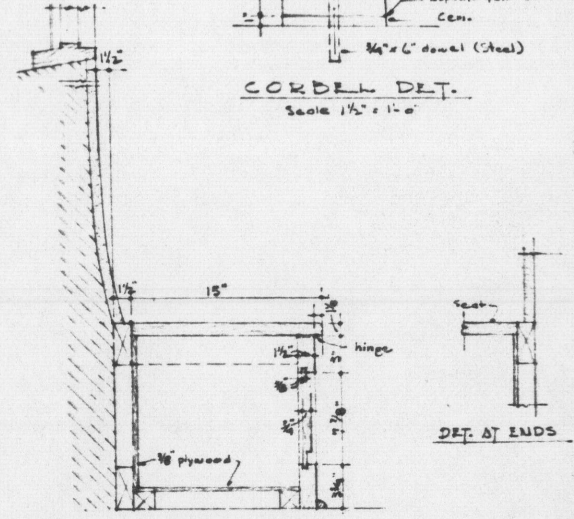
SECTIONS THRU DUCT
Scale 1/4" = 1'-0"



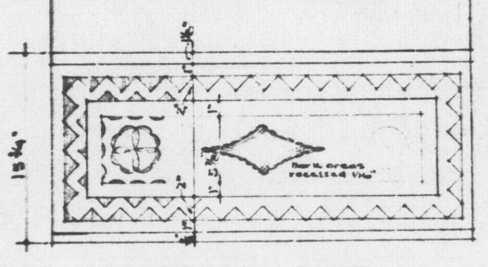
PLAN CABIN "C-1"
Scale 1/4" = 1'-0"
Note: Cabins C-2 and C-3 same as C-1 in plan.



PORTAL PLAN
Scale 1/4" = 1'-0"
Note: Portal on Cabin C-2 only



SECTION



WINDOW SEAT
All details scale 1 1/2" = 1'-0"

SCALE

HALF-SIZE REPRODUCTION

BASIC DATA

RECOMMENDED W. G. Carnes Actg. CHIEF OF PLANNING	DATE 12/17/38
CONCURRED Frank Pinkley SUPERINTENDENT	DATE 11-25-38
APPROVED A. E. Demaray Acting DIRECTOR	DATE 12-20-38

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH of PLANS AND DESIGN
PREPARED BY
REGIONAL OFFICE
OFFICE

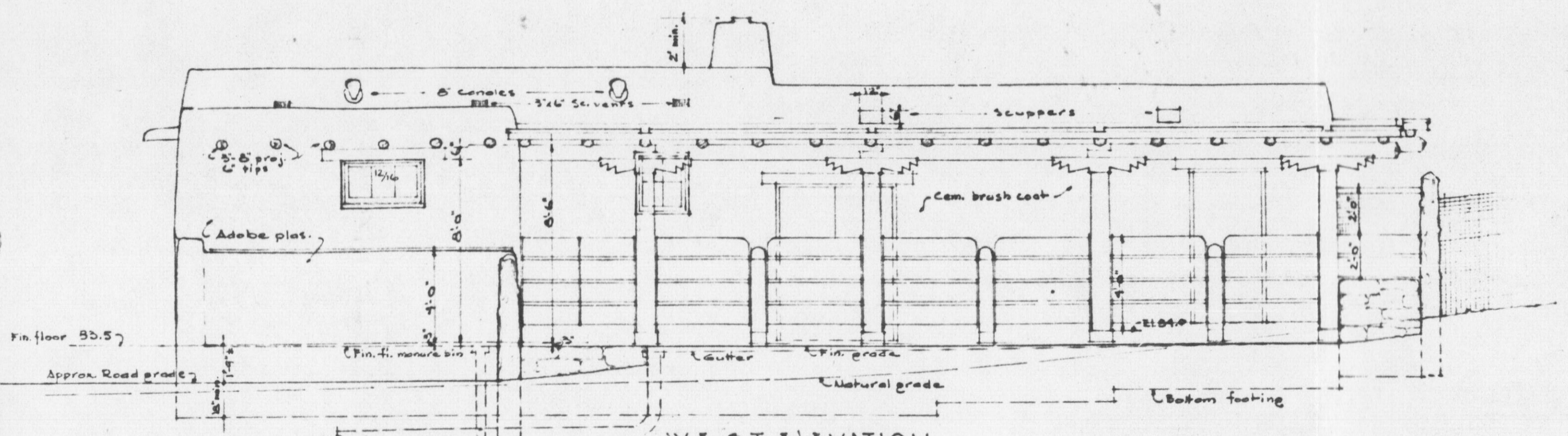
CABINS - GROUP "C"
NAME OF JOB
OPERATOR'S DEV.
LOCATION
BANDELIER NATIONAL MONUMENT
NAME OF PARK OR MONUMENT

REGION III
SHEET 1 OF 1
DRAWING NO. NM / BAN-2042

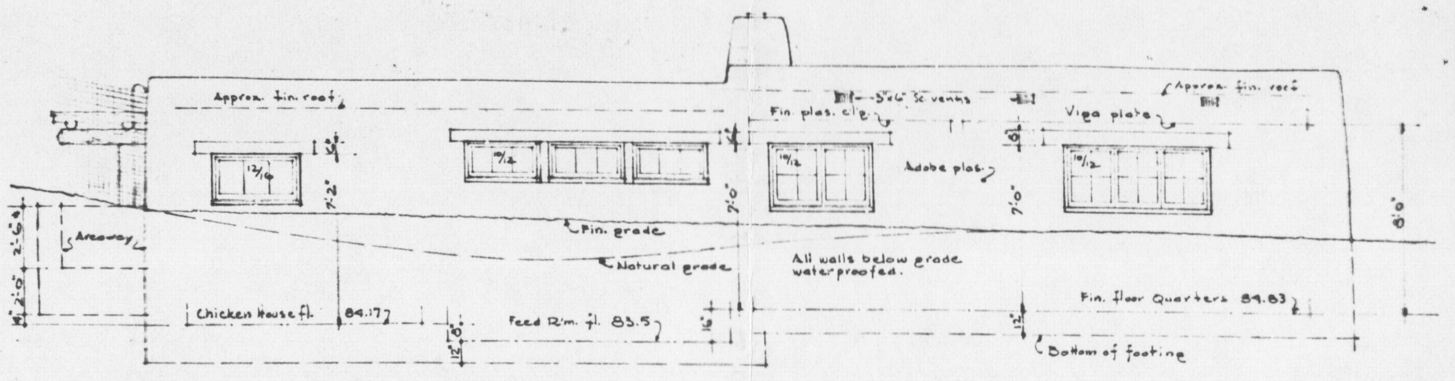
DESIGNED BY Bennett 15-38
PLANS AND DESIGN A.R. / J.B.H. P. Sutton 12/17/38
ENGINEERING John S. Cross 12/19/38
FORESTRY
HISTORY
REVIEWED
RESEARCH AND EDUCATION
SANITATION
RECREATIONAL PLANNING AND STATE COOPERATION 12/20/38
CLEARED M. R. Tillotson ACTG. REGIONAL DIRECTOR

TRIM LINE

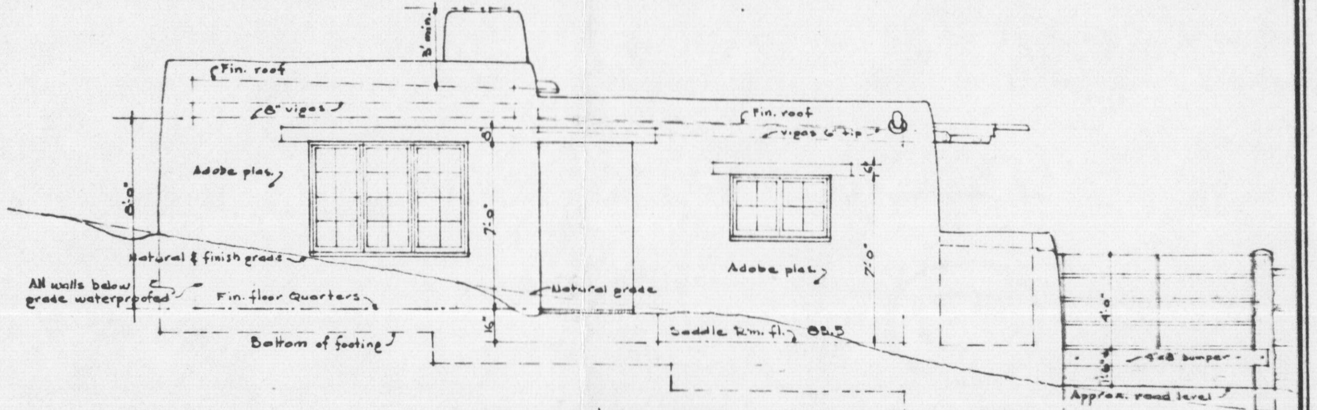
#24 C4D



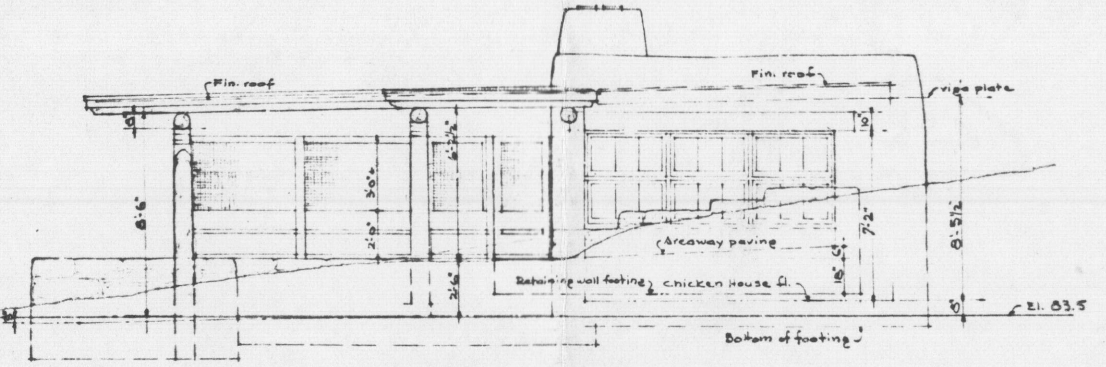
WEST ELEVATION
Scale 1/4" = 1'-0"



