

MINIMUM TREE SIZE REQUIREMENTS																			
Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper
ACACIA					ACACIA (Cont.)					ARGENTINE MESQUITE	15	5	3	0.75	VELVET\ ARIZONA (M)	15	5.5	3	0.5
BLUE LEAF WATTLE	15	6	2	0.75	WEeping	15	5	2	0.75	(M) (PROSOPIS ALBA)	24	8	5	1.25	(PROSOPIS VELUNTINA)	24	7	4	1
(ACACIA SALIGNA)	24	8	4	1.5	(ACACIA PENDULA)	24	6.5	3	1.25		30	9	7	1.5		30	9	6	1.5
	30	10	5	2		30	9	5	2		36	11	9	2		36	10	8	2.5
	36	12	6	2.5		36	11	6	2.5		42	13	11	2.5		42	12	10	3
BERLANDER\ GUAJILLO	15	4	2	0.5	WILLOW \	15	6	2	0.75	MESQUITE (Cont.)					PALOVERDE				
(M) (ACACIA BERLANDIERI)	24	5	4	1	AUSTRALIAN WILLOW	24	8	4	1.5	CHILEAN MESQUITE	15	6	2	0.75	BLUE PALO VERDE	15	6	2	0.75
	30	7	5	1.5	(ACACIA SALICINA)	30	10	5	2	(PROSOPIS CHILENSIS)	24	8	4	1.5	(CERCIDIUM FLORIDUM)	24	7.5	4	1.5
	36	9	6	2		36	14	6	2.5		30	9	6	2		30	9	7	2
MULGA	15	5	2	0.75	IRONWOOD						36	10	8	2.5		36	10	8	2.5
(ACACIA ANEURA)	24	7	4	1.5	DESERT IRONWOOD	15	3	2	0.5		42	12	10	3		42	12	9	3
	30	9	6	2	(OLNEYA TESOTA)	24	6	3	1.25		48	14	12	3.5		48	14	10	3.5
	36	10	8	2.5		30	8	6	2	CHILEAN MESQUITE (M)	15	5	3	0.5	BLUE PALO VERDE (M)	15	5	3	0.5
SHOESTRING	15	7	2.5	0.75		36	10	8	2.5	(PROSOPIS CHILENSIS)	24	8	5	1	(CERCIDIUM FLORIDUM)	24	7	4	1
(ACACIA STENOPHYLLA)	24	9	4	1.5		42	11	9	3		30	9	7	1.5		30	8	6	1.5
	30	11	5	2		48	12	10	3.5		36	10	9	2		36	10	8	2
	36	13	6	2.5	DESERT IRONWOOD (M)	15	3	2	0.5		42	12	11	2.5		42	12	9	2.5
	42	15	7	3	(OLNEYA TESOTA)	24	6	3	1.25		48	14	13	3		48	14	11	3
	48	17	8	4		30	8	6	2	HONEY MESQUITE (M)	15	6	2	0.75	LITTLE LEAF\ FOOTHILLS	15	4	2	0.5
SHOESTRING (M)	15	7	2.5	0.5		36	10	8	2.5	(PROSOPIS -	24	8	4	1.5	(CERCIDIUM -	24	6	3	1
(ACACIA STENOPHYLLA)	24	9	4	1		42	11	9	3	GLANDULOSA)	30	9	6	2	MICROPHYLLUM)	30	7	5	1.5
	36	13	6	2		48	12	10	3.5		36	10	8	2.5		36	8	6	2
SWEET	15	6	2.5	0.75	MESQUITE						42	12	10	3	LITTLE LEAF\ FOOTHILLS	15	4	3	0.5
(ACACIA SMALLII)	24	8	4	1.5	ARGENTINE MESQUITE	15	6.5	2	0.75		48	14	12	3.5	(M) (CERCIDIUM -	24	5	4	1
	30	9	6	2	(PROSOPIS ALBA)	24	8	4	1.5	SCREW BEAN (M)	15	5.5	3	0.5	MICROPHYLLUM M)	30	6	5	1.5
	36	10	8	2.5		30	9	6	2	(PROSOPIS -	24	8	4	1		36	8	7	2
	42	12	10	3		36	11	8	2.5	PUBESCENS)	30	9	6	1.5					
	48	14	12	3.5		42	13	10	3		36	10	8	2					
SWEET (M)	15	5	3	0.5		48	15	12	3.5										

MINIMUM TREE SIZE REQUIREMENTS																											
Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper								
ARIZONA ASH (FRAXINUS VELUTINA)	15	8	2	1	Canary Island Pine (Pinus Canariensis)	15	6	2	0.75	COOLIBAH (EUCALYPTUS - MICROTHECA)	15	7	3	0.75	FEATHER BUSH FERN OF THE DESERT (LYSILOMA THORNBERI)	15	5	3	0.75	JACARANDA (JACARANDA ACUTIFOLIA)	15	8	2	0.75			
	24	10	4	1.5		24	9	4	2		24	10	4	1.5		24	6.5	4	1.25		24	9	4	1.5			
	30	12	5	2		30	13	5	3.5		30	12	5	2		30	7	6.5	2		30	12	5	2.5			
	36	14	8	2.5		36	17	5	4		36	15	6	2.5		36	8	6	2.5		36	14	8	3			
	42	15	9	3		42	18	6	4.5	CORK OAK (QUERCUS SUBER)	15	4	2	0.75	FEATHER BUSH FERN OF THE DESERT(M) (LYSILOMA THORNBERI)	15	4	3	0.75		42	16	8	3.5			
	48	16	10	3.5		48	22	7	5.5		24	6.5	3	1.5		24	5	5	1		48	18	9	4			
ARIZONA SYCAMORE (PLATANUS WRIGHTII)	15	7	2	1	CAROB (CERATONIA SILQUA)	15	8	2	0.75		30	9	4.5	2.5	FICUS (FICUS NITIDA)	30	7	7	1.5	JACARANDA (M) (JACARANDA- ACUTIFOLIA)	15	5.5	3	0.5			
	24	9	4	1.5		24	9	4	1.5		36	12	6	3.5		36	8	8	2		24	8	5	0.75			
	30	13	6	2.5		30	10	5	2		42	14	9	4		15	8	2	0.75		30	10	6	1.5			
	36	16	8	3.5		36	12	5	3		48	16	11	4.5		24	9	4	1.5		36	12	7	2			
ARIZONA SYCAMORE(M) (PLATANUS WRIGHTII)	15	6	3	0.5	CHASTE TREE (VITEX ANGUS-CASTUS)	15	5	3	0.75	CORRAL GUM (EUCALYPTUS TORQUATA)	15	6	2.5	0.75	FICUS (FICUS NITIDA M)	30	10	5	2	LEMON BOTTLE BRUSH (CALLISTEMON CITRINUS)	15	8	2	0.75			
	24	8	4	1		24	6	4	1.25		24	8	3.5	1.25		36	12	6	3		24	9	4	1.25			
	30	12	7	2		30	7	5	2	DESERT WILLOW (CHILOPSIS LINEARIS)	15	6	2	0.75		15	5.5	3	0.5		30	10	5	2			
	36	15	9	3		36	8	6	2.5		24	7	4	1.25		24	8	4	1		36	12	6	2.75			
AUSTRALIAN WILLOW WILGA (GEIJERA PARVIFLORA)	15	5	3	0.75	CHINESE EVERGREEN ELM (ULMUS PARVIFOLIA)	15	7	2	0.75	DESERT WILLOW (M) (CHILOPSIS LINEARIS)	30	9	6	1.75	FLOODED GUM (EUCALYPTUS RUDIS)	30	10	6	2	MEDITERANEAN FAN PALM (CHAMAEROPS HUMULIS)	15	2	2	N/A			
	24	8	4	1.25		24	8	3	1.25		36	10	8	2.25		36	12	8	2.5		24	3	3	N/A			
	30	10	5	2		30	12	6	2		15	5	3	0.75		15	8	3	1		30	4	4	N/A			
	36	12	5.5	2.5		36	14	8	2.5		24	7	5	1		24	10	4	1.5		36	5	5	N/A			
BOTTLE TREE (BRACHYCHITON - POPULNEUS)	15	6	2	1.5		CHINESE PISTACHE (PISTACIA CHINENSIS)	42	16	9		3.5	ELDARICA (PINUS ELDARICA)	30	9		6	1.5	FLOWERING CHERRY (PRUNUS VARIETIES)	15	6	2.5	0.75	MESCAL BEAN TEXAS MOUNTAIN LAUREL (SOPHORA - SECUNDIFLORA)	15	3	1	0.75
	24	9	4	2.5			48	18	10		3.75		36	10		8	2		24	9	4	1.25		24	4	2	1
	30	12	5	4	15		7	2	0.75	15	6		2	1.5	30	11	8		2	30	5	3		1.75			
	36	15	6	5	24		9	4	1.5	24	10		4	2	36	13	10		2.5	36	6	4		2			
	42	17	8	6	30		10	5	2.5	30	13		4	3	42	15	11		3	15	3	2		0.75			
	48	20	9	6.5	36		12	6	3.5	36	15		5	4	48	17	12		3.5	24	4	3		1			
BRAZILIAN PEPPER (SCHINUS - TEREBINTHIFOLLA)	15	8	2	0.75	CHIR PINE\ INDIAN LONG LEAF (PINUS ROXBURGHII) <																						

MINIMUM TREE SIZE REQUIREMENTS																										
Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper							
MODESTO ASH (FRAXINUS V MODESTO)	15	8	2	1	RAYWOOD ASH\ CLARET ASH (FRAXINUS O RAYWOODII)	15	8	4	1	SILK TREE MIMOSA (M) (ALBIZIA JULIBRISSIA)	15	5	3.5	0.5	SILK TREE MIMOSA (ALBISIA JULIBRISSIN)	15	6	3	0.75							
	24	10	4	1.5		24	10	3	1.5		24	6.5	5	0.75		24	8	4	1.5							
	30	12	6	2		30	12	5	2		30	6	6	1		30	10	6	2							
	36	14	7	2.5		36	14	8	2.5		36	10	8	2.5		36	12	8	3							
	42	16	8	3		42	16	10	3	SILVER DOLLAR GUM (EUCALYPTUS- POLYANTHEMOS)	15	7	3	0.75	TEXAS EBONY (M) (PITHECELLUBIUM- FLEXICAULE)	15	4	2	0.5							
	48	17	10	3.5		48	18	12	4		24	10	4	1.5		24	6	4	1							
NARROW LEAF GIMLET\ SWAMP MALLET (EUCALYPTUS - SPATHULATA)	15	6	2.5	0.75	RED CAP GUM (EUCALYPTUS- ERYTHROCORYES)	15	6.5	2.4	0.75	SISSOO (DALBERGIA SISSOO)							30	7	6	1.5						
	24	8	3	1		24	8	4	1.25		15	7	3	0.75		36	9	8	2							
											24	10	4	1.25		42	10	10	2.5							
OLEANDER (NERIUM OLEANDER)					RED GUM (EUCALYPTUS- CAMALDULENSIS)	15	8	3	1		SOUTHERN LIVE OAK\ HERITAGE (QUERCUS VIRGINIANA)	30	12	7		2.5	48	11	11	3						
	15	7	2	0.75		24	10	4	1.75	36		15	10	3	15	8	2	0.75								
	24	9	4	1.25					15	6		2	0.75	24	10	3.5	1.5									
	30	10	5	2	RED IRON BARK (EUCALYPTUS - SIDEROXYLON)	15	8	3	0.75	24		9	4	1.25	30	11	6.5	2	30	12	5	2				
36	12	6	2.5	24		10	4	1.5	36	13		8	2.75	WEeping WILLOW (SALIX BABYLONICA)	36	14	7	2.5								
OLIVE TREE (OLEA EUROPAEA)	15	5	3	0.5		RIO GRANDE\ FAN TEXAS ASH (FRAXINUS V FANTEX)	15	7	2	0.75		42	15		10	3.5	15	8	2	1						
	24	8	5.5	1.5	24		9	4	1.25	48	17	12	4.5		24	10	4	1.5								
	30	11	9	2	30		12	5	2	TEXAS EBONY (PITHECELLOBIUM- FLEXICAULE)	15	5	2		0.75	30	12	6	2.5							
	36	12	10	3	36		14	8	2.5		24	6	3	1.5	WHITE IRON BARK (EUCALYPTUS - LEUCOXYLON)	36	14	8	4							
	42	14	12	3.5	42		15	9	3.5		30	7	4	2		15	6.5	2.5	0.75							
ORCHID TREE (BAUHINIA)	48	16	14	4	48	16	10	4	36		9	6	2.5	42	10	6	3	24	8	3.5	1.25					
	15	8	2	0.75	SHAMEL\ EVERGREEN (FRAXINUS UHDEI)	15	8	2	1		48	11	7	3.5	YELLOW OLEANDER (THEVETIA PERUVIANA)	15	6	2	0.5							
	24	9	4	1.25		24	10	4	1.5					24		8	4	1.25								
	30	11	6	2		30	12	5	2.5	YELLOW OLEANDER(M) (THEVETIA PERUVIANA)	15	4	3.5	0.5												
36	13	7	2.5	36		14	8	3						24		6	5	0.75								
ORNAMENTAL PEAR (PYRUS CALLERYANA)	15	7	2	1		SILK OAK (GREVILLEA ROBUSTA)	15	8	3		1	GENERAL NOTES: 1. All trees shall be guaranteed for one year from the date of acceptance 2. "M" designates a multitrunk tree. A multitrunk tree is a tree with more than one main trunk. 3. Caliper is measured at 12" above the ground for trees with caliper greater than 4". For multitrunk trees, and trees with caliper of less that 4", the caliper is measured 6" above the ground. 4. Size is listed as the box size in inches except for those trees in 15 gallon containers.														
	24	10	3.5	1.5			24	10	4		2															
	30	12	6	2.5			30	12	6	2.5																
	36	14	8	3			36	14	7	3																
	42	16	10	3.5																						
	48	18	12	4																						
DETAIL NO.		City of Scottsdale				APPROVED BY:				MINIMUM TREE SIZE REQUIREMENTS										DETAIL NO.						
2600-3		Standard Details																		2600-3						

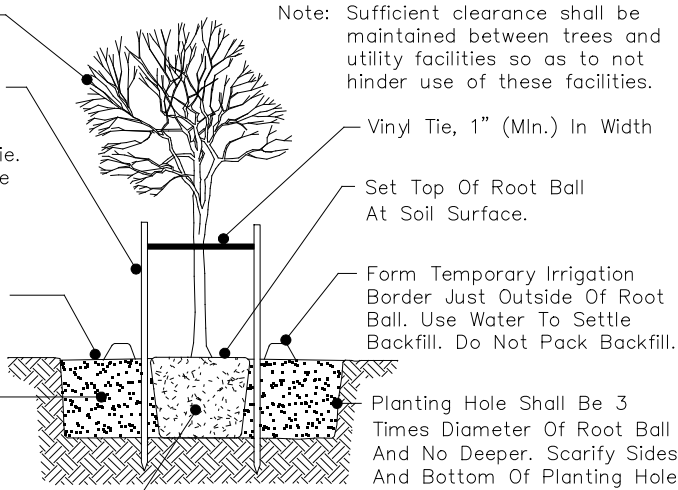
Prune Tree At Time Of Stake Removal.

(2) 2" Diameter x 10' Long Lodgepole Pine Tree Stakes. Bury 3' In Ground And Cut Off Stake 12" Above Vinyl Tie. Stakes Shall Remain In Place For 2 Years Unless Removal Is Approved By Maintenance Director.

Mulch To A Depth Of 1/2", 5' In Diameter. Keep Mulch 6" Away From Trunk.

Backfill With Native Soil. (No Rocks Greater Than 1") Apply Fertilizer To Surface Away From Trunk Per Specifications.

Scarify One Side Of Root Ball Prior To Planting

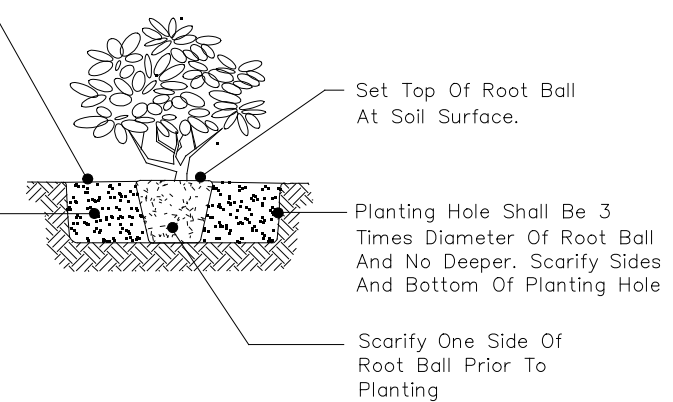


Tree Planting and Staking ≤36" Box Or 2" Caliper

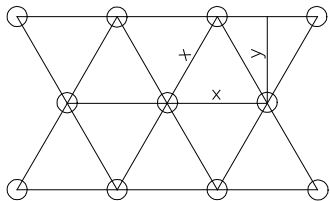
Note: Sufficient clearance shall be maintained between shrubs and utility facilities so as to not hinder use of these facilities.

