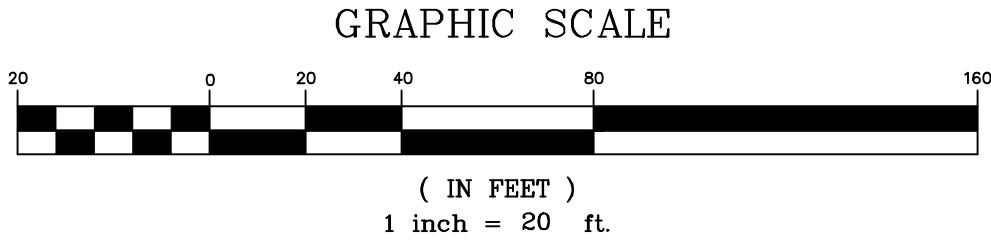
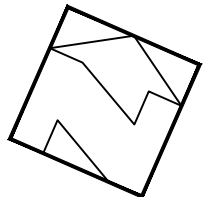


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APPLICANT: MENEKSHE

DATE: 7/28/21  
HORIZ. SCALE: 1"=20'-0"  
VERT. SCALE: N/A  
DESIGNED BY: GREG  
CHECKED BY: GREG  
DRAWN BY: GREG



ROAD: 3085 PASEO VISTA AVENUE

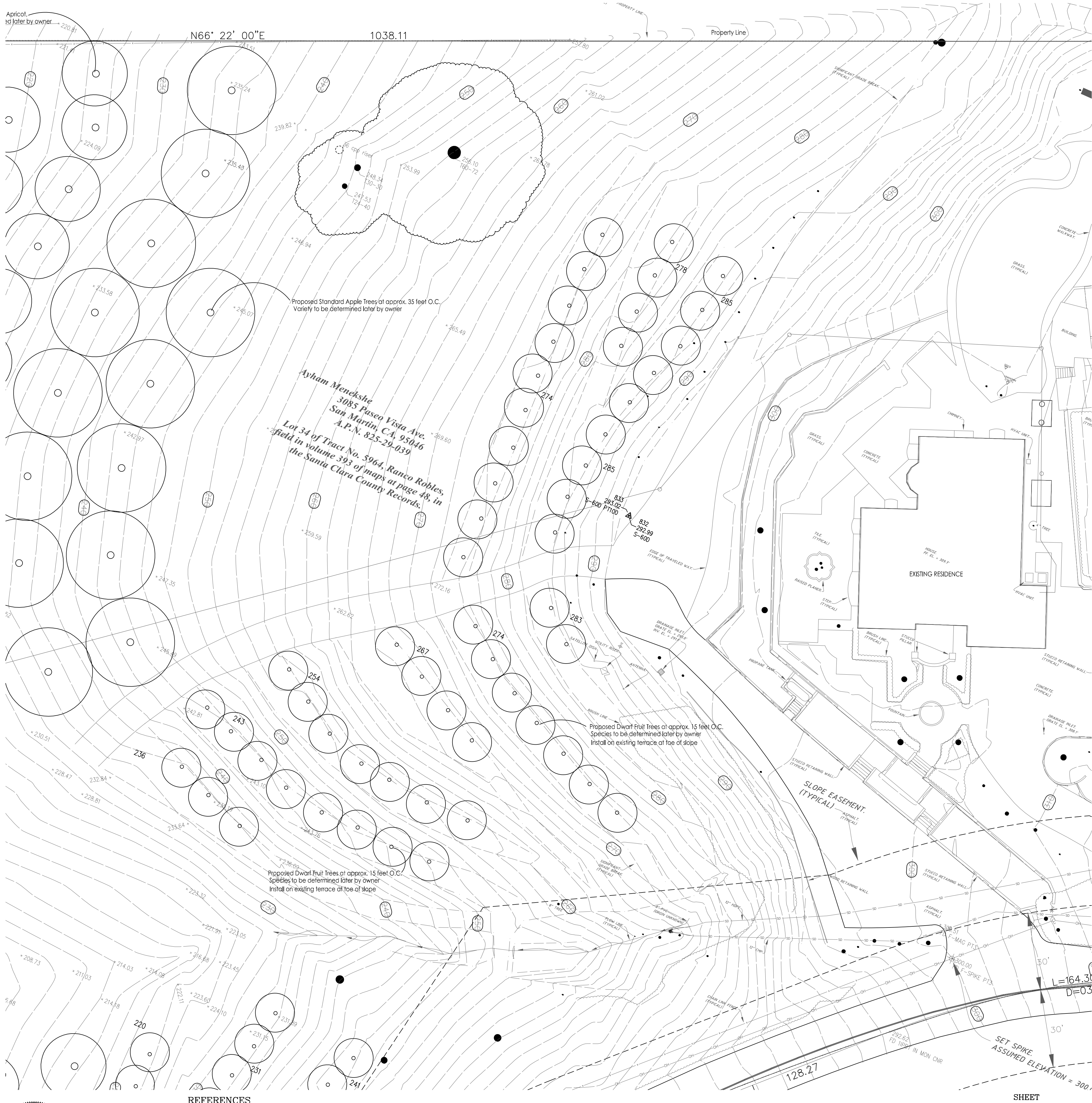
REFERENCES


AREA  
DATE

FRUIT\_TREE\_PLANTING\_PLAN

LANDS\_OF\_MENEKSHE-3085\_PASEO\_VISTA\_AVENUE\_APN\_825-29-039

COUNTY FILE NO.: PLN20-0105



L1

OF SHEETS

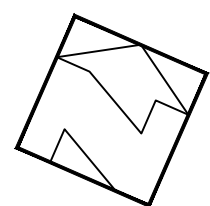
JOB#

COUNTY  
STATE

JOB NO. 19071



PLAN # \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_



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VERT. SCALE: NA  
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CHECKED BY: GREG  
DRAWN BY: GREG



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AREA  
DATE

# FRUIT\_TREE\_PLANTING\_PLAN

LANDS\_OF\_MENEKSHE-3085\_PASEO\_VISTA\_AVENUE\_APN\_825-29-039

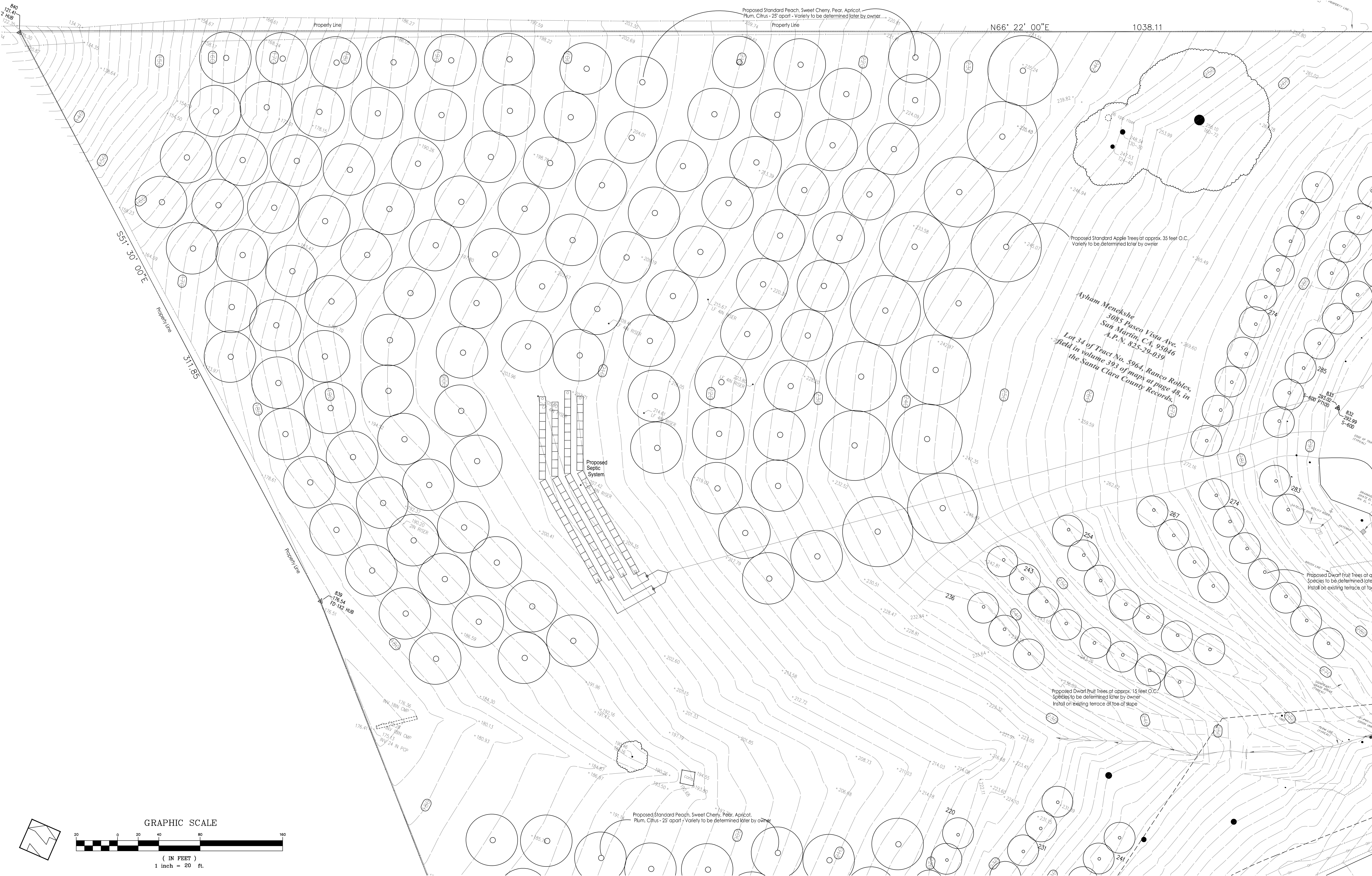
COUNTY FILE NO.: PLN20-0105

L2

COUNTY  
STATE

JOB#

JOB NO. 19071





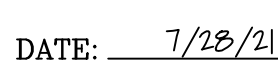
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REVISIONS:

