

County of Santa Clara

Department of Planning and Development
Planning Office

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www.sccplanning.org



STAFF REPORT Zoning Administration January 3, 2019 **Item # 1**

Staff Contact: Charu Ahluwalia, Associate Planner
(408) 299-5740, charu.ahluwalia@pln.sccgov.org

11411-18A-18G (STANFORD UNIVERSITY)

Architecture & Site Approval and Grading Approval – Installation of a subgrade air supply system for turf maintenance at Stanford Stadium.

Summary: Architecture & Site Approval and Grading Approval for installation of an automatic subgrade air supply system for turf maintenance and condition control at the Stanford Stadium, including installation of subgrade air and drain lines, and associated replacement of the playing field and field irrigation. Estimated grading quantities associated with the grading approval are 4,060 cubic yards (c.y.) of cut and 4,020 c.y. of fill, with a maximum depth 10'-6".

Owner:	Stanford University	Community Plan Designation:	Academic Campus
Applicant:	Mark Bonino, Project Manager	Zoning:	A1 (General Use)
Address:	625 Nelson Road, Stanford	Project Area:	93,550 sq. ft.
APN:	142-04-036	Supervisory District:	5

RECOMMENDED ACTIONS

- A. Approve the use of a prior California Environmental Quality Act (CEQA) document [2000 Stanford Community Plan and General Use Permit (GUP) Program Environmental Impact Report (EIR)].
- B. Grant Architecture & Site Approval (ASA) and Grading Approval, subject to Conditions of Approval outlined in Attachment B.

ATTACHMENTS INCLUDED

Attachment A – CEQA Determination – Use of a Prior CEQA Document
Attachment B – Proposed ASA Conditions of Approval
Attachment C – Location & Vicinity Map
Attachment D – Proposed Plans

PROJECT DESCRIPTION

The proposed project is for installation of an automatic subgrade air supply system for turf maintenance and condition control at the Stanford Stadium, including installation of subgrade air and drain lines, and associated replacement of the playing field and field irrigation. No square footage is proposed to be deducted from the 2000 GUP academic square footage allocation. The project site is an existing football field. No new parking or tree removal is proposed with this project.

Estimated grading quantities associated with the grading approval are 4,060 c.y. of cut and 4,020 c.y. of fill, with a maximum depth 10'-6".

REASONS FOR RECOMMENDATION

A. Environmental Review and Determination (CEQA)

The proposed project is in conformance with both the 2000 Stanford Community Plan ("SCP") and General Use Permit ("GUP") and has no new effects beyond those analyzed in the Program EIR, certified by the Board of Supervisors in December 2000. The Program EIR analyzed the environmental impacts of campus development allowed under the SCP and GUP. The proposed project is within the scope of the campus development analyzed in the 2000 GUP. Therefore, use of the prior CEQA document is adequate for this project.

B. Project/Proposal

1. Stanford Community Plan and GUP: The project conforms to applicable Community Plan goals, strategies and policies. Athletics facilities like the Stanford football stadium are permitted uses within the Academic Campus land use designation, and as conditioned will satisfy the requirements of the GUP. The 2000 Community Plan and GUP governs development projects on the Stanford campus. This project conforms to the criteria set forth by the GUP and provisions identified within the Community Plan and is subject to compliance with the preliminary Conditions outlined in Attachment B.

2. ASA approval:

ASA approval standards, applicable regulations, and findings: The project substantially conforms to the requirements and guidelines in the SCP and GUP. These requirements meet all of the ASA Guidelines through the ASA approval process approved by the Zoning Administrator.

C. ASA Findings:

Pursuant to §5.40.040 of the County Zoning Ordinance, the Zoning Administrator may grant an Architecture & Site Approval, contingent upon specific findings. In the following discussion, the scope of review findings are listed in **bold**, and an explanation of how the project meets the required standard is in plain text below.

A. Adequate traffic safety, on-site circulation, parking and loading areas, and insignificant effect of the development on traffic movement in the area;

Long-term traffic

The project is located within an established area of the Stanford academic campus which currently provides adequate parking facilities for the surrounding uses. Traffic impacts of academic projects in the core of the campus have been assessed in the programmatic 2000 GUP EIR. The proposed project does not increase traffic or use of the facility, but instead provides an upgrade to the stadium grounds, materials and maintenance systems. As such, the proposed improvements to the Football Stadium do not result in any change in the amount of traffic and does not generate any new trips from a traffic impact perspective. The traffic would be consistent with that analyzed in the prior 2000 GUP EIR.

Short-term construction traffic

The project will result in short-term impacts related to construction activities, however Conditions of Approval have been added to this project to mitigate these short-term impacts to a less than significant level. All construction trucks will be required to use approved truck routes for transporting construction materials to and from the site. Furthermore, the project has been conditioned to restrict construction material deliveries to non-peak hours, as defined in the 2000 GUP EIR. Compliance with the Conditions of Approval (Attachment B) ensures that the short-term construction traffic associated with the project will not have a significant effect on traffic movement in the area.

Parking

The project has no new proposed parking on the project site. Hence, there would be no impact on parking. Existing Stanford Stadium parking is adequate for the existing use and proposed improvements.

B. Appearance of proposed site development and structures, including signs will not be detrimental to the character of the surrounding neighborhood or zoning district;

The proposed project is for installation of an automatic subgrade air supply system for turf maintenance and condition control. The installation including subgrade air and drain lines and associated replacement of the playing field and field irrigation will take place below and at ground level. No structures are proposed above ground level. The project, as proposed, will not be detrimental to the surrounding area or neighborhood, and no new permanent signs are proposed for the development.

C. Appearance and continued maintenance of proposed landscaping will not be detrimental to the character of the surrounding neighborhood or zoning district;

No tree removal or landscaping is proposed with this project.

D. No significant, unmitigated adverse public health, safety and environmental effects of proposed development;

The Program GUP EIR, certified by the Board of Supervisors in December 2000, analyzed the environmental impacts of Stanford campus development allowed under the SCP and GUP. The proposed installation of the subgrade air supply system at Stanford

Stadium is within the scope of the development analyzed in the 2000 GUP EIR. All appropriate Conditions of Approval have been added to ensure conformance with the 2000 GUP EIR.

The prior CEQA analysis concluded that the proposed installation of the subgrade air supply system at Stanford Stadium would not result in any significant environmental impacts as it relates to parking, traffic, construction noise, and air quality. The project has been reviewed with respect to all applicable regulations relating to public health and safety. The prior CEQA analysis for the project determined that with the conditions of approval, the project would not result in any significant environmental impacts (See Attachment A).

E. No adverse effect of the development on flood control, storm drainage, and surface water drainage;

The project site does not contain any creeks or streams and is not located within a 100-year flood zone. Field drainage is conveyed to a stormwater treatment system and discharged to the local storm drainage infrastructure. The project has been reviewed by County Staff with respect to all applicable regulations relating to drainage and flood control.

F. Adequate existing and proposed fire protection improvements to serve the development;

The Fire Marshal's Office has reviewed and conditioned the project to ensure existing and proposed fire protection access and water supply are in conformance with applicable regulations. Condition of Approval Nos. 8 and 9 ensure adequate fire protection will be provided as part of the proposed project.

G. No significant increase in noise levels;

Due to the nature of the proposed use, and its location within the Stanford Campus area, the project is not anticipated to cause any significant increases in noise levels to surrounding neighborhoods. The project may create short-term/temporary construction noise impacts due to construction activities and construction traffic. The project has been conditioned to require submittal of a Traffic and Construction Management Plan. Furthermore, construction activities shall be limited to the hours of 7AM and 7PM, Monday through Saturday, with no construction activity occurring after 7PM, or on Sundays.

H. Conformance with zoning standards, unless such standards are expressly eligible for modification by the Zoning Administrator as specified in the Zoning Ordinance.

