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Budget Bureau No. 13-RO 35  
Approval Expires: 6/30/44

Ending July 1943

## Monthly Report

ENGINEERING

Center MANZANA R

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electrical On Buildings	20 work orders 28 service calls	6	\$500.00
On Utilities	1 work order 92 repairs	6	25.00

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 20 Sewage Disposal 10 Electrical 6

Est. Value Materials Used: Water Supply \_\_\_\_\_ Sewage Disposal \_\_\_\_\_ Electrical \_\_\_\_\_

Gallons Water Used This Month 57,337,187 Per Capita Water Consumption 212 gals.

REFRIGERATION:

Number of Service Calls 32 Number Repair Jobs 32 Ave. Total Number Employees 2

Number of Units Inspected and Serviced This Month 38

Units Not Operating: (give number and size) None

Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

12 new Refrigerators and 12 new Electric Ranges were assembled and installed in new Staff Houses. 4 Staff Houses were wired for lighting and range circuits during the month of July.



Budget Bureau No. 13-RO35  
Approval Expires: 6/30/44

Ending August 1943

## Monthly Report

ENGINEERING

Center      **Manzanar**

**INSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
On Buildings	<u>11</u>	<u>5</u>	<u>288.87</u>
On Utilities	<u>1</u>	<u>5</u>	<u>312.43</u>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 8 Electrical 5  
 Est. Value Materials Used: Water Supply 127.74 Sewage Disposal 174.806 Electrical 137.51  
 Gallons Water Used This Month 56494,000 Per Capita Water Consumption \_\_\_\_\_

REFRIGERATION:

Number of Service Calls 52 Number Repair Jobs 30 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 41  
 Units Not Operating: (give number and size) two 1/4 HP Compressors

Explain why units not operating, how long idle, etc.

**Damaged piston and head plates caused from broken valve**

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

# ENGINEERING

Ending Sept. 1943

Monthly Report

Center Manzanar

**INSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
On Buildings	6	5	112.75
On Utilities	2	5	216.57

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 8 Electrical 5

Est. Value Materials Used: Water Supply \$232.35 Sewage Disposal \$353.56 Electrical 429.29

Gallons Water Used This Month 47,396,953.85 Per Capita Water Consumption 5266 gals.

REFRIGERATION:

Number of Service Calls 46 Number Repair Jobs 26 Ave. Total Number Employees 2

Number of Units Inspected and Serviced This Month 39

Units Not Operating: (give number and size) None

Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



Budget Bureau No. 13-R035

Approval Expires: 6/30/44

# ENGINEERING

Ending 10-31 194 3

# Monthly Report

Center Manzanar

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Buildings (Elect.)	81	7	122.33
On Buildings (Repair)	690	405	1,762.73
On Utilities	42	7	25.15

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 6 Electrical 7  
 Est. Value Materials Used: Water Supply \$258.50 Sewage Disposal \$222.00 Electrical 157.20  
 Gallons Water Used This Month 40,029,875 Per Capita Water Consumption 151 Gals.

REFRIGERATION:

Number of Service Calls 40 Number Repair Jobs 31 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 40  
 Units Not Operating: (give number and size) None  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

None



## WAR RELOCATION AUTHORITY

Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Ending Nov. 30 1943

## Monthly Report

# ENGINEERING

Center    Manzanar

**INSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
On Buildings (Elect)	59	7	397.34
(Repair) On Buildings	911	424	1501.92
Elect. Distribution			
On Utilities	48	7	13.30

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 17 Sewage Disposal 8 Electrical 7  
 Est. Value Materials Used: Water Supply \$1,007.50 Sewage Disposal \$243.30 Electrical \$410.64  
 Gallons Water Used This Month 32,233.150 Per Capita Water Consumption 130

REFRIGERATION:

Number of Service Calls 35 Number Repair Jobs 25 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 32  
 Units Not Operating: (give number and size) None  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Ending Dec. 194 3

# Monthly Report

# ENGINEERING

Center Manzanar

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electric (Bldgs) On Buildings	126 1145	4 60	\$401.30 \$2600.00
Electric Dist. On Utilities	33	4	\$20.13

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 5 Electrical 4  
 Est. Value Materials Used: Water Supply \$690.00 Sewage Disposal \$223.00 Electrical \_\_\_\_\_  
 Gallons Water Used This Month 29,572,284,70 Per Capita Water Consumption 100 gals.

REFRIGERATION:

Number of Service Calls 20 Number Repair Jobs 23 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 30  
 Units Not Operating: (give number and size) none  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



## ENGINEERING

DECEMBER, 1943

During the month of December the Poultry and Hog Projects were completed and all buildings are now in use by the Agricultural Division to house chickens and hogs to be used to supplement the food supplies in this center.

All of our staff housing except four buildings are completed and occupied by Appointed Personnel. The four remaining buildings require some finishing in the interior which we expect to complete and make ready for occupancy during January.

We have remodeled 50 percent of the high school buildings. We expect to start remodeling school buildings for the elementary unit as soon as spacing is available so they can be grouped in one block.



## ENGINEERING

Center      Manzanar

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electric (Bldg.)	115	4	\$300.45
On Buildings	994	61	1609.19
Electric (Dist.)	27	4	11.85
On Utilities			

Plumbing (Bldgs.) 164 4 72.89

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 20 Sewage Disposal 6 Electrical 4  
 Est. Value Materials Used: Water Supply \$65.00 Sewage Disposal \$192.75 Electrical ---  
 Gallons Water Used This Month 29,020,088 Per Capita Water Consumption 111 Gals.

