SECTION 5000

LANDSCAPING
CONSTRUCTION STANDARDS

SECTION 5000 – LANDSCAPING

5001 Typical House Connection
5002 Control Placement Detail
5003 Rain Sensor
5004 Rain Guard
5005 Irrigation Controller – Revised 12/12/19
5006 Tipping Bucket
5007 Typical Backflow - Revised 12/12/19
5008 Typical Backflow “Private”
5009 Typical Backflow
5010 Flow Meter/Master Valve – Revised 12/12/19
5011 Typical Brass Remote Control Valve Detail
5012 Automatic Antisiphon Valve
5013 Wire Connector
5014 Wire Connection
5015 Trenching Detail
5016 Piping and Wiring
5017 Splice Box Assembly
5018 Sleeving Detail
5019 Gate Valve
5020 Thrust Block Assembly
5021 Quick Coupler
5022 Swing Joint
SECTION 5000 – LANDSCAPING (Cont’d)

5023 Lawn/4”, 6”, 8” Shrub Pop-up Head
5024 Hi Pop Shrub Head
5025 Shrub Spray Head
5026 Bubbler Head
5027 Shrub Rotor
5028 Irrigation at Top of Slope
5029 Shrub Rotor on Slope
5030 Oscillation Head Assembly
5031 Tree Staking
5032 Tree Guying
5033 Tree Placement
5034 Palm Tree Installation
5035 Shrub Planting
5036 Shrub on Slope
5037 Vine Planting
5038 Automatic Drip Valve
5039 Emitter
5040 Emitter Layout
5041 Pot Irrigation
5042 Drip Emitter
5043 Redwood Headerboard
5044 Concrete Mow Curb
5045 Typical Rock Treatment
5046 (3 Sheets) Tree Grates – Revised 01/14/15
EXISTING GATE VALVE FOR MAIN WATER SUPPLY LINE

HOSE BIB

GATE VALVE TO REMOTE IRRIGATION SYSTEM (VALVE TO BE LINE SIZE)

MAINLINE TO IRRIGATION SYSTEM

MAIN SUPPLY LINE TO RESIDENCE

FINISH GRADE

LOCATE CONTROL VALVES ALONG GARAGE SIDE OF HOUSE

CONTROLLER

RESIDENCE WATER METER

PER BUILDING CODE

CITY OF FONTANA

TYP. HOUSE CONNECTION

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY: Timothy Roasted

DATE OF LAST REVISION: 1-26-00

STD. PLAN NO. 5001 SHT 1 OF 1
WALL

CONTROLLER

TRANSFORMER

120V CONVIENCE OUTLET – SEE DETAIL BELOW

PVC CONDUIT – SIZE AS REQUIRED

*NOTE:
FOR CONTROLLERS WITH BUILT IN
TRANSFORMERS, HARDWIRE DIRECT.
INSTALL ALL WIRING PER CODE.

J BOX – SIZE AS NEEDED

DIRECT BURIAL
CONTROLL WIRING

FLOOR

NOTE:
CONVIENCE OUTLET TO BE
PLACED NEAR CONTROLLER.

ELECTRICAL
OUTLET

IRRIGATION
CONTROLLER

CONTROL DETAIL

CITY OF FONTANA

CONTROL PLACEMENT

DETAIL

APPROVED BY:

RICARDO SANDOVAL

CITY ENGINEER

DATE

REVIEWED BY:  Timothy Rastedt

DATE OF LAST REVISION:  1-28-00

STD. PLAN NO.  5002  SHT 1 OF 1
EXACT LOCATION OF CONTROLLER SHALL BE AGREED UPON BY EDISON, CITY LANDSCAPE INSPECTOR AND CONTRACTOR PRIOR TO ANY TRENCHING OR WIRE PLACEMENT.

GENERAL NOTES:

PROVIDE 100A METER AND 50A/2P MAIN C/B WHERE INDICATED ON DRAWINGS.

PROVIDE PANELBOARD WHERE INDICATED ON DRAWINGS.

PROVIDE IRRIGATION CONTROLLER CABINET WHERE INDICATED ON DRAWINGS.

TERMINATE AT EXISTING HANDHOLE, PER S.C.E. COMPANY REQ. VERIFY EXACT LOCATION AND TERMINATION REQ. WITH S.C.E. CO. PRIOR TO TRENCHING.

CONDUIT AND CONDUCTOR SIZES ARE BASED ON NONMETALIC CONDUIT AND COPPER CONDUCTORS WITH TYPE "THHN/THWN" INSULATION.

