

SECTION 8

Public Services, Facilities, and Utilities

The existence of public facilities and utilities not only allows urban development to take place, but also directs the locations of that development. Access to existing facilities and utilities often determine which lands are developed. It is, therefore, important in planning to consider both the adequacy of the supply and the location of these services. Figure 4 shows the location of public facilities in Moscow.

Water

Water demand in Moscow varies greatly during the year and does not always correlate with population. During the fall and winter months, when the city's population is the greatest, the average demand of about 1.9 million gallons daily is substantially lower than in the summer months, when the peak demand has reached as high as 5.3 million gallons daily and is usually between 4.5 and 5 million gallons daily.

Moscow's municipal water supply presently comes from six wells. The three primary wells, Wells #6, #8, and #9, are deep wells taking water from lower basalt aquifers. They are approximately 1200 feet below ground level. Wells #2 and #3 are much shallower (200 feet plus) and along with the Cemetery Well (550 feet deep) supply water high in iron and manganese and are used only as auxiliary wells to meet peak summer demands. A treatment plant to decrease the iron content of the city water was activated in 1975 and 1977. The University of Idaho operates its own water system from its own wells. The two systems are connected for emergency purposes.

The amount of water that the city's system can supply in a given day is a total of the pumping capability from its wells and the storage capacity of its storage tanks. Wells #6, #8, and #9, which supply the majority of the city's water, are capable of producing approximately 1400, 1200, and 2400 gallons per minute, respectively. Wells #2 and #3 and the Cemetery Well are used to supplement the supply during the year when water demands increase and jointly produce an additional 2860 gallons per minute, for a total of about 11 million gallons a day. The city's four water storage tanks have a combined capacity of 4.8 million gallons. To maintain an emergency supply of 0.5 million gallons at all times, only 4.3 million gallons of this amount can be considered working storage. During peak summer demand periods, an 8-hour period every night or the next day's demand, might draw from the emergency reserves.

City water is distributed in mains ranging between 6 and 24 inches in diameter, the majority being 6-inch lines. A program of pipe replacement for inadequate lines has been in progress in recent years, as well as expansion of the system into areas of growth.

The existing pumping capability and storage facilities are adequate to meet the city's normal water demand. In past years, there were periods of high summer demand during

which maintaining an emergency water supply has been possible only by implementing an alternating watering schedule within the city. With the recent installation of Well #9, and a two-million-gallon reservoir, this problem has been corrected.

Since 1896, water levels in the deeper aquifers in the Moscow area have progressively lowered. This is the result of the city taking water at a faster rate than natural recharge can occur. While studies of ground water supplies concerning the future availability are conflicting, most have agreed that research on either alternative sources for municipal water supplies or more efficient management of present groundwater resources is needed. The Pullman-Moscow Water Resources Committee, including representatives from the city of Moscow, city of Pullman, Latah and Whitman Counties, University of Idaho, and Washington State University, has been studying the water problem for the past several years. A Groundwater Management Plan was adopted by those representatives and approved by the Idaho Department of Water Resources and the Washington Department of Ecology as a reference for future requests for water permits in 1992.

Future planning decisions concerning any new development in the Moscow area should consider the amount of water to be used by the development, the nature of the water use, and the source of the water supply. The city should establish guidelines for water usage based upon the nature of the new development. Developers of large commercial or industrial developments that are expected to use large quantities of water should be required to quantify the future water demands of any future development and the impacts of those demands on the city's water supply. Finally, the city should develop mechanisms to insure that new developments continue to meet the established guidelines as set forth in the management plan.

Future industrial development that would require large quantities of water could be encouraged to consider alternative sources of water. The present use by the university of the city's sewage effluent for lawn watering is one example of such an alternative source.

Sewer System

Sewage collection in Moscow is accomplished by the gravity tributary system with mains ranging between 6 and 24 inches in diameter, the majority between 6 and 19 inches. A pump station located south of Palouse River Drive pumps sewage from the urbanized area south of Lauder Avenue through a 10-inch pressure line up the hill on Main Street to Taylor Avenue. An extensive inventory of the sewage collection system has recently been completed to locate sewer lines in the city and to determine sizes.