REFRIGERATION:

Number of Service Calls 47 Number Repair Jobs 32 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 37  
 Units Not Operating: (give number and size) None

Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

None



Budget Bureau No. 13-RO35  
Approval Expires: 6/30/44

Approval Expires: 8/30/44

th Ending Feb. 194 4

## Monthly Report

Center      Manzanar

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

*Due to recent storm and segregation the completion of Hostel was delayed -					
Now estimate completion on March 31, 1944.					

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

C-0 137  
( OVER )



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electric (bldgs)	98	4	\$282.99
On Buildings	780	76	1320.64
Electire Dist.	12	4	18.50
On Utilities			
Plumbing (bldgs.)	148	2	42.92

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 7 Electrical 4  
 Est. Value Materials Used: Water Supply \$45.44 Sewage Disposal \$212.06 Electrical         
 Gallons Water Used This Month 29,445,779 Per Capita Water Consumption 127 Gals.

REFRIGERATION:

Number of Service Calls 17 Number Repair Jobs 12 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 30  
 Units Not Operating: (give number and size) None  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



## WAR RELOCATION AUTHORITY

Budget Bureau No. 13-RO 35  
Approval Expires: 8/30/44

Ending 2/30/ 1944

## Monthly Report

# ENGINEERING

Center **MANZANAR**

INSTRUCTION: Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electrical Bldgs.	35	4	\$ 225.59
* On Buildings	842	70	6,231.13
Elect. On Utilities	4	4	60.00
Plumbing	134	3	187.50

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 6 Electrical 4  
 Est. Value Materials Used: Water Supply 225.59 Sewage Disposal 75.63 Electrical —  
 Gallons Water Used This Month 45,131,474 Per Capita Water Consumption 270

REFRIGERATION:

Number of Service Calls 40 Number Repair Jobs 28 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 28  
 Units Not Operating: (give number and size) 0  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.) **Of the total amount spent for material under building maintenance, \$5,515.00 represents money spent on reroofing.**



September 28, 1944

Monthly Report  
Narrative Report for September

1. Irrigation--No activity on this project during month of September.
2. Remodel Schools--Electrical connections for stove and refrigerator hook-up to provide facilities for the Home Economics Class was complete this month as well as some painting to prepare for the fall term of school.
3. Auditorium--This project now complete and turned over to the Auditorium Committee.
4. Well #169--There is no change on percentage complete in September due to evascoe labor shortage and concentration on the more important job of re-roofing camp buildings.
5. Re-roofing Buildings--All barrack buildings and M.P. Camp are complete. Warehousing area and block latrines and ironing rooms remain to be done. We are forced to advance estimated completion date over August report due to loss of many teen age workers who returned to school and shortage of other employees.
6. Resurfacing Roads--This important maintenance project is now complete and an ample stock pile of oiled M/X is available for maintenance of streets.

We have submitted some W.P.B. form #817 to Washington for approval of Construction projects in the 2nd. Quarter. The other projects will be submitted as soon as plans and estimates are completed.



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

ENGINEERING

th Ending March 31 1944

Monthly Report

Center Manzanar

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

\*Note: Buildings complete: 8 Electric ranges will be installed as soon as received.

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Electric (Bldgs.)</b>	<b>120</b>	<b>4</b>	<b>\$ 478.10</b>
On Buildings	759	72	2099.85
On Utilities	12	4	30.10
<b>Plumbing (Bldgs.)</b>	<b>193</b>	<b>2</b>	<b>83.85</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 7 Electrical 4  
 Est. Value Materials Used: Water Supply \$80.70 Sewage Disposal \$227.69 Electrical ---  
 Gallons Water Used This Month 27,994,967,950 Per Capita Water Consumption 140 Gal.

REFRIGERATION:

Number of Service Calls 45 Number Repair Jobs 30 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 38  
 Units Not Operating: (give number and size) none  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



# ENGINEERING

# Monthly Report

Center      Manzanar

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electric (Bldgs)	98	4	144.79
On Buildings	862	52	1,175.49
On Utilities	25	4	34.00
Plumbing (Bldgs.)	139	2	85.36

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 9 Electrical 4  
 Est. Value Materials Used: Water Supply 58.42 Sewage Disposal 172.49 Electrical -  
 Gallons Water Used This Month 33,041.428 Per Capita Water Consumption 174 gal

REFRIGERATION:

Number of Service Calls 57 Number Repair Jobs 60 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 60  
 Units Not Operating: (give number and size) 15

Explain why units not operating, how long idle, etc. 8-Messhalls closed approximately one month.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

The Engineering Division is devoting utmost energy toward completion of the High School Auditorium in time to hold June commencement exercises, and the remodeling of elementary school buildings in Block 16 which we expect to complete in May. Construction of a new fire station which was recently approved by War Production Board is to be initiated in the near future, as soon as materials can be obtained. Our irrigation program is proceeding smoothly and should be completed in time to enable the agricultural division to produce their quota of vegetables.



ENGINEERING

Month Ending May 31, 1944

Monthly Report

Center **Manzanar**

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Electrical</b>	<b>87</b>	<b>3</b>	<b>128.53</b>
On Buildings	<b>718</b>	<b>34</b>	<b>728.28</b>
On Utilities	<b>23</b>	<b>2</b>	<b>48.87</b>
<b>Plumbing</b>	<b>128</b>	<b>3</b>	<b>181.72</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 20 Sewage Disposal 7 Electrical 3  
 Est. Value Materials Used: Water Supply 77.56 Sewage Disposal 221.48 Electrical --  
 Gallons Water Used This Month 41,834,753 Per Capita Water Consumption 233 gal.

REFRIGERATION:

Number of Service Calls 43 Number Repair Jobs 38 Ave. Total Number Employees 1  
 Number of Units Inspected and Serviced This Month 48  
 Units Not Operating: (give number and size) None  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



May 31, 44.