GREGORY LEWIS

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DESIGNED BY: GREG  
CHECKED BY: GREG  
DRAWN BY: GREG



HORIZ. SCALE: 1"=20'-0"  
VERT. SCALE: NA  
DESIGNED BY: GREG  
CHECKED BY: GREG  
DRAWN BY: GREG

## REFERENCES

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AREA  
DATE

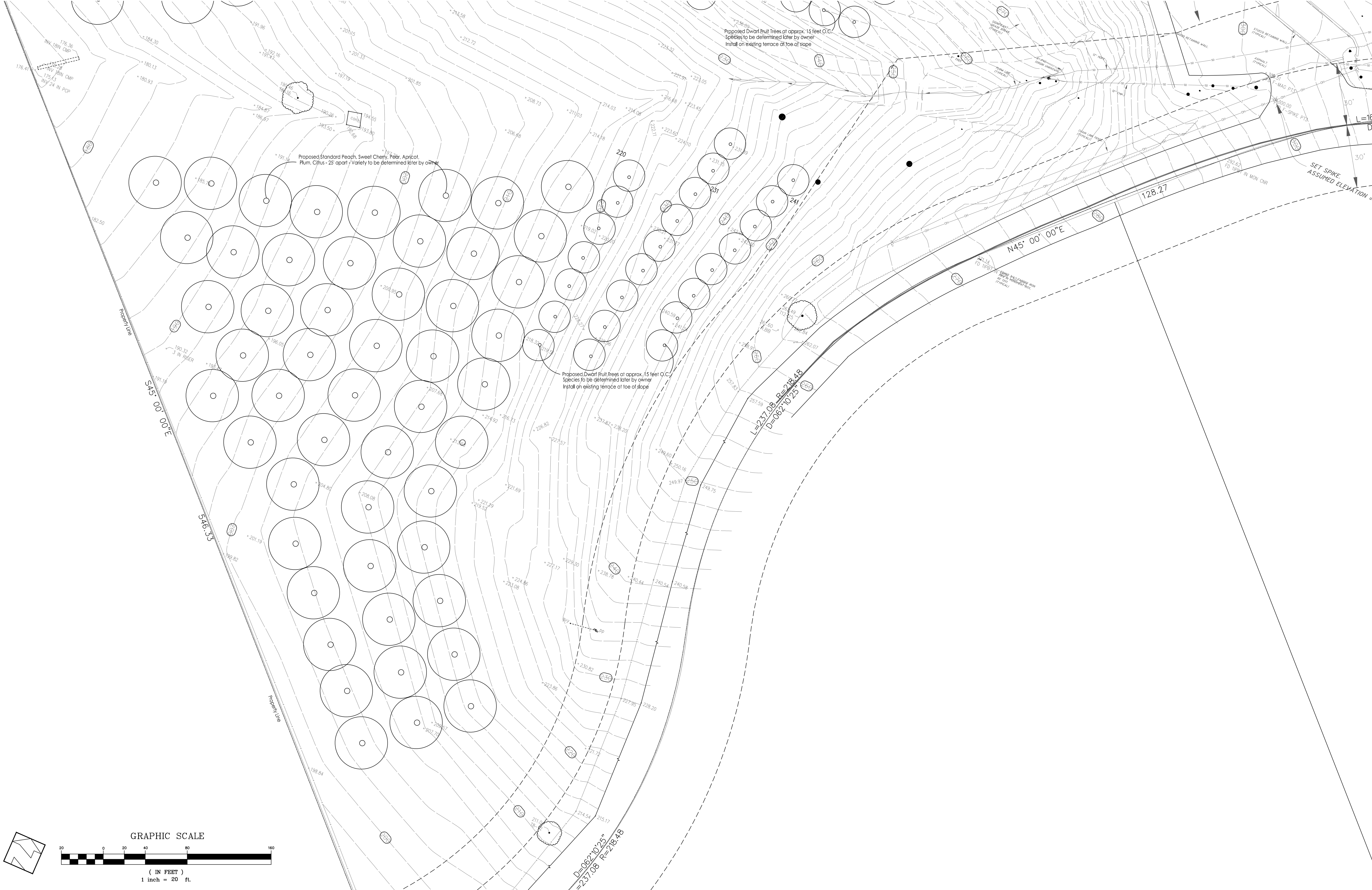
## LANDS\_OF\_MENEKSHE-3085\_PASEO\_VISTA\_AVENUE\_APN\_825-29-039

SHEET

OF SHEETS

COUNTY \_\_\_\_\_  
STATE \_\_\_\_\_

JOB NO. 19071

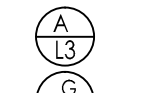
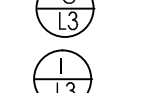
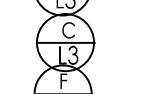
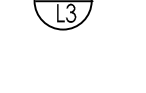
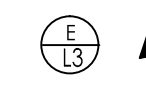
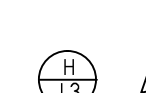

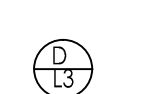

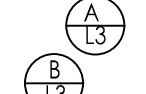
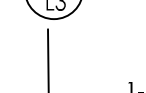


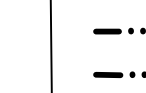
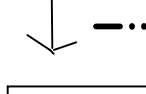
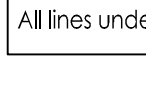


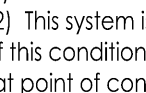
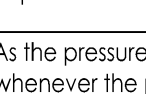
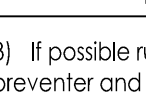





PLAN # OF SHEET

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## Irrigation Legend

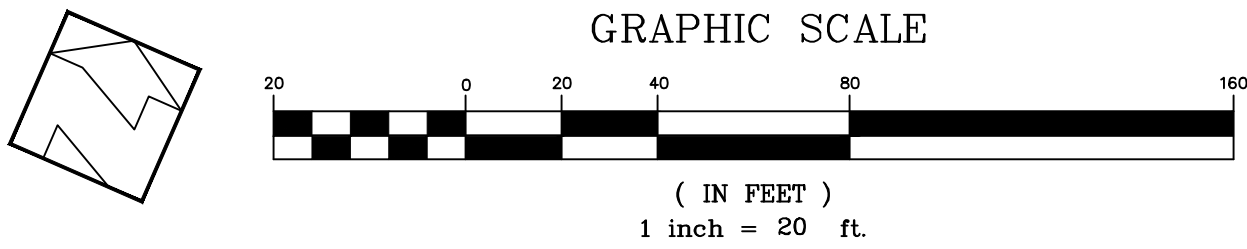
KEY	MANUF.	MANUF. #	DESCRIPTION
	Watts	3/4"	Existing Watts Reduced pressure backflow preventer as per city standards
	Hunter	ICV-101-G	Manual shutoff ball valve in valve box same size as pressure line
	Hunter	FLOW-CLK	1" globe valve - master valve below grade in valve box
	Hunter	ICV 101 G	Pressurizes main line only during irrigation run times
	Hunter	ICV 101 G	Flow sensor set to shut off irrigation if there is a break in the line
	Hunter	ICV 101 G	1" globe valve with flow control below grade in valve box
	Rainbird	RWS-M-B-1402	3/4" hose/bib pointed up in 10" round valve box with ball down lid
	Rainbird	B-1402	Master valve must be turned on in order to activate if this is connected to irig pressure line
	Rainbird	B-1402	One .5 GPM bubblers (18" root watering system) at each tree in water basin or install bubbler on SPX-FLEX as per below over top of 18" deep perf pipe filled with gravel if you want to do something less expensive than RWS
	Rainbird	B-1402	1/2" FPT threaded .5 GPM bubbler on 4' length of Rainbird SPX-FLEX 100 pipe with S8 spiral barb fittings
	Rainbird	B-1402	Use one per tree on rootball inside water basin
	Hunter	IC-600SS	Controller with enough modules for 30 stations (expandable to 42)
	Hunter	IC-600SS	wall mount exterior with Wireless Solar Sync On-Site Weather Station. Controller will change it's program based on current weather conditions. Controller has stainless steel box and is mounted on existing post at utility riser/satellite dish - elec. power is available at this location for controller
	Hunter	IC-600SS	Pressure regulator - install on pressure line in 10" round valve box as pressure line goes down hill if pressure exceeds 75 psi
	Hunter	IC-600SS	Nonpressure line - SCH 40 PVC 3/4" unless noted for larger
	Hunter	IC-600SS	size - 12" cover - pipes less than 2" to be Sch 40 PVC
	Hunter	IC-600SS	2" Pressure line - Sch 40 PVC
	Hunter	IC-600SS	- 18" of cover (24" of cover under A.C. paving)
	Hunter	IC-600SS	LINES UNDER PAVING Sch 40 PVC - 24" of cover
	Hunter	IC-600SS	Pressure line - 2" Sch 40 PVC in 1-1/2" sleeve
	Hunter	IC-600SS	Non Pressure line - 1" Sch 40 PVC in 1-1/2" sleeve
	Hunter	IC-600SS	2" gray elec. conduit for control wires.

## Irrigation Notes

- See sheet L7 and L8 for details and specifications
- This system is designed to operate with minimum 12 GPM at minimum 45 p.s.i. at the point of connection. If this condition is not met contact the Landscape Architect for possible redesign. If pressure exceeds 75 psi at point of connection install a Wilkins pressure regulator the same size as the pressure line .

