SUBMIT OFFER TO: Via Bonfire Web Portal UNIVERSITY OF CENTRAL FLORIDA Phone: (407) 823-2661 <u>www.procurement.ucf.edu</u> https://ucfprocurement.bonfirehub.com/opportunities/78019 Your submission must be uploaded, submitted, and finalized prior to the closing time on December 16, 2022 at 3:00pm EST. We strongly recommend that you give yourself sufficient time and at least ONE (1) day before the closing time to begin the uploading process and to finalize your submission. See Appendix 4 for submittal instructions.		University of Central Florida INVITATION TO NEGOTIATE Contractual Services Acknowledgement Form			
Page 1 of 62 F	Pages	OFFE	RS WILL BE OPENED December	16, 2022 at 3:00pm EST	ITN NO. 2022-06TCSA
		and m	hay not be withdrawn within 120 days	s after such date and time.	
UNIVERSITY ADVERTISING DATE: ITN TITLE: Optical Laboratory		at Arecido Observatory			
FEDERAL EMP	PLOYER IDENTI	FICATI	ON NUMBER		
SUPPLIER NAME		REASON FOR NO OFFER:			
SUPPLIER MAILING ADDRESS					
CITY - STATE - ZIP CODE		POSTING OF PROPOSAL	_ TABULATIONS		
AREA CODE	TELEPHONE	NUMBE	R	Proposal tabulations with intended award(s) will be posted for review by interested parties on the Procurement	
	FAX:			Services solicitation webpage and will remain posted for a period of 72 hours. Failure to file a protest in accordance with BOC regulation 18,002 or failure to past the band of	
EMAIL:		other security in accordance with BOG regulation 18.003 shall constitute a waiver of protest proceedings.			

Government Classifications Check all that apply

- African American
- American Woman
- Asian-Hawaiian
- Government Agency
 MBE Federal
- HispanicNative American

- Non-Minority
 PRIDE
- □ Non-Profit Organization □
 - Small Business Federal
 Small Business State

GENERAL CONDITIONS

1. SEALED OFFERS: All offer sheets and this form must be executed and submitted as specified in Section 2.6. Offer prices not submitted on any attached price sheets when required shall be rejected. All offers are subject to the terms and conditions specified herein. Those which do not comply with these terms and conditions are either automatically rejected with respect to non-compliance with non-negotiable terms and conditions or may be rejected, at UCF's sole discretion, with respect to any other terms and conditions.

2. EXECUTION OF OFFERS: Offers must contain a manual signature of the representative authorized to legally bind the Respondent to the provisions herein. Offers must be typed or printed in ink. Use of erasable ink is not permitted. All corrections to prices made by the Supplier are to be initialed.

3. NO OFFER SUBMITTED: If not submitting an offer, respond by returning only this offer acknowledgment form, marking it "NO OFFER," and explaining the reason in the space provided above. Failure to respond

I certify that this offer is made without prior understanding, agreement, or connection with any corporation, firm or person submitting an offer for the same materials, supplies, or equipment and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this offer and certify that I am authorized to sign this offer for the Supplier and that the Supplier is in compliance with all requirements of the Invitation To Negotiate, including but not limited to, certification requirements. In submitting an offer to an agency for the State of Florida, the Supplier offers and agrees that if the offer is accepted, the Supplier will convey, sell, assign or transfer to the State of Florida all rights, title and interest in and to all causes of action it may now or hereafter acquire under the Anti-trust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the state of Florida. At the State's discretion, such assignment shall be made and become effective at the time the procurement agency tenders final payment to the Supplier.

without justification may be cause for removal of the company's name from the solicitation mailing list. NOTE: To qualify as a respondent, the Supplier must submit a "NO OFFER," and it must be received no later than the stated offer opening date and hour.

AUTHORIZED SIGNATURE (MANUAL)

AUTHORIZED SIGNATURE (TYPED), TITLE

4. **PRICES, TERMS AND PAYMENT**: Firm prices shall be negotiated and include all services rendered to the purchaser.

(a) **DISCOUNTS:** Cash discount for prompt payment shall not be considered in determining the lowest net cost for offer evaluation purposes.

(b) MISTAKES: Proposers are expected to examine the conditions, scope of work, offer prices, extensions, and all instructions pertaining to the services involved. Failure to do so will be at the Proposer's risk.

(c) INVOICING AND PAYMENT: All Suppliers must have on file a properly executed W-9 form with their Federal Employer Identification Number prior to payment processing.

Suppliers shall submit properly certified original invoices to:

Division of Finance 12424 Research Parkway, Suite 300 Orlando, Florida 32826-3249

Invoices for payment shall be submitted in sufficient detail for a proper pre-audit and post audit. Prices on the invoices shall be in accordance with the price stipulated in the contract at the time the order is placed. Invoices shall reference the applicable contract and/or purchase order numbers. Invoices for any travel expenses shall be submitted in accordance with the State of Florida travel rates at or below those specified in Section 112.061, Florida Statutes and applicable UCF policies. Travel reimbursement must be made using the UCF Voucher for Reimbursement of Traveling Expenses available at https://fa.ucf.edu/travelpayables-forms/.

Final payment shall not be made until after the contract is complete unless the University has agreed otherwise.

Interest Penalties: Supplier interest penalty payment requests will be reviewed by the UCF vendor ombudsman whose decision will be final.

Vendor Ombudsman: A vendor ombudsman position has been established within the UCF Division of Finance. It is the duty of this individual to act as an advocate for Suppliers who may be experiencing problems in obtaining timely payments(s) from the University of Central Florida. The vendor ombudsman can be contacted at (407) 882-1082 or by mail at the address in paragraph 4(d) above.

The ombudsman shall review the circumstances surrounding non-payment to determine if an interest payment is due, the amount of the payment; and, shall ensure timely processing and submission of the payment request in accordance with University policy.



UNIVERSITY OF CENTRAL FLORIDA

INVITATION TO NEGOTIATE (ITN) NUMBER ITN 2022-06TCSA

FOR

OPTICAL LABORATORY AT ARECIBO OBSERVATORY

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1.0 INTRODUCTION

1.1 Statement of Objective

The objective of this Invitation to Negotiate (ITN) is to enable the University of Central Florida (UCF) to enter into an agreement with a Supplier to provide general contracting services for the development of a concrete building and blocks within the Arecibo Observatory (AO), located in Arecibo, Puerto Rico, including, but not limited to, the partial demolition and disposition of the material of the existing structure that is built in metal on a concrete base and that can extend beyond the current footprint of the original structure.

In the demolition of the building, the floor will be left in concrete and will be built on it. The extension of the building will be on natural land where there is a section of an asphalt road, where rock could be found. This area already has the corresponding utilities for water, electricity, toilets and communications. See Appendix V for building photos.

Contractor is expected to demolish the existing structure shown in Appendix V (Building Photos) and rebuild based on the draft plans shown in Appendix VI, any changes must be approved by program team for budgetary or schedule purposes.

The Successful Respondent, if any, will enter into a contract with UCF that provides for the performance of all terms and conditions set forth in this ITN, unless UCF has agreed to accept or negotiate certain terms and conditions, as described in Section 2.3. Non-negotiable terms and conditions (as indicated in Appendix I) must always be performed by the Respondent.

1.2 Contract Award

UCF intends to award a contract or contracts resulting from this solicitation to the responsible Respondent(s) whose offer(s) represent the best interest to UCF, after evaluation in accordance with the criteria in this solicitation. The Contract will include this solicitation document and the Successful Respondent's proposal and all the terms and conditions found in any resulting contract. A sample of UCF's standard terms and conditions can be viewed at <u>https://procurement.ucf.edu</u>. The Contract will also incorporate any clarifications and, if negotiations are conducted, any additional terms and conditions that are negotiated.

- A. UCF may reject any or all offers if such action is in UCF's best interest.
- B. UCF reserves the right and sole discretion to reject any offer at any time on grounds that include, but are not limited to, the Respondent's offer being found to be nonresponsive, incomplete, or irregular in any way, or when the Respondent's offer is not in UCF's best interest.
- C. UCF may waive informalities and minor irregularities in offers received.
- D. UCF reserves the right to award a contract without negotiations. Therefore, the Respondent's initial offer should contain the best terms from a cost or price and technical standpoint.
- E. UCF reserves the right to conduct negotiations with the proposer(s) whose offer may be deemed in the best interest of the university.
- F. UCF reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the respondent specifies otherwise in the offer.
- G. UCF reserves the right to make multiple awards if, after considering the additional administrative costs, it is in UCF's best interest to do so.
- H. UCF is not obligated to make an award under or as a result of this solicitation.

1.3 UCF Environment

The Arecibo Observatory (AO) is a multidisciplinary research and education facility that is recognized worldwide as a leading facility in astronomy, planetary, and atmospheric and space sciences. The facility, located at Arecibo, Puerto Rico, is owned by the National Science Foundation and UCF is the lead organization currently managing the facility.

AO provides high quality data obtained with a suite of instruments at Arecibo for research in the astronomy, planetary science and atmospheric and space science. The facility is being used by over 300 researchers spread over 250 institutes worldwide. AO has a strong, diverse scientific and engineering staff who are leaders in their respective area of expertise and provide help in maintaining the prime operation of the facility.

AO has a strong STEAM education and outreach components, facilitated through the world renowned science and visitor center. About 50 students from high school to graduate level are annually trained through the wide range of programs run by the science and visitor center.

Additional information available at http://www.ucf.edu/about_ucf

2.0 GENERAL CONDITIONS

2.1 Authorized UCF Representative/Public Notices/UCF Discretion

The Respondent's response to this ITN and any communications and/or inquiries by the Respondent during this ITN process shall be submitted in writing to the individual and address stated below. **Inquiries are preferred via email**. UCF will consider only those communications and/or inquiries submitted in writing to the individual below on or before the date and time specified in Section 2.2, "Calendar of Events." To the extent UCF determines, in its sole discretion, to respond to any communications and/or inquiries, such response will be made in writing in the form of an addendum. UCF shall not accept or consider any written or other communications and/or inquiries (except an offer) made between the date of this deadline and the posting of an award, if any, under this ITN.

Trinh Nguyen Procurement Services Department 12424 Research Parkway, Suite 300 Orlando, FL 32816-0975 trinh.nguyen@ucf.edu

Advance notice of public meetings regarding this ITN, if UCF determines at its sole discretion whether any such meetings will be held, will be in writing and posted on the UCF Procurement Services website. Additionally, any portion of a meeting at which a negotiation with a Supplier is conducted pursuant to a competitive solicitation at which a Supplier makes an oral presentation or at which a Supplier answers questions is exempt from s. 286.011 and s. 24(b), Art. I of the State Constitution. This also includes any portion of a team meeting at which negotiation strategies are discussed. All such meetings shall be conducted in accordance with Chapter 286 of the Florida Statutes. UCF also reserves the right and sole discretion to REJECT any offer at any time on grounds that include, without limitation, either that an offer is nonresponsive to the ITN or is incomplete or irregular in any way, or that a responsive offer is not in UCF's best interest.

2.2 Approximate Calendar of Events

Listed below are the dates and times by which stated actions should be taken or completed. If UCF determines, in its sole discretion, that it is necessary to change any of these dates and times, it may issue an Addendum to this ITN. All listed times are local time in Orlando, Florida.

Date/Time	Action
11/18/22	Invitation To Negotiate advertised
12/02/22	Last day to submit communications and/or inquiries in writing only; preferably
	by email to <u>trinh.nguyen@ucf.edu</u> (buyer)
12/07/22	Responses to inquiries and Addenda
12/16/22	Deadline for Offer submission at 3:00 p.m. (ITN opening)

2.3 Respondent Communications and/or Inquiries

- A. UCF is not liable for interpretations/misinterpretations or other errors or omissions made by the Respondent in responding to this ITN. The Respondent shall examine this ITN to determine if UCF's conditions and requirements are clearly stated. If, after examination of the various conditions and requirements of this ITN, the Respondent believes there are any conditions or requirements which remain unclear or which restrict competition, the Respondent may request, in writing, that UCF clarify or change condition(s) or requirement(s) specified by the Respondent. The Respondent is to provide the Section(s), Subsection(s), and Paragraph(s) that identify the conditions or requirements guestioned by the Respondent. The Respondent also is to provide detailed justification for a change and must recommend specific written changes to the specified condition(s) or requirement(s). Requests for changes to this ITN must be received by UCF not later than the date shown in Section 2.2., entitled "Calendar of Events," for the submittal of written communications and/or inquiries. UCF shall not make any changes to any of the non-negotiable terms and conditions. The non-negotiable terms and conditions are indicated on Appendix I. Requests for changes to the non-negotiable provisions of this ITN shall automatically be rejected. Requests for changes to anything other than the non-negotiable provisions of this ITN may or may not be accepted by UCF and may or may not be negotiated by UCF, all at UCF's sole discretion.
- B. Any Respondent disagreeing with any negotiable terms and conditions set forth in this ITN is to indicate in Appendix I, Terms and Conditions Supplemental Offer Sheet, the specific ITN section(s) the Respondent disagrees with and is to provide a clear and detailed reason for the disagreement and a solution to the disagreement in his/her offer. UCF may or may not accept or agree to negotiate any of the terms and conditions that Respondents indicated they disagreed with, all at UCF's sole discretion. The indication of disagreement with any non-negotiable terms and conditions may be automatically rejected.
- C. Failure to submit Appendix I and clearly indicate which terms and conditions the Respondent agrees and disagrees with (i.e., failure to initial the designated sections set forth in Appendix I, indicating that the Respondent has either understood and agreed to or disagreed with each particular section listed on Appendix I) and/or clear and detailed reasons for the disagreement, with the offer, may be grounds for rejection of that offer, at UCF's sole discretion. UCF may or may not accept and/or negotiate any such terms and conditions that the Respondent disagreed with. If UCF decides not to accept any of the terms and conditions the Respondent disagreed with, UCF shall have the right, at UCF's sole discretion, to exercise its right to reject the tentative awardee's offer and proceed to the next highest ranked respondent. As noted above, the disagreement with any non-negotiable terms and conditions by the Respondent may be automatically rejected.

- D. UCF shall at its sole discretion determine what requested changes to this ITN and the resulting agreement are acceptable. Non-negotiable terms and conditions, as indicated in Appendix I, will always stay as they are, and any requested changes to such clauses may automatically be rejected. UCF shall issue an Addendum reflecting the acceptable changes to this ITN, if any, which shall be sent to all known Respondents as specified in Section 2.1.
- E. Any communications, questions and/or inquiries from the Respondent concerning this ITN in any way are to be submitted in writing to the individual identified in Section 2.1 not later than **December 2, 2022 at 3:00** p.m. Eastern Standard Time as set forth in the Calendar of Events. Written inquiries are to be legible and concise and are to clearly identify the Respondent who is submitting the inquiry. Questions directed to or any responses received from any other department, person, agent, or representative of the university will not be considered valid or binding.

2.4 Respondent Conference and Site Visit

N/A

2.5 Written Addenda

Written Addenda to this ITN along with an Addenda Acknowledgment Form will be posted on the Procurement Services website. The Addenda Acknowledgment Form is to be signed by an authorized representative of the Respondent, dated and returned with the offer. All Respondents, including known interested Respondents, are solely responsible for checking the Procurement Services website periodically to verify whether any such Addenda and forms were issued.

2.6 Offer Due/Proposal Opening Date

Proposals will be received and opened on **December 16, 2022** at **3:00 p.m. EST** via UCF's Bonfire Web Portal. For additional information, please refer to Appendix IV: Submission Instructions for Suppliers. UCF shall in no way be responsible for or accept any proposals not uploaded prior to the closing date and time. The Respondent's response to this ITN shall be prepared in accordance with Section 3.0 "Required Offer Format." Telephone, facsimile, telegraphic, and electronic mail offers, negotiations, and/or amendments to original offers shall not be accepted.

2.7 Section Not Used

2.8 Evaluation Criteria and Selection Process

A. UCF reserves the right to conduct negotiations if the decision maker (UCF Board of Trustees, Vice President/Dean or his/her written designee(s)) with the advice and consent of Procurement Services determines negotiations to be in the best interest of the university. Any portion of a meeting at which a negotiation with a Supplier is conducted pursuant to a competitive solicitation is exempt from s. 286.011 and s. 24(b), Art. I of the State Constitution. Discussions with Suppliers after receipt of an offer do not constitute a rejection, counteroffer or acceptance by UCF.

- B. UCF reserves the right to conduct negotiations with the proposer(s) whose offer(s) may represent the best interest of the university. The following is a short overview of some of the decision maker's responsibilities during the solicitation and award process:
 - 1. Establish a group of evaluators tailored for the particular acquisition that includes appropriate expertise to ensure a comprehensive evaluation of offers. The evaluators will review all responsive offers;
 - 2. Develop the acquisition plan (strategy to award with or without negotiations) after review of offers;
 - 3. Ensure consistency among the solicitation requirements, notices to proposers, offer preparation instructions, evaluation criteria, solicitation provisions or contract clauses, and data requirements;
 - 4. Ensure that offers are evaluated based solely on the evaluation criteria contained in the solicitation;
 - 5. Consider the recommendations of the evaluators or other boards (if any);
 - 6. Select the proposer(s) whose offer(s) are the best value to the university;
 - 7. Select a negotiation team (only if award is not made outright). This can be the evaluators or any other individual(s) the decision maker deems necessary for the acquisition. The negotiation team will negotiate with those proposer(s) determined by the decision maker to have submitted a proposal that may be beneficial to the university.
- C. All offers shall be initially evaluated based on weighted criteria set forth in the table below by the group of evaluators. The group of evaluators shall consist of three (3) or more individuals who have expertise regarding, or some experience with, the subject matter of the ITN or, if none, then individuals who could be characterized as recipients, beneficiaries, or users of the ITN's subject matter. The Vice President/Dean or his/her written designee(s) will appoint the evaluators. Evaluators, at the discretion of the Vice President/Dean or his/her written designee(s), shall have the option to meet as a group any time during formulation of the specifications and solicitation stage to discuss and correct any concerns and ambiguities of the solicitation and specifications. After offer opening, <u>each evaluator shall function independently of all other persons including, without limitations, the other evaluators</u>, and, throughout the entire evaluation process, <u>each evaluator is strictly prohibited from meeting with or otherwise discussing this ITN and any aspect thereof including, without limitation, the offers and their content with any other individual whatsoever. Each evaluator shall conduct an independent evaluation of the offers in accordance with the weighted evaluation criteria set forth in the following Table A:</u>

Evaluation Criteria	Max Points
1. EXPERIENCE AND QUALIFICATIONS OF PROPOSER	15
2. PROJECT STAFF QUALIFICATIONS/EXPERIENCE	15
3. OVERALL RESPONSIVENESS OF PROPOSAL TO SATISFY SCOPE/ PROJECT APPROACH	30
4. OVERALL PRICING	30
5. CONFORMANCE TO ITN'S PREFERRED CONDITIONS AND REQUIREMENTS (FAILURE TO CONFORM TO ITN'S MANDATORY CONDITIONS AND REQUIREMENTS	10

Table A – Evaluation of Responses

MAY RESULT IN REJECTION OF PROPOSAL)	
Evaluation of Responses Point Total	100

Each evaluator must independently score each offer in UCF's Bonfire Web Portal in accordance with the criteria herein. Each evaluator is to enter comments, if any, regarding the offer and submit his/her evaluation via Bonfire. The assigned **Procurement Services Professional identified in section 2.1** will forward a summary to the **Decision Maker** or his/her designee. At the time of such delivery to the **Procurement Services Professional**, the evaluator shall cease to participate further in this ITN process unless expressly requested otherwise by **Decision Maker**.

