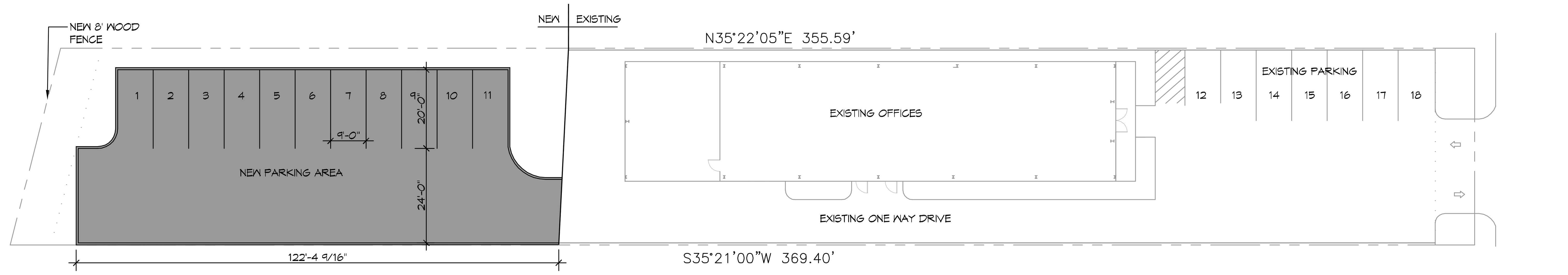
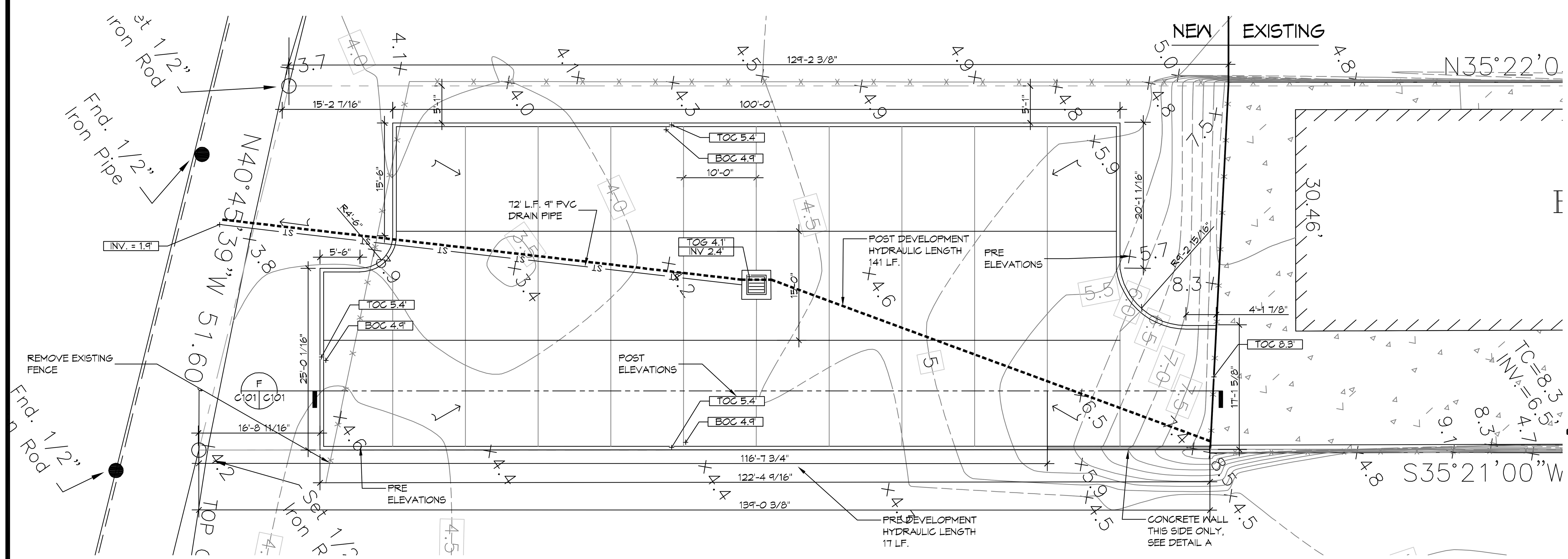
PARKING REQUIREMENTS

