




<b>NUMBER</b>		<b>NOT REQ'D</b>	<b>NOT DONE</b>	<b>SATISFIED</b>	<b>WATER Checklist</b>			
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<b>General</b>					
1	Review General Checklist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">See City Of Goodyear Engineering Web Site</a>
2	Plans Satisfy City's Master Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.1(A) 5.1.4(A.2) Integrated Water Master Plan June 2008</a>
3	Water Design Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">2.11.2(G) 5.1.2(A)</a>
<b>Cover Sheet</b>					
4	COG General Notes For Water Construction (On Cover Or Sheet 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">0.4.6</a>
5	Private Utility Notes For Water (Liberty, EPCOR, Etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	MCESD / LPSCO Approval Blocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">0.2.3 2.3.2(A.3) 2.3.3 2.6.1(M)</a>
6	Master Utility Sheet At 1"=100' (On Cover Or Sheet 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">2.6.1(P.4) 2.11.2(A.12) 2.11.2(A.20)</a>
<b>Plan Sheets</b>					
7	Scales 1"=20' Horizontal, 1"=4' Vertical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">2.11.2(A.12)</a>
8	Pipe Size, Length, & Materials Shown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.2(C.8)</a>
9	All Mains In R/W & Easements - DIP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(C) See Approved Materials List On City Website</a>
10	DIP <24"=Min. Class 250, ≥24"=Min. Class 200 (Private Property Mains May Be C900 PVC Class 200)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(G.1)</a>
11	Distribution Lines - 8"-12" Ø Transmission Mains - ≥16" Ø (On Arterials & Collectors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(B) 5.1.4(C)</a>
12	Stub Outs -16" Per Mile, 12" Per ½ Mile, 8" Per ¼ Mile On Arterial Streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(C.5)</a>
13	Polyethylene Wrap On All DIP Pipes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(F.2)</a>
14	Waterline Offset Shown (If Different Than Centerline Data)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.2(C.2)</a>
15	Waterline Location Stationed Off Monument Line Or Roadway Centerline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.2(C.2) G-3130 G-3132 G-3134 G-3136</a>
16	Size On Size Tapping Sleeves Not Permitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.5.e.3)</a>
17	20' Min. Waterline Easement For City-Maintained Pipes Outside A Dedicated R/W (Must Be Larger If Multi-Utilities Are Co-Located Or If Additional Area Is Required For Maintenance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(G.5) 5.1.4(D.1.c)</a>

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18	Any Trench Cut In Existing Pavement >300' In Length Must Include Resurfacing The Half Street.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MAG 336.2.4.1(F) See Note 1 Listed At End Of Document
19	In Areas Inaccessible By Normal Excavation Methods/Culvert Crossings Install A Sleeve (C900 PVC Class 200 For Reclaimed Water, Not Filled, Dust Covers At Ends, Skids Strapped To Waterline)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(G.6.)</a> <a href="#">5.2.4(G.6)</a>
20	Abandoned Ex Water Infrastructure (Pipes, Services, Meter Boxes) To Be Approved By Engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(J.7)</a>
21	Water lines 12"+ Ø Shall Be Profiled (Label Slopes, Elevations, Cover)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">2.11.2(E.1.d)</a>
22	Looped System Or Max. 400' For Dead End	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(J.1)</a> <a href="#">5.1.6(B.2.b(5))</a>
23	Sampling Stations 1 Per 100 Dwelling Units	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4 (E.3)</a> <a href="#">G-3370</a>
24	Extend To Serve Adjacent (If Necessary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.1(B.5)</a>
25	Future Waterline Extensions Require A Valve, 13' Min. Stub & A Flushing Device At End (Valve To Be Closed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(A.2.h)</a> MAG 390 Type A
26	PRV's Or Boosters Needed (On Hillside Development)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.3(E)</a> <a href="#">5.1.5(C)</a> <a href="#">G-3323</a>
27	Joint Restraints On All Fittings & Dead Ends On Pipes 4"+ Ø (No Thrust Blocks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MAG 303-1,2
<b>Separation and Cover</b>					
28	Pipes < 12" Ø = 36" Min. Cover, Pipes ≥ 12" Ø = 48" Min. Cover (Add To Construction Note Or Dimension)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(H)</a> , <a href="#">G-3301</a>
29	Water Service = 36" Min. Cover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.1.e)</a> , <a href="#">G-3310</a>
30	Min. Horiz. Separation Called Out On Plan View	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.2(C.6)</a> <a href="#">5.1.4(G.1)</a> <a href="#">MAG 404-1</a>
31	Water & Sewer Separation - Special Protection (No Water < 2' Below Sewer Or < 1' Above)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(G.1)</a> <a href="#">6.3.1(E.2.)</a> <a href="#">MAG 404-1,2,3</a>
32	All Utility Crossings Shown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">2.11.2(E.2.a)</a> <a href="#">5.1.4(G)</a> , <a href="#">G-3300</a>
33	2' Min. Cover Over Washes, Culverts, & Storm Drains 3' Min. Cover Under Retention Basins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(J.5)</a> <a href="#">3.3.5(C.7.e)</a>

