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NOT APPLICABLE TO THIS PROJECT

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NOT APPLICABLE TO THIS PROJECT

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NOT APPLICABLE TO THIS PROJECT

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NOT APPLICABLE TO THIS PROJECT

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NOT APPLICABLE TO THIS PROJECT

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**San Mateo County Community College District**

College of San Mateo

North Gateway - Load Center and Site Wall

DSA Application 01-110308

**Section 00 91 03**

**ADDENDUM NO. 3**

**SUMMARY**

This document includes requirements that clarify or supersede portions of the Request for Proposal. This Addendum is a Contract Document.

General

The following changes, additions and deletions shall be made to the following document(s); all other conditions shall remain the same.

**I. SPECIFICATIONS**

Item	Reference	Description
1.	Document 00 31 19 –	Document 00 31 19 – Reports, Surveys, and Existing Conditions: <b>Additional Reference Documents have been posted</b> <b>ADD Article 1.4 M:</b> M. Document Name: CSM Building #36, The Science Building: Selected Architectural and Structural Drawings Prepared by: LPA Date Prepared: (DSA Approval) 01/18/2005
2.	Section 31 1300	Section 31 1300 – Tree Protection and Trimming: REPLACE SECTION in its entirety

**II. DRAWINGS**

Item	Reference	Description
3.	G0.3	Revise Keynote T1 to read as follows: Remove all designated trees in the indicated area as listed in Section 31 1300 - Tree Protection and Trimming – TREE REMOVAL AND PRUNING SCHEDULE. Trees are tagged on site. <b>NOTE: Additional trees have been tagged on October 11, 2010</b>
4.	G0.3	PHASE 1 Legend: and 1/G0.03 Site Diagram: Disregard “X” designations for trees to be removed.  Refer to Section 31 1300 - Tree Protection and Trimming – for <b>revised</b> list of trees to be removed or pruned.  Individual trees and groups of trees are tagged on site <b>NOTE: Additional trees have been tagged on October 11, 2010</b>

**III. CLARIFICATIONS**

**San Mateo County Community College District**

College of San Mateo

North Gateway - Load Center and Site Wall

DSA Application 01-110308

Item		
A.	Contractors should review Reference Drawings available from the District's website	<u>Additional Reference Drawings have been provided from the Building 36 construction documents:</u> A2.01 First Floor Plan A3.12 Building Sections A4.08 Enlarged Plans A8.06 Window and Miscellaneous Details S3.04 Concrete Details

**IV. ATTACHMENTS**

Item	Section Number	Reference
1.	Section 31 1300 – Tree Protection and Trimming	Section replaced in its entirety

END OF ADDENDUM 3

- SECTION 31 1300 -

## TREE PROTECTION & TRIMMING

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### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the protection and trimming, or removal of existing trees and shrubs that are within limits of the work, interfere with, or are affected by, execution of the Work, whether temporary or permanent construction. Specific tree pruning and removal recommendations are included in this Section as a Tree Pruning and Removal Schedule.

#### 1.3 RELATED SECTIONS

- A. Section 31 0000 "Earthwork and Grading" for building and utility trench excavation, backfilling, compacting and grading requirements, and soil materials.
- B. Section 31 1000 "Site Preparation" for removal limits of trees, shrubs, and other plantings affected by new construction.
- C. Section 32 9119 "Landscaping Grading" for work near, or within the "Tree Protection Zone" under the direct supervision of a certified Arborist.
- D. Section 32 9300 "Landscaping" for tree and shrub planting, tree support systems, and soil materials.

#### 1.4 DEFINITIONS

- A. Tree Protection Zone: Area surrounding individual trees or groups of trees to remain during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

## 1.5 SUBMITTALS

- A. Product Data: For each type of product indicated.
  - a. Tree Pruning and Removal Schedule: Written schedule from an arborist detailing scope and extent of removing trees, or pruning of trees to remain, that interfere with or may be affected by construction. Arborist must meet the qualifications listed in the Quality Assurance article of this section.
- B. Qualification Data: For both tree service firm and arborist.
- C. Certification: From arborist, certifying that trees indicated to remain have been protected prior to, and during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- D. Maintenance Recommendations: From arborist, for care and protection of trees affected by construction during and after completing the Work.

