SAN FRANCISCO
PLANNING DEPARTMENT

MEMO

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Categorical Exemption Appeal

203 Cotter Street

DATE: November 28, 2016
TO: Angela Calvillo, Clerk of the Board of Supervisors
FROM: Lisa M. Gibson, Acting Environmental Review Officer – (415) 575-9032
Lana Russell-Hurd – (415) 575-9047
RE: Planning Case No. 2015-003791ENV
Appeal of Categorical Exemption for 203 Cotter Street
HEARING DATE: December 6, 2016
ATTACHMENTS: A. Categorical Exemption Determination
B. Appeal Letter
C. Site Plans and Photographs
D. Memorandum from Jason T. White, P.E. BKF Engineers, June 10, 2016
E. Memorandum from Jason T. White, P.E. BKF Engineers, September 28, 2016.
F. Email and attachments from Amy Chastain, Public Utilities Commission, September 28, 2016.
G. Memorandum from Edward D. Ballman, P.E. Balance Hydrologics, Inc. September 29, 2016

PROJECT SPONSOR: Jessie Elliot, Golden Bridges School, (415) 912-8666
APPELLANT: Nancy Huff on behalf of the Mission Terrace Land Preservation Committee

---

INTRODUCTION

This memorandum and the attached documents are a response to the letter of appeal to the Board of Supervisors (the "Board") regarding the Planning Department's (the "Department") issuance of a Categorical Exemption under the California Environmental Quality Act ("CEQA Determination") for the proposed project at 203 Cotter Street (the "Project").

The Department, pursuant to Title 14 of the CEQA Guidelines, issued a Categorical Exemption for the Project on September 27, 2016 finding that the proposed Project is exempt from the California Environmental Quality Act (CEQA) as a Class 32 categorical exemption.

The decision before the Board is whether to uphold the Department's decision to issue a categorical exemption and deny the appeal, or to overturn the Department's decision to issue a categorical exemption and return the project to Department staff for additional environmental review.

SITE DESCRIPTION & EXISTING USE

The project site is located at 203 Cotter Street, a long and irregular (bowtie) shaped parcel that fronts Cotter Street and extends most of the block towards Santa Rosa Avenue in San Francisco's Outer Mission

neighborhood. The site is roughly 85 feet by 500 feet, with a lot area of approximately 31,000 square feet. The site is located within the RH-1 (Residential-House, One Family) Zoning District. The property is surrounded by two- and three-story single family homes. The project site is located approximately half a mile from the Glen Park BART Station and one mile from the Balboa Park BART Station. The project site is currently occupied by an existing neighborhood agricultural use and contains a greenhouse and two storage sheds.

PROJECT DESCRIPTION

The project proposes to change the use from a neighborhood agricultural use to a school and construct a new kindergarten through 8th grade private Golden Bridges School campus. The new school would enroll up to 200 students and 30 full or part-time staff. The campus would include a two-story building, totaling approximately 15,400 square feet.

The proposed building would be approximately 25 feet in height (excluding a 2 foot 4 inch elevator penthouse) and divided into two sections through a central hallway and would include six courtyard spaces and eight classrooms. The project site is surrounded by an existing 6 to 10 foot tall fence that would remain. The project would include a living roof, living wall[1], permeable pavers, and other bioretention[2] measures and would retain permeable open space in the rear of the property for farming and educational activities (totaling approximately 31,300 square feet of permeable space). The project may also include other stormwater retention features such as pipes, a detention vault, or a detention pond; as determined necessary during detailed design review, and review of the Project's various construction-related permit applications. The project would include a total of 41 bicycle parking spaces, including 33 Class I and eight Class II bicycle parking spaces. Several physical traffic calming features are proposed as part of the project including: the installation of school zone signage and speed limit signs, speed humps along Cotter Street, and the installation of high-visibility crosswalks at the intersections of Cotter Street and San Jose Avenue and Cotter Street and Cayuga Avenue. Construction of the project would require excavation up to six feet below ground surface, resulting in approximately 910 cubic yards of soil excavation. Construction activities would occur over a 14-month period and all construction staging would occur on site. During construction, existing vegetation and one existing tree[3] would be removed, one existing tree would be retained, and up to 21 trees would be planted (including up to three street trees). The proposed project would also include a backup emergency generator.

The exemption determination analyzed two proposed student pick-up/drop-off design variants.

- The first design variant would remove up to three existing on-street parking spaces on Cotter Street and provide an on-site pick-up/drop-off area, which would be accessible through a circular

[1] Living walls are plantings on the exterior walls of buildings that can add detail to a building and streetscape and serve environmental goals as well. Plants can be independent and hang from wall elements or can grow from property line planters or contained raised planter beds integrated with a building's architecture. Guide to the San Francisco Better Streets Plan Chapter 6: Streetscape Elements, December, 2010.

[2] Bioretention is a soil and plant-based retention practice that captures and biologically degrades pollutants as water infiltrates through sub-surface layers containing microbes that treat pollutants. Treated runoff is then slowly infiltrated and recharges the groundwater. These biological processes operate in all infiltration-based strategies. Guide to the San Francisco Better Streets Plan Chapter 6: Streetscape Elements, December, 2010.

[3] The existing tree to be removed is not a significant tree, landmark tree, or street tree as specifically designated in the Urban Forestry Ordinance.

U-shaped driveway with two 12-foot long curb cuts (one existing and one new) on Cotter Street. The proposed on-site drop-off/pick-up area would be one-way in and one-way out through the ingress/egress curb cuts and would accommodate up to five vehicles at a time.

- Under the second design variant, the project would not provide any on-site pick-up/drop-off area and instead would seek approval from San Francisco Municipal Transportation Agency (SFMTA) for the conversion of three on-street parking spaces (60 feet) on Cotter Street to a drop-off/pick-up passenger loading zone adjacent to the project site between the hours of 8:00 a.m. and 5:30 p.m. on school days. Outside these times, the on-street loading spaces would be available for public parking.

The proposed project would operate at full capacity with up to 200 students and 30 staff. It is noted that half[4] of all kindergarteners would meet at off-campus locations each day for educational activities. The school would operate between the months of September and June (10 months), with a summer program offered over a six to eight week period from mid-June through July or mid-August. The proposed school is anticipated to operate from Monday through Friday between the hours of 8:00 a.m. to 5:30 p.m. with regular classroom instruction occurring from 8:30 a.m. through 3:40 p.m. and extended care from 3:40 p.m. to 5:30 p.m. There would be no early morning child care program. The proposed summer program is anticipated to operate between the hours of 9:00 a.m. and 4:00 p.m., Monday through Friday. The school would have a designated student drop-off period between 8:00 a.m. and 8:30 a.m. for students in all grades. All students would be dropped off during the same time period in the morning, but there would be staggered pick-up times generally between the hours of 1:00 p.m. and 5:30 p.m. in the afternoon.

The proposed project would also include extracurricular events that may occur outside the normal weekday business hours of 8:00 a.m. and 5:30 p.m. The extracurricular events would be held on weeknights and weekends and would include community festivals, farm/work days, class/club performances, open houses, committee meetings, and community workshops. These events would occur on a weekly, monthly, or periodic basis throughout the school year, with attendance ranging between 10 and 250 visitors depending on the event type. It is anticipated that up to 53 extracurricular events would occur throughout the academic year as shown in Table 1.

[4] Half of all kindergarteners (16 students) would meet at the Christopher Playground in San Francisco's Glen Canyon Park.

Table 1: Extracurricular Event Schedule by Frequency & Attendance

Representative Event	Day of Week	Hours of Operation	Frequency	Estimated Attendees
Community Festival	Saturday	10:00am-3:00pm	1 per year	250
Farm/Work Day	Saturday	10:00am-3:00pm	2 per year	50
Class/Club Performance	Weeknight	5:00pm-7:00pm	7 per year	30
Open House	Saturday	10:00am-12:00pm	3 per y ear	75
Parent Meetings	Weeknight	7:00pm-9:00pm	10 per year	100
Committee Meeting	Weeknight	7:00pm-9:00pm	20 per year	10
Community Workshop	Saturday	1:00pm-3:00pm	10 per year	50

Source: Golden Bridges School, 2016.

The proposed project includes several measures to improve circulation. The project proposes the development of a Transportation Management Plan (TMP) to guide pick-up and drop-off procedures and to develop multimodal strategies for parents to encourage the use of alternative modes of transportation to the school. The TMP proposes to establish a walking school bus[5] from the Balboa Park playground/swimming pool to the school; improvements to the pedestrian realm, new street safety and traffic calming measures (as mentioned above); a Construction Management Plan; and an Extracurricular Event Traffic and Parking Management Plan.

BACKGROUND

March 25, 2015- Environmental Evaluation Application Filed

On March 25, 2015, David Bushnell on behalf of the project sponsor, Jessie Elliot, (hereinafter "Project Sponsor") filed an application with the Department for CEQA determination for the project described above.

February 11, 2016- Environmental Evaluation Application Filed

On February 11, 2016, Neil Kaye on behalf of the project sponsor, filed a revised application and plan set with the Department for CEQA determination for the project described above.

September 27, 2016- CEQA Clearance

The Department determined that the project was categorically exempt under CEQA Class 32 In-fill Development Projects (CEQA Guidelines Section 15332) and that no further environmental review was required.

[5] A walking school bus is a group of children walking to school with one or more adults. It can be as simple and informal as several families taking turns walking their children to school, or as structured as a route with meeting points, a timetable and regularly rotated schedule of volunteers. The walking school bus model has been established as part of the Safe Routes to School Program. More information is available online at: http://sfsaferoutes.org/2011/09/walking-school-bus-resources/

September 29, 2016- Approval by the Planning Commission
The Planning Commission approved the proposed project by granting a Conditional Use Authorization in accordance with Chapter 31 of the San Francisco Administrative Code.

October 27, 2016- CEQA Appeal Filed
Nancy Huff, on behalf of the Mission Terrace Land Preservation Committee (hereinafter "Appellant"), filed an appeal of the Categorical Exemption Determination. The appeal letter was dated and filed with the Clerk of the Board on October 27, 2016.

November 1, 2016- CEQA Appeal Timely Filed
The Department determined that the appeal of the CEQA determination was timely filed and advised the Clerk of the Board to schedule the CEQA appeal hearing in compliance with Section 31.16(b)(4) of the San Francisco Administrative Code.

CEQA GUIDELINES

Categorical Exemptions

Section 21084 of the California Public Resources Code requires that the CEQA Guidelines identify a list of classes of projects that have been determined not to have a significant effect on the environment and are exempt from further environmental review.

In response to that mandate, the State Secretary of Resources found that certain classes of projects, which are listed in CEQA Guidelines Sections 15301 through 15333, do not have a significant impact on the environment, and therefore are categorically exempt from the requirement for the preparation of further environmental review.

CEQA State Guidelines Sections 15332, or Class 32, allows for in-fill development projects that meet the conditions described in the section.

(a) The project is consistent with applicable general plan designations and policies as well as with applicable zoning designations.

(b) The development occurs within city limits on a site of less than five acres surrounded by urban uses.

(c) The project site has no habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.

Significant Environmental Effects

In determining the significance of environmental effects caused by a project, CEQA State Guidelines Section 15064(f) states that the decision as to whether a project may have one or more significant effects shall be based on substantial evidence in the record of the lead agency. CEQA State Guidelines 15604(f)(5)

offers the following guidance: "Argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumption predicated upon facts, and expert opinion supported by facts."

SAN FRANCISCO ADMINISTRATIVE CODE

Section 31.16(e)(3) of the Administrative Code states: "The grounds for appeal of an exemption determination shall be limited to whether the project conforms to the requirements of CEQA for an exemption."

San Francisco Administrative Code Section 31.16(b)(6) provides that in reviewing an appeal of a CEQA decision, the Board of Supervisors "shall conduct its own independent review of whether the CEQA decision adequately complies with the requirements of CEQA. The Board shall consider anew all facts, evidence and issues related to the adequacy, accuracy and objectiveness of the CEQA decision, including, but not limited to, the sufficiency of the CEQA decision and the correctness of its conclusions."

CONCERNS RAISED AND PLANNING DEPARTMENT RESPONSES

The concerns raised in the October 27, 2016 Appeal Letter (Attachment B to this appeal response) included discussion of items that were incorporated as attachments to the appeal response. This information is part of the project file and has already been considered. The appeal letter itself is two pages and raises five primary concerns as the general basis for the appeal. These five concerns are summarized below as Concerns 1 through 5 and are followed by the Department's responses.

Concern 1: The Appellant states that the project does not meet the conditions of the Class 32 exemption and further environmental review is required.

Response 1: The project meets all conditions of the Class 32 exemption and is appropriately exempt from further environmental review.

The Appellant agrees that the proposed projects meets the conditions for preparation of a Class 32 exemption related to 15332(a), (b), and (c), but states that the project does not meet the conditions of 15332(d) related to traffic and water quality and (e) adequacy of the project site to be served by utilities and public services. The CEQA Determination provides substantial evidence that approval of the project would not result in significant effects relating to traffic and, water quality, and that the project site can be adequately served by all required utilities and public services. The discussion below is a summary of the analysis provided for each of these topics. For further discussion, please see the CEQA Determination and Responses 2 through 5 below.

Traffic

A School Circulation Memorandum[6], which was prepared by a transportation consultant and reviewed and approved by the Department, which analyzed transportation impacts associated with the proposed project. The analysis included site observations and data collection, development of trip generation associated with the proposed project, and evaluated the project specific impacts related to traffic, transit,

[6] CHS Consulting Group, *203 Cotter Street, (Golden Bridge School) Transportation Technical Memorandum*, September 21 2016.

bicycle, pedestrians, parking, emergency access, and construction. The analysis[7] found that transportation impacts related to the project would be less than significant. To further reduce this less-than-significant impact and to help manage vehicle circulation immediately surrounding the project site, especially during the student drop-off and pick-up periods, Golden Bridges School will implement a comprehensive set of circulation and transportation demand management measures, which have been imposed as conditions of project approval through the project's Conditional Use Authorization. The Appellant's concerns regarding parking, enforcement of improvement measures, queuing, and transit impacts are addressed in Responses 3, 4, and 5. Therefore, the proposed project meets the conditions for the preparation of the Class 32 exemption related to 15332(d) with regards to traffic, and the Appellant does not provide any substantial evidence to the contrary.

Water Quality

As stated in the CEQA Determination[8], the project would not have the potential to degrade water quality or contaminate a public water supply. Project-related wastewater and stormwater would flow into the City's combined sewer system and would be treated to standards contained in the City's National Pollutant Discharge Elimination System (NPDES) Permit for the Southeast Water Pollution Control Plant prior to discharge. The Department of Building Inspection (DBI) would review the proposed project's stormwater features for compliance with the California Plumbing Code (Section 16) Nonpotable Rainwater Catchment Systems to ensure compliance with State requirements for water quality. Therefore, the proposed project meets CEQA Guidelines Section 15332(d) with regards to water quality, and the Appellant does not provide any substantial evidence to the contrary.

Utilities and Public Services

As stated in the CEQA Determination[9], the project site is located in a dense urban area where all public services and facilities are available. The proposed project would be connected to existing water, electric, gas, and wastewater services. Prior to receiving a building permit, the project would be reviewed by the Department of Building Inspection (DBI), the San Francisco Fire Department, the San Francisco Public Utilities Commission (SFPUC), and San Francisco Public Works (SFPW) to ensure compliance with City and State regulations concerning building standards, fire protection, sewer connections, and hydrology. Therefore, the proposed project would meet CEQA Guidelines Section 15332(e), and the Appellant does not provide any substantial evidence to the contrary.

Concern 2: The Appellant states that there are unusual circumstances within the Mission Terrace neighborhood related to stormwater and flooding, and that the proposed project would result in a significant impact related to flood hazards.

Response 2: The Appellant has not provided substantial evidence that there are unusual circumstances that present a reasonable possibility of a significant effect related to flood hazards.

[7] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 6-13.
[8] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 18-19.
[9] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 19.

The determination of whether a project is eligible for a categorical exemption is based on a two-step analysis: (1) determining whether the project meets the requirements of the categorical exemption, and (2) determining whether there are unusual circumstances at the site or with the proposal that would result in a reasonable possibility of a significant effect. The project types that are listed in CEQA Guidelines Sections 15301 through 15333 have been determined not to have a significant environmental effect. As discussed in the CEQA Determination and in this appeal response, the project meets all the conditions of Section 15332, or Class 32. CEQA Guidelines Section 15300.2(c) states that an exemption shall not be used where there is a reasonable possibility that the activity would have a significant effect on the environment due to unusual circumstances. There are no conditions associated with the proposed project that would suggest the possibility of a significant environmental effect under this exception because: (1)the project site is located in a flood prone area where the City has established review procedures to address existing hydrologic conditions, (2) the proposed project would be required to meet the design standards in the Stormwater Management Ordinance, and (3) the San Francisco Public Utilities Commission (SFPUC) staff has modeled hypothetical flood scenarios for the site, which confirm that under those scenarios flood hazards would not be exacerbated with the proposed project.

Planning Director's Bulletin No. 4 for Review of Projects in Identified Areas Prone to Flooding

As stated in the CEQA Determination[10], the project site is located within the historical Islais Creek, and on (SFPUC) Block of Interest[11]. A Block of Interest is an area prone to historical flooding. There are approximately 23,800 parcels within SFPUC Block of Interest Areas in San Francisco, and the Planning Department has issued Planning Director Bulletin No. 4 *Review of Projects in Identified Areas Prone to Flooding* establishing procedures for early consultation and review of projects with SFPUC and/or PW to adequately address site-specific flooding concerns. The project site, being in a topographically low area, and with no downhill slope for surface runoff from the adjacent Cotter Street, requires attention to properly drain stormwater during major storms. The existing flooding conditions at the project site are not considered unusual as these areas are known and there is a specific review process in place to address flooding concerns in these areas during the permit review process. As per the requirements of the Planning Director Bulletin No. 4, the Planning Department referred the plan set and project information to Public Works, Bureau of Engineering, Hydraulics, who have reviewed the project and did not raise any concerns which could not be addressed during the permit review process.

Stormwater Management Ordinance

As stated in the CEQA Determination[12], the proposed project would create or replace more than 5,000 square feet of impervious surface, therefore the project is subject to SFPUC's San Francisco Stormwater Management Ordinance. Compliance with this ordinance and attendant Stormwater Management Requirements and Design Guidelines will require the project to maintain or reduce the existing volume and rate of stormwater runoff discharged from the project site. To achieve this, the proposed project would be required to implement and install appropriate stormwater management systems that retain

[10] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 23-24.
[11] San Francisco Planning Department, *Planning Director Bulletin No.4 Review of Projects in Identified Areas Prone to Flooding*, April 1, 2007.
[12] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 23-24.

runoff on-site, promote stormwater reuse, and limit site discharges before entering the combined sewer collection system.

As stated in the CEQA Determination[13], a Conceptual Stormwater Management Approach memorandum[14] was prepared to analyze the proposed stormwater management design for the project. As discussed in that memorandum, the project would minimize disruption of natural hydrology by implementing Low Impact Design approaches. The proposed project would include several stormwater management measures that would achieve a total of 31,300 sf of pervious surface area on-site, including pervious pavers, a green roof, a living wall, bioretention planters, and permeable rear yard open space. During the permit review process, additional stormwater retention measures that may be required by the SFPUC, (DBI), or (SFPW) could include additional pipes, a detention vault, or a detention pond, the environmental effects of which have been considered in the CEQA Determination. As currently proposed, all non-active roof space would be vegetated where feasible. All roof areas, vegetated or not, would be routed to a bioretention planter. These measures would reduce impervious surfaces and increase stormwater infiltration on-site. The memorandum found that the project would comply with the two-year 24-hour design storm that is required by the Stormwater Management Ordinance. This memorandum will serve to guide the preparation of a Stormwater Control Plan for submittal to the SFPUC. Prior to issuance of building permits, the project is required to submit a Stormwater Control Plan demonstrating compliance with the requirements of the Stormwater Management Requirements and Design Guidelines as required under the Stormwater Management Ordinance.

The Appellant provided two hydrologic and water quality review letters from Kamman Hydrology & Engineering, Inc. (KHE). KHE contends that the construction of the project would increase flood hazards to surrounding properties as well as increase human exposure to raw sewage during flood events. KHE estimates that there is approximately 6,000 cubic feet of flood water storage below the existing project site, and implementation of the project would result in forcing this water onto surrounding properties that otherwise is detained on the project site during flood events. KHE states that the project's conceptual stormwater management approach overestimates the true amount of stormwater infiltration and storage at the site due to shallow groundwater.

As part of the administrative record to the project, BKF, the hydraulic consultant for the proposed project, provided an additional memorandum[15] to address the concerns that were raised by KHE. As part of the required permit process, BKF would prepare a hydrologic and hydraulic analysis to determine if an onsite detention system is necessary to reduce runoff downstream. If it is determined that an onsite detention system is required, the total detention volume estimated by KHE of 6,000 cubic feet could be provided onsite by various methods, including a detention pond, a large diameter pipe, or an underground vault. As mentioned above, these features have been included in the project description and analyzed in the CEQA determination should the SFPUC determine they are necessary during detailed design review. The memorandum demonstrates that the project could feasibly attain compliance with the Stormwater Management Ordinance even if infiltration is infeasible due to high groundwater or poorly

[13] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 23-24.
[14] BKF, *Golden Bridges School - 203 Cotter Street Conceptual Stormwater Management Approach*, June 10, 2016.
[15] BKF, Response Memorandum, September 28, 2016.

draining soils. In support of BKF's analysis that attests that Best Management Practices could achieve Stormwater Management Ordinance compliance, the project sponsor requested and conducted a peer review[16] of the proposed stormwater management approach. While acknowledging that KHE raises valid points related to the limited capacity of the Cayuga Avenue sewer system in the 25-year and greater storms[17], the existing ability of the site to detain runoff at low-points, and the potentially high ground water at the site, the peer review concluded that BKF's analysis has recognized and adequately addressed these conditions.

SFPUC Hydrologic Modeling

Furthermore, as part of the administrative record to the project, the SFPUC conducted a case study simulation[18] of the project site to evaluate how the sewer system would function under different dry and wet weather conditions using hydrologic modeling. Three different modeling scenarios for the 203 Cotter site were developed for the case study: (1) existing conditions in which the project site is mostly pervious; (2) a hypothetical future condition in which the project site impervious surface area was unchanged but the service population was increased to 300 people; and (3) a hypothetical future condition in which the project site's impervious surface area increased to 100% but the service population was unchanged. The model simulates two-dimensional surface flows using LiDAR data, and it is not intended to simulate very small and localized changes in topography, such as project site, street or sidewalk modifications that could have very localized effects. In all of the model simulations, the topography of the site remained unchanged and all stormwater runoff from the parcel was set to flow to the Cotter Street sewer. Each of these scenarios was run in the model for 5, 25, and 100 year storm return intervals, each with 3 hour durations.

The model results indicate that for all modeled scenarios, under the five-year storm, stormwater and wastewater would be below the hydrologic grade line; meaning that localized flooding would not occur. Under the 25-year and 100-year storms, flooding would occur under all three modeled scenarios, including the scenario in which the project site is mostly pervious, which is representative of existing conditions. The model scenarios indicate that there is no or little difference between the existing flooding conditions (stormwater and wastewater above the hydrologic grade line) and the increased wastewater from a service population of 300 scenario or the scenario in which 100% of the site was developed with impervious surfaces. While these model scenarios do not evaluate the proposed project, they do evaluate conservative outcomes with regard to flooding, of which the actual effects of the proposed project would be less. Specifically, the model scenarios analyzed a population greater than the proposed project and a scenario with more impervious surface area than the proposed project, resulting in a conservative analysis.

Furthermore, in the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015[19], the California Supreme Court held that CEQA does not generally require lead agencies

[16] Balance Hydrologics Inc, Memorandum, September 29, 2016.
[17] SFPUC Model shows stormwater from Cayuga Street flow north on Cotter Street in 25-year and greater storms.
[18] Amy Chastian, SFPUC Email, September 28, 2016.
[19] *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369. Opinion Filed December 17, 2015.

to consider how existing hazards or conditions might impact a project's users or residents, except where the project would significantly exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing or future flood hazard area are not considered impacts under CEQA unless the project would significantly exacerbate the flood hazard. As shown from the analysis above, the proposed project would not exacerbate future flood hazards at the project site and its surroundings.

In summary, the Department does not find any unusual circumstances related to the project site or the project proposal that could result in a significant environmental effect. There are numerous areas in the City that are located in flood prone areas and the City has developed review procedures to adequately address flooding concerns in these areas. Pursuant to the Stormwater Management Ordinance, the project sponsor is required to have an approved Preliminary Stormwater Control Plan from the SFPUC prior to the issuance of a site or building permit from DBI. As discussed above, the project sponsor's preliminary stormwater management approach represents an option for compliance at the conceptual stage. The conceptual approach was presented to and discussed with SFPUC staff and Public Works staff who find that the proposed design measures are adequate to achieve compliance with the Stormwater Management Ordinance. A peer review of the Conceptual Stormwater Management Approach confirms that there are practical means of addressing the existing flooding conditions at the project site and the project sponsor will employ such approaches to address on-site flood conditions appropriately. Therefore, the concerns raised by the Appellant would be addressed and resolved through the Stormwater Control Plan approval process in coordination with SFPUC and Public Works. If determined necessary during that review, the proposed project may be required to include additional stormwater management measures. Furthermore, SFPUC modeling confirms that the project would not significantly exacerbate existing flood hazards or conditions on-site. For these reasons, the proposed project would not result in significant impacts related to hydrology and water quality.

Concern 3: The Appellant states that the proposed trip generation is incorrect and the number of vehicle trips is too low.

Response 3: The Appellant has not provided any evidence that the trip generation is inaccurate.

The Planning Department utilized trip generation estimates consistent with other proposed school projects informed by trip surveys. A travel mode survey was conducted to better understand the future travel demand for the proposed project; travel mode surveys were distributed to both parents/guardians of enrolled students for the fall 2015 school year and faculty/staff members, who would be relocating to the project site once the project is complete. The survey included questions on the planned mode choice to the project site and the expected pick-up and drop-off time period.

The survey results showed that respondents indicated that a high proportion would carpool. Recognizing that the survey results show a substantially higher share of carpool rate than other similar K-8 schools in San Francisco, the mode split rates were adjusted to be more conservative by increasing the percentage of parents driving one student to the school and reducing the percentage of carpools. Furthermore, in an effort to provide a more conservative analysis, the project site was assumed to be vacant for trip

generation purposes, meaning that no credits for existing trips to the site were subtracted from the total number of new school or event related trips reported in the CEQA Determination. However, the project site has been actively occupied by farm workers, farm volunteers, and Golden Bridges teachers, staff, and students. Therefore, the trip generation rates estimated for the proposed project are appropriately conservative (i.e., worst case) and the Appellant has not provided any substantial evidence as to why they believe the vehicle trip generation rates to be low.

Concern 4: The Appellant states that the proposed transportation improvement measures are not enforceable and are unrealistic. The Appellant states that a walking school bus located 0.7 miles away from Cotter Street is not sensible for parents, especially in rainy or inclement weather. The Appellant refers to another measure that assigns pick-up/ drop-off times, which they claim is not enforceable.

Response 4: The proposed transportation measures are feasible and enforceable. The Appellant has not provided any evidence to the contrary.

As explained in the CEQA Determination[20], transportation impacts were found to be less-than-significant. The project description includes several transportation measures which are designed to further reduce the already less-than-significant transportation impact. Furthermore, the sponsor agreed to implement the proposed project's transportation improvement measures and these measures were added as conditions of approval to the Conditional Use Authorization. These measures are therefore enforceable by the Planning Department.

The Appellant states that the transportation improvement measures are unrealistic and states that a walking school bus located 0.7 miles away from Cotter Street is not sensible for parents, especially in rainy or inclement weather. The types of transportation improvement measures included as part of the project are typical of school projects in the City of San Francisco. The San Francisco Safe Routes to Schools Partnership, led by the San Francisco Department of Public Health, works to support and encourage families to walk to school every day. Walking school buses have been implemented in over 35 schools in the San Francisco school district as part of the Safe Routes to School Program.[21] Thus, the walking school bus measure is not unrealistic, but rather commonplace, given the context of this program throughout San Francisco school systems.

The Appellant refers to another measure that assigns pick-up/ drop-off times for students, which they claim is not enforceable. School projects regularly assign staggered drop-off and pick-up times as a means of managing traffic and preventing vehicle queues. Many other school projects have assigned drop-off and pick-up times, such as Presidio Knolls, Alt School, and the International School to name a few. The Planning Department has not received any concerns regarding implementation of these measures. The Appellant has not presented evidence demonstrating that the project would not be able to utilize these measures and that the Planning Department would not be able to enforce these measures.

Concern 5: The Appellant states that there is a lack of parking capacity, which will result in parents circling to find parking creating more traffic. The Appellant states that the proposed project's vehicle

[20] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 6-13.
[21] Safe Routes to School Program. More information is available at http://sfsaferoutes.org/

trips would result in vehicle queues that would back-up on Cotter Street and would block the Muni J line on San Jose Ave.

Response 5: The Appellant has not provided substantial evidence that a lack of parking capacity would result in vehicle queues that would then result in a significant impact to traffic or transit.

Parking

The Appellant states that parking capacity is nearly 100 percent full. As explained in the CEQA Determination[22], the project would remove three on-street parking spaces to provide a new curb cut and U-shaped driveway to accommodate the five off-street parking spaces under the first driveway design variant. Under the second driveway design variant, the project would convert three on-street parking spaces along Cotter Street to a 60 foot passenger loading zone (white zone) between the hours of 8:00 a.m. and 5:30 p.m.

Existing parking supply and occupancy conditions were observed within the project study area (bounded by San Jose Avenue to the north, Cayuga Avenue to the south, Theresa Street to the east, and Santa Rosa Avenue to the west). There are a total of 111 on-street parking spaces in the study area. During the morning period, 81 percent were observed to be utilized. Parking demand is relatively constant throughout the day, as the survey findings indicate that during the afternoon period, overall parking utilization is about 83 percent. There are no public, off-street parking facilities in the vicinity of the project site. On-street parking demand within the project area is generally well-utilized; however, the survey results indicate that parking occupancies are not above practical capacity (85 percent for on-street facilities). Based on these findings, parking conditions are not constrained during the course of a typical weekday and on-street parking is generally available and these available spaces could accommodate some of the parking demand generated by the proposed project.

A parking shortfall does not necessarily constitute a significant effect on the environment. Furthermore, the transportation analysis accounts for potential secondary effects, such as cars circling and looking for a parking space in areas of limited parking supply, by assuming that all drivers would attempt to find parking at or near the project site and then seek parking farther away if convenient parking is unavailable. The secondary effects of drivers searching for parking is typically offset by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area, and thus choose to reach their destination by other modes (i.e. walking, biking, transit, taxi). If this occurs, any secondary environmental impacts that may result from a parking shortfall in the vicinity of the proposed project would be minor, and the traffic assignments used in the transportation analysis, as well as in the associated air quality, noise, and pedestrian safety analyses, reasonably addresses potential secondary effects.

Although no significant impacts were identified, improvement measures such as encouraging the use of other transportation modes to the site were included in the project and would reduce vehicle trips and thereby parking demand. Furthermore, the project is pursuing negotiations with nearby facilities for the use of off-street parking.

[22] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 6-13.

Transit

The Appellant states that the project's vehicle trips will back-up on Cotter Street on to San Jose Avenue at which point the Muni J line would be blocked. As explained in the CEQA Determination[23], the proposed project's 54 vehicle trips during the morning drop-off and 99 vehicle trips during the afternoon pick-up period would be staggered and would be accommodated in the U-Shaped driveway (first design variant) and in the on-street loading zone (second design variant), preventing queues from forming. Also, as improvement measures the project would implement queue abatement strategies and monitoring of the loading zone. The highest amount of vehicle trips generated by extracurricular events would be from the annual community festival, which would result in 126 vehicle trips. These vehicle trips would be generated from various neighborhoods in San Francisco, as such, it would be highly unlikely that all of these trips would arrive simultaneously. The community festival would be held once per year on Saturday from 10:00 AM to 3:00 PM. This event is outside the typical weekday PM Peak period for which traffic volumes are at their worst. An improvement measure to develop extracurricular event traffic and parking management plan was included in the project description and identified several measures to encourage the use of alternative modes of transportation to the site during events and to manage and discourage queuing and parking on Cotter Street during events. These improvement measures were analyzed as part of the project description in the CEQA Determination and are included as conditions of approval for the project. The Appellant has not presented substantial evidence demonstrating that the project would result in vehicle queues that would impact transit.

CONCLUSION

No substantial evidence supporting a fair argument that a significant environmental effect may occur as a result of the project has been presented that would warrant preparation of further environmental review. The Department has found that the proposed project is consistent with the cited exemption. The Appellant has not provided any substantial evidence or expert opinion to refute the conclusions of the Department.

For the reasons stated above and in the September 27, 2016 CEQA Determination, the project complies with the requirements of CEQA and is appropriately exempt from environmental review pursuant to the cited exemption. The Department therefore recommends that the Board uphold the CEQA Categorical Exemption Determination and deny the appeal of the CEQA Determination.

[23] San Francisco Planning Department, *Categorical Exemption Determination*, September 27, 2016, p. 6-13.

Attachment A

SAN FRANCISCO
PLANNING DEPARTMENT

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Certificate of Determination
Exemption from Environmental Review

Case No.:	**2015-003791ENV**
Project Title:	**203 Cotter Street**
Zoning:	Residential –House, One Family (RH-1) 40-X Height and Bulk District
Block/Lot:	6795A/029
Lot Size:	30,744 square feet (0.71 acres)
Project Sponsor:	Jessie Elliot, Golden Bridge School (415) 912-8666
Staff Contact:	Lana Russell-Hurd– (415) 575-9047 lana.russell@sfgov.org

PROJECT DESCRIPTION:

The project site (Assessors Block 6795A, Lot 029) is located on a parcel bounded by Cotter Street, Cayuga Avenue, Santa Rosa Avenue, Capistrano Avenue in San Francisco's Outer Mission Neighborhood. The project site is an existing neighborhood agricultural use and contains a greenhouse and two storage sheds. The parcel size is approximately 31,000 square feet (0.71 acres). The project proposes to change the use from a neighborhood agricultural use to a school and construct a new kindergarten through 8th grade private Golden Bridges School campus. The new school would enroll up to 200 students and 30 full or part-time staff. The campus would include a two-story building, totaling approximately 15,400 square feet. The proposed site plan is shown on Figure 1.

EXEMPT STATUS:

Categorical Exemption, Class 32 (California Environmental Quality Act [CEQA] Guidelines Section 15332)

DETERMINATION:

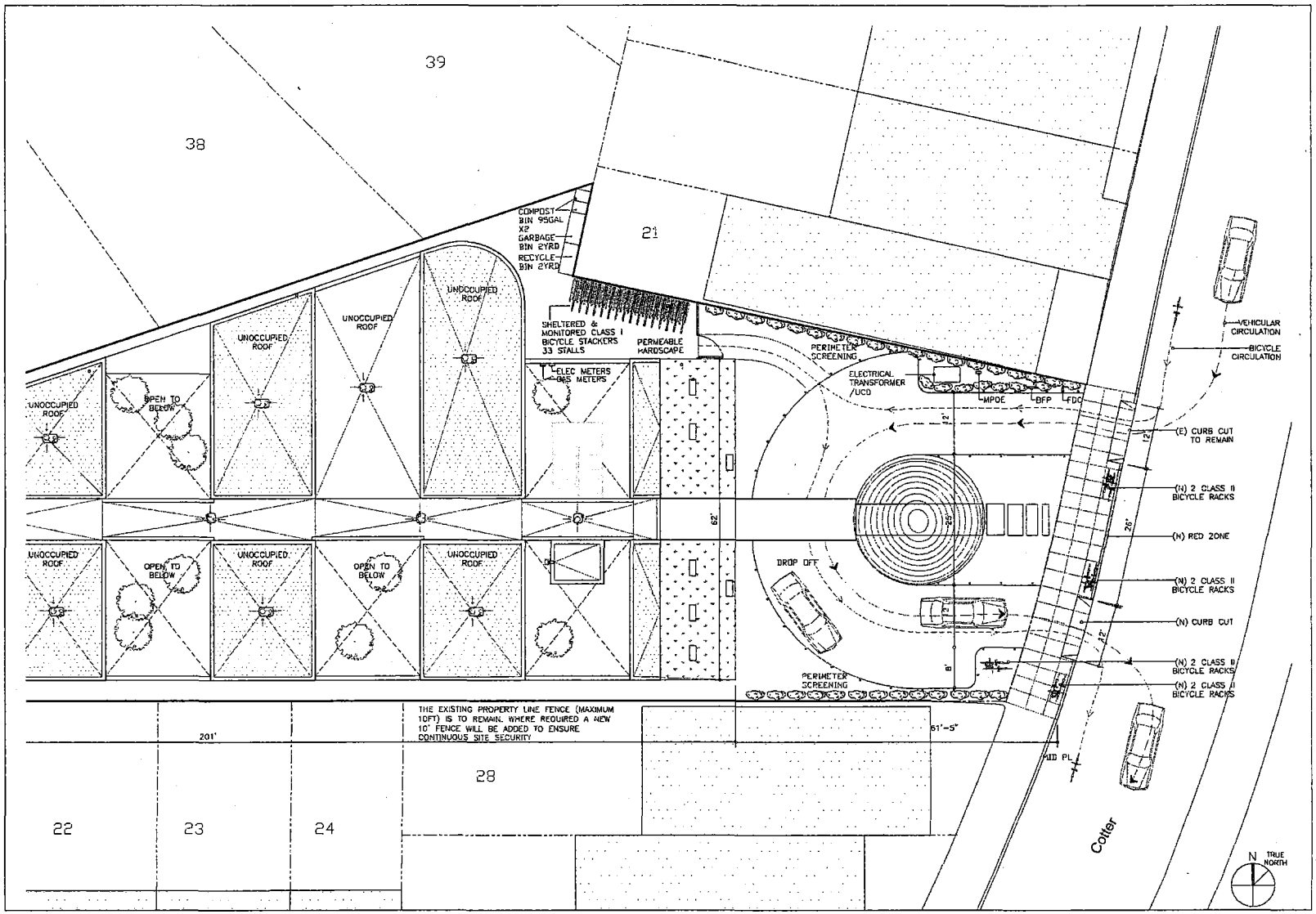
I do hereby certify that the above determination has been made pursuant to State and local requirements.

for Lisa M. Gibson
Acting Environmental Review Officer

September 27, 2016
Date

cc: **Jessie Elliot,** Project Sponsor
Nancy Tran, Current Planner
Supervisor **John Avalos,** District 11 (via Clerk of the Board)
Outer Mission and Citywide Distribution Lists
Virna Byrd, M.D.F.

Figure 1 – Proposed Site Plan



PROJECT DESCRIPTION (continued):

The proposed building would be approximately 25 feet in height (excluding a 2 foot 4 inch elevator penthouse) and divided into two sections through a central hallway and would include six courtyard spaces and eight classrooms. The project site is surrounded by an existing 6 to 10 foot tall fence that would remain. The project would include a living roof, living wall[1], permeable pavers, and other bioretention[2] measures and would retain permeable open space in the rear of the property for farming and educational activities (totaling approximately 31,300 square feet of permeable space). The project may also include other stormwater retention features such as pipes, a detention vault, or a detention pond; as determined necessary during detailed design review. The project would include a total of 41 bicycle parking spaces, including 33 Class I and eight Class II bicycle parking spaces. Several physical traffic calming features are proposed as part of the project including: the installation of school zone signage and speed limit signs, speed humps along Cotter Street, and the installation of high-visibility crosswalks at the intersections of Cotter Street and San Jose Avenue and Cotter Street and Cayuga Avenue. Construction of the project would require excavation up to six feet below ground surface, resulting in approximately 910 cubic yards of soil excavation. Construction activities would occur over a 14-month period and all construction staging would occur on site. During construction, existing vegetation and one existing tree[3] would be removed, one existing tree would be retained, and up to 21 trees would be planted (including up to three street trees). The proposed project would also include a backup emergency generator.

This exemption determination analyzes two proposed student pick-up/drop-off design variants.

- The first design variant, as shown in Figure 1, would remove up to three existing on-street parking spaces on Cotter Street and provide an on-site pick-up/drop-off area, which would be accessible through a circular U-shaped driveway with two 12-foot long curb cuts (one existing and one new) on Cotter Street. The proposed on-site drop-off/pick-up area would be one-way in and one-way out through the ingress/egress curb cuts and would accommodate up to five vehicles at a time.

- Under the second design variant, the project would not provide any on-site pick-up/drop-off area and instead would seek approval from San Francisco Municipal Transportation Agency (SFMTA) for the conversion of three on-street parking spaces (60 feet) on Cotter Street to a drop-off/pick-up passenger loading zone adjacent to the project site between the hours of 8:00 a.m. and 5:30 p.m. on school days. Outside these times, the on-street loading spaces would be available for public parking.

---

[1] Living walls are plantings on the exterior walls of buildings that can add detail to a building and streetscape and serve environmental goals as well. Plants can be independent and hang from wall elements or can grow from property line planters or contained raised planter beds integrated with a building's architecture. Guide to the San Francisco Better Streets Plan Chapter 6: Streetscape Elements, December, 2010.

[2] Bioretention is a soil and plant-based retention practice that captures and biologically degrades pollutants as water infiltrates through sub-surface layers containing microbes that treat pollutants. Treated runoff is then slowly infiltrated and recharges the groundwater. These biological processes operate in all infiltration-based strategies. Guide to the San Francisco Better Streets Plan Chapter 6: Streetscape Elements, December, 2010.

[3] The existing tree to be removed is not a significant tree, landmark tree, or street tree as specifically designated in the Urban Forestry Ordinance.

The proposed project would operate at full capacity with up to 200 students. It is noted that half[4] of all kindergarteners would meet at off-campus locations each day for educational activities. The school would operate between the months of September and June (10 months), with a summer program offered over a six to eight week period from mid-June through July or mid-August. The proposed school is anticipated to operate from Monday through Friday between the hours of 8:00 a.m. to 5:30 p.m. with regular classroom instruction occurring from 8:30 a.m. through 3:40 p.m. and extended care from 3:40 p.m. to 5:30 p.m. There would be no early morning child care program. The proposed summer program is anticipated to operate between the hours of 9:00 a.m. and 4:00 p.m., Monday through Friday. The school would have a designated student drop-off period between 8:00 a.m. and 8:30 a.m. for students in all grades. All students would be dropped off during the same time period in the morning, but there would be staggered pick-up times generally between the hours of 1:00 p.m. and 5:30 p.m. in the afternoon.

The proposed project would also include extracurricular events that may occur outside the normal weekday business hours of 8:00 a.m. and 5:30 p.m. The extracurricular events would be held on weeknights and weekends and would include community festivals, farm/work days, class/club performances, open houses, committee meetings, and community workshops. These events would occur on a weekly, monthly, or periodic basis throughout the school year, with attendance ranging between 10 and 250 visitors depending on the event type. It is anticipated that up to 53 extracurricular events would occur throughout the academic year as shown in Table 1.

Table 1: Extracurricular Event Schedule by Frequency & Attendance

Representative Event	Day of Week	Hours of Operation	Frequency	Estimated Attendees
Community Festival	Saturday	10:00am-3:00pm	1 per year	250
Farm/Work Day	Saturday	10:00am-3:00pm	2 per year	50
Class/Club Performance	Weeknight	5:00pm-7:00pm	7 per year	30
Open House	Saturday	10:00am-12:00pm	3 per y ear	75
Parent Meetings	Weeknight	7:00pm-9:00pm	10 per year	100
Committee Meeting	Weeknight	7:00pm-9:00pm	20 per year	10
Community Workshop	Saturday	1:00pm-3:00pm	10 per year	50

Source: Golden Bridges School, 2016.

The proposed project includes several measures to improve circulation, as provided in Attachment A. The project proposes the development of a Transportation Management Plan (TMP) to guide pick-up and drop-off procedures and to develop multimodal strategies for parents to encourage the use of alternatives modes of transportation to the school. The TMP proposes to establish a walking school bus[5] from the Balboa Park playground/swimming pool to the school; improvements to the pedestrian realm, new street

[4] Half of all kindergarteners (16 students) would meet at the Christopher Playground in San Francisco's Glen Canyon Park.

[5] A walking school bus is a group of children walking to school with one or more adults. It can be as simple and informal as several families taking turns walking their children to school, or as structured as a route with meeting points, a timetable and regularly rotated schedule of volunteers. The walking school bus model has been established as part of the Safe Routes to School Program. More information is available online at: http://sfsaferoutes.org/2011/09/walking-school-bus-resources/

safety and traffic calming measures (as mentioned above); a Construction Management Plan; and an Extracurricular Event Traffic and Parking Management Plan.

Project Setting. The project site is a long and irregular (bowtie) shaped parcel that fronts Cotter Street and extends most of the block towards Santa Rosa Avenue in San Francisco's Outer Mission neighborhood. The site is roughly 85 feet by 500 feet. The site is located in a residential area and is surrounded by two- and three-story single family homes over garages. The project site is located approximately half a mile from the Glen Park BART Station and one mile from the Balboa Park BART Station. There are no known projects in the vicinity that could combine with the proposed project to result in cumulative impacts.

Project Approvals

The proposed project would require a Condition Use Authorization to establish an elementary and secondary school within a Residential District (Planning Code Sections 303 and 209.1) and permits from the Department of Building Inspection for the construction of the proposed project.

Approval Action: The Conditional Use Authorization from the Planning Commission is the Approval Action for the proposed project. The Approval Action date establishes the start of the 30-day appeal period for this CEQA exemption determination pursuant to Section 31.04(h) of the San Francisco Administrative Code.

EXEMPT STATUS (continued):

CEQA State Guidelines Section 15332, or Class 32, provides an exemption from environmental review for in-fill development projects that meet five specific conditions. As discussed below, the proposed project satisfies the terms of the Class 32 exemption.

a) *The project is consistent with applicable general plan designations and policies as well as with applicable zoning designations.*

The San Francisco General Plan establishes objectives and policies to guide land use decisions related to the physical development of San Francisco and is composed of ten elements, each of which addresses a particular topic that applies citywide: air quality; arts; commerce and industry; community facilities; community safety; environmental protection; housing; recreation and open spaces; transportation; and urban design. The Plan provides general policies to guide land use decisions, and contains some policies that relate to physical environmental issues. The proposed project is consistent with applicable general plan designations and policies. The site is located within the RH-1 Zoning District. The proposed project would construct a 15,400 square foot kindergarten through 8th grade private Golden Bridges School campus. Educational uses within the RH-1 District may be authorized through the provisions of a Conditional Use Authorization. The project site is located in the 40-X Height and Bulk District, where the maximum allowed height of a building is 40 feet. The proposed building would conform to this zoning, with a height of approximately 25 feet (excluding a 2 foot, 4 inch elevator penthouse). Thus, the proposed project would be consistent with applicable general plan zoning designations.

b) *The development occurs within city limits on a site of less than five acres surrounded by urban uses.*

The 30,744 square-foot (0.71 acres) project site is located within a developed area of San Francisco and the surrounding lots are developed with residential uses. The proposed project, therefore, would be properly characterized as a development of less than five acres, completely surrounded by urban uses.

c) *The project site has no habitat for endangered, rare or threatened species.*

The project site is an existing neighborhood agricultural use that includes row crops, trees, and shrubs. The project site is completely surrounded by residential uses and within a developed urban area of San Francisco with no significant riparian corridors, estuaries, marshes, wetlands, or any other potential wildlife habitat that might contain endangered, rare, or threatened species.

d) *Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.*

Transportation

A School Circulation Memorandum[6] was prepared by a consultant to analyze transportation impacts associated with the proposed project. The following discussion summarizes the results from this analysis.

On March 3, 2016, in anticipation of the future certification of revised CEQA Guidelines pursuant to Senate Bill 743, the San Francisco Planning Commission adopted State Office of Planning and Research's recommendation in the *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*[7] to use the Vehicle Miles Traveled (VMT) metric instead of automobile delay to evaluate the transportation impacts of projects (Resolution 19579). (Note: the VMT metric does not apply to the analysis of impacts on non-automobile modes of travel such as riding transit, walking, and bicycling.) Accordingly, this categorical exemption does not contain a separate discussion of automobile delay (i.e., traffic) impacts. Instead, a VMT and induced automobile travel impact analysis is provided within.

VMT and Induced Vehicle Travel

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development at great distance from other land uses, located in areas with poor access to non-private vehicular modes of travel, generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

---

[6] CHS Consulting Group, 203 Cotter Street (Golden Bridges School) Transportation Technical Memorandum, September 21, 2016. This document (and all other documents cited in this report, unless otherwise noted), is available for review at 1650 Mission Street, Suite 400, San Francisco, CA, as part of Case No. 2015-003791ENV.

[7] This document is available online at: https://www.opr.ca.gov/s_sb743.php.

Given these travel behavior factors, San Francisco has a lower VMT ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the City, expressed geographically through transportation analysis zones (TAZs), have lower VMT ratios than other areas of the City. The Planning Department has prepared a Geographic Information System database (the Transportation Information map) with current and projected 2040 per capita VMT figures for all TAZs in the City, in addition to regional daily average figures.[8]

A project would have a significant effect on the environment if it would cause substantial additional VMT. The State Office of Planning and Research's (OPR) *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*[9] ("proposed transportation impact guidelines") recommend screening criteria to identify types, characteristics, or locations of projects that would not result in significant impacts to VMT. If a project meets one of the three screening criteria provided (Map-Based Screening, Small Projects, or Proximity to Transit Stations), then it is presumed that VMT impacts would be less than significant for the project and a detailed VMT analysis is not required. Map-Based Screening is used to determine if a project site is located within a TAZ in the City that exhibits low levels of VMT; Small Projects are projects that would generate fewer than 100 vehicle trips per day; and the Proximity to Transit Stations criterion includes projects that are within a half mile of an existing major transit stop, have a floor area ratio (FAR) of greater than or equal to 0.75, vehicle parking that is less than or equal to that required or allowed by the Planning Code without conditional use authorization, and are consistent with the applicable Sustainable Communities Strategy.

According to the Transportation Information Map, the existing average daily VMT per capita for office (used to approximate school uses)[10] is 10.9 for the transportation analysis zone the project site is located in, 910. This is 33 percent below the existing regional average daily VMT per employee of 16.2. Given the project site is located in an area where existing VMT is more than 15 percent below the existing regional average, the proposed school would not result in substantial additional VMT. Future 2040 average daily VMT per employee for office use is 10.0 for the transportation analysis zone, 910. This is 31 percent below the future 2040 regional average daily VMT per employee of 14.5.

The proposed project is not a transportation project. However, the first design variant would create a new 12 foot curb cut on Cotter Street. The second design variant would create a 60 foot white passenger loading zone on the full length of the project frontage. The proposed project would also include Class I and Class II bicycle parking. These features fit within the general types of projects that would not substantially induce automobile travel. Therefore, VMT impacts from the project would not be significant.

---

[8] San Francisco Planning Department *Transportation Information Map*, accessed August 10, 2016 at: http://sftransportationmap.org.

[9] Governor's Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, January 20, 2016. Accessed August 10, 2016 at: https://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_-Proposal_January_20_2016.pdf.

[10] Per the San Francisco Planning Department. Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation, K-12 schools should be treated as office for screening and analysis. This is based on the SFCHAMP Model.

Trip Generation

Travel demand resulting from the project was based on a School Circulation Memorandum. The proposed project would generate up to 189 daily vehicle trips (153 student trips and 36 staff trips). These vehicle trips include about 54 vehicle trips during the morning drop-off period and 99 vehicle trips during the afternoon pick-up period. The difference between a.m. and p.m. vehicle trips is due to off-site drop-off for 84 students in Grades 5 through 8 proposed to occur at the Balboa Park playground/swimming pool as part of the morning walking school bus program. The students would be dropped off and would depart in the Walking School Bus between 8:00 a.m. and 8:30 a.m. Balboa Park swimming pool's operating hours are from 9:00 a.m. to 5:00 p.m. Therefore, the walking school bus would not affect swimming pool operations. Furthermore, 16 kindergarten students would be drop-off and picked-up off-site at the Christopher Playground. The project would also result in 36 daily vehicle trips from faculty/staff members, which would occur before and after school hours and outside of student drop-off/pick-up periods. The proposed project is also estimated to generate a total (student and staff) of 38 daily transit trips, 41 daily bicycle trips, 125 daily walking trips, and 17 daily trips by other modes (e.g., Uber, Lyft, other rideshare services, taxi, etc.), respectively. Table 2 depicts the trip generation for the proposed project.

Table 2 – Estimated Daily Trip Generation

	Student				Faculty/Staff		Total	
Person Trips by Mode								
Mode	Person Trips (AM)	Percent (AM)	Person Trips (PM)	Percent (PM)	Person Trips	Percent	Person Trips	Percent
Drive Alone	45	24%	83	45%	8	13%	136	32%
Carpool	18	10%	33	18%	20	33%	71	17%
Transit	9	5%	17	9%	12	20%	38	9%
Bike	11	6%	20	11%	10	17%	41	10%
Walk	95[1]	52%	20	11%	10	17%	125	29%
Other (e.g. rideshare, taxi, etc.)	6	3%	11	6%	0	0%	17	4%
Total	184[1]	100%	184[1]	100%	60	100%	428[1]	100%
Vehicle Trips								
Arrivals	Vehicle Trips[2]		Percent[3]		Vehicle Trips[2]	Percent[3]	Vehicle Trips[2]	Percent[3]
Morning	54		35%		18	50%	72	38%
Afternoon	99		65%		18	50%	117	62%
Total	153		100%		36	100%	189	100%

Notes:
1. The 95 student walking trips in the a.m. drop-off period includes 84 trips stemming from the off-site walking school bus for students in Grades 5-8. There is no walking school bus during the p.m. pick-up period, and students in Grades 5-8 would be picked up on-site.
2. Student/Faculty vehicle trips represent total drive-alone person trips and carpool trips (which assumes two students per vehicle trip).
3. Percentage of vehicle arrivals is considered "one-way" trips during each morning and afternoon period. Therefore 38% of total daily vehicle trips would arrive in the morning and the other 62% of total daily vehicle trips would arrive in the afternoon.
4. The total person trips for the a.m. drop-off and p.m. pick-up periods does not include 16 off-site kindergarten drop-off/pick-ups at Christopher playground.
5. The drop-off at Balboa Park swimming pool/playground and drop-off/pick-up at Christopher playground would not result in any hazardous conditions
Sources: Golden Bridges School, 2015; CHS Consulting Group, 2016.

The extracurricular events would result in parent and children participation outside of the typical school day. The project proposes an annual community festival which would generate the highest amount of vehicle trips with an estimated 126 vehicle trips, while committee meetings would generate the least amount of vehicle trips at 5 trips. Table 3 depicts the estimated vehicle trip generation from proposed extracurricular events.

Table 3: Extracurricular Event Trip Generation by Mode

Representative Event	Frequency	Estimated Attendees	Person Trips (One-Way)					Vehicle Trips
			Auto	Transit	Walk	Bike	Total	
Community Festival	1 per year	250	284	93	82	42	500	126
Farm/Work Day	2 per year	50	57	19	16	8	100	25
Class/Club Performance	7 per year	30	34	11	10	5	60	15
Open House	3 per year	75	85	28	24	12	150	38
Parent Meetings	10 per year	100	114	37	33	17	200	50
Committee Meeting	20 per year	10	11	4	3	2	20	5
Community Workshop	10 per year	50	57	19	16	8	100	25
Weighted Average	--	--	**53**	**17**	**15**	**8**	**94**	**24**

Source: Golden Bridges School, 2016; *SF Transportation Impact Analysis Guidelines* (October 2002) Appendix E – Table E-15; CHS Consulting Group, 2016.

Transit

The project site is located in an area well-served by transit. Muni bus routes 23-Monterey, 36-Teresita, 44 O'Shaughnessy, 52-Excelsior and Muni light-rail line J-Church are located within a half-mile (walking distance) of the project site. The project site is also within a half-mile (walking distance) from the Glen Park BART Station and one mile from the Balboa Park BART Station.

According to the School Circulation Memorandum, the project would result in 38 new daily transit trips. Transit trips generated by extracurricular events would vary depending on the event type and associated attendance level. Community festivals would generate 93 transit trips, which represents the highest number of transit trips generated by an extracurricular event. These 93 transit trips would typically be outside the p.m. peak hour, when system wide ridership is at its highest. Therefore, additional capacity exists at these times to accommodate the 93 transit trips. This is a minimal increase of transit trips that would be generated by the proposed project. The SFMTA Board has adopted an "85 percent" standard for transit vehicle load—that is, all transit vehicles should operate at or below 85 percent capacity utilization. The p.m. peak hour capacity utilization on the 44 O'Shaughnessy within the Southwest Muni screenline[11] is at the 85 percent capacity utilization standard. An exceedance of the capacity utilization standard would represent a significant transit impact. However, the project's transit trips would be dispersed among several different transit lines within the Southwest Muni screenlines. The project's 38 daily transit

[11] Screenlines are hypothetical lines that would be crossed by persons traveling between the downtown vicinity and other parts of San Francisco and the region, allowing for a comparison between estimated transit volumes and available capacities. Four screenlines have been established in San Francisco to analyze potential impacts of projects on Muni service: northeast, northwest, southwest, and southeast, with sub-corridors within each screenline.

trips would be distributed across several Muni lines, and therefore would not result in a substantial increase in capacity utilization on any one line. The project's proposed transit trips would be less than 5 percent of the overall capacity for the existing Southwest screenline (comprised of a number of Muni lines). Therefore the proposed project would not result in any new significant transit impacts or contribute considerably to any cumulative transit impacts.

Bicycle

According to the School Circulation Memorandum, the project would result in 41 new daily bicycle trips. Bicycle trips generated by extracurricular events would vary depending on the event type and associated attendance level. Community festivals would generate 42 bicycle trips, which represents the highest number of bicycle trips generated by an extracurricular event. Two bicycle routes (#45 and #70) are within a half-mile of the project site. Bicycle Route #45 (a class II facility) is the nearest bicycle route in proximity to the project site and runs in a southeast direction along Alemany Boulevard, about one and a half blocks south of the project site. Bicycle Route #70 is a Class III facility with segments that run along Hearst Avenue and Circular Avenue north of I-280 and past the Glen Park BART station, along Still Street between the Lyell Street and Alemany Boulevard. The proposed project would comply with Section 155.2 of the Planning Code as the project would include a total of 41 bicycle parking spaces, consisting of 33 Class I and eight Class II bicycle parking spaces. The increase of bicycle trips generated by the proposed project would be accommodated by the existing bicycle network and the proposed project would not create potentially hazardous conditions for bicyclists; therefore, no significant impacts related to bicycling or bicycle facilities would occur.

