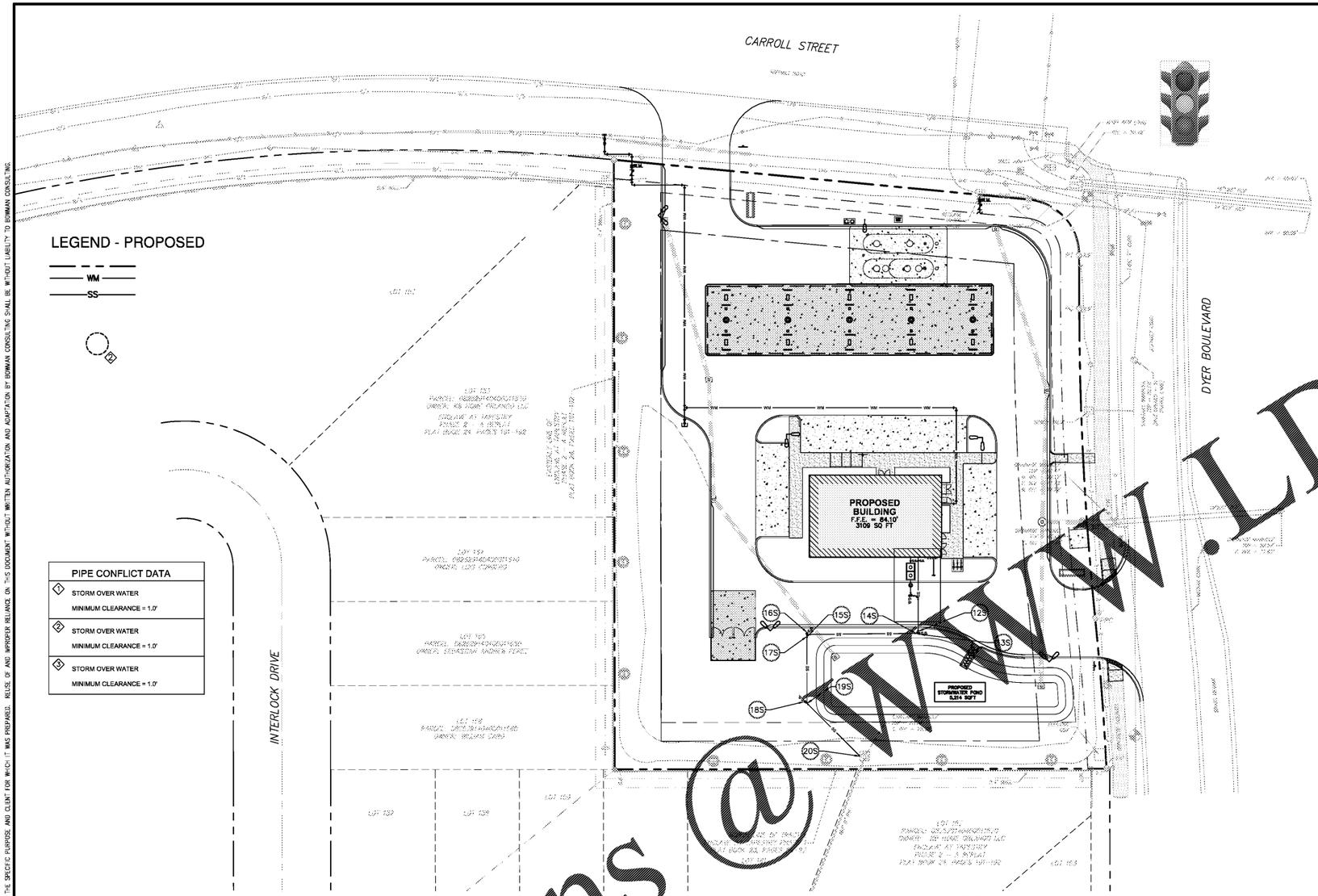


GENERAL UTILITY NOTES

1. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND IS RESPONSIBLE TO REPAIR ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. ALL UTILITIES ARE SHOWN FROM INFORMATION GATHERED AND SHOULD NOT BE USED AS EXACT. CONTRACTOR SHALL VERIFY EXACT DEPTHS AND LOCATIONS PRIOR TO UTILITY INSTALLATION.
3. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY FOR INSTALLATION AND SPECIFICATION REQUIREMENTS.
4. ALL PIPE MATERIALS SHALL COMPLY WITH LOCAL REGULATIONS.
5. ALL TRENCHING AND BEDDING SHALL BE PER THE UTILITY TRENCH AND BEDDING DETAIL.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR ALL BUILDING UTILITY TIE INS.
7. THE CONTRACTOR IS TO FIELD VERIFY THE EXACT LOCATIONS AND DEPTHS OF UTILITY LINES.
8. ALL CERTIFICATES AND SHOP DRAWINGS MUST BE SUBMITTED, REVIEWED, AND APPROVED PRIOR TO STARTING CONSTRUCTION.
9. CONTRACTOR TO PROVIDE AS-BUILTS OF ALL IMPROVEMENTS TO THE SITE, PERFORMED BY A LICENSED SURVEYOR IN THE STATE OF FLORIDA. AS-BUILTS TO INCLUDE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UNDERGROUND UTILITIES INCLUDING, BUT NOT LIMITED TO, PIPES, FITTINGS, STRUCTURES, AND OTHER APPURTENANCES. ELEVATIONS OF PIPES AT CROSSING POINTS MUST BE SUFFICIENT TO IDENTIFY MINIMUM SEPARATION OF UTILITIES AS DEFINED BY F.A.C. RULE 62-555.314. IN ADDITION TO THE AFOREMENTIONED CRITERIA AS-BUILTS MUST MEET ALL LOCAL AND JURISDICTIONAL REQUIREMENTS FOR CERTIFICATION OF CONSTRUCT