The property is zoned A1, which is the "General Use" zoning district that provides for general purpose uses subject to discretionary land use approvals. The standards applicable to development within this zoning district are listed in Table 2.50-2 of the

County Zoning Ordinance. The project complies with the development standards set forth in the Zoning Ordinance.

I. Conformance with the general plan and any applicable area or specific plan, or, where applicable, city general plan conformance for property located within a city's urban service area; and

The Stanford academic campus is primarily designated as Major Educational and Institutional Use within the Santa Clara County general plan. The Community Plan identifies the project site for installation of the subgrade air supply system at Stanford Stadium as Academic Campus. The proposed project is part of an existing athletic field and complies with the applicable policies set forth in the Community Plan with reference to SCP-LU1 and SCP-LU2, which state that allowable academic uses include athletics, physical education, and recreation facilities.

J. Substantial conformance with the adopted "Guidelines for Architecture and Site Approval" and other applicable guidelines adopted by the County.

The project substantially conforms to applicable sections of the Architecture and Site Approval (ASA) Guidelines. It should be noted that issues addressed generally in the ASA guidelines are addressed in more detail within the Stanford Community Plan and GUP. The project complies with the Stanford Community Plan and GUP, which ensures compliance with the ASA Guidelines.

Grading Findings:

Pursuant to Section C12-433, all Grading Approvals are subject to specific findings. In the following discussion, the scope of review findings are listed in **bold**, and an explanation of how the project meets the required standard is in plain text below.

A. The amount, design, location, and the nature of any proposed grading is necessary to establish or maintain a use presently permitted by law on the property.

Estimated grading quantities associated with the grading approval are 4,060 c.y. of cut and 4,020 c.y. of fill, with a maximum depth 10'-6". This grading would include removal of 12.25 inches of sand and top soil, 1.75 inches of native soil, and filling 10" rootzone sand and 4" gravel over 93,550 square feet of the existing Stanford Stadium. An additional excavation of native soil down 10.5 feet from grade is proposed for an air separator. The cut and fill are required for installation of the automatic subgrade air supply system. The pre-existing grade elevations will be maintained, and no new grade elevations will be created as a result of the proposed grading. The amount, design, location and the nature of proposed grading is necessary to establish the improvements.

B. The grading will not endanger public and/or private property, endanger public health and safety, will not result in excessive deposition of debris or soil in the watercourse.

The applicant will be required to obtain a Grading Permit through the County's Land Development Engineering, which will ensure that the project drains adequately. No excessive material will be deposited onsite. All excess grading will be hauled to a County-approved off-site facility. Furthermore, no grading is proposed near a creek that may impair any existing spring or watercourse.

C. Grading will minimize impacts to the natural landscape, scenic, biological and aquatic resources, and minimize erosion impacts.

The proposed grading has been designed to minimize impacts to existing landscaping, and will not result in any scenic, biological, or aquatic resource impacts. No tree removal is proposed with this project. Compliance to the conditions of approval (Attachment B) have been identified and are required to minimize impacts to the natural landscape, scenic, biological and aquatic resources, and minimize erosion impacts.

D. For grading associated with a new building or development site, the subject site shall be one that minimizes grading in comparison with other available development sites, taking into consideration other development constraints and regulations applicable to the project.

The proposed grading, with compliance with Conditions of Approval in Attachment B, will be in conformance with all applicable regulations. A building permit is required to install the subgrade air-supply system.

E. Grading and associated improvements will conform with the natural terrain and existing topography of the site as much as possible and should not create a significant visual scar.

The new proposed installation of the subgrade air supply system at the Stanford Stadium, is designed to conform with the existing football field. The resulting grade elevations will be consistent with and the same as previously existed.

F. Grading conforms with any applicable general plan or specific plan policies; and

The proposed grading is in conformance with specific findings and policies identified in the County General Plan. Minimal grading is provided to install the subgrade air supply system. The proposed grading is compatible with the surrounding athletic and sports facilities in the area.

G. Grading substantially conforms with the adopted "Guidelines for Grading and Hillside Development" and other applicable guidelines adopted by the County.

The project site is in the A1 zone on the academic campus of Stanford University. This finding does not apply to the site.

BACKGROUND

On December 12, 2000, the County of Santa Clara approved the 2000 Stanford University Community Plan and General Use Permit (GUP), governing development projects on the Stanford campus. The GUP allows Stanford to construct up to 2,035,000 net square feet of academic and academic support uses, 3,018 new housing units, and 2,300 net new parking spaces on Stanford lands. The proposed project for installation of a subgrade air supply system for turf maintenance is located in the DAPER and Administrative Development District ("District"). No new structure is proposed; thus, no square footage will be deducted from the 2000 GUP academic square footage allocation.

On September 21, 2018 an application for Architecture & Site Approval and Grading Approval was submitted for installation of a subgrade air supply system for turf maintenance at Stanford Stadium. To complete the planning review, Staff requested additional information from the applicant and a one-week extension for the 30-day review. Subsequently the application was deemed complete on October 29, 2018. A public notice was mailed to all property owners within a 300-foot radius on November 21, 2018 and was also published in the Post Records on November 21, 2018.

STAFF REPORT REVIEW

Prepared by: Charu Ahluwalia, Associate Planner 

Reviewed by: Leza Mikhail, Principal Planner & Zoning Administrator 

USE OF A PRIOR CEQA DOCUMENT PROGRAM ENVIRONMENTAL IMPACT REPORT (EIR)

Pursuant to Section 15162 of the CEQA Guidelines, the County of Santa Clara has determined that the project described below is pursuant to or in furtherance of an Environmental Impact Report which has been previously adopted and does not involve new significant impacts beyond those analyzed in the previous Environmental Impact Report.

File Number	APN(s)	Date
11411-18A-18G	142-04-036	11/30/2018
Project Name	Project Type	
Installation of subgrade air supply system for turf maintenance at Stanford Stadium.	Architecture and Site Approval and Grading Approval	
Owner	Applicant	
Stanford University	Mark Bonino, Project Manager	
Project Location		
625 Nelson Road, Stanford		
Project Description		
Installation of an automatic subgrade air supply system for turf maintenance and condition control at the Stanford Stadium, including installation of subgrade air and drain lines and associated replacement of the playing field turf and field irrigation system. Estimated grading quantities associated with the grading approval are 4,060 cubic yards (c.y.) of cut and 4,020 c.y. of fill, maximum depth 10 feet 6 inches.		
Background and Summary of Findings		

Per the California Environmental Quality Act (CEQA) of 1970 (as amended), all development permits processed by the County Planning Office which require discretionary approval are subject to environmental review. A new Negative Declaration or EIR is not required if a previous CEQA document has been prepared and adopted or certified which adequately address all the possible environmental impacts of the proposed project and (a) no substantial changes are proposed in the project which will result in new significant environmental effects, (b) no substantial changes have occurred with respect to the circumstances under which will result in the identification of new significant impacts, or (c) no new information is available which shows that the project will have new significant impacts or mitigation measures and alternatives which were previously found to be infeasible would now in fact be feasible (CEQA Guidelines 15162).

The Planning Office evaluated the project described above and has determined that none of the circumstances exist which would require additional environmental review. As such the environmental impacts of the project have been adequately evaluated in the Environmental Impact Report adopted by the Board of Supervisors on December 15, 2000 for the project entitled "Stanford University Community Plan and General Use Permit" and that no further environmental review is required under the California Environmental Quality Act.

Approved by:
Manira Sandhir, Principal Planner


Signature

12/11/18.
Date

ATTACHMENT B
Conditions of Approval

PRELIMINARY
ARCHITECTURAL & SITE APPROVAL AND GRADING APPROVAL

Date: January 3, 2019

Owner/Applicant: Stanford University

Location: 625 Nelson Road, Stanford (APN: 142-04-036)

File Number: 11411-18A-18G

CEQA: Prior CEQA - 2000 Stanford Community Plan and General Use Permit (GUP) Program Environmental Impact Report (EIR)

Project Description: Architecture & Site Approval and Grading Approval for installation of an automatic subgrade air supply system for turf maintenance and condition control at the Stanford Stadium. The project includes installation of subgrade air and drain lines, and associated replacement of the playing field and field irrigation. Estimated grading quantities associated with the grading approval are 4,060 cubic yards (c.y.) of cut and 4,020 c.y. of fill, with a maximum depth 10'-6."

