PRELIMINARY SITE PLAN/ CONSTRUCTION PLAN/ STORMWATER MANAGE-MENT PLAN AND REPORT:

D8135
SKYBROOKE BOULEVARD & STATE ROAD 54, LUTZ, FLORIDA 33558
PASCO COUNTY

PROJECT CONTACTS

CURRENT OWNER/MASTER DEVELOPER
FERBER CORPORATION
MR. WILL ANDERSON
100 SECOND AVENUE SOUTH
SUITE 201-N
ST. PETERSBURG, FLORIDA 33701
PHONE: (727) 490-1779
WANDERSON@FERBERCOMPANY.COM

DEVELOPER
PANDA EXPRESS, INC.
MR. JOE CELENTO
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
PHONE: (626) 799-9898
CELL: (912) 272-4811
JOE.CELENTO@PANDARG.COM

CIVIL ENGINEER
INGENIUM ENTERPRISES, INC.
MR. JEREMY PETTIT, P.E.
14499 NORTH DALE MABRY HIGHWAY
SUITE 250
TAMPA, FLORIDA 33618
PHONE: (813) 387-0084
JPETTIT@INGENIUMTEAM.COM

ARCHITECT
CUHACI & PETERSON
MS. ADRIANA LOVERA
2600 MAITLAND CENTER PARKWAY
SUITE 200
MAITLAND, FL 32751
PHONE: (407) 661-9100
ADRIANA-LOVERA@C-P.COM

LAND SURVEYOR
TO BE DETERMINED

MEP
CUHACI & PETERSON
MS. ADRIANA LOVERA
2600 MAITLAND CENTER PARKWAY
SUITE 200
MAITLAND, FL 32751
PHONE: (407) 661-9100
ADRIANA-LOVERA@C-P.COM

SITE LIGHTING
VILLA LIGHTING SUPPLY
MR. RYAN ZINSELMEIER
2929 CHOUTEAU AVENUE
ST. LOUIS, MISSOURI 63103
PHONE: (314) 633-0423
RYAN.ZINSELMEIER@VILLALIGHTING.COM

STRUCTURAL
BRITT, PETERS & ASSOCIATES
MS. KIM FAIST, P.E.
101 FALLS PARK DRIVE
SUITE 601
GREENVILLE, SOUTH CAROLINA 29601
PHONE: (864) 271-8869
KFAIST@BRITTPETERS.COM

MUNICIPAL SEWER & WATER AGENCY
PASCO COUNTY UTILITIES
MR. MARK GUTTMAN
19420 CENTRAL BLVD.
LAND O' LAKES, FLORIDA 34637
PHONE: (813) 235-6189 EXT. 6195
MGUTTMAN@PASCOCOUNTYFL.NET

ELECTRIC
DUKE ENERGY
MR. RICH MARSILGIO
PHONE: (727) 281-1686
RICH.MARSIGLIO@DUKE-ENERGY.COM

GAS
TECO GAS
MS. BETTY TRUEBLOOD
PHONE: (813) 299-7342
BXTRUEBLOOD@TECOENERGY.COM

TELEPHONE COMPANY
AT&T
MR. DINO FARRUGIO
PHONE: (954) 249-0558
DF1979@ATT.COM

LANDSCAPE ARCHITECT
WAS DESIGN
MR. JARED ACY
175 EAST CAPITOL STREET
SUITE 500
JACKSON, MISSISSIPPI 39201
PHONE: (601) 790-0781
JACY@WAS-DESIGN.COM

SIGNAGE
ALLEN INDUSTRIES
MR. GEORGE THOMSON
4100 SHERATON COURT
GREENSBORO, NORTH CAROLINA 27410
PHONE: (336) 615-8766
GEORGE.THOMSON@ALLENINDUSTRIES.COM

FIRE
PASCO COUNTY FIRE RESCUE
MR. BILL McGOUGH
8731 CITIZENS DRIVE
NEW PORT RICHEY, FLORIDA 34654
WMCGOUGH@PASCOCOUNTYFL.NET

PANDA EXPRESS STANDARD NOTES

1. THE GEOTECHNICAL INVESTIGATION PREPARED BY NAME, DATED DATE AND ANY SUBSEQUENT ADDENDUMS IS CONSIDERED PART OF THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE REPORT'S RECOMMENDATIONS AND FINDINGS WITH THE OWNER, ENGINEER AND ARCHITECT PRIOR TO CONSTRUCTION. IMPLEMENTATION OF THE REPORT'S RECOMMENDATIONS MAY REQUIRE THE CONTRACTOR TO PERFORM ADDITIONAL WORK NOT SHOWN ON THE CIVIL PLANS INCLUDING BUT NOT LIMITED TO EXCAVATION, REMEDIATION, DEWATERING, COMPACTION ETC.
2. CONTRACTOR SHALL COORDINATE AND VERIFY LOCATION OF ALL SIGNAGE WITH OWNER PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE AND ADJUST LOCATION OF LOOP DETECTORS TO AVOID UTILITY CONFLICTS PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL ENSURE 100% COVERAGE OF ALL LANDSCAPED AREAS WITHIN LIMITS OF WORK, INCLUDING POTENTIAL OFFSITE AREAS. COVERAGE SHALL INCLUDE BOTH LANDSCAPING AND IRRIGATION.

PASCO COUNTY STANDARD FIRE PROTECTION NOTES

1. ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
3. PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1 16.4.3.13: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
4. PER NFPA-1, 18.3.4.1: CLAEARANEC OF 7.5' IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH 4 FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.
5. GATED ENTRIES REQUIRE A SIREN OPERATION SYSTEM OR A 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS.

CONDITION OF APPROVAL #73

PRELIMINARY DEVELOPMENT PLAN/PRELIMINARY SITE PLAN SUBMITTALS SHALL INCLUDE A DETAILED BREAKDOWN OF THE INDIVIDUAL PLAN APPROVALS, INCLUDING THE PLAN NAME AND INCREMENT OR PHASE DESIGNATION AS IT RELATES TO THE MASTER DEVELOPMENT PLAN, ACREAGE OF THE SITE, TOTAL NUMBER OF UNITS, OR GROSS FLOOR AREA, RATIO OF COMMERCIAL SPACE WHICH HAVE RECEIVED PRELIMINARY DEVELOPMENT PLAN/PRELIMINARY SITE PLAN APPROVAL, CONSTRUCTION PLAN/CONSTRUCTION SITE PLAN APPROVAL, AND/OR RECORD PLAT APPROVAL.

THIS PROJECT CANNOT BE PROPERLY REVIEWED UNTIL THE PDP AND PLAT ARE APPROVED.

FDOT ROADWAY INFO

ROAD NAME:
STATE ROAD 54

SPEED LIMIT:
60 MPH

WIDTH OF RIGHT-OF-WAY:
100'

NUMBER OF LANES:
6 LANES (DIVIDED WITH GRASS MEDIAN)

DISTANCE TO THE NEAREST INTERSECTION:
APPROXIMATELY 935' TO BALLANTRAE BLVD. (WEST OF PROPOSED SITE).
APPROXIMATELY 5,280' (1.0 MILE) FROM SUNLAKE BLVD. (WEST OF PROPOSED SITE.

PREPARED BY:
ingenium ENTERPRISES
PLANNING & ENGINEERING

PREPARED FOR:
PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
PHONE: 626.799.9898
FAX: 626.372.8288

Zone ID	Petition	Request	Description	Name	Applicant	Action	Date
10393	ORIGINAL	N/A	Agricultural District	AC	N/A	N/A	11/19/1975
14862	ORIGINAL	N/A	Agricultural District	AC	N/A	N/A	Nov-75
12229	RZ2993	AR TO AR1	Agricultural-Residential District	AR1	MELI	APP W/ CONDS	Aug-85
11078	RZ7028	AC (ORIG) TO MPUD	Master Planned Unit Development District	MPUD	SMITH 54 MPUD	APP W/ COND (COND 64 - NO MORE THAN 15 YRS)	10/23/2012
658655	RZ6497	AC TO PO1	Professional Office District	PO1	SHANNON	APP W/CONDS	1/24/2006
658655	RZ6930	EXTENSION OF CHARTER SCHOOL	Professional Office District	PO1	HOWELL	APP 1 YR - 624 STUDENTS	7/27/2010
658655	RZ6789	SPECIFIC USE - CHARTER SCHOOL	Professional Office District	PO1	HOWELL	APP - 2 YRS / 420 STUDENTS	6/24/2008
658655	RZ6977	EXTENSION OF CHARTER SCHOOL	Professional Office District	PO1	HOWELL	APP 624 STUDENTS THRU 01/31/12	7/26/2011

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine 811 Always call 811 before you dig

THERE ARE NO KNOWN REGISTERED CULTURAL RESOURCES ON THE PROPOSED SITE.

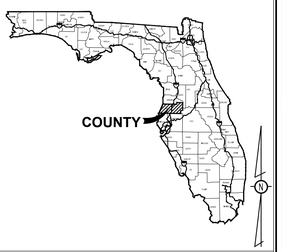
THE GEOTECHNICAL INVESTIGATION PREPARED BY TERRACON CONSULTANTS, INC., DATED 05/19/2021 AND ANY SUBSEQUENT ADDENDUMS IS CONSIDERED PART OF THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE REPORT'S RECOMMENDATIONS AND FINDINGS WITH THE OWNER, ENGINEER AND ARCHITECT PRIOR TO CONSTRUCTION. IMPLEMENTATION OF THE REPORT'S RECOMMENDATIONS MAY REQUIRE THE CONTRACTOR TO PERFORM ADDITIONAL WORK NOT SHOWN ON THE CIVIL PLANS INCLUDING BUT NOT LIMITED TO EXCAVATION, REMEDIATION, DEWATERING, COMPACTION ETC.

THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL LOCAL, STATE, AND FEDERAL CERTIFICATION AND LICENSING REQUIREMENTS FOR CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: LAND DISTURBANCE PERMITS, BUILDING PERMITS, DEMOLITION PERMITS, NPDES PERMITS, DEWATERING PERMITS, ETC.

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

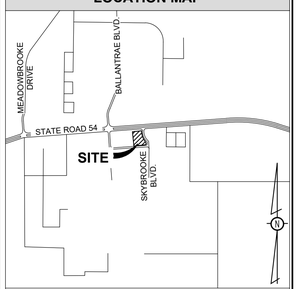
CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

REGIONAL MAP



PASCO COUNTY, FLORIDA
NOT TO SCALE

LOCATION MAP



LUTZ, FLORIDA
NOT TO SCALE

SITE INFORMATION

JURISDICTION:
PASCO COUNTY

ZONING:
MASTER PLANNED UNIT DEVELOPMENT (MPUD)

FUTURE LAND USE:
PLANNED DEVELOPMENT (PD)

PARCEL NUMBER:
29 26 18 0000 00400 0070 (BASED ON PASCO MAPPER)

REQUIRED BUILDING SETBACKS:
FRONT: 60'
SIDE: 7.5'
SIDE: 7.5'
REAR: 5'

REQUIRED PARKING:
19 SPACES - ONE (1) SPACE FOR EVERY 150 SF OF GROSS FLOOR AREA. ASSUMING A 2,381 SF BUILDING AND A 400 SF OUTDOOR DINING SPACE IS PROVIDED. THE MINIMUM PARKING REQUIRED IS 19 SPACES.

PROPOSED PARKING:
9' X 20' (REGULAR) = 27
8' X18' (COMPACT) = 10
12' X 20' (HC) = 2
TOTAL = 39

PROVIDED LANDSCAPE BUFFER:
FRONT: 20' TYPE D BUFFER (NORTH)
REAR: 10' TYPE A BUFFER (SOUTH)
SIDE: 5' TYPE A BUFFER (EAST AND WEST)

DRIVE AISLE: 24'

SITE AREA CALCULATIONS:
SITE: ±1.00 AC.
PERVIOUS AREA: ±.27 AC.
IMPERVIOUS AREA: ±.73 AC.
DISTURBED AREA: ±1.20 AC.

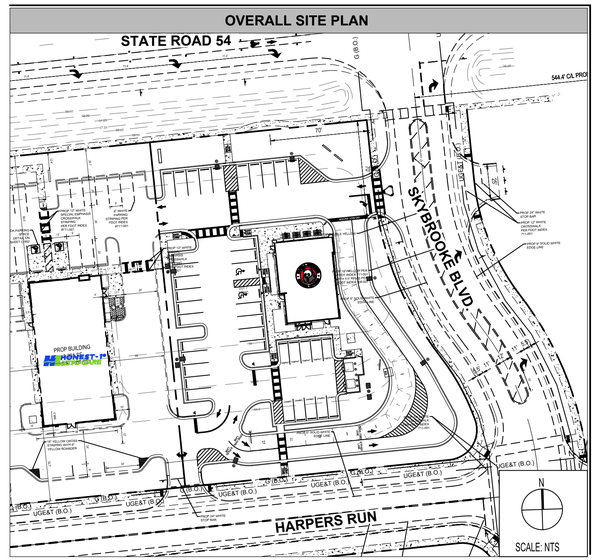
FLOOD HAZARD:
A PORTION OF THIS PROPERTY IS LOCATED IN A SPECIAL FLOOD AREA AS PER F.I.R.M. MAP NO. 12101C0384F, DATED 09/26/2014. HOWEVER, PLANS PROVIDED BY BOHLER ENGINEERING SHOW THAT ALL WETLANDS AND FLOODPLAINS WILL BE FILLED IN. PLEASE SEE PLANS PROVIDED BY BOHLER ENGINEERING AND APPROVED BY COUNTY ON 05/08/2020.

EXISTING INFORMATION:
ALL EXISTING INFORMATION SHOWN HEREIN IS BASED OFF OF DESIGN FILES PROVIDED BY BOHLER ENGINEERING, DATED 11/18/2020.
ALL ELEVATIONS SHOWN HEREON ARE BASED OFF OF THE ABOVE REFERENCED DESIGN FILES, WHICH ARE BASED ON NATIONAL GEODETIC SURVEY BENCHMARK D669, SAID POINT BEING A SURVEY DISC STAMPED "D669 2006" SET IN TOP OF A CONCRETE MONUMENT AND HAVING AN ELEVATION OF 60.39 FEET, PURSUANT TO THE NAVD88.

SITE LIGHTING:
PHOTOMETRICS DESIGNED BY VILLA LIGHTING. POLE LOCATIONS ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY FINAL LOCATION OF POLES WITH PHOTOMETRIC PLAN, SHEETS SL1.0, AND OWNER PRIOR TO CONSTRUCTION.

FLOOR AREA RATIO CALCULATION:
TOTAL BUILDING AREA = 2,381 SF = 0.055 AC.
DEVELOPABLE ACREAGE = 1.00 AC. (1.00 LOT AREA - 0.00 WETLANDS)
FLOOR AREA RATIO = 0.055.

OVERALL SITE PLAN



SHEET INDEX

JEREMY PETTIT, STATE OF FLORIDA,
PROFESSIONAL ENGINEER
LICENSE NO. 88046

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY JEREMY PETTIT ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

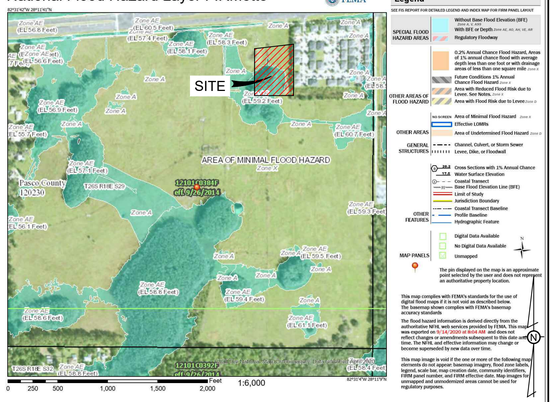
ingenium ENTERPRISES
PLANNING & ENGINEERING

COVER SHEET
C01.0

TRUE WARM & WELCOME 2300

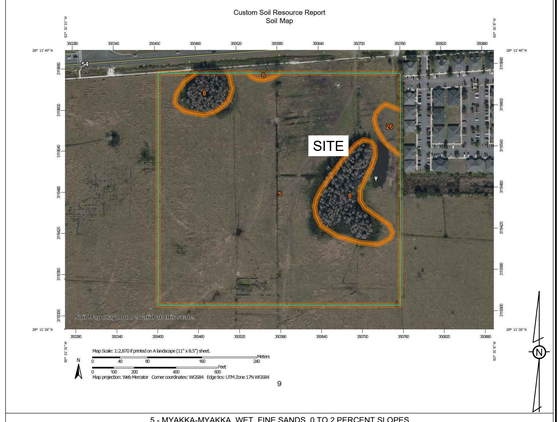
FLOOD INSURANCE RATE MAP FIRMETTE

National Flood Hazard Layer FIRMette



FEMA FLOOD INSURANCE RATE MAP 12101C0384F, DATED 09/26/2014
NOT TO SCALE

SOILS MAP



5 - MYAKKA-MYAKKA, WET, FINE SANDS, 0 TO 2 PERCENT SLOPES
(NOT TO SCALE)

DEFINITIONS

"ISSUED FOR PERMITTING"
DRAWINGS ARE INTENDED FOR SUBMITTAL TO THE JURISDICTION(S) HAVING AUTHORITY FOR REVIEW, COMMENT, AND/OR APPROVAL. DRAWINGS ARE NOT INTENDED FOR PRICING, BID, OR CONSTRUCTION.

"NOT ISSUED FOR CONSTRUCTION"
DRAWINGS ARE INTENDED FOR SUBMITTAL TO THE JURISDICTION(S) HAVING AUTHORITY FOR REVIEW, COMMENT, AND/OR APPROVAL. DRAWINGS ARE NOT INTENDED FOR CONSTRUCTION.

"ISSUED FOR CONSTRUCTION"
DRAWINGS ARE INTENDED FOR PRICING, BID, AND/OR CONSTRUCTION.

"RIM"
1. THROAT OR GRATE ELEVATION FOR CURB INLETS.
2. TOP OF STRUCTURE FOR JUNCTION BOXES/OCS.
3. TOP OF STRUCTURE FOR SANITARY MANHOLES AND CLEANOUTS.

"MUTCD"
THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION, AND TO INCLUDE REVISIONS 1 AND 2 FROM MAY 2012.

"FDOT"
THE FLORIDA DEPARTMENT OF TRANSPORTATION. ALL REFERENCED DETAILS AND INDICES ARE FROM THE FY 2021-2022.

ABBREVIATIONS

ASPH	=	ASPHALT
BC	=	BOTTOM OF CURB
BFP	=	BACKFLOW PREVENTER
BW	=	BOTTOM OF WALL
C&G	=	CURB AND GUTTER
C.B.	=	CHORD BEARING
CB	=	CATCH BASIN
CF	=	CUBIC FEET
℄	=	CENTERLINE
CMP	=	CORRUGATED METAL PIPE
Co	=	GENERAL CLEAN OUT
CONC.	=	CONCRETE
CW	=	COLD WATER SUPPLY
CY	=	CUBIC YARD
D.O.T.	=	DEPARTMENT OF TRANSPORTATION
DI	=	DROP INLET
DS	=	DOWN SPOUT
DIP	=	DUCTILE IRON PIPE
E	=	EAST
EL	=	ELEVATION
EGL	=	ENERGY GRADE LINE
EXIST.	=	EXISTING
FDC	=	FIRE DEPARTMENT CONNECTION
FES	=	FLARED END SECTION
FFE	=	FINISH FLOOR ELEVATION
FH	=	FIRE HYDRANT
GC	=	GENERAL CONTRACTOR
GSF	=	GROSS SQUARE FEET
GT	=	GREASE TRAP
GV	=	GATE VALVE
HDPE	=	HIGH DENSITY POLYETHYLENE
HGL	=	HYDRAULIC GRADE LINE
HW	=	HOT WATER SUPPLY
I	=	INTERNAL ANGLE
INV.	=	INVERT
IRR	=	IRRIGATION
L	=	LENGTH OF CURVE
L.C.	=	LENGTH OF CHORD
LFFE	=	LOWER FINISH FLOOR ELEVATION
LP	=	LIGHT POLE/FIXTURE
LS	=	LANDSCAPE
MH	=	MANHOLE
N	=	NORTH
PC	=	POINT OF CURVATURE
PI	=	POINT OF INTERSECTION
PIV	=	POST INDICATOR VALVE
PROP	=	PROPOSED
PT	=	POINT OF TANGENCY
PVC	=	POLYVINYL CHLORIDE PIPE
R	=	RADIUS OF CURVE
RCP	=	REINFORCED CONCRETE PIPE
RD	=	ROOF DRAIN
R/W	=	RIGHT-OF-WAY
S	=	SOUTH
SF	=	SQUARE FEET
SSE	=	SANITARY SEWER EASEMENT
STD	=	STANDARD
SY	=	SQUARE YARD
T	=	TANGENT OF CURVE LENGTH
TC	=	TOP OF CURB
TB	=	THRUST BLOCKING
TW	=	TOP OF WALL
TYP.	=	TYPICAL
W	=	WEST
WM	=	WATER METER
W.S.	=	WATER SURFACE
W.S.E.	=	WATER SURFACE ELEVATION
YR	=	YEAR

SEE SURVEY/EXISTING CONDITIONS FOR ABBREVIATIONS SPECIFIC TO THAT SHEET

EXISTING CONDITIONS LEGEND

DESCRIPTION	SYMBOL
IRRIGATION CONTROL VALVE	ICV
IRON PIN FOUND	IPF
IRON PIN SET (1/2" RB)	IPS
OPEN TOP PIPE	OT
CRIMP TOP PIPE	CT
CONCRETE MONUMENT FOUND	CMF
NAIL AND CAP	N & C
REBAR	RB
POWER POLE	PP
TELEPHONE POLE	TP
LAND LOT	LL
LAND LOT LINE	LLL
POINT OF BEGINNING	POB
BUILDING LINE	BL
CENTER LINE	CL
PROPERTY LINE	PL
FIRE HYDRANT	FH
CATCH BASIN	CB
DROP INLET	DI
HEADWALL	HW
JUNCTION BOX	JB
DRAINAGE EASEMENT	DE
WATER METER	WM
WATER VALVE	WV
GAS VALVE	GV
MANHOLE	MH
RIGHT-OF-WAY MONUMENT FOUND	☒
GAS LINE	GAS
WATER LINE	WAT
SANITARY SEWER LINE	SAN
STORM DRAINAGE PIPE	
OVERHEAD ELECTRIC LINE	OH ELE
OVERHEAD ELECTRIC/TELEPHONE/TV	OH E/T/TV
OVERHEAD ELECTRIC/TELEPHONE LINE	OH E/T

GENERAL NOTES

1. INGENIUM ENTERPRISES, INC. (IE) REGULARLY UPDATES ELECTRONIC FILES DURING THE DEVELOPMENT OF A PROJECT. AS A RESULT, THE DATA INCLUDED IN ANY CAD FILE OR DRAWING PRIOR TO ITS FINAL RELEASE DOES NOT NECESSARILY REFLECT THE COMPLETE SCOPE OR CONTENT AS DEFINED IN THE CONTRACT. THE CONTENTS IN THESE FILES MAY THEREFORE BE PRELIMINARY, INCOMPLETE WORK IN PROGRESS, AND SUBJECT TO CHANGE. FURTHERMORE, THE INFORMATION CONTAINED HEREIN IS THE EXCLUSIVE PROPERTY OF IE. THE ORIGINAL IDEAS REPRESENTED HERE BY THIS INFORMATION SHALL NOT BE USED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT OF IE.
2. DEVIATIONS FROM THESE PLANS AND NOTES WITHOUT PRIOR CONSENT OF THE OWNER, HIS REPRESENTATIVE, OR THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT, READY TO USE, AND ALL ITEMS NECESSARY FOR A COMPLETE AND WORKABLE JOB SHALL BE FURNISHED AND INSTALLED. THIS INCLUDES ALL STRIPING AND SIGNAGE.
4. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE OWNER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. CONTRACTOR TO COMPLY WITH ALL OSHA REGULATIONS REQUIREMENTS AND SAFETY MEETING REQUIREMENTS.
5. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION, MEANS, METHODS, TECHNIQUES, OR PROCEDURES UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTOR'S EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

PROPOSED LEGEND

GENERAL	LINETYPE/SYMBOL	REFERENCE
RIGHT-OF-WAY/PROPERTY LINE		SEE PLANS
CENTERLINE		SEE PLANS
LIMITS OF CONSTRUCTION	L	SEE PLANS
DETAIL REFERENCE	# / #	SEE PLANS
ADDENDUM AND/OR REVISION REFERENCE	#	SEE PLANS
SITE/HARDSCAPE	**LINETYPE/SYMBOL**	**REFERENCE**
CHAIN LINK FENCE		NOT APPLICABLE
RETAINING WALL		NOT APPLICABLE
SCREEN WALL/DUMPSTER ENCLOSURE		SEE PLANS
CURB & GUTTER		DETAIL 6, SHEET C03.2
HEADER CURB		NOT APPLICABLE
CONCRETE SIDEWALK		DETAIL 10, SHEET C03.2
PROPOSED UTILITY	**LINETYPE/SYMBOL**	**REFERENCE**
DOMESTIC WATER LINE	DW DW	1-1/2" PVC (COLOR CODED BLUE)
FIRE WATER LINE	FW FW	NOT APPLICABLE
BUILDING FIRE SPRINKLER LINE	FWS FWS	NOT APPLICABLE
IRRIGATION WATER LINE	IRR IRR	1" POLY (COLOR CODED PURPLE)
DOMESTIC WATER METER (WM)	WM	DETAIL 6, SHEET C04.2
IRRIGATION METER (IRR)	IRR	DETAIL 4, SHEET C04.2
BACKFLOW PREVENTER (RPZ)	RPZ	DETAIL 7, SHEET C04.2
FIRE VAULT (DDC)	DDC	NOT APPLICABLE
DC BACKFLOW PREVENTER		DETAIL 5, SHEET C04.2
WATER TAP OR TEE		NOT APPLICABLE
GATE VALVE (GV)	GV	NOT APPLICABLE
THRUST BLOCK (TB)	TB	NOT APPLICABLE
FIRE HYDRANT (FH)	FH	NOT APPLICABLE
FIRE DEPARTMENT CONNECTION (FDC)	FDC	NOT APPLICABLE
SANITARY SEWER (SS)	SS SS	2" & 6" PVC (COLOR CODED GREEN)
SANITARY MANHOLE (SSMH)		NOT APPLICABLE
GENERAL CLEAN OUT (Co)	Co	DETAIL 2, SHEET C04.2
SAMPLING MANHOLE		NOT APPLICABLE
SANITARY STRUCTURE NUMBER	S2	SEE PLANS
UNDERGROUND ELECTRIC LINE-PRIMARY	UGE-P UGE-P	(2) 5" PVC
UNDERGROUND ELECTRIC LINE-SECONDARY	UGE-S UGE-S	(2) 5" PVC
POST INDICATOR VALVE	PIV	NOT APPLICABLE
SITE LIGHTING POLE		SEE PLANS
TRANSFORMER PAD	T	DETAIL 8 SHEET C04.2
METER/CT PEDESTAL	CT	SEE PLANS
UNDERGROUND TELEPHONE LINE	UGT UGT	(2) 4" PVC
TELEPHONE CABLE PULL BOX	PB	SEE PLANS
GENERAL UTILITY CONDUIT	GU GU	4" PVC
GAS LINE	G	***
GAS METERS	G	SEE PLANS

*** ALL UTILITIES SHALL BE INSTALLED ACCORDING TO UTILITY PROVIDERS AND JURISDICTION STANDARDS AND SPECIFICATIONS. ***

FUTURE UTILITY	LINETYPE/SYMBOL	REFERENCE
DOMESTIC WATER LINE (FUTURE)	W (B.O.)	SIZE VARIES
IRRIGATION LINE (FUTURE)	IRR (B.O.)	SIZE VARIES
GATE VALVE (FUTURE)		SIZE VARIES
FIRE HYDRANT (FUTURE)		SEE PLANS BY OTHERS
UNDERGROUND ELECTRIC LINE (FUTURE)	UGE (B.O.)	SIZE VARIES
SANITARY SEWER (FUTURE)	SS (B.O.)	SIZE VARIES
UNDERGROUND CABLE LINE (FUTURE)	FO (B.O.)	SIZE VARIES
UNDERGROUND TELEPHONE LINE (FUTURE)	TEL (B.O.)	SIZE VARIES
GAS LINE (FUTURE)	G (B.O.)	SIZE VARIES
FUTURE CAP		SEE PLANS BY OTHERS

*** ALL UTILITIES SHALL BE INSTALLED ACCORDING TO UTILITY PROVIDERS AND JURISDICTION STANDARDS AND SPECIFICATIONS. ***

GRADING/DRAINAGE	LINETYPE/SYMBOL	REFERENCE
GRADE	1000	SEE PLANS
SPOT ELEVATION	× 1000.00	SEE PLANS
STORM DRAIN		SEE PLANS
HEADWALL (HW) / FLARED END SECTION (FES)		PROPOSED BY OTHERS
DROP INLET (GRATE)		NOT APPLICABLE
DROP INLET (GRATE AND HOOD)		DETAILS 4 & 5, SHEET C04.3
JUNCTION BOX (JB) / OCS		NOT APPLICABLE
CATCH BASIN (SINGLE WING)		NOT APPLICABLE
CATCH BASIN (DOUBLE WING)		NOT APPLICABLE
LANDSCAPE DRAIN		DETAILS 1 & 2, SHEET C04.3
STORM STRUCTURE NUMBER	A3	SEE PLANS

ESPC BMP		LINETYPE/SYMBOL	REFERENCE
Co	CONSTRUCTION EXIT		SHEET C06.4
SR	CONSTRUCTION EXIT		SHEET C06.4
SF	SILT FENCE - TYPE C		SHEET C06.5
SF	SILT FENCE - TYPE C DOUBLE		SHEET C06.5
IP	INLET PROTECTION		SHEET C06.6
OP	OUTLET PROTECTION		SHEET C06.7
DU	DUST CONTROL	DU	
Ts	TEMPORARY SEEDING	Ts	SHEET C06.4
Ps	PERMANENT SEEDING	Ps	SHEET C06.8
M	MULCHING	M	SHEET C06.8
So	SODDING	So	SHEET C06.7

SEE LANDSCAPE/TREE PROTECTION PLANS FOR LEGEND SPECIFIC TO THOSE SHEETS

PASCO COUNTY - STANDARD SITE PLAN NOTES

PASCO COUNTY DEVELOPMENT REVIEW - STANDARD SITE PLAN NOTES

1. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE PASCO COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.

2. ALL ON-SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER/ DEVELOPER.

3. INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS.

4. ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE.

5. HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.

6. THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.

7. ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PARKING SPACES, DIRECTIONAL ARROWS, AND STOP BARS SHALL BE STRIPED IN WHITE. IT SHALL BE THE OWNER/DEVELOPER'S RESPONSIBILITY TO PROPERLY SIGN AND STRIPE IN ACCORDANCE WITH APPLICABLE STANDARDS.

8. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE ANY WORK IN THE COUNTY RIGHT-OF-WAY. ALL RIGHT-OF-WAY WORK SHALL BE A FUNCTION OF AN APPROVED PASCO RIGHT-OF-WAY USE PERMIT.

9. ALL CLEAR-SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3-1/2) FEET IN HEIGHT.

10. NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMIT.

11. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.

12. ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE BUILDING PERMITS.

13. IF A PROJECT SITE CONTAINS AN EASEMENT, ESPECIALLY A POWER COMPANY EASEMENT, A LETTER OF NO OBJECTION IS REQUIRED FROM THE EASEMENT HOLDER. BY SIGNING AND SEALING THIS PLAN THE ENGINEER OF RECORD IS ATTESTING THAT HE/SHE HAS IDENTIFIED AND ACCURATELY SHOWN ALL EASEMENTS OF RECORD ON THE PLANS.

IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE OF STATE OR FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES IS DISCOVERED, PASCO COUNTY AND APPLICABLE AGENCIES SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE. ALL WORK IN THE AFFECTED AREA SHALL COME TO AN IMMEDIATE STOP UNTIL ALL PERTINENT PERMITS HAVE BEEN OBTAINED, AGENCY WRITTEN AUTHORIZATION TO COMMENCE ACTIVITIES HAS BEEN GIVEN, OR UNLESS COMPLIANCE WITH STATE AND FEDERAL GUIDELINES CAN BE DEMONSTRATED.

IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.

PASCO COUNTY LANDSCAPING STANDARD NOTES

1. WHERE A DRIVEWAY/ACCESSWAY INTERSECTS A ROAD RIGHT-OF-WAY OR WHERE TWO (2) ROAD RIGHTS-OF-WAY INTERSECT, VEGETATION, STRUCTURES, AND NON-VEGETATIVE VISUAL SCREENS SHALL NOT BE LOCATED SO AS TO INTERFERE WITH THE CLEARSIGHT TRIANGLE AS DEFINED IN THIS CODE OR THE FLORIDA DEPARTMENT OF TRANSPORTATION, MANUAL OF UNIFORM MINIMUM STANDARDS, MOST RECENT EDITION (GREEN BOOK), WHICHEVER IS MORE RESTRICTIVE. (LDC 905.2.C.1.B)

2. LANDSCAPING SHALL BE INSTALLED SO THAT LANDSCAPING MATERIALS MEET THE CONCEPT OF RIGHT MATERIAL/RIGHT PLACE. INSTALLED TREES AND PLANTS SHALL BE GROUPED INTO ZONES ACCORDING TO WATER, SOIL, CLIMATE, AND LIGHT REQUIREMENTS. PLANT GROUPINGS BASED ON WATER REQUIREMENTS ARE DROUGHT TOLERANT, NATURAL, AND OASIS. (LDC 905.2.C.1.C)

3. ALL PLANT MATERIALS SHALL BE FLORIDA NO. 1 GRADE PER "GRADES AND STANDARDS FOR NURSERY PLANTS," FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES (FDACS), WHICH IS INCORPORATED HEREIN BY REFERENCE. (LDC 905.2.C.2.A)

4. GROUNDCOVER PLANTS SHALL BE SPACED TO PRESENT A FINISHED APPEARANCE AND OBTAIN A REASONABLY COMPLETE COVERAGE WITHIN ONE (1) YEAR. NON-LIVING GROUND COVER, SUCH AS MULCH, GRAVEL, ROCKS, ETC., SHALL BE USED IN CONJUNCTION WITH LIVING PLANTS SO TO COVER EXPOSED SOIL AND SUPPRESS FUGITIVE DUST. (LDC 905.2.C.2.G)

5. ALL TREES SHALL BE PLANTED ACCORDING TO THE FLORIDA CHAPTER, INTERNATIONAL SOCIETY OF ARBORICULTURE STANDARDS FOR PLANTING, WHICH IS INCORPORATED HEREIN BY REFERENCE. ALL TREES MUST BE MAINTAINED IN GOOD CONDITION AND PLANTED IN LOCATIONS WITH ADEQUATE OPEN SPACE TO ALLOW FOR MATURE TREE-CANOPY DEVELOPMENT. (LDC 905.2.C.3.B)

6. TREES SHALL NOT BE PLANTED WITHIN ANY EASEMENT SO AS TO INTERFERE WITH THE USE OF THAT EASEMENT, NOR UNDER ANY PRESENT OR PLANNED OVERHEAD UTILITY, NOR IN ANY RIGHTS-OF-WAY WITHOUT COUNTY APPROVAL THROUGH THE ASSOCIATED REVIEW PROCESS. (LDC 905.2.C.3.C)

7. MULCH SHALL BE USED IN CONJUNCTION WITH LIVING PLANT MATERIALS SO AS TO COVER EXPOSED SOIL. MULCH SHALL BE INSTALLED TO A MINIMUM DEPTH OF THREE (3) INCHES. THE MULCH SHOULD NOT BE PLACED DIRECTLY AGAINST THE PLANT STEM OR TREE TRUNK. MULCH SHALL NOT BE REQUIRED FOR ANNUAL BEDS. STONE OR GRAVEL MAY BE USED TO COVER A MAXIMUM OF 20 PERCENT OF THE LANDSCAPED AREA. (LDC 905.2.C.3.D)

8. ALL LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH STANDARDS AND PRACTICES OF THE FLORIDA NURSERY, GROWERS, AND LANDSCAPE ASSOCIATION AND THE FLORIDA CHAPTER OF THE INTERNATIONAL SOCIETY OF ARBORICULTURE. (LDC 905.2.C.3.E)

9. ALL HEIGHT REQUIREMENTS SHALL BE BASED ON THE FINISHED GRADE OF THE LANDSCAPED AREA AND MEASURED AT THE MAIN STEM. (LDC 905.2.C.3.F)

10. ALL PORTIONS OF A LOT UPON WHICH DEVELOPMENT HAS COMMENCED, BUT NOT CONTINUED FOR A PERIOD OF 30 DAYS, SHALL BE PLANTED WITH A GRASS SPECIES OR GROUND COVER TO PREVENT EROSION AND ENCOURAGE SOIL STABILIZATION. ADEQUATE COVERAGE, SO AS TO SUPPRESS FUGITIVE DUST, SHALL BE ACHIEVED WITHIN 45 DAYS. (LDC 905.2.C.3.G)

11. ALL PORTIONS OF EACH SITE, WHICH ARE NOT DEVOTED TO BUILDINGS, SIDEWALKS, PAVING, OR SPECIAL LANDSCAPE FEATURES SHALL BE GRASSED. HOWEVER, NO MORE THAN THIRTY (30) PERCENT OF THE REQUIRED LANDSCAPE AREA MAY BE GRASSED; THE BALANCE SHALL BE LANDSCAPED IN SHRUBS AND GROUND COVER PLANTS. (LDC 905.2.D.1.A)

12. ALL REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY CONDITION IN PERPETUITY IN ACCORDANCE WITH THIS CODE. (LDC 905.2.E.2)

13. ONGOING MAINTENANCE TO PREVENT THE ESTABLISHMENT OF PROHIBITED EXOTIC SPECIES IS REQUIRED. (LDC 905.2.E.4)

A LETTER OF COMMITMENT FOR WATER & SEWER SERVICE, AND A LETTER OF SERVICE AVAILABILITY FOR ELECTRIC SERVICE HAVE ALL BEEN PROVIDED FOR THIS PROJECT. THE LETTERS WERE PROVIDED TO DOREEN ROY IN PLANNING ON 03/30/2021.