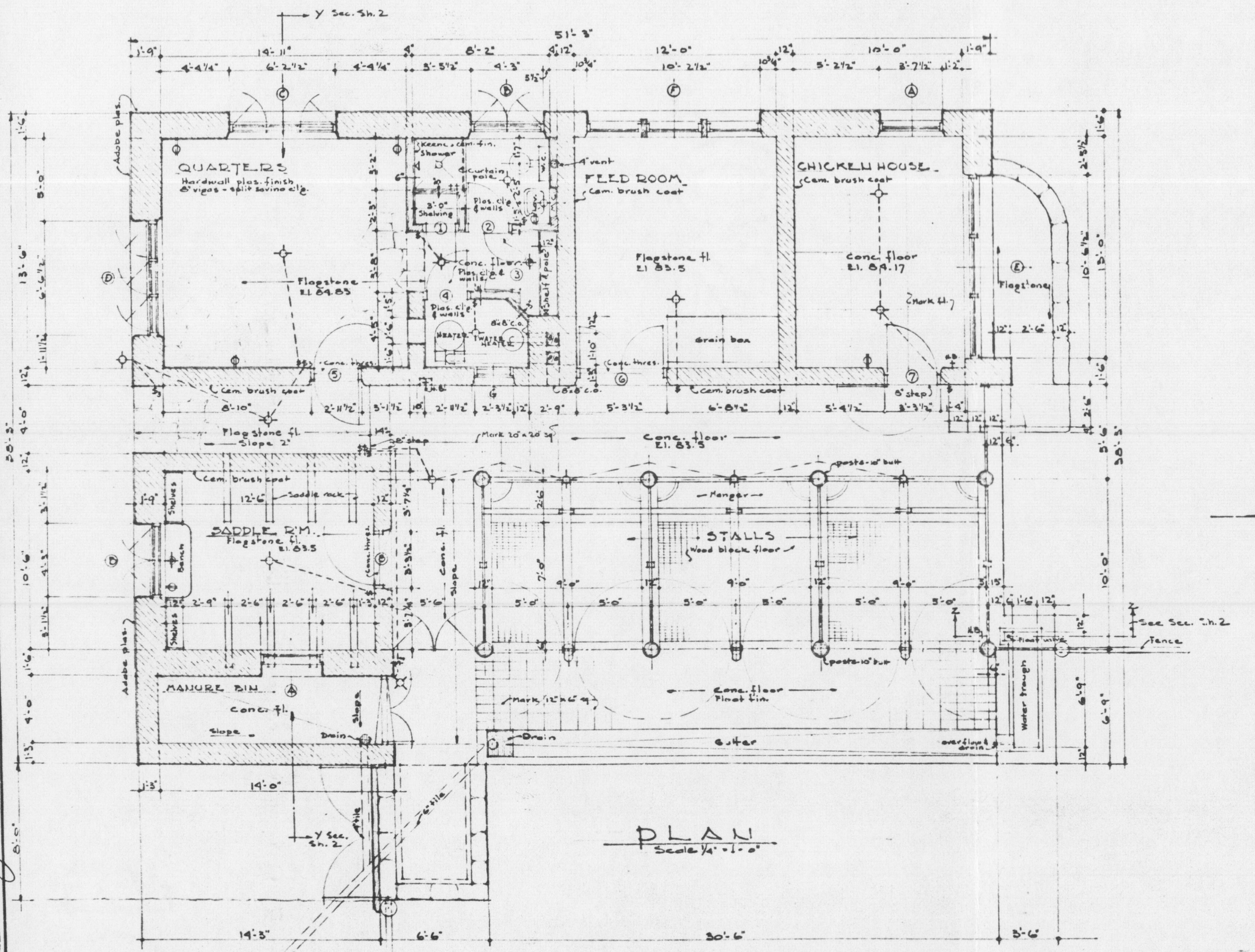
EAST ELEVATION
Scale 1/4" = 1'-0"



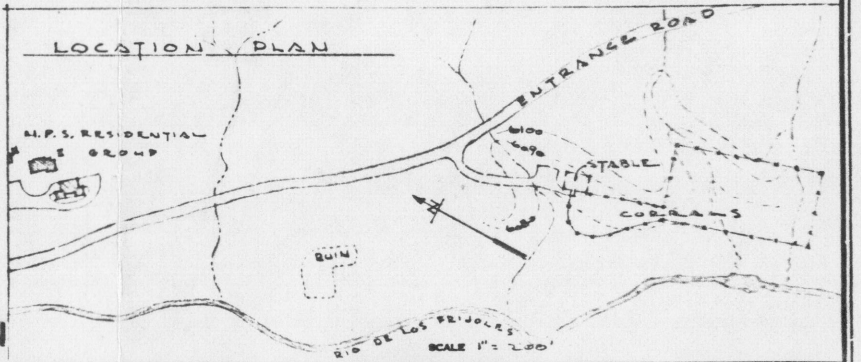
NORTH ELEVATION
Scale 1/4" = 1'-0"



SOUTH ELEVATION
Scale 1/4" = 1'-0"



PLAN
Scale 1/4" = 1'-0"



HALF-SIZE REPRODUCTION

BASIC DATA

DESIGNED BY Dennett
DATE 5-2-39
PLANS AND DESIGN TCV D. Sutton 6/15/39
ENGINEERING John S. Cross 6/7/39
REVIEWED
FORESTRY
HISTORY
RESEARCH AND EDUCATION
SANITATION
RECREATIONAL PLANNING AND STATE COOPERATION W. Hayes 6/21/39
CLEARED Herbert A. Maier 6/1 REGIONAL DIRECTOR

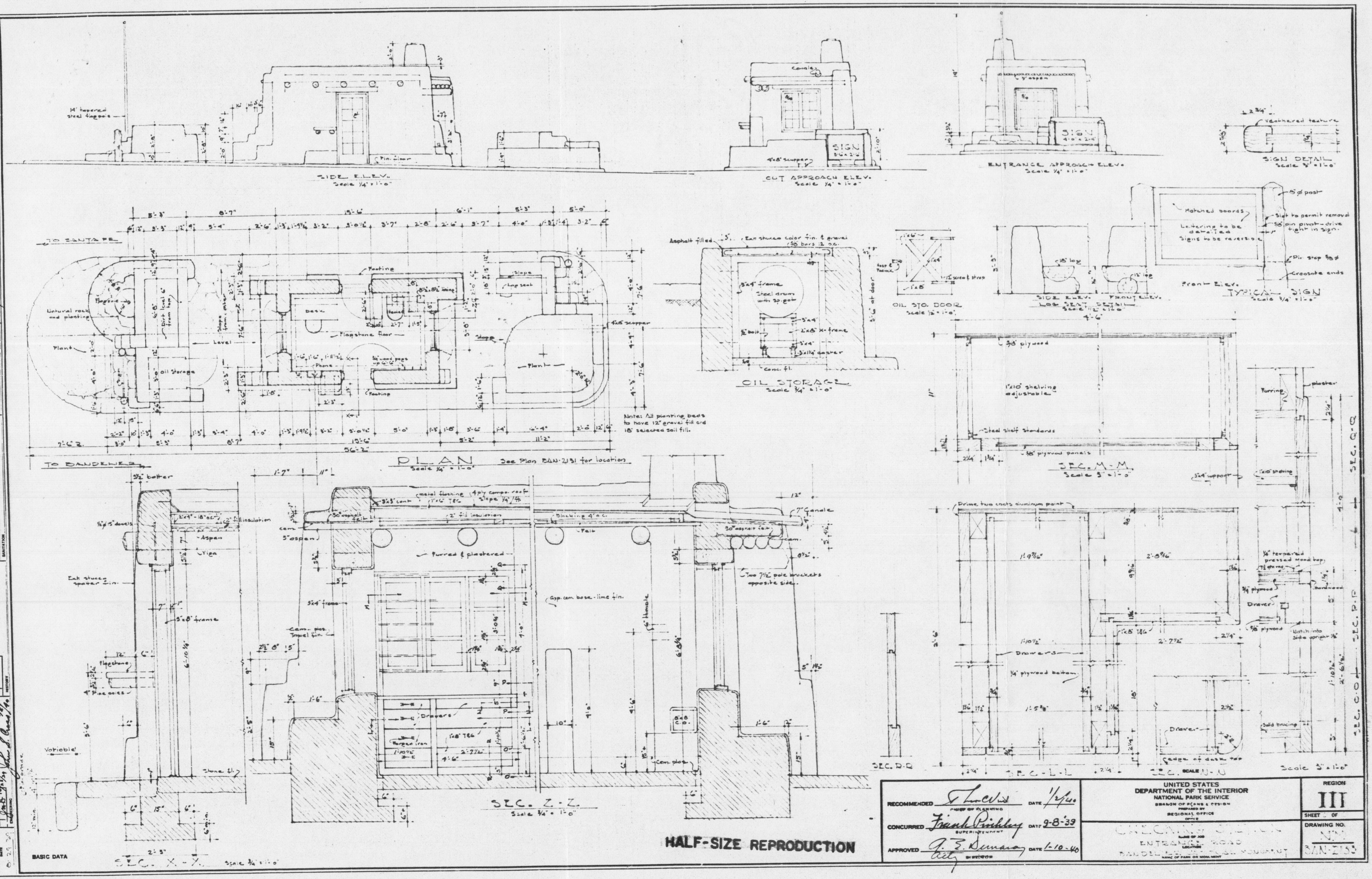
RECOMMENDED Albert H. Good DATE 6/15/39
ACTING CHIEF OF PLANNING
CONCURRED Frank Pinkley DATE 5-8-39
SUPERINTENDENT
APPROVED A. E. Demaray DATE 6-24-39
Acting DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS & DESIGN
PREPARED BY
REGIONAL OFFICE
OFFICE

STABLE
NAME OF JOB
OPERATOR'S DEVELOPMENT
LOCATION
BANDELIER NATIONAL MON.
NAME OF PARK OR MONUMENT

REGION
III
SHEET 1 OF 4
DRAWING NO.
NM
BAN-2127-A

#25



HALF-SIZE REPRODUCTION

BASIC DATA

DESIGNED BY	PLANS AND DESIGN	REVIEWED	CLEARED
DATE 6-29-39	ENGINEERING	FORESTRY HISTORY RESEARCH AND EDUCATION SANITATION RECREATIONAL PLANNING AND STATE COOPERATION	ACT. REGIONAL DIRECTOR

RECOMMENDED CHIEF OF PLANNING	DATE 1/2/40
CONCURRED Frank Pinkley SUPERINTENDENT	DATE 9-8-39
APPROVED Acty DIRECTOR	DATE 1-10-40

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS & DESIGN
PREPARED BY
REGIONAL OFFICE
OFFICE

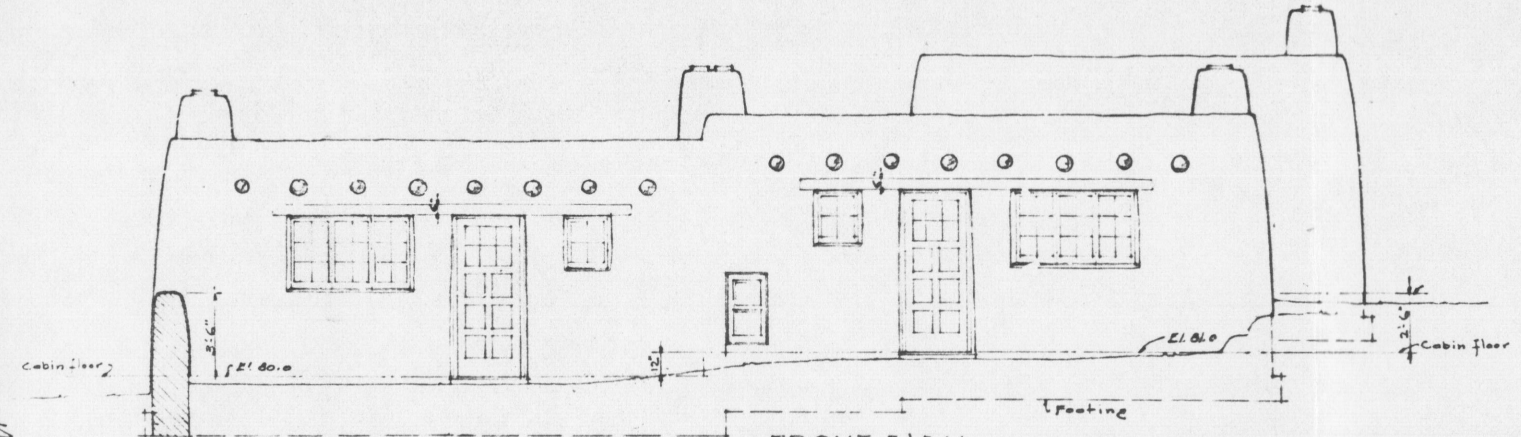
CHECKING STATION
NAME OF JOB
ENTRANCE ROAD
LOCATION
BANDELIER NATIONAL MONUMENT
NAME OF PARK OR MONUMENT