## 1.6 QUALITY ASSURANCE

- A. Arborist Qualifications: An arborist certified by International Society of Arboriculture (ISA), and licensed in the jurisdiction where Project is located. License shall be California C27 and D49 licenses.
- B. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign a qualified, experienced, ISA certified arborist to Project site during execution of tree protection and trimming.
- C. **Tree Pruning Standard: Comply with ANSI A300 (Part 1), "Tree, Shrub, and Other Woody Plant Maintenance--Standard Practices (Pruning)", as well as Class I, per ISA standards.**
- D. Any pruning, cutting trimming or trimming of any trees shall be performed by an International Society of Arboriculture (ISA) Certified Arborist, or certified tree worker in accordance with the National Arborist Association and/or ISA pruning standards.
- E. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Meetings."
  - 1. Prior to the beginning of clearing, grubbing, trenching, tree pruning or removal, or excavation on site, the Contractor, grading contractor, project arborist, landscape contractor, tree removal firm, Landscape Architect, and the Architect shall meet in a pre-construction conference to discuss grading near existing trees, tree protection and trimming procedures, and responsibilities.

## PART 2 - PRODUCTS

### TREE PROTECTION & TRIMMING

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## 2.1 MATERIALS

- A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 3/4-inch (19 mm) in diameter; and free of subsoil and weeds, roots, toxic and other non-soil materials. Refer to Section 32 9300 "Landscaping" for more information.
- B. Obtain topsoil only from well-drained sites where topsoil is 4 inches (100 mm) deep or more; do not obtain from bogs or marshes.
- C. Filter Fabric: Manufacturer's standard, nonwoven, pervious, geotextile fabric of polypropylene, nylon, or polyester fibers similar to Mirafi N-Series "140N", or equal.
- D. Chain-Link Fence: Metallic-coated steel chain-link fence fabric of 0.120-inch- (3-mm-) diameter wire; a minimum of 72 inches (1800 mm) high; with 1.9-inch- (48-mm-) diameter line posts; 2-3/8-inch- (60-mm-) diameter terminal and corner posts; 1-5/8-inch- (41-mm-) diameter top rail; and 0.177-inch- (4.5-mm-) diameter bottom tension wire; with tie wires, hog ring ties, and other accessories for a complete fence system.
- E. Organic Mulch: Wood and bark, free of deleterious materials as specified in Section 32 9300 "Landscaping".

## PART 3 - EXECUTION

### 3.1 GENERAL

- A. The contractor shall protect all existing trees and shrubs scheduled to remain against injury or damage, including cutting, breaking or skinning of roots, trunks or branches. No blasting of rock shall occur in any area adjacent to existing trees without prior written consent of the Architect.
- B. No trees or shrubs are to be removed, trimmed, or cut without prior approval of the Architect.
- C. Prior to the beginning of the clearing and grading phase of the project, a continuous temporary, six foot high chain link fence shall be erected around the dripline of trees scheduled to remain, unless otherwise specified by the Landscape Architect. The temporary fence shall be erected prior to commencing any other work on the project. No construction activity shall be allowed within the limits of this fencing unless directed by the Landscape architect. The temporary fence shall remain in place during the entire construction period and shall not be removed until directed by the Landscape Architect.
- D. Grading beneath trees to be saved shall be given special attention. Every effort shall be made to avoid creating conditions adverse to the tree's health. The natural ground within the drip lines of trees to be preserved shall remain as undisturbed as possible. Grading within the protected root zone of trees to be preserved will not be permitted unless specifically approved by the Architect prior to beginning of proposed grading.
- E. If during construction or grading (grading, excavation, etc.) tree roots of 2-inches in diameter or greater are encountered, work shall stop immediately and the Arborist, approved in advance by the Architect, shall be contracted for a root inspection. Root cutting of any roots over 2-inches in

### TREE PROTECTION & TRIMMING

diameter must have prior approval from the Landscape Architect. All cuts are to be made with appropriate equipment, as to not affect the plant material.

