

Portland State University

**PDXScholar**

---

Real Estate Development Workshop Projects

Center for Real Estate

---

Summer 2009

## Lincoln High School

April Chastain

*Portland State University*

Tyler Clark

*Portland State University*

Gonzo Grasis

*Portland State University*

Eric Hayes

*Portland State University*

Robert Pile

*Portland State University*

*See next page for additional authors*

Follow this and additional works at: [https://pdxscholar.library.pdx.edu/realestate\\_workshop](https://pdxscholar.library.pdx.edu/realestate_workshop)



Part of the [Real Estate Commons](#)

**Let us know how access to this document benefits you.**

---

### Recommended Citation

Chastain, April; Clark, Tyler; Grasis, Gonzo; Hayes, Eric; Pile, Robert; and Winslow, Jonathan, "Lincoln High School" (2009). *Real Estate Development Workshop Projects*. 9.

[https://pdxscholar.library.pdx.edu/realestate\\_workshop/9](https://pdxscholar.library.pdx.edu/realestate_workshop/9)

This Report is brought to you for free and open access. It has been accepted for inclusion in Real Estate Development Workshop Projects by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: [pdxscholar@pdx.edu](mailto:pdxscholar@pdx.edu).

---

## **Authors**

April Chastain, Tyler Clark, Gonzo Grasis, Eric Hayes, Robert Pile, and Jonathan Winslow



# Lincoln High School Redevelopment









## Table of Contents

### Executive Summary

#### Introduction

- Introduction to Lincoln High School
- Current state of LHS Facilities
- 21st Century School Model
- The Basis for a New School Facility

#### The Hybrid Option

- Development Strategy
- Development Program
- Design
- Market
- Planning and Zoning
- Construction
- Deal Structure
- Economic Model

#### Appendix A: Alternative Development Option: Duniway Park

#### Appendix B: Alternative Development Option: “3 Squares”

#### Appendix C: Team Biographies

April Chastain

Tyler Clark

Gonzo Grasis

Eric Hayes

Robert Pile

Jonathon Winslow

Professor Will Macht

Mentor John Baymiller

## Acknowledgements

### We would like to thank:

#### Portland Chapter of BOMA

TMT Development – Lamont Smith

Lease Crutcher Lewis – Jeff Spencer, Matt Pearson, Paul Riso

Hoffman Construction – Erik Klein, Eric HI Hoffman

Equilibrium Engineering – JoMarie Farrell

Group MacKenzie Architecture - Richard Spies

PMC – Greg Goodman, Al Niknabard

US Dept of HUD/FHA – Will Lee, Renee Greenman

HFF – Kerry Hughes, Nicholas Fritel

PSU Administration – John Eckman, Cassandra Hill

Portland Public Schools – Gretchen Hollands

Norris & Stevens - Kirk Ward

Sperry Van Ness - Jamie Martinson

Housing Authority of Portland - Betty Dominguez

Weston Holding Company - Joe Weston

Integra Realty Resources - Robert Greene

St. Mary's Academy - Patricia Barr

Cameron McCarthy Gilbert & Scheibe Landscape Architects - Aaron Olson

LHS Principal - Peyton Chapman

LHS Business Manager - Kirsten Leonard

LHS - LongTerm Development Company

YMCA of Columbia-Willamette - Julie Karlson

PPS - Blair Fitzgibbon

PPS - Patty Christensen

Sporttech/FieldTurf - Steve Coury

John Baymiller - for volunteering countless hours and patience mentoring us.



## Executive Summary

The overarching goal of our six-student development group was to add to the ongoing discussion and debate over revitalizing urban schools of the 21st Century, while expanding upon and brainstorming novel ways of funding these public facilities. By achieving our stated goals the team plans to better integrate Lincoln High School (LHS) with the surrounding neighborhood for future students and residents and capitalize on the abundance of strategic partnerships downtown has to offer.

The 11-acre Lincoln High School site presents a rare opportunity to transform a superblock near the heart of downtown Portland from a sprawling and deficient building of suburban density into a mixed-use community with a potential prototype of the 21st Century, urban, magnet high school. The site would contain:

- a prototype of the urban magnet high school of the 21st Century
- flexible high-tech classrooms, adaptable laboratories, improved technology systems, lecture halls, arts studios, individual study carrels and similar improvements to the entire educational program
- facilities for a 3-year, 4-term option with project-based learning, collaborative and independent endeavors and individually paced advanced learning;
- specialized facilities, pools, gyms, tennis courts and meeting halls operated by public-private partnerships to provide rich educational, athletic and community services to the school and on-site population
- more than 1,680 workforce housing units
- sufficient on-site, underground parking for 1,678 cars to support all uses on-site in addition to absorbing excess parking demand generated by adjacent uses
- almost 50,000 SF of retail and service commercial space including daycare and healthcare facilities, coffee shops and service offices.

The LHS site is very unique and offered a challenging yet rare opportunity. The design embodies the goals with a dense, mixed-use high school located on the west half of the site from SW 16th to SW 18th Avenues. A four-block parking garage forms the base for the track, field and school, with 635 units of workforce housing on floors above. Open space will be preserved in the form of a full-size athletic field and covered running track and will remain open for school and public use.

The eastern portion of the site will be developed in subsequent phases and will house additional residential towers for 1,047 units of workforce housing around a Pioneer Square-sized public square, using an underground parking garage as a podium. The phasing is flexible enough to respond to changing market conditions in the future.

The strategy for developing the 21st Century urban high school consists of a multi-phased plan carefully chosen to meet the following goals, site constraints and development criteria:

### Location Advantages:

1. 11-acre superblock, with no through streets and minimal easements
2. Publicly owned
3. Near downtown
4. Multiple transit options, including Goose Hollow MAX stop
5. Near PGE Park, MAC Club, PSU and other partner institutions

### Location Disadvantages:

1. Disconnected from downtown by I-405
2. No synergy with existing office or retail
3. Current status as a high school campus without mixed uses, could be politically volatile



# Executive Summary

## Goals:

1. Keep LHS operational during development
2. Turn LHS into a modern educational facility
3. Move the entrance of LHS to 18th and Salmon to create a sense of place and to utilize Goose Hollow MAX stop
4. Maximize development potential of the site
5. Build socially beneficial housing, as the market will bear, leveraging a federally insured mortgage program
6. Minimize up-front costs and operating expenses for parking
7. Allow the eastern half of the site to generate additional funding
8. Capitalize on area parking shortages with rare superblock floorplate advantages
9. Convert the site into a consistent school district revenue source

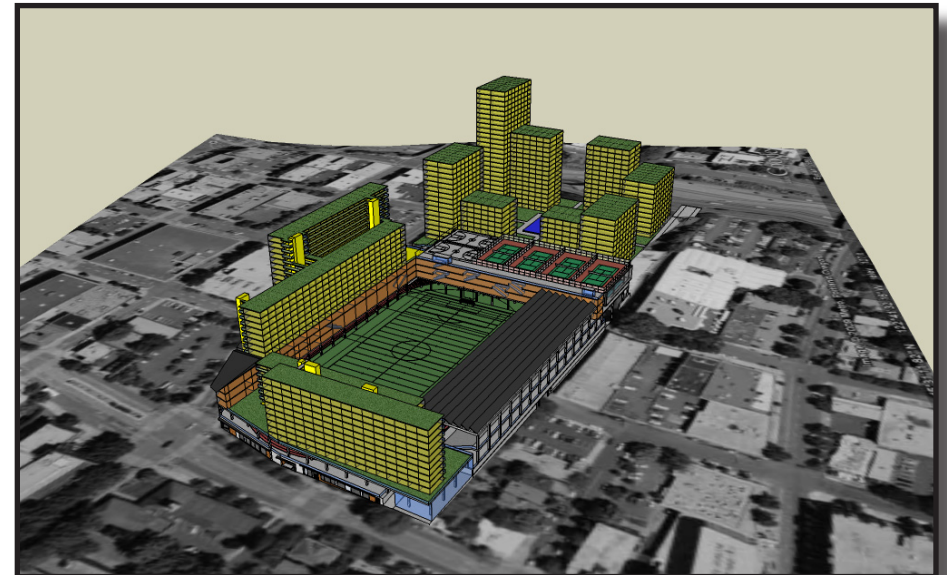
## Key Decisions:

1. Retain LHS on site
2. Retain Track and Field on site
3. Keep LHS academic facilities operational during development
4. Use eastern half for housing

## Funding Mechanisms:

Two assets vital to the financial success of the program are the ability to obtain FHA 221(d)(3) mortgage funds for the residential portion, along with Portland Public Schools' ability to issue tax-exempt bonds. The residential mortgage offers very favorable terms (100% loan-to-cost, 6.9% interest, 40 year term, 1.05 debt coverage ratio) and is fully transferable. General obligation bond financing for the non-residential public components covers the site's full equity requirement of \$130 million, requiring \$9 million of tax revenue to be allocated to bond debt service. The deal structure further couples this favorable financing with preservation of cash flows due to tax implications, as the owner will remain a public, tax-exempt entity.

For a bond commitment roughly equivalent to that needed for a traditional school alone, PPS gains an additional cash flow income stream worth \$30 million, an innovative high school drawing national attention, 1,682 socially beneficial residential units, 1,678 parking stalls and complementary retail space, all under long-term public ownership increasing in value.



## Introduction

Lincoln High School (LHS) has a long and storied history but has always maintained its central location. It is this very history and location that presents both its greatest challenge and opportunity to study the redevelopment options, as it necessitates taking into consideration a greater range of objectives than more traditional, less central high schools. The current 10.96-acre Lincoln campus, located just across the 405 Interstate from downtown Portland, within walking distance of Portland State University and on major light rail, freeway and bus routes, makes for a supremely attractive, developable urban superblock.

This urban location, which, in more normal times, would be highly sought by commercial developers should Portland Public Schools ever sell, also holds exceptional educational partnering opportunities with the abundance of educational, arts, athletics, communications and business institutions within this mixed-use, mixed-income neighborhood. As such, LHS could become a model for the 21st Century urban, magnet high school. The LHS development program can and should create flexible physical spaces in which students from all over the city, the state and even foreign nations can grow, learn and even live together surrounding an increasingly flexible, modern academic curriculum geared to personal student growth and individual development to each student's highest potential.

Our development workshop team attempted to extend the work of Lincoln High's Long-Term Development Committee (LTDC), and in particular that of local architect Richard Spies who provided insight into the outstanding issues surrounding redevelopment of LHS. The LTDC, comprised mainly of current and former LHS students, parents and faculty, met and brainstormed for over two years on ways to modernize LHS and published its findings, "A Vision for 21st Century Schools – Portland, Oregon" in 2008 as the culmination of their efforts. This document inspired our group and launched our focus into a more global view of a facility in which to create academic excellence for secondary education in an enriched urban environment in the 21st Century.

After a great deal of debate, our team decided to go beyond the LTDC's recommendations and expand our redevelopment options to increase the flexibility of academic programmatic potentials for LHS, as well as to capitalize on the value of the current LHS downtown site. We whittled our diverse opinions down to three new options that would better maximize the development value of the site,

theoretically increasing both the academic and economic program potential for the school district.

Of the many difficult decisions to be made during this redevelopment plan, the first we had to address was whether to keep Lincoln High School on site. There is precedence for moving the school. In fact since the school's inception in 1869, it has moved its physical location five times!<sup>1</sup> We looked at the possibilities of moving to the large Con-Way site in Northwest Portland, as others had previously suggested, as well as our own alternative for moving LHS to Duniway Park, which is publicly owned and located just south of the 405 Interstate. This option became increasingly attractive as its location bridges the minimal divide between Portland State University and Oregon Health and Sciences University on Marquam Hill in Southwest Portland. This Duniway Option became a feasible and reasonable low-risk alternative that could preserve the value for other urban development on the Lincoln site that remains one of our final three redevelopment plan options. However, we understood that moving LHS would be a controversial decision and lose the benefits of partnerships with many downtown educational, arts and communications institutions and we ultimately decided to explore an option that retained the school on site.

We then looked at the possibility of keeping Lincoln on site by incorporating a new school facility within a more forward-thinking, dense, urban development plan that takes full advantage of Lincoln's exceptional downtown urban location. Our two final redevelopment options creatively explored these scenarios.

The underlying major issue we had to address early on was whether to expend the land and financial resources to keep a traditional athletic field and track on site or whether the new Lincoln High physical education and athletic departments would be enriched indoors while making use of shared outdoor facilities off campus. Of the two options to keep Lincoln on site, one explored eliminating the field and track. The other incorporated a field and track within the new urban development. It is this option that attempts to balance the traditional high school elements with the modern urban magnet high school, which we termed "the Hybrid option" and upon which we ultimately focused our efforts.

1 <http://lincoln.pps.k12.or.us/about>



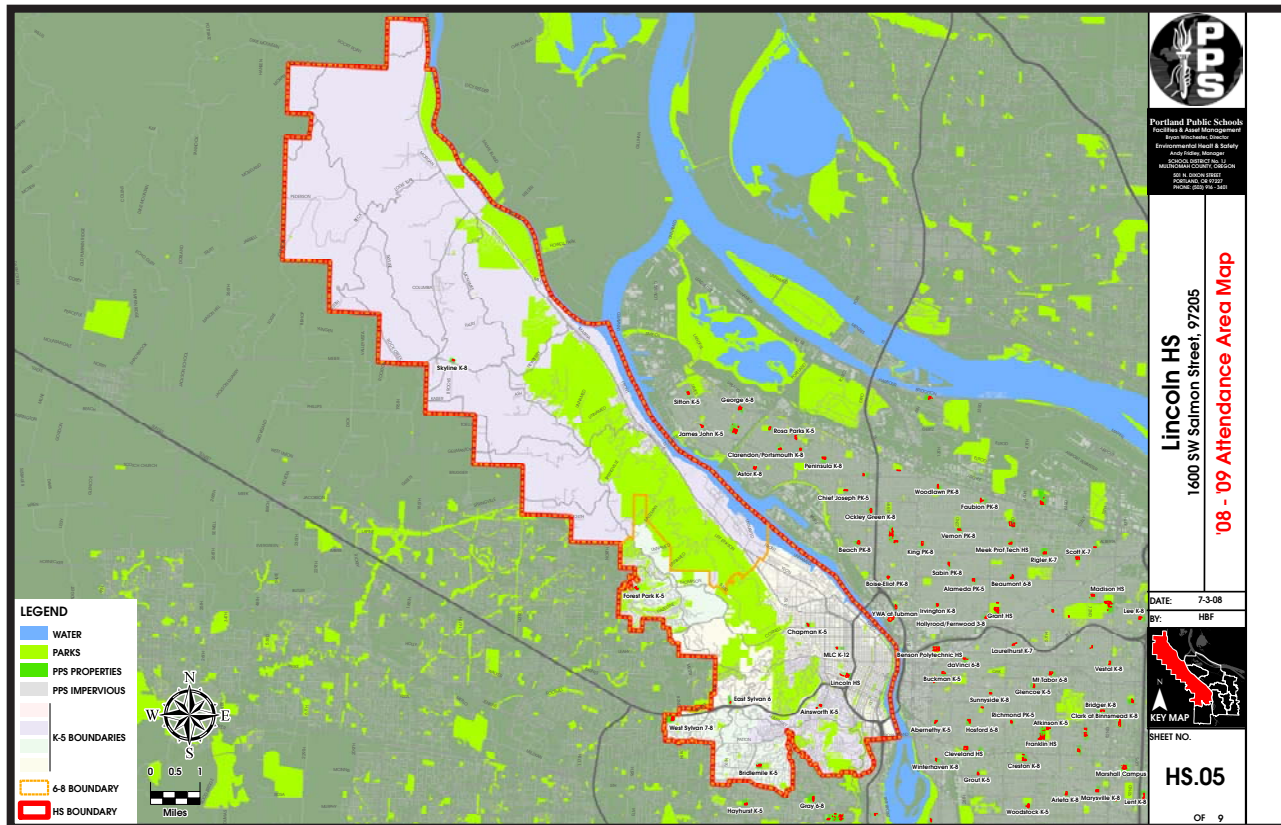
# Existing Lincoln High School

Lincoln High School is Portland's first and oldest high school. In fact it is the oldest high school in the Pacific Northwest. LHS is one of ten high schools currently in the Portland Public Schools District. The current LHS building was constructed in 1952.

LHS is known for its academic excellence as well as its champion athletes. Lincoln offers a diverse student body with 70% of students coming from the surrounding neighborhoods and the other 30% coming from the greater metropolitan area. Recent history shows 80% or more of each graduating class report plans to attain a post-secondary education. It benefits from a very active and engaged alumni association, the donations of which have improved some of the facilities, including the language laboratory and the current athletic field and track.

## Academic Highlights:

- International Baccalaureate (IB) Program
- International Studies (ISC) Program
- Spanish Immersion Program
- Small Alternative Education Program
- Cardinal Times Newspaper
- Polyglot literary magazine
- Drama Season



## Sports Programs:

- Football
- Cross Country
- Soccer
- Volleyball
- Dance
- Wrestling
- Basketball
- Swimming
- Baseball
- Softball
- Track
- Golf
- Tennis
- Lacrosse
- Water Polo
- Rugby
- Skiing
- Snowboarding



## Current State of Lincoln High School Facilities

### Antiquated Facilities

Many of the current facilities have become outdated, and much has changed since it was first built in the 1950's. Most importantly, many of the existing classrooms have become functionally obsolete. The majority are too small, with too few electrical outlets to accommodate ever-increasing technological demands. Very few classrooms are equipped with permanent projection wiring to permit teachers to use the Internet for instructional purposes. On-campus computer classrooms are antiquated with equipment that is many generations behind current technology. The system is slow and lacks wireless capabilities.



Athletic facilities at Lincoln High School have been surpassed by newer, bigger, suburban schools. LHS has only one athletic field which is one of the most heavily used fields in Portland, normally in operation from as early as 6:00 a.m. to as late as 10:00 p.m. during the school year. Nine varsity or club sports, most of which have multiple levels of teams (i.e. freshman, junior varsity and varsity squads), spend the school year vying for practice and game time on one field with substandard bleachers. For example, during the fall high school sports season, there are three levels of football, three levels of boys' soccer, three levels of girls' soccer, multiple cheer and dance squads and a marching band all attempting to share the same field. There are no other on-campus field spaces of any dimension, forcing some teams to find alternative practice facilities and some sports teams (i.e. softball and baseball) to travel up to nine miles off campus to practice. There are no district vehicles available to the teams, so teen drivers must transport themselves off-campus for practice, causing safety concerns and taking time away from schoolwork.



## Current State of Lincoln High School Facilities

Contrast this to athletic competitors of Lincoln High School, such as Beaverton School District's Southridge or Sunset High Schools, which feature one main field with lights, track and stadium, and also feature two full-sized softball fields and two full-sized baseball fields, making for four full-size practice fields during fall sports.

LHS has just one gymnasium. This gym is too small and is in constant use every school day, before school for practices starting as early as 6:00 a.m., during school for multiple physical education classes per period, and after school for continual practices and games that, on many nights, do not end until 10:00 p.m. The size of the structure does not allow for one full length, regulation-size basketball court. Contrast this with most other 1,000-plus student high schools, which usually have two gyms. Lincoln's gym is the only interior space on campus in which to gather the entire student body, which is hardly an ideal setting for guest speakers, assemblies or performances.



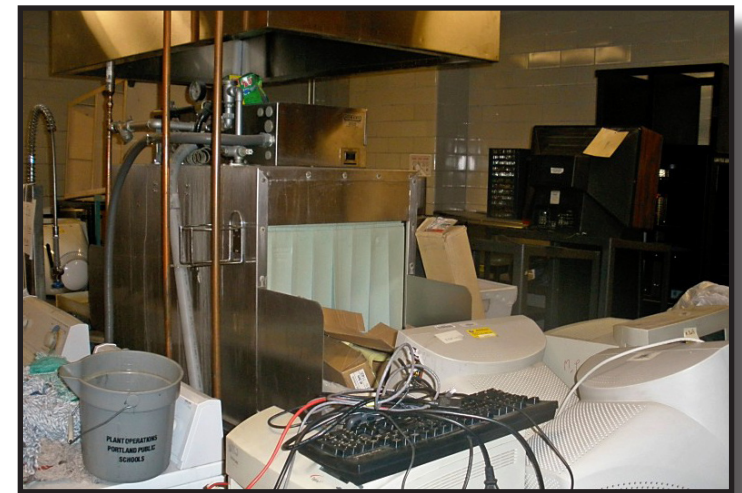
Most high school auditoriums have enough seats to accommodate the entire student body, but this is not the case at Lincoln. Current auditorium capacity is less than 500 and decreases yearly as more room in the balcony is sacrificed for the storage of sets and props, as there are no alternative storage spaces. Seats from the balcony are cannibalized to replace broken seats below.



## Current State of Lincoln High School Facilities



The air-conditioning and ventilation systems are also distressingly old-fashioned, wasteful and inefficient. The only portions of the school that feature air-conditioning are the four “temporary,” modular classrooms on the northeast corner of campus, which have now been in place for nine years. Some classrooms do not even have windows. The school was designed with long, locker-lined narrow hallways with very little dedicated common meeting areas for students. What little faculty space has not been converted to classrooms or storage is cramped, dreary and uninspiring.

