

# Neighborhood 'C' - Hansen (Theme : Farm House)

## In-Tract Landscape Guidelines

# Mountain House

## San Joaquin County, California

### CONSULTANT TEAM:

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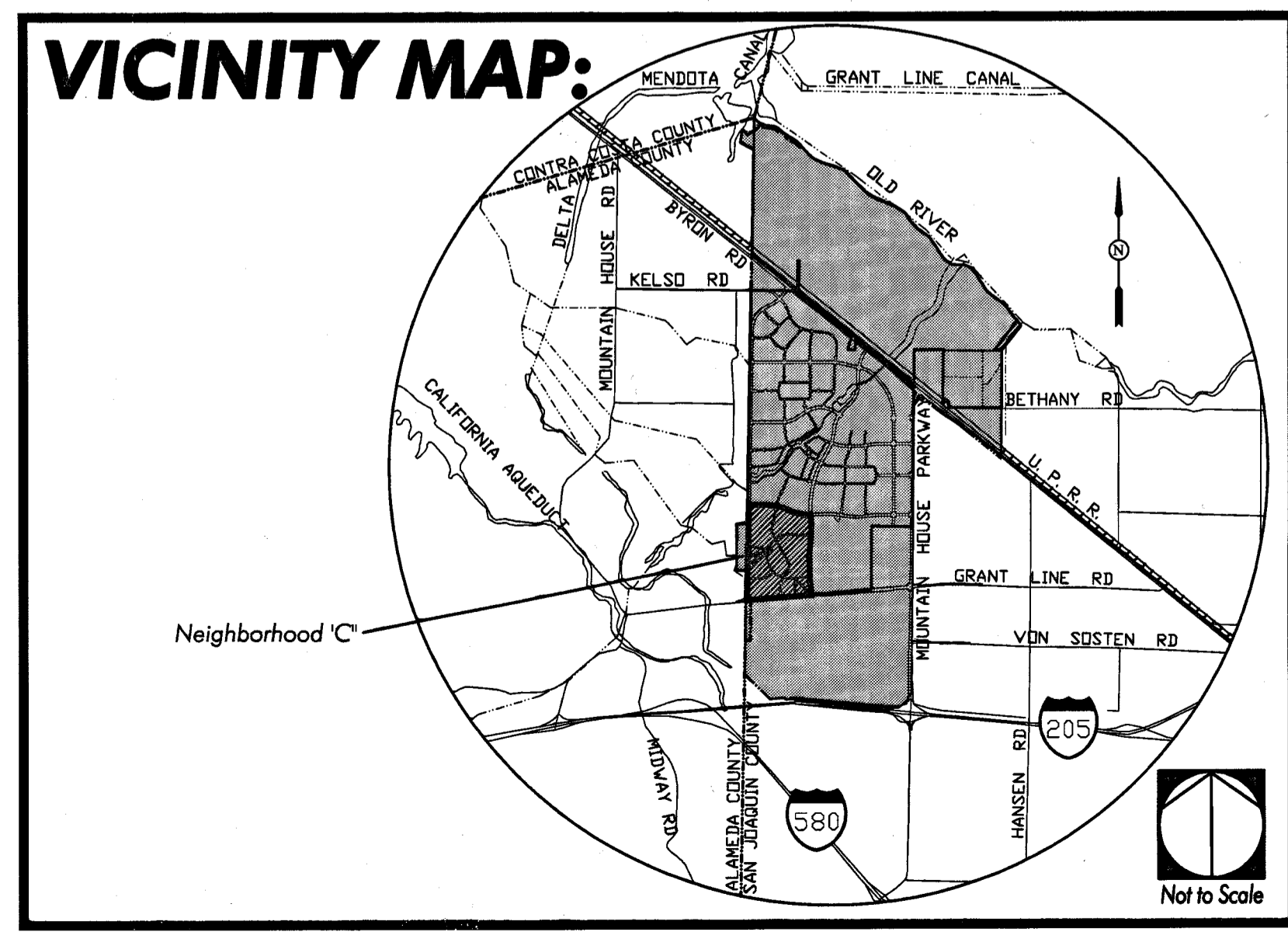
#### IRRIGATION CONSULTANT:

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Contact: Scott Lindner  
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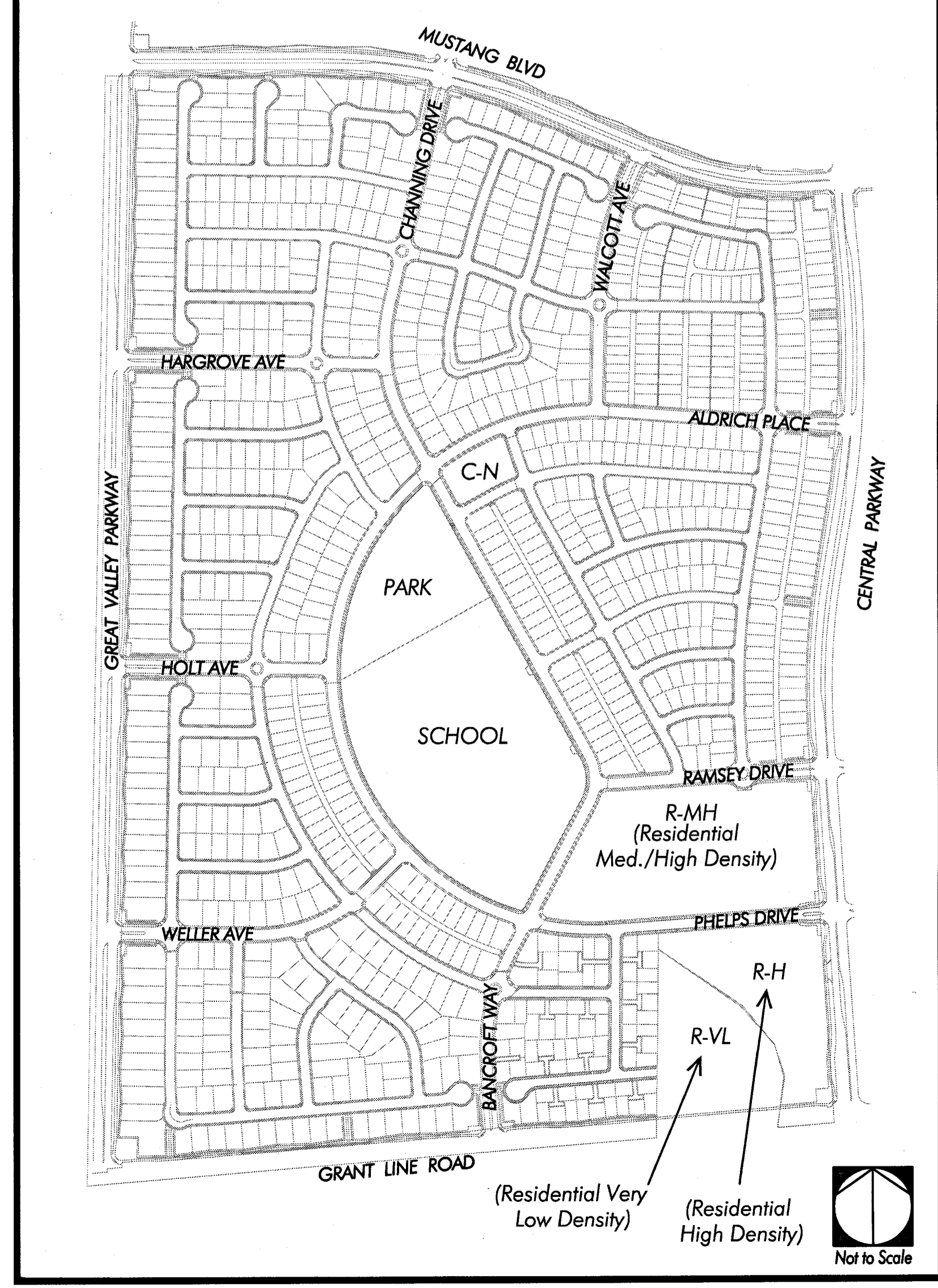
### SHEET INDEX:

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| 2   | LP-0.01       | Planting Schedule and Notes        |
| 3   | LP-1.01       | Tree Location Index Map            |
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**UNDERGROUND UTILITY SERVICE ALERT OF NORTHERN CALIFORNIA!**  
Call: 1(800)-227-2600  
"CALL A MINIMUM OF TWO WORKING DAYS BEFORE YOU DIG"



### LOCATION MAP:



REVISIONS

| No. | Descriptions | Date | App. |
|-----|--------------|------|------|
|     |              |      |      |

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

Approved By: *Nancy Glarecki*  
NANCY GLARECKI  
RCE #181 EIP 12-11-16  
PUBLIC WORKS DIRECTOR

Title: \_\_\_\_\_ Date: 7-30-14

DATE: 07/16/2014  
DRAWN BY: RH  
PROJ. ENGR.  
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JOB: SHN-03-14FM DG

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT  
NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES  
COVER SHEET

Comp. File No.  
Plan File No. 0418  
SHEET: 1 OF: 11  
CS-0.01

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**TREE ROOT BARRIER SCHEDULE:**

- Provide root control barriers per Detail LC-12 & LC-13 in MHCS Standard Details (Root Barrier Requirements For Selected Trees. See below for abbreviated list relative to this project.
- Type: UB24-2.
- Mfg: Deep Root (800) 458-7668
- Length: 10' long.
- Comments:
  - A. Set top of barrier flush to grade and adjacent to curb, sidewalk, wall, etc. in accordance to MHCS Root Barrier Requirements for selected trees. See Detail LC-12.

**PARKWAY TURF AMENDMENT:**

SOIL AMENDMENT REQUIREMENTS FOR PARKWAYS RECEIVING ECO-MAT DRIP MATTING:

- ALL SOIL WITHIN PARKWAY SHALL BE REMOVED TO THE DEPTH OF THE ECO-MAT (5'-6").
- REMOVED SOIL SHALL BE THOROUGHLY MIXED WITH THE AMENDMENTS DESCRIBED IN THE LANDSCAPE ARCHITECT'S SPECIFICATIONS. INSURE ANY ROCKS OR DEBRIS LARGER THAN 2", AND ANY SHARP EDGED ROCKS OR DEBRIS ARE REMOVED.
- BEFORE INSTALLING ECO-MAT, RAKE IN TO THE SUB-SOIL, TO A DEPTH OF 1", THE AMENDMENTS DESCRIBED IN THE LANDSCAPE ARCHITECT'S SPECIFICATIONS.
- INSTALL ECO-MAT ON SUBSOIL AS DETAILED.
- INSTALL AMENDED, (PREVIOUSLY REMOVED), SOIL OVER ECO-MAT TO REQUIRED GRADE LEVEL, COMPACTING TO 80-85% IN 3" LIFTS. MEET REQUIRED SLOPE GRADES TO DRAIN. DO NOT OPERATE COMPACTION MACHINERY DIRECTLY ON ECO-MAT.
- REVIEW AND FOLLOW MANUFACTURERS INSTALLATIONS SPECIFICATIONS.
- SOIL AMENDMENT REQUIREMENTS FOR PARKWAYS RECEIVING ECO-MAT DRIP MATTING:
  - A. ALL SOIL WITHIN PARKWAY SHALL BE REMOVED TO THE DEPTH OF THE ECO-MAT (5'-6").
  - B. REMOVED SOIL SHALL BE THOROUGHLY MIXED WITH THE AMENDMENTS DESCRIBED IN THE LANDSCAPE ARCHITECT'S SPECIFICATIONS. INSURE ANY ROCKS OR DEBRIS LARGER THAN 2", AND ANY SHARP EDGED ROCKS OR DEBRIS ARE REMOVED.
  - C. BEFORE INSTALLING ECO-MAT, RAKE IN TO THE SUB-SOIL, TO A DEPTH OF 1", THE AMENDMENTS DESCRIBED IN THE LANDSCAPE ARCHITECT'S SPECIFICATIONS. INSTALL ECO-MAT ON SUBSOIL AS DETAILED.
  - D. INSTALL AMENDED, (PREVIOUSLY REMOVED), SOIL OVER ECO-MAT TO REQUIRED GRADE LEVEL, COMPACTING TO 80-85% IN 3" LIFTS. MEET REQUIRED SLOPE GRADES TO DRAIN. DO NOT OPERATE COMPACTION MACHINERY DIRECTLY ON ECO-MAT.
  - E. LEVEL, COMPACTING TO 80-85% IN 3" LIFTS. MEET REQUIRED SLOPE GRADES TO DRAIN. DO NOT OPERATE COMPACTION MACHINERY DIRECTLY ON ECO-MAT.
  - F. REVIEW AND FOLLOW MANUFACTURERS INSTALLATIONS SPECIFICATIONS.

**GENERAL PLANTING NOTES:**

- Refer to planting details and specifications within these guidelines and applicable MHCS details and specs for additional planting information.
- Consult with site superintendent, appropriate agencies, and Drawings to verify existing locations of underground utilities, pipes and structures. Take sole responsibility for costs incurred due to damage of these utilities, pipes, or structures if proper verification by Contractor was not performed.
- Do not willfully proceed with planting operations when it is obvious that unknown obstructions and grade differences exist that may not have been known during design process. Bring such conditions immediately to attention of Owner's Authorized Representative for resolution. Assume full responsibility for costs incurred and required modifications due to lack of providing such notification.
- Coordinate other contractor's work related to proper execution of Contractor's work.
- Obtain approval of final grade certification from Owner prior to beginning planting operations that certifies that rough grades are within 1/10th of an inch from specified grades. Ensure that finish grade elevations of planting areas are set to the proper elevations relative to the finish surfaces of paving, utility covers, and curbs.
- Existing site soil may be used in planting areas, however, it shall be amended as indicated in the horticultural soils report (see note 12 below). Should import soil be necessary to bring site to specified finish grades, indicate source location. Ensure that import soil is of a sandy loam nature, containing no toxic chemicals or elements that might inhibit or retard normal plant growth. Submit soil test results of import soil to Owner's Authorized Representative for approval prior to delivering soil to site.
- Submit photos of each tree species to Owner's Authorized Representative for approval. Trees may, however, be hand-tagged by the Owner's Authorized Representative at a nursery selected by Owner's Authorized Representative, or if deemed acceptable, by the Contractor. In any case, trees of a similar species and variety are to have matching form.
- Plant material must be approved by Owner's Authorized Representative prior to installation. Plant material installed without Owner's Authorized Representative's approval may be subject to removal and replacement with related costs borne by Contractor.
- Final locations of plant materials are subject to approval of the Owner's Authorized Representative prior to installation. Perform the following before beginning planting pit excavation:
  - a. Shrubs - place in containers on-site in "final" locations.
  - b. Trees - stake or flag centerpoint of tree.
- Notify Owner's Authorized Representative in sufficient time to perform a required site observation visit. Refer to specifications for specific site visit notification tasks and times. Insufficient notification time given Owner's Authorized Representative may require the site visit to be canceled, or possibly, make Contractor responsible to compensate Owner's Authorized Representative for overtime.
- Be responsible to furnish plant material free of pests, poor condition, or disease, including pre-selected or "tagged" plant material provided by Owner's Authorized Representative.
- After fine grading operations have been completed and prior to beginning soil preparation, take a minimum of (3) horticultural soil samples where soil conditions or plant types vary, i.e. turf, shrub, slopes, etc. at the midpoint of each Collector Street. Soil samples are to be collected and tested by a qualified soil testing laboratory (current member of the California Association of Agricultural Labs) and a written report prepared which includes recommendations for soil amendments, fertilization, planting backfill mixes and maintenance. Submit a copy of the report to the Owner's Authorized Representative.
- If conflicts arise between actual size of planting areas on-site and those areas indicated on Drawings, contact Owner's Authorized Representative for resolution. Failure to make such conflicts known to Owner's Authorized Representative in a timely fashion may result in Contractor's own liability to relocate plant materials.
- Ensure that turf areas are separated from groundcovers and shrub areas with metal header edging - see Sheet LP-1.02 and MHCS Detail LC-01.
- Triangular space groundcovers and shrubs, unless indicated otherwise on Drawings - refer to planting details.
- Provide a representative example of a typical tree staking and guying (if any) installation for Owner's Authorized Representative review before performing tree staking and guying (if any) operations - refer to planting details.
- Excavate plant pits to specified dimensions per planting details.
- Mulch shrub and groundcover areas (excluding turf) with a 2-inch deep layer of wood mulch. See Specifications for requirements. Submit sample for approval prior to placement.
- Do not plant trees closer than 4-feet to fixed edge such as sidewalks and walls, unless indicated otherwise on Drawings.
- Provide root control barriers for trees per MHCS Standard Details LC-12 and LC-13.
- Ensure that top of tree rootballs are set 2" above finish grade and shrub rootballs are set 1" above finish grade.
- Install plant material with its best side facing predominate view of public.
- Provide the required setbacks between trees and elements such as utilities, i.e. gas, electric, sewer, water and related vaults, streetlights, fire hydrants, and signage.
- Replace or repair existing materials that are damaged by Contractor during planting operations.
- Verify property lines prior to commencing planting operations.
- N/A.
- Keep turf two feet clear of tree trunks.
- Provide matching sizes and forms for each species of tree species of tree installed on grid or spaced equally in rows as shown on drawings. Align trees across walks and roadways. Adjust spacing as necessary, subject to review by the Landscape Architect.
- Provide matching sizes and forms for all hedge plantings. Space equally.
- Refer to MHCS Standards for tree planting distance from street lights, regulatory signage, and corner sight distance at intersections and driveways. Contractor to verify tree planting and locations adhere to the MHCS standards. Report any discrepancies to Owner and Landscape Architect.
- All tree and shrub plantings shall adhere to spacing requirements as shown in MHCS Details LD-01 through LD-04. This may require adjustments in the field with the approval of the MHCS Inspector, e.g.: landscaping may need to be adjusted to avoid existing traffic signs and for clearance issues.
- All street trees shall be installed / planted per MHCS details and specifications.
- All plantings are prohibited from being placed within 5-ft. of fire hydrants, mailboxes and other stationary street appurtenances unless approved otherwise by the Public Works manager. Trees shall not be planted closer than 8-ft. from a stop sign. Trees shall not be planted less than 10-ft. from Type B light poles nor less than 20-ft. from Type A light poles in medians. No Tree shall be planted within 10-ft. of a curb return or as controlled by sight distance.
- All irrigation lines shall be restrained adhering to MHCS Standards for water lines. Please refer to MHCS Detail WS-17 for thrust blocks on standard sized lines.
- See MHCS Standard Details LI-16, LI-17 & LI-18 for MHCS Irrigation Standards.
- Landscaping must conform with MHCS intersection visibility guidelines details LD-01, LD-02, LD-03, and LD-04.
- All trees shall be installed within a lot. Trees may not straddle a lot line.

**SYMBOLS LEGEND:**

- Center Line
- Property Line
- Align
- Limit of Work Line
- Plant quantities shown on plans are for contractors convenience and reference only. Contractor is responsible to provide all plant material required to conform to specified plant spacing.

**TREE SCHEDULE:**

| KEY | BOTANICAL NAME  | COMMON NAME  | SIZE    | STAKE/MHCS   | CALIPER/CANOPY/HT. SIZE                             | COMMENTS  |
|-----|---|--|---------|--------------|---|---|
|     | <i>Platanus acerfolia</i> 'Bloodgood'   | London Plane Tree                                    | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 4'-5"<br>Ht.: 10'-12" | Collector Street Tree<br>*Walcott Ave shall be Columbia variety |
|     | <i>Cercis canadensis</i>  | Eastern Redbud                                       | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 9'-10"  | Pedestrian Connection<br>Local to Connector                     |
|     | <i>Quercus lobata</i>   | Valley Oak   | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 8'-10"  | Round-A-Bout Tree   |
|     | <i>Lagerstroemia h.</i> 'Muskogee'  | Crape Myrtle   | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 7'-8"   | Neighborhood Accent Tree  |
|     | <i>Fraxanus oxycarpa</i> 'Raywood'  | Raywood Ash  | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 4'-5"<br>Ht.: 9'-11"  | Cul De Sac and Knuckle  |
|     | <i>Pistacia chinensis</i> 'Keith Dovey'   | Chinese Pistache                                     | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 9'-10"  | Local Street Tree - North/South                                 |
|     | <i>Acer rubrum</i> 'Redpointe'  | Redpointe Maple                                      | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 9'-11"  | Local Street Tree - East/West                                   |
|     | <i>Lagerstroemia hybrid</i> 'Tuscarora'   | Crape Myrtle   | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 9'-11"  | Alley Tree  |
|     | <i>Ginkgo biloba</i> 'Fairmount'  | Maidenhair Tree                                      | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 9'-10"  | Paseo Tree  |
|     | <i>Quercus robur</i> 'Fastigiata'   | English Oak  | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 3'-4"<br>Ht.: 8'-10"  | Pedestrian Connection Tree                                      |
|     | Back Yard Tree<br><i>Celtis australis</i><br>Mustang Boulevard: <i>Quercus illex</i><br>Grant Line Road: <i>Celtis sinensis</i> | European Hackberry<br>Holly Oak<br>Chinese Hackberry | 24" Box | Double stake | Caliper: 1.5"-2.5"<br>Canopy: 4'-5"<br>Ht.: 10'-12" | Backyard Trees  |

**GROUNDCOVER SCHEDULE:**

| SYMBOL | BOTANICAL NAME              | COMMON NAME        | SIZE   | SPACING           | DETAIL NO. | COMMENTS   |
|--------|-----------------------------|--------------------|--------|-------------------|------------|--|
|        | Bolero Plus                 | Turf               | Sodded | -                 | -          | Delta Bluegrass Company (888) 818-8873   |
|        | <i>Myoporum parvifolium</i> | Myoporum           | 1 gal. | See sheet LP-1.02 | -          | - Two per planter  |
|        | Shrubs - Separate Submittal | -                  | -      | -                 | -          | Separate submittal sets.<br>Shrubs to be selected from MHCS Single Family Resident Design Manual.  |
|        | Decomposed granite          | Decomposed granite | -      | -                 | -          | The use of decomposed granite is subject to review and approval by the MHCS during the in-tract landscape improvement plan process. An alternate material may be selected by the MHCS in-lieu of decomposed granite. |

REVISIONS

| No. | Date | App. | Description |
|-----|------|------|-------------|
|     |      |      |             |

DATE: 07/16/2014  
DRAWN BY: RH  
PROJ. ENGR: NADER B. SHARIFI  
PROJ. MGR: TSR

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

Approved By: *Nader Sharifi*  
NADER B. SHARIFI  
P.E. 47837 EXP. 12-31-16  
PUBLIC WORKS DIRECTOR

Title: \_\_\_\_\_ Date: 7-20-14

REG. LANDSCAPE ARCHITECT  
STATE OF CALIFORNIA  
Signature: \_\_\_\_\_  
Exp. 07/29/16

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Habitat Restoration

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JOB: SHN-03-1FM DG

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES

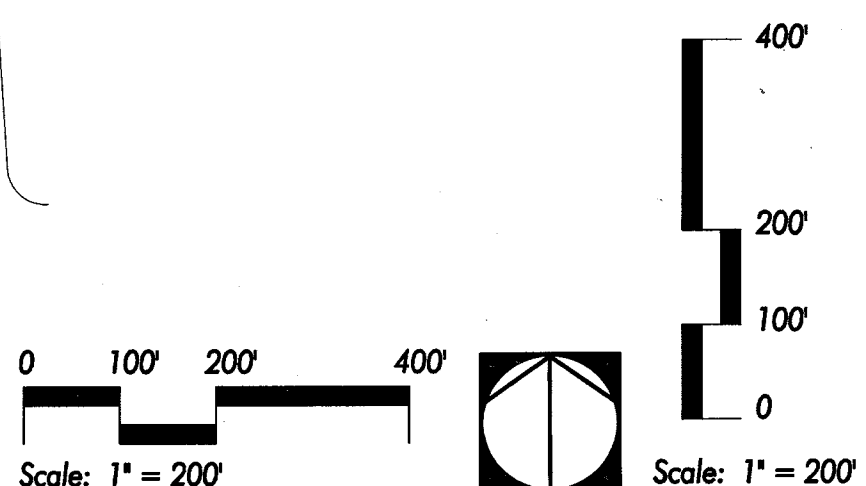
PLANTING SCHEDULES AND NOTES

Comp. File No.  
Plan File No. 0418  
SHEET: 2 OF: 11  
LP-0.01

**TREE LOCATION LEGEND**

- Symbol Location / Botanical Name (Common Name)
- Collector Street Trees (5' PKWY PLTR.)**
- Collector Street Trees\*:  
Platanus acerfolia 'Bloodgood' (London Plane Tree)  
\*Wakcott Ave. shall be planted with 'Columbia' variety.
  - Round-A-Bout Tree:  
Quercus lobata (Valley Oak)
- Neighborhood Accent Tree**
- Accent Tree:  
Lagerstroemia h. 'Muskogee' (Crape Myrtle)
- Cul De Sac and Knuckle**
- Cul de sac and Knuckle Tree:  
Fraxinus oxycarpa 'Raywood' (Raywood Ash)
- Local Street Trees (4' PKWY PLTR.)**
- Local Street Trees North/South:  
Pistachia Chinensis 'Keith Davey' (Chinese Pistache)
  - Local Street Trees East/West:  
Acer rubrum 'Redpointe' (Redpointe Maple)
- Alley (3' PKWY PLTR.) & Paseo Trees**
- Alley Trees:  
Lagerstroemia hybrid 'Tuscarora' (Crape Myrtle)
  - Paseo Trees:  
Ginkgo biloba 'Fairmount' (Maidenhair Tree)
  - Ped. Connection Tree to Collector and Arterial:  
Quercus robur 'Fastigiata' (English Oak)

Note: Landscaping must conform with MHCSD intersection visibility guidelines details LD-01, LD-02, LD-03, and LD-04. For Neighborhood Entries and Pedestrian Connections, See in Tract Landscape Plans.