Two sewer districts have recently been formed in the Moscow area; one is in the area to the southeast of the city and one is to the north along North Polk Street. The southeast district operates with its collection system connected through a second lift station to the Moscow system for treatment. The North Polk Sewer District uses gravity flow to connect to the Moscow system for treatment purposes.

The city's secondary trickling filter sewage treatment plant has a design capacity of 3.5 million gallons per day and operates at a base load of 2.8 million gallons per day. Treated effluent is presently discharged into Paradise Creek.

During periods of heavy rain, storm runoff infiltrates the sewage system. The additional liquids in the sewage at those times can overtax the trickling system of the plant. The trickling system will need to be expanded in the future to handle the excess liquids.

Storm Drainage

The city's storm runoff drains into a system of pipes, culverts, and natural draws that carry it ultimately into Paradise Creek. In some areas, runoff is collected in an underground system, carried out of the immediate area, and then emptied into areas of minor natural drainage. In many cases, such handling of storm drainage will become inadequate as development intensifies and cause isolated flooding. This flooding will intensify due to the city's policy of requiring all new commercial developments with parking lots to connect their runoff system with the city's runoff system.

Where storm drainage is channeled through underground pipes, many of the pipes are undersized for the runoff loads they now must carry, and excess water floods areas around catch basins. This occurs particularly in the areas adjacent to the central business district.

While the city's storm runoff is being routed into Paradise Creek, the creek itself creates some serious storm drainage problems. The creek's course through most of the city is above ground, routed through culverts under city streets. It goes underground for a short distance in the vicinity of the University of Idaho's physical plant. The Paradise Creek area has been designated a flood prone area by the Federal Emergency Management Agency. Periods of high runoff have resulted in flooding in areas adjacent to the channel, and water damage to residences has occurred. The natural tendency of the creek to flood has been enhanced by the collection of debris, which obstructs the flow within the channel at restrictive points such as culvert openings. In the winter, ice often causes obstructions and adds to the flooding problems. The culverts along the creek located under the city streets serve as bottlenecks to flood waters even without obstruction from debris or ice.

Recent cleanup efforts by the city within the Paradise Creek channel have reduced debris and have resulted in less flood potential within the area. This practice should be encouraged and budgeted by the city. The city also plans to reduce the number of culverts along the channel by replacing them with bridges. However, despite these efforts and plans, there is still a need to further improve the bottlenecks in order to minimize the impact of additional storm runoff on the existing system.

Solid Waste Disposal

A privately owned service provider franchised by the city collects Moscow's solid waste for disposal. The solid waste is delivered to a transfer station/landfill facility southeast of Moscow. Compostable materials and inert/demolition waste are retained there. A city-owned, privately managed recycling center and residential yard waste drop-off is located on North Jackson Street.

Street Lighting

With the exception of the lighting along Main Street, which is owned by the city, street lighting in Moscow is leased by the city of Moscow from a private utility company. In the past, less than desirable street lighting was provided. Planning for adequate lighting is needed when the city accepts new subdivisions and major new developments.

Fire and Police Protection

The Moscow Fire Department is a volunteer organization operated with full-time fire chief, fire marshal, and training officer and with more than 70 volunteers. In addition to the downtown headquarters at Sixth and Main Streets, a second station with training facilities is operated at White Avenue and Mountain View Road. The fire department has three trucks, three pumpers, two ambulances, and other accessory fire fighting vehicles.

The police department staff includes chief, captains, and administrative sergeants who are administrative officers; twenty-five patrol officers; three part-time parking enforcement officers; six dispatchers; and one animal control officer. The department operates twelve vehicles.

The Latah County Sheriff's Department is also headquartered in Moscow. While this department has the authority to patrol the city, by informal arrangements they only act within the city when they see an infraction. The Police Department and the Sheriff's Department will assist each other when necessary.

As development continues in the Moscow area, it will be important that sufficient staffing, facilities, and equipment are available to maintain the present high level of emergency services. It is also important that new developments provide for complete access of emergency vehicles to within a reasonable distance of all points of structures so that adequate protection can be given.

Gritman Medical Center and Other Medical Services

Gritman Medical Center, Inc., is a general public hospital with sixty-two beds serving all of Latah County. There is an emergency room at the hospital and the Moscow Fire Department provides ambulance and emergency medical technician (EMT) service. Gritman Medical Center is located at the south end of the central business district on the block bounded by Main, Washington, Seventh and Eighth Streets, with the main entrance at 700 South Main Street.