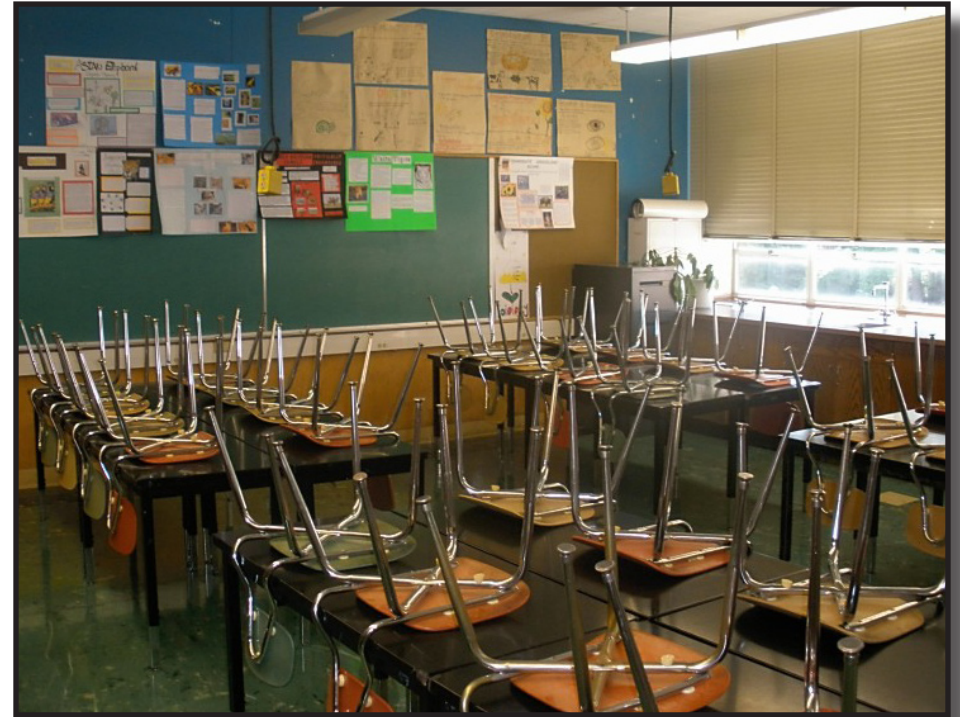




## Current State of Lincoln High School Facilities

### Overcrowding

Lincoln High School was originally built for 1,200 students, though in recent school years has accommodated up to 1,500 students. Not only is there an excess number of students, but also the 57-year-old facilities have not been expanded or changed to accommodate the additional students and storage. In addition to the temporary portable classrooms, there is too little space within the classrooms themselves. For example, in science labs there are up to 36 students in a classroom of less than 500 square feet with supplemental outlets hanging from electric cords over the tables. All but senior students share lockers and the cafeteria has been reduced by building a windowless wall to add three additional classrooms. Teachers must share classrooms, which further complicates programming and teacher planning areas. There is very little dedicated storage within LHS and instead the school has used up every possible room, closet, and even hallways to accommodate storage.

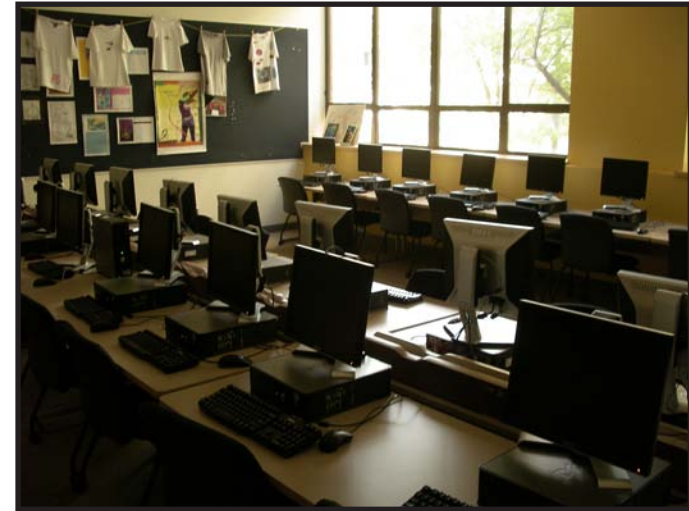


## Desired Changes to Lincoln High School

### Desired Changes:

The most critical changes needed are the replacement of outmoded academic facilities, the creation of new flexible high-tech classrooms, library and media facilities, adaptable laboratories, improved communications and technology systems, lecture halls, art studios, group academic commons areas, teacher preparation areas, individual study carrels and similar improvements.

An increase in academic and athletic facilities would provide for additional after-hours public use that would foster parent participation, pride and safety within the neighborhood. This increased school program could also serve as a revenue stream for the district with the high-tech classrooms, auditorium meeting hall, gym(s), field and the library/media center being rented during non-school hours.



The new LHS should incorporate:

- Expanded library/media center with more neighborhood access and updated technology
- Flexible high-tech classrooms
- Adaptable laboratories
- Improved communications and technology systems
- Arts practice facilities and studios
- Teacher preparation areas
- Individual study carrels
- Group academic commons areas
- Tennis courts
- Two lecture hall/small performance spaces, one to accommodate all students at once, and another smaller sized facility similar to a college lecture hall.
- Two gymnasiums -- one main gym/school meeting hall with regulation size basketball court with increased seating capacity and another practice gym
- Swimming pools (without competition diving)
- Safer, better lit, parking options





## 21st Century School Model

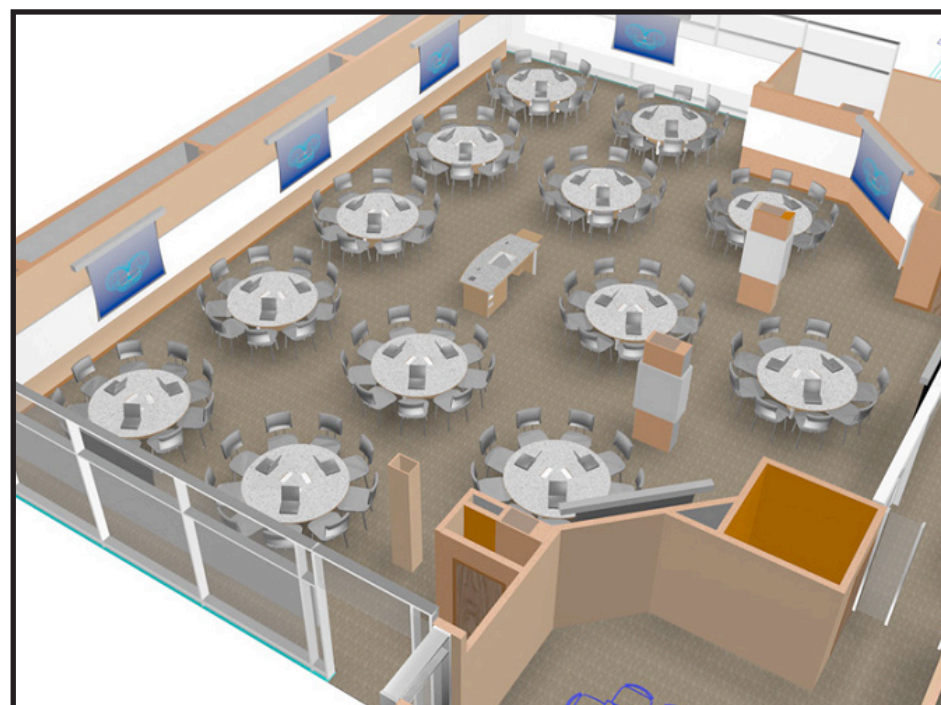
### 21st Century School Model – The Basis for a New School Facility

The LTDC report summarized the views of survey respondents as imagining “a 21st Century school facility as collaborative, community-focused, and inviting. They envision the school as a hub in the community, with spaces available for neighborhood uses. Respondents described a welcoming, technology-infused facility with a variety of flexible, differently-sized and arranged learning spaces that enable multiple teaching and learning styles.” [LTDC]

In line with Education Secretary Arne Duncan’s proposal,<sup>1</sup> one of the flexible options that should be accommodated is a three-year program, featuring four, 12-week terms per year (with four weeks of vacation), which would equal the 720-day current four-year program. Partnering with PSU, students could begin college earlier, take a collegiate level year of advanced classes, study abroad, work in community service or engage in other activities that would broaden and enrich their academic pursuits. From an administrative perspective, the economic effect of this three-year program would also permit as many as 25% more students to benefit from exceptional new facilities thereby reducing the effective cost of those facilities. The current practice of operating only 180 days a year not only shortchanges our students vis-à-vis students from competitor nations but also leaves idle millions of dollars of plant and equipment.

A 21st Century urban magnet school takes a more holistic approach to teaching and aims to engage students in their own education instead of spoon feeding them a rigid curriculum. Project-based learning promoted by collaborative and independent endeavors replaces some of the lecture and note-taking style of teaching/learning. Individual paced learning, languages, arts, community service, internships and apprenticeships become a natural part of the process to allow students to explore and find an academic path appropriate to their needs. Strategic partnerships with nearby institutions foster a unique learning environment and help students reach out to the community. Mentoring opportunities draw in professional and retired volunteers who want to mentor and impart wisdom to students.

The physical manifestation of a 21st Century urban magnet school incorporates flexible spaces which can be arranged to accommodate the needs of student groups, guest lecturers, roundtable discussions, and partner or volunteer mentors. In order to envelop and engage students in their school community a variety of larger spaces need to accommodate the entire student body at once and be flexible enough to provide for the needs of a guest speaker, a play, an assembly or a sports competition. Smaller flexible spaces that can be arranged for a debate, an audition, group work and small intimate lectures are also essential. Individual study carrels allow students a place to work on individual projects under the supervision of the school faculty. Teachers would have areas to plan their lessons and store materials needed throughout the year as well as private spaces in which to tutor students. Technology should be incorporated into every classroom by wireless connections, smart visual presentation products and individual computer stations, although some facilities would be open and shared by multiple classes based on their needs. When not in use by the school, facilities would be shared by the community, thus magnifying the school’s impact on the community.



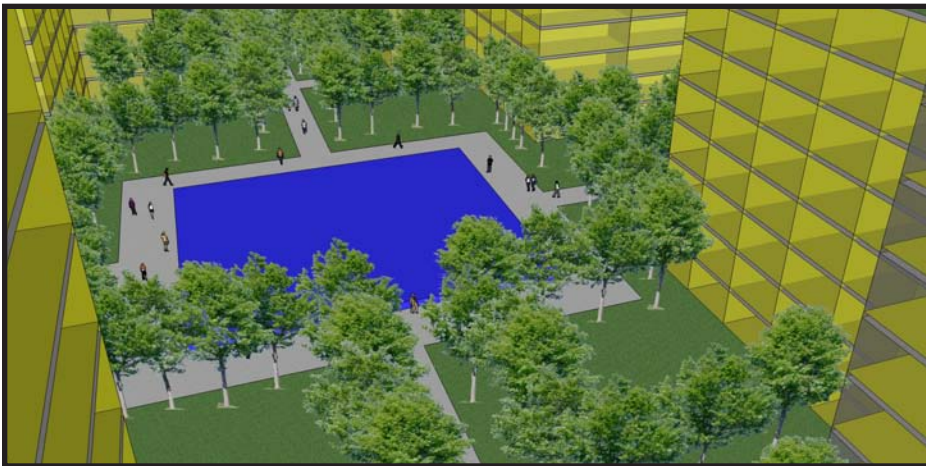
<sup>1</sup> <http://www.education.com/print/school-answer/>

## The Hybrid Option

Of the three development options explored by this team, the hybrid option is preferred because it is intended to take advantage of the downtown urban location of LHS to foster rich partnerships with a variety of downtown institutions such as PSU, KGW, the Artists Repertory Theater, the Portland Center for the Performing Arts, the Portland Art Museum, the Western Culinary Arts School, the International School, the MAC Club and PCC, to name a few. In addition, the hybrid option seeks to retain the athletic field and track by building the school above the track and around the field, embracing it as a focused and programmed open space.

Moreover, the hybrid plan seeks to build an active urban community with over 1,682 workforce and student housing units which not only creates affordable housing options for teachers, visiting students, international students and staff, but also for legions of creative class college graduates who can use the rich mix of athletic and meeting facilities of the school and still walk downtown to work. With the addition of a residential component, safety would increase as there would be more “eyes on the street” to monitor the community.

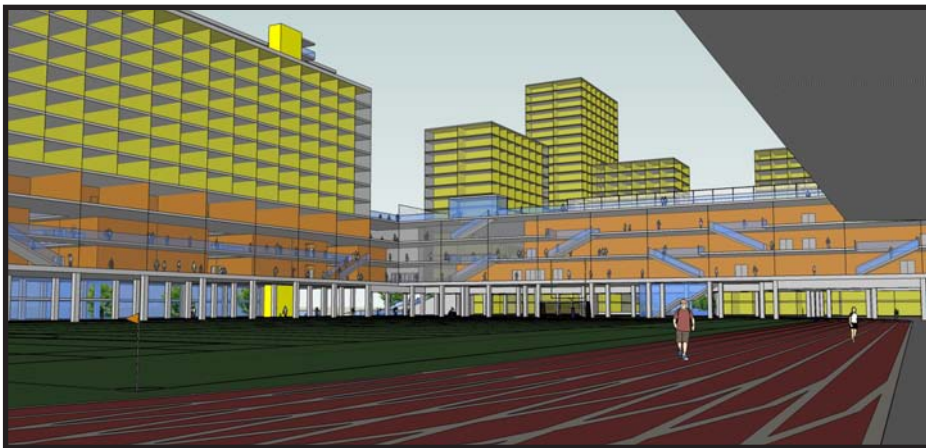
Importantly, the availability of workforce housing helps transform a school into a learning and living community active throughout the day, enriching the options for programmatic interaction, exchange students, teachers living onsite, state-wide magnet programs and partnership programs. In addition, the control of the housing by the school district also brings with it a growing income stream and development value that enriches income sources for operating funds into the future.





## The Hybrid Option

Retaining the field and track, although it is costly and renders a large portion of the site undevelopable, would continue to invigorate the neighborhood. In fact, the plan improves upon the current track by covering it on all sides, protecting it from adverse weather year-round. Additionally the new facilities such as pools, gyms and tennis courts could be made available to the community when not used by the school. It would also provide much needed parking for PGE Park and the MAC Club.



The drawbacks to this plan include a higher risk profile because of the nature of mixed-use development, higher development costs, more complicated construction, the phasing of the project over several years, and the fact that the field and track render over two acres of valuable downtown land otherwise undevelopable. The construction costs would be significantly higher than greenfield school construction.

This option tries to strike a balance between acknowledging the urban context and inherent land value of the currently underutilized site while preserving athletic and neighborhood amenities currently found at LHS. It seeks to provide supplemental funding for the school by creating residential development and parking on site. It invites the community to engage with the school community while monitoring and maintaining security for the school, residential and retail components. The school, as a tax-exempt landowner, with alternative long-range funding sources available to non-profit and public entities, could develop these facilities at a lower cost and more affordable rents than could a private developer. The residential, retail/commercial, and parking components could provide a long term income stream and create long term economic value for the school system, which could supplement operating capital for future program expansion. If realized this project would serve as a catalyst for developing other underutilized properties in the area and held by the Portland Public Schools District in some other locations.



## Development Strategy

The Lincoln High School site presents a rare opportunity to transform a superblock near the heart of downtown Portland from a sprawling and deficient building of suburban density into a mixed-use community with the prototype of the 21st Century urban magnet high school. It would contain 1,682 mixed-income workforce housing units and specialized spaces which can be developed and operated by public-private partnerships to provide rich educational, athletic and community services to the school, the onsite population and other community partners downtown. Sufficient on-site parking would support the uses on site in addition to absorbing the excess demand for parking in the area generated by the adjacent uses, such as PGE Park and the MAC Club.

The essential development strategy to achieve this vision is to maximize the urban location advantages of the site, the public-private partnerships it allows with nearby downtown partners, the possible density supported by the location and superblock site and the public financing options that can flow from public ownership of the site and parking.

This superblock property has unrealized development potential. It currently has a sprawling suburban-style 190,000-square foot, two-story school building with a track and field on an 10.96-acre site in downtown. The assessor currently values the property at \$62,754,600. The land alone is valued at \$37,076,590, the equivalent of \$3.4 million per acre, or approximately \$78 per square foot for its 477,418 square feet<sup>1</sup>. Under more normal economic conditions, the commercial value should substantially exceed that figure because it is a superblock made up of eight city blocks with no through-streets and only one functioning sewer easement.

The school is facing major renovation needs, estimated to cost at least \$23 million for systems expected to fail in the next 10 years and up to 50%-100% of replacement costs for full modernization and expansion. Replacement costs were estimated by the LTDC at \$110 million dollars. LHS can barely accommodate the number of students currently attending, let alone those that would like to transfer in order to attend its prestigious programs, such as the International Baccalaureate (IB) program.

After considering the layout of the site, the zoning requirements, and the goals put forth by the Long Term Development Committee (LTDC), we decided on a development strategy that builds a 21st Century<sup>2</sup> urban magnet high school in downtown Portland, paid for to the extent feasible with revenue and value generated from the site, as a way for the Portland Public School system to create economic and educational value and turn an underutilized asset into a revenue stream. In order for PPS to maintain more control of the site, acquire more favorable financing and better control the uses that could be developed on the site, we believe that PPS should act as the master developer of the site with the assistance of fee developers for individual projects.

We assumed that LHS would become a magnet school, since its downtown location and many unique features including the IB program draw students throughout the district. A statewide residential magnet school could also be considered for this site, something which is not currently offered in Oregon, but has been successful in other states, such as North Carolina<sup>3</sup>.

Lincoln High School is situated in an ideal location to develop innovative partnerships. The LTDC would like to see “synergistic [partnerships], such as colleges, museums or teacher family housing”. Other nearby organizations such as KGW TV studio, Artists Repertory Theatre, and PSU, could help LHS further engage students in the neighborhood and foster community outreach by providing unique internship opportunities for the students. Another goal in modernizing the schools is to better connect the schools with their surrounding neighborhood. Taking this into consideration, it is important for the school to be open to the neighborhood and command more of a presence in this area.

1 Portlandmaps.com values the land at \$37,076,590 for the 10.96 acre LHS property

2 <http://lincoln.pps.k12.or.us/files/6-12-08%20LTDC%20Report.pdf>

3 North Carolina School of Science and Math - <http://www.ncssm.edu/>





- A. PSU – LHS could provide student housing, student teaching/tutoring opportunities, and IT support for Department of Education students who could be teacher's aides and assistants in order to fulfill their credit and training requirements.
- B. Portland Art Museum – The school could host additional art displays. Students could learn from visits to the museum or lectures from visiting artists and staff. Internships for art students would provide additional training and supply the museum with consistent volunteer support.
- C. PNCA - LHS students could take PNCA classes. PNCA instructors could teach studio arts classes at LHS.
- D. Western Culinary Institute – Could run a wholesome food preparation program, cater events, provide cooking classes or internship opportunities.
- E. NW Film Study Center- Could provide instructional film/video production, and allow for student interns.
- F. PGE Park – LHS competitions could be held at the Park when needed. Visitors at PGE Park would use LHS underground parking.
- G. Multnomah Athletic Club (MAC) – Could rent space at LHS as needed or use the new facilities for meetings etc. Would also utilize new parking structure providing revenue to the school
- H. KGW TV Studio – Could assist the school with post-production facilities and student internships.
- I/J. PCC – Advanced students could take classes at PCC's downtown center. PCC instructors could teach special classes at LHS. PCC could use LHS classrooms at night.
- K. OHSU – Could provide internship opportunities or run a small outpatient clinic on site. OHSU students may take advantage of workforce housing on the site.
- L. Artists Repertory Theatre – Could teach LHS drama classes in exchange for student interns.
- M. Portland Center for Performing Arts – LHS could hold major programs, plays at PCPA Performing Arts Center. PCPA could use LHS facilities as training facilities.



## Development Strategy

### Potential Partnerships (Continued):

- Churches - Local churches could rent the LHS Meeting Hall as needed for community events.
- Daycare/After School Care – A daycare facility would benefit from shared facilities such as a gym and underground covered parking/dropoff. Greater family involvement for teachers or residents, especially those with children of different ages, whose parents could drop off their children in one location. Students interested in early childhood education could assist in caring for the children.
- Kaplan- could rent testing facilities for large group examinations, providing a closer facility to college bound students.
- YMCA / YWCA – Could provide before and after school programs in school facilities, and run other community programs. They would not have to build additional facilities.
- Library – community library, community center, readings, performance space, civic facilities
- Portland Parks and Recreation – Could contribute to the capital costs in order to have off-hour access to the facilities, pool, tennis courts etc.
- Boys and Girls Club – Could share the use of athletic facilities, mentor programs before and after school and on weekends.
- International School - Could make joint use of language labs, immersion programs, guest lecturers.
- MAX/Streetcar – Would gain ridership; students and teachers improve accessibility.
- Health Care Facility – Public health clinic could serve students during week; public on weekends.
- Parking Partner – SmartPark could manage daily/monthly parking, increase revenues, decrease, labor, etc. in return for a portion of the revenues. Students could assist in onsite management.

