GENERAL NOTES:

1. REFERENCE ARCHITECTURAL PLANS FOR DIMENSIONS NOT SHOWN. REFERENCE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL PLANS FOR SIZES AND LOCATIONS OF WALL AND SLAB OPENINGS, DUCTS, PIPING, CURBS, AND EQUIPMENT PADS. IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS, SPECIFICATIONS, OR NOTES ON THE DRAWINGS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION.
2. EXISTING DIMENSIONS AND CONDITIONS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL EXISTING CONSTRUCTION AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION OR FABRICATION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF DEVIATIONS OR CHANGES ARE REQUIRED TO THE CONTRACT DOCUMENTS OR APPROVED SHOP DRAWINGS DUE TO INTERFERENCES, FABRICATION ERRORS, OR OTHER CAUSES.
4. THE STRUCTURE IS SELF-SUPPORTING AND STABLE AFTER THE ENTIRE BUILDING IS COMPLETELY CONSTRUCTED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION PROCEDURES AND SEQUENCING DURING CONSTRUCTION AND ERECTION TO PROVIDE AND ENSURE LOCAL AND OVERALL STABILITY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION AND ERECTION. THE CONTRACTOR SHALL RETAIN A LICENSED STRUCTURAL ENGINEER TO DESIGN TEMPORARY BRACING/SHORING AND DETERMINE WHERE THE TEMPORARY BRACING/SHORING IS NEEDED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTION PROCEDURES, SEQUENCING AND FOR COMPLYING WITH ALL APPLICABLE SAFETY REGULATIONS DURING THE WORK.
6. ONE ELECTRONIC COPY OR TWO SETS OF HARD COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER. ONE HARD COPY WILL BE RETURNED TO THE CONTRACTOR AND ONE HARD COPY WILL BE RETAINED BY THE ENGINEER.
7. REFERENCE THE PROJECT SPECIFICATIONS FOR MATERIAL, WORKMANSHIP AND ADDITIONAL INFORMATION NOT COVERED IN THESE NOTES (WHERE APPLICABLE)

FOUNDATION NOTES:

1. FOUNDATIONS HAVE BEEN DESIGNED USING A PRESUMED ALLOWABLE BEARING PRESSURE PER TABLE 1806.2 OF THE INTERNATIONAL BUILDING CODE BASED ON TYPICAL SOILS FOUND IN THIS AREA. IF CLAY, MUD, ORGANIC SILT, PEAT OR UNPREPARED FILL IS FOUND DURING CONSTRUCTION, NOTIFY ENGINEER IMMEDIATELY, AS THE ALLOWABLE LOADS USED IN DESIGN WILL NEED TO BE VERIFIED BY A GEOTECHNICAL ENGINEER. CASCO BAY ENGINEERING RECOMMENDS PROCURING A GEOTECHNICAL ENGINEER TO VERIFY EXISTING SOIL CONDITIONS.
2. ALLOWABLE SOIL BEARING CAPACITY USED IN DESIGN = 2,000 PSF
3. MINIMUM FROST DEPTH COVER = 4'-6" FOR EXTERIOR FOOTINGS BELOW FINAL EXTERIOR GRADE.
4. EXCAVATION, BACKFILL, COMPACTION, GRADATION REQUIREMENTS, FOUNDATION DRAINAGE AND PERMANENT DEWATERING REQUIREMENTS SHALL BE PROVIDED BY A GEOTECHNICAL ENGINEER.
5. CONCRETE SLABS ON GRADE SHALL BE CONSTRUCTED ON A MINIMUM 12" THICK LAYER OF PROPERLY COMPACTED STRUCTURAL FILL, UNLESS OTHERWISE DIRECTED BY A GEOTECHNICAL ENGINEER.
6. FOUNDATIONS SHALL BEAR ON UNDISTURBED NATIVE SOIL, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL AND STRUCTURAL ENGINEER IF ANY UNSUITABLE SOILS ARE ENCOUNTERED PRIOR TO PLACING FOUNDATIONS.
7. FOUNDATION WALLS AND SLAB-ON-GRADES SHALL REACH THEIR FULL 28 DAY COMPRESSIVE STRENGTH PRIOR TO BACKFILLING. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING/BRACING FOR WALLS WHEN BACKFILL IS PLACED PRIOR TO CONCRETE ACHIEVING ITS FULL 28 DAY STRENGTH. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING/BRACING FOR WALLS AND OTHER STRUCTURAL ELEMENTS PRIOR TO INSTALLATION OF PERMANENT BRACING/FLOOR/STRUCTURE.
8. PROTECT FOUNDATIONS FROM FROST AND KEEP BOTTOM OF TRENCH DRY DURING CONSTRUCTION. IF GROUNDWATER IS ENCOUNTERED NEAR OR ABOVE THE BASE OF THE FOOTINGS, EXCAVATIONS SHALL BE DEWATERED DURING CONSTRUCTION. SURFACE WATER SHALL BE DIVERTED AWAY FROM EXCAVATIONS.
9. DO NOT UNDERMINE EXISTING FOUNDATIONS OF ADJACENT STRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SHORING, BRACING AND UNDERPINNING OF EXISTING STRUCTURES DURING EXCAVATION, BACKFILLING, AND CONSTRUCTION. CONTRACTOR SHALL SLOPE EXCAVATIONS TO ACHIEVE SOIL STABILITY.

