general notes:

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR PERMITTEE TO CONTACT "UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA" BY PHONE AT 8-1-1 FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION FOR LOCATION OF POWER, TELEPHONE, OIL AND NATURAL GAS UNDERGROUND FACILITIES. CONTRACTOR OR PERMITTEE SHALL ALSO CONTACT THE APPROPRIATE AGENCY FOR THE LOCATION OF CABLE T.V., WATER, SEWER, DRAINAGE OR UNDERGROUND FACILITIES.
- 2. THE CONTRACTOR SHALL POSSESS A CLASS _____ LICENSE AT THE TIME OF BID OPENING.

datum:

BASIS OF BEARINGS
THE BASIS OF BEARINGS AND COORDINATES FOR THIS SURVEY ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM NAD83, CALIFORNIA ZONE 5, US SURVEY FEET, AS DETERMINED BY GPS OBSERVATIONS ON POINTS 8028 AND 8201 AS SHOWN ON THE CITY OF SAN LUIS OBISPO "HORIZONTAL CONTROL NETWORK" (JANUARY 2007)

BENCHMARK

THE ELEVATIONS SHOWN HEREON ARE NAVD88 AS DETERMINED BY MEASUREMENTS ON POINT S-12 AS SHOWN ON THE CITY OF SAN LUIS OBISPO "BENCHMARK SYSTEM" (JUNE 2019) HAVING PUBLISHED ELEVATION OF 197.61'.

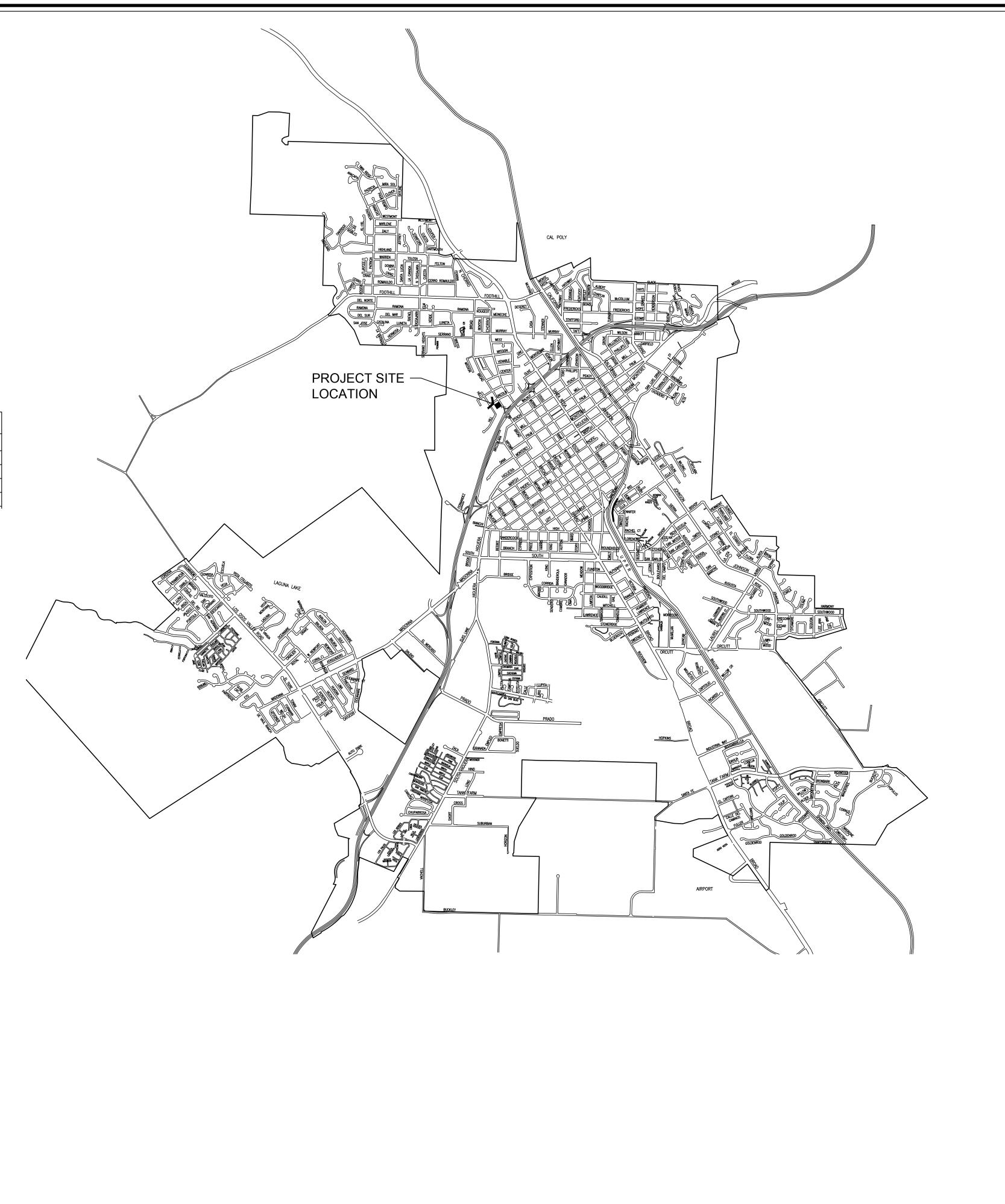
Point Table								
Point #	Northing	Easting	Elevation	Description				
5	2300369.21	5765389.37	197.49	SET X				
6	2300431.43	5765349.27	197.62	FD SLO BM S-12				
8	2300234.99	5765435.07	197.22	SET X				
9	2300245.75	5765448.51	196.03	FD PIN IN CNC IN MON WELL				

legend:

Λ DDDC\/I Λ TI Ω NIC

AC	Asphalt Concrete Paving
AP CO	Angle Point Clean—out
CL	Centerline
CONC	Concrete
CONST	Construction
DIA & Ø	Diameter
ELEV	Elevation
EXIST & ()	Existing Finished Floor
FF FS	Finished Floor Finished Surface
FH	Fire Hydrant
FL	Flow Line
G	Gas
GB	Grade Break
GR	Finished Grade
HDPE HP	Hi—density Polyethylene High Point
INV	Invert Elevation
LT	Left
LF	Linear Feet
LP	Low Point
MH	Manhole
P PC	Power oint Of Curvature
PL	Property Line
PRC	Point Of Reverse Curvature
PT	Point Of Tangency
PUE	Public Utility Easement
PVC	Polyvinyl Chloride
R RT	Radius Right
RP	Radius Point
RW	Right-of-way
S	Slope
SD	Storm Drain
SS	Sanitary Sewer
STA T	Station Telephone
TW	Top Of Wall
TVD	T

Silt Fence



index to plans

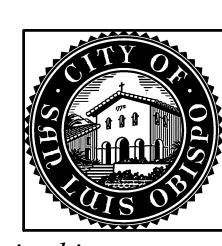
sheet no.

description

- TITLE SHEET/ VICINITY MAP
- **GENERAL NOTES**
- TREE PROTECTION NOTES
- LINCOLN & BROAD DEMOLITION PLAN
- PARK DEMOLITION EROSION CONTROL PLAN
- LINCOLN & BROAD IMPROVEMENT PLAN
- PARK GRADING PLAN
- PARK CONSTRUCTION PLAN
- PLAYGROUND PLAN
- CONSTRUCTION DETAILS
- CONSTRUCTION DETAILS
- LANDSCAPE PLANTING PLAN
- PLANTING DETAILS
- IRRIGATION PLAN
- IRRIGATION SHCEUDULE-NOTES
- IRRIGATION DETAILS
- IRRIGATION DETAILS
- SPECIFICATIONS SHEET

Reference Documents:

City Standard Specifications - May 2018 Edition City Engineering Standards - May 2018 Edition



san luis obispo county, california

NORTH BROAD STREET **NEIGHBORHOOD PARK**

APPROVED BY

Matthew A. Horn, City Engineer R.C.E. C63611 Approved Date

SPECIFICATION NO.

#######

12/30/2019 FILE NO./LOCATION

- 1. ALL EXISTING FEATURES WITHIN THIS PLAN SET ARE TAKEN FROM THE FIELD SURVEY OF RECORD BY CANNON, AND THE CITY OF SAN LUIS OBISPO RECORDS. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO BEGINNING OF
- 2. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING:
- A. APPLICABLE SECTIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION, HEREINAFTER REFERRED TO AS "CALTRANS",
- B. APPLICABLE SECTIONS OF THE STATE OF CALIFORNIA BUILDING CODE, LATEST
- C. CITY OF SAN LUIS OBISPO GRADING ORDINANCE, STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION WHERE APPLICABLE,
- D. APPROVED PLANS AND DETAILS, E. STANDARDS OF THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL
- STATE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH, F. RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER AS NOTED IN THE PROJECT SOILS REPORT ENTITLED "SOILS ENGINEERING REPORT SAN LUIS RANCH -DALIDIO MADONNA ROAD SAN LUIS OBISPO, CALIFORNIA" PREPARED BY

SAFETY AND HEALTH ADMINISTRATION , OFFICE OF STANDARDS AND RULES OF THE

- GEOSOLUTIONS, INC, DATED MAY 29, 2015, AND ALL ADDENDUMS THERETO. G. THE REQUIREMENTS OF ALL PERMITS ISSUED FOR WORK BY THE CITY OF SAN LUIS
- H. WHERE CONFLICTS EXIST BETWEEN ANY OF THE ABOVE LISTED SPECIFICATIONS, THE MOST STRINGENT LISTED SPECIFICATION SHALL APPLY.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SECURE ALL PERMITS NECESSARY TO PERFORM WORK, INCLUDING, BUT NOT LIMITED TO, WORK WITHIN THE PUBLIC RIGHT-OF-WAY, GRADING, TREE REMOVAL, AND UTILITY MODIFICATIONS.
- 4. CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO PERFORM THE WORK SHOWN ON THE APPROVED PLANS.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE VARIOUS CONTRACTORS TO COORDINATE THEIR WORK SO AS TO ELIMINATE CONFLICTS AND WORK TOWARD THE GENERAL GOOD AND COMPLETION OF THE ENTIRE PROJECT
- 6. ALL WORKMANSHIP AND MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE KIND AND QUALITY DESCRIBED IN THE SPECIFICATIONS AND SHALL BE FIRST CLASS THROUGHOUT. NEITHER FINAL ACCEPTANCE NOR FINAL PAYMENT BY THE OWNER SHALL RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR FAULTY MATERIALS OR
- 7. IN THE EVENT OF ANY CONFLICT OF INFORMATION SHOWN ON THE APPROVED PLANS OR ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE INTENT OF A CONSISTENT AND FUNCTIONAL PRODUCT. THE CONTRACTOR SHALL NOTIFY THE OWNER AND DESIGN ENGINEER IN WRITING, UPON WHICH NOTICE THE OWNER AND DESIGN ENGINEER SHALL AGREE UPON A RESOLUTION TO THE CONFLICT AND ISSUE THE RESOLUTION WITH A WRITTEN ORDER, REVISED PLANS, OR BOTH. THE CONTRACTOR SHALL BEAR THE FULL COST AND RESPONSIBILITY FOR WORK AFFECTED BY SUCH CONFLICTS AND PERFORMED BY CONTRACTOR PRIOR TO SUCH NOTICE TO THE OWNER AND DESIGN ENGINEER AND ISSUANCE OF SUCH ORDER AND/OR REVISED PLANS.
- 8. CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL AT ALL TIMES AS REQUIRED BY THE OWNER'S REPRESENTATIVE.
- 9. CONTRACTOR SHALL EXERCISE ALL NECESSARY CAUTION TO AVOID DAMAGE TO ANY EXISTING TREES, OR SURFACE IMPROVEMENTS, OR TO ANY EXISTING DRAINAGE STRUCTURE, WATER STRUCTURE, SEWER CLEANOUTS, MANHOLES, OR JUNCTION BOXES FOR UNDERGROUND ELECTRIC, GAS, TELEPHONE, CABLE TV. STORM, SANITARY, WATER OR OTHER UTILITIES WHICH ARE TO REMAIN IN PLACE AND SHALL BEAR FULL RESPONSIBILITY FOR ANY DAMAGE THERETO.
- 10. AN EFFORT HAS BEEN MADE TO DEFINE THE LOCATION OF UNDERGROUND FACILITIES WITHIN THE JOB SITE. HOWEVER, ALL EXISTING UTILITY AND OTHER UNDERGROUND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS AND THEIR LOCATION WHERE SHOWN IS APPROXIMATE. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR LOCATING OR HAVING LOCATED ALL UNDERGROUND UTILITIES AND OTHER FACILITIES AND FOR PROTECTING THEM DURING CONSTRUCTION.
- 11. CONTRACTOR SHALL CONTACT BOTH UNDERGROUND SERVICE ALERT (800-227-2600) AND THE AFFECTED UTILITY COMPANIES PRIOR TO STARTING WORK TO REQUEST AND OBTAIN MARKING OF EXISTING UNDERGROUND FACILITIES.
- 12. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF THE DISCOVERY OF ANY UTILITY THAT WAS OMITTED FROM THE PLANS, INCORRECTLY SHOWN OR NOT PROPERLY MARKED. IF A UTILITY COMPANY DOES NOT PROVIDE LOCATION INFORMATION OR MARKING SERVICES IN THE FIELD, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER. FAILURE OF THE CONTRACTOR TO NOTIFY THE OWNER PER SECTION 4-1.06B OF THE CITY STANDARDS SHALL PROHIBIT THE CONTRACTOR FROM CLAIMING EXTRA WORK ASSOCIATED WITH SAID UTILITY.
- 13. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY AND UTILITY OWNER IF ANY UTILITY IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BEAR THE COSTS OF REPAIR OR REPLACEMENT OF ANY MARKED UTILITY WHERE DAMAGE WAS CAUSED BY THE CONTRACTOR'S ACTIVITIES.
- 14. CONTRACTORS SHALL HIRE A LICENSED LAND SURVEYOR TO PROVIDE CONSTRUCTION STAKING IN ORDER TO ENSURE THE PROJECT IS CONSTRUCTED TO THE LINES AND GRADES INDICATED ON THE APPROVED PLANS.
- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF REQUIRED INSPECTIONS WITH THE APPROPRIATE AGENCIES AND UTILITY COMPANIES AND CITY

16. ENGINEER OF RECORD SHALL BEAR NO RESPONSIBILITY FOR METHODS AND PROCEDURES OF WORK ESTABLISHED BY CONTRACTOR. JOBSITE CONDITIONS, JOBSITE SAFETY, OR

- CONFORMANCE WITH SAFETY PROCEDURES AND REQUIREMENTS. 17. THE CONTRACTOR SHALL PRACTICE SAFETY AT ALL TIMES AND SHALL FURNISH, ERECT, AND MAINTAIN SUCH FENCES, BARRICADES, DETOURS, FLAGMAN, LIGHTS AND SIGNS AS NECESSARY TO GIVE PROTECTION TO THE PUBLIC AT ALL TIMES.
- 18. IN CONFORMANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS BOTH THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER OF RECORD.
- 19. THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED PLANS AND SPECIFICATIONS FOR THIS PROJECT ON THE SITE AT ALL TIMES.
- 20. THE CONTRACTOR SHALL MAINTAIN A CURRENT, COMPLETE, AND ACCURATE RECORD OF ALL CHANGES WHICH DEVIATE FROM THE CONSTRUCTION AS PROPOSED IN THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE AS-BUILT INFORMATION AS TO THE EXACT LOCATION OF ALL FEATURES FOR THE PURPOSE OF PROVIDING THE ENGINEER WITH A BASIS FOR RECORD DRAWINGS. NO CHANGES SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE CITY ENGINEERING DEPARTMENT.
- 21. ALL UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE PROJECT AND BE PLACED AT A SUITABLE DISPOSAL SITE.
- 22. NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS AND/OR PERMITS APPROVED BY THE REGULATORY AGENCIES HAVING JURISDICTION OVER THE PROJECT WORK. ALL AGENCIES SHALL BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING CONSTRUCTION. ANY CONSTRUCTION DONE WITHOUT APPROVED PLANS AND/OR PERMITS AND PRIOR NOTIFICATION WILL BE REJECTED AND WILL BE AT THE CONTRACTOR'S RISK AND EXPENSE.
- LIST OF AGENCIES HAVING JURISDICTION: A. CITY OF SAN LUIS OBISPO
- B. REGIONAL WATER QUALITY CONTROL BOARD C. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
- D. U.S. ARMY CORPS OF ENGINEERS
- E. NATIONAL MARINE FISHERIES SERVICE
- F. U.S. FISH AND WILDLIFE SERVICE
- 23. SEPARATE DEMOLITION PERMITS ARE REQUIRED IF ANY EXISTING STRUCTURES AND INFRASTRUCTURE IS REMOVED.

- 24. UNDERGROUND DEWATERING IMPROVEMENTS (SUCH AS RETAINING WALL SUB-DRAINS OR GROUNDWATER COLLECTION SYSTEM) SHALL NOT DEPOSIT COLLECTED GROUNDWATER OR SPRING WATER TO THE GUTTER OR OTHER SURFACE DRAINAGE FACILITY. SYSTEMS SHALL BE DESIGNED TO RETAIN THE WATER ON-SITE OR DEPOSIT THE COLLECTED WATER TO AN APPROVED COLLECTION SYSTEM. PER CITY STANDARD 1010B.
- 25. CONTRACTOR SHALL PROVIDE FOR THE PROTECTION OF AL EXISTING SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
- 26. CONTRACTOR SHALL MAINTAIN THE WORK AREA IN A NEAT, SAFE, CLEAN, AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE AGENCY HAVING JURISDICTION OVER THE AREA. STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. TH CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY CLEANUP ON ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION.
- 27. ALL CONSTRUCTION ACTIVITY THAT DISRUPTS THE SMOOTH FLOW OF TRAFFIC OVER THE PUBLIC ROADS WILL REQUIRE A TRAFFIC CONTROL PLAN AS SPECIFIED IN THE PROJECT SPECIFICATIONS. TRAFFIC CONTROL SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE CURRENT "MANUAL OF WARNING SIGNS, LIGHTS, AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAYS" ISSUED BY THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION AND BE SUBMITTED 5 WORKING DAYS PRIOR FOR APPROVAL OF CITY OF SAN LUIS OBISPO TRANSPORTATION DEPARTMENT.
- 28. IN THE EVENT THAT EXISTING TRAFFIC STRIPING OR STENCILING IS OBLITERATED BY CONSTRUCTION, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE "IN KIND" THE SAID STRIPING OR STENCILING TO THE SATISFACTION OF THE AGENCY HAVING JURISDICTION OVER THE STREET. IF STENCILING OR LEGEND IS PARTIALLY OBLITERATED, THE ENTIRE STENCIL OR LEGEND SHALL BE REPLACED TO THE
- 29. ALL P.C.C. AND A.C. PAVEMENT REMOVALS SHALL BE OUTLINED TO NECESSARY WORKING LIMITS AND SAWCUT PRIOR TO REMOVAL. ALL DEBRIS CREATED BY THE REMOVAL OPERATIONS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AWAY FROM THE JOB SITE IN A MANNER AND AT A LOCATION ACCEPTABLE TO ALL COGNIZANT AGENCIES.
- 30. THE CONTRACTOR'S WORK SCHEDULE SHALL TAKE INTO ACCOUNT SCHEDULE RESTRICTIONS NECESSARY FOR THE SAFE HANDLING OF VEHICLE, BICYCLE, AND PEDESTRIAN TRAFFIC ADJACENT TO PROJECT.
- 31. IN THE EVENT THAT THE CONTRACTOR NOTICES IRREGULARITIES IN THE LINE OR GRADE HE SHALL BRING IT TO THE IMMEDIATE ATTENTION OF THE CITY AND DESIGN ENGINEER. IF HE FAILS TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ERROR IN THE LINE AND GRADE AND NECESSARY RECONSTRUCTION TO CORRECT SUCH ERROR. 32. NEITHER THE CITY NOR THE DESIGN ENGINEER WILL ENFORCE SAFETY MEASURES OR
- REGULATIONS AS THEY PERTAIN TO THE CONTRACTOR. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.

ENERAL GRADING NOTES

- 1. ALL GRADING SHALL CONFORM TO THE RECOMMENDATIONS OF THE PROJECT SOILS REPORT PROVIDED BY THE CITY SAN LUIS OBISPO.
- 2. WORK SHALL CONSIST OF ALL CLEARING (INCLUDING TREE REMOVAL), GRUBBING, AND STRIPPING, PREPARATION OF AREAS TO RECEIVE FILL MATERIAL, EXCAVATION, SPREADING, COMPACTION AND CONTROL OF THE FILL MATERIAL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADING AND SLOPES, AS SHOWN ON THE ACCEPTED PLANS AND TO THE SATISFACTION OF THE PROJECT GEOTECHNICAL ENGINEER REVIEWING THE WORK.
- 3. CONTRACTOR IS RESPONSIBLE TO VERIFY THAT PERMITS ARE IN ORDER PRIOR TO STARTING WORK ON THE PROJECT. CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS THEREOF
- 4. THE CONTRACTOR SHALL NOTIFY THE PROJECT GEOTECHNICAL ENGINEER, AND THE CITY OF SAN LUIS OBISPO INSPECTOR AT LEAST SEVENTY TWO (72) HOURS PRIOR TO COMMENCEMENT OF ANY CLEARING OR GRADING OPERATIONS ON-SITE.
- 5. A REPRESENTATIVE OF THE PROJECT GEOTECHNICAL ENGINEER SHALL BE ON SITE DURING GRADING OPERATIONS AND SHALL PERFORM SUCH TESTING AS DEEMED NECESSARY. THE REPRESENTATIVE SHALL OBSERVE THE GRADING OPERATION FOR CONDITIONS THAT SHOULD BE CORRECTED, AND IDENTIFY THOSE CONDITIONS WITH RECOMMENDED CORRECTIVE MEASURES TO THE CONTRACTOR.
- IN THE EVENT THAT ANY UNUSUAL CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATION, THE PROJECT GEOTECHNICAL ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTIONS.
- AREAS TO BE GRADED SHALL BE PREPARED BY REMOVING SURFACE AND SUB-SURFACE DELETERIOUS MATERIALS, INCLUDING BUT NOT LIMITED TO, VEGETATION DEBRIS, TOPSOIL, ORGANIC MATERIALS, CONSTRUCTION SPOILS, BURIED UTILITY LINES TO BE REMOVED, SEPTIC SYSTEMS, BUILDING MATERIALS, AND OTHER UNSUITABLE MATERIALS. TREES DESIGNATED FOR REMOVAL SHALL BE REMOVED AND THEIR PRIMARY ROOT SYSTEMS GRUBBED. VOIDS LEFT FROM SITE CLEARING SHALL BE CLEANED AND BACKFILLED AS RECOMMENDED IN THE PROJECT SOILS REPORT.
- 8. ALL EXISTING TRASH, DEBRIS, ROOTS, TREE REMAINS AND OTHER RUBBISH SHALL BE REMOVED FROM THE SITE SO AS TO LEAVE THE AREAS THAT HAVE BEEN DISTURBED WITH A NEAT AND FINISHED APPEARANCE FREE FROM UNSIGHTLY DEBRIS. NO BURNING
- 9. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL ADJUST ALL STORM DRAIN INLETS, VALVE BOXES, MANHOLE RIMS, SEWER CLEANOUTS, AND OTHER UTILITY BOXES TO NEW FINISH GRADE.

