GENERAL CONSTRUCTION NOTES

<u>GENERAL</u>

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, INCLUDING A TOP SOIL DISTURBANCE PERMIT, PRIOR TO START OF CONSTRUCTION.

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

REFERENCES MADE TO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS REFER TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION WITH ALL UPDATES.

THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THESE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE PLANS. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER IN A TIMELY MANNER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY, INCLUDING ENGINEERING DESIGN FEES.

EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.

EXISTING FENCING THAT IS NOT DESIGNATED FOR REMOVAL SHALL NOT BE DISTURBED. ANY FENCING THAT IS DISTURBED OR ALTERED BY THE CONTRACTOR SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR DESIRES TO REMOVE FENCING TO ACCOMMODATE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN PERMISSION BEFORE THE FENCE IS REMOVED. CONTRACTOR SHALL RESTORE THE FENCE TO ITS ORIGINAL CONDITION AT THE EARLIEST OPPORTUNITY. WHILE ANY FENCING IS REMOVED, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURITY OF THE SITE UNTIL THE FENCE IS RESTORED.

WORK WITHIN ADJACENT RIGHT-OF-WAY

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN ADJACENT RIGHT-OF-WAYS OR WITHIN PROPERTY NOT OWNED BY THE OWNER OF THE PROJECT SITE, THE CONTRACTOR SHALL ASSURE THAT ALL PERMITS AND PERMISSIONS REQUIRED HAVE BEEN OBTAINED IN WRITING.

SURVEY MONUMENTS, PROPERTY CORNERS, BENCHMARKS

THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST SEVEN DAYS BEFORE BEGINNING ANY CONSTRUCTION ACTIVITY THAT COULD DAMAGE OR DISPLACE SURVEY MONUMENTS, PROPERTY CORNERS, OR PROJECT BENCHMARKS SO THESE ITEMS MAY BE RELOCATED.

ANY SURVEY MONUMENTS, PROPERTY CORNERS, OR BENCHMARKS THAT ARE NOT IDENTIFIED FOR RELOCATION ARE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE AND PROTECT, RELOCATION OR REPLACEMENT OF THESE ITEMS SHALL BE DONE BY THE OWNER'S SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

<u>DIMENSIONS</u>

- ALL DIMENSIONS TO CURBS ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED.
- ALL STATIONING IS TO THE CENTERLINE OF THE RIGHT-OF-WAY UNLESS OTHERWISE NOTED.
- ALL SLOPES AND GRADES ARE IN PERCENT UNLESS OTHERWISE NOTED.

CURB ELEVATIONS ARE SHOWN AT THE FLOW LINE UNLESS OTHERWISE NOTED. SEE THE DETAIL SHEET TO DETERMINE THE CURB HEIGHT ABOVE FLOW LINE.

UNLESS OTHERWISE SPECIFIED, SUBGRADE, ENGINEERED FILL, AND STRUCTURAL FILL SHALL BE COMPACTED TO THE FOLLOWING SPECIFICATIONS OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

MATERIAL/LOCATION	PERCENT COMPACTION
STRUCTURAL FILL IN THE BUILDING AREA	95%
SUBBASE FOR SLAB SUPPORT	95%
MISCELLANEOUS BACKFILL BELOW STRUCTURAL	_
FILL OR ROADWAY PAVEMENT	95%
MISCELLANEOUS BACKFILL BELOW UNPAVED,	
NON-BUILDING AREAS	90%
ROADWAY PAVEMENT SUBGRADE	95%
SIDEWALK SUBGRADE	90%
CURB AND GUTTER SUBGRADE	95%

<u>PAVEMENT</u>

WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, CUT EXISTING PAVEMENT EDGE TO A NEAT, STRAIGHT LINE AS NECESSARY TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVEMENT ELEVATION TO

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TELEVISION, AND SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISHED GRADE BEFORE PAVING.

WHEN SIDEWALK OR CURB AND GUTTER IS REMOVED, IT SHALL BE REMOVED TO EXISTING CONSTRUCTION JOINTS. CUTTING OR BREAKING SHALL NOT BE ALLOWED.

<u>UTILITIES</u>

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY BASED ON THE INFORMATION PROVIDED TO THE ENGINEER BY OTHERS. THIS INFORMATION MAY BE INACCURATE OR INCOMPLETE. ADDITIONALLY, UNDERGROUND LINES MAY EXIST THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ACCORDANCE WITH CHAPTER 62, ARTICLE 14-1, THROUGH 14-8, NMSA 1978.