Pedestrians

The project site is adjacent to the Cotter Street sidewalk. The proposed project would generate 163 daily walk trips (125 daily walk-trips and 38 daily transit trips, which include walk trips). Walk trips generated by extracurricular events would vary depending on the event type and associated attendance level. Community festivals would generate 175 walk trips, which represents the highest number of walk trips generated by extracurricular events (82 walk trips and 93 transit trips, which include walk trips). The first design variant would provide vehicular access to a new driveway from Cotter Street. No potentially hazardous conditions would occur between pedestrians and vehicles entering and exiting the proposed off-street U-shaped driveway under the first design variant because the staff would manage this loading zone to prevent vehicles queues and would safely help students entering the school as described in Attachment A. The second design variant would not include any curb cuts in the sidewalk along Cotter Street. Instead drop-off/ pick-up would occur along Cotter Street in the created 60 foot passenger loading (white) zone. The project also includes a walking school bus from Balboa Park playground/swimming pool for grades 5th through 8th. Staff members, volunteers, and parents would lead the walking school bus to ensure safety. The increase in daily pedestrian person-trips generated by the proposed project would not substantially overcrowd sidewalks in the project vicinity or otherwise interfere with pedestrian accessibility to the site and adjoining areas. Furthermore, as detailed in the Circulation Memorandum and Attachment A, Golden Bridges School would implement drop-off and pick-up protocols to ensure that loading children are

escorted safely to and from the vehicles. Therefore, no significant impacts related to pedestrian trips would occur as a result of the proposed project.

Parking

The project would remove three on-street parking spaces to provide a new curb cut and U-shaped driveway to accommodate the five off-street parking spaces under the first design variant. Under the second design variant, the project would convert three on-street parking spaces along Cotter Street to a 60 foot passenger loading zone (white zone) between the hours of 8:00 a.m. and 5:30 p.m.

Pursuant to the Planning Code Section 151, the project requires one off-street parking space. The project sponsor has substituted the required off-street parking space with one Class I bicycle space as permitted under the Planning Code 155(e).

Parking was analyzed in the School Circulation Memorandum, which looked at the study area (bounded by San Jose Avenue to the north, Cayuga Avenue to the south, Theresa Street to the east, and Santa Rosa Avenue to the west). As shown in Table 4, there are a total of 111 on-street parking spaces in the study area. During the morning period, there were a total of 90 vehicles parked on-street in the study area, which represents an overall on-street parking utilization of 81 percent. Parking demand is relatively constant throughout the day, as the survey findings indicate that during the afternoon period a total of 92 vehicles were parked in the study area, leaving 19 available spaces (an overall on-street parking utilization of 83 percent). There are no public, off-street parking facilities in the vicinity of the project site. As shown in Table 4, on-street parking demand within the project area is generally well-utilized; however, the survey results indicate that parking occupancies are not above practical capacity (85 percent for on-street facilities). Based on these findings, parking conditions are not constrained during the course of a typical weekday and on-street parking is generally available and these available spaces could accommodate some of the parking demand generated by the proposed project.

Table 4: Project Area On-Street Parking Utilization Summary

Street	To	From	Parking Supply	Parking Occupancy			
				Morning		Afternoon	
				Occupied	Percent	Occupied	Percent
Cotter Street	San Jose Avenue	Cayuga Street	33	33	100%	30	90%
Cotter Street	Cayuga Street	Alemany Blvd	13	11	85%	15	115%
Cayuga Street	Cotter Street	Theresa Street	13	9	69%	11	85%
Cayuga Street	Theresa Street	Tingle Street	16	14	88%	13	81%
Cayuga Street	Santa Rosa Ave	Cotter Street	36	23	64%	23	64%
Total			**111**	**90**	**81%**	**92**	**83%**

Sources: CHS Consulting Group, 2016.

Additionally, the project sponsor is in the process of securing a contract with the Community Assembly of God Church, located at the intersection of Ocean and San Jose Avenues, approximately 0.7 miles from the project site. The parking lot on the Church property has a total of 56 available parking spaces and the project sponsor may be able to lease a portion of these spaces as needed depending on the number of faculty/staff members who would drive to the school and parents/guardians who may occasionally have the need to stay on the school grounds for a longer period of time (e.g. during extracurricular events.). It is anticipated that the school may be able to lease 10 to 15 parking spaces for these purposes. The leased parking spaces may also be made available for parents/guardians who wish to escort their child/children onto the school campus and who are unable to seek an available on-street parking space. The project sponsor is also in communication with the Corpus Christi Church on Santa Rosa Avenue, located two blocks southeast of the project site, for the potential use of their parking lot. The Corpus Christi Church lot consists of 34 parking spaces and the project sponsor may lease or rent a portion of the spaces as needed (approximately up to 18 spaces). Furthermore, the project includes several measures to encourage travel to the school by modes other than the automobile as described in Attachment A. These measures would help the project meet its parking demand; however, even without such features the proposed project is not expected to result in a substantial parking deficit that could create hazardous conditions or significant delays affecting traffic, transit, bicycles or pedestrians.

San Francisco does not consider parking supply as part of the permanent physical environment. Parking conditions are not static, as parking supply and demand varies from day to day, from day to night, from month to month, etc. Hence, the availability of parking spaces (or lack thereof) is not a permanent physical condition, but changes over time as people change their modes and patterns of travel.

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. Environmental documents should, however, address the secondary physical impacts that could be triggered by a social impact (CEQA Guidelines Section 15131(a)). The social inconvenience of parking deficits, such as having to hunt for scarce parking spaces, is not an environmental impact, but there may be secondary physical environmental impacts, such as increased traffic congestion at intersections, air quality impacts, safety impacts, or noise impacts caused by congestion. In the experience of San Francisco transportation planners, however, the absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit service, taxis, bicycles or travel by foot) and a relatively dense pattern of urban development, induces many drivers to seek and find alternative parking facilities, shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service in particular, would be in keeping with the City's "Transit First" policy. The City's Transit First Policy, established in the City's Charter Section 16.102 provides that "parking policies for areas well served by public transit shall be designed to encourage travel by public transportation and alternative transportation." Therefore, no significant parking impacts are expected.

Emergency Access

Emergency vehicles routinely use streets surrounding the project site, including San Jose Avenue, Cotter Street, Cayuga Avenue, Santa Rosa Avenue, and Capistrano Street. Emergency vehicles would continue to use these main streets to reach the project site. The proposed project would not prohibit access to any existing streets. Emergency vehicles would be able to access the site from Cotter Street. As part of the building permit review, the Fire Department will review the proposed project for compliance with the San Francisco Fire Code to ensure adequate emergency access. Therefore, the project would not result in a significant impact to emergency access.

Construction Traffic

Construction of the proposed project is expected to occur over the course of a 14-month period. Construction staging would all occur on the project site. During that time, it is anticipated that the majority of the construction-related truck traffic would use I-80, I-280, and U.S. 101 to access the project site from the East Bay, South Bay, and North Bay and from locations within the City. The addition of worker-related vehicle or transit trips would not substantially affect transportation conditions. Construction workers who drive to the site would result in a small temporary increase in traffic volumes on nearby streets and demand for on-street parking. Construction worker vehicles would temporarily reduce the availability of on-street parking during working hours. As shown in Attachment A, a Construction Management Plan would be prepared for the proposed project and would be subject to review by the Transportation Advisory Staff Committee (TASC), an interdepartmental committee including the Police, Public Works, Planning, Fire Department and SFMTA Muni Operations. TASC would review the Construction Management Plan and would address any issues related to traffic and pedestrian circulation; bicycle safety; parking; and other project construction activities in the area, none of which are anticipated at this time. Due to the temporary and limited duration of construction, construction-related impacts would not be considered significant.

In light of the above, the proposed project would not result in a significant impact on the transportation and circulation system or result in a cumulative transportation impact.

Noise

Noise is regulated by the San Francisco Noise Ordinance (Noise Ordinance), which is codified in Article 29 of the San Francisco Police Code. Article 29 establishes property line and other limits for fixed noise sources and also regulates construction noise. Under Section 2909(b), fixed noise sources from commercial properties (such as the proposed school use) are limited to 8 dBA[12] above ambient levels and Section 2909 (d) also establishes that such noise not exceed an interior daytime (7 a.m. to 10 p.m.) noise limit of 55 dBA or nighttime noise limit (10 p.m. to 7 a.m.) of 45 dBA at the nearest residential receptor. While the limits in the Noise Ordinance only apply to fixed noise sources (e.g. mechanical equipment), and not to noise from the variety of school-related noise activity, the Planning Department uses the criteria in the Noise Ordinance for determining the significance of noise impacts. Specifically, the Department undertakes a two-step

[12] The standard method used to quantify environmental noise involves evaluating the sound with an adjustment to reflect the fact that human hearing is less sensitive to low-frequency sound than to mid-and high-frequent sound. This measurement adjustment is called "a" weighting, and the data are reported in A-weighted decibel (dBA). A -10dB (decibel) increase in noise level is generally perceived to be twice as loud.

analysis that considers first whether noise from a proposed project would exceed the property line noise limits of 8 dBA above ambient per Section 2909(b). If the project does not result in noise in excess of the property line noise limits established in the Noise Ordinance, generally, no further analysis is required. If a project could exceed the property line noise limits, a second analysis is conducted to determine if the noise would meet the daytime or nighttime interior noise limits in Section 2909 (d). The requirements of the Noise Ordinance are designed to prevent sleep disturbance, protect public health, and prevent the acoustical environment from progressive deterioration. Therefore, if noise generated by project operations meets either the property line noise limits or limits established in Section 2909 (d), the project would not result in a significant noise impact.

Section 2907 of Article 29 of the Police Code regulates construction noise and is the basis for determining the significance of construction-related noise impacts.

Operational Noise

An Acoustical Study[13] was conducted for the proposed project and long-and short-term noise measurements were taken. Ambient noise levels at the project site were determined to be 54 dBA. The study analyzed both noise that would be generated from occupants of the school and mechanical noise. The Acoustical Study analyzed noise scenarios from outdoor student program activities, pick-up and drop-off activities, extracurricular events, and overlapping school and mechanical noise.

As indicated in the Acoustical Study, with the exception of noise from car doors closing in the proposed front yard/vehicle drop off area,[14] noise at the property line would not exceed 8 dBA above ambient noise levels (62 dBA) and would meet the criteria of Section 2909(b). Furthermore, the Acoustical Study indicates that none of the foreseeable noise scenarios from operation of the Golden Bridges School would exceed the 55 dBA daytime limit (between the hours of 7 a.m. to 10 p.m.) of Section 2909(d). No nighttime (10 p.m. to 7 a.m.) activities are proposed or anticipated; therefore, the proposed project would also meet the nighttime noise limits of Section 2909(d).

Mechanical noise from fans and heat pumps was also analyzed as part of the Acoustical Study. The results of the mechanical noise analysis (given the assumed equipment and operating conditions) indicate that sound levels at the nearest property line would be at or below 62 dBA, meeting the criteria of Section 2909(b) and would be at or below the 55 dBA interior residential noise limit established for fixed mechanical equipment in Section 2909(d) of Article 29 of the Police Code.

In addition, combined noise from people and mechanical equipment was analyzed as shown in Table 5. Overlapping noise from mechanical equipment and outdoor class time in courtyard 6 (Figure 2) and mechanical equipment and noise from car doors closing in the front yard vehicle drop-off area could result in noise levels of 64 dBA. However, these estimated noise levels are conservative, worst-case, representations of overlapping noise levels that could result from the

[13] Wilson Ihrig, *Golden Bridges School Noise Study Proposed Cotter Street Campus*, August 15, 2016.

[14] The noise analysis of doors closing is conservative (i.e., worst-case) in that it assumes doors from five vehicles in the drop-off/ pick-up area shutting at the same time and does not account for acoustical shielding provided by the property line fence. This is temporary and would only occur during passenger loading activities.

Table 5: Combined Results of Noise Scenario Modeling and Mechanical Noise Predictions

Scenario	Scenario Description	Property Line	Predicted level at property line* (dBA)	Predicted 2nd story interior level (dBA)
1a	Lunch/Recess in Courtyards 1-4	South+	51	35-41
	Lunch/Recess in Courtyard 6	North+	62	41
1b	Lunch/ Recess in Front Yard/ Vehicle Drop-off Area	North and South	52**	37
1c	Lunch/ Recess in Back Yard Planting Area	North and South	54	41
		West	51	38
2a	Outdoor Class Time Speech (Backyard Planting Area)	North and South	54	41
		West	51	38
2b	Outdoor Class Time Speech (Courtyards 1-4)	South+	51	37-42
	Outdoor Class Time Speech (Courtyard 6)	North+	62	41
2c	Outdoor Class Time Singing (Backyard Planting Area)	North and South	60	47
		West	57	43
2d	Outdoor Class Time Singing (Courtyards 1-3)	South+	61	44
	Outdoor Class Time Singing (Courtyard 4)	South+	61	51
	Outdoor Class Time Singing (Courtyard 6)	North+	**64**	47
3	All-School or Community Events in the Backyard Planting Area	North and South	57	45
		West	55	41
4	Closing Doors in Front Yard/ Vehicle Drop-off Area	North and South	**64**	49

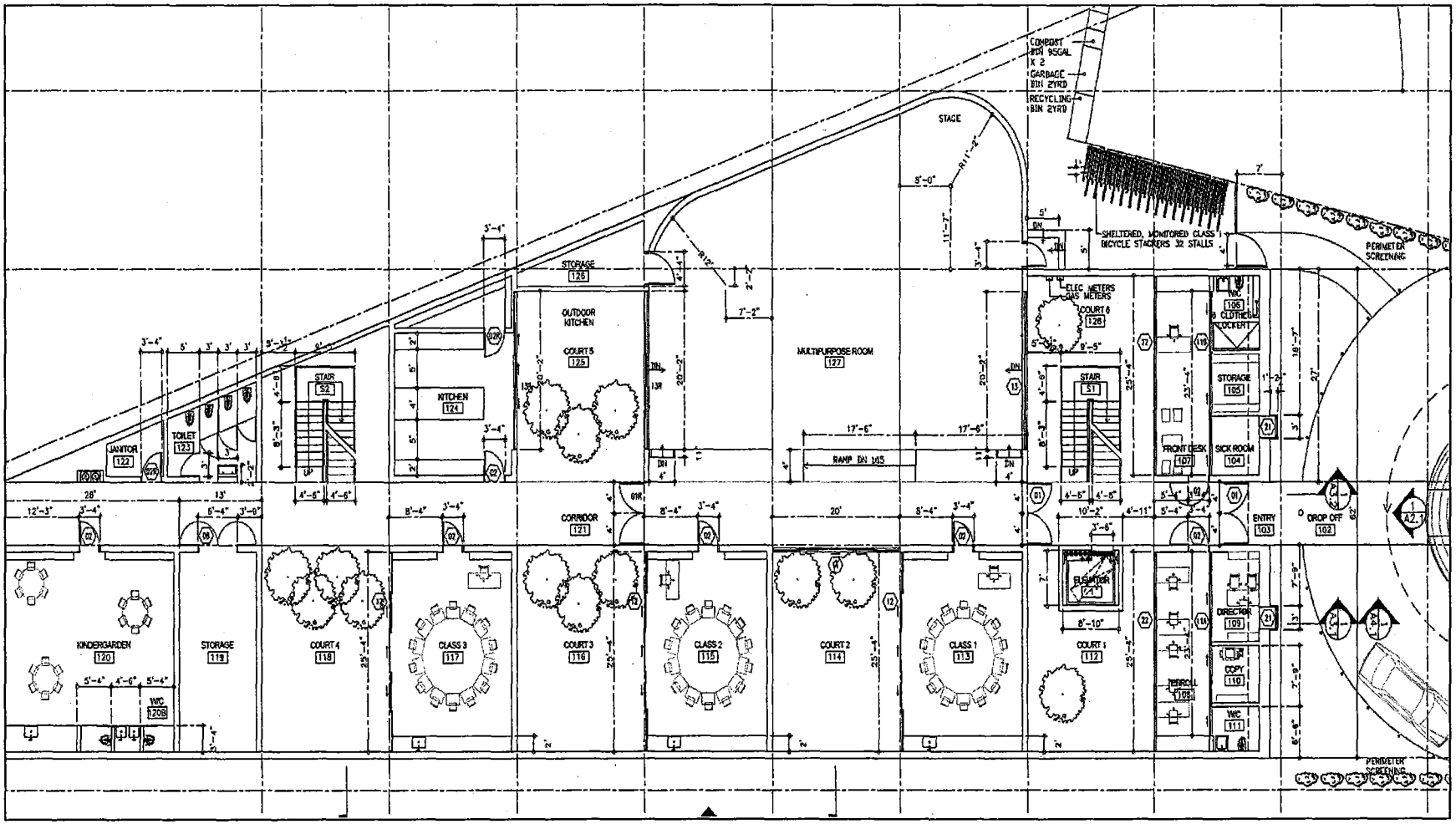
Bold values indicate a possible exceedance of the standards in the San Francisco Noise Ordinance Section 2909 (b).

* Includes 5-7 dB of acoustical shielding from the 6-10 foot tall fence surrounding the property, with the exception of the wall-mounted exhaust fans which are expected to be installed above the fence line. Height of wall is dependent on location.

** Does not include acoustical shielding of the fence

+ These are the worst-case courtyards with the closest distances to the property line/ surrounding homes. The noise level at the property lines and residential balconies due to other courtyard noise would be lower than those numbers presented here.

Figure 2: Ground Floor Plan Showing Courtyard Locations



proposed project. Furthermore, none of the foreseeable combined noise scenarios from overlapping operations at the Golden Bridges School would exceed 55 dBA inside the closest residences, the limit provided by Article 29 of the Police Code Section 2909(d) between the hours of 7 a.m. and 10 p.m. Moreover, per the schedule of events provided by Golden Bridges, there would be no activities or events between 10 p.m. and 7 a.m. Thus, operation of the proposed project (including noise from daytime activities and mechanical noise) would meet the noise limits established in the Noise Ordinance. Therefore, the proposed project would result in less than significant operational noise impacts.

Construction Noise

Although increase in noise during the 14-month construction phase of the project would occur, construction noise would be limited to certain hours of day and would be temporary and intermittent in nature. Construction noise is also regulated by the San Francisco Noise Ordinance and Section 2907 of the Police Code requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet from the source. Impact tools (such as jackhammers and impact wrenches) must have both intake and exhaust muffled to the satisfaction of the Director of Public Works. Section 2908 of the Police Code prohibits construction work between 8:00 p.m. and 7:00 a.m. if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the Director of Public Works. The proposed project would be required to comply with these requirements during construction. Therefore, the proposed project would result in less than significant construction noise impacts.

In light of the above, the proposed project would not result in individually or cumulatively significant noise impacts.

Air Quality

In accordance with the state and federal Clean Air Acts, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO_2), sulfur dioxide (SO_2) and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. The Bay Area Air Quality Management District (BAAQMD) in their *CEQA Air Quality Guidelines* (May 2011), has developed screening criteria to determine if projects would violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the San Francisco Bay Area Air Basin. If a proposed project meets the screening criteria, then the project would result in less-than-significant criteria air pollutant impacts. A project that exceeds the screening criteria may require a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds. The proposed project would not exceed the criteria air pollutant screening levels for an elementary school (277,000 square feet for construction and 271,000 square feet for operation).[16] Therefore, the proposed project would not result in a significant criteria air pollutant impact either individually or cumulatively.

[16] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, Updated May 2011. Table 3-1.

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long-duration) and acute (i.e., severe but short-term) adverse effects to human health, including carcinogenic effects. In response to growing concerns of TACs and their human health effects, the San Francisco Board of Supervisors approved a series of amendments to the San Francisco Building and Health Codes, generally referred to as the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code, Article 38 (Ordinance 224-14, effective December 8, 2014) (Article 38). The purpose of Article 38 is to protect the public health and welfare by establishing an Air Pollutant Exposure Zone and imposing an enhanced ventilation requirement for all urban infill sensitive use development within the Air Pollutant Exposure Zone. Projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would expose sensitive receptors to substantial air pollutant concentrations or add emissions to areas already adversely affected by poor air quality. The project site is not within an Air Pollutant Exposure Zone. Therefore, the proposed project is not subject to Health Code Article 38.

The proposed project would include a backup emergency generator. Emergency generators are regulated by the BAAQMD through its New Source Review (Regulation 2, Rule 5) permitting process. The project sponsor would be required to obtain applicable permits to operate the emergency generator from the BAAQMD. Although emergency generators are intended only to be used in periods of power outages, monthly testing of the generator would be required. The BAAQMD limit testing to no more than 50 hours per year. Additionally, as part of the permitting process, the BAAQMD would limit the excess cancer risk from any facility to no more than ten per one million population and requires any source that would result in an excess cancer risk greater than one per one million population to install Best Available Control Technology for Toxics (T-BACT).

The proposed project would require construction activities for the approximate 14-month construction phase. However, construction emissions would be temporary and variable in nature and would not be expected to expose sensitive receptors to substantial air pollutants. Furthermore, the proposed project would be subject to, and required to comply with, California regulations limiting idling to no more than five minutes,[17] which would further reduce nearby sensitive receptors' exposure to temporary and variable TAC emissions. Therefore, the proposed project would not result in significant impacts from TAC emissions. In conclusion, the proposed project would not result in significant air quality impacts individually or cumulatively.

Water Quality

The project would not result in discharges that would have the potential to degrade water quality or contaminate a public water supply. Project-related wastewater and stormwater would flow into the City's combined sewer system and would be treated to standards contained in the City's National Pollutant Discharge Elimination System (NPDES) Permit for the Southeast Water Pollution Control Plant prior to discharge. Furthermore, the Department of Building Inspection

[17] California Code of Regulations, Title 13, Division 3, § 2485. This regulation applies to on-road heavy duty vehicles and not off-road equipment.

(DBI) would review the proposed project's stormwater features for compliance with the California Plumbing Code (Section 16) Nonpotable Rainwater Catchment Systems to ensure compliance with State requirements for water quality. Therefore, the proposed project would not result in significant water quality impacts.

e) *The site can be adequately served by all required utilities and public services.*

The project site is located in a dense urban area where all public services and facilities are available. The proposed project would be connected to existing water, electric, gas, and wastewater services. Prior to receiving a building permit, the project would be reviewed by the Department of Building Inspection (DBI), the San Francisco Fire Department (SFFD), the San Francisco Public Utilities Commission (SFPUC), and Public Works (DPW) to ensure compliance with City and State regulations concerning building standards, fire protection, sewer connections, and hydrology. Therefore, the proposed project would be adequately served by all required utilities and public services.

DISCUSSION OF ENVIRONMENTAL ISSUES:

CEQA Guidelines Section 15300.2 establishes exceptions to the application of a categorical exemption for a project. None of the established exceptions applies to the proposed project.

Guidelines Section 15300.2, subdivision (b), provides that a categorical exemption shall not be used where the cumulative impact of successive projects of the same type in the same place, over time, is significant. As discussed previously there are no cumulative projects in the vicinity that could combine with the proposed project to result in cumulative effects on the environment. Therefore, there is no possibility of a significant cumulative effect on the environment due to the proposed project.

Guidelines Section 15300.2, subdivision (c), provides that a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. As discussed above, the proposed project would not have a significant effect on traffic, noise, air quality and water quality. In addition, the proposed project would not have a significant effect on the environment due to unusual circumstances for other environmental topics, including those discussed below.

CEQA Guidelines Section 15300.2, subdivision (e), provides that a categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code. The project site is not located on such a list.

OTHER ENVIRONMENTAL TOPICS:

Agriculture and Forest Resources

The project site is an existing neighborhood agricultural use. The project includes a change of use from neighborhood agricultural to an institutional use (Golden Bridges School). The school would construct a new 15,400 square foot building, which includes open space in the rear of the property for farming and

educational activities. The project would remove one existing tree[20] and add up to 21 new trees (including up to three street trees). The project site is located in San Francisco, an urban area. The California Department of Conservation's Farmland Mapping and Monitoring Program identified the site as Urban and Built-Up Land. The site is not under Williamson Act contract or zoned as forest land or timberland. Therefore, the proposed project would not convert any prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use, would not conflict with agricultural zoning or Williamson Act contracts, and would not lead to the loss or conversion of forest land to non-forest use, and the proposed project would not conflict with any policies of the San Francisco Urban Forestry Ordinance. Therefore, the proposed project would not result in a significant impact to agricultural or forest resources.

Aesthetics

Design and aesthetics are by definition subjective, and open to interpretation by decision-makers and members of the public. A proposed project would be considered to have a significant adverse effect on visual quality only if it would cause a substantial and demonstrable negative change. The proposed project would not cause such change. The project would intensify and change the use of the site and would be visible from residential buildings within the project site vicinity. The project would not degrade or obstruct scenic views from public areas viewable by a substantial number of people or substantially degrade the visual quality in the project vicinity. While private views may be lost or obstructed, this is common and expected in an urban setting and not considered a significant impact. In addition, the proposed project would include new lighting, but the lighting would not result in spillover into light-sensitive areas, due to the distance between the lighting and residential properties and proposed screening such as vegetation and fencing. Therefore, the project would not result in a significant impact on aesthetics.

Biological Resources

The area surrounding the project site is currently developed with single-family homes. There are no riparian corridors, estuaries, marshes, or wetlands in the project vicinity that could be affected by the proposed project. The proposed construction of the school's 25-foot-tall building would require the removal of one tree and portions of the existing neighborhood agricultural use including row crops and shrubs. The project would include new landscaping and vegetation including 21 new trees (including up to three street trees). The proposed project's height would not substantially interfere with the movement of any resident or migratory wildlife species and the proposed project would be required to comply with Planning Code Section 139 standards for bird-safe buildings.

Migratory and residential birds often nest in ornamental and/or street trees in urban environments. Although birds that nest in urban environments are generally habituated to higher levels of noise and human activity than birds in less developed areas, project-related construction activities and noise could disrupt nesting activities. Most species of nesting birds and their nests and eggs are protected by Fish and Game code Sections 3505 and 3503.5 and the federal Migratory Bird Treaty Act (MBTA) which makes it unlawful to harm migratory birds and their nests. To ensure compliance with the Fish and Game Code and the MBTA, the project would implement the following measures, or their equivalent, to ensure compliance with state and federal regulations protecting migratory birds:

[20] The existing tree to be removed is not a significant tree, landmark tree, or street tree.

- Vegetation removal activities for the proposed project could be conducted during the nonbreeding season (i.e., September through February) to avoid impacts to nesting birds. If other timing restrictions make it impossible to avoid the nesting season, preconstruction surveys shall be conducted for work scheduled during the breading season (March through August).

- Preconstruction surveys are typically conducted by a qualified ornithologist, authorized by the California Department of Fish and Wildlife (CDFW), to determine if any birds are nesting in or in the vicinity of the vegetation to be removed. The preconstruction survey is typically conducted within 15 days prior to the start of the work from March through May (since there is higher potential for birds to initiate nesting during this period) and within 30 days prior to the start of work from June through August.

- If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist, in consultation with CDFW, typically determine the extent of a construction-free buffer zone to be established around the nest until the young have fledged.

As described above, the proposed project would not conflict with any local policies or ordinances protecting biological resources; affect any rare, threatened, or endangered species; or diminish habitat for rare, threatened or endangered. For these reasons the proposed project is not anticipated to have a significant effect on biological resources.

Geology and Soils

A Geotechnical Investigation[21] was conducted for the proposed project. Soil samples were obtained using borings to determine the probable subsurface conditions at the site, and to provide general soil and foundation engineering design criteria. Groundwater was encountered in all borings at depths of approximately 3 to 3.5 feet below the existing ground surface. Groundwater at the project site would vary seasonally a few feet depending on rainfall amounts and time of year. The site was noted to be susceptible to flooding. The field investigation indicated the site is underlain by about 1.5 to 3 feet of fill consisting of clayey sand and clay with sand. The fill is typically loose or soft to medium stiff and is underlain by very loose to medium dense sand, sand with clay, silty sand and clayey sand to approximately 9 to 12.5 feet below the existing ground surface. Depths of approximately 2 to 12.5 feet below ground surface is susceptible to liquefaction. Total liquefaction-induced settlement may occur on the order of 2.5 to 5 inches. Differential earthquake-induced settlement beneath the proposed building may occur on 1 to 5 inches over a horizontal distance of 50 feet. Earthwork at the site would consist of clearance of existing vegetation including approximately 910 cubic yards of excavation. A letter[22] was provided by the geotechnical engineer confirming that the recommendations of the geotechnical investigation remain valid for the proposed project. The geotechnical report concludes that the site is suitable for the proposed construction, provided that recommendations in the report are incorporated into the project plans and specifications and implemented during construction.

[21] Rollo * Ridley Inc., *Geotechnical Investigation Golden Bridges School 203 Cotter Street San Francisco, California*, January 13, 2015.
[22] Rollo * Ridley Inc., *Geotechnical Investigation Golden Bridges School 203 Cotter Street San Francisco, California*, September 16, 2016.

Compliance with applicable codes and the recommendations in the Geotechnical Investigation would reduce risks related to liquefaction to an acceptable level. The proposed project would be required to conform to the San Francisco Building Code, which ensures the safety of all new construction in the City. Decisions about appropriate foundation and structural design are considered as part of DBI permit review process. DBI would review background information including geotechnical and structural engineering reports to ensure that the security and stability of adjoining properties and the subject property is maintained during and following construction. In this manner, DBI's review would provide another layer of expert oversight in regards to the safety of the proposed structure from geologic hazards. The proposed project would therefore result in a less-than-significant impact with regard to geologic hazards.

Hazards

The proposed project would entail approximately 910 cubic yards of soil disturbance. The project site has been used for neighborhood agricultural uses and agricultural pesticides may have been applied. Therefore, the project is subject to Article 22A of the Health Code, also known as the Maher Ordinance, which is administered and overseen by the San Francisco Department of Public Health (SFDPH). The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare a Phase I Environmental Site Assessment (ESA) that meets the requirements of Health Code Section 22.A.6. The Phase I ESA would determine the potential for site contamination and level of exposure risk associated with the project. Based on that information, the project sponsor may be required to conduct soil and/or ground water sampling and analysis. Where such analysis reveals the presence of hazardous substances in excess of state or federal standards, the project sponsor is required to submit a site mitigation plan (SMP) to SFDPH or other appropriate state or federal agency(ies), and to remediate any site contamination in accordance with an approved SMP prior to the issuance of any building permit. In compliance with the Maher Ordinance, the project sponsor has prepared a Phase I ESA[23] and has submitted a Maher Application to SFDPH. The Phase I ESA identified a Recognized Environmental Condition at the property due to its long history as an urban farm where agricultural pesticides may have been applied and recommended soil sampling to further evaluate soil quality. The Phase I ESA also notes that the location of the water/groundwater source tapped by the 111 Capistrano Avenue residence appears to be located on the project site. If the groundwater well is located on the project site, SFDPH may require it be abandoned in conjunction with the proposed site development or operated under permit from SFDPH. The proposed project would be required to remediate potential soil and/or groundwater contamination at the project site, as described above, in accordance with Article 22A of the Health Code.

In San Francisco, fire safety is ensured through the provisions of the Building Code and Fire Code. During the review of the building permit application, DBI and the San Francisco Fire Department will review the project plans for compliance with all regulations related to fire safety. Compliance with fire safety regulations would ensure that the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan, or expose people or structures to a significant risk of loss, injury, or death involving fires.

[23] All West, *Environmental Site Assessment 203 Cotter Street San Francisco, California,* May 28, 2015.

For these reasons, the proposed project would not result in any significant impacts related to hazards or hazardous materials.

Historic Resources

The existing use is a neighborhood agricultural use. The project proposes to change the use and construct a 15,400 square foot kindergarten through 8th grade private school campus. A property may be considered a historic resource if it meets any of the criteria related to (1) events, (2) persons, (3) architecture, or (4) prehistory that make it eligible for listing in the California Register of Historical Resources, or if it is considered a contributor to a potential historic district.

A Planning Department Preservation Planner reviewed the project and found that the property is not a historic resource[24]. Furthermore, the project site is not located within a historic district. For these reasons, the proposed project would not result in a significant impact with regards to historic resources.

Hydrology

The proposed project is located within the historical Islais Creek and on a San Francisco Public Utilities Commission (SFPUC) Block of Interest[25], within an area prone to flooding. This is the existing condition at the project site. The project site, being in a topographically low area, and with no downhill slope for surface runoff from the adjacent Cotter Street, requires attention to properly drain stormwater during major storms. The project's finished floor elevation has been set sufficiently higher than the adjacent street to minimize chances of inundation during major storms. The project also requires adequate conveyance of runoff during prolonged storms.

In addition, because the proposed project would create or replace more than 5,000 square feet of impervious surface, the project is subject to the San Francisco Stormwater Management Ordinance (SMO). Compliance with the SMO and attendant Stormwater Management Requirements and Design Guidelines will require the project to maintain or reduce the existing volume and rate of stormwater runoff discharged from the site. To achieve this, the project would be required to implement and install appropriate stormwater management systems that retain runoff on-site, promote stormwater reuse, and limit site discharges before entering the combined sewer collection system.

A Conceptual Stormwater Management Approach Memorandum[26], was prepared to analyze the proposed stormwater management design for the project. The project would minimize disruption of natural hydrology by implementing Low Impact Design approaches. The proposed project would include several stormwater management measures, including: pervious pavers, a green roof and living wall, and bioretention planters and the rear yard would remain pervious open space for a total of approximately 31,300 square feet. Additional stormwater retention measures that may be required by the SFPUC, DBI, or Public Works during the permit review process could include additional pipes, a detention vault, or a detention pond, the environmental effects of which have been considered in this exemption determination. As currently proposed, all non-active roof space would be vegetated where feasible. All roof areas, vegetated or not, would be routed to a bioretention planter. These measures

[24] Personal Communication from Tina Tam to Lana Russell-Hurd, Planning Department, *203 Cotter Street*, May 22, 2015.
[25] San Francisco Planning Department, *Planning Bulletin Review of Projects in Identified Areas Prone to Flooding*, April 1, 2007.
[26] BKF, *Golden Bridges School - 203 Cotter Street - Conceptual Storm Water Management Approach*, June 10, 2016.

would reduce impervious surfaces and increase stormwater infiltration on-site. The Memorandum found that the project would comply with the two-year 24-hour design storm that is required by the SMO. This Memorandum will serve to guide the preparation of a Stormwater Control Plan for submittal to the SFPUC. Prior to issuance of building permits, the project is required to submit a Stormwater Control Plan demonstrating compliance with the requirements of the Stormwater Management Requirements and Design Guidelines as required under the Stormwater Management Ordinance.

Although existing conditions at the site indicate that the site is prone to flooding, compliance with the SMO would require the project sponsor to maintain or reduce the amount of stormwater runoff at the site. Therefore, the proposed project would not result in significant impacts to hydrology.

Neighborhood Concerns. A "Notification of Project Receiving Environmental Review" was mailed on August 7, 2015, to community organizations, tenants of the affected property, properties adjacent to the project site, and to persons who own property within 300 feet of the project site. The combined 311 and Conditional Use Authorization notice was mailed on September 9, 2016. The Planning Department has received numerous comments from members of the public concerning environmental issues during both of these notification periods.

The following comments and responses to the comments (in italics) are provided below.

1. Concerns about the size, scale and use of the proposed building.

As discussed under Section a), the proposed project is consistent with applicable general plan designations and policies as well as with applicable zoning designations.

2. Loss of neighbor's views.

As discussed under Aesthetics, the proposed project would not degrade or obstruct scenic views from public areas viewable by a substantial number of people. While private views may be lost or obstructed, this is common and expected in an urban setting and not considered a significant impact.

3. Loss of agricultural land and open space.

As discussed under Agriculture and Forest Resources, the proposed project would not convert any prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use, would not conflict with agricultural zoning or Williamson Act contracts, would not lead to the loss or conversion of forest land to non-forest use, and the proposed project would not conflict with any policies of the San Francisco Urban Forestry Ordinance. The project would include farming and educational activities in the rear of the property. The project's impact is less than significant for agricultural and forestry resources.

4. Water drainage issues.

As discussed under Hydrology, the proposed project would be required to be reviewed by the SFPUC to ensure compliance with the Stormwater Management Ordinance. Public Works will also review the project's impact on hydrology. The project's impacts with respect to hydrology were found to be a less than significant impact.

5. Flooding and sewer failure on property and effects on nearby properties.

As discussed under Hydrology, the proposed project's potential flooding impacts were evaluated according to a technical memorandum, which found that the project would comply with the two-year 24-hour design storm. Prior to issuance of building permits, the project sponsor is required to submit a Stormwater Control Plan demonstrating

compliance with the requirements of the Stormwater Management Requirements and Design Guidelines as required under the SMO. Furthermore, the project's design with regard to hydrology would also be reviewed by Public Works. Also, as discussed under Section d) the proposed project would comply with water quality requirements. This is considered a less than significant impact.

6. Lack of capacity to handle stormwater runoff and runoff during a 100 year storm.

As discussed under Hydrology, flooding at the site is an existing condition. The proposed project would be required to design the project to comply with the two-year 24-hour design storm as required by the SFPUC. The project would include living walls, living roof, and bioretenation planters to reduce impervious surfaces and increase infiltration. The proposed project may include pipes, a detention vault, or a detention pond to further retain stormwater on-site. The proposed project is not required to be designed for a 100-year-storm. This is considered a less than significant impact.

7. Increased traffic, queuing, and double parking during project operation.

As discussed under Section d), the potential for impacts associated with traffic, queuing, and double parking is considered to be less than significant, given the available vehicle and parking capacity in the project area and demand estimated to occur with the proposed project. Furthermore, the project sponsor has agreed to implement several measures to further reduce the project's less than significant traffic impact (See Attachment A).

8. Loss of street parking during project operation.

As discussed under Section d), the potential for impacts associated with loss of parking is considered to be less than significant.

9. Noise effects on residential uses.

As discussed under Section d), the proposed project's potential noise impacts were evaluated in an Acoustical Study and found to be less than significant.

10. Air pollution from new project automobile trips.

As discussed under Section d), the potential for air pollution associated with new vehicle trips is considered to be less than significant per BAAQMD CEQA Air Quality Guidelines construction and operation screening criteria.

11. Emergency vehicle and fire access to the site.

As discussed under Section d), the proposed project would not prohibit or interfere with emergency vehicle or fire access to the project site or project area. Also as part of permit review for the project, the Fire Department would ensure compliance with the Fire Code to ensure safety and access to fight fires. This is considered a less than significant impact.

Other issues that were raised by members of the public include:

12. Effect on real estate values and liability for damage.

Since these concerns do not relate to physical environmental effects, they are outside the scope of CEQA and are not addressed in this document. Comments that relate to economic, financial, and legal concerns may be considered by City decision-makers during their deliberations on whether to approve, modify, or disapprove the proposed project.

Conclusion. CEQA State Guidelines Section 15300.2 states that a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. There are no unusual circumstances surrounding the current proposal that would suggest a reasonable possibility of a significant effect. The proposed project would have no significant environmental effects. The project would be exempt under the above-cited classification. For the above reasons, the proposed project is appropriately exempt from environmental review.

Attachment A

Golden Bridges School

TRANSPORTATION MANAGEMENT PLAN
203 COTTER STREET, SAN FRANCISCO

Golden Bridges School is currently planning a new academic facility at 203 Cotter Street in San Francisco. This is a new construction of approximately 15,400 sq ft on a currently open lot of approximately 30,000 sq ft. The projected enrollment is up to 200 students in grades K-8 and 30 staff members, with additional part-time staff as needed.

To help manage vehicle circulation immediately surrounding the school site, especially during the student drop-off and pick-up periods, Golden Bridges School will implement a comprehensive suite of circulation and transportation demand management strategies. This Transportation Management Plan (TMP) provides transportation-related measures that Golden Bridges School will commit to implementing at its campus at 203 Cotter Street.

Recommended Improvement Measures

The following improvement measures would aid in further reducing less-than-significant impacts to traffic/circulation, construction and parking.

Improvement Measure I-TR-1: Develop Transportation Management Plan (TMP)
Project Sponsor should develop a comprehensive Transportation Management Plan (TMP) for the proposed site. The overall purpose of the TMP is to provide guidelines for student drop-off and pick-up procedures. The following elements of the conceptual TMP are outlined below:

- Golden Bridges School should develop assigned drop-off/pick-up periods for each student depending upon grade and would enforce these drop-off/pick-up times by not allowing vehicles to occupy the proposed loading zone before or after their designated drop-off/pick-up time;

- Under the on-site passenger loading zone design alternative, a staff member would locate at the entrance of the on-site loading zone to facilitate vehicle flow into the on-site loading zones, while another staff member would locate at the exit to facilitate vehicle flow out of the on-site loading zones and back onto Cotter Street. A third staff member would locate in the middle of the on-site roundabout to coordinate vehicle movement into and through the on-site loading zones. One staff member would locate at the on-street passenger loading zone adjacent the on-site loading zone space to coordinate traffic into and out of the space and facilitate student drop-off/pick-up from and to vehicles in the loading space. In the event these spaces are occupied, staff members should direct vehicles to alternative on-street parking or to prospective, alternative parking locations in

nearby private lots. Staff members would help students safely exit vehicles and walk the students into the school;

- Under the on-street passenger loading zone design alternative, no less than three staff members would locate at the curbside adjacent to the loading zone to coordinate vehicle entries and exits into and out of the loading spaces and facilitate students exiting or entering vehicles on the vehicle curbside during drop-off/pick-up activities;

- Notify parents/guardians about pick-up and drop-off procedures in writing and orientations;

- Discourage parents/guardians from parking in the school loading space for longer than one (1) minute;

- Golden Bridges School should maintain a log (inventory) of complaints from neighbors and would work with these neighbors to mitigate unforeseen problems with student drop-off/pick-up activities, and to maintain an ongoing, constructive relationship with the neighboring residents and businesses; and

- Golden Bridges School should establish a monitoring program for the first year of school operation at 203 Cotter Street to conduct observations and circulation along Cotter Street and surrounding streets during student drop-off and pick-up activities. The monitoring reports should be distributed to staff and parents/guardians up to three times during the academic school year (between September and June). Potential improvements and adjustments to the student drop-off and pick-up procedures and other related school operations should be conducted based on the monitoring reports.

- Post the TMP on the Golden Bridges School website for public access to the document;

- Provide parents/guardians with the TMP as part of the enrollment application, orientation manual, and/or related information packet;

- Provide a detailed map of student drop-off and pick-up zones along Cotter Street, including the loading zones on-site and adjacent to the proposed site and potential secondary off-street parking spaces at nearby private lots;

- Provide a suggested vehicle routing map to the Golden Bridges School to minimize traffic impacts on local residential streets (e.g., Capistrano Avenue, Theresa Street, Tingley Street)

- Encourage parent/guardians to utilize on-street parking or potential secondary off-street parking spaces for long-term parking (e.g., parking more than two [2] minutes);

- Enforce parents/guardians to not exit their vehicles and enter the school while stopped/parked at the loading zone;

Improvement Measure I-TR-2: Develop Multimodal Strategies for Parents
In order to improve the student drop-off and pick up operations and encourage the use of carpooling and alternative modes of transportation to reduce vehicle and parking demand, Golden Bridges School proposes implementing the following measures for future consideration for the Golden Bridges School:

- Provide parents/guardians with *Multimodal Access Guide* to describe how to reach the school by walking, bicycling, and transit. The guide may include:
    - A detailed map of nearby transit facilities (stops and routes) in vicinity of the school site;
    - A detailed map of bicycle routes in the vicinity of the school site; and
    - Provide online links and phone numbers to transit providers that serve the school site.
- Develop a volunteer carpooling program for parents/guardians; and
- Appoint a TDM coordinator who is in charge of overseeing the implementation of various multi-modal strategies and programs and promoting them.
    - TDM coordinator would establish model split goals for Golden Bridges School staff members and students, and monitor progress each year; and
    - TDM coordinator would periodically survey parents/guardians and faculty/staff to determine travel patterns, reasons for travel choices, barriers and potential opportunities for change.

Improvement Measure I-TR-3: Establish a Walking School Bus
To reduce the number of vehicles on Cotter Street and other surrounding streets during the morning drop- off period, the Project Sponsor should establish a volunteer program modeled after the Safe Routes to School Program similar to the San Francisco Unified School District Program, and arrange a "walking school bus" for students enrolled in older middle school students (i.e., Grades 5 to 8). The "walking school bus" would have a drop-off point at the Balboa Park playground/swimming pool (San Jose Avenue and Havelock Street), approximately a half mile from the school site. From this drop-off point, the "walking school bus" would proceed up the west side of San Jose Avenue to the closest stop light, located at Santa Rosa Avenue. At the intersection of San Jose Avenue and Santa Rosa Avenue, the walking school bus would proceed to cross from the west side of San Jose Avenue to the east side. The walking school bus would then continue up San Jose Avenue, turning right onto Cotter Street. This is the safest and most direct route, and would lessen any disturbance to the neighborhood. Parents/guardians would have the option to park their vehicles at the parking lot of the park and walk with their children to school, or drop their child off to walk as part of the walking school bus, which would be led by volunteers and/or faculty/staff members. It is noted that the walking school bus would occur prior to school hours for students above Grade 5. The walking school bus would be conducted by staff and parent volunteers, with a ratio of 1 volunteer to every 12 students.

Improvement Measure I-TR-4: Improve the Pedestrian Realm and Street Safety:
In order to establish a more pedestrian-friendly environment and improve pedestrian and bicycle safety along Cotter Street and at the intersection of Cotter Street and Cayuga Street, the project sponsor proposes the following streetscape and traffic calming improvements:

- Install appropriate signage along Cayuga and Cotter Streets which may include, but is not limited to, "School Zone" and appropriate speed limit signs, particularly at the intersection of San Jose Avenue and Cotter Street;

- Install speed humps along Cotter Street in order to increase pedestrian safety by reducing vehicular travel speeds adjacent to the project site;

- Provide high-visibility yellow school crosswalk crossing Cotter Street at San Jose Avenue. This is intended to identify the potential crossing and alert drivers to pay attention to a pedestrian area. However, it shall be the school policy to discourage the use of this crossing and instead encourage crossing at Cayuga Street where there is greater visibility;

- Install painted, high-visibility (e.g., yellow-striped, continental design) crosswalks at all four approaches at the Cotter Street/Cayuga Street intersection and upgrade existing curb ramps including the reduction of curb radii to promote lower vehicle turning speeds and reduce crossing distance to improve pedestrian and school children safety;

Improvement Measure I-TR-5: Queue Abatement

- As an improvement measure to further minimize vehicle queues and conflicts with other modes at the Proposed Project's driveway into the public right-of-way, Golden Bridges School would monitor loading activities and would employ additional queue abatement methods as needed.

Improvement Measure I-TR-6: Construction Management Plan
The construction contractor(s) should develop a detailed *Construction Management Plan*. The *Construction Management Plan* would, at a minimum, include the following provisions:

- Circulation routes should be developed to minimize impacts on local street circulation, as appropriate. In the event of parking and/or travel lane closures, flaggers or signs or both should be used to guide vehicles through or around the construction zone. Roadside construction safety protocols should be implemented.

- Truck routes should be identified. Haul routes that minimize truck traffic on local roadways and residential streets should be used to the extent possible.

- Sufficient staging areas should be developed for trucks accessing construction zones so as to minimize disruption of access to adjacent land uses, particularly at entries to the project site.

- Construction vehicle movement should be controlled and monitored by on-site inspectors enforcing standard construction specifications.

- Truck trips should be scheduled outside the peak morning and evening commute hours, to the extent possible.

- All equipment and materials should be stored in designated contractor staging areas on or next to the worksite, such that vehicle, pedestrian, and bicycle traffic obstruction is minimized.

- Shuttle service should be established for off-site construction worker parking.

- Construction should be coordinated with facility owners or administrators of police and fire stations (including all fire protection agencies) and transit stations or stops. Emergency service vehicles shall be given priority for access.

- The contractor should be encouraged to reduce the number of construction workers' vehicle trips by facilitating the use of public transportation and minimizing construction worker parking availability.

- The contractor should coordinate with other contractor(s) for projects in the vicinity and share information regarding schedule, duration of activities, vehicle routing and detouring (if applicable), staging of vehicles, etc.

- The contractor should provide regularly-updated information (typically in the form of website, news articles, on-site posting, etc.) regarding project construction and schedule, as well as contact information for specific construction inquiries or concerns.

It is noted that the construction management plan should be reviewed by the TASC to adequately address issues of circulation (traffic, pedestrians, and bicycle), safety, parking and other project construction in the area.

Improvement Measure I-TR-7: Develop Extracurricular Event Traffic & Parking Management Plan

The project sponsor should develop a detailed *Extracurricular Traffic and Parking Management Plan* in order to provide transportation and parking guidelines for extracurricular events occurring on weekday evenings and weekends. The *Extracurricular Traffic and Parking Management Plan* would, at a minimum, include the following provisions:

- Include a section in the *Multimodal Access Guide* to describe how to reach the school by transit on weekday evenings and weekends;

- Maintain the volunteer carpooling program for parents/guardians for extracurricular events;

- Ensure that the TDM coordinator promotes multimodal strategies for reducing project-generated traffic and parking demand for extracurricular events;

- Utilize TDM coordinator, staff, and parents to manage events and discourage parking and queuing on Cotter Street;

- Consider utilizing a shuttle service for extracurricular events. The shuttle service would be provided by the project sponsor, and would provide transportation for event attendees from/to the Glen Park and Balboa Park BART Stations, as well as from/to potential off-site parking spaces located at the Community Assembly of God Church and the Corpus Christi Church parking lots; and

- Continue to pursue negotiations with nearby private lot operators to secure access to off-site parking spaces to accommodate extracurricular events.

Golden Bridges School commits to implementing the above measures at its location at 203 Cotter Street in San Francisco, CA

9/16/16

Jessie Elliot
Administrative Director
Golden Bridges School

Attachment B

Mission Terrace Land Preservation Committee

214 Cotter Street• San Francisco, CA 94112• Phone: 408.218.2777 •
E-Mail: missionterraceLPC@gmail.com Web: www.savethefarmsf.com

Date: October 26, 2016

Angela Calvillo
Clerk of the Board of Supervisors
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689

Dear Ms. Calvillo:

The Mission Terrace Land Preservation Committee (MTLPC) is hereby appealing the issuance of the Categorical Exemption for the development proposed for 203 Cotter Street, Case # 2015-003791ENV, dated September 27, 2016. The exemption should not have been issued based on Section 15300.2.(c) of the California Environmental Quality Act (CEQA) Guidelines which states that "A Categorical Exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances." The proposed project would have significant adverse environmental impacts on the neighborhood. These impacts have not been adequately addressed and require further study and analysis in an Initial Study followed by either a Mitigated Negative Declaration or Focused Environmental Impact Report.

The MTLPC has provided letters and reports regarding potential flooding and other hazards specific to the Mission Terrace neighborhood that have not been fully addressed by the project sponsor or the City. A hydrology report from Greg Kamman, of Kamman Hydrology and Engineering (attached) states that the proposed construction will increase flood hazards to surrounding properties and increase human exposure to raw sewage during flood events.

The Planning Commission did not consider the potential hydrology impacts and determined that the standard development and building process should be sufficient to meet CEQA guidelines. This Categorical Exemption fails to address unusual circumstances within the Mission Terrace neighborhood related to stormwater and flooding. In addition, traffic and parking impacts were not adequately addressed and provide additional grounds for appeal.

Given the above circumstances, the proposed development at 203 Cotter Street has not met all the conditions that CEQA requires as the basis for exemption generally and for Class 32 exemptions (CEQA Guidelines Section 15332) Such Exemptions are appropriate for in-fill development projects meeting the following conditions:

"(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services."

While the project is an in-fill development that meets conditions a, b, and c, it does not meet conditions d and e. We are concerned that the project could result in significant adverse impacts on hydrology, traffic, and parking and may not be adequately served by all required utilities and public services.

Hydrology. Mission Terrace is a neighborhood beset by major flooding on a regular basis. The neighborhood has experienced two 100-year flood events in the past ten years, and five-year rain events occur nearly every year. The plans on file by the project sponsor only address the one and two -ear rain events and this simply is not the real life situation tat the neighborhood faces. When heavy rain occurs, flooding in Mission Terrace invades many homes with raw sewage. The City of San Francisco has sued twice by the neighborhood over this issue. The project at 203 Cotter increases sewage loads to the already over-burdened system by adding sinks and toilets to accommodate 230 additional students and staff. A hydrology report from Greg Kamman, of Kamman Hydrology and Engineering (attached) states that the proposed construction will increase flood hazards to surrounding properties and increase human exposure to raw sewage during flood events. The Commission refused to take into consideration the potential hydrology impacts. We steadfastly believe that further hydrological study must be undertaken to determine whether the project would result in significant hydrology impacts. Unless it can be demonstrated that such impacts would not be significant, the project should not be allowed to proceed. Once building begins, it will be too late to mitigate the likely increased flooding on Cotter Street and associated property damage and public health hazards.

Traffic and Parking. This proposed project will create a substantial amount of traffic on Cotter Street, which is a narrow one- way street already beset with traffic congestion and lack of available parking. Cotter is 35 feet wide and only allows for one car passage at a time. Cotter Street is also a major thoroughfare for cars driving from San Jose Avenue to Alemany or Mission Streets. The traffic memo generated by the project sponsor states that that pick-up and drop-off will generate 184 additional trips, but only 54 will be via car. This seems very low compared to most school situations and quite unlikely to be the real life daily scenario.

All the traffic mitigation plans provided by the school are aspirational only, there is no method of enforcement and methods are unrealistic at best. A "walking school bus" located 0.7 miles away from Cotter is simply not sensible for parents especially in rainy or inclement weather. Another measure suggests each grade is assigned a pickup/drop-off time, which is also non-enforceable and even if so, what will parents who miss their allotted timeslot do? They will drive around the block and continue to create more traffic. The transportation memo prepared for the project sponsor also indicates that parents will be able to find parking on Cotter Street or close by, however, anyone who has been to the area knows that parking capacity is nearly always 100 percent full any time of day or night due to proximity of Glen Park BART.

Ensuing backup of even a fraction of the unlikely figure of 54 cars would likely mean that Cotter Street is fully backed up potentially close or onto San Jose Avenue, at which point the Muni J line comes out of the San Jose Avenue tunnel and could be dangerously blocked.

While the project is an in-fill development, there is a reasonable possibility that it may have significant adverse hydrologic, traffic, and parking impacts and would not meet all the conditions prescribed by Class 32. Therefore, it cannot be exempt from CEQA under Section 15332. We ask that you determine that the Class 32 Categorical Exemption was not proper for this project and require that either a Mitigated Negative Declaration or Focused EIR be prepared.

Attached, you will find the following:

1. A copy of the CatEx determination dated 9/27/16,
2. Letter from Greg Kamman, Kamman Hydrology & Engineering, September 19. 2016, and

3. Letter from Greg Kamman, Kamman Hydrology & Engineering, September 26, 2016.

We appreciate your assistance in this matter. If there are any questions, please do not hesitate to contact me directly.

Sincerely,

Nancy Huff, President, Mission Terrace Land Preservation Committee

SAN FRANCISCO
PLANNING DEPARTMENT

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Certificate of Determination
Exemption from Environmental Review

Case No.:	**2015-003791ENV**
Project Title:	**203 Cotter Street**
Zoning:	Residential –House, One Family (RH-1) 40-X Height and Bulk District
Block/Lot:	6795A/029
Lot Size:	30,744 square feet (0.71 acres)
Project Sponsor:	Jessie Elliot, Golden Bridge School (415) 912-8666
Staff Contact:	Lana Russell-Hurd– (415) 575-9047 lana.russell@sfgov.org

PROJECT DESCRIPTION:

The project site (Assessors Block 6795A, Lot 029) is located on a parcel bounded by Cotter Street, Cayuga Avenue, Santa Rosa Avenue, Capistrano Avenue in San Francisco's Outer Mission Neighborhood. The project site is an existing neighborhood agricultural use and contains a greenhouse and two storage sheds. The parcel size is approximately 31,000 square feet (0.71 acres). The project proposes to change the use from a neighborhood agricultural use to a school and construct a new kindergarten through 8th grade private Golden Bridges School campus. The new school would enroll up to 200 students and 30 full or part-time staff. The campus would include a two-story building, totaling approximately 15,400 square feet. The proposed site plan is shown on Figure 1.

EXEMPT STATUS:

Categorical Exemption, Class 32 (California Environmental Quality Act [CEQA] Guidelines Section 15332)

DETERMINATION:

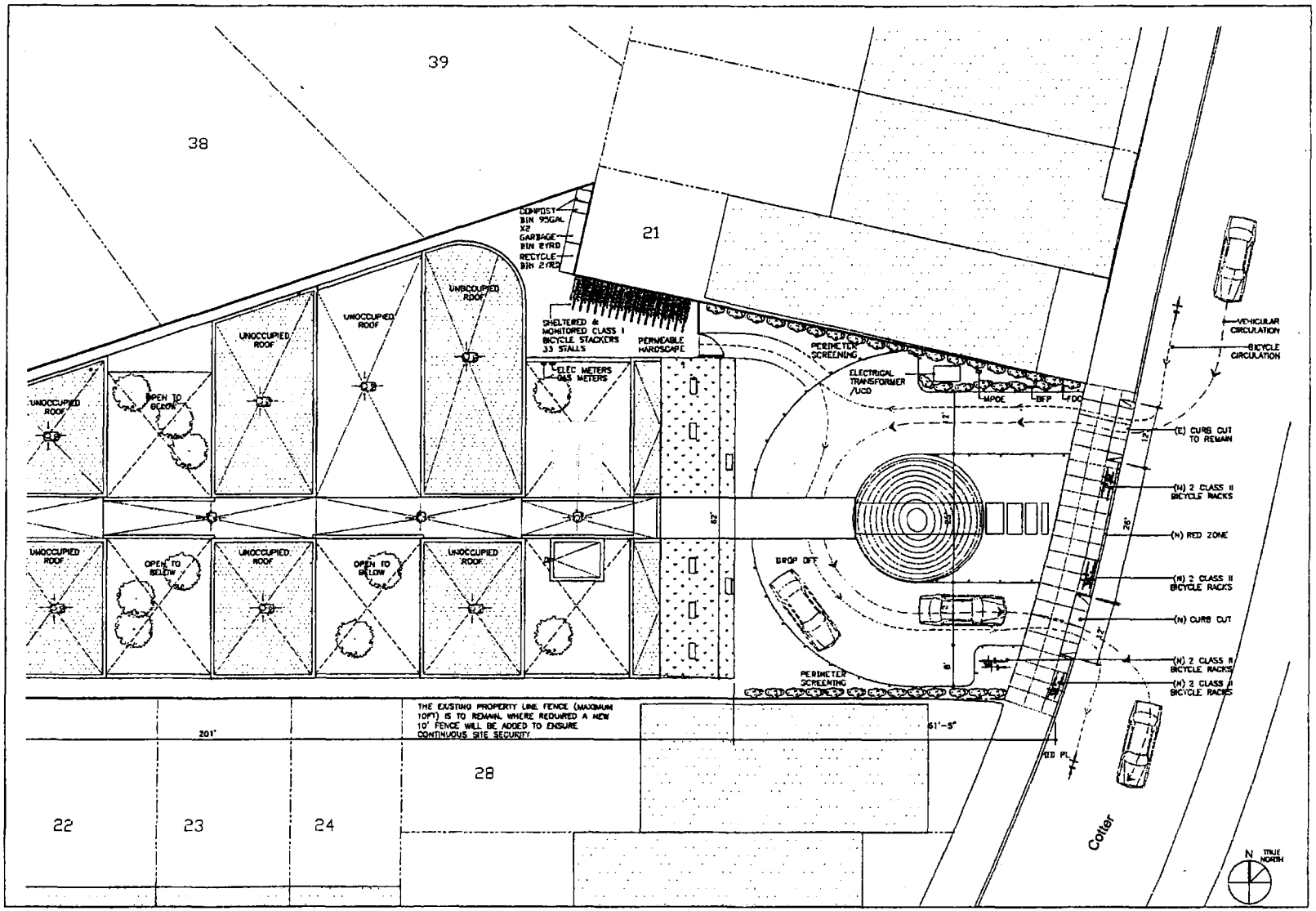
I do hereby certify that the above determination has been made pursuant to State and local requirements.

for Lisa M. Gibson
Acting Environmental Review Officer

September 27, 2016
Date

cc: **Jessie Elliot**, Project Sponsor
Nancy Tran, Current Planner
Supervisor **John Avalos**, District 11 (via Clerk of the Board)
Outer Mission and Citywide Distribution Lists
Virna Byrd, M.D.F.

