State Center Community College District
Facilities Master Plan Update

Landscape Facilities Review
And Recommendations

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1.0 General

1.1 Landscape Review Criteria

Review focus of the Districts existing landscape shall center on sustainable and maintainable landscapes. Addressing aspects of environmentally friendly practices comfort, scale, and safety while providing an interesting and pleasant educational opportunity.
It is with this direction in hand that the following design criteria have been developed.

1.2 Sustainable / Maintainable Facilities

With the current status of the Districts resources it is imperative the landscape space / site design be sustainable in nature. Thereby allowing the landscape installation to realize full potential. Sustainable landscape space and design is low consumption of labor and materials to maintain the site and landscape improvements in a healthy and flourishing condition all year long. In other words the site design, landscape spaces, plant material selection, irrigation system design and other elements need to combine to act as a whole unit allowing the District to mitigate excessive expenditure of resources.

1.3 Environmental Considerations

Wide temperature variations from winter to summer and low rainfall amounts dictate design that is environmentally sensitive. The need for accommodating outdoor use of space in differing climatic conditions, shelter from heat and rain should be entertained. Exterior spaces for potential outdoor classrooms, public speech areas, outdoor dining areas, large scale gatherings and smaller seating areas need a comfortable environment to be successful. The landscape design working with the site design shall provide for shade, shelter, screening, wind control, noise attenuation, enclosure, etc. that all together create a comfortable inviting and appealing experience.

1.4 Health and Safety Criteria

Large mature evergreen and deciduous trees are common on the Fresno City College, Reedley College and Madera Campuses. With this comes along the need to manage the aging landscape. Many trees exhibit risk to the school population for one reason or another. Some trees have large surface roots that are buckling pavement and invading lawn spaces creating trip and fall hazards. Other trees are planted in tight spaces and have out grown the area leaving the potential for tipping over from wind and a trip condition in the surrounding paving. There are some specimens that have dense tree canopies and heavy limbs. The likelihood of branch drop is evident. Care must be taken to manage the existing landscape at each site. Tree preservation shall be first and foremost. All effort shall be made to retain healthy trees and landscape. If hazardous conditions are apparent removal of trees and landscape is acceptable.

2.0 Irrigation Standards

2.1 Design Parameters

The design of the irrigation system shall be such that at any time of the calendar year the system will deliver an even, balanced and regulated distribution of water to the landscape. Generally, the designer shall anticipate the scenario of providing two inches of precipitation per week to the landscape in the months of July and August. This scenario is based upon typical weather cycles of the Fresno area and relative evapotranspiration rates. Design of the system shall also consider site solar exposure, soil type, slopes, wind and the District's allowable water window. The irrigation system designed for any given area or site, regardless of size, shall be capable of providing the required amount of precipitation within the District's water window. The system shall operate five days per week from 9:00 P.M. to 6:00 A.M.

2.2 District Wide Central Control System

The District utilizes a central control system for their irrigation systems. Not all of the District facilities are currently linked to the central control system. Ultimately all irrigation of the District grounds will be part of the central control system. Each new site and modification to existing sites shall incorporate components to provide communication and control of the system through the District's central control computer. Maxicom Central Control by Rainbird has been selected as the District's preferred system. Communication options vary from campus to campus. The best option for this path of communication shall be reviewed with each project to determine which suits the situation best.

2.3 System Layout and Design Criteria

The basic design premise of providing an irrigation system that is efficient and operates within the water window stipulated must translate directly to the system layout. The layout shall recognize water coefficients for each individual irrigation head proposed for the site. All heads shall be spaced evenly to provide head to head coverage for both turf and shrub areas. In addition, where the planting design proposes the installation of large plant material, back up heads shall be designed in to the system. This will account for the potential of planting blocking the distribution of water. Also, all new trees proposed for the school shall have a separate bubbler that is installed in a deep water pipe. This will allow the system to provide supplemental water to the trees if needed. Irrigation heads selected for the site shall be suited for the space intended as well as plant material proposed. A conservative approach shall be adopted where the right head for the space is one that will provide an even distribution of water over the entire zone area. Irregular shaped areas shall not have mixed head types.

2.4 Flow / System Zones and Exposure Criteria

Once the system head layout has been completed, the designer shall then consider how the site, buildings, use areas, solar orientation and proposed plant material will affect the next stage of design. Individual valves zones will need to be developed. The valve zones must respond to the area of the site so that ultimately each singular turf of shrub area receives the amount of water required for healthy plant growth without adversely affecting other areas of the site. The valve zones shall take into account all of the elements surrounding the zone. Eastern exposure shrub areas should not be piped to run with western exposure shrub areas, etc. Doing so will attribute

undue maintenance and difficulty in balancing water supply to the area. The designer shall realize that this exercise is critical to the success of the overall image of the school as well as sustainability. The designer shall also take into account the ultimate flow of the system with regard to the water window. In order to keep watering within the desired window, multiple valve zones that are similar in exposure and plant material will have to be activated at the same time. For this to be successful the supply line must be correctly sized so that flow in the pipe does not exceed five feet per second to provide the required gallons per minute to each valve zone.

2.5 District Standard Irrigation Equipment

The following is a listing of District standard irrigation equipment

Rotor Head:	Rainbird 6504 Falcon, Rainbird 5004
Spray Head:	Rainbird, 1804, 1806, 1812 – PRS – Sam with U series nozzles
Dripline:	Toro, DL 2000 RGP
Control Valve:	Rainbird PEB
Quick Coupler:	Rainbird 44RC
Gate Valve:	Nibco F-619-RW-SON
Master Valve:	Bermad 710
Flow Sensor:	Data Industrial
Backflow Preventor:	Febco 880V
Booster Pump:	Watertronics
Controller:	Rainbird, Maxicom CCU and ESP Controller

3.0 Planting Standards

3.1 General Design

Plants selected for use shall reflect the environment of the space, projected use of the surrounding space, available water, require little pruning and provide for a visual appeal. The District has finite maintenance resources, detailed intricate planting designs are most likely more than the District can handle.

3.2 Environmental Considerations

Plant material selected for the site shall be carefully chosen so that the plant will fulfill natural growth habits without expenditure of excessive care. Consider reflective heat, glare off of ground surfaces, dense shade, full sun exposure, slope, wind and drainage. The existing landscape will also impact plant selection, shade and roots from existing trees must be reviewed to ensure the understory planting is successful.

3.3 Sustainable Planting Design

The planting shall be made up of shrubs, ground cover and trees which are normally long lived, need minimal corrective pruning, do not require shearing to form the appropriate look and demand any special time consuming attention. Plants selected shall be hardy to the central valley climate, be well suited to the sites soil conditions and designed with the architecture, traffic flows and environmental conditions of the landscape space in mind. Shrubs and trees with growth habits that will overwhelm a small landscape space are inappropriate. Rule of thumb for planting design is right plant for the right place leading to a sustainable design.

3.4 District Standard Plant Material

The following is a listing of preferred plant material. The list is not intended to be all inclusive of plants that may be utilized, other plant types should be considered.