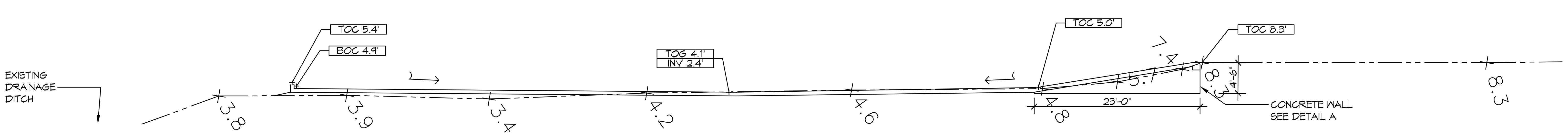
BUSINESS AND PROFESSIONAL OFFICES
OFFICE SPACES = 6 SPACES
TRAINING CENTER & MEETING ROOM = 11 SPACES
WAREHOUSE = 1 SPACE
18 PARKING SPACES REQUIRED AND PROVIDED



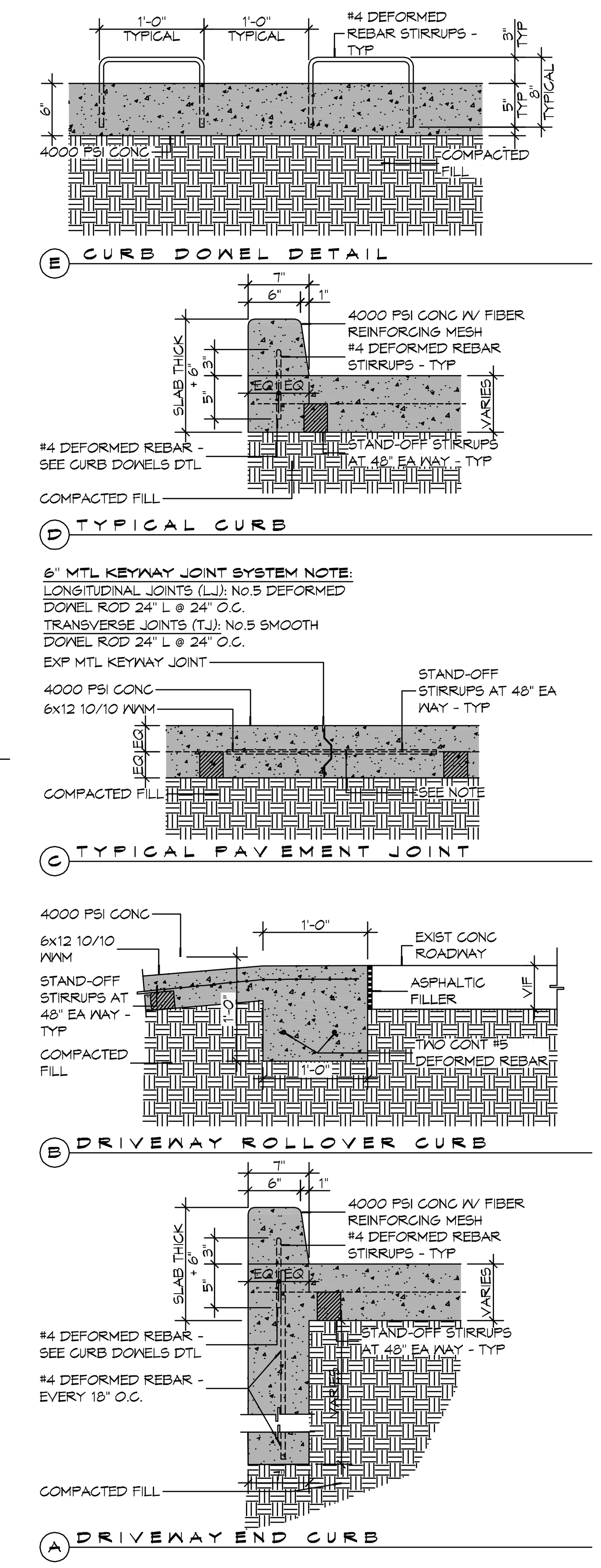
1 PARKING SITE PLAN
SCALE: 1" = 20'-0"