CITY OF SAN LUIS OBISPO STANDARD NOTES

- 1. ALL WORK LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY OR WITHIN THE JURISDICTION OF THE UTILITIES AND PUBLIC WORKS DEPARTMENTS SHALL COMPLY WITH THE MOST CURRENT EDITION OF THE ENGINEERING STANDARDS AND STANDARD SPECIFICATION. THE CURRENT ADOPTED STANDARDS ARE DATED MAY 2016.
- 2. A SEPARATE ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY OR WITHIN CITY EASEMENTS FOR CONNECTIONS TO PUBLIC UTILITIES. WORK REQUIRING AN ENCROACHMENT PERMIT INCLUDES BUT IS NOT LIMITED TO DEMOLITIONS, UTILITIES, WATER, SEWER, AND FIRE SERVICE LATERALS, CURB, GUTTER, AND SIDEWALK, DRIVEWAY APPROACHES, SIDEWALK UNDERDRAINS, STORM DRAIN IMPROVEMENTS, STREET TREE PLANTING OR PRUNING, CURB RAMPS, STREET PAVING, AND PEDESTRIAN PROTECTION OR CONSTRUCTION STAGING IN THE RIGHT-OF-WAY
- 3. CONTACT THE PUBLIC WORKS INSPECTION HOTLINE AT 781-7554 WITH AT LEAST A 48 HOUR NOTICE FOR ANY REQUIRED ENCROACHMENT PERMIT INSPECTION OF FINAL
- 4. A TRAFFIC AND PEDESTRIAN CONTROL PLAN SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ENCROACHMENT PERMIT
- 5. A CAL-OSHA PERMIT IS REQUIRED FOR EXCAVATION OR TRENCHING GREATER THAN 5 FEET IN DEPTH. A COPY OF THE ANNUAL, PROVISIONAL, OR TEMPORARY PERMIT SHALL BE PROVIDED TO THE BUILDING DIVISION PRIOR TO BUILDING, UTILITY, AND/OR GRADING PERMIT ISSUANCE IS APPLICABLE. ANY OSHA PERMIT EXEMPTION OR WAIVER SHALL BE PROCESSED ON A FORM PROVIDED BY THE BUILDING DIVISION.
- 6. A PRE-CONSTRUCTION MEETING SHALL BE COORDINATED BY THE OWNER/DEVELOPER OR CONTRACTOR AND SHALL INCLUDE PERTINENT CITY STAFF. AS A MINIMUM, THE ASSIGNED BUILDING INSPECTOR, CITY OF SAN LUIS OBISPO AND PUBLIC WORKS INSPECTOR SHALL BE INCLUDED IN THIS MEETING TO DISCUSS THE LIMIT OF PUBLIC AND PRIVATE IMPROVEMENTS AND THE CORRESPONDING INSPECTION RESPONSIBILITIES.
- 7. ANY SECTIONS OF DAMAGED OR DISPLACED CURB, GUTTER & SIDEWALK OR DRIVEWAY APPROACH SHALL BE REQUIRED OR REPLACED TO THE SATISFACTION OF THE CITY OF SAN LUIS OBISPO.
- 8. ELECTRONIC DRAWING FILES (.DWG) AND ANY ASSOCIATED PLOT FILES ALONG WITH ONE ORIGINAL, STAMPED AND SIGNED, INK ON BOND, SET OF PLANS SHALL BE SUBMITTED PRIOR TO THE START OF CONSTRUCTION OR MAP RECORDING, RECORD DRAWINGS ARE TO BE SUBMITTED WITHIN 4 WEEKS OF COMPLETION OF CONSTRUCTION AND PRIOR TO CITY ACCEPTANCE OF THE PUBLIC IMPROVEMENTS AND SHALL INCLUDE A SIGNED SCAN (.TIT) OR ADOBE FILE IN ADDITION TO THE DRAWING FILES. SUBMIT THIS DATA EITHER VIA EMAIL (FOR SMALL PROJECTS) OR ON A CD, 3-1/2" FLOPPY DISC OR ZIP DISC CONTAINING THE REQUIRED DATA. FILES SHALL BE SUBMITTED TO THE DEVELOPMENT REVIEW DIVISION ENGINEER.
- 9. MAKE ARRANGEMENTS, AND PROVIDE EVIDENCE OF SAME, TO PROVIDE THE "AS-BUILT" PLANS, MICROFICHE AND A DIGITAL COPY OF THE RECORD DRAWING IN A FILE FO1MAT COMPATIBLE WITH AUTOCAD, E.G. DXF FORMAT.

EXISTING	PROPOSED	H I I I I I I I I I I I I I I I I I I I

-----___ _ _ _ _ _ _ _ _ _ ____ ____

STREET CENTERLINE CURB CURB & GUTTER ROAD STRIPING FENCE ____X____X____ DAYLIGHT LINE 100YR FLOODPLAIN BOUNDARY -----FLOWLINE DRAINAGE SWALE RETAINING WALL

LEGEND

TRACT BOUNDARY

PROPERTY LINE

RIGHT-OF-WAY

EASEMENT/SETBACK

BIORETENTION AREA

TREES

GRADE BREAK TOP OF SLOPE _____ TOP OF SLOPE SLOPE CONTOURS = > = = WATER MAIN RECLAIMED WATER LINE _____ RW _____ **RW** _____

SANITARY SEWER LINE STORM DRAIN LINE GAS LINE ELECTRIC LINE OVERHEAD WIRES ____ OH ____ **OH ___** FIBER OPTICS ____ F0 ____ **F0 ___** TELEPHONE _____T____T___ JOINT TRENCH ____ JT ____ **____ JT ___**

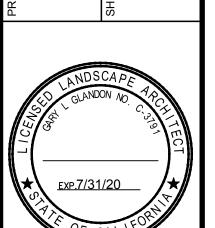
FIRE HYDRANT STREET LIGHT (PUBLIC) -X---**⇒** STREET LAMP (PRIVATE) STORM DRAIN INLET CURB INLET

POWER POLE SDMH RIPRAP PROTECTION AT SD OUTLET ROUGH PAD ELEVATION

STREET ELEVATION SURFACE

ABOVE STRUCTURAL SECTION

PAD XXX.X

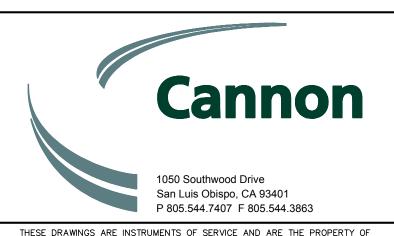


G. GLANDON G. GLANDON

CHECKED BY:

12/30/2019

CITY SPECIFICATION NO. 190125 PLAN FILE NO. / LOCATION



ANNON. ALL DESIGNS AND INFORMATION ON THESE DRAWINGS ARE FOR USE OF THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE OR REPRODUCED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF CANNON.

TREE PROTECTION NOTES

2.1 Pre-Construction

2.1.1 Tree Protection and Critical Root Zones

Tree Protection Zones (TPZ) for each tree will be designated on construction plans that identify areas where trees are to be preserved and where special care is necessary to protect living trees. Tree protection fencing will be installed as per grading plans and will be maintained throughout construction. For work within the TPZ, construction means and methods must be approved by the Project arborist prior to initiating work. Work within the TPZ will be subject to daily monitoring by the Project arborist.

The TPZ is defined by the tree's critical root zone (CRZ) defined as a minimum of one foot of canopy diameter times each inch of diameter at breast height (DBH). For example, a 24-inch DBH tree would have a 24-foot CRZ and the TPZ fencing for that tree would have a 24-foot radius fence surrounding the tree. If several 24-inch trees occurred within the same vicinity to be protected, TPZ fencing would be placed along outer boundary of the CRZ line formed by the individual trees. Note that root systems of trees may extend well beyond the canopy dripline and may be two to three times beyond the CRZ. Damage to the tree roots can be caused by any disturbance inside this area. In addition, nearby trenching, paving, or altering drainage patterns outside the immediate CRZ may also significantly affect a tree.

For trees that do not have a circular trunk, CRZ can be calculated by measuring the circumference of the tree and dividing that number by "pi" (3.14) to get tree diameter. This method shall be used whenever possible; and at minimum, tree protection fencing shall be installed at the perimeter of the tree dripline or CRZ whichever is greater. The dripline is defined as the outermost circumference of the tree canopy.

2.1.2 Pre-Construction Meeting

The project arborist shall attend a pre-construction meeting with tree removal, irrigation, landscape, and any other contractors expected to work within the TPZ to explain the tree protection and monitoring requirements as outlined in the approved TPP.

2.1.3 Tree Protection Fencing

General protective fencing will be installed sitewide to clearly delineate and protect environmentally sensitive habitat areas (ESHA), see Attachment C, ESHA Fence. Fences will protect trees from unnecessary impacts due to construction activities, materials storage, and equipment staging. TPZ fence will be installed at the CRZ or dripline (whichever is greater) for trees to be protected within 20 feet of construction that are located outside of the ESHA fence.

The Project arborist may allow temporary and limited tree removal activity with tree protection fencing temporarily removed during specified activity and immediately replaced, under the arborist's supervision. All trees whose critical root zones (CRZ) are within 20 feet of construction, stockpile areas, storage and staging areas, and access roads will require tree protective fencing. The tree protective fencing is to be installed around all trees to remain and groups of trees wherever possible. Protective fencing shall extend to the outer edge of the critical root zone CRZ whenever possible. The Project arborist may reduce fence placement under some circumstances.

Prior to any clearing, grubbing, trenching, grading, or any land disturbances, tree protection

2.1.3.1 Fencing Type

Fencing shall be temporary, readily visible, orange snow drift/construction fencing, and a minimum of 4-feet high. Fencing shall be secured to 6-foot t-posts, driven into the ground by 12 inches, and placed at intervals of 8 feet minimum. Fencing can be fastened to the t-posts with bailing wire or zip ties. Fencing shall be installed outside the CRZ unless modifications are approved by the Project arborists. Fencing shall effectively: 1) keep the foliage, crown, branch structure and trunk clear from damage by equipment, materials or disturbances; 2) preserve roots and soil in an intact and non- compacted state; and 3) identify the TPZ zone. Fencing shall be maintained for the duration of construction. Fencing shall be removed as the last item of contract

2.1.3.2 Signs

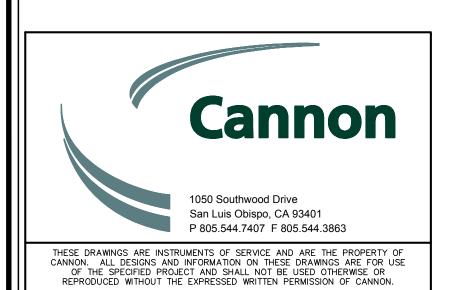
One English language and one Spanish language, readily-visible, durable, waterproof sign shall be installed on tree protection fences in 4 equidistant locations around each individual protected tree or tree clusters. Signs placed on fencing around a stand of protected trees shall be placed at approximately 50- foot intervals. The size of each sign must be a minimum of 16 inches wide and must contain the wording below. The lettering in the word "WARNING" ("ADVERTENCIA") must be in capital letters at least 2 inches in height; the phrase "TREE PROTECTION ZONE" ("ZONA DE PROTECCIÓN DE ÁRBOLES") must be in capital letters at least 1 inch in height; all other lettering must be at least ½ inch in size (Attachment D, Signage).

2.1.4 Fence Installation Verification

Verification that appropriate tree protection fencing has been installed per the Project arborist's instruction and pursuant to the approved TPP and construction drawings shall be provided in the Project arborist's weekly reports to the Project Manager and Natural Resources Manager.

2.2 During Construction

Due to the nature of construction activities on a project site, there are direct and indirect hazards that must be considered for long term tree protection of trees. Table 2 addresses constructionrelated impacts to trees and recommendations for impact avoidance and mitigation to minimize impacts to trees (Matheny and Clark 1998; City of San Luis Obispo 2016).



Tree	Construction Activity	Methods/Treatments to Minimize Damage
		• Restrict clearing of soil around trees.
	Clearing site of organic surface soil before grading;	 Install 4-foot high construction fences to protect trees from injury.
	clearing vegetation.	 Any trees to be removed adjacent to trees should be cut at ground level and not pulled out by equipment; otherwise, root injury to remaining trees may result.
	Lawaring grade proposing	 No grading cuts or fills will be allowed within the drip-line of trees to be saved, unless approved by the Engineer and Arborist.
	subgrade for fill and structures	 Before grading, root prune tree at edge of excavation to depth required.
Root loss		 Spoils beyond cut face can be removed by equipment sitting outside the dripline of the tree.
	Dunania a sub ana la Can	• Use paving section requiring a minimum amount of excavation (e.g., reinforced concrete instead of asphalt).
	pavement	• Increase strength of pavement to reduce reliance on subgrade for strength (e.g., use extra reinforcement in concrete, geotextile under base material).
		 Avoid continuous footings adjacent to trees Any roots encountered greater than 1 inch in diameter must be protected from scarring or drying.
	Excavation for footings, walls, foundations	• If the root cannot be protected, schedule the Engineer and City Arborist to review excavation and give direction.
		 Where roots must be removed, cut cleanly with appropriate equipment (e.g. rock saw)
Root loss Root loss Clearing site of surface soil before clearing vegetations. Lowering grade, subgrade for fill structures. Preparing subgrapavement Excavation for fivalls, foundation walls, foundation. Trenching for utter the subgraph of the subg	Excavation for footings, walls, foundations	• Do not use equipment that pulls and shatters roots (e.g., backhoe, trencher).
		• No trenching permitted within in the drip- line of protected trees un less approved by Engineer and Arborist.
Root loss		• Any trenching within 20 feet of the drip- line of tree to be saved, mark the trench location with chalk or paint, and notify the Engineer for review and approval before trenching work begins. If Engineer approves trenching within the drip-line of trees or shrubs to be saved, trenching excavation must be done by hand.
1000 1035	Trenching for utilities, drains	 Shade roots from direct sunlight when exposed in open trench. Pruned or cut roots must be reviewed by the Engineer prior to backfilling trench.
Root loss		• Trench must be backfilled within 24 hours of encountering roots.
		 Tunnel under roots, if possible. If not, within root area, dig trench by hand, bridging roots greater than 1-inch diameter
		• Where possible, consolidate utilities into one trench.
		• All directional boring within drip-line of protected trees must maintain a minimum depth of 5 feet.
_	Injury from equipment	 Have certified arborist clean up wounds as soon as possible.
	mjary nom equipment	• Have arborist monitor for trees with intertwined crowns during tree removal.
Wounding	Creating clearance for	Prune to minimum height required prior to construction.
of tree	building, traffic, construction	 Consider minimum height requirements of construction equipment and emergency vehicles over roads.

Impacts to Tree	Construction Activity	Methods/Treatments to Minimize Damage
		 All pruning should be performed by a certified arborist and conform to ANSI pruning standards.
		• Fence trees to keep traffic and storage out of root area.
	Compacted surface soils	• Provide a storage yard and traffic areas for construction activity well away from trees.
		• Where traffic cannot be diverted, protect soil surface with thick mulch or steel plates.
	Spills, waste disposal (e.g.,	Fence trees to exclude dumping.
Unfavorable	paint, oil, fuel, construction materials)	• Clean up accidental spills immediately.
conditions for root	Soil sterilants (herbicides) applied under pavement	• Use herbicides safe for use around trees. Adhere to label requirements.
growth; chronic	Impervious pavement over	Minimize use of pavement within dripline.
stress from reduced root systems	soil surface	• Allow sidewalk/trail alignments to vary to minimize impact to trees.
	Lack of surface drainage away from tree	 Where surface grades are to be modified, make sure that water will flow away from the trunk (i.e., that the trunk is not the lowest point). If tree is in low point, design drain system with least impact to roots.
	Imigation of avatic landscape	 Match irrigation requirements of tree and understory landscape to avoid over irrigation
	Irrigation of exotic landscape	 Do not have irrigation directed toward trunk of tree.
	Thinning stands, removal of	• Retain trees in groves rather than singly.
Increased	undergrowth	Maintain natural undergrowth.
exposure	Reflected heat from surrounding hard surfaces	 Minimize use of hard surfaces around trees. Monitor moisture needs where water use is expected to increase.
Increased exposure	Pruning	 Avoid severe pruning where previously shaded bark would be exposed to sun. Where pruning is unavoidable, provide protection to bark from sun.

2.2.1 Tree Protection Zone Restrictions

- No ground disturbance, grading, trenching, construction activities or structural development shall occur within the tree protection zone (TPZ; e.g., the dripline of protected trees) except as specifically authorized by the Project's development permit, the approved TPP, and the Project arborist.
- Eucalyptus setbacks for TPZ fencing may be adjusted under guidance of the Project
- All temporary vehicle and equipment access areas within TPZ boundaries will require a minimum 6-inch layer of wood chip mulch to mitigate soil compaction over the CRZ. Additionally, the Project arborist may require the addition of plywood or rubber mats over the mulch in frequently traveled sensitive areas.
- No equipment, soil, or construction materials shall be placed, staged, or stored within the TPZ. No oil, gasoline, chemicals, paints, solvents, or other damaging materials shall be deposited within the TPZ or in drainage channels, swales or areas that may lead to the TPZ.
- Unless otherwise directed by the Project arborist, all work done within the TPZ, including brush clearance, digging, trenching and planting, shall be done with hand tools or small hand-held power tools that are of a depth and design that will not cause root damage.
- Where trenching or digging within the TPZ is specifically permitted, the work shall be conducted in a manner that minimizes root damage, as directed by the Project arborist.
- Grade changes outside of the TPZ shall not significantly alter drainage to protected trees. Grading within the TPZ shall use methods that minimize root damage and ensure that roots are not cut off from air. Where erosion may be a factor, return and protect the original grade or otherwise stabilize the soil.
- Protected trees shall not be used for posting signs, electrical wires or pulleys; for supporting structures; and shall be kept free of nails, screws, rope, wires, stakes and any other unauthorized fastening devices or attachments.

2.2.2 Tree Care

Wood chip mulch created from the eucalyptus removals should be used on site as much as possible. The wood chips can be spread approximately four inches thick around protected trees, but mulch should not be placed up against tree trunks of the trees. Wood chips piled against trees can cause fungal issues on the trunk when kept wet. Wood chip mulch will help retain soil moisture, moderate soil temperature and suppress weed growth. This will also help with preventing soil compaction.

During construction there should be no fertilizer or chemical applications to trees unless considered necessary by the Project arborist.

Providing supplemental water to existing trees during the dry months is desirable. The Project arborist will determine if supplemental watering (and frequency) is necessary to maintain protected

2.2.3 Treating Wounds

If a protected tree is wounded, immediately expand protective fencing and have the Project arborist treat the wound. Fite and Smiley (2016) recommend against use of wound dressings (paint, shellac, or latex paint), unless open wounds will attract serious insect pests. In this case, wound dressing should be applied in a timely manner following injury to tree.

If bark on trunk or a major limb is damaged, it may be possible to reattach the bark or wrap the area to encourage regeneration of bark. Wound wrapping must be done shortly after damage occurs. With certain species like oaks (Quercus sp.), the bark may regenerate if the wound did not penetrate deeply into the xylem. Fite and Smiley (2016) recommend wrapping the trunk wound with black plastic sheeting or several layers of burlap to reduce drying. Leave wraps on for several weeks during the growing season. If trunk wound is exposed to the sun, only use burlap wraps as plastic may trap excessive heat.

In most cases of trunk or branch damage, the loose bark should be carefully removed, leaving attached bark in place. Jagged bark edges can be cut away with a sharp knife or chisel while avoiding injury to living tissue. Peninsulas of live bark in a wound speed the healing process, so leave as much attached live bark as possible (Fite and Smiley 2016).

2.2.4 Pruning

Pruning is recommended for 112 of the protected trees (Figure 3; Table 1). Pruning shall be performed by a certified arborist and in compliance with the International Society of Arboriculture (ISA) *Tree-Pruning Guidelines* (ANSI 2017).

- Major pruning should not occur unless the Project arborist determines that pruning is necessary for tree health or if trees pose a hazard to life or property. Trees recommended for pruning must be approved by the Natural Resources Manager. Major pruning involves pruning limbs or roots that are greater than 20 percent of the tree's girth or; pruning that overall will amount to more than 20 percent of the tree's canopy or root system. Pruning shall be performed under the supervision of the Project arborist.
- Pruning protected trees shall be kept to a minimum. Pruning for equipment clearance, dead wood and hazardous situations will be permissible with the approval of the Project arborist.
- Climbing gaffs shall not be used on live wood.
- No live tissue may be removed from protected trees solely for the purpose of altering the appearance of a tree.
- Recommended timing for pruning willows is late fall through early spring when willows are dormant, and before buds break. Branches over 1-inch diameter may be cut to 4-ft lengths and stored in large plastic trash cans filled with water until they can be used as live stakes for replanting after irrigation is installed on the cut slopes. The above-water parts should be covered with wet burlap and maintained in a moist condition for up to 4 weeks. Water should be treated with mosquito dunks (a biological control for mosquito larvae) during the holding period).

