

DRAFT UNTIL APPROVED

Executive & Study Sessions (Tuesday, November 3, 2015)

Generated by Shelley R Shelton on Wednesday, November 4, 2015

Members present

Julie Rash, McKay Jensen, Jim Pettersson, Marsha Judkins, Michelle Kaufusi, Shannon Poulsen, Taz Murray

Staff members present

Keith C. Rittel, Superintendent; Gary Wilson Assistant Superintendent; Stefanie Bryant, Business Administrator; Jason Cox, Executive Director of Human Resources; Shelley Shelton, Executive Assistant

Excused (Study Session)

Anne-Marie Harrison, Executive Director of Teaching & Learning; Alex Judd, Executive Director of Elementary Education

Meeting called to order at 7:33 AM

A. 7:30 - 8:15 a.m. Executive Session for the purpose of discussing real property and personnel. Utah Code 52.4.205

D. 8:15 - 9:30 a.m. Study Session

Meeting called to order at 8:28 AM

1. Review of Westside Information to Date

Board President Julie Rash welcomed all guests and stated this is the board's meeting and is not open for public comment.

Facilities Director Mark Wheeler gave the background of the recent studies that have taken place in regards to possibly rebuilding PHS on a 42-acre site on the west side of town on Lakeshore Drive.

- The design team from FFKR Architects has been evaluating the pros and cons of relocating vs. rebuilding on the current PHS site, including those associated with geotech, civil and structural engineering, for the past sixty days to help the board through the decision-making process.
- Assisting with the presentation were Kelly Calder, Structural Engineer; Coby Morgan, Civil Engineer; Greta Anderson & Abe Nelson, FFKR Architects; Westland Construction

Greta Anderson, Principal Architect with FFKR Architects, explained the conceptual site plan for possible use at the west side location. Highlights included:



- Zoning possibilities that would work were developed by the civil engineers and in-house land planners. While everything is conceptual at this point, the entire design team is excited about the site plan they presented.
- Information about possible connections to a planned arterial road north of the site is not yet available.
- More public zones will likely be on the north side of the site, including parking, delivery zones for busing and food services.
- Faculty parking would be located on the northeast end of the campus with 285 stalls; the main student parking with 616 spaces would be on the southeast side of campus. An additional 138 parking stalls on the northwest end of the campus would accommodate the driver's ed. range and athletic field parking.
- A student common area, courtyard for emergency access and pedestrian walkways, administration area, shops, gyms (secondary and main), classroom wing would be located in the central and north part of the campus. Room for future expansion would be available adjacent to the classroom wing.
- The plan is not much different from the plan drawn for the current PHS location. The biggest difference would be the student commons area.
- The athletic practice field would be closer to locker rooms; football, baseball/softball fields and tennis courts would also be on the south end of the site, which is deemed an un-buildable zones due to the sewer location. Ejector pumps could be utilized to accommodate restroom demands in those areas.
- Based on discussions with the City, design changes were made to the northeast corner to give the district the best financial advantages in connecting to utilities. The district then avoids any long-term pump system, which becomes expensive.

Abe Nelson, FFKR land planner, reviewed the traffic engineering study:

University location:

- Salt Lake City firm Fehr & Peers assisted with the study, evaluating the in and out flow of the University campus. They're taking that data to see how it would translate to the west side site.
- University site: data was collected regarding the bus in and out flow on Canyon Road/University, Bulldog/University; existing parking flow onto University. One-hour peak traffic periods in the morning and again in the afternoon were studied to determine the level of service (LOS) - how well traffic is flowing during those hours. The per second/per vehicle traffic delay to turn into an intersection was also measured.
- There are 6 grades, ranging from A-F. UDOT is happy with anything from a "D" grade up. Intersections with "E" and "F" grades require some type of mitigation such as stop signs, signals or turn restrictions (right turn only). The district would likely be required to share in the responsibility of paying for needed mitigation at key intersections.
- Provo City wants to purchase small section of northeast parking lot to accommodate Bulldog improvement; has asked district to widen road on 960 North.

- The current site has 520 parking spaces; the current design has 525 spaces; the city requirement is 900 spaces.

West side location:

- Three intersections would require mitigation should the school be built: Geneva Rd./2000 North; Geneva Rd./1520 North; Geneva Rd./620 North.
- With the new housing development, both the City and District would share the responsibility of funding the needed mitigation.
- Connecting Lakeshore to new arterial road would have to take place either north or south of the school site due to existing homes. No additional information is available at this point.
- The design includes 1,034 parking spaces.

Greta Anderson reviewed the pros and cons list of rebuilding on the current site and moving to the west side location.

