

Engineering Design & Construction Standards



STANDARD PLANS

(PARKS & STREETSCAPE)

Development and Engineering Services Department Resolution No. 2020-031 ◆ FEBRUARY 18, 2020

INDEX ENGINEERING DESIGN STANDARDS

Resolution 2020-031

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LANDSCAPE DESIGN CHECKLIST
PROJECT NAME:
PROJECT ADDRESS:
SUBMITTAL REQUIREMENTS A. Landscape Document Package 1. Project information including: a.) Project Applicant b.) Project Address c.) Project Owner d.) Total Landscape Area (square feet) (Landscape Area is only the irrigated space) e.) Project water type f.) Identify the local retail water purveyor
B. Landscape Improvement Plans (Electronic Submittal)
C. Site Improvement Plans / Grading (Electronic Submittal) 1. Plans on 24"X36" with 1" margin on City's title block, scale 1:20 or 1:10 (existing and new sewer lines). 2. Copy of the preliminary soils report. 3. Copy of the on-site and off-site drainage study. 4. Copies of any other calculations. 5. Print of boundary survey or map of property, or an acceptable legal description if a map is not available. 6. Non-interference letter from public utility companies, with any existing facilities/easements. 7. Show, identify and place in background any and all existing and proposed utilities including Joint Trench. 8. Show and identify any and all sight vision clearance areas 9. Provide an 8" wide concrete strip per D 7.11 adjacent to the curb: a) In a parking lot planter island for access to a vehicle b) In the median for maintenance access

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	anting and Irrigation Submittal (Electronic Submittal)
1. 2.	Plans on 24"X36" with 1" margin on city's title block, scale 1:20 or 1:10 (existing and new sewer lines).
∠.	Location of all proposed plant materials with legend including botanical names, common names, quantity, size, spacing, and water use per WUCOLS (Water Use Classification of Landscape Species).
3	Minimum turf width to be 10'. Maximum slope for turf area maintained by the city to be 6:1
3. 4.	Where applicable, specification for stockpiling and reapplying site topsoil and/or imported topsoil. All imported
	top soil is subject to soils testing.
5.	Include city's standards notes, D 7.0, D 8.0, and city's details on the plans.
6.	Maintain 20' distance from trees to street lights, 8' distance from trees to sewer lines, and 10' distance from
	trees to storm drain lines. Hardscape and paving within 8' of trees will need root barrier protection. Maintain a distance of 6' from shrubs to fire hydrants.
7.	Show, identify and place in background any and all existing and proposed utilities including Joint Trench.
8. 9.	Show and identify any an all sight vision clearance areas.
	Show layout and note sizes of irrigation system with service line, water meter backflow prevention device, flow meter.
10.	Show layout and location of automatic controller and the secondary electrical power source for controller. Irrigation controllers must be metered and within a metered pedestal.
11.	Show layout of other irrigation equipment such as ball and gate valves, main and lateral lines with pipe sizes,
40	valves, sprinklers, bubbler and quick couplers. Drip irrigation is not allowed within City Right-of-Way.
12.	Indicate static water and design pressure (psi) and design flow (gpm). Water pressure can be obtained from Public Works (209) 831-4420
13.	Preliminary soils report from Soils Lab (on plans)
14.	Water Efficient Landscape Worksheet (on plans). (Annual ETo for Tracy is 48.5)
15.	Irrigation controller schedules (establishment & long term) (on plans).
	Certificate of Installation, revised Irrigation Schedules, Landscape and Maintenance Schedules, Soils Management Report (if differs from plans)". An irrigation Audit Report is required, and if feasible, place on as-built plans. Otherwise, supply two bound hard copies.

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CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project

PART 1: PROJECT INFORMATION SHEET

Date			
Project Name			
Name of Project Applicant		Telephone No.	
		Fax No.	
Title		Email Address	
Company		Street Address	
City		State	Zip Code
		Otato	Zip Godo
Project Address and Loca	ation:		
Street Address		Parcel, Tract or Lo	ot Number (If available)
City		Lattitude/Longitude	e (optional)
State	Zip Code		
Property Owner or their d	esignee:		
Name		Telephone No.	
		Fax No.	
Title		Email Address	
Company		Street Address	
City		State	Zip Code
	and that it is our responsib		dscape Documentation Package and the is maintained in accordance with the
Property Owner Signature			Date
	CITY	OF TRACY	7

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CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project

PART 1: PROJECT INFORMATION SHEET

Telephone No. Fax No. Email Address Street Address	
Fax No. Email Address	
Email Address	
Street Address	
222.7 (44.000	
State	Zip Code
Parcel, Tract or Lot	Number (If available)
Lattitude/Longitude	(optional)
Telephone No.	
Fax No.	
Email Address	
Street Address	
State	Zip Code
	Iscape Documentation Package and the maintained in accordance with the
	Date
OF TRACY	
	Parcel, Tract or Lot Lattitude/Longitude Telephone No. Fax No. Email Address Street Address State

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CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project

PART 2: CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENT PACKAGE

"I/We certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specification of the approved Landscape Document Package."

	In .	
Signature*	Date	
Name (print)	Telephone No.	
(Pilit)		
	Fax No.	
	l ax ito.	
Title	Email Address	
	Linaii / Idai 655	
License No. or Certification No.		
LICCISC NO. OF OCITINOALION NO.		
Company	Street Address	
City	State	Zip Code
 ,		— · · · · · · · · ·

PART 3: IRRIGATION SCHEDULING

Attach parameters for setting the irrigation schedule on controller per ordinance Section 492.10.

PART 4: SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11.

PART 5: LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

PART 6: SOIL MANAGEMENT REPORT

Attach soil analysis report, if not previously submitted with the Landscape Document Package per ordinance Section 492.5.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.5.

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^{*}Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is to be filled out by the project applicant and it is a required element of the Landscape Documentation Package. Please complete all sections (A, B and C) of the worksheet.

SECTION A: HYDROZONE INFORMATION TABLE

Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone or Valve	Water Use*	Irrigation Method**	Area (sq.ft.)	% of Landscape Area
TOTAL:	**!rrigation M			100%

*Water Use:
HW = High Water Use Plants
MW = Moderate Water Use Plants

LW = Low Water Use Plants

**Irrigation Method MS = Micro-Spray

S = Spray

R = Rotor

RN = Rotary Nozzle

B = Bubbler

D = Drip

O = Other

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WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is to be filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Please complete all sections (A, B and C) of the worksheet.

SECTION B: WATER BUDGET CALCULATIONS MAXIMUM APPLIED WATER ALLOWANCE (MAWA)

The project's Maximum Applied Water Allowance shall be calculated using this equation:

$MAWA = (ETo)(0.62) [(ETAF \times LA) + (1-ETAF \times SLA)]$					
Where: MAWA ETo 0.62 ETAF LA SLA EPPT	= = = = = =	Maximum Applied Water Allowance (gallons per year) Reference Evapotransporation Rate - 48.5 Conversion factor (to gallons per square foot) Residential Landscapes = 0.55, Non-Residential Landscapes = 0.45 Portion of the irrigated Landscape Area (square feet). Non-irrigated space is Portion of the landscape area identified as Special Landscape Area (square			
MAXIMUM	I APP	LIED WATER ALLOWANCE =	gallons per year		
Show calcula	itions:				

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WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is to be filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Please complete all sections (A, B and C) of the worksheet.

SECTION C: WATER BUDGET CALCULATIONS ESTIMATED TOTAL WATER USE (ETWU)

The project's Estimated Total Water Use shall be calculated using this equation:

ETWU = (ETo)(0.62) ETAF x LA

Where:

ETWU = Estimated Total Water Use (gallons per year)
ETo = Reference Evapotransporation Rate - 48.5
0.62 = Conversion factor (to gallons per square foot)

PF = Plant Factor (High Water Use = 0.7-1.0, Moderate Water Use = 0.4-0.6, Low Water Use = 0.1-0.3) *

IE = IrrigationEfficiency (Overhead Spray = 0.75, Drip = 0.81) **

ETAF = Plant Factor / Irrigation Efficiency

LA = Portion of the irrigated Landscape Area (square feet). Non-irrigated space is not included.

SLA = Portion of the landscape area identified as Special Landscape Area (square feet)

Hydrozone or Valve	Plant Factor*	Irrigation Efficiency**	ETAF (PF/IE)	LA (Landscape Area)	ETAF x LA	ETWU (gallons)
Regular Landscape Areas						
		l	REGULAR L	ANDSCAPE ARE	A ETWU TOTAL	
Special Landscape Areas						
			1			
			1			
			1			
			1			
			SPECIAL L	ANDSCAPE ARE	A ETWU TOTAL	
ETWU TOTAL						
Maximum Allowed Water Allowance (MAWA) TOTAL						

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LOCAL CLIMATE AND SOIL CHARACTERISTICS

CLIMATIC INFORMATION

The City of Tracy is located approximately 25 miles southwest of Stockton, in the San Joaquin Valley in northern California and 60 miles east of San Francisco. The Tracy area falls into Sunset Garden Book' climate Zone 14, Northern California's Inland Areas with some ocean influence. The key climate factors in the area are:

- 1. Temperature: Lows range from 26 to 16 degrees F over a 20-year period. Some frost tender plants may thrive in sheltered or selected locations.
- 2. Humidity: Humidity can be higher here than might be expected due to summer irrigation of surrounding agricultural lands. However, this is changing with increased development conversion of agricultural land within and near the city.
- 3. Wind: Most of Tracy is characterized by persistent, moderate winds from the northwest and west in summer afternoons; Winter storm winds come from the southwest.
- 4. Precipitation: Mean annual rainfall 12-16 inches occurring primarily between October and March. Potential evapotranspiration stress is 52-56 inches per year.
- 5. Water Table: Tracy is characterized by a seasonal high water table in summer due to surrounding agricultural irrigation; this tends to grade from high in the northern half of the City of up to 18" to much lower depths in the south. This does fluctuate throughout the City, and each site should be checked prior to design. The water table is lowering due to the conversion of agricultural land; there is no prediction currently of what the final effect will be on the water table condition. For more information see the following section concerning Soils Information.
- 6. Plant Habitats: The Tracy area is characterized by cultivated agricultural lands interspersed with drainage channels where willows, locusts, walnuts, scrub oak and elm thrive. Old walnut trees may be found in old orchard areas. In the developed town areas, large trees planted 30 to 40 years ago are primarily mulberry, elm, ash, sycamore and Celtis; some oak (both deciduous and evergreen), she-oak, cedar, and pines are also found. Old farmstead properties are characterized by the presence of a mix of these trees, along with large date palms (Phoenix canariensis)

GENERAL SOILS NOTES:

The following soils information was obtained from the USDA Soil Conservation Service Stockton Field Office. Their soil descriptions are dated October 1988 and noted as preliminary drafts and subject to revision

The basic soil types found within the area are:

El Solyo clay loam and silty clay loam (BR) - a well drained soil located between MacArthur Drive and Tracy Blvd, north of Valpico Road. This soil is typically 60" deep and calcareous (High lime) between the depths of 10" and 60". PH will vary between 6.6 and 7.8. Water holding capacity is rated high and infiltration rates low (0.2 to 0.6" per hour)

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LOCAL CLIMATE AND SOIL CHARACTERISTICS

Capay Clay (CP) - a moderately well drained soil widely present north of Schulte Rd. East of MacArthur Dr. and north of Lowell Ave. This soil is 60" deep and calcareous between the depths of 20" and 60". PH will vary from 5.6 to 8.4. Water holding capacity is high and infiltration rates are very low (0.06 to 0.2" per hour) Within this soil unit are areas of clay soils with perched water tables at depths of 48". Small areas within this soil unit may be saline-sodic.

Zacharias clay loam (LS and LR) - Well drained soils located through the sites south of Schulte Rd. and west of Tracy Blvd.. These soils are to 60" in depth. PH varies from 6.6 to 8.4. Water holding capacities high and infiltration rates are low (0.2 to 0.6" per hour)

Stomar clay loam (RM) - A well drained soil occurring primarily north of Valpico Rd to Approximately Lowell Ave. This soil is typically 60" in depth and calcareous between the depths of 17" and 60". PH varies from 6.6 to 8.4. Available water capacity is high and infiltration rates are low (0.2 to 0.6" per hour).

Reiff loam (RK) - A very well drained soil occurring to a depth of 60". "Reiff loam has been identified from Eleventh St. south to past Schulte Rd. PH ranges from 6.1 to 84.. Available water capacity is moderate and infiltration rates are rapid (2.0 to 6.0" per hour)

Soil Characteristics

These soils are suitable for most landscape plant species providing individual sites are evaluated for the occasional conditions of excessive alkalinity, high lime concentrations, perched water tables, and possible saline/sodic soils. As a general guideline, plants should be selected for tolerance of slightly to moderately alkaline soils and possible high lime concentrations where calcareous soils are present. Where pH or lime sensitive species are desired for use, the planting sites should be adequately tested prior to planting to check for this condition within root zone depths.

Plant growth problems associated with these soil conditions are chlorosis, stunted growth, and dieback or decline. Severity of symptoms varies according to concentration levels and individual plant species. Often symptoms will not become apparent for three to five years after planting.

Soil pH may be lowered to more desirable levels with the use of soil sulphur, though the size of the planting and respective cost may limit the practicality of this type of procedure. High lime concentrations are not treatable, with the only solution being the selection of lime tolerant species.

Perched water tables should not be a restraint providing the water level is below 2' to 3'. This amount of soil will provide ample volume for healthy root growth. For deep rooting tree and shrub species, a high water table may provide a summer water source, diminishing or eliminating the need for supplemental irrigation after plants are established. If the water table is less than 2' for extended periods of time, then water tolerant species should be selected. In this situation, surface rooting should be anticipated and methods employed to limit associated problems.

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LOCAL CLIMATE AND SOIL CHARACTERISTICS

The textural qualities of these soils will affect cultural procedures such as irrigation and organic amendment incorporation. Generally, these soils are fine textured with high water holding capacity and relatively slow infiltration rates (usually less than .5" per hour). The strong prevailing seasonal winds are another important consideration. Irrigation design should utilize appropriate equipment selection to respond to these site characteristics.

In areas of turf and high water requirement groundcovers, there will be a tendency for trees to surface root in response to shallow, frequent irrigations. Proper tree selection, appropriate installation techniques (i.e. root barriers, deep cultivation, etc) and knowledgeable irrigation management are all necessary to avoid this problem.

Organic Amendments

The role of organic soil amendments should be considered carefully. With the exception of the clay soils (Capay clay), the use of organic amendments in container plant backfill mixes is optional. The use of organic amendments in well drained loam to clay loam soils is generally not required and often contributes to problems associated with over-irrigation. If organic amendments are used in backfill mixes, then they should be a nitrolized wood residue and incorporated minimally 30% by volume.

The most beneficial soil preparation is the alleviation of soil compaction resulting from construction activities. Soils should be well cultivated to a depth of 24" to 3" for trees, 18" to 24" for shrubs and 6" to 12" for ground covers. If grading has been minimal, then compaction may only be in the top 6" of soil, making deep cultivation unnecessary. Cultivation requirements should be established based upon individual site conditions.

The use or organic amendment incorporation is desirable for planting of turf and herbaceous ground covers. For this application, 4 to 6 cubic yards of coarse nitrolized fir/redwood bark or shavings should be <u>uniformly</u> incorporated to a depth of 6". This procedure provides a uniform rooting medium for establishment of these plants. The critical aspect of this method is the consistent and uniform incorporation to 6", which is not easily accomplished given soils that are either too wet or too dry.

Fertilizers

Fertilizer requirements can be anticipated to be primarily nitrogen and phosphorous (for herbaceous species). Potassium may also be necessary in certain sites. Fertilizer formulations should be acid based which will contribute to lowering of soil pH. In addition, soil sulphur and iron sulfates may be appropriate for lowering pH in alkaline soils and supplying additional iron.

For most planting conditions, the use of high nitrogen, slow release, IBDU/SCU formulations provide the most consistent source of nutrients. Specific formulations and application procedures will be dependent on plant types and site specific conditions.

	REVIEWED BY: Colent (Irmiye) RCE 63173	DETAIL No. A 3.0 Sheet 3 of 3
TRACY	Res No. 2020-031	DATE:February 18, 2020	APPENDIX
	Rev: Lyle C.	Rev:	Local Climate and Soil
Think Inside the Triangle ™	Rev:	Rev:	Characteristics

STANDARD FINISHES AND COLORS

FINISH	COLOR
MEDIUM BROOM	INTEGRAL COLOR 'DAVIS 5447 'MIAMI BUFF', 1 LB. PER SACK OF CEMENT OR EQUAL. NOTE: USE OF STANDARD GREY CONCRETE WILL BE CONSIDERED WHERE SITE CONDITIONS AND/OR BUDGET ARE FACTORS. 1/2 LB. LAMP BLACK PER CUBIC YARD.
FLOAT FINISH	SAME AS ABOVE
BROOM FINISH	SAME AS ABOVE
FLOAT FINISH	STANDARD GREY. APPLY INTEGRAL COLOR 'LAMP BLACK' 1/2 LB. PER CUBIC YARD.
ROUGH BROOM FINISH	INTEGRAL COLOR SOLOMON #417 'APPLE RED', 4% LIQUID PER 100 LBS CEMENT OR 25 LBS DRY COLOR PER 1 CUBIC YARD CONCRETE, OR APPROVED EQ.
PENOFIN TRANSPARENT REDWOOD COATING OR APPROVED EQUAL	LIGHT NATURAL REDWOOD
PRIMER AND 2 COATS SEMI-GLOSS EXTERIOR ENAMEL	IVORY WHITE
	MEDIUM BROOM FLOAT FINISH BROOM FINISH FLOAT FINISH ROUGH BROOM FINISH PENOFIN TRANSPARENT REDWOOD COATING OR APPROVED EQUAL PRIMER AND 2 COATS SEMI-GLOSS EXTERIOR

NOTES

- 1. CONTRACTOR TO SUPPLY SUBMITTALS / SAMPLES TO CITY FOR APPROVAL PRIOR TO CONSTRUCTION.
- 2. PROVIDE WRITTEN TECHNICAL SPECIFICATIONS AND CUTSHEETS FOR ALL FINISHES INCLUDING SEALANTS, HARDENERS AND RELEASE AGENTS.

	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. D 0.0 Sheet 1 of 2
TRACY	Res No. 2020-031	DATE:February 18, 2020	STANDARD FINISHES
Rev: Lyle C.		Rev:	Finish and Color
Think Inside the Triangle ™	Rev:	Rev:	i illisti aliu coloi

STANDARD FINISHES AND COLORS

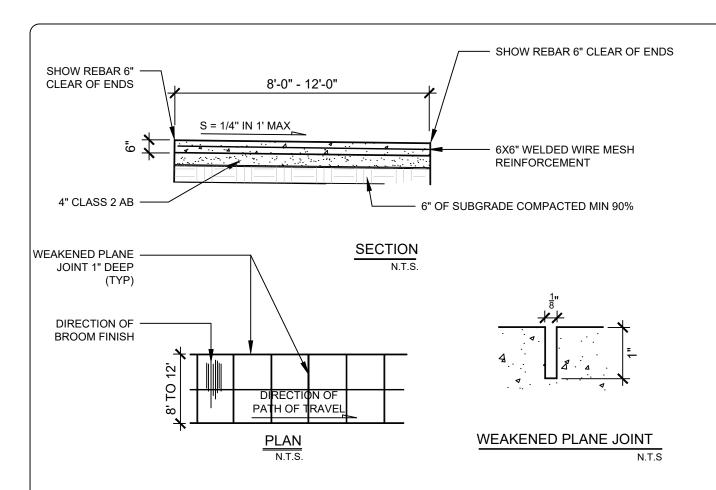
ITEM	FINISH	COLOR
METAL ELEMENTS		
PLAY STRUCTURE METAL PARTS	POWDERCOATED BY MANUFACTURER	AS SPECIFIED
BOLLARDS	POWDERCOATED BY MANUFACTURER	PINE
HANDRAILS	POWDERCOATED BY MANUFACTURER	FOREST GREEN
BIKE RACKS	POWDERCOATED BY MANUFACTURER	FOREST GREEN
BIKE LOCKER	POWDERCOATED BY MANUFACTURER	FOREST GREEN (RAL-6009)
DRINKING FOUNTAIN	POWDERCOATED BY MANUFACTURER	ROYAL BLUE
BARBECUE UNIT	STANDARD AS SUPPLIED BY MANUFACTURER	FLAT BLACK
TRASH RECEPTACLE	POWDERCOATED BY MANUFACTURER	PINE - TRASH ROYAL BLUE - RECYCLE
BENCH	POWDERCOATED BY MANUFACTURER	PINE
PICNIC TABLE	POWDERCOATED BY MANUFACTURER	PINE
SHADE STRUCTURE POSTS, FRAME	POWDERCOATED BY MANUFACTURER	AS SPECIFIED
CHAIN LINK FENCE POSTS	POWDER COAT	BLACK
CHAIN LINK FABRIC	VINYL COATED	BLACK OR GREEN
IRRIGATION CONTROLLER STRONG BOX	STAINLESS STEEL	NATURAL

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$\left(\right)$		REVIEWED CITY ENGIN	<u> </u>	armije RCE	63173	DETAIL No. Sheet 2 of 2	D 0.0
	TRACY	Res No.	2020-031	DATE:February	18, 2020	CTANDAD	RD FINISHES
		Rev: Lyle	C.	Rev:		_	and Color
	Think Inside the Triangle ™	Rev:		Rev:		1 1111511 6	

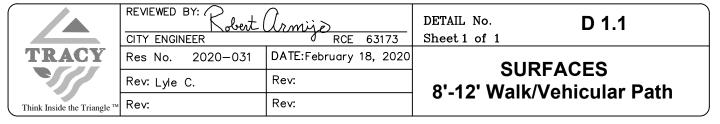
SURFACING GUIDELINES

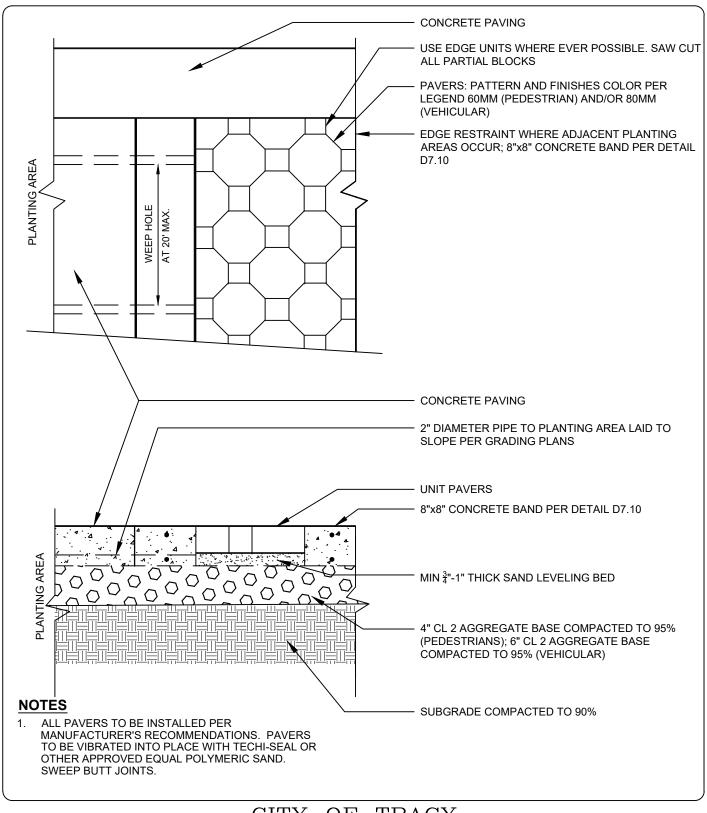
- ALL SURFACING GUIDELINES MUST MEET A.D.A STANDARDS AND CALIFORNIA CODE OF REGULATION TITLE 24
 ACCESSIBILITY STANDARDS.
- ELONGATED OPENINGS OR EXPANSION JOINTS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINATE DIRECTION OF TRAVEL AND SHALL NOT BE WIDER THAN 1/2 INCH.
- 3. CELLULAR CONCRETE PAVERS SHALL NOT BE USED AS PART OF AN ACCESSIBLE PATH OF TRAVEL.
- 4. ABRUPT CHANGES IN LEVEL SHALL EXCEED 4" IN VERTICAL DIMENSION BETWEEN WALKS, SIDEWALKS, AND OTHER PEDESTRIAN WAYS.
- 5. DECOMPOSED GRANITE SHALL NOT BE USED FOR PRIMARY PATH OF TRAVEL.
- 6. MAXIMUM CROSS SLOPE OF CONCRETE NOT TO EXCEED 2%, AND THE RUNNING SLOPE SHALL NOT EXCEED 5% IN THE PATH OF TRAVEL.
- 7. ASSEMBLY AREAS SHALL PROVIDE WHEEL CHAIR SPACES, COMPANION SEATS, DESIGNATED AISLE SEATS, AND SEMI-AMBULANT.
- 8. THE NUMBER OF WHEELCHAIR SPACES SHALL BE PROVIDED PER CBC TABLE 11B-221.2.1.1.
- 9. WHEELCHAIR SPACES SHALL PROVIDE LINE OF SIGHT. IN PROVIDING IN LINES OF SIGHT, WHEELCHAIR SPACES SHALL BE DISPERSED TO PROVIDE SPECTATORS WITH CHOICES OF SEATING LOCATIONS AND VIEWING ANGLES AVAILABLE TO ALL OTHER SPECTATORS. WHEELCHAIR SPACES SHALL BE DISPERSED HORIZONTALLY IN ASSEMBLY AREAS THAT HAVE SEATING ENCIRCLING, IN WHOLE OR PART, A FIELD OF PLAY OR PERFORMANCE.
- 10. AT LEAST ONE COMPANION SEAT SHALL BE PROVIDED IMMEDIATELY ADJACENT TO EACH WHEELCHAIR SPACE REQUIRED BY CBC TABLE 11B-221.2.1.1.
- 11. COMPANION SEATS SHALL BE LOCATED TO PROVIDE SHOULDER ALIGNMENT WITH ADJACENT WHEELCHAIR SPACES. THE SHOULDER ALIGNMENT POINT OF THE WHEELCHAIR SPACE SHALL BE MEASURE 36" FROM THE FRONT OF THE WHEELCHAIR SPACE. THE FLOOR SPACE OF COMPANION SEAT SHALL BE AT THE SAME LEVEL OF THE WHEELCHAIR SPACE. ADDITIONALLY, COMPANION SEATS SHALL BE EQUIVALENT IN SIZE, QUALITY, COMFORT, AND AMENITIES.
- 12. RAMPS AND SURFACING TO MEET THE CURRENT CALIFORNIA CODE OF REGULATION TITLE 24 AND A.D.A REQUIREMENTS; SURFACING TO COMPLY WITH ASTM 1951 (AND ASTM F1292 IF WITHIN USE ZONES OF PLAYGROUND EQUIPMENT).
- 13. A CONTRASTING STRIPE THAT IS 2" WIDE MINIMUM TO 4" WIDE MAXIMUM PLACED PARALLEL TO, AND NOT MORE THAN 1 INCH FROM THE NOSE OF THE STEP ON THE UPPER APPROACH.

	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 1.0
TRACY	Res No. 2020-031	DATE:February 18, 2020	CUDE	TACING
	Rev: Lyle C.	Rev:	SURFACING Guidelines	
Think Inside the Triangle ™	Rev:	Rev:	Guid	ieimes

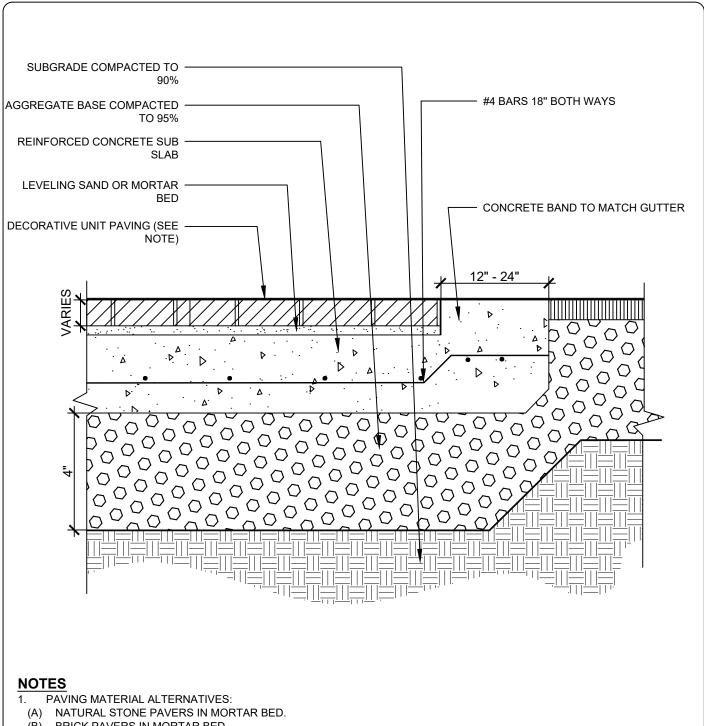


- SUBGRADE SHALL BE MIN. 6" THICK OF 90% COMPACTED NATIVE OR MOIST UNDISTURBED NATIVE SUBGRADE MAY BE APPROVED BY THE CITY ENGINEER.
- 2. CONCRETE SHALL BE: FIVE SACKS CLASS "B" 2500 PSI AT 28 DAYS: 4" MAXIMUM SLUMP; 3/4" MAXIMUM AGGREGATE SIZE; 1/2 LB. LAMPBLACK PER CUBIC YARD, UNLESS OTHERWISE SPECIFIED.
- 3. EXPANSION JOINTS SHALL BE SHAPED TO FIT CONCRETE AND PLACED AT EC, BC, DROP INLETS AND AT 20' MAXIMUM INTERVALS.
- 4. THE TOP AND SURFACE OF THE CURB SHALL BE TRUE, STRAIGHT AND FREE OF IRREGULARITIES. THE SURFACE MUST NOT VARY MORE THAN 1/4" FROM A 10' STRAIGHT EDGE PLACED ON ITS SURFACE. THE WIDTH MUST BE UNIFORM.
- 5. SIDEWALKS, GUTTERS, ISLANDS AND DRIVEWAYS SHALL HAVE SURFACES FREE OF BLEMISHES. THE SURFACE SHALL NOT VARY MORE THAN 1/4" FROM A 10' STRAIGHT EDGE EXCEPT BECAUSE OF GRADE CHANGES.
- ALL EXPOSED CORNERS SHALL HAVE A 1/2" RADIUS.
- CONCRETE SHALL HAVE A LIGHT BROOM FINISH UNLESS OTHERWISE SPECIFIED AND AN IMPERVIOUS MEMBRANE OR SPRAY CURE. 1 GAL./150 S.F. PIGMENTED CURING COMP., CLASS A OR B. APPLY IMMEDIATELY AFTER MOISTURE SHEEN DISAPPEARS.
- 8. FOR COLOR FINISHES SEE D0.0.
- 9. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, TRAFFIC INDEX, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.





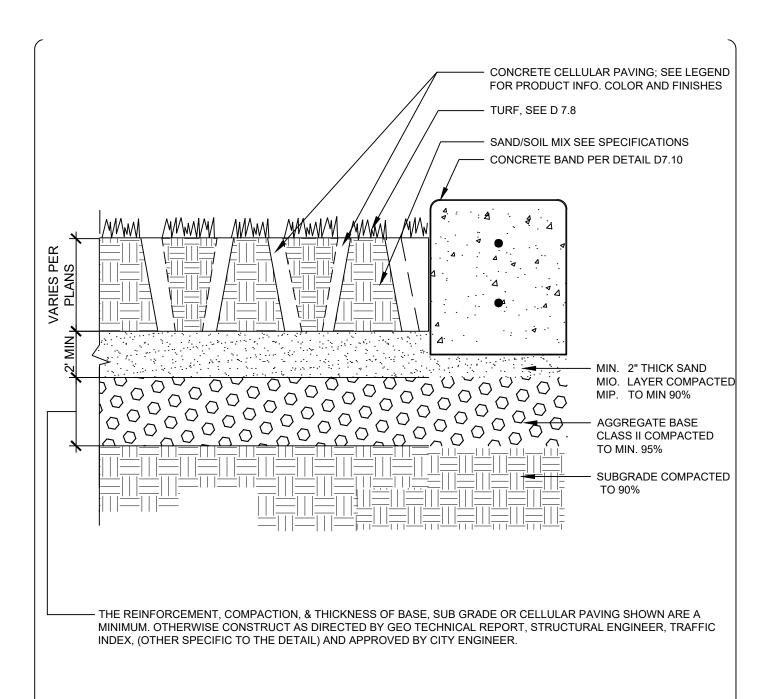
	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. D 1.2	
TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES	
	Rev: Lyle C.	Rev:	Unit Pavers in Sand	
Think Inside the Triangle TM	Rev:	Rev:	Unit Pavers in Sand	



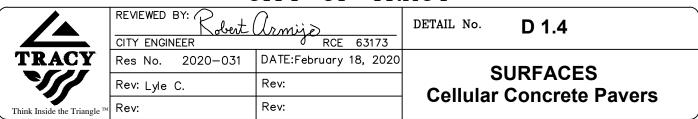
- BRICK PAVERS IN MORTAR BED. (B)
- CONCRETE UNIT PAVERS IN SAND BED.
- THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, TRAFFIC INDEX, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER."

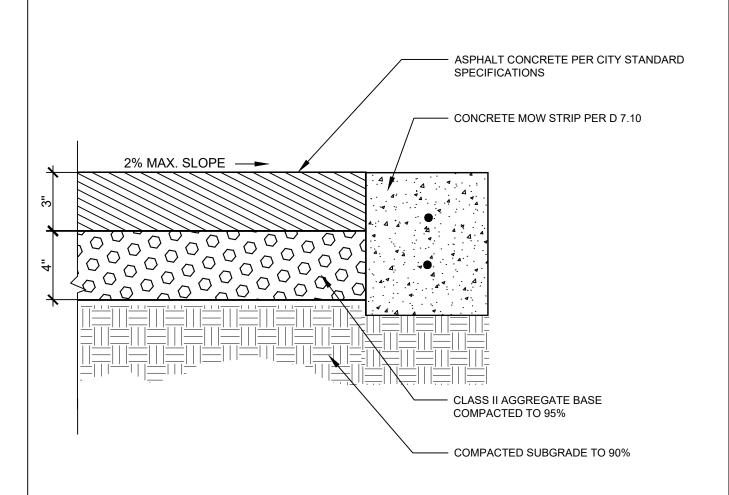
CITY TRACY OF

	REVIEWED BY: Cobert (Irmije) RCE 63173	DETAIL No. D 1.3
TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES
	Rev: Lyle C.	Rev:	Unit Pavers Over Concrete
Think Inside the Triangle ™	Rev:	Rev:	Office Pavers Over Concrete



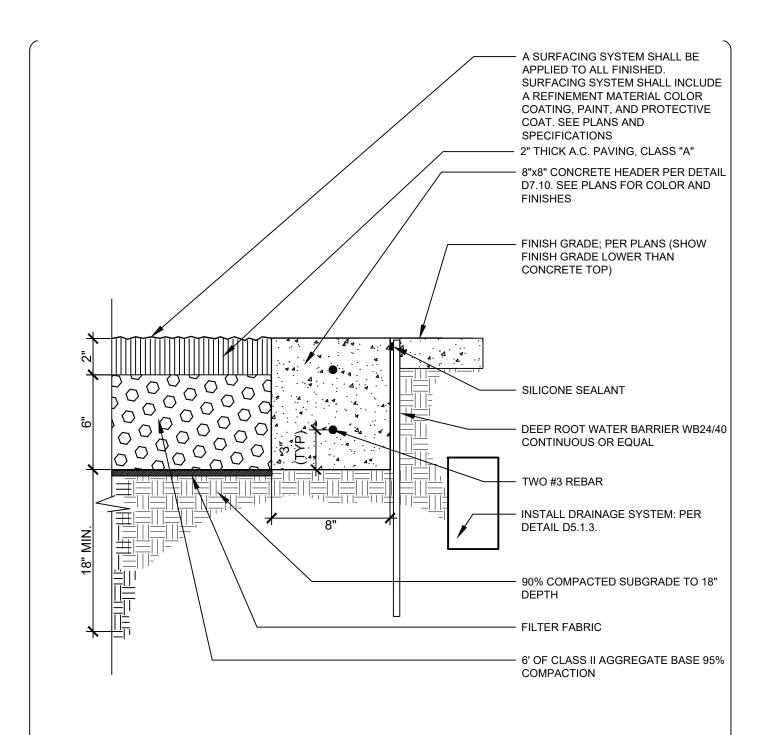
- CELLULAR CONCRETE PAVING SHALL BE 4000 PSI MIN. PREFORMED UNIT BLOCKS UNLESS OTHERWISE SPECIFIED. ACCEPTABLE MANUFACTURERS: GRASSCRETE BY BOMANITE PAVING SYSTEMS, TURFSTONE BY BELGARD OR AN APPROVED EQUAL.
- 2. INSTALLATION PER MANUFACTURERS RECOMMENDATIONS
- 3. SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL





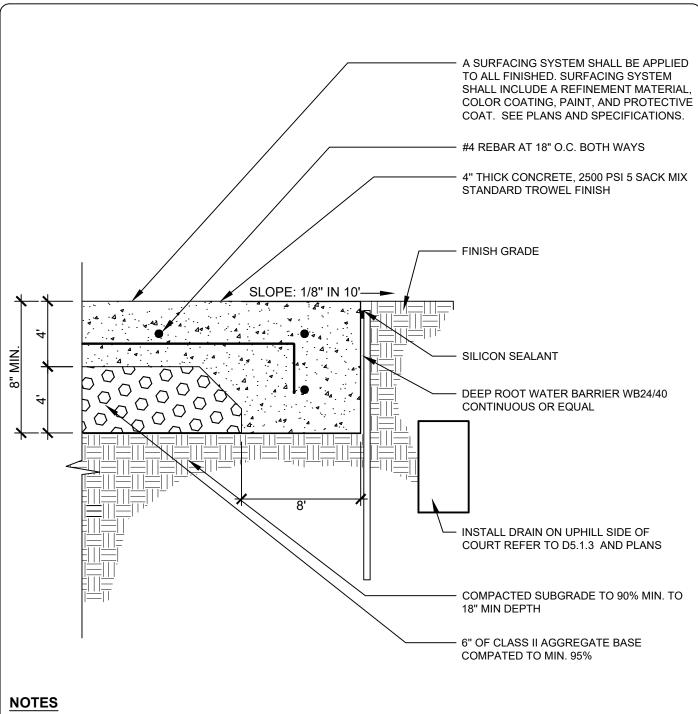
- 1. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.
- 2. DRAINAGE SHALL BE INSTALLED AT EDGES PER PLAN.