PLANT MATERIAL LIST

Evergreen Trees

CEDRUS atlantica 'Glauca' / Blue Atlas Cedar
CEDRUS *deodara* / Deodar Cedar
CINNAMOMUM *camphora* / Camphor Tree
LAURUS *nobilis* / Grecian Bay
PINUS *pinea* / Italian Stone Pine
QUERCUS *ilex* / Holly Oak
QUERCUS *suber* / Cork Oak
QUERCUS wislizenii / Interior Live Oak

Deciduous Trees

ACER rubrum 'October Glory' / Scarlet Maple
CERCIS *canadensis* 'Oklahoma' / Redbud
CERCIDIUM 'Desert Museum' / Palo Verde
GINKGO *biloba* 'Autumn Gold'/ Maidenhair Tree
KOELREUTERIA *bipinnata* / Chinese Flame Tree
LAGERSTROEMIA hybrid / Crape Myrtle
PISTACIA *chinensis* 'Keith Davey' / Chinese Pistache
PLATANUS *acerifolia* / London Plane Tree
QUERCUS *douglasii* / Blue Oak
QUERCUS *coccinea* / Scarlet Oak
QUERCUS *lobata* / Valley Oak
SOPHORA *japonica* / Japanese Scholar Tree
ULMUS *parvifolia* / Chinese Elm
ZELKOVA *serrata* 'Village Green' / Saw Leaf Zelkova

Shrubs

ACHILLEA *millefolium* 'Rosa' / Yarrow
AGAVE 'Sharkskin' / Sharkskin Agave
ARCTOSTAPHYLOS 'Howard McMinn' / NCN
ARTEMISIA *x* 'Powis Castle' / Wormwood
BERBERIS *thunbergii* 'Rose Glow' / Japanese Barberry
BUDDLEJA *davidii* / Butterfly Bush
CALLISTEMON *viminalis* 'Little John' / Dwarf Bottlebrush
CALAMAGROSTIS *acutiflora* 'Karl Foerster' / Feather Reed Grass
CISTUS *purpureus* / Orchid Rockrose
COTONEASTER *lacteus* / Parney Cotoneaster
ELYMUS *arenarius* / Blue Lyme Grass
GARDENIA *jasminoides* / Gardenia
GAURA *lindheimeri* 'Siskiyou Pink' / Gaura
GREVILLEA x noelii / Grevillea
HEMEROCALLIS *hybrids* / Daylily
HESPERALOE *parviflora* / Red Yucca
HETEROMELES *arbutifolia* / Toyon
KNIPHOFIA uvaria / Red Hot Poker
LAVANDULA stoechas 'Otto Quast' / Lavander
LEUCOPHYLLUM *frutescens* 'Green Cloud' / Texas Ranger

LIRIOPE *muscari* 'Big Blue' / Lily Turf
LOROPETALUM *chinense* 'Razzleberry' / Razzle Berry
MISCANTHUS *sinensis* / Silver Grass
MORAEA *bicolor* / Fortnight Lily
MUHLENBERGIA *capilaris* 'Regal Mist' / Pink Muhly
MYRTUS *communis* 'Compacta' / Myrtle
NANDINA *domestica* 'Fire Power' / Heavenly Bamboo
NEPTA x fassenni 'Walker's Low' / Catmint
NESSALLA *tenuissama* / Mexican Feather
OLEA *europea 'Little Ollie'* / Dwarf Olive
PENNISETUM *setaceum* 'Rubrum' / Fountain Grass
PLUMBAGO *auriculata* / Cape Plumbago
RAPHIOLEPIS *indica* / India Hawthorn
SALVIA x 'Bee's Bliss' / Sage
SALVIA *gregii* / Autumn Sage
SALVIA *leucanthas* / Mexican Sage
SPIRAEA *japonica* / Red Spiraea
SPIRAEA *vanhouttei* / Bridal Wreath Spiraea
TEUCRIUM *fruiticans* / Bush Germander
TULBAGHIA *violacea* / Society Garlic
VIBURNUM *tinus* 'Spring Bouquet'/ Laurestinus
XYLOSMA congestum 'Compacta' / Shiny Xylosma
YUCCA *filamentosa* 'Bright Edge' / Adam's needle

Groundcover

APTENIA *cordifolia* 'Red Apple' / Aptenia
ARCTOSTAPHYLOS X 'Emerald Carpet' / Manzanita
BACCHARIS *pilularis* 'Twin Peaks' / Coyote Brush
CISTUS pulverulentus 'Sunset' / Rockrose
COTONEASTER *dammerii* 'Coral Beauty' / Cotoneaster
LANTANA *montevedensis* / Trailing Lantana
MYOPORUM *parvifolium* / Sandelwood
ROSA x 'Flower Carpet' / Flower Carpet Rose
ROSMARINUS officinalis 'Collingwood Ingram' / Rosemary
SEDUM x 'Autumn Joy' / Stonecrop

Turf Grass

General Turf Area - 'Celebration' variety of Hybrid Bermuda grass
Athletic Field Turf Area – 'Celebration' variety of Hybrid Bermuda grass, Football, Soccer and Baseball Fields over seeded annually with 'Futura 3000' Perennial Rye grass

4.0 Campus Maintenance Program Staffing / Management Analysis

4.1 General Overview

The content of this analysis is derived from general information provided by APPA Physical Plant Operators Guideline Manual for Grounds. The guideline is an accepted format for determining staffing, materials, equipment and miscellaneous items necessary for successful grounds maintenance programs at educational facilities. The campus analysis attempts to guide future maintenance at all the district campus sites. Maintenance requirements for all sites are very similar, comments and observations within are attributable to all of the district grounds.

4.2 Industry Standards for Grounds Maintenance

As previously indicated the APPA guidelines define budgets, staffing, materials and equipment allowances for grounds maintenance. The analysis is based upon these accepted standards and have been verified by cross comparison to grounds maintenance at California State University, Fresno.

Listed below are budget, staffing and equipment that should be achieved to give the grounds a level 2 image of landscape.

Annual overall maintenance budget - $ 9,000 per acre of landscape

Annual materials budget - $ 2,400 per acre of landscape

Annual tree maintenance budget - $ 800 per acre of landscape

Maintenance staffing - Eight (8) acres of landscape per staff member

Maintenance equipment - Parking Lot Sweeper, (3) Twelve Foot Gang Mower, (4) 72” Deck mower, Slit Seeder, Flail Mower, Turf Aerator, Fertilizer Spreader – Tractor Pull, (3) Tractors with Turf Tires, Sand Spreader – Tractor Pull, (3) Walk Behind Mowers, (3) Edgers, Hedge Trimmers, Blowers, Miscellaneous Hand Held Equipment

4.3 Grounds Staffing

There are a couple of methods utilized to distribute personnel resources for grounds management. The first being the broadcast method. This method rotates personnel throughout the grounds to help keep the worker mindset fresh. Adding variety to the daily tasks will encourage critical thinking and foster problem solving. It is essential to maintaining interest and avoiding complacency in the work force. Energy and productivity levels decline when there is a lack of stimulus or challenge. Rotating grounds personnel throughout the district and assigning changing tasks will keep the work force engaged and fresh. The end result is that the staff will then be familiar with all the grounds and related intricacies thereby establishing versatility. Broad cast approach uses teams. The mow crew moves throughout the site, the irrigation crew does the same and so on. Then they move on to another area. This broadcast approach avoids duplication of efforts and efficiently uses labor and equipment resources, nurtures cooperation and allows personnel to respond to problems.

The zone method of staffing is based upon the personal pride concept. People tend to care more for things they are personally responsible for. For example, a grounds worker who operates the same mower every day will likely take better care of it. The condition of a piece of equipment can often reveal attention to detail and alert supervisors to the operators work habit. On the other hand, the problem of poorly maintained can develop if the equipment is operated by different people. Tracking oil level, blade sharpness, etc. tends to be more prominent. As with equipment, with responsibility for a specific area can create a sense of ownership and develop teamwork. Often people are more interested and perform well if they own areas to take care of. A zone approach assigns a supervisor and a specific crew to a particular area of grounds. They perform all the tasks within the zone, mowing, weed control, irrigation repair, tree pruning. This in turn requires that all the workers are versatile and are able to perform all the tasks required within the zone. The whole organization benefits by people evolving to solve any problem, meet any challenge and fill any void. Careful thought must be given to lines drawn in a zone approach. People can become territorial and create boundaries which in turn will not suit the end product.

Either the zone approach or broadcast approach are suitable to the district grounds. Management preference is deemed acceptable in this case. A six month trial period for each approach should be tested to ensure maximum efficiency is achieved.

As indicated earlier in the report the grounds workers should be charged with eight (8) acres of landscape to maintain. Staffing levels should be reviewed to support this ratio.

4.4 Grounds Material and Equipment

Sustainability is the ultimate goal for all landscape management. Options for selecting materials, fuels and equipment have become viable in recent years. Alternative fuels sources that eliminate greenhouse gas production should be considered for the maintenance equipment. Electric vehicles and equipment are readily available and should be pursued as a viable product. Green fuels such as compressed natural gas, propane and biodiesel are alternatives to gasoline powered equipment. The use of alternative fuels will greatly improve the District carbon footprint leading to enhanced air quality on and around the District sites.