A market analysis has shown that residential uses, along with a few supporting neighborhood commercial uses, are the best options for this site. Because of its proximity to PSU and to other PSU student housing, and as a way to increase the potential of LHS to serve college-oriented students, workforce housing designed in a way that could be used by upperclassmen and graduate students from PSU would be a viable housing option as part of the residential component. In the event that Lincoln is also used as a statewide magnet, or develops an international exchange program, such housing could be used by exceptional students from around the state/world who might choose to attend Lincoln.

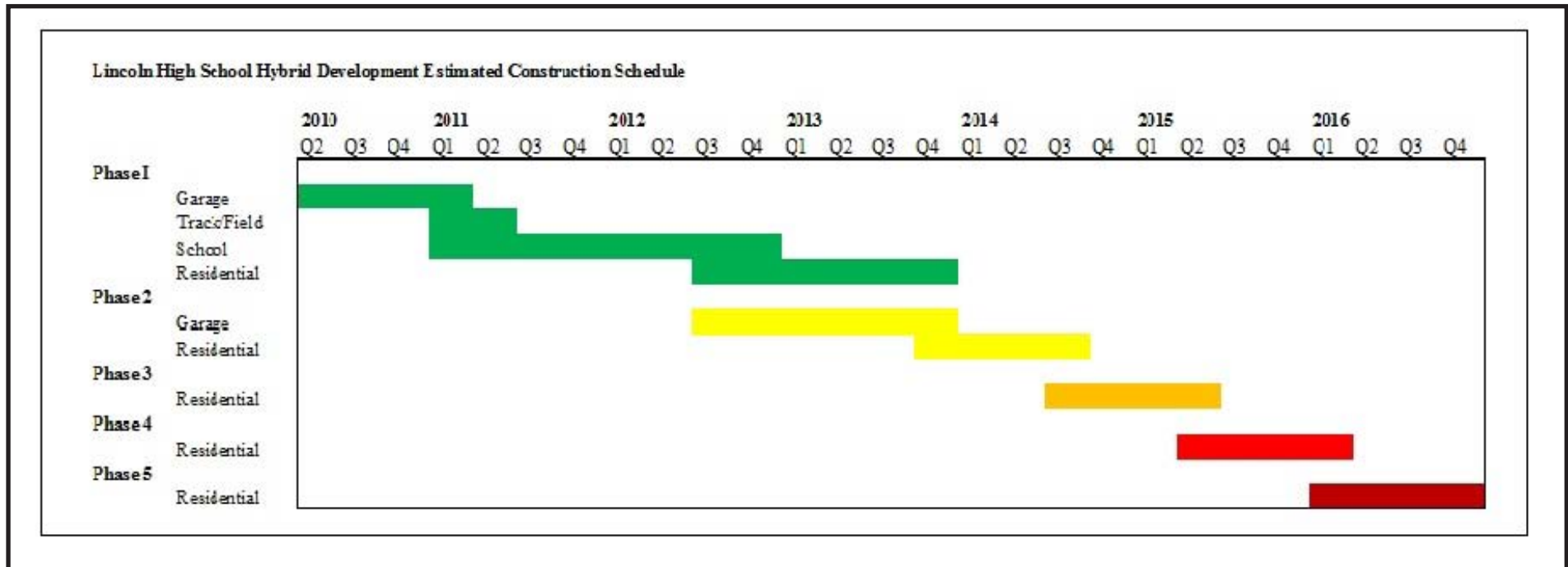
Workforce housing that could accommodate teachers is another piece of the residential component, as well as a few affordable family-sized units, for those families that want their children to be near the school and the advantages of downtown. Once the market recovers from the current recession, an absorption rate of up to 300 workforce housing units per year is expected for this site, translating into a six-year phased development schedule.





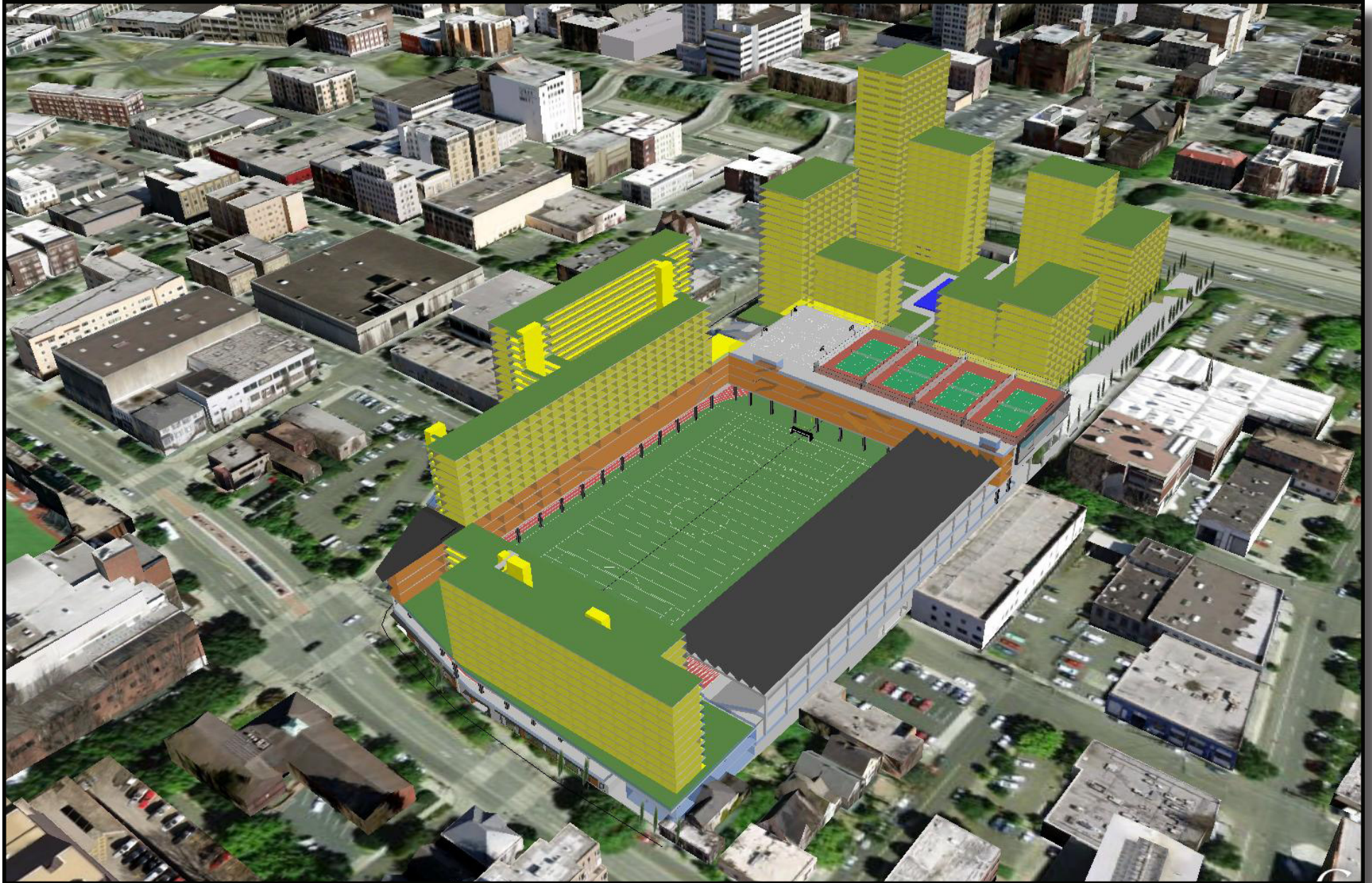
## Development Strategy

Development would occur in a total of five phases with the current school building remaining in operation on the eastern portion of the site while the new school is being built on the western end of the site during the first phase. The track and field would not be available for use once construction began. Duniway Park, which has a fully functioning soccer/football field and track, has been proposed as a substitute track and field. Once Phase I is completed, and LHS moves into its new facilities, phases two through five would commence on the eastern half of the site. See the following timeline for a proposed schedule of development:





## Development Program





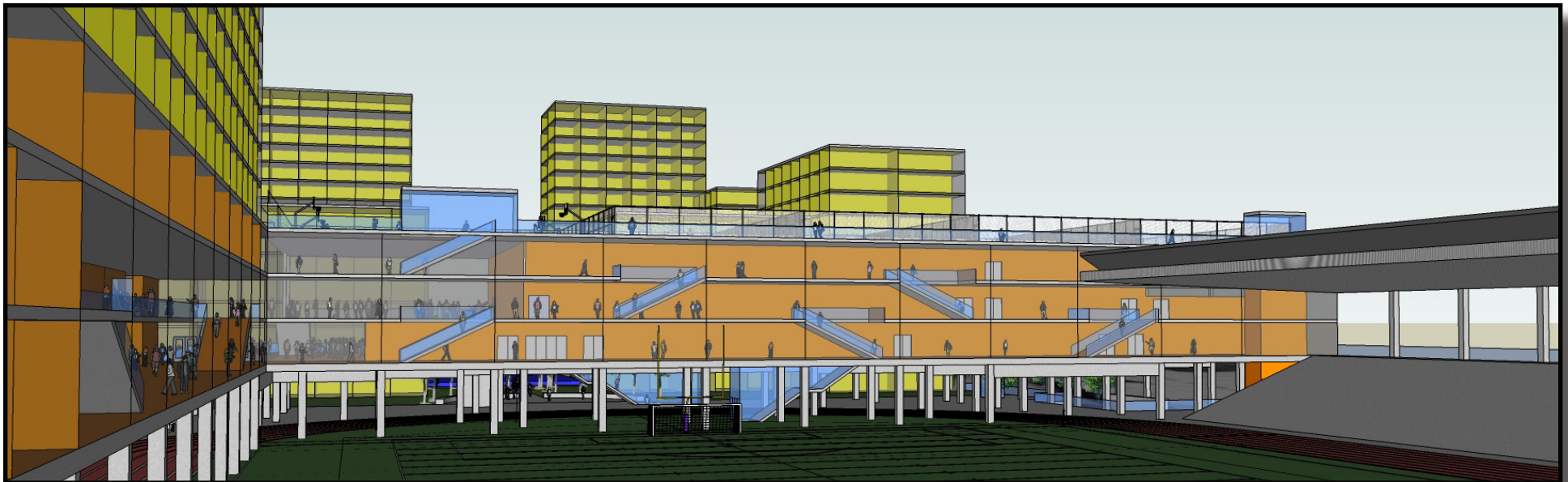
## Development Program

<b>Academic</b>	<b>Number of</b>	<b>Size per</b>	<b>Total Square Feet</b>
<b>General Classrooms (English, Math, History, Language, etc.)</b>	46	750	34,500
<b>Specialized Classrooms</b>			
Science	6	1,000	6,000
Culinary/Home Economics	4	1,000	4,000
Art Studios	4	1,000	4,000
<b>Flex/Break-out Learning Space (located between Classrooms)</b>			15,000
<b>Media Center/Library</b>			5,000
<b>Individual Study Space (Study Carrels)</b>			15,000
<b>Total Academic</b>			<b>83,500</b>

<b>Athletic</b>	<b>Number of</b>	<b>Size per</b>	<b>Total Square Feet</b>
<b>Main Gym/"Performagymnasium"</b>			15,000
<b>Practice Gym</b>			6,600
<b>Natatorium(General Purpose Pool/Lap Pool)</b>			7,500
<b>Locker Room/Athletic Center</b>			
Locker Room (Boys and Girls)	4	1,500	6,000
Weights/Cardio Room			3,250
Fitness Aerobics			750
Cheerleading/Dance Room			750
Wrestling Room			1,500
Glorified Restrooms	2	400	800
<b>Total Athletic</b>			<b>42,150</b>

## Development Program

<b>School Administrative</b>	<b>Number of</b>	<b>Size per</b>	<b>Total Square Feet</b>
<b>General School Office Administrative</b>			
Front Desk/Business Manager/Secretary/Media Prep			1,000
Principal's Office	1	400	400
Vice Principal's Office	2	200	400
Councilors (Career/College/Discipline/Family)	5	200	1,000
Medical Clinic			1,000
Teacher's Lounge			1,000
Private Teacher's Offices	70	75	5,250
Supervisor's Offices	10	150	1,500
<b>Total School Administrative</b>			<b>11,550</b>





# Development Program

<b>Specialized Facilities</b>	<b>Number of</b>	<b>Size per</b>	<b>Total Square Feet</b>
<b>Cafeteria/Pre-function Space for "Performagymatorium"</b>			<b>8,500</b>
<i>Catering Kitchen (share with PPS Admin)</i>			
<i>Food Storage</i>			
<i>Loading</i>			
<i>Trash/Recycling</i>			
<i>Dining Hall</i>			
<i>Reception Space</i>			
<i>Storage for multi-purpose room (transitioning space)</i>			
<b>Student Center</b>			<b>1,000</b>
<b>Performing Arts for "Performagymatorium"</b>			
Music Rooms (Band/Choir/Piano)	2	1,500	3,000
Drama/Backstage Room			1,500
TV Studio/Equipment			1,000
<b>Total Specialized Facilities</b>			<b>15,000</b>
<b>Miscellaneous</b>	<b>Number of</b>	<b>Size per</b>	<b>Total Square Feet</b>
<b>Restrooms</b>	<b>6</b>	<b>500</b>	<b>3,000</b>
Mechanical/Boiler/Janitor/Maintenance Rooms			10,000
Circulation @ 20% (Vertical/Stairs/Elevators/Escalators/Hallways)			40,550
<b>Total Miscellaneous</b>			<b>53,550</b>
<b>Total New Lincoln High School</b>			<b>205,750</b>

# Development Program

## Residential Programming & Unit Mix

### Workforce Housing Summary (Phases I through V)

Beds	Baths	Count	Unit Mix	Rent	Rent, PSF	Avg. SF	Circulation	Total SF
3	2	18	1%	\$ 1,350	\$ 1.13	1,200	15%	25,412
2	2	178	11%	\$ 1,120	\$ 1.24	900	15%	188,471
1	1	558	33%	\$ 945	\$ 1.40	675	13%	435,093
Studio	1	928	55%	\$ 695	\$ 1.54	450	9%	461,257
<b>TOTAL</b>	<b>N/A</b>	<b>1,682</b>	<b>100%</b>	<b>\$ 1,395,930</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1,110,232</b>
<b>AVERAGE</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 829.92</b>	<b>\$ 1.43</b>	<b>580</b>	<b>11%</b>	<b>660</b>

### West Half Workforce Housing Summary (Phase I)

Beds	Baths	Count	Unit Mix	Rent	Rent, PSF	Avg. SF	Circulation	Total SF
3	2	-	0%	\$ 1,350	\$ 1.13	1,200	5%	-
2	2	-	0%	\$ 1,120	\$ 1.24	900	5%	-
1	1	96	15%	\$ 945	\$ 1.40	675	5%	68,211
Studio	1	539	85%	\$ 695	\$ 1.54	450	5%	255,316
<b>TOTAL</b>	<b>N/A</b>	<b>635</b>	<b>100%</b>	<b>\$ 465,325</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>323,526</b>
<b>AVERAGE</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 732.80</b>	<b>\$ 1.51</b>	<b>484</b>	<b>5%</b>	<b>509</b>

### East Half Workforce Housing Summary (Phases II through V)

Beds	Baths	Count	Unit Mix	Rent	Rent, PSF	Avg. SF	Circulation	Total SF
3	2	18	2%	\$ 1,350	\$ 1.13	1,200	15%	25,412
2	2	178	17%	\$ 1,120	\$ 1.24	900	15%	188,471
1	1	462	44%	\$ 945	\$ 1.40	675	15%	366,882
Studio	1	389	37%	\$ 695	\$ 1.54	450	15%	205,941
<b>TOTAL</b>	<b>N/A</b>	<b>1,047</b>	<b>100%</b>	<b>\$ 930,605</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>786,706</b>
<b>AVERAGE</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 888.83</b>	<b>\$ 1.39</b>	<b>639</b>	<b>15%</b>	<b>751</b>



## Development Program

Total housing proposed for the LHS site is 1,682 units of workforce housing constructed over five phases at up to 300 units absorption per year. The first phase could include up to 635 units, all affordable studios and one-bedrooms, rented primarily to college students. The income limits for unit types, which in turn establish the residential rents for households of one through four adults, are as follows:

Household Size	Monthly Rent Limit	Asking Rents
1	\$1,089	\$695
2	\$1,244	\$945
3	\$1,400	\$1,120
4	\$1,555	\$1,350

Subsequent phases will supply the remaining 1,047 units with a mix of studios, one-bedrooms, two-bedrooms, and three-bedrooms; again, delivering proportionally more studios and one-bedrooms, with all rental rates below the Housing Authority of Portland's income limits, yet well within an acceptable market rate. Unit sizes vary from 450 square feet up to 1,200 square feet with an average size of 580 square feet. Rental rates vary from \$695 to \$1,350 per unit, or \$1.54 to \$1.13 psf.

Average Rents					
	1BR/1BA	2BR/1BA	2BR/2BA	3BR/2BA	Current Vacancy
<b>Downtown Portland</b>	1088	1167	1825	2777	4.49
<b>Southwest</b>	638	713	935	1023	5.7
<b>Total Metro Area</b>	682	720	876	972	5.03

Commercial space on this site will be 49,600 square feet with around 15,000 square feet of street level retail. Some options for suitable uses include:

1. Daycare
2. Coffee Shop
3. Sandwich Shop or Deli
4. Health Clinic
5. Convenience Store
6. Restaurant
7. Management office



Retail at SW 18th and Salmon.

## Market

The current state of the development market suggests that PPS plan for a conservative, phased approach to developing the site, based on a long-term agenda. Before 2007, one might have envisioned an extremely dense development on the Lincoln High School site, rich with condominiums and luxury apartments, in conjunction with hundreds of thousands of square feet of office space and retail. However, what the market will currently bear is drastically different.

The market for new office and retail space has been decimated because of a significant rise in vacancy and unemployment. The condominium market is at a standstill with an estimated two to three and a half years' worth of inventory yet to be absorbed. Several condominium projects have been converted to luxury apartments to avoid going into receivership, which in turn increased the supply of upper-end rental housing.

The Lincoln site is an island separated from downtown by I-405, making an office building much less marketable than a site on the east side of I-405. Though the distance to downtown is relatively small, the absence of a surrounding office district on this portion of the downtown periphery dictates substantially lower asking rents than comparable downtown buildings. The proximity of the Goose Hollow MAX stop increases the attractiveness of this site, but still requires a 5-10 minute ride to the core of downtown. The necessary reduction in asking rents would handicap any financial model constructed to justify the development of substantial amounts of office space.

Likewise, substantial amounts of retail space will not thrive in an isolated site. There is no other major retail user nearby and retail vacancies are at an all-time high. Any retail uses would have to be supported by the site itself, which, given the intended mix, could include a small convenience store, franchise service restaurant like a Subway, coffee shop and daycare, but no retail of larger size would be anticipated for this site in the near future.





## Market



The hotel market has also taken a hit, forcing some local hotels to close for two to four weeks in order to cut costs. Hotel financing is unavailable, room rents are low, RevPAR is at an all-time low and occupancy levels are marginal. The site is not well connected to supporting uses such as a retail center or executive offices. Any hotel located in this area would not be financially viable in today's market nor the near future. A discount hotel on the eastern side of the site might eventually work but this market is very weak and risky, and the use is not well integrated with a school.

Aside from these currently perceived shortcomings, there are still some unmet market demands. First, while the market for upper-income residential units has been saturated, demand for urban workforce or family housing remains. Second, a strong demand for student housing persists despite the economic downturn, positioning this publicly owned site to capitalize on and supply needed student housing. Financing is available under the HUD 221(d)(4) and (3) programs for units that are affordable for up to 80% of area median income.

According to the Housing Authority of Portland, the 2009 area median income for Portland is \$49,000 for a 1-person household, up to \$70,000 for a family of four. At 80% of median income, the feasible rent for workforce housing units could range from \$1,089 to \$1,555 per month. Considering the proximity to PSU there is potential to quickly absorb up to 1,000 primarily student housing units serving upperclassmen and graduate students. Unfortunately the financing options though HUD are unavailable for student housing specifically. However, college students meeting the income requirements are eligible for tenure in workforce housing and would likely be attracted to the intended unit mix of workforce housing. The current demand for student housing is approximately 600 beds per year according to PSU facilities personnel, with workforce housing absorbing another 300 units per year, projecting a combined absorption of up to 900-1,000 units in the initial phase of intended development.

The overall vacancy in rental housing in Southwest Portland has remained the lowest in Portland at 4.28% according to the Norris Beggs & Simpson Multi-family Report 1st Quarter of 2009. Vacancies for new units are over 80 basis points lower for the same area at 3.47%, according to same NB&S report.