As the pressure line goes down hill and pressure increases due to elevation install a pressure regulator whenever the pressure exceeds 75 psi

- If possible run a new 2" pressure line all the way back to the existing reduced pressure backflow preventer and put the master valve and flow sensor there so it can be used by other parts of the existing or future irrigation system. This would require wires run from the master valve and flow sensor back to the controller.
- Detector tape should be installed with any pressure lines not buried in the same trench with control wires and with any lines of any kind under paving not in a trench with control wires.
- Electric controllers should be set to water between 6:00 PM and 11:00 a.m. to avoid watering during times of higher wind or temperature and programmed with repeat cycles to avoid runoff. This is not as important for drip that is not affected by the wind. Set irrigation schedule according to plants' water needs.
- Run 2 extra control wires from the controller to the far end of each leg and to the furthest hose bib, coming up at each valve with some extra wire along the way so at least one extra valve could be added if necessary in the future at each valve grouping.
- The routing of sprinkler lines is schematic on the plan. Do not put valves too close to trees. Stay 8' to 10' away if possible. Do not put pressure lines under trees. Install line in planting areas instead of under paving whenever possible.
- Whenever paving is dug up or trenches are put in areas of paving consider running sleeves, control wires and irrigation lines to eventually replace irrigation lines and control wires to different parts of the landscaping
- Prior to finalizing bid or doing installation check with the Landscape Architect to make sure you have the most recent plans.
- Ask the owner if he would prefer a higher tech controller such as the Hydrowise Pro HC and the HC Flow Meter. More than one controller may be required due to the number of proposed valves and future valves at the residence.



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VERT. SCALE: NA  
DESIGNED BY: GREG  
CHECKED BY: GREG  
DRAWN BY: GREG



## REFERENCES


AREA  
DATE

ROAD: 3085 PASEO VISTA AVENUE

COUNTY FILE NO.: PLN20-0105

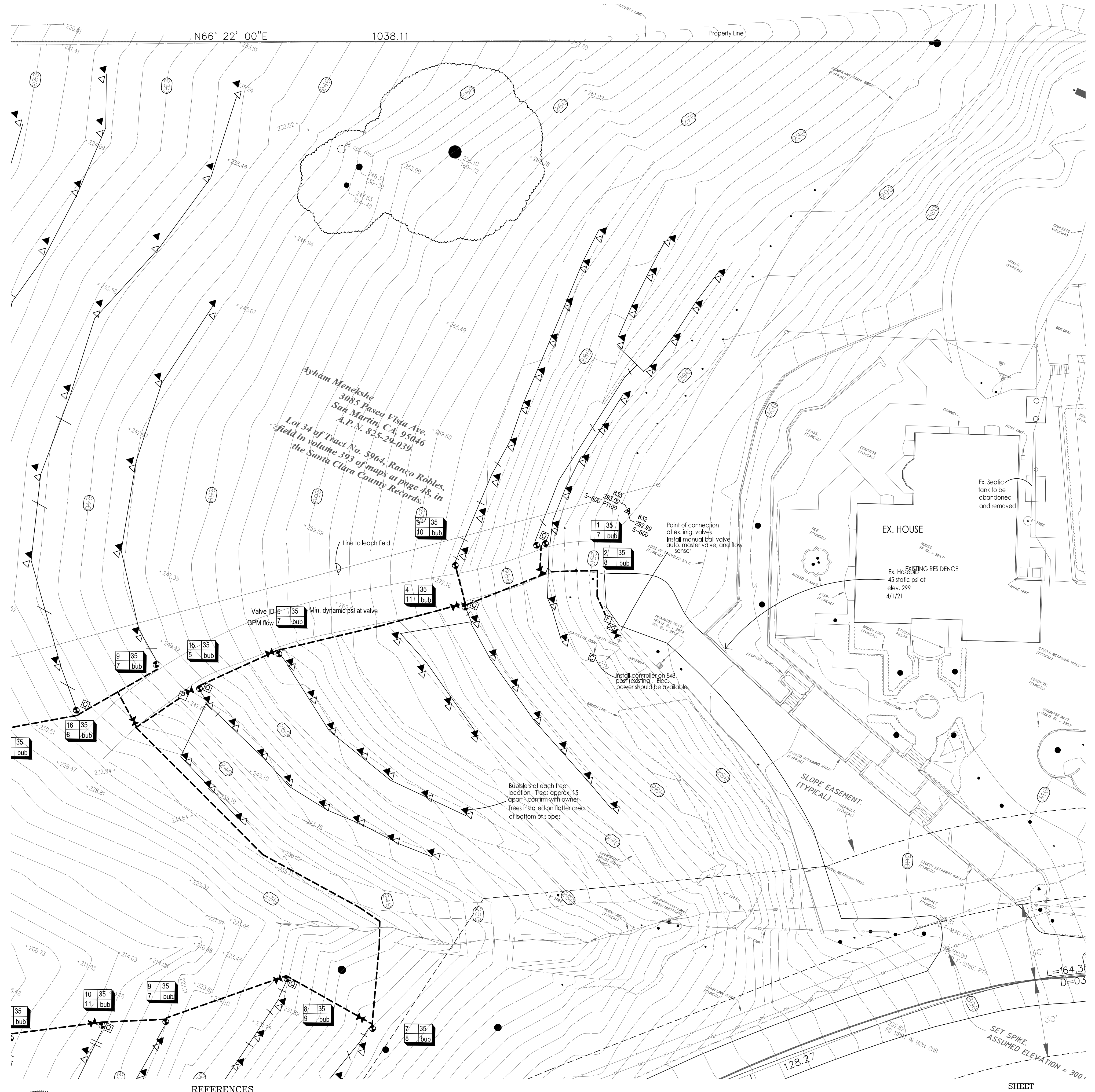
# FRUIT\_TREE\_IRRIGATION\_PLAN

LANDS\_OF\_MENEKSHE-3085\_PASEO\_VISTA\_AVENUE\_APN\_825-29-039

COUNTY  
STATE  
JOB NO. 19071

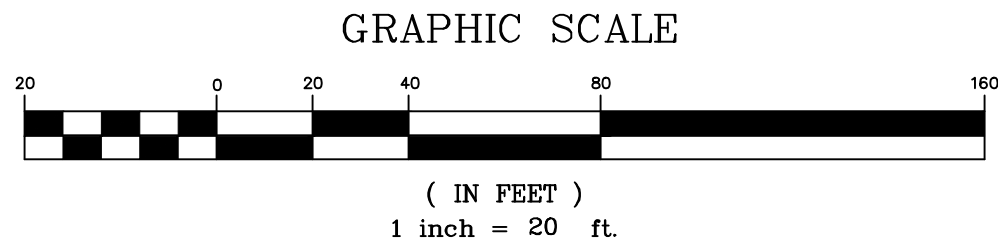
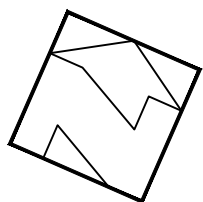
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VERT. SCALE: NA  
DESIGNED BY: GREGL  
CHECKED BY: GREGL  
DRAWN BY: GREGL



REFERENCES

	AREA
	DATE

APPLICANT: MENEKSHE

ROAD: 3085 PASEO VISTA AVENUE

# FRUIT\_TREE\_IRRIGATION\_PLAN

LANDS\_OF\_MENEKSHE-3085\_PASEO\_VISTA\_AVENUE\_APN\_825-29-039

COUNTY FILE NO.: PLN20-0105

SHEET

L6

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COUNTY  
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FRUIT\_TREE\_IRRIGATION\_DETAILS

LANDS\_OF\_MENEKSHE-3085\_PASEO\_VISTA\_AVENUE\_APN\_825-29-039

COUNTY FILE NO.: PLN20-0105

SHEET

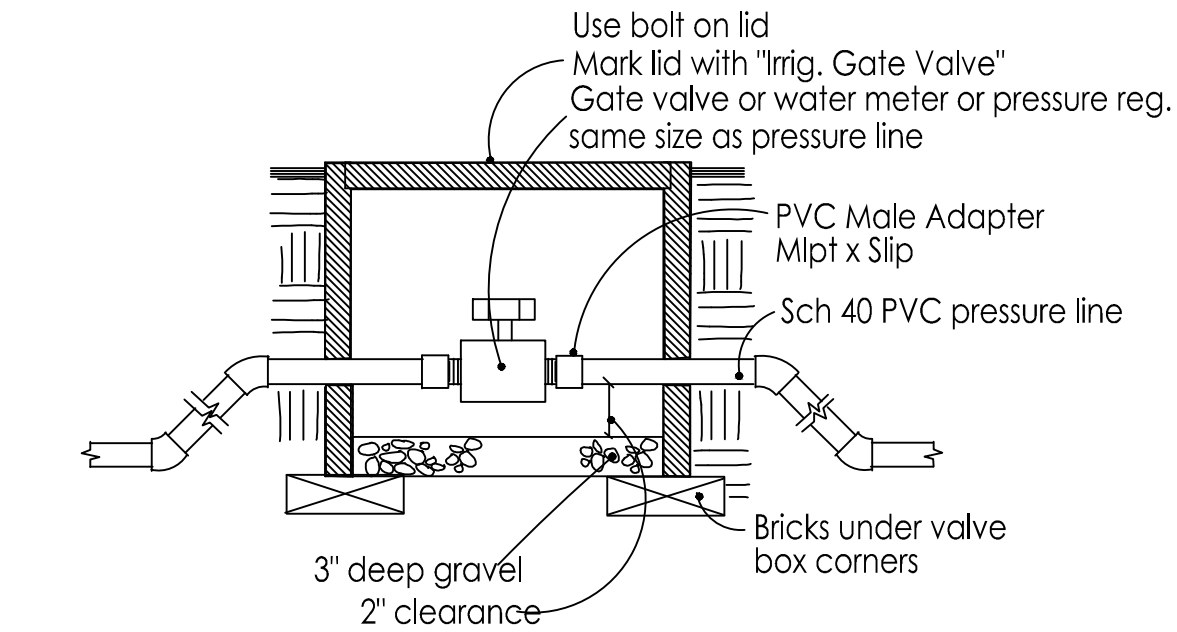
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OF SHEETS