Figure 1 – Proposed Site Plan



PROJECT DESCRIPTION (continued):

The proposed building would be approximately 25 feet in height (excluding a 2 foot 4 inch elevator penthouse) and divided into two sections through a central hallway and would include six courtyard spaces and eight classrooms. The project site is surrounded by an existing 6 to 10 foot tall fence that would remain. The project would include a living roof, living wall[1], permeable pavers, and other bioretention[2] measures and would retain permeable open space in the rear of the property for farming and educational activities (totaling approximately 31,300 square feet of permeable space). The project may also include other stormwater retention features such as pipes, a detention vault, or a detention pond; as determined necessary during detailed design review. The project would include a total of 41 bicycle parking spaces, including 33 Class I and eight Class II bicycle parking spaces. Several physical traffic calming features are proposed as part of the project including: the installation of school zone signage and speed limit signs, speed humps along Cotter Street, and the installation of high-visibility crosswalks at the intersections of Cotter Street and San Jose Avenue and Cotter Street and Cayuga Avenue. Construction of the project would require excavation up to six feet below ground surface, resulting in approximately 910 cubic yards of soil excavation. Construction activities would occur over a 14-month period and all construction staging would occur on site. During construction, existing vegetation and one existing tree[3] would be removed, one existing tree would be retained, and up to 21 trees would be planted (including up to three street trees). The proposed project would also include a backup emergency generator.

This exemption determination analyzes two proposed student pick-up/drop-off design variants.

- The first design variant, as shown in Figure 1, would remove up to three existing on-street parking spaces on Cotter Street and provide an on-site pick-up/drop-off area, which would be accessible through a circular U-shaped driveway with two 12-foot long curb cuts (one existing and one new) on Cotter Street. The proposed on-site drop-off/pick-up area would be one-way in and one-way out through the ingress/egress curb cuts and would accommodate up to five vehicles at a time.

- Under the second design variant, the project would not provide any on-site pick-up/drop-off area and instead would seek approval from San Francisco Municipal Transportation Agency (SFMTA) for the conversion of three on-street parking spaces (60 feet) on Cotter Street to a drop-off/pick-up passenger loading zone adjacent to the project site between the hours of 8:00 a.m. and 5:30 p.m. on school days. Outside these times, the on-street loading spaces would be available for public parking.

---

[1] Living walls are plantings on the exterior walls of buildings that can add detail to a building and streetscape and serve environmental goals as well. Plants can be independent and hang from wall elements or can grow from property line planters or contained raised planter beds integrated with a building's architecture. Guide to the San Francisco Better Streets Plan Chapter 6: Streetscape Elements, December, 2010.

[2] Bioretention is a soil and plant-based retention practice that captures and biologically degrades pollutants as water infiltrates through sub-surface layers containing microbes that treat pollutants. Treated runoff is then slowly infiltrated and recharges the groundwater. These biological processes operate in all infiltration-based strategies. Guide to the San Francisco Better Streets Plan Chapter 6: Streetscape Elements, December, 2010.

[3] The existing tree to be removed is not a significant tree, landmark tree, or street tree as specifically designated in the Urban Forestry Ordinance.

The proposed project would operate at full capacity with up to 200 students. It is noted that half[4] of all kindergarteners would meet at off-campus locations each day for educational activities. The school would operate between the months of September and June (10 months), with a summer program offered over a six to eight week period from mid-June through July or mid-August. The proposed school is anticipated to operate from Monday through Friday between the hours of 8:00 a.m. to 5:30 p.m. with regular classroom instruction occurring from 8:30 a.m. through 3:40 p.m. and extended care from 3:40 p.m. to 5:30 p.m. There would be no early morning child care program. The proposed summer program is anticipated to operate between the hours of 9:00 a.m. and 4:00 p.m., Monday through Friday. The school would have a designated student drop-off period between 8:00 a.m. and 8:30 a.m. for students in all grades. All students would be dropped off during the same time period in the morning, but there would be staggered pick-up times generally between the hours of 1:00 p.m. and 5:30 p.m. in the afternoon.

The proposed project would also include extracurricular events that may occur outside the normal weekday business hours of 8:00 a.m. and 5:30 p.m. The extracurricular events would be held on weeknights and weekends and would include community festivals, farm/work days, class/club performances, open houses, committee meetings, and community workshops. These events would occur on a weekly, monthly, or periodic basis throughout the school year, with attendance ranging between 10 and 250 visitors depending on the event type. It is anticipated that up to 53 extracurricular events would occur throughout the academic year as shown in Table 1.

Table 1: Extracurricular Event Schedule by Frequency & Attendance

Representative Event	Day of Week	Hours of Operation	Frequency	Estimated Attendees
Community Festival	Saturday	10:00am-3:00pm	1 per year	250
Farm/Work Day	Saturday	10:00am-3:00pm	2 per year	50
Class/Club Performance	Weeknight	5:00pm-7:00pm	7 per year	30
Open House	Saturday	10:00am-12:00pm	3 per y ear	75
Parent Meetings	Weeknight	7:00pm-9:00pm	10 per year	100
Committee Meeting	Weeknight	7:00pm-9:00pm	20 per year	10
Community Workshop	Saturday	1:00pm-3:00pm	10 per year	50

Source: Golden Bridges School, 2016.

The proposed project includes several measures to improve circulation, as provided in Attachment A. The project proposes the development of a Transportation Management Plan (TMP) to guide pick-up and drop-off procedures and to develop multimodal strategies for parents to encourage the use of alternatives modes of transportation to the school. The TMP proposes to establish a walking school bus[5] from the Balboa Park playground/swimming pool to the school; improvements to the pedestrian realm, new street

[4] Half of all kindergarteners (16 students) would meet at the Christopher Playground in San Francisco's Glen Canyon Park.

[5] A walking school bus is a group of children walking to school with one or more adults. It can be as simple and informal as several families taking turns walking their children to school, or as structured as a route with meeting points, a timetable and regularly rotated schedule of volunteers. The walking school bus model has been established as part of the Safe Routes to School Program. More information is available online at: http://sfsaferoutes.org/2011/09/walking-school-bus-resources/

safety and traffic calming measures (as mentioned above); a Construction Management Plan; and an Extracurricular Event Traffic and Parking Management Plan.

Project Setting. The project site is a long and irregular (bowtie) shaped parcel that fronts Cotter Street and extends most of the block towards Santa Rosa Avenue in San Francisco's Outer Mission neighborhood. The site is roughly 85 feet by 500 feet. The site is located in a residential area and is surrounded by two- and three-story single family homes over garages. The project site is located approximately half a mile from the Glen Park BART Station and one mile from the Balboa Park BART Station. There are no known projects in the vicinity that could combine with the proposed project to result in cumulative impacts.

Project Approvals
The proposed project would require a Condition Use Authorization to establish an elementary and secondary school within a Residential District (Planning Code Sections 303 and 209.1) and permits from the Department of Building Inspection for the construction of the proposed project.

Approval Action: The Conditional Use Authorization from the Planning Commission is the Approval Action for the proposed project. The Approval Action date establishes the start of the 30-day appeal period for this CEQA exemption determination pursuant to Section 31.04(h) of the San Francisco Administrative Code.

EXEMPT STATUS (continued):

CEQA State Guidelines Section 15332, or Class 32, provides an exemption from environmental review for in-fill development projects that meet five specific conditions. As discussed below, the proposed project satisfies the terms of the Class 32 exemption.

a) *The project is consistent with applicable general plan designations and policies as well as with applicable zoning designations.*

The San Francisco General Plan establishes objectives and policies to guide land use decisions related to the physical development of San Francisco and is composed of ten elements, each of which addresses a particular topic that applies citywide: air quality; arts; commerce and industry; community facilities; community safety; environmental protection; housing; recreation and open spaces; transportation; and urban design. The Plan provides general policies to guide land use decisions, and contains some policies that relate to physical environmental issues. The proposed project is consistent with applicable general plan designations and policies. The site is located within the RH-1 Zoning District. The proposed project would construct a 15,400 square foot kindergarten through 8th grade private Golden Bridges School campus. Educational uses within the RH-1 District may be authorized through the provisions of a Conditional Use Authorization. The project site is located in the 40-X Height and Bulk District, where the maximum allowed height of a building is 40 feet. The proposed building would conform to this zoning, with a height of approximately 25 feet (excluding a 2 foot, 4 inch elevator penthouse). Thus, the proposed project would be consistent with applicable general plan zoning designations.

b) *The development occurs within city limits on a site of less than five acres surrounded by urban uses.*

The 30,744 square-foot (0.71 acres) project site is located within a developed area of San Francisco and the surrounding lots are developed with residential uses. The proposed project, therefore, would be properly characterized as a development of less than five acres, completely surrounded by urban uses.

c) *The project site has no habitat for endangered, rare or threatened species.*

The project site is an existing neighborhood agricultural use that includes row crops, trees, and shrubs. The project site is completely surrounded by residential uses and within a developed urban area of San Francisco with no significant riparian corridors, estuaries, marshes, wetlands, or any other potential wildlife habitat that might contain endangered, rare, or threatened species.

d) *Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.*

Transportation

A School Circulation Memorandum[6] was prepared by a consultant to analyze transportation impacts associated with the proposed project. The following discussion summarizes the results from this analysis.

On March 3, 2016, in anticipation of the future certification of revised CEQA Guidelines pursuant to Senate Bill 743, the San Francisco Planning Commission adopted State Office of Planning and Research's recommendation in the *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*[7] to use the Vehicle Miles Traveled (VMT) metric instead of automobile delay to evaluate the transportation impacts of projects (Resolution 19579). (Note: the VMT metric does not apply to the analysis of impacts on non-automobile modes of travel such as riding transit, walking, and bicycling.) Accordingly, this categorical exemption does not contain a separate discussion of automobile delay (i.e., traffic) impacts. Instead, a VMT and induced automobile travel impact analysis is provided within.

VMT and Induced Vehicle Travel

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development at great distance from other land uses, located in areas with poor access to non-private vehicular modes of travel, generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

---

[6] CHS Consulting Group, 203 Cotter Street (Golden Bridges School) Transportation Technical Memorandum, September 21, 2016. This document (and all other documents cited in this report, unless otherwise noted), is available for review at 1650 Mission Street, Suite 400, San Francisco, CA, as part of Case No. 2015-003791ENV.

[7] This document is available online at: https://www.opr.ca.gov/s_sb743.php.

Given these travel behavior factors, San Francisco has a lower VMT ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the City, expressed geographically through transportation analysis zones (TAZs), have lower VMT ratios than other areas of the City. The Planning Department has prepared a Geographic Information System database (the Transportation Information map) with current and projected 2040 per capita VMT figures for all TAZs in the City, in addition to regional daily average figures.[8]

A project would have a significant effect on the environment if it would cause substantial additional VMT. The State Office of Planning and Research's (OPR) *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*[9] ("proposed transportation impact guidelines") recommend screening criteria to identify types, characteristics, or locations of projects that would not result in significant impacts to VMT. If a project meets one of the three screening criteria provided (Map-Based Screening, Small Projects, or Proximity to Transit Stations), then it is presumed that VMT impacts would be less than significant for the project and a detailed VMT analysis is not required. Map-Based Screening is used to determine if a project site is located within a TAZ in the City that exhibits low levels of VMT; Small Projects are projects that would generate fewer than 100 vehicle trips per day; and the Proximity to Transit Stations criterion includes projects that are within a half mile of an existing major transit stop, have a floor area ratio (FAR) of greater than or equal to 0.75, vehicle parking that is less than or equal to that required or allowed by the Planning Code without conditional use authorization, and are consistent with the applicable Sustainable Communities Strategy.

According to the Transportation Information Map, the existing average daily VMT per capita for office (used to approximate school uses)[10] is 10.9 for the transportation analysis zone the project site is located in, 910. This is 33 percent below the existing regional average daily VMT per employee of 16.2. Given the project site is located in an area where existing VMT is more than 15 percent below the existing regional average, the proposed school would not result in substantial additional VMT. Future 2040 average daily VMT per employee for office use is 10.0 for the transportation analysis zone, 910. This is 31 percent below the future 2040 regional average daily VMT per employee of 14.5.

The proposed project is not a transportation project. However, the first design variant would create a new 12 foot curb cut on Cotter Street. The second design variant would create a 60 foot white passenger loading zone on the full length of the project frontage. The proposed project would also include Class I and Class II bicycle parking. These features fit within the general types of projects that would not substantially induce automobile travel. Therefore, VMT impacts from the project would not be significant.

---

[8] San Francisco Planning Department *Transportation Information Map*, accessed August 10, 2016 at: http://sftransportationmap.org.

[9] Governor's Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, January 20, 2016. Accessed August 10, 2016 at: https://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_-_Proposal_January_20_2016.pdf.

[10] Per the San Francisco Planning Department. Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation, K-12 schools should be treated as office for screening and analysis. This is based on the SFCHAMP Model.

Trip Generation

Travel demand resulting from the project was based on a School Circulation Memorandum. The proposed project would generate up to 189 daily vehicle trips (153 student trips and 36 staff trips). These vehicle trips include about 54 vehicle trips during the morning drop-off period and 99 vehicle trips during the afternoon pick-up period. The difference between a.m. and p.m. vehicle trips is due to off-site drop-off for 84 students in Grades 5 through 8 proposed to occur at the Balboa Park playground/swimming pool as part of the morning walking school bus program. The students would be dropped off and would depart in the Walking School Bus between 8:00 a.m. and 8:30 a.m. Balboa Park swimming pool's operating hours are from 9:00 a.m. to 5:00 p.m. Therefore, the walking school bus would not affect swimming pool operations. Furthermore, 16 kindergarten students would be drop-off and picked-up off-site at the Christopher Playground. The project would also result in 36 daily vehicle trips from faculty/staff members, which would occur before and after school hours and outside of student drop-off/pick-up periods. The proposed project is also estimated to generate a total (student and staff) of 38 daily transit trips, 41 daily bicycle trips, 125 daily walking trips, and 17 daily trips by other modes (e.g., Uber, Lyft, other rideshare services, taxi, etc.), respectively. Table 2 depicts the trip generation for the proposed project.

Table 2 – Estimated Daily Trip Generation

	Student				Faculty/Staff		Total	
Person Trips by Mode								
Mode	Person Trips (AM)	Percent (AM)	Person Trips (PM)	Percent (PM)	Person Trips	Percent	Person Trips	Percent
Drive Alone	45	24%	83	45%	8	13%	136	32%
Carpool	18	10%	33	18%	20	33%	71	17%
Transit	9	5%	17	9%	12	20%	38	9%
Bike	11	6%	20	11%	10	17%	41	10%
Walk	95[1]	52%	20	11%	10	17%	125	29%
Other (e.g. rideshare, taxi, etc.)	6	3%	11	6%	0	0%	17	4%
Total	184[1]	100%	184[1]	100%	60	100%	428[1]	100%
Vehicle Trips								
Arrivals	Vehicle Trips[2]		Percent[3]		Vehicle Trips[2]	Percent[3]	Vehicle Trips[2]	Percent[3]
Morning	54		35%		18	50%	72	38%
Afternoon	99		65%		18	50%	117	62%
Total	153		100%		36	100%	189	100%

Notes:
1. The 95 student walking trips in the a.m. drop-off period includes 84 trips stemming from the off-site walking school bus for students in Grades 5-8. There is no walking school bus during the p.m. pick-up period, and students in Grades 5-8 would be picked up on-site.
2. Student/Faculty vehicle trips represent total drive-alone person trips and carpool trips (which assumes two students per vehicle trip).
3. Percentage of vehicle arrivals is considered "one-way" trips during each morning and afternoon period. Therefore 38% of total daily vehicle trips would arrive in the morning and the other 62% of total daily vehicle trips would arrive in the afternoon.
4. The total person trips for the a.m. drop-off and p.m. pick-up periods does not include 16 off-site kindergarten drop-off/pick-ups at Christopher playground.
5. The drop-off at Balboa Park swimming pool/playground and drop-off/pick-up at Christopher playground would not result in any hazardous conditions
Sources: Golden Bridges School, 2015; CHS Consulting Group, 2016.

The extracurricular events would result in parent and children participation outside of the typical school day. The project proposes an annual community festival which would generate the highest amount of vehicle trips with an estimated 126 vehicle trips, while committee meetings would generate the least amount of vehicle trips at 5 trips. Table 3 depicts the estimated vehicle trip generation from proposed extracurricular events.

Table 3: Extracurricular Event Trip Generation by Mode

Representative Event	Frequency	Estimated Attendees	Person Trips (One-Way)					Vehicle Trips
			Auto	Transit	Walk	Bike	Total	
Community Festival	1 per year	250	284	93	82	42	500	126
Farm/Work Day	2 per year	50	57	19	16	8	100	25
Class/Club Performance	7 per year	30	34	11	10	5	60	15
Open House	3 per year	75	85	28	24	12	150	38
Parent Meetings	10 per year	100	114	37	33	17	200	50
Committee Meeting	20 per year	10	11	4	3	2	20	5
Community Workshop	10 per year	50	57	19	16	8	100	25
Weighted Average	--	--	**53**	**17**	**15**	**8**	**94**	**24**

Source: Golden Bridges School, 2016; *SF Transportation Impact Analysis Guidelines* (October 2002) Appendix E – Table E-15; CHS Consulting Group, 2016.

Transit

The project site is located in an area well-served by transit. Muni bus routes 23-Monterey, 36-Teresita, 44 O'Shaughnessy, 52-Excelsior and Muni light-rail line J-Church are located within a half-mile (walking distance) of the project site. The project site is also within a half-mile (walking distance) from the Glen Park BART Station and one mile from the Balboa Park BART Station.

According to the School Circulation Memorandum, the project would result in 38 new daily transit trips. Transit trips generated by extracurricular events would vary depending on the event type and associated attendance level. Community festivals would generate 93 transit trips, which represents the highest number of transit trips generated by an extracurricular event. These 93 transit trips would typically be outside the p.m. peak hour, when system wide ridership is at its highest. Therefore, additional capacity exists at these times to accommodate the 93 transit trips. This is a minimal increase of transit trips that would be generated by the proposed project. The SFMTA Board has adopted an "85 percent" standard for transit vehicle load—that is, all transit vehicles should operate at or below 85 percent capacity utilization. The p.m. peak hour capacity utilization on the 44 O'Shaughnessy within the Southwest Muni screenline[11] is at the 85 percent capacity utilization standard. An exceedance of the capacity utilization standard would represent a significant transit impact. However, the project's transit trips would be dispersed among several different transit lines within the Southwest Muni screenlines. The project's 38 daily transit

[11] Screenlines are hypothetical lines that would be crossed by persons traveling between the downtown vicinity and other parts of San Francisco and the region, allowing for a comparison between estimated transit volumes and available capacities. Four screenlines have been established in San Francisco to analyze potential impacts of projects on Muni service: northeast, northwest, southwest, and southeast, with sub-corridors within each screenline.

trips would be distributed across several Muni lines, and therefore would not result in a substantial increase in capacity utilization on any one line. The project's proposed transit trips would be less than 5 percent of the overall capacity for the existing Southwest screenline (comprised of a number of Muni lines). Therefore the proposed project would not result in any new significant transit impacts or contribute considerably to any cumulative transit impacts.

Bicycle

According to the School Circulation Memorandum, the project would result in 41 new daily bicycle trips. Bicycle trips generated by extracurricular events would vary depending on the event type and associated attendance level. Community festivals would generate 42 bicycle trips, which represents the highest number of bicycle trips generated by an extracurricular event. Two bicycle routes (#45 and #70) are within a half-mile of the project site. Bicycle Route #45 (a class II facility) is the nearest bicycle route in proximity to the project site and runs in a southeast direction along Alemany Boulevard, about one and a half blocks south of the project site. Bicycle Route #70 is a Class III facility with segments that run along Hearst Avenue and Circular Avenue north of I-280 and past the Glen Park BART station, along Still Street between the Lyell Street and Alemany Boulevard. The proposed project would comply with Section 155.2 of the Planning Code as the project would include a total of 41 bicycle parking spaces, consisting of 33 Class I and eight Class II bicycle parking spaces. The increase of bicycle trips generated by the proposed project would be accommodated by the existing bicycle network and the proposed project would not create potentially hazardous conditions for bicyclists; therefore, no significant impacts related to bicycling or bicycle facilities would occur.

Pedestrians

The project site is adjacent to the Cotter Street sidewalk. The proposed project would generate 163 daily walk trips (125 daily walk-trips and 38 daily transit trips, which include walk trips). Walk trips generated by extracurricular events would vary depending on the event type and associated attendance level. Community festivals would generate 175 walk trips, which represents the highest number of walk trips generated by extracurricular events (82 walk trips and 93 transit trips, which include walk trips). The first design variant would provide vehicular access to a new driveway from Cotter Street. No potentially hazardous conditions would occur between pedestrians and vehicles entering and exiting the proposed off-street U-shaped driveway under the first design variant because the staff would manage this loading zone to prevent vehicles queues and would safely help students entering the school as described in Attachment A. The second design variant would not include any curb cuts in the sidewalk along Cotter Street. Instead drop-off/ pick-up would occur along Cotter Street in the created 60 foot passenger loading (white) zone. The project also includes a walking school bus from Balboa Park playground/swimming pool for grades 5th through 8th. Staff members, volunteers, and parents would lead the walking school bus to ensure safety. The increase in daily pedestrian person-trips generated by the proposed project would not substantially overcrowd sidewalks in the project vicinity or otherwise interfere with pedestrian accessibility to the site and adjoining areas. Furthermore, as detailed in the Circulation Memorandum and Attachment A, Golden Bridges School would implement drop-off and pick-up protocols to ensure that loading children are

escorted safely to and from the vehicles. Therefore, no significant impacts related to pedestrian trips would occur as a result of the proposed project.

Parking

The project would remove three on-street parking spaces to provide a new curb cut and U-shaped driveway to accommodate the five off-street parking spaces under the first design variant. Under the second design variant, the project would convert three on-street parking spaces along Cotter Street to a 60 foot passenger loading zone (white zone) between the hours of 8:00 a.m. and 5:30 p.m.

Pursuant to the Planning Code Section 151, the project requires one off-street parking space. The project sponsor has substituted the required off-street parking space with one Class I bicycle space as permitted under the Planning Code 155(e).

Parking was analyzed in the School Circulation Memorandum, which looked at the study area (bounded by San Jose Avenue to the north, Cayuga Avenue to the south, Theresa Street to the east, and Santa Rosa Avenue to the west). As shown in Table 4, there are a total of 111 on-street parking spaces in the study area. During the morning period, there were a total of 90 vehicles parked on-street in the study area, which represents an overall on-street parking utilization of 81 percent. Parking demand is relatively constant throughout the day, as the survey findings indicate that during the afternoon period a total of 92 vehicles were parked in the study area, leaving 19 available spaces (an overall on-street parking utilization of 83 percent). There are no public, off-street parking facilities in the vicinity of the project site. As shown in Table 4, on-street parking demand within the project area is generally well-utilized; however, the survey results indicate that parking occupancies are not above practical capacity (85 percent for on-street facilities). Based on these findings, parking conditions are not constrained during the course of a typical weekday and on-street parking is generally available and these available spaces could accommodate some of the parking demand generated by the proposed project.

Table 4: Project Area On-Street Parking Utilization Summary

Street	To	From	Parking Supply	Parking Occupancy			
				Morning		Afternoon	
				Occupied	Percent	Occupied	Percent
Cotter Street	San Jose Avenue	Cayuga Street	33	33	100%	30	90%
Cotter Street	Cayuga Street	Alemany Blvd	13	11	85%	15	115%
Cayuga Street	Cotter Street	Theresa Street	13	9	69%	11	85%
Cayuga Street	Theresa Street	Tingle Street	16	14	88%	13	81%
Cayuga Street	Santa Rosa Ave	Cotter Street	36	23	64%	23	64%
Total			**111**	**90**	**81%**	**92**	**83%**

Sources: CHS Consulting Group, 2016.

Additionally, the project sponsor is in the process of securing a contract with the Community Assembly of God Church, located at the intersection of Ocean and San Jose Avenues, approximately 0.7 miles from the project site. The parking lot on the Church property has a total of 56 available parking spaces and the project sponsor may be able to lease a portion of these spaces as needed depending on the number of faculty/staff members who would drive to the school and parents/guardians who may occasionally have the need to stay on the school grounds for a longer period of time (e.g. during extracurricular events.). It is anticipated that the school may be able to lease 10 to 15 parking spaces for these purposes. The leased parking spaces may also be made available for parents/guardians who wish to escort their child/children onto the school campus and who are unable to seek an available on-street parking space. The project sponsor is also in communication with the Corpus Christi Church on Santa Rosa Avenue, located two blocks southeast of the project site, for the potential use of their parking lot. The Corpus Christi Church lot consists of 34 parking spaces and the project sponsor may lease or rent a portion of the spaces as needed (approximately up to 18 spaces). Furthermore, the project includes several measures to encourage travel to the school by modes other than the automobile as described in Attachment A. These measures would help the project meet its parking demand; however, even without such features the proposed project is not expected to result in a substantial parking deficit that could create hazardous conditions or significant delays affecting traffic, transit, bicycles or pedestrians.

San Francisco does not consider parking supply as part of the permanent physical environment. Parking conditions are not static, as parking supply and demand varies from day to day, from day to night, from month to month, etc. Hence, the availability of parking spaces (or lack thereof) is not a permanent physical condition, but changes over time as people change their modes and patterns of travel.

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. Environmental documents should, however, address the secondary physical impacts that could be triggered by a social impact (CEQA Guidelines Section 15131(a)). The social inconvenience of parking deficits, such as having to hunt for scarce parking spaces, is not an environmental impact, but there may be secondary physical environmental impacts, such as increased traffic congestion at intersections, air quality impacts, safety impacts, or noise impacts caused by congestion. In the experience of San Francisco transportation planners, however, the absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit service, taxis, bicycles or travel by foot) and a relatively dense pattern of urban development, induces many drivers to seek and find alternative parking facilities, shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service in particular, would be in keeping with the City's "Transit First" policy. The City's Transit First Policy, established in the City's Charter Section 16.102 provides that "parking policies for areas well served by public transit shall be designed to encourage travel by public transportation and alternative transportation." Therefore, no significant parking impacts are expected.

Emergency Access

Emergency vehicles routinely use streets surrounding the project site, including San Jose Avenue, Cotter Street, Cayuga Avenue, Santa Rosa Avenue, and Capistrano Street. Emergency vehicles would continue to use these main streets to reach the project site. The proposed project would not prohibit access to any existing streets. Emergency vehicles would be able to access the site from Cotter Street. As part of the building permit review, the Fire Department will review the proposed project for compliance with the San Francisco Fire Code to ensure adequate emergency access. Therefore, the project would not result in a significant impact to emergency access.

Construction Traffic

Construction of the proposed project is expected to occur over the course of a 14-month period. Construction staging would all occur on the project site. During that time, it is anticipated that the majority of the construction-related truck traffic would use I-80, I-280, and U.S. 101 to access the project site from the East Bay, South Bay, and North Bay and from locations within the City. The addition of worker-related vehicle or transit trips would not substantially affect transportation conditions. Construction workers who drive to the site would result in a small temporary increase in traffic volumes on nearby streets and demand for on-street parking. Construction worker vehicles would temporarily reduce the availability of on-street parking during working hours. As shown in Attachment A, a Construction Management Plan would be prepared for the proposed project and would be subject to review by the Transportation Advisory Staff Committee (TASC), an interdepartmental committee including the Police, Public Works, Planning, Fire Department and SFMTA Muni Operations. TASC would review the Construction Management Plan and would address any issues related to traffic and pedestrian circulation; bicycle safety; parking; and other project construction activities in the area, none of which are anticipated at this time. Due to the temporary and limited duration of construction, construction-related impacts would not be considered significant.

In light of the above, the proposed project would not result in a significant impact on the transportation and circulation system or result in a cumulative transportation impact.

Noise

Noise is regulated by the San Francisco Noise Ordinance (Noise Ordinance), which is codified in Article 29 of the San Francisco Police Code. Article 29 establishes property line and other limits for fixed noise sources and also regulates construction noise. Under Section 2909(b), fixed noise sources from commercial properties (such as the proposed school use) are limited to 8 dBA[12] above ambient levels and Section 2909 (d) also establishes that such noise not exceed an interior daytime (7 a.m. to 10 p.m.) noise limit of 55 dBA or nighttime noise limit (10 p.m. to 7 a.m.) of 45 dBA at the nearest residential receptor. While the limits in the Noise Ordinance only apply to fixed noise sources (e.g. mechanical equipment), and not to noise from the variety of school-related noise activity, the Planning Department uses the criteria in the Noise Ordinance for determining the significance of noise impacts. Specifically, the Department undertakes a two-step

[12] The standard method used to quantify environmental noise involves evaluating the sound with an adjustment to reflect the fact that human hearing is less sensitive to low-frequency sound than to mid-and high-frequent sound. This measurement adjustment is called "a" weighting, and the data are reported in A-weighted decibel (dBA). A -10dB (decibel) increase in noise level is generally perceived to be twice as loud.

analysis that considers first whether noise from a proposed project would exceed the property line noise limits of 8 dBA above ambient per Section 2909(b). If the project does not result in noise in excess of the property line noise limits established in the Noise Ordinance, generally, no further analysis is required. If a project could exceed the property line noise limits, a second analysis is conducted to determine if the noise would meet the daytime or nighttime interior noise limits in Section 2909 (d). The requirements of the Noise Ordinance are designed to prevent sleep disturbance, protect public health, and prevent the acoustical environment from progressive deterioration. Therefore, if noise generated by project operations meets either the property line noise limits or limits established in Section 2909 (d), the project would not result in a significant noise impact.

Section 2907 of Article 29 of the Police Code regulates construction noise and is the basis for determining the significance of construction-related noise impacts.

Operational Noise

An Acoustical Study[13] was conducted for the proposed project and long-and short-term noise measurements were taken. Ambient noise levels at the project site were determined to be 54 dBA. The study analyzed both noise that would be generated from occupants of the school and mechanical noise. The Acoustical Study analyzed noise scenarios from outdoor student program activities, pick-up and drop-off activities, extracurricular events, and overlapping school and mechanical noise.

As indicated in the Acoustical Study, with the exception of noise from car doors closing in the proposed front yard/vehicle drop off area,[14] noise at the property line would not exceed 8 dBA above ambient noise levels (62 dBA) and would meet the criteria of Section 2909(b). Furthermore, the Acoustical Study indicates that none of the foreseeable noise scenarios from operation of the Golden Bridges School would exceed the 55 dBA daytime limit (between the hours of 7 a.m. to 10 p.m.) of Section 2909(d). No nighttime (10 p.m. to 7 a.m.) activities are proposed or anticipated; therefore, the proposed project would also meet the nighttime noise limits of Section 2909(d).

Mechanical noise from fans and heat pumps was also analyzed as part of the Acoustical Study. The results of the mechanical noise analysis (given the assumed equipment and operating conditions) indicate that sound levels at the nearest property line would be at or below 62 dBA, meeting the criteria of Section 2909(b) and would be at or below the 55 dBA interior residential noise limit established for fixed mechanical equipment in Section 2909(d) of Article 29 of the Police Code.

In addition, combined noise from people and mechanical equipment was analyzed as shown in Table 5. Overlapping noise from mechanical equipment and outdoor class time in courtyard 6 (Figure 2) and mechanical equipment and noise from car doors closing in the front yard vehicle drop-off area could result in noise levels of 64 dBA. However, these estimated noise levels are conservative, worst-case, representations of overlapping noise levels that could result from the

[13] Wilson Ihrig, *Golden Bridges School Noise Study Proposed Cotter Street Campus,* August 15, 2016.

[14] The noise analysis of doors closing is conservative (i.e., worst-case) in that it assumes doors from five vehicles in the drop-off/ pick-up area shutting at the same time and does not account for acoustical shielding provided by the property line fence. This is temporary and would only occur during passenger loading activities.

Table 5: Combined Results of Noise Scenario Modeling and Mechanical Noise Predictions

Scenario	Scenario Description	Property Line	Predicted level at property line* (dBA)	Predicted 2nd story interior level (dBA)
1a	Lunch/Recess in Courtyards 1-4	South+	51	35-41
	Lunch/Recess in Courtyard 6	North+	62	41
1b	Lunch/ Recess in Front Yard/ Vehicle Drop-off Area	North and South	52**	37
1c	Lunch/ Recess in Back Yard Planting Area	North and South	54	41
		West	51	38
2a	Outdoor Class Time Speech (Backyard Planting Area)	North and South	54	41
		West	51	38
2b	Outdoor Class Time Speech (Courtyards 1-4)	South+	51	37-42
	Outdoor Class Time Speech (Courtyard 6)	North+	62	41
2c	Outdoor Class Time Singing (Backyard Planting Area)	North and South	60	47
		West	57	43
2d	Outdoor Class Time Singing (Courtyards 1-3)	South+	61	44
	Outdoor Class Time Singing (Courtyard 4)	South+	61	51
	Outdoor Class Time Singing (Courtyard 6)	North+	**64**	47
3	All-School or Community Events in the Backyard Planting Area	North and South	57	45
		West	55	41
4	Closing Doors in Front Yard/ Vehicle Drop-off Area	North and South	**64	49

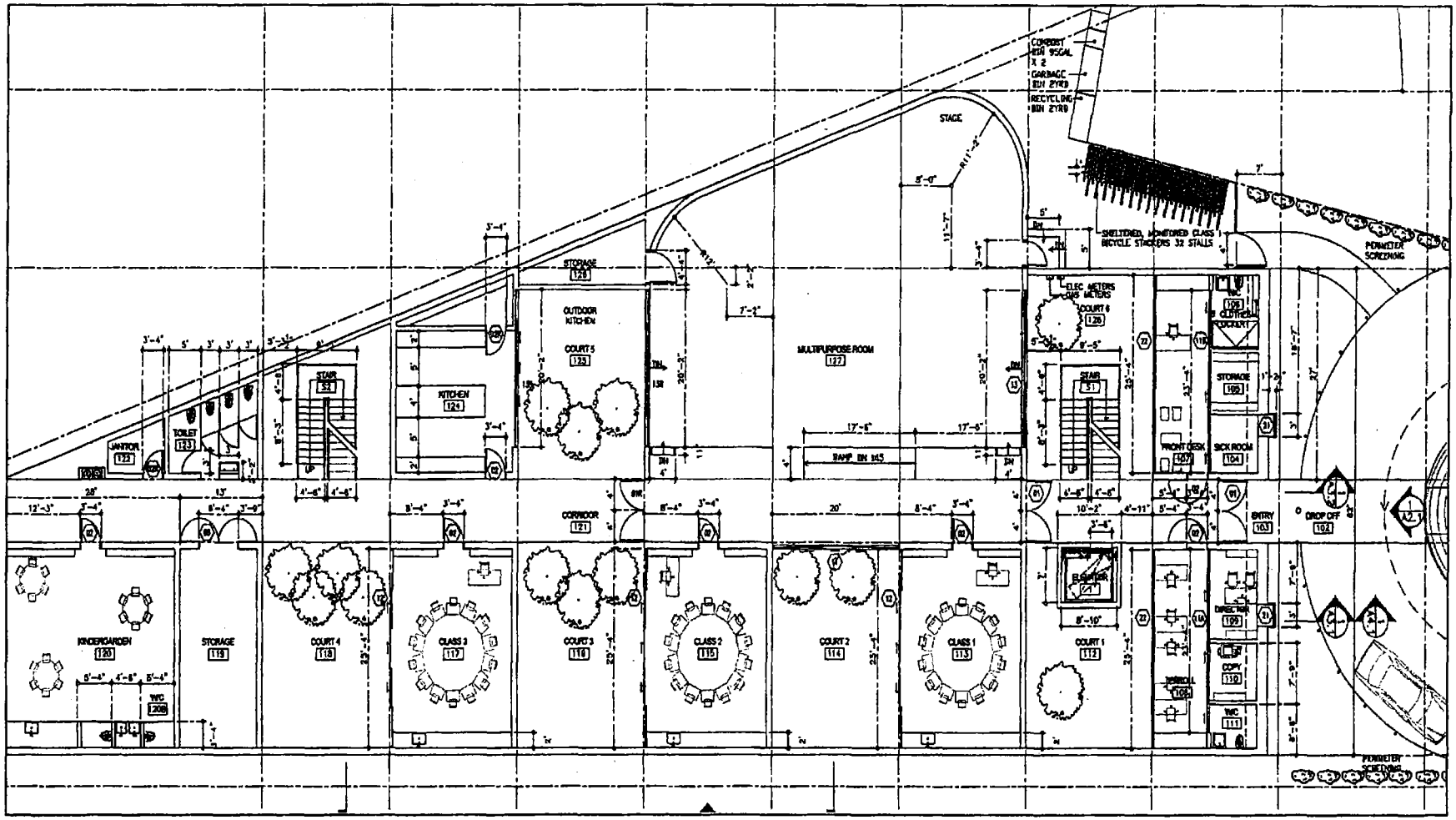
Bold values indicate a possible exceedance of the standards in the San Francisco Noise Ordinance Section 2909 (b).

* Includes 5-7 dB of acoustical shielding from the 6-10 foot tall fence surrounding the property, with the exception of the wall-mounted exhaust fans which are expected to be installed above the fence line. Height of wall is dependent on location.

** Does not include acoustical shielding of the fence

+ These are the worst-case courtyards with the closest distances to the property line/ surrounding homes. The noise level at the property lines and residential balconies due to other courtyard noise would be lower than those numbers presented here.

Figure 2: Ground Floor Plan Showing Courtyard Locations



proposed project. Furthermore, none of the foreseeable combined noise scenarios from overlapping operations at the Golden Bridges School would exceed 55 dBA inside the closest residences, the limit provided by Article 29 of the Police Code Section 2909(d) between the hours of 7 a.m. and 10 p.m. Moreover, per the schedule of events provided by Golden Bridges, there would be no activities or events between 10 p.m. and 7 a.m. Thus, operation of the proposed project (including noise from daytime activities and mechanical noise) would meet the noise limits established in the Noise Ordinance. Therefore, the proposed project would result in less than significant operational noise impacts.

Construction Noise

Although increase in noise during the 14-month construction phase of the project would occur, construction noise would be limited to certain hours of day and would be temporary and intermittent in nature. Construction noise is also regulated by the San Francisco Noise Ordinance and Section 2907 of the Police Code requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet from the source. Impact tools (such as jackhammers and impact wrenches) must have both intake and exhaust muffled to the satisfaction of the Director of Public Works. Section 2908 of the Police Code prohibits construction work between 8:00 p.m. and 7:00 a.m. if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the Director of Public Works. The proposed project would be required to comply with these requirements during construction. Therefore, the proposed project would result in less than significant construction noise impacts.

In light of the above, the proposed project would not result in individually or cumulatively significant noise impacts.

Air Quality

In accordance with the state and federal Clean Air Acts, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO_2), sulfur dioxide (SO_2) and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. The Bay Area Air Quality Management District (BAAQMD) in their *CEQA Air Quality Guidelines* (May 2011), has developed screening criteria to determine if projects would violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the San Francisco Bay Area Air Basin. If a proposed project meets the screening criteria, then the project would result in less-than-significant criteria air pollutant impacts. A project that exceeds the screening criteria may require a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds. The proposed project would not exceed the criteria air pollutant screening levels for an elementary school (277,000 square feet for construction and 271,000 square feet for operation).[16] Therefore, the proposed project would not result in a significant criteria air pollutant impact either individually or cumulatively.

[16] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, Updated May 2011. Table 3-1.

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long-duration) and acute (i.e., severe but short-term) adverse effects to human health, including carcinogenic effects. In response to growing concerns of TACs and their human health effects, the San Francisco Board of Supervisors approved a series of amendments to the San Francisco Building and Health Codes, generally referred to as the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code, Article 38 (Ordinance 224-14, effective December 8, 2014) (Article 38). The purpose of Article 38 is to protect the public health and welfare by establishing an Air Pollutant Exposure Zone and imposing an enhanced ventilation requirement for all urban infill sensitive use development within the Air Pollutant Exposure Zone. Projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would expose sensitive receptors to substantial air pollutant concentrations or add emissions to areas already adversely affected by poor air quality. The project site is not within an Air Pollutant Exposure Zone. Therefore, the proposed project is not subject to Health Code Article 38.

The proposed project would include a backup emergency generator. Emergency generators are regulated by the BAAQMD through its New Source Review (Regulation 2, Rule 5) permitting process. The project sponsor would be required to obtain applicable permits to operate the emergency generator from the BAAQMD. Although emergency generators are intended only to be used in periods of power outages, monthly testing of the generator would be required. The BAAQMD limit testing to no more than 50 hours per year. Additionally, as part of the permitting process, the BAAQMD would limit the excess cancer risk from any facility to no more than ten per one million population and requires any source that would result in an excess cancer risk greater than one per one million population to install Best Available Control Technology for Toxics (T-BACT).

The proposed project would require construction activities for the approximate 14-month construction phase. However, construction emissions would be temporary and variable in nature and would not be expected to expose sensitive receptors to substantial air pollutants. Furthermore, the proposed project would be subject to, and required to comply with, California regulations limiting idling to no more than five minutes,[17] which would further reduce nearby sensitive receptors' exposure to temporary and variable TAC emissions. Therefore, the proposed project would not result in significant impacts from TAC emissions. In conclusion, the proposed project would not result in significant air quality impacts individually or cumulatively.

Water Quality

The project would not result in discharges that would have the potential to degrade water quality or contaminate a public water supply. Project-related wastewater and stormwater would flow into the City's combined sewer system and would be treated to standards contained in the City's National Pollutant Discharge Elimination System (NPDES) Permit for the Southeast Water Pollution Control Plant prior to discharge. Furthermore, the Department of Building Inspection

[17] California Code of Regulations, Title 13, Division 3, § 2485. This regulation applies to on-road heavy duty vehicles and not off-road equipment.

(DBI) would review the proposed project's stormwater features for compliance with the California Plumbing Code (Section 16) Nonpotable Rainwater Catchment Systems to ensure compliance with State requirements for water quality. Therefore, the proposed project would not result in significant water quality impacts.

e) *The site can be adequately served by all required utilities and public services.*

The project site is located in a dense urban area where all public services and facilities are available. The proposed project would be connected to existing water, electric, gas, and wastewater services. Prior to receiving a building permit, the project would be reviewed by the Department of Building Inspection (DBI), the San Francisco Fire Department (SFFD), the San Francisco Public Utilities Commission (SFPUC), and Public Works (DPW) to ensure compliance with City and State regulations concerning building standards, fire protection, sewer connections, and hydrology. Therefore, the proposed project would be adequately served by all required utilities and public services.

DISCUSSION OF ENVIRONMENTAL ISSUES:

CEQA Guidelines Section 15300.2 establishes exceptions to the application of a categorical exemption for a project. None of the established exceptions applies to the proposed project.

Guidelines Section 15300.2, subdivision (b), provides that a categorical exemption shall not be used where the cumulative impact of successive projects of the same type in the same place, over time, is significant. As discussed previously there are no cumulative projects in the vicinity that could combine with the proposed project to result in cumulative effects on the environment. Therefore, there is no possibility of a significant cumulative effect on the environment due to the proposed project.

Guidelines Section 15300.2, subdivision (c), provides that a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. As discussed above, the proposed project would not have a significant effect on traffic, noise, air quality and water quality. In addition, the proposed project would not have a significant effect on the environment due to unusual circumstances for other environmental topics, including those discussed below.

CEQA Guidelines Section 15300.2, subdivision (e), provides that a categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code. The project site is not located on such a list.

OTHER ENVIRONMENTAL TOPICS:

Agriculture and Forest Resources

The project site is an existing neighborhood agricultural use. The project includes a change of use from neighborhood agricultural to an institutional use (Golden Bridges School). The school would construct a new 15,400 square foot building, which includes open space in the rear of the property for farming and

educational activities. The project would remove one existing tree[20] and add up to 21 new trees (including up to three street trees). The project site is located in San Francisco, an urban area. The California Department of Conservation's Farmland Mapping and Monitoring Program identified the site as Urban and Built-Up Land. The site is not under Williamson Act contract or zoned as forest land or timberland. Therefore, the proposed project would not convert any prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use, would not conflict with agricultural zoning or Williamson Act contracts, and would not lead to the loss or conversion of forest land to non-forest use, and the proposed project would not conflict with any policies of the San Francisco Urban Forestry Ordinance. Therefore, the proposed project would not result in a significant impact to agricultural or forest resources.

Aesthetics

Design and aesthetics are by definition subjective, and open to interpretation by decision-makers and members of the public. A proposed project would be considered to have a significant adverse effect on visual quality only if it would cause a substantial and demonstrable negative change. The proposed project would not cause such change. The project would intensify and change the use of the site and would be visible from residential buildings within the project site vicinity. The project would not degrade or obstruct scenic views from public areas viewable by a substantial number of people or substantially degrade the visual quality in the project vicinity. While private views may be lost or obstructed, this is common and expected in an urban setting and not considered a significant impact. In addition, the proposed project would include new lighting, but the lighting would not result in spillover into light-sensitive areas, due to the distance between the lighting and residential properties and proposed screening such as vegetation and fencing. Therefore, the project would not result in a significant impact on aesthetics.

Biological Resources

The area surrounding the project site is currently developed with single-family homes. There are no riparian corridors, estuaries, marshes, or wetlands in the project vicinity that could be affected by the proposed project. The proposed construction of the school's 25-foot-tall building would require the removal of one tree and portions of the existing neighborhood agricultural use including row crops and shrubs. The project would include new landscaping and vegetation including 21 new trees (including up to three street trees). The proposed project's height would not substantially interfere with the movement of any resident or migratory wildlife species and the proposed project would be required to comply with Planning Code Section 139 standards for bird-safe buildings.

Migratory and residential birds often nest in ornamental and/or street trees in urban environments. Although birds that nest in urban environments are generally habituated to higher levels of noise and human activity than birds in less developed areas, project-related construction activities and noise could disrupt nesting activities. Most species of nesting birds and their nests and eggs are protected by Fish and Game code Sections 3505 and 3503.5 and the federal Migratory Bird Treaty Act (MBTA) which makes it unlawful to harm migratory birds and their nests. To ensure compliance with the Fish and Game Code and the MBTA, the project would implement the following measures, or their equivalent, to ensure compliance with state and federal regulations protecting migratory birds:

[20] The existing tree to be removed is not a significant tree, landmark tree, or street tree.

- Vegetation removal activities for the proposed project could be conducted during the nonbreeding season (i.e., September through February) to avoid impacts to nesting birds. If other timing restrictions make it impossible to avoid the nesting season, preconstruction surveys shall be conducted for work scheduled during the breading season (March through August).

- Preconstruction surveys are typically conducted by a qualified ornithologist, authorized by the California Department of Fish and Wildlife (CDFW), to determine if any birds are nesting in or in the vicinity of the vegetation to be removed. The preconstruction survey is typically conducted within 15 days prior to the start of the work from March through May (since there is higher potential for birds to initiate nesting during this period) and within 30 days prior to the start of work from June through August.

- If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist, in consultation with CDFW, typically determine the extent of a construction-free buffer zone to be established around the nest until the young have fledged.

As described above, the proposed project would not conflict with any local policies or ordinances protecting biological resources; affect any rare, threatened, or endangered species; or diminish habitat for rare, threatened or endangered. For these reasons the proposed project is not anticipated to have a significant effect on biological resources.

Geology and Soils

A Geotechnical Investigation[21] was conducted for the proposed project. Soil samples were obtained using borings to determine the probable subsurface conditions at the site, and to provide general soil and foundation engineering design criteria. Groundwater was encountered in all borings at depths of approximately 3 to 3.5 feet below the existing ground surface. Groundwater at the project site would vary seasonally a few feet depending on rainfall amounts and time of year. The site was noted to be susceptible to flooding. The field investigation indicated the site is underlain by about 1.5 to 3 feet of fill consisting of clayey sand and clay with sand. The fill is typically loose or soft to medium stiff and is underlain by very loose to medium dense sand, sand with clay, silty sand and clayey sand to approximately 9 to 12.5 feet below the existing ground surface. Depths of approximately 2 to 12.5 feet below ground surface is susceptible to liquefaction. Total liquefaction-induced settlement may occur on the order of 2.5 to 5 inches. Differential earthquake-induced settlement beneath the proposed building may occur on 1 to 5 inches over a horizontal distance of 50 feet. Earthwork at the site would consist of clearance of existing vegetation including approximately 910 cubic yards of excavation. A letter[22] was provided by the geotechnical engineer confirming that the recommendations of the geotechnical investigation remain valid for the proposed project. The geotechnical report concludes that the site is suitable for the proposed construction, provided that recommendations in the report are incorporated into the project plans and specifications and implemented during construction.

[21] Rollo * Ridley Inc., *Geotechnical Investigation Golden Bridges School 203 Cotter Street San Francisco, California,* January 13, 2015.
[22] Rollo * Ridley Inc., *Geotechnical Investigation Golden Bridges School 203 Cotter Street San Francisco, California,* September 16, 2016.

Compliance with applicable codes and the recommendations in the Geotechnical Investigation would reduce risks related to liquefaction to an acceptable level. The proposed project would be required to conform to the San Francisco Building Code, which ensures the safety of all new construction in the City. Decisions about appropriate foundation and structural design are considered as part of DBI permit review process. DBI would review background information including geotechnical and structural engineering reports to ensure that the security and stability of adjoining properties and the subject property is maintained during and following construction. In this manner, DBI's review would provide another layer of expert oversight in regards to the safety of the proposed structure from geologic hazards. The proposed project would therefore result in a less-than-significant impact with regard to geologic hazards.

Hazards

The proposed project would entail approximately 910 cubic yards of soil disturbance. The project site has been used for neighborhood agricultural uses and agricultural pesticides may have been applied. Therefore, the project is subject to Article 22A of the Health Code, also known as the Maher Ordinance, which is administered and overseen by the San Francisco Department of Public Health (SFDPH). The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare a Phase I Environmental Site Assessment (ESA) that meets the requirements of Health Code Section 22.A.6. The Phase I ESA would determine the potential for site contamination and level of exposure risk associated with the project. Based on that information, the project sponsor may be required to conduct soil and/or ground water sampling and analysis. Where such analysis reveals the presence of hazardous substances in excess of state or federal standards, the project sponsor is required to submit a site mitigation plan (SMP) to SFDPH or other appropriate state or federal agency(ies), and to remediate any site contamination in accordance with an approved SMP prior to the issuance of any building permit. In compliance with the Maher Ordinance, the project sponsor has prepared a Phase I ESA[23] and has submitted a Maher Application to SFDPH. The Phase I ESA identified a Recognized Environmental Condition at the property due to its long history as an urban farm where agricultural pesticides may have been applied and recommended soil sampling to further evaluate soil quality. The Phase I ESA also notes that the location of the water/groundwater source tapped by the 111 Capistrano Avenue residence appears to be located on the project site. If the groundwater well is located on the project site, SFDPH may require it be abandoned in conjunction with the proposed site development or operated under permit from SFDPH. The proposed project would be required to remediate potential soil and/or groundwater contamination at the project site, as described above, in accordance with Article 22A of the Health Code.

In San Francisco, fire safety is ensured through the provisions of the Building Code and Fire Code. During the review of the building permit application, DBI and the San Francisco Fire Department will review the project plans for compliance with all regulations related to fire safety. Compliance with fire safety regulations would ensure that the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan, or expose people or structures to a significant risk of loss, injury, or death involving fires.

[23] All West, *Environmental Site Assessment 203 Cotter Street San Francisco, California*, May 28, 2015.

For these reasons, the proposed project would not result in any significant impacts related to hazards or hazardous materials.

Historic Resources

The existing use is a neighborhood agricultural use. The project proposes to change the use and construct a 15,400 square foot kindergarten through 8th grade private school campus. A property may be considered a historic resource if it meets any of the criteria related to (1) events, (2) persons, (3) architecture, or (4) prehistory that make it eligible for listing in the California Register of Historical Resources, or if it is considered a contributor to a potential historic district.

A Planning Department Preservation Planner reviewed the project and found that the property is not a historic resource[24]. Furthermore, the project site is not located within a historic district. For these reasons, the proposed project would not result in a significant impact with regards to historic resources.

Hydrology

The proposed project is located within the historical Islais Creek and on a San Francisco Public Utilities Commission (SFPUC) Block of Interest[25], within an area prone to flooding. This is the existing condition at the project site. The project site, being in a topographically low area, and with no downhill slope for surface runoff from the adjacent Cotter Street, requires attention to properly drain stormwater during major storms. The project's finished floor elevation has been set sufficiently higher than the adjacent street to minimize chances of inundation during major storms. The project also requires adequate conveyance of runoff during prolonged storms.

In addition, because the proposed project would create or replace more than 5,000 square feet of impervious surface, the project is subject to the San Francisco Stormwater Management Ordinance (SMO). Compliance with the SMO and attendant Stormwater Management Requirements and Design Guidelines will require the project to maintain or reduce the existing volume and rate of stormwater runoff discharged from the site. To achieve this, the project would be required to implement and install appropriate stormwater management systems that retain runoff on-site, promote stormwater reuse, and limit site discharges before entering the combined sewer collection system.

A Conceptual Stormwater Management Approach Memorandum[26], was prepared to analyze the proposed stormwater management design for the project. The project would minimize disruption of natural hydrology by implementing Low Impact Design approaches. The proposed project would include several stormwater management measures, including: pervious pavers, a green roof and living wall, and bioretention planters and the rear yard would remain pervious open space for a total of approximately 31,300 square feet. Additional stormwater retention measures that may be required by the SFPUC, DBI, or Public Works during the permit review process could include additional pipes, a detention vault, or a detention pond, the environmental effects of which have been considered in this exemption determination. As currently proposed, all non-active roof space would be vegetated where feasible. All roof areas, vegetated or not, would be routed to a bioretention planter. These measures

[24] Personal Communication from Tina Tam to Lana Russell-Hurd, Planning Department, *203 Cotter Street*, May 22, 2015.
[25] San Francisco Planning Department, *Planning Bulletin Review of Projects in Identified Areas Prone to Flooding*, April 1, 2007.
[26] BKF, *Golden Bridges School - 203 Cotter Street - Conceptual Storm Water Management Approach*, June 10, 2016.

would reduce impervious surfaces and increase stormwater infiltration on-site. The Memorandum found that the project would comply with the two-year 24-hour design storm that is required by the SMO. This Memorandum will serve to guide the preparation of a Stormwater Control Plan for submittal to the SFPUC. Prior to issuance of building permits, the project is required to submit a Stormwater Control Plan demonstrating compliance with the requirements of the Stormwater Management Requirements and Design Guidelines as required under the Stormwater Management Ordinance.

Although existing conditions at the site indicate that the site is prone to flooding, compliance with the SMO would require the project sponsor to maintain or reduce the amount of stormwater runoff at the site. Therefore, the proposed project would not result in significant impacts to hydrology.

Neighborhood Concerns. A "Notification of Project Receiving Environmental Review" was mailed on August 7, 2015, to community organizations, tenants of the affected property, properties adjacent to the project site, and to persons who own property within 300 feet of the project site. The combined 311 and Conditional Use Authorization notice was mailed on September 9, 2016. The Planning Department has received numerous comments from members of the public concerning environmental issues during both of these notification periods.

The following comments and responses to the comments (in italics) are provided below.

1. Concerns about the size, scale and use of the proposed building.

As discussed under Section a), the proposed project is consistent with applicable general plan designations and policies as well as with applicable zoning designations.

2. Loss of neighbor's views.

As discussed under Aesthetics, the proposed project would not degrade or obstruct scenic views from public areas viewable by a substantial number of people. While private views may be lost or obstructed, this is common and expected in an urban setting and not considered a significant impact.

3. Loss of agricultural land and open space.

As discussed under Agriculture and Forest Resources, the proposed project would not convert any prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use, would not conflict with agricultural zoning or Williamson Act contracts, would not lead to the loss or conversion of forest land to non-forest use, and the proposed project would not conflict with any policies of the San Francisco Urban Forestry Ordinance. The project would include farming and educational activities in the rear of the property. The project's impact is less than significant for agricultural and forestry resources.

4. Water drainage issues.

As discussed under Hydrology, the proposed project would be required to be reviewed by the SFPUC to ensure compliance with the Stormwater Management Ordinance. Public Works will also review the project's impact on hydrology. The project's impacts with respect to hydrology were found to be a less than significant impact.

5. Flooding and sewer failure on property and effects on nearby properties.

As discussed under Hydrology, the proposed project's potential flooding impacts were evaluated according to a technical memorandum, which found that the project would comply with the two-year 24-hour design storm. Prior to issuance of building permits, the project sponsor is required to submit a Stormwater Control Plan demonstrating

compliance with the requirements of the Stormwater Management Requirements and Design Guidelines as required under the SMO. Furthermore, the project's design with regard to hydrology would also be reviewed by Public Works. Also, as discussed under Section d) the proposed project would comply with water quality requirements. This is considered a less than significant impact.