CONCRETE NOTES:

1. ALL WORK SHALL CONFORM TO IBC 2009 REFERENCED EDITIONS OF "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301).
2. REQUIRED CONCRETE PARAMETERS ARE AS FOLLOWS:

LOCATION	MAX W/C RATIO	f'c	AIR-ENTRAINMENT
ELEVATED SLABS	.52	3,000 PSI	2% ± 11/2%
INT. SLAB-ON-GRADE	.45	4,500 PSI	2% ± 11/2%

WHERE: W/C = WATER TO CEMENT RATIO AND
f'c = COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS

USE PORTLAND CEMENT TYPE II, IN CONFORMANCE WITH ASTM 150
AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C 260
ADMIXTURES SHALL CONFORM TO ASTM C 494
FLY ASH USED AS ADMIXTURES SHALL CONFORM TO ASTM C 618

3. MAXIMUM AGGREGATE SIZE SHALL BE 3/4", IN CONFORMANCE WITH ASTM C33.
4. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE IS NOT PERMITTED.
5. MAXIMUM SLUMP AFTER THE ADDITION OF A WATER-REDUCING ADMIXTURE IS 6 INCHES.
6. CONTRACTOR SHALL NOT PLACE CONCRETE ON FROZEN GROUND OR IN WATER. ADEQUATE EQUIPMENT SHALL BE PROVIDED FOR HEATING CONCRETE MATERIALS AND PROTECTING CONCRETE DURING NEAR-FREEZING OR FREEZING WEATHER. REFERENCE ACI 306, AS NOTED ABOVE, FOR RECOMMENDATIONS FOR COLD WEATHER CONCRETING.
7. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS.
8. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185 AND BE PROVIDED IN FLAT SHEETS. PROVIDE ADEQUATE SUPPORT FOR WWF TO ENSURE PROPER LOCATION WITHIN SLAB DURING CONCRETE PLACEMENT.
9. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:
   A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH — 3 INCHES
   B. FORMED CONCRETE IN CONTACT WITH EARTH OR EXPOSED TO WEATHER — 2 INCHES
   C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER IN SLABS & WALLS — 11/2 INCHES
10. WELDING OF REINFORCEMENT IS NOT PERMITTED.
11. PROVIDE CONTINUOUS REINFORCEMENT AT ALL CORNERS AND INTERSECTIONS, SEE TYPICAL FOUNDATION WALL DETAILS ON FOUNDATION DETAILS SHEET.
12. REINFORCING BARS AND ALL EMBEDDED ITEMS, INCLUDING ANCHOR BOLTS, MUST BE ACCURATELY PLACED AND ADEQUATELY SECURED BEFORE CONCRETE IS PLACED. "WET SETTING" OF COLUMN ANCHOR BOLTS INTO CONCRETE IS STRICTLY PROHIBITED.
13. UNLESS NOTED ON DRAWINGS, FOLLOW ACI STANDARDS FOR LAP SPLICE LENGTHS OF REINFORCING BARS.