There are three nursing homes in Moscow. Latah Health Services, located on West Palouse River Drive, is county owned and is operated under the direction of a seven-member board elected by the countywide membership. The non-profit corporation provides a large outpatient physical therapy department, Latah Home Care and Hospice, an 84-bed skilled nursing facility, and a 36-bed shelter care resident center for the fragile, self-care elderly. Meals-on-Wheels are provided by Latah Health Services to Meals-on-Wheels, Inc.

Good Samaritan Village is in northeast Moscow and provides 66 retirement apartments, 16 duplexes (32 units), and one house. It has 52 beds for skilled nursing care and in-patient hospice care, eight beds for Alzheimer's-dementia care, and 12 beds for assisted living care. Good Samaritan Village is part of the Evangelical Lutheran Good Samaritan Society and is a Christian non-profit facility. The facility is funded by local contributions and is operated financially independently.

Moscow Care Center is owned by Hillhaven Corporation from Tacoma, Washington. It is located on Rowe Street in southeast Moscow. The facility provides intermediate and skilled nursing care and is licensed for 94 beds.

There are two home health agencies in Moscow. Latah Home Care and Hospice is run by Latah Health Services and Gritman Home Health is run by Gritman Medical Center. Services provided by these agencies include nursing, physical therapy, speech therapy, and social services.

The North Central Health District is located on East Palouse River Drive and provides health teaching, maintenance, and communicable disease prevention. State and county taxes fund the Health District.

Hospice of the Palouse is a separate corporation managed by Gritman Medical Center for home care and support of the dying patient and his or her family. It is located in Gritman Medical Center. Good Samaritan Village offers in-patient hospice accommodations.

Latah County Library District

A branch of the Latah County Library District, including the district's administrative offices, is located at the corner of East Second and Jefferson Streets, and contains approximately 70,000 volumes. The largest branch of the county system, the library is in a city-owned building that underwent a major addition in 1983.

Government Offices

The city offices are located in multiple sites. The main City Hall is at 206 East Third Street, the Old Post Office Building. The city supervisor, city attorney, and community development department (planning and building) are located on the third floor. The second floor houses the Mayor's office and the City Council chambers. The main floor is the Community Center, and the senior meals are held there on Tuesdays and Thursdays.

The City Hall Annex is located at the northwest corner of Fourth and Washington Streets and houses engineering, finance, and human resources departments, along with the police department via a separate entrance. The parks and recreation department is located at the Eggan Youth Center at the southwest corner of East D Street and Mountain View Road; the water and sewer departments are located at the northeast corner of West A and Jackson Streets; and the street department and city shop are located at 650 North Van Buren Street.

Latah County Courthouse is situated among Adams, Van Buren, East Fifth, and East Sixth Streets. The sheriff department and county offices are there, while driver and car licensing are located at the Eastside Marketplace at South Blaine Street and Troy Road.

The Idaho State Employment office is located in the central business district at the corner of First and Jefferson Streets. The Idaho Department of Health and Welfare is also in downtown at 200 South Almon Street. The North Central Idaho Health District offices are located on East Palouse River Drive in the southern part of Moscow.

Federal offices, including the post office, are located in the Federal Building on Washington Street between Fourth and Fifth Streets. District offices of the Clearwater National Forest are located at 1221 South Main Street.

The city, county, and Moscow School District have been discussing ways to fully use or share facilities to keep these services near the center of Moscow and use some of the older, historic buildings for practical purposes.

Specialized Facilities and Services

Several independent and voluntary agencies operate in Moscow to provide for more specialized needs of city residents and are generally coordinated by Volunteers in Moscow, a multipurpose service organization. The Area Agency on Aging, operating within Latah and adjacent counties, provides bus service for the elderly and handicapped through federal funding and city assistance, and serves to organize other activities for older residents, such as a twice-weekly lunch program.

The Community Center, located in the Old Post Office/City Hall, offers a meeting facility for numerous groups and activities. The center contains a large meeting hall and kitchen.

The Clearwater Economic Development Agency has relocated to Lewiston. This multi-county agency offers technical assistance to local units of government and individuals in such areas as economic development planning.