2.2.5 Arborist Monitoring

The Project arborist shall be onsite to monitor all tree removal activities, grubbing, trenching, digging, grading and construction activities within the TPZ. Additionally, the Project arborist shall perform the following duties:

- Perform weekly inspections of tree protection fencing during grading or construction in the vicinity of protected trees and report deficiencies immediately to the Project Manager and the Natural Resources Manager.
- If construction-related dust has accumulated on protected tree foliage, notify the Project Manager and the Natural Resources Manager that foliage should be hosed off
- Prepare and submit to the Project Manager and Natural Resources Manager, monthly reports summarizing the above weekly inspections. - Stop or divert all work when deficiencies require remediation and notify the Project
- Manager and Natural Resources Manager within 24 hours. Inform the Project Manager and Natural Resources Manager when tree protection fencing may be removed.

2.2.6 Unanticipated Tree Damage Reporting

In the event that unanticipated or unauthorized impacts are inflicted on protected trees, the Project arborist shall be immediately notified. The Project arborist shall inspect damaged trees and prepare unanticipated damage reports with remediation recommendations to the Project Manager and Natural Resources Manager within 24 hours of occurrence or discovery of the damage. Any damage or wounds to a tree shall be corrected within 24 hours of notification by a certified arborist using ISA guidelines. The Project arborist shall submit unanticipated damage reports to the Natural Resources Manager for two years post-construction.

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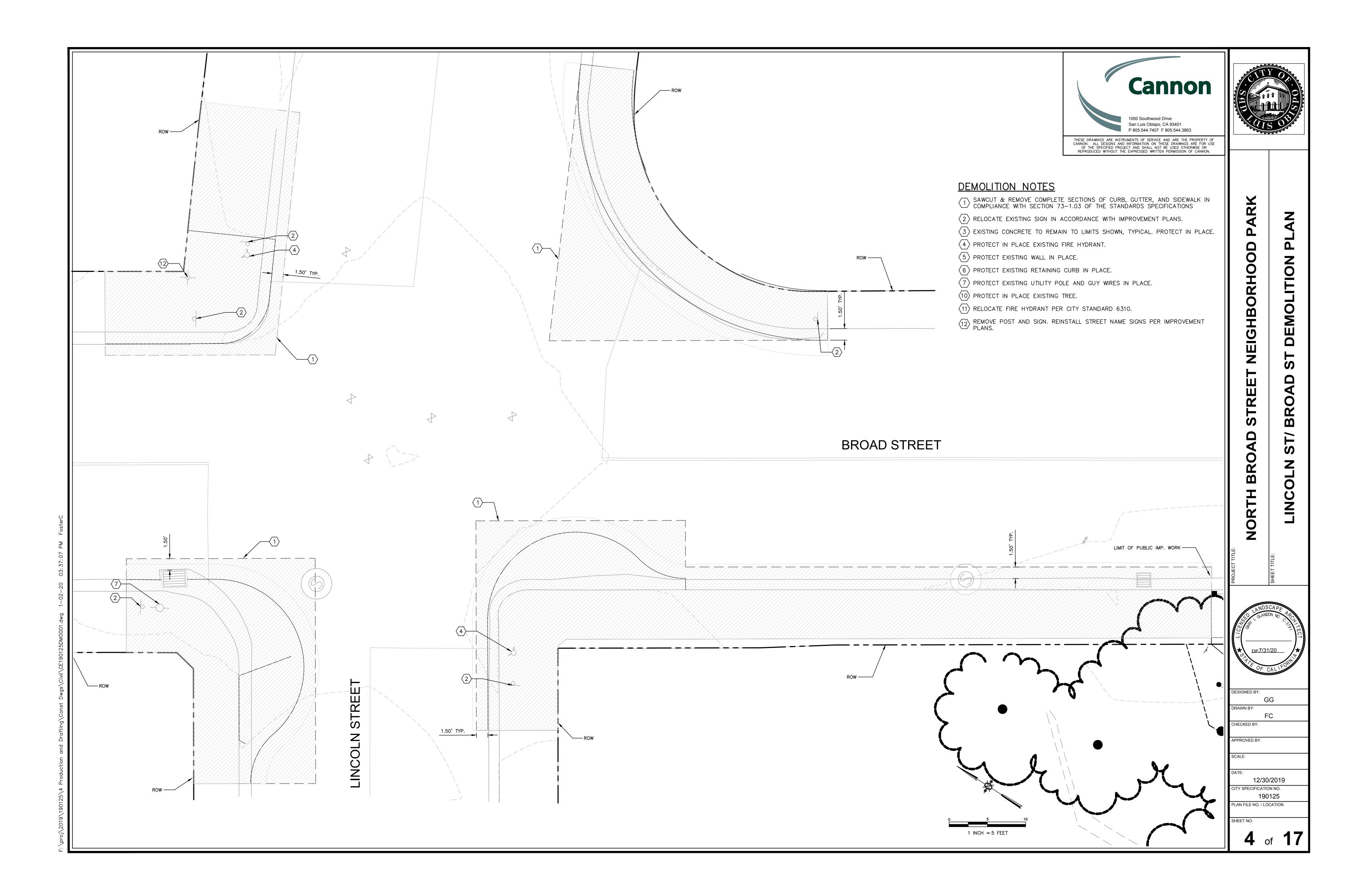
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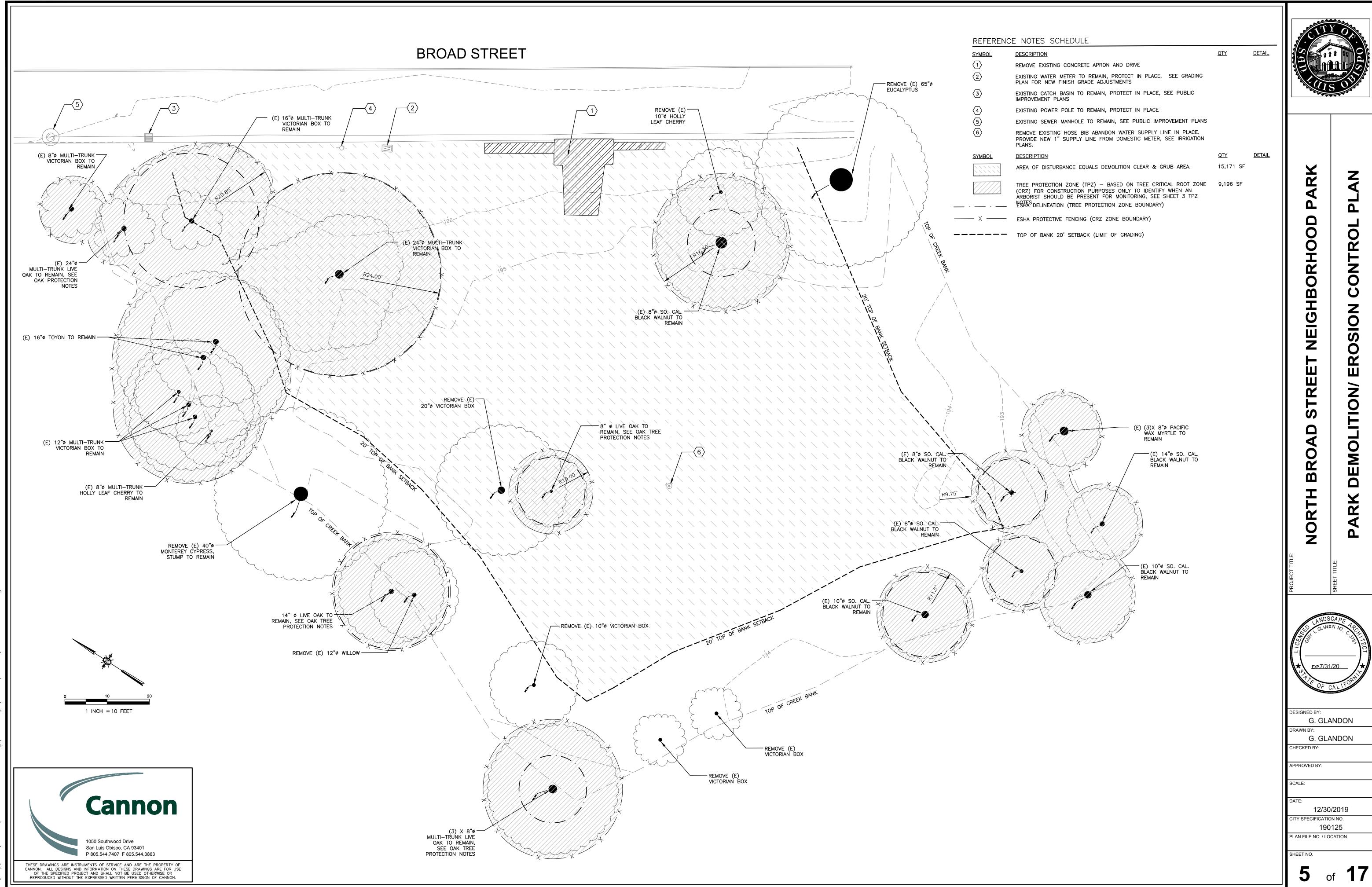
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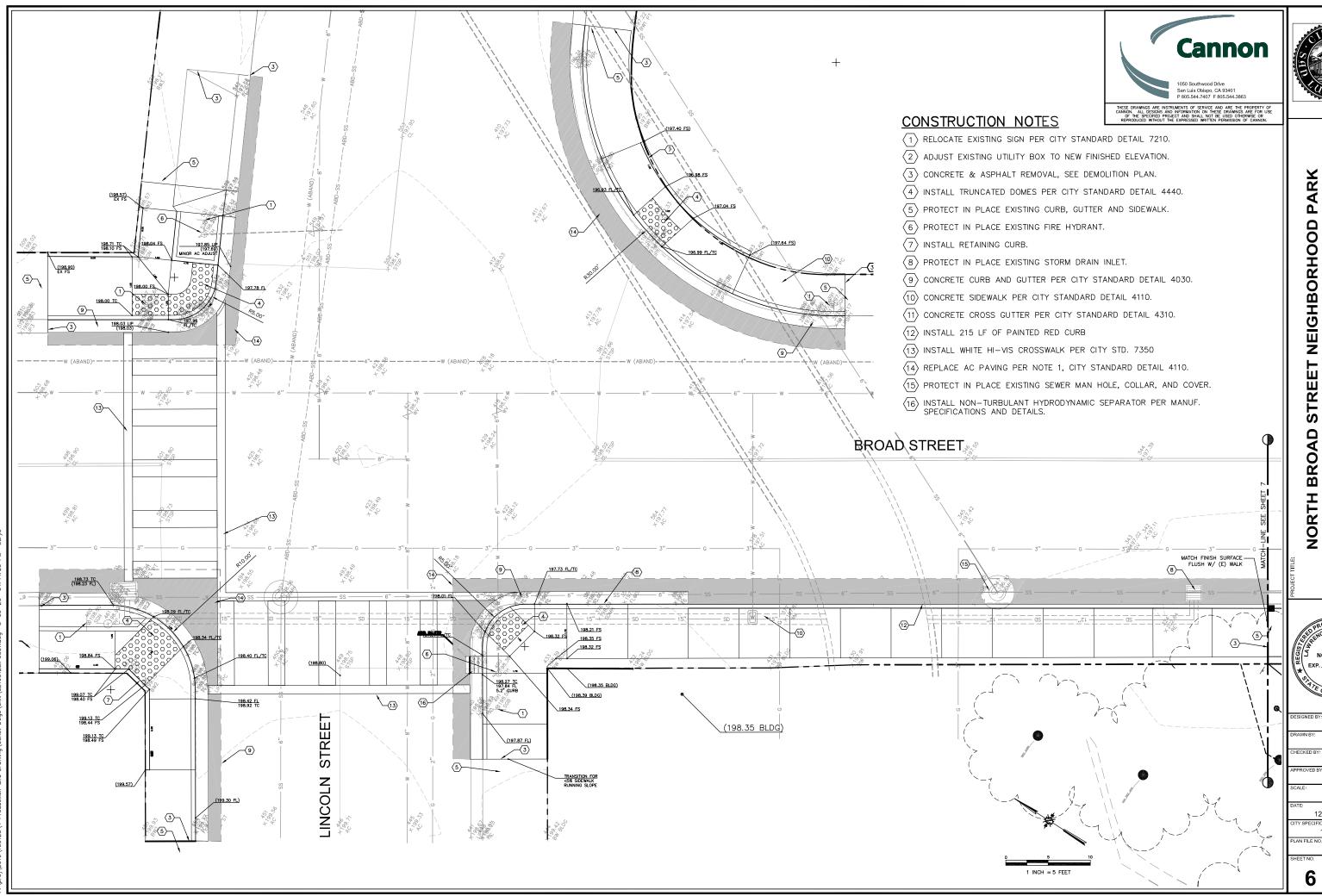
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PLAN FILE NO. / LOCATION







PLAN

IMPROVEMENT

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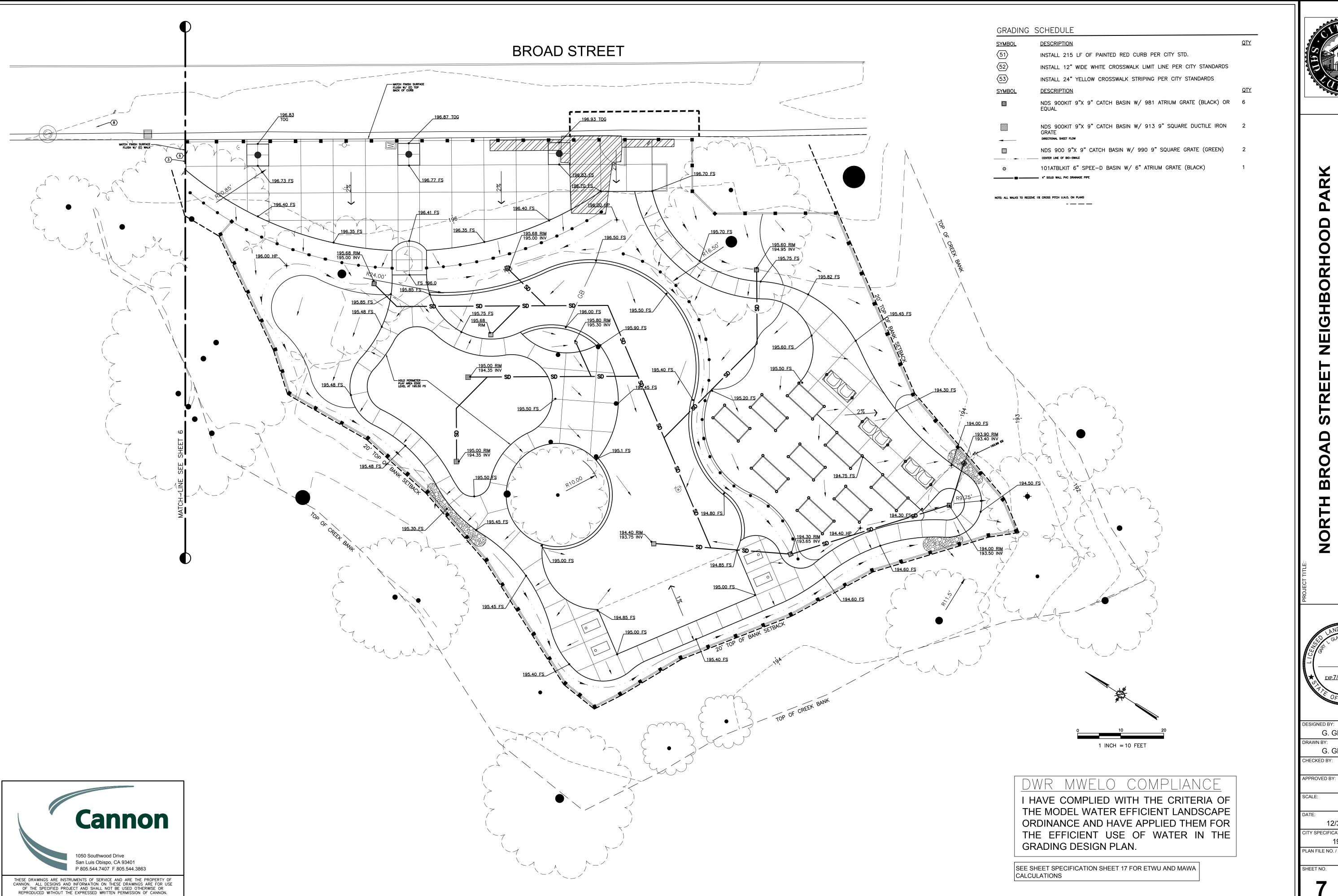
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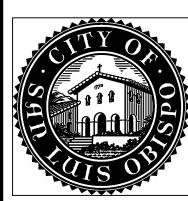
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LINCOLN

NEIGHBORHOOD STREET **BROAD**

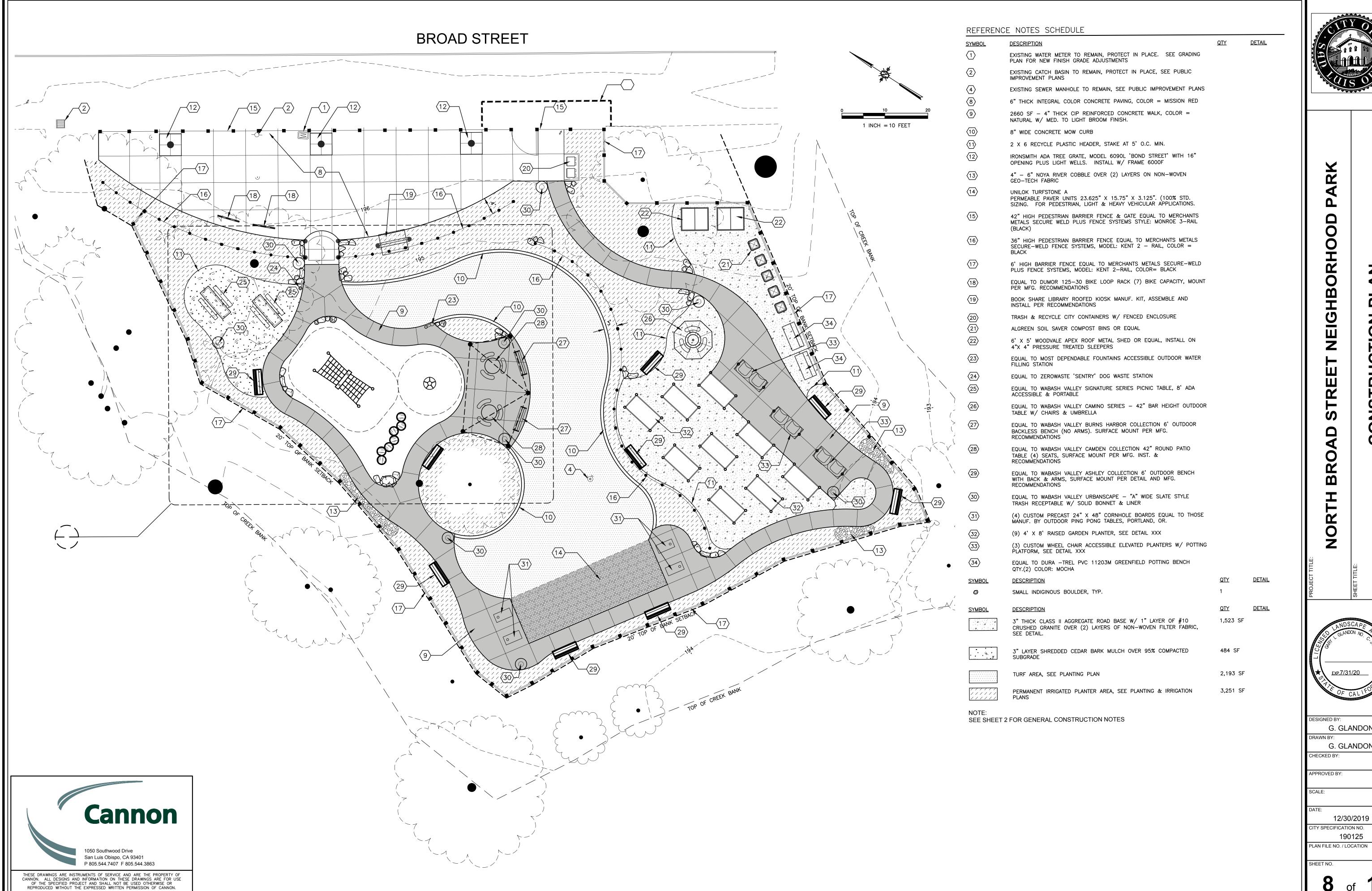
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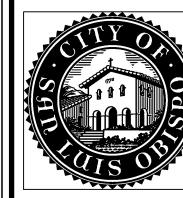




