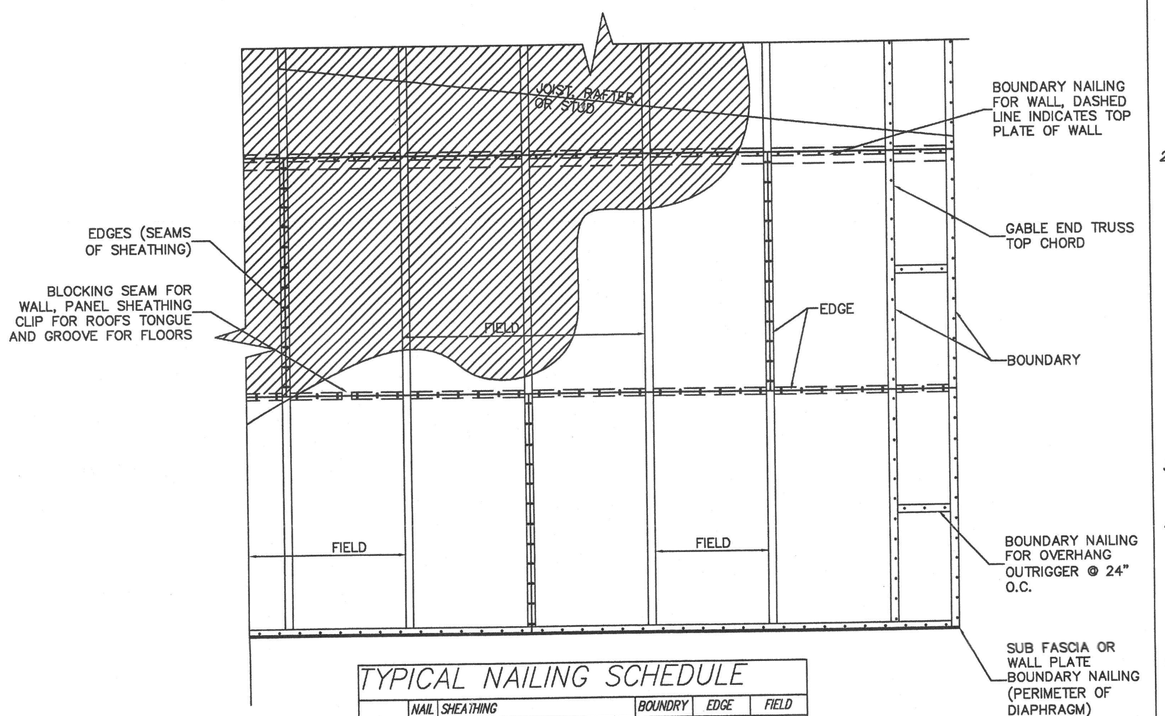
CONNECTOR SCHEDULE

UPLIFT CAPACITIES ARE BASED ON SOUTHERN YELLOW PINE (S.Y.P.) UNLESS NOTED OTHERWISE

	SIMPSON				USP		
ID	QTY.	CONNECTOR	UPLIFT	FASTENERS	CONNECTOR	UPLIFT	FASTENERS
T1	1	MTSM16,20	840	(7) 10d W/ (4) 1/4" x 2 1/4" Titen			
T2	1	META18,20,36	1500	(14) 10d x 1 1/2"	HTA18-20	1500	(13) 10d x 1 1/2"
T3	1	MSTAM24	1370	(9) 10d W/ (5) 1/4" x 2 1/4" Titen	N/A		
T4	1	LTT20B	1750	(10) 16d	LTS20B	1910	(10) 16d
T5	1	LTA1	1765	(12) 10d x 1 1/2"	N/A		
T6	1	HETA20	1890	(16) 10d x 1 1/2"	HTA20	1890	(16) 10d x 1 1/2"
T7	1	HTT16	4175	(1) 5/8" A.T.R.** (16) 16d	HTT16	4290	(1) 5/8" A.T.R.** (16) 16d
T8	1	MGT	3965	(22) 10d & 5/8" A.T.R.**	N/A		
T9	1	MTT28B	4455	(1) 5/8" A.T.R.** w/(24) 16d	MTS27B	4635	(24) 16d
T10	1	HTT22	5260	(1) 5/8" A.T.R.** w/ (32) 16d Sinkers	HTT22	5370	(1) 5/8" A.T.R.** w/ (32) 16d Sinkers
T11	1	HGT-2 (2ply member)	8665	(2) 3/4" A.T.R.** w/(8) 10d	HUGT2 (2ply member)	9505	(2) 3/4" A.T.R.** w/(8) 10d
T12	1	HGT-3 (3ply member)	9685	(2) 3/4" A.T.R.** w/(8) 10d	HGT-3 (3ply member)	9770	(2) 3/4" A.T.R.** w/(8) 10d
T13	1	H10	990	(8) 8d x 1 1/2"	RT16	1030	(8) 8d x 1 1/2"
T14	1	MTS12	1000	(14) 10d 1 1/2" or 10d	MTW12	1195	(14) 10d 1 1/2" or 10d
