



FACILITIES PLANNING COMMITTEE FINAL REPORT – MARCH 2008

EXECUTIVE SUMMARY

In 2006, Superintendent Marv Ott commissioned a steering committee titled “**Banks Facility Planning Committee**” to research the state of the district facilities and identify a set of planning considerations for the Board. The Committee was charged with determining the needs of the District, both current and long term, while contemplating conditions, needs, governmental requirements, growth, etc. In December of 2006, the Committee delivered its final report to Board. This Committee identified the need to replace buildings, acquire additional land, and develop partnerships within the community to enhance and better utilize the District’s facilities by providing benefits to the entire community and not limiting the facilities use to just the student population. In summary, the first FPC provided an overall long term vision to the Board for consideration.

In 2007 the School Board resolved to create a second Facilities Committee in an effort to provide a long range property facilities plan which was to include identification of deferred maintenance needs, modernization needs, and expansion needs due to anticipated enrollment growth. The Committee worked to further define the District’s needs with a more focused look at actual conditions of the facilities and associated needs. This final report is the summary of several studies the Committee commissioned to further support the need for the Banks School Board’s acceptance of projected growth, additional curriculum needs, and the overall poor condition of several school facilities and or systems. The FPC excluded the elementary school facility except for consideration of traffic circulation and sports fields.

The FPC divided the project into several segments:

- Develop a firm timeline for proposal completion and subsequent activities needed for project funding
- Poll the key administrators (school Principals) in the District to determine classroom needs considering both no-growth and projected growth scenarios (based on the first Committee’s growth projections); then develop a chart of District classroom needs considering both cases
- Commission professional evaluations of current facility conditions as well as school district population growth forecasts
- Form a “steering committee” to publicize the FPC’s finding to the community
- Accumulate data into a final report, to be considered along with the first FPC proposal, for Board review consideration and action.

STUDIES

The FPC hired several consultants and engineers to look at the facilities as they stand currently:

- Population - Portland State University estimations on long term projected population growth within the school district
- Survey stakeholders in athletics for best use and needs of sports facilities
- Mechanical – HVAC and other related equipment including boilers and supporting systems
- Electrical – wiring, lighting, emergency signaling
- Plumbing – pipes, fixtures, and other plumbing related to systems
- Seismic – conditions of structures considering earthquake hazards
- Wetlands – areas on district properties that are considered sensitive for wetland and wildlife
- IT – condition of wiring for information technologies, i.e. internet, network, etc.
- Costs – general cost estimation for both remodeling facilities and replacing facilities



SUMMARY OF INITIAL FINDINGS

SCHOOL DISTRICT ENROLLMENT FORECASTS

The City of Banks has identified housing needs and updated its comprehensive plan to reflect a population forecast of 3,739 by 2024, which is nearly triple the 2000 Census population. Expansion of the Urban Growth Boundary around Banks (UBG) in combination with the general growth within Washington County and subsequently the Banks School District provides for an average growth of 1.7% annually between 2007 and 2024.

The PSU study provides a detailed description of expected growth rates during the years from now through 2018, a ten year forecast, with a substantial amount of data to support predictions. In summary, they have provided both high and low growth forecasts, but expect the growth to meet or exceed the high forecast of 27% in the next 10 years. Our current student population is at 1,200 for K-12, and expected to be 1,518 in 10 years and 1,864 in 2024. These projections are considerably in excess of our current facility's ability to accommodate the growth.

ENVIRONMENTAL ASSESSMENT FOR WETLANDS

Two natural resource areas on the 13.8 acre site were identified as subject to regulation. These include an unnamed stream and a small emergent wetland. The unnamed stream has a vegetated corridor and any proposed construction activity within 200 feet requires attention. The emergent wetland is located near the athletic practice field and wrestling facility and is .06 acres in size. Attention to this area prior to future construction is required.