REVISIONS 7.25/14

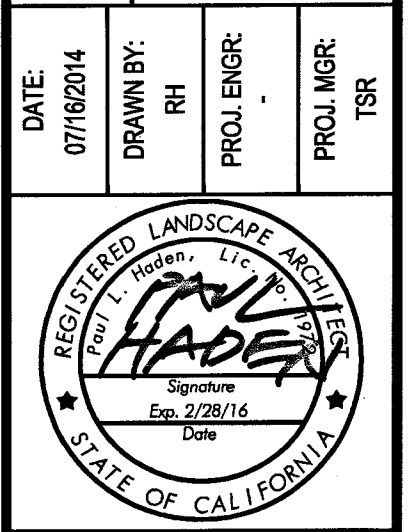
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DATE: 07/16/2014  
 DRAWN BY: RH  
 PROJ. ENGR:  
 PROJ. MGR.:  
 TSR:

MOUNTAIN HOUSE  
 COMMUNITY SERVICES DISTRICT

Approved By: *Nancy Shores*  
 NANCY B. SHORES  
 P.C.E. #1687 EXP. 12/31/15  
 PUBLIC WORKS DIRECTOR

Title: \_\_\_\_\_ Date: 7-30-14



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JOB: SHN-03-1FM DG'

MOUNTAIN HOUSE  
 COMMUNITY SERVICES DISTRICT

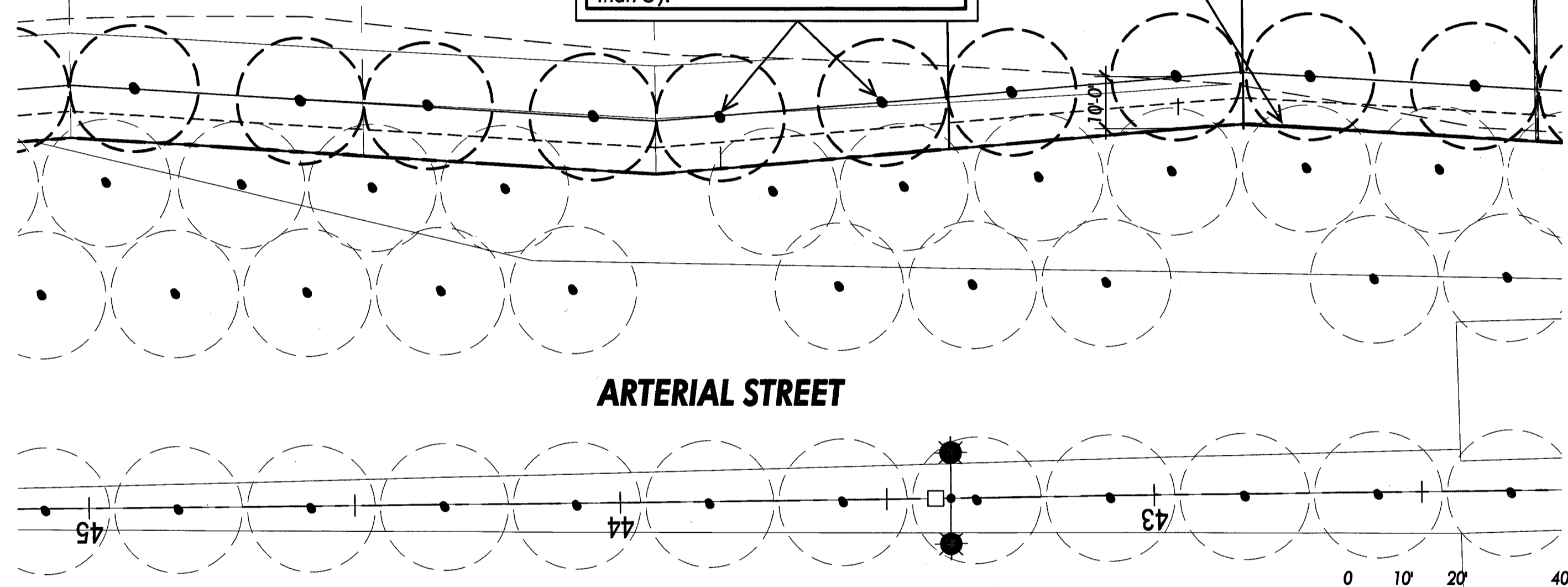
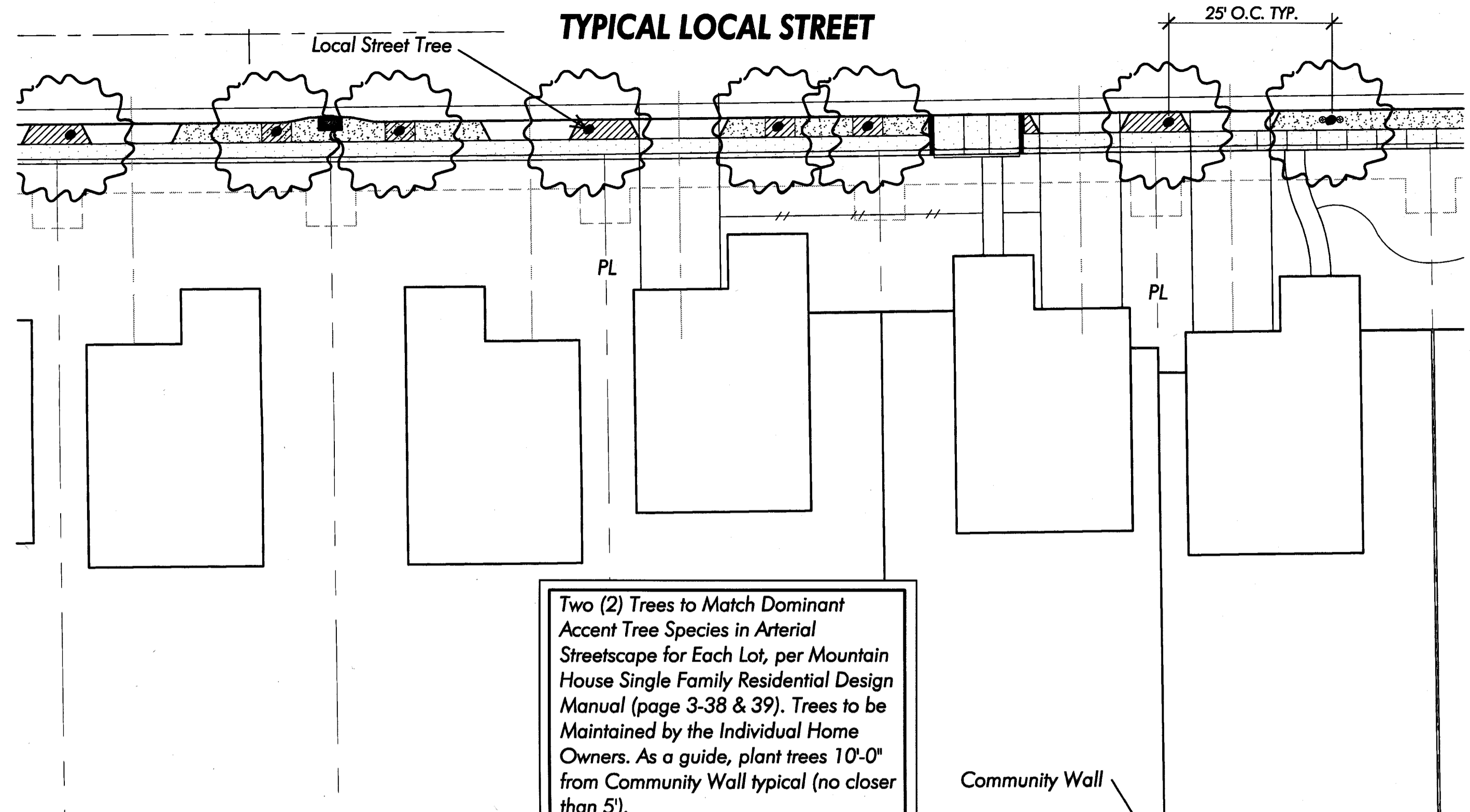
NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES

TREE LOCATION  
 INDEX MAP

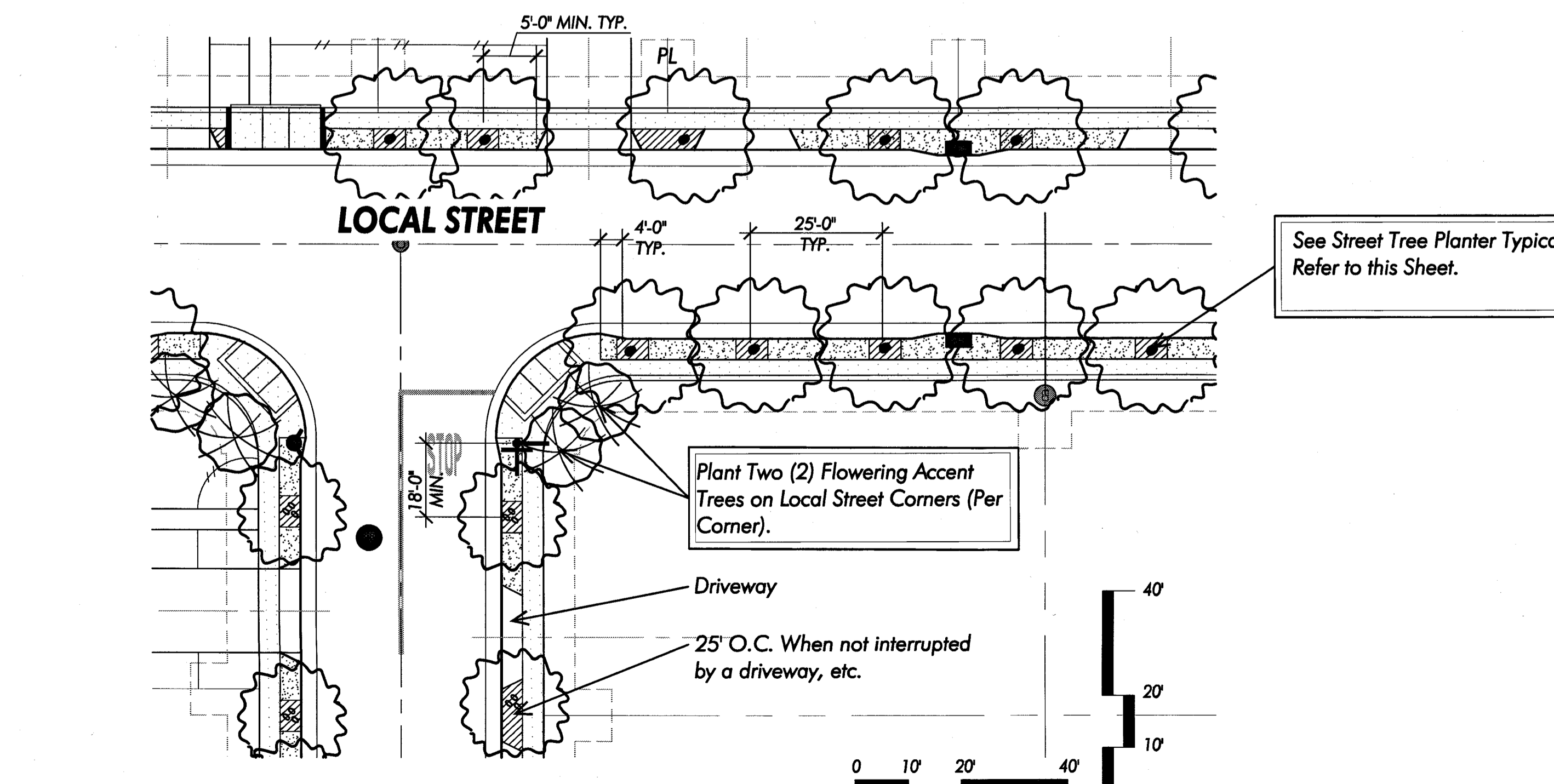
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 Plan File No. 0418

SHEET: 3 OF: 11  
 LP-1.01

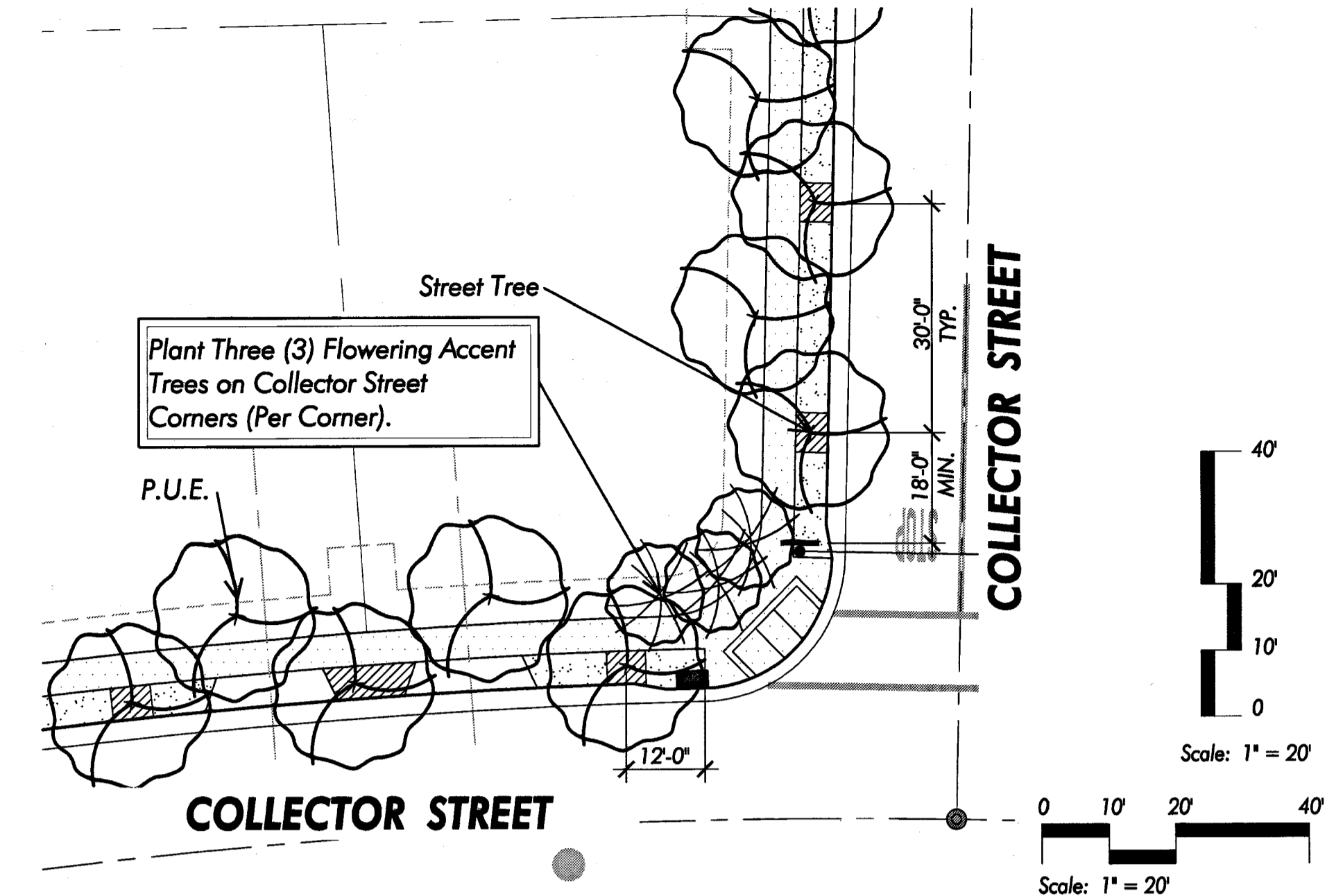
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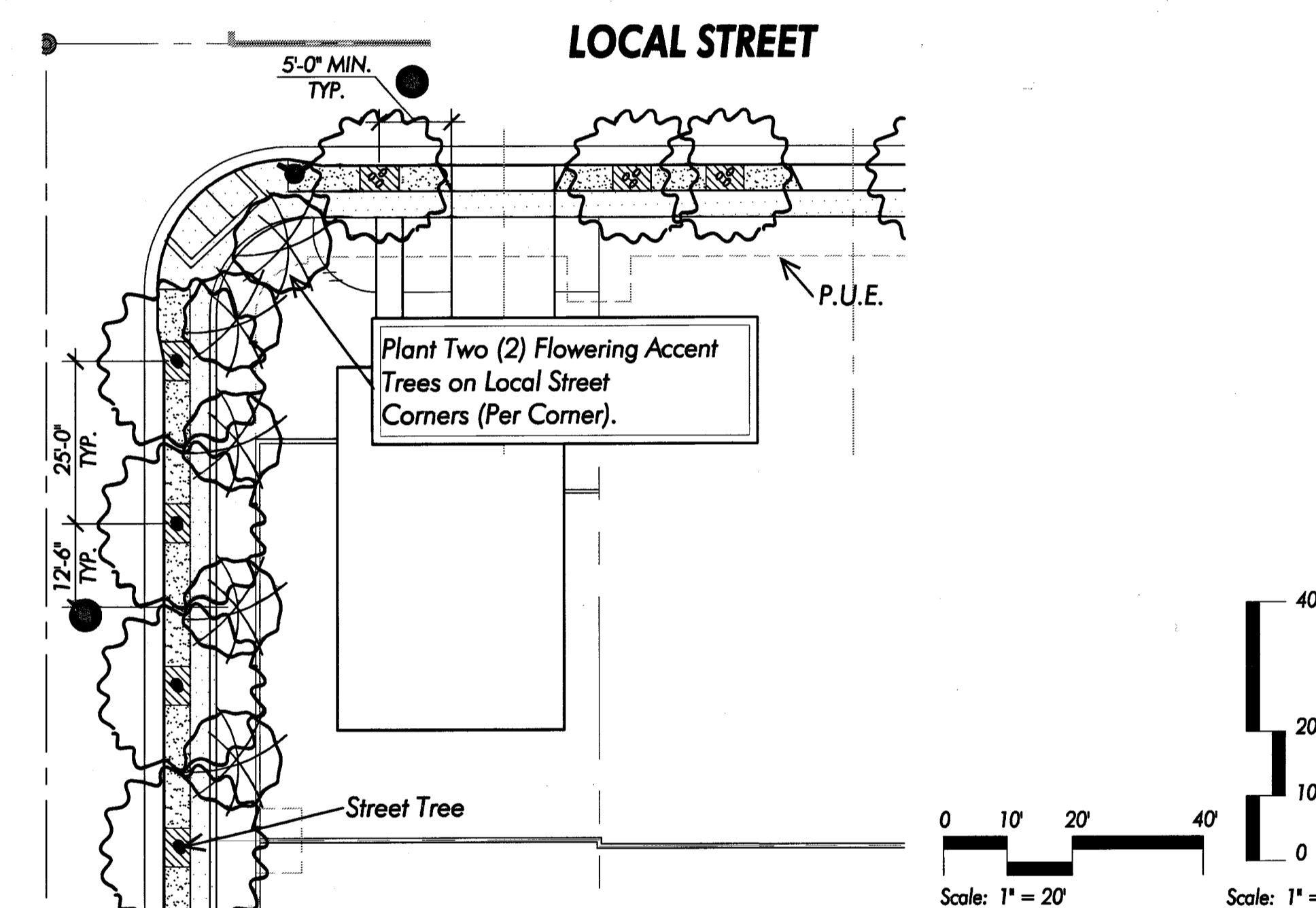
BACK YARD TREE SPACING FOR LOTS ADJACENT TO ARTERIALS, TYP.



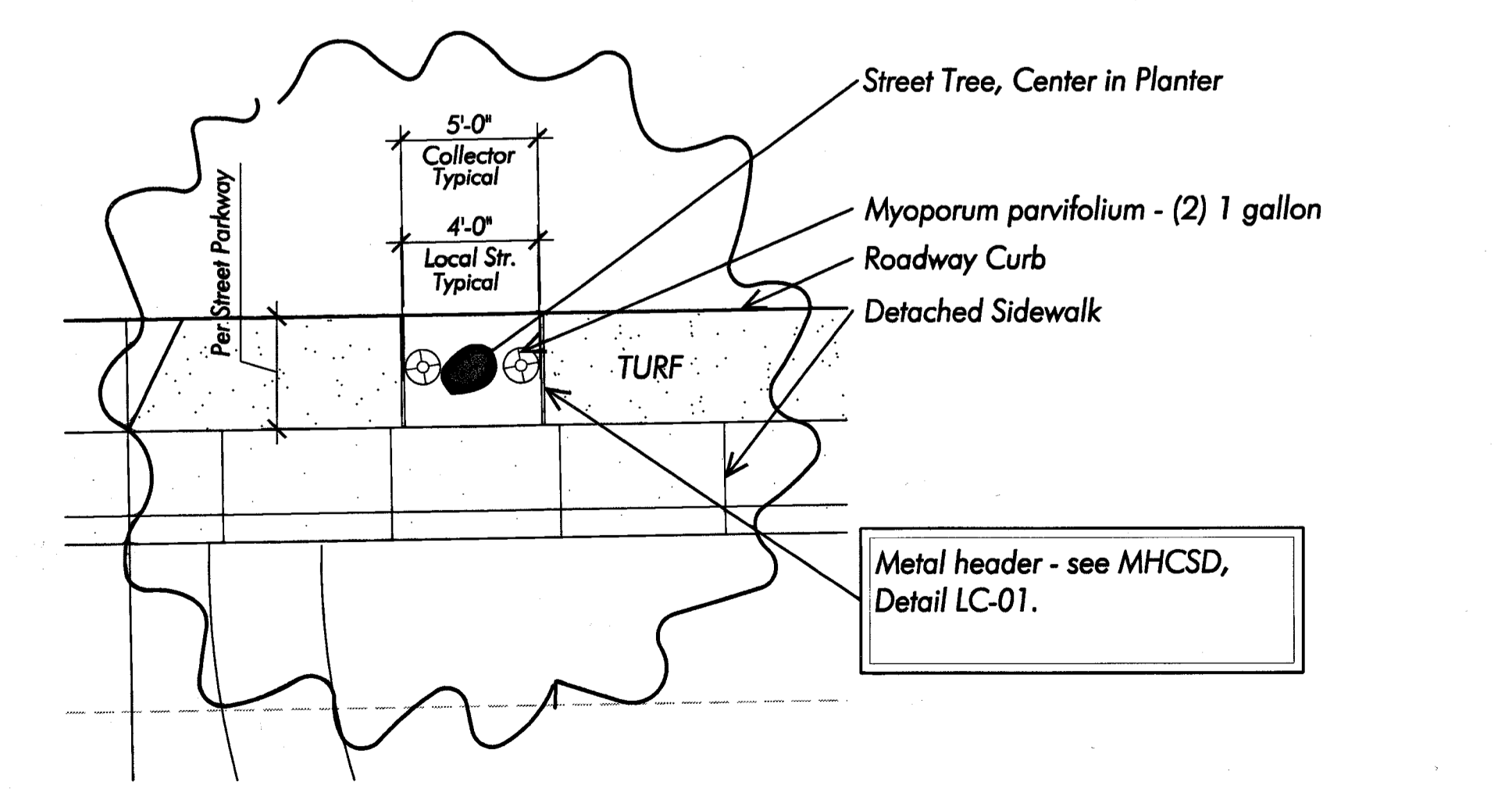
IN-TRACT CORNER LOT SPACING, TYP.