	REVIEWED BY: Robert armijes CITY ENGINEER RCE 63173		D 1.5.1	
TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES	
	Rev: Lyle C. Rev:			
Think Inside the Triangle ™	Rev:	Rev:	Bike/Pedestrian Path	



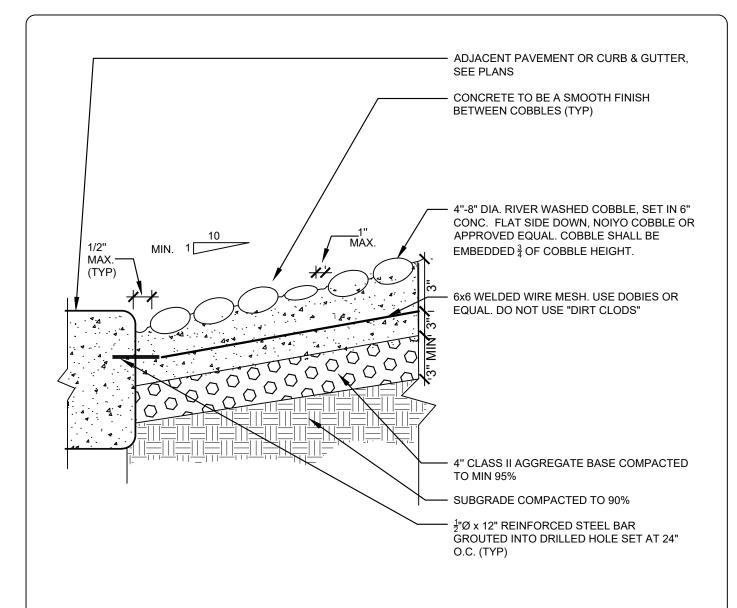
- 1. DRAINAGE SYSTEM SHALL BE INSTALLED AROUND PERIMETER OF SPORTS COURT PER PLAN
- 2. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.

	REVIEWED BY: Robert armigo CITY ENGINEER RCE 63173		DETAIL No.	D 1.5.2
TRACY	Res No. 2020-031	DATE:February 18, 2020	S	URFACES
	Rev: Lyle C.	Rev:	Court Asphalt	
Think Inside the Triangle ™	Rev:	Rev:		urt Aspiiait



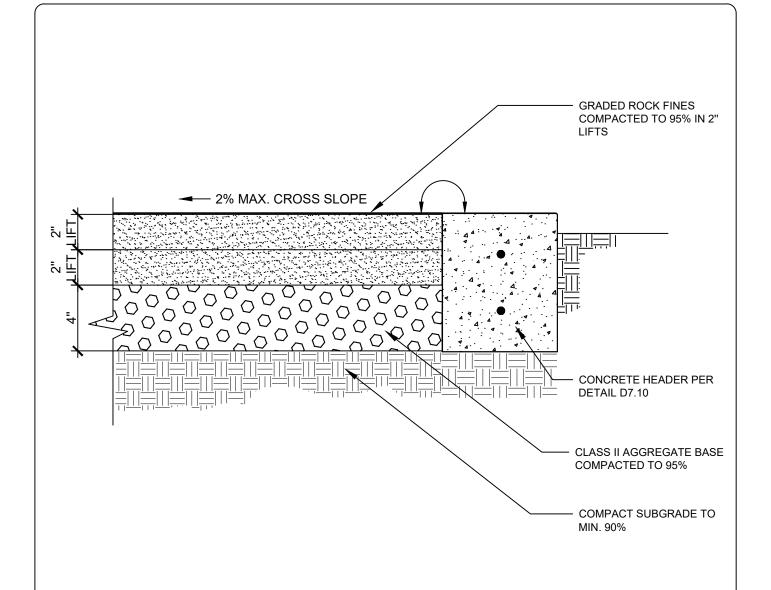
- 1. DRAINAGE SYSTEM SHALL BE INSTALLED AROUND PERIMETER OF SPORTS COURT PER PLANS.
- 2. CONCRETE SHALL BE SAW CUT 1" DEEP ON A 10'X10' GRID PATTERN OR PER PLANS.
- 3. SEE D5.0 FOR MORE INFORMATION.
- 4. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.

	REVIEWED BY: Robert Crmijo CITY ENGINEER RCE 63173		DETAIL No. D 1.5.3
TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES
	Rev: Lyle C.	Rev:	
Think Inside the Triangle TM	Rev:	Rev:	Concrete Sport Court



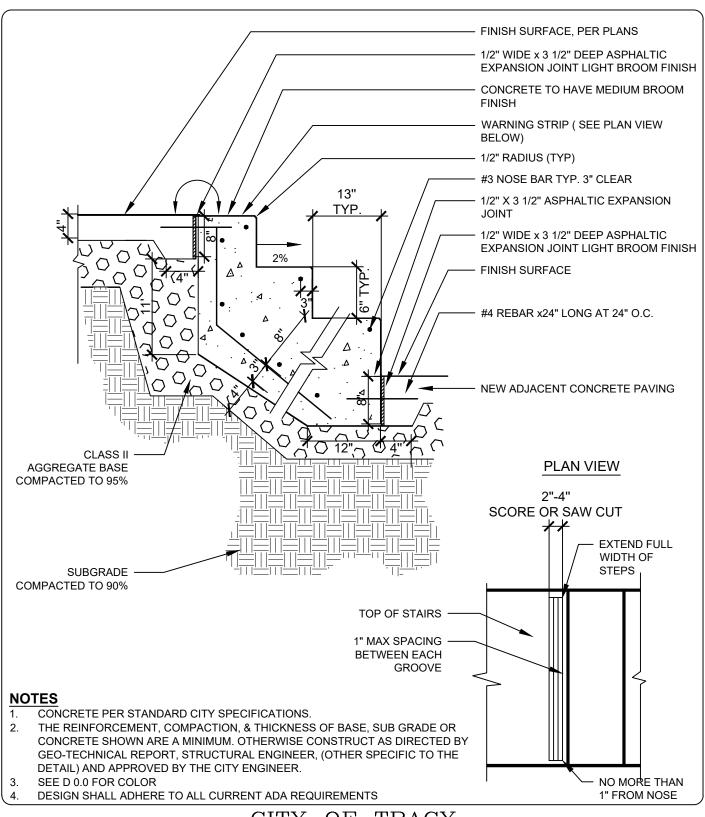
- THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE ARE SHOWN ARE A MINIMUM.
 OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE
 DETAIL) AND APPROVED BY CITY ENGINEER.
- 2. CONCRETE TO BE COLORED CONCRETE, COLOR PER DETAIL D 0.0
- 3. CONCRETE MIX TO USE 3/8" PEA GRAVEL
 - TREES SHALL NOT BE PLANTED WITHIN 10' OF COBBLE PAVING.
- 5. REINFORCE CONCRETE WITH POLYPROPYLENE FIBERS, MIN 1/2 LB. PER CU. YD.

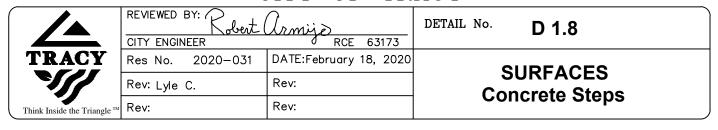
	DETAIL No. DETAIL No.	1.6
TRACY	Res No. 2020-031 DATE:February 18, 2020	ACES
	Rev: Lyle C. Rev: Cobble	_
Think Inside the Triangle ™	Rev:	ravilly

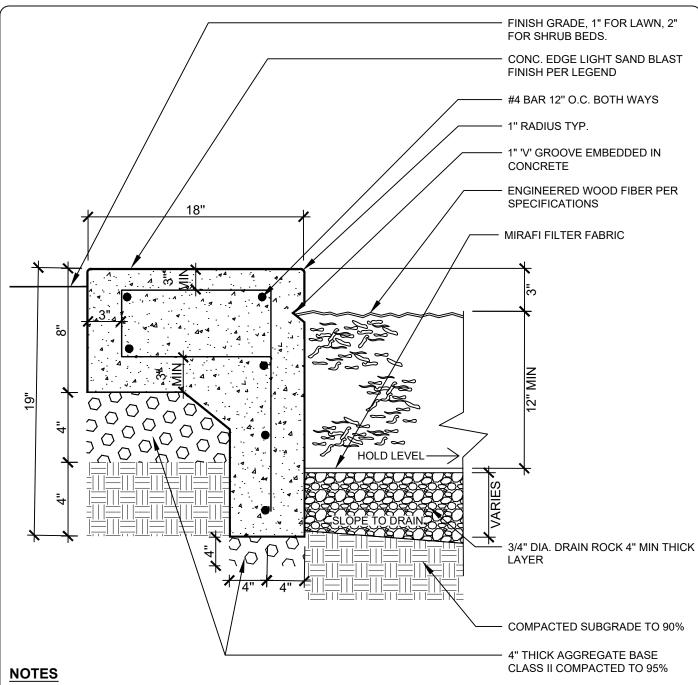


- 1. CONCRETE MOW STRIP PER D 7.10 AT LAWN AND PLANTER EDGES.
- ORGANIC STABILIZER SHALL BE ADDED TO ROCK FINES AT BATCH PLANT AND BLENDED THOROUGHLY PER THE MANUFACTURERS RECOMMENDED RATE.
- 2. BEFORE INSTALLING ROCK FINES, APPLY AND ACTIVATE AN APPROVED PRE-EMERGENT HERBICIDE TO BASE AS PER SPECIFICATIONS.
- 3. ROCK FINES SHALL BE "GOLD PATH FINES" OR APPROVED EQUAL.
- 4. WHEN ROCK FINES ARE PLACED IN TREE WELLS OR PLANTERS. COMPACTION SHALL NOT EXCEED 85% MINIMUM.
- 5. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.

	REVIEWED BY: Polert armije CITY ENGINEER RCE 63173		DETAIL No. D 1.7
TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES
	Rev: Lyle C.	Rev:	Rock Fines
Think Inside the Triangle ™	Rev:	Rev:	NOCK FILLES

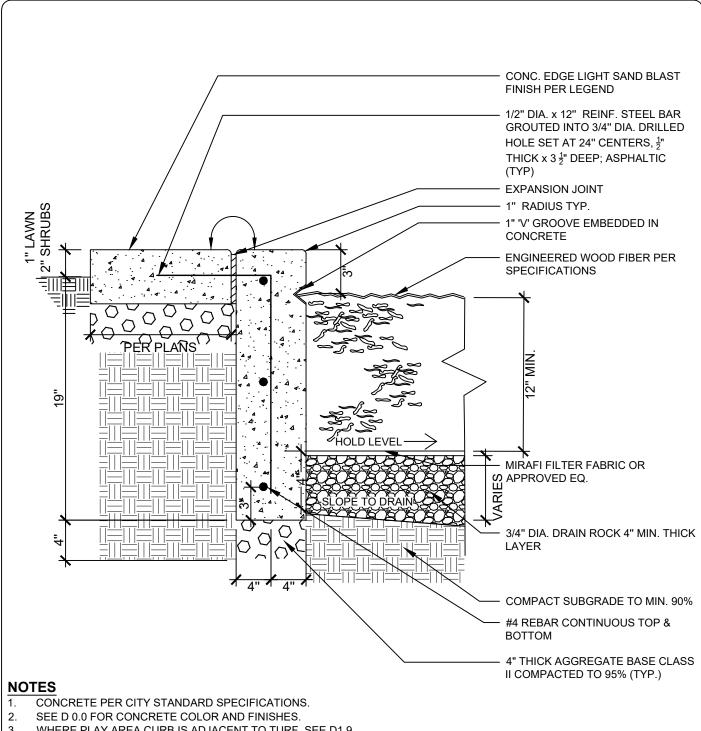






- CONCRETE PER CITY STANDARD SPECIFICATIONS.
- 2. SEE D 0.0 FOR CONCRETE COLOR AND FINISHES.
- 3. WHERE PLAY AREA CURB IS ADJACENT TO CONCRETE SIDEWALK, SEE D1.10.
- 4. WOOD FIBER TO BE PLACED IN SUFFICIENT QUANTITY TO RESULT IN 3" MAX CLEARANCE AFTER SETTLEMENT.
- 5. PLACEMENT OF FILTER FABRIC ABOVE BASE ROCK AREA TO BE APPROVED BY CITY ENGINEER TO MITIGATE PLACEMENT OF SEEMS IN HIGH TRAFFIC AREAS.

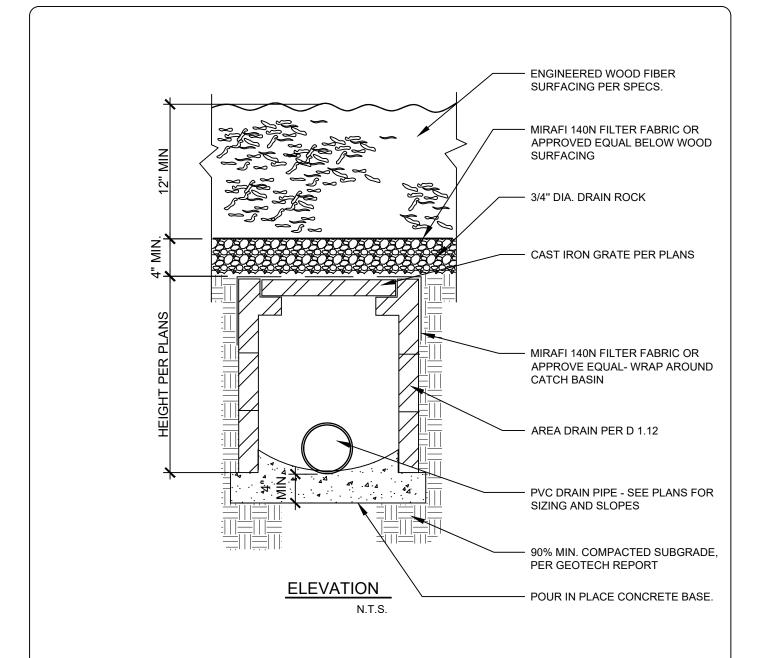
	REVIEWED BY: Pobert	Irmije) RCE 63173	DETAIL No. D 1.9
TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES
	Rev: Lyle C.	Rev:	Play Area Curbing Adjacent to Planter Area
Think Inside the Triangle ™	Rev:	Rev:	Adjacent to Planter Area



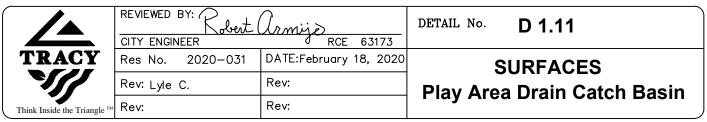
- WHERE PLAY AREA CURB IS ADJACENT TO TURF, SEE D1.9
- ENGINEERED WOOD FIBER TO BE PLACED IN SUFFICIENT QUANTITY TO RESULT IN 3" MAX CLEARANCE AFTER 4. SETTLEMENT.
- PLACEMENT OF FILTER FABRIC ABOVE BASE ROCK AREA TO BE APPROVED BY CITY ENGINEER. 5.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF FINISH ELEVATIONS OF PLAY EQUIPMENT AND 'V' GROOVE.

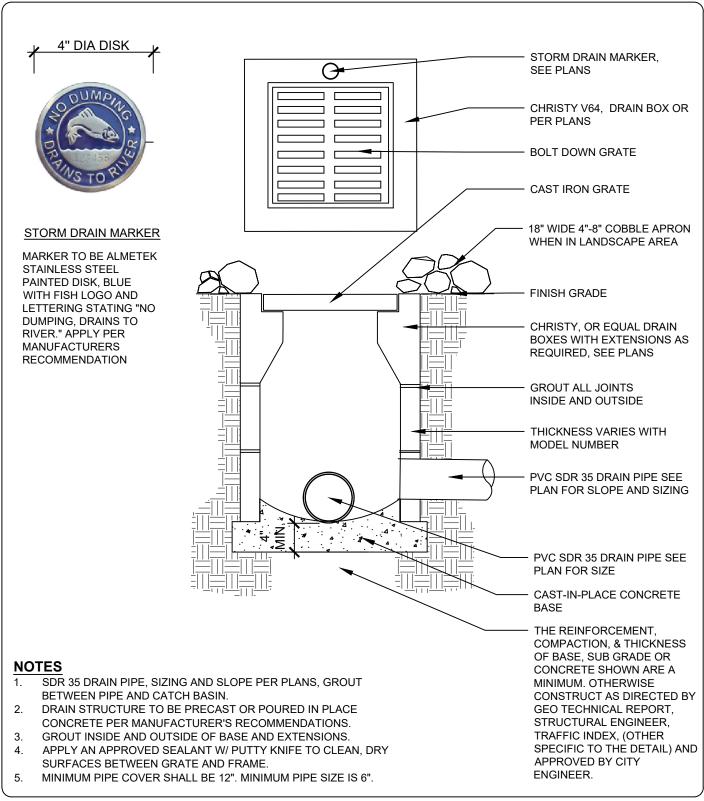
CITY TRACY OF

	REVIEWED BY: Robert (Irmije) RCE 63173	DETAIL No. D 1.10		
TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES		
	Rev: Lyle C.	Rev:			
Think Inside the Triangle ™	Rev:	Rev:	Tot Lot Curbing		

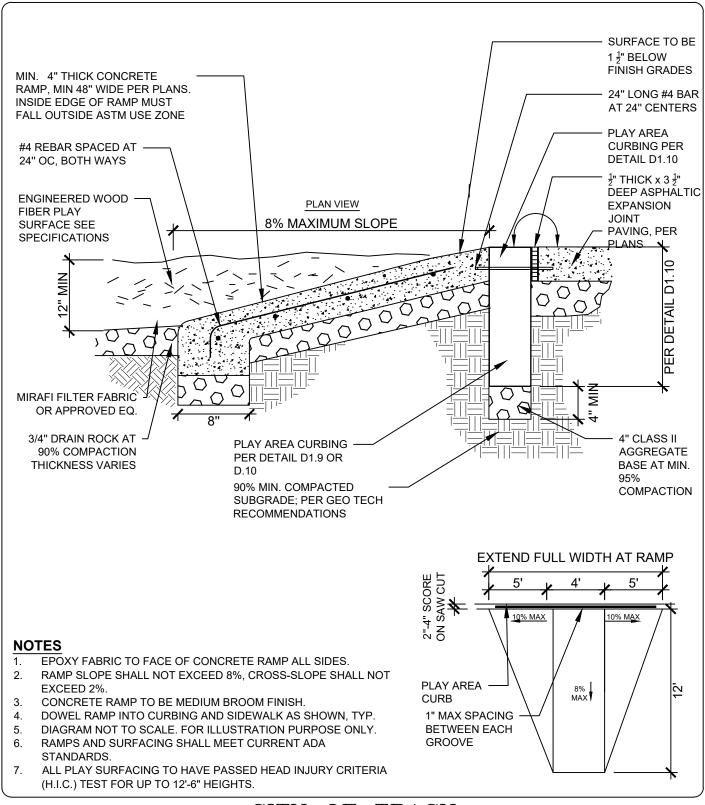


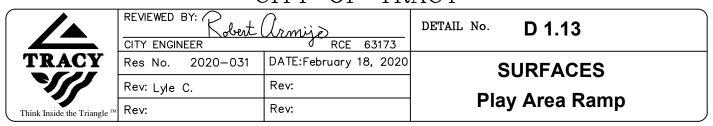
- 1. PVC DRAIN PIPE, SIZING AND SLOPES PER PLANS
- 2. GROUT BETWEEN PIPE AND CATCH BASIN, INSIDE AND OUTSIDE OF BASE & EXTENSION.
- 3. DRAIN STRUCTURE TO BE PRECAST OR POURED IN PLACE CONCRETE PER MANUFACTURER'S RECOMMENDATIONS.
- 4. MINIMUM PIPE COVER SHALL BE 12".





		REVIEWED BY: Robert armigo CITY ENGINEER RCE 63173		DETAIL No. D 1.12		
	TRACY	Res No. 2020-031	DATE:February 18, 2020	SURFACES		
		Rev: Lyle C.	Rev:	Area Drain		
Think Inside the Triangle ¹	Rev:	Rev:	Alea Diaiii			





WALLS AND FENCES GUIDELINES

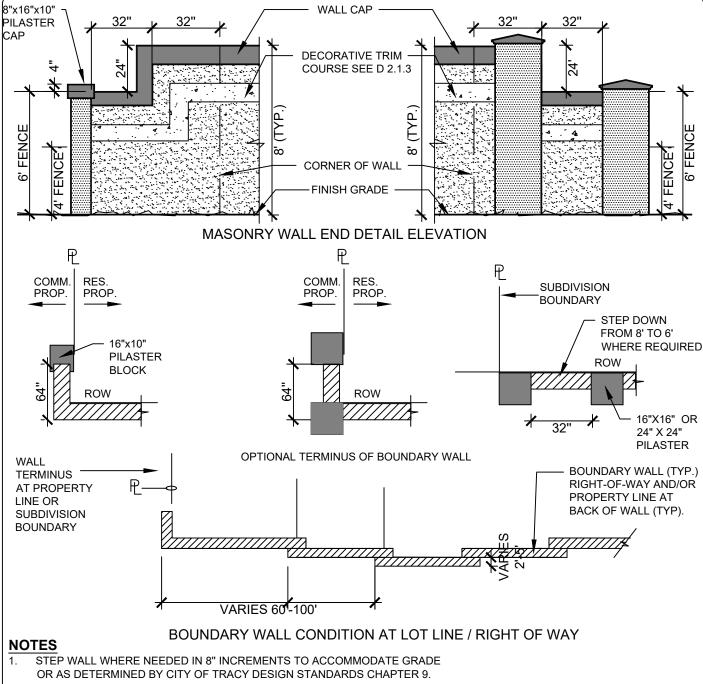
- ALL FREESTANDING WALLS GREATER THAN OR EQUAL TO 4-FEET INCLUDING FOOTING SHALL REQUIRE A BUILDING PERMIT.
- 2. FENCES GREATER THAN 7FT. SHALL REQUIRE BUILDING PERMIT.
- 3. ALL RETAINING WALLS GREATER THAN OR EQUAL TO 4-FEET INCLUDING FOOTING SHALL REQUIRE A BUILDING PERMIT.
- 4. ALL RETAINING WALLS WITH SUPERIMPOSED LOADS REQUIRE A BUILDING PERMIT.
- 5. GATE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LBS MAXIMUM.
- 6. GATE SURFACES WITHIN 10 INCHES OFF THE GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE GATE. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACES SHALL BE WITHIN 1/16 INCH OF THE SAME PLANE AS OTHER AND SHALL BE FREE OF SHARP ABRASIVE EDGES. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED.
- 7. GATE CLOSURES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES, THE GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM.
- 8. GATE OPENING HARDWARE SHALL BE LOCATED BETWEEN 34 AND 44 INCHES ABOVE GRADE AND SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LBS. MAXIMUM.
- 9. GATES WITHIN A DOG PARK REQUIRE PANIC BARS.
- 10. GATES AT PASEOS ADJACENT TO A HIGH VEHICLE TRAFFIC AREA SHALL OPEN INWARDLY AND AWAY FROM THE FLOW OF TRAFFIC. GATES SHALL BE SELF-CLOSING AND SELF-LATCHING.
- 11. CONTACT BUILDING SAFETY AND FIRE PREVENTION DEPARTMENT FOR MORE INFORMATION ON BUILDING PERMITS AND STRUCTURAL REQUIREMENTS.
- 12. PRE-FABRICATED OR PANEL WALLS ARE NOT AN ACCEPTABLE NEIGHBORHOOD BOUNDARY WALL.
- 13. PROVIDE WRITTEN TECHNICAL SPECIFICATION FOR ALL WALLS AND FENCES.
- 14. PROVIDE SCHEMATIC RENDERINGS FOR WALLS, ENTRY FEATURES, PILASTERS OR OTHER DESIGN FEATURES INCLUDING WRITTEN DESCRIPTION FOR COLOR, TEXTURE & FINISHES DURING THE DESIGN PHASE FOR APPROVAL.
- 15. PROVIDE SUBMITTAL AND SAMPLES FOR APPROVAL PRIOR TO CONSTRUCTION.
- 16. REFER TO CITY OF TRACY DESIGN SECTION 9, WALL DESIGN STANDARDS FOR ADDITIONAL INFORMATION.

CITY OF TRACY

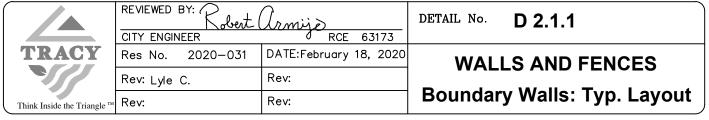
	REVIEWED BY: Robert armije						DETAIL No.
	CITY ENGIN	IEER	0	RCE	63	173	
TRACY	Res No.	2020-031	DATE:Feb	ruary	18,	2020	\A/A
Rev: Lyle C.		Rev:			WA		
Think Inside the Triangle ™	Rev:		Rev:				

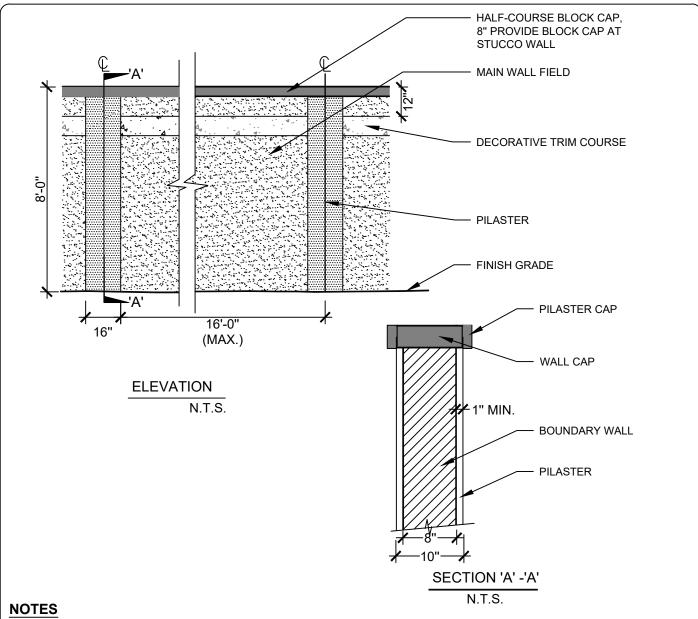
WALLS AND FENCES
Guidelines

D 2.0

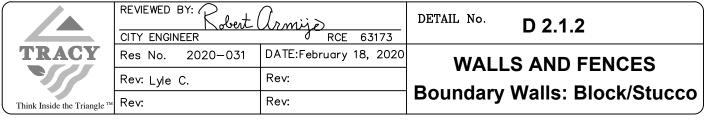


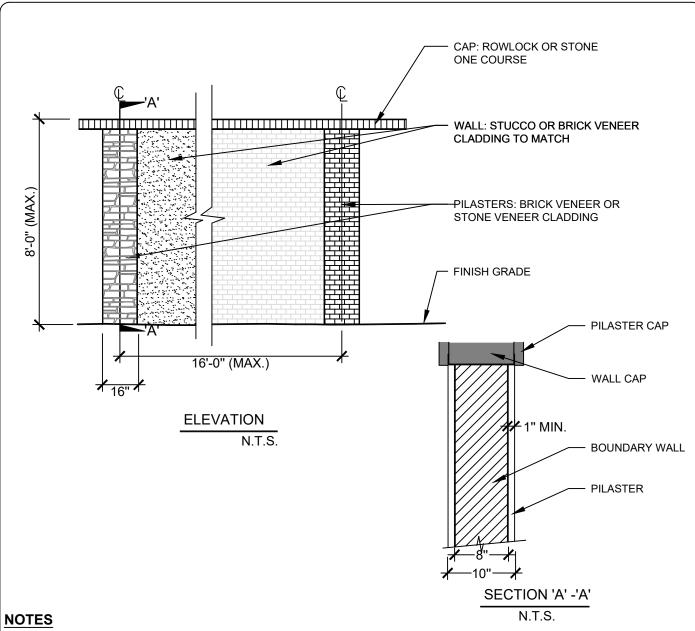
- 2. FOR INDIVIDUAL WALL DETAILS SEE D 2.1.3 ,D 2.1.5.
- 3. FOR CONDITION AT ENTRIES SEE D 2.1.6.
- 4. FOR CONDITION AT INTERSECTIONS SEE D 2.1.2.
- 5. WALL AND FOOTING TO BE LOCATED ENTIRELY WITHIN THE CITY RIGHT OF WAY.
- 6. WALL, CAP, & FINISH PER STREETSCAPE DESIGN GUIDELINES.
- 7. BOUNDARY WALL TO BE CONSTRUCTED AS A 'SOUNDWALL' AS REQUIRED BY GOVERNING ENVIRONMENTAL DOCUMENTS.



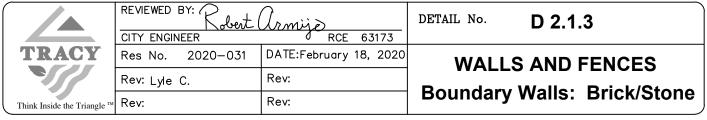


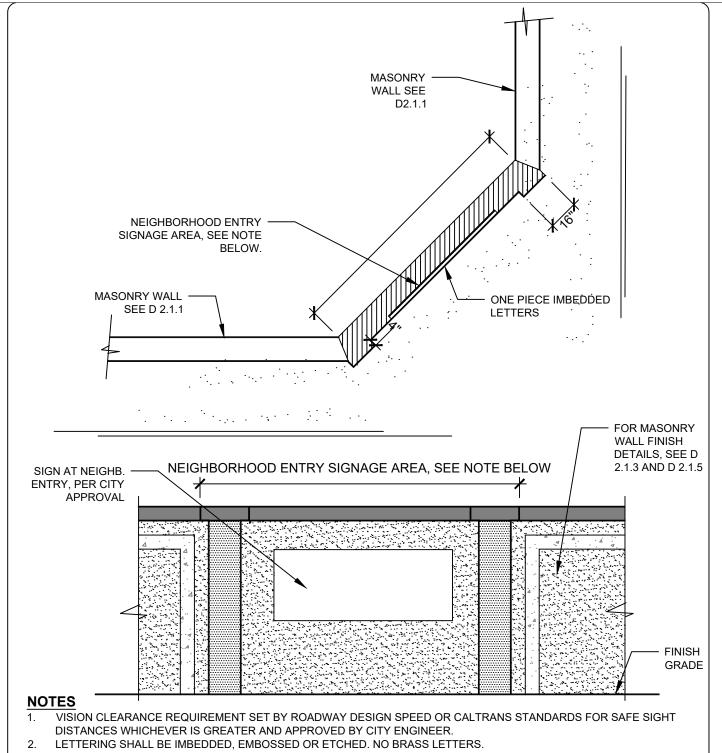
- 1. BOUNDARY WALLS TO MEET CITY STANDARDS.
- 2. CONSTRUCT WALL AS PER GEOTECHNICAL REPORT AND STRUCTURAL ENGINEER WITH APPROVAL BY CITY ENGINEER.
- FOOTING TO ACCOMMODATE RETAINING WALL ON ONE SITE IF APPLICABLE. MAX. RETENTION IS 24". WALLS AND FOOTING
 TO BE INSTALLED ENTIRELY WITHIN THE CITY RIGHT-OF-WAY
- 4. WALL CONSTRUCTION SHALL MEET CITY STANDARDS AND REQUIREMENTS OF SITE STRUCTURAL ENGINEER. DESIGN FOOTING TO ACCOMMODATE RETAINING ON ONE SIDE IF APPLICABLE.
- 5. WALL TYPE, COLOR, TEXTURE AND FINISH PER STREETSCAPE DESIGN GUIDELINES
- 6. FOR LAYOUT ALONG PROPERTY LINE AND AT WALL ENDS, SEE D 2.1.1
- 7. FOR CONDITION AT INTERSECTIONS, SEE D 2.1.2
- 8. FOR CONDITION AT NEIGHBORHOOD ENTRIES, SEE D 2.1.6
- 9. ALL BLOCKS SHALL BE SAME FINISH, FRONT AND BACK SIDES.
- 10. BOUNDARY WALL TO BE CONSTRUCTED AS A 'SOUNDWALL' AS REQUIRED BY GOVERNING ENVIRONMENTAL DOCUMENTS.



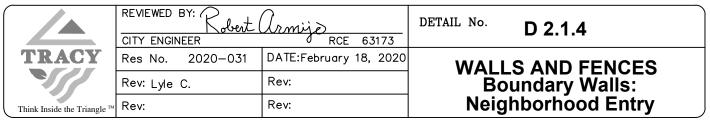


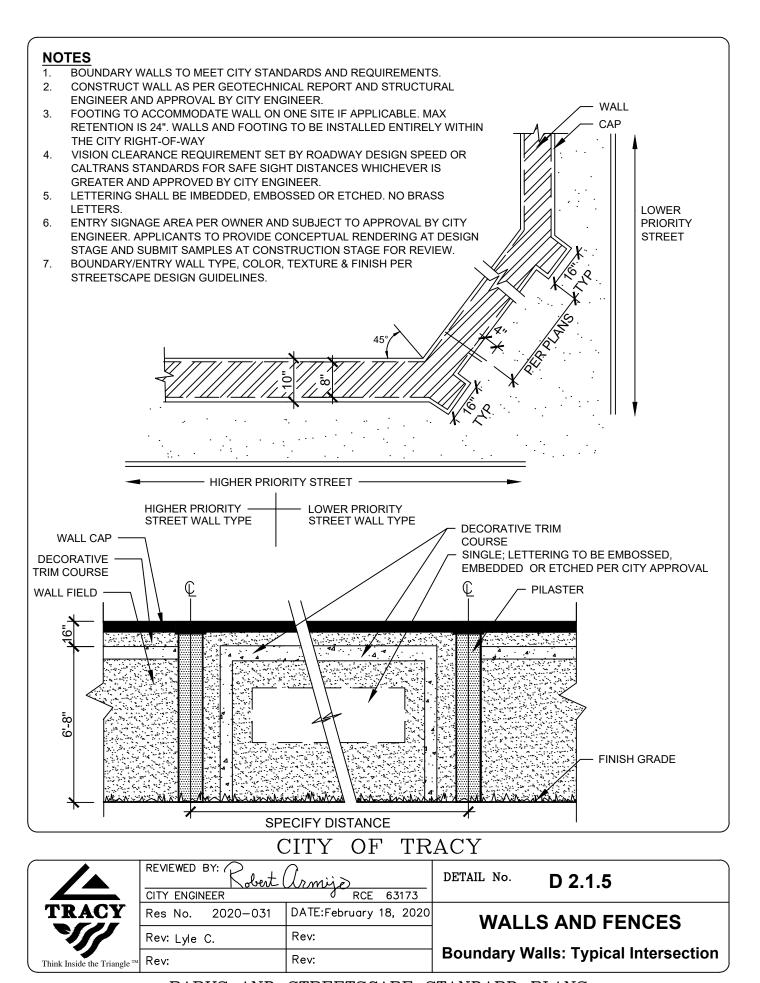
- 1. MASONRY WALLS TO MEET CITY STANDARDS.
- 2. CONSTRUCT WALL AS PER GEOTECHNICAL REPORT AND STRUCTURAL ENGINEER AND APPROVAL BY CITY ENGINEER.
- 3. FOOTING TO ACCOMMODATE WALL ON ONE SITE IF APPLICABLE. MAX RETENTION IS 24". WALLS AND FOOTING TO BE INSTALLED ENTIRELY WITHIN THE CITY RIGHT-OF-WAY.
- 4. WALL CONSTRUCTION SHALL MEET CITY STANDARDS AND REQUIREMENTS OF SITE STRUCTURAL ENGINEER. DESIGN FOOTING TO ACCOMMODATE RETAINING ON ONE SIDE IF APPLICABLE.
- 5. WALL TYPE, COLOR, TEXTURE AND FINISH PER STREETSCAPE DESIGN GUIDELINES
- 6. FOR LAYOUT ALONG PROPERTY LINE AND AT WALL ENDS, SEE D 2.1.1
- 7. FOR CONDITION AT INTERSECTIONS, SEE D 2.1.2
- 8. FOR CONDITION AT NEIGHBORHOOD ENTRIES, SEE D 2.1.6
- 9. ALL BLOCKS SHALL BE SAME FINISH, FRONT AND BACK SIDES.
- 10. BOUNDARY WALL TO BE CONSTRUCTED AS A 'SOUNDWALL' AS REQUIRED BY GOVERNING ENVIRONMENTAL DOCUMENTS.

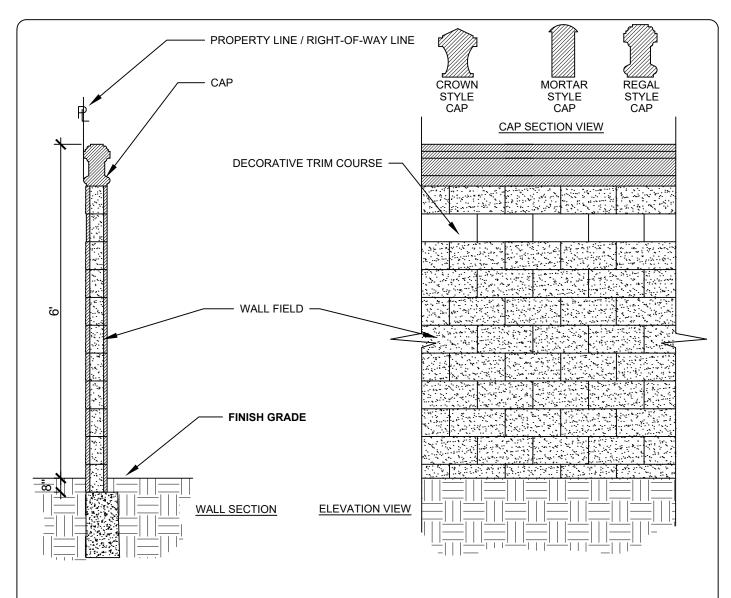




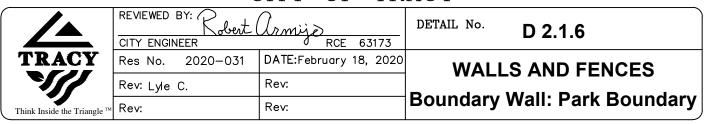
- 3. NEIGHBORHOOD ENTRY SIGNAGE AREA PER OWNER AND SUBJECT TO APPROVAL BY CITY ENGINEER. APPLICANTS TO PROVIDE CONCEPTUAL RENDERING AT DESIGN STAGE AND SUBMIT SAMPLES AT CONSTRUCTION STAGE FOR REVIEW.
- 4. BOUNDARY/ENTRY WALL TYPE, COLOR, TEXTURE & FINISH PER STREETSCAPE DESIGN GUIDELINES.

