

## GENERAL STRUCTURAL NOTES

THE NOTES AND TYPICAL DETAILS ARE APPLICABLE TO THE ENTIRE PROJECT EXCEPT WHERE SPECIFIED OR INDICATED OTHERWISE.

ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE UNIFORM BUILDING CODE, 1997 EDITION.

DESIGN LOADS:

- A) BUILDINGS:  
ROOF LIVE LOAD.....20 PSF
- B) WIND LOAD: BASIC WIND SPEED: 75 MPH EXPOSURE "C"
- C) SEISMIC LOAD: SEISMIC ZONE 2B, SOIL PROFILE S<sub>D</sub>

THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, ALL DIMENSIONS CONTROLLED BY OR RELATED TO EQUIPMENT AND INSTRUMENTS SHOWN ON OTHER DRAWINGS.

THE STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON COMPLETED STRUCTURES. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY PROPER BRACING, REINFORCING AND BALANCING WHEREVER ADDITIONAL CONSTRUCTION LOADS MAY OCCUR.

ALL WORK IN THIS PROJECT SHALL COMPLY WITH THE SPECIFIED SECTIONS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AND SHALL BE EXECUTED IN ACCORDANCE WITH FEDERAL, STATE, COUNTY, AND CITY CODES AND REGULATIONS.

THE EXISTING UNDERGROUND UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.

BIDDERS ARE URGED TO VISIT THE SITE TO VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BIDS.

ALL ASPHALT CONCRETE, CONCRETE PAVEMENT, AND OTHER EXISTING SURFACES DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND INSPECTIONS REQUIRED BY THE DEPARTMENT OF BUILDING AND SAFETY OF THE CITY OF LAS VEGAS AND ALL OTHERS DESCRIBED IN SECTION 14 OF THE GENERAL CONDITIONS OF THE SPECIFICATIONS.

UNLESS SPECIFIED OR SHOWN MORE RESTRICTIVE IN THE LATEST EDITIONS OF THE UNIFORM BUILDING CODE (UBC), ACI CODE, AISC MANUAL, AND AWS CODE, CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

THE ENGINEER DOES NOT WARRANT THE ACCURACY OF THE DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES SHOWN ON THE DRAWINGS. FIELD MEASUREMENT OF DIMENSIONS AND ELEVATIONS OF EXISTING AFFECTED ITEMS SHALL BE MADE PRIOR TO THE START OF CONSTRUCTION.

SAFETY NOTE:

A) IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF NEVADA, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.

B) THE ARCHITECT, STRUCTURAL ENGINEER, AND THE OWNER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.

C) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS AND SHORING REQUIRED.

CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DRAWINGS OR DOCUMENTS. CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE BUILDING IT-AT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED WITH THE AFFECTED PARTIES.

## FOUNDATION NOTES

REFER TO RECOMMENDATIONS IN GEOTECHNICAL (SOILS) REPORT BY: HARDING ENGINEERING AND ENVIRONMENTAL SERVICES, DATED JULY 19, 2001, AND ADDENDUMS.

DESIGN DATA:

- A) ALLOWABLE SOIL BEARING PRESSURE: 2000 PSF
- B) COEFFICIENT OF FRICTION VALUE: 0.4
- C) PASSIVE PRESSURE: 350 PSF PER FOOT OF EMBEDMENT DEPTH
- D) CANTILEVERED EQUIVALENT FLUID PRESSURE: 35 PSF/FOOT
- E) MODULUS OF SUBGRADE REACTION (K) FOR CONCRETE SLAB ON GRADE: 200 PCF

FOOTINGS AND CONCRETE SLAB ON GRADE SHALL BEAR ON A MINIMUM OF 12 INCHES OF COMPACTED IMPORTED ENGINEERED SELECT FILL TO 95% RELATIVE DENSITY PER ASTM D 1557.

EXTEND FOOTING A MINIMUM OF 18 INCHES BELOW LOWEST ADJACENT FINISH GRADE OR FINISH FLOOR, WHICHEVER IS LOWER.