## Design and Drawings

The 11 acre Lincoln High School site is one of the largest contiguous parcels in the central city. A superblock of this size and location allows for unique opportunities and has outstanding advantages.

The most critical design aspect of the project was the phasing which allowed the existing school to remain in use during construction of the new school on the current site of the track and field.

The first phase contains the entire new Lincoln High School, the new track, football/soccer field with bleachers, two separate towers of housing containing studio units, two levels of above ground structured parking and commercial space along SW 18th Avenue and SW Salmon Street. The second phase would be built later, on the current school site once the school is demolished. The second phase would consist entirely of housing built over two levels of underground parking. The entire site creates a living learning center with LHS as a hub of activity in the Goose Hollow neighborhood.





## Design and Drawings

### Phase I - The Western Half

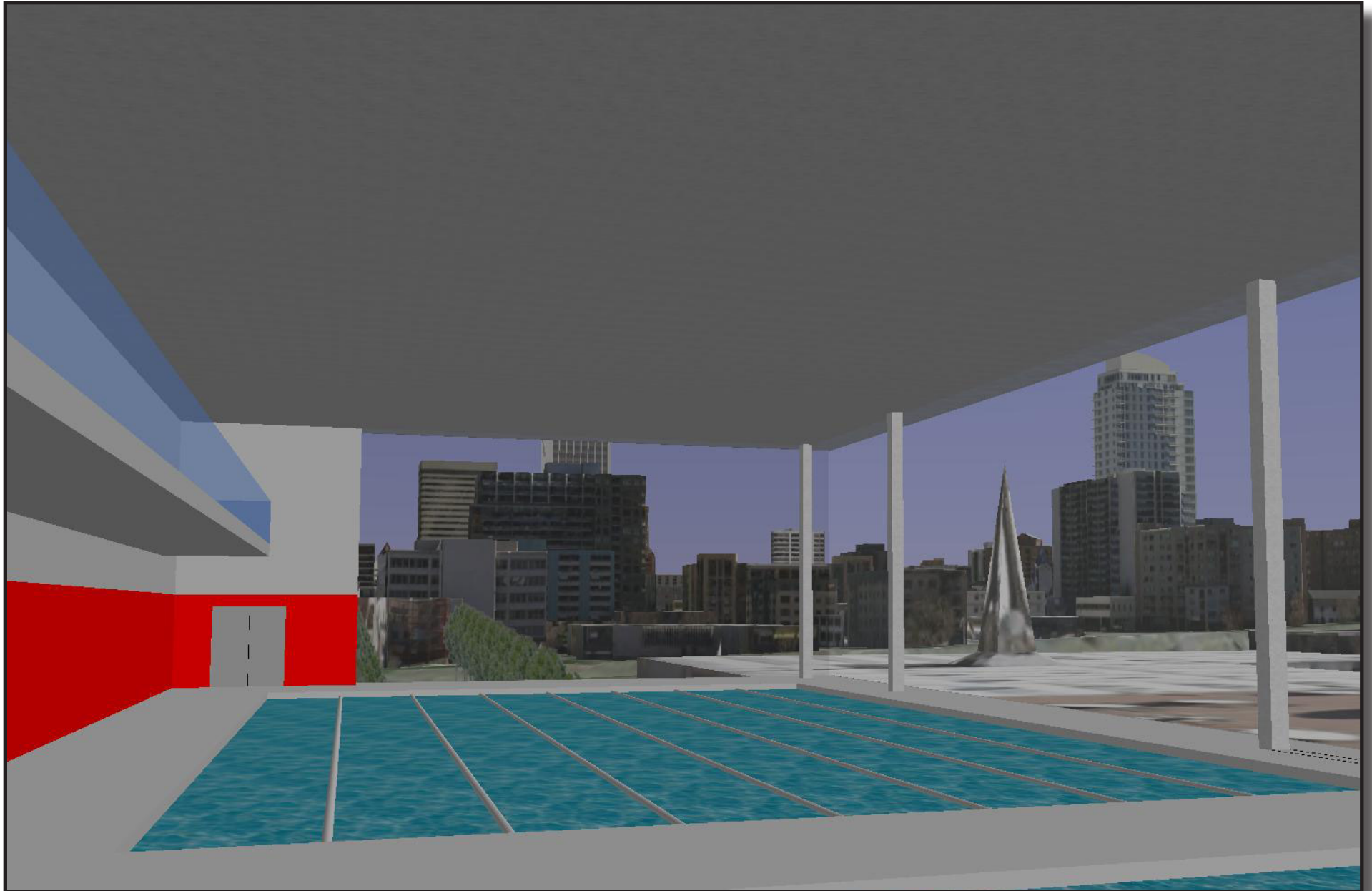
In the first phase, the two levels of structured parking containing 878 spaces sit at grade. Retail/commercial spaces create a liner along the SW Salmon Street and SW 18th Avenue street frontage. Above the parking, and located 18 feet above grade is the track and football/soccer field. 20 feet above the track (38 feet above grade) is the first of the three floors for Lincoln High. Lincoln High is divided into two wings: one, on the north side of the field is the academic wing containing the classrooms, media center and main school entry. The other wing, located on the east side of the field, contains the cafeteria, main gym and performance venue, dining and function space, practice gym, pool, and locker rooms. On top of the school's academic wing (on the north side) is a 12 story tower of studio housing. An additional tower of 10 stories of studio housing is located on the west side of the field.

The main entry of the school is located on SW Salmon between SW 17th and SW 18th Streets at the street level of a seven story glass atrium. Express escalators and elevators transport students, faculty, staff and visitors directly from the street level entrance to the first floor of the school, 38 feet above the street. Abundant sets of stairways connect the three school floors together amongst generous hallways throughout the school. The school's administrative office is located at the level of the track and field, under the school classrooms so as to provide a secure threshold between the street and school in a location that allows supervision over a range of school facilities.

A secondary entry to the school is located where the northern academic wing of the school meets the eastern non-academic wing. This is intended to be used primarily at night for the public where it provides a better entry for the public to the performance space and athletic facilities while also enabling the school's academic wing to be closed off from the public at night. A third entry to the school is the underground bus pickup and drop off. This is a secure indoor covered facility located under the school and in the heart of the site. It allows students to board buses to off-site school functions and athletic activities and is accessed internally from the school and is separated from the street.

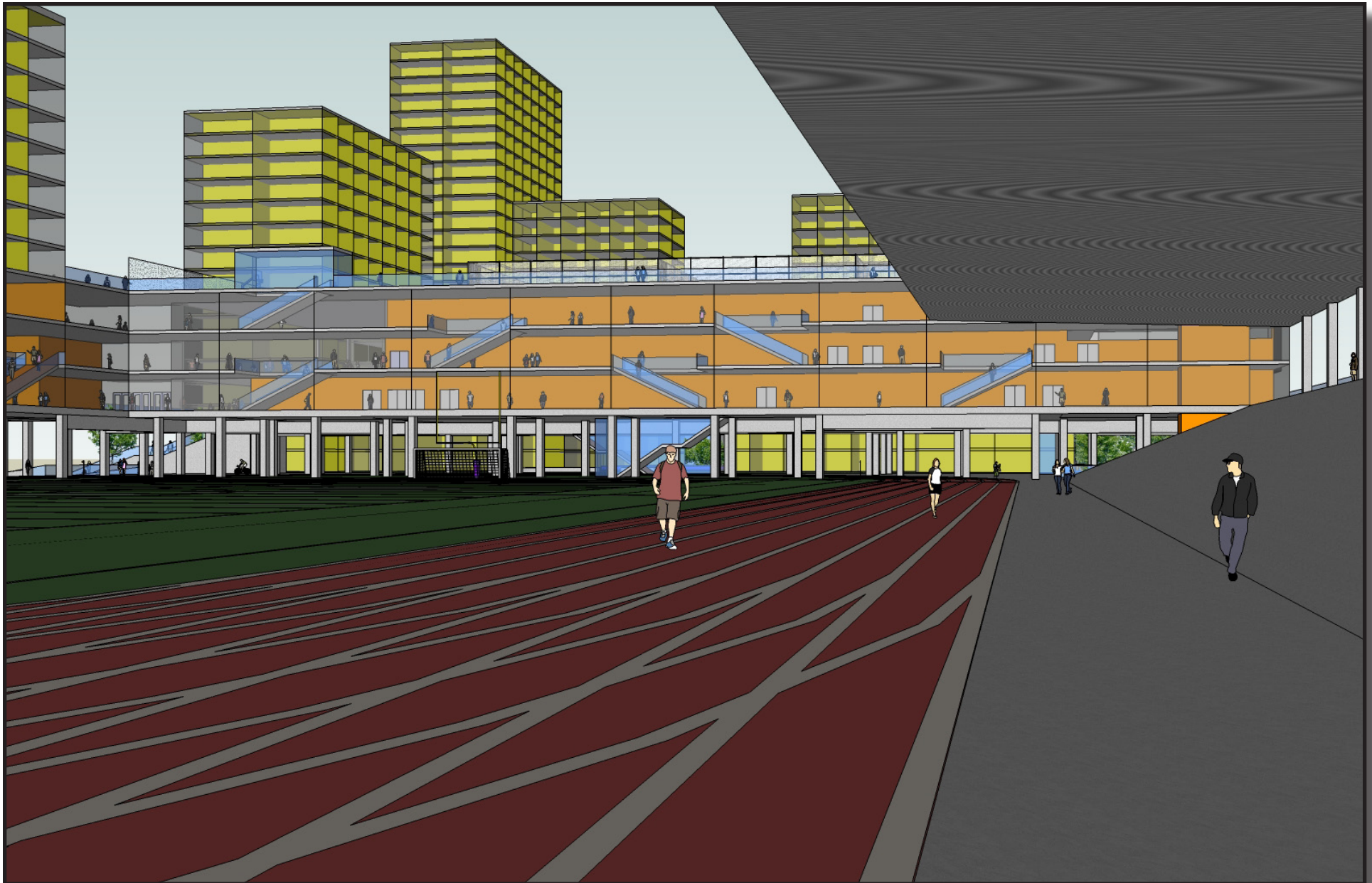


## Design and Drawings

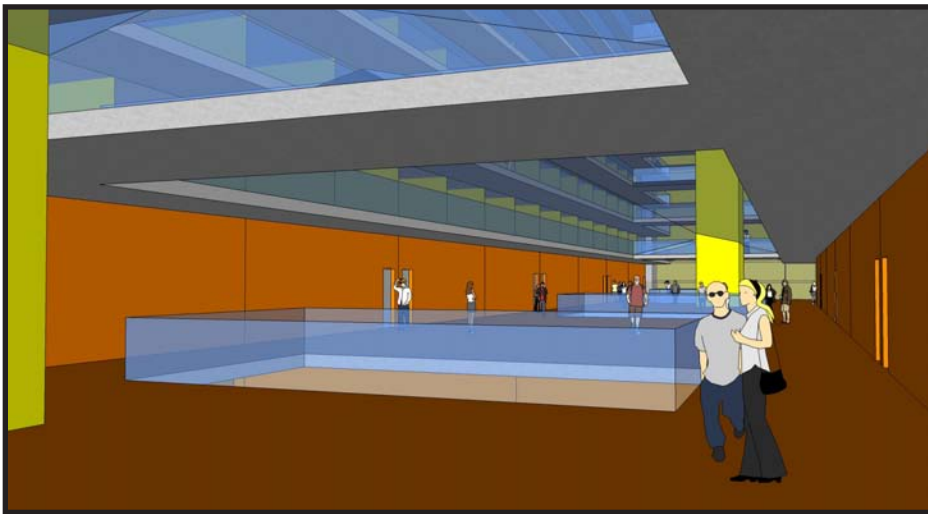




## Design and Drawings

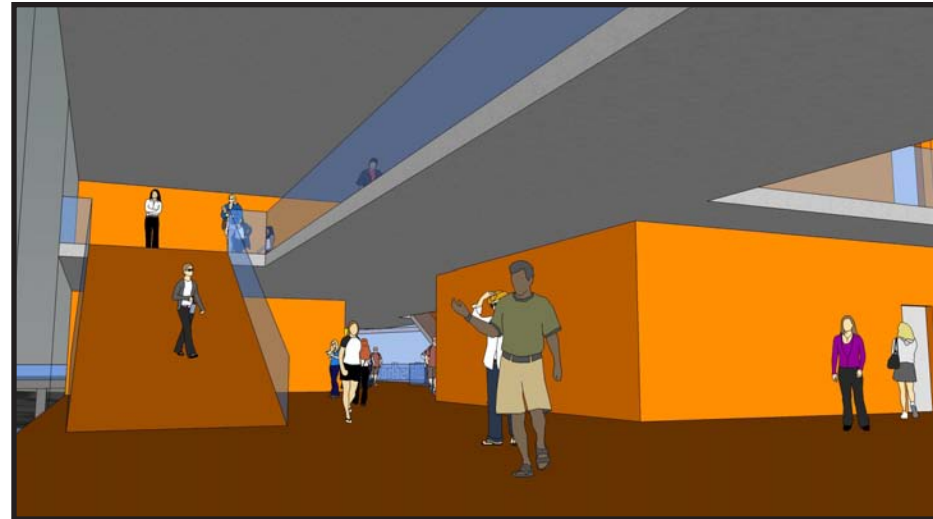


## Design and Drawings





## Design and Drawings



## Design and Drawings



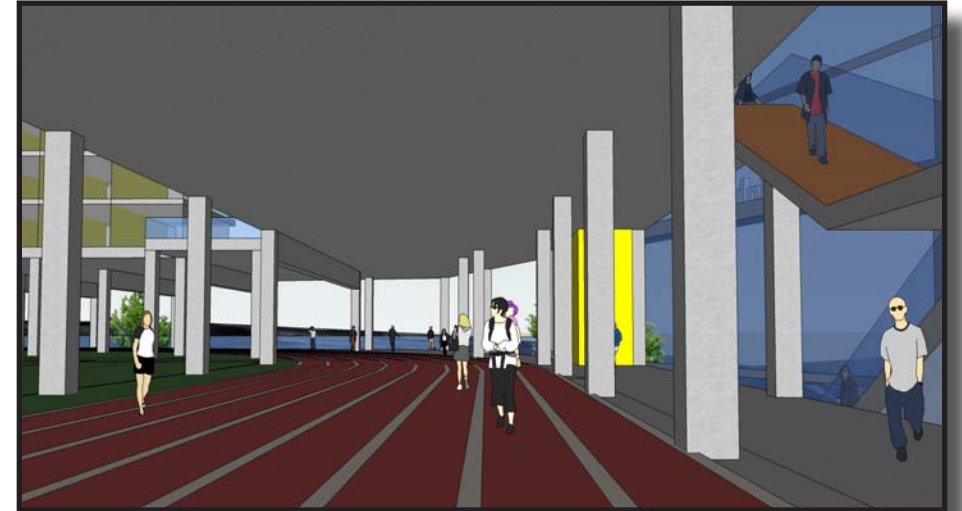
Entry to prefunction space.



"Performagymtorium"



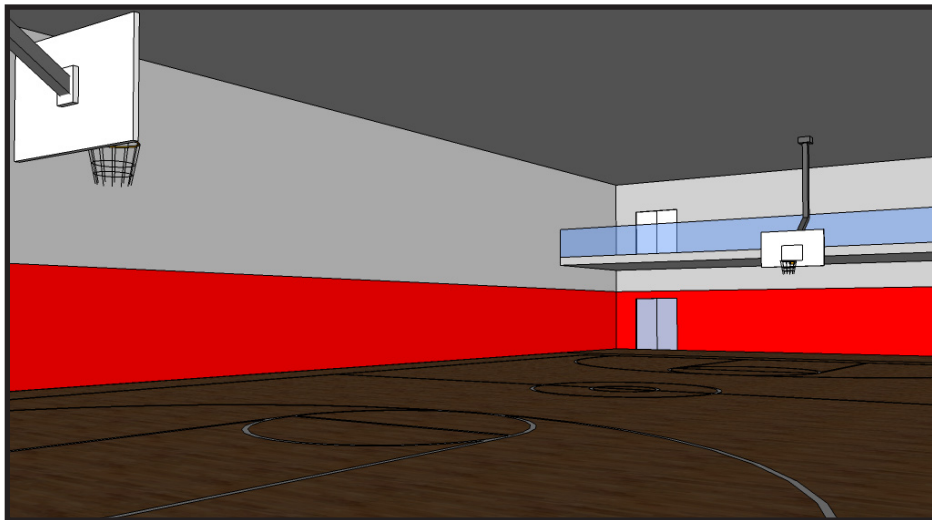
Prefunction space.



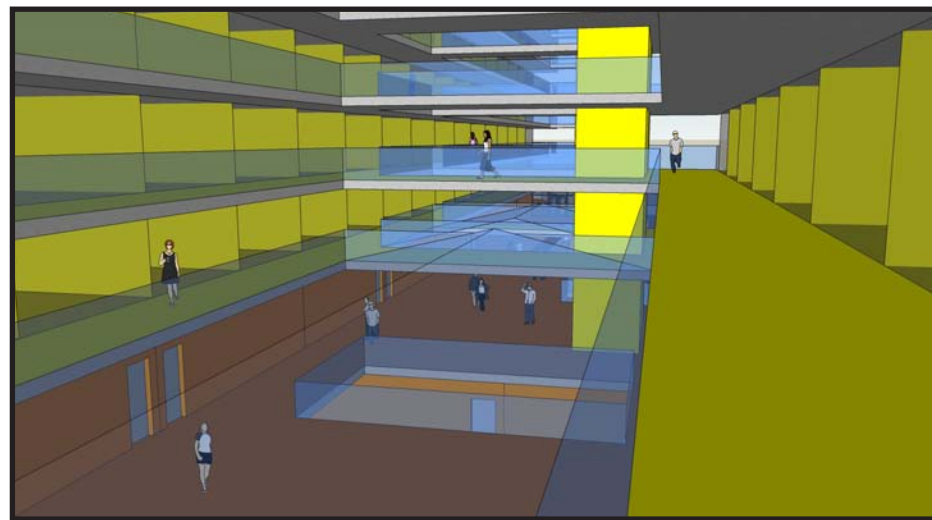
Track under school.



## Design and Drawings



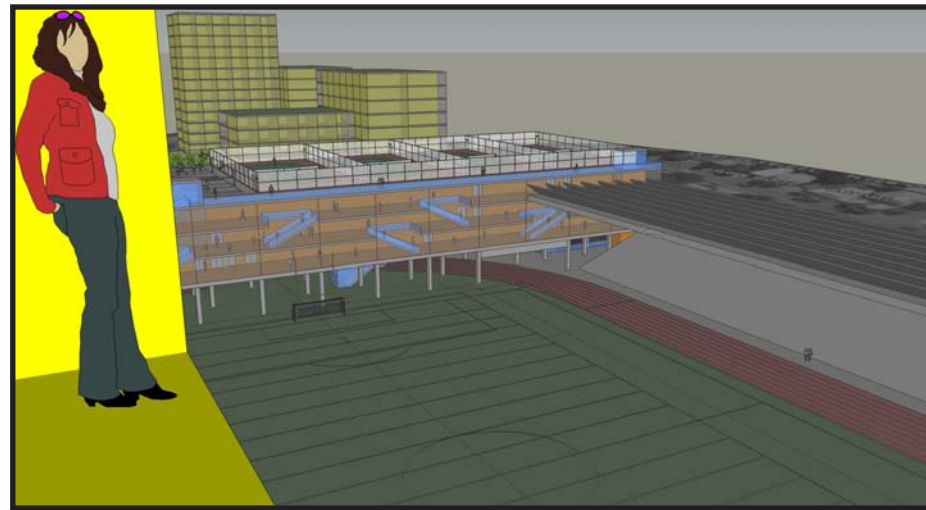
Practice gym.



Workforce housing above the school.



Off-street bus drop off.



Top floor of housing overlooking field

## Design and Drawings

### Phase II (and beyond) – The Eastern Half

The second phase consists of four towers of housing on the eastern half of the site and would be built after the current Lincoln High School building is demolished. These four towers are located around a central square with lush planting and a tranquil abstract fountain at the center. Below the towers are two levels of underground parking containing 800 parking spaces.

The phasing of the site, which keeps the school in operation while building the first phase, required that the school be located on the western half of the site. This placed the school closer to the MAX station and the prominent SW 18th Avenue, giving it more of a civic identity while making the school more accessible to the students, teachers, staff and the community. The second phase would then have to be located on the eastern half of the site. It was felt that some housing had to be included in the initial first phase to spread out the housing throughout the entire site and generate some income during the first phase so as to not be overly dependent on the later phase for income.

The close proximity of the KGW studio building's backside on the south side played into the design as something in particular to avoid with housing units as much as possible and as a place to locate large inward focused school facilities like the athletic facilities. Another reason to avoid locating building on the south side of the site was so that direct sunlight could strike the field and the buildings surrounding the field on the north, west and east sides.