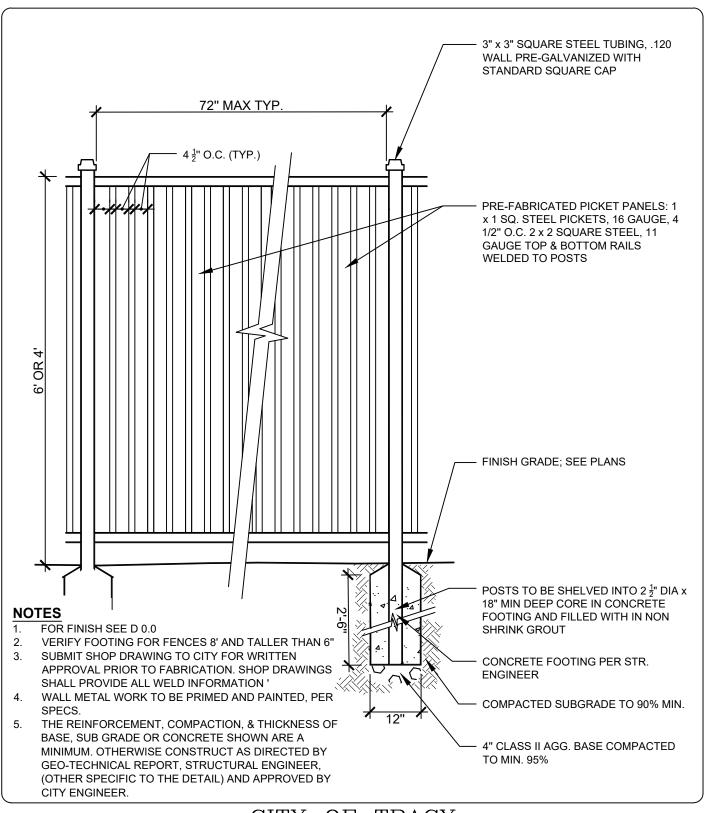




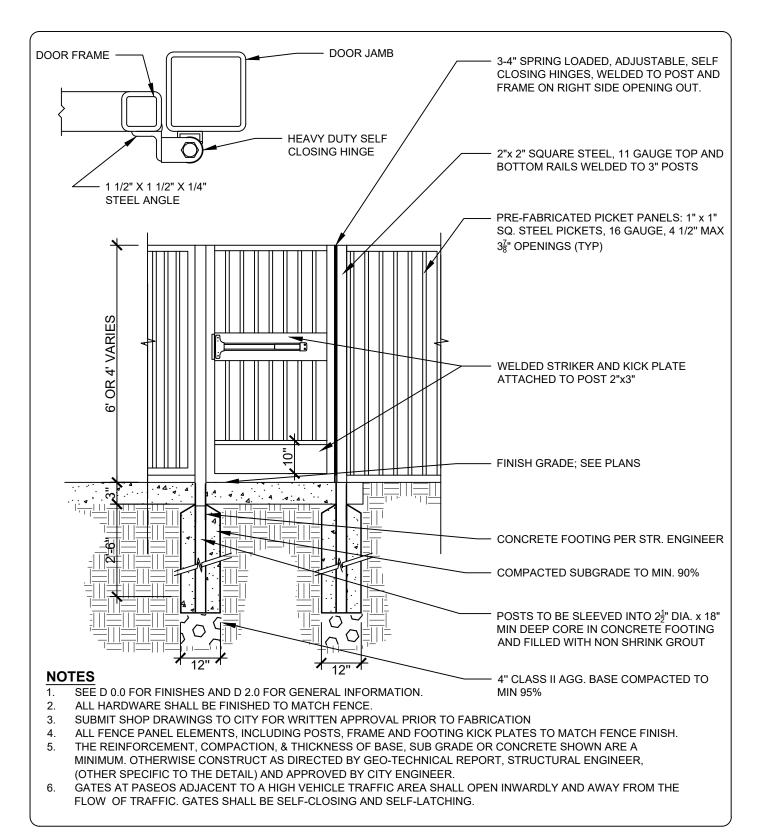


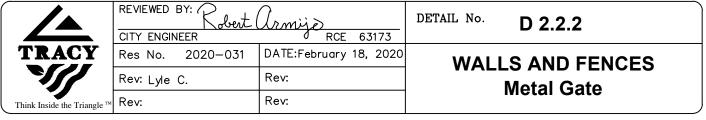
- 1. MASONRY WALLS TO MEET CITY STANDARDS.
- 2. CONSTRUCT WALL AS PER GEOTECHNICAL REPORT AND STRUCTURAL ENGINEER WITH APPROVAL BY CITY ENGINEER.
- 3. FOOTING TO ACCOMMODATE RETAINING WALL ON ONE SITE IF APPLICABLE. MAX. RETENTION IS 24". WALLS AND FOOTING TO BE INSTALLED ENTIRELY WITHIN THE CITY RIGHT-OF-WAY/PARK/CITY PROPERTY.
- 4. FOR CONDITION AT INTERSECTIONS, SEE D 2.1.2
- 5. FOR CONDITION AT NEIGHBORHOOD ENTRIES, SEE D 2.1.6
- BOUNDARY WALL TO BE CONSTRUCTED AS A 'SOUNDWALL' AS REQUIRED BY GOVERNING ENVIRONMENTAL DOCUMENTS.
- 7. CAP: BASALITE COLOR #345 OR AN APPROVED EQUAL. CAP STYLE TO BE DETERMINED BY CITY.
- 8. WALL FIELD: BASALITE SPLIT FACE BLOCK COLOR #345, OR AN APPROVED EQUAL. BLOCK TO BE ONE SIDED SPLIT FACE AT PROPERTY LINE AND DOUBLE FACE AT RIGHT-OF-WAY.
- 9. DECORATIVE TRIM COURSE: BASALITE SMOOTH FACE BLOCK COLOR #345, OR AN APPROVED EQUAL.
- 10. GROUT: BASALITE MORTAR COLOR #345, OR AN APPROVED EQUAL.

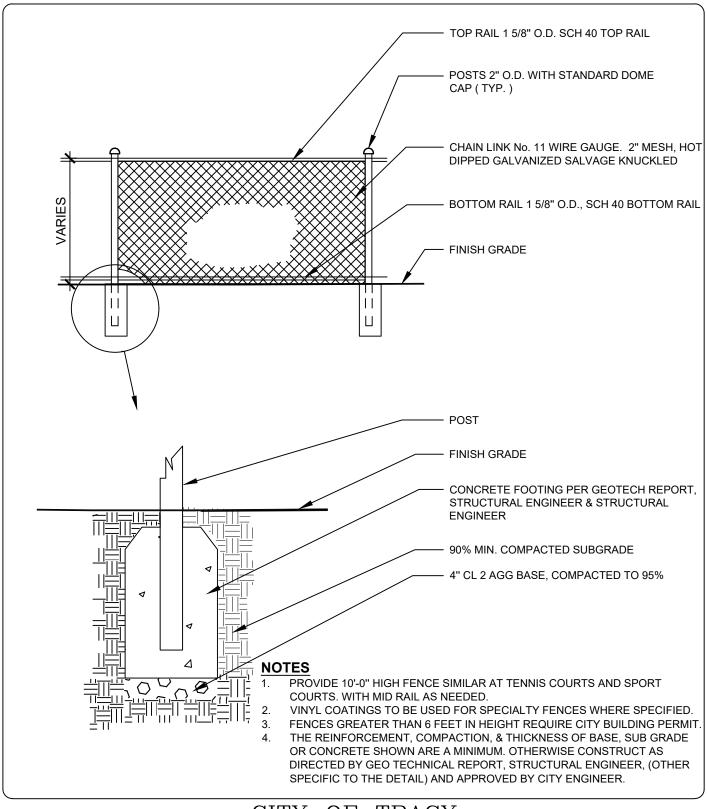




	REVIEWED E	Sobert 1	Irmije RCE 63173	DETAIL No.	D 2.2.1
TRACY	Res No.	2020-031	DATE:February 18, 2020	WALI	LS AND FENCES
	Rev: Lyle	C.	Rev:		
Think Inside the Triangle ™	Rev:		Rev:	ı	Metal Fence







	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. D 2.3
TRACY	Res No. 2020-031	DATE:February 18, 2020	WALLS AND FENCES
	Rev: Lyle C.	Rev:	
Think Inside the Triangle ™	Rev:	Rev:	Vinyl Clad Chain Link Fence

SHADE STRUCTURE GUIDELINES

- 1. SHALL BE INSTALLED PER LOCATIONS IN THE PLANS. LOCATION OF STRUCTURE SHALL TAKE INTO CONSIDERATION ORIENTATION FOR SUN AND WIND PROTECTION. LOCATE PICNIC AND SHADE STRUCTURES ADJACENT TO OPEN TURF OR PLAY AREAS AS SHOWN IN THE PLANS.
- 2. STRUCTURES SHALL HAVE A SOLID ROOF UNLESS OTHERWISE SPECIFIED. ACCEPTED MANUFACTURES INCLUDE CLASSIC RECREATION SYSTEMS, POLIGON PARK ARCHITECTURE OR AN APPROVED EQUAL. CITY APPROVED CUSTOM STRUCTURES WILL BE CONSIDERED.
- 3. POST AND TRIM COLORS SHALL COORDINATE WITH OTHER PARK AMENITIES AND SHALL BE APPROVED BY THE CITY ENGINEER.
- 4. NO LIGHTS SHALL BE INSTALLED WITHIN STRUCTURES UNLESS OTHERWISE SPECIFIED.
- 5. STRUCTURE AND ADJOINING FACILITY MUST COMPLY WITH ALL RELEVANT TITLE 24, AND ACCESSIBILITY REGULATIONS.
- 6. ALL SHADE STRUCTURES SHALL BE DESIGNED IN ACCORDANCE WITH CURRENT LOCAL BUILDING CODES. THE DESIGN SHALL INCLUDE LATERAL ANALYSIS, DESIGN OF ALL MEMBERS, POSTS, BEAMS, RAFTERS, ETC. DESIGN MUST ALSO INCLUDE A FOOTING DESIGN TO RESIST WIND LOADS AND SEISMIC FORCES. ALL DESIGNS AND CALCULATIONS MUST BE STAMPED AND SIGNED BY A LICENSED CALIFORNIA ARCHITECT OR STRUCTURAL ENGINEER. NOTE: DESIGN CRITERIA SHALL BE AS FOLLOWS: WIND SPEED = 110 MPH, EXPOSURE "C" SEISMIC ZONE = 3
- 7. UPRIGHT POSTS SHALL BE EMBEDDED IN CONCRETE. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.
- 8. SUBMIT PLANS TO BUILDING DEPARTMENT FOR REVIEW AND PERMITS.
- 9. DETAILED SHOP DRAWINGS SHALL BE SUBMITTED TO THE CITY FOR WRITTEN APPROVAL PRIOR TO FABRICATION.

	REVIEWED BY: Cobert CITY ENGINEER	armije) RCE 63173	DETAIL No. D 3.0
TRACY	Res No. 2020-031	DATE:February 18, 2020	SHADE STRUCTURE
	Rev: Lyle C.	Rev:	
Think Inside the Triangle ™	Rev:	Rev:	General Guidelines

SITE FURNISHINGS GUIDELINES

A. BENCHES

- ALLOWABLE TYPES INCLUDE: PROTECTIVE COATED STRAP METAL. BENCHES SHALL BE SURFACE MOUNT. WOOD BENCHES ALLOWED ONLY FOR RETROFITS.
- MANUFACTURER SHALL TOURNESOL PLAZA COLLECTION PZ-0100-60 (TYP) OR PZ-0100-48 (OPTIONAL CENTER ARM) OR AN APPROVED EQUAL.
- 3. COLOR TO BE PER D 0.0 UNLESS OTHERWISE SPECIFIED.

B. PICNIC TABLES

- 1. ALLOWABLE TYPES INCLUDE: PROTECTIVE COATED STRAP METAL (PREFERRED), OR CONCRETE.
- METAL STRAP TABLES SHALL BE TOURNESOL PLAZA COLLECTION PZ-1000 & PZ-400 (OR LENGTH AS SPECIFIED)
 OR AN APPROVED EQUAL, SURFACE MOUNT.
- 3. COLOR TO BE PER D 0.0 UNLESS OTHERWISE SPECIFIED.
- TABLES SHALL BE PLACED INDIVIDUALLY OR IN CLUSTERS WITH MINIMUM OF TWO TABLES PER ACRE, DEPENDING
 ON USE AND CONFIGURATION OF PARK, OR SPORTS FACILITY.
- 5. MINIMUM OF ONE ACCESSIBLE TABLE SHALL BE PROVIDED.
- 6. A MINIMUM DISTANCE BETWEEN TABLES SHALL BE 5'.

C. BOLLARDS

- 1. KNOCK DOWN BOLLARDS SHALL BE INSTALLED AT WALK ENTRANCES 8 FEET AND WIDER.
- 2. INSTALL BOLLARDS PER DETAILS ON THE PLANS.
- 3. MANUFACTURER TO BE TOURNESOL B-0240-40-3604 (HINGE/BOLLARD) OR B-0200-40-*3604 (FIXED) OR AN APPROVED EQUAL.
- 4. COLOR TO BE PER D 0.0 UNLESS OTHERWISE SPECIFIED.

D. TRASH RECEPTACLES

- TRASH RECEPTACLES SHALL BE PLACED THROUGHOUT PARKS, MINIMUM ONE TRASH AND ONE RECYCLING PER EVERY TWO PICNIC TABLES SUPPLIED. TYPE OF FACILITY WILL DICTATE QUANTITY; PER PLAN.
- TRASH RECEPTACLE SHALL BE COATED STRAP METAL, TOURNESOL PLAZA COLLECTION, PZ-072D-30 OR AN APPROVED EQUAL. WOOD RECEPTACLES ALLOWED ONLY FOR RETROFITS UNLESS OTHERWISE SPECIFIED.
- LINER FOR EACH RECEPTACLE SHALL BE GALVANIZED, 30 GALLON SIZE, POWDERCOATED IF PROVIDED BY MANUFACTURER.
- 4. COLOR TO BE PER D 0.0 UNLESS OTHERWISE SPECIFIED.

E. DRINKING FOUNTAINS

- 1. EACH PARK SHALL HAVE A MINIMUM OF ONE DRINKING FOUNTAIN.
- 2. UNIT SHALL BE MOST DEPENDABLE, MODEL 440 SM OR 410 SM OR APPROVED EQUAL.
- 3. COLOR TO BE PER D 0.0 UNLESS OTHERWISE SPECIFIED.
- 4. UNIT AND LOCATION SHALL FOLLOW ALL ACCESSIBILITY REQUIREMENTS.

F. BIKE RACKS

- BIKE RACKS SHALL BE PROVIDED IN PARKS, SPORTS & OTHER CITY OWNED FACILITIES, AND RIGHT-OF-WAY AS DETERMINED BY THE CITY ENGINEER. BIKE RACKS SHALL BE TOURNESOL SITEWORKS MODEL LP-1500 OR AN APPROVED EQUAL.
- 2. COLOR TO BE PER D 0.0 UNLESS OTHERWISE SPECIFIED.

G. BIKE RACKS

- 1. BIKE LOCKERS SHALL BE PROVIDED AT CITY OWNED FACILITIES AND RIGHT-OF-WAY AS DETERMINED BY THE CITY ENGINEER. BIKE DETERMINED SHALL BE DURA BIKE LOCKER MODEL DL-2 0 OR AN APPROVED EQUAL.
- 2. COLOR TO BE PER D 0.0 UNLESS OTHERWISE SPECIFIED.

H. PARK SIGN

 ONE PARK SIGN MINIMUM SHALL BE PROVIDED AT PARK ENTRY. DESIGN SHALL BE PER D 9.1 FOR PARK LESS THAN 5 (FIVE) ACRES IN SIZE. DESIGN SHALL BE PER D 9.2 FOR PARKS LARGER THAN 5 (FIVE) ACRES. COLORS TO BE PER D 9.1 OR D 9.2 UNLESS OTHERWISE SPECIFIED.

	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 2	D 4.0
TRACY	Res No. 2020-031	DATE:February 18, 2020	FURNISI	HINGS
	Rev: Lyle C.	Rev:		
Think Inside the Triangle ™	Rev:	Rev:	General Gu	lidelines

SITE FURNISHINGS GUIDELINES

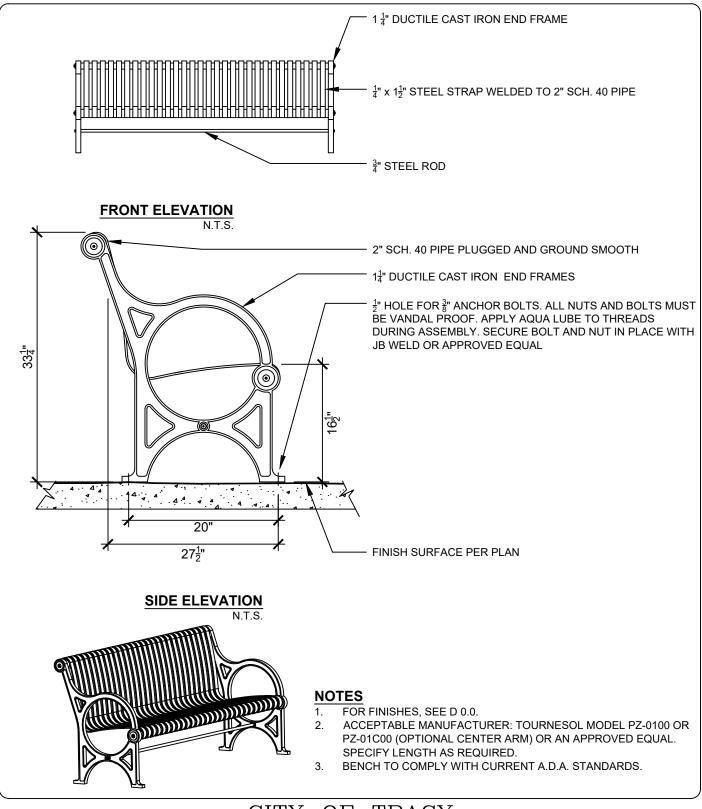
I. ACCESSIBILITY

- 1. ALL FURNISHINGS GUIDELINES MUST MEET A.D.A. STANDARDS AND THE CALIFORNIA CODE OF REGULATIONS TITLE 24 ACCESSIBILITY STANDARDS.
- 2. WHERE BOLLARDS ARE INSTALLED ACROSS PEDESTRIAN PATHS, SUCH SHALL BE SET SO THAT A CLEAR WIDTH OF 48 INCHES IS MAINTAINED ON PEDESTRIAN PATH.
- 3. DRINKING FOUNTAINS SHALL HAVE MINIMUM OF 30"X48" CLEAR SPACE WITH CROSS SLOPES NOT EXCEEDING 1:48 SHALL BE PROVIDED.
- 4. DRINKING FOUNTAINS SHALL HAVE A 17-INCH MINIMUM TO 25-INCH MAXIMUM TOE CLEARANCE SHALL BE PROVIDED UNDERNEATH THE DRINKING FOUNTAIN. KNEE CLEARANCE SHALL BE PROVIDED AT A MIN 27-INCHES ABOVE FLOOR OR GROUND.

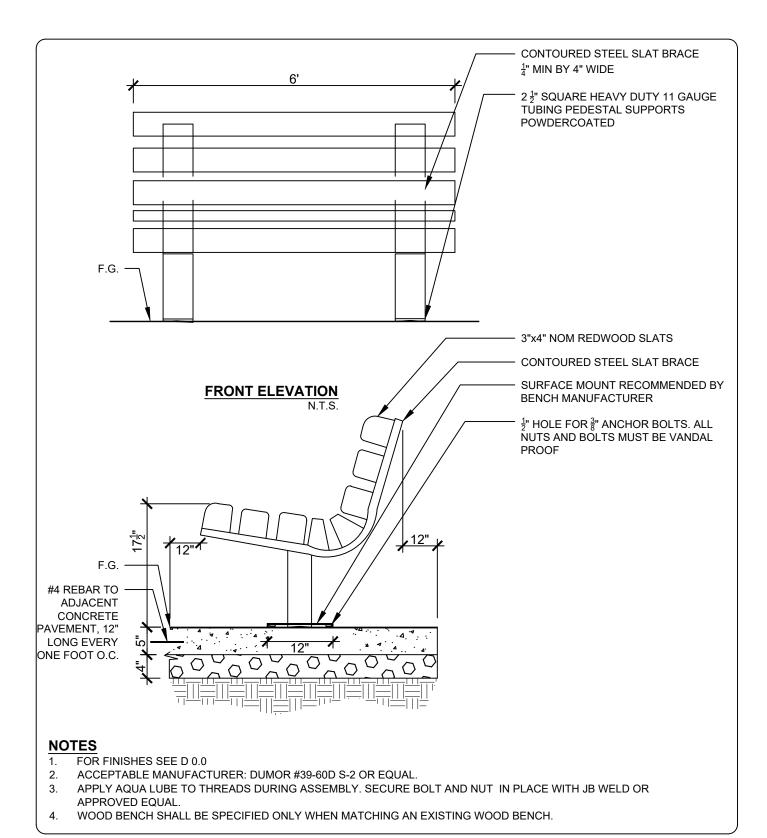
J. SUBMITTALS

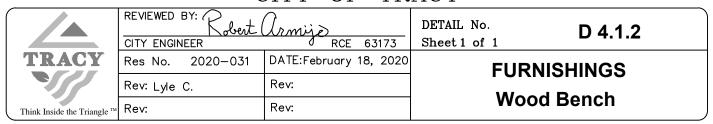
- 1. PROVIDE WRITTEN TECHNICAL SPECIFICATION FOR ALL FINISHES.
- 2. PROVIDE SUBMITTAL AND SAMPLES FOR APPROVAL PRIOR TO CONSTRUCTION.

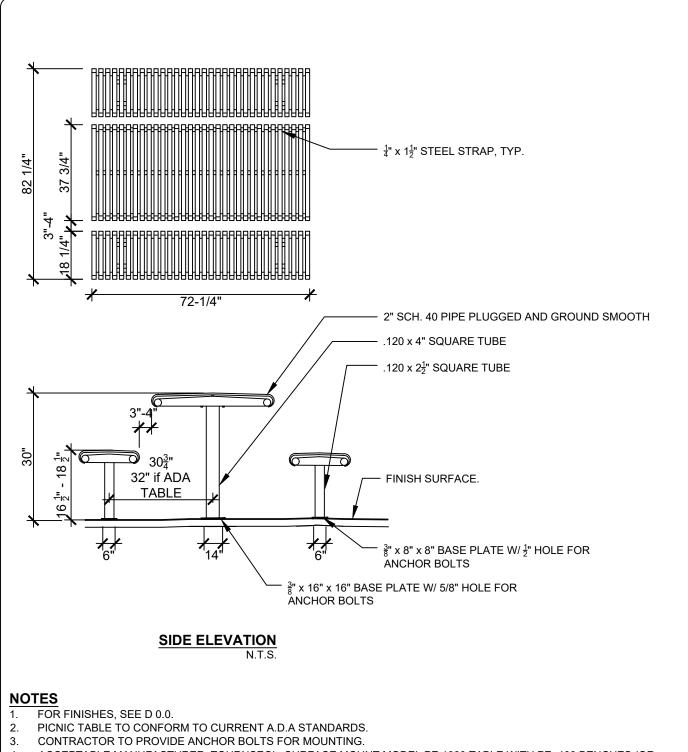
	REVIEWED BY: Robert CITY ENGINEER	armije RCE 63173	DETAIL No. Sheet 2 of 2	D 4.0
TRACY	Res No. 2020-031	DATE:February 18, 2020	FURNISH	IINGS
	Rev: Lyle C.	Rev:		
Think Inside the Triangle ™	Rev:	Rev:	General Gui	idelines



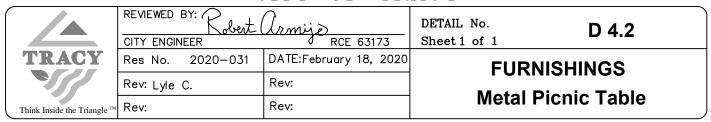
	REVIEWED BY: Pobert	Irmije RCE 63173	DETAIL No. Sheet 1 of 1	D 4.1.1
TRACY	Res No. 2020-031	DATE:February 18, 2020	FURNIS	HINGS
	Rev: Lyle C.	Rev:	Park, Streetsca	pe or Transit
Think Inside the Triangle ™	Rev:	Rev:	Ben	ch

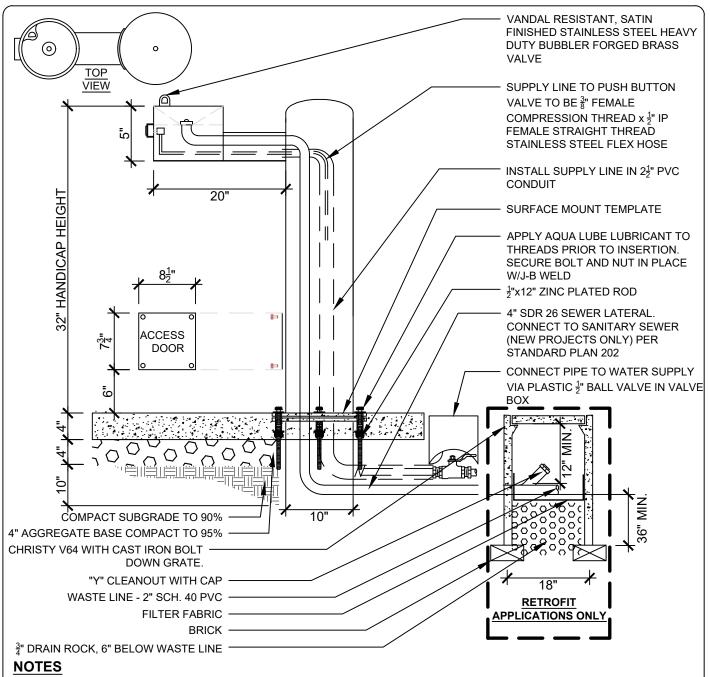






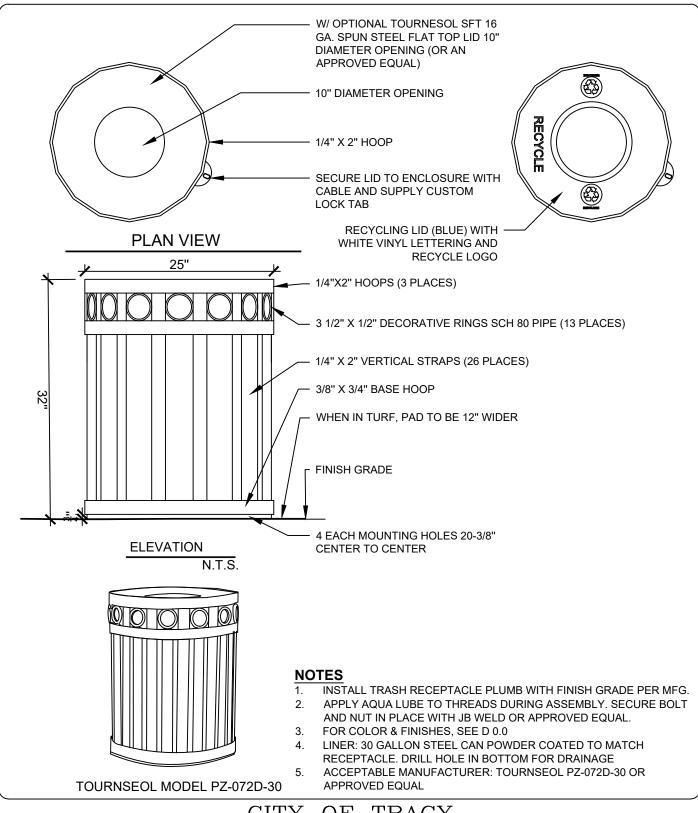
- 4. ACCEPTABLE MANUFACTURER: TOURNSEOL, SURFACE MOUNT MODEL PZ-1000 TABLE WITH PZ- 400 BENCHES (OR LENGTH AS SPECIFIED) OR AN APPROVED EQUAL.
- PROVIDE AN ACCESSIBLE MODEL AS REQUIRED.





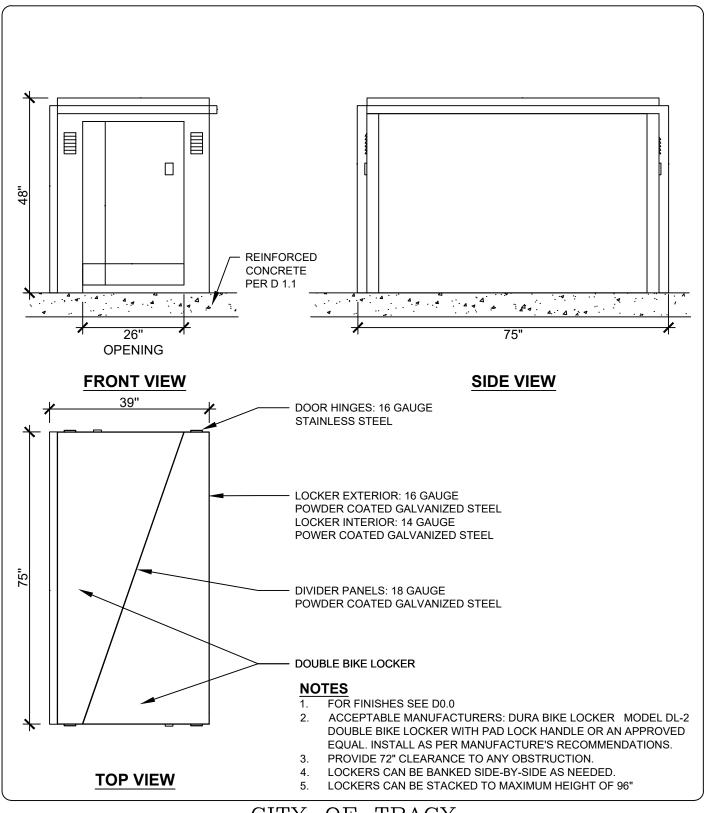
- 1. DRINKING FOUNTAIN TO BE M.D.F. (MOST DEPENDABLE FOUNTAINS) MODEL 410 SM (SHOWN) OR EQUAL USE MODEL 440 SM IN LARGER PARKS OR AS DIRECTED.
- 2. BALL VALVE SHALL NOT BE MORE THAN 4' FROM MOUNTAIN; UNLESS OTHERWISE SPECIFIED.
- 3. CONNECT TO SANITARY SEWER SYSTEM.
- 4. LOCATE A QUICK COUPLER VALVE WITHIN A 20' RADIUS OF DRINKING FOUNTAIN; UNLESS OTHERWISE SPECIFIED.
- 5. WATER LINE TO BE PRESSURE TESTED, FLUSHED, AND CHLORINATED; PER SPECS.
- 6. DEDICATE REDUCED PRESSURE PRINCIPAL BACKFLOW DEVICE FOR DRINKING FOUNTAIN, MINIMUM 1".
- 7. PROVIDE CLEAN OUT ON WASTE LINE, PER 100' OR OTHERWISE NOTED ON PLANS.
- 8. COLOR AND FINISHES PER D 0.0

	CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	
TRACY	Res No. 2020-031	DATE:February 18, 2020	FURNISHINGS	
	Rev: Lyle C.	Rev:		
Think Inside the Triangle TM	Rev:	Rev:	Drinking Fountain	_

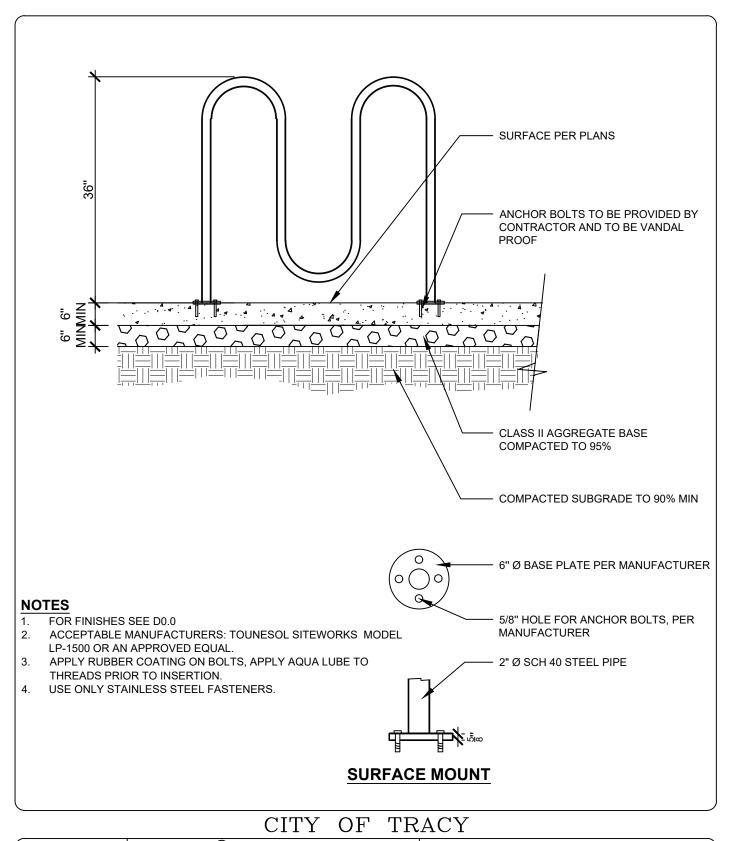


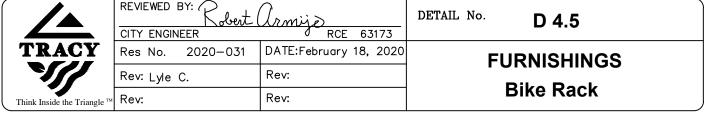
TRACY CITY OF

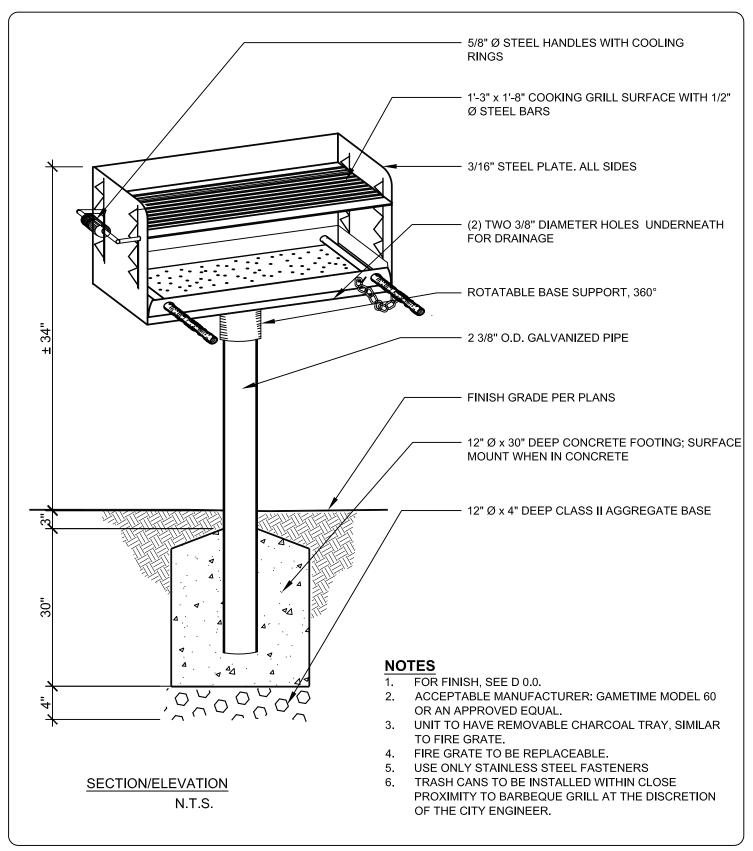
	REVIEWED BY: Cobert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. D 4.4
TRACY	Res No. 2020-031	DATE:February 18, 2020	FURNISHINGS
~///	Rev: Lyle C.	Rev:	
Think Inside the Triangle TM	Rev:	Rev:	Trash Receptacle: Metal



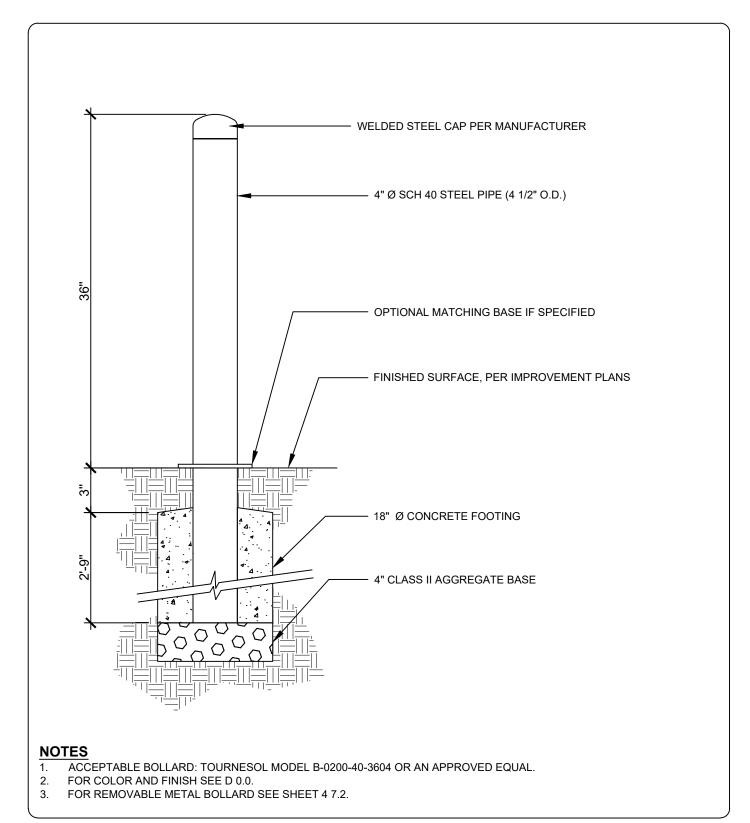
	REVIEWED BY: Cobert 1	Irmije) RCE 63173	DETAIL No. D 4.5.1
TRACY	Res No. 2020-031	DATE:February 18, 2020	FURNISHINGS
	Rev: Lyle C.	Rev:	
Think Inside the Triangle TM	Rev:	Rev:	Bike Locker

