

CITY OF DESERT HOT SPRINGS ENGINEERING DEPARTMENT

ROUGH GRADING PLAN REVIEW CHECKLIST

PROJECT NAME: _____
 TRACT, PARCEL MAP OR PROJECT ID NO. _____
 PLAN CHECKED BY: _____

	1 ST CHECK	2 ND CHECK	3 RD CHECK	FINAL MYLAR	COMMENTS
DATE CHECKED:					
I. SUBMITTAL REQUIREMENTS – SEE PLAN CHECK REQUIREMENT CHECK LIST					
(1) APPROVED PHASING PLAN					
(1) APPROVED TENTATIVE MAP					
(2) HYDROLOGY/HYDRAULIC CALCULATIONS					
(1) STORM DRAIN PLAN					
(1) CONDITIONS OF APPROVAL					
(2) ESTIMATES OF QUANTITIES AND COSTS					
(5) ROUGH GRADING PLAN					
(2) SOILS REPORT & UPDATE LETTER					
II. GENERAL SHEET REQUIREMENTS – ALL SHEETS					
A. MEDIUM					
1. 24”X36” SIZE. FINAL SUBMITTAL ON 3 MIL. MYLAR FILM					
2. NO “STICKY BACK” FILM, GLUED OR TAPED ON SECTIONS					
B. DRAFING/LAYOUT REQUIREMENTS					
1. PLAN NAME WITH TRACT, PM OR SDP NUMBER					
3. TYPE OF IMPROVEMENT PLAN, I.E. ROUGH GRADING PLAN.					
4. SECTION, TOWNSHIP AND RANGE					
5. REVISION BLOCK					
6. PREPARER’S NAME, ADDRESS, PHONE NUMBER					
7. BASIS OF BEARING AND APPROVED BENCH MARK					
8. SIGNATURE BLOCKS PROVIDED					
a. CITY SIGN OFF BLOCK – APPROVED BY: CITY ENGR., RCE # __, __, EXP. DATE – / / .					
b. RESPONSIBLE ENGINEER’S SIGNATURE BLOCK AND SEAL – CHECK EXP. DATE					
c. PLAN CHECKER APPROVAL BLOCK					
d. OTHER AGENCY SIGNATURE BLOCK(S) IF REQUIRED, I.E. CVWD, COUNTY OF RIVERSIDE, CITY OF INDIO					
9. USA DIG ALERT NOTE WITH PHONE NUMBER 1-800-227-2600					
10. SHEETS NUMBERED NUMERICALLY IN INCREASING ORDER – SHEET ___ OF ___					
11. 0.08” MINIMUM TEXT HEIGHT – CAD DRAFTED, 0.10” IF HAND DRAFTED					