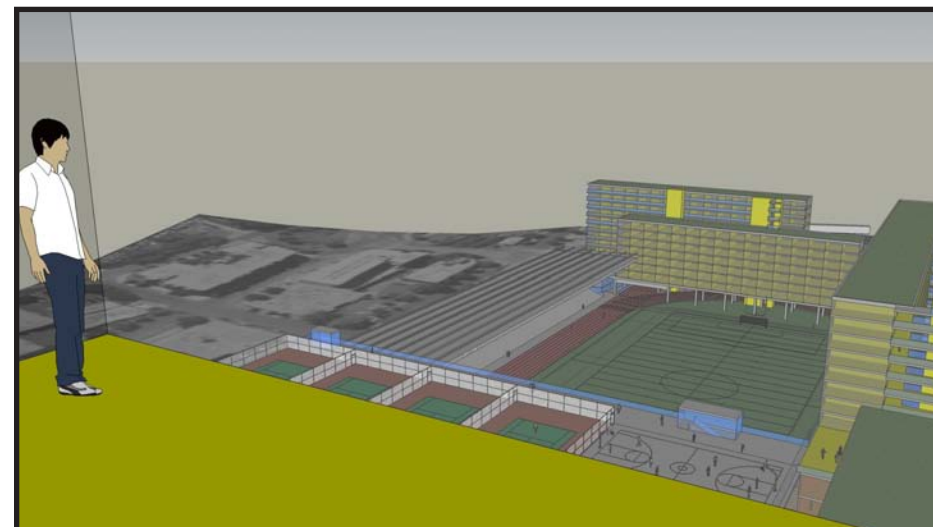
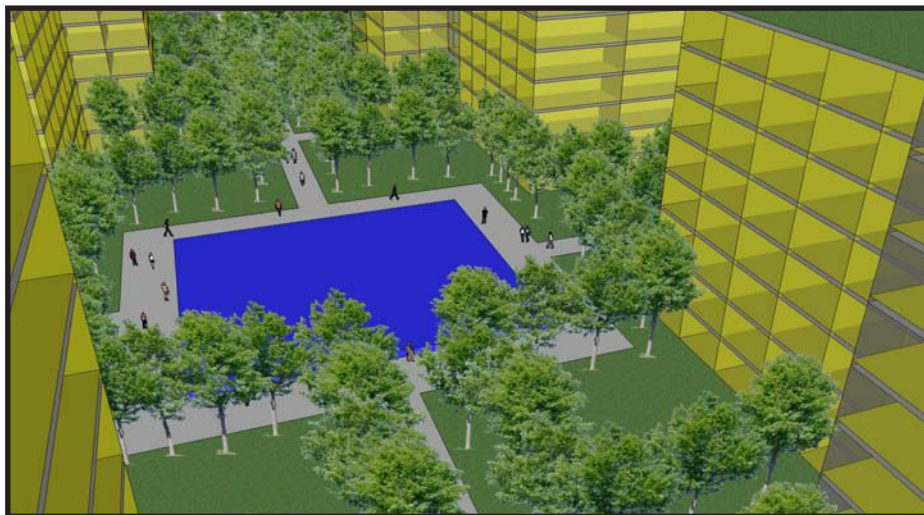
A key decision early in the process, retained a full sized regulation track in addition to the soccer/football field on the site. This decision was one of the most important components shaping the design. The spatial requirements required of a regulation sized track surrounding a field, combined with the need to phase the project and therefore fit everything relating to the school on half of the site, dictated intense development vertically stacked into a mixed use building. The solution was to place the school above the track, creating an open air yet all-season covered track.

Placing the track and field above grade allowed lower cost, above ground structured parking to be built instead of expensive, excavated underground parking. This also allowed for retail lining the perimeter of the garage at street level that would not have been possible had the track been located at grade.

From the start the team intended to place parking under the track where large efficient floor plates could be easily built. Plus, the absence of any streets running through the site allowed for these large uninterrupted parking floor plates. By placing the parking under the field, it also had the advantage of avoiding stair and elevator cores and structural supports of towers above that would ruin the efficiency of the parking. The structural grid for the parking could also be more uniform and based entirely on parking dimensions, by only having a field above. The western parking garage is entered from the south from SW 17th Avenue which currently dead ends at the site boundary. A second entry to the western garage is off SW 16th Avenue which would be extended through the site with restricted access and use. The entry to the eastern garage is also off the SW 16th Avenue extension. An additional new on-site access street or alley would be built on the southeast corner of the site, connecting SW 14th Avenue to SW 16th Avenue, directly adjacent to and north of the KGW building.



## Design and Drawings



## Design Precedents

### Detroit Cass High School

This new 7-story school in Detroit opened in 2005 replacing an older-outmoded school.



### New York City Trinity School

Both a middle and high school occupying the first four floors of a 25-story tower. Developed in 1969, the tower and school complex were built by and are still owned and managed by Trinity School.



### Niagara Falls High School



This is a 4-story replacement high school completed in 2000 which houses 2500 students. It was built without raising taxes. It is privately financed and the construction was privately managed.

### Philadelphia Friends Select School

This is a great example of a school acting as a developer in urban landscape. It also features an athletic field on top of the school roof with different color striping to represent the different sports that make use of that space, including one field hockey and eight tennis courts.



### Portland Rosa Parks School

The most recent school built within Portland Public Schools system, this elementary school in North Portland exemplifies the abundance of funding sources and potential partnerships available within Portland's metro area. The school has partnerships with the Boys and Girls Club and Portland Parks and Recreation which share in school facilities, upkeep and costs. Completed in 2006 the school earned a LEED Gold certification.





## Design Precedents

### New York City Stuyvesant High School

This modern 10-story urban high school in Lower Manhattan opened in 1992, replacing a much older high school. It contains 400,000 square feet of space including a gym, theater and swimming pool. To overcome the height issues with a 10-story high school, the architects (Cooper Robertson) devised the use of “skip-stop” escalators to allow the rapid movement of the 3000 students between classes.



### Urban School of San Francisco

This is a programmatically inspirational school which embraces technology. Each student and faculty member is loaned an Apple laptop for the school year which have become an essential part of the entire curriculum.



### Tacoma Stadium High School

The school's playing field features irregular shaped running track surrounding artificial grass. Tennis courts sit on top of parking structure



### Union City (New Jersey) High School

In 2009 the school rebuilt its athletic field on the roof of the school. The rooftop field features over three acres of artificial turf, enough for a regulation-sized high school baseball field, in addition to a full size soccer/football field. The site also features a grandstand that seats over 2,000 spectators.



## Zoning/Site Considerations

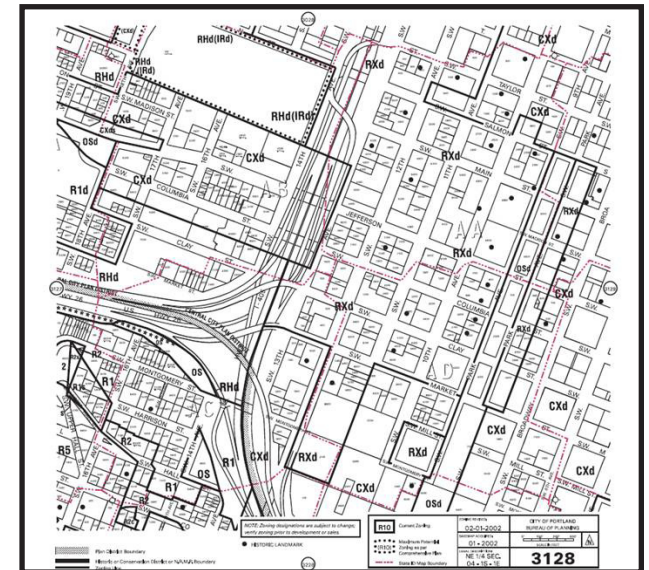
The Lincoln High School property is 10.96 acre-superblock site located just west of the downtown urban core in Goose Hollow bounded by 14th Ave on the east, 18th Ave on the west and Salmon St. to the north. The MAX line runs south on SW 18th Ave, which is zoned as a street with required building lines, and is parking access restricted, which means no driveways or garage entrances can be located on this street. These zoning measures are meant to create a pedestrian-friendly, active environment along the MAX line. The MAC Club, PGE Park, and the Goose Hollow MAX stop can all be accessed from 18th Avenue.

- Zoned RHd (IRd)
- Goose Hollow subdistrict of Central City Plan
- 4:1 FAR (max 9:1 with bonuses)
- 250' height limit
- 16th and 17th Ave sewer easements
- 18th Ave.
- Required Building lines
- Parking restricted
- Heritage Tree on NE corner
- Potential bonuses
- Percent for Art
- Open Space height transfer
- Eco-roof
- Middle-income housing option (150% of median family income)

### Existing Conditions

The 191,857 SF building was built in 1952 and sits on 10.96 acres or more than eight city blocks. Two portable classrooms provide an additional 3,600 SF of classroom space. The school is located in the middle of the property with very little interaction with the surrounding streets or neighborhood. The area is not currently eligible for urban renewal funds, although the LTDC mentioned a possibility of being included in an URA.

The site is located in the Goose Hollow neighborhood of the Central City District, which means that it is not only regulated by the base zone, but also by the Central City plan. It is zoned RHd, High Density Multi-dwelling with a design overlay, but the school itself is IR, which is a multi-use zone within the RHd, providing for the establishment and growth of large institutional campuses as well as higher density residential uses, regulated by a 4:1 Floor Area Ratio (FAR). However, there are several opportunities to increase the FAR through potential bonuses. It has a (d) overlay, which means it will be subject to design review by the design.<sup>1</sup>



1 Central City Plan, Multi-Dwelling Zones



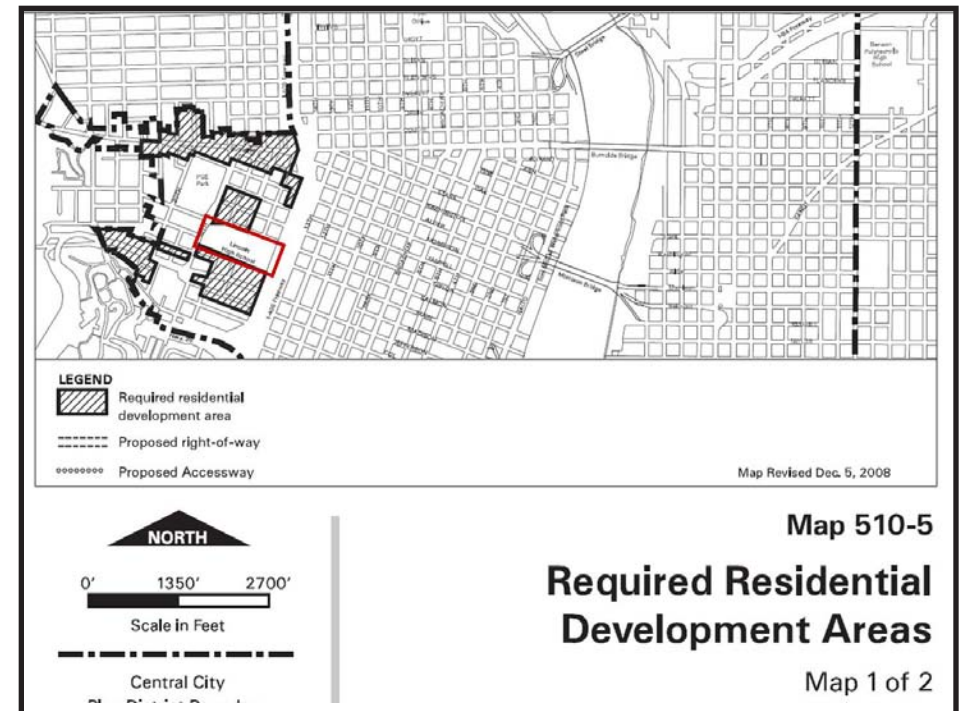
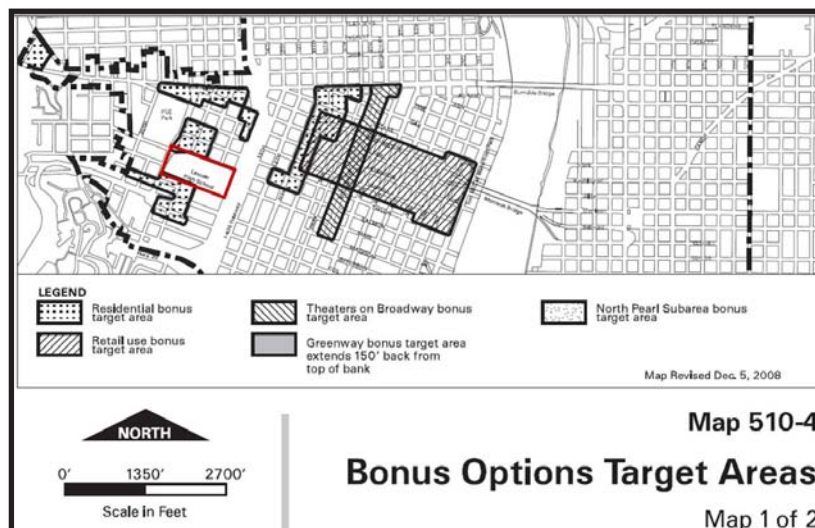
## Zoning/Site Considerations

### Potential Bonuses

There are several potential FAR bonuses which could easily increase the FAR to 6:1. The blocks to the north and south of the site are covered by a required residential zone and offer a FAR bonus for residential construction. The LHS site should be treated in the same manner and a bonus applied to the residential portion of the site.

A middle-income bonus option would allow three additional square feet of floor area for each square foot of floor area that is certified by meets the requirements of the PDC. A percent for art bonus gives an additional floor area equal to the size of the site for a project that donates one percent of their threshold value to public art.

The open space height transfer would allow a maximum of 100' additional building height if a park measuring at least one full block, at least 35,000 square feet in size is dedicated to the City. The eco-roof bonus option could earn between one to three square feet of additional floor area per square foot of eco roof space if the eco-roof is at least ten percent of the building footprint.



## Construction

Construction can occur in a total of 5 phases to facilitate the continued operation of LHS at its current site, while construction of the new school is performed. The garages will be constructed in 2 phases. This will raise the costs to some degree, but is necessary to avoid displacing the students during construction, which would result in additional costs and administration. National average construction costs for high school facilities average around \$190 per square foot as of 2008 . Construction costs for this facility are conservatively expected to be closer to \$300 per square foot considering the unique design, location, and amenities being provided onsite. Garage construction will run approximately \$38,500 per parking space. Because of the various elevations on the site, excavation will be relatively minimal.

Construction will begin with Phase 1, which includes the West garage, new track and field, new LHS, and 635 residential units. Because of the sequencing of the components of this Phase, and the fact that each component stacks on top of the other, it is necessary to stagger them considerably, stretching the total timeline for Phase 1 to as much as 45 months.

Phase 2 would begin as soon as the new LHS begins to operate in its new facilities and the old building can be demolished. Phase 2 consists of constructing the underground garage across the four city blocks on the eastern half of the site, which will serve as the podium for the residential towers above, in addition to constructing one of the four residential structures. The delay in building the remaining residential structures on the eastern half of the site allows for reasonable rates of absorption for the volume of housing being added to the area. The remaining three residential towers would be built in accordance with current market demand and absorption rate.

A consultation with both Lease Crutcher Lewis and Hoffman Construction Company and Equilibrium Engineering provided order of magnitude pricing information for the proposed structure. All three firms are well respected in the industry, and their vast knowledge and experience with constructing structures of all shapes and sizes aided in the estimates included in this report.

The total project to is anticipated to cost approximately \$340 million, estimated on an order-of-magnitude basis, which incorporates approximately 1700 parking spaces in two public parking garages (one above ground, one below), 1,682 residential units, a new high school including track and field, and approximately 50,000 square feet of retail and/or other commercial space.

### Site Preparation:

By dividing the site into its eastern and western halves (approximately 4 blocks each) LHS can remain in operation during construction of the western half. Phase 1 consists of demolishing the existing track, field, and bleachers in order to prepare the site for the new parking structure. These costs are minimal as there is very little structure which needs to be removed to make way for the parking structure. Thus, the western half of the site is virtually ready to go. Once Phase 1 is completed, and LHS migrates into its new facility, the eastern half would become available for the development of Phases 2 and beyond.





# Construction

## Phase 1

### Parking:

The construction of the Phase 1 parking facility above grade avoids the cost premiums associated with going below grade (excavation, shoring, a more complex ventilation system, etc). By doing so, we estimate the hard cost of the west parking structure to be \$80 per square foot, with TDC at approximately \$100 psf. At a size of 640,000 square feet, the total garage cost is estimated at \$65 million. On the eastern half of the site, beneath the future residential/commercial towers, we anticipate a more traditional 2 level underground parking structure. Ideally, the timing and scope of Phase 2 will allow for the construction of one, large, multi-block parking garage beneath all future structures. The efficiencies which can be realized by using floor plates of that size will help reduce the total cost per parking space, although it will be higher than Phase 1. At a total size of approximately 640,000 square feet, the total garage costs are estimated at \$65 million.

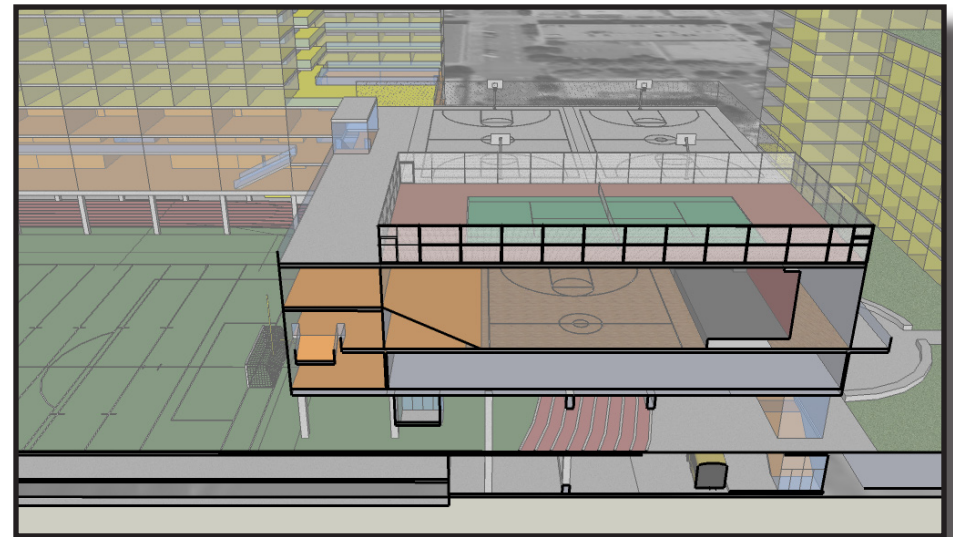
The size and elevation of the west garage (equivalent of four city blocks, above grade, totaling 1012 parking spaces) realized substantial cost savings compared to constructing it below grade. There is very minimal excavation, and because it is open to the outside, natural ventilation assists with the removal of CO from the structure. Minimal excavation avoids the potential headaches involved with working alongside the existing sewer main located under what is approximately 16th St, running through the site. Making special provisions to protect this main line during construction would have added to the costs associated with excavating for the underground garage.

The structure will be steel and concrete with post tensioned slabs, and the columns will be substantially reinforced to support the structures rising above. The floor plate of each deck is extremely important in enabling efficient use of the space and realizing as many parking spaces as possible. The horizontal expanse aided in minimizing costs per square foot, because it required less ramp circulation and enabled more efficient layout of the parking spaces. The preservation of the existing LHS building during the first phase of construction prohibited the continuance of the parking garage across the entire site, although it is feasible to

tie the second phase garage into the garage built during Phase 1. However, the savings from not moving the school to a temporary location during construction should offset any construction cost premium.

### Ground level retail and other commercial space:

The plan includes the construction of space for a few retailers, in addition to providing readily accessible community space on street level. Zoning regulations require an active streetfront to our structure along SW 18th St. Thus, the above ground garage itself does not continue to the edge of the property, but the deck between the first and second levels continues out, providing the roof of the space sheltered underneath. This allows for reasonably shallow, divisible space along 18th which could be used for retail, commercial, or other community space. The expected cost PSF for space of this type is less than \$65 PSF as most of the structure is in place, requiring minimal mechanical, electrical and plumbing expenses to be ready for tenant improvements. Because three-quarters of these spaces must be built along with the garage, there are some cost savings associated with being able to build both structures at once. These spaces will have concrete floors, east walls, and ceiling, with glass storefronts.



## Construction

### Track/Field/Bleachers:

The track is perhaps the simplest component of our structure to construct. Previous experience constructing the existing track and field indicates an expected cost in the \$1.4-\$1.5 million range. It will cost more than the previous installation, due to simple cost inflation, additional site preparation and the complexity involved in constructing an elevated track and field. A key component will be sealing the top of the parking structure to prevent any future water intrusion. The grandstands/bleachers will run an estimated \$170,000.