10. ANY NEW UTILITY SHALL BE LOCATED UNDERGROUND.
11. ALL LANDSCAPING MUST MAINTAIN A MINIMUM 5' SEPARATION FROM TWA OWNED WATER, SEWER AND REUSE UTILITIES.
12. ALL CONDUIT INSTALLED UNDER PAVEMENT MUST BE 42" FROM TOP OF CONDUIT TO FINAL PAVEMENT AND EACH END OF THE CONDUIT MUST EXTEND AT LEAST FIVE FEET PAST PAVEMENT EDGE.

UTILITY CONSTRUCTION NOTES

WATER SERVICE

1W TAP EXIST. 16" WATERMAIN W/18"x4" TAPPING SLEEVE AND 4" TAPPING VALVE ASSEMBLY 4"x2" REDUCER 5 LF OF 2" C900 PVC WATER SERVICE
2W 2" - 90° BEND
3W 3 LF OF 2" C900 PVC WATER SERVICE
4W 2" DOUBLE WATER METER AND 2" BACKFLOW PREVENTER 2"x3" REDUCER 3 LF OF HDPE WATER SERVICE END OF TWA RESPONSIBILITY
5W 3" - 90° BEND
6W 28 LF OF 3" HDPE WATER SERVICE
7W 5 LF OF 3" HDPE WATER SERVICE
8W 3"x3"x1" TEE
9W 10 LF OF 3" HDPE WATER SERVICE W/3" GATE VALVE AND 3" PLUG FOR FUTURE CARWASH CONNECTION (CARWASH MUST MAINTAIN SEPARATION FROM ALL TWA INFRASTRUCTURE)
10W 149 LF OF 1" HDPE WATER SERVICE
11W 1" - 90° BEND
12W 51 LF OF 1" HDPE WATER SERVICE
13W 7 LF OF 1" HDPE WATER SERVICE CONNECT TO BUILDING

RECLAIM WATER SERVICE

1R CONNECT TO EXIST. RECLAIM WATER VALVE PROVIDE FITTINGS AS NEEDED END OF TWA RESPONSIBILITY
2R 1" REUSE WATER METER AND 1" BACKFLOW PREVENTER
3R SEE IRRIGATION PLANS FOR CONTINUATION