REGION
III
SHEET OF
DRAWING NO.
NM
BAN-2153

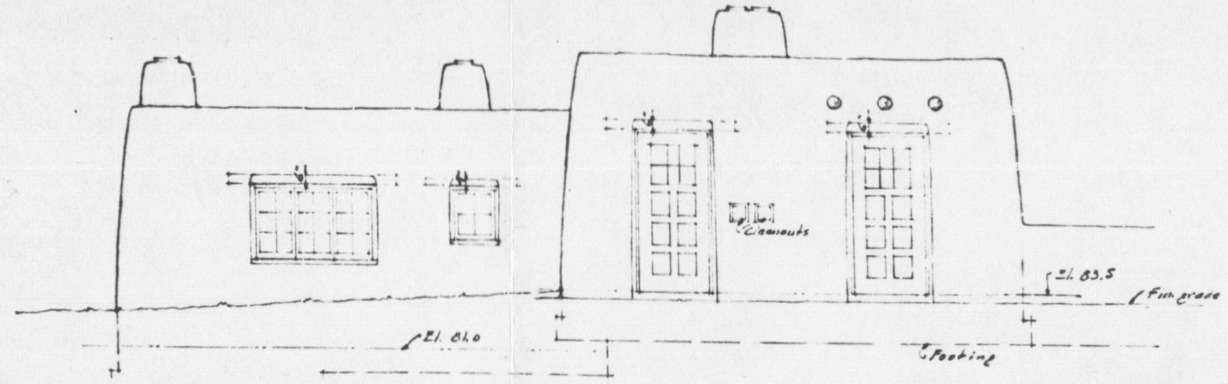
TRIM LINE

#26

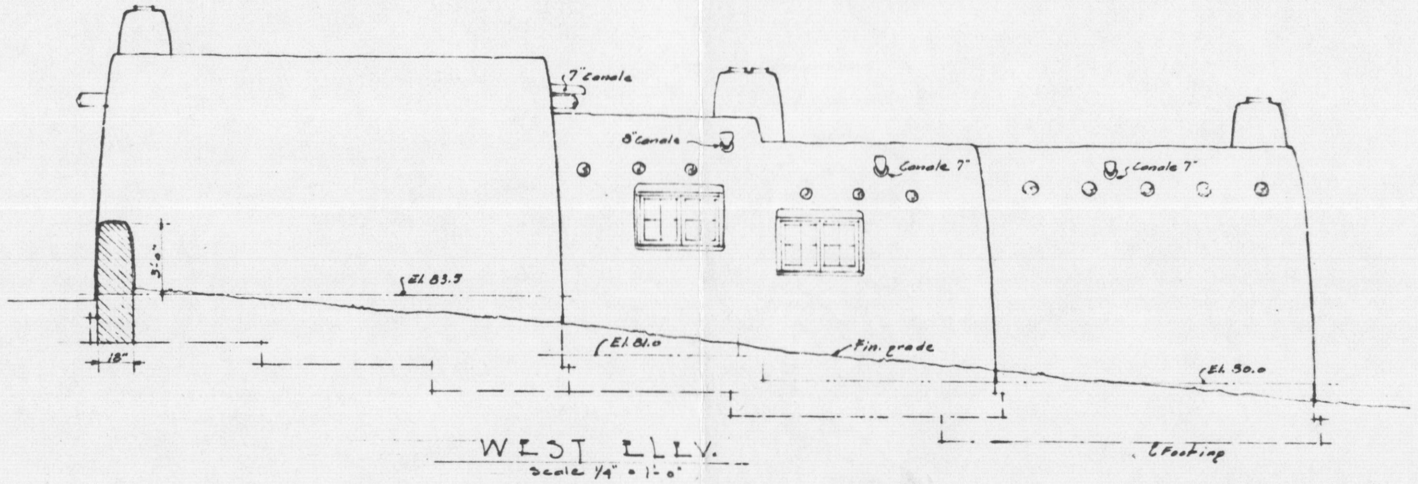
TRIM LINE



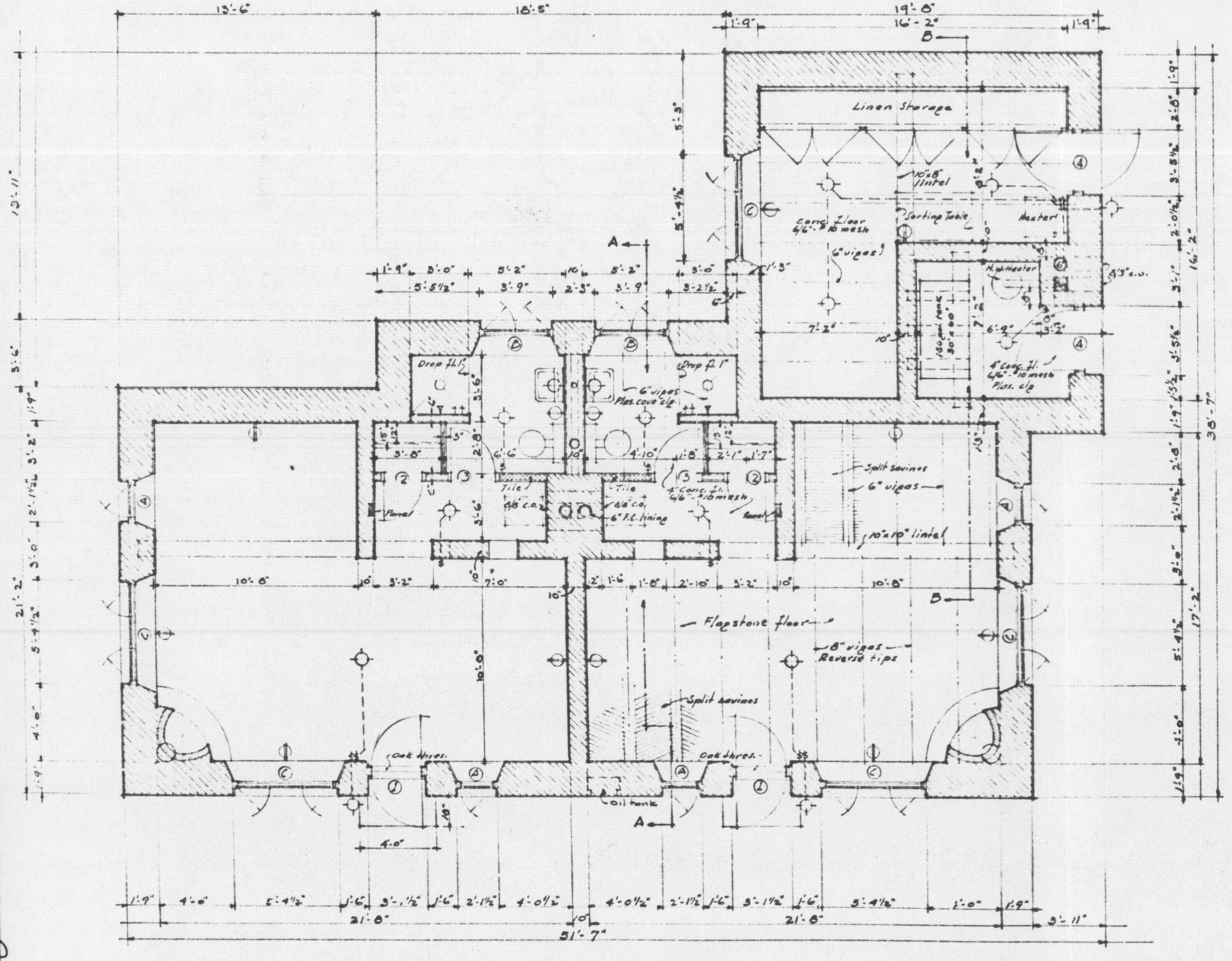
FRONT ELEV.
Scale 1/4" = 1'-0"



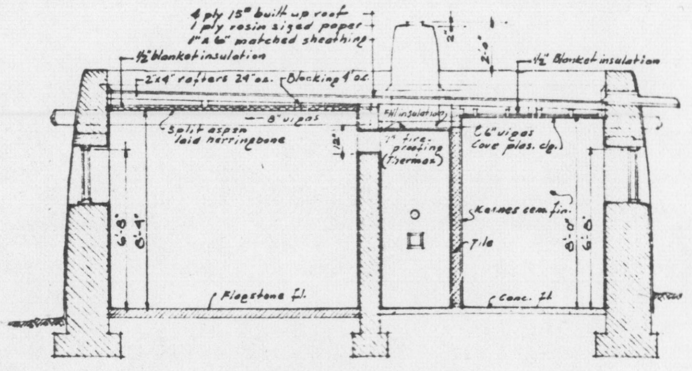
NORTH ELEV.
Scale 1/4" = 1'-0"



WEST ELEV.
Scale 1/4" = 1'-0"

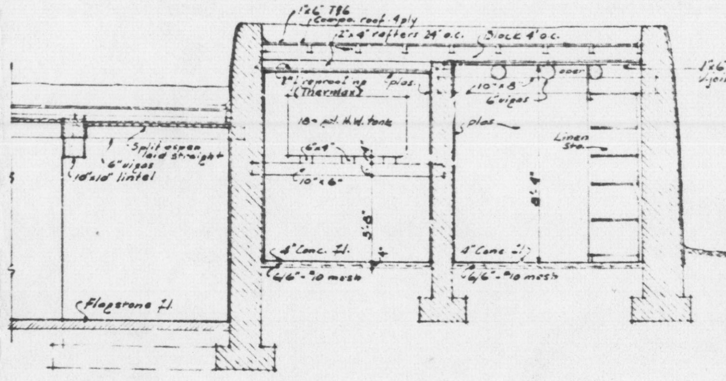


FLOOR PLAN E-1
Scale 1/4" = 1'-0"



SECTION A-A
Scale 1/4" = 1'-0"

See Section sheet 2 for other details



SECTION B-B
Scale 1/4" = 1'-0"