T15	1	LSTA18	1265	(14) 10d	LSTA18	1270	(14) 10d
T16	1	HTS20	1450	(24) 10d 1 1/2" or (20) 10d	HTW20	1530	(24) 10d 1 1/2" or (20) 10d
T17	1	LSTA30	1715	(22) 10d	LSTA30	1740	(22) 10d
T18	(2)	MTS18	2000	(28) 10d 1 1/2" or 10d	MTW18	2390	(28) 10d 1 1/2" or 10d
T19	(2)	HTS20	2900	(48) 10d 1 1/2" or (48) 10d	HTS20	3060	(40) 10d 3" or (48) 10d 1 1/2"
T20	1	ST6224	2520	(28) 16d	N/A		
T21	(3)	HTS20	4350	(72) 10d 1 1/2" or (72) 10d	N/A		
T22	(4)	HTS20	5800	(96) 10d 1 1/2" or (96) 10d	N/A		
T23	1	LTA1	1250	(12) 10d x 1 1/2"			
WOOD TO MASONRY UPLIFT LESS THAN 1500# USE SIMPSON META20							
WOOD TO WOOD UPLIFT LESS THAN 455# USE SIMPSON H5 w/ (8) 8d							
WOOD TO WOOD UPLIFT LESS THAN 1000# MORE THAN 455# REQUIRE MTS12 w/14-10d							

* CONC. 8" WIDE TIE-BEAM USING SIMPSON EPOXY-TIE:
** DENOTES ALL THREAD ROD TO BE EMBEDDED 5" MIN. AND SECURED W/ SIMPSON SET EPOXY OR EQUAL.

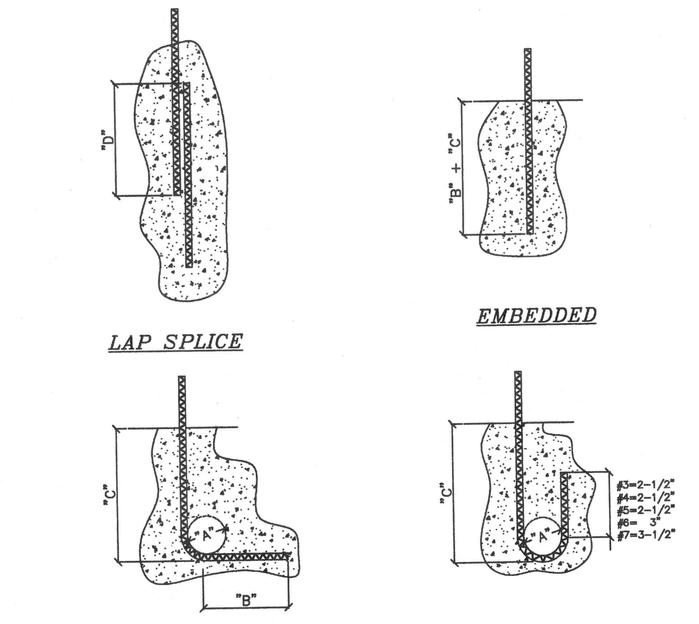
CONNECTOR SCHEDULE



TYPICAL NAILING SCHEDULE

	NAIL	SHEATHING	BOUNDRY	EDGE	FIELD
ROOF	8d	COMMON 7/16"- 5/8" NOMINAL	4"	6"	6"
WALL	8d	COMMON 7/16"- 5/8" NOMINAL	4"	6"	6"
FLOOR	10d	COMMON 3/4" T.G.	6"	6"	12"
ALL SHEATHING APA APPROVED, EXTERIOR GRADE.					