IT IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD TO ENSURE THE UTILITY PLANS SUBMITTED WITH THE FINAL PLAN SET MATCH THOSE PLANS APPROVED BY THE APPROPRIATE UTILITY PROVIDER.

[redacted]

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

[redacted]

[redacted]

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

[redacted]

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

[redacted]

DRAWN BY: INGENIUM

[redacted]

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

[redacted]

ingenium ENTERPRISES
PLANNING & ENGINEERING

[redacted]

[redacted]

[redacted]

GENERAL NOTES
C01.1

[redacted]

TRUE WARM & WELCOME 2300

STATE ROAD 54
(VARIABLE RIGHT-OF-WAY)

SKYBROOKE BLVD
(72' RIGHT-OF-WAY)

HARPERS RUN
(60' RIGHT-OF-WAY)

LOT 4
29-26-18-0000-00400-0700
(OR BK 10189/PG 0561)
ZONING: PD
FUTURE LAND USE: MPUD

LOT 5
29-26-18-0000-00400-0700
(OR BK 10189/PG 0561)
ZONING: PD
FUTURE LAND USE: MPUD

LOT 6
29-26-18-0000-00400-0600
(OR BK 10189/PG 0571)
ZONING: PD
FUTURE LAND USE: MPUD

LOT 7
29-26-18-0000-00400-0700
(OR BK 10189/PG 0562)
ZONING: PD
FUTURE LAND USE: MPUD

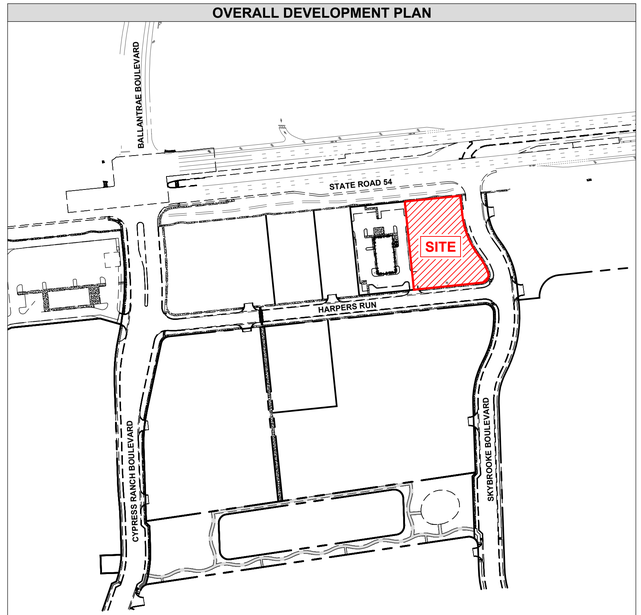
29-26-18-0000-00400-0080
(OR BK 10189/PG 575)
ZONING: PD
FUTURE LAND USE: MPUD

29-26-18-0000-00400-0900
(OR BK 10189/PG 0558)
ZONING: PD
FUTURE LAND USE: MPUD

29-26-18-0000-00400-0100
(OR BK 10189/PG 0558)
ZONING: PD
FUTURE LAND USE: MPUD

29-26-18-0000-00E0
(OR BK 10189/PG 584)
ZONING: PD
FUTURE LAND USE: MPUD

OVERALL DEVELOPMENT PLAN



SCALE 1" = 200'

LEGAL DESCRIPTION (LOT 7)

THAT PORTION OF SECTION 29, TOWNSHIP 26 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 29; THENCE RUN NORTH 89°26'29" WEST, ALONG THE SOUTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 29, A DISTANCE OF 2637.79 FEET TO THE SOUTH 1/4 CORNER OF SAID SECTION 29; THENCE DEPARTING SAID SOUTH LINE, RUN NORTH 00°17'39" EAST, ALONG THE WEST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 29, A DISTANCE OF 2640.64 FEET TO THE CENTER OF SAID SECTION 29; THENCE DEPARTING SAID WEST LINE, RUN NORTH 00°18'02" EAST, ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 29, A DISTANCE OF 61.68 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 54 (A VARIABLE WIDTH RIGHT-OF-WAY PER FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP, SECTION 14570-2521); THENCE DEPARTING SAID WEST LINE, RUN ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE THE FOLLOWING TWO (2) COURSES AND DISTANCES: 1) THENCE RUN NORTH 86°05'34" EAST, A DISTANCE OF 1186.76 FEET TO THE POINT OF BEGINNING; 2) THENCE CONTINUE NORTH 86°05'34" EAST, A DISTANCE OF 155.93 FEET; THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY LINE, RUN SOUTH 03°54'26" EAST, A DISTANCE OF 50.00 FEET TO A POINT OF CURVATURE OF A 236.00 FOOT RADIUS CURVE CONCAVE TO THE EAST; THENCE RUN SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 31°47'18" AN ARC DISTANCE OF 130.94 FEET TO A POINT OF REVERSE CURVATURE OF A 164.00 FOOT RADIUS CURVE CONCAVE TO THE SOUTHWEST; THENCE RUN SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 17°53'47" AN ARC DISTANCE OF 51.23 FEET TO A POINT OF COMPOUND CURVATURE OF A 21.50 FOOT RADIUS CURVE CONCAVE TO THE NORTHWEST; THENCE RUN SOUTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 103°53'31" AN ARC DISTANCE OF 38.99 FEET TO A POINT OF TANGENCY; THENCE RUN SOUTH 86°05'34" WEST, A DISTANCE OF 190.26 FEET; THENCE RUN NORTH 03°54'26" WEST, A DISTANCE OF 248.00 FEET TO THE POINT OF BEGINNING.

SAID LANDS CONTAINING 1.00 ACRES, MORE OR LESS.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

Sunshine811 Always call 811 before you dig.

N

0 40 80 Feet

SCALE 1" = 40'

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

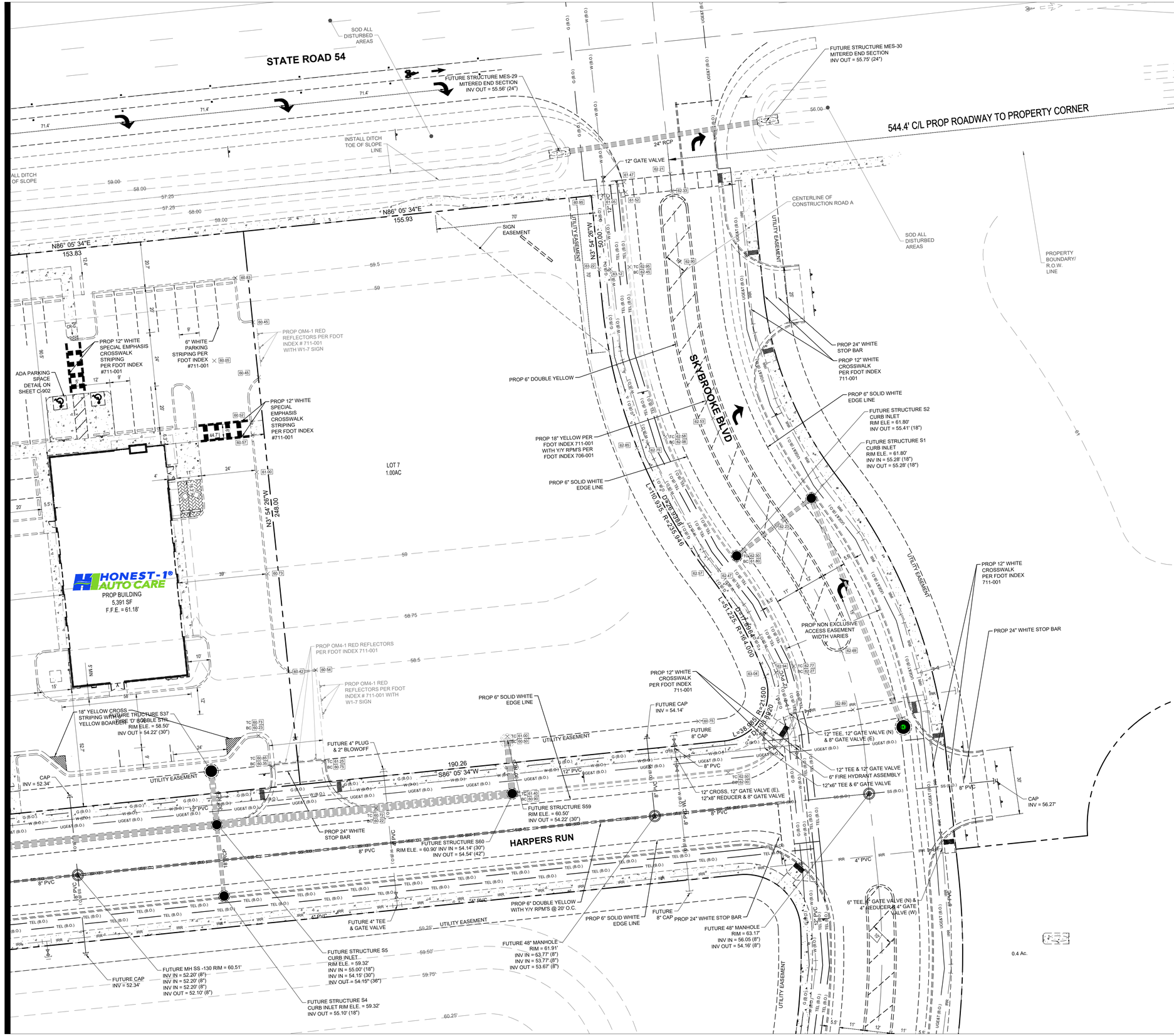
DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

DEVELOPMENT PLAN
C02.0

TRUE WARM & WELCOME 2300



CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine 811 Always call 811 before you dig

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

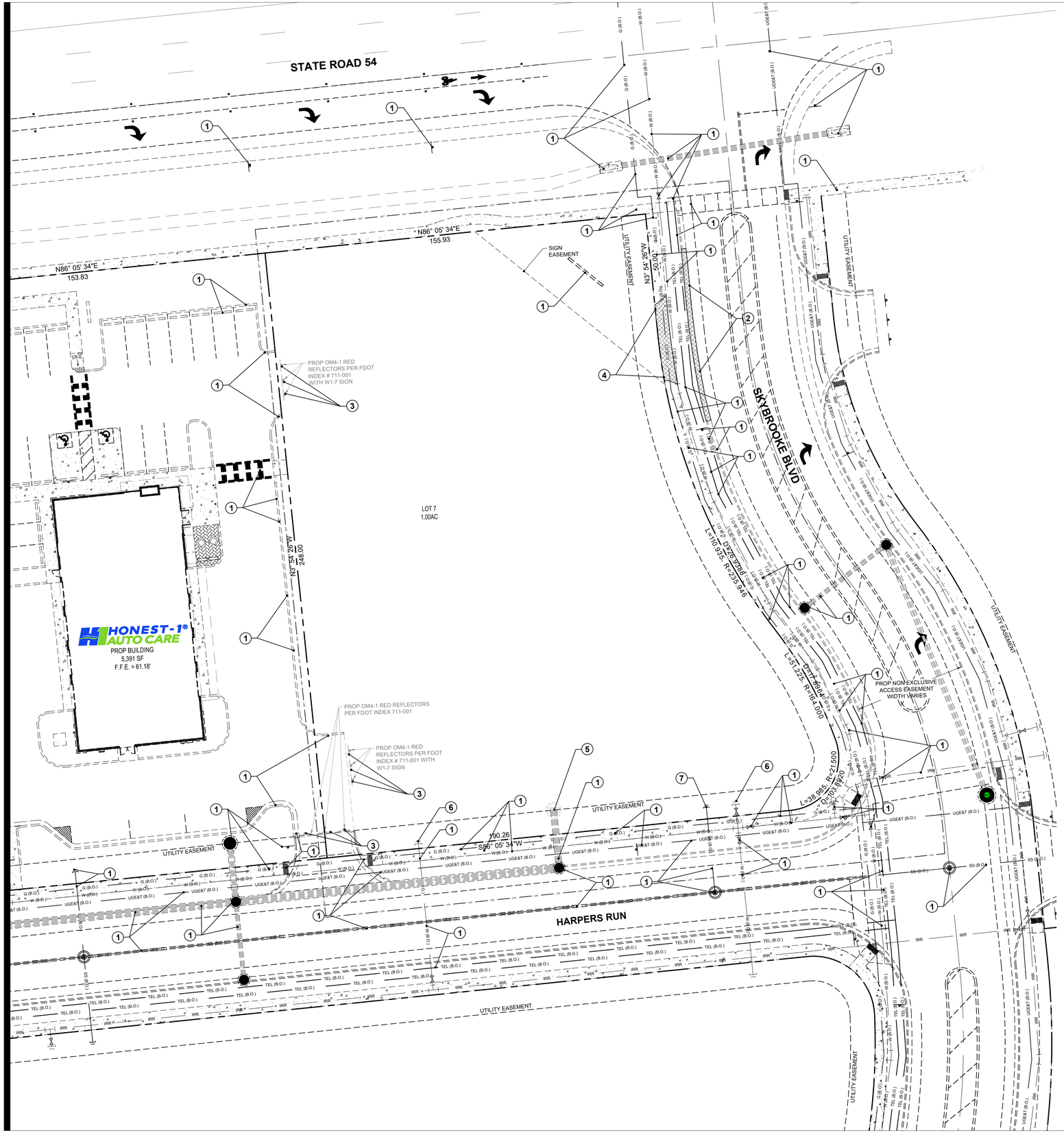
DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

EXISTING CONDITIONS PLAN
C02.1

TRUE WARM & WELCOME 2300



DEMOLITION LEGEND

1. PROTECT ALL ITEMS DURING ALL PHASES OF CONSTRUCTION (SEE GENERAL DEMOLITION NOTE #1). THE CONTRACTOR SHALL ENSURE THE INTEGRITY OF ALL ITEMS DENOTED TO BE PROTECTED THAT ARE ADJACENT TO ITEMS DENOTED TO BE DEMOLISHED AND WILL SAFELY REPAIR ANY SUCH ITEMS TO THE REQUIRED JURISDICTIONAL STANDARDS.
2. CONTRACTOR SHALL SAWCUT AND REMOVE FUTURE/EXISTING CURB AND GUTTER TO NEAREST JOINTS.
3. CONTRACTOR SHALL REMOVE ALL BARRICADES, FDOT REFLECTOR SIGNS, POLES, & ALL ASSOCIATED APPURTENANCES INCLUDING, BUT NOT LIMITED TO, FOOTERS, REBAR AND BASE.
4. CONTRACTOR SHALL SAWCUT AND REMOVE FUTURE/EXISTING SIDEWALK TO NEAREST JOINTS.
5. CONTRACTOR SHALL REMOVE FUTURE/EXISTING INLET FRAME, GRATE & TOP AND CONVERT TO FDOT TYPE 9 CURB INLET AS NOTED ON SHEET C05.0. SEE GENERAL DEMOLITION NOTE #3.
6. CONTRACTOR SHALL REMOVE FUTURE/EXISTING PLUGS & BLOWOFF VALVES PRIOR TO CONNECTING AND INSTALLING IRRIGATION AND DOMESTIC LINES. REFER TO SHEET C04.1 FOR MORE INFORMATION.
7. CONTRACTOR SHALL REMOVE FUTURE/EXISTING PLUGS & CAPS PRIOR TO CONNECTING AND INSTALLING SANITARY SEWER LINES. REFER TO SHEET C04.1 FOR ADDITIONAL INFORMATION.

GENERAL DEMOLITION NOTES

1. ALL ITEMS TO BE PROTECTED SHALL BE PROTECTED THROUGH ALL THE PHASES OF CONSTRUCTION UNTIL FINAL ACCEPTANCE BY PASCO COUNTY IS RECEIVED.
2. CONTRACTOR TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS WITH ALL DEMOLITION ACTIVITIES. IF ADDITIONAL REQUIREMENTS ARE REQUIRED FOR HAZARDOUS WASTE REMOVAL INCLUDING BUT NOT LIMITED TO ASBESTOS, SEPTIC FIELDS, LEAD, PCB, TCP, OR OTHER WASTE OR CONTAMINANT, IT IS THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH MANDATES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. CONTRACTORS SHALL COORDINATE WITH ALL UTILITY COMPANIES CONCERNING THE ABANDONMENT, RELOCATION AND/OR DEMOLITION OF UTILITIES PRIOR TO CONSTRUCTION. NO WORK IS TO BE PERFORMED ON LIVE LINES UNLESS APPROVED IN WRITING BY THE UTILITY IN ALL CASES. A REPRESENTATIVE FROM THE UTILITY SHALL BE PRESENT FOR INITIAL ABANDONMENT AND/OR LIVE CUTS. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR UTILITIES AND SHALL PROTECT THEM AT ALL TIMES.
4. CONTRACTOR IS RESPONSIBLE FOR PROCUREMENT OF ALL NECESSARY PERMITS.
5. DEMOLITION SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, HAULING, PERMITTING, FEES, AND COORDINATION WITH PUBLIC AND/OR PRIVATE UTILITY REQUIRED TO REMOVE AND PROPERLY DISPOSE OF ANY ITEM NECESSARY TO PERFORM THE REQUIRED DEMOLITION AS INDICATED ON THE PLANS.
6. RELOCATION SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, HAULING, PERMITTING, FEES, AND COORDINATION WITH PUBLIC AND/OR PRIVATE UTILITY REQUIRED TO REMOVE, RELOCATE, AND INSTALL NEW ITEMS AS INDICATED ON THE PLANS.
7. ABANDONMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, PERMITTING, FEES, AND COORDINATION WITH PUBLIC AND/OR PRIVATE UTILITY REQUIRED TO ADEQUATELY ABANDON ITEMS AS INDICATED ON THE PLANS.
8. THE CONTRACTOR SHALL COORDINATE ALL TREE AND LANDSCAPE REMOVAL WITH THE LANDSCAPE PLANS. ANY DISCREPANCY BETWEEN THIS DEMOLITION PLAN AND THE LANDSCAPE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER IMMEDIATELY.
9. THE CONTRACTOR IS FULLY AND COMPLETELY RESPONSIBLE FOR LOCATION, VERIFICATION, PROTECTION, STORAGE, MAINTENANCE, DEMOLITION, REMOVAL, RELOCATION OR ALTERATION OF ALL EXISTING SITE UTILITIES, SITE IMPROVEMENTS, STRUCTURES, OR CONSTRUCTION ELEMENTS AS REQUIRED TO COMPLETE THE WORK THAT ARE SHOWN ON THE PLANS AND OR THAT ARE OBSERVABLE IN THE FIELD, WHETHER CONSPICUOUSLY VISIBLE OR NOT. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING IMPROVEMENTS, UTILITIES, AND SITE CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION.
10. THIS DEMOLITION PLAN IS FOR GRAPHICAL REFERENCE ONLY. ITEMS NOT DEPICTED ON THESE PLAN MAY BE REQUIRED TO BE PROTECTED, REMOVED, OR RELOCATED. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE LOCATIONS OF ALL EXISTING STRUCTURES, UTILITIES, AND APPURTENANCES WITHIN THE LIMITS OF CONSTRUCTION. DEMOLITION INCLUDES BUT IS NOT LIMITED TO THE ITEMS SHOWN ON THIS PLAN.
11. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR ANY EXISTING UNDERGROUND OR OVERHEAD UTILITIES.
12. SAWCUT DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD STAKE AND CONSULT ENGINEER TO VERIFY PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine811 Always call 811 before you dig.

N

0 20 40 Feet

SCALE 1" = 20'

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

DEMOLITION PLAN
C02.2

TRUE WARM & WELCOME 2300

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine 811
Always call 811 before you dig

N

0 20 40 Feet

SCALE 1" = 20'

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

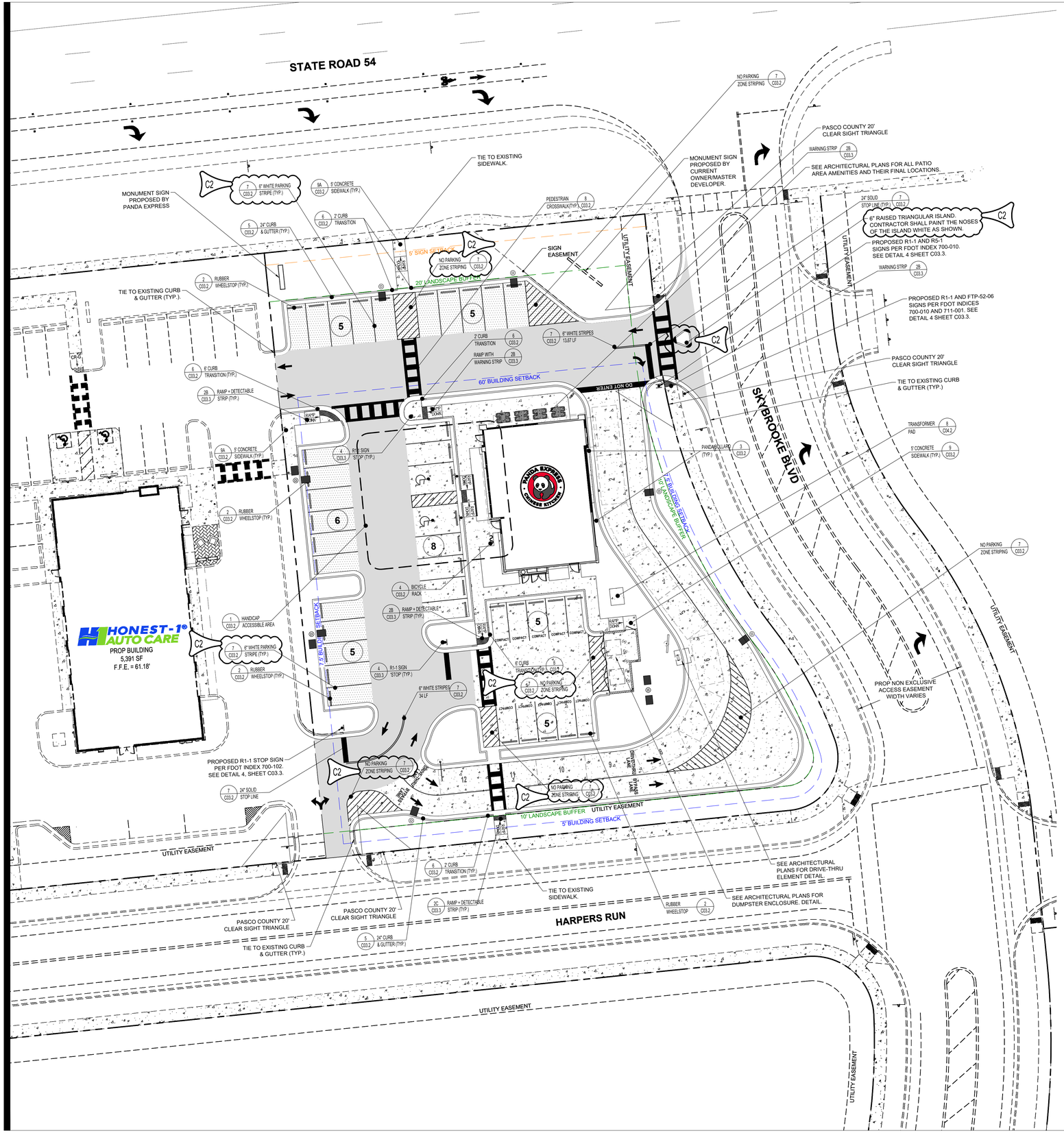
DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

AERIAL MAP
C02.3

TRUE WARM & WELCOME 2300



PAVING LEGEND

HEAVY DUTY PAVEMENT SECTION:
DETAIL 3A ,SHEET C03.3

LIGHT DUTY PAVEMENT SECTION:
DETAILS 3B, SHEET C03.3

CONCRETE SECTIONS:
SIDEWALK:
DETAIL 3C, SHEET C03.3
DRIVE-THRU:
DETAIL 1, TYPE A, SHEET C03.3
PARKING:
DETAIL 1, TYPE B, SHEET C03.3
DUMPSTER APPROACH PAD:
DETAIL 3C, SHEET C03.3

BUILDING AREA NOTES

1. MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS UNDER CONSTRUCTION; i.e. IN TIMES OF RAIN OR MUD, ROADS SHALL BE PASSABLE TO EMERGENCY VEHICLES BY BEING PAVED OR HAVING A CRUSHED STONE BASE ETC. WITH A MINIMUM WIDTH OF 20 FEET. THE ACCESS TO BUILDINGS HAVING SPRINKLER OR STANDPIPE SYSTEMS SHALL BE TO WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTION (NFPA 1141 3-1).
2. CONTRACTOR TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING IN ALL AREAS AROUND BUILDING. INSTALL FRENCH DRAIN IN LANDSCAPED AREAS ADJACENT TO BUILDING AND CONNECT TO DRAINAGE SYSTEM.
3. SEE SHEET C01.1 FOR GENERAL NOTES.

SITE NOTES

1. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING IMPROVEMENTS AND TREES AND OTHER DEBRIS WITHIN THE LIMITS OF THE WORK FROM THE SITE. ON SITE BURIAL OF TREES AND OTHER DEBRIS WILL NOT BE ALLOWED. THERE ARE NO KNOWN INERT BURY PITS ON THE SITE AND NONE WILL BE ALLOWED DURING CONSTRUCTION OF THE PROJECT.
2. ALL WORK SHALL COMPLY WITH PASCO COUNTY, STATE OF FLORIDA, AND FEDERAL CODES AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER.
3. ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER, AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
4. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER PRIOR TO USE.
5. ALL WORK PERFORMED ON CITY, COUNTY, AND/OR STATE OR FEDERAL RIGHT-OF-WAY SHALL BE IN STRICT CONFORMANCE WITH APPLICABLE STANDARDS AND SPECIFICATIONS OF THE APPROPRIATE GOVERNING AGENCIES.
6. BASE COURSE MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO "STATE OF FLORIDA" TRANSPORTATION STANDARD SPECIFICATIONS", CURRENT EDITION.
7. ALL BUILDING DIMENSIONS SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL PLANS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
8. PHOTOMETRICS DESIGNED BY OTHERS. POLE LOCATIONS ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY FINAL LOCATION OF POLES WITH PHOTOMETRIC PLAN AND OWNER PRIOR TO CONSTRUCTION.
9. ALL PARKING SPACES, PAVEMENT ARROWS, STOP BARS, AND SIGNS SHALL MATCH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND FDOT INDICES 700 AND 711.
10. SEE SHEET C01.1 FOR GENERAL NOTES.
11. ANY LIGHTING USED TO ILLUMINATE ANY PARKING AREA SHALL BE SO ARRANGED AS TO DIRECT AND/OR SHIELD LIGHT AWAY FROM ADJOINING RESIDENT PREMISES AND RIGHT-OF-WAY.

SITE INFORMATION

JURISDICTION:
PASCO COUNTY

ZONING:
MASTER PLANNED UNIT DEVELOPMENT (MPUD)

FUTURE LAND USE:
PLANNED DEVELOPMENT (PD)

PARCEL NUMBER:
29 26 18 0000 00400 0070 (BASED ON PASCO MAPPER)

REQUIRED BUILDING SETBACKS:
FRONT: 60'
SIDE: 7.5'
SIDE: 7.5'
REAR: 5'

REQUIRED PARKING:
19 SPACES - ONE (1) SPACE FOR EVERY 150 SF OF GROSS FLOOR AREA. ASSUMING A 2,381 SF BUILDING AND A 400 SF OUTDOOR DINING SPACE IS PROVIDED, THE MINIMUM PARKING REQUIRED IS 19 SPACES.

PROPOSED PARKING :

9' X 20' (REGULAR)	= 27
8'x18' (COMPACT)	= 10
12' X 20' (HC)	= 2
TOTAL	= 39

PROVIDED LANDSCAPE BUFFER:
FRONT: 20' TYPE D BUFFER (NORTH)
REAR: 10' TYPE A BUFFER (SOUTH)
SIDE: 5' TYPE A BUFFER (EAST AND WEST)

DRIVE AISLE: 24'

SITE AREA CALCULATIONS:

SITE:	±1.00 AC.
PERVIOUS AREA:	±.27 AC.
IMPERVIOUS AREA:	±.73 AC.
DISTURBED AREA:	±1.20 AC.

FLOOD HAZARD:
A PORTION OF THIS PROPERTY IS LOCATED IN A SPECIAL FLOOD AREA AS PER F.I.R.M. MAP NO. 12101C0384F, DATED 09/26/2014. HOWEVER, PLANS PROVIDED BY BOHLER ENGINEERING SHOW THAT ALL WETLANDS AND FLOODPLAINS WILL BE FILLED IN. PLEASE SEE PLANS PROVIDED BY BOHLER ENGINEERING AND APPROVED BY COUNTY ON 05/08/2020.

EXISTING INFORMATION:
ALL EXISTING INFORMATION SHOWN HEREIN IS BASED OFF OF DESIGN FILES PROVIDED BY BOHLER ENGINEERING, DATED 11/18/2020.
ALL ELEVATIONS SHOWN HEREON ARE BASED OFF OF THE ABOVE REFERENCED DESIGN FILES, WHICH ARE BASED ON NATIONAL GEODETIC SURVEY BENCHMARK D669, SAID POINT BEING A SURVEY DISC STAMPED "D669 2006" SET IN TOP OF A CONCRETE MONUMENT AND HAVING AN ELEVATION OF 60.39 FEET, PURSUANT TO THE NAVD88.

SITE LIGHTING:
PHOTOMETRICS DESIGNED BY VILLA LIGHTING. POLE LOCATIONS ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY FINAL LOCATION OF POLES WITH PHOTOMETRIC PLAN, SHEETS SL1.0, AND OWNER PRIOR TO CONSTRUCTION.

FLOOR AREA RATIO CALCULATION:
TOTAL BUILDING AREA = 2,381 SF = 0.055 AC.
DEVELOPABLE ACREAGE = 1.00 AC. (1.00 LOT AREA - 0.00 WETLANDS)
FLOOR AREA RATIO = 0.055.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine811 Always call 811 before you dig.

N
0 20 40 Feet
SCALE 1" = 20'

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

CONTRACTOR SHALL COORDINATE AND VERIFY LOCATION OF ALL SIGNAGE WITH OWNER PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL COORDINATE AND ADJUST LOCATION OF LOOP DETECTORS TO AVOID UTILITY CONFLICTS PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL INSTALL GENERAL UTILITY CONDUITS TO PLANTER AREAS AROUND BUILDING AND PATIO.

[redacted]

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

[redacted]

[redacted]

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

[redacted]

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

[redacted]

DRAWN BY: INGENIUM

[redacted]

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

[redacted]

ingenium ENTERPRISES
PLANNING & ENGINEERING

[redacted]

[redacted]

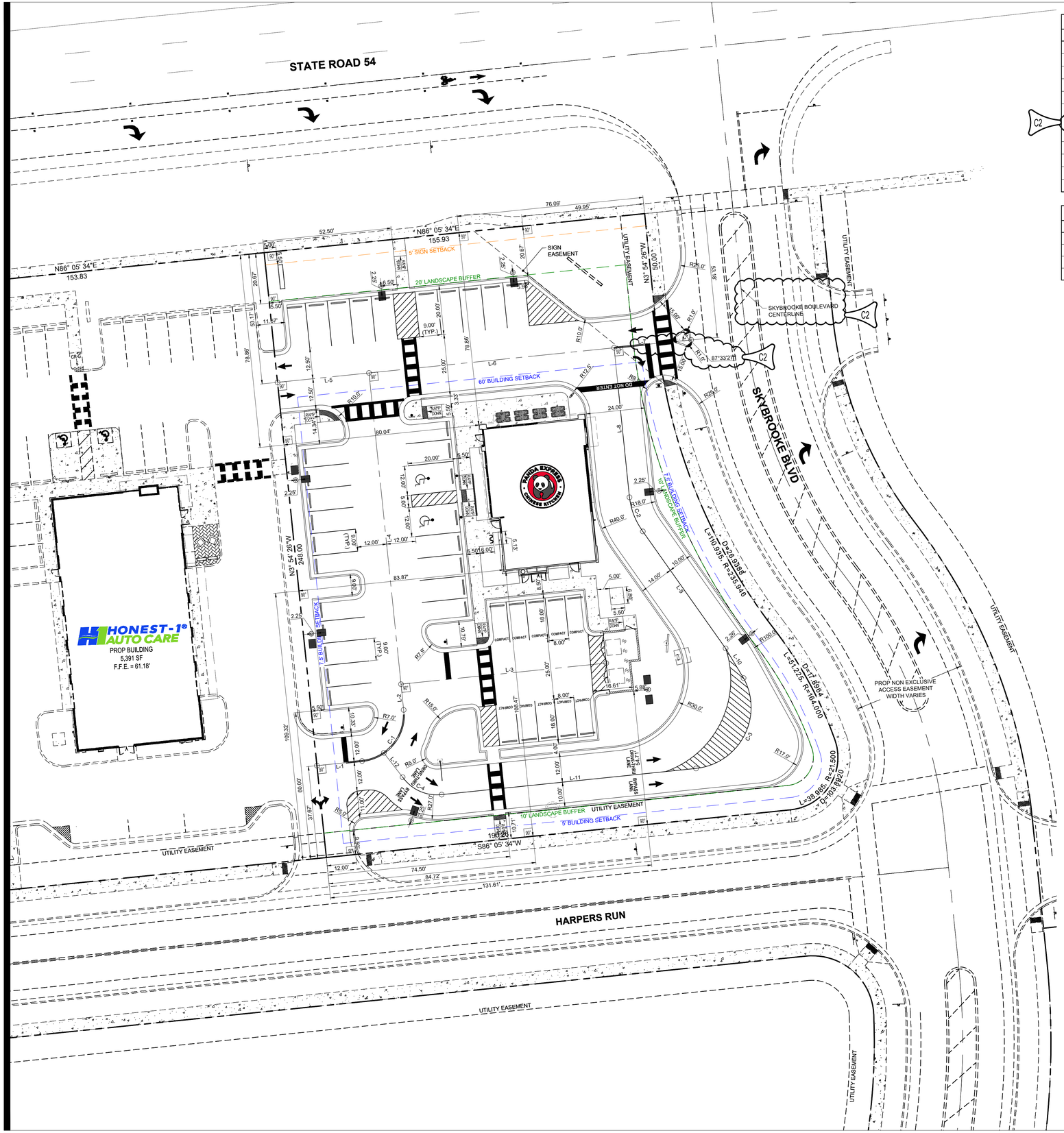
[redacted]

SITE PLAN

C03.0

[redacted]

TRUE WARM & WELCOME 2300



LINE TABLE				
LINE #	LENGTH	DIRECTION	START POINT	END POINT
L-1	18.50'	N86°05'34"E	487789.17, 1403475.51	487807.62, 1403476.77
L-2	10.55'	S03°54'26"E	487824.56, 1403507.54	487825.28, 1403497.02
L-3	84.11'	S86°05'34"W	487908.48, 1403513.28	487824.56, 1403507.54
L-4	127.62'	N03°54'26"W	487824.56, 1403507.54	487815.87, 1403634.87
L-5	37.50'	N86°05'34"E	487778.46, 1403632.31	487815.87, 1403634.87
L-6	100.46'	N86°05'34"E	487815.87, 1403634.87	487916.09, 1403641.71
L-7	31.57'	N86°05'34"E	487916.09, 1403641.71	487947.59, 1403643.86
L-8	61.31'	S03°54'26"E	487916.09, 1403641.71	487920.27, 1403580.54
L-9	58.47'	S33°19'17"E	487925.23, 1403566.45	487957.35, 1403517.59
L-10	14.13'	S29°09'01"E	487957.34, 1403517.60	487964.22, 1403505.26
L-11	104.25'	S86°05'34"W	487943.60, 1403469.07	487839.60, 1403461.96
L-12	12.47'	N35°47'11"W	487823.90, 1403469.64	487816.61, 1403479.75

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD LENGTH	CHORD BEARING
C-1	29.85'	19.00'	90.0000	26.87'	N41°05'34"E
C-2	15.12'	28.00'	30.9413	14.94'	S19°22'40"E
C-3	49.24'	25.00'	112.8401	41.66'	N29°40'22"E
C-4	18.35'	17.01'	61.8088	17.47'	S63°56'11"E

STAKING NOTES

1. ALL RADII ARE 3.0' UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE MEASURED TO FACE OF CURB UNLESS OTHERWISE NOTED.
3. ALL SITE LIGHTING POLE DIMENSIONS ARE TO THE CENTER OF THE POLE, UNLESS OTHERWISE NOTED.
4. STAKING OF STRIPING IS TO THE CENTERLINE OF THE STRIPE, UNLESS OTHERWISE NOTED.
5. SEE SHEET C01.1 FOR GENERAL NOTES.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine 811 Always call 811 before you dig.