The **Decision Maker** shall review, in the manner and to the extent he/she deems reasonable under the circumstances, the ITN, the offers, and evaluators' scoring forms. While not bound to them, the **Decision Maker** may give deference to the scoring forms. Based on what the **Decision Maker** determines is in the best interest of UCF, the **Decision Maker** will then make the final decision whether or not to recommend the award of a contract to a Respondent to this ITN, negotiate with the respondent(s) whose offer(s) may be beneficial to the university, or cancel the ITN.

The **Decision Maker** may, at any time during this ITN process, assign one (1) or more individuals to assist and advise the **Decision Maker** during his/her decision-making process. UCF is not obligated to make an award under or as a result of this ITN or to award such contract, if any, on the basis of lowest cost or highest commission offered. UCF reserves the right to award such contract, if any, to the Respondent(s) submitting an offer that UCF, at its sole discretion, determines is in UCF's best interest.

D. **Decision Maker** shall obtain approval from the University Board of Trustees to award a contract exceeding the President's Delegation of Authority, per Policy BOT-4.

2.9 Posting of Recommended Selection

An intent to award will be posted within a reasonable time after the Procurement Services Department receives the decision maker's recommended award decision. The recommendation to award a contract, if any, to a Respondent(s) to this ITN will be posted for review by interested parties on the Procurement Services solicitations webpage and will remain posted for a period of seventy-two (72) hours.

- A. If the Respondent desires to protest the recommendation to award a contract, if any, the Respondent must file with UCF:
 - 1. A written notice of intent to protest within seventy-two (72) hours of the posting of the recommended award. <u>UCF shall not extend or waive this time requirement for any reason</u> whatsoever.
 - 2. A formal written protest by petition within ten (10) calendar days of the date on which the notice of intent to protest is filed. <u>UCF shall not extend or waive this time requirement for any reason whatsoever</u>.

- B. Failure to timely file a protest or failure to timely deliver the required bond or other security in accordance with the Board of Governors' Regulations 18.002 and 18.003 shall constitute a waiver of protest proceedings.
 - A formal written protest by petition must be accompanied by a Protest Bond payable to UCF in the amount equal to 10% of the estimated value of the protestor's bid or proposal; 10% of the estimated expenditure during the contract term; \$10,000; or whichever is less. The form of the Protest Bond shall be a cashier's check, bank official check, or money order made payable to UCF.
 - 2. In addition to all other conditions and requirements of this ITN, UCF shall not be obligated to pay for information obtained from or through the Respondent.

2.10 Offer Validity Period

Any submitted offer shall in its entirety remain a valid offer for **120** days after the offer submission date.

2.11 Disposition of Offers; Florida Public Records Law Compliance

All offers become the property of the State of Florida, and the State of Florida shall have the right to use all ideas, and/or adaptations of those ideas, contained in any offer received in response to this solicitation. Any parts of the offer or any other material(s) submitted to UCF with the offer that are copyrighted or expressly marked as "confidential," "proprietary," or "trade secret" will only be exempted from the "open records" disclosure requirements of Chapter 119, Florida Statutes if Florida law specifically recognizes these materials as exempt from disclosure. Thus, the mere designation as "confidential," "proprietary," or "trade secret" by a Supplier does not ensure that such materials will be exempt from disclosure. Respondents must identify specifically any information contained in their bid which they consider confidential and/or proprietary and which they believe to be exempt from disclosure, citing specifically the applicable exemption law. A generic notation that information is "confidential" is not sufficient. Failure to provide a detailed explanation and justification including statutory citations and specific reference to your bid detailing what provisions, if any, the Respondent believes are exempt from disclosure, may result in the entire bid being subject to disclosure in accordance with Chapter 119 of the Florida Statutes. In the absence of a specific Florida statute exempting material from the public records law, UCF is legally obligated to produce any and all public records produced or received in the course of conducting university business, irrespective of any designation by the Supplier of those same records as "confidential," "proprietary," or "trade secret." The ultimate determination of whether a Supplier's claim of "confidential," "proprietary," or "trade secret" will support an exemption from disclosure will be made by UCF or, potentially, a court. UCF's selection or rejection of an offer will not affect this provision.

2.12 Economy of Presentation

Each offer shall be prepared simply and economically, providing a straightforward, concise description of the Respondent's capabilities to satisfy the conditions and requirements of this ITN. Fancy bindings, colorful displays, and promotional material are not desired. Emphasis in each offer must be on completeness and clarity of content. To expedite the evaluation of offers, it is desired and beneficial to evaluators that Respondents follow the format and instructions contained herein. UCF is not liable for any costs incurred by any Respondent in responding to this ITN including, without limitation, costs for oral presentations requested by UCF, if any.

2.13 Restricted Discussions/Submissions

From the date of issuance of the ITN until UCF takes final agency action, the Respondent shall not discuss the offer or communicate with any UCF employees, agents, representatives, evaluators or representatives of UCF except as expressly requested by UCF in writing. Violation of this restriction may result in REJECTION of the Respondent's offer.

2.14 Verbal Instructions Procedure

No negotiations, decisions, or actions shall be initiated or executed by the Respondent as a result of any discussions with any UCF employee. Only those communications that are in writing from the authorized UCF representative identified in Section 2.1 of this ITN that have been approved in writing by UCF's President or the President's designee shall be considered as a duly authorized expression on behalf of UCF. Only communications/inquiries from the Respondent that are signed and received on a timely basis, i.e., not later than <u>3:00 p.m. EST</u>, on <u>December 02, 2022</u>, will be recognized by UCF as duly authorized expressions on behalf of the Respondent.

2.15 State Licensing Requirements

To the extent applicable, the Respondent shall have all appropriate licenses to conduct business in the State of Florida and Orange County at or prior to award of a contract resulting from this competitive solicitation. The Respondent is to provide proof of such to UCF as a condition of award of a contract. If the Respondent contemplates the use of subcontractors, the Respondent is responsible for ensuring that all subcontractors are registered with the State of Florida in accordance with Chapter 607 or 620, Florida Statutes. For additional information, the Respondent should contact the Florida Secretary of State's Office.

2.16 Parking

The Respondent/Supplier(s) shall ensure that all vehicles parked on campus for purposes relating to work resulting from an agreement shall have proper parking permits. This applies to all personal vehicles and all marked and unmarked company vehicles that will be on any University campus for one (1) day or more or on a recurring basis. All such vehicles must be registered with University's Parking Services Department, and parking permits must be purchased by the Respondent/Supplier. The Respondent's/Supplier's vehicle(s) shall observe all parking rules and regulations. Failure to obtain parking permits, properly display them, and otherwise comply with all of the University's parking rules and regulations could result in the issuance of a parking ticket and/or towing at the expense of the Respondent/Supplier or Respondent's/Supplier's employees. For additional parking information or information regarding parking fees/rates, contact the UCF Parking Services Department at (407) 823-5812 or online at https://parking.ucf.edu.

2.17 Definitions

Addendum – Written or graphic instruments issued prior to the date for opening of proposals, which modify or interpret the proposal documents by additions, deletions, corrections or clarifications.

And/Or – The word "and" shall also mean "or," and the word "or" shall also mean "and" whenever the contents or purpose so require.

Contract/Agreement – The formal bilateral agreement signed by a representative of the University and the Supplier which incorporates the requirements and conditions listed in this ITN and the Supplier's offer.

Invitation to Negotiate – A written solicitation for goods or services where factors other than price are to be considered in the award determination. These factors may include such items as Supplier experience, project plan, design features of the product(s) offered, etc. An ITN is used when the specifications cannot be identified; the end result is explained, but we want qualified companies to offer their solutions for consideration.

May, Should – Indicates something that is not mandatory, but permissible, recommended, or desirable.

Minor Irregularities – Irregularities that have no adverse effect on UCF's interest will not affect the amount of the ITN and will not give a Respondent an advantage or benefit not enjoyed by another Respondent.

Must, Shall, Will – The words "must," "shall," or "will" are equivalent and indicate mandatory requirements or conditions.

Project Manager – After contract award, a liaison from the user department will oversee the Contractor's performance and report as needed to the contract administrator. The Project Manager is **Arturo Garcia**.

Proposal – An executed offer submitted by a Respondent in response to an ITN and intended to be used as a basis for negotiations for a contract.

Purchase Order/Contract – The Purchase Order (PO) or other form or format provided to the awarded Respondent(s) that UCF uses to make a purchase under the contract term, which includes a formal written PO, electronic PO, Procurement Card (PCard), or any other means authorized by Procurement Services and that incorporates the requirements and conditions listed in the ITN.

Renewal – Contracting with the same contractor for an additional period of time after the initial contract term, provided the original terms of the agreement specify an option to renew or the renewal is determined by UCF General Counsel to be in the best interest of the university.

Respondent/Proposer/Vendor/Supplier/Contractor – Anyone who submits a timely offer in response to this ITN or their duly authorized representative. These may be used interchangeably within the ITN.

Response – The entirety of the Respondent's submitted proposal response to the ITN, including any and all supplemental information submitted.

Responsible Respondent – Respondent who has the capability in all respects to perform fully the contract requirements, and the experience, integrity, perseverance, reliability, capacity, facilities, equipment, and credit which will assure good faith performance.

Responsive Respondent – Respondent who has submitted an offer that conforms in all material respects to the solicitation.

Sole Point of Contact – The Procurement Services representative or designee to whom Respondents shall address any questions regarding the solicitation or award process. The sole point of contact shall be the arbitrator of any dispute concerning performance of the Contract.

Successful Respondent/Proposer/Supplier/Contractor – The firm or individual who is the recommended recipient of the award of a contract under this ITN (also synonymous with "Proposer" and "Supplier"). If a Respondent is a manufacturer, its certified dealers and resellers may also furnish products under the Contract; in choosing to do so, the dealers and resellers agree to honor the Contract, and the term "contractor" shall be deemed to refer to them. Unless awarded the Contract as a direct Respondent, however, dealers and resellers are not parties to the Contract, and the Respondent that certifies them shall be responsible for their actions and omissions.

UCF or University - University of Central Florida

UCF's Contract Administrator – The University's designated liaison with the Respondent. In this matter, UCF's Contract Administrator will be **Trinh Nguyen**.

2.18 Procurement Rules

- A. UCF has established for purposes of this ITN that the words "shall," "must," or "will" are equivalent in this ITN and indicate a mandatory requirement or condition, the material deviation from which could be waived by UCF. UCF will, at UCF's sole discretion, determine whether a deviation is material. Any deviation found by UCF to be material shall result in the rejection of the offer.
- B. The words "should" or "may" are equivalent in this ITN and indicate very desirable conditions or requirements but are permissive in nature. Deviation from, or omission of, such a desirable condition or requirement will not in and of itself cause automatic rejection of an offer but may result in the offer being considered as not in the best interest of UCF. UCF will, at UCF's sole discretion, determine whether an offer is considered as not in the best interest of UCF and may or may not reject the offer, all at UCF's sole discretion.
- C. The Respondent must comply with the instructions cited in Section 2.3. Also, the Respondent must initial the designated sections set forth on Appendix I, indicating that the Respondent has either understood and agreed to or disagreed with each particular section listed in Appendix I. Failure to submit Appendix I with each area marked as set forth above and initialed by the Respondent shall constitute grounds for rejection of the offer by UCF and shall give UCF the right to reject the offer, at UCF's sole discretion.
- D. The Respondent is solely responsible for the accuracy and completeness of its offer. The Respondent's errors or omissions, if any, are solely at the risk of the Respondent and may be grounds for rejection of the offer and shall give UCF the right to reject the offer, at UCF's sole discretion.

2.19 Force Majeure

No default, delay or failure to perform on the part of UCF or the Respondent shall be considered a default, delay or failure to perform otherwise chargeable, hereunder, if such default, delay or failure to perform is due to causes beyond UCF's reasonable control including, but not limited to, strikes, lockouts, actions or inactions of governmental authorities, epidemics, pandemics, wars, embargoes, fires, earthquakes, acts of God, or default of common carriers. In the event of such default, delay or failure to perform due to causes beyond UCF's or the Respondent's reasonable control, any date or times by which UCF or the Respondent is otherwise scheduled to perform shall be extended automatically for a period of time equal in duration to the time lost by reason of the cause beyond the reasonable control of UCF or the Respondent.

2.20 Limitation of Remedies, Indemnification, and Insurance

- A. The Attorney General of the State of Florida has rendered an opinion that agencies of the State of Florida cannot contractually limit the State's right to redress. Consequently, any offer by the Respondent to limit the Respondent's liabilities to the State or to limit the State's remedies against the Respondent is unacceptable and will result in the REJECTION of the Respondent's offer.
- B. As an agency of the State of Florida, UCF's liability is regulated by Florida law. Except for its employees acting within the course and scope of their employment, UCF shall not indemnify any entity or person. The State of Florida is self-insured to the extent of its liability under law, and any liability in excess of that specified in statute may be awarded only through special legislative action. Accordingly, UCF's liability and indemnification obligations under this ITN and the resulting contract, if any, shall be effective only to the extent required by Florida law; and any provision requiring UCF to provide insurance coverage other than the State of Florida self-insurance shall not be effective.
- C. The Respondent(s)/Supplier(s)/ /Proposer(s) shall hold the University and the UCF Board of Trustees and the University's officers, employees, agents and/or servants harmless and indemnify each of them against any and all liabilities, actions, damages, suits, proceedings, and judgments from claims arising or resulting from the acts or omissions of the Respondent(s)/Supplier(s)/ /Proposer(s), its employees, its agents or of others under the Respondent's/Supplier's/ Proposer's control and supervision. If any part of a delivery to the University pursuant to a contract resulting from this ITN is protected by any patent, copyright, trademark, other intellectual property right or other right, the Respondent/Supplier/ Proposer also shall indemnify and hold harmless the University of Central Florida Board of Trustees and the University's officers, employees, agents and/or servants from claims instituted or recovered against the University by any person or persons whomsoever on account of the University's use or sale of such article in violation of rights under such patent, copyright, trademark, other intellectual property right or other right.

All insurance shall be procured from companies authorized to do business in the State of Florida with a minimum A.M. Best rating of A, or equivalent. Proof of coverage shall be provided by submitting to the University's Risk Management Office a certificate or certificates evidencing the existence thereof or binders and shall be delivered within fifteen (15) days of the tentative award date of the Contract. In the event a binder is delivered, it shall be replaced within thirty (30) days by a certificate in lieu thereto. A renewal certificate shall be delivered to the University at least thirty (30) days prior to the expiration date of each expiring policy.

1. **General Liability:** Supplier shall provide a Certificate of Insurance evidencing Commercial General Liability insurance coverage in force with minimum limits of \$1,000,000 (ONE MILLION DOLLARS) per Occurrence and \$2,000,000 (TWO MILLION DOLLARS) Aggregate. Upon acceptance and confirmation of coverage by the University and before beginning work, and at all times during the term of the contract, Supplier will maintain said

General Liability insurance in force and shall provide the University with a Certificate of Insurance and Additional Insured Endorsement listing the University of Central Florida Board of Trustees as "Additional Insured." The Certificate will provide a minimum 30 days advanced notice to in the event of cancellation.

- 2. **Auto Liability:** If Supplier operates a vehicle on campus for commercial use in the performance of this Contact (i.e. deliveries, transport of employees, etc.), Supplier shall provide a Certificate of Insurance evidencing Auto Liability insurance with minimum \$1,000,000 (ONE MILLION DOLLARS) per Accident Combined Single Limit for Bodily Injury and Property Damage. Upon acceptance and confirmation of coverage by University and before beginning work, and at all times during the term of the contract, Supplier will maintain said Auto Liability insurance in force and provide University with a Certificate of Insurance listing the University of Central Florida Board of Trustees as "Additional Insured." The Certificate will provide a minimum 30 days advanced notice to University in the event of cancelation.
- 3. **Workers' Compensation:** Supplier shall provide a Certificate of Insurance evidencing Workers' Compensation coverage consistent with Florida Statute and Employer's liability no less than \$500,000 (FIVE HUNDRED THOUSAND DOLLARS) for Bodily Injury by accident, each accident, Bodily Injury by disease, each employee, and policy limit. Upon acceptance and confirmation of coverage by University and before beginning work, and at all times during the term of the contract, Supplier will maintain said Workers Compensation and Employer's Liability insurance in force and provide University with a current Certificate of Insurance. The Certificate will provide a minimum 30 days advanced notice to University in the event of cancellation.
- 4. **Certificates of Insurance:** The University of Central Florida Board of Trustees is to be listed as Additional Insured on all Certificates issued. Supplier shall send a copy of his/her Certificate of Insurance along with accompanying Additional Insured Endorsements naming the University of Central Florida Board of Trustees to the following address:

Email: <u>RiskManagement@ucf.edu</u>

5. The University, at its sole discretion, has the right to deviate from any of the insurance requirements herein. If the University decides to deviate from the insurance requirements stated herein, the University will inform the Supplier in writing.

2.21 Term of Contract

The contract resulting from this ITN, if any, shall commence on or about January 2023 and shall end on March 15, 2023. The University may renew/extend a resultant contract, as mutually agreed to by both parties. Renewals may not exceed 5 years or twice the term of the original contract, whichever is longer. An extension may not exceed 12 months or until completion of the competitive solicitation and award or protest, whichever is longer.

