

MINIMUM TREE SIZE REQUIREMENTS

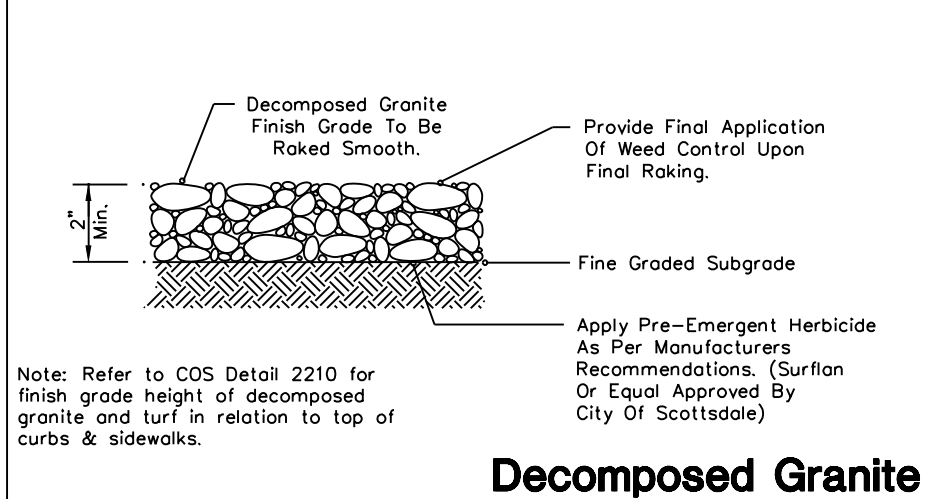
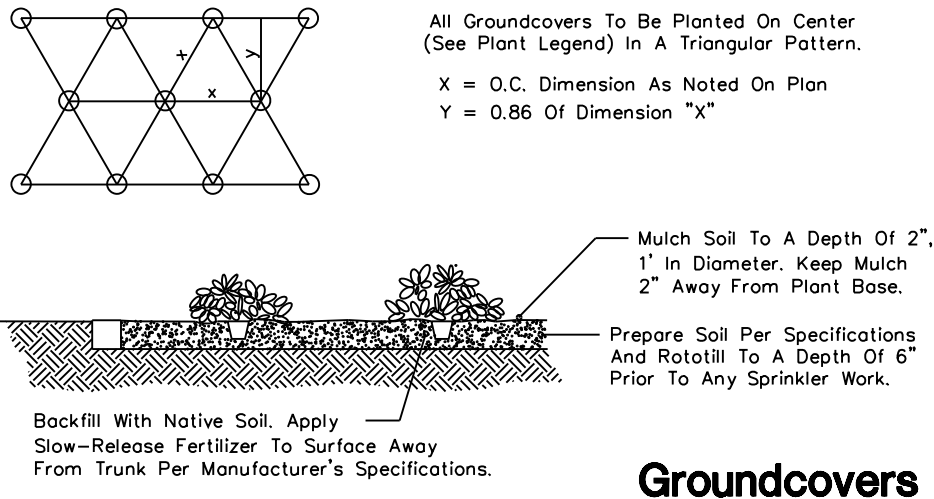
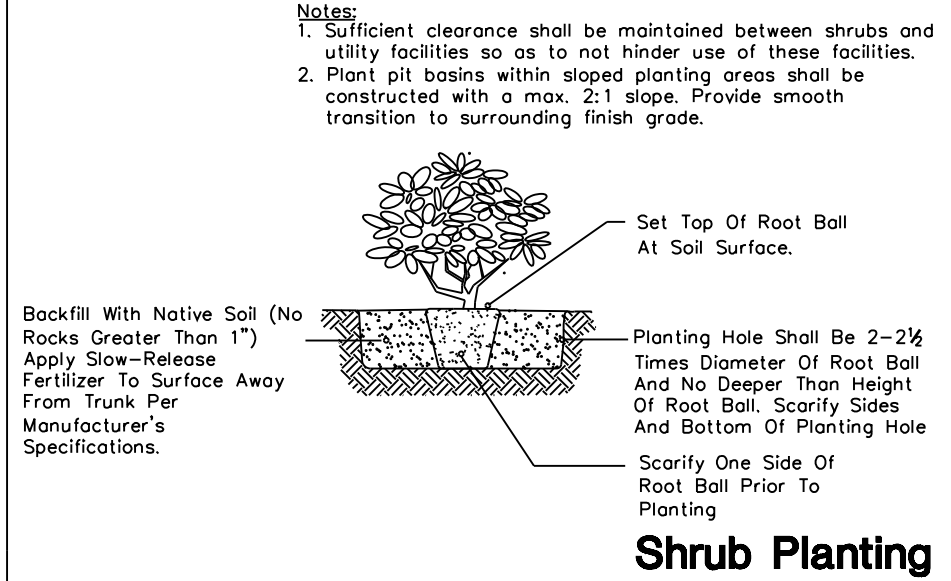
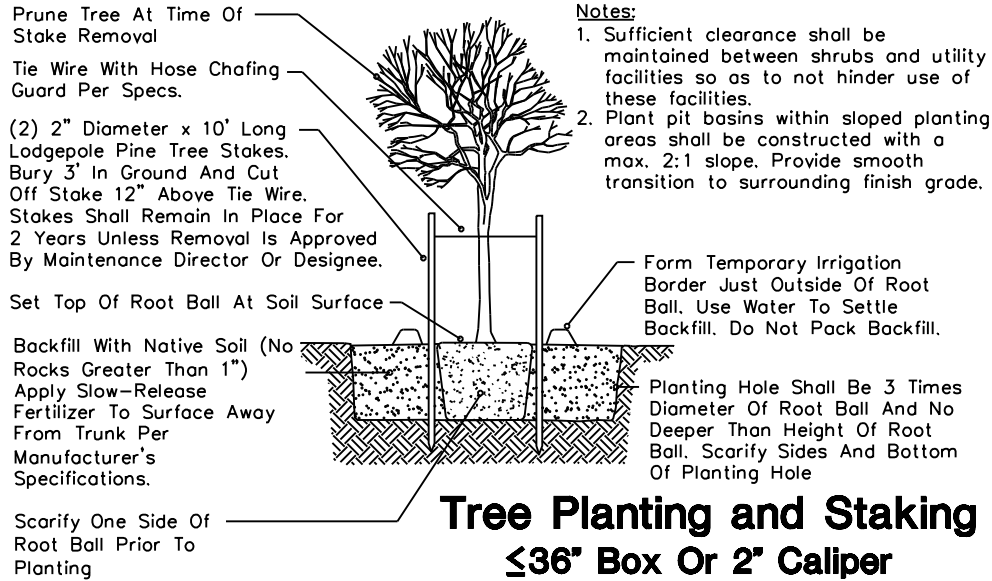
Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper
ACACIA					IRONWOOD					MESQUITE (Cont.)					OTHER TREES					COOLIBAH	15	7	3	0.75
BERLANDER\	15	4	2	0.5	DESERT IRONWOOD	15	3	2	0.5	VELVET\ ARIZONA (M)	15	5.5	3	0.5	ALEPPO	15	6	3	0.75	(EUCALYPTUS -	24	10	4	1.5
GUAJILLO (M)	24	5	4	1	(OLNEYA TESOTA)	24	6	3	1.25	(PROSOPIS VELUNTINA)	24	7	4	1	(PINUS HALEPENSIS)	24	9	4	2	MICROTHECA)	30	12	5	2
(ACACIA BERLANDIERI)	30	7	5	1.5		30	8	6	2		30	9	6	1.5		30	11	6	3		36	15	6	2.5
	36	9	6	2		36	10	8	2.5		36	10	8	2		36	14	7	3.5	CORK OAK	15	4	2	0.75
MULGA	15	5	2	0.75		42	11	9	3		42	12	10	2.5		42	16	9	4	(QUERCUS SUBER)	24	6.5	3	1.5
(ACACIA ANEURA)	24	7	4	1.5		48	12	10	3.5		48	14	12	3		48	18	10	4.5		30	9	4.5	2.5
	30	9	6	2	DESERT IRONWOOD (M)	15	3	2	0.5	PALOVERDE					ARIZONA SYCAMORE	15	7	2	1		36	12	6	3.5
	36	10	8	2.5	(OLNEYA TESOTA)	24	6	3	1.25	BLUE PALO VERDE	15	6	2	0.75	(PLATANUS WRIGHTII)	24	9	4	1.5		42	14	9	4
SHOESTRING	15	7	2.5	0.75		30	8	6	2	(PARKINSONIA FLORIDUM)	24	7.5	4	1.5		30	13	6	2.5	CORRAL GUM	15	6	2.5	0.75
(ACACIA STENOPHYLLA)	24	9	4	1.5		36	10	8	2.5		30	9	7	2		36	16	8	3.5	(EUCALYPTUS TORQUATA)	24	8	3.5	1.25
	30	11	5	2		42	11	9	3		36	10	8	2.5	ARIZONA	15	6	3	0.5	DESERT WILLOW	15	6	2	0.75
	36	13	6	2.5		48	12	10	3.5		42	12	9	3	SYCAMORE (M)	24	8	4	1	(CHILOPSIS LINEARIS)	24	7	4	1.25
	42	15	7	3	MESQUITE					BLUE PALO VERDE (M)	15	5	3	0.5	(PLATANUS WRIGHTII)	30	12	7	2		30	9	6	1.75
	48	17	8	4	CHILEAN MESQUITE	15	6	2	0.75	(PARKINSONIA FLORIDUM)	24	7	4	1		36	15	9	3		36	10	8	2.25
SHOESTRING (M)	15	7	2.5	0.5	(PROSOPIS CHILENSIS)	24	8	4	1.5		30	8	6	1.5	AUSTRALIAN WILLOW\	15	5	3	0.75	DESERT WILLOW (M)	15	5	3	0.75
(ACACIA STENOPHYLLA)	24	9	4	1		30	9	6	2		36	10	8	2	WILGA	24	8	4	1.25	(CHILOPSIS LINEARIS)	24	7	5	1
	36	13	6	2		36	10	8	2.5		42	12	9	2.5	(GEIJERA PARVIFLORA)	30	10	5	2		30	9	6	1.5
SWEET	15	6	2.5	0.75		42	12	10	3		48	14	11	3		36	12	5.5	2.5		36	10	8	2
(ACACIA SMALLII)	24	8	4	1.5		48	14	12	3.5	LITTLE LEAF	15	4	2	0.5	CHASTE TREE	15	5	3	0.75	ELDARICA	15	6	2	1.5
	30	9	6	2	CHILEAN MESQUITE (M)	15	5	3	0.5	FOOTHILLS	24	6	3	1	(VITEX ANGUS-CASTUS)	24	6	4	1.25	(PINUS ELDARICA)	24	10	4	2
	36	10	8	2.5	(PROSOPIS CHILENSIS)	24	8	5	1	(PARKINSONIA	30	7	5	1.5		36	8	6	2.5		30	13	4	3
	42	12	10	3		30	9	7	1.5	MICROPHYLLUM)	36	8	6	2	CHINESE EVERGREEN	15	7	2	0.75		36	15	5	4
	48	14	12	3.5		36	10	9	2	LITTLE LEAF	15	4	3	0.5	ELM	24	8	3	1.25		42	18	7	4.5
SWEET (M)	15	5	3	0.5		42	12	11	2.5	FOOTHILLS (M)	24	5	4	1	(ULMUS PARVIFOLIA)	30	12	6	2		48	20	9	5.5
(ACACIA SMALLII)	24	8	5	1		48	14	13	3	(PARKINSONIA	30	6	5	1.5		36	14	8	2.5	FEATHER BUSH	15	5	3	0.75
	30	9	7	1.5	HONEY MESQUITE (M)	15	6	2	0.75	MICROPHYLLUM)	36	8	7	2	CHINESE PISTACHE	24	9	4	1.5	FERN OF THE DESERT	24	6.5	4	1.25
	36	10	9	2	(PROSOPIS -	24	8	4	1.5	SONORAN	15	6	2	0.75	(PISTACIA CHINENSIS)	48	18	10	3.75	(LYSILOMA THORNBURI)	30	7	6.5	2
	42	12	10	2.5	GLANDULOSA)	30	9	6	2	(PARKINSONIA PRAECOX)	24	7	4	1.5		15	7	2	0.75		36	8	6	2.5
	48	14	12	3		36	10	8	2.5		30	8	6	2		24	9	4	1.5	FEATHER BUSH\ FERN	15	4	3	0.75
WILLOW\	15	6	2	0.75		42	12	10	3		36	10	8	2.5		30	10	5	2.5	OF THE DESERT(M)	24	5	5	1
AUSTRALIAN WILLOW	24	8	4	1.5		48	14	12	3.5		42	11	10	3		36	12	6	3.5	(LYSILOMA THORNBURI)	30	7	7	1.5
(ACACIA SALICINA)	30	10	5	2	SCREW BEAN (M)	15	5.5	3	0.5		48	12	12	3.5	CHIR PINE\ INDIAN	15	5	3	1		36	8	8	2
	36	14	6	2.5	(PROSOPIS -	24	8	4	1	SONORAN (M)	15	5	2	0.5	LONG LEAF	24	8	4	2					
					PUBESCENS)	30	9	6	1.5	(PARKINSONIA PRAECOX)	24	7	4	1	(PINUS ROXBURGHII)	30	11	6	2.5					
						36	10	8	2		30	8	6	1.5		36	15	6.5	3.5					
						42	12	10	3		36	10	8	2		42	17	8	4.5					
See General Notes						48	14	12	3.5		42	11	10	2.5		48	20	9	5	Page 1 of 2				
											48	12	12	3										
DETAIL NO.	City of Scottsdale				APPROVED BY:				MINIMUM TREE SIZE REQUIREMENTS												DETAIL NO.			
2600-1	Standard Details				Scottsdale Standards & Specifications Committee																2600-1			