COLLECTOR STREET AT SIDE YARD TREE SPACING, TYP.



LOCAL STREET AT SIDE YARD TREE SPACING, TYP.



STREET TREE PLANTER, TYP.

PLANTING SCHEDULE:

| KEY | BOTANICAL NAME   |
|-----|--|
|     | Collector Street Tree<br><i>Platanus acerfolia</i> 'Bloodgood'   |
|     | Local to Connector Tree<br><i>Cercis canadensis</i>  |
|     | Round-A-Bout Tree<br><i>Quercus lobata</i>   |
|     | Neighborhood Accent Tree<br><i>Lagerstroemia h.</i> 'Muskogee'   |
|     | Cul De Sac and Knuckle Tree<br><i>Fraxinus oxycarpa</i> 'Raywood'  |
|     | Local Street Tree - North/South<br><i>Pistacia chinensis</i> 'Keith Davey'   |
|     | Local Street Tree - East/West<br><i>Acer rubrum</i> 'Redpointe'  |
|     | Alley Tree<br><i>Lagerstroemia hybrid</i> 'Tuscarora'  |
|     | Paseo Tree<br><i>Ginkgo biloba</i> 'Fairmount'   |
|     | Pedestrian Connection Tree<br><i>Quercus robur</i> 'Fastigiata'  |
|     | Back Yard Tree<br>Central Parkway: <i>Celtis australis</i><br>Mustang Boulevard: <i>Quercus illex</i><br>Grant Line Road: <i>Celtis sinensis</i> |
|     | Bolero Plus Turf   |
|     | <i>Myoporum parvifolium</i>  |
|     | Shrubs - Separate Submittal  |
|     | Decomposed granite path at School and Park   |

Abbreviations:  
P.U.E. = Public Utility Easement  
Typ. = Typical  
O.C. = On Center  
EQ. = Equal  
MIN. = Minimum  
Clr. = Clear

NOTE: Landscaping must conform with MHCS intersection visibility guidelines details LD-01, LD-02, LD-03, and LD-04.

REVISIONS

| No. | Date | App. |
|-----|------|------|
|     |      |      |

DATE: 07/16/2014  
DRAWN BY: [Signature]  
PROJ. ENGR: [Signature]  
PROJ. MGR: [Signature]  
TSR: [Signature]

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

APPROVED BY: [Signature]  
MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT  
PUBLIC WORKS DIRECTOR

DATE: 7-30-14

REGISTERED LANDSCAPE ARCHITECT  
STATE OF CALIFORNIA

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JOB: SHN-03-HFM DG

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

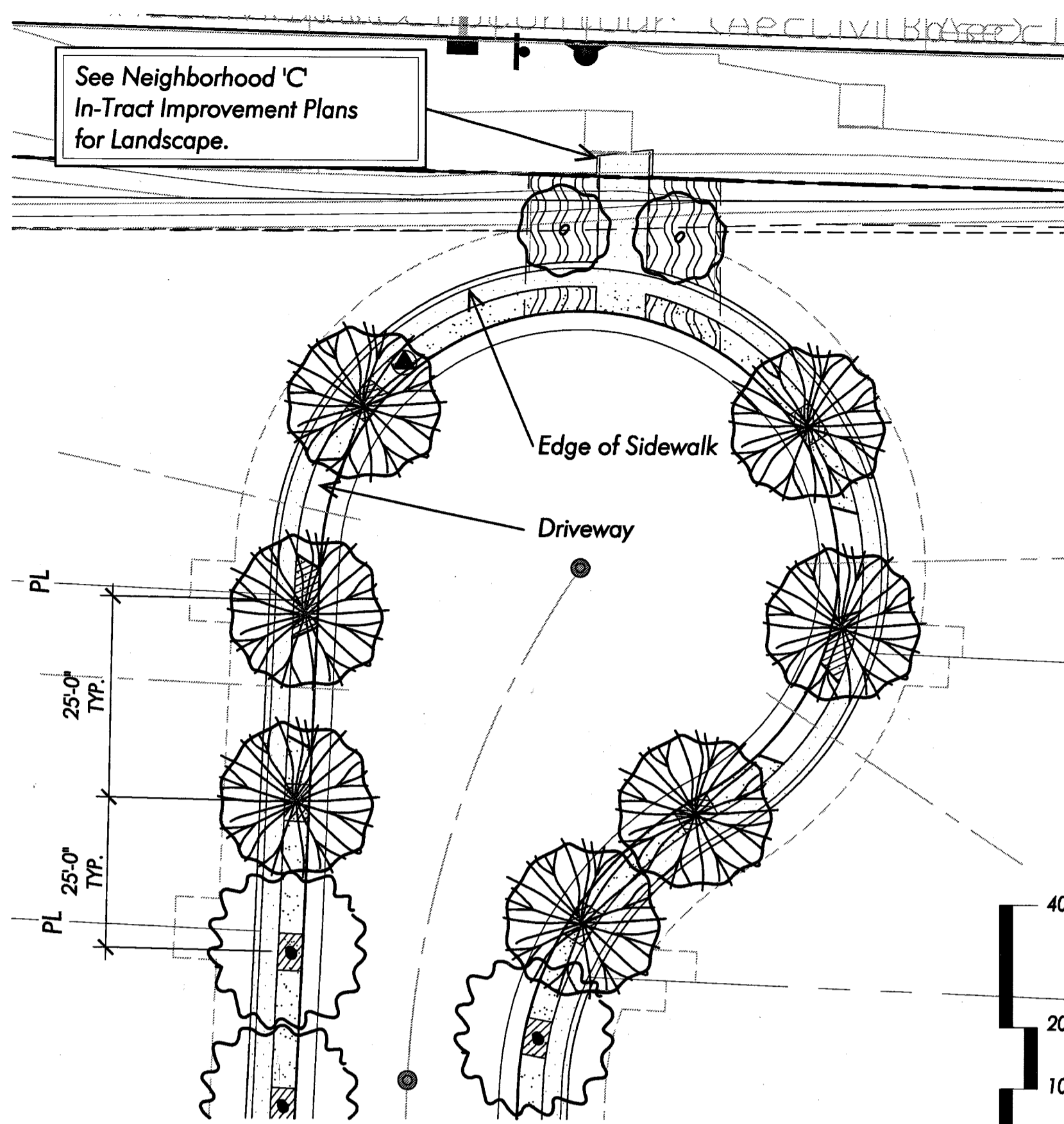
NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES

TYPICAL TREE LAYOUT

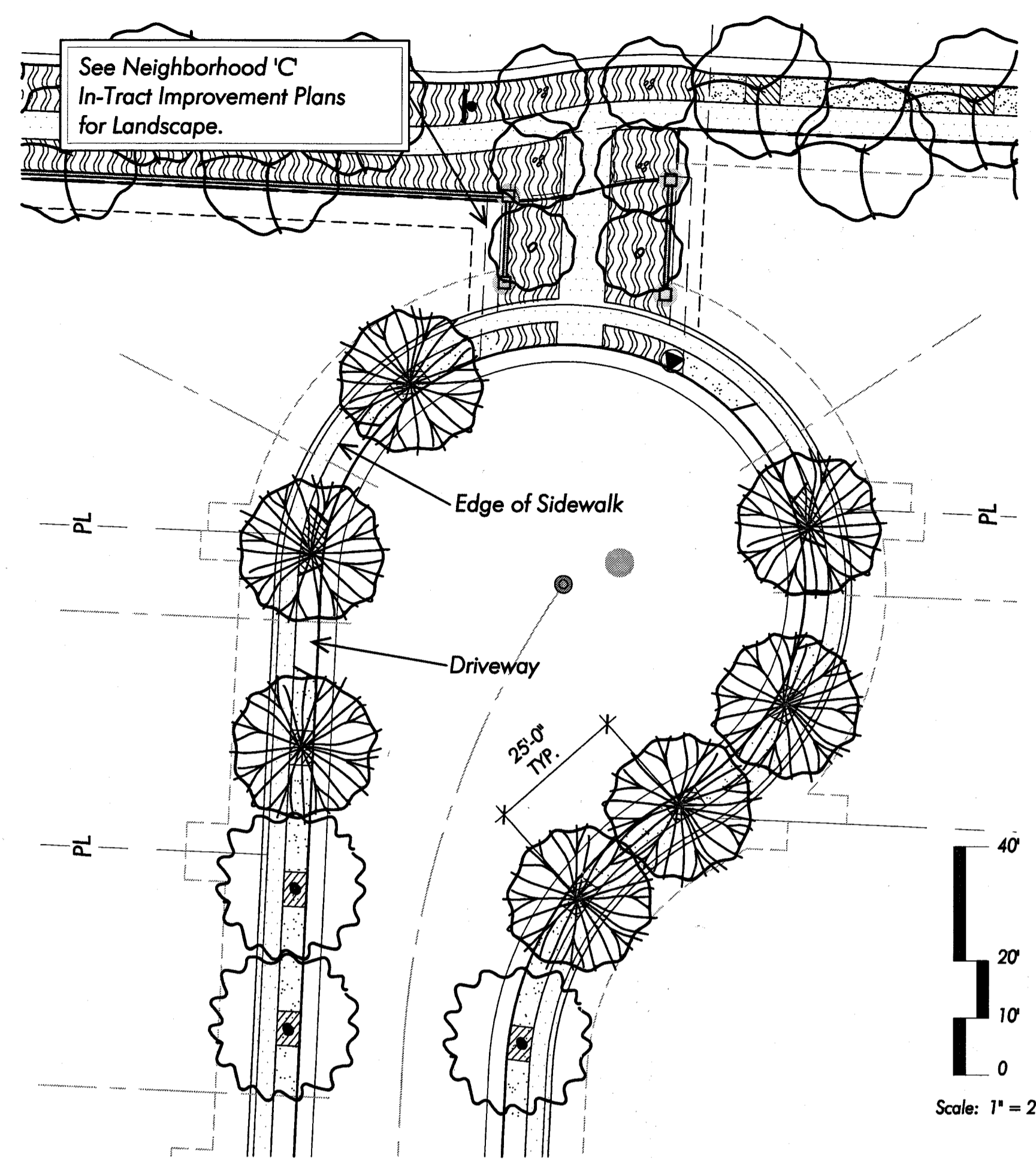
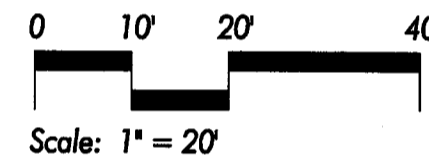
Comp. File No.  
Plan File No. 0418  
SHEET: 4 OF: 11  
LP-1.02

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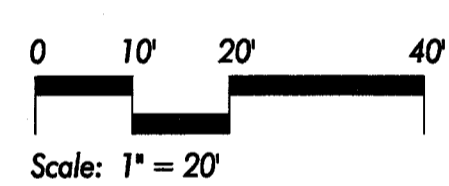
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**CUL-DE-SAC AT ARTERIAL PED. CONNECTION, TYP.** Scale: 1" = 20'



**CUL-DE-SAC AT COLLECTOR PED. CONNECTION, TYP.** Scale: 1" = 20'

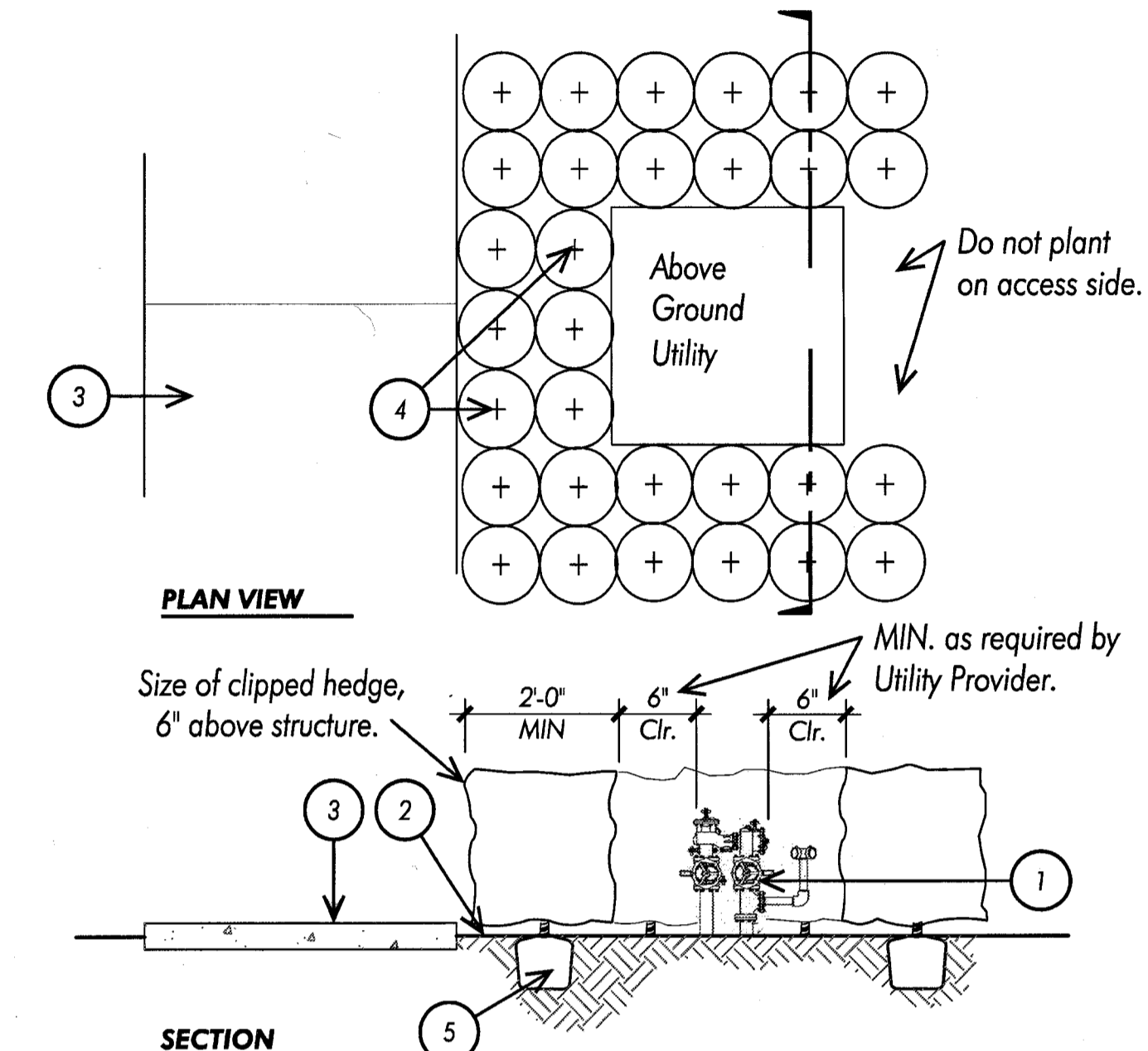


**LEGEND**

1. Utility.
2. Finish grade.
3. Adjacent walkway where occurs.
4. 5 gallon shrub to be selected from M.H. single family residential design manual.
5. Rootball.

**NOTES**

- A. Surround three sides with plant screen. Access side to remain open for access.
- B. Refer to Improvement Plans for paint colors and insulated covers, and the structure's dimensions. The screening methods shown below are for above ground utilities.
- C. ground utilities.
- D. The 5 gallon shrub dimensions are guidelines for the contractor when acquiring the plants. Physical plant size may be different due to availability.



**SHRUB SCREENING AT UTILITIES** Scale: 1/2" = 1'-0"

- NOTES:**
1. Refer to Sheet LP-0.01 for Planting Schedules and Notes.

**PLANTING SCHEDULE:**

| KEY | BOTANICAL NAME   |
|-----|--|
|     | Collector Street Tree<br><i>Platanus acerfolia</i> 'Bloodgood'   |
|     | Local to Connector Tree<br><i>Cercis canadensis</i>  |
|     | Round-A-Bout Tree<br><i>Quercus lobata</i>   |
|     | Neighborhood Accent Tree<br><i>Lagerstroemia h.</i> 'Muskogee'   |
|     | Cul De Sac and Knuckle Tree<br><i>Fraxinus oxycarpa</i> 'Raywood'  |
|     | Local Street Tree - North/South<br><i>Pistacia chinensis</i> 'Keith Davey'   |
|     | Local Street Tree - East/West<br><i>Acer rubrum</i> 'Redpointe'  |
|     | Alley Tree<br><i>Lagerstroemia hybrid</i> 'Tuscarora'  |
|     | Paseo Tree<br><i>Ginkgo biloba</i> 'Fairmount'   |
|     | Pedestrian Connection Tree<br><i>Quercus robur</i> 'Fastigiata'  |
|     | Back Yard Tree<br>Central Parkway: <i>Celtis australis</i><br>Mustang Boulevard: <i>Quercus illex</i><br>Grant Line Road: <i>Celtis sinensis</i> |
|     | Bolero Plus Turf   |
|     | <i>Myoporum parvifolium</i>  |
|     | Shrubs - Separate Submittal  |
|     | Decomposed granite path at School and Park   |

REVISIONS

| No. | Date | App. | Description |
|-----|------|------|-------------|
|     |      |      |             |

DATE: 07/16/2014  
DRAWN BY: RH  
PROJ. ENGR: MADER B. SHARREH  
PROJ. MGR: TSR

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

Approved By: *Mader B. Sharreh*  
MADER B. SHARREH  
RCE 47837 EXP 12-31-16  
PUBLIC WORKS DIRECTOR

Title: 7-30-14

REGISTERED LANDSCAPE ARCHITECT  
**PAUL HADEN**  
Signature: [Signature]  
Exp. 2/28/14  
Date  
STATE OF CALIFORNIA

The Collaborative West  
Landscape Architecture  
Urban Design  
Planning  
Habitat Restoration

100 Avenida Miramar  
San Clemente  
California 92672  
Phone 949.366.6624  
Fax 949.366.6626  
www.thecollaborativewest.com

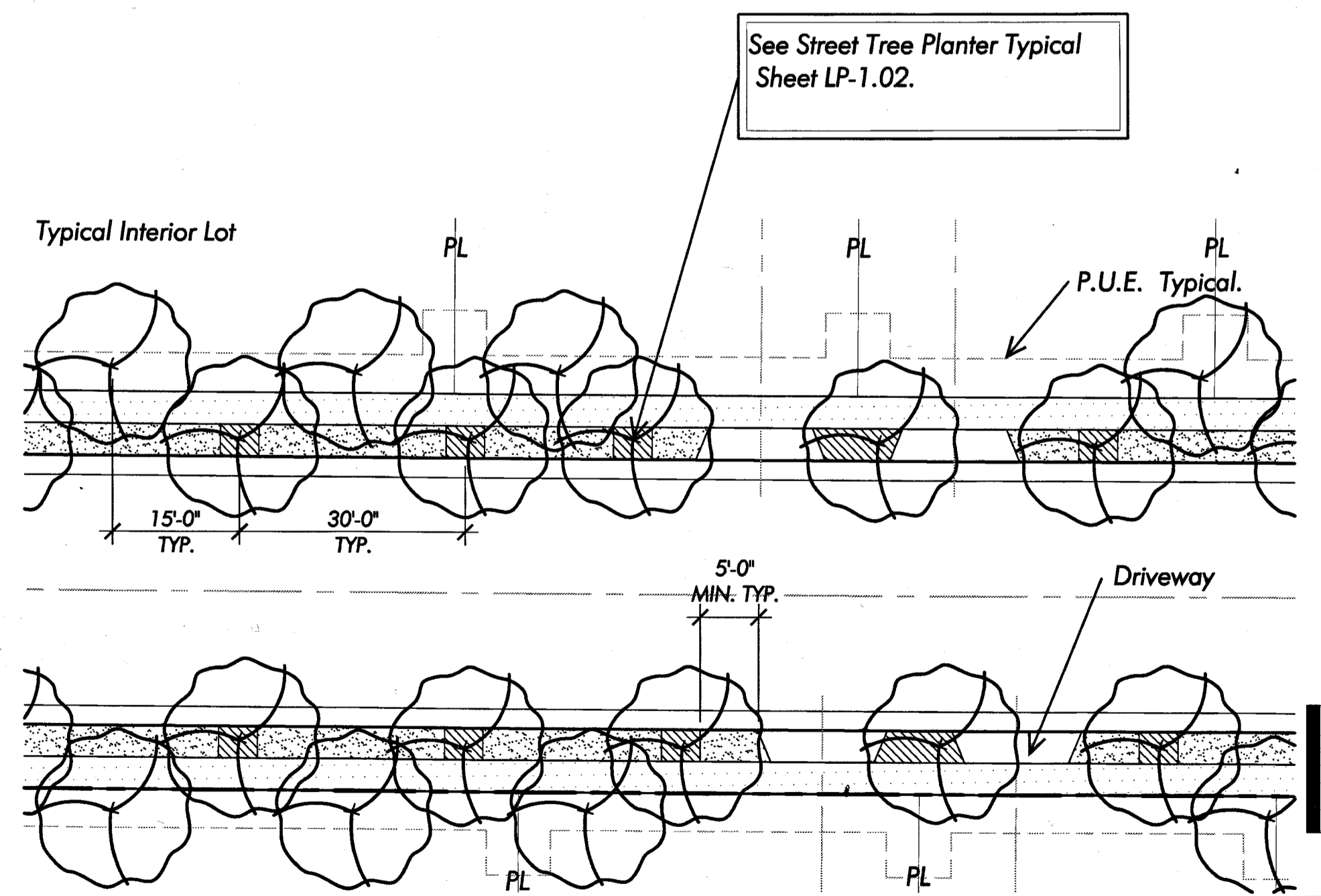
JOB: SHN-03-1FM DG

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES

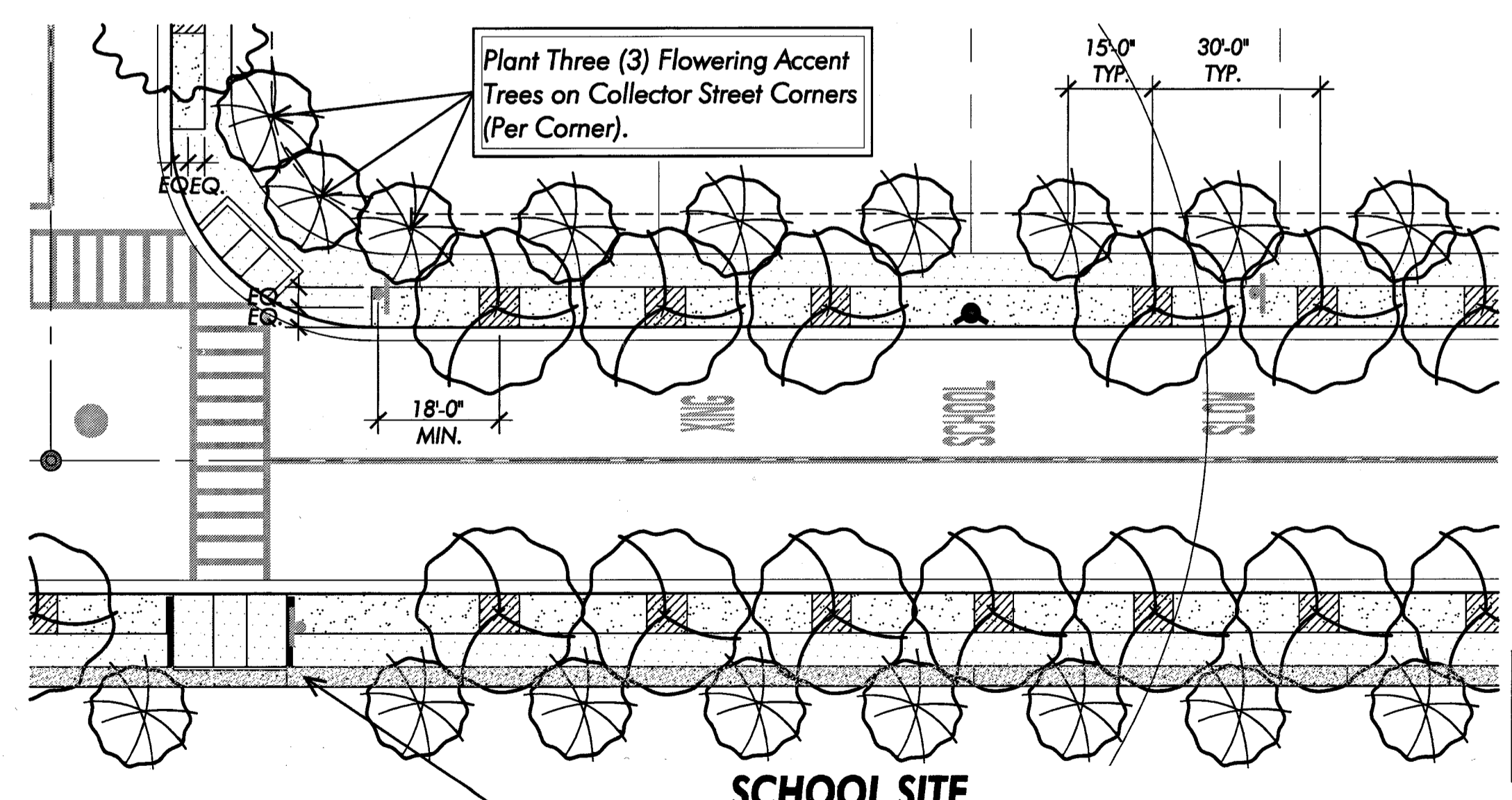
TYPICAL TREE LAYOUT

Comp. File No. 0416  
Plan File No. 0416  
SHEET: 5 OF: 11  
LP-1.03



**COLLECTOR STREET, TYP.** Scale: 1" = 20'

NOTE: All trees shall be installed within a lot. Trees may not straddle lot lines.