TYP. NAILING SCHEDULES (FLOOR, ROOF, WALL)



LAP SPLICE

EMBEDDED

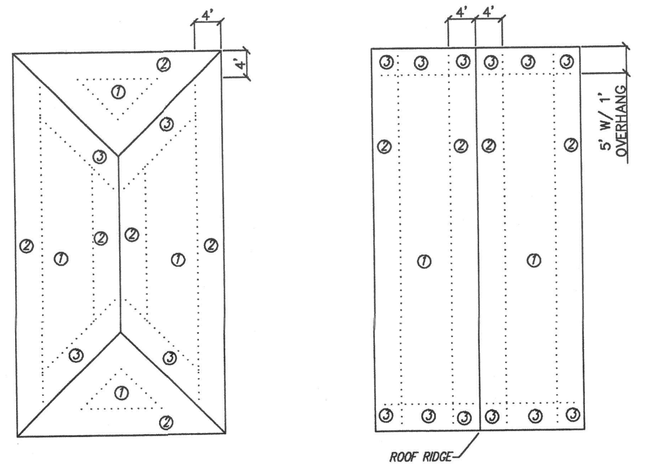
STANDARD 90°HOOK

STANDARD 180°HOOK

REQUIRED LAP SPLICE, EMBEDMENT, AND HOOKED REINFORCING STEEL (INCHES)

	GRADE 40				GRADE 60			
BAR SIZE	BEND DIAMETER	LENGTH		LAP SPLICE	BEND DIAMETER	LENGTH		LAP SPLICE
	"A"	"B"	"C"	"D"	"A"	"B"	"C"	"D"
#3	1 7/8	4 1/4	7	15	2 1/4"	4 1/4	9 1/4	18
#4	2 1/2	5 5/8	9 1/2	20	3"	5 5/8	12 1/2	24
#5	3 1/8	7	11 3/4	25	3 3/4"	7	15 1/2	30
#6	3 3/4	8 7/16	14	30	4 1/2"	8 7/16	18 1/2	36
#7	4 3/8	9 13/16	16 1/2	35	5 1/4"	9 13/16	21 3/4	42
#8	–	–	–	–	6"	11.25	24 3/4	48
#9	–	–	–	–	9"	12.66	28	54
#10	–	–	–	–	10"	14.06	31	60
#11	–	–	–	–	11"	15.46	34 1/4	66

REBAR LAP AND HOOK SCHEDULE



ROOF FASTENING ZONES FOR UPLIFT

ROOF SHEATHING FASTENING SCHEDULE FOR HIGH WIND UPLIFT

REGION	NAILS	PANEL LOCATION	ZONE 1	ZONE 2	ZONE 3
HIGH WIND UPLIFT	8d COMMON	PANEL EDGES*	6" O.C.	6" O.C.	4" O.C.**
		PANEL FIELD	6" O.C.	6" O.C.	6" O.C.**

* EDGE SPACING ALSO APPLIES OVER ROOF FRAMING AT GABLE END WALLS
** USE 8d RING SHANK NAILS IN THIS ZONE IF MEAN ROOF HEIGHT IS GREATER THAN 25'

ALL EXTERIOR WINDOWS AND GLASS DOORS ARE REQUIRED TO BE TESTED IN ACCORDANCE WITH ANSI/AMMA/NWWDA 101/IS2 STANDARD AND BEAR AN AMMA OR WDMA LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT TESTING ENTITY.

ALL WINDOWS AND WALK DOORS SHALL HAVE MINIMUM DESIGN PRESSURES OF +39.9 /-50.2 PSF

ALL GARAGE DOORS SHALL HAVE MINIMUM DESIGN PRESSURES OF +36.7 /-43.8 PSF

BASIC WIND SPEED	130	MPH 3 SECOND GUST
WIND IMPORTANCE FACTOR	1.0	
BUILDING CATEGORY	II	
WIND EXPOSURE	B	
INT. PRESSURE COEFF.	+/- 0.55	PARTIALLY ENCLOSED
COMPONENTS AND CLADDING		
ROOF @ 10 SQFT	+27.0 -28.2	PSF
@ 20 SQFT	+25.5 -27.8	PSF
@ 50 SQFT	+23.4 -25.6	PSF
@ 100 SQFT	+21.9 -26.2	PSF
WALL @ 10 SQFT	+39.9 -50.2	PSF
@ 20 SQFT	+38.5 -47.5	PSF
@ 50 SQFT	+36.7 -43.8	PSF
@ 100 SQFT	+35.4 -41.1	PSF
OVERHANG	-35.3	PSF