N

0 20 40 Feet

SCALE 1" = 20'

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

CONTRACTOR SHALL COORDINATE AND VERIFY LOCATION OF ALL SIGNAGE WITH OWNER PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL COORDINATE AND ADJUST LOCATION OF LOOP DETECTORS TO AVOID UTILITY CONFLICTS PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL INSTALL GENERAL UTILITY CONDUITS TO PLANTER AREAS AROUND BUILDING AND PATIO.

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

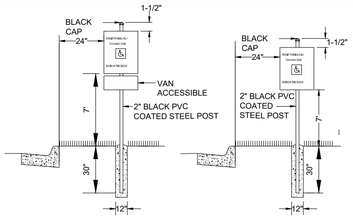
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

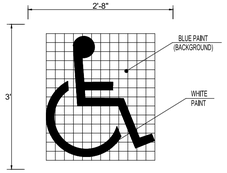
STAKING PLAN

C03.1

TRUE WARM & WELCOME 2300



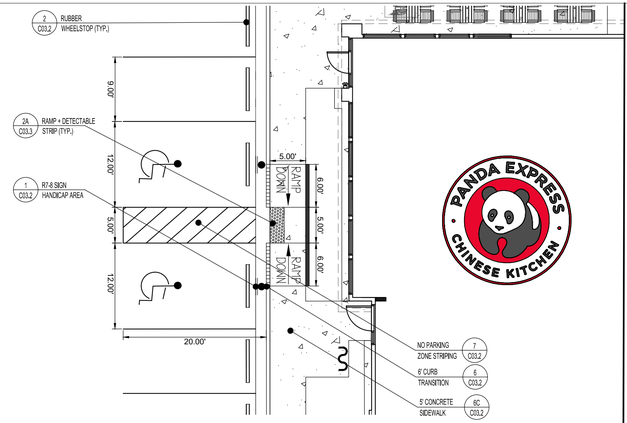
HEIGHT & CLEARANCE OF SIGNS (FOR SITE SIGNAGE)

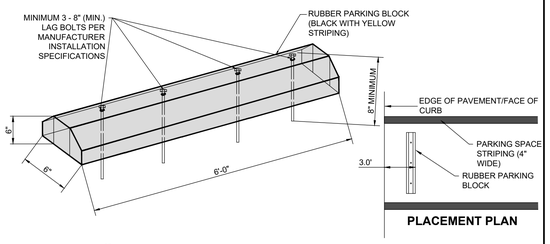


ACCESSIBLE SYMBOL SHALL MATCH FDOT INDEX #711-001 PAGE #12 FY 2021-2022.
INTERNATIONAL ACCESSIBILITY SYMBOL

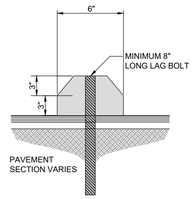
1 HANDICAP ACCESSIBLE AREA NTS

ALL HANDICAP ACCESSIBLE PARKING SPACES SHALL BE SIGNED AND MARKED IN ACCORDANCE WITH THE LATEST MUTCD AND FDOT INDICES 700-102 AND 711-001.





PLACEMENT PLAN



SECTION A-A

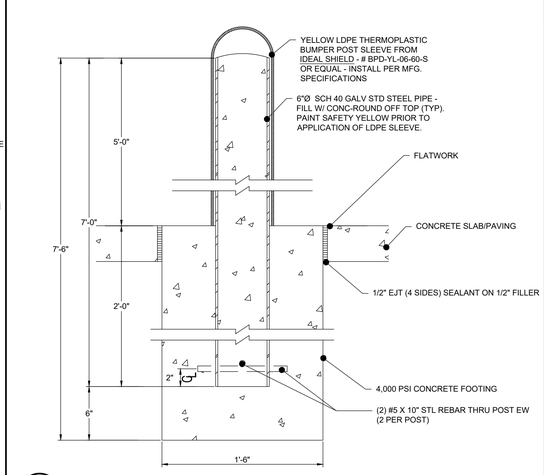
LAG BOLT METHOD: RECOMMENDED FOR ASPHALT OR CONCRETE ONLY.

REFER TO MANUFACTURERS INSTALLATION SPECIFICATIONS.

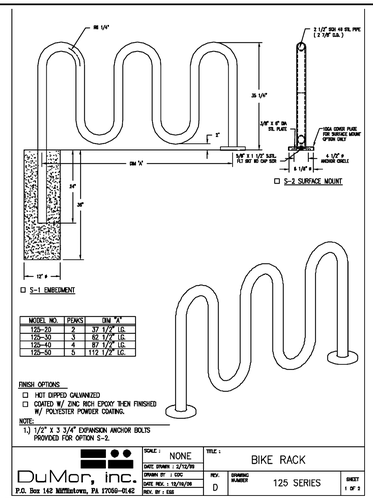
TOOLS NEEDED:
-HIGH SPEED HAMMER DRILL WITH A ¾" MASONRY DRILL BIT
-IMPACT WRENCH OR HEAVY RATCHET WITH 2" SOCKET

1. POSITION THE PARKING BLOCK WHERE YOU WANT TO INSTALL IT. USING THE HOLES MOLDED IN THE PARKING BLOCK AS TEMPLATES, MARK THE LOCATION OF EACH HOLE ON THE SURFACE.
2. REMOVE THE PARKING BLOCK. USING A HIGH-SPEED HAMMER DRILL WITH A ¾" MASONRY BIT, DRILL A 4" TO 4 ½" DEEP HOLE AT EACH MARKED LOCATION.
3. INSERT A LAG ANCHOR (WITH THE LARGE ROUND HOLE IN THE ANCHOR FACING UP) INTO EACH HOLE. TAP THE ANCHOR INTO THE HOLES WITH A HAMMER SO THAT THE TOP OF EACH ANCHOR IS FLUSH WITH THE SURFACE.
4. REPOSITION THE PARKING BLOCK SO THAT THE MOLDED HOLES LINE UP VERTICALLY WITH THE PILOT HOLES YOU DRILLED. BEGINNING IN THE CENTER HOLE, APPLY FIRM HAND PRESSURE. SLIP A WASHER ONTO A LAG BOLT, INSERT THE BOLT THROUGH THE HOLE IN THE PARKING BLOCK AND TIGHTEN THE BOLT ABOUT THREE QUARTERS OF THE WAY WITH A ¾" SOCKET. REPEAT FOR EACH HOLE IN THE PARKING BLOCK. FINISH TIGHTENING EACH BOLT UNTIL JUST SNUG. DO NOT OVER TIGHTEN! EXCESSIVE TIGHTENING MAY DAMAGE THE PARKING BLOCK AND WILL VOID THE WARRANTY.

2 RUBBER WHEELSTOP NTS



3 PANDA BOLLARD NTS



MODEL NO.	PERCH	DIM "A"
125-20	2	37 1/2" LG
125-30	3	62 1/2" LG
125-40	4	87 1/2" LG
125-50	5	112 1/2" LG

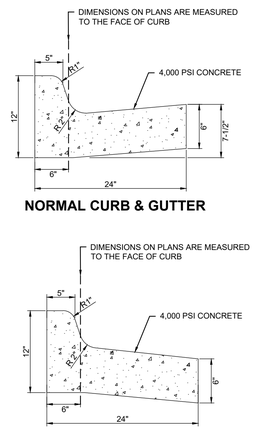
FINISH OPTIONS
- ☐ HOT DIPPED GALVANIZED
- ☐ COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.

NOTE:
1.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED FOR OPTION S-2.

DuMor, inc. P.O. Box 142 Mifflintown, PA 17059-0142

SCALE: NONE | DATE DRAWN: 2/12/98 | DRAWN BY: CDC | DATE REV.: 10/26/98 | REV. BY: CDC | REV: D | DRAWING NUMBER: 125 SERIES | TITLE: BIKE RACK | SHEET 1 OF 1

4 BIKE RACK NTS

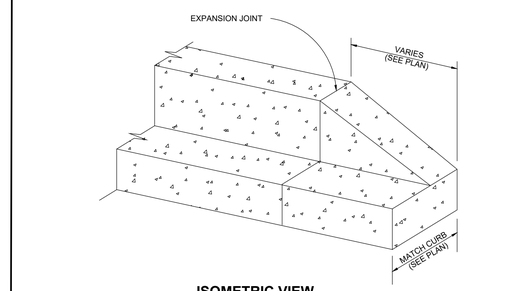


NORMAL CURB & GUTTER

REVERSE CURB & GUTTER

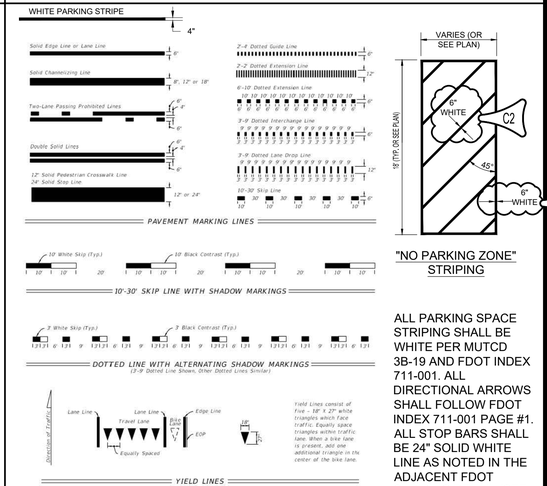
NOTE: USE REVERSE OR "SPILL" CURB WHEN THE PAVEMENT SLOPES AWAY FROM THE CURB.

5 24" CURB & GUTTER NTS



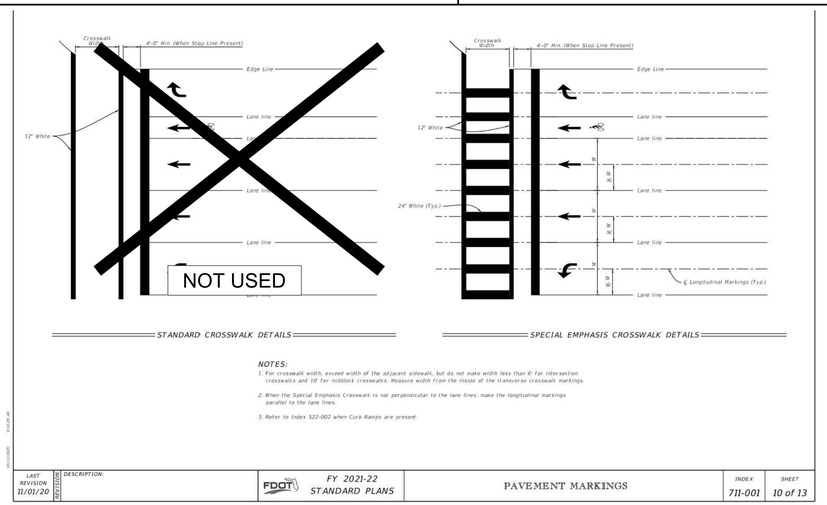
ISOMETRIC VIEW
TYPICAL CURB & GUTTER

6 CURB TRANSITION NTS



ALL PARKING SPACE STRIPING SHALL BE WHITE PER MUTCD 3B-19 AND FDOT INDEX 711-001. ALL DIRECTIONAL ARROWS SHALL FOLLOW FDOT INDEX 711-001 PAGE #1. ALL STOP BARS SHALL BE 24" SOLID WHITE LINE AS NOTED IN THE ADJACENT FDOT STRIPING DETAIL (SEE FDOT INDEX 711-001).

7 PAVEMENT STRIPES NTS

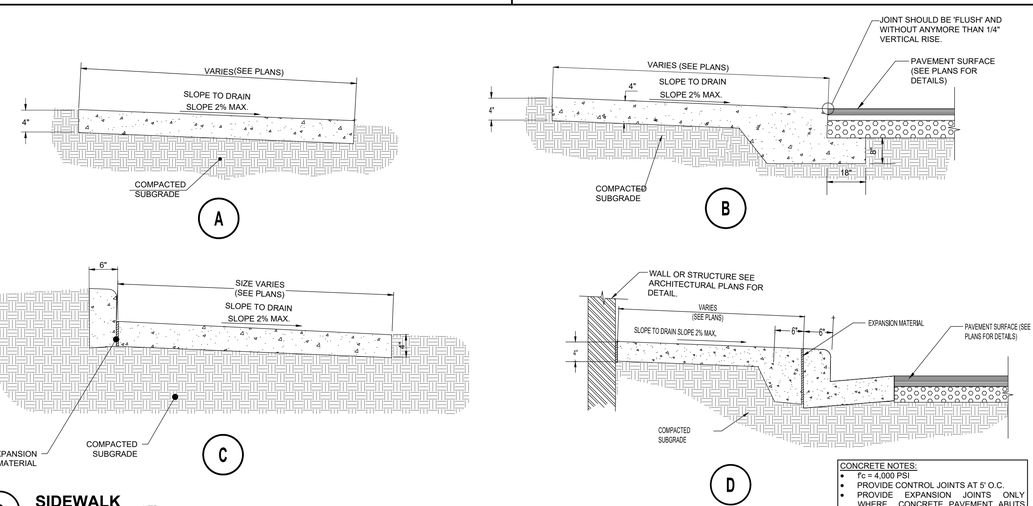


NOTES:
1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
3. Refer to Index 522-002 when Curb Ramps are present.

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 10 of 13

ALL CROSSWALKS SHALL BE 12" WHITE SPECIAL EMPHASIS CROSSWALK STRIPING PER FDOT INDEX 711-001, AS SHOWN ON THE ADJACENT DETAIL.

8 PEDESTRIAN CROSSWALK NTS



CONCRETE NOTES:
- f'c = 4,000 PSI
- PROVIDE CONTROL JOINTS AT 5' O.C.
- PROVIDE EXPANSION JOINTS ONLY WHERE CONCRETE PAVEMENT ABUTS FIXED OBJECTS, CURB AND GUTTER, AND OTHER PAVEMENT TYPES.

9 SIDEWALK NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

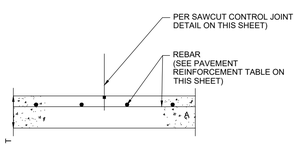
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

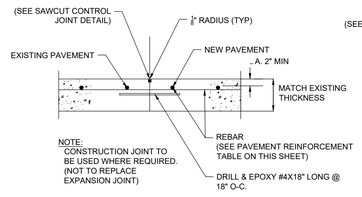
HARDSCAPE DETAILS I

C03.2

TRUE WARM & WELCOME 2300

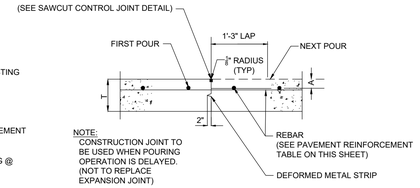


SAWCUT JOINT



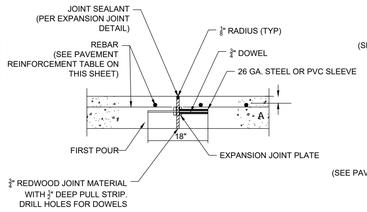
NOTE:
CONSTRUCTION JOINT TO BE USED WHERE REQUIRED. (NOT TO REPLACE EXPANSION JOINT)

CONCRETE TO CONCRETE TIE IN

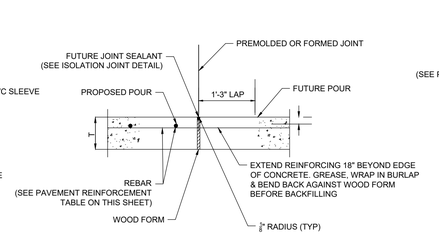


NOTE:
CONSTRUCTION JOINT TO BE USED WHEN POURING OPERATION IS DELAYED. (NOT TO REPLACE EXPANSION JOINT)

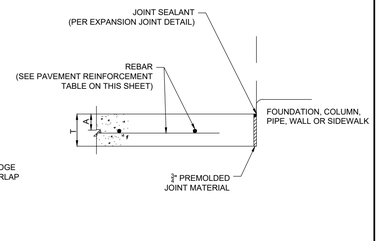
CONSTRUCTION JOINT



SAWCUT JOINT



CONCRETE TO CONCRETE TIE IN



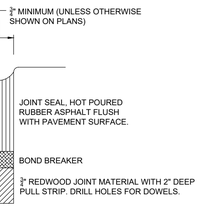
CONSTRUCTION JOINT

NOTES:

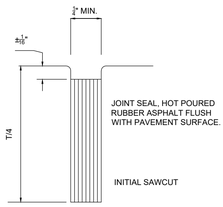
1. REINFORCING STEEL BAR SIZE/SPACING SPECIFICATIONS IN GEOTECH REPORT SHALL SUPERSEDE ABOVE TABLE.
2. REINFORCING STEEL SIZE/SPACING IS BASED ON MIN. 60,000 PSI TENSILE STRENGTH REINFORCING STEEL AS SHOWN.
3. CONCRETE PAVING MIX DESIGN SHALL HAVE MINIMUM 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. GEOTECHNICAL REPORT CONCRETE PAVING MIX DESIGN SHALL SUPERSEDE VALUES HEREIN.
4. MAXIMUM JOINT SPACING SHALL BE PER JOINT LAYOUT PLAN (IF PROVIDED) BUT SHALL NOT EXCEED VALUES IN TABLE.
5. MAXIMUM JOINT SPACING IN GEOTECHNICAL REPORT SHALL SUPERSEDE VALUES IN ABOVE TABLE.
6. USE STATE DOT SUBBASE UNLESS OTHERWISE SPECIFIED BY GEOTECHNICAL REPORT.
7. ALL JOINTS IN PAVING SHALL BE REFLECTED IN CURBING AND SHALL HAVE ALL THEIR RESPECTIVE JOINTING MATERIALS PRESENT (I.E. EXPANSION JOINTS SHALL HAVE THEIR RESPECTIVE FILLER BOARD AND CAULK REPLACED).
8. CURB EXPANSION JOINTS: - IF THERE IS AN EXPANSION JOINT IN THE PAVING, THE EXPANSION JOINT MUST FOLLOW THROUGH THE CURB. THE REINFORCING STEEL MUST ALSO BE CUT AT THE EXPANSION JOINT AND NOT ALLOWED TO RUN THROUGH THE JOINT CONTINUOUSLY. A SAW CUT EXPANSION JOINT IS NOT ACCEPTABLE BECAUSE NORMAL EXPANSION AND CONTRACTION WILL CAUSED THE CONCRETE TO PUSH AGAINST THE TWO SECTIONS AND ONE SIDE WILL EVENTUALLY FAIL. IF AN EXPANSION JOINT IS LEFT OUT AND MUST BE SAW CUT IN, THE CURB SHOULD BE CUT TWICE AND A ¾" PIECE OF CONCRETE IS REMOVED. IN ALL CASES THE JOINT SHOULD BE CAULKED WITH NP1.
9. CONCRETE TOUCHING THE BACK OF CURBS:- ANY CONCRETE THAT TOUCHES THE BACK OF A CURB INCLUDING SIDEWALKS, ISLAND NOSINGS AND PAYPHONE PADS SHALL BE ISOLATED FROM THE CURB USING ½" BLACK ASPHALT IMPREGNATED FIBERBOARD. CONTRACTOR SHALL USE A REMOVABLE STRIP OR A ZIP-STRIP AND SEAL THE JOINT WITH SL1. THE ONLY EXCEPTION IS IF THE ISLAND NOSINGS ARE POURED MONOLITHICALLY WITH THE CURB AND PARKING LOT.
10. CURBS AT THE BUILDING FOUNDATION:- IF A CURB TOUCHES THE BUILDING FOUNDATION, IT NEEDS TO BE ISOLATED WITH EXPANSION JOINT MATERIAL JUST LIKE THE PAVING. IF AN EXPANSION JOINT IS LEFT OUT AND MUST BE SAW CUT IN, A ½" PIECE OF CONCRETE SHOULD BE REMOVED. THE JOINT SHOULD BE CAULKED WITH NP1.
11. EXPANSION JOINTS AT ISLAND NOSINGS:- IF THE ISLAND NOSINGS ARE POURED MONOLITHICALLY WITH THE CUB AND PARKING LOT, THEN PAVING EXPANSION JOINTS SHOULD CONTINUE THROUGH THE NOSINGS.

REINFORCEMENT TABLE				
CONCRETE SECTION DESIGNATION	(T) SLAB THICKNESS (IN.)	(COVER) COVER (IN.) (2" MIN)	MAX. EXPANSION JOINT SPACING (FT.)	60,000 PSI STEEL REINFORCING STEEL BAR SIZE & SPACING*
TYPE "A"	6	2	15	#3 @ 24" C-C
TYPE "B"	8	2	15	#3 @ 24" C-C

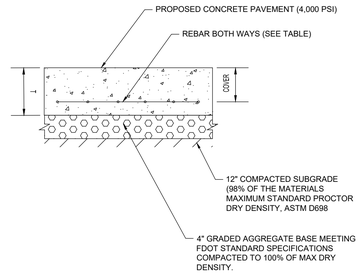
1 CONCRETE SECTIONS NTS

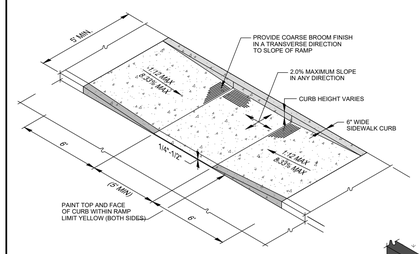


EXPANSION JOINT

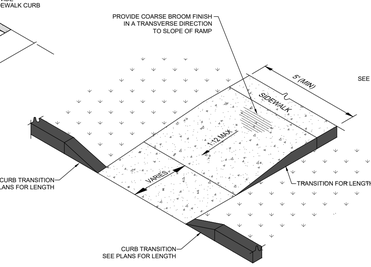


SAW CUT CONTROL JOINT

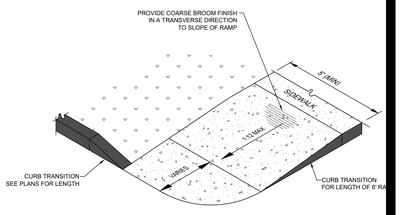




A



B

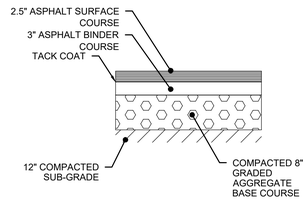


C

2 RAMP DETAILS NTS

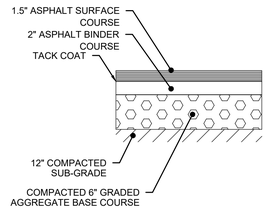
A

HEAVY DUTY ASPHALT



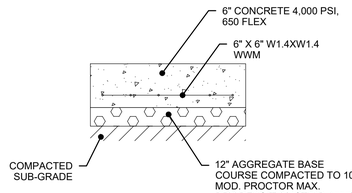
B

LIGHT DUTY ASPHALT



C

CONCRETE PAVEMENT & CONCRETE DUMPSTER APPROACH PAD

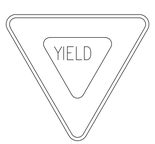


NOTE:
THE ASPHALT SURFACE COURSE SHOULD CONFORM TO THE MOST RECENT EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION. FOR HOT MIX ASPHALTIC CONCRETE SURFACE COURSE. THE BASE COURSE SHOULD CONFORM TO THE FDOT STANDARDS FOR BASE COURSE COMPACTED TO 100 PERCENT OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY. TOP 12" OF SUBGRADE TO BE COMPACTED TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY (OR AS RECOMMENDED, AS A MINIMUM).

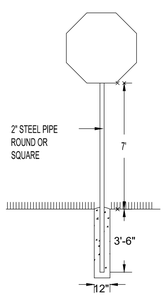
3 PAVEMENT SECTIONS NTS

R5-1
24"x24"

R1-1
24"x24"

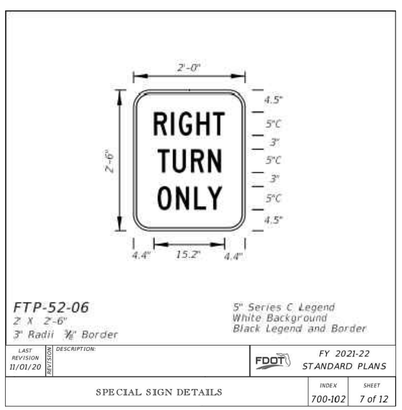


R1-2
36"x36"x36"



HEIGHT & CLEARANCE OF SIGNS (FOR ROADWAY SIGN)

4 SITE SIGNAGE NTS



ALL SIGNS ON PROPERTY SHALL MATCH THE STANDARDS OF THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FDOT INDICES 700-010 AND 711-001.

5 DETAIL (NOT USED) NTS

6 DETAIL (NOT USED) NTS

[redacted]

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

[redacted]

[redacted]

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

[redacted]

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

[redacted]

ingenium ENTERPRISES
PLANNING & ENGINEERING

[redacted]

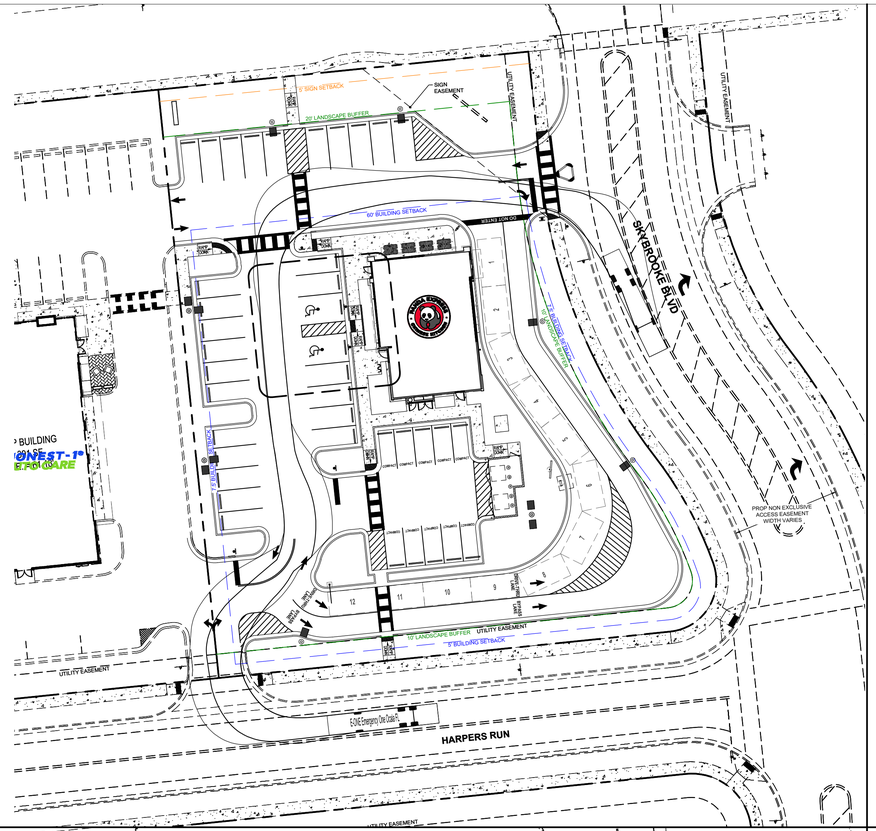
[redacted]

HARDSCAPE DETAILS II

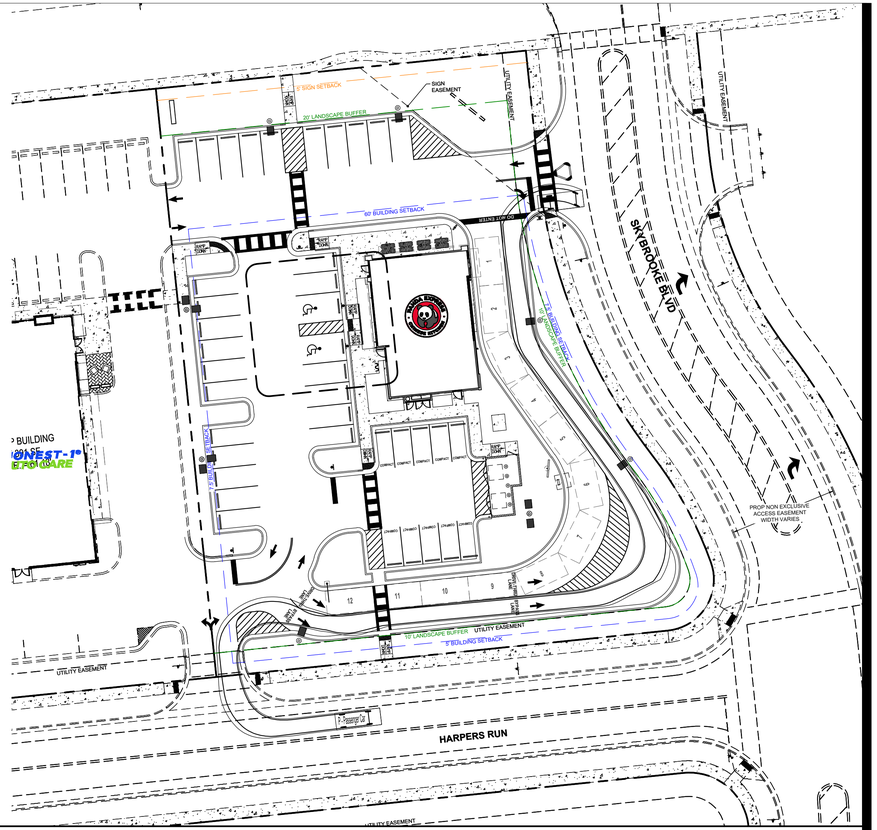
C03.3

[redacted]

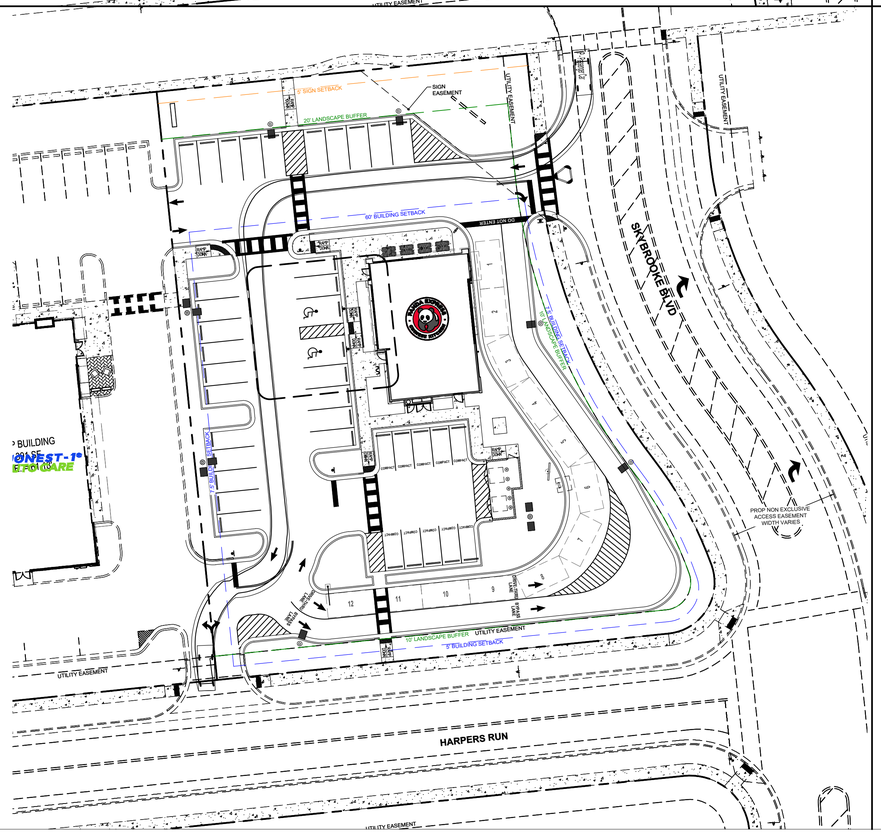
TRUE WARM & WELCOME 2300



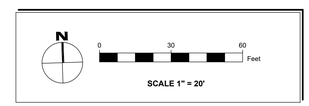
1 **FIRE TRUCK** NTS



2 **CAR OPTION 1** NTS



3 **CAR OPTION 2** NTS



SCALE 1" = 20'

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

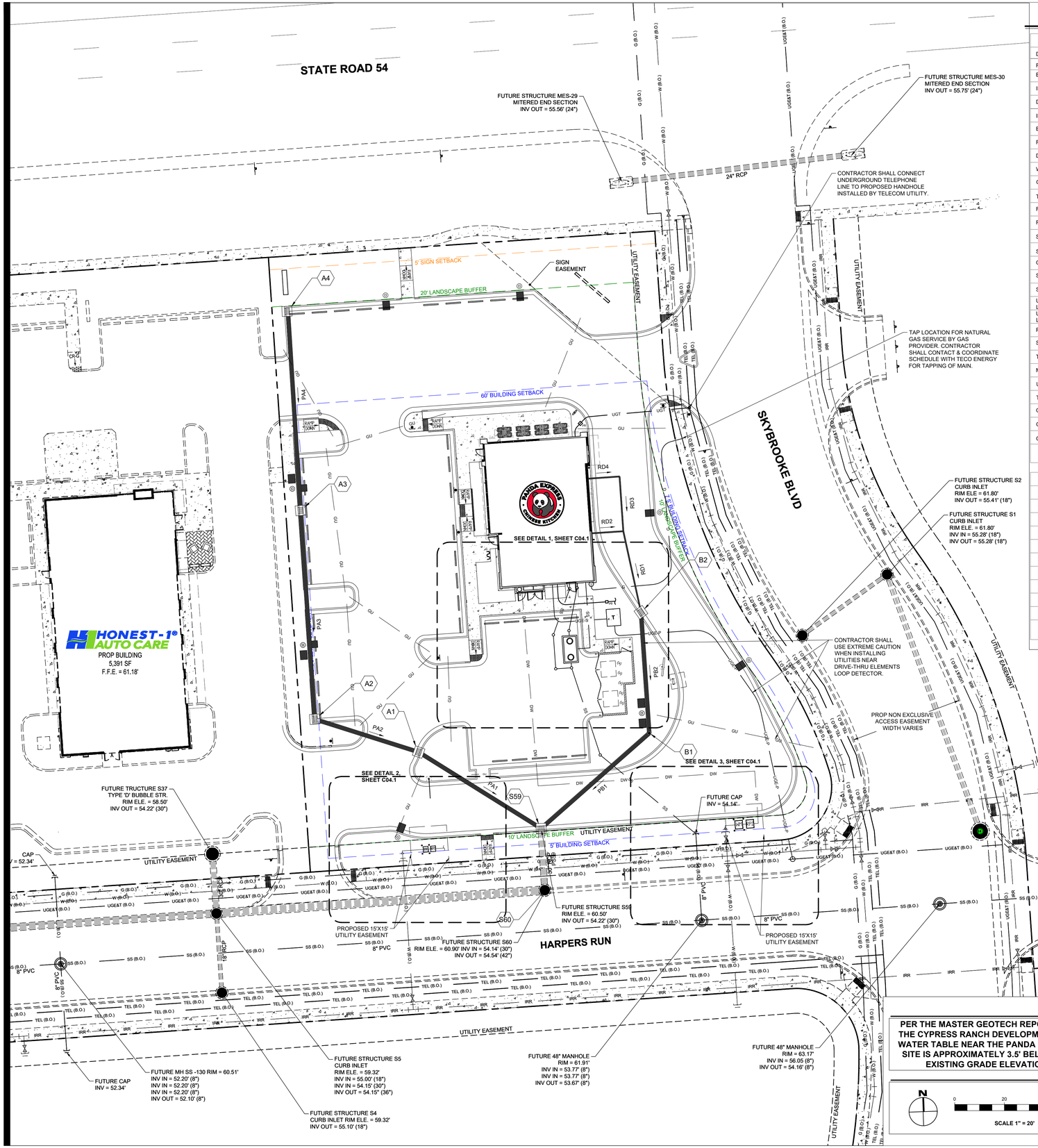
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

VEHICLE TRACKING DIAGRAMS

C03.4

TRUE WARM & WELCOME 2300



UTILITY LEGEND

PROPOSED UTILITY	LINETYPE/SYMBOL	REFERENCE
DOMESTIC WATER LINE	DW	1-1/2" PVC (COLOR CODED BLUE)
FIRE WATER LINE	FW	NOT APPLICABLE
BUILDING FIRE SPRINKLER LINE	FWS	NOT APPLICABLE
IRRIGATION WATER LINE	IRR	1" POLY (COLOR CODED PURPLE)
DOMESTIC WATER METER (WM)	WM	DETAIL 6, SHEET C04.2
IRRIGATION METER (IRR)	IRR	DETAIL 4, SHEET C04.2
BACKFLOW PREVENTER (RPZ)	RPZ	DETAIL 7, SHEET C04.2
FIRE VAULT (DDC)	DDC	NOT APPLICABLE
DC BACKFLOW PREVENTER		DETAIL 5, SHEET C04.2
WATER TAP OR TEE		NOT APPLICABLE
GATE VALVE (GV)	GV	NOT APPLICABLE
THRUST BLOCK (TB)	TB	NOT APPLICABLE
FIRE HYDRANT (FH)	FH	NOT APPLICABLE
FIRE DEPARTMENT CONNECTION (FDC)	FDC	NOT APPLICABLE
SANITARY SEWER (SS)	SS	2" & 6" PVC (COLOR CODED GREEN)
SANITARY MANHOLE (SSMH)		NOT APPLICABLE
GENERAL CLEAN OUT (Co)	Co	DETAIL 2, SHEET C04.2
SAMPLING MANHOLE		NOT APPLICABLE
SANITARY STRUCTURE NUMBER	S2	SEE PLANS
UNDERGROUND ELECTRIC LINE-PRIMARY	UGE-P	(2) 5" PVC
UNDERGROUND ELECTRIC LINE-SECONDARY	UGE-S	(2) 5" PVC
POST INDICATOR VALVE	PIV	NOT APPLICABLE
SITE LIGHTING POLE		SEE PLANS
TRANSFORMER PAD	T	DETAIL 8 SHEET C04.2
METER/CT PEDESTAL	CT	SEE PLANS
UNDERGROUND TELEPHONE LINE	UGT	(2) 4" PVC
TELEPHONE CABLE PULL BOX	PB	SEE PLANS
GENERAL UTILITY CONDUIT	GU	4" PVC
GAS LINE	G	***
GAS METERS	G	SEE PLANS

*** ALL UTILITIES SHALL BE INSTALLED ACCORDING TO UTILITY PROVIDERS AND JURISDICTION STANDARDS AND SPECIFICATIONS. ***

FUTURE UTILITY	LINETYPE/SYMBOL	REFERENCE
DOMESTIC WATER LINE (FUTURE)	W (B.O.)	SIZE VARIES
IRRIGATION LINE (FUTURE)	IRR (B.O.)	SIZE VARIES
GATE VALVE (FUTURE)		SIZE VARIES
FIRE HYDRANT (FUTURE)		SEE PLANS BY OTHERS
UNDERGROUND ELECTRIC LINE (FUTURE)	UGE (B.O.)	SIZE VARIES
SANITARY SEWER (FUTURE)	SS (B.O.)	SIZE VARIES
UNDERGROUND CABLE LINE (FUTURE)	FO (B.O.)	SIZE VARIES
UNDERGROUND TELEPHONE LINE (FUTURE)	TEL (B.O.)	SIZE VARIES
GAS LINE (FUTURE)	G (B.O.)	SIZE VARIES
FUTURE CAP		SEE PLANS BY OTHERS

*** ALL UTILITIES SHALL BE INSTALLED ACCORDING TO UTILITY PROVIDERS AND JURISDICTION STANDARDS AND SPECIFICATIONS. ***

GENERAL UTILITY NOTES

1. SEE SHEET C01.1 FOR GENERAL NOTES.
2. SEE MEP PLANS FOR CONTINUATION OF ALL UTILITIES INTO BUILDING.
3. SANITARY LATERALS SHALL HAVE A MINIMUM FALL OF 1.00%.
4. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND THEIR LOCATIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION.
5. THE FINAL LOCATION OF FIRE HYDRANTS, VALVES, WATER LINES, BACKFLOW PREVENTERS, ETC. SHALL BE DETERMINED DURING CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CHANGES TO LOCATION OR CONFIGURATION. NFPA CODES SHALL BE ADHERED TO.
6. THE CONTRACTOR SHALL CONTACT PUBLIC UTILITIES INSPECTIONS AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.
7. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH LOCAL GOVERNING CODES.
8. UTILITY CONDUIT MATERIAL FOR ELECTRIC, TELEPHONE, AND CABLE SHALL BE INSTALLED PER UTILITY PROVIDER SPECIFICATIONS.
9. CONTRACTOR TO BUILD CONCRETE TRANSFORMER PAD AND INSTALL SCHEDULE 80 PVC CONDUIT AND PULL STRING WITH SWEEPING BENDS.
10. PASCO COUNTY SHALL NOT OWN OR MAINTAIN ANY WATER LINES, SEWER LINES, OR FACILITIES CONSTRUCTED ON PRIVATE PROPERTY.*
11. ALL MATERIALS AND LABOR SHALL MEET THE SPECIFICATIONS REQUIRED BY THE COUNTY. ALL CONSTRUCTION SHALL BE PERFORMED UNDER THE INSPECTION OF THE COUNTY AND IN STRICT COMPLIANCE WITH THE STANDARDS OF THE COUNTY DESIGN STANDARDS.
12. ALL NEWLY INSTALLED WATER DISTRIBUTION MAINS AND SERVICE LATERALS SHALL BE COLOR CODED BLUE.
13. ALL NEWLY INSTALLED FORCE MAINS AND GRAVITY LINES SHALL BE COLOR CODED GREEN.
14. ALL NEWLY INSTALLED RECLAIM WATER DISTRIBUTION MAINS AND SERVICE LATERALS SHALL BE COLOR CODED PURPLE.

