DATE 03/11/2008

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000026833

APPLICANT BECKY DUGAN PHONE 752-8653

ADDRESS P.O. BOX 815 LAKE CITY FL 32056

OWNER GENESIS DEVELOPERS PHONE 752-8653

ADDRESS 139 SW HIGH STREET LAKE CITY FL 32025

CONTRACTOR BRYAN ZECHER PHONE 752-8653

LOCATION OF PROPERTY 41S, ACROSS FROM THE HIGH SCHOOL, CORNER OF HIGH ST AND S. MARION ON RIGHT

TYPE DEVELOPMENT COMM. RETAIL MALL ESTIMATED COST OF CONSTRUCTION 350000.00

HEATED FLOOR AREA 6250.00 TOTAL AREA 6250.00 HEIGHT 26.20 STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 5/12 FLOOR SLAB

LAND USE & ZONING CI MAX. HEIGHT

Minimum Set Back Requirments: STREET-FRONT REAR 15.00 SIDE 5.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 08-4S-17-08197-000 SUBDIVISION

LOT BLOCK PHASE UNIT TOTAL ACRES

000001571		CBC054575	Becky Dugan	
Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor	
CULVERT	179/180	BK	JH	N
Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident

COMMENTS: ENG. DETERMINATION OF 98.75, ELEVATION CONFIRMATION LETTER REQUIRED AT SLAB

Check # or Cash 2231

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ date/app. by | Foundation _____ date/app. by | Monolithic _____ date/app. by

Under slab rough-in plumbing _____ date/app. by | Slab _____ date/app. by | Sheathing/Nailing _____ date/app. by

Framing _____ date/app. by | Rough-in plumbing above slab and below wood floor _____ date/app. by

Electrical rough-in _____ date/app. by | Heat & Air Duct _____ date/app. by | Peri. beam (Lintel) _____ date/app. by

Permanent power _____ date/app. by | C.O. Final _____ date/app. by | Culvert _____ date/app. by

M/H tie downs, blocking, electricity and plumbing _____ date/app. by | Pool _____ date/app. by

Reconnection _____ date/app. by | Pump pole _____ date/app. by | Utility Pole _____ date/app. by

M/H Pole _____ date/app. by | Travel Trailer _____ date/app. by | Re-roof _____ date/app. by

BUILDING PERMIT FEE $ 1,750.00 CERTIFICATION FEE $ 31.25 SURCHARGE FEE $ 31.25

MISC. FEES $ 0.00 ZONING CERT. FEE $ 50.00 FIRE FEE $ 0.00 WASTE FEE $

FLOOD DEVELOPMENT FEE $ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ 25.00 **TOTAL FEE$ 1,912.50**

INSPECTORS OFFICE CLERKS OFFICE CH

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED TO BE IN ACTIVE PROGESS WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permit Application

1750.00
1912.50

For Office Use Only Application # 0709-83 Date Received 9/28/07 By G Permit # 1571/26833

Application Approved by - Zoning Official BLK Date 03/0/07 Plans Examiner OKTH Date 2-22-08

Flood Zone X Development Permit N/A Zoning CI Land Use Plan Map Category Commercial

Comments Eng/determination of 98.75' Elevation confirmation letter required

□ NOC ☒ EH ☒ Deed or PA ☒ Site Plan □ State Road Info □ Parent Parcel # □ Development Permit

Name Authorized Person Signing Permit Bryan Zecher Fax 758-8920 Phone 752-8653

Address Po Box 815 Lake City, FL 32056

Owners Name Genesis Developers Phone 752-8653

911 Address 139 SW High Street Lake City, FL 32025-0293

Contractors Name Bryan Zecher Construction Phone 752-8653

Address P.O. Box 815 Lake City, FL 32056

Fee Simple Owner Name & Address ~~Bo~~ Genesis Developers, Po Box 815 LC, FL 32056

Bonding Co. Name & Address —

Architect/Engineer Name & Address Nicholas Geisler 1758 NW Brown Rd. L.C. 32055

Mortgage Lenders Name & Address —

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy

Property ID Number 08-4S-17-08197-000 and Estimated Cost of Construction $350,000.00

Subdivision Name Dixie Villa/08-4S-17-08199-001 Lot ~~1-3~~ Block A Unit ____ Phase ____

Driving Directions From US Hwy 90, turn South onto Marion St. Job site is across from the high school. corner of High St. & Marion on Right

Type of Construction Strip Mall Commercial Retail/office Number of Existing Dwellings on Property 1

Total Acreage .803 Lot Size 35,000 S.F. Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 64 Side 51 Side 45 Rear 15

Total Building Height 26'2" Number of Stories 1 Heated Floor Area 6250 s.f. Roof Pitch 5/12

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Owner Builder or Authorized Person by Notarized Letter

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me
this 17th day of September 20 07.
Personally known ✓ or Produced Identification ____

Contractor Signature
Contractors License Number CBC054575
Competency Card Number
NOTARY STAMP/SEAL

REBECCA DUGAN
MY COMMISSION #DD452939
EXPIRES: JUL 20, 2009
Bonded through 1st State Insurance

Rebecca Dugan
Notary Signature

(Revised Sept. 2006)

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT II YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment

According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE:

YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

OWNERS CERTIFICATION: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

_____

Owners Signature

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit.

_____

Contractor's Signature (Permitee)

Contractor's License Number CBC054575

Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 25th **day of** February **20** 08.

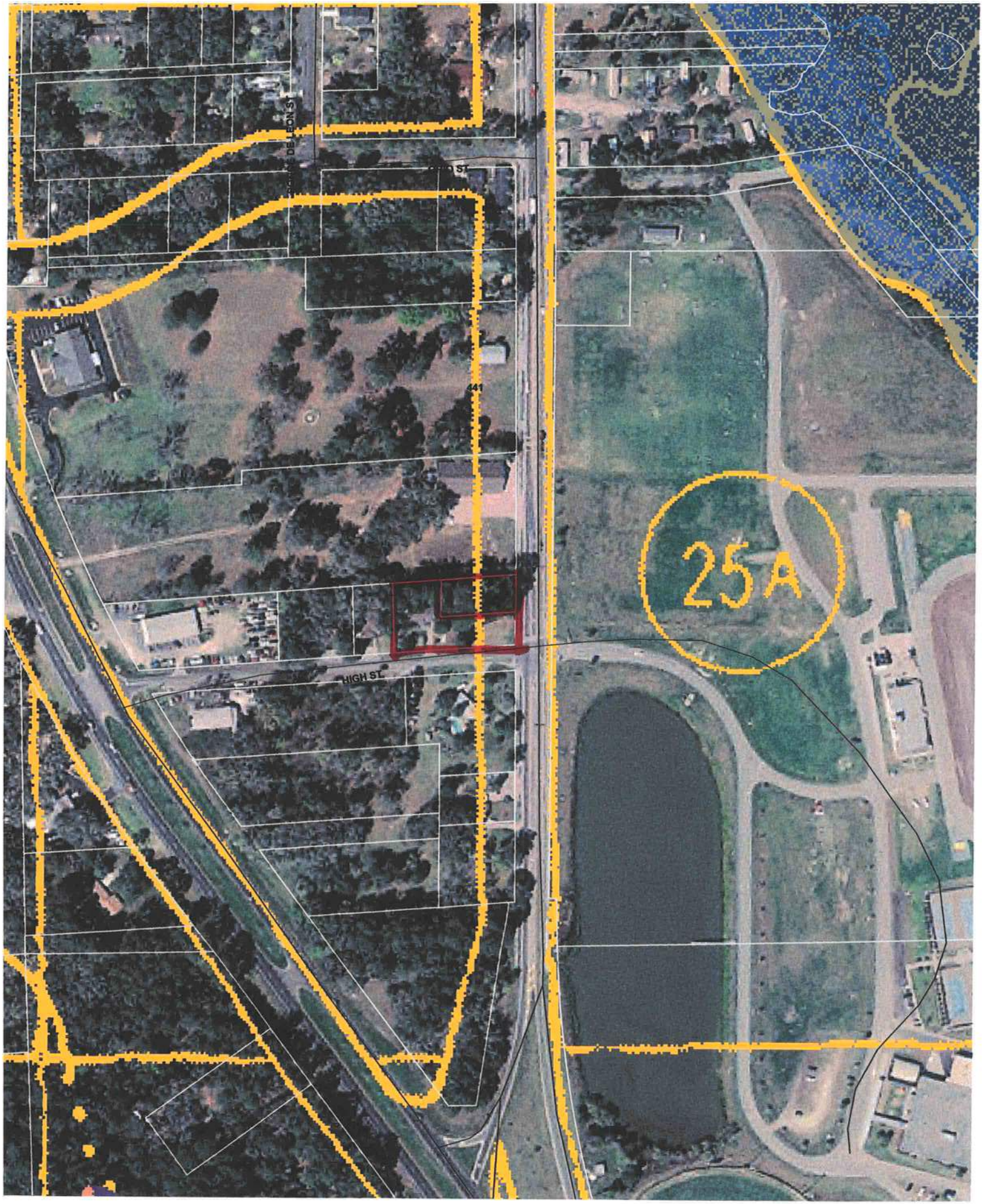
Personally known ✓ **or Produced Identification** _____

Rebecca Dugan

State of Florida Notary Signature (For the Contractor)

SEAL:

REBECCA DUGAN
MY COMMISSION #DD452939
EXPIRES: JUL 20, 2009
Bonded through 1st State Insurance



0709-83

3 October 2007

TO: File

FROM: Land Development Regulation Administrator

SUBJECT: BP 07-4 (Zecher/Genesis Developers, LLC)

Concurrency Assessment Concerning a Building Permit

The following assessment is provided for the purpose of a binding concurrency determination regarding the demand and residual capacities for public facilities required to be addressed within the Concurrency Management System. This assessment serves as a binding concurrency determination, but does not ensure that facilities, which are not owned, operated or permitted by the County will be available to the property at the time development occurs.

BP 07-4, an application by Bryan Zecher, as agent for Genesis Developers, LLC, for building permit approval for general office and warehouse use located in a COMMERCIAL INTENSIVE (CI) zoning district in accordance with a site plan and submitted as part of building permit application 0709-83 dated September 28, 2007 to be located on property described, as follows:

A parcel of land lying with in Section 8, Township 4 South, Range 17 East, Columbia County, Florida. Being more particularly described, as follows: Lots 1, 2, 3, 4, 5, 6, 7 and the East 20.0 feet of Lot 8, Dixie Villa Subdivision as recorded in the Public Records of Columbia County Florida.

Containing 0.80 acre, more or less.

Availability of and Demand on Public Facilities

Potable Water Impact -

The site is located within the City of Lake City community potable water system service area. The community potable water system is currently meeting or exceeding the adopted level of service standard for potable water facilities established within the Comprehensive Plan.

The proposed development will result in the location of 3,750 square feet gross floor area of specialty retail use and 4,380 square feet gross floor area of warehouse use to be located on the site.

An average specialty retail use is estimated to have 1.82 employees per 1,000 square feet gross floor area:

3.75 (3,750 square feet gross floor area) x 1.82 (employees per 1,000 square feet gross floor area) = 7 employees x 45 gallons of potable water usage per employee per day = 315 gallons of potable water usage per day.

An average warehouse use is estimated to have 1.87 employees per 1,000 square feet gross floor area.

3.75 (3,750 square feet gross floor area) x 1.87 (employees per 1,000 square feet gross floor area) = 7 employees x 22.5 (gallons of potable water generated per 1,000 square feet gross floor area) = 158 gallons of potable water generated per day.

Therefore, the estimated number of gallons of potable water generated day = 473 gallons per day (315 + 158 = 473).

Permitted capacity of the community potable water system = 6,000,000 gallons of potable water per day.

The average daily potable water usage for 2006 = 3,320,000 gallons of potable water per day

Residual available capacity prior to reserved capacity for previously approved development = 2,680,000 gallons of potable water per day.

Less reserved capacity for previously approved development = 147,451 gallons of potable water per day.

Residual available capacity after reserved capacity for previously approved development = 2,532,549 gallons of potable water per day.

Less estimated gallons of potable water use as a result of this proposed development = 473 gallons of potable water per day.

Residual capacity after proposed development = 2,532,076 gallons of potable water per day.

Based upon the above analysis, the potable water facilities are anticipated to continue to meet or exceed the adopted level of service standard for potable water facilities as provided in the Comprehensive Plan, after adding the potable water demand generated by the special retail and warehouse use of the site.

Sanitary Sewer Impact -

The site is located within the City of Lake City community centralized sanitary sewer system service area. The community centralized sanitary sewer system is currently meeting or exceeding the adopted level of service standard for sanitary sewer established within the Comprehensive Plan. Currently the City of Lake City has a temporary permit from F.D.E.P. allowing for an addition 500,000 gallons of sanitary sewer effluent being treated per day.

The proposed development will result in the location of 3,750 square feet gross floor area of specialty retail use and 4,380 square feet gross floor area of warehouse use to be located on the site.

An average specialty retail use is estimated to have 1.82 employees per 1,000 square feet gross floor area:

3.75 (3,750 square feet gross floor area) x 1.82 (employees per 1,000 square feet gross floor area) = 7 employees x 34.5 (gallons of sanitary sewer effluent per employee per day) = 242 gallons of sanitary sewer effluent per day.

Permitted available capacity of the community centralized sanitary sewer system = 3,000,000 gallons of sanitary sewer effluent per day.

An average warehouse use is estimated to have 1.87 employees per 1,000 square feet gross floor area.

3.75 (3,750 square feet gross floor area) x 1.87 (employees per 1,000 square feet gross floor area) = 7 employees x 17.25 (gallons of sanitary sewer effluent generated per day) = 121 gallons of sanitary sewer effluent generated per day.

Therefore, the estimated number of gallons of sanitary sewer effluent generated per day = 363 gallons (242 + 121 = 363).

The average daily sanitary sewer usage for 2006 = 2,400,000 gallons of sanitary sewer effluent per day.

The residual available capacity prior to reserved capacity for previously approved development = 600,000 gallons of sanitary sewer effluent per day.

With the temporary permit allowing an additional 500,000 gallons of sanitary sewer effluent per day. The residual available capacity prior to reserved capacity for previously approved development = 1,100,000 gallons of sanitary sewer effluent per day.

Less reserved capacity for previously approved development = 1,050,433 gallons of sanitary sewer effluent per day.

Residual available capacity after reserved capacity for previously approved development = 49,567 gallons of sanitary sewer effluent per day.

Less estimated gallons of sanitary sewer use as a result of this proposed development = 363 gallons of sanitary sewer effluent per day.

Residual capacity after the proposed development = 49,204 gallons of sanitary sewer effluent per day.

Based upon the above analysis, the sanitary sewer facilities are anticipated to continue to meet or exceed the adopted level of service standard for sanitary sewer facilities as provided in the Comprehensive Plan, after adding the sanitary sewer demand generated by the specialty retail and warehouse use of the site.

Solid Waste Impact -

Solid waste facilities for the use to be located on the site are provided at the County sanitary landfill, the level of service standard established within the Comprehensive Plan for the provision of solid waste disposal is currently being met or exceeded.

The proposed development will result in the location of 3,750 square feet gross floor area of specialty retail use and 4,380 square feet gross floor area of warehouse use to be located on the site.

Based upon an average of 5.5 pounds of solid waste generated per 1,000 square feet gross floor area per day:

7.5 (7,500 square feet gross floor area) x 5.5 (pounds of solid waste generated per 1,000 square feet gross floor area per day) = 42 pounds of solid waste generated per day.

Total County average solid waste disposal per day (including municipalities) = 416,000 pounds per day.

Based upon the annual projections of solid waste disposal at the sanitary landfill for 2007, solid waste facilities are anticipated to meet or exceed the adopted level of service standard for solid waste facilities, as provided in the Comprehensive Plan, after adding the solid waste demand generated by the specialty retail and warehouse use of the site.

Drainage Impact -

Drainage facilities are already maintained on site for the management of stormwater. As stormwater is to be retained on site, the proposed development is not anticipated to adversely impact drainage systems. Therefore, the adopted level of service standard for drainage established within the Comprehensive Plan is anticipated to continue to be met or exceeded.

Recreation Impact -

The level of service standards established within the Comprehensive Plan for the provision of recreation facilities are currently being met or exceeded.

As there will be no additional population generated by the proposed specialty retail use, the proposed development is not anticipated to have an adverse impact on recreational facilities. Therefore, the level of service standards established within the Comprehensive Plan for the provision of recreation facilities are anticipated to continue to be met or exceeded.

Traffic Impact -

The roadway serving the site is currently meeting or exceeding the level of service standard required for traffic circulation facilities as provided in the Comprehensive Plan.

The proposed development will result in the location of 3,750 square feet gross floor area of specialty retail use and 4,380 square feet gross floor area of warehouse use to be located on the site.

Summary of Trip Generation Calculations for Specialty Retail Use

Based upon 0.96 p.m. peak hour trips per 1,000 square feet gross floor area per day:

3.75 (3,750 square feet gross floor area) x 0.96 (trips per 1,000 square feet gross floor area per day) = 4 p.m. peak hour trips per day.

Summary of Trip Generation Calculations for a Warehouse Use

Based upon .59 p.m. peak hour trips on a weekday per 1,000 square foot gross floor area:

3.75 (3,750 square foot gross floor area) x .59 (p.m. peak hour trips per weekday) = 3 p.m. peak hour trips per day.

Therefore, the estimated number of p.m. peak hour trips generated per day = 7 p.m. peak hour trips per day (4 + 3 = 7).

Existing p.m. peak hour trips = 6,600 annual average daily traffic trips per day (2006 Annual Average Daily Traffic Count Station Data, Florida Department of Transportation). x .095 (k factor) = 627 peak hour p.m. trips per day.

The following table contains information concerning the assessment of the traffic level of service on the surrounding road network by the proposed development.

Level of Service Section	Existing P.M. Peak Hour Trips	Existing Level of Service	Reserved Capacity P.M. Peak Hour Trips Previously Approved	Development P.M. Peak Hour Trips	P.M. Peak Hour Trips With Development	Level of Service With Development
Section 4 U.S. 441 (from Lake City South limits to U.S.41)	627[a]	C	0	7	634	C

a 2006 Annual Average Daily Traffic Count Station Data, Florida Department of Transportation.

Sources: Trip Generation. Institute of Transportation Engineers, 7th Edition, 2003.

Quality/Level of Service Handbook. Florida Department of Transportation, February 2002.

Based upon the above analysis and the adopted level of service standard of "D" with a capacity of 1,560 p.m. peak hour trips for Section 4, the roadway serving the site is anticipated to continue to meet or exceed the level of service standard required for traffic circulation facilities as provided in the Comprehensive Plan after adding the projected number of trips associated with the proposed development.

Surrounding Land Uses

The current land use of the site is single family residential. The site is bound on the north by commercial, on the east by a school, on the south by single family residential and on the west by multi-family residential land uses.

Historic Resources

According to Illustration A-II of the Comprehensive Plan, entitled Historic Resources, which is based upon the Florida Division of Historical Resources, Master Site File, dated 1989 and 1996, there are no known historic resources located on the site.

Flood Prone Areas

According to Illustration A-V of the Comprehensive Plan, entitled General Flood Map, which is based upon the Flood Insurance Rate Map, prepared by the Federal Emergency Management Agency, dated January 6, 1988, the site is not located within flood zone area.

Wetlands

According to Illustration A-VI of the Comprehensive Plan, entitled Wetland Areas, which is based upon the National Wetlands Reconnaissance Survey, dated 1981, and the National Wetlands Inventory, dated 1987, there are no wetlands located on the site.

Minerals

According to Illustration A-VII of the Comprehensive Plan, entitled Minerals, which is based upon Natural Resources, prepared by the North Central Florida Regional Planning Council, 1977, the site is within an area known to contain phosphate deposits.

Soil Types

According to Illustration A-VIII of the Comprehensive Plan, entitled General Soil Map, which is based upon the U.S. Department of Agriculture, Soil Conservation Service, Soil Survey dated October 1984, the Bonneau fine sand soils (2 to 5 percent slopes).

Bonneau fine sand soils (2 to 5 percent slopes) are moderately well drained, gently sloping soils on uplands and on knolls in the uplands. The surface and subsurface layers are comprised of fine sand to a depth of 27 inches. The subsoil layer is comprised of fine sandy loam and sandy clay loam to a depth of 80 inches.

Bonneau fine sand soils (2 to 5 percent slopes) have slight limitations for building site development.

Stream to Sink

According to the Stream to Sink Watersheds, prepared by the Suwannee River Water Management District, dated October 7, 1997, the site is not located within a stream to sink area.

High Aquifer Groundwater Recharge

According to the Areas of High Recharge Potential to the Floridan Aquifer, prepared by the Suwannee River Water Management District, dated July 17, 2001, the site is not located within an area of high aquifer groundwater recharge.

Vegetative Communities/Wildlife

According to Illustration V-I of the Data and Analysis Report, entitled Vegetative Communities, the site is located within a non-vegetative community. There are no known wildlife habitats associated with a non-vegetative community.

>> **Print as PDF** <<

LOTS 3, 4 & 5 BLOCK A DIXIE VILLA S/D. ORB 637-798 THRU 637-801, WD 1020-839, DC 1101-2476, WD 1115-2501

GENESIS DEVELOPERS LLC
465 NW ORANGE ST
LAKE CITY, FL 32056

08-4S-17-08197-000

Columbia County 2007 R
CARD 001 of 001

PRINTED 8/01/2007 13:08 BY JEFF
APPR 4/14/2004 ME

BUSE		AE?	HTD AREA	.000	INDEX	8417.02	DIXIE VLA
MOD	BATH		EFF AREA	25.144	E-RATE	.000	INDX
EXW	FIXT		RCN				AYB
%	BDRM		%GOOD		BLDG VAL		EYB
RSTR	RMS						
RCVR	UNTS						
%	C-W%						
INTW	HGHT						
%	PMTR						
FLOR	STYS						
%	ECON						
HTTP	FUNC						
A/C	SPCD						
QUAL	DEPR						
FNDN	UD-1						
SIZE	UD-2						
CEIL	UD-3						
ARCH	UD-4						
FRME	UD-5						
KTCH	UD-6						
WNDO	UD-7						
CLAS	UD-8						
OCC	UD-9						
COND	%						

SUB	A-AREA	%	E-AREA	SUB VALUE
TOTAL				

FIELD CK:
LOC: --

PUSE	000000	VACANT	
STR	8- 4S- 17		
MKT AREA	06		
(PUD1			0 BLDG
AC	.275		0 XFOB
NTCD			9,000 LAND
APPR CD			0 AG
CNDO			0 MKAG
SUBD			9,000 JUST
BLK			0 CLAS
LOT			
MAP#			0 SOHD
			0 ASSD
TXDT	002		0 EXPT
			0 COTXBL

BLDG TRAVERSE

PERMITS

NUMBER	DESC	AMT	ISSUED

SALE

BOOK	PAGE	DATE	PRICE
1115	2501	4/05/2007 Q V	169000
GRANTOR JOSEPH & CAROLE GRAZIANO			
GRANTEE GENESIS DEVELOPERS LLC			
1020	839	6/10/2004 Q V	6000
GRANTOR BANKS, ROBINSON, SHERIDAN			
GRANTEE JOSEPH & CAROLE C GRAZIANO			

EXTRA FEATURES

AE	BN	CODE	DESC	LEN	WID	HGHT	QTY	QL	YR	ADJ	UNITS	UT	PRICE	ADJ UT PR	SPCD %	%GOOD	XFOB VALUE

FIELD CK:

AE	LAND CODE	DESC	ZONE	TOPO	ROAD UTIL	UD1 UD2 UD3 UD4	FRONT	DEPTH	DT	ADJUSTMENTS	UNITS	UT	PRICE	ADJ UT PR	LAND VALUE
Y	000000	VAC RES	RSF-2				80	150	1.00 1.00 1.00 1.25		12000.000	SF	.600	.75	9,000
2007															

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LOTS 1, 2, 6, 7 & E 20 FT LOT 8 BLOCK A DIXIE VILLA S/D. ORB 812-2365, DC 1101-2476, WD 1115-2501

GENESIS DEVELOPERS LLC
465 NW ORANGE ST
LAKE CITY, FL 32056

08-4S-17-08199-001

Columbia County 2007 R
CARD 001 of 001
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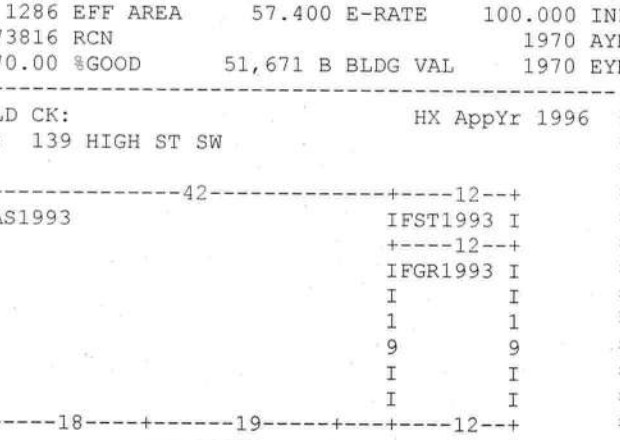
APPR 4/28/2004 TW

BUSE	000100 SINGLE FAM		AE? Y	1092 HTD AREA	114.800 INDEX	8417.02 DIXIE VLA		PUSE	000100 SINGLE FAMILY		
MOD	1 SFR	BATH	1.00	1286 EFF AREA	57.400 E-RATE	100.000 INDX	STR 8- 4S- 17				
EXW	19 COMMON BRK	FIXT		73816 RCN		1970 AYB	MKT AREA 06			51,671	BLDG
%	0000000000	BDRM	3	70.00 %GOOD	51,671 B BLDG VAL	1970 EYB	(PUD1			1,700	XFOB
RSTR	03 GABLE/HIP	RMS					AC	.528		17,250	LAND
RCVR	03 COMP SHNGL	UNTS		FIELD CK:		HX AppYr 1996	NTCD			0	AG
%	N/A	C-W%		LOC: 139 HIGH ST SW			APPR CD			0	MKAG
INTW	05 DRYWALL	HGHT					CNDO			70,621	JUST
%	N/A	PMTR					SUBD			0	CLAS
FLOR	14 CARPET	STYS	1.0				BLK				
10%	08 SHT VINYL	ECON					LOT			0	SOHD
HTTP	04 AIR DUCTED	FUNC					MAP#			0	ASSD
A/C	03 CENTRAL	SPCD								0	EXPT
QUAL	05 05	DEPR	52				TXDT	002		0	COTXBL
FNDN	N/A	UD-1	N/A								
SIZE	03 RECTANGLE	UD-2	N/A								
CEIL	N/A	UD-3	N/A								
ARCH	N/A	UD-4	N/A								
FRME	01 NONE	UD-5	N/A								
KTCH	01 01	UD-6	N/A								
WNDO	N/A	UD-7	N/A								
CLAS	N/A	UD-8	N/A								
OCC	N/A	UD-9	N/A								
COND	03 03	%	N/A								



BLDG TRAVERSE

BAS1993=W42 S26 E18 FOP1993=S4E19 N4 W19$ E24 FGR1993=E12 N19W12 S19$ N19 FST1993= E12 N7W12S7$ N7$.

SUB	A-AREA	%	E-AREA	SUB VALUE
BAS93	1092	100	1092	43877
FST93	84	55	46	1848
FOP93	76	30	23	924
FGR93	228	55	125	5022
TOTAL	1480		1286	51671

PERMITS

NUMBER	DESC	AMT	ISSUED

SALE

BOOK	PAGE	DATE		PRICE
1115	2501	4/05/2007	Q I	169000
GRANTOR JOSEPH R GRAZIANO				
GRANTEE GENESIS DEVELOPERS LLC				
812	2365	11/01/1995	Q I	45000
GRANTOR JULIAN MCCRANIE				
GRANTEE J R GRAZIANO				

EXTRA FEATURES

AE	BN	CODE	DESC	LEN	WID	HGHT	QTY	QL	YR	ADJ	UNITS	UT	PRICE	ADJ UT PR	SPCD %	%GOOD	XFOB VALUE
Y		0166	CONC,PAVMT				1		2003	1.00	1.000	UT	800.000	800.000		100.00	800
Y		0294	SHED WOOD/VI	12	10		1		2003	1.00	120.000	SF	7.500	7.500		100.00	900

AE	LAND CODE	DESC	ZONE	TOPO	ROAD UTIL	{UD1 {UD2	{UD3 {UD4	FRONT	DEPTH	FIELD CK: ADJUSTMENTS	UNITS	UT	PRICE	ADJ UT PR	LAND VALUE
Y	000100	SFR	RSF-2					250	140	1.00 1.00 1.00 1.25	23000.000	SF	.600	.75	17,250
2007															

Columbia County Building Department
Culvert Permit

Culvert Permit No.
000001571

DATE 03/11/2008 PARCEL ID # 08-4S-17-08197-000

APPLICANT BECKY DUGAN PHONE 752-8653

ADDRESS P.O. BOX 815 LAKE CITY FL 32056

OWNER GENESIS DEVELOPERS PHONE 752-8653

ADDRESS 139 SW HIGH STREET LAKE CITY FL 32025

CONTRACTOR BRYAN ZECHER PHONE 752-8653

LOCATION OF PROPERTY 41S, ACROSS FROM THE HIGH SCHOOL, CORNER OF HIGH ST AND S. MARION ON RIGHT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT

SIGNATURE Becky Dugan

INSTALLATION REQUIREMENTS

[X] Culvert size will be 18 inches in diameter with a total lenght of 32 feet, leaving 24 feet of driving surface. Both ends will be mitered 4 foot with a 4 : 1 slope and poured with a 4 inch thick reinforced concrete slab.

INSTALLATION NOTE: Turnouts will be required as follows:
a) a majority of the current and existing driveway turnouts are paved, or;
b) the driveway to be served will be paved or formed with concrete.
Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.

[ ] Culvert installation shall conform to the approved site plan standards.

[ ] Department of Transportation Permit installation approved standards.

[ ] Other

ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED DURING THE INSTALATION OF THE CULVERT.

135 NE Hernando Ave., Suite B-21
Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160

Amount Paid 25.00

COLUMBIA COUNTY GATEWAY TO FLORIDA

Florida Energy Efficiency Code For Building Construction
Florida Department of Community Affairs

EnergyGauge FlaCom v 2.11 FORM 400A-2004
Whole Building Performance Method for Commercial Buildings

Jurisdiction: LAKE CITY, COLUMBIA COUNTY, FL (221200)

Short Desc: High St. Project
Owner: Genesis Developers
Address: 139 S.W. High Street

Project: South Marion Plaza

City: Lake City
State: FL
Zip: 0

PermitNo: 0
Storeys: 1

Type: Office
Class: New Finished building

***Conditioned Area:** 6250
***Cond + UnCond Area:** 6250

* denotes lighted area. Does not include wall crosection areas

Max Tonnage: 2.5 (if different, write in)

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Use	5,329.91	5,811.96	**PASSES**
LIGHTING CONTROLS			**PASSES**
EXTERNAL LIGHTING			**PASSES**
HVAC SYSTEM			**PASSES**
PLANT			**None Entered**
WATER HEATING SYSTEMS			**PASSES**
PIPING SYSTEMS			**Not Checked**
Met all required compliance from Check List?			**Yes/No/NA**

IMPORTANT NOTE: An input report Print-Out from EnergyGauge Com of this design building must be submitted along with this Compliance Report.

COMPLIANCE CERTIFICATION:

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Efficiency Code.

PREPARED BY: David Royal - ADD, Inc.

DATE: _____

I hereby certify that this building is in compliance with the Florida Energy Efficiency Code.

OWNER AGENT: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed, this building will be inspected for compliance in accordance with Section 553.908, F.S.

BUILDING OFFICIAL: _____

DATE: _____

If required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Code.

	REGISTRATION No.
ARCHITECT :	**Nick Geisler**
ELECTRICAL SYSTEM DESIGNER	
LIGHTING SYSTEM DESIGNER:	
MECHANICAL SYSTEM DESIGNER:	
PLUMBING SYSTEM DESIGNER:	

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.
Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: High St. Project
Title: South Marion Plaza
Type: Office
(WEA File: JACKSONVILLE.TMY)

Whole Building Compliance

	Design	Reference
Total	*91.53*	*100.00*
	$5,329.91	*$5,811.96*
ELECTRICITY(MBtu/kWh/$)	91.53	100.00
	107,675.00	117,651.00
	$5,329.91	*$5,811.96*
AREA LIGHTS	16.04	17.90
	18,865.00	21,054.00
	$933.82	*$1,040.07*
MISC EQUIPMT	11.68	11.68
	13,736.00	13,736.00
	$679.93	*$678.56*
PUMPS & MISC	0.90	0.90
	1,050.00	1,060.00
	$51.97	*$52.36*
SPACE COOL	18.25	19.27
	21,464.00	22,671.00
	$1,062.47	*$1,119.95*
VENT FANS	44.67	50.25
	52,560.00	59,130.00
	$2,601.72	*$2,921.02*

Credits & Penalties (if any): Modified Points: = 91.54 | **PASSES**

Project: High St. Project
Title: South Marion Plaza
Type: Office
(WEA File: JACKSONVILLE.TMY)

External Lighting Compliance

Description	Category	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 3	Building Entrance with (or free standing) Canopy	3.00			

Design: 0 (W)
Allowance: 0 (W)

PASSES

Project: High St. Project
Title: South Marion Plaza
Type: Office
(WEA File: JACKSONVILLE.TMY)

Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	No. of Tasks	Design CP	Min CP	Compliance
Off1	16	Office - Open Plan	1,250	1	1	1	PASSES
Off2	16	Office - Open Plan	1,250	1	1	1	PASSES
Off2	16	Office - Open Plan	1,250	1	1	1	PASSES
Off2	16	Office - Open Plan	1,250	1	1	1	PASSES
Off1	16	Office - Open Plan	1,250	1	1	1	PASSES

PASSES

Project: High St. Project
Title: South Marion Plaza
Type: Office
(WEA File: JACKSONVILLE.TMY)

System Report Compliance

Pr0Sy1 **System 1** **Condensing Units** **No. of Units 5**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Evap Cooled		14.00	13.10	14.00	13.10	PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.80	0.90			PASSES

PASSES

Plant Compliance

Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance

None

Project: High St. Project
Title: South Marion Plaza
Type: Office
(WEA File: JACKSONVILLE.TMY)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Electric water heater	<= 12 [kW]	0.95	0.88			PASSES

PASSES

Project: High St. Project
Title: South Marion Plaza
Type: Office
(WEA File: JACKSONVILLE.TMY)

Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Heating System (Steam, Steam Condensate, & Hot Water)	0.25	True	105.00	0.28	1.00	0.00	PASSES
Domestic and Service Hot Water Systems	0.25	True	105.00	0.28	2.00	0.50	PASSES
Cooling Systems (Chilled Water, Brine and Refrigerant)	0.25	False	105.00	0.28	0.00	0.50	Not Checked

Not Checked

Project: High St. Project
Title: South Marion Plaza
Type: Office
(WEA File: JACKSONVILLE.TMY)

Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Infiltration	406.1	Infiltration Criteria have been met	☐
System	407.1	HVAC Load sizing has been performed	☐
Ventilation	409.1	Ventilation criteria have been met	☐
ADS	410.1	Duct sizing and Design have been performed	☐
T & B	410.1	Testing and Balancing will be performed	☐
Motors	414.1	Motor efficiency criteria have been met	☐
Lighting	415.1	Lighting criteria have been met	☐
O & M	102.1	Operation/maintenance manual will be provided to owner	☐
Roof/Ceil	404.1	R-19 for Roof Deck with supply plenums beneath it	☐
Report	101	Input Report Print-Out from EnergyGauge FlaCom attached?	☐

EnergyGauge FlaCom v 2.11

INPUT DATA REPORT

Project Information

Project Name: High St. Project
Project Title: South Marion Plaza
Address: 139 S.W. High Street

State: FL
Zip: 0

Owner: Genesis Developers

Orientation: North
Building Type: Office
uilding Classification: New Finished building

No.of Storeys: 1
GrossArea: 6250

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]	
1	Off1	Office Nr. 1	CONDITIONED	1250.0	1	1250.0	☐
2	Off2	Office Nr.2	CONDITIONED	1250.0	1	1250.0	☐
3	Off3	Office Nr.2	CONDITIONED	1250.0	1	1250.0	☐
4	Off4	Office Nr.2	CONDITIONED	1250.0	1	1250.0	☐
5	Off5	Office Nr. 1	CONDITIONED	1250.0	1	1250.0	☐

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multiplier	Total Area [sf]	Total Volume [cf]	
In Zone:	**Off1**									
1	Off1	Office Nr.1	Office - Open Plan	50.00	25.00	10.00	1	1250.0	12500.0	☐
In Zone:	**Off2**									
1	Off2	Office Nr.2	Office - Open Plan	50.00	25.00	10.00	1	1250.0	12500.0	☐
In Zone:	**Off3**									
1	Off2	Office Nr.2	Office - Open Plan	50.00	25.00	10.00	1	1250.0	12500.0	☐
In Zone:	**Off4**									
1	Off2	Office Nr.2	Office - Open Plan	50.00	25.00	10.00	1	1250.0	12500.0	☐
In Zone:	**Off5**									
1	Off1	Office Nr.1	Office - Open Plan	50.00	25.00	10.00	1	1250.0	12500.0	☐

Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No.of Ctrl pts	
In Zone: **Off1**								
In Space: **Off1**								
1	Incandescent	General Lighting	8	160	1280	Manual On/Off	1	☐
In Zone: **Off2**								
In Space: **Off2**								
1	Incandescent	General Lighting	10	120	1200	Manual On/Off	1	☐
In Zone: **Off3**								
In Space: **Off2**								
1	Incandescent	General Lighting	10	120	1200	Manual On/Off	1	☐
In Zone: **Off4**								
In Space: **Off2**								
1	Incandescent	General Lighting	10	120	1200	Manual On/Off	1	☐
In Zone: **Off5**								

In Space: Off1									
1	Incandescent	General Lighting	8	160	1280	Manual On/Off	1	☐	

Walls

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Off1												
1	Pr0Zo1Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94	☐
2	Pr0Zo1Wa3	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94	☐
3	Pr0Zo1Wa4	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	10.00	1	500.0	North	0.1118	1.1829	14.94	8.94	☐
In Zone: Off2												
1	Pr0Zo2Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94	☐
2	Pr0Zo2Wa3	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94	☐
3	Pr0Zo2Wa4	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	10.00	1	500.0	North	0.1118	1.1829	14.94	8.94	☐
In Zone: Off3												
1	Pr0Zo2Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94	☐
2	Pr0Zo2Wa3	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94	☐
3	Pr0Zo2Wa4	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	10.00	1	500.0	North	0.1118	1.1829	14.94	8.94	☐
In Zone: Off4												

1	Pr0Zo2Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94
2	Pr0Zo2Wa3	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94
3	Pr0Zo2Wa4	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	10.00	1	500.0	North	0.1118	1.1829	14.94	8.94
In Zone: Off5											
1	Pr0Zo1Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94
2	Pr0Zo1Wa2	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	10.00	1	500.0	North	0.1118	1.1829	14.94	8.94
3	Pr0Zo1Wa3	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	10.00	1	250.0	North	0.1118	1.1829	14.94	8.94
4	Pr0Zo5Wa5	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	10.00	1	500.0	North	0.1118	1.1829	14.94	8.94

Windows

No	Description	Type	Shaded	U [Btu/hr sf F]	SHG	Vis.Tr	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]
In Zone: Off1										
In Wall Pr0Zo1Wa1										
1	Pr0Zo1Wa1Wi1	User Defined	No	1.2500	0.70	0.58	3.00	5.00	2	30.0
In Zone: Off2										
In Wall Pr0Zo2Wa1										
1	Pr0Zo2Wa1Wi1	User Defined	No	1.2500	0.70	0.58	3.00	5.00	2	30.0
In Zone: Off4										
In Wall Pr0Zo2Wa1										
1	Pr0Zo4Wa1Wi1	User Defined	No	1.2500	0.70	0.58	3.00	5.00	3	45.0
In Zone: Off5										
In Wall Pr0Zo1Wa1										
1	Pr0Zo1Wa1Wi1	User Defined	No	1.2500	0.70	0.58	3.00	5.00	1	15.0

Doors

No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]	
In Zone: Off1												
In Wall:	**Pr0Zo1Wa1**											
1	Pr0Zo1Wa1Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21	☐
In Wall:	**Pr0Zo1Wa3**											
1	Pr0Zo1Wa3Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21	☐
In Zone: Off2												
In Wall:	**Pr0Zo2Wa1**											
1	Pr0Zo2Wa1Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21	☐
In Wall:	**Pr0Zo2Wa3**											
1	Pr0Zo2Wa3Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21	☐
In Zone: Off4												
In Wall:	**Pr0Zo2Wa1**											
1	Pr0Zo4Wa1Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21	☐
In Wall:	**Pr0Zo2Wa3**											
1	Pr0Zo4Wa3Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21	☐
In Zone: Off5												
In Wall:	**Pr0Zo1Wa1**											
1	Pr0Zo5Wa1Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21	☐
In Wall:	**Pr0Zo1Wa3**											

	1	Pr0Zo5Wa3Dr1	Aluminum door, 1.25 in. polystyrene	No	3.00	7.00	1	21.0	0.1919	43.67	0.53	5.21

Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone: Off1											
1	Pr0Zo1Rf1	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	25.00	50.00	1	1250.0	0.00	0.0320	1.50	8.22	31.24
In Zone: Off2											
1	Pr0Zo2Rf1	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	25.00	50.00	1	1250.0	0.00	0.0320	1.50	8.22	31.24
In Zone: Off3											
1	Pr0Zo2Rf1	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	25.00	50.00	1	1250.0	0.00	0.0320	1.50	8.22	31.24
In Zone: Off4											
1	Pr0Zo2Rf1	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	25.00	50.00	1	1250.0	0.00	0.0320	1.50	8.22	31.24
In Zone: Off5											
1	Pr0Zo1Rf1	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	25.00	50.00	1	1250.0	0.00	0.0320	1.50	8.22	31.24

Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Tran	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]
In Zone:										
In Roof:										

Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Off1											
1	Pr0Zo1Fl1	Concrete floor, carpet and rubber pad	25.00	50.00	1	1250.0	0.5987	9.33	140.00	1.67	☐
In Zone: Off2											
1	Pr0Zo2Fl1	Concrete floor, carpet and rubber pad	25.00	50.00	1	1250.0	0.5987	9.33	140.00	1.67	☐
In Zone: Off3											
1	Pr0Zo2Fl1	Concrete floor, carpet and rubber pad	25.00	50.00	1	1250.0	0.5987	9.33	140.00	1.67	☐
In Zone: Off4											
1	Pr0Zo2Fl1	Concrete floor, carpet and rubber pad	25.00	50.00	1	1250.0	0.5987	9.33	140.00	1.67	☐
In Zone: Off5											
1	Pr0Zo1Fl1	Concrete floor, carpet and rubber pad	25.00	50.00	1	1250.0	0.5987	9.33	140.00	1.67	☐

Systems

Pr0Sy1 **System 1** **Condensing Units** **No. Of Units 5**

Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System (Evap Cooled)	30000.00	14.00	14.00	☐
2	Air Handling System -Supply (Air Handler (Supply) - Constant Volume)	1500.00	0.80		☐

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLV

Water Heaters

	W-Heater Description	Capacit	Cap.Unit	I/P Rt.	Efficienc		Loss	
1	Electric water heater	40	[Gal]	[kW]	0.9500	[Ef]	[Btu/h]	

Ext-Lighting

	Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]	
1	Ext Light 3	Building Entrance with (or free standing) Canopy	1	0	0.00	Photo Sensor control	0.00	

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?	
1	Heating System (Steam, Steam Condensate, & Hot Wat	105.00	0.28	0.25	1.00	Yes	
2	Domestic and Service Hot Water Systems	105.00	0.28	0.25	2.00	Yes	
3	Cooling Systems (Chilled Water, Brine and Refriger	105.00	0.28	0.25	0.00	No	

Fenestration Used

Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT	
ASHULTntAllFrm	User Defined	1	1.2500	0.7000	0.5800	☐

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat	
264	Matl264	ALUMINUM, 1/16 IN	No	0.0002	0.0050	26.0000	480.00	0.1000	☐
214	Matl214	POLYSTYRENE, EXP., 1-1/4IN,	No	5.2100	0.1042	0.0200	1.80	0.2900	☐
187	Matl187	GYP OR PLAS BOARD,1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000	☐
151	Matl151	CONC HW, DRD, 140LB, 4IN	No	0.4403	0.3333	0.7570	140.00	0.2000	☐
178	Matl178	CARPET W/RUBBER PAD	Yes	1.2300					☐
267	Matl267	0.75" stucco	No	0.1563	0.0625	0.4000	16.00	0.2000	☐
266	Matl266	2x4@16" oc + R11 Batt	No	8.3343	0.2917	0.0350	9.70	0.2000	☐
12	Matl12	3 in. Insulation	No	10.0000	0.2500	0.0250	2.00	0.2000	☐
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000	☐
81	Matl81	ASPHALT-ROOFING, ROLL	Yes	0.1500					☐
244	Matl244	PLYWOOD, 1/2IN	No	0.6318	0.0417	0.0660	34.00	0.2900	☐

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1002	Aluminum door, 1.25 in. polystyrene	No	No	0.19	0.53	43.67	5.2104	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	264	ALUMINUM, 1/16 IN	0.0050	0.00	☐
2	214	POLYSTYRENE, EXP., 1-1/4IN,	0.1042	0.00	☐
3	264	ALUMINUM, 1/16 IN	0.0050	0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1004	Concrete floor, carpet and rubber pad	No	No	0.60	9.33	140.00	1.6703	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	151	CONC HW, DRD, 140LB, 4IN	0.3333	0.00	☐
2	178	CARPET W/RUBBER PAD		0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1009	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	No	No	0.11	1.18	14.94	8.9438	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	267	0.75" stucco	0.0625	0.00	☐
2	266	2x4@16" oc + R11 Batt	0.2917	0.00	☐
3	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1038	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	No	No	0.03	1.50	8.22	31.2351	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	81	ASPHALT-ROOFING, ROLL		0.00	☐
2	244	PLYWOOD, 1/2IN	0.0417	0.00	☐
3	12	3 in. Insulation	0.2500	0.00	☐
4	23	6 in. Insulation	0.5000	0.00	☐
5	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00	☐

STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION F0R ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 08-0179

------------------------- PART II - SITEPLAN -------------------------

Scale: 1 inch = 50 feet.

SEE ATTACHED

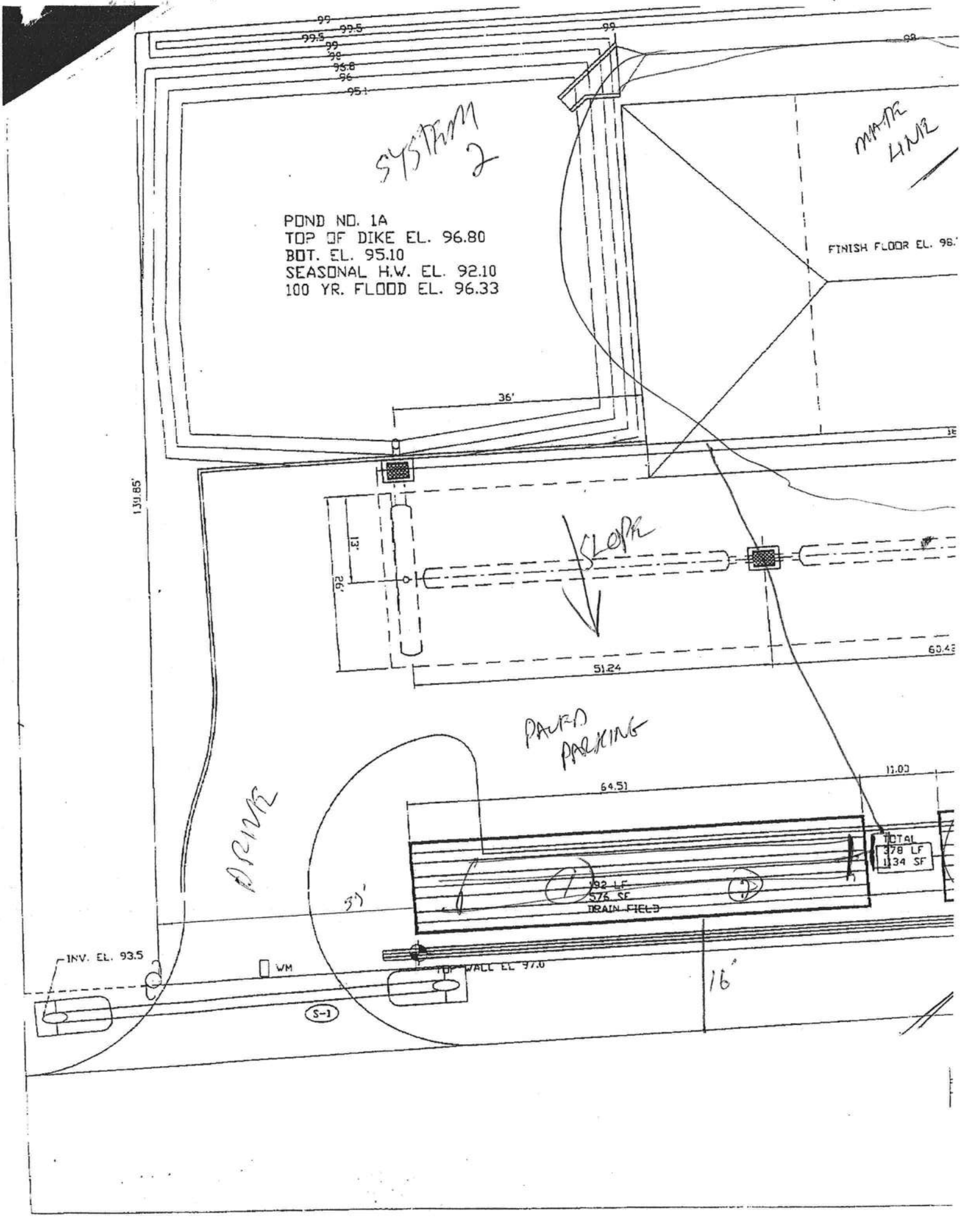
Notes: ____

Site Plan submitted by: [signature] MASTER CONTRACTOR

Plan Approved ✓ Not Approved_____ Date 3/10/08

By [signature] Columbia County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT


SYSTEM 2
POND NO. 1A
TOP OF DIKE EL. 96.80
BOT. EL. 95.10
SEASONAL H.W. EL. 92.10
100 YR. FLOOD EL. 96.33
FINISH FLOOR EL. 98.
36'
139.85'
SLOPE
51.24
PAVED PARKING
64.51
11.00
TOTAL
378 LF
1134 SF
192 LF
576 SF
DRAIN FIELD
INV. EL. 93.5
WM
TOP WALL EL 97.0
S-1
16'

STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION F0R ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 08-0180

-------------------------- PART II - SITEPLAN --------------------------

Scale: 1 inch = 50 feet.

SEE ATTACHED

Notes: ____

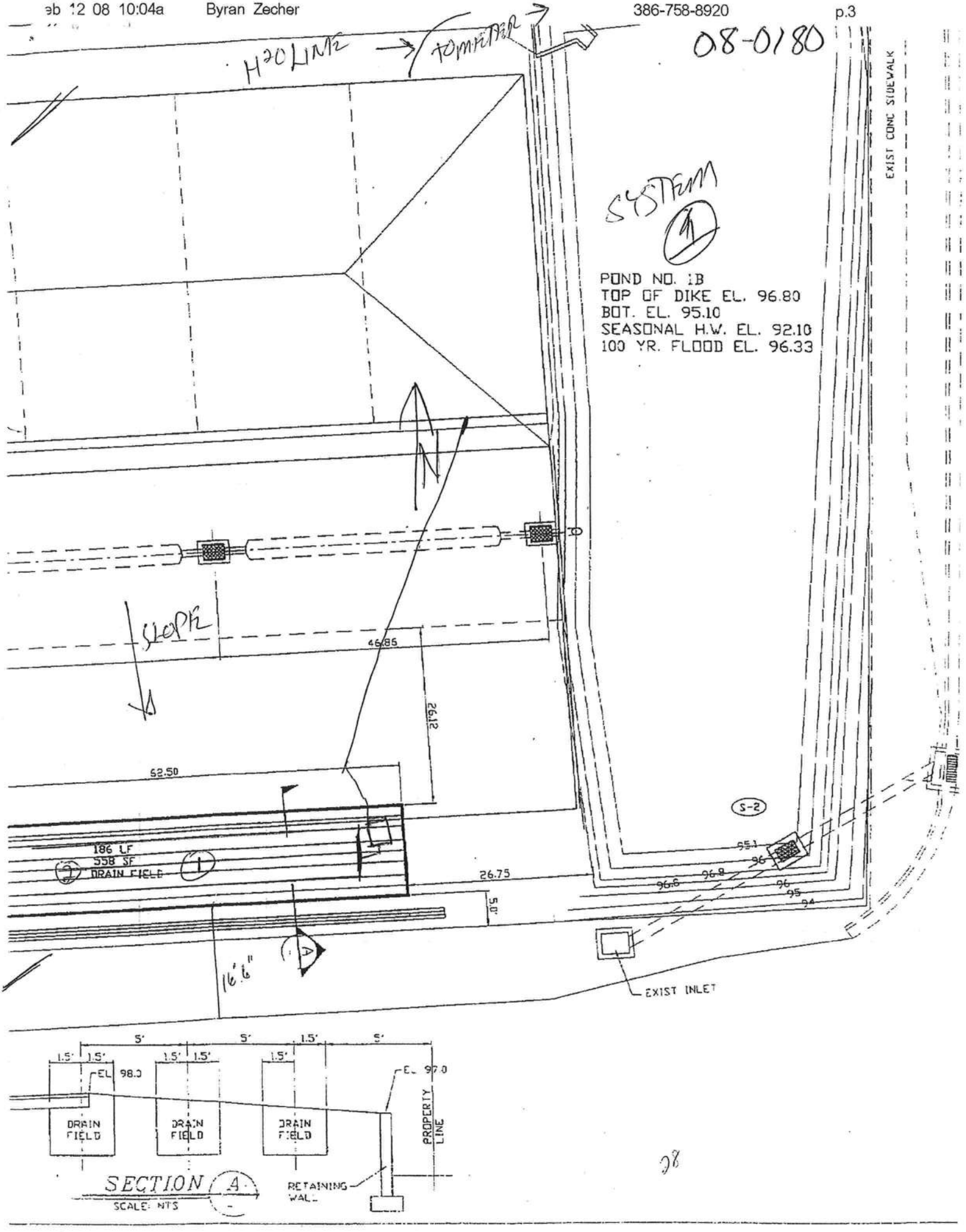
Site Plan submitted by: Rocky D. Ford MASTER CONTRACTOR

Plan Approved ✓ Not Approved____ Date 3/10/08

By ____________ Columbia County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

08-0180


H20 LINE
TO METER
EXIST CONC SIDEWALK
SYSTEM 1
POND NO. 1B
TOP OF DIKE EL. 96.80
BOT. EL. 95.10
SEASONAL H.W. EL. 92.10
100 YR. FLOOD EL. 96.33
SLOPE
46.85
26.12
62.50
186 LF
558 SF
DRAIN FIELD
1
S-2
55.1
96
96.6
96.8
96
95
94
26.75
5.0'
16'6"
A
EXIST INLET
5'
5'
1.5'
5'
1.5'
1.5'
1.5'
1.5'
1.5'
EL 98.0
EL 97.0
DRAIN FIELD
DRAIN FIELD
DRAIN FIELD
PROPERTY LINE
SECTION A
SCALE: NTS
RETAINING WALL

28

REPORT OF GEOTECHNICAL EXPLORATION

South Marion Plaza
High Street & Marion Street
Lake City, Columbia County, Florida
CTI Project No. 08-00115-01

- Prepared For -
Bryan Zecher Construction
P.O. Box 815
Lake City, Florida 32056

- Prepared by -
Cal-Tech Testing, Inc.
P.O. Box 1625
Lake City, Florida 32056-1625

February 18, 2008

Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056 Tel. (386) 755-3633 • Fax (386) 752-5456
4784 Rosselle Street • Jacksonville, FL 32254 Tel. (904) 381-8901 • Fax (904) 381-8902
2230 Greensboro Highway • Quincy, FL 32351 Tel. (850) 442-3495 • Fax (850) 442-4008

February 18, 2008

Bryan Zecher Construction
P.O. Box 815
Lake City, Florida 32056

Attention: Ms. Becky Dugan

Reference: Subsurface Exploration
Proposed South Marion Plaza
139 SW High Street
Lake City, Columbia County, Florida
Cal-Tech Project No. 08-00115-01

Dear Ms. Dugan:

Cal-Tech Testing, Inc. (**CTI**) has completed the subsurface exploration and engineering evaluation for the proposed South Marion Plaza. Our work was verbally authorization by you during a telephone conversation on February 12, 2008.