MONTHLY REPORT  
MANZANAR  
ENGINEERING DIVISION

The Engineering Division has been concentrating its energies toward completion of the High School Auditorium in time to hold commencement exercise between June 15 and 18. An ever increasing labor shortage is going to make completion impossible by the above date, however all necessary installations will be in place and the main Auditorium rendered usable.

Remodeling of schools in Block 16 for consolidating Elementary Schools is almost complete but we had to use the men that were working on this job to help complete the Auditorium. We expect to finish Remodeling Schools by June 30, 1944.

A recently completed and drastically cut budget for the first quarter of Fiscal Year 1945 allows practically no new construction for Manzanar and has temporarily halted action on several contemplated jobs.



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Monthly Report

ENGINEERING

Center **Manzanar**

[illegible]

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value Materials Used
<b>Electric - Buildings</b>	<b>96</b>	<b>2</b>	<b>388.12</b>
On Buildings	<b>766</b>	<b>111</b>	<b>3,186.59</b>
<b>Electric</b>	<b>25</b>	<b>2</b>	<b>54.28</b>
On Utilities			
<b>Plumbing</b>	<b>154</b>	<b>3</b>	<b>122.75</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 8 Electrical 2

Est. Value Materials Used: Water Supply \$63.07 Sewage Disposal \$180.32 Electrical --

Gallons Water Used This Month 44,119,146 Per Capita Water Consumption 263 Gal.

REFRIGERATION:

Number of Service Calls 65 Number Repair Jobs 40 Ave. Total Number Employees 2

Number of Units Inspected and Serviced This Month 35

Units Not Operating: (give number and size) 7 small boxes

Explain why units not operating, how long idle, etc. Waiting for gas to be shipped in.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



## ENGINEERING DEPARTMENT

MONTHLY REPORT ENDING JUNE 30, 1944

1. The High School Auditorium is rapidly nearing completion. Installation of finish flooring, last coat of paint and heating appliances are proceeding nicely and completion is expected about July 31.
2. School remodeling in Block 16 is practically complete with Education Department already occupying most of the buildings. A few minor items remain to be accomplished.
3. Lining of field laterals (Irrigation) has been stopped temporarily.
4. Installation of a deep well pump on the old existing casing of Well #169 in the vicinity of Block 34 was approved by W.F.B. in April, and purchase of necessary equipment has been completed. The hookup is expected to be made within the next 30 days and will provide a standby source of water supply in case of emergency.



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

## Monthly Report

# ENGINEERING

Center MANZANAR

[illegible]

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Elect. Bldgs.</b>	<b>50</b>	<b>3</b>	<b>150.95</b>
On Buildings	983	121	11,749.39
On Utilities	20	3	52.00
<b>Plumbing</b>	<b>170</b>	<b>3</b>	<b>81.73</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 6 Electrical 2  
 Est. Value Materials Used: Water Supply 104.17 Sewage Disposal 166.50 Electrical ----  
 Gallons Water Used This Month 53,568,276 Per Capita Water Consumption 300 gallons

REFRIGERATION:

Number of Service Calls 66 Number Repair Jobs 38 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 30  
 Units Not Operating: (give number and size) 4 small boxes  
 Explain why units not operating, how long idle, etc. Waiting on overhaul of sealed units (Idle, 10 days)

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.) **Note: Refer to Narrative report.**



August 2, 1944

Engineering Dept.  
Monthly report ending July 31, 1944

1. Irrigation construction is approximately 80% complete, and has been temporarily suspended so that workers and supervision could be concentrated on the job of re-roofing camp buildings. Approval for additional irrigation work has been granted by W.P.B. and work will be resumed shortly.
2. School remodeling in Block #16, shows no change over the report of June 30, except for small plumbing changes and grading.
3. Concrete foundation for pump installation and pump house framing for Well #139, is now in place. Machinery is expected to be installed during August.
4. Auditorium: Completion on this project is expected about August 15th. Some heating and plumbing installations are yet to be done as well as sanding of flooring. Construction of benches and lockers for use in this building are complete.
5. Re-roofing: Thirteen (13) blocks and Administrative Buildings have been re-roofed with crews composed of high school boys supervised by experienced foremen.
6. Due to loss of many appointed personnel and reduction of evacuee force, our work on all Engineering Activities has been retarded.
7. A disastrous fire of unknown origin occurred in the late afternoon of July 26, completely destroying Warehouse #33, #34, and Warehouse #35. Engineering Division is particularly involved in Warehouse #34, which housed the wood working department, with power saw set for construction and maintenance, and Warehouse #35 which housed our Maintenance offices, records, reports, and janitorial supplies. We have suffered serious loss in various types of motors and sawmill equipment, including saws, jigs, etc. Warehouse #33 was devoted to Industrial Activities comprising desk and office file manufacturing. A few maintenance records were saved out of Warehouse #35, but the majority of files are a total loss. Exact property damage will not be known until a complete inventory is available.



## WAR RELOCATION AUTHORITY

Budget Bureau No. 13-R035  
Approval Expires: 8/30/44

# ENGINEERING

Ending July 31, 1944

## Monthly Report

Center **MANZANAR**

**INSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Elect. Bldgs.</b>	<b>50</b>	<b>5</b>	<b>130.95</b>
On Buildings	985	121	11,749.59
On Utilities	20	5	52.00
<b>Plumbing</b>	<b>170</b>	<b>5</b>	<b>81.73</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 6 Electrical 2

Est. Value Materials Used: Water Supply 104.17 Sewage Disposal 166.59 Electrical ----

Gallons Water Used This Month 55,568,276 Per Capita Water Consumption 300 gallons

REFRIGERATION:

Number of Service Calls 68 Number Repair Jobs 38 Ave. Total Number Employees 2

Number of Units Inspected and Serviced This Month 50

Units Not Operating: (give number and size) 4 small boxes

Explain why units not operating, how long idle, etc. **Waiting on overhaul of sealed units (Idle, 10 days)**