Mulch Soil To A Depth Of 2", 2' In Diameter For 1 Gal. Shrubs, 4' In Diameter For 5 Gal. Shrubs, Keep Mulch 4" Away From Plant Base.

Backfill With Native Soil. Apply Fertilizer To Surface Away From Trunk Per Specifications.



Shrub Planting



All Groundcovers To Be Planted On Center (See Plant Legend) In A Triangular Pattern.

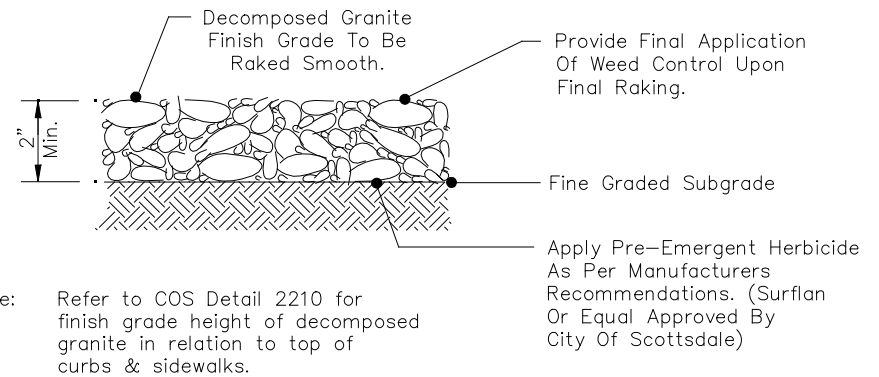
X = O.C. Dimension As Noted On Plan
Y = 0.86 Of Dimension "X"

Mulch Soil To A Depth Of 2", 1' In Diameter. Keep Mulch 2" Away From Plant Base.

Prepare Soil Per Specifications And Rototill To A Depth Of 6" Prior To Any Sprinkler Work.

Backfill With Native Soil. Apply Fertilizer To Surface Away From Trunk Per Specifications.

Groundcovers



Decomposed Granite

DETAIL NO.

2620-1

City of Scottsdale
Standard Details

APPROVED BY:

Scottsdale Standards &
Specifications Committee

LANDSCAPE DETAILS

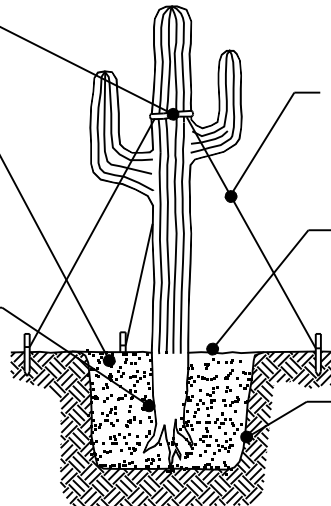
DETAIL NO.

2620-1

Garden Hose Reinforced With Wire (Metal).

Use Golf Sand Or 1/4" Minus Decomposed Granite To Backfill Planting Hole. Backfill 1/2 Of Pit, Then Compact.

Root Prune All Shredded Or Damaged Roots And Dust Entire Root Structure With Wettable Sulphur (1.5 Min.) And Streptomycin Spray At Planting Site. Root Ball Minimum Size Shall Be 24" With A Minimum Root Length Of 6" On All Sides.



3 Tree Braces, Spaced Equally. Braces To Remain In Place For One Year Min.

6 - 1 Gallon Emitters In 'Hula Hoop' Distribution, Run Once A Month 24 To 48 Hours For One Year.

Planting Hole Width Shall Be 3 Times Diameter Of Roots And No Deeper Than The Extension Of The Roots.

Saguaro Planting Type A

NOTES:

1. Optimum transplanting season is October thru November.
2. Maintain original plant orientation. The original "North" orientation shall be marked on a rib at a height of 5' above ground level.
3. Water thoroughly at the time of transplanting to remove air pockets and assure proper compaction. Backfill shall be free of injurious rocks and debris.
4. Do not water for 3 weeks after planting.
5. Plant in areas safe from present and future construction activities.
6. Transplant to original depth of bury.

NOTE: Water weekly through the summer.

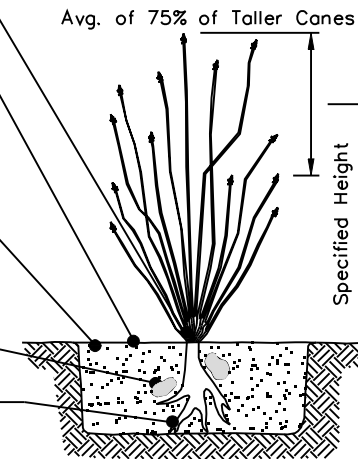
Plant At Depth Which Plant Was Grown.

Planting Mix To Be 1/3 Golf Sand And 2/3 Specified Soil. Pack The Backfill Mix, Do Not Use Water To Settle Backfill Mix.

Planting Hole Width Shall Be 3 Times Diameter Of Roots And No Deeper Than The Extension Of The Roots.

Use 6" to 8" Rocks To Anchor Roots.

Root Prune All Shredded Or Damaged Roots And Dust Entire Root Structure With Wettable Sulphur (1.5 min.) At Planting Site.

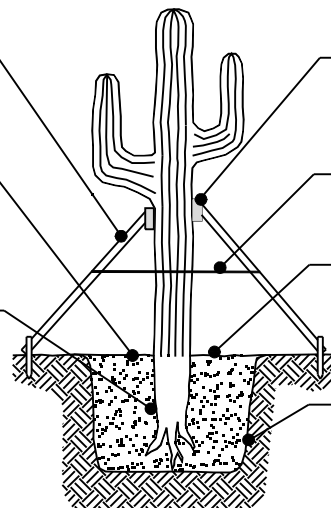


Ocotillo Planting

(3) 2"x 6" Braces, Spaced Equally And Nailed To Wooden Stakes In The Ground. Braces To Remain In Place For One Year Min.

Use Golf Sand Or 1/4" Minus Decomposed Granite To Backfill Planting Hole. Backfill 1/2 Of Pit, Then Compact.

Root Prune All Shredded Or Damaged Roots And Dust Entire Root Structure With Wettable Sulphur (1.5 Min.) And Streptomycin Spray At Planting Site. Root Ball Minimum Size Shall Be 24" With A Minimum Root Length Of 6" On All Sides.



4"x 8"- Dense Foam And Carpet Padded, 8' Above Natural Grade And Nailed To Brace.

Steel Band Fastened With 2 Large Staples Per Brace.

6 - 1 Gallon Emitters In 'Hula Hoop' Distribution, Run Once A Month 24 To 48 Hours For One Year.

Planting Hole Width Shall Be 3 Times Diameter Of Roots And No Deeper Than The Extension Of The Roots.

Saguaro Planting Type B

NOTES:

1. Optimum transplanting season is October thru November.
2. Maintain original plant orientation. The original "North" orientation shall be marked on a rib at a height of 5' above ground level.
3. Water thoroughly at the time of transplanting to remove air pockets and assure proper compaction. Backfill shall be free of injurious rocks and debris.
4. Do not water for 3 weeks after planting.
5. Plant in areas safe from present and future construction activities.
6. Transplant to original depth of bury.

NOTES: Water weekly through the summer. Maintain original growing orientation.

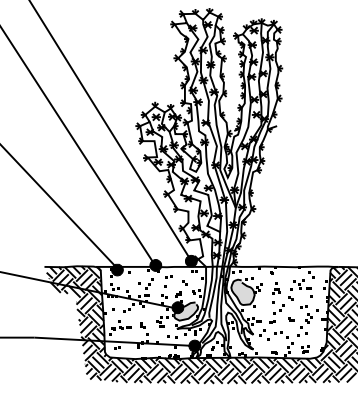
Plant At Depth Which Plant Was Grown.

Planting Mix To Be 1/3 Golf Sand And 2/3 Specified Soil. Pack The Backfill Mix, Do Not Use Water To Settle Backfill Mix.

Planting Hole Width Shall Be 3 Times Diameter Of Roots And No Deeper Than The Extension Of The Roots.

Use 6" to 8" Rocks To Anchor Roots.

Root Prune All Shredded Or Damaged Roots And Dust Entire Root Structure With Wettable Sulphur (1.5 min.) At Planting Site.



Cactus Planting

DETAIL NO.

2620-2

City of Scottsdale
Standard Details

APPROVED BY:

Scottsdale Standards & Specifications Committee

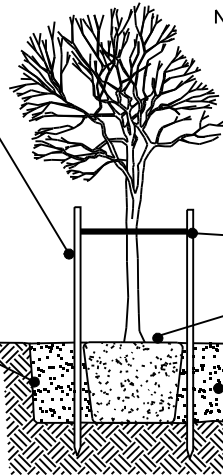
LANDSCAPE DETAILS

DETAIL NO.

2620-2

REVISED 1/5/00

Staking Required For Trees In 36" Box Or Less Or With A Caliper Of Less Than 2". (2) 2" Diameter x 10' Long Lodgepole Pine Tree Stakes. Bury 3' In Ground And Cut Off Stake 12" Above Vinyl Tie. Stakes Shall Remain In Place For 2 Years Unless Removal Is Approved By Maintenance Director.



- Notes: 1. Sufficient clearance shall be maintained between trees and utility facilities so as to not hinder use of these facilities.
2. Plant pit basins within sloped planting areas shall be constructed with a max. 2:1 slope. Provide smooth transition to surrounding finish grade.

Vinyl Tie, 1" (Min.) In Width

Set Top Of Root Ball At Soil Surface.

Planting Hole Shall Be 2 Times Diameter Of Root Ball And No Deeper. Scarify Sides And Bottom Of Planting Hole

Backfill With Native Soil. (No Rocks Greater Than 3") Backfill 3/4 The depth Of Rootball Before Removing Box Side Panels. Compact Backfill As Needed To Prevent Breaking Rootball.

Salvaged Tree Planting

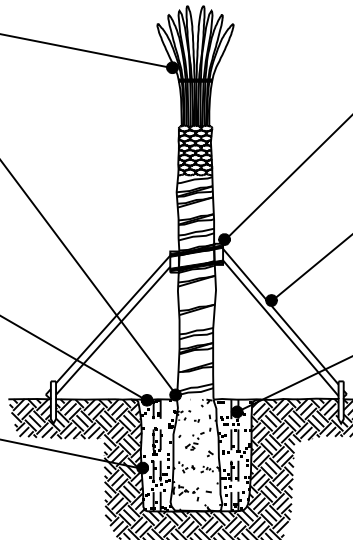
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Thin Top 6-8 Fronds, Tie With Natural Fiber Twine. (Remove Ties Prior To Buckling 60-90 Days).

Plant At Depth Which Plant Was Grown. Adjusting Root Ball Depth To Align Finished Height Will Not Be Allowed.

100% Golf Sand Backfill. Settle Backfill With Water, Do Not Pack Backfill.

Planting Hole Width Shall Be 3 Times Diameter Of Roots And No Deeper Than The Extension Of The Roots.



2"x 4" Blocking Nailed To Brace. Tie To Trunk With 1" (Min.) Vinyl Tie.

(3) 2"x 6" Braces, Spaced Equally And Nailed To Wooden Stakes In The Ground.

4" Perforated PVC, 2 Per Tree. Wrap PVC With Soil Screen Fabric.

Palm Planting and Bracing Detail

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DETAIL NO.

2620-3

City of Scottsdale
Standard Details

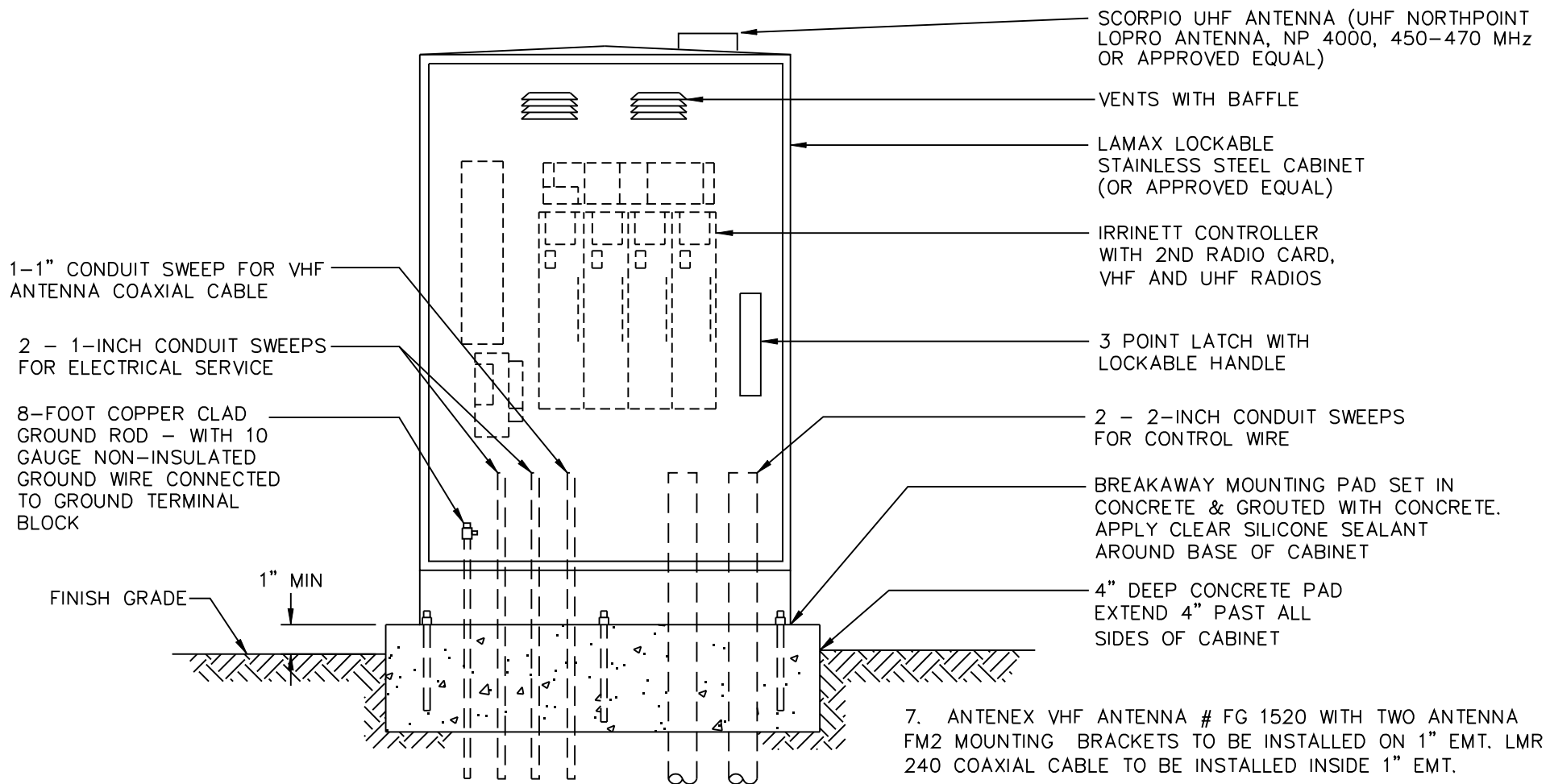
APPROVED BY:

Scottsdale Standards &
Specifications Committee

LANDSCAPE DETAILS

DETAIL NO.

2620-3



NOTES:

1. POWER SOURCE FOR CONTROLLER TO BE HARD WIRED FROM CIRCUIT BREAKER MOUNTED INSIDE CABINET TO CONTROLLER.
2. LOCATION OF POWER SOURCE TO BE NOTED ON CIRCUIT BREAKER PANEL.
3. PROGRAMMING KEYPAD TO BE SUPPLIED WITH CONTROLLER.
4. CONTROLLER TO BE LOCATED IN AREA WITH POSITIVE DRAINAGE.
5. INSTALL ONLY ONE CONTROL VALVE WIRE PER CONTROLLER OUTPUT.
6. VHF AND UHF RADIOS TO BE TUNED TO C.O.S. FREQUENCIES. CONTACT IRRIGATION DEPARTMENT FOR INFORMATION (480-312-2189)

7. ANTENEX VHF ANTENNA # FG 1520 WITH TWO ANTENNA FM2 MOUNTING BRACKETS TO BE INSTALLED ON 1" EMT. LMR 240 COAXIAL CABLE TO BE INSTALLED INSIDE 1" EMT.

8. ANTENNA MAST & MOUNTING INSTALLATION TO BE APPROVED BY CITY OF SCOTTSDALE IRRIGATION DEPARTMENT.

9. POWER SOURCE TO BE PROVIDED BY CONTRACTOR FOLLOWING NEC REQUIREMENTS. INSTALLATION TO BE INSPECTED AND APPROVED BY COS INSPECTOR. INSTALL METAL ADDRESS LABLES TO OUTSIDE DOOR OF IRRIGATION CONTROLLER CABINETS FOR ALL CONTROLLERS RECEIVING NON-METERED POWER SUPPLY.