MINIMUM TREE SIZE REQUIREMENTS

Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper	Name	Size	Height	Width	Caliper
FICUS (FICUS NITIDA)	15	8	2	0.75	MEXICAN PALO VERDE	15	7	3	1	RED GUM	15	8	3	1	SILK TREE MIMOSA (M)	15	5	3.5	0.5	SILK TREE MIMOSA	15	6	3	0.75
	24	9	4	1.5	JERUSALEM	24	9	6	1.5	(EUCALYPTUS- CAMALDULENSIS)	24	10	4	1.75	(ALBIZIA JULIBRISSIA)	24	6.5	5	0.75	(ALBISIA JULIBRISSIN)	24	8	4	1.5
	30	10	5	2	(PARKINSONIA ACULEATA)	30	11	9	2.5							30	6	6	1		30	10	6	2
	36	12	6	3		36	12	10	3	RED IRON BARK	15	8	3	0.75		36	10	8	2.5		36	12	8	3
FICUS (M) (FICUS NITIDA M)	15	5.5	3	0.5	MODESTO ASH	15	8	2	1	(EUCALYPTUS - SIDEROXYLON)	24	10	4	1.5	SILVER DOLLAR GUM	15	7	3	0.75	TEXAS EBONY (M)	15	4	2	0.5
	24	8	4	1	(FRAXINUS V MODESTO)	24	10	4	1.5					(EUCALYPTUS- POLYANTHEMOS)	24	10	4	1.5	(PITHECELLUBIUM- FLEXICAULE)	24	6	4	1	
	30	10	6	2		30	12	6	2	RIO GRANDE\ FAN	15	7	2	0.75						30	7	6	1.5	
	36	12	8	2.5		36	14	7	2.5	TEXAS ASH	24	9	4	1.25	SISSOO	15	7	3	0.75		36	9	8	2
FLOODED GUM (EUCALYPTUS RUDIS)	15	8	3	1		42	16	8	3	(FRAXINUS V FANTEX)	30	12	5	2	(DALBERGIA SISSOO)	24	10	4	1.25		42	10	10	2.5
	24	10	4	1.5		48	17	10	3.5		36	14	8	2.5		30	12	7	2.5		48	11	11	3
FLOWERING CHERRY (PRUNUS VARIETIES)	15	6	2.5	0.75	NARROW LEAF GIMLET	15	6	2.5	0.75		42	15	9	3.5	SOUTHERN LIVE OAK\	36	15	10	3	YELLOW OLEANDER	15	6	2	0.5
	24	9	4	1.25	SWAMP MALLET	24	8	3	1	SHAMEL\ EVERGREEN	48	16	10	4	(QUERCUS VIRGINIANA)	15	6	2	0.75	(THEVETIA PERUVIANA)	24	8	4	1.25
	30	11	8	2	(EUCALYPTUS - SPATHULATA)					(FRAXINUS UHDEI)	15	8	2	1	HERITAGE	24	9	4	1.25					
	36	13	10	2.5							24	10	4	1.5		30	11	6.5	2					
	42	15	11	3	OLIVE TREE	15	5	3	0.5		30	12	5	2.5		36	13	8	2.75					
HONEY LOCUST (GLEDITSIA TRIACANTHOS INERMIS)	48	17	12	3.5	(OLEA EUROPAEA)	24	8	5.5	1.5		36	14	8	3		42	15	10	3.5					
	15	8	2	0.75	'SWAN HILL'	30	11	9	2		42	15	9	3.5		48	17	12	4.5					
	24	9	4	1.5		36	12	10	3	SILK OAK	48	16	10	4	(PITHECELLOBIUM- FLEXICAULE)	15	5	2	0.75					
	30	10	6	2		42	14	12	3.5	(GREVILLEA ROBUSTA)	15	8	3	1		24	6	3	1.5					
	36	12	8	2.5		48	16	14	4		24	10	4	2		30	7	4	2					
	42	14	10	3	ORCHID TREE	15	8	2	0.75		30	12	6	2.5		36	9	6	2.5					
JACARANDA (JACARANDA ACUTIFOLIA)	48	16	12	3.5	(BAUHINIA)	24	9	4	1.25		36	14	7	3		42	10	6	3					
	15	8	2	0.75		30	11	6	2							48	11	7	3.5					
	24	9	4	1.5		36	13	7	2.5															
	30	12	5	2.5	RAYWOOD ASH\	15	8	4	1															
	36	14	8	3	CLARET ASH	24	10	3	1.5															
JACARANDA (M) (JACARANDA- ACUTIFOLIA)	42	16	8	3.5	(FRAXINUS O RAYWOODII)	30	12	5	2															
	48	18	9	4		36	14	8	2.5															
	15	5.5	3	0.5		42	16	10	3															
	24	8	5	0.75		48	18	12	4															
MESCAL BEAN\ TEXAS MOUNTAIN LAUREL (SOPHORA - SECUNDIFLORA)	30	10	6	1.5	RED CAP GUM	15	6.5	2.4	0.75															
	36	12	7	2	(EUCALYPTUS- ERYTHROCORYES)	24	8	4	1.25															
	15	3	1	0.75																				
	24	4	2	1																				
MESCAL BEAN\ TEXAS MOUNTAIN LAUREL (M) (SOPHORA - SECUNDIFLORA)	30	5	3	1.75																				
	36	6	4	2																				
	15	3	2	0.75																				
	24	4	3	1																				
	30	5	4	1.5																				
	36	6	5	2																				
DETAIL NO. 2600-2	City of Scottsdale Standard Details				APPROVED BY: Scottsdale Standards & Specifications Committee	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.															DETAIL NO. 2600-2			

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.
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4. Size is listed as the box size in inches except for those trees in 15 gallon containers.



DETAIL NO.
2620-1

City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards & Specifications Committee

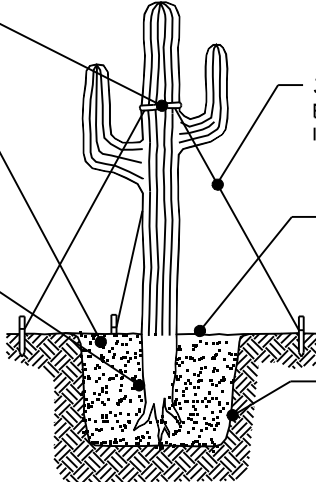
LANDSCAPE DETAILS

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 ML 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.

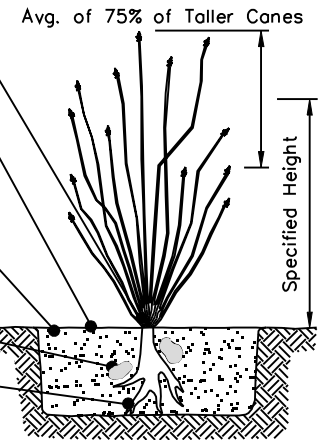
Plant At Depth Which Plant Was Grown.

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 ML min.) At Planting Site.

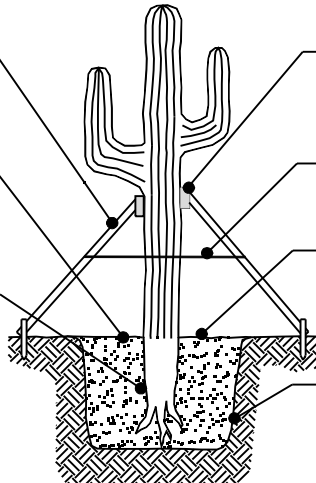


Ocotillo Planting

(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 ML 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.

Plant At Depth Which Plant Was Grown.

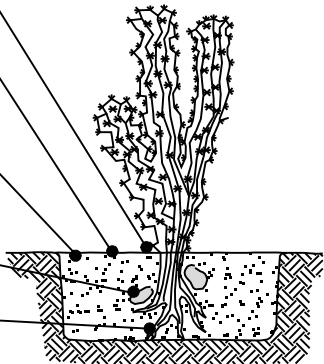
Planting Mix To Be 1/3 Golf Sand And 2/3 Specified Soil. Pack The Backfill Mix, Do Not Use Water To Settle Backfill Mix.

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 ML min.) At Planting Site.

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



Cactus Planting

DETAIL NO.

2620-2

City of Scottsdale
Standard Details

APPROVED BY:

Scottsdale Standards & Specifications Committee

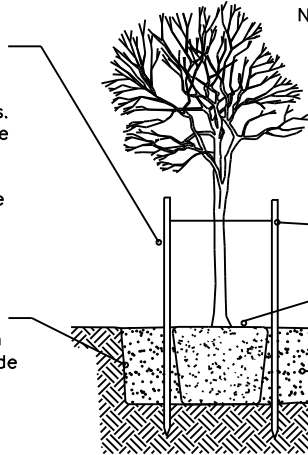
LANDSCAPE DETAILS

DETAIL NO.

2620-2

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 Tie Wire. Stakes Shall Remain In Place For 2 Years Unless Removal Is Approved By Maintenance Director Or Designee.

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.



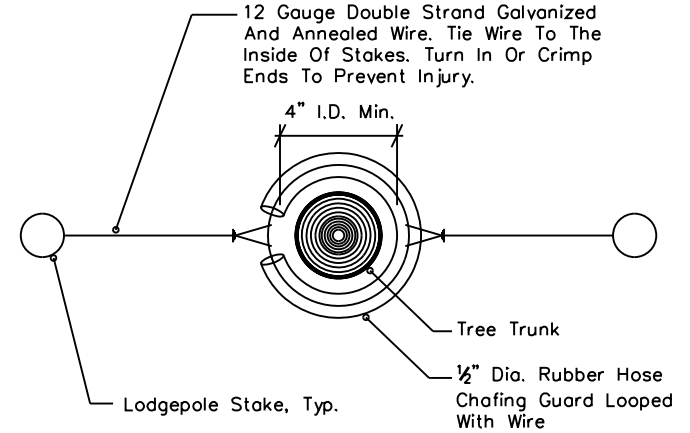
- Notes: 1. Sufficient clearance shall be maintained between trees and utility facilities so as to not hinder use of these facilities.
2. Plant pit basins within sloped planting areas shall be constructed with a max. 2:1 slope. Provide smooth transition to surrounding finish grade.

Tie Wire With Hose Chafing Guard Per Specs. As Required.

Set Top Of Root Ball At Soil Surface.

Planting Hole Shall Be 3 Times Diameter Of Root Ball And No Deeper Than Height Of Rootball. Scarify Sides And Bottom Of Planting Hole

Salvaged Tree Planting



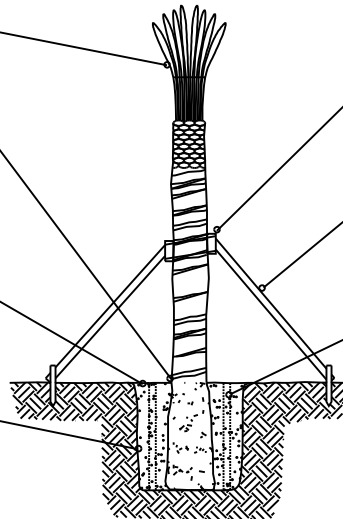
Tree Staking - Plan View

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.

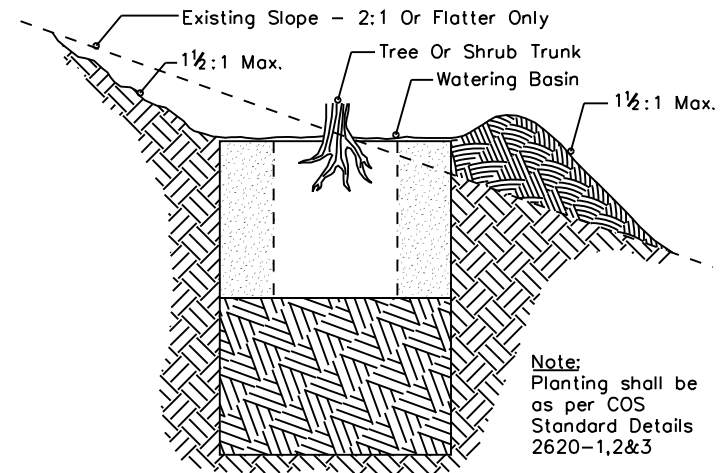


2"x 4" Blocking Nailed To Brace. Tie To Trunk With 1" (Min.) Vinyl Tie.

(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



Note: Planting shall be as per COS Standard Details 2620-1,2&3

Tree & Shrub On Slope Planting

DETAIL NO.

2620-3

City of Scottsdale
Standard Details

APPROVED BY:

Scottsdale Standards &
Specifications Committee

LANDSCAPE DETAILS

DETAIL NO.

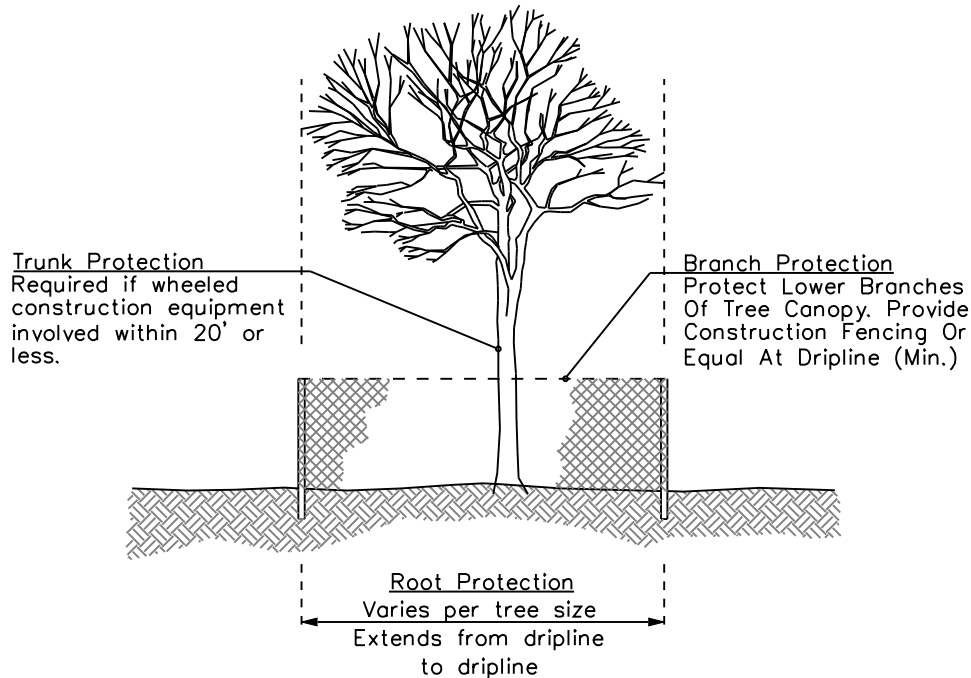
2620-3

Note:
No Materials Shall Be
Stored Within The Tree
Protection Areas

Place Signs:

KEEP OUT
TREE PROTECTION
AREA

Every 50' Attached To Fencing



Tree Protection

NOTES:

1. All trees to be protected within the construction area shall be identified with white survey tape wrapped around the trunk. Grouping of more than one tree within the tree protection zone may occur.
2. To prevent tree root smothering, soil stockpiles, supplies, equipment or any other material shall not be placed or stored within a tree drip line or within 25 feet of a tree trunk, whichever is greater.
3. Trenches shall be hand dug within the drip line in areas where roots two inches in diameter and greater are present, or when in close proximity to low branching trees. Whenever possible, roots two inches or greater in diameter shall be tunneled or bored under and shall be covered to prevent dehydration.
4. Tree roots shall not be cut unless cutting is unavoidable. When root cutting is unavoidable, a clean sharp cut with an approved pruning saw shall be made to avoid shredding or smashing. Root cuts should be made back to a lateral root. Whenever possible, tree roots should be cut between late fall and bud opening, when root energy supplies are high and conditions are least favorable for disease-causing agents. Exposed roots shall be covered immediately to prevent dehydration. Roots shall be covered with soil or burlap and kept moist. Backfill material around damaged roots shall be a light mulch/sand mixture to promote root recovery.
5. Watering of protected trees in which roots were cut shall be provided by the contractor. Watering schedule to be established by City arborist.
6. Horizontal boring rather than trenching should be used for utility placement within drip line of tree whenever possible.
7. Fencing material shall encircle any tree whose outer drip line edge is within 25 feet of any construction activities.
8. Fencing material shall be orange construction fence a minimum of 4 feet in height.
9. Fencing material shall be set at the drip line or 25 feet from tree trunk, whichever is greater, and maintained in an upright position throughout the duration of construction activities.
10. Any grade changes or retaining wall/tree well installation within the drip line shall be approved by City arborist.

DETAIL NO.