If you have any question regarding the following preliminary conditions of approval, call the person whose name is listed as the contact for that agency. He or she represents a specialty or office and can provide details about the conditions of approval.

Agency	Name	Phone	E-mail
Planning	Charu Ahluwalia	(408) 299-5740	charu.ahluwalia@pln.sccgov.org
Land Development Engineering	Ed Duazo	(408) 299-5733	ed.duazo@pln.sccgov.org
Fire Marshal	Alex Goff	(408) 299-5763	alex.goff@sccfd.org

STANDARD CONDITIONS OF APPROVAL

Planning

1. Development and maintenance of the project site shall take place in accordance with approved plans, received by the Planning Department on October 24. The project allows installation of an automatic subgrade air supply system for turf maintenance and condition control at the Stanford Stadium, including installation of subgrade air and drain lines, and associated replacement of the playing field and field irrigation.

2. The project shall comply with the Stanford University 2000 General Use Permit Conditions of Approval, and approved Stanford University 2000 GUP Mitigation Monitoring and Reporting Program.
3. Stanford shall be responsible for paying all reasonable costs associated with work by the County Planning Department, or with work conducted under the supervision of the County Planning Office, in conjunction with, or in any way related to the Conditions of Approval identified in this project. This includes but is not limited to costs for staff time, consultant fees, and direct costs associated with report production and distribution.
4. In the event that previously unidentified historic or prehistoric archaeological resources are discovered during construction, the contractor shall cease work in the immediate area and the County Planning Office and Campus Archaeologist shall be contacted. An independent qualified archaeologist retained by the County at the expense of Stanford shall assess the significance of the find and make mitigation recommendations.
5. If archeological resources are discovered as described above, construction monitoring shall be conducted at any time ground-disturbing activities (greater than 12 inches in depth) are taking place in the immediate vicinity of the identified resources. If monitoring does not produce evidence of significant cultural resources within the project area, further mitigation shall be limited to construction monitoring, unless additional testing or other specific mitigation measures are determined by a qualified archaeologist to be necessary to ensure avoidance of damage to significant archaeological resources. A technical report of findings describing the results of all monitoring shall be prepared in accordance with professional standards. The archaeological monitoring program shall be implemented by an individual meeting the Secretary of Interior Professional Qualifications Standards in Archaeology (36 CFR 61); individual field monitors shall be qualified in the recognition of cultural resources and possess sufficient academic and field training as required to conduct the work effectively and without undue delay.
6. In the event that human skeletal remains are encountered, the applicant is required by County Ordinance No. B6-18 to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of section 7050.5 of the Health and Safety Code and the County Coordinator of Indian affairs. No further disturbance of the site may be made except as authorized by the County Coordinator of Indian Affairs in accordance with the provisions of state law and this chapter. If artifacts are found on the site a qualified archaeologist shall be contacted along with the County Planning Office. No further disturbance of the artifacts may be made except as authorized by the County Planning Office.
7. In the event that fossilized shell or bone is uncovered during any earth-disturbing operation, contractors shall stop work in the immediate area of the find and notify the Campus

Archaeologist and the County Building Inspector assigned to the project. The Campus Archaeologist shall visit the site and make recommendations for treatment of the find (including but not limited to consultation with a paleontologist and excavation, if warranted), which would be sent to the County Building Inspection Office and the County Planning Office. If a fossil find is confirmed, it will be recorded with the United States Geological Survey and curated in an appropriate repository.

Fire Marshal's Office

8. The existing Fire Department Access is to be kept clear during the project.
9. The existing fire hydrants and fire department connections are to be kept accessible and in working condition during the project

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO GRADING PERMIT ISSUANCE

Planning

10. Place a construction note on the site plan that states the following: "The Bay Area Air Quality Management District (BAAQMD) has identified a set of feasible PM10 control measures for all construction activities. These control measures, as previously required in the Program EIR, shall be adhered to during all construction activities.
 - A. Water all active construction areas at least twice daily;
 - B. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard;
 - C. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;
 - D. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites;
 - E. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;
 - F. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more);
 - G. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand,);
 - H. Limit traffic speeds on unpaved roads to 15 mph;
 - I. Install fiber rolls, sandbags or other erosion control measures to prevent silt runoff to public roadways;
 - J. Replant vegetation in disturbed areas as quickly as possible;
 - K. Install wheel washers for all existing trucks, or wash off the tires of tracks of all trucks and equipment leaving the site; and

- L. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.”
11. Place a construction note on the site plan that states the following: “All construction contractors shall properly maintain the equipment and where feasible, use “clean fuel” equipment and emissions control technology (e.g., CNG fired engines, catalytic converters, particulate traps, etc.). Measures to reduce diesel emission would be considered feasible when they are capable of being used on equipment without interfering substantially with equipment performance.”
 12. Submit site plan that shows all pedestrian and bicycle corridors along with public transit stops adjacent to the project site and indicate how bicycle, pedestrian, and public transit access and circulation will be maintained during construction. Bicycle and pedestrian access onto the campus and around the site (outside construction areas) shall not be substantially limited by construction activities associated the project. In addition, access to public transit shall not be limited, which could include the relocation or removal of adjacent bus stops.
 13. Final grading permit plans shall include the following construction notes:
 - A. Construction materials delivered from off campus shall not be delivered between the hours of 7:00 AM to 9:00 AM and 4:00 to 6:00 PM on weekdays.
 - B. Trucks exporting/importing dirt and building materials for the project shall use approved truck routes shown in the 2000 GUP, as designated by the cities of Palo Alto and Menlo Park.
 14. Submit a Construction Management and Logistics Plan for approval by Planning and Land Development Engineering, prior to issuance of any grading permits, that clearly identifies the elements listed below:
 - A. Provide the location, anticipated quantities and time frame for construction staging and earthwork stockpiling associated with this project. Said location is required to be approved by Planning and Land Development Engineering.
 - B. Provide off-street construction related parking. Identify off-street parking location(s) on site plan for all construction related vehicles (employee parking and construction equipment) throughout the construction period. If adequate parking cannot be provided on the construction sites, identify on the site plan or vicinity map the satellite parking location(s) that will be used.
 - C. Prohibit impacts to accessing public transit access and movement of public transit vehicles. Identify on site plan all temporary or permanent access limitations, re-routes, lane closures, or limits to public transit movements or place a note on the site plan stating “No temporary or permanent access limitations, re-routes, lane closures, or limits to public transit movement are permitted.”
 - D. Prohibit roadway construction activities from reducing roadway capacity during Stanford major athletic and special events. Stanford shall not limit roadway capacity