LOCATION AND POSITIONING OF CABINETS NEED TO BE VERIFIED AND APPROVED BY THE ENGINEERING PUBLIC WORKS INSPECTOR PRIOR TO ANY INSTALLATIONS.
NOTE:
ALL POWER WIRES, GROUND WIRES ETC. SHALL BE SEPARATELY SLEEVED AND SWEEP THROUGH ENCLOSED PAD WITH SCH 40 RIGID CONDUIT. ALL SLEEving SHALL BE A MINIMUM OF 18" BELOW FINISHED GRADE. ALL SLEEving IS A GRAPHIC REPRESENTATION OF A TYP. INSTALLATION.

SIZE OF CONC. SLAB = 8" THICK W/#4 REBARS AT 12" O.C. TYP

8" DIA. X 12" D. BOTTOMLESS GROUND WELL WITH PARKWAY COVER, FILL WITH PEA GRAVEL

5/8" DIA X 10' DRIVEN GROUND ROD PER ARTICLE 250-81 OF 1990 NEC

PROVIDE 20 AMP 2 POLE BREAKER FOR NEW PUMPS WHERE APPLICABLE

120/240 0 3W 12 OR PANEL

PUMP TEMPLATE SIGNAL POWER

CONCRETE MOUNTING SLAB

EXTRA 1" CONDUITS

GROUND FOR ELECTRICAL

3/4" 1#6
City of Fontana
Irrigation Controller Standard
For Communities Facilities Districts

(CFD)

Toro Sentinel controller installed in an approved stainless steel Edison meter box enclosure.

Contact Imperial Sprinkler Supply with the following numbers for the City of Fontana meter/controller. Phone: (714) 696-7535

Fontana part # for a 48 station controller
SBW48SS5U

Required items to be included with each controller installed:

1. W481-XB Toro Sentinel 48 station wireless output board, level 3 surge protection with XB-Spread Spectrum Radio
2. SHHR Kenwood hand held remote w/ charger set to City of Fontana frequency programming
3. SB-TFRMR-120-60-50-50VA 24VAC Transformer
4. After controller installation contact Imperial Technical Services to schedule inspection for certification which is required prior to starting 90 day maintenance

Contact:

Imperial Technical Services
Phone: (714) 696-7535
1. 4" diameter steel post cap secure to pipe.
2. Tipping bucket bracket.
3. 1/2" dia. flexible all weather electrical conduit, connect box to box.
4. Tipping bucket rain gauge, install per manufacturer's recommendations.
5. 4" dia galvanized steel pipe post.
6. Weather proof electrical "J" box drill 1" dia hole through pipe and mount box to pipe.
7. Slope top of footing away from pipe.
8. Finish surface.
10. 1" dia electrical PVC ridged conduit from pipe to controller.
11. Proposed controller enclosure.
12. Stainless steel hose clamps (2) each.

Note:
- Acid wash steel pipe post, steel post cap and electrical "J" box thoroughly.
- Paint with 1 coat rustoleum primer and 2 coats of forest green exterior high gloss paint.
PRESSURE REGULATOR REQUIRED. SET AS SHOWN ON SITE DRAWING

STRAINER #40 MESH MODEL
Sch 80 ELBOW
Sch 80 BALL VALVE
Sch 80 PIPE

LOOSE KEY HOSE Bib-18"
RELIEF PORT

LOCK BOX INSTALLED BY MANUFACTURE

REDUCE PRESSURE BACKFLOW PREVENTER (SEE NOTE 3)
Sch 80 NIPPLE (4 PLACES)
Sch 80 ELBOW
Sch 80 UNION
Sch 80 PIPE
Sch 80 BALL VALVE

FOOTING/FOUNDATION
INSTALL FERTILIZING SYSTEM AFTER BACKFLOW SEE NOTE 6

PRESSURE SUPPLY LINE (INTAKE)
CONC. STABILIZER (TRUST BLOCK)
PRESSURE SUPPLY LINE (DISCHARGE)

NOTE: BACKFLOW ENCLOSURE: LE MEUR OR EQUAL 24"X60"X36" HIGH HINGED AT BOTH ENDS SECURE TO 6"X6" FOOTING W/4" J BOLTS (EQUIPMENT TO BE CENTERED INSIDE HOUSING)
COLOR OF ENCLOSURE: HUNTER GREEN