INTRODUCTION

This report presents the results of our subsurface exploration performed for the proposed retail plaza. The services rendered by CTI during the course of this exploration can be summarized as follows:

- Reviewed available in-house data such as results of similar exploration and published data including the U.S.G.S. Quadrangle map, and the Geologic Map of Florida for this area.
- Planned and performed a total of four (4) SPT borings each extending to a depth of 15 feet below the existing ground surface.
- Reviewed and analyzed gathered data in order to evaluate the subsurface conditions with respect to the proposed construction.
- Prepared this report, which includes the results of our field exploration as well as our recommendations with respect to foundation design, foundation related site work, general site development, and quality control.

PROJECT INFORMATION

The subject site is located in the northwest quadrant of the Marion Street and High Street intersections in Lake City, Columbia County, Florida. It is our understanding the proposed development will consist of constructing an approximately 6,250 square feet, one-story building for use as retail space. We assume the building frame will consist of wood or steel construction. Structural loading information for the building is not available at this time; however, we anticipate that column and wall loads will not exceed 25 kips and 3 kips per lineal foot. Design grade elevations were also not provided. However, we anticipate that less than 3 feet of earthwork cut/fill will be required to bring the sites to the desired grades.

The existing site conditions were observed by the author of this document on February 13, 2008. At the time of our site visit, the ground surface within the construction area was covered with tall grass and small shrubbery. Ground surface topography appears to gently sloping towards the south-southeast with elevation difference of approximately 4 feet across between the construction area and the southern property line.

FIELD PROGRAM

The field investigation consisted of performing four (4) Standard Penetration Test (**SPT**) borings each extending to a depth of 15 feet below the existing ground surface. The boring locations were determined in the field based on building corners that had been staked by others. The four SPT borings were performed at the following locations:

- B-1 – Southwest corner of proposed building
- B-2 – Northwest corner of proposed building
- B-3 – Southeast corner of proposed building
- B-4 – Northeast corner of proposed building

The sampling and penetration procedures of the **SPT** borings were accomplished in general accordance with **ASTM D-1586**, using a power rotary drill rig. The standard penetration tests were performed by driving a standard 1-3/8" I.D. and 2" O.D. split spoon sampler with a 140 pound hammer falling 30 inches. The number of hammer blows required to drive the sampler a total of 18 inches, in 6-inch increments, were recorded. The penetration resistance or "*N*" value is the summation of the last two 6-inch increments and is illustrated on the attached boring records adjacent to their corresponding sample depths. The penetration resistance is used as an index to derive soil parameters from various empirical correlations.

The results of the **SPT** borings are shown on the attached Generalized Subsurface Profile and individual boring logs. It must be noted the stratification lines indicated on the boring logs represent the approximate boundaries between major soil types and the actual transition may be gradual.

SUBSURFACE CONDITIONS

In general, the soil profile as disclosed by SPT borings B-1 through B-4 initially consisted of about 12 inches of light gray, silty fine sand with organic matter (topsoil). The surficial cover is underlain by alternating layers of silty fine sand (SP-SM), reddish tan and gray, mottled, clayey fine sand (SC), reddish brown and light gray, mottled sandy clay (CL), or greenish gray mottled with brown, clay (CH). The sandy soils have a penetration resistance or "*N*" values ranging from 5 to 24 Blows Per Foot (BPF) indicating these sandy soils to vary form loose to medium dense in relative density . The clayey soils have a "*N*" values ranging from 12 to 53 BPF indicating these soils vary from stiff to hard in consistency.

For a more detailed description of the subsurface conditions encountered, please refer to the attached Generalized Subsurface Profile and individual boring logs. Note that transition between soil types may be gradual and not abrupt as indicated by the boring logs, and the thickness of soil layers should be considered approximate.

Groundwater

At the time of completion of drilling, the groundwater was not encountered in any of the SPT borings. It must be noted that due to the relatively short time frame of the field exploration, the groundwater may not have had sufficient time to stabilize. For a true groundwater level reading, piezometers may be required. In any event, fluctuation in groundwater levels should be expected due to seasonal climatic changes, construction activity, rainfall variations, surface water runoff, and other site-specific factors. Since groundwater level variations are anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based on the assumption that variations will occur.

RECOMMENDATIONS FOR FOUNDATION DESIGN & SITE PREPARATION

Foundation Support

The test borings indicated the presence of loose soils within the upper 5 feet of the existing ground surface. The majority of these soils (with the exception of the upper ±12 inches of topsoil) are considered suitable for reuse as structural fill, however, they are not considered acceptable for the support of the proposed building in their current conditions. To improve the density of the supporting soils, the upper 5 feet of the site soils within the building and pavement areas (including 5 feet outside the perimeter of the building) should be recompacted as indicated herein.

Provided the foundation and site soils are prepared in accordance with the guidelines presented in this report, it is our opinion the proposed structure may be supported on a conventional shallow foundation system. The shallow foundation may be designed for an allowable bearing pressure of 2,500 pounds per square foot (psf) or less on **recompacted** soils or newly placed structural fill.

In using net pressures, the weight of the footing and backfill over the footing need not be considered. Hence, only loads applied at or above final grade need to be used for dimensioning footings. However, wall bearing footings should be designed with a minimum width of 18 inches, while the individual column footings should have minimum dimensions of 2 feet by 2 feet.

Settlement Analyses

Actual magnitude of settlement that will occur beneath foundations will depend upon variations within the subsurface soil profile, actual structural loading conditions, embedment depth of the footings, actual thickness of compacted fill or cut, and the quality of the earthwork operations. Assuming the foundation related site work and foundation design is completed in accordance with the enclosed recommendations, we estimate the total settlement of the structure will be on the order of 1 inch or less. Differential settlements (between adjacent columns or along the length of a continuous wall footing) should be approximately one-half of the total settlement. This settlement is primarily the result of elastic compression of the upper looser sands, and should occur almost immediately following the application of the structural dead load during construction.

Uplift Resistance

Under wind loading conditions, the foundations will likely be subjected to considerable uplift forces. In order to resist these uplift forces, it may be necessary to increase the footing size (thus increasing the dead weight) or lower the footing to mobilize additional soil weight above the footing. Uplift resistance from the soil may be evaluated as the weight of the soil directly above the footing, plus the shearing resistance along the vertical face of the soil prism. Alternately, the available soil uplift resistance may be calculated as the weight of the soil prism defined by the diagonal line drawn from the top of the footing to the ground surface at an angle of 30 degrees with the vertical. We recommend that a total unit weight of 100 pcf (compacted to 95% of the modified Proctor maximum dry density) be used for well-compacted, suitable fill. Should the bottom of any structure be below the stabilized seasonal-high groundwater level, these structures must be properly designed to resist the resulting uplift forces due to hydrostatic pressures.

Lateral Resistance

Lateral loads created by wind may be resisted by the passive pressure of the soil acting against the side of the individual footings and/or the friction developed between the base of the foundation system and the underlying soils. For compacted backfill and/or in-situ material, the passive pressure may be taken as an equivalent to the pressure exerted by a fluid weighing 300 pcf for above the ground-water table and 113 pcf below water level. A coefficient of friction equal to 0.35 may be used for calculating the frictional resistance at the base of the shallow footings. The resistance values discussed herein are based on the assumption that the foundations can withstand horizontal movements on the order of ¼ inch. Lateral resistance determined in accordance with the recommendations provided herein should be considered the total available resistance. Consequently, the design should include a minimum factor of safety of 1.5.

Lateral Earth Pressures

In generally, retaining walls will be subjected to "at-rest" or "active" pressures. Retaining walls that are restrained at the top will be subject to "at-rest" pressures due to their restricted movement. The "at-rest" pressures may be calculated as the equivalent pressure exerted by a fluid density of 50 pcf. Where walls are not restrained at the top and thus allowed sufficient movement to mobilize "active" pressures, an equivalent fluid density of 33 pcf should be used in the design.

These values may be used only for walls above the groundwater table. The presence of any groundwater due to surface water intrusion should be handled with the use of a drainage layer behind the walls with a collection pipe discharging accumulated water away from the walls. If this is not practical, then the hydrostatic pressure due to water should be included in the design of the walls.

Drainage Considerations

Adequate drainage should be provided at the site in order to minimize increase in moisture content of the foundation soils. Excessive moisture can significantly reduce the soils bearing capacity and contribute to foundation settlement. For the protection of the foundation soils, we recommend the ground water surface be sloped away from all proposed structures.

Floor Slab

All unsuitable material (such as topsoil, organics, etc.) located within the building area (**including 5 feet outside the perimeter of the building**) should be overexcavated and removed. The exposed subgrade should be recompacted and proofrolled with a fully-loaded, tandem-axle dump-truck or similar pneumatic-tired equipment. Provided the recompaction and proofrolling operations do not indicate significant deflecting or pumping of the existing subgrade, the floor slab may be designed as a slab-on-grade. Any soft or loose soils found during the proofrolling procedure should be undercut and/or replaced with suitable, well-compacted, engineered fill.

Floor slabs should be supported on at least 4 inches of relatively clean granular material, such as sand, sand and gravel, or crushed stone. This is to help distribute concentrated loads and equalize moisture beneath the slab. This granular material should have 100 percent passing the 1½ -inch sieve and a maximum of 10 percent passing the No. 200 sieve.

Based upon the soil conditions encountered at the subject site, the anticipated fill placement, and the recommended site preparation operations presented in this report, a modulus of vertical subgrade reaction (k) for the slab bearing soils of 150 pounds per square inch per inch of vertical deflection (pci) may be used for the recommended structural fill compaction criteria.

Exposed Subgrade

Following excavation and backfilling, exposed soils in the building and pavement areas should be compacted Field with overlapping passes of a relatively heavy weight drum roller (running in static mode to protect nearby structures) having a total operating static weight (weight of fuel and water included) of at least 10 tons and a drum diameter of 5 feet. All exposed surfaces should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (**ASTM D-1557**) to a depth of at least 12 inches below the compacted surface.

Structural Fill/Backfill

Structural fill should be placed in thin loose lifts not exceeding 12 inches in thickness and compacted with a heavy roller as described above. For walk-behind equipment, a maximum loose lift thickness of 6 inches is recommended. Each lift should be thoroughly compacted with a roller as described above to provide densities equivalent to at least 95 percent of the modified Proctor maximum dry density (ASTM D-1557). Structural fill should consist of an inorganic, non-plastic, granular soil containing less than 10 percent material passing the No. 200 mesh sieve (relatively clean sand with a Unified Soil Classification of SP or SP-SM).

Due to the varying density of the upper soils, it is recommended the exposed subgrade be proofrolled and proofcompacted to a depth of 5 feet below the existing grade prior to concrete placemen. This may require the overexcavation and recompaction of the upper 5 feet of the existing soils. Granular (sandy) soils should be proofcompacted to a minimum of 95% of the modified Proctor maximum dry density, ASTM D 1557. For floor slab areas (including 5 feet outside all building lines), overexcavation of clayey soils will be required should finished subgrade be at or below 12 inches of the existing ground surface.

All floor slab(s) and footings should be supported by a minium of 24-inches of inorganic, non-plastic, granular soil containing less than 10 percent material passing the No. 200 mesh sieve (relatively clean sand with a Unified Soil Classification of SP or SP-SM). Depending on the finished subgrade elevation, this may require the overexcavation and recompaction of the near-surface clayey soils. In any event, it is essential that finished subgrades be inspected by a geotechnical engineer to verify that these recommendations have been interpreted correctly and applied.

Compaction of exposed soils in deeper excavations may cause pumping and/or yielding of the soils being compacted. The instability is caused by excess pore water pressure build-up in the subgrade soils being compacted. To allow this excess pore water pressure to dissipate, the contactor may temporarily halt the compaction operation or disengage the vibratory action of the compaction equipment. In any event, it is recommended to maintain a distance of at least two feet between the groundwater level and the compaction surface.

The exploration and recommendations presented in this report are based upon subsurface conditions encountered at a specific location and time as presented within this report. However, subsurface conditions may exist that differ from our findings. We request that we be notified if dissimilar subsurface conditions are encountered.

We appreciate the opportunity to be of service on this project and look forward to a continued association. Should you have questions concerning this report or if we may be further service, please contact this office.

Respectfully submitted,
Cal-Tech Testing, Inc.

David B. Brown
Executive Vice President

Nabil O. Hmeidi, P.E.
Senior Geotechnical Engineer
Licensed, Florida No. 57842

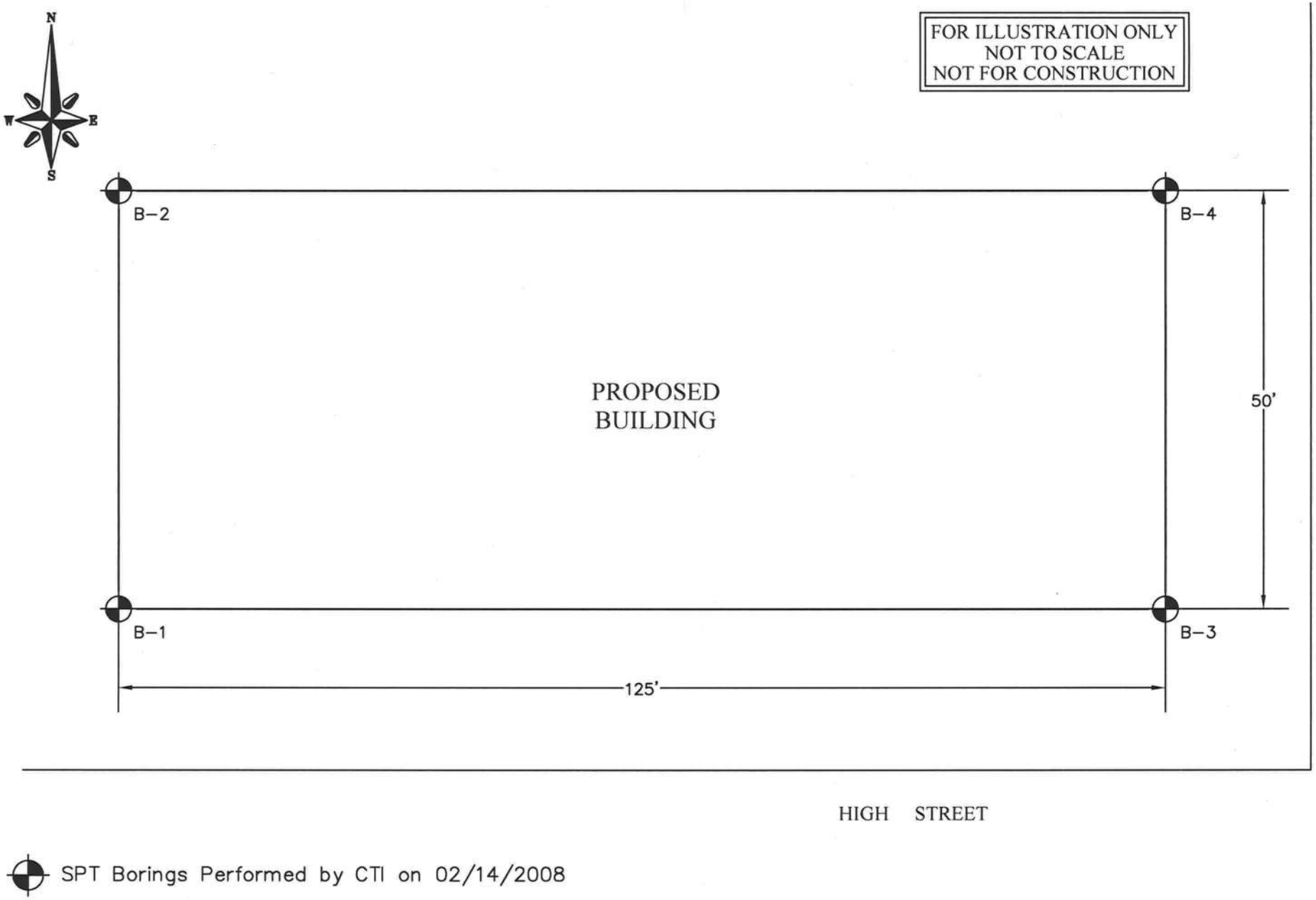
Attachments:
Vicinity Map (1 page)
Field Exploration Plan (1 page)
Generalized Subsurface Profile (1 page)
Boring Logs (4 pages)
Fence Diagram (1 page)
Unified Soil Classification System chart (1 page)
Key To Test Data (1 page)

Distribution:
File (1 copy)
Addressee (2 bound copies)

ATTACHMENTS

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: (386) 755-3633
Fax: (386) 752-5456

VICINITY MAP
SOUTH MARION PLAZA
139 SW HIGH STREET
LAKE CITY, COLUMBIA COUNTY, FLORIDA
Cal-Tech Testing Project No. 08-00115-01



SPT Borings Performed by CTI on 02/14/2008

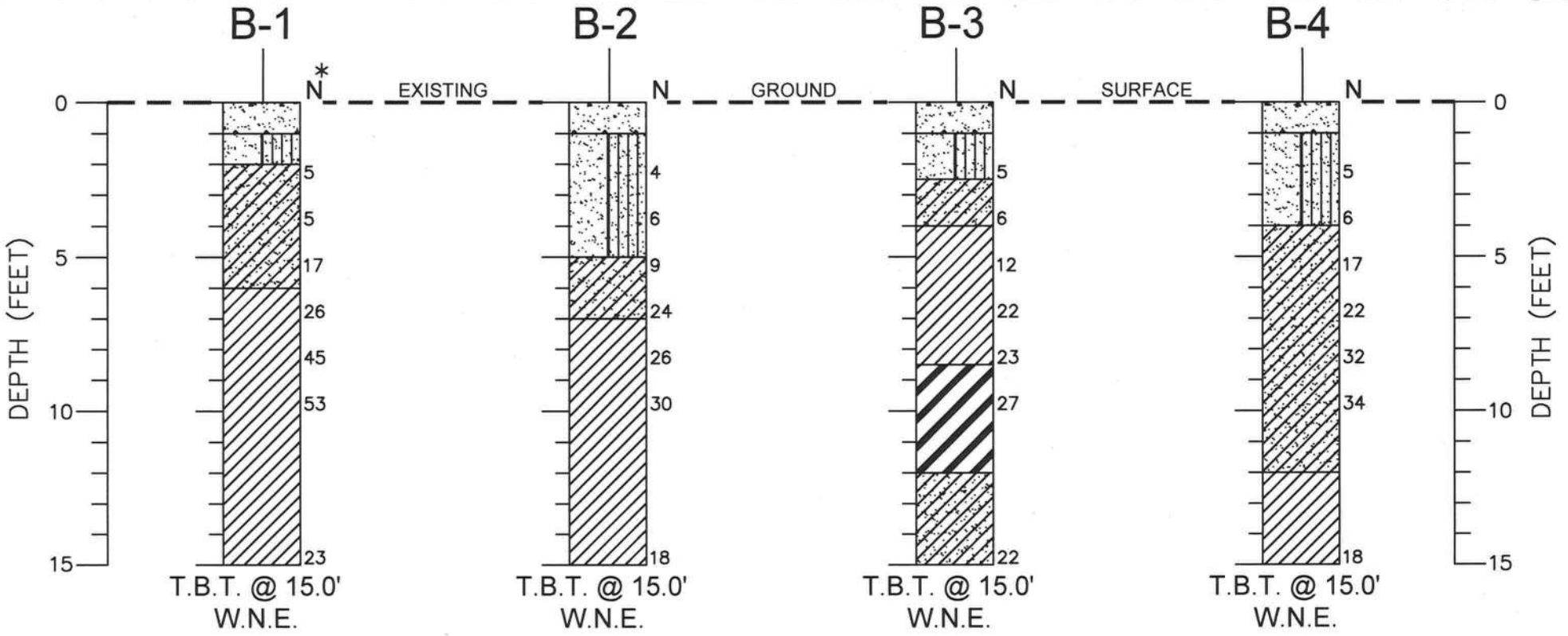
REVISIONS		NAMES	DATE
	DRAWN BY:	N.H.	02/18/2008
	CHECKED BY:		
	DRILLER(S):	B.W. & M.T.	02/14/2008
	EQUIPMENT:	BK-51, Manual Hammer	
	CAL-TECH PROJECT No.: 08-00115-01		

SUBSURFACE EXPLORATION
SOUTH MARION PLAZA
HIGH STREET & MARION STREET
LAKE CITY, COLUMBIA COUNTY, FLORIDA

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: (386) 755-3633
Fax: (386) 752-5456

FIELD EXPLORATION PLAN

Project No. 08-00115-01		DATE: 02/18/2008	FIGURE: 1
DRAWN:	APPROVED:	SCALE: N.T.S.	SHEET: 1/1



LEGEND

- Light gray silty fine sand with organic matter (topsoil)
- Tan, silty fine sand (SP–SM)
- Reddish tan and gray, mottled, clayey fine sand (SC)
- Reddish brown and light gray, mottled, sandy clay (CL)
- Greenish gray and gray, mottled, clayey fine sand (CH)

* Standard Penetration Resistance (Blows/ft.) Measured Using a Manual Hammer System

Groundwater Level Measured at Completion

T.B.T. Test Boring Terminated

W.N.E. Water Not Encountered at Completion

NOTE: Refer to report for additional information.

REVISIONS		NAMES	DATE
	DRAWN BY:	N.H.	02/18/2008
	CHECKED BY:		
	DRILLER(S):	B.W. & M.T.	02/14/2008
	EQUIPMENT:	BK-51, Manual Hammer	
	CAL-TECH PROJECT No.:	08-00115-01	

SUBSURFACE EXPLORATION
SOUTH MARION PLAZA
HIGH STREET & MARION STREET
LAKE CITY, COLUMBIA COUNTY, FLORIDA

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: (386) 755-3633
Fax: (386) 752-5456

GENERALIZED SUBSURFACE PROFILE

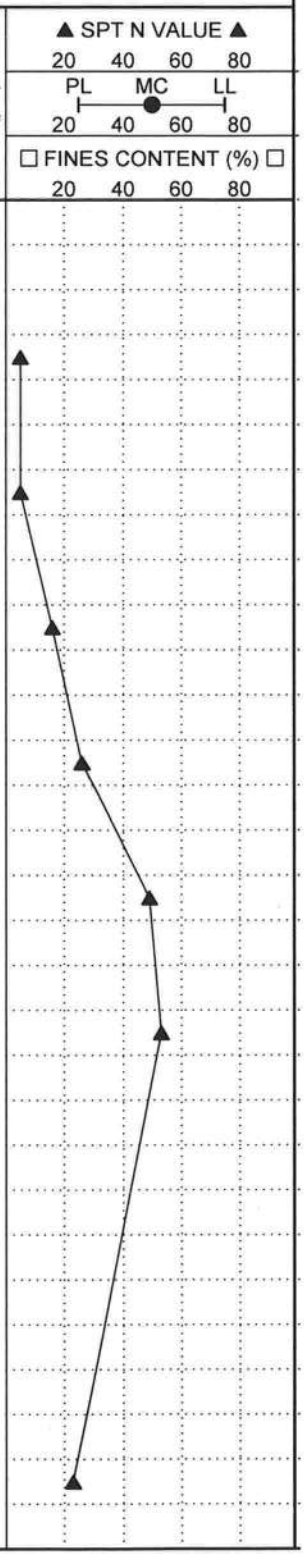
Project No. 08-00115-01	DATE: 02/18/2008	FIGURE: 2
DRAWN:	APPROVED:	SCALE: N.T.S. / SHEET: 1/1

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-1

CLIENT Bryan Zecher Construction, Inc.
PROJECT NAME South Marion Plaza
PROJECT NUMBER 08-00115-01
PROJECT LOCATION 139 SW High St. Lake City, Florida
DATE STARTED 02/14/08 **COMPLETED** 02/14/08
GROUND ELEVATION 0 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
AT TIME OF DRILLING ---
LOGGED BY E.E. **CHECKED BY** N.H.
AT END OF DRILLING ---
NOTES BK-51, manual hammer
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Light gray, silty fine sand with trace of organic matter, TOPSOIL					
		LOOSE, tan, silty fine sand (SP-SM)	SPT 1	100	1-2-3 (5)		
2.5		LOOSE TO MEDIUM DENSE, reddish tan and gray, mottled, clayey fine sand (SC)	SPT 2	100	2-2-3 (5)		
			SPT 3	100	5-6-10 (16)		
5.0		VERY STIFF TO HARD, reddish brown and light gray, mottled, sandy clay (CL)	SPT 4	100	8-12-14 (26)		
7.5			SPT 5	100	12-24-25 (49)		
			SPT 6	100	17-23-30 (53)		
10.0							
12.5							
			SPT 7	100	7-10-13 (23)		
15.0		Bottom of borehole at 15.0 feet.					



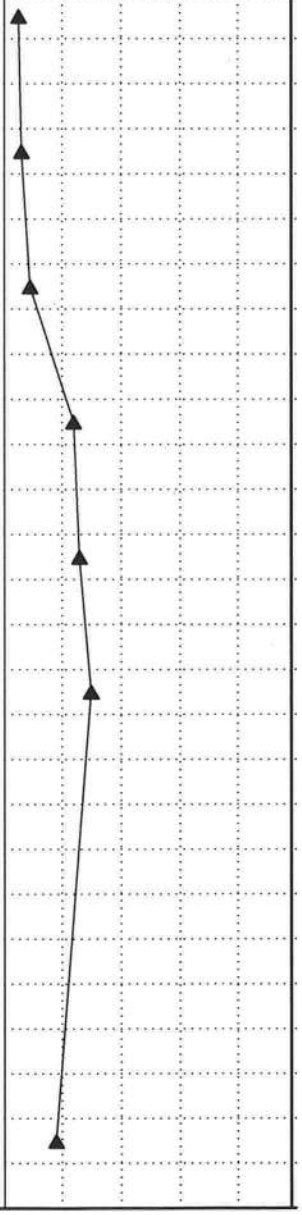
CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-2

CLIENT Bryan Zecher Construction, Inc.
PROJECT NAME South Marion Plaza
PROJECT NUMBER 08-00115-01
PROJECT LOCATION 139 SW High St. Lake City, Florida
DATE STARTED 02/14/08 **COMPLETED** 02/14/08
GROUND ELEVATION 0 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
AT TIME OF DRILLING ---
LOGGED BY E.E. **CHECKED BY** N.H.
AT END OF DRILLING ---
NOTES BK-51, manual hammer
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Light gray, silty fine sand with some organic matter, TOPSOIL					
		LOOSE, tan, silty fine sand (SP-SM)	SPT 1	100	1-2-3 (5)		
2.5			SPT 2	100	2-3-3 (6)		
5.0			SPT 3	100	2-4-5 (9)		
		MEDIUM DENSE, reddish tan and gray, mottled, clayey fine sand (SC)	SPT 4	100	6-10-14 (24)		
7.5		VERY STIFF, reddish brown and light gray, mottled, sandy clay (CL)	SPT 5	100	8-12-14 (26)		
			SPT 6	100	10-14-16 (30)		
10.0							
12.5							
			SPT 7	100	6-8-10 (18)		
15.0							

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-3

CLIENT Bryan Zecher Construction, Inc.
PROJECT NAME South Marion Plaza
PROJECT NUMBER 08-00115-01
PROJECT LOCATION 139 SW High St. Lake City, Florida
DATE STARTED 02/14/08 **COMPLETED** 02/14/08
GROUND ELEVATION 0 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
AT TIME OF DRILLING ---
LOGGED BY E.E. **CHECKED BY** N.H.
AT END OF DRILLING ---
NOTES BK-51, manual hammer
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Light gray, silty fine sand with trace of organic, TOPSOIL					
		LOOSE, tan, silty fine sand (SP-SM)	SPT 1	100	2-2-3 (5)		
2.5		LOOSE, reddish tan and gray, mottled, clayey fine sand (SC)	SPT 2	100	2-3-3 (6)		
		STIFF TO VERY STIFF, reddish brown and light gray, mottled, sandy clay (CL)	SPT 3	100	3-5-7 (12)		
5.0			SPT 4	100	6-10-12 (22)		
7.5			SPT 5	100	7-10-13 (23)		
		VERY STIFF, greenish gray mottled with reddish brown, clay (CH)	SPT 6	100	8-2-15 (17)		
10.0							
		MEDIUM DENSE, reddish tan and gray, mottled, clayey fine sand (SC)					
12.5			SPT 7	100	6-10-12 (22)		
15.0							

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

Bottom of borehole at 15.0 feet.

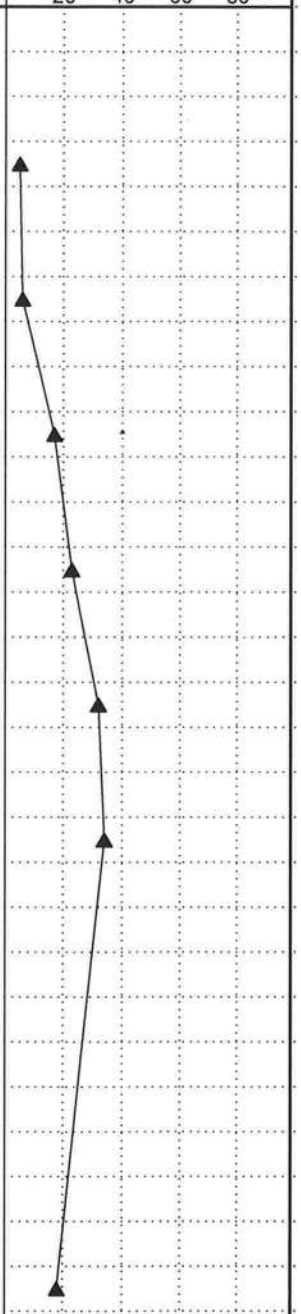
CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-4

CLIENT Bryan Zecher Construction, Inc.
PROJECT NAME South Marion Plaza
PROJECT NUMBER 08-00115-01
PROJECT LOCATION 139 SW High St. Lake City, Florida
DATE STARTED 02/14/08 **COMPLETED** 02/14/08
GROUND ELEVATION 0 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
AT TIME OF DRILLING ---
LOGGED BY E.E. **CHECKED BY** N.H.
AT END OF DRILLING ---
NOTES BK-51, manual hammer
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Light gray, silty fine sand with organic matter, TOPSOIL					
		LOOSE, tan, silty fine sand (SP-SM)	SPT 1	100	2-3-2 (5)		
2.5			SPT 2	100	2-3-3 (6)		
		MEDIUM DENSE TO DENSE, reddish tan and gray, mottled, clayey fine sand (SC)	SPT 3	100	4-7-10 (17)		
5.0			SPT 4	100	7-10-13 (23)		
7.5			SPT 5	100	9-14-18 (32)		
			SPT 6	100	10-15-19 (34)		
10.0							
12.5		VERY STIFF, reddish brown and light gray, mottled, sandy clay (CL)					
			SPT 7	100	6-8-10 (18)		
15.0							

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

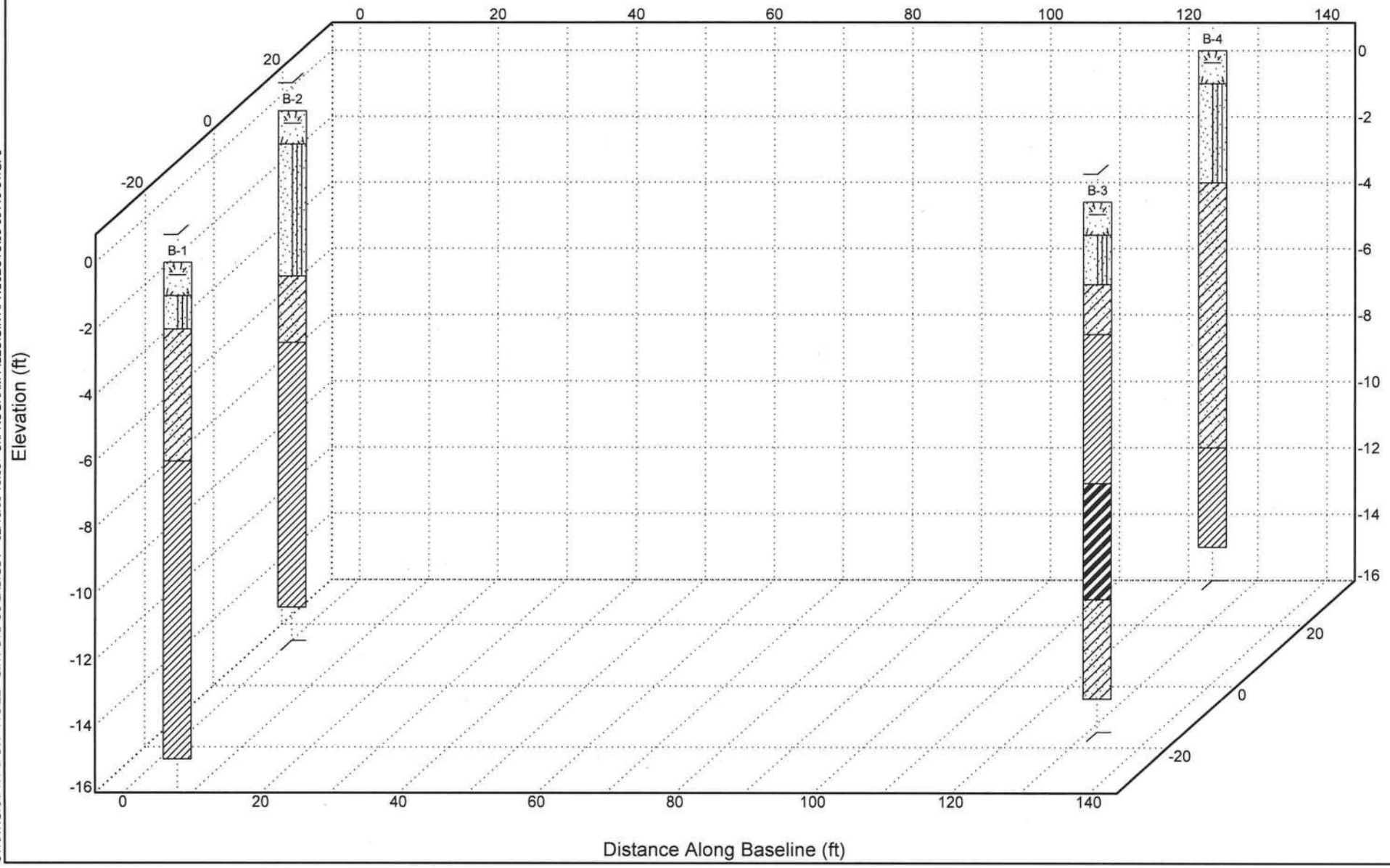
SUBSURFACE DIAGRAM
FENCE DIAGRAM

CLIENT Bryan Zecher Construction, Inc.

PROJECT NAME South Marion Plaza

PROJECT NUMBER 08-00115-01

PROJECT LOCATION 139 SW High St. Lake City, Florida



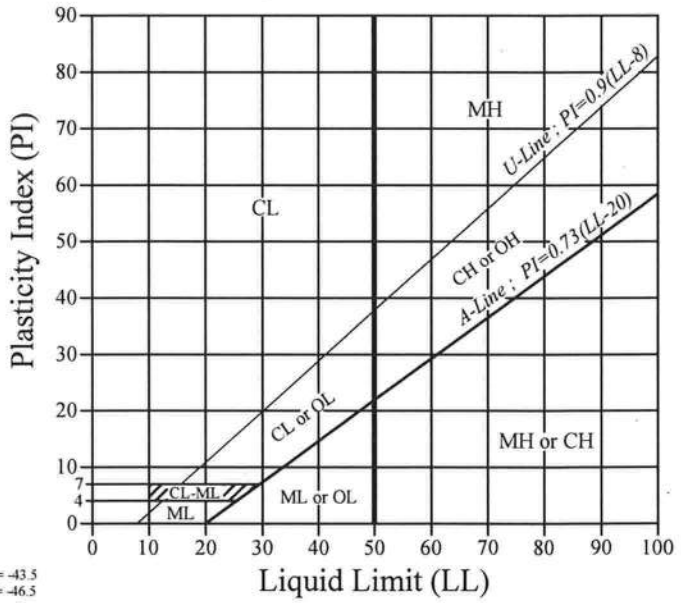
UNIFIED SOIL CLASSIFICATION SYSTEM
ASTM DESIGNATION D-2487

MAJOR DIVISIONS			GROUP SYMBOL	TYPICAL NAMES
COARSE GRAINED SOILS (More than half of the material is larger than No. 200 sieve)	Gravels (more than half of the coarse fraction is larger than No. 4 sieve)	Clean gravels	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels, gravel-sand mixture, little or no fines.
		Gravel with fines	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	Sands (more than half of the coarse fraction is smaller than No. 4 sieve)	Clean sands	SW	Well-graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands, gravelly sands, little or no fines.
		Sands with fine	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than half of the material is finer than No. 200 sieve)	Silts and Clays (LL less than 50)		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clay.
			OL	Organic silts and organic silty clays of low plasticity.
	Silts and Clays (LL greater than 50)		MH	Inorganic silts, micaceous or diato-maceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clay.
			OH	Organic clays of medium to high plasticity, organic silts.
	Highly Organic Soils		Pt	Peat and other highly organic soils.

LABORATORY CLASSIFICATION CRITERIA		
Determine percentage of sand and gravel from grain size curve Depending on percentage of fines (fraction smaller than No. 200 Sieve size), coarse grained soils are classified as follows: Less than 5% ..... GW, GP, SW, SP More than 12% ... GM, GC, SM, SC 5 to 12% ..... Borderline cases requiring dual symbols	$C_u = \frac{D_{60}}{D_{10}} > 4 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$	
	Not meeting all gradation requirments of GW	
	Atterberg Limits below A-Line or PI less than 4	Above A-Line with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
	Atterberg Limits above A-Line or PI greater than 7	
	$C_u = \frac{D_{60}}{D_{10}} > 6 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$	
	Not meeting all gradation requirments of SW	
	Atterberg Limits below A-Line or PI less than 4	Limits plotting in hatched zone with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
	Atterberg Limits above A-Line or PI greater than 7	

PLASTICITY CHART

1. Plot intersection of PI as determined by the Atterberg Limits tests.
2. Points plotted above the A-Line indicate clay soils.
3. Points plotted below the A-Line indicate silt.



CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve ..... SP
5% - 12% Passing the U.S. No. 200 Sieve ..... SM-SP
12% - 50% Passing the U.S. No. 200 Sieve ..... SM/SC

KEY TO TEST DATA

STANDARD PENETRATION TEST:-

Soil sampling and penetration testing is performed in accordance with ASTM D-1586. The standard penetration resistance ("*N*") is the number of blows of a 140-pound hammer falling 30 inches to drive a 2-inch O.D., 1.4-inch I.D. split spoon sampler one foot.

ROCK CORE DRILLING:-

Rock sampling and core drilling is performed in accordance with ASTM D-2113. The rock quality designation percentage (RQD) is determined by summing only pieces of core that are at least 4 inches long, and dividing by the "run" length.

Relation of RQD and In-situ Rock Quality	
RQD (%)	Rock Quality
90 –100	Excellent
75 – 90	Good
50 –75	Fair
25 – 50	Poor
0 – 25	Very Poor

RELATIVE DENSITY:-

SANDS:

Very loose - less than 4 blows/ft.
Loose - 5 to 10 blows/ft.
Medium - 11 to 30 blows/ft.
Dense - 31 to 50 blows/ft.
Very dense - over 50 blows/ft.

SILTS AND CLAYS:

Very soft - less than 2 blows/ft.
Soft - 3 to 4 blows/ft.
Medium stiff - 5 to 8 blows/ft.
Stiff - 9 to 15 blows/ft.
Very stiff - 16 to 30 blows/ft.
Hard - 31 to 50 blows/ft.
Very hard - over 50 blows/ft.

ROCKS:

Soft - Rock core crumbles when handled.
Medium - Can break core with hands.
Moderately hard - Thin edges of rock core can be broken with fingers.
Hard - Thin edges of core can not be broken with fingers.
Very hard - Can not be scratched with knife.

GROUNDWATER:- Water levels shown on boring logs are taken immediately upon completion of boring, and are intended for general information. The apparent level may have been altered by the drilling process. Groundwater levels, if desired, can be monitored over a long time interval.

PRODUCT APPROVAL SPECIFICATION SHEET

Location: _____ **Project Name:** _____

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project fo which you are **applying for a building permit on or after April 1, 2004**. We recommend you contact your local produ supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s
A. EXTERIOR DOORS			
1. Swinging			
2. Sliding			
3. Sectional			
4. Roll up	N/A		
5. Automatic	N/A		
6. Other	—		
B. WINDOWS			
1. Single hung	Capital / Jordan		FL 675 / FL 1378
2. Horizontal Slider	" "		FL 685 / FL 138
3. Casement	—		
4. Double Hung	—		
5. Fixed	C / J		FL 681 / FL 138
6. Awning	—		
7. Pass -through	—		
8. Projected	—		
9. Mullion	—		
10. Wind Breaker	—		
11 Dual Action	—		
12. Other			
C. PANEL WALL			
1. Siding	Hardy Plank		FL 889-R1
2. Soffits	Ashley Aluminum		FL 4968
3. EIFS	—		
4. Storefronts	—		
5. Curtain walls	—		
6. Wall louver	—		
7. Glass block	—		
8. Membrane	—		
9. Greenhouse	—		
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles	Elk / Certainteed		FL 728-R1 / FL 250 A
2. Underlayments	Felt		FL 1814
3. Roofing Fasteners	Nails		ROM 3378
4. Non-structural Metal Rf	—		
5. Built-Up Roofing	—		
6. Modified Bitumen	—		
7. Single Ply Roofing Sys	—		
8. Roofing Tiles	—		
9. Roofing Insulation	—		
10. Waterproofing	—		
11. Wood shingles /shakes	—		
12. Roofing Slate	—		

Builders FirstSource

Project Information for: L254852

Address :	139 SW HIGH ST.
	LAKE CITY, FL 32025
County:	COLUMBIA
Truss Count:	25
Design Program:	MiTek 20/20 6.3
Building Code:	FBC2004/TPI2002

Truss Design Load Information:

Gravity:	**Wind:**	
Roof (psf): 42.0	Wind Standard: ASCE 7-02	Wind Exposure: B
Floor (psf): N/A	Wind Speed (mph): 110	

Note: See the individual truss drawings for special loading conditions.

Contractor of Record, responsible for structural engineering:
Bryan C. Zecher Florida Certified Building Contractor License No. CBC054575
Address: Bryan Zecher Construction P.O. Box 815 Lake City, Florida 32056

Truss Design Engineer: Julius Lee, PE Florida P.E. License No. 34869
Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

Notes:
1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1-2002 Section 2.2
2. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.
3. The Truss Design Engineer's responsibility relative to this structure consists solely of the design of the individual truss components and does not include the design of any additional structural elements including but not limited to continuous lateral bracing elelments in the web and chord planes. See Florida Administrative Code 61G15-31.003 sections 3 c) & 5 and Chapter 2 of the National Design Standard for Metal Plate Connected Wood Truss Construction ANSI/TPI 1-2002 for additional information on the responsibilities of the delegated "Truss Design Engineer". Builders FirstSource and Julius Lee, PE do not accept any additional delegations beyond the scope of work described in the referenced documents above.

No.	Drwg. #	Truss ID	Date
1	J1898312	CJ1	10/8/07
2	J1898313	CJ3	10/8/07
3	J1898314	CJ5	10/8/07
4	J1898315	EJ5	10/8/07
5	J1898316	EJ7	10/8/07
6	J1898317	HJ7	10/8/07
7	J1898318	HJ9	10/8/07
8	J1898319	T01	10/8/07
9	J1898320	T02	10/8/07
10	J1898321	T03	10/8/07
11	J1898322	T04	10/8/07
12	J1898323	T05	10/8/07
13	J1898324	T06	10/8/07
14	J1898325	T07	10/8/07
15	J1898326	T08	10/8/07
16	J1898327	T09	10/8/07
17	J1898328	T10	10/8/07
18	J1898329	T11	10/8/07
19	J1898330	T12	10/8/07
20	J1898331	T12G	10/8/07
21	J1898332	T13	10/8/07
22	J1898333	T13G	10/8/07
23	J1898334	T14	10/8/07
24	J1898335	T15	10/8/07
25	J1898336	T11A	10/8/07

Project Information for: **L254852**

Address : 139 SW HIGH ST.
LAKE CITY, FL 32025

October 8,2007

County: COLUMBIA
Truss Count: 25
Design Program: MiTek 20/20 6.3
Building Code: FBC2004/TPI2002

Truss Design Load Information:

Gravity: **Wind:**

Roof (psf): 42.0 Wind Standard: ASCE 7-02 Wind Exposure: B
Floor (psf): N/A Wind Speed (mph): 110

Note: See the individual truss drawings for special loading conditions.

Contractor of Record, responsible for structural engineering:

Bryan C. Zecher Florida Certified Building Contractor License No. CBC054575
Address: Bryan Zecher Construction P.O. Box 815 Lake City, Florida 32056

Truss Design Engineer: Julius Lee, PE Florida P.E. License No. 34869
Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

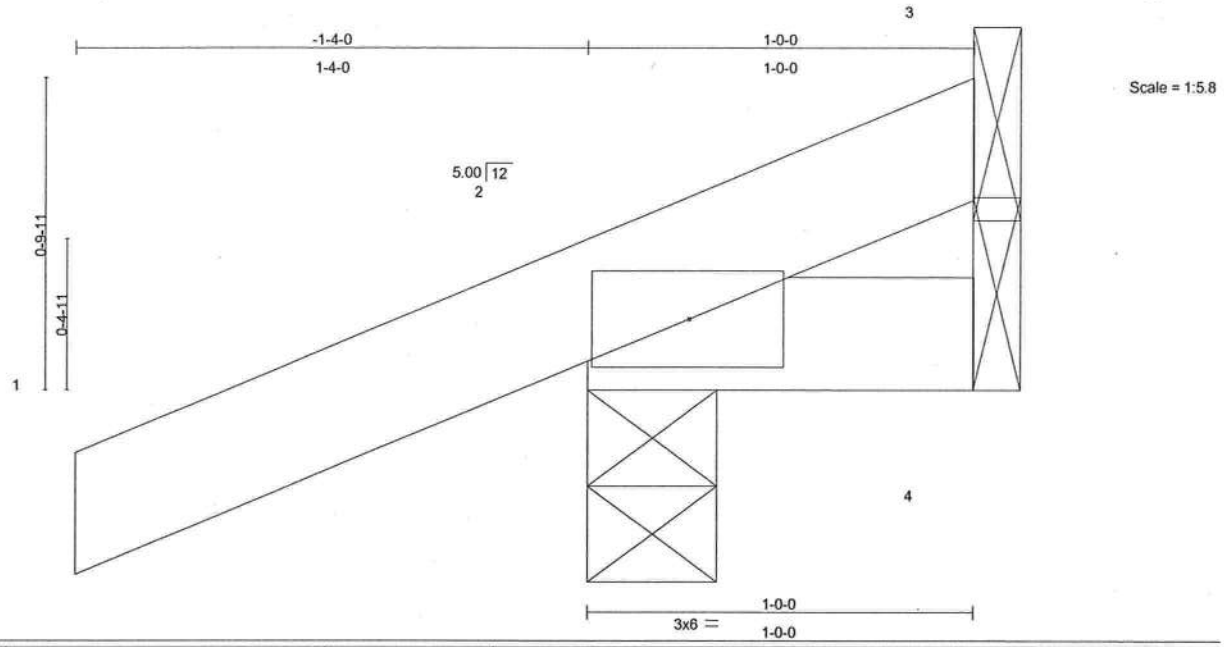
Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1-2002 Section 2.2
2. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.
3. The Truss Design Engineer's responsibility relative to this structure consists solely of the design of the individual truss components and does not include the design of any additional structural elements including but not limited to continuous lateral bracing elelments in the web and chord planes. See Florida Administrative Code 61G15-31.003 sections 3 c) & 5 and Chapter 2 of the National Design Standard for Metal Plate Connected Wood Truss Construction ANSI/TPI 1-2002 for additional information on the responsibilities of the delegated "Truss Design Engineer". Builders FirstSource and Julius Lee, PE do not accept any additional delegations beyond the scope of work described in the referenced documents above.

No.	Drwg. #	Truss ID	Date
1	J1898312	CJ1	10/8/07
2	J1898313	CJ3	10/8/07
3	J1898314	CJ5	10/8/07
4	J1898315	EJ5	10/8/07
5	J1898316	EJ7	10/8/07
6	J1898317	HJ7	10/8/07
7	J1898318	HJ9	10/8/07
8	J1898319	T01	10/8/07
9	J1898320	T02	10/8/07
10	J1898321	T03	10/8/07
11	J1898322	T04	10/8/07
12	J1898323	T05	10/8/07
13	J1898324	T06	10/8/07
14	J1898325	T07	10/8/07
15	J1898326	T08	10/8/07
16	J1898327	T09	10/8/07
17	J1898328	T10	10/8/07
18	J1898329	T11	10/8/07
19	J1898330	T12	10/8/07
20	J1898331	T12G	10/8/07
21	J1898332	T13	10/8/07
22	J1898333	T13G	10/8/07
23	J1898334	T14	10/8/07
24	J1898335	T15	10/8/07
25	J1898336	T11A	10/8/07

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898312
L254852	CJ1	JACK	16	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:34:46 2007 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.11	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.01	Vert(TL)	-0.00	2	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 5 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=157/0-4-0, 4=5/Mechanical, 3=-27/Mechanical
Max Horz 2=53(load case 6)
Max Uplift 2=-148(load case 6), 3=-27(load case 1)
Max Grav 2=157(load case 1), 4=14(load case 2), 3=38(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-36/19
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.07

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 2 and 27 lb uplift at joint 3.

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1109 Coastal Bay Blvd
Boynton Beach, FL 33435

October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898312
L254852	CJ1	JACK	16	1	Job Reference (optional)

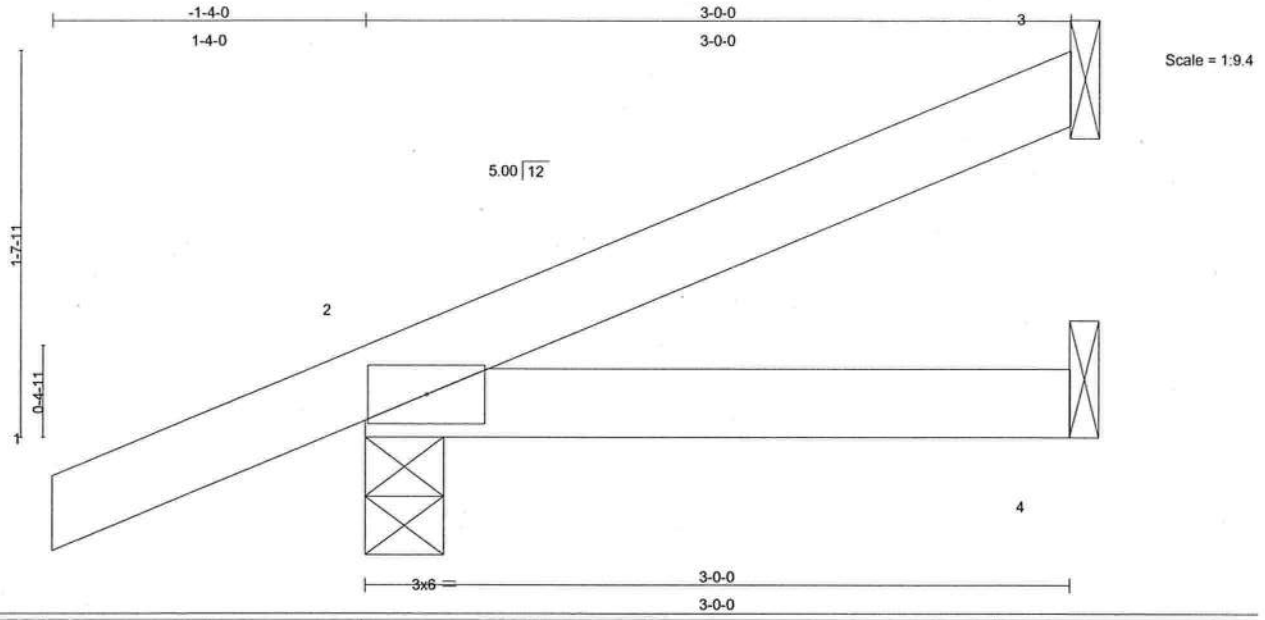
LOAD CASE(S) Standard

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1100 Coastal Bay Blvd
Boynton Beach, FL 33435

October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898313
L254852	CJ3	JACK	16	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:34:47 2007 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.13	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.05	Vert(TL)	-0.01	2-4	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 12 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=53/Mechanical, 2=192/0-4-0, 4=14/Mechanical
Max Horz 2=91(load case 6)
Max Uplift 3=-41(load case 6), 2=-139(load case 6)
Max Grav 3=53(load case 1), 2=192(load case 1), 4=42(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-41/16
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.08

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 3 and 139 lb uplift at joint 2.

