# Craig High School New Shop Building

# Craig, AK

## PARTICIPANTS

CLIENT: Craig City School District (CCSD) PO Box 800 Craig, AK 99921 907.826.3274

ARCHITECT / CIVIL ENGINEER: R&M ENGINEERING-KETCHIKAN, INC. 7180 REVILLA ROAD, SUITE 300 KETCHIKAN, ALASKA 99901 907.225.7917

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#### **GENERAL NOTES**

COMPLY WITH ALL PROVISIONS OF THE INTERNATIONAL CODES AS ADOPTED BY THE CITY OF CRAIG AND THE STATE OF ALASKA.

- ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, INCLUDING THE LATEST ADOPTED EDITIONS OF THE IBC, IFC, IMC, IPC, IRC, UFC, UMC, UPC, NEC, AND ADA ACCESSIBILITY GUIDELINES.
- 2. THE ARCHITECTURAL DRAWINGS ARE A PART OF LARGER SET OF DRAWINGS WHICH, WHEN COMPLETE, CONSISTS OF ALL DRAWINGS LISTED BY THE INDEX OF DRAWINGS. THE WORK DESCRIBED BY THE DRAWINGS OF ANOTHER DISCIPLINE MAY BE AFFECTED BY THE WORK DESCRIBED ON DRAWINGS OF ANOTHER DISCIPLINE AND MAY REQUIRE REFERENCE TO THE DRAWINGS OF ANOTHER DISCIPLINE AND MAY REQUIRE REFERENCE TO THE DRAWINGS OF ANOTHER DISCIPLINE. PARTIAL SETS OF DRAWINGS ARE INCOMPLETE AND SHOULD NOT BE DISTRIBUTED OR UTILIZED BY THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUBCONTRACTORS, TRADES, AND SUPPLIERS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BEFORE COMMENCING CONSTRUCTION, AND TO ASSURE THAT ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS., WHICH MIGHT AFFECT THE WORK OF THAT PARTY.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DIMENSIONS ARE TO CENTERLINE OF COLUMNS OR TO FACE OF FRAMING, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLEAR" ARE TO FACE OF FINISH MATERIALS.
- REFER TO THE STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL, LANDSCAPE AD PLUMBING DRAWINGS FOR THE DETAILED DESIGN OF STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL, LANDSCAPE AND PLUMBING SYSTEMS, OF WHICH PORTIONS MAY BE SHOWN ON THE ARCHITECTURAL DRAWINGS.
- 5. FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE FLOOR SLAB OR WOOD SUB-FLOOR, UNLESS OTHERWISE NOTED.

### SCOPE OF WORK

SUPPLY OF AN 2,400 SF PRE-MANUFACTURED METAL BUILDING, INCLUDING ALL PRIMARY AND SECONDARY FRAMING, ASSOCIATED METAL SIP PANELS, LINER PANELS, SOFFIT PANELS, FASCIA, GUTTERS, SNOW GUARDS, MAN DOORS, OVERHEAD COILING DOORS, & VINYL WINDOW UNITS.

REVISIONS:
Craig High School New Shop Building
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SHEET DESCRIPTION: Cover Sheet
G100 SHEET: 01 of 06