HALF-SIZE REPRODUCTION
SCALE

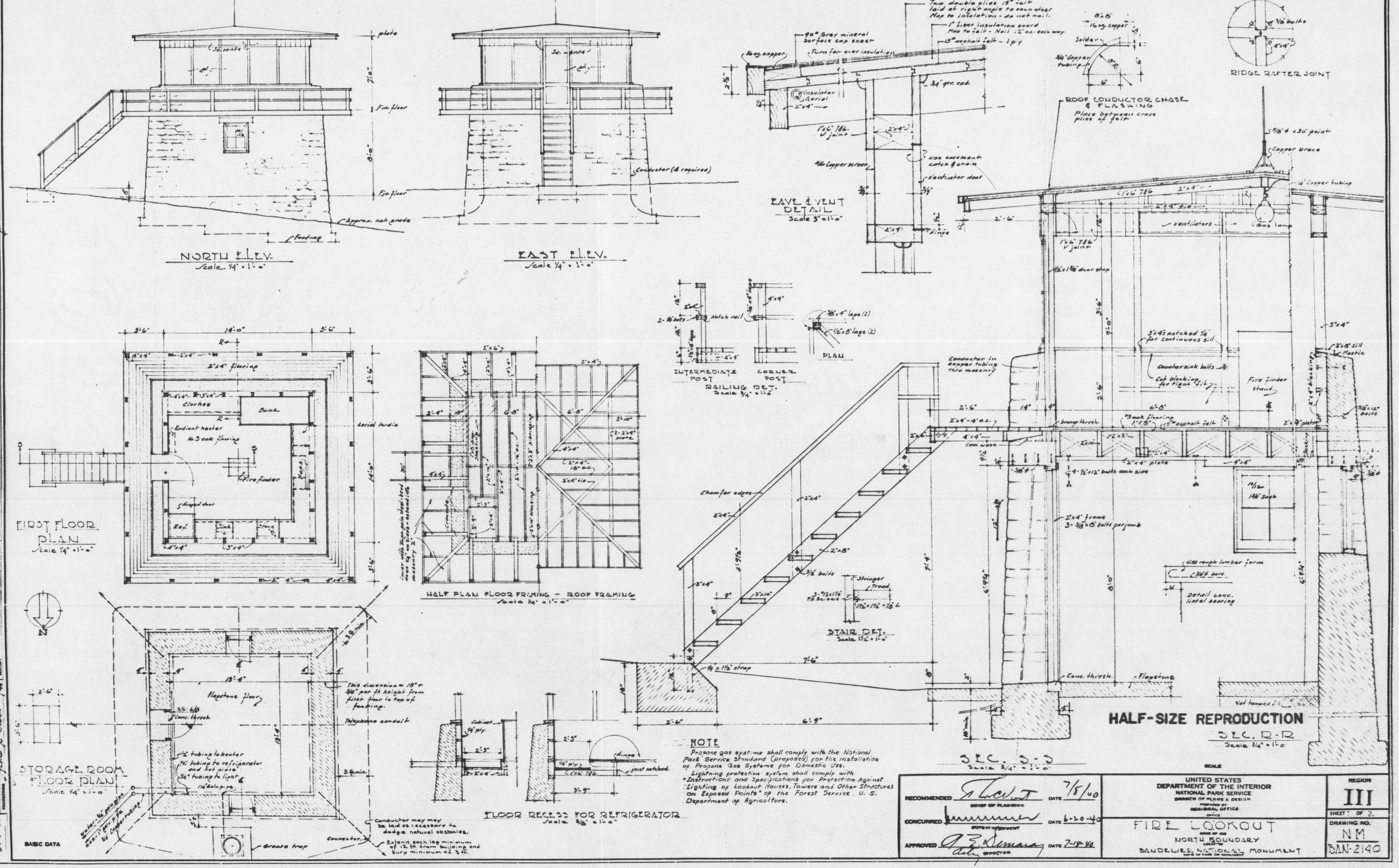
RECOMMENDED F. Lincevant CHIEF OF PLANNING	DATE 3/20/40	UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE BRANCH OF PLANS & DESIGN PREPARED BY REGIONAL OFFICE OFFICE	REGION III SHEET 1 OF 4
CONCURRED Frank Pinkley SUPERINTENDENT	DATE 2-11-40	CABIN GROUP E NAME OF JOB OPERATOR'S AREA LOCATION BANDELIER NATIONAL MONUMENT NAME OF PARK OR MONUMENT	DRAWING NO. NM BAN-2138
APPROVED Arno B. Cammerer DIRECTOR	DATE 3-22-40		

DESIGNED BY Bennett
DATE 2-5-40
Cornell
PLANS AND DESIGN
Hamilton
ENGINEERING
John S. Cross 2/21/40
FORESTRY
HISTORY
REVIEWED
RESEARCH AND EDUCATION
SANITATION
2/23/40
RECREATIONAL PLANNING AND STATE COOPERATION
CLEARED
REGIONAL DIRECTOR

BASIC DATA

TRIM LINE

#27



NOTE

Propane gas systems shall comply with the National Park Service Standard (proposed) for the installation of Propane Gas Systems for Domestic Use.

Lightning protection system shall comply with "Instructions and Specifications for Protection Against Lighting of Lookout Houses, Towers and Other Structures on Exposed Points" of the Forest Service, U. S. Department of Agriculture.

DESIGNED BY Brewer
DATE 6-7-40
PLANS AND DESIGN Albert D. Gre[illegible] 7/6/40
ENGINEERING J.B.H. John S. Cass 7/9/40
REVIEWED
FORESTRY
HISTORY
RESEARCH AND EDUCATION 3-11-40
SANITATION
PLANNING AND STATE COOPERATION
RECREATIONAL [illegible] 7/17/40
CLEARED
REGIONAL DIRECTOR

RECOMMENDED DATE 7/8/40
CHIEF OF PLANNING
CONCURRED DATE 6-20-40
SUPERINTENDENT
APPROVED A. E. Demaray DATE 7-19-40
Acting DIRECTOR

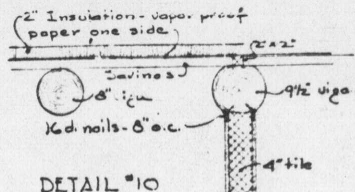
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS & DESIGN
PREPARED BY
REGIONAL OFFICES
OFFICE

FIRE LOOKOUT
NAME OF JOB
NORTH BOUNDARY
LOCATION
BANDELIER NATIONAL MONUMENT
NAME OF PARK OR MONUMENT

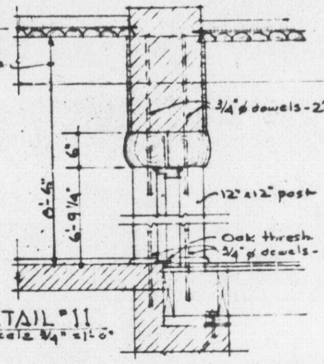
SCALE

REGION III
SHEET 1 OF 2.
DRAWING NO. NM BAN-2140

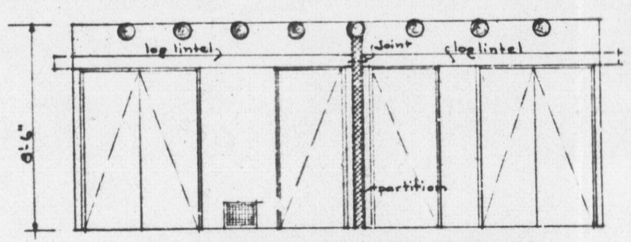
#30



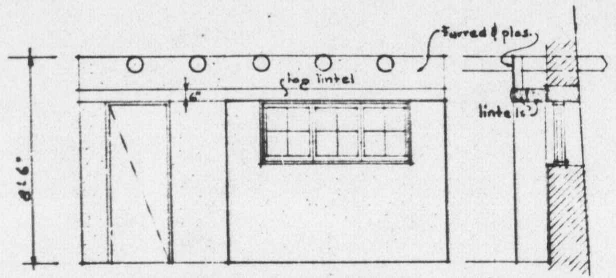
DETAIL #10
Scale 3/4" = 1'-0"



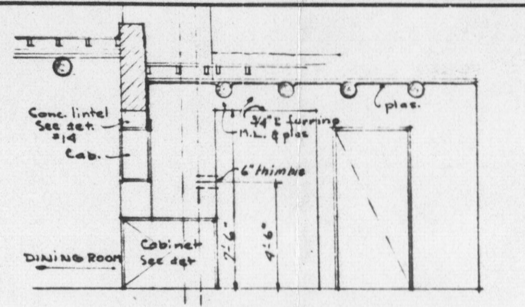
DETAIL #11
Scale 3/4" = 1'-0"



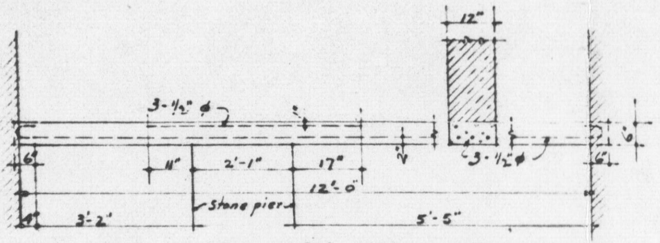
ELEVATION OF NORTH BEDROOMS
DETAIL #12
Scale 1/4" = 1'-0"



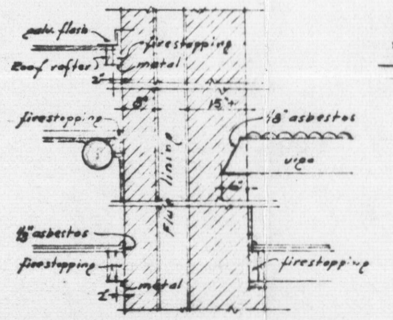
ELEVATION OF EAST BEDROOM SECTION
DETAIL #13
Scale 1/4" = 1'-0"



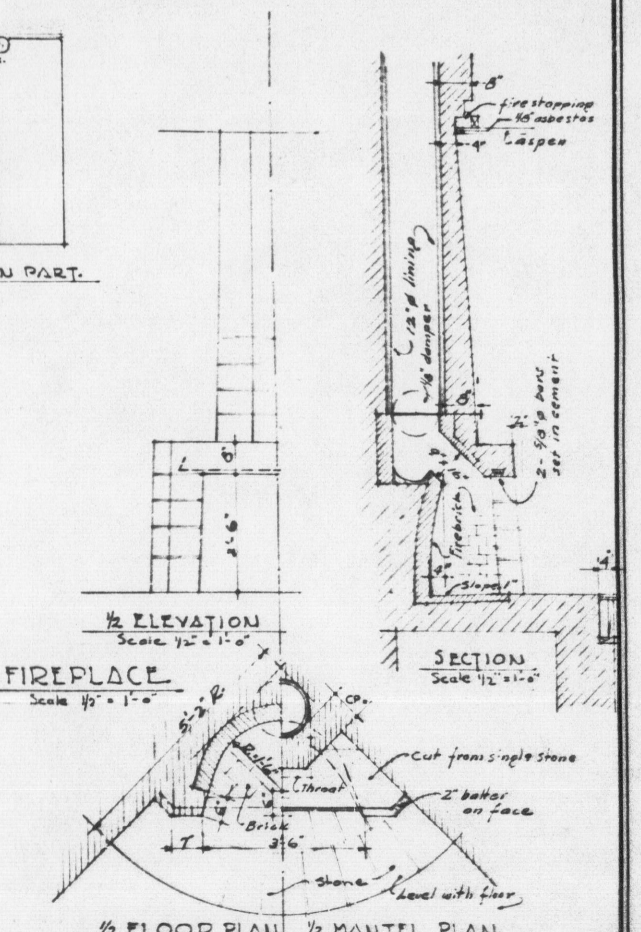
SEC. THRU DINING RM. - KITCHEN PART.
Scale 1/4" = 1'-0"



DETAIL #14 - CONC. LINTEL



TYPICAL FIRESTOPPING DET'S.