REBAR LAP SPLICE TABLE

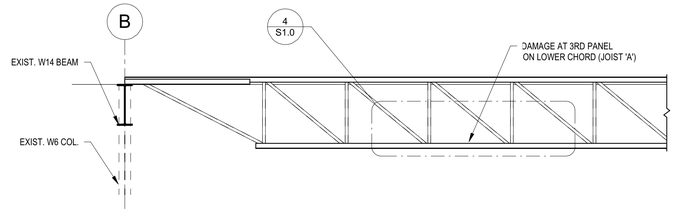
BAR SIZE	#3	#4	#5	#6	#7	#8	#9
3000 PSI CONCRETE	18"	24"	30"	36"	48"	56"	64"
4500 PSI CONCRETE	16"	20"	24"	30"	40"	48"	54"

STRUCTURAL STEEL NOTES:

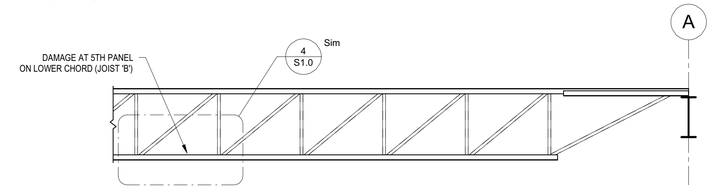
1. STRUCTURAL STEEL WORK SHALL CONFORM TO IC 2009 REFERENCED EDITIONS OF AISC "SPECIFICATION FOR THE DESIGN FABRICATIONS, AND ERECTION OF STRUCTURAL STEEL" AND THE "CODE OF STANDARD PRACTICE"
2. STRUCTURAL STEEL MEMBERS SHALL BE IN CONFORMANCE WITH THE FOLLOWING:

WIDE FLANGE SHAPES AND TEES	ASTM A992
ANGLES, PLATES, CHANNELS	ASTM A36, Fy=36 KSI (U.N.O.)
SQUARE/RECTANGULAR HSS	ASTM A500, GRADE B, Fy=46 KSI
ROUND HSS	ASTM A500, GRADE B, Fy=42 KSI
STEEL PIPE	ASTM A53, TYPE E OR S, GRADE B, Fy=35 KSI

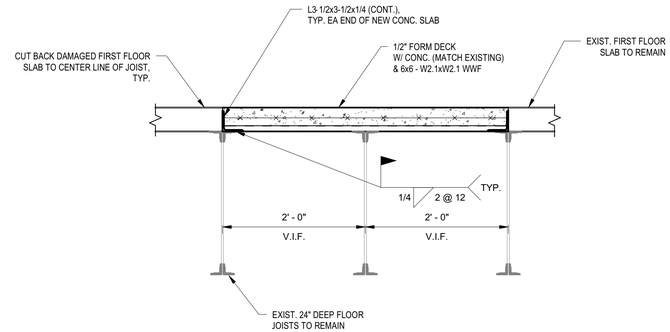
3. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO COMMENCING FABRICATION.
4. CONTRACTOR IS RESPONSIBLE FOR DESIGN OF CONNECTIONS NOT ALREADY DETAILED ON STRUCTURAL DRAWINGS. CONTRACTOR SHALL SUBMIT DESIGN STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE WHERE PROJECT IS LOCATED PRIOR TO COMMENCING FABRICATION.
5. WELDING SHALL CONFORM TO AWS D1.1. USE LOW-HYDROGEN SMAW ELECTRODES WITH MINIMUM TENSILE STRENGTH OF 70 KSI.
6. ALL STRUCTURAL STEEL NOT EXPOSED TO WEATHER SHALL RECEIVE ONE COAT OF STANDARD SHOP PRIMER, U.N.O.