MECHANIC SYSTEMS ANALYSIS

HIGH SCHOOL

HVAC

- Replace the boilers (1920's and 1960's vintage overall condition poor) with energy efficient natural gas hot water system

- Replace Control system with Direct Digital Controls (DDC)

Ventilation

- Replace steam heat ventilators with hot water ventilators or use roof top a/c as an option

- Replace control system with DDC

Administration

- Replace warm air furnace with air cooled heat pump

- Replace control system with DDC.

Kitchen

- Replace steam coils and piping with hot water coils and piping

- Replace exhaust fans

- Replace control system with DDC

Vocational Area

- Replace insulation, piping and controls

- Provide new heated water piping from central unit

- Provide ventilations system (code issue)

Band/Choir/Art

- Replace heat pumps

- Replace controls with DDC

Plumbing

- Replace oil fired heater with gas fired heater



- Demolish existing heat system
- Replace hot/cold domestic piping system (30-50 yrs old)

MECHANIC SYSTEMS ANALYSIS

JUNIOR HIGH SCHOOL

HVAC

- Replace 1920's steam boiler and piping with gas fired hot water boiler
- Demolish the existing boiler plant
- Provide new heating with gas fired system
- Provide new air handlers
- Replace controls with DDC

Classrooms

- Replace ventilation system with (a) new hot water units or (b) roof top units
- No new construction should be added to current heating system

Plumbing

- Replace oil fired heater with gas fired heater
- Demolish storage tank system
- Replace hot/cold domestic piping

STRUCTURAL ENGINEER SEISMIC EVALUATION

Priority ranking 1 has the highest vulnerability in the event of a seismic event while ranking 11 has the lowest vulnerability during such an event, by order of magnitude:

<u>Priority rank</u>	<u>Area</u>	<u>Rating</u>
1	Original Junior High School	-1.0
2	High School boiler room	0.7
3	Vocational building (1939)	0.7
4	High School original gym	2.0
5	High School classroom, library, cafeteria (1959)	2.5
6	High School storage, shop (1969)	2.5
7	High School gym (1967)	2.6
8	High School classrooms (1967)	3.0
9	Jr. High School addition (1976)	3.8
10	High School band/choir/art (1976)	5.0
11	Jr. High School addition (1997)	N/A

HIGH SCHOOL

Boiler room

- Reduce chimney height
- Repair and reinforce openings
- Tie walls to roof, ceiling and floors
- Reinforce roof diaphragm

Gym

- Reduce chimney height
- Replace interior wall at basketball hoop
- Add plywood to straight sheathing on exterior walls and roof.
- Repair or replace deteriorated posts and interior walls of basement



Vocational Building

- Repair and reinforce openings
- Tie walls to roof, ceiling and floors
- Reinforce roof diaphragm

1959 Addition

- Add plywood shear walls to exterior walls and missing interior walls
- Brace un-reinforced brick wall
- Add plywood sheathing to the roof diaphragm
- Brace lights for lateral loading
- Repair covered walkways

1967 Addition

- Add plywood shear walls to exterior walls and missing interior walls
- Add plywood sheathing to the gym roof diaphragm
- Attach walls to roof at gym
- Brace lights for lateral loading
- Strengthen roof framing

1969 Addition

- Extend plywood wall to roof diaphragm
- Add foundation below exterior wall line

JUNIOR HIGH SCHOOL

- Brace outer walls for lateral forces
- Add plywood shear walls to exterior wall lines and locations of straight sheathing
- Add plywood sheathing to straight sheath roof diaphragm
- Attach outer walls to roof for out-of-plane loads
- Reduce chimney height
- Repair brick veneer mortar joints

ELECTRICAL SYSTEMS

HIGH SCHOOL

Electrical Service

- Replace 1920 service
- Inspect 1967 service

Electrical distribution

- Replace panel boards
- Check panel feeders for insulation failure
- Check panel board grounding

