NUMBER	ITEMS	NOT REQ'D	NOT DONE	SATISFIED	Grading & Drainage  REVIEW #  BY DATE  Location in Engineering Design Standards & Policy Manual
	Cover Sheet				
1	RID Signature Block (Signed & Sealed)				0.2.3 2.3.2(A.3) 2.6.1(M) 2.13.2
2	Check If Existing Tail Water Ditch Or Pipes Are Still In Use (If Not, Does The Irrigation District Need To Sign Off On The Plans?)				
	Detail or Notes Sheet (Sheet 2)				
3	COG General Notes For Grading & Drainage				<u>0.4.3</u> <u>2.11.1(A.8)</u>
4	Grading Details & Typical Sections				2.11.2(D.1.a.1) 2.11.4(C.2) 4.1.9(B.1) G-3206
5	Lot Grading Detail (Lots Shall Be 1% Min. To Street, Show Detail)				3.2.1(C.1) 3.2.1(C.2) G-3580
	Plan Sheets				
6	Scale 1"=40' Min.				2.11.2(A.12)
7	No Grading Outside Of Property Lines Without An Easement (Show Limits Of Grading)				0.4.3(D) 2.11.2(D.1.b.8)
8	No Adverse Impacts To Adjacent Properties				1.4.1(B.1) 3.3.2(C)
9	Centerline & Stations Shown				2.11.2(D.1.b.9) 4.1.1(D.2) 4.2.5(B.2.c.7-8)
10	Grade Breaks Shown				2.11.2(D.1.b.2) 2.11.2(E.2.a.4)
11	Slopes Shown On Streets				2.11.2(E.2.a.4)
12	Slopes - 4:1 Max. (On Private), 6:1 Max. (Within 10' From Road, Sidewalk, Or In R/W)				0.4.3(I) 3.2.1(A.4) 3.3.5(C.2.b) G-3206
13	Drainage Ways, SD & Channels Shall Be In Easements/Tracts Or R/W				3.3.3(B.1) 3.3.4(C.1) 9.1.3(D.12) Sub Reg. 15- 3-7(C)
14	Sufficient Adjacent Topo & Land info				2.11.2(D.1.b.2) 3.2.4(A.2) 9.1.2(D.4)
15	Label Or Notes Describing All Existing Features To Be Removed				1.1.1(A.6)
16	Elevations At Rear Lot Corners Shown				2.11.2(D.1.b.(2).i)
17	Outfall Elevations Shown				3.3.5(C.5)
18	Existing Irrigation Facilities To Remain In				4.1.2(C.4)

NUMBER		REQ'D	NOT DONE	ATISFIED	Grading & Drainage REVIEW # DATE
UMI	ITEMS	NOT	TC	ATI	Location in Engineering Design Standards &
Z	11 EMG	ž	ž	S	Policy Manual
10	No double walls allowed. Grading sheets	1			Zoning Ordinance 5-2-2.A.6
19	shall show existing and proposed grades				201111g Ordinance 3 2 2.71.0
	on both sides of the existing walls.				
20	FF & Pad Elevation Shown				0.4.2(M) 2.11.2(E.7.a) 10.1.2(F.4)
21	FF - 18" Above Low Lot Line Outfall	Ш		П	3.2.1(B.3) 3.3.5(A.1.b.1) G-3570
	FF - 12" Over High Water Elevation (In				
	Basins, Streets, Or Channels)	_	_		
22	Headwalls & Vertical Face Drops Of More	Ш	Ш	Ш	4.1.5(B.3) Safety Rail Per MAG 145 Painted To Match Nearest Structure, Wall, Or
	Than 2' Require Safety Rail (Includes				Landscaping Per ADOT Specs.
	Sidewalks & Retaining Walls)				
23	Walls Between Lots Or Alleys ≤6' Tall,				3.2.1(D) 4.1.5(B.2.b) 8.1.6
	Retaining Walls 6' Max. Height, 6' Max.				
0.4	Facing Public View				0.4.12(E) 3.2.1(C.4) 3.2.1(D) 4.1.5(B.2.b)
24	Retaining Walls Required Between Lots With An Elevation Difference >1'		Ш	Ш	<u>0.4.12(E)</u> <u>3.2.1(C.4)</u> <u>3.2.1(D)</u> <u>4.1.3(B.2.0)</u>
	(Add Note To Plans: "Retaining Walls Are For				
	Reference Only. All Retaining Walls Must Be				
	Submitted To Building Safety Approval And				
25	Inspection.") Floodplain Designation - Depict & Label	Ш			3.2.2(B.1a) 3.2.2(C.4)
40	Floodplain Within, Adjacent To, &		ш	ш	<u> </u>
	Downstream Of The Site				
	Channels				
26	Channel Changes In Direction >45° -				3.3.6(D.5)
۷0	Run-Up Calculations Will Be Required	╽Ш	ш	ш	<u> </u>
27	Channel Drainage Easements - Provide	П			3.3.3(B.3)
_, -	Adjacent 8' Wide Maintenance Roadway				
28	Channel Max. Velocity < Scour Velocity				3.3.4(C.3)
	Of Soils Or Provide Protection				
29	Show HWE At Channel Structures				3.2.3(A.1.f)
30	Culvert Flow Lines Must Be >0.5' Above				3.3.7(C.1)
	Natural Wash (Or Show The Reduced Capacity)				
31	No Embankments/Berms To Be Used For				3.3.5(E.2-4)
	Impounding Storm Water				
32	Channel Maintenance Shall Be Stated On				3.2.1(A.1) 3.3.4(C.4.b)
	Plat And Grading & Drainage Plans				