2 DRAINAGE & PAVING PLAN
SCALE: 1" = 10'-0"



F SECTION
SCALE: 1" = 10'-0"

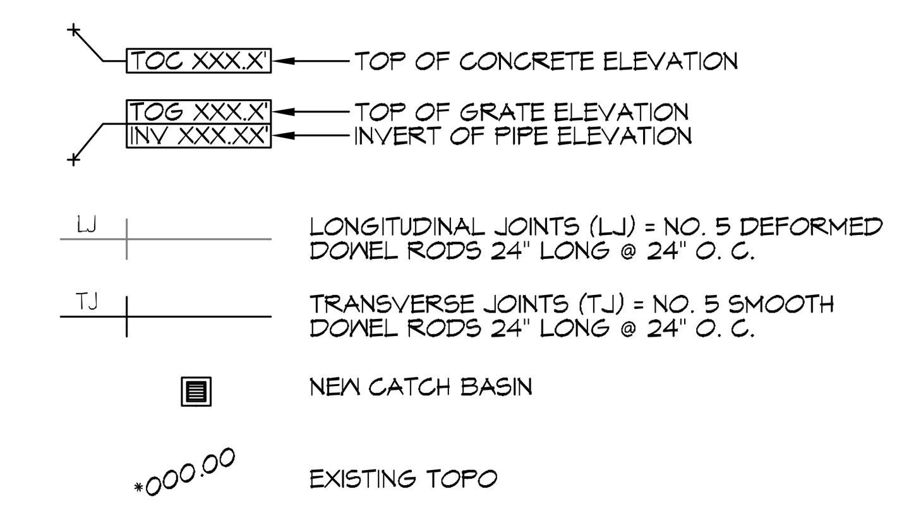


4 PAVING DETAILS
SCALE: 1" = 1'-0"

GENERAL PAVING NOTES

1. ALL NEW CONCRETE SHALL SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS AND A MINIMUM THICKNESS OF 6". CONCRETE MIX SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF ASTM C-150 TYPE 1.
2. CONCRETE PAVING THICKNESS SHALL VARY AS FOLLOWS:
   a. APRONS & LOADING AREAS = 8" THICKNESS (INDICATED WITH CROSS HATCH WHERE OCCURS)
   b. DRIVE LANES & PARKING AREAS = 6" THICKNESS (STANDARD UNO)
3. ALL REINFORCING STEEL SHALL MEET ASTM-A615 (GRADE 60).
4. ALL REINFORCING STEEL SHALL BE SECURELY SUPPORTED TO PREVENT BOTH VERTICAL AND HORIZONTAL MOVEMENT DURING CONCRETE PLACEMENT. ALL CONTROL AND EXPANSION JOINTS SHALL BE LOCATED AND INSTALLED AS SHOWN ON THE PAVING PLAN AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
5. ALL SUB GRADE FILL SHALL BE SELECT GRANULAR MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY IN A MAXIMUM OF 6" LIFTS.
6. ANY WORK WITHIN THE ROADWAY OR ADJACENT TO THE ROADWAY CAUSING AN INTERFERENCE TO VEHICULAR TRAFFIC MUST CONFORM TO THE REQUIREMENTS SET FORTH BY THE UNIFORM MANUAL OF TRAFFIC CONTROL DEVICES OF THE STATE OF LOUISIANA. THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC SIGNS AND/OR BARRICADES AND MAINTAIN THEM DURING CONSTRUCTION ACTIVITY.