Lighting systems

- General lighting
- Replace with new electronic ballasts and T8 technology lamps
- Lighting control
- Implement occupancy sensors for offices and classrooms
- Special Lighting
- Secure control equipment in the cafeteria and check stage luminaries and wiring for code
- Path of Egress lighting
- Provide dedicated circuit to be used for POE lighting and exit signage



Life Safety Systems

Emergency Power

Provide an emergency power system that would include an alternate power source

Fire Alarm

Provide a new Fire Alarm system with inputs; smoke detection, fire sprinkler tamper and flow, manual pull Outputs; horn-strobe (notification), door release, HVAC system shut-down, central monitoring dialers

Signal Systems

Bell system - remove current system

Public Address system: keep

Security system. Consider added use of CCTV with DVR

JUNIOR HIGH SCHOOL

Electrical service

Replace the existing equipment with new

Electrical distribution

Additions could be added without major impact

Lighting system

No recommendation

Life Safety System

Keep existing system

Signal System

Keep existing system

BARN

Electrical service

Replace existing service equipment

Electrical distribution

Replace existing service

Lighting system

Replace all incandescent luminaries with fluorescent

Provide additional luminaries with instant strike for the gym area POE lighting

Provide occupancy sensors for small areas

Life an Safety systems

Provide alternate power source for POE lighting

Provide new fire alarm system

SPORTS FACILITIES

Please Note: The following information is derived from questionnaires completed by coaches, administrators, and people active in Banks youth sports. In addition the FPC has included observations, personal experience and extensive research in our findings.

FOOTBALL

With 2 to 4 youth teams, 2 BJHS teams, 3 BHS teams, and the competing interests of the new varsity soccer program, there will continue to be severe of pressure on our current football facilities. The varsity game field can only withstand a limited number of games until it breaks down and turns to mud. Because of the fragile nature of the field, it is one of the most underutilized pieces of ground on the campus . Converting it to artificial turf would provide a multi-use facility for football, soccer, and PE classes.



Present Facilities:
2 full size grass fields
1 lighted and 1 unlighted

No Growth Needs:
1 turf field (lighted)
1 grass field (lighted)

SOCCER

Soccer will be an exhibition sport in school year 2008 – 2009. They are planning on fielding 4 teams if possible – varsity and junior varsity boys and girls. In order to accommodate their practice and game needs they require two soccer fields. The youth soccer program is growing in Banks so the potential of fielding 4 teams will be very attainable if it is not realized in the first year of the program. This growth will also put tremendous pressure on all available soccer fields in the area.

Present Facilities:
1 grass field unlighted
(football practice field shared w/football)

No Growth Needs:
1 turf field (lighted)
1 grass field (lighted)

BASEBALL

At present the BHS varsity team practices and plays their games on the varsity baseball field located on campus. The junior varsity team practices and plays their games at Sunset Park. This is accomplished via an agreement with Sunset Park. There is a concession stand at the varsity field which is controlled by the baseball program. The control of the Sunset Park concession stand is assumed to be by Sunset Park. The varsity field has a fence and the Sunset Park field does not have a fence. Neither of the fields have lights.

The baseball program would like to have a facility that has two adjacent fields with fences. At least one of the fields would have lights. The fields would share a concession stand and bathrooms. The program would also like to add an indoor hitting facility. Optimally this facility would be located between the varsity and JV fields. Research shows that most area high schools have indoor hitting facilities.

The community youth baseball program which is called Banks Summer Baseball is very active and presently operating their program at Sunset Park. Their needs seem to be adequately met at Sunset Park.

Present Facilities:
1 field on campus (unlighted)
1 field off campus at Sunset Park (unlighted)
1 concession stand on campus

No Growth Needs:
2 adjacent fields – both with fences
At lease one field with lights
Indoor hitting facility
1 concession stand with bathrooms

SOFTBALL

The BHS softball complex is located on campus and consists of three adjacent fields. There is also a concession stand and storage shed. The varsity and JV fields have fences and the third field is open. None of the fields have lights. The BHS softball program feels very strongly that permanent restrooms should be established at the softball complex. They have been fundraising for bathrooms for a number of years. With the addition of bathrooms and at least one lighted field the program feels that the facilities would be adequate under a no growth scenario and beyond. 50% growth would require at least one more field.



