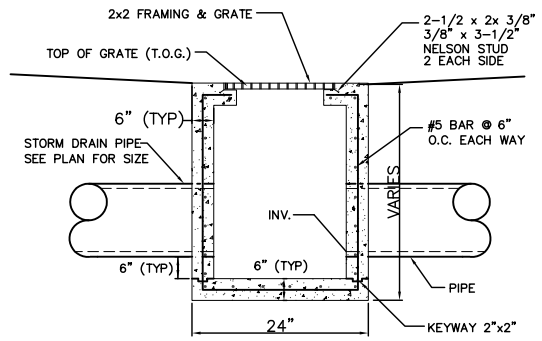
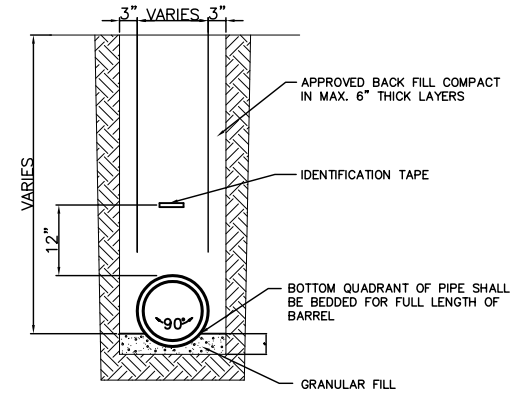


TYPICAL DROP INLET CA C3 C3

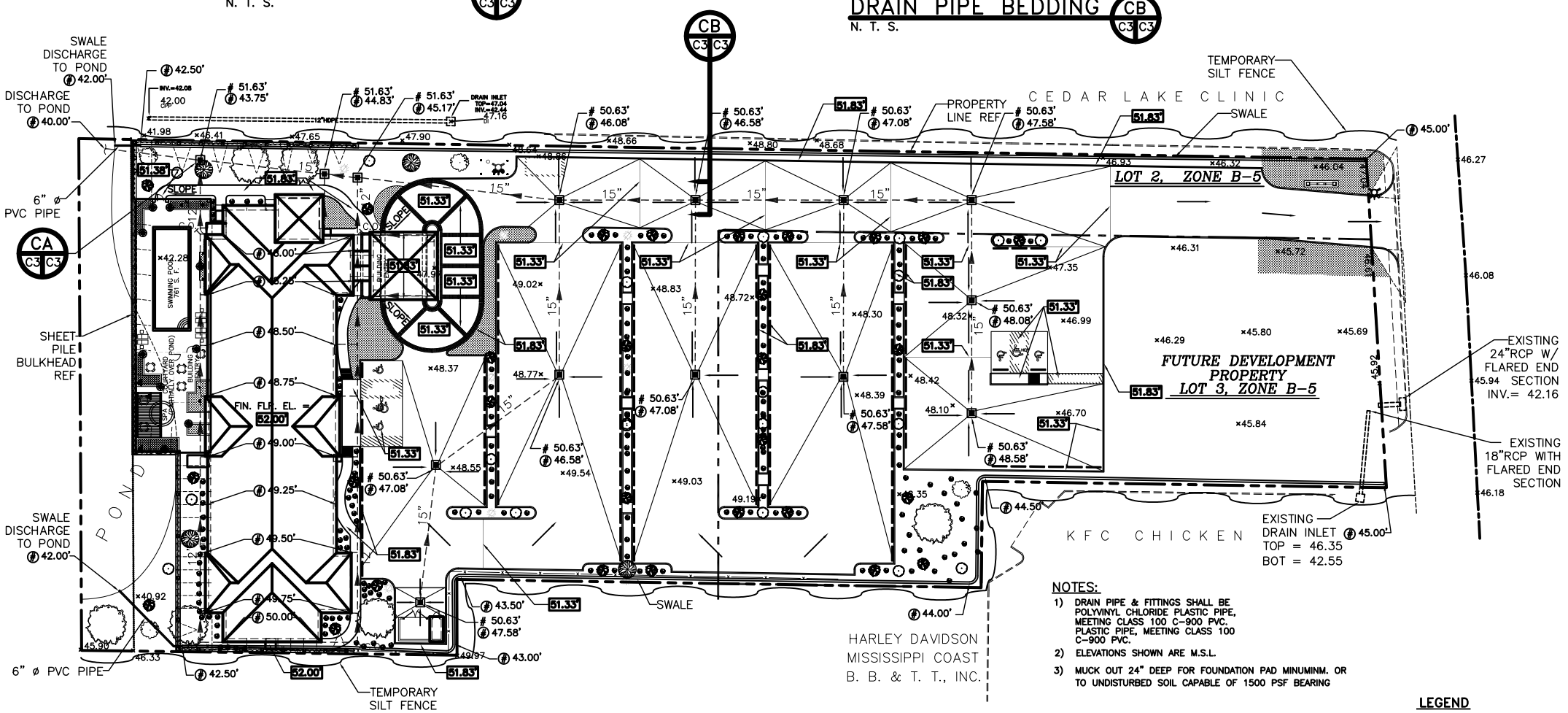
N. T. S.