2620-4

**City of Scottsdale
Standard Details**

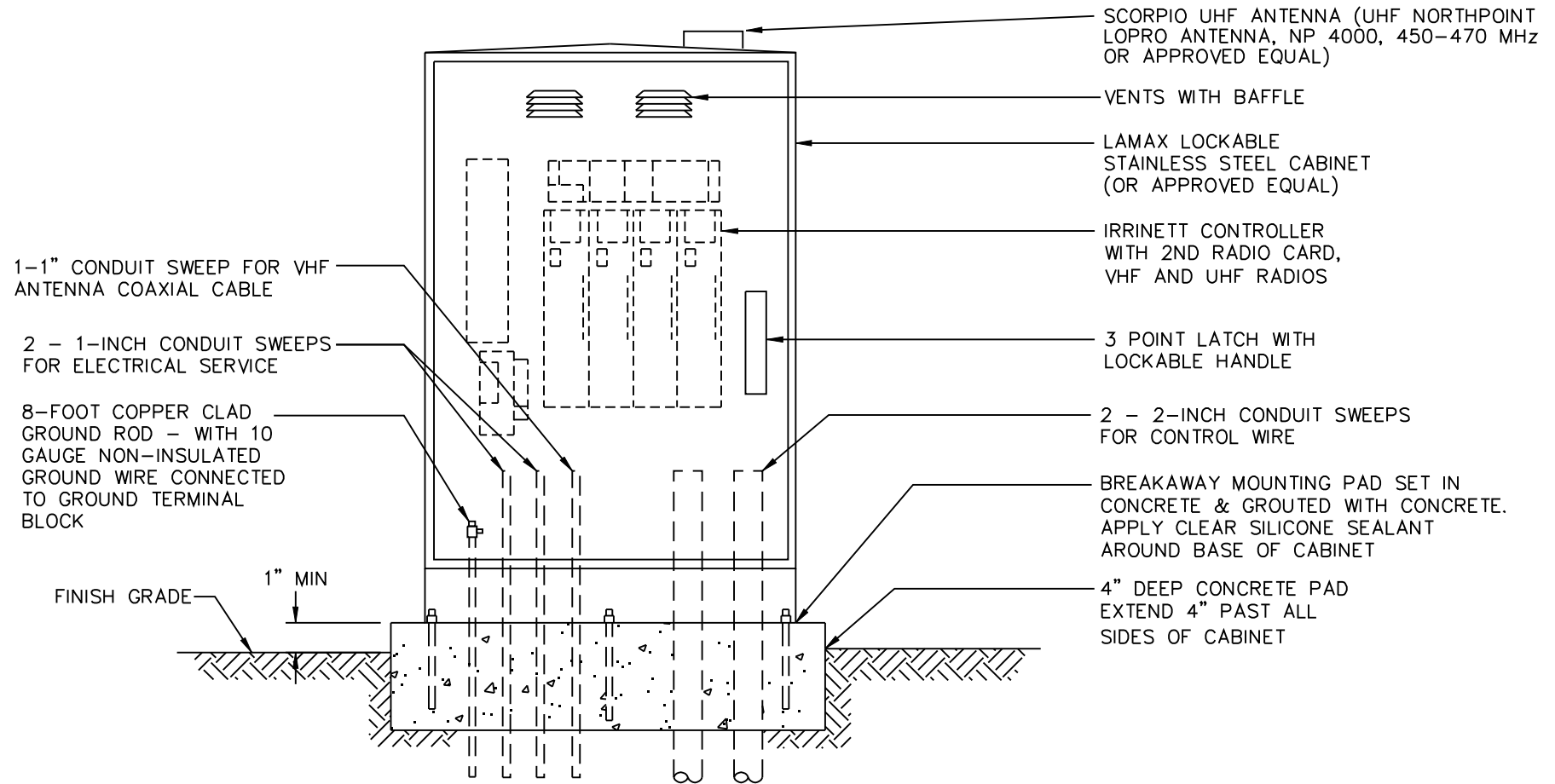
APPROVED BY:

**Scottsdale Standards &
Specifications Committee**

LANDSCAPE DETAILS

DETAIL NO.

2620-4



NOTES:

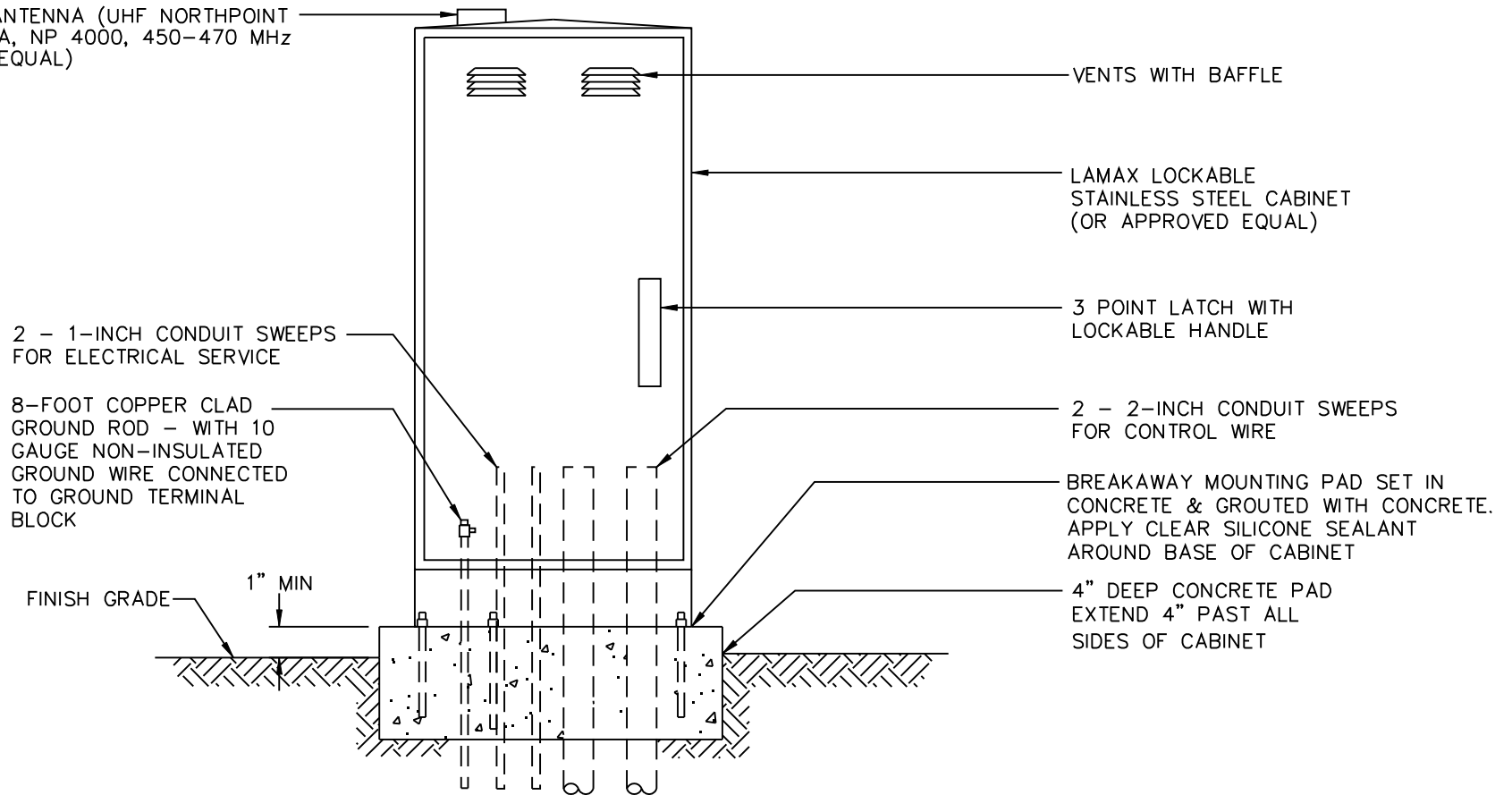
1. POWER SOURCE FOR CONTROLLER TO BE HARD WIRED FROM CIRCUIT BREAKER MOUNTED INSIDE CABINET TO CONTROLLER.
2. LOCATION OF POWER SOURCE TO BE NOTED ON CIRCUIT BREAKER PANEL.
3. PROGRAMMING KEYPAD TO BE SUPPLIED WITH CONTROLLER.
4. CONTROLLER TO BE LOCATED IN AREA WITH POSITIVE DRAINAGE.
5. INSTALL ONLY 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. ANTENNA TYPE, MAST & MOUNTING INSTALLATION TO BE APPROVED BY CITY OF SCOTTSDALE IRRIGATION DEPARTMENT.
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.
2631City of Scottsdale
Standard DetailsAPPROVED BY:
Scottsdale Standards &
Specifications Committee

IRRINET PEDESTAL MOUNTED CONTROLLER

DETAIL NO.
2631

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



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. MIDLAND 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)

VENTS WITH BAFFLE

3 POINT LATCH WITH
LOCKABLE HANDLE

2-INCH MALE ADAPTER
WITH LOCK RING

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

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. MIDLAND 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.

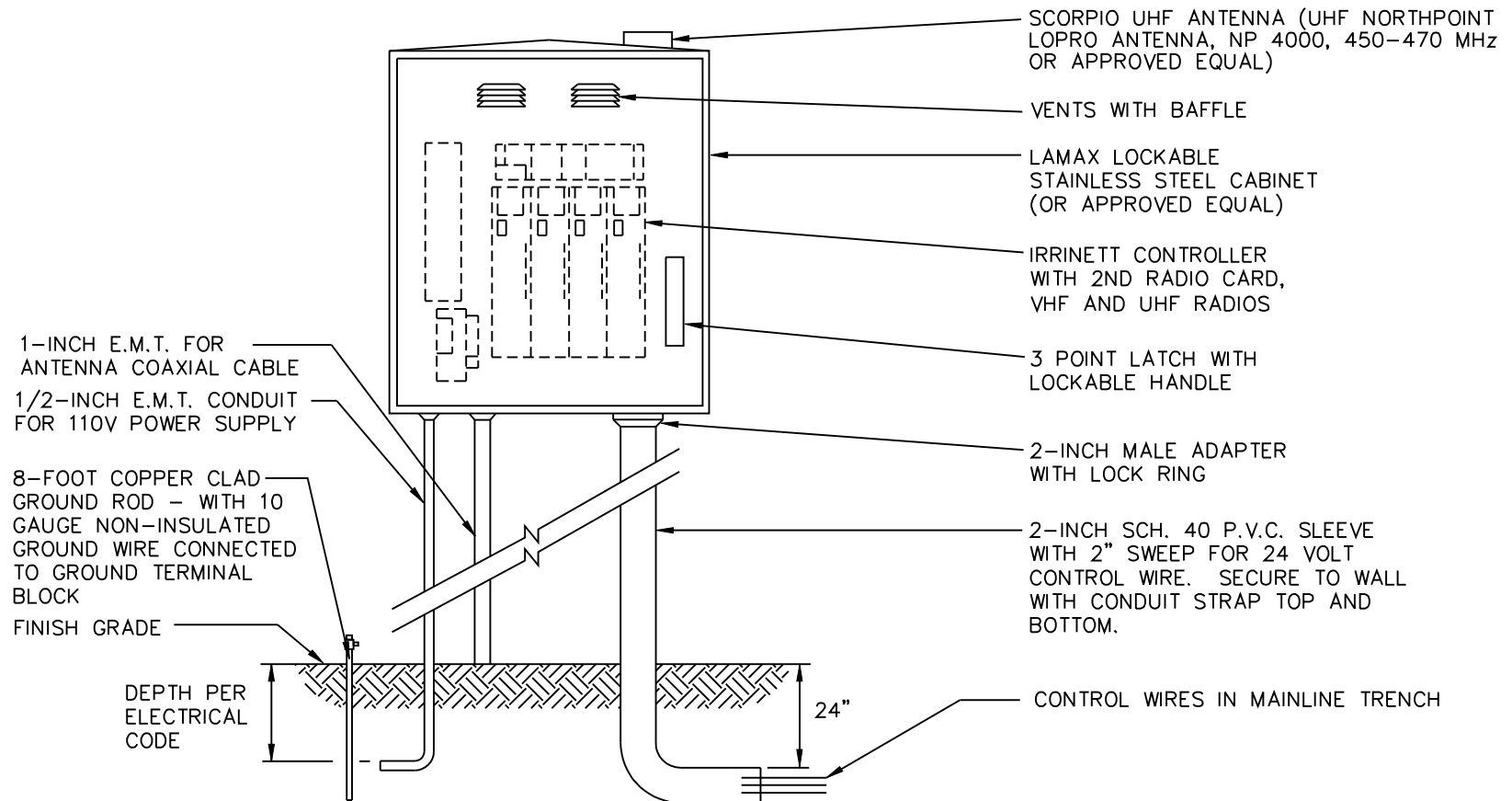
DETAIL NO.
2633

City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards &
Specifications Committee

SCORPIO WALL MOUNTED CONTROLLER

DETAIL NO.
2633



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. ANTENNA TYPE, MAST AND MOUNTING INSTALLATION TO BE APPROVED BY COS IRRIGATION DEPARTMENT.

DETAIL NO.
2634

City of Scottsdale
Standard Details

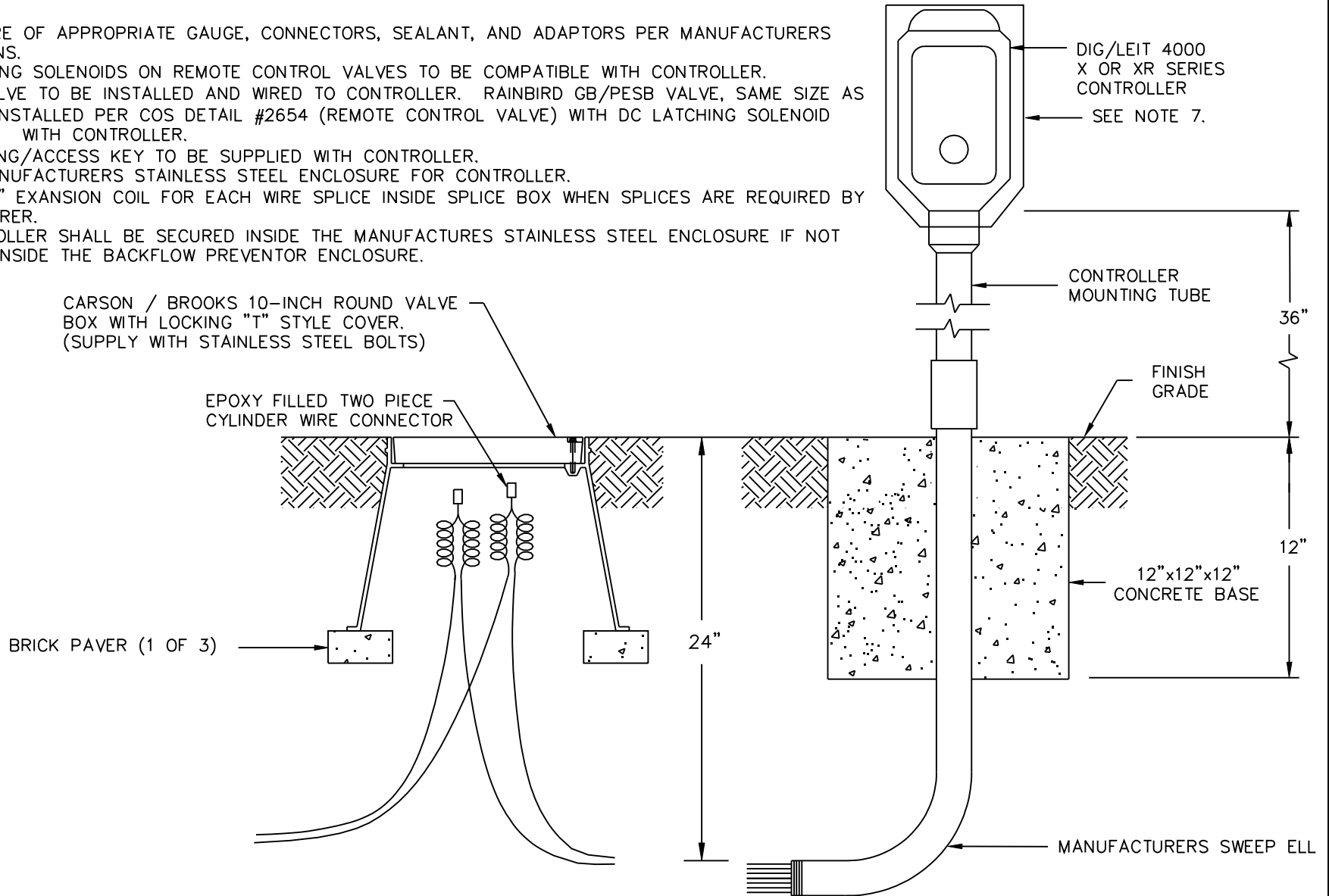
APPROVED BY:
Scottsdale Standards &
Specifications Committee

IRRINET WALL MOUNTED CONTROLLER

DETAIL NO.
2634

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.