CONTRACTOR SHALL COORDINATE AND VERIFY LOCATION OF ALL SIGNAGE WITH OWNER PRIOR TO CONSTRUCTION.

PER THE MASTER GEOTECH REPORT FOR THE CYPRESS RANCH DEVELOPMENT, THE WATER TABLE NEAR THE PANDA EXPRESS SITE IS APPROXIMATELY 3.5' BELOW THE EXISTING GRADE ELEVATION.

CONTRACTOR SHALL COORDINATE AND ADJUST LOCATION OF LOOP DETECTORS TO AVOID UTILITY CONFLICTS PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

UTILITY INFORMATION

WATER

	GC	MASTER DEVELOPER	PANDA EXPRESS	UTILITY	ADDITIONAL NOTES
LINE EXTENSION TO PROPERTY LINE		●			NONE
PIPING (PROPERTY LINE TO BUILDING)	●				NONE
TAPPING THE MAIN		●			NONE
WATER VAULT	●				NONE
WATER (METER) PIT	●				NONE
DOMESTIC METER	●				NONE
FIRE METER					NOT APPLICABLE
IRRIGATION METER	●				NONE
DOMESTIC BFP	●				NONE
FIRE BFP					NOT APPLICABLE
IRRIGATION BFP	●				NONE
OBTAINING EASEMENTS			●		NONE
OBTAINING ROW WORK PERMITS		●			NONE

SANITARY SEWER

	GC	MASTER DEVELOPER	PANDA EXPRESS	UTILITY	ADDITIONAL NOTES
TAPPING OF THE MAIN		●			NONE
LINE EXTENSION		●			NONE
SERVICE LATERAL (INSIDE PROPERTY)	●				NONE
OBTAINING EASEMENTS			●		NONE
OBTAINING ROW PERMIT		●			NONE

ELECTRIC

	GC	MASTER DEVELOPER	PANDA EXPRESS	UTILITY	ADDITIONAL NOTES
PRIMARY CONDUIT	●				NONE
PRIMARY CABLE				●	NONE
PRIMARY FINAL CONNECTION				●	NONE
TRANSFORMER				●	NONE
TRANSFORMER PAD	●				NONE
POLE					NOT APPLICABLE
SECONDARY CABLE	●				NONE
SECONDARY CONDUIT	●				NONE
SECONDARY FINAL INSPECTION	●				NONE
METER				●	NONE
CT CABINET	●				NONE
CT METER CONDUIT	●				NONE
SOCKET				●	NONE
OBTAINING EASEMENTS	●				NONE
ROW WORK PERMITS	●				NONE

TELEPHONE

	GC	MASTER DEVELOPER	PANDA EXPRESS	UTILITY	ADDITIONAL NOTES
CONDUIT	●				NONE
TRENCH & BACKFILL	●				NONE
CABLE & WIRE	●				NONE
OBTAINING EASEMENTS			●		NONE
OBTAINING ROW WORK PERMITS	●				NONE

GAS

	GC	MASTER DEVELOPER	PANDA EXPRESS	UTILITY	ADDITIONAL NOTES
TAP				●	NONE
PIPING				●	NONE
TRENCH AND BACKFILL				●	NONE
METER				●	NONE
REGULATOR				●	NONE
OBTAINING EASEMENTS			●		NONE
OBTAINING ROW WORK PERMITS				●	NONE

CONTRACTOR SHALL INCLUDE PULL STRING FOR TELECOM SERVICE. LEAVE CONDUIT PROTRUDING OUT OF GROUND MIN 12" AND PAINT ORANGE, TAG WITH FLAG OR OTHER MARKER NOTING LOCATION OF TELEPHONE CONDUIT.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

Sunshine 811 Always call 811 before you dig

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

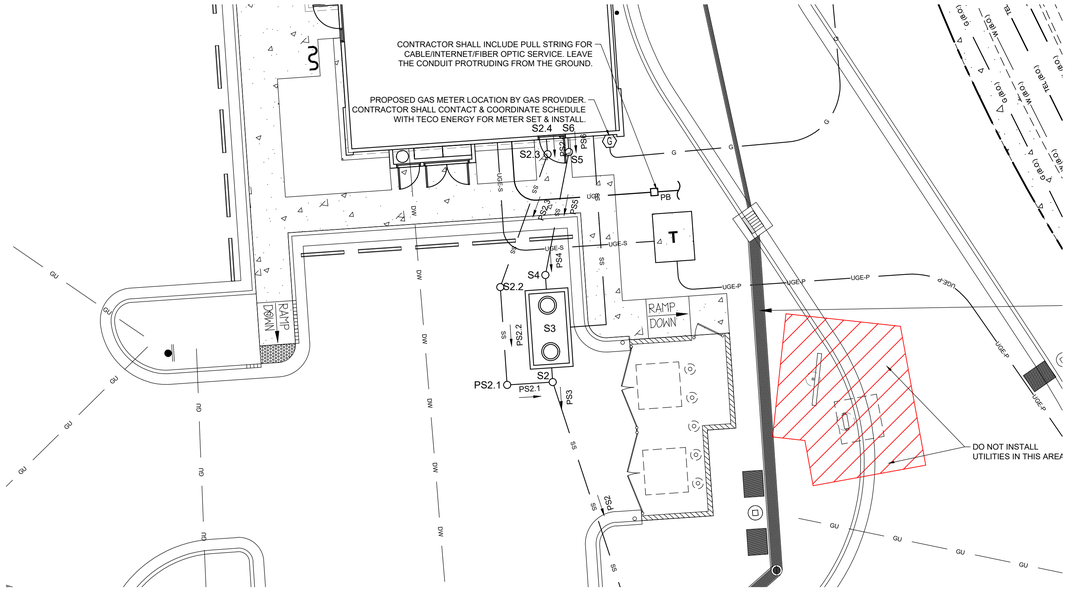
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

UTILITY PLAN

C04.0

TRUE WARM & WELCOME 2300



1 SANITARY DETAIL

GREASE TRAP CALCULATIONS:

D x GL x (HR/12) = SIZE IN GALLONS

D = SEATS IN RESTAURANT (INDOOR AND OUTDOOR)
GL = GALLONS OF WASTEWATER PER MEAL (PAPERWARE, 10 GAL)
HR = HOURS OF OPERATION

D = 84
GL = 10
HR = 10

84 x 10 x 10/12 = 700

THEREFORE, THE 1,000 GAL. GREASE INTERCEPTOR SPECIFIED ON THE NEXT PAGE IS SUFFICIENT, BASED ON FLORIDA PLUMBING CODE 2020.

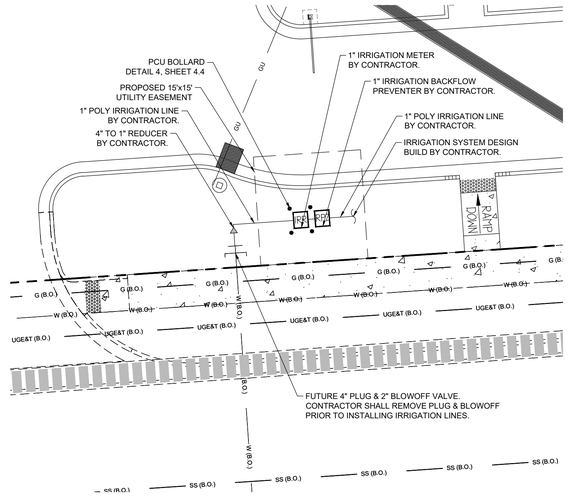
IRRIGATION FLOW DESIGN ANALYSIS:

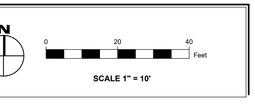
MAXIMUM STATION FLOW = 26.53 GPM
FLOW AVAILABLE AT POC = 37.50 GPM
RESIDUAL FLOW AVAILABLE = 10.97 GPM

MAX. GAL/DAY = 2,132 GAL.
MAX. GAL/WEEK = 7,556 GAL.

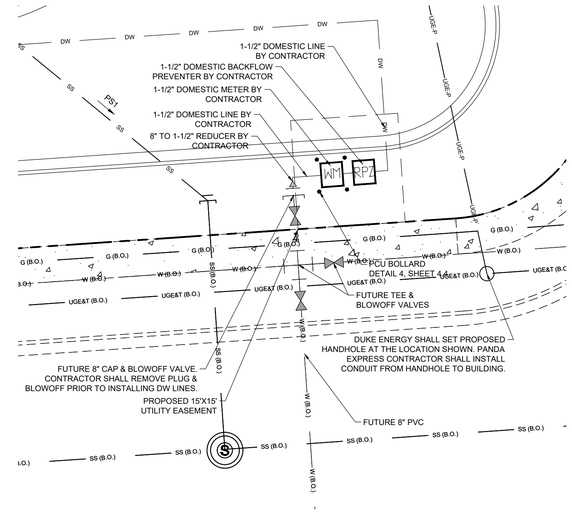
*FLOWS ARE BASED ON HYDRANT TEST COMPLETED BY MASTER DEVELOPER OF CYPRESS RANCH DEVELOPMENT. CONTRACTOR SHALL FIELD VERIFY INFORMATION ABOVE.

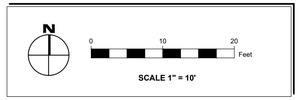
PLEASE REFER TO THE IRRIGATION PLAN (SHEET I01.0 FOR ADDITIONAL INFORMATION.





2 IRRIGATION METER DETAIL





3 WATER METER DETAIL

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

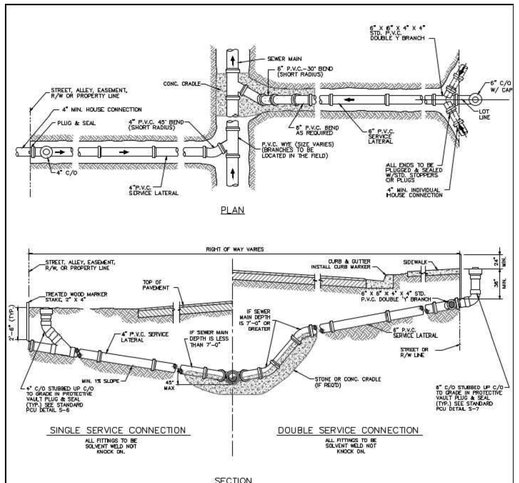
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

UTILITY DETAIL PLAN

C04.1

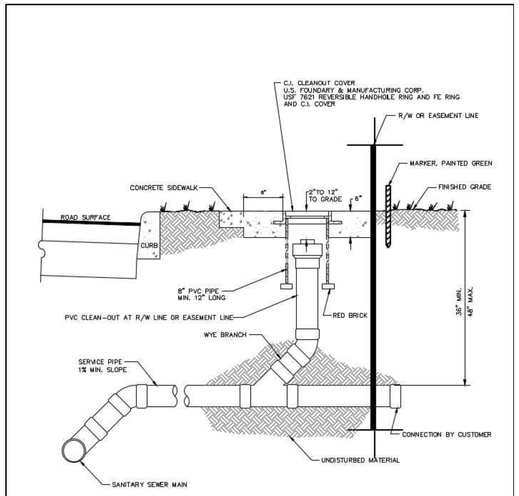
TRUE WARM & WELCOME 2300



NOTE:
- CONTRACTOR SHALL MAKE, ON A CLEAN SET OF PLANS, THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE OF EACH SERVICE LATERAL AND THEN GIVE TO ENGINEER FOR RECORD PURPOSES.
- PROVIDE 2" x 4" PRESSURE TREATED WOOD MARKER STAKE AT ALL SANITARY SERVICES (INCLUDE IN PIPE PRICE), TOP OF STAKE TO BE PAINTED WITH GREEN PAINT.
- THE MINIMUM DIAMETER OF ALL SERVICE LATERALS SHALL BE 4 INCHES.

CREATED FEB 2003 REVISED JAN 2014 MAY 2015 JUNE 2017	SANITARY SEWER LATERAL CONNECTION	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL S4

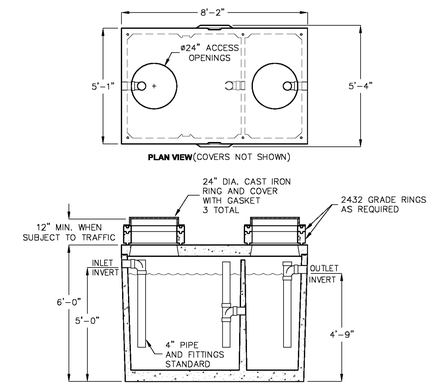
1 SANITARY SEWER CONNECTION NTS
PASCO COUNTY UTILITY DETAIL S4



CREATED AUG 2015 REVISED MAY 2016 JUNE 2017	SANITARY SEWER – SINGLE WYE CONNECTION AND TYPICAL CLEAN-OUT	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL S6

2 SANITARY CLEANOUT NTS
PASCO COUNTY UTILITY DETAIL S6

1000 GALLON GREASE INTERCEPTOR
MODEL JP1000-EE-G
TRAFFC RATED



OPERATING CAPACITY: 1,000 GALLONS.

DESIGN LOAD: H-20 TRAFFIC WITH DRY SOIL CONDITIONS (WATER LEVEL BELOW TANK) AND 1 TO 6 FEET EARTH COVER.

BEDDING NOTE: SUITABLE SUB-BASE BEDDED WITH GRANULAR MATERIAL SHALL BE PREPARED TO HANDLE ANTICIPATED LOADS.

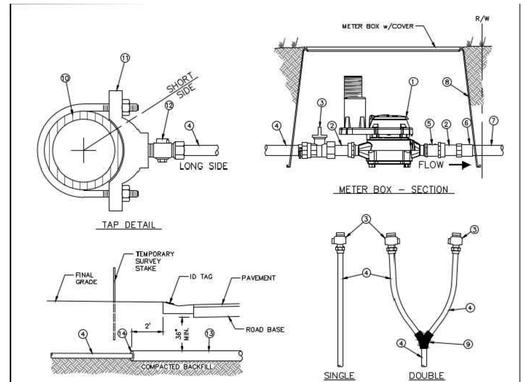
FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

MINIMUM EXCAVATION 8'-1" x 9'-2" x REQ'D DEPTH

JENSEN PRECAST

4/21/2010
JP1000_EE_G_AZ_A.DWG
©2010

3 1,000 GAL. GREASE TRAP NTS



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	RECORDALL WATER METER w/ADE & ORION INTEGRAL PIT TRANSMITTER (5/8" x 3/4" RCDL C25 OR 1" RCDL M55)
2	2	METER TAIL, 3/4" OR 1" LONG, BRONZE MULTISIDED, w/RUBBER WASHER
3	1	CURB STOP BALL VALVE, w/LOCK WING (FIP X COMP)
4	*	WATER TUBING, POLYETHYLENE BLUE
5	1	DUAL CHECK VALVE (FMTR X MMTR)
6	1	COUPLING, PVC (TYP)
7	*	PIPE, PVC (TYP.)
8	1	METER BOX w/READER COVER, NDS D1200 OR EQUAL
9	1	1" x 3/4" WYE BRANCH (COMP. x COMP.)
10	*	PIPE, PVC (DR-18) OR D.I.P.
11	1	1" TAPPING SADDLE, DOUBLE STRAP, F.I.P., S.S.
12	1	1" CORPORATION (M.I.P. x COMP.)
13	*	2" CASING, PVC OR HDPE
14	*	SEALER, RAM-NEK

NOTES:
WHEN POSSIBLE SERVICE LINE TO BE LOCATED ON PROPERTY LINES.
SERVICE LINES TO BE STAKED 3'-0" FROM WYE BEND

SERVICE LINES – PLAN

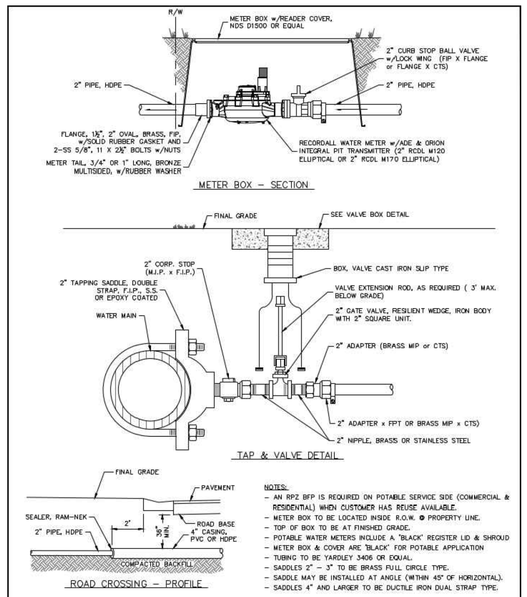
NOTES:
- A DUAL CHECK VALVE IS REQUIRED ON THE POTABLE SERVICE LINE WHEN THE CUSTOMER HAS REUSE AVAILABLE.
- METER BOX TO BE LOCATED INSIDE R.O.W. & PROPERTY LINE.
- TOP OF BOX TO BE AT FINISHED GRADE.
- ALL FITTINGS FOR POLYETHYLENE TUBING ARE BRASS COMPRESSION TYPE.
- POTABLE WATER METERS INCLUDE A GREY" REGISTER LID & SHROUD, SUPPLIED BY PCU
- METER BOX & COVER ARE 'BLACK' FOR POTABLE APPLICATION, SUPPLIED BY PCU
- TUBING TO BE YARDLEY 3406 OR EQUAL 'BLUE'.
- SADDLES 2" – 3" TO BE BRASS FULL CIRCLE TYPE.
- SADDLES 4" AND LARGER TO BE D.I. DUAL STRAP TYPE.
- SADDLE MAY BE INSTALLED AT ANGLE (WITHIN 45° OF HORIZONTAL).

W, RW

CREATED JAN 2014 REVISED AUG 2015 MAY 2016 JUNE 2017	AMR METER SERVICE INSTALLATION 5/8", 3/4" OR 1"	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL G13

4 1" IRRIGATION METER NTS
PASCO COUNTY UTILITY DETAIL G13

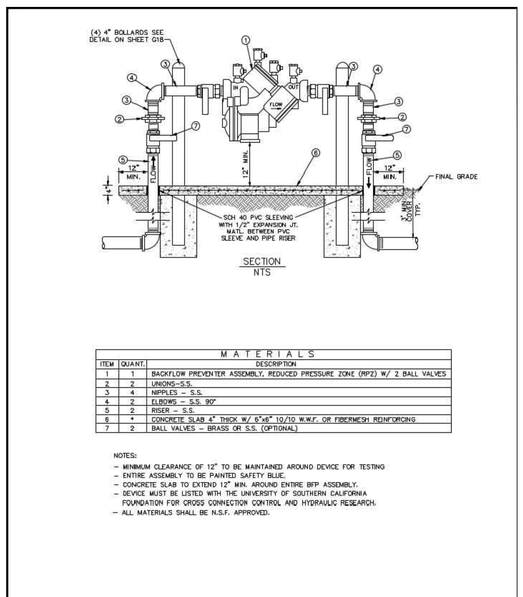
5 DETAIL (NOT USED) NTS



NOTES:
- AN RPZ BFP IS REQUIRED ON POTABLE SERVICE SIDE (COMMERCIAL & RESIDENTIAL) WHEN CUSTOMER HAS REUSE AVAILABLE.
- METER BOX TO BE LOCATED INSIDE R.O.W. & PROPERTY LINE.
- TOP OF BOX TO BE AT FINISHED GRADE.
- POTABLE WATER METERS INCLUDE A "BLACK" REGISTER LID & SHROUD
- METER BOX & COVER ARE 'BLACK' FOR POTABLE APPLICATION
- TUBING TO BE YARDLEY 3406 OR EQUAL.
- SADDLES 2" – 3" TO BE BRASS FULL CIRCLE TYPE.
- SADDLE MAY BE INSTALLED AT ANGLE (WITHIN 45° OF HORIZONTAL).
- SADDLES 4" AND LARGER TO BE DUCTILE IRON DUAL STRAP TYPE.

CREATED FEB 2003 REVISED JAN 2014 AUG 2015 JUNE 2017	AMR METER SERVICE INSTALLATION 1-1/2" or 2"	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL G14

6 1"-1/2" DOMESTIC METER NTS
PASCO COUNTY UTILITY DETAIL G14

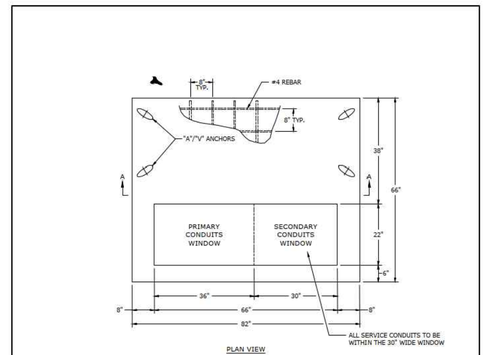


MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	BACKFLOW PREVENTER ASSEMBLY, REDUCED PRESSURE ZONE (RPZ) W/ 2 BALL VALVES
2	2	UNIONS – S.S.
3	4	NIPPLES – S.S.
4	2	ELBOWS – S.S. 90°
5	2	RISER – S.S.
6	*	CONCRETE SLAB 4" THICK W/ 6"x6" 10/10 W.W.F. OR FIBERMESH REINFORCING
7	2	BALL VALVES – BRASS OR S.S. (OPTIONAL)

NOTES:
- MINIMUM CLEARANCE OF 12" TO BE MAINTAINED AROUND DEVICE FOR TESTING
- ENTIRE ASSEMBLY TO BE PAINTED SAFETY BLUE.
- CONCRETE SLAB TO EXTEND 12" MIN. AROUND ENTIRE BFP ASSEMBLY.
- DEVICE MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
- ALL MATERIALS SHALL BE N.S.F. APPROVED.

CREATED 02/24/03 REVISED 08/00/10 AUG 2015 JUNE 2017	REDUCED PRESSURE BACKFLOW PREVENTER (SINGLE SERVICE: 3/4", 1", 1-1/2", 2")	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL W8

7 1"-1/2" BACKFLOW PREVENTER NTS
PASCO COUNTY UTILITY DETAIL W8



NOTES:

1. PRECAST PAD SUPPLIERS ARE REQUIRED TO PROVIDE THE PADS WITH RECESSED "A/V" ANCHORS, TO BE USED FOR LIFTING THE PADS.

3							
2							
1	5/31/18	NORMAN	SAUNDERS	GRAHAM			
0	7/14/16	NORMAN	SAUNDERS	NICOLA			
REVISED		BY	CHK'D	APPR.			

DUKE ENERGY.

DEC	DEM	DEP	DEF
			X

SMALL FLAT PAD SPECIFICATIONS

PAGE 3

8 TRANSFORMER PAD NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

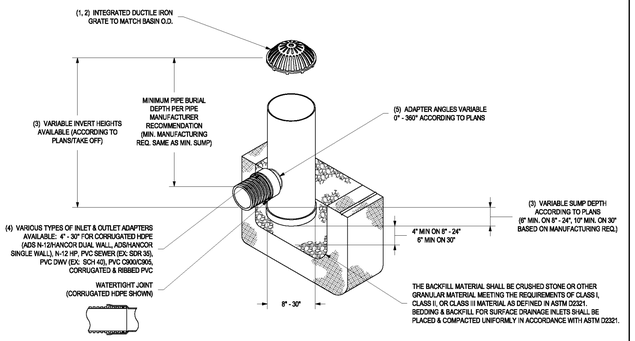
ingenium ENTERPRISES
PLANNING & ENGINEERING

UTILITY DETAILS I

C04.2

TRUE WARM & WELCOME 2300

NYLOPLAST DRAIN BASIN WITH DOME GRATE



1 - 8" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 8" & 10" DOME GRATES FIT ONTO THE DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-150440.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 60" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-000.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 8" - 30" DOME GRATES HAVE NO LOAD RATING.

DRAWN BY	EBC	MATERIAL	
DATE	03-25-10		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-15-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

Nyloplast — 3126 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

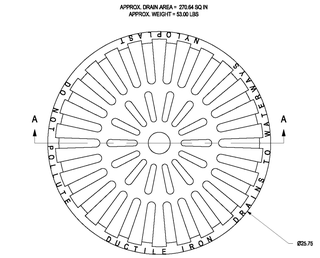
TITLE: DRAIN BASIN WITH DOME GRATE QUICK SPEC INSTALLATION DETAIL

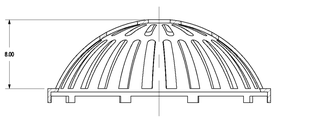
DWG NO. 7001-110-307 REV D

1 LANDSCAPE DRAIN WITH DOME GRATE NTS

2499CGD

APPROX. DRAIN AREA = 270.64 SQ IN
APPROX. WEIGHT = 53.00 LBS





SECTION A-A

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	03-09-06		
REVISED BY	CCA	PROJECT NO./NAME	
DATE	05-30-13		
DWG SIZE	A	SCALE 1:5	SHEET 1 OF 1

Nyloplast — 3126 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

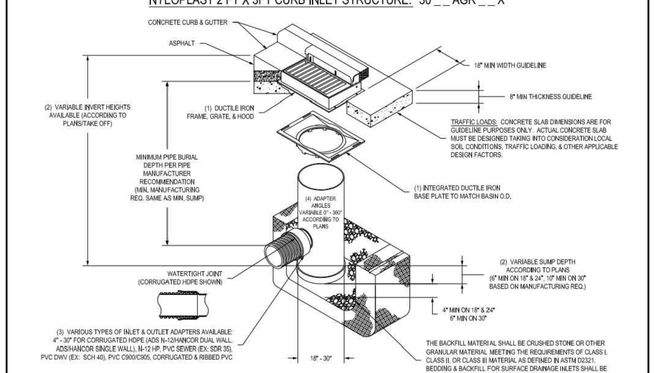
TITLE: 24 IN DOME GRATE

DWG NO. 7001-110-210 REV E

2 NYLOPLAST DOME GRATE NTS

3 DETAIL (NOT USED) NTS

NYLOPLAST 2 FT X 3FT CURB INLET STRUCTURE: 30 _ _ AGR _ _ X



1 - 18" - 30" FRAMES, GRATES, HOODS, & BASE PLATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
3 - DRAINAGE CONNECTOR STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
4 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
5 - ALL CURB INLET GRATE OPTIONS (DIAGONAL & HIGH FLOW) SHALL MEET H-20 LOAD RATING

DRAWN BY	EBC	MATERIAL	
DATE	03-22-10		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-16-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

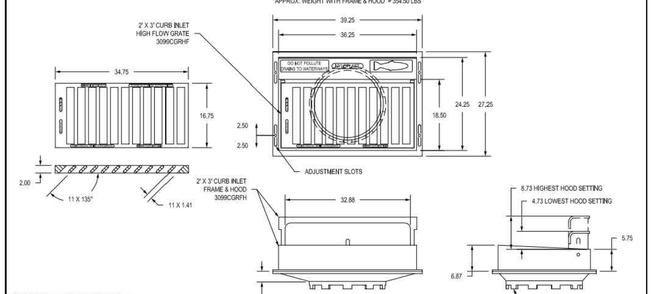
Nyloplast — 3126 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE: DRAIN BASIN WITH 2 FT X 3 FT CURB INLET QUICK SPEC INSTALLATION DETAIL

DWG NO. 7002-110-087 REV C

3099CGRHF & 3099CGRFH

APPROX. GRATE DRAIN AREA = 327.25 SQ IN
*APPROX. WEIGHT WITH FRAME & HOOD = 354.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7002-110-058
SLOPE OF GRATE SURFACE IS 5.2%
CURB INLET FRAME INSIDE VOLUME IS APPROX 2.73 CU FT
APPROX. DRAIN AREA OF GRATE & HOOD
LOWEST SETTING = 463.92 SQ IN
LOWEST + 1" SETTING = 496.79 SQ IN
LOWEST + 2" SETTING = 529.67 SQ IN
LOWEST + 3" SETTING = 562.54 SQ IN
HIGHEST SETTING = 595.42 SQ IN

DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	04-16-06		
REVISED BY	CCA	PROJECT NO./NAME	
DATE	09-05-13		
DWG SIZE	A	SCALE 1:16	SHEET 1 OF 1

Nyloplast — 3126 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

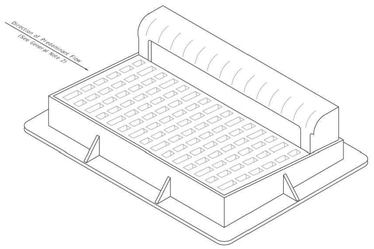
TITLE: 2 FT X 3 FT CURB INLET HIGH FLOW GRATE ASSEMBLY

DWG NO. 7002-110-047 REV D

4 NYLOPLAST HIGH FLOW CURB INLET NTS

GENERAL NOTES:

1. Work this Index with Index 425-001 and Index 425-010.
2. Orient grate with vanes directed toward predominant Flow.
3. Provide 1¼" minimum cover for steel in slab tops unless otherwise shown. Tops may be either cast-in-place or precast concrete.
4. Place top slab openings such that 2 edges of Inlet Frame will be located directly above bottom wall or riser wall for Alternate B applications.
5. When used on a structure with dimensions larger than those detailed on Sheet 3 and risers are not applied, construct the top slab using Index 425-010 with the slab opening adjusted to 24"x36". The "Special Top Slab" on Index 425-010 is not permitted.
6. Frame may be adjusted with one to six courses of brick.
7. Vaned grates with approximately equal openings that satisfy AASHTO HL-93 loading are permitted. Provide reversible (right or left) grate.

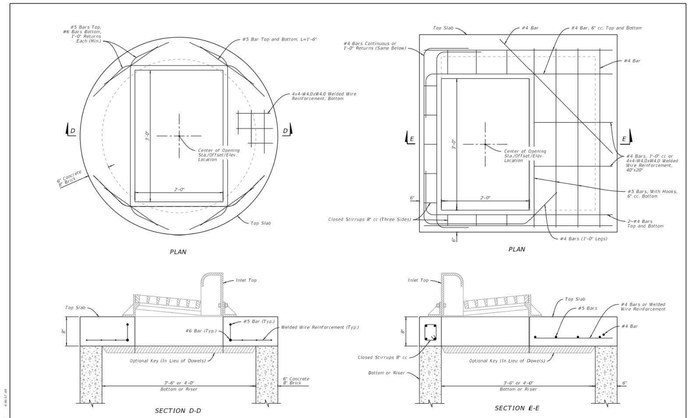


CURB INLET TOP TYPE 9

TABLE OF CONTENTS:

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	INDEX 425-024	SHEET 1 of 3

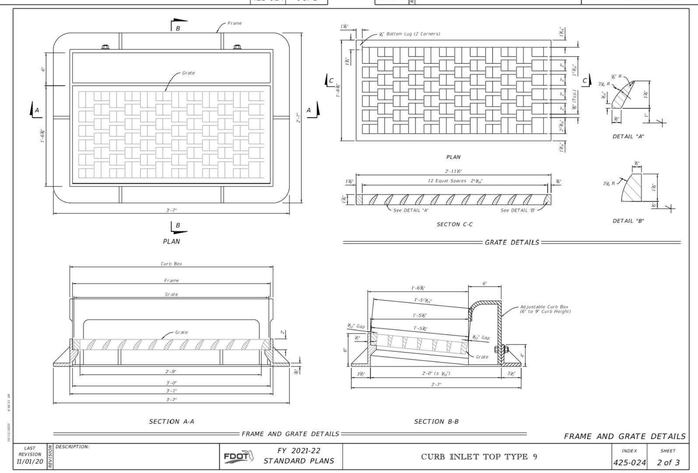
CURB INLET TOP TYPE 9



TOP SLAB DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	INDEX 425-024	SHEET 3 of 3

CURB INLET TOP TYPE 9



FRAME AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	INDEX 425-024	SHEET 2 of 3

CURB INLET TOP TYPE 9

5 CURB INLET - TYPE 9 NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

UTILITY DETAILS II

C04.3

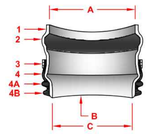
TRUE WARM & WELCOME 2300

FATBOY, SDR 26, SDR 35 GASKETED BELL GRAVITY APPLICATIONS

A. BELL END ACCEPTS PIPE WITH SDR 26, SDR 35 AND ASTM D3034 OR EQUIVALENT O.D. SPECIFICATION IN 4" AND 6" SIZES.

B. CURVATURE VARIES WITH MAINLINE DIAMETERS.

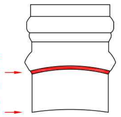
C. SPIGOT END SDR 26, PVC SDR 35, ASTM D3034 DIAMETERS: 4" AND 6"



PART	PART NAME	MATERIALS
1	HUB ADAPTOR	PVC SDR 26 ASTM D3034
2	RUBBER GASKET	ASTM F477
3	SECURING CLAMP*	BAND SS #301 SCREW SS #305 HOUSING SS #301
4	RUBBER SLEEVE (AVAILABLE IN NITRILE AND EPDM BY SPECIAL ORDER)	ASTM F477
4A	UPPER SEGMENT**	
4B	LOWER SEGMENT***	

* OPTIONAL: #316 STAINLESS STEEL BAND, SCREW AND HOUSING
** DISTANCE BETWEEN 4A AND 4B WILL VARY BY PRODUCT TYPE
*** WILL NOT APPEAR ON RUBBER SLEEVES FOR CONCRETE OR CLAY PIPE

INSERTA TEE SIZE	HOLE DIAMETER
4" (100 mm)	4 ½" (114 mm)
6" (150 mm)	6 ½" (165 mm)



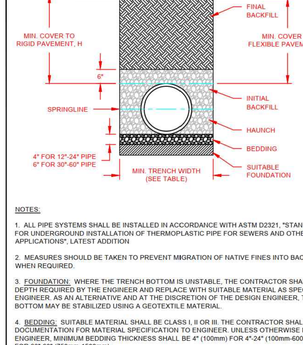
NOTE: RECOMMENDED METHOD OF CUTTING HOLE IS WITH HOLE SAW FOR PVC AND OTHER PLASTICS, AND DIAMOND BIT FOR CONCRETES, CLAY, FRP AND D.I. (SEE INSTALLATION INSTRUCTIONS. HOLE SAWS ARE AVAILABLE FOR PURCHASE OR RENT.)