2.22 Cancellation/Termination of Contract

UCF may terminate a contract resulting from this ITN without cause on thirty (30) days' advanced written notice to the Contractor. The parties to a resultant contract may terminate the contract at any time by mutually consenting in writing. Either party may terminate a resultant contract immediately for breach by the other that remains substantially uncured after thirty (30) days' advanced written notice to the breaching party, which notice describes the breach in detail sufficient to permit cure by the breaching party. The University shall be liable only for payment for services satisfactorily rendered/goods satisfactorily delivered and accepted from the date of commencement until the effective date of termination. The thirty (30) days' advanced written notice shall start on the date sent out by UCF, e.g., date of email sent, date stamp on letter mailed.

2.23 Assignment and Amendment of Contract

Neither the contract resulting from this ITN, if any, nor any duties or obligations under such contract shall be assignable by the Respondent without the prior written consent of UCF. Any contract resulting from this ITN may be amended only in writing signed by the Respondent and UCF with the same degree of formality evidenced in the contract resulting from this ITN.

2.24 Independent Parties

Except as expressly provided otherwise in the contract resulting from this ITN, if any, UCF and the Respondent shall remain independent parties and neither shall be an officer, employee, agent, representative or co-partner of, or a joint venture with the other.

2.25 **Performance Investigations**

As part of its evaluation process, UCF may make investigations to determine the ability of the Respondent to perform under this ITN. UCF reserves the right to REJECT any offer if the Respondent fails to satisfy UCF that it is properly qualified to carry out the obligations under this ITN.

2.26 Records

The Respondent/Supplier/ Proposer/Contractor agrees to keep and maintain separate and independent records, in accordance with generally accepted accounting principles, devoted exclusively to its obligations and activities pursuant to a contract resulting from this ITN. Such records (including books, ledgers, journals, and accounts) shall contain all entries reflecting the business operations under a resultant contract. The University or its authorized agent shall have the right to audit and inspect such records from time to time during the term of a resultant contract, upon reasonable notice to the Contractor.

2.27 Public Records

Any contract resulting from this ITN may be canceled unilaterally by the University for refusal by the Respondent/Supplier/ Proposer/Contractor to allow public access to all papers, documents, letters or other material subject to the provisions of Chapter 119, Florida Statutes and made or received by the Respondent/Supplier/ Proposer/Contractor in conjunction with a resultant contract.

2.28 Public Records, Service Contracts, Compliance With Section 119.0701, F.S. IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO

PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: Office of the General Counsel, (407)823-2482, gcounsel@ucf.edu, University Of Central Florida, 4365 Andromeda Loop N., Millican Hall, Suite 360, Orlando, FL 32816-0015.

PUBLIC RECORDS, CONTRACT FOR SERVICES

To the extent that the Contractor meets the definition of "Contractor" under Section 119.0701, Florida Statutes, in addition to other contract requirements provided by law, the Contractor must comply with public records laws, including the following provisions of Section 119.0701, Florida Statutes:

- 1. Keep and maintain public records required by the public agency to perform the service.
- 2. Upon request from the public agency's custodian of public records, provide the public agency with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this chapter or as otherwise provided by law.
- 3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the public agency.
- 4. Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of the contractor or keep and maintain public records required by the public agency to perform the service. If the contractor transfers all public records to the public agency upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon completion of the contract, the contractor shall destroy any duplicate for the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the public agency's custodian of public records, in a format that is compatible with the information technology systems of the public agency.

A request to inspect or copy public records relating to a public agency's contract for services must be made directly to the public agency. If the public agency does not possess the requested records, the public agency shall immediately notify the contractor of the request, and the contractor must provide the records to the public agency or allow the records to be inspected or copied within a reasonable time.

If a contractor does not comply with the public agency's request for records, the public agency shall enforce the contract provisions in accordance with the contract.

This Contractor and any subcontractors shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a), 60-741.5(a), and 29 CFR Part 471, Appendix A to Subpart A with respect to affirmative action program and posting requirements. These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation gender identity, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, or physical or mental disability.

If any provision of the contract resulting from this ITN, if any, is contrary to, prohibited by, or deemed invalid by applicable laws or regulations of any jurisdiction in which it is sought to be enforced, then said provision shall be deemed inapplicable and omitted and shall not invalidate the remaining provisions of such contract.

2.30 Notices

All notices and all other matters pertaining to the contract resulting from this ITN, if any, to a party shall be in writing, hand delivered, or sent by email (receipt acknowledged), registered or certified U.S. Mail, return receipt requested, and shall be deemed to have been duly given when actually received by the addressee at the address listed in section 2.1 of this ITN.

2.31 Governing Law and Venue

This ITN and resulting contract, if any, and any disputes thereunder will be governed by the laws of the State of Florida and shall be deemed to have been executed and entered into in the State of Florida. Any such contract shall be construed, performed, and enforced in all respects in accordance with the laws and rules of the State of Florida, and any provision in such contract in conflict with Florida law and rules shall be void and of no effect. UCF and Respondent hereby agree that this ITN and resulting contract, if any, shall be enforced in the courts of the State of Florida and that venue shall always be in Orange County, Florida.

2.32 Liaison

UCF's liaison with the successful Respondent, if any, shall be Arturo Garcia.

2.33 Subcontracts

The Respondent is fully responsible for all work performed under the contract resulting from this ITN, if any. The Respondent may enter into written subcontract(s) for performance of certain of its functions under such contract, unless otherwise specified. The subcontractors and the amount of the subcontract(s) shall be identified in the Respondent's response to this ITN. No subcontract(s) which the Respondent enters into under the contract resulting from this ITN, if any, shall in any way relieve the Respondent of any responsibility for performance of its duties under such contract. The Respondent is responsible to fully notify any subcontractor(s) of their responsibilities under any subcontract. All payments to subcontractors shall be the sole responsibility of the Respondent.

2.34 Employment of UCF Personnel

The Respondent shall not, without UCF's prior written consent, knowingly recruit for engagement, on a full time, part time, or other basis during the period of this ITN and any resulting contract, any individuals who are or have been UCF employees at any time during such period, except for UCF's regularly retired employees, or any adversely affected State employees.

2.35 Conflicts of Interest

Acceptance of a contract resulting from this ITN shall certify that Contractor is aware of the requirements of Chapter 112, Florida Statutes and in compliance with the requirements of Chapter 112, Florida Statutes and other laws and regulations concerning conflicts of interests in

dealing with entities of the State of Florida. Contractor certifies that its directors and/or principal officers are not employed and/or affiliated with the University unless a current Conflict of Interest (Report of Outside Activity/Employment) form has been completed, executed by such director or officer and approved in accordance with applicable University policies or rules. Violation of this section by Contractor shall be grounds for cancellation of a contract resulting from this ITN.

2.36 Equal Opportunity Statement

The State of Florida and UCF subscribe to equal opportunity practices, which conform to both the spirit and the letter of all laws against discrimination and are committed to non-discrimination on the basis of race, creed, color, sex, age, national origin, religion, veteran or marital status, or disability. The Respondent commits to the following:

- A. The provisions of Executive Order 11246, September 24, 1965, as amended by Executive Order 11375, and the rules, regulations and relevant orders of the Secretary of Labor that are applicable to each order placed against the contract resulting from this ITN, if any, regardless of value.
- B. The Respondent, if any, awarded a contract under this ITN shall agree to comply with the Americans with Disabilities Act (ADA) of 1990.
- C. If the Respondent anticipates receiving \$10,000 in orders during the first 12 months of the contract, if any, resulting from this ITN, the Respondent must complete a Certificate of Non-Segregated Facilities form and attach the form to the offer. A sample certificate is attached as **APPENDIX II**.
- D. If the Respondent anticipates receiving \$50,000 in orders during the first 12 months of the contract, if any, resulting from this ITN, and employs more than 50 people, the Respondent must complete and file prior to March 1 of each year a standard form 100 (EEO-1).
- E. If the Respondent anticipates receiving \$50,000 in orders during the first 12 months of the contract, if any, resulting from this ITN, and employs more than 50 people, the Respondent must maintain a written program for affirmative action compliance that is accessible for review upon request by UCF.
- F. Respondents shall identify their company's government classification at time of offer submittal (See UCF Form ITN/CS: ITN acknowledgement cover page). The Respondent's identity will not foster special consideration during this ITN process; this is only for informational purposes for reporting.

2.37 Waiver of Rights and Breaches

No failure or delay by a party hereto to insist on the strict performance of any term of a contract resulting from this ITN or to exercise any right or remedy consequent to a breach thereof shall constitute a waiver of any breach or any subsequent breach of such term. No waiver of any breach hereunder shall affect or alter the remaining terms of such a contract, but every term of such a contract shall continue in full force and effect with respect to any other then-existing or subsequent breach thereof. The remedies provided in such a contract are cumulative and not exclusive of the remedies provided by law or in equity.

2.38 Headings Not Controlling

Headings used in any contract resulting from this ITN are for reference purposes only and shall not be considered a substantive part of such contract.

2.39 Employee Involvement/Covenant Against Contingent Fees

In accordance with Section 112.3185, Florida Statutes, the Respondent hereby certifies that, to the best of its knowledge and belief, no individual employed by the Respondent or subcontracted by the Respondent has an immediate relationship to any employee of UCF who was directly or indirectly involved in any way in the procurement of the contract, if any, resulting from this ITN or goods or services thereunder. Violation of this section by the Respondent shall be grounds for cancellation of such contract. The Respondent also warrants that no person or selling agency has been employed, engaged or retained to solicit or secure any contract resulting from this ITN or any advantage hereunder upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, or in exchange for any substantial consideration bargained for, excepting that which is provided to the Respondent's bona fide employees or to bona fide professional commercial or selling agencies or in the exercise of reasonable diligence should have been known by the State to be maintained by the Respondent for the purpose of securing business for the Respondent. In the event of the Respondent's breach or violation of this warranty, UCF shall, subject to the Respondent's rights under Chapter 120, Florida Statutes, have the right, at its option, to annul any contract resulting from this ITN without liability, to deduct from the charges otherwise payable by UCF under such contract the full amount of such commission, percentage, brokerage, or contingent fee, and to pursue any other remedy available to UCF under such contract, at law or in equity.

2.40 Employment of Aliens

The Contractor's employment of unauthorized aliens, if any, shall be considered a violation of §§274(e) of the Immigration and Nationality Act. If the Contractor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of a contract resulting from this ITN by the University.

2.41 Site Rules and Regulations

The Respondent shall use its best efforts to assure that its employees and agents, while on UCF's premises, shall comply with the State's and UCF's site rules and regulations, if any.

2.42 Travel Expenses

The Respondent shall not under this ITN or any resulting contract charge UCF for any travel expenses, meals, and lodging without UCF's prior written approval. Upon obtaining UCF's prior written approval, the Respondent may be authorized to incur travel expenses payable by UCF to the extent and means provided by Section 112.061, Florida Statutes and applicable UCF policies. Any expenses in excess of the prescribed amounts shall be borne by the Respondent.

2.43 Annual Appropriations

The University's performance and obligations under a contract resulting from this ITN are subject to and contingent upon annual appropriations by the Florida Legislature and other funding sources.

2.44 Taxes

The State of Florida is a tax-immune sovereign and exempt from the payment of all sales, use and excise taxes. The Respondent shall be responsible to pay any such taxes imposed on taxable activities/services under the contract, if any, resulting from this ITN.

2.45 Contractual Precedence

The contract that results from this ITN, if any, and any attachments and/or addenda that are executed by University's duly authorized signatory constitutes the entire and exclusive agreement between the parties. Attachments and/or addenda may include but are not limited to UCF's Invitation to Negotiate ("ITN") including all the University's ITN specifications and the Contractor's ITN response. In the event of any conflict or inconsistency between the aforementioned documents, the order of precedence is:

- A. The Agreement/Contract;
- B. University's ITN and ITN specifications;
- C. Respondent's ITN response; and
- D. Any other attached documents signed by the University's official signatory at the time the Agreement/Contract is executed.

2.46 Use of Contract by Other Governmental Agencies

At the option of the Supplier/Contractor, the use of the contract resulting from this solicitation may be extended to other governmental agencies, including the State of Florida, its agencies, political subdivisions, counties, and cities. Each governmental agency allowed by the Supplier/Contractor to use this contract shall do so independent of any other governmental entity. Each agency shall be responsible for its own purchases and shall be liable only for goods or services ordered, received and accepted. No agency receives any liability by virtue of this offer and subsequent contract award.

2.47 Public Entity Crimes

A person or affiliate who has been placed on Florida's Convicted Vendor List following a conviction for a public entity crime may not submit an offer on a contract to provide any goods or services to a public entity, may not submit an offer on a contract with a public entity for the construction or repair of a public building or public work, may not submit offers on leases of real property to a public entity, may not be awarded, or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the offer limit for that public entity, for a period of thirty-six (36) months from the date of being placed on the Convicted Vendor List.

2.48 Work for Hire

Any work specifically created for the University under a contract resulting from this ITN by the Contractor or anyone working on behalf of the Contractor (the term Contractor shall encompass both) shall be considered a "work for hire." All designs, prints, paintings, artwork, sketches, etchings, drawings, writings, photographs, or any other work or material or property produced, developed or fabricated and any other property created hereunder, including all material incorporated therein and all preliminary or other copies thereof, (the "Materials") shall become and remain the property of the University, and, unless otherwise specifically set forth herein, shall be considered specially ordered for the University as a "work made for hire," or, if for any reason held not to be a "work for hire," the Contractor who created, produced, developed or fabricated the Materials hereunder assigns all of his/her right, title and interest in the Materials to the University.

The University shall own all right, title and interest in the Materials. The Contractor agrees upon request to execute any documents necessary to perfect the transfer of such title to the University. The Materials shall be to the University's satisfaction and are subject to the University's approval. The Contractor bears all risk of loss or damage to the Materials until the University has accepted delivery of the Materials. The University shall be entitled to return, at the Contractor's expense, any Materials which the University deems to be unsatisfactory. On or before completion of the Contractor's services hereunder, the Contractor must furnish the University with valid and adequate releases necessary for the unrestricted use of the Materials for advertising or trade purposes, including model and property releases relating to the Materials and releases from any persons whose names, voices or likenesses are incorporated or used in the Materials.

The Contractor hereby represents and warrants that (a) all applicable laws, rules and regulations have been complied with, (b) the Contractor is free and has full right to enter into this P.O. and perform all of its obligations hereunder, (c) the Materials may be used or reproduced for advertising or trade purposes or any commercial purposes without violating any laws or the rights of any third parties and (d) no third party has any rights in, to, or arising out of, or in connection with the Materials, including without limitation any claims for fees, royalties or other payments.

The Contractor agrees to indemnify and hold harmless the University of Central Florida Board of Trustees and those acting for or on its behalf, the State of Florida and the Florida Board of Governors and their respective officers, agents, employees and servants from and against any and all losses, claims, damages, expenses or liabilities of any kind, including court costs and attorneys' fees, resulting from or in any way, directly or indirectly, connected with (a) the performance or non-performance of the University's order by the Contractor, (b) the use or reproduction in any manner, whatsoever, or (c) any breach or alleged breach of any of the Contractor's contracts or representations and warranties herein.

2.49 Export Control

The parties shall comply with all applicable U.S. export control laws and regulations, including but not limited to the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799 and/or other restrictions imposed by the Treasury Department's Office of Foreign Asset Controls (OFAC), in the performance of a contract resulting from this ITN. The parties agree that no technology, related data or information will be exchanged or disseminated under such a contract nor any collaboration conducted pursuant to such a contract that are export controlled pursuant to the export control laws of the United States, including the EAR and the ITAR and any other applicable regulations.

The Parties agree that the Contractor will not provide the University with any ITAR or EAR restricted technology and/or related data, and that any ITAR or EAR restricted technologies and/or data produced in furtherance of a contract resulting from this ITN will be in the exclusive possession of the Contractor and at no time will any export controlled technologies, related data, or information be intentionally or inadvertently transferred to the University, its facilities, labs, staff, researchers, employees, officers, agents, servants or students in the performance of such a contract.

If the Contractor wishes to disclose export controlled technology or technical data to the University, the Contractor will, prior to disclosing any information, technical data or source code that is subject to export controls under federal law, notify the University in writing that the material is export controlled and shall identify the controls that apply. The University shall have the right

to decline or limit (a) the receipt of such information, and (b) any task requiring receipt of such information. In the event the Contractor sends any such technical data or product that is subject to export control, without notice of the applicability of such export control, the University has the right to immediately terminate a contract resulting from this ITN. The Contractor understands and agrees that to the extent the Contractor's personnel have access to work or materials subject to U.S. export controls while on University property, such personnel will meet all federal export control regulatory requirements or have the appropriate U.S. government approval.

2.50 Nonnegotiable Conditions and Requirements

The University seeks to award a contract from this ITN that complies with applicable law and will be both fair and reasonable to all parties, protecting the best interest of the University, its Board of Trustees, faculty, staff and students. With that goal in mind, we have developed a list of terms and conditions that are either required by law and are thus non-negotiable or have been deemed to be important to the University's interests and are thus non-negotiable. Any discussions seeking to alter or remove such a term or condition from any contract resulting from this ITN shall not be granted to any Respondent. The non-negotiable terms and conditions are listed in Appendix I of this document and identified with **non-negotiable**. Respondents that disagree with any of those "non-negotiable" terms and conditions should forego submitting an offer because said offer shall be rejected as nonresponsive to this ITN. Failure to submit Appendix I with the offer constitutes grounds for rejection of the offer, and UCF shall have the right to reject said offer, at UCF's sole discretion.

2.51 Revised Quantities

The University reserves the right to increase or decrease total quantities as necessary. The University may place additional orders for the same or modified scope of the commodities/services solicited under this ITN within 180 days after expiration of the contract resulting from this ITN. Total additional quantities/modified scope, if any, are unknown.

2.52 Family Educational Rights and Privacy Act

Licensor acknowledges that Licensee has a duty to maintain the privacy of student records, including without limitation education records as defined by the Family Educational Rights and Privacy Act (20 USC § 1232g; 34 CFR Part 99) ("FERPA") and further acknowledges that as a contractor to whom Licensee has outsourced certain institutional services or functions:

- A. Confidential information about Licensee's students is contained in records provided to and maintained by Licensor, and Licensor will protect the privacy of all student education records to the fullest extent required of Licensee under FERPA;
- B. Licensor is performing an institutional service or function that has been outsourced by Licensee and for which Licensee would otherwise use its employees;
- C. Licensor is under the direct control of Licensee with respect to the use and maintenance of education records, as defined by FERPA;
- D. Licensor is subject to all FERPA requirements governing the use and re-disclosure of personally identifiable information from education records, including without limitation the requirements of 34 CFR § 99.33(a);

- E. Even in circumstances that might justify and exception under FERPA, Licensor may not disclose or re-disclose personally identifiable information unless Licensee has first authorized in writing such disclosure or re-disclosure; and
- F. Licensor will not use any personally identifiable information acquired from Licensee for any purpose other than performing the services or function that are the subject of this agreement.