Equipment for mowing, aeration, fertilizer spreading, herbicide application, etc. is essential to smoothly functioning maintenance. Investment in new equipment is warranted to ensure that dollars spent maintaining grounds are completely effective. Labor hours can be reduced by the addition of equipment that offer time savings features. A program for review of equipment to evaluate efficiencies, repairs needed over time, longevity and useful life should be developed and utilized annually. Budgets can then be adjusted as needed to account for potential equipment purchases.

4.5 Maintenance Program Recommendations

Observation of the district grounds found that general maintenance practices in use are satisfying the demand to a level 3 image and in some cases a level 4 image. Unfortunately these levels are in the lower image scale and do not reflect the best for the district. General maintenance practices and budgets in place should be modified to add equipment, money and staff to meet the level indicated in section 4.2. Without the staff, budget and equipment modified as indicated change in the district grounds image will not occur.

Weed control to provide a clean consistent image of the grounds will go a long way toward improving the look and atmosphere of the district sites. Pre-emergent herbicides are the first line of defense toward this end. Pre-emergent herbicide applied twice a year to turf and shrub areas

will eliminate 80-90% of annual weeds. Thus freeing up labor hours to pursue other tasks. From there post emergent herbicides can remove the remaining weeds.

Turf areas need twice a year aeration to combat compaction and heavy soils. Flail mowing of turf areas to scalp down to ¼" high is recommended to rejuvenate the turf and mow out broadleaf grasses. This should be done in March on a semi-annual basis or as considered needed. Regular turf fertilization will enhance the grounds immensely. Healthy vigorous turf tends to choke out weeds and stand up to high foot traffic at district sites.

Shrub and ground cover areas in many areas of the district sites need replanting. Hedging and shearing of plants is also prevalent. Concentrated effort to replant barren areas and removing out of scale size shrubs that need constant hedging should be a priority. The replanting of water wise plants appropriate for the space will enhance the district sites. Where foot traffic will ultimately trample planting consideration should be given to placing decomposed granite surfacing or wood top dress mulch. Both of these will provide a finished look and suppress weeds while allowing air and water exchange to the soil.

Trees at the district sites are in varying states of maturity. Trees on the Fresno City College campus are midway through their life cycle if not more. A rule to remember for tree maintenance is visit the tree on five year intervals to ensure structural or cultural conditions are corrected. Pruning and thinning on a five year cycle is generally accepted for ornamental trees. Tree care and management is often a cumbersome task for facilities. Expense for annual tree trimming, thinning, replacement and pesticide applications should be included in the annual maintenance budget. A tree service should be contracted with the district so that maximum value for the work can be attained. Outside contractors have the equipment and insurance in place to do the work efficiently. This allows the grounds crew to complete the required daily task of maintenance without any impact to schedule.

5.0 Athletic Fields Maintenance Program Staffing / Management Analysis

5.1 General Overview

The content of this analysis for the athletic fields is derived from general information provided by APPA Physical Plant Operators Guideline Manual for Grounds. The guideline is an accepted format for determining staffing, materials, equipment and miscellaneous items necessary for successful grounds maintenance programs at educational facilities. The athletic field's analysis attempts to guide future maintenance at all the district campus sites. Maintenance requirements for all sites are very similar, comments and observations within are attributable to all of the district athletic facilities.

5.2 Industry Standards for Grounds Maintenance

As previously indicated the APPA guidelines define budgets, staffing, materials and equipment allowances for grounds maintenance. The analysis is based upon these accepted standards and have been verified by cross comparison to grounds maintenance at California State University, Fresno. Refer to section 4.2.

5.3 Athletic Fields Staffing

The staffing requirements and approach for labor use as described in section 4.2 and 4.3 apply to the athletic field's maintenance. However athletic field maintenance tends to require more specialty knowledge and an attention to detail. For the acreage of athletic fields in the district a minimum of three grounds workers dedicated to athletic fields is required. Four dedicated grounds workers for athletics is preferable. Two for Fresno City College and two for Reedley

College is recommended. Given the frequency of use at the athletic fields for competition and practice dedicated personnel is warranted. The dedicated workers will provide a product acceptable for collegiate competition and can be responsive to problems specific to play field management.

5.4 Athletic Fields Material and Equipment

Equipment requirements for mowing, aeration, fertilizer spreading, herbicide application, etc. are similar to those described in section 4.2. Equipment types specific to large turf areas are more appropriate for servicing the athletic fields. Labor hours can be reduced by the addition of equipment that offer features focused on large turf areas. Tractor pulled spreaders, aerators and gang mowers are appropriate for use. A program for review of equipment to evaluate efficiencies, repairs needed over time, longevity and useful life should be developed and utilized annually. Similarly materials to foster healthy turf growth must be considered. The budget for material to sustain the turf in athletic / competition fields should hover around $200,000 annually. The materials budget should include quarterly soils testing and analysis in order to address specific conditions. This will take the guess work out of decision making and materials purchasing. This is a very useful tool and should not be overlooked. Budgets should be adjusted as needed to account for potential material and equipment purchases.

5.5 Athletic Fields Maintenance Program Recommendations

The greatest enemy to sustainable turf is heavy use. The District athletic fields due to area available are subject to this issue. Currently overlap of sports on the athletic fields complicates the ability of grounds to manage the facilities. Turf grass needs time to respond to care given. If time for turf regeneration is not built into use activities the turf will suffer and the product will be less than desirable. Acknowledgment of this condition must be a priority. Rotation of sports team activities around the usable athletic fields will allow grounds to aerate, fertilize, over seed and provide herbicide weed control on a consistent basis. In the long run allowing all the turf to become healthy and playable. Logistics required to rectify this condition are a challenge and in most cases changing the existing culture will be disruptive. This is an important issue, if the turf is used too frequently it will be unlikely to have a consistently playable stand of turf. Compaction of soil and uneven grade conditions are a result from overuse. A continuing program to combat compaction will help with the athletic use management. Aeration should be provided three (3) times a year and flail mowing with sandy loam fill placed in low areas to adjust uneven grade conditions should occur once a year. Budgets to allow for soils analysis, chemicals for weed control and fertilization, over seeding, aeration, playfield leveling, etc. are crucial for the success of the athletic fields. The budget amount stated previously in this document must be planned to accommodate the preferred result. Maintenance program issues identified in section 4.5 also apply to the athletic fields. Pre-emergent and post emergent herbicides, flail mowing, turf leveling, etc. shall be consistently implemented to foster the playfields.

6.0 Individual Campus Review and Assessment

6.1 Fresno City College

Fresno City College as the oldest of the District campuses is the greatest maintenance challenge due to the amount of people the school serves. The high rate of foot traffic and daily use has taken a toll on the landscape. Plants have been crushed and die out has occurred from pedestrians walking through and on plantings. Plants that have been in the ground for some time have been pruned and “boxed” into odd and misshapen forms with their natural habit far from displayed. Old plantings and areas that have evolved over time turning from sunny areas to deep shade require removal and replanting. Trees have grown to maturity creating some

significant issues with root damage to walks, dense and dangerous tree canopies and overgrown in the planting space. The two story buildings along with dense tree plantings of evergreens have created highly shaded areas choking off light to the turf and shrubs below. This attributes to difficulty in keeping grass and shrubs alive that are not tolerant of shady conditions. Pruning, thinning and removal of trees is warranted. The campus would benefit greatly from a tree pruning program that removes wood from the trees thereby alleviating some of the labor burden for daily maintenance. The turf areas are weedy and lack color, a general indication of marginal care. There are areas of the site where plants have died and not been replaced leaving large gaps and area for weed growth. Weeds are present in some planting areas. Not excessive, yet again eluding to marginal care. The campus image can be greatly enhanced at a relatively low cost. Consideration should be given to adding a fertilizer injection system to the irrigation system. The cost for adding a fertilizer injector is around $6,000.00.This would allow fertilizers and other chemicals to be applied easily and regularly. Effective results would be realizer quickly. Planting areas with missing shrubs should be replanted. If foot traffic has been the cause of the planting damage then either wood top dress mulch or decomposed granite surfacing should be placed in the area to provide a finished look. A wood top dress mulch program should be implemented. This will help retain moisture, combat weeds and create a well-tended image throughout the campus. Areas of concern are indicated on the Fresno City College exhibit.