G. GLANDON G. GLANDON

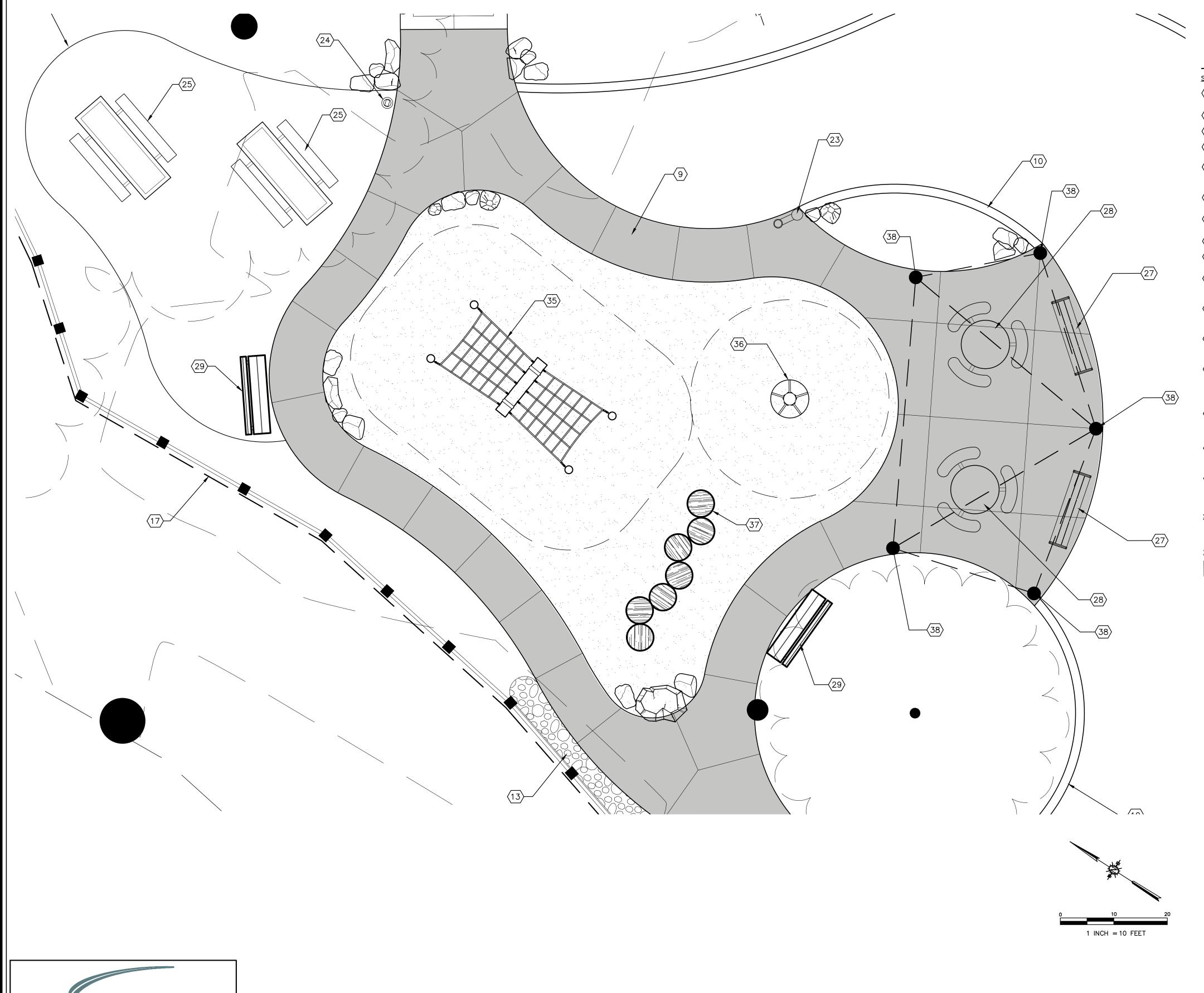
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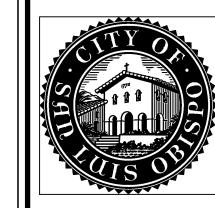
G. GLANDON G. GLANDON

12/30/2019



9	2660 SF $-$ 4" THICK CIP REINFORCED CONCRETE WALK, COLOR $=$ NATURAL W/ MED. TO LIGHT BROOM FINISH.		
(10)	8" WIDE CONCRETE MOW CURB		
11	2 X 6 RECYCLE PLASTIC HEADER, STAKE AT 5' O.C. MIN.		
(13)	4"-6" NOYA RIVER COBBLE OVER (2) LAYERS ON NON-WOVEN GEO-TECH FABRIC		
(14)	UNILOK TURFSTONE A PERMEABLE PAVER UNITS 23.625" X 15.75" X 3.125". (100% STD. SIZING. FOR PEDESTRIAN, LIGHT & HEAVY VEHICULAR APPLICATIONS.		
17 >	6' HIGH BARRIER FENCE EQUAL TO MERCHANTS METALS SECURE-WELD PLUS FENCE SYSTEMS, MODEL: KENT 2-RAIL, COLOR= BLACK		
(23)	EQUAL TO MOST DEPENDABLE FOUNTAINS ACCESSIBLE OUTDOOR WATER FILLING STATION		
\(24 \)	EQUAL TO ZEROWASTE 'SENTRY' DOG WASTE STATION		
(25)	EQUAL TO WABASH VALLEY SIGNATURE SERIES PICNIC TABLE, 8' ADA ACCESSIBLE & PORTABLE		
(27)	EQUAL TO WABASH VALLEY BURNS HARBOR COLLECTION 6' OUTDOOR BACKLESS BENCH (NO ARMS). SURFACE MOUNT PER MFG. RECOMMENDATIONS		
(28)	EQUAL TO WABASH VALLEY CAMDEN COLLECTION 42" ROUND PATIO TABLE (4) SEATS, SURFACE MOUNT PER MFG. INST. & RECOMMENDATIONS		
29 >	EQUAL TO WABASH VALLEY ASHLEY COLLECTION 6' OUTDOOR BENCH WITH BACK & ARMS, SURFACE MOUNT PER DETAIL AND MFG. RECOMMENDATIONS		
35 >	PLAY STRUCTURE EQUAL TO TIMBERFORM ROPE NET CLIMBER MODEL# 4500-021 STANDARD COLOR CASPAX-7 POWDER COATED STEEL ATTACHEMENTS STRAPS, 11" AND 7" DIA. FREE-OF-HEART-CENTER LATHE TURNED DOUGLAS FIR POSTS, NATURAL COLOR ROPE.		
(36)	PLAY STRUCTURE EQUAL TO TIMBERFORM CLIMBING TREE #1679-6-41 STANDARD COLOR CASPAX-7 POWDER COATED RUNGS, 11 INCH DIA. FREE OF HEART-CENTER LATHE-TURNED PREMIUM DOUGLAS FIR POST, EMBEDMENT MOUNT.		
37	PLAY STRUCTURE EQUAL TO TIMBERFORM LATH TURNED COLUMNS #4500-014 INCLUDES: (7) EA. 11" DIA. PREMIUM F.O.H.C. DOUGLAS FIR		
38 >	SHADE SAIL STRUCTURE EQUAL TO SHADE—N—NET 5— COLUMN TRIANGLE SAIL SHADE, (1) 20'X20'X10' ENTRY HEIGHT (2) 20'X9—5"X10—16 ENTRY HEIGHT, HARDWARE INCLUDED, POWDER COATED FRAME PLUS ENGINEERED DRAWINGS		
SYMBOL	DESCRIPTION	QTY	<u>DETAIL</u>
	SMALL INDIGINOUS BOULDER, TYP.		
<u>SYMBOL</u>	DESCRIPTION	QTY	<u>DETAIL</u>
	ENGINEERED PLAY SURFACE EQUAL TO FIBARSYSTEM 300. ENGINEERD WOOD FIBER, FIBAR—FELT, FIBAR DRAIN, FIBARMAT, FIBARGUARD PLAYGROUND BORDERS.	951 SF	

DESCRIPTION



QTY DETAIL

PLAYGROUND AREA PLAN

SHEET TILL SHEET TILL



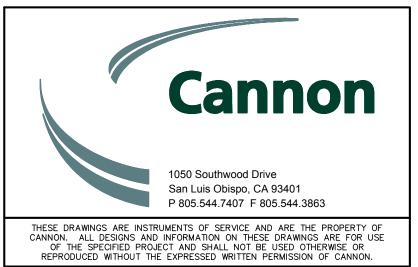
DESIGNED BY:
G. GLANDON
DRAWN BY:
G. GLANDON
CHECKED BY:

APPROVED BY:

SCALE:

12/30/2019
CITY SPECIFICATION NO.
190125
PLAN FILE NO. / LOCATION

SHEET NO.



APPROVED BY:

SCALE:

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CITY SPECIFICATION NO.
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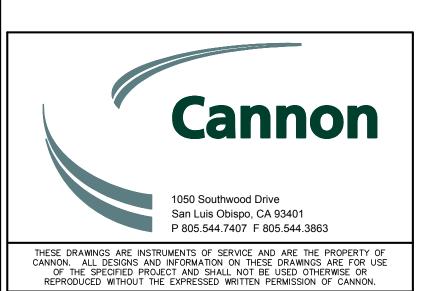
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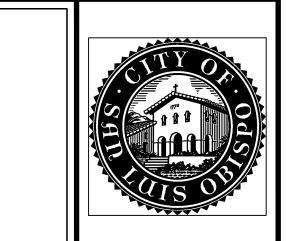
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10of 17

ANTICIPATED DETAILS:

- GARDEN PLOT RAISED PLANTER DETAILS
- SHADE SAIL STRUCTURE FOUNDATION DETAILS
- FENCING DETAILS
- TABLE MOUNTING CONDITIONS DETAIL
- BENCH MOUNTING CONDITION DETAIL
- BIKE RACK INSTALLATION DETAIL
- HYDRATION STATION INSTALLATION DETAIL
- SHED FOUNDATION DETAIL
- LITTLE LIBRARY INSTALLATION DETAIL
- TURF STONE DETAIL
- PLAY EQUIPMENT INSTALLATION DETAILS
- SAFETY SURFACING/ DRAINAGE DETAILS





NOR

CONSTRUCTION DETAILS

EXP.7/31/20

DESIGNED BY: G. GLANDON DRAWN BY: G. GLANDON CHECKED BY:

APPROVED BY: SCALE:

12/30/2019 CITY SPECIFICATION NO. 190125

PLAN FILE NO. / LOCATION

11of **17**

4" THICK CONCRETE PAVING, — REINFORCE AS PER PLANS OR SPECIFICATIONS. / 3/4" DEEP TOOLED JOINT. TYPICAL 4" THICK SAND BED OVER - COMPACTED SUB-GRADE. CONTROL JOINT 1/2 DIA. X 24" SMOOTH STEEL —— DOWEL W/ SLEEVE AT ONE END, 48" O.C. TWO MIN. PER JOINT. EXPANSION JOINT: 1/2" FELT WITH BREAK AWAY TAB, CAULK WITH GREY SEALANT. TYPICAL 4" THICK SAND BED OVER COMPACTED SUB-GRADE. **EXPANSION JOINT**

CONCRETE EXPANSION/CONTROL

1 1/2" = 1'-0"

P-1-NBR-05

8" CONCRETE MOW STRIP

← SHRUB SIDE

1/2" TOOLED EDGE. —

LAWN SIDE ---->

FINISHED GRADE.



P.C. CONCRETE, 5 SACK MIX AT 2500 PSI. —— #3 REBAR CONTINUOUS. LAP 24" AT JOINTS. COMPACTED SUBGRADE.

P-1-NBR-13

BEND-A-BOARD PLASTIC 2X4 EDGING

— 2X4 BEND—A—BOARD HEADER BOARD.

1X4X24" PLASTIC SPLICE BOARD.

2X2X16" PLASTIC STAKES @ 36" O.C. STAKES OCCUR ON SHRUB SIDE ONLY USE 2 PLATED DECK SCREWS FOR ATTACHMENT

36" O.C. 12" 12"

1X4X24" SPLICE BOARD. —

7 GA. GALVANIZED STEEL HAIRPIN AT 1.5"ID X 13"

SHRUB

FACTORY CUT THERMAL EXPANSION SLIP JOINT

ALL 2X4 HEADER BOARD, 1X4 SPLICE BOARDS, AND PLASTIC STAKES TO BE BEND-A-BOARD PLASTIC HEADER BOARD, BROWN. (510) 235-9339.

36" O.C.

MINIMUM RADIUS FOR 2X4 IS 36"

PLASTIC STAKES AT -

1X4X24" SPLICE BOARD. —

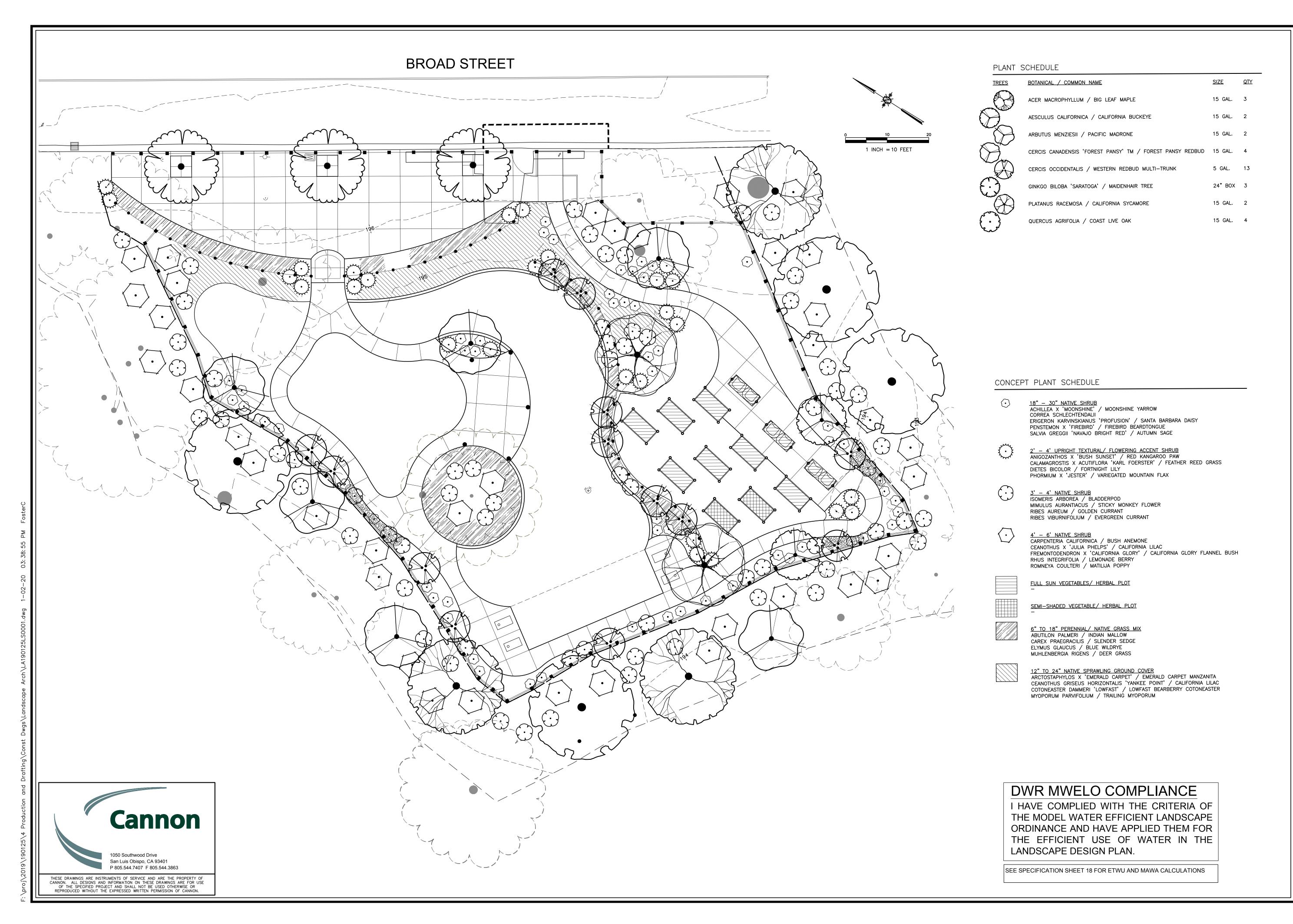
TYPICAL FIELD CUT JOINT. -

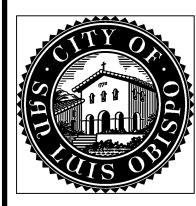
— PLASTIC STAKES, SPACE AS SHOWN

SPLICE BOARD.

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P-1-NBR-04





'H BROAD STREET NEIGHBORHOOD PA

SHEET TITLE:



G. GLANDON

DRAWN BY:
G. GLANDON

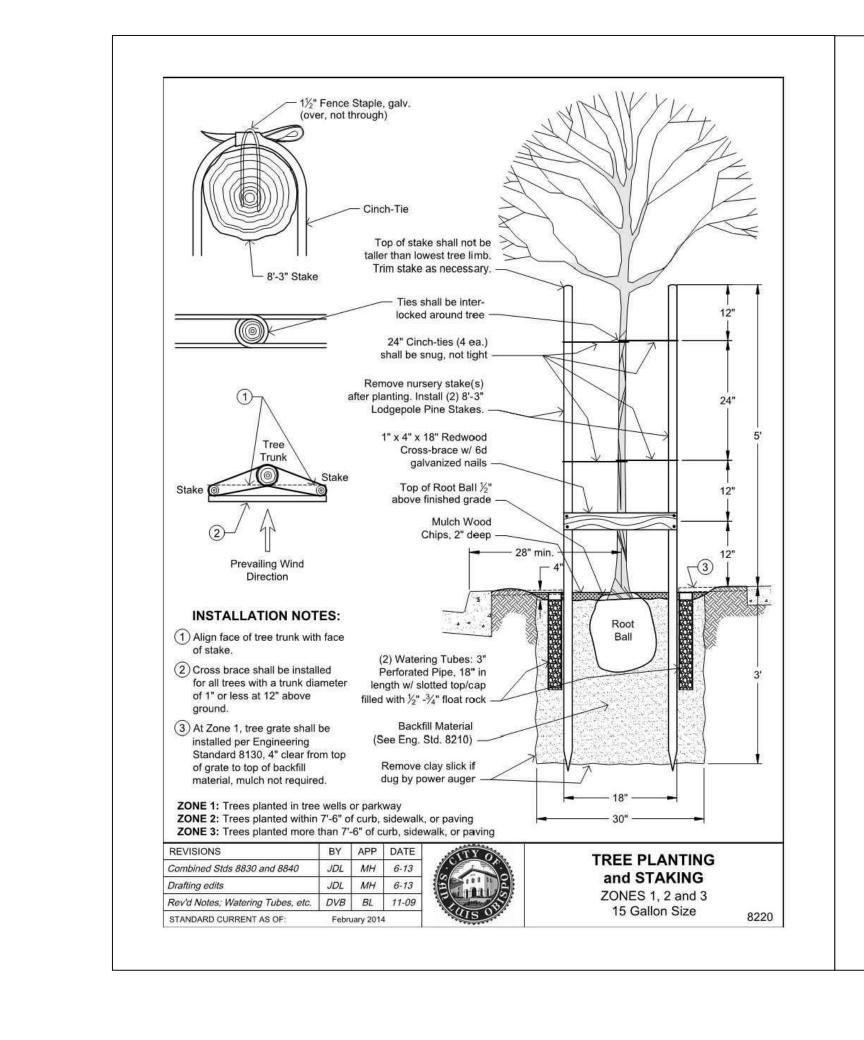
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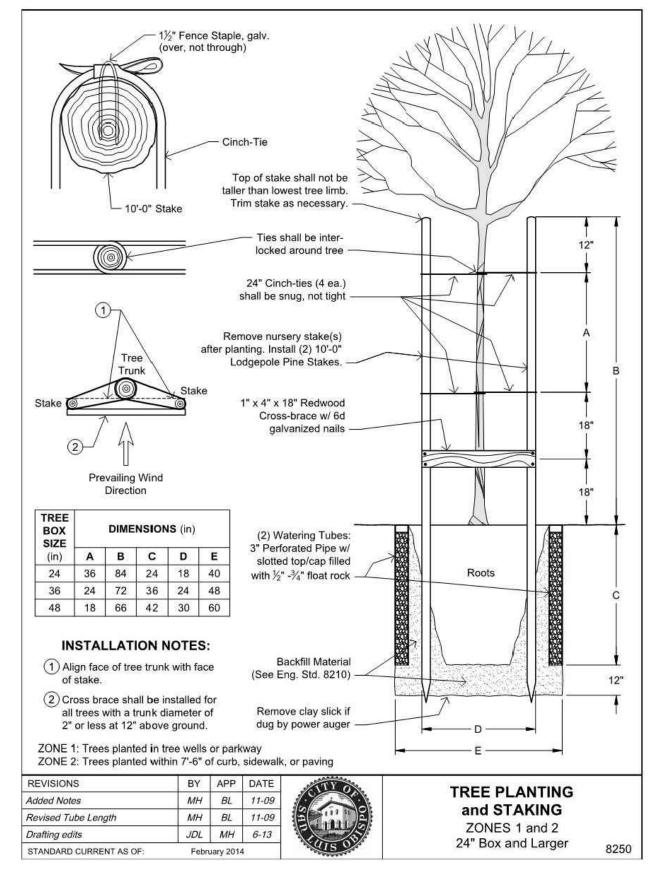
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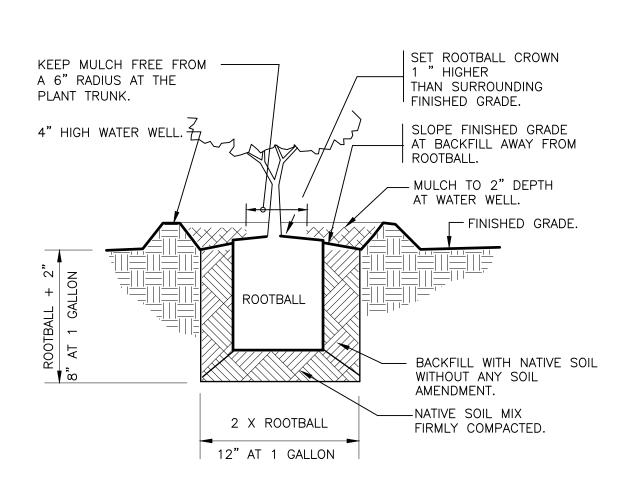
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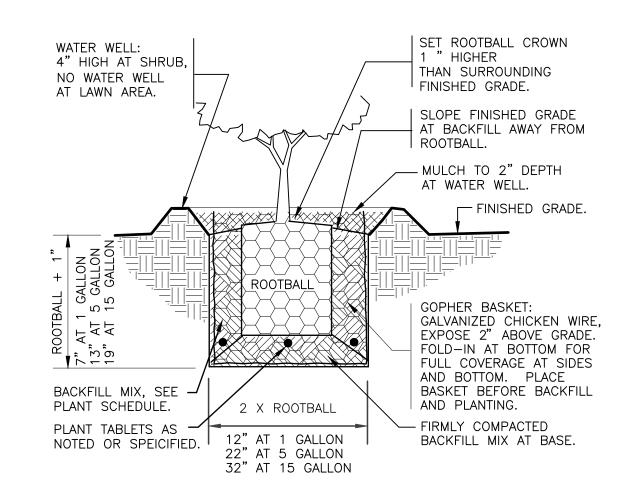
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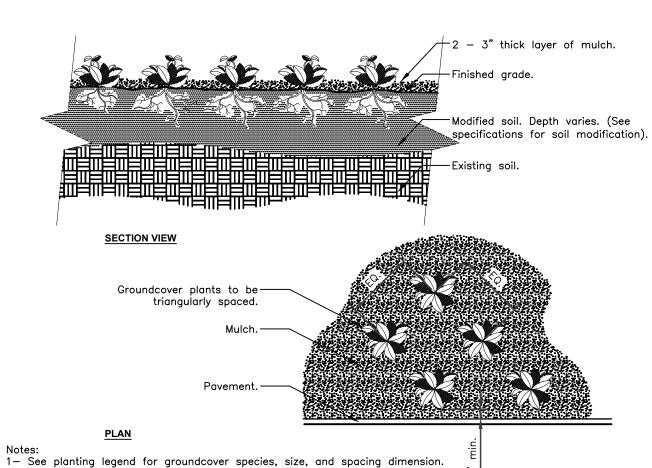




NATIVE SHRUB PLANTING



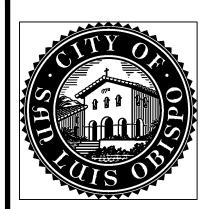
SHRUB PLANTING W/GOPHER BASKET



1— See planting legend for groundcover species, size, and spacing dimension.

