CITY OF MESA GENERAL TOWER NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO CURRENT <u>UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC</u>
 WORKS CONSTRUCTION AS FURNISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS AND AS AMENDED BY THE CITY OF MESA. ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE AMENDED SPECIFICATIONS AND DETAILS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CALL 602-263-1100 FOR BLUE STAKE SERVICES. CONTRACTOR WILL BE WORKING NEXT TO AND TRAVELING THROUGH MCDOWELL MOUNTAIN PARK AND SONORAN PRESERVE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE CITY OF SCOTTSDALE AND APPROPRIATE PARTIES IN DETERMINING THE REQUIREMENTS WITHIN THE PRESERVE FOR THE CONSTRUCTION OPERATIONS.
- 3. CONTRACTOR TO OBTAIN ANY PERMITS REQUIRED UNLESS OTHERWISE INDICATED.
- 4. PRIOR TO START OF CONSTRUCTION ON PRIVATE PROPERTY (EASEMENTS), THE CONTRACTOR SHALL GIVE THE OWNER SUFFICIENT TIME (MINIMUM 48 HOURS) TO REMOVE ANY ITEMS. THE CONTRACTOR SHALL ARRANGE TO REMOVE AND REPLACE ALL OTHER CONFLICTS AS REQUIRED.5.
- 5. THE CONTRACTOR IS ADVISED THAT A DUST CONTROL PERMIT AND DUST CONTROL PLAN MAY BE REQUIRED BY THE MARICOPA COUNTY AIR QUALITY DEPARTMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THIS PERMIT, IF NECESSARY, AND COMPLY WITH ITS REQUIREMENTS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A COPY OF THE DUST CONTROL PERMIT AND DUST CONTROL PLAN TO THE CITY FOR REVIEW.
- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING AND OBTAINING THE APPROPRIATE INSPECTIONS THROUGH THE JURISDICTION AS GIVEN WITH THE PERMIT. INSPECTIONS SHALL BE PROVIDED BY THE CITY OF MESA.
- 7. THE CONTRACTOR SHALL NOTIFY THE CITY OF MESA INSPECTION DEPARTMENT AT LEAST 48 HOURS IN ADVANCE OF ANY CONSTRUCTION.
- 8. THE JOB SITE SHALL BE CLEANED OF ANY DEBRIS OR SPOIL RESULTING FROM THIS PROJECT AT THE COMPLETION OF CONSTRUCTION.
- 9. ALL EQUIPMENT AND MATERIALS NOT SHOWN OR SPECIFIED ON THE PLANS OR SPECIFICATIONS, BUT REQUIRED TO COMPLETE THIS PROJECT, SHALL BE SUPPLIED BY THE CONTRACTOR AS PART OF THIS CONTRACT WORK. (NO ADDITIONAL
- 10. ANY SURVEY MARKERS DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND AT NO ADDITIONAL COST TO THE CITY.
- 11. CONTRACTOR TO KEEP AND MAINTAIN FIRE EXTINGUISHERS ONSITE DURING ALL WORKING HOURS. FIRE EXTINGUISHERS TO BE WITHIN 50 FEET OF THE WORK BEING PERFORMED AND CAPABLE OF HANDLING TYPES A, B, AND C FIRES.
- 12. BACKFILL REQUIREMENTS FOR ALL TRENCHES SHALL CONFORM TO ARTICLE 300 OF THE NEC, SECTION 601 OF THE MAG UNIFORM STANDARD SPECIFICATIONS
- 13. WHEN CONCRETE FOUNDATIONS ARE POURED, THEY SHALL BE VIBRATED WITH A MECHANICAL VIBRATOR.
- 14. ALL JOINTS BETWEEN PVC CONDUIT, COUPLINGS, AND FITTINGS SHALL BE PREPARED WITH PURPLE PRIMER AND CEMENTED TOGETHER WITH GRAY PVC CEMENT.
- 15. THE CONDUIT LOCATIONS SHOWN ON PLAN ARE DIAGRAMMATIC PRESENTATIONS ONLY. CONTRACTOR IS TO INSTALL CONDUIT TO AVOID CONFLICT WITH EXISTING UTILITIES, LANDSCAPING, CONCRETE, ASPHALT CONCRETE, STRUCTURES, PIPE, WIRES, WALLS, AND FENCING.
- 16. ALL MATERIALS REQUIRED SHALL BE NEW AND OF A GRADE AND QUALITY CONSISTENT WITH THE INTENDED USE AS APPROVED BY THE ENGINEER.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ANY UTILITIES THAT MAY IMPACT THE WORK. THE CITY OF MESA DOES NOT GUARANTEE ANY LOCATIONS REFERENCED.
- 18. THE CONTRACTOR IS ADVISED THAT DAMAGE TO ANY PORTION OF THIS PROJECT'S BUILDING AND SURROUNDING AREA, AS A RESULT OF THIS PROJECT, IS TO BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY OF MESA.
- 19. ALL CONSTRUCTION MUST BE COORDINATED WITH AN ENGINEERING INSPECTOR TO ENSURE AN UNINTERRUPTED FLOW OF WORK WHILE CONSTRUCTION IS UNDERWAY.
- 20. APPROVED PLANS ISSUED BY THE CITY SHALL BE KEPT ON SITE AT ALL TIMES TO BE AVAILABLE TO CITY INSPECTORS AND PROJECT ENGINEER AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AS NECESSARY FOR HIS INSPECTION OF THE CONSTRUCTION