Refer to attached exhibit in the Appendix

6.2 Reedley College

The overall landscape is in fair condition. The Reedley College campus presents itself as a well-established landscape. The tree canopy forms a welcoming experience as you enter the campus from Reed Avenue or Manning Avenue. The understory plantings generally provide good appearance and an overall look of continuity creating a sense of place. The turf areas are in good condition with little evidence of weed issues resulting in an acceptable appearance. There are areas of the site where plants have died and not been replaced leaving large gaps and area for weed growth. Weeds are present in some planting areas. Not excessive, yet again eluding to marginal care. Leaf and needle drop from mature trees have not been removed consistently. Allowing build up and created a neglected look. The campus image can be greatly enhanced at a relatively low cost. Planting areas with missing shrubs should be replanted. If foot traffic has been the cause of the planting damage then either wood top dress mulch or decomposed granite surfacing should be placed in the area to provide a finished look. A wood top dress mulch program should be implemented. This will help retain moisture, combat weeds and create a well-tended image throughout the campus. Areas of concern are indicated on the Reedley College exhibit.

Refer to attached exhibit in the Appendix

6.3 Clovis Community College

Clovis Community College being the newest of the four sites reviewed is generally in an acceptable condition. Plantings show care has been given with a recognizable result. Trees are maturing with no excessive need for thinning and pruning at this point. The greatest difficulty with this site is the parent soil. The soil is heavy clay with cemented soils and a hardpan shelf not allowing free drainage of water. Plants struggle in this condition due to lack of air and water exchange to roots. Aeration of soils in turf areas will help the condition. This should be an operation that is completed at least twice a year. However this operation will not solve the issue. The site has a fertilizer injection system installed with the irrigation system. This injector should be utilized frequently to spread soil penetrants across the site helping to alleviate the tight pore

spaces of the soil. Noticeable change will be perceived if a regular chemical application program for soil compaction is in place.

No exhibit is included in the Appendix for the Clovis Community College site.

6.4 Madera Community College Center

Review of the landscape at the Madera Center was completed. Generally the overall landscape is in fair condition. The bones of the campus are recognizable and create a welcoming impression. The tree canopy is beginning to form a presence. The understory plantings generally provide good appearance and an overall look of continuity creating a sense of place. However, there is a definite image of lack of consistent care throughout which must be addressed. The turf areas are weedy and lack color, a general indication of marginal care. There are areas of the site where plants have died and not been replaced leaving large gaps and area for weed growth. Weeds are present in some planting areas. Not excessive, yet again eluding to marginal care. The campus image can be greatly enhanced at a relatively low cost. Consideration should be given to adding a fertilizer injection system to the irrigation system. The cost for adding a fertilizer injector is around $6,000.00.This would allow fertilizers and other chemicals (soil penetrants to help loosen the soil) to be applied easily and regularly. Effective results would be realizer quickly. Planting areas with missing shrubs should be replanted. If foot traffic has been the cause of the planting damage then either wood top dress mulch or decomposed granite surfacing should be placed in the area to provide a finished look. A wood top dress mulch program should be implemented. This will help retain moisture, combat weeds and create a well-tended image throughout the campus. Areas of concern are indicated on the Madera Center exhibit.

Refer to attached exhibit in the Appendix

APPENDIX

Annual Turf Maintenance Plan

The following program is based upon historical turf requirements for the Central Valley ranging from Fresno to Sacramento. Local weather, soil conditions and use of the turf area should be considered prior to implementing the practices listed. Semi annual soils testing and analysis is recommended to assure that materials and labor resources are utilized to their fullest potential.

EVERGREEN TURFGRASS - Fescue, Ryegrass, Bluegrass

January Apply post emergent herbicide to control specific weeds at site. Apply Calcium Nitrate fertilizer at manufacturer's approved rate. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1"-1½".

February Apply pre emergent herbicide to control weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1"-1½".

March Aerate turf area with equipment that removes 4" long cores. Sweep up cores. Apply balanced fertilizer (16-16-16) at manufacturer's approved rate. Apply post emergent herbicide to control specific weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1"-1½".

April Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1"-1½".

May Apply post emergent herbicide to control specific weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1"-1½".

June Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1”-1½”. Apply balanced fertilizer (16-16-16) at manufacturer’s approved rate. Mowing cycles may need to be adjusted to meet the growth rate of the turf. Turf grows rapidly this time of year and may require more attention.

July Apply post emergent herbicide to control specific weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1”-1½”. Mowing cycles may need to be adjusted to meet the growth rate of the turf. Turf grows rapidly this time of year and may require more attention. Apply fungicide at manufacturer’s approved rate if fungus appears.

August Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1”-1½”. Mowing cycles may need to be adjusted to meet the growth rate of the turf. Turf grows rapidly this time of year and may require more attention.

September Aerate turf area with equipment that removes 4” long cores. Sweep up cores. Apply balanced fertilizer (16-16-16) at manufacturer’s approved rate. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1”-1½”. Apply fungicide at manufacturer’s approved rate if fungus appears.

October Apply pre emergent herbicide to control specific weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1”-1½”. Apply pre emergent herbicide specific to spring weeds.

November Apply post emergent herbicide to control specific weeds at site. Apply Calcium Nitrate fertilizer at manufacturer’s approved rate. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow as needed to maintain desired look to height of 1”-1½”.

December Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow as needed to maintain desired look to height of 1”-1½”.

DECIDUOUS TURFGRASS - Hybrid Bermudagrass

January Apply post emergent herbicide to control specific weeds at site. Apply Calcium Nitrate fertilizer at manufacturer's approved rate. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1".

February Apply post emergent herbicide to control specific weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1". Apply pre emergent herbicide specific to spring weeds.

March Aerate turf area with equipment that removes 4" long cores. Sweep up cores. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1".

April Apply post emergent herbicide to control specific weeds at site. Apply balanced fertilizer (16-16-16) at manufacturer's rate. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1".

May Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of ½" after baseball season is over to remove ryegrass and encourage bermudagrass growth.

June Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of ½". Mowing cycles may need to be adjusted to meet the growth rate of the turf. Turf grows rapidly this time of year and may require more attention.

July Apply post emergent herbicide to control specific weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of ½". Mowing cycles may need to be adjusted to meet the growth rate of the turf. Turf grows rapidly this time of year and may require more attention.

August Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of ½". Mowing cycles may need to be adjusted to meet the growth rate of the turf. Turf grows rapidly this time of year and may require more attention.

September Aerate turf area with equipment that removes 4" long cores. Sweep up cores. Apply balanced fertilizer (16-16-16) at manufacturer's approved rate. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather

changes. Mow weekly to height of ½". Overseed turf with annual ryegrass at a rate of five pounds per 1,000 S.F. at the end of the month.

October Apply post emergent herbicide to control specific weeds at site. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1". Apply fungicide at manufacturer's approved rate if fungus appears. Apply pre emergent herbicide specific to spring weeds.

November Apply Calcium Nitrate fertilizer at manufacturer's approved rate. Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1".

December Irrigate as needed to keep the turf moist, never soggy wet. Change watering times as weather changes. Mow weekly to height of 1".

APPENDIX

GENERAL LANDSCAPE MAINTENANCE PROGRAM

SUMMARY

1. The Contractor shall furnish all supervision, labor, materials, tools, tests, supplies, equipment, transportation and services to maintain the Landscape in an attractive condition throughout, and in strict conformity with the Maintenance Program for a period of one (1) year. All work shall be performed by workmen of established status and reputation for executing their work by the very best methods of each kind or type, and in accordance with this program and to the entire satisfaction of District.

2. The Contractor shall perform work at the site daily for each work week and weekends as necessary. A qualified foreman, capable of identifying horticultural problems and establishing cultural practices shall attend each daily visit with at least three (3) laborers. In addition a weekly mow crew shall be provided. The Contractor shall have manpower available daily to respond as needed when conditions at the site warrant additional work other than scheduled. During the course of the contract year rain events may interrupt maintenance services for the Hospital grounds. In this instance the contractor shall credit back to the owner the amount of monies in the contract for each daily visit that the Hospital site landscape maintenance work is not provided. The credit for work not performed shall be for the Hospital grounds only. The contractor in their price for the calendar year shall provide to the Owner a daily cost amount for the Hospital grounds landscape maintenance. The cost shall indicate all manpower, materials and equipment.