- during special events or during major athletic events, which attract a large number of visitors to the campus.
- E. Provide written notification to Stanford Police and Palo Alto Fire Department regarding construction location and construction dates. Include in the notices alternate evacuation and emergency route designations to maintain response times during construction periods, if applicable. Provide one copy of the notices to the County.
 - F. Provide written notification to all contractors and subcontractors regarding appropriate routes and weight limits and speed limits for local roads used to access construction sites. Provide one copy of the notices to the County Planning Office.
 - G. Provide notification to the Cities of Palo Alto and Menlo Park of the construction schedule and include a copy of the Santa Clara County approved Construction and Traffic Management Plan. Provide one copy of the notices to the County Planning Office.
15. Adequate signs shall be posted along the street frontages or in front of the project site, no smaller than 1,296 square inches in size, containing the name, telephone number, and email address of the appropriate Stanford person the public may contact to register a complaint about construction noise. Additionally, Stanford shall create an outreach and information portal to facilitate information and alerts to be delivered to the immediate neighborhoods on construction activities. Stanford shall keep a written record of all such complaints and shall provide copies of these records to the County Planning Office.
16. Preconstruction surveys for nesting raptors and migratory birds shall be conducted by a qualified ornithologist to identify active nests that may be disturbed during project implementation. Between January 1 and April 30, preconstruction surveys shall be conducted no more than 14 days **prior to the initiation of construction activities or tree removal**. Between May 1 and August 31, preconstruction surveys no more than 30 days **prior to the initiation of these activities**. Stanford University shall conduct an additional preconstruction survey within 24 hours of initiation of construction activities, by the Campus Biologist, to verify no new nesting has occurred. If an active nest is found near, or in close proximity to, the construction area where the nest could be disturbed by these activities, the ornithologist or Campus Biologist, shall, in consultation with the California Department of Fish and Game, designate a construction free buffer zone (typically 250 feet) around the nest.
17. Incorporate any applicable water conservation and recycling measures into the project plans, which may include but not be limited to: water efficient landscape, landscape water management, and public outreach.

Land Development Engineering

18. Obtain a Grading Permit from Land Development Engineering (LDE) **prior to beginning any construction activities**. Issuance of the grading permit is required **prior to LDE clearance of the building permit** (building and grading permits can be applied for concurrently). The process for obtaining a Grading Permit and the forms that are required can be found at the following web page:

www.sccplanning.org > I Want to... > Apply for a Permit > Grading Permit

Expect four to six weeks for plan review and plan check comments. Please contact LDE at (299-5734) for additional information and timelines.

19. Final plans shall include a single sheet which contains the County standard notes and certificates as shown on County Standard Cover Sheet. Plans shall be neatly and accurately drawn, at an appropriate scale that will enable ready identification and recognition of submitted information.
20. Final improvement plans shall be prepared by a licensed civil engineer for review and approval by LDE and the scope of work shall be in substantial conformance with the conditionally approved preliminary plans on file with the Planning Office. Include plan, profile, typical sections, contour grading for all street, road, driveway, structures and other improvements as appropriate for construction. The final design shall be in conformance with all currently adopted standards and ordinances. The following standards (Land Development Engineering Standards and Policies Manual, Volume 1, and 2007 Santa Clara County Drainage Manual) are available on-line:
 - www.sccplanning.org > Plans & Ordinances > Land Development Standards and Policies
 - www.sccplanning.org > Plans & Ordinances > Grading and Drainage Ordinance
21. The improvement plans shall include an Erosion and Sediment Control Plan that outlines seasonally appropriate erosion and sediment controls during the construction period). Include the County's Standard Best Management Practice Plan Sheets BMP-1 and BMP-2 with the Plan Set.
22. All new on-site utilities, mains and services shall be placed underground and extended to serve the proposed development. All extensions shall be included in the improvement plans. Off-site work should be coordinated with any other undergrounding to serve other properties in the immediate area.
23. Indicate on the grading plans the land area that will be disturbed. If one acre or more of land area will be disturbed, file a Notice of Intent (NOI) with the State Water Resources Control Board for coverage under the State General Construction Permit. The SWRCGB will issue a Waste Discharge Identification (WDID) number. The WDID number shall be shown on the grading plans. The SWRCVB website is:

www.waterboards.ca.gov > Water Issues > Programs > Stormwater
24. Construct the aforementioned improvements. Construction staking is required and shall be the responsibility of the developer.

Fire Marshal's Office

25. Submit a Construction Site Safety Plan

**CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO OCCUPANCY OR
FINAL INSPECTION**

Planning

26. Following completion of construction, contact Kavitha Kumar at 408-299-5783 to schedule a site visit to verify the approved development. Contact the Planning Department at least two weeks in advance to set up an appointment.

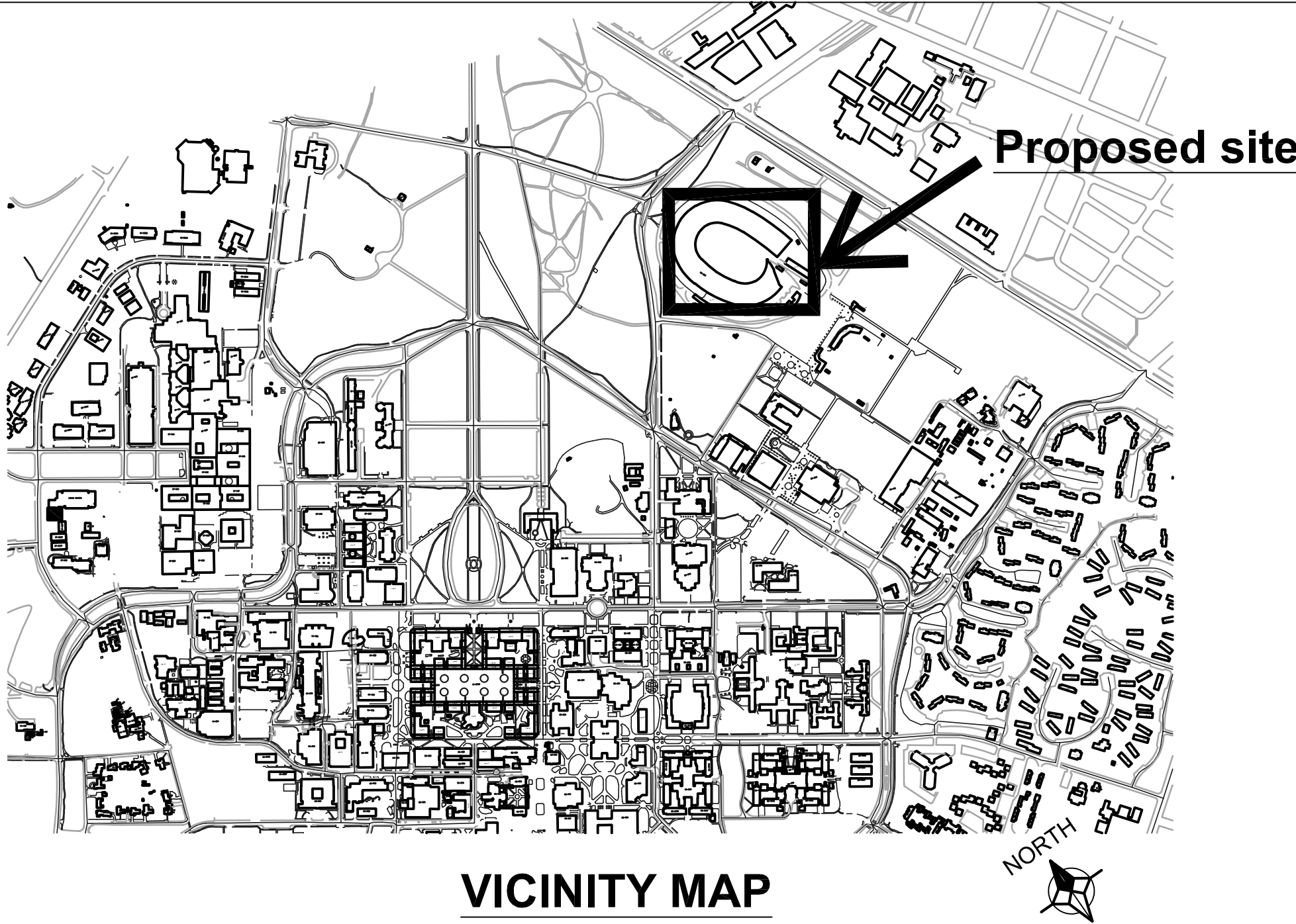
STANFORD UNIVERSITY
STADIUM TURF SUBGRADE AIR SYSTEM

DRAWING STATUS
ASA SUBMITTAL
ASA COMPLIANCE RE-SUBMITTAL
PERMIT APPLICATION
CONSTRUCTION PERMIT
RECORD DRAWINGS

SUBMITTAL DATE: APPROVAL DATE:

PROJECT # 5381

625 NELSON RD. STANFORD, CALIFORNIA



DRAWING INDEX

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SITE DATA INFORMATION

GENERAL

APN:	142-04-036
PARCEL SIZE:	580.15 ACRES
DEVELOPMENT DISTRICT:	DAPER AND ADMINISTRATIVE
BUILDING/QUAD:	09-505
LAND USE DESIGNATION:	ACADEMIC CAMPUS
SITE AREA:	93,550 SF

PERCENTAGE OF SITE AREA:

BUILDING:	0%
PAVEMENT:	0%
LANDSCAPE:	100%

NUMBER OF NET
NEW PARKING SPACES: 0

ESTIMATED CUT AND FILL:

CUT:	4060 CUBIC YARDS
FILL:	4020 CUBIC YARDS

PROJECT DESCRIPTION:

INSTALLATION OF AN AUTOMATIC SUBGRADE AIR SYSTEM FOR TURF MAINTENANCE AND CONDITION CONTROL AT STANFORD STADIUM. THE PROJECT INCLUDES SUBGRADE AIR AND DRAIN LINES AND ASSOCIATED REPLACEMENT OF THE PLAYING FIELD AND FIELD IRRIGATION.

PROJECT MANAGER:
Mark Bonino
3160 Porter Dr.
Palo Alto, CA 94304
mbonino@stanford.edu

GUP EXHIBIT

NO DEMOLISHED OR NEW BUILDINGS

NET GUP ALLOCATION 0 SF

REVISION

DEPARTMENT OF PROJECT MANAGEMENT
360 PORTER DRIVE
PALO ALTO, CA 94304
TELEPHONE (650) 723-0022 FAX (650) 723-7444

TITLE SHEET

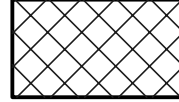
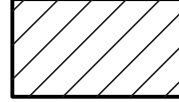

STANFORD UNIVERSITY
STADIUM TURF
SUBGRADE AIR SYSTEM

DATE: 10/22/18

SCALE: N/A

PL0.0

DEMOLITION LEGEND

-  DEMOLISH AND REMOVE AC PAVING AND ANY ASSOCIATED BASEROCK. STABILIZE THE EXISTING SUBGRADE. DEMOLISHED MATERIAL MAY BE USED AS BASEROCK IF APPROVED BY GEOTECHNICAL ENGINEER.
-  DEMOLISH AND REMOVE CONCRETE INCLUDING ANY ASSOCIATED BASEROCK AND REBAR. STABILIZE THE EXISTING SUBGRADE. DEMOLISHED MATERIAL MAY BE USED AS BASEROCK IF APPROVED BY THE GEOTECHNICAL ENGINEER.
-  CLEAR AND GRUB EXISTING LANDSCAPE AREA SO NO ORGANICS ARE STILL PRESENT.

 APPROXIMATE LIMIT OF WORK LINE

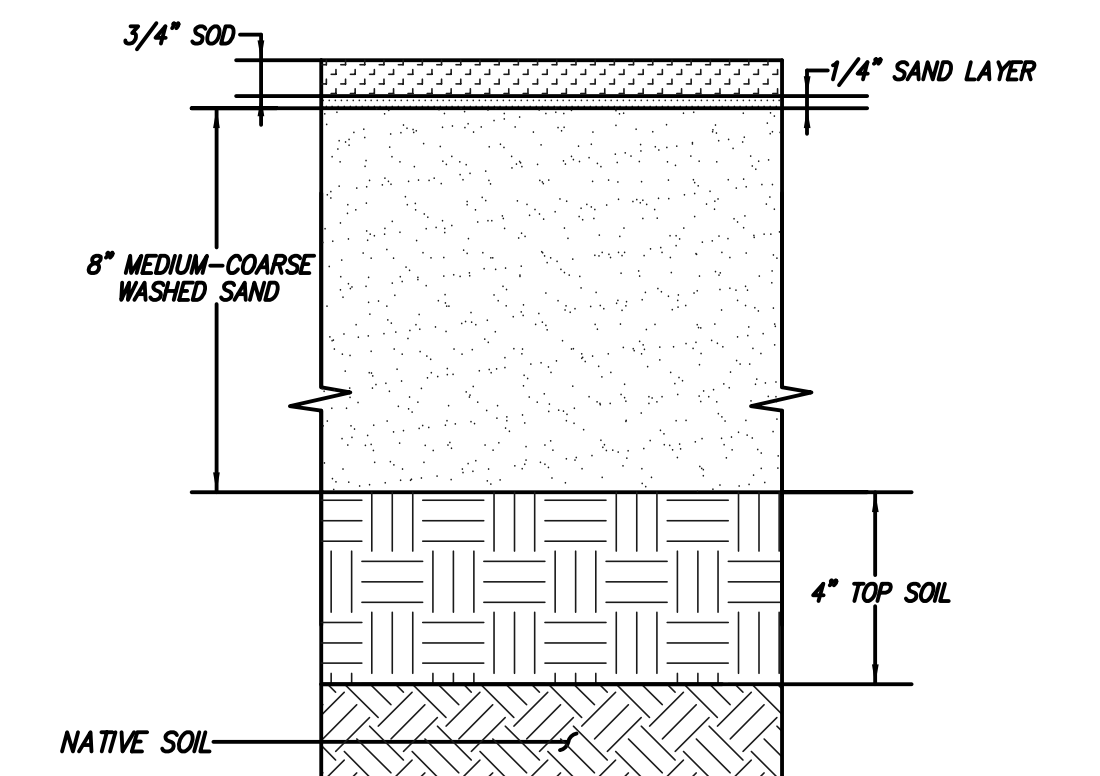
 SAWCUT SAWCUT LINE, CONTRACTOR SHALL SAWCUT WITH A NEAT, CLEAN EDGE. SAWCUT CONCRETE AT NEAREST JOINT TO SAWCUT LINE SHOWN ON PLAN.

 REMOVE EXISTING UTILITY, CUT AND CAP AT LOCATION SHOWN PER UTILITY OWNER'S REQUIREMENTS.

 CAP EXISTING UTILITY WHERE SHOWN PER UTILITY OWNERS SPECIFICATIONS AND REQUIREMENTS. IF PRESSURIZED UTILITY CONTRACTOR SHALL HAVE COMPETENT PROFESSIONAL DESIGN PIPE RESTRAINTS.