# **ARCHITECTURAL ABBREVIATIONS**

# DRAWING SYMBOLS

AB ABV ACOUS ACT AD ADJ AFF AFG AFS AL ALT APPROX ARCH ASPH AUTO BD BKG BLDG	ANCHOR BOLT ABOVE ACOUSTICAL ACOUSTICAL CEILING TILE AREA DRAIN ADDITIONAL ADJUSTABLE ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ABOVE FINISHED SLAB ALUMINUM ALTERNATE ACCESS PANEL APPROXIMATE(LY) ARCHITECT(URAL) ASPHALT AUTOMATIC BOARD BACKING BUILDING	F/F F,F FA FBD FDC FND FDV FE FEB FEC FHY FIN FIN GR FL FLASH FLASH FLASH FLASH FLASH FLEX FLR SK FLUOR FNR FNTD	FACE TO FACE FINISH FLOOR FIRE ALARM FIBERBOARD FLOOR DRAIN FUOR DRAIN FOUNDATION FIRE DEPARTMENT CONNECTION FOUNDATION FIRE DEPARTMENT VALVE FIRE EXTINGUISHER FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FIRE EXTINGUISHER CABINET FIRE HYDRANT FINISH FINISH GRADE FLOOR (ING) FLASHING FLEXIBLE FLOOR SINK FLUORESCENT FEMININE NAPKIN RECEPTACLE FEMININE NAPKIN TAMPON DISPENSER	MACH MAN MATL MAX MC MECH MER MFR MH MIN MIR MIN MIR MIN MISC MOD MTD MTG MULL (N) N N NA	MACHINE MANUAL MATERIAL MAXIMUM MEDICINE CABINET MECHANICAL MEMBRANE METAL MANUFACTURER MANHOLE MINIMUM MIRROR MISCELLANEOUS MODULAR MOUNTED MOULLION NEW NORTH NOT APPLICABLE	SHR SHT SHV SIM SK SP SPEC SPKLR SPKR SQ IN ST STAG STD STAG STD STD STDR STDR STRUCT SUSP CLG SERV SYM	SHOWER SHEET(ING) SHELVES, SHELVING SIMILAR SINK SPACE, SPACING SPECIFICATION SPRINKLER SPEAKER SQUARE SQUARE INCH STAINLESS STEEL STAGGERED STANDARD STEEL STORAGE STORAGE STRUCTURAL SUSPENDED CEILING SERVICE SYMBOL	$\begin{array}{c} 1 \\ A \\ \hline \\ A \\$	GRID LINES DETAIL BU BUILDING S
BLKG BLW BOT BRKT BSMT	BELOW BOTTOM BRACKET BASEMENT	FOF FOM FOS FRPF	FACE OF FINISH FACE OF FINISH FACE OF MASONARY FACE OF STUD FIREPROOFING	NIC NO NOM NRC	NOT IN CONTRACT NUMBER NOMINAL NOISE REDUCTION COEFFICIENT	T T&B T&G TB	TREAD TOP & BOTTOM TONGUE & GROOVE TOWEL BAR	A101 3	
BTW BURS	BETWEEN BUILT UP ROOFING SYSTEM	FRZ FSB	FREEZER FOLDING SHOWER BENCH	NTS	NOT TO SCALE	TEL TEMP	TELEPHONE TEMPORARY		WINDOW I
CAB CB	CABINET CATCH BASIN CLOSED CIPCLIT TELEVISION	FSTNR FT FTG FURN	FASTENER FOOT, FEET FOOTING FURNITI IRF	OA OC OD	OVERALL ON CENTER OUTSIDE DIAMETER OWNER EURNISHED.CONTRACTOR INSTALLED	THERM THK THRES THRU	THERMAL THICK, THICKNESS THRESHOLD THEOLIGH		DOOR TYP
CG CEM	CORNER GUARD CEMENT	FURR FUS	FURRING FOLDING UTILITY SEAT	OFOI OH	OWNER FURNISHED-OWNER INSTALLED OPPOSITE HAND	TOL TYP	TOLERANCE TYPICAL	1	WALL TYPE
CER CER TILE	CERAMIC CERAMIC TILE	FUT FXTR	FUTURE FIXTURE	OPNG OPP	OPENING OPPOSITE	UC	UNDER COUNTER		EQUIPMEN
CL CLG CLJ	CENTERLINE CEILING CONTROL JOINT	GA GALV	GAUGE GALVANIZED	OVHD PBD	OVERHEAD PARTICLE BOARD	UNFIN UON UR	UNFINISHED UNLESS OTHERWISE NOTED URINAL	101	ROOM NUM
CLR CMU	CLEAR CONCRETE MASONRY UNIT	GB GC	GRAB BAR GENERAL CONTRACTOR	PCF PERF	POUNDS PER CUBIC FOOT PERFORATED	UTIL	UTILITY		
CNTR CO	COUNTER CASED OPENING	GL GL BLK	GLASS GLASS BLOCK	PERIM PERM	PERIMETER PERMANENT	VAC VB	VACUUM VINYL BASE	$\mathbf{\Psi}$	DATOMPOL