### Lincoln High School:

The new Lincoln High School has a very unique design, including portions that are elevated above the track which encircles the field. In order to provide sufficient height from the track to the nearest obstruction overhead approximately 20' clearance above the track is necessary, greatly impacting the structural requirements of the entire development. Because of the additional height, and the fact that the school and residential structures above will be supported by them, the

supporting columns must be fortified by a substantial degree. Not only will all of the primary columns need to be increased in size and weight bearing capability, but an increased amount of them is necessary. An estimated 30% premium for the structural component of the hard costs accounts for this additional structural reinforcement. Most of the school itself will be constructed in the traditional fashion, while incorporating recycled and regional materials, in addition to being wired appropriately for a high school of the 21st Century, a facility which will be active most hours of the day.

The primary component of the school is a simple structure, housing the classrooms and ample hallways to facilitate movement throughout the school. Essentially it is a three-level rectangle, above the ground floor retail space and track that is very open, transparent, and bright. The secondary component for the school houses the athletic facilities, auditorium, gyms, and kitchen facilities. Both components will be constructed of a steel structure and concrete deck.





## Construction

### Residential:

Included in Phase 1 are 635 units of workforce housing divided between 3 buildings. The structures to accommodate these units will be made of steel and concrete due to the height of each building. Total development cost per square foot for these buildings is estimated at \$190 PSF.

The narrow structures maximize the amount of daylight entering each unit, reducing the size of units that can be built, decreasing effective rents while increasing rents PSF as well as increasing flexibility. The level of finish will be adequate, but minimal. These units are intended for moderate income individuals and families, and therefore will not have some of the higher end amenities and/or finish upgrades. These structures will be aesthetically and functionally pleasing, while remaining very utilitarian. The unit mix consists primarily of one bedroom and studio units, which increases the fixture count, plumbing system sizes, etc. As each unit will have its own kitchen/kitchenette and restroom, much less of the building is being used by spaces which do not need the additional mechanical infrastructure. This ultimately increases the relative construction costs by a fair degree.

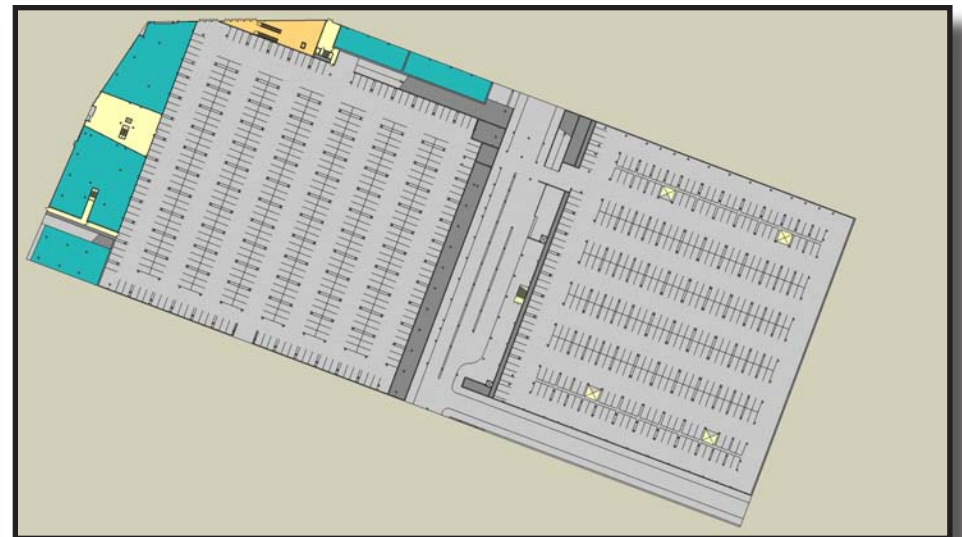


### Phases 2-5

The eastern half of the site will be developed once the western half has finished, and LHS has moved into its new facilities. This will open up the remainder of the site for construction. There are a number of Heritage Trees along SW 14th Ave that must be preserved. The design of the residential structures and the parking garage accommodates leaving these trees in place. They are a special part of the existing Lincoln High School site and every effort has been made to leave them in tact.

### Parking:

The east parking garage will be a two-level, below grade structure with 773 additional spaces. These spaces will support the residential structures which will be built on top of the garage, in addition to the minor amount of additional retail space. The garage will be below grade, and the cost PSF estimates are higher than the west garage to account for the additional excavation and shoring which will be required. It will also be constructed of steel and concrete columns with post tensioned decks.



## Deal Structure

### Residential:

The residential structures which will be built above the eastern garage will be geared toward workforce housing, and so will have a more simple finish level. The structures themselves are fairly straightforward: large rectangular floor plates with no abnormal design features. Because these structures will be built in a more traditional fashion and will not have to deal with some of the constraints the western residential structures faced (namely being built effectively on 20' columns), we expect the costs PSF to be lower. These structures will be steel and concrete above a post tensioned garage. The funding for this project must come from a variety of sources, some of them rather unique. The primary purpose of this development is providing new and adequate facilities for a public high school, while simultaneously capitalizing on its urban location. This project is first and foremost a school, and thus has to be funded as such. The residential portion of the development will be capable of funding itself, but the cost of the school alone is what seems to be the greatest obstacle. In order to construct a school similar to the one we have designed, we need to provide approximately \$64 million.

PPS benefits from a number of factors associated with this development. First, they own the site outright. This aids the financial models substantially by not having to account for land acquisition costs. Second, because PPS is a public entity, it is exempt from property taxes, which substantially reduces the operating expenses of both the publicly-owned residential, retail and public garage components. Finally, PPS is able to secure substantial financing through the issuance of bonds. As LHS is a non-income generating component, other than through its tax base, this is both a necessary and helpful element as the overall total bond amount can be adjusted to accommodate the funding necessary to construct the public parking facilities which will then generate long term income.

The development is divided into two components, each with its own source of financing:

- 1) LHS, public parking facilities, and associated retail/commercial space;
- 2) residential.

### LHS/Parking

Primary funding for the new school structure will come from PPS bonds. LHS is in dire need of repair or replacement, and whether or not that change comes in the form of major (both in terms of scope and cost) renovations, or a completely new structure, PPS should already be well on its way to making this happen. We estimate that a bond of \$130 million dollars will be necessary to cover the cost of the school (estimated at approximately \$65 million) and the public garages.

Public general obligation bonds will require a vote and for the taxpayers to buy into the vision of the new LHS site. However, when considered on the whole, the projections show the creation of nearly \$30 million in additional present value that would otherwise not exist, in addition to giving PPS a brand new, mixed-use facility that will generate income over the long term. Various local, state, and federal grants will be sought to help reduce the total amount of the bond, but in order to provide enough financing to complete what the design, \$130 million will be the projected bond amount.

The bond payments will be covered by general tax revenues raised through approved tax levies and supplemented by revenues generated by the retail and public garage. Though this may be a difficult task to accomplish, the public should recognize what they are receiving both in terms of facilities and future values and thus be amenable to the tax levies.

Its possible that in the interim new or expanded Urban Renewal Areas may be able to provide portions of the necessary financing. For the purposes of our models, we have elected not to assume any URA funds due to the lengthy and complex process associated with changing and/or creating new URAs.

Because our intent is for PPS to develop and own the entire project, thereby eliminating taxes to the project, we cannot include any funding which would be a result of additional property tax increment financing, outright sale, or land lease revenues.



## Deal Structure

If we are successful in getting the FAR for the site improved from the current 4:1 to a reasonable 6:1 (based on our analysis of the surrounding area and accounting for the applicable residential bonuses), we would have an excess FAR of approximately 850,000 SF available for sale. At an estimated sale price of \$10 per square foot, this could generate an additional \$8.5 million.

### Residential

The residential structures will be funded using Federal Housing Authority insured 221(d)(3) financing for public and non-profit sponsors. This allows for 100% of the total development costs to be borrowed. It is below the statutory limits imposed by the FHA on a per unit cost basis and thus can receive 100% financing without any equity. Because we are providing moderate income housing, this financing program is a great benefit to the project and to the city, where workforce housing has been difficult to develop. As a bonus, the loan is fully transferrable and assumable if PPS were to ever consider selling pieces of the residential structures. The income generated from the residential component of the program will completely fund the loan payments, in addition to creating positive cash flow to PPS. The project provides substantial amounts of workforce housing, encouraged and enabled by HUD, and supported by the rents received. However, one of the significant drawbacks of using 221(d)(3) financing is that it requires compliance with Davis-Bacon prevailing wages. Estimates vary widely for the impact this requirement has on total construction costs. This model estimated a premium for labor of 10%.

### Parking/Retail/Commercial

The public parking structure financed within the PPS bonds. The revenues being generated by the garage can aid in making payments on the bond. The location of the garage and the nature of the uses that sit above it will effectively determine the demand and thus the revenues. The proximity of PGE Park, the MAC club, LHS, and the site's future residential structures will all aid in filling the garage and generating revenue. LHS's many activities, from sporting events to artistic productions, will help draw friends and family of LHS students to the site and into the garage.

In addition, the intent of this design is to create a year round facility which is active at all hours of the day both by LHS and the community in general. The small amount of retail on site will also be supported by and support the garage. Many of the uses are complimentary. The residential component will aid in filling the garage at night, and the HS component will assist in filling it during the day. In order to maximize the shared parking pool, no spaces will be allocated to specific uses. This means that parking spaces vacated during the day by residential tenants will not lie fallow. The effect, in the context of a large parking structure with 1682 parking spaces will mean the effective parking ratio will be higher. Moreover, this management structure acts as an incentive to maximize the use of transit.

Retail and commercial spaces are effectively a byproduct of the construction of the garage and the high school, but also comply with the intentions of the zoning regulations along SW 18th to create a pedestrian friendly environment. Supplementing the cost of construction for the garage to include the creation of the "alcoves" which will be the future retail and commercial spaces, it is possible to include a sizeable amount of area for these uses with minimal incremental cost.

## Economic Model

### Assumptions:

#### Lincoln High School:

- Space requirements: based on our analysis of Lincoln High School's current attendance, administrative structure, current curriculum, and anticipated future curriculum we determined that the total square feet needed would be approximately 205,750. The reduction from the 300,000 SF estimate of the LTDC was accomplished on the basis of a space-by-space program coupled with the creation of as many flexible and multiple-use spaces as possible.
- Construction costs: we divided the school construction costs into three components: 1) Educational facilities; 2) indoor athletic facilities, and 3) the outdoor track and field. The weighted average total development cost of all school facilities is approximately \$303. PSF

#### Parking structures:

- Stall requirements: at a design ratio of 0.7 parking spaces for each residential unit, we needed to provide a minimum of 1178 parking spaces. Our design provided 1678 spaces, more than enough to provide for the residential requirements, LHS, the onsite retail/commercial spaces, and the neighboring uses.
- Construction costs: because we are building 2 individual public parking garages, one above grade and one below, there were differing construction costs. The weighted average total construction cost for both garages came to \$98.95 PSF.
- Income: we assumed that each parking space would generate a weighted average (incorporating both monthly and transient revenues and accounting for vacancy) of \$150 per month with 3% annual escalations. Further backing-out vacancy of 15% yields approximate per stall gross revenues of \$175 per month.

- Operating expenses: because there are no property taxes assessed on the public parking garage since it is owned by a public entity, we assumed operating expenses would be approximately 8% of EGI.

#### Retail/commercial space:

- Space available: as a result of the design, we have created approximately 49,600 square feet of space available for either supporting retail uses (such as small convenience uses, coffee shop, etc) or specific commercial uses (such as medical/dental clinic, day care facilities, etc.).
- Construction costs: because all of this space is being created as a result of the construction of LHS and the garage on the western half, and the residential structures on the eastern half, we assumed very little (relatively speaking) in additional construction costs for these spaces. In order to bring the space to a warm vanilla shell, pre-tenant improvement condition, we allocated a total cost of \$65 PSF.
- Income: based on our market research, and to account for the variety of possible uses, we assumed net rents of \$22 PSF, triple net, with 3% annual escalations.
- Operating expenses: again, as with the garages, operating expenses are relatively low because there are no property taxes. Therefore we assumed an operating expense estimate of 10% of EGI.
- Vacancy: we assumed a vacancy rate of 10%



# Economic Model

## Residential:

- Number of units: we assumed that our project would support 1682 units divided among seven structures, throughout five phases.
- Absorption rate: we assumed a total of approximately 300 units per year, with more coming online in the first phase along with the new LHS facilities, and fewer in the final phases during the construction of the dedicated residential structures.
- Rents: because we are focusing on creating workforce housing for moderate-income households, we assumed weighted average rents of \$830 per unit, or \$1.43 PSF, with 3% annual escalations.
- Vacancy: each phase which has been completed for one year or more is assumed to have a 5% vacancy rate. During the first year after each phase is completed we assumed an average vacancy of 30% as structures lease-up.

## Financing Assumptions:

### PPS Bond Assumptions

- o Yield: 5%, ranging between 4.5% and 5.5% for recent PPS bond issues
- o Term: 25 years
- o Bond Issue: \$130 million
- o Bond Constant: 7.05%
- o Annual Tax Revenue Allocated to Bond Service: \$9 million

### Residential Mortgage:

- o Rate: 6.9%, as cited by
- o Term: 40 years
- o Loan Amount: \$211.5 million
- o Mortgage Constant: 7.37%
- o Debt Service Coverage Ratio: 1.05
- o Annual Debt Service (stabilized year): \$15.6 million
- o Source: Kerry Hughes, Holliday Fenoglio Fowler



# Economic Model

## Financing & Returns

### Project Return Summary

#### Stabilized Cash Flows (Year 6)

	<u>Residential</u>	<u>Retail</u>	<u>Parking</u>	<u>Combined</u>
Net Operating Income	\$ 16,559,128	\$ 1,024,650	\$ 3,194,509	\$ 20,778,287
Net Cash Flow	\$ 967,008	\$ 1,024,650	\$ 3,194,509	\$ 5,186,167

#### Stabilized Metrics (Year 6)

	<u>Residential</u>	<u>Combined</u>
Return on Cost	7.8%	7.5%
Leverage	0.5%	0.4%
Return on Equity	100% LtC	7.8%
Development Profit	\$ 23,270,545	\$ 16,678,096
Break-even Occupancy	90.1%	72.5%

#### Holding Period Returns

	<u>Residential</u>	<u>Combined</u>
IRR, Leveraged	38.1%	11.5%
Net Present Value at 7.05%	\$ 34,055,344	\$ 29,226,372
IRR, Unleveraged	7.7%	7.4%

## Financing & Returns

### Terminal Value (Year 10)

#### Income Capitalization (7.05% Bond Constant)

	<u>Residential</u>	<u>Retail</u>	<u>Parking</u>	<u>Combined</u>
Net Operating Income	\$ 18,637,444	\$ 1,153,252	\$ 3,595,448	\$ 23,386,145
<b>Unleveraged Terminal Value</b>	<b>\$ 264,300,502</b>	<b>\$ 16,354,453</b>	<b>\$ 50,987,610</b>	<b>\$ 331,642,565</b>
Less: Mortgage Balance	197,288,647	N/A	N/A	N/A
<b>Leveraged Terminal Value</b>	<b>\$ 67,011,855</b>	<b>\$ 16,354,453</b>	<b>\$ 50,987,610</b>	<b>\$ 134,353,918</b>



# Economic Model

## Consolidated Pro Forma Income Statement

Building Summary	<i>Stabilized Year</i>							
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 10
Residential Units		635	903	1,249	1,462	1,682	1,682	1,682
Parking Stalls		878	1,678	1,678	1,678	1,678	1,678	1,678
Square Feet, Residential		323,526	501,409	797,879	927,056	1,110,232	1,110,232	1,110,232
Square Feet, Retail		49,600	49,600	49,600	49,600	49,600	49,600	49,600
Square Feet, Parking		347,000	640,000	640,000	640,000	640,000	640,000	640,000
<b>Total Building SF</b>		<b>720,126</b>	<b>1,191,009</b>	<b>1,487,479</b>	<b>1,616,656</b>	<b>1,799,832</b>	<b>1,799,832</b>	<b>1,799,832</b>
<b>Operating Income</b>								
PGI, Residential	3% Annual Increases	\$ 5,695,578	\$ 8,626,287	\$ 13,271,939	\$ 15,857,374	\$ 19,230,650	\$ 19,807,569	\$ 22,293,594
PGI, Retail	3% Annual Increases	1,091,200	1,123,936	1,157,654	1,192,384	1,228,155	1,265,000	1,423,768
PGI, Parking	3% Annual Increases	1,843,800	3,629,514	3,738,399	3,850,551	3,966,068	4,085,050	4,597,760
<b>Potential Gross Income</b>		<b>\$ 8,630,578</b>	<b>\$ 13,379,737</b>	<b>\$ 18,167,993</b>	<b>\$ 20,900,310</b>	<b>\$ 24,424,873</b>	<b>\$ 25,157,619</b>	<b>\$ 28,315,122</b>
Occupancy, Residential		70.0%	87.6%	88.1%	91.4%	91.7%	95.0%	95.0%
Less: Vacancy, Residential		1,708,673	1,071,360	1,582,750	1,370,437	1,590,359	990,378	1,114,680
EGI, Residential		\$ 3,986,905	\$ 7,554,927	\$ 11,689,189	\$ 14,486,937	\$ 17,640,291	\$ 18,817,191	\$ 21,178,914
Occupancy, Retail		90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Less: Vacancy, Retail		109,120	112,394	115,765	119,238	122,816	126,500	142,377
EGI, Retail		\$ 982,080	\$ 1,011,542	\$ 1,041,889	\$ 1,073,145	\$ 1,105,340	\$ 1,138,500	\$ 1,281,392
Utilization, Parking		85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Less: Utilization, Parking		276,570	544,427	560,760	577,583	594,910	612,757	689,664
EGI, Parking		\$ 1,567,230	\$ 3,085,087	\$ 3,177,640	\$ 3,272,969	\$ 3,371,158	\$ 3,472,292	\$ 3,908,096
<b>Effective Gross Income, Combined</b>		<b>\$ 6,536,215</b>	<b>\$ 11,651,557</b>	<b>\$ 15,908,717</b>	<b>\$ 18,833,051</b>	<b>\$ 22,116,788</b>	<b>\$ 23,427,983</b>	<b>\$ 26,368,401</b>
<b>Operating Expense</b>								
Less: Op.Ex., Residential	12.0% of EGI	478,429	906,591	1,402,703	1,738,432	2,116,835	2,258,063	2,541,470
Net Operating Income, Residential		\$ 3,508,476	\$ 6,648,336	\$ 10,286,486	\$ 12,748,505	\$ 15,523,456	\$ 16,559,128	\$ 18,637,444
Less: Op.Ex., Retail	10.0% of EGI	98,208	101,154	104,189	107,315	110,534	113,850	128,139
Net Operating Income, Retail		\$ 883,872	\$ 910,388	\$ 937,700	\$ 965,831	\$ 994,806	\$ 1,024,650	\$ 1,153,252
Less: Op.Ex., Parking	8.0% of EGI	125,378	246,807	254,211	261,837	269,693	277,783	312,648
Net Operating Income, Parking		\$ 1,441,852	\$ 2,838,280	\$ 2,923,428	\$ 3,011,131	\$ 3,101,465	\$ 3,194,509	\$ 3,595,448
Less: Operating Expense, Combined		\$ 702,015	\$ 1,254,552	\$ 1,761,103	\$ 2,107,584	\$ 2,497,062	\$ 2,649,696	\$ 2,982,257
<b>Net Operating Income, Combined</b>		<b>\$ 5,834,200</b>	<b>\$ 10,397,004</b>	<b>\$ 14,147,614</b>	<b>\$ 16,725,467</b>	<b>\$ 19,619,727</b>	<b>\$ 20,778,287</b>	<b>\$ 23,386,145</b>
<i>Operating Margin</i>		<i>89.3%</i>	<i>89.2%</i>	<i>88.9%</i>	<i>88.8%</i>	<i>88.7%</i>	<i>88.7%</i>	<i>88.7%</i>
Less: Debt Service, Residential		\$ 5,886,442	\$ 8,370,799	\$ 11,578,215	\$ 13,552,722	\$ 15,592,119	\$ 15,592,119	\$ 15,592,119
<i>Debt Service Coverage Ratio, Residential</i>		<i>0.60</i>	<i>0.79</i>	<i>0.89</i>	<i>0.94</i>	<i>1.00</i>	<i>1.06</i>	<i>1.20</i>
<b>Net Cash Flow From Operations, Combined</b>		<b>\$ (52,243)</b>	<b>\$ 2,026,205</b>	<b>\$ 2,569,399</b>	<b>\$ 3,172,745</b>	<b>\$ 4,027,607</b>	<b>\$ 5,186,167</b>	<b>\$ 7,794,025</b>
<i>Net Margin</i>		<i>-0.8%</i>	<i>17.4%</i>	<i>16.2%</i>	<i>16.8%</i>	<i>18.2%</i>	<i>22.1%</i>	<i>29.6%</i>
<b>Tax Revenue Allocated to GO Bond Service</b>		<b>\$ 9,083,824</b>	<b>\$ 9,083,824</b>	<b>\$ 9,083,824</b>	<b>\$ 9,083,824</b>	<b>\$ 9,083,824</b>	<b>\$ 9,083,824</b>	<b>\$ 9,083,824</b>