SCORPIO UHF ANTENNA (UHF NORTHPOINT
LOPRO ANTENNA, NP 4000, 450-470 MHz
OR APPROVED EQUAL)

2 - 1-INCH CONDUIT SWEEPS
FOR ELECTRICAL SERVICE

8-FOOT COPPER CLAD
GROUND ROD - WITH 10
GAUGE NON-INSULATED
GROUND WIRE CONNECTED
TO GROUND TERMINAL
BLOCK

FINISH GRADE

1" MIN

VENTS WITH BAFFLE

LAMAX LOCKABLE
STAINLESS STEEL CABINET
(OR APPROVED EQUAL)

3 POINT LATCH WITH
LOCKABLE HANDLE

2 - 2-INCH CONDUIT SWEEPS
FOR CONTROL WIRE

BREAKAWAY MOUNTING PAD SET IN
CONCRETE & GROUTED WITH CONCRETE.
APPLY CLEAR SILICONE SEALANT
AROUND BASE OF CABINET

4" DEEP CONCRETE PAD
EXTEND 4" PAST ALL
SIDES OF CABINET

NOTES:

1. POWER SOURCE FOR CONTROLLER TO BE HARD WIRED FROM CIRCUIT BREAKER MOUNTED INSIDE CABINET TO CONTROLLER.
2. LOCATION OF POWER SOURCE TO BE NOTED ON CIRCUIT BREAKER PANEL.
3. REMOTE CONTROL VALVES FOR D.C. SCORPIO APPLICATIONS MUST HAVE D.C. LATCHING SOLENOIDS AND APPROVED SOLAR PANEL FOR POWER SOURCE.
4. JSLM NARROW BAND RADIO # 2845 G TO BE INSTALLED WITH SCORPIO CONTROLLER.
5. PROGRAMMING KEYPAD TO BE SUPPLIED WITH CONTROLLER.
6. CONTROLLER TO BE LOCATED IN AREA WITH POSITIVE DRAINAGE.
7. INSTALL ONLY ONE CONTROL VALVE WIRE PER CONTROLLER OUTPUT.
8. UHF RADIO TO BE TUNED TO C.O.S. FREQUENCIES. CONTACT IRRIGATION DEPARTMENT FOR INFORMATION (480-312-2189)
9. POWER SOURCE TO BE PROVIDED BY CONTRACTOR FOLLOWING NEC REQUIREMENTS. INSTALLATION TO BE INSPECTED AND APPROVED BY COS INSPECTOR. INSTALL METAL ADDRESS LABELS TO OUTSIDE DOOR OF IRRIGATION CONTROLLER CABINETS FOR ALL CONTROLLERS RECEIVING NON-METERED POWER SUPPLY.

DETAIL NO. 2632	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	SCORPIO PEDESTAL MOUNTED CONTROLLER	DETAIL NO. 2632
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SCORPIO UHF ANTENNA (UHF NORTHPOINT
LOPRO ANTENNA, NP 4000, 450-470 MHz
OR APPROVED EQUAL)

LAMAX LOCKABLE
STAINLESS STEEL CABINET
(OR APPROVED EQUAL)

1/2-INCH E.M.T. CONDUIT
FOR 110V POWER SUPPLY

8-FOOT COPPER CLAD
GROUND ROD - WITH 10
GAUGE NON-INSULATED
GROUND WIRE CONNECTED
TO GROUND TERMINAL
BLOCK

FINISH GRADE

DEPTH PER
ELECTRICAL
CODE

VENTS WITH BAFFLE

3 POINT LATCH WITH
LOCKABLE HANDLE

2-INCH MALE ADAPTER
WITH LOCK RING

2-INCH SCH. 40 P.V.C. SLEEVE
WITH 2" SWEEP FOR 24 VOLT
CONTROL WIRE. SECURE TO WALL
WITH CONDUIT STRAP TOP AND
BOTTOM.

24"

CONTROL WIRES IN MAINLINE TRENCH

NOTES:

1. POWER SOURCE FOR CONTROLLER TO BE HARD WIRED FROM CIRCUIT BREAKER MOUNTED INSIDE CABINET TO CONTROLLER.
2. LOCATION OF POWER SOURCE TO BE NOTED ON CIRCUIT BREAKER PANEL.
3. REMOTE CONTROL VALVES FOR D.C. SCORPIO APPLICATIONS MUST HAVE D.C. LATCHING SOLENOIDS AND APPROVED SOLAR PANEL FOR POWER SOURCE.
4. JSLM NARROW BAND RADIO #2845 G TO BE INSTALLED WITH SCORPIO CONTROLLER.
5. PROGRAMMING KEYPAD TO BE SUPPLIED WITH CONTROLLER.
6. INSTALL ONLY ONE CONTROL VALVE WIRE PER CONTROLLER OUTPUT.
7. UHF RADIO TO BE TUNED TO C.O.S. FREQUENCIES. CONTACT IRRIGATION DEPARTMENT FOR INFORMATION (480-312-2189)
8. POWER SOURCE TO BE PROVIDED BY CONTRACTOR FOLLOWING NEC REQUIREMENTS. INSTALLATION TO BE INSPECTED AND APPROVED BY COS INSPECTOR. INSTALL METAL ADDRESS LABELS TO OUTSIDE DOOR OF IRRIGATION CONTROLLER CABINETS FOR ALL CONTROLLERS RECEIVING NON-METERED POWER SUPPLY.

DETAIL NO.
2633

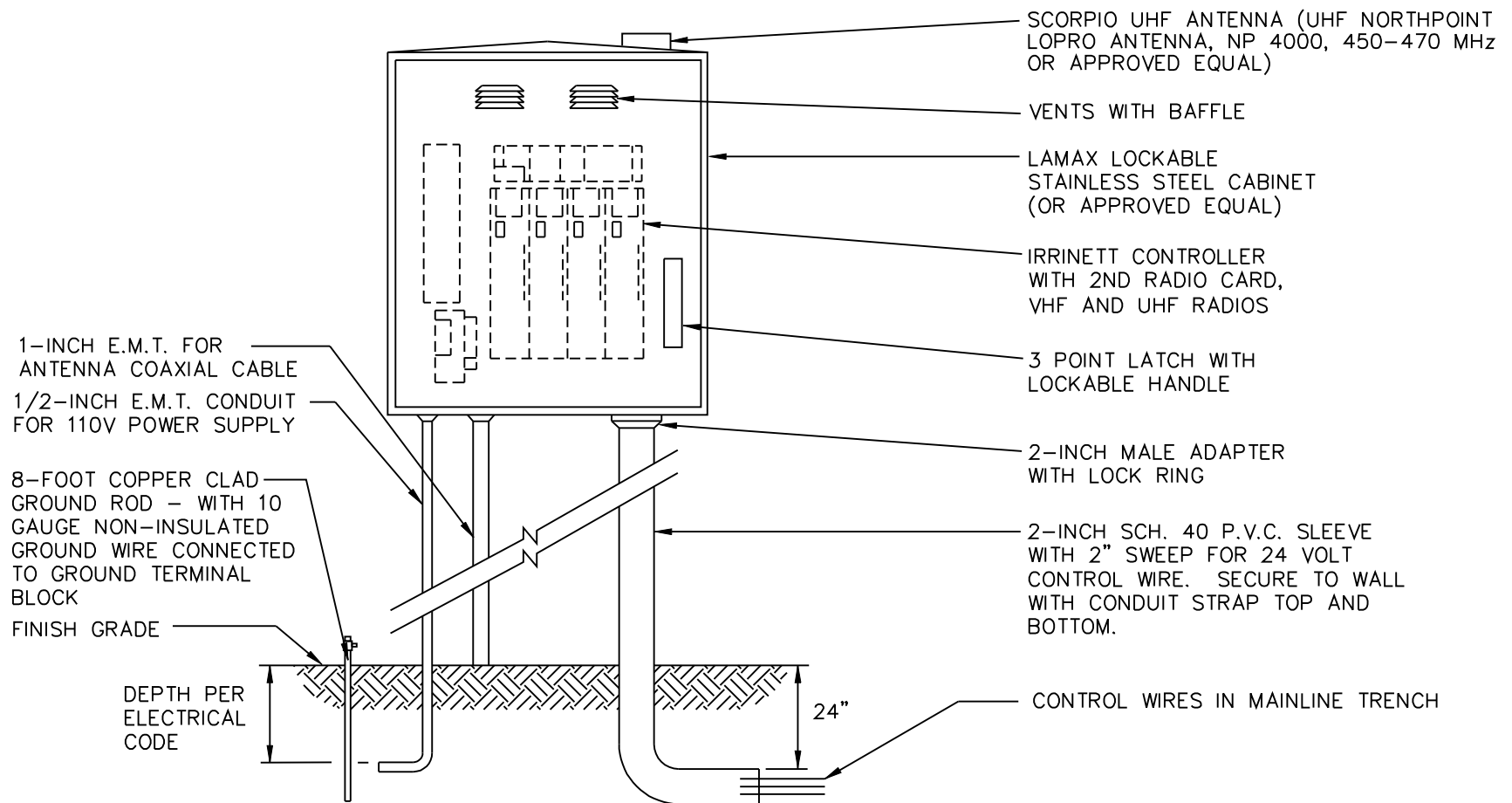
City of Scottsdale
Standard Details

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

SCORPIO WALL MOUNTED CONTROLLER

DETAIL NO.
2633

REVISED: 5/17/06



NOTE:

1. POWER SOURCE FOR CONTROLLER TO BE HARD WIRED FROM CIRCUIT BREAKER MOUNTED INSIDE CABINET TO CONTROLLER.
2. LOCATION OF POWER SOURCE TO BE NOTED ON CIRCUIT BREAKER PANEL.
3. PROGRAMMING KEYPAD TO BE SUPPLIED WITH CONTROLLER.
4. INSTALL ONLY ONE CONTROL VALVE WIRE PER CONTROLLER OUTPUT.
5. VHF AND UHF RADIOS TO BE TUNED TO C.O.S. FREQUENCIES. CONTACT IRRIGATION DEPARTMENT FOR INFORMATION (480-312-2189)
6. POWER SOURCE TO BE PROVIDED BY CONTRACTOR FOLLOWING NEC REQUIREMENTS. INSTALLATION TO BE INSPECTED AND APPROVED BY COS INSPECTOR. INSTALL METAL ADDRESS LABELS TO OUTSIDE DOOR OF IRRIGATION CONTROLLER CABINETS FOR ALL CONTROLLERS RECEIVING NON-METERED POWER SUPPLY.
7. ANTENEX VHF ANTENNA #FG1520 WITH TWO ANTENEX FM2 MOUNTING BRACKETS TO BE INSTALLED ON 1" E.M.T. LMR 240 COAXIAL CABLE TO BE INSTALLED INSIDE 1" E.M.T.
8. ANTENNA MAST AND MOUNTING INSTALLATION TO BE APPROVED BY COS IRRIGATION DEPARTMENT.

DETAIL NO. 2634	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	IRRINET WALL MOUNTED CONTROLLER	DETAIL NO. 2634
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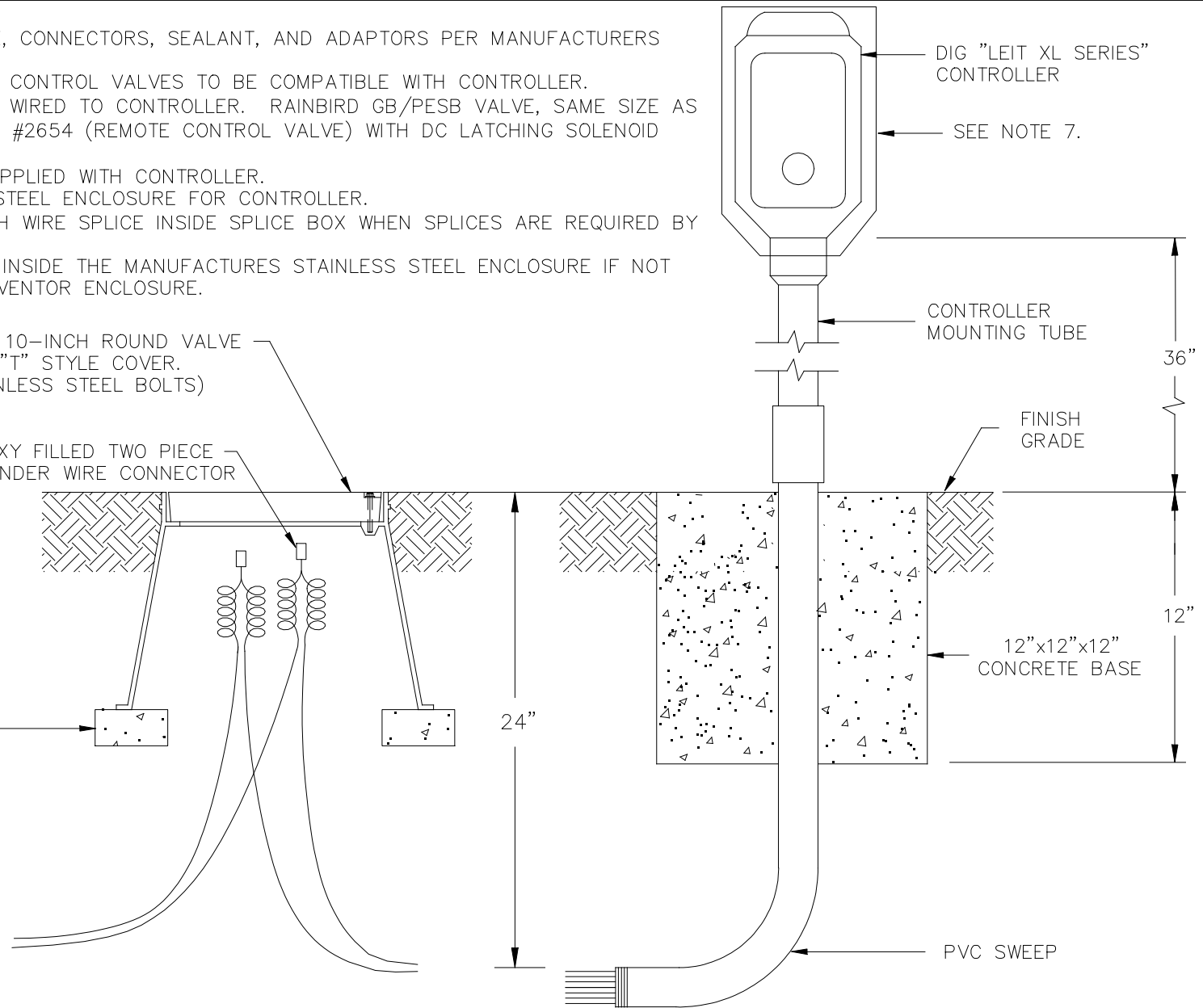
NOTES:

1. INSTALL WIRE OF APPROPRIATE GAUGE, CONNECTORS, SEALANT, AND ADAPTORS PER MANUFACTURERS INSTRUCTIONS.
2. D.C. LATCHING SOLENOIDS ON REMOTE CONTROL VALVES TO BE COMPATIBLE WITH CONTROLLER.
3. MASTER VALVE TO BE INSTALLED AND WIRED TO CONTROLLER. RAINBIRD GB/PESB VALVE, SAME SIZE AS MAINLINE INSTALLED PER COS DETAIL #2654 (REMOTE CONTROL VALVE) WITH DC LATCHING SOLENOID COMPATIBLE WITH CONTROLLER.
4. PROGRAMMING/ACCESS KEY TO BE SUPPLIED WITH CONTROLLER.
5. INSTALL MANUFACTURERS STAINLESS STEEL ENCLOSURE FOR CONTROLLER.
6. PROVIDE 12" EXANSION COIL FOR EACH WIRE SPLICE INSIDE SPLICE BOX WHEN SPLICES ARE REQUIRED BY MANUFACTURER.
7. THE CONTROLLER SHALL BE SECURED INSIDE THE MANUFACTURES STAINLESS STEEL ENCLOSURE IF NOT INSTALLED INSIDE THE BACKFLOW PREVENTOR ENCLOSURE.