COUNTY  
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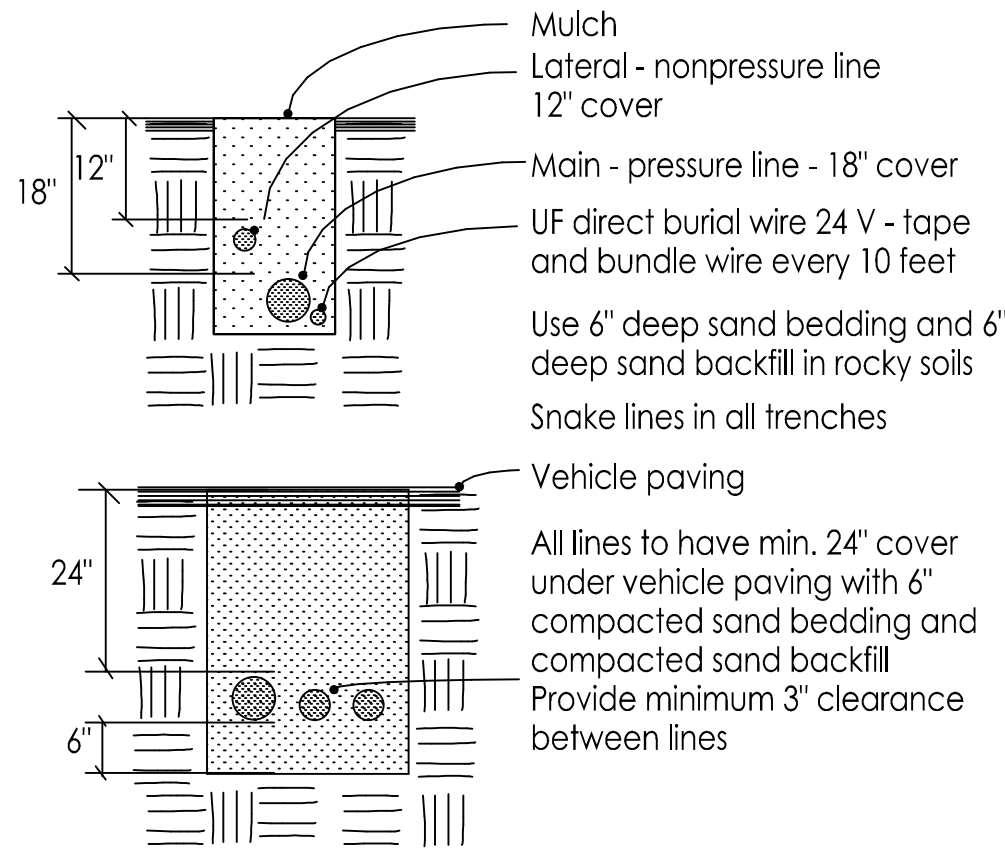
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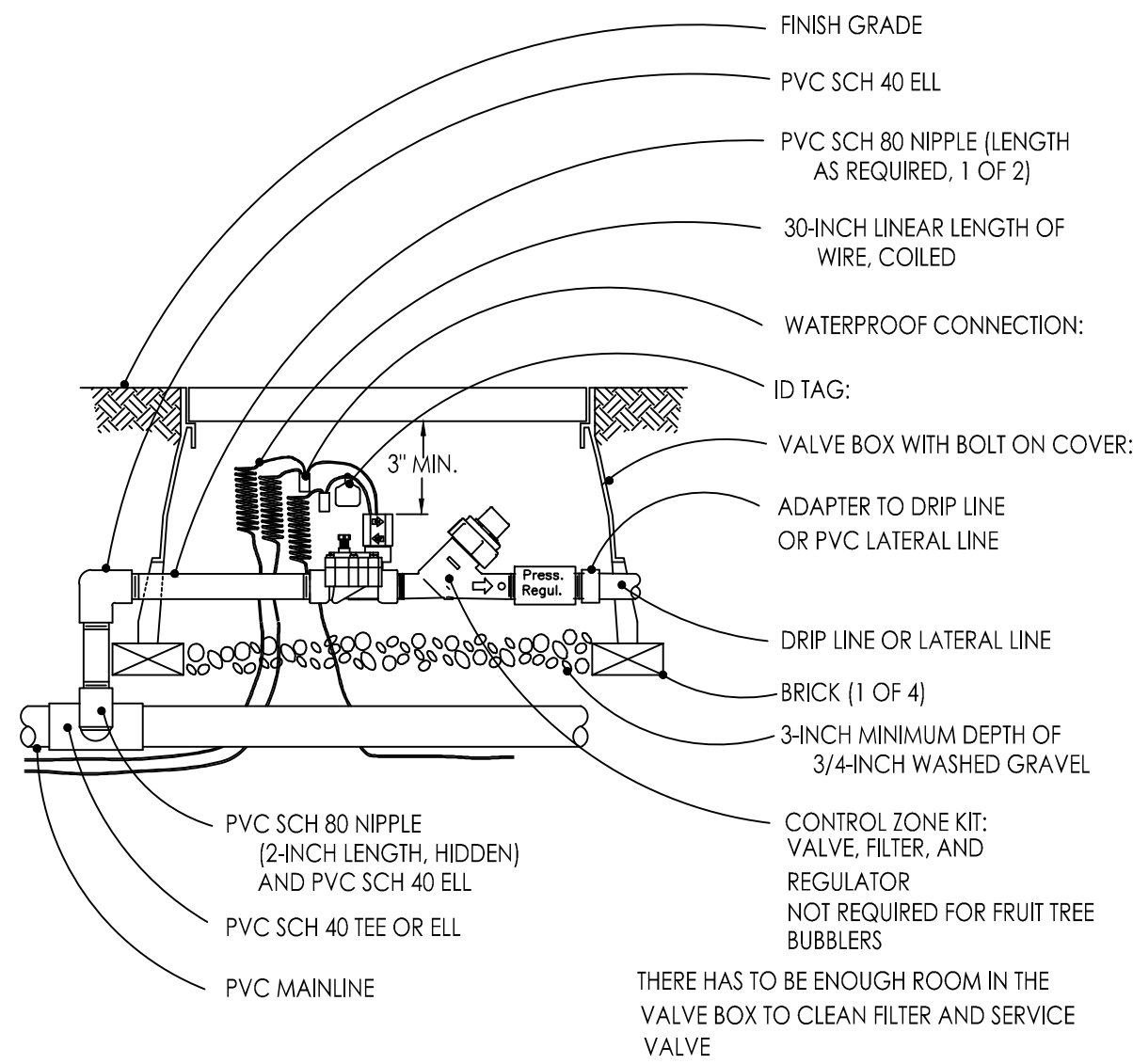
Manual Gate Valve  
No Scale Pressure Regulator

A



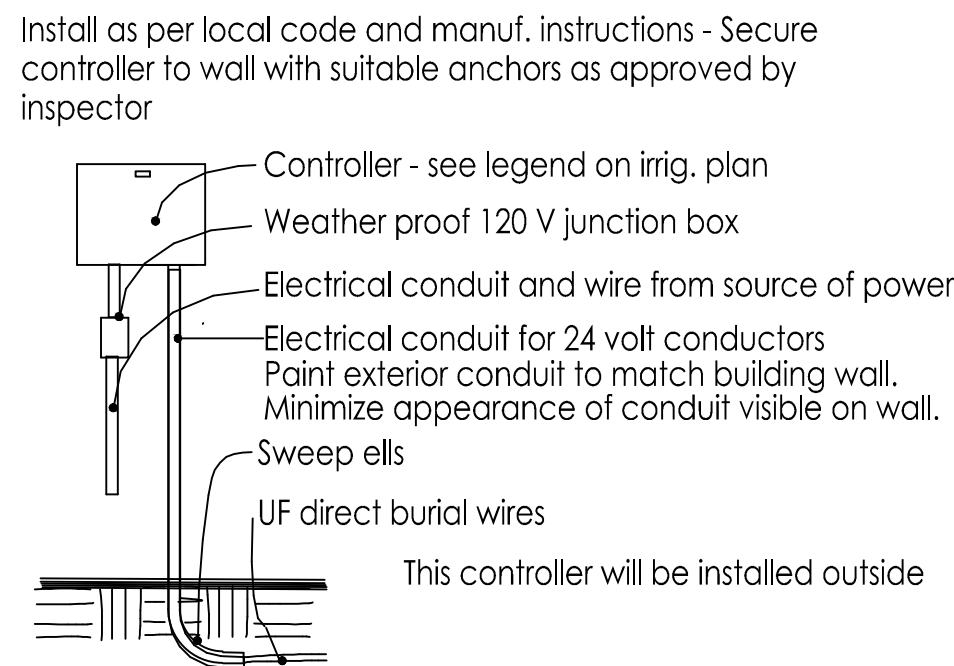
Trenches/Lines  
No Scale

B



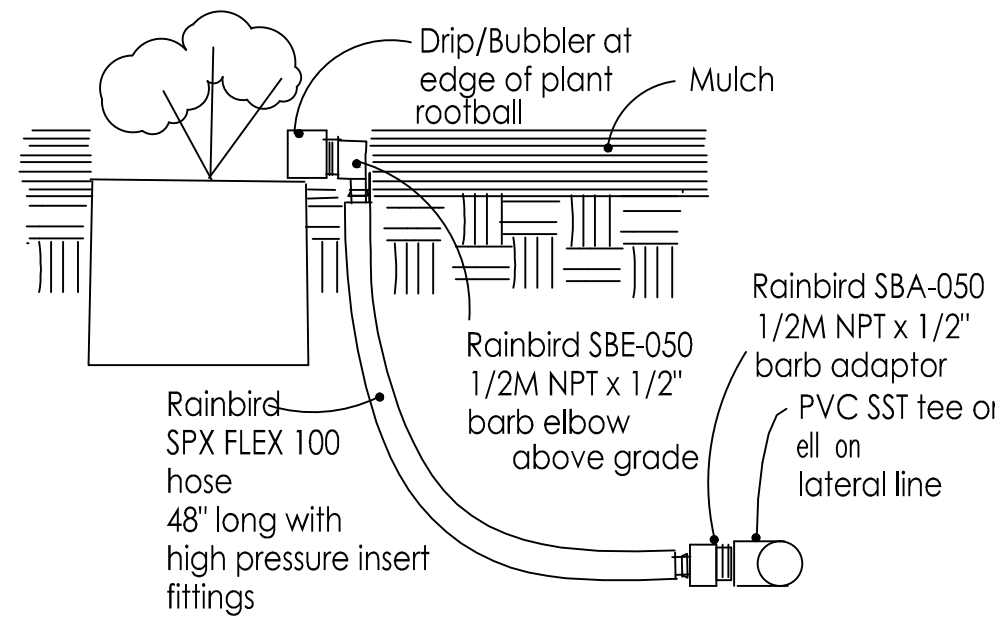
Remote Control Globe Valve  
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C