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1100 Coastal Bay Blvd
Boynton Beach, FL 33435

October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898313
L254852	CJ3	JACK	16	1	Job Reference (optional)

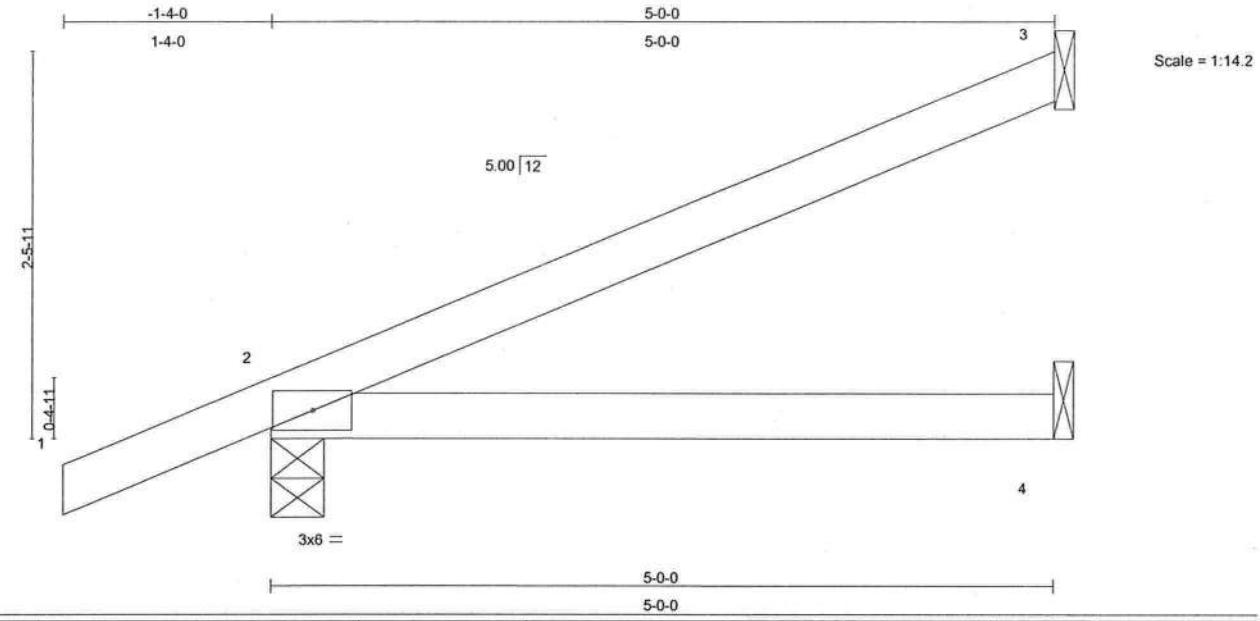
LOAD CASE(S) Standard

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1109 Coastal Bay Blvd
Boynton Beach, FL 33436

October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898314
L254852	CJ5	JACK	8	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:34:47 2007 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.24	Vert(LL)	-0.03	2-4	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.16	Vert(TL)	-0.05	2-4	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 18 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=116/Mechanical, 2=246/0-4-0, 4=24/Mechanical
Max Horz 2=129(load case 6)
Max Uplift 3=-97(load case 6), 2=-152(load case 6)
Max Grav 3=116(load case 1), 2=246(load case 1), 4=72(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-82/37
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.10

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 3 and 152 lb uplift at joint 2.

Continued on page 2

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October 8,2007

Builders FirstSource

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898314
L254852	CJ5	JACK	8	1	Job Reference (optional)

LOAD CASE(S) Standard

Julius Lee
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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898315
L254852	EJ5	JACK	2	1	Job Reference (optional)

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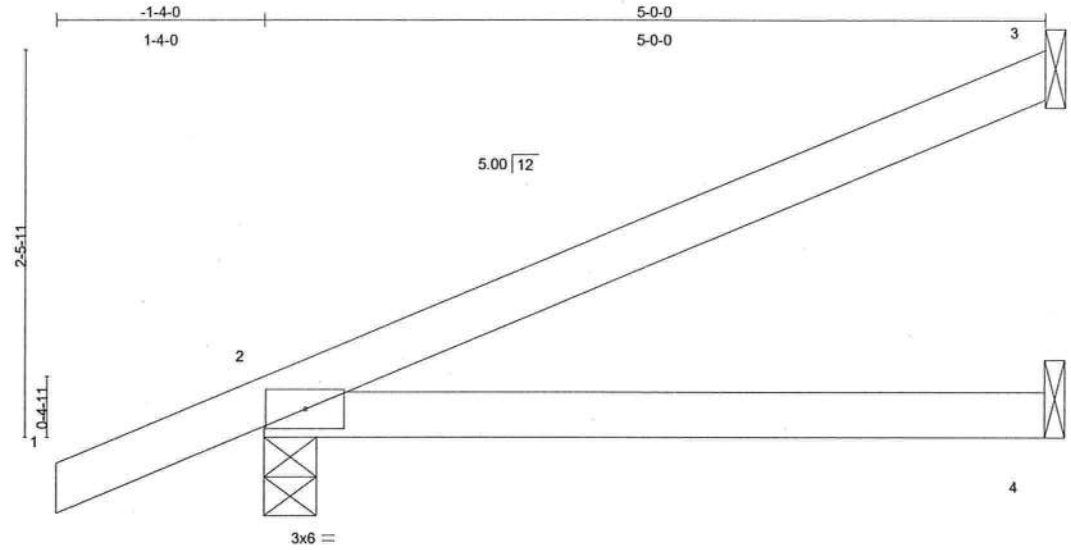

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.24	Vert(LL)	-0.03	2-4	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.16	Vert(TL)	-0.05	2-4	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 18 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=116/Mechanical, 2=246/0-4-0, 4=24/Mechanical
Max Horz 2=129(load case 6)
Max Uplift 3=-97(load case 6), 2=-152(load case 6)
Max Grav 3=116(load case 1), 2=246(load case 1), 4=72(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-82/37
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.10

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 3 and 152 lb uplift at joint 2.

Continued on page 2

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898315
L254852	EJ5	JACK	2	1	Job Reference (optional)

LOAD CASE(S) Standard

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898316
L254852	EJ7	MONO TRUSS	38	1	Job Reference (optional)

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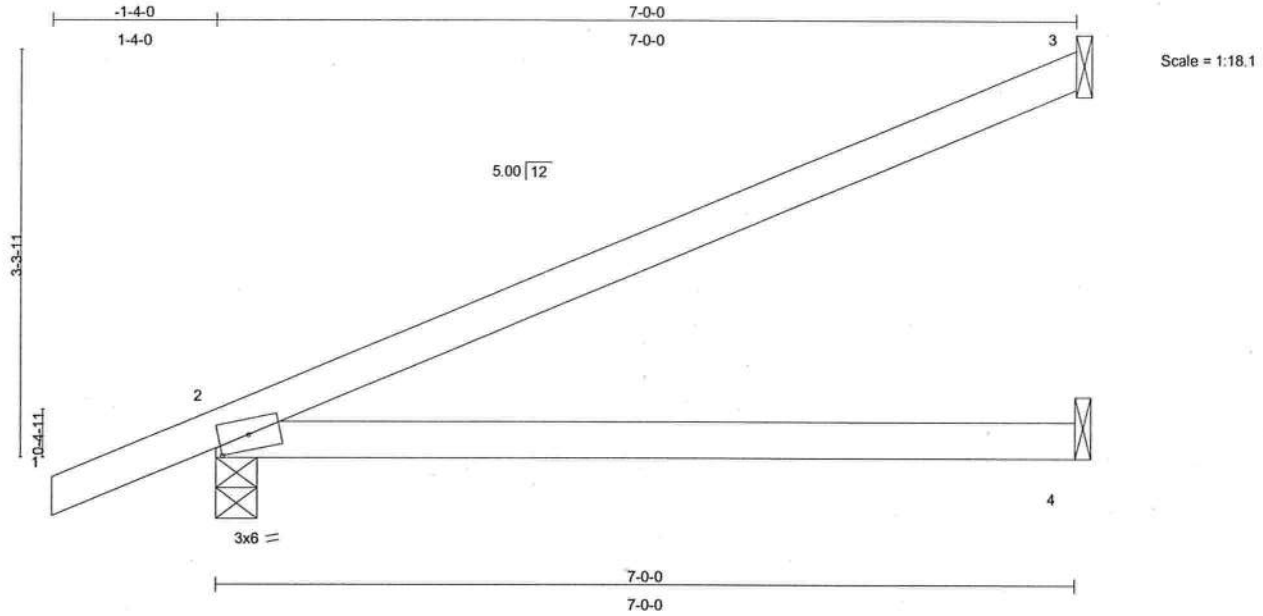

Plate Offsets (X,Y): [2:0-2-14,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.42	Vert(LL)	0.11	2-4	>756	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.28	Vert(TL)	-0.17	2-4	>487	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 24 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=159/Mechanical, 2=307/0-4-0, 4=49/Mechanical
Max Horz 2=119(load case 6)
Max Uplift 3=-82(load case 6), 2=-110(load case 6)
Max Grav 3=159(load case 1), 2=307(load case 1), 4=94(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-102/49
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.73

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 3 and 110 lb uplift at joint 2.

Continued on page 2

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898316
L254852	EJ7	MONO TRUSS	38	1	Job Reference (optional)

LOAD CASE(S) Standard

Julius Lee
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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898317
L254852	HJ7	JACK	4	1	Job Reference (optional)

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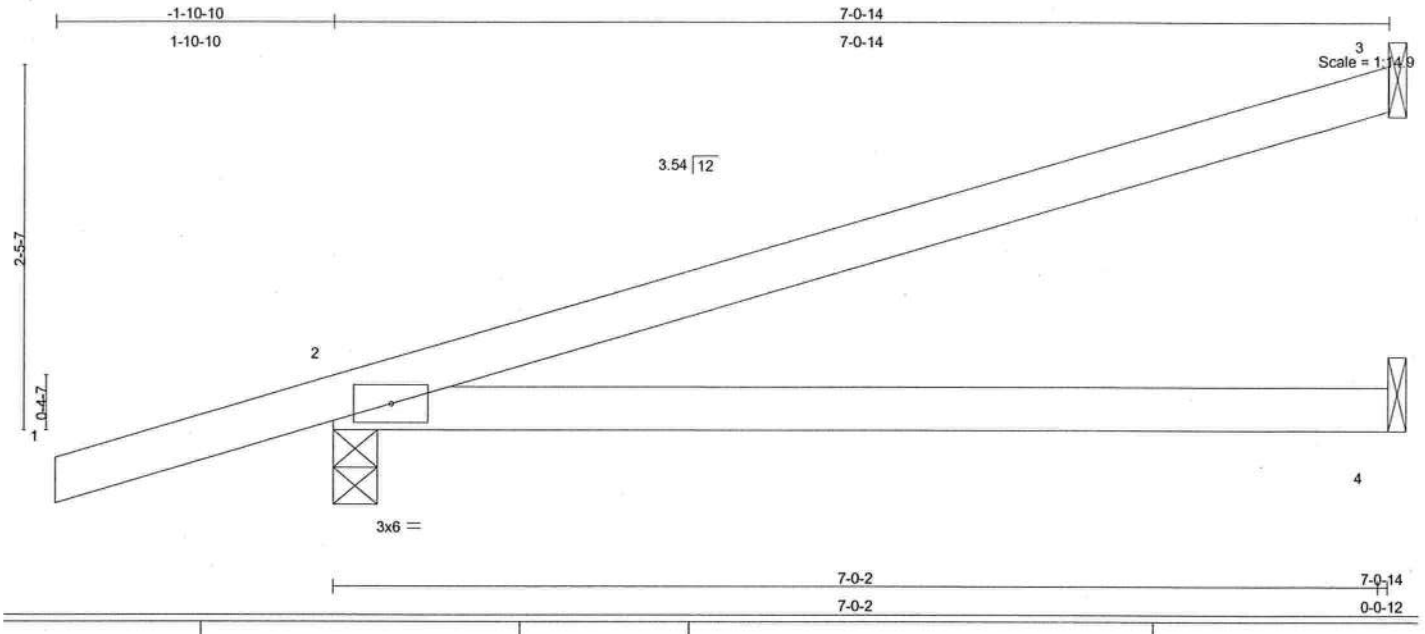

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.48	Vert(LL)	-0.08	2-4	>996	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.30	Vert(TL)	-0.16	2-4	>523	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 25 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 7-0-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=196/Mechanical, 2=260/0-3-8, 4=49/Mechanical
Max Horz 2=119(load case 3)
Max Uplift 3=-149(load case 3), 2=-176(load case 3)
Max Grav 3=196(load case 1), 2=260(load case 1), 4=100(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-60/40
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.36

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 3 and 176 lb uplift at joint 2.
5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898317
L254852	HJ7	JACK	4	1	Job Reference (optional)

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
      Vert: 1-2=-54
   Trapezoidal Loads (plf)
      Vert: 2=-2(F=26, B=26)-to-3=-95(F=-21, B=-21), 2=0(F=5, B=5)-to-4=-18(F=-4, B=-4)

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898318
L254852	HJ9	MONO TRUSS	4	1	Job Reference (optional)

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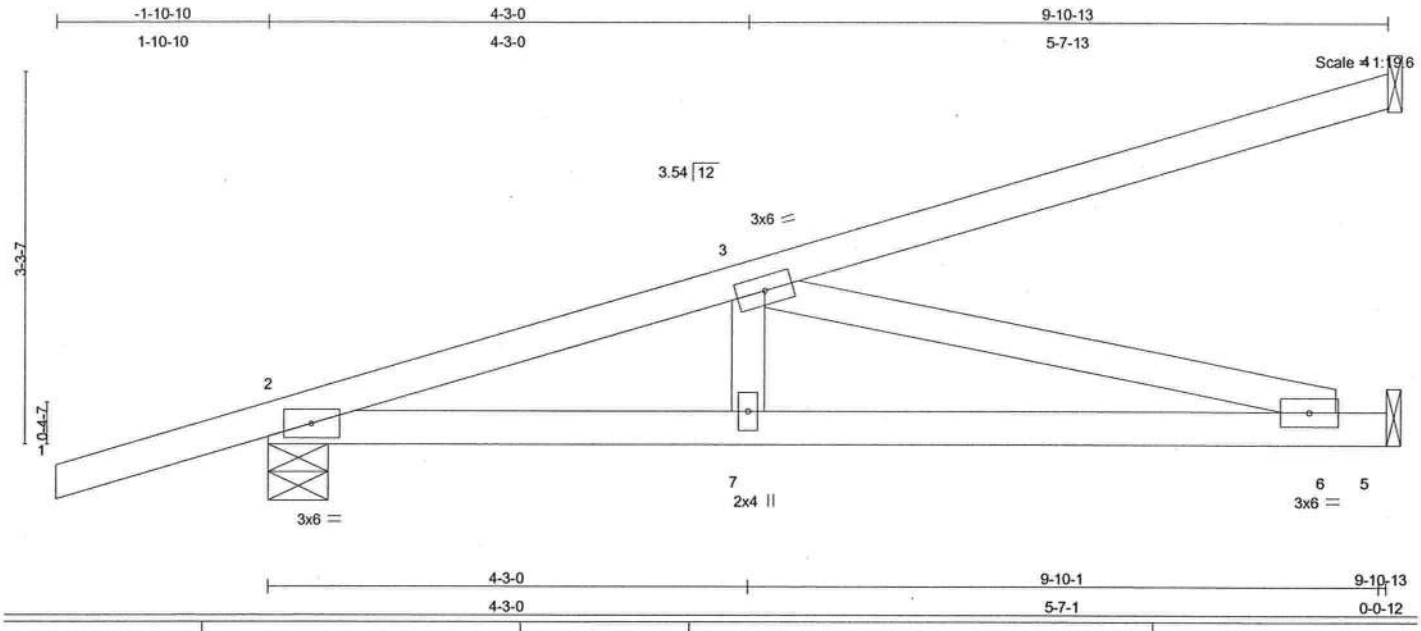

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.60	Vert(LL)	0.05	6-7	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.37	Vert(TL)	-0.12	6-7	>947	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.39	Horz(TL)	0.01	5	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 42 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-4-14 oc bracing.

REACTIONS (lb/size) 4=267/Mechanical, 2=393/0-6-6, 5=231/Mechanical
Max Horz 2=203(load case 3)
Max Uplift 4=-216(load case 3), 2=-230(load case 3), 5=-73(load case 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-794/259, 3-4=-84/55
BOT CHORD 2-7=-413/753, 6-7=-413/753, 5-6=0/0
WEBS 3-7=0/194, 3-6=-777/426

JOINT STRESS INDEX
2 = 0.55, 3 = 0.20, 6 = 0.21 and 7 = 0.14

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 216 lb uplift at joint 4, 230 lb uplift at joint 2 and 73 lb uplift at joint 5.
5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898318
L254852	HJ9	MONO TRUSS	4	1	Job Reference (optional)

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-54

Trapezoidal Loads (plf)

Vert: 2=-4(F=25, B=25)-to-4=-134(F=-40, B=-40), 2=0(F=5, B=5)-to-5=-25(F=-7, B=-7)

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898319
L254852	T01	HIP	2	2	Job Reference (optional)

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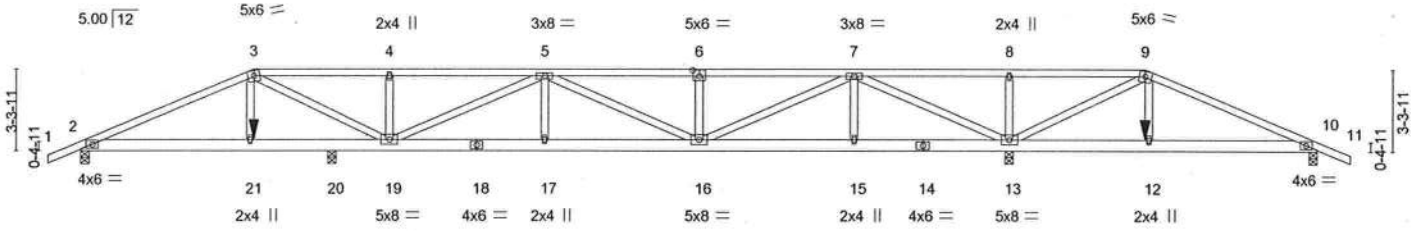
Scale = 1:89.6



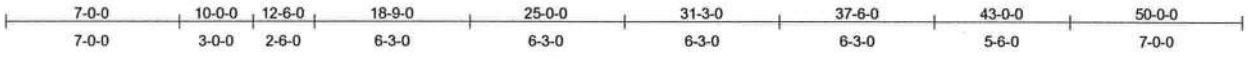


Plate Offsets (X,Y): [6:0-3-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.56	Vert(LL)	-0.14	17-19	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.84	Vert(TL)	-0.26	17-19	>999	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.75	Horz(TL)	0.03	13	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 561 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 6 SYP No.1D
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 12-13,10-12.

REACTIONS (lb/size) 2=611/0-4-0, 13=3814/0-4-0, 10=88/0-4-0, 20=2340/0-4-0
Max Horz 2=-55(load case 6)
Max Uplift 2=-227(load case 5), 13=-1221(load case 3), 10=-167(load case 9), 20=-737(load case 4)
Max Grav 2=611(load case 1), 13=3814(load case 1), 10=95(load case 10), 20=2343(load case 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-651/209, 3-4=-1015/376, 4-5=-1015/376, 5-6=-3000/1006, 6-7=-3000/1006, 7-8=-799/2576, 8-9=-799/2576, 9-10=-209/678, 10-11=0/28
BOT CHORD 2-21=-163/541, 20-21=-172/567, 19-20=-172/567, 18-19=-992/3207, 17-18=-992/3207, 16-17=-992/3207, 15-16=-305/1093, 14-15=-305/1093, 13-14=-305/1093, 12-13=-620/241, 10-12=-598/237
WEBS 3-21=-526/239, 3-19=-198/661, 4-19=-723/350, 5-19=-2422/777, 5-17=0/394, 5-16=-236/80, 6-16=-728/359, 7-16=-682/2110, 7-15=0/240, 7-13=-4034/1308, 8-13=-755/361, 9-13=-2396/745, 9-12=-83/460

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JOINT STRESS INDEX
2 = 0.21, 3 = 0.66, 4 = 0.33, 5 = 0.96, 6 = 0.41, 7 = 0.96, 8 = 0.33, 9 = 0.66, 10 = 0.21, 12 = 0.33, 13 = 0.45, 14 = 0.61, 15 = 0.33, 16 = 0.47, 17 = 0.33, 18 = 0.61, 19 = 0.45 and 21 = 0.33

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898319
L254852	T01	HIP	2	2	Job Reference (optional)

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2 X 6 - 2 rows at 0-9-0 oc.
   Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; Lumber DOL=1.60 plate grip DOL=1.60.
5) Provide adequate drainage to prevent water ponding.
6) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 2, 1221 lb uplift at joint 13, 167 lb uplift at joint 10 and 737 lb uplift at joint 20.
9) Girder carries hip end with 7-0-0 end setback.

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
      Vert: 1-3=-54, 3-9=-117(F=-63), 9-11=-54, 2-21=-10, 12-21=-22(F=-12), 10-12=-10
   Concentrated Loads (lb)
      Vert: 21=-411(F) 12=-411(F)

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898320
L254852	T02	HIP	2	1	Job Reference (optional)

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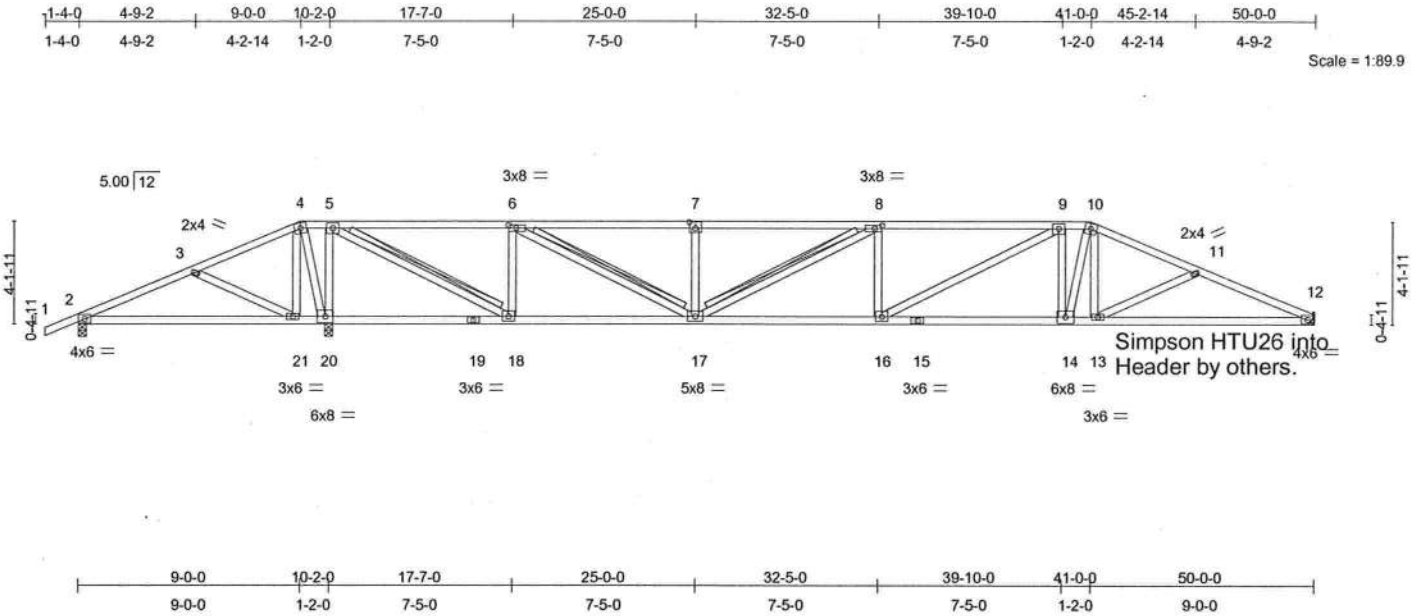

Plate Offsets (X,Y): [6:0-3-8,0-1-8], [7:0-3-0,0-3-0], [8:0-3-8,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.75	Vert(LL)	0.31	16-17	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.56	Vert(TL)	-0.51	16-17	>940	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.85	Horz(TL)	0.05	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 262 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-6-4 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-18, 6-17, 8-17
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

Recommended hanger connection based on manufacturer tested capacities and nail calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information. Hanger connection to be reviewed and approved by the Architect/Engineer of Record.

REACTIONS (lb/size) 12=1084/Mechanical, 2=-371/0-4-0, 20=2548/0-4-0
Max Horz 2=69(load case 6)
Max Uplift 12=-238(load case 4), 2=-604(load case 11), 20=-648(load case 5)
Max Grav 12=1090(load case 11), 2=139(load case 5), 20=2548(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-710/1661, 3-4=-904/1842, 4-5=-900/1903, 5-6=-553/343, 6-7=-1972/1088, 7-8=-1972/1088, 8-9=-2483/1368, 9-10=-2038/1157, 10-11=-2102/1126, 11-12=-2351/1276
BOT CHORD 2-21=-1493/692, 20-21=-1671/981, 19-20=-1841/1062, 18-19=-1841/1062, 17-18=-147/553, 16-17=-1172/2483, 15-16=-974/2059, 14-15=-974/2059, 13-14=-879/1888, 12-13=-1107/2115
WEBS 3-21=-406/316, 4-21=-67/270, 4-20=-908/451, 5-20=-1642/879, 5-18=-1362/2637, 6-18=-1147/679, 6-17=-840/1613, 7-17=-397/284, 8-17=-590/315, 8-16=-189/150, 9-16=-224/574, 9-14=-642/328, 10-14=-319/685, 10-13=-74/249, 11-13=-243/248

Continued on page 2

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898320
L254852	T02	HIP	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.64, 3 = 0.33, 4 = 0.50, 5 = 0.82, 6 = 0.65, 7 = 0.57, 8 = 0.65, 9 = 0.82, 10 = 0.50, 11 = 0.33, 12 = 0.64, 13 = 0.34, 14 = 0.21, 15 = 0.68, 16 = 0.82, 17 = 0.72, 18 = 0.82, 19 = 0.68, 20 = 0.21 and 21 = 0.34

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All plates are 5x6 MT20 unless otherwise indicated.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 238 lb uplift at joint 12, 604 lb uplift at joint 2 and 648 lb uplift at joint 20.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898321
L254852	T03	HIP	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:34:54 2007 Page 1

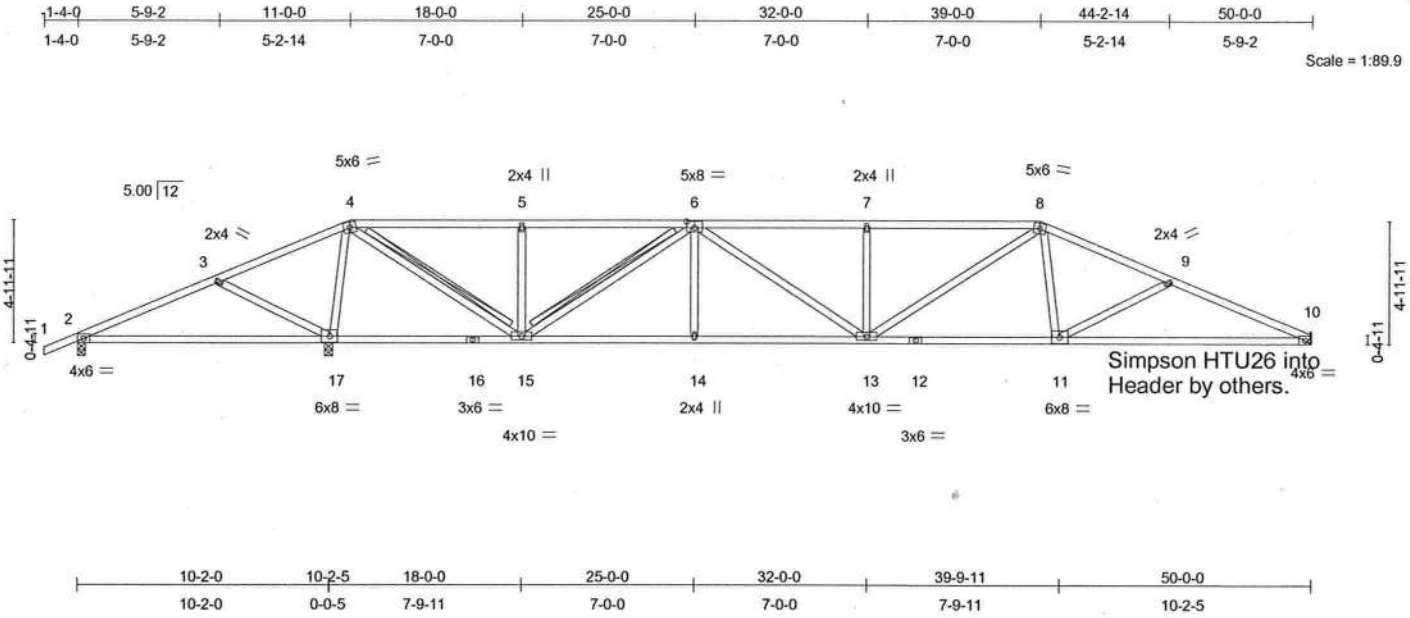

Plate Offsets (X,Y): [6:0-4-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.61	Vert(LL)	-0.25	10-11	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.66	Vert(TL)	-0.50	10-11	>940	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.83	Horz(TL)	0.07	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 250 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-10-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-7-1 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-15, 6-15
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

Recommended hanger connection based on manufacturer tested capacities and nail calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information. Hanger connection to be reviewed and approved by the Architect/Engineer of Record.

REACTIONS (lb/size) 10=1101/Mechanical, 2=-225/0-4-0, 17=2385/0-4-0
Max Horz 2=79(load case 6)
Max Uplift 10=-232(load case 4), 2=-458(load case 11), 17=-576(load case 5)
Max Grav 10=1110(load case 11), 2=95(load case 5), 17=2385(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-569/1368, 3-4=-771/1602, 4-5=-672/424, 5-6=-672/424, 6-7=-2106/1198, 7-8=-2106/1198, 8-9=-2061/1117, 9-10=-2363/1293
BOT CHORD 2-17=-1231/574, 16-17=-1122/716, 15-16=-1122/716, 14-15=-745/1722, 13-14=-745/1722, 12-13=-831/1817, 11-12=-831/1817, 10-11=-1113/2125
WEBS 3-17=-411/345, 4-17=-2111/1163, 4-15=-1084/2085, 5-15=-396/273, 6-15=-1283/673, 6-14=0/216, 6-13=-258/477, 7-13=-396/273, 8-13=-155/484, 8-11=-89/344, 9-11=-306/303

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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898321
L254852	T03	HIP	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.65, 3 = 0.33, 4 = 0.70, 5 = 0.33, 6 = 0.37, 7 = 0.33, 8 = 0.70, 9 = 0.33, 10 = 0.65, 11 = 0.28, 12 = 0.61, 13 = 0.95, 14 = 0.33, 15 = 0.95, 16 = 0.61 and 17 = 0.28

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 10, 458 lb uplift at joint 2 and 576 lb uplift at joint 17.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898322
L254852	T04	HIP	2	1	Job Reference (optional)

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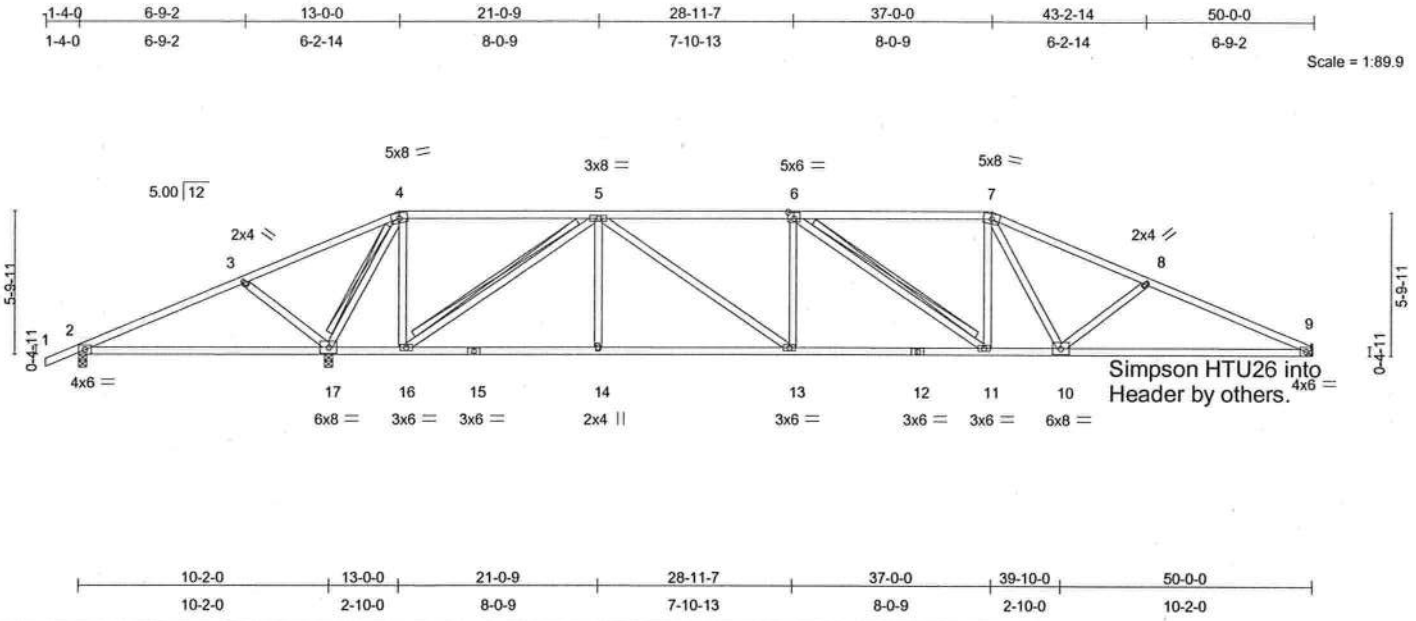

Plate Offsets (X,Y): [6:0-3-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.66	Vert(LL)	-0.25	9-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.62	Vert(TL)	-0.52	9-10	>925	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.91	Horz(TL)	0.09	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 257 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-8-9 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-17, 5-16, 6-11
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

Recommended hanger connection based on manufacturer tested capacities and nail calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information. Hanger connection to be reviewed and approved by the Architect/Engineer of Record.

REACTIONS (lb/size) 9=1139/Mechanical, 2=-111/0-4-0, 17=2233/0-4-0
Max Horz 2=89(load case 6)
Max Uplift 9=-231(load case 4), 2=-338(load case 11), 17=-509(load case 5)
Max Grav 9=1145(load case 11), 2=60(load case 5), 17=2233(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-466/1106, 3-4=-612/1345, 4-5=0/194, 5-6=-1862/1101, 6-7=-1761/1074, 7-8=-2140/1198, 8-9=-2421/1331
BOT CHORD 2-17=-992/488, 16-17=-219/257, 15-16=-477/1230, 14-15=-477/1230, 13-14=-477/1230, 12-13=-823/1865, 11-12=-823/1865, 10-11=-794/1758, 9-10=-1140/2174
WEBS 3-17=-405/359, 4-17=-2096/1116, 4-16=-469/996, 5-16=-1705/881, 5-14=0/248, 5-13=-419/784, 6-13=-367/289, 6-11=-312/72, 7-11=-17/216, 7-10=-197/350, 8-10=-332/329

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898322
L254852	T04	HIP	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.53, 3 = 0.33, 4 = 0.63, 5 = 0.80, 6 = 0.67, 7 = 0.42, 8 = 0.33, 9 = 0.67, 10 = 0.17, 11 = 0.34, 12 = 0.68, 13 = 0.45, 14 = 0.33, 15 = 0.49, 16 = 0.63 and 17 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 9, 338 lb uplift at joint 2 and 509 lb uplift at joint 17.

LOAD CASE(S) Standard

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898323
L254852	T05	HIP	2	1	Job Reference (optional)

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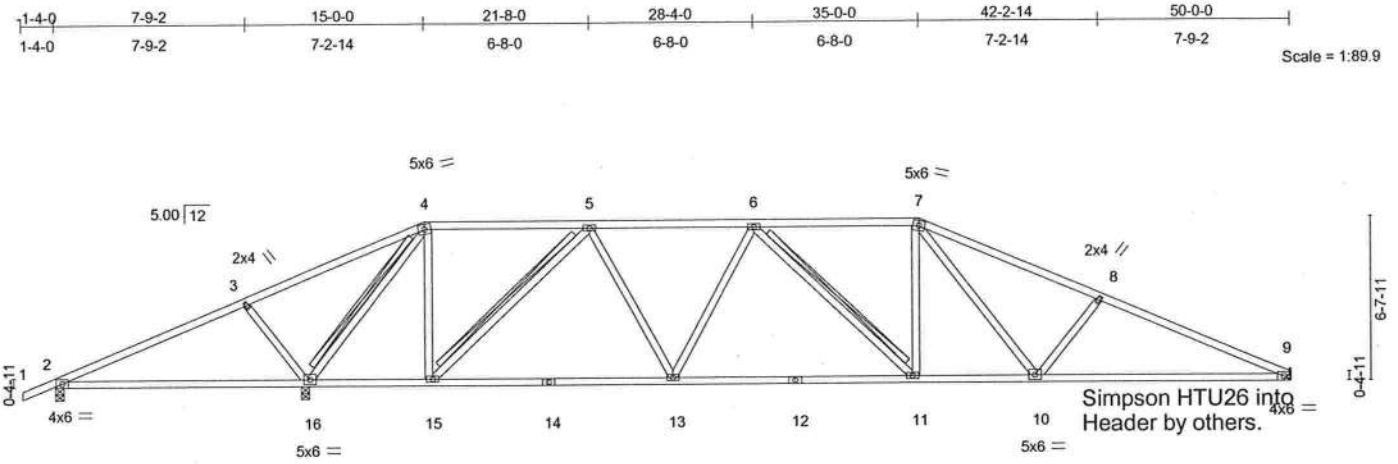

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.56	Vert(LL)	-0.28	9-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.61	Vert(TL)	-0.57	9-10	>828	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.79	Horz(TL)	0.09	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 254 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-7-4 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-16, 5-15, 6-11
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

Recommended hanger connection based on manufacturer tested capacities and nail calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information. Hanger connection to be reviewed and approved by the Architect/Engineer of Record.

REACTIONS (lb/size) 9=1160/Mechanical, 2=-6/0-4-0, 16=2108/0-4-0
Max Horz 2=99(load case 6)
Max Uplift 9=-240(load case 7), 2=-234(load case 11), 16=-454(load case 5)
Max Grav 9=1160(load case 1), 2=76(load case 10), 16=2108(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-385/871, 3-4=-465/1101, 4-5=-332/308, 5-6=-1424/881, 6-7=-1643/1038, 7-8=-2181/1268, 8-9=-2445/1343
BOT CHORD 2-16=-774/421, 15-16=-2/315, 14-15=-451/1169, 13-14=-451/1169, 12-13=-698/1622, 11-12=-698/1622, 10-11=-716/1641, 9-10=-1142/2177
WEBS 3-16=-437/394, 4-16=-2064/1076, 4-15=-406/917, 5-15=-1236/651, 5-13=-230/550, 6-13=-425/301, 6-11=-186/56, 7-11=0/192, 7-10=-326/498, 8-10=-383/371

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JOINT STRESS INDEX
2 = 0.67, 3 = 0.33, 4 = 0.71, 5 = 0.44, 6 = 0.44, 7 = 0.71, 8 = 0.33, 9 = 0.67, 10 = 0.29, 11 = 0.58, 12 = 0.68, 13 = 0.44, 14 = 0.68, 15 = 0.58 and 16 = 0.29

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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898323
L254852	T05	HIP	2	1	Job Reference (optional)

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All plates are 3x6 MT20 unless otherwise indicated.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 9, 234 lb uplift at joint 2 and 454 lb uplift at joint 16.

LOAD CASE(S) Standard

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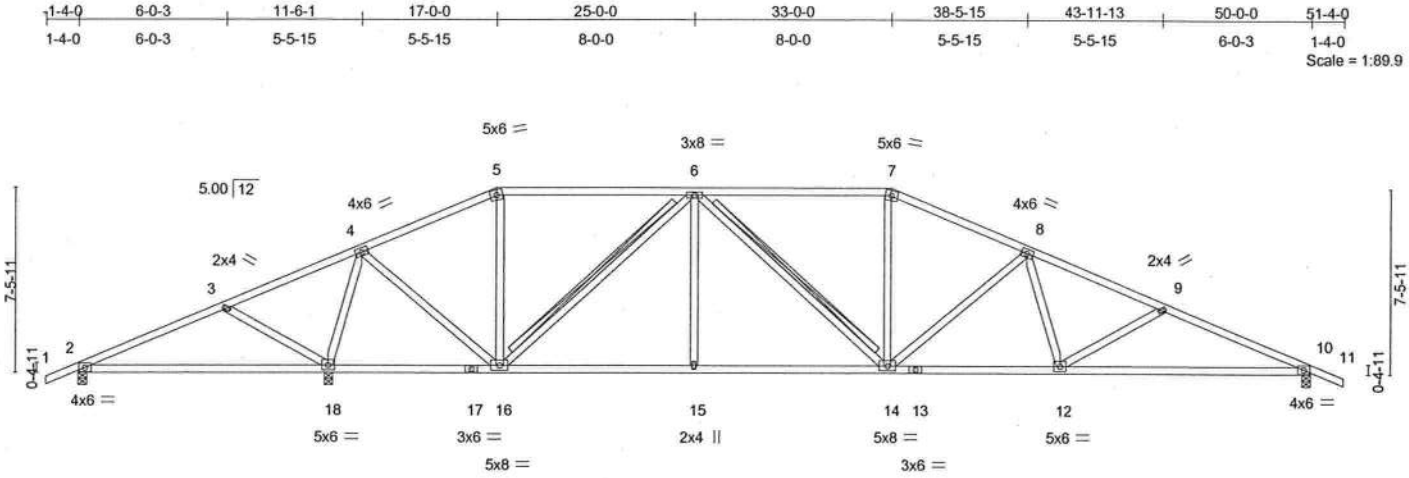
Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898324
L254852	T06	HIP	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:34:58 2007 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.44	Vert(LL)	-0.24	10-12	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.62	Vert(TL)	-0.48	10-12	>998	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.87	Horz(TL)	0.08	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 269 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-10-15 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 6-16, 6-14
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (lb/size) 2=-16/0-4-0, 18=2112/0-4-0, 10=1245/0-4-0
Max Horz 2=-102(load case 7)
Max Uplift 2=-227(load case 11), 18=-416(load case 5), 10=-319(load case 7)
Max Grav 2=84(load case 10), 18=2112(load case 1), 10=1245(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-305/799, 3-4=-494/1095, 4-5=-660/471, 5-6=-560/486, 6-7=-1492/988, 7-8=-1661/1010, 8-9=-2169/1220, 9-10=-2480/1377, 10-11=0/24
BOT CHORD 2-18=-708/372, 17-18=-468/399, 16-17=-468/399, 15-16=-482/1321, 14-15=-482/1321, 13-14=-864/1876, 12-13=-864/1876, 10-12=-1145/2216
WEBS 3-18=-420/352, 4-18=-1864/1047, 4-16=-638/1364, 5-16=-143/94, 6-16=-1055/542, 6-15=0/252, 6-14=-138/244, 7-14=-112/325, 8-14=-516/374, 8-12=-99/337, 9-12=-315/295

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898324
L254852	T06	HIP	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.70, 3 = 0.33, 4 = 0.63, 5 = 0.70, 6 = 0.56, 7 = 0.70, 8 = 0.63, 9 = 0.33, 10 = 0.70, 12 = 0.47, 13 = 0.61, 14 = 0.62, 15 = 0.33, 16 = 0.62, 17 = 0.61 and 18 = 0.47

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 2, 416 lb uplift at joint 18 and 319 lb uplift at joint 10.

LOAD CASE(S) Standard

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898325
L254852	T07	HIP	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:35:00 2007 Page 1

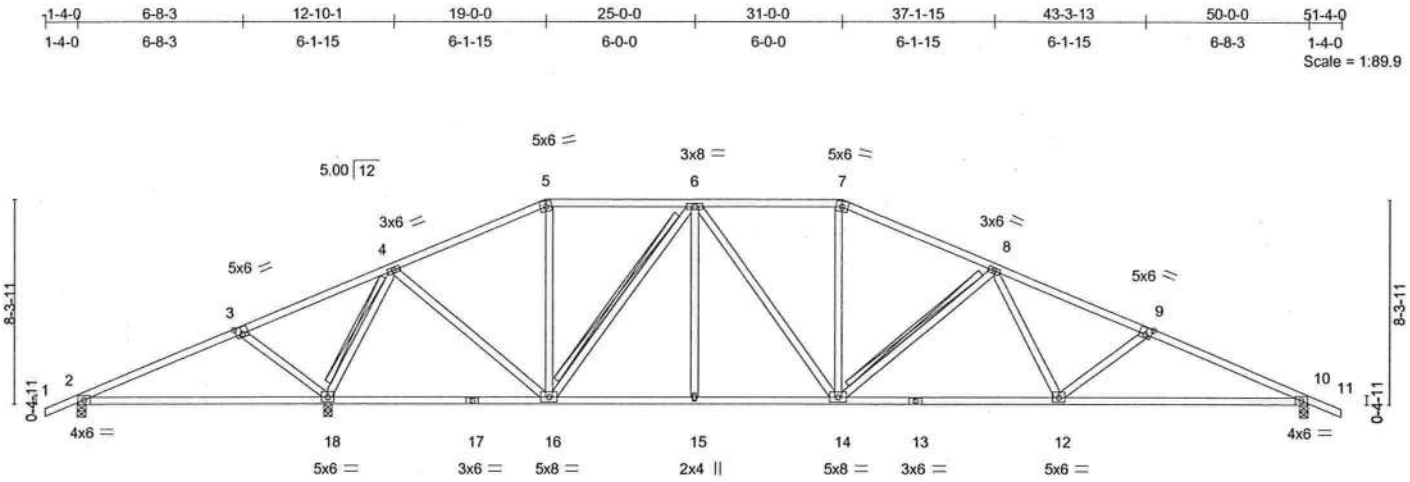

Plate Offsets (X,Y): [3:0-3-0,0-3-4], [9:0-3-0,0-3-4]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.45	Vert(LL)	-0.22	10-12	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.60	Vert(TL)	-0.45	10-12	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.56	Horz(TL)	0.08	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 275 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-10-2 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-18, 6-16, 8-14
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (lb/size) 2=11/0-4-0, 18=2078/0-4-0, 10=1252/0-4-0
Max Horz 2=-112(load case 7)
Max Uplift 2=-195(load case 11), 18=-381(load case 5), 10=-330(load case 7)
Max Grav 2=123(load case 10), 18=2078(load case 1), 10=1252(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-310/741, 3-4=-456/1041, 4-5=-865/597, 5-6=-739/605, 6-7=-1352/939, 7-8=-1524/956, 8-9=-2185/1252, 9-10=-2479/1378, 10-11=0/24
BOT CHORD 2-18=-656/383, 17-18=-122/189, 16-17=-122/189, 15-16=-396/1179, 14-15=-396/1179, 13-14=-829/1801, 12-13=-829/1801, 10-12=-1140/2211
WEBS 3-18=-411/358, 4-18=-1899/1072, 4-16=-460/1065, 5-16=-57/123, 6-16=-793/401, 6-15=0/147, 6-14=-165/318, 7-14=-112/297, 8-14=-600/446, 8-12=-155/412, 9-12=-329/312

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898325
L254852	T07	HIP	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.70, 3 = 0.75, 4 = 0.73, 5 = 0.55, 6 = 0.56, 7 = 0.55, 8 = 0.73, 9 = 0.75, 10 = 0.70, 12 = 0.40, 13 = 0.64, 14 = 0.49, 15 = 0.33, 16 = 0.49, 17 = 0.64 and 18 = 0.40

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 195 lb uplift at joint 2, 381 lb uplift at joint 18 and 330 lb uplift at joint 10.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898326
L254852	T08	HIP	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:35:01 2007 Page 1

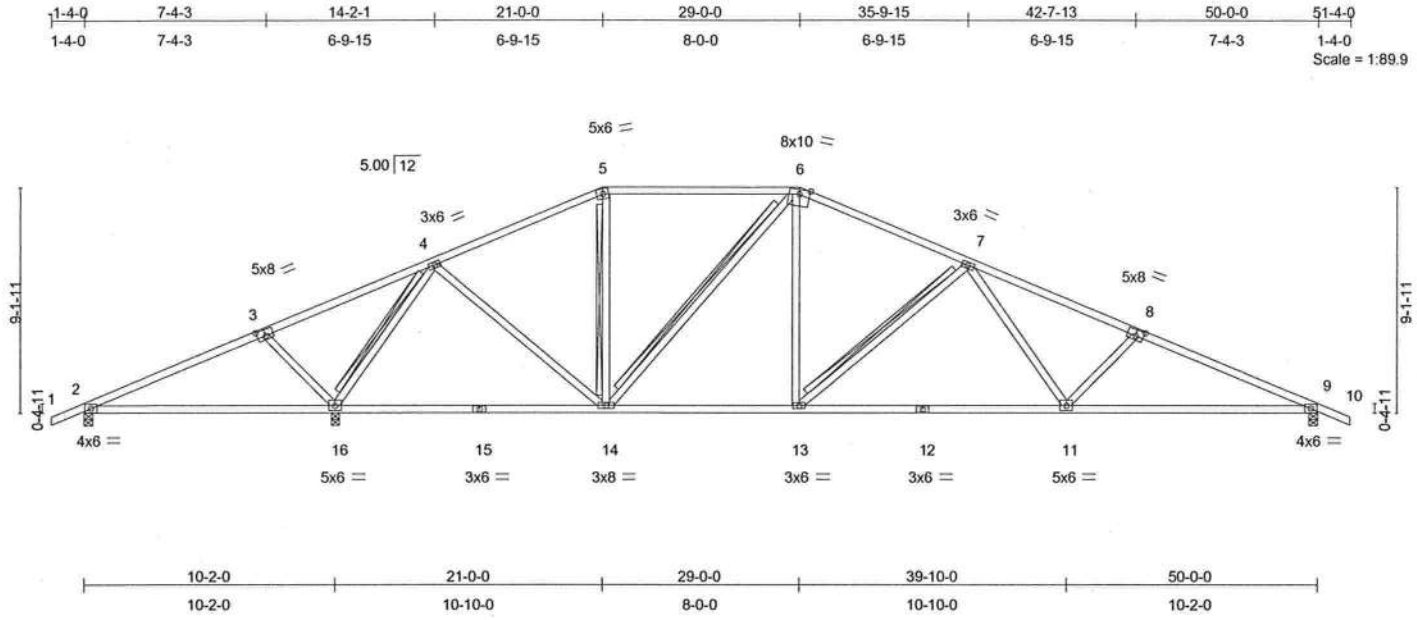

Plate Offsets (X,Y): [3:0-4-0,0-3-0], [8:0-4-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.49	Vert(LL)	-0.29	11-13	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.69	Vert(TL)	-0.58	11-13	>828	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.63	Horz(TL)	0.08	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 260 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-9-8 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-16, 5-14, 6-14, 7-13
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (lb/size) 2=48/0-4-0, 16=2031/0-4-0, 9=1261/0-4-0
Max Horz 2=-122(load case 7)
Max Uplift 2=-155(load case 11), 16=-393(load case 6), 9=-341(load case 7)
Max Grav 2=167(load case 10), 16=2031(load case 1), 9=1261(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-299/667, 3-4=-399/950, 4-5=-1018/695, 5-6=-877/704, 6-7=-1403/908, 7-8=-2219/1295, 8-9=-2490/1385, 9-10=0/24
BOT CHORD 2-16=-574/377, 15-16=-34/280, 14-15=-34/280, 13-14=-417/1241, 12-13=-790/1724, 11-12=-790/1724, 9-11=-1141/2217
WEBS 3-16=-421/374, 4-16=-1916/1089, 4-14=-319/830, 5-14=-132/143, 6-14=-621/303, 6-13=-270/531, 7-13=-648/498, 7-11=-223/500, 8-11=-354/336

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898326
L254852	T08	HIP	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.38, 3 = 0.68, 4 = 0.62, 5 = 0.80, 6 = 0.79, 7 = 0.39, 8 = 0.52, 9 = 0.70, 11 = 0.21, 12 = 0.77, 13 = 0.34, 14 = 0.79, 15 = 0.64 and 16 = 0.35

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 155 lb uplift at joint 2, 393 lb uplift at joint 16 and 341 lb uplift at joint 9.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898327
L254852	T09	HIP	2	1	Job Reference (optional)

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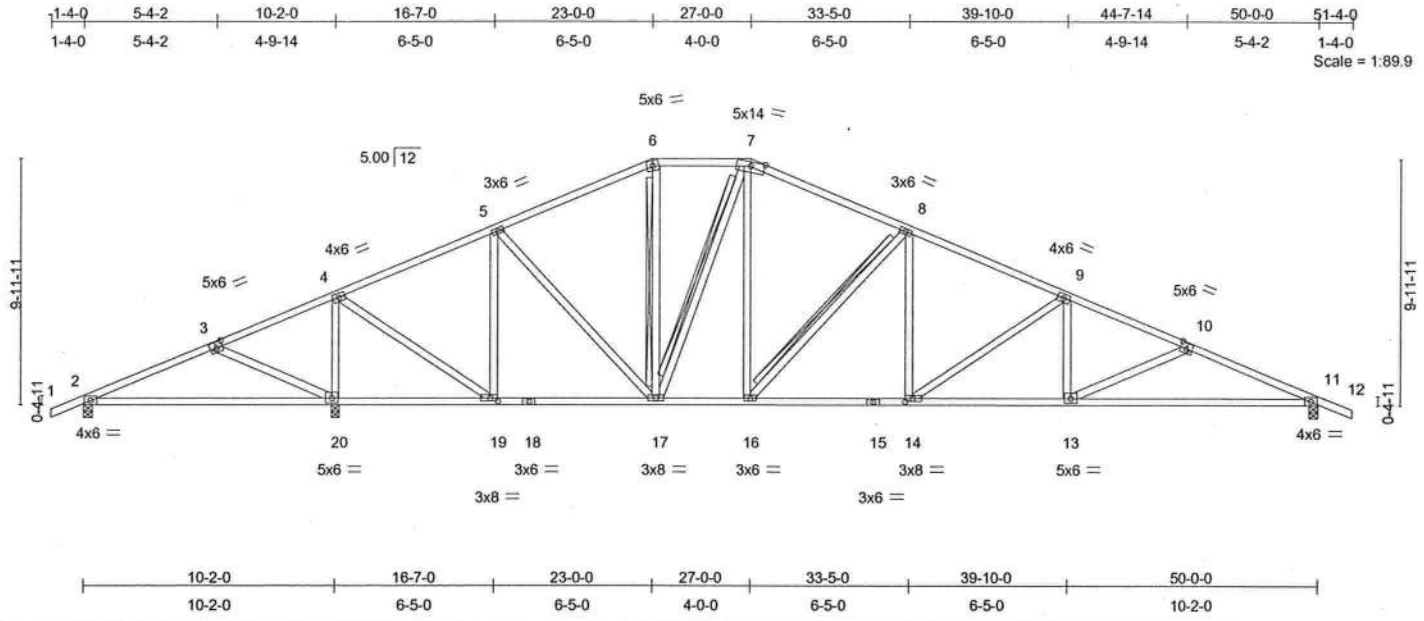