6. Lack of capacity to handle stormwater runoff and runoff during a 100 year storm.

As discussed under Hydrology, flooding at the site is an existing condition. The proposed project would be required to design the project to comply with the two-year 24-hour design storm as required by the SFPUC. The project would include living walls, living roof, and bioretenation planters to reduce impervious surfaces and increase infiltration. The proposed project may include pipes, a detention vault, or a detention pond to further retain stormwater on-site. The proposed project is not required to be designed for a 100-year-storm. This is considered a less than significant impact.

7. Increased traffic, queuing, and double parking during project operation.

As discussed under Section d), the potential for impacts associated with traffic, queuing, and double parking is considered to be less than significant, given the available vehicle and parking capacity in the project area and demand estimated to occur with the proposed project. Furthermore, the project sponsor has agreed to implement several measures to further reduce the project's less than significant traffic impact (See Attachment A).

8. Loss of street parking during project operation.

As discussed under Section d), the potential for impacts associated with loss of parking is considered to be less than significant.

9. Noise effects on residential uses.

As discussed under Section d), the proposed project's potential noise impacts were evaluated in an Acoustical Study and found to be less than significant.

10. Air pollution from new project automobile trips.

As discussed under Section d), the potential for air pollution associated with new vehicle trips is considered to be less than significant per BAAQMD CEQA Air Quality Guidelines construction and operation screening criteria.

11. Emergency vehicle and fire access to the site.

As discussed under Section d), the proposed project would not prohibit or interfere with emergency vehicle or fire access to the project site or project area. Also as part of permit review for the project, the Fire Department would ensure compliance with the Fire Code to ensure safety and access to fight fires. This is considered a less than significant impact.

Other issues that were raised by members of the public include:

12. Effect on real estate values and liability for damage.

Since these concerns do not relate to physical environmental effects, they are outside the scope of CEQA and are not addressed in this document. Comments that relate to economic, financial, and legal concerns may be considered by City decision-makers during their deliberations on whether to approve, modify, or disapprove the proposed project.

Conclusion. CEQA State Guidelines Section 15300.2 states that a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. There are no unusual circumstances surrounding the current proposal that would suggest a reasonable possibility of a significant effect. The proposed project would have no significant environmental effects. The project would be exempt under the above-cited classification. For the above reasons, the proposed project is appropriately exempt from environmental review.

Attachment A

Golden Bridges School

TRANSPORTATION MANAGEMENT PLAN
203 COTTER STREET, SAN FRANCISCO

Golden Bridges School is currently planning a new academic facility at 203 Cotter Street in San Francisco. This is a new construction of approximately 15,400 sq ft on a currently open lot of approximately 30,000 sq ft. The projected enrollment is up to 200 students in grades K-8 and 30 staff members, with additional part-time staff as needed.

To help manage vehicle circulation immediately surrounding the school site, especially during the student drop-off and pick-up periods, Golden Bridges School will implement a comprehensive suite of circulation and transportation demand management strategies. This Transportation Management Plan (TMP) provides transportation-related measures that Golden Bridges School will commit to implementing at its campus at 203 Cotter Street.

Recommended Improvement Measures

The following improvement measures would aid in further reducing less-than-significant impacts to traffic/circulation, construction and parking.

Improvement Measure I-TR-1: Develop Transportation Management Plan (TMP)
Project Sponsor should develop a comprehensive Transportation Management Plan (TMP) for the proposed site. The overall purpose of the TMP is to provide guidelines for student drop-off and pick-up procedures. The following elements of the conceptual TMP are outlined below:

- Golden Bridges School should develop assigned drop-off/pick-up periods for each student depending upon grade and would enforce these drop-off/pick-up times by not allowing vehicles to occupy the proposed loading zone before or after their designated drop-off/pick-up time;

- Under the on-site passenger loading zone design alternative, a staff member would locate at the entrance of the on-site loading zone to facilitate vehicle flow into the on-site loading zones, while another staff member would locate at the exit to facilitate vehicle flow out of the on-site loading zones and back onto Cotter Street. A third staff member would locate in the middle of the on-site roundabout to coordinate vehicle movement into and through the on-site loading zones. One staff member would locate at the on-street passenger loading zone adjacent the on-site loading zone space to coordinate traffic into and out of the space and facilitate student drop-off/pick-up from and to vehicles in the loading space. In the event these spaces are occupied, staff members should direct vehicles to alternative on-street parking or to prospective, alternative parking locations in

nearby private lots. Staff members would help students safely exit vehicles and walk the students into the school;

- Under the on-street passenger loading zone design alternative, no less than three staff members would locate at the curbside adjacent to the loading zone to coordinate vehicle entries and exits into and out of the loading spaces and facilitate students exiting or entering vehicles on the vehicle curbside during drop-off/pick-up activities;

- Notify parents/guardians about pick-up and drop-off procedures in writing and orientations;

- Discourage parents/guardians from parking in the school loading space for longer than one (1) minute;

- Golden Bridges School should maintain a log (inventory) of complaints from neighbors and would work with these neighbors to mitigate unforeseen problems with student drop-off/pick-up activities, and to maintain an ongoing, constructive relationship with the neighboring residents and businesses; and

- Golden Bridges School should establish a monitoring program for the first year of school operation at 203 Cotter Street to conduct observations and circulation along Cotter Street and surrounding streets during student drop-off and pick-up activities. The monitoring reports should be distributed to staff and parents/guardians up to three times during the academic school year (between September and June). Potential improvements and adjustments to the student drop-off and pick-up procedures and other related school operations should be conducted based on the monitoring reports.

- Post the TMP on the Golden Bridges School website for public access to the document;

- Provide parents/guardians with the TMP as part of the enrollment application, orientation manual, and/or related information packet;

- Provide a detailed map of student drop-off and pick-up zones along Cotter Street, including the loading zones on-site and adjacent to the proposed site and potential secondary off-street parking spaces at nearby private lots;

- Provide a suggested vehicle routing map to the Golden Bridges School to minimize traffic impacts on local residential streets (e.g., Capistrano Avenue, Theresa Street, Tingley Street)

- Encourage parent/guardians to utilize on-street parking or potential secondary off-street parking spaces for long-term parking (e.g., parking more than two [2] minutes);

- Enforce parents/guardians to not exit their vehicles and enter the school while stopped/parked at the loading zone;

Improvement Measure I-TR-2: Develop Multimodal Strategies for Parents
In order to improve the student drop-off and pick up operations and encourage the use of carpooling and alternative modes of transportation to reduce vehicle and parking demand, Golden Bridges School proposes implementing the following measures for future consideration for the Golden Bridges School:

- Provide parents/guardians with *Multimodal Access Guide* to describe how to reach the school by walking, bicycling, and transit. The guide may include:
    - A detailed map of nearby transit facilities (stops and routes) in vicinity of the school site;
    - A detailed map of bicycle routes in the vicinity of the school site; and
    - Provide online links and phone numbers to transit providers that serve the school site.
- Develop a volunteer carpooling program for parents/guardians; and
- Appoint a TDM coordinator who is in charge of overseeing the implementation of various multi-modal strategies and programs and promoting them.
    - TDM coordinator would establish model split goals for Golden Bridges School staff members and students, and monitor progress each year; and
    - TDM coordinator would periodically survey parents/guardians and faculty/staff to determine travel patterns, reasons for travel choices, barriers and potential opportunities for change.

Improvement Measure I-TR-3: Establish a Walking School Bus
To reduce the number of vehicles on Cotter Street and other surrounding streets during the morning drop- off period, the Project Sponsor should establish a volunteer program modeled after the Safe Routes to School Program similar to the San Francisco Unified School District Program, and arrange a "walking school bus" for students enrolled in older middle school students (i.e., Grades 5 to 8). The "walking school bus" would have a drop-off point at the Balboa Park playground/swimming pool (San Jose Avenue and Havelock Street), approximately a half mile from the school site. From this drop-off point, the "walking school bus" would proceed up the west side of San Jose Avenue to the closest stop light, located at Santa Rosa Avenue. At the intersection of San Jose Avenue and Santa Rosa Avenue, the walking school bus would proceed to cross from the west side of San Jose Avenue to the east side. The walking school bus would then continue up San Jose Avenue, turning right onto Cotter Street. This is the safest and most direct route, and would lessen any disturbance to the neighborhood. Parents/guardians would have the option to park their vehicles at the parking lot of the park and walk with their children to school, or drop their child off to walk as part of the walking school bus, which would be led by volunteers and/or faculty/staff members. It is noted that the walking school bus would occur prior to school hours for students above Grade 5. The walking school bus would be conducted by staff and parent volunteers, with a ratio of 1 volunteer to every 12 students.

Improvement Measure I-TR-4: Improve the Pedestrian Realm and Street Safety:
In order to establish a more pedestrian-friendly environment and improve pedestrian and bicycle safety along Cotter Street and at the intersection of Cotter Street and Cayuga Street, the project sponsor proposes the following streetscape and traffic calming improvements:

- Install appropriate signage along Cayuga and Cotter Streets which may include, but is not limited to, "School Zone" and appropriate speed limit signs, particularly at the intersection of San Jose Avenue and Cotter Street;

- Install speed humps along Cotter Street in order to increase pedestrian safety by reducing vehicular travel speeds adjacent to the project site;

- Provide high-visibility yellow school crosswalk crossing Cotter Street at San Jose Avenue. This is intended to identify the potential crossing and alert drivers to pay attention to a pedestrian area. However, it shall be the school policy to discourage the use of this crossing and instead encourage crossing at Cayuga Street where there is greater visibility;

- Install painted, high-visibility (e.g., yellow-striped, continental design) crosswalks at all four approaches at the Cotter Street/Cayuga Street intersection and upgrade existing curb ramps including the reduction of curb radii to promote lower vehicle turning speeds and reduce crossing distance to improve pedestrian and school children safety;

Improvement Measure I-TR-5: Queue Abatement

- As an improvement measure to further minimize vehicle queues and conflicts with other modes at the Proposed Project's driveway into the public right-of-way, Golden Bridges School would monitor loading activities and would employ additional queue abatement methods as needed.

Improvement Measure I-TR-6: Construction Management Plan
The construction contractor(s) should develop a detailed *Construction Management Plan*. The *Construction Management Plan* would, at a minimum, include the following provisions:

- Circulation routes should be developed to minimize impacts on local street circulation, as appropriate. In the event of parking and/or travel lane closures, flaggers or signs or both should be used to guide vehicles through or around the construction zone. Roadside construction safety protocols should be implemented.

- Truck routes should be identified. Haul routes that minimize truck traffic on local roadways and residential streets should be used to the extent possible.

- Sufficient staging areas should be developed for trucks accessing construction zones so as to minimize disruption of access to adjacent land uses, particularly at entries to the project site.

- Construction vehicle movement should be controlled and monitored by on-site inspectors enforcing standard construction specifications.

- Truck trips should be scheduled outside the peak morning and evening commute hours, to the extent possible.

- All equipment and materials should be stored in designated contractor staging areas on or next to the worksite, such that vehicle, pedestrian, and bicycle traffic obstruction is minimized.

- Shuttle service should be established for off-site construction worker parking.

- Construction should be coordinated with facility owners or administrators of police and fire stations (including all fire protection agencies) and transit stations or stops. Emergency service vehicles shall be given priority for access.

- The contractor should be encouraged to reduce the number of construction workers' vehicle trips by facilitating the use of public transportation and minimizing construction worker parking availability.

- The contractor should coordinate with other contractor(s) for projects in the vicinity and share information regarding schedule, duration of activities, vehicle routing and detouring (if applicable), staging of vehicles, etc.

- The contractor should provide regularly-updated information (typically in the form of website, news articles, on-site posting, etc.) regarding project construction and schedule, as well as contact information for specific construction inquiries or concerns.

It is noted that the construction management plan should be reviewed by the TASC to adequately address issues of circulation (traffic, pedestrians, and bicycle), safety, parking and other project construction in the area.

Improvement Measure I-TR-7: Develop Extracurricular Event Traffic & Parking Management Plan

The project sponsor should develop a detailed *Extracurricular Traffic and Parking Management Plan* in order to provide transportation and parking guidelines for extracurricular events occurring on weekday evenings and weekends. The *Extracurricular Traffic and Parking Management Plan* would, at a minimum, include the following provisions:

- Include a section in the *Multimodal Access Guide* to describe how to reach the school by transit on weekday evenings and weekends;

- Maintain the volunteer carpooling program for parents/guardians for extracurricular events;

- Ensure that the TDM coordinator promotes multimodal strategies for reducing project-generated traffic and parking demand for extracurricular events;

- Utilize TDM coordinator, staff, and parents to manage events and discourage parking and queuing on Cotter Street;

- Consider utilizing a shuttle service for extracurricular events. The shuttle service would be provided by the project sponsor, and would provide transportation for event attendees from/to the Glen Park and Balboa Park BART Stations, as well as from/to potential off-site parking spaces located at the Community Assembly of God Church and the Corpus Christi Church parking lots; and

- Continue to pursue negotiations with nearby private lot operators to secure access to off-site parking spaces to accommodate extracurricular events.

Golden Bridges School commits to implementing the above measures at its location at 203 Cotter Street in San Francisco, CA

9/16/16

Jessie Elliot
Administrative Director
Golden Bridges School

Kamman Hydrology & Engineering, Inc.
7 Mt. Lassen Drive, Suite B250, San Rafael, CA 94903
Telephone: (415) 491-9600
Facsimile: (415) 680-1538
E-mail: Greg@KHE-Inc.com

September 19, 2016

Rodney Fong, Commission President
Planning Department, City and County of San Francisco
1650 Mission Street, Suite 400
San Francisco, CA 94103

Subject: Hydrologic and Water Quality Issues Associated with Proposed Golden Bridges School Project at 203 Cotter Street, San Francisco, CA

Dear Mr. Fong:

I am a hydrologist with over twenty five years of technical and consulting experience in the fields of geology, hydrology, and hydrogeology. I have been providing professional hydrology services in California since 1991 and routinely manage projects in the areas of surface- and groundwater hydrology, flood studies and modeling, water quality assessments, water resources management, and geomorphology. Most of my work is located in the Coast Range watersheds of California, including the Northern and Southern San Francisco Bay Counties. My areas of expertise include: characterizing and modeling watershed-scale hydrologic and geomorphic processes; evaluating surface- and ground-water resources/quality and their interaction; assessing hydrologic, geomorphic, and water quality responses to land-use changes in watersheds and causes of stream channel instability; and designing and implementing field investigations characterizing surface and subsurface hydrologic and water quality conditions. I co-own and operate the hydrology and engineering consulting firm Kamman Hydrology & Engineering, Inc. in San Rafael, California (established in 1997). I earned a Master of Science in Geology, specializing in Sedimentology and Hydrogeology as well as an A.B. in Geology from Miami University, Oxford, Ohio. I am a Certified Hydrogeologist (CHg) and a registered California Professional Geologist (PG).

I have been retained by Ms. Nancy Huff and other neighbors of Cotter Street to review and identify potential impacts on area hydrology and flooding associated with the proposed Golden Bridges School Project (Project) at 203 Cotter Street, San Francisco, California. Currently, residents along Cotter Street, and many others living in the low-lying areas of the Mission Terrace neighborhood, experience frequent flood damage to their homes and exposure to raw sewage. Ms. Huff has asked me to evaluate if the proposed Project will effect current flooding and water quality conditions that she and other neighbors experience.

In addition to speaking with Ms. Huff, I have discussed local area flood conditions with City DPW staff. I have also review the following materials regarding Project design and local drainage and flood conditions.

- ASTM Standard D2487, 2006, "Standard practice for classification of soils for engineering purposes (Unified Soil Classification System)," ASTM International, West Conshohocken, PA, 2006, DOI.

- BkF Engineers, Surveyors, Planners, 2016, Golden Bridges School – 2013 Cotter Street – conceptual storm water management approach. Memorandum to: Neal Kaye A.I.A, Stanley Saitowitz / Natoma Architects, Inc., May 16, 11p.

- Brown and Caldwell, Carollo Engineers, and Metcalf and Eddy, 2010, Final Draft Technical Memorandum No. 501, collection system modeling, City and County of San Francisco 2030 Sewer Systems Master Plan. Prepared for: San Francisco Public Utility Commission (SFPUC), December, 111p.

- Brown and Caldwell, Carollo Engineers, and Metcalf and Eddy, 2009a, Final Draft Technical Memorandum No. 502, detailed drainage plan modeling approach, City and County of San Francisco 2030 Sewer Systems Master Plan. Prepared for: San Francisco Public Utility Commission (SFPUC), August, 93p.

- Brown and Caldwell, Carollo Engineers, and Metcalf and Eddy, 2009b, Final Draft Technical Memorandum No. 504, existing conditions and needs assessment for detailed drainage plan, City and County of San Francisco 2030 Sewer Systems Master Plan. Prepared for: San Francisco Public Utility Commission (SFPUC), August, 73p.

- Holley Consulting, 2016, 203 Cotter Street. Prepared for: San Francisco Planning Department, January 12, 18p.

- Rollo & Ridley, 2015, Geotechnical investigation, Golden Bridges School, 2013 Cotter Street, San Francisco, CA. Prepared for: Golden Bridges School, January 13.

- San Francisco Public Works (SFPW), 2016, Preliminary review of 203 Cotter development. Memorandum to: R. Kraai, SFPUC-WWE, May 27, 5p. (included as Attachment A).

- Sherwood Design Engineers, 2015, Storm sewer summary, Golden Bridges School – 203 Cotter Street. Prepared by Chris Boswell, October 22, 6p.

- Stanley Saitowitz / Natoma Architects, Inc., 2016a, Project architectural drawings, February 10, 6 sheets (A0.1, A0.5, A0.6, A1.1, A1.2, and A2.2).

- Stanley Saitowitz / Natoma Architects, Inc., 2016b, Project architectural drawings, August 5, Sheet A2.1.

- U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS), 2009, Chapter 7 Hydrologic Soil Groups. In: Part 630 Hydrology, National Engineering Handbook, January, 13p.

- U.S. Department of Agriculture, Soil Conservation Service (USDA-SCS), 1991, Soil survey of San Mateo County, Eastern Part, and San Francisco County, California, May, 120p.

Based on my discussions and review, it is my professional opinion that construction of the Golden Bridges School project will increase flood hazards to surrounding properties as well as increase human exposure to raw sewage during flood events. In particular, I believe homes immediately across the street from 203 Cotter will experience the most direct and severe impacts. It is also my opinion that the Conceptual Storm Water Management Plan developed by Project engineers used invalid assumptions and the proposed Project BMPs will likely not satisfy the City of San Francisco's Storm Water Management Ordinance. I present the rationale for these conclusions in the following sections.

1.0 Existing Site Setting and Flood Conditions

The proposed Golden Bridges School Project (Project) is located in the Mission Terrace neighborhood of San Francisco, which lies within the SFPUC's Cayuga flood study focus area. The following description of flood conditions and history effecting the Project site is excerpted from the SFPUC's Technical Memorandum No. 504 (2009a) and describes the existing flood-prone character in the immediate vicinity.

The Cayuga Focus Area can be defined as the area around the Cayuga Avenue and Alemany Boulevard trunk sewers. The Cayuga Avenue and Alemany Boulevard trunk sewers carry flows (West to East) from the Mission Terrace, Outer Mission, Excelsior, Crocker Amazon, Oceanview, Ingleside, Sunnyside, Westwood Highlands, Miraloma Park, Diamond Heights, and Glen Park neighborhoods (see Figures 1 and 2). The Alemany sewer carries flows originating from the southern and southeastern part of the basin. The Cayuga sewer carries flows originating from the western and northern part of the basin. The trunk sewers of this basin are aligned with the upper part of the historical Islais Creek (SFPW, 2016). The Cotter Street sewer is a smaller (12-inch) lateral line that flows into the 8-foot diameter Cayuga trunk sewer at the street intersection (Sherwood Design Engineers, 2015).

The Cayuga Focus Area has a history of flooding occurrences. Flooding in the area varies from minor and localized events to extremely serious, major flooding during large storm events. Minor flooding may occur during storm events on the order of a five year return period due to peak flows exceeding pipe conveyance capacity. The sewers in the focus area are also affected by downstream hydraulic conditions. In particular, high hydraulic grade lines in the downstream Alemany Boulevard sewer may propagate upstream contributing to Cayuga focus area issues.

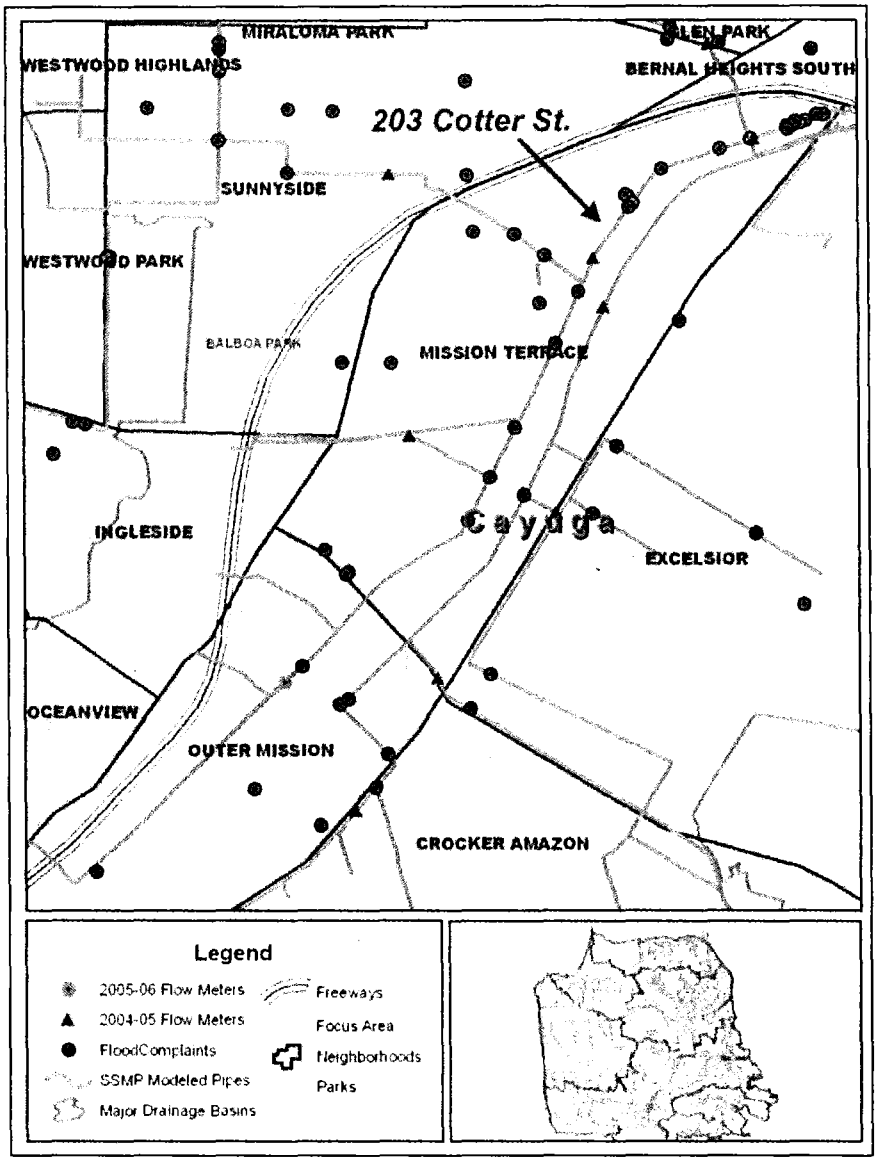


FIGURE 1: Project location in Cayuga Focus Area. Source: Brown & Caldwell et al. Tech. Memo No. 504, 2009.

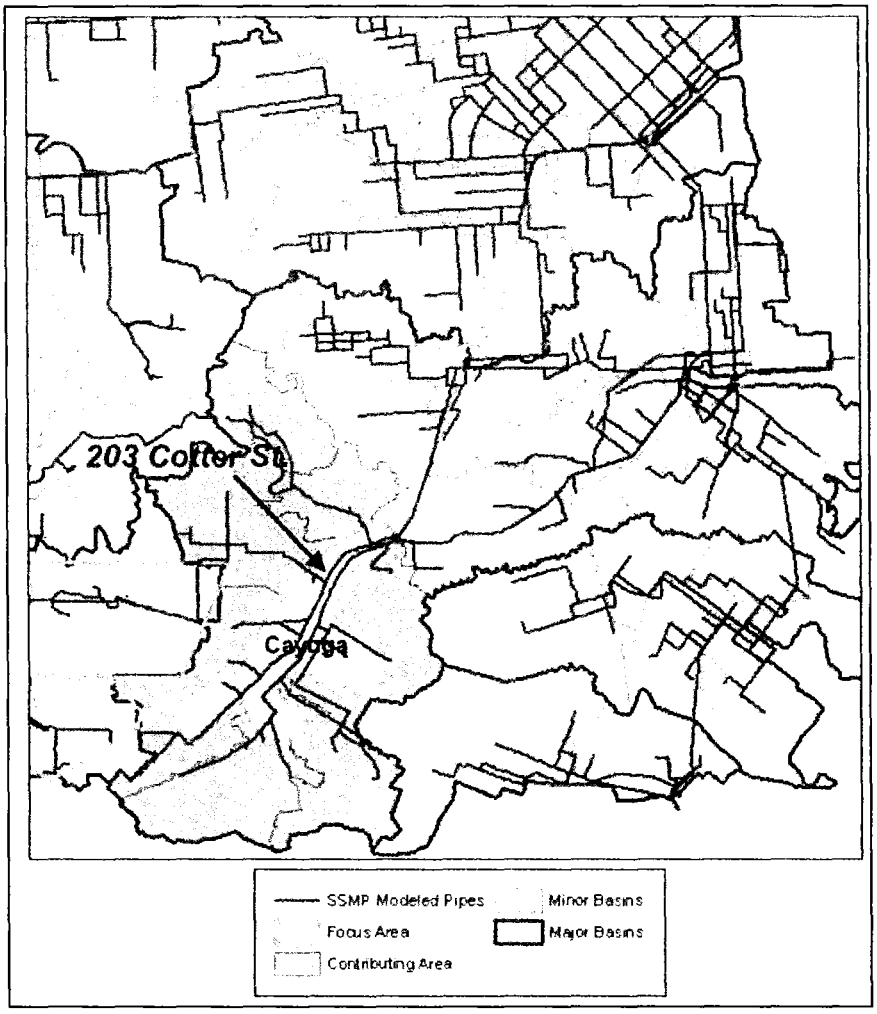


FIGURE 2: Contributing drainage area to Cayuga Focus Area. Note location of 2013 Cotter St. Source: Brown & Caldwell et al., Tech. Memo No. 504, 2009.

The two major trunk sewers of the focus area are aligned with the historical Islais Creek. During major storms, if there is overland flow, it tends to follow the lower elevations of the older historical creek route. The elongated lot at 203 Cotter Street is centered and aligned within the low-lying historic creek route (see Figure 3). Further compounding the issue is the fact that Highway I-280 is built on a berm and, together with the Mission Viaduct, impedes the overland flow near the intersection of Cayuga Avenue and Milton Street, an area also known as the "foot of Cayuga," creating a pond (see Figure 3). During the February 25, 2004, storm event, this pond was estimated based on visual observation to have a depth of approximately 6 feet.

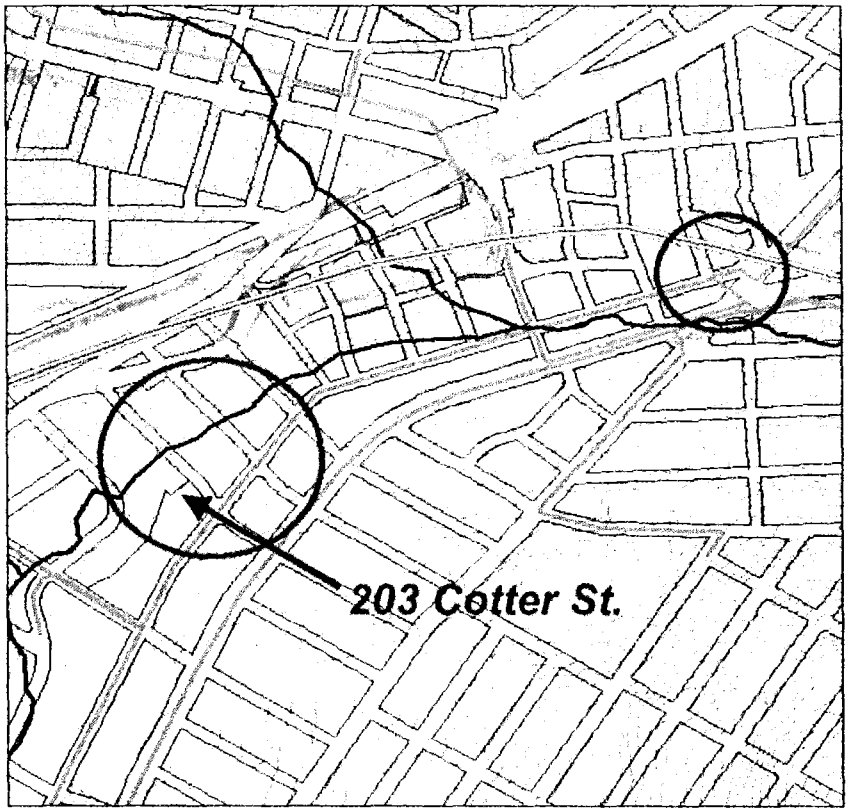


FIGURE 3: Low lying and ponded areas in the Cayuga Focus Area. Circle to left indicates existing topography lower than Cayuga Street. Smaller circle to the right indicates area of surface ponding at "foot of Cayuga." Source: Brown & Caldwell et al., Tech. Memo No. 504, 2009.

A number of lots in the Cayuga Focus Area are built within the historical creek, including 203 Cotter Street (Figure 3). In these areas, the lots and houses are at a lower elevation than the surrounding streets. This is the case along Cotter Street running north of Cayuga Avenue, which displays a pronounced dip centered on the former creek alignment located at 203 Cotter Street (SFPW, 2016). As illustrated on a sewer as-built drawing for Cotter Street provided in Sherwood Design Engineers 2015 drainage study report (provided as Attachment A), the low spot in the Cotter Street dip is 110.6-feet in elevation (City vertical datum) at the north end of the Project lot. Street elevations rise when moving away from this point in both directions. The road elevation at the Cayuga-Cotter Streets intersection is at an elevation of 113.4-feet (see Attachment A). When the Cayuga Avenue sewer at the intersection of Cotter Street is surcharged, there is no way flow generated on local properties can enter the sewer, even if the hydraulic grade line is lower than the ground on Cayuga Avenue itself. Instead, water flowing out of the surcharging Cayuga Avenue sewer would flow north on Cotter Street to the low point in front of the

Project site. Based on review of available LiDAR data[1] for the project area, portions of the 203 Cotter Street lot lie 1.0-foot below street elevation and 1.5-feet below curb elevation. Thus, the site acts as a small detention basin that can receive and hold flood waters entering from the street or surrounding properties. This topographic setting is also illustrated in the shaded relieve map (Figure 6) presented in the San Francisco Public Works memorandum dated May 27, 2016. Once the lot becomes fully ponded to the elevation of the street curb, local area topography is such that flood water would flow to the Northeast, centered on the 200 Cotter Street property, located opposite of the Project parcel.

2.0 Potential Increased Adverse Impacts Associated with Proposed Project

Based on the Golden Gate LiDAR, I estimate that there is currently approximately 6000-cubic feet (0.14-acre-feet) of flood water storage below the existing curb crest at the Project property. Based on project plans (Stanley Saitowitz / Natoma Architects, 2016a and 2016b) and statements in the geotechnical report (Rollo & Ridley, 2015), the project proposes to fill site grades up to, if not higher, than the existing curb height. This Project action will effectively eliminate the existing flood storage available to the Project property. This will result in forcing approximately 6000-cubic feet of flood waters onto surrounding properties that otherwise currently is detained on the Project lot during flood events when the Cayuga trunk line is over capacity and surcharging. Based on my understanding of the local area topography, most of this water would be directed onto properties directly across the street from the Project site imparting potentially larger magnitude, higher frequency and longer duration flows, which will all contribute to greater potential flood damages than currently exist.

The loss of stormwater detention also increases the volume (and flooded area), frequency and duration of sewage exposure to humans, property and the environment surrounding the Project. Other ways the Project increases the potential impacts to water quality include new and increased loads to the sanitary system with the addition of approximately 200 students and 30 staff members (Stanley Saitowitz / Natoma Architects, 2016a) and placing and potentially exposing students, families and staff into an area known to experience routine flooding of sewage contaminated water. Increasing the size of the storm/sanitary line in Cotter Street that connects to the Cayuga trunk line will make no improvements to drainage capacity when the Cayuga trunk line is already over capacity and surcharging during known flood magnitudes. Therefore, it is my opinion that ***the Project will increase adverse impacts to water quality and increase health risk to students, staff and surrounding residents***.

3.0 Inaccurate Conceptual Project Storm Water Management Approach

Based on my review of the BkF conceptual Stormwater Management Plan (2016), I believe there are two incorrect assumptions in the CSS BMP Sizing Calculator that call into question the ability for proposed BMPs to achieve compliance with City Ordinances. One concern I have is

[1] 2010 Golden Gate LiDAR, The Golden Gate LiDAR Project is a cooperative project sponsored by the US Geological Survey (USGS) and San Francisco State University (SFSU) that has resulted in the collection and processing of high resolution 2 meter nominal pulse spacing or better LiDAR and meet objectives of the American Recovery and Reinvestment Act (ARRA). http://dds.cr.usgs.gov/lidar_v2/CA/2010/ARRA-CA_GoldenGate_2010/

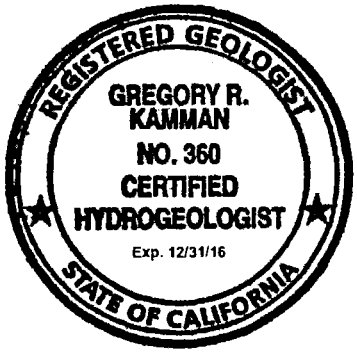
the shallow groundwater beneath the site. Rollo & Ridley (2015) state that groundwater was encountered between 3 and 3.5 feet below existing ground surface. They also anticipated that the groundwater level would vary seasonally a few feet depending on rainfall amounts and time of year. Based on my experiences in monitoring and measuring groundwater conditions in similar soils and settings in San Francisco, I would expect full saturation of site soils to or close to the ground surface during wet winter periods. Saturated soils do not provide the infiltration capacity or subsurface water storage necessary for many of the BMPs contained in the Project Conceptual Stormwater Management Plan. For example, infiltration trenches, dry well/infiltration gallery and permeable pavement will not infiltrate or store water during storms (including those of 1- and 2-year recurrence intervals) if they are already fully saturated by groundwater. Even if only partially saturated by groundwater the full function of these BMPs would not be realized. ***Thus, it is my opinion that the Project BMP calculator is overestimating the true amount of stormwater infiltration and storage at a site with such shallow groundwater.***

The second critique I have with the BMP sizing calculator is the assumed Hydrologic Soil Group and associated infiltration rate of site soils. In their 2016 Conceptual Storm Water Management Plan, BkF assumes site soils uniformly fall into Hydrologic soil group (HSG) A, but note that this designation should be verified and infiltration rate to be tested prior to final design. HSG designations for soil are most commonly provided in the U.S. Department of Agriculture Natural Resources Conservation Service (formerly Soil Conservation Service) soil survey reports. The soil survey report for San Francisco County (USDA SCS, 1991) maps the soil at the project site as "Urban land" and does not provide a HSG classification. However, Rollo & Ridley (2015) state that their field investigation indicates the site is underlain by about 1.5 to 3 feet of fill consisting of clayey sand and clay with sand. They also report the fill is underlain by very loose to medium dense sand, sand with clay, silty sand and clayey sand to approximately 9 to 12.5 feet below existing grade. Since groundwater is so shallow at the site, the character and soil type of the upper fill layer will dictate the infiltration rates. According to the Unified Soil Classification System (ASTM, 2006), a soil described as "clayey sand" is defined as having greater than 12% clay content and "clay with sand" is defined as having greater than 50% clay content. In my experience, soil with these types of clay content do not fall into and HSG A category – the category with the highest infiltration rates. Pursuant to USDA guidance on Hydrologic Soil Groups (USDA NRCS, 2009), soil with a clay content falling between 10-20% typically falls into the HSG B category, and a soil containing clay in excess of 40% is typically an HSG D. As an HSG alphabet category increases the associated infiltration rate decreases. Thus, site field information indicates that the infiltration rates for site soils are less than the rates assumed in the BMP sizing analysis presented by BkF. ***When taking into account the shallow groundwater table elevations and lower site infiltration rates discussed above, I don't think the BMP sizing analysis can be considered valid. Therefore, it is not possible to make a determination on if the Conceptual Storm Water Management Plan complies with City Ordinance and should be considered non-compliant until demonstrated otherwise.***

Please feel free to contact me with any questions regarding the material and conclusions contained in this letter report.

Sincerely,

Greg Kamman, PG, CHG
Principal Hydrologist



Attachment
Cc: Dennis Richards, Commission Vice-President
Rich Hillis, Commissioner
Christine D. Johnson, Commissioner
Katherin Moore, Commissioner
Joel Koppel, Commissioner
Myrna Melgar, Commissioner
Jonas P. Ionin, Planning Commission Secretary
Nancy Tran, Planner
Lana Russel-Hurd, Planner
Nancy Huff
Deborah Holley, Holley Consulting
Scott Emblidge, Moscone Emblidge & Otis LLP

ATTACHMENT A

Memorandum from San Francisco Public Works
May 27, 2016

SAN FRANCISCO PUBLIC WORKS

Edwin M. Lee
Mayor

Mohammed Nuru
Director

Patrick Rivera
Manager

Infrastructure Design
and Construction
1680 Mission St.
San Francisco, CA 94103
tel 415-554-8200

sfpublicworks.org
facebook.com/sfpublicworks
twitter.com/sfpublicworks

MEMORANDUM

Lesley Wong
Manager, Hydraulic Section

To: R. Kraai, SFPUC-WWE
B. Shrestha, Supervisor, Hydraulic Studies Group

Through: N. Birth

From: I. Taghavi

Date: May 27th, 2016

Subject: **Preliminary Review of 203 Cotter Development**

Backround

SFPUC has asked for flooding review of a development of the lot at 203 Cotter St.

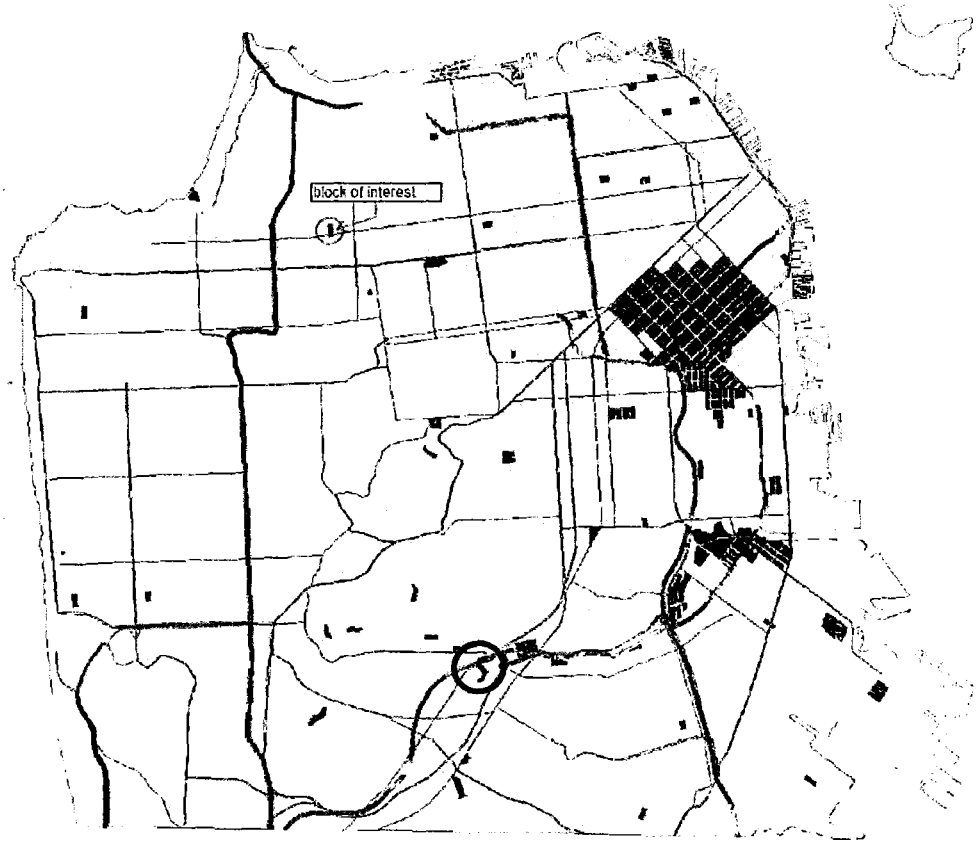


Figure 1: Bulletin 4 Overall Map

Figure 2: Bulletin 4 Map - 203 Cotter St.

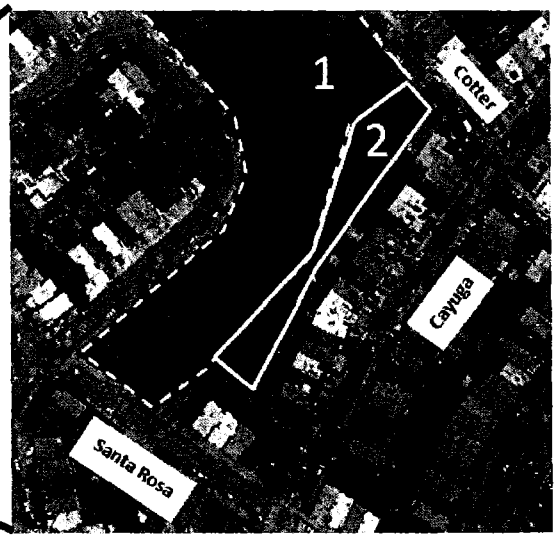


Figure 3: 203 Cotter Aerial Picture

Figures 1 and 2 show 203 Cotter St. on the Bulletin 4 map. Figure 3 shows the property with aerial imaging. In Figure 3, Region 2 (solid line polygon) represents 203 Cotter St.'s property and Region 1 (dotted white polygon) represents a "block of interest" (BOI) bordering 203 Cotter St. that is susceptible to flooding.

Source: http://www.sf-planning.org/ftp/files/publications_reports/DB_04_Flood_Zones.pdf

Analysis

1. **Is 203 Cotter St. part of the Islais creekbed?** Figure 4 has the property in the red circle. The Islais Creek bed, in green, clearly travels through 203 Cotter St.

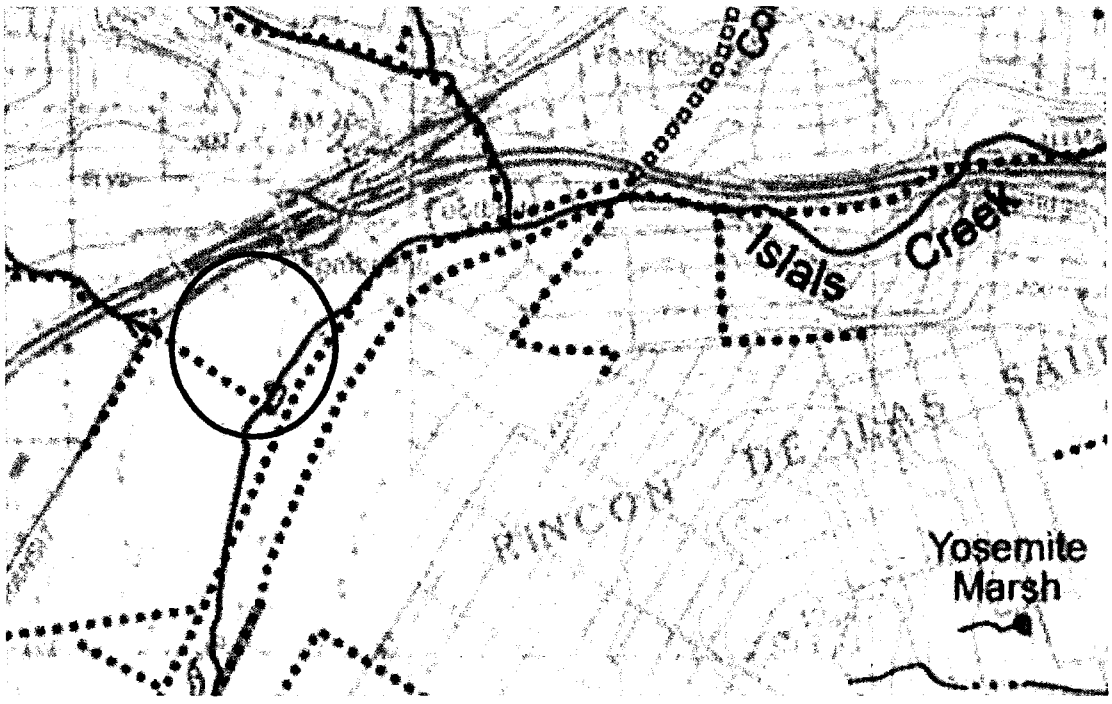


Figure 4: Islais Creek Historic Map

Sources: http://explore.museumca.org/creeks/1630-OMIslaisBig.html

2. **Is 203 Cotter St. a natural stormwater management asset?**

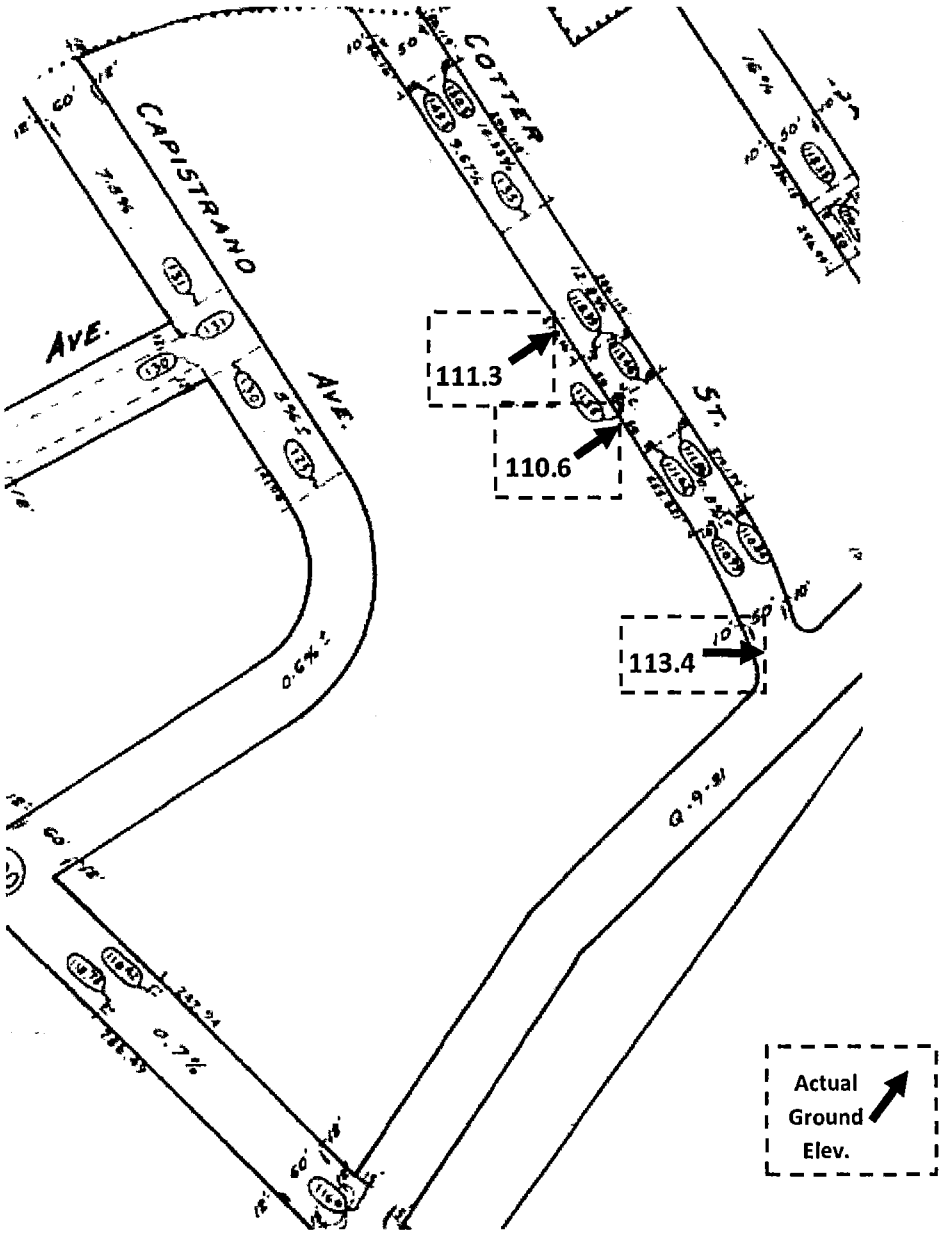


Figure 5: 203 Cotter St. Grademap

Figure 5 is the grade map, showing the planned street elevations. Ground elevations in dotted boxes are the current ground levels from Lidar. There is a low point bordering 203 Cotter St, which is shown on the grade map. The grade map does not give an elevation at the intersection of Cotter and Cayuga, where the 113.4 ft. Lidar elevation is labeled.

Sources:

http://bsm.sfdpw.org/subdivision/keymap/,
http://bsm.sfdpw.org/subdmap/subd/Key_Maps/224_gm.tif

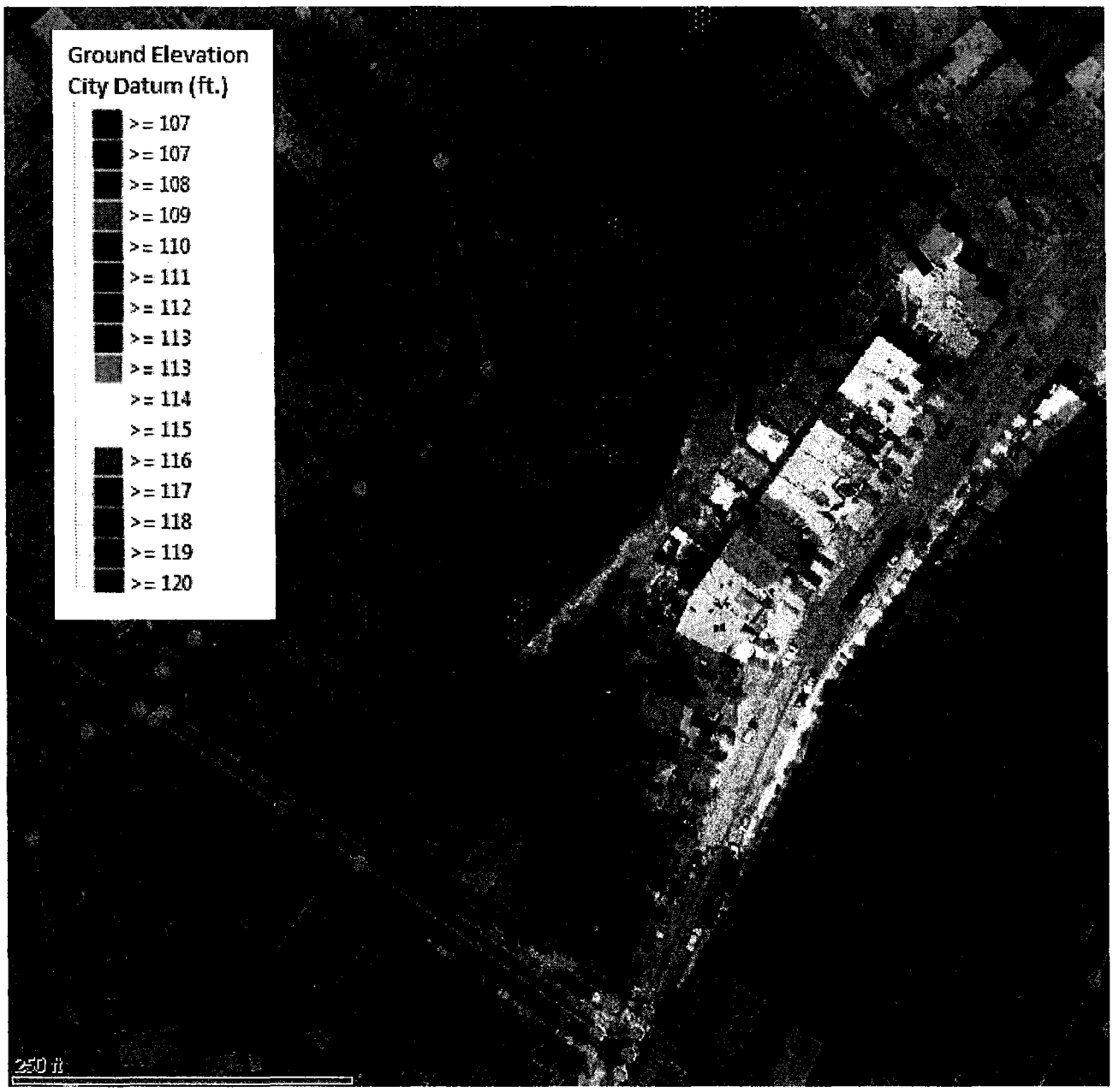


Figure 6: 203 Cotter St. Lidar Map w/ Surface Water Flow

Figure 6 shows the flow direction of surface water. 203 Cotter St. acts as a basin collecting surface water runoff leaving it susceptible to flooding even though it is not within the black shaded BOI. As such, 203 Cotter St. should be considered a valuable natural stormwater management asset.

3. **Does 203 Cotter St. lie on the 100 year floodplain?**

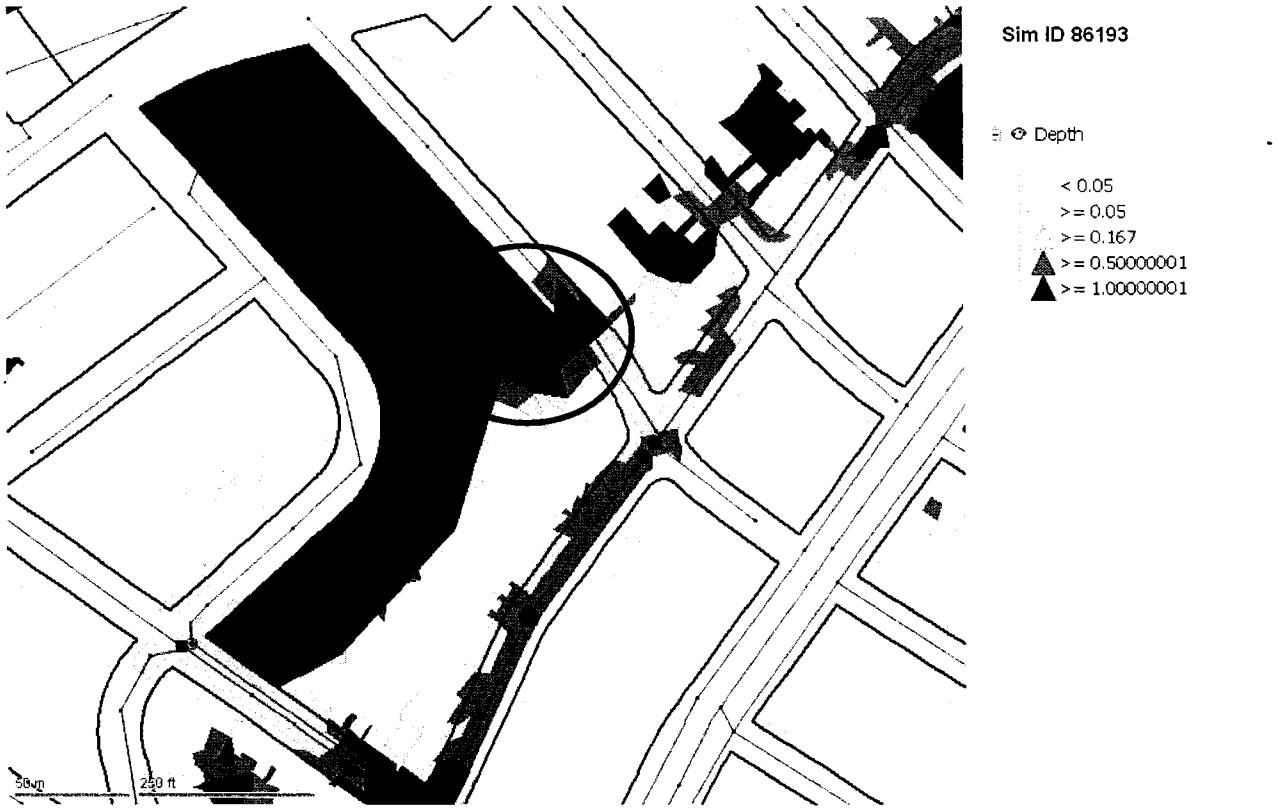


Figure 7: 203 Cotter St. 100 Year Floodmap

Figure 7 shows flooding as a result of the 100 year storm. The source of model results is the Flood Resilience Baseline, 100-year storm simulation. The area of lowest elevation on 203 Cotter St. bordering Cotter St. is circled in red.

Kamman Hydrology & Engineering, Inc.
7 Mt. Lassen Drive, Suite B250, San Rafael, CA 94903
Telephone: (415) 491-9600
Facsimile: (415) 680-1538
E-mail: Greg@KHE-Inc.com

September 26, 2016

Rodney Fong, Commission President
Planning Department, City and County of San Francisco
1650 Mission Street, Suite 400
San Francisco, CA 94103

Subject: Amendment to Letter dated September 19, 2016
Hydrologic and Water Quality Issues Associated with Proposed Golden Bridges School Project at 203 Cotter Street, San Francisco, CA

Dear Mr. Fong:

This letter is an amendment to my original comment letter regarding the subject project which I sent on September 19, 2016 on behalf of Ms. Nancy Huff and other neighbors of Cotter Street. Since that submission, I have received and reviewed the Final Conceptual Storm Water Management Approach memorandum prepared by BkF Engineers and dated June 10, 2016. I received this updated memorandum from the Planning Department just last Friday September 23 and therefore was unable to review if before. I only reviewed the May 16, 206 draft version of this report for my original comments letter.