DETAIL NO.
2635-1

City of Scottsdale
Standard Details

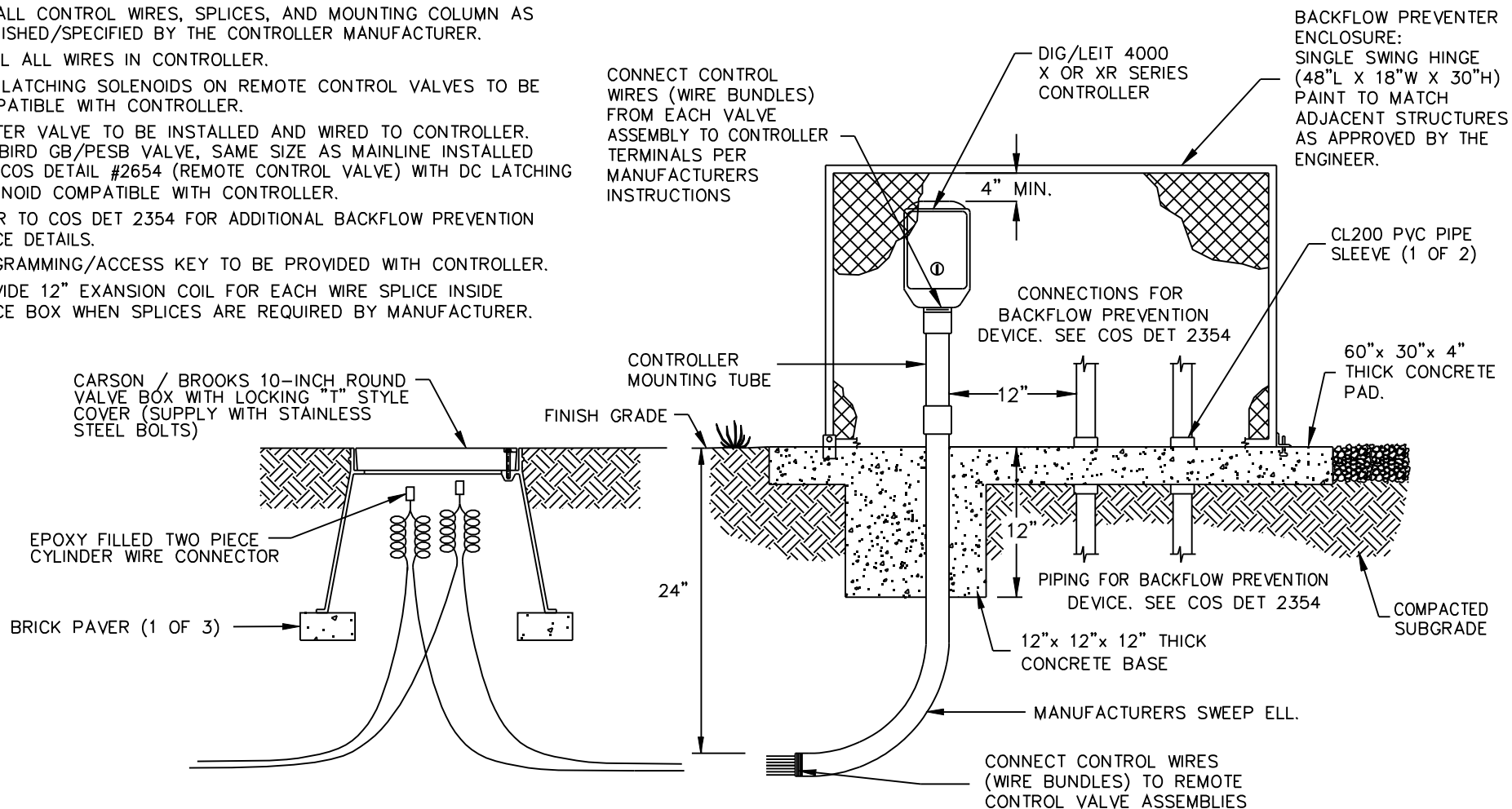
APPROVED BY:
Scottsdale Standards & Specifications Committee

SOLAR CONTROLLER

DETAIL NO.
2635-1

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.

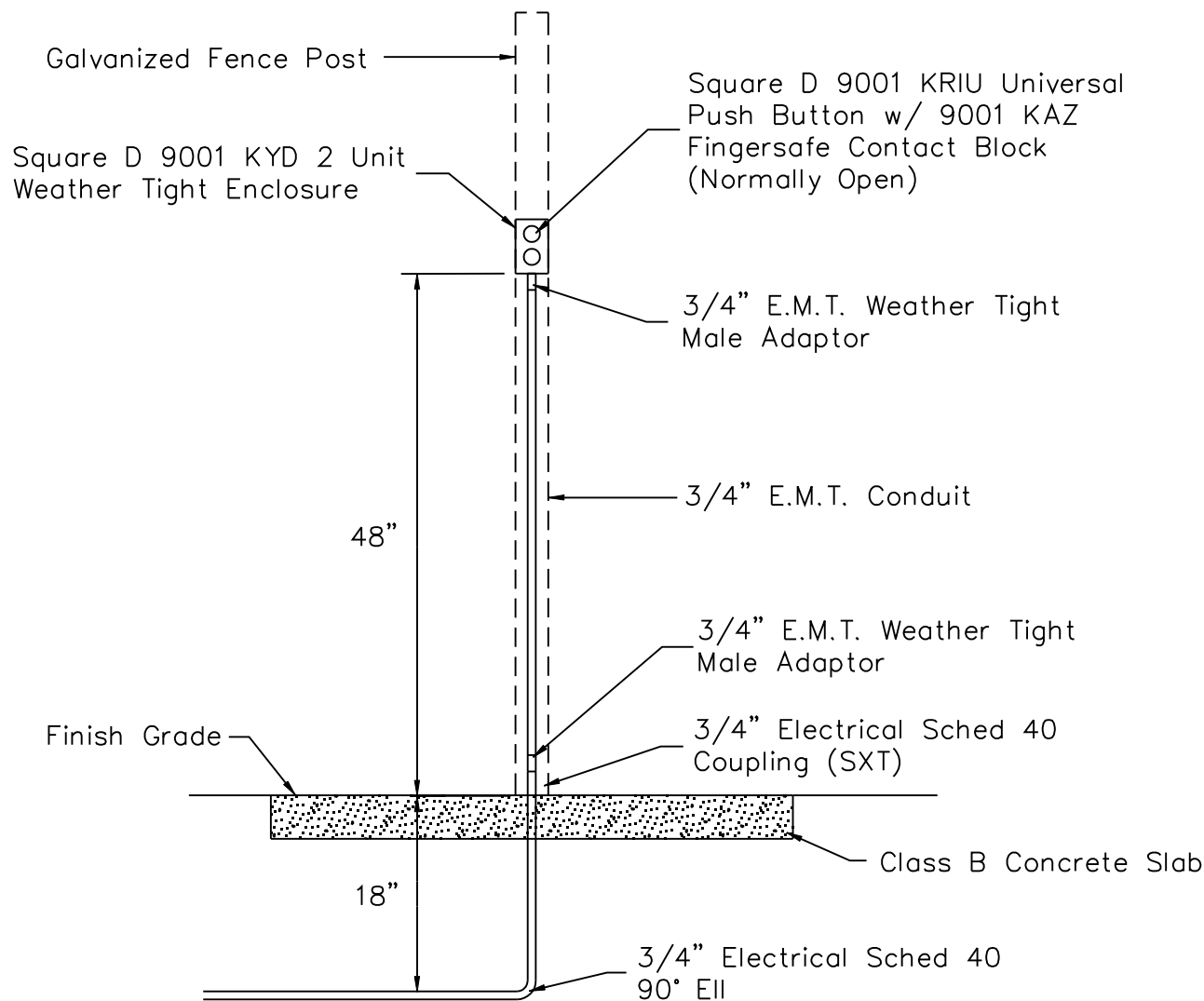


DETAIL NO. **2635-2** **City of Scottsdale**
Standard Details

APPROVED BY:
Scottsdale Standards & Specifications Committee

SOLAR CONTROLLER AND BACKFLOW PREVENTER ENCLOSURE

DETAIL NO.
2635-2



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.

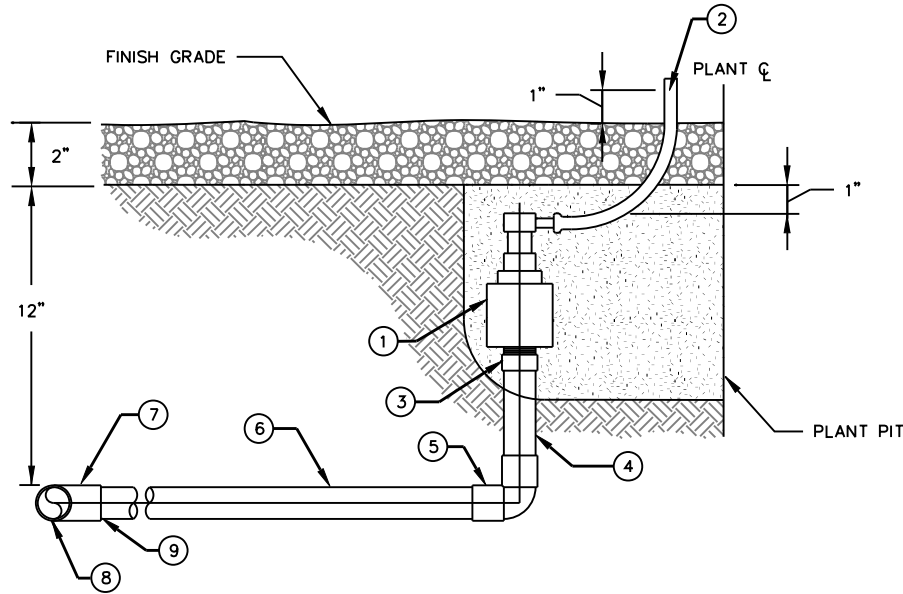
DETAIL NO.
2636

**City of Scottsdale
Standard Details**

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

IRRIGATION PUSH BUTTON CONTROL

DETAIL NO.
2636



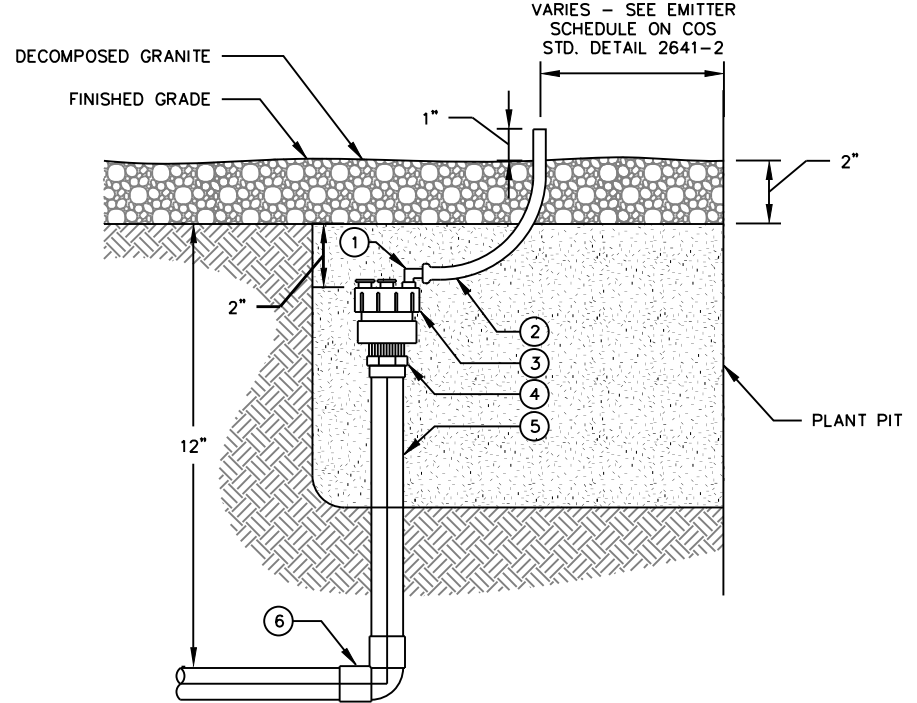
**SINGLE OUTLET EMITTER
ALL SHRUBS & GROUND COVER**
SCALE: NTS

LIST OF MATERIALS

- ① BOWSMITH SL 200 SERIES SINGLE PORT EMITTER OR APPROVED EQUAL. LOCATE ON UPHILL SIDE OF PLANT CENTERLINE
- ② 1/4" POLYETHYLENE 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. POLYETHYLENE 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" POLYETHYLENE FLEX HOSE EMITTER TUBING (6' MAX.)
- ③ BOWSMITH ML 200 SERIES MULTI-PORT EMITTER OR APPROVED EQUAL. LOCATE ON UPHILL SIDE OF PLANT C
- 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

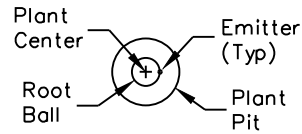
DETAIL NO.
2641-1

**City of Scottsdale
Standard Details**

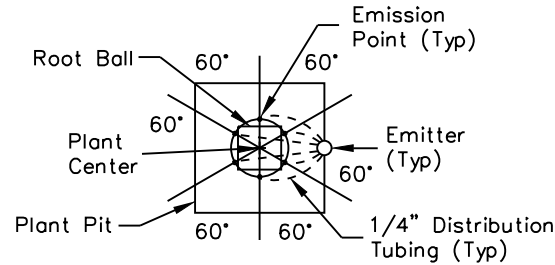
APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

SINGLE & MULTI-OUTLET EMITTERS

DETAIL NO.
2641-1

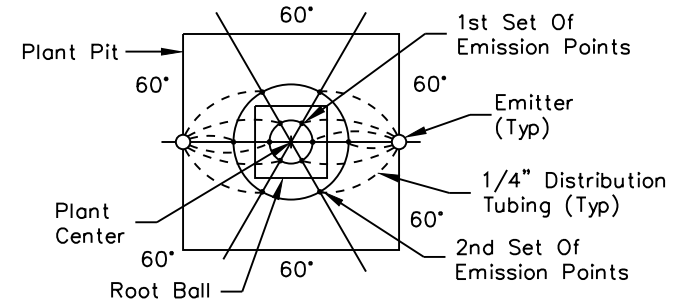


**SHRUB EMITTER
SINGLE OUTLET**



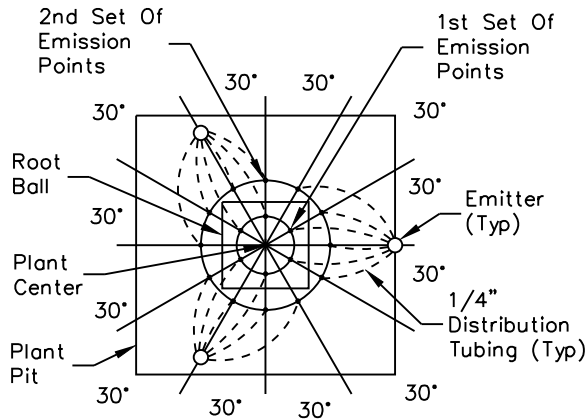
**TREE EMITTER - MULTI OUTLET
15 GAL TO 42" BOX TREES**