INSERTA TEE | PO BOX 714 CORNELIUS, OR 97116
PH:(503) 357-2110 FAX:(503) 359-5417
SALES@INSERTATEE.COM

FATBOY, SDR 26, SDR 35 GASKETED BELL GRAVITY APPLICATION SPECIFICATIONS

SCALE: NTS
DATE: 9/12/2013
DRAWN BY: KLJ

1 INSERT A TEE NTS



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
12" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

PIPE DIAM.	SURFACE LIVE LOADING CONDITION H-25	SURFACE LIVE LOADING CONDITION HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I COMPACTED	CLASS I DUMPED	CLASS II 95%	CLASS II 90%	CLASS III 95%
4" (100mm)	37 (11.3m)	18 (5.5m)	25 (7.6m)	18 (5.5m)	18 (5.5m)
6" (150mm)	44 (13.4m)	20 (6.1m)	29 (8.8m)	20 (6.1m)	21 (6.4m)
8" (200mm)	32 (9.8m)	15 (4.6m)	22 (6.7m)	15 (4.6m)	16 (4.9m)
10" (250mm)	38 (11.6m)	18 (5.5m)	26 (7.9m)	18 (5.5m)	18 (5.5m)
12" (300mm)	35 (10.7m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	17 (5.2m)
15" (375mm)	38 (11.6m)	17 (5.2m)	25 (7.6m)	17 (5.2m)	18 (5.5m)
18" (450mm)	36 (11.0m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	17 (5.2m)
24" (600mm)	28 (8.5m)	13 (4.0m)	20 (6.1m)	13 (4.0m)	14 (4.3m)
30" (750mm)	28 (8.5m)	13 (4.0m)	20 (6.1m)	13 (4.0m)	14 (4.3m)
36" (900mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	13 (4.0m)	13 (4.0m)
42" (1050mm)	23 (7.0m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	11 (3.4m)
48" (1200mm)	25 (7.6m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)
60" (1500mm)	25 (7.6m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE.
UNIT WEIGHT OF SOIL (Ys) = 120 PCF

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm), 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

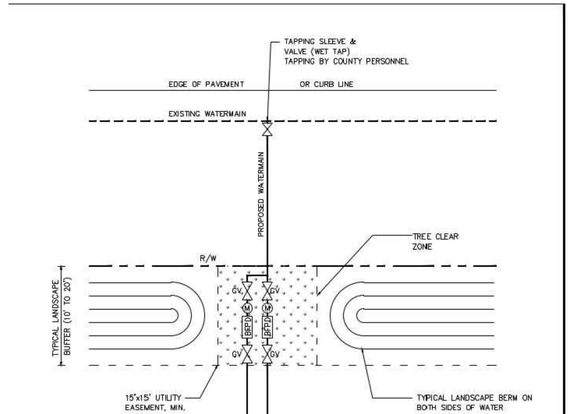
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
	COVER HEIGHTS TO MATCH TH 21.01	AGC	09/28/17	CMF

TRENCH INSTALLATION DETAIL (N-12 PER AASHTO)
DRAWING NUMBER: STD-101

4640 TRUEMAN BLVD
HILLIARD, OHIO 43026
ADVANCED DRAINAGE SYSTEMS, INC.

DRAWN BY: TJR
DATE: 12/28/16
SCALE: NTS
SHEET: 1 OF 1

2 PIPE BEDDING NTS



TREE CLEAR ZONE EXTENDS 7.5' TO EITHER SIDE OF WATER DISTRIBUTION ASSEMBLY
TREES MUST NOT BE PLANTED IN THE TREE CLEAR ZONE. TREE CLEAR ZONES ARE ESTABLISHED TO PROTECT WATER LINE FROM DAMAGE CAUSED BY GROWTH OF ROOT SYSTEMS.

TREE CLEAR ZONE

CREATED	FEB 2003
REVISED	JAN 2014
	AUG 2015
	JUNE 2017

WATER CONNECTION ASSEMBLY WITHOUT FIRE PROTECTION TYPICAL LAYOUT

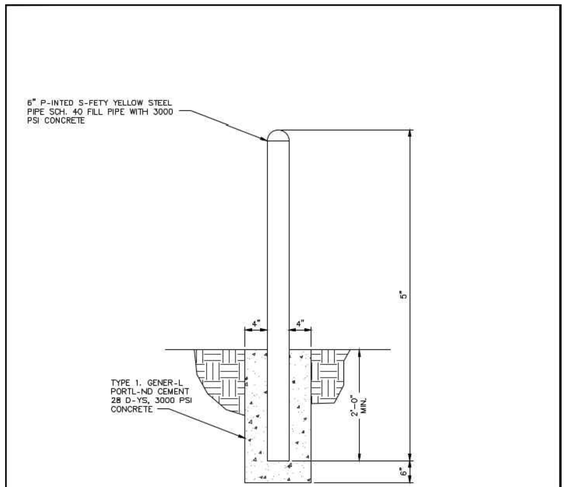
PASCO COUNTY UTILITIES

PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL

DETAIL W12

3 WATER CONNECTION ASSMEBLY NTS

PASCO COUNTY UTILITY DETAIL W12



IF THE METER ASSEMBLY IS LOCATED WITHIN A TRAFFIC /EHICLE AREA (PARKING LOT, DRIVEWAY, OR WITHIN 15 FEET OF EDGE OF PA/EMENT OR BACK OF CURB), METERS UP TO 2 INCHES SHALL HA/E A MINIMUM OF FOUR TRAFFIC BOLLARD PROTECTION POSTS AND FOR METERS 3 INCHES AND LARGER A MINIMUM OF 6 TRAFFIC BOLLARDS ARE REQUIRED

CREATED	AUG 2015
REVISED	NOV. 2015
	MAY 2016
	JUNE 2017

BOLLARD POST DETAIL

PASCO COUNTY UTILITIES

PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL

DETAIL G18

4 BOLLARD NTS

PASCO COUNTY UTILITY DETAIL G18

THIS DETAIL APPLIES TO METER AREAS ONLY

DETAIL (NOT USED) NTS

DETAIL (NOT USED) NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

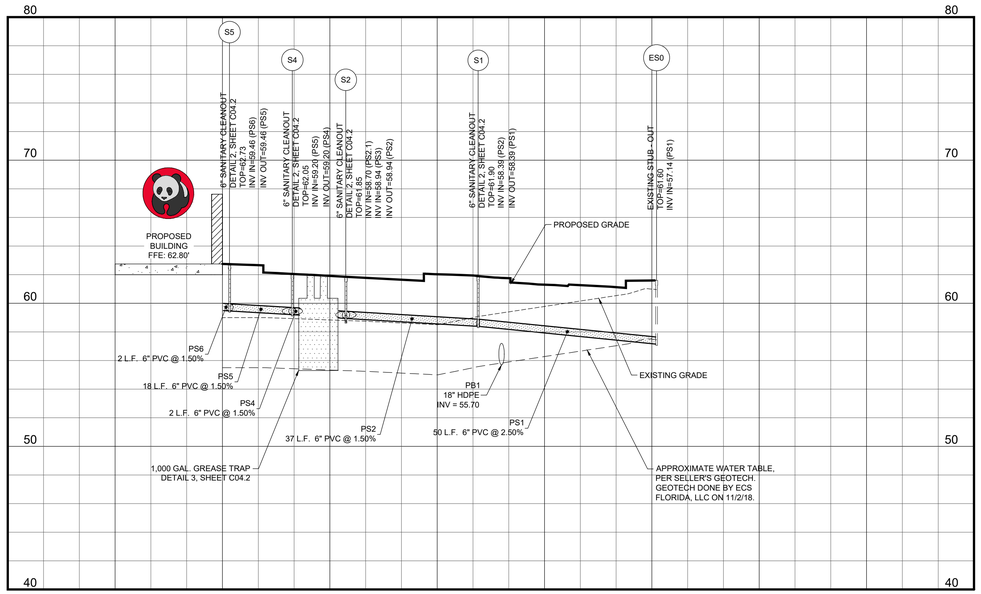
ingenium ENTERPRISES
PLANNING & ENGINEERING

UTILITY DETAILS III

C04.4

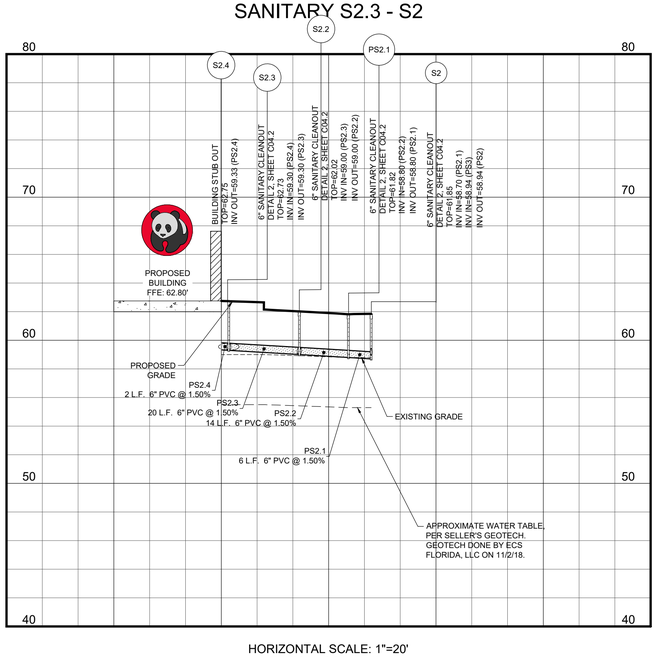
TRUE WARM & WELCOME 2300

SANITARY S6 - ES0



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

SANITARY S2.3 - S2



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PROFILE NOTES

1. REFER TO DETAIL 2 ON SHEET C04.4 FOR BACKFILL AND COMPACTION REQUIREMENTS.
2. STORM DRAIN AND SANITARY SEWER LENGTHS ARE MEASURED FROM CENTER LINE OF STRUCTURE TO CENTERLINE OF STRUCTURE OR FACE OF HEADWALL.
3. ALL PIPE LENGTHS SHOWN ARE ROUNDED TO THE NEAREST FOOT.
4. ALL STORM DRAIN PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 2 ON SHEET C04.4 UNLESS SPECIFICALLY NOTED OTHERWISE.
5. ALL SANITARY SEWER PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 2 ON SHEET C04.4 UNLESS SPECIFICALLY NOTED OTHERWISE.
6. UNFORESEEN SUBSURFACE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S AND ENGINEER'S ATTENTION IMMEDIATELY IMPLEMENTATION OF CORRECTIVE BEDDING MEASURES WITHOUT THE OWNER'S APPROVAL SHALL BE AT THE CONTRACTOR'S OWN RISK AND AT NO ADDITIONAL COMPENSATION.
7. EXISTING GRADES SHOWN ARE APPROXIMATE AND DO NOT REFLECT TOP SOIL REMOVAL, CLEARING, AND GRUBBING OPERATIONS. THE CONTRACTOR SHALL ASCERTAIN FOR HIMSELF THE EXTENT OF DISTURBANCE FOR THESE ACTIVITIES.
8. THE CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL REPORT PREPARED FOR THE OWNER FOR SUBSURFACE CONDITIONS. THE GEOTECHNICAL REPORT IS NOT A PART OF THE CONTRACT DOCUMENTS.
9. EXCAVATIONS FOR STRUCTURES SHALL BE TAKEN AS A TRENCHING EXCAVATION WITHOUT FURTHER COMPENSATION.
10. SEE SHEET C01.1 FOR GENERAL NOTES.

SANITARY STRUCTURE TABLE

STRUCTURE NAME	STRUCTURE TYPE	RIM ELEVATION	INVERT IN	INVERT OUT
ES0	EXISTING STUB - OUT	61.60	57.14 (PS1)	
PS2.1	6" SANITARY CLEANOUT DETAIL 2, SHEET C04.2	61.82	58.80 (PS2.2)	58.80 (PS2.1)
S1	6" SANITARY CLEANOUT DETAIL 2, SHEET C04.2	61.90	58.39 (PS2)	58.39 (PS1)
S2	6" SANITARY CLEANOUT DETAIL 2, SHEET C04.2	61.85	58.70 (PS2.1) 58.94 (PS3)	58.94 (PS2)
S2.2	6" SANITARY CLEANOUT DETAIL 2, SHEET C04.2	62.02	59.00 (PS2.3)	59.00 (PS2.2)
S2.3	6" SANITARY CLEANOUT DETAIL 2, SHEET C04.2	62.73	59.30 (PS2.4)	59.30 (PS2.3)
S2.4	BUILDING STUB OUT	62.75		59.33 (PS2.4)
S3	1,000 GAL. GREASE INTERCEPTOR DETAIL 3, SHEET C04.2	60.49		
S3 - IN	GREASE TRAP - IN	60.52	59.17 (PS4)	
S3 - OUT	GREASE TRAP - OUT	60.49		58.97 (PS3)
S4	6" SANITARY CLEANOUT DETAIL 2, SHEET C04.2	62.05	59.20 (PS5)	59.20 (PS4)
S5	6" SANITARY CLEANOUT DETAIL 2, SHEET C04.2	62.73	59.46 (PS6)	59.46 (PS5)
S6	BUILDING STUB OUT	62.75		59.49 (PS6)

SANITARY PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
PS1	6"	50'	2.50%	PVC
PS2	6"	37'	1.50%	PVC
PS2.1	6"	6'	1.50%	PVC
PS2.2	6"	14'	1.50%	PVC
PS2.3	6"	20'	1.50%	PVC
PS2.4	6"	2'	1.50%	PVC
PS3	6"	2'	1.50%	PVC
PS4	6"	2'	1.50%	PVC
PS5	6"	18'	1.50%	PVC
PS6	6"	2'	1.50%	PVC

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

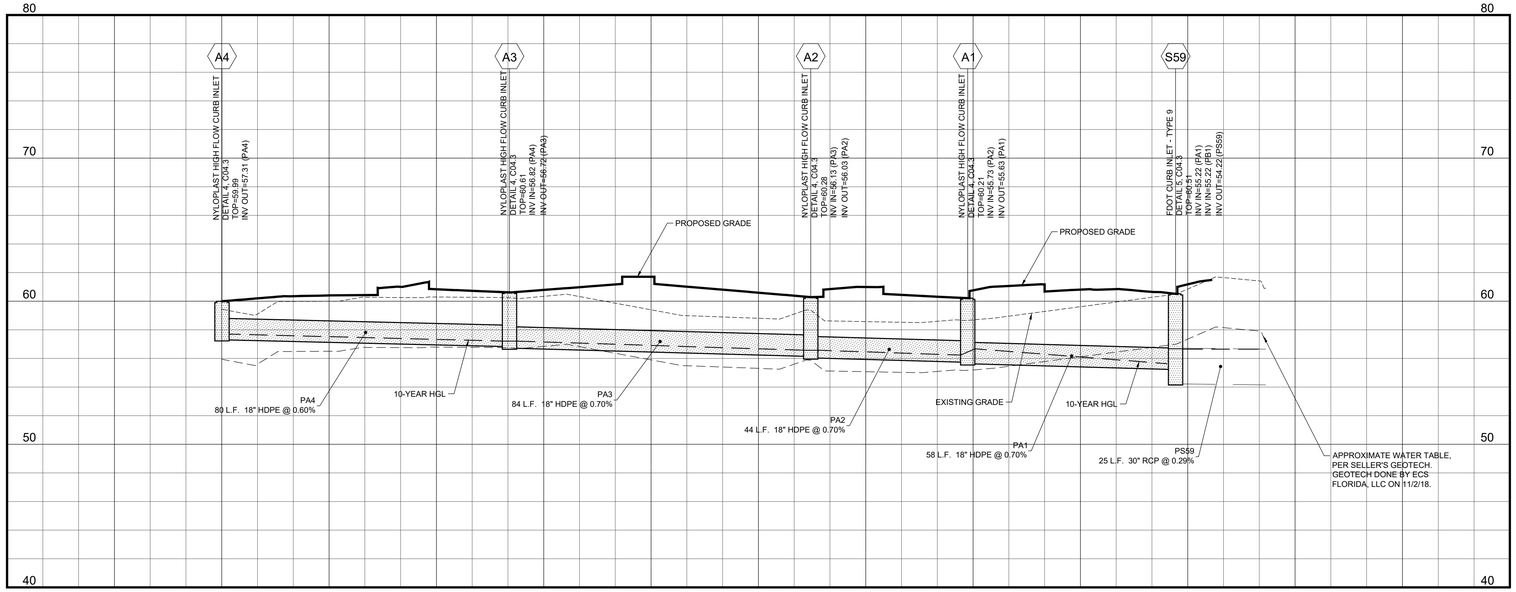
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

PROFILES I

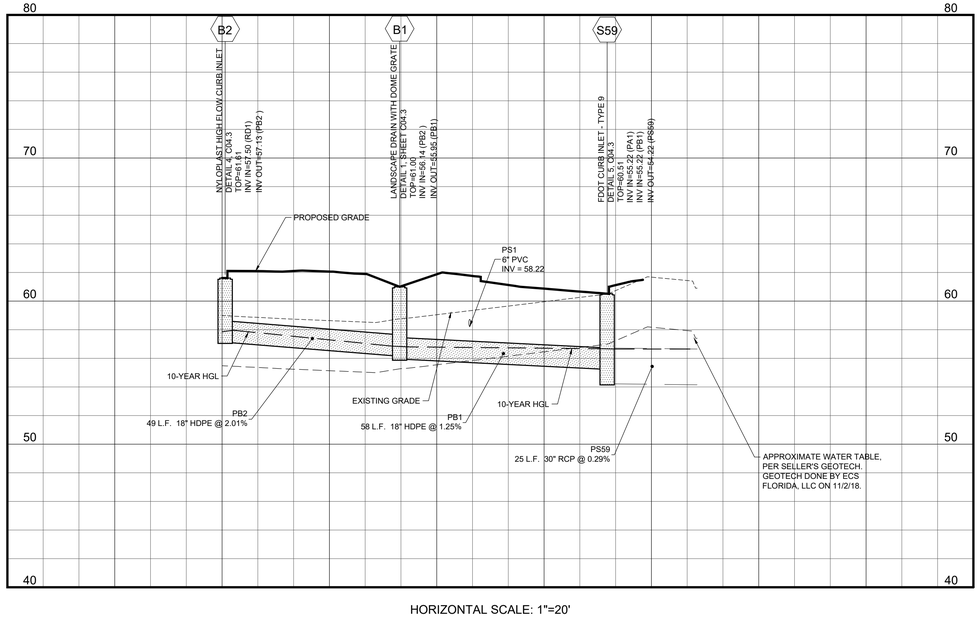
C04.5

STORM A4 - S59



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM B2 - S59



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PROFILE NOTES

1. REFER TO DETAIL 2 ON SHEET C04.4 FOR BACKFILL AND COMPACTION REQUIREMENTS.
2. STORM DRAIN AND SANITARY SEWER LENGTHS ARE MEASURED FROM CENTER LINE OF STRUCTURE TO CENTERLINE OF STRUCTURE OR FACE OF HEADWALL.
3. ALL PIPE LENGTHS SHOWN ARE ROUNDED TO THE NEAREST FOOT.
4. ALL STORM DRAIN PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 2 ON SHEET C04.4 UNLESS SPECIFICALLY NOTED OTHERWISE.
5. ALL SANITARY SEWER PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 2 ON SHEET C04.4 UNLESS SPECIFICALLY NOTED OTHERWISE.
6. UNFORESEEN SUBSURFACE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S AND ENGINEER'S ATTENTION IMMEDIATELY IMPLEMENTATION OF CORRECTIVE BEDDING MEASURES WITHOUT THE OWNER'S APPROVAL SHALL BE AT THE CONTRACTOR'S OWN RISK AND AT NO ADDITIONAL COMPENSATION.
7. EXISTING GRADES SHOWN ARE APPROXIMATE AND DO NOT REFLECT TOP SOIL REMOVAL, CLEARING, AND GRUBBING OPERATIONS. THE CONTRACTOR SHALL ASCERTAIN FOR HIMSELF THE EXTENT OF DISTURBANCE FOR THESE ACTIVITIES.
8. THE CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL REPORT PREPARED FOR THE OWNER FOR SUBSURFACE CONDITIONS. THE GEOTECHNICAL REPORT IS NOT A PART OF THE CONTRACT DOCUMENTS.
9. EXCAVATIONS FOR STRUCTURES SHALL BE TAKEN AS A TRENCHING EXCAVATION WITHOUT FURTHER COMPENSATION.
10. SEE SHEET C01.1 FOR GENERAL NOTES.

10-YEAR INLET CALCULATIONS

Page 1

Line No	Inlet ID	Q = CiA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet Ht (in)	Curb Inlet L (ft)	Grate Inlet Area (sq/ft)	Grate Inlet L (ft)	Grate Inlet W (ft)	Gutter So (ft/ft)	Gutter W (ft)	Gutter Sw (ft/ft)	Gutter Sx (ft/ft)	Gutter n	Gutter Depth (ft)	Gutter Spread (ft)	Inlet Depth (ft)	Inlet Spread (ft)	Inlet Depr (in)	Byp Line No
11	A4	1.09	0.00	1.09	0.00	Comb	5.7	2.90	1.07	2.90	1.40	Sag	1.50	0.083	0.024	0.000	0.22	5.57	0.22	5.57	0.0	Off
10	A3	0.61	0.00	0.61	0.00	Comb	5.7	2.90	1.07	2.90	1.40	Sag	1.50	0.083	0.027	0.000	0.17	3.22	0.17	3.22	0.0	Off
9	A2	0.38	0.00	0.38	0.00	Comb	5.7	2.90	1.07	2.90	1.40	Sag	1.50	0.083	0.025	0.000	0.14	2.15	0.14	2.15	0.0	Off
8	A1	0.49	0.00	0.49	0.00	Comb	5.7	2.90	1.07	2.90	1.40	Sag	1.50	0.083	0.040	0.000	0.16	2.28	0.16	2.28	0.0	Off
7	Null Structure	0.18	0.00	0.00	3.18	None	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
6	Null Structure	0.18	0.00	0.00	3.18	None	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
5	Structure - (67)	0.01*	0.00	0.00	3.01	None	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
4	Structure - (68)	0.01*	0.00	0.00	3.01	None	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
3	B2	0.79	0.00	0.79	3.00	Comb	5.7	2.90	1.07	2.90	1.40	Sag	1.50	0.083	0.016	0.000	0.19	5.65	0.19	5.65	0.0	Off
2	B1	0.11	0.00	0.11	3.00	DrGrt	0.0	0.00	1.00	1.00	1.00	Sag	1.50	0.083	0.062	0.000	0.04	2.87	0.04	2.87	0.0	Off
1	S59	1.26	0.00	1.26	3.00	Comb	4.0	5.92	2.10	5.92	1.50	Sag	1.50	0.083	0.024	0.000	0.19	4.34	0.19	4.34	0.0	Off

Project File: 200071.stm | Number of lines: 11 | Run Date: 12/7/2020

NOTES: Inlet N-Values = 0.016; Intensity = 53.44 / (Inlet time + 6.50) ^ 0.70; Return period = 10 Yrs. ; * Indicates Known Q added All curb inlets are throat.

Storm Sewers v2020.00

10-YEAR PIPE CALCULATIONS

Page 1

Station Line	Station To Line	Len (ft)	Drng Area Incr (ac)	Drng Area Total (ac)	Rnoff coeff (C)	Area x C Incr	Area x C Total	Tc Inlet (min)	Tc Syst (min)	Rain (i) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe Size (in)	Pipe Slope (%)	Invert Elev Dn (ft)	Invert Elev Up (ft)	HGL Elev Dn (ft)	HGL Elev Up (ft)	Grnd / Rim Elev Dn (ft)	Grnd / Rim Elev Up (ft)	Line ID
11	10	80.426	0.19	0.19	0.92	0.17	0.17	15.0	15.0	6.3	1.09	8.88	3.01	18	0.61	56.82	57.31	57.21	57.70	60.60	59.95	PA4
10	9	84.208	0.11	0.30	0.89	0.10	0.27	15.0	15.4	6.2	1.68	9.52	3.66	18	0.70	56.13	56.72	56.57	57.21	60.25	60.60	PA3
9	8	43.869	0.07	0.37	0.86	0.06	0.33	15.0	15.8	6.1	2.03	9.41	3.77	18	0.68	55.73	56.03	56.23	56.57	60.20	60.25	PA2
8	1	58.085	0.10	0.47	0.78	0.08	0.41	15.0	16.0	6.1	2.49	9.56	2.61	18	0.71	55.22	55.63	56.67	56.23	60.50	60.20	PA1
7	4	12.580	0.03	0.03	0.95	0.03	0.03	15.0	15.0	6.3	0.18	0.86	1.86	6	1.99	58.17	58.42	58.47	58.63	62.05	62.80	RD2
6	5	12.580	0.03	0.03	0.95	0.03	0.03	15.0	15.0	6.3	0.18	0.86	2.23	6	1.99	58.61	58.86	58.83	59.07	62.25	62.80	RD4
5	4	22.056	0.01	0.04	0.01	0.00	0.03	15.0	15.1	6.2	0.19	0.86	1.92	6	1.99	58.17	58.61	58.47	58.83	62.05	62.25	RD3
4	3	33.234	0.01	0.06	0.01	0.00	0.06	15.0	15.3	6.2	0.37	0.86	2.45	6	1.99	57.50	58.16	57.96	58.47	61.60	62.05	RD1
3	2	49.012	0.15	0.23	0.84	0.13	0.18	15.0	15.5	6.2	1.15	16.09	4.15	18	2.00	56.58	57.56	56.85	57.96	61.00	61.60	PB2
2	1	58.004	0.04	0.27	0.42	0.02	0.20	15.0	15.7	6.1	1.24	16.09	1.91	18	2.00	55.22	56.38	56.67	56.80	60.50	61.00	PB1
1	End	25.144	0.24	0.98	0.84	0.20	0.81	15.0	16.4	6.0	4.88	23.44	1.00	30	0.28	54.15	54.22	56.65	56.65	58.42	60.50	PS59

Project File: 200071.stm | Number of lines: 11 | Run Date: 12/7/2020

NOTES:Intensity = 53.44 / (Inlet time + 6.50) ^ 0.70; Return period =Yrs. 10 ; c = cir e = ellip b = box

Storm Sewers v2020.00

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

PROFILES II

C04.6

TRUE WARM & WELCOME 2300

Cuhaci & Peterson
Architects Engineers Planners

March 23, 2021

Mr. Eric B. Patrick
Pasco County Utilities Engineering
19420 Central Boulevard
Land O'Lakes, FL 34637

Re: Panda Express, Skybrooke Boulevard & SR 54 CP: 2200775

Dear Mr. Patrick:

This is in response to the deficiency comments for the above referenced project. According to Table 18.4.5.2.1 of the Seventh Edition of the Florida Fire Prevention Code, NFPA 1, the needed fire flow for an unprotected wood frame (VB-FBC or V(000)- NFPA) building of 2,381 ft^2 is 1,500 gallons per minute for 2 hours (please see the attached table).

At this time the fire hydrants for the development have not been installed. However, Bohler Engineering has prepared the report, "WaterCAD Report Prepared for Cypress Ranch", dated September 5, 20199 and Revised October 24, 2019. This report is a predictive model of the available water flow in the proposed underground pipe network based on existing fire hydrant test reports.

There is a proposed fire hydrant located to the southwest corner of the Panda Express building, to be located in Stonybrook Road. Since this fire hydrant is less than 250-feet from the proposed Panda Express, as allowed by Table 18.4.5.3 (attached), this fire hydrant is allowed a maximum flow capacity of 1,500 gpm.

The fire hydrant to the southeast of the Panda Express store is fire hydrant H-03 in the Bohler Report. The Appendix H of the report indicates that the static pressure will be 79 psi and that there will be 2302 gpm available at 20 psi. Therefore, based on the Bohler Report there will be adequate fire flow available, 1,500 gpm, in the fire hydrant indicated as H-03.

I appreciate your consideration and I look forward to your response. If you have any questions please do not hesitate to contact me at 407-643-2402 or andrew.valente@c-p.com.

Sincerely,

Andrew P Valente

Digitally signed by Andrew P Valente
Reason: This item has been digitally signed and sealed by Andrew Valente on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
Date: 2021.03.23 13:58:47-04'00'

ANDREW PAUL VALENTE LICENSE No 52186 STATE OF FLORIDA PROFESSIONAL ENGINEER
03/23/2021

Andrew P. Valente, PE, FSFPS
Manager, Fire Protection

Attachments: Attachment 1 – Table 18.4.5.2.1
Attachment 2 – Table 18.5.4.3
Attachment 3 – Bohler Report Appendix H
Separate File, WaterCAD Report prepared for Cypress Ranch

2600 Maitland Center Parkway, Suite 200 • Maitland, FL 32751 • PH: 407-661-9100 • FAX: 407-661-9101 • www.c-p.com

Attachment 1 – Table 18.4.5.2.1

Table 18.4.5.2.1 Minimum Required Fire Flow and Flow Duration for Buildings

Fire Flow Area ft^2 (× 0.0929 for m^2)						
I(645), I(332), II(222)*	II(111), III(211)*	IV(2HH), V(111)*	II(000), III(200)*	V(000)*	Fire Flow gpm[1] (× 3.785 for L/min)	Flow Duration (hours)
0–22,700	0–12,700	0–8200	0–5900	0–3600	1500	2
22,701–30,200	12,701–17,000	8201–10,900	5901–7900	3601–4800	1750	
30,201–38,700	17,001–21,800	10,901–12,900	7901–8800	4801–6200	2000	
38,701–48,300	21,801–24,200	12,901–17,400	9801–12,600	6201–7700	2250	
48,301–59,000	24,201–33,200	17,401–21,300	12,601–15,400	7701–9400	2500	
59,001–70,900	33,201–39,700	21,301–25,500	15,401–18,400	9401–11,300	2750	

Attachment 2 – Table 18.5.4.3

Table 18.5.4.3 Maximum Fire Hydrant Fire Flow Capacity

Distance to Building[a]		Maximum Capacity[b]	
(ft)	(m)	(gpm)	(L/min)
≤ 250	≤ 76	1500	5678
> 250 and ≤ 500	> 76 and ≤ 152	1000	3785
> 500 and ≤ 1000	> 152 and ≤ 305	750	2839

[a]Measured in accordance with 18.5.1.4 and 18.5.1.5.
[b]Minimum 20 psi (139.9 kPa) residual pressure.

BUILDING TYPE: COMMERCIAL RESTAURANT
CONSTRUCTION TYPE: TYPE II-B
BUILDING SIZE: 2,381 SQ. FT.
FIRE FLOW: SEE INFORMATION ON THIS PAGE
PEAK DEMAND: SEE INFORMATION ON THIS PAGE
FLOW REDUCTIONS: NONE

Attachment 3 – Appendix H of Bohler Report

Appendix H – Fire/Domestic Fire Flow Report Results

Fire Flow Report

Label	Elevation (ft)	Hydraulic Grade (ft)	Fire Flow (Available) (gpm)	Pressure (psi)
H-01	58.54	240.82	2,295	79
H-02	58.65	240.82	2,293	79
H-03	58.76	240.82	2,302	79
H-04	59.06	240.81	2,247	79
H-05	59.25	240.72	2,197	79
H-06	61.31	240.82	2,130	78
H-07	59.52	240.82	2,117	78
H-08	61.12	240.81	2,224	79
H-09	60.03	240.71	2,089	78
H-10	58.31	240.7	2,063	78
H-11	57.57	240.76	2,137	78
H-12	59.13	240.76	1,880	78
H-SF-1	63.00	240.66	1,553	77
H-SF-2	63.00	240.65	1,407	77
H-SF-3	63.00	240.65	1,521	77
H-TH-1	61.50	240.82	1,458	79
H-TH-2	61.50	240.77	1,543	79

Appendix C – Fire Flow Test Hydrant Number 257-24

PASCO COUNTY FIRE HYDRANT REPORT

"Flow tests should take place 6:00 a.m. to 8:00 a.m.& 5p.m. to 8:00p.m. to represent high demand periods"

Work Order No: 660197 Date: 11/20/18 Time: 6:30 AM
Subdivision: Odessa
Line Type/Size: 12" Map & Hydrant No: 257-24 Traffic Model: Yes x No
Hydrant Location Where Residual PSA Taken: Hydrant #18-275
Address: SR 54 in front of Taco Bell
Hydrant Manufacturer: Clow Year and Model: 2007 - Medallion
Barrel Size: 4 ½ 5 ¼ x Nozzles: 2 ½ x 4 ½ x
Caps and Chains: Yes x No
Hydrant Height To C/L of 4 1/2 Nozzles: 20
Hydrant Valve Operations: Yes x No Number Of Turns: 19
Hydrant Serviced And Lubricated: Yes No X
Physical Appearance: Good x Fair
Date PSI Gauge And Pilot Tube Was Last Calibrated: 11/20/18
Replace Reflective Marker: Yes No X Gasket Replacement: Yes No X

FLOW TEST RESULTS:
Static: 80 Time: 1 HR @ PER HOUR
Residual: 70 Materials: 3oz Lube 8oz Paint Street Marker
Flow: 45 GPM: 1126 Total Cost:
Calculated Fire Flow Rate:
Comments: ** Flow Test **

Inspected By MGutowski / TChaban
Reviewed By And Title:

UT/UT FORMS/Fire Hydrant Report/C Helmrich Revised 11-10-15

Appendix D – Fire Flow Test Hydrant Number 257-25

PASCO COUNTY FIRE HYDRANT REPORT

"Flow tests should take place 6:00 a.m. to 8:00 a.m.& 5p.m. to 8:00p.m. to represent high demand periods"

Work Order No: 660198 Date: 11/20/18 Time: 6:00 AM
Subdivision: Ballantrae
Line Type/Size: 12" Map & Hydrant No: 257-25 Traffic Model: Yes x No
Hydrant Location Where Residual PSA Taken: Fire hydrant #26 just east of ballantrae Blvd
Address: Fire hydrant west of ballantrae blvd #25
Hydrant Manufacturer: Mueller Year and Model: 2008 - Centerion
Barrel Size: 4 ½ 5 ¼ x Nozzles: 2 ½ x 4 ½ x
Caps and Chains: Yes x No
Hydrant Height To C/L of 4 1/2 Nozzles: 21
Hydrant Valve Operations: Yes x No Number Of Turns: 19
Hydrant Serviced And Lubricated: Yes No X
Physical Appearance: Good x Fair
Date PSI Gauge And Pilot Tube Was Last Calibrated: 11/20/18
Replace Reflective Marker: Yes No X Gasket Replacement: Yes No X

FLOW TEST RESULTS:
Static: 80 Time: 1 HR @ PER HOUR
Residual: 70 Materials: 3oz Lube 8oz Paint Street Marker
Flow: 50 GPM: 1187 Total Cost:
Calculated Fire Flow Rate:
Comments: ** FLOW TEST **

Inspected By MGutowski / TChaban
Reviewed By And Title:

UT/UT FORMS/Fire Hydrant Report/C Helmrich Revised 11-10-15

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

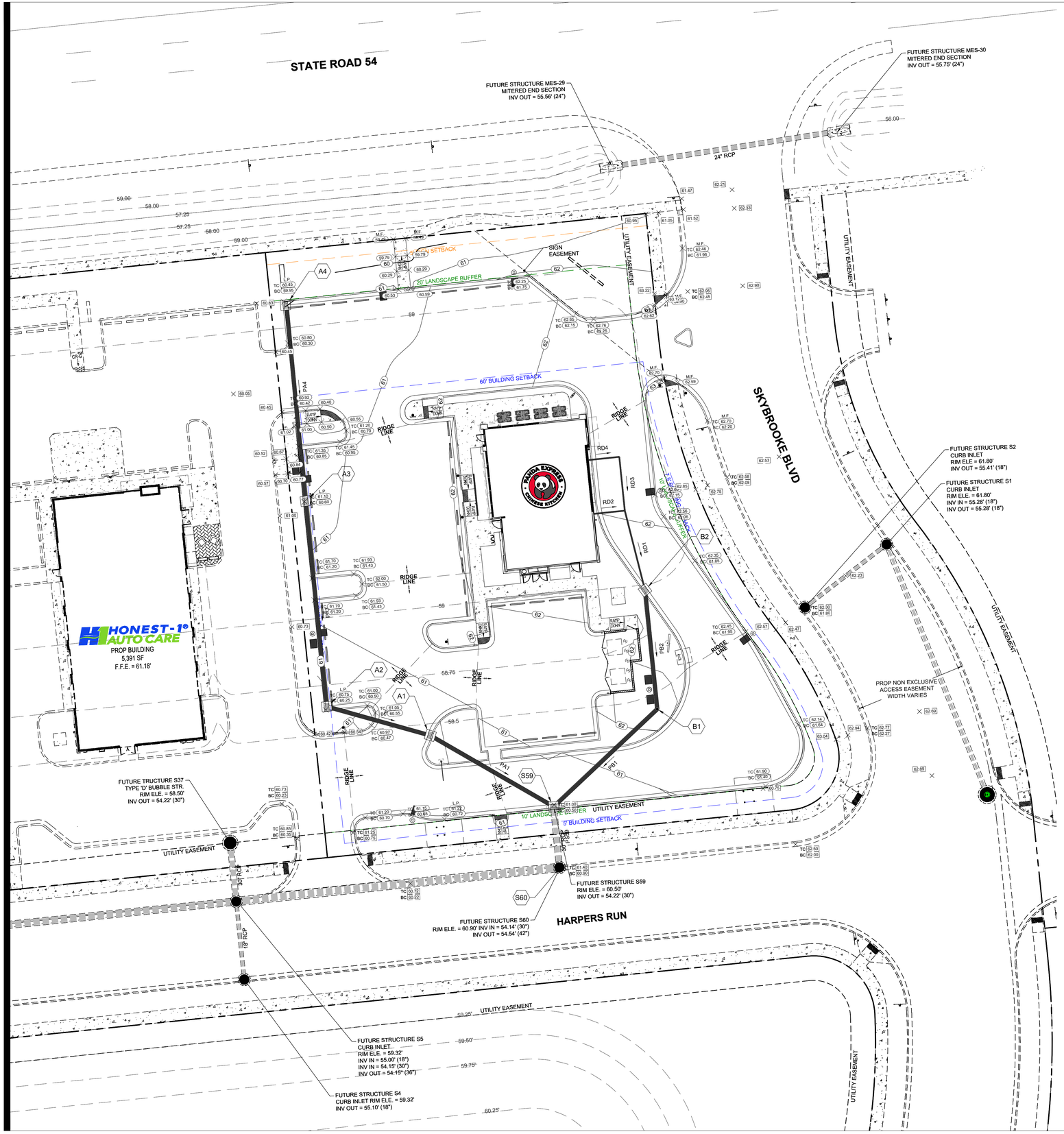
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

FIRE FLOW AND PRESSURE CALCS

C04.7

TRUE WARM & WELCOME 2300



GRADING & DRAINAGE LEGEND

GRADING/DRAINAGE	LINETYPE/SYMBOL	REFERENCE
GRADE	1000	SEE PLANS
SPOT ELEVATION	× 1000.00	SEE PLANS
STORM DRAIN		SEE PLANS
HEADWALL (HW) / FLARED END SECTION (FES)		PROPOSED BY OTHERS
DROP INLET (GRATE)		NOT APPLICABLE
DROP INLET (GRATE AND HOOD)		DETAILS 4 & 5, SHEET C04.3
JUNCTION BOX (JB) / OCS		NOT APPLICABLE
CATCH BASIN (SINGLE WING)		NOT APPLICABLE
CATCH BASIN (DOUBLE WING)		NOT APPLICABLE
LANDSCAPE DRAIN		DETAILS 1 & 2, SHEET C04.3
STORM STRUCTURE NUMBER	A3	SEE PLANS

PASCO COUNTY DRAINAGE NOTES

SHOULD ANY NOTICEABLE SOIL SLUMPING OR SINKHOLE FORMATION BECOME EVIDENT, THE APPLICANT/DEVELOPER SHALL IMMEDIATELY NOTIFY THE COUNTY, TAMPA BAY WATER, AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND ADOPT ONE (1) OR MORE OF THE FOLLOWING PROCEDURES AS DETERMINED TO BE APPROPRIATE BY THE COUNTY AND SWFWMD:

1. IF THE SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT BEFORE OR DURING CONSTRUCTION ACTIVITIES, STOP ALL WORK (EXCEPT FOR MITIGATION ACTIVITIES) IN THE AFFECTED AREA AND REMAIN STOPPED UNTIL THE COUNTY AND SWFWMD APPROVE RESUMING CONSTRUCTION ACTIVITIES.
2. TAKE IMMEDIATE MEASURES TO ENSURE NO SURFACE WATER DRAINS INTO THE AFFECTED AREAS.
3. VISUALLY INSPECT THE AFFECTED AREA.
4. EXCAVATE AND BACKFILL OR GROUT, AS REQUIRED, TO FILL THE AFFECTED AREA AND PREVENT FURTHER SUBSIDENCE.
5. USE SOIL REINFORCEMENT MATERIALS IN THE BACKFILLING OPERATION WHEN APPROPRIATE.
6. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA, MAINTAIN A MINIMUM DISTANCE OF TWO (2) FEET FROM THE BOTTOM OF THE RETENTION POND TO THE SURFACE OF THE LIMEROCK OR KARST CONNECTION.
7. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA AND THE ABOVE METHODS DO NOT STABILIZE THE COLLAPSE, RELOCATE THE RETENTION AREA.