2— Small roots (¼" or less) that grow around, up, or down the root ball periphers are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periperhy can be removed at the time of planting. (See root ball shaving container detail).

3— Settle soil around root ball of each groundcover prior to mulching. GROUNDCOVER URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE



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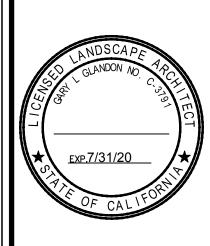
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ESIGNED BY: G. GLANDON DRAWN BY: G. GLANDON CHECKED BY: APPROVED BY: SCALE: 12/30/2019 CITY SPECIFICATION NO.

190125 PLAN FILE NO. / LOCATION

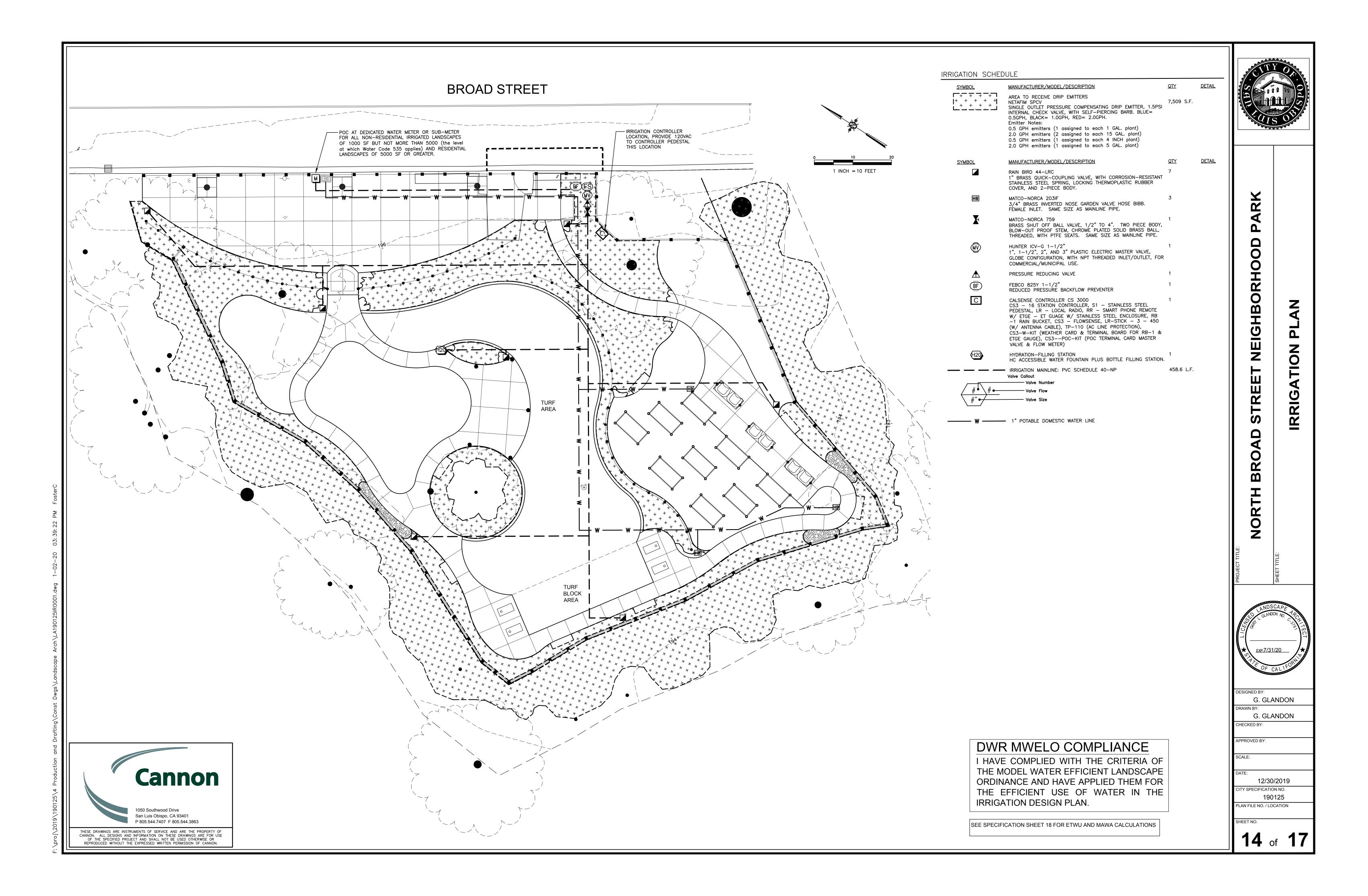
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P-1-NBR-03

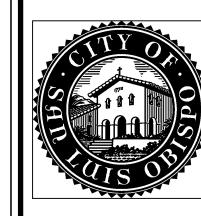
P-1-NBR-02

3/4" = 1'-0"



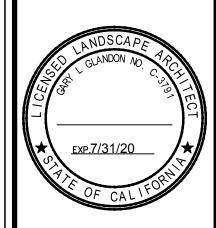
- 1. SEE SHEET L2 FOR GENERAL NOTES.
- ALL WORK IN OR ADJACENT TO MITIGATION AREAS OR TREE PROTECTION ZONE TO BE PERFORMED IN CONFORMANCE WITH THE HABITAT MITIGATION AND MONITORING PLAN PREPARED FOR THE PROJECT BY ALTHOUSE AND MEADE.
- 3. MITIGATION AREA AND OPEN SPACE AREA LANDSCAPES SHARE MAINLINES IN SOME PLACES, HOWEVER, THE SYSTEM IS DESIGNED TO ALLOW PHASED CONSTRUCTION, SO THAT THE MITIGATION AREA IRRIGATION CAN BE CONSTRUCTED AS SOON AS THE AREA IS PREPARED, WHICH MAY BE BEFORE THE OPEN SPACE AND OTHER AREAS OF THE SITE ARE READY.
- 4. IRRIGATION PLAN, EQUIPMENT LOCATIONS ARE DIAGRAMMATIC AND SHALL BE ADJUSTED AS NECESSARY TO ACCOMMODATE ACTUAL FIELD CONDITIONS.

 MAIN LINES, LATERAL LINES, VALVES AND SPRINKLER HEAD LOCATIONS ARE TO BE ADJUSTED TO ACCOMMODATE PAVEMENTS, CURBS, UTILITIES, LIGHT POLES, ELECTRICAL VAULTS, AND OTHER SITE STRUCTURES AND FURNISHINGS. ANY DISCREPANCIES, OMISSIONS, ERRORS, ETC. ON THESE DRAWINGS OR ON SITE CHANGES, SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PROVIDE A COMPLETE IRRIGATION SYSTEM.
- 5. THE CONTRACTOR SHALL VERIFY THE ON-SITE STATIC WATER PRESSURES IN RELATION TO THE STATED AVAILABLE WATER PRESSURE ON THE PLANS PRIOR TO CONSTRUCTION. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IF THE ACTUAL ON-SITE WATER PRESSURE IS LESS THAN NOTED ON THE PLANS.
- 6. MAINLINE / FEEDER-LINE BETWEEN POC, METER AND BACKFLOW PREVENTER SHALL BE OF MATERIAL AS REQUIRED BY CITY OF SAN LUIS OBISPO.
- 7. WHERE IRRIGATION LINES CANNOT BE LOCATED WITHIN PUBLIC LANDSCAPE AREAS, LOCATE ADJACENT TO BACK OF CURB. IRRIGATION LINES SHALL NOT ENCROACH INTO PRIVATE PARCELS.
- 8. PRIOR TO BACKFILLING IRRIGATION TRENCHES, ALL MAINLINE SHALL BE CAPPED AND PRESSURE TESTED AT 125 PSI, FOR A PERIOD OF FOUR HOURS. ALL LATERAL LINES SHALL BE PRESSURE TESTED AT DESIGN PRESSURE FOR A MIN. OF ONE HOUR. ANY LEAKS FOUND SHALL BE CORRECTED BY REMOVING THE LEAKING PIPE OR FITTINGS AND INSTALLING NEW MATERIAL IN ITS PLACE.
- 9. UNLESS OTHERWISE INDICATED, 120 VOLT ELECTRICAL METERS FOR CONTROLLERS SHALL BE PROVIDED BY CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HOOK-UPS FROM THE ELECTRICAL METER TO THE CONTROLLER.
- 10. THE CONTRACTOR SHALL INCLUDE STUB-OUT OF (1) VALVE CONTROL WIRE (OR AS SHOWN ON IRRIGATION PLANS) AND (1) ONE COMMON WIRE FROM THE CONTROLLER FOR EACH MAINLINE BRANCH (RUN). THE SPARE WIRES SHALL BE PLACED INSIDE THE CONTROL BOX OF THE FARTHERMOST VALVE BOX AT THE END OF EACH MAINLINE RUN.
- 11. ALL TRENCHING AND CONDUIT RUNS SHALL CROSS UTILITY EASEMENTS AT PERPENDICULAR (90 DEGREE) ANGLE TO LENGTH OF UTILITY EASEMENT.
- 12. CONTRACTOR SHALL PROVIDE IRRIGATION AS—BUILTS (24" x 36" SHEETS).
 COPIES MUST BE LAMINATED AND KEPT INSIDE CONTROLLER BOX.
- 13. INSTALLATION THE CENTRAL CONTROLLER SHALL BE INSTALLED PER THE MANUFACTURES SPECIFICATIONS AND INSTRUCTIONS. RADIO COMMUNICATION SET—UP FOR CONTROLLER SHALL BE COORDINATED WITH OWNER OR OWNER'S REPRESENTATIVE.
- 14. ALL CONTROLLER AND VALVE WIRE SPLICES SHALL BE MADE USING APPROVED WATERTIGHT CONNECTORS PER THE SPECIFICATIONS.
- 15. CONTRACTOR SHALL PROVIDE SLEEVES FOR MAINLINE, LATERAL LINE & CONTROL WIRES UNDER ALL PAVING PER SPECIFICATIONS. ALL SLEEVES UNDER PAVING SHALL RECEIVE IDENTIFYING MARK ON TOP OF CONCRETE. EXTEND ALL SLEEVES 18" BEYOND EDGE OF PAVING
- 16. WHERE MORE THAN ONE PIPE IS SHOWN IN THE SAME TRENCH, PIPE SHALL BE SEPARATED BY 6" HORIZONTAL SEPARATION.
- 17. ALL RECLAIMED WATER PIPE SHALL BE COLORED PURPLE.
- 18. LANDSCAPE CONTRACTOR SHALL PROVIDE OWNER WITH (2) QUICK COUPLER KEYS AT FINAL ACCEPTANCE (INSTALLATION), PRIOR TO THE START OF THE MAINTENANCE PERIOD.
- 19. AFTER FINAL ACCEPTANCE AN IRRIGATION AUDIT SHALL BE CONDUCTED BY A CERTIFIED IRRIGATION AUDITOR AND FINDINGS STATED IN A REPORT, AND PROVIDED TO THE LAND. ARCH. AND OWNER.
- 20. EACH DRIP BRANCH SHALL INCLUDE A FLUSH CAP ASSEMBLY PER DETAILS.
- 21. ANY IRRIGATION LINE CROSSING PUBLIC STREETS SHALL HAVE 4' MIN.
- 22. PUBLICLY MAINTAINED IRRIGATED AREAS SHALL ABIDE BY THE MOST RECENT VERSION OF THE CITY OF SAN LUIS OBISPO'S STANDARD SPECIFICATIONS & ENGINEERING STANDARDS, AND THE PROCEDURES FOR RECYCLED WATER USE



HEET TITLE:

OR



DESIGNED BY:
G. GLANDON
DRAWN BY:
G. GLANDON

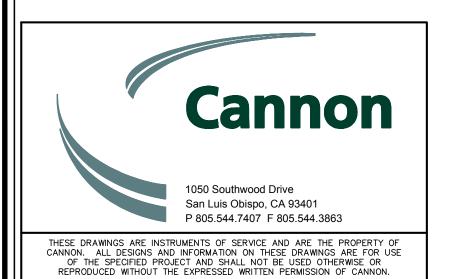
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SCALE:

12/30/2019
CITY SPECIFICATION NO.
190125

PLAN FILE NO. / LOCATION

SHEET NO



GENERAL NOTES:

- A. All exposed conduit shall be Schedule 80.
- B. Install Controller and Telemetry equipment required for the site as specified by the City Parks Maintenance Division.
- C. Attach Recycled Water adhesive warning decal per Engineering Standard 8810 to inside and outside of cabinet door when used to control recycled water.

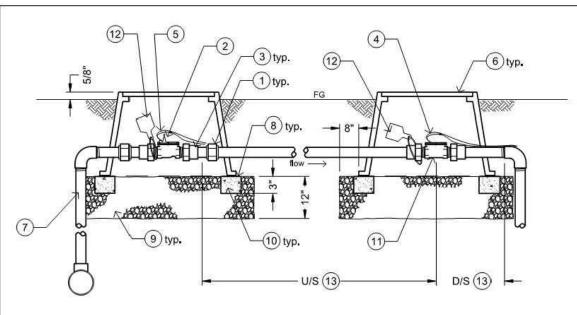
NOTES:

- 1) 3/8" Ø x 4" Lag Bolts. Connect to building wall or, where wall is not available, mount to 4" x 6" Pressure Treated Douglas Fir post.
- (2) Controller / Stainless Steel Enclosure
- 3) 2" Ø PVC Conduit w/ Irrigation Control Wires
- (4) 3/4" Ø PVC Conduit w/ 120 volt Power Source 5) PVC Sweep Ells for Conduit
- 6) 1/32" 1/4" Ø Anchor Bolts
- 7) Class 3 PCC Footing
- 3) 4" Class 3 PCC Pad
- 9) 4" Class 2 Aggregate Base
- 10) Class 3 PCC Post Footing when Post Mount is used
- (11) Ground Rod

REVISIONS	BY	APP	DATE	Г
Drafting edits	JDL	MH	6-13	
Add Note 12	SR	BL	3-06	3
Delete Note 12	DVB	BL	11-06	
STANDARD CURRENT AS OF:	Ma	y 2018	•	



IRRIGATION CONTROLLER



GENERAL NOTES:

- A. Locate valves in shrub areas whenever possible.
- B. Valve boxes shall be a maximum of 12" from walkways or curbs.
- C. Valve boxes shall be set parallel to walkways or curbs.
- D. Flow meter size and pipe size must be equal.
- E. No splices are allowed in wiring except at connectors shown (in box.)

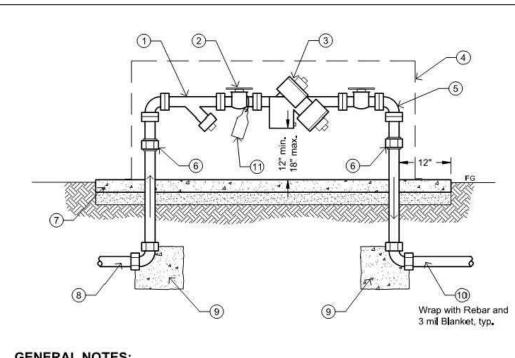
INSTALLATION NOTES:

- (1) PVC Union 2) Master Valve - normally open
- (3) PVC Male Adapter
- (4) Flow Sensor Specialized Shielded Cable (EV-CAB-SEN) (1-Flow Meter, 1-Common)
- Mazimum distance between meter and controller is 2000' -(5) 14 gauge Master Valve Controller Wires (1-Valve, 1-Common)
- (6) Plastic Valve Box with bolt down lid, Bolts to be stainless steel.
- Carson Industries 1419-3B (Purple) for Recycled Water Valves up to 2"
- Carson Industries 1324-3B (Purple) for Recycled Water Valve 21/2" and larger (7) Irrigation Pressure Mainline
- (8) Galvanized Cloth set under box 1/2" Grid
- (9) Gravel 3/4" to 11/2" in size 10) Cement Blocks or Brick continuous for box support
- (11) Flow Sensor RainMaster
- (12) Attach Recycled Water Warning Tab per Engineering Standard 8810 when used in recycled water system.
- (13) U/S distance equals ten (10) times the Flow Meter size.

D/S distance	equals five (5) ti	mes the	Flow Met	er size.
DEVICIONE	DV	ADD	DATE	فقعه

REVISIONS	BY	APP	DATE
Edit Note 11, add PVC Union	JDL	BL	6-12
Revise Notes 2 and 11	МН	BL	11-09
Update Note s 4 and 5	SR	BL	8-11
STANDARD CURRENT AS OF:	Ma	ay 2018	•

MASTER VALVE & **FLOW SENSOR**



GENERAL NOTES:

- A. All pipe shall be schedule copper or brass unless otherwise specified.
- B. Dissimilar metals shall be separated by an approved dielectric coupling. C. Service assembly shall be installed as the first assembly after the meter.
- D. Device shall be located within 10' of water meter and no connection or tees are allowed between the meter and the

INSTALLATION NOTES:

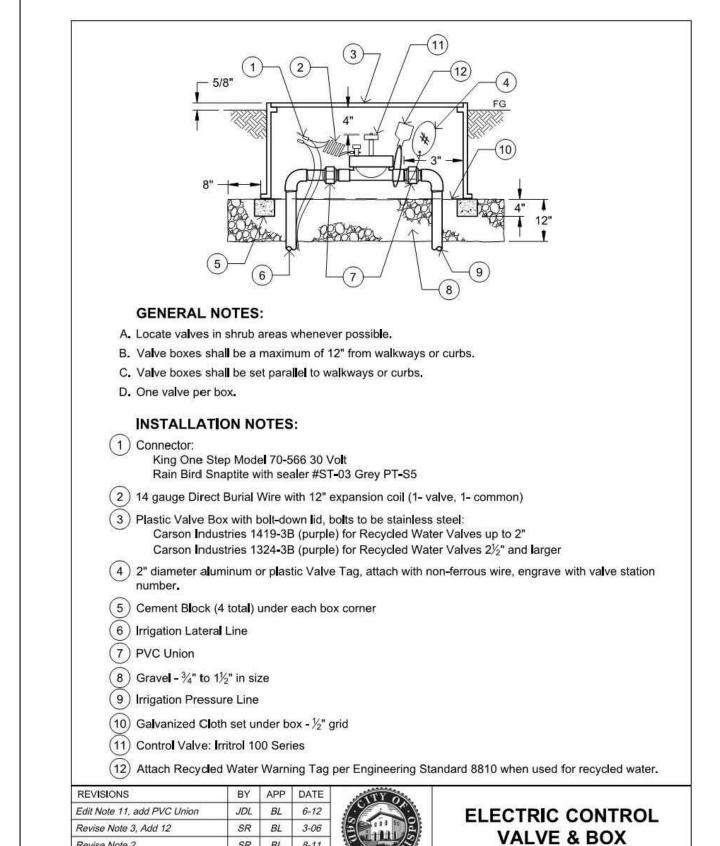
- 1 WYE STRAINER: Barrel position 45° from horizontal for below ground installations
- 2) BALL VALVE: Brass
- 3) FOR POTABLE SERVICE: Backflow Assembly (reduced pressure type), FEBCO/WILKINS
- FOR RECYCLED SERVICE: Pressure Regulator. Where there is no backflow assembly, place wye strainer and regulator in paired boxes installed per Engineering Standard 8550.
- (4) LOCKING ENCLOSURE: Secure to pad per manufacturer's direction. Enclosure shall not be field-painted. All coatings shall be completed by manufacturer. Model: Strongbox #SBBC Series, expanded metal, dark green powder-coated, low profile, smooth touch, vandal resistant
- (5) ELBOW 6 UNION: Brass
- (7) CONCRETE PAD: Class 3, 60" x 24" x 4" on 14" Class 3 Base, with 2% cross-slope for drainage
- (8) SUPPLY LINE
- (9) THRUST BLOCK
- (10) IRRIGATION PRESSURE LINE
- (11) RECYCLED WATER WARNING TAG: Attach per Engineering Standard 8810 when used for recycled water.