DESIGN WIND SPEED / PRESSURE

1. CODES AND REFERENCES

1.1 FLORIDA BUILDING CODE 2001 (FBC 2001)
1.2 AMERICAN CONCRETE INSTITUTE OF STRUCTURAL CONCRETE (ACI 318-99)
1.3 AMERICAN CONCRETE INSTITUTE OF MASONRY STRUCTURES (ACI-530-99/ ASCE-5-99/TMS 402-99 AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-99/ASCE 6-99/TMS 602-99)
1.4 AMERICAN SOCIETY OF CIVIL ENGINEERS MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE-7-98)
1.5 SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS LATEST EDITION
1.6 DESIGN SPECIFICATION FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES BY THE TRUSS PLATE INSTITUTE (TPI) LATEST EDITION
1.7 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) LATEST EDITION
1.8 AMERICAN PLYWOOD ASSOCIATION DESIGN / CONSTRUCTION GUIDE. (APA) LATEST EDITION

2. DESIGN CRITERIA

2.1 ROOF LOADING
LIVE 20 PSF @ 1.25 DURATION FACTOR
30 PSF @ 1.33 DURATION FACTOR
DEAD 17 PSF FOR SHINGLE
25 PSF FOR TILE
2.2 FLOOR LOADING
LIVE 40 PSF @ 1.00 DURATION FACTOR
DEAD 15 PSF
2.3 BALCONY LOADING
LIVE 40 PSF FOR LESS THAN 100 SQUARE FT
LIVE 60 PSF FOR MORE THAN 100 SQUARE FT
DEAD 15 PSF
2.4 FOR FLOORING MATERIALS HEAVIER THAN 5 PSF, CONTACT SILCOX, KIDWELL & ASSOCIATES FOR RECOMENDATIONS
2.5 WIND LOADING
SEE TABLE FOR CRITERIA
DEAD MAXIMUM 10 PSF FOR SHINGLE
15 PSF FOR TILE

3. SOIL

3.1 MINIMUM ALLOWABLE SOIL PRESSURE 2,000 PSF U.N.O.

4. CONCRETE

4.1 OPERATION INSTALLATION AND PROCEDURE TO COMPLY WITH ACI STANDARDS
4.2 CONCRETE & MINIMUM COMPRESSIVE STRENGTH OF 2500 psi AT 28 DAYS U.N.O.
4.3 REINFORCEMENT REBARS ASTM A615 GRADE 40 U.N.O.
4.4 WELD WIRE FABRIC (WWF ASTM A185)
4.5 LAP SPLICES AND HOOKS SEE TABLE.

5. MASONRY

5.1 MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF, "SPECIFICATION FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 602)," PUBLISHED BY THE MASONRY SOCIETY, BOULDER, COLORADO: THE AMERICAN CONCRETE INSTITUTE, FARMINGTON HILLS, MICHIGAN: AND THE AMERICAN SOCIETY OF CIVIL ENGINEERS, RESTON, VIRGINIA: EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.
5.2 GENERAL SPECIFICATION FOR MASONRY STRUCTURES
5.2.1 TESTING OF FIELD MATERIALS FOR QUALITY CONTROL IS NOT REQUIRED BY ENGINEER FOR THIS PROJECT.
5.2.2 COMPRESSIVE STRENGTH REQUIREMENT IS f'm=1500 PSI
5.2.3 DETERMINATION OF COMPRESSIVE STRENGTH IS THE ALLOWABLE STRESS METHOD
5.2.4 UNIT STRENGTH METHOD IS NOT APPLICABLE
5.2.5 QUALITY ASSURANCE IS NOT APPLICABLE
5.3 PRODUCTS
5.3.1 MORTAR MATERIALS SHALL BE TYPE M OR S GRAY MORTAR
5.3.2 MASONRY UNIT MATERIALS SHALL BE 1900 PSI MIN. CONCRETE MASONRY UNIT.
5.3.3 REINFORCEMENT, PRE-STRESSED TENDONS, AND METAL ACCESSORIES SHALL BE 40 KSI REBAR (MIN.).
5.3.4 WELDED WIRE FABRIC TO BE INSTALLED AS SPECIFIED ON PLAN SET.
5.3.5 STAINLESS STEEL IS NOT APPLICABLE.
5.3.6 COATING FOR CORROSION PROTECTION IS NOT APPLICABLE.
5.3.7 CORROSION PROTECTION FOR TENDONS IS NOT APPLICABLE.
5.3.8 PRE-STRESSING ANCHORAGE, COUPLERS, AND END BLOCKS ARE NOT APPLICABLE.
5.3.9 JOINT FILLERS ARE NOT APPLICABLE.
5.3.10 LINTELS TO BE BY CAST-CRETE UNLESS NOTED OTHERWISE.
5.4 EXECUTION
5.4.1 PIPES AND CONDUITS ARE NOT APPLICABLE.
5.4.2 ACCESSORIES ARE NOT APPLICABLE.
5.4.3 EXPANSION AND CONTROL JOINTS SHALL BE AS INDICATED IN PLAN SET.