2.53 Smoke-Free Policy

The University prohibits smoking on all university owned, operated, leased and/or controlled properties in order to maintain a healthy and safe environment for its faculty, staff, students, and visitors. Visit <u>http://www.ucf.edu/smokefree</u> for additional information.

2.54 Contact with Minor Children

To the extent that the Supplier qualifies as a provider pursuant to the National Child Protection Act of 1993, as amended, or as a service provider in accordance with applicable Florida law/Statutes, who has direct contact with children receiving services or with adults who are developmentally disabled receiving services or who qualifies as a direct service provider to the elderly (as defined by Florida law/Statutes), Supplier hereby guarantees that Supplier and/or anyone acting on the Supplier's behalf (including, but not limited to Supplier's employees, agents, subcontractors, etc.) has undergone/passed a Level II (two) background check with the State of Florida, as provided under Chapter 435 and hereby certifies that none of Supplier's employees, agents, subcontractors and/or anyone else acting on the Supplier's behalf, has any disqualifying offenses, including, but not limited to those listed in Section 435.04, Florida Statutes.

2.55 Reporting of Child Abuse

The Supplier hereby expressly agrees to instruct its employees, agents, subcontractors and/or anyone else acting on the Supplier's behalf to report to the University of Central Florida police any instance of child abuse, abandonment, or neglect witnessed or learned about that occurred on University of Central Florida property or during an event or function sponsored by the University of Central Florida.

2.56 Secure Handling of UCF Data

The University requires Suppliers and other third parties to review, accept, and integrate secure data handling requirements as part of any contract, agreement, or Service Level Agreement ("SLA") that involves the storage, transmission, processing, or collection of UCF data, or access to UCF data, by the Supplier. This Agreement is intended to ensure that UCF's security and compliance requirements are outlined and followed by the Supplier. Additional agreements may be required depending on the data involved. Visit <u>http://www.infosec.ucf.edu/vrm</u> for additional information.

2.57 Employee Background Checks

The Contractor assumes all liability arising out of, and is solely responsible for, conducting background checks for all of the Contractor's employees, agents, or independent contractors. The Contractor shall provide background checks for all of the contractor's non-temporary employees, agents, or independent contractors working at UCF and shall ensure that all hires have been cleared before placement at the University. Temporary employees hired through a

temporary staffing agency shall require the background checks listed herein, and Contractor may satisfy this requirement by conducting the background checks directly or having a contract with the temporary staffing agency that incorporates the same requirements.

Convictions discovered in the background check will be reviewed by Contractor's Loss Prevention and/or Human Resources department. Consideration may be given to the person's relationship to the job, how long ago the conviction occurred, the potential risk posed to employees, customers, students, and the University and any other circumstances deemed relevant to the final determination of whether to employ or retain the person. Conviction information will be maintained by Contractor as confidential.

Background checks shall include, at a minimum, the following items:

A State of Florida Level I Background Check (Level 1): Which consists of criminal history background check inclusive of a search of the following:

- National Sex Offenders Registry
- Statewide criminal history background check through the Florida Department of Law Enforcement (FDLE)
- Local criminal records check through local law enforcement agencies

Certification that such personnel, agents, and subcontractors have satisfactorily completed a background check equivalent to Level 1 Background Check standards must be furnished to the University.

Depending on the nature of the position or duties required, hiring officials may require the temporary employment agency and/or contractors to provide evidence of additional levels of background checks performed pursuant to State of Florida Level 2 background check standards prior to commencement of work.

2.58 E-Verify

All terms defined in §448.095, Fla. Stat., are adopted and incorporated into this provision. Pursuant to §448.095, Fla. Stat., Vendor certifies that it is registered with and uses the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all of Vendor's employees hired by the Vendor during the term of this Agreement and/or while performing work or providing services for UCF. Vendor shall require that all subcontractors performing work or providing services on behalf of Vendor for UCF also comply with the requirements of §448.095, Fla. Stat and utilize the E-Verify system to verify employment eligibility of all employees hired by subcontractor. The Vendor shall require for the subcontractor to provide to Vendor an affidavit stating that the subcontractor does not employ, contract with or subcontract with an unauthorized alien. Vendor shall maintain a copy of such affidavit for the duration of the Agreement. UCF may terminate this Agreement immediately upon notice to Vendor for any violation of this provision. A Vendor whose contract is terminated pursuant to this paragraph is liable for additional costs incurred by UCF due to the termination of the Agreement.

2.59 COVID-19 Policy Compliance

Pursuant to UCF's Emergency COVID-19 Return Policy

(<u>https://policies.ucf.edu/documents/PolicyEmergencyCOVIDReturnPolicy.pdf</u>), the University of Central Florida requires vendors/contractors and employees to wear a mask or facial covering when indoors in all common indoor areas with other people present even if physically distant,

all enclosed spaces with other people present, and when outdoors. In addition, before coming to campus, you are required to complete the COVID self-checker questionnaire (<u>https://ucf.service-now.com/self_checker?id=public</u>) and be cleared each day you plan on coming to campus. Violation of this policy may result in immediate removal from campus. Repeat offenses may result in termination of contract. Vendor agrees to follow all applicable UCF COVID policies as may be developed and updated. For additional information regarding COVID and vendors/contractors, please visit <u>https://www.ucf.edu/coronavirus/resources-forvisitors-vendors-contractors/</u>.

3.0 REQUIRED OFFER FORMAT

3.1 Introduction

The Respondent shall not alter the ITN in any way and shall not reproduce all or any part of the ITN in its offer document. The contract, if any, resulting from this ITN shall incorporate the entire ITN and proposal by reference.

To facilitate analysis of its offer, the Respondent is to prepare its offer in accordance with the instructions outlined in this section. If the Respondent's offer deviates from these instructions, such offer may, at UCF's sole discretion, be REJECTED.

UCF EMPHASIZES THAT THE RESPONDENT CONCENTRATE ON ACCURACY, COMPLETENESS, AND CLARITY OF CONTENT. The Respondent is encouraged to use sections and tabs that are clearly identified and number and label all parts, pages, figures, and tables in its proposal submittal/offer. Additional tabs may be appended which contain any other pertinent matters that the Respondent wishes UCF to take into consideration in reviewing the offer. The Respondent's response to this ITN must be submitted via UCF's Bonfire Web Portal, as listed in Section 2.6.

3.2 Respondent/Offer Submittal Sections

The Respondent should organize its offer into the following major sections.

A. EXPERIENCE AND QUALIFICATIONS OF PROPOSER

- 1. Provide an overview and history of your company, and experience in providing general contracting services similar in scope to those requested in section 1.1. of this ITN.
- 2. The proposer should provide a list of current or very recent similar-type client accounts, if any, which are located in the United States. Client account information should include contact name, address, phone number, and length of service.
- 3. Please provide a list of client accounts lost through early termination or non-renewal over the past five (5) years. Include contact name and phone number, length of service at each account, and reason for loss.
- 4. The Proposer should provide email address, a chart of the company's organization and a description of its corporate structure. Also provide the company's chain of ownership up its ultimate parent corporation, and all subsidiaries.
- 5. Provide the number of years' experience providing services as described in section 1.1.

B. PROJECT STAFF QUALIFICATIONS/EXPERIENCE

1. List the total number of employees, include job titles and experience of individual(s) who

will be assigned to the UCF account. Include resume(s).

2. Clearly identify the skill sets your staff is capable of providing, and clearly indicate if subcontractors or sub-consultants will be used.

C. OVERALL RESPONSIVENESS OF PROPOSAL TO SATISFY SCOPE/PROJECT APPROACH

- 1. Demonstrate an understanding of the services the university requires under this contract.
- Explain the methodology the proposer will employ to fulfill the requirements discussed in section 1.1, including, but not limited to, the submission of periodic progress schedule with activities to be carried out.
- 3. Discuss how proposer will accomplish Project completion.
- D. OVERALL PRICING
 - 1. The proposal submitted in response to this ITN should enumerate a <u>fixed fee</u> for the completion of the Project.
 - 2. The proposal shall specify billing rates for the various personnel who will be involved.
 - 3. The proposal must list any other categories of ancillary expenses that may be billed. Note: The University will not reimburse travel, meals or lodging expenses.
 - 4. Any additional subcontractors will be hired directly by the vendor. UCF shall not engage in contractual agreement with additional parties nor shall be responsible for the work subcontracted by the vendor.

4.0 OTHER REQUIREMENTS

A sample copy of UCF's standard contractual agreement, which is the instrument used to bind the parties, can be viewed at <u>http://www.procurement.ucf.edu/</u>. Any concerns with the provisions and clauses of the offered agreement are to be addressed during the question and answer period sited in section 2.2.

APPENDIX I SUPPLEMENTAL OFFER SHEET TERMS AND CONDITIONS

The sections set forth below are to each be initialed as YES for "understood and agreed upon" or NO for "not agreed to." Failure to complete and return this document with your offer could result in rejection of your offer, at UCF's sole discretion. Respondents shall not check sections as "understood and agreed upon" with the intent to negotiate a change to those sections/terms and conditions after tentative award of a contract resulting from this ITN. Respondents disagreeing with any negotiable term or condition of this ITN are to provide a clear and detailed reason for the disagreement and a solution to the disagreement in his/her offer. A Respondent's disagreement with any non-negotiable section of this ITN may be automatically rejected. Failure of the University and the tentative awardee to come to an agreement with respect to terms and conditions within a time frame UCF determines to be reasonable constitutes grounds for rejection of that offer, and the University shall have the right, at its sole discretion, to award the contract to the next favorable respondent.

SECTION	YES	NO	RESPONDENT INITIALS
2.1 **Non-negotiable**			
2.2**Non-negotiable**			
2.3**Non-negotiable**			
2.4			
2.5			
2.6**Non-negotiable**			
2.7 Section Not Used			
2.8**Non-negotiable**			
2.9			
2.10			
2.11 **Non-negotiable**			
2.12			
2.13 **Non-negotiable**			
2.14 **Non-negotiable**			
2.15			

SECTION	<u>YES</u>	NO	RESPONDENT INITIALS
2.16			
2.17			
2.18 **Non-negotiable**			
2.19			
2.20 **Non-negotiable**			
2.21			
2.22			
2.23			
2.24			
2.25			
2.26			
2.27 **Non-negotiable**			
2.28 **Non-negotiable**			
2.29			
2.30 **Non-negotiable**			
2.31 **Non-negotiable**			
2.32			
2.33			
2.34			
2.35 **Non-negotiable**			
2.36			
2.37			
2.38			
2.39 **Non-negotiable**			

<u>SECTION</u>	YES	NO	RESPONDENT INITIALS
2.40			
2.41			
2.42 **Non-negotiable**			
2.43			
2.44			
2.45			
2.46			
2.47			
2.48			
2.49 **Non-negotiable**			
2.50			
2.51			
2.52 **Non-negotiable**			
2.53 **Non-negotiable**			
2.54			
2.55			
2.56 **Non-negotiable**			
2.57 **Non-negotiable**			
2.58 **Non-negotiable**			
2.59 **Non-negotiable**			
Appendix I			
Appendix II			
Appendix III			
Appendix IV			
Company:	Authorized	d Representative's	Name:
Authorized Representative's	s Signature:		Date:

APPENDIX II

CERTIFICATE OF NON-SEGREGATED FACILITIES

We,______ certify to the University of Central Florida that we do not and will not maintain or provide for our employees any segregated facilities at any of our establishments, and that we do not and will not permit our employees to perform their services, under our control, where segregated facilities are maintained. We understand and agree that a breach of this certification is a violation of the Equal Opportunity clause required by Executive Order 11246, as amended.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash room, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color or national origin, because of habit, local custom or otherwise.

We, further, agree that (except where we have obtained identical certifications from offered subcontractors for specific time periods) we will obtain identical certifications from offered subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause; that we will retain such certification in our files; and that we will forward the following notice to such offered subcontractors (except where the offered subcontractors have submitted certifications for specific time periods):

NOTE TO PROSPECTIVE SUBCONTRACTORS ON REQUIREMENTS FOR CERTIFICATIONS OF NON-SEGREGATED FACILITIES. A Certificate of Non-segregated Facilities, as required by the 9 May 1967 order on Elimination of Segregated Facilities, by the Secretary of Labor (32 Fed. Reg. 7439, 19 May 1967), must be submitted prior to the award of a sub-contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each sub-contract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

The Contractor and subcontractors shall abide by the requirements of 41 CFR Section 60-1.4(a), 60-300.5(a), 60-741.5(a), and 29 CFR Part 471, Appendix A to Subpart A with respect to affirmative action program and posting requirements. These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status, or physical or mental disability.

NOTE: Whoever knowingly and willfully makes any false, fictitious, or fraudulent representation may be liable to criminal prosecution under 18 U.S.C. 1001.

APPENDIX II

CERTIFICATE OF NON-SEGREGATED FACILITIES SUBPART - CONTRACTOR'S AGREEMENTS

SEC. 202. Except in contracts exempted in accordance with Section 204 of this Order, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity or national origin. Such action shall include, but not be limited to the following: employment, upgrading demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity or national origin.
- (3) The contractor will send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or worker's representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoiced as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the provision of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued

pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or Supplier. The contractor will take such action with respect to any subcontract or purchase orders the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or Supplier as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

SEC. 402 Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era:

(1) The contractor agrees to comply with the affirmative action clause and regulation published by the US Department of Labor implementing Section 402 of the Vietnam Era Veteran's Readjustment Assistance Act of 1974, as amended, and Executive Order 11701, which are incorporated in this certificate by reference.

Company:	
Authorized Representative's Name:	· · · · · · · · · · · · · · · · · · ·
Authorized Representative's Signature: _	
Date:	

APPENDIX III

COMPLIANCE AND CERTIFICATION OF GOOD STANDINGS

The parties shall at all times comply with all applicable ordinances, laws, rules and regulations of local, state and federal governments, or any political subdivision or agency, or authority or commission thereof, which may have jurisdiction to pass laws, ordinances, or make and enforce rules and regulations with respect to the parties.

Suppliers shall certify below that they are in good standings to conduct business in the State of Florida. The awardee of any contract resulting from this solicitation shall forward a certification of good standing, upon request of UCF. Noncompliance with this provision may constitute rejection of proposal or termination of a contract at UCF's sole discretion.

CERTIFICATION

I certify that the company submitting an offer under this solicitation is in compliance with all applicable laws to conduct business in the State of Florida, is in good standings and will provide a certificate of good standings from the State of residence prior to initiating any performance under any contract resulting from this solicitation.

Company:
Authorized Representative's Name:
Authorized Representative's Signature:
Date:

APPENDIX IV

BONFIRE SUBMISSION INSTRUCTIONS FOR SUPPLIERS

Submission Instructions for Suppliers

Please follow these instructions to submit via our Public Portal.

1. Prepare your submission materials:

Requested Information

Name	Туре	# Files	Requirement
Proposal	File Type: Any	Multiple	Required

Requested Documents:

Please note the type and number of files allowed. The maximum upload file size is 1000 MB.

Please do not embed any documents within your uploaded files, as they will not be accessible or evaluated.

2. Upload your submission at:

https://ucfprocurement.bonfirehub.com/opportunities/78019

Your submission must be uploaded, submitted, and finalized prior to the Closing Time of **Dec 16**, **2022 3:00 PM EST.** We strongly recommend that you give yourself sufficient time and **at least ONE (1) day** before Closing Time to begin the uploading process and to finalize your submission.

Important Notes:

Each item of Requested Information will only be visible after the Closing Time.

Uploading large documents may take significant time, depending on the size of the file(s) and your Internet connection speed.

You will receive an email confirmation receipt with a unique confirmation number once you finalize your submission.

Minimum system requirements: Microsoft Edge, Google Chrome, or Mozilla Firefox. Javascript must be enabled. Browser cookies must be enabled.

Need Help?