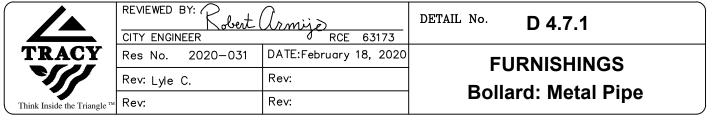


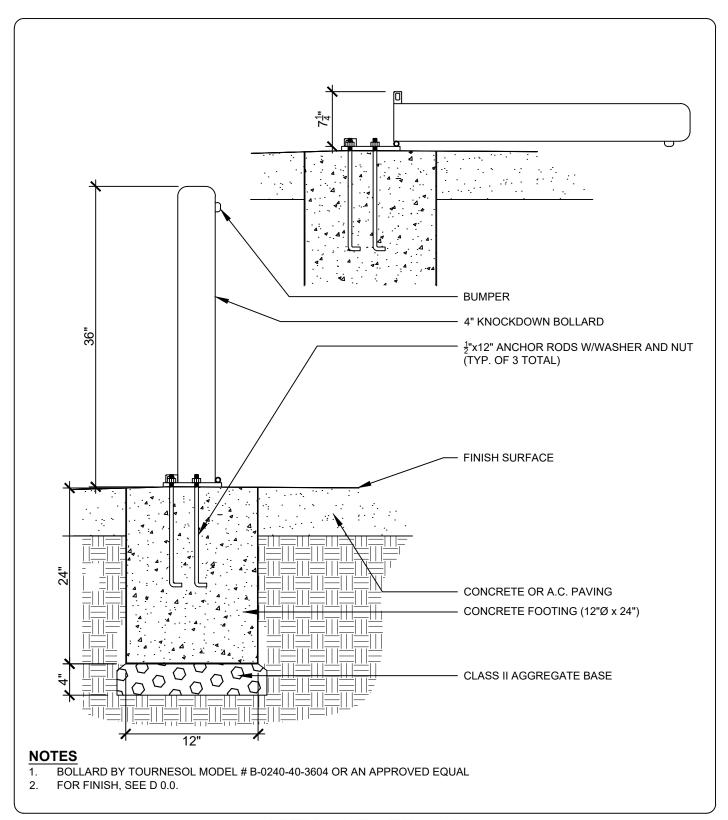


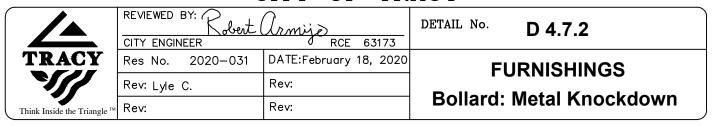


	REVIEWED BY: Colent (Irmije) RCE 63173	DETAIL No. D 4.6
TRACY	Res No. 2020-031	DATE:February 18, 2020	FURNISHINGS
	Rev: Lyle C.	Rev:	
Think Inside the Triangle ™	Rev:	Rev:	Barbeque Grill









SPORT COURT SURFACING

PAVING FOR CONCRETE COURTS

- LIME TREAT NATIVE SOIL PER GEOTECHNICAL REPORT.
- 2. INSTALL A 6 MIL PLASTIC LINER/VAPOR BARRIER BETWEEN NATIVE SOIL AND BASE ROCK.
- WOOD FLOAT OR MEDIUM BROOM FINISH CONCRETE ONLY.
- 4. CURING COMPOUNDS SHALL NOT BE USED. SURFACE SHALL BE KEPT CONTINUALLY MOIST FOR SEVEN DAYS. COVER WITH PLASTIC POLY FILM OR WATER PROOF CURING PAPER. CONCRETE MUST CURE FOR A MINIMUM OF 28 DAYS.
- 5. SURFACE AREA SHOULD NOT EXCEED 1/8" IN 10' WHEN MEASURED IN ANY DIRECTION WITH A STRAIGHT EDGE AND SLOPE 1" IN 10' ALL IN ONE PLANE, PER PLANS.
- 6. THOROUGHLY REMOVE ALL DUST, DIRT, OIL AND FOREIGN MATTER. FLOOD THE SURFACE, LOCATE AND MARK ALL DEPRESSIONS GREATER THAN THE THICKNESS OF A NICKEL.
- 7. CONCRETE SURFACE MUST BE ETCHED WITH A CONCRETE PREPARE SOLUTION. AFTER DRYING, ALL LATENT MATERIAL MUST BE REMOVED FROM SURFACE.
- 8. AFTER SURFACE HAS DRIED, FILL MARKED DEPRESSIONS WITH A COURT PATCH BINDER ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND DIRECTIONS. ALL COMPATIBLE MATERIAL, FOLLOW DIRECTIONS.
- 9. A TACK COAT IS NECESSARY UNDER PATCHES ONLY AND SHALL BE MIXED PER SPECIFICATIONS MIX.
- 10. APPLY PRIMER COAT PER MANUFACTURER'S SPECIFICATIONS AND DIRECTION.
- 11. A COAT OF ACRYLIC FILLER SHALL BE APPLIED WITHIN 1-3 HOURS OF THE APPLICATION OF THE PRIMER COAT WHILE STILL TACKY TO FINGERTIP TOUCH.
- 12. ACRYLIC TEXTURED COLOR COATS SHALL BE APPLIED ON THE CLEAN, DRY, UNDERLYING SURFACE IN 3 APPLICATIONS PER SPECIFICATIONS. NO APPLICATION SHALL BE COVERED BY A SUCCEEDING APPLICATION UNTIL THOROUGHLY DRIED.
- 13. FOUR HOURS MINIMUM AFTER COMPLETION OF THE COLOR COATING, 2 INCH WIDE, TEXTURED PLAYING LINES SHALL BE ACCURATELY LOCATED, MARKED AND PAINTED WITH TEXTURED LINE PAINT PER IMPROVEMENT PLANS AND SPECIFICATIONS.
- 14. FOR ASPHALT COURTS, SEE DETAIL D 1.6.2.

FOR PLEXIPAVE FINISH SURFACE:

CRACK FILLER

MATERIALS FOR FILLING CRACKS SHALL BE OVER KOTE CRACK FILLER MANUFACTURED BY REED & GRAHAM, OR AN APPROVED EQUAL COMMERCIALLY PREPARED CRACK FILLER.

REFINEMENT MATERIAL

MATERIAL FOR LEVELING LOW AREAS AND FOR THE REFINEMENT COURSE SHALL BE OVER KOTE PAVEMENT COATING MANUFACTURED BY REED & GRAHAM, OR AN APPROVED EQUAL MINERAL FILLED ASPHALT EMULSION PRODUCT.

COLOR COATING

COLOR COATING IS TO BE "PLEXI-PAVE" SYSTEM MANUFACTURED BY CALIFORNIA PRODUCTS CORP., OR APPROVED EQUAL. COLORS TO MEET CURRENT NCAA STANDARDS.

PAINT

PLEXICOLOR LINE PAINT BY CALIFORNIA PRODUCTS CORP., OR APPROVED EQUAL.

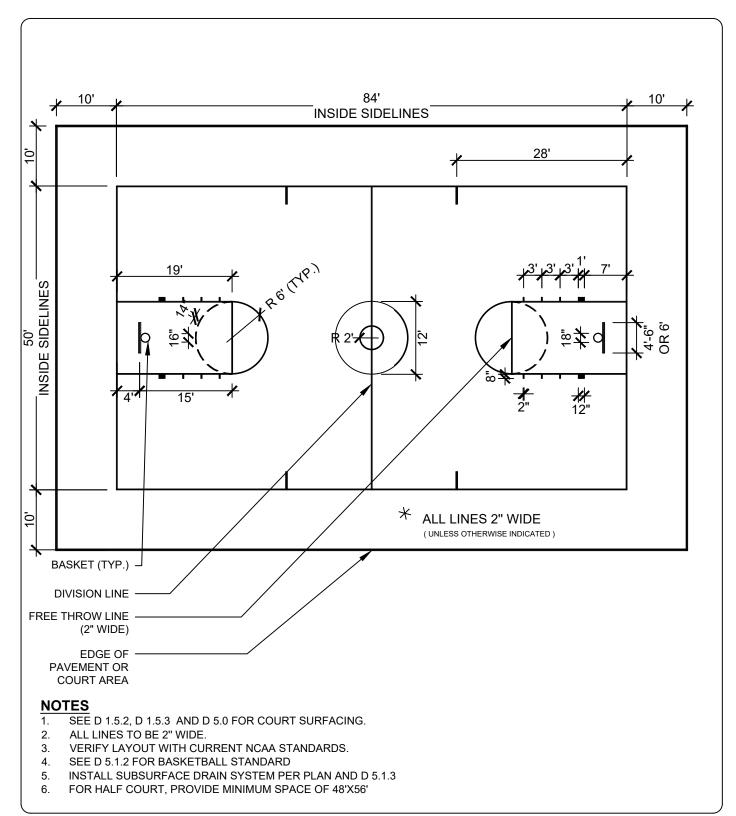
PROTECTIVE COATING

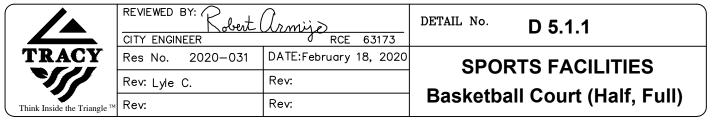
ON ALL SURFACES, APPLY TWO COATS OF "CLEAR-GLO 3", APPLIED OVER COLOR COATINGS, MANUFACTURED BY CALIFORNIA PRODUCTS CORP., OR APPROVED EQUAL.

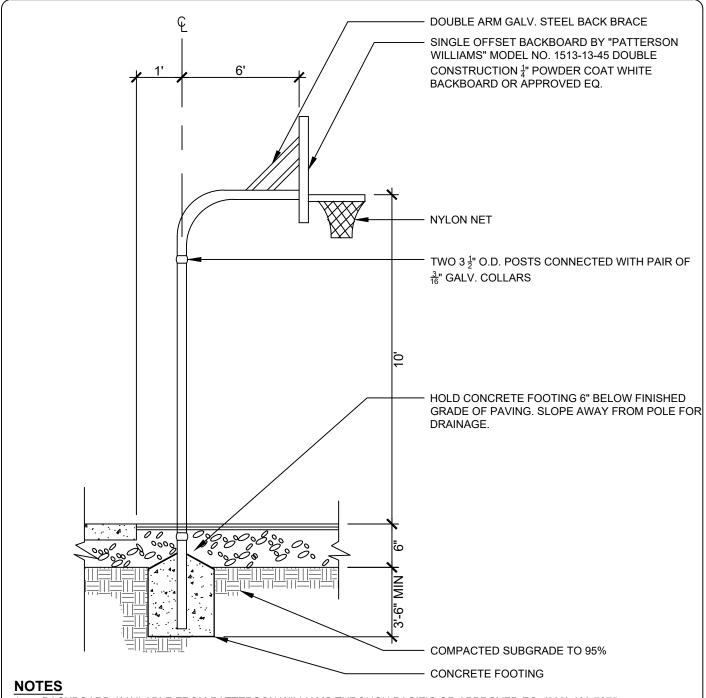
NOTES:

SPORTS COURTS TO MEET CALTRANS STANDARD SPECIFICATIONS, IN CASE OF TENNIS COURTS COMPLY WITH THE UNITED STATES TENNIS ASSOCIATION (USTA) STANDARDS THAT GIVES RISE TO INDUSTRY STANDARDS REGARDING PONDING ON TENNIS COURTS.

	REVIEWED BY: Cobert (Irmija RCE 63173	DETAIL No. D 5.0
TRACY	Res No. 2020-031	DATE:February 18, 2020	SPORTS FACILITIES
	Rev: Lyle C.	Rev:	Sport Court Surfacing
Think Inside the Triangle ™	Rev:	Rev:	Sport Court Surfacing

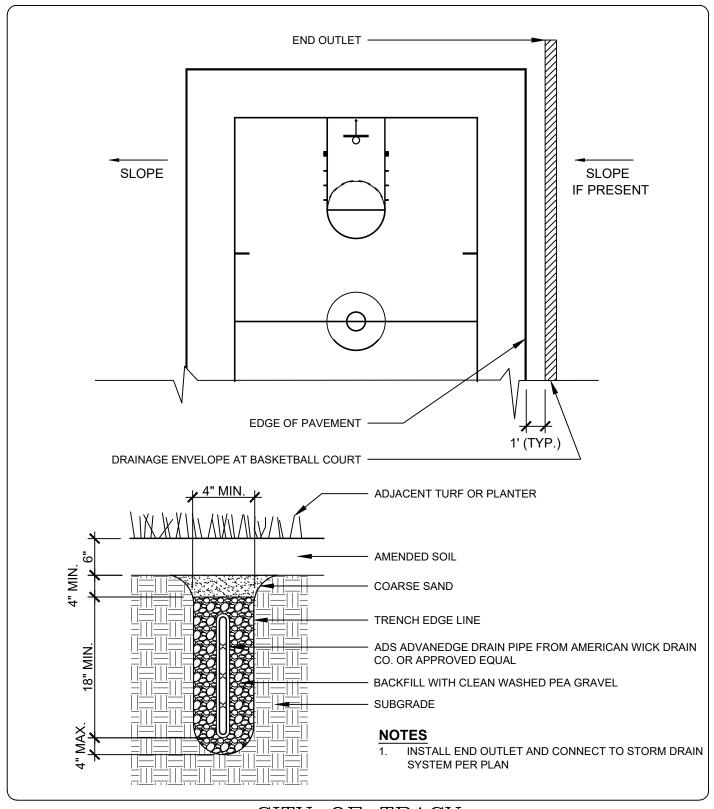


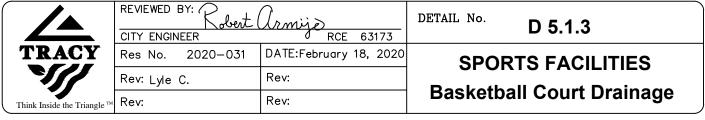


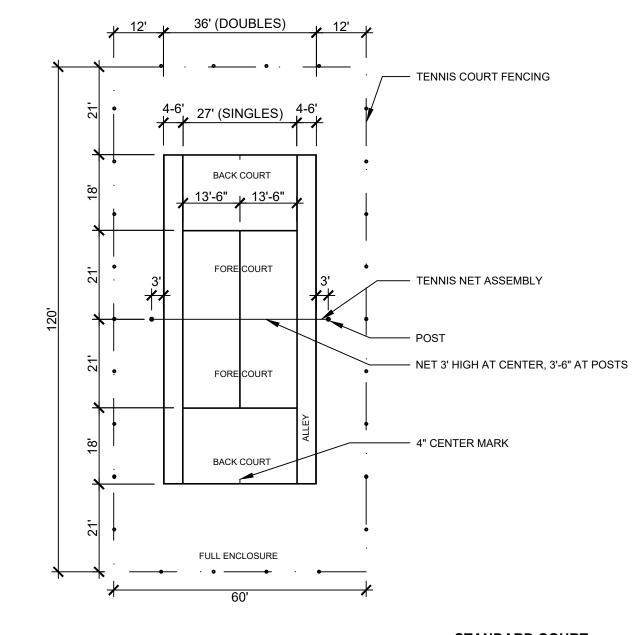


- 1. BACKBOARD AVAILABLE FROM PATTERSON WILLIAMS THROUGH PACIFIC OR APPROVED EQ. (888) 460-7275
- 2. DIMENSIONS MAY CHANGE BASED UPON FINAL COURT SIZE, REFER TO PLANS
- 3. MAINTAIN 10' HEIGHT FROM FINISHED PLAY SURFACE TO BASKETBALL RIM
- 4. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR CONCRETE SHOWN ARE MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.

	CITY ENGINEER	Irmije)	DETAIL No. D 5.1.2
TRACY	Res No. 2020-031	DATE:February 18, 2020	SPORTS FACILITIES
	Rev: Lyle C.	Rev:	Basketball Standard
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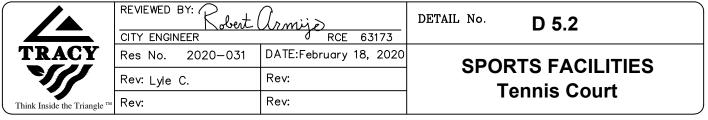


STANDARD COURT

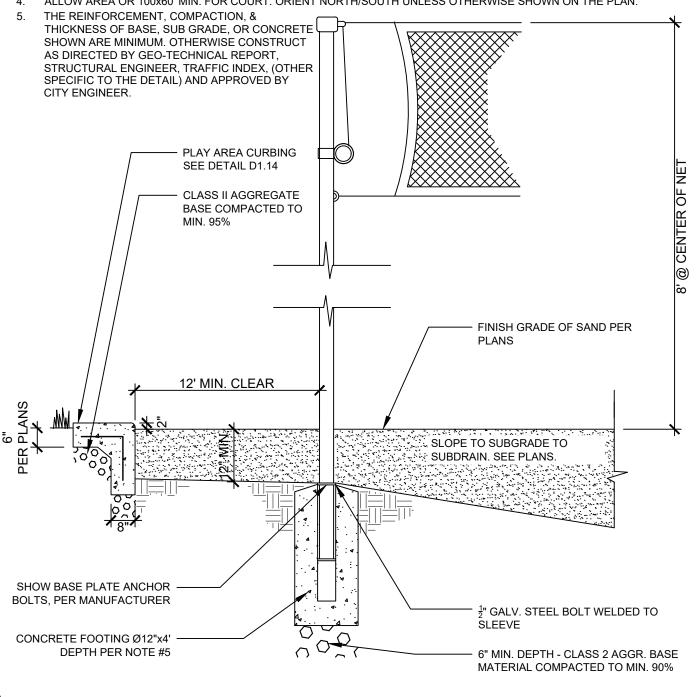
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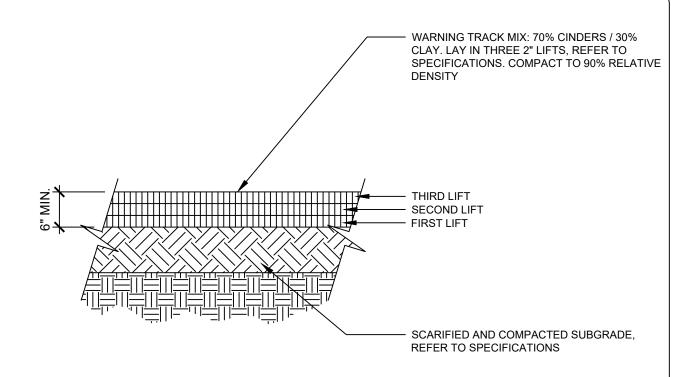
- 1. SEE D1.6.2 FOR COURT SURFACING
- 2. VERIFY LAYOUT WITH CURRENT NCAA STANDARDS
- 3. ORIENT IN A NORTH SOUTH DIRECTION; UNLESS OTHERWISE NOTED ON PLANS
- 4. DIMENSIONS GIVEN TO OUTSIDE OF LINES EXCEPT CENTER LINE. LINES 2" WIDE EXCEPT BASE LINE TO BE 4" WIDE



- 1. VOLLEYBALL POST TO BE GALVANIZED PATTERSON WILLIAMS ATHLETIC OR APPROVED EQUAL POST $2\frac{7}{8}$ " MODEL #2214-21 WITH EXTENSION FOR SAND PLAY. NET TO BE MODEL #8361-20 OR APPROVED EQUAL
- 2. VOLLEYBALL POST, SLEEVE & FITTINGS PER SPECIFICATIONS
- 3. SAND SHALL BE OLYMPIC #12 OR APPROVED EQUAL
- 4. ALLOW AREA OR 100x60' MIN. FOR COURT. ORIENT NORTH/SOUTH UNLESS OTHERWISE SHOWN ON THE PLAN.

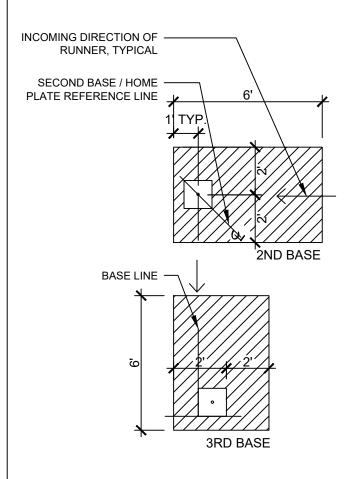


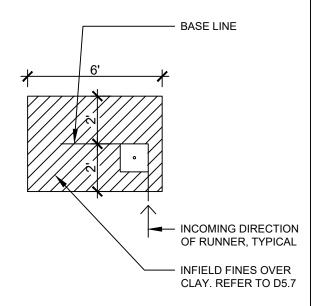
	REVIEWED BY: Cobert CITY ENGINEER	Det Urmije DETAIL No. D 5.3	
TRACY	Res No. 2020-031	DATE:February 18, 2020	SDODTS EACH ITIES
	Rev: Lyle C.	Rev:	SPORTS FACILITIES
Think Inside the Triangle TM	Rev:	Rev:	Sand Volleyball Court



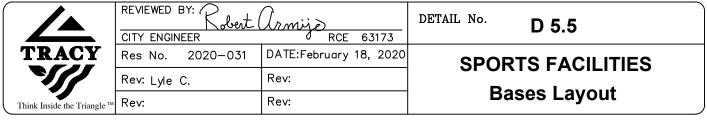
- 1. INSTALL WARNING TRACK AND FOUL LINE RUN ADJACENT TO FENCE WITH 6" DEPTH OF FINES PER IMPROVEMENT
- 2. WARNING TRACK SURFACE TO BE FREE OF ROCK, DEBRIS, VEGETATION, AND FOREIGN MATERIAL.
- SUBSURFACE TO BE STERILIZED TO ELIMINATE POSSIBLE VEGETATIVE GROWTH PER RECOMMENDATION BY PCA AND APPROVED BY CITY ENGINEER.
- 4. SPREAD MIX IN 2" LIFTS. WATER LIGHTLY AND COMPACT WITH ROLLER AFTER EACH LIFT.

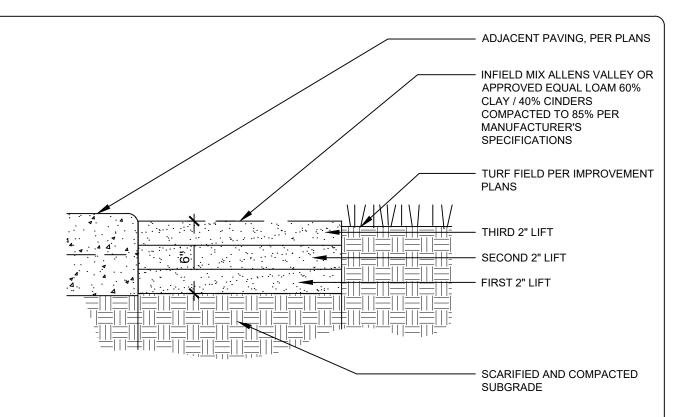
	REVIEWED BY: Colent 1	DETAIL No. D 5.4	
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	Rev: Lyle C.	Rev:	
Think Inside the Triangle TM	Rev:	Rev:	Warning Track





- 1. PEGS LOCATED CENTERED ON BASE, 6" FROM INTERSECTION OF BASE LINE FOR 1ST AND 3RD BASES.
- 2. PEGS LOCATED ON INTERSECTION OF BASE LINE FOR 2ND BASE.
- 3. DETAIL PROVIDED FOR LOCATION ONLY.

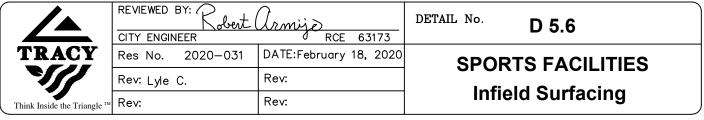




1. INFIELD MIX SHALL PASS PHYSICAL PROPERTIES BELOW:

SIEVE SIZE	% PASSING
5MM	100
2MM	95-100
1MM	70-95
.5MM	60-80
.05MM	20-30
<.05MM	20-30%

- ENTIRE INFIELD SKINNED SURFACE SHALL BE FREE OF ROCK, DEBRIS, VEGETATION, AND FOREIGN MATERIAL, PER SPECIFICATIONS.
- 3. STERILIZE SUBGRADE TO ELIMINATE POSSIBLE VEGETATION GROWTH PER MANUFACTURER SPECIFICATIONS / RECOMMENDATIONS.
- 4. SPREAD INFIELD MIX IN 2" THICK LIFTS. WATER LIGHTLY AND COMPACT WITH ROLLER AFTER EACH LIFT, PER MANUFACTURER'S RECOMMENDATIONS.
- 5. INCORPORATE INFIELD CONDITIONER "PROS CHOICE SELECT RED OR APPROVED EQUAL" AT A RATE OF 1 TON/1000 SQ. FT. UNIFORMLY INTO THE TOP 3" OF THE SURFACE AFTER APPROXIMATE GRADE IS ESTABLISHED, PER MANUFACTURER SPECIFICATIONS. DISTRIBUTED BY ALLENS VALLEY LOAM OR APPROVED EQUAL.
- RECOMPACT TO 85% MIN. UNTIL FINAL GRADE ELEVATION IS ACHIEVED, PER IMPROVEMENT PLANS.



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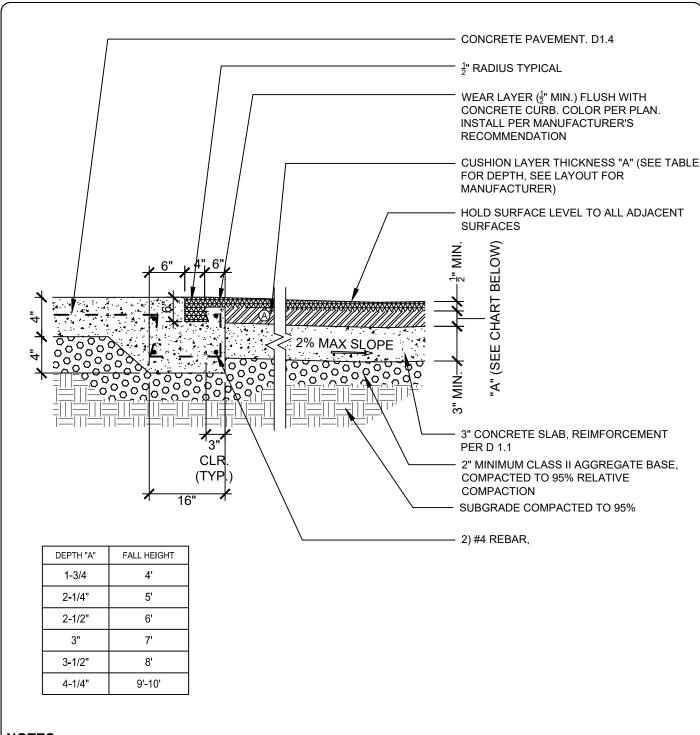
10. PRIOR TO ITS FIRST USE, THE PLAYGROUND EQUIPMENT SHALL BE INSPECTED BY AN INDEPENDENT CERTIFIED PLAYGROUND SAFETY INSPECTOR WHO SHALL CERTIFY TO THE CITY IN WRITING THAT THE EQUIPMENT IS IN COMPLIANCE WITH ALL CURRENT CODES AND REQUIREMENTS.

		REVIEWED BY: Robert armige CITY ENGINEER RCE 63173		DETAIL No. Sheet 2 of 2	D 6. 0		
,	TRACY	Res No.	2020-031	DATE:February	18, 2020	PLAY EQUIPMENT	
		Rev: Lyle	C.	Rev:			
TI	nink Inside the Triangle TM	Rev:		Rev:		Gene	eral Guidelines

PLAY EQUIPMENT GENERAL NOTES

- 1. GENERAL: EACH PLAY EQUIPMENT INSTALLATION SHALL BE AN INTEGRATED MODULAR SYSTEM AS DESIGNED BY A SINGLE MANUFACTURER, AND SHALL INCLUDE ELEMENTS AS DESCRIBED IN THE PARKS SECTION. PLAY EQUIPMENT SHALL BE OF METAL POST CONSTRUCTION WITH PLASTIC AND STEEL ATTACHMENTS CLAMPED TO IT. ALL EQUIPMENT, DESIGN, LAYOUT, INSTALLATION, AND ANY OPTIONS OR MODIFICATIONS SHALL BE IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS, MEET CURRENT U.S. CONSUMER PRODUCT SAFETY COMMISSION HANDBOOK FOR PLAYGROUND SAFETY, ASTM STANDARDS, AND MEET CURRENT A.D.A. REQUIREMENTS AND CALIFORNIA CODE OF REGULATIONS, TITLE 22, DIVISION 4, CHAPTER 22.
- 2. POSTS: POSTS SHALL BE 4 1/2" MINIMUM OUTSIDE DIAMETER STEEL PIPE. ALL ENDS SHALL BE FITTED WITH CAST ALUMINUM OR GLASS FIBER-IMPREGNATED POLYETHYLENE ROUNDED CAPS, MOUNTED IN VANDAL PROOF PERMANENT FASHION; PER PLANS.
- 3. FOOTINGS: SHALL BE PER MANUFACTURER'S SPECIFICATIONS, VERIFIED BY CITY ENGINEER.
- 4. HARDWARE: CLAMPS SHALL BE CAST ALUMINUM ALLOY, MINIMUM TENSILE STRENGTH 45,000 PSI; UNLESS OTHERWISE INDICATED. BOLTS SHALL BE STAINLESS STEEL, TAMPER RESISTANT. SUPPLY ALL SPECIALTY MAIN. TOOLS TO THE OWNER; PER SPECIFICATIONS.
- 5. ATTACHMENTS: ALL HANDRAILS AND PIPE ATTACHMENTS SHALL BE GALVANIZED STEEL PIPE, SCHED. 40 OR APPROVED EQUAL. PLASTIC PANELS AND SLIDES SHALL BE MOLDED MEDIUM DENSITY POLYETHYLENE, MINIMUM 7/16" THICK; CHAINS SHALL BE GALVANIZED STEEL LINK, MINIMUM 1/4" GAUGE. SLIDES SHALL BE ORIENTED TO THE NORTH WHENEVER POSSIBLE; UNLESS OTHERWISE INDICATED ON THE PLANS.
- 6. PAINT FINISHES: ALL METAL POSTS, HANDRAILS, HARDWARE, CLAMPS AND OTHER NON-STAINLESS STEEL PARTS OF THE ASSEMBLY SHALL RECEIVE ELECTROSTATICALLY APPLIED POWDERCOAT BONDED TO METAL TO PROHIBIT PEELING, PER MANUFACTURER'S SPECIFICATIONS. COLOR SHALL BE U.V.-STABILIZED. ACCESSORY CLAMPS MAY BE POWDER-COAT FINISHED, MINIMUM 5 MILS THICKNESS. ALL METAL PARTS SHALL BE GROUND SMOOTH AND DEBURRED PRIOR TO COATING; PER SPECIFICATIONS.
- 7. ACCEPTABLE MANUFACTURERS: LANDSCAPE STRUCTURES; GAMETIME; BCI BURKE, BERLINER, LAPPSET OR AN APPROVED EQUAL.
- 8. SURFACING SHALL MEET REGULATIONS AS NOTED IN ITEM 1 ABOVE AND BE ONE OR A COMBINATION OF THE FOLLOWING:
 - A) RESILIENT SURFACE: POLYURETHANE/FOAM COMPOSITE OVER A CONCRETE BASE (PREFERRED) OR COMPACTED AGGREGATE BASE. SURFACE SHALL MEET OR EXCEED THE STANDARDS SET FORTH BY THE U.S. CONSUMER PRODUCT SAFETY COMMISSION HANDBOOK FOR PLAYGROUND SAFETY. MINIMUM THICKNESS OF RESILIENT SURFACE 2 1/4 INCHES; UNLESS OTHERWISE INDICATED. SURFACE SHALL BE SINGLE UNIT, SHRINK RESISTANT, SEAMLESS, BONDED TO SUBSTRATE WITH MANUFACTURER APPROVED ADHESIVE. EDGES SHALL BE BEVELED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. ACCEPTABLE MANUFACTURERS: ITRI-TURF, SURFACE AMERICA, SPECTRA TURF OR TOT TURF BY ROBINSON OR APPROVED EQUAL TO SATISFY REQUIREMENTS OF PLAYGROUND MANUFACTURER.
 - B) ENGINEERED WOOD FIBERS, FIBAR OR EQUAL, MINIMUM OF 12" DEEP; UNLESS OTHERWISE INDICATED.
- 9. PLAY EQUIPMENT SHOP DRAWINGS AND SITE LAYOUT BY MANUFACTURER IN DESIGNED AREA AND SHALL SHOW ALL DIMENSIONS, OFFSETS, AREA CURB AND USE ZONE REQUIREMENTS. OPERATORS SHALL HAVE PLAYGROUND EQUIPMENT ASSEMBLED AND INSTALLED IN COMPLIANCE WITH THE WRITTEN INSTRUCTIONS OF THE MANUFACTURER. THE PLAYGROUND EQUIPMENT SHALL BE ASSEMBLED AND INSTALLED BY OR UNDER THE DIRECT SUPERVISION OF AN INDIVIDUAL WHO IS AUTHORIZED BY THE MANUFACTURER TO ASSEMBLE AND INSTALL THE EQUIPMENT.

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Think Inside the Triangle ™	Rev:	Rev:	General Guidelines



1. THE REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE, OR CONCRETE SHOWN ARE AT A MINIMUM. OTHERWISE CONSTRUCT AS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, (OTHER SPECIFIC TO THE DETAIL) AND APPROVED BY CITY ENGINEER.

	REVIEWED BY: Colent (Irmije) RCE 37186	DETAIL No. D 6.1	
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	Rev: Lyle C.	Rev:	·	
Think Inside the Triangle TM	Rev:	Rev:	PIP Rubber	

PLANTING DESIGN GUIDELINES

A. GENERAL

- SELECT PLANTS ACCORDING TO THE FUNCTIONAL CHARACTERISTICS DESCRIBED IN THE PLANTING ZONES SECTION OF THE STREETSCAPE AND DESIGN GUIDELINES DOCUMENT, AND D7.1.
- EXISTING SITE VEGETATION SHALL BE CHEMICALLY CONTROLLED AS SPECIFIED BY A LICENSED PEST CONTROL ADVISOR AND APPROVED BY CITY PRIOR TO CLEARING THE SITE, STRIPPING, OR SCARIFYING.
- 3. EXISTING TOPSOIL ON A SITE SHOULD BE STRIPPED AND STOCKPILED FOR REDISTRIBUTION IN THE PLANTING AREAS ONCE GRADING AND HEAVY CONSTRUCTION OPERATIONS ARE COMPLETE. IN ANY CASE, A MINIMUM OF 6" OF CLEAN, FRIABLE TOPSOIL MUST BE PROVIDED IN ALL PLANTING AREAS, OR THE DEPTH THAT ORIGINALLY EXISTED ON THE SITE, WHICHEVER IS DEEPER. WHERE IMPORT TOPSOIL MUST BE USED TO MEET THIS CRITERIA, IT SHALL BE CERTIFIED AS PHYSICALLY AND CHEMICALLY COMPATIBLE WITH THE UNDERLYING SOIL BY THE SOIL TESTING LABORATORY AS DESCRIBED BELOW.
- 4. SITE SHALL BE RIPPED AND CROSS RIPPED TO A DEPTH OF 12" PRIOR TO THE ESTABLISHMENT OF ROUGH GRADE.
- 5. ALL PLANTING WATER USE TO BE DETERMINED BY THE LATEST EDITION OF CALIFORNIA WATER USE CLASSIFICATION OF LANDSCAPE SPECIES (WUCOLS).
- 6. PLANTING DESIGN SHALL COMPLY WITH CALIFORNIA TITLE 23 CHAPTER 2.7. (MWELO) AND AB1881 INCLUDING ALL REQUIRED NOTES AND COMPLIANCE STATEMENT WITH SIGNATURE BLOCK.
- 7. PROVIDE LANDSCAPE DOCUMENTATION PACKAGE INFORMATION PER TITLE 23, CHAPTER 7. NOTE THE CITY OF TRACY HAS ADDITIONAL REQUIREMENTS FOR SOILS TESTING.
- 8. ALL PLANS ARE TO BE PREPARED AND UNDER THE DIRECTION OF A CALIFORNIA LICENSED LANDSCAPE ARCHITECT EXCEPT WHERE ALLOWED BY CALIFORNIA LANDSCAPE ARCHITECTS PRACTICE ACT, BUSINESS AND PROFESSION CODE.
- LANDSCAPE PLANS ARE TO CONFORM WITH THE CITY OF TRACY PARKS DESIGN STANDARDS, STREETS &
 UTILITIES STANDARD PLANS, PARKS & STREETSCAPE STANDARD PLANS, STREETSCAPE DESIGN
 GUIDELINES, AND CITY MUNICIPAL CODE.