Wall Mount Controller  
No Scale

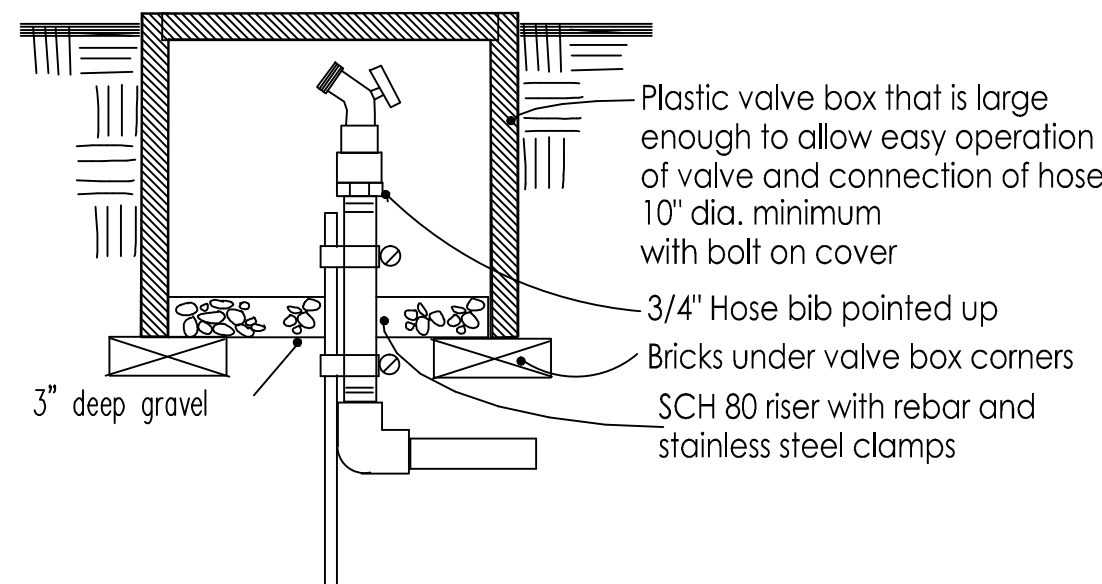
D



Drip/Bubbler w/Flexible PVC Riser

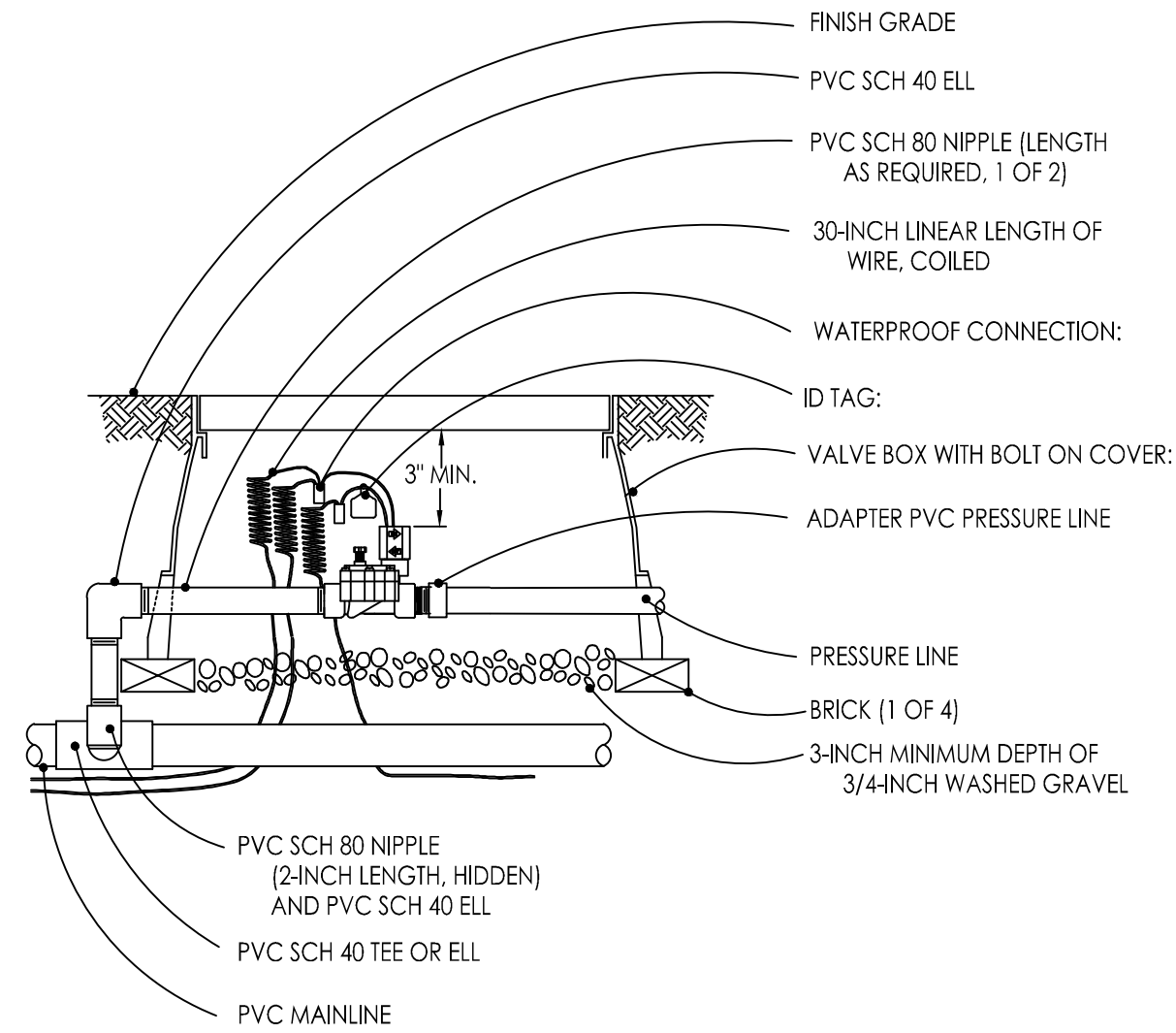
E

No Scale  
All male adapters above grade to be Sch 80 or marlex  
When using multi outlet emitters run 1/4" tubing to locations equally spaced around edge of rootball and install bug caps on ends of tubing  
Secure tubing to soil under mulch with 7" metal U stables



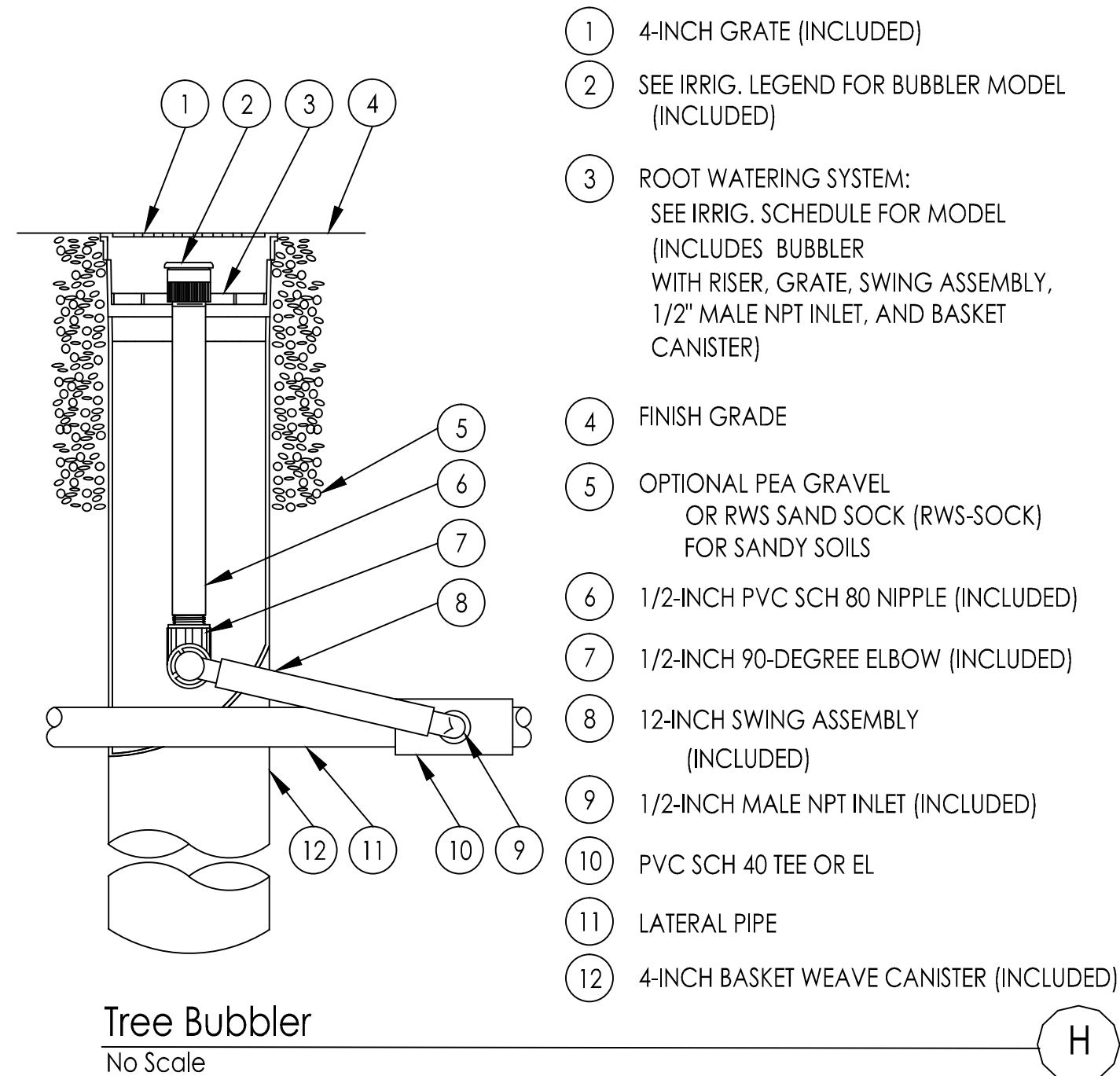
Hose bib Pointed Up  
Below Grade  
No Scale