University of Central Florida Procurement Services uses a Bonfire portal for accepting and evaluating proposals digitally. Please contact Bonfire at Support@GoBonfire.com for technical questions related to your submission. You can also visit their help forum at https://vendorsupport.gobonfire.com/hc/en-us

APPENDIX V

Building Photos

Optical Lab (Aerial View)



Optical Lab (Back)



Optical Lab (Front)



Optical Lab (Left Side)



Optical Lab (Right Side)



ARECIBO - AIRGLOW LAB

100% CONTRACT DOCUMENTS

DATE: 03.26.2021

STRUCTURAL DRAWING LIST

SHEET NO	SHEET NAME
S0 SERIES:	GENERAL
S0.00	COVER SHEET
S0.01	SHEET PUBLICATION MATRIX
S0.02	LEGEND & ABBREVIATIONS
S0.10	GENERAL NOTES
S0.11	GENERAL NOTES
S0.20	SPECIAL INSPECTIONS AND STRUCTURAL TESTING
S0.21	STRUCTURAL OBSERVATION
S0.30	LOADING DIAGRAM PLANS
S0.51	LAP SPLICE, DEVELOPMENT LENGTH AND STANDARD HOOKS SCHEDULES
S2 SERIES:	STRUCTURAL PLANS
S2.01	FOUNDATION & ROOF FRAMING PLAN
S2.01R	REINFORCING PLANS
S4 SERIES:	FOUNDATION DETAILS
S4.00	TYPICAL FOUNDATION DETAILS
S4.10	TYPICAL SLAB ON GRADE DETAILS
S4.11	TYPICAL SLAB-ON-GRADE DETAILS
S4.51	CONCRETE SECTION & DETAILS
S4.52	ROOF FRAMING DETAILS
S5 SERIES:	CONCRETE SECTION AND DETAILS
S5.10	TYPICAL CONCRETE WALL DETAILS
S5.20	TYPICAL CONCRETE SLAB DETAILS
S7 SERIES:	STEEL DETAILS
S7.20	TYPICAL STEEL DECK DETAILS
S7.21	TYPICAL STEEL DECK DETAILS

Appendix VI





PUERTO RICO





	SHEET NAME	DESIGN DEVELOPMENT
S0 SERIES: (GENERAL	
S0.00	COVER SHEET	
S0.01	SHEET PUBLICATION MATRIX	
S0.02	LEGEND & ABBREVIATIONS	
S0.10	GENERAL NOTES	•
S0.11	GENERAL NOTES	•
S0.20	SPECIAL INSPECTIONS AND STRUCTURAL TESTING	•
S0.21	STRUCTURAL OBSERVATION	•
S0.30	LOADING DIAGRAM PLANS	
S0.51	LAP SPLICE, DEVELOPMENT LENGTH AND STANDARD HOOKS SCHEDULES	•
S2 SERIES: S	STRUCTURAL PLANS	
S2.01	FOUNDATION & ROOF FRAMING PLAN	
S2.01R	REINFORCING PLANS	
S4 SERIES: F	OUNDATION DETAILS	
S4.00	TYPICAL FOUNDATION DETAILS	•
S4.10	TYPICAL SLAB ON GRADE DETAILS	•
S4.11	TYPICAL SLAB-ON-GRADE DETAILS	•
S4.51	CONCRETE SECTION & DETAILS	
S4.52	ROOF FRAMING DETAILS	
S5 SERIES: C	ONCRETE SECTION AND DETAILS	
S5.20	TYPICAL CONCRETE SLAB DETAILS	•
S5.10	TYPICAL CONCRETE WALL DETAILS	
S7 SERIES: S	STEEL DETAILS	
S7.20	TYPICAL STEEL DECK DETAILS	
S7.21	TYPICAL STEEL DECK DETAILS	
-	· · · · · · · · · · · · · · · · · · ·	



SYMBOLS	DESCRIPTION	REFERENCE	SYMBOLS	DESCRIPTION	REFERENCE	
$ \begin{array}{c} T/SLAB \\ FI = 0' - 0'' \end{array} $	ELEVATION		2-PD5A			
(AHU) 1000 lbs	AIR HANDLING UNIT AND MAX OPERATING WEIGHT			2 HOLDOWNS		
<u>πη</u> χ"	X - INDICATES CHANGE IN T/STRUCTURAL SLAB ELEVATION		<u>PB-1</u>	WOOD POST & POST BASE		
	INDICATES SLOPE IN STRUCTURAL SLAB		2x12@ 24" OC	EXTENT OF RAFTER OR JOIST FRAMING		
?	GRID NUMBER		(PX)	SPECIAL TOP OF WALL PLATES		
•	WORK POINT		_"X"	"X" TYPE METAL DECKING SPAN DIRECTION SEE DECK SCHEDULE		
OPEN	OPENING IN FLOOR OR ROOF		c=X"	CAMBER		
>	SLOPE		(AESS)	DENOTES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL. SEE SPECIFICATION SECTION 05 12 13 FOR REQUIREMENTS.		
	RIDGE AT SLOPED ROOF		(X,Y,Z) OR (X)	WELDED STUDS		
SLRS	VALLEY AT SLOPED ROOF ALL COLUMNS, BEAMS, BRACES AND THEIR CONNECTIONS ON LINES DENOTED "SLRS" SHALL COMPLY WITH SPECIFICATION	SEE SPECS	<u>с-х</u> <u>с-х</u> Т	STEEL COLUMN		
	REQUIREMENTS FOR THE SEISMIC-LOAD-RESISTANCE SYSTEM SLOPED OR DEPRESSED SLAB		⊢ ⊢ →	WELDED CONNECTION AT T&B FLANGE OF MOMENT FRAME BEAM		
PHD5A	HOLDOWN		H⊳→	WELDED CONNECTION AT T&B FLANGE OF NON-MOMENT FRAME BEAM		
	CONCRETE CURB ON DECK OR SLAB			WELDED CONNECTION AT TOP AND BOTTOM FLANGE OF NON-MOMENT FRAME BEAM		
<u>F11</u> (-2'-6")				F= FULL DEPTH SHEAR PLATE 1=1" BOLTS		
	SPREAD FOOTING TYPE AND TOP OF FOOTING ELEVATION		, <u>-D</u>	DROPPED BEAM "D" NUMBER OF INCHES		
s — s	STEP IN FOOTING		<u>⊱ _T</u>	WT SECTION ON TOP OR BELOW BEAM		
GB-X ↓ ↓	GRADE BEAM		$\int \rightarrow \int $	LOWER FLANGE BRACE TO ADJACENT BEAM		
CF-X 	CONTINUOUS FOOTING			LOWER FLANGE BRACE TO SLAB		
PX XX	MINIMUM DESIGN PILE LENGTH			SPLICE IN MEMBER		
			 	MOMENT FRAME		
	SLAB REINFORCING DIRECTION					
	CONCRETE WALL			BRACED AT CHANGE IN T/S. ELEVATIONS		
	CONCRETE MASONRY UNIT WALL		OR DCW	NOTCH-TOUGH ELECTRODES	SEE SPECS	
	SHEAR OR BEARING WALL BELOW (AND NOT ABOVE)		B	MECHANICAL SCREEN BRACE		
	SHEAR OR BEARING WALL (ABOVE AND BELOW)			BEND IN BEAM		
	PLYWOOD SHEARWALL WITH INDICATED NAIL SPACING			INDICATES BEAM WEB PENETRATION AND PENETRATION LOCATION FROM END OF BEAM		
			X'-XX"			

ABBREVIATION

(E) (N)

ABV

ADDL

ADJ

AESS

ALT

AR

B/

B/B

BAL

BLDG

BLK

BLKG

BLW

BM

BOT

BRDG

BRG

BTWN

BS

С

C/C

CIP

CJP CL

CLR

CMU

COL

COMP

CONN

CONST

CONT

db

DBL

DCW

DEG

DET

DF

DIA

DL

DIAG

DIM(S)

DWG(S)

DWL

EA

ECC

EF

EL

ELEC

EN

ENGR

EOS

EQUIP

EQ

EW

EXP

EXT

F/

F/F

FF

FIN

FLR

FP

FS

FTG

GA

GB

GEN

GLB

GR

HD

ΗK

HP

HT

ID

IF

INFO

INTRM

JST(S)

INT

JH

JT

KLF

KSF

LBS

LCS

LL

LLH

LLV

LP

LONG

HSS

HORIZ

GALV

FND

FRM'G

CONC

BF

ARCH

APPRX

DESCRIPTION

EXISTING NEW ABOVE ADDITIONAL ADJACENT ARCHITECTURALLY EXPOSED STRUCTURAL STEEL ALTERNATE APPROXIMATE ANCHOR RODS ARCHITECT OR ARCHITECTURAL BOTTOM OF BACK TO BACK BALANCE BRACED FRAME BUILDING BLOCK BLOCKING BELOW BEAM BOTTOM BRIDGING BEARING BOTH SIDES BETWEEN COMPRESSION CENTER TO CENTER CAST-IN-PLACE COMPLETE JOINT PENETRATION CENTER LINE CLEAR OR CLEARANCE CONCRETE MASONRY UNIT COLUMN COMPRESSION CONCRETE CONNECTION(S) CONSTRUCTION CONTINUOUS CENTER(ED) COUNTERSINK DIAMETER OF BOLT OR REBAR DOUBLE DEMAND CRITICAL WELD DEGREE(S) DETAIL DOUGLAS FIR DIAMETER DIAGONAL DIMENSION(S) DEAD LOAD DRAWING(S) DOWEL(S) EACH ECCENTRICITY EACH FACE ELEVATION ELECTRICAL EDGE NAIL ENGINEER EDGE OF SLAB EQUAL EQUIPMENT EACH WAY EXPANSION EXTERIOR FACE OF FACE TO FACE FINISH FLOOR FINISH(ED) FLOOR FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING GAGE, GAUGE GALVANIZED GRADE BEAM GENERAL GLUE-LAMINATED BEAM GRADE HOLDOWN HOOK HORIZONTAL HIGH POINT HOLLOW STRUCTURAL SECTION (TUBE STEEL) HEIGHT INSIDE DIAMETER INSIDE FACE INFORMATION INTERIOR INTERMEDIATE JOIST HANGER JOIST(S) JOINT KIPS (1,000 POUNDS) KIP PER LINEAR FOOT KIP PER SQUARE FOOT POUNDS LAP COMPRESSION SPLICE LIVE LOAD LONG LEG HORIZONTAL LONG LEG VERTICAL LONGITUDINAL LOW POINT

ABBREVIATION

LSL LTS LVL LW LWC Μ MATL MAX MB MC MECH MEP MEZZ MFR MID MIN MISC NIC NO NOM NS NTS Nvd NW NWC OC OD OF OH OPNG(S) OPP OSB OSL P/T PAF PC PCY PERP PG PJP PL PLY PRC PRLL PSF PSI PSL PT RAD REF REINF REQD RWD SCHED SDL SECT SER SF SHT SIM SLRS SMRF SMS SOG SP SPEC(S) SQ STD STL STR STRCTL SYMM T&B T&G Τ/ TD TEMP TEN THK THRD'D TRANSV TYP UON V VERT VIF W/ W/O WC WD WF WP WPFG WS WΤ WWR

DESCRIPTION

LAMINATED STRAND LUMBER LAP TENSION SPLICE OR CLASS "B" LAP SPLICE LAMINATED VENEER LUMBER LIGHTWEIGHT LIGHTWEIGHT CONCRETE MOMENT MATERIAL MAXIMUM UNFINISHED MACHINE BOLT MOMENT CONNECTION(S) MECHANICAL MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION MEZZANINE MANUFACTURER MIDDLE MINIMUM MISCELLANEOUS NOT IN CONTRACT NUMBER NOMINAL NEAR SIDE NOT TO SCALE NUMBER OF DIAGONAL SHEAR REINF BARS IN LINK BEAM NORMAL WEIGHT NORMALWEIGHT CONCRETE ON CENTER OUTSIDE DIAMETER OUTSIDE FACE **OPPOSITE HAND** OPENING(S) OPPOSITE ORIENTED STRAND BOARD OUTSTANDING LEG POST-TENSIONED POWDER ACTUATED FASTENER PIECE POUNDS PER CUBIC YARD PERPENDICULAR PLATE GIRDER PARTIAL JOINT PENETRATION PLATE PLYWOOD PRECAST PARALLEL POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PARALLEL STRAND LUMBER POINT RADIUS REFERENCE REINFORCE(D) (ING) OR (MENT) REQUIRED REDWOOD SCHEDULE(D) SUPERIMPOSED DEAD LOAD SECTION STRUCTURAL ENGINEER OF RECORD SQUARE FOOT (FEET) SHEET SIMILAR SEISMIC LOAD RESISTING SYSTEM SPECIAL MOMENT RESISITING FRAME SHEET METAL SCREW(S) SLAB ON GRADE SPACE SPECIFICATION(S) SQUARE STANDARD STEEL STRUCTURE STRUCTURAL SYMMETRICAL TENSION TOP AND BOTTOM TONGUE AND GROOVE TOP OF TIE DOWN TEMPERATURE OR TEMPORARY TENSION THICK OR THICKNESS THREADED TRANSVERSE TYPICAL UNLESS OTHERWISE NOTED SHEAR VERTICAL VERIFY IN FIELD WITH WITHOUT WOOD COLUMN WOOD WIDE FLANGE WORK POINT WATERPROOFING WATERSTOP WEIGHT WELDED WIRE REINFORCEMENT



GR GENERAL REQUIREMENTS

GR-1) AS USED IN THESE GENERAL NOTES:

"DRAWINGS" MEANS THE LATEST STRUCTURAL DESIGN DRAWINGS, UON. "SPECIFICATIONS" MEANS THE LATEST PROJECT SPECIFICATIONS, UON. "CONTRACT DOCUMENTS" IS DEFINED AS THE DESIGN DRAWINGS AND THE SPECIFICATIONS

"SER" IS DEFINED AS THE STRUCTURAL ENGINEER OF RECORD FOR THE STRUCTURE IN ITS FINAL CONDITION.

"DESIGN PROFESSIONALS" IS DEFINED AS THE OWNER'S ARCHITECT AND SER. "MEP" INCLUDES. BUT IS NOT LIMITED TO MECHANICAL. ELECTRICAL. PLUMBING. FIRE PROTECTION.

"CONTRACTOR" IS DEFINED TO INCLUDE ANY OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS, STRUCTURAL STEEL FABRICATOR OR STRUCTURAL STEEL ERECTOR

"BASE BUILDING STRUCTURE" IS DEFINED AS THE STRUCTURAL FRAME DESIGNED BY THORNTON TOMASETTI.

"STRUCTURE IN ITS FINAL CONDITION" MEANS ALL STRUCTURAL ELEMENTS SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS ARE INSTALLED AND COMPLETELY CONNECTED AND INSPECTED WITH NO OUTSTANDING NON-COMPLIANCE ISSUES.

GR-2) THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE STRUCTURAL WORK WITH THE ARCHITECTURAL. CIVIL. MEP CONTRACT DOCUMENTS, AS WELL AS ANY OTHER APPLICABLE TRADES.

GR-3) THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE UNTIL THE CONSTRUCTION OF THE STRUCTURE REACHES ITS FINAL CONDITION.

GR-4) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND REMOVAL OF TEMPORARY BRACING AND CONSTRUCTION SUPPORTS. FOR NEW AND EXISTING STRUCTURES. AS NECESSARY TO COMPLETE THE PROJECT. NO PORTION OF THE PROJECT WHILE UNDER CONSTRUCTION IS INTENDED TO BE STABLE IN THE ABSENCE OF THE CONTRACTOR'S TEMPORARY SUPPORTS AND BRACES. CONTRACTOR SHALL RETAIN A STRUCTURAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED TO DESIGN TEMPORARY BRACING AND CONSTRUCTION SUPPORTS.

GR-5) LATERAL LOAD RESISTANCE AND STABILITY OF THE STRUCTURE IN ITS FINAL CONDITION IS PROVIDED BY SHEARWALLS AND LATERAL STABILITY OF OTHER ELEMENTS IS PROVIDED THROUGH FLOOR SLABS; ROOF DECK.

GR-6) THE SPECIFICATIONS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS.

GR-7) THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE STRUCTURAL DRAWINGS. ARCHITECTURAL DRAWINGS. DRAWINGS FROM OTHER CONSULTANTS. PROJECT SHOP DRAWINGS AND FIELD CONDITIONS.

GR-8) IN CASES OF CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS AND OTHER DISCIPLINES OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONALS AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK.

GR-9) APPLY DETAILS. SECTIONS. AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR

GR-10) ONLY USE DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS.

GR-11) ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS, IF NOT INDICATED ON DRAWINGS.

GR-12) CENTERLINES OF COLUMNS AND FOUNDATIONS COINCIDE WITH GRID LINE INTERSECTIONS. UON.

GR-13) CENTERLINES OF GRADE BEAMS AND WALLS COINCIDE WITH CENTERLINES OF FOUNDATIONS, UON.

GR-14) CENTERLINES OF FRAMING MEMBERS COINCIDE WITH COLUMN CENTERLINES, UON.

GR-15) THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES FROM DAMAGE.

GR-16) THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED.

GR-17) THE CONTRACTOR SHALL COORDINATE THE BOTTOM OF BASE PLATE ELEVATIONS WITH THE AS-BUILT TOP OF SUPPORT ELEVATIONS.

GR-18) THE CONTRACTOR SHALL VERIFY ALL OPENING SIZES AND LOCATIONS WITH OTHER DISCIPLINES. THE DRAWINGS DO NOT SHOW ALL OPENINGS REQUIRED. ADDITIONAL OPENINGS, BLOCKOUTS AND SLEEVES MAY BE REQUIRED BY OTHER DISCIPLINES AND SHALL BE CONSTRUCTED USING THE TYPICAL DETAILS AND/OR THE CRITERIA INDICATED ON THE DRAWINGS. OPENINGS REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER.

GR-19) ELEVATIONS INDICATED ON STRUCTURAL DRAWINGS ARE BASED ON A PROJECT DATUM INDICATED ON THE ARCHITECTURAL DRAWINGS.

CD CODES AND DESIGN CRITERIA

CD-1) PERFORM ALL CONSTRUCTION IN CONFORMANCE WITH THE BUILDING AND DESIGN CODES REFERENCED WITHIN THESE DOCUMENTS. THE PROJECT DOCUMENTS REFER TO THE FOLLOWING CODES AND STANDARDS, UON:

2018 INTERNATIONAL BUILDING CODE (IBC) ,AS MODIFIED BY THE 2018 PIERTO RICO BUILDING CODE

CD-2) RISK CATEGORY:II

CD-3) SEE DESIGN LOAD DIAGRAMS ON SHEET S0.40 FOR LOCATIONS AND EXTENT OF LIVE LOAD.

CD-4) <u>SNOW LOADS:</u> FLAT ROOF SNOW LOAD (Pf): GROUND SNOW LOAD (Pg)	0 PSF 0 PSF
CD-5) <u>WIND LOAD DESIGN DATA:</u> MAIN WIND FORCE RESISTING SYSTEI BASIC WIND SPEED, V EXPOSURE RISK/OCCUPANCY CATEGORY WIND IMPORTANCE FACTOR (Iw) BUILDING CATEGORY INTERNAL PRESSURE COEFFICIENT	M 160 MF C II 1.0 ENCLC +0.18

COMPONENTS AND CLADDING DESIGN WIND PRESSURES (LRFD) WIDTH OF PRESSURE COEFFICIENT ZONE, a= 3'-0" EFFECTIVE WIND AREA= 10 FT2 55 PSF WALL=

WALL END ZONE= ROOF DESIGN WIND PRESSURES= (LRFD) WIDTH OF PRESSURE COEFFICIENT ZONE, a= 3'-0' EFFECTIVE WIND AREA= 10 FT2 23 PSF ROOF= 89 PSF ROOF EDGE= ROOF CORNER/OVERHANG= 141 PSF

CD-7) SEISMIC LOAD DESIGN DATA SFISMIC IMPORTANCE FACTOR (Ie)

Ss	1.08
S1	0.42
SDS	0.87
SD1 SITE CLASS CONCRETE PORTION	0.42 C
SEISMIC DESIGN CATEGORY	D
LATERAL SYSTEM DESCRIPTION	SPE

SEISMIC RESPONSE COEFFICIENT (Cs) 0.174 RESPONSE MODIFICATION FACTOR (R) ANALYSIS PROCEDURE DESCRIPTION EQUIVALENT LATERAL LOAD PROCEDURE DESIGN BASE SHEAR 20 KIPS COMPONENT IMPORTANCE FACTOR (lp) 1.0

CD-8) IN CASES WHERE THE CONTRACTOR DETERMINES THAT SUSPENDED OR FLOOR MOUNTED MEP EQUIPMENT LOADS EXIST WHICH EXCEED DESIGN LOADS INDICATED ON CONTRACT DOCUMENTS, CONTRACTOR SHALL SUBMIT LOAD DATA TO DESIGN PROFESSIONALS FOR REVIEW PRIOR TO PROCEEDING WITH WORK.