SANITARY SEWER

1S CONNECT TO BUILDING @ INV = 80.10', 3" - 45° PVC PIPE @ 2.0%, SEE ARCHITECTURAL PLANS
2S 6" CLEANOUT @ INV = 80.04'
3S 4 LF OF 6" PVC PIPE @ 1.0%, GREASE INTERCEPTOR, PER DETAIL SHEET D2.0 INFLOW INV EL = 80.03', OUTFLOW INV EL = 79.78', 2 LF OF 6" PVC @1.0%
4S CONNECT TO PROPOSED 8" PVC PIPE W/WYE CONNECTION @ INV EL = 79.76'
5S 20 LF OF 6" PVC PIPE @ 2.1%
6S SAMPLE POINT PER DETAIL SHEET D2.0 INFLOW INV EL=79.76', OUTFLOW INV EL=79.75', 4 LF OF 6" PVC @ 1.0%
7S 6" - 45° BEND, 3 LF OF 6" PVC PIPE @ 1.0%
8S 6" CLEANOUT @ INV = 79.71' 3 LF OF 6" PVC PIPE @ 1.0%
9S CONNECT TO PROPOSED 6" PVC PIPE W/WYE CONNECTION @ INV EL = 79.68', 3 LF OF 6" PVC PIPE @ 1.0%
10S 6" - 45° BEND, 3 LF OF 6" PVC PIPE @ 1.0%
11S CONNECT TO PROPOSED 6" PVC PIPE W/WYE CONNECTION @ INV EL = 79.62' 18 LF OF 6" PVC PIPE @ 1.0%
12S 6" - 45° BEND, 3 LF OF 6" PVC PIPE @ 1.0%
13S 6" CLEANOUT @ INV = 79.44' 3 LF OF 6" PVC PIPE @ 1.0%
14S CONNECT TO PROPOSED 6" PVC PIPE W/WYE CONNECTION @ INV EL = 79.41', 57 LF OF 6" PVC PIPE @ 1.0%
15S 6" - 45° BEND, 3 LF OF 6" PVC PIPE @ 1.0%
16S 6" CLEANOUT @ INV = 78.81' 3 LF OF 6" PVC PIPE @ 1.0%
17S CONNECT TO PROPOSED 6" PVC PIPE W/WYE CONNECTION @ INV EL = 78.78', 36 LF OF 6" PVC PIPE @ 1.0%
18S 6" CLEANOUT @ INV =78.48' 3 LF OF 6" PVC PIPE @ 1.0%
19S CONNECT TO PROPOSED 6" PVC PIPE W/WYE CONNECTION @ INV EL = 78.45', 40 LF OF 6" PVC PIPE @ 1.0%
20S CORE DRILL EXIST SANITARY MANHOLE @ INV EL=75.55' CONNECT PROPOSED 6" PVC PIPE. END OF TWA RESPONSIBILITY

ALTA	AMERICAN LAND TITLE ASSOCIATION	PB	PLAT BOOK
ACSM	AMERICAN CONGRESS ON SURVEYING & MAPPING	ORB	OFFICIAL RECORDS BOOK
NSPS	NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS	PG(S)	PAGE(S)
±	MORE OR LESS	R/W	RIGHT OF WAY
EL.	ELEVATION	ESMT	EASEMENT
LB	LICENSED BUSINESS	SEC	SECTION
NO.	NUMBER	FND	FOUND
LS	LAND SURVEYOR	REC	RECOVERED
I.D.	IDENTIFICATION	CCR	CERTIFIED CORNER RECORD
CONST	CONSTRUCTION	RLS	REGISTERED LAND SURVEYOR
℄	CENTERLINE	⊡	FOUND CONCRETE MONUMENT AS NOTED
(C)	CALCULATED MEASUREMENT	○	FOUND NAIL AS NOTED
(M)	FIELD MEASUREMENT	◎	FOUND NAIL & DISK AS NOTED
(P)	PLAT MEASUREMENT	●	FOUND IRON ROD & CAP AS NOTED
C.D.	CHORD LENGTH	⊙	FOUND IRON PIPE & CAP AS NOTED
C.B.	CHORD BEARING	●	FOUND IRON ROD AS NOTED
POC	POINT ON CURVE	◎	SET NAIL & DISK LB 8011
POL	POINT ON LINE	◎	SET 5/8" IRON ROD & CAP LB 8011
PC	POINT OF CURVATURE	⊕	CONCRETE BENCHMARK AS DESCRIBED
PT	POINT OF TANGENCY	⊙	STORM MANHOLE
PI	POINT OF INTERSECTION	⊞	CURB INLET GRATE
P.O.C.	POINT OF COMMENCEMENT	⊞	CATCH BASIN
P.O.B.	POINT OF BEGINNING	Ⓢ	SANITARY MANHOLE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	□	SANITARY CLEANOUT
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	⋈	FIRE DEPT. VALVE
GIP	CAST IRON PIPE	⋈	GATE VALVE
CMP	CORRUGATED METAL PIPE	☎	TELEPHONE MANHOLE
DIP	DUCTILE IRON PIPE	◉	MONITORING WELL
PVC	POLYVINYL CHLORIDE	⋈	IRRIGATION CONTROL VALVE
RCP	REINFORCED CONCRETE PIPE	⧈	WATER METER
VCP	VITRIFIED CLAY PIPE	⋈	WATER VALVE
NAVD	NORTH AMERICAN VERTICAL DATUM	⋈	RECLAIM WATER VALVE
NGVD	NATIONAL GEODETIC VERTICAL DATUM	⛲	FIRE HYDRANT