ENGINEER'S NOTES

- ALL CONDUCTORS AND BOND WIRES SHALL BE COPPER.
- 2. ALL CIRCUIT CONDUCTORS IN CONDUIT SHALL BE XHHW INSULATION,
- EXCEPT ABOVE GRADE GROUND WIRES SHALL BE SHALL BE THHN/THWN. UNLESS NOTED OTHERWISE.
- ALL CONDUITS SHALL BE BLOWN OUT USING 90 PSI AIR PRESSURE BEFORE PULLING WIRE.
- 5. A TWO PIECE EXPANSION JOINT COUPLING SHALL BE INSTALLED IN ALL PVC CONDUIT RUNS AT INTERVALS NOT TO EXCEED 100 FEET.
- ALL CONDUCTORS SHALL BE STRANDED.
- ALL STEEL POLES AND STEEL POLE PARTS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH MAG STANDARD SPECIFICATION 771.
- ALL WORKMANSHIP, MATERIALS AND INSTALLATION SHALL COMPLY WITH THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS AS AMENDED BY CITY OF MESA, THE CITY OF MESA ENGINEERING PROCEDURES MANUAL AND THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE.
- 9. ALL FORTY-FIVE (45) AND NINETY (90) DEGREE BENDS OF CONDUIT SHALL HAVE A RADIUS OF NOT LESS THAN EIGHTEEN (18) INCHES. (FACTORY BENDS ONLY SHALL BE USED.)
- 10. UNDERGROUND WIRING SHALL BE INSTALLED IN SCHEDULE 40 RIGID PVC CONDUIT, IT SHALL BE UL APPROVED FOR ABOVE GROUND AND UNDERGROUND USE WITH 90 DEGREE C WIRE. MINIMUM DEPTH FROM FINISHED FLOOR OR GRADE TO TOP OF CONDUIT SHALL BE TWENTY-FOUR (24) INCHES WITH A MAXIMUM DEPTH OF THIRTY-SIX (36) INCHES UNLESS OTHERWISE SPECIFIED. IN AREAS WHERE TWENTY-FOUR (24) INCHES COVER IS NOT POSSIBLE, GALVANIZED RIGID STEEL CONDUIT (GRS) SHALL BE RUN. GRS CONDUIT SHALL BE DOUBLE WRAPPED WITH 20-MIL TAPE TO SIX (6) INCHES PAST THE THREADED METAL COUPLING. COMPRESSION COUPLINGS ARE NOT ALLOWED. PRIOR APPROVAL IS NEEDED FOR ANY DESIGN USING GRS CONDUIT.