B. SOIL TESTING

- 1. GENERAL: FOR RENOVATED LANDSCAPES AND AREAS OF UNDISTURBED SOILS SCHEDULED FOR PLANTING WHERE MASS GRADING DOES NOT OCCUR; PROVIDE A SOIL TEST, PRIOR TO THE PLANTING DESIGN, AND RECOMMENDATIONS FOR EACH SITE DEVELOPED. AFTER THE FINAL GRADE HAS BEEN ESTABLISHED FOR THE PROJECT, THE SOIL SHALL BE RETESTED AND THE FINAL SOIL AMENDMENT DETERMINED. THIS SOILS TEST IS TO BE PRESENTED TO THE CITY OF TRACY FOR REVIEW PRIOR TO ANY PLANTING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL NOT COMMENCE WORK WITH OUT PRIOR APPROVAL BY THE CITY. THE GUIDELINES FOR THE SOIL TESTING ARE AS FOLLOWS:
 - A. PARKS: MINIMUM 2 SAMPLES PER ACRE.
 - B. PARKWAYS: MINIMUM 1 SAMPLE PER 2000 LF OF EACH SIDE OF PARKWAY.
 - C. PROVIDE ONE ADDITIONAL SAMPLE FOR EVERY BATCH OF IMPORT SOIL; PROVIDE ONE ADDITIONAL SAMPLE PER ACRE FOR EVERY 3-FOOT DROP IN GRADE.
- 2. TESTING SHALL BE DONE BY A REPUTABLE CERTIFIED LABORATORY FOR SOIL AND PLANT DISEASE DIAGNOSIS AND ANALYSIS, WITH A MINIMUM OF FIVE YEARS EXPERIENCE. CITY MUST APPROVE SELECTED LABORATORY BEFORE SAMPLING AND TESTING BEGINS. ALL TESTING SHALL COMPLY WITH CALIFORNIA TITLE 23 CHAPTER 2.7. (MWELO) AND AB1881.

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PLANTING DESIGN GUIDELINES

3. TAKE SOIL SAMPLES IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:
A. A SOIL SAMPLE SHOULD REPRESENT ONLY ONE SOIL OR PLANT CONDITION. THE SAMPLE SHOULD BE A
MIXTURE OF 10 OR MORE SUB-SAMPLES TAKEN FROM THE ROOTING DEPTHS OF EXISTING OR
PROPOSED PLANTINGS. TYPICAL ROOTING DEPTHS ARE:

TURF AND HERBACEOUS GROUND COVER: 0 TO 6"

SHRUBS: 0 TO 18"

SHRUBS: 0 TO 12" AND 13" TO 36" (SAMPLE FROM EACH DEPTH)

LANDSCAPE CONDITIONS REQUIRING DIFFERENT SAMPLES WOULD BE:

DIFFERENT SOIL TEXTURES OR COLORS.

DIFFERENT DRAINAGE PATTERNS.

IMPORT FILLS.

- 4. AREAS RECEIVING DIFFERENT FERTILIZER OR AMENDMENT TREATMENTS. SAMPLES SHOULD NOT CONTAIN ANY PLANT OR ORGANIC MATERIAL FROM THE SOIL SURFACE. THE BEST COLLECTING TOOL IS A SAMPLING TUBE WHICH REMOVES A CORE OF SOIL FROM THE SURFACE TO THE LOWER ROOTING DEPTHS. IF A SHOVEL IS USED, THEN A HOLE SHOULD BE DUG TO THE CORRECT DEPTH AND A VERTICAL 1" SLICE TAKEN FROM THE SIDE OF THE HOLE.
- 5. THE SUB-SAMPLES SHOULD BE RANDOMLY COLLECTED FROM EACH REPRESENTATIVE AREA. THEY SHOULD BE MIXED THOROUGHLY AND PLACED IN A WATER PROOF BAG OR CONTAINER (GALLON ZIP LOCK FREEZER BAGS WORK WELL). LABELS WITH ALL PERTINENT INFORMATION SHOULD BE PLACED ON THE OUTSIDE OF THE CONTAINER. COLLECT AT LEAST TWO CUPS OF SOIL FOR EACH SAMPLE.
- 6. SOIL ANALYSIS AT A MINIMUM SHOULD BE DONE FOR SOIL CHEMISTRY INCLUDING PH; FERTILITY; AGRICULTURAL SUITABILITY; PARTICLE SIZE ANALYSIS; PERCOLATION RATE; AND PRESENCE OF CALCAREOUS CONDITIONS. ADDITIONAL TESTS MAY BE REQUIRED; IF DEEMED APPROPRIATE.
- 7. SOIL TEST RESULTS SHALL BE PRESENTED IN A REPORT FORM, AND SHOULD INCLUDE RECOMMENDATIONS FOR SOIL AMENDMENT, FERTILIZATION, DRAINAGE MITIGATION, AND OTHER NECESSARY MEASURES, FOR BOTH PLANTING AND DURING THE INITIAL 60 OR 90-DAY MAINTENANCE PERIOD. DEPTH OF WATER TABLE SHALL BE ASCERTAINED AND INCLUDED IN THE REPORT.
- 8. SOIL REPORT SHALL BE SUBMITTED TO THE CITY ON THE LANDSCAPE AND IRRIGATION PLANS FOR THE PROJECT, AND SHALL BE ACCOMPANIED BY A STATEMENT FROM A LANDSCAPE ARCHITECT, HORTICULTURAL CONSULTANT OR THE SOIL AND PLANT LABORATORY THAT THE PROPOSED PLANT LIST, PLANTING AND IRRIGATION METHODS ARE IN COMPLIANCE WITH THE SOIL REPORT RECOMMENDATIONS AND WITH THE INTENT OF THE DESIGN GUIDELINES MANUAL. A LOCATION MAP SHALL BE PLACE ON THE PLANS IDENTIFYING SOIL SAMPLES SITES.

C. PLANTING

- 1. PLANT SELECTION AND PLANTING METHODS SHALL COMPLY WITH THIS MANUAL, THE DESIGN DETAILS AND WITH ANY SPECIAL RECOMMENDATIONS GIVEN IN THE SOILS REPORT.
- PLANT MATERIAL NEEDS TO BE SECURED FROM A NURSERY WITHIN 30 DAYS AFTER AWARD OF CONTRACT. IF UNAVAILABLE, SUBSTITUTIONS NEED TO BE REQUESTED DURING THIS TIME. AFTER 30 DAYS, NO SUBSTITUTIONS WILL BE ALLOWED: UNLESS OTHERWISE APPROVED BY CITY.
- 3. ALL TREES SHALL BE STAKED RATHER THAN GUYED. A ROOTBALL ANCHORING SYSTEM MAY BE ALLOWED UNDER SPECIAL CIRCUMSTANCES.
- 4. MINIMUM TREE SIZE SPECIFIED SHALL BE 15-GALLON CAN MINIMUM CONTAINER SIZE SHALL AS FOLLOWS: SHRUBS AND VINES 5-GALLON CAN GRASSES AND GROUND COVERS 1-GALLON CAN FLATS AND LINERS ARE NOT ALLOWED

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- 5. PRIOR TO PLANTING, CONTAINERIZED TREE AND SHRUB ROOTBALLS SHALL BE SCARIFIED.
- TREES TO BE PLANTED 20' FROM STREET LIGHTS, 10' FROM FIRE HYDRANTS AND 8' FROM UTILITIES SHRUBS TO BE PLANTED A MIN. OF 6' FROM FIRE HYDRANTS.
- 7. ALL PLANTING TO CONFORM TO AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1 AND CALIFORNIA STATE DEPARTMENT OF AGRICULTURE REGULATION FOR NURSERY INSPECTION, RULES AND GRADING.
- 8. PLANTING AT ROADWAY INTERSECTIONS SHALL CONFORM TO CORNER VISION CLEARANCE, CITY OF TRACY STANDARD PLAN 174, ROADWAY DESIGN SPEED AS DETERMINED BY TRAFFIC ENGINEER, OR CALTRANS STANDARD.
- 9. SELECTION OF TREES FOR ANY PROJECT TO BE LIMITED TO THE FOLLOWING:

10% OF TOTAL FROM ANY ONE GENIUS

10% OF ANY ONE SPECIES OF THE SPECIFIED GENIUS

10% OF ANY ONE CULTIVAR OF THE SPECIFIED SPECIES

- 10. TURF SHALL NOT BE PERMITTED IN PLANTED AREAS LESS THAN 10' IN WIDTH; OR WITHIN 20" OF EXISTING TREE TRUNK BASE.
- 11. TURF SHALL NOT BE INSTALLED ON SLOPES GREATER THAN 10% OR 10:1. THE TOE OF ANY SLOPING SECTION SHALL BE A MINIMUM OF 24" BEHIND A CURB OR SIDEWALK. GRADES FOR SHRUB AND GROUND COVER AREAS SHALL NOT EXCEED 25% OR 4:1.

D. SEED

- 1. HYDROSEEDING OR HYDRO SPRIGGING (OPTION):
- 2. HYDROSEED OR HYDRO-SPRIGGING MAY BE USED TO PLANT LAWN AREAS, AND MAY BE REQUIRED BY CITY FOR SPECIFIC PROJECTS WITH SOIL PREPARATION PER D7.8.1. HYDROSEED MIXTURE SHALL BE 90% TURF TYPE TALL FESCUE & 10% BLUEGRASS SEED PER CITY: HYDRO-SPRIG BERMUDA SHALL BE USED FOR SPORTS FIELDS

VIRGIN WEYERHEUSER SILVA CANFOR ECO-FIBER 2000 LBS/ACRE WOOD FIBER OR APPROVED EQUAL (46.0 LBS/1000 SQ FT.)

SEED; SPECIFY VARIETY 435 LBS/ACRE

STOLONS: SPECIFY VARIETY 200-300 BUSHELS/ACRE

FERTILIZER: 6-20-20 OR PER SOILS REPORT 650 LBS/ACRE

- SPRAY MIXTURE UNIFORMLY ON PLANTING AREA. USE A NOZZLE WHICH PRODUCES A SPRAY THAT DOES
 NOT CONCENTRATE OR ERODE THE MATERIAL. PROTECT BUILDINGS, TREES, SHRUBS, CARS, ETC. FROM
 SPRAY.
- 4. A DISPERSING AGENT MAY BE ADDED IF EVIDENCE IS PROVIDED THAT THE AGENT IS NOT HARMFUL TO THE MIXTURE OR TO PLANT GROWTH. MIX MATERIALS IN TANK HAVING A BUILT-IN CONTINUOUS AGITATION AND RECIRCULATION SYSTEM OF SUFFICIENT CAPACITY TO PRODUCE A HOMOGENEOUS SLURRY. IF APPLIED MATERIAL BEGINS TO DRY OUT, SPRAY DRIED AREA WITH WATER.
- 5. ALLOW SEED TO GERMINATE AND GROW TO 3" BEFORE FIRST MOWING. MOW AT LEAST TWICE, AND ENSURENO MORE THAN 2% WEEDS. ALL AREAS MUST BE FULLY GERMINATED. CONTACT THE CITY OF TRACY FOR A WALK-THROUGH BEFORE THE START OF THE MAINTENANCE OF LANDSCAPE AND IRRIGATION.

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6. HYDROSEEDING WILL BE ALLOWED ONLY BETWEEN APRIL 1 AND OCTOBER 15. HYDRO SPRIGGING SHALL BE ALLOWED BETWEEN APRIL 1 AND SEPTEMBER 1. HYDRO-APPLICATIONS ARE NOT PERMITTED DURING THE WINTER MONTHS.

E. SOD PLANTING

- 1. SOD SHALL CONSIST OF 90% TALL FESCUE VARIETIES & 10% BLUEGRASS OR EQUAL PER PLAN.
- GRADING FOR SOD SHALL BE LEVEL AND SMOOTH WITH NO LOW SPOTS, AND ONE INCH BELOW TOP OF PAVEMENT FOR SOD, 1/2" BELOW FOR SEED OR AS DIRECTED.
- 3. SOIL SHALL BE MOISTENED TO A DEPTH OF 6" BEFORE SOD IS INSTALLED.
- 4. EDGES OF SOD SHALL BE LAID IN STAGGERED ROWS WITH EDGES BUTTING TIGHTLY TOGETHER.
- AFTER LAYING, SOD SHALL BE WATERED AND ROLLED WITH A WEIGHTED ROLLER TO ENSURE ADEQUATE CONTACT WITH THE SOIL.

F. MAINTENANCE

- 1. ALL PLANTING INSTALLATION CONTRACTS SHALL INCLUDE PROVISION FOR A 90 DAY MAINTENANCE PERIOD AND CONFORM TO THE CITY'S STANDARD MAINTENANCE SPECIFICATIONS. THE 60-90 DAY MAINTENANCE PERIOD SHALL NOT BEGIN UNTIL AFTER CITY HAS ACCEPTED ALL LANDSCAPING AND IRRIGATION FOR MAINTENANCE. FOLLOW THE GUIDELINES INDICATED IN SECTION ON MAINTENANCE.
- 2. MAINTENANCE SHALL INCLUDE THE FOLLOWING: MOWING, WATERING, WEEDING, ROLLING, TRIMMING, EDGING, FERTILIZING, SPRAYING INSECT AND PEST CONTROLS, RODENT CONTROL, RE-SEEDING, RE-SODDING, OR REPLACEMENT OF DAMAGED MATERIALS.
- 3. USE A PRE-EMERGENT WEED CONTROL BEFORE MAINTENANCE BEGINS AND AGAIN AT THE END OF THE MAINTENANCE PERIOD.
- 4. TURF SHALL NOT BE PERMITTED IN PLANTED AREAS LESS THAN 10' IN WIDTH; OR WITHIN 20" OF EXISTING TREE TRUNK BASE.
- 5. ALL PLANTING INSTALLATION CONTRACTS SHALL INCLUDE PROVISION FOR A 90 DAY MAINTENANCE PERIOD AND CONFORM TO THE CITY'S STANDARD MAINTENANCE SPECIFICATIONS. THE 60-90 DAY MAINTENANCE PERIOD SHALL NOT BEGIN UNTIL AFTER CITY HAS ACCEPTED ALL LANDSCAPING AND IRRIGATION FOR MAINTENANCE. FOLLOW THE GUIDELINES INDICATED IN SECTION ON MAINTENANCE.
- 6. FERTILIZE AT 30 DAY INTERVALS AND AGAIN AT THE END OF THE MAINTENANCE PERIOD.
- 7. MAINTENANCE PERIOD SHALL BE FOR 90 DAYS.
- ALL GUARANTEE BINDERS, SITE INFORMATION AND AS-BUILTS MUST BE TURNED OVER AT THE END OF THE MAINTENANCE PERIOD.
- ALL TREES AND PLANTS SHALL BE WARRANTED FOR A MINIMUM OF ONE YEAR BEYOND THE END OF THE MAINTENANCE PERIOD.
- 10. ALL NURSERY STAKES SHALL BE REMOVED ON OR BEFORE THE END OF THE MAINTENANCE PERIOD.

	REVIEWED CITY ENGIN	Robert 1	armijo RC	E 63173	DETAIL No. Sheet 4 of 4	D 7.0
TRACY	Res No.	2020-031	DATE:Februar	y 18, 2020	DI A	NTING
	Rev: Lyle	C.	Rev:			
Think Inside the Triangle ™	Rev:		Rev:		General Guidelines	

"DO NOT PLANT & RESTRICTED PLANT LIST" TREES

BOTANICAL NAME	COMMON NAME	REMARKS / RESTRICTIONS
ACACIA DEALBATA	SILVER WATTLE	NOT ALLOWED
ACACIA MELANOXYLON	BLACKWOOD ACACIA	NOT ALLOWED
ACER SACCHARIUM	SILVER MAPLE	OPEN SPACE AREAS
ACER NEGUNDO CULTIVARS	BOX ELDER	OPEN SPACE / NATURAL AREAS
ALBIZIA JUILBRISSIN	SILK TREE CULTIVARS	NOT ALLOWED
AILANTHUS ALTISSIMA	TREE OF HEAVEN	NOT ALLOWED
ALNUS SPECIES	ALDER	OPEN SPACE / NATURAL AREAS
BETULA SPECIES EXCEPT BETULA PENDULA CULTIVARS	BIRCH EUROPEAN WHITE BIRCH	OPEN SPACE / NATURAL AREAS NOT ALLOWED
CRATAEGUS MONOGYNA	COMMON HAWTHORN	NOT ALLOWED
CRATAEGUS LAVIAGATA CULTIVARS	ENGLISH HAWTHORN	NON-PEDESTRIAN / VEHICLE AREA / MEDIAN PLANTER 12' WIDE MIN.
CATALPA SPECIES	CATALPA	OPEN SPACE AREAS
CELTIS SPECIES	HACKBERRY	NON-PEDESTRIAN / VEHICLE AREAS
CERCIS CANADENSIS CULTIVARS	EASTERN RED BUD	ESTABLISHED DEEP SHADE
CORNUS SPECIES	DOGWOOD	ESTABLISHED DEEP SHADE
FAGUS SPECIES	BEECH	NOT ALLOWED
FRANINUS SPECIES	ASH	NOT ALLOWED
LIQUIDAMBER STYRACIFULA	SWEETGUM	OPEN SPACE / MEDIAN PLANTER 12' WIDE MIN.
LIRODENDRON TULIPIFERA	TULIP TREE	NOT ALLOWED
MAGNOLIA GRANDIFLORIA CULTIVARS	SOUTHERN MAGNOLIA	NON-PEDESTRIAN / VEHICLE AREAS
MAYTEN BORIA	MAYTEN TREE	NOT ALLOWED
MORUS ALBA	MULBERRY	OPEN SPACE
MYOPORUM LAETUM	NGAIO TREE	NOT ALLOWED
NERIUM SPECIES	OLEANDER	NOT ALLOWED
PALMS	VARIOUS SPECIES	NOT ALLOWED
POPULUS SPECIES	POPLAR	NATURAL SPACES

NOTES

- 1. NO FRUIT TREES SHALL BE PLANTED
- 2. DO NOT SPECIFY ANY TREES ON THE CALIFORNIA INVASIVE PLANT LISTING.

	CITY ENGINEER	Irmijo RCE 63173	DETAIL No. Sheet 1 of 3	D 7.1
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLAN	TING
	Rev: Lyle C.	Rev:	Plant M	laterial
Think Inside the Triangle ™	Rev:	Rev:	Design Guide	lines: Trees

"DO NOT PLANT & RESTRICTED PLANT LIST" TREES

BOTANICAL NAME	COMMON NAME	REMARKS / RESTRICTIONS	
PRUNUS BLIREANA CULTIVARS	FLOWERING PLUM	NON-PEDESTRIAN / VEHICLE AREAS	
PRUNUS CERISIFERIA CULTIVARS	FLOWERING PLUM	NOT ALLOWED	
PRUNUS SERRULATA CULTIVARS	FLOWERING CHERRY	NOT ALLOWED	
PYRUS SPECIES	FLOWERING PEAR	NOT ALLOWED	
ROBINIA SPECIES	LOCUST	NOT ALLOWED	
SALIX SPECIES	WILLOW	NATURAL AREAS	
SAPIUM SEBIFERUM	CHINESE TALLOW	NOT ALLOWED	
SCHINUS SPECIES	PEPPER TREE	NOT ALLOWED	
SEQUIOA SEMPERVIRENS CULTIVARS	COAST REDWOOD	NOT ALLOWED	
STYRAX JAPONICUS	JAPANESE SNOWBELL	ESTABLISHED DEEP SHADE	
TAMARIX SPECIES	TAMARIX	NOT ALLOWED	

NOTES

- 1. NO FRUIT TREES SHALL BE PLANTED
- 2. DO NOT SPECIFY ANY TREES ON THE CALIFORNIA INVASIVE PLANT LISTING.

	CITY ENGINEER	DETAIL No. Sheet 2 of 3		
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLANTING	
	Rev: Lyle C.	Rev:	Plant Material	
Think Inside the Triangle ™	Rev:	Rev:	Design Guidelines: Trees	

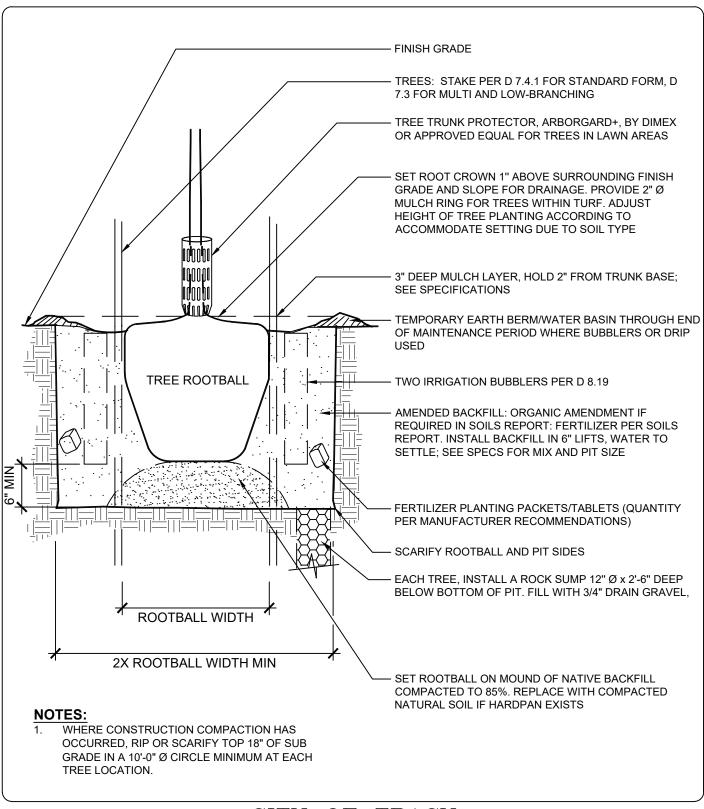
"DO NOT PLANT & RESTRICTED PLANT LIST" SHRUBS, GRASSES, GROUND COVERS, PERENNIALS & VINES

BOTANICAL NAME	COMMON NAME	REMARKS / RESTRICTIONS
CARPOBROTUS CHILENSIS	ICE PLANT	NOT ALLOWED
CORTADERIA SELLOANA	PAMPAS GRASS	NOT ALLOWED
COTONEASTER SPECIES	CONTONEASTER	NOT ALLOWED
CYTISUS SPECIES	BROOM	NOT ALLOWED
FESTUCA ARUNDINACEA	BUNCH GRASS	NOT ALLOWED
GAZANIA SPECIES	GAZANIA	NON-PEDESTRIAN AREAS
HEUCHERA SPECIES	CORAL BELLS	NOT ALLOWED
HEDRA SPECIES	IVY	NOT ALLOWED
ILEX VOMITORIA	YAUPON HOLLY	NOT ALLOWED
LIGUSTRUM SPECIES	PRIVET	NOT ALLOWED
LONICERA SPECIES	HONEYSUCKLE	NOT ALLOWED
MAHONIA REPENS	CREEPING MAHONIA	ESTABLISHED DEEP SHADE
MACFADYENA UNGUS-CATI	CAT'S CLAW	NOT ALLOWED
NASSELLA TENUISSIMA	MEXICAN FEATHER GRASS	NOT ALLOWED
NERIUM OLEANDER CULTIVARS	OLEANDER	NOT ALLOWED
PACHYSANDRA TERMINALIS	JAPANESE SPRUGE	ESTABLISHED DEEP SHADE
PENNISETUM SETACEUM	FOUNTAIN GRASS	NOT IN OPEN SPACE OR NATURAL AREAS
PENSTEMON HYBRIDS	BEARDTOUNGE	NOT ALLOWED
PRUNUS LYONII	CATALINA CHERRY	NON-PEDESTRIAN / VEHICLE AREAS
PRUNUS LUSITANICA	PORTUGUESE LAUREL	NOT ALLOWED
STACHYS BYANTINA	LAMB'S EAR	NOT ALLOWED
VERBENA SPECIES	VERBENA	NOT ALLOWED
VINCA MAJOR	PERIWINKLE	NOT ALLOWED

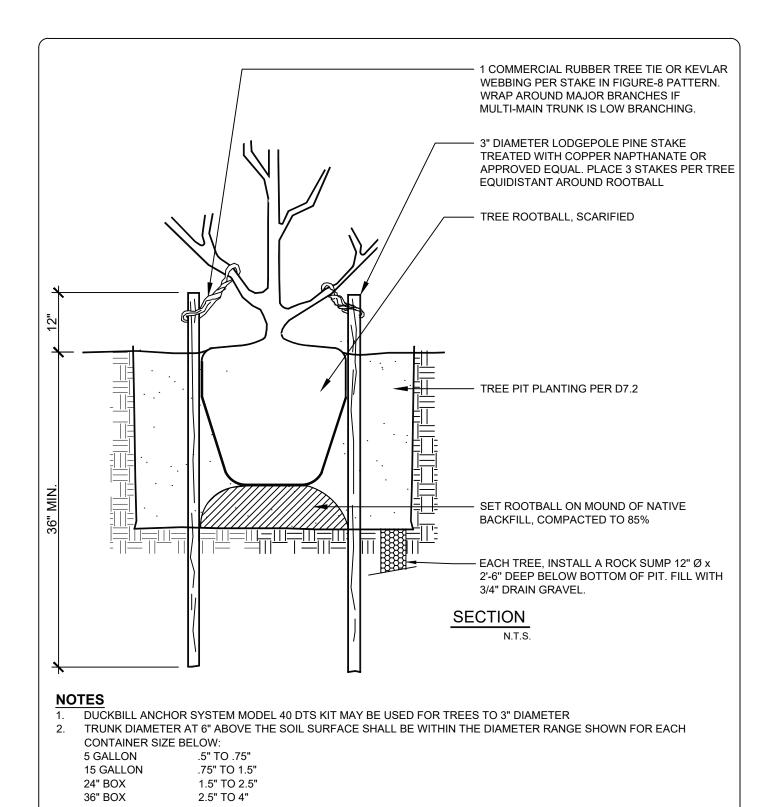
NOTES

- WOODY SHRUBS SHOULD BE AVOIDED IN AREAS OF HIGH FOOT TRAFFIC SUCH AS PARKS, DOG PARK, PEDESTRIAN WALKWAYS AND TRAILS.
- 2. DO NOT SPECIFY ANY SHRUBS ON THE CALIFORNIA INVASIVE PLANT LISTING.
- 3. ORNAMENTAL NO-MOW, BIOSWALE, BIO-RETENTION, OR SPORT FIELD TURF GRASSES TO BE REVIEWED UPON SUBMITTAL.

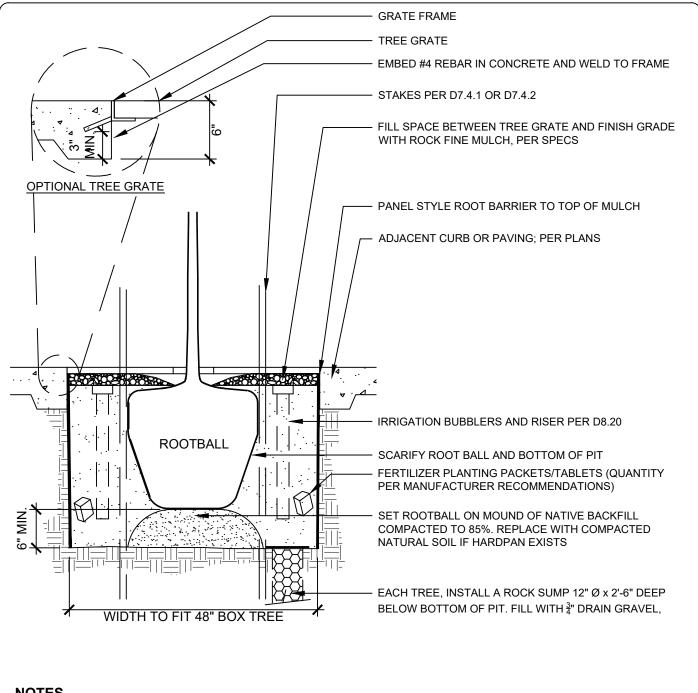
	REVIEWED BY: Polert CITY ENGINEER	DETAIL No. Sheet 3 of 3	D 7.1	
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLAN	ING
	Rev: Lyle C.	Rev:	Plant Ma	aterial
Think Inside the Triangle ™	Rev:	Rev:	Design Guidel	ines: Shrubs



	REVIEWED BY: Cobert	Irmije RCE 63173	DETAIL No. Sheet 1 of 1	D 7.2
TRACY	Res No. 2020-031	DATE:February 18, 2020	F	PLANTING
	Rev: Lyle C.	Rev:		ree Planting
Think Inside the Triangle ™	Rev:	Rev:	••)

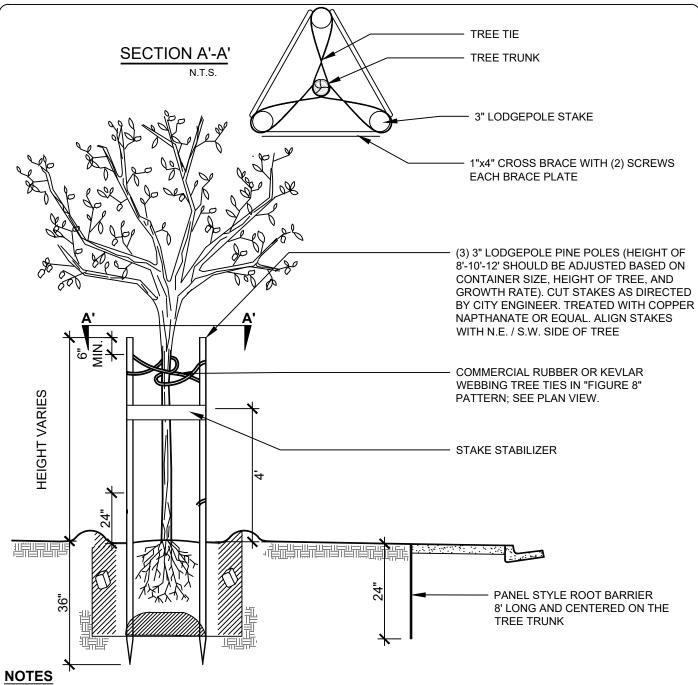


	REVIEWED BY: Robert 1	Irmije)	DETAIL No. Sheet 1 of 1	D 7.3
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLANTING	G
	Rev: Lyle C.	Rev:	Anchor Tree S	_
Think Inside the Triangle ™	Rev:	Rev:	Anonor 1100 C	



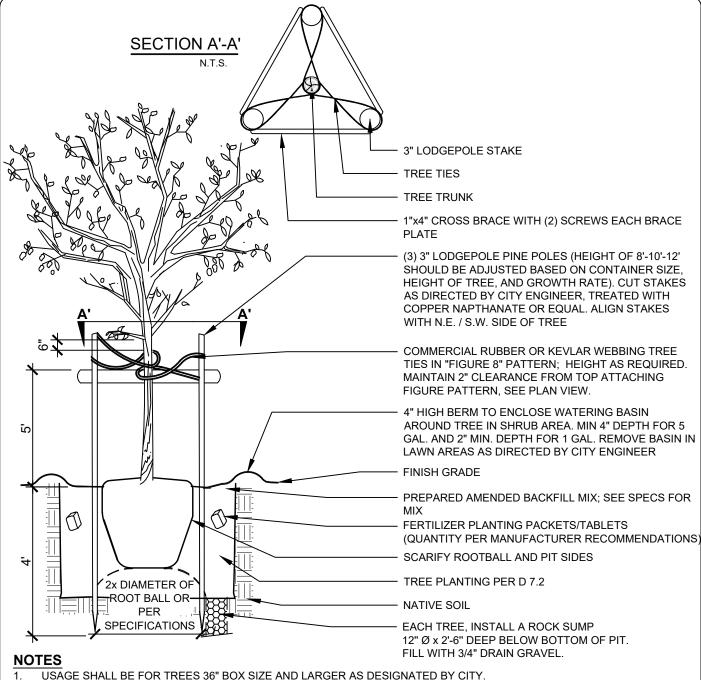
- WHERE CONSTRUCTION COMPACTION HAS OCCURRED, RIP OR SCARIFY TOP 18" OF SOIL IN A 10' DIAMETER CIRCLE MINIMUM AT EACH TREE LOCATION.
- FOR SOME APPLICATIONS, DECOMPOSED GRANITE MAY BE SUBSTITUTED FOR GRATE AND GRAVEL, AS DETERMINED BY 2. CITY ENGINEER.
- USE CU STRUCTURED SOIL AS SPECIFIED. 3.
- ROOT BARRIER MANUFACTURER: DEEP ROOT OR AN APPROVED EQUAL.

						63173	DETAIL No. Sheet 1 of 1	D 7.4
TRAC	Y	Res No.	2020-031	DATE:Feb	oruary	18, 2020		PLANTING
		Rev: Lyle	C.	Rev:				Tree Well
Think Inside the Tri	riangle ™	Rev:		Rev:				



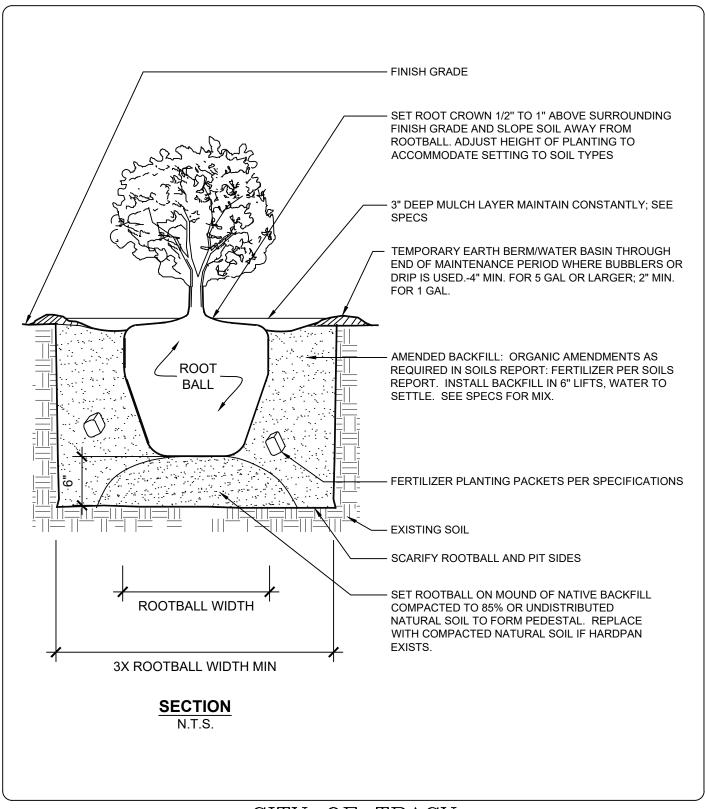
- TREES SHALL BE 15 GALLON MIN., 24" MAX. SIZE AND BE PLACED 10 FEET FROM EDGE OF PAVING WHENEVER POSSIBLE.
- 2. AS DETERMINED BY CITY ENGINEER, ROOT CONTROL BARRIER PANELS SHALL BE REQUIRED WHERE TREE IS 10 FEET OR LESS FROM EXISTING OR FUTURE SIDEWALK OR CURB. DEEP ROOT UB-24-2 OR APPROVED EQUAL MAY BE USED. LENGTH OF BARRIER=8' CENTERED ON TREE.
- 3. TREES SHALL BE PROVIDED W/ AUTOMATIC IRRIGATION SYSTEMS (INDIVIDUAL BUBBLERS WITH WATERING BASIN).
- 4. ROOT BARRIERS SHALL NOT BE CUT
- 5. REFER TO D7.2 FOR TREE PLANTING DETAIL

	REVIEWED BY: Cobert CITY ENGINEER	Irmije) RCE 37186	DETAIL No. Sheet 1 of 1	D 7.4.1
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLAN	TING
	Rev: Lyle C.	Rev:	15G-24"	Box Tree
Think Inside the Triangle ™	Rev:	Rev:	Staking 8	R Planting

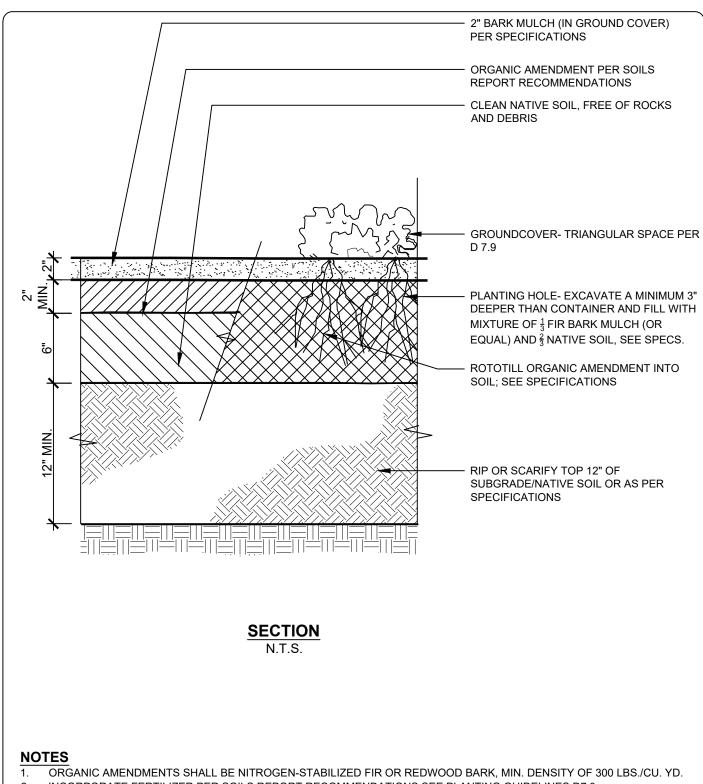


- TREES SHALL BE PROVIDED WITH AUTOMATIC IRRIGATION SYSTEMS. REFER TO D8.11.
- 3. TREE STAKE TO BE LOCATED ON NORTH WEST SIDE OF TREE UNLESS OTHERWISE SPECIFIED.
- 4. ROOT CONTROL BARRIER PANELS SHALL BE REQUIRED WHERE TREE IS 8 FEET OR LESS FROM EXISTING OR FUTURE SIDEWALK OR CURB. DEEP ROOT UB-24-2 OR APPROVED EQUAL. LENGTH OF BARRIER=8' CENTERED ON TREE.
- TREES SHALL BE PROVIDED W/ AUTOMATIC IRRIGATION SYSTEMS (INDIVIDUAL BUBBLERS WITH WATERING BASIN). 5.
- 6. ROOT BARRIERS SHALL NOT BE CUT.
- REFER TO D7.2 FOR PLANTING DETAIL

	REVIEWED BY: Robert (Irmije)	DETAIL No. Sheet 1 of 1	D 7.4.2
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLANTI	NG
	Rev: Lyle C.	Rev:	36" Box & L	.arger
Think Inside the Triangle ™	Rev:	Rev:	Trees Plan	nting