CONC CONF	CONCRETE CONFERENCE	GLULAM GLZ	GLUE LAMINATED GLAZING GDGUND	PERP PH	PERPENDICULAR PANIC HARDWARE	VCT VERT	VINYL COMPOSITION TILE VERTICAL		MATCH LINI
CONN CONSTR	CONNECTION CONSTRUCTION	GND GR CBV	GRADE, GRADING CRAVEL	PL PLAM PLAT	PROPERTY LINE PLASTIC LAMINATE DI ATEORM	VEST VF	VESTIBULE VERIFY IN FIELD	$\sim$	
CORR	CORRIDOR	GYP BD	GYPSUM BOARD	PLAT PLBG PLF	PLUMBING PLUMBING POLINDS PER LINEAL FOOT	VOL	VENEER VOLUME VINYL WALL COVERING		REVISION C
CSWK	CARPET CASEWORK CARPET THE	H HB	HIGH HOSE BIB	PLYWD	PLYWOOD PANEL	W/C	WEST		
CUST	CUSTOM COLD WATER	HC HCP	HOLLOW CORE HANDICAPPED	PREFAB PRKG	PREFABRICATED	W/ W/O	WITH WITHOUT		
DBL	DOUBLE	HD HDBD	HEAD HARDBOARD	PROJ PROP	PROJECT PROPERTY	W/W WC	WALL TO WALL WATER CLOSET		CENTERLIN
DEMO DET	DEMOLISH DETAIL	HDWE HM	HARDWARE HOLLOW METAL	PSF PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH	WD WDW	WOOD WINDOW		PROPERTY
DF DIA	DRINKING FOUNTAIN DIAMETER	HNDRL HR	HANDRAIL HOUR	PT PTD	POINT PAPER TOWEL DISPENSER	WF WHCH	WIDE FLANGE WHEEL CHAIR	777777777777777777777777777777777777777	NEW WALL
DIAG DIFF	DIAGONAL DIFFUSER	HT HVAC	HEIGHT HEATING, VENTILATION,	PTD/R PTR	PAPER TOWEL DISPENSER W/ RECEPTACLE PAPER TOWEL RECEPTACLE	WO WR	WHERE OCCURS WATER RESISTANT		
DIM DIM PT	DIMENSION DIMENSION POINT	HW	AIR CONDITIONING, & COOLING HOT WATER	PVMT PWR	PAVEMENT POWER	WSCT WT	WAINSCOTING WEIGHT		EXISTING W
DISP DIST	DISPENSER DISTANCE	ID INCAND		QT	QUARRY TILE	WTRPRF WWF	WELDED WIRE FABRIC		DEMOLITIO
DMPF	DAMPROOFING DAMPROOFING	INCL	INCLUDING	QTY	QUANTITY	XFMR	TRANSFORMER		
DR DS	DRAIN DOWNSPOLIT	INSUL INT	INSULATION INTERIOR	R RA	RISER RETURN AIR				
DT DWG	DRAIN TILE DRAWING	JAN	JANITOR	RAD RCP	RADIUS REFLECTED CEILING PLAN				
DWGS DWR	DRAWINGS DRAWER	JB JT	JUNCTION BOX JOINT	RD REF	ROOF DRAIN REFRIGERATOR				
(E)	EXISTING	KIT	KITCHEN	REINF REQD	REINFORCED REQUIRED				
E EA	EAST EACH	KPL KS	KICK PLATE KNEE SPACE	RESIL RET	RESILIENT RETURN				
ECAB EG	ELECTRICAL CABINET EDGE GUARD	LAB		RH	REVISION RIGHT HAND				
EL-S EL	ELEVATION ELEVATION	LAM	LAMINA I E LAVATORY BOUND	RO	ROUGH OPENING				
ELEC			LINEAR FOOT	ROW S					
ENCL	ENCLOSURE		LEFT HAND	SA SR	SUPPLY AIR				
ENGR EO EOL SD			LOCKER	SC	SOLID CORE SEAT COVER DISPENSER				
EQUIP	EQUIPMENT	LTWT	LIGHT WEIGHT	SCHED					
EXP	EXPANSION EXPANSION	LIG	Lonniko	SD	SOAP DISPENSER SECTION				
EXIST	EXISTING EXISTING EXTERIOR			SEP SF	SEPARATION SQUARE FOOT				
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s	REVISIONS:
IBBLE SECTION	gh School op Building
ELEVATION SYMBOL TYPE PE	Craig Hi New Sho
IT SYMBOL IBER	STATUS: BIDDING DOCUMENTS
IE	DRAWN BY: <u>MMG</u> CHECKED BY: <u>MMG</u> DATE: <u>7.19.23</u> PROJECT #: <u>182360</u>
CLOUD NE, FOR DIMENSIONING (LINE . CONSTRUCTION WALL CONSTRUCTION DN	R&M ENGINEERING-KETCHIKAN, INC. 7180 REVILLA ROAD, SUITE 300 KETCHIKAN, ALASKA 99901 PH: 907 225.7187 www.ketchikanengineer.com
	SHEET DESCRIPTION: Abbreviations & Symbols





