SPAR PROJECT NARRATIVE

TABLE OF CONTENTS

1. Executive Summary **Page 3**

2. Introduction and Background **Page 5**
- A. History of The Nueva School
- B. Mission and Values
- C. The High School Expansion
- D. Sustainable Development and Citizenship
- E. Community
- F. Student Geographic Draw

3. School Operations **Page 9**
- A. Private High School Uses
- B. Community Input
- C. Proximity to Nueva Lower/Middle School Campus
- D. Semester and Summer Use
- E. Neighborhood Engagement and Facilities Sharing
- F. Facilities
- G. Student Growth and Schedule
- H. Operating Times and Activities
- I. Campus Security Measures
- J. Alternative Transportation Goals, Policies, and Incentives
- K. On-Site Parking, Circulation, and Operations Management Plan

4. Design Narrative and Project Description **Page 17**
- A. Design Process and Input
- B. Site Overview and Adjacencies
- C. Site Access, Pick up/Drop off, Loading, and Parking
- D. Architectural Design Strategy, Program, and Phasing
- E. Landscape Design Strategy and Features
- F. Project Sustainability Goals and Strategies
- G. Site and Building Security
- H. Noise Study
- I. Recycling and Refuse Management Plan
- J. Hazardous Materials and Air Quality Management Plan
- K. Demand Side Water Management Strategies

5. Conclusion **Page 29**

APPENDIX

1. **SPAR APPLICATION FORMS, EXCEPTIONS, ILLUSTRATIOINS AND TITLE REPORT**
   - **1A. Planning Application & Certification Forms Completed**
   - **1B. Environmental Information Form**
   - **1C. Design Guidelines Exceptions**
   - **1D. Childcare Letter**
   - **1E. Site Photos – Existing Conditions of Project Site**
   - **1F. Updated Illustrative Plan for Bay Meadows Phase II Project**
   - **1G. Preliminary Title Report —** First American Title Insurance Company

2. **PARKING & TRAFFIC DATA**
   - **2A. Nueva High School <u>Transportation Management Plan</u> –** Kimley-Horn & Associates
   - **2B. Bay Meadows II Parking Management Plan (Updated) –** Kimley-Horn & Associates
   - **2C. Bay Meadows II Traffic Management Plan (Updated) –** Kimley Horn & Associates

3. **ENVIRONMENTAL NOISE STUDY —** Charles Salter & Associates
   - **3A. Environmental Noise Letter**
   - **3B. Environmental Noise Study**

4. **ENVIRONMENTAL FORMS:**
   - **4A. Hazardous Materials Air Quality Checklist**
   - **4B. LEED for Schools 2009 Sustainability Checklist —** LMS Architects
   - **4C. Air Quality Consistency Analysis** – Michael Brandman Associates

5. **SUPPLEMENTAL GEOTECHNICAL RECOMMENDATIONS —** Treadwell & Rollo

6. **Storm Water and Sanitary Items:**
   - **6A. NPDES Checklist**
   - **6B. NPDES Impervious Surface Worksheet**
   - **6C. Flow-Through Planter Maintenance Plan** (Stormwater Treatment Operations & Maintenance)
   - **6D. Infiltration / Harvesting and Use Feasibility Screening Worksheet** (formerly titled Low Impact Development Form)
   - **6E. Sanitary Sewer Demand Calculation**
   - **6F. Storm Water Control Plan** (and see Drawing Sheet C-6)
   - **6G. Rainwater Harvesting and Use Feasibility Worksheet**

1. EXECUTIVE SUMMARY

The development of The **Nueva High School** at Bay Meadows has been designed with extensive community input to fit well within the context of the Bay Meadows urban village in San Mateo. The school has been designed from the ground up to:

- **Create** an innovative, adaptive, and sustainable educational space to meet the needs of 21st century high school students;
- **Foster** a dynamic learning community integrated within the broader Bay Meadows development that allows for active involvement with and participation from neighboring tenants and residents;
- **Address** the specific development goals of the City of San Mateo and master developer Wilson Meany; and
- **Help** make Bay Meadows a first-class Transit Oriented Development and a model for the nation.

The planning process at Nueva High School has included multiple collaborative meetings with the staff of San Mateo City Planning, Fire and Police Departments, Parks and Recreation, and the Department of Public Works, as well as master developer Wilson Meany and its architects, Hart Howerton. The Nueva School, which is a permitted use under the Bay Meadows Specific Plan Amendment, also participated in a community meeting to solicit neighbor input and in a public Study Session to solicit additional guidance from City Planning Commissioners, planning staff, and community members. In addition, the Nueva School team has worked closely with City Affordable Housing staff and their consultants to ensure compatibility of the new high school with the adjacent affordable housing site.

This collaborative process has resulted in several project design revisions and enhancements to directly address and respond to the guidance and advice of City staff, agencies, and the master developer. As a result, the Nueva High School will be a better project.

The first significant change from the original presentation is the ultimate potential size of the school. The preliminary planning application was based on constructing the maximum allowable building area under the purchase and sale agreement with the master developer, namely 165,000 square feet of interior occupied space. Based on an industry standard of approximately 275–300 square feet per person/student, the carrying capacity of the site worked out to approximately 600 students. The school's actual need-based space plan only contemplates approximately 128,000 square feet of interior occupied space. After discussion with City staff, including a detailed review of Nueva High School's near, medium, and long-term plan and space needs, the school's request has been reduced to its actual anticipated maximum of 450 students with an accompanying 60 full- and part-time staff and faculty. Reducing that number to fit the actual size of the campus and the actual anticipated maximum number of students by 150 students dramatically reduces any potential impacts the school may have and allows the current plan to more easily accommodate and reflect the design guidelines, code-compliance, and sustainability principles that are essential to Nueva, the master developer, and the City.

Other revisions and enhancements that reflect City staff and consultant input include:

- Site circulation and traffic: At the request of the City, Hexagon (the City traffic consultant), and the master developer, site traffic circulation has been reversed from the original proposal to enter from 28th Avenue and exit onto Delaware Street, resulting in an all right-turn circulation pattern. The student drop-off zone was relocated to the north side of the site to ensure generous on-site queuing space. In response to an initial SPAR comment by City Staff, the driveway entrance from 28th Avenue was adjusted to provide greater safety and access to the school campus.

- On-site parking: The site is located in one of the most advanced Transit-Oriented Developments in the nation. But, in response to feedback from the City and the master developer, we have increased the number of parking spaces provided on-site by 79%, or 55 spaces, to 125 parking spaces. 33 of these spaces have been set aside for students who need to drive to school on an exception basis managed through a single day use parking permit. All students are subject to a No Student Driving Policy that was refined with staff and Hexagon input.
- Parking Management Plan and Coordinator: In line with Nueva's commitment to be a responsible neighbor, Nueva will designate a Commute, Transportation, and Parking Coordinator to design and implement a comprehensive Parking Management Plan to maximize the safe and effective use of on-site and special event off-site parking.
- Advanced Transit Management: Rising to Bay Meadows' impressive transit-oriented goals as well as its own commitment to environmentally sensitive choices, Nueva's high school has developed an advanced yet practical Transportation Management Plan that will significantly reduce automobile traffic to the site compared with other high schools in the region. As a new model for high schools of the future, carbon reduction will play a central role in the educational culture of Nueva's high school. See Appendix for additional information.
- Emergency vehicle access: An emergency access road is included around the entire north and east edges of the property to address Fire Department requirements for full vehicle access to the site.
- Student drop-off/queuing: All vehicle queuing and passenger loading occurs within the site boundaries.
- Park boundary/site security: In response to Parks and Recreation and Police Department security concerns, a six-foot fence is provided at the Park boundary abutting the new high school. This fence will be part of a continuous perimeter and locked gates that secure the site after hours.
- Affordable housing interface: In collaboration with the City's Neighborhood Improvement and Housing staff and consultants, the design team relocated the western property line and design of the school site to allow for more efficient parking on the housing site and neighborly sight lines, orientations, and setbacks.
- Architectural Feature: The required Architectural Feature was redesigned in response to feedback from the Planning Commission and Wilson Meany's architects, Hart Howerton.
- Other design modifications: The eastern elevation of the gymnasium and various landscape features were revised to address concerns expressed by Hart Howerton.
- Driveway Entry at 28th Avenue: In response to Public Work's concerns regarding traffic safety, the driveway into the site from 28th Avenue is now located along the eastern property line.
- Planning Staff Design Comments (Cannon Design Group): Exterior design enhancements have been made in response to comments made by the City's design consultant. Additional glazing and doors have been added to the Theater, Plaza furniture has been reconfigured to enhance the public's experience along 28th Avenue, and Facade material quality and design have been enhanced at the property line wall facing the future housing parcel to the west.

The Nueva High School is a thoughtfully and sensitively designed 21st century high school that will enrich the Bay Meadows community and the City of San Mateo. We invite you to review the detailed information attached and look forward to advancing and completing this exciting project in continued collaboration.