1. Major roots 1-inch or greater in diameter encountered within the "Tree Protection Zone" in the course of hand excavation or hand trenching shall not be cut and shall be kept moist and covered with earth as soon as possible.
  2. Roots one half inch (1/2") to one inch (1") in diameter which are severed shall be trimmed cleanly and covered with earth as soon as possible.
- F. All trenching beneath the "Tree Protection Zone" of trees scheduled to remain shall be done with hand tools only. No mechanical trenching or excavation is allowed within the drip line of existing trees at any time, or where roots are encountered outside the "Tree Protection Zone".
- G. Branches interfering with construction but not designated for removal may be removed only as directed by the Architect.
- H. Procure a permit where required prior to pruning or removing any trees, as required by applicable local codes or ordinances.
- I. Parking of vehicles, equipment or storage of materials under the drip line of existing trees shall not occur at any time.
- J. **The areas outside the perimeter Loop Road are infested with poison oak and ground yellow jacket nests. It is the Contractor's responsibility to provide workers with adequate warnings and protection for this situation. Contractor shall hold harmless the College and all other parties for any poison oak and yellow jacket related issues.**

**3.2 TREE REMOVAL AND PRUNING SCHEDULE**

- ~~A. Trees to be removed in the future parking areas within the "Loop Road" are identified on the Civil Demolition Plans.~~
- B. Trees to be removed or pruned outside the "Loop Road" are tagged and numbered in the field to correspond to the tree numbers in the table below. **Trees marked with an orange dot are trees to be removed.** The Contractor is required to field verify the location, quantity and access to these trees, and report any discrepancies.

<b>Tag Number/Species</b>	<b>Work Description</b>	<b>CSM North Gateway Load Center Quantity</b>
97 Pines	Prune 14 Pines Remove 2 Pines	16
98 Pines	Prune 10 Pines	10
99 Pines/Oaks	Prune 6 Pines Prune 4 Oaks Remove 3 Pines	13
100 Toyon, Bay, Pine, Oak, Euc.	Prune 1 Toyon Prune 1 Bay Remove 6 Pines Prune 7 Oaks	27

**TREE PROTECTION & TRIMMING**

<b>Tag Number/Species</b>	<b>Work Description</b>	<b>CSM North Gateway Load Center Quantity</b>
	<i>Remove 12 Eucalyptus</i>	
<i>101 Eucalyptus</i>	<i>Remove 61 Eucalyptus</i>	<i>61</i>
<i>102 Pines, Euc., Oak</i>	<i>Remove 4 Pines Remove 4 Eucalyptus Prune 13 Oaks</i>	<i>21</i>
<i>103 Pines, Euc., Oak</i>	<i>Remove 25 Pines Remove 1 Eucalyptus Prune 52 Oaks</i>	<i>78</i>
<i>104 Pine, Redwood</i>	<i>Remove 35 Pines Remove 8 Redwoods</i>	<i>43</i>
<i>105 Redwood, Pine, Oak</i>	<i>Remove 19 Redwoods Remove 13 Pines Prune 8 Redwoods Prune 46 Oaks</i>	<i>86</i>
<i>106 Eucalyptus, Pines</i>	<i>Remove 29 Eucalyptus Remove 12 Pines</i>	<i>41</i>
<i>107 Euc., Pine, Oak</i>	<i>Prune 13 Eucalyptus Grind 2 stumps 4" below grade Remove 15 Pines Prune 12 Pines Remove 6 Eucalyptus Prune 1 Oak</i>	<i>49</i>
<i>108 through 178 Euc., Pine</i>	<i>Prune 20 Eucalyptus Remove 1 Eucalyptus Prune 42 Pines Remove 13 Pines</i>	<i>76</i>