BACKFLOW DEVICES SHALL BE INSPECTED BY THE LOCAL DEPARTMENT OF HEALTH SERVICES AND THE CITY OF SAN LUIS OBISPO UTILITIES DEPARTMENT

IRRIGATION

SERVICE ASSEMBLY

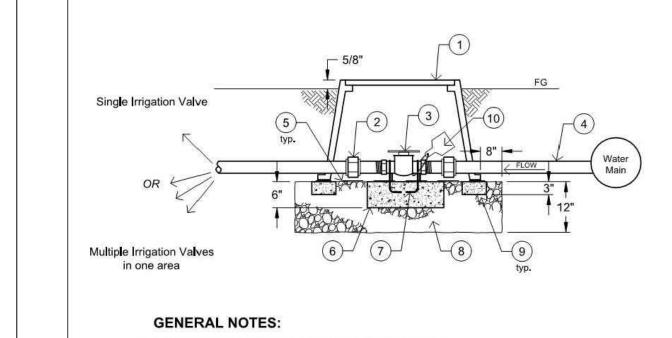
REVISIONS	BY	APP	DATE	
Revised Note 1	МН	BL	11-09	
Revised title; Drafting edits	JDL	MH	10-12	
Revised Notes 3, 4 & 5	DVB	BL	10-07	
STANDARD CURRENT AS OF:	Ma	y 2018	-	



SR BL 8-11

May 2018

STANDARD CURRENT AS OF:



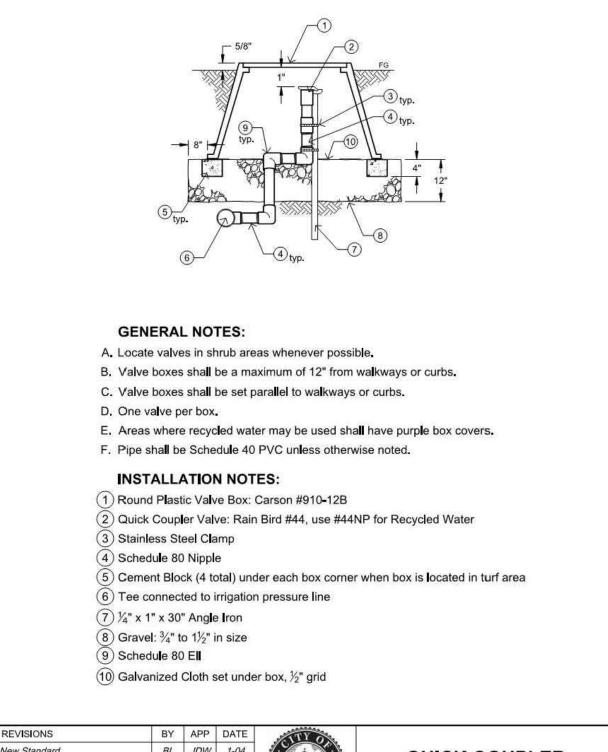
- A. Isolation valves shall be installed for all irrigation valves. B. Locate valves in shrub areas whenever possible.
- C. Valve boxes shall be a maximum of 12" from walkways or curbs.
- D. Valve boxes shall be set parallel to walkways or curbs.
- E. Valve size and pipe size must be equal.

INSTALLATION NOTES:

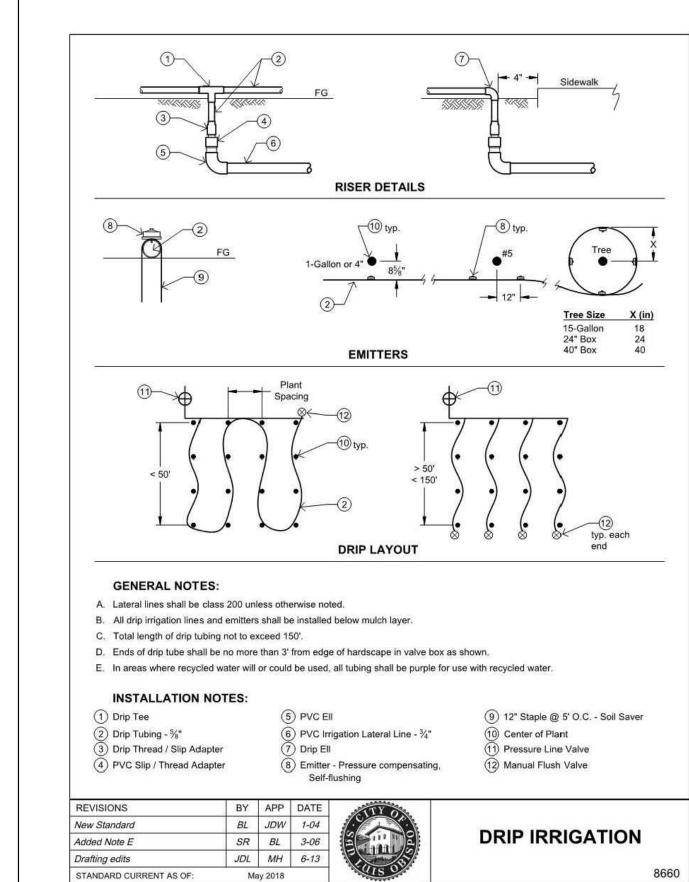
- (1) Plastic Valve Box with bolt-down lid. Bolts to be stainless steel: Carson Industries 1419-3B (purple) for Recycled Water Valves up to 2" Carson Industries 1324-3B (purple) for Recycled Water Valves 21/2" and larger
- (2) PVC Union
- 3 Brass Ball Valve
- (4) Schedule 40 Pressure Line
- (5) Galvanized Cloth set under box: ½" grid
- (6) Concrete block below valve, extending 6" beyond outside dimensions of valve
- 7) #10 Reinforcing Bar looped over valve Only for valves 2½" and larger
- (8) Gravel: 3/4" to 11/2" in size
- (9) Cement Blocks or Brick continuous for box support
- 10) Attach Recycled Water Warning Tag per Engineering Standard 8610 when used for recycled water.

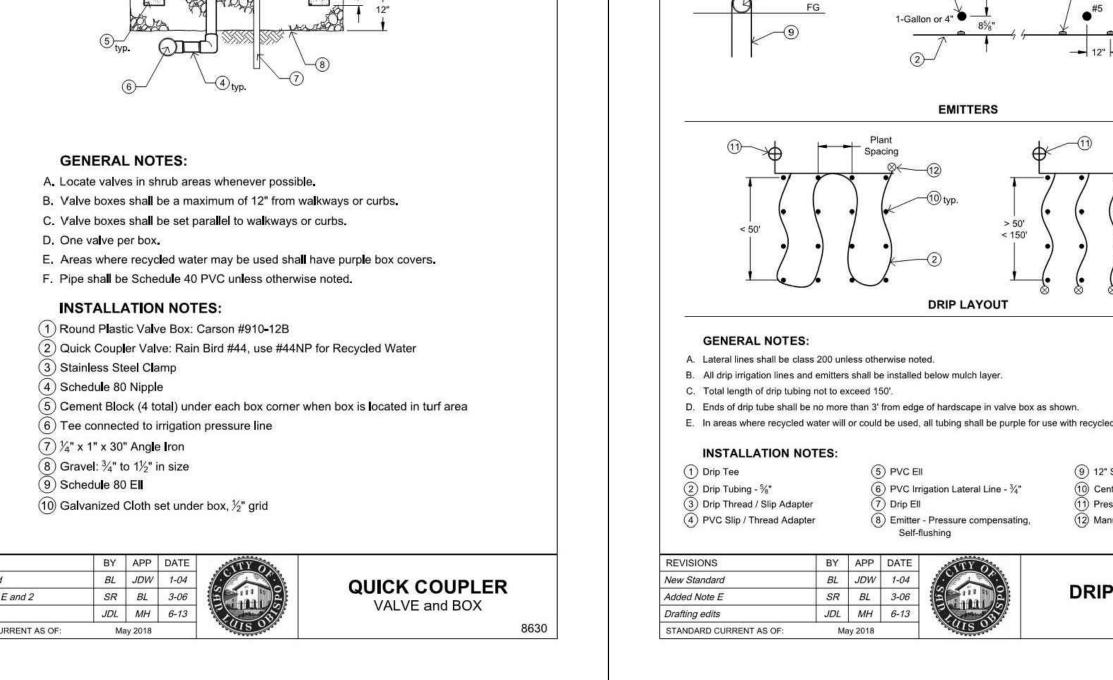
REVISIONS	BY	APP	DATE		
Add PVC Union; drafting edits	JDL	BL	6-12		
Revised Notes and Detail	MH	BL	10-05		
Revise Note 1; Add Note 10	SR	BL	3-06		
STANDARD CURRENT AS OF:	Ma	y 2018		TE O	

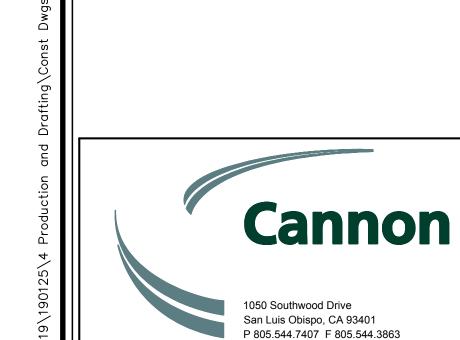




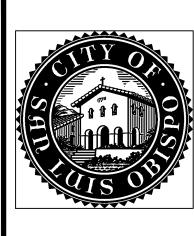
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New Standard	BL	JDW	1-04		
Revise Notes E and 2	SR	BL	3-06		QU
Drafting edits	JDL	MH	6-13		
STANDARD CURRENT AS OF:	M	ay 2018		WIS O	







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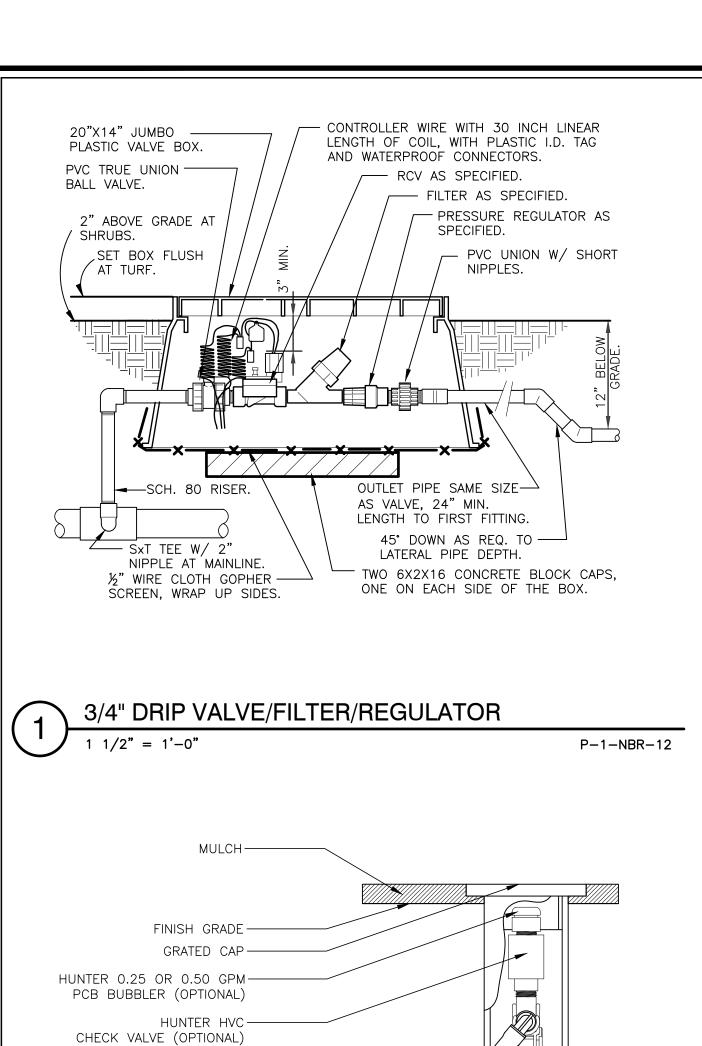
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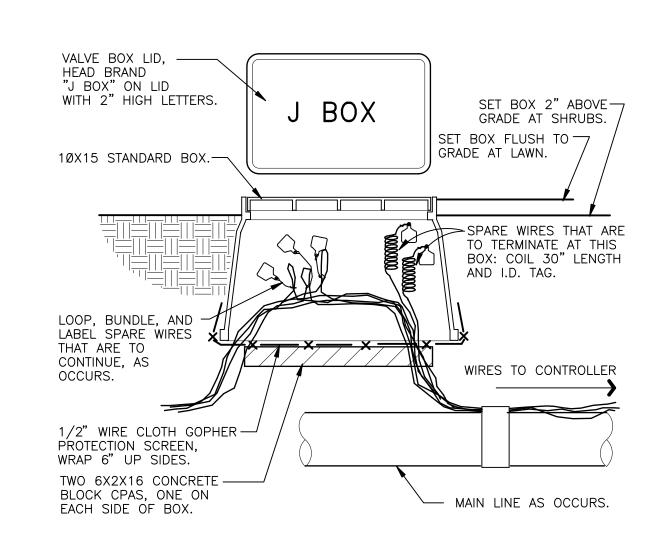
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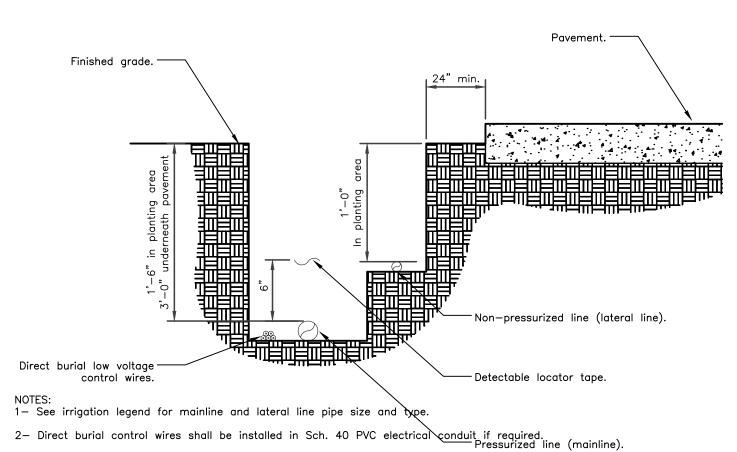
G. GLANDON G. GLANDON

CHECKED BY: APPROVED BY:

12/30/2019 ITY SPECIFICATION NO. 190125 PLAN FILE NO. / LOCATION







TYPICAL 1/2" DRIP TUBING. -— 6" DRIP BOX. COMPRESSION TEE. —¾"FPT X½" DRIP TUBING ADAPTER. FINISHED GRADE. 3" THICK LAYER OF WASHED GRAVEL. THE BOX SHALL REST UPON THE ROCK BED. DO NOT EXTEND GRAVEL INTO - ¾" SCHEDULE 80 NIPPLE AS REQUIRED. PVC LATERAL LINE.

WIRE BUNDLE JUNCTION BOX

TREE PLANTING AS

3— 2—wire irrigation wire shall be installed in Sch. 40 PVC electrical conduit.

4- Detectable locator tape shall be located six inches (6") above the entire mainline run.

ZONE CONTROL

P-1-NBR-16

—— 1" FPTXMPT ELL.

ADAPTER.

 \sim $\frac{3}{4}$ "X1"MPT ADAPTER.

/ ¾"FPT X ½" DRIP TUBING

" THICK LAYER OF WASHED GRAVEL. THE BOX SHALL REST UPON THE ROCK BED.

DO NOT EXTEND GRAVEL INTO

- DRIP TUBING COUPLING.

P-1-NBR-10

FINISHED GRADE.

TURF POP UP HEAD.

LATERAL LINE AND PVC TEE.

1/2" MARLEX STREET ELLS. —,

IRRIGATION TRENCHING

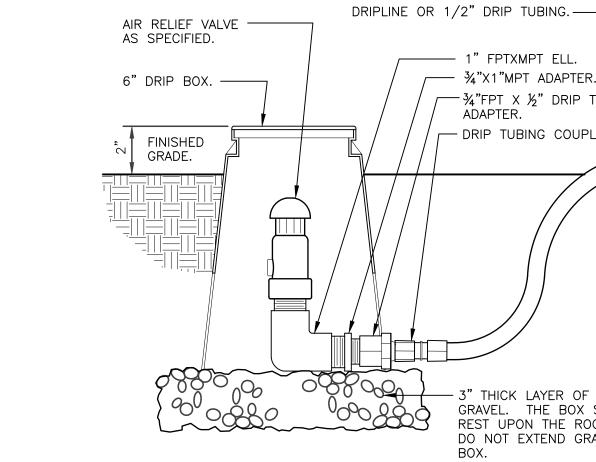
- CLEAR TO FENCE OR

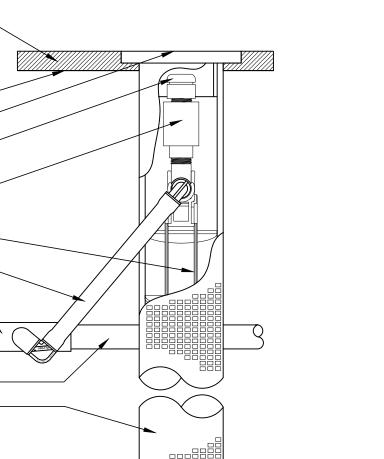
HARDSCAPE WHERE

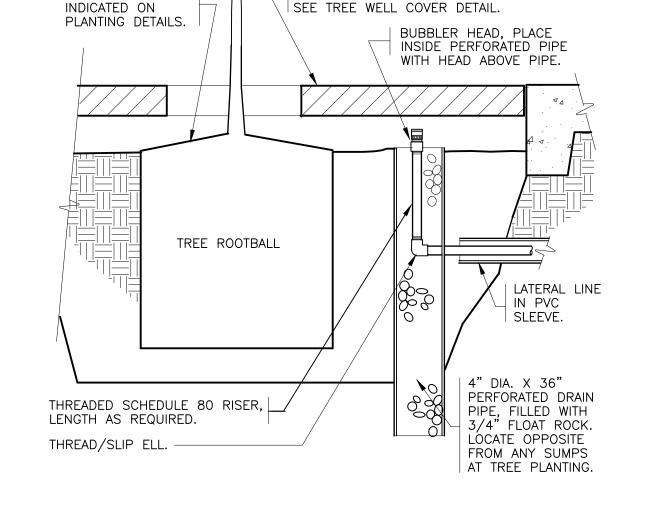
I APPLICABLE.

SCHEDULE 80 PVC

NIPPLE, SET AT 45 DEGREE ANGLE.

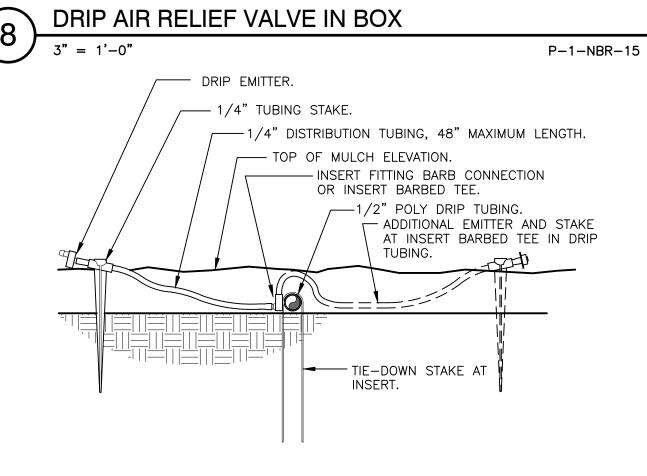




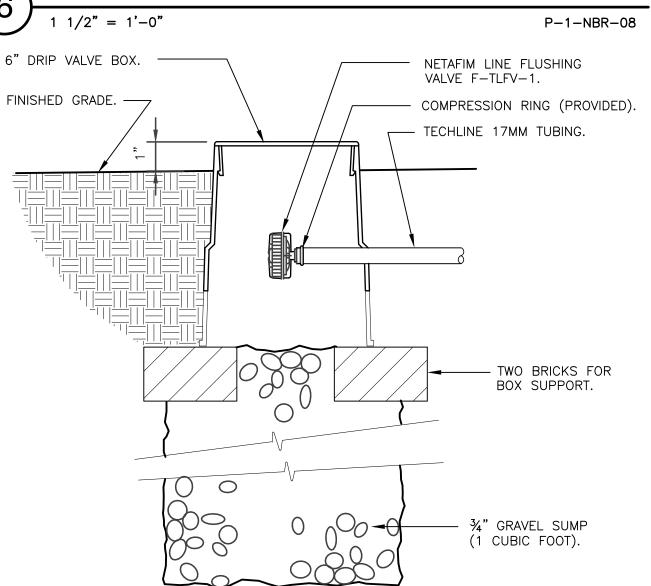


TREE WELL COVER AS SPECIFIED.