2. INTRODUCTION AND BACKGROUND

A. History of The Nueva School

The Nueva School was established more than 45 years ago as a place of educational innovation and excellence. The founders recognized the demand for the education and social-emotional development of motivated, high-potential children, and sought to create a new approach to teaching that would address their needs. Tapping into the personal experience and insights of 17 Nobel Prize winners, the founders designed a school where children could learn and grow in a living laboratory for best practices and emerging knowledge.

The school opened in 1967 as The Nueva Day School and Learning Center in Menlo Park and moved to its permanent home in the William W. Crocker Skyfarm Mansion on the thirty-three acre Hillsborough campus four years later. Today, Nueva serves 400 children between four and 14 years of age in prekindergarten through eighth grade. The program provides a strong academic curriculum emphasizing critical thinking and problem solving, creative arts, and social-emotional learning. The school also stresses affective education: helping children to develop self-esteem, to take responsibility for their choices and behavior, and to learn the skills necessary for cooperative problem-solving.

Nueva has become a widely recognized leader in the field of education. In each of the last three decades, Nueva received the United States Department of Education Blue Ribbon School award. It also won the National School of Excellence Award and numerous accolades for its LEED Gold certified sustainable campus design, including becoming the first prekindergarten through eighth grade school in the country to receive LEED Gold recognition.

B. Mission and Values

The mission of The Nueva School is to inspire passion for life-long learning, foster social-emotional acuity, and develop the child's imaginative mind. By emphasizing integrated thematic studies, project-based learning, and empathy-centered design thinking, Nueva has created a dynamic educational model that enables children to learn how to make choices that will benefit the world around them. The Nueva School has also maintained a longstanding commitment to and policy supporting diversity in its community, including but not limited to socioeconomic, racial, ethnic, religious, sexual orientation, and family structure. Approximately 20 percent of Nueva's students receive financial aid and more than 40 percent of our students represent non-Caucasian ethnicities. The campus draws students from more than 35 cities and towns throughout San Mateo County and five other counties throughout the Bay Area. More than 12 percent come from the City of San Mateo and more than 70 percent from San Mateo County.

True to its founding principles of creating a living laboratory for educational innovation and its commitment to creating sensitive and aware citizens, Nueva's second mission is to actively share its resources and learning with a broader community. The school regularly welcomes educators to its campus, collaborates extensively with other local, national, and international academic institutions, and hosts small teacher training institutes and programs for students during the summer including in partnership with community organizations like the Boys and Girls Clubs.

C. The High School Expansion

Just as Nueva created a path-finding, innovative model for preK–8 education under the 12-year leadership of its current executive director Diane Rosenberg, the new high school will expand Nueva's reach. The high school expansion has long been a part of Nueva's vision to offer a unique educational model to support students all the way through their primary and secondary education. The timeliness of this expansion in the context of the broader community discourse about 21st century skills and the need for innovation in our current high school models creates an appealing platform to support a wider applicant pool. The high school is anticipated to draw both from current preK–8 Nueva students and the Bay Area public and independent school communities.

Continuing the founding tradition, Nueva has again reached out to educational and thought leaders across the country to create an independent program specifically designed to meet the needs of the next generation. The four-year design project has involved visits to more than 50 leading secondary schools, universities, and colleges, collaboration with presidents and administrative deans at the country's top universities, and input from educational pioneers. A pro bono study by Stanford Business School's Alumni Consulting Team found that there was not only educational demand but validated demographic demand as well. There has been intense community interest in a new Nueva high school.

The new program will build on Nueva hallmarks in a high-school relevant context, emphasizing:

- integrated multi-disciplinary programs and critical thinking
- real-world experiences with internships, partnerships, and exchanges
- a global orientation including work-study and study-abroad opportunities
- service learning as an integrated core component linked to curriculum
- the importance of civics, leadership, and the democratic process
- environmental studies, ecology, and sustainability
- a culture focused on resiliency and social-emotional intelligence
- an intellectually challenging and academically rigorous environment with low student-teacher ratios and exceptionally qualified area specialists
- engagement with immediate neighbors and community members via tutoring, community service, and internships

The school's inaugural class will be approximately 65–75 students growing to 150 in 2014–15, when it aims to move to its permanent site at Bay Meadows. Total enrollment will continue to grow to a target of 400 students (100 per grade) over the following seven years. The school will have a maximum enrollment over a longer term of 450 students.

D. Sustainable Development and Citizenship

Nueva has a longstanding commitment to environmental sustainability and regeneration that enhances its curriculum as well as its campus.

The award-winning gold-level LEED certified Hillside Learning Complex at the heart of the Hillsborough campus made Nueva the first preK–8 educational institution in the country to receive this level of recognition. The development, which was completed in 2007, houses the central library, cafeteria, a 3,700-square-foot design lab, and classroom space, as well as an outdoor plaza. The project, estimated to reduce energy use by as much as 65 percent relative to the national school average, integrated green design principles throughout. This included such features as natural ventilation and cooling systems, photovoltaic solar panels, drought-tolerant landscape design, and selection of non-toxic and recycled building materials.

The design also provides an instructional platform through elements such as "living roofs" that support local biodiversity and insulate the building, and real-time classroom energy monitors that reinforce responsible decision-making in every day school life. For Nueva, environmental stewardship and sustainable development are responsibilities stemming from its commitment to both the community and its vision of serving as a "learning laboratory." The proposed Nueva High School incorporates similar features into its site and building design.

In addition, the school has fostered a culture of environmentally friendly, shared transportation whereby more than one-third of students, faculty, and staff use the school's contracted bus service or carpools to get to and from campus on a daily basis. Contracted bus service is overseen by a school-employed Commute, Transportation, and Parking Coordinator and the program is supported by school staff who promote and supervise its use. The availability of immediately convenient and economically attractive and compelling public transportation options at Bay Meadows is an eagerly anticipated service for the students, faculty, and staff who come from throughout San Mateo County and five other Bay Area counties.

E. Community

Nueva's community is local and beyond. The school has always believed in sharing its resources, whether opening the campus to local neighbors or providing public programming for the community. Hillsborough residents make use of campus trails for hiking and exploring; the Hillsborough Fire Department regularly uses the facility for training exercises. Non-Nueva and Nueva students and community members from Hillsborough, San Mateo, and San Mateo County participate in the biennial Innovative Learning Conference, annual Common Ground Speaker Series, after-school and weekend enrichment classes, and summer camp programs at the Hillsborough campus. For example, the annual six-week summer camp serves approximately 250-300 campers each week, 90% of whom are non-Nueva campers, primarily from San Mateo County. Fifty of those campers attend from area Boys and Girls Clubs, thanks to generous Nueva-procured foundation scholarships. International campers from China, Japan, Indonesia, and England attend the camp programs, staying in local hotels and patronizing local restaurants and businesses. Similarly, local hotels, restaurants, and shops are patronized during Nueva's biennial Innovative Learning Conference at our Hillsborough campus, which attracts prominent educational innovators from around the country to the Bay Area.

The new campus will offer opportunities for Nueva to interact with the community as well. The campus will allow daily visits to local retail and restaurant venues while the high school curriculum will support internships and collaboration with commercial and corporate neighbors. The location of this new, innovative, mixed-use development was specifically chosen because of the aspirational leadership this kind of design represents. Nueva is excited about the proximity to and integration into the community and Nueva looks forward to creating a dynamic interaction with its local neighbors. The school believes in the importance of civic responsibility and leadership, with its students playing an active role in the communities of Bay Meadows and San Mateo. Many of its staff, students, and administrators reside in and/or are attracted to the urban community and amenities and, along with student families who have a history of relocating to be closer to the existing preK–8 school, are eager to explore housing and service options in the new Bay Meadows and neighboring San Mateo community.

F. Student Geographic Draw

The Nueva School currently draws its 400 students from more than 35 cities and towns throughout the Peninsula, including the City of San Mateo (12%) and the school's current locaton, Hillsborough (14%). Another 24 percent come from the neighboring towns of Belmont, Burlingame, Redwood City, and San Carlos and more than 70 percent come from San Mateo County. See table below for more detail:

City	2011-12		City	2011-12
Atherton	3.1%		Portola Valley	2.2%
Belmont	1.0%		Redwood City	3.1%
Burlingame	14.7%		Redwood Shores	0.7%
Coast	2.7%		San Bruno	0.2%
Emerald Hills	1.0%		San Carlos	3.6%
Foster City	1.7%		San Francisco	12.1%
Hillsborough	14.0%		San Mateo	12.3%
Los Altos	1.9%		South Bay	1.0%
Los Altos Hills	1.9%		South San Francisco	0.7%
Menlo Park	5.3%		Stanford	1.4%
Millbrae	1.4%		Woodside	5.8%
Mountain View	1.4%		Other	1.2%
Palo Alto	5.3%			

According to current projections, more than 50 percent of the incoming high school freshman class is expected to come from the existing Nueva community and will likely have a similar geographic distribution to the lower and middle schools. The remaining 40–50 percent of students will be new to Nueva. The high school is expected to be an attractive non-sectarian, independent school option for San Mateo and adjacent community residents as well as for the many communities accessible through convenient public transit. These include communities north to San Francisco and south to San Jose/Silicon Valley via Caltrain/ BART/VTA as well as west to the coast side and east to the East Bay via SamTrans and AC Transit.