CARSON / BROOKS 10-INCH ROUND VALVE BOX WITH LOCKING "T" STYLE COVER.
(SUPPLY WITH STAINLESS STEEL BOLTS)

EPOXY FILLED TWO PIECE
CYLINDER WIRE CONNECTOR

BRICK PAVER (1 OF 3)



DETAIL NO.
2635-1

City of Scottsdale
Standard Details

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

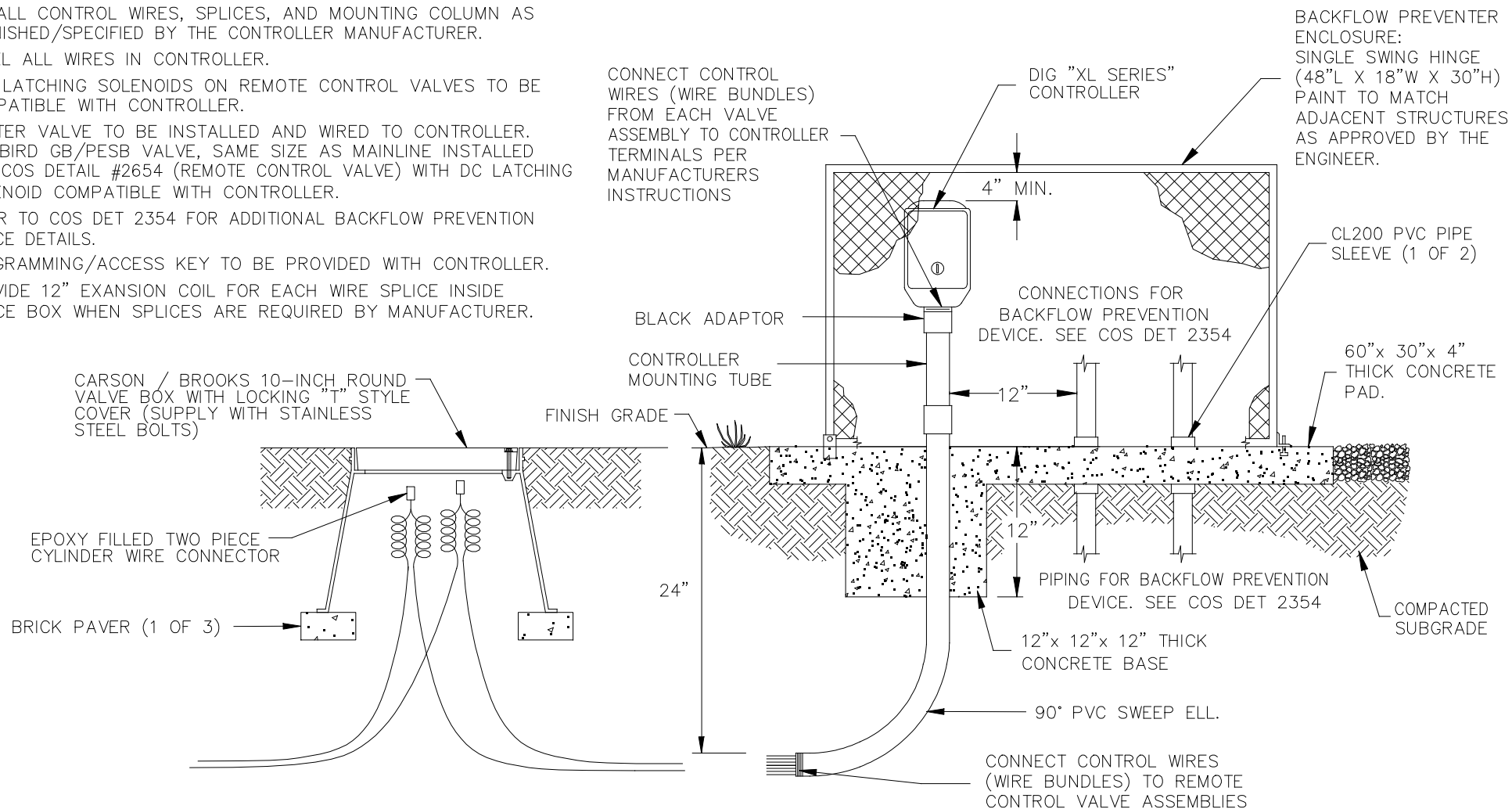
SOLAR CONTROLLER

DETAIL NO.
2635-1

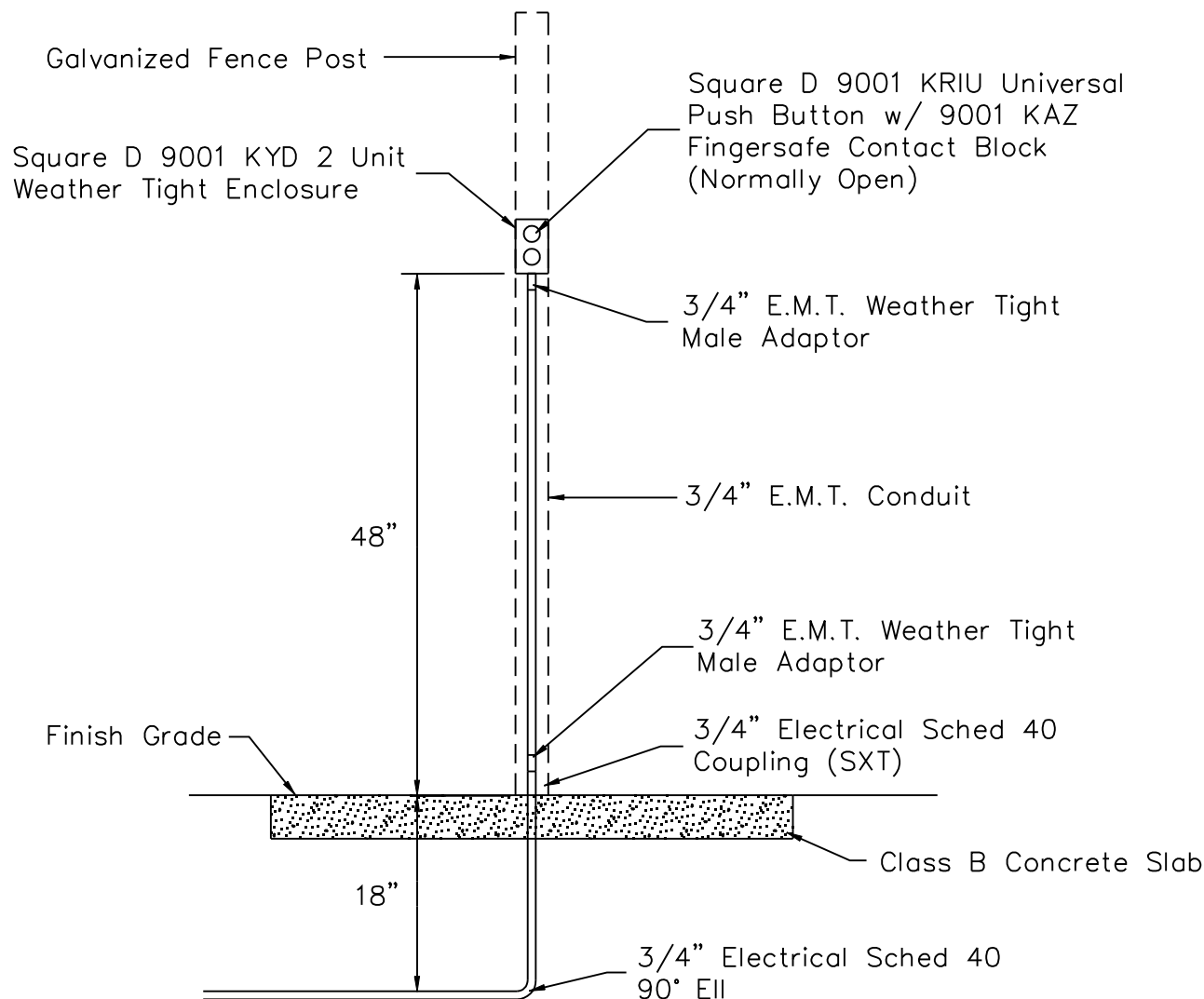
REVISED 05/01/07

NOTES:

1. INSTALL WIRING OF APPROPRIATE GAUGE, CONNECTORS, SEALANT, AND ADAPTORS PER MANUFACTURERS INSTRUCTIONS.
2. INSTALL CONTROL WIRES, SPLICES, AND MOUNTING COLUMN AS FURNISHED/SPECIFIED BY THE CONTROLLER MANUFACTURER.
3. LABEL ALL WIRES IN CONTROLLER.
4. D.C. LATCHING SOLENOIDS ON REMOTE CONTROL VALVES TO BE COMPATIBLE WITH CONTROLLER.
5. MASTER VALVE TO BE INSTALLED AND WIRED TO CONTROLLER. RAINBIRD GB/PESB VALVE, SAME SIZE AS MAINLINE INSTALLED PER COS DETAIL #2654 (REMOTE CONTROL VALVE) WITH DC LATCHING SOLENOID COMPATIBLE WITH CONTROLLER.
6. REFER TO COS DET 2354 FOR ADDITIONAL BACKFLOW PREVENTION DEVICE DETAILS.
7. PROGRAMMING/ACCESS KEY TO BE PROVIDED WITH CONTROLLER.
8. PROVIDE 12" EXANSION COIL FOR EACH WIRE SPLICE INSIDE SPLICE BOX WHEN SPLICES ARE REQUIRED BY MANUFACTURER.



DETAIL NO. 2635-2	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	SOLAR CONTROLLER AND BACKFLOW PREVENTER ENCLOSURE	DETAIL NO. 2635-2
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NOTES:

1. Install #14 ga. irrigation control wire.
2. Install one control wire per push button. Control wire to be different color from all other irrigation control wires.
3. Common wire (#12 ga) for push buttons shall be a separate common wire and not part of the irrigation control valve common wire.
4. Push button common wire to have color stripe matching push button control wire. The common wire may be shared by other push buttons.
5. Attach push button enclosure to galvanized post with two self-tapping hex head screws.
6. For other configurations/applications, contact Irrigation Dept 480-312-2189.
7. Label control wires inside enclosure and at controller to differentiate their functionality.

DETAIL NO.
2636

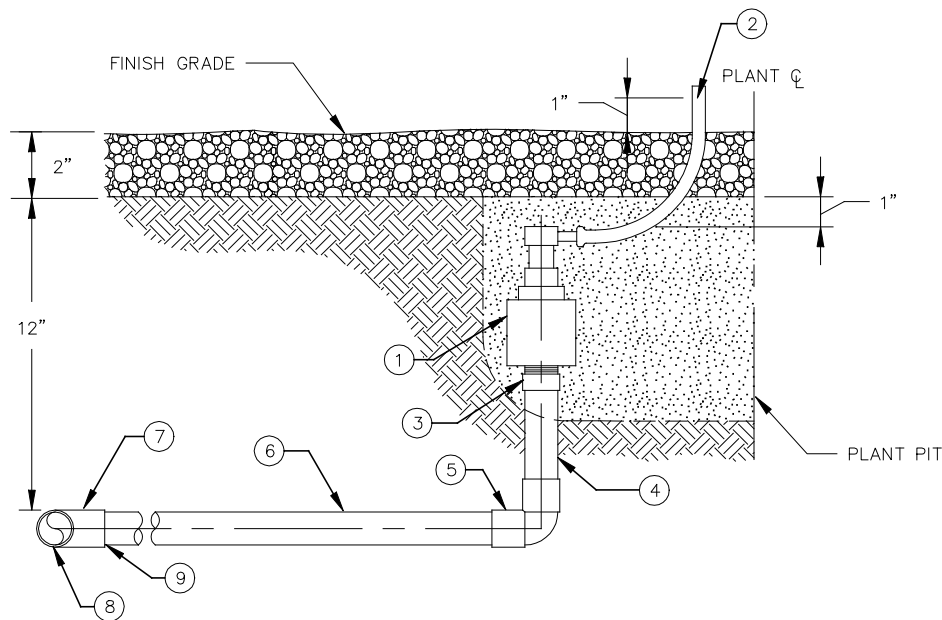
**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

IRRIGATION PUSH BUTTON CONTROL

DETAIL NO.
2636

REVISED: 05/01/07



SINGLE OUTLET EMITTER ALL SHRUBS & GROUND COVER

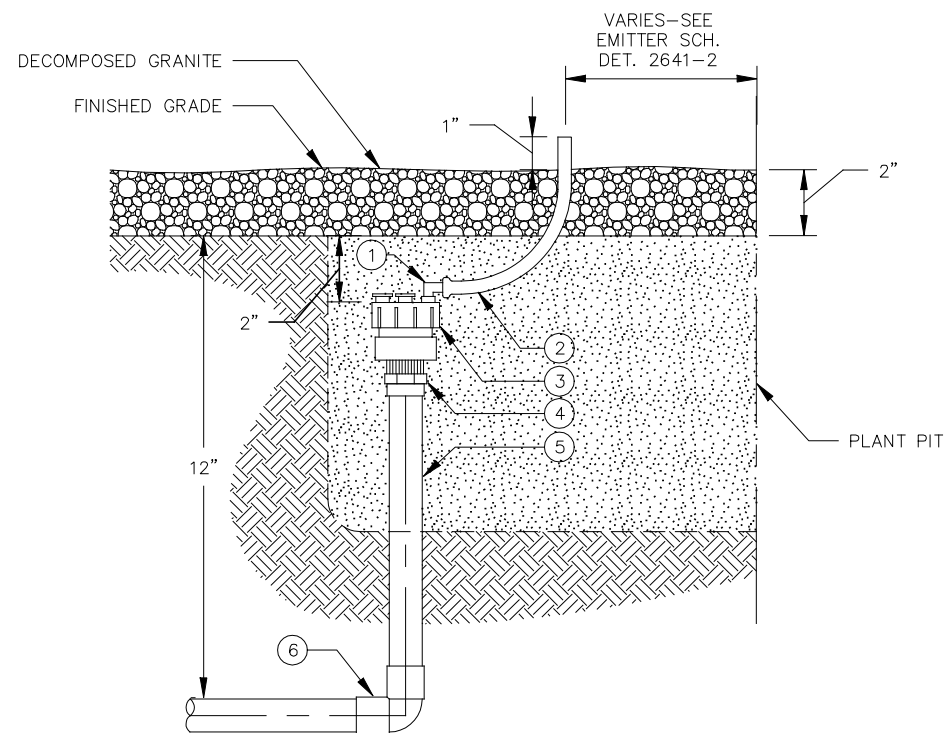
SCALE: NTS

LIST OF MATERIALS

- ① BOWSMITH SL - SERIES SINGLE PORT EMITTER OR APPROVED EQUAL. LOCATE ON UPHILL SIDE OF PLANT CENTERLINE
- ② 1/4" POLY FLEX HOSE EMITTER TUBING (6' MAX.)
- ③ 1/2" PVC SCH 40 MALE ADAPTOR
- ④ AG. PRODUCTS - 1/2" I.P.S. FLEXIBLE VINYL PVC PIPE OR APPROVED EQUAL
- ⑤ 1/2" PVC SCH 40 90° ELBOW
- ⑥ 1/2" PVC CL 315 PIPE
- ⑦ 1/2" PVC SCH 40 FITTING
- ⑧ PVC CL 315 FOR 1/2" LATERALS, PVC CL 200 FOR LATERALS GREATER THAN 1/2"
- ⑨ INSTALL BUSHING AS REQUIRED.

NOTES

1. PIPE CEMENT & PRIMER SHALL BE USED FOR FLEXIBLE AND RIGID PIPE CONNECTIONS.
2. EMITTER TUBING EMISSION POINTS SHALL BE EQUALLY SPACED AND LOCATED TO DIRECT WATER FLOW TO THE PERIMETER OF THE DRIP LINE.
3. NUMBER OF OPENINGS AND EMITTER TUBES REQUIRED IS BASED ON PLANT SIZE. (SEE COS STD. DET. 2641-2)
4. MAXIMUM EMITTER TUBING LENGTH = 6 FEET.
5. NO EMITTER LATERALS OR PIPING SHALL BE INSTALLED THROUGH OR BENEATH PLANT PITS. MINIMUM DISTANCE BETWEEN PLANT PIT PERIMETER AND PIPING SHALL BE 12".