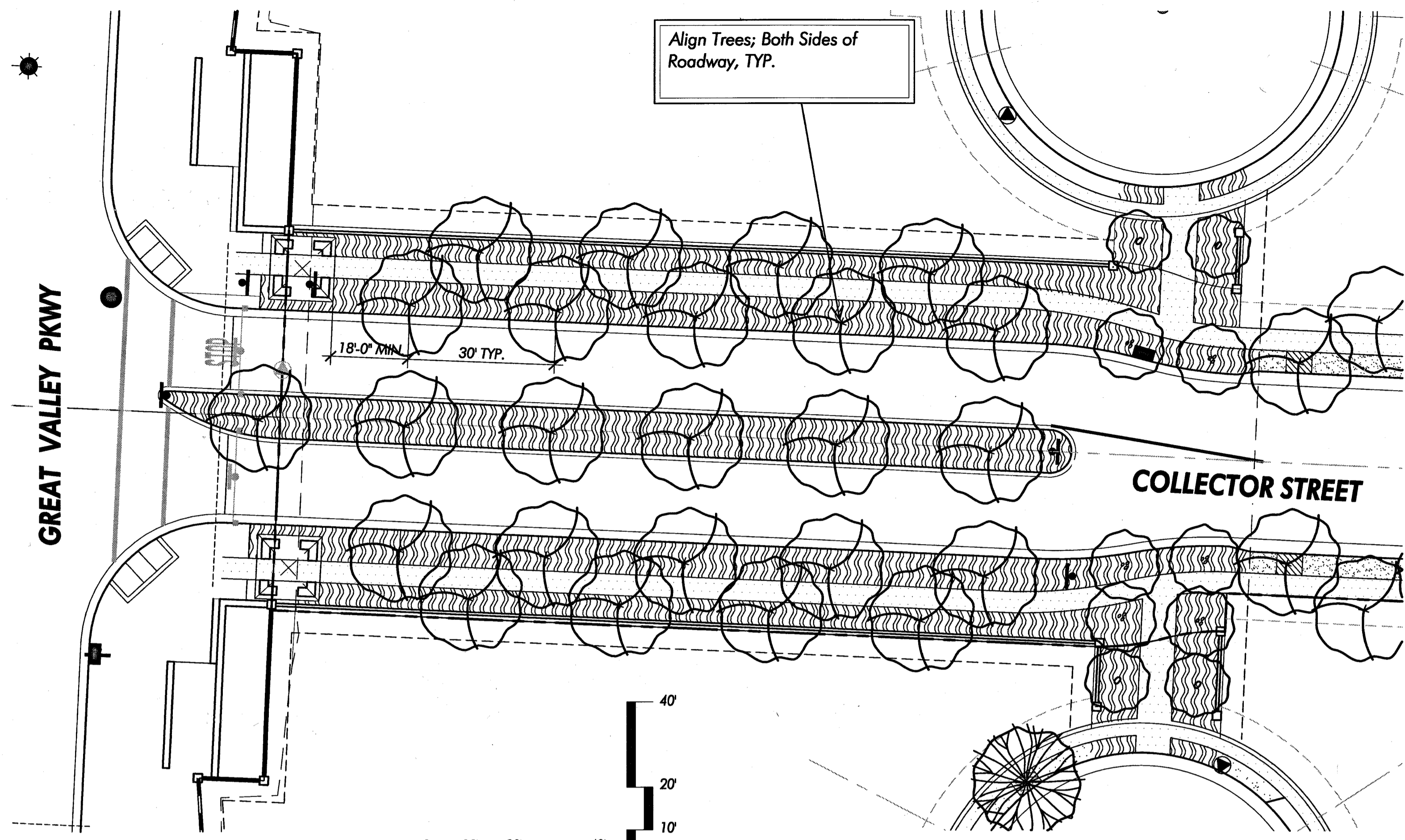


**COLLECTOR STREET, TYP. AT SCHOOL LOOP ROAD** Scale: 1" = 20'

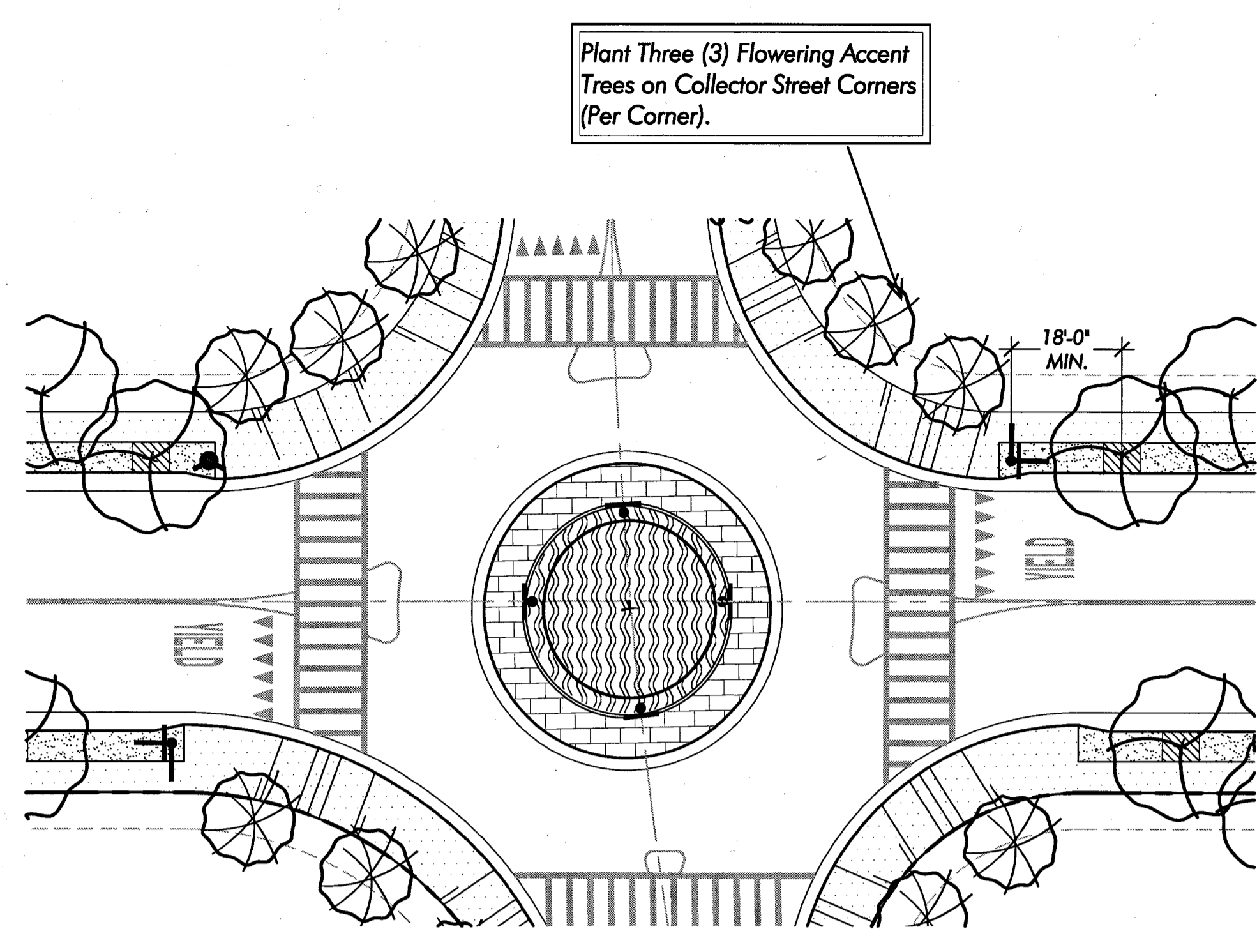
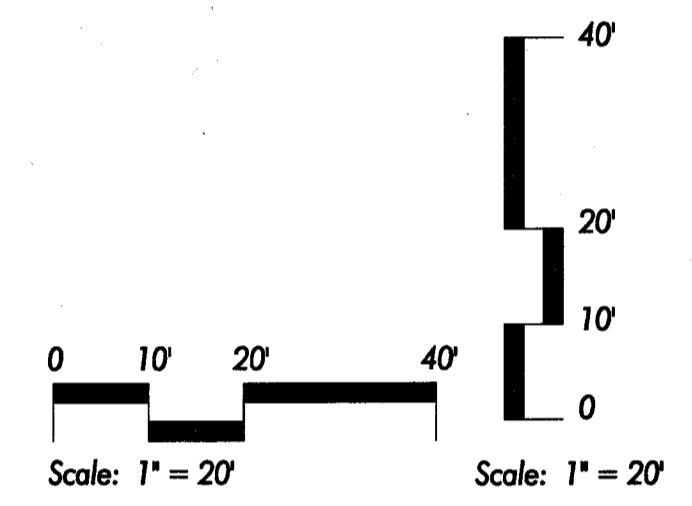
- Abbreviations:**
- P.U.E. = Public Utility Easement
  - Typ. = Typical
  - O.C. = On Center
  - EQ. = Equal
  - MIN. = Minimum
  - Clr. = Clear
  - PL = Property Line

NOTE: Landscaping must conform with MHCSO intersection visibility guidelines details LD-01, LD-02, LD-03, and LD-04.

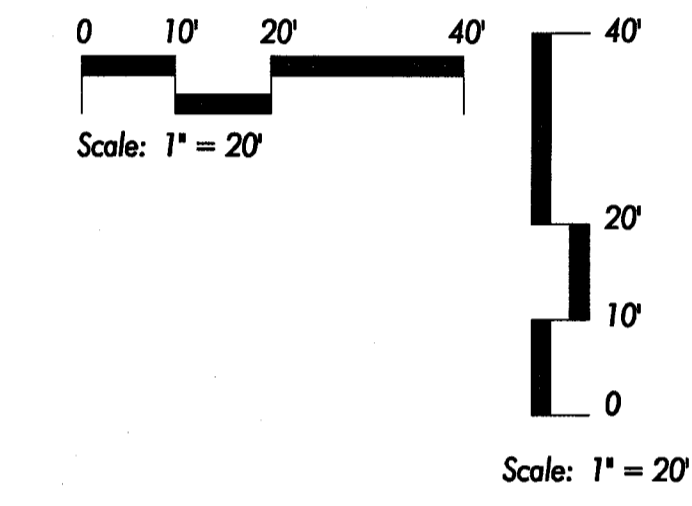
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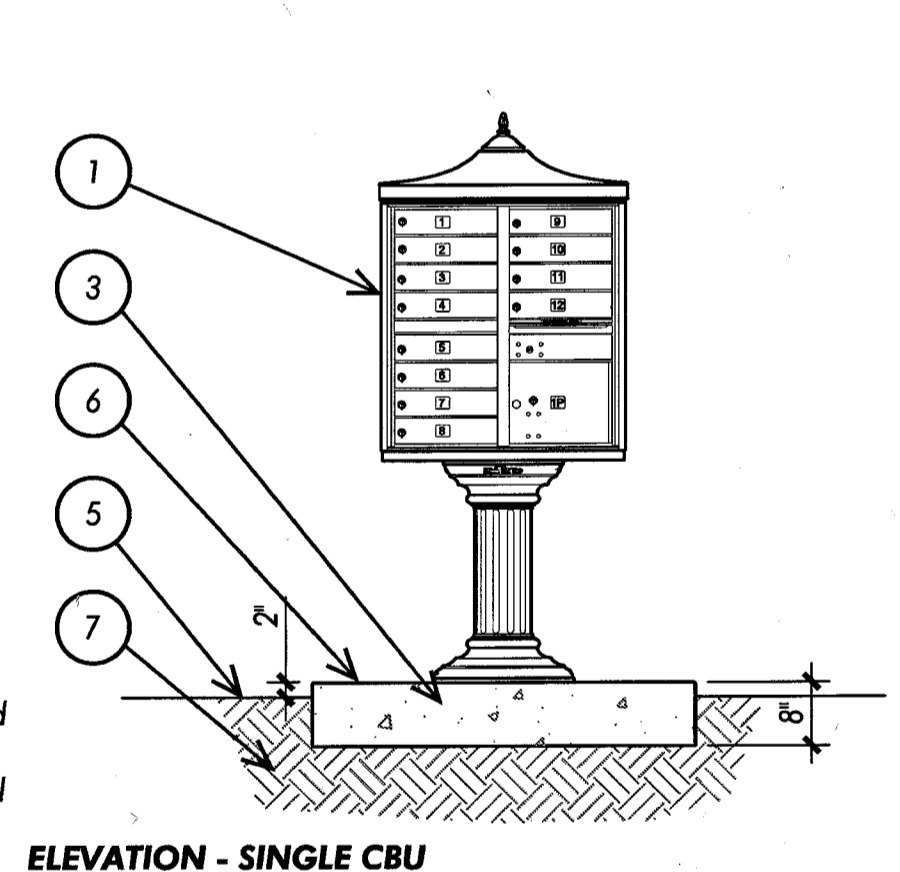
**NEIGHBORHOOD ENTRY, TYP.  
COLLECTOR STREET**



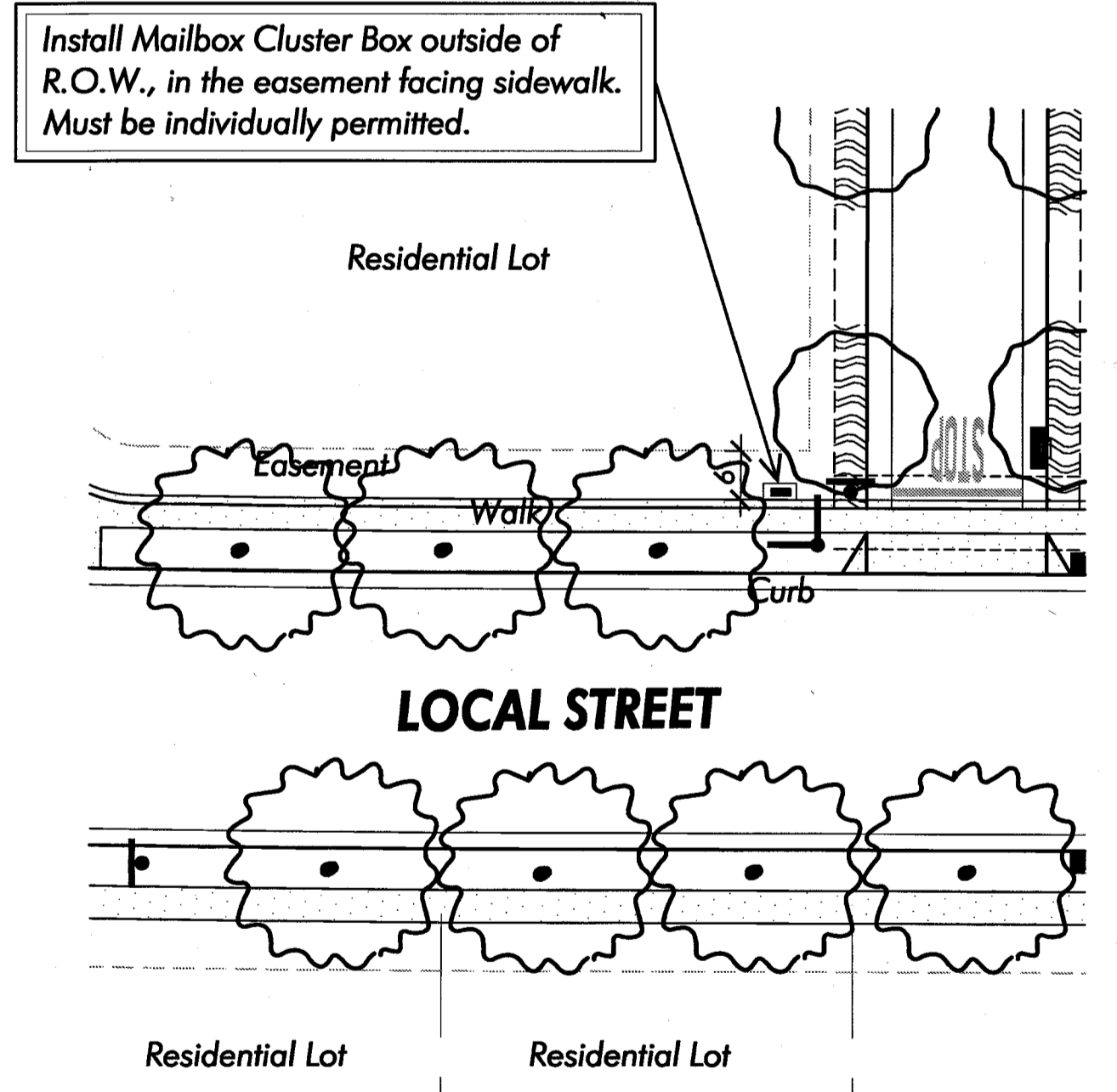
**ROUND-A-BOUT, TYP.  
COLLECTOR STREET**



- LEGEND**
- Cluster box unit per plan.
  - Curb per Civil Engineer.
  - Concrete footing per manufacturer specifications.
  - Anchor bolts.
  - Finish grade.
  - Finish surface. Align footing with walk.
  - 90% Compacted subgrade.
  - Concrete sidewalk or landing.
- NOTES**
- Refer to manufacturer specifications and installation requirements for connections.
  - All dimensions indicated shall be confirmed/verified with US Postal Service Standards and followed.
  - Refer to "Mountain House - Single Family, Residential Design Manual" (Chapter Three, Page 3-47) for design standards.
  - Manufacturer: Custom Home Accessories Model#REG-ED-TOP (Regency Collection - 'Edward' with Flame Finish, 1570) Color: Black
  - Mailboxes in Right of Way need to be properly sited to not interrupt traffic sight lines and individually permitted.

