



DRAINAGE AREA NOTES:

(OS) DRAINAGE WILL BE ROUTED AROUND SITE BY NORTH DITCH DRAINAGE CHANNEL.

ON-SITE NORTH DITCH DRAINAGE CHANNEL

50 YEAR DESIGN STORM					
DEVELOPMENT STAGE	STORM DRAINAGE AREA (ACRES)	PEAK RUNOFF RATE Q (CFS)	RUNOFF COEF. C.	AVERAGE CHANNEL VELOCITY V (FT/S)	AVERAGE DEPTH ELEVATION (FT.)
PRE-DEV.	8.0	29.27	61	N/A	N/A
POST-DEV.	8.0	56.38	86	2.94	1.72(±)
100 YEAR DESIGN STORM					
PRE-DEV.	8.0	42.17	61	N/A	N/A
POST-DEV.	8.0	72.11	86	3.14	1.94(±)

- (1) INLET FOR DRAINAGE AREA.
- (2) INLET FOR DRAINAGE AREA.
- (3) INLET FOR DRAINAGE AREA.
- (4) INLET FOR DRAINAGE AREA.
- (5) RETENTION INLET STRUCTURE, ALL DRAINAGE FROM DRAINAGE AREA 1, 2, 3, 4, AND 5 WILL BE ROUTED HERE.
- (6) RISER INLET/OUTLET STRUCTURE FOR DETENTION DISCHARGE.
- (7) DETENTION BASIN OUTLET CONTROL STRUCTURE FOR 100 YEAR STORM.

ON-SITE STORMWATER RETENTION/DETENTION BASIN

50 YEAR DESIGN STORM						
DEVELOPMENT STAGE	STORM DRAINAGE AREA (ACRES)	PEAK RUNOFF RATE Q (CFS)	RUNOFF COEF. C.	RETENTION OR DETENTION VOLUME V(FT³)	DESIGNED WATER SURFACE VOLUME (FT³)	WATER SURFACE ELEVATION (FT.)
PRE-DEV.	5.5	16.87	58	41382	N/A	N/A
POST-DEV.	5.5	36.31	81	87120	94090	376(±)
100 YEAR DESIGN STORM						
PRE-DEV.	5.5	25.87	58	62291	N/A	N/A
POST-DEV.	5.5	47.49	81	114563	117176	377(±)

SUMMARY OF AREAS (ACRES):

- 1. IMPERVIOUS AREA - 2.48
- 2. CRUSHED ROCK SURFACE AREA - 1.88
- 3. VEHICULAR AREA - 1.75
- 4. SEEDED AREA - 5.70
- 5. TEMPORARY CONSTRUCTION PARKING AREA - 0.70
- 6. TOTAL DISTURBED AREA - 10.10

GENERAL NOTES:

- 1. SEE SITE GRADING AND DRAINAGE PLAN FOR DETAILED STORM DRAINAGE DESIGN DATA.
- 2. SEE STORM DRAINAGE CALCULATIONS FOR DETENTION BASIN AND OUTLET CONTROL STRUCTURE DESIGN.

LEGEND:

- (A) A = AREA IN ACRES
- (B) B = BASIN DESIGNATION
- (C) C = COMPOSITE RUNOFF COEFFICIENT
- (D) D = BASIN DESIGNATION
- DRAINAGE AREA LIMITS

KEY:

- (EX) - EXISTING STRUCTURES
- CI - CURB INLET
- SI - CURB INLET IN SUMP
- DI - SINGLE DROP INLET
- DI-2 - DOUBLE DROP INLET
- ES - PREFABRICATED END SECTION
- JB - JUNCTION BOX
- YI - YARD INLET
- AI - AREA INLET
- MH - MANHOLE
- R - REDUCER
- FI - FIELD INLET
- BEND - PREFABRICATED VERTICAL BEND
- T.D. - TRENCH DRAIN
- G.I. - GRATE INLET
- O.C. - DETENTION OUTLET CONTROL STRUCTURE
- RCP - REINFORCED CONCRETE PIPE

DESIGN NOTES:

- (a) TIME OF CONCENTRATION 15 MINUTES MAX. 5 MINUTES MIN.
- (b) PIPE LENGTHS EXCLUDE END SECTIONS AND ARE MEASURED ALONG CENTERLINE OF PIPE FROM CENTER OF INSIDE FACE TO CENTER OF INSIDE FACE OF STRUCTURES.
- (c) MANNING'S ROUGHNESS COEFFICIENT = 0.013 (CONCRETE)

NOTES:

- 1. ALL GRADELINES AND ELEVATIONS ARE BASED ON USGS TOPO 20' CONTOURS. ALL OTHER CONTOURS HAVE BEEN DRAWN TO REPRESENT LIKELY EXISTING ELEVATIONS. AS A RESULT, PROPOSED CONTOURS AND ELEVATIONS SHOULD BE VIEWED AS PRELIMINARY.
- 2. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED GAS LINE
- PROPOSED UNDERGROUND ELECTRICAL
- PROPOSED WATERLINE
- EXISTING T&D LINE
- EXISTING FENCE
- EXISTING ROAD
- PROPOSED FENCE
- PARCEL LINE
- EXISTING USGS BOUNDARY
- PROPOSED S&T FENCE/EROSION CONTROL
- PROPOSED INLET PROTECTION
- EROSION CONTROL
- PROPOSED RIP RAP

REV.	DATE	DESCRIPTION	DWN	CHK
A	6-22-07	FOR REVIEW AND COMMENT	BGG	WHR

Sealed Only When Signed in Blue Ink

Sega
Engineers - Architects - Technicians
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ORANGE GROVE PROJECT
DRAINAGE AREA MAP

DESIGN BY: B. ROMINES	CHECKED BY: J. BONDANK
DRAWN BY: B. GASPERS	DATE: 6-22-07
CLIENT I.D. JPO00101	SEGA PROJECT NO. 07-098

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