

**Facilities Assessment
Grand County School District**

Executive Summary:

Study Organization:

MHTN Architects, Inc. along with its consultants spent three days visiting each of the schools and all of the support facilities in the Grand County School District. As part of the process interviews with the school staff, district representative and School District administration were conducted as well as visual observation and inspection. There were many reoccurring items through-out the District. Some of these are noted in the structural assessment prepared by Reaveley Engineers, Ron Reaveley P.E.; the Mechanical and Plumbing assessment prepared by Van Boerum, Kim Harris, P.E.; and Frank Associates and the Electrical Assessment prepared by Electrical Consulting Engineers, Akbar Matinkhah, P.E.

Classrooms:

Typically the schools all have what would be considered to be smaller class sizes than are typically found in Utah Schools this is true from the Elementary school level through the High School. Short term growth in student population could be absorbed by increasing class sizes by several students per classroom. There are some trends to increasing class sizes at the elementary school level with about 5% increase in class size from third grade to kindergarten. This trend will take five or six years to have any significant impact on the upper grade levels. While each school expressed a need for additional classroom space in the future the most pressing needs seem to be at the High School where they need better athletic facilities and vocational education classrooms within easy access of the High School. The Elementary School needs space for Title 1 and special education classrooms and increasing enrollment may need added classrooms in the future.

School Sites:

From an architectural view point the school sites were generally in good locations in residential neighborhoods with adequate vehicular access and no major traffic flow problems. The schools are situated on large sites with adequate room for parking, play areas and in most cases for some additional classrooms or building area. There are some minor site circulation problems with buses not being separated from student drop-off and faculty parking areas. All of the older schools (all but the newer high school) have a number of issues with ADA accessibility compliance. These issues start with site access from streets, parking areas and drop off areas to doorways that serve as ingress and egress and include ramp, railing and stair issues.

Toilet Rooms:

On the interior of the buildings there are almost no fully accessible toilet facilities, with issues on clearances at doorways, hardware at lavatories, padding of piping at lavatories, clearances in restrooms and accessible stalls with door in incorrect locations.

In the older buildings, modifications to the restrooms may require extensive work to provide proper width and clearances at doors and circulation in addition to hardware and protections at sinks and grab bars and clearances at toilets. Toilet rooms in general are expensive to remodel due to the high costs of the finishes and plumbing.

Support Facilities:

Typically every school expressed concerns about inadequate storage space, lack of office space for administration staff, conference rooms and meeting rooms. While some of the storage issues can be attributed to housekeeping issues, storage seems to be a universal problem in K-12 facilities. Several of the schools do not have conference or meeting rooms that can be used for staff training and meeting as well as spaces for consultation with students and parents. The Elementary School and intermediate school both have small multi-purpose rooms that are inadequate for full school functions. Both Helen M Knight Intermediate School and Red Rock Elementary School have older kitchens that do not meet current health codes for food preparation and serving with floors and counter tops not being the correct materials.

Structural Characteristics:

Three of the schools Red Rock Elementary, Helen M Knight Intermediate School and Grand County Middle School are constructed with un-reinforced masonry units (URM) which have poor seismic stability and present a substantial risk of collapse in the event of moderate to severe seismic activity. This condition is discussed at length in the structural assessment. At Red Rock Elementary School this has resulted in several large cracks and some masonry damage to the exterior walls. At Red Rock and at Helen M Knight there are large URM chimney stacks that propose a severe risk of collapse that have been noted for demolition in the Capitol Outlay Budget, the team highly encourages the District to proceed with the removal of these chimneys. Note that neither of the chimneys are currently in use and the chimneys would serve no purpose in the future. The existing vocational education building needs minor upgrades to improve stability and the High School should be in very good conditions, however, there were several minor problems with things like seismic wires on the ceiling grid.

Environmental Systems:

While they have upgraded several of the schools with new HVAC systems to provide cooling and heating, it appears that these were completed with limited budgets and have resulted in some systems being very noisy, particularly in the Grand County Middle School, and to some degree in the Red Rock Elementary School and Helen M Knight Intermediate School. There would be major costs associated with either replacing these systems or modifying them to be quiet enough not to interfere with the teaching/learning process. There are several schools that need to have plumbing upgrades. These relate to old galvanized pipe systems that have corroded to the point that the water flow is severely reduced and there is rust and debris in the pipes. See the Mechanical and plumbing assessment.

