

Introduction/Mission Statement

This Master Plan is developed in response to the Dead Man's Run flood water control project that will create a water holding area (detention cell) on the east end of Lincoln Lutheran's property. Preliminary designs show this detention cell to be 3-5 acres in size and recessed 13' below the current grade, and only during a 10-15 year rain will any significant water be retained. The purpose of this plan is to:

- Understand the effects of this retention area; and
- To explore the potential for expansion of this 18-acre campus.

Keeping the school's mission statement--*Lincoln Lutheran exists to equip young people to be faithful disciples of Jesus Christ by providing an excellent Christ-centered education*--our approach focuses on the following criteria:

- Completely understand the effects of the NRD's "Dead Man's Run Water Retainage Project" on the Lincoln Lutheran campus;
- Maximize campus potential including parking, athletic fields and building facilities with and without the water-holding area;
- Plan for a maximum growth of 600 students in grades 6 through 12; and
- Enhance separation between middle school and high school activities.

Our goal for the study is to provide a good planning and decision-making process so that the development of the water holding area and all Lincoln Lutheran growth occurs as harmoniously as possible.

The master planning process began in October of 2008. At that time, Lincoln Lutheran's steering committee blended with Davis Design engineers to form the design team that would study the above criteria. As such, the design team has had four work sessions discussing multiple options and possibilities, an existing facility evaluation, two open forums for interested parents and has considered all input invaluable to the success of this study. Like most master plans, this document is a working document providing a vehicle in which informed planning decisions can be made.

Existing Condition Survey

The existing facilities consist of building projects undertaken in four different years as follows:

1. In 1962, the original facility was built as a junior high for grades 7 through 9.
2. In 1997, the facility was expanded to the east and to the south in order to accommodate the addition of grades 10 through 12 to create a junior/senior high school facility.
2. By 1999, additional space was needed. This led to the construction of 2 classroom buildings onsite, housing 4 classrooms on the east side of the school, adjacent to the athletic fields.
3. In 2005, to accommodate the inclusion of 6th graders to the school, two more portables were added to the campus.

The 1962 facility consists of two levels that were home to a small gym and stage, locker rooms, and a total of 10 classrooms--7 general, 1 family consumer sciences, 1 industrial arts, and 1 art classroom. The 1997 east expansion added a new music room, art room, computer lab, and a much larger industrial art department. The 1997 south expansion expanded and renovated the administration offices, and provided a new entry, commons, cooking kitchen, and 1100-seat competition gym with locker rooms. Four portables remain on the campus today, offering 7 classrooms, a computer lab and toilets.

For ease of discussion, architectural, structural and mechanical reports were developed and are presented as "1962 Building", "1997 Additions" and "Portables" reports. The electrical and site reports address each design issue as it pertains to the campus as a whole, ie: lighting, fire alarm system, parking lots, etc.

Architectural Report

1962 Building: This building shows the most wear and tear but, overall, is in good condition. The exterior skin is brick with concrete block back-up. Only one location shows any structural movement and that is at the far eastern stair. For now, it is advised that maintenance staff keep any movement caulked and sealed. Most likely with any new addition, this will concern will be addressed and fixed.

The windows and doors have been replaced and are in good shape. The roof on the original gym appears to be at the end of its useful life and should be replaced. Most of the interior finishes are concrete block and will require a fresh coat of paint on an as-needed basis. Many of the rooms need new carpeting and paint. The quarry tile on the main steps is cracked and should be replaced and having lockers in the halls causes a good deal of congestion in the hallways and is an issue that should be addressed in any future expansion to be relocated. From an ADA perspective an elevator should be installed to ease access to all levels and any future new toilet rooms will need to be handicap accessible. The current ADA toilets are more of a temporary fix then a permanent solution. To the best of our knowledge, all asbestos and environmental issues have previously been taken care of and are no longer issues.

1997 Additions: This phase was built in two separate additions--one to the east, housing the art, music and industrial art departments, and one to the south, which serves as the main entry/commons and a competition-sized gym with adjacent locker rooms. Both additions are in great shape and should serve the school well into the future. Again, the exterior skin is brick with block back-up. The windows and doors are in good shape and the roof also appears in good shape with an estimated life of 10+ years. All interior finishes appear in good shape only requiring typical, routine maintenance.