ALL FOOTINGS SHALL BE FORMED. FOUNDATIONS MAY BE PLACED IN NEAT EXCAVATIONS, PROVIDED WRITTEN PERMISSION IS OBTAINED FROM THE STRUCTURAL ENGINEER AND FOOTINGS ARE INCREASED THREE INCHES IN WIDTH.

NOTIFY THE STRUCTURAL ENGINEER AND STRUCTURAL INSPECTOR 72 HOURS IN ADVANCE OF PLACING CONCRETE.

SLAB AND SUB-BASE (FILL) PREPARATION SHALL BE BASED ON THE SPECIFICATIONS.

GRANULAR BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION OF ASTM D-1557-78 MAXIMUM DRY DENSITY AND SHALL BE AT OR SLIGHTLY ABOVE OPTIMUM MOISTURE LEVEL.

ALL FOOTING EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR AND SOILS ENGINEER PRIOR TO CONCRETE PLACEMENT. 72 HOURS ADVANCE NOTICE IS REQUIRED.

ALL CONCRETE SLAB-ON-GRADE AREAS SHALL BE UNDERLAIN BY AT LEAST 6 INCHES OF COMPACTED FINE OR LIGHTWEIGHT AGGREGATE.

IN THOSE AREAS WHERE FLOOR COVERINGS ARE SENSITIVE TO MOISTURE, THE BASE PREPARATION FOR CONCRETE SLAB-ON-GRADE AREAS SHALL CONSIST OF AT LEAST 4 INCHES OF FINE OR LIGHTWEIGHT AGGREGATE OVERLAIN BY MINIMUM 8 MIL VAPOR BARRIER AND THEN A 2-INCH LAYER OF FINE AGGREGATE TO ACT AS A CAPILLARY BREAK.

HEAVY STATIC OR VIBRATORY COMPACTING EQUIPMENT SHOULD BE KEPT AT LEAST 1 FOOT FROM THE WALL AT ALL TIMES DURING CONSTRUCTION.

## CONCRETE

THE MINIMUM 28 DAYS STRENGTH AND TYPE OF CONCRETE SHALL BE AS FOLLOWS:

NORMAL WEIGHT CONCRETE, F'C = 4000 PSI.

ALL CONCRETE SHALL CONFORM TO THE LATEST EDITION OF THE UNIFORM BUILDING CODE.

ALL CEMENT SHALL CONFORM TO ASTM C-150, TYPE V.

FINE AND COARSE AGGREGATE SHALL CONFORM TO ASTM C-33 FOR STANDARD WEIGHT CONCRETE AND ASTM C-330 FOR LIGHT WEIGHT CONCRETE.

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT, UNLESS NOTED OTHERWISE:

COVER (INCHES)  
CONCRETE CAST AGAINST EARTH 3"  
CONCRETE EXPOSED TO EARTH  
OR WEATHER AFTER FORMING 2"

GENERAL:

A) NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE SLABS OR WALLS UNLESS SPECIFICALLY DETAILED.

B) REFER TO ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS FOR ALL MOLDS, GROOVES, ORNAMENTS, CLIPS, AND GROUNDS TO BE CAST IN CONCRETE.

ALL ANCHOR BOLTS SHALL BE TYPE A307.

ALL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES, AND EMBEDMENTS NOT SHOWN ON STRUCTURAL DRAWINGS, BUT REQUIRED BY OTHER DRAWINGS OR SPECIFICATIONS SHALL BE PROVIDED PRIOR TO CASTING CONCRETE.

REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR CLIPS, INSERTS, PIPES, SLEEVES, ETC., EMBEDDED OR ATTACHED TO CONCRETE.

SEE THE ARCHITECTURAL DRAWINGS FOR THE LOCATION OF ALL CURBS AND DEPRESSIONS IN SLAB.

MONOLITHIC SLABS WITH SLOPED TOPS SHALL HAVE BOTTOMS SLOPED ACCORDINGLY TO MAINTAIN A UNIFORM SLAB THICKNESS UNLESS OTHERWISE SHOWN.

EXCEPT AS OTHERWISE REQUIRED, EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS.

ALL REINFORCING BARS SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM SPECIFICATION A615, GRADE 60. BARS SHALL BE CUT AND BENT IN ACCORDANCE WITH THE PROVISIONS OF THE UNIFORM BUILDING CODE AND ACI 318.