DOOR TYPES



A

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	Door Schedule					
	Thickness	Door Material	Frame Material		Hardware	
	0' - 1 3/4"	НМ	НМ	HDW-1		
1	0' - 2"	Steel	НМ			

<u>B</u>

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SHEET DESCRIPTION: Main Floor Plan
A200
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\_\_Mtl Gutter to D.S., Typ @ Eaves

\_ 5" MTL SIP Roofing Panels, Typ.

Install Snow Guards per Manuf's Recommendations

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A201



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A400 SHEET: 05 of 06

#### GENERAL

BUILDING CODE: ALL MATERIALS, WORKMENSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION

STANDARDS: REFERENCE TO ASTM AND OTHER STANDARDS SHALL MEAN THE LATEST EDITION IN EFFECT ON THE BID DATE, UNLESS NOTED IN THESE DOCUMENTS OR DESIGNATED BY THE GOVERNING CODE.

#### LOADS AND CRITERIA

GRAVITY: IN ADDITION TO THE SELF WEIGHT, THE FOLLOWING WERE USED FOR DESIGN:

#### SNOW DESIGN DATA:

GROUND SNOW LOAD	P <sup>g</sup> = 40 PSF
FLAT-ROOF SNOW LOAD	P <sup>f</sup> = 25.2 psf
SNOW EXPOSURE FACTOR	C <sup>e</sup> = 0.9
SNOW LOAD IMPORTANCE FACTOR	I <sup>s</sup> = 1.0
THERMAL FACTOR	C <sup>f</sup> = 1.0
RAIN-ON-SNOW SURCHARGE	= 0 PSF
SLOPED ROOF SNOW LOAD	P <sup>s</sup> = 25.2 PSF
DESIGN SNOW LOAD	=40 PSF

WIND DESIGN DATA (GOVERNS DESIGN OF LATERAL FORCE RESISTING SYSTEM)

BASIC WIND SPEED (3-SECOND GUST) WIND RISK CATEGORY SURFACE ROUGHNESS EXPOSURE CATEGORY INTERNAL PRESSURE COEFFICIENT COMPONENT AND CLADDING PRESSURE	$ \begin{array}{l} V = 150 \; MPH \\ I_w = II \\ = B \\ = d \\ GC = \; 0.18: ENCLOSED \\ P_{PI} = +/-\; 41 \; PSF \end{array} $
SEISMIC DESIGN DATA	
MAPPED SPECTRAL RESPONSE	Ss = 0.468 %g
SPECTRAL RESPONSE COEFFICIENTS	Sds = 0.448 %g Sds = 0.467 %g

#### SEISMIC DESIGN CATEGORY

SHOP DRAWINGS AND SUBMITTALS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION OR CONSTRUCTION OF THESE ITEMS:

#### CONCRETE MIX DESIGN CONCRETE REINFORCING

CONTRACTOR SHALL REVIEW AND STAMP SUBMITTALS PRIOR TO SUBMISSION. IF SHOP DRAWINGS DIFFER FROM DESIGN SHOWN ON STRUCTURAL DRAWINGS. THEY SHALL BE SEALED BY THE ALASKA STATE REGISTERED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN DIMENSIONS AND QUANTITIES ARE CONTRACTOR'S RESPONSIBILITY AND WILL NOT BE REVIEWED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS PLACED PRIOR TO RECEIPT OF REVIEWED SUBMITTALS. CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR REVIEW.

#### NOTE

SUBMIT TRUSS CALCULATIONS AND LAYOUT PLAN TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO SUBMITTAL TO CITY. PLANS AND CALCULATIONS TO BE APPROVED BY CITY PRIOR TO REQUESTING FRAME INSPECTION.

SOIL BEARING PRESSURE: 3000 PSF (IBC TABLE 1804.2)

SOIL BEARING IS BASED ON THREE TEST PITS EXCAVATED TO THE NATIVE BEACH GRAVEL WHICH CONFIRMED THE SITE WAS FILLED WITH SHOT ROCK FILL.