3. SCHOOL OPERATIONS

A. Private High School Uses

The school expects to conduct those activities and uses typically associated with a private high school.

B. Community Input

As a new, not-yet-built operation that intends to be a good neighbor, the high school is in a unique position to be responsive to the needs and concerns of the community in designing its operations, unencumbered by existing traditions or practices. The policies and plans defined below reflect the input received from many community stakeholders to date (including city planning staff, police, fire, parks and recreation, housing, neighbors, and the Wilson Meany Partners master development team). We look forward to our continued relationship and partnership with the City of San Mateo as we move ahead with our operations planning.

C. Proximity to Nueva Lower / Middle School Campus

The Nueva School is currently based at its Hillsborough campus on Skyline Boulevard, where it serves 400 students in its lower and middle schools (preK–8). Nueva's new high school campus in San Mateo will be home to the upper school program for grades 9–12. Approximately 10 minutes away from the Hillsborough campus, the new high school site affords easy access and integration with the lower and middle schools while simultaneously allowing for independence developmentally appropriate for the high school students. See also discussion below of Parking, Circulation, and Operations Plan and Transportation and Demand Management Plan.

D. Semester and Summer Use

The school will operate on a two-semester academic year from late August to early June. During the summer months, from mid-June to end of August, Nueva may host during regular school hours on weekdays limited teacher training programs and summer programs for students.

E. Neighborhood Engagement and Facilities Sharing

Community Outreach and Communications: The Nueva School values its relationship with its neighbors and community. The school welcomes the opportunity to consider making certain facilities (for example, the gymnasium or classrooms) and programs (for example, recreational athletics, tutoring, or summer programs) available to neighbors and local community members and has initiated discussions with various community stakeholders toward this end. Note, these programs generally will happen during regular school hours and serve immediate neighbors and community members, including from the proximate affordable housing and other high density multi- and single-family residential units with pedestrian, non vehicular, or local transit access to the campus.

Community Park Shared Use: Nueva respects the multitude of uses and interests in public resources, including the adjacent park space. The school will have access to ample facilities both on-site, at its Hillsborough campus, and off-site through leased agreements currently being negotiated with neighboring public and private facilities that fully support its athletic, cultural, and other activities. The

school does not intend to use the adjacent park in any scheduled or unscheduled manner unless and until a specific understanding is reached with the Parks and Recreation Department. Any future permitted park use will be supervised with school staff at all times. The campus will be a closed (or modified closed) and secured campus and school access to the park will be restricted by landscaping, fencing, and staff supervision and will only be via publicly permitted access.

F. Facilities

Facilities on the new campus will support the activities typically associated with everyday school use including, but not limited to, academic studies, administration, athletic and arts curriculum, school sporting events, before- and after-school clubs and academies, and school-related meetings, gatherings, and other events. See the Design Narrative and Drawings for detailed information regarding the facilities and program areas, including:

- **Gymnasium**
- **Kitchen, Servery, and Café**
- **Student Center**
- **Multi-use classrooms**
- **Science, Technology and Arts laboratory spaces**
- **Writing & Research Center**
- **Faculty Offices and Tutoring Rooms**
- **Administrative Offices**
- **425-Seat Theater**

G. Student Growth and Schedule

The school is planning for full enrollment of 100 per grade or 400 students total in grades 9–12 to be reached gradually over the seven years after opening at the new site (with long-term expansion capacity up to a maximum of 450 students). The school will commence its inaugural year at a temporary site with a freshman class and will transition to the permanent campus with grades 9 and 10 partially enrolled. A new freshman class will be added each of the following years and the majority of new students will enter as freshmen. The off-site high school launch and gradual on-site enrollment growth plan was intentionally planned to permit the school gradual, continuous, and maximum opportunity to adjust (if and as required) any aspect of school operations to ensure compliance and achievement of school and city requirements.

Anticipated student body upon opening Fall 2014:	**150**
Anticipated faculty / staff count upon opening Fall 2014:	**30**
Full student enrollment (2020–21 forecast):	**400**
Full faculty / staff count (2020–21 forecast):	**55**
Maximum student enrollment:	**450**
Maximum faculty / staff count:	**60**

H. Operating Times and Activities

- **Days of Operation:** During the regular school year, high school will be a full Monday through Friday weekday academic program with regular weekday after-school activities (e.g., sports, arts, clubs, and academies), occasional weekday nighttime events, and occasional weekend activities and events.

- **Bell Schedule:** The bell and activities schedules are being planned around public transit timetables to minimize conflicts with peak traffic hours. Morning bell is currently expected to be approximately 8:30 am with afternoon bell currently expected to be approximately 3:30 pm.

- **Student Arrival and Departures:** Weekdays, there will be some before-school activities, and peak morning arrivals will generally occur between 7:00 am and the approximately 8:30 am morning bell. The high participation rate of high school students in after-school activities of varying duration will result in staggered student departures from the approximately 3:30 pm afternoon bell, when the majority of students will depart, to after 6:00 pm, when after-school activities will begin to finish; they will generally conclude by 11:00 pm during the school year. Peak student arrivals will be supervised beginning at least 30 minutes before morning bell and peak student departures will be supervised until at least 30 minutes after afternoon bell to ensure orderly and compliant pick up / drop off via public transit, private bus, carpools, and other preferred transit options. At no time will students be on campus unsupervised. Occasional weekend activities will generally be limited to 8:00 am until 11:00 pm on Saturdays and until 8:00 pm on Sundays.

- **Special Events:** Events will not be scheduled to start before 7:00 am or end after 11:00 pm during weekdays and not start before 8:00 am or end after 11:00 pm on Saturdays or end after 8:00 pm on Sundays. Outdoor events using the amphitheater or courtyards will not start before 8:00 am or end after the later of 6:00 pm or dusk on weekdays or weekends. To ensure orderly and non-intrusive set-up and clean-up, staffing for these special events may need to begin slightly before or after these times.

  Such special events may be large events in excess of the full enrollment and staffing of the school by virtue of family participation, visitors, guests, and the public, or non-recurring or one-time events. Larger events during the school year may include, but not be limited to:

  <u>School Special Event Calendar:</u>

  <u>Back-to-School Night</u>
  Location — courtyard, amphitheater, gymnasium, classrooms, student center, and/or theater
  Time of Year —September
  Day / Time — weekday, afternoon / evening
  Attendees — up to 400 comprised of 350 parents and 50 faculty / staff

  <u>Performing Arts Presentation</u>
  Location — courtyard, amphitheater, gymnasium, and/or theater
  Time of Year — April
  Day / Time — 1 production presented up to 3 weekday / weekend days in a row, afternoon / evening
  Attendees — up to 450 comprised of 200 students, 200 parents, 25 faculty / staff, and 25 guests

  <u>Culmination Presentations</u>
  Location — throughout the school facilities and grounds, theater
  Time of Year —May

Day / Time — up to 4 weekday or weekend days, 1 per grade level, afternoon and evening
Attendees — up to 300 comprised of 125 students, 125 parents, 25 faculty / staff, and 25 guests

Graduation
Location — courtyard, amphitheater, gymnasium, and/or theater
Time of Year — June
Day / Time — weekend after the last day of school, afternoon / evening
Attendees — up to 450 comprised of 200 parents, 150 students, 50 faculty / staff, and 50 guests

See also Community Outreach and Communications above and On-Site Parking, Circulation, and Operations Management Plan — Special Events below.

- **Staff Arrivals and Departures:** Staff and faculty typically arrive one to two hours before the start of school and have staggered departures, based on teaching and working hours at or after student departure times mentioned above.

- **Deliveries:** Service provider/business operations deliveries will be scheduled before or after morning drop-off and afternoon pick-up and around key community morning, afternoon, and evening peak periods to avoid conflict with campus and community traffic and other activities.

- **Refuse Management:** See Design Narrative for detailed information regarding refuse, recycling, and compostable materials strategies and management.

- **Noise Management:** See attached Environmental Noise Study for expected noise-related issues and proposed controls. As mentioned above, special outdoor events, including at the outdoor amphitheater, will be limited to 8:00 am or later start times and end at the later of dusk or 6:00 pm.

I. Campus Security Measures

The high school generally will be a closed campus for students during school hours — students will not be at liberty to come and go during the regular school day. The school is exploring allowing grades 11 and 12 to have a modified closed campus experience, which may permit limited off-campus privileges primarily to support curricular, internship, and other programmatic activities. However, these modified closed guidelines will not be considered for implementation any earlier than the first year the school has 11th graders (2015–16 school year) and will be modified to ensure compliance with campus and community expectations for citizenship, conduct, and safety.

In addition, as with the current middle and lower school campus, the campus, buildings, and people on the high school campus will be secured by:

- **Access Security System:** All campus and facility gates and doors will be secured, alarmed, and monitored via access keys, access cards, and required identification after and during regular operating hours.