GENERAL NOTES
1. CONTRACTOR SHALL FORM ENCLOSURE AND REQUEST INSPECTION PRIOR TO POURING FOOTING/FOUNDATION
2. CONTRACTOR SHALL USE 520-C-2500 CONCRETE
3. WILKINS 375XL LEAD FREE PLASTIC BACKFLOW PREVENTER
4. WILKINS 500XL REGULATOR LOW RANGE FOR PRESSURE'S FROM 0 PSI TO 75 PSI LEAD FREE
   WILKINS 600XL REGULATOR HIGH RANGE FOR PRESSURE'S FROM 75 PSI TO 120 PSI LEAD FREE
5. BACKFLOW CERTIFICATION REQUIRED BY A CERTIFIED PROFESSIONAL PRIOR TO CITY ACCEPTANCE
6. INSTALL EZ-FLO FERTILIZING SYSTEM EZ025-HC INSTALL DIRECTLY IN THE IRRIGATION MAINLINE AFTER THE BACKFLOW PREVENTER SEE DETAILS ON SHEET 2

APPROVED BY: CITY OF FONTANA
RICARDO SANDOVAL
REVIEWED BY: K5
DATE: 12-2-19
DATE OF LAST REVISION: 12-2-19

TYP. BACKFLOW

CITY ENGINEER
DATE
NO. 51152
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER
CIVIL
Sizing the Tank

In the table below refer to the 4-6 week coverage columns to determine the tank size required for the irrigated area.

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Coverage 4-6 Weeks</th>
<th>Unit Size</th>
<th>Valve Box Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gallons</td>
<td>Pounds</td>
<td>Zones</td>
<td>Square Feet</td>
</tr>
<tr>
<td>EZ001-CX</td>
<td>1.5</td>
<td>10</td>
<td>5 / 8</td>
<td>10,000</td>
</tr>
<tr>
<td>EZ003-CX</td>
<td>2.5</td>
<td>15</td>
<td>8 / 14</td>
<td>15,000</td>
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<tr>
<td>EZ005-FX</td>
<td>5.0</td>
<td>30</td>
<td></td>
<td>30,000</td>
</tr>
<tr>
<td>EZ10-FX</td>
<td>9.4</td>
<td>50</td>
<td></td>
<td>50,000</td>
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</tr>
<tr>
<td>EZ25-HC</td>
<td>25.0</td>
<td>225</td>
<td></td>
<td>225,000</td>
</tr>
</tbody>
</table>

Tank sizing is based on 1 lb of product capacity required to service 1000 sqft of landscape for a 4 to 6 week period. This method is intended to simplify the sizing process and allow for a broad range of products to be used with the system while maintaining adequate capacity.
GENERAL NOTES:

1. BACKFLOW TO BE USED ON PRIVATE PROJECTS ONLY.
NOTE:
INSTALL BACKFLOW A MIN. 6" ABOVE HIGHEST HEAD

ATMOSPHERIC VACUUM BREAKER

COPPER UNION

FINISHED GRADE

12"
FROM CONTROL VALVE

LATERAL LINE

12"
TO HEADS
WATERPROOF ALL WIRE CONNECTIONS AS PER STD. 5013

FLOW SENSOR FLOMEC QS200 SEE NOTE 1 FOR SIZING

MINIMUM DISTANCE DOWNSTREAM OF UNINTERRUPTED PIPE 5X DIAMETER OF FLOW METER SIZE

MINIMUM DISTANCE UPSTREAM OF UNINTERRUPTED PIPE 10X DIAMETER OF FLOW METER SIZE

NOTES:
1. MASTER VALVE AND FLOW SENSOR TO MATCH MAINLINE SIZE
2. MAXIMIZE THE DISTANCE BETWEEN THE MASTER VALVE AND THE FLOW SENSOR

APPROVED BY: RICARDO SANDOVAL
CITY ENGINEER
DATE 12/2/19
STD. PLAN NO. 5010 SHT 1 OF 1
BOX TO BE PLACED AT RIGHT ANGLE TO HARDSCAPE EDGE W/ VALVE "#" ETCHED IN LID
CHRISTY'S I.D TAG (STANDARD)
SECURE TO SOLENOID PICTAIL
12"X18" PLASTIC BOX AND COVER WITH LOCK TOP
CURL TYPE EXPANSION LOOP (MIN.24")
WATERPROOF WIRE CONNECTION

FINISH GRADE
3/4"

12" MAX TOP OF VALVE
18" MIN

COMMON WIRE
CONTROL WIRE

SCH 80 UNION CONNECTION
PEA GRAVEL
(MIN.3 CU. FT.)
PVC SCH. 40 MALE ADAPTOR
(TYP. 2 PLACES)
PVC LINE PIPE
PVC ELBOW
PVC LINE PIPE
PVC SUPPLY LINE FITTINGS(SXSXS)