Portables: These units are in good shape. They were installed as a temporary solution and will serve their purpose well into the next decade. They are stick-built prefabricated units that have a 20 year life span. They are on solid, well-built foundations and have their own HVAC systems. In any future expansions these units should be considered being replaced with a more permanent construction.

Existing Condition Survey, cont'd

Mechanical Report

1962 Building: The existing Heating Ventilation and Air Conditioning (HVAC) system serving this wing was renovated as part of the 1997 addition and, overall, is in good condition. This includes the main boiler room on the lower level which provides glycol heating hot water and domestic hot water to the 1962 building and the 1997 additions. Also located in this room is the 100% outside air unit that serves portions of the 1962 building, including the classroom wing, weight room and family consumer sciences classroom. This ventilation air handler has hot water heat and DX cooling coils; however, it currently has a roof top condensing unit that is not working and needs replacing.

Fin tube heating with ventilation air provided by the unit located in the main boiler room (described above) serves the original classroom wing, weight room and family consumer sciences classroom. In addition, five classrooms (101, 103, 104, 105 & 106) are provided with separate Sanyo ductless split systems that were installed in September 2008 to provide cooling, all other spaces are heated and ventilated only. These units are wall mounted with the remote air cooled condensers located on the roof of the classroom wing.

The 1962 gym HVAC system, installed as part of the 1997 addition, is a constant volume rooftop air handler with glycol hot water heating and DX cooling coils. A remote air cooled condenser is ground mounted on the north side of the gym to serve the air handler.

Also installed as part of the 1997 addition is a variable air volume rooftop air handler with glycol heating hot water and local variable air volume boxes with reheat to serve the media center and the computer lab in the classroom wing. Although space for a DX cooling coil was provided in the unit it was not installed. Window air conditioners have been installed in the media center and computer lab to provide cooling.

Four inch domestic water and six inch fire sprinkler service entrances are located on the lower level of the 1962 building and were upgraded as part of the 1997 addition. They are of sufficient size to serve future building expansion. The gas service is on the north side of the facility with gas mains routed on the roof.

Fire sprinkler protection is provided through all areas of the 1962 building.

1997 Additions: The existing HVAC systems serving the east and south 1997 additions are served by rooftop air handling units and indoor air handling units that are in good operating condition.

The east addition containing the music, art and industrial art departments are served by a variable air volume rooftop air handler with glycol heating hot water and local variable air volume boxes with reheat. Although space for a DX cooling coil was provided in the unit it was not installed and these spaces are provided with heat and ventilation only.

The competition gymnasium is served by a constant volume indoor air handling unit with glycol heating hot water and DX coils. A remote roof mounted air cooled condensing unit is located on the roof to serve the air handler. Locker areas adjacent to the gym are served by an indoor constant volume air handler with a glycol heating hot water coil. The unit utilizes transfer air from the gymnasium to serve the locker spaces keeping them tempered during the cooling season.

Commons and kitchen areas are served by two separate constant volume rooftop air handling units. The commons area rooftop air handler has glycol heating hot water and DX cooling coils with a remote roof-mounted air cooled condenser. The kitchen area rooftop air handler has a glycol heating hot water coil and although space for a DX cooling coil was provided it was not installed in the unit.

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Existing Condition Survey, cont'd

Administration offices are served by a variable air volume rooftop air handler with glycol heating hot water and DX cooling coils and local variable air volume reheat boxes. A remote roof mounted air-cooled condenser is provided to serve the DX cooling coil.

Fire sprinkler protection is provided through all areas of the 1997 additions.

There were no major deficiencies noted in the 1962 building or the 1997 additions; however, any major future projects should consider expanding the air conditioning to areas that were not included in the 1997 project to improve indoor air quality and comfort throughout the building.

Electrical Report

Lighting- The school has both T-12 and T-8 florescent lighting ballasts throughout the facility that have been replaced with more efficient florescent fixtures when they burn out. The large gym has 400 watt metal halide fixtures and the old gym has 250 watt fixture that were new in 2005.

Receptacles- Generally there are adequate receptacles throughout. There are some limitations in the commons area, computer labs, and science rooms.

Circuit panels, transformers, and motor control centers.- All new components were installed when the 1997 addition was built. The only original electrical panels are located in the old gym. These panels appear to be adequate and will most likely remain unless the function of this space changes.

Fire alarm system-New in 1997, the system is serviced bi-annually.

Computer cable trays for networking, data / access points- The entire main building is networked along with the portable classrooms. Each classroom is wired with at least 1 access point.

