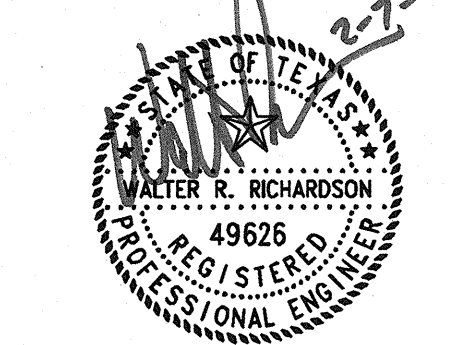




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LADERA BEND

PACKAGE B  
RETAIL BUILDING

Project 16-5236-00  
Drawn 08.01.06  
Quality Control SMM  
Project Director

Issues  
CONSTRUCTION 02-02-07

GENERAL NOTES  
AND LEGENDS

P1.00

ABBREVIATIONS		PLUMBING SYMBOLS		GENERAL PROVISIONS		PLUMBING GENERAL NOTES	
ABV. ABOVE	PH PHASE		COLD WATER (RISER TYP: CW)	<p>1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE CITY, STATE, AND NATIONAL CODES AND STANDARDS. WHERE CONTRACT DOCUMENTS ARE IN EXCESS OF CODE REQUIREMENTS, THE CONTRACT DOCUMENTS SHALL GOVERN. THIS REQUIREMENT SPECIFICALLY INCLUDES COMPLIANCE OF ASHRAE STANDARD 90.1-2004. MODIFICATIONS REQUIRED BY THE ABOVE SAID AUTHORITIES SHALL BE MADE WITHOUT ADDITIONAL CHARGE TO THE OWNER. WHERE ALTERATIONS TO AND DEVIATIONS FROM THE CONTRACT DOCUMENTS ARE REQUIRED BY SAID AUTHORITY, REPORT THE REQUIREMENTS AND SECURE APPROVAL BEFORE STARTING WORK. THE CONTRACTOR SHALL OBTAIN A COPY OF THE BASE BUILDING SPECIFICATIONS AND OWNERS BUILDING STANDARDS PRIOR TO STARTING WORK. IN ADDITION, COMPLY WITH ALL SECTIONS OF THE BASE BUILDING SPECIFICATIONS AND OWNERS BUILDING STANDARDS AS A MINIMUM, EXCEPT WHERE THESE DOCUMENTS EXCEED THE BASE BUILDING STANDARDS.</p> <p>2. THIS WORK INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FIXTURES, APPARATUS, AND APPURTENANCES REQUIRED FOR COMPLETE INSTALLATION OF OPERATING PLUMBING SYSTEMS AS INDICATED AND SPECIFIED, IN PLACE AND READY FOR SERVICE.</p> <p>3. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FOUND PRIOR TO SUBMITTING A BID. THE DRAWINGS ARE SCHEMATIC IN NATURE AND INDICATE APPROXIMATE LOCATIONS OF THE HVAC AND PLUMBING SYSTEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE AND ATTEMPT TO SHOW HOW THESE ITEMS SHOULD BE INTEGRATED INTO THE BUILDING CONSTRUCTION. LOCATE ALL ITEMS BY ON-THE-JOB MEASUREMENTS, CONFORMANCE WITH DRAWINGS, AND CODE REQUIREMENTS. COOPERATE WITH OTHER TRADES TO ENSURE PROJECT COMPLETION AS INDICATED.</p> <p>4. CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN ON THE DRAWINGS, SCHEDULED, AND/OR REQUIRED BY THE NATURE OF THIS PROJECT.</p> <p>5. ARRANGE ALL WORK IN A NEAT, WELL ORGANIZED MANNER WITH SERVICES RUNNING PARALLEL WITH PRIMARY LINES OF THE BUILDING CONSTRUCTION. LOCATE OPERATING EQUIPMENT AND MATERIALS PROPERLY TO PROVIDE EASY ACCESS, AND ARRANGE ENTIRE WORK WITH ADEQUATE ACCESS FOR OPERATION AND MAINTENANCE, AND FOR PROPER CODE CLEARANCES.</p> <p>6. THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO BE PROVIDED. SUBMIT FOUR (4) COPIES FOR APPROVAL.</p>	<p>1. REFER TO THE ARCHITECTURAL PLANS AND DETAILS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES.</p> <p>2. ALL SANITARY AND VENT PIPING SHALL BE ROUTED AT A SLOPE PER PLUMBING DESIGN CRITERIA THIS DRAWING</p> <p>3. THE PLUMBING CONTRACTOR SHALL COORDINATE EXACT ROUTING OF ALL PIPING WITH THE WORK OF ALL OTHER TRADES. PROVIDE OFFSETS IN PIPING WHERE REQUIRED BY COORDINATION OF TRADES.</p> <p>4. REFER TO DIVISION 15 SPECIFICATIONS FOR PLUMBING FIXTURE AND FLOOR DRAIN SPECIFICATIONS.</p> <p>5. THE PLUMBING CONTRACTOR SHALL CLEAN, FLUSH, AND DISINFECT ALL CW AND HW PIPING AND ALL FIXTURES PRIOR TO COMPLETION OF WORK.</p> <p>6. INSTALL ALL FLOOR DRAINS TO ALLOW GRATING TO BE FLUSH WITH ADJACENT FLOORING SURFACE. PROVIDE 3/4" DIAMETER SLOPED SUMP TO FLOOR DRAINS, SET 1/2" BELOW FINISHED FLOOR.</p> <p>7. VENTS THROUGH ROOF TO BE LOCATED A MINIMUM OF 15'-0" HORIZONTALLY AWAY FROM OUTSIDE AIR INTAKES.</p> <p>8. HOT WATER AND CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1-INCH THICKNESS R-4 FIBERGLASS INSULATION WITH KRAFT- SCRM-FOIL VAPOR BARRIER JACKET.</p> <p>9. SADDLE CLAMP SHALL NOT BE PERMITTED AT 1/4-INCH CW PIPING STUBOUTS FOR ICEMAKERS AND COFFEE MAKERS.</p> <p>10. FLOOR DRAINS NOT RECEIVING REGULAR-USE DRAINAGE ARE TO BE TRAP PRIMERED.</p> <p>11. PROVIDE BACKFLOW PREVENTION AS REQUIRED BY THE CITY OF AUSTIN CROSS CONNECTION CONTROL DEPT. STANDARDS WHERE NOT PROVIDED OR INADEQUATELY PROVIDED, BY EQUIPMENT MANUFACTURER. REFERENCE BACK FLOW PREVENTER DETAIL FOR ADDITIONAL INFORMATION.</p> <p>12. PROVIDE HOT WATER RECIRCULATION LOOP ON ALL VERTICAL AND HORIZONTAL HOT WATER PIPING FROM THE OUTLET OF THE WATER HEATER TO THE INLET OF THE FURTHEST FIXTURE INLET SERVED. TYPICAL FOR EACH BRANCH.</p> <p>13. INSTALL ALL PIPING AS HIGH AS POSSIBLE, UNLESS OTHERWISE NOTED. COORDINATE ROUTING WITH ALL DISCIPLINES.</p> <p>14. THE DRAWINGS INDICATE APPROXIMATE LOCATIONS OF THE PLUMBING SYSTEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE AND ATTEMPT TO SHOW HOW THESE ITEMS SHOULD BE INTEGRATED INTO THE BUILDING CONSTRUCTION. LOCATE ALL ITEMS BY ON-THE-JOB MEASUREMENTS, CONFORMANCE WITH DRAWINGS, AND CODE REQUIREMENTS. MAKING ADJUSTMENTS TO FIELD CONDITIONS IS CONSIDERED A PART OF THE WORK REQUIRED.</p> <p>15. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.</p> <p>16. ALL WORK NOTED "NIC" OR "NOT IN CONTRACT" IS TO BE ACCOMPLISHED BY ANOTHER CONTRACTOR OR SUBCONTRACTOR AND IS NOT TO BE PART OF THE CONSTRUCTION AGREEMENT.</p> <p>17. MAKE ALL PENETRATIONS THROUGH WALLS AND FLOORS AT 90° ANGLES WHERE POSSIBLE.</p> <p>18. SEAL ALL PENETRATIONS AT SOUND WALLS WITH SOUND-PROOFING MATERIAL.</p> <p>19. ALL ROOF PENETRATIONS SHALL BE MADE WITHIN ROOF CURB AND BE SEALED BY OWNER APPROVED ROOFING CONTRACTOR.</p> <p>20. ALL PIPING ROUTED THROUGH FLOOR OR ROOF STRUCTURE SHALL SHARE COMMON PENETRATIONS AS MECHANICAL DUCTWORK OR PIPING. COORDINATE WITH MECHANICAL CONTRACTOR.</p> <p>21. REFER TO RISER DIAGRAM AND FIXTURE SCHEDULE FOR PIPING SIZES.</p> <p>22. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS, OR CONNECTED EQUIPMENT.</p> <p>23. INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.</p> <p>24. PROVIDE ACCESS PANEL TO ALL ISOLATION VALVES AND CLEANOUTS NOT ABOVE DROP CEILINGS. COORDINATE ACCESS PANEL TYPE AND LOCATION WITH ARCHITECT.</p> <p>25. MECHANICAL EQUIPMENT CONDENSATE LINES BY MECHANICAL CONTRACTOR.</p>		