- **Surveillance System:** An extensive network of electronic surveillance cameras and alarms, which are supervised 24/7 through a combination of on-site and off-site resources, will be located at all campus and facilities entrances, exits, and public spaces.

- **Staffing:** The primary campus and facility entrances and exits on 28th Avenue and the north and east perimeter access road will be staffed and monitored by school safety personnel during regular school bell hours and beginning at least 30 minutes before morning bell peak arrivals and at least until 30 minutes after afternoon bell peak departures. All visitors will be required to check in and out of campus and will be accommodated by express permission and/or supervision only. Additional campus and facility access control measures and staffing will be considered.

- **Maintenance:** Regular grounds and building maintenance will ensure clear unobtrusive aesthetic landscape, vegetation, and buildings free of safety and security risks/nuisances and graffiti and consistent and compliant with all planning, zoning, and city agency requirements.

- **See Design Narrative** for additional security information.

J. Alternative Transportation Goals, Policies, and Incentives

Nueva is committed to reducing vehicle trips and ensuring compliance with the City of San Mateo's conditions including maximum trip budgets and prohibitions on street parking. In alignment with the Nueva School's cultural and environmental values, the school deliberately sought out the Bay Meadows location because of the availability of public transportation.

Currently, without any incentives and with limited public transit options available at Nueva's Hillsborough location, more than one-third of families and staff are taking advantage of the Nueva shuttle bus service or other carpool arrangements, with many more expressing interest if more shared transportation options could be available and accessible.

Nueva will put in place policies and incentives to ensure that students, staff, and administrators take full advantage of public transportation options, Nueva contracted bus service and carpooling in an effort to reduce vehicle trips. These measures include, but are not limited to the following (all are described in greater detail in the Transportation Management Plan):

- **No Driving Policy for Students** — Students will not be allowed to drive to school except when after-school, project, or medical needs necessitate. Exceptions will be granted in the form of single-day use permits by the school's commute, transportation, and parking coordinator.

- **Nueva Bus Service** — Nueva will continue to offer its contracted bus service to supplement and complement public transportation options.

- **Incentives** — Public transportation incentives will be offered to all students, faculty, and staff and a guaranteed ride-home program will serve to enhance public transportation programs.

- **Commute Support** — Carpools for students, faculty, and staff will be facilitated with ride match services.

- **Secure Bicycle Parking and Changing Areas** — Facilities to accommodate students, faculty, and staff will be provided.

K. On-Site Parking, Circulation, and Operations Management Plan

Below is a synopsis of daily parking and traffic operations. See Traffic Management Plan for additional details. See Site Plan and Parking Garage Plan graphics at end of this section.

Commute, Transportation, and Parking Coordinator: A commute, transportation, and parking coordinator will oversee all programs and practices including staff and student parking, special events parking, communications, and enforcement, and will work with designated faculty, staff, students, and contractors. The scope of ongoing monitoring and enforcement will include shared transportation programs, promotion, and actual usage; pick-up and drop-off; specifically assigned faculty and staff parking permits; single-day, exception-based, student-use permits; visitor traffic; management of tandem and alternative-energy parking spaces; special events; and the annual commute, transportation, and parking survey to ensure achievement and maintenance of our school and city commute, traffic, and parking commitments and goals.

Vehicle Registration and Parking: The project provides 125 parking spaces on site for staff, faculty, and visitor use, as well as for students on an exception basis as described above. All employee and student vehicles will be required to be registered at employment and enrollment, respectively, and updated accordingly. Parking will be by permit and enforced by the coordinator and assigned safety and security staff overseeing assigned faculty and staff parking spots and shared student and visitor parking areas. Enforcement to encourage compliance will include robust communications programs, signage, warnings, financial penalties, towing, revocation of driving/parking privileges, and, if required, employee termination or student expulsion. Monitoring and enforcement will also include regular patrol of the immediate adjacent public streets and parking to ensure compliance.

Further, at initial occupancy, initial student driver count will be zero (a student count of 150 ninth and tenth graders unable by law and/or not allowed by school policy to drive) and faculty and staff count will be approximately 30. Growth in enrollment and faculty/staff count is projected to be gradual over a seven- to eight-year period towards our initial target enrollment of 400 students and 55 faculty/staff. Thus, at occupancy and for the immediate and intermediate period thereafter, parking supply will dramatically exceed need, allowing ample opportunity for the school's coordinator to monitor, refine, and optimize the parking, circulation, and operations management plan and the traffic-demand management plan to ensure achievement and maintenance of school and city commute, traffic, and parking commitments.

Access, as well as separate staging and parking for service vehicles, shipping and delivery vans, trucks, and school buses (including from visiting schools), is provided on site without interference with the circulating drive that wraps around the school. All regular parkers will be required to register their companies and vehicles to ensure compliance with our parking capacity, policies, and procedures. Compliance will be monitored by the school commute, transportation, and parking coordinator supported by school safety and security personnel.

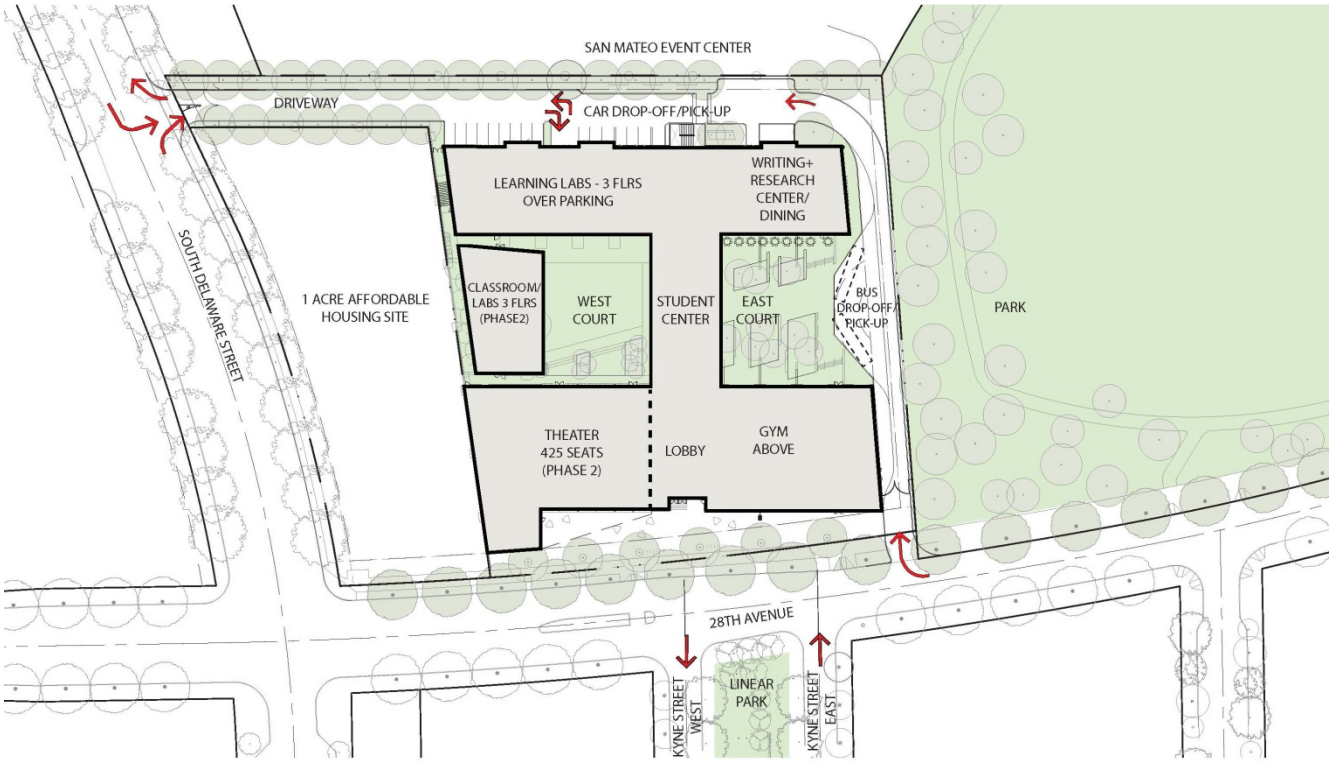
Tandem, Ride Share, and Alternative Energy Vehicle Parking Spaces: Tandem parking (21 of the 125 spaces) will be assigned by permit to individual commuter faculty and staff only. Access and departure will be facilitated by controlled access to permit and space-specific lockbox under the supervision of the coordinator. Other faculty and staff will have access by permit to assigned standard parking spaces. Students by exception and visitors will have access via one-day use permits to designated shared-use standard parking spaces. Spaces within each of these allocations will be further set aside to promote ride-sharing carpools and use of alternative-energy vehicles.