The Adult/Child Development Center, located at the Idaho Department of Health and Welfare offices, provides evaluation, diagnosis, and individualized programs to developmentally disabled infants, children, and adults. Specialized staff assists individuals in the development of pre-academic and self-help skills, language and motor skills, and daily living.

Goal

Provide public facilities, utilities, and services of such amount, location, and quality to meet the needs of the residents of Moscow now and in the future, and to assist in directing the location of new developments.

Objectives

1. Promote public utility policies that will discourage urban sprawl and needless destruction of productive agricultural lands.
2. Promote public utility policies that are economically efficient.
3. Promote coordination between agencies in the planning process and administration in order to make maximum use of existing and future public facilities and services.
4. Maintain and improve the city's water system to fulfill domestic, irrigation, and industrial needs, and to provide ample water for emergency purposes. Before new irrigation and industrial developments are permitted, their water demands will be identified and their impact on the existing water supply will be determined. Industries requiring large quantities of water may need to look to alternative sources of water.
5. Maintain and improve the city's sewer system to serve all urban development in the city and to comply with environmental standards.
6. Flood-prone areas will be identified, and flood hazards eliminated where feasible.
7. Maintain the high level of service provided by emergency service departments in Moscow.
8. Provide adequate programs and facilities to accommodate public services.
9. Locate public facilities with maximum convenience to potential users. Ensure compatibility of public facilities with adjacent land and land uses.

Implementation Policies

1. **The city of Moscow should maintain control of all sewer and water service in the area. Extension of city services, particularly water and sewer services, should encourage new development adjacent to existing urban development.**

The major reason-for-being of local government is the provision and maintenance of necessary services and facilities in an area. If these services are provided in unincorporated areas around the city by numerous special districts, or if city services are provided to unincorporated areas, the general purpose government will have no control over how or where development around it is to occur. The city's present policy requiring annexation of any land to receive city services should be continued. Any special districts to be created within the Moscow Area of City Impact should be allowed only if they are to be connected to the city's systems. The city should maintain complete control over all new hookups and line extensions within such districts by written agreement before the new lines are connected with the city's system or by dedication of new lines to the city.

The city also has some valid concerns regarding areas lying beyond the Moscow Area of City Impact. Within this area of interest, the city and county should cooperate in planning and zoning. Such cooperation would help limit urban development until such times as city services could be provided.

Since urban development is largely dependent on the presence of water and sewer and the extension of major streets, the existence of those services will direct the location of development. Thus, the most effective means for the city of Moscow to encourage the most efficient, economical development on its borders, and thereby conserve agricultural land, is to avoid lengthy extensions of services into undeveloped areas. However, to provide sufficient land for additional residential development in Moscow, limited service extensions into undeveloped areas may be necessary. These two concepts are not necessarily incompatible. Service extensions can be made into areas of existing scattered development where new development will fill in the vacant areas, and can be designed in other areas to keep new development close to the urban fringe. Shorter service extensions in several directions will maintain the equilibrium between new development and existing services and facilities in the areas as opposed to a single, lengthy extension in one direction.

- 2. Public utility systems, including water and sewer lines, etc., should be scaled in accordance with the densities proposed for the area according to the Comprehensive Plan Map.**
- 3. The Pullman-Moscow Water Resource Committee's study of long-range water needs and alternative sources should be continued to ensure an adequate water supply at a reasonable cost for the city in the future.**

The water supply of Moscow, Pullman, and the two universities is evidently from the same aquifer system, and thus the problem and perhaps the solution are shared in common. A sizable project for developing future water supply may be possible only through such cooperative efforts.

- 4. Water demand within the city should be continually evaluated to ensure that demand does not exceed potential future supply.**

Further information needs to be gathered concerning the potential quantity of water that will be available to Moscow in the future. This information, combined with data on present and future demand, will assist the city in making future developmental decisions. Planning controls should be implemented to ensure that demand does not exceed future supply.

- 5. A program should be developed for replacement of inadequate lines in the water distribution system along with extension of mains to developing areas. Priority for improvement should be to the southeast and northwest areas of the city.**

A program for improvement of the city's water distribution system should include line extension, replacement of undersized lines, additional fire hydrants, and looping of lines that are presently dead-ended.