AFF. ABOVE FINISHED FLOOR	PLUMB. PLUMBING		COMPRESSED AIR				
AHU. AIR HANDLING UNIT	PNEU. PNEUMATIC		HOT WATER SUPPLY				
AMP. AMPERE	PNL. PANEL		HOT WATER RETURN				
APD. AIR PRESSURE DROP	PPM. PARTS PER MILLION		FIRE PIPING (RISER TYP: FP)				
ARRGT. ARRANGEMENT	PRV. PRESSURE REGULATING VALVE		GAS PIPING (RISER TYP: G)				
AUX. AUXILIARY	QTY. QUANTITY		PLUMBING VENT (RISER TYP: V)				
AVD. AUTOMATIC VOLUME DAMPER	R.A. RETURN AIR		SANITARY WASTE (RISER TYP: SW)				
BFW. BOILER FEED WATER	R.C.P. REINFORCED CONCRETE PIPE		SANITARY WASTE BELOW GRADE				
BHP. BRAKE HORSE POWER	RD. ROOF DRAIN		SPRINKLER FLOOR CONTROL TEST DRAIN				
BLDG. BUILDING	RE. REFER OR REFERENCE		STORM DRAIN PIPING ABOVE GRADE (RISER TYP: ST)				
B.O.D. BOTTOM OF DUCT	REQ'D. REQUIRED		STORM DRAIN PIPING BELOW GRADE				
B.O.P. BOTTOM OF PIPE	REV. REVISED OR REVISIONS		TELLTALE				
BTU. BRITISH THERMAL UNIT	RLA. RATED LOAD AMPS		CONCENTRIC REDUCER				
CFH. CUBIC FEET PER HOUR	RM. ROOM		ECCENTRIC REDUCER				
CFM. CUBIC FEET PER MINUTE	RPM. REVOLUTIONS PER MINUTE		DIRECTION OF FLOW				
CH. CHILLER	SAN. SANITARY		ELBOW 45°				
CHR. CHILLED WATER RETURN	S.A. SUPPLY AIR		ELBOW 90°				
CHS. CHILLED WATER SUPPLY	SD. STORM DRAIN		ELBOW 90° RADIUS				
C.I. CAST IRON	SFD. SMOKE FIRE DAMPER		ELBOW TURNED DOWN				
CIRC. CIRCULATING	SECT. SECTION		ELBOW TURNED UP				
CL. CENTERLINE	S.H. SENSIBLE HEAT		TEE				
CLG. CEILING	SHT. SHEET		TEE OUTLET DOWN				
C.M.U. CONCRETE MASONRY UNIT	SK. SINK		TEE OUTLET UP				
CO. CLEAN OUT	S.P. STATIC PRESSURE		HOSE BIBB				
CONC. CONCRETE	SPR. SPRINKLER		FROST PROOF HOSE BIBB				
COND. CONDENSER OR CONDENSATE	SQ. SQUARE		MIXING FAUCET				
CONN. CONNECTION	SS. SERVICE SINK		UNION				
CR. CONDENSER RETURN	STD. STANDARD		FLOW SWITCH				
CS. CONDENSER SUPPLY	SURF. SURFACE		TEMPERATURE GAUGE				
CT. COOLING TOWER	SUSP. SUSPEND OR SUSPENDED		PRESSURE GAUGE				
C.W. COLD WATER	SW. SWITCH	PLUMBING VALVES					
DB. DRY BULB	SYS. SYSTEM		STRAINER				
Δ. DELTA	TD. TRENCH DRAIN		GATE VALVE				
DF. DRINKING FOUNTAIN	TEMP. TEMPERATURE		GLOBE VALVE				
DIA. DIAMETER	T.O.C. TOP OF CURB		PLUG COCK				
DISC. DISCONNECT	T.P. TOTAL PRESSURE		CHECK VALVE				
DN. DOWN	T.S.P. TOTAL STATIC PRESSURE		DOUBLE CHECK VALVE				
DWG. DRAWING	T'STAT. THERMOSTAT		BUTTERFLY VALVE				
EA. EACH	T.W. TEMPERED WATER		3-WAY VALVE				
EAT. ENTERING AIR TEMPERATURE	TYP. TYPICAL		BALL VALVE				
EL. ELEVATION	U. URINAL		RELIEF VALVE				
ELEC. ELECTRICAL	U.G. UNDERGROUND		PRESSURE REGULATING VALVE (PRV)				
EMERG. EMERGENCY	U.N.O. UNLESS NOTED OTHERWISE		VALVE IN BOX				