SPECIAL INSPECTION

CONTRACTOR SHALL PROVIDE SPECIAL INSPECTION FOR THE FOLLOWING: SOIL SUBGRADE GENERAL FRAMING REBAR PLACEMENT CONCRETE PLACEMENT STRUCTURAL HOLD DOWNS ROCK BOLTS (SEE NOTE BELOW) SUMMARY OF BUILDING INSPECTION (PUR-102)

#### CONCRETE

REFERENCE STANDARDS: CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE FOLLOWING DOCUMENTS, EXCEPT AS MODIFIED BELOW:

CI 301	"STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE"

- "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" "GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE" ACI 318 ACI 304
- ACI 311 "GUIDE FOR CONCRETE INSPECTION"

MATERIALS:	
CEMENT	ASTM C150, C595
AGGREGATE	ASTM C33
ADMIXTURES	ASTM C260, C494, & C1017
FLY ASH	ASTM C618, CLASS "F" OR "C"

AGGREGATES THAT EXHIBIT DELETERIOUS ACTIVITY WHEN EVALUATED IN ACCORDANCE WITH ASTM C33 APPENDIX XI SHALL NOT BE USED. SAND EQUIVALENT FOR FINE AGGREGATE SHALL NOT EXCEED 75.

MAXIMUM LOSS ON IGNITION SHALL BE 1%.

CONCRETE SHALL BE PROPORTIONED TO ACHIEVE A WORKABLE MIX THAT CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER. MIX DESIGNS SHALL BE SUBMITTED FOR REVIEW PRIOR TO USE. COMPLY WITH IBC SECTION 1905. MIXES SHALL MEET OR EXCEED THE FOLLOWING CRITERIA:

TYPE OF CONSTRUCTION	COMPRESSIVE STRENGTH (fc)	TEST AGE	MAXIMUM WATER/CEMENT RATIO	
OOTINGS, TOPPING SLABS, RETAINING AND FOUNDATION WALLS, CONCRETE ON METAL DECK. WALLS	4,000 PSI	28 DAYS	0.50	

ADMIXTURES: ALL CONCRETE, INCLUDING SLAB ON GRADE, SHALL HAVE A WATER-REDUCING ADMIXTURE COMPLYING WITH ASTM C-494 ADDED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CALCIUM CHLORIDE OR OTHER CHLORIDE ADMIXTURES SHALL NOT BE USED.

ALL HORIZONTAL SURFACE EXPOSED TO WEATHER SHALL CONTAIN AN AIR-ENTRAINING AGENT COMPLYING WITH ASTM C260. THE AMOUNT OF ENTRAINED AIR SHALL BE 5% +/-1/2% BY VOLUME. TESTS FOR AIR CONTENT SHALL BE MADE AT THE DISCHARGE END OF THE PLACING HOSE IN ACCORDANCE WITH ASTM C173.

WATER/CEMENT RATIO SHALL BE MEASURED BY WEIGHT AND BE BASED ON TOTAL CEMENTITIOUS MATERIAL, INCLUDING CEMENT AND POZZOLANS SUCH AS FLY ASH AND SILICA FUME.

MAXIMUM AGGREGATE SIZE SHALL BE 1 1/2". BUT NOT MORE THAN 3/4 TIMES THE CLEAR DISTANCE BETWEEN REINFORCING BARS NOR 1/5 TIMES THE NARROWEST DIMENSION BETWEEN SIDES OF FORMS. MAXIMUM AGGREGATE SIZE FOR SLABS ON GRADE SHALL BE 1/3 TIMES THE SLAB THICKNESS.

SLUMP REQUIRED FOR PROPER PLACEMENT SHALL BE DETERMINED BY CONTRACTOR AND SUPPLIER, AND INCLUDED IN MIX DESIGN SUBMITTALS. FIELD MEASURED SLUMP SHALL CONFORM TO SUBMITTED CONCRETE MIX DESIGN. SLUMP SHALL CONFORM TO ASTM C94.

EMBEDDED ITEMS: CONDUIT AND SLEEVES SHALL NOT BE EMBEDDED IN OR PASS THROUGH CONCRETE WITHOUT APPROVAL. ALUMINUM ITEMS SHALL NOT BE EMBEDDED IN CONCRETE. SUBMIT CONDUIT LAYOUTS AND EMBEDDED ITEM PLANS FOR REVIEW PRIOR TO PLACING CONCRETE

CONSTRUCTION JOINTS IN WALLS SHALL BE KEYED IN ACCORDANCE WITH TYPICAL CONSTRUCTION JOINT DETAILS SHOWN ON DRAWINGS OR, AT CONTRACTOR'S OPTION, SHALL BE AN INTENTIONALLY ROUGHENED CONSTRUCTION JOINT DEFINED BY THE FOLLOWING:

- 1. SUFFACE OF JOINT SHALL BE SAND BLASTED OR ROUGHENED WITH A CHIPPING HAMMER TO EXPOSE AGGREGATE EMBEDDED IN PREVIOUS POUR.
- 2. EXPOSED AGGREGATE SHALL BE CLEANED AND LAITANCE REMOVED. 3. JOINT SURFACE SHALL BE CLEANED AND LAITANCE REMOVED.
- 4. JOINT SHALL BE WETTED AND STANDING WATER REMOVED IMMEDIATELY BEFORE NEW CONCRETE IS PLACED.