THE CONTRACTOR SHALL CONTACT THE STATEWIDE UTILITY LOCATOR SERVICE AT 1-800-321-2537 AT LEAST TWO WORKING DAYS BEFORE BEGINNING CONSTRUCTION. AFTER THE UTILITIES ARE SPOTTED, THE CONTRACTOR SHALL EXPOSE ALL PERTINENT UTILITIES TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATION. IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.

THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE OR BELOW GROUND. UTILITIES THAT ARE DAMAGED BY CARELESS CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

EXISTING VALVES SHALL ONLY BE OPERATED BY THE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY THE UTILITY A MINIMUM OF TWO WORKING DAYS BEFORE ANY VALVE, NEW OR EXISTING, NEEDS TO BE OPERATED.

THE CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY INTERRUPTIONS WITH THE OWNER AND AFFECTED UTILITY COMPANY A MINIMUM OF THREE WORKING DAYS BEFORE THE INTERRUPTION.

THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SET OF PLANS AND PROMPTLY LOCATE ALL UTILITIES, EXITING OR NEW, IN THEIR CORRECT LOCATION, HORIZONTAL AND VERTICAL. THIS RECORD SET OF DRAWINGS SHALL BE MAINTAINED ON THE PROJECT SITE AND SHALL BE AVAILABLE TO THE OWNER AND ENGINEER AT ANY TIME DURING CONSTRUCTION.

EROSION CONTROL, ENVIRONMENTAL PROTECTION, AND STORM WATER POLLUTION PREVENTION PLAN

THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PREPARE ANY DUST CONTROL OR EROSION CONTROL PERMITS REQUIRED FROM THE REGULATORY AGENCIES.

THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITH THE PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY BY CONSTRUCTION OF TEMPORARY EROSION CONTROL BERMS OR INSTALLING SILT FENCES AT THE PROPERTY LINES AND WETTING THE SOIL TO PREVENT IT FROM BLOWING.

WATERING, AS REQUIRED FOR CONSTRUCTION DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR IMPERVIOUS SURFACES SHALL BE REVEGETATED WITH RECLAMATION SEEDING.

THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT REMOVED ON THE PROJECT BY HAULING IT TO AN APPROVED DISPOSAL SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW MEXICO SOLID

ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC.. SHALL BE APPROPRIATELY DISPOSED OF OFFSET AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINT, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO EMERGENCY RESPONSE AT 1-800-219-6157.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.

ACCESSIBLE FACILITIES

ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE FIRM, SLIDE RESISTANT AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.

LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20. CROSS SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.

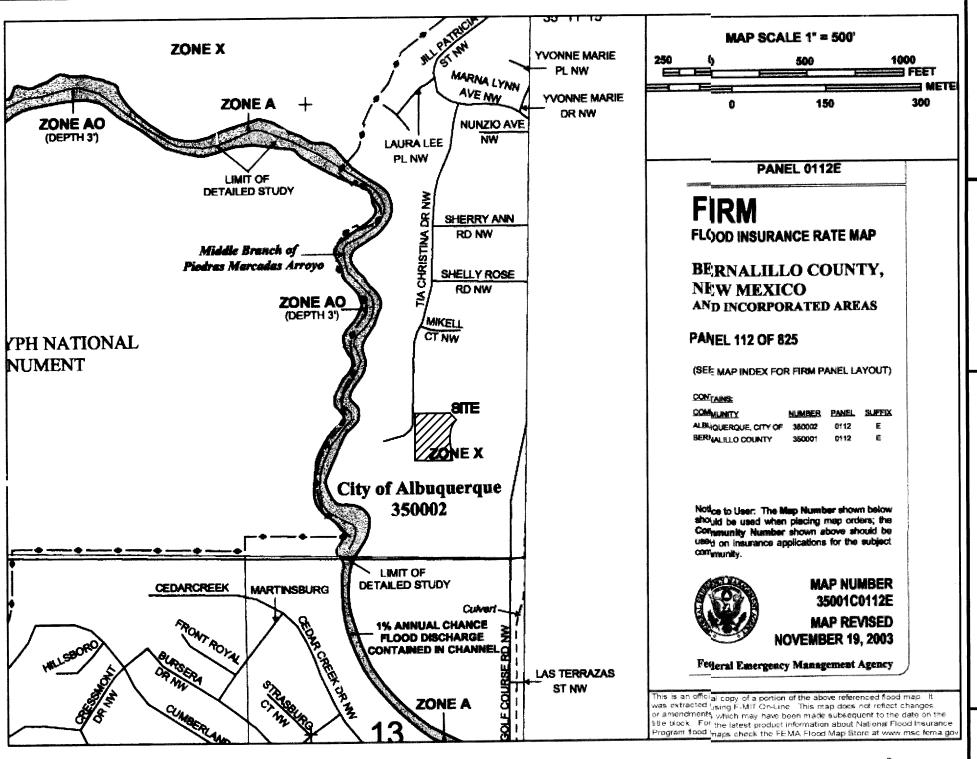
THE SITE SHALL COMPLY WITH ANSI A117.1-1992, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".

TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL PLANS. ALL SIGNS, BARRICADES, CHANNELIZATION DEVICES, SIGN FRAMES AND ERECTION OF SUCH DEVICES SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION. PRIOR TO CONSTRUCTION, TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE GOVERNING AUTHORITY.

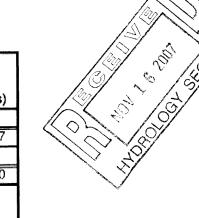
ABBREVIATIONS

	AD = AREA DRAIN	DTL = DETAIL	GV = GATE VALVE	RCP = REINFORCED CONCRETE PIPE	TCC =
	AIP = ABANDONED IN PLACE	DWG = DRAWING	HI PT = HIGH POINT	R/W = RIGHT-OF-WAY	TG = TOP OF GRATE
-	BLDG = BUILDING	E = ELECTRIC LINE	INV = INVERT ELEVATION	SAS = SANITARY SEWER	TS = TOP OF SIDEWALK
	BM = BENCHMARK	ELEC. = ELECTRIC	LF = LINEAL FEET	SD = STORM DRAIN	TW = TOP OF WALL
	CATV = CABLE TELEVISION LINE	ELEV = ELEVATION	MH = MANHOLE	STA = STATION	TYP = TYPICAL
	CMP = CORRUGATED METAL PIPE	EX = EXISTING	NG = NATURAL GROUND	STD = STANDARD	TB = TELEPHONE BOX
	CO = CLEANOUT	FF = FINISHED FLOOR ELEVATION	OE = OVERHEAD ELECTRIC LINE	SW = SIDEWALK	UE =
	COA = CITY OF ALBUQUERQUE	FG = FINISHED GRADE	PCC = PORTLAND CEMENT CONCRETE	T = TELEPHONE	UT =
	CONC = CONCRETE	FH = FIRE HYDRANT	PP = POWER POLE	TA = TOP OF ASPHALT PAVEMENT	W = WATER
	CL = CENTERLINE	FL = FLOW LINE	PROP = PROPOSED	TAC = TOP OF ASPHALT CURB	WM = WATER METER
	DIA = DIAMETER	GM = GAS METER	PVC = POLYVINYL CHLORIDE PIPE	TC = TOP OF CONCRETE SLAB (PAVEMENT)	WV WATER VALVE



100-YEAR HYDROLOGIC CALCULATIONS

BASIN ARE		LAND TREATMENT				WEIGHTED					
	AREA (acre)	A B (%) (%)	В	ВС	D E] E	V (6-hr)	V (6-hr)	V(10 day)	V(10 day)	Q
#			(%)	(%) (%)	(in)	(acre-ft)	(cu-ft)	(acre-ft)	(cu-ft)	(cts)	
					EXIST	ING CONDIT	ONS				
NORTH	1 0284	0.00	13.62	0.00	86.38	1.79	0.15	6,693	0.26	11,433	4.17
					PROPO	SED CONDI	rions				
NORTH	1.0284	0.00	20.00	20.00	60.00	1.51	0.13	5,652	0.21	8,944	3.70
	<u>-</u>										
EXCESS	PRECIP.	0.44	0.67	0.99	1.97	E (in)					
PEAK DIS	CHARGE	1.29	2.03	2.87	4.37	Qn (cfs)					
	THE STATE OF THE S		A						ZONE =	1	
WEIGHT	ED E (in) =	= (Ea)(%	A) + (Ee)(%B) + (E	c)(%C) +	(E ₀)(%D)			P _{6-HR} (in.) =	2.20	
	e-ft) = (WE				24 1 2 2 2	, ,,			P _{24-HR} (in.) =	2.66	
•	re-ft) = Vs		• •						Ploday (in.) =	3.67	