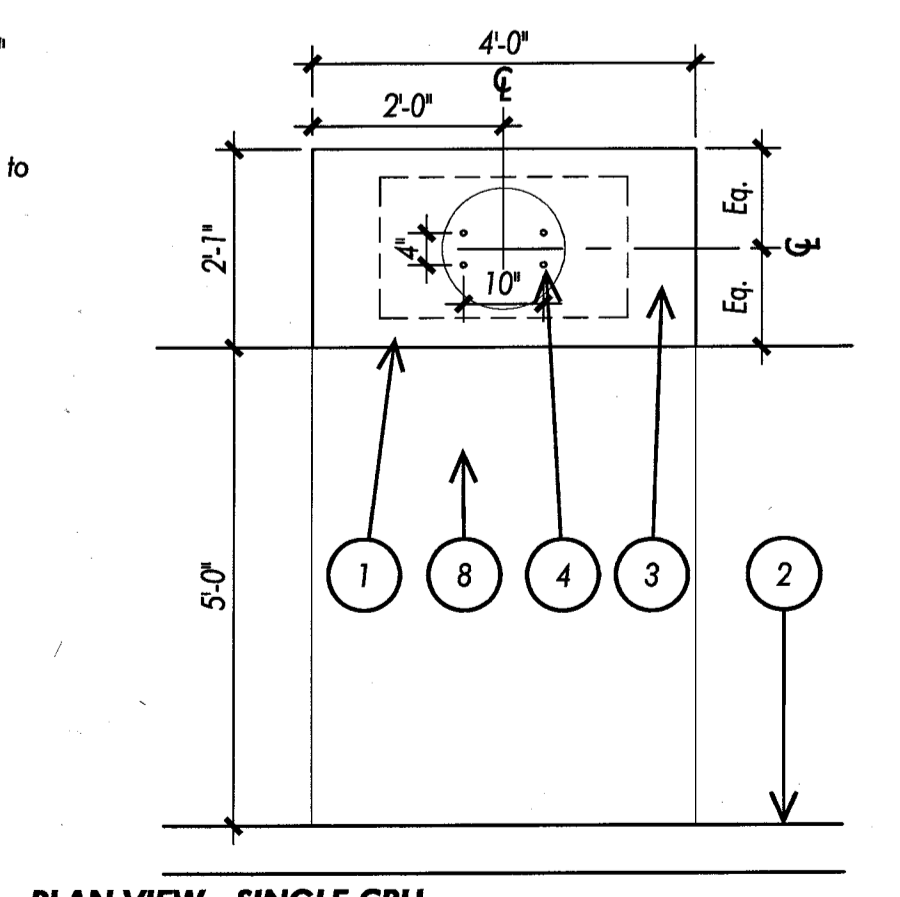


**ELEVATION - SINGLE CBU**

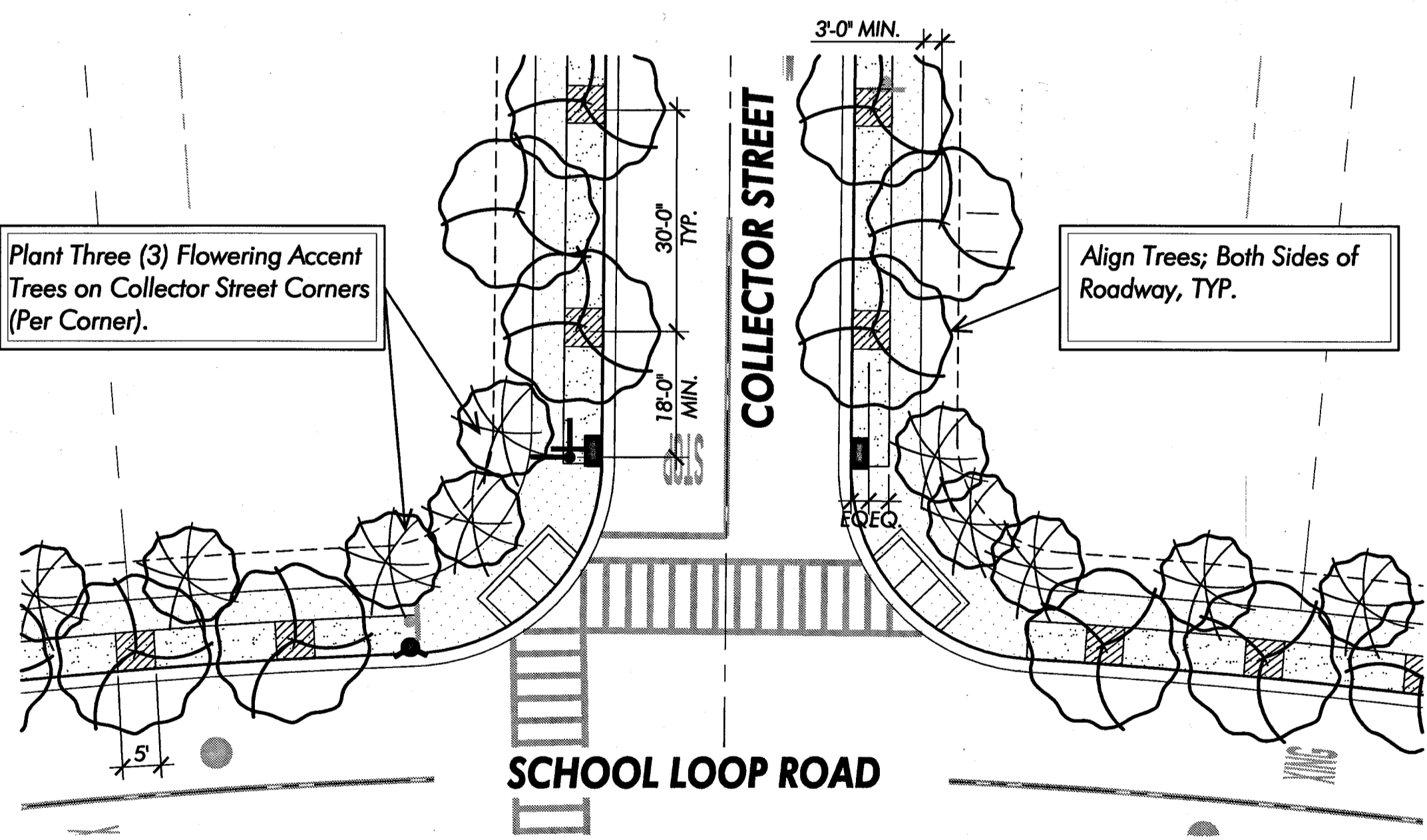


**LOCAL STREET**

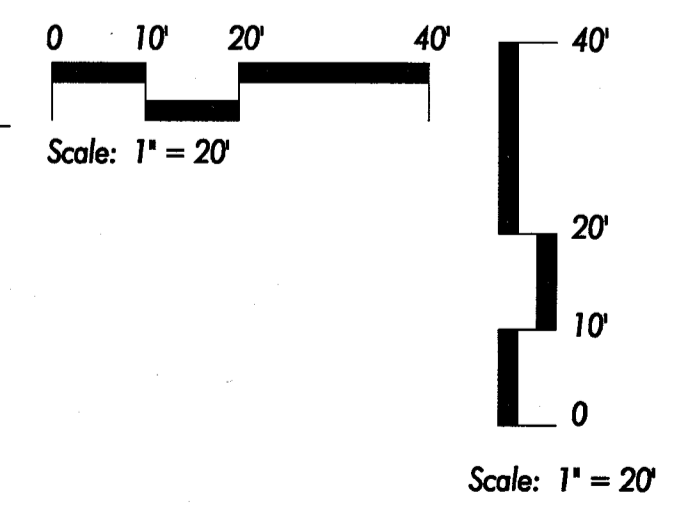
**CBU Typical Location**



**PLAN VIEW - SINGLE CBU**



**SCHOOL LOOP ROAD AND COLLECTOR STREET**



**PLANTING SCHEDULE:**

| KEY | BOTANICAL NAME   |
|-----|--|
|     | Collector Street Tree<br><i>Platanus acerfolia</i> 'Bloodgood'   |
|     | Local to Connector Tree<br><i>Cercis canadensis</i>  |
|     | Round-A-Bout Tree<br><i>Quercus lobata</i>   |
|     | Neighborhood Accent Tree<br><i>Lagerstroemia h. 'Muskogee'</i>   |
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|     | Local Street Tree - North/South<br><i>Pistacia chinensis</i> 'Keith Davey'   |
|     | Local Street Tree - East/West<br><i>Acer rubrum</i> 'Redpointe'  |
|     | Alley Tree<br><i>Lagerstroemia hybrid</i> 'Tuscarora'  |
|     | Paseo Tree<br><i>Ginkgo biloba</i> 'Fairmount'   |
|     | Pedestrian Connection Tree<br><i>Quercus robur</i> 'Fastigiata'  |
|     | Back Yard Tree<br>Central Parkway: <i>Celtis australis</i><br>Mustang Boulevard: <i>Quercus illex</i><br>Grant Line Road: <i>Celtis sinensis</i> |
|     | Bolero Plus Turf   |
|     | <i>Myoporum parvifolium</i>  |
|     | Shrubs - Separate Submittal  |
|     | Decomposed granite path at School and Park   |

Abbreviations:  
P.U.E. = Public Utility Easement  
Typ. = Typical  
O.C. = On Center  
EQ. = Equal  
MIN. = Minimum  
Clr. = Clear

REVISIONS

| Date | Appr. |
|------|-------|
|      |       |
|      |       |
|      |       |

DATE: 07/23/2014  
DRAWN BY: RH  
PROJ. ENGR: RCE  
PROJ. MGR: TSR

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

Approved By: *Nancy Sloane*  
MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT  
RCE 4187 EMP 12/15/15  
PUBLIC WORKS DIRECTOR

Title: \_\_\_\_\_ Date: 7-30-14

REGISTERED LANDSCAPE ARCHITECT  
*DAVE*  
STATE OF CALIFORNIA

TheCollaborativeWest  
Landscape Architecture  
Urban Design  
Planning  
Habitat Restoration

100 Avenida Miramar  
San Clemente  
California 92672  
Phone 949.366.6624  
Fax 949.366.6626  
www.thecollaborativewest.com

JOB: SHN-03-'HFM DG'

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES

TYPICAL TREE LAYOUT

Comp. File No. \_\_\_\_\_  
Plan File No. 0418  
SHEET: 6 OF: 11  
LP-1.04

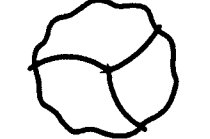


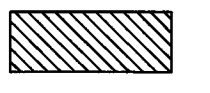
NOTE: Landscaping must conform with MHCSO intersection visibility guidelines details LD-01, LD-02, LD-03, and LD-04.

Plant Three (3) Flowering Accent Trees on Collector Street Corners (Per Corner).

3' wide Stabilized Decomposed Granite adjacent to walk.

**'C' Park**  
 Note: Perimeter Streetscape for Park to be installed by Neighborhood 'C' Park Plan Set.

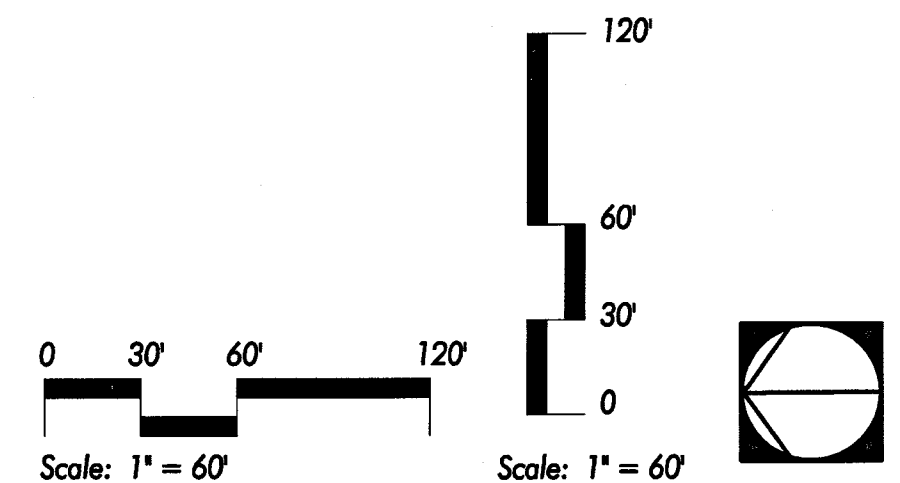
**PLANTING SCHEDULE:**

| KEY   | BOTANICAL NAME   |
|---|--|
|    | Collector Street Tree<br><i>Platanus acerfolia</i> 'Bloodgood' |
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|  | Bolero Plus Turf   |
|  | <i>Myoporum parvifolium</i>                                    |

Refer to sheet LP-1.02 for Typical ground cover in street tree planters in turf parkway.

**'C' School Site**  
 Note: Perimeter Streetscape for School to be installed by Neighborhood 'C' In-Tract Landscape Plans.

3' wide Stabilized Decomposed Granite adjacent to walk.



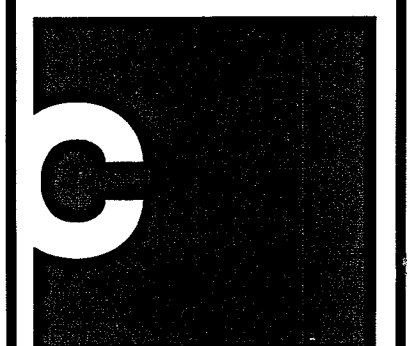
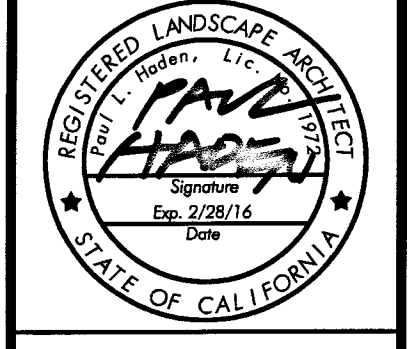
NOTE: Landscaping must conform with MHCSD intersection visibility guidelines details LD-01, LD-02, LD-03, and LD-04.

JEFFERY STRAINLICES 7.25/14

| No. | Revisions | Date | App. |
|-----|-----------|------|------|
|     |           |      |      |
|     |           |      |      |
|     |           |      |      |
|     |           |      |      |

MOUNTAIN HOUSE  
 COMMUNITY SERVICES DISTRICT  
 Approved By: *Nader Shareghi*  
 NADER B. SHAREGHI  
 ACE 47837 EXP 12/31/15  
 PUBLIC WORKS DIRECTOR  
 Title: \_\_\_\_\_ Date: **7-30-14**

DATE: 07/16/2014  
 DRAWN BY: RH  
 PROJ. ENGR:  
 PROJ. MGR: TSR



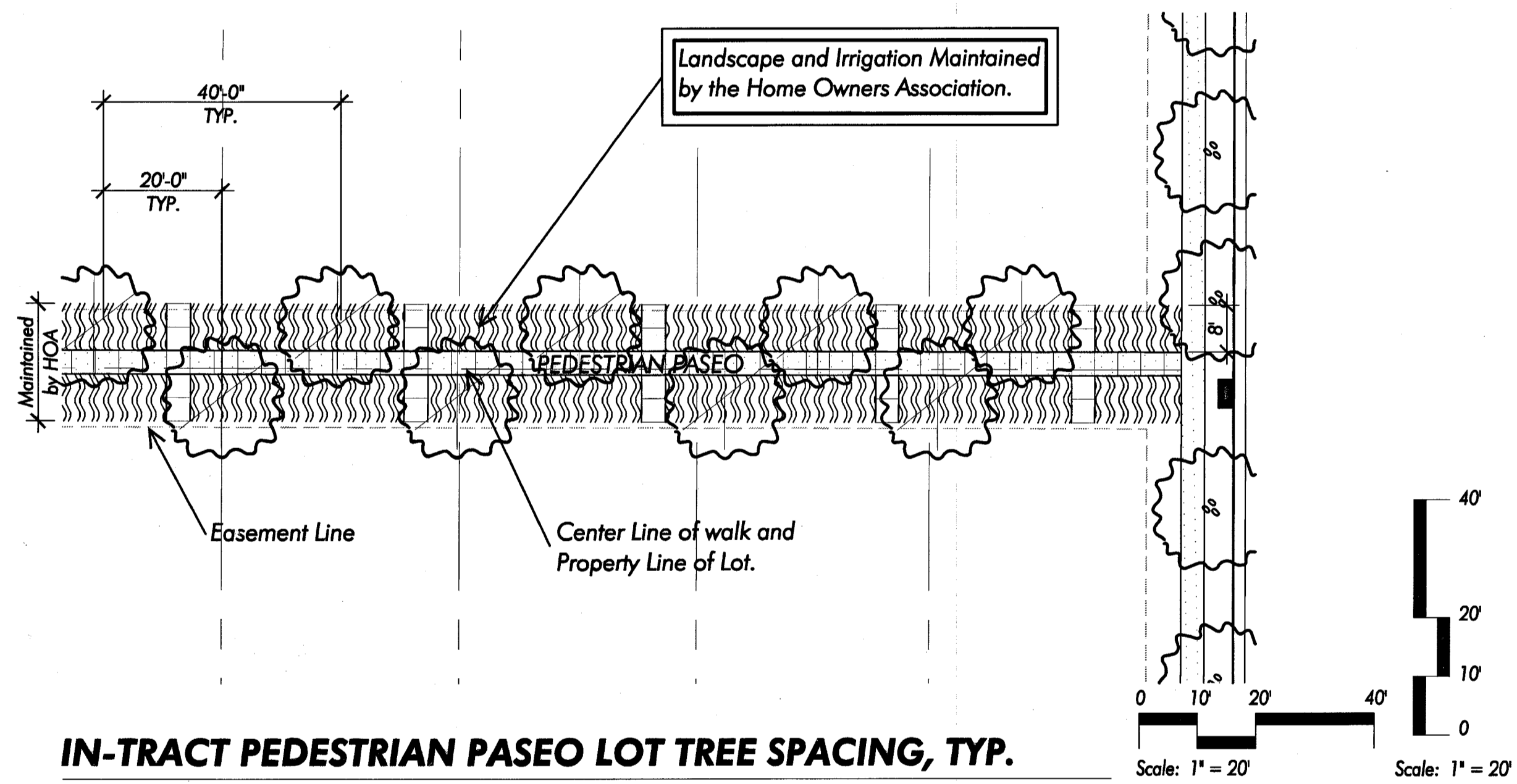
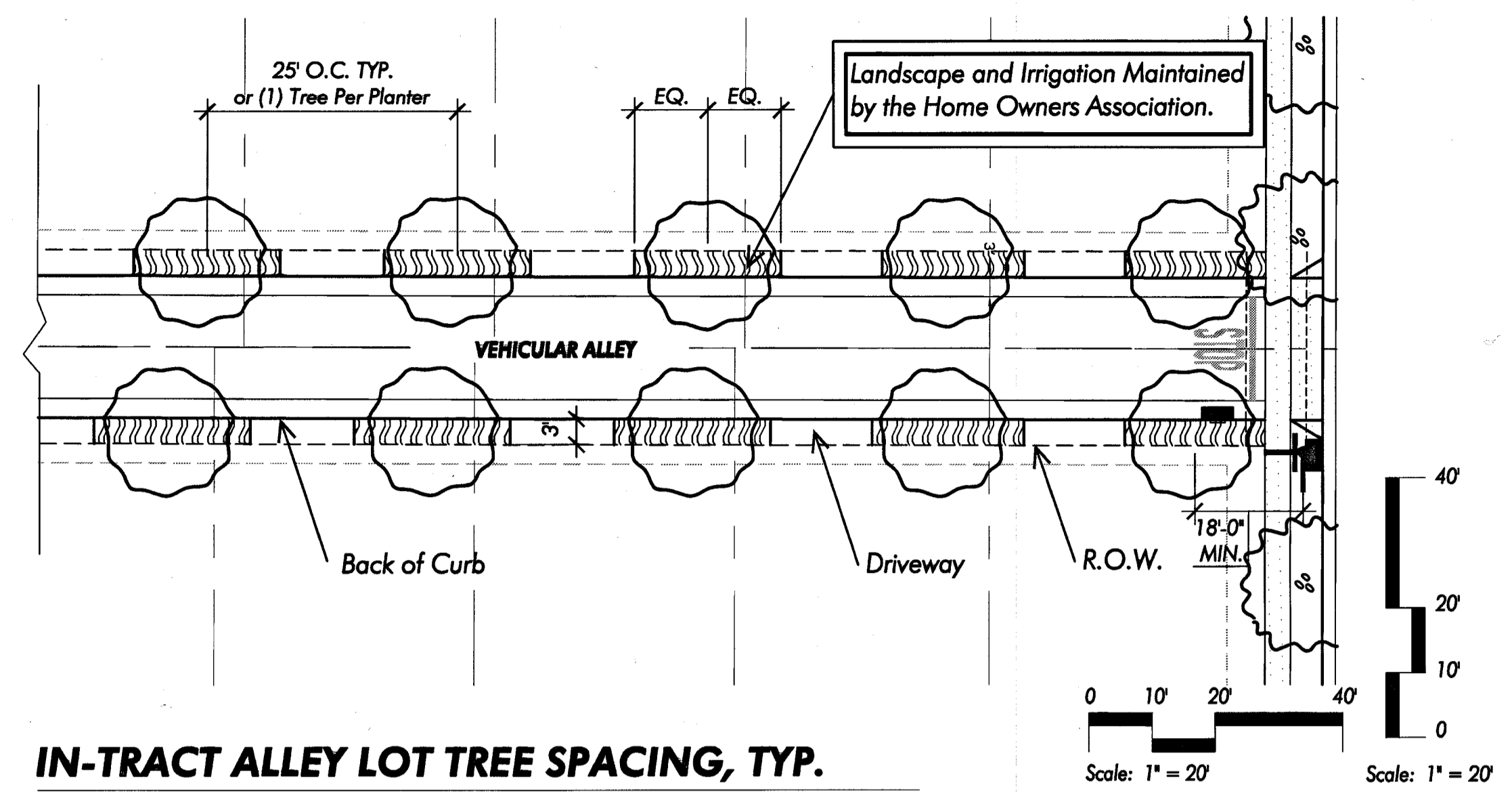
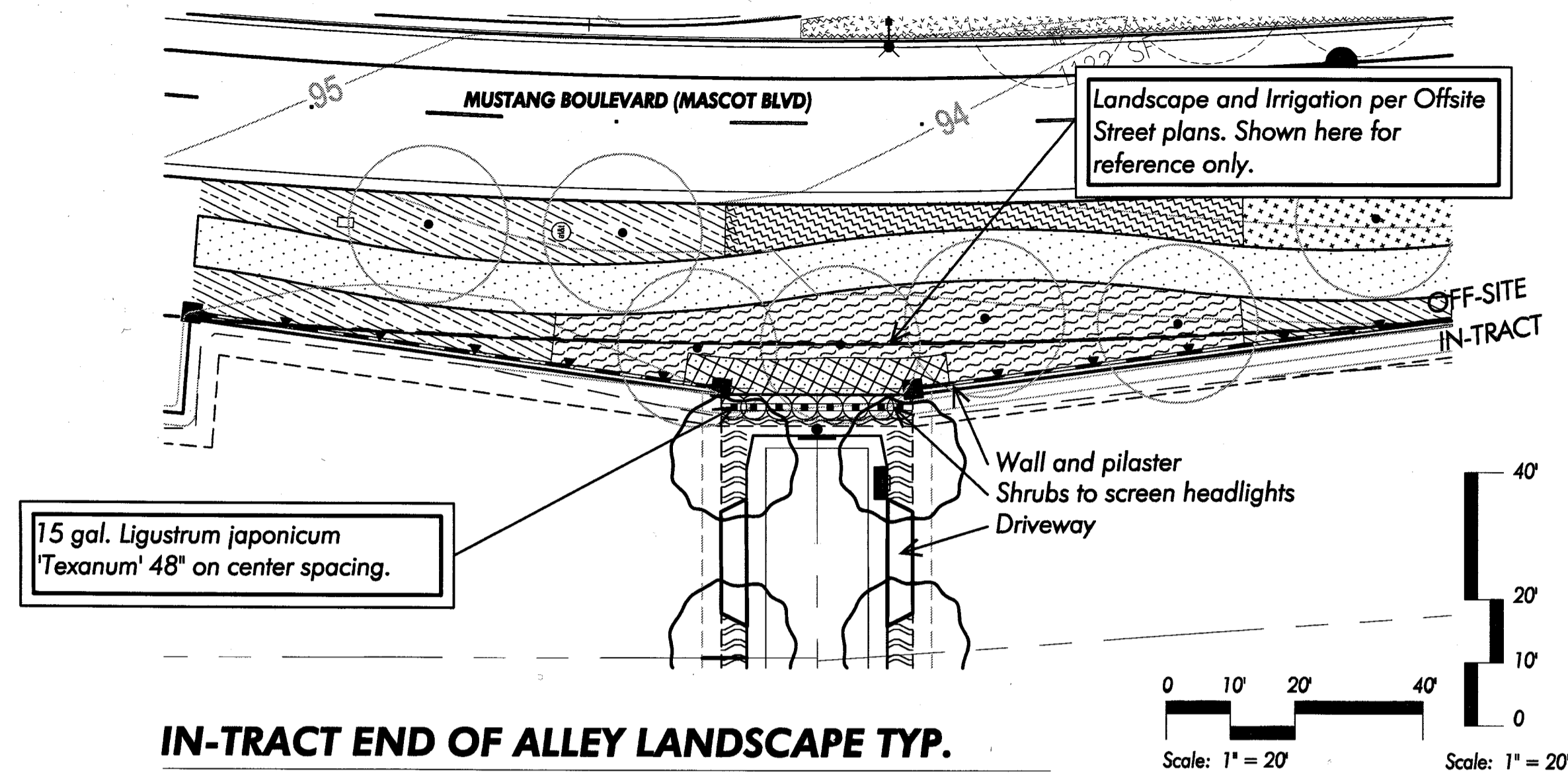
The Collaborative West  
 Landscape Architecture  
 Urban Design  
 Planning  
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 100 Avenida Miramar  
 San Clemente  
 California 92672  
 Phone 949.366.6254  
 Fax 949.366.6226  
 www.thecollaborativewest.com

JOB: SHN-03-1FM DG'

MOUNTAIN HOUSE  
 COMMUNITY SERVICES DISTRICT  
**NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES**  
**TYPICAL TREE LAYOUT PLAN**

Comp. File No.  
 Plan File No. **0418**  
 SHEET: 7 OF: 11  
 LP-1.05

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**PLANTING SCHEDULE:**

| KEY | BOTANICAL NAME   |
|-----|--|
|     | Collector Street Tree<br><i>Platanus acerfolia</i> 'Bloodgood'   |
|     | Local to Connector Tree<br><i>Cercis canadensis</i>  |
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|     | Decomposed granite path at School and Park   |

Abbreviations:  
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REVISIONS

| No. | Date | App. |
|-----|------|------|
|     |      |      |

DATE: 07/16/2014  
DRAWN BY: RH  
PROJ. ENGR:   
PROJ. MGR: TSR

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

Approved By: *Nancy Shareef*  
MADER R. SHAREEF  
RCE-4787 EXP 12/31/15  
PUBLIC WORKS DIRECTOR

Title:   
Date: 7-30-14

REGISTERED LANDSCAPE ARCHITECT  
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JOB: SHN-03-'14FM DG'