Loading and Delivery Zones: Two loading areas for delivery vehicles are provided. These areas, as well as the bus zone, may be utilized for short-term visiting school buses. Service-provider / business-operations deliveries and refuse pick-up will be scheduled before or after morning drop-off and afternoon pick-up and around key community morning, afternoon, and evening peak periods to avoid conflict with campus and community activities.

Circulation, Drop-off, and Pick-up: On-site circulation has been designed to allow drop-off and pick-up queuing and bus loading/unloading in such a way as to contain the vehicles on site without spillback onto surrounding city streets. Vehicular circulation direction on site for visitors and student drop-off/pick-up is one-way to maximize traffic flow safety and efficiency. The proposed one-way, right-in inlet from 28th Avenue, and the right-only exit onto South Delaware maximize traffic safety and flow along adjoining public streets. A bus zone is provided along the driveway at the East Courtyard, and a car drop-off/pick-up zone is provided further along the driveway to maximize queuing distance. Staff, under the supervision of the coordinator, will assist in directing traffic flow daily during primary morning drop-off and afternoon pick-up hours, including at least 30 minutes preceding morning bell and for 30 minutes following afternoon bell as required, to ensure pedestrian safety, as well as safe, efficient bus, car, bicycle, and pedestrian traffic flow. The auto garage is located at the north side of the site. Access to the garage and outdoor visitor parking area is from South Delaware Street onto a two-way driveway. Autos leave the site by way of the two-way driveway back to South Delaware Street; a right turn exit only is permitted to maximize traffic flow safety and efficiency. Service vehicles enter off 28th Avenue in a manner similar to bus and student drop-off/pick-up flow, and exit onto South Delaware Street, right turn only.

Special Events: Occasional large special events, including interscholastic athletics, performing arts or cultural productions and graduation, may require additional off-site parking. Nueva is finalizing a special event parking lease arrangement for up to 400 spaces within walking distance at the San Mateo County Event Center, its immediate neighbor to the north, as well as is pursuing an arrangement with Bay Meadows for access to its future parking structure also within walking distance at Station Block 1, its immediate neighbor to the west, where school special event use will not conflict with peak office demand. Nueva will communicate its projected annual special event calendar in advance to its special event parking partners to ensure that all special events can be adequately parked before they are confirmed and calendared. Parking spaces on site and contracted off site spaces will accommodate all contemplated events, including special events assuming typical vehicle loads. School staff and contracted parking assistants will supervise onsite and overflow off-site arrangements, including vehicular and pedestrian traffic flows, to ensure orderly, safe, minimal, and compliant traffic, circulation, and parking impacts at Bay Meadows. Special events will be scheduled, staffed, sized, and parked under the direction of school administration in conjunction with the commute, transportation, and parking coordinator and school safety and security personnel to ensure compliance with on-site and off-site parking availability and traffic requirements at Bay Meadows, and will be rescheduled, downsized, relocated, or cancelled, as required.

NUEVA HIGH SCHOOL SITE PLAN



NUEVA HIGH SCHOOL PARKING GARAGE PLAN

4. DESIGN NARRATIVE / PROJECT DESCRIPTION

A. Design Process and Input

The Nueva School team has worked closely with City of San Mateo staff to understand community stakeholder desires, requirements, and needs. The time and effort expended by City Staff and the Planning Commission in providing detailed feedback during multiple meetings during the past five months have been very productive. The current design incorporates many of the suggestions discussed. Below is a list of meetings the project team has held with Staff, and specific changes that we have made as a result of the City's input.

- **January 17, 2012** — Meeting with Planning Department, introducing Nueva to the City, discussing the overall project scope, timing and required approval process.

- **February 15, 2012** — Meeting with Housing Manager about the layout and location of the affordable housing site.
  - City suggested potential housing layouts would be helpful to review affordable housing parcel — **Layouts provided.**

- **February 15, 2012** — Meeting with Planning Staff to review initial Nueva school layout.
  - City requested detailed queuing analysis for pick up and drop off — **Analysis provided**
  - City requested list of design exceptions — **List provided**
  - City directed the pick-up and drop-off area relocated from 28th Avenue — **Pick-up and drop-off relocated**

- **February 28, 2012** — Pre-application meeting with Planning, Engineering, Traffic, Housing, Parks and Recreation, Police and Fire
  - Fire requested 20-foot circulation around project — **Site plan changed with building tunnel through building and moving the gym to the second floor**
  - City recommended against having a left turn off Delaware into site — **Site plan changed to right in only on Delaware**
  - City requested separate bus drop-off area — **Bus drop-off provided**
  - Police recommend tour of existing Nueva campus to understand the school and needs better — **Tour provided**
  - Parks and Recreation requested a fence along the park — **Fence provided**

- **March 19, 2012** — Tour of the Peninsula Station project with Housing Manger
  - City requested building and parking plans based on Peninsula Station as a model — **Layouts provided**

- **April 10, 2012** — Meeting with City Planning Staff
  - City requested larger entry off Delaware — **Entry made larger**
  - City requested school operational plan — **Plan provided**

- **May 9, 2012** — Meeting with City Neighborhood Improvement and Housing Manger
  - City requested layouts showing more parking — **Revised layouts and additional parking provided**

- **May 14, 2012** — Neighborhood meeting was held discussing the project in detail.

- **May 22, 2012** — Planning Commission Study Session
  - Planning Commission requested more parking be provided — **More than 30 percent additional parking provided**
  - Planning Commission requested architectural feature be more prominent from Linear Park — **Architectural feature adjusted and brought to the ground.**
  - Planning Commission requested HVAC noise mitigated — **Noise study provides mitigating strategies to reduce HVAC noise to allowable levels.**
  - Planning Commission raised concerns regarding traffic related to drop-off and pick-up — **Circulation pattern revised to ensure maximum safety and minimum stacking.**

- **May 23, 2012** — Meeting with SamTrans reviewing options and opportunities for Nueva using Caltrain and SamTrans

- **May 23, 2012** — Meeting with Planning staff and City Neighborhood Improvement and Housing Manager
  - City requested a revised circulation — **Entry modified to enter on 28th Avenue and exit on Delaware for drop-off and pick-up**
  - City requested the property line be adjusted for better layout for affordable housing parking — **Property line adjusted**
  - City requested Nueva theater building be moved to the property line so affordable housing and theater building abut — **Building moved**
  - City requested west side of the north classroom building design to abut east side of affordable housing building — **Adjustment made**
  - City requested additional coordination on garage layout with our design team — **Coordination resulted in revised layout with additional parking**

- **June 5, 2012** — Meeting with Planning Staff
  - City requested traffic report address pick-up and drop-off queuing times to show no back-up on public streets — **Traffic report analysis provided**
  - City suggested need-based parking for students — **Need-based parking incorporated into the TDM plan**

- **June 5, 2012** — City Staff visited Nueva School: Planning and police staff visited the Nueva School in Hillsborough to review:
  - The school's successful traffic management methods, including active staff supervision, bus service, carpooling, and parking.
  - Campus security procedures, including video and alarm systems.
  - Environmental design advocacy, including building and site design features.
  - Neighbor and community relations and programs.
  - Proximity of Hillsborough and Bay Meadows campuses (~10 minutes) and ample excess parking at Hillsborough to support Bay Meadows bus staging and overflow parking needs.

B. Site Overview and Adjacencies

- Nueva's high school is a **new campus for up to 450 high school students and 60 staff,** located on the easternmost 2.75-acre portion of Parcel MU-1, in the Bay Meadows Urban Village Neighborhood of San Mateo, California. The nearby neighborhood includes dense low-rise multi-family housing across 28th Avenue and commercial/office buildings with surface lot parking across Delaware Street.
- The campus fronts 28th Avenue to the south. The proposed **building address is 131 28th Avenue.**
- A new **Community Park** is located to the east of the project site.
- The **San Mateo Event Center** is located to the north of the project site.
- A one-acre undeveloped **below market rate housing parcel** is located to the west of the project site.

C. Site Access, Pick-up/Drop-off, Loading, and Parking

1. The project and neighborhood are part of a **Transit-Oriented Development**: The site is located within three blocks of a Caltrain stop and within blocks of multiple bus routes, and it includes a dedicated bike path, which runs along 28th Avenue in front of the proposed high school and connects the new Caltrain stop to the Community Park and the neighborhood beyond.

2. The parcel's southern frontage and the **building's main public and pedestrian entry face 28th Avenue**. **Auto, bus, delivery, and emergency vehicle site access** is via a driveway that extends along the east and north edges of the site. Vehicles enter the site at the intersection of 28th Avenue and Kyne Street East and exit onto South Delaware Street. The driveway at South Delaware Street also allows right-in and left-in entry for staff and guest parking at the north side of the site. Traffic does not continue through to 28th Avenue, however. See Transportation Management Plan.

3. **Carpool drop-off and pick-up** is located along the driveway at the north side of the site, opposite the parking garage. A **bus zone** for drop-off and pick-up is located adjacent to the East Courtyard, in a pull-out at the west side of the driveway to allow for required emergency vehicle clearances and safe exiting of students from buses. See Transportation Management Plan for detailed information regarding traffic, parking, drop-off, and pick-up.