As you may recall, my original comment letter included a critique that the Storm Water Management Approach did not acknowledge or integrate a lower infiltration rate of the clay-rich soils found at the site. The updated Management Approach does include an analysis of soils having both high and low infiltration rates (Type A and D Soils, respectively). Thus, my concern about the analysis not acknowledging the lower permeability soils has been addressed. However, I still contend that the shallow groundwater conditions at the site will prohibit surface water infiltration via associated BMP measures regardless of soil type. The fully saturated condition of the inter-granular soil pore spaces by shallow groundwater that extend to or close to the ground surface does not permit infiltration of surface water. ***Thus, it is my opinion that the Final Storm Water Management Approach is still overestimating the true amount of stormwater infiltration and storage at a site with such shallow groundwater. When taking into account the shallow groundwater table elevations, I don't think the BMP sizing analysis can be considered valid, regardless of site soil type or infiltration rate. Therefore, it is not possible to make a determination on if the Conceptual Storm Water Management Plan complies with City Ordinance and should be considered non-compliant until demonstrated otherwise.***

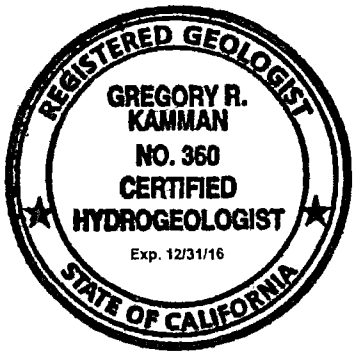
Nor does the additional information contained in the Final Storm Water Management Approach memorandum change my professional opinion about potential project impacts on flood and water quality hazards to surrounding properties. It is still my opinion that due to the loss of existing

flood water storage on the existing site lot, ***the Project will increase flood hazards and adverse impacts to water quality and increase health risk to students, staff and surrounding residents***.

Please feel free to contact me with any questions regarding the material and conclusions contained in this letter report.

Sincerely,

Greg Kamman, PG, CHG
Principal Hydrologist



Attachment
Cc: Dennis Richards, Commission Vice-President
Rich Hillis, Commissioner
Christine D. Johnson, Commissioner
Kathrin Moore, Commissioner
Joel Koppel, Commissioner
Myrna Melgar, Commissioner
Jonas P. Ionin, Planning Commission Secretary
Nancy Tran, Planner
Lana Russel-Hurd, Planner
Nancy Huff
Deborah Holley, Holley Consulting
Scott Emblidge, Moscone Emblidge & Otis LLC

Attachment C

ABBREVIATIONS

A.C.—A/C	Asphalt concrete	F.O.C.	Face of concrete
ACOUS.	Acoustical	F.O.FRM'G	Face of framing
ADJ.	Adjacent	F.O.F	Face of finish
ALUM.	Aluminum	F.O.P	Face of plywood
AGG.	Aggregate	F.O.SHT'G.	Face of sheathing
APPROX.	Approximate	GA.	Gauge
ARCH.	Architectural/ Architect	GALV.	Galvanized
B.C.	Bottom of conc./ curb	G.B.	Grab bar
BLDG.	Building	GL.	Glass
B.O.	Bottom of	GSM.	Galvanized sheet metal
BLK.	Blocking/ block	GYP.	Gypsum
BM.	Beam	H.B.	Hose bid
BTWN.	Between	H.C.	Handicapped
B.U.R.	Built—up roof	HDWE.	Hardware
B.W.	Bottom of wall	H.M.	Hollow metal
CAB.	Cabinet	HORIZ.	Horizontal
C.B.	Catch basin	H.P.	High point
CEM.	Cement	HT.	Height
C.L.	Centerline	I.D.	Inside diameter
CLG.	Ceiling	JAN.	Janitor
CMU.	Concrete masonry unit	JT.	Joint
CNTL. JT.	Control joint	LAM.	Laminate
C.O.	Cleanout	L.ARCH.	Landscape architect
COL.	Column	LAV.	Lavatory
CONC.	Concrete	LB.	Pound
CONT.	Continuous	LT.	Light
CTR.	Center	MAX.	Maximum
DEMO.	Demolition	MECH.	Mechanical
D.F.	Drinking fountain	MFR.	Manufacturer
DIA.	Diameter	MIN.	Minimum
DIM.	Dimensions	MISC.	Miscellaneous
DISP.	Dispenser	MTD.	Mounted
DN.	Down	MTL.	Metal
DWGS.	Drawings	N.	North
(E)	Existing	(N)	New
EA.	Each	N.I.C.	Not in contract
ELEC.	Electrical	NOM.	Nominal
ELEV.	Elevation	N.T.S.	Not to scale
EQ.	Equal	O.C.	On center
e	Equal	O.D.	Outside diameter
EQUIP.	Equipment	OPNG.	opening
EX.	Existing	OPP.	opposite
EXP.	Expansion	OPP.HD.	Opposite hand
EXT.	Exterior	OZ.	Ounce
F.D.	Floor drain	PERF.	Peforated
FDN.	Foundation	PL.	Plastic
F.F.	Finished Floor	P/L	Property line
FIN.	Finish	PLAS	Plaster
FL.	Floor	PLYWD.	Plywood
FLR.	Floor	PR.	Pair
FNDN.	Foundation		

SYMBOLS

- Reference Point
- Wall, floor and roof type
- Door number (for door schedule)
- Window number (for window schedule)
- Window number — obscured glass
- Detail number / Sheet location
- Section number / Sheet location
- Interior elevation number / Specific wall / Sheet location
- Sheet note designation and number
- Room number (for finish schedule)
- Existing Sprinkler: Pendent Concealed
- Existing Sprinkler: Pendent Semi—recessed
- Existing Sprinkler: Sidewall

SYMBOLS CONTINUED

- Existing Sprinkler: Upright with Riser
- Existing Sprinkler: Pendent
- Existing Sprinkler: Pendent Online
- Existing Sprinkler: Line
- BMR — Below Market Rate
- P/L — Property Line
- HC — Handicap Accessible

DIRECTORY

OWNER	GOLDEN BRIDGES SCHOOL 3358 22ND STREET SAN FRANCISCO, CA, 94110 T 415.912.8666	JESSIE ELLIOT
ARCHITECT	NATOMA ARCHITECTS 1022 NATOMA STREET #3 SAN FRANCISCO, CA 94103 t: 415.626.8977 X 112 f: 415.626.8978 NKaye@saitowitz.com	NEIL KAYE

SHEET INDEX

PROJECT DATA

PROJECT SITE	203 COTTER ST., SAN FRANCISCO, CA 94112
CROSS STREET	CAYUGA ST.
NEIGHBORHOOD	MISSION TERRACE
BLOCK/LOT	6795A — 029
PARCEL SIZE	30,744 SQ.FT
ZONING	RH—1
HEIGHT	40—X
CONSTRUCTION	TYPE VA
PRESERVATION	C— NO HISTORIC RESOURCE PRESENT
OCCUPATION	E— EDUCATION
DESCRIPTION	

The proposal is for a new private kindergarten, elementary and middle school to accommodate a student population of approx. 200 and 30 staff members. Conditional use authorization will be required.
There will be on—site vehicular drop off and pick up. When not in use, as drop off, the permeable front yard will be cross programmed for social gatherings and temporary car parking. The remaining street curb not allocated for curb cut will be white zoned
The project will provide for approximately 70% open space. The rear yard will be used as part of an edible school yard program thereby preserving some of its current use. The project will meet or exceed SFPUC storm water requirements.

PROJECT DATA

	EXISTING USES:	EXISTING USES TO BE RETAINED:	NET NEW CONSTRUCTION AND/OR ADDITION:	PROJECT TOTALS:
PROJECT FEATURES				
Dwelling Units	0	0	0	0
Hotel Rooms	0	0	0	0
Parking Spaces	0	0	0	0
Loading Spaces	0	0	0	0
Number of Buildings	0	0	1	1
Height of Building(s)	0	0	30	30
Number of Stories	0	0	2	2
Bicycle Spaces	0	0	24	24
GROSS SQUARE FOOTAGE (GSF)				
Residential	0	0	0	0
Retail	0	0	0	0
Office	0	0	0	0
Industrial	0	0	0	0
PDR (Production, Distribution, & Repair)	0	0	0	0
Parking	0	0	0	0
Other (Edu.)	0	0	15,400	15,400
Other ( )				
Other ( )				
TOTAL GSF	0	0	15,400	15,400

PARKING — ON SITE VEHICULAR DROP OFF AND PICK UP

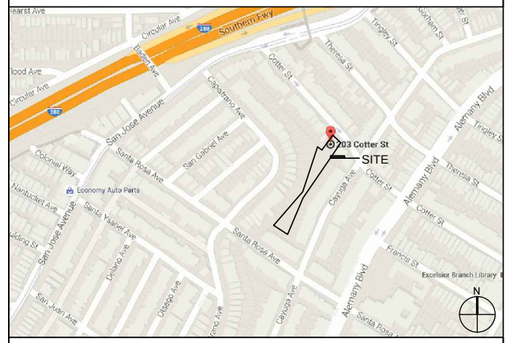
BIKE PARKING — 33 CLASS I BIKE STALLS
8 CLASS II BIKE STALLS AT CURB

OPEN SPACE — THE PROJECT WILL PROVIDE APPROXIMATELY 72% OPEN SPACE THOUGH A COMBINATION OF FRONT, REAR AND SIDE YARDS AS WELL AS INTERIOR COURTYARDS

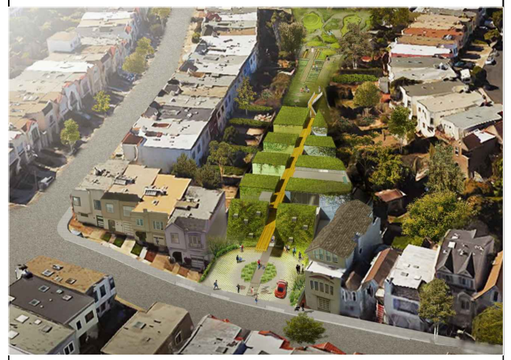
FRONT COURT:	4,100 SQFT
SIDE COURT:	900 SQ FT
GREEN ROOFS:	7,000 SQ FT
COURTYARDS:	2,750 SQ FT
FARM AREA:	4,400 SQ FT
CHICKEN RUN:	300 SQ FT
KINDER PLAY:	550 SQ FT
WILD AREA:	7,500 SQ FT

CODES USED — 2013 CALIFORNIA BUILDING CODE, 2013 SF MUNICIPLE CODE, 2013 CALIFORNIA MECHANICAL CODE, 2013 CALIFORNIA PLUMBING CODE, 2013 CALIFORNIA ELECTRICAL CODE, 2013 CALIFORNIA ENERGY CODE, 2013 CALIFORNIA FIRE CODE, 2013 NFPA 72 (FIRE ALARMS), 2013 NFPA 13 (SPRINKLERS), CALIFORNIA GOVERNMENT CODE

LOCATION MAP



PROJECT RENDERING



ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

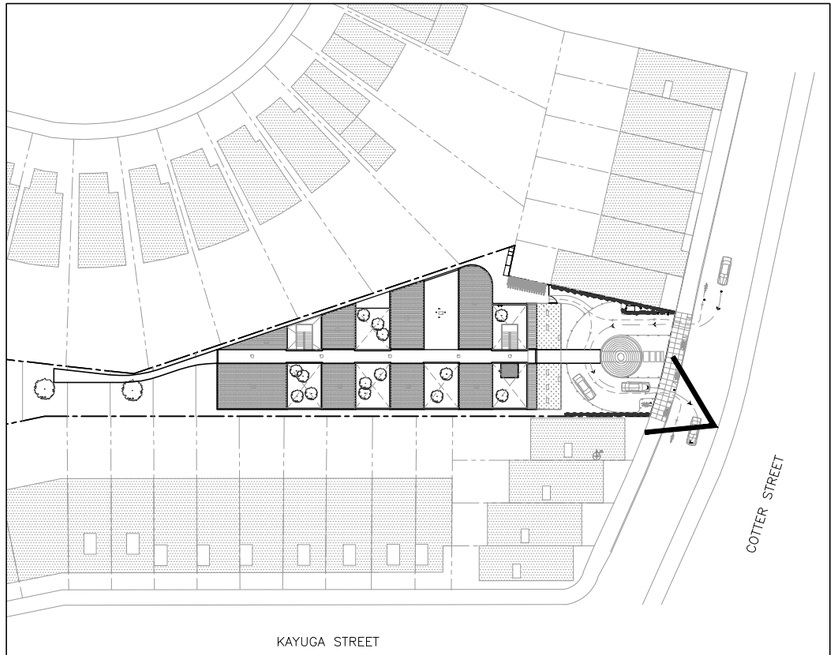
SHEET TITLE

COVER SHEET

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	N.T.S
DRAWN:	SS|NAI

SHEET NO:

A0.1



RENDERING LOCATION | 3

COTTER STREET RENDERING WITHOUT GREEN WALL | 2

COTTER STREET RENDERING WITH GREEN WALL | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE

RENDERING

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	N.T.S
DRAWN:	SS|NAI

SHEET NO:

A0.3A

AERIAL RENDERING | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE

RENDERING

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	N.T.S
DRAWN:	SS|NAI

SHEET NO:

A0.3B

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

183 COTTER ST.
BLOCK 6795A / LOT 28

PROJECT SITE
203 COTTER ST.
BLOCK 6795A / LOT 29

205 COTTER ST.
BLOCK 6795A / LOT 21

← COTTER ST →

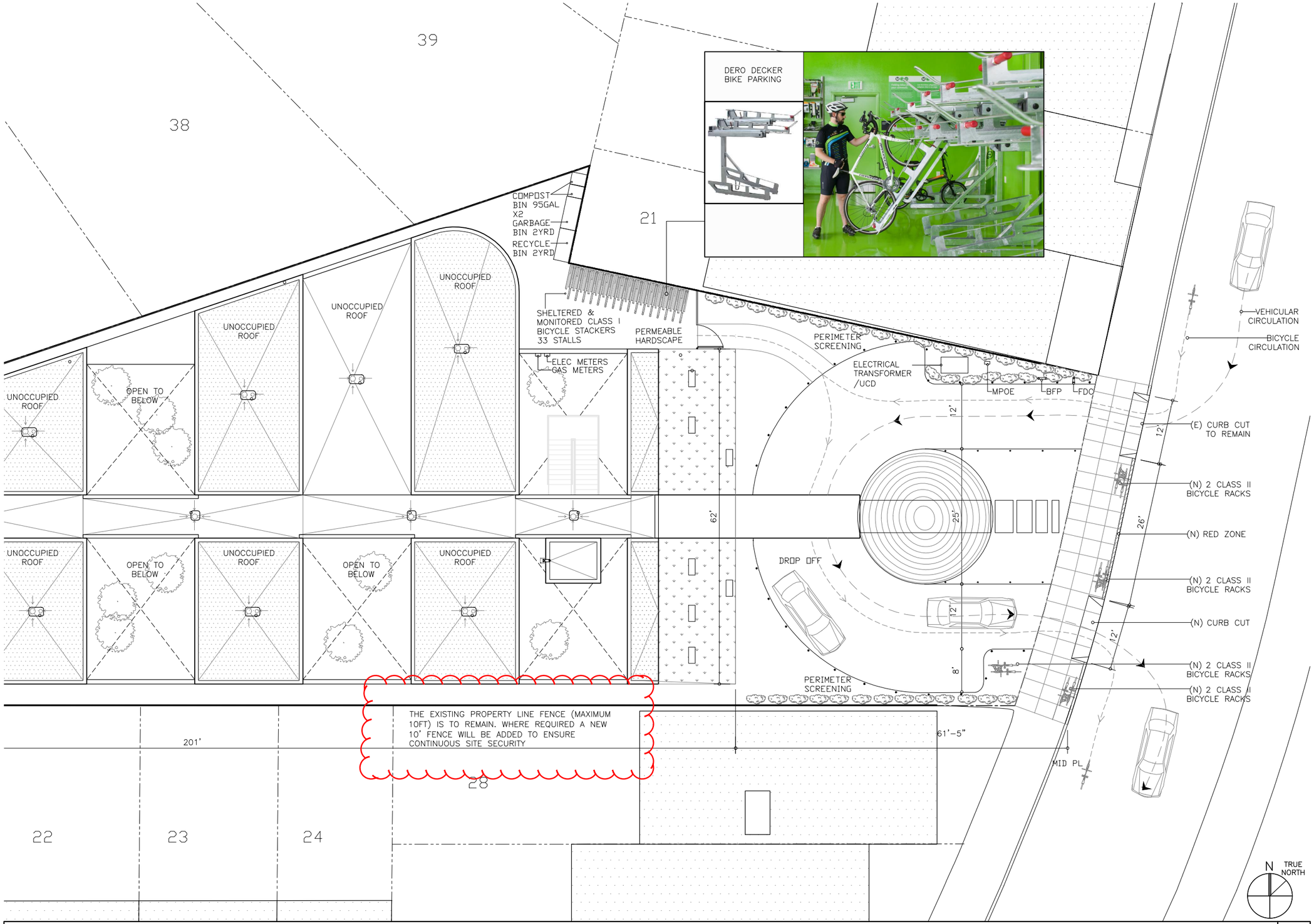
COTTER STREET ELEVATION | 1

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE
STREET ELEVATION

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	N.T.S
DRAWN:	SS|NAI

SHEET NO:
A0.3



ENLARGED **SITE PLAN** | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

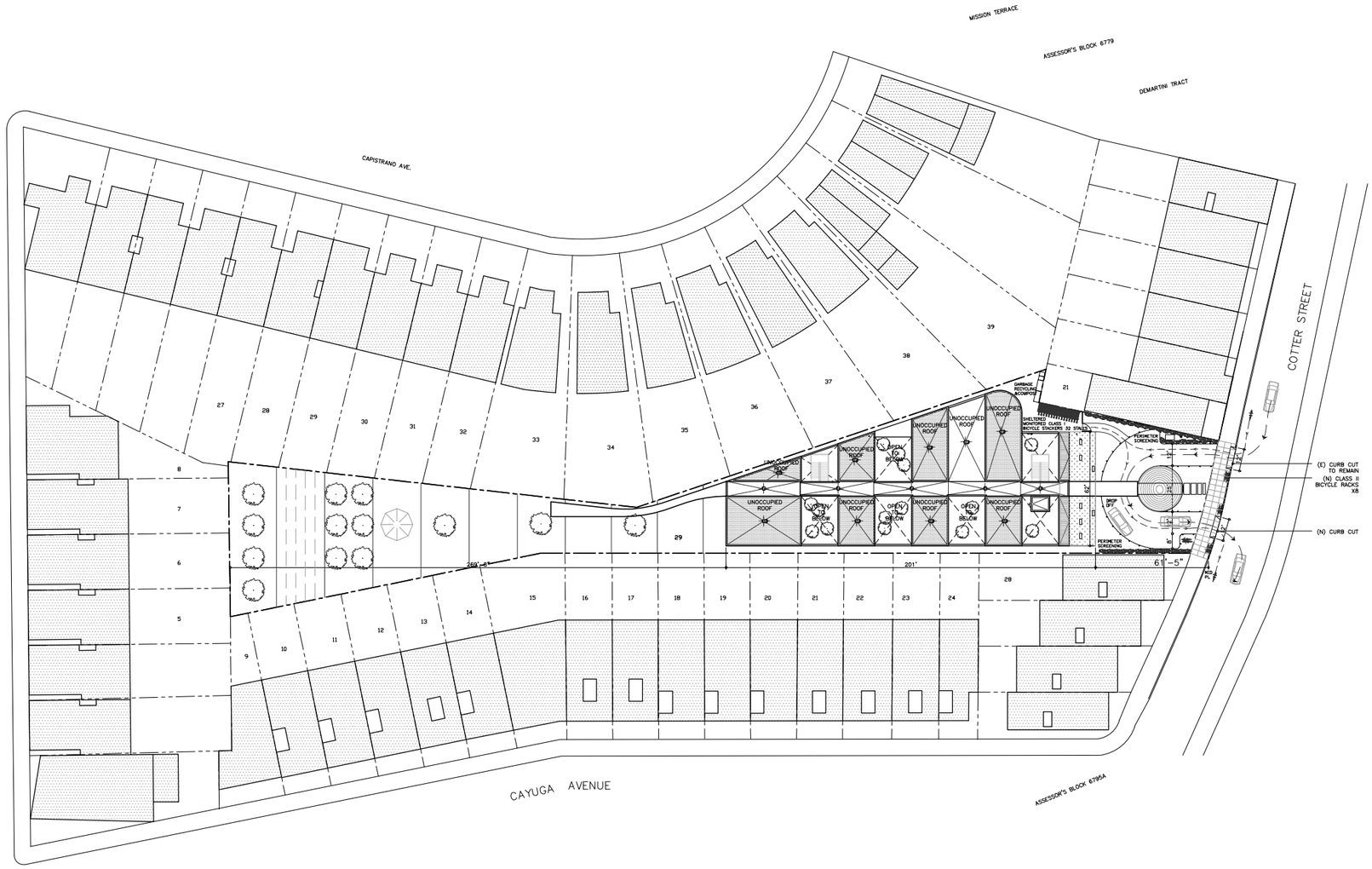
1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

GOLDEN BRIDGES SCHOOL
203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE
ENLARGED
SITE PLAN

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:
A0.4A



N TRUE NORTH

SITE PLAN | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE
SITE PLAN

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/32" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:
A0.4

NOTES:

1. ALL DISTANCES ARE MEASURED IN FEET AND DECIMAL FEET.
2. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.

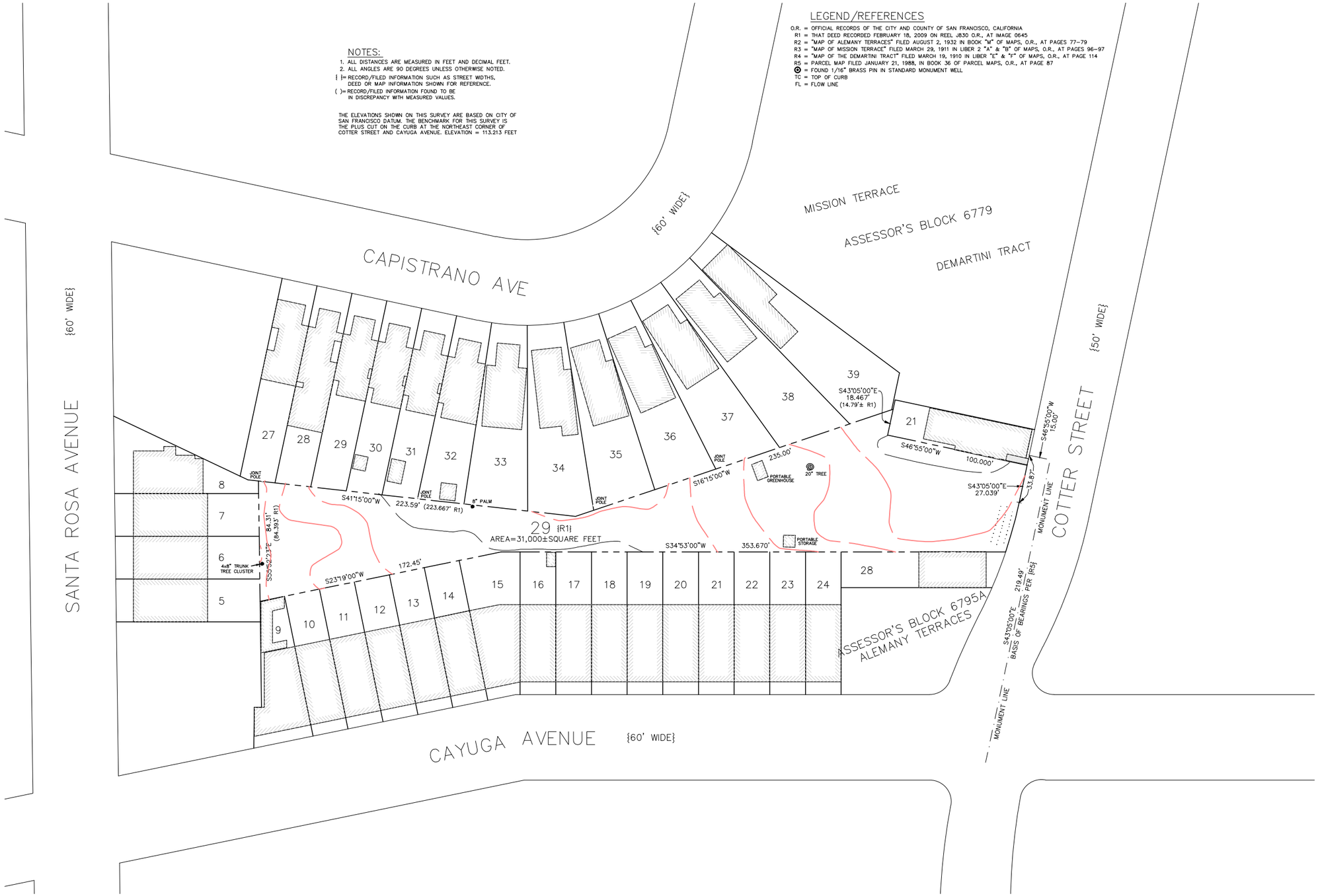
{ }= RECORD/FILED INFORMATION SUCH AS STREET WIDTHS, DEED OR MAP INFORMATION SHOWN FOR REFERENCE.

( )= RECORD/FILED INFORMATION FOUND TO BE IN DISCREPANCY WITH MEASURED VALUES.

THE ELEVATIONS SHOWN ON THIS SURVEY ARE BASED ON CITY OF SAN FRANCISCO DATUM. THE BENCHMARK FOR THIS SURVEY IS THE PLUS CUT ON THE CURB AT THE NORTHEAST CORNER OF COTTER STREET AND CAYUGA AVENUE. ELEVATION = 113.213 FEET

LEGEND/REFERENCES

O.R. = OFFICIAL RECORDS OF THE CITY AND COUNTY OF SAN FRANCISCO, CALIFORNIA
R1 = "THAT DEED RECORDED FEBRUARY 18, 2009 ON REEL J830 O.R., AT IMAGE 0645
R2 = "MAP OF ALEMANY TERRACES" FILED AUGUST 2, 1932 IN BOOK "M" OF MAPS, O.R., AT PAGES 77-79
R3 = "MAP OF MISSION TERRACE" FILED MARCH 29, 1911 IN LIBER 2 "A" & "B" OF MAPS, O.R., AT PAGES 96-97
R4 = "MAP OF THE DEMARTINI TRACT" FILED MARCH 19, 1910 IN LIBER "E" & "F" OF MAPS, O.R., AT PAGE 114
R5 = PARCEL MAP FILED JANUARY 21, 1988, IN BOOK 36 OF PARCEL MAPS, O.R., AT PAGE 87
⊙ = FOUND 1/16" BRASS PIN IN STANDARD MONUMENT WELL
TC = TOP OF CURB
FL = FLOW LINE



N TRUE NORTH

EXISTING SITE SURVEY | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

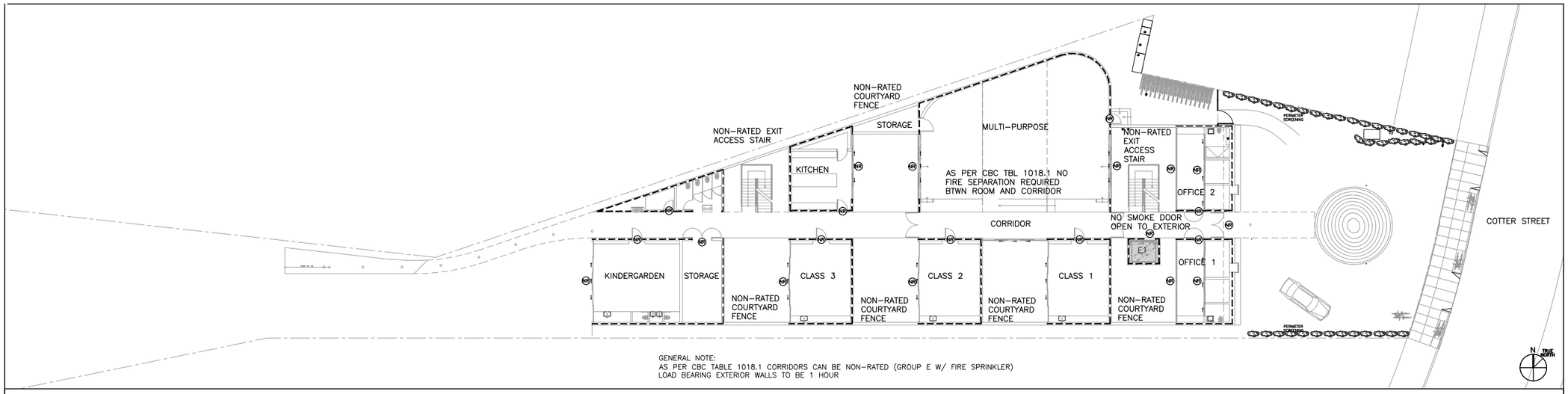
SHEET TITLE

SURVEY

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/32" = 1'-0"
DRAWN:	SS|NAI

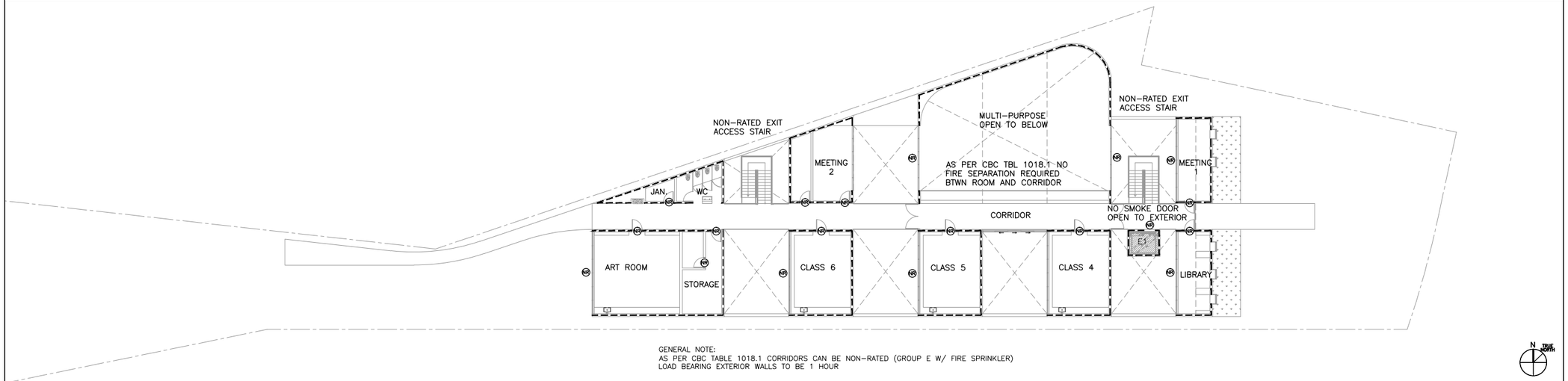
SHEET NO:

A0.5



GENERAL NOTE:
AS PER CBC TABLE 1018.1 CORRIDORS CAN BE NON-RATED (GROUP E W/ FIRE SPRINKLER)
LOAD BEARING EXTERIOR WALLS TO BE 1 HOUR

FLOOR PLAN: LEVEL1



GENERAL NOTE:
AS PER CBC TABLE 1018.1 CORRIDORS CAN BE NON-RATED (GROUP E W/ FIRE SPRINKLER)
LOAD BEARING EXTERIOR WALLS TO BE 1 HOUR

FLOOR PLAN: LEVEL 2

C.B.C. TABLE 601
FIRE RESISTANCE RATING REQUIRMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TYPE VA
PRIMARY STRUCTURAL FRAME	1
BEARING WALL EXTERIOR	1
BEARING WALL INTERIOR	1
NONBEARING WALLS & PARTITIONS EXTERIOR	SEE TABLE 602
NONBEARING WALLS & PARTITIONS INTERIOR	0
FLOOR CONSTRUCTION & SECONDARY MEMBERS	1
ROOF CONSTRUCTION & SECONDARY MEMBERS	1

C.B.C. TABLE 602
FIRE RESISTANCE RATING REQUIRMENTS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE = X (FT)	OCCUPANCY E
X<5	1
5<X<10	1
10<X<30	1
X>30	0

GENERAL NOTES:

NON-RATED WALL

1 HOUR WALL AS PER CBC TBL 601
ALL INTERIOR NON LOAD BEARING WALLS TO BE NON RATED

1 HOUR ELEVATOR SHAFT
ALL FLOOR CONSTRUCTION AS PER CBC 601 SHALL BE 1HR

NR NON RATED DOOR
NON RATED OPENING IN 1HR WALL PERMITTED AS PER CBC TBL 5-A WHERE PERPENDICULAR SEPARATION BETWEEN OPENINGS ARE GREATER THAN 5 FEET

NRW NON RATED WINDOW ASSEMBLY
NON RATED OPENING IN 1HR WALL PERMITTED AS PER CBC TBL 5-A WHERE PERPENDICULAR SEPARATION BETWEEN OPENINGS ARE GREATER THAN 5 FEET

20 20 MINUTE DOOR WITH CLOSER AND GASKETED

60 60 MINUTE DOOR WITH CLOSER AND GASKETED

90 90 MINUTE FIRE WINDOW
AS PER CBC 715.8 & 715.9 & SFBC 503.5 OPENINGS ARE TO HAVE AUTOMATIC FIRE SPRINKLER SYSTEM

90 90 MINUTE DOOR W/ CLOSER
SMOKE GASKETED
MAX. TRANSMIT. TEMP END POINT SHALL NOT EXCEED 450F ABOVE AMBIENT AFTER 30 MIN. OF FIRE EXPOSURE
ALL 90 MINUTE ELEVATOR SHAFT DOORS ARE TO BE SMOKE ACTIVATED WITH MAGNETIC LOCKS AND CLOSERS

FIRE RATED ASSEMBLY DIAGRAM | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

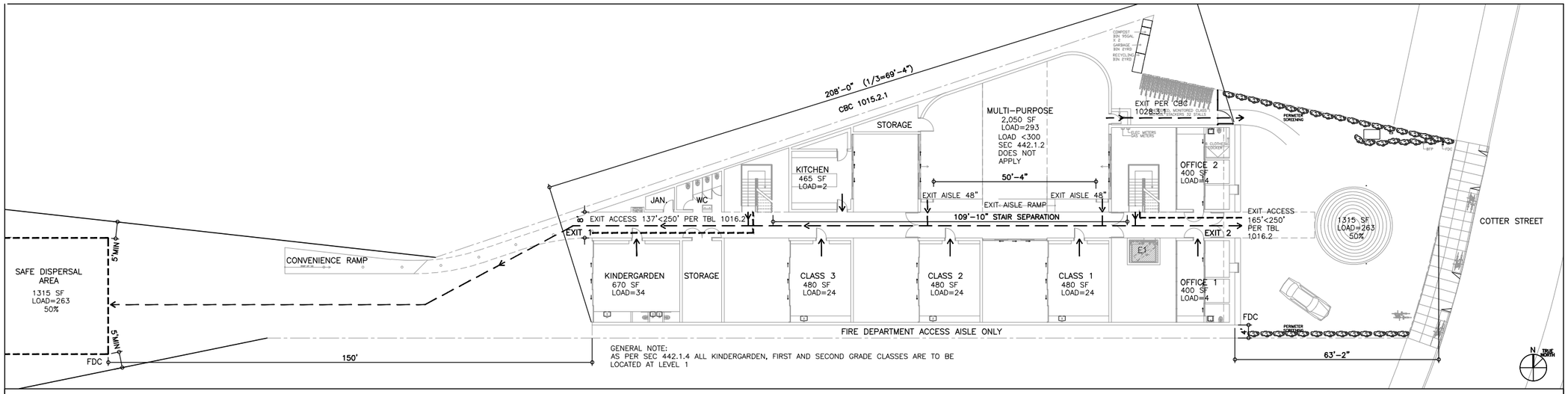
1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

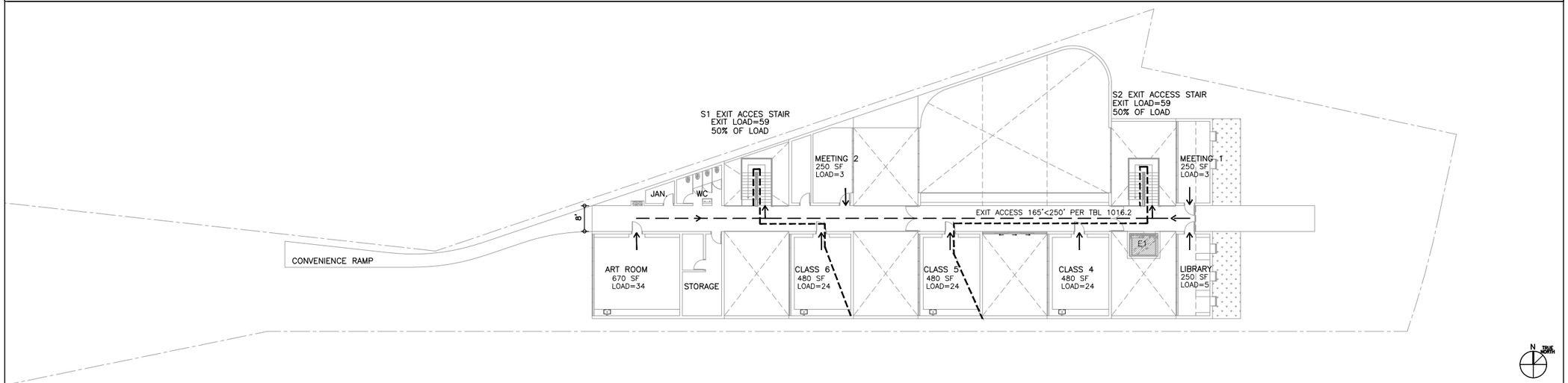
SHEET TITLE
FIRE RATING

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/16" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:
A0.6A



FLOOR PLAN: LEVEL1



FLOOR PLAN: LEVEL 2

Level 2	Area	Load Factor	Load	Exits Req.	Exits Provided	Door Width Req.	Door Width Provided	Stair Width Req.	Stair Width Provided	Notes
Library	280	50	5.00	1	1	1"	36"			
Meeting 1	300	100	3.00	1	1	1"	36"			
Meeting 2	300	100	3.00	1	1	1"	36"			
Classroom 4	480	20	24.00	1	1	5"	36"			
Classroom 5	480	20	24.00	1	1	5"	36"			
Classroom 6	480	20	24.00	1	1	5"	36"			
Art Room	670	20	33.50	1	1	7"	36"			
Total			116.50	2	2			35"	96"	Corridor width >72"

Level 1	Area	Load Factor	Load	Exits Req.	Exits Provided	Door Width Req.	Door Width Provided	Stair Width Req.	Stair Width Provided	Notes
Office 1	400	100	4.00	1	1	1"	36"			
Office 2	400	100	4.00	1	1	1"	36"			
Classroom 1	480	20	24.00	1	1	5"	36"			
Classroom 2	480	20	24.00	1	1	5"	36"			
Classroom 3	480	20	24.00	1	1	5"	36"			
Kindergarden	670	20	33.50	1	1	6.7"	36"			
Multipurpose	2,050	7	293.00	2	2	59"	72"	36"min/88" total	48"min/144" total	
Kitchen	465	200	2.00	1	1	1"	36"			
Sub Total			408.50	2	2					Corridor width >72"
Accumulative Total			525.00	3	3	105"	180"			

EXIT PATH

EXITING DIAGRAM | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE
EXITING DIAGRAMS

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/16" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:
A0.6B

SAN FRANCISCO FIRE DEPARTMENT
BUREAU OF FIRE PREVENTION
PLAN CHECK DIVISION/WATER FLOW
1660 MISSION STREET, 4TH FLOOR
SAN FRANCISCO, CA. 94103
FAX # 415-575-6933
Email: WaterflowSFFD@sfgov.org

E-MAILED 4-1-16

REQUEST FOR WATER FLOW INFORMATION

DATE: 03 /22 /2016 REQUEST IS FOR: [X] FIRE FLOW [ ] SPRINKLER DESIGN

CONTACT PERSON: Jessie Elliot ADDRESS: 3358 22nd Street., SF, CA 94110

PHONE NO. (415) 759 /6228 FAX NO. (415) 759 / 6215

EMAIL : JESSIE@GOLDENBRIDGESSCHOOL.ORG

OWNER'S NAME: 999 Cotter Street Partners, LLC PHONE # (510)917/ 1703

ADDRESS FOR WATER FLOW INFORMATION: PROVIDE SKETCH HERE:

203 COTTER STREET

CROSS STREETS (*BOTH ARE REQUIRED*):

San Jose Ave. / Cayuga Ave.

SPECIFY STREET FOR POINT OF CONNECTION: Cayuga Avenue

OCCUPANCY (CIRCLE ONE): R3 R2 LIVE/WORK COMMERCIAL (OTHER) E (K-8)

HAZARD CLASSIFICATION: LIGHT ORD 1 ORD 2 EXT 1 EXT 2 OTHER

CAR-STACKER: YES (NO)

NUMBER OF STORIES: 2 HEIGHT OF BLDG.: 20 FT.

- SUBMIT FORM WITH A **$120.00** CHECK MADE PAYABLE TO 'S.F.F.D.'
- REQUESTS REQUIRING A FIELD FLOW TEST WILL BE NOTIFIED BY FAX OR EMAIL, AND AN ADDITIONAL FEE OF **$240.00** WILL BE NECESSARY.
- WATER FLOW INFORMATION WILL BE RETURNED BY FAX, MAIL, OR EMAIL.
- INCOMPLETE FORMS **WILL NOT** BE PROCESSED.
- PLEASE ALLOW 7-14 WORKING DAYS FOR PROCESSING.

Field Flow Test required.
Payment by check only, made payable to SFFD for $240.00

**********Official use only**********

Flow data provided by: Deen Date Forwarded 4.19.16

Flow data: FIELD FLOW TEST X STATIC 69 PSI

RECORDS ANALYSIS ____ RESIDUAL 55 PSI

FLOW 533 GPM

Gate Page 161/160 8" MAIN on Cayuga

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT INSPECTOR DEEN @ 415-558-6361 9/05/2015

M. K. ENGINEERING INC.
Professional Mechanical/Engineering Consultants

FIRE FLOW CALCULATION

Date: 5-2-2016

1. Project: Golden Bridges School
   203 Cotter St.
   San Francisco. CA. 94112
2. Building Type: Type VA
   Number of Stories: 2
   Occupancy: E
3. Total Fire Area: 15,400ft²
4. Fire flow requirement:

a) Per 2013 CFC, Section B105.2 Table B 105.1
2250 gpm x 0.25 (25%) = 562.5 gpm

Adjusted minimum fire flow: 1,500 gpm @ 20 psi
(Per 2013 CFC Section B 105.2, if the fire flow is less than 1500 gpm, use 1500 gpm)

b) Estimated fire sprinkler demand:
1) Fire sprinkler:
1500 sqft. x .1 x 1.15 = 173 gpm

c) Required fire flow at hydrant: Sum of a & b
1,500 + 173 = 1,673 gpm @ 20 psi

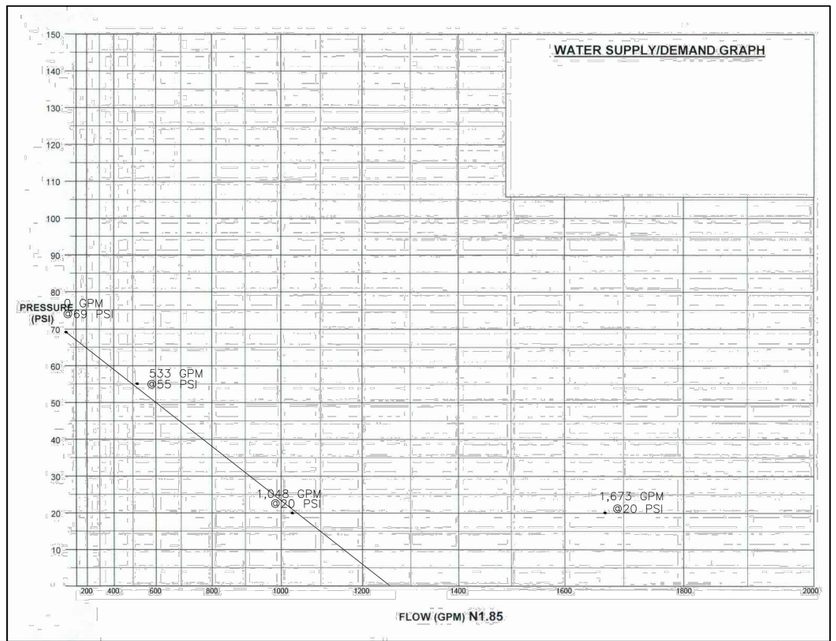
5. Available water flow at this site:
Static Pressure: 69 psi, Residual Pressure: 55 psi and Flow: 533 gpm

Available $Q = 533[(69-20)^{0.54}/(69-55)^{0.54}] = 1{,}048$ **gpm@ 20 psi**

Calculated by : _____
Moon H. Kang, P.E.

REGISTERED PROFESSIONAL ENGINEER
MOON HYUNG, KANG
NO. M026516
EXP. 3-31-16
MECHANICAL
STATE OF CALIFORNIA

3450 3RD ST., #4B. • SAN FRANCISCO, CA 94124 • TEL: (415) 282-3100, FAX: (415) 282-3101 • www.mkengrs.com



FIRE FLOW CALCULATION | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL
3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.
1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE
FIRE FLOW

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	N.T.S
DRAWN:	SS|NAI

SHEET NO:
A0.7

Green Building: Site Permit Submittal

BASIC INFORMATION:
These facts, plus the primary occupancy, determine which requirements apply. For details, see AB 093 Attachment A Table 1.

Project Name	Block/Lot	Address
GOLDEN BRIDGES SCHOOL	BLOCK 6795A / LOT 029	203 COTTER ST., SAN FRANCISCO, CA 94112
Gross Project Area	**Primary Occupancy**	**Number of occupied floors**
15,400 GSF	E - EDUCATION	2
Design Professional/Applicant: Sign & Date		

Instructions:

As part of application for site permit, this form acknowledges the specific green building requirements that apply to a project under San Francisco Green Building Code, California Title 24 Part 11, and related codes. Attachment C3, C4, C5, C6, C7, or C8 will be due with the applicable addendum. To use the form:

(a) Provide basic information about the project in the box at left. This info determines which green building requirements apply.

AND

(b) Indicate in one of the columns below which type of project is proposed. If applicable, fill in the blank lines below to identify the number of points the project must meet or exceed. A LEED or GreenPoint checklist is not required to be submitted with the site permit application, but using such tools as early as possible is strongly recommended.

Solid circles in the column indicate mandatory measures required by state and local codes. For projects applying LEED or GreenPoint Rated, prerequisites of those systems are mandatory. See relevant codes for details.

ALL PROJECTS, AS APPLICABLE

Construction activity stormwater pollution prevention and site runoff controls - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	●
Stormwater Control Plan: Projects disturbing ≥5,000 square feet must implement a Stormwater Control Plan meeting SFPUC Stormwater Design Guidelines	●
Water Efficient Irrigation - Projects that include ≥ 1,000 square feet of new or modified landscape must comply with the SFPUC Water Efficient Irrigation Ordinance.	●
Construction Waste Management – Comply with the San Francisco Construction & Demolition Debris Ordinance	●
Recycling by Occupants: Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. See Administrative Bulletin 088 for details.	●

GREENPOINT RATED PROJECTS

Proposing a GreenPoint Rated Project (Indicate at right by checking the box.)	
Base number of required Greenpoints:	75
Adjustment for retention / demolition of historic features / building:	
Final number of required points (base number +/- adjustment)	
GreenPoint Rated (i.e. meets all prerequisites)	●
Energy Efficiency: Demonstrate a 10% energy use reduction compared to Title 24, Part 6 (2013).	●
Meet all California Green Building Standards Code requirements (CalGreen measures for residential projects have been integrated into the GreenPoint Rated system.)	●

Notes

1) New residential projects of 4 or more occupied floors must use the "New Residential High-Rise" column. New residential with 3 or fewer occupied floors must use the "New Residential Low Rise" column.

2) LEED for Homes Mid-Rise projects must meet the "Silver" standard, including all prerequisites. The number of points required to achieve Silver depends on unit size. See LEED for Homes Mid-Rise Rating System to confirm the base number of points required.

LEED PROJECTS

	New Large Commercial	New Low Rise Residential	New High Rise Residential	Large First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration
Type of Project Proposed (Indicate at right)						
Overall Requirements:						
LEED certification level (includes prerequisites):	GOLD	SILVER	SILVER	GOLD	GOLD	GOLD
Base number of required points:	60	[2]	50	60	60	60
Adjustment for retention / demolition of historic features / building:				n/a		
Final number of required points (base number +/- adjustment)				50		
Specific Requirements: (n/r indicates a measure is not required)						
Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance - LEED MR 2, 2 points	●	●	●	●	Meet C&D ordinance only	●
Energy Use Comply with California Title-24 Part 6 (2013) and meet LEED minimum energy performance (LEED EA p2)	●	LEED prerequisite	●	●	LEED prerequisite only	
Renewable Energy or Enhanced Energy Efficiency **Effective 1/1/2012:** Generate renewable energy on-site ≥1% of total annual energy cost (LEED EAc2), OR Demonstrate at least 10% energy use reduction (compared to Title 24 Part 6 2013), OR Purchase Green-E certified renewable energy credits for 35% of total electricity use (LEED EAc6).	●	n/r	n/r	n/r	n/r	n/r
Enhanced Commissioning of Building Energy Systems LEED EA 3	●	Meet LEED prerequisites				
Water Use - 30% Reduction LEED WE 3, 2 points	●	Meet LEED prerequisite	●	Meet LEED prerequisite		
Enhanced Refrigerant Management LEED EA 4	●	n/r	n/r	●	●	n/r
Indoor Air Quality Management Plan LEED IEQ 3.1	●	CalGreen 4.504.1	CalGreen 4.504.1	CalGreen 5.504.3	CalGreen 5.504.3	CalGreen 4.504.1
Low-Emitting Materials LEED IEQ 4.1, 4.2, 4.3, and 4.4	●	●	●	●	●	●
Bicycle parking: Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater, or meet LEED credit SSc4.2.	●	See San Francisco Planning Code 155		●	See San Francisco Planning Code 155	
Designated parking: Mark 8% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	●			●	n/r	n/r
Water Meters: Provide submeters for spaces projected to consume more than 1,000 gal/day, or more than 100 gal/day if in building over 50,000 sq. ft.	●	n/r	n/r	●	● (addition only)	n/r
Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings (or LEED credit IEQ 5).	●	n/r	n/r	●	●	n/r
Air Filtration: Provide MERV-13 filters in residential buildings in air-quality hot-spots (or LEED credit IEQ 5). (SF Health Code Article 38 and SF Building Code 1203.5)	n/r	●	●	n/r	n/r	●
Acoustical Control: Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.	●	See CBC 1207		●	● (envelope alteration & addition only)	n/r

OTHER APPLICABLE NON-RESIDENTIAL PROJECTS

Requirements below only apply when the measure is applicable to the project. Code references below are applicable to New Non-Residential buildings. Corresponding requirements for additions and alterations can be found in Title 24 Part 11, Division 5.7. Requirements for additions or alterations apply to applications received July 1, 2012 or after.[3]	Other New Non-Residential	Addition ≥1,000 sq ft OR Alteration ≥$200,000[3]
Type of Project Proposed (Check box if applicable)		
Energy Efficiency: Comply with California Energy Code, Title 24, Part 6 (2013).	●	●
Bicycle parking: Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater (or LEED credit SSc4.2).	●	●
Fuel efficient vehicle and carpool parking: Provide stall marking for low-emitting, fuel efficient, and carpool/van pool vehicles; approximately 8% of total spaces.	●	●
Water Meters: Provide submeters for spaces projected to consume >1,000 gal/day, or >100 gal/day if in buildings over 50,000 sq. ft.	●	Addition only
Indoor Water Efficiency: Reduce overall use of potable water within the building by 20% for showerheads, lavatories, kitchen faucets, wash fountains, water closets, and urinals.	●	●
Commissioning: For new buildings greater than 10,000 square feet, commissioning shall be included in the design and construction of the project to verify that the building systems and components meet the owner's project requirements. **OR** for buildings less than 10,000 square feet, testing and adjusting of systems is required.	●	● (Testing & Balancing)
Protect duct openings and mechanical equipment during construction	●	●
Adhesives, sealants, and caulks: Comply with VOC limits in SCAQMD Rule 1168 VOC limits and California Code of Regulations Title 17 for aerosol adhesives.	●	●
Paints and coatings: Comply with VOC limits in the Air Resources Board Architectural Coatings Suggested Control Measure and California Code of Regulations Title 17 for aerosol paints.	●	●
Carpet: All carpet must meet one of the following: 1. Carpet and Rug Institute Green Label Plus Program, 2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350), 3. NSF/ANSI 140 at the Gold level, 4. Scientific Certifications Systems Sustainable Choice, OR 5. California Collaborative for High Performance Schools EQ 2.2 and listed in the CHPS High Performance Product Database AND carpet cushion must meet Carpet and Rug Institute Green Label, AND indoor carpet adhesive & carpet pad adhesive must not exceed 50 g/L VOC content.	●	●
Composite wood: Meet CARB Air Toxics Control Measure for Composite Wood	●	●
Resilient flooring systems: For 80% of floor area receiving resilient flooring, install resilient flooring complying with the VOC-emission limits defined in the 2009 Collaborative for High Performance Schools (CHPS) criteria or certified under the Resilient Floor Covering Institute (RFCI) FloorScore program.	●	●
Environmental Tobacco Smoke: Prohibit smoking within 25 feet of building entries, outdoor air intakes, and operable windows.	●	●
Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings.	●	●
Acoustical Control: Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.	●	● (envelope alteration & addition only)
CFCs and Halons: Do not install equipment that contains CFCs or Halons.	●	●
Additional Requirements for New A, B, I, OR M Occupancy Projects 5,000 - 25,000 Square Feet		
Construction Waste Management – Divert 75% of construction and demolition debris AND comply with San Francisco Construction & Demolition Debris Ordinance.	●	Meet C&D ordinance only
Renewable Energy or Enhanced Energy Efficiency **Effective January 1, 2012:** Generate renewable energy on-site equal to ≥1% of total annual energy cost (LEED EAc2), OR demonstrate a 10% energy use reduction compared to Title 24 Part 6 (2013), OR purchase Green-E certified renewable energy credits for 35% of total electricity use (LEED EAc6).	●	n/r

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL
3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

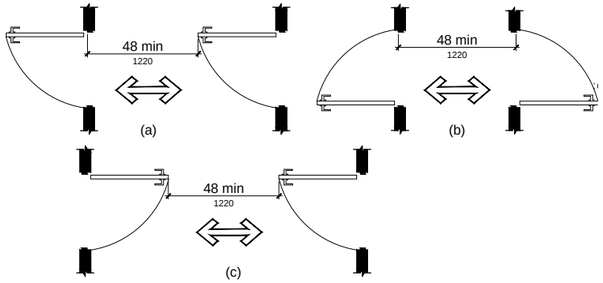
ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.
1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE
GREEN POINT DATA

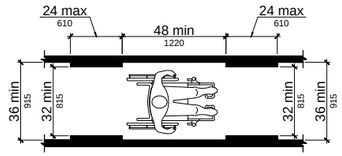
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	N.T.S
DRAWN:	SS|NAI

SHEET NO:
A0.8

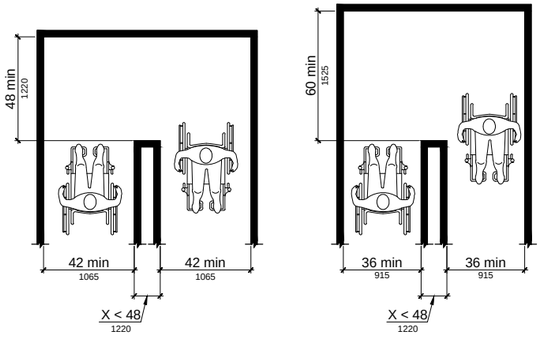


11B–404.2.6 DOORS IN SERIES AND GATES IN SERIES

DOORS IN SERIES | 7



11B–403.5.1 CLEAR WIDTH OF AN ACCESSIBLE ROUTE

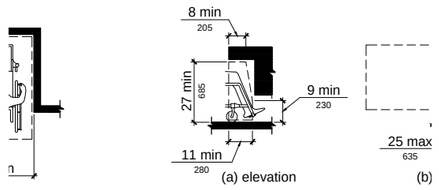


(a) 180 degree turn

(b) 180 degree turn (Exception)

TE 11B–403.5.2 CLEAR WIDTH AT TURN

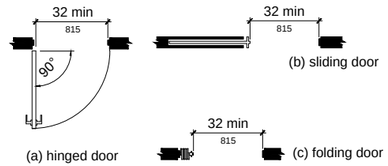
ASSESSIBLE ROUTE | 4



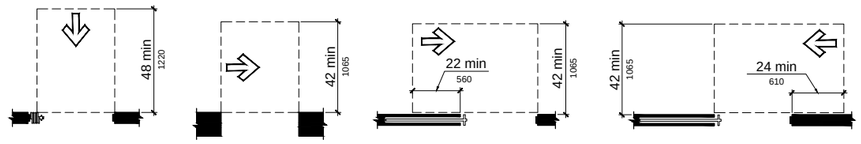
MANEUVERING
AN ALCOVE,
OACH

11B–306 KNEE & TOE CLEARANCE.