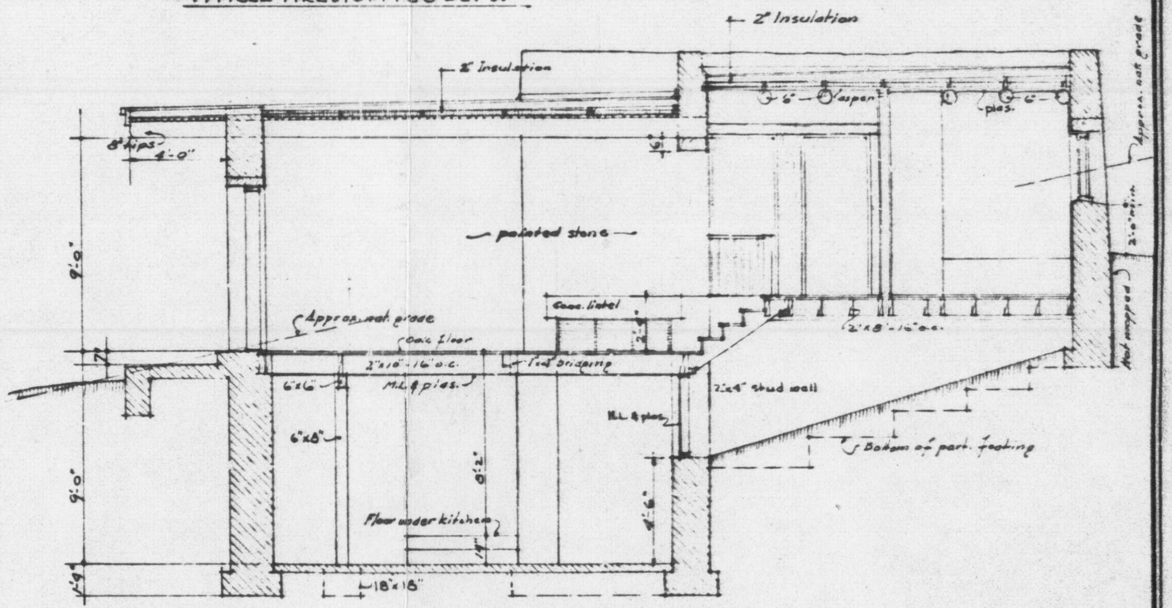


½ ELEVATION
Scale ½" = 1'-0"

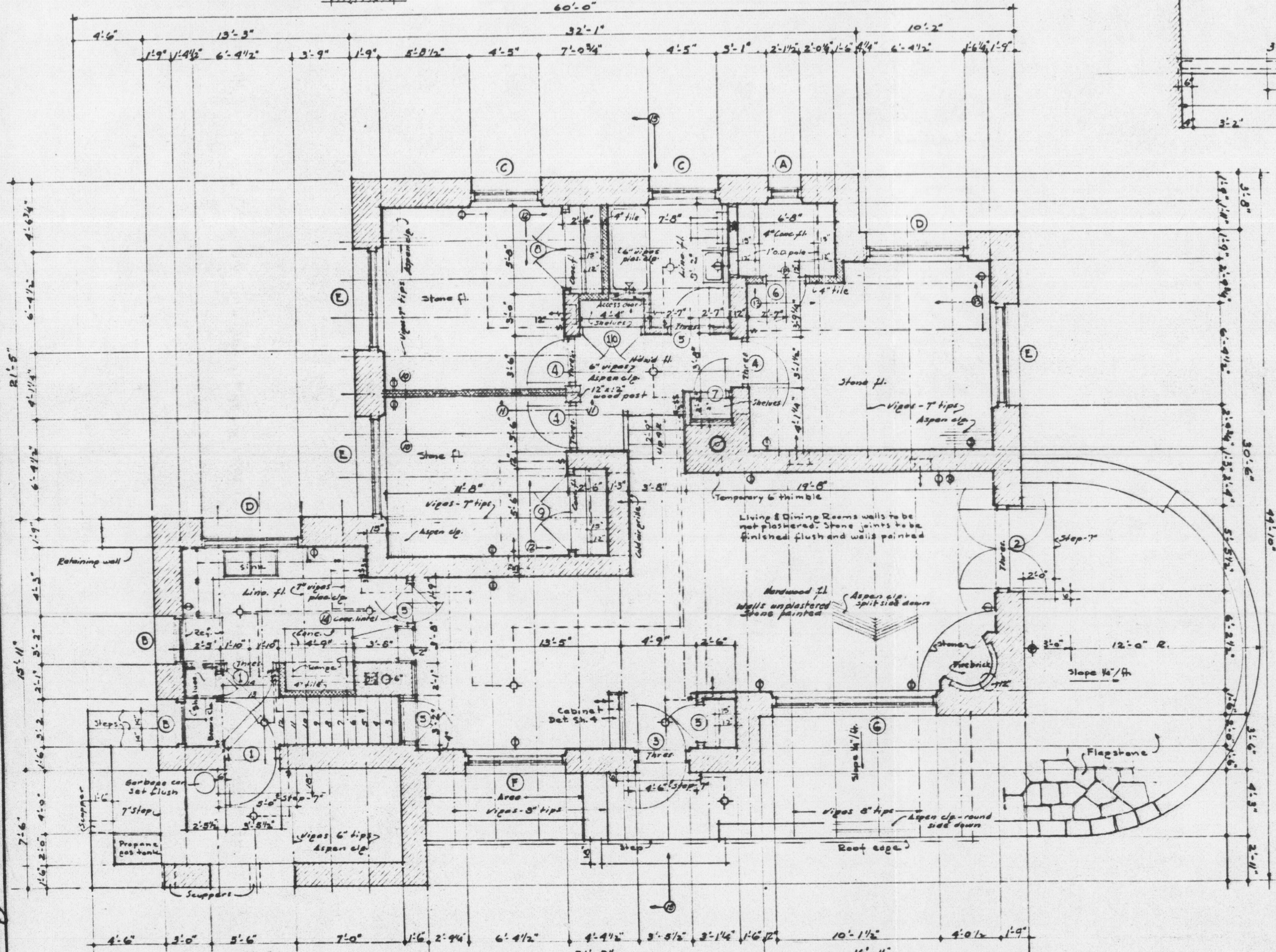
SECTION
Scale ½" = 1'-0"

FIREPLACE
Scale ½" = 1'-0"

½ FLOOR PLAN ½ MANTEL PLAN
Scale ½" = 1'-0"



SECTION - DET. #15
Scale 1/4" = 1'-0"



FLOOR PLAN
Scale 1/4" = 1'-0"

Note: Approval does not include propane gas installation, for which complete details must be submitted.

PROJ. CONST. NO. BAN-B-1

HALF-SIZE REPRODUCTION
SCALE

RECOMMENDED Thos. C. Vint DATE 10/30/40
CHIEF OF PLANNING
CONCURRED DATE 10-11-40
SUPERINTENDENT
APPROVED A. E. Demaray DATE 11-18-40
Acting DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS & DESIGN
PREPARED BY
REGIONAL OFFICE
OFFICE

RESIDENCE NO 4
NAME OF JOB
NPS RESIDENTIAL AREA
LOCATION
BANDELIER NATIONAL MONUMENT
NAME OF PARK OR MONUMENT

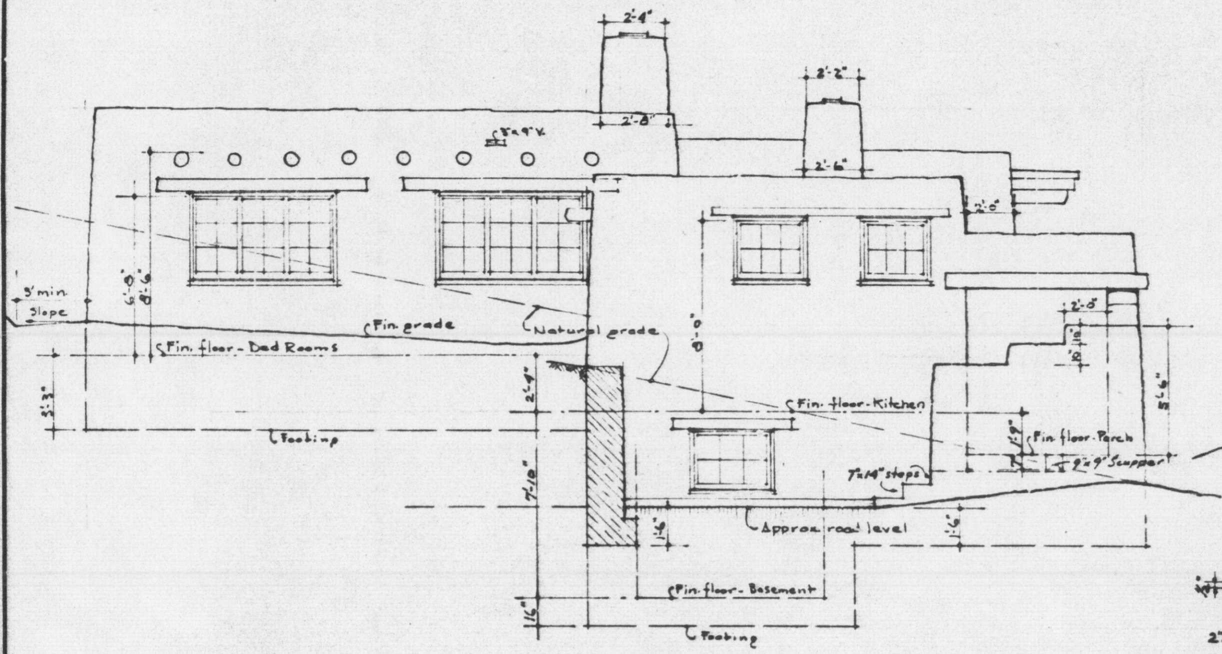
REGION
III
SHEET 1 OF 5
DRAWING NO.
NM
BAN-2143A

DESIGNED BY Bennett
DATE 10-11-40
PLANS AND DESIGN Albert H. Good 10/31/40
ENGINEERING John S. Cass 9/1/40
FORESTRY
HISTORY
REVIEWED
RESEARCH AND EDUCATION
SANITATION
PLANNING AND STATE COOPERATION
RECREATION 11/18/40
CLEARED
M. McColm
Acting REGIONAL DIRECTOR