CONSTRUCTION JOINTS WHEN REQUIRED SHALL BE IN ACCORDANCE WITH ACI 6.4. SUBMIT JOINT LAYOUT PLAN FOR REVIEW PRIOR TO PLACING CONCRETE.

#### CONCRETE REINFORCEMENT

REFERENCE STANDARDS: CONCRETE REINFORCEMENT SHALL CONFORM TO ALL REQUIREMENTS OF THE FOLLOWING CODES, SPECIFICATIONS, AND STANDARDS, EXCEPT AS MODIFIED BELOW:

ACI 301 ACI SP-66 ACI 318 CRSI CRSI

#### MATERIALS:

WRI

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DEFORMED BARS SMOOTH WELDED WIRE BAR SUPPORTS

ASTM A615, GRADE 60 ASTM A185 65 KSI YIELD CONFORM TO CHAPTER 3, CRSI MSP-1

REINFORCING STEEL SHALL BE PLACED AND SUPPORTED IN ACCORDANCE WITH CRSI MSP-1 REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI SP-66. NO BENDING OR STRAIGHTENING OF REINFORCEMENT WILL BE PERMITTED AFTER PARTIAL EMBEDMENT IN CONCRETE.

LAP ALL CONTINUOUS REINFORCEMENT IN ACCORDANCE WITH THE SECTIONS AND DETAILS. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 1 CROSS WIRE SPACING + 2" OR 8" WHICHEVER IS GREATER

AR SIZE	#4	#5
L	30"	37.5"
Lp 18"	22.5"	

WELDING OR TACK WELDING OF REINFORCING BARS TO OTHER BARS OR TO PLATES, ANGELS, ETC IS PROHIBITED, EXCEPT WHERE SPECIFICALLY APPROVED, WHERE WELDING IS APPROVED, IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING E9018 ELECTRODES. WELDING PROCEDURES SHALL COMPLY WITH AWS-D1.4.

CONCRETE COVER: UNLESS NOTED OTHERWISE, MINIMUM COVER FOR REINFORCING SHALL

ELEVATED SLABS	3/4" (1" AT FIRE-RESISTIVE RATING   2 HOURS
SLABS ON GRADE	2" BOTTOM
NTERIOR WALL FACES	3/4"
EXPOSED FORMED WALL FACES	1 1/2" (#5 AND SMALLER), 2" (#6 & LARGER)
OOTINGS	3" (2" TOP AND FORMED SIDES)
BEAMS, COLUMNS	1 1/2" (TO TIES, SPIRALS, STIRRUPS)

FIBROUS REINFORCEMENT: POLYPROPYLENE FIBROUS REINFORCEMENT ("FIBERMESH", "GRACE FIBERS", OR APPROVED EQUAL) SHALL BE USED WHERE NOTED ON THE DRAWINGS. SUBMIT PROPOSED PRODUCT DATA AND SPECIFICATIONS FOR REVIEW. ADD FIBERS TO CONCRETE MIX AND FINISH IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS COMPLY WITH ASTM C116, TYPE III, PERFORMANCE LEVEL 1. MINIMUM APPLICATION RATE SHALL BE 1.5 LB/CY.

#### ANCHORAGE

POST-INSTALLED ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND NOTED ICC-ES REPORTS. SUBSTITUTES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH ICC-ES REPORTS INDICATING FOUNDALENT OR GREATER LOAD CAPACITIES. ALLOWABLE EPOXY PRODUCTS INCLUDE HILTI HY-150 OR APPROVED EQUAL

NO REINFORCING BARS SHALL BE CUT TO INSTALL ANCHORS. ALL DEFECTIVE ANCHOR HOLES SHALL BE GROUTED WITH EPOXY ADHESIVE AND A NEW HOLE DRILLED A MINIMUM OF 3 BOLT DIAMETERS AWAY

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