Plate Offsets (X,Y): [3:0-3-0,0-3-0], [10:0-3-0,0-3-0], [14:0-3-8,0-1-8], [19:0-3-8,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.42	Vert(LL)	-0.24	11-13	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.63	Vert(TL)	-0.48	11-13	>993	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.85	Horz(TL)	0.08	11	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 299 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-9-5 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 6-17, 7-17, 8-16
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (lb/size) 2=67/0-4-0, 20=2007/0-4-0, 11=1266/0-4-0
Max Horz 2=-132(load case 7)
Max Uplift 2=-128(load case 11), 20=-414(load case 6), 11=-350(load case 7)
Max Grav 2=192(load case 10), 20=2007(load case 1), 11=1266(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-204/547, 3-4=-389/841, 4-5=-712/502, 5-6=-1069/767, 6-7=-922/764, 7-8=-1234/860, 8-9=-1766/1090, 9-10=-2250/1296, 10-11=-2531/1439, 11-12=0/24
BOT CHORD 2-20=-480/278, 19-20=-729/554, 18-19=-131/599, 17-18=-131/599, 16-17=-322/1082, 15-16=-674/1572, 14-15=-674/1572, 13-14=-988/2034, 11-13=-1204/2263
WEBS 3-20=-372/305, 4-20=-1748/1039, 4-19=-826/1600, 5-19=-844/501, 5-17=-148/508, 6-17=-88/192, 7-17=-528/241, 7-16=-349/580, 8-16=-730/522, 8-14=-177/408, 9-14=-560/378, 9-13=-48/307, 10-13=-259/239

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898327
L254852	T09	HIP	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.59, 3 = 0.52, 4 = 0.68, 5 = 0.40, 6 = 0.44, 7 = 0.56, 8 = 0.40, 9 = 0.28, 10 = 0.35, 11 = 0.71, 13 = 0.19, 14 = 0.34, 15 = 0.53, 16 = 0.37, 17 = 0.64, 18 = 0.23, 19 = 0.73 and 20 = 0.30

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint 2, 414 lb uplift at joint 20 and 350 lb uplift at joint 11.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898328
L254852	T10	COMMON	16	1	Job Reference (optional)

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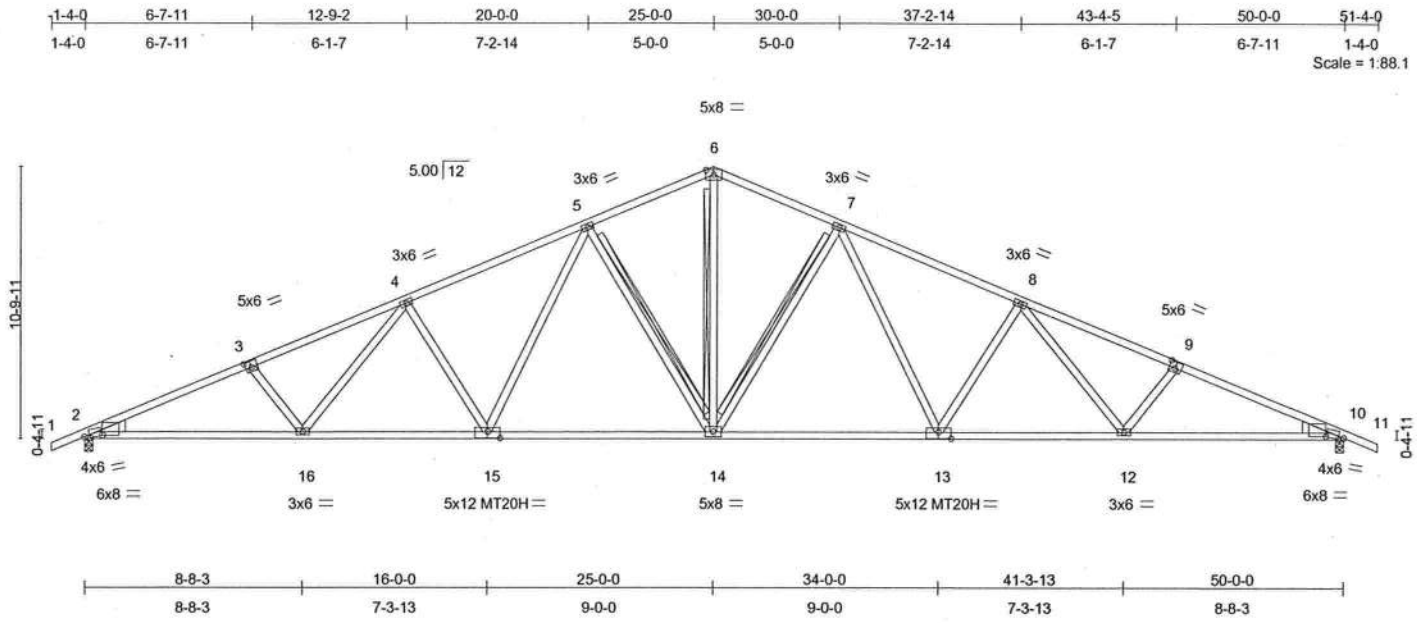

Plate Offsets (X,Y): [2:0-2-8,0-1-0], [2:0-8-8,0-0-14], [3:0-3-0,0-3-0], [9:0-3-0,0-3-0], [10:0-8-8,0-0-14], [10:0-2-8,0-1-0], [13:0-6-0,0-3-0], [15:0-6-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.35	Vert(LL)	0.37	14	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.52	Vert(TL)	-0.61	14-15	>970	240	MT20H	187/143
BCLL	10.0	* Rep Stress Incr	YES	WB	0.56	Horz(TL)	0.20	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 282 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.1D
BOT CHORD 2 X 4 SYP No.1D
WEBS 2 X 4 SYP No.3
WEDGE
Left: 2 X 6 SYP No.2, Right: 2 X 6 SYP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-1-6 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-14, 6-14, 7-14
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (lb/size) 2=1670/0-4-0, 10=1670/0-4-0
Max Horz 2=141(load case 6)
Max Uplift 2=-417(load case 6), 10=-417(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-3516/1987, 3-4=-3320/1949, 4-5=-2799/1734, 5-6=-2106/1404, 6-7=-2106/1404, 7-8=-2799/1734, 8-9=-3320/1949, 9-10=-3516/1987, 10-11=0/24
BOT CHORD 2-16=-1697/3157, 15-16=-1423/2789, 14-15=-1043/2258, 13-14=-1043/2258, 12-13=-1423/2789, 10-12=-1697/3157
WEBS 3-16=-267/256, 4-16=-203/381, 4-15=-541/437, 5-15=-362/599, 5-14=-736/552, 6-14=-894/1341, 7-14=-736/552, 7-13=-362/599, 8-13=-541/437, 8-12=-203/381, 9-12=-267/256

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898328
L254852	T10	COMMON	16	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.71, 2 = 0.24, 3 = 0.60, 4 = 0.43, 5 = 0.44, 6 = 0.39, 7 = 0.44, 8 = 0.43, 9 = 0.60, 10 = 0.71, 10 = 0.24, 12 = 0.39, 13 = 0.44, 14 = 0.39, 15 = 0.44 and 16 = 0.39

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All plates are MT20 plates unless otherwise indicated.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 417 lb uplift at joint 2 and 417 lb uplift at joint 10.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898329
L254852	T11	COMMON	19	1	Job Reference (optional)

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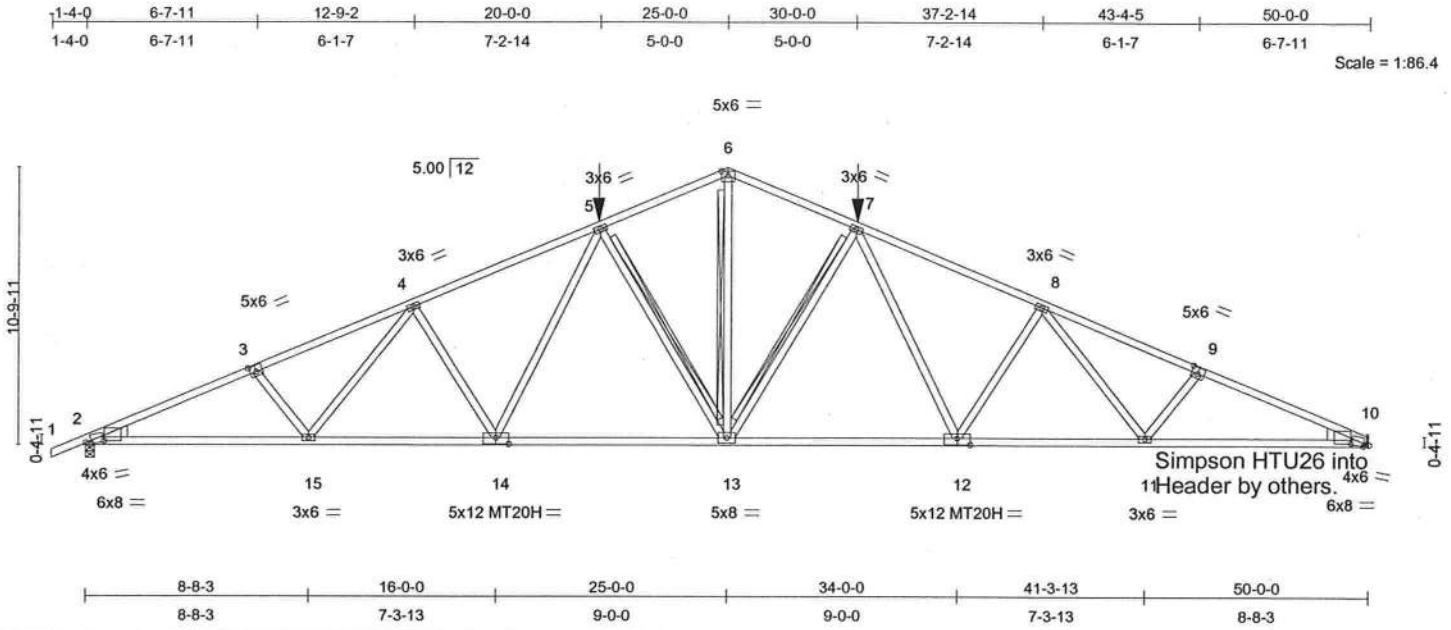

Plate Offsets (X,Y): [2:0-2-8,0-1-0], [2:0-8-8,0-0-14], [3:0-3-0,0-3-0], [6:0-3-0,0-2-2], [9:0-3-0,0-3-0], [10:0-8-8,0-0-14], [10:0-2-8,0-1-0], [12:0-6-0,0-3-0], [14:0-6-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.65	Vert(LL)	0.61	12-13	>978	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.84	Vert(TL)	-0.96	12-13	>623	240	MT20H	187/143
BCLL	10.0	* Rep Stress Incr	NO	WB	0.96	Horz(TL)	0.33	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 280 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.1D
BOT CHORD 2 X 4 SYP No.1D
WEBS 2 X 4 SYP No.3
WEDGE
Left: 2 X 6 SYP No.1D, Right: 2 X 6 SYP No.1D

Recommended hanger connection based on manufacturer tested capacities and nail calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information. Hanger connection to be reviewed and approved by the Architect/Engineer of Record.

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-11-10 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-13, 6-13, 7-13
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (lb/size) 2=2387/0-4-0, 10=2303/Mechanical
Max Horz 2=148(load case 6)
Max Uplift 2=-615(load case 6), 10=-551(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-5282/2997, 3-4=-5095/2965, 4-5=-4619/2775, 5-6=-3572/2243, 6-7=-3572/2243, 7-8=-4625/2781, 8-9=-5121/2994, 9-10=-5311/3030
BOT CHORD 2-15=-2658/4772, 14-15=-2416/4458, 13-14=-2046/3944, 12-13=-2049/3947, 11-12=-2427/4468, 10-11=-2694/4803
WEBS 3-15=-223/231, 4-15=-176/334, 4-14=-522/426, 5-14=-352/583, 5-13=-1381/920, 6-13=-1532/2455, 7-13=-1386/925, 7-12=-359/589, 8-12=-531/436, 8-11=-201/354, 9-11=-237/246

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JOINT STRESS INDEX
2 = 0.88, 2 = 0.55, 3 = 0.74, 4 = 0.45, 5 = 0.62, 6 = 0.74, 7 = 0.62, 8 = 0.45, 9 = 0.74, 10 = 0.88, 10 = 0.55, 11 = 0.40, 12 = 0.73, 13 = 0.74, 14 = 0.73 and 15 = 0.40

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898329
L254852	T11	COMMON	19	1	Job Reference (optional)

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All plates are MT20 plates unless otherwise indicated.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 615 lb uplift at joint 2 and 551 lb uplift at joint 10.

Loading has been calculated by the truss manufacturer. It is the responsibility of the Architect/Engineer of Record to verify and approve the loading.

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-6=-54, 6-10=-54, 2-10=-10
   Concentrated Loads (lb)
   Vert: 5=-715 7=-715

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898330
L254852	T12	COMMON	4	1	Job Reference (optional)

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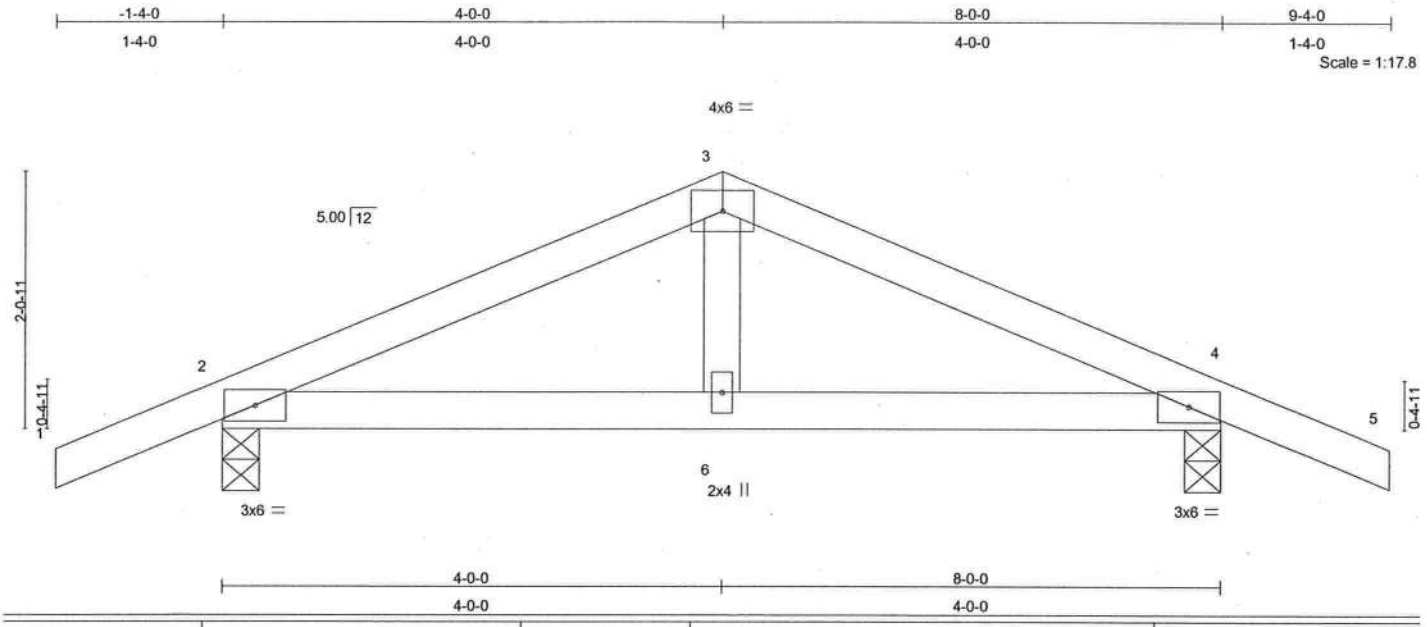

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.13	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.09	Vert(TL)	-0.01	2-6	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	4	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 32 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=327/0-3-8, 4=327/0-3-8
Max Horz 2=-38(load case 7)
Max Uplift 2=-123(load case 6), 4=-123(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-350/220, 3-4=-350/220, 4-5=0/24
BOT CHORD 2-6=-99/280, 4-6=-99/280
WEBS 3-6=0/128

JOINT STRESS INDEX
2 = 0.17, 3 = 0.33, 4 = 0.17 and 6 = 0.09

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 2 and 123 lb uplift at joint 4.

Continued on page 2

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1109 Coastal Bay Blvd
Boynton Beach, FL 33435

October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898330
L254852	T12	COMMON	4	1	Job Reference (optional)

LOAD CASE(S) Standard

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898331
L254852	T12G	GABLE	4	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:35:07 2007 Page 1

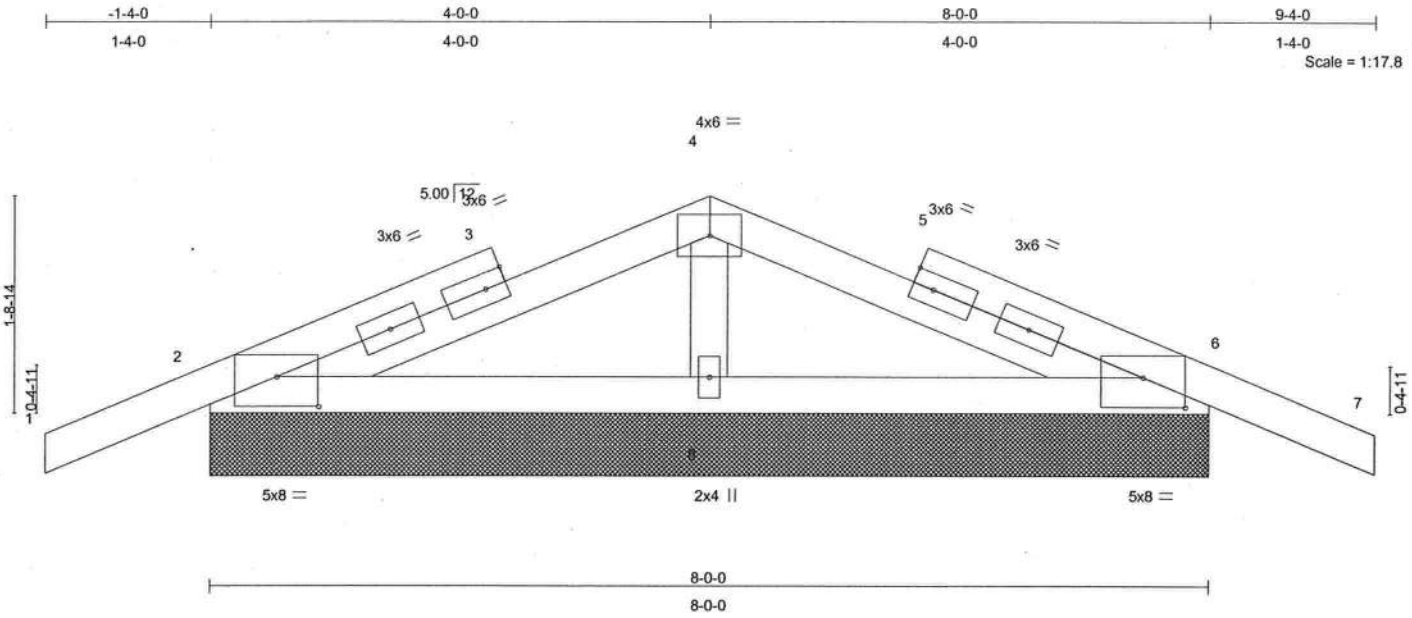

Plate Offsets (X,Y): [2:0-4-0,0-2-14], [6:0-4-0,0-2-14]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.11	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.06	Vert(TL)	0.00	7	n/r	90		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.00	6	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 37 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
OTHERS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 8-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 2=183/8-0-0, 6=183/8-0-0, 8=290/8-0-0
Max Horz 2=39(load case 6)
Max Uplift 2=-143(load case 6), 6=-149(load case 7), 8=-96(load case 6)
Max Grav 2=192(load case 10), 6=192(load case 11), 8=290(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-11/23, 3-4=-5/67, 4-5=0/67, 5-6=-18/23, 6-7=0/24
BOT CHORD 2-8=-22/67, 6-8=-22/67
WEBS 4-8=-240/198

JOINT STRESS INDEX
2 = 0.52, 3 = 0.00, 3 = 0.20, 3 = 0.20, 4 = 0.34, 5 = 0.00, 5 = 0.20, 5 = 0.20, 6 = 0.52 and 8 = 0.11

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898331
L254852	T12G	GABLE	4	1	Job Reference (optional)

NOTES

4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 2, 149 lb uplift at joint 6 and 96 lb uplift at joint 8.

LOAD CASE(S) Standard

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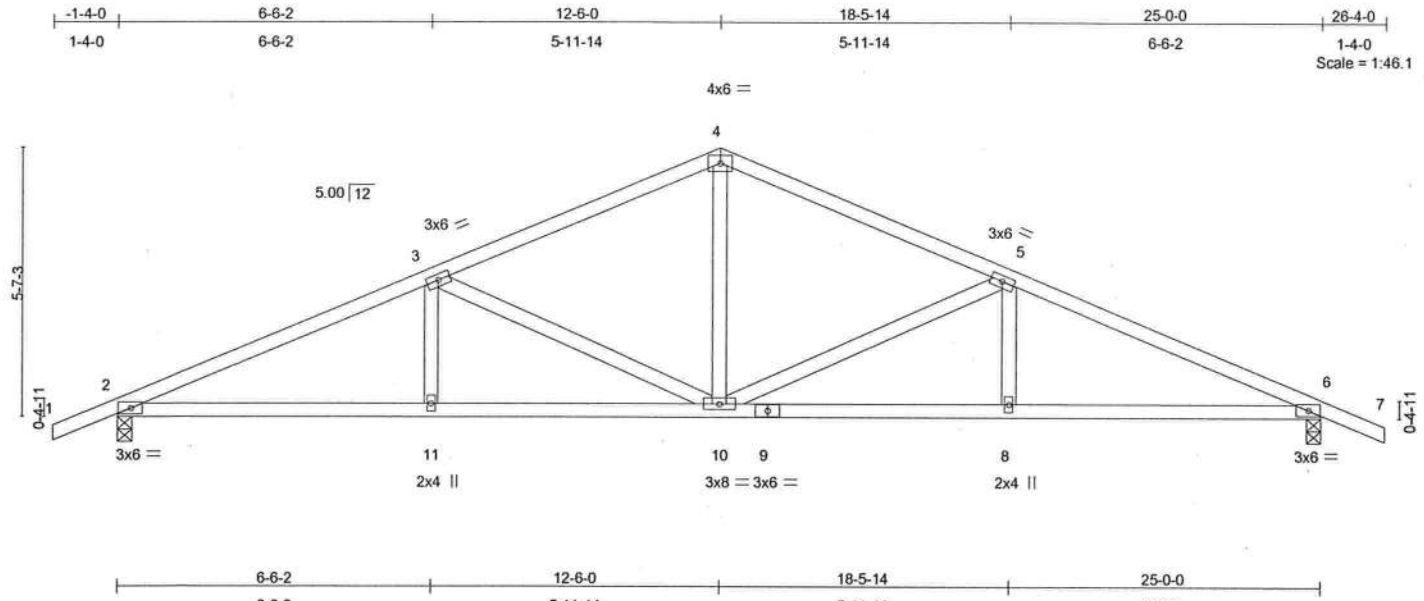
October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898332
L254852	T13	COMMON	1	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:35:08 2007 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.28	Vert(LL)	0.09	10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.36	Vert(TL)	-0.15	8-10	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.39	Horz(TL)	0.06	6	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 116 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-7-7 oc bracing.

REACTIONS (lb/size) 2=871/0-3-8, 6=871/0-3-8
Max Horz 2=-80(load case 7)
Max Uplift 2=-240(load case 6), 6=-240(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-1581/863, 3-4=-1087/666, 4-5=-1087/666, 5-6=-1581/863, 6-7=0/24
BOT CHORD 2-11=-672/1388, 10-11=-672/1388, 9-10=-672/1388, 8-9=-672/1388, 6-8=-672/1388
WEBS 3-11=0/199, 3-10=-516/343, 4-10=-255/470, 5-10=-516/343, 5-8=0/199

JOINT STRESS INDEX
2 = 0.63, 3 = 0.39, 4 = 0.63, 5 = 0.39, 6 = 0.63, 8 = 0.33, 9 = 0.44, 10 = 0.56 and 11 = 0.33

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 2 and 240 lb uplift at joint 6.

Continued on page 2

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898332
L254852	T13	COMMON	1	1	Job Reference (optional)

LOAD CASE(S) Standard

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898333
L254852	T13G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:35:09 2007 Page 1

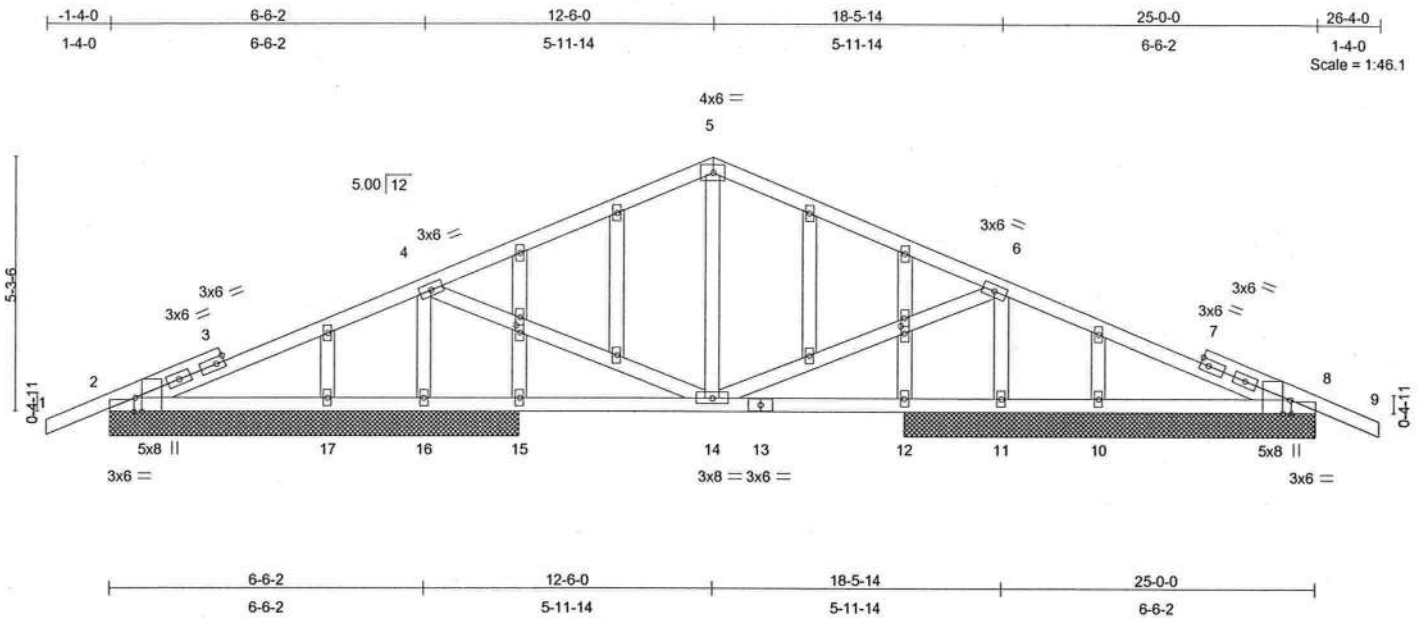

Plate Offsets (X,Y): [2:0-3-8,Edge], [2:0-0-5,Edge], [8:0-3-8,Edge], [8:0-0-5,Edge], [20:0-1-12,0-1-0], [26:0-1-12,0-1-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.48	Vert(LL)	-0.02	8-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.23	Vert(TL)	-0.03	8-10	>999	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.15	Horz(TL)	0.01	8	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 141 lb	

LUMBER

TOP CHORD	2 X 4 SYP No.2
BOT CHORD	2 X 4 SYP No.2
WEBS	2 X 4 SYP No.3
OTHERS	2 X 4 SYP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 2=263/8-6-0, 8=263/8-6-0, 16=785/8-6-0, 11=785/8-6-0, 15=58/8-6-0, 17=112/8-6-0, 12=58/8-6-0, 10=112/8-6-0
Max Horz 2=88(load case 6)
Max Uplift 2=-159(load case 6), 8=-174(load case 7), 16=-453(load case 6), 11=-437(load case 7), 17=-19(load case 6), 10=-21(load case 7)
Max Grav 2=268(load case 10), 8=268(load case 11), 16=785(load case 1), 11=785(load case 1), 15=116(load case 2), 17=152(load case 2), 12=116(load case 2), 10=152(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-3/35, 2-3=-153/176, 3-4=-156/297, 4-5=-310/212, 5-6=-310/212, 6-7=-126/297, 7-8=-120/176, 8-9=-3/35
BOT CHORD	2-17=-180/205, 16-17=-180/205, 15-16=-180/205, 14-15=-180/205, 13-14=-180/205, 12-13=-180/205, 11-12=-180/205, 10-11=-180/205, 8-10=-180/205
WEBS	4-16=-825/551, 4-14=-179/410, 5-14=-288/172, 6-14=-179/410, 6-11=-825/551

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JOINT STRESS INDEX

2 = 0.31, 2 = 0.25, 3 = 0.00, 3 = 0.36, 3 = 0.36, 4 = 0.39, 5 = 0.75, 6 = 0.39, 7 = 0.00, 7 = 0.36, 7 = 0.36, 8 = 0.31, 8 = 0.25, 10 = 0.33, 11 = 0.33, 12 = 0.33, 13 = 0.15, 14 = 0.56, 15 = 0.33, 16 = 0.33, 17 = 0.33, 18 = 0.33, 19 = 0.33, 20 = 0.39, 20 = 0.33, 21 = 0.33, 22 = 0.33, 23 = 0.33, 24 = 0.33, 25 = 0.33, 26 = 0.39, 26 = 0.33 and 27 = 0.33

Continued on page 2

October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898333
L254852	T13G	GABLE	1	1	Job Reference (optional)

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 2, 174 lb uplift at joint 8, 453 lb uplift at joint 16, 437 lb uplift at joint 11, 19 lb uplift at joint 17 and 21 lb uplift at joint 10.
9) Gable truss supports 16" max. rake gable overhang.

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-5=-79, 5-9=-79, 2-8=-10

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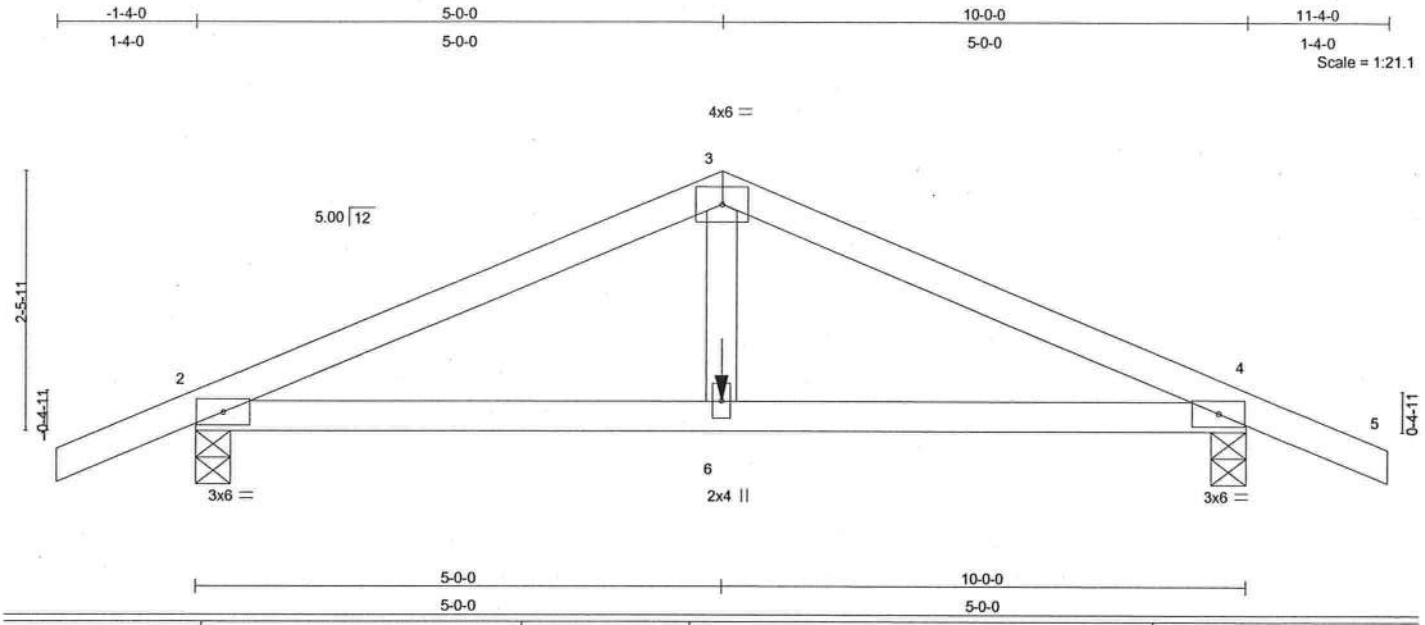
October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898334
L254852	T14	COMMON	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:35:10 2007 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.17	Vert(LL)	-0.02	6	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.21	Vert(TL)	-0.04	2-6	>999	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.14	Horz(TL)	0.01	4	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 38 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=577/0-4-0, 4=577/0-4-0
Max Horz 2=-43(load case 6)
Max Uplift 2=-204(load case 5), 4=-204(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-915/247, 3-4=-915/247, 4-5=0/24
BOT CHORD 2-6=-191/789, 4-6=-191/789
WEBS 3-6=-105/433

JOINT STRESS INDEX
2 = 0.37, 3 = 0.31, 4 = 0.37 and 6 = 0.31

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; Lumber DOL=1.60 plate grip DOL=1.60.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 204 lb uplift at joint 2 and 204 lb uplift at joint 4.
6) Girder carries hip end with 5-0-0 end setback.

Continued on page 2

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898334
L254852	T14	COMMON	2	1	Job Reference (optional)

NOTES

7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-54, 3-5=-54, 2-4=-10
   Concentrated Loads (lb)
   Vert: 6=-373(F)

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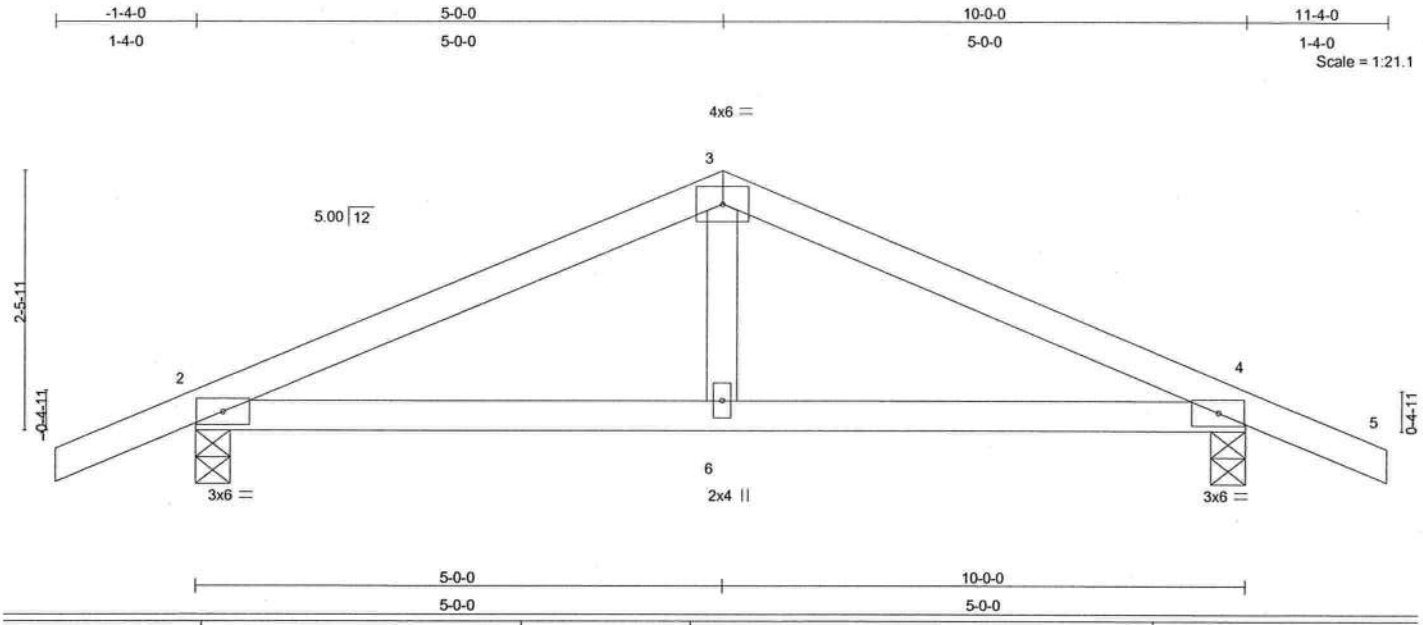
October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898335
L254852	T15	COMMON	4	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Fri Oct 05 14:35:11 2007 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.16	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.14	Vert(TL)	-0.03	2-6	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.01	4	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 38 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=390/0-4-0, 4=390/0-4-0
Max Horz 2=-43(load case 7)
Max Uplift 2=-136(load case 6), 4=-136(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-468/286, 3-4=-468/286, 4-5=0/24
BOT CHORD 2-6=-152/381, 4-6=-152/381
WEBS 3-6=0/164

JOINT STRESS INDEX
2 = 0.24, 3 = 0.52, 4 = 0.24 and 6 = 0.12

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 136 lb uplift at joint 2 and 136 lb uplift at joint 4.

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898335
L254852	T15	COMMON	4	1	Job Reference (optional)

LOAD CASE(S) Standard

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October 8,2007

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898336
L254852	T11A	COMMON	2	1	Job Reference (optional)

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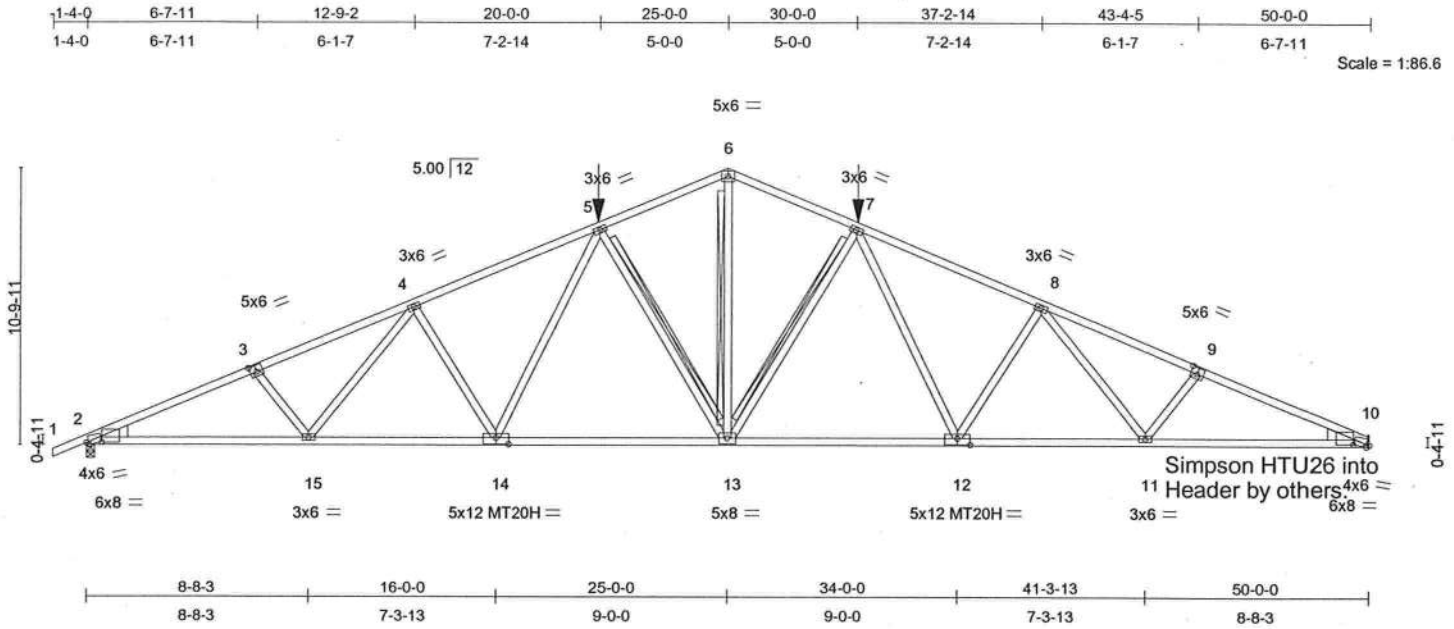

Plate Offsets (X,Y): [2:0-1-2,Edge], [2:0-7-6,0-0-4], [3:0-3-0,0-3-0], [9:0-3-0,0-3-0], [10:0-7-8,0-0-6], [10:0-1-2,Edge], [12:0-6-0,0-3-0], [14:0-6-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.74	Vert(LL)	0.70	13	>850	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.93	Vert(TL)	-1.09	12-13	>546	240	MT20H	187/143
BCLL	10.0	* Rep Stress Incr	NO	WB	0.93	Horz(TL)	0.38	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 280 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.1D
BOT CHORD 2 X 4 SYP No.1D
WEBS 2 X 4 SYP No.3
WEDGE
Left: 2 X 6 SYP No.1D, Right: 2 X 6 SYP No.1D

Recommended hanger connection based on manufacturer tested capacities and nail calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information. Hanger connection to be reviewed and approved by the Architect/Engineer of Record.

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-8-6 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-13, 6-13, 7-13
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c.,with 4in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (lb/size) 2=2691/0-4-0, 10=2606/Mechanical
Max Horz 2=148(load case 6)
Max Uplift 2=-699(load case 6), 10=-635(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-6033/3425, 3-4=-5849/3394, 4-5=-5388/3214, 5-6=-4490/2750, 6-7=-4490/2751, 7-8=-5394/3220, 8-9=-5875/3424, 9-10=-6063/3459
BOT CHORD 2-15=-3050/5458, 14-15=-2817/5160, 13-14=-2460/4671, 12-13=-2463/4674, 11-12=-2828/5170, 10-11=-3086/5492
WEBS 3-15=-211/224, 4-15=-168/320, 4-14=-495/411, 5-14=-338/558, 5-13=-1322/886, 6-13=-1474/2353, 7-13=-1327/892, 7-12=-345/565, 8-12=-504/421, 8-11=-194/341, 9-11=-226/240

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JOINT STRESS INDEX
2 = 0.87, 2 = 0.80, 3 = 0.79, 4 = 0.45, 5 = 0.60, 6 = 0.95, 7 = 0.60, 8 = 0.45, 9 = 0.79, 10 = 0.87, 10 = 0.76, 11 = 0.40, 12 = 0.84, 13 = 0.71, 14 = 0.84 and 15 = 0.40

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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	ZECHER (SOUTH MARION PLAZA) J1898336
L254852	T11A	COMMON	2	1	Job Reference (optional)

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All plates are MT20 plates unless otherwise indicated.
5) The following joint(s) require plate inspection per the Tooth Count Method when this truss is chosen for quality assurance inspection: 6.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 699 lb uplift at joint 2 and 635 lb uplift at joint 10.
8) Girder carries tie-in span(s): 2-0-0 at 20-0-0 to 5-0-0 at 25-0-0.; 5-0-0 at 25-0-0 to 2-0-0 at 30-0-0.

Loading has been calculated by the truss manufacturer. It is the responsibility of the Architect/Engineer of Record to verify and approve the loading.

LOAD CASE(S) Standard

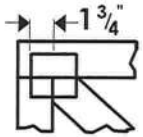
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-5=-54, 7-10=-54, 2-10=-10
   Concentrated Loads (lb)
   Vert: 5=-398 7=-398
   Trapezoidal Loads (plf)
   Vert: 5=-170-to-6=-186, 6=-186-to-7=-170

Julius Lee
Truss Design Engineer
Florida PE No. 34183
1109 Coastal Bay Blvd
Boynton Beach, FL 33435

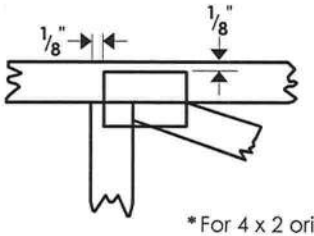
October 8,2007

Symbols

PLATE LOCATION AND ORIENTATION



*Center plate on joint unless dimensions indicate otherwise. Dimensions are in inches. Apply plates to both sides of truss and securely seat.



*For 4 x 2 orientation, locate plates 1/8" from outside edge of truss and vertical web.

*This symbol indicates the required direction of slots in connector plates.

PLATE SIZE

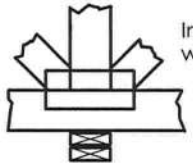
4 x 4

The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING

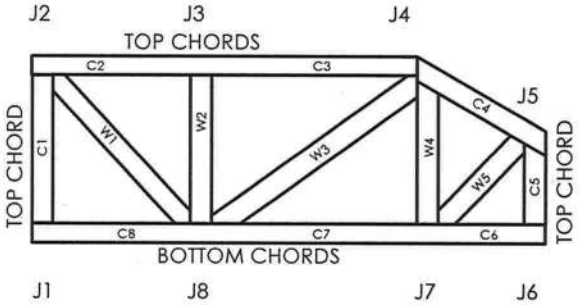
Indicates location of required continuous lateral bracing.

BEARING



Indicates location of joints at which bearings (supports) occur.

Numbering System



JOINTS AND CHORDS ARE NUMBERED CLOCKWISE AROUND THE TRUSS STARTING AT THE LOWEST JOINT FARTHEST TO THE LEFT.

WEBS ARE NUMBERED FROM LEFT TO RIGHT

CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 96-67
ICBO	3907, 4922
SBCCI	9667, 9432A
WISC/DILHR	960022-W, 970036-N
NER	561

MiTek Engineering Reference Sheet: MII-7473

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
2. Cut members to bear tightly against each other.
3. Place plates on each face of truss at each joint and embed fully. Avoid knots and wane at joint locations.
4. Unless otherwise noted, locate chord splices at ¼ panel length (± 6" from adjacent joint.)
5. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
6. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
7. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
8. Plate type, size and location dimensions shown indicate minimum plating requirements.
9. Lumber shall be of the species and size, and in all respects, equal to or better than the grade specified.
10. Top chords must be sheathed or purlins provided at spacing shown on design.
11. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
12. Anchorage and / or load transferring connections to trusses are the responsibility of others unless shown.
13. Do not overload roof or floor trusses with stacks of construction materials.
14. Do not cut or alter truss member or plate without prior approval of a professional engineer.
15. Care should be exercised in handling, erection and installation of trusses.

ASCE 7-02: 130 MPH WIND SPEED, 15' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

MAX GABLE VERTICAL LENGTH

2X4 GABLE VERTICAL SPACING	SPECIES	BRACE GRADE	NO BRACES	(1) 1X4 "L" BRACE *		(1) 2X4 "L" BRACE *		(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X6 "L" BRACE **	
				GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
24" O.C.	SPF HF	#1 / #2	3' 4"	5' 10"	6' 0"	6' 11"	7' 1"	8' 3"	8' 6"	10' 10"	11' 2"	12' 11"	13' 3"
		#3	3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"
		STUD	3' 3"	4' 11"	4' 11"	6' 5"	6' 5"	8' 3"	8' 3"	10' 0"	10' 0"	12' 11"	12' 11"
		STANDARD	3' 3"	4' 2"	4' 2"	5' 6"	5' 6"	7' 5"	7' 5"	8' 8"	8' 8"	11' 8"	11' 8"
	SP DFL	#1	3' 8"	5' 10"	6' 3"	6' 11"	7' 5"	8' 3"	8' 11"	10' 10"	11' 8"	12' 11"	13' 11"
		#2	3' 7"	5' 10"	6' 3"	6' 11"	7' 5"	8' 3"	8' 11"	10' 10"	11' 8"	12' 11"	13' 11"
		#3	3' 6"	5' 0"	5' 0"	6' 8"	6' 8"	8' 3"	8' 8"	10' 4"	10' 4"	12' 11"	13' 7"
		STUD	3' 6"	5' 0"	5' 0"	8' 7"	6' 7"	8' 3"	8' 8"	10' 3"	10' 3"	12' 11"	13' 7"
		STANDARD	3' 4"	4' 3"	4' 3"	5' 8"	5' 8"	7' 8"	7' 8"	8' 10"	8' 10"	12' 0"	12' 0"
16" O.C.	SPF HF	#1 / #2	3' 10"	6' 8"	6' 10"	7' 11"	8' 1"	9' 5"	9' 8"	12' 5"	12' 9"	14' 0"	14' 0"
		#3	3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 4"	12' 4"	14' 0"	14' 0"
		STUD	3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 4"	12' 4"	14' 0"	14' 0"
		STANDARD	3' 9"	5' 2"	5' 2"	6' 10"	6' 10"	9' 2"	9' 2"	10' 7"	10' 7"	14' 0"	14' 0"
	SP DFL	#1	4' 3"	8' 8"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"
		#2	4' 2"	8' 8"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"
		#3	4' 0"	6' 2"	6' 2"	7' 11"	8' 2"	9' 5"	9' 11"	12' 5"	12' 8"	14' 0"	14' 0"
		STUD	4' 0"	8' 1"	6' 1"	7' 11"	8' 1"	9' 5"	9' 11"	12' 5"	12' 8"	14' 0"	14' 0"
		STANDARD	3' 10"	5' 3"	5' 3"	6' 11"	6' 11"	9' 4"	9' 4"	10' 10"	10' 10"	14' 0"	14' 0"
12" O.C.	SPF HF	#1 / #2	4' 3"	7' 4"	7' 7"	8' 9"	8' 11"	10' 6"	10' 8"	13' 8"	14' 0"	14' 0"	14' 0"
		#3	4' 2"	6' 11"	6' 11"	8' 9"	8' 9"	10' 5"	10' 5"	13' 8"	13' 8"	14' 0"	14' 0"
		STUD	4' 2"	6' 11"	6' 11"	8' 9"	8' 9"	10' 5"	10' 5"	13' 8"	13' 8"	14' 0"	14' 0"
		STANDARD	4' 2"	5' 11"	5' 11"	7' 10"	7' 10"	10' 5"	10' 5"	12' 3"	12' 3"	14' 0"	14' 0"
	SP DFL	#1	4' 8"	7' 4"	7' 11"	8' 9"	8' 9"	10' 5"	11' 2"	13' 8"	14' 0"	14' 0"	14' 0"
		#2	4' 7"	7' 4"	7' 11"	8' 9"	8' 9"	10' 6"	11' 2"	13' 8"	14' 0"	14' 0"	14' 0"
		#3	4' 4"	7' 2"	7' 2"	8' 9"	8' 9"	10' 5"	10' 11"	13' 8"	14' 0"	14' 0"	14' 0"
		STUD	4' 4"	7' 1"	7' 1"	8' 9"	8' 9"	10' 6"	10' 11"	13' 8"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 3"	6' 1"	6' 1"	8' 0"	8' 0"	10' 5"	10' 8"	12' 6"	12' 6"	14' 0"	14' 0"

BRACING GROUP SPECIES AND GRADES:

GROUP A:

SPRUCE-PINE-FIR	
#1 / #2	STANDARD
#3	STUD

HEM-FIR	
#2	STUD
#3	STANDARD

DOUGLAS FIR-LARCH
#3
STUD
STANDARD

SOUTHERN PINE
#3
STUD
STANDARD

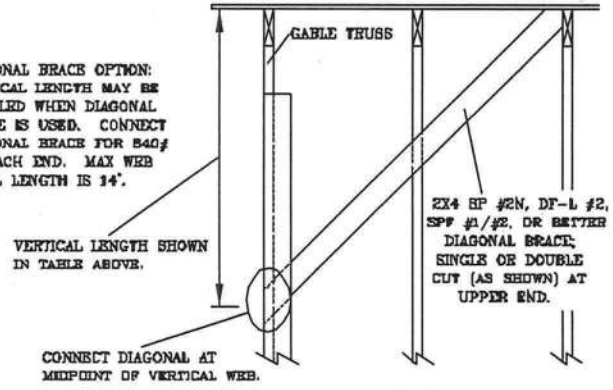
GROUP B:

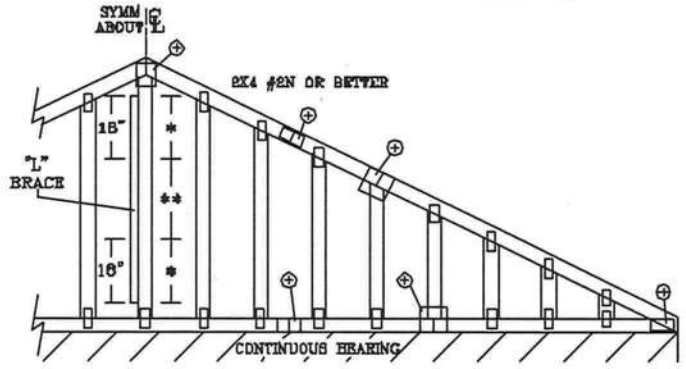
HEM-FIR
#1 & BTR
#1

SOUTHERN PINE
#3
#2

DOUGLAS FIR-LARCH
#1
#2

DIAGONAL BRACE OPTION: VERTICAL LENGTH MAY BE DOUBLED WHEN DIAGONAL BRACE IS USED. CONNECT DIAGONAL BRACE FOR 540# AT EACH END. MAX WEB TOTAL LENGTH IS 14'.





REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 136 PLF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD).

GABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.

ATTACH EACH "L" BRACE WITH 10d NAILS.
* FOR (1) "L" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES.
** FOR (2) "L" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES.

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

GABLE VERTICAL PLATE SIZES

VERTICAL LENGTH	NO SPLICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 8"	2X4
GREATER THAN 11' 8"	2.5X4

+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPLICE, AND HEEL PLATES.