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES

TYPICAL TREE LAYOUT

Comp. File No.  
Plan File No. 0418  
SHEET: 8 OF: 11  
LP-1.06



# IRRIGATION NOTES:

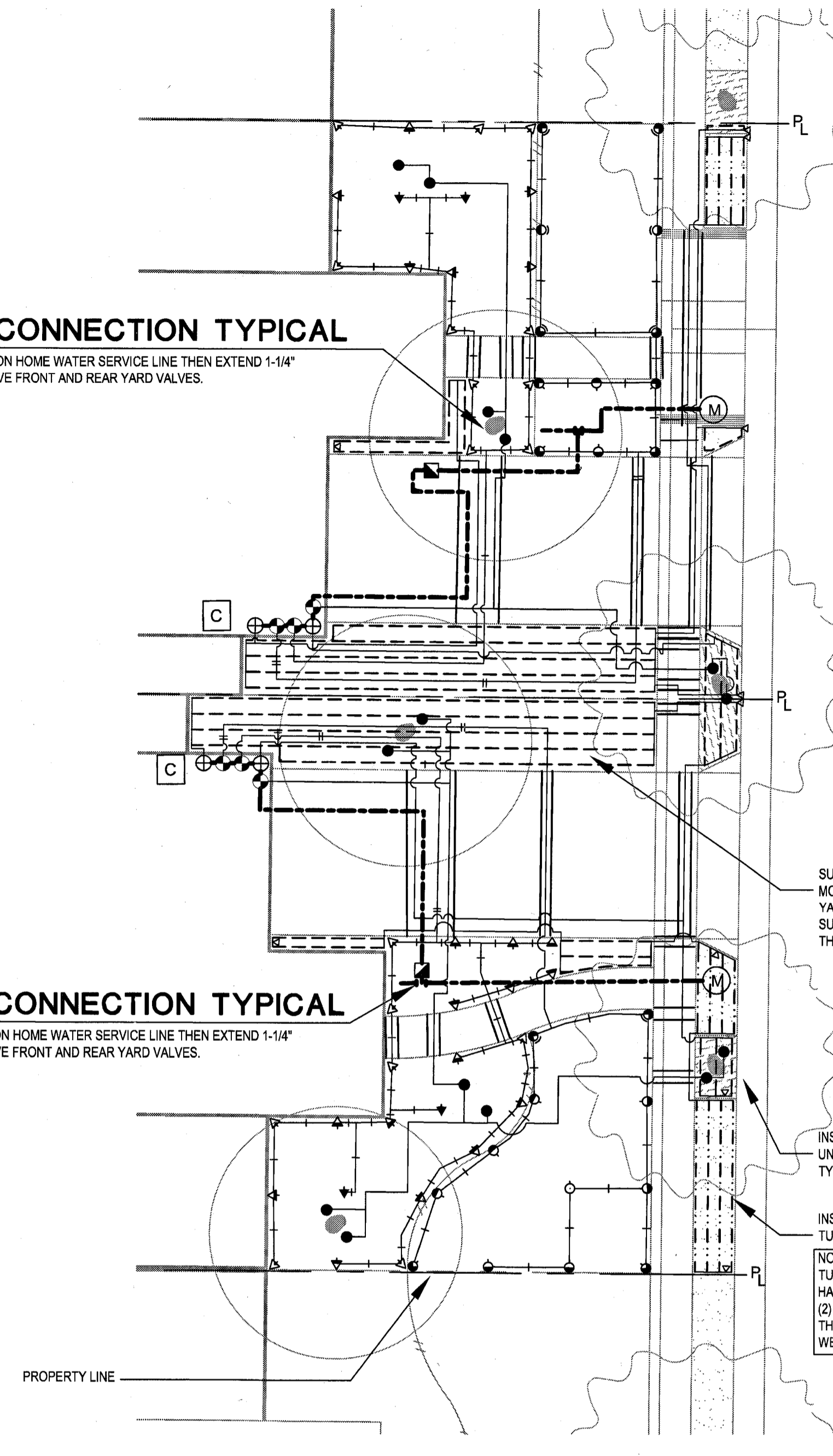
- THESE IRRIGATION DRAWINGS ARE DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. ALL PIPING, VALVES, AND OTHER IRRIGATION COMPONENTS MAY BE SHOWN WITHIN PAVED AREAS FOR GRAPHIC CLARITY ONLY AND ARE TO BE INSTALLED WITHIN PLANTING AREAS. DUE TO SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, CONDUIT, AND OTHER ITEMS WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISHED CONDITION AFFECTING THE CONTRACT WORK INCLUDING OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIMENSIONAL DIFFERENCES. IN THE EVENT OF FIELD DISCREPANCY WITH CONTRACT DOCUMENTS, PLAN THE INSTALLATION WORK ACCORDINGLY BY NOTIFICATION AND APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND ACCORDING TO THE CONTRACT SPECIFICATIONS. NOTIFY AND COORDINATE IRRIGATION CONTRACT WORK WITH APPLICABLE CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE, CONDUIT OR SLEEVES THROUGH OR UNDER WALLS, ROADWAYS, PAVING AND STRUCTURES BEFORE CONSTRUCTION. IN THE EVENT THESE NOTIFICATIONS ARE NOT PERFORMED, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR REQUIRED REVISIONS.
- IT IS THE RESPONSIBILITY OF THE LANDSCAPE MAINTENANCE CONTRACTOR AND / OR OWNER TO PROGRAM THE IRRIGATION CONTROLLER(S) TO PROVIDE THE MINIMUM AMOUNT OF WATER NEEDED TO SUSTAIN GOOD PLANT HEALTH. THIS INCLUDES MAKING ADJUSTMENTS TO THE PROGRAM FOR SEASONAL WEATHER CHANGES, PLANT MATERIAL, WATER REQUIREMENTS, MOUNDS AND SLOPES, SUN, SHADE AND WIND EXPOSURES.
- WHEN VERTICAL OBSTRUCTIONS (STREET LIGHTS, TREES, FIRE HYDRANTS, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE HEADS SO AS TO PREVENT PROPER COVERAGE, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER, THIRD OR HALF CIRCLE HEAD AT THE SIDES OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
- IRRIGATION CONTROL WIRES, SOLID COPPER WITH U.L. APPROVAL FOR DIRECT BURIAL IN GROUND. CONTROL WIRE SERVICING REMOTE CONTROL VALVES SIZE #14-1 WIRE WITH A UNIQUE COLOR INSULATING JACKET FOR EACH CONTROLLER. COMMON GROUND WIRE SIZE #12-1 WIRE WITH A WHITE INSULATING JACKET AND A STRIPE OF COLOR WHICH MATCHES THE CONTROL WIRE CHOICE FOR SPECIFIC CONTROLLER. SPARE WIRE #14-1 WIRE WITH BLACK INSULATION JACKET. SPLICES SHALL BE MADE WITH 3M-DBY SEAL PACKS OR APPROVED EQUAL.
- SPLICING OR LOW VOLTAGE WIRES IS PERMITTED IN VALVE BOXES ONLY. LEAVE A 36" LONG 1" DIAMETER COIL OF EXCESS WIRE AT EACH SPLICE AND 36" LONG EXPANSION LOOP EVERY 100 FEET ALONG WIRE RUN. TAPE WIRES TOGETHER EVERY TEN FEET. DO NOT TAPE WIRES TOGETHER WHERE CONTAINED WITHIN SLEEVING OR CONDUIT.
- VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER / SHRUB AREAS AT THE SIDE OF THE RESIDENCES.
- FLUSH AND ADJUST IRRIGATION OUTLETS AND NOZZLES FOR OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ONTO WALKS, ROADWAYS, AND / OR BUILDINGS. SELECT THE BEST DEGREE OF ARC AND RADIUS TO FIT THE EXISTING SITE CONDITION AND THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH CONTROL ZONE.
- SET SPRINKLER HEADS PERPENDICULAR TO FINISH GRADE.
- AT LOCATIONS WHERE LOW SPRINKLER HEAD DRAINAGE WILL OCCUR, INSTALL A TORO 570Z SERIES POP-UP BODY WITH INTEGRAL CHECK VALVE. INSTALL A HUNTER HCV SERIES, KBI CV-SERIES, OR APPROVED EQUAL SPRING LOADED CHECK VALVE ON BUBBLER RISERS WHERE REQUIRED.
- THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE.
- PIPE SIZING SHOWN ON THE DRAWINGS IS TYPICAL AS CHANGES IN LAYOUT OCCUR DURING CONSTRUCTION THE SIZE MAY NEED TO BE ADJUSTED ACCORDINGLY. ALL UNSIZED LATERAL PIPE DOWNSTREAM OF 1" WILL BE 3/4".
- PIPE THREAD SEALANT COMPOUND SHALL BE PERMATEX 51 OR RECTOR SEAL T+2.
- PRIOR TO TRENCHING, CALL UNDERGROUND SERVICE ALERT, 1-800-642-2444 FOR NORTHERN CALIFORNIA.
- IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO APPLY FOR ANY PERMITS REQUIRED.

# IRRIGATION SCHEDULE:

| SYMBOL | MANUFACTURER | MODEL NUMBER   | DESCRIPTION   | DETAIL NUMBER                              | OPERATING PRESSURE | FLOW IN GPM @ 1/2" H.P. @ 1' RADIUS | RADIUS |
|--------|--------------|--|---|--|--------------------|-------------------------------------|--------|
| ● ○ ○  | TORO         | 570Z-4P-COM W/ OT-5 QTR, HLF, FULL NOZZLE                                  | 4" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)                | Mtn. House Std Detail LI-10                | 30                 | .10, 20, 41                         | 5'     |
| ● ○ ○  | TORO         | 570Z-4P-COM W/ OT-8" QTR, HLF, FULL NOZZLE                                 | 4" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)                | Mtn. House Std Detail LI-10                | 30                 | 26, 52, 105                         | 8'     |
| ● ○ ○  | TORO         | 570Z-4P-COM W/ OT-10" QTR, HLF, FULL NOZZLE                                | 4" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)                | Mtn. House Std Detail LI-10                | 30                 | 39, 79, 157                         | 10'    |
| ● ○ ○  | TORO         | 570Z-4P-COM W/ OT-12" QTR, HLF, FULL NOZZLE                                | 4" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)                | Mtn. House Std Detail LI-10                | 30                 | 65, 130, 260                        | 12'    |
| ▽ ▽ ▽  | TORO         | 570Z-12P-COM W/ OT-5" QTR, HLF, FULL NOZZLE                                | 12" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)               | Mtn. House Std Detail LI-10                | 30                 | .10, 20, 41                         | 5'     |
| ▽ ▽ ▽  | TORO         | 570Z-12P-COM W/ OT-8" QTR, HLF, FULL NOZZLE                                | 12" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)               | Mtn. House Std Detail LI-10                | 30                 | .10, 20, 41                         | 5'     |
| ▽ ▽ ▽  | TORO         | 570Z-12P-COM W/ OT-8" QTR, HLF, FULL NOZZLE                                | 12" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)               | Mtn. House Std Detail LI-10                | 30                 | 26, 52, 105                         | 8'     |
| ▽ ▽ ▽  | TORO         | 570Z-12P-COM W/ OT-10" QTR, HLF, FULL NOZZLE                               | 12" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)               | Mtn. House Std Detail LI-10                | 30                 | 39, 79, 157                         | 10'    |
| ▽ ▽ ▽  | TORO         | 570Z-12P-COM W/ OT-15" QTR, HLF, FULL NOZZLE                               | 12" POP-UP SPRAY HEAD (SEE SUPPLEMENTAL NOTE #5 FOR NOZZLE)               | Mtn. House Std Detail LI-10                | 30                 | 65, 130, 260                        | 12'    |
| ●      | TORO         | FB-50-PC   | TWO ASSEMBLIES/TREE   | Detail 10 Sheet LI-1.03                    | 30                 | 0.50                                | 0'     |
| ---    | HUNTER       | PLD-06-18-XX   | DRIP EMITTER TUBING - SURFACE MOUNT 18" O.C. ROWS X 18" O.C. EMIT SPACING | Details 7, 8, & 9 Sheet LI-1.03            |                    |                                     |        |
| ---    | HUNTER       | ECO-MAT (17MM)   | DRIP MAT - SUB SURFACE MOUNT 5" - 6" BELOW FINISH GRADE                   | Details 4, 5, & 6 Sheet LI-1.02            |                    |                                     |        |
| ○      | IRRITROL     | 100-P1   | 1" VALVE ASSEMBLY   | Mtn. House Std Detail LI-11, LI-13 & LI-15 |                    |                                     |        |
| ⊕      | HUNTER       | PCZ-101  | 1" DRIP VALVE ASSEMBLY  | Detail 2, Sheet LI-1.02                    |                    |                                     |        |
| ▽      | AS DETAILED  | AS DETAILED  | DRIP FLUSH VALVE ASSEMBLY   | Detail 9, Sheet LI-1.03                    |                    |                                     |        |
| ■      | FEBCO        | 765-1-1/4"   | PRESSURE VACUUM BREAKER   | Detail 3, Sheet LI-1.02                    |                    |                                     |        |
| ---    | APPROVED     | SCH 40 BE - 1-1/4" SIZE  | PVC PRESSURE SUPPLY LINE W/ SCH 40 FITTINGS 18" COVER OVER PIPE           | Mtn. House Std Detail LI-07 & LI-08        |                    |                                     |        |
| ---    | APPROVED     | 1120 - CL 200  | LATERAL PIPING FOR SPRAY W/ SCH 40 FITTINGS 12" COVER OVER PIPE           | Mtn. House Std Detail LI-07 & LI-08        |                    |                                     |        |
| ---    | APPROVED     | 1120 - CL 200  | SLEEVING - SEE NOTE #4 18" COVER OVER PIPE                                |  |                    |                                     |        |
| ⊞      | TORO         | EVO-4ID W/ REQ'D QTY. OF EMO-4 EXPANSION MODULES W/ EVO-SC SMART CONNECTOR | INTERIOR MOUNTED CONTROLLER FOR HOMEOWNER MODELS                          | Detail 1, Sheet LI-1.02                    |                    |                                     |        |
| ⊞      | WATER METER  | BY OTHERS  |   | Mtn. House Std Detail LI-01                |                    |                                     |        |

## POINT OF CONNECTION TYPICAL

INSTALL COMPRESSION TEE ON HOME WATER SERVICE LINE THEN EXTEND 1-1/4" MAINLINE AS SHOWN TO SERVE FRONT AND REAR YARD VALVES.



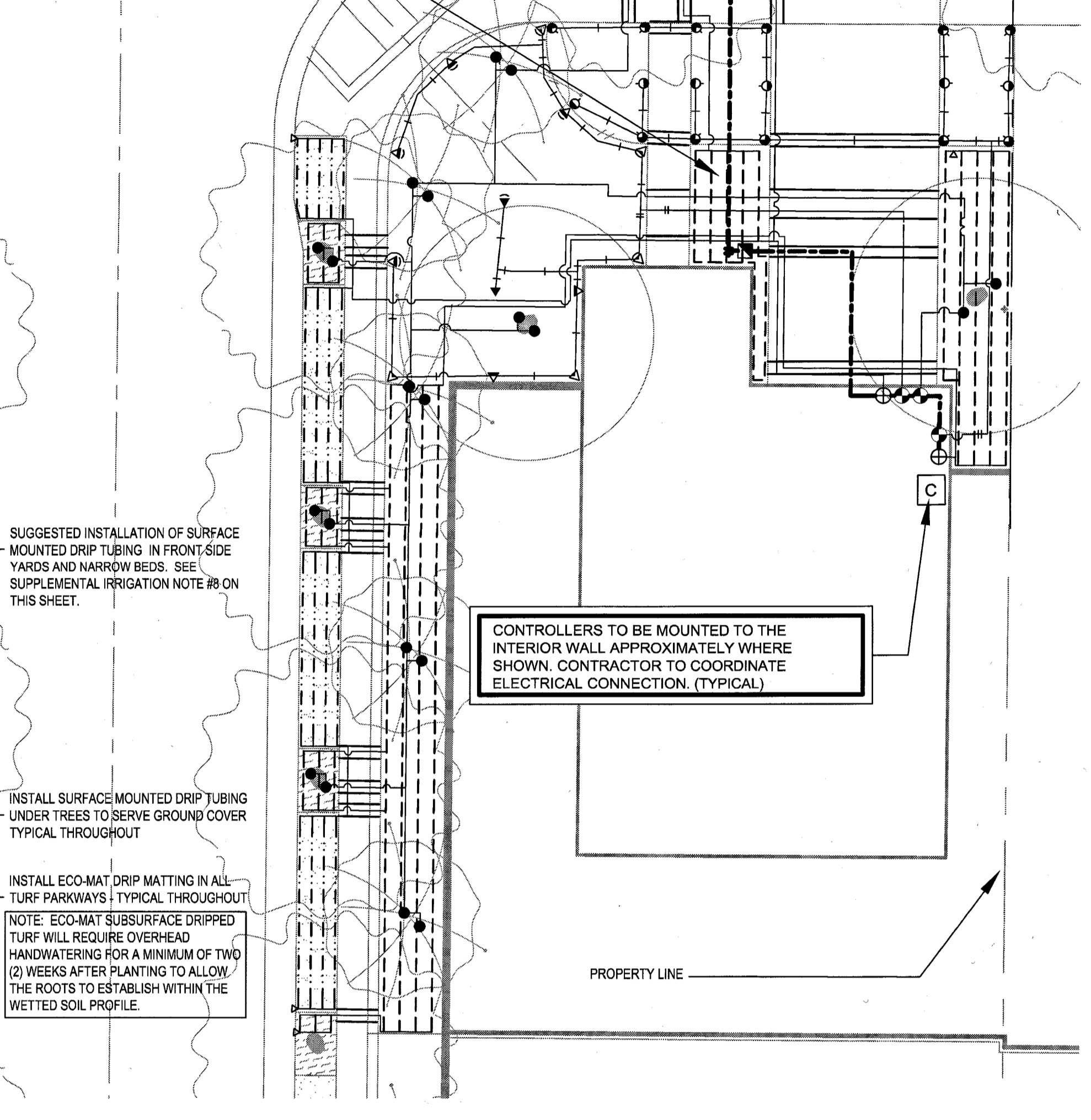
## POINT OF CONNECTION TYPICAL

INSTALL COMPRESSION TEE ON HOME WATER SERVICE LINE THEN EXTEND 1-1/4" MAINLINE AS SHOWN TO SERVE FRONT AND REAR YARD VALVES.



## POINT OF CONNECTION TYPICAL

INSTALL COMPRESSION TEE ON HOME WATER SERVICE LINE THEN EXTEND 1-1/4" MAINLINE AS SHOWN TO SERVE FRONT AND REAR YARD VALVES.



SUGGESTED INSTALLATION OF SURFACE MOUNTED DRIP TUBING IN FRONT-SIDE YARDS AND NARROW BEDS. SEE SUPPLEMENTAL IRRIGATION NOTE #8 ON THIS SHEET.

CONTROLLERS TO BE MOUNTED TO THE INTERIOR WALL APPROXIMATELY WHERE SHOWN. CONTRACTOR TO COORDINATE ELECTRICAL CONNECTION. (TYPICAL)

INSTALL SURFACE MOUNTED DRIP TUBING UNDER TREES TO SERVE GROUND COVER TYPICAL THROUGHOUT

INSTALL ECO-MAT DRIP MATTING IN ALL TURF PARKWAYS - TYPICAL THROUGHOUT  
NOTE: ECO-MAT SUBSURFACE DRIPPED TURF WILL REQUIRE OVERHEAD HANDWATERING FOR A MINIMUM OF TWO (2) WEEKS AFTER PLANTING TO ALLOW THE ROOTS TO ESTABLISH WITHIN THE WETTED SOIL PROFILE.

## PROTOTYPICAL IRRIGATION PLAN

SCALE: 1" = 10'-0"

## NOTE:

IRRIGATION DESIGN SHOWN WITHIN THE SINGLE FAMILY RESIDENTIAL LOT IS FOR REFERENCE ONLY. ACTUAL SYSTEM CONFIGURATION WILL VARY.

## IRRIGATION NOTES - SUPPLEMENTAL:

- ALL BASE INFORMATION HAS BEEN TAKEN FROM DRAWINGS PROVIDED BY THE COLLABORATIVE WEST.
- IRRIGATION PIPING SHOWN IN PAVING IS FOR GRAPHIC CLARITY ONLY. INSTALL PIPING IN ADJACENT PLANTING AREAS OR UNDER PAVING IN SLEEVING.
- SYSTEM HAS BEEN DESIGNED BASED ON THE STATIC WATER PRESSURE OF 55 PSI AT THE POINT OF CONNECTION.
- INSTALL IRRIGATION SLEEVES UNDER ALL SIDEWALKS AND DRIVEWAYS PER THE FOLLOWING SCHEDULE:

| PIPE SIZE OR WIRE QUANTITY  | REQUIRED SLEEVES(S) |
|-----------------------------|---------------------|
| 3/4" LATERAL                | 1-2" SDR 35 PVC     |
| 1" LATERAL                  | 1-2" SDR 35 PVC     |
| 1 1/4" LATERAL              | 1-4" SDR 35 PVC     |
| 1 1/2" LATERAL              | 1-4" SDR 35 PVC     |
| 1" PRESSURE SUPPLY LINE     | 1-2" SDR 35 PVC     |
| 1 1/4" PRESSURE SUPPLY LINE | 1-3" SDR 35 PVC     |
| 1-20 CONTROL WIRES          | 1-2" SDR 35 PVC     |
- INSTALL IRRIGATION SLEEVES WITH 18" OF COVERAGE, AND EXTEND 12" BEYOND EDGES OF HARDSCAPE. MULTIPLE PIPES/WIRING CROSSING AT THE SAME POINT SHALL HAVE INDIVIDUAL SLEEVES.