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34	Encasement Shown Plan & Profile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.2(C.3)</a>
<b>Fire Hydrants</b>					
35	Use COG Detail For Fire Hydrants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">G-3330</a>
36	Fire Hydrants Tied To Roadway Centerline By Station & Offset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">2.11.2</a>
37	FH Pavement Markers Shown On Paving Plans (In R/W Only)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.5.2(B.4.a) <a href="#">G-3212</a>
38	FH Located At Curb Returns & Back Of Curb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">G-3330</a> <a href="#">MAG 362</a>
39	FH At End Of Cul-de-Sac & Dead Ends, 400' Max. From Looped Line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(J.3.a)</a> <a href="#">5.1.6(B.2.b.6)</a>
40	FH Spacing - 400' Res., 300' Multi-Use, 1320' (@ Intersections) No Adjacent Development, 1000' Where No Intersections Or Development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.6(B.2.b)</a>
<b>Valves</b>					
41	Valve Spacing - No More Than 2 Fire Hydrants Out Of Service At Any Given Valve Closure Or No More Than 30 Homes Without Water Per Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(A.2.c)</a>
42	Place Valves On Branches So Main Is Still In Service During Closures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(A.2.g)</a>
43	Place Isolation Valves On Both Sides Of A Culvert Or Larger Storm Drain Crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(B.4)</a> <a href="#">G-3301</a>
44	Max. Valve Spacing - 660' On Dist., ¼ - ½ Mile Max. On Trans. Mains (Located Outside Of Tire Paths)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(A.2.a)</a> <a href="#">5.1.5(A.2.b)</a>
45	Valve Covers - MAG 391-1 Type "A" Only With COG Debris Cap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(A.1.g)</a> <a href="#">5.1.5(A.1.h)</a> <a href="#">G-3321</a>
46	Air Release Valves At High Points On Distribution Lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(B)</a> <a href="#">G-3301</a>
47	Pipes >16" Req. Butterfly Valves & Manhole With Bypass Assembly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(A.1.c)</a> <a href="#">5.1.5(A.1.e)</a> <a href="#">G-3307</a> <a href="#">G-3336</a>