NOTES:
1. VALVES ARE TO BE INSTALLED IN SHRUB AREAS UNLESS OTHERWISE NOTED
2. WHEN MORE THAN ONE VALVE IS LOCATED IN THE SAME AREA PROVIDE A SPACE A MIN. OF 3 FT. APART
3. USE TEFCON TAPE ON ALL THREADED FITTINGS
4. ONE VALVE PER VALVE BOX
Antisiphon Manual Valve Vent to be 12" Min. Above Highest Head

Union Connection

Sch 80 PVC Risers

Finish Grade

Lateral Line

Mainline

Automatic Valve Adaptor—See Legend for Type

12" Min

12"

18"

CITY OF FONTANA

AUTOMATIC ANTISIPHON VALVE

Approved By:

Ricardo Sandoval

City Engineer

Date

Reviewed By: Timothy Rostedt

Date of Last Revision: 1-28-00

Std. Plan No. 5012

Sht 1 of 1
**STEP 1**

- Slip base socket over end of wires
- Strip wires approx. 5/8" from ends

**STEP 2**

- Put crimp sleeve over wire ends—crimp sleeve
- Apply sealer to inside of sealing plug
- Fill base socket with sealer

**STEP 3**

- Push sealing plug into base socket until it locks

**STEP 4**

- Push wires to end of base socket to assure complete sealing of connection
- Rainbird Snap-Tite Wire Connector "or equal"
STRIP WIRES APPROX. 5/8" FROM ENDS

STEP 1

TWIST CONNECTOR UNTIL WIRE END REACHES BOTTOM

STEP 2

MIX CONTENTS OF SEALING PACK, CUT 1/2 OFF END OF PACK AND INSERT CONNECTOR TO OPPOSITE END

STEP 3

WRAP OPEN END OF SEALING PACK WITH TAPE, ALLOW TO SET UNTIL RESIN JELLS

STEP 4

"SCOTCH" SEALING PACK
FINE GRANULAR MATERIAL WILL BE PLACED ON ALL LINES, NO LARGER THAN 1/2" INCH IN SIZE. THIS WILL BE PERMITTED IN THE INITIAL BACKFILL MEASURED 6" FROM THE TOP OF PIPE. THE REMAINDER OF TRENCH CAN BE FILL WITH ROCK SCREENED 2" MINUS.

ALL BACK FILL IS TO BE SATURATED AND COMPACTED TO 90%
INSTALL ALL PVC PIPE WITH LABEL UP.

SNAKE ALL PIPE IN TRENCH.

BUNDLE AND TAPE ALL CONTROL WIRES AT 10' O.C. TO PRESSURE SUPPLY LINE AND PROVIDE A SERVICE LOOP AT ALL 90 DEGREE CHANGES IN DIRECTION.

PRESSURE MAIN 2" AND LARGER SHALL BE P.V.C. CLASS 315 SMALLER THAN 2" SHALL BE P.V.C. SCHEDULE 40.

CONTRACTOR SHALL PROVIDE SLEEVES OR CONDUIT LINES WHEN MAINLINE INSTALLATION IS UNDER ASPHALT OR CONCRETE.

CONTRACTOR SHALL PROVIDE 24" INCHES OF COVER OVER PIPE SERVING A DRINKING FOUNTAIN OR PRESSURE MAINLINE 3" AND LARGER.
TAPE AND BUNDLE WIRING AT 10" D.C. MAXIMUM TO MAINLAIN.

PROVIDE A 20" LOOP OF WIRE IN ALL CHANGES OF DIRECTION GREATER THAN 30 DEGREES REMOVE TIES AFTER ALL CONNECTIONS HAVE BEEN MADE

NOTE:
DO NOT INSTALL 120 VOLTAGE OR HIGHER WIRE IN THE SAME TRENCH AS THE IRRIGATION CONTROL WIRING

PLAN VIEW

CITY OF FONTANA

PIPING AND WIRING

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY: Timothy Rostadt

DATE OF LAST REVISION: 1-28-00

STD. PLAN NO. 5016

SHT 1 OF 1
INSTALL A 9" ROUND PLASTIC BOX WITH LOCKING LID

WATER PROOF CONNECTION

SPlice BLOCK

MIN. 24" ABOVE GRADE

FINISH GRADE

IRR. CONTROL WIRE

2" x 4" RWD BLOCK

1 CU. FT. PEA GRAVEL

NOTE:

REMOTE CONTROL BOX MAY BE USED IN LIEU OF SPlice BOX.
NOTES:
INSTALL CONTROL WIRE SLEEVE ADJACENT TO THE PRESSURE SUPPLY LINE, SIZE PER SPEC.
ALL SLEEVES TO BE SCH. 40 PVC AND TO BE 2X THE DIAMETER OF THE LINE TO BE SLEEVED.
* INCREASE THIS DISTANCE TO 36” WHEN SLEEVING UNDER ROADWAYS AND COMMERCIAL TRAFFIC WAYS WHEN INSTRUCTED BY INSPECTOR.
SLEEVES SHALL BE EXTENDED BEYOND HARDSCAPE TO POINTS AS REQUESTED BY INSPECTOR
IF SLEEVES ARE TO BE USED AT A LATER DATE, CONTRACTOR SHALL TAPE ENDS AND PROVIDE A VERTICAL MARK AT ENDS OF SLEEVING VISIBLE AT GROUND LEVEL.
NOTE: THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATION FOR SIZE OF PIPING REQUIRED. UTILIZED IN ALL (2 1/2" AND LARGER MAINLINE PIPE) #3 REBAR TO BE PLACED AROUND PIPE INTO THRUST BLOCK TYP.
10" VALVE BOX MARKED W/ 2" LETTERS READING Q.C. W/ LOCKING BOLT LID

FINISH GRADE

6" MIN PEA GRAVEL

18"

BRASS STREET ELL TYP.

QUICK COUPLER VALVE

12" MIN. FROM HARDSCAPE MATERIALS

2 x 4 RWD OR BRICK

BRASS NIPPLE 6" MIN

PVC SHC 40 TEE OR ELL
LATERAL LINE SIZE TO BE NOTED ON PLAN

24" MIN. #4 REBAR, ATTACH W/(2) STAINLESS STEEL BANDS

NOTE:
USE TEFLOM TAPE ON ALL THREADED FITTINGS
FINISH GRADE

RISER

MAIN OR LATERAL LINE

TEE OR ELL

12" NIPPLE

NIPPLE SIZE TO MATCH HEAD SIZE

TEE OR ELL

MAIN OR LATERAL LINE

MARLEX STREET ELL(PRIVATE)

PVC STREET ELL(PUBLIC)

NIPPLE SIZE TO MATCH HEAD SIZE

MARLEX STREET ELL(PRIVATE)

SCH 40 PVC STREET ELL(PUBLIC)

SCHEDULE 40 STREET ELL

SCHEDULE 80 PVC RISER

NOTE: ALL PIPE AND FITTINGS SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE SPECIFIED

USE PVC STREET ELLS W/TEFLON TAPE FOR ALL PUBLIC JOBS

APPROVED BY: ____________________________

CITY ENGINEER

RICARDO SANDOVAL

REVIEWED BY: ____________________________

DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA

SWING JOINT

STD. PLAN NO. 5022

SHT 1 OF 1
NOTE:

- INSTALL 12" SHRUB POP-UP HEAD 1 1/2" ABOVE F.G.
- F.G. - 1 1/2" BELOW WALK OR CURB
- CHECK VALVE FOR LOW HEAD DRAINAGE
CONC. WALK OR CURB

FINISH GRADE

HI POP SHRUB HEAD

PVC STREET ELL

LATERAL LINE WITH PVC TEE OR ELL

DOUBLE SWING JOINT

2 EA. PVC STREET ELLS

NOTE:
INSTALL HI-POP IRR. HEAD 1 1/2" ABOVE F.G.
F.G. 1 1/2" BELOW HARDSCAPE
INSTALL CHECK VALVES FOR LOW HEAD DRAINAGE
NOTE: FIXED RAISERS ALLOWED ONLY AGAINST BUILDINGS, WALLS, FENCES, ETC.
NOTE:
- ALL BUBBLERS TO BE INSTALLED WITH TRIPLE SWING JOINTS
- F.G. = 1 1/2” BELOW WALK OR CURB
GEAR DRIVEN SHRUB ROTOR

PVC RISER
FINISH GRADE

HEAVY DUTY GALV. STEEL PUNCH LOCK FASTENER (2 REQ'D)

LATERAL LINE WITH PVC TEE OR ELL
PVC STREET ELL
SCH.80 NIPPLE
1"X1"X30" GALV. ANGLE IRON
RAINBIRD PA-8S W/10' HLA (OR QLA) SHRUB SPRAY HEADS

MIN. 12" SCH. 80 RISER

STAKE EVERY HEAD W/#4X16 LONG REBAR

SECURE BROWNLINE LATERAL INE. AT SOIL SURFACE W/ #3 J-BAR PINS AT 10' O/C

2 1/2 :1 SLOPE

CLASS 200 SUPPLY LINE

PVC STREET ELLS (2 EA)
12" MIN

GEAR DRIVEN
SHRUB ROTOR

PVC RISER
FINISH GRADE

HEAVY DUTY GALV.
STEEL PUNCH LOCK
FASTENER (2 REQ'D)