TYPICAL DRIP TUBING

P-1-NBR-14

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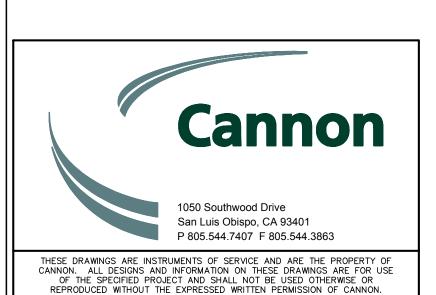
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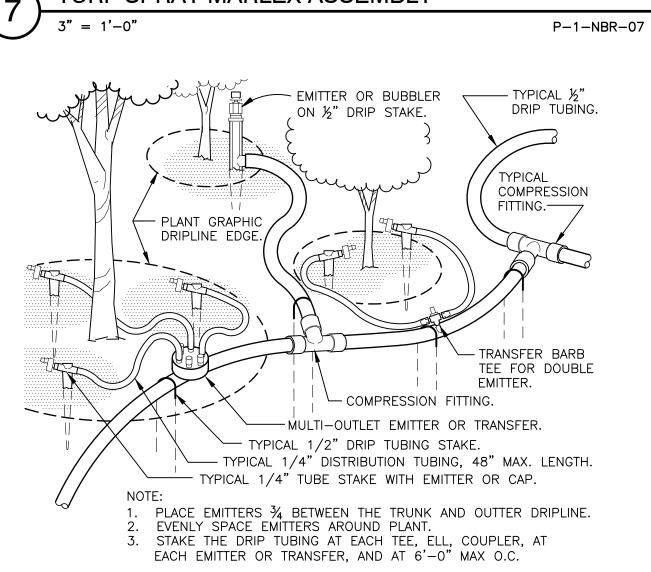
APPROVED BY: SCALE:

12/30/2019 CITY SPECIFICATION NO. 190125 PLAN FILE NO. / LOCATION

16 of **17**

P-1-NBR-11





 $1 \ 1/2" = 1'-0"$

BUBBLER AT TREE WELL P-1-NBR-17 6" DRIP VALVE BOX. — FINISHED GRADE. ——

NETAFIM TECHLINE FLUSH VALVE

P-1-NBR-33

DRIP EMITTER AT 1/4" TUBING

PATENTED STRATAROOT ASSEMBLY

MODEL SJ-5XX-X (OPTIONAL)

HUNTER SWING JOINT -

LATERAL TEE OR ELL-

ROOT INTRUSION BARRIER -

LATERAL PIPE —

NOTE: INSTALL HUNTER FILTER FABRIC

SLEEVE- 3RZWS-SLEEVE

- 1. SCOPE OF WORK: THE WORK OF THIS SECTION CONSISTS OF ALL LANDSCAPE PLANTING WORK AND RELATED ITEMS AS INDICATED ON THE DRAWINGS OR AS SPECIFIED HEREIN AND INCLUDES, BUT IS NOT LIMITED TO,
- a. FURNISH ALL MATERIAL, LABOR, SERVICES, AND RELATED ITEMS REQUIRED TO COMPLETE WORK INDICATED ON
- FURNISH ALL MATERIAL, LABOR, SERVICES, AND RELATED ITEMS REQUIRED TO DISC, AMEND, INCORPORATE, AND MIX TO PREPARE THE LANDSCAPE AREAS FOR PLANTING.
- INSTALLATION OF ALL PLANT MATERIALS; TREES, SHRUBS AND GROUNDCOVERS.
- 2. THERE ARE THREE LANDSCAPE AREA TYPES ON THIS PROJECT (SOIL PREPARATION, SOIL MEDIA, AMENDMENT, PLANTING, AND MULCH APPLICATIONS DIFFER FOR EACH): BIORETENTION AREAS, PER CIVIL DRAWINGS.
- b. SEEDED AREAS c. Planting areas: all remaining planted areas not identified as bioretention or seeded.
- 3. RELATED WORK SPECIFIED ELSEWHERE INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:
- a. LANDSCAPE IRRIGATION
- REFERENCES AND STANDARDS a. STANDARDS FOR PLANTING: THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARD FOR NURSERY
- b. STANDARDS FOR IDENTIFICATION: SUNSET WESTERN GARDEN BOOK, LATEST EDITION, AND HORTUS THIRD, CORNELL UNIVERSITY, LATEST EDITION.
- MATERIALS LIST: PROVIDE A COMPLETE LIST OF PLANT MATERIALS, MULCH AND MISCELLANEOUS MATERIALS PROPOSED TO BE FURNISHED AND INSTALLED TO THE OWNER'S REPRESENTATIVE. LIST TO INCLUDE NAMES,
- ADDRESSES, CONTACT NAMES, AND PHONE NUMBERS OF NURSERIES AND SUPPLIERS. MATERIALS INVOICES: FURNISH ORIGINAL MATERIALS INVOICES AND ORIGINAL TRUCK DELIVERY TICKETS INDICATING THE QUANTITIES OF SOIL AMENDMENTS, MULCH, AND MISCELLANEOUS MATERIALS DELIVERED TO THE JOB SITE. MATERIAL INVOICES MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION
- PLANT MATERIAL ACQUISITION: SUBMIT DOCUMENTATION TO THE OWNER'S REPRESENTATIVE THAT THE PLANT MATERIALS HAVE BEEN SECURED WITHIN 60 DAYS OF NOTICE-TO-PROCEED. DOCUMENTATION INCLUDES ORIGINAL ORDERS OR INVOICES FROM PLANT GROWERS. DOCUMENTATION INCLUDES, BUT IS NOT LIMITED TO, THE LOCATION. ROOT CONDITION, CONTAINER SIZE, AND PLANT MATERIAL SIZE, INCLUDING HEIGHT AND CALIPER FOR TREES, OF ALL PLANTS ON THE PLANT SCHEDULE. THIS SUBMITTAL DOES NOT PRECLUDE OTHER ACCEPTANCE AI WARRANTY REQUIREMENTS. SHOULD THE CONTRACTOR NEGLECT TO PROVIDE THIS LIST WITHIN THE 60 ALLOCATED DAYS. HE/SHE FORFEITS ANY SUBSTITUTION BENEFITS AND WILL PROVIDE PLANTS AT SIZES AND CONDITIONS AS NDICATED ON THE PLANT SCHEDULE WITH NO EXCEPTIONS. NO SUBSTITUTIONS WILL BE MADE BEYOND THE 60-DAY PERIOD EXCEPT FOR LARGER PLANTS AT NO ADDITIONAL COST TO OWNER.
- THE SOURCE NAME AND A 1/2-POUND SAMPLE OF MULCH TO THE OWNER'S REPRESENTATIVE. MYCORRHIZAL FUNGI INOCULANT: SUBMIT DOCUMENTATION THAT THE INOCULANT HAS BEEN SECURED WITHIN 60
- DAYS OF NOTICE-TO-PROCEED. SECURING MYCORRHIZAL FUNGI INOCULANT INCLUDES PROVIDING DOCUMENTED ORDERS OR ORIGINAL INVOICE.
- a. APPROVAL: OWNER'S REPRESENTATIVE WILL INSPECT ALL PLANT MATERIAL PRIOR TO INSTALLATION. PLANTS NOT MEETING SPECIFICATIONS WILL BE REJECTED. SUBSEQUENT INSPECTIONS TO OCCUR AFTER PLANTING
- AND PLANTS MAY BE REJECTED AT THAT TIME NOTIFY OWNER'S REPRESENTATIVE NO LESS THAN 72 HOURS PRIOR TO INSPECTIONS. ALL PLANTS MUST BE
- AVAILABLE BEFORE INSPECTION IS SCHEDULED. INSPECTION LOCATION MUST BE WITHIN 20 MILES OF THE PROJECT INSPECTION OF PLANT MATERIALS REQUIRED BY CITY, COUNTY, STATE OR FEDERAL AUTHORITIES IS THE
- RESPONSIBILITY OF THE CONTRACTOR, AND HE/SHE MUST SECURE PERMITS OR CERTIFICATES PRIOR TO DELIVERY OF PLANTS TO SITE.
- SUBSTITUTIONS OF PLANT MATERIALS WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE PROJECT OWNER'S REPRESENTATIVE. REQUESTS FOR SUBSTITUTIONS TO BE PROVIDED WITH THE SUBMITTAL OF PLANT MATERIAL ACQUISITION DOCUMENTATION WITHIN 60 DAYS OF NOTICE-TO-PROCEED. IF PROOF IS SUBMITTED THAT A SPECIFIED PLANT IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF AN APPROPRIATE CURRENT TON
- PROVIDE A LIST OF NURSERIES CONTACTED THAT DID NOT HAVE AVAILABILITY OF SPECIFIED PLANTS, INCLUDING
- PROVIDE A MINIMUM OF THREE OPTIONS FOR EACH SUBSTITUTION TO BE PROVIDED. d. PLANT MATERIAL OF A LARGER SIZE THAN SPECIFIED MAY BE USED IF ACCEPTABLE AT THE CONTRACTOR'S
- PLANT ONLY DURING PERIODS THAT ARE NORMAL FOR LANDSCAPE INSTALLATION WORK AS DETERMINED B'
- SFASON, WFATHER CONDITIONS, LOCAL ACCEPTED PRACTICE AND NURSERY GROWER RECOMMENDATIONS, DO NOT PLANT WHEN THERE IS PROLONGED FREEZING WEATHER OR WHEN SOIL IS IN A WET OR MUDDY CONDITION.
- CONTRACTOR QUALIFICATIONS: CONTRACT IS TO BE PERFORMED BY CURRENTLY LICENSED FIRM(S) ACTIVE AND EXPERIENCED IN THE RESPECTIVE TRADE(S) REPRESENTED IN THE DRAWINGS AND SPECIFICATIONS. INSTALLER IS REQUIRED TO BE A COMPANY SPECIALIZING IN WORK OF THIS SECTION, DEFINED AS SPECIALIST WITH MINIMUM FIVE YEARS DOCUMENTED COMPANY EXPERIENCE IN LANDSCAPE INSTALLATIONS OF A SIMILAR NATURE.
- INSTALLER'S LEAD MUST BE PRESENT AT ALL TIMES DURING EXECUTION OF THIS PORTION OF WORK AND HAVE SIZE. THE INSTALLER'S LEAD TO BE THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE PROPER MATERIALS AND METHODS FOR INSTALLATION, AND DIRECT ALL WORK PERFORMED UNDER THIS
- FIFTY-PERCENT OF ALL WORKERS TO HAVE A MINIMUM ONE-YEAR OF DOCUMENTED CALIFORNIA EXPERIENCE IN LANDSCAPE INSTALLATIONS OF A SIMILAR NATURE. THESE PERSONS ARE TO BE THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE PROPER MATERIALS AND METHODS FOR THEIR INSTALLATION.
- CONTRACTOR TO REVIEW SITE BEFORE COMMENCEMENT OF CONSTRUCTION. IF EXISTING CONDITIONS ARE IN
- VARIANCE WITH DRAWINGS AND SPECIFICATIONS, NOTIFY THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING.
- a. ALL WORK IN THE TREE PROTECTION ZONE (TPZ) MUST COMPLY WITH THE TPZ NOTES. b. CONTRACTOR TO CHECK FOR LOCATION OF CABLES OR CONDUITS, UTILITY LINES, AND OTHER EXISTING FEATURES OR CONDITIONS ABOVE OR BELOW GROUND LEVEL THAT MIGHT BE DAMAGED AS A RESULT OF HIS/HER
- OPERATION. QUESTIONS OR CONFLICTS ARISING OUT OF SUCH EXAMINATION PRIOR TO OR DURING OPERATION MUST BE IMMEDIATELY DIRECTED TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR NECESSARY ACTION OR DECISIONS BEFORE RESUMING OPERATION. CONTRACTOR IS RESPONSIBLE FOR REPAIR OR REPLACEMENT, AT NO COST TO THE OWNER, FOR FEATURES OR CONDITIONS DAMAGED THROUGH FAILURE TO COMPLY WITH ABOVE
- 13. DELIVERY STORAGE AND HANDLING
- a. CONTRACTOR TO PROVIDE PROTECTION FOR ALL PLANT MATERIALS DURING DELIVERY, STORAGE AND INSTALLATION
- PROTECT PLANT MATERIALS FROM DEHYDRATION, CONTAMINATION AND HEATING DURING DELIVERY, STORAGE, AND
- DELIVER BRANCHED PLANTS WITH BRANCHES TIED AND EXPOSED BRANCHES COVERED WITH MATERIAL THAT ALLOWS AIR CIRCULATION. UNTIE BRANCHES AS SOON AS POSSIBLE, ONCE DELIVERED. d. PREVENT DAMAGE TO ROOT BALLS AND DESICCATION OF LEAVES.
- e. IF THERE IS ANY DELAY OF MORE THAN ONE DAY IN PLANTING, COVER ROOT BALLS WITH MOIST SOIL OR MULCH. IMMEDIATELY REMOVE FROM SITE PLANTS THAT ARE NOT TRUE TO NAME OR THAT DO NOT COMPLY WITH
- DAMAGED PLANTS WILL BE REJECTED. REPLACE SUCH PLANTS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- LABEL PLANTS WITH SCIENTIFIC NAME, A MINIMUM OF TWO LABELS PER FLAT FOR PLANTS OF THE SAME TYPE. ALL OTHER PLANTS WILL HAVE INDIVIDUAL LABELS.
- a. ALL AREAS TO BE KEPT CLEAN, NEAT AND ORDERLY AT ALL TIMES. DIRT AND RUBBISH TO BE KEPT OFF BOTH PAVED AND PLANTED AREAS DURING CONSTRUCTION. PROJECT TO BE LEFT SAFE, CLEAN, AND NEAT AT THE END
- b. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL SEDIMENT AND DEBRIS RELATED TO LANDSCAPE INSTALLATION FROM CATCH BASINS AND OTHER STORMWATER FACILITIES. B. MATERIALS
- PLANTS TO BE GROWN IN NURSERIES INSPECTED BY THE STATE DEPARTMENT OF AGRICULTURE. PLANTS TO BE GROWN IN CLIMATIC CONDITIONS SIMILAR TO SITE AND OF A SIZE AT LEAST EQUAL TO SIZE SPECIFIED AND MEASURED WITH BRANCHES IN NORMAL GROWING POSITION.
- b. DO NOT PRUNE PRIOR TO SITE DELIVERY, UNLESS AUTHORIZED IN WRITING BY THE OWNER'S REPRESENTATIVE. c. CALIFORNIA NATIVE PLANTS TO BE PROPAGATED FROM CALIFORNIA GENETIC STOCK.
- d. TREES AND SHRUBS TO HAVE OVERALL FORM TYPICAL OF THE SPECIES, UNIFORMLY BRANCHED, SYMMETRICAL
- TREES WITH DAMAGED LEADERS, DAMAGED BARK, SUNSCALDS, DISFIGURING KNOTS, CIRCLING OR GIRDLING ROOTS, OR FRESH CUT LIMBS OVER 1/4-INCH WILL BE REJECTED. THE SIZE OF PLANTS TO CONFORM TO THE PLANS AND PLANT SCHEDULE. OVERSIZED PLANTS MAY BE USED AT NO ADDITIONAL COST TO THE OWNER.
- CONTAINER GROWN PLANTS TO HAVE BEEN GROWN IN THE CONTAINERS IN WHICH THEY ARE DELIVERED FOR AT LEAST SIX MONTHS - IN OUR TWO YEARS.
- PLANT. BE WELL-ROOTED IN THEIR CONTAINERS. PLANTS WITH POORLY FORMED ROOT SYSTEMS AS A RESULT RECENT SHIFT TO A LARGER CONTAINER SIZE WILL BE REJECTED. CANTS MUST EXHIBIT NO ROOT-BOUND CONDITIONS. ROOT-BOUND PLANTS AND CONTAINER PLANTS THAT HAVE
- CRACKED OF DKEN BALLS OF EARTH WHEN TAKEN FROM CONTAINER WILL BE REJECTED.

 REPLACE FUECTED. DEMANEE CONTAINER WILL BE REJECTED.

 EXPENSE TO THE OWNER.

1050 Southwood Drive San Luis Obispo, CA 93401 P 805.544.7407 F 805.544.3863

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF NON. ALL DESIGNS AND INFORMATION ON THESE DRAWINGS ARE FOR US OF THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE OR REPRODUCED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF CANNON

- k. CONTRACTOR TO DETERMINE EXACT QUANTITIES FROM DRAWINGS AND FIELD CONDITIONS.
- 2. BIORETENTION SOIL: PER CIVIL PLANS.
- d. TOPSOIL IS SCREENED, FERTILE, FRIABLE SANDY LOAM FREE FROM NUT GRASS, REFUSE, ROOTS, HEAVY CLAY, NOXIOUS WEEDS OR ANY MATERIAL TOXIC TO PLANT GROWTH. ACCEPTABLE SOIL FROM THE SITE MAY BE USED.
- b. IF TOPSOIL IS IMPORTED TO THE SITE, AN AGRICULTURAL SUITABILITY TEST SHALL BE CONDUCTED BY AN APPROVED SOILS LABORATORY AND RESULTS SUBMITTED TO THE CLIENT'S REPRESENTATIVE OR PROJECT
- LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO DELIVERY TO THE PROJECT SITE. c. TOPSOIL CONTENTS ARE AS FOLLOWS: SILT 20-40%, CLAY 15-20%, FINE SAND 30-40%, COURSE SAND 5%-20%, GRAVEL 0%-8% (MAXIMUM AGGREGATE SIZE 1/2") WITH A MINIMUM OF 5% ORGANIC
- a. COMPOST FOR SOIL PREPARATION TO BE A WELL DECOMPOSED, STABLE, WEED FREE ORGANIC MATTER SOURCE DERIVED FROM WASTE MATERIALS INCLUDING YARD DEBRIS, WOOD WASTES OR OTHER ORGANIC MATERIALS. COMPOST TO HAVE A DARK BROWN COLOR AND A SOIL LIKE ODOR. COMPOST EXHIBITING A SOUR OR PUTRI

MATERIAL (NATURAL OR ADDED), PH BETWEEN 5.5 AND 8.0, AND SOLUBLE SALTS NOT EXCEEDING 1500 PPM.

- SMELL, CONTAINING RECOGNIZABLE GRASS OR LEAVES, OR IS HOT (120F) UPON DELIVERY OR REWETTING IS NOT b. COMPOST FACILITY AND COMPOST MATERIAL MUST MEET THE FOLLOWING REQUIREMENTS:
- INSPECTED AND REGULATED BY THE LOCAL ENFORCEMENT AGENCY FOR CALRECYCLE. THE PAST 3 INSPECTION REPORTS TO BE SUBMITTED VERIFYING COMPLIANCE WITH TITLE14 REQUIREMENTS OF THE PROCESS TO FURTHER REDUCE PATHOGENS (PFRP), FECAL COLIFORM AND SALMONELLA TESTING AND PATHOGEN AND EPA, 40 CFR 503 REGULATIONS.
- CERTIFIED THROUGH THE USCC SEAL OF TESTING ASSURANCE (STA) PROGRAM (A COMPOST TESTING AND INFORMATION DISCLOSURE PROGRAM).
- . ANALYZED BY A LABORATORY THAT IS ENROLLED IN THE US COMPOSTING COUNCIL'S COMPOST ANALYSIS PROFICIENCY (CAP) PROGRAM AND USING APPROVED TEST METHODS FOR THE EVALUATION OF COMPOSTING FACILITY MUST PROVIDE PROOF OF COMPOST TESTING WITHIN 120 CALENDAR DAYS PRIOR TO DELIVERY OF
- a. MULCH TO BE USED IN ALL PLANTING AREAS WHERE INDICATED ON LANDSCAPE PLANS.
- b. MULCH VARIES BY AREA:

MATERIAL TO PROJECT SITE.