BASIC DATA

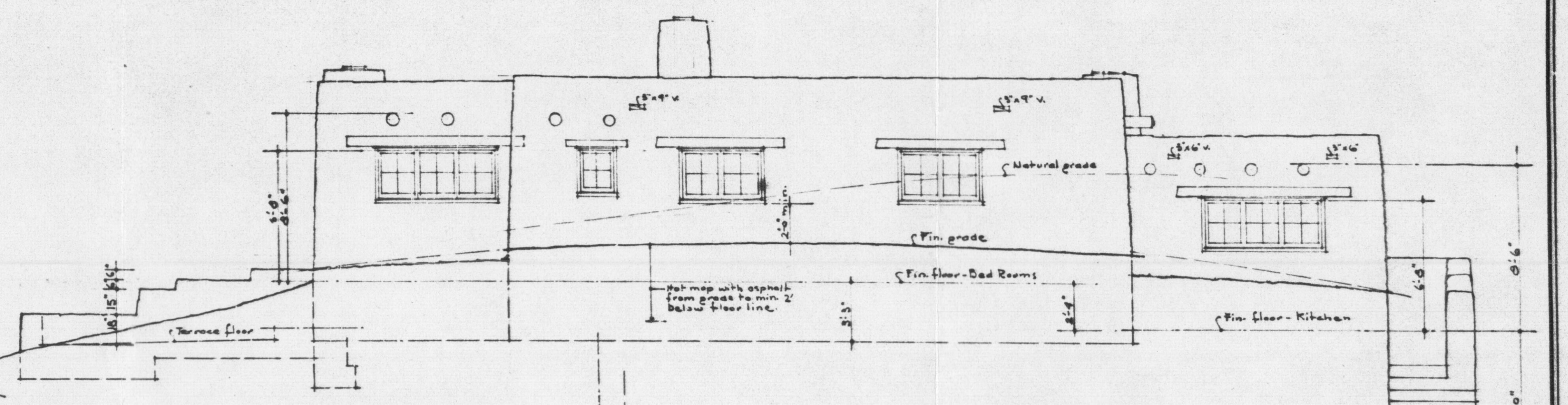
#32

TRIM LINE



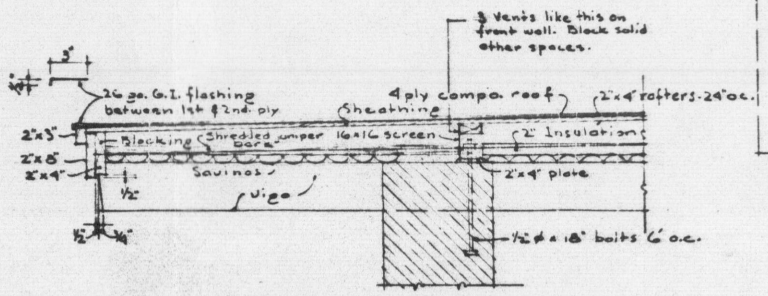
NORTHWEST ELEV.

Scale 1/4" = 1'-0"



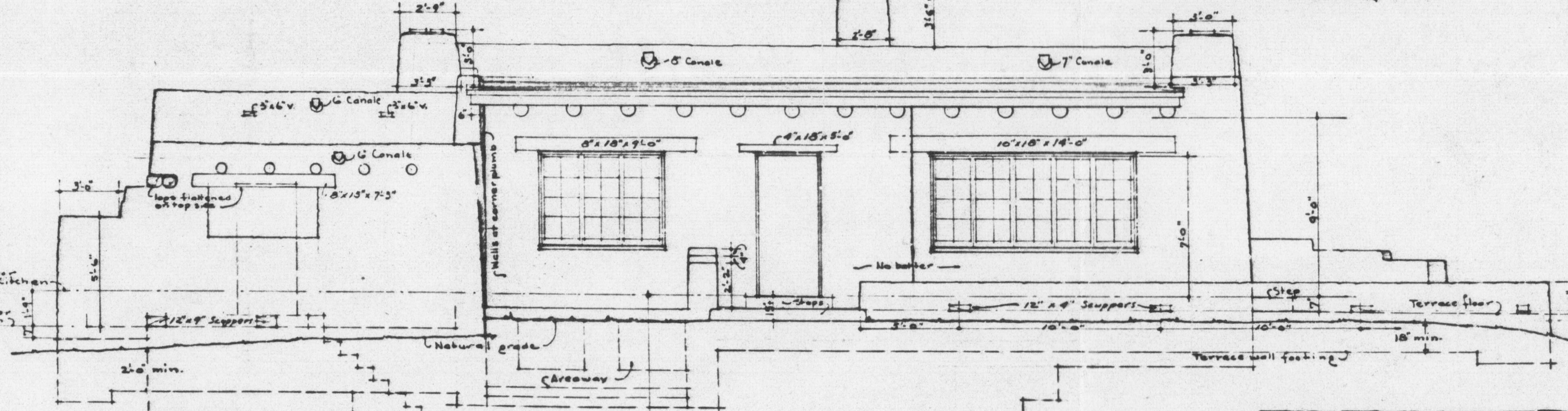
NORTHEAST ELEV.

Scale 1/4" = 1'-0"



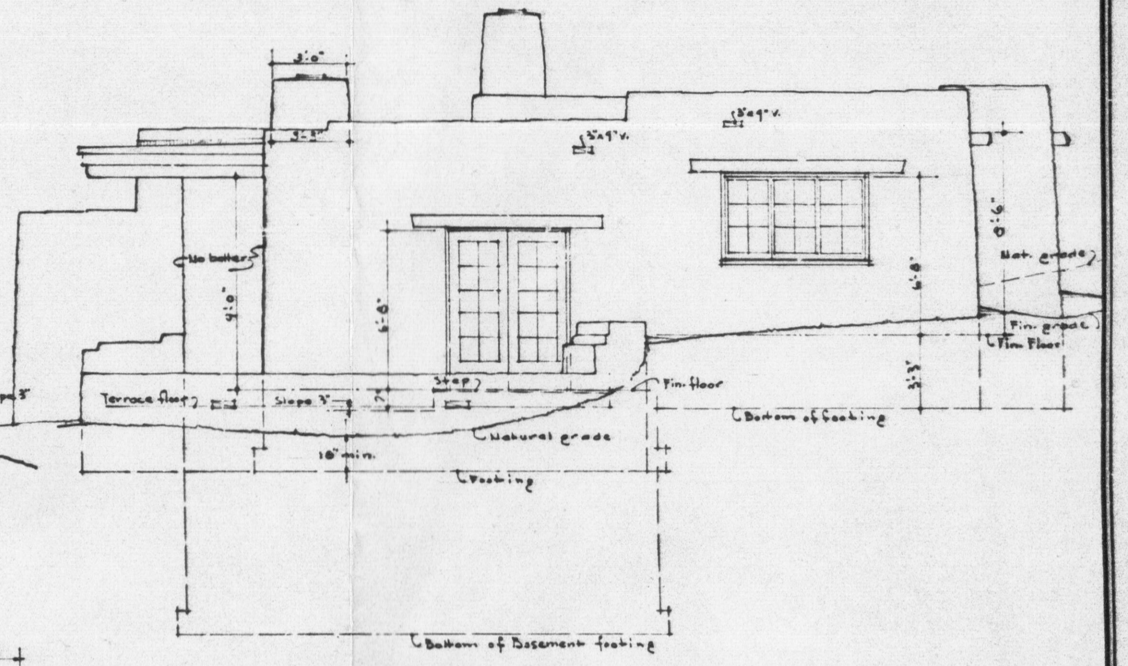
ROOF OVERHANG DET.

Scale 3/4" = 1'-0"



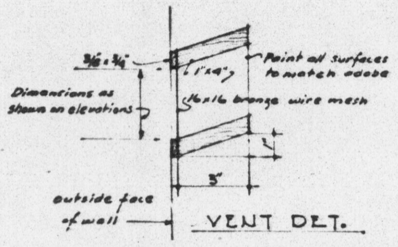
SOUTHWEST ELEV.

Scale 1/4" = 1'-0"



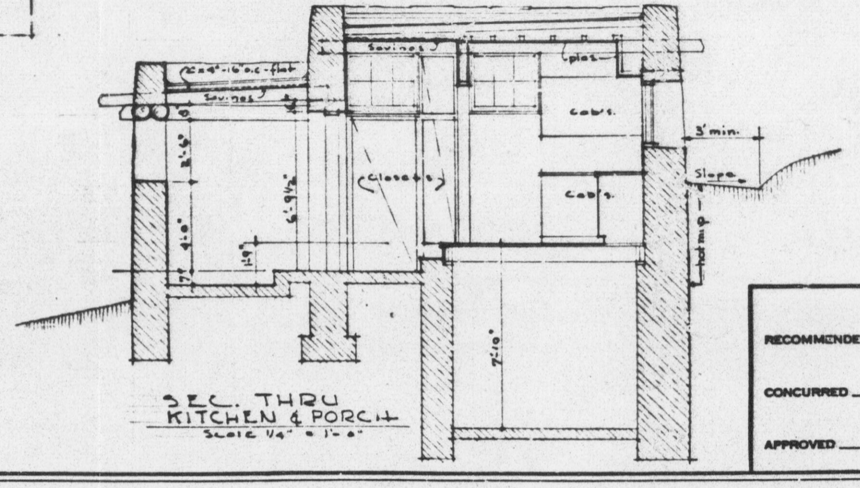
SOUTHEAST ELEV.

Scale 1/4" = 1'-0"



3/8"x3/4"
1"x4"
Paint all surfaces to match adobe
Dimensions as shown on elevations
16x16 bronze wire mesh
3"
outside face of wall

VENT DET.