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 (BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI. 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL 33444-2161

No: 34869
STATE OF FLORIDA

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF ASCE7-02-GAB13015
DATE 11/26/03
DRWG MITEK STD GABLE 15 E HT
-ENG

ASCE 7-02: 130 MPH WIND SPEED, 30' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

MAX GABLE VERTICAL LENGTH

2X4 GABLE VERTICAL SPACING	SPECIES	BRACE GRADE	NO BRACES	(1) 1X4 "L" BRACE *		(1) 2X4 "L" BRACE *		(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X6 "L" BRACE **	
				GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
24" O.C.	SPF HF	#1 / #2	3' 2"	5' 6"	6' 5"	6' 6"	6' 9"	7' 10"	8' 0"	10' 3"	10' 7"	12' 3"	12' 7"
		#3	3' 1"	4' 5"	4' 5"	5' 10"	5' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"
		STUD	3' 1"	4' 5"	4' 5"	5' 10"	5' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"
		STANDARD	2' 11"	3' 9"	3' 9"	6' 0"	6' 0"	6' 9"	6' 9"	7' 10"	7' 10"	10' 7"	10' 7"
	SP DFL	#1	3' 6"	5' 8"	5' 11"	6' 8"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"
		#2	3' 5"	5' 6"	5' 11"	6' 6"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"
		#3	3' 3"	4' 6"	4' 6"	6' 0"	6' 0"	7' 10"	8' 1"	9' 4"	9' 4"	12' 3"	12' 8"
		STUD	3' 3"	4' 6"	4' 6"	5' 11"	5' 11"	7' 10"	8' 0"	9' 3"	9' 3"	12' 3"	12' 8"
		STANDARD	3' 0"	3' 10"	3' 10"	5' 1"	5' 1"	6' 11"	6' 11"	8' 0"	8' 0"	10' 10"	10' 10"
16" O.C.	SPF HF	#1 / #2	3' 8"	6' 4"	6' 6"	7' 8"	7' 8"	8' 11"	9' 2"	11' 9"	12' 1"	14' 0"	14' 0"
		#3	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"
		STUD	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 1"	11' 1"	14' 0"	14' 0"
		STANDARD	3' 7"	4' 6"	4' 6"	6' 2"	6' 2"	8' 3"	8' 3"	9' 7"	9' 7"	12' 11"	12' 11"
	SP DFL	#1	4' 0"	6' 4"	6' 10"	7' 8"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"
		#2	3' 11"	6' 4"	6' 10"	7' 8"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"
		#3	3' 9"	5' 7"	6' 7"	7' 4"	7' 4"	8' 11"	9' 5"	11' 5"	11' 5"	14' 0"	14' 0"
		STUD	3' 8"	5' 6"	5' 8"	7' 3"	7' 3"	8' 11"	9' 5"	11' 4"	11' 4"	14' 0"	14' 0"
		STANDARD	3' 8"	4' 9"	4' 9"	6' 3"	6' 3"	8' 5"	8' 5"	9' 9"	9' 9"	13' 3"	13' 3"
12" O.C.	SPF HF	#1 / #2	4' 0"	6' 11"	7' 2"	8' 3"	8' 6"	9' 10"	10' 1"	12' 11"	13' 4"	14' 0"	14' 0"
		#3	3' 11"	6' 3"	6' 3"	8' 3"	8' 3"	9' 10"	9' 10"	12' 11"	12' 11"	14' 0"	14' 0"
		STUD	3' 11"	6' 3"	6' 3"	8' 3"	8' 3"	9' 10"	9' 10"	12' 10"	12' 10"	14' 0"	14' 0"
		STANDARD	3' 11"	5' 4"	5' 4"	7' 1"	7' 1"	9' 6"	9' 6"	11' 1"	11' 1"	14' 0"	14' 0"
	SP DFL	#1	4' 5"	6' 11"	7' 5"	8' 3"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"	14' 0"
		#2	4' 4"	6' 11"	7' 5"	8' 3"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"	14' 0"
		#3	4' 2"	6' 5"	6' 5"	8' 3"	8' 6"	9' 10"	10' 4"	12' 11"	13' 3"	14' 0"	14' 0"
		STUD	4' 2"	6' 4"	6' 4"	8' 3"	8' 5"	9' 10"	10' 4"	12' 11"	13' 1"	14' 0"	14' 0"
		STANDARD	4' 0"	5' 6"	5' 6"	7' 3"	7' 3"	9' 9"	9' 9"	11' 4"	11' 4"	14' 0"	14' 0"

BRACING GROUP SPECIES AND GRADES:

GROUP A:

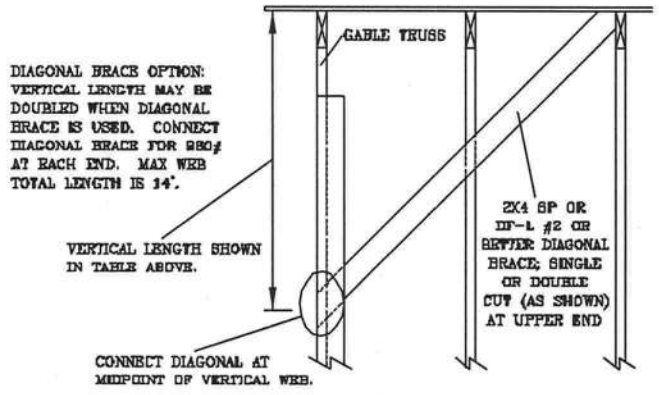
SPRUCE-PINE-FIR		HEM-FIR	
#1 / #2	STANDARD	#2	STUD
#3	STUD	#3	STANDARD

DOUGLAS FIR-LARCH	SOUTHERN PINE
#3	#3
STUD	STUD
STANDARD	STANDARD

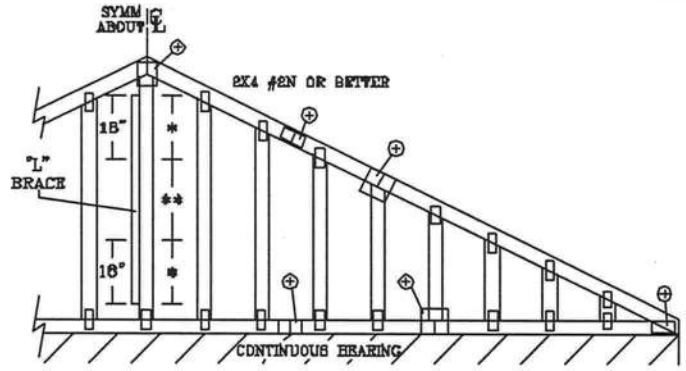
GROUP B:

HEM-FIR
#1 & BTR
#1

SOUTHERN PINE	DOUGLAS FIR-LARCH
#3	#1
#2	#2



DIAGONAL BRACE OPTION: VERTICAL LENGTH MAY BE DOUBLED WHEN DIAGONAL BRACE IS USED. CONNECT DIAGONAL BRACE FOR 980# AT EACH END. MAX WEB TOTAL LENGTH IS 14'.



REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 180 PLF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD).

GABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.

ATTACH EACH "L" BRACE WITH 10d NAILS.
* FOR (1) "L" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES.
** FOR (2) "L" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES.

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

GABLE VERTICAL PLATE SIZES

VERTICAL LENGTH	NO SPLICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 8"	2X4
GREATER THAN 11' 8"	2.5X4

+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPLICE, AND HEEL PLATES.

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

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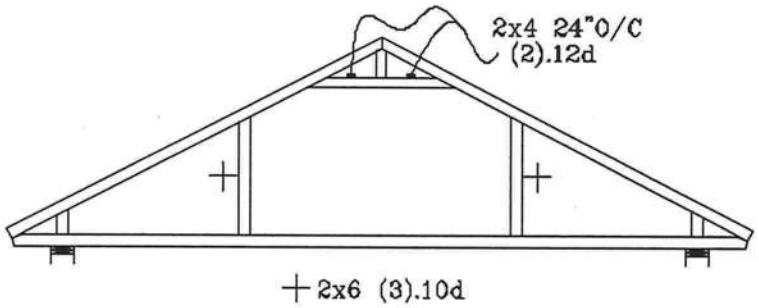
DELRAY BEACH, FL. 33444-2161
No: 34869
STATE OF FLORIDA

MAX. TOT. LD. 60 PSF

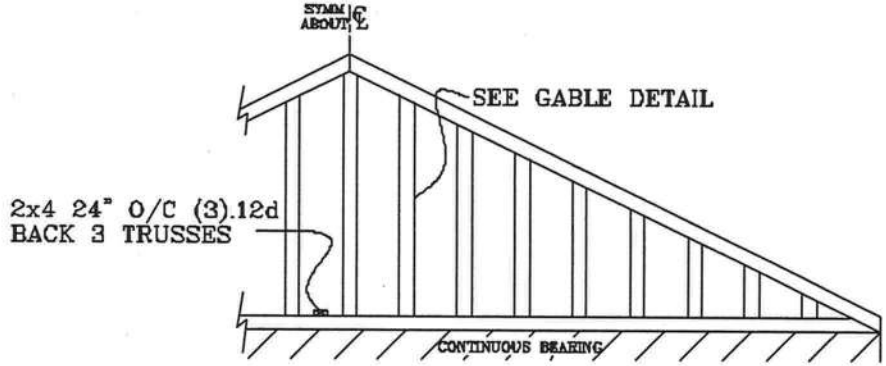
MAX. SPACING 24.0"

REF ASCE7-02-GAB13030
DATE 11/26/03
DWG MTEK STD GABLE 30' E W7
-ENG

TYPICAL ATTIC TRUSS BRACING

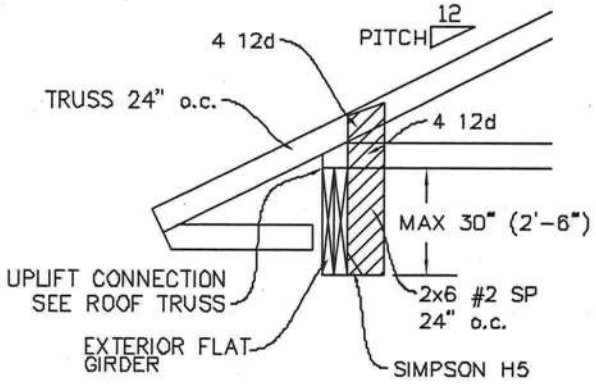


GABLE END TRUSS DETAIL

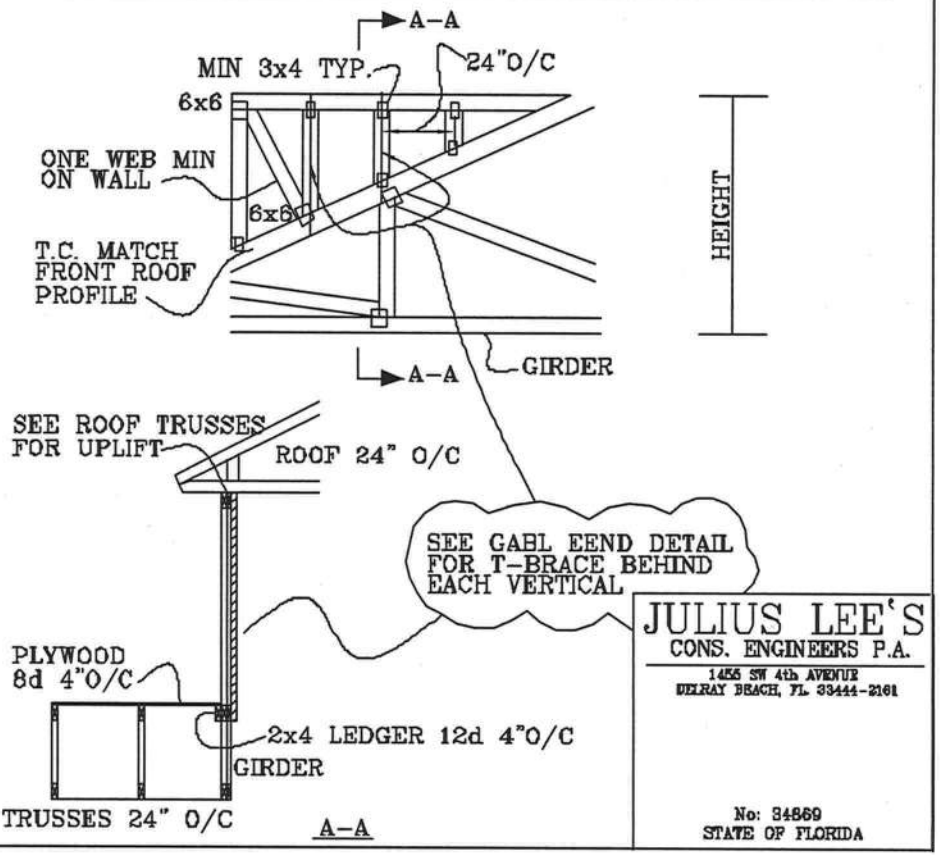


MINIMUM BC BRACING ON GABLE TRUSS. OTHER PERMANENT BRACING DESIGNS BY ARCHITECT OR EOR

TYPICAL ALTERNATE BRACING DETAIL FOR EXTERIOR FLAT GIRDER TRUSS



TYPICAL WALL GIRDER VERTICAL WEB BRACING DETAIL



JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL. 33444-2161

No: 34869
STATE OF FLORIDA

PIGGYBACK DETAIL

TOP CHORD 2X4 #2 OR BETTER
BOT CHORD 2X4 #2 OR BETTER
WEBS 2X4 #3 OR BETTER

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

TOP AND BOTTOM CHORD SPLICES MUST BE STAGGERED SO THAT ONE SPLICE IS NOT DIRECTLY OVER ANOTHER.

PIGGYBACK BOTTOM CHORD MAY BE OMITTED. ATTACH VERTICAL WEBS TO TRUSS TOP CHORD WITH 1.5X3 PLATE.

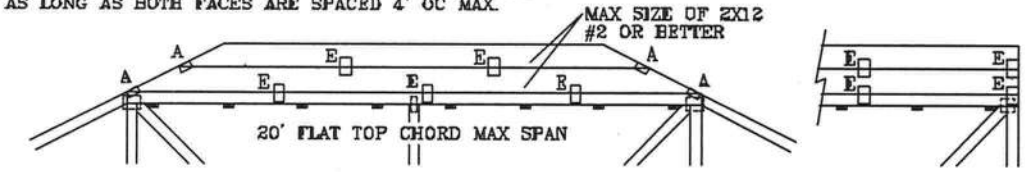
ATTACH PURLINS TO TOP OF FLAT TOP CHORD. IF PIGGYBACK IS SOLID LUMBER OR THE BOTTOM CHORD IS OMITTED, PURLINS MAY BE APPLIED BENEATH THE TOP CHORD OF SUPPORTING TRUSS.

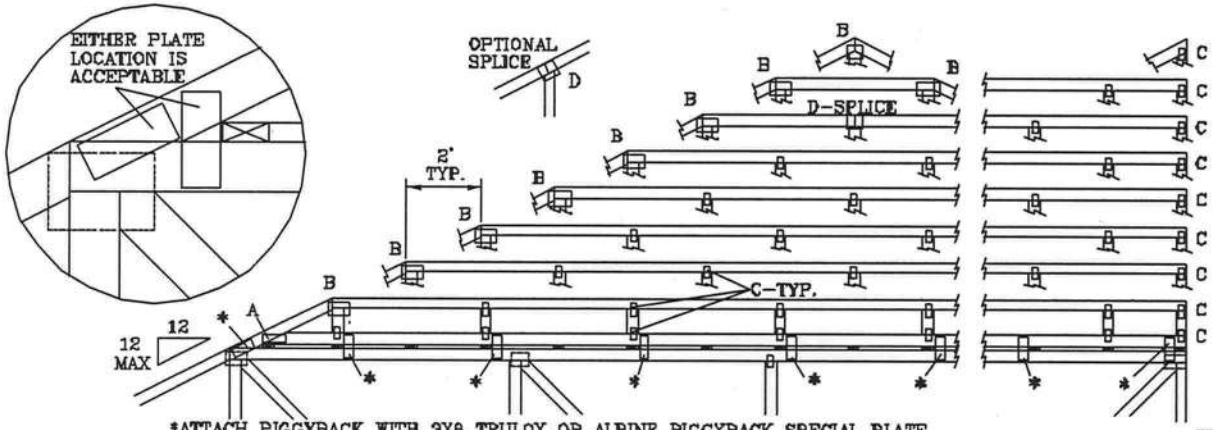
REFER TO ENGINEER'S SEALED DESIGN FOR REQUIRED PURLIN SPACING.

THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

- 110 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, 1 MI FROM COAST CAT I, EXP C, WIND TC DL=5 PSF, WIND BC DL=5 PSF
- 110 MPH WIND, 30' MEAN HGT, FBC ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF WIND TC DL=5 PSF, WIND BC DL=5 PSF
- 130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

FRONT FACE (E,*) PLATES MAY BE OFFSET FROM BACK FACE PLATES AS LONG AS BOTH FACES ARE SPACED 4' OC MAX.





*ATTACH PIGGYBACK WITH 3X8 TRULOX OR ALPINE PIGGYBACK SPECIAL PLATE.

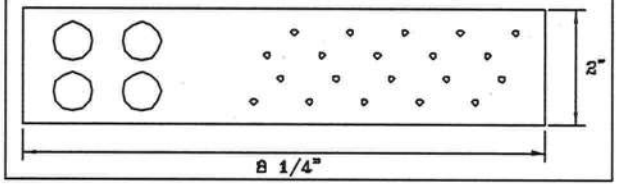
JOINT TYPE	SPANS UP TO			
	30'	34'	38'	52'
A	2X4	2.5X4	2.5X4	3X5
B	4X8	5X8	5X8	5X8
C	1.5X3	1.5X4	1.5X4	1.5X4
D	5X4	5X5	5X5	5X6
E	4X8 OR 3X6 TRULOX AT 4' OC, ROTATED VERTICALLY			

ATTACH TRULOX PLATES WITH (8) 0.120" X 1.375" NAILS, OR EQUAL, PER FACE PER PLY. (4) NAILS IN EACH MEMBER TO BE CONNECTED. REFER TO DRAWING 160 TL FOR TRULOX INFORMATION.

WEB BRACING CHART	
WEB LENGTH	REQUIRED BRACING
0' TO 7'9"	NO BRACING
7'9" TO 10'	1x4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 8d NAILS AT 4" OC.
10' TO 14'	2x4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 16d NAILS AT 4" OC.

* PIGGYBACK SPECIAL PLATE

ATTACH TEETH TO THE PIGGYBACK AT THE TIME OF FABRICATION. ATTACH TO SUPPORTING TRUSS WITH (4) 0.120" X 1.375" NAILS PER FACE PER PLY. APPLY PIGGYBACK SPECIAL PLATE TO EACH TRUSS FACE AND SPACE 4" OC OR LESS.



THIS DRAWING REPLACES DRAWINGS 634,018 634,017 & 847,045

xxWARNINGxx TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI. 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S
CONS. ENGINEERS P.A.
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DELRAY BEACH, FL. 33444-2161

No: 34869
STATE OF FLORIDA

MAX LOADING
55 PSF AT 1.33 DUR. FAC.
50 PSF AT 1.25 DUR. FAC.
47 PSF AT 1.15 DUR. FAC.
SPACING 24.0"

REF PIGGYBACK
DATE 09/12/07
DRWG MITEK STD PIGGY
-ENG JL

VALLEY TRUSS DETAIL

TOP CHORD 2X4 SP #2 OR SPF #1/#2 OR BETTER.
BOT CHORD 2X3(*) OR 2X4 SP #2N OR SPF #1/#2 OR BETTER.
WEBS 2X4 SP #3 OR BETTER.

* 2X3 MAY BE RIPPED FROM A 2X6 (PITCHED OR SQUARE).

** ATTACH EACH VALLEY TO EVERY SUPPORTING TRUSS WITH: (2) 16d BOX (0.135" X 3.5") NAILS TOE-NAILED FOR FBC 2004 110 MPH, ASCE 7-02 110 MPH WIND OR (3) 16d FOR ASCE 7-02 130 MPH WIND. 15' MEAN HEIGHT, ENCLOSED BUILDING, EXP. C, RESIDENTIAL, WIND TC DL=5 PSF.

UNLESS SPECIFIED ON ENGINEER'S SEALED DESIGN, APPLY 1X4 "T"-BRACE, 80% LENGTH OF WEB, VALLEY WEB, SAME SPECIES AND GRADE OR BETTER, ATTACHED WITH 8d BOX (0.113" X 2.5") NAILS AT 6" OC, OR CONTINUOUS LATERAL BRACING, EQUALLY SPACED, FOR VERTICAL VALLEY WEBS GREATER THAN 7'9".

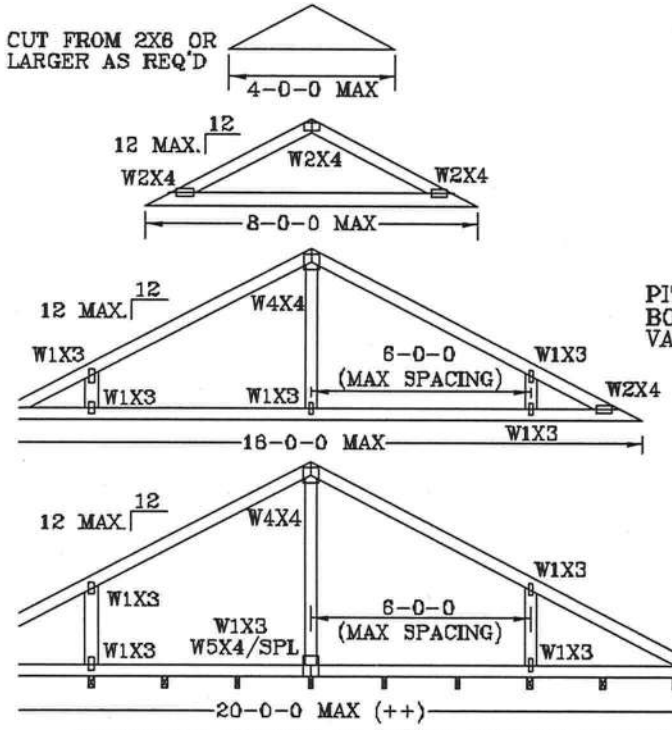
MAXIMUM VALLEY VERTICAL HEIGHT MAY NOT EXCEED 12'0".

TOP CHORD OF TRUSS BENEATH VALLEY SET MUST BE BRACED WITH:
PROPERLY ATTACHED, RATED SHEATHING APPLIED PRIOR TO VALLEY TRUSS INSTALLATION
OR
PURLINS AT 24" OC OR AS OTHERWISE SPECIFIED ON ENGINEERS' SEALED DESIGN
OR
BY VALLEY TRUSSES USED IN LIEU OF PURLIN SPACING AS SPECIFIED ON ENGINEERS' SEALED DESIGN.

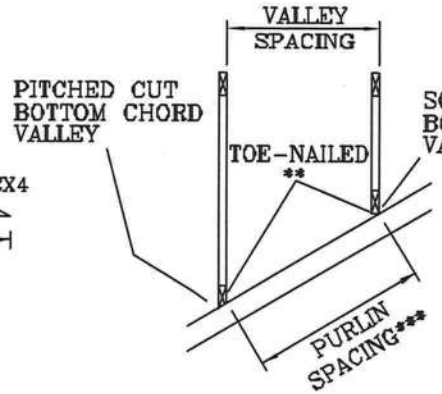
*** NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.

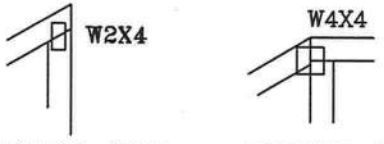
++ LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES NOT EXCEED 12'0".

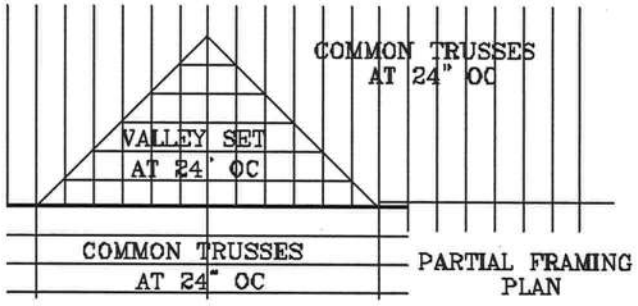
BOTTOM CHORD MAY BE SQUARE OR PITCHED CUT AS SHOWN.



SUPPORTING TRUSSES AT 24" OC MAXIMUM SPACING.







THIS DRAWING REPLACES DRAWING A105

xxWARNINGxx TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI. 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL 33444-2161

No: 34869
STATE OF FLORIDA

TC LL	20	20	PSF	REF VALLEY DETAIL
TC DL	7	15	PSF	DATE 11/26/03
BC DL	5	5	PSF	DRWG VALTRUSS1103
BC LL	0	0	PSF	-ENG JL
TOT. LD.	32	40	PSF	
DURFAC.	1.25	1.25		
SPACING		24"		

TOE–NAIL DETAIL

TOE–NAILS TO BE DRIVEN AT AN ANGLE OF APPROXIMATELY THIRTY DEGREES WITH THE PIECE AND STARTED APPROXIMATELY ONE–THIRD THE LENGTH OF THE NAIL FROM THE END OF THE MEMBER.

PER ANSI/AF&PA NDS–2001 SECTION 12.4.1 – EDGE DISTANCE, END DISTANCE, SPACING: "EDGE DISTANCES, END DISTANCES AND SPACINGS FOR NAILS AND SPIKES SHALL BE SUFFICIENT TO PREVENT SPLITTING OF THE WOOD."

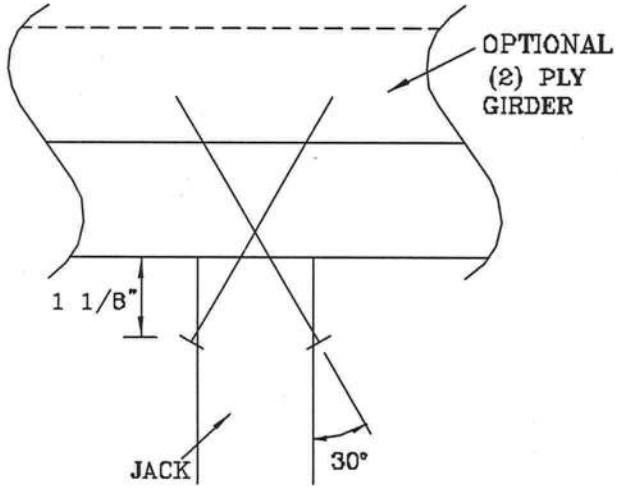
THE NUMBER OF TOE–NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

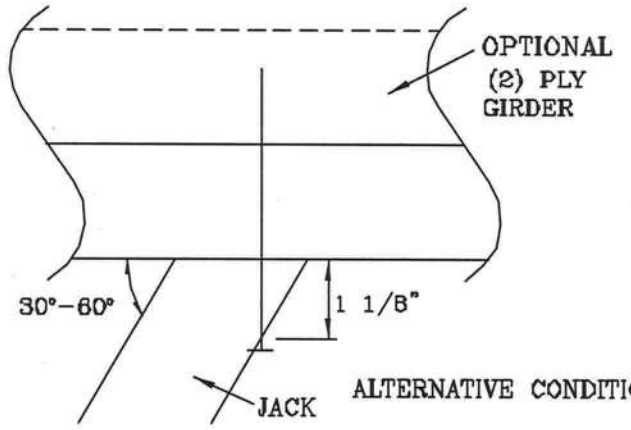
THIS DETAIL DISPLAYS A TOE–NAILED CONNECTION FOR JACK FRAMING INTO A SINGLE OR DOUBLE PLY SUPPORTING GIRDER.

MAXIMUM VERTICAL RESISTANCE OF 16d (0.162"X3.5") COMMON TOE–NAILS

NUMBER OF TOE–NAILS	SOUTHERN PINE		DOUGLAS FIR–LARCH		HEM–FIR		SPRUCE PINE FIR	
	1 PLY	2 PLIES	1 PLY	2 PLIES	1 PLY	2 PLIES	1 PLY	2 PLIES
2	197#	256#	181#	234#	156#	203#	154#	199#
3	296#	383#	271#	351#	234#	304#	230#	298#
4	394#	511#	361#	468#	312#	406#	307#	397#
5	493#	639#	452#	585#	390#	507#	384#	496#

ALL VALUES MAY BE MULTIPLIED BY APPROPRIATE DURATION OF LOAD FACTOR.





ALTERNATIVE CONDITION

THIS DRAWING REPLACES DRAWING 784040

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1–03 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL 33444–2161

No: 34869
STATE OF FLORIDA

TC LL	PSF	REF	TOE–NAIL
TC DL	PSF	DATE	09/12/07
BC DL	PSF	DRWG	CNTONAIL1103
BC LL	PSF	–ENG	JL
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			

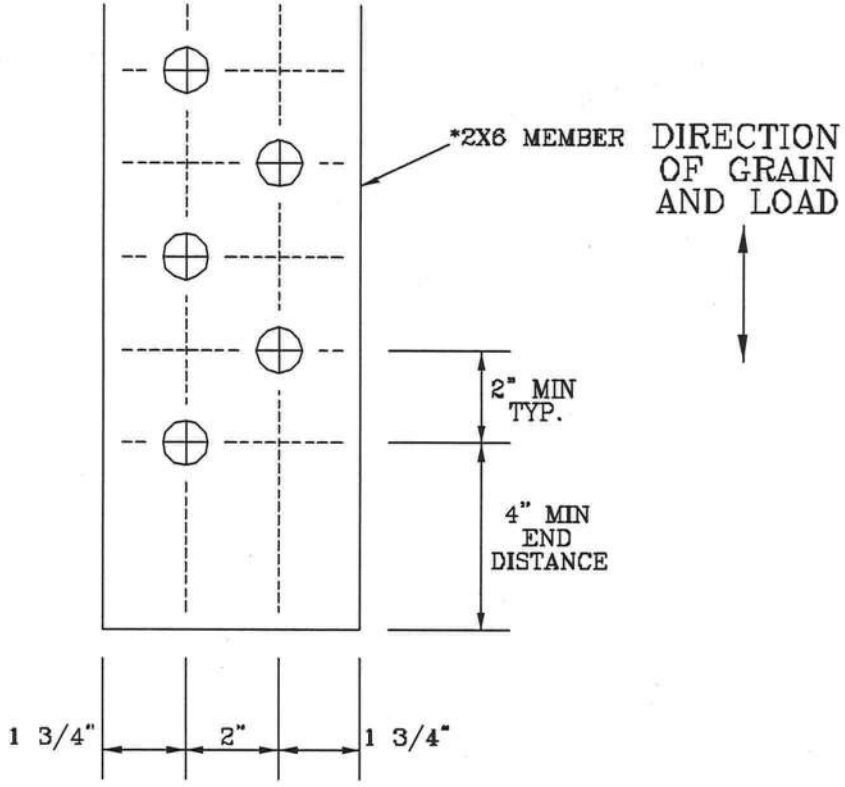
1/2" DIAMETER BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN.

* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN.

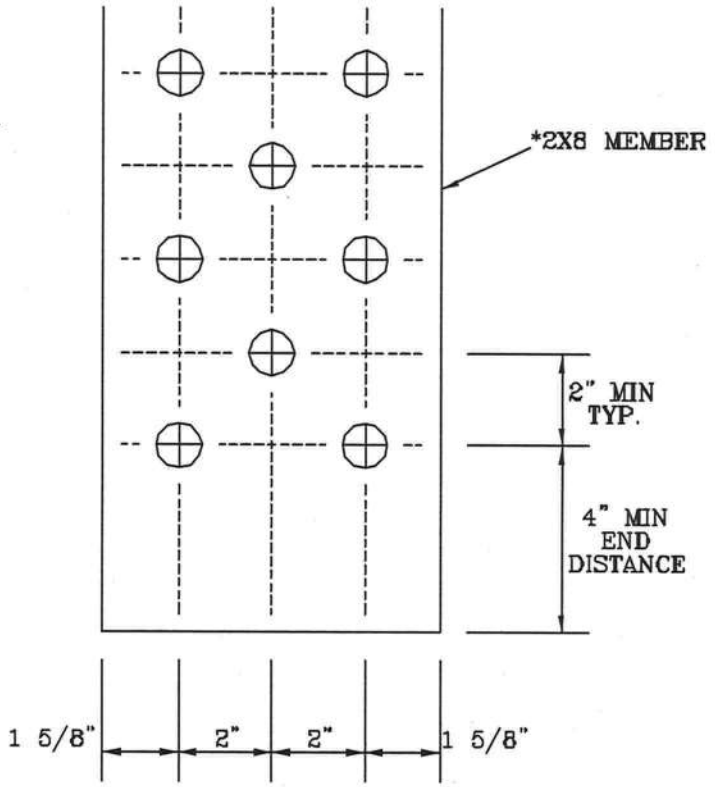
BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER.

TYPICAL LOCATION OF 1/2" DIAMETER THRU BOLTS. BOLT QUANTITIES AS NOTED ON SEALED DESIGN MUST BE APPLIED IN ONE OF THE PATTERNS SHOWN BELOW.

WASHERS REQUIRED UNDER BOLT HEAD AND NUT



2X6 DETAIL



2X8 DETAIL

THIS DRAWING REPLACES DRAWING A628,016

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI. 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

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CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL 33444-2161

No: 34869
STATE OF FLORIDA

TC LL	PSF	REF BOLT SPACING
TC DL	PSF	DATE 11/26/03
BC DL	PSF	DRWG CNBOLTSP1103
BC LL	PSF	-ENG JL
TOT. LD.	PSF	
DUR. FAC.		
SPACING		

TRULOX CONNECTION DETAIL

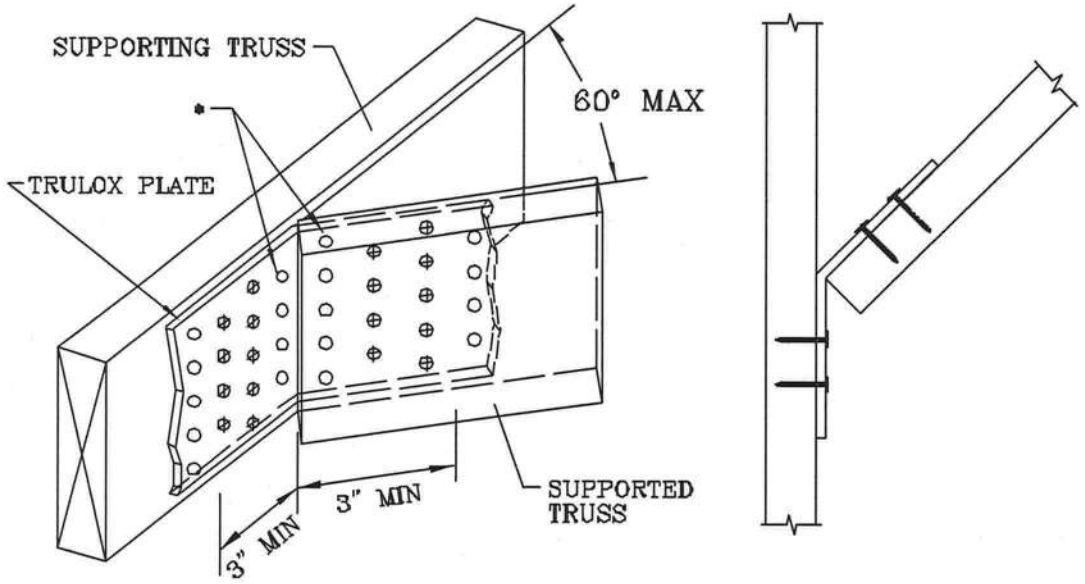
11 GAUGE (0.120" X 1.375") NAILS REQUIRED FOR TRULOX PLATE ATTACHMENT. FILL ROWS COMPLETELY WHERE SHOWN (⊕).

* NAILS MAY BE OMITTED FROM THESE ROWS.

THIS DETAIL MAY BE USED WITH SO. PINE, DOUGLAS-FIR OR HEM-FIR CHORDS WITH A MINIMUM 1.00 DURATION OF LOAD OR SPRUCE-PINE-FIR CHORDS WITH A MINIMUM 1.15 DURATION OF LOAD. CHORD SIZE OF BOTH TRUSSES MUST EXCEED THE TRULOX PLATE WIDTH.

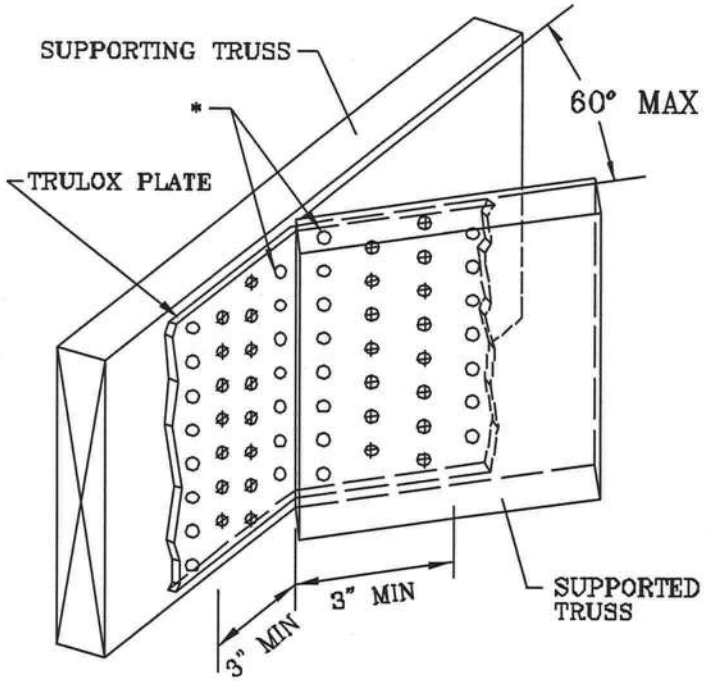
TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS.

REFER TO ENGINEER'S SEALED DESIGN REFERENCING THIS DETAIL FOR LUMBER, PLATES, AND OTHER INFORMATION NOT SHOWN.



MINIMUM 3X6 TRULOX PLATE

TRULOX PLATE SIZE	REQUIRED NAILS PER TRUSS	MAXIMUM LOAD UP OR DOWN
3X6	9	350#
5X6	15	990#



MINIMUM 5X6 TRULOX PLATE

THIS DRAWING REPLACES DRAWINGS 1,158,989 1,158,989/R 1,154,944 1,152,217 1,152,017 1,159,154 & 1,151,524

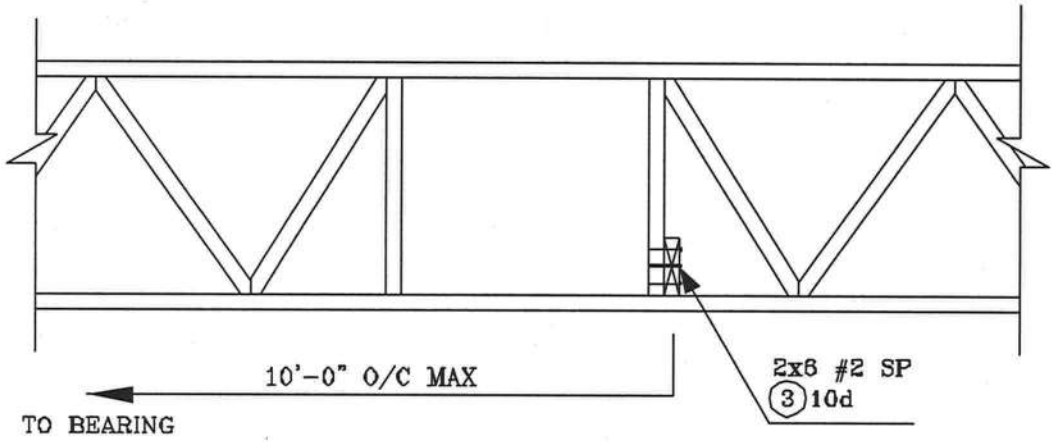
WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL. 33444-2351

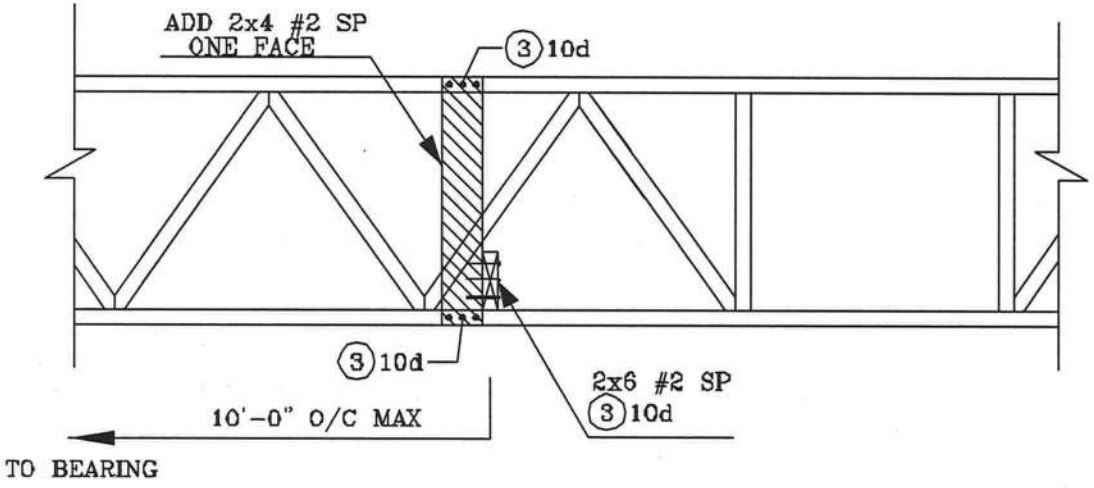
No: 34869
STATE OF FLORIDA

REF	TRULOX
DATE	11/26/03
DRWG	CNTRULOX1103
-ENG	JL

STRONG BACK DETAIL
SYSTEM–42 OR FLAT TRUSS



ALTERNATE DETAIL FOR
STRONG BACK WITH VERTICAL
NOT LINING UP



JULIUS LEE'S
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1455 SW 4th AVENUE
DELRAY BEACH, FL. 33444-2161

No: 34869
STATE OF FLORIDA

SUWANNEE
RIVER
WATER
MANAGEMENT
DISTRICT
9225 CR 49
LIVE OAK, FLORIDA 32060
TELEPHONE: (386) 362-1001
TELEPHONE: 800-226-1066
FAX (386) 362-1056

GENERAL PERMIT

PERMITTEE:
JOCK R. PHELPS
3566 NORTHWEST BROWN ROAD
LAKE CITY, FL 32055

PERMIT NUMBER: ERP06-0619
DATE ISSUED: 05/24/2007
DATE EXPIRES: 05/24/2010
COUNTY: COLUMBIA
TRS: S8/T4S/R17E

PROJECT: DIXIE VILLA

Approved entity to whom operation and maintenance may be transferred pursuant to rule 40B-4.1130, Florida Administrative Code (F.A.C.):

JOCK R. PHELPS
3566 NORTHWEST BROWN ROAD
LAKE CITY, FL 32055

Based on information provided, the Suwannee River Water Management District's (District) rules have been adhered to and an environmental resource general permit is in effect for the permitted activity description below:

Construction and operation of a surfacewater management system serving 0.45 acres of impervious surface on a total project area of 0.78 acres according to the plans certified by Huey Hawkins, P.E., on May 20, 2007.

It is your responsibility to ensure that adverse off-site impacts do not occur either during or after construction. Any additional construction or alterations not authorized by this permit may result in flood control or water quality problems both on and off site and will be a violation of District rule.

You or any other substantially affected persons are entitled to request an administrative hearing or mediation. Please refer to enclosed notice of rights.

This permit is issued under the provisions of chapter 373, F.S., chapter 40B-4, and chapter 40B-400, F.A.C. A general permit authorizes the construction, operation, maintenance, alteration, abandonment, or removal of certain minor surface water management systems. This permit

authorizes the permittee to perform the work necessary to construct, operate, and maintain the surface water management system shown on the application and other documents included in the application. This is to notify you of District's agency action concerning Notice Of Intent. This action is taken pursuant to rule 40B-4 and 40B-400, F.A.C.

Standard Conditions for All General Permits:

1. The permittee shall perform all construction authorized in a manner so as to minimize adverse impacts to fish, wildlife, natural environmental values, and water quality. The permittee shall institute necessary measures during construction including riprap, reinforcement, or compaction of any fill materials placed around newly installed structures, to minimize erosion, turbidity, nutrient loading, and sedimentation in the receiving waters.

2. Water quality data representative of the water discharged from the permitted system, including, but not limited to, the parameters in chapter 62-302, F.A.C., shall be submitted to the District as required. If water quality data are required, the permittee shall provide data as required on the volume and rate of discharge including the total volume discharged during the sampling period. All water quality data shall be in accordance with and reference the specific method of analysis in "Standard Methods for the Examination of Water and Wastewater" by the American Public Health Association or "Methods for Chemical Analysis of Water and Wastes" by the U.S. Environmental Protection Agency.

3. The operational and maintenance phase of an environmental resource permit will not become effective until the owner or his authorized agent certifies that all facilities have been constructed in accordance with the design permitted by the District. If required by the District, such as-built certification shall be made by an engineer or surveyor. Within 30 days after the completion of construction of the system, the permittee shall notify the District that the facilities are complete. If appropriate, the permittee shall request transfer of the permit to the responsible entity approved by the District for operation and maintenance. The District may inspect the system and, as necessary, require remedial measures as a condition of transfer of the permit or release for operation and maintenance of the system.

4. Off-site discharges during and after construction shall be made only through the facilities authorized by the permit. Water discharged from the project shall be through structures suitable for regulating upstream stage if so required by the District. Such discharges may be subject to operating schedules established by the District.

5. The permit does not convey to the permittee any property right nor any rights or privileges other than those specified in the permit and chapter 40B-1, F.A.C.

6. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance, alteration, abandonment, or development in a Works of the District which is authorized by the permit.

7. The permit is issued based on the information submitted by the applicant which reasonably demonstrates that adverse off-site water resource impacts will not be caused by the permitted activity. It is the responsibility of the permittee to insure that such adverse impacts do not in fact occur either during or after construction.

8. It is the responsibility of the permittee to obtain all other clearances, permits, or authorizations required by any unit of local, state, or federal government.

9. The surfacewater management system shall be constructed prior to or concurrent with the development that the system is intended to serve and the system shall be completed within 30 days of substantial completion of the development which the system is intended to serve.

10. Except for General Permits After Notice or permits issued to a unit of government, or unless a different schedule is specified in the permit, the system shall be inspected at least once every third year after transfer of a permit to operation and maintenance by the permittee or his agent to ascertain that the system is being operated and maintained in a manner consistent with the permit. A report of inspection is to be sent to the District within 30 days of the inspection date. If required by chapter 471, F.S., such inspection and report shall be made by an engineer.

11. The permittee shall allow reasonable access to District personnel or agents for the purpose of inspecting the system to insure compliance with the permit. The permittee shall allow the District, at its expense, to install equipment or devices to monitor performance of the system authorized by their permit.

12. The surfacewater management system shall be operated and maintained in a manner which is consistent with the conditions of the permit and chapter 40B-4.2040, F.A.C.

13. The permittee is responsible for the perpetual operation and maintenance of the system unless the operation and maintenance is transferred pursuant to chapter 40B-4.1130, F.A.C., or the permit is modified to authorize a new operation and maintenance entity pursuant to chapter 40B-4.1110, F.A.C.

14. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.

15. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

16. Activities approved by this permit shall be conducted in a manner which do not cause violations of state water quality standards.

17. Prior to and during construction, the permittee shall implement and maintain all erosion and sediment control measures (best management practices) required to retain sediment on-site and to prevent violations of state water quality standards. All practices must be in accordance with the guidelines and specifications in the Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual unless a project specific erosion and sediment control plan is approved as part of the permit, in which case the practices must be in accordance with the plan. If site-specific conditions require additional measures during any phase of construction or operation to prevent erosion or control sediment, beyond those specified in the erosion and sediment control plan, the permittee shall implement additional best management practices as necessary, in accordance with the Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

18. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased.

19. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District a Construction Commencement Notice Form No. 40B-1.901(14) indicating the actual start date and the expected completion date.

20. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an Annual Status Report Form No. 40B-1.901(15). These forms shall be submitted during June of each following year.

21. For those systems which will be operated or maintained by an entity requiring an easement or deed restriction in order to provide that entity with the authority necessary to operate or maintain the system, such easement or deed restriction, together with any other final operation or maintenance documents as are required by Paragraph 40B-4.2030(2)(g), F.A.C., and Rule 40B-4.2035, F.A.C., must be submitted to the District for approval. Documents meeting the requirements set forth in these subsections of District rules will be approved. Deed restrictions,

easements and other operation and maintenance documents which require recordation either with the Secretary of State or Clerk of the Circuit Court must be so recorded prior to lot or unit sales within the project served by the system, or upon completion of construction of the system, whichever occurs first. For those systems which are proposed to be maintained by county or municipal entities, final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local governmental entity. Failure to submit the appropriate final documents referenced in this paragraph will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system.

22. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.

23. Within 30 days after completion of construction of the permitted system, or independent portion of the system, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, using the supplied As-Built Certification Form No. 40B-1.901(16) incorporated by reference in Subsection 40B-1.901(16), F.A.C. When the completed system differs substantially from the permitted plans, any substantial deviations shall be noted and explained and two copies of as-built drawings submitted to the District. Submittal of the completed form shall serve to notify the District that the system is ready for inspection. The statement of completion and certification shall be based on on-site observation of construction (conducted by the registered professional engineer, or other appropriate individual as authorized by law, or under his or her direct supervision) or review of as-built drawings for the purpose of determining if the work was completed in compliance with approved plans and specifications. As-built drawings shall be the permitted drawings revised to reflect any changes made during construction. Both the original and any revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawing. All surveyed dimensions and elevations shall be certified by a registered surveyor. The following information, at a minimum, shall be verified on the as-built drawings:

a. Dimensions and elevations of all discharge structures including all weirs, slots, gates, pumps, pipes, and oil and grease skimmers;

b. Locations, dimensions, and elevations of all filter, exfiltration, or underdrain systems including cleanouts, pipes, connections to control structures, and points of discharge to the receiving waters;

c. Dimensions, elevations, contours, or cross-sections of all treatment storage areas sufficient to

determine stage-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems, when appropriate;

d. Dimensions, elevations, contours, final grades, or cross-sections of the system to determine flow directions and conveyance of runoff to the treatment system;

e. Dimensions, elevations, contours, final grades, or cross-sections of all conveyance systems utilized to convey off-site runoff around the system;

f. Existing water elevation(s) and the date determined; and

g. Elevation and location of benchmark(s) for the survey.

24. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the condition in paragraph 23 above, the District determines the system to be in compliance with the permitted plans, and the entity approved by the District in accordance with Rule 40B-4.2035, F.A.C., accepts responsibility for operation and maintenance of the system. The permit may not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall request transfer of the permit to the approved responsible operation and maintenance operating entity if different from the permittee. Until the permit is transferred pursuant to Rule 40B-4.1130, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

25. Should any other regulatory agency require changes to the permitted system, the permittee shall provide written notification to the District of the changes prior to implementation so that a determination can be made whether a permit modification is required.

26. This permit does not eliminate the necessity to obtain any required federal, state, local and special District authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and in this chapter and Chapter 40B-4, F.A.C.

27. The permittee is hereby advised that Section 253.77, F.S., states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary

authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

28. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under 40B-400.046, F.A.C., provides otherwise.

29. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rule 40B-4.1130, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.

30. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the District.

31. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

Special limiting conditions made part of this permit are as follows:

32. The Suwannee River Water Management District must be notified no less than 48 hours prior to the installation of the StormTech system.

WITHIN 30 DAYS AFTER COMPLETION OF THE PROJECT, THE PERMITTEE SHALL NOTIFY THE DISTRICT, IN WRITING, THAT THE FACILITIES ARE COMPLETE.

Approved by _____ Date Approved 5-25-07
District Staff

_____ _____
Clerk Executive Director

NOTICE OF RIGHTS

1. A person whose substantial interests are or may be determined has the right to request an administrative hearing by filing a written petition with the Suwannee River Water Management District (District), or may choose to pursue mediation as an alternative remedy under Section 120.569 and 120.573, Florida Statutes, before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for pursuing mediation are set forth in Sections 120.569 and 120.57 Florida Statutes. Pursuant to Rule 28-106.111, Florida Administrative Code, the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). A petition must comply with Chapter 28-106, Florida Administrative Code.

2. If the Governing Board takes action which substantially differs from the notice of District decision to grant or deny the permit application, a person whose substantial interests are or may be determined has the right to request an administrative hearing or may chose to pursue mediation as an alternative remedy as described above. Pursuant to Rule 28-106.111, Florida Administrative Code, the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). Such a petition must comply with Chapter 28-106, Florida Administrative Code.

3. A substantially interested person has the right to a formal administrative hearing pursuant to Section 120.569 and 120.57(1), Florida Statutes, where there is a dispute between the District and the party regarding an issue of material fact. A petition for formal hearing must comply with the requirements set forth in Rule 28-106.201, Florida Administrative Code.

4. A substantially interested person has the right to an informal hearing pursuant to Section 120.569 and 120.57(2), Florida Statutes, where no material facts are in dispute. A petition for an informal hearing must comply with the requirements set forth in Rule 28-106.301, Florida Administrative Code.

5. A petition for an administrative hearing is deemed filed upon receipt of the petition by the Office of the District Clerk at the District Headquarters in Live Oak, Florida.

6. Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing pursuant to Rule 28-106.111, Florida Administrative Code.

7. The right to an administrative hearing and the relevant procedures to be followed is governed by Chapter 120, Florida Statutes, and Chapter 28-106, Florida Administrative Code.

8. Pursuant to Section 120.68, Florida Statutes, a person who is adversely affected by final District action may seek review of the action in the District Court of Appeal by filing a notice of appeal pursuant to the Florida Rules of Appellate Procedure, within 30 days of the rendering of the final District action.

9. A party to the proceeding before the District who claims that a District order is inconsistent with the provisions and purposes of Chapter 373, Florida Statutes, may seek review of the order pursuant to Section 373.114, Florida Statutes, by the Florida Land and Water Adjudicatory Commission, by filing a request for review with the Commission and serving a copy of the Department of Environmental Protection and any person named in the order within 20 days of adoption of a rule or the rendering of the District order.

10. For appeals to the District Courts of Appeal, a District action is considered rendered after it is signed on behalf of the District, and is filed by the District Clerk.