The Program also feels that the softball complex could be located off campus if necessary, as long as all of the fields are located adjacent to each other. They could potentially be located near the baseball fields to allow for the sharing of concessions, storage, and bathrooms.

Present Facilities:

- ~ 3 adjacent fields – no lights
- ~ 1 concession stand
- ~ 1 storage shed

No Growth Needs:

- ~ 3 adjacent fields with at least one lighted
- ~ Concession stand with bathrooms
- ~ adequate storage

TRACK & FIELD/CROSS COUNTRY

The present BHS track and field facilities are all located on campus. They are sufficient for both a no growth and 50% growth scenarios. The only requirement that needs to be maintained in the future is the separation of throwing events from the running and jumping events. At present the football practice field is utilized for the throwing events. In the near future the track will need a resurfacing and striping.

BASKETBALL

The BHS boys and girls basketball programs run their practices and games in the BHS gym and the barn. The BJHS runs their practices and games in the BJHS gym. Banks Youth Basketball, which is boys and girls grades 3 through 6 and 7th and 8th grade select teams, utilizes the elementary gym, the BJHS gym and the barn for their practices and some games. They often practice after BHS and BJHS programs have finished.

The BHS programs feel that one additional gymnasium at the high school is necessary. This would help to ease some of the constant scheduling issues.

VOLLEYBALL

The varsity and JV1 teams practice and play their matches in the BHS gym while JV2 practices in the barn and plays their matches in the BJHS gym. There are problems with the barn as it is not possible to raise the net to regulation height. The BJHS is not available for practice for the JV2 because the BJHS teams are using their gym for practice.

The BHS volleyball program recommends the addition of another gymnasium at the high school. This would relieve the problem of inadequate practice space and eliminate any conflicts with the BJHS.

WRESTLING

The BHS wrestling program conducts their practices in the wrestling building. Their matches are held in the high school gym. They use the locker room in the high school for dressing and showering. The BJHS wrestling program also uses the wrestling building for their practices and matches. They dress and shower in the BJHS locker room.

The program feels that with the increase of communicable skin diseases it would be highly advantageous to install shower facilities and rest room in the wrestling building. Readily available, high quality showers are the best defense against skin diseases. The other line of defense is a clean wrestling mat. The mats are sanitized after each practice and match. However, they need to be replaced periodically to insure they remain in compliance with health standards.

The BHS wrestling program recommends that shower facilities be installed in the wrestling building along with the addition of at least 2 new mats and an overhead mat storage system in the BHS gym. With the weight room being located in the mezzanine of the BHS gym it is difficult for the wrestlers to do supervised weight training during practice.



DANCE & DRILL

The BHS Dance & Drill Program presently practices in the High School cafeteria. They are allotted 3 hours per week of gymnasium time for practice. The team has 15 members at present and the cafeteria can get tight when practicing their full dance numbers. The hard tile floor in the cafeteria helps to contribute to injury. The Program recommends the addition of a dance studio with barre and mirrors. The present dance studio in the Barn is too small for meaningful practice.

COMMITTEE RECOMMENDATIONS

The Facilities Planning Committee is again unanimous in its recommendation to the Banks School Board to provide new and adequate facilities to accommodate current needs, growth, student safety, and to incorporate a broader public use philosophy. It's clear that the District can ill-afford to continue to manage facilities that are nearing unsafe conditions for its students. Meeting code requirements for safety is of utmost importance. We believe that the Board should move forward with an aggressive plan to pass bonds and engage a project to replace certain aging facilities as well as begin new partnerships with other community service providers in an effort maximize this Community's investments within the District facilities.

LAND ACQUISITION

The Committee believes that the District should be watchful for opportunities to purchase land that can be used for expansion of current campus facilities, locating new facilities at alternate locations in the future (including a second elementary school), vocational training facilities, and more sporting fields.