Intercom, sound system, telephones-The school has an updated sound system replaced in 2004, which also serves as the intercom system. Both gyms have separate sound systems that are 12 years old.

Central clock system- There is a central clock and bell system. There are only a select number of clocks still connected to this system and for the most part this system is not used. Most of the clocks on campus are battery powered, including the portable classrooms.

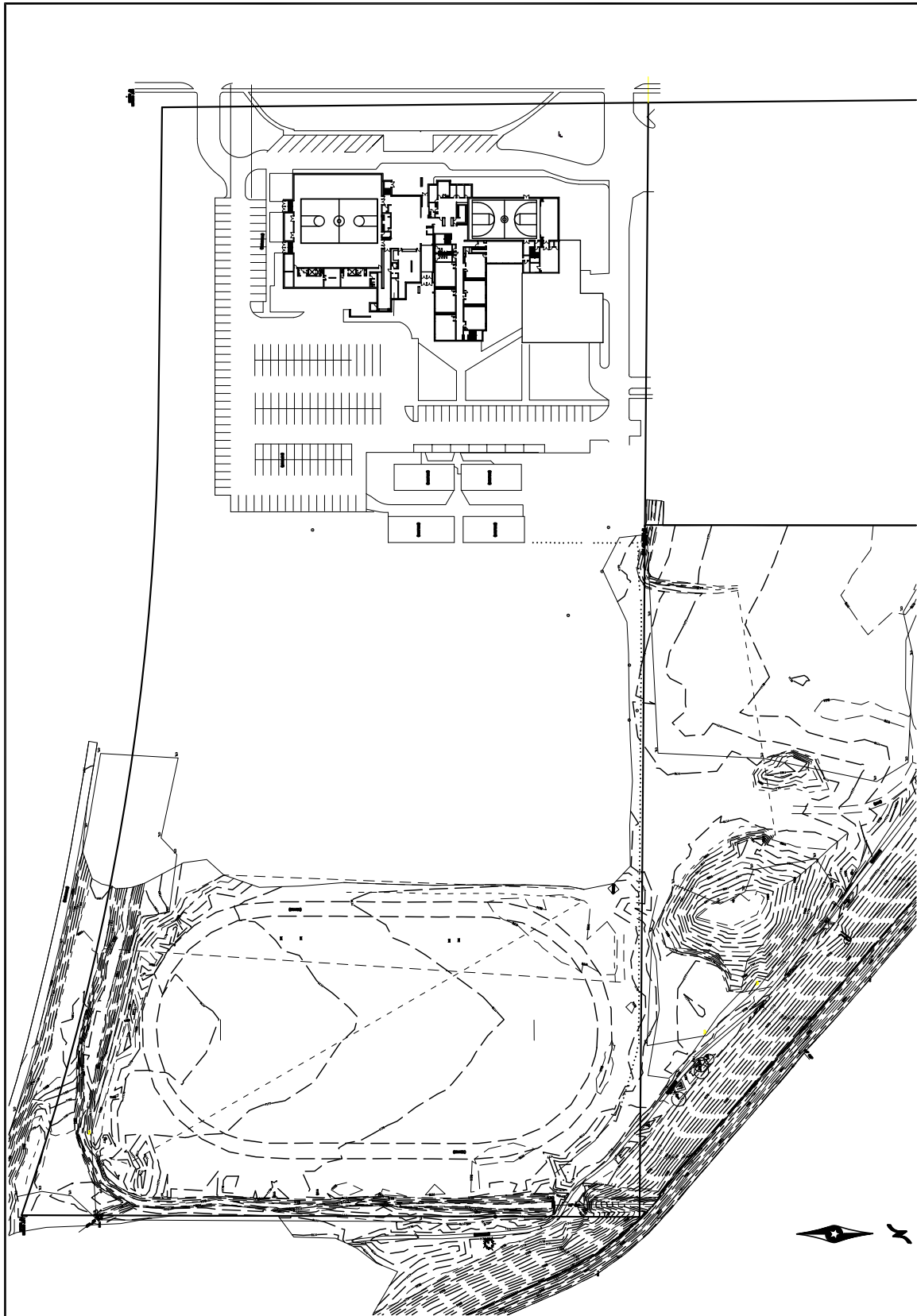
Security system- The only area of the campus that has a security system is the technology lab located in one of the portable classrooms.