NUMBER	ITEMS	NOT REQ'D	NOT DONE	SATISFIED	Grading & Drainage  REVIEW #  BY DATE  Location in Engineering Design Standards & Policy Manual
33	Show Flow Rate Of Natural Washes Or				3.2.3(A.1.g)
	Manmade Channels				
34	Channel Is Designed Per Flood Control Design Standards				<u>Chapter 6, Open Channels, Flood Control</u> <u>District Drainage Design Manual (FCDMC),</u> <u>Hydraulics Volume</u>
35	Channel – Please Note Normal Depth				3.2.1
	(Using Manning's Equation) Calculations Are Acceptable For Preliminary Plats				
	Although A Greater Level Of Detail Is				
	Required For The Final Drainage Report.				
	(It Is Recommended To Consider Providing The More Detailed Calculations For Preliminary Plats				
	To Provide Better FFE Estimates & Avoid Possible				
	Major Grading Revisions During The Construction				
	Document Submittal). The Final Drainage				
	Report Level Of Detail Would Include, But				
26	May Not Be Limited To, Providing:				Flood Control District Drainage Design Manual
36	A HEC-RAS Or Equivalent Model To	Ш	Ш		(FCDMC), Hydraulics Volume
	Establish The Preliminary Channel Capacities, Culvert Capacities, & The				<u>, , , ,</u>
	100-Year Water Surface Elevation For				
	The Channel; Both In Any Interim (i.e.,				
	Weir Over A Street) & Ultimate (i.e., Through A				
	Culvert) Conditions.				
37	Verify That All Residential Lots Along The				Flood Control District Drainage Design Manual
	Channel Are At A Minimum Freeboard				(FCDMC), Hydraulics Volume.
	Per Section 6.5.4 Above The 100-Year				
	Water Surface Elevation.				
20	Retention Basins				1 4 1(D 1) 2 0 1(A 0)
38	100% Of 100-Year 6-Hour Storm	Ш	Ш		1.4.1(B.1) 3.2.1(A.2)
20	Retained On-Site				3.3.5(C.1.c-e)
	3' Max. Depth (1.5' Max. Within 10' Of R/W)				
40	Slopes - 4:1 Max. (Private Property)				0.4.3(I) 3.2.1(A.4) 3.3.5(C.2.b.1-2)
	- 6:1 Max. (Within 10' Of SW & R/W)				
⊿ 1	- 10:1 Max. (Within 10' Of Street)	-			3.3.5(C.2.a)
	0.5% Min. Bottom Slope (Towards Discharge Points)		_		
42	Freeboard - 12" Off-Site, 6" On-Site				3.3.5(A.1.b)

NUMBER	ITEMS	NOT REQ'D	NOT DONE	SATISFIED	Grading & Drainage  REVIEW #  BY DATE  Location in Engineering Design Standards & Policy Manual
43	Freeboard Elevation Contour At Least 4' Horizontally From Any Building Or Public Roadway				3.3.5(C.7.c)
44	First Flush Separation (First ½" storm water)				3.1.2(C) 3.3.5 8. Disposal/Discharge
45	No Retention In: - R/W, PUE, Or Easements - Multi-Family Development Parking Lots - Fire Lanes				0.4.3(I) 3.3.5(C.1.a) 3.3.5(C.7.a) G-3206 3.3.4(C.4.a) 3.3.5(C.4.b.6)
46	Basin 1' Deep Or <1,000 CY Can Allow Use Of An Eng. Floor/Trench Option (Include Geotechnical Report In Drainage Report)				3.3.5(C.8.c.2)
	Internal Items				
1	Review General Plan Review Checklist				0.3 2.6.1(E.1.c) 2.6.1(K) 2.6.1(Q)
2	SWPPP Included With Plan Set & NOI Submitted (>1 Acre Disturbed, See SWPPP Checklist)				0.3 0.4.4 0.4.5 2.6.1(P.3) 2.8.2(A.4) 3.2.2(D.2) 3.3.4 3.3.5
3	Drainage Report Submitted (See Checklist)				0.3 3.2.2
4	Site Complies With Master Drainage Plan				3.2.2(D.2)
5	G&D Plans Combined With Paving Plans (See Paving Checklist)				0.3
6	Drywells shown (see Drywell checklist)				0.3 3.3.5(I)
7	Storm Drain Shown (See Storm Drain Checklist)				0.3
8	Dust-Proof - All Parking, Maneuvering Areas, Driveways, & Fire Lanes				Ordinance No. 8A (08-3748) 08-1108
9	Blasting Site Needs Fire Dept Permit (Separate Permit From Building Safety)				Fire Department "Site Permit Application"
10	Industrial Sites That Have Fuel Tanks Needs Fire Dept Permit (Separate Permit From Building Safety)				Fire Department "Site Permit Application"
11	Soils Report Submitted ("R" Value, Sieve Analysis, Plasticity Index Of Subgrade & Recommendations For Structural Section)				4.1.9(B.1)
12	Grading Restart Fee \$63.57 Per Hour				Hours Per Field Inspector