GRADING & DRAINAGE NOTES

1. SEE LANDSCAPE PLAN FOR REQUIRED TREES AND GROUND COVER.
2. SLOPE OF SURFACE GRADE SHALL BE A MINIMUM OF 1.00%
3. MAXIMUM CUT OF FILL SLOPES IS 2H:1V.
4. THE CONTRACTOR SHALL PROVIDE CLEAN, SUITABLE MATERIAL FOR REQUIRED FILL. SHOULD A SUFFICIENT QUANTITY OF SUITABLE MATERIAL NOT BE AVAILABLE FROM THE REQUIRED EXCAVATION ON THE SITE.
5. FILL SHALL BE PLACED IN MAXIMUM 12" THIN, HORIZONTAL LOOSE LIFTS WHEN HEAVY, SELF-PROPELLED COMPACTION EQUIPMENT IS USED. FILL SHALL BE PLACED IN 4 TO 6 INCH THIN, HORIZONTAL LOOSE LIFTS WHEN HAND-GUIDED EQUIPMENT (i.e. JUMPING JACK OR PLATE COMPACTOR) IS USED.
6. FILL SHALL BE COMPACTED TO AT LEAST 98 PERCENT OF THE MODIFIED PROCTOR TEST (ASTM D 1557) WITHIN 1 FOOT OF FOOTING BOTTOM AND FINISHED PAVEMENT SUBGRADE. FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR TEST ABOVE FOUNDATIONS, BELOW FLOOR SLABS, AND MORE THAN 1 FOOT BELOW THE FOOTING BOTTOM AND FINISHED PAVEMENT SUBGRADE.
7. COMPACTION MUST BE CERTIFIED BY A FLORIDA REGISTERED PROFESSIONAL SOILS ENGINEER PRIOR TO THE INSTALLATION OF PAVEMENTS, CURBS, SIDEWALKS OR FOOTINGS OF ANY TYPE.
8. DETENTION POND, DETENTION OUTLET STRUCTURES AND TEMPORARY SEDIMENT POND FEATURES ARE TO BE FULLY CONSTRUCTED AND OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
9. JURISDICTIONAL LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
10. SEE SHEET C01.1 FOR GENERAL NOTES.

BUILDING AREA NOTES

1. MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS UNDER CONSTRUCTION; i.e. IN TIMES OF RAIN OR MUD, ROADS SHALL BE PASSABLE TO EMERGENCY VEHICLES BY BEING PAVED OR HAVING A CRUSHED STONE BASE ETC... WITH A MINIMUM WIDTH OF 20 FEET. THE ACCESS TO BUILDINGS HAVING SPRINKLER OR STANDPIPE SYSTEMS SHALL BE TO WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTION (NFPA 1141 3-1).
2. CONTRACTOR TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING IN ALL AREAS AROUND BUILDING. INSTALL FRENCH DRAIN IN LANDSCAPED AREAS ADJACENT TO BUILDING AND CONNECT TO DRAINAGE SYSTEM.
3. SEE SHEET C01.1 FOR GENERAL NOTES.

STORMWATER MANAGEMENT NOTES

1. PRIOR TO THE START OF CLEARING & GRUBBING, OR ANY SOIL DISTURBANCE, CONTRACTOR SHALL CONTACT PASCO COUNTY STORMWATER MANAGEMENT AT (727) 834-3611 FOR SOIL EROSION AND SEDIMENT CONTROL PRE-INSPECTION MEETING.
2. THE CONTRACTOR SHALL PROVIDE A DEWATERING PLAN, IF APPLICABLE TO PASCO COUNTY ENGINEERING INSPECTIONS DEPARTMENT AT (727) 834-3670 FOR REVIEW PRIOR TO THE EROSION CONTROL MEASURES PRE-INSPECTION MEETING.

HYDROLOGY STATEMENT

IN THE EXISTING CONDITION, THE SUBJECT PARCEL IS 100% PERVIOUS GRASSLAND. THE OVERALL SELLER WILL BE PROVIDING A STORMWATER STUB OUT AT STRUCTURE S59 AND COMPLETING MASS GRADING ACROSS THE ENTIRE DEVELOPMENT. THE HYDROLOGIC SOIL GROUP AT THIS SITE IS A/D. PER THE USGS WEB SOIL SURVEY. IN THE PROPOSED CONDITION, THE STORM WATER FROM THE SITE WILL DRAIN TO MULTIPLE FDOT TYPE 9 CURB INLETS ON THE SITE. THE STORMWATER WILL BE CONVEYED THROUGH A SERIES OF HDPE PIPES, EVENTUALLY OUTFALLING TO EXISTING STRUCTURE S59, WHICH WILL BE PROVIDED BY BOHLER ENGINEERING. EXISTING PIPE PS59 HAS BEEN MODELED AS RUNNING FULL AND ALL PROPOSED INLETS ON THE SITE HAVE BEEN MODELED IN THE HALF CLOGGED CONDITION.

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine 811 Always call 811 before you dig.

N

0 20 40 Feet

SCALE 1" = 20'

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

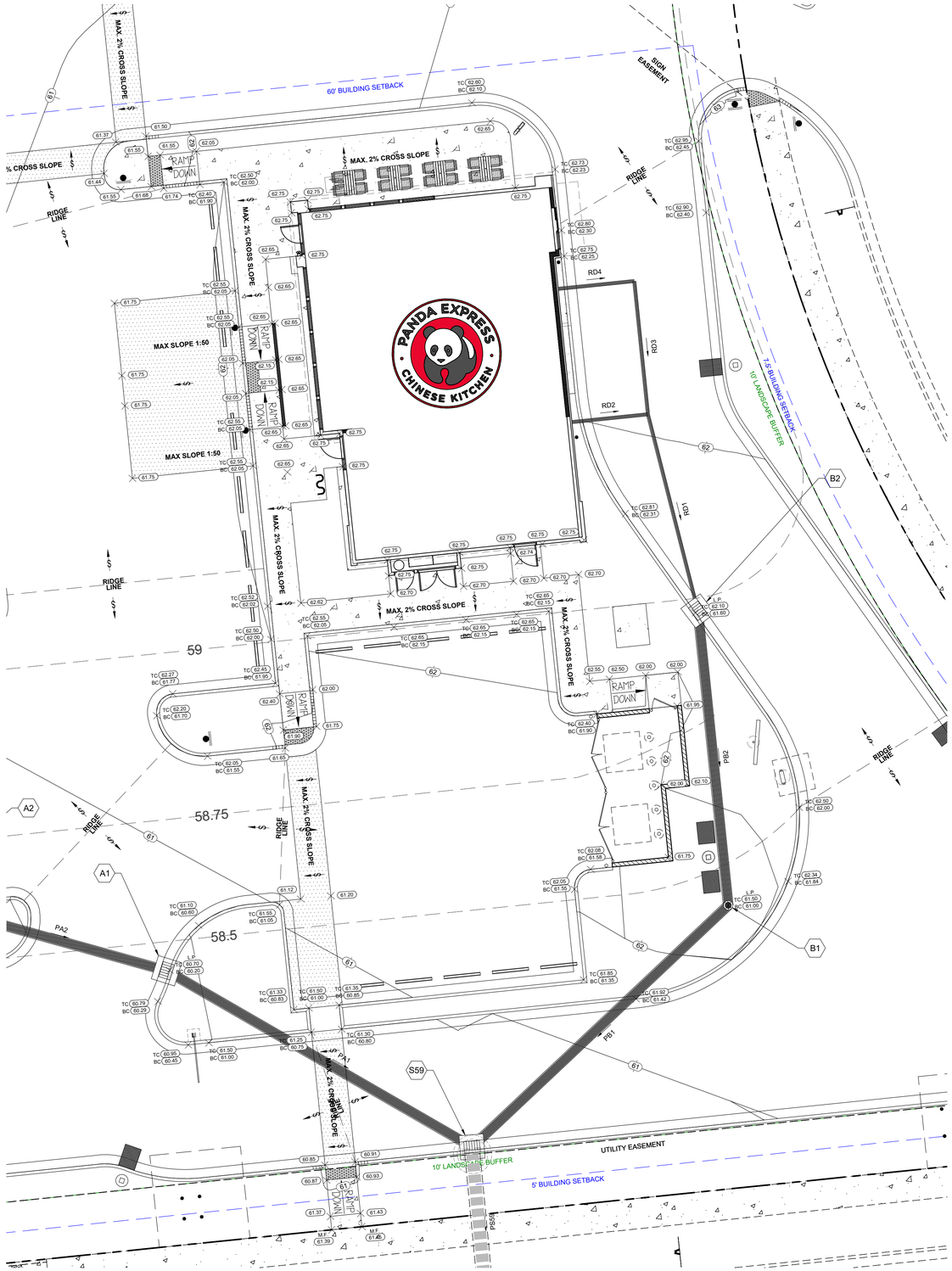
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

GRADING & DRAINAGE PLAN

C05.0

TRUE WARM & WELCOME 2300



GRADING & DRAINAGE LEGEND

GRADING/DRAINAGE	LINETYPE/SYMBOL	REFERENCE
GRADE	1000	SEE PLANS
SPOT ELEVATION	× 1000.00	SEE PLANS
STORM DRAIN		SEE PLANS
HEADWALL (HW) / FLARED END SECTION (FES)		PROPOSED BY OTHERS
DROP INLET (GRATE)		NOT APPLICABLE
DROP INLET (GRATE AND HOOD)		DETAILS 4 & 5, SHEET C04.3
JUNCTION BOX (JB) / OCS		NOT APPLICABLE
CATCH BASIN (SINGLE WING)		NOT APPLICABLE
CATCH BASIN (DOUBLE WING)		NOT APPLICABLE
LANDSCAPE DRAIN		DETAILS 1 & 2, SHEET C04.3
STORM STRUCTURE NUMBER	A3	SEE PLANS

PASCO COUNTY DRAINAGE NOTES

SHOULD ANY NOTICEABLE SOIL SLUMPING OR SINKHOLE FORMATION BECOME EVIDENT, THE APPLICANT/DEVELOPER SHALL IMMEDIATELY NOTIFY THE COUNTY, TAMPA BAY WATER, AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND ADOPT ONE (1) OR MORE OF THE FOLLOWING PROCEDURES AS DETERMINED TO BE APPROPRIATE BY THE COUNTY AND SWFWMD:

1. IF THE SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT BEFORE OR DURING CONSTRUCTION ACTIVITIES, STOP ALL WORK (EXCEPT FOR MITIGATION ACTIVITIES) IN THE AFFECTED AREA AND REMAIN STOPPED UNTIL THE COUNTY AND SWFWMD APPROVE RESUMING CONSTRUCTION ACTIVITIES.
2. TAKE IMMEDIATE MEASURES TO ENSURE NO SURFACE WATER DRAINS INTO THE AFFECTED AREAS.
3. VISUALLY INSPECT THE AFFECTED AREA.
4. EXCAVATE AND BACKFILL OR GROUT, AS REQUIRED, TO FILL THE AFFECTED AREA AND PREVENT FURTHER SUBSIDENCE.
5. USE SOIL REINFORCEMENT MATERIALS IN THE BACKFILLING OPERATION WHEN APPROPRIATE.
6. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA, MAINTAIN A MINIMUM DISTANCE OF TWO (2) FEET FROM THE BOTTOM OF THE RETENTION POND TO THE SURFACE OF THE LIMEROCK OR KARST CONNECTION.
7. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA AND THE ABOVE METHODS DO NOT STABILIZE THE COLLAPSE, RELOCATE THE RETENTION AREA.

GRADING & DRAINAGE NOTES

1. SEE LANDSCAPE PLAN FOR REQUIRED TREES AND GROUND COVER.
2. SLOPE OF SURFACE GRADE SHALL BE A MINIMUM OF 1.00%
3. MAXIMUM CUT OF FILL SLOPES IS 2H:1V.
4. THE CONTRACTOR SHALL PROVIDE CLEAN, SUITABLE MATERIAL FOR REQUIRED FILL. SHOULD A SUFFICIENT QUANTITY OF SUITABLE MATERIAL NOT BE AVAILABLE FROM THE REQUIRED EXCAVATION ON THE SITE.
5. FILL SHALL BE PLACED IN MAXIMUM 12" THIN, HORIZONTAL LOOSE LIFTS WHEN HEAVY, SELF-PROPELLED COMPACTION EQUIPMENT IS USED. FILL SHALL BE PLACED IN 4 TO 6 INCH THIN, HORIZONTAL LOOSE LIFTS WHEN HAND-GUIDED EQUIPMENT (i.e. JUMPING JACK OR PLATE COMPACTOR) IS USED.
6. FILL SHALL BE COMPACTED TO AT LEAST 98 PERCENT OF THE MODIFIED PROCTOR TEST (ASTM D 1557) WITHIN 1 FOOT OF FOOTING BOTTOM AND FINISHED PAVEMENT SUBGRADE. FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR TEST ABOVE FOUNDATIONS, BELOW FLOOR SLABS, AND MORE THAN 1 FOOT BELOW THE FOOTING BOTTOM AND FINISHED PAVEMENT SUBGRADE.
7. COMPACTION MUST BE CERTIFIED BY A FLORIDA REGISTERED PROFESSIONAL SOILS ENGINEER PRIOR TO THE INSTALLATION OF PAVEMENTS, CURBS, SIDEWALKS OR FOOTINGS OF ANY TYPE.
8. DETENTION POND, DETENTION OUTLET STRUCTURES AND TEMPORARY SEDIMENT POND FEATURES ARE TO BE FULLY CONSTRUCTED AND OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
9. JURISDICTIONAL LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
10. SEE SHEET C01.1 FOR GENERAL NOTES.

STORMWATER MANAGEMENT NOTES

1. PRIOR TO THE START OF CLEARING & GRUBBING, OR ANY SOIL DISTURBANCE, CONTRACTOR SHALL CONTACT PASCO COUNTY STORMWATER MANAGEMENT AT (727) 834-3611 FOR SOIL EROSION AND SEDIMENT CONTROL PRE-INSPECTION MEETING.
2. THE CONTRACTOR SHALL PROVIDE A DEWATERING PLAN, IF APPLICABLE TO PASCO COUNTY ENGINEERING INSPECTIONS DEPARTMENT AT (727) 834-3670 FOR REVIEW PRIOR TO THE EROSION CONTROL MEASURES PRE-INSPECTION MEETING.

HYDROLOGY STATEMENT

IN THE EXISTING CONDITION, THE SUBJECT PARCEL IS 100% PERVIOUS GRASSLAND. THE OVERALL SELLER WILL BE PROVIDING A STORMWATER STUB OUT AT STRUCTURE S59 AND COMPLETING MASS GRADING ACROSS THE ENTIRE DEVELOPMENT. THE HYDROLOGIC SOIL GROUP AT THIS SITE IS A/D, PER THE USGS WEB SOIL SURVEY. IN THE PROPOSED CONDITION, THE STORM WATER FROM THE SITE WILL DRAIN TO MULTIPLE FDOT TYPE 9 CURB INLETS ON THE SITE. THE STORMWATER WILL BE CONVEYED THROUGH A SERIES OF HDPE PIPES, EVENTUALLY OUTFALLING TO EXISTING STRUCTURE S59, WHICH WILL BE PROVIDED BY BOHLER ENGINEERING. EXISTING PIPE PS59 HAS BEEN MODELED AS RUNNING FULL AND ALL PROPOSED INLETS ON THE SITE HAVE BEEN MODELED IN THE HALF CLOGGED CONDITION.

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine811 Always call 811 before you dig.

N

0 10 20 Feet

SCALE 1" = 10'

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

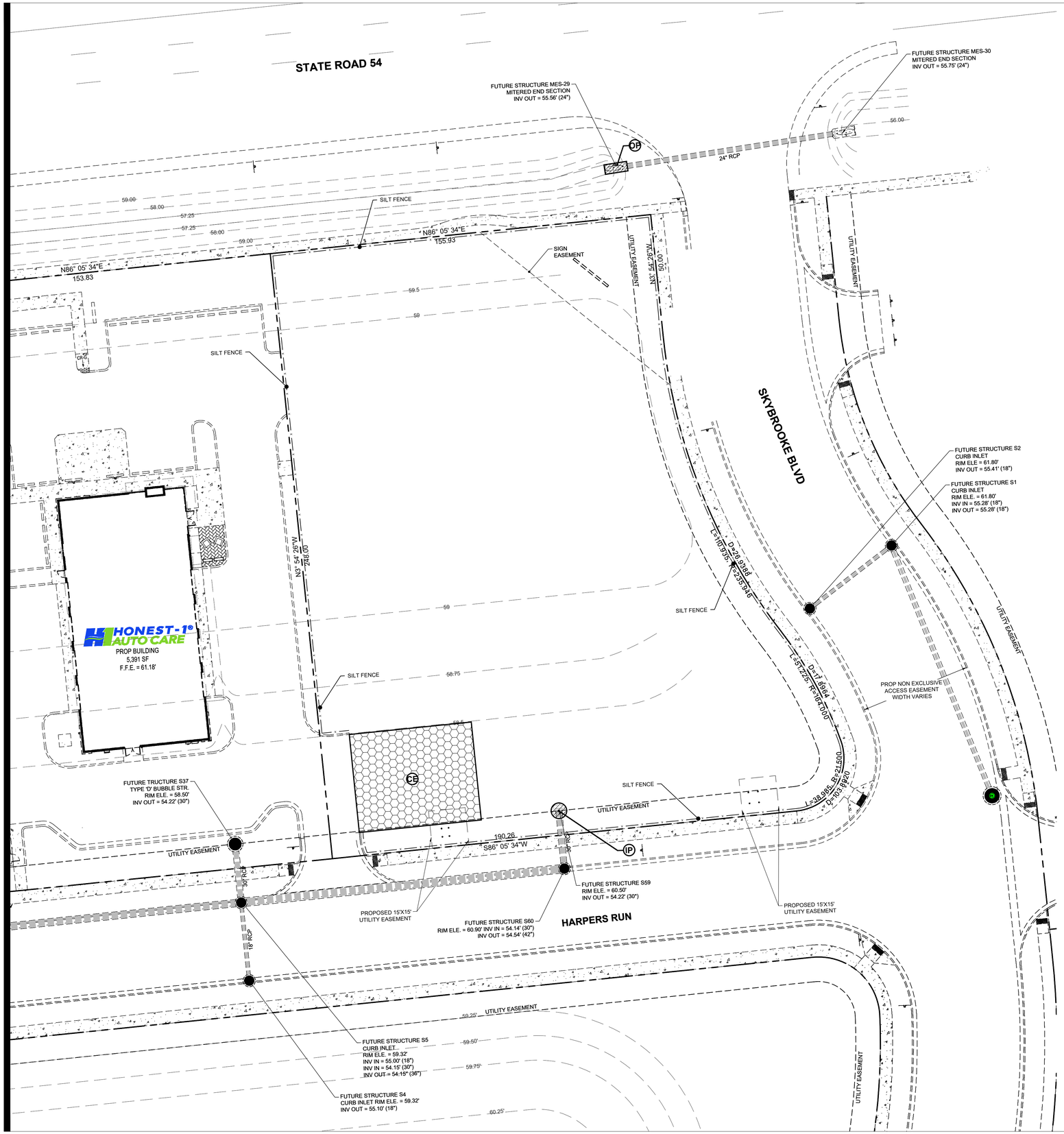
PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

BUILDING AREA GRADING DETAIL

C05.1

TRUE WARM & WELCOME 2300



EROSION CONTROL LEGEND

ESPC BMP		LINETYPE/SYMBOL	REFERENCE
Co	CONSTRUCTION EXIT		SHEET C06.4
SR	CONSTRUCTION EXIT		SHEET C06.4
SF	SILT FENCE - TYPE C		SHEET C06.5
SF	SILT FENCE - TYPE C DOUBLE		SHEET C06.5
IP	INLET PROTECTION	IP	SHEET C06.6
OP	OUTLET PROTECTION	OP	SHEET C06.7
DU	DUST CONCTROL	DU	
Ts	TEMPORARY SEEDING	Ts	SHEET C06.4
Ps	PERMANENT SEEDING	Ps	SHEET C06.8
M	MULCHING	M	SHEET C06.8
So	SODDING	So	SHEET C06.7

SEE LANDSCAPE/TREE PROTECTION PLANS FOR LEGEND SPECIFIC TO THOSE SHEETS

ESPC NOTES

GENERAL

1. EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL MEASURES AND PRACTICES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AT THE EXPENSE OF THE CONTRACTOR.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
3. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
4. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
5. ANY AMENDMENT TO THE EROSION CONTROL PLANS WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
6. THE PERMITEE IS ONLY RESPONSIBLE FOR THE FOR THE INSTALLATION AND MAINTENANCE OF STORM WATER MANAGEMENT DEVICES PRIOR TO STABILIZATION OF THE SITE AND NOT THE OPERATION AND MAINTENANCE OF SUCH STRUCTURES AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
7. EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
8. SEE GRADING & DRAINAGE NOTES.

SLOPES AND DISTURBED AREA STABILIZATION

1. CONCENTRATED FLOW AREAS AND ALL SLOPES 2H:1V OR STEEPER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET.
2. ALL CUT AND FILL SLOPES MUST BE SURFACE ROUGHENED AND VEGETATED WITHIN (7) DAYS OF THEIR CONSTRUCTION.
3. ALL DISTURBED AREAS SHALL BE GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT. NO EXPOSED GRADE WILL BE LEFT UNSTABLE FOR MORE THAN 7 DAYS.
4. PERMANENT GRASSING AND LANDSCAPING OF DISTURBED AREAS SHALL BE COMPLETED AS QUICKLY AS POSSIBLE. TEMPORARY STABILIZATION BY MULCHING AND/OR TEMPORARY SEEDING WILL BE REQUIRED IN THE EVENT OF PROJECT DELAYS.
5. WIRE MESH REINFORCED SEDIMENT BARRIERS SHALL BE PLACED AT THE TOE OF ALL FILL SLOPES.

DRAINAGE

1. ALL DRAINAGE STRUCTURES SHALL BE EROSION PROOFED.
2. LENGTH OF RIP-RAP PADS AT PIPE OUTLETS SHALL BE A MINIMUM LENGTH OF (6) SIX TIMES THE DIAMETER OF THE PIPE IN FEET.
3. A 25' UNDISTURBED VEGETATIVE STREAM BUFFER ADJACENT TO ALL RUNNING STREAMS AND CREEKS WILL BE LEFT UNDISTURBED AND MAINTAINED THROUGH ALL PHASES OF CONSTRUCTION. REFER TO PLANS FOR EXACT LOCATIONS.

TREE PROTECTION

1. ALL BUFFERS AND TREE SAVE AREAS SHALL BE CLEARLY IDENTIFIED WITH FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.
2. ALL TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO START OF LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPING IS INSTALLED.
3. NO PARKING, STORAGE, OR OTHER CONSTRUCTION SITE ACTIVITIES ARE TO OCCUR WITHIN TREE PROTECTION AREAS.

MAINTENANCE AND INSPECTIONS

1. SEDIMENT AND EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSPECTED DAILY.
2. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME.
3. SEDIMENT CONTROL DEVICES MUST BE INSPECTED DAILY AND CHECKED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN THEY REACH 1/3 OF DESIGN CAPACITY.
4. ALL TREE PROTECTION FENCING TO BE INSPECTED DAILY AND REPLACED OR REPAIRED AS NEEDED.
5. MAINTENANCE OF ALL SOIL AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine 811
Always call 811 before you dig

N

0 162.46 324.93 Feet

SCALE 1" = 20'

BASED IN THE WEB SOIL SURVEY INFORMATION, ALL SOILS AT THIS SITE ARE CLASSIFIED AS 5 - MYAKKA-MYAKKA, WET, FINE SANDS, 0 TO 2 PERCENT SLOPES.

TOTAL DISTURBED AREA THIS PHASE: 0.00 AC.

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

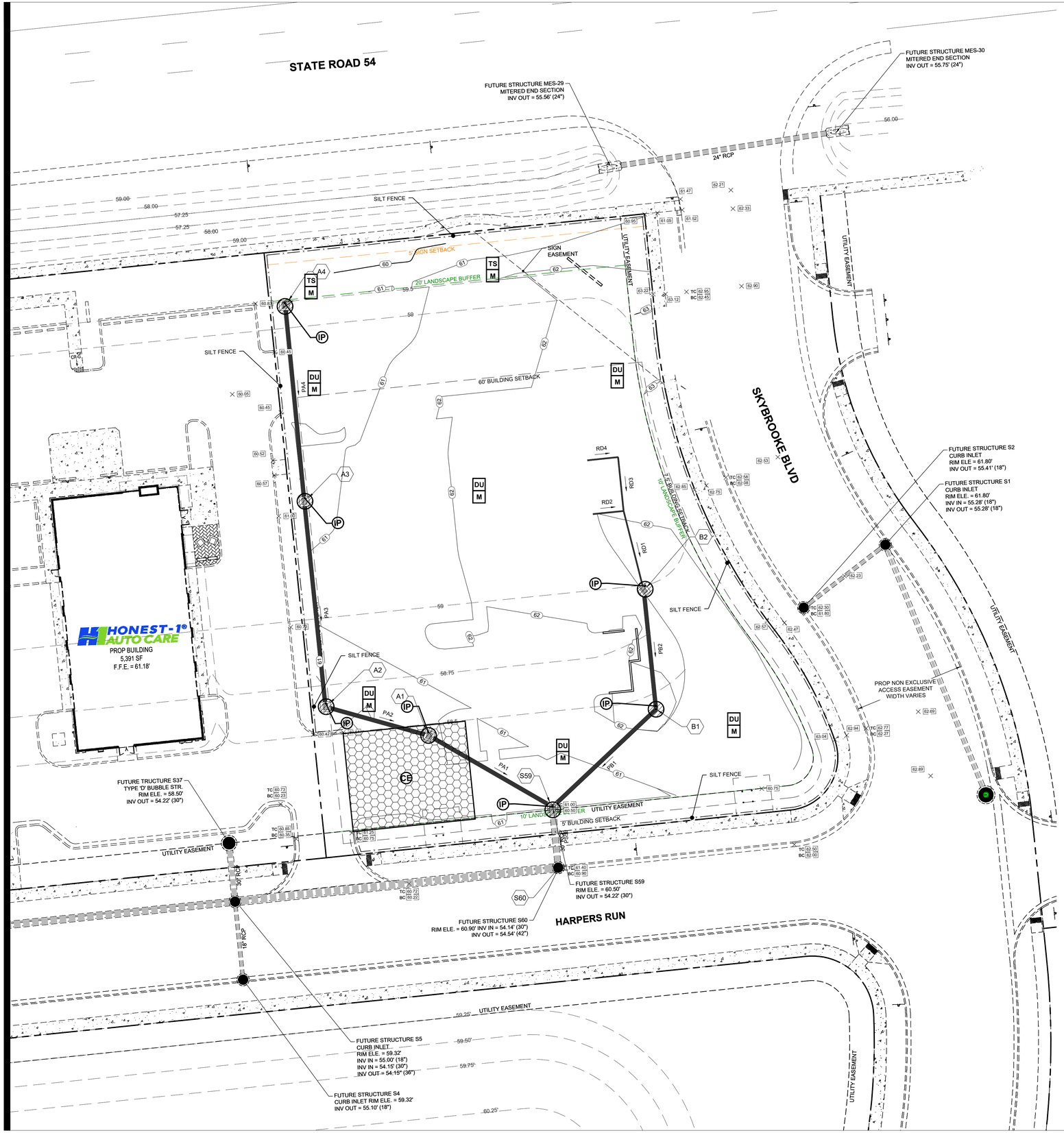
DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC PLAN CLEARING PHASE C06.1

TRUE WARM & WELCOME 2300



EROSION CONTROL LEGEND

	ESPC BMP	LINETYPE/SYMBOL	REFERENCE
Co	CONSTRUCTION EXIT		SHEET C06.4
SR	CONSTRUCTION EXIT		SHEET C06.4
SF	SILT FENCE - TYPE C		SHEET C06.5
SF	SILT FENCE - TYPE C DOUBLE		SHEET C06.5
IP	INLET PROTECTION		SHEET C06.6
OP	OUTLET PROTECTION		SHEET C06.7
DU	DUST CONCTROL	DU	
Ts	TEMPORARY SEEDING	Ts	SHEET C06.4
Ps	PERMANENT SEEDING	Ps	SHEET C06.8
M	MULCHING	M	SHEET C06.8
So	SODDING	So	SHEET C06.7

SEE LANDSCAPE/TREE PROTECTION PLANS FOR LEGEND SPECIFIC TO THOSE SHEETS

ESPC NOTES

GENERAL

1. EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL MEASURES AND PRACTICES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AT THE EXPENSE OF THE CONTRACTOR.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
3. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
4. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
5. ANY AMENDMENT TO THE EROSION CONTROL PLANS WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
6. THE PERMITEE IS ONLY RESPONSIBLE FOR THE FOR THE INSTALLATION AND MAINTENANCE OF STORM WATER MANAGEMENT DEVICES PRIOR TO STABILIZATION OF THE SITE AND NOT THE OPERATION AND MAINTENANCE OF SUCH STRUCTURES AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
7. EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
8. SEE GRADING & DRAINAGE NOTES.

SLOPES AND DISTURBED AREA STABILIZATION

1. CONCENTRATED FLOW AREAS AND ALL SLOPES 2H:1V OR STEEPER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET.
2. ALL CUT AND FILL SLOPES MUST BE SURFACE ROUGHENED AND VEGETATED WITHIN (7) DAYS OF THEIR CONSTRUCTION.
3. ALL DISTURBED AREAS SHALL BE GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT. NO EXPOSED GRADE WILL BE LEFT UNSTABLE FOR MORE THAN 7 DAYS.
4. PERMANENT GRASSING AND LANDSCAPING OF DISTURBED AREAS SHALL BE COMPLETED AS QUICKLY AS POSSIBLE. TEMPORARY STABILIZATION BY MULCHING AND/OR TEMPORARY SEEDING WILL BE REQUIRED IN THE EVENT OF PROJECT DELAYS.
5. WIRE MESH REINFORCED SEDIMENT BARRIERS SHALL BE PLACED AT THE TOE OF ALL FILL SLOPES.

DRAINAGE

1. ALL DRAINAGE STRUCTURES SHALL BE EROSION PROOFED.
2. LENGTH OF RIP-RAP PADS AT PIPE OUTLETS SHALL BE A MINIMUM LENGTH OF (6) SIX TIMES THE DIAMETER OF THE PIPE IN FEET.
3. A 25' UNDISTURBED VEGETATIVE STREAM BUFFER ADJACENT TO ALL RUNNING STREAMS AND CREEKS WILL BE LEFT UNDISTURBED AND MAINTAINED THROUGH ALL PHASES OF CONSTRUCTION. REFER TO PLANS FOR EXACT LOCATIONS.

TREE PROTECTION

1. ALL BUFFERS AND TREE SAVE AREAS SHALL BE CLEARLY IDENTIFIED WITH FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.
2. ALL TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO START OF LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPING IS INSTALLED.
3. NO PARKING, STORAGE, OR OTHER CONSTRUCTION SITE ACTIVITIES ARE TO OCCUR WITHIN TREE PROTECTION AREAS.

MAINTENANCE AND INSPECTIONS

1. SEDIMENT AND EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSPECTED DAILY.
2. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME.
3. SEDIMENT CONTROL DEVICES MUST BE INSPECTED DAILY AND CHECKED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN THEY REACH 1/3 OF DESIGN CAPACITY.
4. ALL TREE PROTECTION FENCING TO BE INSPECTED DAILY AND REPLACED OR REPAIRED AS NEEDED.
5. MAINTENANCE OF ALL SOIL AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

BASED IN THE WEB SOIL SURVEY INFORMATION, ALL SOILS AT THIS SITE ARE CLASSIFIED AS 5 - MYAKKA-MYAKKA, WET, FINE SANDS, 0 TO 2 PERCENT SLOPES.

TOTAL DISTURBED AREA THIS PHASE: 1.20AC.

Sunshine 811 Always call 811 before you dig

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

N

0 20 40 Feet

SCALE 1" = 20'

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

PANDA EXPRESS CHINESE KITCHEN

PANDA EXPRESS, INC.