	CONCRETE UTILITY POLE
	METAL UTILITY POLE
	WOOD UTILITY POLE
	POLE GUY ANCHOR
	LIGHT POLE (TYPE NOTED ON SURVEY)
	SIGN
	BOLLARD
	MAIL BULLBOX
	FIBER-OPTIC CABLE MARKER
	BURIED SEWER MAIN MARKER
	BURIED WATER MAIN MARKER
	LINE BREAK
	CHAIN LINK FENCE
	WOOD FENCE
	OVERHEAD UTILITY LINE
	UNDERGROUND SANITARY SEWER
	UNDERGROUND STORM SEWER
	UNDERGROUND ELECTRIC
	UNDERGROUND FIBER OPTIC
	UNDERGROUND GAS
	UNDERGROUND TRAFFIC SIGNAL
	UNDERGROUND WATER
	EXISTING CONTOUR
	x 6.42 SPOT ELEVATION (HARD SURFACE)
	x 6.4 SPOT ELEVATION (GROUND)
	CONCRETE AREA
	ELM

Grease Interceptor Calculations

Step One Flow Rate / Fixture Capacity

3 Comp Sink	12" X 19" X 12" X 3 compartments =	8,208 cubic inches
Hand Sinks	10" X 12" X 6" X 3 separate sinks =	720 cubic inches
Mop Sink	24" X 24" X 10" =	6,250 cubic inches
TOTAL	15,178 cubic inches / 231 X .75 / 1 =	**50 gpm**

Step Two Grease Production

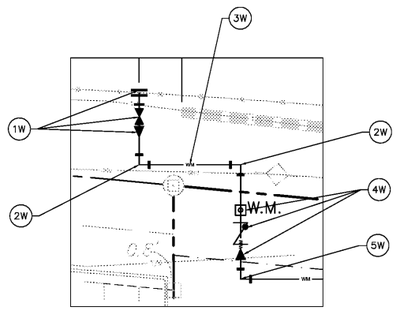
125 meals per day
.005 lbs of grease / meal - Very Low Grease Producer / No Flatware
90 days between pump-outs
125 X .005 X 90 = **57 lbs of grease**

SCHIER	DESCRIPTION: Polyethylene Grease Interceptor
MODEL NUMBER: GB-75	Flow Rates / Grease Capacities: 75 GPM / 616 lbs.
	Liquid Capacity: 125 gal.

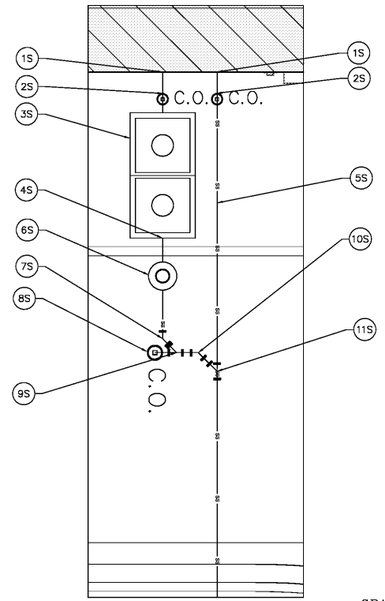
FIRE FLOW CALCULATIONS

MINIMUM FIRE FLOW REQUIREMENTS (NFPA 1)

BUILDING CLASSIFICATION:	V (III)
GROSS BUILDING AREA:	3,109 SF
FIRE FLOW REQUIRED (PER 18.4.5.1.2):	1,500 GPM
FIRE HYDRANT REQUIRED:	1
FIRE HYDRANT PROVIDED:	1 EXISTING



DETAIL - 'B'



DETAIL - 'A'

GRAPHIC SCALE
0 15' 30' 60'
(IN FEET)
SCALE: 1" = 30'

DRC #17-00138

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UTILITY PLAN
KISSIMMEE 7-ELEVEN #38227
SW C/O CARROLL ST. AND DYER BLVD.
KISSIMMEE, FL 34741
OSCEOLA COUNTY
FLORIDA

ANDREW J. PETERSEN LICENSE No. 75493 STATE OF FLORIDA PROFESSIONAL ENGINEER

ANDREW J. PETERSEN
LICENSE NO. 75493

PLAN STATUS

DATE	DESCRIPTION

AW	EC	AJP
DESIGN	DRAWN	CHKD

SCALE 1" = 30'
JOB No. 010063-02-087
DATE 12/18/2017
FILE 010063-02-D-CP-087-07-C3.0-UTP.DWG
SHEET C3.0

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BID SET - 1/8/2018