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.) **Note: Refer to Narrative report.**



August 2, 1944

Engineering Dept.  
Monthly report ending July 31, 1944

1. Irrigation construction is approximately 90% complete, and has been temporarily suspended so that workers and supervision could be concentrated on the job of re-roofing camp buildings. Approval for additional irrigation work has been granted by W.P.B. and work will be resumed shortly.
2. School remodeling in Block #16, shows no change over the report of June 30, except for small plumbing changes and grading.
3. Concrete foundation for pump installation and pump house framing for Well #169, is now in place. Machinery is expected to be installed during August.
4. Auditorium: Completion on this project is expected about August 15th. Some heating and plumbing installations are yet to be done as well as sanding of flooring. Construction of benches and lockers for use in this building are complete.
5. Re-roofing: Thirteen (13) blocks and Administrative Buildings have been re-roofed with crews composed of high school boys supervised by experienced foremen.
6. Due to loss of many appointed personnel and reduction of evacuee force, our work on all Engineering Activities has been retarded.
7. A disastrous fire of unknown origin occurred in the late afternoon of July 28, completely destroying Warehouse #33, #34, and Warehouse #35. Engineering Division is particularly involved in Warehouse #34, which housed the wood working department, with power saw set for construction and maintenance, and Warehouse #35 which housed our Maintenance offices, records, reports, and janitorial supplies. We have suffered serious loss in various types of motors and sawmill equipment, including saws, jigs, etc. Warehouse #33 was devoted to Industrial Activities comprising desk and office file manufacturing. A few maintenance records were saved out of Warehouse #35, but the majority of files are a total loss. Exact property damage will not be known until a complete inventory is available.



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Ending Aug. 31 1944

# Monthly Report

# ENGINEERING

Center Manzanar

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Electrical Bldg.</b>	<b>50</b>	<b>4</b>	<b>\$ 216.60</b>
On Buildings	935	118	\$ 10,790.45
<b>Elect. On Utilities</b>	<b>18</b>	<b>4</b>	<b>\$20.00</b>
<b>Plumbing</b>	<b>135</b>	<b>3</b>	<b>\$185.75</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 6 Electrical 4  
 Est. Value Materials Used: Water Supply 74.82 Sewage Disposal 200.52 Electrical ---  
 Gallons Water Used This Month 51,671,526 Per Capita Water Consumption 293

REFRIGERATION:

Number of Service Calls 53 Number Repair Jobs 35 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 50  
 Units Not Operating: (give number and size) 6 Super Cold

Explain why units not operating, how long idle, etc. Waiting to exchange compressors for reconditional units.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.) **Note: See narrative report.**



September 1944

Engineering Dept.  
Monthly report ending August 31, 1944

1. Irrigation--The construction of irrigation field laterals is complete, and we hope to proceed with the lining of main ditch from reservoir to 1st. gauging station as soon as it is advisable. Because of the fact that field lateral lining has been complete for some time, no change in percentages appear.
2. School Remodeling--School remodeling in Block #16 shows no change over report of July. This project cannot be completed until authorization is received from Washington to proceed with certain electrical and plumbing hook ups.
3. Auditorium--Completion on this project has been held up due to inability to obtain a floor sanding machine. This condition is now overcome and completion is expected by September 30. This unforeseen delay has made a revision of completion date necessary.
4. Well #169--Completion date on this installation has been advanced 1 month due to unforeseen difficulty in placing deep well pump in existing casing which was found to have an obstruction about 60 feet below ground level.
5. Re-roofing building--Twenty seven (27) of the thirty six (36) blocks in Manzanar have now been provided with new asphalt felt roofing, making this project 75% complete. By September 15, this job should be finished.
6. Resurfacing roads--This project was started in June and comment inadvertently omitted from previous narrative reports. Approximately 250 tons of road oil was used to resurface 13 miles of manzanar streets including 1 mile in the farm area. Mr. Bradshaw, construction foreman, in charge of this work, expects completion about Sept. 5.

Considerable construction is anticipated for the second quarter of 1945 fiscal year, pending approval by the War Production Board in Washington.



Budget Bureau No. 13-RO 35  
Approval Expires: 6/30/44

Ending 9/30/ 1944

Monthly Report

ENGINEERING

Center **MANZANAR**

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electrical Bldgs.	35	4	\$ 225.59
* On Buildings	842	70	6,251.15
Elect. On Utilities	4	4	60.00
Plumbing	134	3	187.50

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 6 Electrical 4  
 Est. Value Materials Used: Water Supply 225.59 Sewage Disposal 75.83 Electrical —  
 Gallons Water Used This Month 45,131,474 Per Capita Water Consumption 270

REFRIGERATION:

Number of Service Calls 40 Number Repair Jobs 28 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 28  
 Units Not Operating: (give number and size) 0  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.) **Of the total amount spent for material under building maintenance, \$5,515.00 represents money spent on reroofing.**



September 28, 1944

Monthly Report  
Narrative Report for September

1. Irrigation--No activity on this project during month of September.
2. Remodel Schools--Electrical connections for stove and refrigerator hook-up to provide facilities for the Home Economics Class was complete this month as well as some painting to prepare for the fall term of school.
3. Auditorium--This project now complete and turned over to the Auditorium Committee.
4. Well #169--There is no change on percentage complete in September due to evacuee labor shortage and concentration on the more important job of re-roofing camp buildings.
5. Re-roofing Buildings--All barrack buildings and M.P. Camp are complete. Warehousing area and block latrines and ironing rooms remain to be done. We are forced to advance estimated completion date over August report due to loss of many teen age workers who returned to school and shortage of other employees.
6. Resurfacing Roads--This important maintenance project is now complete and an ample stock pile of oiled MIX is available for maintenance of streets.