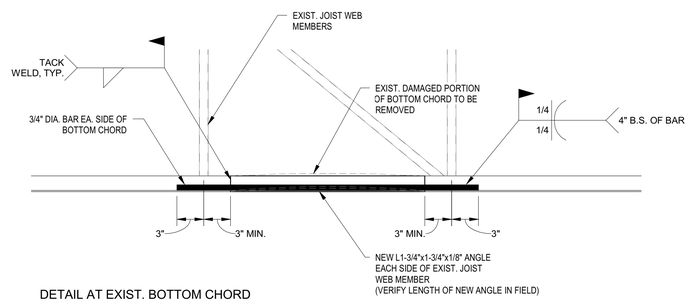
1 DAMAGED JOIST 'A'
1/2" = 1'-0"



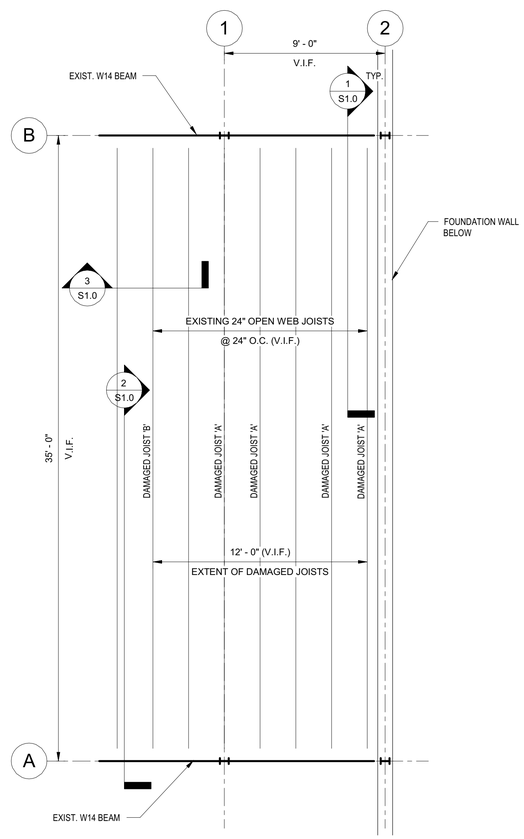
2 DAMAGED JOIST 'B'
1/2" = 1'-0"



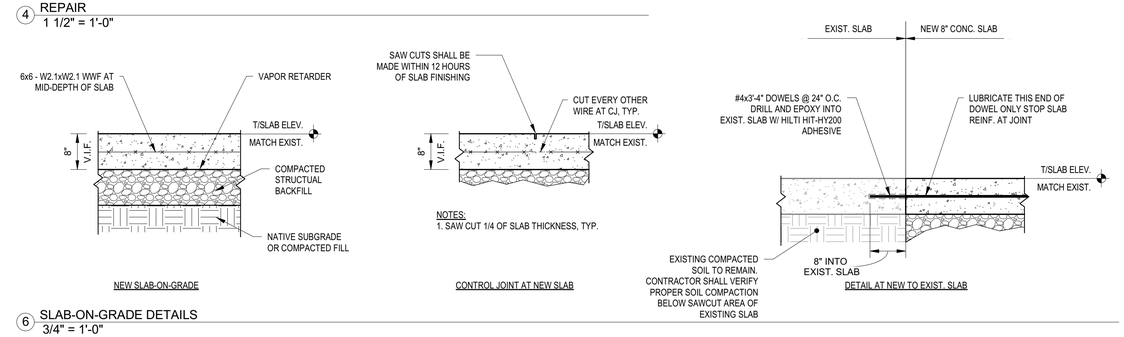
3 SECTION AT FIRST FLOOR SLAB REPAIR
1" = 1'-0"



4 DETAIL AT EXIST. BOTTOM CHORD REPAIR
1 1/2" = 1'-0"



5 FIRST FLOOR FRAMING PLAN
1/4" = 1'-0"



6 SLAB-ON-GRADE DETAILS
3/4" = 1'-0"

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ISSUED

Revision Number	Revision Description	Issued by	Revision Date
1	ISSUED FOR CONSTRUCTION		09-21-17

SHEET TITLE:

PROJECT NOTES, PLANS, AND DETAILS

DESIGNED BY:	TD
DRAWN BY:	ZP
DATE:	09-21-17
PROJECT NUMBER:	16-220

S1.0