3. The Contractor shall coordinate his efforts and make all communications regarding landscape maintenance work with the authorized representative of District. A daily operations schedule shall be submitted to the authorized representative for review and

approval. Any modifications to the schedule, procedures or scheduling of work (such as turf aeration, fertilization, herbicide application, etc.) shall be communicated to the authorized representative seven (7) working days prior to the activity.

4. The Contractor agrees to keep all equipment utilized at the site maintained and in a safe running condition and to use such equipment in a safe manner.

5. The contractor shall be required to provide a credited amount of monies from the lump sum calendar year price to the owner for any reduction in scope of services at any of the work sites.
When a portion of the existing maintained landscape is removed the contractor shall adjust their contract price to credit back the work scope for the removed area of maintenance. The amount of the credited work scope shall be negotiated with the Owner and contractor based upon the contractor's daily visit rate and hourly man hour rates.

IRRIGATION

1. The Contractor is responsible for maintaining, operating, and adjusting the irrigation system, and performing all repairs as herein defined.

   A. On each weekly site visit, the Contractor shall visually and hydraulically inspect the irrigation system to insure that no sprinkler breakage has occurred, no foreign matter is clogging the sprinkler heads and that sprinkler coverage and arc of spray is proper, and shall correct any other inadequacies that might impair the proper performance of the irrigation system. All irrigation drip line shall be inspected for breakage or non-operation. Irrigation repairs shall be accomplished by the maintenance crew as needed with the like kind of materials unless otherwise authorized by District. Any damages to system caused by Contractor's operation shall be repaired without charge to District. Repairs shall be made within one daily watering cycle. The Contractor shall guarantee any repair work to the irrigation system for a period of one (1) calendar year.

   B. The contractor shall provide all material, labor, equipment, etc. to repair any damaged, broken or malfunctioning components of the irrigation system. This requirement extends to the entire irrigation system beginning just downstream from the irrigation backflow preventer or irrigation booster pump depending on the condition at the site. All irrigation controllers, irrigation mainline and fittings, irrigation lateral lines and fittings, gates valves, quick coupling valves, control valves, valve boxes, swing joints, drip line and fittings, rotor heads and pop up spray heads shall be maintained in excellent operating condition by the contractor. Repairs needed on any of the listed components and all irrigation system materials shall be the sole responsibility of the contractor. Age of the existing irrigation products and irrigation system components shall not relieve the contractor of the responsibility of replacement. No additional compensation will be given the contractor for all the repair work required to maintain all aspects of the irrigation system operational.

   C. The Contractor is required to adjust the height of sprinkler heads in turf and ground cover areas to insure proper coverage. Excavation around sprinkler heads in order to assure coverage from sprinklers is strictly prohibited.

D. All repairs to irrigation system shall be the sole responsibility of the Contractor. Accidental damage resulting from the Owner work forces shall be reported promptly to the authorized representative. Additional compensation shall be allowed for irrigation system repairs of damaged system components caused by Owner's work forces. The Contractor shall guarantee any repair work to the irrigation system for a period of one (1) calendar year.

E. At least once every week throughout the year, the Contractor shall review water requirements of the project, by probing in at least one area covered by each sectional valve and ascertaining the anticipated water requirements, adjusting the automatic controller accordingly. Particular attention shall be given to avoid applying more water than the soil can absorb at one time. Where more water is required than the soil is capable of taking at one time, the horticultural technician shall set the irrigation controller for repeat cycles at short intervals to satisfy the ultimate water demand. In no case shall water be allowed to run across the surface of the ground.

F. The Contractor shall be responsible for adjusting each individual automatic controller for a balanced distribution of water throughout the site. The controllers shall be programmed to run the irrigation system during the watering window of the site. The required water window shall meet the City of Fresno's watering time regulations. The irrigation systems shall not operate during rain events. Contractor shall provide all materials and labor to ensure watering cycles do not occur during rain events, prior to rain events of after rain events until the landscape needs irrigation water to sustain healthy plant material.

G. The Contractor shall notify District immediately of any failure of electrical service to all irrigation controller's and or water source to the irrigation systems in order that steps can be taken to immediately rectify the problem.

TURF

1. Mowing and Trimming

    A. Debris such as leaf litter and trash shall be removed prior to weekly mowing to prevent shredding of debris and a detrimental appearance to the turf areas. No wheel barrows will be allowed on site for the removal of debris.

    B. Grasses shall be cut at a height of 1-1/2" to 2" weekly.

    C. A uniform high quality of cut shall be provided by mowers with sharp cutting edges.

    D. Clippings will be collected after each mowing and removed from the site. High quality mulching mowing equipment will be considered for use on the site if requested by the contractor. No mulching mowers will be allowed on site without written approval from District.

E. Trimmings around the trees shall be provided using hand labor/mechanical device after each mowing, as long as the overall appearance is not adversely affected by poor workmanship. Prudent care shall be taken to protect the base of young trees when using string trimmers. At the discretion of District, trees damaged by poor workmanship will be brought to the attention of the Contractor and are subject to replacement at no additional cost to District.

2. Edging in Turf Area

Turf areas shall be edged on a weekly basis along curbs, sidewalks, planter edges, valve boxes, fences and berms using a steel blade edger. Edging may not be accomplished with a string trimmer. Grass clippings and trimmings shall not be allowed to remain on side-walks, streets, driveways or gutters and shall be disposed of off-site. At no time shall turf areas be allowed to encroach upon shrubs or ground cover area. Chemical edging shall be considered in certain specific instances with the approval of the District.

3. Weed Control in Turf Areas

A. Broadleaf weeds shall be controlled with a selective herbicide at manufacturer's recommended rates. A seasonal spray program shall be adopted and implemented to combat varying types of weeds. The frequency of spraying shall be subject to review and arranged as needed at no additional cost to the Owner. All applications for weed control shall be performed by a licensed, qualified applicator possessing a current license in the state of California to apply pesticides and herbicides.

B. Seasonal pre-emergent herbicide shall be applied prior to annual weed germination. In areas where annual weeds have already been permitted to germinate, a selective post-emergent herbicide shall be applied at no additional cost to District. Applications shall be made at manufacturer's recommended rate.

4. Pest and Disease Control in Turf Areas

A. The Contractor shall provide rodent, insect, pest, and disease control at the first sign or symptom of infestations, or as directed by District. Fresh rodent mounds are to be leveled to existing grade and all tunnel entrances filled with coarse gravel.

B. Perform pest and disease control services in accordance with applicable laws and regulations set forth for commercial spraying for hire. Provide as many applications that are necessary for control, but never more than manufacturer recommends. All applications of pesticides and herbicides for pest and disease control shall be performed by a licensed, qualified applicator possessing a current license in the state of California to apply pesticides and herbicides.

5. Fertilization Program

A. Turf grass areas shall be fertilized to maintain a healthy, vigorous and green appearance normal to the turf grass installed at the site.

B. Turf areas shall be fertilized not less than once every two months supplying one pound of actual Nitrogen per 1000 sq. ft. using an approved fertilizer containing micronutrients or approved equivalent. During the cool season (Nov. to Feb.), the Contractor may elect to use Calcium Nitrate at the rate of not less than one pound actual Nitrogen per 1000 sq. ft. The Contractor shall notify the authorized representative at least 48 hours in advance of any scheduled fertilizer application. All areas of the site shall be fertilized within the same fifteen (15) day period.

6. Aeration of Turf Areas

The Contractor shall aerate turf grass areas no less than twice per year. Aeration shall be conducted within the months of May through September. The Contractor shall use an aerator with minimum 1/2" diameter coring tines. The depth of penetration shall be 2-3" with the cores spaced on a maximum of 6" on center. Vacuum, drag or rake aerated turf grass areas immediately after aerating; remove all plugs and or debris over 1/4" in diameter and immediately clean up adjacent areas disturbed by aeration procedures.