- 6. The sewage system should be studied to develop a program for replacement of older inadequate parts of the system, as well as for gradual expansion of the system.**
- 7. A long-term improvement project for the city's storm drainage system should be planned and implemented. Plans for flood control measures on Paradise Creek should be compatible with a parkway concept along that drainage.**

A comprehensive approach should be taken to developing a storm drainage system improvement plan. It should include installing culverts or piping the storm drainage that is now allowed to follow natural drainage in developed areas, replacement of existing undersized pipe, and replacement of undersized culverts on Paradise Creek and in other areas of the system. Consideration should also be given to future improvements to Paradise Creek to alleviate flooding conditions along its course, including possible diversion channels.

- 8. New development within the Moscow area should include on-site detention capability for storm water runoff when determined to be needed.**
- 9. The Moscow Flood Hazard Ordinance should continue to be enforced in those areas near Paradise Creek and the South Fork of the Palouse River that have been designated as flood-prone areas.**

Certain portions of the flood plains are more vulnerable to hazardous flooding than other areas and therefore require greater regulation. There are uses, including recreational and seasonal uses, which can be made of even the most restricted areas of the flood plain. Other more intensive uses can be permitted in less vulnerable areas through compliance with specific construction standards.

- 10. As the population of Moscow increases, staffing and equipment needs for city services, particularly the emergency services, should be continually reevaluated.**

11. Adequate emergency vehicle access to all buildings must be provided in all new developments so that the emergency services can be assured at all times.

The fire and police departments should review development site plans for adequate access to buildings.

12. In Moscow, adequate street lighting should be planned along with all new developments.

13. Government facilities and other institutional uses serving the public should generally be located in the eastern portion of the central business district and in the area immediately adjoining it to the east.

The cluster of institutional and office uses along the eastern edge of the central business district is a logical and beneficial development and should be encouraged in the future by maintaining city offices, facilities, and services there. This type of use can be further encouraged by zoning the area for office, institutional, and similar uses, along with high-density residential uses. Adequate parking and landscaping should be provided along with new development.

14. Cooperative efforts between the city of Moscow and other agencies that maximize the capabilities of public facilities, utilities, and services should be continued.

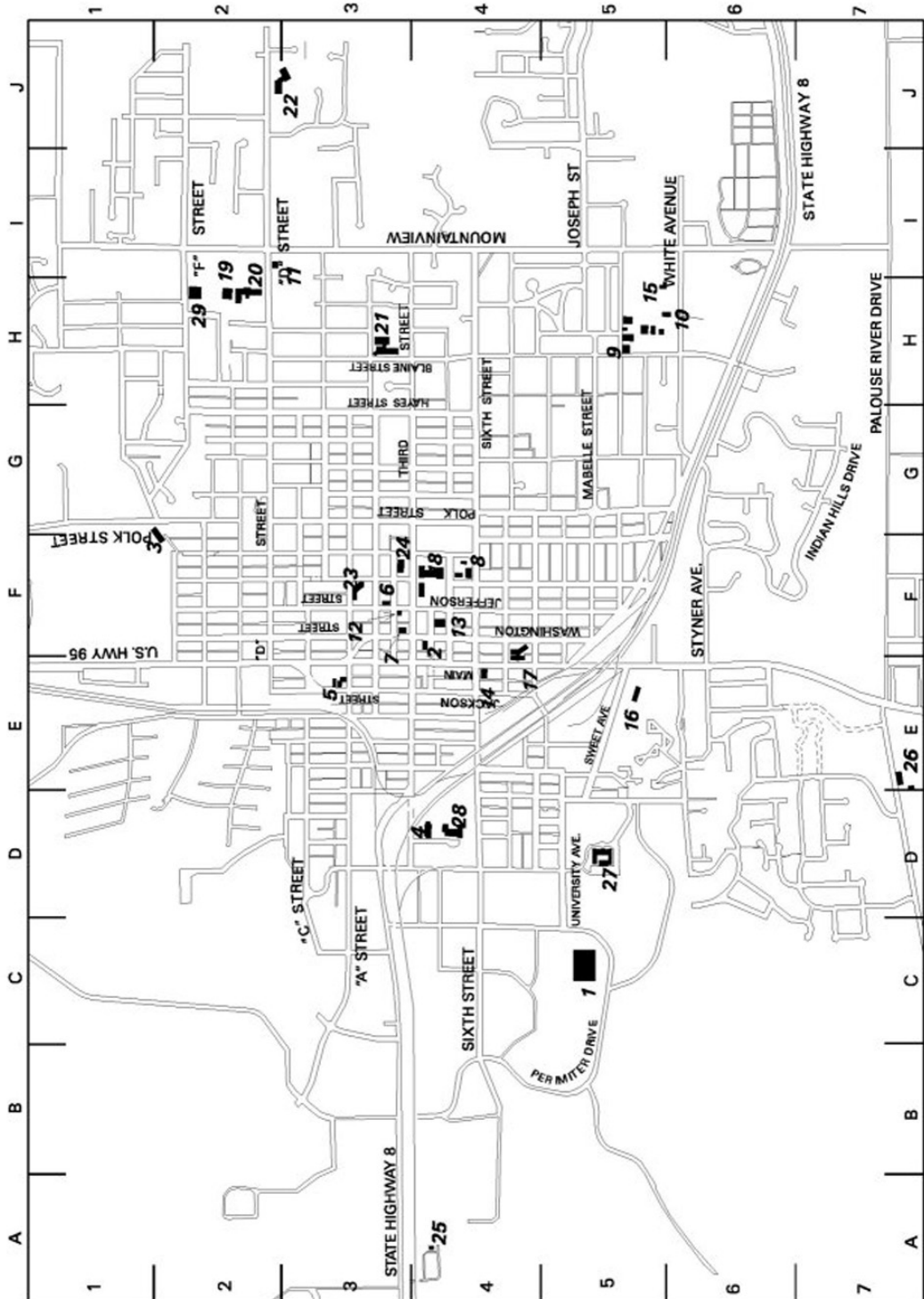
Currently, the University of Idaho contracts for police and fire protection from the city and there is a common water agreement for emergency purposes between the two entities. The university is also using the city's sewage effluent for lawn water in the summer months. The Pullman-Moscow Water Resource Committee is another example of the cooperative effort needed to maximize the capabilities and efficiencies of public facilities.