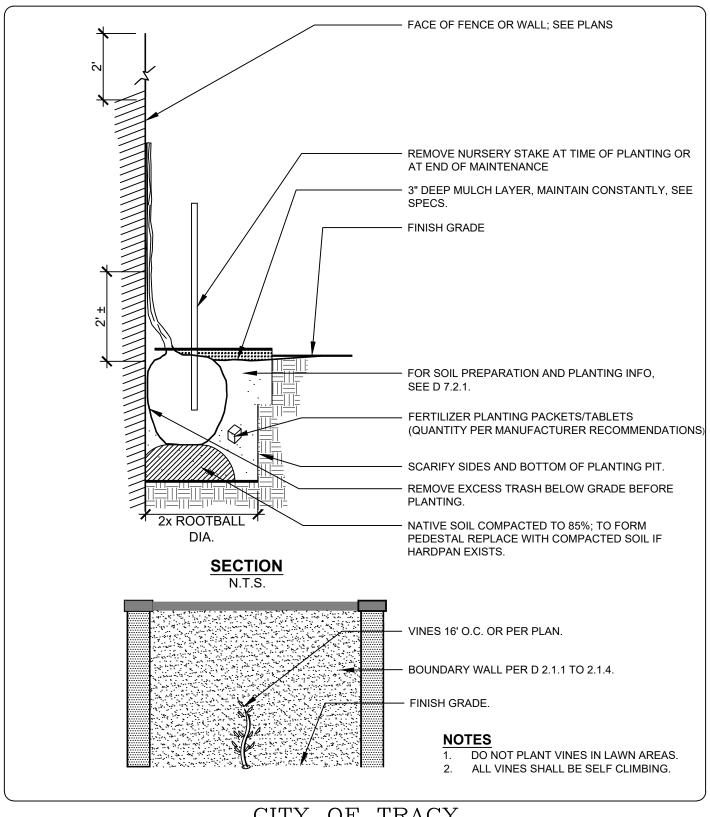


	REVIEWED BY: Robert 1	Irmije) RCE 63173	DETAIL No.	D 7.5
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLA	NTING
	Rev: Lyle C.	Rev:	Shrub Planting	
Think Inside the Triangle ™	Rev:	Rev:	Siliuk	Planting

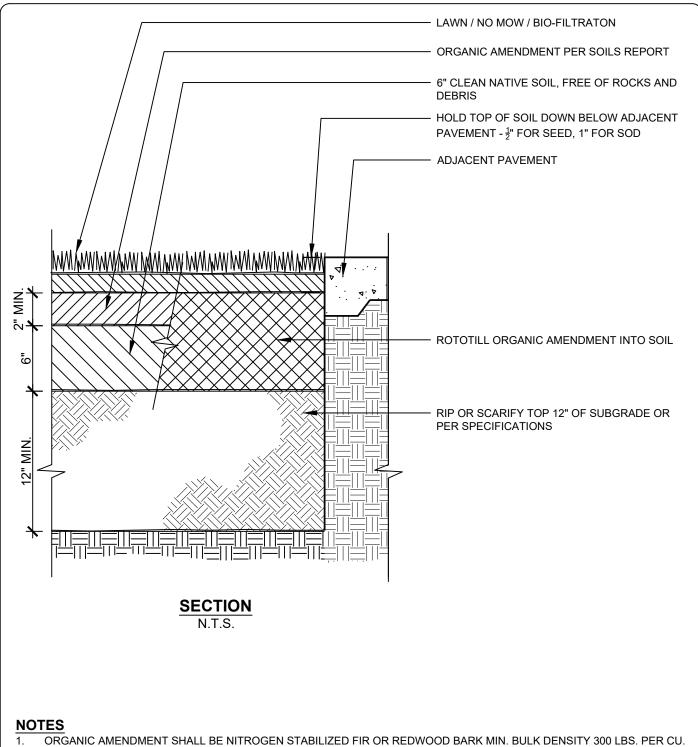


2. INCORPORATE FERTILIZER PER SOILS REPORT RECOMMENDATIONS SEE PLANTING GUIDELINES D7.0

	REVIEWED BY: Pobert	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1
TRACY	Res No. 2020-031	DATE:February 18, 2020	PLANTING
	Rev: Lyle C.	Rev:	Groundcover
Think Inside the Triangle ™	Rev:	Rev:	2.33.1433731

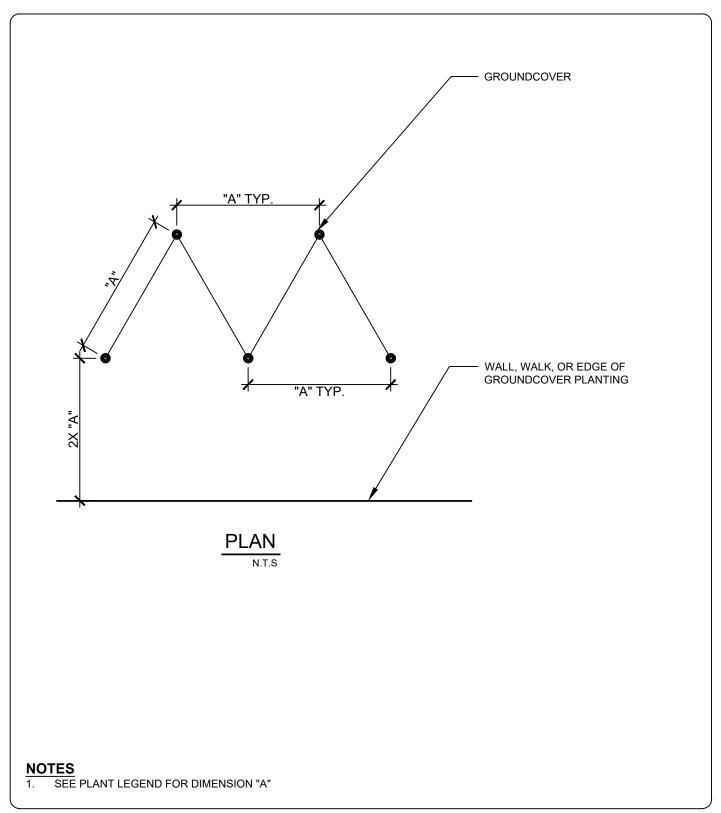


	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 7.7
TRACY	Res No. 2020-031	DATE:February 18, 2020		PLANTING
	Rev: Lyle C.	Rev:	Vines	
Think Inside the Triangle ™	Rev:	Rev:		

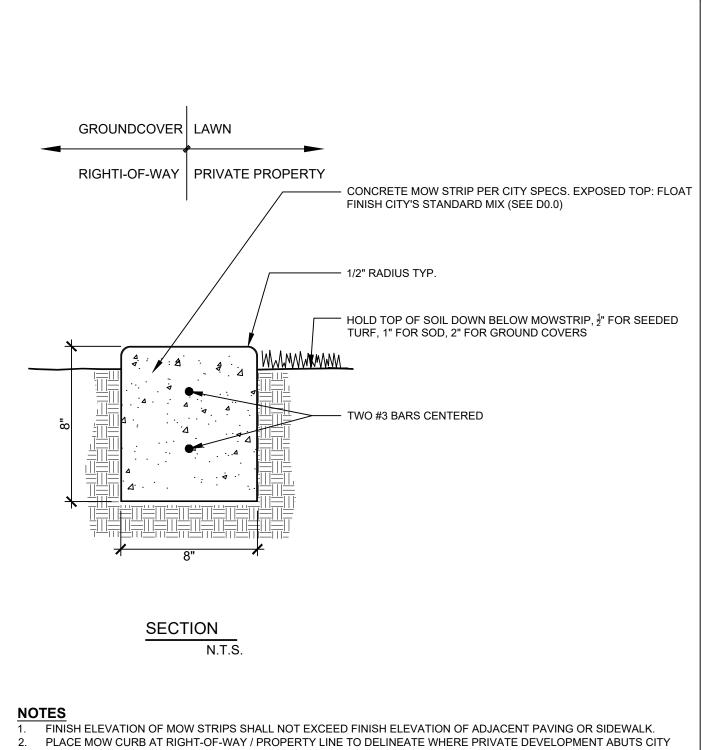


- YD.
- INCORPORATE FERTILIZER PER SOILS REPORT. SEE GENERAL GUIDELINES D7.0 2.
- 3. FINISH GRADE SLOPE SHALL BE MINIMUM 1%, MAXIMUM 16%

	REVIEWED BY: Robert CITY ENGINEER	Irmije RCE 63173	DETAIL No. Sheet 1 of 1	D 7.8		
TRACY	Res No. 2020-031	DATE:February 18, 2020		PLANTING		
	Rev: Lyle C.	Rev:		Turf		
Think Inside the Triangle ™	Rev:	Rev:				

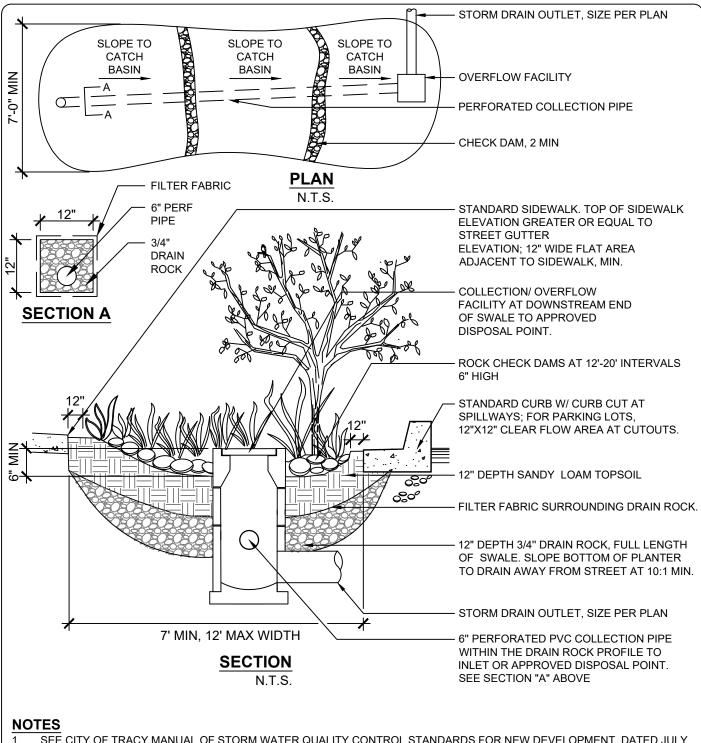


	REVIEWED BY: Pobert	armije) RCE 63173	DETAIL No. Sheet 1 of 1	D 7.9
TRACY	Res No. 2020-031	DATE:February 18, 2020		PLANTING
	Rev: Lyle C.	Rev:	Triangular Spacing	
Think Inside the Triangle ™	Rev:	Rev:		angalar opaomig



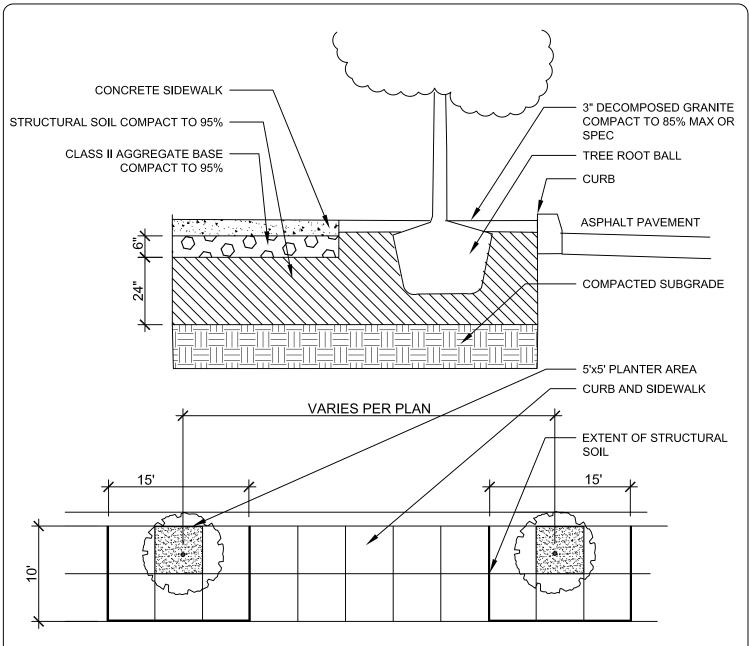
PROPERTY. MOW CURB TO ENTIRELY WITHIN RIGHT-OF-WAY / CITY PROPERTY,

	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	
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	Rev: Lyle C.	Rev:	Concrete Mow Strip	
Think Inside the Triangle TM	Rev:	Rev:		



- SEE CITY OF TRACY MANUAL OF STORM WATER QUALITY CONTROL STANDARDS FOR NEW DEVELOPMENT, DATED JULY 1, 2008 FOR DESIGN CRITERIA AND OTHER TREATMENT CONTROL STANDARDS.
- 2. ROCK CHECK DAMS TO BE 3-5" SMOOTH COBBLE AT 12'-20' INTERVALS OR MIN. 2 DAMS PER SWALE.
- 3. REFER TO D 1.16 FOR OVER FLOW CATCH BASIN INSTALLATION

	REVIEWED BY: Robert CITY ENGINEER	armije RCE 63173	DETAIL No. Sheet 1 of 1	D 7.11
TRACY	Res No. 2020-031	DATE:February 18, 2020	P	LANTING
	Rev: Lyle C.	Rev:	Storr	nwater Planter
Think Inside the Triangle ™ Rev:		Rev:	Veg	jetated Swale



PLAN- TYPICAL CU STRUCTURAL SOIL PLACEMENT AT WELLS

NOT TO SCALE

NOTES

- 1. STRUCTURAL SOIL WILL BE REQUIRED WHERE TREES ARE SURROUNDED BY PAVING, OR HAVE LESS THAN 8 FEET OF PLANTING AREA ON EITHER SIDE.
- 2. DESIGN MAY VARY BASED ON CONFIGURATION OF SIDEWALK AND CURB LOCATIONS.
- 3. STAKE PER D7.4 AS NOTED.
- 4. CU STRUCTURAL SOIL IS AVAILABLE THROUGH

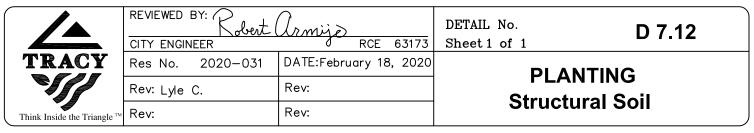
"TMT ENTERPRISES, INC.

1996 OAKLAND ROAD,

SAN JOSE, CA 95131

PHONE: 408-432-9040"

OR EQUAL



- ALL PLANS ARE TO BE PREPARED AND UNDER THE DIRECTION OF A CALIFORNIA LICENSED LANDSCAPE ARCHITECT OR CERTIFIED IRRIGATION DESIGNER EXCEPT WHERE ALLOWED BY CALIFORNIA LANDSCAPE ARCHITECTS PRACTICE ACT, BUSINESS AND PROFESSION CODE.
- 2. ALL IRRIGATION SYSTEMS SHALL BE INSTALLED WITH A REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY AT POINT OF CONNECTION. D 8.2-D 8.2.2
- 3. BALL VALVES SHALL BE INSTALLED OFF MAINLINE BEFORE EACH VALVE TO FACILITATE EASE OF MAINTENANCE OF VALVES, BEFORE MAINLINE CROSSED UNDER STREET, AND ALSO AT LOCATIONS ALONG MAINLINE TO ALLOW SERVICE TO SYSTEM.
- 3. MAIN LINES (CONSTANT PRESSURE) SHALL BE SCHEDULE 40 SOLVENT WELD WITH SCHEDULE 40 FITTINGS FOR SIZES 2" AND LESS. FOR MAIN LINES 2 1/2" AND LARGER PVC CLASS 315 WITH SCHEDULE 80 SOLVENT WELD FITTINGS 18" MINIMUM COVER, 36" UNDER PAVING. ALL MAINLINE SHALL HAVE DETECTABLE TAPE ALONG FULL LENGTH OF MAINLINE. ALL SOLVENT WELDING OF PIPE JOINTS PER MAIN INSTRUCTIONS. D 8.9
- 4. LATERAL LINES SHALL BE SCHEDULE 40 PVC PIPE WITH SOLVENT WELD FITTINGS 12" MINIMUM COVER, 24" UNDER PAVING. D 8.9
- 5. THRUST BLOCKS SHALL BE PROVIDED TO RESIST SYSTEM PRESSURE ON RING-TITE PIPE AND FITTINGS, BASED ON AVERAGE SOIL SAFE BEARING LOAD OF 1000# PER SQUARE FOOT. D 8.10
- 6. QUICK COUPLERS SHALL BE PROVIDED AT INTERVALS OF 100 FEET AT PARKWAYS. AT PARKS, QUICK COUPLERS SHALL BE PLACED AT FUNCTIONAL USE ZONES, SUCH AS BUS STOPS, TRASH RECEPTACLES, PLAYGROUNDS, DRINKING FOUNTAINS, AND AT AREAS OTHERWISE DIRECTED BY THE CITY. PLACE IN VALVE BOX FOR PROTECTION AND EASE OF USE. INSTALL EMS DEVICE IN BOX. D 8.5
- 7. REMOTE CONTROL VALVES SHALL BE 200 PSI RATED PLASTIC BODY AND BONNET. ONE VALVE PER VALVE BOX. VALVE BOX SHALL BE AT GRADE AND HAVE AN EMS DEVICE PLACED IN THE BOX TO FACILITATE DETECTION MY METAL DETECTOR. D 8.6
- 9. CITY DOES NOT ALLOWS DRIP SYSTEMS FOR CITY MAINTAINED LANDSCAPES.
- 10. WIRE SPLICES SHALL BE MADE WITH 3M-DBY CONNECTORS OR APPROVED EQUAL FOR PROJECTS IN PUBLIC WORKS' JURISDICTION, AND DRI-SPLICE CONNECTORS OR EQ. FOR PROJECTS IN THE L.M.D. ALL SPLICES SHALL BE MADE IN VALVE BOX ONLY & SHOWN ON AS-BUILTS. D 8.11
- 11. THREADED PVC FITTINGS SHALL BE WRAPPED WITH TEFLON TAPE, MINIMUM THREE WRAPS.
- 12. VALVE WIRE SHALL BE BURIED WITH MAIN LINE 18" MINIMUM COVER. COMMON WIRE TO BE WHITE, CONTROL WIRES TO EACH VALVE COLOR CODED AS PER GROUPING BY AREA AS DESIGNATED BY CITY. MINIMUM SIZE TO BE 14 GAUGE. INSTALL 1 (ONE) EXTRA WIRE FOR EACH 3 VALVES WITH 2 (TWO) MAXIMUM PER EVERY 10 (TEN) VALVES. EXTRA WIRE SHALL BE A DIFFERENT COLOR FROM VALVE WIRES. D 8.9
- 13. ALL VALVE WIRES SHALL BE LABELED BY NUMBER WITH PERMANENT MARKING IN THE CONTROLLER. ALL VALVE BOXES SHALL BE HOT STAMPED WITH 2" TALL LETTERS/NUMBERS. MARK BOXES WITH THE CORRESPONDING VALVE NUMBER OR BOX IDENTIFICATION (QC, SV, GV etc.) AND BE PERMANENTLY MARKED.
- 14. LEAVE A 36" INCH COIL OF EXCESS WIRE AT EACH SPLICE ALONG THE MAINLINE RUN AND AT 100 FEET ON CENTER ALONG ANY WIRE RUN.
- 15. ALL POP-UP HEADS SHALL HAVE A CHECK VALVE TO PREVENT LOW HEAD DRAINAGE AND INTEGRAL PRESSURE REGULATING DEVICE.

	REVIEWED BY: Colert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 5	D 8.0
TRACY	Res No. 2020-031	DATE:February 18, 2020	IDDICA	TION
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Think Inside the Triangle ™	Rev:	Rev:	Seneral S	dideiiiies

- 16. ALL SHRUB SPRAYS AND SHRUB ROTORS WITHOUT INTERNAL CHECK VALVES SHALL HAVE A CHECK VALVE INSTALLED ON THE RISER IN PLACE OF THE SCHEDULE 80 COUPLING AND INTEGRAL PRESSURE REGULATING DEVICE IF AVAILABLE.
- 17. NOZZLES SHALL BE MATCHED PRECIPITATION RATE NOZZLES.
- 18. OVERHEAD IRRIGATION SHALL NOT BE PLACED WITHIN 24" OF ANY NON PERMEABLE SURFACE UNLESS THE ADJACENT NON PERMEABLE SURFACE DRAINS TO A LANDSCAPE AREA EFFORTS TO CONTROL OVER SPRAY SHALL BE MADE TO REDUCE SPRAY FROM HITTING TRUNKS OF TREES.
- 19. NO OVERHEAD IRRIGATION SHALL BE INSTALLED IN AREAS LESS THAN TEN (10) FEET IN ANY DIRECTION.
- 20. SOILS SHOULD BE INVESTIGATED AT EACH SITE FOR WATER RETENTION CAPABILITIES. SOILS REPORTS SUGGEST INFILTRATION RATES RANGE FROM .2 TO .6 INCHES/HOUR.
- 21. IRRIGATION SYSTEMS SHALL BE DESIGNED SO THAT THE APPLICATION RATE OF WATER DOES NOT EXCEED THE INFILTRATION RATE OF THE SOIL (SEE SOILS REPORT) AND WILL NOT ALLOW EXCESSIVE OVERSPRAY AND RUNOFF. IN GENERAL, LOW VOLUME SPRINKLER HEADS, AND PRESSURE COMPENSATION BUBBLERS SHALL BE USED THROUGHOUT THE SYSTEM.
- 22. CONTROLLERS SHALL HAVE MULTIPLE PROGRAMS AND WATER BUDGETING AVAILABLE. INSTALL CONTROLLERS INTO A VANDAL RESISTANT CONTROLLER ENCLOSURE. THE CITY WILL UTILIZE A MOTOROLA CENTRAL IRRIGATION CONTROL SYSTEM, AND SATELLITE FIELD CONTROLLERS, OR AN APPROVED EQUAL. D 8.1. CONTROLLER SHALL BE PROGRAMMED TO OPERATE BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM. RESTRICTED WATERING TIMES MAY BE ESTABLISHED BASED UPON SITE CONDITIONS AS DETERMINED BY THE CITY. CONTROLLERS OPERATION STICKER SHALL BE APPLIED TO ALL CONTROLLERS PER CITY OF TRACY REQUIREMENTS.
- 23. ALL CONTROLLERS ARE TO BE METERED AND WITHIN AN PG&E APPROVED METERED CONTROLLER CABINET.
- 24. SPRINKLERS AT TOPS OF SLOPES SHALL BE VALVED SEPARATELY FROM SPRINKLERS AT BOTTOM OF SLOPES. PRECIPITATION RATES OF HEADS SHALL BE CONSIDERED.
- FOR INSTALLATION, USE STRAP WRENCHES ONLY ON ALL EQUIPMENT WITH UNIONS, EXCEPT ON BACKFLOWS. NO PIPE WRENCHES SHALL BE USED.
- 26. MAIN LINE IRRIGATION NEEDS TO BE CENTER LOADED WITH VALVES INSTALLED AND FITTINGS COMPLETELY VISIBLE. A WATER PRESSURE OF 125 PSI SHALL BE APPLIED AND HELD FOR 2.5 HOURS. ALL LEAKS SHALL BE REPAIRED AND ALL LINES APPROVED BY THE CITY BEFORE ANY OF THE SYSTEM IS BACKFILLED.
- 27. CONTRACTOR SHALL KEEP AN AS-BUILT FIELD COPY OF IRRIGATION SYSTEM SHOWING ALL CHANGES. MAIN LINE SHALL NOT BE BACKFILLED UNTIL AS-BUILT DRAWINGS ARE APPROVED BY CITY ENGINEER. MARKED UP AS-BUILTS SHALL BE TURNED OVER TO CITY BEFORE MAINTENANCE BEGINS. LANDSCAPE ARCHITECT OF RECORD SHALL PREPARE RECORD DRAWINGS IN AUTOCAD FORMAT, AND PRINT AND SUBMIT NEW MYLARS.
- 28. IF EXPANDING EXISTING PARKWAY OR FACILITY, CONTRACTOR WILL UPDATE EXISTING CONTROLLER CHARTS, REFLECTING MODIFICATIONS TO THE EXISTING PROJECT AND PROVIDING A NEW CHART. UPON INSTALLATION OF A NEW PICCOLO UNIT, CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPROGRAMMING OF THE EXISTING OR NEW IRRINET FROM WHICH THE SCORPIO WILL COMMUNICATE.
- 29. FOR EACH IRRINET INSTALLED, PROVIDE CITY WITH TWO SETS OF LAMINATED REDUCED (11"x17") AS-BUILT IRRIGATION CHARTS, 10 ML. THICKNESS OF LAMINATION, SHOWING ZONES AND CORRESPONDING CORRESPONDING CORRESPONDING CONTROLLER STATIONS. FOR EACH SCORPIO CONTROLLER, PROVIDE THREE CHARTS.
- ALL WATERING SHALL TAKE PLACE WITHIN THE CITY'S REQUIRED WATER WINDOW, OF 10PM TO 7AM. PROVIDE AN AUDIT TO SHOW WATERING SCHEDULE AND HOW IT MEETS REQUIREMENTS.
- 31. IRRIGATION SYSTEMS MUST BE COMPLETE AND FULLY OPERATIONAL BEFORE ANY PLANTING BEGINS.

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- 32. A BOOSTER PUMP WILL BE REQUIRED FOR ALL PARKS BUT MAY NOT BE REQUIRED FOR STREETSCAPES. PLACEMENT SHALL BE WITHIN CITY'S RIGHT OF WAY. BOOSTER PUMP, BACKFLOW, FLOW METER AND CONTROLLER SHALL BE SECURED WITHIN A LOCKED CHAIN LINK OR OTHER ENCLOSURE WHERE AS DIRECTED BY THE CITY ENGINEER. AN EXTERNAL ROUTED BY-PASS SHALL BE INCLUDED WITH ALL INSTALLATIONS.
- 33. IRRIGATION SYSTEMS MUST BE TESTED BY A THIRD PARTY WATER AUDITOR, FOR THE PLANT ESTABLISHMENT PERIOD AND LONG TERM MAINTENANCE. AUDIT SHALL INCLUDE APPLIED WATER IRRIGATION, IRRIGATION DAYS PER WEEK, CYCLES PER DAY, MINUTES OF RUN TIME PER CYCLE. CONSIDERATION SHOULD BE GIVEN TO THE FLOW RATE, AREA COVERED BY VALVE, AND PRECIPITATION RATE. WATER AUDIT REPORT SHALL BE SUBMITTED TO THE CITY ALONG WITH LANDSCAPING AND IRRIGATION PLANS.
- 34. PRESSURE LOSS CALCULATIONS SHALL BE PROVIDED UPON FIRST IRRIGATION SUBMITTAL TO THE CITY. SHOW LOSSES BASED ON VALVE WITH POTENTIAL FOR GREATEST LOSS.
- 35. TO ENSURE THAT SYSTEMS DON'T FAIL UPON BUILD-OUT, WE REQUIRE A MINIMUM 5 PSI DYNAMIC RESIDUAL FOR TYPICAL SYSTEMS AND A MINIMUM 10 PSI DYNAMIC RESIDUAL PRESSURES FOR SYSTEMS WITH BOOSTER PUMPS. IF IRRIGATION CALCULATIONS FALL BELOW THESE PERIMETERS, ANOTHER SERVICE LINE / POINT OF CONNECTION WILL BE REQUIRED AND NO FUTURE TIE-INS WILL BE ALLOWED.
- 36. ALL WARRANTY REPAIRS ARE TO BE COMPLETED WITHIN 72 HOURS OF NOTIFICATION, OR CITY MAY MAKE REPAIRS AT CONTRACTOR'S EXPENSE.
- 37. A 4-INCH IRRIGATION SERVICE IS REQUIRED FOR ALL PARK SITES. A 2-INCH SERVICE IS REQUIRE FOR ALL STREETSCAPES WHICH MUST BE A SEPARATE SERVICE THAN THE ADJOINING PRIVATE PROPERTY.
- 38. WHEN SYSTEM USES RECLAIMED WATER, ADD ALL PERTINENT COMPONENTS, DETAILS AND NOTES.
- 39. IRRIGATION CONTROLLERS ARE TO BE MOTOROLA BY CENTRAL CONTROL SYSTEMS
 CONTACT: CENTRAL CONTROL SYSTEMS
 PHONE: 530-662-6841
 CCS@CCONTROLSYSTEMS.COM
- 40. IRRIGATION SHALL COMPLY WITH CALIFORNIA TITLE 23 CHAPTER 2.7 (MWELO) AND AB1881 INCLUDING ALL REQUIRED NOTES AND COMPLIANCE STATEMENT WITH SIGNATURE BLOCK.
- 41. RECYCLED WATER FOR IRRIGATION SHALL COMPLY WITH CALIFORNIA TITLE 22 CHAPTER 3
- 42. IDENTIFY AND LOCATE ON PLANS IRRIGATION POINT OF CONNECTION SHOWING SERVICE LINE, METER, BACKFLOW, AND FLOW METER LOCATION AND SIZES.
- 43. IDENTIFY AND LOCATE ON PLANS SECONDARY POWER SOURCE FOR IRRIGATION CONTROLLER. POWER SOURCE MUST BE A RIGHT-OF-WAY UTILITY.
- 44. PROVIDE ONE 6" SLEEVE AND TWO 4" SLEEVES FOR ALL CROSSINGS. SLEEVING TO BE SCHEDULE 40 PVC
- 45. PROVIDE AN ISOLATION VALVE AT EACH SIDE OF MAJOR CROSSINGS. REFER TO DETAILS FOR VALVE TYPE.
- 46. THE EVAPOTRANSPIRATION (ETO) RATE FOR THE CITY OF TRACY IS 48.5.
- 47. PROVIDE WRITTEN TECHNICAL SPECIFICATION FOR IRRIGATION.
- 48. PROVIDE SUBMITTALS AND / OR SAMPLES FOR APPROVAL PRIOR TO CONSTRUCTION.
- 49. FOR PROJECT WITH SPECIFIC PLANS AND/OR TO BE CONSTRUCTED IN PHASES, AN IRRIGATION MASTERPLAN WILL BE REQUIRED SHOWING POINTS OF CONNECTION (INCLUDING SERVICE LINE, METER, BACKFLOW SIZES), NOTE POTABLE OR RECYCLED, MAIN LINE ROUTING AND PROJECTED PEAK FLOW AND PRESSURE LOSS.

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RECYCLED WATER NOTES

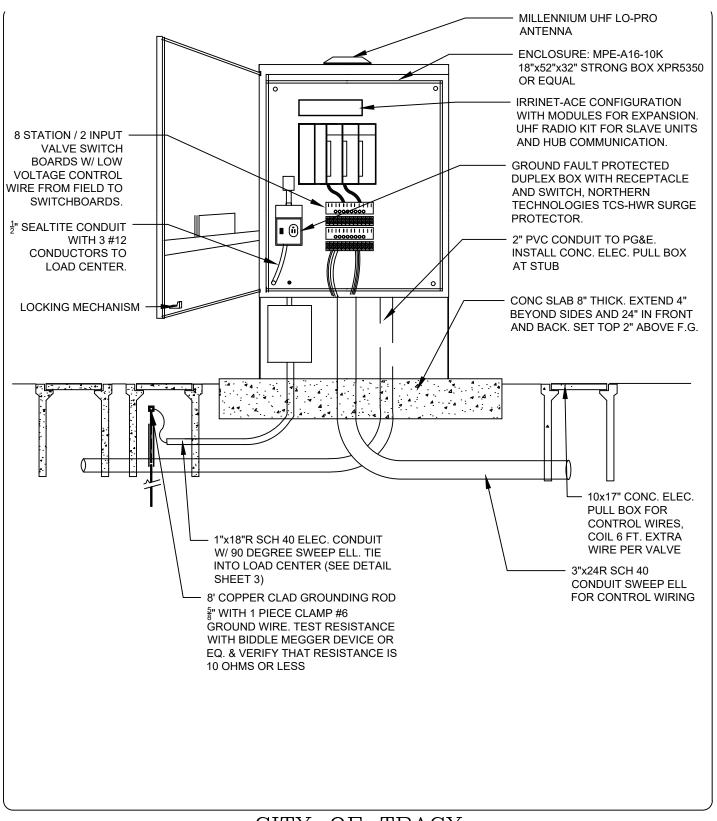
- 1. ALL PLANS ARE TO BE PREPARED AND UNDER THE DIRECTION OF A CALIFORNIA LICENSED LANDSCAPE ARCHITECT OR CERTIFIED IRRIGATION DESIGNER EXCEPT WHERE PROHIBITED BY CALIFORNIA LANDSCAPE ARCHITECTS PRACTICE ACT, BUSINESS AND PROFESSION CODE.
- 2. NO WORK SHALL START UNTIL THE CONTRACTOR HAS FULL UNDERSTANDING OF THE CITY OF TRACY DESIGN STANDARDS. STREET & UTILITY STANDARDS AND PARKS & STREETSCAPE DESIGN STANDARDS.
- 3. NOTIFY THE CITY'S AUTHORIZED REPRESENTATIVE NO LESS THAN (2) TWO WORKING DAYS PRIOR TO THE START OF WORK FOR INSPECTION SCHEDULE COORDINATION.
- 4. THE IRRIGATION SYSTEM DESIGN SHALL BE BASED ON THE STATIC WATER PRESSURE AT THE POINT OF CONNECTION AND NOTED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE AVAILABLE STATIC PRESSURE AT THE POINT OF CONNECTION PRIOR TO START OF CONSTRUCTION. ANY DEVIATION FROM THE DESIGN PRESSURE SHALL BE REPORTED TO THE IRRIGATION DESIGN AND THE CITY'S REPRESENTATIVE.
- 5. ALL PIPING AND IRRIGATION SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED SO THAT SPRAY OR RUNOFF SHALL NOT ENTER A SWELLING, FOOD HANDLING FACILITY, OR EATING AREA AND SHALL NOT CONTACT ANY POTABLE WATER SOURCE NOR SHALL AN RECYCLED WATER SYSTEM BE CONNECTION TO A POTABLE WATER SOURCE.
- 6. IRRIGATION SYSTEMS WITH RECYCLED WATER SHALL BE ACCOMPLISHED AT TIME AND MANNER THAT MINIMIZES THE POSSIBILITY OF PUBLIC CONTACT. THE CONTRACTOR SHALL CONDUCT PRESSURE AND COVERAGE TESTS WHEN WIND CONDITIONS ARE SUCH THAT WATER WILL NOT BE WINDBLOWN. RECYCLED WATER OVERSHAPY ON TO AREAS NOT CONTROLLED BY THE CITY IS PROHIBITED.
- 7. THE CONTRACTOR SHALL PROPERLY SUPERVISE, INFORM AND WARN ALL INDIVIDUALS INVOLVE IN THE INSTALLATION OF RECYCLED WATER IRRIGATION SYSTEM REGARDING THE HAZARDS OF CONTACT WITH RECYCLED WATER. A FIRST AID KIT SHALL BE AVAILABLE AT ALL TIMES DURING INSTALLATION AND OPERATION OF IRRIGATION SYSTEMS. AN EYE WASH STATION SHALL BE PROVIDED ON THE PROJECT SITE.
- 8. ALL RECYCLED WATER PIPING SHALL USE PURPLE COLORED AND STENCILED PIPE. ALL MARKINGS SHALL INCLUDE THE FOLLOWING OR SIMILAR WORDS: "CAUTION: RECYCLED WATER - DO NOT DRINK". PURPLE PIPE SHALL BE "PWPURPLE PLUSA" MANUFACTURED BY PW PIPE, INC., JAM "PURPLE SAVE" OR AN APPROVED EQUAL.
- 9. INSTALL VALVES, METERS AND APPURTENANCES IN PURPLE COLORED VALVE BOXES WITH PURPLE LIDS. THE VALVE BOX LIDS SHALL HAVE THE FOLLOWING WARNING MOLDED OR HOT-STAMPED UPON IT: "RECYCLED WATER" OR USE WARNING LABELS BY T. CHRISTY ENTERPRISES 3800 OR AN APPROVED EQUAL.
- 10. ALL SPRINKLERS AND OTHER EMISSION DEVICES USED IN RECYCLED WATER FACILITIES SHALL HAVE AN EXPOSED SURFACE COLORED PURPLE TO ASSOCIATE THEM WITH RECYCLED WATER USE. THE EXPOSED SURFACE MAY BE COLORED PURPLE THROUGH THE USE OF:
 - A. DYED PLASTIC OR RUBBER
 - B. WEATHERPROOF PAINT.
- 11. INSTALL WARNING TAGS AS MANUFACTURED BY T. CHRISTY ENTERPRISES 3150 OR AN APPROVED EQUAL FOR ALL CONTROL VALVES, GATE OR BALL ISOLATION VALVES, QUICK COUPLERS, CONTROLLERS METERS, OR OTHER APPARATUS AS REQUIRED BY CITY ENGINEER. TAGS SHALL BE WEATHERPROOF PLASTIC, 3" x 4", PURPLE IN COLOR WITH THE WORDS "WARNING: RECYCLED WATER DO NOT DRINK" IMPRINTED ON ONE SIDE AND "AVISO: AQUA IMPURA NO TOMAR" ON THE OTHER SIDE, OR SIMILAR AS APPROVED BY THE CITY ENGINEER. IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR.
- 12. PRIOR TO INSTALLATION, LOCATE DOMESTIC WATER MAINS AND/OR LATERALS IN PROXIMITY TO THE PROJECT LIMIT OF WORK. RECYCLED IRRIGATION WATER LINES AND POTABLE WATER LINES SHALL BE INSTALLED IN SEPARATE TRENCHES. A MINIMUM 10-FOOT HORIZONTAL SEPARATION AND A MINIMUM 1-FOOT VERTICAL COVER SHALL BE MAINTAINED BETWEEN POTABLE AND RECYCLED WATER LINES. WHERE RECYCLED IRRIGATION WATER LINES CROSS, THE RECYCLED WATER SHALL BE INSTALLED WITHIN A 10-FOOT PURPLE SCHEDULE 40 PVC SLEEVE, CENTERING ON THE POTABLE WATER LINE.