We have submitted some W.P.B. form #617 to Washington for approval of Construction projects in the 2nd. Quarter. The other projects will be submitted as soon as plans and estimates are completed.



Budget Bureau No. 13-RO 35  
Approval Expires: 8/30/44

Monthly Report

ENGINEERING

Center Manzanar

[illegible]

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electrical Bldg.	97	4	96.35
On Buildings	493	39	2728.70
Elect. On Utilities	83	4	7.69
Plumbing	811	3	190.02

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 18 Sewage Disposal 5 Electrical 4

Est. Value Materials Used: Water Supply 54.57 Sewage Disposal 186.82 Electrical ----

Gallons Water Used This Month 41,899,556 Gals. Per Capita Water Consumption 249 Gallons

REFRIGERATION:

Number of Service Calls 59 Number Repair Jobs 35 Ave. Total Number Employees 2

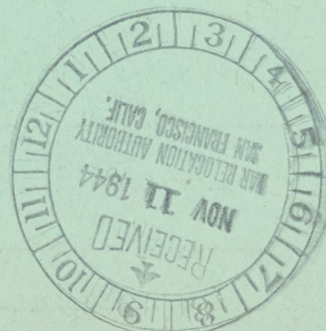
Number of Units Inspected and Serviced This Month 48

Units Not Operating: (give number and size) None

Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.) See narrative report.

Note: In regard maintenance on buildings in amount of \$2,728.70 - \$1,715.27 represents materials used on reroofing project.





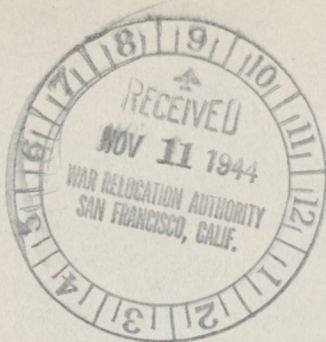
November 1, 1944

Monthly Report  
Narrative Report for October

1. Remodeling Schools: Installation of a kitchen sink with necessary sanitary sewer connections to 16-8 will complete this project.
2. Well #169: In order to put Well #169 in operation, it is necessary to install 3 phase power and an additional transformer. As the electrical engineer has resigned and all of the experienced evacuees have left the center, we do not have personnel to make the installation.
3. Doctor's Quarters: Doctor's Quarters at hospital have been remodeled to accommodate medical men close to hospital. Kitchen ranges, cabinets, and sinks have been installed but some painting remains to be done. The project is approximately 85% complete.
4. Re-roofing Buildings: Block Ironing rooms are the only buildings remaining to be covered. This project can be considered 98% complete.

Lack of labor especially skill labor makes operations and maintenance for Engineering Section very difficult.







Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Monthly Report

ENGINEERING

Center      **Manzanar**

[illegible]

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electrical (Bldgs.)	86	4	\$ 260.10
On Buildings	802	45	1,322.02
Elect. On Utilities	16	4	4.76
Plumbing	251	3	158.24

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 6 Electrical 4  
 Est. Value Materials Used: Water Supply 33.38 Sewage Disposal 176.15 Electrical 0  
 Gallons Water Used This Month 34,069,630 Per Capita Water Consumption 199

REFRIGERATION:

Number of Service Calls 46 Number Repair Jobs 32 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 57  
 Units Not Operating: (give number and size) None  
 Explain why units not operating, how long idle, etc.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

Of the total shown under "Building Maintenance" \$1,322.02, \$524.34 was spent on re-roofing buildings. This project is now complete.



December 1, 1944

MEMORANDUM TO: Office of Reports  
FROM: Engineering Division  
SUBJECT: Narrative for November

1. Remodeling Schools: Refer to report of October.
2. Well #69: Deep well turbine pump has been installed and necessary transformer is in place. Completion is expected about December 15, 1944.
3. Doctors' Quarters: This project approved on W.P.B. Serial #131087, is now complete and ready for occupancy.
4. Children's Village: This project involving the installation of a bathroom for new Appointed Personnel and new heater installation is approximately 70% complete. Completion date of December 15, 1944 is expected to be met.
5. Appointed Personnel Recreation building: This project involves the installation of some plasterboard, shelving and a kitchen sink. It is now considered to be 70% complete.
6. Under two maintenance classifications. (1) Re-roofing of camp buildings is now complete, including M. P. Camp and ironing rooms. (2) Improvement of the hospital now consists of the painting of two wards out of five. This work will progress as our labor situation permits.
7. Lack of experienced evacuee labor is still hampering stove and cooler maintenance, but the situation is improving.



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Monthly Report

## ENGINEERING

Center Manzanar

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electrical (Bldgs.)	26	4	\$48.25
On Buildings	927	37	\$728.10
Electrical Utilities	75	4	\$143.05
Plumbing	224	3	87.64

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 17 Sewage Disposal 5 Electrical 4

Est. Value Materials Used: Water Supply \$77.74 Sewage Disposal \$162.61 Electrical 0

Gallons Water Used This Month 27,158,394 Per Capita Water Consumption 150

REFRIGERATION:

Number of Service Calls 37 Number Repair Jobs 8 Ave. Total Number Employees 21

Number of Units Inspected and Serviced This Month 20

Units Not Operating: (give number and size) 4-40 Cu. ft.

Explain why units not operating, how long idle, etc. Motors out for repair.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)



January 1, 1945

TO: Office of Reports  
FROM: Engineering Section  
SUBJECT: Narrative for December

Remodel Schools - This project may now be considered closed. Small installations which had been holding up completion were made this month.

Well #169 - Completion is expected on Well #169 installation as soon as pole cross arm extensions are in place to carry wire.

Children's Village - This project was completed early in December and consisted of the erection of two outside boiler sheds, necessary pipe connections and the installation of a bath room.