BUILDING TOLERANCES:

STANDARD TOLERANCES SHALL BE BASED ON THE REQUIREMENTS OF THE AISC CODE OF STANDARD PRACTICE AND ACI 117, STANDARD SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS.

EXISTING STRUCTURE;

EXISTING STRUCTURAL DIMENSIONS AND MEMBER SIZES ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION. THE CONTRACTOR SHALL VERIFY THE ACTUAL CONFIGURATION OF EXISTING CONSTRUCTION AND THE CONDITION OF THE STRUCTURE BEFORE BEGINNING WORK. ANY DISCREPANCIES OR UNSOUND CONDITIONS SHALL BE REPORTED TO THE ARCHITECT FOR RESOLUTION BEFORE BEGINNING WORK. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, EMBEDMENTS, AND OPENINGS NOT SHOWN. REFER TO MECHANICAL AND ELECTRICAL PLANS FOR DUCTS, PIPING, EMBEDMENTS, AND OPENINGS NOT SHOWN.

SEQUENCING CONSTRUCTION AND LATERAL STABILITY:

THE STRUCTURAL COMPONENTS BY THEMSELVES ARE A NON-SELF-SUPPORTING STRUCTURE. LATERAL FORCES DUE TO WIND, EARTHQUAKE, OR SOIL ARE CARRIED BY THE ROOF AND FLOOR DIAPHRAGMS TO THE LATERAL SYSTEM. CERTAIN ELEMENTS SHOWN ON OR LOCAL STABILITY OF OTHER ELEMENTS (SUCH AS BEAMS, COLUMNS, AND WALLS). IF, DUE TO SEQUENCING OF CONSTRUCTION, THESE STABILITY ELEMENTS ARE NOT IN PLACE, THE CONTRACTOR SHALL RETAIN A LICENSED STRUCTURAL ENGINEER WHO SHALL INVESTIGATE WHERE TEMPORARY SHORING/BRACING IS REQUIRED, AND SHALL DESIGN THIS TEMPORARY SHORING/BRACING. THE CONTRACTOR SHALL PROVIDE THIS SHORING/BRACING UNTIL THE REQUIRED STRUCTURAL ELEMENTS AND THEIR CONNECTIONS HAVE BEEN INSTALLED AND REACH THEIR FINAL DESIGN STRENGTHS.

MISCELLANEOUS:

REFER TO ALL ENGINEERING DRAWINGS FOR DIMENSIONS NOT SHOWN, INCLUDING BUT NOT LIMITED TO: SIZE AND LOCATION OF CURBS, EQUIPMENT HOUSEKEEPING PADS, WALL AND FLOOR OPENINGS, BLOCKOUTS, FLOOR DEPRESSIONS, SUMPS, DRAINS, ANCHOR BOLTS, EMBEDDED ITEMS, ARCHITECTURAL TREATMENT, ETC. CONTRACTOR SHALL VERIFY DIMENSIONS AND RESOLVE DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.

SPECIAL INSPECTION:

PER IBC SECTION 1701. SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING ITEMS:

- 1. CONCRETE GRADE OF 3000 PSI OR HIGHER (CONTINUOUS) A) DURING THE TAKING OF TEST SPECIMENS. B) DURING THE PLACEMENT OF ALL REINFORCED CONCRETE, UNLESS NOTED OTHERWISE
- 2. STEEL CONSTRUCTION (PERIODIC)
- BOLTS IN CONCRETE (CONTINUOUS)
- 4. REINFORCING STEEL(PERIODIC)
- 5 WELDING (PERIODIC):
- (A) VISUAL INSPECTION OF ALL FIELD WELDS. (B) NON-DESTRUCTIVE TESTING OF ALL COMPLETE PENETRATION WELDS
- 6. EXPANSION AND EPOXY BOLTS (CONTINUOUS): A) DURING PLACEMENT OF ALL EXPANSION AND EPOXY BOLTS, FOR VISUAL VERIFICATION OF HOLE
- B) DIAMETER AND DEPTH AND PLACEMENT OF BOLT AND/OR EPOXY.
- 7. STRUCTURAL MASONRY (PERIODIC)
- 8. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
- (A) THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE
- APPROVED DESIGN DRAWINGS AND SPECIFICATION. (B) THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE

PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

- (C) UPON COMPLETION OF THE ASSIGNED WORK THE ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN THE CONFORMANCE WITH THE APPROVED
- OUR PROFESSIONAL SERVICES HAVE BEEN PERFORMED USING DEGREE AND SKILL ORDINARILY EXERCISED UNDER SIMILAR CIRCUMSTANCES. BY REPUTABLE CIVIL & STRUCTURAL ENGINEERS PRACTICING IN THIS OR SIMILAR LOCALITIES. THE LIABILITY OF THS IS LIMITED TO TERMS AND CONDITIONS STATED IN THE SIGNED CONTRACT WITH CITY OF MESA. NO OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE. THIS CONSTRUCTION DRAWINGS SET WAS SEALED AND SIGNED IN ACCORDANCE WITH THE GENERALLY ACCEPTED STANDARD OF PRACTICE IN ARIZONA AT THE TIME THE DRAWINGS WERE
- THE CONSTRUCTION LAYOUT, SPECIFICATIONS, AND DETAILS ARE BASED ON OUR SITE VISIT, OWNER PROVIDED DATA AND OUR UNDERSTANDING OF THE NEW CONSTRUCTION. WE ARE NOT RESPONSIBLE FOR DATA PRESENTED BY OTHERS.
- THE LAYOUT, PLANS AND DETAILS WITH SPECIFICATIONS PROVIDED IN THESE DRAWINGS ARE BASED ON THE ASSUMPTION THAT THE STRUCTURAL/CIVIL ENGINEER OF RECORD BE RETAINED DURING CONSTRUCTION TO MONITOR ALL THE ACTIVITIES ASSOCIATED REQUIRED FOR SPECIAL INSPECTION PER JURISDICTION AND TO CONFIRM THAT THE SITE CONDITIONS ARE SIMILAR TO THOSE ENCOUNTERED DURING OUR DESIGN SITE VISIT. IF WE ARE NOT RETAINED FOR THESE SERVICES. THS CANNOT ASSUME ANY RESPONSIBILITY FOR ANY POTENTIAL CLAIMS THAT MAY ARISE DURING OR AFTER CONSTRUCTION AS A RESULT OF MISUSE OR MISINTERPRETATION OF THESE PLANS BY OTHERS.
- IT IS THE OWNER'S RESPONSIBILITY TO SEE THAT ALL PARTIES TO THE PROJECT INCLUDING THE DESIGNER. CONTRACTOR, SUBCONTRACTORS, FIELD ENGINEER, ETC, ARE MADE AWARE OF THESE CONSTRUCTION DRAWINGS IN ITS ENTIRETY. THE USE OF INFORMATION CONTAINED IN THESE DRAWINGS FOR BIDDING PURPOSES SHOULD BE DONE AT THE CONTRACTOR'S OPTION AND RISK, IF THE SCOPE OF THE NEW CONSTRUCTION CHANGES FROM THAT DESCRIBED IN THIS DRAWING, OUR FIRM SHOULD BE NOTIFIED.
- THIS CONSTRUCTION SET MAY BE USED ONLY BY THE CLIENT AND ONLY FOR THE PURPOSES STATED, WITHIN A REASONABLE TIME FROM ITS ISSUANCE. LAND USE, SITE CONDITIONS (BOTH ON AND OFFSITE) OR OTHER FACTORS MAY CHANGE OVER TIME, CHANGES IN APPLICABLE STANDARDS OF PRACTICE CAN OCCUR AS A RESULT OF LEGISLATION AND/OR THE BROADENING OF KNOWLEDGE, FURTHERMORE, CONSTRUCTION ISSUES MAY ARISE THAT WERE NOT APPARENT AT THE TIME OF OUR EXPLORATION. ANY PARTY. OTHER THAN THE CLIENT, WHO WISHES TO USE THESE CONSTRUCTION DRAWING SHALL NOTIFY TNS OF SUCH INTENDED USE. NON-COMPLIANCE WITH ANY OF THESE REQUIREMENTS, BY THE CLIENT OR ANYONE ELSE, WILL RELEASE TNS FROM ANY LIABILITY RESULTING FROM THE USE OF THIS CONSTRUCTION DRAWING BY ANY UNAUTHORIZED PARTY.