E.S.P. EXTERNAL STATIC PRESSURE	V. VOLTS		OS&Y VALVE				
EVAP. EVAPORATOR	VAV. VARIABLE AIR VOLUME		VALVE IN RISE				
EW. ELECTRIC WATER CHILLER	VEL. VELOCITY	PLUMBING ACTUATORS					
EWT. ENTERING WATER TEMPERATURE	VERT. VERTICAL		NON-RISING STEM				
EXH. EXHAUST	VOL. VOLUME		LEVER				
EXIST. EXISTING	VIR. VENT THRU ROOF		MOTORIZED				
F. FAN	WCO. WATER CLOSET		SOLENOID				
FCO. FLOOR CLEAN OUT	W.C. WALL CLEAN OUT		PNEUMATIC				
FCU. FAN COIL UNIT	W.B. WET BULB		GOVERNOR				
FD. FIRE DAMPER	W.G. WATER GAUGE		FLOAT				
F.L. FLOW LINE	WH. WATER WATER		SAFETY				
FLA. FULL LOAD AMPS	WT. WEIGHT		QUICK OPEN				
FLEX. FLEXIBLE	W/ WITH	FIRE VALVES AND SYMBOLS					
FLR. FLOOR	W/O WITHOUT		ANGLE DRAIN VALVE				
FMV. FIRE HOSE VALVE			END OF LINE DRAIN				
FT. FEET PER MINUTE			DRY PIPE VALVE				
FS. FLOOR SINK			ROOF MANIFOLD W/ BALL DRIP AND ISOLATION VALVE				
FT. FEET OR FOOT			FIRE DEPARTMENT CONNECTION (FDC)				
G.C. GENERAL CONTRACTOR		MECHANICAL PIPING					
GEN. GENERATOR			CONDENSATE DRAIN LINE				
GPH. GALLONS PER HOUR			REFRIGERANT (TWO LINE SYSTEM)				
GPM. GALLONS PER MINUTE		GENERAL PLUMBING IDENTIFICATIONS AND SYMBOLS					
H. HEATER			EQUIPMENT TAG				
HB. HOSE BIBB			RISER TYPE				
HD. HEAD IN FEET			RISER NUMBER				
H.D. HUB DRAIN		DRAINS					
HORIZ. HORIZONTAL			FLOOR DRAIN, SQUARE (FD)				
HP. HORSE POWER			FLOOR DRAIN, CIRCULAR (CD)				
HR. HOUR			FLOOR SINK (ES)				
HT. HEIGHT			PRIMARY ROOF DRAIN (RD)				
H.W. HOT WATER			SECONDARY ROOF (OVERFLOW) DRAIN (ORD)				
IN. INCHES			DECK DRAIN (DD)				
INSUL. INSULATION			TRENCH DRAIN (TD)				
I.W. INDIRECT WASTE			HUB DRAIN (HD)				
J-BOX. JUNCTION BOX		CLEANOUTS					
KVA. KILOVOLT-AMPS			FLOOR CLEANOUT (FCO)				
KW. KILOWATT			GRADE CLEANOUT (GCO)				
L. LAVATORY			DOUBLE CLEANOUT (DCO)				
LAT. LEAVING AIR TEMPERATURE			CLEANOUT PLUG (CO)				
LIN. FT. LINEAL FEET			WALL CLEANOUT PLUG (WCO)				
LRA. LOCKED ROTOR AMPS			LINE CLEANOUT PLUG				
LTC. LIGHTING		GENERAL MECHANICAL IDENTIFICATIONS AND SYMBOLS					
LWT. LEAVING WATER TEMPERATURE			EQUIPMENT TAG				
M. METER			NEW DUCTWORK CONNECTION				
MAX. MAXIMUM			REMOVE DUCTWORK				
MBH. THOUSAND BTU/HR			SUPPLY FLOW ARROW				
MD. MOTORIZED DAMPER			RETURN FLOW ARROW				
MECH. MECHANICAL			THERMOSTAT WITH LOCATION ARC				
MH. MANHOLE			STATIC PRESSURE SENSOR				
MIN. MINIMUM			NEW OR RELOCATED WORK				
MVD. MANUAL VOLUME DAMPER			HUMIDISTAT				
N.C. NORMALLY CLOSED			STATIC PRESSURE SENSOR				
NF. NATIONAL FIRE PROTECTION ASSOCIATION			FIRESTAT				
NFPA. NOT IN CONTRACT			RISER TYPE				
N.I.C. NUMBER			RISER DESIGNATION				
NO. NORMALLY OPEN			RISER NUMBER				
NTS. NOT TO SCALE							
O.A. OUTSIDE AIR							
OD. OPPOSED BLADE DAMPER							
ORD. OVERFLOW ROOF RAIN							
OS&Y. OUTSIDE STEM AND YOKE							
P. PUMP							
PBD. PARALLEL BLADE DAMPER							
P.D. PRESSURE DROP							