Appointed Personnel (Recreation Bldg.) - Expect completion in December. Installation of a kitchen sink, counter, and some shelving and kalsomining of plasterboard was accomplished.

New Garage Bldg. - The garage building is rapidly taking shape. Sanitary sewer connections, water pipe installations and building framing is complete. 30% complete is estimated.

Hospital - Mastipave, etc. - Remodeling at hospital is progressing in good shape and consists of lining mess hall with plasterboard, painting wards and laying mastipave in wards and covered walkways not already provided for.

Duck-boards for food warehouse are rapidly nearing completion. The project will enable mess division to conform to a directive from Washington, regarding food storage houses.

Canteen Building 8-14 was completed December 4; consisting of plasterboard on interior walls, new floor installation and some kalsomining.

Maintenance problems have been controlled to a point where general camp maintenance is greatly eased and generally taken care of.



Budget Bureau No. 13-R035  
Approval Expires: 8/30/44

Monthly Report

ENGINEERING

Center      **Manzanar**

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Electrical (Bldgs)</b>	<b>75</b>	<b>4</b>	<b>144.18</b>
On Buildings	894	39	928.55
<b>Elect. On Utilities</b>	<b>12</b>	<b>4</b>	<b>11.31</b>
Plumbing	255	3	110.70

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 17 Sewage Disposal 5 Electrical 4  
 Est. Value Materials Used: Water Supply 105.04 Sewage Disposal 193.90 Electrical 155.49  
 Gallons Water Used This Month 28,550,520.3 Gals. Capita Water Consumption 159 Gals.

REFRIGERATION:

Number of Service Calls 37 Number Repair Jobs 8 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 20  
 Units Not Operating: (give number and size) 3 - 10 Cu. Ft. Refrigerators  
1 - 6 Cu. Ft. Refrigerator

Explain why units not operating, how long idle, etc.

Inability to obtain sufficient repair parts. Delay is occasioned by having to get permission from Washington to make emergency purchases.

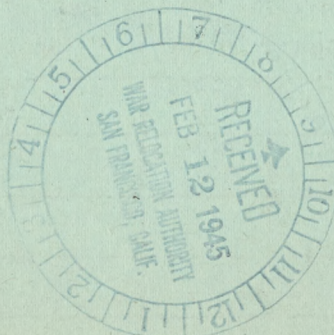
COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

The construction projects are inactive pending approval from Washington to continue.

A great many breaks in the water mains have occurred, evidently caused by settling of line and poor calking during construction. This has increased our maintenance work and also accounts for most of increased per capita consumption of water.

Building maintenance has also increased due to deterioration of light weight paper on outside walls of buildings, steps, doors, etc.

Repairs on hot-water boilers, stoves, motors, refrigerators, etc., have also increased.





Budget Bureau No. 13-R035  
Approval Expires: 8/30/44

# Monthly Report

# ENGINEERING

Center      MANZANAR

STRUCTION: , Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electric on Bldgs. On Buildings	<del>119</del> 773	<del>5</del> 38	<del>149.10</del> 761.63
Elect. On Utilities	13	5	5.58
Plumbing	216	6	97.91

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 5 Electrical 5  
 Est. Value Materials Used: Water Supply 38.16 Sewage Disposal 136.79 electrical 154.68  
 Gallons Water Used This Month 23,052,578 Per Capita Water Consumption 145 Gals.

REFRIGERATION:

Number of Service Calls 23 Number Repair Jobs 23 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 63  
 Units Not Operating: (give number and size) 2 - 20 Cu. Ft.

Explain why units not operating, how long idle, etc. Inability to obtain sufficient repair parts. Delay is occasioned by having to get permission from Washington to make emergency purchases.

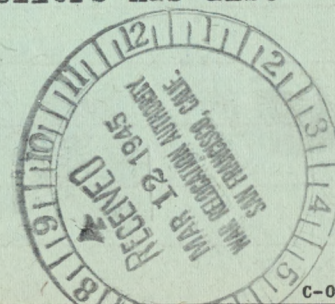
COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

We received authority to finish construction on Garage and Well #169. After this authority was granted, we installed windows, doors, and poured concrete floor in part of Garage. As soon as the Lift is received, we will finish this building. Work on Well #169 will be resumed as soon as some material which has been ordered is received.

We have started construction of packing boxes for evacuee property. This project is set up so we believe boxes can be made fast enough to meet the needs of Evacuee Property Section for packing.

Building maintenance has increased especially on building paper for outside walls of barracks and warehouses which has deteriorated very fast during the winter months.

Maintenance of refrigerators, stoves and hot water boilers has also increased.





Budget Bureau No. 13-RO35  
Approval Expires: 6/30/44

Ending March 31 1945

# Monthly Report

# ENGINEERING

Center **MANZANAR**

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Elect. on Bldgs.</b>	<b>110</b>	<b>6</b>	<b>137.22</b>
On Buildings	622	33	720.34
<b>Elect. On Utilities</b>	<b>12</b>	<b>4</b>	<b>7.20</b>
<b>Plumbing</b>	<b>196</b>	<b>6</b>	<b>84.88</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 4 Electrical 6  
 Est. Value Materials Used: Water Supply \$44.52 Sewage Disposal \$157.25 Electrical 136x42  
 Gallons Water Used This Month 28,562,454 Per Capita Water Consumption 165 Gals.

REFRIGERATION:

Number of Service Calls 25 Number Repair Jobs 20 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 59  
 Units Not Operating: (give number and size) 2- 20 Cubic Ft.