DEMOLITION NOTES

- CONTRACTOR SHALL INSTALL TREE PROTECTION FOR EXISTING TREES TO REMAIN. SEE LANDSCAPE DRAWINGS AND ARBORIST REPORT FOR TREE PROTECTION REQUIREMENTS.
- CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR ALL TRENCH BACKFILL RECOMMENDATIONS FOR ALL EXISTING UTILITIES THAT ARE TO BE REMOVED.
- CONTRACTOR TO DEMOLISH AND REMOVE ALL IRRIGATION IN LANDSCAPE AREAS WITHIN THE LIMIT OF WORK. IF ANY IRRIGATION LINES OR MAINS ARE IN THE LIMIT OF WORK OR ARE DAMAGED THAT SERVE LANDSCAPE TO REMAIN, CONTRACTOR TO RECONNECT OR RELOCATE AT NO ADDITIONAL COST TO OWNER.
- ALL UNDERGROUND UTILITIES, LANDSCAPE FEATURES, AND HARDSCAPE FEATURES NOT SHOWN TO BE REMOVED THAT ARE IMPACTED OR DAMAGED BY THE CONTRACTOR OR THEIR SUB-CONTRACTORS SHALL BE REMOVED AND REPLACED IN KIND. ITEMS MAY INCLUDE, BUT NOT LIMITED TO, UNDERGROUND UTILITY AND IRRIGATION LINES, CURB, GUTTER, SIDEWALK, PAVEMENT, FENCING, STRIPING AND OTHER PAVEMENT MARKINGS, PLANTING, LANDSCAPING, AND BOLLARDS.
- PROTECT ALL EXISTING UTILITIES IN PLACE UNLESS OTHERWISE NOTED. REPLACE ANY DAMAGED UTILITY TO REMAIN TO KEEP OPERABLE DURING CONSTRUCTION.
- THIS DEMOLITION PLAN IS NOT A COMPLETE INVENTORY OF UTILITIES OR STRUCTURES. CONTRACTOR SHALL CONTACT ENGINEER IF ANY UNKNOWN OR UNEXPECTED UTILITIES OR OTHER STRUCTURES ARE FOUND. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO PREPARE THE SITE FOR DEVELOPMENT.
- ALL UTILITY DEMOLITION TO BE DISCONNECTED AND CAPPED WHERE SHOWN ON THE PLAN PER UTILITY OWNERS SPECIFICATIONS AND STANDARDS.
- ALL UTILITY SHUT DOWNS ARE TO BE AVOIDED. IF SHUT DOWNS ARE NECESSARY, CONTRACTOR TO COORDINATE SHUT DOWN WITH UTILITY OWNER WITH 48 HOUR MINIMUM NOTICE.
- CONTRACTOR TO COORDINATE WITH PG&E WHEN WORKING AROUND UTILITY LINES AND HAVE APPROPRIATE PG&E PERSONNEL ON SITE AS REQUIRED.
- CONTRACTOR TO POTHOLE AND VERIFY ALL EX. UTILITIES PRIOR TO DEMOLITION.
- ALL EXISTING STORM DRAIN, SANITARY SEWER, AND WATER MAINS THAT SERVE EXISTING BUILDINGS MUST REMAIN OPERABLE DURING CONSTRUCTION. CONTRACTOR TO SET UP TEMPORARY SERVICE OR PUMP AS NECESSARY TO ENSURE UNINTERRUPTED SERVICE.



EXISTING SUBGRADE PROFILE

NO PART OF THIS DOCUMENT MAY BE REPRODUCED IN ANY FORM INCLUDING PHOTOCOPY, RECORDING OR ANY INFORMATION RETRIEVABLE AND STORAGE SYSTEM, WITHOUT PERMISSION IN WRITING FROM SANDIS.



CIVIL ENGINEERS
SURVEYORS
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SILICON VALLEY TRI-VALLEY CENTRAL VALLEY SACRAMENTO EAST BAY/SF

DATE: 10/22/18
SCALE: 1"=20'
DRAWN BY: CV
APPROVED BY: EE
DRAWING NO.: 218226

No.	REVISION/ISSUE	DATE	BY

DEMOLITION PLAN

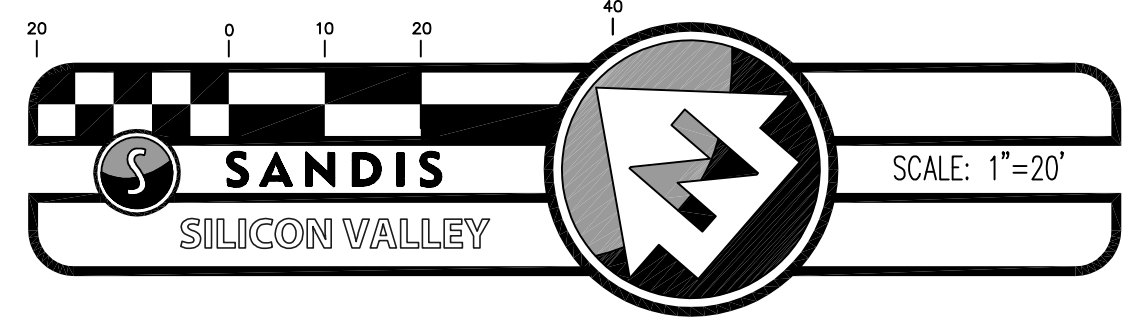
625 NELSON RD
STADIUM TURF SUBGRADE AIR SYSTEM
STANFORD
CALIFORNIA

SHEET

C-3.0

4 OF 15 SHEETS

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GRADING PLAN LEGEND

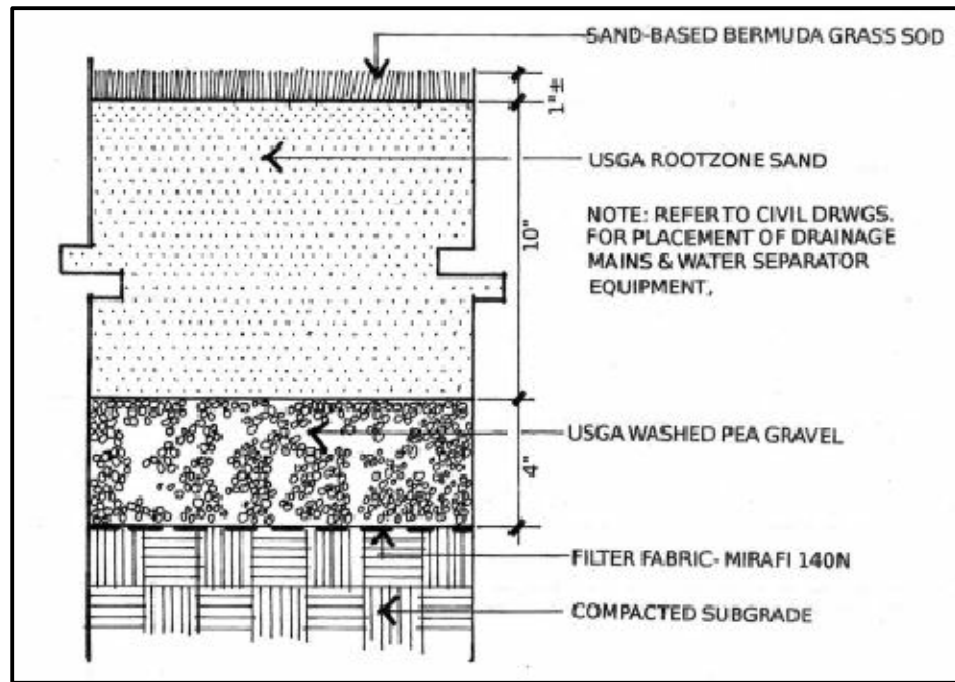
- TURF FIELD REPLACEMENT, SEE LANDSCAPE PLANS FOR TYPICAL SECTION
- LIMIT OF WORK LINE
- GRADE BREAK / RIDGELINE