CD-9) DISTRIBUTE THE MAXIMUM LOAD HUNG FROM ANY STRUCTURAL MEMBER FOR MEP DUCTWORK, PIPING ETC OVER THE MEMBER'S TRIBUTARY AREA IN A WAY THAT THE DESIGN SUPERIMPOSED DEAD LOADS LISTED IN CONTRACT DOCUMENTS ARE NOT EXCEEDED. THE CONTRACTOR SHALL COORDINATE THE LOADS OF ALL TRADES AND PROVIDE ADDITIONAL SUPPORT OR DISTRIBUTION FRAMING AS REQUIRED TO ACHIEVE THE ALLOWABLE LOAD DISTRIBUTION.

CD-10) STRUCTURAL COMPONENTS ARE NOT DESIGNED FOR VIBRATING EQUIPMENT. MOUNT VIBRATING EQUIPMENT ON VIBRATION ISOLATORS. DESIGN OF VIBRATION ISOLATOR SYSTEM ANCHORAGE TO BUILDING SHALL BE BY A REGISTERED DESIGN PROFESSIONAL AND SUBMITTED TO SEOR FOR APPROVAL PRIOR TO INSTALLATION

CD-11) SERVICEABILITY

LIVE LOAD DEFLECTION IS LESS THAN L/360

LONG-TERM TOTAL DEFLECTION IS LESS THAN L/240

EXTERIOR SPANDRELS HAVE BEEN DESIGNED TO LIMIT LIVE LOAD MIDSPAN VERTICAL DEFLECTION TO 1/360 OF THE SPAN OR 1/2", WHICHEVER IS LESS.

EXTERIOR SPANDRELS HAVE BEEN DESIGNED TO LIMIT DEAD PLUS SUPERIMPOSED DEAD LOAD MIDSPAN VERTICAL DEFLECTION TO 1/240 OF THE SPAN OR 3/4", WHICHEVER IS LESS.

LATERAL DRIFT DUE TO **WIND** LOADS IS LESS THAN OR EQUAL TO **H/400**

CD-12) CONNECTIONS OF SYSTEMS DESIGNED BY CONTRACTOR'S ENGINEER SUCH AS, BUT NOT LIMITED TO, CLADDING, STAIRS, ELEVATORS, ESCALATORS, PRECAST STADIA, AND MEP LOADS ARE ASSUMED TO IMPOSE VERTICAL AND/OR HORIZONTAL LOADS ON THE BASE BUILDING STRUCTURAL MEMBERS WITHOUT GENERATING TORSION IN THE SUPPORTING STRUCTURAL MEMBERS. CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL SUPPLEMENTARY BRACING MEMBERS AS REQUIRED TO PREVENT TORSION ON THE BASE BUILDING STRUCTURE.

CD-13) FOR FIRE RATING AND FIREPROOFING ASSEMBLY EVALUATIONS, CONSIDER THE FOLLOWING ASSEMBLIES RESTRAINED: COMPOSITE WIDE-FLANGE STEEL FRAMING. INTERIOR BAYS OF CONTINUOUS CAST-IN-PLACE CONCRETE CONSTRUCTION. CONSIDER ALL OTHER ASSEMBLIES UNRESTRAINED.

FNFOUNDATIONS

FN-1) THE FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT AT ADJACENT STRUCTURE BY GEOTECH DATED AUGUST 1996

FN-2) FOUNDATIONS HAVE BEEN DESIGNED BASED ON THE FOLLOWING DESIGN VALUES FROM THE GEOTECHNICAL INVESTIGATION REPORT:

NET ALLOWABLE BEARING CAPACITY: 2000

SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS AND INFORMATION. DESIGN VALUES SHALL BE FIELD VERIFIED BY QUALIFIED GEOTECHNICAL CONSULTANT RETAINED BY THE OWNER .

FN-3) THE CONTRACTOR SHALL VERIFY FOUNDATION INSTALLATION AND CONSTRUCTION IS IN CONFORMANCE WITH THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT.

FN-4) CONTRACTOR SHALL BE RESPONSIBLE TO ADEQUATELY PROTECT ALL EXCAVATION, WHERE NECESSARY, SHEET AND SHORE THE EXCAVATION WITH ALL REQUIRED TIEBACKS AND BRACING AS DETERMINED BY CONTRACTOR'S STRUCTURAL ENGINEER.

FN-5) PROVIDE BRACING FOR ALL BASEMENT FOUNDATION WALLS PRIOR TO BACKFILLING. THIS BRACING SHALL REMAIN IN PLACE UNTIL ALL SLABS AND BEAMS FRAMING INTO WALL HAVE BEEN PLACED AND HAVE ATTAINED 100 PERCENT OF THEIR DESIGN STRENGTH.

FN-6) DO NOT BACKFILL AGAINST CANTILEVER RETAINING WALLS UNTIL THE CONCRETE HAS ATTAINED 100 PERCENT OF ITS DESIGN STRENGTH.

OSED

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ECIAL REINFORCED MASONRY SHEAR WALLS

CM CONCRETE MATERIALS

CM-1)CONCRETE STRENGTHS AND WEIGHT (SEE SPECIFICATION SECTION 03 30 00 FOR ADDITIONAL CONCRETE PROPERTIES)

LOCATION	MIN MA COMPRESSIVE WEIG STRENGTH (PSI) (PC		MIN/MAX % CLASS F FLY ASH	MIN/MAX % SLAG	MAX TOTAL % FLY ASH AND SLAG
OOTINGS / GRADE BEAMS	4000 @ 56 DAYS	145	0-25	0-30	40
LAB ON GRADE	3000 @ 28 DAYS	145	0-25	0-30	40
VALLS / COLUMNS	5000 @ 28 DAYS	145	0-30	0-50	50
HOTCRETE	4000 @ 28 DAYS	145	0-25	0-30	40
LAB & BEAMS	5000 @ 28 DAYS	145	0-20	0-30	40
	1	1	1 '	1 '	

CM-2) ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED.

CM-3) THE USE OF CALCIUM CHLORIDE AND OTHER CHLORIDE CONTAINING AGENTS IS PROHIBITED. THE USE OF RECYCLED CONCRETE IS PROHIBITED. PLACEMENT WITHIN AND CONTACT BETWEEN ALUMINUM ITEMS. INCLUDING ALUMINUM CONDUIT. AND CONCRETE IS PROHIBITED.

CM-4) SUBMIT CONCRETE MIX DESIGNS FOR EACH DESIGN AND STRENGTH OF CONCRETE. MIX DESIGNS SHALL BE PREPARED OR REVIEWED BY AN APPROVED INDEPENDENT TESTING AGENCY RETAINED BY THE CONTRACTOR IN ACCORDANCE WITH REQUIREMENTS OF ACI 301 AND ACI 318, SIGNED BY A REGISTERED DESIGN PROFESSIONAL LICENSED TO PRACTICE AS A PROFESSIONAL ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED. AND SHALL BE COORDINATED WITH DESIGN REQUIREMENTS AND CONTRACT DOCUMENTS. MIX DESIGN TO INCLUDE COMPRESSIVE STRENGTH TEST REPORTS IN ACCORDANCE WITH ACI 318 CHAPTER 5.

CM-5)CONCRETE PRODUCTS

A. PORTLANT CEMENT: ASTM C150, TYPE I, TYPE II, TYPE II/V OR TYPE V. B. AGGREGATES FOR NORMALWEIGHT CONCRETE: ASTM C 33. MAXIMUM AGGREGATE SIZE FOR FOOTINGS, PIERS, AND SLAB-ON-GRADE IS NO. 57. MAXIMUN AGGREGATE SIZE FOR ALL OTHER LOCATIONS IS NO. 67. C. FINE AGGREGATE: NATURAL SAND, OR SAND PREPARED FROM STONE OR GRAVEL, CLEAN, HARD, DURABLE, UNCOATED AND FREE FROM SILT, LOAM AND CLAY.

- D. FLY ASH: ASTM C 618, CLASS C OR CLASS F
- E. AIR ENTRAINING ADMIXTURE: ASTM C 260. F. WATER-REDUCING ADMIXTURE: ASTM C 494,
- G. SPRINKAGE REDUCING ADMIXTURES: ASTM C 157
- H. WATER: ASTM C 94 AND ASTM C 1602.

CM-6) WATER-CEMENTITIOUS MATERAILS RATIO (W/C):

A. ALL CONCRETE EXPOSED TO FREEZING AND THAWING IN MOIST CONDITION AND/OR REQUIRED TO BE WATERTIGHT OR USED IN SLABS-ON-GRADE SHALL HAVE A MAXIMUM W/C RATIO OF 0.45. B. ABSENT THE ABOVE CONDITIONS, ALL CONCRETE WITH REQUIRED STRENGTH OF 4000 PSI OR HIGHER SHALL HAVE A MAXIMUM W/C RATIO OF 0.50.

CM-7) SLUMP:

A. CONCRETE WITHOUT HIGH RANGE WATER-REDUCING ADMIXTURE TO HAVE A MAXIMUM SLUMP OF 8". B. CONCRETE WITH HIGH RANGE WATER-REDUCING ADMIXTURE: CONCRETE SLUMP PRIOR TO ADDITION OF HIGH RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 3" FOR NORMAL WEIGHT CONCRETE AND 4" FOR

LIGHTWEIGHT CONCRETE AFTER ADDITION OF WATER-REDUCING ADMIXTURE. THE CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 9" UNLESS OTHERWISE APPROVED BY THE SER. C. CONCRETE FOR DRILLED PIERS: 6" +/-1" MAXIMUM

F. TEST CYLINDERS IN ACCORDANCE WITH ASTM C 39

CM-8) CONDUCT STRENGTH TESTS OF CONCRETE AS FOLLOWS: A. TEST CONCRETE FOR REQUIRED COMPRESSIVE STRENGTH IN ACCORDANCE

WITH ACI 318 CHAPTER 5. B. SECURE SAMPLE SETS IN ACCORDANCE WITH ASTM C 172. MOLD AND CURE CYLINDERS IN ACCORDANCE WITH ASTM C 31. C. SAMPLES FOR EACH CONCRETE DESIGN MIX PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 100 CU.YD. OF CONCRETE, NOR LESS THAN ONCE FOR EACH 5000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS. D. QUANTITY OF CYLINDERS SHALL BE AT LEAST TWO 6 INCH DIAMETER BY 12 INCH LONG CYLINDERS OR AT LEAST THREE 4 INCH DIAMETER BY 8 INCHES LONG CYLINDERS. E. TRANSPORT SPECIMEN CYLINDERS FROM JOB TO LABORATORY AFTER CYLINDERS HAVE CURED FOR 24-HOURS ON SITE.

CM-9) MIXING:

A. ALL CONCRETE SHALL BE READY-MIXED CONFORMING TO ASTM C 94. B. METHODS OF MIXING SHALL COMPLY WITH ACI 318 CHAPTER 5.8.

CM-10) PLACE CONCRETE CONTINUOUSLY WITHOUT INTERRUPTION BETWEEN PREDETERMINED CONSTRUCTION AND CONTRACTION JOINTS. DEPOSIT AND CONSOLIDATE CONCRETE SLABS IN A CONTINUOUS OPERATION, WITHIN LIMITS OF CONSTRUCTION JOINTS, UNTIL COMPLETING PLACEMENT OF A PANEL OR SECTION. EMPLOY MECHANICAL VIBRATING EQUIPMENT IN ACCORDANCE WITH ACI 309R AS REQUIRED TO ACHIEVE THOROUGH CONSOLIDATION.

CM-11) COMPLY WITH RECOMMENDATIONS FOR CONCRETE FINISHING ESTABLISHED BY ACI 302.1R AND ACI 304R.

CM-12) COMPLY WITH DIMENSIONAL TOLERANCE LIMITATIONS GIVEN BY ACI 117 EXCEPT AS MODIFIED IN THE CONSTRUCTION DOCUMENTS.

CM-13) PROTECT CONCRETE FROM PREMATURE DRYING, EXCESSIVE HOT OR COLD TEMPERATURE, AND DAMAGE.

CM-14) CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST AND ABOVE 50°F FOR SEVEN DAYS (ASTM C 150 TYPE I CEMENT) OR FOR 10 DAYS (ASTM C 150 TYPE II CEMENT). HIGH EARLY STRENGTH CONCRETE USAGE SHALL BE MAINTAINED OVER 50°F FOR THREE DAYS.

CM-15) FORMWORK:

A. DESIGN OF FORMWORK AND ITS REMOVAL IS THE CONTRACTOR'S

RESPONSIBILITY. B. FORMWORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE'S "RECOMMENDED PRACTUCE FOR CONCRETE FORMWORK" (ACI 347) AND ACI

318 CHAPTER 6. C. USE PLYWOOD, FIBERGLASS, METAL, METAL-FRAMED PLYWOOD FACED, OR OTHER ACCEPTABLE PANEL-TYPE MATERIALS TO PROVIDE CONTINUOUS,

STRAIGHT, SMOOTH. EXPOSED SURFACES. D. PROVIDE FORMS FOR FOOTINGS WHEREVER CONCRETE CANNOT BE PLACED AGAINST SOLID EARTH EXCAVATION. E. REMOVE LOOSE DIRT AND DEBRIS FROM FORMS PRIOR TO CONCRETE POURS.

TOPPING SLABS: SHALL HAVE F'C=2500 PSI MIN

FOR SLABS UP TO 3" THICK USE #3@16" EW FOR SLABS UP TO 6" THICK USE #4@16" EW

RE CONCRETE REINFORCEMENT

RE-1) ALL CONCRETE SHALL INCLUDE REINFORCEMENT. IF REINFORCEMENT IS NOT SPECIFICALLY INDICATED ON THE DRAWINGS, VERIFY WITH THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH WORK.

RE-2) REINFORCEMENT SHALL CONFORM TO THE FOLLOWING STANDARDS AND MATERIAL PROPERTIES:

DEFORMED BARS: WELDABLE DEFORMED BARS:

EPOXY COATED DEFORMED BARS: A775 WELDED WIRE REINFORCEMENT EPOXY COATED WELDED WIRE REINFORCEMENT WELDED BAR ANCHORS: ANCHORS

RE-3) DETAIL REINFORCEMENT BASED ON THE PROJECT REQUIREMENTS, ACI-318 AND ACI-315, UON.

RE-4) WHERE A 90-DEG, 135 -DEG OR 180-DEG HOOK IS GRAPHICALLY INDICATED, PROVIDE CORRESPONDING ACI STANDARD HOOKS, UON,

RE-5) DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT, UON.

PER ACI 318 UNLESS OTHERWISE INDICATED ON THE DRAWINGS. LOCATION

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH CONCRETE EXPOSED TO EARTH OR WEATHER: NO 5 BARS OR SMALLER...

NO 6 BARS AND LARGER... CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND SLABS, WALLS, JOISTS: NO 11 BARS OR SMALLER.

NO 14 BARS AND LARGER. BEAMS. COLUMNS: PRIMARY REINFORCEMENT, TIES,

STIRRUPS, SPIRALS.... SHELLS, FOLDED PLATE MEMBERS: NO 11 BARS OR SMALLER..

RE-7) REBAR SHOP DRAWINGS: SUBMIT SHOP DRAWINGS THAT SHALL CLEARLY INDICATE ALL DETAILS, DIMENSIONS AND INFORMATION REQUIRED FOR FABRICATION AND PLACEMENT OF CONCRETE REINFORCEMENT IN ACCORDANCE WITH CONTRACT DOCUMENTS, PREPARED IN ACCORDANCE WITH ACI 315 REQUIREMENTS.

RE-8) REINFORCING STEEL SHALL NOT BE PERMITTED TO RUST WHERE THERE IS DANGER OF STAINING EXPOSED SURFACES OF ADJACENT CONCRETE. THE CONTRACTOR SHALL REPLACE RUST-STAINED CONCRETE AT HIS EXPENSE.

RE-9) REINFORCEMENT SHALL BE FREE OF FORM COATINGS, SEALERS, POWDERED AND SCALED RUST, LOOSE MILL SCALE, EARTH, ICE, AND OTHER MATERIALS WHICH WILL REDUCE OR DESTROY BOND WITH CONCRETE.

RE-10) PLACE REINFORCEMENT IN ACCORDANCE WITH APPROVED SHOP DRAWINGS, ACI 318, AND CRSI RECOMMENDED PRACTICE FOR "PLACING REINFORCING BARS". PLACE REINFORCEMENT BARS WITHIN TOLERANCES SPECIFIED IN ACI 117 AND ACI 318 SECTION 7.5.

RE-11) POSITION, SUPPORT AND SECURE REINFORCEMENT IN A MANNER TO PREVENT DISPLACEMENT BEFORE AND DURING PLACEMENT OF CONCRETE.

RE-12) WELDING ELECTRODES: SHALL BE IN CONFORMANCE WITH AWS D1.4 AND AWS A5.1. WELDED JOINTS OF ASTM A706, GRADE 60 BARS SHALL BE MADE WITH LOW HYDROGEN WELD FILLER METALS CLASSIFIED AS E80 ELECTRODES WITH A MINIMUM TENSILE STRENGTH OF 80K.

RE-13) LAP REINFORCEMENT AS SPECIFICALLY DETAILED ON THE DRAWINGS. SEE REBAR OFFSET AND LAP SPLICE SCHEDULE, 1/S0-51

RE-14) UNLESS OTHERWISE NOTED ALL LAP SPLICES ARE TO BE CLASS "B" SPLICES PER REBAR OFFSET AND LAP SPLICE SCHEDULE, 1/S0.51.

INDICATED. PROVIDE TENSILE, PRE-QUALIFIED, WELDED OR THREADED MECHANICAL SPLICES UON.