PLANT MATERIAL

1. A consistent effort shall be made to closely monitor the Landscape. If a tree or shrub shows signs of stress the Contractor shall take immediate steps to prevent any further decline. The sole responsibility of the Landscape survival is the Maintenance Contractor's, and any plant that dies is his responsibility unless conditions detrimental to plant growth can be shown. At no time will a dead tree or shrub be allowed to remain. Replacement shall occur immediately at no additional cost to District. Replacement material shall be of the same species, variety, and size as the original plant upon its death. Standard planting techniques as commonly practiced shall be followed in replacing the material. The Owner authorized representative shall inspect the plant material on site prior to installation. No replacement planting shall be done without notice to proceed from District. Additional compensation shall be allowed for plant material replacement for damaged plants caused by Owner work forces.
2. The contractor shall be solely responsible for the replacement of any plant material that dies while under the care of the contractor. This requirement extends to turf grass, ground cover, shrubs and trees for the entire one (1) calendar year service contract. Any dead turf grass shall be replaced with turf grass sod to match the turf type being replaced. Total area of turf grass replacement shall be agreed upon between Kaiser Permanent and the contractor. Ground cover that dies shall be replaced with the type removed in one gallon size containers. The ground cover replacement shall be installed at eighteen inches (18”) on center for the entire area agreed upon between District and the contractor. Shrubs that die shall be replaced with the same type and variety removed in five gallon size containers. Trees that die shall be removed along with the entire root system and rootball. Stump grinding is not an acceptable method for rootball and root removal. However stump grinding will be

considered by Kaiser Permanent on a case by case basis. The replacement tree shall be the same variety as the tree rem oved. Minimum size shall 24” box size container. Any fill dirt required due to root system removal shall be provided and placed by the contactor as directed by District. Restoration of the surrounding landscape after tree replacement shall be provided by the contractor at the direction of District.

3. Trimming

Trimming, selective pruning, thinning and training of ornamental plants shall be performed as needed or required to maintain a pleasing appearance. Hedging of shrubs into geometric shapes shall be permitted at the direction of the authorized representative where conditions are dictated by structural elements. Prune all topiary forms as needed or required to provide the desired appearance. Shrubbery in parking areas and at roadway interior shall be trimmed to permit non-impaired vehicular visibility at all times. Plant material under stress shall be trimmed to reduce evaporation. At no time shall shrub growth be permitted to grow uncontrolled or to restrict pedestrian or vehicular passage along sidewalks, driveways, road and roadside. At no time shall dead and declining flower stalks be left on plant material. Remove and dispose of off-site.

4. Edging

A. Edging of groundcovers shall be performed frequently enough to prevent encroachment of the plant materials into trees, shrub beds and onto hardscapes (curbs, driveways, walls, sidewalks, etc.) At no time shall groundcover or shrubs be permitted to impede sprinkler coverage or cover valve boxes.

B. Dirt and debris from edging shall be removed completely. Method of edging shall be mechanical. Chemical edging shall be considered unacceptable.

5. Weed Control

Areas shall be kept in a "weed free" appearance. Weeds may be controlled with a pre-emergent herbicide and/or post emergent herbicide and removed offsite immediately after desiccation. At no time shall weeds be allowed to become established. The use of organic mulch to prevent weed seed germination and retain soil moisture is desirable. Use coarse texture mulches that knit together and form a mat.

6. Pest and Disease Control

Provide rodent, insect, pest and disease control services at the first sign or symptom of infestations, or as directed by the Owner/ Owner's representative. Fresh rodent mounds are to be leveled to existing grade and all tunnel entrances filled with coarse gravel. Perform pest and disease control services in accordance with applicable laws and regulations set forth for commercial spraying for hire. Provide as many applications that are necessary for control, but never more than manufacturer recommends. All application for pest and disease control shall be performed by a licensed qualified applicator possessing a current license in the state of California to apply pesticides and herbicides.

7. Fertilization

Fertilize all groundcover and shrub beds with an approved fertilizer containing micronutrients not less than four times per year (to achieve a rate of four pounds actual nitrogen per 1,000 sq. ft. year). Contractor shall notify the Owner/Owner's representative at least 48 hours in advance of any scheduled fertilizer application. All areas on the site shall be fertilized within the same fifteen (15) day period.

8. Trash and Debris Pickup / Parking Lot Sweeping

A. The Contractor shall be responsible for trash removal and debris picked up and removed from common areas of site with each visit including all Courtyards. The Contractor shall also be responsible for the sweeping of all parking lots. The Contractor and Owner shall arrange a schedule per mutual agreement. The contractor shall remove trash from all exterior trash receptacles and dispose of trash off-site.

B. The contractor shall maintain a consistent parking lot sweeping schedule throughout the one (1) calendar year service contract as agreed upon between the contractor and District. If the contractor is unable to comply with the established schedule as accepted by District then the contractor shall immediately inform District and provide a day and time when the parking lot sweeping will be provided. In no instance will one calendar week pass without the contracted parking lot sweeping being provided.

C. The contractor shall be responsible for wash down of all exterior site walkways and wipe down of all exterior site furniture including tables, umbrellas, chairs, benches, etc. Wash down and wipe down activities shall be provided for all exterior areas of the site including entries, courtyards, service areas, staff areas, etc. Wash down and wipe down activities shall remove all dirt, stains, gum, etc. The contractor shall high pressure wash each entry to all the buildings once each calendar month. The day and time of the entry area high pressure wash operations shall be as determined by the Owner.

9. Tree Care

A. Structural pruning shall be required. The extent of the tree pruning shall be: removal of broken, dead and crossed branches and removal of sucker growth and excessive growth to minimize potential wind damage to trees and structures and to eliminate safety hazards for the public and employees. Every effort shall be made to achieve and maintain basic tree symmetry and balance.

B. Driveway and Parking Lot Clearance - All driveways and parking lots shall be kept clear for safe vehicular passage and parking. Particular attention shall be paid to guying and staking to prevent girdling or loss of tree due to wind. The Contractor shall also repair and or maintain tree stakes, ties and guying in order to prevent tree trunks from bowing. Remove stakes and guys as soon as they are no longer needed. Height clearance to bottom of all trees will be as follows: Street Clearance - 12' above top of curb; Sidewalk clearance - 9' above sidewalk.

C. Ladders and tree trimming equipment shall be non-metallic and meeting all requirements of local and state safety regulations.

10. Annual Flowers

A. The Contractor shall furnish all labor, materials, tools, equipment and services to maintain annual flower plantings in a vigorous, continual display. Size of material provided shall be six packs in flats minimum and planted at 8" o.c. The Contractor shall provide annual color in the current locations throughout the site. The contractor shall provide three (3) full replacements of the annual flowers per calendar year of the service contract.

B. Annual flower rotation and flower types shall be approved by District. The Contractor shall submit a schedule for one calendar year showing replacement times, proposed types of material, sizes of material to be installed and note any time within the schedule when annual color may not be available for planting.

APPENDIX

Campus Review / Assessment Exhibits

Fresno City College Exhibit

Reedley College Exhibit

Madera Community College Center Exhibit

APPENDIX

Campus Lighting Survey Exhibits

Fresno City College Exhibit

Reedley College Exhibit

Madera Community College Center Exhibit

Clovis Community College Exhibit

E CAMBRIDGE AVE

N COLLEGE AVE

E WELDON AVE

N BLACKSTONE AVE

E UNIVERSITY AVE

N VAN NESS AVE

E MCKINLEY AVE

Legend	
	Thin/Prune/Remove Dense Tree Canopy. Replant to Provide Shade
	Plant Trees to Provide Shade & Soften Hardscape