LATERAL LINE WITH PVC
TEE OR ELL
PVC STREET ELL
SCH.80 NIPPLE
1"X1"X30" GALV.
ANGLE IRON
NOTE: CONTRACTOR SHALL TILT HEAD AS REQUIRED TO BEST SUIT SITE COVERAGE
SHINGLE NAIL
LODGE POLE
TREE TRUNK
CINCH TIE
(Do not twist)
Prevailing wind direction

2" DIA LODGEPOLE PINE TREE STAKE COPPER NAPHTHENATE
TREATED AND DRIVEN IN GROUND TO 2FT. MIN. DEPTH. 2 REQ'D
'CINCH TIE' (4) REQ'D
ARBOR GUARD IN TURF AREAS
PREPARED BACKFILL MIX,
SEE SPECIFICATIONS
3" HIGH WATER BASIN,
AT TIME OF PLANTING
FINISH GRADE
AGRIFORM TABLETS TO BE
ADDED PER MFG. RECOM DS.

2X DIA. OF ROOT BALL

APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL
REVIEWED BY: Timothy Rastegar
DATE OF LAST REVISION: 1-28-00

CITY OF FONTANA
TREE STAKING

STD. PLAN NO. 5031 SHT 1 OF 1
- TREE TRUNK
- WONDER TREE TIE—ATTACH TO TURNBUCKLE
- TURNBUCKLE
- 10 GAGE GALV. WIRE

- TREE PER PLAN
- ARBORGUARD IN TURF AREAS AND FRONT YARDS

- 1/2" SCH. 40 PVC SLEEVE

- 6" EARTH BERM—REMOVE PRIOR TO SEEDING

- 4"X4"X36" RDWD. DEADMAN

- PLANT PIT — 1/ 1/2X SIZE OF PLANT BALL

- PLANT TABLET—SEE SPECS.
NOTES:

1. TREE SPACING SHALL CONFORM TO PLANS APPROVED BY THE CITY ENGINEER.
2. ALL TREES IN THE R.O.W. ARE SUBJECT TO LINE OF SIGHT CRITERIA AS APPROVED BY TRAFFIC ENGINEER.
3. AT ALL LOCAL RESIDENTIAL INTERSECTIONS THE FIRST TWO PARKWAY TREES AT ALL APPROACHES TO BE PLACED BEHIND SIDEWALK.
4. MAINTAIN 10 FEET FROM CENTER OF STREET TO EDGE OF ALL UNDERGROUND FACILITIES.
5. MAINTAIN 10 FEET FROM ALL STREET LIGHTS, UTILITIES STRUCTURES AND VALVE BOXES.
TRIM 1/3 OF FROND

COTTON ROPE AT 2 LOCATIONS TIE PRIOR TO DELIVERY TO STABILIZE FRONDS AND PROTECT HEART

TRIM FOR UNIFORMITY

NOTE:
LANDSCAPE ARCH. TO INSPECT PALMS AT SITE PRIOR TO INSTALLATION. NOTIFY AT LEAST 48 HOURS IN ADV.

BACKFILL PER. SPECS.

6" DIA. GRAVEL SUMP, FILL W/3/4" DIA. CRUSHED ROCK REF. TO SOILS REPORT FOR DEPTH.

NOTE:
PALM SHALL BE TRIMMED, CLEANED AND TIED AT ORIG. LOCATION PRIOR TO TRANSPLANTING.
PERMANENT BASIN

3" BERM TO FORM WATER BASIN

FERTILIZER TABLETS

ROOTBALL

BACKFILL MIX.

1 1/2" Min. ROOTBALL DEPTH
2X THE WIDTH OF ROOTBALL

PUDDLE AND SETTLE BACKFILL
PRIOR TO PLACEMENT OF SHRUB

CITY OF FONTANA

SHRUB PLANTING

APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY: Timothy Rasted

DATE OF LAST REVISION: 1-28-00

STD. PLAN NO. 5035 SHT 1 OF 1
PERMANENT BASIN

EXISTING SLOPE

TAPER 1:1 MAX. CUT SLOPE @ PLANT PIT

FERTILIZER TABLETS (SEE SPECS.)

1 1/2" X MIN. ROOTBALL DEPTH

2X THE WIDTH OF ROOTBALL

ROOTBALL

BACKFILL MIX. (SEE SPECS.)