LATERAL PIPE SIZING IS INDICATED BY THE FOLLOWING SYMBOLS:

3/4" - | 0-6 GPM    1-1/4" - || 13-20 GPM  
1" - || 7-12 GPM    UN-MARKED = 3/4"
- INSTALL TORO 'O' PRECISION SPRAY NOZZLES ON ALL POP-UP SPRAY HEADS AS INDICATED IN THE SCHEDULE AND AS SHOWN BELOW:

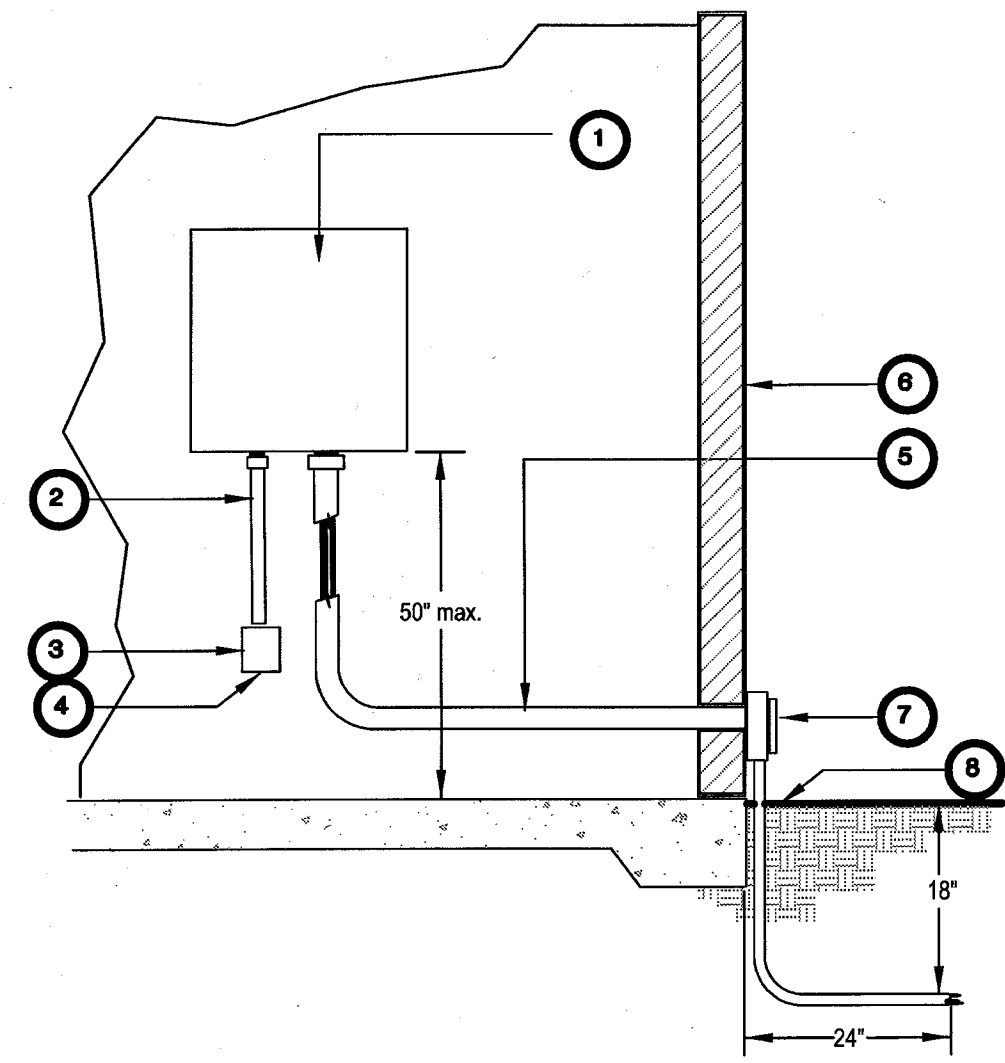
| DISTANCE: | NOZZLE:       |
|-----------|---------------|
| 3'-5'     | O-T-5-SERIES  |
| 6'-8'     | O-T-8-SERIES  |
| 9'-10'    | O-T-10-SERIES |
| 11'       | O-T-12-SERIES |
| 12'-14'   | O-T-15-SERIES |
- REFER TO APPLICABLE MHCSD STANDARD DETAILS, NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- HOME OWNER DRIP SYSTEM TRAINING PROGRAM:
  - THE DEVELOPER SHALL ARRANGE FOR HUNTER IRRIGATION TO PROVIDE DRIP AND SUB-SURFACE TRAINING AND FAMILIARIZATION SESSIONS FOR THE HOMEOWNERS DESCRIBING THE FUNCTION, PROPER MAINTENANCE AND PROGRAMMING OF THESE DRIP SYSTEMS. TRAINING SESSIONS SHALL BE OFFERED AND/OR OCCUR EACH MONTH.
  - SOIL AMENDMENT REQUIREMENTS FOR PARKWAYS RECEIVING ECO-MAT DRIP MATTING:
    - ALL SOIL WITHIN PARKWAY SHALL BE REMOVED TO THE DEPTH OF THE ECO-MAT (5"-6").
    - REMOVED SOIL SHALL BE THOROUGHLY MIXED TO CREATE AN EVEN SOIL PROFILE WITH THE AMENDMENTS RECOMMENDED BY A SOILS LAB AND DESCRIBED IN THE LANDSCAPE ARCHITECT'S SPECIFICATIONS. INSURE ANY ROCKS OR DEBRIS LARGER THAN 2" AND ANY SHARP EDGED ROCKS OR DEBRIS ARE REMOVED.
    - BEFORE INSTALLING ECO-MAT, RAKE IN TO THE SUB-SOIL, TO A DEPTH OF 1", THE AMENDMENTS DESCRIBED IN THE LANDSCAPE ARCHITECT'S SPECIFICATIONS AND SOIL LAB RECOMMENDATIONS.
    - INSTALL ECO-MAT ON SUBSOIL AS DETAILED.
    - INSTALL AMENDED, (PREVIOUSLY REMOVED), SOIL OVER ECO-MAT TO REQUIRED GRADE LEVEL, COMPACTING TO 80-85% IN 3" LIFTS. MEET REQUIRED SLOPE GRADES TO DRAIN. DO NOT OPERATE COMPACTOR MACHINERY DIRECTLY ON ECO-MAT.
    - REVIEW AND FOLLOW MANUFACTURERS INSTALLATIONS SPECIFICATIONS.
- SURFACE MOUNTED DRIP SYSTEM FOR SHRUB PLANTINGS:
  - THE PROTOTYPICAL IRRIGATION PLANS SHOW HEREON DESCRIBE SURFACE MOUNTED DRIP SYSTEMS FOR SOME OF THE SHRUB PLANTINGS OCCURRING BETWEEN THE HOUSE AND THE SIDEWALK. THIS HAS BEEN SHOWN TO PROVIDE A MINIMUM OF 0.5 GPM OF FLOW AT THE CONTROL VALVES TO ALLOW PROPER OPERATION.
  - THE SURFACE MOUNTED DRIP IRRIGATION SHOWN UNDER THE TREES IN THE PARKWAY IS REQUIRED, BUT WILL NOT, IN MOST CASES, PROVIDE THE MINIMUM FLOW REQUIREMENT FOR THE VALVES. IN THESE INSTANCES, ADDITIONAL DRIP IRRIGATED AREA WILL BE REQUIRED. REFER TO NOTE 'C' BELOW AND THE IRRIGATION PLAN EXAMPLES ON THIS SHEET.
  - THE SURFACE MOUNTED DRIP IRRIGATION SHOWN OUTSIDE OF THE PARKWAY IS NOT NECESSARILY REQUIRED, HOWEVER AN ADDITIONAL COVERAGE QUANTITY OF AREA IRRIGATED BY DRIP IS NECESSARY TO ACHIEVE THE MINIMUM FLOWS. THE AREAS SHOWN ON THESE PLANS ARE SUGGESTIONS TO ACHIEVE THAT COVERAGE. THE CONTRACTOR SHALL INSTALL AT LEAST THE MINIMUM AMOUNT OF AREA IRRIGATED BY DRIP TO CREATE THE MINIMUM FLOW NECESSARY TO OPERATE THE DRIP VALVE.

Aqua Commercial Irrigation  
810 Los Vallecitos Blvd., Suite 204  
San Marcos, California 92069  
Ph: (760)750-1900 Fax: (760)750-1999

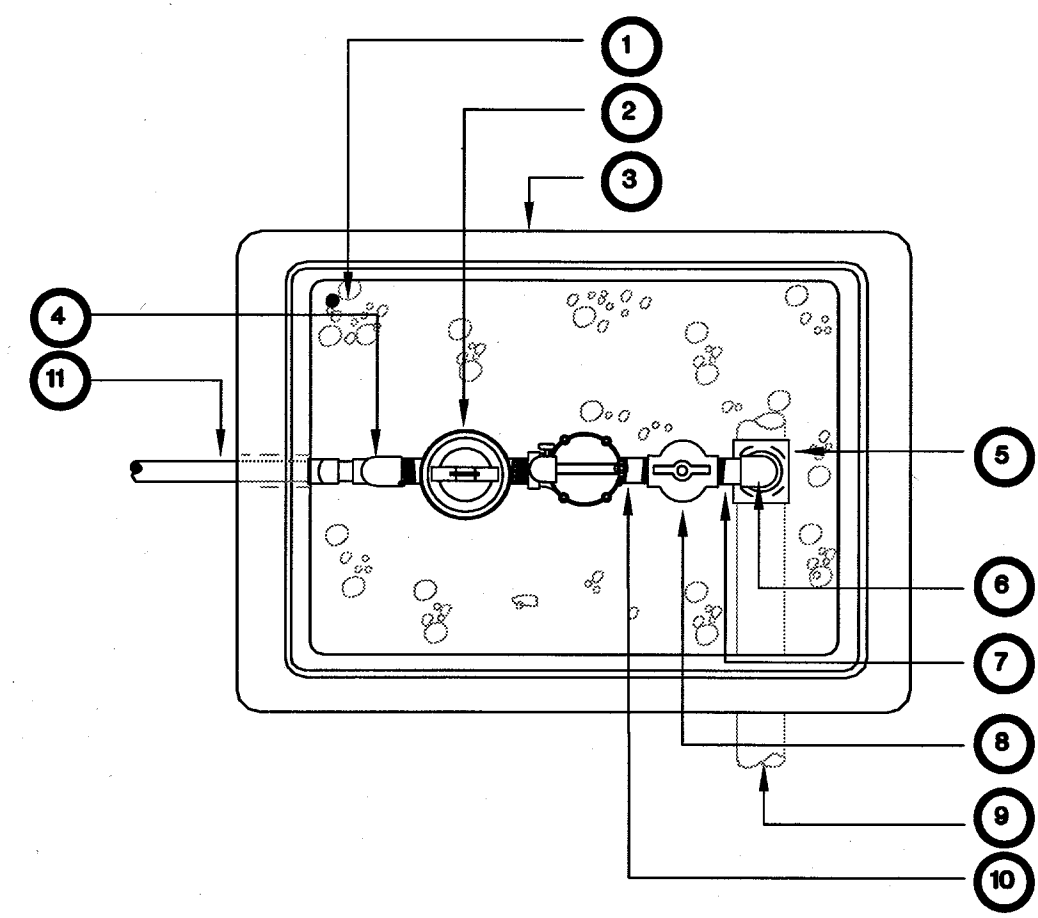


REVISIONS  
 No. Description Date App.  
 1. JERRY CHAN REVISED 7-25-14  
 Approved By: *Nadejda Shergin*  
 PROJECT MANAGER  
 RCE 4787 EXP 12-31-15  
 PUBLIC WORKS DIRECTOR  
 Title: \_\_\_\_\_ Date: 7-30-14  
 DATE: 05/19/14  
 DRAWN BY: TSR  
 PROJ. ENGR: TSR  
 PROJ. MGR: TSR  
 REGISTERED LANDSCAPE ARCHITECT  
 Nadejda Shergin  
 Exp. 12/28/15  
 STATE OF CALIFORNIA  
 The Collaborative West  
 Landscape Architecture  
 Urban Design  
 Planning  
 Habitat Restoration  
 100 Avenida Miramar  
 San Clemente  
 California 92672  
 Phone 949.366.6024  
 Fax 949.366.6026  
 www.thecollaborativewest.com  
 JOB: SHN-03- 'HFM DG'  
 MOUNTAIN HOUSE  
 COMMUNITY SERVICES DISTRICT  
 NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES  
 IRRIGATION PLAN,  
 LEGEND AND NOTES  
 Comp. File No.  
 Plan File No. 0418  
 SHEET: 9 OF: 11  
 LI-1.01

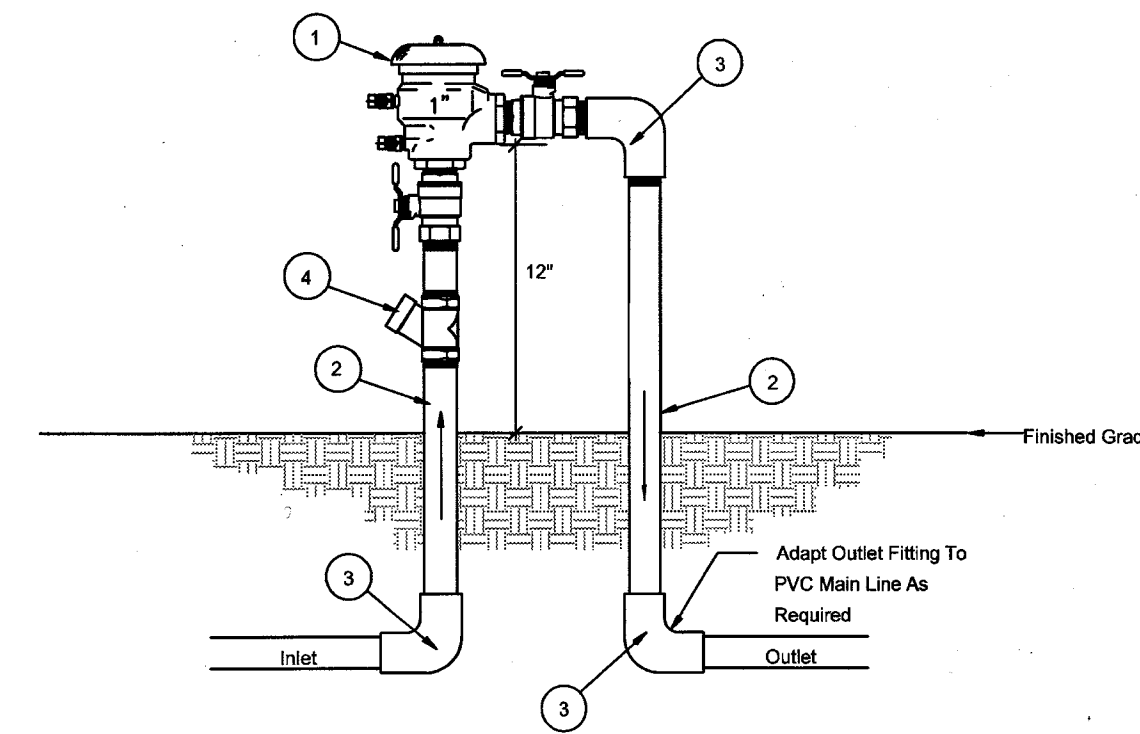
Z:\CLIENTS\THE COLLABORATIVE WEST\MountainHouse-C:\interior-homeowner\LI-101-SHN03-DG.dwg, May 19, 2014, 4:49 pm, Scott



- 1 IRRIGATION CONTROLLER
- 2 120 VOLT SERVICE IN RIDGID STEEL CONDUIT. INSTALL PER ELECTRICAL CODE.
- 3 120 VOLT LOCKABLE ON/OFF SWITCH PROVIDED UNDER IRRIGATION CONTRACT.
- 4 120 VOLT ELECTRICAL SERVICE TO CONTROLLER LOCATION PROVIDED BY ELECTRICAL CONTRACTOR.
- 5 SCH 40 PVC GREY ELECTRICAL CONDUIT FOR LOW VOLTAGE WIRE PROVIDED BY ELECTRICAL CONTRACTOR.
- 6 EXTERIOR GARAGE WALL
- 7 ELECTRICAL PULL BOX MOUNTED TO GARAGE WALL PER ELECTRICAL CODE
- 8 FINISH GRADE



- NOTES:
- REFER TO MOUNTAIN HOUSE STANDARD DETAILS LI-11, LI-13 AND LI-15 FOR ADDITIONAL INSTALLATION REQUIREMENTS.
  - DRIP SYSTEMS TO USE WYE STRAINER AND PRESSURE REGULATOR AS INDICATED.
  - SUPPORT VALVE BOX ASSEMBLY ON BRICKS, ONE IN EACH CORNER, WIRE VALVE AND SET TOP OF VALVE BOX AT FINISH GRADE AS DESCRIBED IN MOUNTAIN HOUSE STD. DETAIL LI-11
- 1 PEA GRAVEL SUMP - 4" DEEP BELOW VALVE. (NO SOIL IN VALVE BOX).
  - 2 HUNTER PCZ-101 DRIP CONTROL ZONE KIT. INCLUDES VALVE, FILTER AND PRESSURE REGULATOR
  - 3 RECTANGULAR GREEN PLASTIC VALVE BOX W/ BOLT DOWN LID- ONE VALVE PER BOX- NO EXCEPTIONS. INSTALL BOX AS SHOWN IN THE BOX INSTALLATION DETAIL MHCSO LI-15. TOP DIMENSION 14" X 19".
  - 4 LOWER LATERAL PIPING W/ TWO SCH 40 45° ELBOWS TO SPECIFIED DEPTH AND REDUCE TO 1/2" W/ 3/4" X 1" REDUCER SCH 40 REDUCER
  - 5 UPC APPROVED SCH 40 PVC TEE. LINE SIZE X VALVE SIZE W/ VALVE SIZE PVC LENGTH AS REQ'D.
  - 6 SLIP SCH 40 PVC 90° W/ SCH 40 RISER - LENGTH AS REQ'D.
  - 7 1" X 3" SCH 80 NIPPLE T.O.E.
  - 8 1" SPEARS PVC SCH. 80 BALL VALVE
  - 9 IRRIGATION PVC MAINLINE
  - 10 1" X 3" TBE SCH 80 NIPPLE
  - 11 3/4" PVC SCH 40 LATERAL - LENGTH AS REQ'D. TO DRIP SYSTEMS.



- LIST OF MATERIALS
- 1 Febco 765 pressure vacuum breaker assembly, ball valves included.
  - 2 Pipe spool, type 1" copper, 3/4" thru 2 1/2".
  - 3 90° ell, copper, 3/4" thru 2 1/2".
  - 4 Watts series 777 "Y" strainer

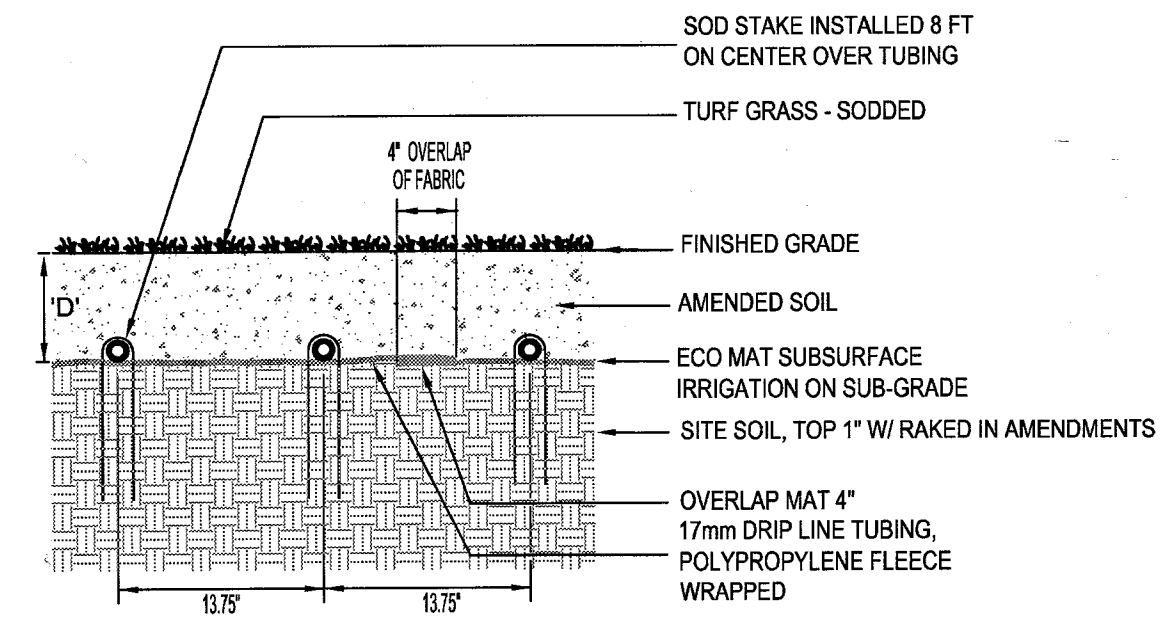
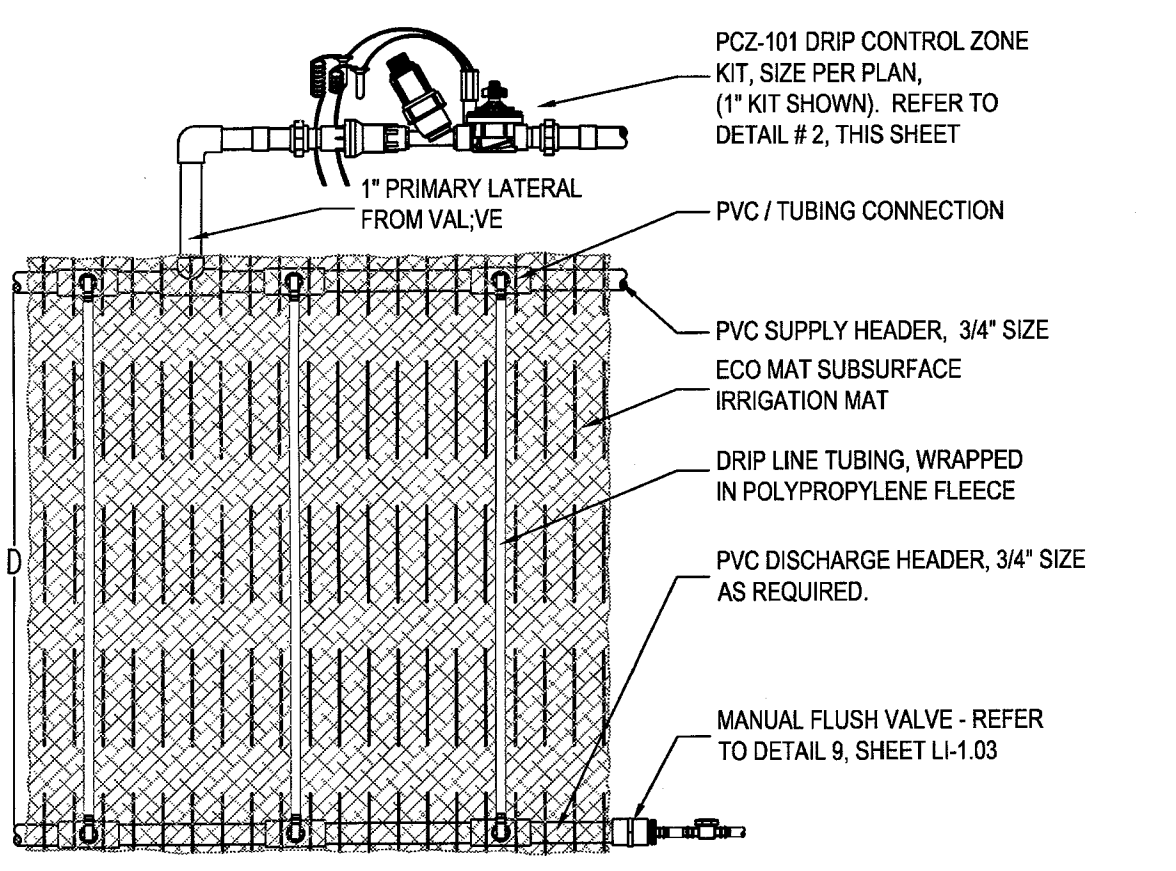
NOTE: PRESSURE VACUUM BREAKER TO BE INSTALLED WHERE INDICATED ON DRAWINGS IN CLOSEST SHRUB PLANTING BED AND ADJACENT TO BUILDING. CONNECT INTO DOMESTIC SERVICE LINE SERVING HOUSE AT THE APPROXIMATE LOCATING INDICATED AND EXTEND TO PVB UNIT.

- GENERAL NOTES
- Backflow device shall be certified by an approved and certified backflow preventer tester.
  - Backflow preventers must be tested by a certified tester before final approval is issued.
  - Copper fittings shall be connected with lead free solder joints.
  - Finished grade underneath the backflow preventer shall be at 95% compaction.
  - All nipples to be copper or brass.