KNEE AND TOE CLEARANCE | 2

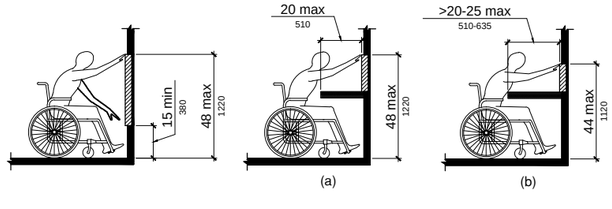


11B–404.2.3 CLEAR WIDTH OF DOORWAYS



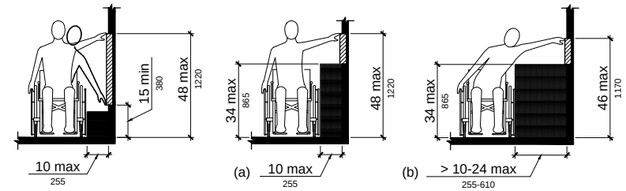
11B–404.2.4.2 MANEUVERING CLEARANCES AT DOORWAYS WITHOUT DOORS, SLIDING DOORS, GATES, AND FOLDING DOORS

DOORS WIDTHS | 6



11B–308.2.1 UNOBSTRUCTED FORWARD REACH

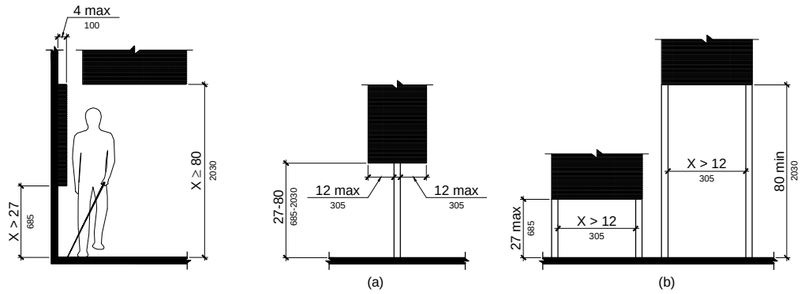
11B–308.2.2 OBSTRUCTED HIGH FORWARD REACH



11B–308.3.1 UNOBSTRUCTED SIDE REACH

11B–308.3.2 OBSTRUCTED HIGH SIDE REACH

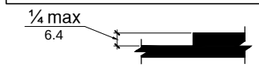
REACH RANGES | 5



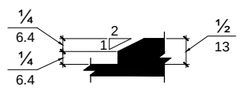
11B–307.2 LIMITS OF PROTRUDING OBJECTS 307.4 POST–MOUNTED PROTRUDING OBJECTS

11B–307.4 VERTICAL CLEARANCE

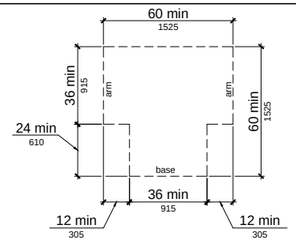
PROTRUDING OBJECTS | 3



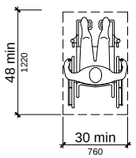
303.2 VERTICAL CHANGE IN LEVEL



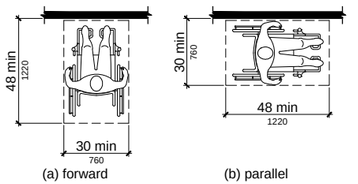
11B–303.3 BEVELED CHANGE IN LEVEL



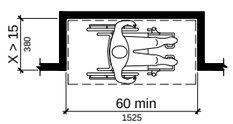
11B–304.3.2 T–SHAPED TURNING SPACE



11B–305.3 CLEAR FLOOR OR GROUND SPACE



11B–305.5 POSITIONS OF CLEAR FLOOR OR GROUND SPACE



11B–305.7.2 MANEUVERING CLEARANCE IN AN ALCOVE, PARALLEL APPROACH

CLEAR FLOOR AND GROUND SPACE | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

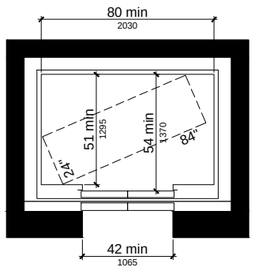
SHEET TITLE

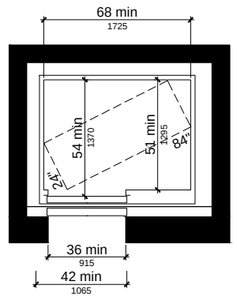
ACCESSIBILITY DIAGRAMS

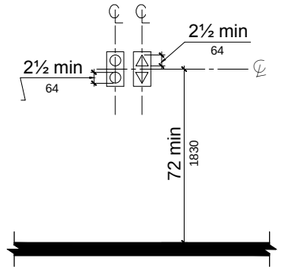
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	3/8" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A0.9







11B–407.2.2.2 VISIBLE HALL SIGNALS

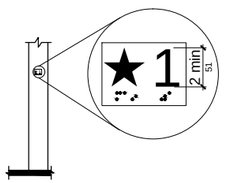
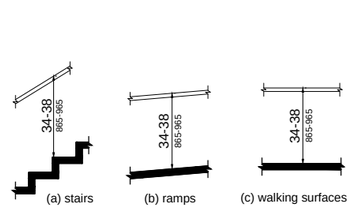


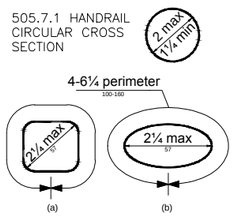
FIGURE 11B–407.2.3.1 FLOOR DESIGNATION ON JAMBS OF ELEVATOR HOISTWAY ENTRANCES

ELEVATORS | 2

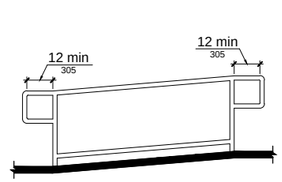


11B–505.4 HANDRAIL HEIGHT

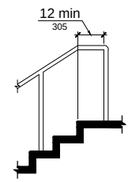
11B–505.6 HORIZONTAL PROJECTIONS BELOW GRIPPING SURFACE



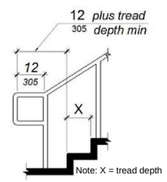
11B–505.7.2 HANDRAIL NON–CIRCULAR CROSS SECTION



11B–505.10.1 TOP AND BOTTOM HANDRAIL EXTENSION AT RAMPS

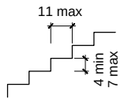


11B–505.10.2 TOP HANDRAIL EXTENSION AT STAIRS

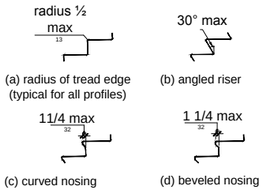


11B–FIGURE 505.10.3 BOTTOM HANDRAIL EXTENSION AT STAIRS

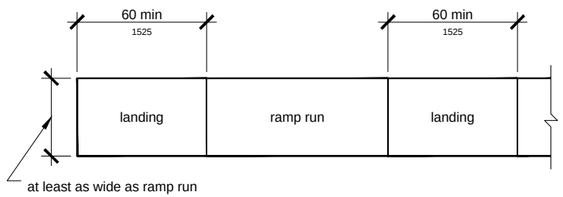
HANDRAILS AT STAIRS AND RAMPS | 5

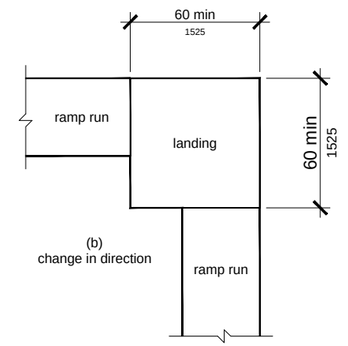


11B–504.2 TREADS AND RISERS

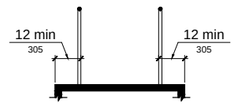


11B–504.5 STAIR NOSINGS

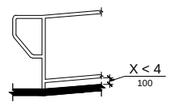




11B–405.7 RAMP LANDINGS



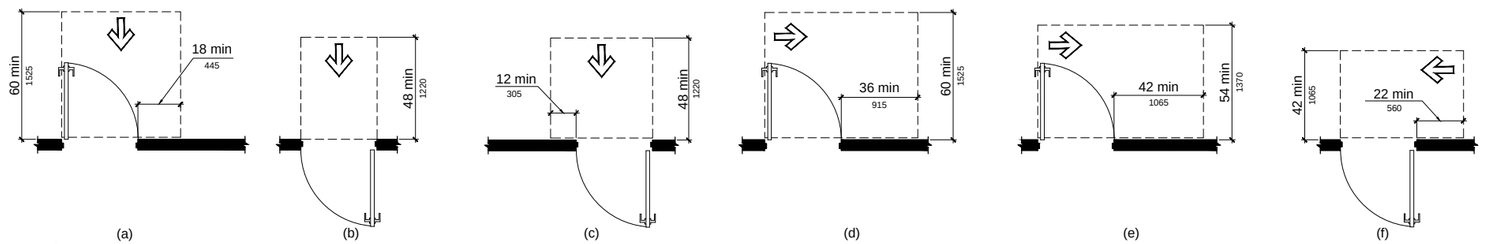
405.7 RAMP LANDINGS



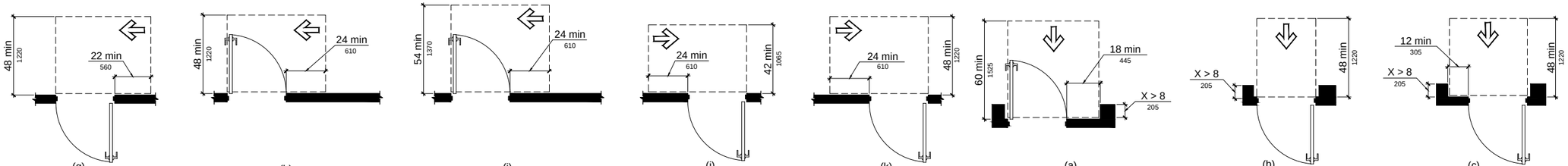
405.9.2 CURB OR BARRIER EDGE PROTECTION

TREAD PROFILE | 4

RAMPS | 3



11B–404.2.4.1 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES



11B–404.2.4.3 MANEUVERING CLEARANCES AT RECESSED DOORS AND GATES

CLERANCE AT DOORS, DOORWAYS AND GATES | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

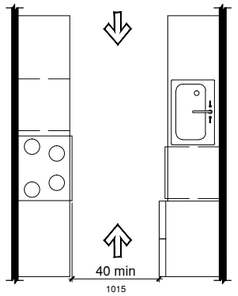
SHEET TITLE

ACCESSIBILITY DIAGRAMS

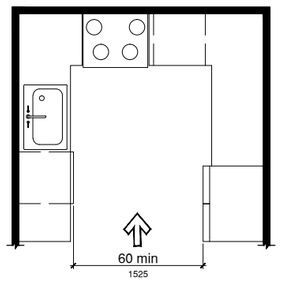
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	3/8" = 1'-0"
DRAWN:	SS|NAI

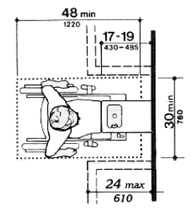
SHEET NO:

A0.10

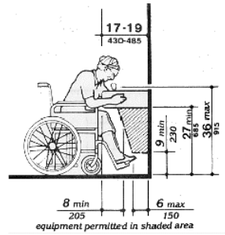


11B–804.2.1 PASS THROUGH KITCHENS

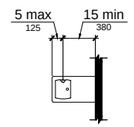




11B–602.2 CLEAR FLOOR SPACE

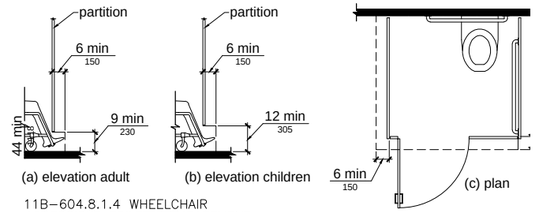


SPOUT HEIGHT AND KNEE CLEARANCE



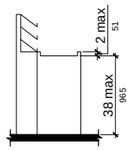
11B–602.5 DRINKING FOUNTAIN SPOUT LOCATION

DRINKING FOUNTAIN | 5

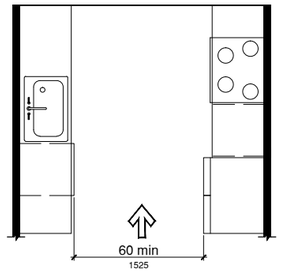


11B–604.8.1.4 WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT TOE CLEARANCE

TOE CLEARANCE AT WC PARTITIONS | 2

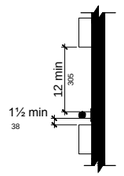


11B–904.3.2 CHECK–OUT AISLE COUNTERS



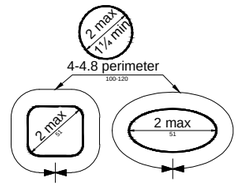
11B–804.2.2 U–SHAPED KITCHENS

KITCHEN | 7



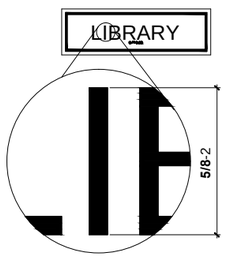
(a) projecting objects (b) recessed objects

11B–609.3 SPACING OF GRAB BARS

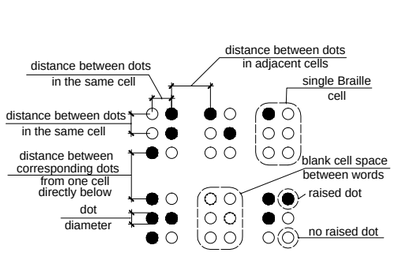


11B–609 GRAB BARS CROSS SECTION

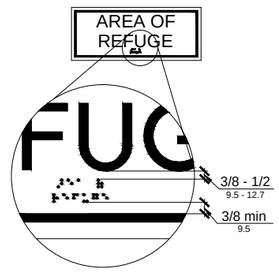
BATHROOM RAILS | 4



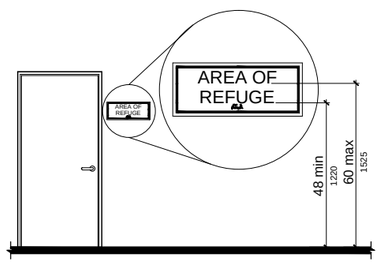
11B–703.2.5 HEIGHT OF RAISED CHARACTERS



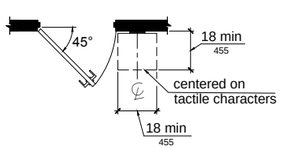
11B–703.3.1 BRAILLE MEASUREMENT



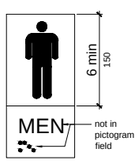
11B–703.3.2 POSITION OF BRAILLE



11B–703.4.1 HEIGHT OF TACTILE CHARACTERS ABOVE FINISH FLOOR OR GROUND



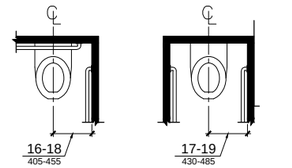
11B–703.4.2 LOCATION OF TACTILE SIGNS AT DOORS



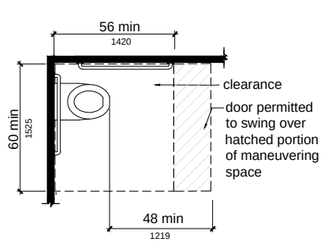
11B–703.6.1 PICTOGRAM FIELD

11B–703.7.2.1 INTERNATIONAL SYMBOL OF ACCESSIBILITY

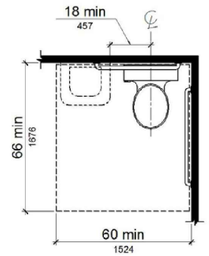
COMMUNICATION ELEMENTS | 6



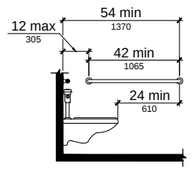
11B–604.2 WATER CLOSET LOCATION



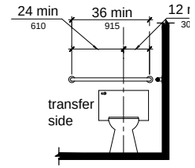
11B–604.3.1 SIZE OF CLEARANCE AT WATER CLOSETS



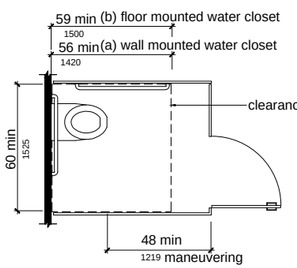
11B–604.3.2 OVERLAP OF WATER CLOSET CLEARANCE IN RESIDENTIAL DWELLING UNITS

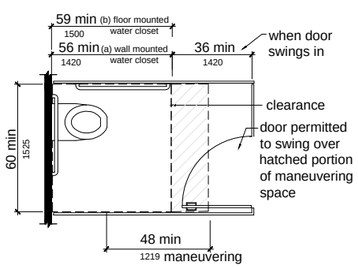


11B–604.5.1 SIDE WALL GRAB BAR AT WATER CLOSETS

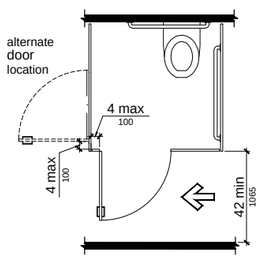


11B–604.5.2 REAR WALL GRAB BAR AT WATER CLOSETS





11B–604.8.1.1.2 MANEUVERING SPACE WITH SIDE–OPENING DOOR



11B–604.8.1.2 WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT DOORS

PLUMBING ELEMENTS AND FACILITIES | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

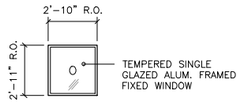
SHEET TITLE

ACCESSIBILITY DIAGRAMS

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	3/8" = 1'-0"
DRAWN:	SS|NAI

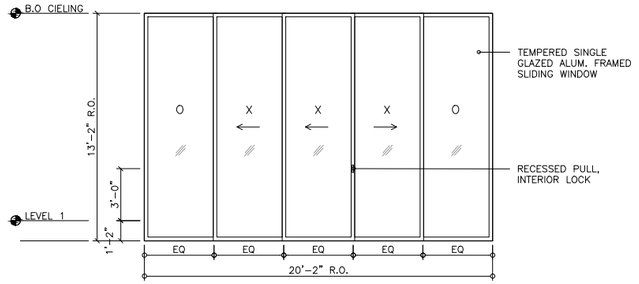
SHEET NO:

A0.11

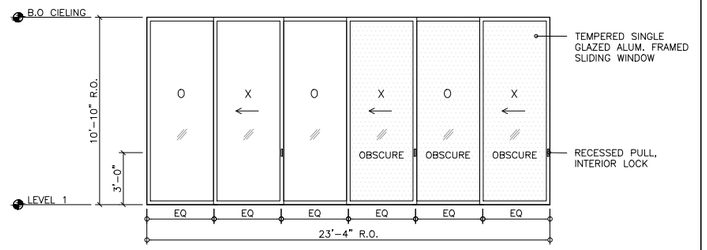


SEE PLAN AND ELEVATIONS FOR WINDOW LOCATIONS

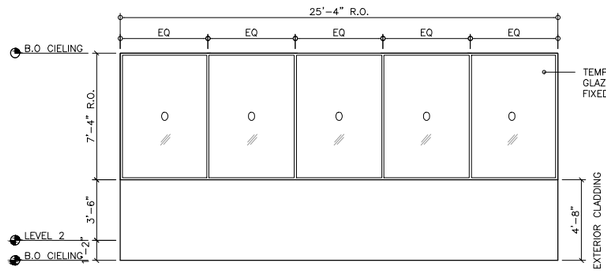
ALUMINUM FRAME FIXED WINDOW 21



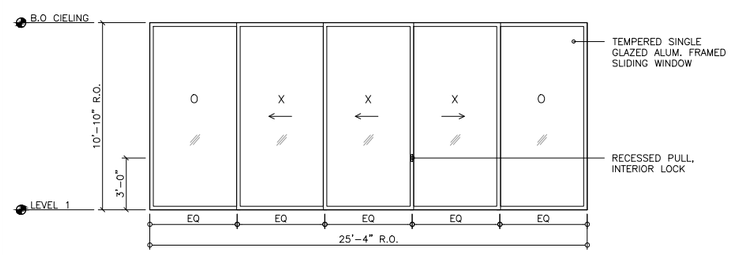
ALUMINUM FRAME SLIDING DOOR 13 13R



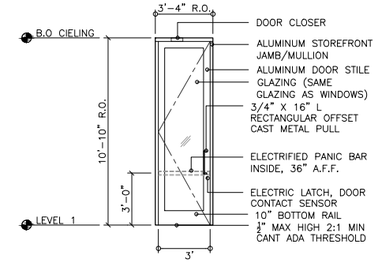
ALUMINUM FRAME SLIDING DOOR 11



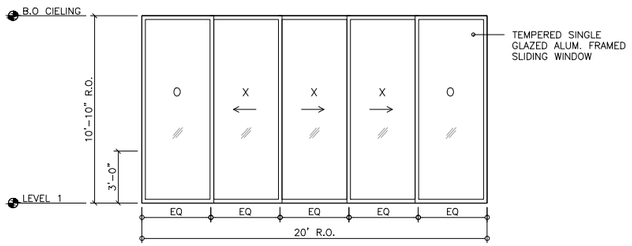
ALUMINUM FRAME FIXED WINDOW 22



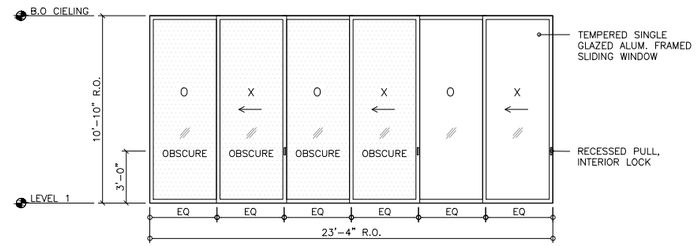
ALUMINUM FRAME SLIDING DOOR 12



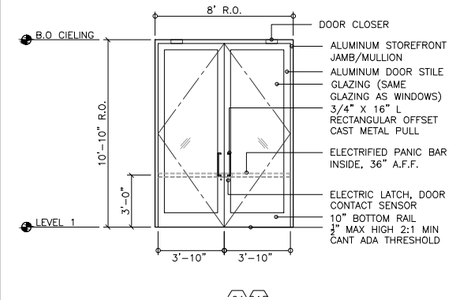
ALUMINUM FRAME STORREFRONT DOOR 02



ALUMINUM FRAME SLIDING DOOR 14



ALUMINUM FRAME SLIDING DOOR 11A



ALUMINUM FRAME STORREFRONT ENTRY 01

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

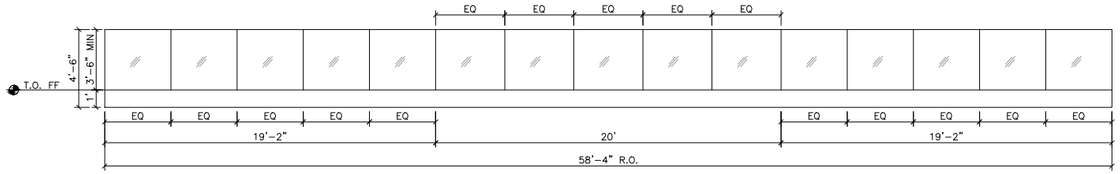
SHEET TITLE

WINDOW TYPES

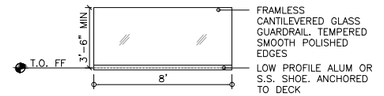
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/4" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

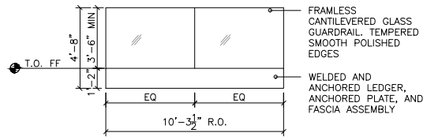
A6.2



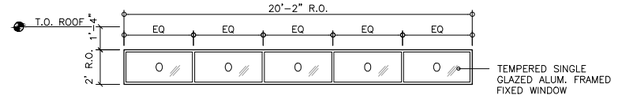
FRAMELESS CANTILEVERED GLASS GUARDRAIL 34



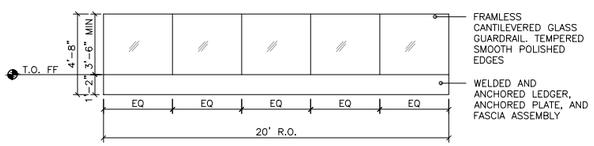
FRAMELESS CANTILEVERED GLASS GUARDRAIL 31



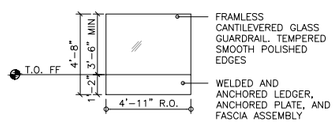
FRAMELESS CANTILEVERED GLASS GUARDRAIL 33



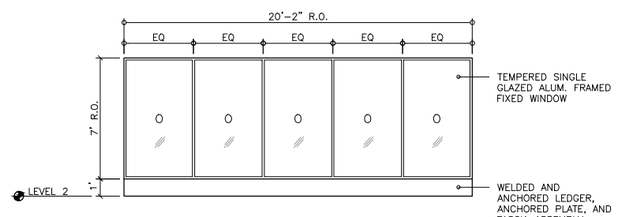
ALUMINUM FRAME FIXED WINDOW 24



FRAMELESS CANTILEVERED GLASS GUARDRAIL 35



FRAMELESS CANTILEVERED GLASS GUARDRAIL 32



ALUMINUM FRAME FIXED WINDOW 23

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

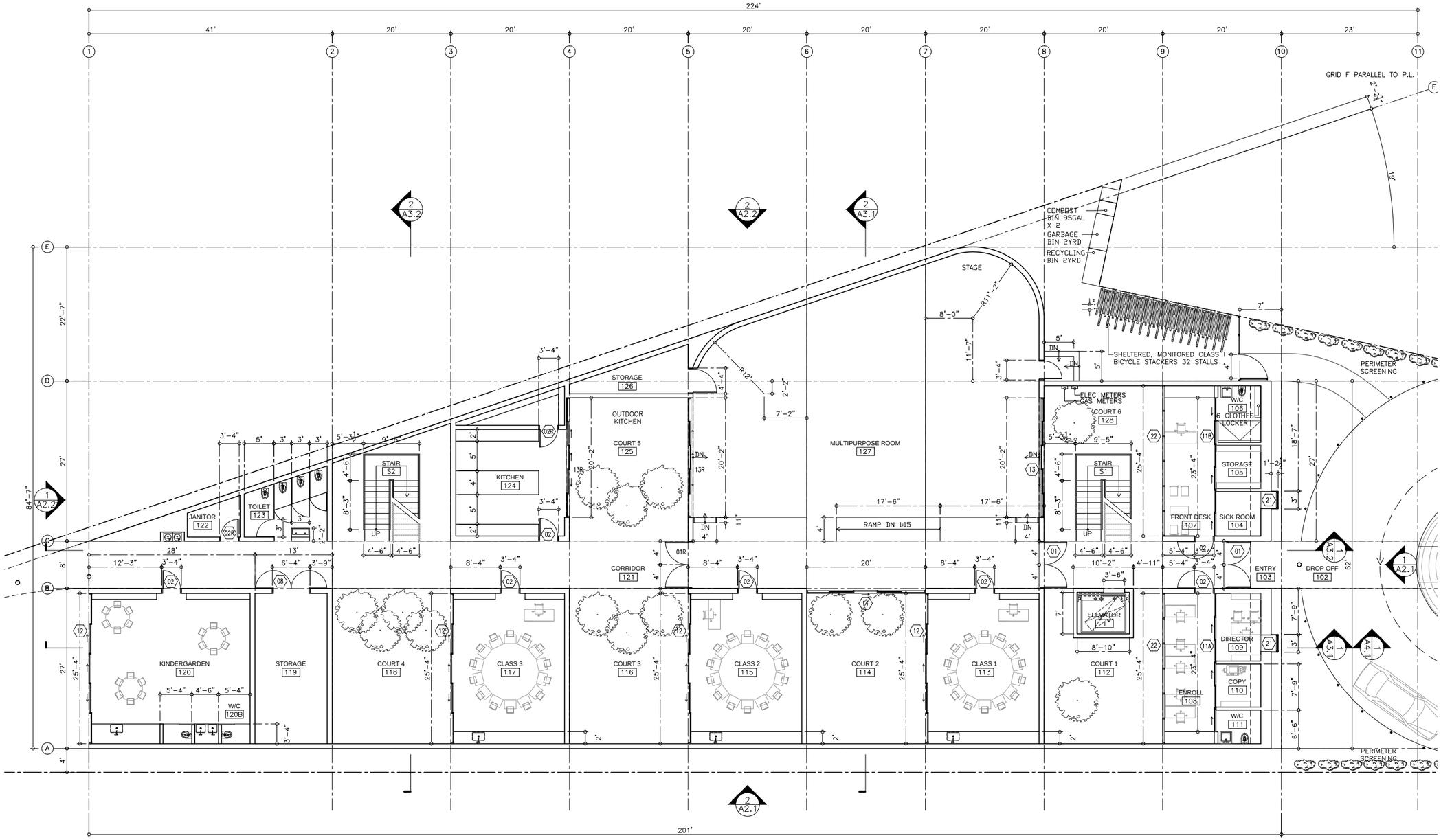
SHEET TITLE

WINDOW TYPES

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/4" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A6.3



GROUND FLOOR PLAN | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

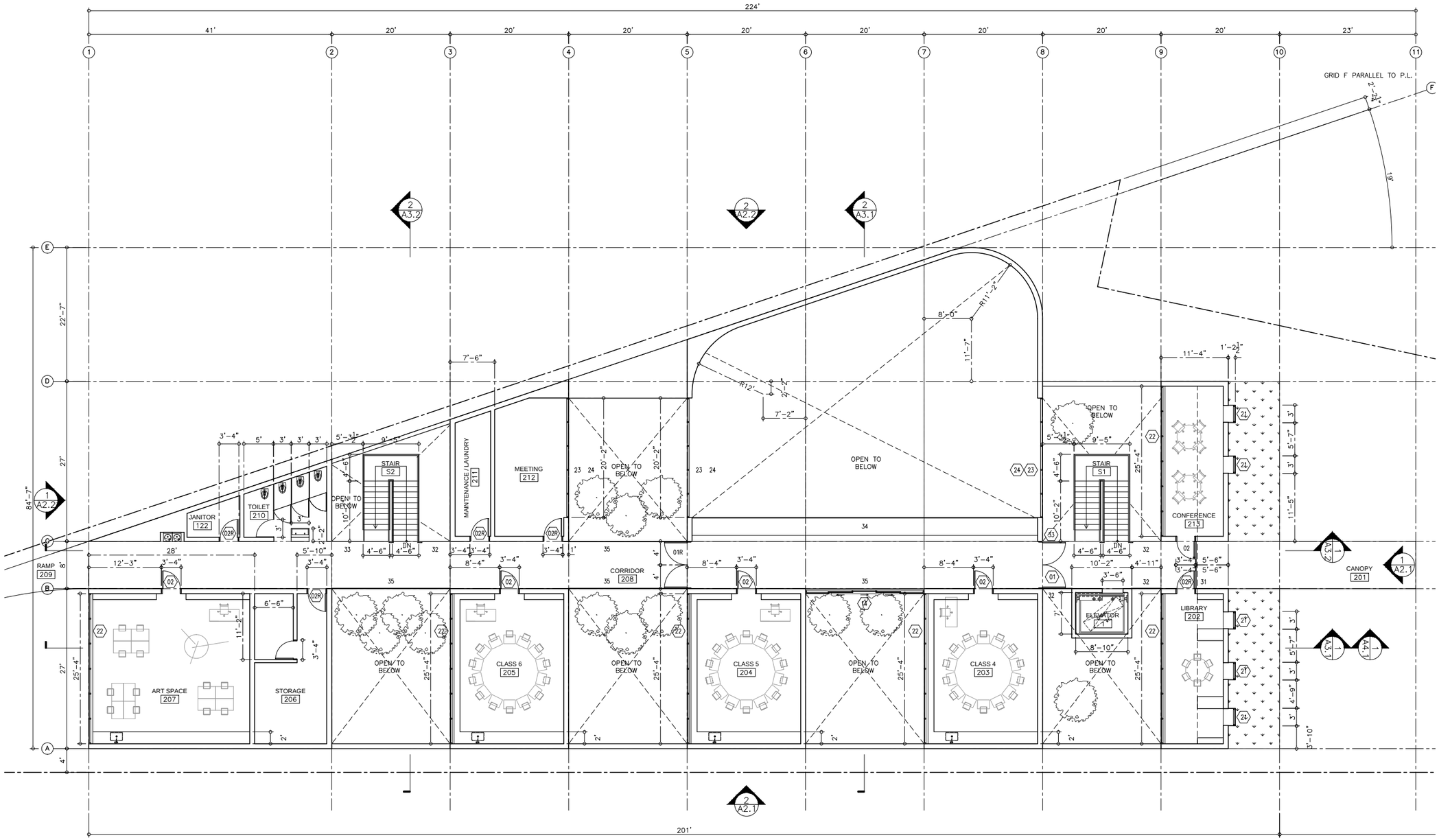
SHEET TITLE

PLANS

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NA|

SHEET NO:

A1.1



N TRUE NORTH

SECOND FLOOR PLAN | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

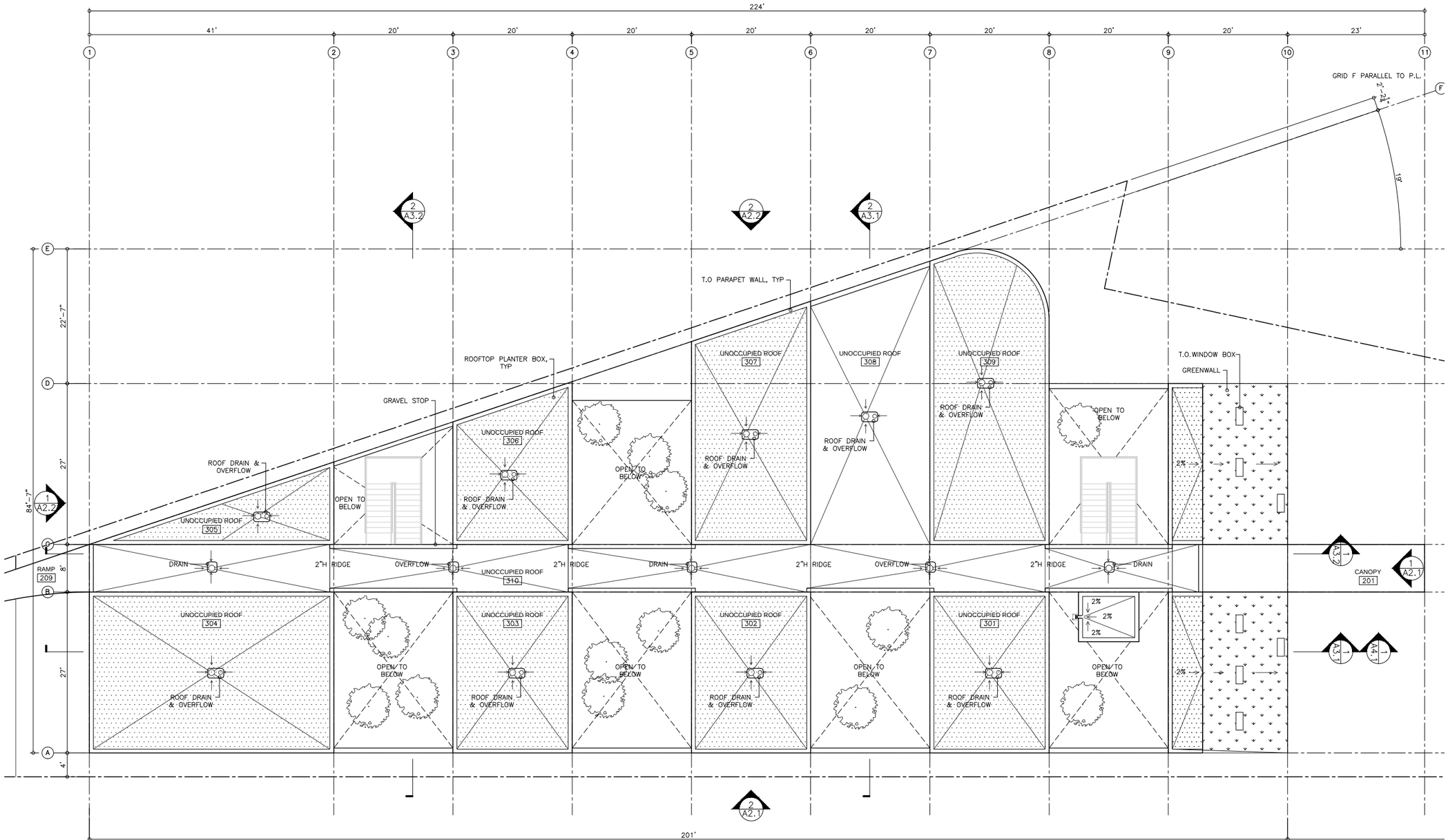
SHEET TITLE

PLANS

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A1.2



ROOF PLAN | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

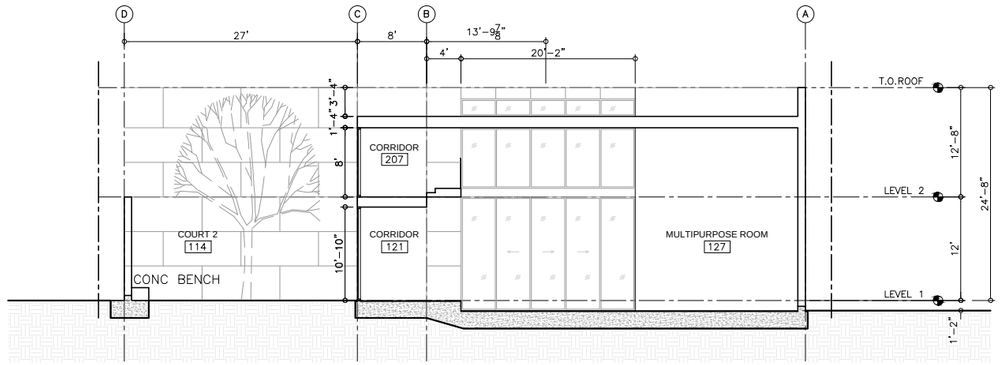
SHEET TITLE

PLANS

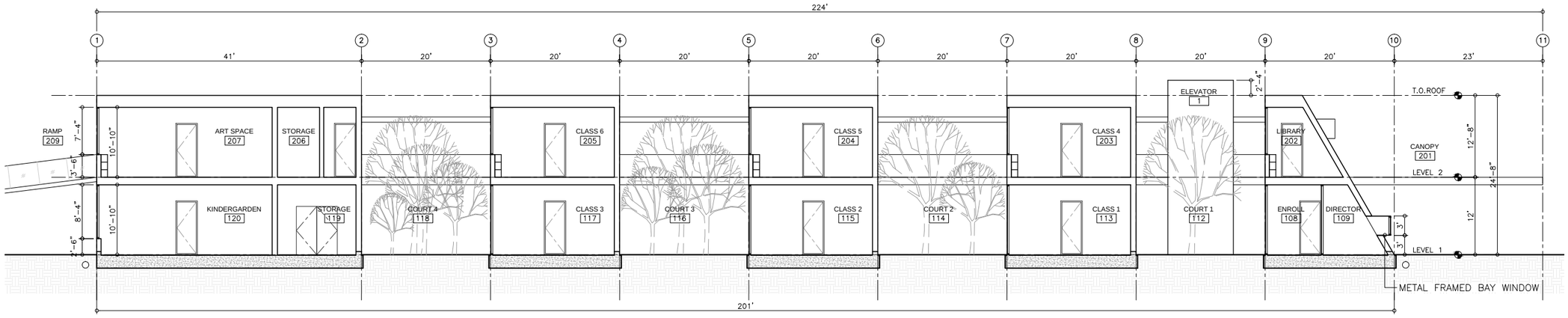
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A1.3



SECTION 2



SECTION 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

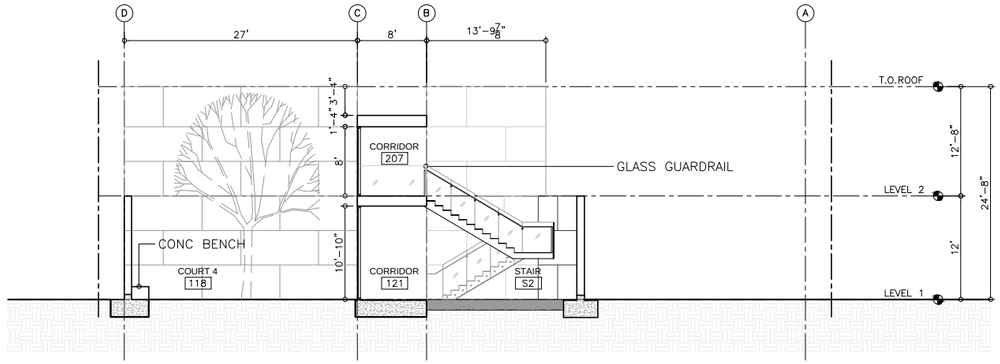
SHEET TITLE

BUILDING SECTION

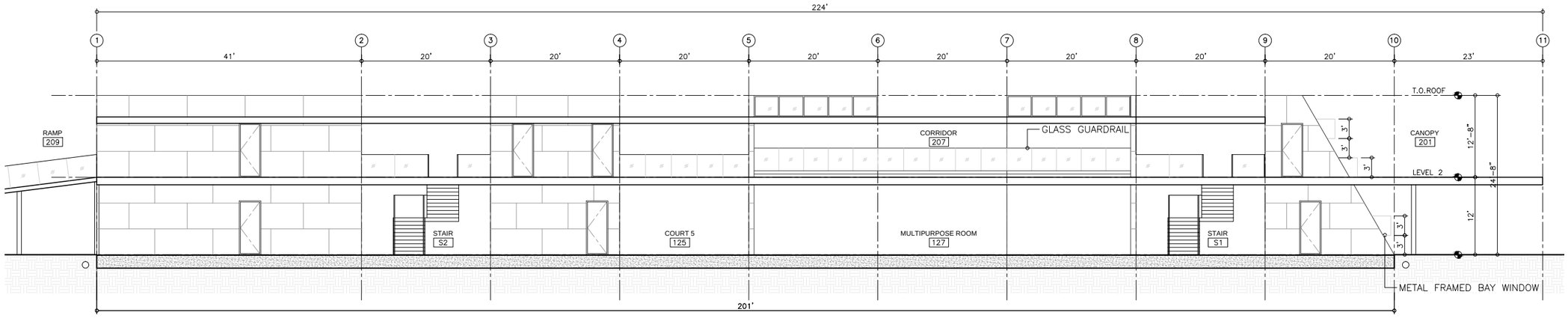
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A2.1



SECTION 2



SECTION 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

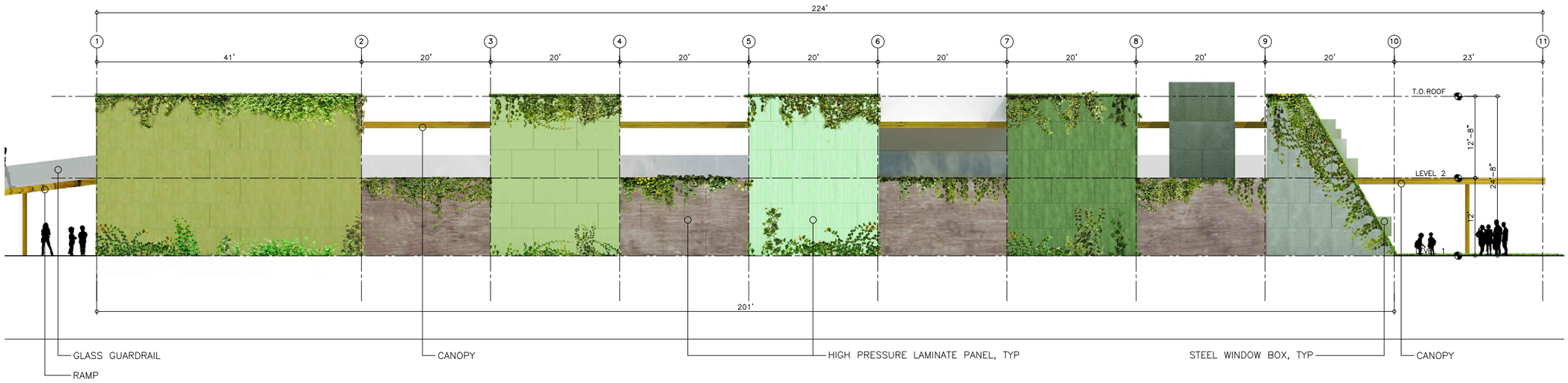
SHEET TITLE

BUILDING SECTION

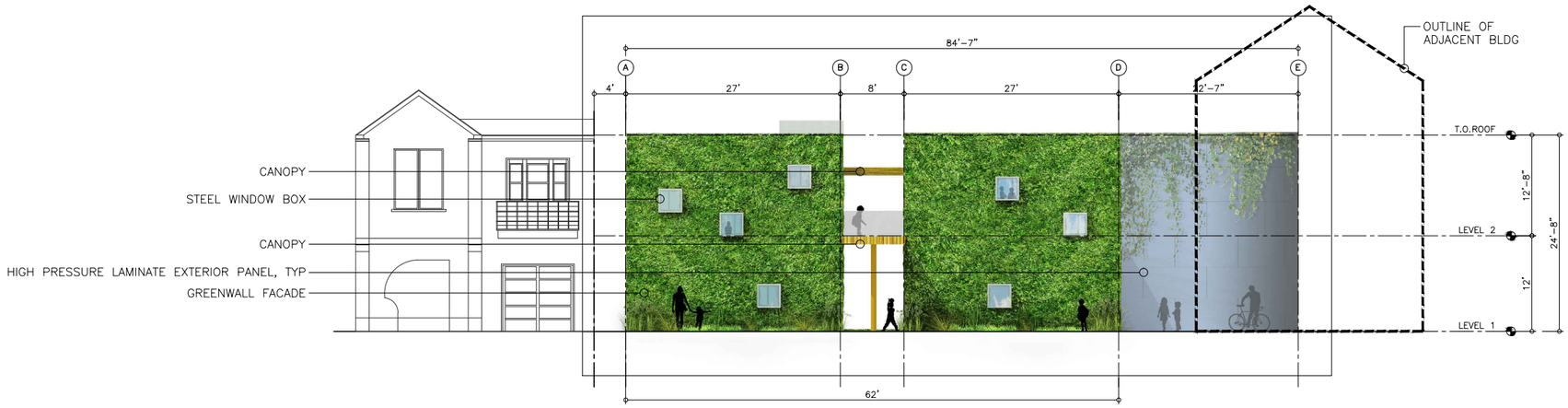
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A2.2



EAST ELEVATION | 2



NORTH ELEVATION | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

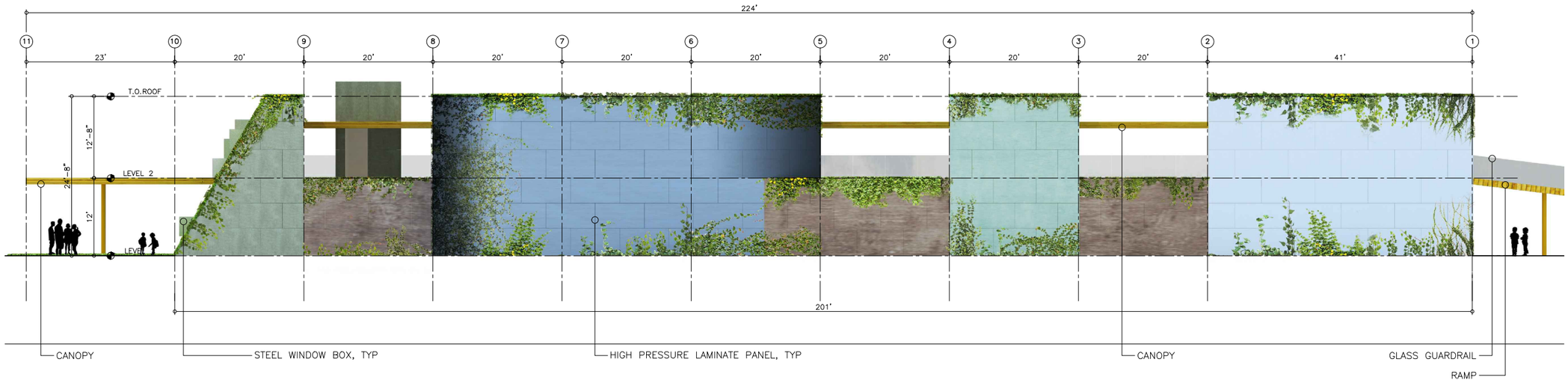
SHEET TITLE

ELEVATIONS

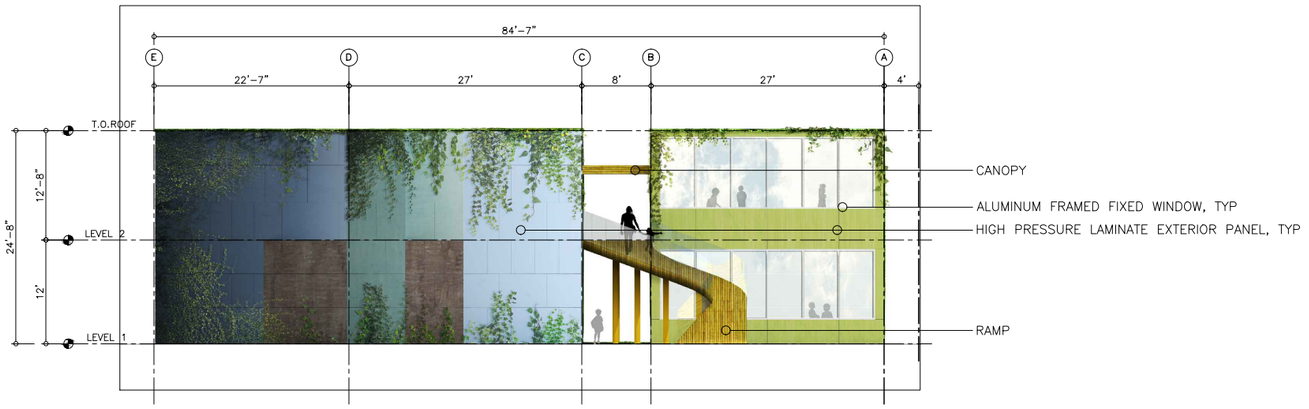
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A3.1



WEST ELEVATION | 2



SOUTH ELEVATION | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE

ELEVATIONS

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/8" = 1'-0"
DRAWN:	SS|NAI

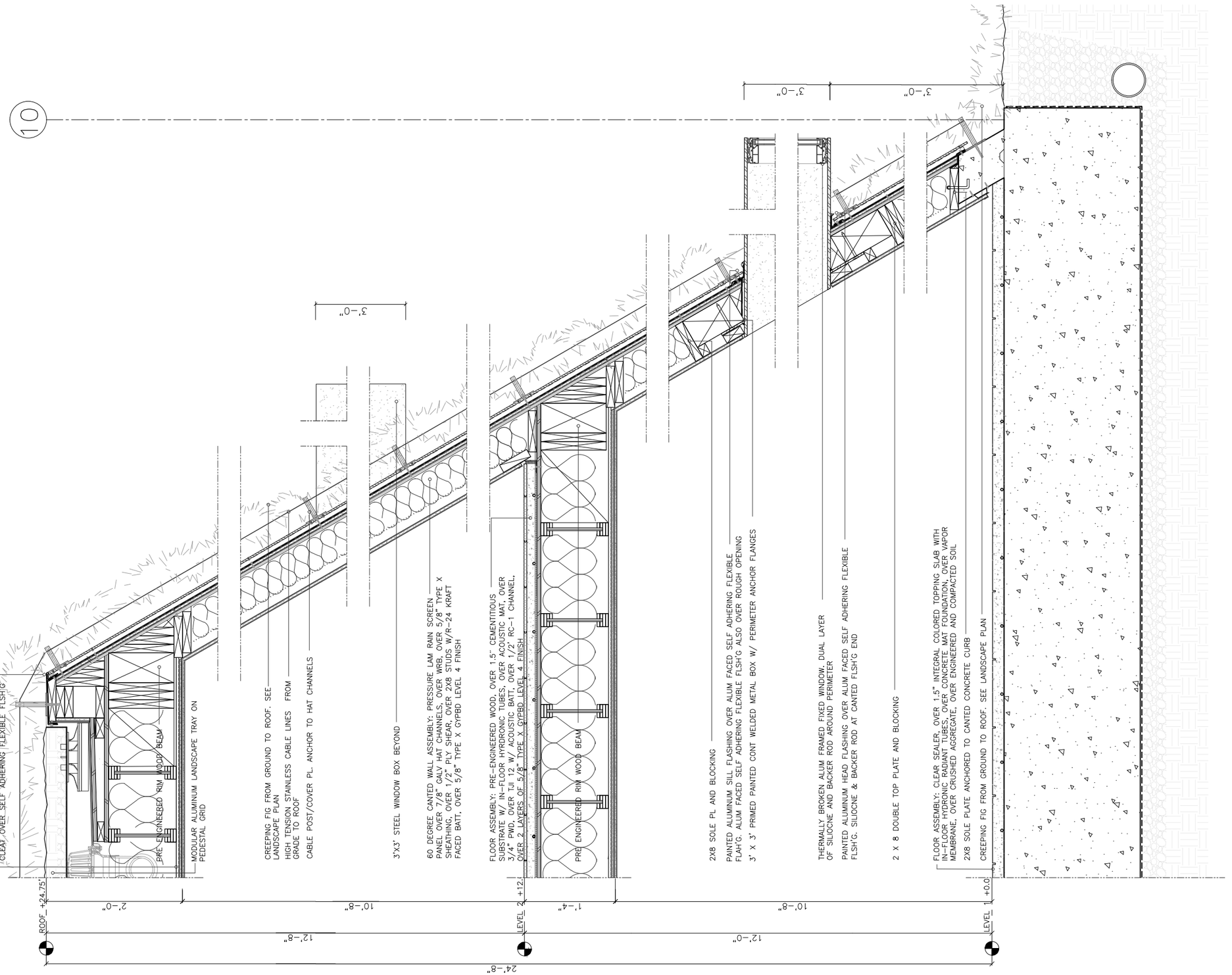
SHEET NO:

A3.2

DETAIL WALL SECTION - EAST WALL - GRID 10

1

10



ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

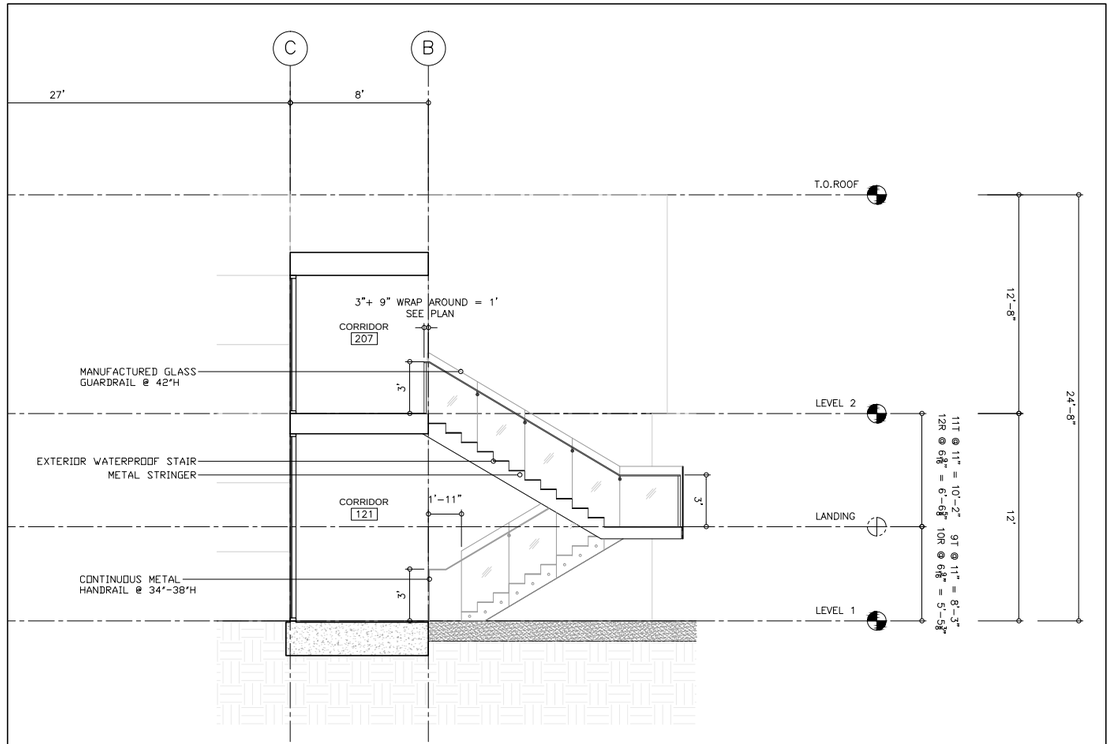
SHEET TITLE

DETAIL WALL SECTION

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/4" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A4.1



STAIR S1 AND S2 SECTION | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ |
NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

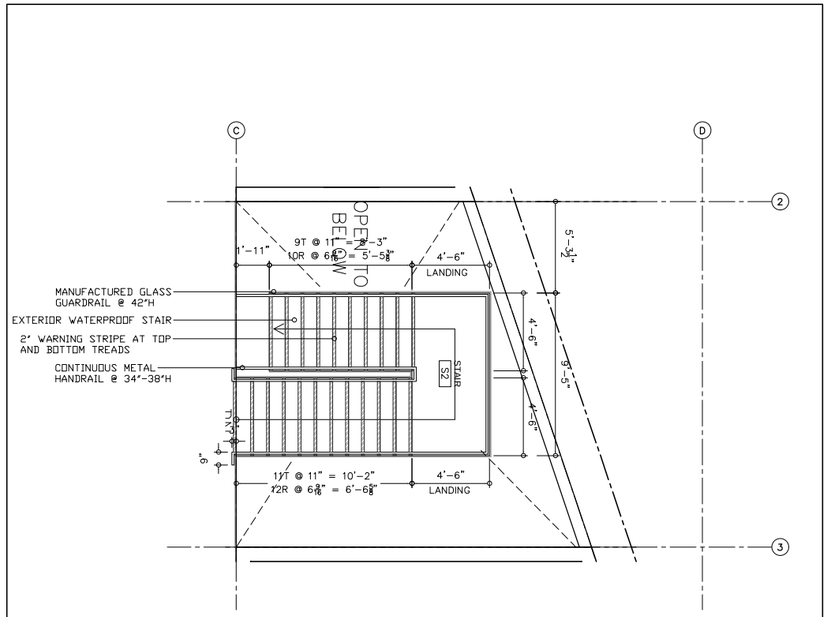
SHEET TITLE

STAIR
SECTION

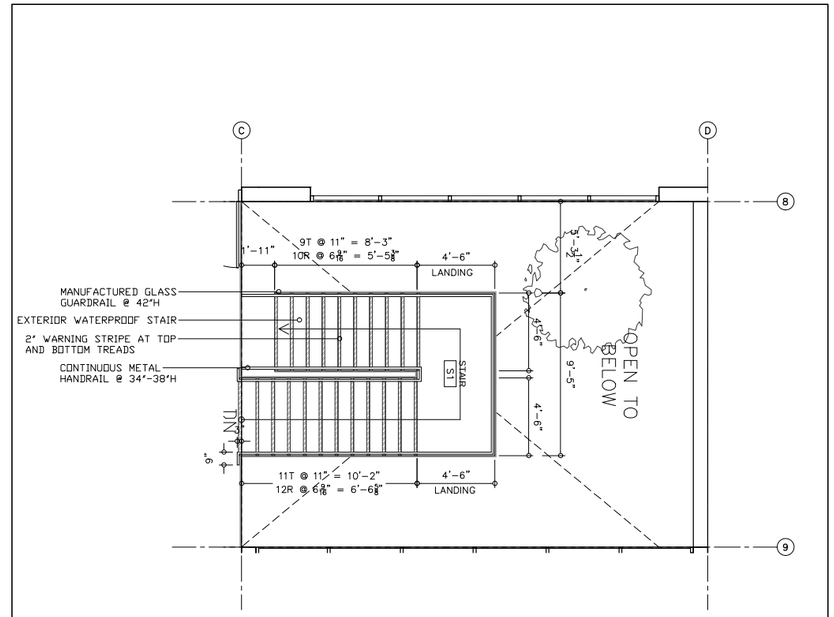
SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/4" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

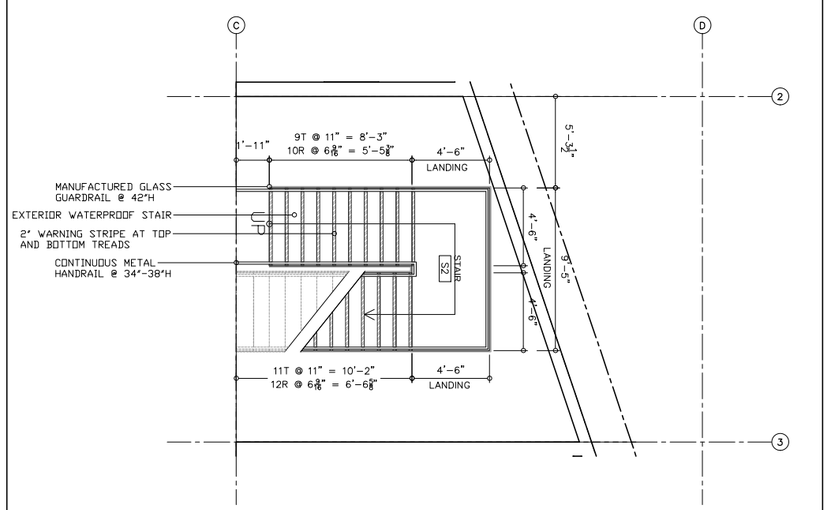
A8.1



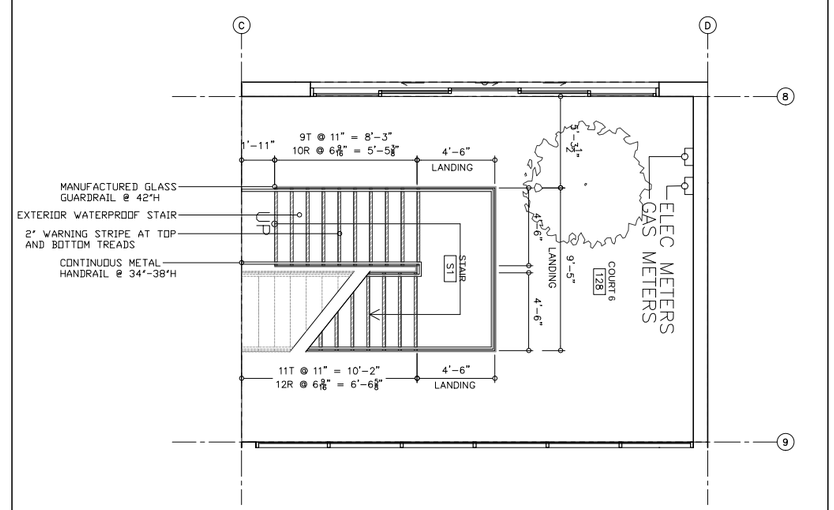
STAIR S2 - LEVEL 2 PLAN | 4



STAIR S1 - LEVEL 2 PLAN | 2



STAIR S2 - LEVEL 1 PLAN | 3



STAIR S1 - LEVEL 1 PLAN | 1

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3358 SECOND ST
SAN FRANCISCO, CA 94110
T: 415.912.8666

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.682.8978

203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE

STAIR PLANS

SET:	SITE PERMIT
DATE:	08.05.2016
SCALE:	1/4" = 1'-0"
DRAWN:	SS|NAI

SHEET NO:

A8.2

Green Roof Planting List

Perennials
Fragaria chiloensis-Beach Strawberry
Sedum spathulifolium- Stone Crop
Prunella vulgaris- Self Heal
Armeria Maritima- Sea Thrift
Annuals
Eschscholzia Maritima-Coast Cal. Poppy
Lupinus bicolor-Miniature Lupine
Luvia Platyglossa-Tidy Tips

Green Wall Planting List

Vines
Ficus pumila- Creeping Fig

Bio-Treatment Planting List

Leymus condensatus-Wild Rye
Juncus Patens-Spreading Rush
Salvia spathacea-Hummingbird Sage
Limonium californicum-Marsh rosemary
Sisyrinchium bellum-Blue eyed grass

Rear Yard Planting List

Iris douglasiana-Douglas Iris
Festuca Fubra-Red Fescue]
Plantago erecta-California plantain
Solidago californica-goldenrod
Stachys bullata-hedge nettle
Romneya Coulteri-Matilja poppy
Arctostaphylos uva-ursi-Manzanita
Fremontodendron Californicum-
Flannel bush
Myrica californica- Pacific Wax Myrtle
Trees
Robinia pseudocacacia-Black Locust
Cercis occidentalis-Western Redbud
Laurus nobilis-Sweet Bay
Quercus Lobata-Valley Oak

02 LANDSCAPE PLANT LIST

01 SCHOOL CONCEPTUAL LANDSCAPE PLAN

1"-20'-0"

ISSUE RECORD	DATE

OWNER:
GOLDEN BRIDGES SCHOOL

3388 SECOND ST.
SAN FRANCISCO, CA 94110
T: 415.912.8868

ARCHITECTS
STANLEY SAITOWITZ |
NATOMA ARCHITECTS Inc.