RE-16) PROVIDE LAP LOCATIONS AS FOLLOWS, UON:

A. GRADE BEAM / WALL (TOP HORIZONTAL REINFORCEMENT): AT CENTER OF SPAN

B. GRADE BEAM / WALL (BOTTOM HORIZONTAL REINFORCEMENT): AT SUPPORTS C. WALL INSIDE FACE (VERTICAL REINFORCEMENT): AT SUPPORT D. WALL OUTSIDE FACE (VERTICAL REINFORCEMENT): AT MIDHEIGHT OF WALL E. UNLESS OTHERWISE NOTED TERMINATE BARS AT DISCONTINUOUS ENDS WITH STANDARD HOOKS

RE-17) PROVIDE EPOXY COATED REINFORCEMENT AND ACCESSORIES IN AREAS OF DIRECT EXPOSURE TO THE ENVIRONMENT, CHEMICALS, OR DE-ICING FOR THE AREAS INDICATED ON THE DRAWINGS

RE-18) TERMINATION OF REINFORCEMENT, UON:

EXISTING CONCRETE.

B. BEND TOP MAT OR FOOTING BARS DOWN TO BOTTOM BARS AT ENDS.

C. BEND BOTTOM MAT OR FOOTING BARS UP WITH STANDARD 90 DEGREE BENDS.

D. PROVIDE DOWELS FROM FOOTINGS AND SLABS INTO WALLS AND COLUMNS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCEMENT.

CJ CONCRETE CONSTRUCTION JOINTS

CJ-1) PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI-318. SUBMIT SHOP DRAWINGS SHOWING PROPOSED CONSTRUCTION JOINT LOCATIONS. DETAILS AND THE PLACEMENT SEQUENCE FOR THE STRUCTURAL ENGINEER'S APPROVAL PRIOR TO PROCEEDING WITH WORK.

CJ-2) NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN BEAMS, UPTURNED BEAMS. WALLS AND SLABS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED IN WRITING BY THE DESIGN PROFESSIONALS PRIOR TO CONSTRUCTION.

CJ-3) PLACE VERTICAL CONSTRUCTION JOINTS IN WALLS TO PROVIDE A 60 FT MAXIMUM LENGTH OF CONCRETE PLACEMENT AND LOCATE AS FOLLOWS:

A. FOUNDATION WALLS: MINIMUM OF 8 FT FROM ANY COLUMN LINE OR WALL OPENING

ASTM A615, GRADE 60, UON ASTM A706, GRADE 60, UON ASTM A615, GRADE 60, UON ASTM A185

ASTM A185 / A884 NELSON D2L DEFORMED BAR (ICC-ES REPORT ER-5217)

RE-6) REINFORCEMENT SHALL HAVE CONCRETE PROTECTION (CLEAR COVER)



RE-15) PROVIDE MECHANICAL SPLICES FOR BARS LARGER THAN #11 OR WHERE

A. TERMINATE ALL BARS IN LAPS, 90 DEGREE BENDS, OR WITH DOWELS INTO

B. GRADE BEAMS SUPPORTING FOUNDATION WALLS: AT CENTERLINES BETWEEN SUPPORTS

C. RETAINING WALLS: 60 FT MAXIMUM LENGTH OF CONCRETE PLACEMENT CJ-4) PROVIDE CONTINUOUS WATERSTOPS AT ALL CONSTRUCTION JOINTS EXPOSED TO SOIL OR WATER, AS DESCRIBED IN THE SPECIFICATIONS.

SS STRUCTURAL STEEL

SS-1) STEEL MATERIALS:

SHAPE	MATERIAL
WIDE FLANGES & WT'S	ASTM A992, GRADE 50
MISCELLANEOUS PLATES	ASTM A36
CONTINUITY PLATES	ASTM A572, GRADE 50
ANGLES & CHANNELS	ASTM A36
RECTANGULAR HSS (TUBES)	ASTM A500, GRADE B
ROUND HSS	ASTM A500, GRADE B
BOLTS	ASTM A325 N, UON
ANCHOR RODS	ASTM F1554, Fy=36ksi, UON
THREADED RODS	ASTM A36
STEEL JOIST	PER STEEL JOIST INSTITUTE'S SPECIFICATIONS
WELDING ELECTRODES	E70, SEE SPECIFICATIONS FOR CVN REQUIREMENTS
WELDED STUDS	ASTM A108 HEADED STUDS: TYPE H4L OR S3L BY NELSON OR EQUAL.

SS-2) STRUCTURAL STEEL MEMBERS AND CONNECTIONS DENOTED "SLRS" SHALL SATISFY REQUIREMENTS FOR THE SEISMIC LOAD RESISTING SYSTEM IN SPECIFICATION SECTION 05 12 10.

SS-3) WHERE NO CAMBER IS INDICATED. FABRICATE BEAMS SO THAT ANY NATURAL CAMBER IS UPWARD AFTER ERECTION.

SS-4) SPLICES SHALL BE ALLOWED ONLY AT LOCATIONS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE BY THE SER IN WRITING.

SS-5) FOR STEEL MEMBERS AND EMBEDMENTS EXPOSED TO WEATHER, PROVIDE HOT-DIPPED GALVANIZED FINISH.

SS-6) PROVIDE HOLES IN ALL STEEL AS REQUIRED TO PREVENT ANY ACCUMULATION OF WATER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL NOT EXCEED 1 1/8"Ø AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OPEN.

SS-7) SHOW ALL COPES, HOLES, OPENINGS AND MODIFICATIONS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR ERECTION OR THE WORK OF OTHER TRADES ON THE SHOP DRAWINGS FOR APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

SS-8) FIELD MODIFICATION OF STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ARCHITECT AND STRUCTURAL ENGINEER.

SS-9) THE CONTRACTOR SHALL SUBMIT A STEEL ERECTION PROCEDURE. PREPARED UNDER THE SUPERVISION OF A STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE LOCATION OF THE PROJECT (THE CONTRACTOR'S ENGINEER) FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD. THIS PROCEDURE MUST INCLUDE THE PROPOSED SURVEY REQUIRED BY THE STEEL SPECIFICATIONS.

SS-10) STEEL USING COMPLETE JOINT PENETRATION GROOVE WELDS THAT FUSE THROUGH THE THICKNESS OF THE FLANGE OR WEB SHALL HAVE A MINIMUM CHARPY V-NOTCH IMPACT TESTING VALUE AS FOLLOWS:

A.) ASTM A6/A6M HOT-ROLLED SHAPES WITH A FLANGE THICKNESS EXCEEDING [2] INCHES AND BUILT-UP HEAVY SHAPES WITH PLATES EXCEEDING [2] INCHES IN THICKNESS: 20 FT-LB @ 70 DEG. F

B.) REGARDLESS OF THICKNESS, ALL TRUSSES, LATERAL SYSTEM MEMBERS (INCLUDING COLUMNS, WIND GIRDERS, BRACES, ETC.): 20 FT-LB @ 70 DEG. F

C.) STEEL EXPOSED TO TEMPERATURES IN SERVICE BELOW 50 DEG. F: 25 FT-LB @ [40] DEG. F.

D.) WELD METAL: 20 FT-LB @ MINUS 20 DEG. F AND 40 FT-LB @ 70 DEG. F

E.) WELD METAL EXPOSED TO TEMPERATURES IN SERVICE BELOW 50 DEG. F 25 FT-LB @ MINUS 40 DEG. F

F.) TESTING IS TO BE IN ACCORDANCE WITH ASTM A6/A6M, SUPPLEMENTARY REQUIREMENT S30, CHARPY V-NOTCH IMPACT TEST FOR STRUCTURAL SHAPES -ALTERNATE CORE LOCATION, AT ROLLED SHAPES AND ASTM A673 FOR PLATES, AT ANY PERMITTED LOCATIONS.

SC STRUCTURAL STEEL CONNECTIONS

SC-1) ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE STRUCTURAL WELDING CODE, ANSI/AWS D1.1, LATEST EDITION. ALL WELD SIZES SHALL BE THE LARGER OF THE SIZE REQUIRED BY CONNECTION FORCES, THE MINIMUM SIZE PER ANSI/AWS D1.1, OR 3/16 INCH MINIMUM FILLET WELD UON. ANY WELD SIZES SHOWN ON THE DESIGN DRAWINGS ARE CONSIDERED EFFECTIVE WELD SIZES AND SHALL BE INCREASED IN ACCORDANCE WITH AWS AS REQUIRED BY GAPS OR SKEWS BETWEEN COMPONENTS.

SC-2) WELDING EXPOSED TO LOW (OUTDOOR) TEMPERATURES IN SERVICE SHALL CONFORM TO AWS D1.5.

SD STEEL DECK GENERAL REQUIREMENTS

SD-1) THE MANUFACTURE AND ERECTION OF STEEL DECK AND ITS ANCHORAGE SHALL, AT A MINIMUM, BE IN ACCORDANCE WITH "DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS" OF THE STEEL DECK INSTITUTE (SDI), CURRENT EDITION AND "SPECIFICATIONS FOR DESIGN OF LIGHT GAGE COLD FORMED STEEL STRUCTURAL MEMBERS" AS PUBLISHED BY THE AMERICAN IRON AND STEEL INSTITUTE (AISI), CURRENT EDITION.

SD-2) FABRICATE STEEL DECK UNITS AND ACCESSORIES FROM STEEL SHEET CONFORMING TO THE FOLLOWING STANDARDS AND MATERIAL PROPERTIES:

ASTM A653 SQ GRADE 50, WITH A MINIMUM YIELD STRENGTH OF 50 KSI. HOT-DIPPED GALVANIZED PER ASTM A653 G60.

SD-2) HOT-DIPPED GALVANIZED PER ASTM A653 G90.

SD-3) CONFIGURE ALL STEEL DECK LAYOUTS USING THREE OR MORE CONTINUOUS SPANS WHEREVER POSSIBLE. SPLICES SHALL BE LOCATED OVER SUPPORTS. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE STRUCTURAL WELDING CODE, ANSI/AWS D1.1, LATEST EDITION.

SD-4) CONFIGURE ALL STEEL DECK AS SHOWN ON THE DRAWINGS.

SD-5) SEE TYPICAL DECK NOTES ON SHEET S7.20 FOR ADDITIONAL REQUIREMENTS





PA POST-INSTALLED ANCHORS

PA-1) POST-INSTALLED ANCHORS INCLUDE EXPANSION ANCHORS. SCREW ANCHORS, EPOXY ANCHORS/DOWELS, AND POWDER-ACTUATED FASTENERS.

PA-2) INSTALL POST-INSTALLED ANCHORS IN ACCORDANCE WITH THE APPLICABLE ICC-ES REPORT AND THE MANUFACTURER'S RECOMMENDATIONS.

PA-3) USE SCANNING EQUIPMENT OR OTHER MEANS TO LOCATE AND AVOID CUTTING OR DAMAGING REINFORCING BARS. SER APPROVAL IS REQUIRED PRIOR TO CUTTING OR DAMAGING REINFORCING.

PA-4) SPECIAL INSPECTION IS REQUIRED FOR ALL POST-INSTALLED ANCHOR INSTALLATIONS, UON. **PA-5)** FIELD TESTING OF POST-INSTALLED ANCHORS IS REQUIRED, UON. TEST INSTALLED ANCHORS IN ACCORDANCE WITH THE FOLLOWING:

- TEST 100% OF ANCHORS AT ALL STRUCTURAL APPLICATIONS, UON. B. TEST 50% OF ANCHORS AT ALL NON-STRUCTURAL APPLICATIONS (SUCH
- AS EQUIPMENT ANCHORAGE), UON. TEST 10% OF ANCHORS AT SILL PLATE BOLTING APPLICATIONS, UON.
- NOT PREVIOUSLY TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS.
- REQUIRED FOR THE SPECIFIC ANCHOR TYPE
- COUPLER TO THE SAME TIGHTNESS AS THE ORIGINAL NUT USING A TORQUE WRENCH. REACTION LOADS FROM TEST FIXTURES MAY BE IS NOT RESTRAINED FROM WITHDRAWING BY THE FIXTURES. TO BE ACCEPTABLE, ANCHORS SHALL HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD (OBSERVABLE MOVEMENT IS DEFINED AS THE WASHER UNDER THE NUT BECOMING LOOSE).
- TORQUE TESTS: TO BE ACCEPTABLE, THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN ONE-HALF TURN OF THE NUT. H. TEST EQUIPMENT IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED
- PROCEDURES. FIELD TESTING SHALL BE DONE IN THE PRESENCE OF THE PROJECT
- INSPECTOR. OF THE SUBJECT ANCHOR.

PA-6) EXPANSION ANCHORS

A. EXPANSION ANCHORS SHALL BE EITHER ONE OF THE FOLLOWING, UON: HILTI KWIK BOLT TZ

(ICC-ES REPORT ESR-1917)

SIMPSON STRONG-BOLT 2 (ICC-ES REPORT ESR-3037)

USE OF CARBON STEEL EXPANSION ANCHORS IS LIMITED TO DRY. EXTERIOR, WEATHER-EXPOSED, OR DAMP LOCATIONS.

ANCHOR EMBEDMENTS BELOW ARE TO BE USED WHEN EXPLICITLY SPECIFIED IN THE STRUCTURAL DRAWINGS. FOR LOCATIONS WHERE TENSION TEST VALUES ARE NOT SPECIFIED IN THE DRAWINGS, CONSULT WITH THE SER.

HILTI KWIK BOLT TZ IN NORMAL-WEIGHT CONCRETE				
ANCHOR DIAMETER	Hnom	MINIMUM HOLE DEPTH	TORQUE TEST VALUE (FT-LBS)	
3/8"	2 5/16"	2 5/8"	25	
1/2"	2 3/8"	2 5/8"	40	
5/8"	4 7/16"	4 3/4"	60	
3/4"	5 9/16"	5 3/4"	110	
HILTI KV	VIK BOLT TZ	IN LIGHTWEIGH	T CONCRETE	
ANCHOR DIAMETER	Hnom	MINIMUM HOLE DEPTH	TORQUE TEST VALUE (FT-LBS)	
3/8"	2 5/16"	2 5/8"	25	
1/2"	2 3/8"	2 5/8"	40	
5/8"	3 9/16"	3 7/8"	60	
3/4"	4 5/16"	4 1/2"	110	
SIMPSON STRONG-BOLT 2 IN NORMAL-WEIGHT CONCRET				
	KUNG-DULT Z			
ANCHOR DIAMETER	Hnom	MINIMUM HOLE DEPTH	TORQUE TEST VALUE (FT-LBS)	
ANCHOR DIAMETER 3/8"	Hnom 1 7/8"	MINIMUM HOLE DEPTH 2"	TORQUE TEST VALUE (FT-LBS) 30	
ANCHOR DIAMETER 3/8" 1/2"	Hnom 1 7/8" 2 3/4"	MINIMUM HOLE DEPTH 2" 3"	TORQUE TEST VALUE (FT-LBS) 30 60	
ANCHOR DIAMETER 3/8" 1/2" 5/8"	Hnom 1 7/8" 2 3/4" 5 1/8"	MINIMUM HOLE DEPTH 2" 3" 5 3/8"	TORQUE TEST VALUE (FT-LBS) 30 60 90	
ANCHOR DIAMETER 3/8" 1/2" 5/8" 3/4"	Hnom 1 7/8" 2 3/4" 5 1/8" 5 3/4"	MINIMUM HOLE DEPTH 2" 3" 5 3/8" 6"	TORQUE TEST VALUE (FT-LBS) 30 60 90 150	
ANCHOR DIAMETER 3/8" 1/2" 5/8" 3/4" SIMPSON ST	Hnom 1 7/8" 2 3/4" 5 1/8" 5 3/4" RONG-BOLT	MINIMUM HOLE DEPTH 2" 3" 5 3/8" 6" 2 IN LIGHTWEIG	TORQUE TEST VALUE (FT-LBS) 30 60 90 150 HT CONCRETE	
ANCHOR DIAMETER 3/8" 1/2" 5/8" 3/4" SIMPSON ST ANCHOR DIAMETER	Hnom 1 7/8" 2 3/4" 5 1/8" 5 3/4" RONG-BOLT Hnom	MINIMUM HOLE DEPTH 2" 3" 5 3/8" 6" 2 IN LIGHTWEIG MINIMUM HOLE DEPTH	TORQUE TEST VALUE (FT-LBS) 30 60 90 150 HT CONCRETE TORQUE TEST VALUE (FT-LBS)	
ANCHOR DIAMETER 3/8" 1/2" 5/8" 3/4" SIMPSON ST ANCHOR DIAMETER 3/8"	Hnom 1 7/8" 2 3/4" 5 1/8" 5 3/4" RONG-BOLT Hnom 1 7/8"	MINIMUM HOLE DEPTH 2" 3" 5 3/8" 6" 2 IN LIGHTWEIG MINIMUM HOLE DEPTH 2"	TORQUE TEST VALUE (FT-LBS) 30 60 90 150 HT CONCRETE TORQUE TEST VALUE (FT-LBS) 30	
ANCHOR DIAMETER 3/8" 1/2" 5/8" 3/4" SIMPSON ST ANCHOR DIAMETER 3/8" 1/2"	Hnom 1 7/8" 2 3/4" 5 1/8" 5 3/4" RONG-BOLT Hnom 1 7/8" 2 3/4"	MINIMUM HOLE DEPTH 2" 3" 5 3/8" 6" 2 IN LIGHTWEIG MINIMUM HOLE DEPTH 2" 3"	TORQUE TEST VALUE (FT-LBS) 30 60 90 150 HT CONCRETE TORQUE TEST VALUE (FT-LBS) 30 60	
ANCHOR DIAMETER 3/8" 1/2" 5/8" 3/4" SIMPSON ST ANCHOR DIAMETER 3/8" 1/2" 5/8"	Hnom 1 7/8" 2 3/4" 5 1/8" 5 3/4" RONG-BOLT Hnom 1 7/8" 2 3/4" 3 3/8"	MINIMUM HOLE DEPTH 2" 3" 5 3/8" 6" 2 IN LIGHTWEIG MINIMUM HOLE DEPTH 2" 3" 3 5/8"	TORQUE TEST VALUE (FT-LBS) 30 60 90 150 HT CONCRETE TORQUE TEST VALUE (FT-LBS) 30 60 90	

Hnom IS MEASURED FROM FACE OF CONCRETE SUBSTRATE TO THE END OF THE BOLT. CONTRACTOR SHALL PROVIDE ANCHORS WITH SUFFICIENT TOTAL LENGTH FOR THE

D. SPECIFIED EMBEDMENT LENGTH, THICKNESS OF FASTENED PART, WASHER AND NUT

PA-7) EXPANSION ANCHORS IN MASONRY

A. EXPANSION ANCHORS SHALL BE EITHER ONE OF THE FOLLOWING, UON: HILTI KWIK BOLT 3

(ICC-ES REPORT ESR-1385) SIMPSON WEDGE-ALL (ICC-ES REPORT ESR-1396)

USE OF ZINC-PLATED CARBON STEEL EXPANSION ANCHORS IS LIMITED TO DRY, INTERIOR LOCATIONS. USE MECHANICALLY GALVANIZED EXPANSION ANCHORS AT EXTERIOR, WEATHER-EXPOSED, OR DAMP LOCATIONS.