F



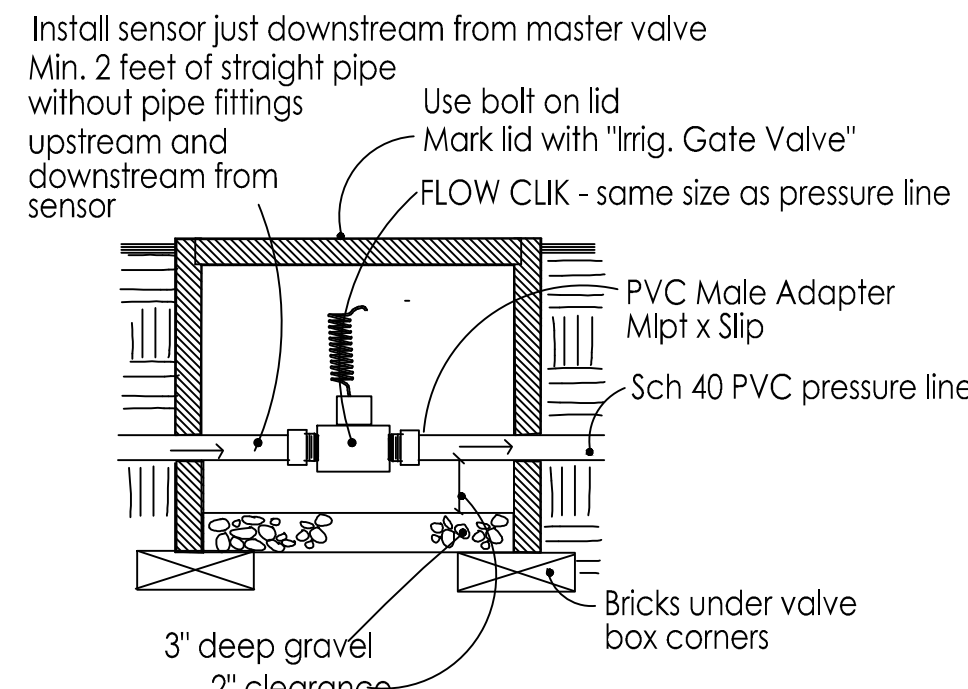
Remote Control Master Valve  
No Scale

G



Tree Bubbler  
No Scale

H



FLOW-CLIK Sensor  
No Scale

I



GENERAL CONDITIONS – SOIL PREPARATION, PLANTING, AND IRRIGATION

1.1 QUALITY ASSURANCE:

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.
- B. It is the Contractor's responsibility to verify all information contained in the plans and specifications and to notify the Architect of any discrepancy prior to ordering products or commencing with the work.
- C. Check and verify dimensions, reporting any variations to the Architect before proceeding with the work.

1.2 CONTRACTOR COORDINATION

- A. It is the responsibility of the Landscape Contractor to familiarize himself with all grade differences, location of walls, retaining walls, etc., and to coordinate work with the General Contractor.

1.3 DIMENSIONS AND SCALE

- A. Dimensions are to take precedence over scale at all times. Large scale details are to take precedence over those of small scale. Dimensions shown on plans shall be adhered to insofar as it is possible, and no deviation from such dimensions shall be made except with the consent of the Architect. The Contractor shall verify all dimensions at the site and shall be solely responsible for same or deviations from same.

1.4 LAWS AND REGULATIONS

- A. The Contractor shall conform to and abide by all city, county, state and federal building, labor and sanitary laws, ordinances, rules, and regulations.

1.5 LICENSES AND PERMITS

- A. The Contractor shall give all notices and procure and pay for all permits and licenses that may be required to complete the work.

1.6 SUBMITTALS

- A. At the request of the owner or the Landscape Architect, submit manufacturer's and/or supplier's specifications and other data needed to prove compliance with the specified requirements including certificates stating quantity, type, composition, weight, and origin of all amendments, chemicals, import soil, planter mix, plants, and irrigation equipment used on the site.

1.7 PRODUCT SUBSTITUTIONS

- A. Any product substitutions shall be requested in writing. The Landscape Architect must approve or refuse any substitutions in writing. Lack of written approval will mean the substitution is not approved. Any difference in cost to the Contractor of a less expensive substitution shall be credited to the Owner's

1.8 ERRORS AND OMISSIONS

- A. The Contractor shall not take advantage of any unintentional error or omission in the drawings or specifications. He will be expected to furnish all necessary materials and labor that are necessary to make a complete job to the true intent and meaning of these specifications. Should there be discrepancies in the drawings or specifications, the contractor shall immediately call the attention of the Architect to same and shall receive the complete instructions in writing.

1.9 INSPECTIONS/REVIEWS DEFINITION

- A. Inspection or observation as used in these specifications means visual observation of materials, equipment, or construction work on an intermittent basis to determine that the work is in substantial conformance with the contract documents and the design intent. Such inspection or observation does not constitute acceptance of the work nor shall it be construed to relieve the contractor in any way from his responsibility for the means and methods of construction or for safety on the construction site. Inspection or observation will be done by the Landscape Architect only if requested by the owner in writing. This service will require a written contract for additional fees.

LANDSCAPE IRRIGATION

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. The work includes but is not necessarily limited to the furnishing of all materials, equipments, and labor required to install a complete irrigation system.

- 1.2 GUARANTEE. The entire sprinkler system shall be guaranteed by the Contractor in writing to be free from defects in material and workmanship for a period of one year from acceptance of the work. The guarantee shall include repair of any trench settlement occurring within the guarantee period, including related damage to paving, landscaping, or improvements of any kind.

1.3 REVIEWS

- A. Request the following reviews prior to progressing with the work: (1) Layout of system (2) Depth of lines prior to backfilling (3) Coverage adjustment of all heads, valve boxes and operation of system.

1.4 WATER PRESSURE

- A. Verify the existence of the minimum acceptable volume of water at the minimum acceptable dynamic pressure as per plan at the point of connection at the earliest opportunity, reporting insufficient volume and/or pressure to the Landscape Architect. Contractor is responsible for cost of installation of pressure regulator if pressure exceeds 80 psi.

1.5 UTILITIES

- A. Verify the location of all existing utilities and services in the line of work before excavating. Take all precautionary measures necessary to avoid damaging

1.6 ELECTRICAL CONNECTION

- A. Verify existence of 110 Volt 20 Amp. circuit for irrigation controller (by others) at location noted on plan for installation of controller.

PART 2 – PRODUCTS

2.1 PIPE

- A. Plastic pipe is to be polyvinyl chloride, marked 1120–1220, and bearing the seal of the National Sanitation Foundation. Use Schedule 40 polyvinyl chloride, type II fittings bearing the seal of the National Sanitation Foundation, and complying with ASTM D2466 for pressure line and also for any water lines under asphalt paving. Use Sch 40 PVC for lateral lines in planting areas unless stronger pipe is specified in the irrigation legend. For joining, use a solvent complying with ASTM D2466 and recommended by the manufacturer of the approved pipe. Pipe is to be continuously and permanently marked with the manufacturer's name, pipe size, schedule number, type of material, and code number.
- B. Galvanized steel pipe is to comply with ASTM A120 or ASTM A53, galvanized, Schedule 40, threaded, coupled, and hot-dip galvanized. Use 150 lb. rated galvanized malleable iron, banded pattern fittings. Wrap all galvanized pipe below grade with 2" wide, 10 mil. plastic wrapping tape (#50 Scotch wrap or equal).
- C. Drip tubing is to be as noted on plans. Use compression fittings.

2.2 CONTROL WIRE

- A. Use type UF direct burial wire minimum size #14, copper, U.L. approved for irrigation control use for runs of 1000 feet or less. For longer runs consult with Landscape Architect. Use 3M DBY Direct Bury Wire Splice Kits or dry splice type wire connectors at splices. No underground splices will be allowed without a splice box.

2.3 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 – EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2 EXCAVATION

- A. Trenches may be excavated either by hand or machine, but shall not be wider than is necessary to lay the pipes. Care should be taken to avoid damage to existing water lines, utility lines, and roots of plants to be saved.
- B. Minimum depth of cover for buried pipelines shall be: 1. Eighteen (18) inches for mainline pressure piping. 2. Eighteen (18) inches for 24 volt wiring from controllers to remote control valves. 3. Twelve (12) inches for lateral distribution lines. 4. Twenty-four (24) inches, minimum cover, with 6" sand bedding and 6" sand cover for any pipe or wire sleeve under A.C. paving.
- C. Under existing paving, piping may be installed by jacking, boring, or hydraulic driving except that no hydraulic driving will be permitted under asphalt concrete pavement (most pipes and sleeves under A.C. paving are to be installed prior to installation of the paving). Where cutting or breaking of existing pavement is necessary, secure permission from the Architect before cutting or breaking the pavement, and then make necessary repairs and replacements to the approval of the Architect and at no additional cost to the Owner.