1022 NATOMA ST, UNIT 3
SAN FRANCISCO, CA 94103
T: 415.626.8977
F: 415.882.5878

swa

LICENSED ARCHITECT
NEIL B. HOYE
No. C 33704
EXP. 08/31/2017
STATE OF CALIFORNIA

GOLDEN BRIDGES SCHOOL
203 COTTER ST.
SAN FRANCISCO, CA 94112

SHEET TITLE
LANDSCAPE PLAN

SET:	SITE PERMIT
DATE:	04.28.2016
SCALE:	
DRAWN:	SS|NA|

SHEET NO:
L1.1

Attachment D

BKF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS

SAN FRANCISCO OFFICE | 415.930.7900

MEMORANDUM

Date: June 10, 2016 *(Original dated May 16, 2016)* **BKF Job Number:** 20165050-10

Deliver To: Neil Kaye A.I.A

Company: STANLEY SAITOWITZ | NATOMA ARCHITECTS INC.
From: Jason T. White, P.E.

Subject: Golden Bridges School – 203 Cotter Street – Conceptual Storm Water Management Approach

REMARKS:

The Golden Bridges School proposes to construct a new campus on a 0.7-acre parcel, which is currently the home of a working farm, at 203 Cotter Street. See Figures A and B for existing site phots. New and redevelopment projects that create and/or replace more than 5,000 square feet of impervious area are subject to the City of San Francisco's Storm Water Management Ordinance. If the site's existing imperviousness is less than 50% of the overall area, the project cannot exceed the pre-development rate and volume of storm water runoff released from the 2-year 24-hour design storm. The site's impervious area is well under 50%; therefore no increase in runoff rate or volume will be per permitted.

BKF has prepared a conceptual storm water management plan for the project based on the "Golden Bridges School Landscape Concept Design" prepared by SWA San Francisco dated May 5th, 2016 (attached). The project proposes to include several storm water management measures including pervious pavers, green roof, and bioretention planters. Non-active roof space will be vegetated where feasible. The conceptual storm water management plan is summarized in Table 1 below and detailed in the attached SFPUC Combined System BMP Sizing Calculator for Quantity Control. We have presented compliant results for best case (Type A soils) and worst case (Type D soils).

Table 1: Storm Water Management Summary

	Type A Soils		Type D Soils	
	Pre-Project (Existing)	Post-Project (Proposed)	Pre-Project (Existing)	Post-Project (Proposed)
Landscape	0	11,000 ft²	0	11,000 ft²
Other (Row Crops[1])	28,400 ft²	0	28,400 ft²	0
Other (Dirt Road)	2,600 ft²		2,600 ft²	
Pavement (Conventional)	0	1,500 ft²	0	1,500 ft²
Roof (Conventional)	300 ft²	1,900 ft²	300 ft²	1,900 ft²
Bioretention Planter[2]	0	1,400 ft²	0	1,400 ft²
Permeable Pavement[3]	0	8,500 ft²	0	8,500 ft²
Vegetated Roof	0	7,000 ft²	0	7,000 ft²
Total	31,300 ft²	31,300 ft²	31,300 ft²	31,300 ft²
2-year, 24 hour: Peak Flow	0.263 cfs	0.042 cfs (84% reduction)	0.263 cfs	0.238 cfs (10% reduction)
2-year, 24 hour: Runoff Volume	4,627 ft³	842 ft³ (82% reduction)	4,627 ft³	4,047 ft³ (13% reduction)

Notes:

1) Hydrologic Curve Number 67 used for row crops per Soil Conservation Service (SCS) Technical Release 55 (TR-55) Table 2-2b.
2) Two separate bioretention planters totaling 1,400 ft² are included in the conceptual design.
3) Hydrologic soil group to be verified and infiltration rate to be tested prior to final design.
4) This table is summary of the information provided in the SFPUC standard calculator (attached)
5) Items listed as "other" are not among the standard surfaces in the SFPUC standard calculator (attached).

Please note this storm water management approach represents a potential option for compliance at the conceptual design stage. The approach will be revised and refined as the project progresses. Existing areas are approximated based on the topographic survey provided for the site. This approach was discussed with SFPUC staff at a meeting on May 26th, 2016. While the SFPUC does not typically grant design approval prior to submittal of a Stormwater Control Plan (SCP), staff was in general agreement with the proposed design measures as a means to achieve compliance.

Figure A: Existing Site Photos

Cc:

Figure B: Existing Site Photos (Continued)

SAN FRANCISCO PUBLIC UTILITIES COMMISSION - URBAN WATERSHED MANAGEMENT PROGRAM

COMBINED SEWER SYSTEM BMP SIZING CALCULATOR for QUANTITY CONTROL

525 Golden Gate, 11th Floor
San Francisco, CA 94102

CSS BMP SIZING CALCULATOR - *Only use for subwatersheds less than 2 acres, and sites less than 5 acres.*

Project Address:	203 Cotter Street	Applicant Name:	Jason White
Project Name (Alias):	Golden Bridges	Company:	BKF Engineers
Total Project Site Area (ft^2):	31,320	Date:	12-May-2016
Subwatershed Name (if applicable):	DMA-1		

Modified Compliance Application

Modified Compliance approved?	No
N/A	25%
N/A	25%

Project Requirement: *No net increase in peak flow and volume from the 1-yr, 24 hr and 2-yr, 24 hr storms*

LEGEND:

User Input
Default Value
Locked
Comment

STEP 1 - Enter the site's infiltration characteristics

HSG Soil Type:	A	
Is Infiltration Feasible or Proposed?	Yes	
Field Tested Infiltration Rate (in/hr):	1	
Infiltration Testing Method:	Double-Ring Infiltrometer	
Infiltration Rate Safety Factor:	2	
Design Infiltration Rate (in/hr):	0.50	*Max allowable design rate for this size is 5 in/hr*

STEP 2 - Enter the site's EXISTING runoff pathway information to estimate the Time of Concentration (Tc)

Existing Means of Conveying Runoff Offsite?	Overland
Avg. Site Slope in Direction of Flow (ft/ft):	0.01
Maximum Flow Length (ft):	520

STEP 3a - Enter the sites EXISTING and PROPOSED areas of impervious, pervious, and BMP surfaces.

		Surface Type	Existing (ft^2)	Proposed (ft^2)	Curve Number
Conventional Surfaces	Impervious	Pavement (Conventional)		1,500	98
		Roof (Conventional)	300	1,900	98
		Gravel on Soils			76
		Other:	2,600		89
		Impervious Areas Subtotal	*2,900*	*3,400*	
	Pervious	Grass/Lawn			49
		Landscaping at Grade (Low Density)		11,000	39
		Landscaping at Grade (High Density)	0		35
		Tree Well			35
		Traditional Planter on Podium			74
		Other:	28,400		89
		Pervious Areas Subtotal	*28,400*	*11,000*	--
Stormwater BMPs	Retention	Bioretention (No Underdrain, No Liner)	--	1,000	--
		Cistern	--	0	--
		Infiltration Trench	--		--
		Dry Well/Infiltration Gallery	--	0	--
		Permeable Pavement (No Underdrain)	--	8,500	--
	Detention	Bioretention/FTP (Underdrain, No Liner)	--	400	--
		Bioretention/FTP (Underdrain, Liner)	--		--
		Vegetated Roof	--	7,000	--
		Permeable Pavement (Underdrain)	--		--
		Detention Vault or Tank	--	0	--
		BMP Areas Subtotals	--	*16,900*	--
		Total Project Site Areas	***31,300***	***31,300***	--

BMPs in Series

Are BMPs in Series Proposed?	Yes
First BMP in Series	Vegetated Roof
Receiving BMP in Series	Bioretention/FTP (Underdrain No Liner)

STEP 3b - Enter stormwater BMP design information AND the conventional areas from Step 3a that drain to each BMP measure.

	Drainage Areas		BMP Depths and Volumes					Outlet Design	
	Impervious Area Draining to BMP (ft^2)	Pervious Area Draining to BMP (ft^2)	BMP Ponding Depth (ft)	BMP Media Depth (ft)	Gravel Storage Depth (ft)	Height of Underdrain Above Base (ft)	Storage Volume (gallons)	Outlet or Orifice Diameter (in)	Approx. Drawdown Time (hrs)
Bioretention (No Underdrain, No Liner)	3,400		0.5	1.5	0.67	--	9,111	--	23
Cistern	0	0	0.0	--	0.00	--	0	0.0	0 days
Infiltration Trench			--	--	3.00	--	0	--	0
Dry Well/Infiltration Gallery			0.0	--	4.00	--		--	0
Permeable Pavement (No Underdrain)		0	--	--	1.00	--	25,432	--	10
Bioretention/FTP (Underdrain, No Liner)			0.5	1.5	0.67	0.17	3,644	4.0	2
Bioretention/FTP (Underdrain, Liner)		0	0.5	1.5	0.67	--	0	4.0	0
Vegetated Roof	0		--	0.5	--	--	10,036	4.0	2
Permeable Pavement (Underdrain)		0	--	--	1.00	0.17	0	4.0	0
Detention Vault or Tank			7.0	--	--	--		1.5	0
Total Project Site Areas	*3,400*	*0*					*48,223*		

STEP 4 - Check that site and drainage management areas are entered correctly. (Note: CSS = Combined Sewer System.)

Project Site Surfaces	Existing Area (ft^2)	Proposed Area (ft^2)	CHECK OF AREAS
Impervious Area Draining to BMP	0	3,400	OK
Impervious Area Draining Directly to CSS	2,900	0	

SAN FRANCISCO PUBLIC UTILITIES COMMISSION - URBAN WATERSHED MANAGEMENT PROGRAM

COMBINED SEWER SYSTEM BMP SIZING CALCULATOR for QUANTITY CONTROL

525 Golden Gate, 11th Floor
San Francisco, CA 94102

CSS BMP SIZING CALCULATOR - *Only use for subwatersheds less than 2 acres, and sites less than 5 acres.*

Project Address:	203 Cotter Street	Applicant Name:	Jason White
Project Name (Alias):	Golden Bridges	Company:	BKF Engineers
Total Project Site Area (ft²):	31,320	Date:	12-May-2016
Subwatershed Name (if applicable):	DMA-1		

Modified Compliance Application

Modified Compliance approved?	No
N/A	25%
N/A	25%

Project Requirement: *No net increase in peak flow and volume from the 1-yr, 24 hr and 2-yr, 24 hr storms*

LEGEND:

User Input
Default Value
Locked
Comment

Pervious Area Draining to BMP	0	0	**OK**
Pervious Area Draining Directly to CSS	28,400	11,000	
Stormwater BMP Area	0	16,900	
Total Area	31,300	31,300	**OK**

STEP 5 - Compare if the SDG runoff reductions to quantity control requirements are met. If not, review BMP performance output in Step 6, then return to Step 3 to adjust stormwater strategies.

Quantity Control Parameter	Existing Conditions	Proposed Conditions	% Reduction From Existing Conditions	Target % Reduction	Requirement Met?
1-yr, 24 hr: Peak Flow (cfs)	0.218	0.042	81%	0%	PASS
1-yr, 24 hr: Runoff Volume (ft³)	4,155	721	83%	0%	PASS
2-yr, 24 hr: Peak Flow (cfs)	0.263	0.042	84%	0%	PASS
2-yr, 24 hr: Runoff Volume (ft³)	4,627	842	82%	0%	PASS

STEP 6 - Review the summary table below to see how each BMP performs during the 2-yr 24 hr storm. The site's hydrographs are shown in the "Rainfall and Hydrographs" tab.

	Stormwater BMP Measures	Inflows: Peak Flow to BMP (cfs)	Outflows: Peak Rate of Discharged Flow (cfs)	Outflows: Peak Rate of Overflow (cfs)	Volume In: Runoff to BMP (ft³)	Volume Retained: Infiltration + E/T (ft³)	Volume Retained: Reuse (ft³)	Volume Retained: Volume Remaining in Storage (ft³)	Volume Out to CSS: Detained Discharge Volume (ft³)	Volume Out to CSS: Overflow Volume (ft³)
Retention	Bioretention (No Underdrain, No Liner)	0.055	0.000	0.000	961	961	0	0	0	0
Retention	Cistern	0.000	0.000	0.000	0	0	0	0	0	0
Retention	Infiltration Trench	0.000	0.000	0.000	0	0	0	0	0	0
Retention	Dry Well/Infiltration Gallery	0.000	0.000	0.000	0	0	0	0	0	0
Retention	Permeable Pavement (No Underdrain)	0.106	0.000	0.000	1856	1856	0	0	0	0
Detention	Bioretention/FTP (Underdrain, No Liner)	0.087	0.042	0.000	87	365	0	0	842	0
Detention	Bioretention/FTP (Underdrain, Liner)	0.000	0.000	0.000	0	0	0	0	0	0
Detention	Vegetated Roof	0.087	0.000	0.000	1528	409	0	0	0	0
Detention	Permeable Pavement (Underdrain)	0.000	0.000	0.000	0	0	0	0	0	0
Detention	Detention Vault	0.000	0.000	0.000	0	0	0	0	0	0
	Totals				***4,432***	***3,590***	***0***	***0***	***842***	***0***

For BMPs in Series Only

Volume to Receiving BMP: Detained Discharge Volume (ft³)	Volume to Receiving BMP: Overflow Volume (ft³)
--	--
0	0
--	--
--	--
--	--
--	--
0	0
1120	0
--	--
--	--
1,120	***0***

*NOTE: With the exception of Cisterns, BMP measures should not have any "**Volume Remaining in Storage**". If volume is remaining in any BMP measures other than a Cistern, check and revise **STEP 3b** for the "**Outlet Design**" (outlet/orifice diameter) or underdrain such that the "**Approx. Drawdown Time**" is less than 48 hours, therefore empty for the next storm event.*

SAN FRANCISCO PUBLIC UTILITIES COMMISSION - URBAN WATERSHED MANAGEMENT PROGRAM

COMBINED SEWER SYSTEM BMP SIZING CALCULATOR for QUANTITY CONTROL

525 Golden Gate, 11th Floor
San Francisco, CA 94102

CSS BMP SIZING CALCULATOR - *Only use for subwatersheds less than 2 acres, and sites less than 5 acres.*

Project Address:	203 Cotter Street	Applicant Name:	Jason White
Project Name (Alias):	Golden Bridges	Company:	BKF Engineers
Total Project Site Area (ft^2):	31,320	Date:	12-May-2016
Subwatershed Name (if applicable):	DMA-1		

Modified Compliance Application

Modified Compliance approved?	No
N/A	25%
N/A	25%

Project Requirement: *No net increase in peak flow and volume from the 1-yr, 24 hr and 2-yr, 24 hr storms*

LEGEND:

User Input
Default Value
Locked
Comment

STEP 1 - Enter the site's infiltration characteristics

HSG Soil Type:	D	
Is Infiltration Feasible or Proposed?	No	
Field Tested Infiltration Rate (in/hr):	0	
Infiltration Testing Method:	Not Conducted	
Infiltration Rate Safety Factor:	N/A	
Design Infiltration Rate (in/hr):	0.00	*Max allowable design rate for this size is 5 in/hr*

STEP 2 - Enter the site's EXISTING runoff pathway information to estimate the Time of Concentration (Tc)

Existing Means of Conveying Runoff Offsite?	Overland
Avg. Site Slope in Direction of Flow (ft/ft):	0.01
Maximum Flow Length (ft):	520

STEP 3a - Enter the sites EXISTING and PROPOSED areas of impervious, pervious, and BMP surfaces.

		Surface Type	Existing (ft^2)	Proposed (ft^2)	Curve Number
Conventional Surfaces	Impervious	Pavement (Conventional)		1,500	98
		Roof (Conventional)	300	1,900	98
		Gravel on Soils			91
		Other:	2,600		89
		Impervious Areas Subtotal	*2,900*	*3,400*	
	Pervious	Grass/Lawn			80
		Landscaping at Grade (Low Density)		11,000	77
		Landscaping at Grade (High Density)	0		73
		Tree Well			35
		Traditional Planter on Podium			74
		Other:	28,400		89
		Pervious Areas Subtotal	*28,400*	*11,000*	--
Stormwater BMPs	Retention	Bioretention (No Underdrain, No Liner)	--		--
		Cistern	--	0	--
		Infiltration Trench	--		--
		Dry Well/Infiltration Gallery	--	0	--
		Permeable Pavement (No Underdrain)	--	0	--
	Detention	Bioretention/FTP (Underdrain, No Liner)	--		--
		Bioretention/FTP (Underdrain, Liner)	--	1,400	--
		Vegetated Roof	--	7,000	--
		Permeable Pavement (Underdrain)	--	8,500	--
		Detention Vault or Tank	--	0	--
		BMP Areas Subtotals	--	*16,900*	--
		Total Project Site Areas	***31,300***	***31,300***	--

BMPs in Series

Are BMPs in Series Proposed?	Yes
First BMP in Series	Vegetated Roof
Receiving BMP in Series	Bioretention/FTP (Underdrain No Liner)

STEP 3b - Enter stormwater BMP design information AND the conventional areas from Step 3a that drain to each BMP measure.

	Drainage Areas		BMP Depths and Volumes					Outlet Design	
	Impervious Area Draining to BMP (ft^2)	Pervious Area Draining to BMP (ft^2)	BMP Ponding Depth (ft)	BMP Media Depth (ft)	Gravel Storage Depth (ft)	Height of Underdrain Above Base (ft)	Storage Volume (gallons)	Outlet or Orifice Diameter (in)	Approx. Drawdown Time (hrs)
Bioretention (No Underdrain, No Liner)			0.5	1.5	0.67	--	0	--	0
Cistern	0	0	0.0	--	0.00	--	0	0.0	0 days
Infiltration Trench			--	--	3.00	--	0	--	0
Dry Well/Infiltration Gallery			0.0	--	4.00	--		--	0
Permeable Pavement (No Underdrain)		0	--	--	1.00	--	0	--	0
Bioretention/FTP (Underdrain, No Liner)			0.5	1.5	0.67	0.17	0	4.0	0
Bioretention/FTP (Underdrain, Liner)	3,400	0	0.5	1.5	0.67	--	12,755	4.0	2
Vegetated Roof	0		--	0.5	--	--	10,036	4.0	2
Permeable Pavement (Underdrain)		0	--	--	1.00	0.17	25,432	4.0	4
Detention Vault or Tank			7.0	--	--	--		1.5	0
BMP Areas Subtotals									
Total Project Site Areas	*3,400*	*0*					*48,223*		

STEP 4 - Check that site and drainage management areas are entered correctly. (Note: CSS = Combined Sewer System.)

Project Site Surfaces	Existing Area (ft^2)	Proposed Area (ft^2)	CHECK OF AREAS
Impervious Area Draining to BMP	0	3,400	OK
Impervious Area Draining Directly to CSS	2,900	0	

SAN FRANCISCO PUBLIC UTILITIES COMMISSION - URBAN WATERSHED MANAGEMENT PROGRAM

COMBINED SEWER SYSTEM BMP SIZING CALCULATOR for QUANTITY CONTROL

525 Golden Gate, 11th Floor
San Francisco, CA 94102

CSS BMP SIZING CALCULATOR - *Only use for subwatersheds less than 2 acres, and sites less than 5 acres.*

Project Address:	203 Cotter Street	Applicant Name:	Jason White
Project Name (Alias):	Golden Bridges	Company:	BKF Engineers
Total Project Site Area (ft²):	31,320	Date:	12-May-2016
Subwatershed Name (if applicable):	DMA-1		

Modified Compliance Application

Modified Compliance approved?	No
N/A	25%
N/A	25%

Project Requirement: *No net increase in peak flow and volume from the 1-yr, 24 hr and 2-yr, 24 hr storms*

LEGEND:

User Input
Default Value
Locked
Comment

Pervious Area Draining to BMP	0	0	**OK**
Pervious Area Draining Directly to CSS	28,400	11,000	
Stormwater BMP Area	0	16,900	
Total Area	31,300	31,300	**OK**

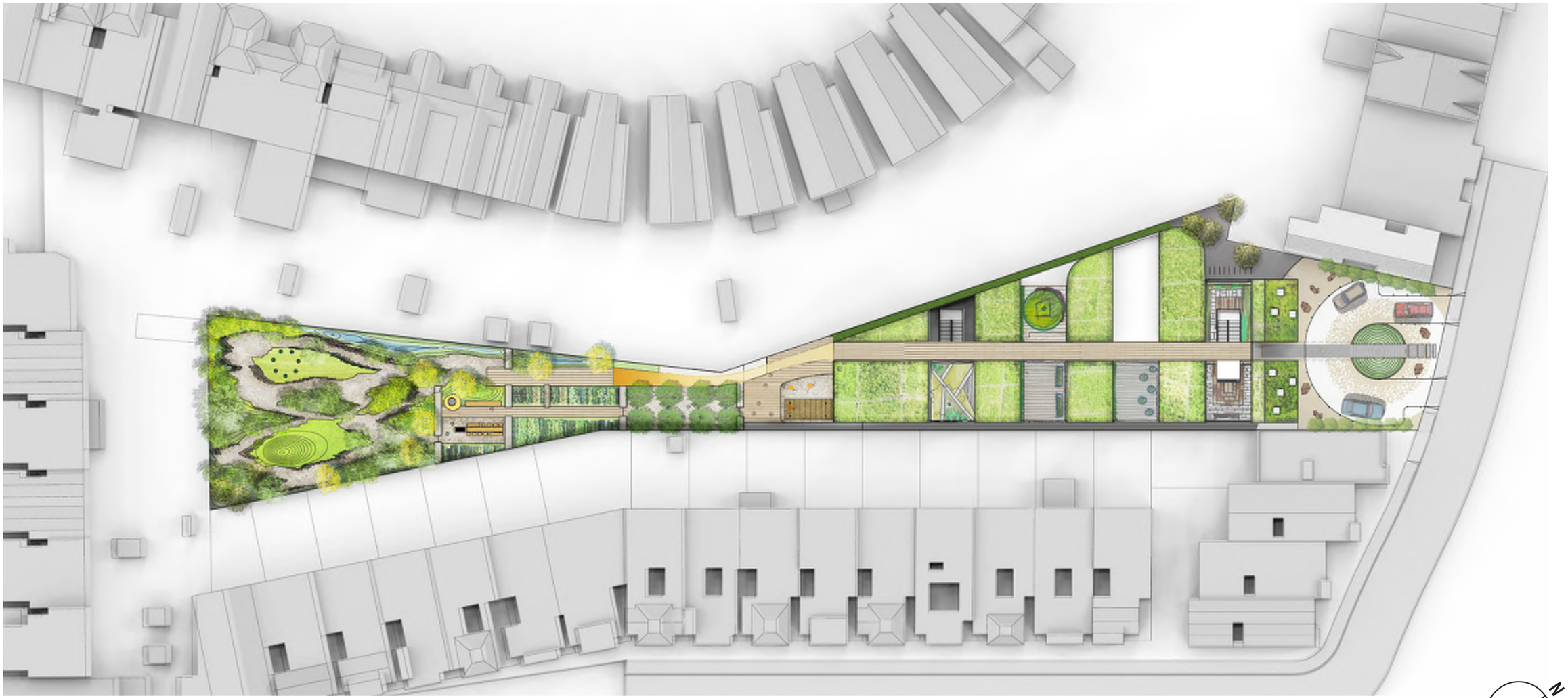
STEP 5 - Compare if the SDG runoff reductions to quantity control requirements are met. If not, review BMP performance output in Step 6, then return to Step 3 to adjust stormwater strategies.

Quantity Control Parameter	Existing Conditions	Proposed Conditions	% Reduction From Existing Conditions	Target % Reduction	Requirement Met?
1-yr, 24 hr: Peak Flow (cfs)	0.218	0.197	10%	0%	PASS
1-yr, 24 hr: Runoff Volume (ft³)	4,155	3,584	14%	0%	PASS
2-yr, 24 hr: Peak Flow (cfs)	0.263	0.238	10%	0%	PASS
2-yr, 24 hr: Runoff Volume (ft³)	4,627	4,047	13%	0%	PASS

STEP 6 - Review the summary table below to see how each BMP performs during the 2-yr 24 hr storm. The site's hydrographs are shown in the "Rainfall and Hydrographs" tab.

Stormwater BMP Measures		Inflows	Outflows		Volume In	Volume Retained			Volume Out to CSS		For BMPs in Series Only: Volume to Receiving BMP	
		Peak Flow to BMP (cfs)	Peak Rate of Discharged Flow (cfs)	Peak Rate of Overflow (cfs)	Runoff to BMP (ft³)	Infiltration + E/T (ft³)	Reuse (ft³)	Volume Remaining in Storage (ft³)	Detained Discharge Volume (ft³)	Overflow Volume (ft³)	Detained Discharge Volume (ft³)	Overflow Volume (ft³)
Retention	Bioretention (No Underdrain, No Liner)	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Retention	Cistern	0.000	0.000	0.000	0	0	0	0	0	0	0	0
Retention	Infiltration Trench	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Retention	Dry Well/Infiltration Gallery	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Retention	Permeable Pavement (No Underdrain)	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Detention	Bioretention/FTP (Underdrain, No Liner)	0.082	0.000	0.082	0	0	0	0	0	1120	--	--
Detention	Bioretention/FTP (Underdrain, Liner)	0.060	0.055	0.000	1048	298	0	0	750	0	0	0
Detention	Vegetated Roof	0.087	0.000	0.000	1528	409	0	0	0	0	1120	0
Detention	Permeable Pavement (Underdrain)	0.106	0.068	0.000	1856	0	0	568	1288	0	--	--
Detention	Detention Vault	0.000	0.000	0.000	0	0	0	0	0	0	--	--
	Totals				***4,432***	***707***	***0***	***568***	***2,038***	***1,120***	***1,120***	***0***

*NOTE: With the exception of Cisterns, BMP measures should not have any "**Volume Remaining in Storage**". If volume is remaining in any BMP measures other than a Cistern, check and revise **STEP 3b** for the "**Outlet Design**" (outlet/orifice diameter) or underdrain such that the "**Approx. Drawdown Time**" is less than 48 hours, therefore empty for the next storm event.*



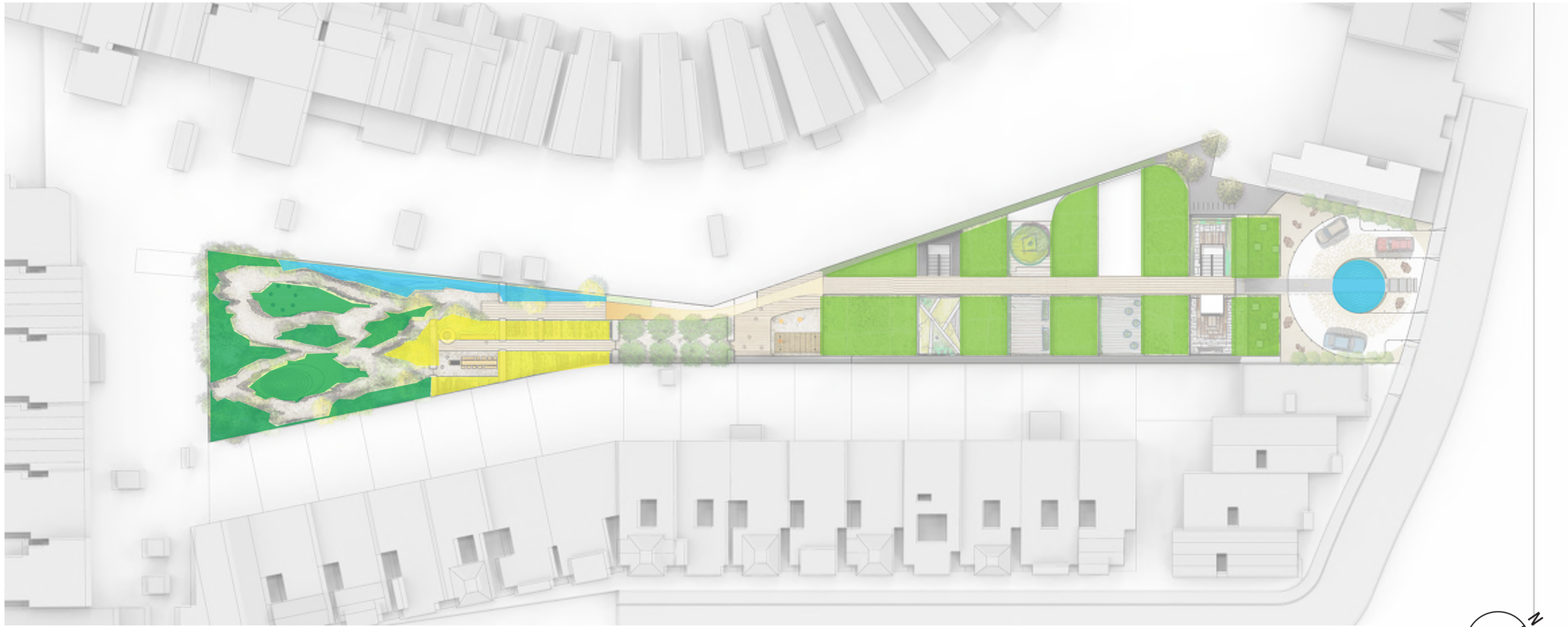
swa San Francisco

Landscape Concept Design

Golden Bridges School
Landscape Concept Design
2016.05.05

KEY

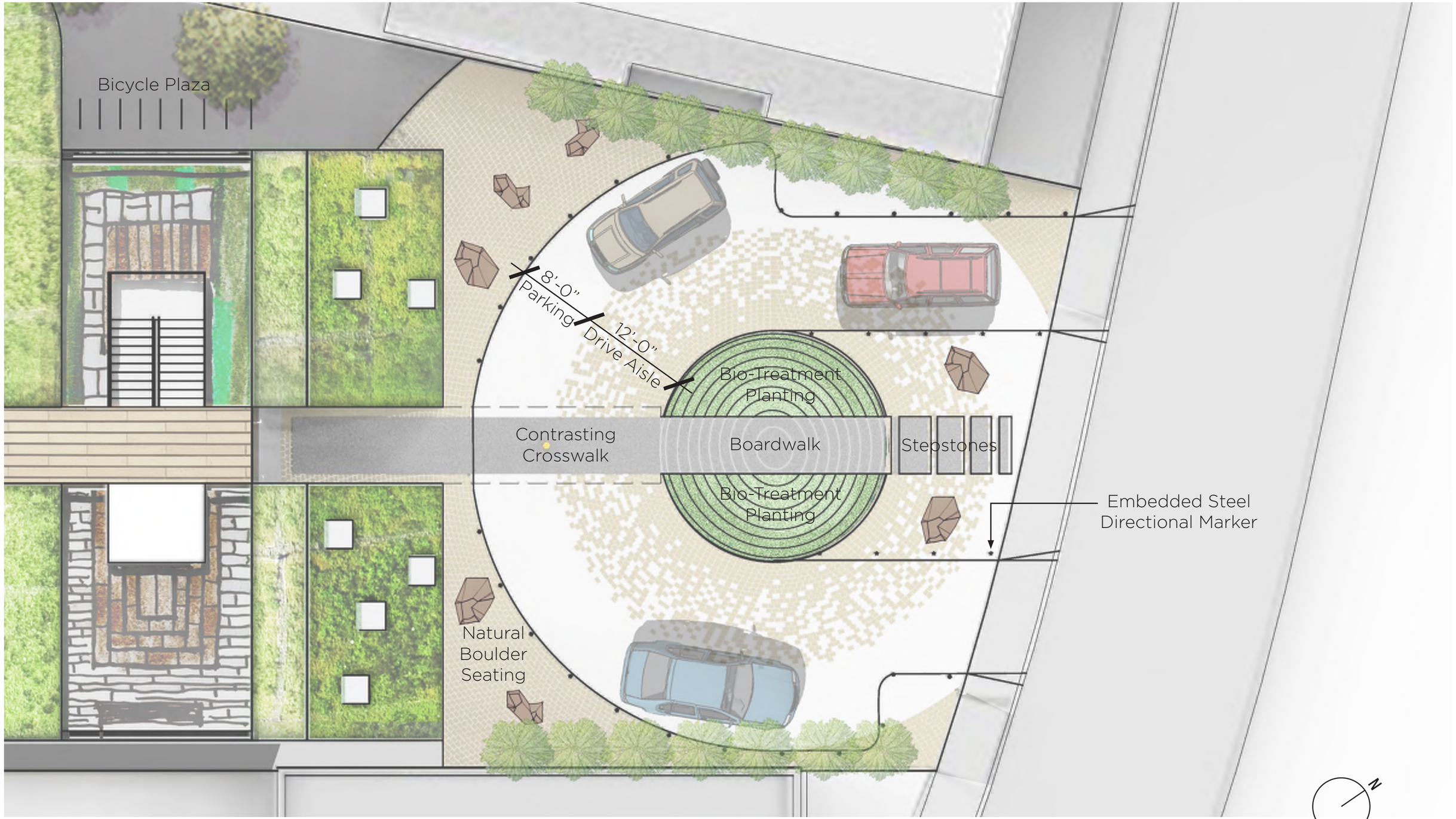
- Naturalized Native Garden
- Edible Garden
- Bio-Treatment Planters
- Living Wall / Roof



Softscape Diagram

swa San Francisco

Golden Bridges School
Landscape Concept Design
2016.05.05



swa San Francisco

Neighborhood Commons Plan

Golden Bridges School
Landscape Concept Design
2016.05.05

swa San Francisco

Neighborhood Commons View

Golden Bridges School
Landscape Concept Design
2016.05.05

swa San Francisco

Farm Plan

Golden Bridges School
Landscape Concept Design
2016.05.05

Wildness Plan

swa San Francisco

Golden Bridges School
Landscape Concept Design
2016.05.05

Attachment E

BKF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS

SAN FRANCISCO OFFICE | 415.930.7900

MEMORANDUM

Date: September 28, 2016 **BKF Job Number:** 20165050-10

Deliver To: Jessie Elliot

Company: Golden Bridges School
From: Jason T. White, P.E.

Subject: Golden Bridges School – 203 Cotter Street – Response to Comments on Conceptual Storm Water Management Approach

REMARKS:
The following is in response to the letter prepared by Kamman Hydrology & Engineering, Inc. dated September 19, 2016 entitled "*Hydrologic and Water Quality Issues Associated with Proposed Golden Bridges School Project at 203 Cotter Street, San Francisco, CA"* (KHE).

A. Response to Section 2.0 *"Potential Increased Adverse Impacts Associated with Proposed Project"*

KHE Concern: The project will result in the loss of existing stormwater detention and thereby increase flooding on adjacent properties and associated water quality and health risks.

BKF Response: During the permit process, the project will evaluate if it must provide stormwater detention onsite to reduce the potential increase in runoff created by the proposed school.

KHE comments that the project "*will result in forcing approximately 6000-cubic feet of flood waters onto surrounding properties that otherwise currently is detained on the Project lot during flood events when the Cayuga trunk line is over capacity and surcharging."* The volume presented by KHE is an estimate of the existing storage available on the property, it is not an analysis of the detention volume required. As part of the permit process, BKF will prepare a hydrologic and hydraulic analysis to determine if an onsite detention system is necessary to reduce runoff downstream. The analysis will be subject to review and approval by City staff. If required, the total detention volume estimated by KHE (6,000 CF) can easily be provided onsite by various methods including a detention pond, large diameter pipe, or an underground vault. Please refer to the attached Exhibit A illustrating how these measures could be incorporated into the site design.

Standard stormwater management design practice provides that property owners may reasonably increase drainage runoff by construction of impervious surfaces provided that they do not further increase drainage runoff by diverting water that previously drained to another area. Additionally, property owners may not concentrate water where it was not concentrated before without making proper provision for its disposal without damage to the downstream property owner. The project will be designed in accordance with these practices. By complying with stormwater best management design practices, the project would not increase existing stormwater flows from the property, from a reasonable storm recurrence interval, that contribute to off-site flooding.

B. Response to Section 3.0 "*Inaccurate Conceptual Project Storm Water Management Approach"*

KHE Concern: Assumptions included in BKF's conceptual design do not account for potential for shallow groundwater and poorly soil conditions. These conditions will limit infiltration and reduce the effectiveness of proposed stormwater Best Management Practices (BMPs).

BKF Response: KHE incorrectly references a superseded conceptual design memorandum. An updated analysis was previously provided demonstrating that the project will comply with the City's ordinance with zero infiltration into underlying soils.

KHE lists among its reference documents *"BKF Engineers, Surveyors, Planners, 2016, Golden Bridges School – 2013 Cotter Street – conceptual storm water management approach. Memorandum to: Neal Kaye A.I.A, Stanley Saitowitz / Natoma Architects, Inc., May 16, 11p."* This document was superseded on June 10, 2016 by a memorandum of the same name. The revised document provides analysis for compliance with the City of San Francisco's Storm Water Management Ordinance (SMO) without reliance on infiltration. In addition to the previously provided analysis based on HSG Type A soils, a second SFPUC sizing calculator is included assuming HSG Type D soils. This calculator demonstrates compliance with the SMO with no proposed infiltration into underlying soils. The section of the calculator entitled *"Is Infiltration Feasible or Proposed"* is clearly marked "No", see below.

CSS BMP SIZING CALCULATOR - *Only use for subwatersheds less than 2 acres, and sites less than 5 acres.*

Project Address:	203 Cotter Street	Applicant Name:	Jason White
Project Name (Alias):	Golden Bridges	Company:	BKF Engineers
Total Project Site Area (ft^2):	31,320	Date:	12-May-2016
Subwatershed Name (if applicable):	DMA-1		

STEP 1 - Enter the site's infiltration characteristics

HSG Soil Type:	D	
Is Infiltration Feasible or Proposed?	No	
Field Tested Infiltration Rate (in/hr):	0	
Infiltration Testing Method:	Not Conducted	
Infiltration Rate Safety Factor:	N/A	
Design Infiltration Rate (in/hr):	0.00	*Max allowable design rate for this size is 5 in/hr*

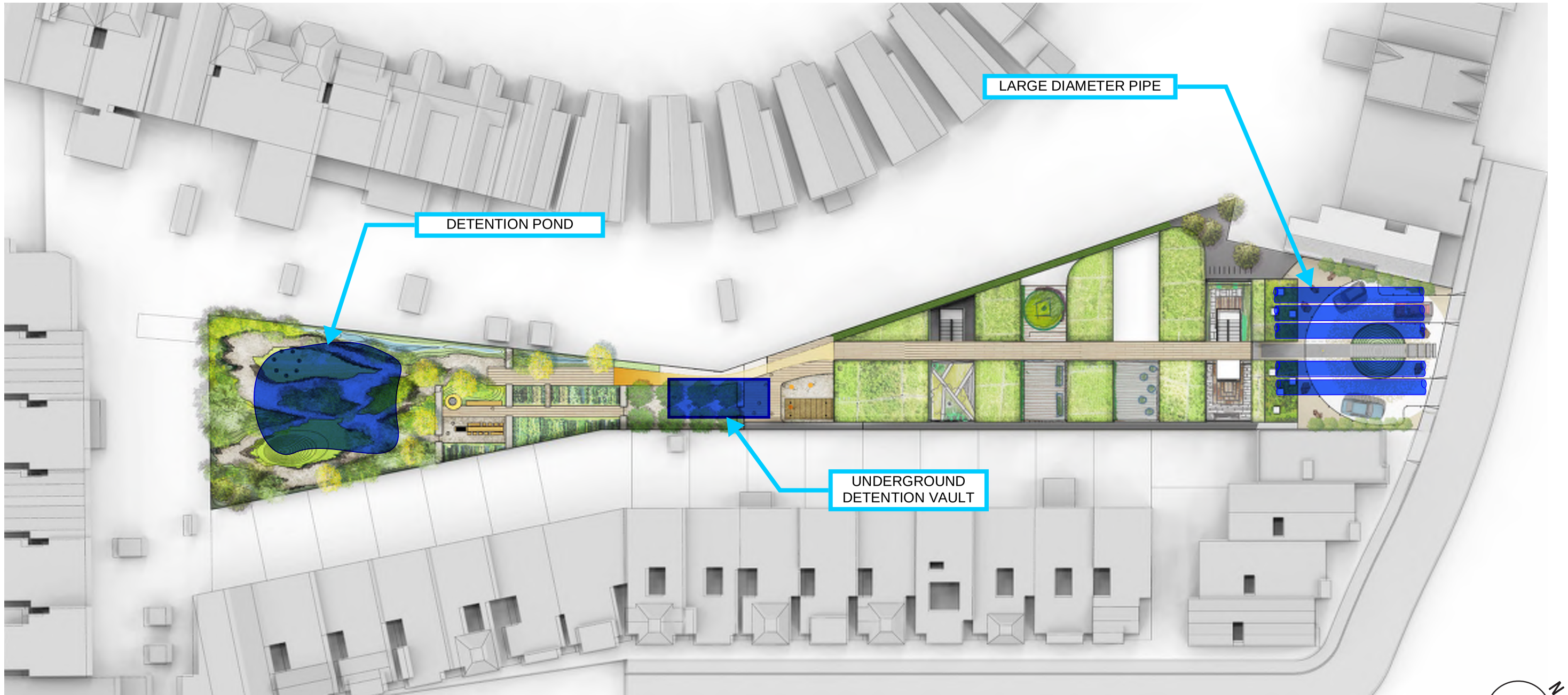
KHE states *"infiltration trenches, dry well/infiltration gallery and permeable pavement will not infiltrate or store water during storms (including those of 1- and 2-year recurrence intervals) if they are already fully saturated by groundwater."* BKF's conceptual approach does not contemplate infiltration trenches nor dry well/infiltration galleries for this project, therefore, discussion of these measures is not relevant. Permeable pavements are proposed, however, in the analysis for Type D soils, an underdrain pipe is included to convey runoff when underlying soils are saturated. Other proposed BMPs including green roof and lined bioretention planters are not affected by infiltration constraints such as shallow groundwater or Type D soils. Furthermore, refer to the attached SFPUC calculator (Exhibit B) which demonstrates that the project can comply the SMO even if all permeable pavement were eliminated in favor of traditional impervious surfaces.

We have demonstrated previously and herein that the project can achieve compliance with the SMO if further geotechnical investigation confirms infiltration is infeasible due to high groundwater or Type D soils.

C. Conclusion

In summary, we acknowledge KHE's concerns regarding potential for increased runoff and limited potential for stormwater infiltration due to shallow groundwater and poorly draining (Type D) soils. We propose to resolve these issues during in the design phase in preparing a hydrology and hydraulic analysis in coordination with the City of San Francisco.

Cc:



swa San Francisco

EXHIBIT A

Golden Bridges School

2016.05.05

EXHIBIT B

SAN FRANCISCO PUBLIC UTILITIES COMMISSION - URBAN WATERSHED MANAGEMENT PROGRAM

COMBINED SEWER SYSTEM BMP SIZING CALCULATOR for QUANTITY CONTROL

525 Golden Gate, 11th Floor
San Francisco, CA 94102

CSS BMP SIZING CALCULATOR - *Only use for subwatersheds less than 2 acres, and sites less than 5 acres.*

Project Address:	203 Cotter Street	Applicant Name:	Jason White
Project Name (Alias):	Golden Bridges	Company:	BKF Engineers
Total Project Site Area (ft^2):	31,320	Date:	23-Sep-2016
Subwatershed Name (if applicable):	DMA-1		

Modified Compliance Application

Modified Compliance approved?	No
N/A	25%
N/A	25%

Project Requirement: *No net increase in peak flow and volume from the 1-yr, 24 hr and 2-yr, 24 hr storms*

LEGEND:

User Input
Default Value
Locked
Comment

STEP 1 - Enter the site's infiltration characteristics

HSG Soil Type:	D	
Is Infiltration Feasible or Proposed?	No	
Field Tested Infiltration Rate (in/hr):	0	
Infiltration Testing Method:	Not Conducted	
Infiltration Rate Safety Factor:	N/A	
Design Infiltration Rate (in/hr):	0.00	*Max allowable design rate for this size is 5 in/hr*

STEP 2 - Enter the site's EXISTING runoff pathway information to estimate the Time of Concentration (Tc)

Existing Means of Conveying Runoff Offsite?	Overland
Avg. Site Slope in Direction of Flow (ft/ft):	0.01
Maximum Flow Length (ft):	520

STEP 3a - Enter the sites EXISTING and PROPOSED areas of impervious, pervious, and BMP surfaces.

		Surface Type	Existing (ft^2)	Proposed (ft^2)	Curve Number
Conventional Surfaces	Impervious	Pavement (Conventional)		10,000	98
		Roof (Conventional)	300	1,900	98
		Gravel on Soils			91
		Other:	2,600		89
		Impervious Areas Subtotal	*2,900*	*11,900*	
	Pervious	Grass/Lawn			80
		Landscaping at Grade (Low Density)		10,600	77
		Landscaping at Grade (High Density)	0		73
		Tree Well			35
		Traditional Planter on Podium			74
		Other:	28,400		89
		Pervious Areas Subtotal	*28,400*	*10,600*	--
Stormwater BMPs	Retention	Bioretention (No Underdrain, No Liner)	--		--
		Cistern	--	0	--
		Infiltration Trench	--		--
		Dry Well/Infiltration Gallery	--	0	--
		Permeable Pavement (No Underdrain)	--	0	--
	Detention	Bioretention/FTP (Underdrain, No Liner)	--		--
		Bioretention/FTP (Underdrain, Liner)	--	1,800	--
		Vegetated Roof	--	7,000	--
		Permeable Pavement (Underdrain)	--	0	--
		Detention Vault or Tank	--	0	--
		BMP Areas Subtotals	--	*8,800*	--
		Total Project Site Areas	***31,300***	***31,300***	--

BMPs in Series

Are BMPs in Series Proposed?	Yes
First BMP in Series	Vegetated Roof
Receiving BMP in Series	Bioretention/FTP (Underdrain No Liner)

STEP 3b - Enter stormwater BMP design information AND the conventional areas from Step 3a that drain to each BMP measure.

		Drainage Areas		BMP Depths and Volumes					Outlet Design	
		Impervious Area Draining to BMP (ft^2)	Pervious Area Draining to BMP (ft^2)	BMP Ponding Depth (ft)	BMP Media Depth (ft)	Gravel Storage Depth (ft)	Height of Underdrain Above Base (ft)	Storage Volume (gallons)	Outlet or Orifice Diameter (in)	Approx. Drawdown Time (hrs)
Bioretention (No Underdrain, No Liner)				0.5	1.5	0.67	--	0	--	0
Cistern		0	0	0.0	--	0.00	--	0	0.0	0 days
Infiltration Trench				--	--	3.00	--	0	--	0
Dry Well/Infiltration Gallery				0.0	--	4.00	--		--	0
Permeable Pavement (No Underdrain)			0	--	--	1.00	--	0	--	0
Bioretention/FTP (Underdrain, No Liner)				0.5	1.5	0.67	0.17	0	4.0	0
Bioretention/FTP (Underdrain, Liner)		8,400	0	0.5	1.5	0.67	--	16,399	2.0	7
Vegetated Roof		0		--	0.5	--	--	10,036	4.0	2
Permeable Pavement (Underdrain)			0	--	--	1.00	0.17	0	4.0	0
Detention Vault or Tank				7.0	--	--	--		1.5	0
BMP Areas Subtotals										
Total Project Site Areas		*8,400*	*0*					*26,435*		

STEP 4 - Check that site and drainage management areas are entered correctly. (Note: CSS = Combined Sewer System.)

Project Site Surfaces	Existing Area (ft^2)	Proposed Area (ft^2)	CHECK OF AREAS
Impervious Area Draining to BMP	0	8,400	OK
Impervious Area Draining Directly to CSS	2,900	3,500	

SAN FRANCISCO PUBLIC UTILITIES COMMISSION - URBAN WATERSHED MANAGEMENT PROGRAM

COMBINED SEWER SYSTEM BMP SIZING CALCULATOR for QUANTITY CONTROL

525 Golden Gate, 11th Floor
San Francisco, CA 94102

CSS BMP SIZING CALCULATOR - *Only use for subwatersheds less than 2 acres, and sites less than 5 acres.*

Project Address:	203 Cotter Street	Applicant Name:	Jason White
Project Name (Alias):	Golden Bridges	Company:	BKF Engineers
Total Project Site Area (ft²):	31,320	Date:	23-Sep-2016
Subwatershed Name (if applicable):	DMA-1		

Modified Compliance Application

Modified Compliance approved?	No
N/A	25%
N/A	25%

Project Requirement: *No net increase in peak flow and volume from the 1-yr, 24 hr and 2-yr, 24 hr storms*

LEGEND:

User Input
Default Value
Locked
Comment

Pervious Area Draining to BMP	0	0	**OK**
Pervious Area Draining Directly to CSS	28,400	10,600	
Stormwater BMP Area	0	8,800	
Total Area	31,300	31,300	**OK**

STEP 5 - Compare if the SDG runoff reductions to quantity control requirements are met. If not, review BMP performance output in Step 6, then return to Step 3 to adjust stormwater strategies.

Quantity Control Parameter	Existing Conditions	Proposed Conditions	% Reduction From Existing Conditions	Target % Reduction	Requirement Met?
1-yr, 24 hr: Peak Flow (cfs)	0.218	0.212	3%	0%	PASS
1-yr, 24 hr: Runoff Volume (ft³)	4,155	4,117	1%	0%	PASS
2-yr, 24 hr: Peak Flow (cfs)	0.263	0.253	4%	0%	PASS
2-yr, 24 hr: Runoff Volume (ft³)	4,627	4,582	1%	0%	PASS

STEP 6 - Review the summary table below to see how each BMP performs during the 2-yr 24 hr storm. The site's hydrographs are shown in the "Rainfall and Hydrographs" tab.

Stormwater BMP Measures		Inflows	Outflows		Volume In	Volume Retained			Volume Out to CSS		For BMPs in Series Only: Volume to Receiving BMP	
		Peak Flow to BMP (cfs)	Peak Rate of Discharged Flow (cfs)	Peak Rate of Overflow (cfs)	Runoff to BMP (ft³)	Infiltration + E/T (ft³)	Reuse (ft³)	Volume Remaining in Storage (ft³)	Detained Discharge Volume (ft³)	Overflow Volume (ft³)	Detained Discharge Volume (ft³)	Overflow Volume (ft³)
Retention	Bioretention (No Underdrain, No Liner)	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Retention	Cistern	0.000	0.000	0.000	0	0	0	0	0	0	0	0
Retention	Infiltration Trench	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Retention	Dry Well/Infiltration Gallery	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Retention	Permeable Pavement (No Underdrain)	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Detention	Bioretention/FTP (Underdrain, No Liner)	0.101	0.000	0.101	0	0	0	0	0	1124	--	--
Detention	Bioretention/FTP (Underdrain, Liner)	0.154	0.059	0.000	2228	391	0	0	1837	0	0	0
Detention	Vegetated Roof	0.105	0.000	0.000	1529	405	0	0	0	0	1124	0
Detention	Permeable Pavement (Underdrain)	0.000	0.000	0.000	0	0	0	0	0	0	--	--
Detention	Detention Vault	0.000	0.000	0.000	0	0	0	0	0	0	--	--
	Totals				***3,757***	***796***	***0***	***0***	***1,837***	***1,124***	***1,124***	***0***

*NOTE: With the exception of Cisterns, BMP measures should not have any "**Volume Remaining in Storage**". If volume is remaining in any BMP measures other than a Cistern, check and revise **STEP 3b** for the "**Outlet Design**" (outlet/orifice diameter) or underdrain such that the "**Approx. Drawdown Time**" is less than 48 hours, therefore empty for the next storm event.*

Attachment F

From:	Chastain, Amy
To:	Russell, Lana (CPC)
Cc:	Chastain, Amy (PUC); Wong, Lesley (DPW); How, Kathryn (PUC); Shrestha, Bimayendra (DPW); Minick, Sarah (CWP)
Subject:	RE: 203 Cotter Street
Date:	Wednesday, September 28, 2016 4:27:20 PM
Attachments:	Model Simulation Sewer Profiles.pdf SCP Instructions V4 20140218.pdf

Lana,

The SFPUC and DPW have reviewed the 9/19/2016 letter from Kamman Hydrology & Engineering (as revised on 9/26/2016) and the 6/10/2016 memo from BKF Engineering regarding the proposed project at 203 Cotter Street. Below is a summary of existing information that may be relevant.

Sewer System Capacity

The SFPUC has a calibrated Hydrologic and Hydraulic (H&H) model of the City's combined sewer system that is capable of simulating dry and wet weather flows in the collection system. The H&H model includes a two-dimensional mesh that incorporates high-resolution surface topography that also allows simulation of runoff on the surface when the hydraulic grade line (HGL) of the collection system is exceeded (i.e., flooding). This model is used to evaluate how the sewer system functions under different dry and wet weather conditions, and for planning capital projects. As part of the SFPUC's long-term capital improvement program, the Sewer System Improvement Program (SSIP), the SFPUC and the SSIP Program Management Consultants used the model to better understand the collection system response to increases in population and impervious surface area. 203 Cotter was used as a case study in these planning-level analyses because it is a proposed greenfill project.

Three different modeling scenarios for 203 Cotter were developed for the case study: (1) existing conditions in which the parcel is mostly pervious; (2) a hypothetical future condition in which the parcel's impervious surface area was unchanged but the service population increased to 300 people; and (3) a hypothetical future condition in which parcel's impervious surface area increased to 100% but the service population was unchanged. In all of the model simulations the topography of the site remained unchanged, and all stormwater runoff from the parcel was set to flow to the Cotter Street sewer. Each of these scenarios was run in the H&H model for 5, 25, and 100 year return interval storms, each with 3 hour durations.

Attached are profiles of the Cotter and Cayuga Street sewers from the model simulations. The model results indicate that, for all scenarios, the peak HGL in the Cotter and Cayuga sewers is below street level in the 5 year storm, and above street level in some places in the 25 and 100 year storms. There is no or little difference in the peak HGL between existing conditions and the increased service population hypothetical, except in the 5 year storm. In the 5 year storm the increased service population hypothetical has a higher peak HGL than existing conditions, but the HGL is still below the street surface. In the 5 year storm, the increased impervious surface area hypothetical also has a higher peak HGL than existing conditions, but the HGL is still below the street surface. This difference decreases in the 25 year storm and is very low in the 100 year storm. Note that while the model simulates two-dimensional surface flows using LiDAR data, it is not intended to simulate very small and localized changes in topography – such as parcel, street or sidewalk

modifications – that could have very localized effects

Stormwater Management Ordinance Compliance
All projects that create and/or replace 5,000 or more square feet of impervious surface must comply with the City's Stormwater Management Ordinance (SMO), which is based on the State's requirements for municipal storm sewer systems. The SMO requirements for sites in the combined sewer system with existing imperviousness of less than or equal to 50% are that the stormwater runoff peak flow rate and volume cannot exceed pre-development conditions for the 1- and 2-year 24-hour design storm.