SEC. THRU KITCHEN & PORCH

Scale 1/4" = 1'-0"

TRIM LINE

BASIC DATA

DESIGNED BY
Bennett
DATE
10-11-40

PLANS AND DESIGN
ENGINEERING
FORESTRY
HISTORY
RESEARCH AND EDUCATION
SANITATION
PLANNING AND STATE COOPERATION
RECREATIONAL
REVIEWED

CLEARED
REGIONAL DIRECTOR

SCALE

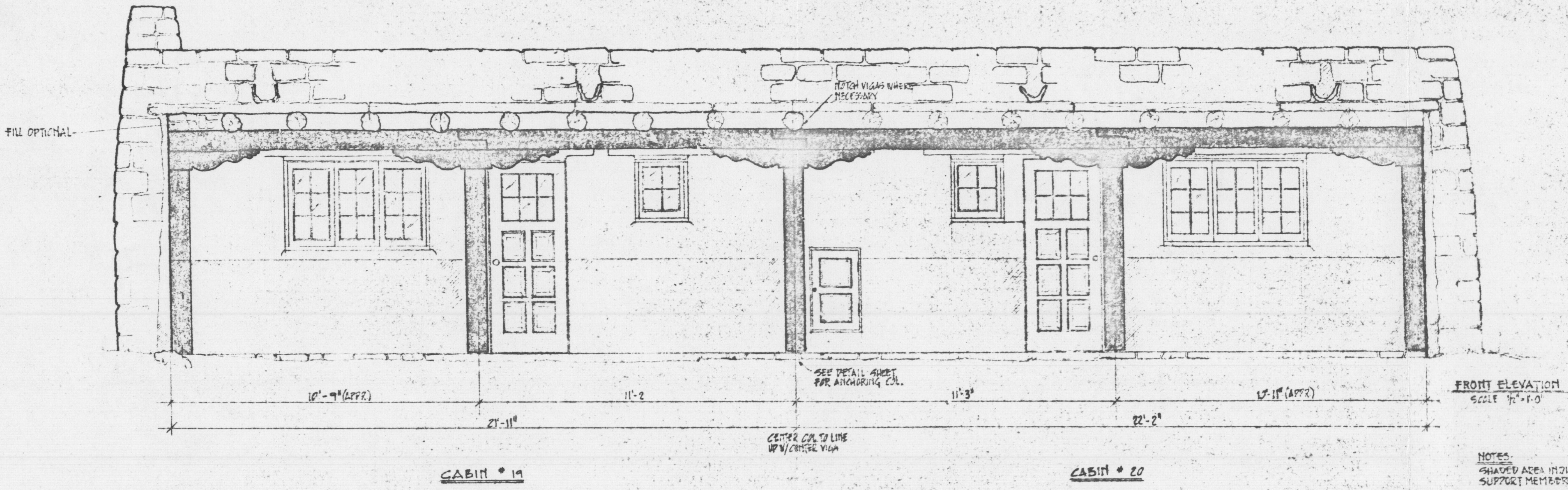
RECOMMENDED ____________ DATE ________
CONCURRED ____________ DATE ________
APPROVED ____________ DATE ________

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF PLANS & DESIGN
PREPARED BY
REGIONAL OFFICE
OFFICE

RESIDENCE NO. 4
NAME OF JOB
NPS RESIDENTIAL AREA
LOCATION
BANDELIER NATIONAL MONUMENT
NAME OF PARK OR MONUMENT

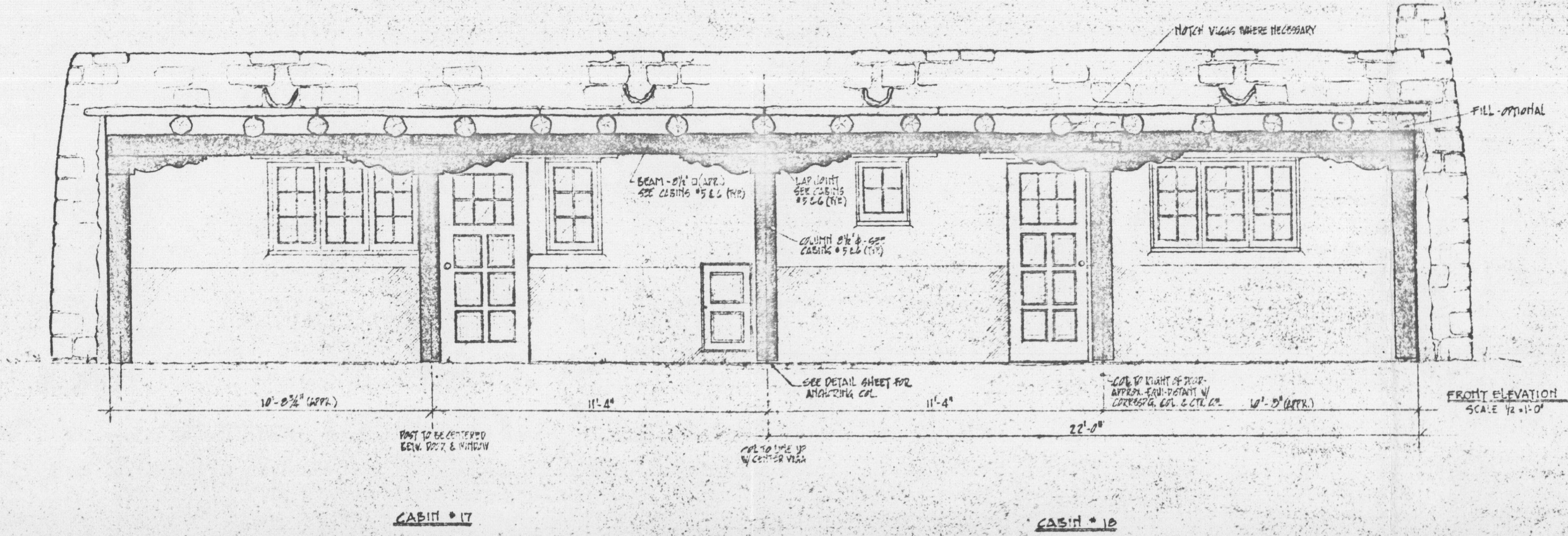
REGION
III
SHEET 3 OF 5
DRAWING NO.
NM
BDN-2143A

#32


FILL OPTIONAL
NOTCH VIGAS WHERE NECESSARY
SEE DETAIL SHEET FOR ANCHORING COL.
10'-9" (APPR.)
11'-2
11'-3"
12'-11" (APPR.)
21'-11"
22'-2"
CENTER COL. TO LINE UP W/ CENTER VIGA
CABIN # 19
CABIN # 20

FRONT ELEVATION
SCALE ½" = 1'-0"

NOTES:
SHADED AREA INDICATES PROPOSED SUPPORT MEMBERS.
DIMENSIONS ARE APPROXIMATE.
SEE SHEET # 2 FOR DETAILS.
NOTE OPTIONS "A" & "B" FOR END SUPPORT OF BMS.
CABINS 19 & 20 SIMILAR TO CABINS 17 & 18.


NOTCH VIGAS WHERE NECESSARY
FILL-OPTIONAL
BEAM - 8½" Ø (APPR.) SEE CABINS #5 & 6 (TYP.)
LAP JOINT SEE CABINS #5 & 6 (TYP.)
COLUMN 8½" Ø - SEE CABINS #5 & 6 (TYP.)
SEE DETAIL SHEET FOR ANCHORING COL.
COL. TO RIGHT OF DOOR - APPROX. EQUI-DISTANT W/ CORRESP'G. COL. & CTR. COL.
10'-8¼" (APPR.)
11'-4"
11'-4"
10'-3" (APPR.)
22'-0"
POST TO BE CENTERED BETW. DOOR & WINDOW
COL. TO LINE UP W/ CENTER VIGA
CABIN # 17
CABIN # 18

FRONT ELEVATION
SCALE ½" = 1'-0"

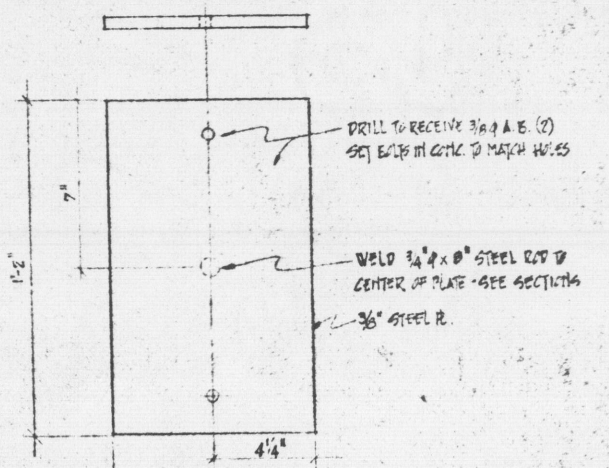
ADDITION OF PORTAL SUPPORT MEMBERS - ELEVATIONS
BANDELIER NATIONAL MONUMENT
CABINS Nos 17 & 18, 19 & 20

United States Department of the Interior
NATIONAL PARK SERVICE
SOUTHWEST CULTURAL RESOURCES CENTER
P.O. Box 728 Santa Fe, New Mexico 87501

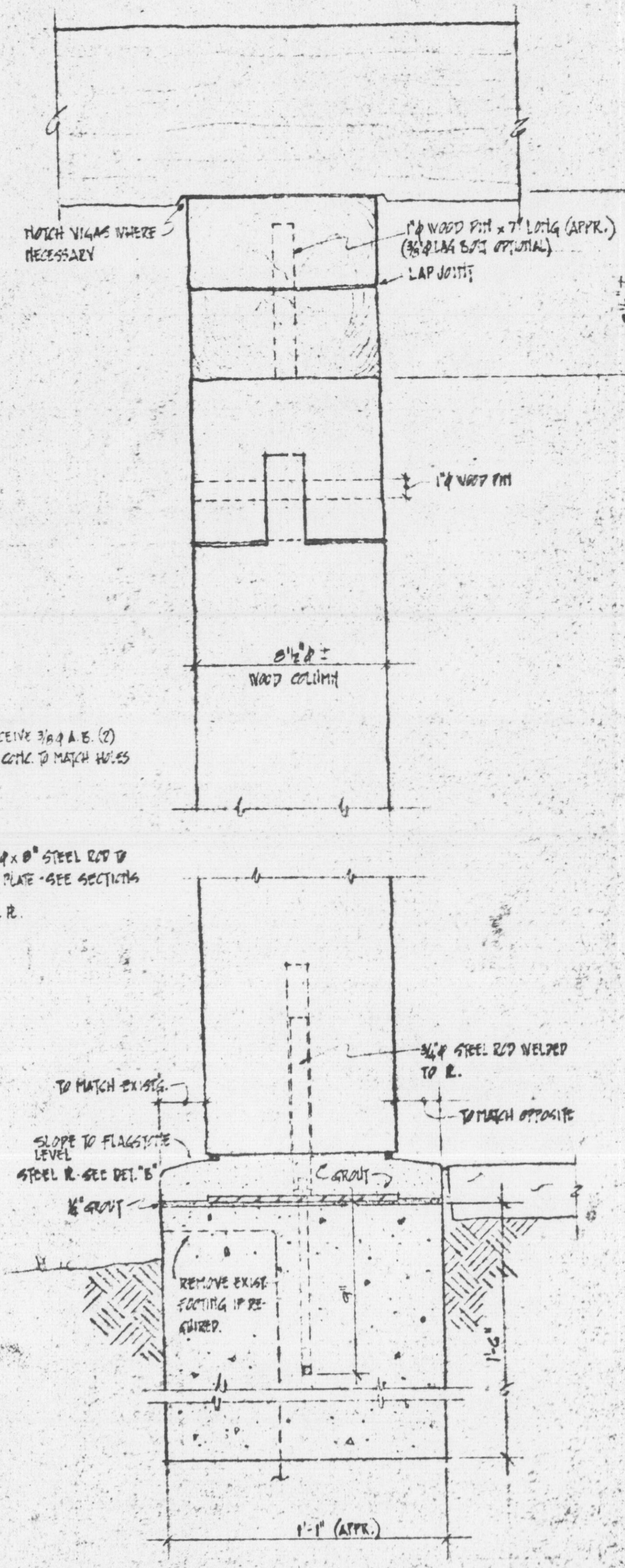
DRAWN BY	DATE
E. Tommier	10-5-79
REVISED	
APPROVED	