PUDDLE AND SETTLE BACKFILL PRIOR TO PLACEMENT OF SHRUB

CITY OF FONTANA

SHRUB ON SLOPE

APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL

DATE

REVIEWS BY: Timothy Rastedt

DATE OF LAST REVISION: 1-28-00

STD. PLAN NO. 5036 SHT 1 OF 1
TOP OF WALL

WALL OR FENCE
SCREW OR BOLT—AS
CONDITIONS REQUIRE
10 GA. STAINLESS
STEEL WIRE

STAINLESS STL.
WASHER—AS
CONDITIONS
REQUIRE

WONDER TIE OR
EQUAL—AS NEEDED

ESPALIERED PLANT
OR VINE

BACKFILL
PER SPECS

NOTE
PAINT BOLT OR SCREW TO
MATCH SURFACE BEHIND

ELEVATION VIEW

PLAN VIEW

6"x8" CONCRETE VINE COLLARS
IN TURF AREAS ONLY

CITY OF FONTANA

VINE PLANTING

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY:  Timothy Rusted
DATE OF LAST REVISION:  1-28-00

APPROVED BY:

STD. PLAN NO.  5037  SHT 1 OF 1
FINISHED GRADE
PRESSURE REGULATOR PRE-SET @ 20 PSI
AMETEX PLASTIC VALVE BOX WITH COVER
BOX PART NO. 10-170-001/GREEN COVER
PART NO. 10-175-004 OR APPROVED EQUAL
ELECTRIC REMOTE
18"
3/4"
INLET
OUTLET
FILTER WITH 200 MESH MIN.
FILTRATION
PEA GRAVEL BELOW, MINIMUM
1 CUBIC FOOT

NOTE: INSTALL CONTROL VALVES MINIMUM OF 3 FT. APART
IN SHRUB AREAS UNLESS OTHERWISE NOTED.
LEGEND:
1. PLANT MATERIAL TYP.
2. EMISSION POINT, SEE XERI—DETAILS
3. RAIN BIRD MODEL#DT—025 1/4 DISTRIBUTION TUBING. MAX LENGTH PER SPECS.
4. RAIN BIRD XERI—BIRD 8 UNIT FLOW PORT PER IRRI. EQUIP. LEGEND
5. RAIN BIRD MODEL # DAC—025 DIFFUSER BUG CAP(TYP.)
6. RAIN BIRD MODEL #TS—025 TURNING STAKE (TYP.)

NOTE
THE RAINBIRD PRODUCTS LISTED ABOVE ARE SUGGESTED ONLY. PRODUCTS OF EQUAL QUALITY CAN BE USED.
PROVIDE 1 BUBBLER OR Emitter, SEE PLAN IN EACH POT AS SHOWN ON IRR. PLAN. LOCATE AWAY FROM CENTER OF POT AS SHOWN.

1/2" P.V.C. SUPPLY LINE ANGLE AS SHOWN TO LOCATE BUBBLER AS SHOWN

SOIL LEVAL

1/2" MALE RISER FROM THREAD TO POT

BORE 1" DIA. HOLE IN CENTER OF EA. POT

PROVIDE HOLE IN PAVING TO ALLOW FOR SLEEVE SEAL W/SILICON

DECORATR POT (TYP.)

PROVIDE 2" OF PEA GRAVEL

1/2" PVC. FEMALE THREADED RIGGED @ FINISH SURFACE

PVC SLEEVING 2X DIA. OF PIPE
DISTRIBUTION TUBING AND BUS CAP TO MATCH Emitter MODEL AND MFG.

SHRUB

MULCH

FINISH GRADE

ROOTBALL

6" MIN S.S. TUBING STAKE

EMITTER, SEE LEGEND FOR MFG, MODEL AND QTY, SCHEDULE

DRIP TUBING, SEE LEGEND FOR MFG, MODEL AND SIZE

CITY OF FONTANA
DRIP Emitter

APPROVED BY:

Ricardo Sandovol
CITY ENGINEER

REVIEWED BY: Timothy Rostedt

DATE OF LAST REVISION: 1-28-00

STD. PLAN NO. 5042 SHT 1 OF 1
GROUND COVER/SHRUB AREA
CUT OFF TOP SECTION OF STAKE AFTER DRIVING INTO GROUND
USE 3" GALVANIZED NAILS
KEEP LAWN MOWED 1" BELOW TOP OF HEADERBOARD

2" BY 4" REDWOOD HEADERBOARD OR 4-1/2 BY 4" LAMINATED BOARDS

2" BY 2" BY 18" REDWOOD STAKE
PLACE STAKES MIN 5' O.C. AND AT ENDS OF BOARDS
SOIL COMPACTED

4 LAMINATED REDWOOD BENDER BOARDS AS REQUIRED TO MAKE A SMOOTH CURVE
1" BY 4" BY 12" SPLICE BLOCK AT JOINTS
2" BY 4" HEADERBOARD