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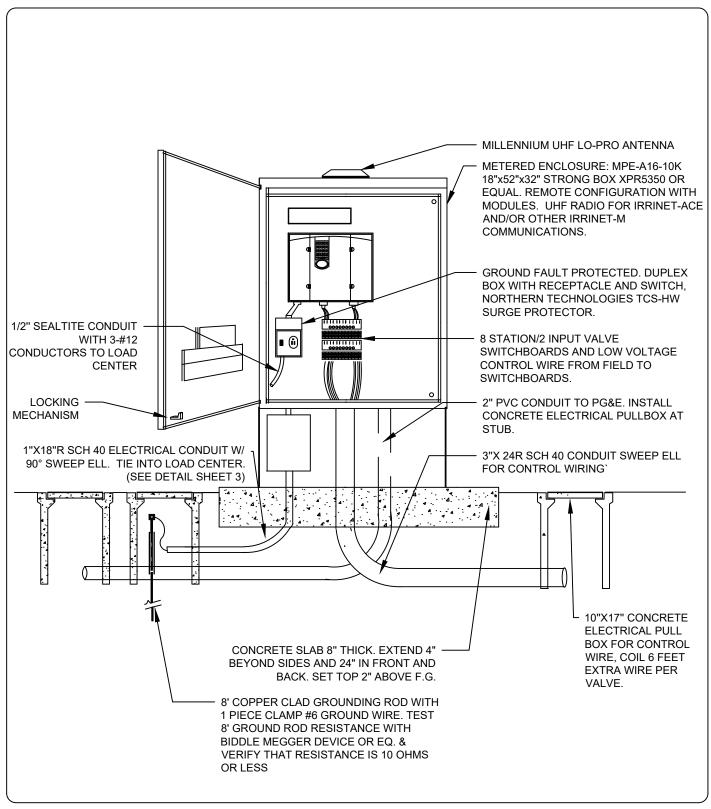
RECYCLED WATER NOTES

- 13. RECYCLED IRRIGATION WATER PIPING SHALL BE INSTALLED PER D 8.8.
- 14. NO HOSE BIBS SHALL BE USED FOR RECYCLED WATER SYSTEMS. QUICK COUPLERS VALVES SHALL BE RAIN BIRD 33DLRC WITH LOCKING CAP (OR AN APPROVED EQUAL) AND A PURPLE RUBBER OR VINYL COVER.
- 15. IRRIGATION CONTROLLER SHALL BE PROGRAMMED AS THESE GENERAL IRRIGATION GUIDELINES.
- 16. FLUSHING OF RECYCLED WATER THROUGH IRRIGATION SYSTEM PIPING SHALL BE PERFORMED IN A MANNER THAT MINIMIZES DISCHARGE FROM THE SITE OR CREATES PONDING. FLUSHING SHALL BE NOT BE PERMITTED IN A WAY THAT CREATES PUDDLES ALLOWING THE RECYCLED WATER TO BECOME STAGNANT. FLUSHING INTO THE SANITARY SEWER IS THE MOST ACCEPTABLE WAY TO DISCHARGE RECYCLED WATER. IF THIS IS NOT POSSIBLE, THEN FLUSHING MAY BE DONE BY DIVERTING RECYCLED WATER INTO A STORAGE TANK, TANK TRUCK OR ANOTHER APPROVED HOLDING FACILITY. HOLDING FACILITIES MUST BE CLEARLY MARKED WITH WARNING SIGNS. RECYCLED WATER SHALL BE TRANSPORTED AND DISCHARGED AT AN APPROVED SITE IN AN APPROVED MANNER.
- 17. WHERE BOTH POTABLE AND RECYCLED IRRIGATION WATER EXIST AT AT SITE, A CROSS-CONNECTION INSPECTION AND TEST SHALL BE PREFORMED ON BOTH THE POTABLE AND RECYCLED IRRIGATION WATER SYSTEMS. THE CROSS-CONNECTION TEST WILL BE CONDUCTED BY THE CITY OF TRACY PUBLIC WORK DEPARTMENT IN ACCORDANCE WITH RECYCLED WATER GUIDELINES. THE CONTRACTOR SHALL REQUEST THE CROSS-CONNECTION A TEST BY TRACY PUBLIC WORKS A MINIMUM OF 2 DAYS PRIOR TO PERFORMING THE TEST.
- 18. AN IRRIGATION AUDITOR SHALL PERFORM A COVERAGE TEST IN PRESENCE OF THE CONSTRUCTION MANAGEMENT INSPECTOR TO CONFIRM THAT EXCESSIVE OVERSPRAY DOES NOT OCCUR IN ACCORDANCE WITH THE CITY OF TRACY STANDARDS. ANY MODIFICATIONS IN EITHER THE SYSTEM EQUIPMENT, OR ADJUSTMENT IDENTIFIED BY THE AUDITOR SHALL BE COMPLETED IN ACCORDANCE WITH THE IRRIGATION AUDIT.
- 19. IN ALL AREAS WITHER RECYCLED WATER IS USED AND IS ACCESSIBLE TO THE PUBLIC, A RECYCLED WATER WARNING SHALL BE INSTALLED AT CITY APPROVED LOCATIONS.

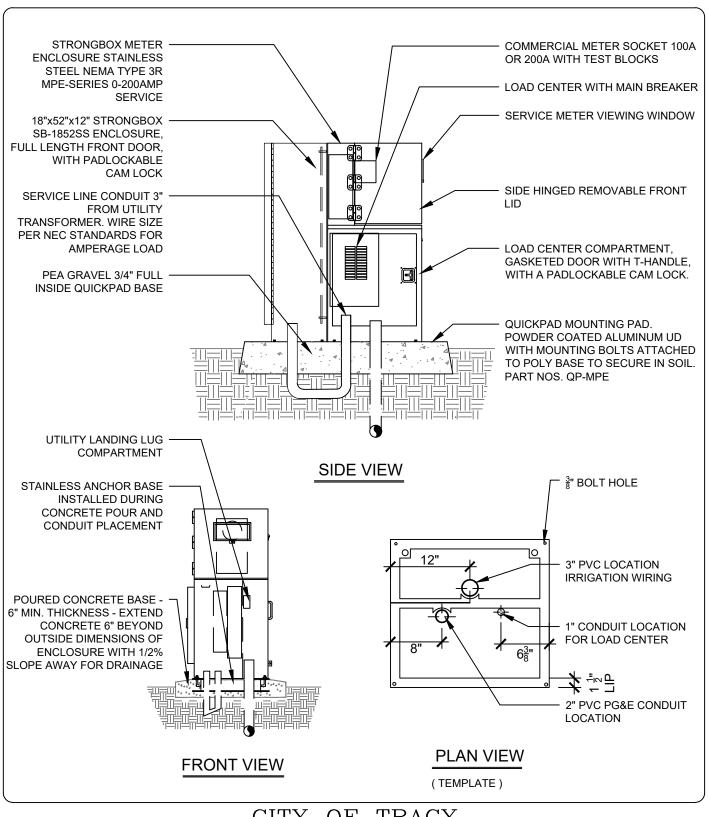
	CITY ENGINEER RCE 37186		DETAIL No. Sheet 5 of 5	D 8.0
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	Rev: Lyle C.	Rev:	General Guidelines	
Think Inside the Triangle ™	Rev:	Rev:	Recycled	Water Notes



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	Rev: Lyle C.	Rev:	Controller in	
Think Inside the Triangle TM	Rev:	Rev:	(MOTOROLA - I	IRRINET-ACE)



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	Rev: Lyle C.	Rev:	Controller in	n Enclosure
Think Inside the Triangle TM	Rev:	Rev:	(MOTOROLA	- IRRINET-M)



REVIEWED BY: Robert (Irmije RCE	63173	DETAIL No. Sheet 3 of 4	D 8.1	
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	Rev: Lyle	C.	Rev:			
Think Inside the Triangle $^{\text{TM}}$	Rev:		Rev:			

MOTOROLA IRRINET-ACE INCLUDES:

- * 8 STATION TO 144 STATION IN INCREMENTS OF 8 STATIONS
- * UHF XPR5350 RADIO KIT
- * UHF MILLENNIUM LO-PRO ANTENNA
- * 8 STATION/2 INPUT VALVE SWITCHBOARDS
- * NORTHERN TECHNOLOGIES TCS-HW SURGE PROTECTOR
- * ASSEMBLY, TEST AND TERMINATE
- * MAY OR MAY NOT REQUIRE HUB FOR SATELLITE COMMUNICATIONS
- * 8' COPPER CLAD GROUNDING ROD (SUPPLIED BY CONTRACTOR)

MOTOROLA IRRINET-M INCLUDES:

- * 12, 24, 36, OR 48 STATION CONTROLLER
- * UHF XPR5350
- * UHF MILLENNIUM LO-PRO ANTENNA
- * 8 STATION/2 INPUT VALVE SWITCHBOARDS
- * NORTHERN TECHNOLOGIES TCS-HW SURGE PROTECTOR
- * ASSEMBLY, TEST AND TERMINATE
- * 8' COPPER CLAD GROUNDING ROD (SUPPLIED BY CONTRACTOR)

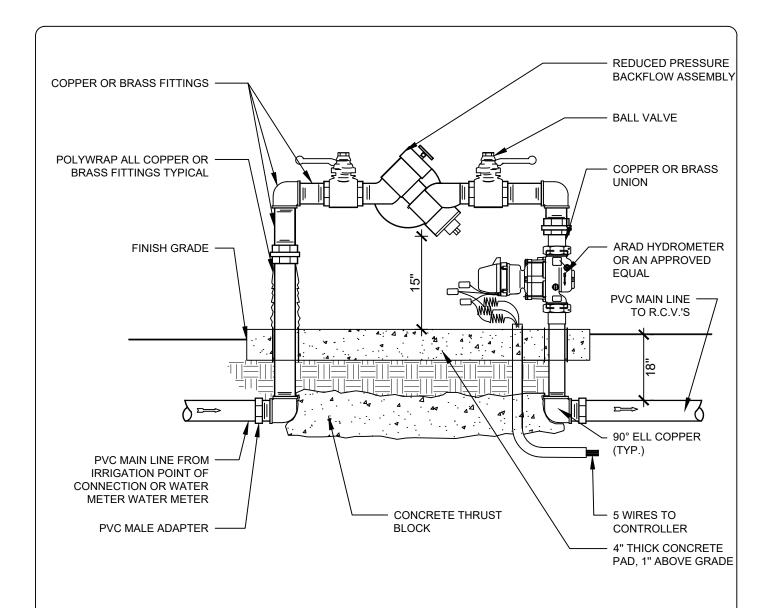
MOTOROLA PICCOLO-XR INCLUDES:

- * 2 STATION OR 4 STATION MOTOROLA PICCOLO-XR
- * CONNECTION TERMINAL
- * 6 VDC BATTERY
- * 6 VDC SOLAR PANEL
- * NEMA 3R OR PLASTIC TELECOM ENCLOSURE
- * VANDAL RESISTANT ANTENNA SYSTEM
- * ADD AS NEEDED; UNISTRUT ASSEMBLY FOR NEMA 3R INSTALLATION
- * NOTE: MUST COMMUNICATE VIA LOCAL PICCOLO PIU (PICCOLO INTERFACE UNIT)
- * STRONG BOX STAINLESS STEEL CABINETS AS REQUIRED

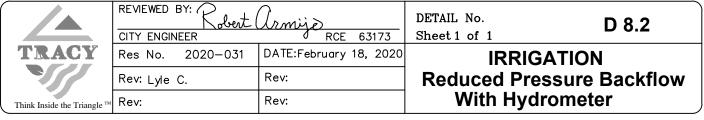
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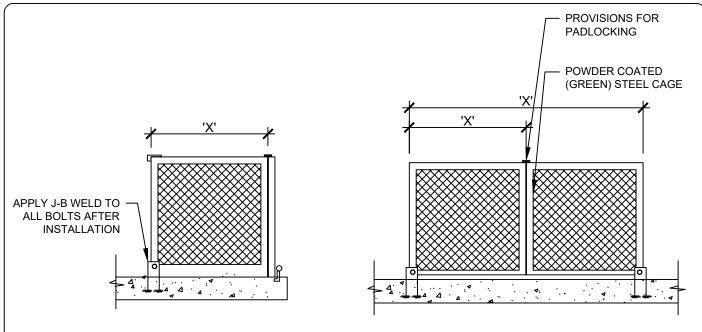
- 1. PULL PERMIT FROM BUILDING DEPARTMENT FOR ELECTRICAL WORK.
- 2. VERIFY CONTROLLER OPTIONS WITH CITY

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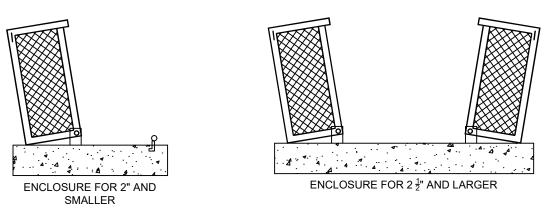


- 1. INSTALL REDUCED PRESSURE BACKFLOW PREVENTER DEVICE PER STANDARD PLAN 415.
- BACKFLOW PREVENTER ENCLOSURE PER DETAIL D 8.2.1.
- 3. BACKFLOW PREVENTION DEVICE TO BE TESTED BY A CERTIFIED BACKFLOW
- 4. INSTALL WEATHERMATIC WEATHER BLANKET, OR AN APPROVED EQUAL, OVER BACKFLOW, SIZED TO FIT.
- 5. RUN 5 WIRES BACK TO CONTROLLER (1 EXTRA, 2 WHITE, 1 PURPLE, 1 YELLOW), BUNDLE, LABEL & TAPE TOGETHER.
- 6. CONNECT PER MANUFACTURERS INSTRUCTIONS.
- 7. MINIMUM FLOW THROUGH THE FLOW METER IS 6.6 GPM.





FRONT VIEW OF ENCLOSURE

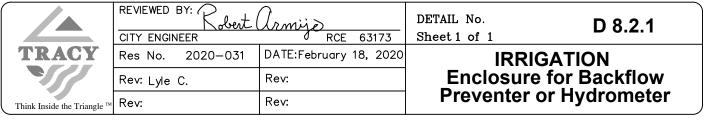


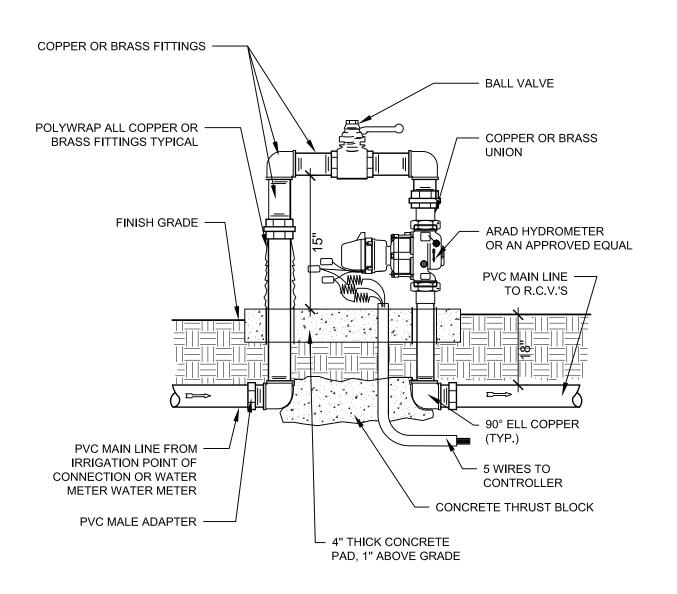
ENCLOSURE OR EQUAL IN OPEN POSITION

'X' REFER TO DIMENSION DENOTED ON IRRIGATION PLAN

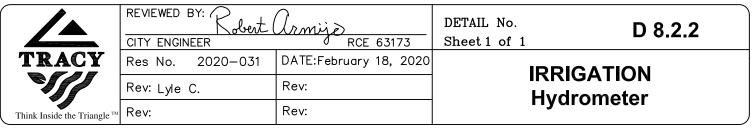
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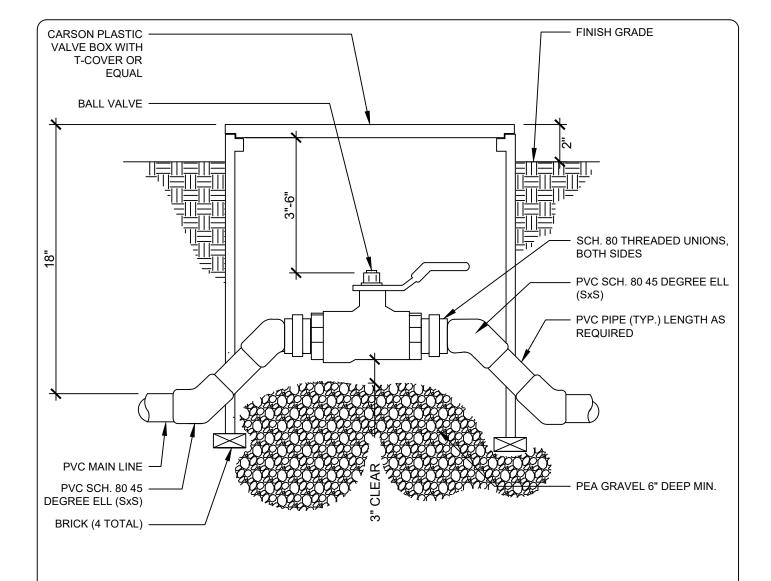
- REFER TO MANUFACTURER'S CATALOG FOR CORRECT DIMENSIONS TO FIT SIZE OF SPECIFIED BACKFLOW.
- 2. CONCRETE FOUNDATION DIMENSIONS TO SUIT EACH INDIVIDUAL INSTALLATION. SLAB SHALL BE 4" THICK, 4" AB, 95% COMPACTION, AND EXTEND 10" BEYOND ALL SIDES OF CAGE.
- 3. CONTRACTOR TO SUPPLY ENCLOSURE LOCKS MASTER 3KALH OR EQUAL.
- 4. ALL FASTENERS TO BE STAINLESS STEEL
- 5. FOR FINISHES, SEE D 0.0.





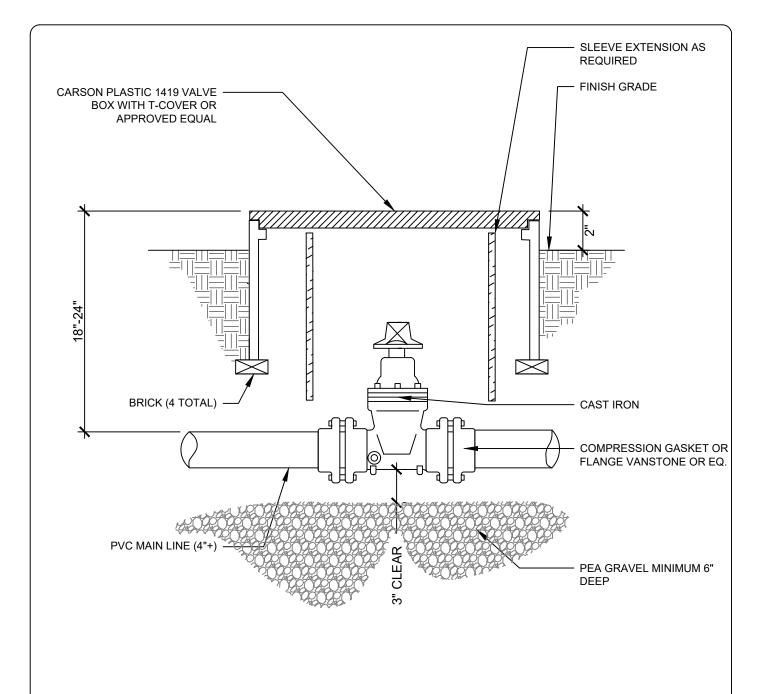
- HYDROMETER SHALL BE INSTALLED ABOVE GRADE UNLESS OTHERWISE SPECIFIED.
- 2. INSTALL HYDROMETER ENCLOSURE PER DETAIL D 8.2.1.
- 4. INSTALL WEATHERMATIC WEATHER BLANKET, OR AN APPROVED EQUAL, OVER BACKFLOW, SIZED TO FIT.
- 5. PROVIDE WIRE SPLICE CONNECTIONS AT ALL SPLICES PER D 8.20.
- 6. CONTROL WIRE SHALL BE SIZED A MINIMUM OF #14 U.L. APPROVED.
- 7. RUN 5 WIRES BACK TO CONTROLLER (1 EXTRA, 2 WHITE, 1 PURPLE, 1 YELLOW), BUNDLE, LABEL & TAPE TOGETHER.
- 8. PURPLE TAGS SHALL BE USED WITH RECLAIMED WATER SYSTEMS
- 9. MINIMUM FLOW THROUGH HYDROMETER TO BE 6.6 GPM.





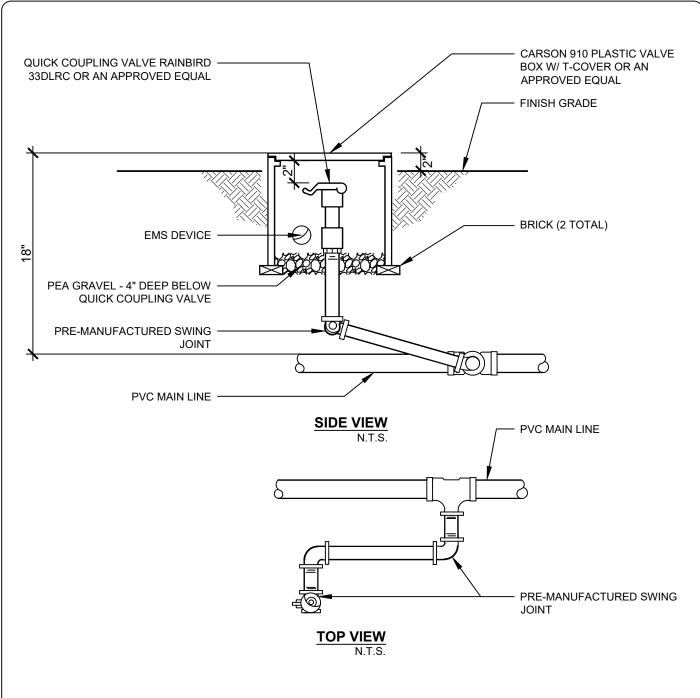
- 1. INSTALL BALL VALVE BEFORE EACH GROUP OF VALVES TO FACILITATE EASE OF MAINTENANCE TO VALVES.
- INSTALL ALONG MAIN LINE FOR ISOLATION OF MAIN. USE NIBCO T-FP-0600A-LF VALVE OR APPROVED EQUAL FOR MAINLINES 3" & LARGER
- 3. BALL VALVE SHALL BE SIZE OF MAINLINE UNLESS NOTED.
- 4. BALL VALVE SHALL BE BRASS FULL PORT.
- 5. VALVE BOXES SHALL BE CARSON 1419 MODEL OR APPROVED EQUAL FOR 1 1/2" OR SMALLER AND SHALL HAVE T-COVER LIDS, USE CARSON 1324 MODEL OR APPROVED EQUAL FOR 2" VALVES.
- 6. ROTATE VALVE SO THAT HANDLE IS 90° OFF MAINLINE
- 7. FITTINGS SHALL BE SPEARS OR LASCO ONLY.
- 8. VALVE BOX LID TO FIT WITH VALVE IN OFF POSITION
- 9. HOT STAMP VALVE ON TOP OF VALVE BOX WITH 2" BLOCK LETTERS-BV
- 10. PURPLE COVER AND PURPLE BOX SHALL BE USED WITH RECLAIMED WATER SYSTEMS

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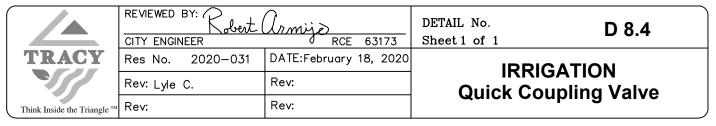


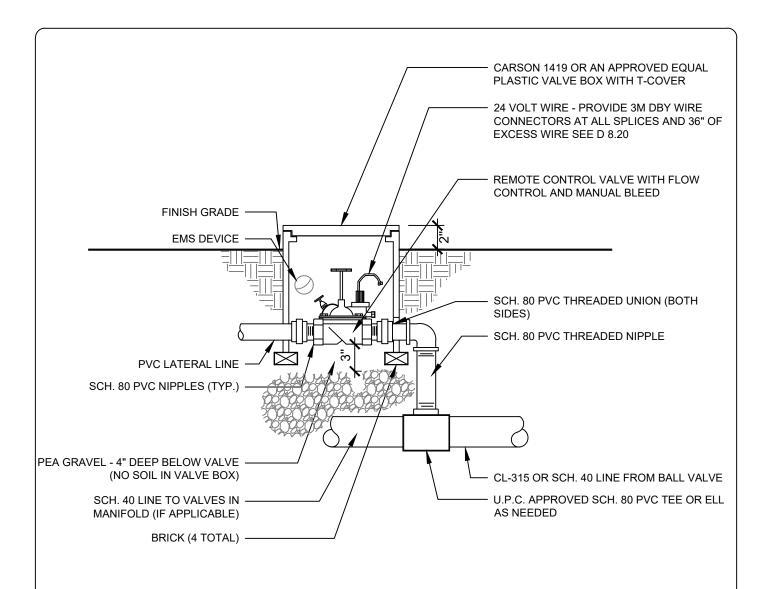
- 1. INSTALL GATE VALVES ON MAINLINES 4" AND LARGER FOR ISOLATION.
- 2. GATE VALVE SHALL BE: 3" AND ABOVE CAST IRON WITH SCREW-IN BONNET. NIBCO F-619-RW-SON OR AN APPROVED EQUAL; BELOW 3" CAST BRONZE NIBCO T-113 OR AN APPROVED EQUAL
- 3. PROVIDE 2 KEYS PER PROJECT PRIOR TO ACCEPTANCE BY CITY
- 4. HOT STAMP VALVE ON TOP OF VALVE BOX WITH 2" BLOCK LETTERS GV
- 5. VALVE BOXES SHALL BE MODEL CARSON 1324 OR AN APPROVED EQUAL FOR 2"+ VALVES AND SHALL HAVE T-COVE LIDS.
- PURPLE COVER AND PURPLE BOX SHALL BE USED WITH RECLAIMED WATER SYSTEMS.

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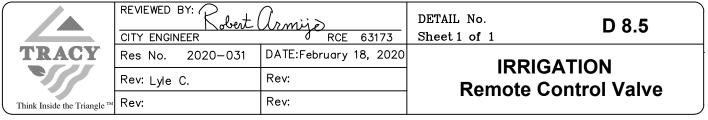


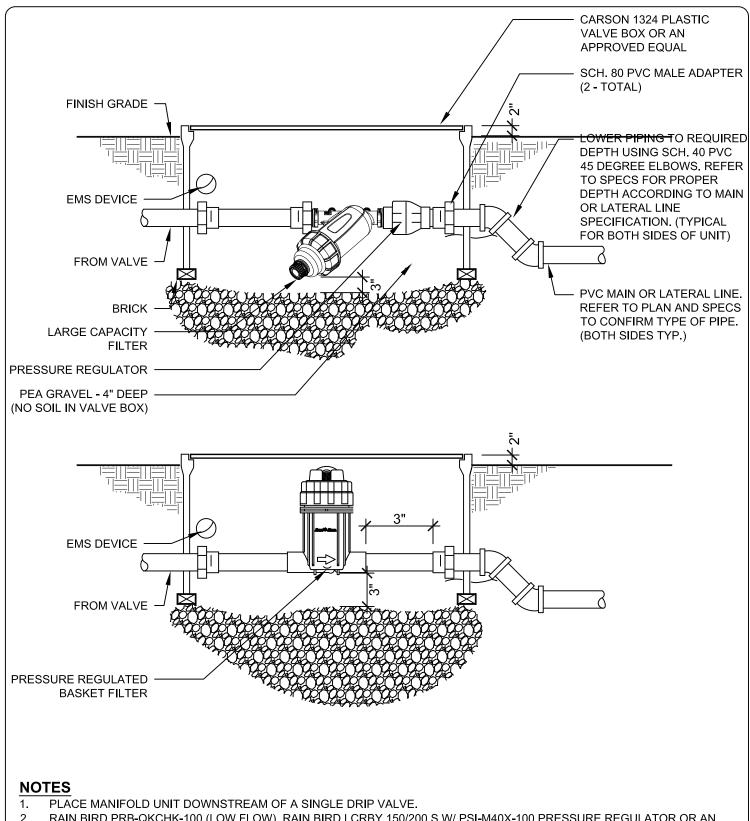
- VALVE BOX SHALL HAVE A LOCK BOLT. VALVE BOX SHALL BE CARSON 910 WITH T COVER OR AN APPROVED EQUAL.
- 2. PROVIDE TWO QUICK COUPLER KEYS TO CITY AT COMPLETION OF PROJECT.
- 3. RAINBIRD, SPEARS OR LASCO PRE-MANUFACTURED SWING JOINTS OR AN APPROVED EQUAL.
- 4. PURPLE COVER SHALL BE USED WITH RECLAIMED WATER SYSTEMS.
- 5. HOT STAMP VALVE TOP OF VALVE BOX WITH 2" BLOCK LETTERS QC





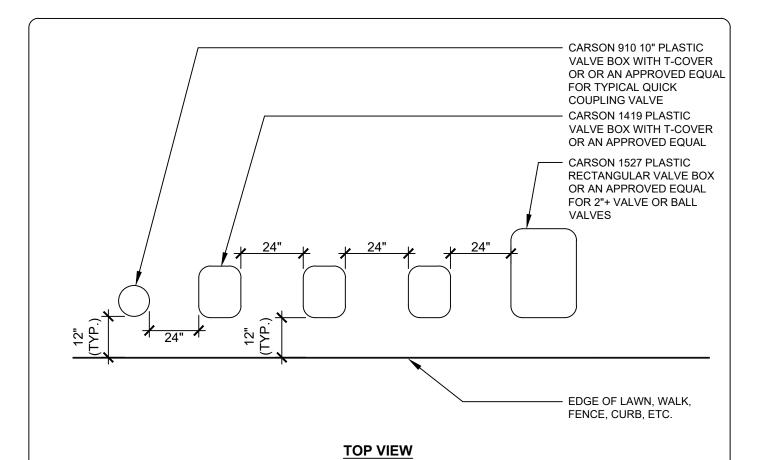
- INSTALL AN EMS DEVICE IN THE BOX TO FACILITATE DETECTION BY A METAL DETECTOR. ATTACH CHRISTY ID MARKER
 OR EQUAL TO VALVE IN BOX.
- ONLY ONE (1) REMOTE CONTROL VALVE PER BOX NO EXCEPTIONS.
- 3. MAINTAIN MIN. 1/2" CLEARANCE BETWEEN VALVE BOX AND PVC LINES.
- 4. PROVIDE WIRE SPLICE CONNECTIONS AT ALL SPLICES PER D 8.11.
- 5. THREADED UNIONS TO BE SPEARS, LASCO, OR APPROVED EQUAL ONLY.
- 6. CONTROL WIRE SHALL BE SIZED A MINIMUM OF #14 U.L. APPROVED.
- 7. VALVE BOXES FOR 1 1/2" SMALLER SHALL BE CARSON 1419 MODEL WITH T-COVER LIDS OR AN APPROVED EQUAL . FOR 2" VALVES, USE CARSON 1324 MODEL WITH T-COVER LID OR AN APPROVED EQUAL
- 8. HOT STAMP VALVE ON TOP OF VALVE BOX WITH 2" BLOCK LETTERS WITH VALVE NUMBER.
- PURPLE COVER SHALL BE USED WITH RECLAIMED SYSTEMS.



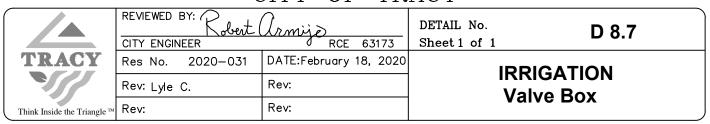


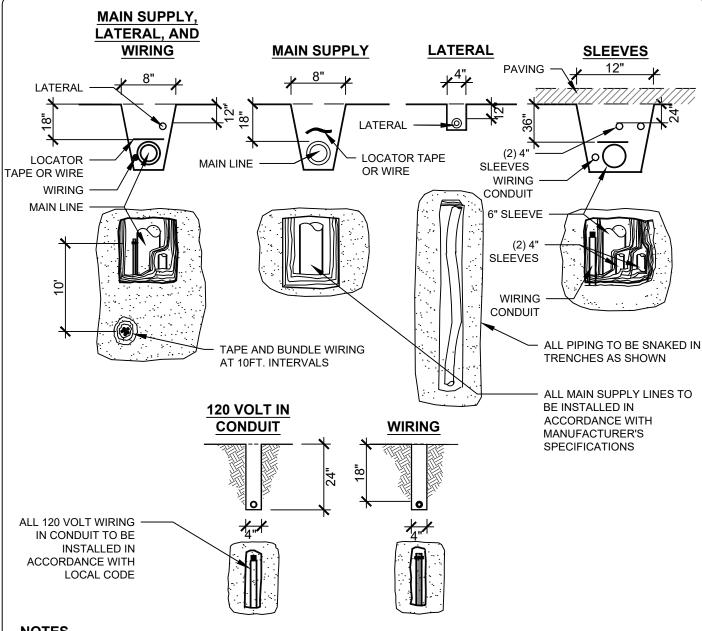
2. RAIN BIRD PRB-QKCHK-100 (LOW FLOW), RAIN BIRD LCRBY 150/200 S W/ PSI-M40X-100 PRESSURE REGULATOR OR AN APPROVED EQUAL.

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Think Inside the Triangle ™	Rev:	Rev:	1 110	. G 1	



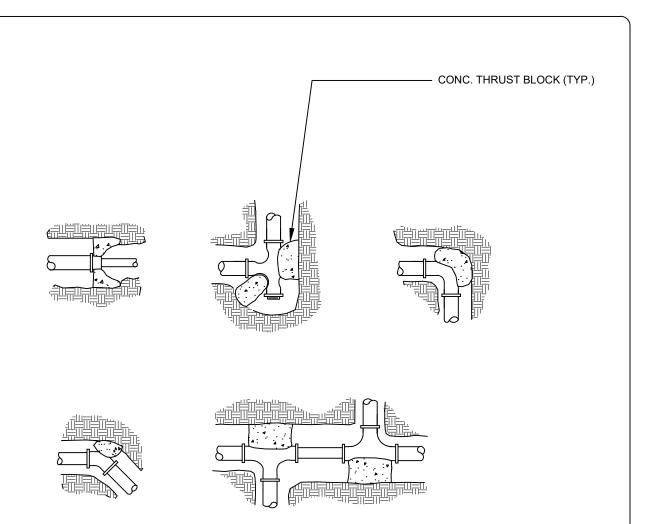
- HEAT BRAND ALL VALVE BOX LID INITIALS OF BOX CONTENTS AND/OR CORRESPONDING VALVE NUMBER AT CONTROLLER. EXAMPLE: QC, BV, MV, FS, C21
- 2. CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE. MAINTAIN MINIMUM 1/2" CLEARANCE BETWEEN VALVE BOX AND LATERAL LINES.
- 3. VALVE BOXES SHALL BE PLACED AT FINISH GRADE. USE A T-COVER LID. BOXES SHALL HAVE AN EMS DEVICE IN THE BOX TO FACILITATE LOCATION WITH METAL DETECTOR.
- 4. SET RCV AND VALVE BOX ASSEMBLY IN GROUND COVER / SHRUB AREA WHERE POSSIBLE, INSTALL IN LAWN ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO LAWN.
- 5. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
- 6. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
- 7. VALVE BOXES SHALL NOT REST ON PVC PIPE.
- 8. DO NOT PLACE VALVE BOXES IN VEHICULAR AREAS.
- 9. PURPLE VALVE LID TO BE USED WITH RECLAIMED WATER SYSTEMS.





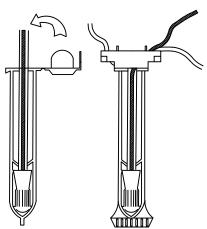
- COMMON TRENCHING OF IRRIGATION PIPE LINE AND/OR REMOTE CONTROL VALVE WIRING TO BE DONE WHEREVER POSSIBLE.
- 2. MAINTAIN MINIMUM 4" SPACE BETWEEN PARALLEL PIPE LINES AND 6" BETWEEN VERTICAL MAIN LINE AND LATERAL LINES.
- 3. WIRING AND MAIN LINE TO BE AT SAME MINIMUM DEPTH OF 18". WHERE CONTROL IS NOT INSTALLED, INSTALL LOCATOR WIRE OR TAPE ALONG LENGTH OF MAIN.
- 4. UNDER CONCRETE OR PAVING, CONTROL WIRE TO BE SLEEVED SEPARATELY FROM MAINLINE OR LATERAL SLEEVES.
- 5. FITTINGS FOR MAINLINE 2" SMALLER TO USE SCH 40 FITTINGS, MAINLINES $2\frac{1}{2}$ 4" TO USE SCH 80 FITTINGS, 6" AND LARGER TO BE LEEMCO STRAP FITTING OR EQUAL WITH THRUST BLOCKS.
- 6. INTSLL (1) ALL 6" SLEEVE AND (2) 4" SLEEVES AT EACH CROSSING, MINIMUM.

	REVIEWED BY: Cobert 1	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 8.8
TRACY	Res No. 2020-031	DATE:February 18, 2020	IDDIC V.	TION
	Rev: Lyle C.	Rev:	IRRIGATION Trenching Detail	
Think Inside the Triangle ™	Rev:	Rev:	Hencini	y Detail



- 1. INSTALL MAIN LINE AS PER MANUFACTURER'S INSTALLATION GUIDE.
- 2. SIZE OF CONCRETE THRUST BLOCKS SHALL BE PER PIPE MANUFACTURER'S INSTALLATION GUIDE.

	REVIEWED BY: Colett	armijo RCE 63173	DETAIL No. Sheet 1 of 1	D 8.9
TRACY	Res No. 2020-031	DATE:February 18, 2020	IDDIC	SATION
	Rev: Lyle C.	Rev:		t Blocks
Think Inside the Triang	e™ Rev:	Rev:	IIIus	



STRIP WIRES, APPLY THE ELECTRICAL CONNECTOR AND TWIST IN A CLOCKWISE DIRECTION.