LEGEND: ✓ = ACCEPTABLE ? = UNCLEAR (PROVIDE MORE DATA) NA = NOT APPLICABLE X = NOT ACCEPTABLE FOR REASONS SHOWN

	1 ST CHECK	2 ND CHECK	3 RD CHECK	FINAL MYLAR	COMMENTS
III. TITLE SHEET					
A. GENERAL NOTES PROVIDED					
B. GRADING NOTES PROVIDED					
C. INDEX MAP					
1. SCALE IS 1"=500' OR SMALLER - USE STANDARD SCALE					
2. SHEET COVERAGE IS SHOWN					
3. STREET NAMES AND LOT #S SHOWN					
4. LOCATIONS OF STORM DRAIN SYSTEMS (CATCH BASINS, CULVERTS, CROSS GUTTERS, INLETS, ETC) ARE SHOWN. DIRECTION OF DRAINAGE FLOW IN STREET WITH Q10 AND Q100 SHOWN AT DRAINAGE INLET LOCATIONS.					
D. VICINITY MAP					
1. ARTERIAL STREETS SHOWN					
2. ORIENT NORTH AS ON INDEX MAP					
3. PROJECT LOCATION INDICATED ON MAP					
4. SCALE NOTATION PROVIDED ("NTS" IS OK)					
E. LEGEND OF SYMBOLS USED, INCLUDES CONSTRUCTION NOTE SYMBOLS, TYPICAL ABBREVIATIONS, SPECIAL LINETYPES, HATCHING LEGEND, ETC.					
F. OWNER'S INFORMATION					
1. ASSESSOR PARCEL NUMBER					
2. SITE ADDRESS					
3. BRIEF LEGAL DESCRIPTION					
4. OWNER'S NAME/ADDRESS AND TELEPHONE NUMBER					
G. UTILITY AGENCY INFORMATION FOR:					
1. COACHELLA VALLEY WATER DISTRICT (CVWD)					
2. IMPERIAL IRRIGATION DISTRICT (IID)					
3. SOUTHERN CALIFORNIA EDISON (SCE)					
4. SOUTHERN CALIFORNIA GAS					
5. VERIZON (FORMALY GTE)					
6. TIME WARNER CABLEVISION					
H. EARTHWORK VOLUMES – SHOWN RAW VOLUMES AND SHINKAGE, SUBSIDENCE, BULKING AND OVEREXCAVATION FACTORS.					
I. ROUGH GRADED STREET TYPICAL SECTIONS AND DETAILS (MAY BE SHOWN ON SEPARATE SHEET IF ROOM DOES NOT PERMIT ON TITLE SHEET). SHOW LIMITS OF ROUGH GRADE, DEPTH, AND ALL HINGE POINTS.					
J. FEMA FLOOD ZONE DESIGNATION.					
K. TYPICAL LOT GRADING DETAIL(S) SHOWING:					
L. SHOW DETAIL OF KEYING AND BENCHING.					

	1 ST CHECK	2 ND CHECK	3 RD CHECK	FINAL MYLAR	COMMENTS
--	--------------------------	--------------------------	--------------------------	----------------	----------

V. PLAN SHEETS					
A. PLAN VIEW SHOWS:					
1. NORTH ARROW (PREFERRED TO POINT UP OR TO THE RIGHT)					
2. 4" BAR SCALE – SCALE TO BE A TYPICALLY USED SCALE, I.E. 1"=20' OR 1"=40'.					
3. SCALE NOT SMALLER THAN 1"=40' FOR HOUSING OR COMMERCIAL DEVELOPMENT AREAS.					
4. SCALE NOT SMALLER THAN 1"=100' FOR GOLF COURSE OR LARGE OPEN SPACE AREAS.					
5. SHOW COMPLETE BOUNDARY INFORMATION AND LOT LINE ANNOTATION.					
6. SHOW ALL LOT NUMBERS.					
7. SHOW ALL EASEMENTS.					
8. SHOW ADJACENT RECORD MAP REFERENCES.					
9. DIMENSION STREET AND RIGHT OF WAY WIDTHS.					
10. EXISTING CONTOURS SHALL BE SHOWN IN SCREENED OR DASHED LINE TYPES AT THE FOLLOWING INTERVALS:					
a. SHOW EXISTING CONTOURS A MINIMUM OF 50' BEYOND ALL PROPERTY LINES OR AS NEEDED FOR DAYLIGHT OR TO JUSTIFY THE DESIGN.					
b. 2' MAXIMUM CONTOUR INTERVAL ON NORMAL AREAS.					
c. 10' MAXIMUM CONTOUR INTERVALS ON STEEP HILLSIDE AREAS					
d. SHOW ½ FOOT CONTOURS IN VERY FLAT AREAS.					
11. SHOW PROPOSED CONTOURS IN HEAVY SOLID LINES. MATCH CONTOUR INTERVALS FOR REQUIRED EXISTING COUNTOURS.					
12. SHOW PAD ELEVATIONS TO THE NEAREST 0.1'. SHOW FINISHED FLOOR ELEVATIONS TO THE NEAREST 0.01'.					
13. FINISHED FLOOR ELEVATION SHALL BE A MINIMUM OF 1 FOOT ABOVE FLOOD ELEVATION IF THE PROPERTY IS LOCATED IN AN A, A1-30, AND/OR A0 FEMA ZONE.					
14. CENTERLINE BEARING TEXT SHOWN ON CENTERLINE.					
15. PROVIDE CENTERLINE STATIONS AT 100' MINIMUM INTERVALS. STATION ALL CENTERLINE INTERSECTIONS.					
16. STATIONS AND ELEVATIONS SHOWN AT:					
a. CATCH BASINS, JUNCTION STRUCTURES, MANHOLES, COLLARS, HEADWALLS, AND OUTLET STRUCTURES					
b. B.C.'s, E.C.'s, AND GRADE BREAKS					
c. AT 50' INTERVALS ON THROUGH VERTICAL CURVES – AT EVEN STATIONS.					