# Economic Model

## Consolidated Financial Analysis

<b>Financial Analysis</b>		<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Stabilized Year</u> <u>Year 6</u>	<u>Year 10</u>
Return on Cost			2.1%	3.7%	5.1%	6.0%	7.1%	7.5%	8.4%
Leverage			-5.0%	-3.3%	-2.0%	-1.0%	0.0%	0.4%	1.4%
Return on Equity			-0.1%	3.1%	3.9%	4.8%	6.1%	7.8%	11.7%
Development Value (7.05% Bond Constant)									
Residential		\$ 49,754,246	\$ 94,281,091	\$ 145,874,262	\$ 180,788,533	\$ 220,140,550	\$ 234,827,573	\$ 264,300,502	
Retail		12,534,327	12,910,356	13,297,667	13,696,597	14,107,495	14,530,720	16,354,453	
Parking		20,447,122	40,250,090	41,457,593	42,701,321	43,982,360	45,301,831	50,987,610	
Total Development Value		\$ 82,735,694	\$ 147,441,537	\$ 200,629,522	\$ 237,186,451	\$ 278,230,405	\$ 294,660,124	\$ 331,642,565	
Development Profit (7.05% Bond Constant)									
Residential		\$ (161,802,782)	\$ (117,275,937)	\$ (65,682,766)	\$ (30,768,495)	\$ 8,583,522	\$ 23,270,545	\$ 52,743,474	
Retail		9,434,327	9,810,356	10,197,667	10,596,597	11,007,495	11,430,720	13,254,453	
Parking		(42,877,878)	(23,074,910)	(21,867,407)	(20,623,679)	(19,342,640)	(18,023,169)	(12,337,390)	
Total Development Profit		\$ (195,246,333)	\$ (130,540,490)	\$ (77,352,506)	\$ (40,795,577)	\$ 248,377	\$ 16,678,096	\$ 53,660,537	
Break-even Occupancy, Combined			76.3%	71.9%	73.4%	74.9%	74.1%	72.5%	65.6%
<b>Cash Flow Metrics</b>									
Net Cash Flow		\$ (52,243)	\$ 2,026,205	\$ 2,569,399	\$ 3,172,745	\$ 4,027,607	\$ 5,186,167	\$ 7,794,025	
Less: Equity Required	\$ (66,425,000)	-	-	-	-	-	-	-	
Add: Leveraged Terminal Value		-	-	-	-	-	-	134,353,918	
<b>IRR, Leveraged</b>	<b>11.5%</b>	<b>\$ (66,425,000)</b>	<b>\$ (52,243)</b>	<b>\$ 2,026,205</b>	<b>\$ 2,569,399</b>	<b>\$ 3,172,745</b>	<b>\$ 4,027,607</b>	<b>\$ 5,186,167</b>	<b>\$ 142,147,944</b>
<b>Net Present Value</b>	<b>7.05% req. rate</b>	<b>\$ 29,226,372</b>							
Net Operating Income		\$ 5,834,200	\$ 10,397,004	\$ 14,147,614	\$ 16,725,467	\$ 19,619,727	\$ 20,778,287	\$ 23,386,145	
Total Development Cost		\$ (277,982,028)	-	-	-	-	-	-	
Add: Unleveraged Terminal Value		-	-	-	-	-	-	331,642,565	
<b>IRR, Unleveraged</b>	<b>7.4%</b>	<b>\$ (277,982,028)</b>	<b>\$ 5,834,200</b>	<b>\$ 10,397,004</b>	<b>\$ 14,147,614</b>	<b>\$ 16,725,467</b>	<b>\$ 19,619,727</b>	<b>\$ 20,778,287</b>	<b>\$ 355,028,710</b>



# Economic Model

## Residential Programming & Unit Mix

### Workforce Housing Summary (Phases I through V)

Beds	Baths	Count	Unit Mix	Rent	Rent, PSF	Avg. SF	Circulation	Total SF
3	2	18	1%	\$ 1,350	\$ 1.13	1,200	15%	25,412
2	2	178	11%	\$ 1,120	\$ 1.24	900	15%	188,471
1	1	558	33%	\$ 945	\$ 1.40	675	13%	435,093
Studio	1	928	55%	\$ 695	\$ 1.54	450	9%	461,257
<b>TOTAL</b>	<b>N/A</b>	<b>1,682</b>	<b>100%</b>	<b>\$ 1,395,930</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1,110,232</b>
<b>AVERAGE</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 829.92</b>	<b>\$ 1.43</b>	<b>580</b>	<b>11%</b>	<b>660</b>

### West Half Workforce Housing Summary (Phase I)

Beds	Baths	Count	Unit Mix	Rent	Rent, PSF	Avg. SF	Circulation	Total SF
3	2	-	0%	\$ 1,350	\$ 1.13	1,200	5%	-
2	2	-	0%	\$ 1,120	\$ 1.24	900	5%	-
1	1	96	15%	\$ 945	\$ 1.40	675	5%	68,211
Studio	1	539	85%	\$ 695	\$ 1.54	450	5%	255,316
<b>TOTAL</b>	<b>N/A</b>	<b>635</b>	<b>100%</b>	<b>\$ 465,325</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>323,526</b>
<b>AVERAGE</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 732.80</b>	<b>\$ 1.51</b>	<b>484</b>	<b>5%</b>	<b>509</b>

### East Half Workforce Housing Summary (Phases II through V)

Beds	Baths	Count	Unit Mix	Rent	Rent, PSF	Avg. SF	Circulation	Total SF
3	2	18	2%	\$ 1,350	\$ 1.13	1,200	15%	25,412
2	2	178	17%	\$ 1,120	\$ 1.24	900	15%	188,471
1	1	462	44%	\$ 945	\$ 1.40	675	15%	366,882
Studio	1	389	37%	\$ 695	\$ 1.54	450	15%	205,941
<b>TOTAL</b>	<b>N/A</b>	<b>1,047</b>	<b>100%</b>	<b>\$ 930,605</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>786,706</b>
<b>AVERAGE</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 888.83</b>	<b>\$ 1.39</b>	<b>639</b>	<b>15%</b>	<b>751</b>

# Economic Model

## Workforce Housing Pro Forma Income Statement & Financial Analysis

		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Stabilized Year Year 6	Year 10
<b>Total Residential Units</b>									
Seasoned Units			-	635	903	1,249	1,462	1,682	1,682
New Units			635	268	346	213	220	-	-
<b>Total Units</b>			<b>635</b>	<b>903</b>	<b>1,249</b>	<b>1,462</b>	<b>1,682</b>	<b>1,682</b>	<b>1,682</b>
<b>Operating Income</b>									
3 Bed / 2 Bath Units	3% Annual Increases	\$ -	\$ -	\$ 206,239	\$ 212,426	\$ 328,198	\$ 338,044	\$ 380,472	
2 Bed / 2 Bath Units	3% Annual Increases	-	249,178	1,682,503	1,732,978	2,692,577	2,773,355	3,121,435	
1 Bed / 1 Bath Units	3% Annual Increases	1,088,640	2,289,319	4,619,753	5,526,620	7,121,905	7,335,562	8,256,239	
Studio Units	3% Annual Increases	4,495,260	5,918,648	6,503,211	8,074,422	8,710,898	8,972,225	10,098,318	
Potential Rent Revenue		\$ 5,583,900	\$ 8,457,145	\$ 13,011,705	\$ 15,546,446	\$ 18,853,578	\$ 19,419,186	\$ 21,856,464	
Misc. Income	2% of Potential Rent Revenue	111,678	169,143	260,234	310,929	377,072	388,384	437,129	
<b>Potential Gross Income</b>		<b>\$ 5,695,578</b>	<b>\$ 8,626,287</b>	<b>\$ 13,271,939</b>	<b>\$ 15,857,374</b>	<b>\$ 19,230,650</b>	<b>\$ 19,807,569</b>	<b>\$ 22,293,594</b>	
Occupancy	70% in absorption; 95% thereafter	70.0%	87.6%	88.1%	91.4%	91.7%	95.0%	95.0%	
Less: Vacancy		1,708,673	1,071,360	1,582,750	1,370,437	1,590,359	990,378	1,114,680	
<b>Effective Gross Income</b>		<b>\$ 3,986,905</b>	<b>\$ 7,554,927</b>	<b>\$ 11,689,189</b>	<b>\$ 14,486,937</b>	<b>\$ 17,640,291</b>	<b>\$ 18,817,191</b>	<b>\$ 21,178,914</b>	
<b>Operating Expense</b>									
Operating Expense Ratio	12.0% of EGI	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	
Less: Operating Expense		\$ 478,429	\$ 906,591	\$ 1,402,703	\$ 1,738,432	\$ 2,116,835	\$ 2,258,063	\$ 2,541,470	
<b>Net Operating Income</b>		<b>\$ 3,508,476</b>	<b>\$ 6,648,336</b>	<b>\$ 10,286,486</b>	<b>\$ 12,748,505</b>	<b>\$ 15,523,456</b>	<b>\$ 16,559,128</b>	<b>\$ 18,637,444</b>	
Operating Margin		88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	
Less: Debt Service		\$ 5,886,442	\$ 8,370,799	\$ 11,578,215	\$ 13,552,722	\$ 15,592,119	\$ 15,592,119	\$ 15,592,119	
Debt Service Coverage Ratio		0.60	0.79	0.89	0.94	1.00	1.06	1.20	
<b>Net Cash Flow From Operations</b>		<b>\$ (2,377,966)</b>	<b>\$ (1,722,463)</b>	<b>\$ (1,291,729)</b>	<b>\$ (804,217)</b>	<b>\$ (68,663)</b>	<b>\$ 967,008</b>	<b>\$ 3,045,325</b>	
Net Margin		-59.6%	-22.8%	-11.1%	-5.6%	-0.4%	5.1%	14.4%	
<b>Financial Analysis</b>									
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Stabilized Year Year 6	Year 10
Return on Cost			1.7%	3.1%	4.9%	6.0%	7.3%	7.8%	8.8%
Leverage			-5.7%	-4.2%	-2.5%	-1.3%	0.0%	0.5%	1.4%
Return on Equity			N/A	N/A	N/A	N/A	N/A	N/A	N/A
Development Value (7.05% Bond Constant)		\$ 49,754,246	\$ 94,281,091	\$ 145,874,262	\$ 180,788,533	\$ 220,140,550	\$ 234,827,573	\$ 264,300,502	
Development Profit (7.05% Bond Constant)		\$ (161,802,782)	\$ (117,275,937)	\$ (65,682,766)	\$ (30,768,495)	\$ 8,583,522	\$ 23,270,545	\$ 52,743,474	
Break-even Occupancy			111.8%	107.5%	97.8%	96.4%	92.1%	90.1%	81.3%
<b>Cash Flow Metrics</b>									
Net Cash Flow		\$ (2,377,966)	\$ (1,722,463)	\$ (1,291,729)	\$ (804,217)	\$ (68,663)	\$ 967,008	\$ 3,045,325	
Less: Equity Required		\$ -	-	-	-	-	-	-	
Add: Leveraged Terminal Value		-	-	-	-	-	-	-	67,011,855
<b>IRR, Leveraged</b>	38.1%	<b>\$ -</b>	<b>\$ (2,377,966)</b>	<b>\$ (1,722,463)</b>	<b>\$ (1,291,729)</b>	<b>\$ (804,217)</b>	<b>\$ (68,663)</b>	<b>\$ 967,008</b>	<b>\$ 70,057,180</b>
<b>Net Present Value</b>	7.05% req. rate	<b>\$ 34,055,344</b>							
Net Operating Income		\$ 3,508,476	\$ 6,648,336	\$ 10,286,486	\$ 12,748,505	\$ 15,523,456	\$ 16,559,128	\$ 18,637,444	
Total Development Cost		\$ (211,557,028)	-	-	-	-	-	-	
Add: Unleveraged Terminal Value		-	-	-	-	-	-	-	264,300,502
<b>IRR, Unleveraged</b>	7.7%	<b>\$ (211,557,028)</b>	<b>\$ 3,508,476</b>	<b>\$ 6,648,336</b>	<b>\$ 10,286,486</b>	<b>\$ 12,748,505</b>	<b>\$ 15,523,456</b>	<b>\$ 16,559,128</b>	<b>\$ 282,937,946</b>



# Economic Model

## Capital Costs Estimate

### Capital Budget

Use	Bldg. SF	% SF	Hard Costs	PSF	% TC	Soft Costs	PSF	% TC	Total Costs	PSF	% CTC
Residential, West	323,526	29.1%	\$ 48,528,947	\$ 150.00	75.0%	\$ 16,176,316	\$ 50.00	25.0%	\$ 64,705,263	\$ 200.00	19.0%
Residential, East	786,706	70.9%	110,138,824	140.00	75.0%	36,712,941	46.67	25.0%	146,851,765	186.67	43.1%
Residential, Subtotal	1,110,232	55.4%	\$ 158,667,771	\$ 142.91	75.0%	\$ 52,889,257	\$ 47.64	25.0%	\$ 211,557,028	\$ 190.55	62.2%
Retail	49,600	2.5%	\$ 2,480,000	\$ 50.00	80.0%	\$ 620,000	\$ 12.50	20.0%	\$ 3,100,000	\$ 62.50	0.9%
Parking	640,000	31.9%	50,660,000	79.16	80.0%	12,665,000	19.79	20.0%	63,325,000	98.95	18.6%
High School	205,750	10.3%	53,035,000	257.76	85.0%	9,359,118	45.49	15.0%	62,394,118	303.25	18.3%
<b>COMBINED</b>	<b>2,005,582</b>	<b>100.0%</b>	<b>\$ 264,842,771</b>	<b>\$ 132.05</b>	<b>77.8%</b>	<b>\$ 75,533,375</b>	<b>\$ 37.66</b>	<b>22.2%</b>	<b>\$ 340,376,146</b>	<b>\$ 169.71</b>	<b>100.0%</b>



# Economic Model

## Financing & Returns

### Residential Mortgage Financing

#### Residential Mortgage Loan Amount Calculations

##### FHA Statutory Limits

	Mtg. Limit	Units	Mtg. Amt.
3 Bedroom	\$ 243,079	18	\$ 4,375,422
2 Bedroom	187,899	178	33,446,022
1 Bedroom	154,522	558	86,223,276
Studio	134,798	928	125,092,544
Potential Loan Amt., Statutory			\$ 249,137,264

##### Income Approach

Stabilized NOI (Yr. 6)	\$ 16,559,128	
Available for Debt Service	15,731,643	1.05 debt coverage ratio
Mortgage Constant	7.37%	6.90% interest, 40 year amort.
Potential Loan Amt., Income	\$ 213,450,117	

##### Cost Approach

Total Development Costs	\$ 211,557,028	
Potential Loan Amt., Cost	\$ 211,557,028	100% Loan to Cost

<b>Mortgage Loan Amount</b>	<b>\$ 211,557,028</b>	(Minimum of three approaches, above)
<b>Equity Required, Residential</b>	<b>\$ -</b>	

### Bond Financing

#### General Obligation Bond

Term (Yrs.)	25
Bond Yield	5.00%
<b>Bond Constant</b>	<b>7.05%</b>

#### Bond Issue Required

Equity, Residential	\$ -
Equity, Retail	3,100,000
Equity, Parking	63,325,000
Equity, High School	62,394,118
<b>Total Bond Issue</b>	<b>\$ 128,819,118</b>
<b>Bond Service</b>	<b>\$ 9,083,824</b>

## Conclusion

In conclusion, our group's recommendation takes the previously underutilized LHS site and transforms it into a stable revenue source that should further benefit all Portland Public Schools, not just the Lincoln community.

We believe the recommended “hybrid” development option meets our intended goals and is the greatest way of taking Lincoln's current educational program and thrusting it into the 21st Century. We have kept LHS in the downtown core and have aligned it with strategic partners who will add to the rich curriculum of students from LHS and other Portland academic programs, the Goose Hollow neighborhood and the greater downtown community. We have opened this site to community involvement and integration while expanding upon this site's obvious location advantages. All of these goals can be met without displacing students during construction.

While the overall real estate market is currently weak, we believe that housing unit mix proposed for the first phase of development is in demand and will likely be absorbed during the present recessionary times. Subsequent development phases, although outlined in our report, remain flexible and can be built to capitalize on the greatest likely absorption potential as the market recovers.





## Appendix A - The Duniway Option

### SUMMARY

There are many reasons to examine the possible move of Lincoln High School out of Goose Hollow, where it has been a large part of the Portland neighborhood since 1952, and to build a new Lincoln High School at Duniway Park. Moving Lincoln out of its current downtown location and rebuilding it one mile to the south on a public park site would allow for greater use and density on the existing site and permit Lincoln High to have a new, more traditional campus-like school with state-of-the-art classroom, art, parking and athletic facilities.

Duniway Park occupies approximately 11 acres, owned by the City of Portland's Parks and Recreation Bureau and is conveniently tucked just south of downtown, directly across the 405 Freeway from Portland State University and directly below OHSU's main Marquam Hill campus. It is bordered by SW Terwilliger Road to the west and south, with SW Sheridan Street to the north and SW Barbur to the east. The former Barbur Boulevard Metro YMCA is immediately adjacent to the south with Terwilliger Plaza, a 12-story senior living facility across Terwilliger to the west.

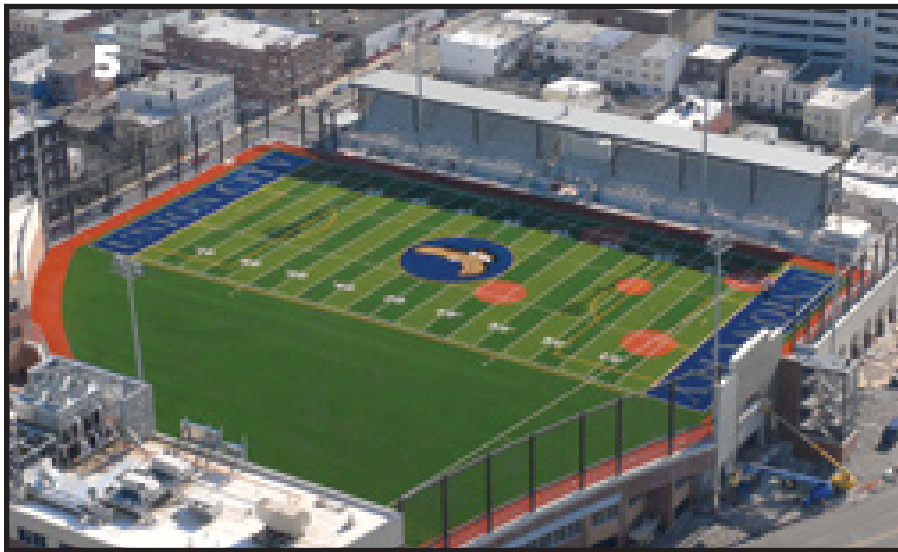
The park is currently split between a lower level on east half of site that features a full size natural grass soccer field and standard track with running trail, grass area and lilac garden on eastern half. Currently the park is open to public use but receives very intermittent use with the exception of some weekday afternoon scheduled high school athletics and club sport practices as well as before work/after work use of the track.



## Appendix A - The Duniway Option

### DEVELOPMENT PROGRAM

Much like the development program for the new on-site Lincoln High School, the alternate development option at Duniway Park would feature approximately the same square footage for classroom and other academic spaces. However all athletic facilities would be acquired from the purchase of Duniway Park and the former Barbur Boulevard Metro YMCA at the south portion of site. The acquisition of the former YMCA would drastically reduce the development costs as the good condition of existing pool, gyms, weight room, dance rooms and locker rooms would easily allow for adaptive re-use as high school athletic facilities.



Additionally the entire lower portion of Duniway Park site could be made into year-round athletic fields featuring the next generation of artificial turf. This turf would be installed to cover the entire lower site with one main field (of regulation football and soccer dimensions, 120'x 70'), as well as a regulation size softball and baseball fields. Since the entire lower portion will be artificial athletic grass different color lines would be painted on for the different sports using this approximate six and a half acre recreation area, i.e. football, soccer, lacrosse, field hockey, softball and baseball (see photo at left for a 2009 example of shared sport field space). This new field configuration would require removal of the existing regulation track and in its stead would be a non-regulation, rectangular track ringing the enlarged playing field area.

Although Lincoln would not be able to host track and field meets (which took place less than five times per year at existing site) the three-lane track surface would still allow for school physical education and sports team use, including track and field training as well as early morning, evening and weekend neighborhood community use. The former YMCA facilities also feature an indoor track ringing the top of the main gym for inclement weather training.

The fact that only two high school varsity teams compete on a regulation size track whereas 11 varsity sports could compete on this new proposed Duniway configuration prompted the decision to eliminate the competition track.