GRADING NOTES

1. PROVIDE POSITIVE SURFACE DRAINAGE AWAY FROM ALL STRUCTURES BY SLOPING ALL HARDSCAPE SURFACES AT 2% AND LANDSCAPE SURFACES AT 5% AWAY FROM STRUCTURES UNLESS OTHERWISE NOTED ON PLANS.
2. STRUCTURE WALLS: PER CBC 2304.11.2.2 (WOOD SUPPORTED BY FOUNDATION) PROVIDE 8" MINIMUM CLEAR TO EXTERIOR GRADE.
3. ALL FILL, IMPORT SOILS AND GRADING SHALL BE IN CONFORMANCE WITH THE GEOTECHNICAL REPORT PERFORMED BY SILICON VALLEY SOIL ENGINEERING, DATED MAY 12, 2015, PROJECT NUMBER 213192
4. COORDINATE THE PLACEMENT OF ALL SLEEVES FOR LANDSCAPE IRRIGATION (WATER AND CONTROL WIRING) AND SITE LIGHTING PRIOR TO THE PLACEMENT OF ANY ASPHALT, BASEROCK OR CONCRETE SURFACING. SEE LANDSCAPING AND SITE ELECTRICAL DRAWINGS.
5. ROUGH GRADING TO BE WITHIN 0.1' AND FINISH GRADES ARE TO BE WITHIN 0.05', HOWEVER CONTRACTOR SHALL NOT CONSTRUCT ANY IMPROVEMENTS THAT WILL CAUSE WATER TO POND OR NOT MEET REQUIREMENTS IN GRADING NOTE #1 OR THE ADA REQUIREMENTS BELOW. DO NOT ADJUST GRADES ON THIS PLAN WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER/ARCHITECT.
6. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO CONFORM TO THE LINES, GRADES, SECTIONS, AND DIMENSIONS AS SET FORTH ON THESE PLANS. ALL GRADED AREAS SHALL CONFORM TO THE VERTICAL ELEVATIONS SHOWN WITH A TOLERANCE OF ONE-TENTH OF A FOOT. WHERE GRADED AREAS DO NOT CONFORM TO THESE TOLERANCES, THE CONTRACTORS SHALL BE REQUIRED TO DO CORRECTIVE GRADING, AT NO EXTRA COST TO THE CLIENT.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO THE START OF CONSTRUCTION AS TO THE ACCURACY BETWEEN THE WORK SET FORTH ON THESE PLANS AND THE WORK IN THE FIELD. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND CIVIL ENGINEER IN WRITING PRIOR TO START OF CONSTRUCTION WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR AFFECT THE EARTHWORK QUANTITIES.
8. ALL GRADING SHALL CONFORM TO APPROVED SPECIFICATIONS PRESENTED HEREON OR ATTACHED HERETO. ALL GRADING WORK SHALL BE OBSERVED AND APPROVED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS BEFORE BEGINNING ANY GRADING. UNOBSERVED AND UNAPPROVED GRADING WORK SHALL BE REMOVED AND REDONE AT THE CONTRACTORS EXPENSE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY EXISTING IMPROVEMENTS OF UNDERGROUND FACILITIES DAMAGED DURING THE CONSTRUCTION PERIOD.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL ENCROACHMENT, EXCAVATION, CONCRETE, ELECTRICAL, PLUMBING, ETC. PERMITS NECESSARY PRIOR TO BEGINNING CONSTRUCTION FOR ANY WORK.
11. THE RISE/ RUN/ STEP COUNT IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY ELEVATIONS AND BUILDING CODE COMPLIANCE PRIOR TO ANY WORK.
12. AREAS LACKING TOPOGRAPHIC INFORMATION (ELEVATIONS) HAVE BEEN INTERPOLATED USING STANDARD ENGINEERING METHODS. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS AT CONFORMS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND REPORT BACK ANY DISCREPANCIES TO THE CIVIL ENGINEER.
13. ADJUST ANY MANHOLE OR UTILITY STRUCTURES TO PROPOSED GRADE PRIOR TO INSTALLING FINAL LIFT OF AC OR POURING CONCRETE.

ADA NOTES

1. ALL HARDSCAPE ALONG THE ADA PATH OF TRAVEL SHALL BE IN CONFORMANCE WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE.
2. SLOPED WALKS ALONG THE DESIGNATED ADA PATH OF TRAVEL SHALL NOT EXCEED A SLOPE OF 1:20 (5%) WITHOUT HANDRAILS. THE MAXIMUM SLOPE WITH HANDRAILS OR FOR CURB RAMPS IS 1:12 (8.33%). LEVEL LANDINGS ARE REQUIRED AT THE TOP AND BOTTOM OF ALL SLOPED WALKWAYS AND RAMPS.
3. WALKWAYS ON ANY PATH OF TRAVEL SHALL HAVE A MINIMUM WIDTH OF 48". WALKWAYS AND ADA PARKING STALLS OR LOADING ZONES SHALL HAVE A 2% MAXIMUM CROSS SLOPE.
4. A LEVEL LANDING (2% MAX SLOPE) SHALL BE PROVIDED AT ALL ACCESSIBLE ENTRANCES TO BUILDINGS. THE LANDINGS SHALL HAVE A MINIMUM WIDTH OF 60" AND A MINIMUM DEPTH OF 60" WHEN THE DOOR OPENS INTO THE BUILDING, AND 42" PLUS THE WIDTH OF THE DOOR WHEN THE DOOR OPEN ONTO THE LANDING.
5. RAMPS GREATER THAN 1:20 SLOPE AND EXCEEDING 30" IN VERTICAL ELEVATION CHANGE SHALL HAVE INTERMEDIATE LEVEL LANDINGS.



TYPICAL LANDSCAPE SECTION AT FIELD



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SILICON VALLEY TRI-VALLEY CENTRAL VALLEY SACRAMENTO EAST BAY/ SF

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GRADING AND DRAINAGE PLAN

625 NELSON RD
STADIUM TURF SUBGRADE AIR SYSTEM
STANFORD
CALIFORNIA

SHEET

C-4.0
5 OF 15 SHEETS

LEGEND

- | | |
|----------------|-----------------------|
| _____ DW _____ | DOMESTIC WATER LINE |
| _____ SD _____ | STORM DRAIN LINE |
| _____ E _____ | OXYGEN SENSOR CONDUIT |
| _____ _____ | AIR DUCT LINE |

STORM DRAIN NOTES

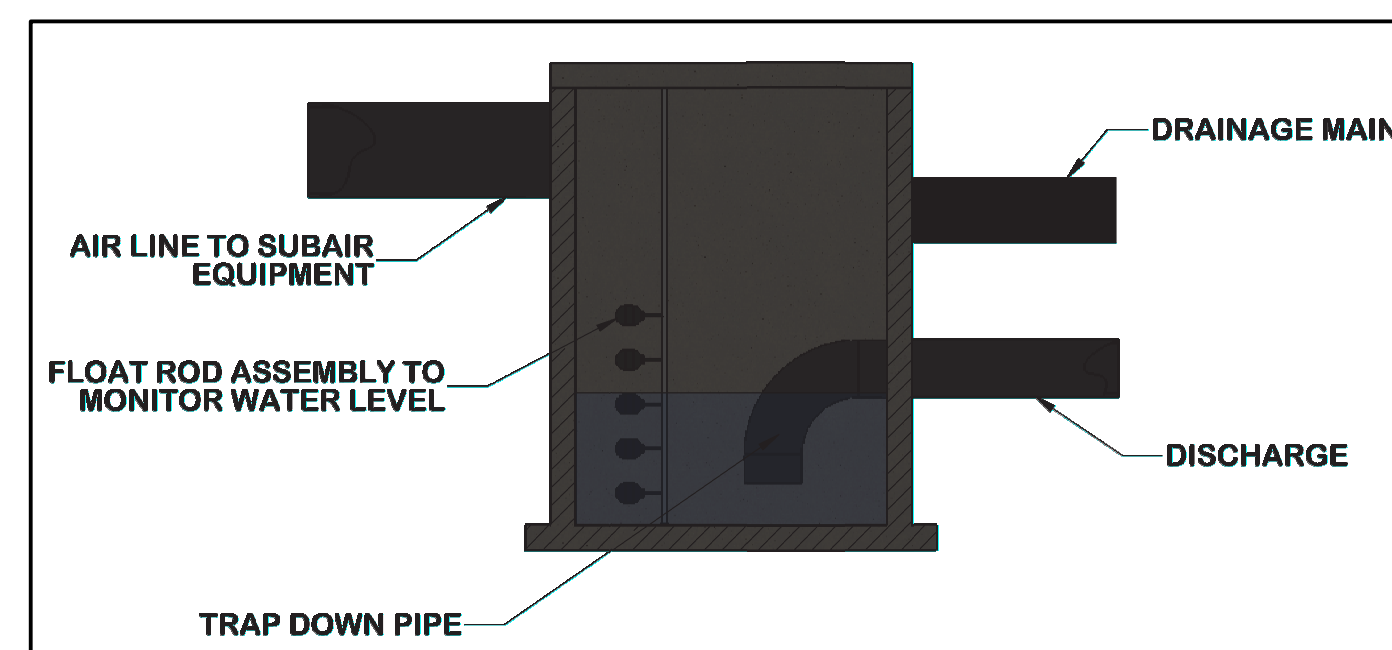
1. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH WITH A MINIMUM OF TWO (2) FEET OF COVER IN NON-TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 GREN PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH BELLS AND SPIGOT CONNECTIONS. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS, 45° ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
2. PRIVATE STORM DRAIN LINE 6-INCH THROUGH 12-INCH WITH LESS THAN THREE (3) FEET OF COVER IN VEHICULAR TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) C900, RATED FOR 150 PSI CLASS PIPE. PROVIDE AND INSTALL "STORM DRAIN" MARKER TAPE FOR THE ENTIRE LENGTH OF PIPE TRENCH. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, OBTUSE ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
3. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS.
4. ALL TRENCHES SHALL BE BACK FILLED PER THE SPECIFICATIONS WITH APPROPRIATE TESTS BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.
5. FOR GRAVITY FLOW SYSTEMS CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS THAT ARE TO BE CONNECTED TO OR CROSSED PRIOR TO THE TRENCHING OR INSTALLATION OF ANY GRAVITY FLOW SYSTEM.
6. DRAINS SHOWN ON CIVIL PLANS ARE NOT INTENDED TO BE THE FINAL NUMBER AND LOCATION OF ALL DRAINS. PLACEMENT AND NUMBER OF LANDSCAPING DRAINS ARE HIGHLY DEPENDENT ON GROUND COVER TYPE AND PLANT MATERIAL. CONTRACTOR SHALL ADD ADDITIONAL AREA DRAINS AS NEEDED AND AS DIRECTED BY THE LANDSCAPE ARCHITECT.
7. INSTALL SEPARATE SUB-DRAIN SYSTEM BEHIND RETAINING WALLS PER GEOTECHNICAL REPORT AND CONNECT TO STORM DRAIN SYSTEM AS SHOWN ON PLANS.
8. ALL DOWN SPOUTS SHALL DISCHARGE DIRECTLY ON TO ADJACENT PAVEMENT SURFACES OR SPLASH BLOCKS UNLESS OTHERWISE NOTED ON PLANS. SEE ARCHITECTURE PLANS FOR EXACT LOCATION OF THE DOWN SPOUTS.