	1 ST CHECK	2 ND CHECK	3 RD CHECK	FINAL MYLAR	COMMENTS
--	--------------------------	--------------------------	--------------------------	----------------	----------

17. SHOW LOCATION OF DAYLIGHT LINES (TRANSITION LINES BETWEEN CUT AND FILL AREAS) MAKING THEM CONTINUOUS AND OBVIOUS.					
18. MINIMUM RATES OF GRADE SHALL BE AS FOLLOWS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER:					
a. SWALE HIGH POINT IS A MINIMUM 0.3' BELOW PAD ELEVATION.					
b. EARTH OR TURF REAR AND SIDEYARD SWALES ARE 0.50%, MIN.					
c. BLDG. PAD OR REAR YARD TO SWALE IS 10%, MAX., 2.0% MIN.					
d. SIDEYARD IS 2.0% MIN., 20% MAX.					
e. ASPHALT CONCRETE PAVEMENT – 1.0% MIN.					
f. PORTLAND CEMENT CONCRETE PAVEMENT – 0.5% MIN.					
19. TOPS AND TOES OF SLOPES SHALL BE CLEARLY DEFINED. 2:1 MAX SLOPE UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER AND SUPPORTED BY THE SOILS ENGINEER.					
20. NO DRAINAGE OVER 2:1 SLOPES. TERRACE AND INTERCEPTOR DRAINS SHALL CONFORM TO CHAPTER 33 OF THE UBC.					
21. VELOCITY REDUCERS ARE REQUIRED WHERE DRAINS DISCHARGE ONTO NATURAL GROUND. IF RIPRAP IS USED, SPECIFY CLASS AND SIZE.					
22. CONCENTRATED DRAINAGE EXCEEDING 4% REQUIRES CONCRETE OR OTHER APPROVED NON-EROSIVE DEVICE.					
23. NO DRAINAGE OVER RETAINING WALLS. USE CONCRETE "V" DITCHES, AREA DRAINS, DOWN DRAINS OR OTHER APPROVED DRAINAGE DESIGN.					
24. A 12" HIGH BY 4" WIDE BERM IS REQUIRED AT THE TOPS OF ALL SLOPES. SHOW TYPICAL DETAIL.					
25. PROVIDE A 1' WIDE (MIN.) BENCH AT THE TOP OF ALL 2:1 SLOPES BETWEEN LOTS.					
26. JOIN ELEVATIONS AND RELATIONSHIPS TO SURROUNDING PROPERTIES ARE SHOWN.					
27. SHOW LOCATIONS OF ALL EXISTING AND PROPOSED STRUCTURES, BURIED TANKS AND WELLS.					
28. LOCATION OF BLOCK WALLS AND OTHER STRUCTURES ARE CLEARLY SHOWN. SHOW TOP OF WALL, GROUND, AND TOP OF FOOTING ELEVATIONS.					
29. INCLUDE DISPOSITION NOTES FOR EXISTING FACILITIES. THE TERM "BY OTHERS" SHALL NOT BE USED BUT SHALL BE DEFINED.					
30. INCLUDE CONSTRUCTION NOTES ON EACH SHEET. DO NOT REFER BACK TO CONSTRUCTION NOTES ON THE TITLE SHEET.					
31. REFER TO CITY STANDARD DRAWING NO. IF APPLICABLE TO WORK. PROVIDE SPECIFICATIONS, NOTES, DETAILS OR OTHER APPROVED STANDARD DRAWING NO. IF DIFFERENT FROM CITY STANDARD.					