Explain why units not operating, how long idle, etc. **Inability to obtain sufficient repair parts. Delay is occasioned by having to get permission from Washington to make emergency repairs.**

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

**Work on Well #169 will be resumed as soon as the balance of materials ordered is received.**

**Work on the garage consisted of preparation of the floor to receive the lift and installation of space heaters.**

**Construction of packing boxes for evacuee property has continued on a schedule believed to be adequate to supply the needs of Evacuee Property Section. A portion of lumber required for crating of evacuee property has been ripped to suitable size.**

**Building maintenance has decreased as to total number of jobs and also personnel has decreased. Maintenance of hot water boilers, stoves and refrigerators has increased.**

**Other crews have been busy with routine operation and maintenance.**



## WAR RELOCATION AUTHORITY

Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Ending 4-30 194 5

# Monthly Report

ENGINEERING

Center **Manzanar**

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



# MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Elect. on Bldg.</b>	<b>49</b>	<b>5</b>	<b>141.87</b>
On Buildings	511	33	469.52
<b>Elect. On Utilities</b>	<b>15</b>	<b>5</b>	
<b>Plumbing</b>	<b>280</b>	<b>6</b>	<b>94.33</b>

## OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 6 Sewage Disposal 4 Electrical 5  
 Est. Value Materials Used: Water Supply 860.13 Sewage Disposal 153.54 Electrical 0  
 Gallons Water Used This Month 35,640,909 Per Capita Water Consumption 222

## REFRIGERATION:

Number of Service Calls 18 Number Repair Jobs 60 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 78  
 Units Not Operating: (give number and size) 2-20 cu. ft. 13

Explain why units not operating, how long idle, etc. Inability to obtain sufficient repair parts.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

On April first one of the worst wind-storms in the history of Manzanar caused extensive damage. Over fifty roofs were damaged and several doors were blown off their hinges. Much sand had to be removed from streets and drains. The reservoir had to be drained and cleaned which together with irrigation and operation of Well #75 accounts for the large increase in per capita water consumption.

Work on Well #169 is held up pending arrival of materials.

Garage construction is complete. During this month Lift and space heaters were installed and concrete floor was poured. Construction of packing boxes and crating for evacuee property is continuing on a schedule considered ample to fill needs of Evacuee Property section.

Maintenance of Stoves, Refrigerators, Ranges, and Hot water boilers has increased. Other crews have been busy with routine operation and maintenance



Budget Bureau No. 13-R035  
Approval Expires: 8/30/44

## Monthly Report

# ENGINEERING

**INSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

\* Estimated on 5,000 Box Basis

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE This Month	DEVELOPED Total To Date



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
<b>Electrical on Building</b>	<b>50</b>	<b>4</b>	<b>194.07</b>
On Buildings	525	48	301.82
<b>Electrical</b>			
On Utilities	12	4	19.78
<b>Plumbing</b>	<b>212</b>	<b>7</b>	<b>67.55</b>

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 4 Electrical 4  
 Est. Value Materials Used: Water Supply \$65.90 Sewage Disposal \$130.98 Electrical 19.78  
 Gallons Water Used This Month 39,423,000 Per Capita Water Consumption 255

REFRIGERATION:

Number of Service Calls 23 Number Repair Jobs 71 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 94  
 Units Not Operating: (give number and size) 1-70 cubic feet 2-65 cubic feet  
10-20 cubic feet 9-40 cubic feet

Explain why units not operating, how long idle, etc. These machines are not operating because they have been stripped of parts to keep other units operating. As soon as Washington gives authority to purchase parts, these units will be repaired and either declared surplus or used here.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

Work on Well #169 is held up pending arrival of materials.

Construction of boxes for Evacuee Property is temporarily held up because construction as well ahead of needs of Evacuee Property Section. Work will be resumed as need arises.

Crating for Evacuee Property has continued at an accelerated pace 1049 pieces of furniture etc., having been crated to date. To accomplish this a large amount of lumber was ripped to a suitable size. At the present rate all lumber of a suitable size and lumber that can be ripped to suitable size will be exhausted by July first.

Maintenance of boilers, ranges, stoves, and refrigerators has increased and personnel has decreased. Appointed personnel will have to be secured to fill key positions left vacant by Evacuees Relocating or maintenance and operation of center will become crippled to such an extent that welfare and health of the people may be endangered.

Mr. Charles Campbell, Refrigeration Engineer, visited Manzanar and made recommendations to Refrigeration and Electrical Departments in regard to stoves.





Monthly Report

ENGINEERING

Center Manzanar

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED This Month	DEVELOPED Total To Date



# MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
Electrical	73	4	\$192.24
On Buildings	420	58	449.25
On Utilities	26	4	20.50
	178	5	29.29

## OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 5 Electrical 3  
 Est. Value Materials Used: Water Supply \$70.17 Sewage Disposal \$125.45 Electrical \$120.50  
 Gallons Water Used This Month 45,537,869.3 Per Capita Water Consumption 336

## REFRIGERATION:

Number of Service Calls 21 Number Repair Jobs 79 Ave. Total Number Employees 2  
 Number of Units Inspected and Serviced This Month 100  
 Units Not Operating: (give number and size) 2-65 c.f. 7-40c.f. 1-72c.f. 11-20c.f.

Explain why units not operating, how long idle, etc. The Refrigeration Dept. has the above number of Refrigerators in Whse. #31. Some are tied up due to motors being in process of rewinding. Others are awaiting Wash. approval (since latter part of Feb. '45) of funds to procure materials, so these units can be repaired on declared Surplus.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

Work on Well #169 has been completed and operation started. This will augment the water supply from Shepherd's Creek and well #75.

\*Approximately one half of boxes for Evacuee Property have been completed and turned over to Property Control. This project is well ahead of the Evacuee Section.

Crating of Evacuee Property has continued at an accelerated pace. Permission to wreck two barracks and salvage lumber for crating purposes has been received and work started to salvage lumber which is desperately needed to keep up with our needs in crating evacuee's property occasioned by the increase in relocation.