### 3.3 PREPARATION

- A. Temporary Fencing: Install temporary fencing around "Tree Protection Zones" (as defined in Part 2 of this Section) to protect remaining trees and vegetation from construction damage. The temporary fencing shall be erected prior to commencing any other work on the project. No construction activity shall be allowed within the limits of this fencing unless directed by the Architect. The temporary fencing shall remain in place during the entire construction period and shall not be removed until directed by the Architect
- B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.
- C. Mulch areas inside tree protection zones and within drip line of trees to remain and other areas indicated.
  1. Apply 6-inch (150-mm) average thickness of organic mulch. Do not place mulch within 6 inches (150 mm) of tree trunks.

### TREE PROTECTION & TRIMMING

- D. Do not store construction materials, debris, or excavated material inside tree protection zones. Do not permit vehicles or foot traffic within tree protection zones; prevent soil compaction over root systems.
- E. Maintain tree protection zones free of weeds and trash.
- F. Do not add or remove soil within the "Tree Protection Zone".
- G. Do not allow fires within tree protection zones.

### **3.4 TREE REMOVAL**

- A. Remove trees designated for removal prior to the construction of new improvements in the vicinity.
- B. Refer to Tree Removal and Pruning Schedule in this Section for specific tree removal and pruning information.
- C. Perform tree removal work in a safe and proper manner, adhering to CAL-OSHA and ANSI Standards.
- D. All trees to be demolished shall be removed in such a way as to not damage branches, trunks, or root systems of adjacent trees, including small existing Oak trees and Oak bushes.
- ~~E. When demolishing trees indicated to be removed within the perimeter of the existing Loop Road, remove tree, stump to a depth of two (2) feet below finish grade, and all roots located in the top twelve (12) inches of soil. Remove wood chips created from grinding process down to remaining stump then refill void and re-compact to 80% relative compaction. Use import soil as indicated in specifications for this purpose. Import soil and compaction in future paved areas shall comply with civil paving plans and specifications.~~
- F. When demolishing trees located outside the perimeter of the existing Loop Road, removal shall be done in one of the following ways:
  - 1. For trees located in accessible areas, remove tree and grind stump to four (4) inches below finish grade. Backfill the void and re-compact to 80% relative compaction. Use import soil as indicated in specifications for this purpose. Do not remove existing roots.
  - 2. For trees located in inaccessible areas, cut stump flush with finish grade, and cover with 3 inches of bark mulch. Do not grind the stump and do not remove existing roots.

### **3.5 CLEANING**

- A. Wash all existing and new trees weekly to remove dust and debris during construction.

### **3.6 EXCAVATION**

- A. Install shoring or other protective support systems to minimize sloping or benching of excavations.

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### **TREE PROTECTION & TRIMMING**

- B. Do not excavate within "Tree Protection Zones", without prior written consent of the Landscape Architect.
  - 1. Excavation within the "Tree Protection Zone" for existing trees shall be done under the direct supervision of the Arborist.
- C. Where excavation for new construction is required within tree protection zones, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks and comb soil to expose roots.
  - 1. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches (75 mm) back from new construction.
  - 2. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.
- D. Where utility trenches are required within tree protection zones, tunnel under or around roots by drilling, auger boring, pipe jacking, or digging by hand.
  - 1. Mechanical trenching of any kind is prohibited.
  - 2. Root Pruning: Prune Roots only with the approval of the Landscape Architect. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots with sharp pruning instruments; do not break or chop.