(SEE EMITTER SCHEDULE)



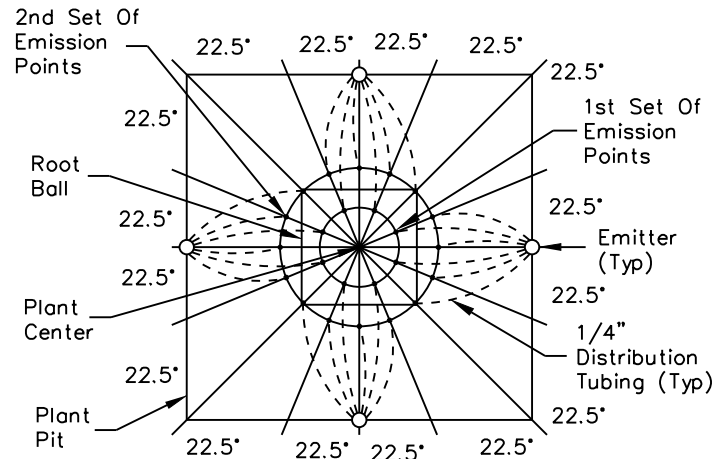
**TREE EMITTER - MULTI OUTLET
48" BOX TO 60" BOX TREES**

(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.	1-2 GPH=12 GPH	3 @ 12"	
24" Box	1-2 GPH=12 GPH	4 @ 18"	
30" Box	1-2 GPH=12 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**

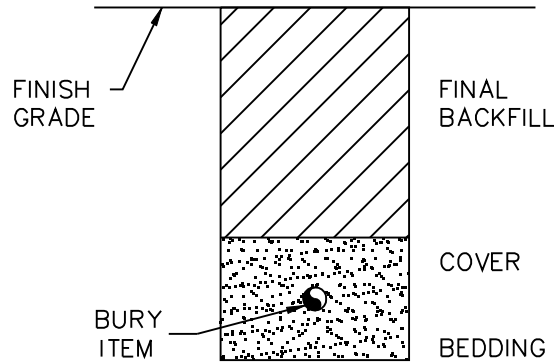
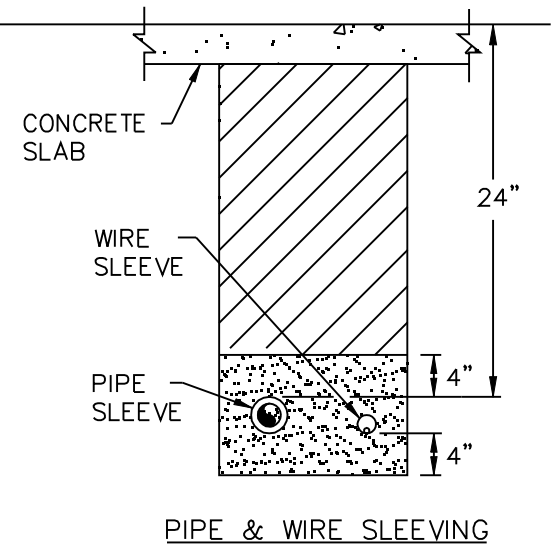
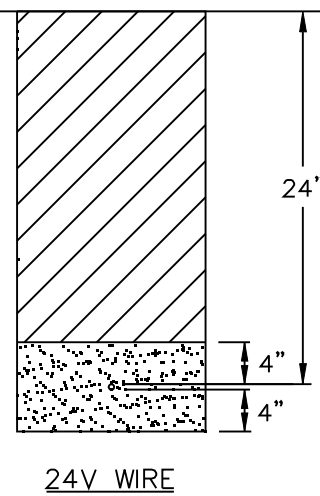
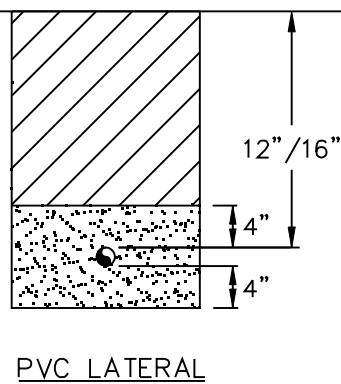
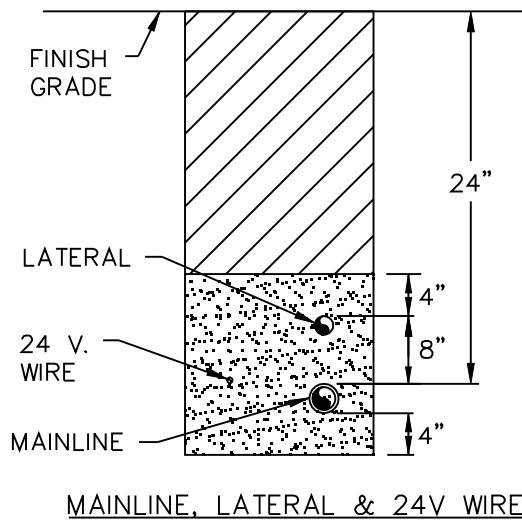
APPROVED BY:

**Scottsdale Standards &
Specifications Committee**

IRRIGATION EMITTER LAYOUT

DETAIL NO.

2641-2



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.
11. WHERE PRESSURE SUPPLY PIPING IS INSTALLED WITHOUT CONTROL WIRING, A 14 GA. TRACKING WIRE SHALL BE INSTALLED.

DETAIL NO.
2642

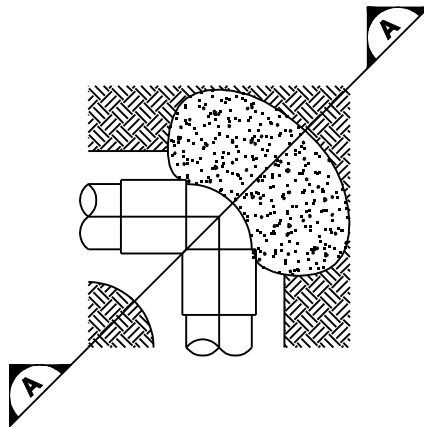
City of Scottsdale
Standard Details

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Scottsdale Standards &
Specifications Committee

IRRIGATION TRENCHING

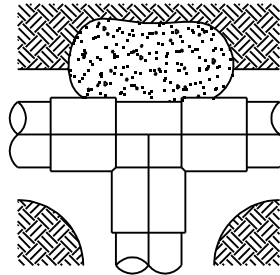
DETAIL NO.
2642

REVISED: 05/14/08



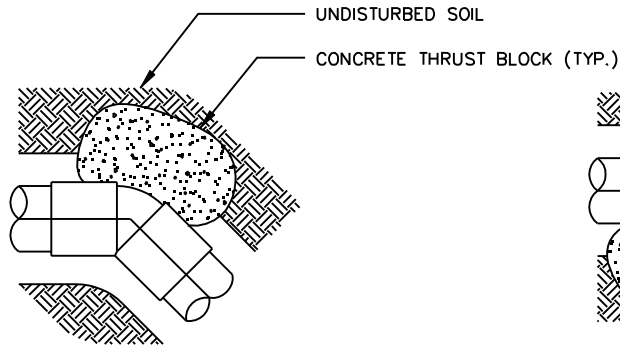
90° ELL

SCALE: NTS



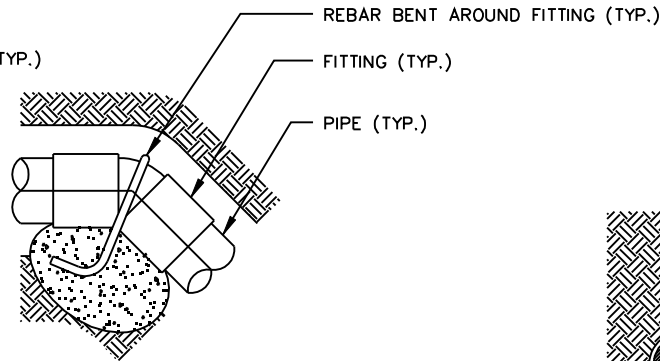
TEE

SCALE: NTS



45° ELL

SCALE: NTS



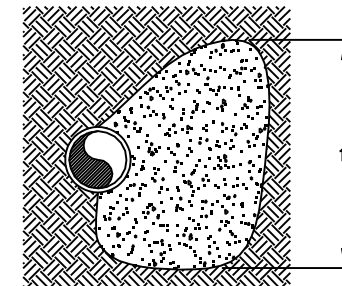
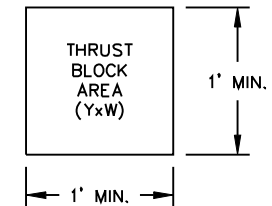
45° ELL (VERTICAL)

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 IF BELL END HARNESS JOINT RESTRAINTS ARE INSTALLED PER MAG 303-1 AND 303-2).



SECTION

A-A

DETAIL NO.
2643

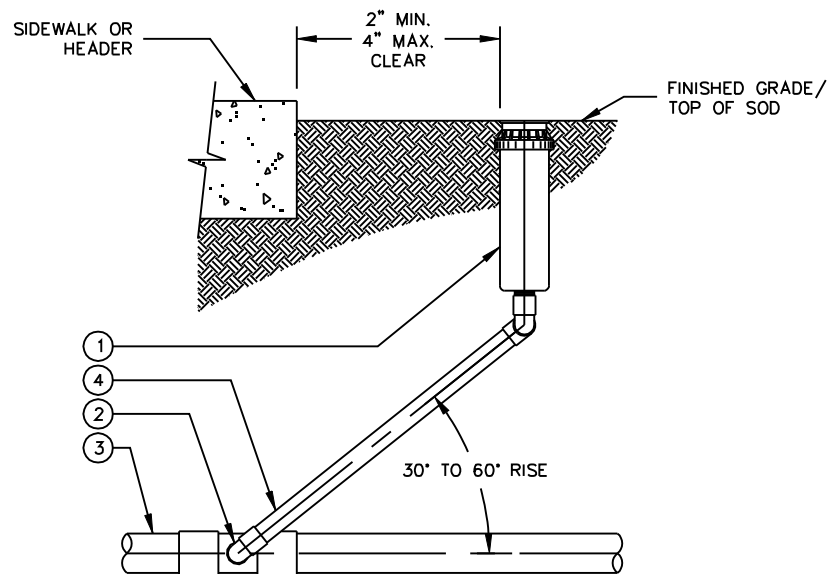
City of Scottsdale
Standard Details

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

IRRIGATION THRUST BLOCK

DETAIL NO.
2643

REVISED: 2/27/02

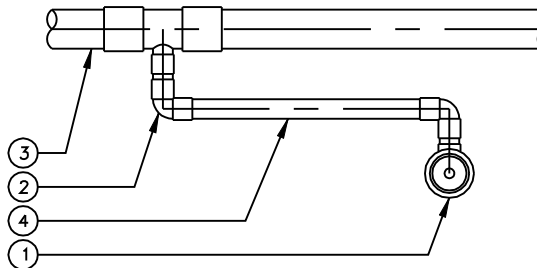


SWING JOINT ASSEMBLY ELEVATION

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

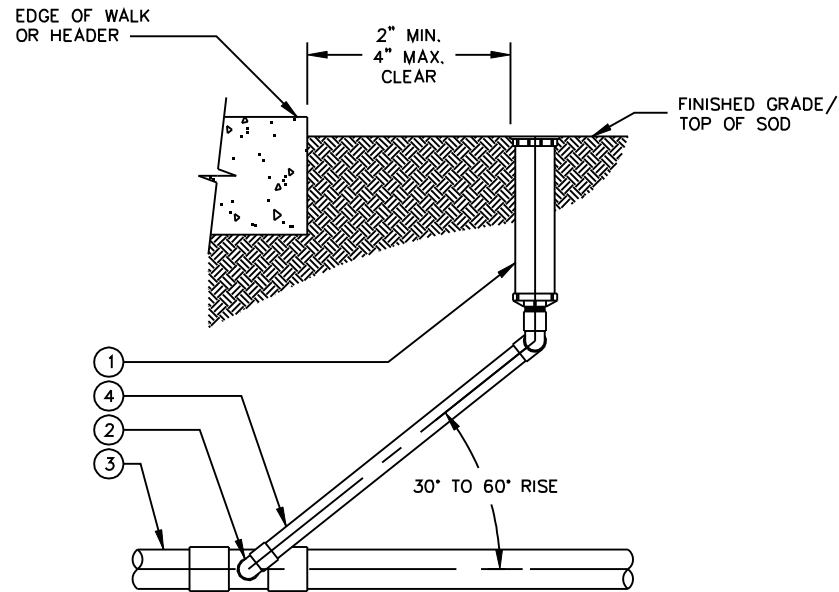
City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards &
Specifications Committee