1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770

TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

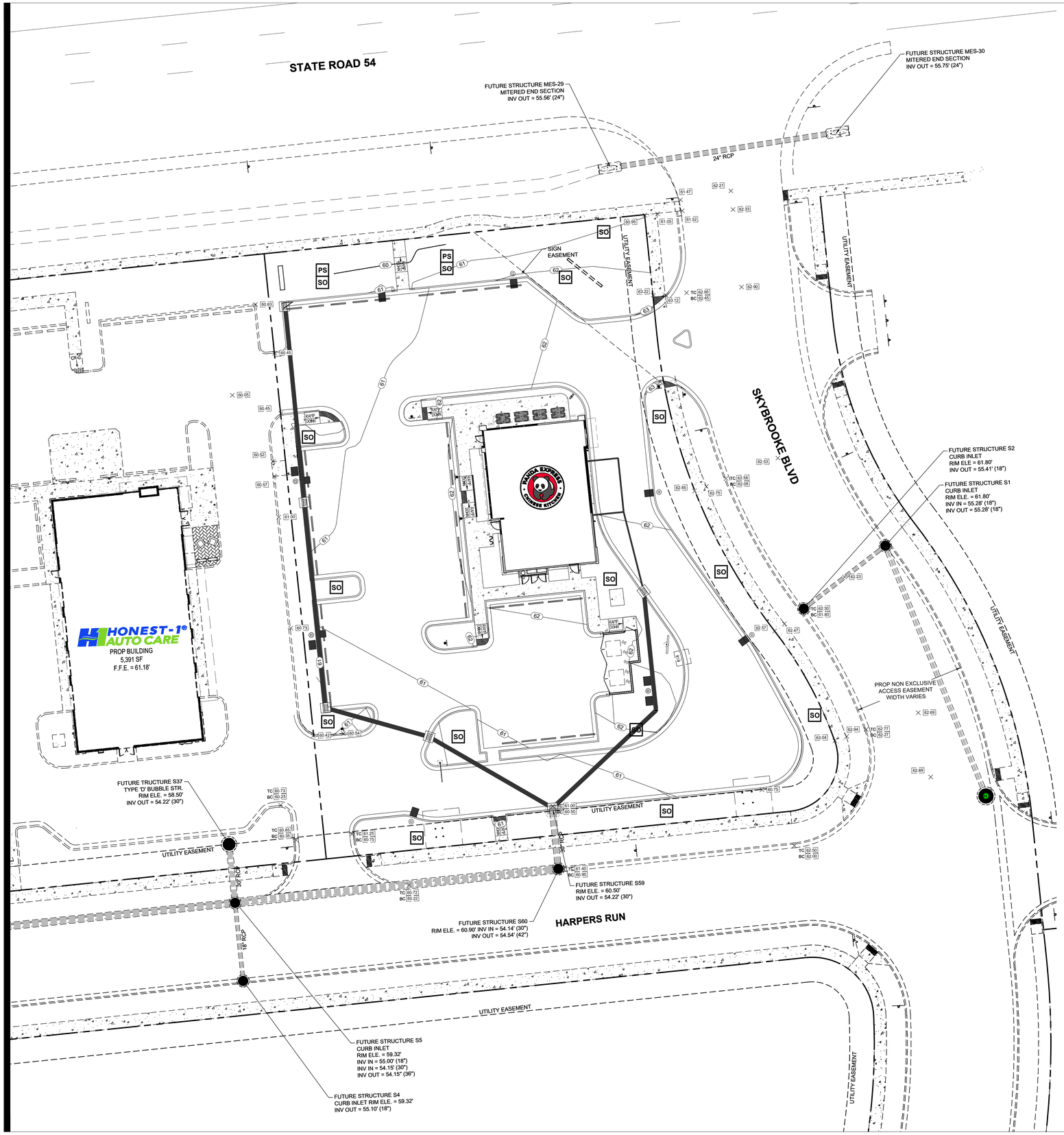
DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC PLAN
GRADING PHASE
C06.2

TRUE WARM & WELCOME 2300



EROSION CONTROL LEGEND

ESPC BMP		LINETYPE/SYMBOL	REFERENCE
Co	CONSTRUCTION EXIT		SHEET C06.4
SR	CONSTRUCTION EXIT		SHEET C06.4
SF	SILT FENCE - TYPE C		SHEET C06.5
SF	SILT FENCE - TYPE C DOUBLE		SHEET C06.5
IP	INLET PROTECTION		SHEET C06.6
OP	OUTLET PROTECTION		SHEET C06.7
DU	DUST CONCTROL	DU	
Ts	TEMPORARY SEEDING	Ts	SHEET C06.4
Ps	PERMANENT SEEDING	Ps	SHEET C06.8
M	MULCHING	M	SHEET C06.8
So	SODDING	So	SHEET C06.7

SEE LANDSCAPE/TREE PROTECTION PLANS FOR LEGEND SPECIFIC TO THOSE SHEETS

ESPC NOTES

GENERAL
1. EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL MEASURES AND PRACTICES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AT THE EXPENSE OF THE CONTRACTOR.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
3. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
4. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
5. ANY AMENDMENT TO THE EROSION CONTROL PLANS WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
6. THE PERMITEE IS ONLY RESPONSIBLE FOR THE FOR THE INSTALLATION AND MAINTENANCE OF STORM WATER MANAGEMENT DEVICES PRIOR TO STABILIZATION OF THE SITE AND NOT THE OPERATION AND MAINTENANCE OF SUCH STRUCTURES AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
7. EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
8. SEE GRADING & DRAINAGE NOTES.

SLOPES AND DISTURBED AREA STABILIZATION
1. CONCENTRATED FLOW AREAS AND ALL SLOPES 2H:1V OR STEEPER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET.
2. ALL CUT AND FILL SLOPES MUST BE SURFACE ROUGHENED AND VEGETATED WITHIN (7) DAYS OF THEIR CONSTRUCTION.
3. ALL DISTURBED AREAS SHALL BE GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT, NO EXPOSED GRADE WILL BE LEFT UNSTABLE FOR MORE THAN 7 DAYS.
4. PERMANENT GRASSING AND LANDSCAPING OF DISTURBED AREAS SHALL BE COMPLETED AS QUICKLY AS POSSIBLE. TEMPORARY STABILIZATION BY MULCHING AND/OR TEMPORARY SEEDING WILL BE REQUIRED IN THE EVENT OF PROJECT DELAYS.
5. WIRE MESH REINFORCED SEDIMENT BARRIERS SHALL BE PLACED AT THE TOE OF ALL FILL SLOPES.

DRAINAGE
1. ALL DRAINAGE STRUCTURES SHALL BE EROSION PROOFED.
2. LENGTH OF RIP-RAP PADS AT PIPE OUTLETS SHALL BE A MINIMUM LENGTH OF (6) SIX TIMES THE DIAMETER OF THE PIPE IN FEET.
3. A 25' UNDISTURBED VEGETATIVE STREAM BUFFER ADJACENT TO ALL RUNNING STREAMS AND CREEKS WILL BE LEFT UNDISTURBED AND MAINTAINED THROUGH ALL PHASES OF CONSTRUCTION. REFER TO PLANS FOR EXACT LOCATIONS.

TREE PROTECTION
1. ALL BUFFERS AND TREE SAVE AREAS SHALL BE CLEARLY IDENTIFIED WITH FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.
2. ALL TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO START OF LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPING IS INSTALLED.
3. NO PARKING, STORAGE, OR OTHER CONSTRUCTION SITE ACTIVITIES ARE TO OCCUR WITHIN TREE PROTECTION AREAS.

MAINTENANCE AND INSPECTIONS
1. SEDIMENT AND EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSPECTED DAILY.
2. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME.
3. SEDIMENT CONTROL DEVICES MUST BE INSPECTED DAILY AND CHECKED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN THEY REACH 1/3 OF DESIGN CAPACITY.
4. ALL TREE PROTECTION FENCING TO BE INSPECTED DAILY AND REPLACED OR REPAIRED AS NEEDED.
5. MAINTENANCE OF ALL SOIL AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.

24-HOUR CONTACT:
JOE CELENTO
(912) 272-4811

Sunshine 811 Always call 811 before you dig

N

0 20 40 Feet

SCALE 1" = 20'

BASED IN THE WEB SOIL SURVEY INFORMATION, ALL SOILS AT THIS SITE ARE CLASSIFIED AS 5 - MYAKKA-MYAKKA, WET, FINE SANDS, 0 TO 2 PERCENT SLOPES.

TOTAL DISTURBED AREA THIS PHASE: 1.20 AC.

CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES (LOCATIONS AND ELEVATIONS) PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

PANDA EXPRESS · CHINESE KITCHEN

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC PLAN
FINAL PHASE
C06.3

TRUE WARM & WELCOME 2300

4.03 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE & EXIT (ES BMP 1.01)

Definition

A stone stabilized pad located at points of vehicular ingress and egress on a construction site.

Purpose

To stabilize entrances to the construction site and reduce the amount of sediment transported onto public roads by motor vehicles or runoff.

Conditions Where Practice Applies

Wherever traffic will be leaving a construction site and moving directly onto a public road or other paved area.

Planning Considerations

Construction entrances provide an area where mud can be removed from construction vehicle tires before they enter a public road. If the action of the vehicle traveling over the gravel pad is not sufficient to remove most of the mud, then the tires must be washed before the vehicle enters a public road. If washing is used, provisions must be made to intercept the wash water and trap the sediment before it is carried off-site. Construction entrances should be used in conjunction with the stabilization of construction roads to reduce the amount of mud picked up by construction vehicles.

Design Criteria

Aggregate Size

FDOT No. 1 Coarse Aggregate (1.5 - 3.5 inch stone)(4 - 9 cm) should be used. Wood chips may be used for single family residential construction, provided that they can be prevented from floating away in a storm.

Entrance Dimensions

The aggregate layer must be at least 6 inches (15 cm) thick. It must extend the full width of the vehicular ingress and egress area. The length of the entrance must be at least 50 feet (20 m). The entrance must widen at its connection to the roadway in order to accommodate the turning radius of large trucks. (See Plate 4.03a)

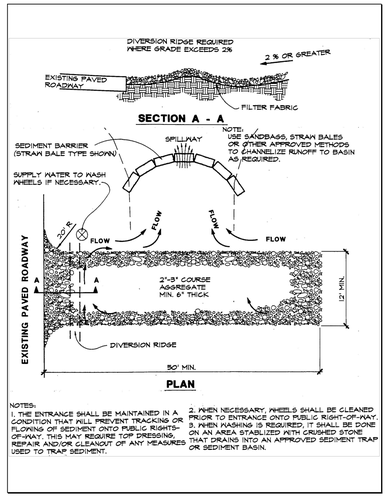


Plate 4.03a Temporary Gravel Construction Entrance
Source: Erosion Draw

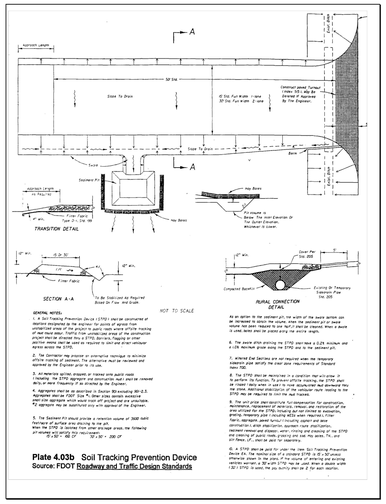


Plate 4.03b Soil Tracking Prevention Device
Source: FDOT Roadway and Traffic Design Standards

Washing

If conditions on the site are such that most of the mud is not removed by the vehicles traveling over the gravel, then the tires of the vehicles must be washed before entering a public road. Wash water must be carried away from the entrance to a settling area to remove sediment (See Plate 4.03b). A wash rack may also be used to make washing more convenient and effective (See Plate 4.03c).

Location

The entrance should be located to provide for maximum utility by all construction vehicles.

Construction Specifications

The area of the entrance should be cleared of all vegetation, roots, and other objectionable material. A geotextile should be laid down to improve stability and simplify maintenance. The gravel shall then be placed over the geotextile to the specified dimensions.

Any drainage facilities required because of washing should be constructed according to approved specifications. If wash racks are used, they should be installed according to manufacturer's specifications.

Maintenance

The entrance shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 2-inch (5 cm) stone, as conditions demand, and repair and/or clean out of any structures used to trap sediments. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately. Look for signs of trucks and trailered equipment "cutting corners" where the gravel meets the roadway. Sweep the paved road daily for sediments and stones.

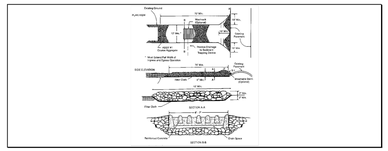


Plate 4.03c Construction Entrance with Wash Rack
Source: 1983 Maryland Standards for Soil Erosion and Sediment Control

CE **CONSTRUCTION ENTRANCE / EXIT** NTS

6.65 TEMPORARY SEEDING (ES BMP 1. 65)

Definition

The establishment of a temporary vegetative cover on disturbed areas by seeding with appropriate rapidly growing annual plants.

Purposes

1. To reduce erosion and sedimentation by stabilizing disturbed areas that will not be brought to final grade for a 30days or more.

2. To reduce problems associated with mud and dust production from bare soil surfaces during construction.

Conditions Where Practice Applies

Where exposed soil surfaces are not to be fine graded for periods from 30 days or more. Such areas include denuded areas, soil stockpiles, dikes, dams, sides of sediment basins, temporary roadbanks, etc.

Specifications

Prior to seeding, install necessary erosion control practices such as dikes, waterways, and basins.

Plant Selection

Select plants appropriate to the season, region, and site conditions. Consult with your local Agricultural Extension agent, county, FDEP, WMD, or FDOT office, or Table 1.65a of The Florida Development Manual.

Seedbed Preparation

To control erosion on bare soil surfaces, plants must be able to germinate and grow. Seedbed preparation is essential. A soil test should be taken to determine liming and fertilization requirements. In the absence of a soil test the following guidelines should be followed:

1. Liming: Where soils are known to be highly acid (pH 6.0 and lower), lime should be applied at the rate of two tons of pulverized agricultural limestone per acre.

2. Fertilizer: Shall be applied as 450 lbs./acre of 10-20-20 (10 lbs./ 1,000 sq. ft.)(504 kg/ha) or equivalent. Lime and fertilizer shall be incorporated into the top 2 to 4 inches (5 to 10 cm) of the soil.

3. Surface Roughening: If the area has been recently loosened or disturbed, no

further roughening is required. When the area is compacted, crusted, or hardened, the soil surface shall be loosened by discing, raking, harrowing, or other acceptable means. See SURFACE ROUGHENING - Section 6.60 (ES BMP 1.60).

4. Tracking: Tracking with bulldozer cleats is most effective on sandy soils. This practice often causes undue compaction of the soil surface, especially in clayey soils, and does not aid plant growth as effectively as other methods of surface roughening.

Seeding

Seed shall be evenly applied with a cyclone seeder, drill, cultipacker seeder or hydroseeder. Small grains shall be planted no more than one inch deep. Grasses and legumes shall be planted no more than 1/4 inch (6 mm) deep.

Mulching

1. Mulching should usually be used to reduce damage from water runoff or wind erosion, and to improve moisture conditions for seedlings. Mulching without seeding should be considered for very short term protection. The use of mulch is a judgment decision based on time of seeding and conditions of individual sites. When used, mulch shall be applied according to MULCHING - Section 6.75 (ES BMP 1.75.

2. Seedings made on slopes in excess of 3:1, or on adverse soil conditions, or during excessively hot or dry weather, shall be mulched according to MULCHING - Section 6.75 (ES BMP 1.75).

3. Seedings made during optimum spring and summer seeding dates, with favorable soil and site conditions, may not require mulch.

Re-seeding

Areas which fail to establish vegetative cover adequate to prevent rill erosion will be filled in with proper topsoil and re-seeded as soon as such areas are identified.

TS **TEMPORARY SEEDING** NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC DETAILS I
C06.4

TRUE WARM & WELCOME 2300

4.06 SILT FENCE
(ES BMP 1.06)

Definition

A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched. There are two types. The silt fence is a temporary linear filter barrier constructed of synthetic filter fabric, posts, and, depending upon the strength of the fabric used, wire fence for support. The filter barrier is constructed of stakes and burlap or synthetic filter fabric.

Purposes

1. To intercept and detain small amounts of sediment from disturbed areas during construction operations.

2. To decrease the velocity of sheet flows and low-to-moderate level channel flows.

Conditions When Practice Applies

1. Below disturbed areas where erosion would occur in the form of sheet and rill erosion.

2. Where the size of the drainage area is no more than 1/4 acre per 100 feet (1.3 ha /100 m) of silt fence length; the maximum slope length behind the barrier is 100 feet (30 m); and the maximum gradient behind the barrier is 50 percent (2:1).

3. In minor swales or ditch lines where the maximum contributing drainage area is no greater than 2 acres (0.8 ha).

4. Under no circumstances should silt fences be constructed in live streams or in swales or ditch lines where flows are likely to exceed one cubic foot per second (cfs)(0.03 m^3 / sec.). See Design Criteria for further clarification.

Planning Considerations

Silt fences can trap a much higher percentage of suspended sediments than can straw bales and may be preferable to straw barriers in many cases. While the failure rate of silt fences is lower than that of straw barriers, this failure rate is still due mainly to improper installation. The most effective application is to install two parallel silt fences spaced a minimum of three feet apart. The installation and maintenance methods outlined here can improve performance.

Filter barriers are inexpensive structures composed of burlap or standard weight synthetic filter fabric stapled to wooden stakes. Flow rates through burlap filter barriers are slightly slower and filtering efficiency is significantly higher than for straw bale barriers.

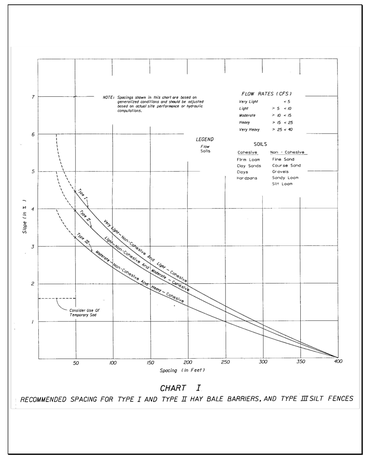


CHART I

RECOMMENDED SPACING FOR TYPE I AND TYPE II HAY BALE BARRIERS, AND TYPE III SILT FENCES

Plate 4.06a FDOT Standard Index 102, Chart 1
Source: FDOT Roadway and Traffic Design Standards

Silt fences composed of a wire support fence and an attached synthetic filter fabric slow the flow rate significantly but have a higher filtering efficiency than burlap. Both woven and non-woven synthetic fabrics are commercially available. The woven fabrics generally display higher strength than the non-woven fabrics. When tested under acid and alkaline water conditions, most of the woven fabrics increase in strength. There are a variety of reactions among the non-woven fabrics. The same is true of testing under extensive ultraviolet radiation. Permeability rates vary regardless of fabric type. While all of the fabrics demonstrate very high filtering efficiencies for sandy sediments, there is considerable variation among both woven and non-woven fabrics when filtering the finer silt and clay particles.

Design Criteria

1. No formal design is required for many small projects and for minor and incidental applications. For channel flow applications refer to FDOT Standard Index 102, Chart 1 (Plate 4.06a) for guidance on recommended spacing.

2. Filter barriers shall have an expected usable life of 3 months. They are applicable in ditch lines, around drop inlets, and at temporary locations where continuous construction changes the earth contour and runoff characteristics and where low or moderate flows (not exceeding 1 cfs) (0.03 m^3 / sec.) are expected.

3. Silt fences, because they have much lower permeability than burlap filter barriers, have their applicability limited to situations in which only sheet or overland flows are expected. They normally cannot filter the volumes of water generated by channel flows, and many fabrics do not have sufficient structural strength to support the weight of water ponded behind the fence line. Their expected usable life is 6 months.

Construction Specifications

Materials

1. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0° F to 120° F (-17C to 49C).

2. Burlap shall be 10 ounces per square yard (340 g/m^2) fabric.

3. Posts for silt fences shall be either 4 inch (10 cm) diameter wood, or 1.33 pounds per linear foot (2 kg/m) steel with a minimum length of 5 feet (1.5 m). Steel posts shall have projections for fastening wire to them.

4. Stakes for filter barriers shall be 1" x 2" (2.5 x 5 cm) wood (preferred), or equivalent metal with a minimum length of 3 feet (90 cm).

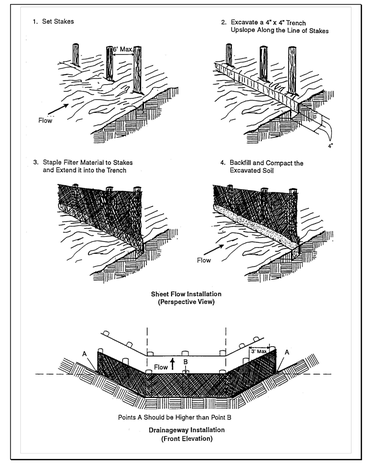


Plate 4.06b Construction of a Filter Barrier
Source: NRCS

5. Wire fence reinforcement for silt fences using standard strength filter cloth shall be a minimum of 36 inches (90 cm) in height, a minimum of 14 gauge and shall have a maximum mesh spacing of 6 inches (15 cm).

Sheet Flow Applications: Filter Barrier

This sediment barrier may be constructed using burlap or standard strength synthetic filter fabric. It is designed for low or moderate flows not exceeding 1 cfs. (0.03 m^3 / sec.). (See Plate 4.06b)

1. The height of a filter barrier shall be a minimum of 15 inches (38 cm) and shall not exceed 18 inches (45 cm).

2. Burlap or standard strength synthetic filter fabric shall be purchased in a continuous roll and cut to the length of the barrier to avoid the use of joints (and thus improve the strength and efficiency of the barrier).

3. The stakes shall be spaced a maximum of 3 feet (90 cm) apart at the barrier location and driven securely into the ground a minimum of 8 inches (20 cm).

4. A trench shall be excavated approximately 4 inches (10 cm) wide and 4 inches (10 cm) deep along the line of stakes and upslope from the barrier.

5. The filter material shall be stapled to the wooden stakes, and 8 inches (20 cm) of the fabric shall be extended into the trench. Heavy duty wire staples at least 1/2 inch (13 mm) long, hog rings, or tie wire shall be used. Filter material shall not be stapled to existing trees.

6. The trench shall be backfilled and the soil compacted over the filter material.

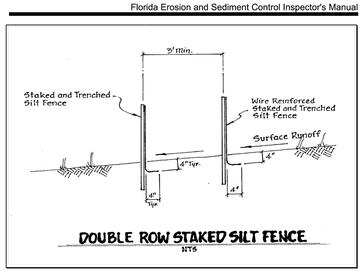
7. Filter barriers shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

Sheet Flow Application: Silt Fence

This sediment barrier uses standard strength or extra strength synthetic filter fabrics. It is designed for situations in which only sheet or overland flows are expected. (See Plate 4.06d)

1. The height of a silt fence shall not exceed 36 inches (90 cm). Higher fences may impound volumes of water sufficient to cause failure of the structure.

2. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced as described in item No. 8 below.



DOUBLE ROW STAKED SILT FENCE
NTS

Plate 4.06c Double Row Staked Silt Fence
Source: Reedy Creek Improvement District

3. Posts shall be spaced a maximum of 10 feet (3 m) apart at the barrier location and driven securely into the ground a minimum of 12 inches (30 cm). When extra strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet (1.8 m).

4. A trench shall be excavated approximately 4 inches (10 cm) wide and 4 inches (10 cm) deep along the line of posts and upslope from the barrier.

5. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1 inch (25 mm) long, tie wires, or hog rings. The wire shall extend into the trench a minimum of 2 inches (5 cm) and shall not extend more than 36 inches (90 cm) above the original ground surface.

6. The standard strength filter fabric shall be stapled or wired to the fence, and 8 inches (20 cm) of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches (90 cm) above the original ground surface.

7. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item No. 6 applying.

8. When attaching two silt fences together, place the end post of the second fence inside the end post of the first fence. Rotate both posts at least 180 degrees on a clockwise direction to create a tight seal with the filter fabric. Drive both posts into the ground and bury the flap. (See Plate 4.06g)

9. The trench shall be backfilled and the soil compacted over the filter fabric.

10. The most effective application consists of a double row of silt fences spaced a minimum of three feet apart. The three foot separation is so that if the first row collapses it will not fall on the second row. Wire or synthetic mesh is may be used to reinforce the first row. (See Plate 4.06c)

11. When used to control sediments from a steep slope, silt fences should be placed away from the toe of the slope for increased holding capacity. (See Plate 4.06f)

12. Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

Channel Flow Applications

1. If a filter barrier is to be constructed across a ditch line or swale, the barrier shall of sufficient length such that the bottom of the end sections of fence are higher in elevation than the top of the center section to eliminate end flow. The plan configuration shall resemble an arc or horseshoe with the ends oriented upslope. (See Plate 4.06b).

2. Use FDOT Standard Index 102, Chart 1(Plate 4.06a) as a guide for spacing.

3. The remaining steps for installing a filter barrier for sheet flow applications apply here.

Maintenance

1. Silt fences and filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.

2. Should the fabric on a silt fence or filter barrier decompose or become ineffective before the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.

3. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.

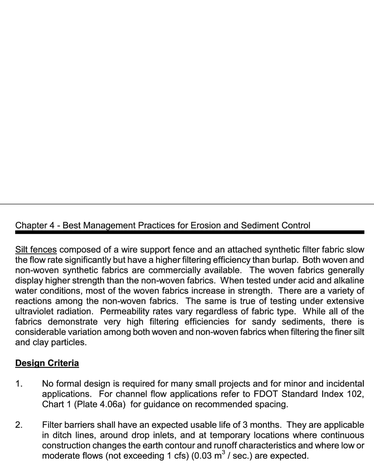


Plate 4.06d Installing a Filter Fabric Silt Fence
Source: HydroDynamics, Inc.

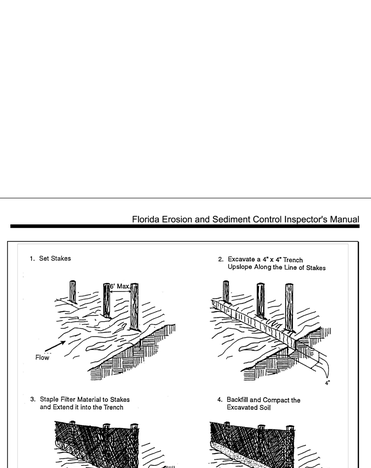


Plate 4.06e Silt Fence
Source: Erosion Draw

4. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared, and seeded.

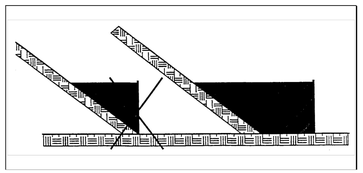


Plate 4.06f Proper Placement of a Silt Fence at the Toe of a Slope
Source: HydroDynamics, Inc

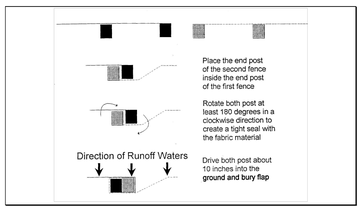


Plate 4.06g Attaching Two Silt Fences
Source: HydroDynamics,Inc.

SF **SILT FENCE** NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC DETAILS II
C06.5

TRUE WARM & WELCOME 2300

4.08 STORM DRAIN INLET PROTECTION (ES BMP 1.08)

Definition

A sediment filter or an excavated impounding area around a storm drain drop inlet or curb inlet.

Purpose

To prevent sediment from entering storm water conveyance systems prior to permanent stabilization of the disturbed area.

Condition Where Practice Applies

Where storm drain inlets are to be made operational before permanent stabilization of the disturbed drainage area. Different types of structures are applicable to different conditions (see Plates 4.08a through 4.08h).

Planning Considerations

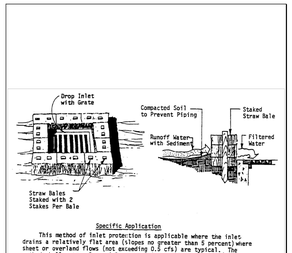
Storm sewers which are made operational before their drainage area is stabilized can convey large amounts of sediment to receiving waters. In case of extreme sediment loading, the storm sewer itself may clog and lose most of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets.

This section contains several types of inlet filters and traps which have different applications dependent upon site conditions and type of inlet. Other innovative techniques for accomplishing the same purpose are encouraged, but only after specific plans and details are submitted to and approved by the stormwater permitting agency.

Note that these various inlet protection devices are for drainage areas of less than one acre (0.4 ha). Runoff from large disturbed areas should be routed through a TEMPORARY SEDIMENT TRAP - Section 4.25 (ES BMP 1.25).

Design Criteria

1. The drainage area shall be no greater than 1 acre (0.4 ha).
2. The inlet protection device shall be constructed to facilitate clean out and disposal of trapped sediment and to minimize interference with construction activities.
3. The inlet protection devices shall be constructed so that any resultant ponding or stormwater will not cause excessive inconvenience or damage to adjacent areas or structures.
4. Design criteria more specific to each particular inlet protection devices will be found on Plates 4.08a-h.



Specific Application

This method of inlet protection is applicable where the inlet drains a relatively flat area (slopes no greater than 5%) where sheet or overland flows (not exceeding 1 c.f.s.) are typical. The method shall not apply to inlets receiving concentrated flows, such as in street or highway medians.

Plate 4.08a Straw Bale Drop Inlet Sediment Filter
Source: Michigan Soil Erosion and Sedimentation Control Guidebook

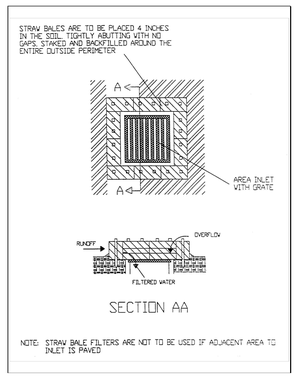


Plate 4.08b Straw Bale Filter for Area Inlet
Source: HydroDynamics, Inc.

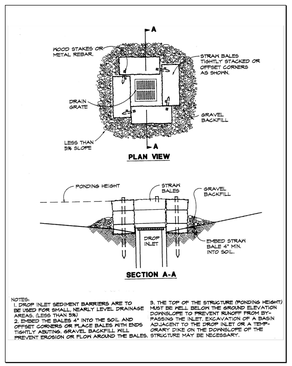


Plate 4.08c Straw Bale and Gravel Drop Inlet Sediment Barrier
Source: Erosion Draw

Construction Specifications

Straw bale drop inlet filter

1. Bales shall be either wire-bound or string-tied with the bindings oriented around the sides rather than over and under the bales.
2. Bales shall be placed lengthwise in a single row surrounding the inlet, with the ends of adjacent bales pressed together. (See Plate 4.08a)
3. The filter barrier shall be entrenched and backfilled. A trench shall be excavated around the inlet the width of a bale to a minimum depth of 4 inches (10 cm). After the bales are staked, the excavated soil shall be backfilled and compacted against the filter barrier. (See Plate 4.08b)
4. Each bale shall be securely anchored and held in place by at least two stakes or rebars (See p. 4-17) driven through the bale.
5. Loose straw should be wedged between bales to prevent water from entering between bales.
6. Gravel may be spread around the bales to improve stability. (See Plate 4.08c)

Fabric drop inlet sediment filter

1. Fabric shall be cut from a continuous roll to avoid joints.
2. Stakes shall be 2" x 4" (5 cm x 10 cm) wood (preferred) or equivalent metal with a minimum length of 3 feet (90 cm). (See Plate 4.08d)
3. Staples shall be of heavy duty wire at least 1/2-inch (13 mm) long.
4. Stakes shall be spaced around the perimeter of the inlet a maximum of 3 feet (90 cm) apart and securely driven into the ground minimum of 8 inches (20 cm). A frame of 2" x 4" (5 cm x 10 cm) wood shall be constructed around the top of the stakes for proper stability.
5. A trench shall be excavated approximately 4 inches (10 cm) wide and 4 inches (10 cm) deep around the outside perimeter of the stakes. (See Plate 4.08e)
6. The burlap shall be stapled to the wooden stakes, and 8 inches (20 cm) of the fabric shall be extended into the trench. The height of the filter barrier shall be a minimum of 15 inches (38 cm) and shall not exceed 18 inches (45 cm).
7. The trench shall be backfilled and the soil compacted over the burlap.

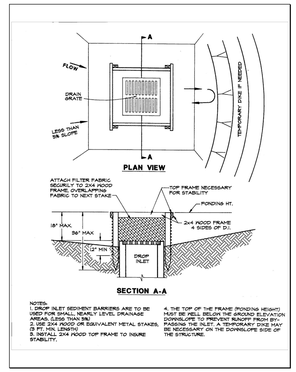


Plate 4.08d Silt Fence Drop Inlet Sediment Barrier
Source: Erosion Draw

Specific Application

This method of inlet protection is applicable where the inlet drains a relatively flat area (slope no greater than 5%) where the inlet sheet or overland flows (not exceeding 1 c.f.s.) are typical. The method shall not apply to inlets receiving concentrated flows, such as in street or highway medians.

Plate 4.08e Filter Fabric Drop Inlet Sediment Filter
Source: North Carolina Erosion and Sediment Control Manual

Gravel and wire mesh drop inlet sediment filter

1. Wire mesh shall be laid over the drop inlet so that the wire extends a minimum of one foot (30 cm) beyond each side of the inlet structure. Hardware cloth or comparable wire mesh with 1/2 inch (13 mm) openings shall be used. If more than one strip of mesh is necessary, the strips shall be overlapped at least 1 ft. (30 cm).
2. FDOT No. 1 Coarse Aggregate (1.5" to 3.5" stone)(4 - 9 cm) shall be placed over the wire mesh as shown on Plate 4.08c. The depth of stone shall be at least 12 inches (30 cm) over the entire inlet opening. The stone shall extend beyond the inlet opening at least 18 inches (45 cm) on all sides. (See Plate 4.08f)
3. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stones must be pulled away from the inlet, cleaned and replaced.

NOTE: This filtering device has no overflow mechanism. Therefore, ponding is likely especially if sediment is not removed regularly. This type of device must never be used where overflow may endanger an exposed fill slope. Consideration should also be given to the possible effects of ponding on traffic movement, nearby structures, working areas, adjacent property, etc.

Specific Application

This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause excessive inconvenience or damage to adjacent structures and unprotected areas.

- Gravel Shall be VDOT #3, #357, or #5 Coarse Aggregate.

Plate 4.08f Gravel and Wire Mesh Drop Inlet Sediment Filter
Source: Virginia DSWC

Block and gravel drop inlet sediment filter

1. Place concrete blocks lengthwise on their sides in a single row around the perimeter of the inlet, with the ends of adjacent blocks abutting. The height of the barrier can be varied, depending on design needs, by stacking combinations of 4 inch, 8 inch and 12 inch (10, 20, and 30 cm) wide blocks. The barrier of blocks shall be at least 12 inches (30 cm) high and no greater than 24 inches (60 cm) high.
2. Wire mesh shall be placed over the outside vertical face (webbing) of the concrete blocks to prevent stone from being washed through the holes in the blocks. Hardware cloth or comparable wire mesh with 1/2 inch (13 mm) openings shall be used. (See Plate 4.08g)
3. Stone shall be piled against the wire to the top of the block barrier. Suitable coarse aggregate shall be used. (See Plate 4.08h)
4. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stone must be pulled away from the blocks, cleaned and replaced.
5. As a very temporary alternative, pervious burlap bags filled with gravel may be placed around the inlet provided that there are no gaps between the bags. (See Plate 4.08i)
6. Either of these two practices may be installed on pavement or bare ground

Sod drop inlet sediment filter

1. Soil shall be prepared and sod installed according to the specifications in SODDING - Section 6.67 (ES BMP 1.67).
2. Sod shall be placed to form a turf mat covering the soil for a distance of 4 feet (1.2 m) from each side of the inlet structure. (See Plate 4.08j)

Prefabricated drop inlet internal filter bag (ACF Silt Sack)

1. Remove the grate over the catch basin and insert the filter device, then replace grate to hold the device in position.
2. When sediments have accumulated to within one foot (30 cm) of the grate the filter insert must be removed by a front-end loader or forklift. The filter may be discarded and replaced or it may be emptied, cleaned, and reused.

NOTE: This segment does not constitute a product endorsement.

Plate 4.08g Block and Gravel Drop Inlet Sediment Filter
Source: Erosion Draw

Specific Application

This method of inlet protection is applicable where heavy flows are expected and where an overflow capacity necessary to prevent excessive ponding around the structure.

- Gravel Shall be VDOT #3, #357, or #5 Coarse Aggregate.

Plate 4.08h Block and Gravel Drop Inlet Sediment Filter
Source: Michigan Soil Erosion and Sedimentation Control Guidebook

Plate 4.08i Gravel Filters for Area Inlets
Source: HydroDynamics, Inc.

Prefabricated drop inlet external filter (Suntree Isles Grate Inlet Protector)

1. Place the device over the inlet. If the inlet has a grate, the device shall be secured to the grate by means of a long toggle bolt. If the grate is not present, the device shall be bolted directly to the concrete.
2. Sediments shall be removed when they have accumulated to within one foot (30 cm) of the top of the device. The filter fabric elements shall be cleaned or replaced at that time.

NOTE: This segment does not constitute a product endorsement.