15. A capital improvement program should be established by the city.

For all of the public facilities and services proposed above, and for other capital improvements advocated by the plan, including street improvements, landscaping, parks, and bicycle routes, a capital improvements program would greatly aid city planning efforts by establishing project priorities in an integrated manner. The comprehensive plan is not a complete guide for physical city development in itself because it lacks a schedule and priorities.

Figure 4

MOSCOW PUBLIC FACILITIES



KEY TO PUBLIC FACILITIES

- | | |
|--|-----|
| 1. ASUI KIBBIE DOME | 5-C |
| 2. CITY HALL ANNEX / POLICE DEPT. | 4-F |
| 3. CITY SHOP | 4-D |
| 4. CITY SWIMMING POOL | 3-E |
| 5. CITY WATER WORKS | 3-F |
| 6. CITY / COUNTY LIBRARY | 4-F |
| 7. CITY HALL & COMMUNITY CENTER | 4-F |
| 8. COUNTY COURTHOUSE | 4-F |
| 9. COUNTY FAIRGROUNDS | 5-H |
| 10. LATAH COUNTY HIGHWAY DISTRICT | 6-H |
| 11. EGGAN YOUTH CENTER | 3-I |
| 12. IDAHO JOB SERVICE | 3-F |
| 13. FEDERAL BUILDING | 4-F |
| 14. FIRE STATION NO. 1 | 4-E |
| 15. FIRE STATION NO. 2 | 5-E |
| 16. U.S. FOREST SERVICE RESEARCH STA. | 4-E |
| 17. GRITMAN MEMORIAL HOSPITAL | 4-F |
| 18. HIGH SCHOOL | 2-H |
| 19. HIGH SCHOOL GYM | 2-H |
| 20. JUNIOR HIGH SCHOOL | 3-H |
| 21. LENA WHITMORE SCHOOL | 3-J |
| 22. McDONALD SCHOOL | 3-F |
| 23. RUSSELL SCHOOL | 3-F |
| 24. 1912 HIGH SCHOOL BUILDING | 3-A |
| 25. SEWAGE TREATMENT PLANT | 7-E |
| 26. STATE HIGHWAY SHOP | 5-D |
| 27. UNIVERSITY OF IDAHO ADMINISTRATION | 7-E |
| 28. WEST PARK SCHOOL | 4-D |
| 29. SCHOOL DISTRICT 281 ADMINISTRATION | 2-H |