4. **Two loading spaces** are located along the north driveway, next to the parking garage and close to stairs and elevators accessing the building. These areas will double as short-term visitor bus parking locations.

5. **Bicycle Parking**: Bike parking spaces comply with the City of San Mateo Bike Parking Ordinance Standards.
   a) **Total Quantity Required by Code: 46 total bicycle parking spaces** are required. Based on the proposed number of students and staff, City zoning code requires one short-term bike space per 20 students (23 spaces) and one long-term space per 10 staff (6 spaces). In addition 1 short-term space per 40 theater seats (11 spaces) and 1 long term bike space per 80 theater seats (6 spaces) are required. 34 total short-term and 12 long-term bike parking spaces are required..
   b) **Total Quantity Provided: 62 total bicycle parking spaces** are proposed, nearly 40% more than required by code. The increased number is appropriate for a Transit Oriented Development

and reflects expectations of the school regarding bicycle use, including visitor bike parking requirements.

c) **Short-Term Bike Parking: 36 bikes** are accommodated at outdoor short-term bike parking spaces at the main school entry, for use by students and the public. Phase 1 will include 24 stalls. 12 additional stalls will be added in Phase 2 to accommodate the added requirements of the Theater constructed at that time. City standard Hoop Rack Heavy Duty by Dero will be utilized.

d) **Long-term Bike Parking: 26 bikes** are accommodated for long-term bike parking inside a secure ground level room with outside access from 28th Avenue, for use by faculty, staff and students. The long-term parking will utilize a variety of stall types: 16 double-decker assist racks (Dero Double Deckers) plus 10 standard double decker racks (Dero Space Saver Racks). 48-inch minimum clearance behind bicycles will be provided for access.

e) **Showers** are available at the gym for use by students and staff who bike to the school.

6. **Automobile parking for a minimum of 125 vehicles** will be located at the basement level of the project's North Wing. Direct access to the parking is via the perimeter driveway, which takes advantage of the site grading to drop down to the basement level. Parking is primarily for faculty and staff, with parking also provided for visitors and students. See Transportation Management Plan for detailed information.

D. Architectural Design Strategy, Program, and Phasing

1. **Concept:** Nueva's high school is envisioned as a collection of innovative educational environments, woven together to form an **integrated "ecology of learning"** designed to inspire 21st century high school students. Incorporating recent research into the spatial implications of learner-centered pedagogy, the school is designed to adapt to changing educational needs while supporting creative inquiry and nurturing mind/body wellness. The more public realm of the school, the South Wing — gymnasium, administration, and theater — is located along the 28th Avenue public frontage. The academically focused teaching environments — classrooms, science labs and outdoor spaces — are located at the center and rear of the site, further from street noise and activity.

2. **Program:** School amenities include flexible classrooms and seminar spaces; innovative science laboratories; R&D tech shops; a 425-seat theater; full kitchen and dining facilities; an athletic center including a gym that can double as an auditorium with seating for 615 people; a student center; and a two-level Writing and Research Center.

3. **Building Area and Phasing:** The full building program area totals approximately **128,000 square feet of interior occupied space (or 134,345 square feet of Floor Area under Zoning Code definitions)** plus a **39,300-square-foot parking garage**, and includes all of the program spaces indicated above. **Phase One for the project totals 87,000 square feet** of interior occupied space (not including parking). The Theater Wing and the West Wing of the school are included in a later Phase Two portion of the project.

4. **Building Form, Height, and Massing:** The school campus consists of a variety of inter-connected buildings:

a) **The North Wing** is four stories high and runs parallel to the north property line. This building includes **classrooms, science labs, faculty offices, a dining facility, and the two-level**

Writing and Research Center. A **parking garage** is located at the lower level of the north wing. The east side of the building faces the park and has abundant glass on this facade to take advantage of these views.

b) **The South Wing** includes a second-floor **gymnasium** that faces the park along with performing arts facilities, sports lockers, bathrooms, and various staff offices and meeting areas located at the ground level below the gym. A **425-seat theater**, part of a future phase of development, provides a venue that supports the school's theater program. In the initial phase of the project, the future theater footprint will take the shape of a landscaped amphitheater for informal performances, outdoor lectures, and student gatherings. A third floor above the theater houses music, performing arts, and additional classrooms. The south wing fronts onto 28th Avenue; both the gym and theater spaces facing the street include a high percentage of glazing that provides visual transparency and a dynamic connection between the building and the street. The main entry to the building is accented by a double height glazed volume and protective canopy over the doorway. A unique **design feature** that is integrated into the gym facade sunshade system is located directly across from the Linear Park. The feature includes a vertical architectural counterpoint to the horizontal building, and incorporates building signage, a flagpole and horizontal sunshading fins. The feature elements are brightly colored, creating a visual landmark that can be seen clearly from 28th Avenue and the Linear Park.

c) **The Student Center Wing** at the interior of the site connects the north and south wings and acts as the main entry to the building from 28th Avenue and from the bus and carpool drop-off areas at the interior of the site. The central wing houses the **Student Center —** a hub of student activity. The roof of the central wing will be partially paved and partially planted, and will be used as an **outdoor classroom and upper level link** between the north and south building wings.

d) A future **West Wing** connecting the north and south wings will provide **three floors of classrooms** and science labs to support curriculum development.

5. Architectural Design Features, Building Elevations, and Materials:

a) The school's central values of community, mentoring, and cross-disciplinary interaction are supported by architectural features such as overlooks and abundant outdoor open space. Interior spaces and the public street facades are designed to maximize views into the building and of school activities inside, thus providing a welcoming public face and greater visual interconnection between interior school spaces.

b) **Exterior finish materials** include cement plaster, aluminum and glass window systems, painted metal sunshades, and painted corrugated fiber cement accent wall finishes. See rendered elevations and graphic materials sample sheet included with drawings.

c) The building **cornice** is constructed of a steel framework with infill panel system: The panels include painted perforated metal or photovoltaic panels, which provide both shading and renewable energy (in the case of the photovoltaic panels.)

d) The **rooftop** is sloped to gutters with downspouts, and rooftop mechanical equipment is screened with painted corrugated metal enclosures. Tall wedge-shaped chimneys at the roof gather light and air for the interior spaces. These structures include glazed skylights, air relief louvers, and painted metal.

e) The **eastern building facade** faces the Community Park and provides abundant glazing for views to the park. A balcony at the gym allows a broad outdoor view of the park.

f) The **western building facade** faces the Below Market Rate Housing Parcel (not yet developed). Considerations have been taken in discussions with the City of San Mateo to ensure that the building forms, placement, and facade designs are articulated in a way that is compatible with a

future build-out of the housing. The future theater wing abuts the property line, and includes a varied pattern of smooth cement plaster alternating with the texture of corrugated cement board paneling for visual interest. The north and (future) west academic wings are set back from the property line and are articulated with glazing elements, fiber cement accent panels, and stucco patterns that provide visual interest when viewed from the adjoining parcel.

g) **Signage:** See building elevations for proposed building and site signage. Signage is NOT internally illuminated.

h) **Exceptions to Design Guidelines:** See attached memo that describes various design features that enhance the project and its interplay with the surrounding neighborhood, above and beyond those elements within the Bay Meadows Design Guidelines.

6. **Outdoor Spaces:**

a) **Outdoor courtyard spaces** at the site interior include contemplative study courts, informal sport and gathering areas, outdoor lab-support areas, and gardens at grade and rooftop that enhance daily connections to teaching, community, and the natural world. In Phase 1 of construction, the location of the future theater is occupied by an outdoor amphitheater with slope grass seating and concrete stage area.

b) **The main building entry plaza** along 28th Avenue is paved and set back from the property line. The sidewalk area includes a **multi-use path** for bikes and pedestrians**, shade trees,** and **sidewalk kiosks** located within the building setback. The kiosks will highlight student work and announce school performances and gym events. **Seating** and other amenities will be provided on the sidewalk along 28th Avenue and behind the required setback line, providing an inviting place for gathering and pedestrian interaction along the sidewalk frontage.

E. Landscape Design Strategy and Features

1. **Creating a sense of place** is central to the landscape design for Nueva's high school. Qualities of the northern California landscape inform each aspect of the design. **Plants and materials chosen for the landscape evoke a variety of natural local ecosystems**—such as a redwood grove, oak woodland, meadow, and riparian biofiltration zone. Benches made from native California trees, stone from local quarries, and native rocks add to the design story. These types of local materials help the students learn about their native landscape and spark the development of future stewards of our environment.

2. **The Plaza along 28th Avenue** is the school's public face to greet and directly engage the community. **London plane trees** that match the street trees both frame the multi-use pathway and connect this pathway to the larger plaza. A **gallery space** in front of the theater building provides an area in which the students can display projects and other information related to their studies. In this way, **transparency and connectivity between the school and community** are enhanced. In Phase One, prior to the construction of the theater, an architectural fence that is covered in vines marks the outline of the future building. **Bicycle racks** provide short-term parking for visitors near the front door of the school; triangular concrete plinths and built-wood benches with backs provide seating and areas for gathering.