A diagram of the standard process for Stormwater Control Plan (SCP) approval is attached to this message. Project proponents must have an approved Preliminary SCP from the SFPUC prior to the issuance of a site or building permit from the Department of Building Inspection (DBI). A Final SCP is required before DBI will issue a Certificate of Final Completion. The Preliminary SCP for the 203 Cotter Project has not yet been submitted. The issues raised in the Kamman letter regarding appropriate assumptions will be resolved through the SCP approval process.

Amy

Amy Chastain
San Francisco Public Utilities Commission
achastain@sfwater.org
(415) 554-1683

From: Russell, Lana (CPC) [mailto:lana.russell@sfgov.org]
Sent: Wednesday, September 21, 2016 9:20 AM
To: Shrestha, Bimayendra; Minick, Sarah; Wong, Cliff
Cc: Scarpulla, John; Range, Jessica; Ho, Ed
Subject: 203 Cotter Street

Hello Colleagues,

Please see the attached comment letter from Greg Kamman regarding 203 Cotter Street. We request that Public Works and PUC review and respond to this letter. The response should be provided to the Planning Department and Planning Commission to be submitted as part of the record prior to the hearing, which is on September 29, 2016. Please feel free to call me with any questions you may have.

Thanks,

Lana Russell-Hurd
Environmental Planner / Transportation Planner

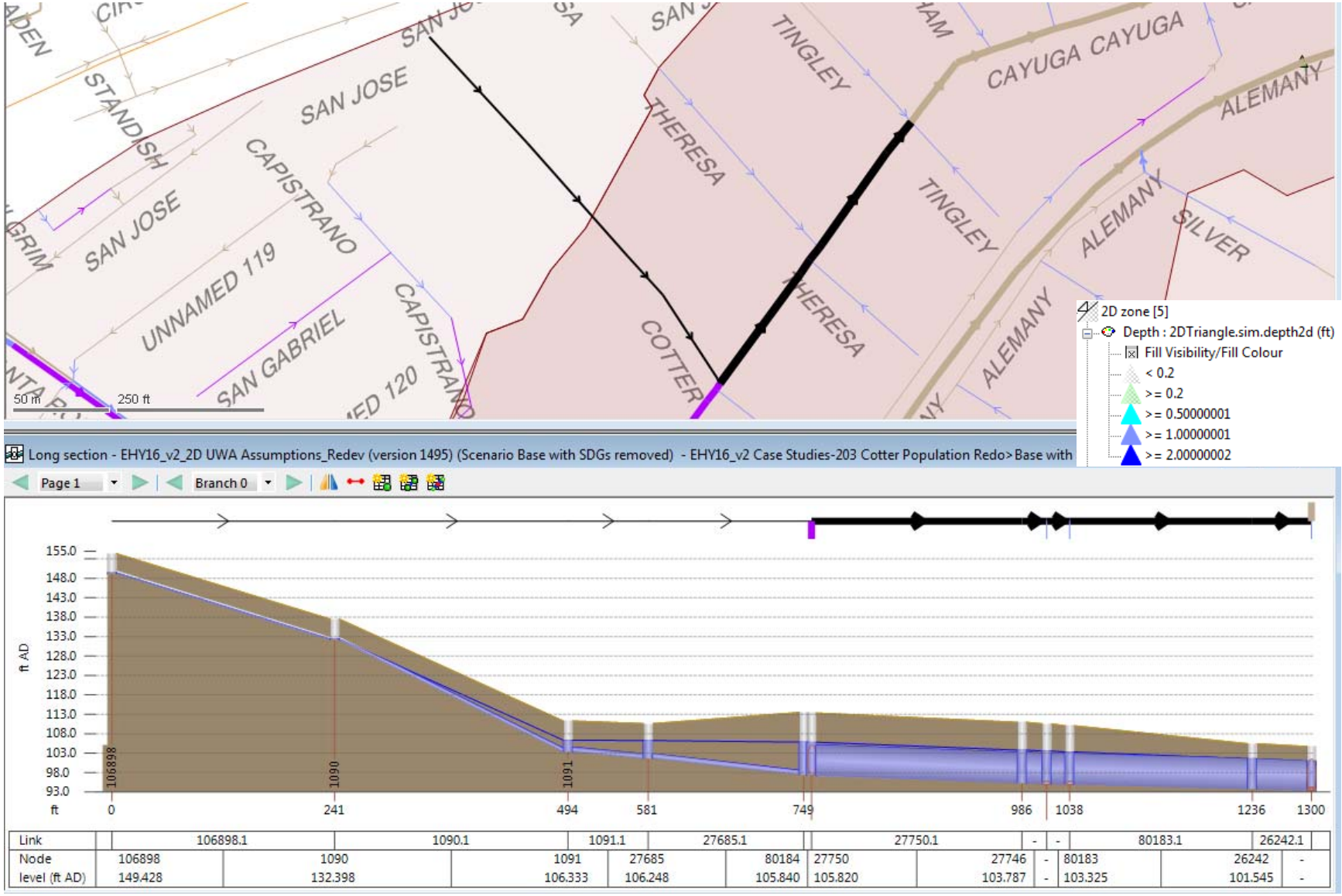
Planning Department, City and County of San Francisco

1650 Mission Street, Suite 400, San Francisco, CA 94103
Direct: 415-575-9047 **Fax:** 415-558-6409
Email: lana.russell@sfgov.org
Web: www.sfplanning.org

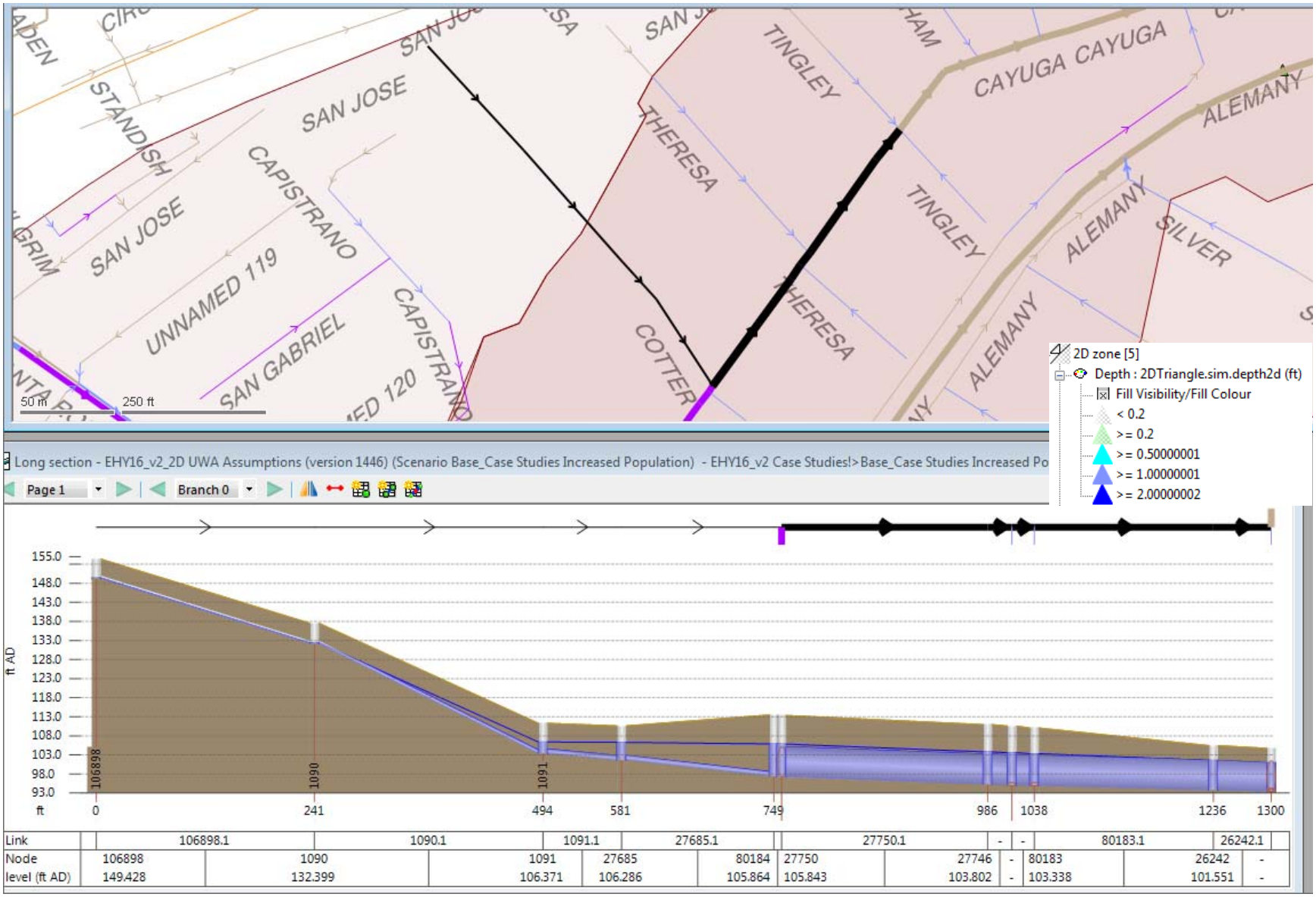
203 Cotter


CAPISTRANO
120
COTTER
CAYUGA
THERESA
CAYUGA
COTTER
ALEMANY
ALEMANY
SANTA RO
EMANY

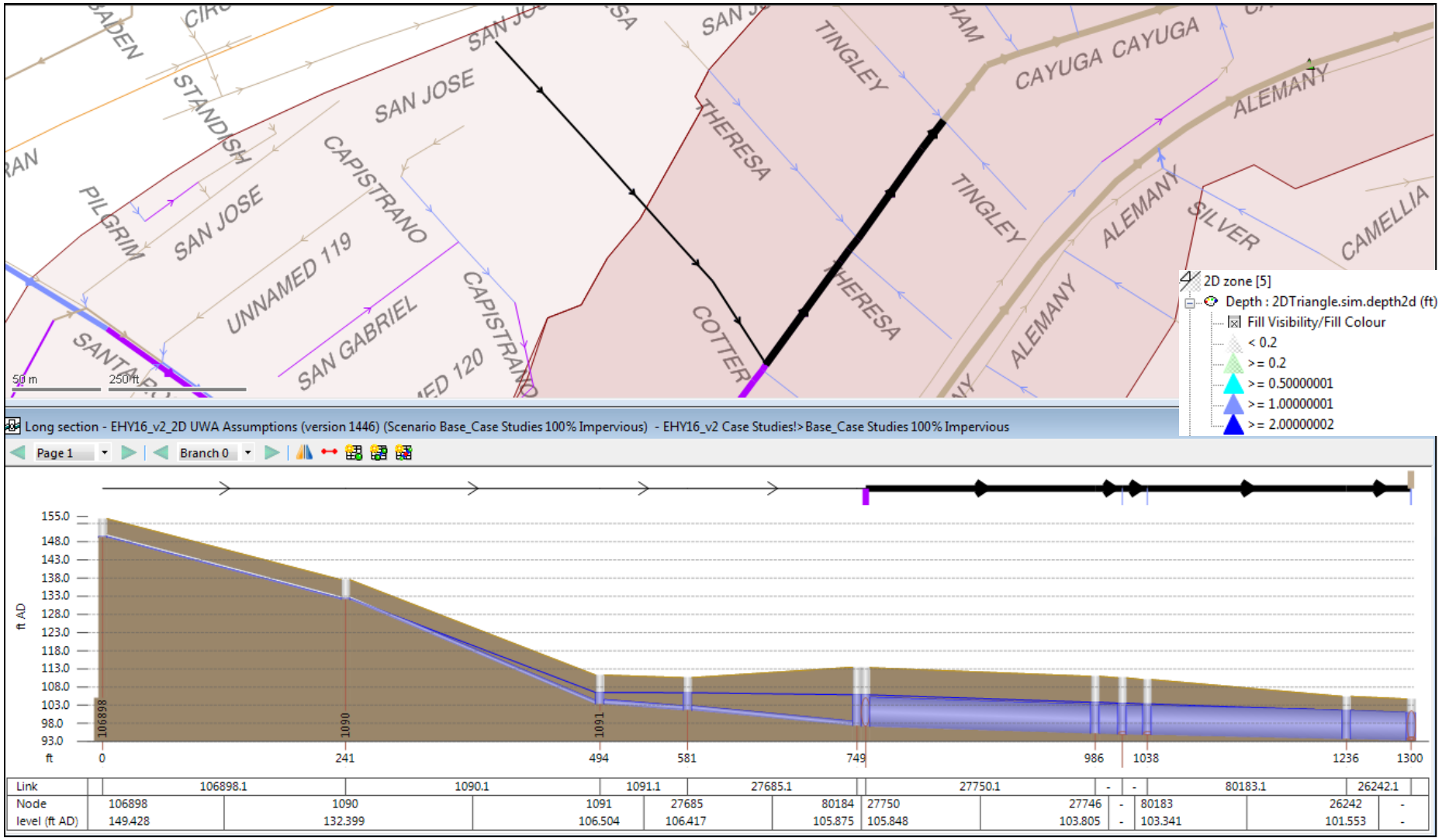
Existing Conditions - 5yr 3hr



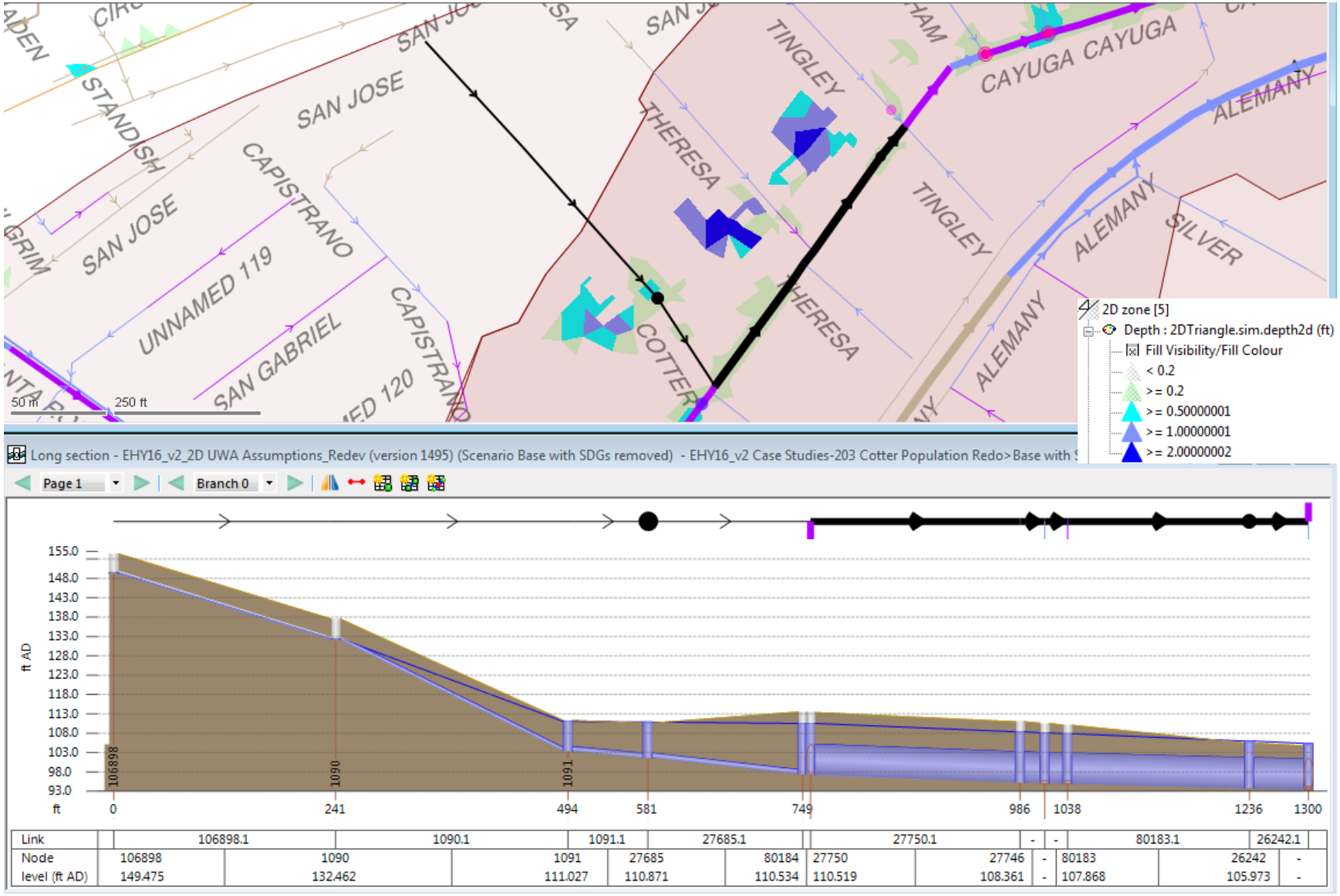
Hypothetical Increase in Service Population - 5yr 3hr



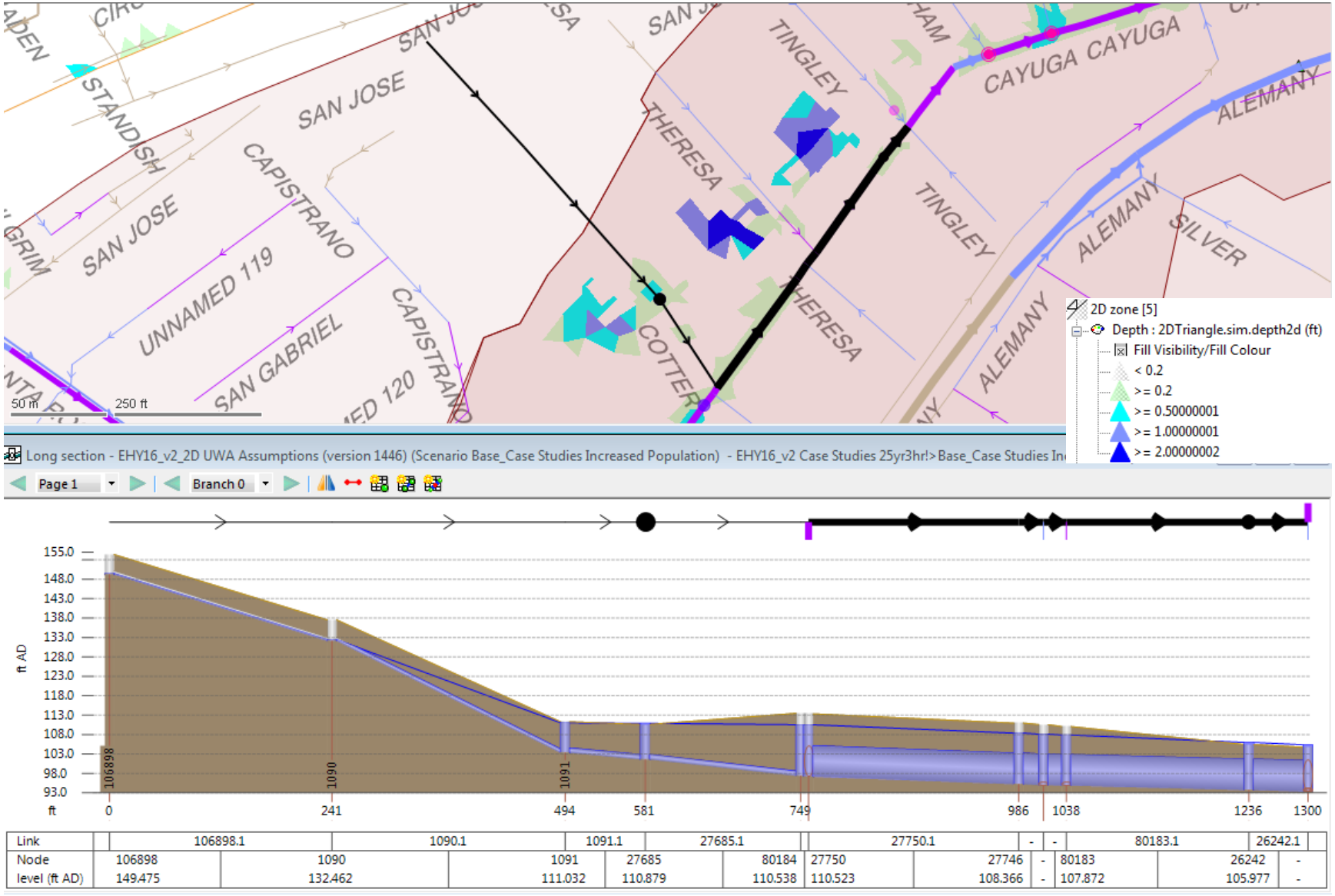
Hypothetical Increase in Imperviousness- 5yr 3hr



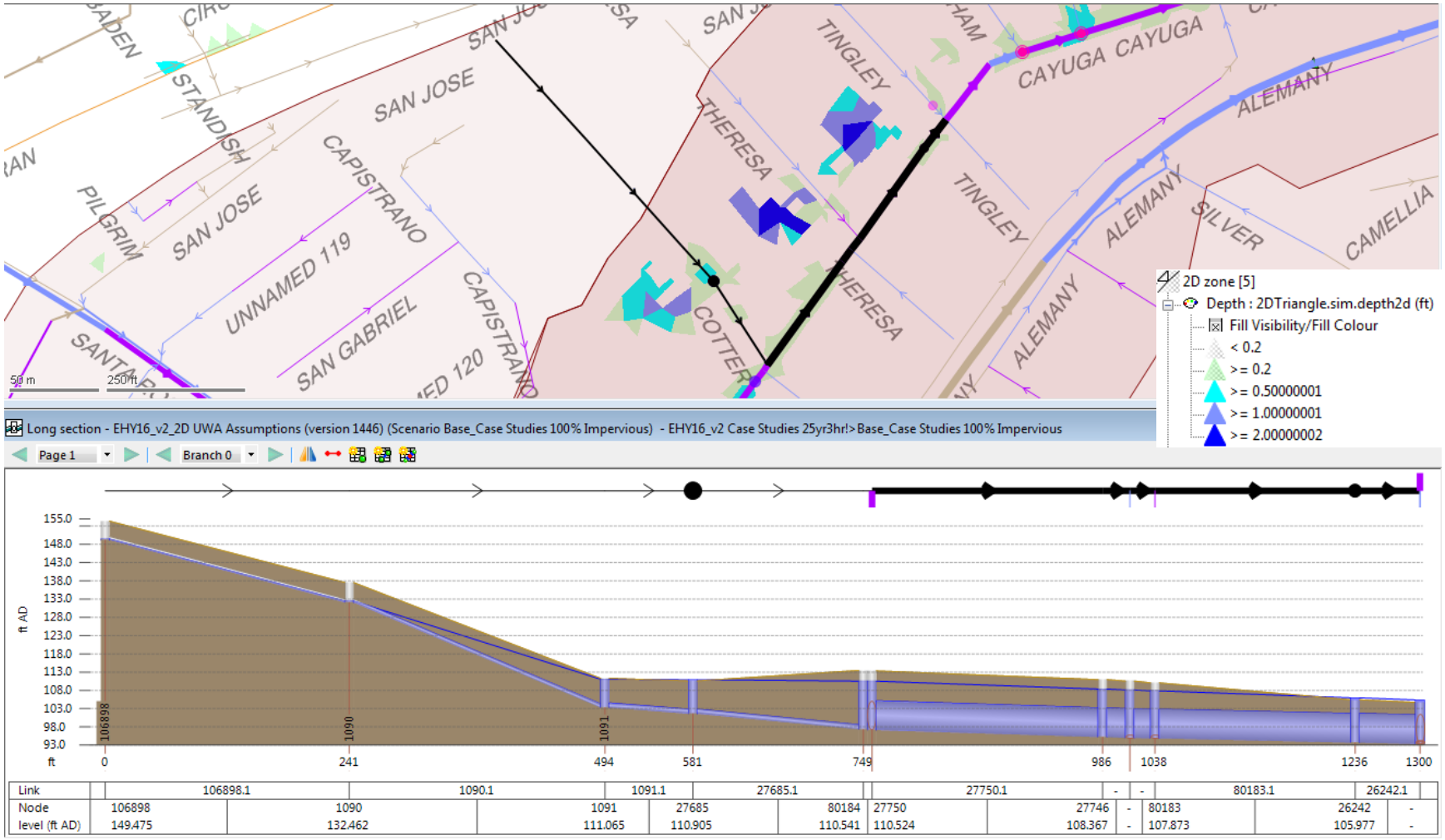
Existing Conditions - 25yr 3hr



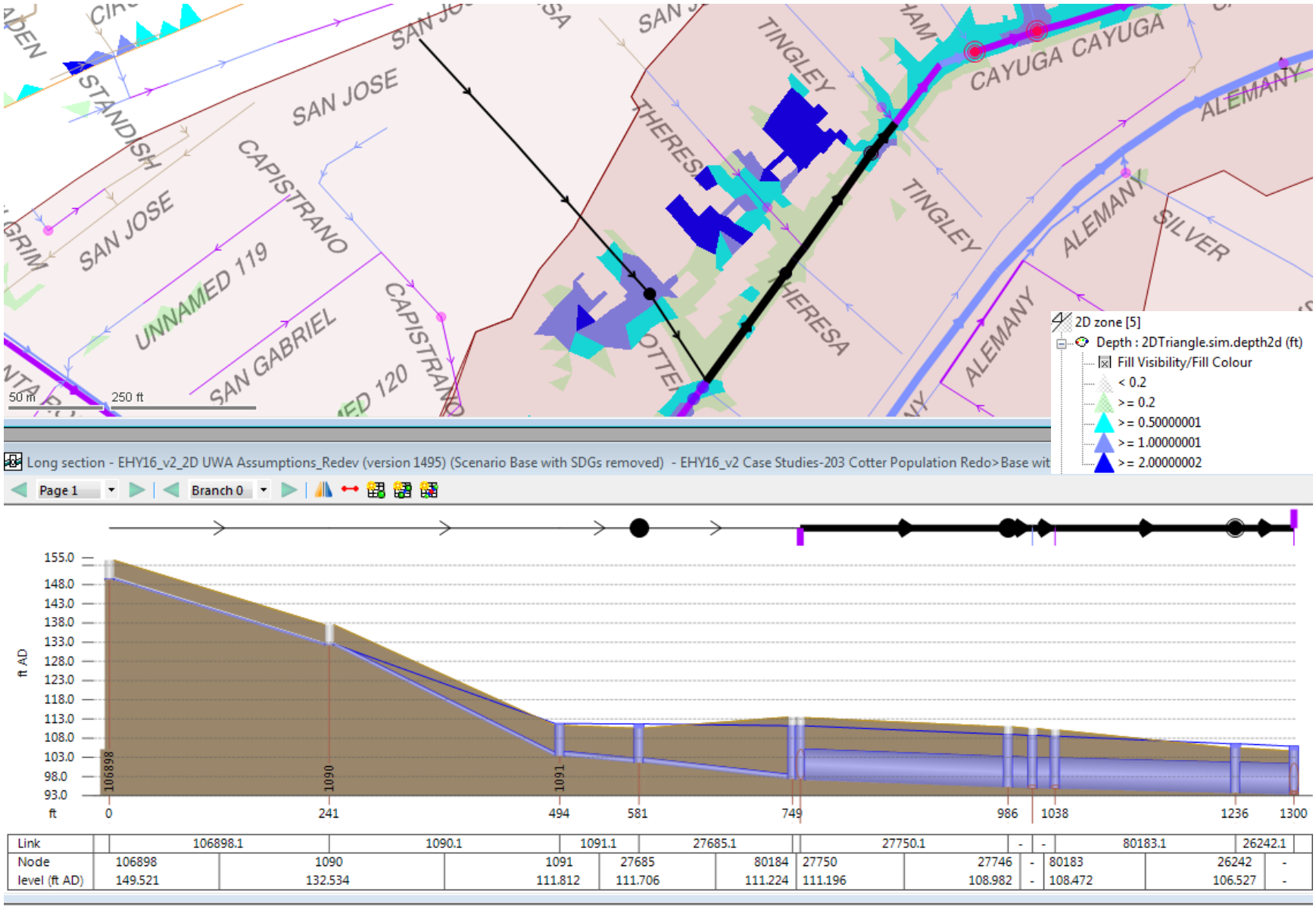
Hypothetical Increase in Service Population - 25yr 3hr



Hypothetical Increase in Imperviousness - 25yr 3hr

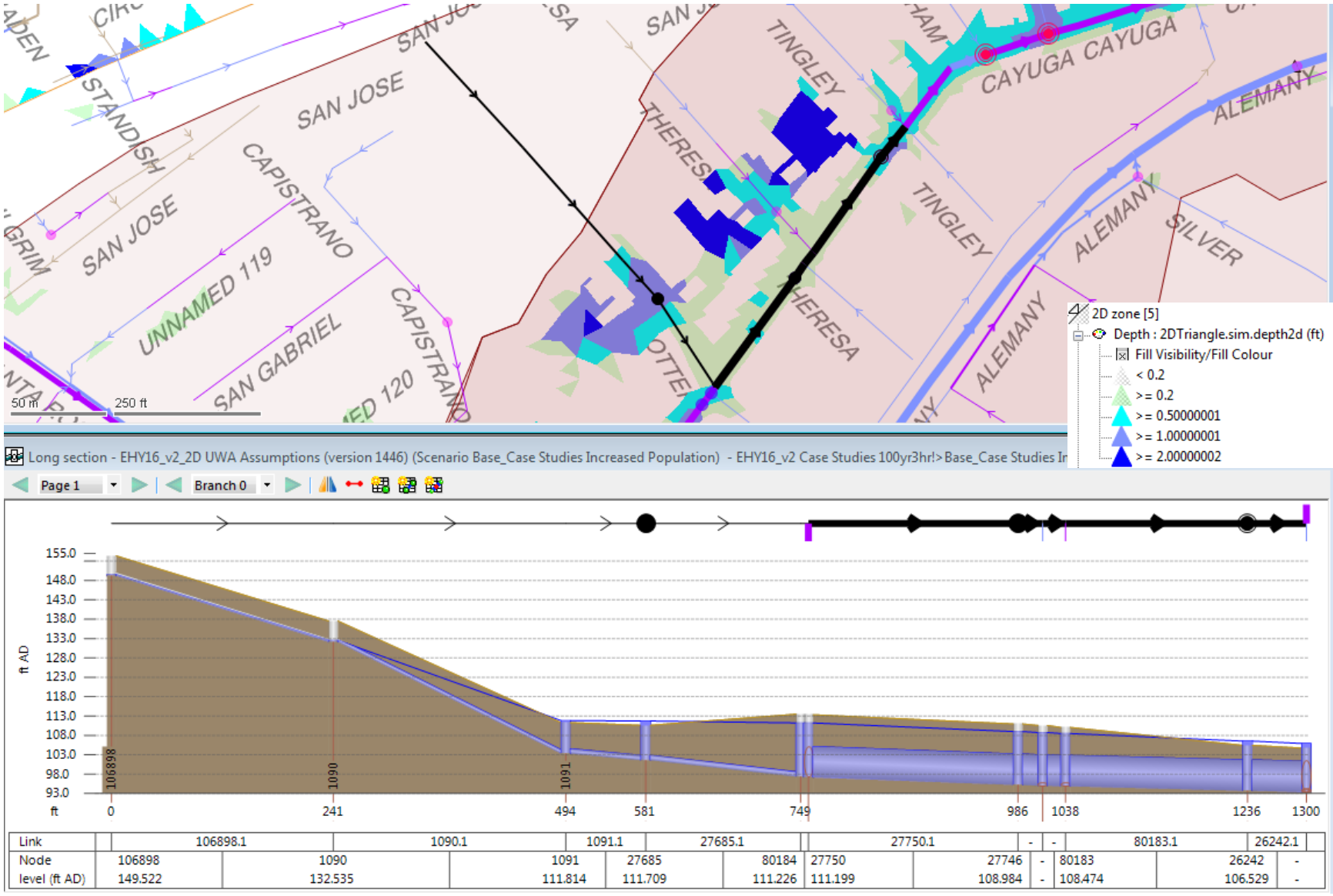


Existing Conditions - 100yr 3hr

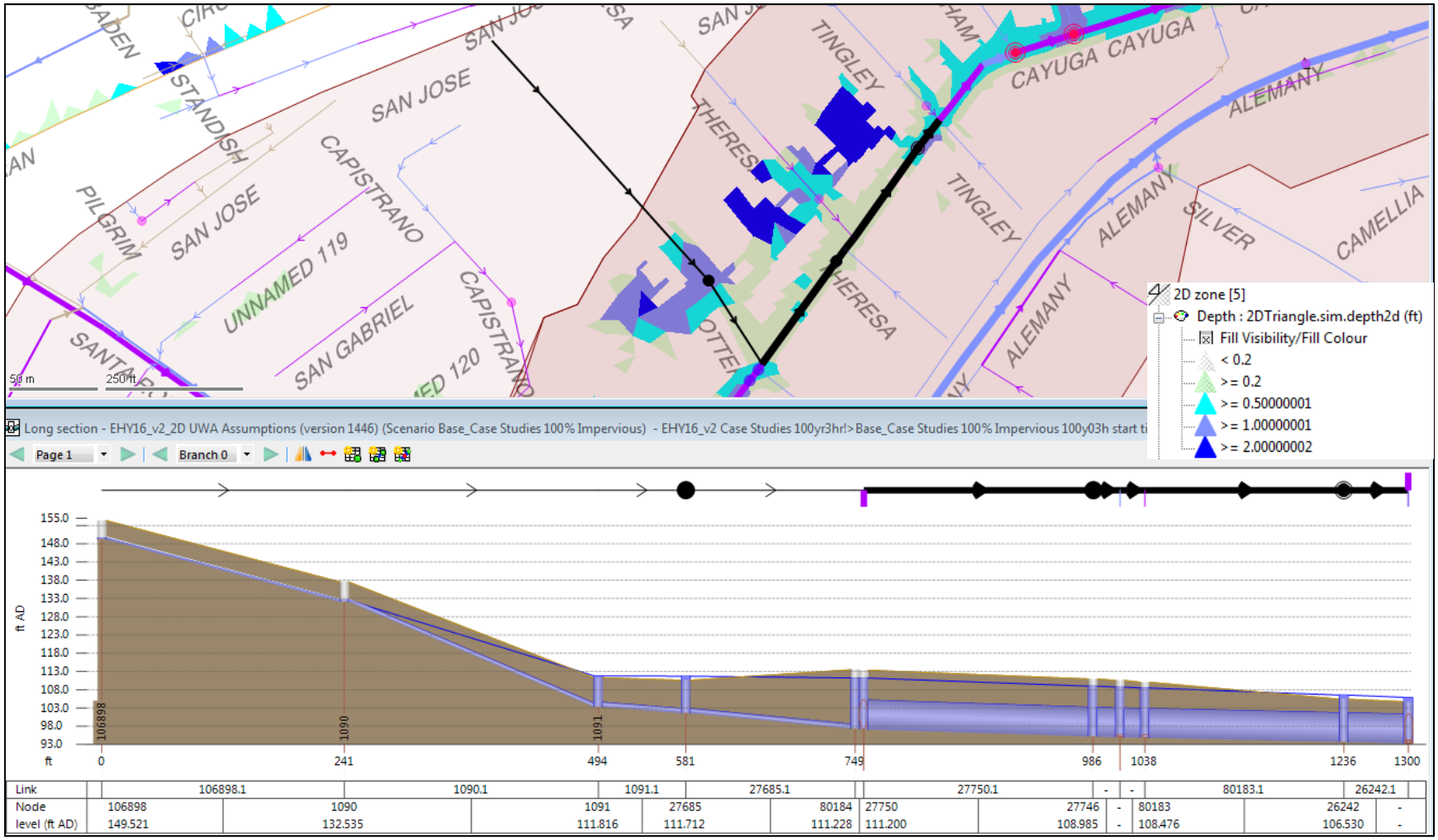


Link	106898.1	1090.1	1091.1	27685.1	27750.1	-	-	80183.1	26242.1
Node	106898	1090	1091	27685	80184	27750	27746	-	80183	26242	-
level (ft AD)	149.521	132.534	111.812	111.706	111.224	111.196	108.982	-	108.472	106.527	-

Hypothetical Increase in Service Population – 100yr 3hr



Hypothetical Increase in Imperviousness - 100yr 3hr



STORMWATER CONTROL PLAN INSTRUCTIONS

How to complete and submit a Stormwater Control Plan for Parcel projects.

SCP SUBMITTAL REQUIREMENTS

Projects that disturb 5,000 square feet or more of ground surface are required to submit a Stormwater Control Plan (SCP) in compliance with the San Francisco Stormwater Management Ordinance and *San Francisco Stormwater Design Guidelines (Guidelines)*. The SCP submittal is separate from any documentation submitted to the Department of Building Inspection (DBI) for a Site or Building Permit. Please refer to the Typical SCP Project Review Process Diagram on page 2.

- The SCP review process consists of two review stages: **Preliminary SCP** and **Final SCP**.
- Prior to submittal of a Preliminary SCP, project teams are encouraged to discuss the proposed stormwater management approach with project review staff at a **pre-application meeting**.
- DBI will not issue a Site or Building Permit until the SFPUC approves the **Preliminary SCP.**
- DBI will not issue a Certificate of Final Completion (CFC) until the SFPUC approves the **Final SCP** and the property owner signs, submits and records the **Maintenance Agreement**.

A complete **Stormwater Control Plan** should include the following per the SCP **Table of Contents**:

Section 1: Project Information Form
Section 2: Project Narrative
Section 3: Calculation Summary and Table
Section 4: Stormwater Management Plan(s)
Section 5: Source Control
Section 6: BMP Maintenance Schedule
Section 7: BMP Inspection Checklist
Appendix A: Calculation Spreadsheets or Modeling Output
Appendix B: Supporting Documentation
Appendix C: Construction Document Drawings (Excerpts related to stormwater management)
Appendix D: Draft Maintenance Agreement Template

SCP SUBMITTAL TIMELINE

The SFPUC staff review SCPs based on the **Typical Project Review Process Diagram** (page 2). **If your project elects to go straight to a DBI Building Permit, coordinate with the SFPUC to determine the review and approval process.**

Pre-Application Meeting: Coordinate with SFPUC to schedule a meeting early during the planning and team building process. Early coordination will minimize design issues when Site Permits are filed.

Preliminary SCP: Submit prior to or concurrent with a DBI Site or Building Permit submittal.

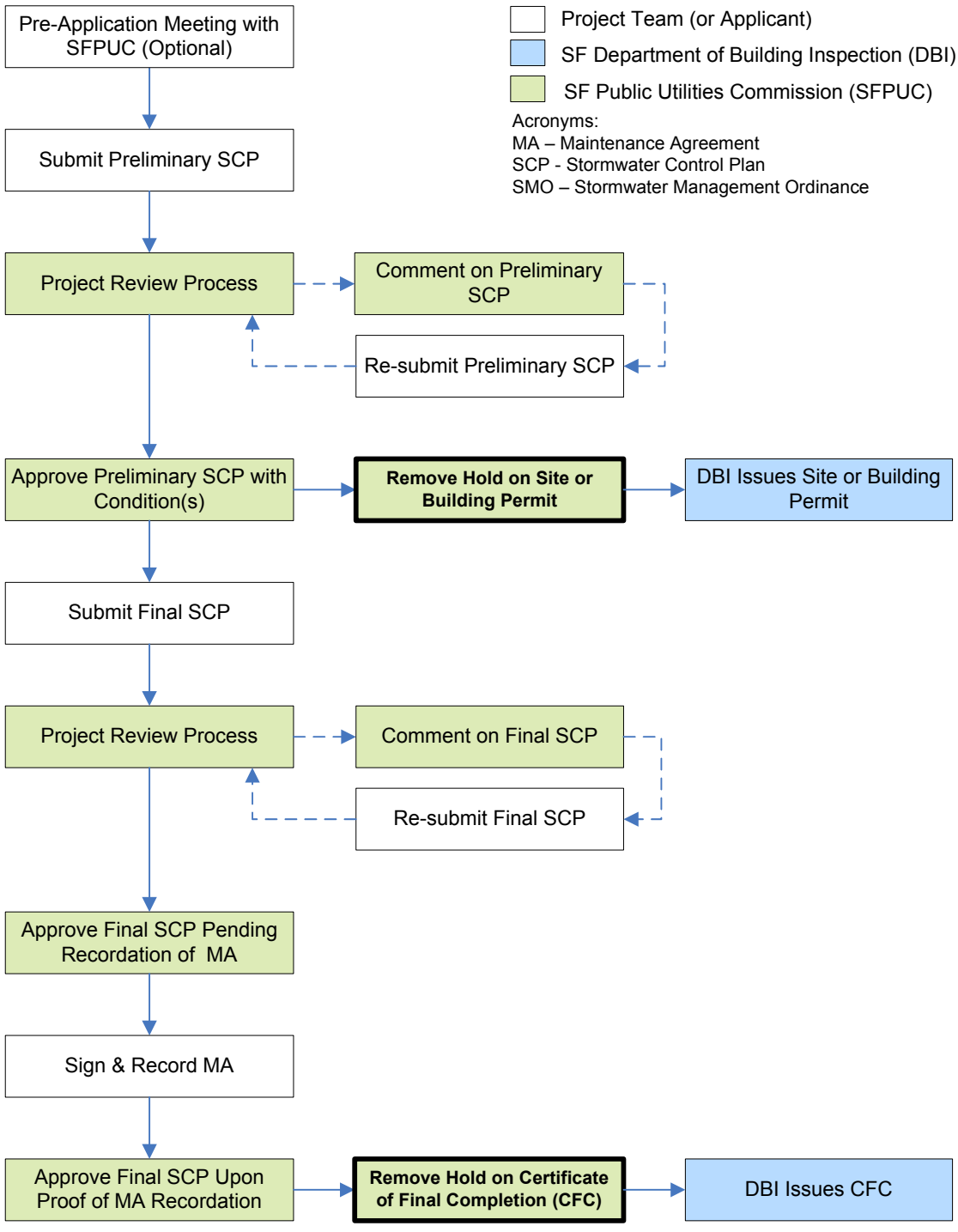
- Attached plans should reflect design level typical of a Site Permit (e.g. 100% DD).
- Project schedules should reflect possible need for more than one Preliminary SCP submittal prior to approval.

Final SCP: Submit initial SCP concurrent with the DBI Addenda process and proir to foundation or vertical construction.

- Attached plans should reflect design level typical of a building permit (e.g. 100% CDs).
- Project schedules should reflect possible need for more than one Final SCP submittal prior to approval.

STORMWATER CONTROL PLAN INSTRUCTIONS

TYPICAL SCP PROJECT REVIEW PROCESS



STORMWATER CONTROL PLAN INSTRUCTIONS

SCP INSTRUCTIONS

A complete SCP must include the following sections in sequential order. Refer to www.sfwater.org/sdg for all supporting materials (active hyperlinks to each document are also included throughout this section).

SECTION 1: PROJECT INFORMATION FORM

Include the completed Project Information Form at the front of the Stormwater Control Plan (SCP).

- The SCP Table of Contents must be accurately completed and reflect the contents of the SCP.
- The completed Project Information Form must be submitted with both Preliminary and Final SCPs.
- **Preliminary SCP submittal**: The Statement of Certification must include the preparer's name and license number or unsigned stamp.
- **Final SCP submittal**: The Statement of Certification must include the preparer's name and license number with a signed and dated stamp.
- Justify all items that have been omitted from the SCP submittal in the Submittal Checklist.

SECTION 2: PROJECT NARRATIVE

Include a concise narrative describing the proposed project. At a minimum, the Project Narrative must:

- Summarize the EXISTING conditions and PROPOSED development project.
- Summarize the opportunities and constraints for stormwater management, including any site conditions checked in the Project Description of the Project Information Form.
- Discuss the proposed stormwater management approach for achieving the required performance measure(s). Include a summary of the process used to select each proposed stormwater control Best Management Practice (BMP).
- If the project will be phased, discuss the plan for phasing and how stormwater compliance will be met at each phase of the project.

SECTION 3: CALCULATION SUMMARY AND TABLE

Provide a written Calculation Summary. This narrative should clearly describe the stormwater control BMP performance calculation methods and assumptions.

- Provide a written summary of the selected stormwater modeling calculation method(s), assumed design criteria, and data sources.
- For rainwater harvesting and storage proposals, summarize the estimated water budget (i.e. on-site sources verses on-site demands), the cistern operation, and the maximum draw down period. Describe how rainwater harvesting approach is incorporated into the overall development phasing plan.

(cont. on the following page)

STORMWATER CONTROL PLAN INSTRUCTIONS

SECTION 3: CALCULATION SUMMARY AND TABLE (CONTINUED)

Provide a Stormwater Control Performance Summary Table. This table should clearly show that the proposed overall design meets the performance requirements of the *Guidelines*. The table should summarize the stormwater runoff calculation results overall and for each individual BMP, such as:

- **Combined Sewer Areas:**
  - EXISTING peak flow rate (cfs) and total volume (cf)
  - REQUIRED peak flow rate and total volume reduction to meet the performance requirement
  - ACHIEVED peak flow rate and volume for the entire site ***and*** for each individual drainage area
- **Separate Sewer Areas:**
  - REQUIRED total treatment volume (cf) to meet the performance requirement
  - ACHIEVED treatment volume for the site as a whole ***and*** for each individual drainage area

SECTION 4: STORMWATER MANAGEMENT PLAN (SMP)

NOTE: A Stormwater Management Plan (SMP) must be a black and white document, as it will be recorded with the Maintenance Agreement.

Include a SMP as a new drawing using an 11x17 format that coordinates with the attached Construction Document drawings.

- Include title block with project name, address, owner's name and contact information, designer's name and contact, project phase (e.g. 100% DD, 100% CD, etc.), north arrow, and scale.
- Show as a compiled "birds-eye" plan including adjacent sidewalks (e.g. if there is a green roof on the 5th story and a biofiltration planter on the 2nd story, the SMP should show both).
- Show and label each stormwater control BMP with a **distinct hatching type** and **ID number** (e.g. for swales, SW-01, SW-02, etc.). Use the same BMP ID number in the Maintenance Schedule and Inspection Checklist.
- Clearly label and **delineate all drainage management area boundaries** (e.g. DMA-01, etc.) for the entire site. A DMA should show the contributing area for each BMP, including the BMP area itself (if above ground), and label the size of each drainage area (square feet or acres).
- If multiple sewer connections are proposed and multiple CSS BMP Sizing Calculators are used, clearly label and **delineate each sub-watershed area** (eg. SubW-01, etc.).
- Clearly show the overflow routing to the sewer system and emergency relief routing.
- Clearly show and label the general piping layout including each downspout, connections to and from BMPs including overflow relief piping, underdrains, and connections to the combined system CSS with flow direction arrows. Coordinate with the Civil and Plumbing CD's.
- Clearly show the adjacent roads, properties and any contributing overland flow from outside the project area.
- Delineate and label all pervious and impervious surface types for the proposed development conditions.
- Provide an **Area Summary Table** that is broken up into surface areas: Sub Watersheds, DMA's, conventional impervious, conventional pervious and BMP areas. Present the data so that all areas can be summed and easily cross referenced with the Calculation Spreadsheet(s).

(cont. on the following page)

STORMWATER CONTROL PLAN INSTRUCTIONS

SECTION 4: SMP (CONTINUED)

- Provide a **typical detail** or **section** for each BMP type (Note: If rainwater harvesting is used, provide cistern section with all inlets, outlets, and associated componenets).
- Where relevant, show and label all stormwater control BMP setbacks as described in the *Guidelines*, BMP Fact Sheets, "Introduction" (especially when infiltration-based BMPs are proposed).
- **For Final SCP Submittal:** Include the electronic stamp of an engineer or landscape architect licensed in the State of California.

SECTION 5: SOURCE CONTROL

Complete the Source Control Template provided in the Technical Report Templates or provide equivalent.

- List each potential source of polluted runoff and the associated pollutants of concern, and describe proposed source control measures and appropriate BMPs.
- Refer to the *Guidelines,* BMP Fact Sheets for resources on required source control measures.

SECTION 6: BMP MAINTENANCE SCHEDULE

Complete the BMP Maintenance Schedule provided in the Technical Report Templates or provide a custom BMP Maintenance Schedule for enhanced maintenance requirements (e.g. vegetated roof or a proprietary BMP system).

- Refer to the Typical Maintenance Activities in the *Guidelines,* BMP Fact Sheets for recommended activities and frequency.
- Edit the recommended activities provided in the *Guidelines* to reflect the specific proposed design.
- The Owner is responsible for securing maintenance funding for all BMPs constructed in compliance with the *Guidelines*. However, a description of the funding mechanism and annual maintenance cost is not required.

NOTE: The Final BMP Maintenance Schedule(s) will be recorded with the Maintenance Agreement. Refer to the Maintenance Agreement Recordation Process memo.

SECTION 7: BMP INSPECTION CHECKLIST

Complete the BMP Inspection Checklist Template provided in the Technical Report Templates or provide a custom Inspection Checklist for enhanced inspection requirements (e.g. vegetated roof or a proprietary BMP system).

- Refer to the Typical Inspection Activities in the *Guidelines,* BMP Fact Sheets for recommended activities and frequency.
- Edit the recommended activities provided in the *Guidelines* to reflect the specific proposed design.
- This Checklist will be used by the Owner or the Owner's Representative for the annual self-certification inspection. For more information refer to the Inspection and Enforcement chapter of the *Guidelines.*

NOTE: The Final BMP Inspection Checklist(s) will be recorded with the Maintenance Agreement. Refer to the Maintenance Agreement Recordation Process memo.

STORMWATER CONTROL PLAN INSTRUCTIONS

APPENDIX A: CALCULATION SPREADSHEETS OR MODELING OUTPUT

Calculation spreadsheets or modeling output should demonstrate that the *Guidelines* performance measures have been met by providing:

- Relevant stormwater calculations per the Accepted Hydrologic Calculation Methods memo, including but not limited to:
  - The SFPUC BMP Sizing Calculator(s) for Combined Sewer Areas and/or Separate Sewer Areas
  - Hydrologic model with input and output (e.g. SWMM, Pondpack, etc.)
  - Hydraulic and/or Hydrology sizing spreadsheet(s)
  - Orifice sizing calculations
- Documentation of design criteria and assumptions
- Stormwater Control BMP Performance Table for each stormwater control BMP including: BMP type, BMP ID number, and contributing drainage management area (DMA's) (in square feet or acres)
- Water budget calculations (if applicable), including:
  - Non-Potable Demand Calculations, and
  - Rainwater Harvesting Calculations (**NOTE: If rainwater harvesting is proposed for irrigation, coordinate with the SFPUC staff prior to SCP submittal regarding allowed calculations.**)

APPENDIX B: SUPPORTING DOCUMENTATION

As appropriate, include additional site-specific documentation to support the stormwater management design and assumptions. Only attach the pages relevant to compliance with the *Guidelines* and clearly identify relevant information for ease of review. **Please do not attach full specifications, geotechnical reports, or manuals**.

Both Preliminary SCPs and **Final SCPs** are required to include the following supporting documentation:

- Proposed BMP proprietary product information (e.g. cut sheets - one or two pages)
- Soils data, boring logs, soil type description, and/or groundwater elevation data
- If the proposed infiltration-based BMPs do not meet the setback requirements outlined in the *Guidelines*' **BMP Fact Sheets** (pages 4 & 5), **include signed letters from the geotechnical and/or structural engineer** stating that they have reviewed and approved the proposed design.

Only Final SCPs are required to include the following additional supporting documentation (If available, projects are also encouraged to include these in Preliminary SCPs):

- Percolation test pit logs or soils test results
- Project specifications excerpts. Include specific pages from the project specifications that relate to stormwater control BMP materials or components, including:
  - BMP materials, such as: aggregates, soils, green roof media, permeable paving, etc.
- BMP proprietary product sizing and/or specifications

STORMWATER CONTROL PLAN INSTRUCTIONS

APPENDIX C: CONSTRUCTION DOCUMENT DRAWING EXCERPTS

Attach Construction Document drawings that adequately depict the existing and proposed conditions and are **relevant** to compliance with the *Guidelines*. Please include the minimal number of sheets reproduced from the most recent set of construction drawings to clearly present the proposed stormwater management BMPs. All drawings should include a project title block with submittal description (e.g. 100% DD,100% CD, etc.). **NOTE: For FINAl SCP, provide a digital stamp on all plans; wet stamp or signature NOT required.**

Relevant plans may include, as needed:

- **Cover Sheet:** Include the design drawing set Cover Sheet for reference.
- **Existing Conditions Plan (or Site Survey):** A clearly labeled site and topographic survey.
- **Site Plan:** Proposed layout of overall project site.
- **Materials Plan(s):** Proposed location of materials related to stormwater control BMPs (e.g. permeable paving, landscaping, etc.).
- **Grading Plan(s):** (may be combined with Drainage Plan): Proposed grading with clearly labeled site contours, spot elevations, site slopes.
- **Sidewalk Improvement Plan(s):** As needed when stormwater BMPs are proposed in sidewalk ROW, per DPW permit requirements.
- **Drainage Plan(s)/ Utility Plan(s):** Proposed overall drainage system including connections to the combined or separate sewer system.
- **Landscape Plan(s):** Proposed BMP Planting Plan and BMP Plant Lists including species and quantities of all trees, plants and seed mixes.
- **Architectural Plan(s):** Include if these plans show elements related to stormwater control BMPs (e.g. green roof).
- **Plumbing Plan(s):** Proposed plumbing plans showing rainwater harvesting system, interior elevation schematic of RWH system, BMP piping, cisterns, or other BMP appurtenances.
- **Detail Sheet(s):** Include all sheets that contain details related to the proposed stormwater control BMP(s) such as:
  - Stormwater control BMP facilities plans and sections
  - Green roofs or stormwater planters
  - Planting details specific to stormwater control BMPs
  - Rainwater harvesting system, tank section, and components
  - Schematic line diagrams showing stormwater system configuration
  - Other details related to stormwater systems that are required to meet the stormwater performance requirements

STORMWATER CONTROL PLAN INSTRUCTIONS

APPENDIX D: DRAFT MAINTENANCE AGREEMENT TEMPLATE

Prior to submittal of the Final SCP, the Project Team must initiate coordination of the Maintenance Agreement with the Owner or Project Proponent using the Maintenance Agreement Template and the Maintenance Agreement Recordation Process memo.

Determine Maintenance Agreement Template

- Use the Maintenance Agreement Template for privately funded development projects.
- Alternate Maintenance Agreement templates are available upon request for projects with special circumstances, such as Federal or CCSF funded/owned projects.

NOTE: All plans and exhibits submitted with the Maintenance Agreement will be recorded and become part of the permanent record for the property.

SCP SUBMITTAL FORMAT

Please submit the **Preliminary SCPs** and **Final SCPs** in both of the following formats:

- **One (1) Hardcopy:** Bound 8.5 x 11" document with 11 x 17" plan foldouts. Half-size plans accepted if required for legibility. **NOTE: Full-size plans and stapled reports are not accepted.**
- **One (1) Electronic Copy:** Submit as one collated PDF file. Provide means for SFPUC Project Review staff to download file or submit a CD with the Hardcopy.

Submit all SCPs or direct questions to either the SFPUC or the Port, depending on overseeing jurisdiction:

Attn.: SCP Project Reviewer
c/o Ken Kortkamp
SFPUC, Wastewater Enterprise
525 Golden Gate Ave, 11th Floor
San Francisco, CA 94102
stormwaterreview@sfwater.org

Attn.: Port Project Reviewer
c/o Richard Berman
The Port of San Francisco
Pier 1
San Francisco, CA 94111
Richard.Berman@sfport.com

NOTE: If the SCP is not submitted in a complete and proper format, the SFPUC reserves the right to not accept the SCP and request that the Project Team resubmit with the appropriate content.

SCP PREPARATION CHECKLISTS

To streamline the SCP review and approval process, these helpful checklists have been prepared for the Project Team's internal use prior to submittal.

The SCP Preparation Checklists contain:
- Preliminary SCP Preparation Checklist
- Final SCP Preparation Checklist

Remember that each SCP is reviewed on a case-by-case basis and all line items in the Preparation Checklists may not apply to your particular project. A complete and carefully prepared SCP will reduce review time and increase the potential for approval.

Attachment G

Balance Hydrologics, Inc.®

800 Bancroft Way • Suite 101 • Berkeley, CA 94710 • (510) 704-1000
224 Walnut Avenue • Suite E • Santa Cruz, CA 95060 • (831) 457-9900
PO Box 1077 • Truckee, CA 96160 • (530) 550-9776
www.balancehydro.com • email: office@balancehydro.com

September 29, 2016

Ms. Jessie Elliot
Administrative Director
Golden Bridges School
3358 22nd Street
San Francisco, California 94110

RE: Review of Drainage and Stormwater Management Issues at the Proposed School Site, 203 Cotter Street, City of San Francisco

Dear Ms. Elliot:

Thank you for contacting Balance Hydrologics regarding a peer review of the proposed stormwater management approach associated with improvements at 203 Cotter Street in the City of San Francisco. I have been actively working in the Bay Area on matters related to stormwater management, flood control, and drainage for over 18 years and am pleased to provide my expertise in this matter.

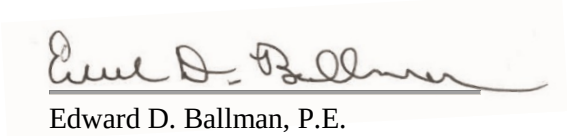
Specifically, you requested that I review project documentation, including a comment letter dated September 19, 2016 from Kamman Hydrology and Engineering, to assess whether there are any constraints or other limitations that would preclude the construction of school facilities at the property.

In summary, I find that the letter of September 19th raises a number of valid points that need to be addressed in the final plans for the site. These include the limited capacity of the Cayuga Avenue sewer system, the existing ability of the site to detain runoff at low-points, and potentially high ground water levels. That said, the memorandum from BKF Engineers dated September 26, clearly demonstrates that these constraints have been recognized and that there are very practical means of addressing them in the final project design. Provision of compensatory detention storage and installation of effective stormwater best management practices in areas of elevated ground water are commonly implemented measures locally and throughout the State of California.

I see no reason that the site cannot be improved in a manner that fully mitigates for all potential drainage impacts and complies fully with all applicable stormwater management regulations.

Sincerely,

BALANCE HYDROLOGICS, Inc.



Edward D. Ballman, P.E.
Principal Engineer