LEGEND: ✓ = ACCEPTABLE ? = UNCLEAR (PROVIDE MORE DATA) NA = NOT APPLICABLE X = NOT ACCEPTABLE FOR REASONS SHOWN

	1 ST CHECK	2 ND CHECK	3 RD CHECK	FINAL MYLAR	COMMENTS
--	--------------------------	--------------------------	--------------------------	----------------	----------

VI. GENERAL REQUIREMENTS					
A. GEOTECHNICAL REPORT					
1. CHECK FOR CONFORMANCE WITH SOILS ENGINEER RECOMMENDATIONS.					
2. PLANS SIGNED BY SOIL'S ENGINEER.					
3. UPDATE LETTER IF SOILS REPORT IS MORE THAN 1 YEAR OLD.					
4. DELINEATE AREAS OF OVEREXCAVATION AND RECOMPACTION. WHERE DEPTH EXCEEDS 12", SOILS ENGINEER TO RECOMMEND COMPACTION IN THE FINAL REPORT.					
5. RECOMMENDATIONS FOR SHRINKAGE AND SUBSIDENCE.					
6. RECOMMENDATIONS FOR PERCOLATION PROVIDED IF MORE THAN 1" PER HOUR IS USED IN RETENTION BASIN SIZING.					
7. DELINEATE ON THE PLANS AND PROVIDE DETAILS FOR ROCK DISPOSAL AREAS AS RECOMMENDED BY THE SOILS ENGINEER.					
B. EROSION CONTROL REQUIREMENTS					
1. CUT SLOPES EQUAL TO OR GREATER THAN 5' IN VERTICAL HEIGHT SHALL BE PLANTED WITH AN APPROVED GROUND COVER TO MINIMIZE EROSION.					
2. FILL SLOPES EQUAL TO OR GREATER THAN 3' IN VERTICAL HEIGHT SHALL BE PLANTED WITH AN APPROVED GROUND COVER TO MINIMIZE EROSION.					
3. GRADED SLOPES EXCEEDING 15' IN VERTICAL HEIGHT ARE TO BE PLANTED WITH TREES AND/OR SHRUBS IN ADDITION TO THE APPROVED GROUND COVER.					
4. LOCAL AIR QUALITY MANAGEMENT PLAN (LAQMP) HAS BEEN SUBMITTED AND APPROVED BY THE CITY.					
5. NPDES AND STATE WATER RESOURCE REQUIREMENTS HAVE BEEN MET.					
C. DESIGN REQUIREMENTS					
1. PAD ELEVATIONS AND GRADING CONCEPTS ARE IN ACCORDANCE WITH THE APPROVED TENTATIVE MAP AND CONDITIONS OF APPROVAL.					
2. DRAINAGE SHALL BE CONDUCTED TO A STREET, NATURAL WATERCOURSE, RETENTION BASIN OR OTHER APPROVED LOCATION.					
3. A NOTARIZED LETTER OF PERMISSION/ACCEPTANCE FROM ADJACENT PROPERTY OWNER(S) REQUIRED FOR SLOPE ENCROACHMENT, ACCEPTANCE OF UN-NATUARL DRAINAGE OR OTHER OFF SITE GRADING OR WORK. INCLUDE LEGAL DESCRIPTION AND ASSESSOR'S PARCEL NUMBERS.					
4. PROVIDE CC&R'S OUTLINING DRAINAGE RIGHTS AND MAINTENANCE RESPONSIBILITIES.					
5. STRUCTURAL CALCULATIONS ARE REQUIRED FOR ALL NON STANDARD WALLS. ALL WALL CONSTRUCTION IS BY SEPARATE PERMIT.					

LEGEND: √ = ACCEPTABLE ? = UNCLEAR (PROVIDE MORE DATA) NA = NOT APPLICABLE X = NOT ACCEPTABLE FOR REASONS SHOWN