LAP SPLICES MAY BE MADE BY WELDING IN ACCORDANCE WITH DETAILS AND WITH AWS SPEC D1.4, IF APPROVED BY THE ENGINEER. IN CASE WHERE REINFORCING BARS CANNOT BE EXTENDED DUE TO ADJACENT CONCRETE STRUCTURES, THE BARS SHALL BE EXTENDED AS FAR AS POSSIBLE AND END IN STANDARD HOOKS.

SPLICES IN REINFORCEMENT SHALL NOT BE PERMITTED AT POINTS OF MAXIMUM STRESS EXCEPT AS SPECIFICALLY APPROVED BY THE ENGINEER.

UNLESS OTHERWISE SHOWN, ALL DETAILING, ERECTING, AND FABRICATION OF REINFORCING AND THEIR ACCESSORIES SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE.

ALL REINFORCING BARS SHALL BE FREE OF RUST, GREASE, MILL SCALE OR OTHER MATERIAL WHICH MAY IMPAIR BOND WITH CONCRETE.

NO FIELD WELDING OF REINFORCING STEEL IS ALLOWED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

ALL REINFORCING BARS SHALL BE ACCURATELY AND SECURELY PLACED BEFORE POURING CONCRETE.

ALL DOWELS SHALL BE THE SAME SIZE AND SPACING AS BARS WHICH ARE TO BE SPLICED TO THE DOWELS, UNLESS NOTED OTHERWISE.

THE MINIMUM ANCHOR BOLT DIAMETER SHALL BE 1/2". ALL ANCHOR BOLTS SHALL BE OF TYPE 316 STAINLESS STEEL. NO EXCEPTIONS.

EXISTING PLUMBING AND ELECTRICAL LINES SHALL NOT BE EMBEDDED IN NEW CONCRETE OR PNEUMATICALLY PLACED CONCRETE, UNLESS ENCASED IN A METAL.

## STRUCTURAL STEEL WELDING

ALL WELDING SHALL COMPLY WITH AWS D1.1 AND SHALL BE DONE BY ELECTRIC SHIELDED ARC METAL PROCESS, USING E70XX ELECTRODES.

ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS, QUALIFIED FOR THE WORK BY THE TEST PROCESS PRESCRIBED IN AWS D1.1, SECTION 5.

ALL WELDS SHALL BE UNIFORM IN SIZE AND APPEARANCE, AND BE FREE OF PINHOLES, POROSITY, UNDERCUTTING, OR OTHER DEFECTS.

PRIOR TO WELDING GALVANIZED STRUCTURAL STEEL, THE AREA TO BE WELDED SHALL BE THOROUGHLY STRIPPED AND CLEANED BY BLASTING WITH ANGULAR SAND OR STEEL GRIT FOR APPROXIMATELY 3" IN ANY DIRECTION FROM SURFACE TO BE WELDED.

## METAL/STEEL DECKING

STEEL DECK SHALL BE BY VERCO MANUFACTURING CO. (LARR #23789)

STEEL DECKING SHALL BE TYPE HSB-36 DECK, 20 GAUGE, WITH 1-1/2" DEEP CORRUGATIONS, AND I(MIN) = 0.216 IN4/FT AND S(MIN) = 0.235 IN3/FT.

SHEETS SHALL BE PLACED PER MANUFACTURER'S RECOMMENDATIONS AND WITH CORRUGATIONS PERPENDICULAR TO SUPPORTS WITH END LAP OF 2 INCHES MINIMUM CENTERED OVER SUPPORT.

ALL CONNECTIONS SHALL BE MADE AS SHOWN ON THE DRAWINGS.

DECKING SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A525.

SEE OTHER DRAWINGS FOR REQUIRED ACCESSORIES AND DETAILS.

## STRUCTURAL STEEL

STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 FOR PLATES AND ANGLES, A572 FOR ALL OTHER SHAPES, AND SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC SPECIFICATION FOR DESIGN, FABRICATION, AND CONSTRUCTION OF STRUCTURAL STEEL FOR BUILDINGS.