6. WOOD FRAMING

6.1 DIMENSIONED LUMBER SHALL BE DRESSED S4S, AND SHALL BEAR THE GRADE STAMP OF THE MANUFACTURER'S ASSOCIATION.
6.2 ALL LUMBER SHALL BE SOUND, SEASONED, AND FREE FROM WARP.
6.3 FRAMING WALLS AND COLUMNS
6.3.1 MINIMUM OF 3 PLY STUD COLUMNS TO BE INSTALLED AT BEAM OR GIRDER TRUSS BEARING LOCATIONS, UNLESS NOTED OTHERWISE.
6.3.2 S.Y.P. #2 GRADE OR BETTER FASTEN PLYS TOGETHER USING 16d COMMON NAILS 6" O.C. AS EACH MEMBER IS APPLIED U.N.O.
6.3.3 4 PLY OR AND LARGER STUD COLUMNS SHALL BE FASTENED TOGETHER AS STATED ABOVE, PLUS CS16 COIL STRAPPING WRAPPED AROUND COLUMN WITH A 4" END CAP AT 16" O.C. OR 1/2" ø THRU BOLTS @ 24" O.C.
6.3.4 ALL FRAMING LUMBER SHALL BE #2 SPRUCE-PINE-FIR OR BETTER U.N.O.
6.3.5 INTERIOR LOAD BEARING (IF APPLICABLE) WALLS SPACED AT 16" OC AND LESS THAN 8'-0 IN HEIGHT SHALL BE STUD GRADE, SPRUCE-PINE-FIR OR BETTER.
6.3.7 INTERIOR NON-LOAD BEARING WALLS SHALL BE UTILITY GRADE OR BETTER.
6.3.8 INSTALL BLOCKING IN ALL WALL STUDS OVER 8'-0 @ MID-HEIGHT, AND SHEATHING JOINT. BRACE GABLE END WALLS AT 4'-0 OC AS SHOWN IN DRAWINGS
6.4 ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED OR NATURAL DURABLE WOOD.
6.5 PRESSURE TREATED LUMBER SHALL BE IMPREGNATED WITH A CCA SALT TREATMENT IN ACCORDANCE WITH F.S. 11-W-571 AND BARE THE AMERICAN WOOD PRESERVES INSTITUTE EQUALITY MARK LP-2.
6.6 A.P.A. RATED SHEATHING EXTERIOR GRADE. ALL ROOF SHEATHING TO INSTALLED WITH PLY CLIPS (MAXIMUM 24" O/C). (SEE PLANS FOR SHEATHING THICKNESS.) FOR ALL SHEATHING ATTACHMENT, SEE TYPICAL NAILING SCHEDULE
6.6.1 ROOF: SHINGLE, 7/16" MIN. THICK SUPPORTED OVER 24" MAX. SPAN TILE, 1/2" MIN. THICK SUPPORTED OVER 24" MAX. SPAN
6.6.2 WALL: 7/16" MIN. THICK SUPPORTED OVER 24" MAX. SPAN
6.6.3 FLOOR: CARPET, VINYL, WOOD, ETC., 3/4" MIN. TONGUE AND GROOVE SUPPORTED OVER 24" MAX. SPAN CERAMIC TILE, MARBLE, ETC., SEE MANUFACTURERS RECOMENDATIONS
6.7 ALL NAILING AND BOLTING SHALL COMPLY WITH AMERICAN INSTITUTE OF TIMBER CONSTRUCTION REQUIREMENTS. ALL NAILS EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED.
6.8 ALL CONNECTION HARDWARE SHALL BE GALVANIZED AND SUPPLIED BY SIMPSON STRONG TIE CO., USP, KC METAL, OR EQUIVALENT. SUBMIT CUT SHEETS FOR ALL CONNECTION HARDWARE TO ENGINEER FOR APPROVAL. ALL NAIL HOLES SHALL BE FILLED OR AS PRESCRIBED BY THE MANUFACTURER.
6.9 BRACING: TEMPORARY BRACING OF THE ROOF SYSTEM SHALL BE INSTALLED PER HIB-91 RECOMMENDATIONS AND SHALL BE UTILIZED AS THE PERMANENT BRACING FOR THE ROOF SYSTEM U.N.O.
6.10 ALL WOOD FRAMING SHALL BE IN COMPLIANCE WITH THE LATEST NDS EDITION FOR WOOD CONSTRUCTION.