University Site

Pros:

- Tradition of history on University Ave
- Keeps west side site free for future projects
- Cost savings on interior work for existing E-Wing

Cons:

- Possible widening of 960 North
- New right turn lane from Bulldog to University reduces parking
- Park strip improvements around entire site including football field
- Limited parking during construction
- Parking counts are short of code requirements
- Adjacency of sports fields is not optimal
- Campus split by major road (Freedom)
- Expense of temporary accommodations, parking lots
- Phasing requires students to eat boxed lunches in classrooms for a year
- Aging E-wing will have a shorter life span than the new building intertwined with it
- E-wing complexity requires ramps and shorter ceiling heights in the new athletic department
- Poor soils underneath the E-wing can't be remedied
- Will have to build temporary parking lot
- Will have to replace baseball field on Fox Field
- Extended schedule due to D-wing constraints
- Have to temporary connect and disconnect mechanical and electrical systems

- Football stadium is already complete
- Avoid cost of major ground improvement

- Have to provide temporary mechanical units for heating and cooling
- Structural and mechanical complications with existing E-wing
- Costly mechanical, electrical, communications and alarm devices must be upgraded in the E-wing
- Structural improvements must be made to the E-wing to accommodate the program
- Design constrained by the 1990's E-wing Phasing shall require temporary new systems to be removed after one year.
- Complexity of system increased in keeping E wing and phasing
- Expense of temporary Provo Power installation and removal as necessary to keep existing school buildings functional during all construction phases.
- Expense of temporary connections and removal to the new and existing fire alarm systems, intercom systems and data/comm systems as necessary to keep existing school buildings functional during all phases of construction.

West Site

Cons:

- Portions of the site are not fully developable
- No sewer available on south side of site
- Future road on west
- Shared road on north
- Possible need for sewage ejection pump system
- Additional soil remediation and added cost required

Pros:

- Adequate acreage
- Room to expand for future projected growth
- Complete campus with all playfields on the same site
- Improved zoning of functions and activities
- Play fields close to locker rooms
- Parking optimally located near event areas
- No interruption of programs including trade shops
- Faculty attrition during construction phasing can be avoided
- Earlier completion of construction
- Close proximity to residential areas
- All programs get newly constructed spaces
- Students encouraged to eat lunch on campus
- Safety from high traffic areas
- All new and coordinated landscaping and irrigation
- Complexity of systems lessened due to no phasing
- No coordination with the existing building structural systems is required.
- Remediated site will provide more stable, long term base for the support of the structure (existing site has a lesser liquefaction potential but the grade beam added only try to keep the movement of the building more uniform for life safety reasons. There would be more damage to the structure after a seismic event on the existing site)
- Double framing is not required to provide temporary structures that will be removed and/or replaced during future phases
- Remediated soils provide a better base for the interaction between the steel framed structures and the masonry bearing wall areas.
- Seismic design category for the existing site is category F, the new site will most likely be a category D. The category F existing site will require higher design loads and additional connection design over the standard category D site.

Civil and Structural Engineering

- Existing site: Still have to upgrade water, sewer, fire protection, systems, could have unforeseen costs.
- Proposed site: Sewer flows to the north and ties in to future Ivory Homes development. Can connect sewer to the classroom wing. Ejector pumps on south side to tie into sewer system on north. The city says they have the capacity to accommodate additional sewage flow.
- Water: putting a large loop around the building. District has coordinated the fire marshal's office about fire flow.
- Grading: The west site requires a considerable amount of fill - 70,000-100,000 yards. Storm drains: put enough catch basins in place to catch run off from parking lots.

West Side Liquefaction Effects: condition that occurs in soil during an earthquake: high ground water and soil condition of sand grains loosely consolidated. Saturated sand grains raise water level, losing ability to support load, building settling, resulting in lateral spread. West site has that characteristic. Can accommodate differential settlement and lateral spread with structure itself and remediating the soil.

West Side Site - *Discussion of Liquefaction Effects*

Increased potential for liquefaction on West site

Possible differential settlement of 5"

Possible lateral spread of 3'

Soil improvement required

Liquefaction potential of current site on University Ave

Potential differential settlement of 1-1.5"

No lateral spread

Stone columns for soil improvement on West site

Vibro replacement (stone columns) to densify soils

Placed on grid pattern: 8' on center; 20' deep

Grid covers footprint plus 1-2 grid spaces outside building perimeter

Liquefaction mitigated and bearing capacity of soil increased

Cost of soil remediation by stone columns

\$2 million ± estimated

More detailed geotech study needed to refine this estimate

Cost savings of soil remediation by stone columns at West site

Footing sizes reduced

Foundation grade beams eliminated (needed at University Ave. site)

Compacted fill below footings eliminated (3' required at University Ave. site)

Westland Construction to assess cost impacts to both sites

Facilities Director Mark Wheeler reviewed the state requirements for phasing.

Costs of building on either site would be comparable because of temporary systems that would need to be built into costs at current site.

2. Review of Questions & Answers

Communications & PR Coordinator Caleb Price sent the draft Q & A documents to the Board. Board members will give feedback to Caleb within 24 hours; Caleb will post on website within 48 hours.

3. Upcoming Google Calendar Events

E. Adjourn

1. Motion to Adjourn Study Session

I move we adjourn the study session.

Motion by Michelle Kaufusi, second by Marsha Judkins.

Final Resolution: Motion Carries

Aye: Julie Rash, McKay Jensen, Jim Pettersson, Marsha Judkins, Michelle Kaufusi, Shannon Poulsen, Taz Murray

The study session was adjourned at 9:52 a.m.