ALL BOLTED CONNECTIONS SHALL BE MADE WITH BOLTS CONFORMING TO ASTM A325. LOCK NUTS OR LOCK WASHERS SHALL BE PROVIDED UNDER THE NUTS.

WELDING SHALL CONFORM TO THE LATEST AMERICAN WELDING SOCIETY AWS STANDARDS. ELECTRODES SHALL BE E70XX CLASSIFICATION UNLESS OTHERWISE NOTED.

PROVIDE CONTINUOUS INSPECTION FOR ALL FIELD WELDING.

FILLS SHALL BE PROVIDED AT SPLICES OF PARTS HAVING MORE THAN 1/8-INCH DIFFERENCE IN THICKNESS.

ALL STEEL SHALL BE CLEANED FREE OF RUST, LOOSE MILL SCALE AND OIL AFTER FABRICATION, THEN GIVEN ONE SHOP COAT OF RUST INHIBITIVE PRIMER. ALL UNPAINTED SURFACES AND SURFACES WHERE PAINT HAS BEEN DAMAGED AND/OR MASKED SHALL BE GIVEN A FIELD TOUCHUP COAT OF PRIMER USED FOR THE SHOP COAT.

TUBE AND PIPE MEMBERS SHALL CONFORM TO ASTM A500 OR A53 GRADE "B" AS REQUIRED.

ALL WELDS SHALL BE UNIFORM IN SIZE AND APPEARANCE, AND BE FREE OF PINHOLES, POROSITY, UNDERCUTTING, OR OTHER DEFECTS.

UNLESS OTHERWISE SHOWN, ALL WELDS SHALL BE A MINIMUM 3/16 INCH.

ALL STRUCTURAL STEEL & BOLTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.

## STAINLESS STEEL

STAINLESS STEEL FASTENERS:

A) STAINLESS STEEL FASTENERS, SHALL BE TYPE 316 OR 316N STAINLESS STEEL. THE THREADS OF THE STAINLESS STEEL FASTENERS SHALL BE COATED WITH A THREAD LUBRICANT BEFORE ASSEMBLY, TO PREVENT GALLING.

B) TYPE 316 OR 316N STAINLESS STEEL FASTENERS, SHALL CONFORM TO ASTM A193, GRADE, BBMA, OR BBMA FOR BOLTING AND STUD MATERIAL AND ASTM D194, GRADE 8MA OR 8BMA FOR NUTS.

C) THE USE OF THREAD LUBRICANT ON STAINLESS STEEL FASTENER ASSEMBLIES TO PREVENT GALLING IS MANDATORY. THREAD LUBRICANT SHALL HAVE EPA AND FDA APPROVAL FOR USE IN POTABLE WATERS. THE ANTI-GALLING COMPOUND SHALL BE RAMCO TRY-SYNLUBE, RAMCO ANTI-SEIZE, HUSKY, LUBE-O-SEAL, OR AN APPROVED EQUAL. THE ANTI-GALLING COMPOUND SHALL BE USED EACH TIME THAT STAINLESS FASTENERS ARE ASSEMBLED OR REASSEMBLED.

STAINLESS STEEL SHAPES SHALL BE TYPE 316 STAINLESS STEEL.

## MASONRY

CONCRETE BLOCK SHALL BE MEDIUM WEIGHT AND SHALL CONFORM TO ASTM C 90 TYPE 1 (GRADE N-1). MINIMUM COMPRESSIVE STRENGTH OF MASONRY UNITS SHALL BE 1,500 PSI. SPECIAL INSPECTION IS NOT REQUIRED.

CEMENT SHALL CONFORM TO ASTM SPECIFICATION C 150, TYPE 1.

REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM SPECIFICATIONS A 615, GRADE 60. ALL BARS SHALL BE LAPPED 48 DIAMETERS UNLESS DETAILED OTHERWISE.

ALL BLOCKS WALLS SHALL BE LAID IN RUNNING BOND.

PROVIDE 2-#5 REINFORCING BARS AT ALL ENDS, CORNERS, AND INTERSECTIONS OF ALL MASONRY WALLS.

MASONRY OPENING DIMENSIONS ARE BLOCK MODULE DIMENSIONS.