SCCCD Fresno City College Campus

Campus Review / Assessment Exhibit

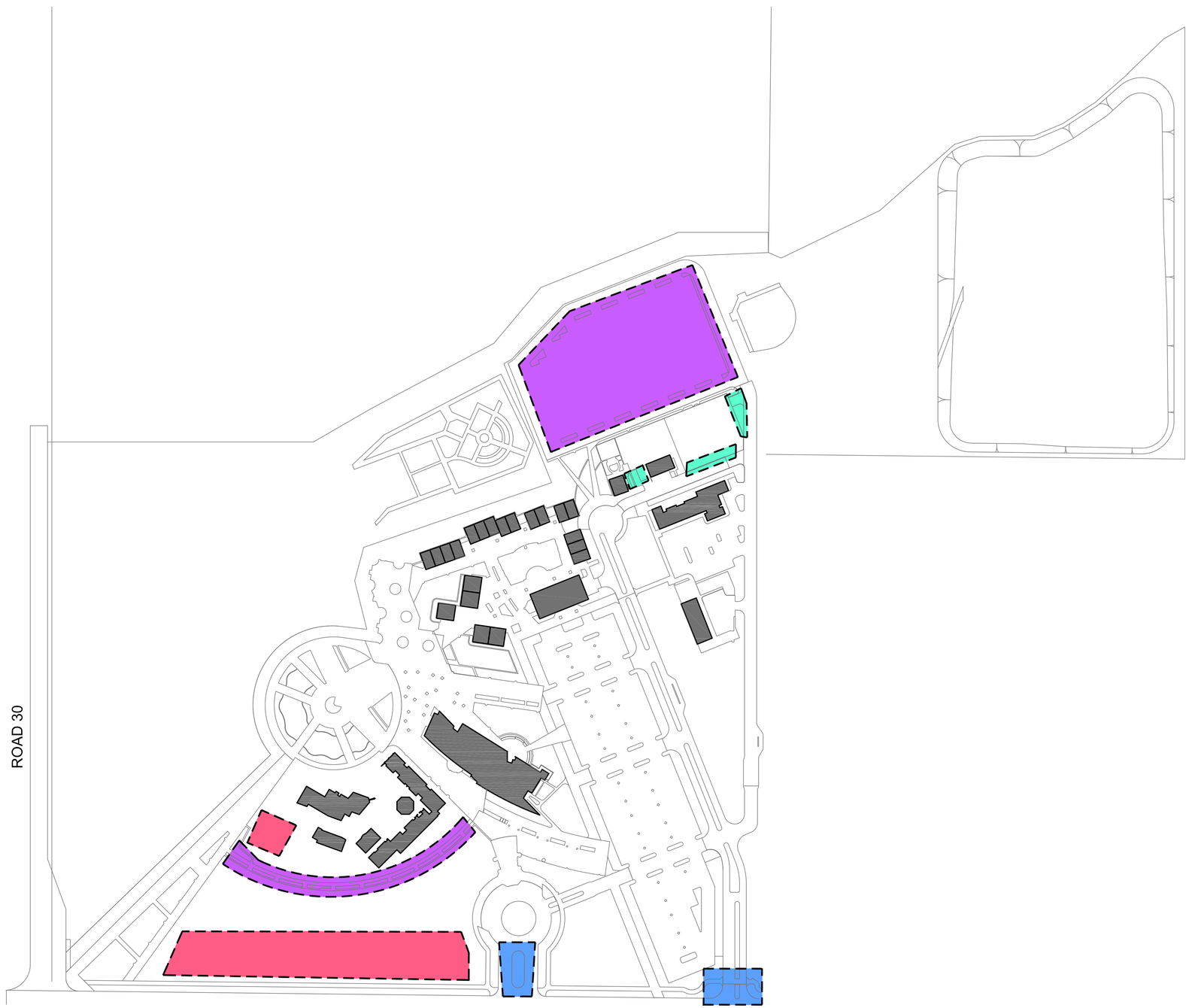
N

Legend	
	Create Edge/Boundary with Planting
	Create Entry Image with Planting
	Plant Trees to Provide Shade & Soften Hardscape
	Create Planting Screen to Soften Blighted Areas of Campus
	Develop/Create Open Space Area with Tree Planting
	Thin & Replace Trees

SCCCD Reedley City College Campus

Campus Review / Assessment Exhibit

N

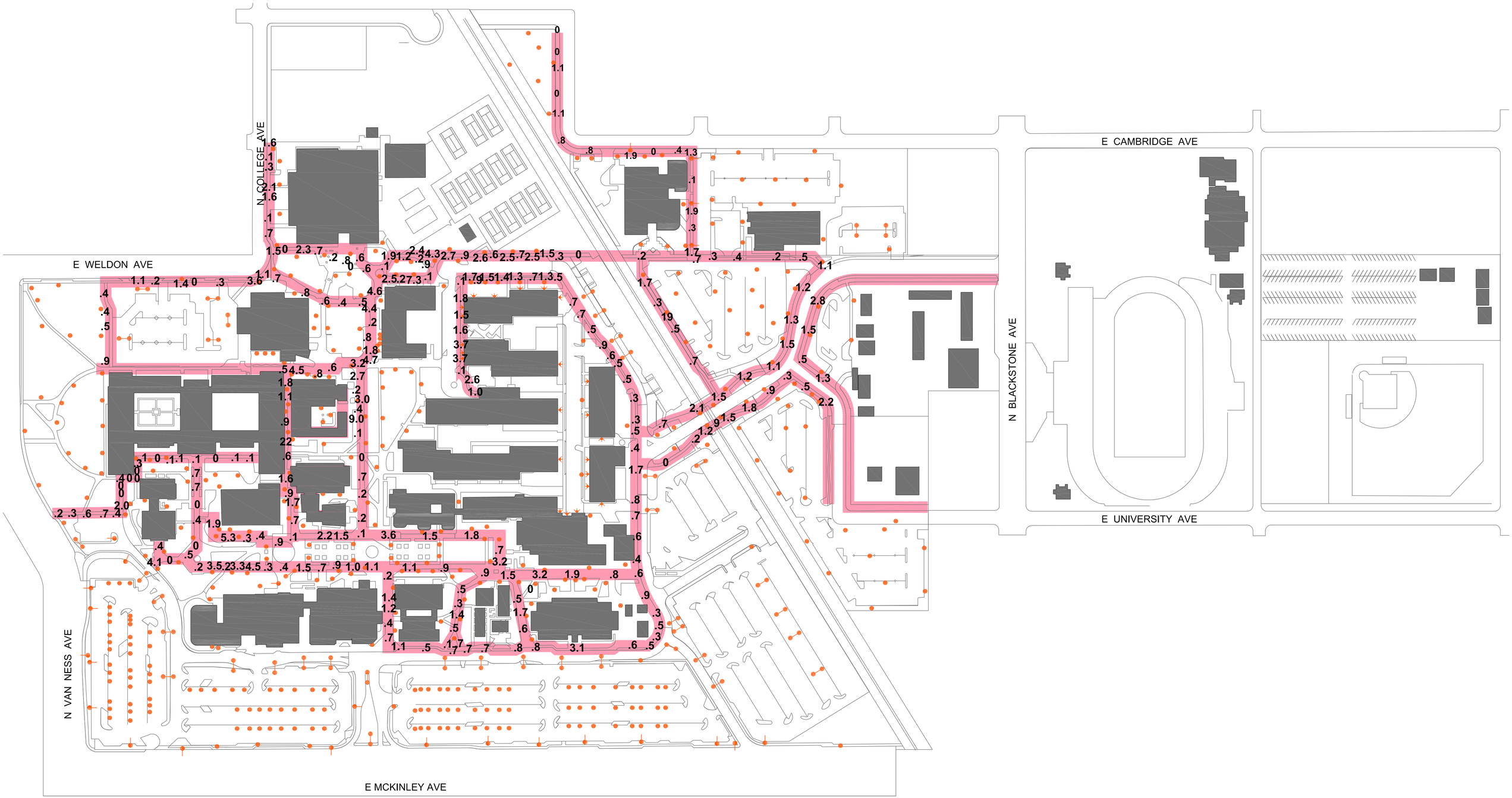


Legend	
	Plant Trees to Provide Shade & Scale
	Plant Trees to Provide Shade & Soften Hardscape
	Create/Enhance Entry Image with Planting
	Create Planting Screen to Soften Blighted Areas of Campus

SCCCD Madera Community College Campus

Campus Review / Assessment Exhibit

N



Light Fixture Legend	
Standard	●
Cobra	●—
Double	●●
In-ground	⊙
Bollard	ⓑ
Wall	⊻

Light Level Legend	
3.1	Indicates Light Level Reading in Foot Candles, and Light Level Reading Locations
	Light Survey Area