DRAINAGE INFORMATION

LOCATION & DESCRIPTION

THE PROPOSED SITE IS 1.03 ACRES LOCATED JUST NORTH AND WEST OF THE GOLF COURSE AND PASEO DEL NORTE INTERSECTION AS SHOWN ON THE VICINITY MAP ON SHEET C3. THE LOT IS UNDEVELOPED WITH DEVELOPED LOTS ALL AROUND IT. THE AREA HAS BEEN MASTER PLANNED BY D. MARK GOODWIN AND ASSOCIATES IN THEIR REPORT "DRAINAGE REPORT FOR FURR'S - LAS MARCADAS." THE SITE HAS BEEN MASS GRADED AND WALLS HAVE BEEN CONSTRUCTED ALONG THE WEST AND PORTIONS OF THE NORTH AND SOUTH SIDES OF THE LOT.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0112 E, DATED NOVEMBER 19, 2003 IS NOT WITHIN ANY DESIGNATED 100-YEAR FLOODPLAIN. A PORTION OF THIS PANEL WITH THE SITE DESIGNATED ON IT IS INCLUDED ON THIS SHEET.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION

PRECIPITATION

THE 100-YR, 6-HR AND 100-YR, 10 DAY DURATION STORM EVENTS WERE USED AS THE DESIGN STORMS FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE 6-HOUR, 24-HOUR, AND 10-DAY PRECIPITATION VALUES, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

EXISTING DRAINAGE

THE SITE IS UNDEVELOPED AS DESCRIBED ABOVE IN "LOCATION AND DESCRIPTION." THE ABOVE MENTIONED STUDY IDENTIFIES THE SITE WITHIN BASIN III. THIS REPORT IDENTIFIED AN ALLOWABLE DISCHARGE OF 35.7-CFS FOR BASIN III BUT THAT THE ACTUAL DEVELOPED DISCHARGE WOULD BE 16.46-CFS AND THAT PONDING IS NOT REQUIRED. THE 16.46-CFS ASSUMES A DEVELOPMENT DENSITY OF 13.62% LAND TREATMENT 'B' AND 86.38% LAND TREATMENT 'D' FOR THE 3.9969 ACRE BASIN. THIS SITE IS A 1.03 ACRE PORTION OF THE 3.9969 ACRE DRAINAGE BASIN AND IS PLANNED TO DRAIN TO A PRIVATE STREET ALONG THE EAST SIDE OF THE PROPERTY. A WATER BLOCK NEAR THE SOUTHEAST CORNER OF THIS SITE DIVERTS THE RUNOFF TO A DOUBLE GRATE TYPE A INLET AND THEN TO THE GOLF COURSE ROAD STORM DRAIN. ONLY A SMALL CORNER WITHIN THIS PARCEL BUT BELOW THIS WATER BLOCK IS PLANNED TO DRAIN TO THE ADJACENT DEVELOPMENT.

DEVELOPED CONDITION

THE SITE WILL BE DEVELOPED IN ACCORDANCE WITH THE MASTER DRAINAGE STUDY AND DRAIN TO THE STREET ABOVE THE WATER BLOCK. A 1130-CF STCRAGE TANK WILL ALSO BE CONSTRUCTED ON SITE TO HARVEST THE ROOF RUNOFF. HOWEVER, THE SITE WILL BE CONSTRUCTED TO RELEASE THE FULL 100-YEAR RUNOFF TO THE STREET IN THE EVENT THAT THE TANK IS FULL. THE WATER STORED IN THE TANK WILL BE USED TO IRRIGATE THE LANDSCAPING. SINCE THE PROPERTY ABOVE THIS SITE IS ALREADY WALLED AND THE LOT TO THE NORTH IS GRADED TO DRAIN AWAY FROM THE SITE, THE ONLY OFFSITE RUNOFF IS A NEGLIGIBLE AMOUNT BETWEEN THE PROPERTY LINE AND THE BUILDING TO THE NORTH. THIS RUNOFF WILL CONTINUE TO DRAIN INTO THIS SITE. THEREFORE, THIS DEVELOPMENT WILL NOT ADVERSELY IMPACT THE PROPERTY AROUND IT. THE CALCULATIONS ABOVE ALSO DEMONSTRATE THAT THIS SITE WILL DISCHARGE LESS THAN THE AMOUNT ANTICIPATED IN THE MASTER DRAINAGE STUDY. THEREFORE, THIS SITE CAN BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN INTENT OF THE MASTER DRAINAGE PLAN.

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DATE: 11/16/07

SHEET NO.