ALL MASONRY WORK SHALL CONFORM TO THE LATEST EDITION OF THE UNIFORM BUILDING CODE.

MORTAR MIX SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT AND THREE PARTS SAND AND NOT LESS THAN 1/4 PART NOR MORE THAN 1/2 PART LINE PUTTY FOR TYPE "S" MORTAR.

GROUT MIX SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT TO NOT MORE THAN THREE PARTS SAND AND NOT LESS THAN TWO PARTS PEA GRAVEL, MAX. GROUT LIFT = 4'-0". SPECIAL INSPECTIONS SHALL BE REQUIRED FOR HIGH LIFT GROUTING.

ALL REINFORCING SHALL HAVE A MINIMUM COVERAGE OF 1/2" GROUT.

NO PIPES OR DUCTS SHALL BE PLACED IN MASONRY WALLS UNLESS SPECIFICALLY NOTED OR DETAILED.

DOWELS IN CONCRETE FOR MASONRY WALLS SHALL BE THE SAME SIZE AND SPACING AS MASONRY WALL REINFORCING.

REINFORCING SHALL BE SECURELY HELD AND BRACED IN PLACE TO PREVENT MOVEMENT WHILE PLACING MASONRY.

## INSPECTIONS

REFERENCE STANDARDS: UBC 108.  
INSPECTIONS ARE TO BE PERFORMED BY AN INDEPENDENT TESTING LAB APPROVED BY THE BUILDING OFFICIAL.

- A) SOIL: VERIFY SUBGRADE IS DRY AND DENSE PRIOR TO POURING FOOTINGS. VERIFY SUBGRADE PREPARATION IS CONSISTENT WITH SOILS REPORT.
- B) CONCRETE: TAKE CONCRETE CYLINDERS AS REQUIRED. VERIFY SLUMP AND STRENGTH.
- C) REINFORCING: VERIFY ALL REINFORCING IS PLACED IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. CHECK FOR REQUIRED COVER, SIZE AND GRADE. DIAPHRAGM NAILING, BLOCKING, HOLD-DOWNS AND CONNECTION HARDWARE
- D) WELDING: PROVIDE INSPECTION IN ACCORDANCE WITH UBC 108.
- F) SPECIAL INSPECTIONS:  
SPECIAL INSPECTIONS REQUIRED BY CODE ARE TO BE PERFORMED BY OTHERS AND PAID FOR UNDER SEPARATE CONTRACT. ALL OTHERS INSPECTIONS SHALL BE PERFORMED BY OTHERS BUT PAID FOR BY THE GENERAL CONTRACTOR. SPECIAL INSPECTIONS IS REQUIRED FOR HIGH-STRENGTH A 325, A 490, AND EPOXIED BOLTS IN CONCRETE.