DRAIN PIPE BEDDING CB C3 C3

N. T. S.

PROJECT:	La Quinta Biloxi	
DRAINAGE RUN OFF CALCULATIONS – RATIONAL METHOD		
PRIOR DEVELOPMENT 10 Year Frequency		
Q_p = CIA		
Watertight Surfaces	c(1) = 0.9	0 sqft = 0.000 Acres
Gravel Surface	c(2) = 0.21	0 sqft = 0.000 Acres
Green Space	c(3) = 0.35	125821 sqft = 2.888 Acres
Summary	c = 0.35	125821 sqft = 2.888 Acres
Duration (D) = Time of concentration (TC)		
TC = .7039(L^.3917)/(c^-1.1395)(S^-.1988)		
where	L = 615 Runoff length ft	Elev diff = 2
	c = 0.35 Runoff coef	
	S = 0.3252 Percent Slope	
Therefore	TC = D = 35.70 minutes or	
and from Rainfall Intensity Table	I = 4.80 in/hr	
	Q_p = 4.549 cfs RUNOFF LIMIT 80%	4.664 cfs
POST DEVELOPMENT 10 Year Frequency		
Q_p = CIA		
Watertight Surfaces	c(1) = 0.9	78802 sqft = 1.802 Acres
Gravel Surface	c(2) = 0.21	0 sqft = 0.000 Acres
Green Space	c(3) = 0.35	47319 sqft = 1.086 Acres
Summary	c = 0.69	126121 sqft = 2.888 Acres
D = Time of concentration (TC)		
TC = .7039(L^.3917)/(c^-1.1395)(S^-.1988)		
where	L = 476 Runoff length ft	Elev diff = 0.25
	c = 0.69 Runoff coef	
	S = 0.0020 Percent Slope	
Therefore	TC = D = 21.41 minutes or	
and from Rainfall Intensity Table	I = 7.60 in/hr	
	Q_p = 15.216 cfs	
RESULTS		
DETENTION REQUIRED Q_p-Q_1	11.122 cfs	
ONE HOUR DETENTION	40036.9 cuft	
DETENTION DIMENSIONS	WIDTH 197 feet	
	LENGTH 358 feet	
	DEPTH 0.57 feet	
DISCHARGE END AREA CALCULATIONS		
Q = cA(2gh)^1/2	where Q is allowable run off	
Allowable run off	Q = 4.004 cfs	
Friction loss factor	c = 0.89 coefficient	
Acceleration	g = 32.2 ft/ft/sec	
Height above invert	If H = 2.75 feet	
End area	A = 0.31 sqft	
REQUIRED CONDUIT =	7.59 Inch diameter	



DRAINAGE PLAN

SCALE: 1"=30'-0"

NOTES:

1) DRAIN PIPE & FITTINGS SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE, MEETING CLASS 100 C-900 PVC. PLASTIC PIPE, MEETING CLASS 100 C-900 PVC.
2) ELEVATIONS SHOWN ARE M.S.L.
3) MUCK OUT 24" DEEP FOR FOUNDATION PAD MINUMINM. OR TO UNDISTURBED SOIL CAPABLE OF 1500 PSF BEARING

DRAINAGE

1. CONCRETE STRENGTH TO BE 4,000 P.S.I. (MIN.) @ 28 DAYS.
2. WHEN BOX IS 7'-0" OR LESS IN HEIGHT USE ONE LAYER OF BRICK. WHEN BOX IS 7'-0" BUT LESS THAN 12'-0" USE TWO LAYERS OF BRICK.
3. ALL MASONRY TO BE LAID WITH RUNNING BOND AND HEADER COURSE (EVERY FOURTH LAYER).
4. ALL WALLS TO BE PLASTERED 1/2" THICK INSIDE AND OUTSIDE.
5. 12" THICK LIMESTONE BEDDING FOUNDATION SHALL BE REQUIRED UNDER ALL MANHOLES AND BASINS.
6. WHEN THE DEPTH OF BOX OR MANHOLE IS FOUR FOOT OR GREATER THE INSTALLATION OF STEPS WILL BE REQUIRED IN ACCORDANCE WITH PUBLIC WORKS STANDARDS.
7. THE MIN. DRAIN SIZE ACCEPTABLE FOR ANY INSTALLATION ON PUBLIC RIGHT-OF-WAY SHALL BE 24" INCHES IN DIAMETER.
8. CONTRACTOR WILL CONTACT THE DEPARTMANT OF ENGINEERING PRIOR TO ANY WORK DONE WITHIN THE COUNTY OR CITY RIGHT OF WAY OR SERVITUDE.

TRAFFIC CONTROLS

ANY WORK IN THE ROADWAY OR ADJACENT TO THE ROADWAY CAUSING AN INTERFERENCE TO VEHICULAR TRAFFIC REQUIRES PRIOR NOTIFICATION TO THE COUNTY OR CITY TRAFFIC ENGINEERING DIVISION AND CONFORMITY TO THE REQUIREMENTS OF THE UNIFORM MANUAL ON TRAFFIC CONTROL DEVICES OF THE STATE OF MISSISSIPPI. THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC SIGNS AND/ OR BARRICADES AND MAINTAIN THEM DURING CONSTRUCTION ACTIVITY.

LEGEND

- PROPERTY LINE
- SETBACK LINE
- NEW BUILDING
- EXISTING CURB
- NEW CURB
- SLOPE LINE
- 15" DRAIN LINE
- SHEET PILE BULKHEAD WITH CAP
- HCP – HANDICAPPED PARKING
- CATCH BASIN W/ TEMPORARY INLET PROTECTION
- TEMPORARY SILT FENCE
- ×45.69 – EXISTING ELEVATIONS
- # X.X' – TOP OF GRATE
- ℄ X.X' – INVERT ELEVATION
- X.X' – NEW ELEVATION'
- DIRECTIONAL FLOW

REVISED: 04-06-06

DRAINAGE PLAN

DR. EDUARDO HERNANDEZ
CEDAR LAKE ROAD
BILOXI, MISSISSIPPI

LA QUINTA INN & SUITES

DAMMON ENGINEERING, INC.
1095 FLORIDA AVENUE 985-646-5532 SLIDELL, LA. 70458
DAMMONENGINEERING.COM

SCALE:AS NOTED

FILE:

JOB NO. 1694

DATE:11-01-05

SHEET C.3D OF