ROTOR SPRINKLER ASSEMBLY

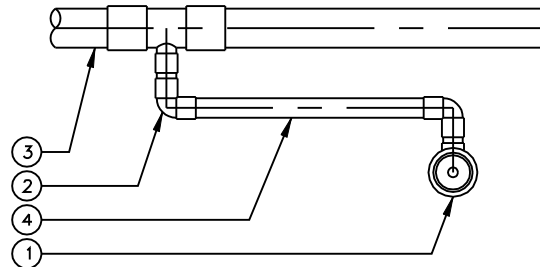
DETAIL NO.
2644

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**

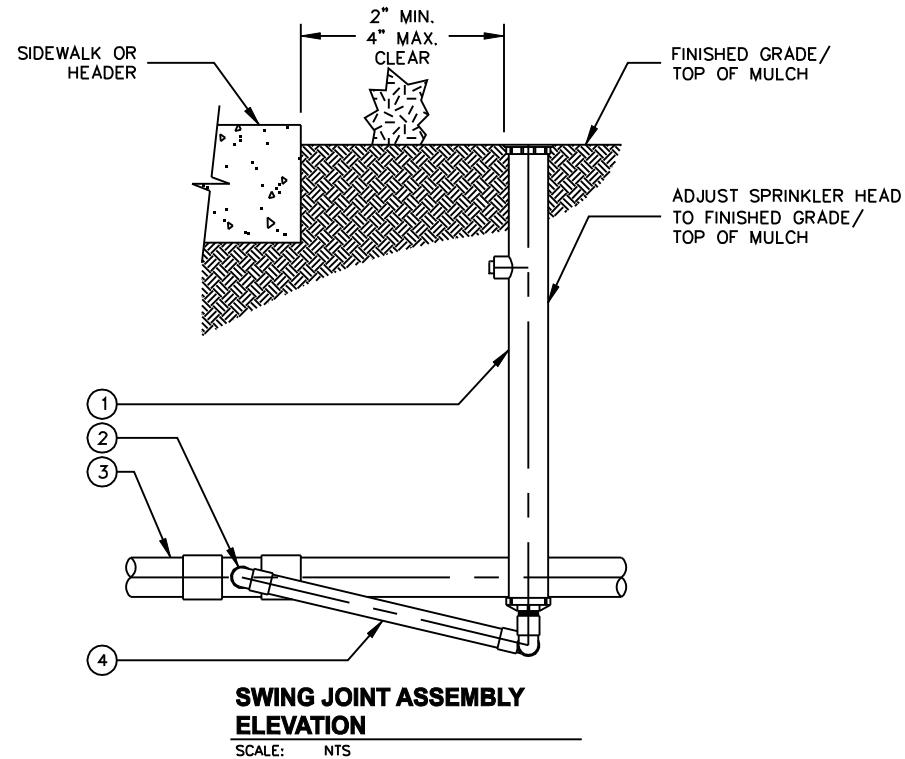
**City of Scottsdale
Standard Details**

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

POP-UP SPRINKLER ASSEMBLY

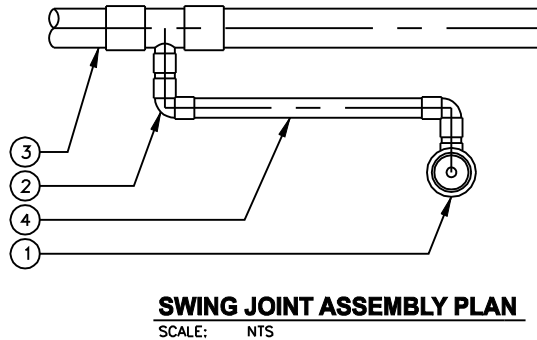
**DETAIL NO.
2645**

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

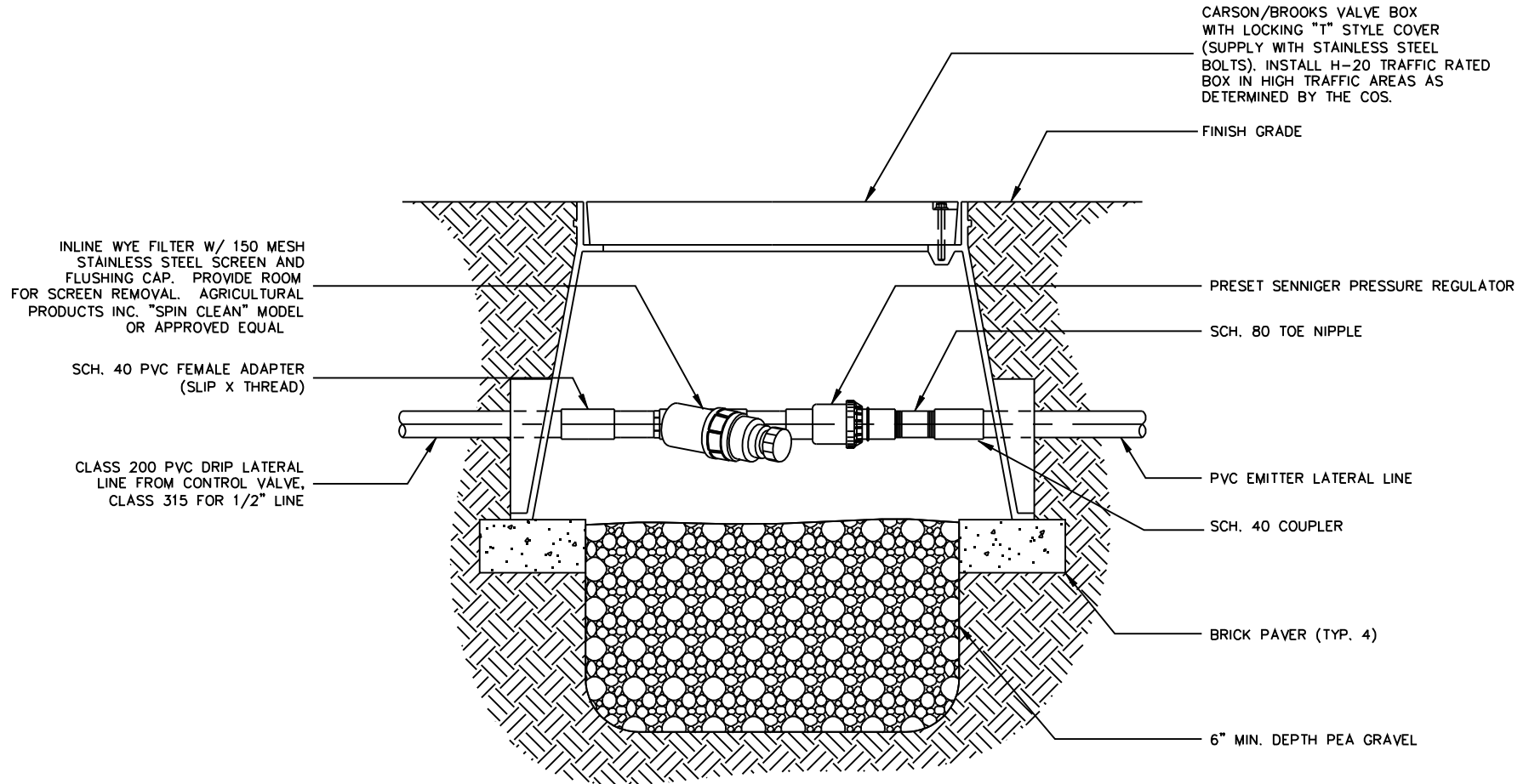


NOTES

- 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: 05/02/08



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

SCALE: NTS

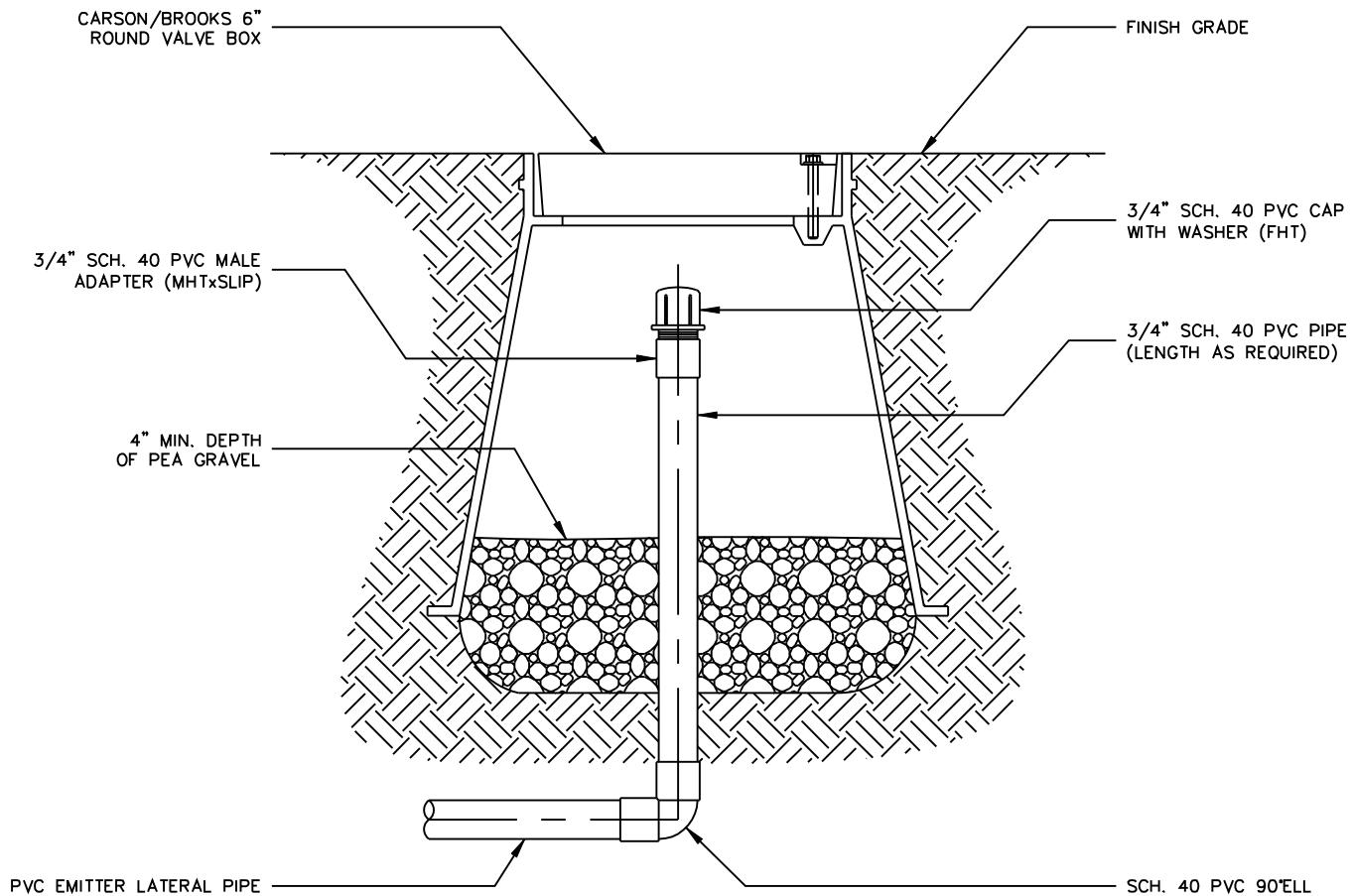
DETAIL NO.
2647

City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards &
Specifications Committee

DRIP FILTER & PRESSURE REGULATOR

DETAIL NO.
2647



EMITTER FLUSH CAP ASSEMBLY

SCALE: NTS

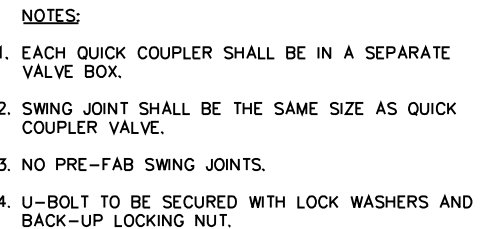
DETAIL NO.
2648

City of Scottsdale
Standard Details

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

EMITTER FLUSH CAP ASSEMBLY

DETAIL NO.
2648



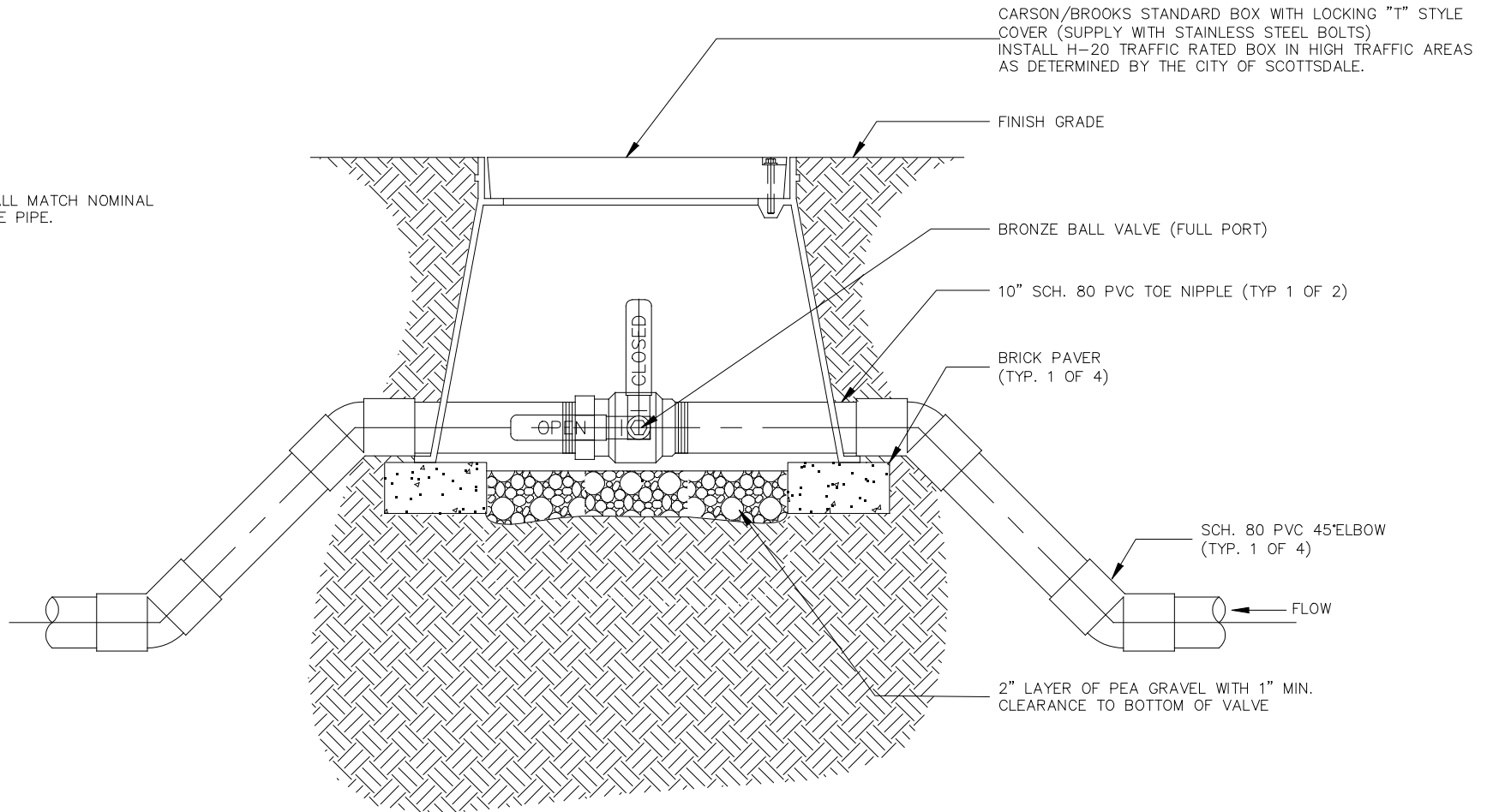
QUICK COUPLER ASSEMBLY

SCALE: NTS

REVISED: 4/25/07

NOTE:

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



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

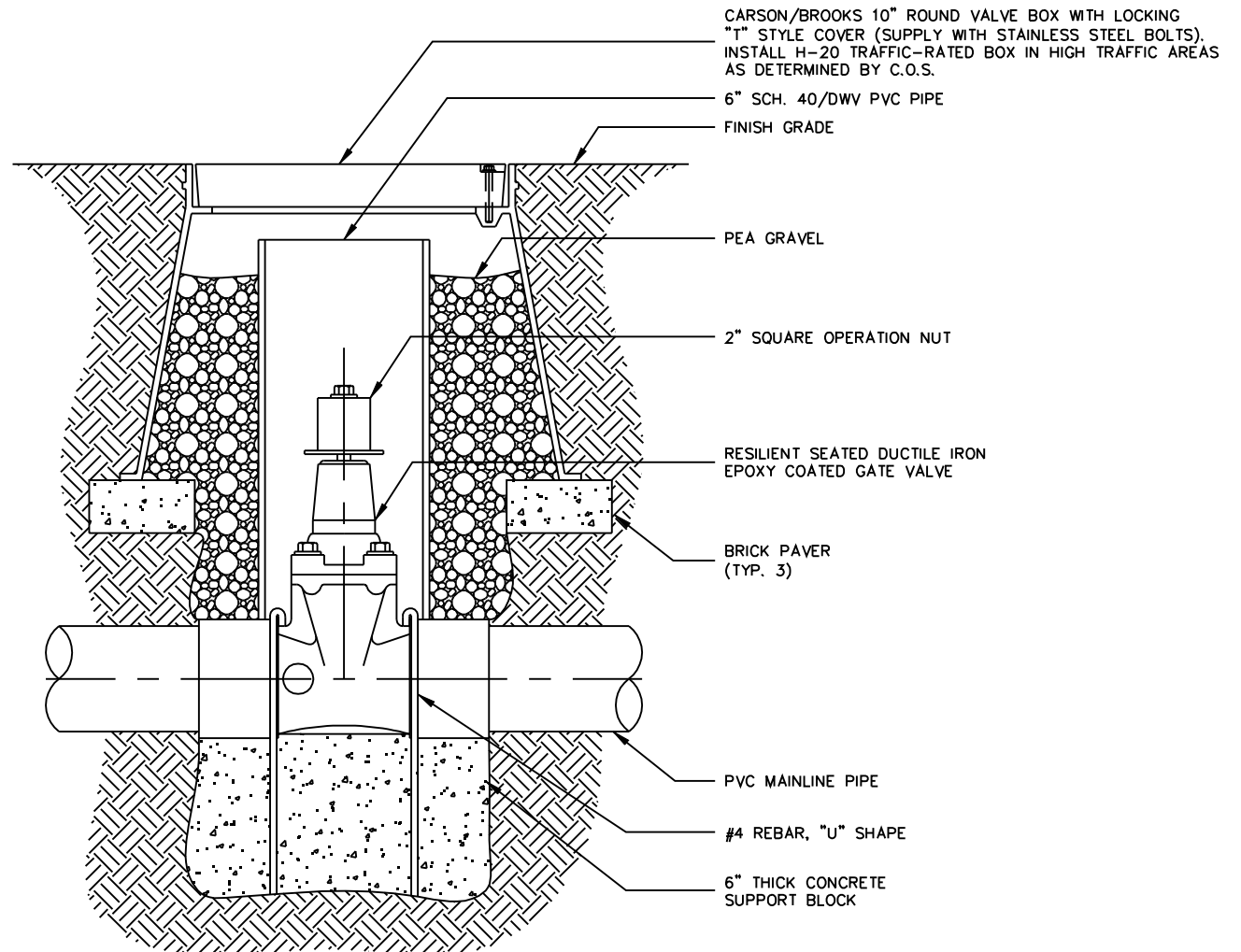
SCALE: NTS

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: 05/02/08

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

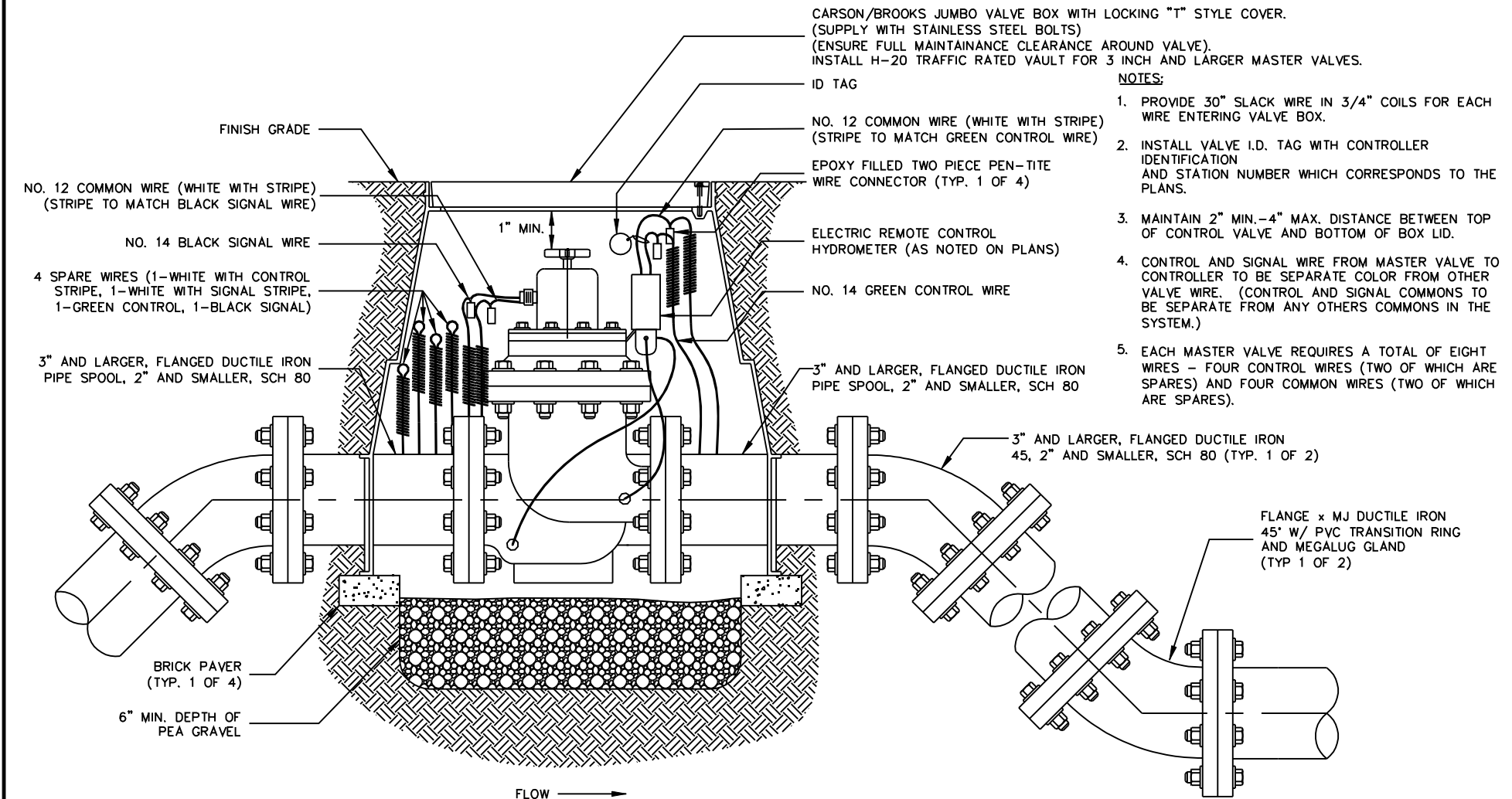
**DETAIL NO.
2651**

**City of Scottsdale
Standard Details**

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

2" & LARGER MAINLINE ISOLATION GATE VALVE

**DETAIL NO.
2651**



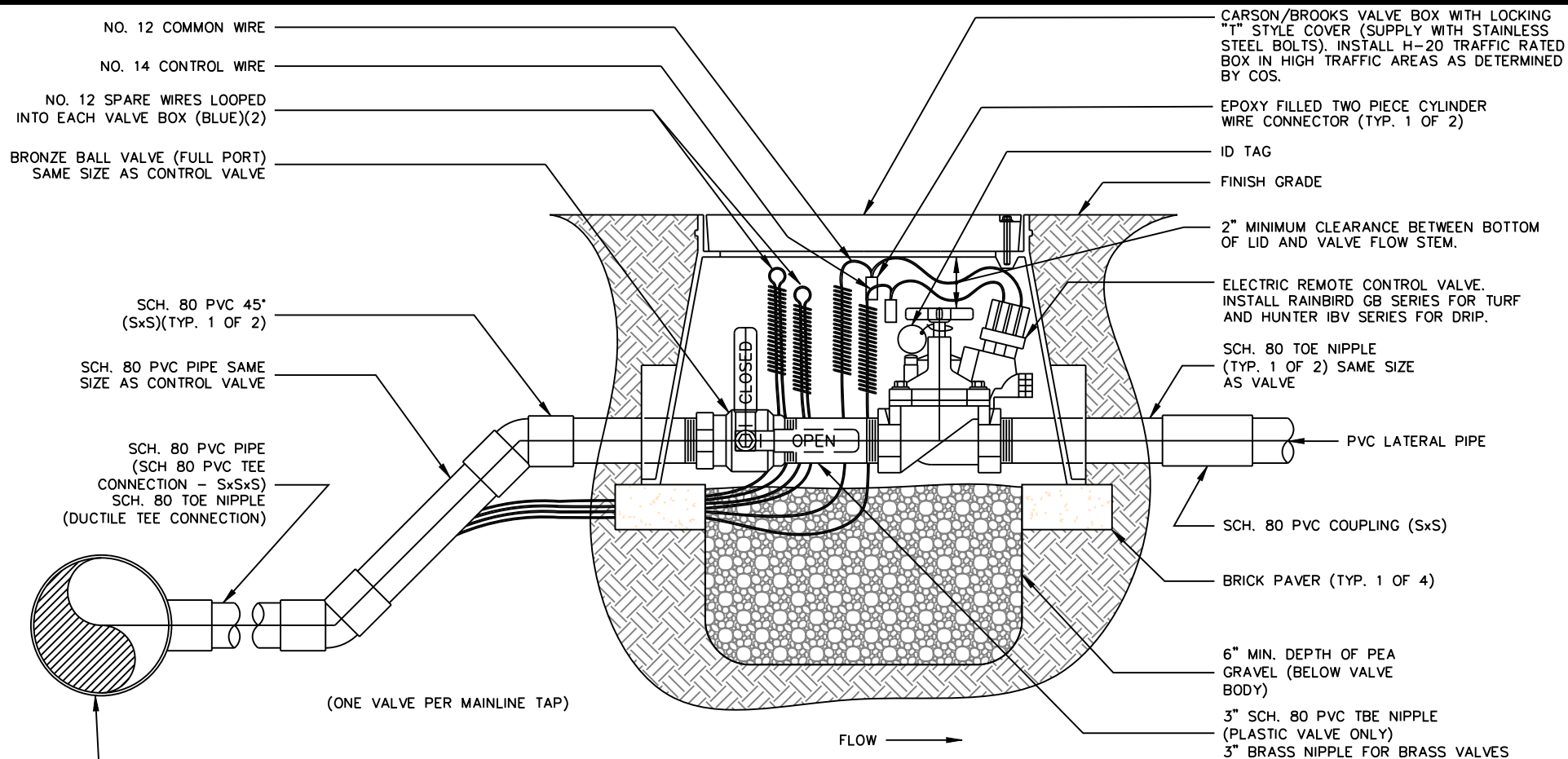
DETAIL NO.
2653

City of Scottsdale Standard Details

APPROVED BY:
Scottsdale Standards & Specifications Committee

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

DETAIL NO.
2653



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

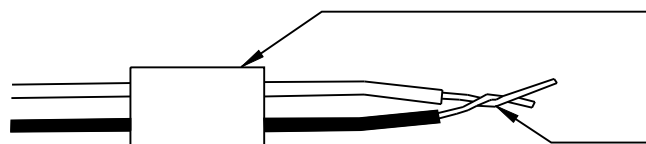
DETAIL NO.
2654

**City of Scottsdale
Standard Details**

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

**REMOTE CONTROL VALVE AND SOLAR
CONTROLLER MASTER VALVE ASSEMBLY**

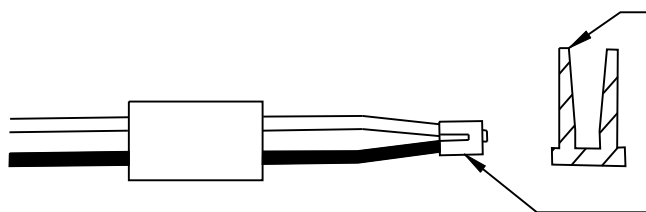
DETAIL NO.
2654



STEP 1

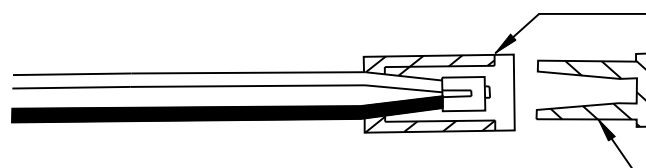
SLIP BASE SOCKET OVER
END OF WIRES

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



STEP 2

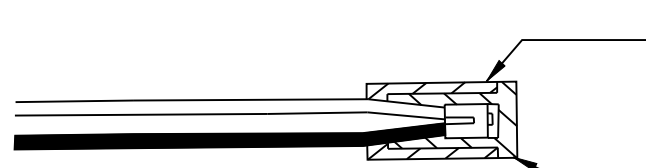
APPLY SEALER TO OUTSIDE OF SEALING
PLUG - FILL CAVITY WITH SEALER



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.

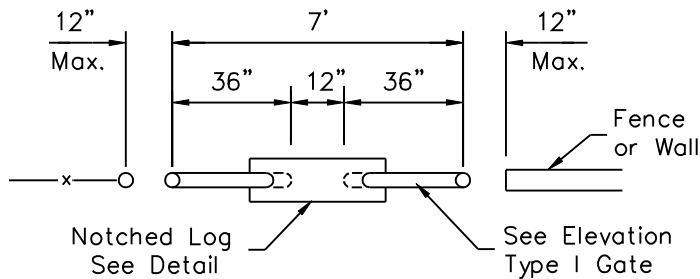
DETAIL NO.
2656

**City of Scottsdale
Standard Details**

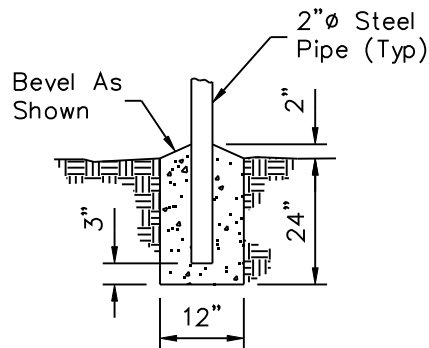
APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

IRRIGATION WIRE SLEEVING CHART

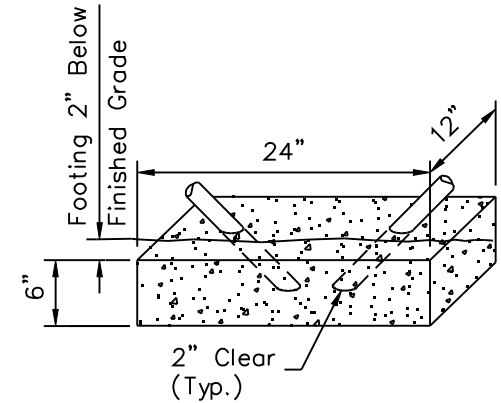
DETAIL NO.
2656



**TYPE I GATE
w/ NOTCHED LOG**



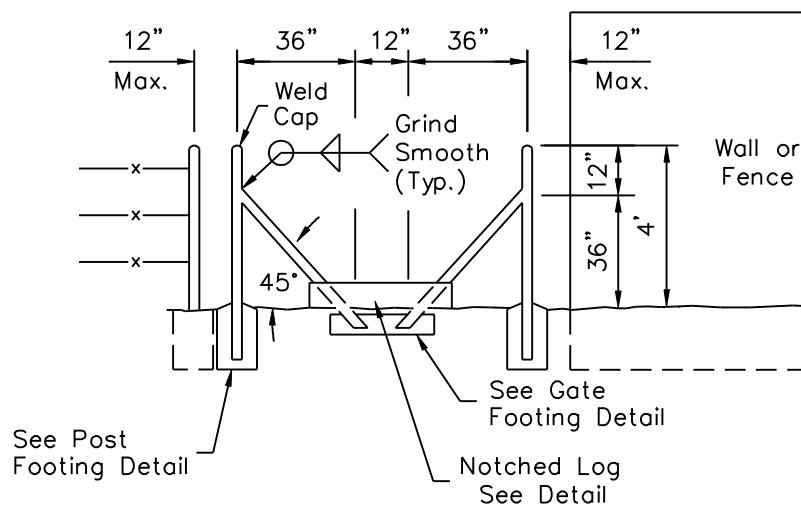
**POST FOOTING
DETAIL**



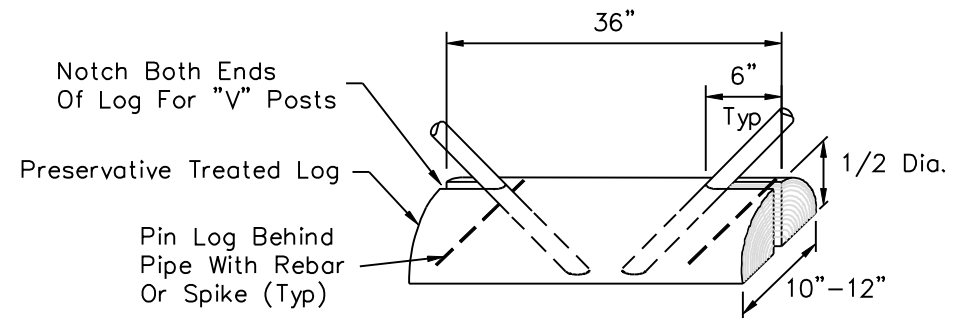
**GATE FOOTING
DETAIL**

NOTES:

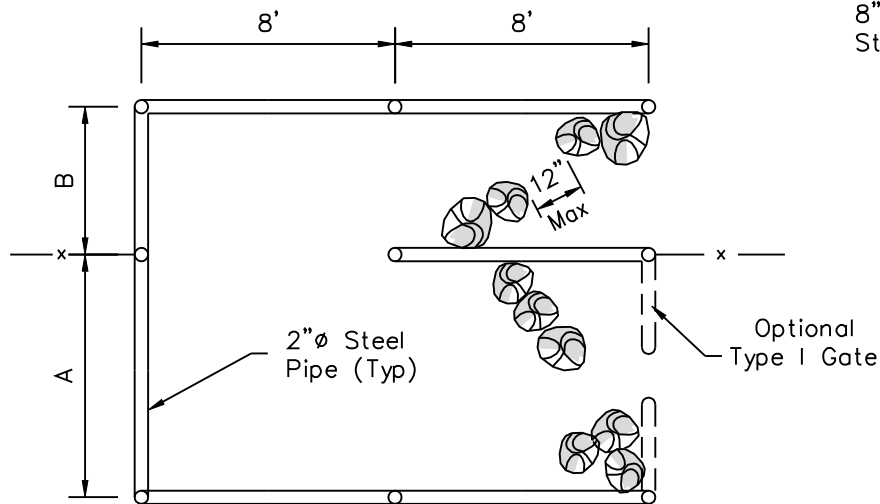
1. All Concrete Shall Be Class "B".
2. Paint Rails Per ADOT Specifications. Color Per Plans.
3. Treated Wood Per MAG Section 779.