11. Failure to observe the relevant time frames for filing a petition for judicial review, or for Commission review, will result in waiver of the right to review.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Notice of Rights has been sent by U.S. Mail to:

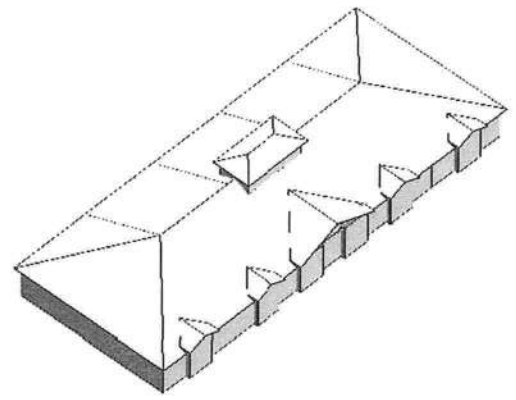
JOCK R. PHELPS
3566 NORTHWEST BROWN ROAD
LAKE CITY, FL 32055

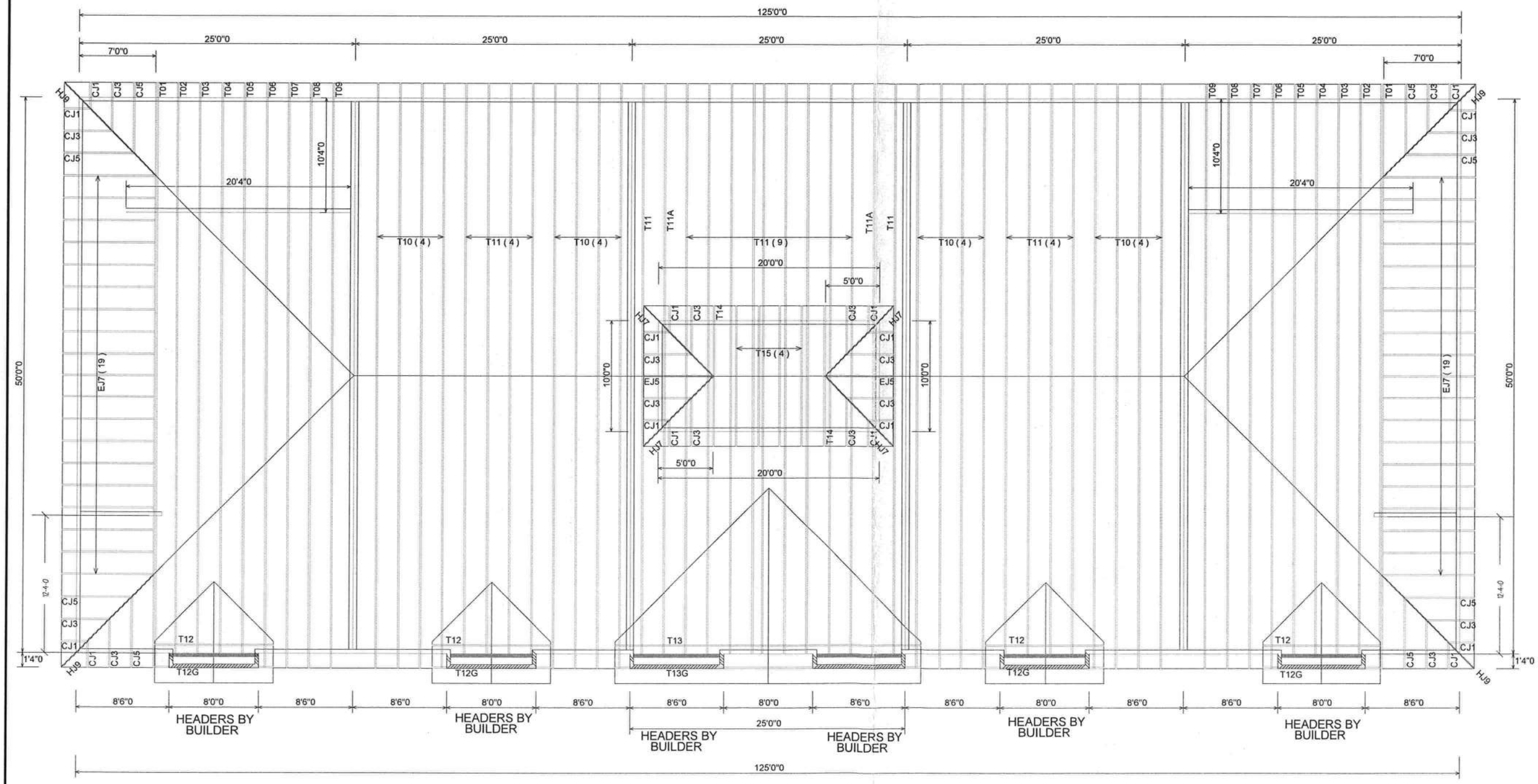
At 4:00 p.m. this 29 day of May, 2007.

_____
Jon M. Dinges
Deputy Clerk
Suwannee River Water Management District
9225 C.R. 49

Live Oak, Florida 32060
386.362.1001 or 800.226.1066 (Florida only)

cc: File Number: ERP06-0619





BEARING HEIGHT SCHEDULE

10'-0"

11'-0"

EXTERIOR WALL SIZE	2 X 4
OVERHANG	1'-4"
ROOF PITCH	5/12

NOTES:

1.) REFER TO HIB 91 (RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING.' REFER TO ENGINEERED DRAWINGS FOR PERMANENT BRACING REQUIRED.

2.) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETELY DECKED OR REFER TO DETAIL V105 FOR ALTERNATE BRACING REQUIREMENTS.

3.) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.

4.) ALL TRUSSES ARE DESIGNED FOR 2' o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.

5.) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.

6.) SY42 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.

7.) ALL ROOF TRUSS HANGERS TO BE SIMPSON HUS26 UNLESS OTHERWISE NOTED. ALL FLOOR TRUSS HANGERS TO BE SIMPSON THA422 UNLESS OTHERWISE NOTED.

8.) BEAM/HEADER/LINTEL (HDR) TO BE FURNISHED BY BUILDER.

SHOP DRAWING APPROVAL

THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION OF TRUSSES AND VOIDS ALL PREVIOUS ARCHITECTURAL OR OTHER TRUSS LAYOUTS. REVIEW AND APPROVAL OF THIS LAYOUT MUST BE RECEIVED BEFORE ANY TRUSSES WILL BE BUILT. VERIFY ALL CONDITIONS TO INSURE AGAINST CHANGES THAT WILL RESULT IN EXTRA CHARGES TO YOU.

Requested Delivery Date: _____

Approved by: _____ Date: _____

Builders FirstSource

Bunnell
PHONE: 904-437-3349 FAX: 904-437-3994

Jacksonville
PHONE: 904-772-6100 FAX: 904-772-1973

Lake City
PHONE: 386-755-6894 FAX: 386-755-7973

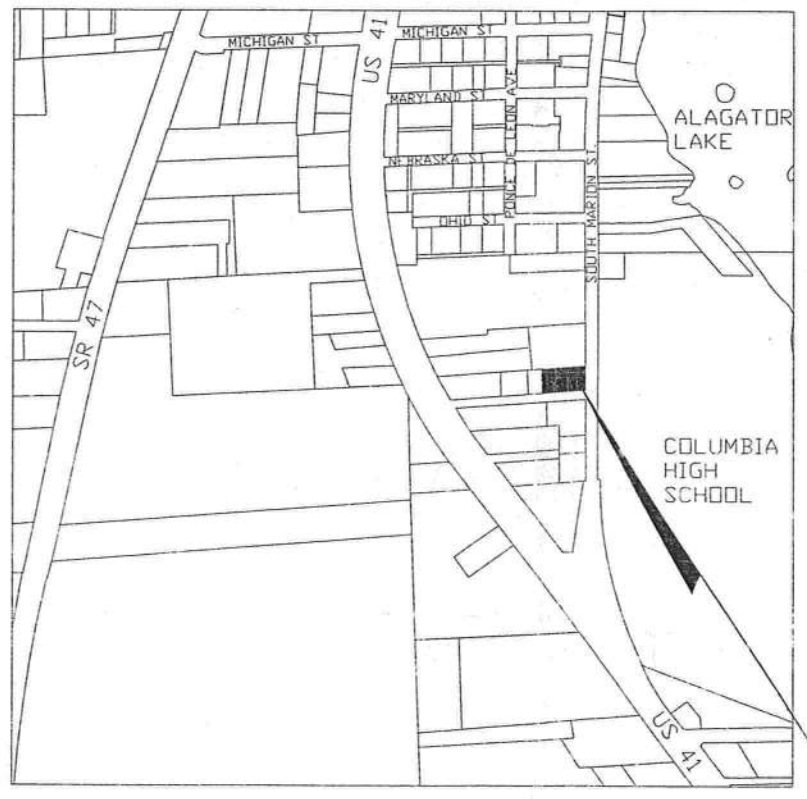
Sanford
PHONE: 407-322-0059 FAX: 407-322-5553

BUILDER: ZECHER		
LEGAL ADDRESS: LAKE CITY, FL.		
MODEL: SOUTH MARION PLAZA		REVISION: SCALE: NTS
DATE: 10/03/07	DRAWN BY: F.G.	JOB #: L254852

DIXIE VILLAS

IN SECTIONS 17, TOWNSHIP 4 SOUTH, RANGE 17 EAST COLUMBIA CO., FLORIDA

INDEX



GENERAL NOTES

1. ALL CONSTRUCTION MATERIALS TO BE ACCORDING TO THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN AND THE FLA. DOT STANDARD INDEXES.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE TO ENSURE THAT ALL WORK WILL FIT IN THE MANNER INTENDED ON THE PLANS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF DIFFERENCES IMMEDIATELY AND PRIOR TO PROCEEDING WITH THE WORK.
3. ALL DISTRUBED AREAS SHALL BE SEEDED WITH A MIXTURE OF LONG TERM VEGETATION AND SHORT TERM VEGETATION. THE LONG TERM VEGETATION SHALL BE APPLIED AT A MINIMUM RATE OF 70# PER ACRE. THE SHORT TERM VEGETATION SHALL BE APPLIED AT A RATE OF 20# PER ACRE AND SHALL CONSIST OF WINTER RYE FROM SEPTEMBER THROUGH MARCH AND MILLIT FROM APRIL THROUGH AUGUST.
4. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO MINIMIZE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION TO ADJACENT LANDS AND PROTECTED LOW AREAS.
5. WHERE REQUIRED, DITCH TRANSITIONS TO CULVERTS SHALL BE A MINIMUM OF 100 FEET.
6. TOPOGRAPHICAL INFORMATION AND ELEVATIONS PROVIDED BY THE SURVEYOR.
7. Boundary based on description from client, monuments found and prior survey by this Company.
8. Date of field survey completion: March, 2006.
9. Zoning classification: CI (per County of Columbia County Zoning Dept.)
10. Building Setback requirements: Front (street)= 20' Sides= 0' Rear= 15'
11. Water and sewer supply by City of Lake City.
12. Contour elevations shown are based on USGS quadrangle map information.
13. Examination of the flood hazard maps (F.I.R.M.) of the Federal Emergency Management Agency, shows the proposed development lies partly within Flood Zone "X" which, per said maps is defined as an area outside of the 500 year flood plain, and partly in Flood Zone "A", defined per said maps as an area within 100 year flood plain (ref: Community Panel No. 120070 0175 B). See face of plat for Zone "A" delineation.
14. Soils data taken from the Soils Survey of Columbia County by the U.S. Department of Agriculture Soils Conservation Service.

DEVELOPER
Jock R. Phelps
Lake City, Florida 32055
Contact: Jock Phelps (386) 874-3234

SURVEYOR
Britt Surveying
830 W. Duval St.
Lake City, Fl. 320ff
Contact: Scott Britt (386) 752-7163

ENGINEER
Huey Hawkins, P.E.
Contact: Arnold Terry (386) 755-2295
(386) 397-8491
MOBILE (386) 303-2064

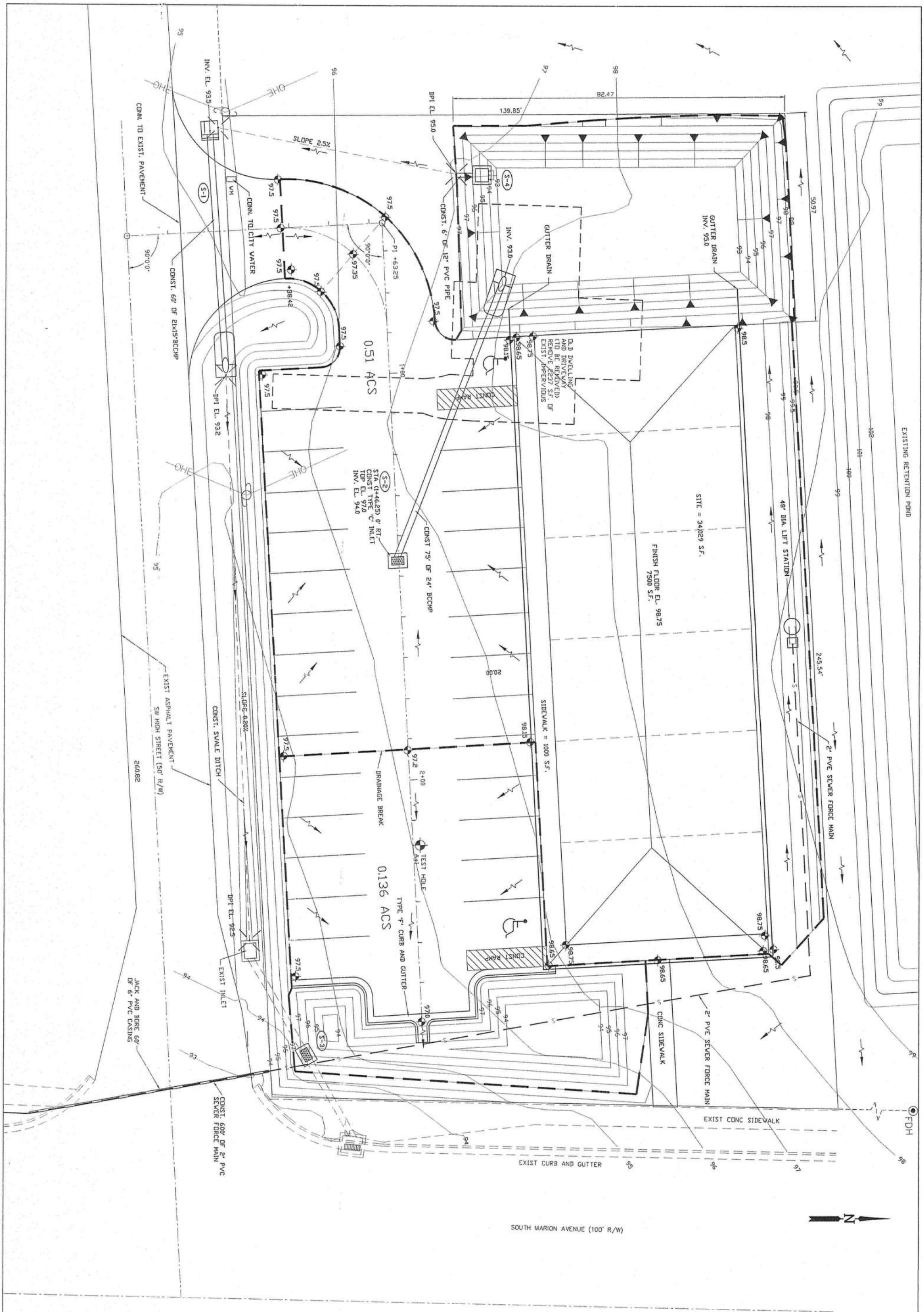
HUEY HAWKINS
6855 SW ELIM CHURCH ROAD
FORT WHITE, FL. 32038
Contact: Arnold Terry (386) 755-2295

HUEY HAWKINS, PE
Engineering - Land Development - Construction

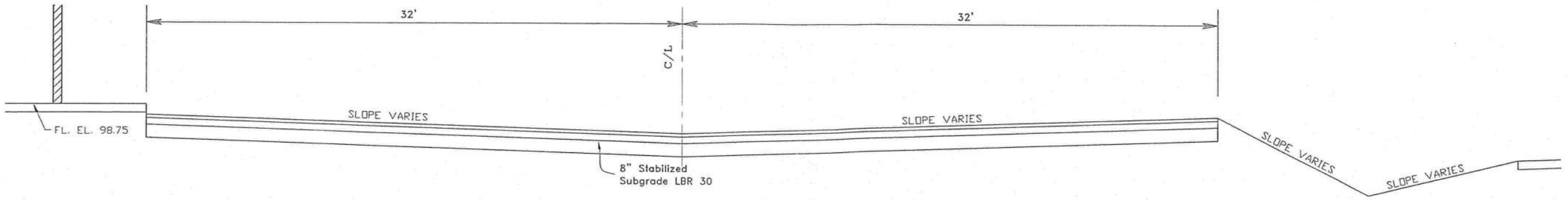
11-3-06

DIXIE VILLAS
LOCATION AND KEY MAP

DATE 11/06	MARK	DESCRIPTION	BY:	DATE
DRN.BY ARNOLD TERRY				
CK. BY				
APR. BY				
SCALE: NTS				
DRG.NO. 1				
FILE NO. DV1KM				



DATE 10/09	MARK	DESCRIPTION	BY:	DATE	SEAL	*DIXIA VILLAS DRAINAGE PLAN*	**HUEY HAWKINS, PE** Engineering - Land Development - Construction	**HUEY HAWKINS** 6855 SW ELIM CHURCH ROAD FORT WHITE, FL. 32038
DRN.BY: A. TERRY								
SCALE: 1"=10'								
DRG. NO. 4								



Limerock Base (6"Thick) Primed with
Asphaltic Concrete Surface Course (1–1/4" Thick)

TYPICAL SECTION

COLUMBIA COUNTY ROADWAY CONSTRUCTION REQUIREMENTS

General Requirements

The roadway construction plans must be reviewed and approved prior to commencing construction.

All materials and construction shall conform to the requirements of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction.

The materials and construction shall be certified by a testing laboratory retained by the developer or contractor. Copies of all test results shall be provided prior to acceptance.

All traffic control and safety items (striping, stop bars, regulatory signs, etc.) shall be in place.

The temporary grass shall be sufficient to control erosion.

Final inspection for acceptance to be performed by County Engineer, Public Works Director, and County Commissioner (should he desire to attend).

Inspections by County Representatives

Completion of clearing and grubbing. Visual only – no test requirements.

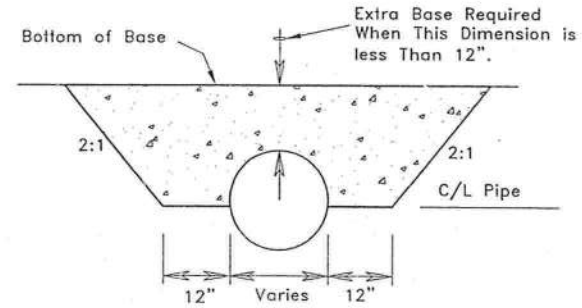
Rough graded and drainage structures in place. Test results – LBR – Pipe backfill density.

Subgrade complete. Test results – Density.

Limerock placed and finished. Test results – Thickness, Cross Section and Density.

Asphaltic Concrete in place. Test results – Thickness and density.

Final Inspection.



Pipe Detail less than 12" Cover

HUEY HAWKINS
6855 SW ELIM CHURCH ROAD
FORT WHITE, FL. 32038
PHONE NO. 386-755-2295

HUEY HAWKINS, PE
Engineering - Land Development - Construction

DIXIE VILLAS
TYPICAL SECTION AND GENERAL NOTES

DATE 11/06	MARK	DESCRIPTION	BY:	DATE	SEAL
DRN.BY ARNOLD TERRY					
CK. BY					
APR. BY					
SCALE: NTS					
DRG.NO. 3					
FILE NO. DV3TS					

EXISTING RETENTION POND

FDH

N

2" PVE SEWER FORCE MAIN

48" DIA. LIFT STATION

50.97

155.00

245.54'

15.00

98.5

98.65

98.75

GUTTER DRAIN
INV. 95.0

SITE = 34,029 S.F.

CONST 600 L.F. OF GUTTER
AND 8" PVC GUTTER DRAIN

FINISH FLOOR EL. 98.75
7500 S.F.

EXIST CONC SIDEWALK

2" PVE SEWER FORCE MAIN

CONC SIDEWALK

MATCH EXIST SIDEWALK

EXIST CURB AND GUTTER

SOUTH MARION AVENUE (100' R/W)

82.47

139.85'

GUTTER DRAIN
INV. 95.0

4" WIDE
YELLOW STRIPE

SIDEWALK = 1000 S.F.

4" WIDE
YELLOW STRIPE

5.00

98.15

CONST RAMP

INV. 93.0

S-4

20.00

10.00
TYP.

12.00

5.00

CONST FLUME

CONST. 6" OF 12" PVC PIPE

DPI EL. 95.0

DBL. 6" YELLOW
STRIPE W/ 4" GAP
53' LONG

R5.00

97.5

12.00

5.00

1+00

2+00

97.2

TEST HOLE
A-1

97.0

TYPE 'F' CURB AND GUTTER

PI +63.25

87.80

88.08

92.69

90°0'0"

97.35

S-2
STA (1+46.25) 0' RT.
CONST TYPE 'C' INLET
TOP EL. 97.0
INV. EL. 94.0

29 PARKING SPACES

24.00

12.00

DRAINAGE BREAK

R36.83

R24.83

R12.83

25.00

38.42

SLOPE 2.5%

+37.97

97.5

OHE

S-3

HIGH STREET

2" PVC SEWER
FORCE MAIN

EXIST CITY
SEWER M.H.

S. MARION ST.

US 41

(US 441)

INSET

30" STOP SIGN (R1-1)

CONN. TO CITY WATER

WM

24" STOP BAR

R25.00

INV. EL. 93.5

+36.53

+37.17

DPI EL. 93.2

SLOPE 0.20%

CONST. SWALE DITCH

DPI EL. 92.5

EXIST INLET

CONST. 600' OF 2" PVC
SEWER FORCE MAIN

20.00

31.25

CONST. 60' OF 21x15"BCCMP

EXIST ASPHALT PAVEMENT

SW HIGH STREET (50' R/W)

CONN. TO EXIST. PAVEMENT

90°0'0"

260.82

JACK AND BORE 60'
OF 6" PVC CASING

HUEY HAWKINS
6855 SW ELIM CHURCH ROAD
FORT WHITE, FL. 32038

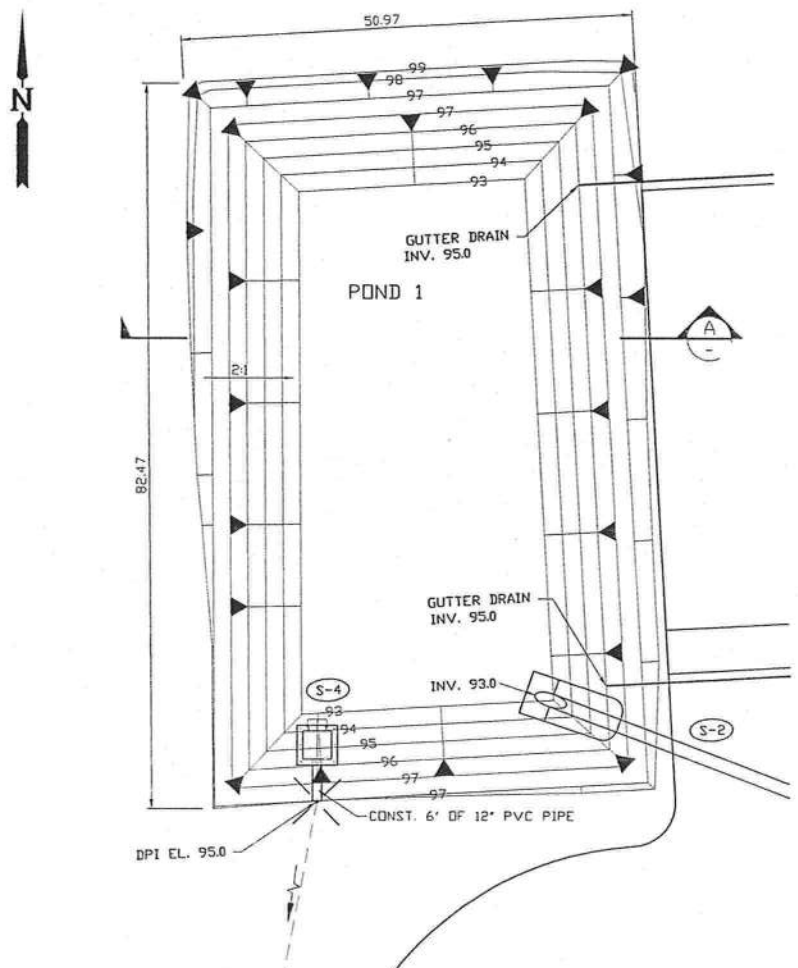
HUEY HAWKINS, PE

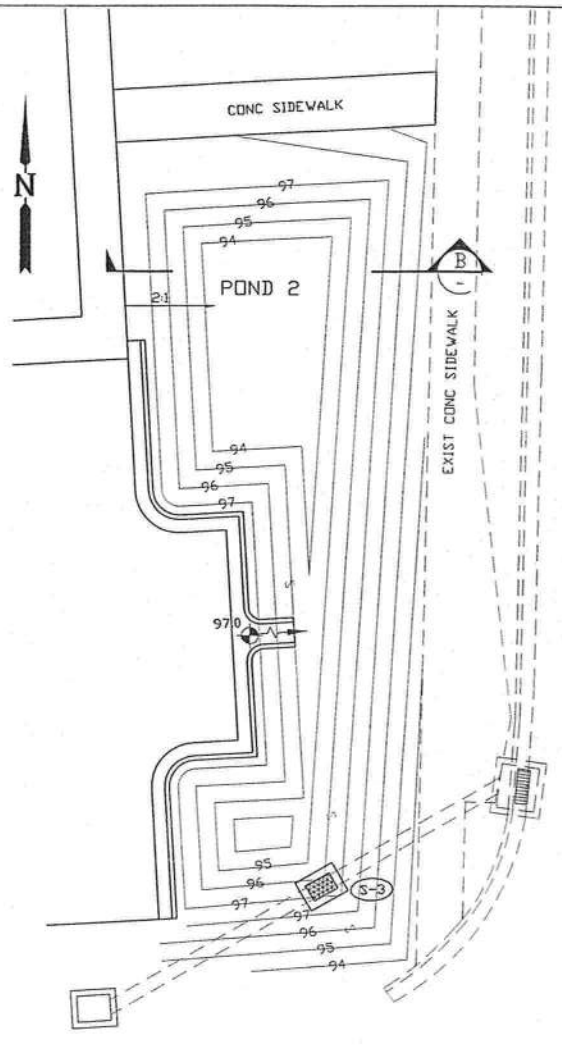
DIXIA VILLAS
DEVELOPMENT PLAN

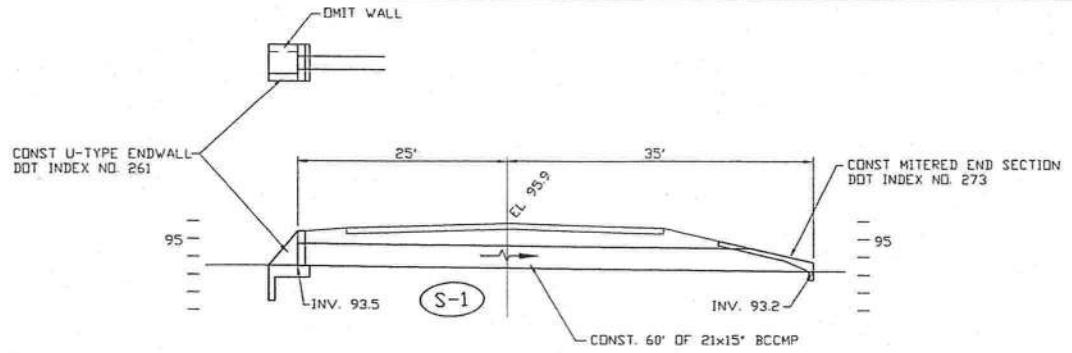
SEAL

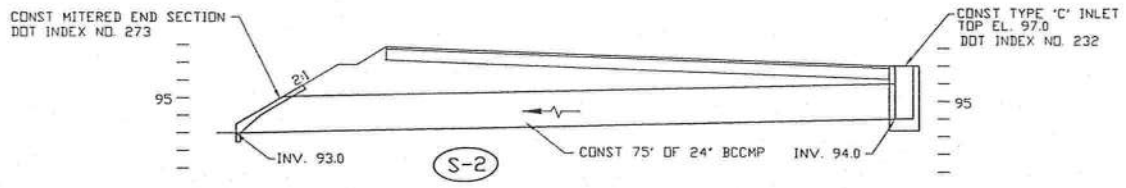
MARK	DESCRIPTION	DATE

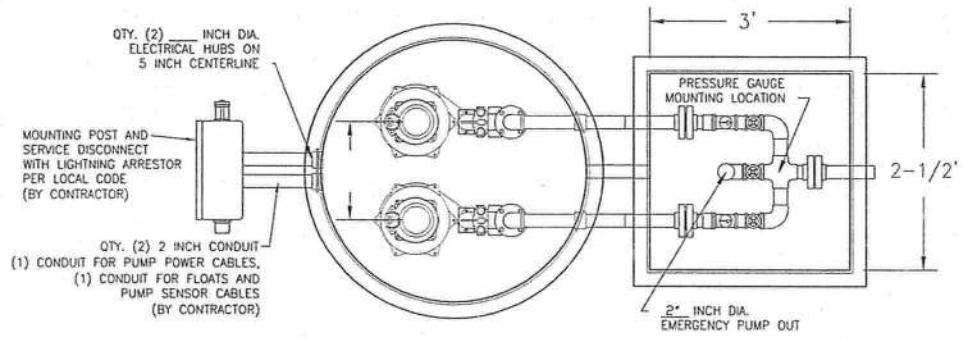
DATE 10/06
DRN.BY: A. TERRY
SCALE: 1"=10'
DRG. NO. 4



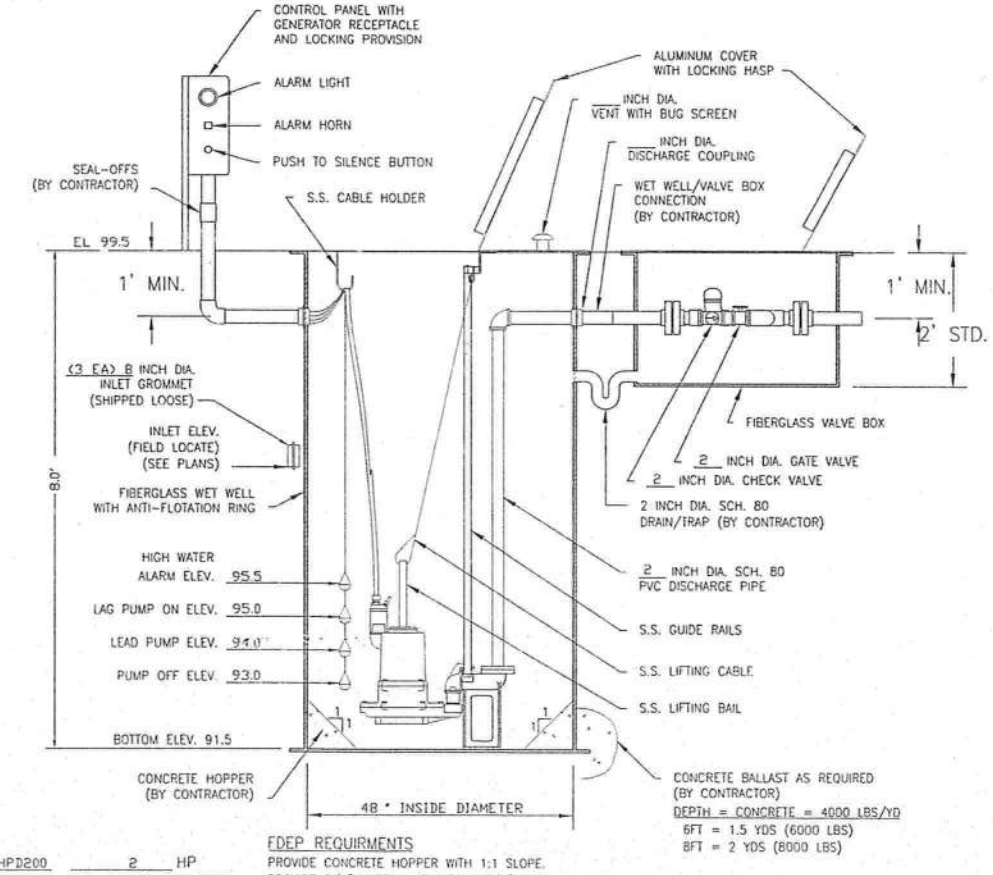








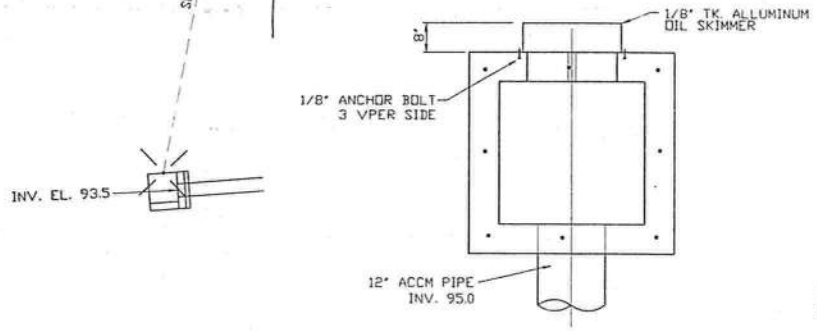
PLAN VIEW

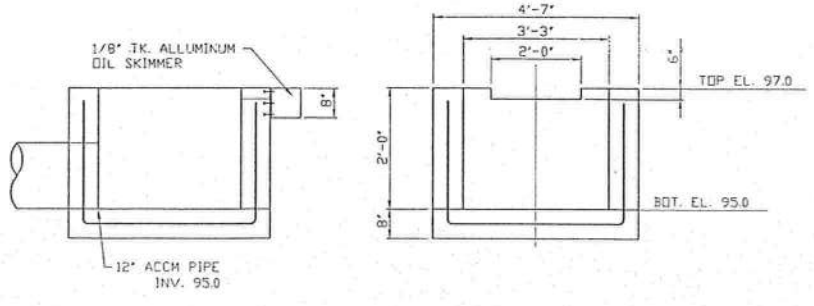


MODEL	HYDROMATIC HPD200	2	HP
GPM	9	150	FT/TDH
VOLTAGE	220	1	PHASE
DISCHARGE	1.25		IMPELLER

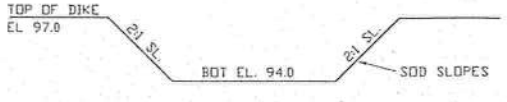
FDEP REQUIRMENTS
PROVIDE CONCRETE HOPPER WITH 1:1 SLOPE.
PROVIDE 3/4" WATER LINE WITH A 3/4" RPZ.
ALL ELECTRICAL PANELS SHALL BE ABOVE THE 100 YEAR FLOOD ELEVATION.

WET WELL/VALVE BOX LAYOUT





SECTION A
SCALE: NTS



SECTION B
SCALE: NTS

OUTLET DETAIL

HUEY HAWKINS
6855 SW ELIM CHURCH ROAD
FORT WHITE, FL 32038

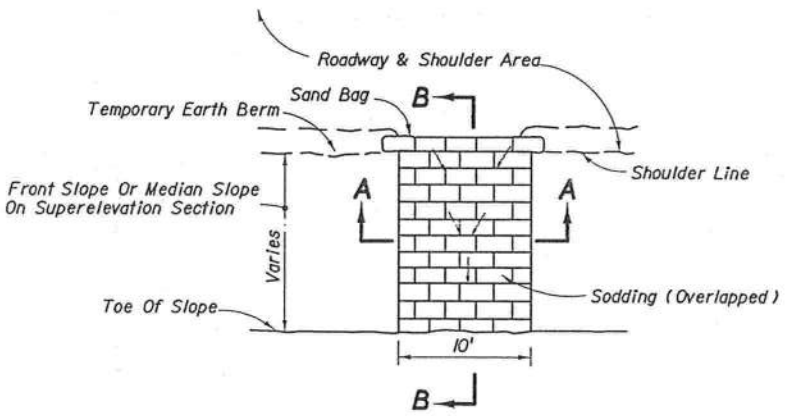
HUEY HAWKINS, PE

DIXIA VILLAS

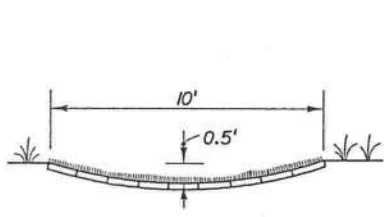
DATE	BY:	DESCRIPTION	MARK

SEAL

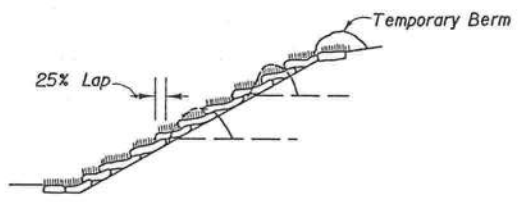
DATE 11/06
DRN.BY: A. TERRY
SCALE: 1"=10'
SHT. NO. 5



PLAN

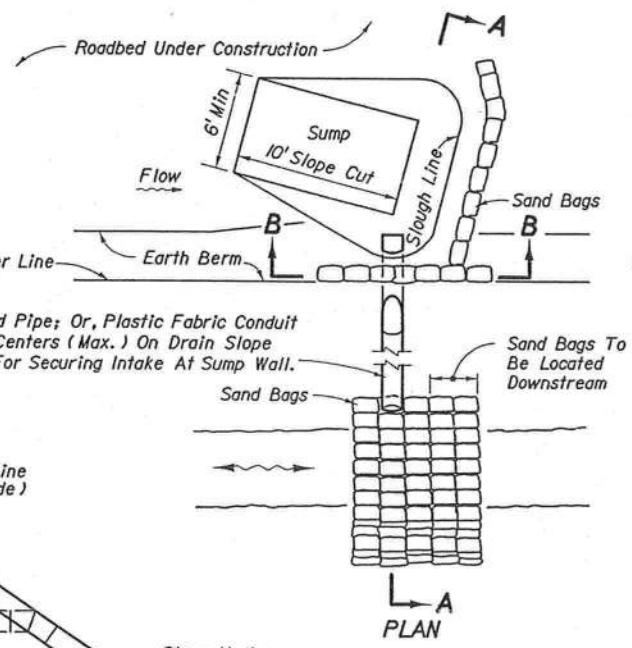


SECTION AA



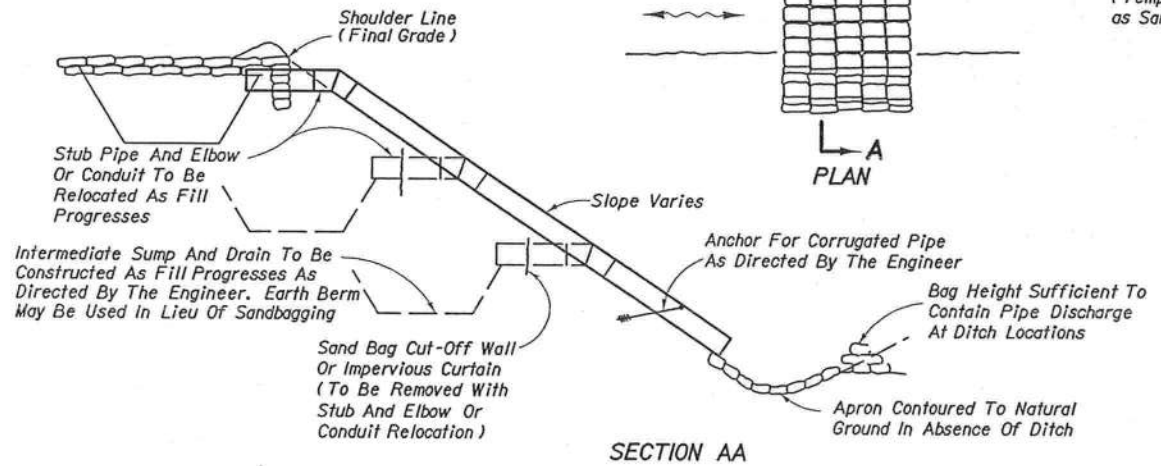
SECTION BB

SOD FLUME (SODDING OVERLAPPED)



PLAN

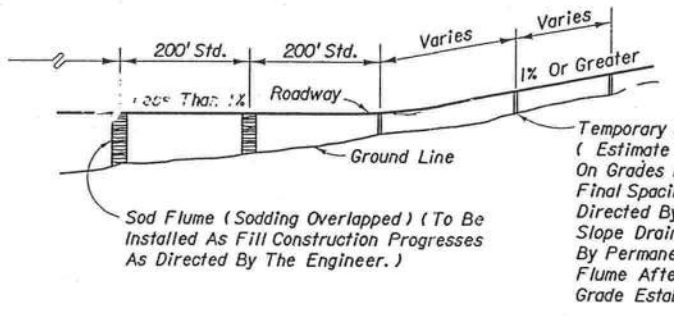
Note:
Slope drain pipe to be paid for as Slope Drains (Temporary) LF, based on linear feet of pipe or conduit installed. Payment to be made for one installation per site, including one stub and elbow or one intake flume or flashing. Sump construction and maintenance and curtains to be included in cost for Slope Drains (Temporary). Sand bags to be paid for as Sandbagging CY.



SECTION AA

SECTION BB

TEMPORARY SLOPE DRAIN



ELEVATION

SLOPE DRAIN APPLICATION

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

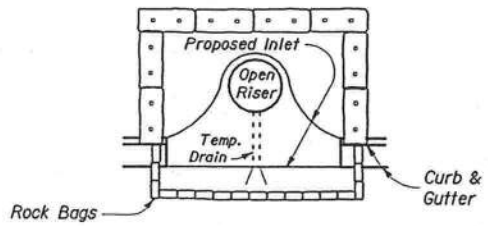
TEMPORARY SLOPE DRAIN AND SOD FLUME

	Names	Dates
Designed By		
Drawn By		
Checked By		10/07/10

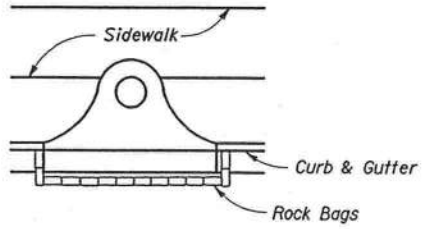
Approved By: S a McLemore
State Drainage Engineer

Revision	Sheet No.	Index No.
00	1 of 1	100

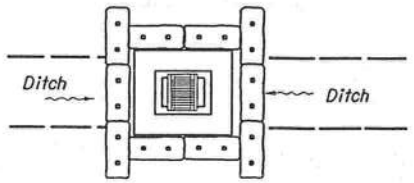
\$\$\$\$\$\$SYTIME\$\$\$\$\$\$



PARTIAL INLET

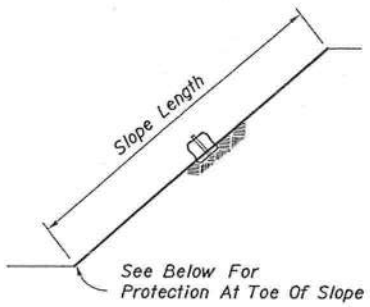


COMPLETED INLET



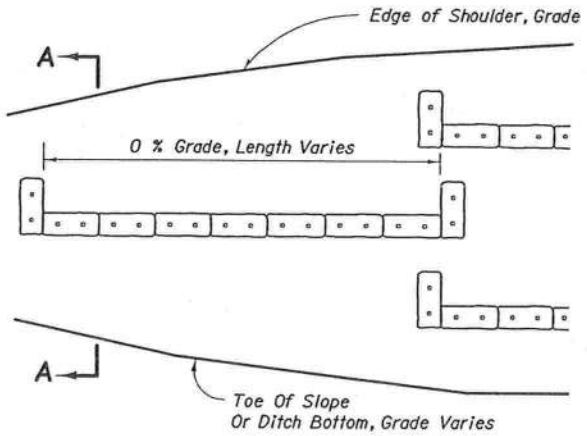
DITCH BOTTOM INLET

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



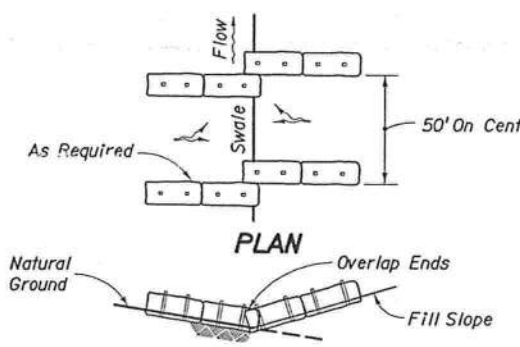
SECTION AA

Note:
Where the slope length exceeds 25 feet, construct one row of bale barriers at 0% longitudinal grade midway up the slope. Contruct two rows of bale barriers where the slope length exceeds 50 feet.



ELEVATION

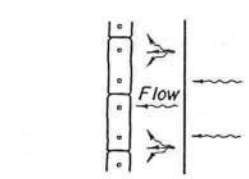
ALONG FILL SLOPE



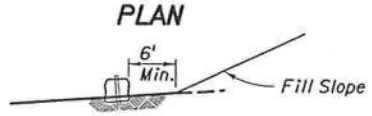
PLAN

ELEVATION

TO BE USED WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE



PLAN

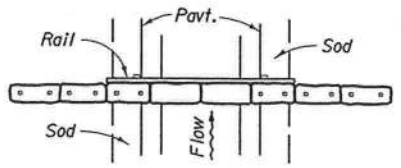


ELEVATION

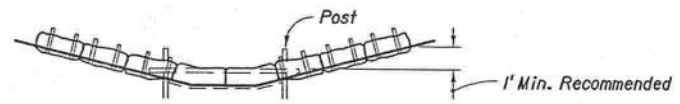
TO BE USED WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

AT TOE OF SLOPE

BARRIERS FOR FILL SLOPES

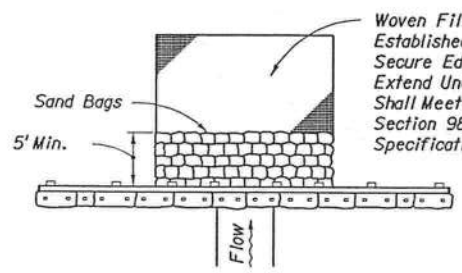


PLAN

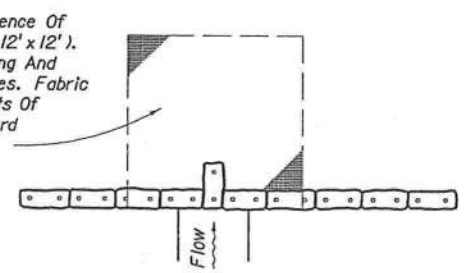


ELEVATION

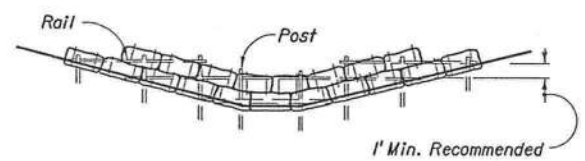
BARRIER FOR PAVED DITCH



PLAN



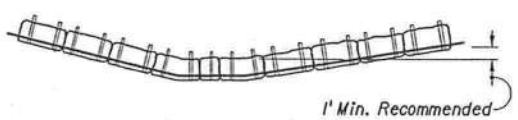
PLAN



Anchor Top Bales To Lower Bales With 2 Stakes Per Bale.

ELEVATION

TYPE II



ELEVATION

TYPE I

BARRIERS FOR UNPAVED DITCHES

NOTES FOR BALED HAY OR STRAW BARRIERS

1. Type I and II Barriers should be spaced in accordance with Chart 1, Sheet 1.
2. Hay bales shall be trenched 3" to 4" and anchored with 2 - 1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if appoved by the Engineer.
4. Adjacent bales shall be butted firmly together. Unavoidable gaps shall be plugged with hay or straw to prevent silt from passing.
5. Where used in conjunction with silt fence, hay bales shall be placed on the upstream side of the fence.
6. Bales to be paid for under the contract unit price for Baled Hay or Straw, EA. The unit price shall include the cost of filter fabric for Type I and II Barriers. Sand bags shall be paid for under the unit price for Sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

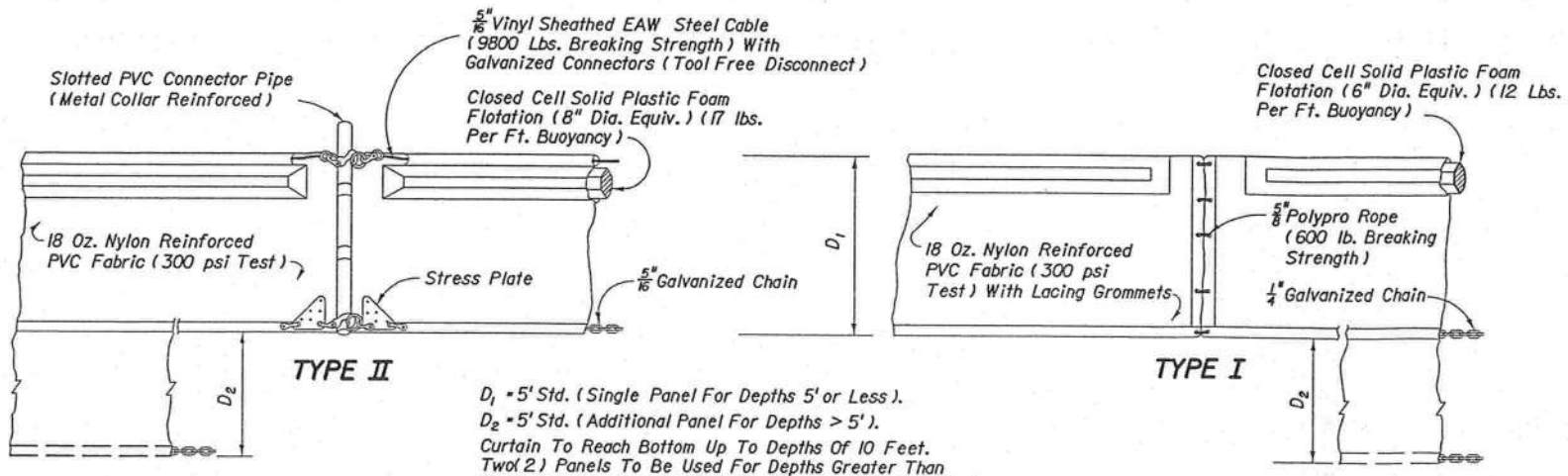
TEMPORARY EROSION AND SEDIMENT CONTROL

	Names	Dates
Designed By	WJR	5/74
Drawn By		
Checked By	HLB	6/74

Approved By: S. A. McInnis, State Drainage Engineer

Revision	Sheet No.	Index No.
00	2 of 3	102

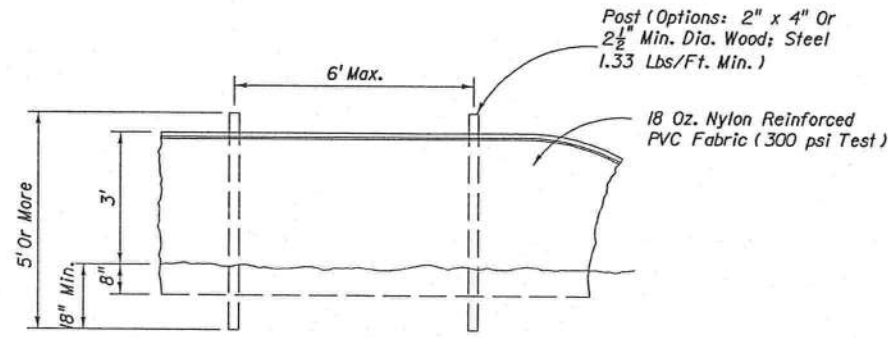
******SYTIME******



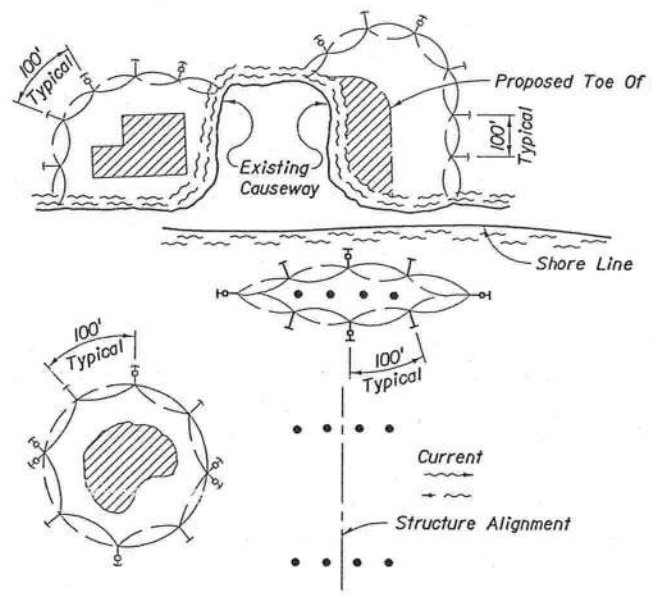
D_1 = 5' Std. (Single Panel For Depths 5' or Less).
D_2 = 5' Std. (Additional Panel For Depths > 5').
Curtain To Reach Bottom Up To Depths Of 10 Feet. Two(2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Specifically Called For In The Plans Or As Determined By The Engineer.

NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

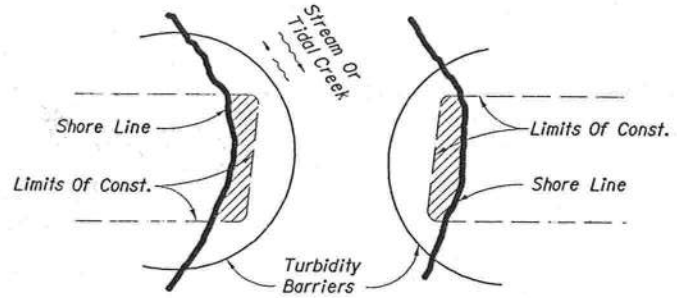
FLOATING TURBIDITY BARRIERS



STAKED TURBIDITY BARRIER



LEGEND
- Pile Locations
- Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- Barrier Movement Due To Current Action



Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.

TURBIDITY BARRIER APPLICATIONS

GENERAL NOTES
1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF.
2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

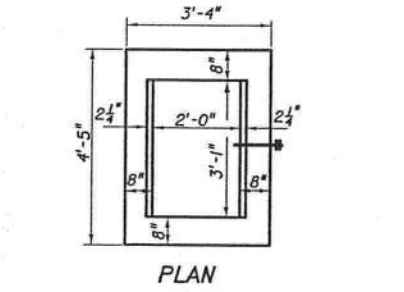
TURBIDITY BARRIERS

	Names	Dates
Designed By	RAA/CJA	9/85
Drawn By	LRE	9/85
Checked By	RAA	10/85

Approved By S a McLemore
State Drainage Engineer

Revision	Sheet No.	Index No.
00	1 of 1	103

$$$$$$SYTIME$$$$$$

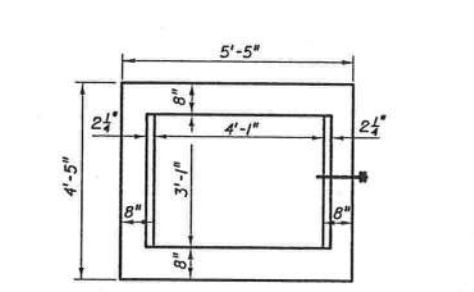


TYPE C

Recommended Maximum Pipe Size:

2'-0" Wall 18" Pipe

3'-1" Wall 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

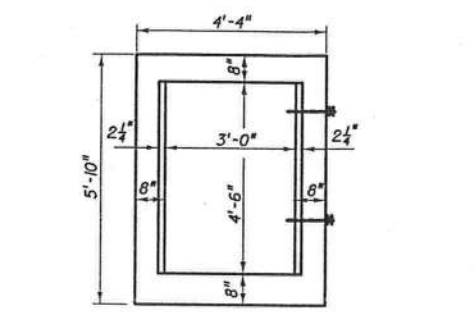


TYPE D

Recommended Maximum Pipe Size:

3'-1" Wall-24" Pipe

4'-1" Wall-36" Pipe

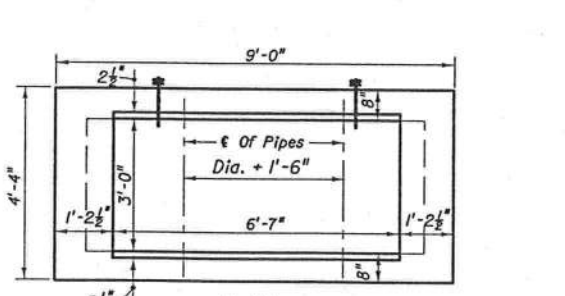


TYPE E

Recommended Maximum Pipe Size:

3'-0" Wall-24" Pipe

4'-6" Wall-36" Pipe



TYPE H

Recommended Maximum Pipe Size:

3'-0" Wall-24" Pipe

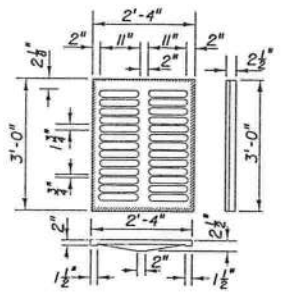
7'-8" Wall-1-66" Pipe

2-30" Pipe

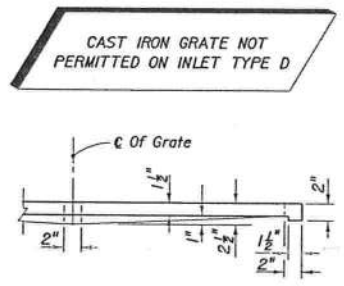
INLETS

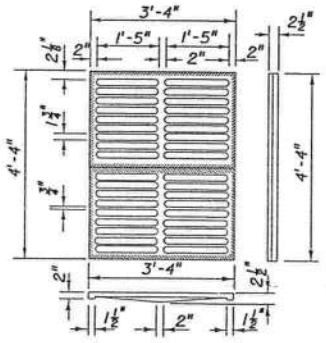
GENERAL NOTES

1. These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads.
2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and in areas accessible to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dipped galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Size for other types of pipe must be checked for fit.
5. All exposed corners and edges of concrete are to be chamfered ¾".
6. Concrete inlet pavement to be used on inlets without slots and inlets with non-traversable slots o when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
7. Traversable slots constructed in existing inlets shall be paid for as inlets partial, and shall include the cost for slot openings, concrete inlet pavement and any required replacement grates.
8. Sodding to be used on all inlets not located in paved areas and paid for under contract concrete inlet pavement unit price for Sodding, SY.
9. For supplementary details see Index No. 201.