3.3 INSTALLATION OF PIPE

- A. Handling and assembly of pipe, fittings, and accessories shall be by skilled tradesmen using methods and tools approved by the manufacturers of the pipe and equipment and exercising care to prevent damage to the materials or equipment.
- B. Metal pipe threads shall be sound, clean cut, and cored to full inside diameter. Threaded joints shall be made up with the best quality pure joint compound carefully and smoothly placed on the male threads only throughout the system.
- C. On plastic threaded connections use the sealer recommended by the manufacturer of the plastic valve or fitting. Do not use paste sealer products on plastic valves. Tighten plastic threaded connections with light wrench pressure only.
- D. Connections and controls shall be functionally as shown on the drawings, but physically shall be the most direct and convenient method while imposing the least hydraulic friction. Install lines in planting areas whenever possible.
- E. Thread male PVC connections into metal female connections rather than the opposite.
- F. Interior of pipe fittings, and accessories shall be kept clean at all times, and all openings in piping runs shall be closed at the end of each day's work or otherwise as necessary to prevent the entry of foreign materials. Bending of galvanized steel pipe will not be permitted. Install plastic pipe with the markings turned up to be seen from above until the pipe is buried. "Snake" the pipe in the trenches so that there will be a small amount of excess length in the line to compensate for contraction and expansion of the pipe.
- G. Place backfill in 6" layers such that there will be no settling. The top 6" of soil is to be the top soil and soil amendment mixture. All backfill shall be free of rock and debris. Test pipe for leaks prior to backfilling joints. Obtain approval of the owner's representative before backfilling joints.

3.4 INSTALLATION OF EQUIPMENT

- A. Flush lines clean prior to installation of valves, sprinkler heads, or hose bibs. Install valves, sprinkler heads, controllers, backflow preventors, hose bibs, and other equipment as per the Irrigation Plan and details.

3.5 ELECTRICAL WORK

- A. The line voltage work shall consist of connecting the controller to the nearest available 115 volt supply. The line voltage connection shall be in conduit, in accordance with local electrical code. Controllers mounted inside buildings can be plugged into outlets. The low voltage work shall include all necessary wiring from the controller to the automatic sprinkler valves, installed in accordance with the manufacturer's recommendations. A loop of extra wire, a minimum of eighteen (18) inches long shall be provided at each automatic valve. Appropriate expansion loops shall be provided throughout the system to assure that no wiring will be under stress.
- B. All splices and connections on the 24 volt system shall be made using 3M DBY Direct Bury Splice Kits, Rain Bird Pentite connector, or equal.
- C. Wiring, wherever possible, shall be placed in the same trench with, and alongside of, the irrigation main water line. Tape and bundle wire every ten feet. All wiring placed under paving shall be put in adequately sized Sch 40 PVC pipe sleeves prior to paving operations.
- D. Wire for 24 volt control lines shall be size #14 UF direct burial irrigation wire. Unless noted differently on the plan, common grounds shall be white, size #14 UF direct burial wire. For wire runs over 1000 feet consult with Landscape Architect for wire size. Under no circumstances, on multiple controller installations, will a single common ground, shared by each controller, be permitted. Each controller shall have its own separate common ground wire.

3.6 TESTING

- A. All testing shall be done in the presence of the Owner's Representative. Center-load all pipelines with clean soil approximately every four feet to resist hydraulic pressures, but leave fittings exposed for inspection. Piping under paving shall be tested before paving is in place. Install a 0 to 160 P.S.I. gauge on lines to be tested. All valves shown on Plans shall be in place and shall be in the closed position. Mains shall be tested at 100 P.S.I., and laterals at 65 P.S.I. If available static water pressure is under 100 P.S.I., provide suitable pump for tests. Fill pipelines slowly to avoid pipe damage, and bleed all air from lines as they are being filled. After closing valve at water source, mains shall hold 100 P.S.I. gauge pressure for two hours with no leaks. Laterals are expected to have minor seepage at multiple swing joint assemblies. Major leaks are not acceptable. Laterals shall be tested for one hour at 65 P.S.I. solely to reveal any piping or assembly flaws. The laterals are not expected to hold gauge pressure. For testing laterals, cap risers or turn adjusting screws on nozzles to the "off" position, as appropriate. Repair any flaws discovered in mains or laterals, then retest in same fashion as outlined in presence of the Landscape Architect until all lines have been approved. Provide required testing equipment and personnel.

3.7 SYSTEM ADJUSTMENT

- A. The entire sprinkler system shall be properly adjusted before final acceptance. Adjustments shall include but not necessarily be limited to: (1) Adjustment of arc and distance control devices on sprinklers, including changing nozzle sizes if necessary to assure proper coverage of planted areas. (2) Relocation or addition of sprinkler heads if necessary to properly cover planted areas, without causing excessive water to be thrown onto building, walks, paving, etc. (3) Throttling of automatic valves as necessary to operate sprinklers at manufacturer's recommended pressure. (4) Adjustment and testing of all automatic control devices to assure their proper function, both automatically and manually. (5) Installation of pop-up heads anywhere there is a chance of pedestrians or vehicles hitting heads even if pop-ups are not shown on the plan. (6) Installation of check valves to keep sprinkler head drainage from eroding landscape areas, wasting water, or creating soggy spots in the landscaping.

3.8 AS-BUILT DRAWINGS AND INSTRUCTION

- A. Regularly update a print of the system noting any changes which are made by dimensioning features below grade from surface features with at least two dimensions. Prior to final approval, give the Owner 2 copies of clean blueprints marked to show changes during construction. The most important features to mark on the plan are valves, pressure lines, wires, and hose bibs.
- B. After the system has been completed, inspected, and approved, instruct the Owner's maintenance personnel in the operation and maintenance of the system. Give the Owner completed warranty cards for the irrigation equipment and keys to controllers and hose bibs.

SOIL PREPARATION AND PLANTING

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The work includes, but is not necessarily limited to, the furnishing of all materials, equipment, and labor required to do the installation and complete placement of topsoil, fine grading, soil conditioning, and planting.

1.2 QUALITY ASSURANCE

- A. Plant Identification and Quality
1. Plants are to be true to name, with one of each bundle or lot tagged with the name of the plants in accordance with standards of practice of the American Association of Nurserymen. In all cases, botanical names take precedence over common names.
2. Plants shall be vigorous, of normal growth habit, free of diseases, insects, eggs, larvae, excessive abrasions, sun scalds, or other objectionable disfigurements, and shall conform to the standards as outlined by the California Association of Nurserymen. Tree trunks shall be sturdy and well "hardened off". All plants shall have normal well developed branch system, and vigorous, fibrous root systems which are not root bound. Ground cover plants (rooted cuttings) shall have well developed root systems and be kept moist prior to and during installation. Plants shall be nursery grown and of size indicated on Drawings. All plants not conforming to those requirements will be considered defective, removed from the site and replaced with acceptable new plants at the Contractor's expense.
3. Sod shall have a well developed root system. Yellowing, brown, diseased, dried, or pest infested sod shall be rejected. Sod is to be cleanly mowed within 72 hours of delivery to the site. Sod is to be delivered to the site within 24 hours after being harvested and installed immediately after being delivered. Sod shall not be stored on the site overnight. Any sod delivered to the site that cannot be installed the same day shall be removed and not used on the site.
4. Ground cover is to have well developed roots and foliage. It is to be grown in and delivered to the site in flats.

1.3 SUBMITTALS

- A. Provide the results of lab tests done on representative samples of existing soils and imported soils to be used for the top 12" or more of landscape area. Tests are to be done by a reputable soils lab (i.e., Perry Lab, Watsonville or Santa Clara Soil and Plant Lab). Samples to be tested are to be collected by lab personnel. Soil samples are to be tested for:
1. Particle size distribution (clay, silt, sand).
2. Agricultural suitability including any excess problems; i.e., salinity (calcium, magnesium), boron, sodium, pH level.
3. Fertility – amounts of available nitrogen, potassium, phosphorous, iron, magnesium, copper, zinc, and boron.
4. Chemicals and/or poisons that would hinder plant growth. The owner is to decide if tests for poisons will be done since there is a small chance that any exist and the cost of testing for them is expensive and difficult.
- An interpretation of the test results and their effect on plant performance done by the lab staff or an approved horticultural consultant should be included in the report. The Owner is responsible for the cost of initial testing and for any additional chemicals and amendments that are required that are not already included in the Specifications or Drawings. Soils tests must be done as soon as possible and prior to ordering or installing soil amendments or plant materials. Plant selections and soil amendment specifications are subject to change depending on the results of the soil tests.
5. If bidding is done prior to soil fertility tests, bid 6 cu yds. of nitralized RWD sawdust and 16 lbs. of 12-12-12 fertilizer per 1000 sq.ft. tilled or dug into the top 6" to 8" of soil in all planting areas for bidding purposes only. Revise bid when results of soil fertility tests are obtained.

REFERENCES

AREA  
DATE

1.4 GUARANTEE

- A. Trees shall be guaranteed 1 year – all other plant material 120 days following final acceptance. Any plant material needing replacement because of weakness or probability of dying will be replaced with material of similar type and size to that of the surrounding area. The replacement plants will have the same guarantee as the original plants or trees, starting the day of their replacement. The Contractor is not responsible for losses due to vandalism if he has taken reasonable measures for protection of the plants.

1.5 PRODUCT HANDLING

- A. Protect plants before and during installation, maintaining them in a healthy condition. Application(s) of anti-dessicant may be required to minimize damage. The Contractor is responsible for vandalism, theft, or damage to plant material until commencement of the maintenance period.

1.6 REVIEWS

- A. Request the following reviews by the Owner's Representative at least three (3) days in advance (in writing): (1) Rough grading (of landscape area) (2) Soil test (3) Verification of incorporation depths (4) Finish grade (5) Plant material quality approval (6) Plant material layout (7) Plant pit sizes (prior to planting plants) (8) Preliminary inspection (9) Final inspection (5 day advance notice required)

PART 2 – PRODUCTS

2.1 TOPSOIL

- A. Native topsoil or import landscape soil

2.2 NATIVE TOPSOIL

- A. Native soil on site without admixture of subsoil, free from rocks over two cubic inches, debris, and other deleterious material. Native topsoil is to be stripped, stockpiled, and reinstalled.