- b.a. BIORETENTION AREAS: 2"-3" DEPTH FINE COMPOST
- b.b. MITIGATION PLANTING AREAS: 3"-4" DEPTH ARBORIST CHIPS b.c. PLANTING AREAS: 2"-3" DEPTH WALK ON BARK - FIR BARK MULCH, 1" PIECES AND SMALLER. c. SUBMIT SAMPLE FOR APPROVAL
- d. MULCH TO BE FREE OF WEED SEEDS, OR SUBSTANCES INJURIOUS TO PLANT GROWTH.
- 5. AMENDMENTS AND MYCORRHIZAL FUNGI INOCULANT
- a.a. GRANULAR TRI-C HUMATE APPLIED AT A RATE OF 400 POUNDS/ACRE. a.b. SUSPENDED TRI-C MYCO DRENCH APPLIED AT A RATE RECOMMENDED BY THE SUPPLIER.
- a.c. TRI-C ENTERPRISES, OR AN APPROVED EQUAL. CONTACT: PO BOX 1367, CHINO, CA 91708, TEL. 800-927-3311, WWW.NATURALSOILUTIONS.COM b. PLANTINGS (APPLIES TO PLANT MATERIAL IN BIORETENTION AREAS, MITIGATION AREAS, AND ALL REMAINING
- b.g. Granular TRI-C Myco revival plus applied at the Manufacturer's recommended rates based on PLANT MATERIAL CONTAINER SIZE.
- a. STAKE TREES USING CINCH TIE OR EQUAL TREE TIE MATERIAL b. WOOD STAKES: LODGEPOLE PINE STAKES, AS SHOWN ON DRAWINGS.
- a. FOR ALL OTHER TREE PLANTINGS LOCATED WITHIN 6' OF ANY HARDSCAPE SURFACE, PROVIDE 24" DEEP ROOT BARRIER, 'ROOT BARRICADE' MODEL RB-24 MANUFACTURED BY AMERICAN DRAINAGE, AVAILABLE THROUGH "NDS" OR APPROVED EQUAL.
- 8. ABBREVIATIONS
- BRANCHES b. CONT CONTAINER
- c. DECO DECORATIVE DIAMETER d. DIA
- GALLON
- LANDSCAPE ARCHITECT f. LAND ARCH h. OC ON CENTER
- i. PA PLANTER AREA SQUARE FOOT 9. PLANT SCHEDULE
- b. CONTRACTOR TO CALCULATE ALL AREAS AND DETERMINE AMOUNT OF PLANT MATERIAL REQUIRED.
- c. IF THERE IS A DISCREPANCY BETWEEN PLANT QUANTITIES ON DRAWING AND THOSE ON PLANT LIST, THE GREATER
- C. EXECUTION
 - GENERAL a. ALL PRODUCTS AND MATERIALS NOTED HEREIN OR ON DRAWINGS ARE TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PER EACH APPROPRIATE TRADE'S HIGHEST STANDARDS.
- a. SOIL SAMPLING: CONTRACTOR TO PROVIDE A SOIL MANAGEMENT REPORT BY SUBMITTING SOIL SAMPLES TO A SOILS LABORATORY FOR ANALYSIS AND RECOMMENDATIONS
- b. SOIL MANAGEMENT REPORT TO MEET REQUIREMENTS OF STATE AB1881 WATER EFFICIENT LANDSCAPE ORDINANCE (WELO) OR LOCAL AGENCY ADOPTED WELO.
- c. SOIL SAMPLING TO MEET LABORATORY PROTOCOL, INCLUDING PROVIDING ADEQUATE QUANTITIES AND LOCATIONS OF SAMPLES, AND SAMPLING DEPTH.
- d. THE SOILS ANALYSIS TO INCLUDE: SOIL TEXTURE, INFILTRATION RATE, PH, TOTAL SOLUBLE SALTS, SODIUM, PERCENT ORGANIC MATERIAL, AND RECOMMENDATIONS FOR SOIL PREPARATION AND AMENDMENTS.
- a. CONTRACTOR TO PROVIDE PHYSICAL COPIES OF THE SOIL REPORT RESULTS TO THE OWNER'S REPRESENTATIVE,
- LANDSCAPE ARCHITECT, AND LOCAL AGENCY WITHIN ONE WEEK OF RECEIVING RESULTS. b. SOIL AMENDMENTS TO BE ADJUSTED FOLLOWING THE REPORT. THE LANDSCAPE ARCHITECT MAY ADJUST THE SOIL PREPARATION SPECIFICATIONS AS NEEDED BASED ON RECOMMENDATIONS, AT NO ADDITIONAL COST TO THE OWNER.
- c. CONTRACTOR TO PROVIDE DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL ANALYSIS REPORT RECOMMENDATIONS TO THE LOCAL AGENCY WITH CERTIFICATE OF COMPLETION.
- SOIL PREPARATION FOR BIORETENTION AREAS PER CIVIL PLANS.
- b. INSPECT ALL PLANTING AREAS FOR THE CONDITIONS SPECIFIED BELOW, AND OTHER CONDITIONS, WHICH WOULD ADVERSELY EFFECT THE INSTALLATION, QUALITY AND PERMANENCE OF PLANTINGS. NOTIFY THE OWNER'S REPRESENTATIVE IF ADVERSE CONDITIONS ARE DISCOVERED. COMMENCEMENT OF LANDSCAPE INSTALLATION NDICATES ACCEPTANCE OF THE SURROUNDING CONDITIONS. PROTECT SURROUNDING CONSTRUCTION FROM DAMAGE CAUSED BY THE WORK OF THIS SECTION.
- c. CONTAMINANTS: INSPECT PLANTING AREAS FOR CONTAMINANTS THAT MAY HAVE BEEN DISCARDED DURING ONSTRUCTION ACTIVITIES, SUCH AS PAINT, PAINT THINNER, PLASTER AND OTHER POTENTIALLY CONTAMINATING
- d. REMOVE FROM ALL PLANTED AREAS ROCKS OVER 1 INCH DIAMETER, STICKS AND OTHER DEBRIS, WEEDS, AND FOREIGN GROWTH OF ANY KIND.
- e. SUBGRADE: INSPECT PLANTING AREAS FOR CONDITION AND DEPTH, PLANTING AREA SUBGRADE TO CONSIST OF NATIVE SOIL OR SPECIFIED SOIL ONLY. ALL ROAD BASE, SAND, OR OTHER FOREIGN MATERIALS TO BE REMOVED. f. SUBGRADE ELEVATION TO ACCOUNT FOR PLACEMENT OF SPECIFIED DEPTHS OF AMENDMENT AND MULCH.
- TO ALL PLANTING AREAS, INCLUDING SEEDING AREAS (NOT BIORETENTION AREAS) PLACE FOUR-INCH LIFT OF SPECIFIED COMPOST AND TILL TO A DEPTH OF EIGHT INCHES.
- TO SEEDING AREAS: APPLY SPECIFIED GRANULAR AMENDMENT AT SPECIFIED RATE FOLLOWING SUPPLIER ROLL_COMPACT SOIL_TO_ACHIEVE COMPACTION OF 85-PERCENT OF DRY WEIGHT DENSITY IN AREAS WHERE
- PLANTINGS ARE LOCATED. AFTER NATURAL SETTLEMENT AND LIGHT ROLLING, THE COMPLETE WORK TO CONFORM STRICTLY TO THE LINES, GRADES AND ELEVATIONS INDICATED, UNDER THE CONTRACT WITHOUT ADDITIONAL COST TO THE OWNER. • PROVIDE ADDITIONAL AMENDMENTS OR ADJUST SOIL PREPARATION IF DIRECTED PER THE SOIL ANALYSIS
- FINISH GRADING OF LANDSCAPE AREAS: FINE GRADE ALL PREPARED PLANTING AREAS TO LINES AND GRADES SHOWN ON PLANS AND AS SPECIFIED WITHIN THIS SECTION.

RECOMMENDATIONS AND APPROVED BY OWNER/OWNER'S REPRESENTATIVE.

- FINISH GRADE TO ACCOUNT FOR PLACEMENT OF SPECIFIED MULCH. • TOP OF FINISHED MULCH SURFACE TO BE 1/2" BELOW ADJACENT PEDESTRIAN OR BICYCLE PATHS UNLESS OTHERWISE SPECIFIED ON CIVIL GRADING PLANS.
- INTENT IS TO MINIMIZE TRIPPING HAZARDS AT PEDESTRIAN INTERFACE FROM GRADE CHANGES AFTER MINOR SETTLEMENT OF PREPARED PLANTING SOILS AND MULCH. . IMPROPER DRAINAGE: INSPECT FOR DRAINAGE CONDITIONS, WHICH WOULD ADVERSELY AFFECT PLANT GROWTH.

- 5. STEEP SLOPES AND EROSION CONTROL
- a. ON SLOPES OF 2:1 AND GREATER LEAVE PERMANENT EROSION CONTROL MEASURES IN PLACE WHERE THEY
- a.g. SEEDING: APPLY 2" 3" DEPTH SPECIFIED COMPOST MULCH LAYER OVER EROSION CONTROL MEASURES AND MECHANICALLY BROADCAST SEED MIX AND GRANULAR AMENDMENT, AND WATER IN WITH SUSPENDED
- a.c. APPLY SPECIFIED MULCH MATERIAL OVER EROSION CONTROL MEASURES
- a. AFTER EARTHWORK, INSTALLATION OF IRRIGATION SYSTEM, AND SOIL PREPARATION, BUT PRIOR TO PLANTING, PERFORM MANUAL WEED ABATEMENT OF ALL PLANTING AREAS
- b. PROCEED WITH INSTALLATION OF PLANT MATERIAL AFTER REMOVAL OF ANY WEEDS BY CULTIVATION INVASIVE WEED CONTROL: IF STUBBORN AND RESIDUAL WEEDS SHOULD PERSIST, MANUAL ERADICATION SHOULD BE
- c.g. ANY USE OF HERBICIDES MUST BE COORDINATED WITH A LICENSED PEST CONTROL ADVISOR AND ALI
- CONTRACTOR TO FOLLOW BEST MANAGEMENT PRACTICES AS DESCRIBED IN THE CALIFORNIA INVASIVE PLANT COUNCIL DOCUMENT: BEST MANAGEMENT PRACTICES FOR WILDLAND STEWARDSHIP: PROTECTING WILDLIFE WHEN JSING HERBICIDES FOR INVASIVE PLANT MANAGEMENT, CAL-IPC PUBLICATION 2015-1. CALIFORNIA INVASIVE
- C.C. CONTRACT TO BE IN COMPLIANCE WITH PROTECTIVE MEASURES FOR NESTING BIRDS AND CALIFORNIA
- b. CONTRACTOR TO PROVIDE OWNER'S REPRESENTATIVE WITH 48 HOURS ADVANCE NOTICE OF LAYOUT STAKING FOR LAYOUT VERIFICATION.
- d. CONTRACTOR TO NOTIFY OWNER'S REPRESENTATIVE IN WRITING IMMEDIATELY OF ANY VARIANCES BETWEEN DRAWINGS AND ACTUAL SITE AND AWAIT INSTRUCTIONS BEFORE PROCEEDING. e. PLANT LOCATION: SET ALL TREES, SHRUBS AND GROUNDCOVER ACCORDING TO DRAWINGS. IF SITE POSITION IS
- TIME DURING INSTALLATION PERIOD. ADJUSTMENTS TO BE MADE AT NO ADDITIONAL COST. g. PLANT TREES, SHRUBS AND GROUNDCOVERS AT THE LOCATIONS SHOWN AND IN ACCORDANCE WITH THE
- 6. ROOT BARRIER: INSTALL ROOT BARRIERS FOR ALL TREE PLANTINGS LOCATED WITHIN 6' OF ANY HARDSCAPE
- BE ON MULTIPLE SIDES OF THE SAME TREE. b. TOP OF ROOT BARRIER TO BE INSTALLED 6" BELOW ADJACENT FINISHED GRADE OF CURB OR SIDEWALK.
- b. PRIOR TO SEEDING CONFIRM DEBRIS IS REMOVED AND SOIL SURFACE IS RAKED SMOOTH. c. BROADCAST SEED AT RATE SHOWN ON PLANS.
- a. PLANTING AND SEEDING OF MITIGATION AREAS MAY BEGIN AS SOON AS GRADING AND EROSION CONTROL IS
- BEFORE AUGUST 1ST, TO ALLOW FOR ESTABLISHMENT OF PLANTINGS IN CHANNELS PRIOR TO THE RAINY SEASON. b. PLANT DURING NORMAL PLANTING SEASON UNLESS OTHERWISE APPROVED IN WRITING BY THE OWNER'S
- c. Do not plant during the rainy season unless otherwise approved in writing by the owner's REPRESENTATIVE.
- GRADE AFTER SETTLEMENT AS THEY BORE NATURAL GRADE. MYCORRHIZAL FUNGI INOCULANT
- PLACE GRANULAR AMENDMENT/MYCORRHIZAL INOCULANT IN PLANTING HOLES, RATE AND APPLICATION AS RECOMMENDED BY SUPPLIER. IN ADDITION TO AND INDEPENDENT OF RECOMMENDATIONS OF SOILS REPORT. . HOLD FIRMLY IN POSITION AND PLACE SOIL CAREFULLY, AVOIDING ROOT DAMAGE AND FILLING VOIDS. WHEN
- STAKE TREES PER DRAWINGS ELEVATIONS AND LANDFORM CONFIGURATION IS CRITICAL TO PROJECT DESIGN INTENT. IF FINAL GRADES WILL BE
- OR PROLONGED PERIODS OF DROUGHT. i. WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.
- j. MULCH INSTALL CONTINUOUS MULCH DEPTH WHERE SHOWN ON PLANS. PROVIDE SMOOTH MULCH SURFACES.
- 8. FINAL CLEANUP RAKE NEATLY ALL PLANTING AREAS TO AN EVEN FINE GRADE AND WASH CLEAN ALL HARD SURFACES.
- a. AFTER ALL WORK INDICATED ON THE DRAWINGS AND SPECIFICATIONS HAS BEEN COMPLETED, INSPECTED, AND APPROVED BY THE OWNER'S REPRESENTATIVE. THE MAINTENANCE PERIOD WILL BEGIN.
- ANY OTHER OPERATION NECESSARY FOR THE CARE AND UPKEEP OF ALL LANDSCAPE AREAS FOR THE CONTRACTED MAINTENANCE PERIOD.
- THE CONTRACTOR TO IMMEDIATELY REPLACE ANY AND ALL PLANT MATERIALS, WHICH, FOR ANY REASON, DIE OR ARE DAMAGED WHILE UNDER HIS/HER CARE. REPLACEMENT PLANTS TO BE THE SAME SPECIES, SIZE, AND QUALITY
- FINISH GRADES RE-ESTABLISHED, AND AREAS REPLANTED. FREE OF DEBRIS AND WEEDS, ALL PLANT MATERIALS TO BE ALIVE, HEALTHY, AND FREE OF INFESTATION. MULCH DEPTH WILL BE AS SPECIFIED OR CONTRACTOR TO PROVIDE ADDITIONAL MULCH DEPTH. RODENT AND VERMIN CONTROL: IMMEDIATELY FOLLOWING INSTALLATION, MONITOR ALL PLANTER AREAS FOR ANY
- a. ALL PLANT MATERIAL IS GUARANTEED TO REMAIN ALIVE AND BE IN HEALTHY, VIGOROUS CONDITION FOR A PERIOD
- REPLACE ANY PLANT INCLUDED IN THIS CONTRACT THAT IS EITHER DEAD OR IN UNSATISFACTORY CONDITION AS DETERMINED BY THE OWNER'S REPRESENTATIVE. PLANTS MUST BE REMOVED FROM THE SITE. THESE AND ANY OTHER MISSING PLANTS TO BE REPLACED AS SOON AS CONDITIONS PERMIT WITHIN THE NORMAL PLANTING SEASON
- CONTRACTOR TO IDENTIFY AND, IF APPROPRIATE, DO ALL WORK NECESSARY TO PREVENT REPLACEMENT PLANTS FROM A SIMILAR DEMISE AT NO EXTRA COST TO THE OWNER.
- CONTRACTOR TO REPAIR ALL DEFECTIVE WORK AND MATERIALS AS DIRECTED BY THE OWNER'S REPRESENTATIVE DURING THE GUARANTEE PERIOD. ALL REPLACEMENT MATERIALS AND INSTALLATIONS TO MEET THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.
- COMPLETION OF ALL WORK (INCLUDING MAINTENANCE). UPON FINAL ACCEPTANCE, AND WRITTEN NOTIFICATION, THE OWNER WILL ASSUME RESPONSIBILITY FOR THE MAINTENANCE OF THE WORK.

END OF SECTION

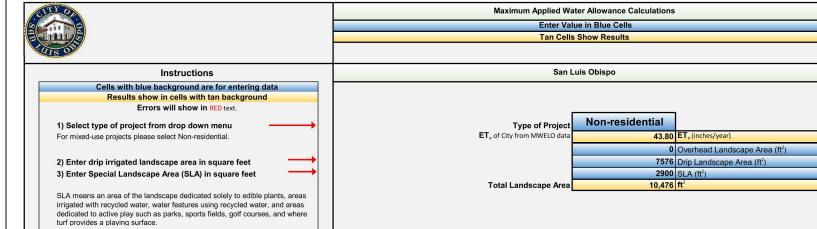
- a.b. PLANT MATERAL: SLICE AN "X' AT PLANTING LOCATIONS TO INSTALL PLANT MATERIAL.
- REPEATED. IF MANUAL METHODS DO NOT CONTROL WEEDS CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH PROJECT BIOLOGIST OR OWNER'S REPRESENTATIVE TO DETERMINE APPROPRIATE REMOVAL METHODS.
- APPROPRIATE PERMITS FOR APPLICATION WITHIN WETLAND AND RIPARIAN AREAS MUST BE ACQUIRED PRIOR
- PLANT COUNCIL, BERKELEY, CA. AVAILABLE AT WWW.CAL-IPC.ORG.
- c.d. ALL INVASIVE PLANT MATERIAL WILL BE BAGGED AND REMOVED FROM THE SITE AND DISPOSED OF AT AN
- a. LAYOUT VERIFICATION REFERS TO STAKING LOCATION OF ALL TREES.
- c. NO WORK MAY COMMENCE ON INSTALLATION OF MATERIALS UNTIL LAYOUT IS VERIFIED AND ACCEPTED BY OWNER'S REPRESENTATIVE. SHOULD CONTRACTOR CHOOSE TO BEGIN INSTALLATION PRIOR TO APPROVAL, IT IS AT
- MORE THAN ONE-FOOT FROM DRAWING POSITION, CONSULT WITH OWNER'S REPRESENTATIVE BEFORE PROCEEDING. ADJUSTMENT OF LAYOUT: OWNER'S REPRESENTATIVE MAY REQUIRE ADJUSTMENT OF THE POSITION OF ANY PLANT MATERIAL IN THE FIELD FOR BEST-FINISHED APPEARANCE OR IN RESPONSE TO EXISTING SITE CONDITIONS AT ANY
- a. INSTALL BARRIER AT CURB AND/OR SIDEWALK, PER MANUFACTURER'S INSTRUCTIONS. IN SOME CASES THIS WILL
- PRIOR TO SEEDING CONFIRM SOIL PREPARATION IS COMPLETE.
- d. AFTER SEEDING, RAKE AREA TO SETTLE SEED INTO SOIL. e. AFTER RAKING, APPLY SPECIFIED SUSPENDABLE AMENDMENTS PER MANUFACTURER'S INSTRUCTIONS.
- COMPLETE AND IRRIGATION SYSTEM IS OPERATIONAL. SEEDING AND PLANTING OF MITIGATION MUST BE COMPLETE
- REPRESENTATIVE, AND AFTER MAJOR CONSTRUCTION WORK IS COMPLETED.
- d. PLANT TREES, SHRUBS AND GROUNDCOVER PER DRAWINGS. e. SET PLANTS IN CENTER OF PITS, ON COMPACTED, SPECIFIED SOIL AND AT THE SAME RELATIONSHIP WITH FINISH
- HOLE IS APPROXIMATELY TWO-THIRDS FULL, COMPACT FILL BY WATERING TO AVOID AIR POCKETS.
- ALTERED BY THE ADDITION OF SOILS FROM PLANT MATERIAL CONTAINERS, REMOVE AND DISPOSE OF EXISTING SITE SOIL FROM TREE AND SHRUB PITS AS NEEDED. SPECIAL PLANTING TECHNIQUES MAY BE REQUIRED BY THE OWNER'S REPRESENTATIVE FOR UNSEASONAL PLANTING
- ALL MULCH AREAS TO BE RAKED SMOOTH AND DEPTH OF MULCH TO BE MAINTAINED AND REFRESHED DURING ENTIRE MAINTENANCE PERIOD.
- a. PRIOR TO INSPECTION FOR FINAL COMPLETION, REMOVE ALL DELETERIOUS MATERIAL AND DEBRIS FROM ALL AREAS,
- b. THE CONTRACTOR TO MAINTAIN THE LANDSCAPE PLANTING AND IRRIGATION SYSTEM FOR A PERIOD OF NINETY c. MAINTENANCE INCLUDES, BUT IS NOT LIMITED TO WATERING, WEEDING, CULTIVATION, MULCHING, PRUNING, AND/OR
- d. AS DIRECTED BY THE OWNER'S REPRESENTATIVE, PROVIDE MINOR PRUNING OF TREES AND SHRUBS FOR FORM AND VISUAL CLEARANCE e. ALL AREAS TO BE HAND WEEDED AND KEPT WEED FREE DURING THE MAINTENANCE PERIOD.
- AS THE ORIGINAL SPECIFIED PLANTS. DAMAGE TO PLANTING AREAS TO BE REPAIRED IMMEDIATELY. ANY SETTLING OF THE SOIL TO BE REPAIRED, h. AT THE COMPLETION OF THE MAINTENANCE PERIOD, ALL AREAS INCLUDED IN THIS CONTRACT TO BE CLEAN AND
- EVIDENCE OF RODENT ACTIVITY. APPLY REPELLENT AS NEEDED FOR SMALL SCALE INFESTATIONS. WHERE ACTIVITY IS IN TWO OR MORE AREAS THEN CONTRACT WITH A LICENSED PEST CONTROL APPLICATOR TO REMOVE
- OF 1 YEAR AFTER DATE OF FINAL ACCEPTANCE. TREES AND SHRUBS REPLACED DURING THE GUARANTEE PERIOD TO BE GUARANTEED FOR A PERIOD OF 1 YEAR BEGINNING AT THE TIME OF REPLACEMENT. GUARANTEE WORK OF THIS SECTION FOR ONE-YEAR FROM THE DATE OF FINAL ACCEPTANCE OF LANDSCAPE BY THE OWNER'S REPRESENTATIVE. THE GUARANTEE WILL COVER AGAINST DEFECTS OF MATERIALS AND WORKMANSHIP.

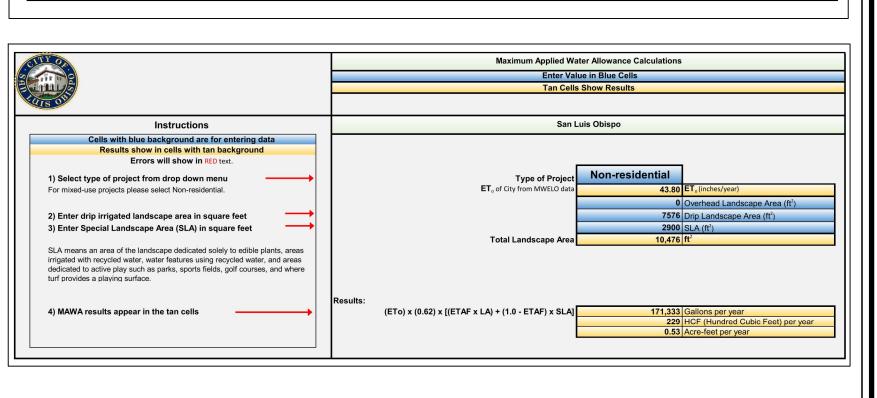
MAKE REPLACEMENTS WITHIN 30 DAYS OF AWARENESS OF PLANT DEATH OR ABNORMAL GROWING CONDITION OR

- WRITTEN NOTIFICATION BY THE OWNER'S REPRESENTATIVE AND PRIOR TO EXPIRATION OF GUARANTEE PERIOD. d. A FINAL INSPECTION BY THE OWNER'S REPRESENTATIVE WILL BE SCHEDULED BY THE CONTRACTOR PRIOR TO THE END OF THE ONE-YEAR GUARANTEE PERIOD. e. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT NON-CONFORMING PLANT MATERIAL AT ANY TIME
- AT THE CONTRACTOR'S EXPENSE.

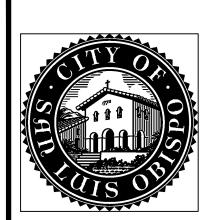
UNTIL COMPLETION OF THE ONE-YEAR GUARANTEE PERIOD AT NO ADDITIONAL COST TO THE OWNER.

- h. ALL REPLACEMENT PLANTS TO BE OF THE SAME VARIETY, SIZE, AND ROOT CONDITION AS EXISTING ADJACENT PLANT MATERIALS, AND INCLUDE ANY NEW GROWTH THAT MAY HAVE OCCURRED SINCE PLANTING, SUCH THAT REPLACEMENT PLANTS MATCH EXISTING PLANTS OF THE SAME VARIETY.
- a. WORK UNDER THIS SECTION WILL BE ACCEPTED BY THE OWNER'S REPRESENTATIVE UPON SATISFACTORY





(ETo) x (0.62) x [(ETAF x LA) + (1.0 - ETAF) x SL



EXP.7/31/20

G. GLANDON G. GLANDON

12/30/2019 CITY SPECIFICATION NO.

PLAN FILE NO. / LOCATION

190125