DRAWING NO. 315

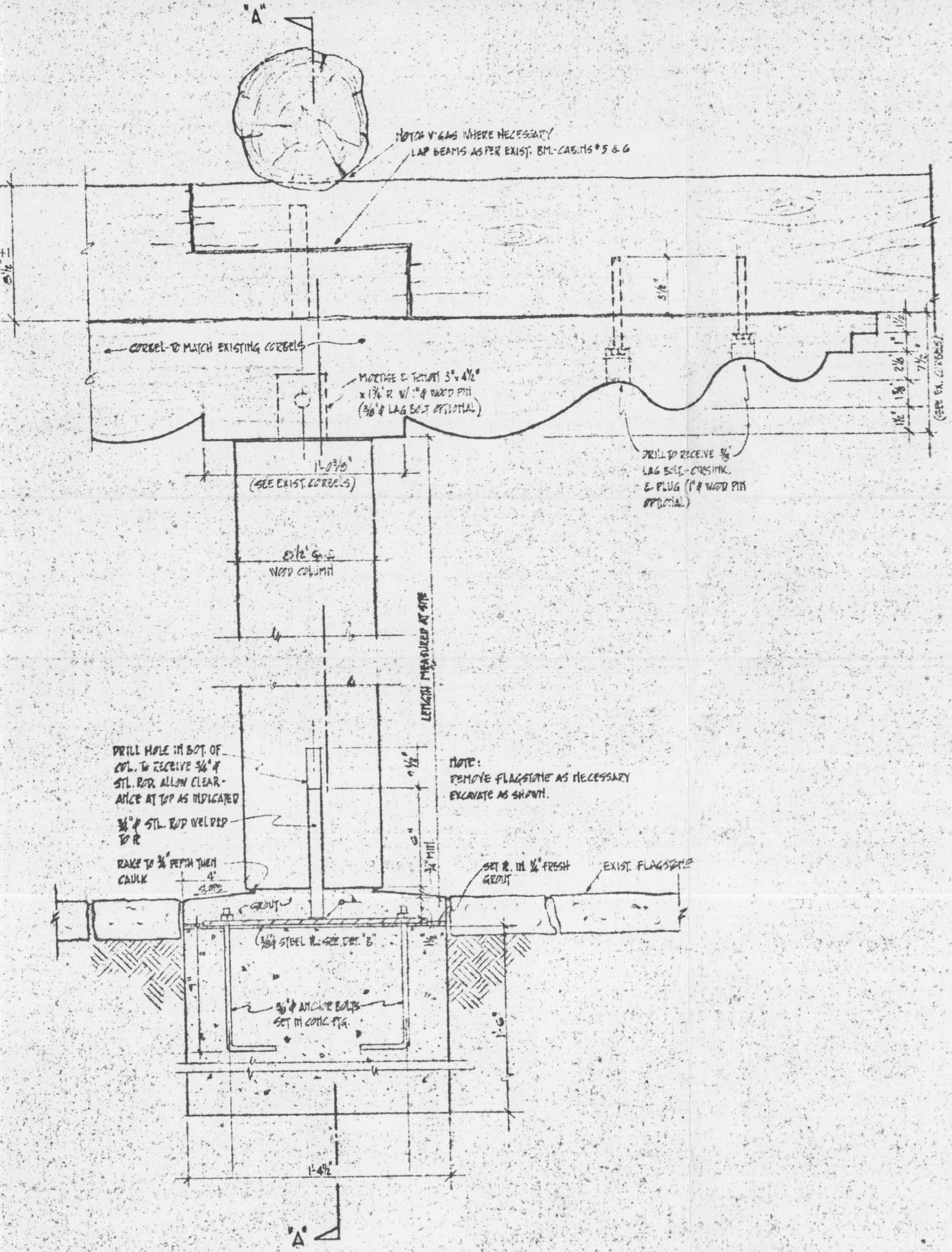
ATTACHMENT B


DRILL TO RECEIVE 3/8"ϕ A.B. (2)
SET BOLTS IN CONC. TO MATCH HOLES
WELD 3/4"ϕ x 8" STEEL ROD TO
CENTER OF PLATE - SEE SECTIONS
3/8" STEEL PL.
7"
1'-2"
4 1/4"
8 1/2"

DETAIL "B"
SCALE 3"=1'-0"



SECTION "A-A"
SCALE 3"=1'-0"



NOTE:
REMOVE FLAGSTONE AS NECESSARY
EXCAVATE AS SHOWN.

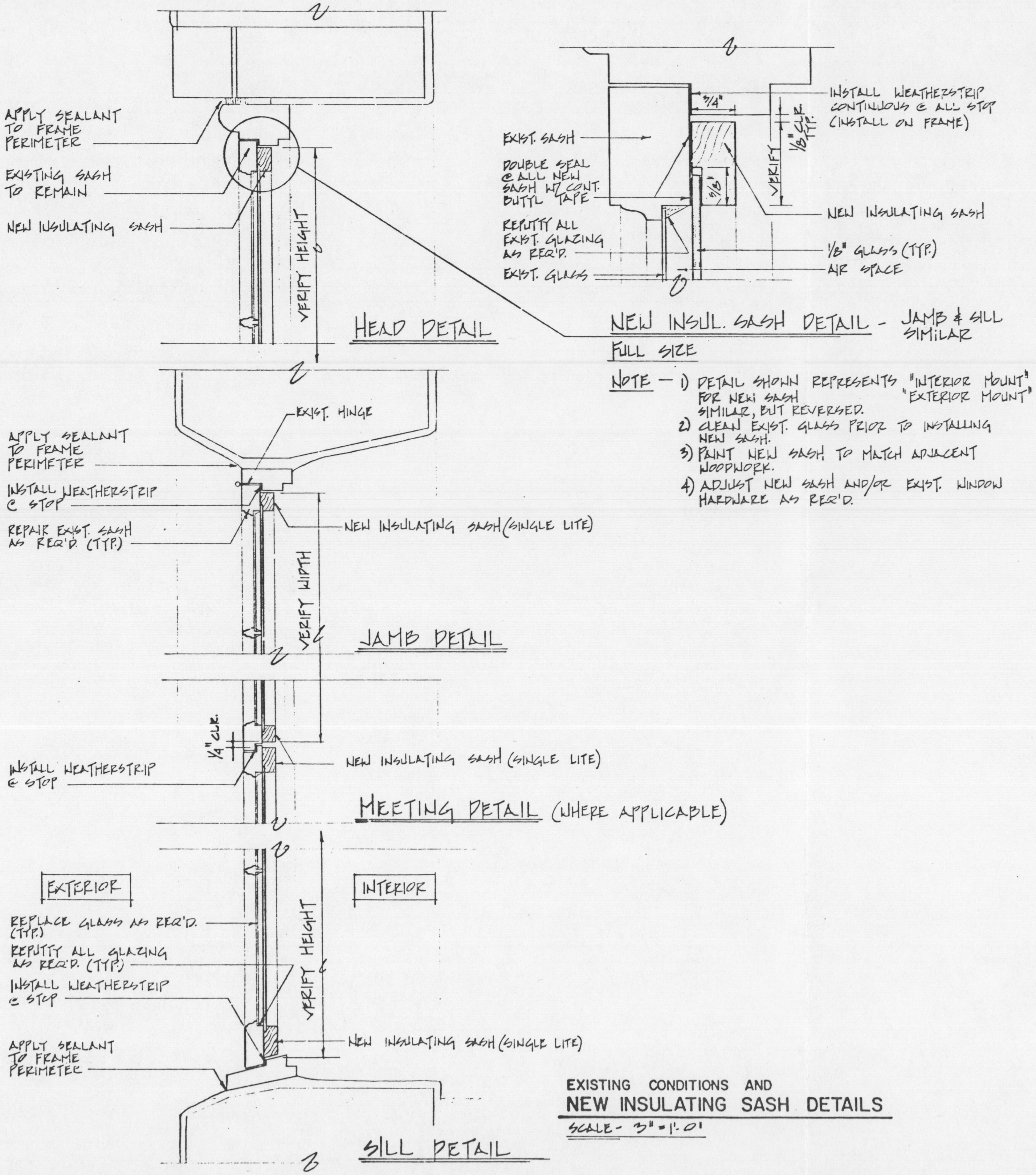
SECTION THRU COLUMN
SCALE 3"=1'-0"

DRAWN BY E. Timmie
DATE 10-3-79
REVISED
APPROVED

United States Department of the Interior
NATIONAL PARK SERVICE
SOUTHWEST CULTURAL RESOURCES CENTER
P.O. Box 728 Santa Fe New Mexico 87501

ADDITION OF PORTAL SUPPORT MEMBERS · DETAILS
BANDELIER NATIONAL MONUMENT
CABINS Nos. 17 & 18, 19 & 20

DRAWING NO. 315
89019
SHEET NO.


APPLY SEALANT TO FRAME PERIMETER
EXISTING SASH TO REMAIN
NEW INSULATING SASH
VERIFY HEIGHT
HEAD DETAIL
EXIST. SASH
DOUBLE SEAL @ ALL NEW SASH W/ CONT. BUTYL TAPE
REPUTTY ALL EXIST. GLAZING AS REQ'D.
EXIST. GLASS
3/4"
5/8"
VERIFY
1/8" CLR. TYP.
INSTALL WEATHERSTRIP CONTINUOUS @ ALL STOP (INSTALL ON FRAME)
NEW INSULATING SASH
1/8" GLASS (TYP.)
AIR SPACE
NEW INSUL. SASH DETAIL - JAMB & SILL SIMILAR
FULL SIZE
EXIST. HINGE
APPLY SEALANT TO FRAME PERIMETER
INSTALL WEATHERSTRIP @ STOP
REPAIR EXIST. SASH AS REQ'D. (TYP.)
NEW INSULATING SASH (SINGLE LITE)
VERIFY WIDTH
JAMB DETAIL
1/4" CLR.
INSTALL WEATHERSTRIP @ STOP
NEW INSULATING SASH (SINGLE LITE)
MEETING DETAIL (WHERE APPLICABLE)
EXTERIOR
INTERIOR
REPLACE GLASS AS REQ'D. (TYP.)
REPUTTY ALL GLAZING AS REQ'D. (TYP.)
INSTALL WEATHERSTRIP @ STOP
VERIFY HEIGHT
APPLY SEALANT TO FRAME PERIMETER
NEW INSULATING SASH (SINGLE LITE)
SILL DETAIL

NOTE —
1) DETAIL SHOWN REPRESENTS "INTERIOR MOUNT" FOR NEW SASH "EXTERIOR MOUNT" SIMILAR, BUT REVERSED.
2) CLEAN EXIST. GLASS PRIOR TO INSTALLING NEW SASH.
3) PAINT NEW SASH TO MATCH ADJACENT WOODWORK.
4) ADJUST NEW SASH AND/OR EXIST. WINDOW HARDWARE AS REQ'D.

EXISTING CONDITIONS AND
NEW INSULATING SASH DETAILS
SCALE - 3" = 1'-0"

ATTACHMENT C

PREPARED	DRAWING NO.	
COPELAND DESIGNED	315 83.026	
COPELAND DRAWN	PCIP PKG	SHEET
BATTLE CHECKED		5
6/83 DATE		OF 5