DESIGN CRITERIA NOTES

SILCOX, KIDWELL & ASSOCIATES, INC.
CONSULTING ENGINEERS
1808 E. BUSCH BOULEVARD
TAMPA, FL 33612-8564
PHONE: (813) 935-2180
FAX: (813) 936-2180
WWW.SILCOX-KIDWELL.COM
STATE OF FLORIDA
PAUL D. KIDWELL, P.E.
C.O.A. #8121 FL Reg #52683
SEALED FOR STRUCTURE ONLY

I HEREBY CERTIFY THAT I HAVE REVIEWED THE ATTACHED DESIGN AND FOUND IT TO BE IN COMPLIANCE WITH SECTION 1606 OF THE FLORIDA BUILDING CODE (ED. 2001) FOR WIND PRESSURES GENERATED BY A DESIGN WIND VELOCITY OF 130 M.P.H.

THE ENGINEER HAS NOT REVIEWED THE PRE-ENGINEERED TRUSS MANUFACTURERS LAYOUT TO DETERMINE ANY LOAD BEARING CONDITIONS AND RESERVES THE RIGHT TO MAKE ANY CHANGES AFTER TRUSS LOAD INFORMATION IS SUPPLIED TO THE ENGINEER.

REVISIONS	BY
⚠ LEE COUNTY COMMENTS 3-31-04	REC

SILCOX, KIDWELL & ASSOCIATES, INC.
CONSULTING ENGINEERS
1808 EAST BUSCH BOULEVARD
TAMPA, FL 33612-8564
PHONE: (813) 935-2180 FAX: (813) 936-2180
WWW.SILCOX-KIDWELL.COM
REGISTERED ENGINEER STATE OF FLORIDA
C.O.A. #8121 Reg #52683

1-5-05

HERON GLEN TOWNHOMES

SECTIONS & DETAILS

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD AND REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO STARTING ANY WORK.

THESE PLANS ARE THE PROPERTY OF SILCOX KIDWELL & ASSOC INC AND SHALL BE RETURNED UPON COMPLETION OF THE PROJECT USE OR COPY IS PERMITTED BY CONTRACT ONLY ANY CHANGES TO THESE PLANS REGARDLESS OF HOW MINOR WITHOUT WRITTEN APPROVAL OF SILCOX KIDWELL & ASSOC INC OR ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS APPROVAL OF SILCOX KIDWELL & ASSOC INC OR ANY CHANGE IN SCOPE, DESIGN OR INTENT FOR ANY PLANS BY ANY PERSON OTHER THAN SILCOX KIDWELL & ASSOC INC SHALL AUTOMATICALLY RENDER SILCOX KIDWELL & ASSOC INCORPORATED HARMLESS TO ANY LIABILITY CLAIMS, SUITS OR LITIGATION BY ANY INTERESTED PARTIES IN THE PROJECT IF BOUND SPECIFICATIONS ACCOMPANY THESE PLANS THEY SHOULD BE READ CAREFULLY FOR ADDITIONAL CONDITIONS.

PERMIT PLANS

DATE	10-10-03
SCALE	NOTED
DRAWN	PDK
JOB	-
SHEET	S1
OF	SHEETS