2.3 IMPORT LANDSCAPE SOIL

- A. Import landscape soil must be tested and meet the following specification:

1. TEXTURE: Sandy loam to loam
2. GRADING:
- | SEIVE SIZE            | PERCENT PASSING SIEVE |
|-----------------------|-----------------------|
| 25.4 mm (1")          | 95 – 100              |
| 9.51 mm (3/8")        | 85 – 100              |
| 53 Micron (2/70 mesh) | 10 – 30               |
3. CHEMISTRY – SUITABILITY CONSIDERATIONS:
- a. Salinity: Saturation Extract Conductivity (ECe x 103 @ 25 degree C.) Less than 4.0
- b. Sodium: Sodium Adsorption Ration (SAR) Less than 9.0
- c. Boron: Saturation Extract Concentration Less than 1.0 PPM
- d. Reaction: pH of Saturated Paste: 5.5 – 7.5
- e. Lime: less than 3% by weight

4. PESTS:

- a. The population of any single species of plant pathogenic nematode: fewer than 500 per pint of soil.

5. ORGANIC MATTER

- a. Soil is to have 5% to 10% organic matter at below 18 inches in depth. Soil is to have less than 30% organic matter at 0 to 18 inches in depth
- Organic matter to be less than 1" dia. Do not use mushroom compost. No noxious weeds are allowed.

6. FERTILITY CONSIDERATIONS:

- a. Soil is to contain sufficient quantities of available nitrogen, phosphorous, potassium, sodium, and magnesium to support normal plant growth. In the event of nutrient inadequacies, provisions shall be made to add required materials to overcome inadequacies prior to planting.

7. COMPACTION

- a. Compact the soil enough so it doesn't settle more when walked on and not significantly over time where the flow of drainage will be affected or soil needs to be added. Don't over compact or work soil when it has too much moisture. Dig bottom layer of import soil into existing soil. Compact in 6 inch lifts.

2.4 ORGANIC SOIL AMENDMENT

- A. Redwood sawdust, 0–1/4" in diameter, that is nitrogen stabilized by the supplier, and contains a wetting agent. Also see note on planting plan

2.5 ORGANIC MULCH

- A. See Planting Plan

2.6 PLANTER SOIL MIX

- A. See Planting Plan and Details.

2.7 BACKFILL FOR PLANT PITS

- A. For native soils with 50% or more clay content – 75% topsoil and 25% organic amendment thoroughly mixed and incorporated together with no topsoil clods larger than 1/2" diameter. In heavy clay soils or other soils with large clods this will require mixing the backfill in a stockpile at the site or at the supplier. For soils with less clay content amend only the top 8" of the plant pit backfill as per the soils lab recommendations.

2.8 FERTILIZER

- A. Fertilizer needs and amounts will be based on the results of the soil test

- B. Sod lawn areas (there is no lawn on the plan)

2.9 PLANT MATERIAL SUBSTITUTES

- A. Substitutes will not be permitted except when proof is submitted that plants specified are not available and then only upon approval of the Landscape Architect and Owner.

2.10 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Landscape Architect.

PART 3 – EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- B. Weed and Debris Removal – All ground areas to be planted shall be cleaned of all weeds and debris prior to any soil preparation or grading work. Weeds and debris shall be disposed of off the site.

- C. Contaminated Soil – Do not perform any soil preparation work in areas where soil is contaminated with cement, plaster, paint or other construction debris. Bring such areas to the attention of the Owner's Representative and do not proceed until the contaminated soil is removed and replaced.
- D. Moisture Content – Soil shall not be worked when moisture content is so great that excessive compaction will occur, nor when it is so dry that dust will form in the air or that clods will not break readily. Water shall be applied, if necessary, to bring soil to an optimum moisture content for tilling and planting.

3.2 ROUGH GRADING AND TOPSOIL PLACEMENT

- A. Request a review by the Owner's Representative to verify specified limits and grades of work completed to date before starting soil preparation work. Place topsoil as required to obtain an 12" minimum depth of topsoil or as noted otherwise on the Plans. (Topsoil may already exist in the planting areas). Integrate topsoil layer into subsoil or existing compacted topsoil layer by ripping. Complete rough grading as necessary to round top and toe of all slopes, providing naturalized contouring to integrate newly graded area with the existing topography. Verify that rough grading is completed in accordance with civil engineering drawings and/or any landscape grading drawings. Break through any compacted layers of subgrade material (sometimes left from building or paving pad compaction) that will not allow water in planting areas to percolate through, causing a boggy, over saturated soil condition. You may have to use a backhoe or rotatohammers to break up and turn soil to a minimum depth of 12". If proposed planters are in areas of existing paving or base rock, remove at least 12" of material and bring in top soil up to grade required by grading plan. Rough grading in planting areas is to be such that when amendment is incorporated and the mulch is installed, the grade will be +– 1" to finish grade.
- B. Soil Preparation: (1) Distribute soil (organic) amendment and fertilizer in the amounts recommended by the soils lab over all planting areas unless noted otherwise on the Plans. (2) Rip and/or till the amendment and fertilizer into the top 6" to 8" of soil until they are thoroughly mixed in. Hand work areas inaccessible to mechanical equipment. (3) Moisten to uniform depth for settlement and regrade to establish elevations and slopes indicated on Drawings.

3.3 FINISH GRADING

- A. The Contractor shall make himself familiar with the site and grading plans and do finished grading in conformance with said Plans and as herein specified.
- B. Grades not otherwise indicated shall be uniform levels or slopes between points where elevations are given or between points established by walks, paving, curbs, or catch basins. Finish grades shall be smooth, even, and on a uniform plane with no abrupt changes of surface. Minor adjustments of finish grades shall be made at the direction of the Landscape Architect, if required.
- C. All grades shall provide for natural runoff of water without low spots or pockets. Flowline grades shall be accurately set and shall be not less than 2% gradient wherever possible. Grades shall slope away from building foundations unless otherwise noted on Plans. All finish grades (top of mulch) are 1" below finish grade of walks, pavements, curbs, and valve boxes unless otherwise noted.

3.5 MULCHING

- A. Recultivate soils compacted by planting or other operations and smooth the soil areas prior to applying mulch. Mulch all planting areas to a depth as noted on plans. This depth should be as per the plans even after being settled and stepped on 30 days after installation. Water lightly to settle mulch. Do not bury ground cover with mulch. Place and settle mulch in such a way that it does not get washed onto paving or block drain swales or inlets.

3.6 WEED CONTROL

- A. The Contractor is responsible for pre-emergent weed control. Follow the manufacturer's directions. The Contractor is responsible for the replacement of any plants (other than weeds) that are hurt or killed due to the misuse of weed control products or use of the wrong product. Clay soils can increase the affect of certain pre-emergents. Adjust the application rate accordingly. Some owners may prefer hand weeding to chemical weed control although it is usually more expensive.

3.7 MAINTENANCE

- A. Maintenance shall begin immediately after each plant is installed.
- B. Maintenance will include:
1. Continuous operations of watering, weeding, cultivating, fertilizing, spraying, insect, pest, fungus, and rodent control, and any other operations to assure good normal growth.
2. Fertilizing: In addition to fertilizing of trees, shrubs and ground covers, herein specified, furnish and apply any additional fertilizers necessary to maintain plantings in a healthy, green vigorous growing condition during the maintenance period.
3. Weeding, Cultivating and Clean Up: Planting areas shall be kept neat and free from debris at all times and shall be cultivated and weeded at no more than 10-day intervals.
4. Insect, Pest and Disease Control: Insects and diseases shall be controlled by the use of approved insecticides and fungicides. Moles, gophers, and other rodents shall be controlled by traps, approved pellets inserted by probe gun, or other approved means.
5. Protection: Work under this Section shall include complete responsibility for maintaining adequate protection for all areas. Any damaged areas shall be repaired at no additional expense to the Owner.
6. Replacements: Immediately replace any plant materials that die or are damaged. Replacements shall be made to the Specifications as required for original plantings.
7. Hand Watering: Even when planting areas are watered with automatic irrigation, the soil surrounding the plant pits can be moist while the sawdust/sand root ball is dry. This can cause the plants to deteriorate or not grow (even during the winter). The plants will do best (especially during the hot season) if they are hand watered deeply until their roots grow out into the surrounding soil.
- 3.8 PRELIMINARY INSPECTION
- A. As soon as all the planting is installed, the Contractor will request the Owner's Representative (in writing) to make a preliminary inspection. The 30 calendar day maintenance period will start when the work is approved. Replacement and/or repairs may be required for approval. The Contractor is to notify the Owner and the Owner's Representative in writing when the 30 day maintenance period begins.

3.9 FINAL INSPECTION

- A. At least 5 days prior to the anticipated end of the maintenance period, the Contractor shall submit a written request for final inspection. The planting areas shall be weeded, neat and clean. The work shall be accepted by the Owner exclusive of the plant materials upon written approval of the work by the Owner's Representative.

SHEET

L8

OF SHEETS

COUNTY  
STATE

JOB#

JOB NO. 19071

GREGORY LEWIS  
LANDSCAPE ARCHITECT  
LIC. # 2176  
736 PARK WAY, SANTA CRUZ, CA  
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APPLICANT: MENEKSHE

ROAD: 3085 PASEO VISTA AVENUE

COUNTY FILE NO.: PLN20-0105

LANDS\_OF\_MENEKSHE-3085\_PASEO\_VISTA\_AVENUE\_APN\_825-29-039

DATE: 4/6/21

HORIZ. SCALE: NA

VERT. SCALE: NA

DESIGNED BY: GREG

CHECKED BY: GREG

DRAWN BY: GREG



REFERENCES

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