MULTI-OUTLET EMITTER TREES ONLY

SCALE: NTS

LIST OF MATERIALS

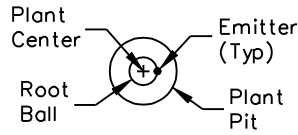
- ① SWIVEL OUTLET 90° ELBOW
- ② 1/4" POLY FLEX HOSE EMITTER TUBING (6' MAX.)
- ③ BOWSMITH ML 200 SERIES MULTI-PORT EMITTER OR APPROVED EQUAL. LOCATE ON UPHILL SIDE OF PLANT CL
- ④ 1/2" PVC SCH 40 MALE ADAPTER
- ⑤ AG. PRODUCTS 1/2" I.P.S. FLEXIBLE VINYL PVC PIPE OR APPROVED EQUAL
- ⑥ 1/2" PVC SCH 40 FITTING

DETAIL NO. **City of Scottsdale**
2641-1 **Standard Details**

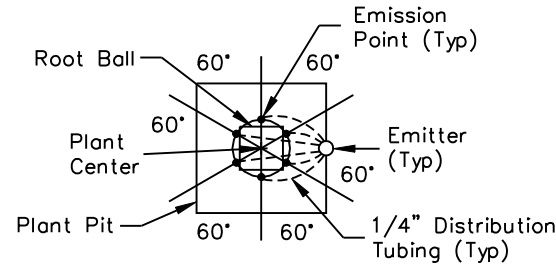
APPROVED BY:
Scottsdale Standards & Specifications Committee

SINGLE & MULTI-OUTLET EMITTERS

DETAIL NO.
2641-1

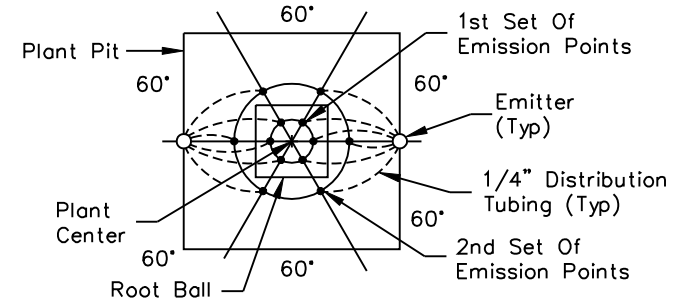


**SHRUB EMITTER
SINGLE OUTLET**



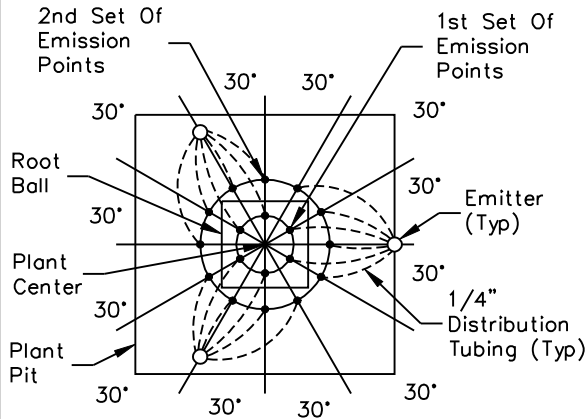
**TREE EMITTER - MULTI OUTLET
15 GAL TO 42" BOX TREES**

(SEE EMITTER SCHEDULE)



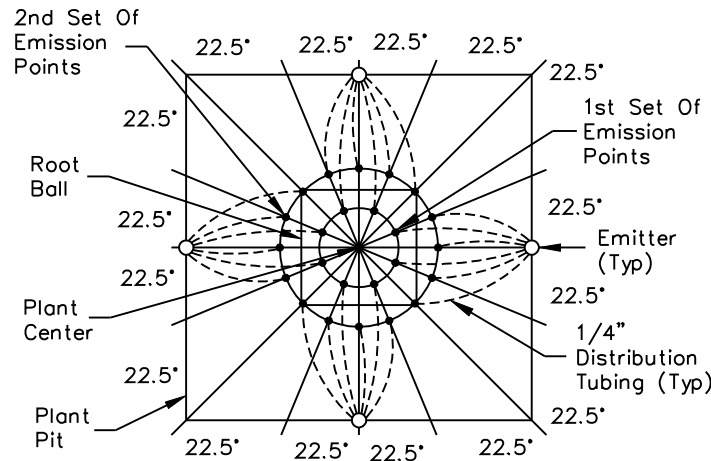
**TREE EMITTER - MULTI OUTLET
48" BOX TO 60" BOX TREES**

(SEE EMITTER SCHEDULE)



**TREE EMITTER - MULTI OUTLET
66" BOX TO 84" BOX TREES**

(SEE EMITTER SCHEDULE)



**TREE EMITTER - MULTI OUTLET
96" BOX TREES**

(SEE EMITTER SCHEDULE)

EMITTER SCHEDULE

Tree Size	Number Of Multi Outlet Emitters - Outlet Quantity = Emitter GPH Total	Distance From Trunk	
		1st Set Of Emission Points	2nd Set Of Emission Points
15 Gal.	1-1 GPH=6 GPH	3 @ 12"	
24" Box	1-1 GPH=6 GPH	4 @ 18"	
30" Box	1-1 GPH=6 GPH	6 @ 21"	
36" Box	1-2 GPH=12 GPH	6 @ 24"	
42" Box	1-2 GPH=12 GPH	6 @ 27"	
48" Box	2-2 GPH=24 GPH	6 @ 12"	4 @ 42"
54" Box	2-2 GPH=24 GPH	6 @ 15"	5 @ 45"
60" Box	2-2 GPH=24 GPH	6 @ 18"	6 @ 48"
66" Box	3-2 GPH=36 GPH	6 @ 24"	12 @ 54"
72" Box			
78" Box	3-2 GPH=36 GPH	6 @ 30"	12 @ 60"
84" Box			
≥ 90" Box	4-2 GPH=48 GPH	8 @ 33"	16 @ 66"

DETAIL NO.
2641-2

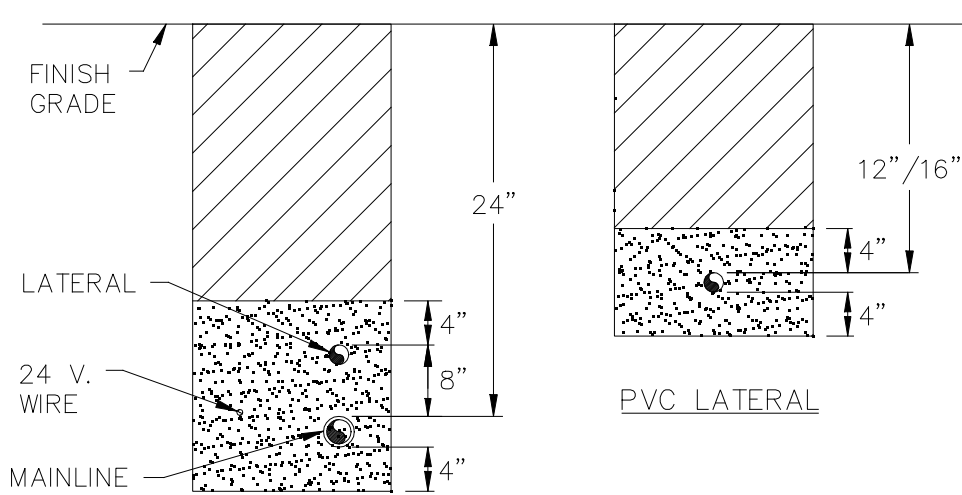
**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

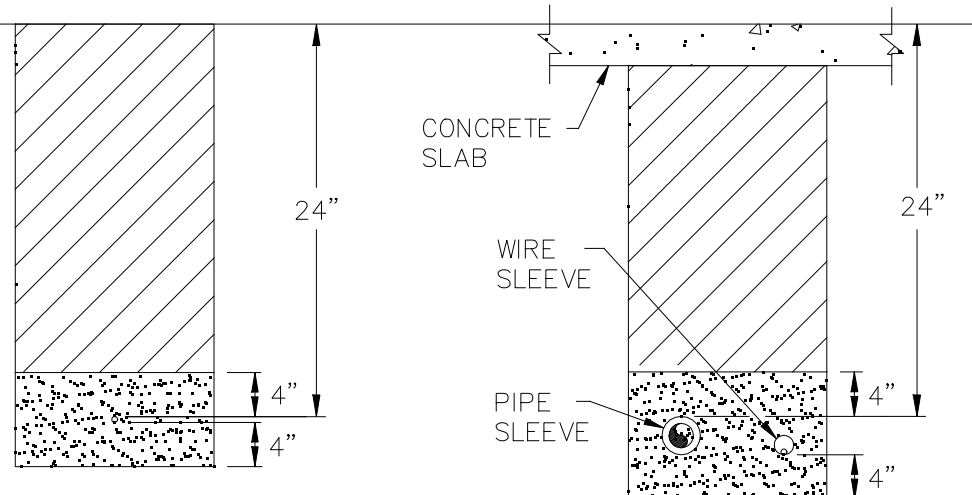
IRRIGATION EMITTER LAYOUT

DETAIL NO.
2641-2

REVISED: 05/01/07

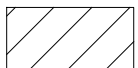
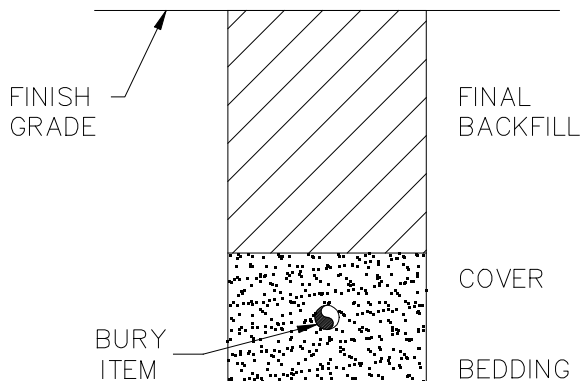


MAINLINE, LATERAL & 24V WIRE



24V WIRE

PIPE & WIRE SLEEVING



EXCAVATED MATERIAL SHALL BE FINELY SCREENED WITH NO ROCKS LARGER THAN 1".



BEDDING AND COVER MATERIAL SHALL BE TOPSOIL WITH NO ROCKS.

NOTES:

1. BEDDING SHALL BE PLACED AND LEVELED PRIOR TO INSTALLATION OF BURY ITEM.
2. BACKFILL SHALL BE PLACED IN MAXIMUM 6" LIFTS.
3. SLEEVE ALL PIPE AND WIRE SEPARATELY. SLEEVE 2 X DIA. OF PIPE (MIN 2"). ONE PIPE PER SLEEVE. SLEEVES TO BE PRIMED AND SOLVENT WELDED.
4. ALL PIPE TO BE INSTALLED PER MANUFACTURES SPECIFICATIONS WITH PIPE LABELING FACING UP FOR INSPECTION PURPOSES. PROVIDE A MINIMUM OF 2" CLEARANCE TO SIDE OF TRENCH AND BETWEEN PIPES.
5. ALL 120 V. WIRING SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.
6. TAPE AND BUNDLE IRRIGATION CONTROL WIRES EVERY 10'. PROVIDE LOOSE 20" LOOP AT ALL CHANGES OF DIRECTION OVER 30°.
7. ALL REMOTE CONTROL VALVE WIRING NOT INSTALLED WITH MAINLINE PIPE SHALL BE INSTALLED IN A MINIMUM 2" SCHEDULE 40 GREY ELECTRICAL CONDUIT OR AS APPROVED.
8. "NON-POTABLE" WARNING TAPE TO BE INSTALLED ON ALL PRESSURIZED MAINLINES 12" ABOVE THE PIPE.
9. INSTALL ONE ADDITIONAL SLEEVE SIZED TO MATCH THE LARGEST REQUIRED SLEEVE WITH ENDS TAPED FOR FUTURE USE.
10. SLEEVES TO EXTEND A MINIMUM OF 12" PAST HARDSCAPE PLANTERS, CURBS, SIDEWALKS, ETC. SLEEVES TO BE STAGGERED/OFFSET SO THAT SLEEVE USE IS NOT OBSTRUCTED BY OTHER PIPES.

DETAIL NO.
2642

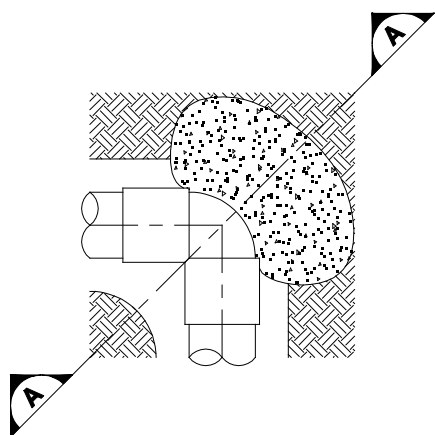
City of Scottsdale
Standard Details

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Scottsdale Standards &
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IRRIGATION TRENCHING

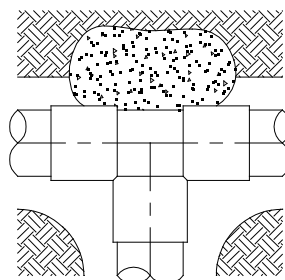
DETAIL NO.
2642

REVISED: 4/25/07



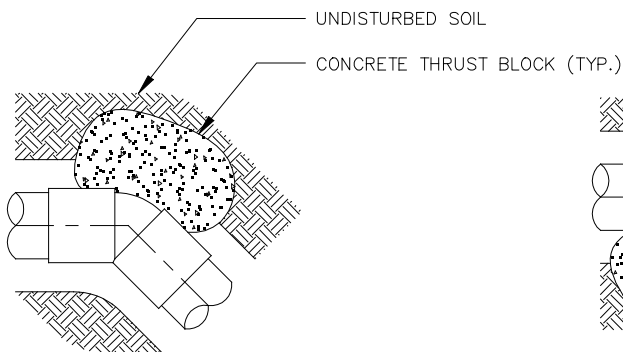
90° ELL

SCALE: NTS



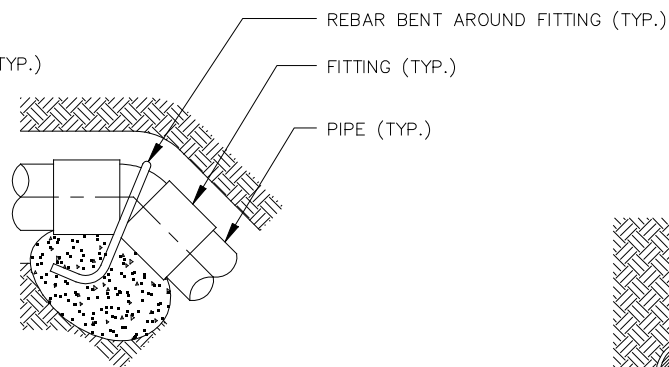
TEE

SCALE: NTS



45° ELL

SCALE: NTS



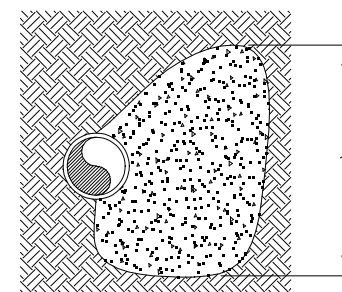
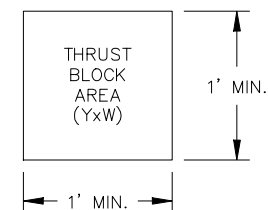
45° ELL (VERTICAL)

SCALE: NTS

PIPE SIZE	MINIMUM THRUST BLOCK AREA (YxW)	
	IRRIGATION PIPE	
	TEE, DEAD END 90° BEND	45°, 22.5°
3"	1 SF	.5 SF
4"	1.5 SF	1 SF
5" & LARGER	2 SF	1.5 SF
	PER MAG DETAIL 380	PER MAG DETAIL 380

NOTES

1. MINIMUM THRUST BLOCK AREAS ARE BASED ON A SOIL BEARING CAPACITY OF 3000 LBS/SF
2. THRUST BLOCK SHALL EXTEND INTO UNDISTURBED SOIL.
3. THRUST BLOCK SHALL BE MAG SECT. 725—CLASS C.
4. MAINLINE PIPING 4" AND LARGER SHALL HAVE MEGA/LUG JOINT RESTRAINTS INSTALLED AT ALL FLOW DIRECTION CHANGES (CONCRETE THRUST BLOCK NOT REQUIRED).