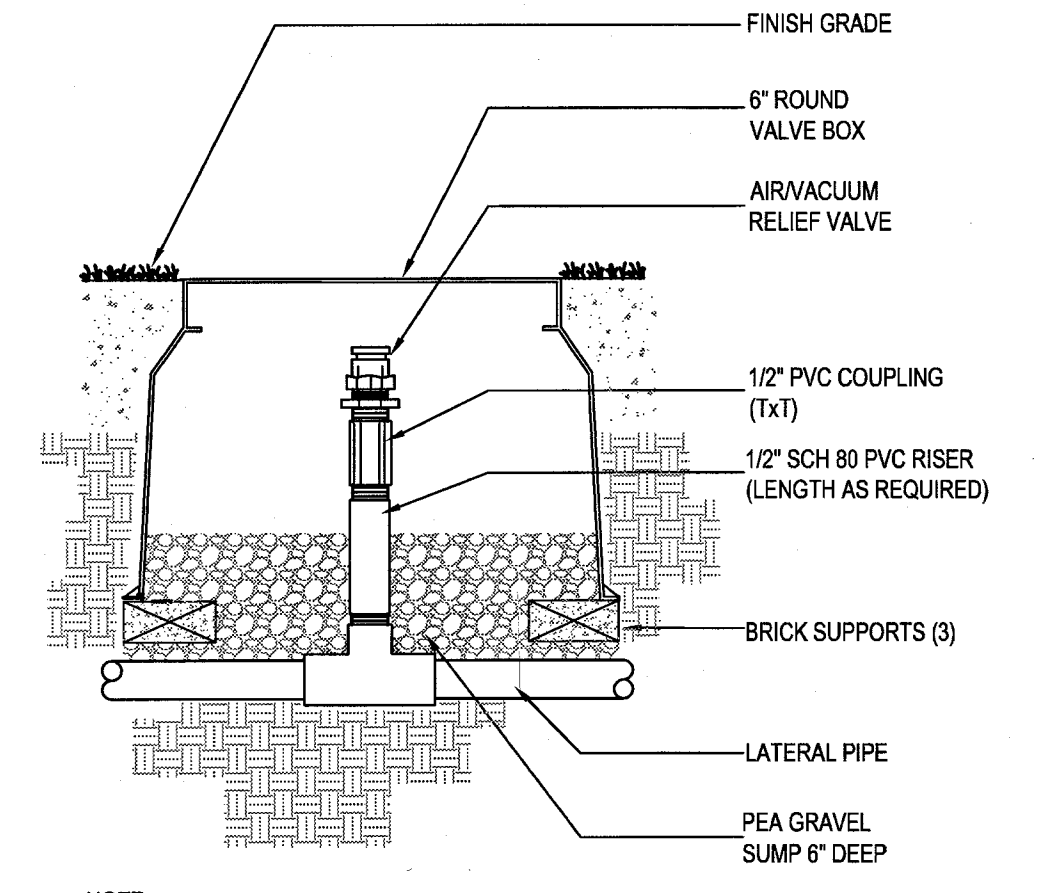
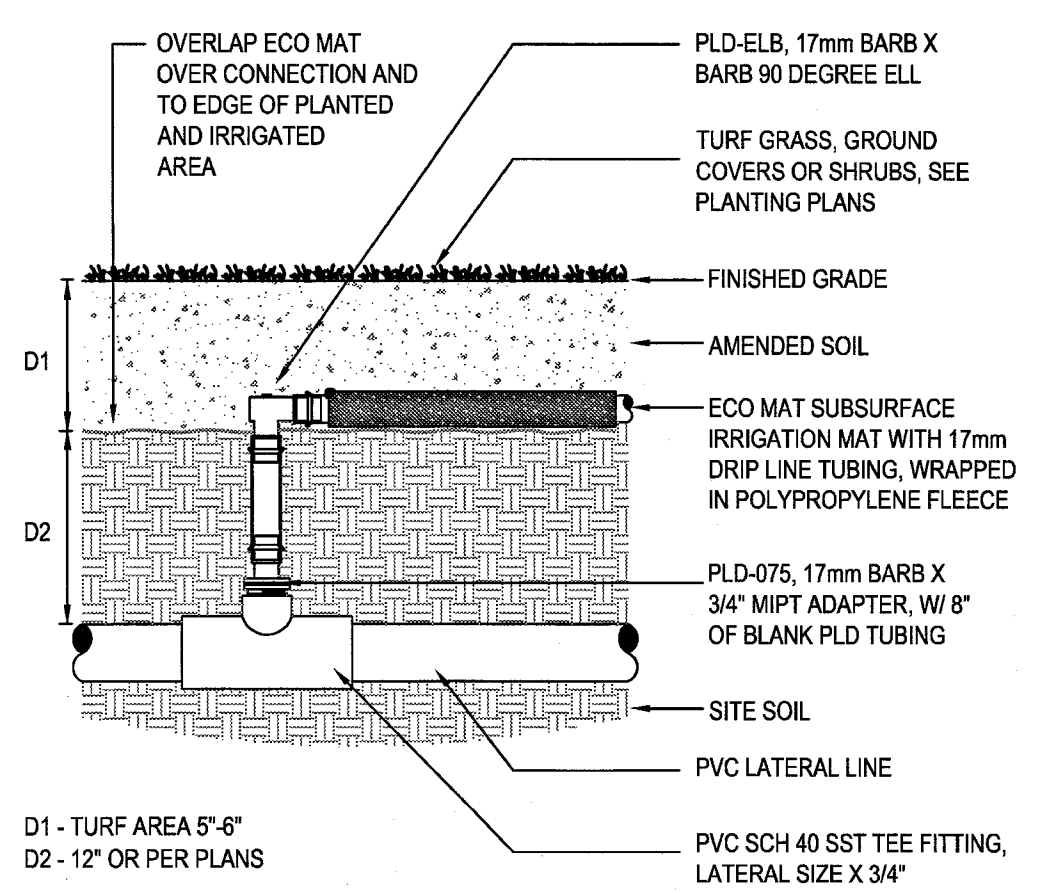
**1 INTERIOR WALL MOUNTED CONTROLLER** NTS

**2 DRIP VALVE ASSEMBLY** NTS

**3 PRESSURE VACUUM BREAKER** NTS



RECOMMENDED ECO MAT INSTALLATION DEPTH (D):  
TURF AREAS: 5" - 6"



NOTE: LOCATION NOT SHOWN ON PLAN. INSTALL AT HIGHEST POINT IN SUBSURFACE ECO-MAT SYSTEM.

**4 ECO-MAT DRIP IRRIGATION MATTING - PLAN/SECTION FOR TURF PARKWAY PLANTINGS** NTS

**5 ECO-MAT - TUBING CONNECTION FOR TURF PARKWAY PLANTINGS** NTS

**5 ECO-MAT - AIR RELIEF FOR TURF PARKWAY PLANTINGS** NTS

CLIENTS THE COLLABORATIVE WEST MountainHouse-C Interior-Houseowner LI-101-SH03-DG.dwg Jul 24, 2014 - 8:25 am Scott

JERRY CHAN SALES 7-25/14

| REVISIONS | No. | Descriptions | Date | App. |
|-----------|-----|--------------|------|------|
|           |     |              |      |      |
|           |     |              |      |      |
|           |     |              |      |      |
|           |     |              |      |      |

MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT

Approved By: *Nader Sharaf*  
NADER B. SHARAF  
RCE-47837 EXP 12-31-15  
PUBLIC WORKS DIRECTOR

Title: \_\_\_\_\_  
Date: **7-30-14**

DATE: 07/24/2014  
DRAWN BY: TSR  
PROJ ENGR: \_\_\_\_\_  
PROJ MGR: \_\_\_\_\_

REGISTERED LANDSCAPE ARCHITECT  
**AVILA**  
STATE OF CALIFORNIA

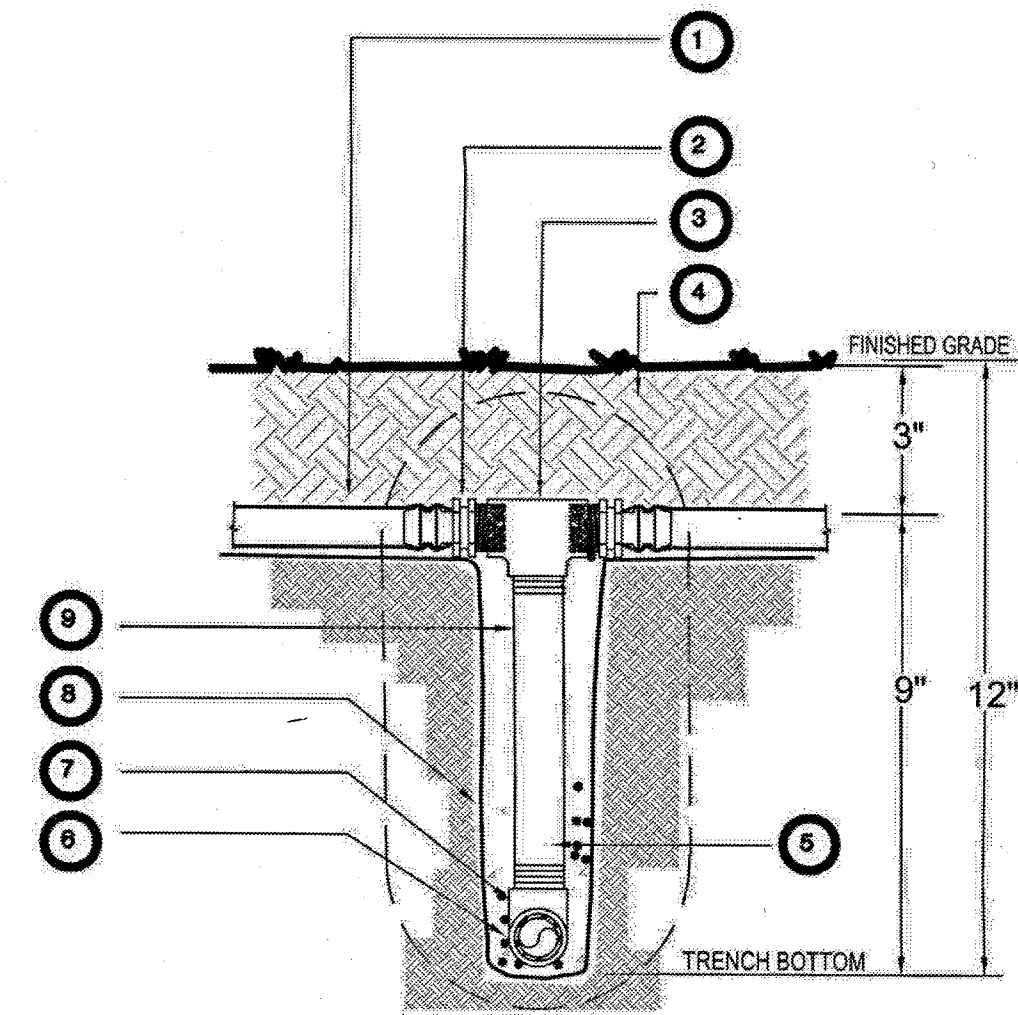
The Collaborative West  
Landscape Architecture  
Urban Design  
Planning  
Habitat Restoration

100 Avenida Miramar  
San Clemente  
California 92672  
Phone 949.366.6624  
Fax 949.366.6626  
www.thecollaborativewest.com

JOB: SHN-03-'HFM DG'

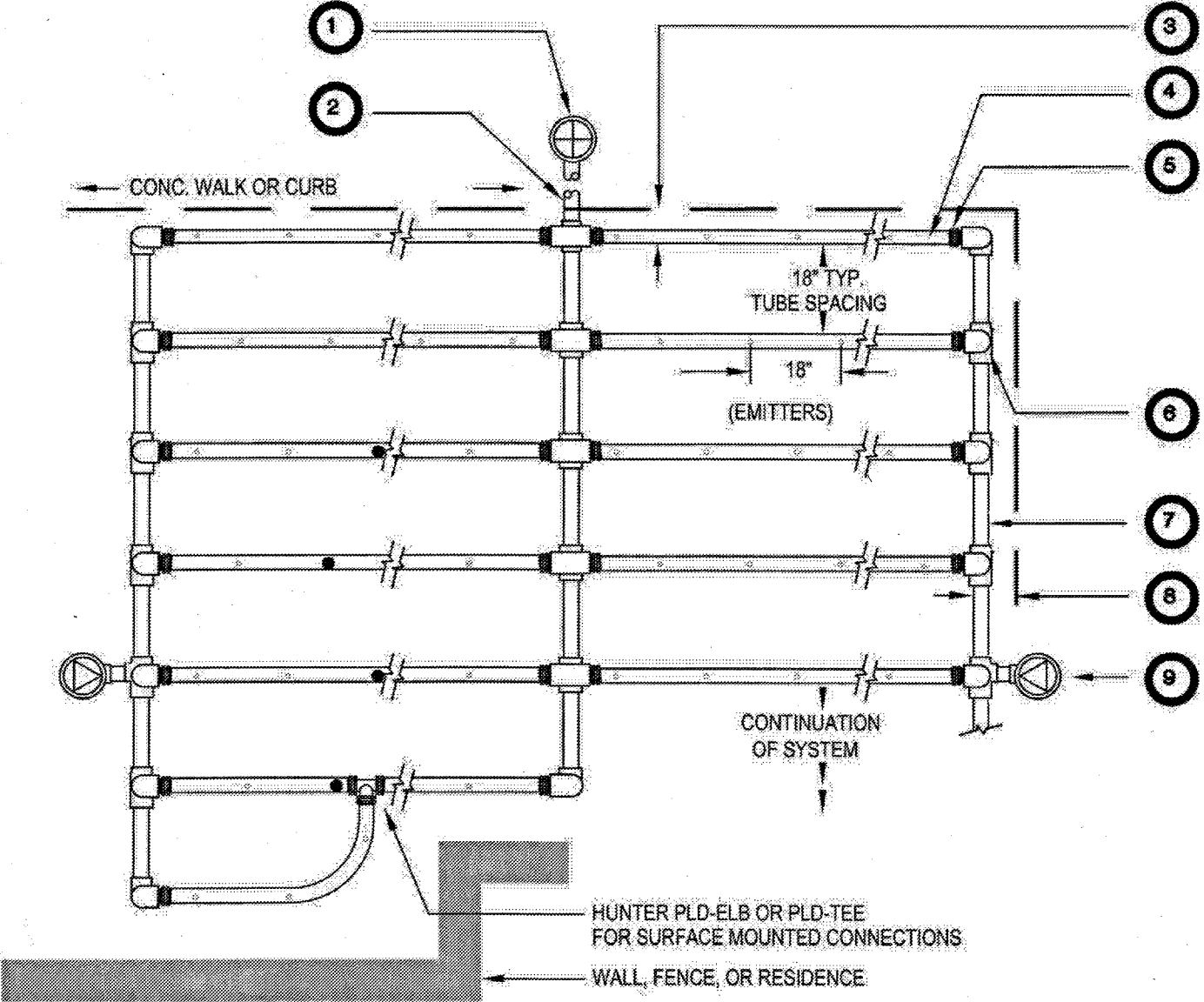
MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT  
NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES  
IRRIGATION DETAILS

Aqua Commercial Irrigation  
810 Los Vallecitos Blvd., Suite 204  
San Marcos, California 92676  
Ph: (760)750-1900 Fax: (760)750-1999



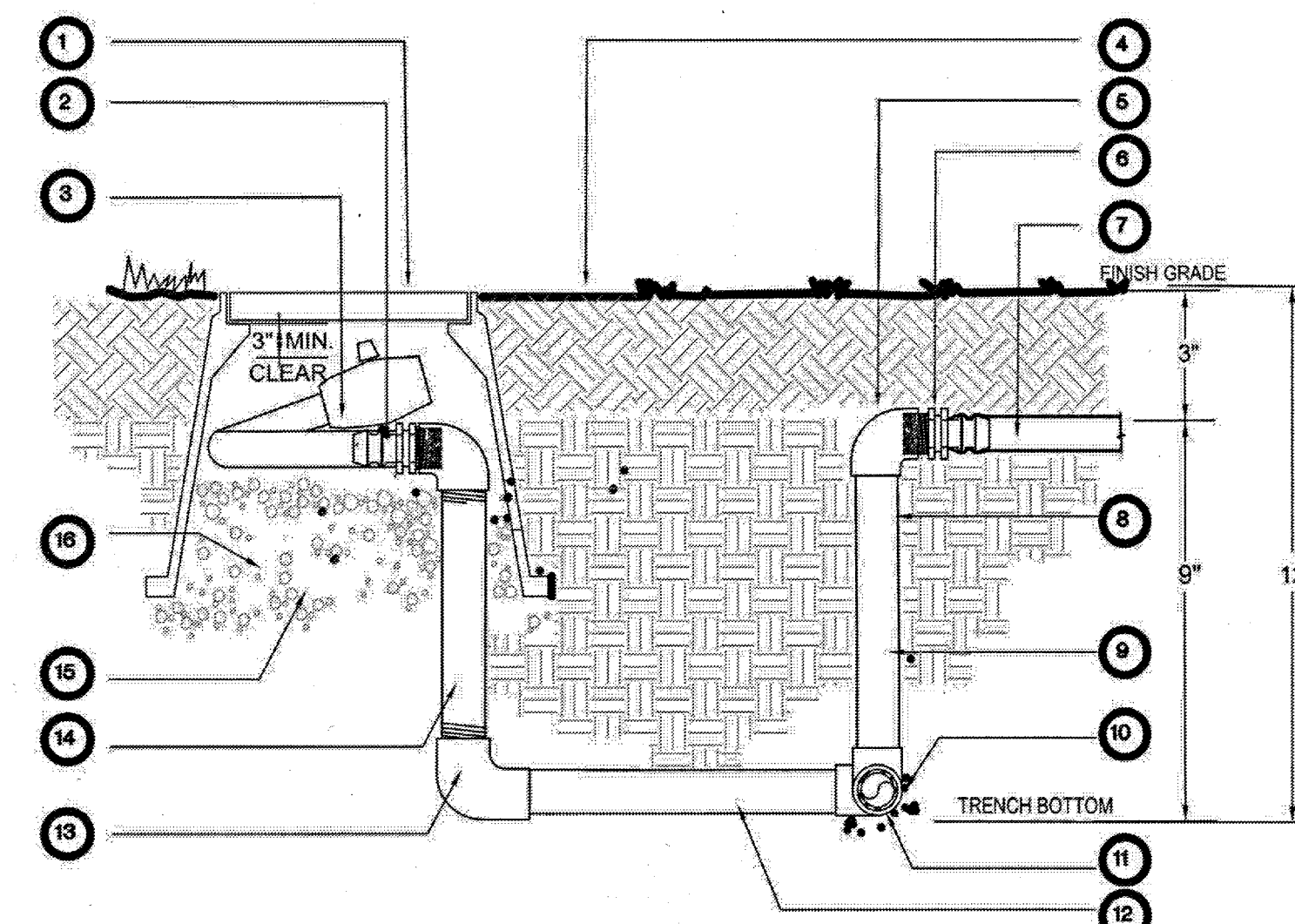
- 1 HUNTER PLD-06-18-XX IN-LINE EMITTER TUBING - EMITTERS AT 18" INTERVALS INSTALL AT FINISH GRADE BELOW MULCH
- 2 HUNTER PLD-075 ADAPTER FITTING
- 3 1/2" SCH 40 FPT TEE (TYPICAL)
- 4 PLANTING BED MULCH
- 5 MID-LAYOUT SUPPLY HEADER & RISERS AS REQ'D, 18" O.C.
- 6 TEE OR ELL 3/4" PVC SCH 40 SUPPLY OR EXHAUST HEADER LATERAL PIPING.
- 7 3/4" X 1/2" X 3/4", S x S x T PVC SCH 40
- 8 TRENCH FOR SUPPLY & EXHAUST HEADERS
- 9 1/2" PVC SCH 80 SUPPLY RISER

**7 DRIP INTAKE HEADER MANIFOLD**  
NTS



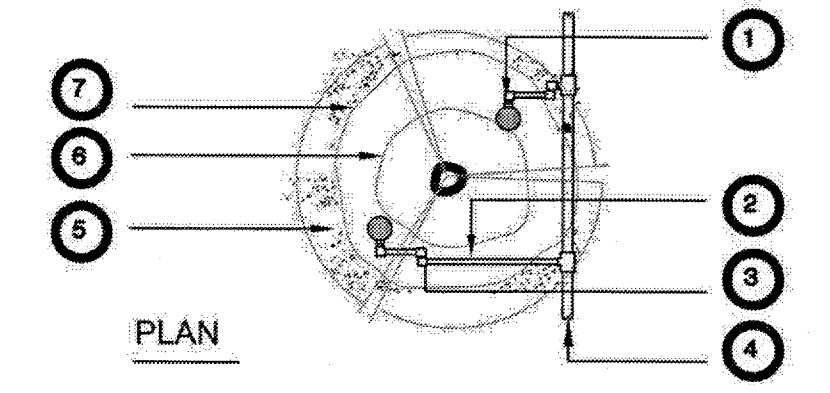
- NOTE: TUBING SHALL BE STAPLED TO THE SOIL SURFACE 24" O.C. ALONG EACH TUBING LENGTH WITH 6" LONG SOIL STAPLES OR 6" LONG JUTTE MATT STAKES.
- 1 1" VALVE ASSEMBLY (SEE DETAIL #2, LI-1.02)
  - 2 3/4" PVC SCH 40 SUPPLY HEADER LATERAL PIPE
  - 3 6" FROM CURB OR WALK
  - 4 HUNTER PLD-06-18-XX IN-LINE EMITTER TUBING - EMITTERS AT 18" INTERVALS INSTALL AT FINISH GRADE BELOW MULCH
  - 5 HUNTER PLD-075 ADAPTER FITTING
  - 6 PVC EXHAUST HEADER ASSEMBLY & FITTINGS
  - 7 3/4" END PIPE HEADER LATERAL PIPE
  - 8 6" FROM CURB, WALL OR WALK TYP. ALL SIDES
  - 9 LINE FLUSHING VALVE (SEE DETAIL #9, THIS SHEET) CENTER ON HEADER PIPING. MAY BE INSTALLED INWARDLY WITHIN TUBING FIELD

**8 IN-LINE EMITTER TUBING IRRIGATION LAYOUT SHRUB DRIP CONDITION**  
NTS



- 1 10" ROUND VALVE BOX
- 2 1/2" FPT X BARB ADAPTER FITTING TO ACCEPT EXCALIBUR TUBING
- 3 1/2" X 18" COIL OF EXCALIBUR (FLEX PVC) TUBING WITH 1/2" BALL VALVE - SEE BELOW.
- 4 PLANTING BED MULCH IN SHRUB BEDS
- 5 INSTALL AT THE QUANTITIES DESCRIBED ON THE PLAN: 1/2" S x T SCH 40 ELL (TYPICAL)
- 6 HUNTER PLD-075 ADAPTER FITTING
- 7 HUNTER PLD-06-18-XX IN-LINE EMITTER TUBING -
- 8 1/2" PVC SCH 80 EXHAUST RISER
- 9 EXHAUST HEADER TERMINATION OF SYSTEMS & RISERS AS REQ'D.
- 10 1/2" PVC SCH 40 SUPPLY OR EXHAUST HEADER
- 11 1/2" SCH 40 TEE TO FLUSH VALVE ASSEMBLY
- 12 1/2" SCH 40 PVC PIPING, LENGTH AS REQ'D.
- 13 1/2" SXT SCH 40 ELL
- 14 1/2" SXT SCH 80 RISER - LENGTH AS REQ'D.
- 15 4" DEEP PEA GRAVEL SUMP BELOW BALL VALVE.
- 16 4" DEPTH OF PEA GRAVEL
- 17 18"x1/2" I.D. EXCALIBUR IRRIGATION HOSE
- 18 INSERT X MIP 90 ELL
- 19 SCH 40 PVC FROM EXHAUST MANIFOLD
- 20 1/2" SLIP X SLIP SCH 40 BALL VALVE

**9 DRIP EXHAUST HEADER MANIFOLD**  
NTS



- 1 DEEP ROOT WATERING ASSEMBLY AS DESCRIBED BELOW
- 2 1/2" SCH 40 PVC LATERAL PIPE.
- 3 1/2" SCH 80 S x T ELL FITTING
- 4 SCH 40 LATERAL PIPING
- 5 PLANTING BACKFILL
- 6 ROOTBALL - SET DEEP ROOT WATERING ASSEMBLY ADJACENT TO ROOTBALL. ALIGN HOLES TO FACE ROOTBALL
- 7 PLANTING PIT
- 8 1/2" SCH 80 CLOSE NIPPLE
- 9 1/2" X 4" SCH 80 NIPPLE
- 10 4" x 3' SDR PERFORATED DRAIN PIPE W/ FILTER FABRIC SOCK COVERING. ALIGN HOLES TO FACE ROOTBALL. DRILL A 2" DIA. HOLE FOR SWING JOINT PIPING ACCESS.
- 11 LATERAL; TEE OR ELL/PIPE SCH. 40 PVC.
- 12 12" SCH 80 NIPPLE
- 13 CHECK VALVE - HUNTER HC-50F-50F
- 14 0.5 GPM BUBBLER - TORO FB-50-PC
- 15 FINISH SOIL GRADE
- 16 NDS 4" ROUND CAP - SAND COLOR
- 17 TWO (2) SCH 80 PVC STREET ELLS
- 18 ONE (1) SCH 80 PVC STREET ELL
- 19 FILL DRAIN PIPE WITH 3/4" CRUSHED DRAIN ROCK

**10 DEEP WATERING BUBBLER ASSEMBLY AT TREES**  
NTS

ERRY CHAN/AN/ES 7-25/14

| REVISIONS |      |
|-----------|------|
| No.       | Date |
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MOUNTAIN HOUSE  
COMMUNITY SERVICES DISTRICT  
Approved By: *Nader Sharaf*  
NADER B. SHARAF  
PCE #1937 EXP 11-03-14  
PUBLIC WORKS DIRECTOR  
Title: \_\_\_\_\_ Date: 7-30-14

DATE: \_\_\_\_\_ DRAWN BY: RLM PROJ. ENGR: \_\_\_\_\_ PROJ. MGR: TSK

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NEIGHBORHOOD 'C' IN-TRACT LANDSCAPE GUIDELINES  
IRRIGATION DETAILS