### **3.7 REGRADING**

- A. No regrading of any kind, either cut or fill will be permitted within the "Tree Protection Zone" without prior written consent of the Landscape Architect. Regrading shall be done under the direct supervision of the certified Arborist.
  - 1. Grade Lowering: Where new finish grade is indicated below existing grade around trees, slope grade beyond tree protection zones. Maintain existing grades within tree protection zones.
  - 2. Minor Fill: Where existing grade is 6 inches (150 mm) or less below elevation of finish grade within the "Tree Protection Zone", fill with topsoil. Place topsoil in a single uncompacted layer and hand grade to required finish elevations.

### **3.8 TREE PRUNING**

- A. Prune trees to remain that are affected by temporary and permanent construction as directed by Arborist.
- B. Refer to Tree Removal and Pruning Schedule in this Section for specific tree removal and pruning information.
- C. Prune trees to remain to compensate for root loss caused by damaging or cutting root system. Provide subsequent maintenance during Contract period as recommended by arborist.
- D. Pruning Standards: Prune trees according to ANSI A300 (Part 1) as follows:

### **TREE PROTECTION & TRIMMING**

1. Type of Pruning as follows:
  - a. Cleaning: Selective pruning to remove one or more of the following parts: dead, diseased, and/or broken branches (5.6.1).
  - b. Thinning: Selective pruning to reduce density of live branches (5.6.2).
  - c. Raising: Selective pruning to provide vertical clearance (5.6.3).
  - d. Reduction: Selective pruning to decrease height and/or spread (5.6.4).
2. Branches interfering with construction but not designated for removal may be removed only as directed by the Architect.
3. Cutting of 2" diameter limbs or greater or major dead wooding shall require approval of the Architect.
4. Lion's Tailing is not permitted.
5. Remove interfering leaders or crossing branches.
6. Never remove more than 20 to 30 percent of the tree mass.

**E. Additional Pruning Standards: Trees shall be pruned so that they are laced out and balanced per Class I, ISA standards.**

F. Cut branches with sharp pruning instruments; do not break or chop.

G. All trees shall be pruned, and cleared in such a way as to not damage branches, trunks, or root systems of adjacent trees, including small existing Oak trees and Oak bushes.

H. Chip removed tree branches and dispose of off-site.

### **3.9 TREE REPAIR AND REPLACEMENT**

A. Promptly repair trees or shrubs scheduled to remain, damaged by construction operations within 24 hours to prevent progressive deterioration. Treat damaged trunks, limbs, and roots according to arborist's written instructions at no additional expense to the Owner.

1. Damaged trees and shrubs shall be repaired promptly. Repair or replacement of trees and shrubs shall be as determined by the Landscape Architect.

B. Remove and replace trees indicated to remain that die or are damaged during construction operations that arborist determines are incapable of restoring to normal growth pattern.

1. Provide new trees of same size and species as those being replaced; plant and maintain as specified in Section 32 9300 "Landscaping".
  - a. Take caliper measurements 6 inches (150 mm) above the ground for trees up to 4-inch (100-mm) caliper size, and 12 inches (300 mm) above the ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip-to-tip.
2. Provide new trees of 6-inch (150-mm) caliper size and of a species selected by Architect when damaged trees more than 6 inches (150 mm) in caliper size, measured 12 inches (300 mm) above grade, are required to be replaced. Plant and maintain new trees as specified in Section 32 9300 "Landscaping".

### **TREE PROTECTION & TRIMMING**

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- C. Damages: Trees which cannot not be replaced of equal caliper size and species shall compensate the Owner at a rate **specified in Section 01 35 00 Special Procedures, Paragraph 1.12.**
1. Contractor shall be held liable for damage caused to trees and shrubs shall be assessed fees based on the International Society of Arboriculture (ISA) "Guide for Plant Appraisal", as determined by the project Arborist; fees will be assessed for: 1). any injury to the trunk, limbs, or root system, and 2). for the value of any tree requiring removal subsequent to injury or treatment that varies from these Specifications.

**3.10 DISPOSAL OF WASTE MATERIALS**

- A. Burning is not permitted.
- B. Disposal: Remove excess excavated material and displaced trees from Owner's property.

- END OF SECTION -