SECTION

A-A

DETAIL NO.
2643

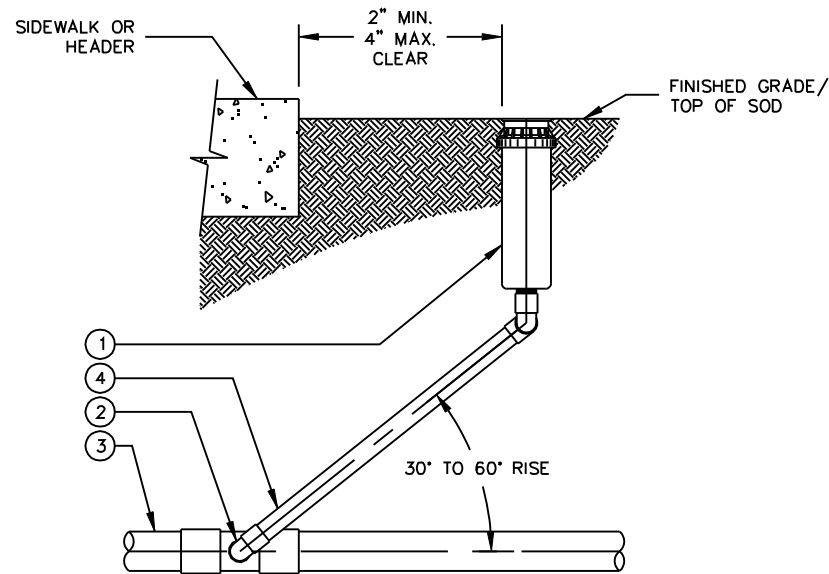
City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards &
Specifications Committee

IRRIGATION THRUST BLOCK

DETAIL NO.
2643

REVISED: 2/27/02

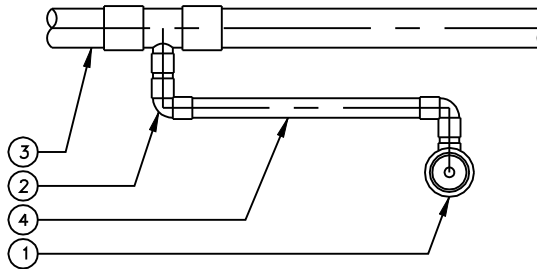


SWING JOINT ASSEMBLY ELEVATION

SCALE: NTS

LIST OF MATERIALS

- ① ROTOR SPRINKLER HEAD
- ② STREET ELL (1 OF 3) SCH 40 PVC
- ③ PVC LATERAL PIPE
- ④ SCH 80 NIPPLE TBE



SWING JOINT ASSEMBLY PLAN

SCALE: NTS

NOTES

- 1. SWING JOINT TO BE THE SAME SIZE AS SPRINKLER HEAD INLET.
- 2. NO PRE-FAB SWING JOINTS
- 3. NO MARLEX FITTINGS

DETAIL NO.
2644

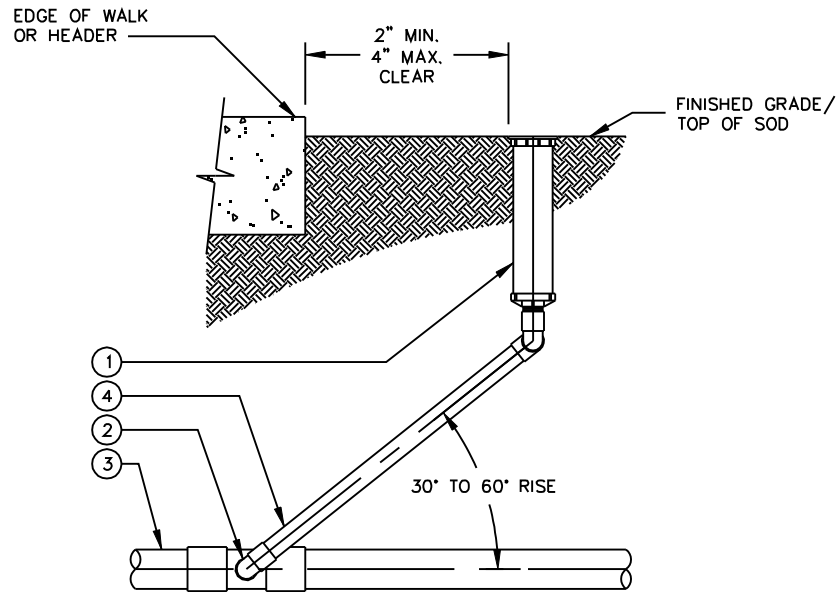
City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards &
Specifications Committee

ROTOR SPRINKLER ASSEMBLY

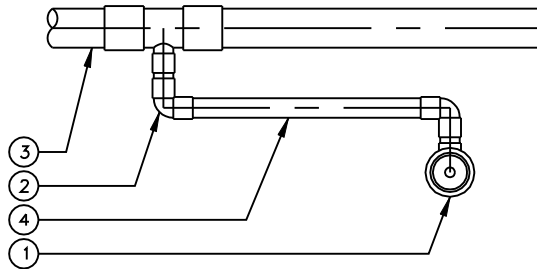
DETAIL NO.
2644

REVISED: 2/27/02



**SWING JOINT ASSEMBLY
ELEVATION**

SCALE: NTS



SWING JOINT ASSEMBLY PLAN

SCALE: NTS

LIST OF MATERIALS

- ① 4" POP-UP SPRAY SPRINKLER HEAD
- ② STREET ELL (1 OF 3) SCH 40 PVC
- ③ PVC LATERAL PIPE
- ④ SCH 80 NIPPLE TBE

NOTES

- 1. SWING JOINT TO BE THE SAME SIZE AS SPRINKLER HEAD INLET.
- 2. NO PRE-FAB SWING JOINTS
- 3. NO MARLEX FITTINGS

**DETAIL NO.
2645**

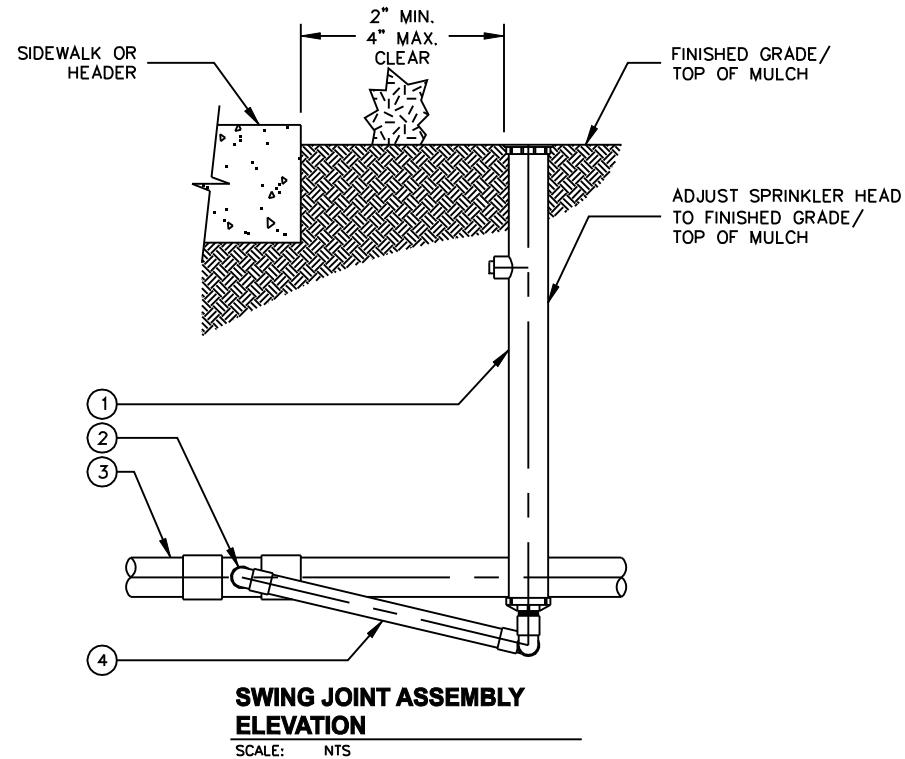
**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

POP-UP SPRINKLER ASSEMBLY

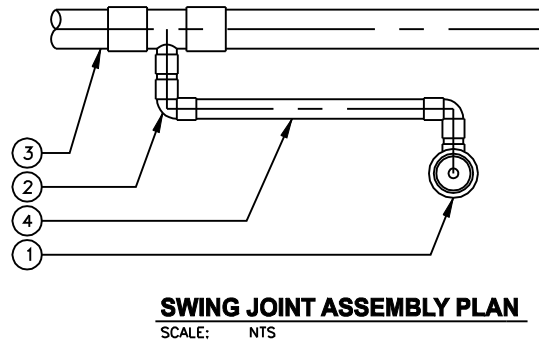
**DETAIL NO.
2645**

REVISED: 2/27/02



LIST OF MATERIALS

- ① 12" POP-UP SPRAY SPRINKLER HEAD
- ② STREET ELL (1 OF 3) SCH 40 PVC
- ③ PVC LATERAL PIPE
- ④ SCH 80 NIPPLE TBE

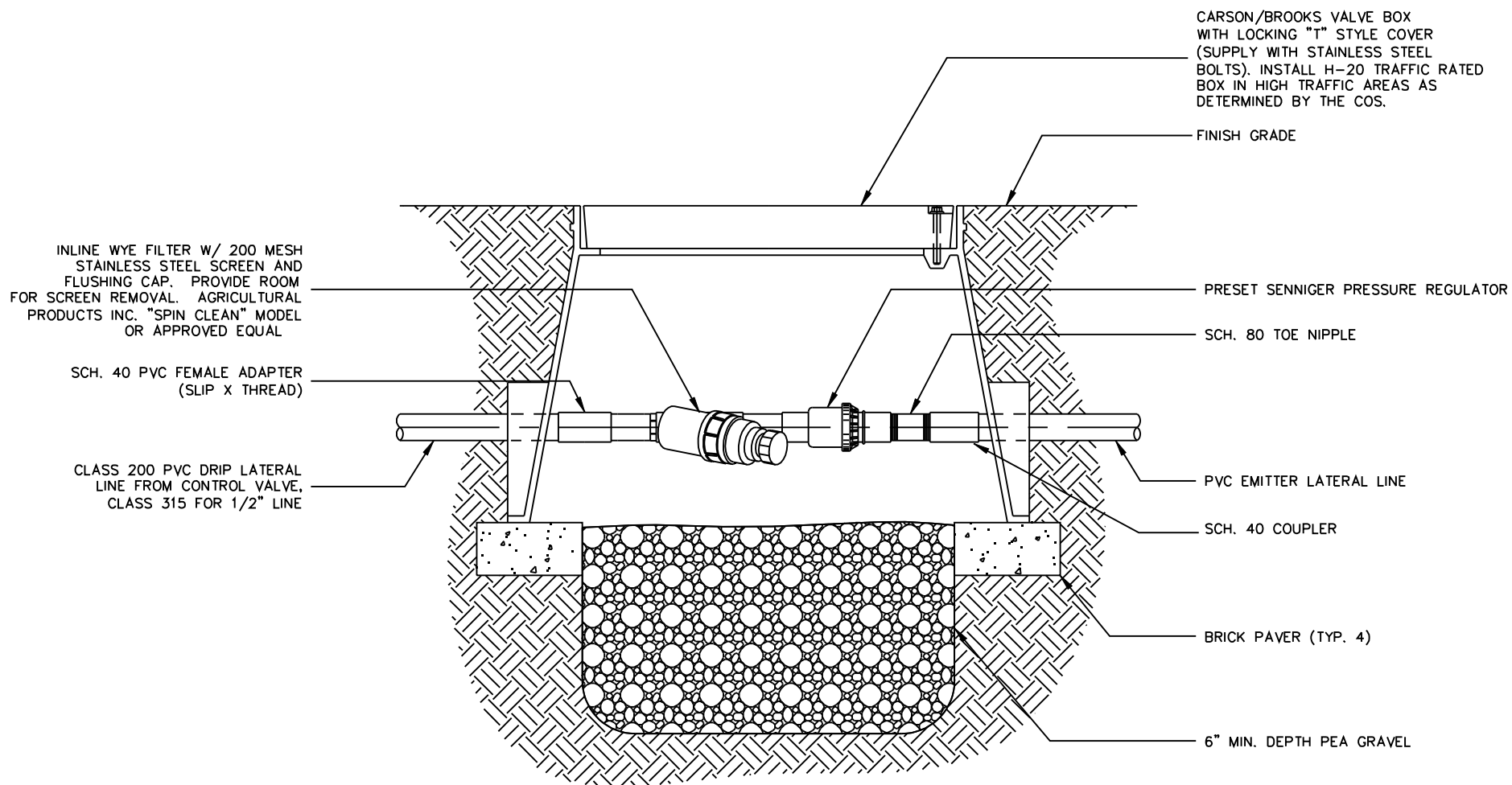


NOTES

- 1. SWING JOINT TO BE THE SAME SIZE AS SPRINKLER HEAD INLET.
- 2. SWING JOINT SHALL BE CONNECTED TO BOTTOM OUTLET.
- 3. NO PRE-FAB SWING JOINTS
- 4. NO MARLEX FITTINGS

DETAIL NO. 2646	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	SHRUB POP-UP SPRINKLER ASSEMBLY	DETAIL NO. 2646
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REVISED: 5/17/06



**DRIP FILTER &
PRESS. REG. ASSEMBLY**

SCALE: NTS

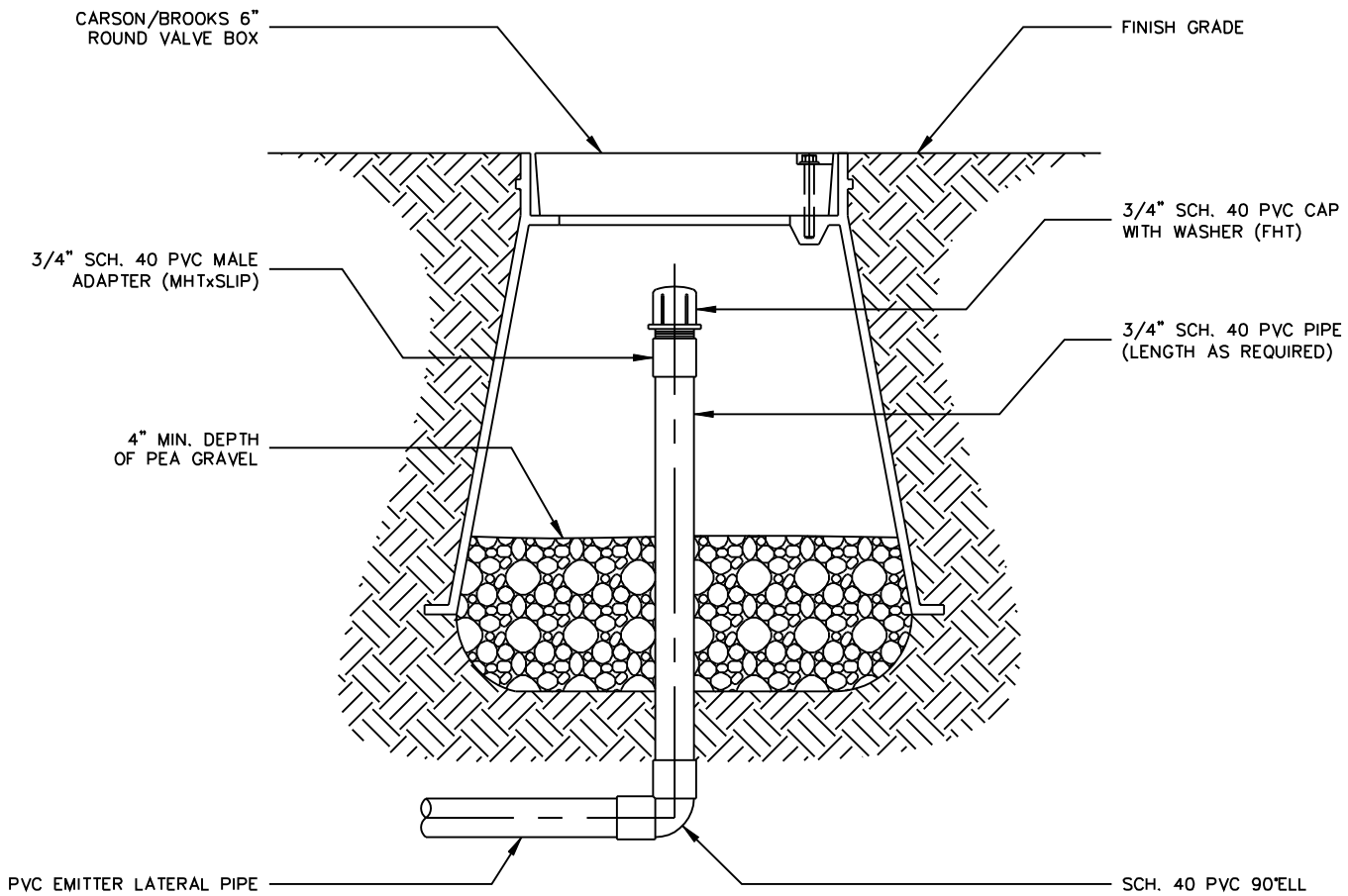
DETAIL NO.
2647

**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

DRIP FILTER & PRESSURE REGULATOR

DETAIL NO.
2647



EMITTER FLUSH CAP ASSEMBLY

SCALE: NTS

DETAIL NO.
2648

City of Scottsdale
Standard Details

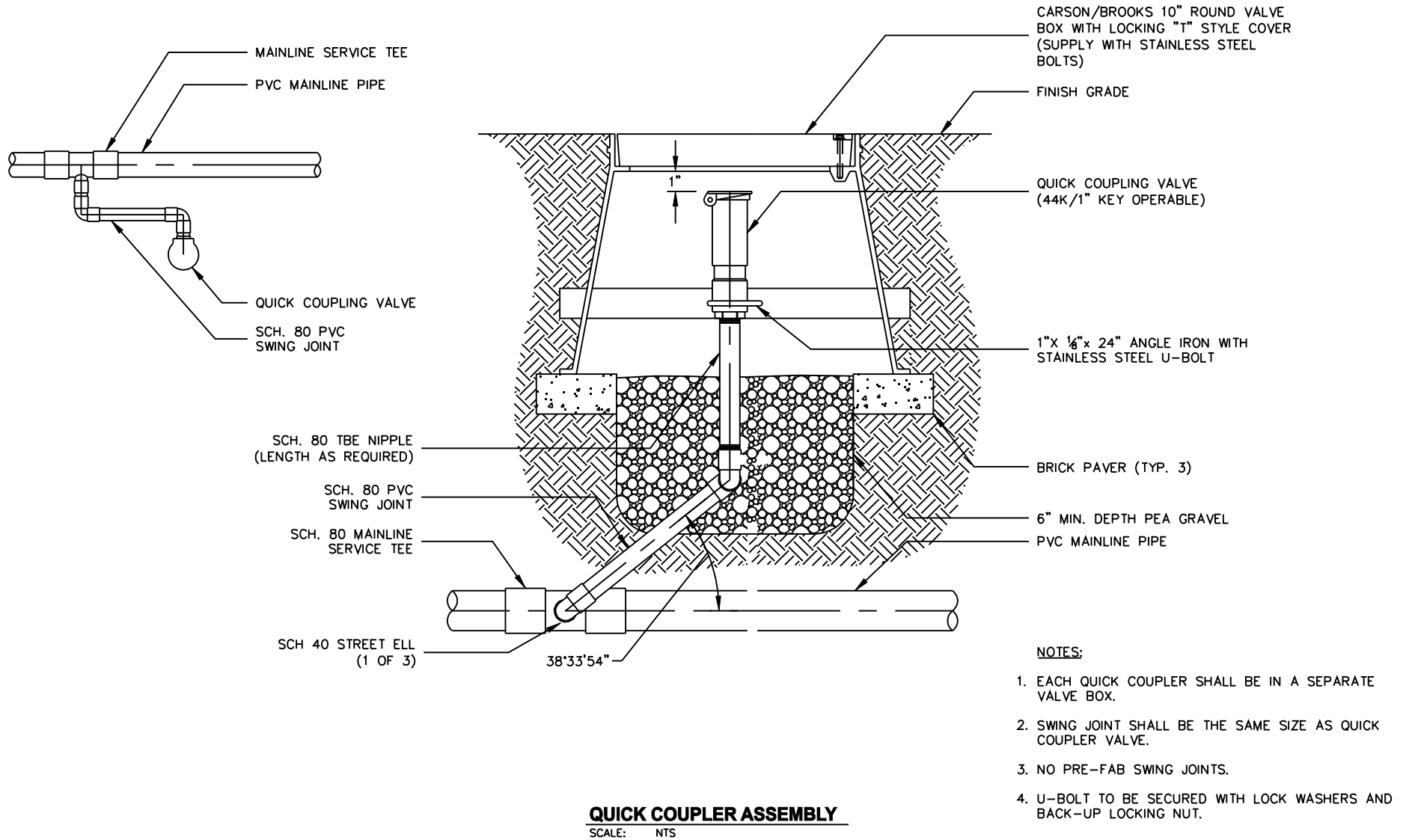
APPROVED BY:
Scottsdale Standards & Specifications Committee