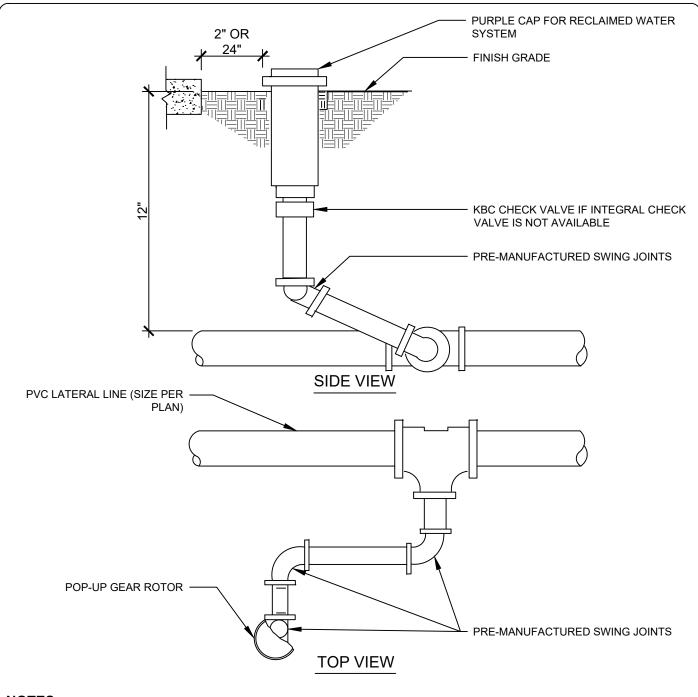
INSERT THE SPLICE INTO THE GEL FILLED INSULATOR TUBE. PUSH PAST THE LOCKING FINGERS TO HOLD THE CONNECTOR IN PLACE.

POSITION WIRE INTO CHANNELS AND SNAP INSULATOR TUBE COVER CLOSED.

NOTES

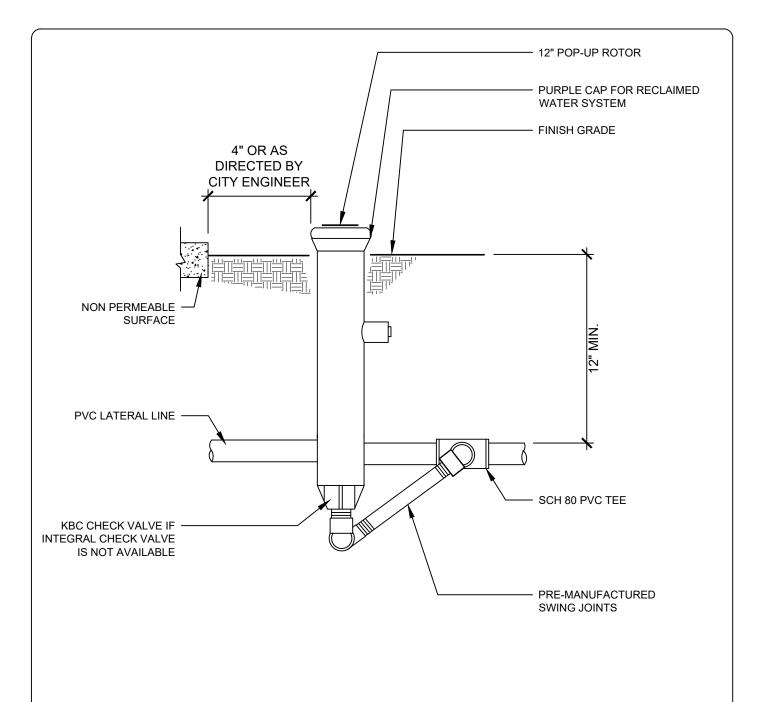
- 1. ONE CONNECTOR HANDLES #10 -AWG, #12, AND #14 -AWG WIRE.
- 2. WIRE CONNECTOR WILL ACCEPT THREE WIRE OR TWO WIRE CONNECTIONS.
- 3. WIRE CONNECTORS TO BE 3M-DBY OR AN APPROVED EQUAL

	CITY ENGINEER	Irmije)	DETAIL No. Sheet 1 of 1	O 8.10
TRACY	Res No. 2020-031	DATE:February 18, 2020	IRRIGATIO	NI
	Rev: Lyle C.	Rev:	Wire Connector	
Think Inside the Triangle ™	Rev:	Rev:	wife Comile	Clui



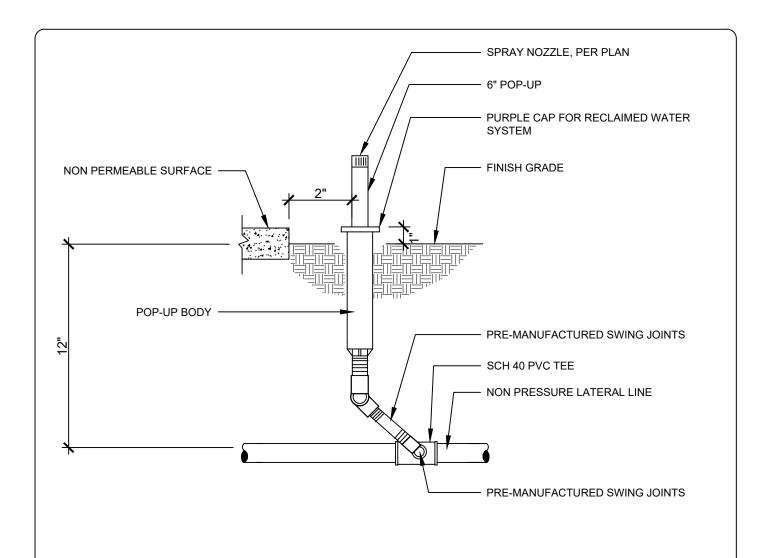
- SPRINKLER SHALL HAVE INTEGRAL CHECK VALVE TO PREVENT LOW HEAD DRAINAGE.
- 2. SET SPRINKLERS 1" ABOVE FINISH GRADE AT TIME OF INSTALLATION.
- 3. RB-TSJ-12 OR PRE MANUFACTURED SWING JOINTS.
- 4. OVEREAD IRRIGATION SHALL NOT BE PLACED WITHIN 24" OF ANY NON PERMEABLE SURFACE UNLESS THE ADJACENT NON PERMEABLE SURFACE DRAINS TO A LANDSCAPE SPACE, OR ADJACENT NON-RENEWABLE SURFACE DRAINS BACK TO THE LANDSCAPE AREA.

	REVIEWED BY: Pobert	Ormije) RCE 63173	DETAIL No. Sheet 1 of 1	D 8.11
TRACY	Res No. 2020-031	DATE:February 18, 2020	IDDIC	ATION
	Rev: Lyle C.	Rev:		ear Rotor
Think Inside the Triangle ™	Rev:	Rev:	r opup G	ear Notor



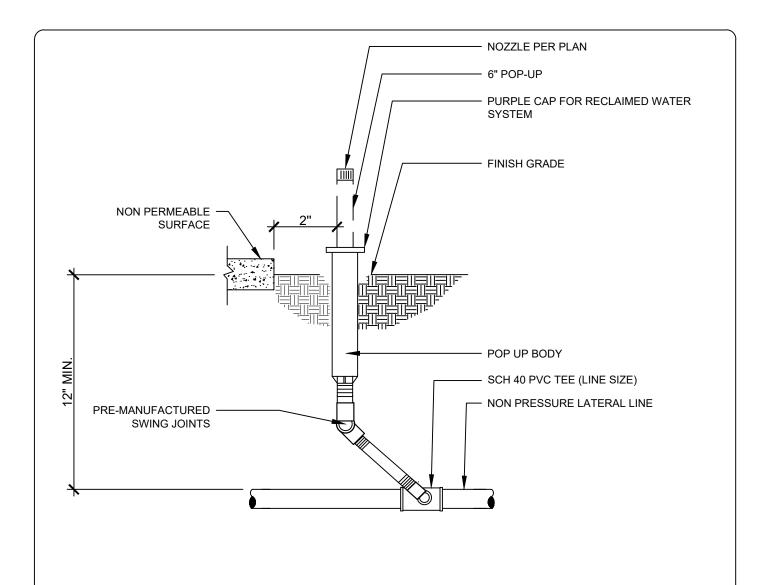
- SPRINKLER TO HAVE INTEGRAL CHECK VALVE TO PREVENT LOW HEAD DRAINAGE.
- 2. SPRINKLER TO HAVE INTEGRAL PRESSURE REGULATION.
- 3. IRRIGATION HEADS TO BE SET 1" ABOVE FINISH GRADE.
- 4. PRE-MANUFACTURED SWING JOINTS, RB-SA125050, RB-SA 125075 OR EQUAL.
- 4. OVEREAD IRRIGATION SHALL NOT BE PLACED WITHIN 24" OF ANY NON PERMEABLE SURFACE UNLESS THE ADJACENT NON PERMEABLE SURFACE DRAINS TO A LANDSCAPE SPACE, OR ADJACENT NON-RENEWABLE SURFACE DRAINS BACK TO THE LANDSCAPE AREA.

	REVIEWED BY: Robert 1	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	3.12
TRACY	Res No. 2020-031	DATE:February 18, 2020	IRRIGATION	
	Rev: Lyle C.	Rev:	12" Popup Shrub R	Potor
Think Inside the Triangle TM	Rev:	Rev:	12 1 opup Siliub N	



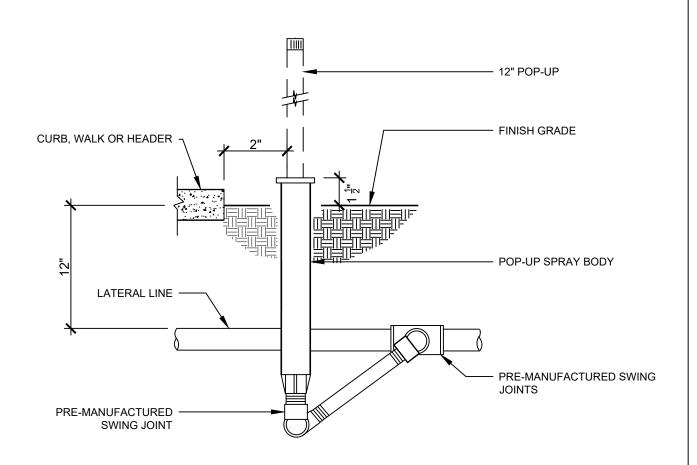
- 1. SPRINKLER TO HAVE INTEGRAL CHECK VALVE TO PREVENT LOW HEAD DRAINAGE.
- 2. SPRINKLER TO HAVE INTEGRAL PRESSURE REGULATION.
- IRRIGATION HEADS TO BE SET 1" ABOVE FINISH GRADE IN SODDED AREA.
- 4. PRE-MANUFACTURED SWING JOINTS, RB-SR125050, RB-SR125075 OR EQUAL.
- 4. OVEREAD IRRIGATION SHALL NOT BE PLACED WITHIN 24" OF ANY NON PERMEABLE SURFACE UNLESS THE ADJACENT NON PERMEABLE SURFACE DRAINS TO A LANDSCAPE SPACE, OR ADJACENT NON-RENEWABLE SURFACE DRAINS BACK TO THE LANDSCAPE AREA.
- 5. NO SPRAY IRRIGATION SHALL BE USED IN AREAS LESS THAN 10' IN ANY DIRECTION.

	REVIEWED BY: Cobert CITY ENGINEER	Irmije RCE 63173	DETAIL No. Sheet 1 of 1	D 8.13
TRACY	Res No. 2020-031	DATE:February 18, 2020	IDDICAT	ION
	Rev: Lyle C.	Rev:	IRRIGATION 6" Pop-Up Lawn Spray	
Think Inside the Triangle ™	Rev:	Rev:	о гор-ор ца	wii Spiay



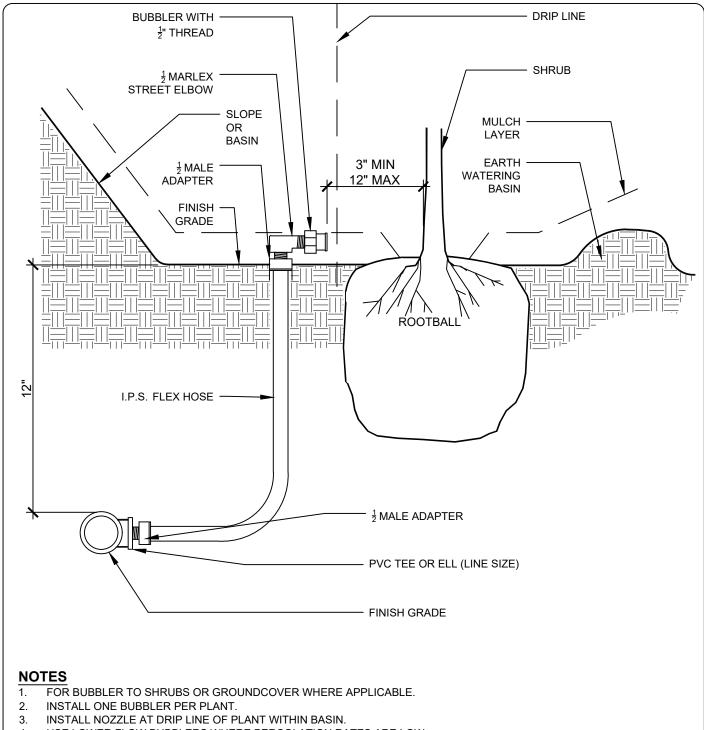
- 1. SPRINKLER TO HAVE INTEGRAL CHECK VALVE TO PREVENT LOW HEAD DRAINAGE.
- 2. SPRINKLER TO HAVE INTEGRAL PRESSURE REGULATION
- 3. IRRIGATION HEADS TO BE SET 1" ABOVE FINISH GRADE.
- 4. PRE-MANUFACTURED SWING JOINTS, RB-SR125050, RB-SR125075 OR EQUAL.
- 4. OVEREAD IRRIGATION SHALL NOT BE PLACED WITHIN 24" OF ANY NON PERMEABLE SURFACE UNLESS THE ADJACENT NON PERMEABLE SURFACE DRAINS TO A LANDSCAPE SPACE, OR ADJACENT NON-RENEWABLE SURFACE DRAINS BACK TO THE LANDSCAPE AREA.
- 5. NO SPRAY IRRIGATION SHALL BE USED IN AREAS LESS THAN 10' IN ANY DIRECTION.

	REVIEWED BY: Cobert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 8.14
TRACY	Res No. 2020-031	DATE:February 18, 2020	IRRIGATION	ON
	Rev: Lyle C.	Rev:	6" Popup Shru	•
Think Inside the Triangle TM	Rev:	Rev:	(Retrofit Area	s only)



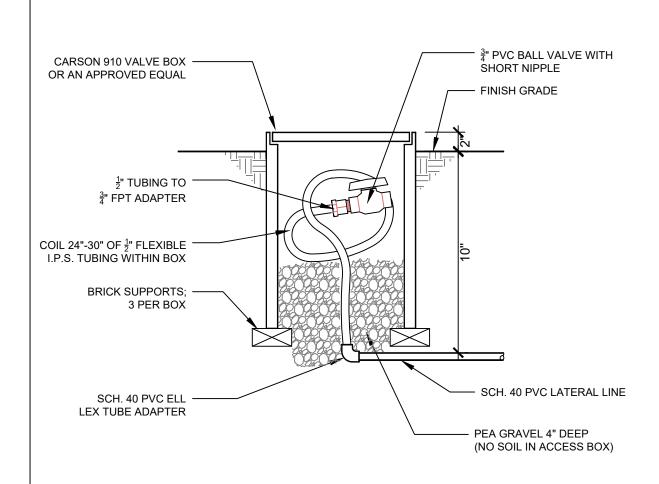
- SPRINKLER TO HAVE INTEGRAL CHECK VALVE TO PREVENT LOW HEAD DRAINAGE.
- 2. IRRIGATION HEADS TO BE SET 1" ABOVE FINISH GRADE.
- 3. PRE-MANUFACTURED SWING JOINTS, RB-SR125050, RB-SR125075 OR EQUAL.
- 4. OVEREAD IRRIGATION SHALL NOT BE PLACED WITHIN 24" OF ANY NON PERMEABLE SURFACE UNLESS THE ADJACENT NON PERMEABLE SURFACE DRAINS TO A LANDSCAPE SPACE, OR ADJACENT NON-RENEWABLE SURFACE DRAINS BACK TO THE LANDSCAPE AREA.

	REVIEWED BY: Robert 1 CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 8.15
TRACY	Res No. 2020-031	DATE:February 18, 2020		
	Rev: Lyle C.	Rev:	12" Popup Sh	•
Think Inside the Triangle ™	Rev:	Rev:	(Retrofit Are	eas only)



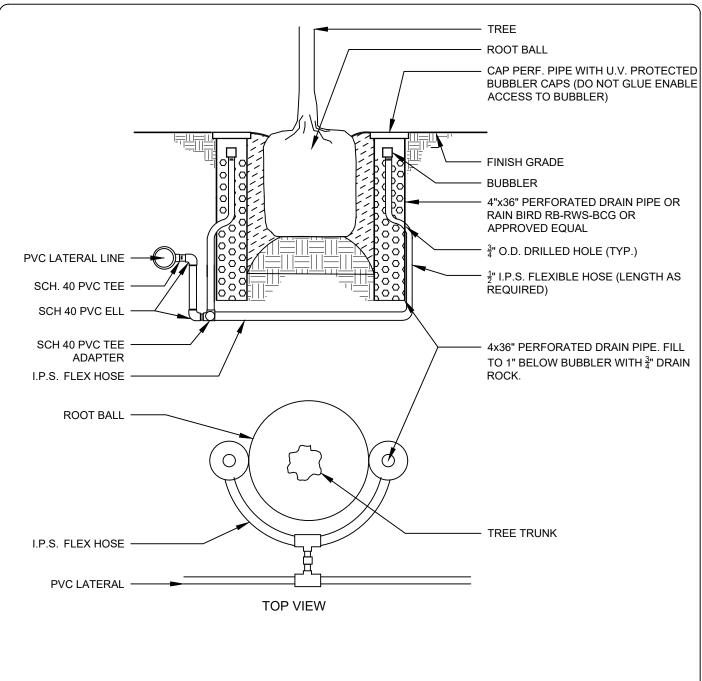
- 4. USE LOWER FLOW BUBBLERS WHERE PERCOLATION RATES ARE LOW.
- 5. USE CEMENT APPROVED FOR I.P.S. FLEX HOSE.
- 6. NO SPLICING OF I.P.S. TUBING
- 7. BUBBLERS SHALL HAVE INTEGRAL CHECK VALVE. MINIMUM FLOW RATE 4 G.P.H.

	REVIEWED BY: Solert CITY ENGINEER	Irmije RCE 63173	DETAIL No. Sheet 1 of 1	D 8.16
TRACY	Res No. 2020-031	DATE:February 18, 2020	IRRIGATIO	N
	Rev: Lyle C.	Rev:	Shrub Bubbler	
Think Inside the Triangle TM	Rev:	Rev:	Siliub Bubb	iei



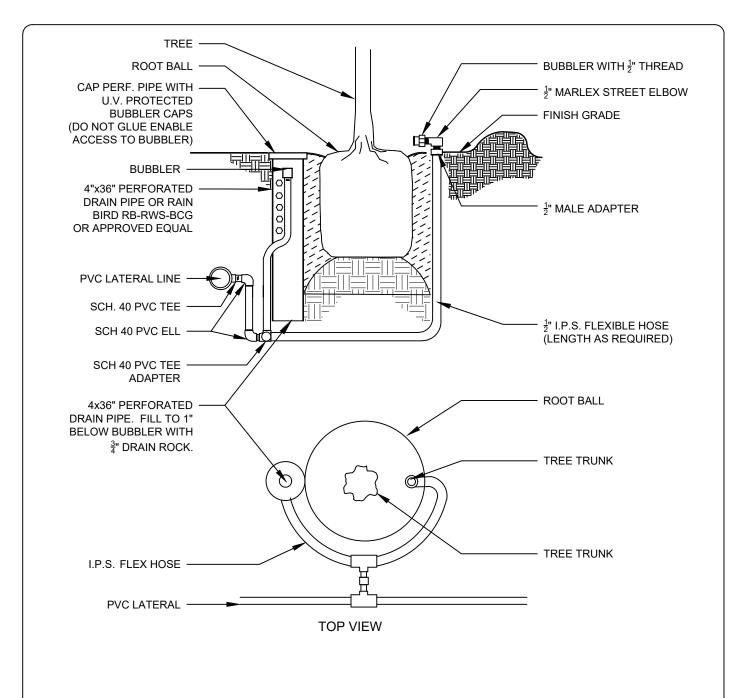
- THIS FLUSH VALVE IS TYPICAL FOR ALL LATERAL ENDS IN BUBBLER SYSTEM.
- 2. USE CEMENT APPROVED FOR I.P.S. FLEX HOSE AND PVC ONLY.

	REVIEWED BY: Colert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 8.17
TRACY	Res No. 2020-031	DATE:February 18, 2020	IDDICAT	ION
	Rev: Lyle C.	Rev:	IRRIGATION Flush Valve	
Think Inside the Triangle TM	Rev:	Rev:	i iusii v	aive



- BUBBLERS ARE REQUIRED FOR TREES IN LAWN AND SHRUB AREAS.
 TWO BUBBLERS PER TREE ARE TO BE PLACED ON OPPOSITE SIDES
 OF ROOTBALL. ORIENT BUBBLERS 180 DEGREES FROM EACH OTHER.
- 2. WHERE ROOT BARRIERS ARE REQUIRED, INSTALL PER DETAIL D 7.4.
- 3. USE PROPER RATED GLUE FOR I.P.S. FLEX HOSE.
- RAIN BIRD RB-RWS-BCG 4"x36" ROOT WATERING SYSTEM OR APPROVED EQUAL.

	REVIEWED BY: Cobert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 8.18
TRACY	Res No. 2020-031	DATE:February 18, 2020	IRRIG	ATION
	Rev: Lyle C.	Rev:	Tree Bubb	olers in Areas
Think Inside the Triangle ™	Rev:	Rev:	With Sur	face Spray



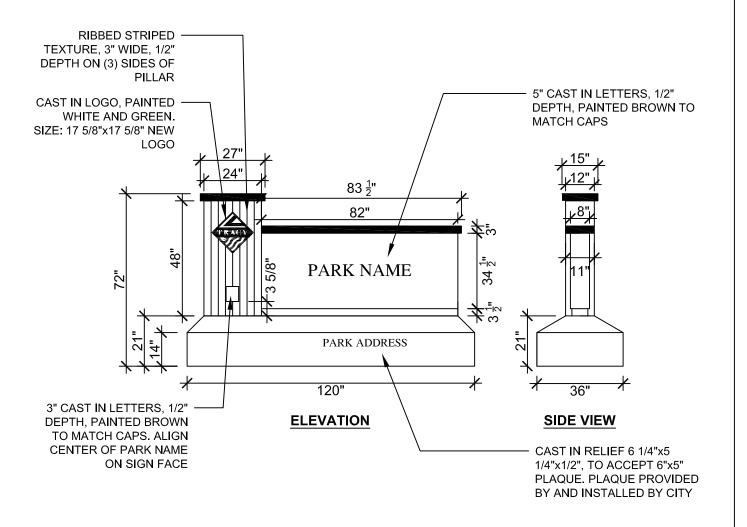
- 1. BUBBLERS ARE REQUIRED FOR TREES IN LAWN AND SHRUB AREAS. TWO BUBBLERS PER TREE ARE TO BE PLACED ON OPPOSITE SIDES OF ROOTBALL. ORIENT BUBBLERS 180 DEGREES FROM EACH OTHER.
- 2. WHERE ROOT BARRIERS ARE REQUIRED, INSTALL PER DETAIL D 7.4.
- 3. USE PROPER RATED GLUE FOR I.P.S. FLEX HOSE.
- 4. RAIN BIRD RB-RWS-BCG 4"x36" ROOT WATERING SYSTEM OR AN APPROVED EQUAL.

	REVIEWED BY: Robert CITY ENGINEER	Irmije) RCE 63173	DETAIL No. Sheet 1 of 1	D 8.19
TRACY	Res No. 2020-031	DATE:February 18, 2020	IRRIG	ATION
	Rev: Lyle C.	Rev:	Tree Bubb	lers in Areas
Think Inside the Triangle ™	Rev:	Rev:	Without Su	rface Spray

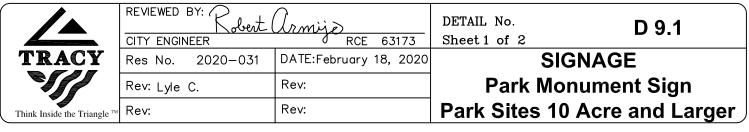
SIGNAGE GUIDELINES

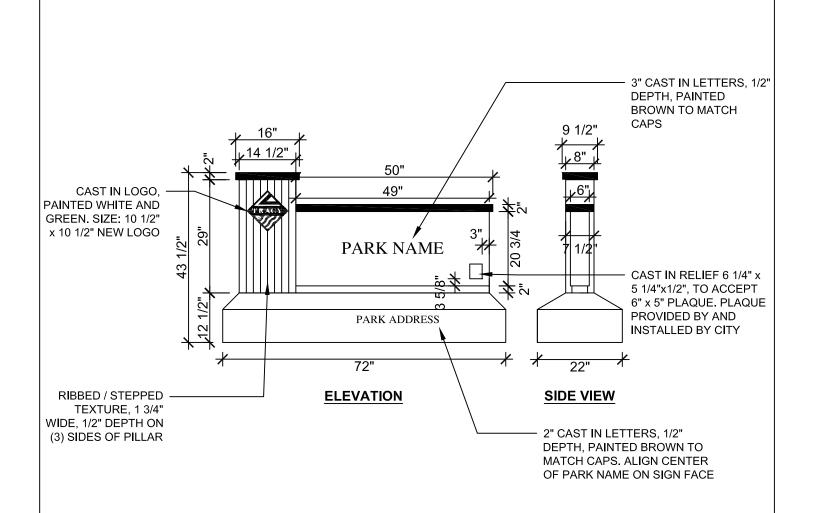
- 1. ONE PARK SIGN MINIMUM SHALL BE PROVIDED AT PARK ENTRY. DESIGN SHALL BE PER D 9.1 FOR PARK LESS THAN 5 (FIVE) ACRES IN SIZE. DESIGN SHALL BE PER D 9.2 FOR PARKS LARGER THAN 5 (FIVE) ACRES. COLORS TO BE PER D 9.1 OR D 9.2 UNLESS OTHERWISE SPECIFIED.
- SIGNS CAN BE ORDERED THROUGH OUTDOOR CREATIONS, INC. (530)365-6106 OR APPROVED EQUALALL SIGN TEXT, ARTWORK AND COLOR SELECTION SHALL BE FINALIZED WITH THE PARKS & RECREATION DEPARTMENT & APPROVED BY THE CITY, PRIOR TO ORDERING THE SIGN.

	TRACY Think Inside the Triangle ™	REVIEWED BY: Pobert armije CITY ENGINEER RCE 63173				DETAIL No. Sheet 1 of 1	D 9.0
		Res No.	Res No. 2020-031 DATE:February 18, 3		18, 2020	SIGNAGE General Guidelines	
		Rev: Lyle	C.	Rev:			
		Rev:		Rev:			

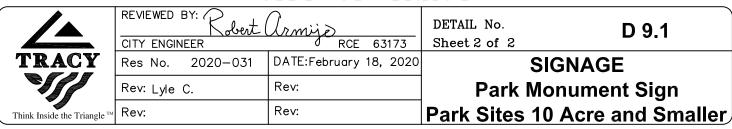


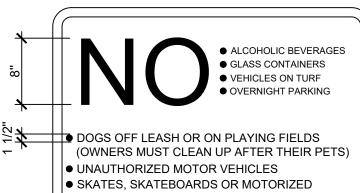
- 1. FONT SHALL GOUDY OLD STYLE OR AN APPROVED EQUAL.
- 2. PAINT COLORS: WHITE, GREEN: PPG 1226 7 BLARNEY STONE, BROWN: PPG 1075 6 POPPY PODS (APPROXIMATE TO CAP COLOR).
- 3. WEIGHT: SIGN W/CAP: 1870LBS, PILLAR W/CAP: 1174LBS, BASE: 6500LBS
- 4. TEXTURE: LIGHT SANDBLAST.
- 5. COLOR: SIGN/BASE/PILLAR: INCRETE DESERT TAN, CAPS: INCRETE AUTUMN BROWN, SEALER: NANO TECH BARRIER.
- 6. CONCRETE FOOTING, REINFORCEMENT, COMPACTION, & THICKNESS OF BASE, SUB GRADE OR PER MANUFACTURES'S RECOMMENDATION OR OTHERWISE CAS DIRECTED BY GEO-TECHNICAL REPORT, STRUCTURAL ENGINEER, AND APPROVED BY CITY ENGINEER.
- 7. CONTRACTOR TO PROVIDE SHOP DRAWING AND SUBMIT FOR APPROVAL.





- 1. FONT SHALL GOUDY OLD STYLE OR AN APPROVED EQUAL.
- PAINT COLORS: WHITE, GREEN: PPG 1226 7 BLARNEY STONE, BROWN: PPG 1075 6 POPPY PODS (APPROXIMATE TO CAP COLOR)
- 3. WEIGHT: SIGN W/CAP: 1870LBS, PILLAR W/CAP: 1174LBS, BASE: 6500LBS
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- 7. CONTRACTOR TO PROVIDE SHOP DRAWING AND SUBMIT FOR APPROVAL.





- **SCOOTERS**
- GOLF PRACTICE OR UNAUTHORIZED SPORTS
- INFLATABLE STRUCTURES, WATER SLIDES OR **DUNK TANKS; PERMIT REQUIRED**
- MODEL VEHICLES, AIRCRAFT OR BOATS

OR ANY OTHER ACTION PROHIBITED BY TRACY MUNICIPAL CODE T.M.C. 4.16.180, 5.08.130

ENTERING OR REMAINING IN THIS PARK BETWEEN DUSK AND DAWN FORBIDDEN BY LAW. T.M.C.4.16.200; T.M.C. 4.16.190

SEPARATE SIGN TO BE INSTALLED SHALL READ:

IT IS PUNISHABLE BY FINE TO SMOKE OR DISPOSE OF ANY TOBACCO OR PLANT RELATED PRODUCTED INTENDED FOR INHALATION, WHETHER NATURAL OR SYNTHETIC, IN ANY MANNER OR FORM WITHIN A PUBLIC PARK OR PLAYGROUND. **HEALTH & SAFETY CODE 1104495**

SEPARATE SIGN TO BE INSTALLED IN:

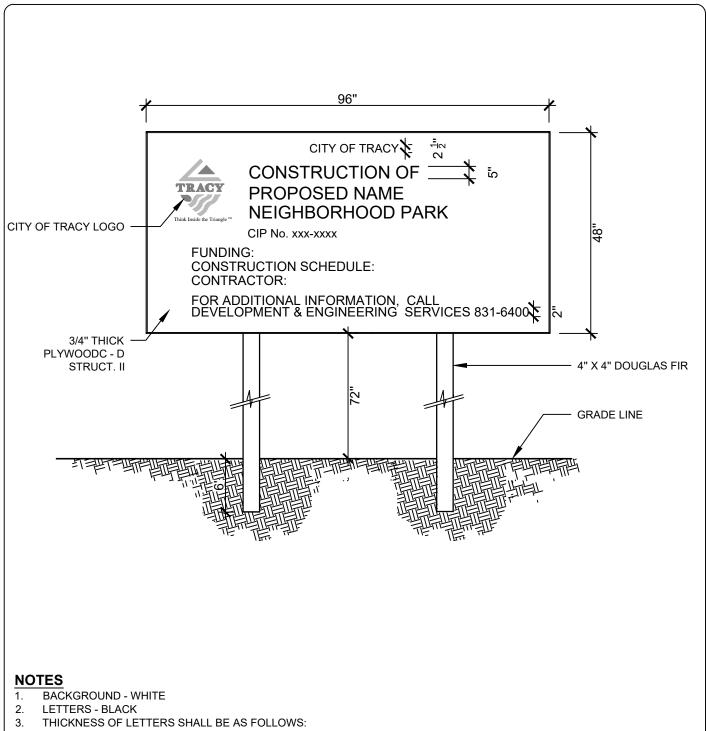
SPORTS FACILITIES OR AT SPORTS FIELDS IN PARKS AS REQUIRED.

NOTES

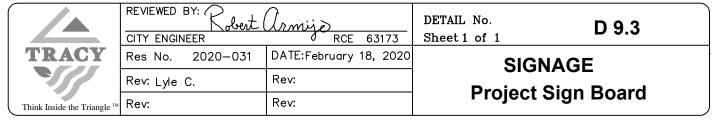
- SIZE OF SIGN SHALL BE 24"X36" IN SIZE.
- BACKGROUND SHALL BE BLUE
- 3. LETTERS SHALL BE HELVETICA COMPRESSED TYPE, WHITE 1 1/2" TALL
- 4. WORDING SHALL BE PER CURRENT CITY CODE.
- SIGNS SHALL BE PLACED PER CITY'S DIRECTION. VERIFY WITH ENGINEER. 5.
- SIGN MATERIAL TO BE .125" ALUMINUM 6.
- APPLY GRAFITTI COATING TO SIGNS 7.
- CONTACT CITY ENGINEER FOR SAMPLE LETTERING, COLOR AND VERICATION OF WORDING. 8.
- SEPARATE SIGNAGE MAY BE REQUIRED AT A SPORTS FACILITY. CONTACT CITY ENGINEER FOR CURRENT SIGNAGE WORDING.

CITY TRACY OF

	CITY ENGINEER	Irmija RCE 63173	DETAIL No. Sheet 1 of 1	D 9.2
TRACY	Res No. 2020-031	DATE:February 18, 2020	CICNA	^ E
	Rev: Lyle C.	Rev:	SIGNA	
Think Inside the Triangle ™	Rev:	Rev:	Park Law	Signs



- A. PROJECT NAME 1".
- B. ALL OTHER LOCATIONS 1/2".
- 2. COORDINATE WITH THE CITY ENGINEER FOR EXACT LETTERING OF THE PROJECT BEFORE CONSTRUCTION.
- 3. SHALL BE USED FOR CIP PROJECTS ONLY



GENERAL LIGHTING GUIDELINES

- 1. SECURITY OR DECORATIVE LIGHTING INSTALLATION IN A PARK WILL BE RECOMMENDED FOR INCLUSION IN THE DESIGN BASED ON THE DISCRETION OF THE CITY ENGINEER. WITH FINAL RECOMMENDATIONS MADE TO THE PARKS COMMISSION. LIGHTING WILL BE EVALUATED AND DETERMINED ON A SITE BY SITE BASIS.
- 2. ALL LIGHTING DESIGN SHALL BE REVIEWED WITH CITY STAFF WITH REGARD TO MAINTENANCE AND UTILITY COSTS.
- 4. ALL LIGHT SOURCES SHALL BE DESIGNED AND ORIENTED SO AS TO SHIELD NEIGHBORING RESIDENCES FROM LIGHT TO THE EXTENT POSSIBLE.
- 5. CONSULTANT MUST PROVIDE DETAILS FOR PROPOSED FIXTURES, ONCE FIXTURE TYPE IS DETERMINED. ALL LIGHTING LAYOUTS, DESIGN AND SPECIFICATIONS SHALL BE DONE BY A LICENSED ELECTRICAL ENGINEER ON A SITE-BY-SITE BASIS TO MEET SITE DESIGN REQUIREMENTS.
- 6. ALL LIGHT FIXTURES AND COMPONENTS SHALL BE APPROVED BY U.L. (UNDERWRITERS LABORATORIES).
- 7. ALL TRANSFORMERS, JUNCTION BOXES, AND ASSOCIATED APPURTENANCES SHALL BE BELOW-GRADE OR INTEGRAL WITH FIXTURE WHEREVER POSSIBLE AND WHERE PERMITTED BY CODE. WHERE SEPARATE APPURTENANCES ARE REQUIRED, THEY SHALL BE PAINTED FLAT BLACK AND LOCATED AWAY FROM DIRECT VIEW. ALL CONDUIT SHALL BE BURIED BELOW GRADE, OR HIDDEN INSIDE STRUCTURES.
- 8. NO LIGHTING OR ELECTRICAL APPURTENANCES SHALL BE PLACED IN OR ON TREES.
- 9. LIGHTING MANUFACTURER SHALL BE EMCO LIGHTING ERA ECOROUND SERIES OR EQUAL; 10, 20, OR 30', HEIGHT AS SPECIDIED.
- 10. LIGHT SOURCES SHALL BE AS FOLLOWS:
- A. STREET LIGHTS PER CITY STANDARD
- B. PARK AREA LIGHTING LED
- C. INTEGRAL SIGNAGE LIGHTING LED
- D. SPORTS FIELD LIGHTING MUSCO
- 11. ALL LIGHTING SHALL BE STANDARD VOLTAGE (120V, 240V). NO LOW-VOLTAGE LIGHTING (12V) SHALL BE PROVIDED.
- 12. ALL LIGHTING CONTROL IN PARKS SHALL BE IN THE DESIGNATED STORAGE AREA WITHIN RESTROOM STRUCTURE OR WITHIN THE STAINLESS STEEL IRRIGATION CONTROLLER ENCLOSURE. LIGHTS SHALL BE DESIGNED WITH PHOTOCELL FOR SECURITY LIGHTING AND TIMER WHEN LIGHTS ARE USED THROUGHOUT THE PARK.
- 13. DESIGN SHALL SPECIFY COORDINATION OF INSTALLATION WITH BUILDING DIVISION. ALL COMPLETED WORK SHALL BE INSPECTED BY CITY'S BUILDING DIVISION FOR CONFORMANCE. A BUILDING PERMIT IS REQUIRED FOR ALL ELECTRICAL WORK.

	REVIEWED BY: Robert (1rmije) CITY ENGINEER RCE 63173					DETAIL No. Sheet 1 of 1	D 10.0
TRACY	Res No.	2020-031	DATE:Feb	ruary	18, 2020	LIGHTING	
	Rev: Lyle C.		Rev:			General Guidelines	
Think Inside the Triangle ™	Rev:		Rev:				