Electrical Systems:

There are many electrical needs throughout the district relating to fire alarms, communication systems security and power supply. Helen M Knight needs a service upgrade to provide additional power and circuits, the school is operating beyond design capacity. Many of the school shave been retrofitted with newer high performance lighting fixtures which has helped reduce power consumption. Most schools are using extension cords and power strips and in some cases they are overloading circuits and increasing the risk of electrical fires and service problems. This is both a safety hazard and Code violation. There are Code issues with fire alarm and communications systems that are incomplete or not to Code that need to be corrected as well. These problems leave areas of the schools and portable classrooms without the ability to hear public address announcements, emergency notifications and instructions and also not be notified of alarm conditions. Many areas are not covered with required fire horn and strobes. See the electrical assessment for the extent of these conditions.

Recommendations:

While we would recommend replacing the three schools that are URM (un-reinforced masonry units) with new schools the current sites for these schools may be the best sites. At **Red Rock Elementary School** and **Helen M Knight Intermediate School** the schools could be rebuilt on the existing sites using phased reconstruction and temporary portable classrooms (for about one or two years). This would provide for long term use of the new facility with safe buildings that are fully Code compliant and maintain the desired site location. If phased reconstruction is selected a larger number of classrooms could be built in the first phase minimizing the number of portables used so that most students remain in traditional classrooms, this might require only about 8 portables. These could then be used on other sites as other schools are upgraded.

Another solution would be to seismically upgrade the classroom wings of both schools do some remodeling of the classrooms and provide Code upgrades along with mechanical and electrical upgrades for the classroom wings and construct new administration, multi-purpose wings with toilet rooms and support spaces as programmed to meet future needs. This would result in extending the useful life of the schools and some cost savings. It is our opinion that by reusing the existing site it will minimize costs and continue the 60 years of tradition of the schools in their historic locations. Helen M Knight has enough property on the site that a new school could be built while the current school is being used, the existing school could be demolished and site upgrade during the summer break. A similar strategy could be used at Red Rock elementary and would result in the School being accessed from Locust Lane.

At **Grand County High school** we would recommend two major additions; 1. construct a new vocational education center adjacent to the high school this should be design to maximize teaching stations provide additional vocational programs and serve both the high school and adult education. Much of the automotive equipment and wood shop equipment could be relocated from the existing facility. 2. Construct a field house to provide new larger gymnasium with additional locker rooms, team rooms, and official locker rooms. The field house should also contain wrestling room, fitness room, dance room and other programmed spaces.

At the **Middle School** we would recommend building a new larger Middle School that could house seventh, eighth and ninth grades. The newly constructed free standing lunch and assembly room could be maintained as well as reusing the existing vocational educational facility for middle school TLC, computer, Home Economics, sewing and other middle school program classes. The New larger Middle School if built to house the ninth grade would extend the useful life of the high school and allow it to serve increasing numbers of students in the tenth, eleventh and twelfth grades. We feel that there are very few redeeming assets at the middle school that would justify spending money to try to extend its current use.

Another option for the middle school would be to build a new middle school on the property located near Spanish Valley. This would allow for construction to be completed while existing school is in use and then the old Middle school could be demolished and land could be used in the future to expand the high school campus. Long range plans 10 to 20 years may require that the high school be larger and require more athletic fields, parking areas and classroom space.

There are major issues with structure, accessibility, Code compliance, noise and plumbing and HVAC issues that due to the limitations of the low profile modernistic design would be very expensive to abate and the resulting building would still have many functional and operational compromises.

The **District Offices** need to be enlarged; suitable restrooms, conference rooms and additional offices and adequate board room meeting space need to be added. The building also has electrical needs and HVAC needs that should be addressed. The current site does not have room for meaningful expansion and The Office needs to be relocated. While District level administration does not need to relate or adjoin the teaching facilities there are two

locations that may allow the District to construct a new office in the 6,000 to 8,000 square foot range without adversely impacting the school operations. These would be on the north end of the property where the vocational education building is near the corner of 100 East and 300 South. The other location would be on the undeveloped land to the north of the Helen M Knight Intermediate school. These two spaces could provide an adequate site with separate parking to meet the needs of the School District and administration offices.

The Maintenance Building, Sundwall Preschool and the Shafer House could continue to operate in the current locations with minor revisions and repairs. At Sundwall preschool the office space in the trailer could be used by the school for storage and offices if the Staff there is moved to a new district office. This might provide additional space in the school building for more students. Minor Code upgrades, drainage swale and paving on the north side of the building and the addition of more office space by increasing the mezzanine size should extend the use and improve function at the Maintenance building. The Shafer house from information we were provided is under long term lease to a non-profit educational program (The Youth Garden Project) and does not require actions by the District until the lease term expires.

Further options and phasing possibilities will be discussed and incorporated into the Master Plan phase of the study after consultation with the School Board and Staff. This will include possibilities for what can be done and how it can be prioritized and how it can be scheduled to not only meet the School District needs but continue to serve the patrons and reduce the impacts and reduce construction costs for the overall project.

End of Summary