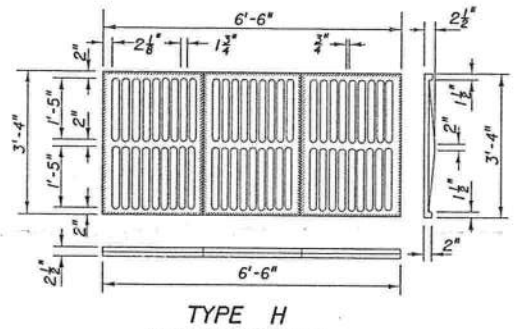


Approx. Weight 235 Lbs.



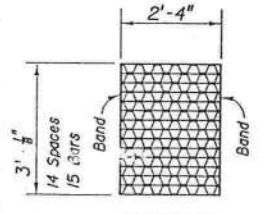


Approx. Weight 465 Lbs.

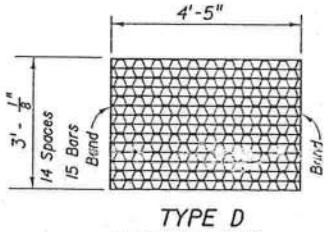


Approx. Weight 725 Lbs.

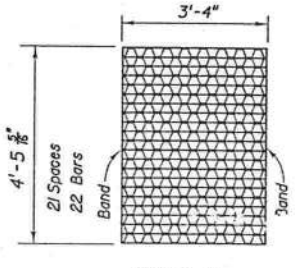
CAST IRON GRATES



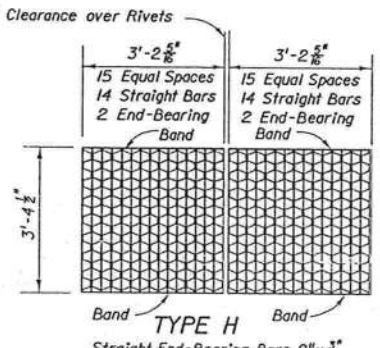
Straight Bars 2"x¼"
Reticuline Bars 1¼" x 3/16"
Bands 2"x¼"
Approx. Weight 104 Lbs.



Straight Bars 2"x¼"
Reticuline Bars 1¼" x 3/16"
Bands 2"x¼"
Approx. Weight 190 Lbs.



Straight Bars 2"x¼"
Reticuline Bars 1¼" x 3/16"
Bands 2"x¼"
Approx. Weight 215 Lbs.



Straight End-Bearing Bars 2"x⅜"
Straight Bearing Bars 2"x¼"
Reticuline Bars 1¼" x 3/16"
Banding Bars 2" x ¼"
Approx. Total Weight 310 Lbs.

NOTICE: Steel Grates Are Required On Inlets With Traversable Slots And On Inlets where Bicycle Traffic Is Anticipated.

STEEL GRATES

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

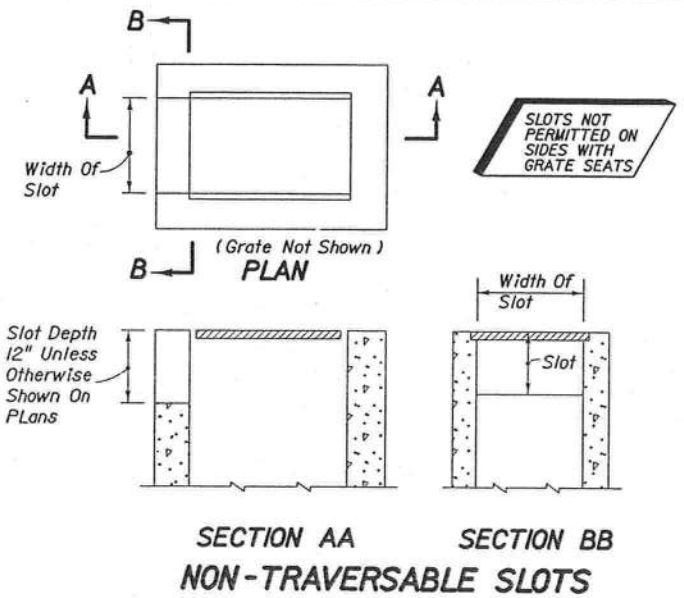
DITCH BOTTOM INLETS TYPES C, D, E & H

	Names	Dates
Designed By		
Drawn By		
Checked By	EGR/JG	07/81

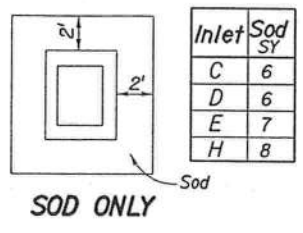
Approved By *S. A. McLemore*
State Drainage Engineer

Revision	Sheet No.	Index No.
02	1 of 5	232

$$$$$SYTIME$$$$$

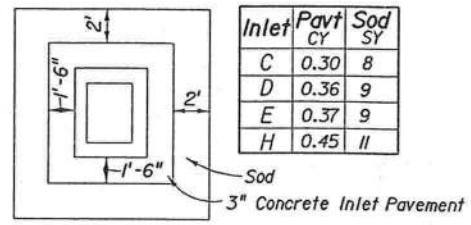


NON-TRAVERSABLE SLOTS



Inlet	Sod SY
C	6
D	6
E	7
H	8

SOD ONLY

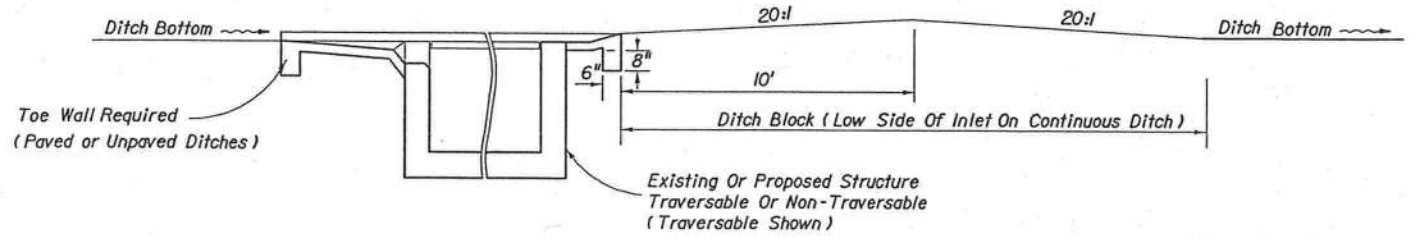


Inlet	Pavt CY	Sod SY
C	0.30	8
D	0.36	9
E	0.37	9
H	0.45	11

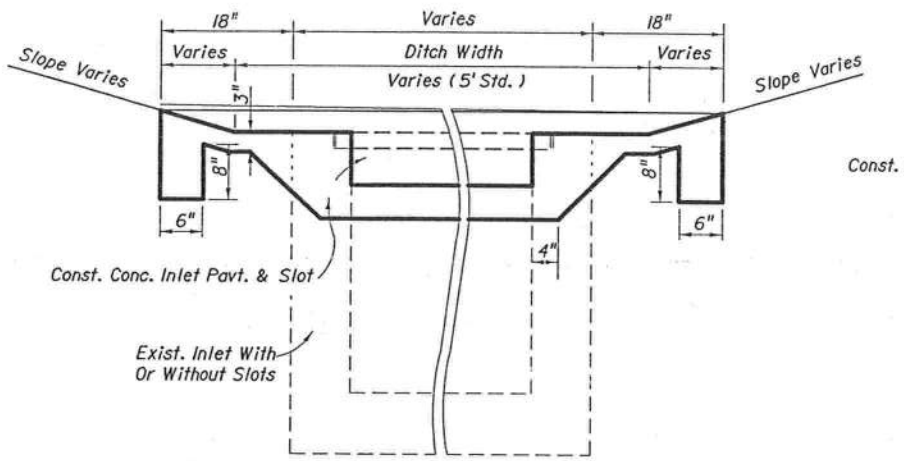
PAVT. AND SOD

NOTE: See General Notes Nos. 6 and 7

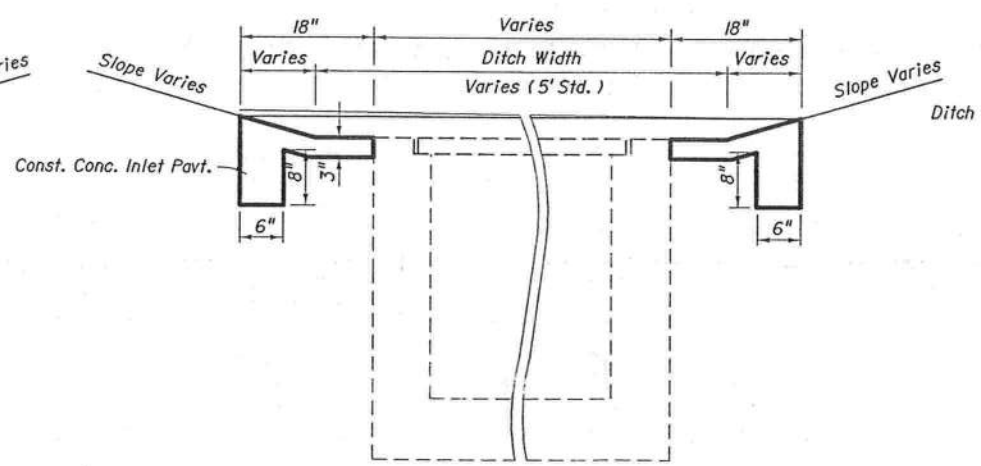
SODDING AND PAVEMENT FOR INLETS WITHOUT SLOTS AND INLETS WITH NON-TRAVERSABLE SLOTS



DITCH BLOCK FOR INLETS WITH OR WITHOUT SLOTS



SECTION AA

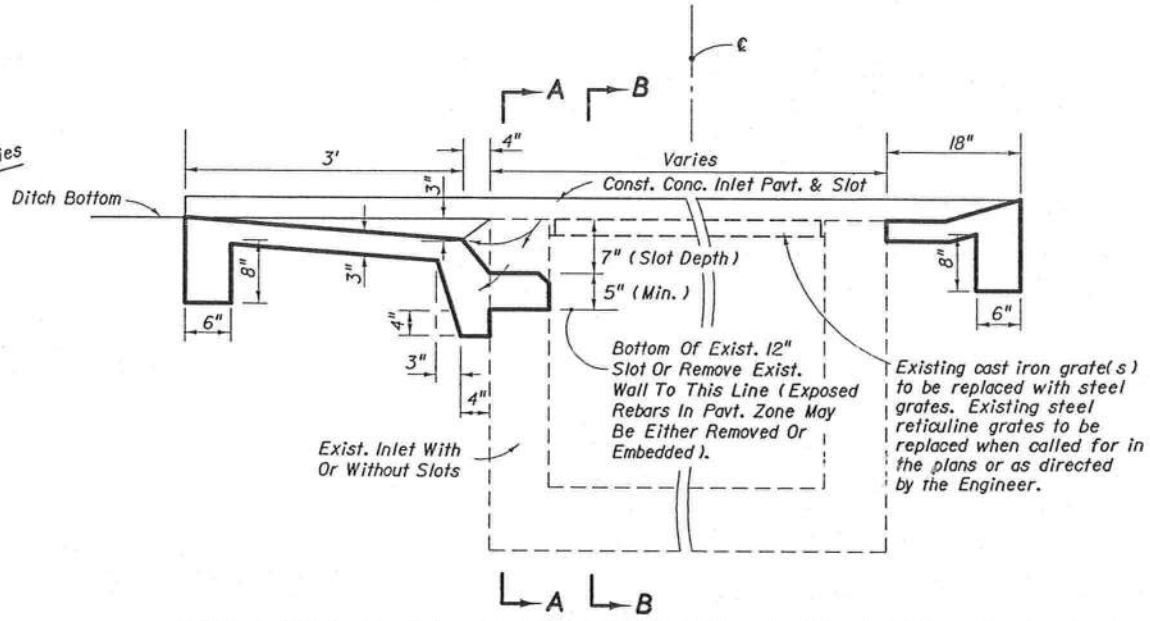


SECTION BB

PAVEMENT AND SODDING QUANTITIES FOR TRAVERSABLE SLOTS						
Inlet	Pavement				Sod	
	Single Slot		Double Slot		Single Slot	Double Slot
	SY	CY	SY	CY	SY	SY
C	4.87	0.83	6.16	1.05	12	16
D	5.99	1.01	7.70	1.30	14	19
E	5.88	0.99	7.37	1.24	14	18

NOTE: For plan view and additional details see sheet 2 of 4.
For payment see General Notes Nos. 6 and 7.

TRAVERSABLE SLOTS FOR EXISTING INLETS



SINGLE SLOT SHOWN (DOUBLE SLOTS SYMMETRICAL ABOUT CENTERLINE)
SECTION CC (CASE 1)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

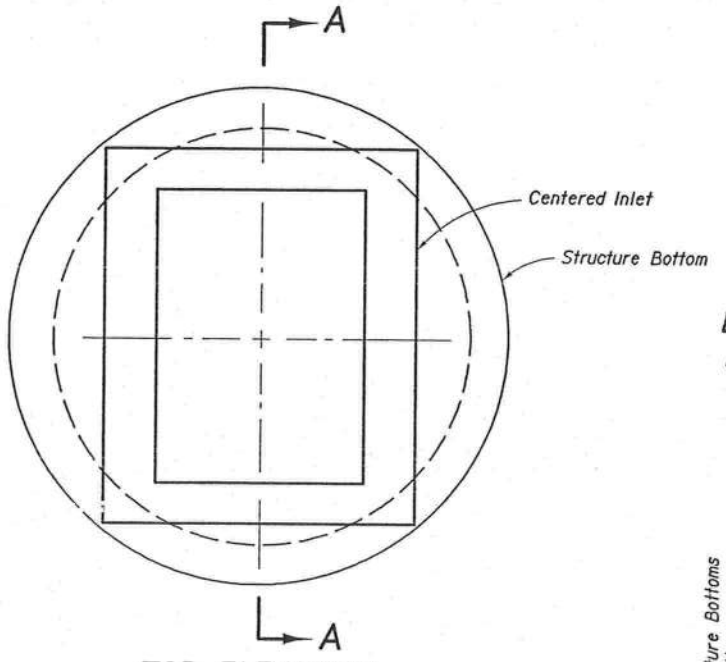
DITCH BOTTOM INLETS TYPES C,D,E & H

	Names	Dates
Designed By	EGR	07/84
Drawn By	DAE	07/84
Checked By	JBW/JWG	07/84

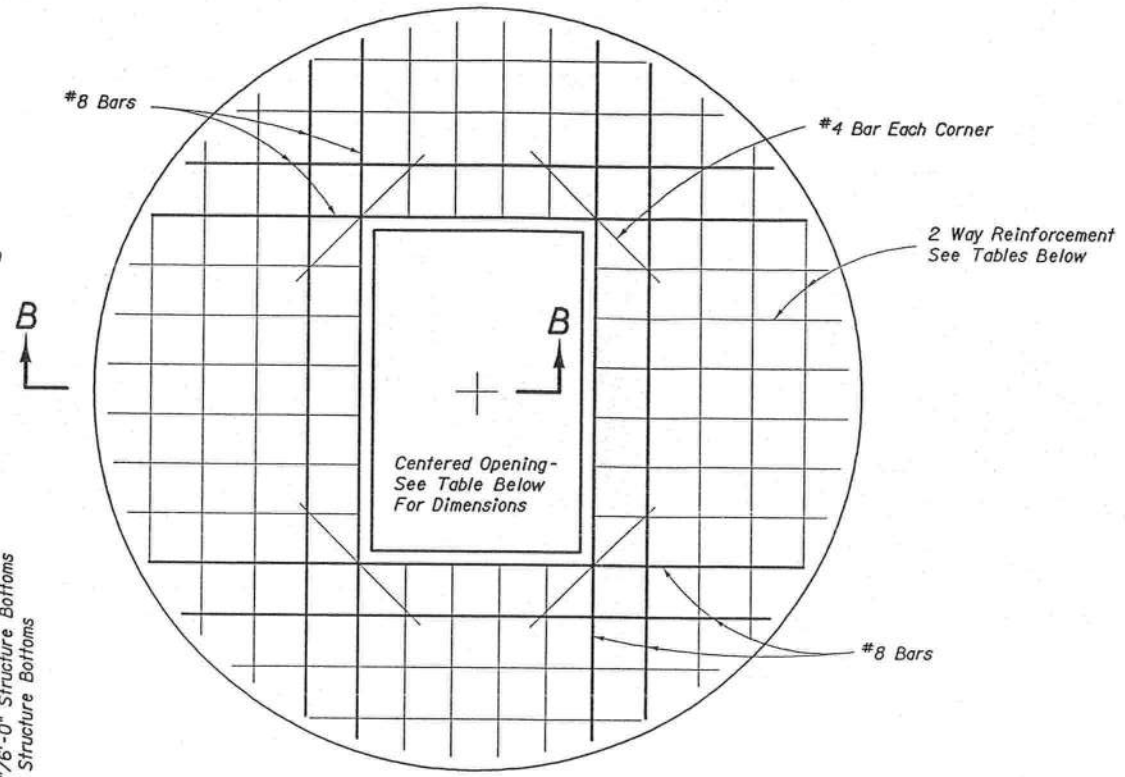
Approved By: S. a. McLemore
State Roadway Design Engineer

Revision	Sheet No.	Index No.
00	3 of 5	232

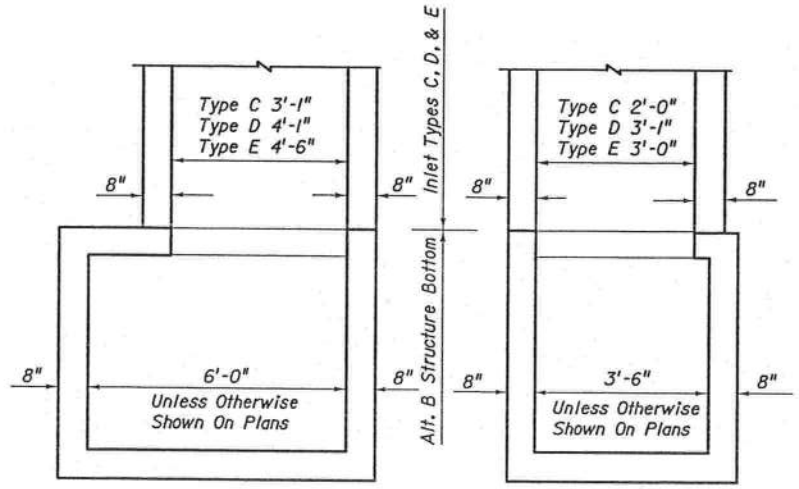
$$$$$$SYTIME$$$$$$



TOP ELEVATION



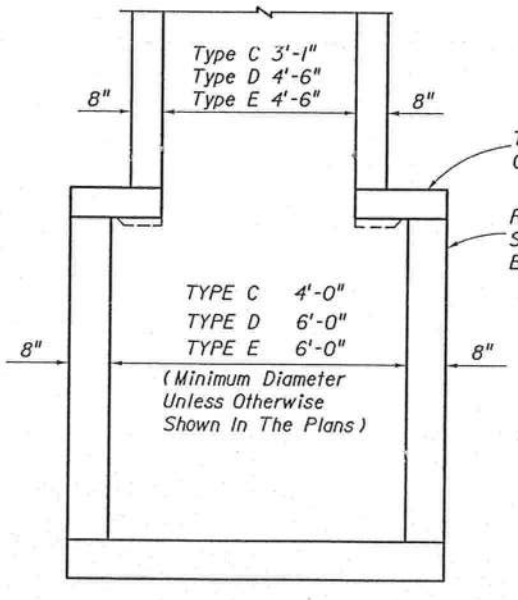
TOP SLAB REINFORCING DIAGRAM



See Index No. 200 for structure bottom details and hole reinforcement.

ALT. B STRUCTURE BOTTOM FOR INLETS TYPE C, D & E

TOP SLAB OPENINGS		
DIAMETER	OPENING SIZE	
	MIN.	MAX.
4'-0"	2'-0" x 3'-1"	2'-0" x 3'-1"
5'-0"	2'-0" x 3'-1"	3'-1" x 4'-1"
6'-0"	2'-0" x 3'-1"	3'-0" x 4'-4"
8'-0"	2'-0" x 3'-1"	3'-0" x 4'-4"



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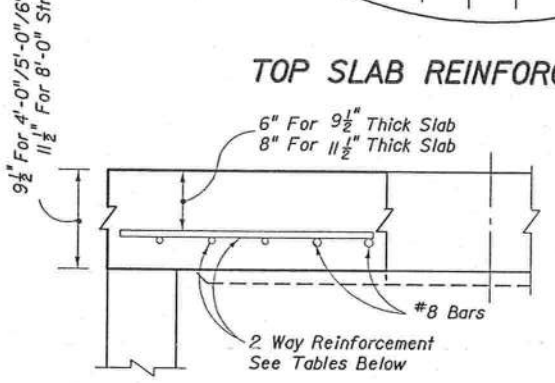


SECTION BB

TOP SLAB REINFORCING SCHEDULE	
SCHEDULE	GRADE 60 OR 65KSI OR (WIRE FABRIC) In ²/ft
A	0.20
B	0.24
C	0.37
D	0.53
E	0.73
F	1.06
G	1.45

TOP SLAB WITH CENTERED OPENING		
SLAB DEPTH	SLAB THICKNESS	REINFORCING (2 WAYS) SCHEDULE
SIZE: 4'-0"		
≥ 0.5'-40'	9½"	C
SIZE: 5'-0"		
≥ 0.5'<30'	9½"	C
30'-40'	9½"	D
SIZE: 6'-0"		
0.5'< 8'	9½"	B
8' < 18'	9½"	C
18'<30'	9½"	D
30' <37'	9½"	E
37'-40'	9½"	G
SIZE: 8'-0"		
≥ 0.5'<9'	11½"	C
9'< 15'	11½"	D
15' <23'	11½"	E
23' <33'	11½"	E
33'-40'	11½"	G

ALT. A STRUCTURE BOTTOM FOR INLETS TYPE C, D AND E

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

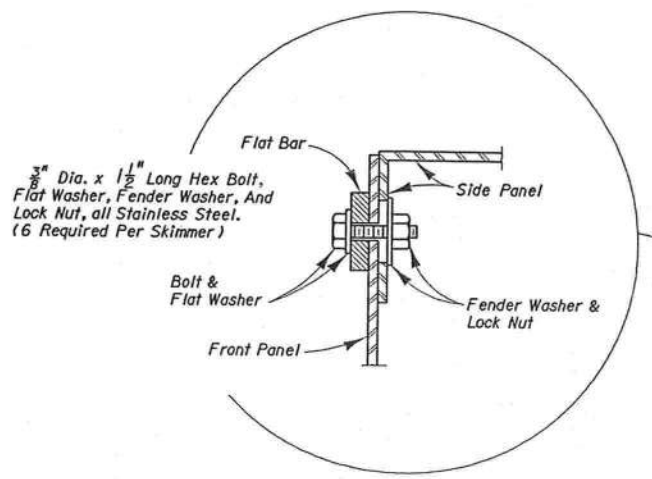
DITCH BOTTOM INLETS TYPES C,D,E & H

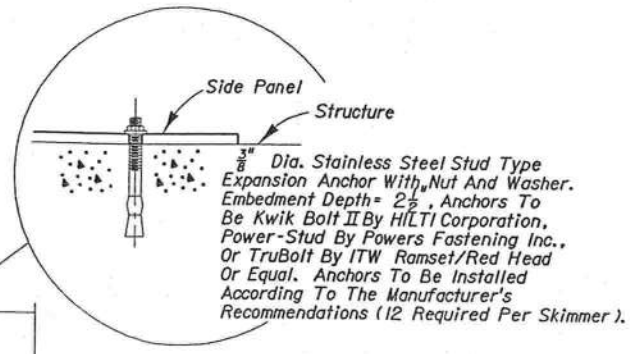
	Names	Dates
Designed By		
Drawn By	JDT	02/99
Checked By		

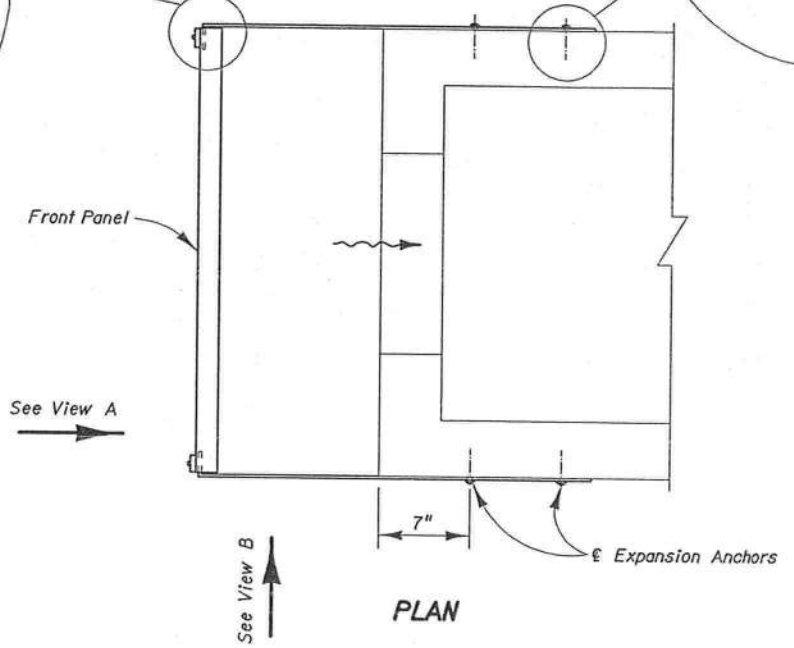
Approved By S a McLemore
State Drainage Engineer

Revision	Sheet No.	Index No.
00	5 of 5	232

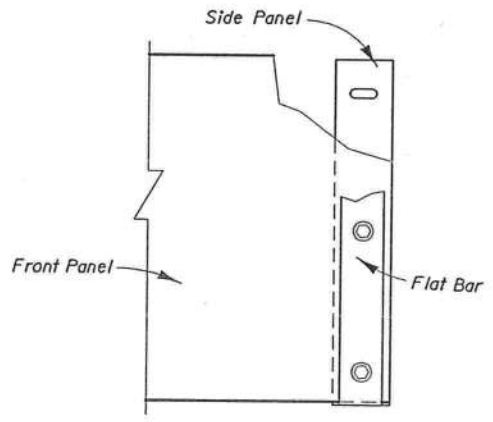
$$$$$$SYTIVE$$$$$$



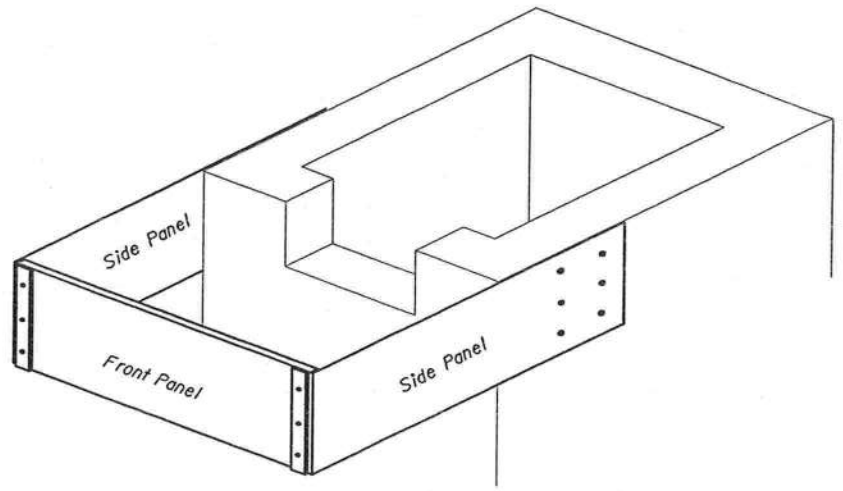




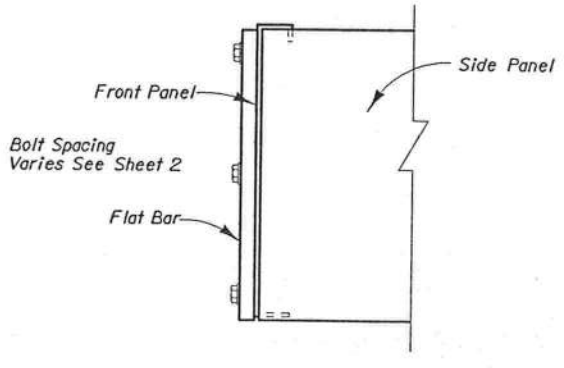
PLAN



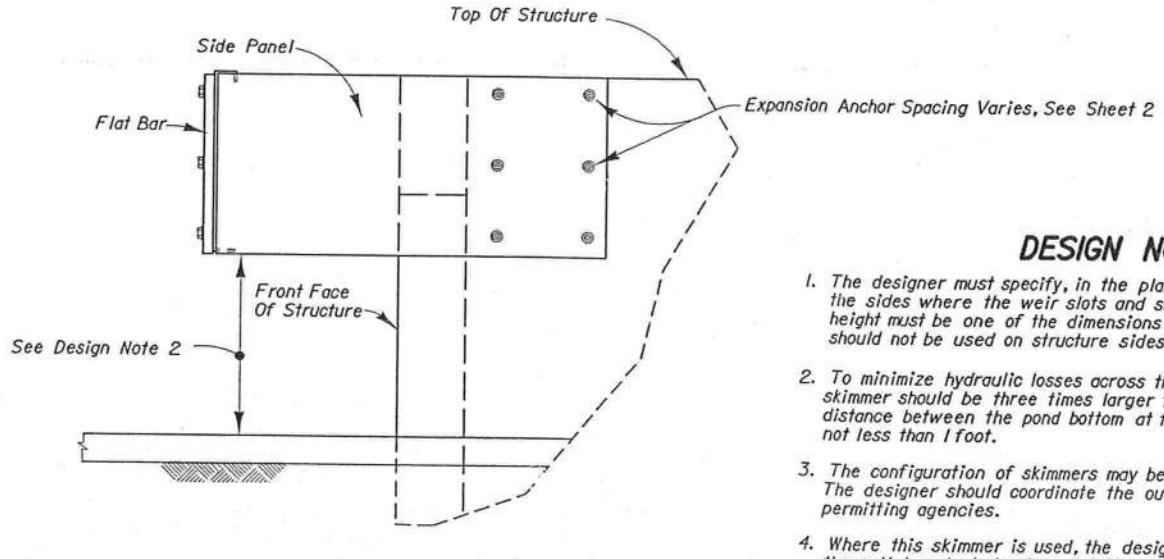
VIEW A



PICTORIAL VIEW



VIEW B



SIDE VIEW

GENERAL NOTES

1. This skimmer is intended for use on Type C, D, or E Ditch Bottom Inlets that are used as outlet control structures of stormwater management facilities.
2. The side panels are dimensionally symetric, therefore they may be used on either side of the structure.
3. Two (2) skimmers may be constructed on one structure provided they are on opposite ends.
4. The width of the front panel (dimension W) shall be the same as the outside dimension across the front of the structure.
5. The front panel, side panels, and flat bars are to be hot dipped galvanized after fabrication.
6. The location of the reinforcing steel in these structures must conform to the applicable standards to avoid conflict with the expansion anchors used to attach the skimmer.
7. Grates to be used on the inlets unless otherwise specified in the plans.
8. A skimmer consists of two (2) side panels, one front panel, two (2) flat bars, and accessory hardware. The cost of skimmers is to be included in the cost of the inlet.

DESIGN NOTES

1. The designer must specify, in the plans, the skimmer height (dimension H) and the sides where the weir slots and skimmers are located. The skimmer height must be one of the dimensions shown in the table on Sheet 2. The skimmer should not be used on structure sides with outside dimensions greater than 6'-4".
2. To minimize hydraulic losses across the skimmer, the flow area under the skimmer should be three times larger than the flow area of the weir slot. The distance between the pond bottom at the structure and the skimmer shall be not less than 1 foot.
3. The configuration of skimmers may be subject to regulatory requirements. The designer should coordinate the outlet control structure details with the permitting agencies.
4. Where this skimmer is used, the designer should reference this index with the outlet control structure details. Where a different skimmer design is needed, the designer should provide skimmer details in the plans.
5. The designer shall evaluate if a grate is needed for safety reasons. Where a grate is not needed for safety reasons and is not desirable for hydraulic or other reasons, the designer may omit the grate by stating so in the outlet control structure details.
6. The designer must show the configuration of the weir slots in the outlet control structure detail.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATIC

SKIMMER FOR OUTLET CONTROL STRUCTURES

	Names	Dates
Designed By	CRH	02/99
Drawn By	JT	02/99
Checked By	WPH	02/99

Approved By: S a McInnes
State Drainage Engineer

Revision	Sheet No.	Index No
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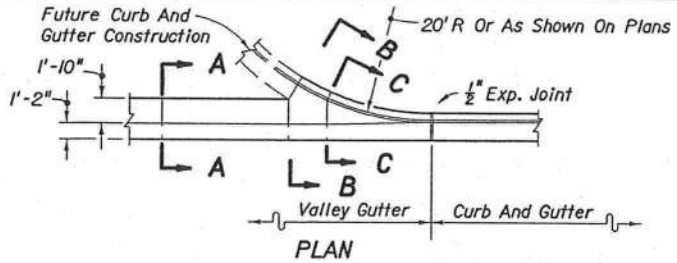
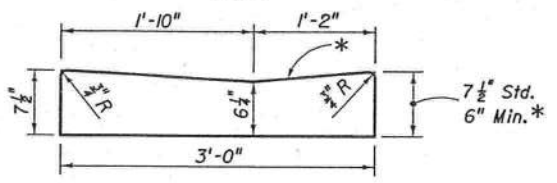
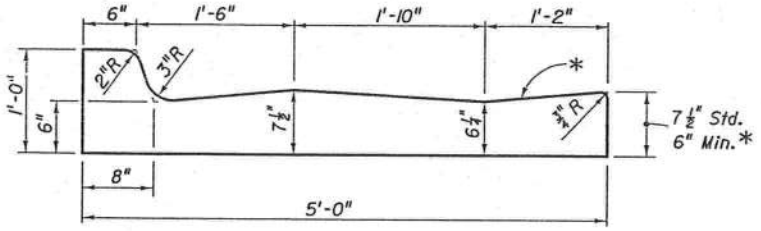
$$$$$$$S:TIME$$$$$$



PLAN



SECTION AA



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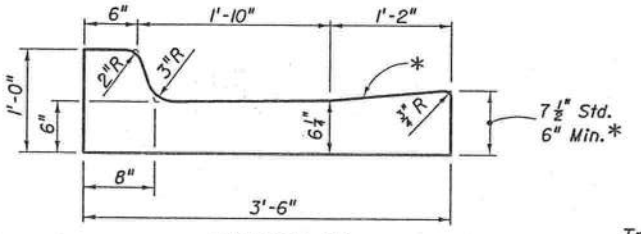
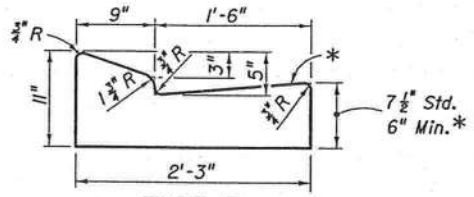
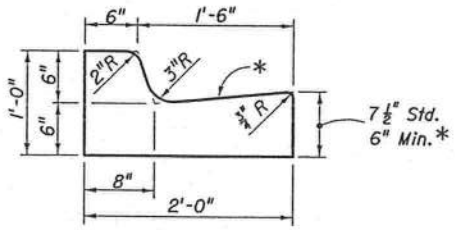


SECTION CC

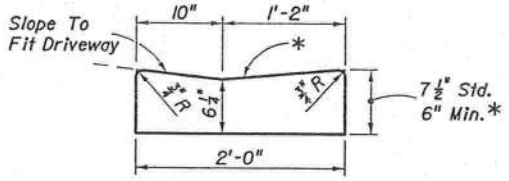
VALLEY GUTTER



TYPE E

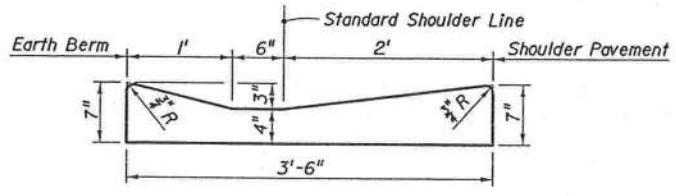


TYPE F



Note: To be paid for as parent curb.

DROP CURB



SHOULDER GUTTER

TRAFFIC BEARING SECTION FOR USE IN ROUNDABOUT CENTRAL ISLAND CONSTRUCTION

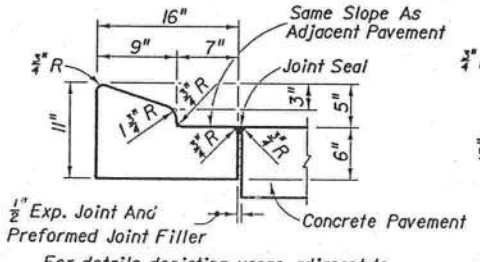
TYPE RA

* When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on plans.

◪ Rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.

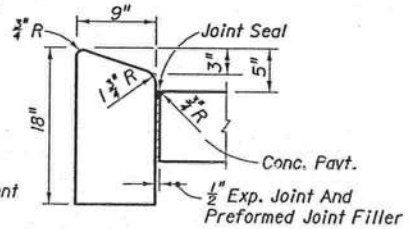
Note: For use adjacent to concrete or flexible pavement. For details depicting usage adjacent to flexible pavement, see diagram right. Expansion joint, preformed joint filler and joint seal are required between curb & gutter and concrete pavement only, see diagram right.

CONCRETE CURB AND GUTTER

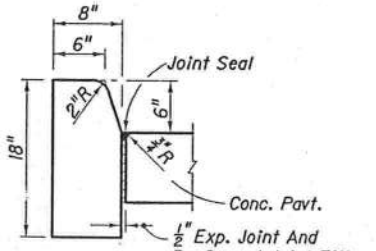


For details depicting usage adjacent to flexible pavement, see diagram right.

TYPE A



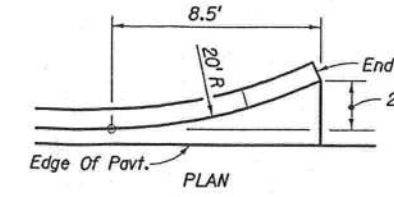
TYPE B

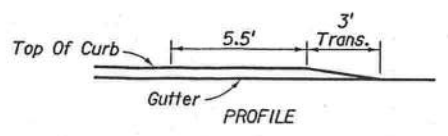


TYPE D

Note: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right.

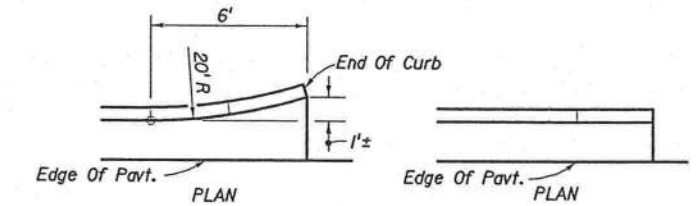
CONCRETE CURB

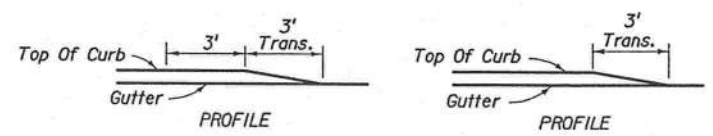




FLARED END STRAIRGHT END

CURB TYPE A

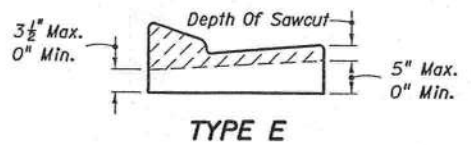




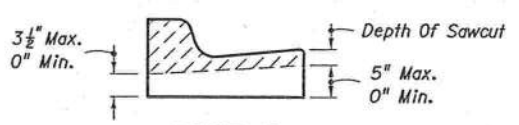
FLARED END STRAIGHT END

CURB AND GUTTER TYPES E & F

CURB AND GUTTER ENDINGS



TYPE E



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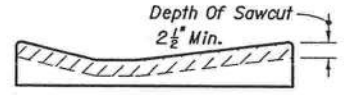
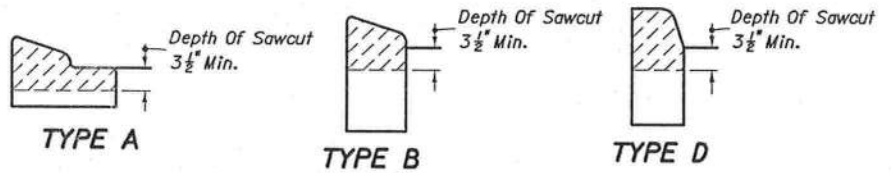


SHOULDER GUTTER

Sawcuts should be avoided within valley gutter and within curb and gutter endings.

CONTRACTION JOINT IN CURB AND GUTTER

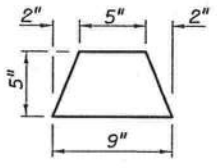


TYPE A

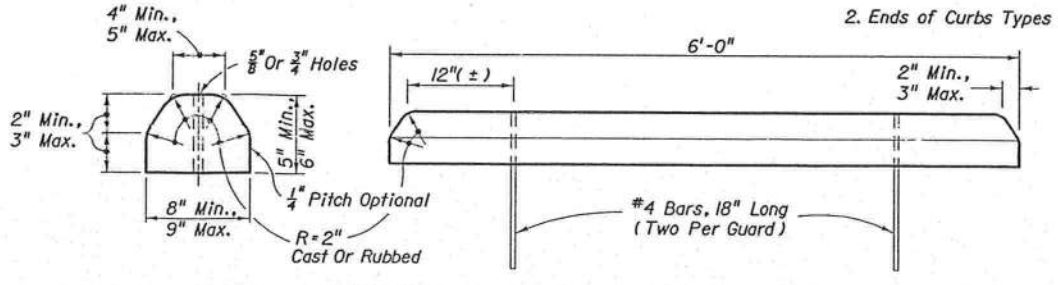
TYPE B

TYPE D

CONTRACTION JOINT IN CURB

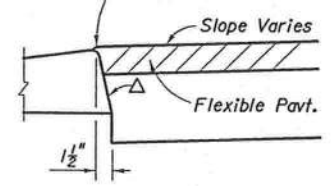


ASPHALTIC CONCRETE CURB



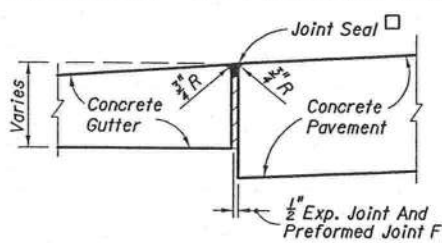
CONCRETE BUMPER GUARD

Surface On Low Side Of Pavement to Be ¼" Above Lip Of Gutter. Surface On High Side To Be Flush With Lip Of Curb Or Curb & Gutter.



△ Applies to both high and low sides of pavement, low side shown. Applies to shoulder gutter only where adjoining traffic lanes.

CURB AND GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT



□ Applies to both high and low sides of pavement, low side shown.

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT

GENERAL NOTES

1. For curb, gutter and curb & gutter provide ⅛" - ¼" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers. Curb, gutter and curb & gutter expansion joints shall be located in accordance with Section 520 of the standard specifications.

2. Ends of Curbs Types B and D shall transition from full to zero heights in 3'.

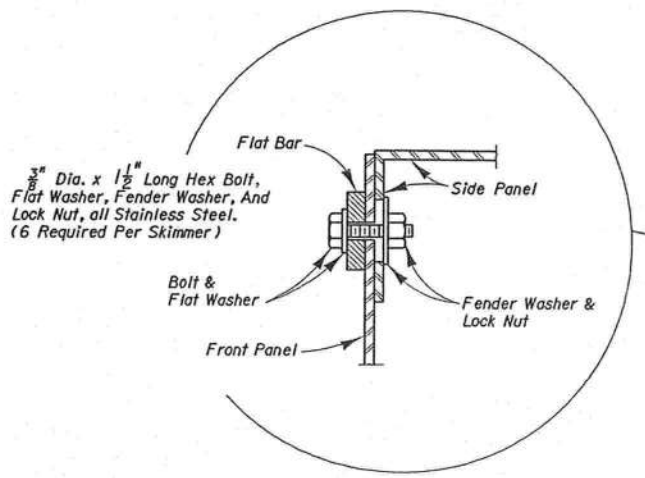
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

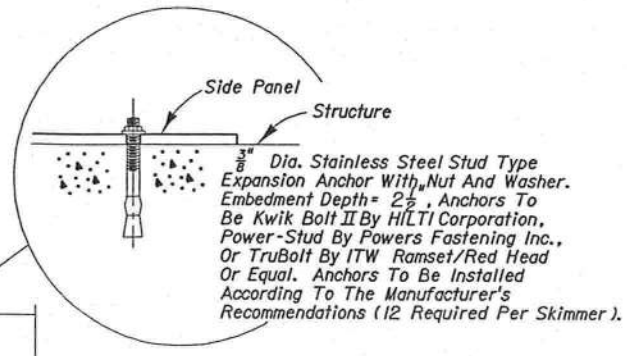
CURB & CURB AND GUTTER

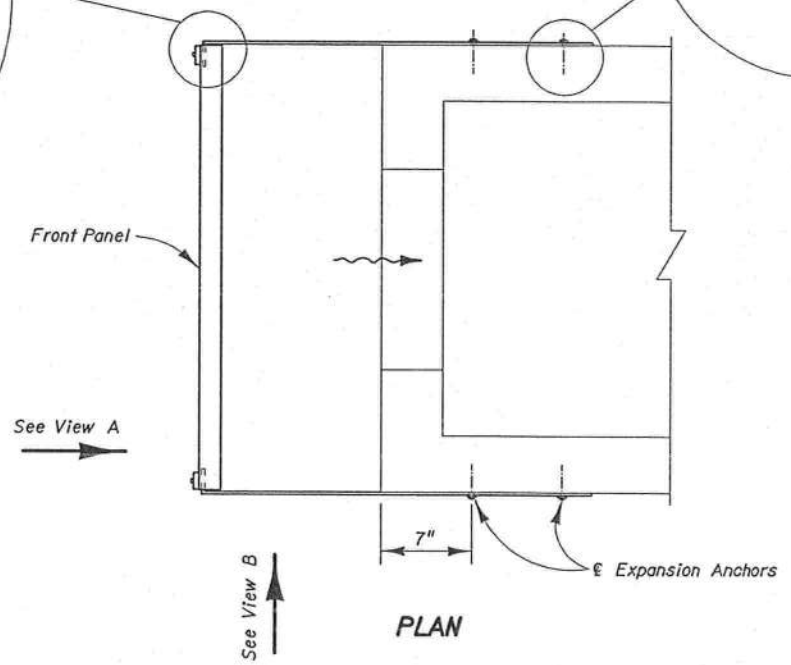
	Names	Dates
Designed By		
Drawn By		
Checked By		

Approved By
State Roadway Design Engineer

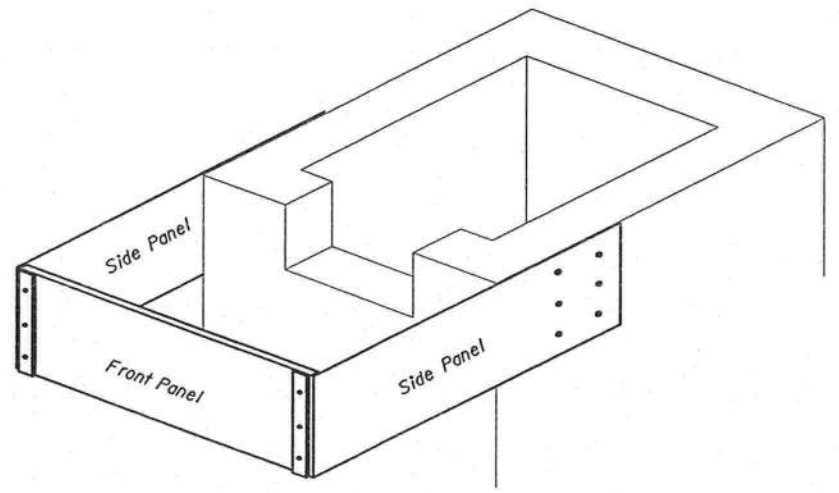
Revision	Sheet No.	Index No.
00	1 of 1	300



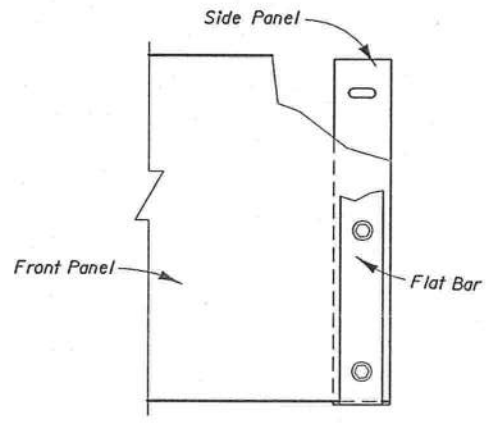




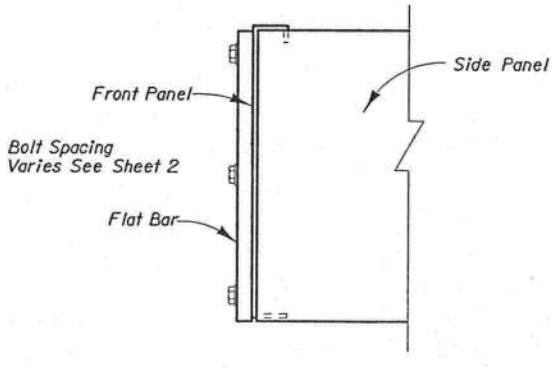
PLAN



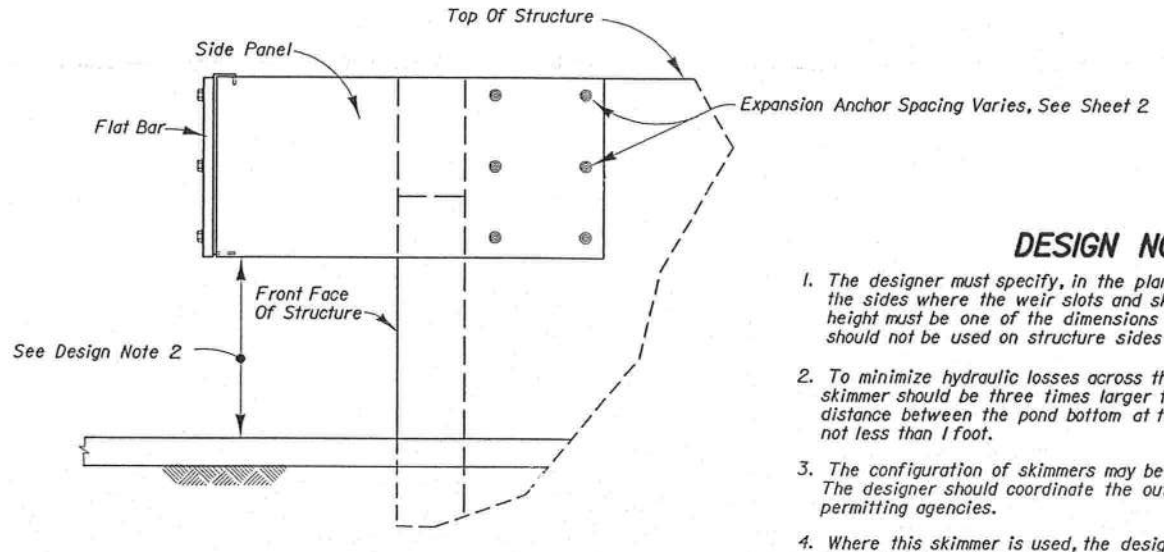
PICTORIAL VIEW



VIEW A



VIEW B



SIDE VIEW

GENERAL NOTES

1. This skimmer is intended for use on Type C, D, or E Ditch Bottom Inlets that are used as outlet control structures of stormwater management facilities.
2. The side panels are dimensionally symetric, therefore they may be used on either side of the structure.
3. Two (2) skimmers may be constructed on one structure provided they are on opposite ends.
4. The width of the front panel (dimension W) shall be the same as the outside dimension across the front of the structure.
5. The front panel, side panels, and flat bars are to be hot dipped galvanized after fabrication.
6. The location of the reinforcing steel in these structures must conform to the applicable standards to avoid conflict with the expansion anchors used to attach the skimmer.
7. Grates to be used on the inlets unless otherwise specified in the plans.
8. A skimmer consists of two (2) side panels, one front panel, two (2) flat bars, and accessory hardware. The cost of skimmers is to be included in the cost of the inlet.