WATER SYSTEM NOTES

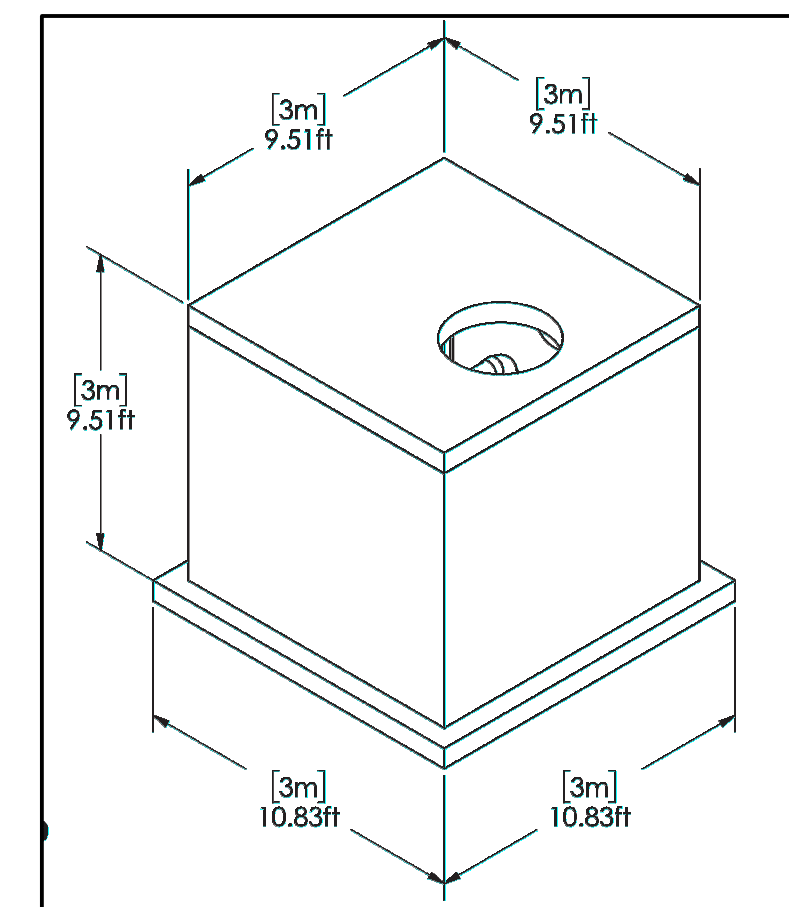
1. MAINTAIN WATER MAIN LINES 10' AWAY FROM SANITARY SEWER MAIN LINES. LATERALS SHALL BE SEPARATED PER PLAN DIMENSIONS.
2. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90 DEGREE ANGLE AND WATER LINES SHALL BE MINIMUM OF 12" ABOVE TOP OF SANITARY SEWER LINES.
3. ALL WATER SERVICE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE WATER DISTRICT STANDARDS.
4. ALL WATER LINES SHALL BE INSTALLED WITH 36" MINIMUM COVER.
5. THRUST RESTRAINTS SHALL BE DESIGNED AND INSTALLED AT ALL TEES, CROSSES, BENDS (HORIZONTAL AND VERTICAL), AT SIZE CHANGES AND AT FIRE HYDRANTS.

SUB-AIR SYSTEM NOTES

1. SUB-AIR SYSTEM IS DESIGNED TO PROVIDE AERATION, MOISTURE CONTROL, OR AIR TEMPERATURE CONTROL THROUGH THE FIELD SUBGRADE BY USE OF FORCED AIR FROM AN AIR HANDLING UNIT WITHIN THE STADIUM
2. THE 24 INCH MAIN AND 8 INCH LATERALS FUNCTION AS AN AIR CONDUIT UNDERNEATH THE FIELD AS WELL AS A MOISTURE COLLECTION CONDUIT FOR WATER REMOVAL.
3. THE AIR CONDUIT OPERATES IN EITHER HEATED OR UNHEATED MODE, PRESSURIZED OR VACUUM MODE THROUGH CONTROLS AT THE AIR HANDLING UNIT.
4. PRESSURIZATION MODE FORCES AIR THROUGH THE SUBGRADE TO PROVIDE AERATION AS CONTROLLED BY OXYGEN SENSORS WITHIN TURF. PRESSURIZATION CAN ALSO PROVIDE HEAT AND TEMPERATURE CONTROL AT THE FIELD LEVEL.
5. VACUUM MODE DRAWS WATER FROM THE SUBGRADE FOR MOISTURE CONTROL. IN VACUUM MODE, RESIDUAL NON-CAPILLARY WATER IS PULLED THROUGH THE SOIL PORE AND THROUGH THE AIR CONDUIT TO AN AIR WATER SEPARATOR. AN OUTFALL IN THE WATER SEPARATOR DISCHARGES WATER TO THE PERIMETER DRAIN EXISTING STADIUM DRAINAGE OUTFALL
6. THE AIR-WATER SEPARATOR SHALL REQUIRE A WATER CONNECTION TO MAINTAIN A MINIMUM WATER LEVEL IN THE SEPARATOR DURING HEAT OPERATIONS. THE MINIMUM WATER LEVEL IS REQUIRED TO ENSURE THE TRAP SEALS THE OUTFALL DURING OPERATION. WATER LEVEL WILL BE CONTROLLED WITH FLOATS AND A SOLENOID VALVE.



SEPARATOR WITH TRAP SYSTEM



TYPICAL SEPARATOR DIMENSIONS