GEOTECHNICAL NOTE:

TNS RECOMMENDS THAT THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE OBSERVE THE FOOTING EXCAVATIONS AND BEARING SURFACE BEFORE REINFORCING STEEL AND CONCRETE ARE PLACED. THIS OBSERVATION IS TO ASSESS WHETHER THE CONDITIONS EXPOSED ARE SIMILAR TO THOSE ANTICIPATED FOR SUPPORT OF THE FOOTINGS. ANY LOOSE MATERIAL OR DEBRIS SHOULD BE REMOVED FROM THE FOUNDATION AREA PRIOR TO POURING CONCRETE. IN ADDITION, WE RECOMMEND THAT THE GEOTECHNICAL ENGINEER HAVE THE OPPORTUNITY TO OBSERVE ANCHORAGE FIELD TESTS, AND PROVIDE ADDITIONAL RECOMMENDATIONS FOR THE FINAL DESIGN, BASED ON THE TEST RESULTS.

LEGEND

STREET CENTERLINE		LIGHT POLE	4
SECTION LINE	The first of a Market state of the first of		^
EASEMENT LINE		REVISION	_1_
PROPERTY LINE			
EXISTING POWER POLE			
EXISTING OVERHEAD POWER	——— OHP ————	DETAIL REFERENCE	$\left(\begin{array}{c} \stackrel{\wedge}{\times - \times} \end{array} \right)$
EXISTING CHAIN LINK FENCE	, where the state of the state		
EXISTING 1' CONTOUR	The second second and the second seco	SECTION REFERENCE	X
EXISTING 5' CONTOUR	эмийский политический политический (
NEW ANTENNA		GROUND CONDUCTOR	an alaid ann alaid h-aideann a fhèir a ch-àide dean baid leideachd 190 an 190 an 190 an 190 an 197 agus
EXISTING ANTENNA			
GROUND ROD	\otimes	and the second of the second o	E
GROUND BUS BAR	The second secon	COAXIAL CABLE	A
MECHANICAL GRND. CONN.	•	PROPOSED CHAIN LINK FENCE	
CADWELD			
ELECTRIC J-BOX	E	EXISTING SAGUARO CACTUS	
CONCRETE			<u></u>
EARTH			
GRAVEL ROAD			