SCCCD Fresno City College Campus

Light Survey

N

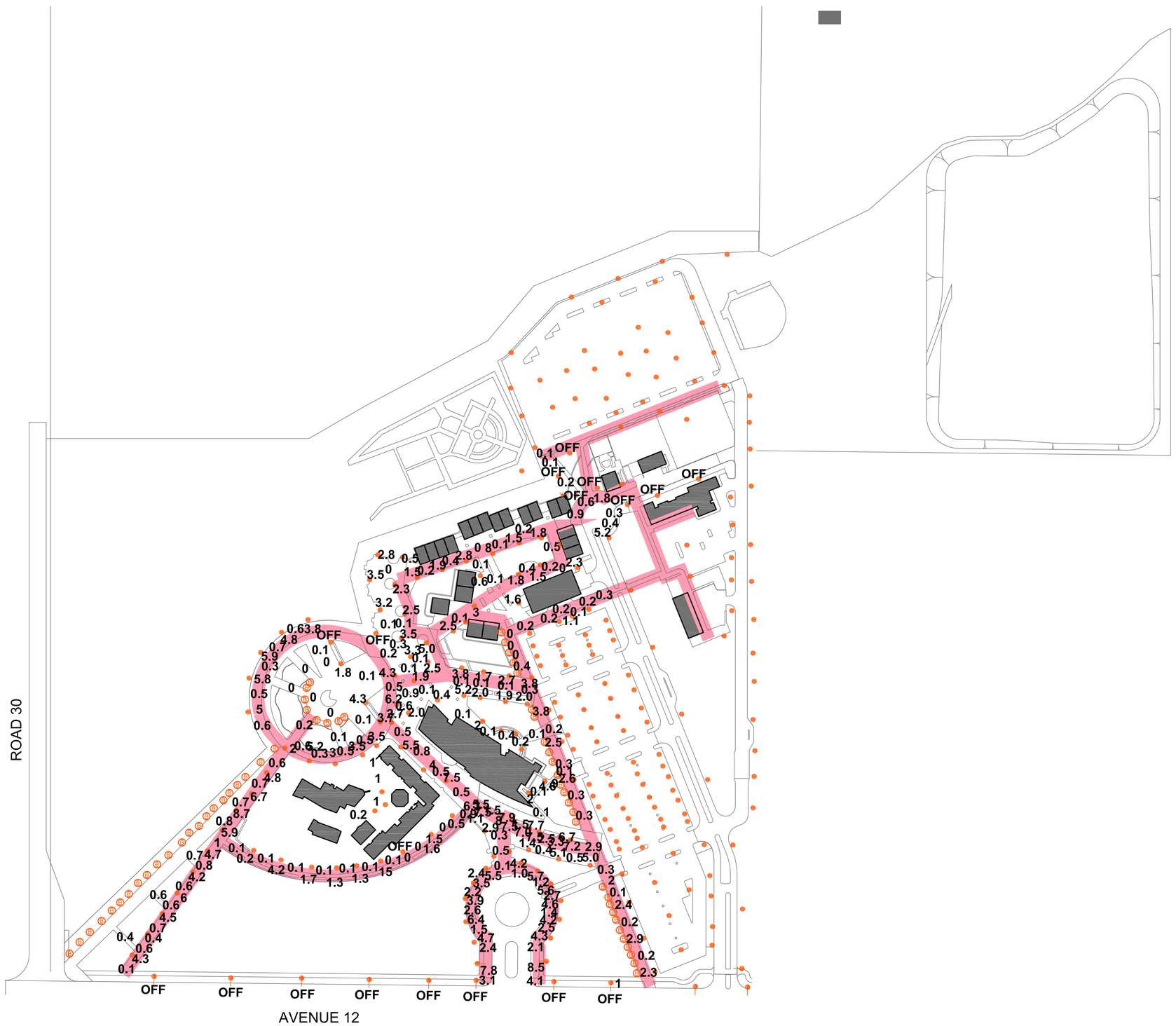
Light Fixture Legend	
Standard	●
Cobra	●—
Double	●—●
In-ground	⊙
Bollard	⊡
Wall	⊻

Light Level Legend	
3.1	Indicates Light Level Reading in Foot Candles, and Light Level Reading Locations
	Light Survey Area

SCCCD Reedley City College Campus

Light Survey

N



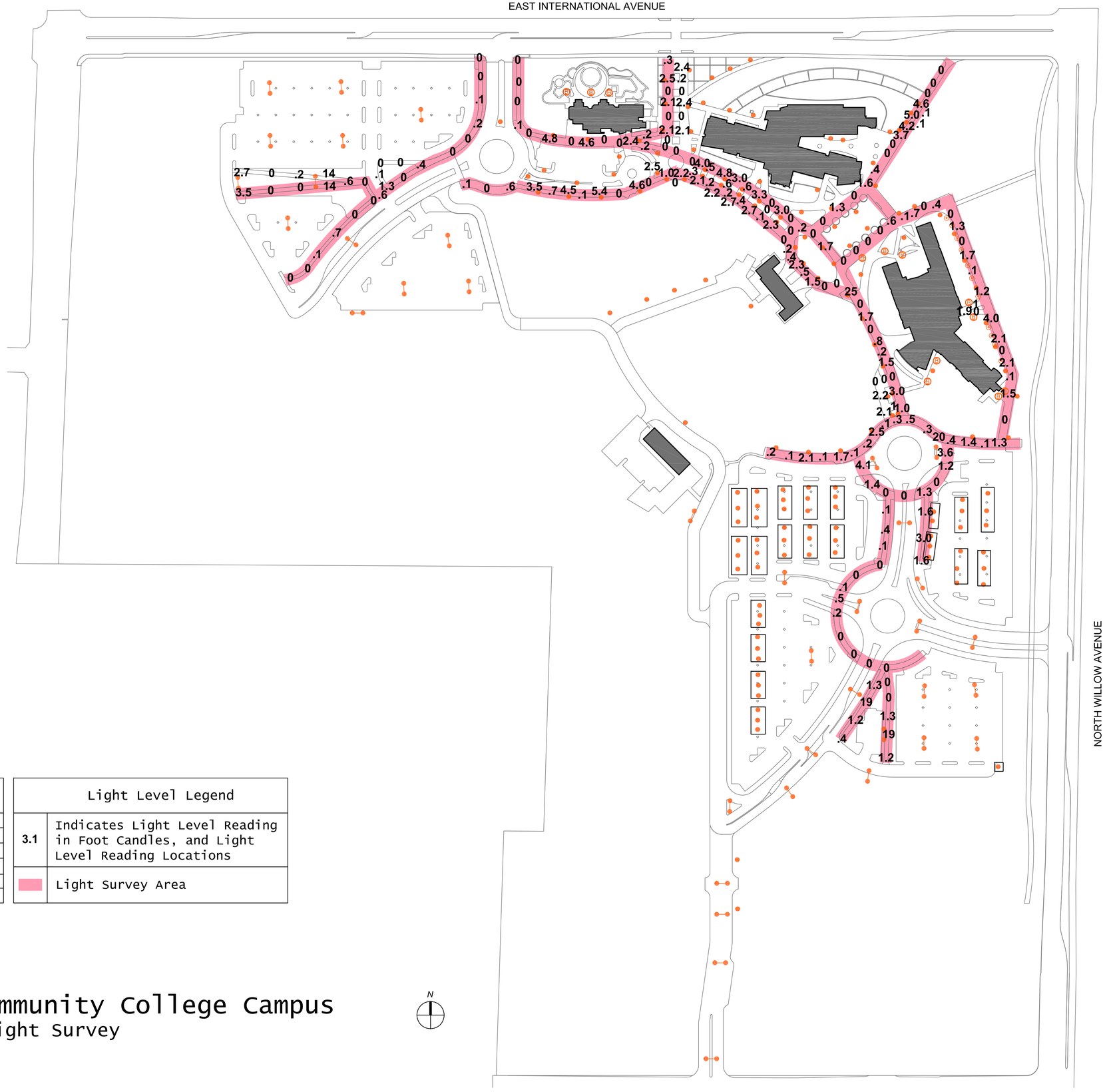
Light Fixture Legend	
Standard	●
Cobra	●—
Double	●—●
In-ground	⊙
Bollard	▣
Wall	↓

Light Level Legend	
3.1	Indicates Light Level Reading in Foot Candles, and Light Level Reading Locations
	Light Survey Area

SCCCD Madera Community College Campus

Light Survey

N



Light Fixture Legend	
Standard	
Cobra	
Double	
In-ground	
Bollard	
Wall	

Light Level Legend	
3.1	Indicates Light Level Reading in Foot Candles, and Light Level Reading Locations
	Light Survey Area

SCCCD Clovis Community College Campus

Light Survey

N