EMITTER FLUSH CAP ASSEMBLY

DETAIL NO.
2648

REVISED: 1/5/00

REVISED: 7/15/03



DETAIL NO.
2649

City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards &
Specifications Committee

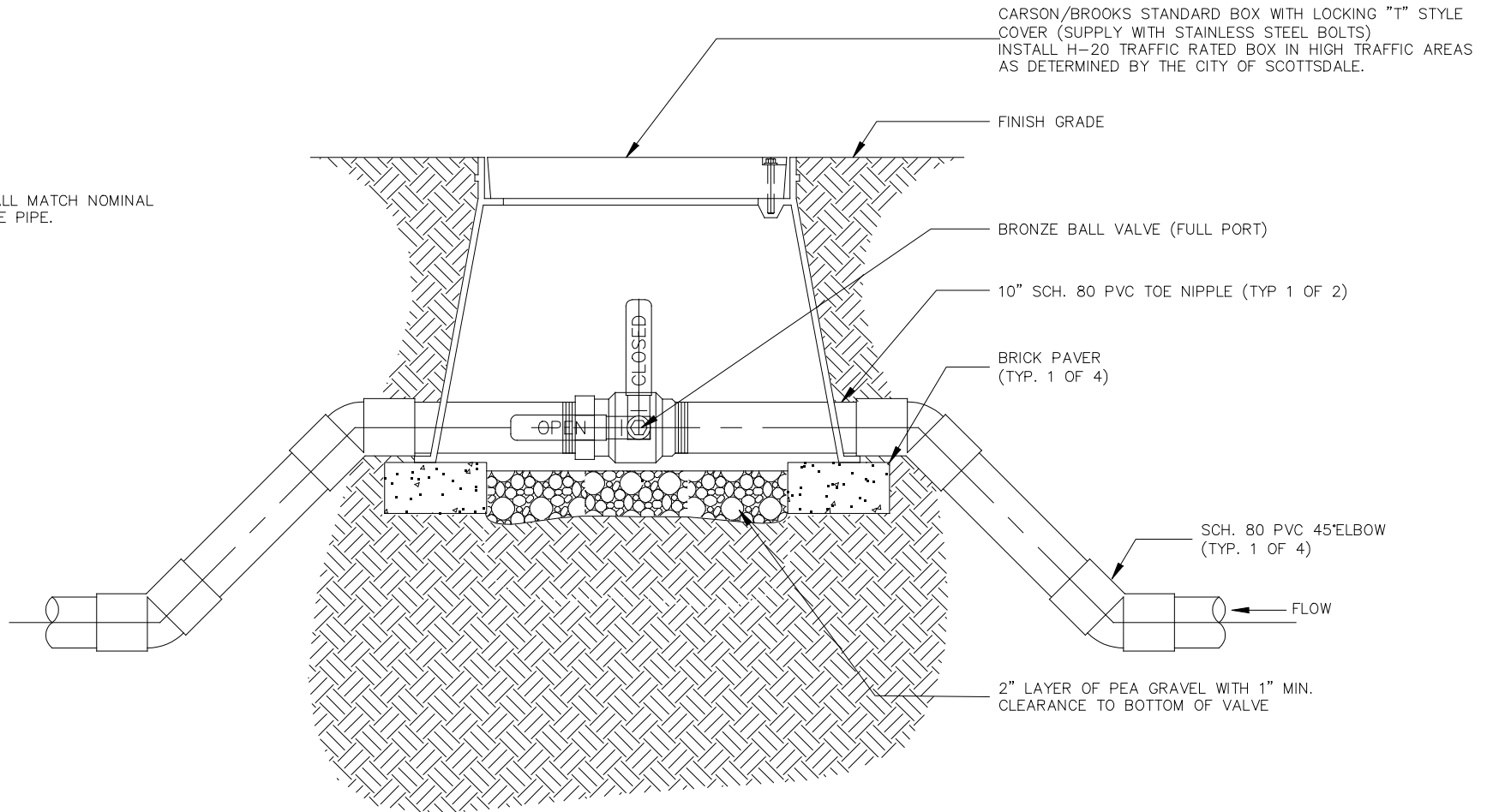
QUICK COUPLER ASSEMBLY

DETAIL NO.
2649

REVISED: 4/25/07

NOTE:

1. BALL VALVE SHALL MATCH NOMINAL SIZE OF MAINLINE PIPE.



1-1/2" & SMALLER MAINLINE ISOLATION BALL VALVE ASSEMBLY

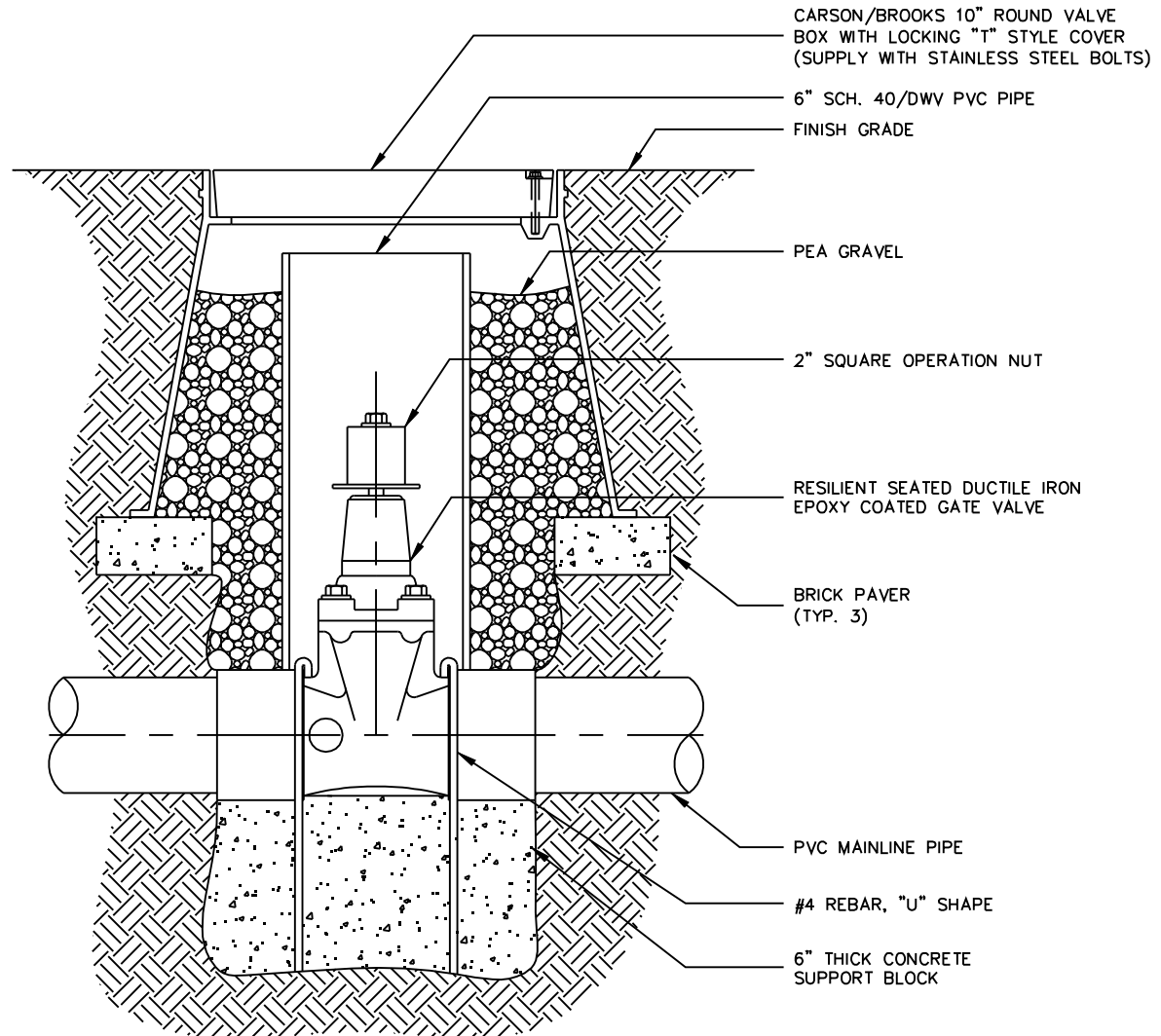
SCALE: NTS

DETAIL NO. 2650	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	1-1/2" & SMALLER MAINLINE BALL VALVE	DETAIL NO. 2650
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REVISED: 7/15/03

NOTE:

1. GATE VALVE SHALL MATCH NOMINAL SIZE OF MAINLINE PIPE.
2. PROTECT VALVE BODY WITH 10MIL PLASTIC PRIOR TO INSTALLATION OF REBAR & SUPPORT BLOCK.



**2' & LARGER MAINLINE ISOLATION
GATE VALVE ASSEMBLY**

SCALE: NTS

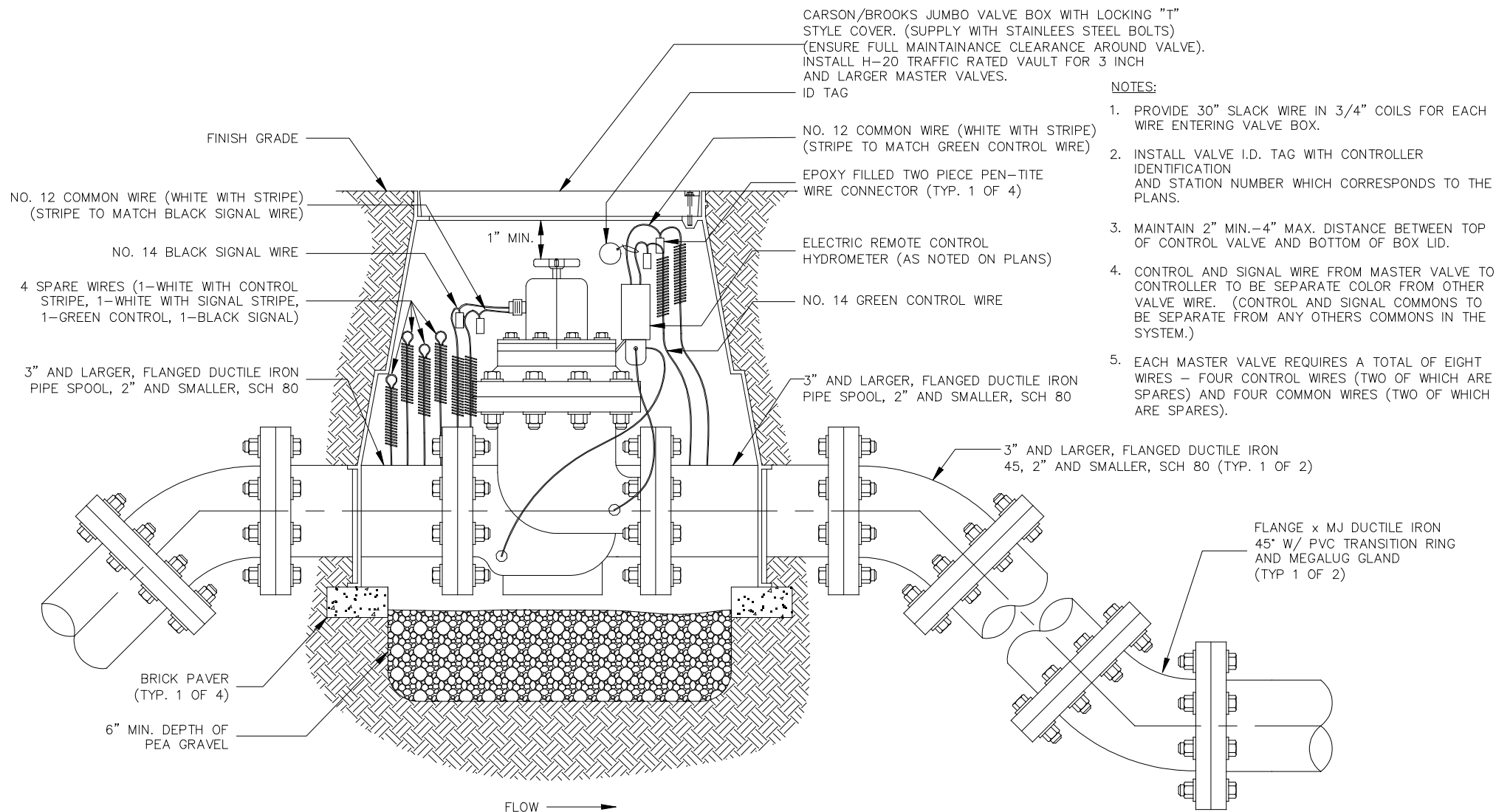
**DETAIL NO.
2651**

**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

2' & LARGER MAINLINE ISOLATION GATE VALVE

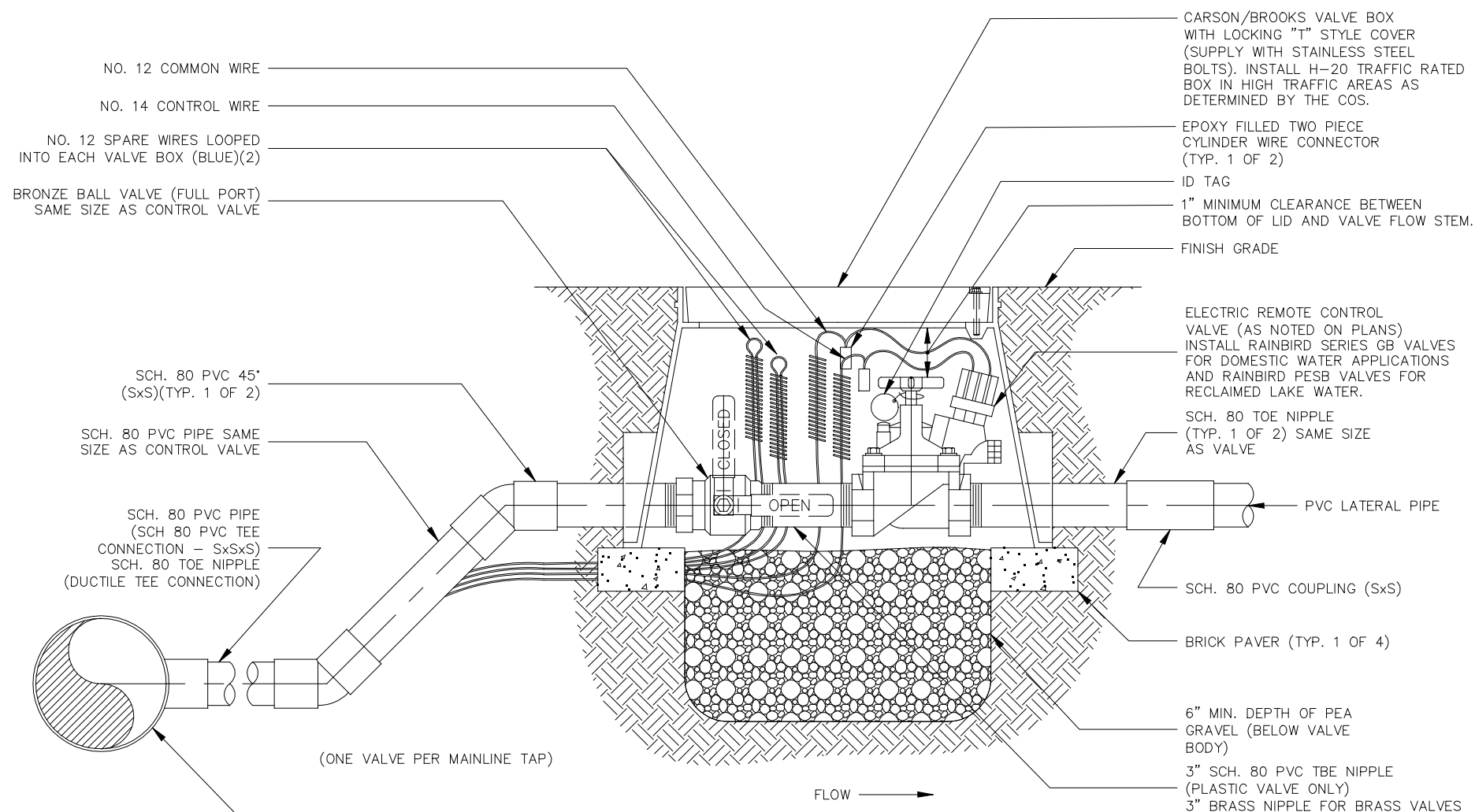
**DETAIL NO.
2651**



1 1/2" LARGER MASTER VALVE / FLOW METER ASSEMBLY

SCALE: NTS

DETAIL NO. 2653	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	1 1/2" & LARGER MASTER VALVE/FLOW METER	DETAIL NO. 2653
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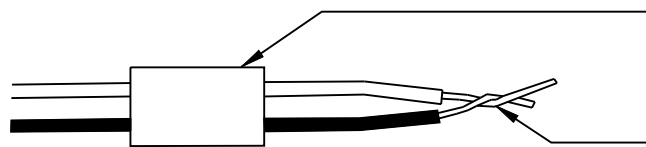