DESIGN NOTES

1. The designer must specify, in the plans, the skimmer height (dimension H) and the sides where the weir slots and skimmers are located. The skimmer height must be one of the dimensions shown in the table on Sheet 2. The skimmer should not be used on structure sides with outside dimensions greater than 6'-4".
2. To minimize hydraulic losses across the skimmer, the flow area under the skimmer should be three times larger than the flow area of the weir slot. The distance between the pond bottom at the structure and the skimmer shall be not less than 1 foot.
3. The configuration of skimmers may be subject to regulatory requirements. The designer should coordinate the outlet control structure details with the permitting agencies.
4. Where this skimmer is used, the designer should reference this index with the outlet control structure details. Where a different skimmer design is needed, the designer should provide skimmer details in the plans.
5. The designer shall evaluate if a grate is needed for safety reasons. Where a grate is not needed for safety reasons and is not desirable for hydraulic or other reasons, the designer may omit the grate by stating so in the outlet control structure details.
6. The designer must show the configuration of the weir slots in the outlet control structure detail.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

SKIMMER FOR OUTLET CONTROL STRUCTURES

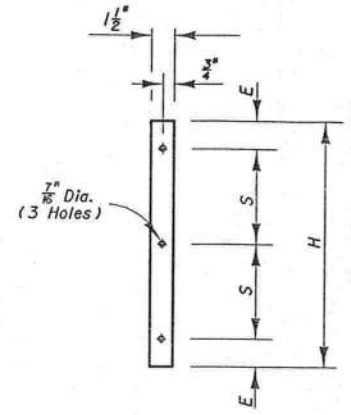
	Names	Dates
Designed By	CRH	02/99
Drawn By	JT	02/99
Checked By	WPH	02/99

Approved By: S a McLemore
State Drainage Engineer

Revision	Sheet No.	Index No.
00	1 of 2	240

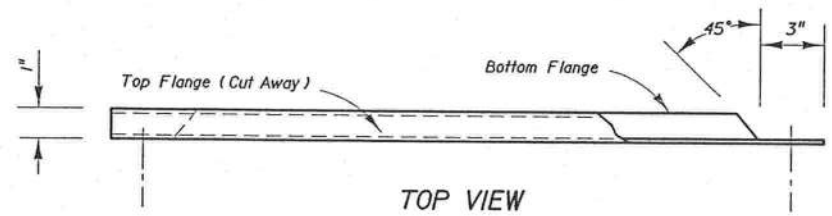
$$$$$$S:\TIMES$$$$$

DIMENSIONS				
Skimmer Height as specified In the plans H	D	E	L	Bolt Spacing S
Inches				
12	3 3/16"	3	28	3
14	3 3/16"	3	28	4
16	3 3/16"	3	28	5
18	3 3/16"	3	28	6
20	4 3/16"	4	31	6
22	4 3/16"	4	31	7
24	4 3/16"	4	31	8
26	4 3/16"	4	31	9
28	4 3/16"	4	31	10
30	5 3/16"	5	31	10
32	5 3/16"	5	31	11
34	5 3/16"	5	31	12
36	6 3/16"	6	31	12
38	6 3/16"	6	31	13
40	6 3/16"	6	31	14

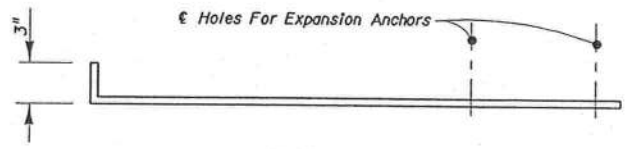


1/4" Thick x 1 1/2" Wide

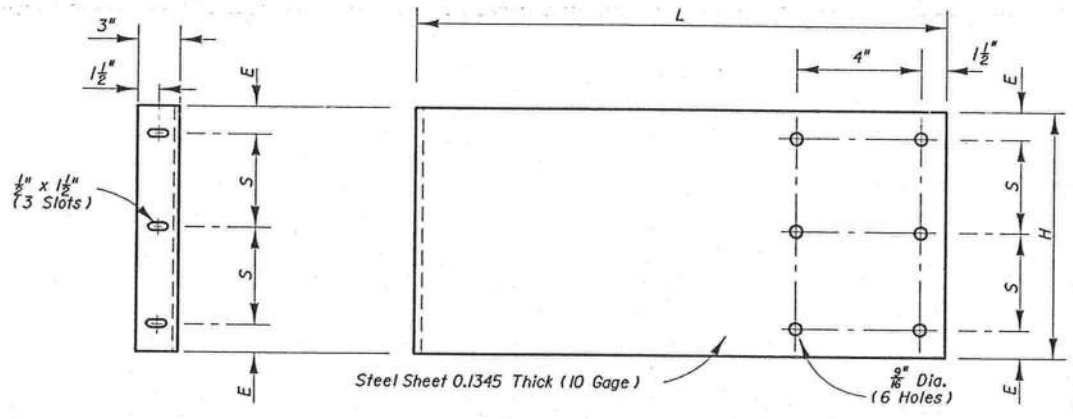
FLAT BAR



TOP VIEW



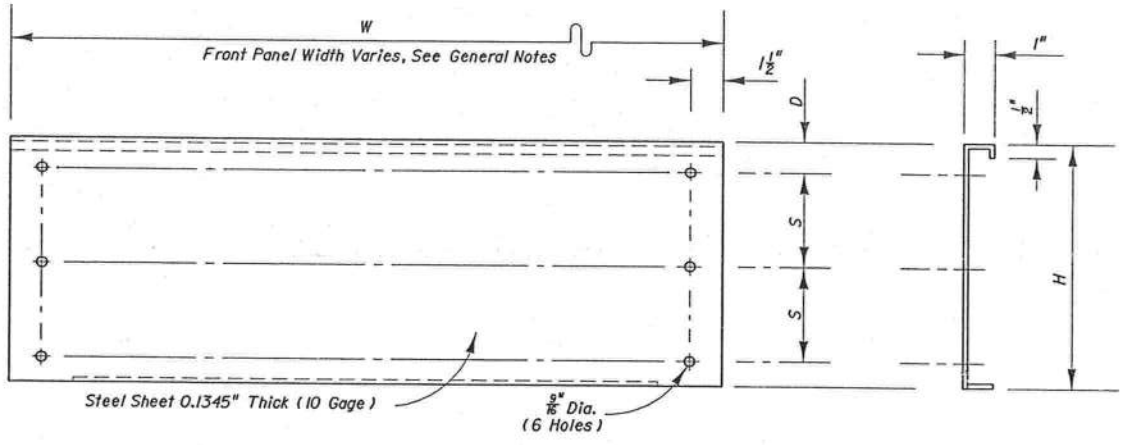
TOP VIEW



END VIEW (FRONT)

SIDE VIEW

SIDE PANEL



FRONT VIEW

END VIEW

FRONT PANEL

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

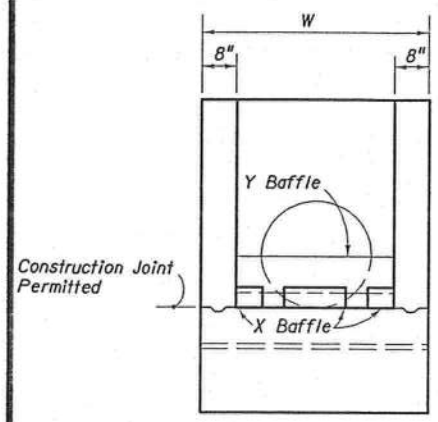
SKIMMER FOR OUTLET CONTROL STRUCTURES

	Names	Dates
Designed By	CRH	02/99
Drawn By	JT	02/99
Checked By	WPH	02/99

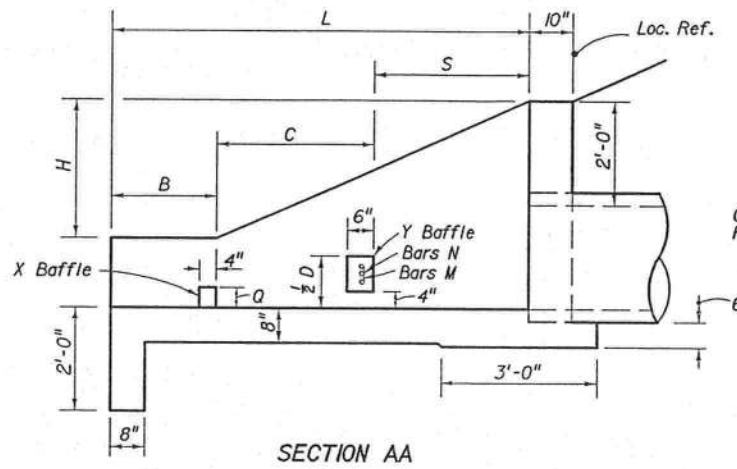
Approved By: S a McLemore
State Drainage Engineer

Revision	Sheet No.	Index No.
00	2 of 2	240

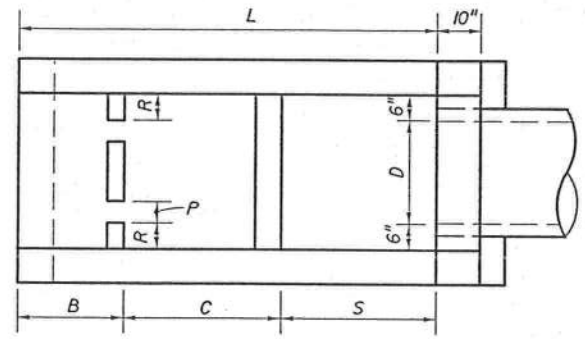
$$$$$$$DGNSPECIFICATION$$$$$
$$$$$$SYTINE$$$$$$



END VIEW

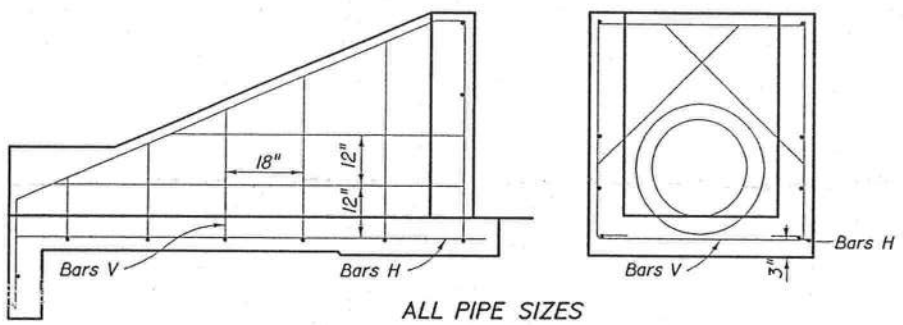


SECTION AA



PLAN

DIMENSIONAL DETAILS



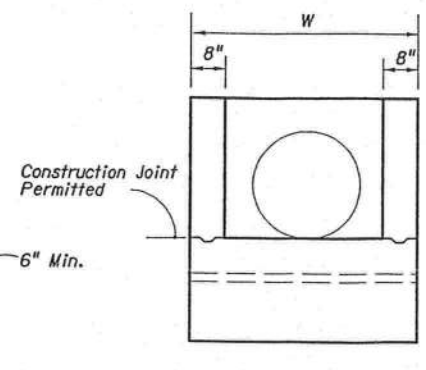
ALL PIPE SIZES
SIDE VIEW AND BACKWALL SECTION

REINFORCING DETAIL

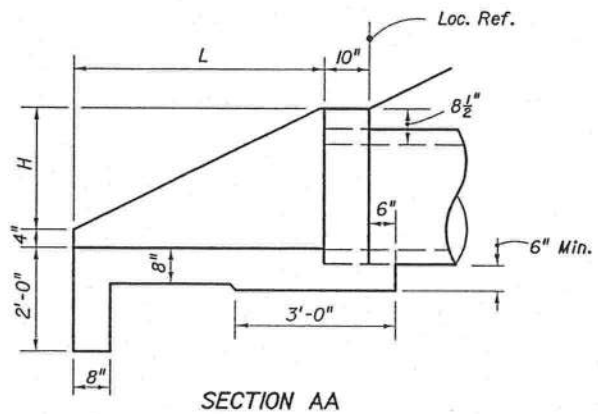
DIMENSIONS AND QUANTITIES FOR ONE U-ENDWALL

Pipe Size								X Baffle			Y Baffle Reinf. Steel		Concrete Class I Cu. Yd.	Reinf. Steel Lbs.
D	Area Sq. Ft.	L	H	W	S	B	C	P	Q	R	Bar M	Bar N		
15"	1.23	5'-9"	2'-3½"	3'-7"	2'-3"	1'-3"	2'-3"	4"	4"	4"	2 #4	1 #4	1.61	72
18"	1.77	6'-6"	2'-5"	3'-10"	2'-6"	1'-6"	2'-6"	4"	4"	5"	3 #4	2 #4	1.89	86
24"	3.14	8'-0"	2'-8"	4'-4"	3'-0"	2'-0"	3'-0"	5"	5"	6"	4 #4	3 #4	2.52	108
30"	4.91	9'-6"	2'-11"	4'-10"	3'-6"	2'-6"	3'-6"	5"	5"	7"	4 #4	4 #4	3.34	131

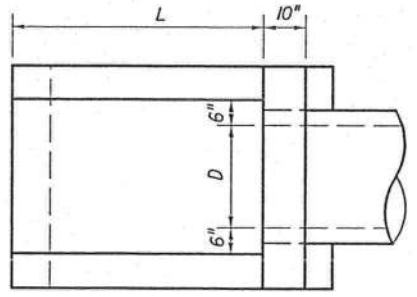
WITH BAFFLES



END VIEW

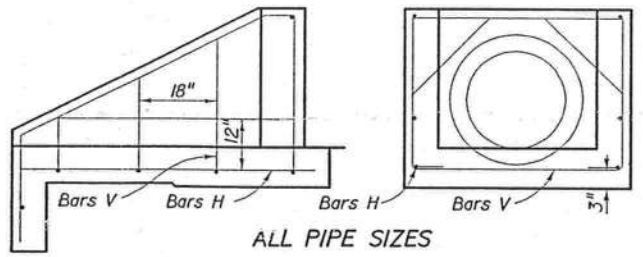


SECTION AA



PLAN

DIMENSIONAL DETAILS



ALL PIPE SIZES
SIDE VIEW AND BACKWALL SECTION

REINFORCING DETAIL

DIMENSIONS AND QUANTITIES FOR ONE U-ENDWALL

Pipe Size					Concrete Class I Cu. Yd.	Reinf. Steel Lbs.
D	Area Sq. Ft.	L	H	W		
15"	1.23	3'-3"	1'- 7½"	3'-7"	0.89	39
18"	1.77	3'-9"	1'- 10½"	3'-10"	1.05	43
24"	3.14	4'-9"	2'- 4½"	4'-4"	1.40	55
30"	4.91	5'-9"	2'- 10½"	4'-10"	1.88	64

WITHOUT BAFFLES

GENERAL NOTES

1. Baffles to be constructed only when called for in plans.
2. When steel grating is required on endwall see Sheet 3 of 3 for details.
3. All reinforcing No. 4 bars with 2" clearance except as noted.
4. All angles, channels and bars shall be ASTM A242/A242M, A572/A572M or A588/A588M Grade 50 steel, when designated Alternate G in the plans galvanized in accordance with Section 962-7 of the Standard Specifications.
5. Channel section C 3 x 6 may be substituted for C 4 x 5.4 channel.
6. Precasting of this endwall will be permitted. Precast units shall conform to the dimensions shown or in accordance with approved shop drawings. Request for shop drawing approval shall be directed to the State Drainage Engineer. Use Index No. 201 for opening and grouting details.
7. Concrete meeting the requirements of ASTM C-478 (4000 psi) may be used in lieu of Class I concrete in precast units manufactured in plants which are under the Standard Operating Procedures for the inspection of precast drainage products.
8. Sodding shall be in accordance with Index No. 281, and paid for under the contract unit price for Sodding, SY.
9. Endwall to be paid for under the contract unit price for Class I Concrete (Endwalls), CY and Reinforcing Steel (Roadway), LB. Cost of grates to be paid for under the contract unit price for Endwall Grate, LB, plan quantity. Cost of galvanized bolts and nuts to be included in the bid price for the grate.

ENDWALLS FOR 2:1 SLOPES

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

U-TYPE CONCRETE ENDWALLS BAFFLES AND GRATE OPTIONAL 15" TO 30" PIPE

	Names	Dates
Designed By		
Drawn By	dds	09/85
Checked By		

Approved By A a Mchenry
State Drainage Engineer

Revision	Sheet No.	Index No.
00	1 of 3	261

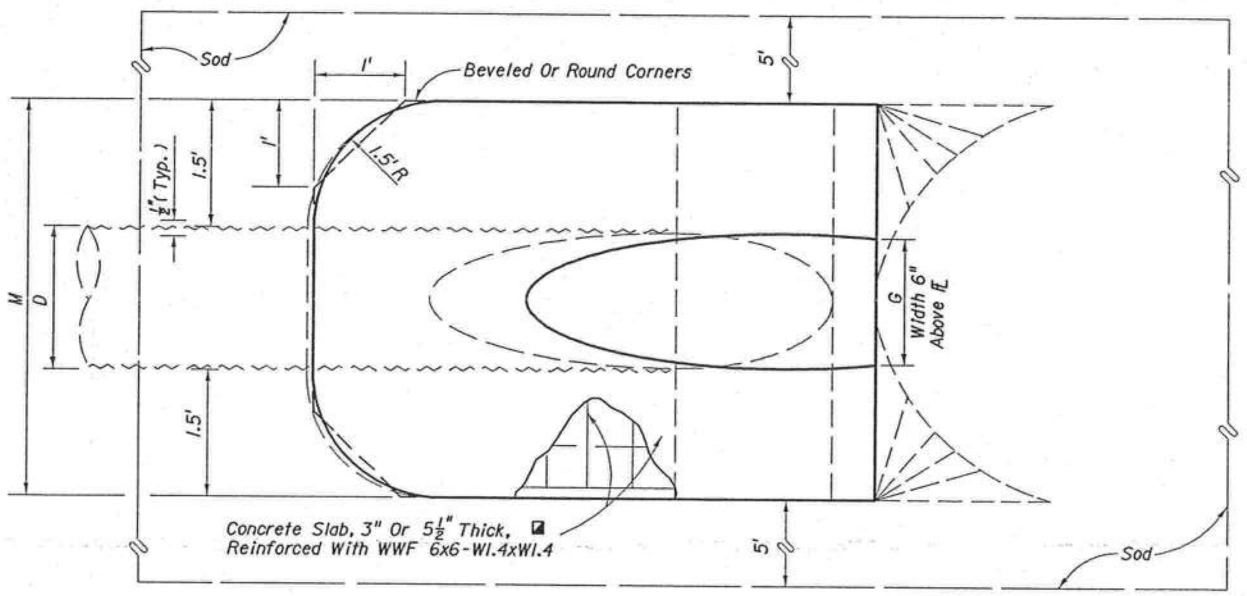
$$$$$$SYTIME$$$$$$

DIMENSIONS AND QUANTITIES

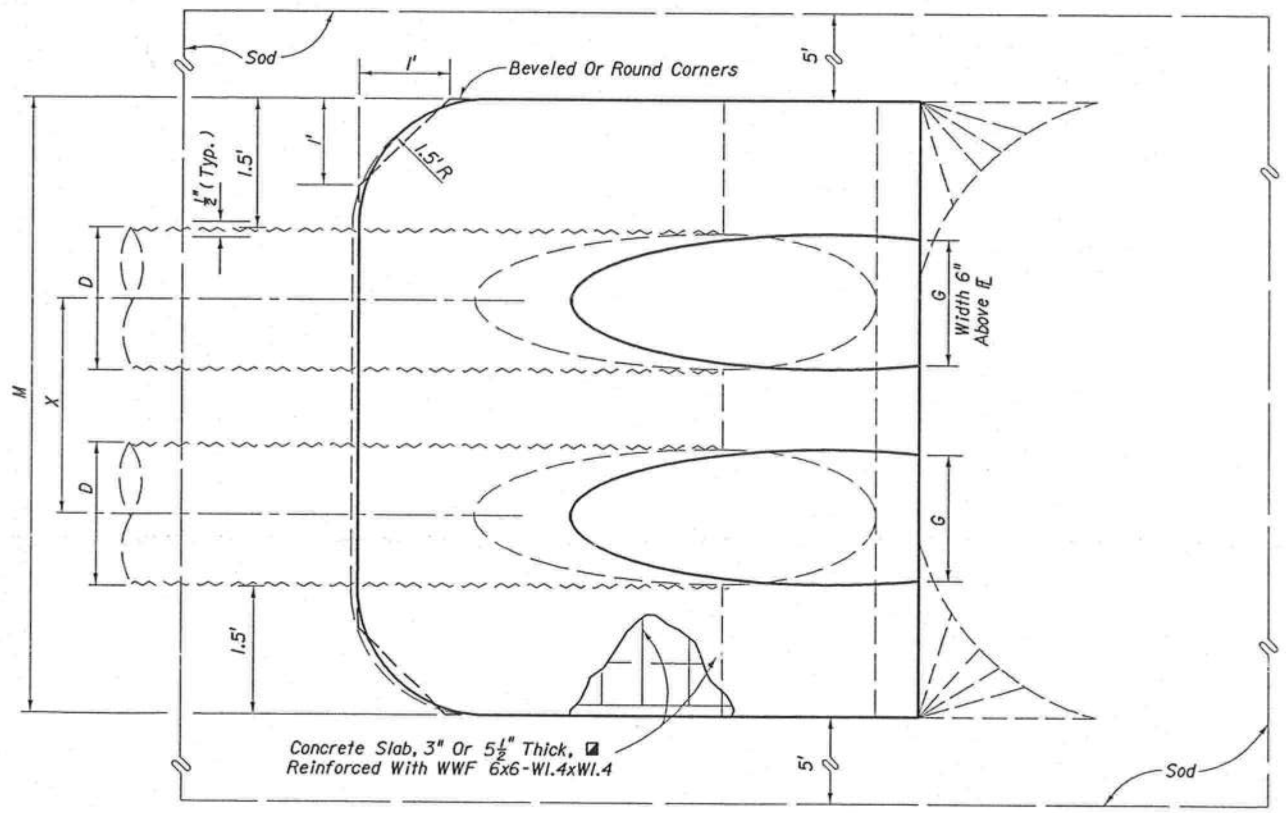
	D	X	A	B	C	E	F	G	H ■	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe	N	5½" Concrete Slab (CY) ◪ Single Pipe	5½" Concrete Slab (CY) ◪ Double Pipe	5½" Concrete Slab (CY) ◪ Triple Pipe	5½" Concrete Slab (CY) ◪ Quad. Pipe	Sodding (SQ. YDS.) Single Pipe	Sodding (SQ. YDS.) Double Pipe	Sodding (SQ. YDS.) Triple Pipe	Sodding (SQ. YDS.) Quad. Pipe
1:2 Slope	15"	2'-7"	2.5'	1.68'	4.18'	1.50'	5'	1.23'	3.5'	4.33'	6.92'	9.50'	12.08'	1.04'	0.35	0.54	0.74	0.94	21	24	27	29
	18"	2'-10"	2.5'	2.24'	4.74'	2.00'	6'	1.41'	4'	4.58'	7.42'	10.25'	13.08'	1.04'	0.38	0.62	0.87	1.12	22	25	28	31
	24"	3'-5"	2.5'	3.35'	5.85'	3.00'	7'	1.73'	4'	5.08'	8.50'	11.92'	15.33'	1.04'	0.47	0.76	1.05	1.34	23	27	31	35
	30"	4'-3"	2.5'	4.47'	6.97'	4.00'	8'	2.00'	4'	5.58'	9.83'	14.08'	18.33'	1.04'	0.57	0.96	1.37	1.77	25	30	35	39
	36"	5'-1"	2.5'	5.59'	8.09'	5.00'	9'	2.24'	4'	6.08'	11.17'	16.25'	21.33'	1.04'	0.67	1.19	1.72	2.26	27	33	38	44
	42"	6'-0"	2.5'	6.71'	9.21'	6.00'	10'	2.45'	4'	6.58'	12.58'	18.58'	24.58'	1.04'	0.78	1.48	2.17	2.87	29	36	42	49
	48"	6'-9"	2.5'	7.83'	10.33'	7.00'	11'	2.65'	4'	7.08'	13.83'	20.58'	27.33'	1.04'	0.89	1.71	2.54	3.36	31	38	46	53
	54"	7'-8"	2.5'	8.94'	11.44'	8.00'	12'	2.83'	4'	7.58'	15.25'	22.92'	30.58'	1.04'	1.02	2.06	3.10	4.14	33	41	50	58
	60"	8'-6"	2.5'	10.06'	12.56'	9.00'	13'	3.00'	4'	8.08'	16.58'	25.08'	33.58'	1.04'	1.14	2.38	3.63	4.89	34	44	53	63
1:4 Slope	15"	2'-7"	2.5'	3.09'	5.59'	3.0'	7.0'	1.23'	4'	4.33'	6.92'	9.50'	12.08'	1.04'	0.44	0.68	0.91	1.15	22	25	28	31
	18"	2'-10"	2.5'	4.12'	6.62'	4.0'	8.0'	1.41'	4'	4.58'	7.42'	10.25'	13.08'	1.04'	0.49	0.77	1.03	1.31	24	27	30	33
	24"	3'-5"	2.5'	6.18'	8.68'	6.0'	10.0'	1.73'	4'	5.08'	8.50'	11.92'	15.33'	1.04'	0.65	1.09	1.38	1.77	27	30	34	38
	30"	4'-3"	2.5'	8.25'	10.75'	8.0'	12.0'	2.00'	4'	5.58'	9.83'	14.08'	18.33'	1.04'	0.81	1.34	1.90	2.44	29	34	39	44
	36"	5'-1"	2.5'	10.31'	12.81'	10.0'	14.0'	2.24'	4'	6.08'	11.17'	16.25'	21.33'	1.04'	0.97	1.68	2.41	3.14	32	38	44	49
	42"	6'-0"	2.5'	12.37'	14.87'	12.0'	16.0'	2.45'	4'	6.58'	12.58'	18.58'	24.58'	1.04'	1.13	2.08	3.06	4.02	35	42	48	55
	48"	6'-9"	2.5'	14.43'	16.93'	14.0'	18.0'	2.65'	4'	7.08'	13.83'	20.58'	27.33'	1.04'	1.29	2.49	3.69	4.88	38	46	53	60
	54"	7'-8"	2.5'	16.49'	18.99'	16.0'	20.0'	2.83'	4'	7.58'	15.25'	22.92'	30.58'	1.04'	1.48	2.98	4.47	5.98	41	49	58	66
	60"	8'-6"	2.5'	18.55'	21.05'	18.0'	22.0'	3.00'	4'	8.08'	16.58'	25.08'	33.58'	1.04'	1.66	3.49	5.31	7.13	44	53	63	72

◪ See General Note No. 3.
See Sheet 5 Of 6 For 3" Slab Quantities

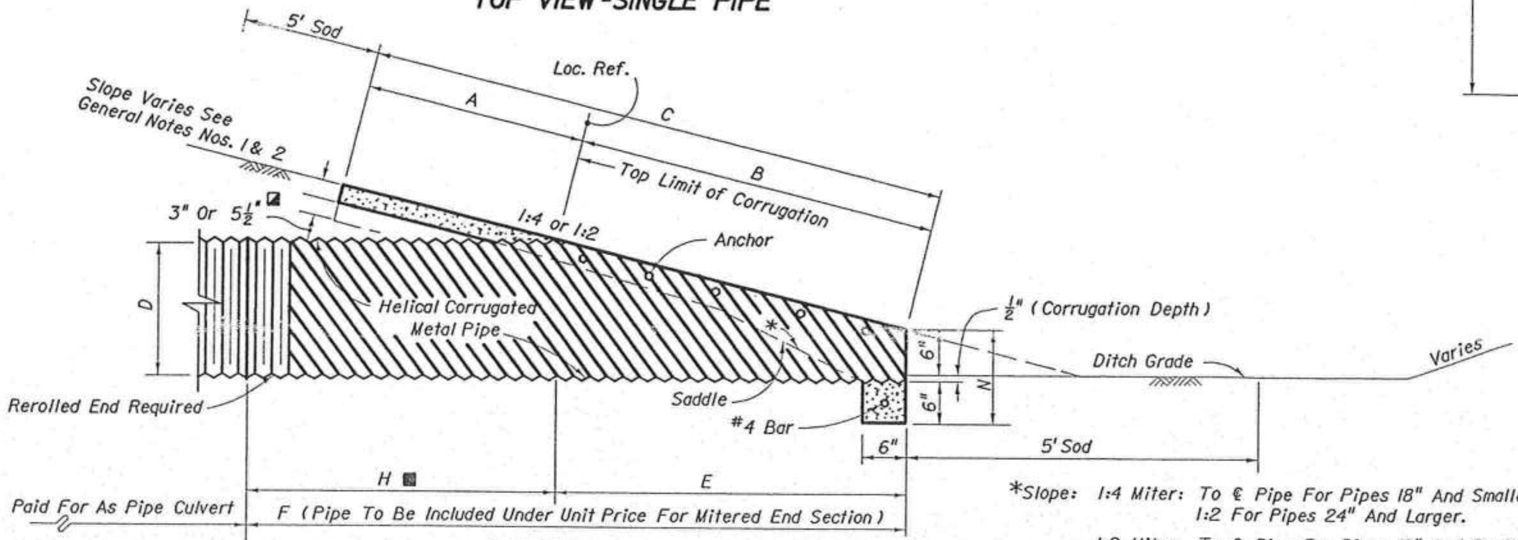
■ Values shown for estimating pipe quantities and are for information only



TOP VIEW-SINGLE PIPE



TOP VIEW-MULTIPLE PIPE



SECTION

NOTE: See Sheet 6 For Details And Notes.

*Slope: 1:4 Miter: To ℄ Pipe For Pipes 18" And Smaller.
1:2 For Pipes 24" And Larger.
1:2 Miter: To ℄ Pipe For Pipes 18" And Smaller.
1:1 For Pipes 24" And Larger.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

CROSS DRAIN MITERED END SECTION

SINGLE AND MULTIPLE ROUND CORRUGATED METAL PIPE

	Names	Dates	Approved By
Designed By	DCB	06/78	S A McLemore (signature), State Drainage Engineer
Drawn By			
Checked By	KNM	06/78	

Revision	Sheet No.	Index No.
02	2 of 6	272

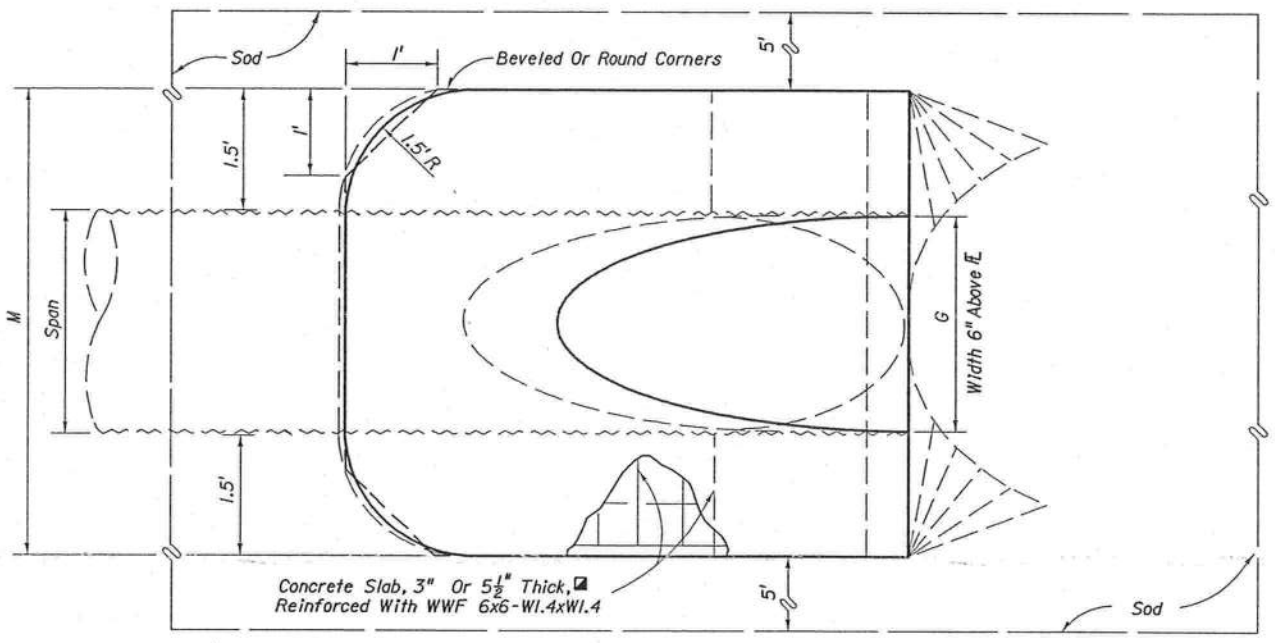
######SYTIME######

1974 AASHTO — DIMENSIONS AND QUANTITIES

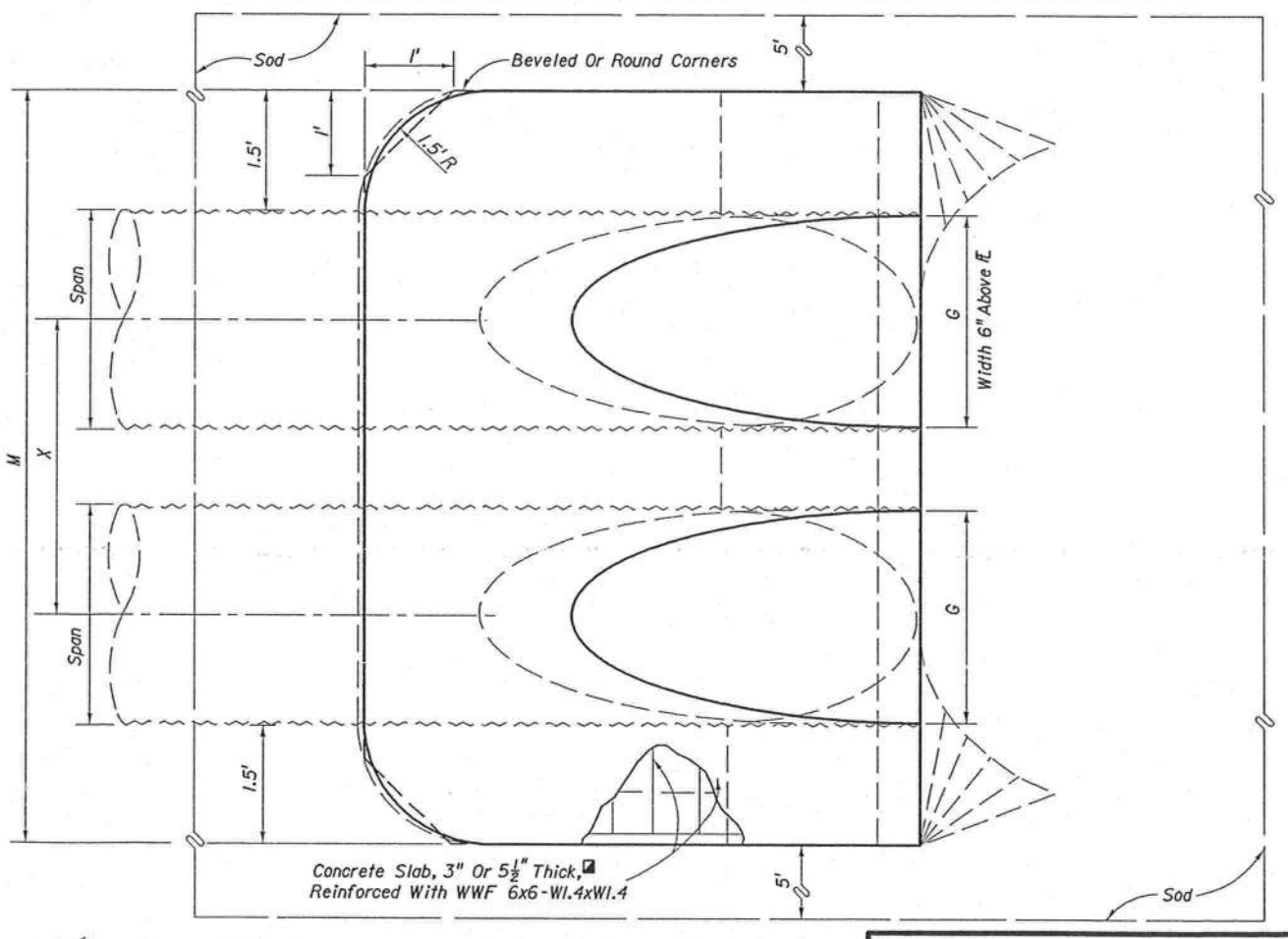
	SPAN	RISE	X	A	B	C	E	F	G	H ■	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe	N	5½" CONCRETE SLAB (CY) ◪ Single Pipe	◪ Double Pipe	◪ Triple Pipe	◪ Quad. Pipe	SODDING (SQ. YDS.) Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe
1:2 Slope	17"	13"	2"-6"	2.5'	1.30'	3.80'	1.17'	4'	1.39'	2.8'	4.50'	7.00'	9.50'	12.00'	1.04'	0.41	0.61	0.81	1.02	21	23	26	29
	21"	15"	2'-10"	2.5'	1.68'	4.17'	1.50'	5'	1.76'	3.5'	4.83'	7.67'	10.50'	13.33'	1.04'	0.43	0.66	0.88	1.10	22	25	28	31
	28"	20"	3'-5"	2.5'	2.61'	5.11'	2.33'	6'	2.22'	3.7'	5.42'	8.83'	12.25'	15.67'	1.04'	0.51	0.78	1.06	1.33	23	27	30	34
	35"	24"	4'-0"	2.5'	3.35'	5.85'	3.00'	7'	2.55'	4.0'	6.00'	10.00'	14.00'	18.00'	1.04'	0.57	0.90	1.22	1.55	24	29	33	38
	42"	29"	4'-9"	2.5'	4.29'	6.79'	3.83'	8'	2.97'	4.2'	6.58'	11.33'	16.08'	20.83'	1.04'	0.64	1.04	1.46	1.87	26	31	37	42
	49"	33"	5'-6"	2.5'	5.03'	7.53'	4.50'	9'	3.34'	4.5'	7.17'	12.67'	18.17'	23.67'	1.04'	0.73	1.23	1.72	2.22	28	34	40	46
	57"	38"	6'-4"	2.5'	5.96'	8.46'	5.33'	10'	3.65'	4.7'	7.83'	14.17'	20.50'	26.83'	1.04'	0.83	1.44	2.04	2.64	29	36	44	51
	64"	43"	7'-1"	2.5'	6.89'	9.39'	6.17'	11'	3.89'	4.8'	8.42'	15.50'	22.58'	29.67'	1.04'	0.95	1.67	2.39	3.11	31	39	47	55
	71"	47"	7'-10"	2.5'	7.64'	10.14'	6.83'	12'	4.14'	5.2'	9.00'	16.83'	24.67'	32.50'	1.04'	1.05	1.89	2.74	3.57	33	41	50	59
1:4 Slope	17"	13"	2'-6"	2.5'	2.41'	4.91'	2.33'	7'	1.39'	4.7'	4.50'	7.00'	9.50'	12.00'	1.04'	0.48	0.71	0.95	1.18	22	25	27	30
	21"	15"	2'-10"	2.5'	3.09'	5.59'	3.00'	8'	1.76	5.0'	4.83'	7.67'	10.50'	13.33'	1.04'	0.52	0.80	1.09	1.31	23	26	29	32
	28"	20"	3'-5"	2.5'	4.81'	7.31'	4.67'	9'	2.22'	4.3'	5.42'	8.83'	12.25'	15.67'	1.04'	0.61	0.92	1.27	1.59	25	29	33	37
	35"	24"	4'-0"	2.5'	6.18'	8.68'	6.00'	11'	2.55'	5.0'	6.00'	10.00'	14.00'	18.00'	1.04'	0.73	1.14	1.55	1.97	28	32	37	41
	42"	29"	4'-9"	2.5'	7.90'	10.40'	7.67'	12'	2.97'	4.3'	6.58'	11.33'	16.08'	20.83'	1.04'	0.87	1.39	1.92	2.45	30	35	41	46
	49"	33"	5'-6"	2.5'	9.28'	11.76'	9.00'	14'	3.34'	5.0'	7.17'	12.67'	18.17'	23.67'	1.04'	1.00	1.66	2.30	2.96	32	38	45	51
	57"	38"	6'-4"	2.5'	11.00'	13.50'	10.67'	16'	3.65'	5.3'	7.83'	14.17'	20.50'	26.83'	1.04'	1.18	2.00	2.82	3.64	35	42	49	56
	64"	43"	7'-1"	2.5'	12.71'	15.21'	12.33'	17'	3.89'	4.7'	8.42'	15.50'	22.58'	29.67'	1.04'	1.36	2.39	3.38	4.38	38	45	53	61
	71"	47"	7'-10"	2.5'	14.09'	16.59'	13.67'	19'	4.14'	5.3'	9.00'	16.83'	24.67'	32.50'	1.04'	1.50	2.65	3.81	4.97	40	48	57	66

◪ See General Note No. 3.
See Sheet 5 Of 6 For 3" Slab Quantities

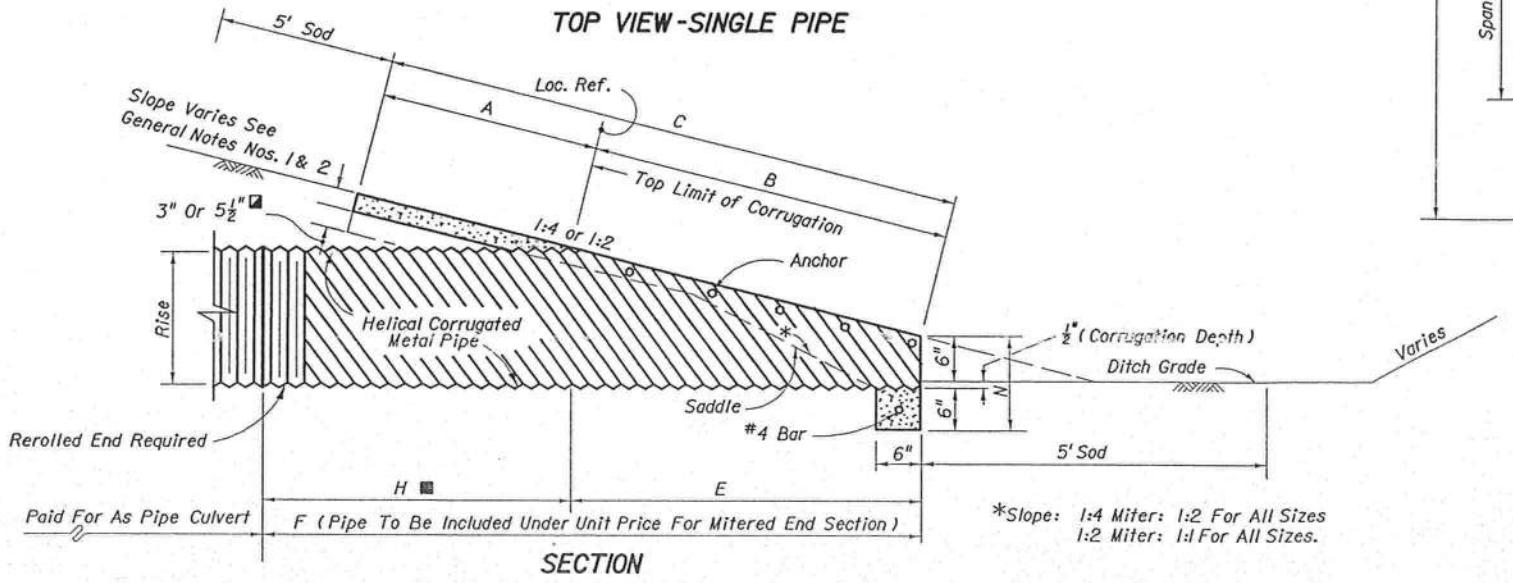
■ Values shown for estimating pipe quanties and are for information.



TOP VIEW-SINGLE PIPE



TOP VIEW-MULTIPLE PIPE



*Slope: 1:4 Miter: 1:2 For All Sizes
1:2 Miter: 1:1 For All Sizes.

SECTION

NOTE: See Sheet 6 For Details And Notes.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

CROSS DRAIN MITERED END SECTION

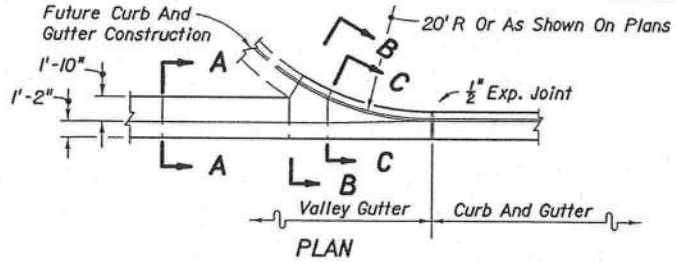
SINGLE AND MULTIPLE CORRUGATED METAL PIPE-ARCH

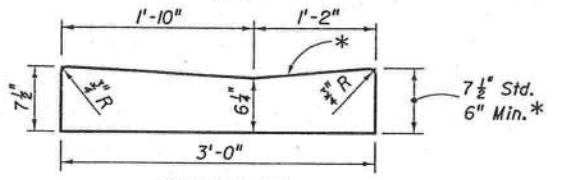
	Names	Dates
Designed By	DCB	06/18
Drawn By	KNW	06/18
Checked By		

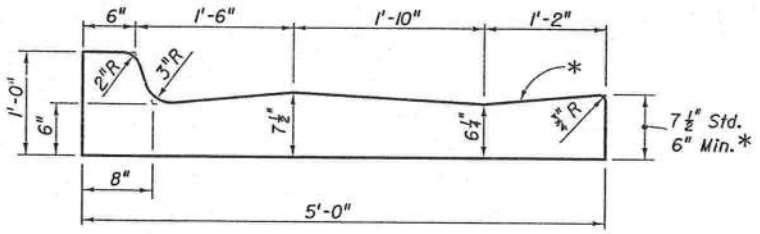
Approved By S a McLemore
State Drainage Engineer

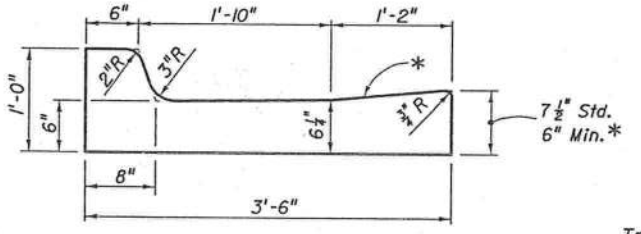
Revision	Sheet No.	Index No.
02	3 of 6	272

SYTIME





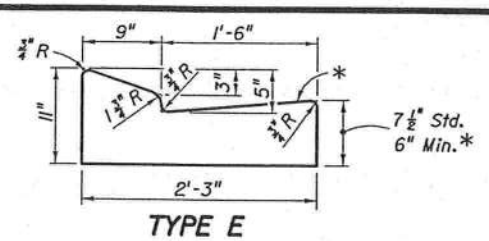




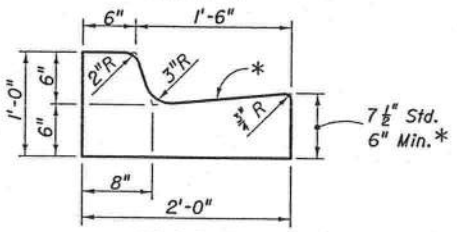
VALLEY GUTTER

* When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on plans.

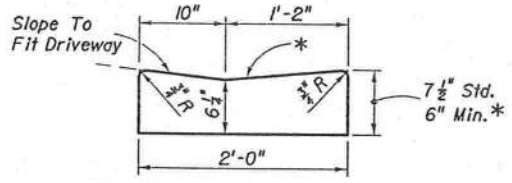
◪ Rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.



TYPE E

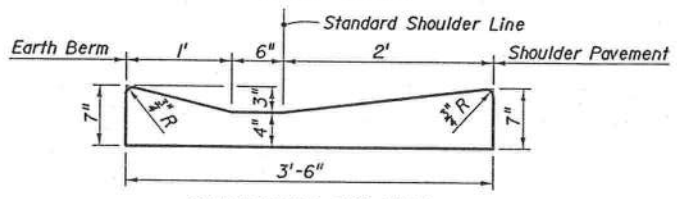


TYPE F

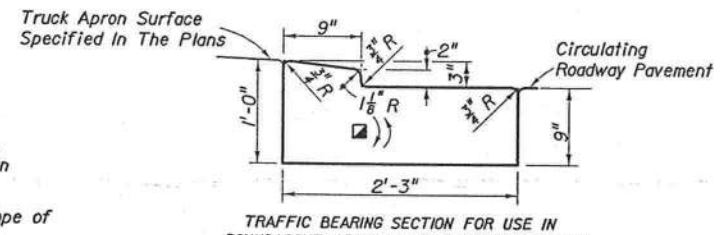


Note: To be paid for as parent curb.

DROP CURB



SHOULDER GUTTER

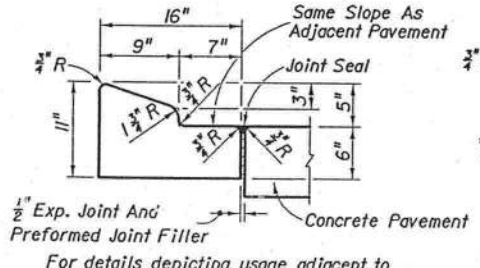


TRAFFIC BEARING SECTION FOR USE IN ROUNDABOUT CENTRAL ISLAND CONSTRUCTION

TYPE RA

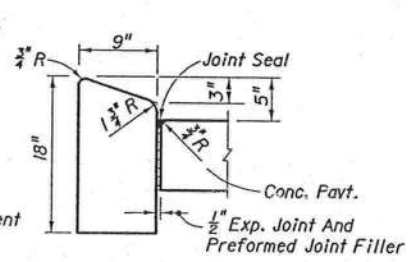
Note: For use adjacent to concrete or flexible pavement. For details depicting usage adjacent to flexible pavement, see diagram right. Expansion joint, preformed joint filler and joint seal are required between curb & gutter and concrete pavement only, see diagram right.

CONCRETE CURB AND GUTTER

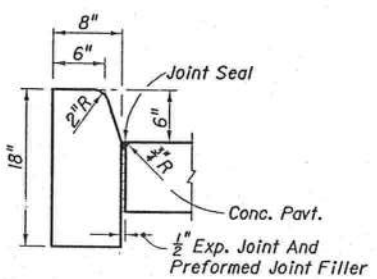


For details depicting usage adjacent to flexible pavement, see diagram right.

TYPE A



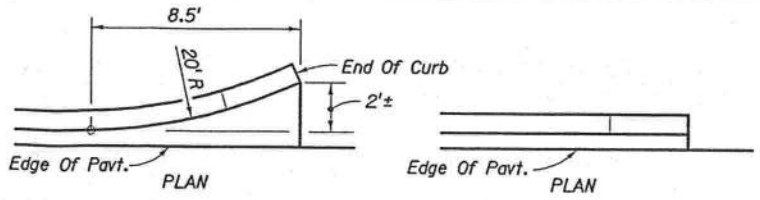
TYPE B



TYPE D

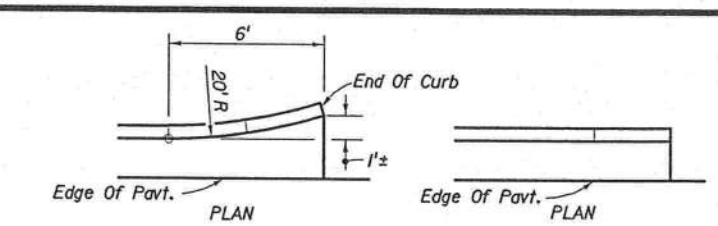
Note: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right.

CONCRETE CURB



FLARED END STRAIGHT END

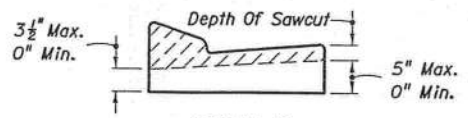
CURB TYPE A



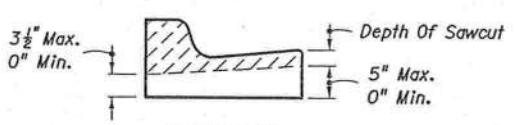
FLARED END STRAIGHT END

CURB TYPE E & F

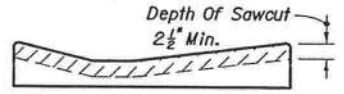
CURB AND GUTTER ENDINGS



TYPE E



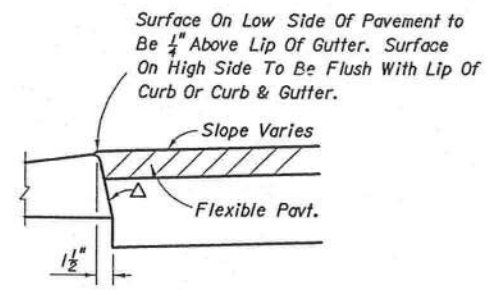
TYPE F



SHOULDER GUTTER

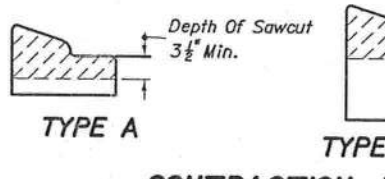
Sawcuts should be avoided within valley gutter and within curb and gutter endings.

CONTRACTION JOINT IN CURB AND GUTTER

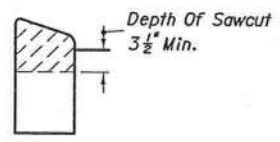


△ Applies to both high and low sides of pavement, low side shown. Applies to shoulder gutter only where adjoining traffic lanes.

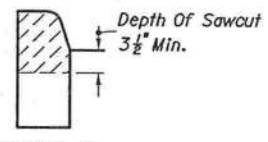
CURB AND GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT



TYPE A

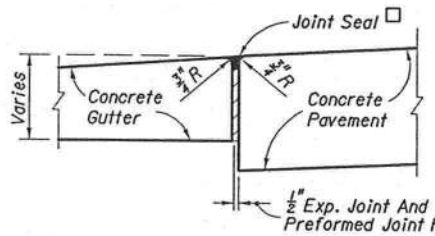


TYPE B



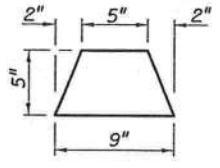
TYPE D

CONTRACTION JOINT IN CURB

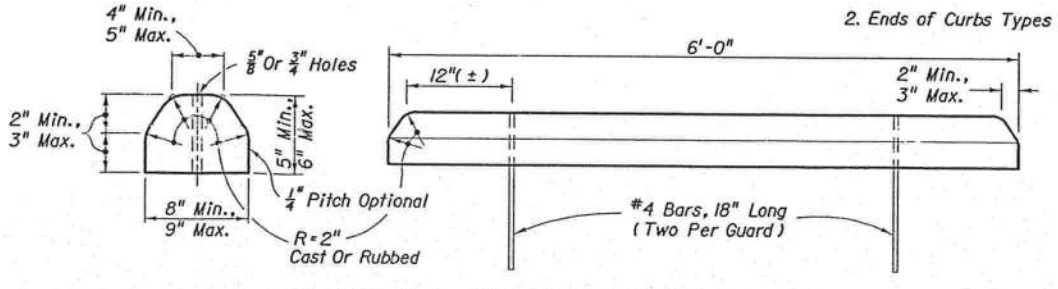


□ Applies to both high and low sides of pavement, low side shown.

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT



ASPHALTIC CONCRETE CURB



CONCRETE BUMPER GUARD

GENERAL NOTES

1. For curb, gutter and curb & gutter provide ⅛" - ¼" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers. Curb, gutter and curb & gutter expansion joints shall be located in accordance with Section 520 of the standard specifications.

2. Ends of Curbs Types B and D shall transition from full to zero heights in 3'.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

CURB & CURB AND GUTTER

	Names	Dates
Designed By		
Drawn By		
Checked By		

Approved By
State Roadway Design Engineer

Revision	Sheet No.	Index No.
00	1 of 1	300