Maintenance of boilers, ranges, stoves and refrigerators has increased and personnel has decreased. Appointed personnel will have to be secured to fill positions left vacant by relocation of Evacuees or maintenance and operation of the Center will become crippled to such an extent that welfare and health may become endangered.



## ENGINEERING

# Monthly Report

**CONSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

( OVER )



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value of Materials Used
On Buildings	<del>433.00</del>	68	<del>\$735.30</del>
On Utilities	86	17	\$101.30

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 19 Sewage Disposal 4 Electrical 3

Est. Value Materials Used: Water Supply 60.87 Sewage Disposal \$107.66 Electrical \$10.10

Gallons Water Used This Month 56,225,176 Per Capita Water Consumption 404

REFRIGERATION:

Number of Service Calls 22 Number Repair Jobs 54 Ave. Total Number Employees 2

Number of Units Inspected and Serviced This Month 76

Units Not Operating: (give number and size) 1-72c.f. 2-65 c.f. 9-40c.f. 14-20c.f.

Explain why units not operating, how long idle, etc. **These refrigerators need repairs to compressors and motors for which we requested authority to purchase parts and it was denied by the Washington office.**

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

**Crating of Evacuee and Government Property has increased considerably. We have the re-saw machine running to resaw new lumber into crating materials. This work is progressing as well as can be expected considering the type of hard lumber to saw and the loss of skilled evacuee employees**

**As authorized by Washington office, we have razed two barracks and salvaged the lumber for crating material.**



## ENGINEERING

# Monthly Report

Center Manzanar

C-0 137  
( OVER )



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value Materials Used
On Buildings	327	51	\$229.20
On Utilities	122	11	\$133.13

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 16 Sewage Disposal 4 Electrical 3  
 Est. Value Materials Used: Water Supply \$62.07 Sewage Disposal \$86.32 Electrical \$6.21  
 Gallons Water Used This Month 44,795,880 Per Capita Water Consumption 374

REFRIGERATION:

Number of Service Calls 17 Number Repair Jobs 89 Ave. Total Number Employees 1  
 Number of Units Inspected and Serviced This Month 106  
 Units Not Operating: (give number and size) 9-200.f.; 9-400.f.; 1-400.f.; 1-720.f.; 2-650.f.

Explain why units not operating, how long idle, etc.  
Same as last month.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

**Creting of evacuee and Government property has increased while the number of evacuee employees for sawing lumber and crating have decreased to where it threatens to hold up relocation if we cannot employ appointed personnel at once to replace skilled evacuees that relocate.**

**Skilled evacuee employees are the first to relocate which has caused a shortage of skilled employees in the Engineering Section which is critical. Appointed personnel are needed for essential operation and maintenance of center to protect health and property.**



Budget Bureau No. 13-R035  
Approval Expires: 6/30/44

Monthly Report

# ENGINEERING

Center      Manzanar

**INSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

C-0 137  
( OVER )



MAINTENANCE:

	Number of Jobs Done	Ave. Total Number Employees	Est. Value Materials Used
On Buildings			
On Utilities			

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 12 Sewage Disposal 3 Electrical 2

Est. Value Materials Used: Water Supply \$56.00 Sewage Disposal \$107 Electrical

Gallons Water Used This Month 33,666,000 Per Capita Water Consumption 353

REFRIGERATION:

Number of Service Calls 10 Number Repair Jobs 51 Ave. Total Number Employees 2

Number of Units Inspected and Serviced This Month 61

Units Not Operating: (give number and size) 9-200c.f.-9:40c.f.1:40c.f.1:72c.f.2-65c.f.1.

Explain why units not operating, how long idle, etc.

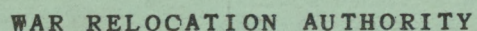
Same as given in several previous months.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

The above information is all that we can supply since we do not have clerks to keep cost records.

Due to shortage of skilled employees to operate large steam boilers at the hospital, we have started to install stoves and a small hot water boiler so one part of the hospital can be used. We expect to close down the boilers which will close the laundry sterilizers and steam heating system, etc., at the hospital the first week in October





Budget Bureau No. 13-RO 35  
Approval Expires: 6/30/44

ENGINEERING

Ending October 1945

Monthly Report

Center Manzanar

**INSTRUCTION:** Buildings, Irrigation, Drainage, Roads.

[illegible]

AGRICULTURAL LAND DEVELOPMENT: Clearing, Levelling, etc.

Type of Project	Date Started	% Done	Est. Date of Completion	Ave. No. Evacuees Employed	ACREAGE DEVELOPED	
					This Month	Total To Date



MAINTENANCE.

	Number of Jobs Done	Ave. Total Number Employees	Est. Value Materials Used
On Buildings			
On Utilities			

OPERATION OF UTILITIES:

Average Number of Employees: Water Supply 5 Sewage Disposal 2 Electrical         
 Est. Value Materials Used: Water Supply \$6.00 Sewage Disposal \$81.00 Electrical         
 Gallons Water Used This Month 19,270,000 Per Capita Water Consumption 287

REFRIGERATION:

Number of Service Calls 8 Number Repair Jobs 38 Ave. Total Number Employees 1  
 Number of Units Inspected and Serviced This Month 46  
 Units Not Operating: (give number and size) 9-20c.f. 9-4-c.f. 1-40 c.f. 1-72c.f.  
2-65c.f. 12-40c.f. 12-40c.f.  
 Explain why units not operating, how long idle, etc.

Same as given in several previous months with the addition of the last ones returned to storage from closed mess halls.

COMMENTS: (Discuss here any unusual or significant developments this month in construction, land development, maintenance, operation of utilities and refrigeration; problems, or difficulties encountered in getting materials, labor or equipment; etc. Use additional sheet if necessary.)