REMOTE CONTROL VALVE ASSEMBLY

SCALE: NTS

NOTES:

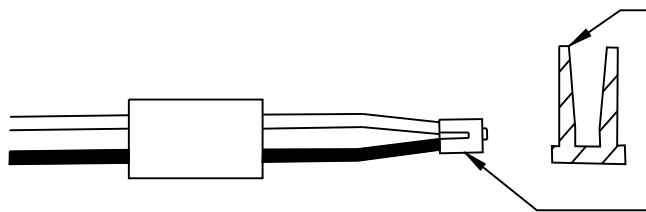
1. PROVIDE 30" SLACK WIRE IN 3/4" COILS FOR EACH WIRE ENTERING VALVE BOX.
2. INSTALL VALVE I.D. TAG WITH CONTROLLER IDENTIFICATION AND STATION NUMBER WHICH CORRESPONDES TO THE PLANS.
3. MAINTAIN 2" MIN.-4" MAX. DISTANCE BETWEEN TOP OF CONTROL VALVE AND BOTTOM OF BOX LID.
4. INSTALL D.C. LATCHING SOLENOIDS W/ D.C. CONTROLLERS.
5. FOR BRASS CONTROL VALVES, INSTALL 3" BRASS TBE NIPPLE BETWEEN BALL VALVE AND CONTROL VALVE



STEP 1

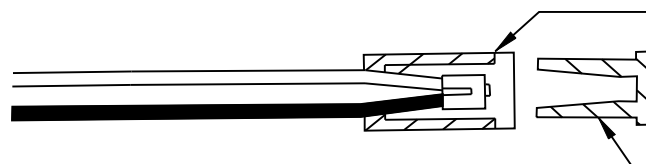
SLIP BASE SOCKET OVER
END OF WIRES

STRIP WIRES APPROX. 5/8" FROM
ENDS - TWIST ENDS TOGETHER



STEP 2

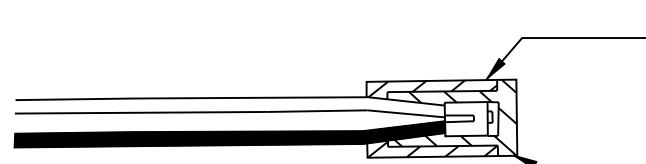
APPLY SEALER TO OUTSIDE OF SEALING
PLUG - FILL CAVITY WITH SEALER



STEP 3

PUT CRIMP SLEEVE OVER WIRE
ENDS - CRIMP SLEEVE AND CUT
OFF EXCESS WIRE

PULL BASE SOCKET OVER WIRE
END AS FAR AS POSSIBLE



STEP 4

PUSH SEALING PLUG INTO
BASE SOCKET

PUSH WIRES TO END OF BASE
SOCKET TO ASSURE COMPLETE
SEALING OF CONNECTION

DRI-SPLICE TYPE WIRE
CONNECTOR

NOTES:

1. FOR WIRE SIZES NO. 14, 12
AND 10, ALL CONNECTIONS
IN VALVE BOXES ONLY.
2. INSTALL SPEARS DS-100
DRI-SPLICE CONNECTORS
WITH DS-300 SEALANT.

DETAIL NO.
2655

**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

TYPICAL IRRIGATION WIRE CONNECTION

DETAIL NO.
2655

WIRE SIZE (AWG)	MAXIMUM NUMBER OF WIRES TO BE INSTALLED IN A SCHEDULE 40 PVC SLEEVE			WIRE SIZE (AWG)
	2"	2-1/2"	3"	
14	25	40	56	14
12	20	33	50	12

NOTE:

1. ALL WIRE SLEEVES TO BE SHC. 40 PVC AND SHALL BE INSTALLED WITH A MINIMUM OFFSET AT THE JOINTS TO PERMIT EASY INSTALLATION AND REMOVAL OF CONTROL AND COMMON WIRES. ALL WIRES SHALL BE INSTALLED IN SLEEVES UNDER THE PAVED AREAS. SLEEVES SHALL EXTEND AT LEAST 12" BEYOND THE EDGES OF THE PAVEMENT. SIZE OF SLEEVES SHALL BE AS SHOWN.

DETAIL NO.
2656

**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

IRRIGATION WIRE SLEEVING CHART

DETAIL NO.
2656



1. All Concrete Shall Be Class "B".
2. Paint Rails Per ADOT Specifications.
Color Per Plans.
3. Treated Wood Per MAG Section 779.



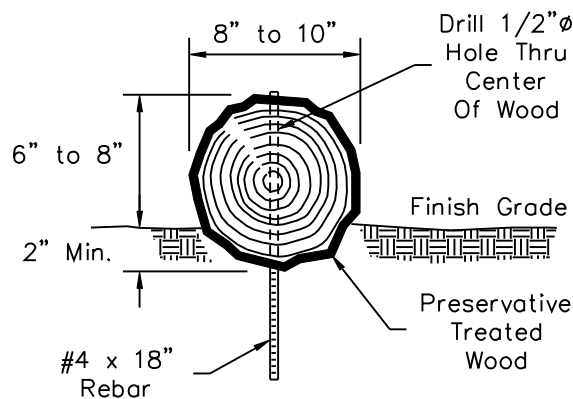


Gate barriers for Type II, III and IV gates shall be buried stones or Type I gate as shown on plan.

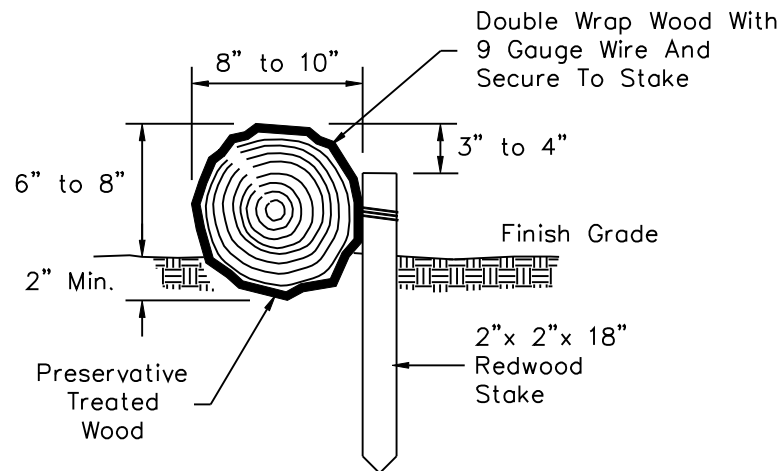


TYPE II and III GATE DIMENSIONS		
GATE BARRIER	A	B
Type I	7'	4'
Buried Rocks	4'	4'





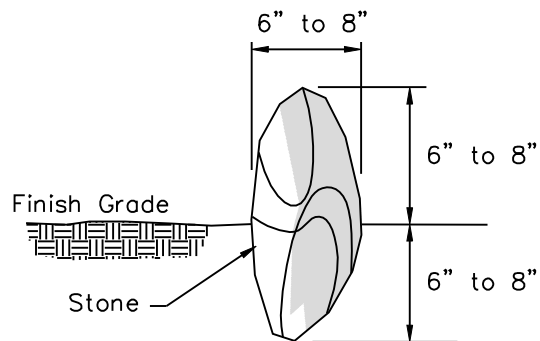
**REBAR SECURED
WOOD BARS**



**WIRE SECURED
WOOD BARS**

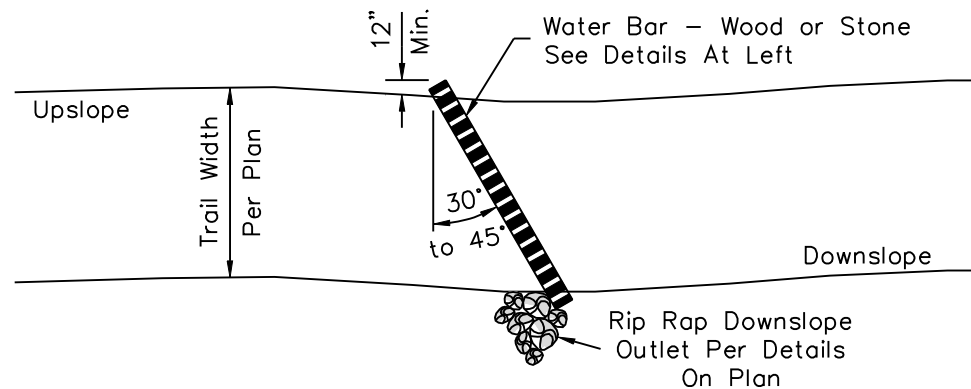
NOTES:

1. Provide water bars at a maximum 100' interval where trail grade is equal to or greater than 6% and at all locations as shown on plans.
2. Treated wood per MAG Section 779.



Stagger Stones To Provide
A Continuous Water Bar

STONE BARS



**WATER BARS
PLAN**

DETAIL NO.
2681

**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

TRAIL WATER BARS

DETAIL NO.
2681



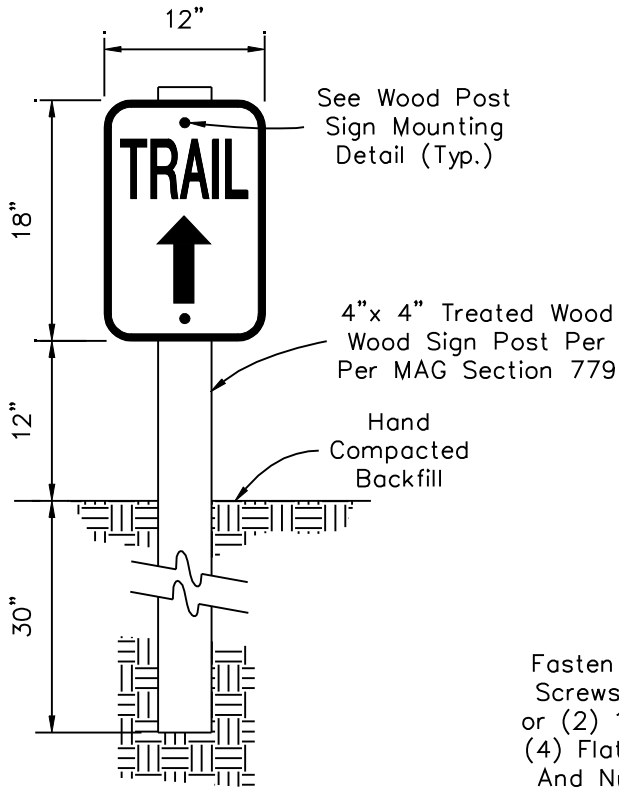
-
- 2"Ø Steel Pipe (Typ)
- 8' Max.
- 4' - 8"
- 14" 14" 14" 14"
- See Footing Detail
- Cope Pipe Ends Prior To Welding (Typical)
- Grind Smooth (Typical)
- This technical drawing illustrates a cross-section of a steel pipe pile cap. The cap is composed of four horizontal 2-inch diameter steel pipes, with a maximum length of 8 feet. The vertical spacing between the centerlines of these pipes is 14 inches. The cap is supported by four vertical footings. Dimensions indicate a total height of 4 feet to 8 feet for the cap assembly. Callouts specify that pipe ends should be coped before welding and that the surface should be ground smooth. A detail reference points to the footing connection.

STEEL RAIL

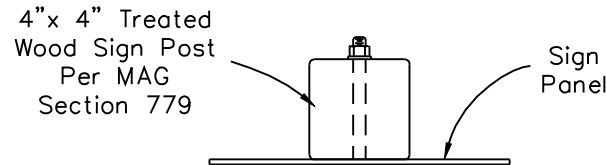


NOTES:

1. Signs shall conform to C.O.S. Supplemental Specifications, Section 402.3.
2. Signs to be mounted on square perforated tubing per C.O.S. Std Det 2131 within C.O.S. Right-of-Way. Treated wood post may be used for trail markers located outside C.O.S. Right-of Way.
3. Legends shall be reflectorized white vinyl sheeting on a green or brown vinyl background unless otherwise approved by the City of Scottsdale.

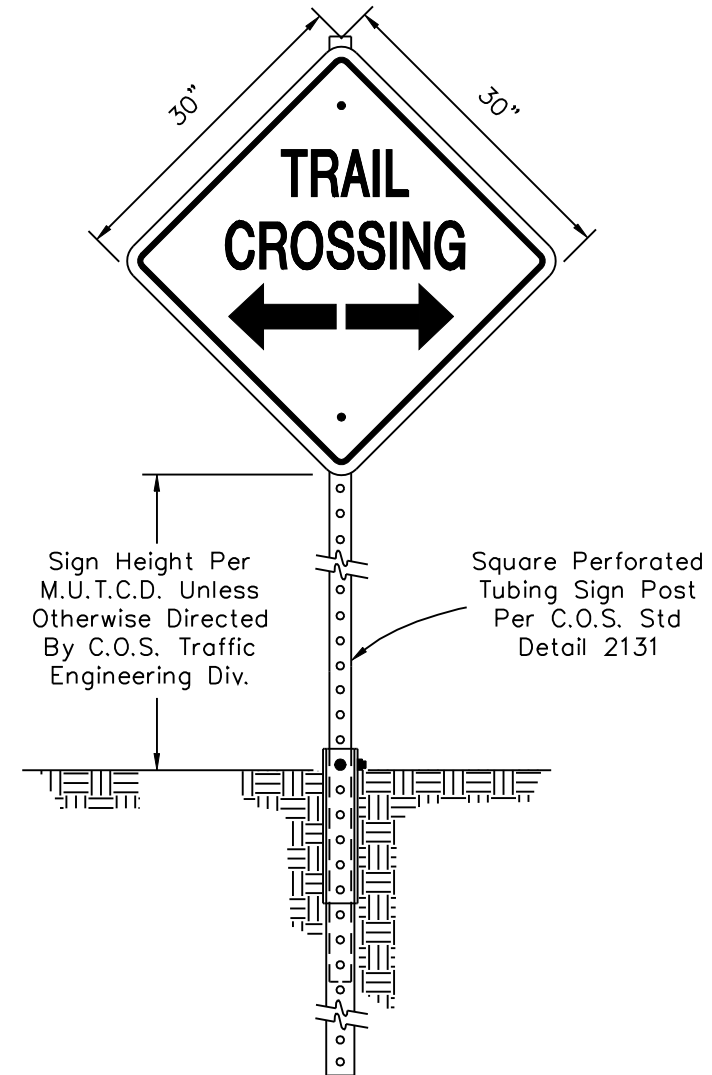


TRAIL MARKER



Fasten With (2) 1/2"x 2" Lag Screws With (2) Flat Washers or (2) 1/2"x 4 1/2" Bolts With (4) Flat Washers, Burr Threads And Nuts With Center Punch.

WOOD POST SIGN MOUNTING DETAIL



TRAIL CROSSING SIGN

DETAIL NO.
2683

**City of Scottsdale
Standard Details**

APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

TRAIL SIGNS

DETAIL NO.
2683