3. **The west courtyard** is the **academic and active outdoor workspace** for the school. A **redwood grove and hedge** on the west side provides wind screening for the courtyard. A terrace along the tech classrooms allows students to expand their workspace out-of-doors. Additionally, circular paved areas set at the edge of a woodland planting scheme create **gathering spaces of various scales**

for students. A lawn area provides a place for active recreation. During Phase One, a **landscape amphitheater** will represent the future theater building.

4. **The east courtyard** is a space of **transient recreation and activities**. Students gather here for **dining on an upper terrace** that connects to the cafeteria. **Bio-filtration planters** filled with trees and ferns step along the main pathway together with benches that provide more **informal gathering areas**. A **bus drop-off plaza** is located at the east side of the courtyard adjoining the driveway. A **fence along the Community Park** provides a secure yet transparent face to the park.

F. Project Sustainability Goals and Strategies

1. The project design is grounded in the desire to integrate **straightforward, appropriate, and cost-effective sustainable design solutions** that create practical and poetic connections between students and the natural world that sustains them.

2. **Sustainable design goals and strategies include**:
   a) **Supporting education**: Create buildings that connect the important links between the built world and the natural world that sustains us all. Indeed, a variety of innovative educational environments that connect students and faculty to the world around them serves to promote environmental stewardship and lifelong learning on a daily basis.
   b) **Building the land:** Respect the character of place by integrating the new buildings into the land and by providing a landscape that mimics the regional flora and fauna.
   c) **Fostering biodiversity:** Promote re-introduction of local and lost ecosystems and create new habitat for native species that students can observe and study.
   d) **Reducing energy and carbon emissions**: Through a variety of simple, observable systems and strategies, exceed the 2030 Challenge by reducing site energy use by at least 60 percent from the national average for schools. This will also exceed state-mandated energy-code requirements. Natural ventilation, natural day-lighting strategies, and efficient mechanical systems such as radiant slab heating will be utilized.
   e) **Conserving water**: Reduce potable water use while teaching students to value this precious resource. See Demand Side Water Conservation Management section below.
   f) **Conserving resources**: Model resource efficiency through simple building forms, efficient structural systems, and use of recycled and regional materials.
   g) **Transportation Demand Management**: Via policy/mandate, voluntarily reduce traffic and by extension reduce congestion and pollution associated with the build-out of the site (see TDM Plan for details).
   h) **LEED**: Achieve LEED Silver (minimum) Certification while striving for a goal of Gold Certification. See attached LEED Scorecard for a comprehensive list of sustainability strategies.

G. Site and Building Security

1. **Operations Security Plan:** See Section 3 – School Operations for School Security Operations information.

2. **City of San Mateo Security Ordinance (SMSO):** The project has been designed to comply with general requirements of the SMSO, including the following key elements:

a) **Security Lighting:** Exterior lighting and light-fixture samples are shown on the landscape lighting site plan. The lighting will meet the requirements of the City of San Mateo Security Code, Section 23.54.060 Exterior Security Lighting. The lighting layouts meet exit path illumination code requirements under normal and emergency conditions and for security purposes throughout the project. Site lighting will provide adequate illumination for circulation, security, and exiting with minimum light trespass and sky glow. All light fixtures will be full-cutoff type with no output above horizontal, except a few small LED uplights for trees in the main entry plaza. The design will use Illuminating Engineering Society recommended practices for selecting site lighting and security lighting levels. In addition to the site lighting shown, there will be a light at every exterior door.

b) **Community Park:** A six-foot fence is provided between the school site and adjoining park. There is no access gate in the fence, which is transparent along most of its length and not of excessive height. School access to the park will be via the public sidewalk access along 28th Avenue.

c) **Site Access Control:** The entire campus perimeter is fenced. Two vehicular entries along 28th Avenue and South Delaware have gates that can be controlled remotely and secured after hours (or during school hours as needed).

d) **Building Access Control:** Building-entry access locations are limited, and are clearly marked, highly transparent in nature, and located close to reception areas. See CPTED items below for more information.

e) **Video Surveillance:** See CPTED CCTV item below.

3. **Crime Prevention through Environmental Design (CPTED):** The building and site layout have been designed with **Crime Prevention through Environmental Design (CPTED**) in mind. Visual transparency is incorporated into the ground-level building facade design to maximize visibility between inside and outside, increasing the real and perceived sense of safety. The Nueva School design also includes secure site and building barriers. Project design features that support CPTED model include:

a) **Site Entry:** The driveways along 28th Avenue and Delaware will have security gates that can be closed automatically and an intercom system to communicate with visitors and vendors who arrive at the site when the gates are closed or after hours.

b) **Building Entry:** Identifiable, well-lit points of entry have been developed for the primary (and secondary) building and site entries. Site, signage and landscape features assist in directing people to those entries. All primary building entries connect directly to the first floor Student Center wing where reception areas have direct views of each entry point.

c) **Public and Private Space Definition:** To provide security between public and private spaces, various forms of separation are provided: Physical interior and exterior building elements, signage, paving patterns, lighting, and landscape all serve to define these boundaries. Reception and security desks are located to maximize staff review of activities across the campus.

d) **Outdoor Gathering:** Places for pedestrians to walk, gather, and bicycle along the street frontage are intended to enhance the sense of “eyes on the street” and provide greater security for the project. Interior courtyard gathering spaces are visually open, without hidden zones.

e) **Transparency:** Window placement overlooks the street frontage, interior courtyards, perimeter driveway, and outdoor parking areas. Building and site entries are made as transparent as possible to enhance visibility.

f) **Fencing:** Fencing at the site perimeter is open, transparent (in most locations), and as low as deemed safe to provide maximize visibility in and out of the site.

g) **Lighting:** Site and building lighting provides code-required exit lighting, as well as lighting of areas that are hidden or out-of-the-way. Outdoor fixtures have been selected to provide minimal glare. Main entries and site access areas receive maximum lighting focus to ensure safety.

h) **CCTV:** A closed-circuit television-camera system will complement the physical and organizational security efforts of Nueva's high school. CCTV cameras will be added at locations where direct surveillance is not always possible, such as the (secured) garage, driveway entry gates, and at other areas as required.

H. Noise Study

The project design addresses attenuation of a variety of noise sources. These include incoming train noise from the nearby Caltrain tracks, car traffic, and the noise from the nearby Community Park, as well as outgoing noise from mechanical equipment and student activities, especially at the gym and theater. See attached **Environmental Noise Study** for details, as well as information regarding construction noise criteria and attenuation requirements.

I. Recycling and Refuse Management Plan

1. **Goals and Criteria:** The Nueva High School's refuse and recycling program and systems have been designed to:
   - Maximize commercial waste diversion and promote awareness of recycling and composting among students, staff and visitors.
   - Conform to all applicable municipal, state and federal regulations, including the City of San Mateo's Sustainable Initiatives Plan.
   - Allow safe and easy utilization by the School, along with ease of access by the local refuse vendor, Recology of San Mateo.
   - Minimize negative impacts such as unsightliness, odors, leakage, traffic, noise and air pollution.

2. **Interior Refuse and Recycling Systems and Program:** The school and students will develop a Recycling and Refuse Management Plan in conjunction with the San Mateo Public Works Dept. (Roxanne Murray) to mutually strive for a goal of minimal landfill waste leaving the campus. The plan will be a living document to ensure that the School's changing habits in evolving curriculum and practice will be captured in the plan. Plan elements and strategies include:
   - Separate refuse containers will be located throughout the building for landfill trash, recycling, and compostable refuse as required for the school's size and refuse management practices.
   - Refuse and recycling will be collected from containers by the janitorial staff each evening (or more frequently as required) and delivered to containers at a centralized enclosure (see below for description.)
   - All kitchen and food refuse will be composted. In addition to waste and recycling containers, compostable refuse containers will be provided at the Kitchen, Servery and Dining areas, as well as at outside terrace and courtyard locations, and other areas where regular daytime dining may occur.
   - Fats, oils and other kitchen related liquid wastes will be stored in sealed containers.

- Academic courses related to environmental issues, and building signage, will reinforce the importance of reuse, recycling, and conservation of materials.
- The school will purchase recycled and recyclable paper products to the greatest extent possible.
- Hazardous and bio-waste collection, storage and disposal will comply with all applicable local and state laws.