CITY OF FONTANA
REDWOOD HEADERBOARD

APPROVED BY:

CITY ENGINEER
RICARDO SANDOVAL
REVIEWED BY: Timothy Restedt
DATE OF LAST REVISION: 1-28-00

STD. PLAN NO. 5043 SHT 1 OF 1
RADIUS EDGES 1/2"

FINISH Grade (turf side)

#3 REBAR, CONTINUOUS

NATIVE SOIL 90% COMPACTED

NOTE:
Mow curb shall be placed between all grass and planter areas unless otherwise noted.
1. ROCK SIZES UNLESS OTHERWISE SPECIFIED SHALL BE:
   COBBLESTONES: MAX. 12" TO MIN. 6" , NO MORE THAN 50% OF ANY ONE SIZE.
2. A SAMPLE AREA, MIN. 10 SQ. FT. SHALL BE APPROVED BY THE CITY INSPECTOR PRIOR TO PROCEEDING WITH THE REMAINING ROCK WORK.
3. FINAL RESTING POSITION OF ALL ROCKS SHALL BE APPROVED BY THE CITY INSPECTOR.
4. ROCKS SHALL BE SMOOTH, ROUNDED, FREE OF OBJECTIONABLE DISFIGURATIONS AND IRON CONTENT AS APPROVED BY THE CITY INSPECTOR.
5. CONCRETE SHALL BE 2500 PSI PEA GRAVEL PUMP MIX CONCRETE.
6. WIRE BRUSH ALL JOINTS AFTER THE INSTALLATION OF THE ROCKS. AFTER CONCRETE HAS SET, CLEAN THE RESIDUE FROM SURFACES OF ROCKS.
7. NO JOINTS GREATER THAN 1" BETWEEN ROCKS WILL BE ACCEPTABLE. 4" FILLER ROCKS WILL BE ACCEPTED TO MAINTAIN THE 1" JOINT.
8. WHERE ROCK BORDERS TURF AREA, PLACE 1" CONCRETE EDGE BETWEEN BACK OF ROCK AND TURF.

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12-2-19
KS

TYP. ROCK TREATMENT
CITY OF FONTANA

APPROVED BY:
CITY ENGINEER
REVIEWED BY:
DATE
DATE OF LAST REVISION:

CIVIL
STATE OF CALIFORNIA
No. 51152
RICARDO SANDOVAL
10-15-19

1-19
5045
SHT 1 OF 1
NOTE: INSTALL GRATE EQUAL DISTANCE FROM TOOLED COLD JOINT/EXPANSION JOINT.
4" PERFORATED DRAIN PIPE

4" P.V.C. CAP WITH 3/8" GRAB HOLE. CAP SHALL BE 1" MAX. ABOVE GRADE.

1/2" DIA. CRUSHED ROCK

4" PERFORATED ABS DRAIN PIPE DEPTH TO BOTTOM OF AND NEXT TO ROOTBALL.

IF SETTLEMENT OF ROOTBALL OCCURS, ADJUST TREE SO THAT NURSERY SOIL LINE IS AT GRADE LEVEL.

4" CONC. SIDEWALK

BACKFILL MIX - PER SOIL TEST AGRIFORM TABLETS TO BE ADDED PER MANUFACTURERS RECOMMENDATIONS.

NATIVE SOIL UNDISTURBED

ONE PIECE MOLDED & RIBBED ROOT BARRIER 22" DIA. TOP x 29" DIA. BOTTOM x 18" HIGH FOR 15 GAL. TREE. BY DEEP ROOT CORP. OR SHAWTOWN IND. OR APPROVED EQUAL.

4" PERFORATED DRAIN PIPE, SEE BUBBLER DETAIL - THIS SHEET

CITY OF FONTANA

TREE GRATES

APPROVED BY:
RICARDO SANDOVAL
CITY ENGINEER

REVIEWED BY: Kyle Scribner

DATE OF LAST REVISION: 1-14-15

STD. PLAN NO. 5046 SHT 2 OF 3
2 ALTERNATIVE TREE/GRATE LOCATIONS
FOR COMMERCIAL AREA PARKWAY SIDEWALKS

CITY OF FONTANA

TREE GRATES

CITY ENGINEER
RICARDO SANDOVAL

REVIEWED BY: Kyle Scribner

DATE OF LAST REVISION: 1-14-15

STD. PLAN NO. 5046 SHT 3 OF 3