## ABBREVIATIONS

AB ANCHOR BOLT	FB FLAT BAR	PR PAIR
ABC AGGREGATE BASE COURSE	FLEX FLEXIBLE	PERP PERPENDICULAR
ACT ACOUSTICAL TILE	FG FINISH GRADE	PH PHASE
ALT ALTERNATE	FG FIGURE	PL PLATE OR PROPERTY LINE
ALUM ALUMINUM	FT FOOT	PVC POLYVINYL CHLORIDE
ANCH ANCHOR		
APPROX APPROXIMATE	GALV GALVANIZED	R RADIUS
ARCH ARCHITECTURAL	GA "GAUGE	REINF REINFORCEMENT, REINFORCING
AT AT	GBW GYPSUM WALL BOARD	REQD REQUIRED
AVG AVERAGE	GL GLASS	REV REVISION
		R/W RIGHT OF WAY
BD BOARD	H1E HOOK ONE END	S SOUTH
BLDG BUILDING	H2E HOOK TWO ENDS	SCH SCHEDULE
BLK BLOCK	HDWR HARDWARE	SEL SELECT
BM BEAM	HORIZ HORIZONTAL	SGL SINGLE
BOIT BOTTOM	HW HOT WATER	SHT SHEET
	HWS HIGH WATER SURFACE	SPEC SPECIFICATION
	HP HIGH POINT	ST STL STAINLESS STEEL
CA CONCRETE ANCHOR		STD STANDARD
CB CATCH BASIN	ID INSIDE DIAMETER	STA STATION
CJ CONSTRUCTION JOINT	IN OR " INCH	STL STEEL
CL OR CL CENTER LINE	INV INVERT	STIRR STIRRUPS
CLR CLEAR		STRUCT STRUCTURAL
CMU CONCRETE MASONRY UNIT		SQ SQUARE
CPLG COUPLING	JT JOINT	SYMM SYMMETRICAL
CW COLD WATER	LAB LABORATORY	
CONC CONCRETE	LAV LAVATORY	T&B TOP & BOTTOM
COMP COMPACTED	LP LOW POINT/LIQUID PROPANE	THK THICK
CONT CONTINUATION, CONTINUOUS	LWS LOW WATER SURFACE	T/O TOP OF
CTSK COUNTERSUNK		TOS TOP OF STEEL
CU CUBIC		TOW TOP OF WALL OR TOP OF WEIR
		TYP TYPICAL
DEG DEGREE	MATL MATERIAL	
DBL DOUBLE	MAX MAXIMUM	UNO UNLESS NOTED OTHERWISE
DIA OR Ø DIAMETER	MCC MOTOR CONTROL CENTER	
DIG DIGESTER	MECH MECHANICAL	VERT VERTICAL
DIST DISTRIBUTION	MFRS MANUFACTURER'S	VOL VOLUME
DWG DRAWING	MIN MINIMUM	
DWL DOWEL	MK MARK	
	NAT GR NATURAL GRADE	
	N NORTH	W WEST
	N/A NOT APPLICABLE	W/ WITH
	NO OR # NUMBER	W/O WITHOUT
	NTS NOT TO SCALE	WS WATER SURFACE
		WWF WELDED WIRE FABRIC
	OC ON CENTER	
	OD OUTSIDE DIAMETER	
	OPG OPENING	

## GENERAL SYMBOLS

### PLAN

1/4" = 1'-0"

ARROW INDICATES DIRECTION OF PLAN NORTH

### SECTION

3/8" = 1'-0"

\* DRAWING WHERE SECTION VIEW IS FIRST CUT

### DETAIL

3" = 1'-0"

\* DRAWING WHERE DETAIL WAS TAKEN

### ELEVATION

ELEVATION I.D. LETTER

3" = 1'-0"

\* DRAWING WHERE POINT OF VIEW MARKER CAN BE FOUND

SECTION LETTER

FLAG INDICATES DIRECTION OF SECTION CUT

\* DRAWING WHERE SECTION VIEW IS LOCATED

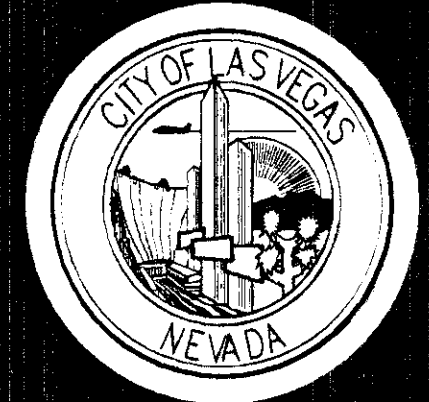
### SECTION CUT MARKER

DETAIL NUMBER

\* DRAWING WHERE DETAIL IS LOCATED

\* IF PLAN AND SECTION, OR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON SAME DRAWING, DRAWING NUMBER IS REPLACED BY A LINE (-).

### DETAIL MARKER



REVISIONS  
03.14.03

CONSULTANT

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CITY OF LAS VEGAS WEST SERVICE YARD  
BUFFALO DRIVE AND PEAK ROAD  
LAS VEGAS, NEVADA  
STRUCTURAL NOTES

APPROVED  
STRUCTURAL  
Building & Safety Dept.  
April 18, 2003

LTE APR 18 2003

Does Not Constitute a Professional Seal, Stamp, or Signature of the Engineer or Architect.

Without Approval of the State Board of Professional Engineers and Architects.



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TITLE: 0475001

DATE: 10.16.02

SCALE: NO SCALE

BID NO: 02.15341.09

CLDRG NO: 107.12548

SHEET NO

S0.01

OF