ABBREVIATIONS

A.B.	ANCHOR BOLT	EXT.	EXTERIOR	OPNG.	OPENING
ABV.	ABOVE	(E)	EXISTING	P/C	PRECAST CONCRETE
ACCA	ANTENNA CABLE COVER ASSEMBLY	F.O.W.	FACE OF WALL	PCS	PERSONAL COMMUNICATION SERVICES
ADD'L	ADDITIONAL	F.S.	FINISH SURFACE	PLY.	PLYWOOD
A.F.F.	ABOVE FINISHED FLOOR	FT./(*)	FOOT(FEET)	PPC	POWER PROTECTION CABINET
A.F.G.	ABOVE FINISHED GRADE	FTG.	FOOTING	PRC	PRIMARY RADIO CABINET
ALUM.	ALUMINUM	FAB.	FABRICATION(OR)	P.S.F.	POUNDS PER SQUARE FOOT
ALT.	ALTERNATE	F.F.	FINISH FLOOR	P.S.I.	POUNDS PER SQUARE INCH
ANT.	ANTENNA	F.G.	FINISH GRADE	P.O.F.	POINT OF FEED
APPRX.	APPROXIMATE(LY)	FIN.	FINISH(ED)	P.T.	PRESSURE TREATED
ARCH.	ARCHITECT(URAL)	FLR.	FLOOR	PWR.	POWER (CABINET)
AWG.	AMERICAN WIRE GAUGE	FDN.	FOUNDATION	QTY.	QUANTITY
BLDG.	BUILDING	F.O.C.	FACE OF CONCRETE	RAD.(R)	RADIUS
BLK.	BLOCK	F.O.M.	FACE OF MASONRY	REF.	REFERENCE
BLKG.	BLOCKING	F.O.S.	FACE OF STUD	REINF.	REINFORCEMENT(ING)
BM.	BEAM	F.O.W.	FACE OF WALL	REQ'D.	REQUIRED
	BOUNDARY NAILING	F.S.	FINISH SURFACE	RGS.	RIGID GALVANIZED STEEL
B.N.		GRNG.	GROUNDING	SCH.	SCHEDULE
BTCW.	BARE TINNED COPPER WIRE BOTTOM OF FOOTING	GRND.	GROUND	SHT.	SHEET
B.O.F.	BACK-UP CABINET			SIM.	SIMILAR
B/U		G.	GROWTH (CABINET)	SPEC.	SPECIFICATION(S)
CAB.	CABINET	GA.	GAUGE	SQ.	SQUARE
CANT.	CANTILEVER(ED)	GI.	GALVANIZE(D)	S.S.	STAINLESS STEEL
C.I.P.	CAST IN PLACE	G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER		STANDARD
CL	CHAIN LINK	GLB.		STD.	
CLG.	CEILING		GLUE LAMINATED BEAM	STL.	STEEL
CLR.	CLEAR	GPS	GLOBAL POSITIONING SYSTEM	STRUC.	STRUCTURAL
COL.	COLUMN	HOR.	HEADER	TEMP.	TEMPORARY
CONC.	CONCRETE	HGR.	HANGER	THK.	THICK(NESS)
CONN.	CONNECTION(OR)	HT.	HEIGHT	T.N.	TOE NAIL
CONST.	CONSTRUCTION	ICGB.	ISOLATED COPPER GROUND BUS	T.O.A.	TOP OF ANTENNA
CONT.	CONTINUOUS	N./(")	INCH(ES)	T.O.C.	TOP OF CURB
DBL.	DOUBLE	INT.	INTERIOR	T.O.F.	TOP OF FOUNDATION
DEPT.	DEPARTMENT	LB.	POUND(S)	T.O.P.	TOP OF PLATE/PARAPET
D.F.	DOUGLAS FIR	L.B.	LAG BOLTS	T.O.S.	TOP OF STEEL
DIA.	DIAMETER	L.F.	LINEAR FEET (FOOT)	T.O.W.	TOP OF WALL
DIAG.	DIAGONAL	L.	LONG(ITUDINAL)	TYP.	TYPICAL
DIM.	DIMENSION	MAS.	MASONRY	U.G.	UNDER GROUND
DWG.	DRAWING(S)	MAX.	MAXIMUM	U.L.	UNDERWRITERS LABORATORY
DWL	DOWEL(S)	M.B.	MACHINE BOLT	U.N.O.	unless noted otherwise
EA.	EACH	MECH.	MECHANICAL	V.I.F.	VERIFY IN FIELD
EL.	ELEVATION	ME.CH.	MANUFACTURER	₩,/	MDE(MDTH)
ELEC.	ELECTRICAL	MIN.	MINIMUM	₩/ WD.	WITH WOOD
ELEV.	ELEVATOR	MISC.	MISCELLANEOUS	W.P.	WEATHERPROOF
EMT.	ELECTRICAL METALLIC TUBING	MTL.	METAL	WT.	WEIGHT
E.N.	EDGE NAIL	(N)	NEW	٤	CENTERLINE
ENG.	ENGINEER	NO.(#)	NUMBER	ē	PLATE
EQ.	EQUAL	N.T.S.	NOT TO SCALE	L	
No. 38.4	FIRE A COMMAND	A A	OU ACUTEO		

ON CENTER

EXPANSION