## Appendix A - The Duniway Option

### DEVELOPMENT STRATEGY

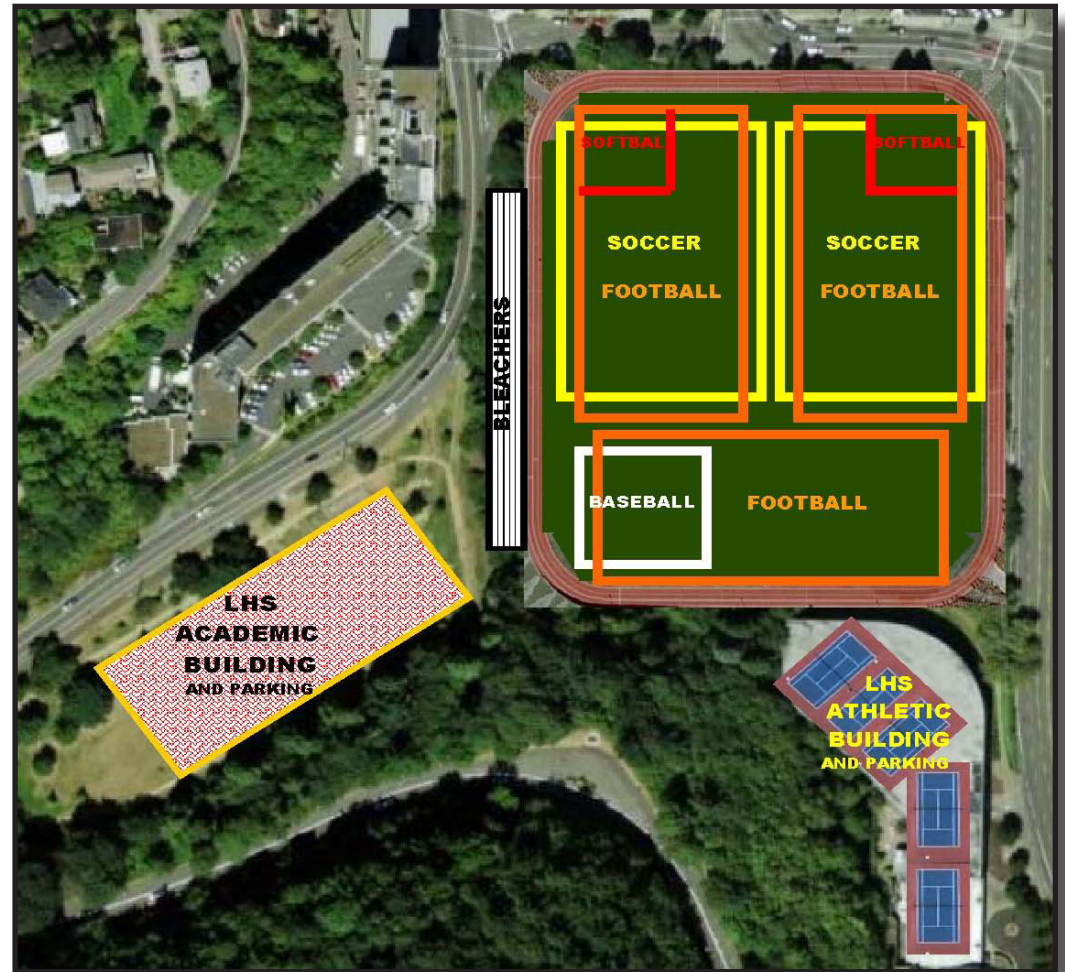
The Duniway option assumes that Lincoln High School could be moved from its current location to Duniway Park with the cooperation of Portland Public Schools, the City of Portland and Portland Parks and Recreation. Relocating the school is not a new option for LHS since the high school has been moved five separate times since its founding in 1869. This alternate option would enable the existing urban site to be sold/leased to its maximum development potential. There are very few viable superblock development opportunities remaining in downtown Portland and by moving the school off site would permit the highest and best use of the existing 11 acres.

The proceeds from the sale or lease of the current Lincoln site could significantly defray the cost of the new school. It is estimated that should each city block within LHS's site be sold off individually, each block would fetch \$5+/- million. Additionally the overall construction costs at Duniway would figure to be lower due to the less urban, less complex site, especially if the actual location of the school on the site was situated on the flat west end of existing park.

A second fundamental strategy would be to make use of Duniway Park's central proximity to both Portland State University and Oregon Health and Science University which would undoubtedly increase opportunities for Lincoln students to intern and/or take classes from each respective institution. There is a tremendous shortage in medical field graduates, especially in Oregon, and this possible high school site might just expose more students to medical professions. This Duniway Park site could be the long sought after "bridge" between PSU and OHSU that would allow for more collaboration and cooperation between the two neighboring universities.

The new LHS could offer meeting space, afternoon, evening and weekend classroom and conference space between these two proud universities as well as other education entities such as ITT Tech, Oregon Institute of Technology, Portland Community College, University of

Phoenix and others. Along these same lines, should Portland Public Schools or Portland Parks allow its use, this Duniway site would prove a superior location for student housing, given its location and potential educational partnerships.



Duniway proposed site plan.



## Appendix A - The Duniway Option

### ASSUMPTIONS

#### 1. Acquire Former Barbur Blvd YMCA

This proposal assumes the purchase of the former YMCA facilities on SW Barbur Boulevard directly adjacent to the Duniway Park site. Although the YMCA sold this site in 2007 to a private investment firm (who subsequently leased it to Lifetime Fitness) our plan would be to use any public means necessary to buy this site at a reasonable market rate and turn it Lincoln High Schools athletic and performance facilities. This 65,000 +/- square foot facility, combined with its underground parking would allow Portland Public Schools to significantly save on development costs by not having to build full-size indoor gymnasiums, dance, wrestling and locker rooms, indoor lap swimming pool and weight-room. This facility also features 75 +/- underground parking spaces would further the district's cost savings.

Having this site under public ownership would also permit more potential partnerships with groups like Portland Parks & Recreation, YMCA and the Portland Boys & Girls Club. In fact, since the YMCA closed its doors earlier this spring, neither the YMCA nor the Boys & Girls Club has a facility within five miles of downtown Portland.

#### 2. Cooperation from the City of Portland and Portland Parks & Recreation.

We anticipate that the essence of a partnership agreement between PPS and Portland Parks & Recreation would exchange the land for its improvement (including tripling the number of fields and their usability due to the new artificial turf), along with PPS acquisition of the former YMCA sports complex with a whole array of active athletic facilities not now available to the public, including lap pools, gyms, racquetball courts etc.



## Appendix A - The Duniway Option



Duniway fall sports field arrangement above.  
Spring sports arrangement at right.





## Appendix B - The Three Squares Option

The 3-Squares option assumes that the primary purpose of an urban magnet high school is the creation of a rich learning environment that builds the maximum personal learning experiences into an exceptional academic program. Accordingly, the emphasis is on spending maximum resources on 21st Century academic facilities and focuses athletic facilities on maximum personal fitness, such as cardio-pulmonary workout facilities, training pools etc. for every student, every day, leaving competitive spectator sports to other comprehensive neighborhood schools. Accordingly, the 3-Squares option develops the LHS site to its maximum density incorporating as many partner facilities as the site allows. In addition, the 3-Squares option builds the maximum amount of workforce and other mixed-income housing to create an inter-generational learning and living community.

The site planning attempts to integrate the superblock into the urban grid creating Three Public Squares, each the size of Pioneer Square, at the intersections of Madison Street and SW 15th, 16th, and 17th Streets. Coupled with the green street treatment of those streets through the superblock, a network of open space is knitted into the urban fabric around which a working, learning and living community is built. Otherwise isolated school facilities are built as pavilions on each square, including a multipurpose Meeting Hall Pavilion taking the place of a dedicated auditorium, lecture hall, cafeteria, performance gym and conference facility, as well as a Fitness Pavilion taking the place of a gym, pool, practice facilities etc. for all the residents of and visitors to the community to use at all hours.

### Pros:

- Maintains connection to the neighborhood
- Integrates the Administrative office into a high school
- Maintains several transit options including the MAX and Bus lines, within a few blocks of the streetcar
- Walkable setting
- Integrates school into surrounding neighborhood
- Facilitates partnerships in the arts, PSU, etc.
- Takes advantage of the developmental value of the land to help fund the school
- Integrates a residential component
- Parking and housing could be developed at lower cost than privately available.
- Provide other neighborhood amenities, gym facilities, community spaces
- Provides parking for PGE Park and MAC club
- Innovative 21st Century Urban Magnet School approach
- Most efficient use of land since no field or track,
- Can build at maximum density since not making up for land lost to field
- Squares provide focal point, interaction, light, air, recreation space, visual amenity
- Pavilions serve as focal points
- Academic emphasis
- Integrates superblock into urban grid breaks with pedestrian green streets
- Integrated with urban neighborhood but distinguished from it
- Maximize FAR/Highest and Best Use
- Facilitates a 3-year, 4-term year model
- Could provide housing for international or statewide students
- More “eyes on the street”
- Building living, learning community
- Potential income stream, long term value from ground lease



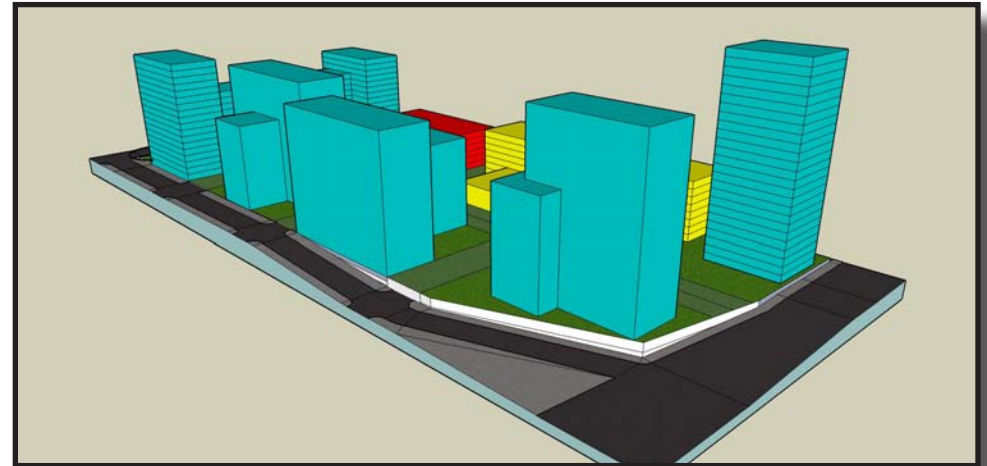
## Appendix B - The Three Squares Option

### Cons:

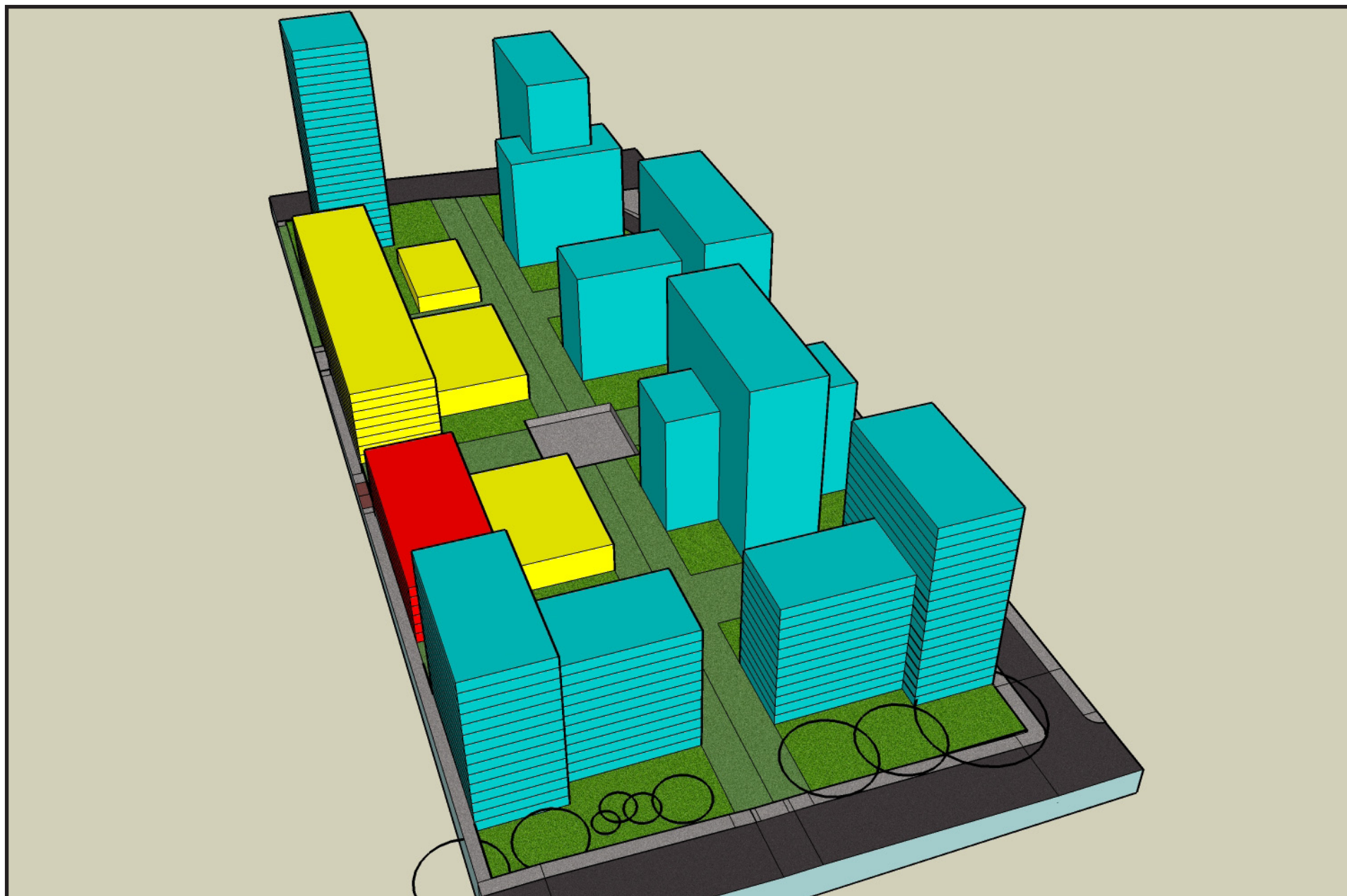
- Lose field and track
- Students would have to travel for sports games and practices
- Complicated development scheme with higher risk profile
- Higher construction costs

This option assumes much of the same development strategies as the Hybrid option and LHS would remain on site, while realizing the greater development potential that the land holds. However the track and field would be forfeited in order to increase the urban density development value of the site, The residential component would allow for teacher housing and student housing, and could allow for an expansion statewide or even internationally of the IB and ISC programs, by allowing students from outside of Portland to live on campus while studying at LHS. Much needed student housing would be developed for PSU students and could facilitate a transition of LHS students to PSU. A ground lease and rents from the housing units would provide an income stream to the school system that could help defray the cost of development and potentially provide income in the long term that could help pay for renovations in the future.

A partnership with PGE Park could provide an alternative field within walking distance of the school for LHS physical education and/or athletics and the “3 Squares” within this dense urban option could still be used for recreation space.



## Appendix B - The Three Squares Option



## Blanchard Site Option



The team investigated the potential for moving some or all of the PPS facilities at the Blanchard site in NE Portland. However, Blanchard also contains a warehouse and kitchen area that provide services to the entire district, such as text book distribution, daily preparation and delivery of food, and a district wide maintenance division, which require a large kitchen, loading docks, a shop and warehouse space. Even though the flexibility and adaptability of electronic resources may reduce or eliminate the need for textbooks in the not too distant future, making textbook storage and distribution less necessary, the team determined that the quasi-industrial nature of the activities at Blanchard are not compatible with the Lincoln site. There simply is no way to accommodate semi tractor trailers at this location nor would the high value of the land make it economically feasible. We considered the possibility of breaking apart the separate functions of Blanchard to allow for the office administration workers to be moved to a different location, such as Lincoln High School. However, we think that PPS will not be able to afford the high cost of occupying downtown land on what could be expensive Class A- office space. A full evaluation of this site might lead to alternatives for the remaining components that would make selling the site a realistic option. However, we think that this is a remote possibility and we have not undertaken such a study.





## Biographies



APRIL CHASTAIN

April recently graduated from Portland State University with a Master of Urban and Regional Planning, Land Use specialization. She holds a BS in Landscape Horticulture and previously worked as a Commercial Maintenance Account Manager, overseeing a book of business worth over \$750,000 in yearly contracts with additional design and enhancement sales. She is currently completing PSU's Graduate Real Estate Development Program.



TYLER CLARK

Tyler began working in real estate in 2003, investing in residential properties. He managed to buy, renovate, and sell four homes in the Albany area during college while gaining experience managing rentals. He received an award from the City of Albany for his work in the Hackleman Historic District and maintains a good working relationship with the Historic Society and Building Departments of Albany and Salem. Tyler graduated cum laude from Oregon State University majoring in Business Administration with a minor in Construction Engineering Management. He currently works for Coldwell Banker Commercial in the Salem area as a commercial real estate broker specializing in multi-family properties and is working on several small development projects in that market. He is also completing PSU's Graduate Real Estate Development Program.



GONZO GRASIS

Gonzo works for Portland State University in Property and Risk Management, where he helps manage many of the campus's commercial tenants. Gonzo has four years of commercial real estate experience having previously worked for Arizona Commercial Real Estate Services, an industrial development company based in Phoenix. Prior to real estate, Gonzo pursued a career in baseball, first as a player, then coach and finally within the front office of the Arizona Diamondbacks of Major League Baseball. Gonzo holds a BA, summa cum laude, in history from Arizona State University. He recently completed PSU's Graduate Real Estate Development Program, and is set to graduate from Portland State's MBA Program in June 2011.

## Biographies



ERIC HAYES

Eric is the Senior Real Estate Analyst at Knowledge Learning Corporation (KinderCare), where he manages the firm's strategic growth plan as well as Development Committee presentations and analyses. Eric's real estate experience dates back to 1999, encompassing positions in senior housing, property management and title insurance. He aspires to direct site selection and acquisitions for multi-unit commercial users. Pursuing an MBA and a Graduate Real Estate Development Certificate from Portland State University, Eric holds an undergraduate degree in finance and real estate from Brigham Young University's Marriot School of Management.



ROBERT PILE

Robert is the Director of Operations for TMT Development Co., Inc. overseeing approximately 8 million square feet of real estate ranging from high rise Class A office (such as the Fox Tower and 1000 Broadway Building) to award winning shopping centers to undeveloped raw land. He also assists with TMT's new developments, such as the Park Avenue West Tower and Alder Park Hotel. Robert intends to continue leading TMT Development's portfolio in an increasingly sustainable and environmentally responsible direction, while simultaneously contributing to Portland's growing renown as a leader in the green building movement. He graduated with a BA in both International Relations and Economics, with an emphasis in real estate, from the University of San Diego. Robert is currently a student in PSU's Graduate Real Estate Development Graduate Program.



JON WINSLOW

Jon is a student in Portland State University's Graduate Real Estate Development Program. Jon graduated from the Rhode Island School of Design in 2008 with a Bachelor of Architecture degree and aspires to pursue a career in the design and development of mixed use urban projects.

## Biographies



JOHN BAYMILLER

John Baymiller is an Urban Designer, Architect, and Design Consultant, in private practice, in Portland. He is in his third 'Mentoring Assignment' with these classes, thanks to vision of RE Dev.Prof. Will Macht. Previously, John mentored/guided RE students in the "Post Office Master Plan", '08, and then, the brilliant 'First Place award-winning, NAIOP Challenge in Spring, '09, for "The Blocks at Northgate", Seattle submission. Now, John joins this new group of students, on a new project, "The Lincoln High School Redevelopment." John's influence can be passed on to students because he has a 43-year, very comprehensive background in urban planning and all phases of environmental design, which can be applied to the present LHS project. John's experience in educational planning is 'Legend.' He has seen the relation of educational planning to the development of master planning for cities, and has energized citizens to engage, speak-out, and connect. 40 years ago, John designed a master plan for education in St. Paul, MN, and helped form the first Open School. John is an Urban Designer, Architect, and artistic Design Consultant. His experience has combined all scales, from metro, city, neighborhood, CBD centers, waterfronts and parks, transit, and all the social effects, in thinking. "John's visionary talents have led students, cities, and regions to envision better futures, and more creative results."



WILL MACHT

Professor Will Macht has provided real estate development, management, consulting and investment services in the Portland metropolitan area for over 32 years. He is currently Associate Director of the Center for Real Estate at Portland State University, where he has been Adjunct Professor of Urban Studies & Planning in the College of Urban & Public Affairs for over 30 years, teaching courses including development planning. Dr. Macht is also an Adjunct Professor of Architecture at the University of Oregon/Portland Center School of Architecture where he has taught courses on urban development, housing and mixed-use to graduate architecture students. In these positions, as in much of his prior development experience, Dr. Macht concentrates on the types of mixed-use, public-private partnerships and retail marketplaces pioneered by the Rouse Company, which he served as a Development Director. His expertise spans the full range of development services including conceptual development and planning, market analysis, financing, construction, leasing and property management.