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<b>Meter Boxes</b>							
48	3/4" - 1" Services = #2 Meter Box 1 1/2" - 2" Services = #4 Meter Box 3"+ Ø Req. A Vault	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D)</a>	<a href="#">G-3310</a>	<a href="#">G-3313</a>
49	2" Water Service Line Size Can Be Reduced To A 1 1/2" Or 1" Meter, 1" Water Service Line Size Can Be Reduced To A 3/4" Meter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
50	Meter Box Locations In R/W Or PUE (1' Min. Behind Back Of Curb Or Sidewalk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.4)</a>	<a href="#">G-3310</a>	
51	Meters To Be Sized Per UPC (No Meter Sizes & On-Site Water Line Sizes Shown On Civil Plans - To Be Approved By BS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.3.e)</a>		
52	Ex. Meters Allowed Relocation Up To 10' Max.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.3.g.4)</a>		
<b>Services</b>							
53	1" Service Line Min. (1" Or 2" For Residential, 2" Or 4"+ For Commercial)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.1)</a>	<a href="#">5.1.4(D.2)</a>	<a href="#">G-3310</a>
54	Landscape Services - Coordinate With Landscape Plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
55	All Non-Residential Water & Irrig. Services Shall Have Meter & Reduced Pressure Backflow Prevention Device (RPBFPD) Double Detector Check Valve Backflow Assembly for Fire Lines only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">G-3350</a> , <a href="#">G-3351</a> , <a href="#">G-3352</a> , <a href="#">G-3353</a>		<a href="#">5.1.6(A.1)</a> <a href="#">5.1.6(E.1)</a>
56	Provide A 2" Water Service On Commercial Sites With #4 Meter Box, Don't Call Out For A Meter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Add Note: "Building Safety To Determine Water Meter Size."		
57	NO Service Taps In Lines ≥16" Ø	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.1.h)</a>		
58	No Sample Taps On Dead End Of A Line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
59	Sta. & Dim Services (3' Min. Off Lot PL)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.1.g)</a>		
60	New Services In Ex. Pavement Must Be Bored Under Pavement. Pavement Cuts Not Permitted (All New Pavement Is To Remain In A New Uncut Condition For A Period Of 5 Years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.4(D.1.d)</a>	<a href="#">4.1.7(A.7)</a>	<a href="#">G-3130</a> <a href="#">G-3132</a> <a href="#">Pavement Cut Fee Schedule</a>

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61	Dimension Non-Typ. Service Locations And Dimension Services On Knuckles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.1.4(D) 2.11.6(B.1.a.)
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62	Any Ex. Stub To Project That Will Be Unused Shall Be Removed To The Main	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Per Mark & Ray
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<b>Reclaimed water</b>					
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1	Reclaimed Water Valves Shall Be Painted Purple And Modified To Read "Reclaimed Water"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	G-3325 Use <a href="#">MAG 391-1</a> Type "A"
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2	Requires A 13' Min. Stub & Valve At End (Valve To Be Closed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">5.1.5(A.2.g)</a>
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3	C900 DR 18 Class 150 Pipe Allowed (8" & Smaller)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Estrella Mountain Ranch Private Irrigation

- i. All Connection Points To The Main Line In Westar Drive Need To Have Meter Vaults Installed For The Future Purpose Of Isolating The System From The Westar Main If So Required. The Concept Would Include Installing Straight Piping Sections Through The Meter Vaults.
- ii. The System Shall Be Constructed To Maricopa County & ADEQ Reclaimed Water & Non-Potable Standards (i.e. Securing County ATC's & AOC's).
- iii. A Note Shall Be Added On The Plans Indicating That The System Meets All ADWR Reporting Criteria.
- iv. All Interactions The System Will Have With City Utilities Will Be Constructed In Conformance With Prevailing City Standards For Reclaimed Water Systems.
- v. A Note Shall Be Added To The Construction Plans At Each Tie-In Location To Identify That The System Is Not Being Constructed To City Of Goodyear Engineering Standards And That The City Of Goodyear Will Not Accept Ownership Of The Improvements.
- vi. A Study Is Provided To The City That Models The Pressures & Verifies That Sufficient Pressures Will Be Available At The Most Remote Portions Of The System.

1. MAG 336.2.4.1 Excerpt

The trench must be compacted to its required density, and required ABC must be in place and compacted prior to the placement of the asphalt concrete.  
 For cuts greater than 300 feet in length the entire area shall then be slurry seal coated in accordance with Section [332](#) or as otherwise specified. This seal coat shall extend from the edge of pavement or lip of gutter to the street centerline except that on residential streets less than 36 feet face to face of curb or where the pavement patch straddles the centerline, the entire width of street shall be seal coated.

In lieu of placing the seal coat as required previously, and with approval of the Contracting Agency, the Contractor may deposit with the Contracting Agency for credit to the Street Maintenance Department, a negotiated agreed upon amount. The Street Maintenance Department will incorporate this work into their street maintenance program.