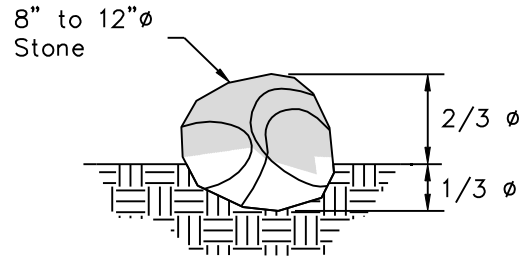
**ELEVATION
TYPE I GATE**



NOTCHED LOG DETAIL



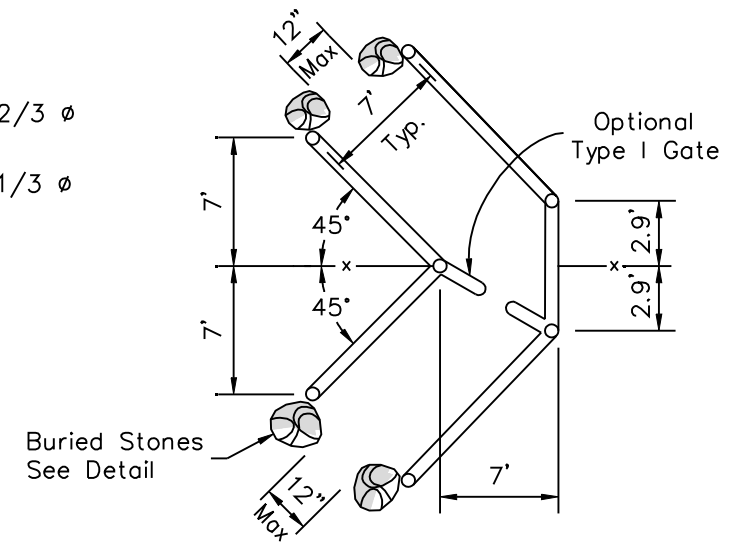
TYPE II GATE



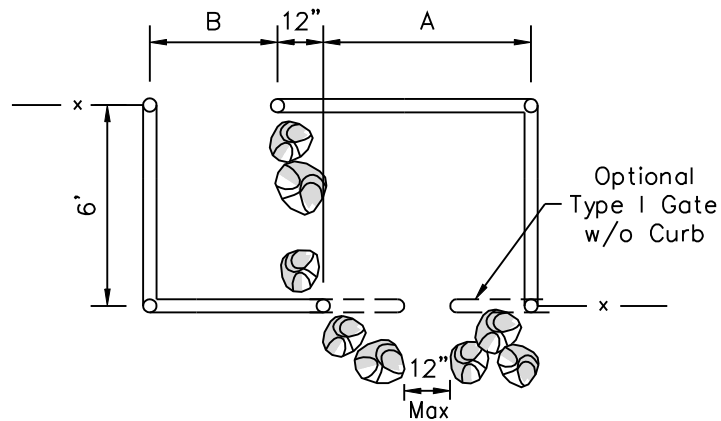
**BURIED STONE
DETAIL**

NOTE:

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

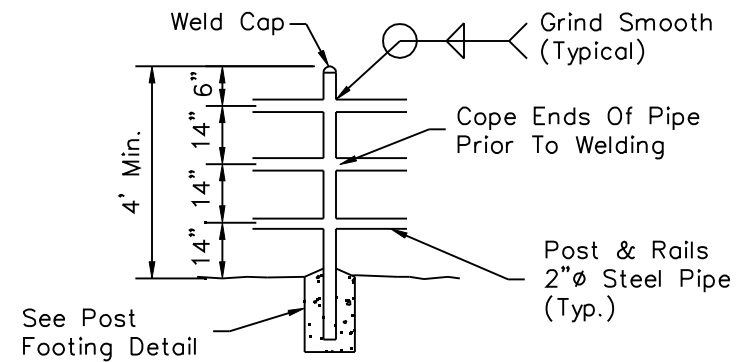


TYPE IV GATE

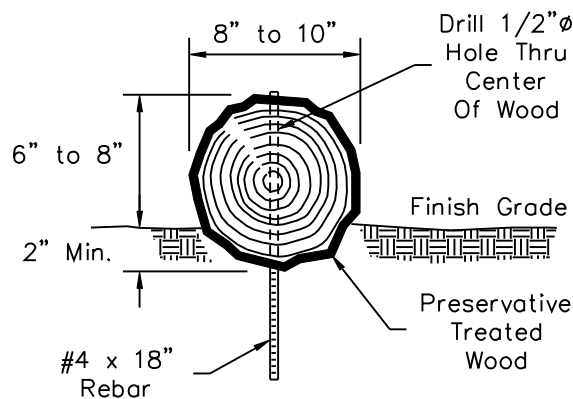


TYPE III GATE

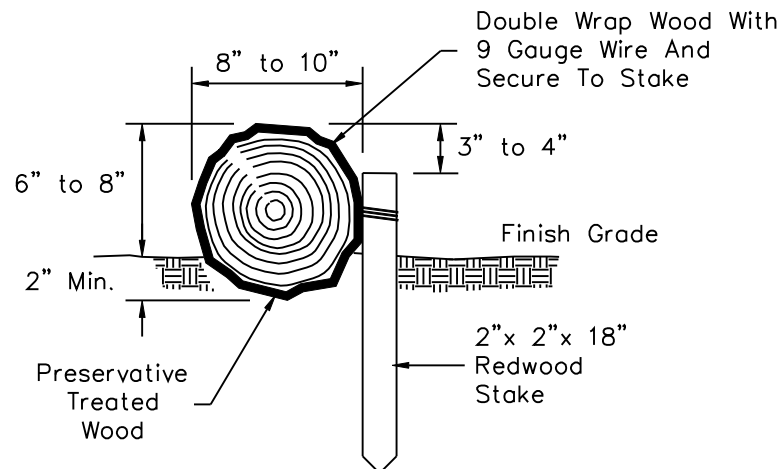
TYPE II and III GATE DIMENSIONS		
GATE BARRIER	A	B
Type I	7'	4'
Buried Rocks	4'	4'



**TYPICAL RAIL ELEVATION
TYPE II, III & IV GATE**



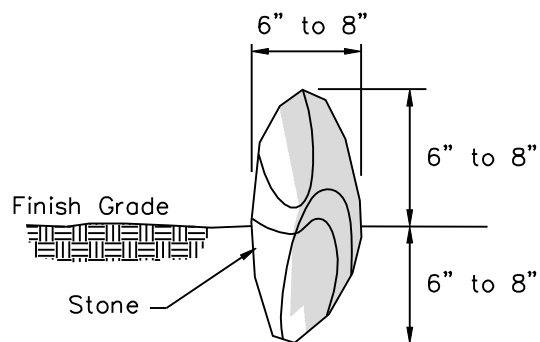
**REBAR SECURED
WOOD BARS**



**WIRE SECURED
WOOD BARS**

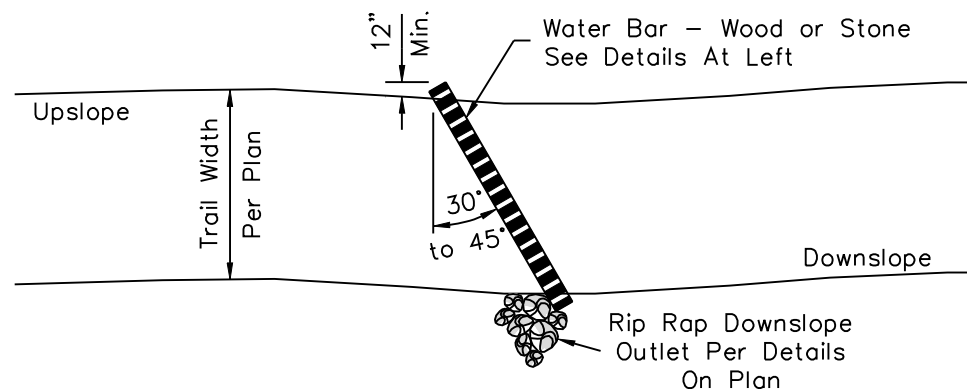
NOTES:

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



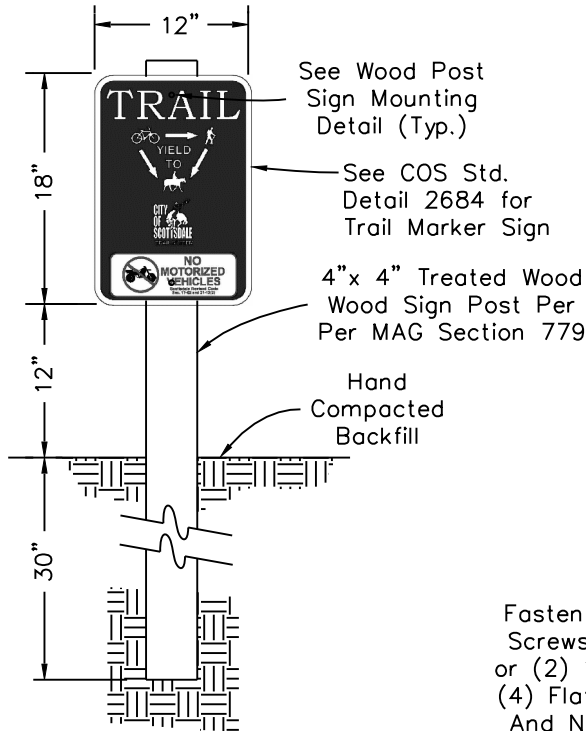
-
- 2"Ø Steel Pipe (Typ)
- 8' Max.
- 4' - 8"
- 14" 14" 14" 14"
- See Footing Detail
- Cope Pipe Ends Prior To Welding (Typical)
- Grind Smooth (Typical)
- This technical drawing illustrates a cross-section of a steel pipe pile cap. The cap is composed of four horizontal 2-inch diameter steel pipes, with 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 design.

STEEL RAIL

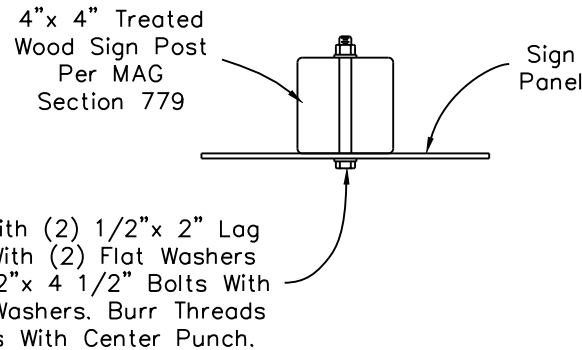


NOTES:

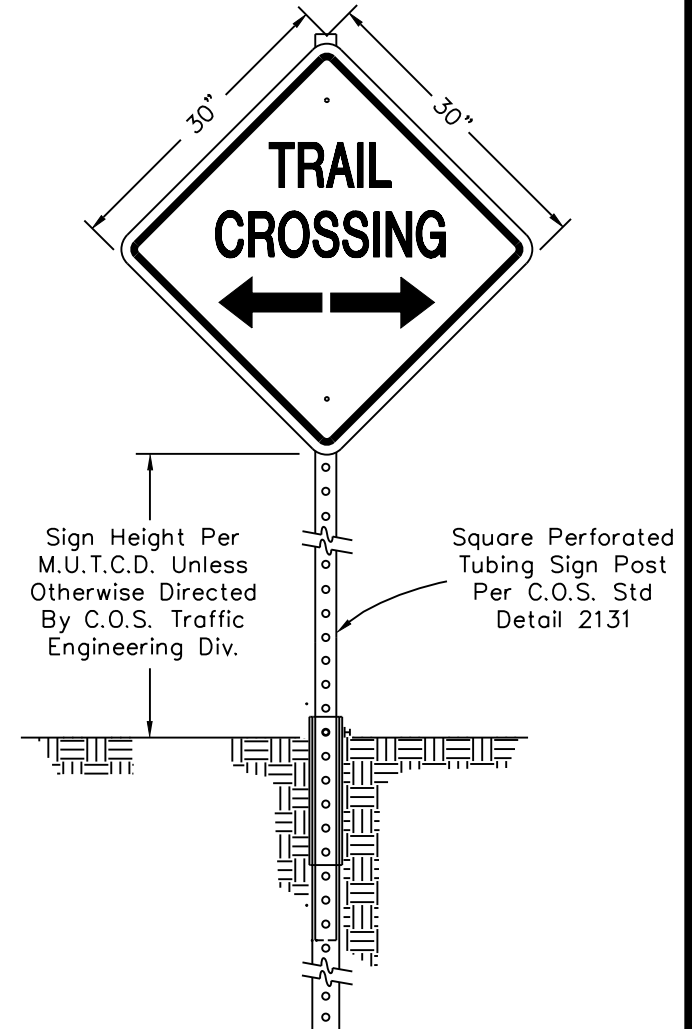
1. Signs shall conform to C.O.S. Supplemental Specifications, Section 402.3.
2. Signs to be mounted on square perforated tubing per C.O.S. Std Det 2131 within C.O.S. Right-of-Way. Treated wood post may be used for trail markers located outside C.O.S. Right-of-Way.
3. Legends shall be reflectorized white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



TRAIL MARKER



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

**NOTES:**

1. Signs shall conform to COS Spec. Sect. 402.3.
2. The sign substrate shall be treated aluminum with a thickness of 0.080".
3. The sign face shall have ASTM Type IV reflectorized sheeting with a brown screen printed or translucent acrylic EC overlay film reflective legend. Brown color shall be Pantone PMS 483 or closest equivalent. "NO MOTORIZED VEHICLES" portion shall be red text on white background except motor vehicle image shall be black.
4. Electronic version of sign graphics available upon request.
5. See COS Std. Detail 2683 for post and mounting details.

DETAIL NO.
2684

City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards & Specifications Committee

TRAIL MARKER SIGN

DETAIL NO.
2684