3. **Exterior Refuse and Recycling Enclosure and General Procedures:** A dedicated, secure, outdoor recycling and refuse enclosure is provided at the north end of the building. It is designed and located to conceal refuse containers and to expedite pick-up by the local refuse vendor, Recology of San Mateo. See Drawings for detailed size information.
    - The refuse enclosure location is conveniently near an elevator and adjoins the driveway, promoting ease of access, yet hidden from general viewing behind an enclosure. Refuse and recycling collected by custodial staff is deposited at refuse containers in the enclosure.
    - The enclosure is constructed of heavy gage durable corrugated metal paneling. One pair of large locked gates is provided for each of the required refuse container types: landfill, recycling and composting.
    - Refuse containers are vendor standard sizes, designed to be rolled from the enclosure by the vendor to the truck at the driveway for front loading or side loading hydraulic lifting.
    - Refuse trucks enter the site from 28th Avenue and exit onto South Delaware along a 20 foot wide (minimum) Emergency Vehicle Access Driveway. Bin pick-up occurs immediately adjacent to the enclosure, or in the loading zone at the opposite side of the driveway to ensure the Emergency Vehicle Access road remains clear.
    - Bin pick-up times will occur outside peak am and pm traffic hours, and at times in compliance with local noise ordinance requirements.
    - A hose bib and drain are located at the enclosure for ease of cleaning and maintenance by school staff. Pressure washing of enclosure and refuse containers will occur on a weekly basis, or more frequently as needed to control odors.

4. **Container Size and Pick-up Frequency:** Based on conversations with Recology of San Mateo, the project will include:
    - One three-yard trash container.
    - One three-yard recycling container.
    - One two-yard composting container.
    - Pick-up frequency will be as required, ranging from every other day to weekly, depending on volume.
    - A trash compactor will not be provided as refuse products will be pre-sorted by School staff and a high volume of bulky-type refuse is not anticipated.

J. Hazardous Materials and Air Quality Management Plan

See Hazardous Materials & Air Quality Checklist in Appendix. Additional Information is provided below:

1. **Hazardous Materials:** The Nueva School has made a preliminary assessment of materials stored and used on the campus that may fall under the listing of hazardous materials indicated on the Hazardous Materials & Air Quality Checklist. The following are mitigation measures for items of possible concern:

a) **Pesticides:** Pesticides in small quantities may be stored by maintenance staff for use in buildings or outdoor areas. Great efforts will be taken by the school to select nontoxic pesticides that are harmless to humans and pets. Pesticides will be stored and used in accordance with City, County, and State health and safety regulations.

b) **Solvents:** Mild solvents will be stored by maintenance staff for use in cleaning activities. These will be limited in quantity and will be secured in fireproof and locked cabinets at a designated location (likely the Maintenance Room shown at the ground floor level.) Solvents and oxidizers will be stored and used in compliance with City, County, and State health and safety regulations.

c) **Science Classroom Chemicals:** A variety of chemicals will be stored and occasionally will be used in very small and limited quantities by science faculty (primarily chemistry and biology) as part of the science curriculum. Chemicals stored and used may include corrosives, flammable and combustible liquids, organic peroxides, solvents, and oxidizers. All chemicals will be secured in fireproof and locked cabinets at a designated location, primarily the chemical Storage Rooms adjoining all Science Classroom where shown on drawings. These rooms will have dedicated 24-hour exhaust as required by state codes. All chemicals will be stored and used in compliance with City, County, and State health and safety regulations, and a chemical inventory will be kept on hand, and updated annually by the science faculty. During classroom experiments involving volatile, flammable, or otherwise potentially dangerous compounds or when burning of a small amount of compound is required, an adult science instructor will be on hand and will oversee all use of these items. Volatile, flammable, or burning items will be exposed only in the fume hoods provided at each of the Science Classrooms. In compliance with the California Mechanical Code, all fume hood experiments will be limited to chemical use in quantities required to limit gaseous concentrations to 25 percent of the lower flammability limit (LFL) within the fume hood exhaust duct. This information will be included in the chemical inventory sheet for each chemical.

2. **Fan Ventilation and Air Quality:** Fans will be used to exhaust fumes from bathrooms, the parking garage, and fume hood equipment in science classrooms. The following precautions will be taken in the venting of fumes:

a) **Code Requirements:** All fan-exhaust equipment and output will be designed to meet applicable City, County, and State Code requirements, and will be located at minimum distances from other equipment or building openings as required by law. Fan-exhaust termination points will be located downstream of prevailing winds to minimize possibility of re-entrainment into building air intake vents.

b) **Garage Ventilation:** During scheduled occupied hours and any time garage sensors indicate carbon monoxide levels above a set-point, an exhaust fan located on the roof draws air through the garage and up to the fan, where the exhaust is discharged to the outdoors. The exhaust fan normally runs at a low speed, but if carbon monoxide sensors distributed in the garage detect levels above a set-point, the fan will turn up to high speed to provide more garage ventilation. This exhaust air is very dilute and is the same “class” of air as toilet exhaust by applicable codes and standards. The fan on the roof is located downwind of outdoor air intakes for the building, mitigating the risk of garage odors brought into the building. Air quality in the garage, in the building, and at the surrounding grade level will be maintained by locating the fan outlet high on the roof away from surrounding grade and from outdoor air intakes while providing air quality sensing and fan speed controls.

c) **Science Classroom Exhaust:** The exhaust fans serving the equipment in the high school science classrooms are designed to discharge and dilute the concentration of the products in

the exhaust air by thoroughly mixing it with outdoor air at a high velocity. The exhaust fans will terminate 8–10 feet above the building roof and discharge air at 2,000 feet per minute, as recommended by ASHRAE 2011-Applications-45.1. This is a very common and accepted arrangement and results in good local mixing and dilution of exhaust air. These prescriptive and standard measures will be met by the proposed design.

K. Demand Side Water Management Strategies

1. **The following design strategies are included to reduce potable water consumption:**
   a) All LEED prerequisites for water consumption will be achieved. Current design targets have water consumption reduced by 40 percent compared to a baseline building.
   b) Lavatories will employ 0.35 GPM aerators compared to 0.5 GPM code/EPAct maximum
   c) Dual flush water closets (0.8/1.28 gpf) compared to 1.28 gpf code/EPAct maximum
   d) Waterless or pint-flush urinals compared to 0.5 gpf code/EPAct maximum
   e) Submeters for kitchen and landscape water consumption provide actionable information about where total water is used on-site.

2. **Design strategies for reducing the amount of water dedicated to landscape irrigation include both reducing demand and increasing efficiency of the system itself.** The following strategies are included:
   a) Irrigation demand will be lessened by the selection of drought-tolerant, low water-use plant species as well as the thoughtful layout of the plant material with regard to spacing, exposure, and micro-climate.
   b) The plans specify a highly efficient, sub-surface irrigation system that helps reduce the waste and run-off inherent in a spray-type of system.
   c) A weather-based irrigation controller will further reduce the waste of water and help make sure the plants receive water only when it is required.

5. CONCLUSION

The design of the **Nueva High School** has been a collaborative process to ensure that all of the design elements included in this SPAR proposal fit within the context of, and conform to, the goals, guidelines, zoning, and requirements of the Bay Meadows Master Plan and the City of San Mateo.

To ensure the best design outcome for all parties, The Nueva School staff and design team members have acted upon input gathered from the staffs of San Mateo City Planning, Fire and Police Departments, Parks and Recreation, Department of Public Works, and City Neighborhood Improvement and Housing, City consultants including Hexagon (traffic, parking, and circulation review) and Larry Cannon (design review) along with master developer Wilson Meany and their architect, Hart Howerton, and the community.

This collaborative process has improved the project at each step along the way and resulted in a number of material project-design revisions and enhancements to respond to direction from City staff, agencies, appointed and elected officials, and the master developer. Revisions and enhancements achieved throughout this process include:

- **Maximum school enrollment request has been reduced** from a potential carrying capacity of 600 students to an actual maximum plan of 450 students and 60 faculty and staff.
- **Site circulation has been reversed, and the student drop-off area moved** to promote traffic flow and to ensure generous on-site queuing space.
- **55 parking spaces have been added for a total of 125 spaces provided on site.**
- **A Commute, Transportation, and Parking Coordinator will be hired to implement and optimize comprehensive Parking Management Plan.** The addition of spaces, coordinator, plan at inception, and gradual increase in student enrollment and faculty/staff over a seven-year period ensure ample opportunity to optimize and achieve parking goals.
- Rising to Bay Meadows's impressive transit-oriented goals, Nueva High School has developed an **advanced yet practical <u>Transportation Management Plan</u>** that will significantly reduce automobile traffic to the site compared with other high schools in the region.
- **An emergency vehicle access road** is included around the entire site to maximize fire and life safety.
- **Student drop-off and queuing**: All vehicle queuing and passenger loading occurs within the site boundaries.
- **A six-foot fence is provided at the park boundary** abutting the new high school to improve security on the campus, and provide a transparent interface with this public amenity.
- **The western property line of the school site is configured** to maximize efficient parking on the adjoining affordable housing site.
- **The Architectural Feature** is enhanced based on feedback from Hart Howerton and San Mateo Planning Commissioner comments.
- **The eastern elevation of the gymnasium and various landscape features** have been revised to address concerns expressed by Hart Howerton.
- **The Driveway Entry at 28th Avenue** is relocated alongside the park to improve traffic safety and unify the building façade design along 28th Avenue.
- **Added glazing and public access doors at the Theater to** improve the public experience along 28th Avenue.

- **Wall materials and design have been upgraded** at the property line façade facing the future housing parcel to the west for improved visual appearance.