JUNIOR HIGH SCHOOL

The oldest section of the Junior High School is no longer a viable structure for consideration of repair or remodeling. The property is well suited for raising the original building, the portables, and the library section of the facility and being replaced with a 2-story structure to accommodate all the Jr. High class needs as well as the addition of the 6th grade class. All the class rooms and supporting facilities should be completely replaced. The space can accommodate the new classroom structure as well as an additional gymnasium. The property may also be able to accommodate a revision of traffic flow to better manage a separation of cars and buses.

- ↳ **Raze the old Jr. High building and portables**
- ↳ **Replace with new two-story structure large enough to accommodate 6-8 grades**
- ↳ **Add 2nd gymnasium and expand / add locker rooms and sports offices**
- ↳ **Utilize grounds for diversion of traffic flow to reduce traffic congestion**

HIGH SCHOOL

The High School facility is not in the severe condition that the Jr. High building has shown to be, however, the overall cost to overhaul or upgrade the facility to current safe and code requirements is proving to be prohibitive. The Committee believes that a new high school with the capacity for 500 students along with an additional gymnasium, community auditorium-performing arts center, and cohabitation with a Community Library is the absolute best solution for the long terms needs of 9-12 grades.

- ↳ **Raze the current High School and underground fuel tanks**
- ↳ **Replace with two-story structure large enough to accommodate 500 students with architectural planning to add wings in the future for planned growth**
- ↳ **Add 2nd gymnasium and refurbish locker rooms in the existing gym**
- ↳ **Add performing arts auditorium accommodating 500 seats**



↳ **Rebuild vocational buildings to accommodate community library**

SPORTS FACILITIES

The 28+ acre facility is home to 2 school buildings, support structures, stadium and fields. It's in the best interest of the District to maximize space while also providing necessary athletic opportunities to all students. There has been considerable discussion regarding playing fields, and even the movement of some fields to alternate locations, but options are limited. The best option is to maximize current space within the campus with a combination of converting the main field to turf and reorganizing softball fields and baseball fields.

- ↳ **Retrofit the stadium field with artificial turf for both football and soccer and upgrade lighting**
- ↳ **Add a baseball field in the vacant land to the east of the current baseball field and add concessions and lighting**
- ↳ **Move the current main softball field 50' south and add bathroom facilities and lighting to the softball complex**
- ↳ **Remove the practice fields north of the main softball field and convert to auto parking**
- ↳ **Convert elementary play field to softball field**
- ↳ **Add shower facilities to the wrestling building**

COMMUNITY PARTNERSHIPS

There are many opportunities to partner with other community service providers within Banks. The library, auditorium, senior services, college courses, police and medical services, are just a few opportunities.

- ↳ **Partner with the City of Banks to locate City library on campus**
- ↳ **Locate daycare and preschool on campus**
- ↳ **Utilize grants to build the "community" performing arts facility (the high school center)**
- ↳ **Invite colleges to locate classes on site**
- ↳ **Provide space in the master plan for police and health care services on campus**

ADDITIONAL NOTES

The school district will have doubled in 10 years and planning needs to continue including moving 6th grade to the middle school and perhaps co-locating day care, preschool, and kindergarten all in one new facility. This provides adequate space for the elementary school 1-5 grades and can be accommodated in the long term planning.

Also, consideration must be given to building the new facilities with sustainable design, the long term operating costs and usable life are considerably enhanced because of the extra initial investment.

APPENDIXES

Administrative report	Class room needs surveys by Principals
Sports Facilities report	Pete Edison (mostly contained herein, survey included in appendix)
Population report	Portland State University
Architectural report	McBride Architecture, PC
Mechanical report	PAE Consulting Engineers
Electrical report	PAE Consulting Engineers
Wetland report	Vigil Agrimis
Seismic report	Miller Consulting Engineers
IT Systems report	PAE Consulting Engineers