PAVING LEGEND



PROJECT:	Old Spanish Trail					
STORMWATER RUN-OFF CALCULATIONS						
Formulas used:						
[1] RATIONAL METHOD: Q=Aci						
where: Q=	Peak discharge of watershed in cubic feet per second (cfs) due to maximum storm assumed.					
A=	Area of watershed in acres.					
c=	Coefficient of run-off [2].					
i=	Intensity of rainfall in inches per hour based on concentration time. [3]					
[4] TC= $\frac{\left(L^{0.8}\left(\frac{1000}{c}-9\right)^{0.7}\right)}{(1140(s^{0.5}))}$						
where: TC=	Time of concentration= time required for rain falling at most remote point to reach discharge point.					
c=	Site run-off coefficient based on conditions shown.					
s=	Percent slope of overland flow.					
PRIOR DEVELOPMENT						
25 Year Frequency						
Q_1 = Aci						
Watertight Surfaces			10,613	sqft =	0.244	Acres
c(1) =	0.9					
Gravel Surface				sqft =	0.000	Acres
c(2) =	0.25					
Green Space			7,525	sqft =	0.173	Acres
c(3) =	0.15					
Summary			18,138	sqft =	0.416	Acres
c =	0.59					
Duration (D) = Time of concentration (TC)						
where	L =	117	run-off length ft		Elev diff =	1
	c =	0.59	run-off coef			
	S =	0.8547	percent slope			
therefore	TC = D =	6.65	minutes			
Expected rainfall intensity	i =	8.53	in/hr			
Q_1 =	2.091	cfs		10% reduction	1.882	cfs
POST DEVELOPMENT						
25 Year Frequency						
Q_2 = Aci						
Watertight Surfaces			15,456	sqft =	0.355	Acres
c(1) =	0.9					
Gravel Surface			0	sqft =	0.000	Acres
c(2) =	0.25					
Green Space			2,682	sqft =	0.062	Acres
c(3) =	0.15					
Summary			18,138	sqft =	0.416	Acres
c =	0.79					
Duration (D) = Time of concentration (TC)						
where	L =	141	run-off length ft		Elev diff =	2
	c =	0.79	run-off coef			
	S =	1.4184	percent slope			
therefore	TC = D =	8.09	minutes			
Expected rainfall intensity	i =	8.29	in/hr			
Q_2 =	2.724	cfs				
DETENTION REQUIREMENTS						
Detention required	Q_2-Q_1	0.84	cfs			
ONE HOUR DETENTION		3029.8	cuft			
DETENTION DIMENSIONS			WIDTH	44	feet	
			LENGTH	122	feet	
			DEPTH	0.56	feet	
DISCHARGE END AREA REQUIREMENTS						
25 Year Frequency						
[5] A= $\frac{Q}{(c\sqrt{(2gh)})}$						
where: A=	Discharge Area required					
g=	Acceleration of gravity					
c=	Discharge coefficient					
h=	Hydraulic head					
Q=	Flow volume from run-off					
Pipe Servicing Site Drainage						
Q =	1.882	cfs		h =	0.50	feet
c =	0.62	coefficient		A =	0.535	sqft
g =	32.16	ft/sec/sec				
REQUIRED CONDUIT =			9.91	inch inside diameter		

References:
1. Chen, W.F. The Civil Engineering Handbook. 1995. Eq.# 31.1, pg. 1036
2. Seelye, Elwyn E. Data Book for Civil Engineers. Vol.1 1960. Tbl. B, pg. 18-02
3. Seelye, Elwyn E. Data Book for Civil Engineers. Vol.1 1960. Fig.B, pg. 18-01
4. Chen, W.F. The Civil Engineering Handbook. 1995. Tbl. 31.2 Regan Equation (n=0.013)
5. Chen, W.F. The Civil Engineering Handbook. 1995. Eq.# 28.32, pg. 969

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REVISIONS
#	DESCRIPTION	DATE

SEAL:

RAY MASKER
McDONALD'S OFFICE
683 OLD SPANISH TRAIL
SLIDELL, LA. 70458

JOB No:	2388	DATE:	07-21-2020
DRAWN BY:	CKD	CHECKED BY:	CKD

SHEET TITLE:
SITE PLAN

DRAWING NUMBER:
C101

SHEET No: 3 of 1