Site Report

Parking lots- The campus has a total of 200 parking stalls. The parking lots are asphalt, and after a recent repair to the east lot, most of the surfaces appear in good shape. There are several places that should have a sealer applied and be restriped.

Driveways and curbs- The campus has a north and south entry drive. Traffic can flow around the school via a loop parking lot design. The curbing appears to be in good repair with only a few locations in need of replacement due to snow removal equipment.

Sidewalks and steps- The sidewalks are also in good repair. All exterior steps are for emergency exiting and are in good shape.

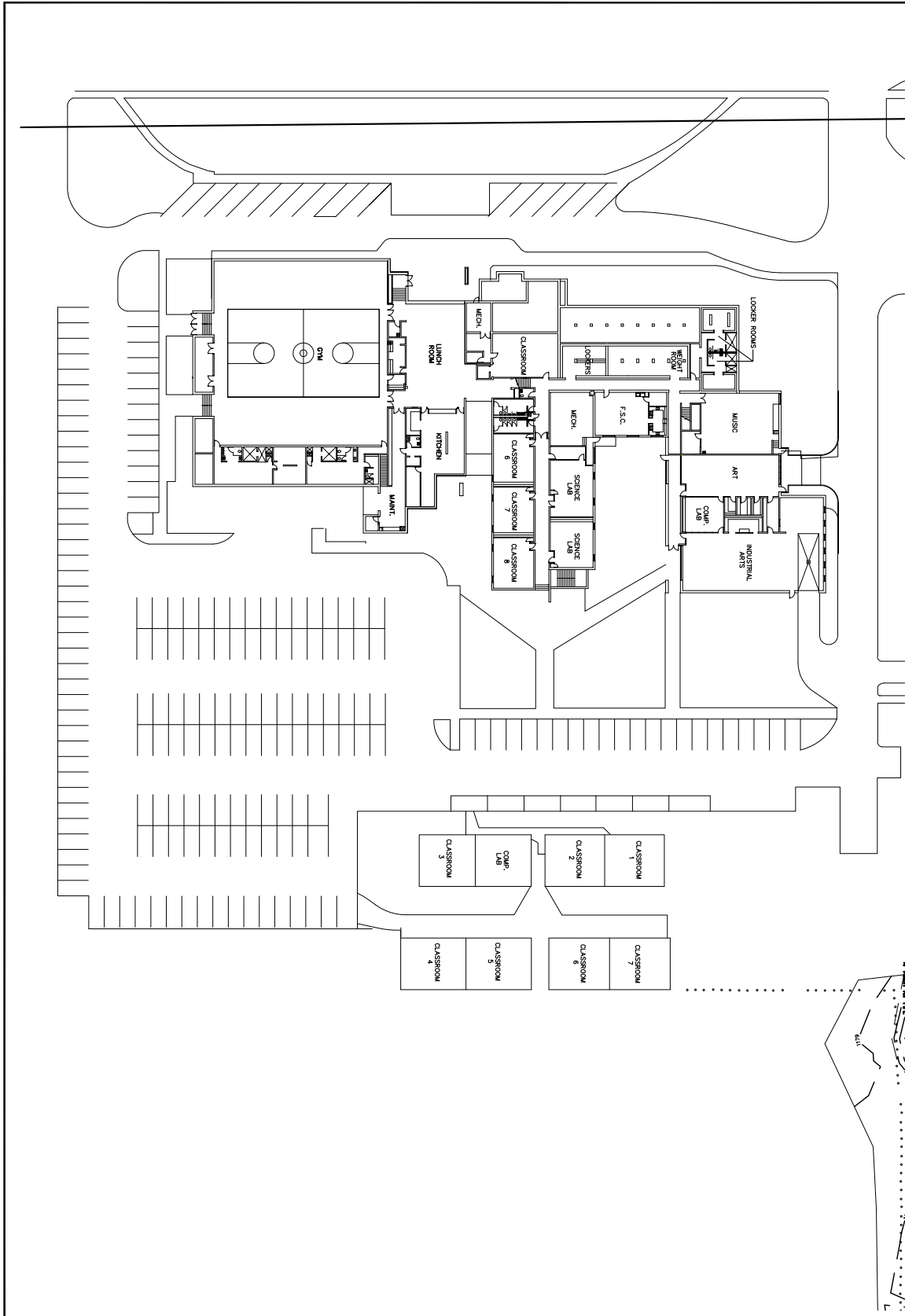


LINCOLN LUTHERAN SCHOOL
SITE ARIEL SURVEY

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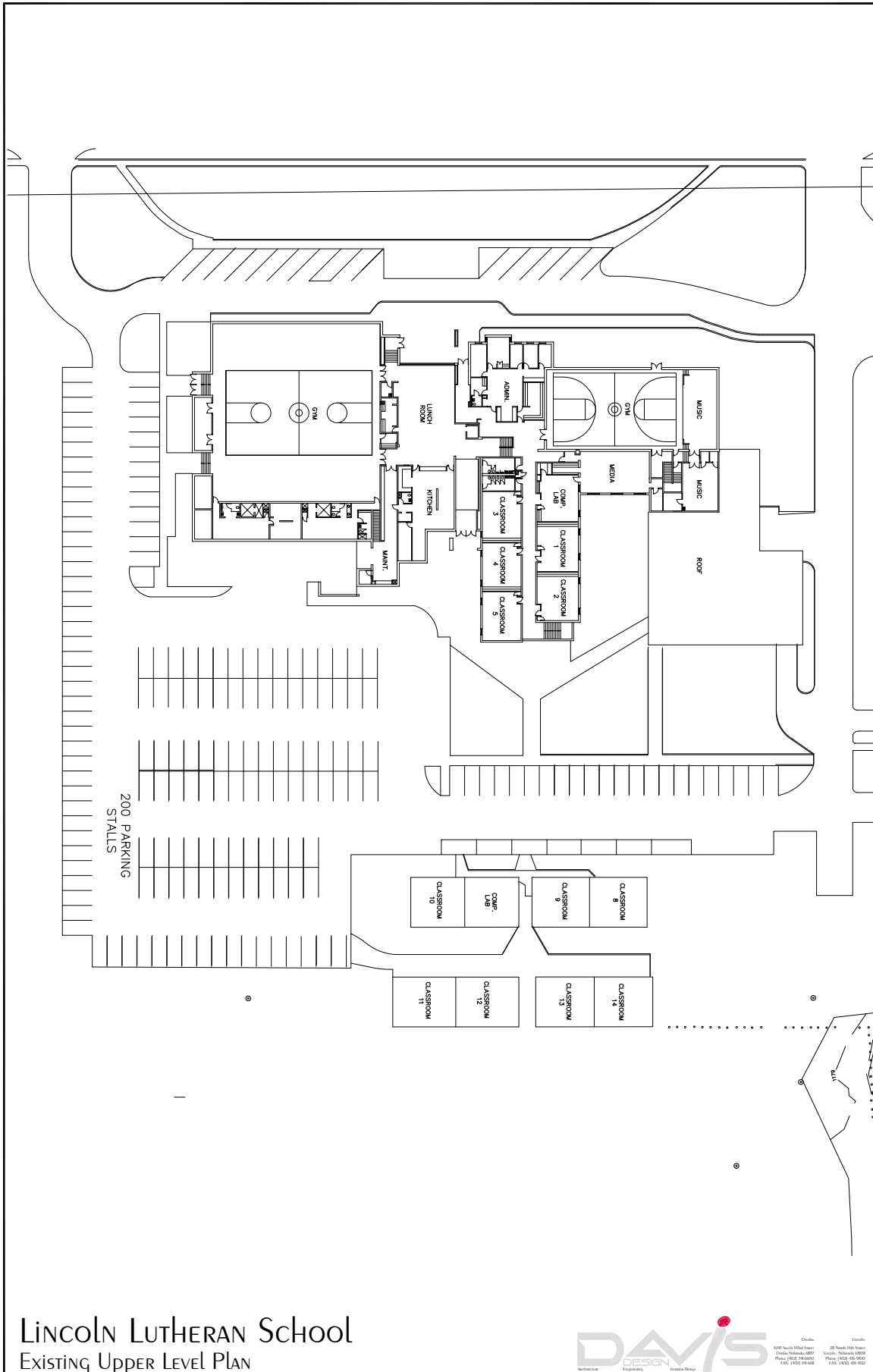
Client: JF North Hill School
Project: Lincoln Lutheran School
Phase: (R)Z 400-0000
Date: 10/22/2018



Lincoln Lutheran School
Existing Lower Level

DAVIS DESIGN
Architecture • Engineering • Interior Design

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Lincoln Lutheran School
Existing Upper Level Plan

DAVIS
DESIGN
Architectural • Engineering • Interior Design

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