Gravel curb inlet sediment filter

1. Hardware cloth or comparable wire mesh with 1/2 inch (13 mm) openings shall be placed over the curb inlet opening so that at least 12 inches (30 cm) of wire extends across the top of the inlet cover and at least 12 inches (30 cm) of wire extends across the concrete gutter from the inlet opening. (See Plate 4.08k)
2. Stone shall be piled against the wire so as to anchor it against the gutter and inlet cover and to cover the inlet opening completely. FDOT No. 1 Coarse Aggregate shall be used.
3. An overflow weir can be constructed of 2" x 4" (5 x 10 cm) boards to lessen ponding from this practice. (See Plate 4.08L)
4. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stone must be pulled away from the block, cleaned and replaced.

Block and gravel curb inlet sediment filter

1. Two concrete blocks shall be placed on their sides abutting the curb at either side of the inlet opening.
2. A 2" x 4" (5 x 10 cm) board shall be cut and placed through the outer holes of each spacer block to help keep the front blocks in place.
3. Concrete blocks shall be placed on their sides across the front of the inlet and abutting the spacer blocks. (See Plate 4.08m)
4. Wire mesh shall be placed over the outside vertical face (webbing) of the concrete blocks to prevent stone from being washed through the holes in the blocks. Hardware cloth with 1/2 inch (13 mm) openings shall be used.
5. FDOT No. 1 Coarse Aggregate shall be piled against the wire to the top of the barrier.

6. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stone must be pulled away from the block, cleaned and replaced.
7. As an alternate, gravel filled burlap bags may be stacked tightly around the curb inlet. (See Plates 4.08n and 4.08o)

Curb and Gutter Sediment Barrier

1. Place gravel filled burlap bags on gently sloping street segments according to the spacing chart. (See Plate 4.08p)
2. Place two or more bags at each interval in a manner which provides maximum support.
3. When stacking several bags high, leave a one bag gap to provide an overflow spillway. (See Plate 4.08q)
4. Sediments must be removed after each rain event.

Maintenance

1. The structure shall be inspected after each rain and repairs made as needed.
2. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 1/2 of the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
3. Structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.

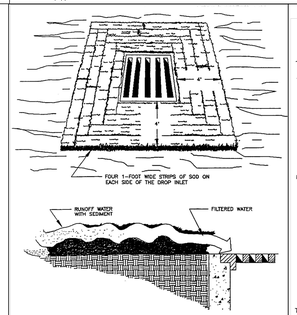


Plate 4.08j Sod Drop Inlet Sediment Filter
Source: Virginia DSWC

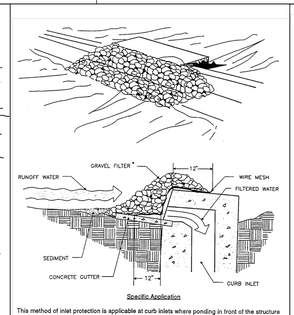


Plate 4.08k Gravel Curb Inlet Sediment Filter
Source: Virginia DSWC

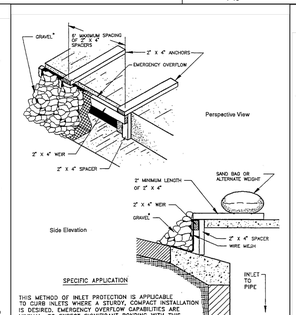


Plate 4.08L Gravel Curb Inlet Sediment Filter with Overflow Weir
Source: Maryland Standards and Specifications for Soil Erosion and Sediment Control

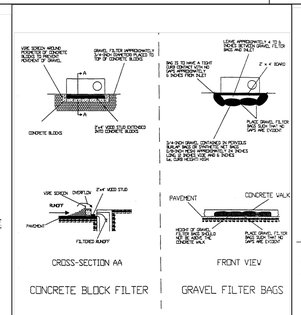


Plate 4.08n Curb Inlet Gravel Filters
Source: HydroDynamics, Inc.

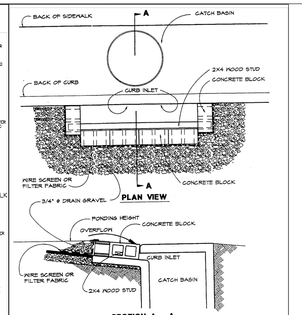


Plate 4.08m Block and Gravel Curb Inlet Sediment Barrier
Source: Erosion Draw

Plate 4.08o Curb Inlet Sediment Filter
Source: Virginia DSWC

Plate 4.08p Curb Inlet Sediment Filter with Overflow Weir
Source: Maryland Standards and Specifications for Soil Erosion and Sediment Control

Plate 4.08q Curb Inlet Sediment Filter with Overflow Weir
Source: HydroDynamics, Inc.

IP INLET PROTECTION NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC DETAILS III
C06.6

TRUE WARM & WELCOME 2300

5.15 OUTLET PROTECTION
(ES BMP 1.36)

Definition

Structurally lined aprons or other acceptable energy dissipating devices placed at the outlets of pipes (See Plate 5.15a) or paved channel sections (see Plate 5.15c). The most common types are riprap aprons or concrete aprons with energy dissipator blocks or walls.

Purpose

To prevent scour at stormwater outlets and to minimize the potential for downstream erosion by reducing the velocity of concentrated stormwater flows.

Conditions Where Practice Applies

Applicable to the outlets of all pipes and paved channel sections where the velocity of flow at design capacity of the outlet will exceed the permissible velocity of the receiving channel or area.

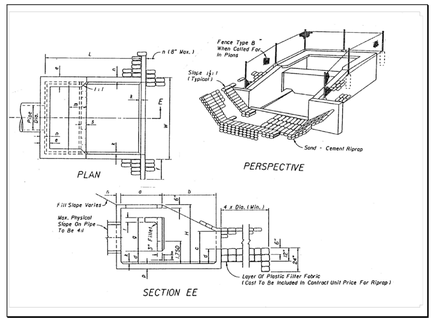


Plate 5.15a Energy Dissipator
Source: FDOT

Construction Specifications

Subgrade preparation for all types of outlet protection shall follow guidelines presented in EARTHWORK SPECIFICATIONS - Section 5.00. Riprap outlet protection aprons shall be installed in accordance with RIPRAP - Section 5.16. Reno mattresses can also be used as per GABIONS AND RENO MATTRESSES - Section 5.19. Underlying geotextiles shall be anchor trenched in at least 6" -9" (15 - 25 cm) and backfilled (see Plate 5.15b).

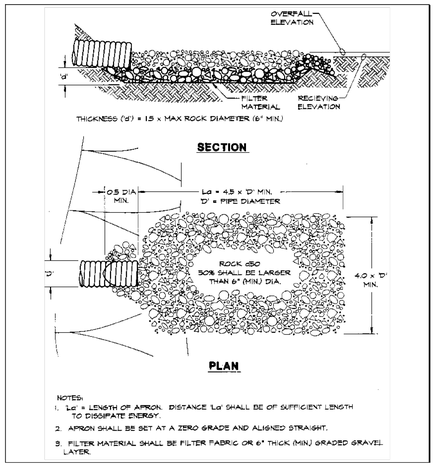


Plate 5.15b Energy Dissipator
Source: Erosion Draw

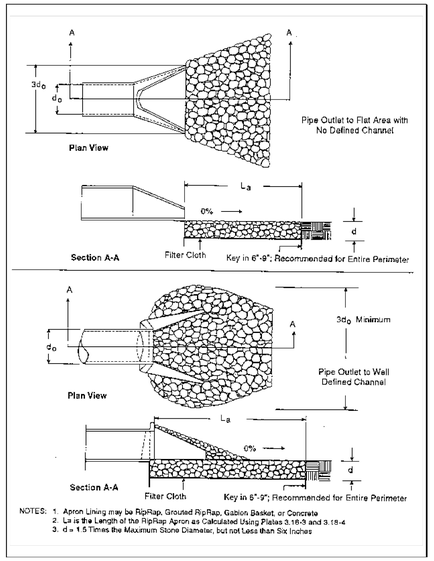


Plate 5.15c Pipe Outlet Conditions
Source: Virginia DSWC

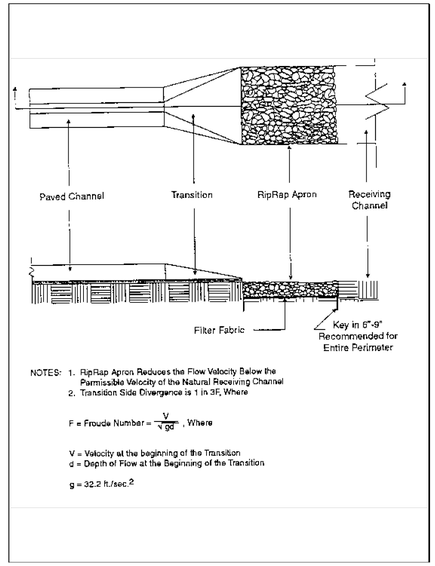


Plate 5.15d Paved Channel Outlet
Source: Virginia DSWC

OP **OUTLET PROTECTION** NTS

6.67 SODDING
(ES BMP 1.67)

Definition

Stabilizing fine-graded disturbed areas by establishing permanent grass stands with sod.

Purposes

1. To establish permanent turf immediately.
2. To prevent erosion and damage from sediment and runoff by stabilizing the soil surface.
3. To reduce the production of dust and mud associated with bare soil surfaces.
4. To stabilize drainageways where concentrated overland flow will occur.

Conditions Where Practice Applies

1. Disturbed areas which require immediate vegetative covers, or where sodding is preferred to other means of grass establishment.
2. Locations particularly suited to stabilization with sod are:
   a. slopes and buffer strips.
   b. waterways and swales, especially around drop inlets.
   c. residential or commercial lawns where quick use or aesthetics are factors.

Specifications

Soil Preparation

1. Prior to soil preparation, areas to be sodded shall be brought to final grade in accordance with the approval plan. These operations should leave as much topsoil as possible or replace the topsoil to a depth of four inches (10 cm).
2. Soil tests should be made to determine the exact requirements for lime and fertilizer. Soil tests may be conducted by the State Laboratory at the University of Florida or a reputable commercial laboratory. Information on state soil tests is available from county agricultural extension agents.

   When a soil test is not made the following soil amendments should be made:

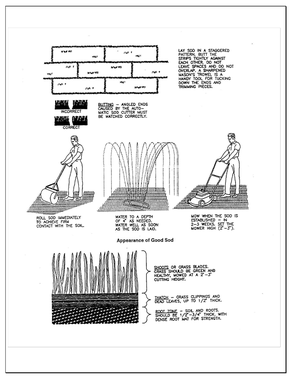


Plate 6.67a Sodding
Source: Virginia DSWC

Pulverized agricultural limestone at 100 lbs./1000 ft^2 (2 tons/acre)(4.48 t/ha)

Fertilizer at 25 lbs./1000 ft^2 (1000 lbs./acre)(1.12 t/ha) of 10-10-10 in fall or 25lbs./1000 ft^2 of 5-10-10 in spring. NOTE: Equivalent nutrients may be applied with other fertilizer formulations.

These amendments shall be spread evenly over the area to be sodded, and incorporated into the top 3 - 6 inches (8 - 15 cm) of the soil by discing, harrowing or other acceptable means.

3. Prior to laying sod, the soil surface shall be clear of trash, debris, roots, branches, stones and clods in excess of 2 inches (5 cm) in length or diameter. Sod shall not be applied to gravel or other non-soil surfaces.
4. Any irregularities in the soil surface resulting from topsoil or other operations shall be filled or leveled in order to prevent the formation of depressions or water pockets.
5. Areas to be topsoiled and topsoil used shall fulfill the requirements of TOPSOILING - Section 6.61 (ES BMP 1.61). No sod shall be spread on soil which has been treated with soil sterilants until enough time has elapsed to permit dissipation of toxic materials.

Sod Quality

1. Sod should be free of weeds and undesirable coarse weedy grasses. If possible, Certified or Approved turfgrass sod should be used.
2. Sod shall be machine cut at a uniform soil thickness of 3/4 inch (20 mm), plus or minus 1/4 inch (6 mm), at the time of cutting. This thickness shall exclude shoot growth and thatch.
3. Pieces of sod shall be cut to the supplier's standard width and length, with a maximum allowable deviation in any dimension of 5%. Torn or uneven pads will not be acceptable.
4. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended from a firm grasp on one end of the section.
5. Sod shall be not cut or laid in excessively wet or dry weather.
6. Sod shall be harvested, delivered, and installed within a period of 36 hours

Sod Installation

A. Solid Sodding (Plate 6.67a)

1. Irrigate areas to be sodded with a minimum of 1/2-inch (13 mm) of water unless

recent rains have provided equivalent moisture.

2. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and butting tightly against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Care shall be exercised to insure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause drying of the roots.

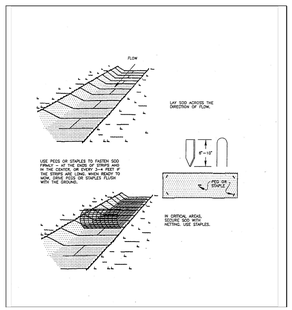


Plate 6.67b Sodding Swales and Waterways
Source: Virginia DSWC

3. On slopes 3:1 or greater, or wherever erosion may be a problem, sod shall be laid with staggered joints and secured by pegging or other approved methods. Sod shall be installed with the length perpendicular to the slope (on the contour). Begin laying sod at the bottom of the slope and work uphill. On very steep slopes, the use of ladders will facilitate the work and prevent damage to the sod.
4. Surface water cannot always be diverted from flowing over the face of the slope, but a capping strip of heavy jute or erosion netting, properly secured, along the crown of the slope will provide extra protection against lifting and undercutting of sod. This same technique can be used to fortify sod in water-carrying channels and other critical areas. Use wire staples to anchor heavy jute or erosion netting in channels.
5. As sodding of clearly defined areas is completed, sod shall be rolled or tamped to provide firm contact between roots and soil.
6. After rolling, sod shall be irrigated to a depth sufficient that the underside of the sod pad and the soil 4 inches (10 cm) below the sod is thoroughly wet.
7. During the first week, in the absence of adequate rainfall, watering shall be performed as often as necessary to maintain moist soil to a depth of at least 4 inches (10 cm).
8. The first mowing shall not be attempted until the sod is firmly rooted, usually after 2 - 3 weeks. Not more than 1/3 of the grass leaf should be removed at any one cutting.

B. Spot Sodding

1. Spot sodding is the planting of plugs or blocks, a minimum of 4 inches (10 cm) in diameter or square, of sod at measured intervals. The plugs or blocks should be placed one foot (30 cm) apart.
2. Sod spots within a row should be placed alternately and not directly opposite sod spots in adjacent rows.
3. Fit the plugs or blocks tightly into prepared holes and tamp them firmly into place.
4. Irrigate to a depth sufficient that the underside of the sod spot and the soil 4 inches (10 cm) below the sod is thoroughly wet.

C. Strip Sodding

1. Areas to be strip sodded should be fertilized, limed, prepared and smoothed as in solid sodding.
2. Lay the strips end to end in rows that are from 1 to 1-1/2 feet (30 to 45 cm) apart with the strips a minimum of 2 to 4 inches (5 to 10 cm) wide.

3. Roll or tamp the strips thoroughly to provide firm contact between roots and soil.
4. Irrigate to a depth sufficient that the underside of the strips and the soil 4 inches (10 cm) below the strips are wet.

D. Sodded Swales and Waterways (Plate 6.67b)

1. Care should be taken to prepare the soil adequately in accordance with this specification. The sod type shall consist of plant materials able to withstand the designed velocity. (See STORMWATER CONVEYANCE CHANNELS - Section 6.35 (ES BMP 1.35).
2. Sod strips in swales and waterways shall be laid perpendicular to the direction of flow. Care should be taken to butt ends of strips tightly.
3. After rolling or tamping, sod shall be pegged or stapled to resist washout during the establishment period. Chicken wire, jute or other netting may be pegged over the sod for extra protection in critical areas.
4. All other specifications for this practice shall be adhered to when sodding a swale or waterway.

Maintenance of Established Sod

1. After the first week, sod shall be watered as necessary to maintain adequate moisture in the root zone and prevent dormancy.
2. Apply lime and fertilizer under a regular program based on soil tests and on the use and general appearance of the vegetative cover. In the absence of a soil test apply 1 - 2 tons/acre (45 - 90 lbs./1000 ft^2)(2.24 to 4.48 t/ha) of finely ground agricultural limestone every three years. Apply 400 - 500 lbs./acre (9 - 18 lbs./1000 ft^2)(450 - 560 kg/ha) of 10-10-10 fertilizer. To obtain better vegetative cover, topdress with 150 - 300 lbs./acre (6 - 12 lbs./1000 ft^2)(170 - 340 kg/ha) of 16-4-4 fertilizer during the growing season, but at least six weeks before the end of the growing season. If Centipede or St. Augustine grass is used, do not apply more than 1 pound of actual nitrogen per 1000 ft^2 (20 - 40 lbs./acre)(22 - 44 kg/ha).
3. Mow to control weeds, improve the appearance of the vegetative cover, and to reduce fire hazard, as necessary. In general, the coarser the leaf texture of the grass, the higher it should be cut. Continuous close mowing will result in loss of vigor and reduced stand. No more than 1/3 of the grass leaf should be removed in any mowing.

SO **SODDING** NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC DETAILS IV
C06.7

TRUE WARM & WELCOME 2300

6.66 PERMANENT SEEDING (ES BMP 1.66)

Definition

The establishment of perennial vegetative cover on disturbed areas by planting seed.

Purposes

1. To reduce erosion and decrease sediment yield from disturbed areas.

2. To permanently stabilize disturbed areas in a manner that is economical, adaptable to site conditions, and allows selection of the most appropriate plant materials.

Conditions Where Practice Applies

1. Disturbed areas where permanent, long-lived vegetative cover is needed to stabilize the soil.

2. Rough-graded areas which will not be brought to final grade for a year or more.

Specifications

Selection of Plant Materials

1. Selection of plant materials is based on climate, topography, soils, land use, and planting season. To determine which plant materials are best adapted to a specific site, use Tables 1.66b and 1.66c of The Florida Development Manual which describe plant characteristics and list recommended varieties.

2. Appropriate seeding mixtures for various site conditions in Florida are given in Table 1.66a of The Florida Development Manual. These mixtures are designed for general use, and are known to perform well on the sites described. Adhere to these mixtures whenever feasible. Check Tables 1.66b and 1.66c for recommended varieties.

Seedbed Requirements

Vegetation should not be established on slopes that are unsuitable due to inappropriate soil texture, poor internal structure or internal drainage, volume of overland flow, or excessive steepness, until measures have been taken to correct these problems.

To maintain a good stand of vegetation, the soil must meet certain minimum requirements as a growth medium. The existing soil must have these criteria:

1. Enough fine-grained material to maintain adequate moisture and nutrient supply.

2. Sufficient pore space to permit root penetration. A bulk density of 1.2 to 1.5

indicates that sufficient pore space is present. A fine granular or crumb-like structure is also favorable.

3. Sufficient depth of soil to provide an adequate root zone. The depth to rock or impermeable layers such as hardpans shall be 12 inches (30 cm) or more, except on slopes steeper than 2:1 where the addition of soil is not feasible.

4. A favorable pH range for plant growth. If the soil is so acid that a pH range of 6.0 - 7.0 cannot be attained by addition of pH-modifying materials, then the soil is considered an unsuitable environment for plant roots.

5. Freedom from toxic amounts of materials harmful to plant growth.

6. Freedom from excessive quantities of roots, branches, large stones, large clods of earth, or trash of any kind. Clods and stones may be left on slopes steeper than 3:1 if they are to be hydroseeded.

If any of the above criteria cannot be met, i.e., if the existing soil is too coarse, dense, shallow, acid, or contaminated to foster vegetation, then topsoil should be applied in accordance with TOPSOILING - Section 6.61 (ES BMP 1.61).

Necessary mechanical erosion and sediment control practices ***will be installed prior to seeding***. Grading will be carried out according to the approved plan.

Surfaces will be roughened in accordance with SURFACE ROUGHENING - Section 6.60 (ES BMP 1.60).

Soil Conditioners

In order to modify the texture, structure, or drainage characteristics of a soil, the following materials may be added to the soil:

1. Peat shall be sphagnum moss peat, hypnum moss peat, reed-sedge peat or peat humus, from fresh-water sources. Peat shall be shredded and conditioned in storage piles for at least six months after excavation.

2. Sand shall be clean and free of toxic materials.

3. Vermiculite shall be horizontal grade and free of toxic substances.

4. Rotted manure shall be stable or cattle manure not containing undue amounts of straw or other bedding materials or toxic chemicals.

5. Thoroughly rotted sawdust shall be 6 lbs. of nitrogen added to each cubic yard (3.5 kg/m^3) and shall be free of stones, sticks, and toxic substances.

6. Where local ordinances permit, treated sewage sludge may be used in accordance with local, state, and federal regulations.

separately. Rates of wood fiber should be at least 2000 lbs. per acre (2.24 t/ha). Surface roughening is particularly important when hydroseeding, as a roughened slope will provide some natural coverage of lime, fertilizer, and seed.

5. Legume inoculants should be used by the date indicated on the container. When dry seeding use four times the manufacturer's recommended rate and use ten times the recommended rate of inoculant when hydroseeding.

Mulching

All permanent seeding must be mulched immediately upon completion of seed application. Refer to MULCHING - Section 6.75 (ES BMP 1.75).

Maintenance of New Seedings

Irrigation: New seedings should be supplied with adequate moisture. Supply water as needed, especially late in the season, in abnormally hot or dry weather, or on adverse sites. Water application rates should be controlled to prevent runoff. Inadequate amounts of water may be more harmful than no water.

Re-seeding: Inspect seeded areas for failure and make necessary repairs and reseedings within the same season, if possible.

1. If vegetative cover is inadequate to prevent rill erosion, overseed and fertilize in accordance with soil test results.

2. If a stand has less than 40% cover, re-evaluate choice of plant materials and quantities of lime and fertilizer. Re-establish the stand following seedbed preparation and seeding recommendations, omitting lime and fertilizer in the absence of soil test results. NOTE: if vegetation has failed to grow, soil must be tested to determine if acidity or nutrient imbalances are responsible.

Fertilization: Seedlings should be fertilized one year after planting to insure proper stand density.

1. To established all-grass stands, apply 500 lbs./acre of 10-20-10 (12 lbs./1000 ft^2)(560 kg/ha) between August 15 and November 15. (The first fall following seeding.)

2. To legume-and-grass stands or pure legume stands, apply 500 lbs./acre of 0-20-20 (12 lbs./1000 ft^2)(560 kg/ha) in early May or between August 15-October 15.

GENERALLY, A STAND OF VEGETATION CANNOT BE DETERMINED TO BE FULLY ESTABLISHED UNTIL SOIL COVER HAS BEEN MAINTAINED FOR ONE FULL YEAR FROM PLANTING. DISTURBED AREAS WHICH ARE TO BE STABILIZED WITH PERMANENT VEGETATION MUST BE SEEDED OR PLANTED WITHIN 15 DAYS AFTER FINAL GRADE IS REACHED UNLESS TEMPORARY STABILIZATION IS APPLIED.

Lime and Fertilizer

Lime and fertilizer needs should be determined by soil tests. Soil tests may be performed by the Cooperative Extension Service Soil Testing Laboratory at the U.F., or by a reputable commercial laboratory. Information concerning the State Soil Testing Laboratory is available from county extension agents. Under unusual conditions where it is not possible to obtain a soil test, the following soil amendments will be applied:

LIME: 2 tons/acre finely ground agricultural or dolomitic limestone (90 lbs./1000 ft^2)(4.48 t/ha)

FERTILIZER: Mixed grasses and legumes: 1000 lbs./acre 5-20-10 (25 lbs./1000 ft^2)(1.12 t/ha)

Legume stands only: 1000 lbs./acre 5-20-10 (25 lbs./1000 ft^2)(1.12 t/ha)

Grass stands only: 1000 lbs./acre 5-20-10 (1.12 t/ha) and 300 lbs.of38-0-0 in spring (7 lbs./1000 ft^2)(336 kg/ha)

1000 lbs./acre 10-20-10 (1.12 t/ha) and 300 lbs. of 38-0-0 in fall (7 lbs./1000 ft^2)(336 kg/ha)

Other fertilizer formulations may be used, provided they can supply the same amounts and proportions of plant nutrients.

Incorporation - Lime and fertilizer shall be incorporated into the top 4 - 6 inches (10 - 15 cm) of the soil by discing or other means. When applying lime and fertilizer with a hydroseeder, apply to a rough, loose surface.

Seeding

1. Certified seed should be used for all permanent seeding whenever possible.

2. Legume seed - Legume seed should be inoculated with the inoculant appropriate to the species. Seed of lespendezas, crown vetch, and clovers should be scarified to promote uniform germination.

3. Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydroseeder on a firm, friable seedbed. Maximum seeding depth should be 1/4 inch.

4. Hydroseeding - To avoid seed damage, it is recommended that if a machinery breakdown of 30 minutes to 2 hours occurs, 50% more seed be added to the tank, based on the proportion of the slurry remaining in the tank. Beyond 2 hours, a full rate of new seed may be necessary.

Often hydroseeding contractors prefer not to apply lime in their rigs as it is abrasive. In inaccessible areas, lime may have to be applied in pelletized or liquid form,

PS PERMANENT SEEDING NTS

6.75 MULCHING (ES BMP 1.75)

Definition

Application of plant residues or other suitable materials to the soil surface.

Purposes

1. To prevent erosion by protecting the soil surface from raindrop impact and reducing the velocity of overland flow.

2. To foster the growth of vegetation by increasing available moisture and providing insulation against extreme heat and cold.

Conditions Where Practice Applies

1. Areas which have been permanently seeded should be mulched immediately following seeding.

2. Areas which cannot be seeded because of the season should be mulched to provide temporary protection to the soil surface. An organic mulch (not wood fiber alone) shall be used, and the area then seeded as soon as feasible in spring.

3. Mulch shall be used together with plantings of trees, shrubs, or certain ground covers which do not provide adequate soil stabilization by themselves.

4. Mulch shall be used in conjunction with temporary seeding operations specified in TEMPORARY SEEDING - Section 6.65 (ES BMP 1.65).

5. Mulches used in areas of concentrated flows or frequent inundation shall be properly anchored to prevent them from floating away.

Specifications

Types of Mulches

1. Organic Mulches

Organic mulches may be used in any area where mulch is required, subject to the restrictions noted in Table 6.75a. Select mulch material based on site requirements, availability of materials, and availability of labor and equipment. Table 6.75a lists the most commonly used organic mulches. Other materials, such as peanut hulls and cotton burs, may be used.

Mulch materials shall be spread uniformly, by hand or machine. When spreading straw by hand, divide the area to be mulched into approximately 1000 sq. ft. sections and place 70 - 90 lbs. (1-1/2 to 2 bales)(30 - 40 kg) of straw in each section

to facilitate uniform distribution.

2. Nets , Mats, and Blankets

Nets may be used alone on level areas, on slopes no steeper than 3:1, and in waterways as specified in STORMWATER CONVEYANCE CHANNELS - Section 5.35 (ES BMP 1.35). When mulching is done in late fall or during June, July, or August, or where soil is highly erodible, net should only be used in conjunction with an organic mulch such as straw. When net and organic mulch are used together, the net should be installed over the mulch except when the mulch is wood fiber. Wood fiber may be sprayed on top of the installed net. Excelsior binders are considered protective mulches and may be used alone on erodible soils and during all times of year.

Table 6.75a - Mulch Application

Mulches	Rate per acre	Rate per 1000 sq.ft.	Notes
Straw	1.5 - 2 tons	70 - 90 lbs.	Free from weeds and coarse matter. Must be anchored. Spread with mulch blower or by hand.
Wood Fibers	0.5 - 1.0 tons	25 - 50 lbs.	Fibers 1.5" min. length. Do not use alone in winter or during hot, dry weather. Apply as slurry.
Corn Stalks	4 - 6 tons	185 - 275 lbs.	Cut or shredded in 4 - 6" lengths. Air-dried. Do not use in fine turf areas. Apply with mulch blower or by hand.
Wood Chips	4 - 6 tons	185 -275 lbs.	Free of coarse matter. Air-dried. Treat with 12 lbs nitrogen per ton. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.
Shredded Bark Chips	50 - 70 cu. yds.	1 - 2 cu. yds.	Free of coarse matter. Air-dried. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.

Table 6.75a Organic Mulch Materials and Application Rates
Source: Virginia SWCC

Jute net shall be heavy, uniform cloth woven of single jute yarn, which if 36 to 48 inches (90 to 120 cm) wide shall weigh an average of 1.2 pounds per linear yard (0.6 kg/m). Other products designed to control erosion shall conform to manufacturer's specification and should be applied in accordance with manufacturer's instructions provided those instructions are at least as stringent as

this specification. Examples of these products are Erosionet, Holdgro, Weedchek, and Curlex. (Use of trade names does not constitute an endorsement of products by FDEP). In no case shall these products cover less than 30% of the soil surface

3. Chemical Mulches

Chemical mulches may be used alone only in the following situations:

a. Where no other mulching material is available.

b. In conjunction with temporary seeding during the times when mulch is not required for that practice.

c. From May 1 to June 15 and September 15 to October 15, provided that they are used on areas with slopes no steeper than 4:1, which have been roughened in accordance with SURFACE ROUGHENING - Section 6.60 (ES BMP 1.60).

Prior to installation:

1. Shape and grade as require the waterway, channel, slope, or other area to be protected.

2. Remove all rocks, clods, or debris larger than 2 inches in diameter that will prevent contact between the net and the soil surface.

3. Lime and fertilizer should be incorporated and surface roughening accomplished as needed. Seed should be applied prior to mulching except in the following cases:

a. Where seed is to be applied as part of a hydroseeder slurry containing wood fiber mulch.

b. Where seed is to be applied following a straw mulch spread during winter months.

c. Where a hydroseeder slurry is applied over straw.

Mulch Anchoring: Straw mulch must be anchored immediately after spreading to prevent windblow. Other organic mulches listed in Table 6.75a do not require anchoring. The following methods of anchoring straw may be used:

1. Mulch anchoring tool: This is a tractor-drawn implement designed to punch mulch into the soil surface. This method provides maximum erosion control with straw. It is limited to use on slopes no steeper than 3:1, where equipment can operate safely. Machinery shall be operated on the contour.

2. Liquid mulch binders: Application of liquid mulch binders and tackifiers should be heaviest at edges of areas and at crests of ridges and banks, to prevent windblow. The remainder of the area should have binder applied uniformly. Binders may be applied after mulch is spread or may be sprayed into the mulch as it is being blown onto the soil. Applying straw and binder together is the most effective method.

Chemical binders such as Petroset, Terratack, Road Oyl, and Aerospray may be used as recommended by the manufacturer to anchor mulch. These are expensive and therefore usually used in small areas or in residential areas where asphalt may be a problem. (Use of trade names does not constitute an endorsement by FDEP).

3. Mulch nettings - Lightweight plastic, cotton, or paper nets may be stapled over the mulch. Netting shall be secured by stakes, staples, or pins according to manufacturer's recommendations. See Plate 6.75g for details.

4. Peg and Twine - Because it is labor intensive, this method is feasible only in small areas where other methods cannot be used. Drive 8 - 10 inch (20 -25 cm) wooden pegs to within 3 inches (8 cm) of the soil surface, every 4 feet (1.2 m) in all directions. Stakes may be driven before or after straw is spread. Secure mulch by stretching twine between pegs in a criss-cross-within-a-square pattern. Turn twine 2 or more times around each peg.

Laying Nets, Mats, and Blankets

Nets, mats, and blankets should be installed according to the manufacturers' instructions, provided that they are at least as stringent as the general recommendations below.

1. Start laying net from top of channel or top of slope and unroll downgrade.

2. Allow to lay loosely on soil--do not stretch.

3. **To secure net:** Upslope ends of net should be buried in a slot or trench no less than 6 inches (15 cm) deep. Tamp earth firmly over net. Staple the net every 12 inches (30 cm) across the top end. Edges of net shall be stapled every 3 feet (90 cm). Where 2 strips of net are laid side by side, the adjacent edges shall be overlapped 3 inches (8 cm) and stapled together. Staples shall be placed down the center of net strips at 3-foot (90 cm) intervals. DO NOT STRETCH net when applying staples.

4. **Joining strips:** Insert new roll of net in trench, as with upslope ends of net. Overlap the end of the previous roll 18 inches (45 cm), turn under 6 inches (15 cm), and staple across end of roll just below anchor slot and at the end of the turned-under net every 12 inches (30 cm).

5. **At bottom of slopes**: Lead net out onto a level area before anchoring. Turn ends under 6 inches (15 cm), and staple across end every 12 inches (30 cm).

6. **Check slots**: On highly erodible soils and on slopes steeper than 4:1, erosion check slots should be made every 15 feet (4.5 m). Insert a fold of net into a 6-inch (15 cm) trench and tamp firmly. Staple at 12-inch (30 cm) intervals across the downstream portion of the net.

7. After installation, stapling, and seeding, net should be rolled to insure firm contact between net and soil.

Maintenance

All mulches should be inspected periodically, in particular after rainstorms, to check for rill erosion. Where erosion is observed additional mulch should be applied. Net should be inspected after rainstorms for dislocation or failure. If washouts or breakage occur, re-install net as necessary after repairing damage to the slope. Inspections should take place up until grasses are firmly established. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

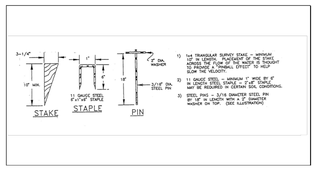
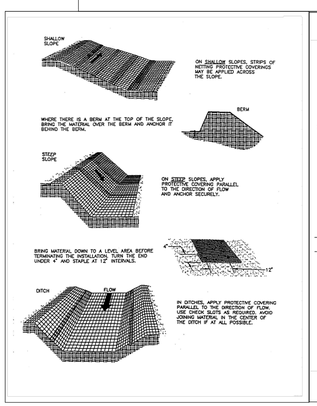
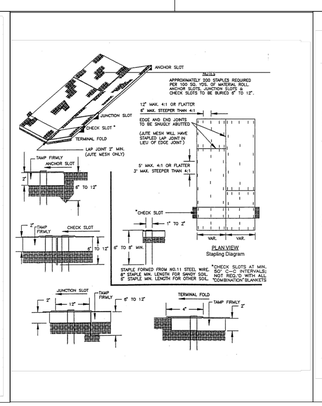
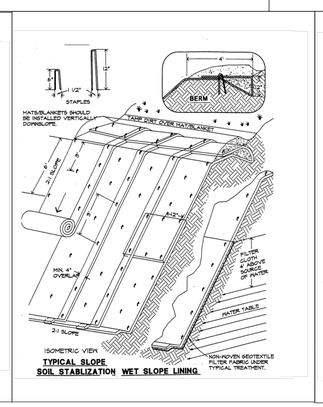
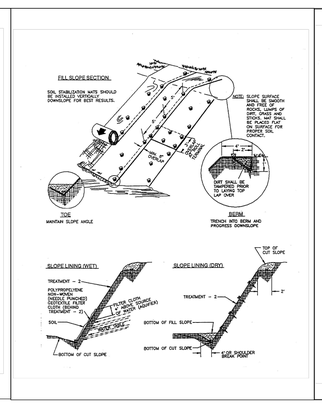


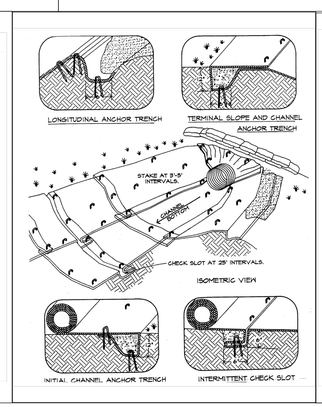
Plate 6.75g Stakes, Staples, and Pins for Installation Soil Stabilization Matting
Source: Product Literature from Greenstreak, Inc.

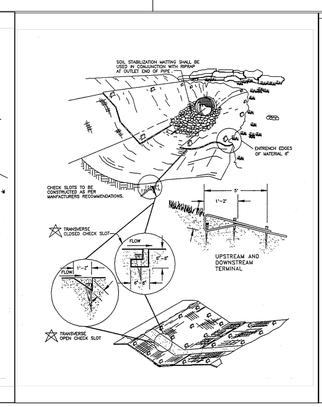


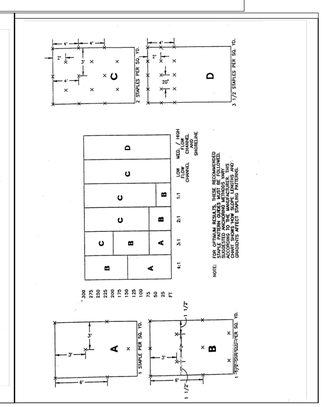












M MULCHING NTS

PANDA EXPRESS, INC.
1683 WALNUT GROVE AVE.
ROSEMEAD, CALIFORNIA 91770
TELEPHONE: 626.799.9898
FACSIMILE: 626.372.8288

REVISIONS:

C1	1ST COUNTY COMMENTS	04/05/2021
C2	2ND COUNTY COMMENTS	06/04/2021

ISSUE DATE:

	ALT. STANDARDS	12/17/2020
	PRELIMINARY SITE PLAN	01/12/2021
	COUNTY COMMENTS	04/05/2021
	ISSUE FOR BID	06/04/2021

DRAWN BY: INGENIUM

PANDA PROJECT #: D8135
PANDA STORE #:
ARCH PROJECT #:

ingenium ENTERPRISES
PLANNING & ENGINEERING

ESPC DETAILS V
C06.8

TRUE WARM & WELCOME 2300