ANCHOR EMBEDMENTS BELOW ARE TO BE USED WHEN EXPLICITLY SPECIFIED IN THE STRUCTURAL DRAWINGS. FOR LOCATIONS WHERE TENSION TEST VALUES ARE NOT SPECIFIED IN THE DRAWINGS, CONSULT WITH THE SER.

IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE FIELD TESTS SHALL BE EITHER TENSION TESTS OR TORQUE TESTS, AS

TENSION TESTS: APPLY TEST LOADS TO ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE NUT AND INSTALL A THREADED

APPLIED CLOSE TO THE ANCHOR BEING TESTED. PROVIDED THE ANCHOR

TESTING SHOULD OCCUR A MINIMUM OF 24 HOURS AFTER INSTALLATION

INTERIOR LOCATIONS. USE STAINLESS STEEL EXPANSION ANCHORS AT



	HILTI KWIK B	OLT 3 IN MASON	IRY
DIAMETER	Hnom	MINIMUM HOLE DEPTH	TORQUE TEST VALUE (FT-LBS)
1/4"	2"	2 1/4"	4
3/8"	2 1/2"	2 7/8"	15
1/2"	3 1/2"	4"	25
5/8"	4"	4 5/8"	65
3/4"	4 3/4"	5 1/2"	120

SI	MPSON WED	GE-ALL IN MASC	ONRY
ANCHOR DIAMETER	Hnom	MINIMUM HOLE DEPTH	TORQUE TEST VALUE (FT-LBS)
3/8"	2 5/8"	3 1/8"	30
1/2"	3 1/2"	4"	35
5/8"	4 3/8"	5 1/8"	55
3/4"	5 1/4"	6"	120

- Hnom IS MEASURED FROM FACE OF CONCRETE SUBSTRATE TO THE END OF THE BOI T
- CONTRACTOR SHALL PROVIDE ANCHORS WITH SUFFICIENT TOTAL LENGTH FOR THE SPECIFIED EMBEDMENT LENGTH, THICKNESS OF FASTENED PART, WASHER AND NUT.
- THE DEPTH OF THE DRILLED HOLES MUST EXCEED THE SPECIFIED ANCHOR EMBEDMENT LENGTH BY A SUFFICIENT AMOUNT TO PERMIT THE ANCHORS TO BE INSTALLED TO A MINIMUM OF SIX THREADS BELOW THE SUBSTRATE SURFACE

PA-8) SCREW ANCHORS

A. SCREW ANCHORS SHALL BE EITHER ONE OF THE FOLLOWING, UON:

SIMPSON TITEN HD (ICC-ES REPORT ESR-2713)

HILTI KWIK HUS-EZ

(ICC-ES REPORT ESR-3027)

ANCHOR EMBEDMENTS AND TENSION TEST VALUES BELOW ARE TO BE USED WHEN EXPLICITLY SPECIFIED IN THE STRUCTURAL DRAWINGS. FOR LOCATIONS WHERE TENSION TEST VALUES ARE NOT SPECIFIED IN THE DRAWINGS. CONSULT WITH THE SER.

SIMPSON TITEN HD IN NORMAL WEIGHT CONCRETE (3000 PSI MIN					
ANCHOR DIAMETER	Hnom	MINIMUM HOLE DEPTH	TENSION TEST VALUE (LBS)		
3/8"	2 1/2"	3"	1100		
1/2"	3 1/4"	3 3/4"	2730		
5/8"	4 1/2"	4 1/2"	3460		
3/4"	5 1/2"	6"	5410		

ł		S-EZ IN NO	RMAL WEIGHT CO	NCRETE (3000 PSI MIN)
	ANCHOR DIAMETER	Hnom	MINIMUM HOLE DEPTH	TENSION TEST VALUE (LBS)
l	1/4"	2 1/2"	2 7/8"	1040
	3/8"	2 1/2"	2 3/4"	1920
	1/2"	3"	3 3/8"	2405
I	5/8"	3 1/4"	3 5/8"	2800
	3/4"	4"	4 3/8"	3780

PA-9) EPOXY ANCHORS AND DOWELS

A. EPOXY SHALL BE EITHER ONE OF THE FOLLOWING, UON:

HILTI HIT-HY 200 (ICC-ES REPORT ESR-3187)

HILTI HIT-RE 500-SD (ICC-ES REPORT ESR-2322)

SIMPSON SET-XP (ICC-ES REPORT ESR-2508)

RODS EMBEDDED IN EPOXY SHALL BE CARBON STEEL THREADED RODS PER THE EPOXY MANUFACTURER'S ICC-ES REPORT. FOR HILTI HIT-HY 200 EPOXY, HILTI HIT-Z ANCHOR RODS MAY BE SUBSTITUTED FOR THREADED RODS AT CONTRACTOR'S OPTION.

REINFORCING STEEL BARS EMBEDDED IN EPOXY SHALL BE ASTM A615, GRADE 60. UON.

ANCHOR EMBEDMENT AND TENSION TEST VALUES BELOW ARE TO BE USED WHEN EXPLICITLY SPECIFIED IN THE STRUCTURAL DRAWINGS. FOR LOCATIONS WHERE TENSION TEST VALUES ARE NOT SPECIFIED IN THE DRAWINGS, CONSULT WITH THE SFR

EPOXY ANCHORS IN NORMAL-WEIGHT CONCRETE (3000 PSI MIN)								
		TENSI	ON TEST VALU	E (LBS)				
REBAR SIZE	EMBEDMENT (IN)	HILTI HIT-HY 200	HILTI HIT-RE 500-SD	SIMPSON SET-XP				
#3	3	2900	940	1040				
#4	4	5180	1670	3740				
#5	5	8130	2600	5260				
#6	6	11120	3750	6740				
#7	7	12260	4320	8020				

EPOXY ANCHORS IN NORMAL-WEIGHT CONCRETE (3000 PSI MIN)											
THREADED		TENSION TEST VALUE (LBS)									
DIAMETER (IN)	EMBEDMENT (IN)	HILTI HIT-HY 200	HILTI HIT-RE 500-SD	SIMPSON SET-XP							
3/8	3	2500	1230	1700							
1/2	4	4480	2110	2600							
5/8	5	7030	3170	3450							
3/4	6	10180	4450	4440							
7/8	7	11710	4720	5540							

N ANCHOR PART SUBSTR	RATE	
DEPTH		

G н

UON:

D.

THAT

THE STRUCTURAL ENGINEER SHALL RETURN. WITHOUT COMMENT. SUBMITTALS WHICH THE CONTRACTOR HAS NOT STAMPED OR WHICH DO NOT MEET THE ABOVE REQUIREMENTS. THE STRUCTURAL ENGINEER'S REVIEW OF SUBMITTALS SHALL BE FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT. NO WORK SHALL BE STARTED WITHOUT SUCH REVIEW.

SU-3) FOR COMPONENTS THAT REQUIRE ENGINEERING BY THE CONTRACTOR, PROVIDE A NOTE ON EACH SHOP DRAWING, WRITTEN AND SIGNED BY THE SUPPLIER'S ENGINEER, INDICATING THAT THE SHOP DRAWING IS IN CONFORMANCE WITH THE CALCULATIONS OF THE CONTRACTOR' S ENGINEER.

SU-5) DEFERRED SUBMITTALS SHALL FIRST BE SUBMITTED TO THE PROJECT ARCHITECT AND/OR THE ENGINEER OF RECORD FOR REVIEW AND COORDINATION. FOLLOWING THE COMPLETION OF THE ARCHITECT'S OR ENGINEER'S REVIEW, A SUBMITTAL TO THE PLAN CHECK AUTHORITY SHALL BE MADE FOR REVIEW AND APPROVAL. THIS SUBMITTAL SHALL BE PROCESSED IN ACCORDANCE WITH CBC APPENDIX CHAPTER 1, SECTION 106.3.4.2. FOR A LIST OF DEFERRED ITEMS, SEE ARCHITECTURAL DRAWINGS.

TESTING OF EPOXY DOWELS AT JOINTS BETWEEN NEW AND EXISTING

SLABS-ON-GRADE IS NOT REQUIRED. TESTING OF #3 EPOXY DOWELS AT CURBS IS NOT REQUIRED.

TESTING SHALL OCCUR AFTER EPOXY HAS CURED, AS PER MANUFACTURER'S RECOMMENDATIONS.

OVERHEAD AND/OR CONSTANT TENSION EPOXY ANCHOR INSTALLATIONS NOT SHOWN ON THE DRAWINGS SHALL NOT BE PERMITTED UNLESS EACH CONDITION IS REVIEWED AND APPROVED IN WRITTING BY SER. EPOXY ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF

21 DAYS AT TIME OF ANCHOR INSTALLATION. INSTALLATION AND INSPECTION OF EPOXY ANCHORS SHALL COMPLY WITH ACI 318-11 APPENDIX D SECTIONS D.9.2.2 AND D.9.2.4. K. FOR USES OF EPOXY DOWELS NOT EXPLICITLY SPECIFIED IN THE STRUCTURAL

DRAWINGS. CONTACT THE SER. **PA-10)** POWDER-ACTUATED FASTENERS (PAF):

A. POWDER-ACTUATED FASTENERS SHALL BE EITHER ONE OF THE FOLLOWING,

HILTI X-U (ICC-ES REPORT ESR-2269, LARR 25675, LARR 25708) AT METAL HILTI X-CP72 (ICC-ES REPORT ESR-2379) AT PTDF. SIMPSON POWER-DRIVEN FASTENERS (ICC-ES REPORT ESR-2138),

LARR 25469 PROVIDE 0.08" THICK x 1.1" SQUARE OR 1.425" ROUND WASHERS FOR ALL POWDER-ACTUATED FASTENERS.

THE MINIMUM EMBEDMENT OF POWDER-ACTUATED FASTENERS INTO CONCRETE SHALL BE 1", UON.

THE EMBEDMENT OF POWDER-ACTUATED FASTENERS INTO STEEL SHALL BE REQUIRED BY THE PAF MANUFACTURER, UON. TESTING OF POWDER-ACTUATED FASTENERS IS NOT REQUIRED.

SU SUBMITTALS

SU-1) TWENTY WORKING DAYS PRIOR TO SUBMITTING SHOP DRAWINGS, THE CONTRACTOR SHALL SUBMIT FOR STRUCTURAL ENGINEER'S REVIEW A SCHEDULE WHICH DETAILS THE ESTIMATED QUANTITY OF SHOP DRAWINGS AND THE DATE THE SHOP DRAWINGS WILL BE RECEIVED BY THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL HAVE THE OPPORTUNITY TO REVIEW THE PROPOSED SCHEDULE AND SUBMIT COMMENTS TO THE CONTRACTOR. THE FINAL SHOP DRAWING SCHEDULE SHALL BE DEVELOPED AND SUBMITTED TO THE STRUCTURAL ENGINEER. IN ACCORDANCE WITH THE SHOP DRAWING SCHEDULE, THE STRUCTURAL ENGINEER WILL RETURN THE SHOP DRAWING ITEMS WITHIN TEN WORKING DAYS AFTER HAVING RECEIVED THE REPRODUCIBLE SHOP DRAWING.

SU-2) THE CONTRACTOR IS TO REVIEW EACH SUBMITTAL PRIOR TO FORWARDING TO ARCHITECT AND STRUCTURAL ENGINEER. THE CONTRACTOR IS TO STAMP EACH SUBMITTAL VERIFYING THAT THE FOLLOWING IS ADDRESSED:

THE SHOP DRAWING IS REQUESTED

THE SHOP DRAWING IS BASED ON THE LATEST DESIGN. THE ARCHITECT'S AND STRUCTURAL ENGINEER'S COMMENTS FROM ANY

PREVIOUS SUBMITTALS ARE ADDRESSED. THE WORK IS COORDINATED AMONG ALL CONSTRUCTION TRADES. REVISIONS FROM PREVIOUS SUBMITTALS ARE CLEARLY MARKED BY CIRCLING OR

SUBMITTAL IS COMPLETE.

SUBMITTAL DOES NOT INCLUDE SUBSTITUTION REQUEST 8. SUBMITTAL SHALL INCLUDE A STAMP INDICATING PROJECT NAME AND LOCATION. SUBMITTAL NUMBER. SPECIFICATION SECTION NUMBER.

SU-4) THE FOLLOWING ITEMS REQUIRE SUBMITTALS FOR STRUCTURAL REVIEW AS OUTLINED IN THE SPECIFICATIONS:

S	CALC	CONCRETE FORMWORK
S		CONCRETE REINFORCING LAYOUT
S		CONCRETE MIX DESIGNS
S		CONCRETE CONSTRUCTION JOINT LAYOUT
S		MASONRY REINFORCEMENT LAYOUT
S		GROUT MIX DESIGNS
S		STRUCTURAL STEEL
S	CALC	STEEL JOISTS, BRIDGING AND CONNECTIONS
S		STEEL DECK

S = SHOP DRAWINGS AND/OR PRODUCT DATA REQUIRED

CALC = SUPPORTING CALCULATIONS REQUIRED, SIGNED AND SEALED BY A LICENSED [PROFESSIONAL, STRUCTURAL] ENGINEER IN THE STATE IN WHICH THE PROJECT IS LOCATED.

THE ITEMS IN THIS SECTION REQUIRE SHOP DRAWINGS, SUBMITTED FOR REVIEW OF INTERACTION WITH THE BASE BUILDING STRUCTURE.

PI PERFORMANCE ITEMS

PI-1) THE CONTRACTOR SHALL EMPLOY OR RETAIN A LICENSED STRUCTURAL ENGINEER IN THE STATE IN WHICH THIS PROJECT IS LOCATED TO DESIGN AND DETAIL PERFORMANCE ITEMS AS PART OF THE BASE BUILDING STRUCTURE INDICATED IN THE CONTRACT DOCUMENTS.

STEEL JOISTS, BRIDGING AND CONNECTIONS

DE DEMOLITION

DE-1) THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE MEANS AND METHODS

DEMOLITION AND THE INTEGRITY AND STABILITY OF THE EXISTING STRUCTURE DURING DEMOLITION UNTIL THE WORK IS COMPLETED. THE CONTRACTOR SHALL PROVIDE SHORING IN REQUIRED LOCATIONS WHERE EXISTING CONSTRUCTION

REMAIN WILL BE AFFECTED BY DEMOLITION.

DE-2) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO ANY STRUCTURAL ELEMENTS WHICH ARE TO REMAIN AND THAT HAVE BEEN DAMAGED DURING THE DEMOLITION PROCESS TO THE COMPLETE SATISFACTION OF THE OWNER. THE REPAIRS SHALL BE AT NO EXPENSE TO THE OWNER. ALL REPAIR WORK SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF [STATE] AND SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO COMMENCING REPAIR WORK.

DE-3) ALL EXISTING FRAMING IS INDICATED FOR REFERENCE ONLY AND IS TO BE FIELD VERIFIED BY THE CONTRACTOR. VERIFY THE EXACT EXTENT OF DEMOLITION AT THE SITE. DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH THE EXISTING CONSTRUCTION.

DE-4) THE CONTRACTOR SHALL USE THE STRUCTURAL CONTRACT DOCUMENTS IN CONJUNCTION WITH THE ARCHITECTURAL AND MEP DEMOLITION CONTRACT DOCUMENTS. IN THE EVENT OF CONFLICTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER.

DE-5) THE CONTRACTOR SHALL USE QUALIFIED, EXPERIENCED PERSONNEL FOR DEMOLITION AND REMOVAL OPERATIONS. PERFORM DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.

DE-6) DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL NOR DEBRIS TO DROP EXCEPT BY METHODS WHICH WILL INSURE INTEGRITY OF THE STRUCTURE.

DE-7) PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.

DE-8) DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.

DE-9) THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF REMOVING DEMOLISHED MATERIALS FROM THE SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND, AND REGULATIONS.

DE-10) WHERE NEW OPENINGS IN EXISTING CONCRETE SLABS OR WALLS ARE TO BE CREATED, THE DEMOLITION CONTRACTOR SHALL CORE HOLES AT THE OUTSIDE CORNERS OF THE NEW OPENING PRIOR TO DEMOLITION. SAW-CUT AND DEMOLISH SLAB OR WALL ONLY AFTER THE INSTALLATION OF ALL REQUIRED NEW STRUCTURAL FRAMING AND/OR REINFORCEMENT IN PLAN OR SECTION. UON. SAW CUTTING SHALL BE STRAIGHT AND SHALL NOT EXTEND INTO EXISTING SLAB OR WALL TO REMAIN NOR BEYOND THE HOLES CORED AT THE CORNERS OF THE NEW OPENING.



SI SPECIAL INSPECTIONS AND STRUCTURAL TESTING

SI-1) SPECIAL INSPECTIONS SHALL BE PERFORMED BY A SPECIAL INSPECTOR PER IBC SECTIONS 1704 AND 1705. THE SPECIAL INSPECTOR SHALL BE EMPLOYED BY THE OWNER AND NOT BY THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK.

SI-2) THE SPECIAL INSPECTOR SHALL BE A QUALIFIED (LICENSED) PERSON WHO SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING HIS OR HER COMPETENCE AND RELEVANT TRAINING OR EXPERIENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL. EXPERIENCE SHALL BE FOR SPECIAL INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

SI-3) THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY PER IBC SECTION 1704.4 TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK WHEN RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND FORCE OR SEISMIC FORCE RESISTING SYSTEM. THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.

SI-4) THE FOLLOWING WORK REQUIRES STRUCTURAL TESTS. FOR SPECIFIC REQUIREMENTS OF STRUCTURAL TESTS, SEE THE SPECIFICATIONS AND GENERAL NOTES.

1. CONCRETE REINFORCEMENT

CAST-IN-PLACE CONCRETE
 SHOTCRETE

4. POST-INSTALLED ANCHORS5 GROUTED DOWELS

6. STRUCTURAL STEEL MATERIALS AND FABRICATION 7. WELDING: STRUCTURAL STEEL AND REINFORCING STEEL

8. STEEL DECKING

SI-5) THE FOLLOWING ITEMS SHALL RECEIVE SPECIAL INSPECTION BY A CERTIFIED SPECIAL INSPECTOR IN ACCORDANCE WITH IBC 1704 AND 1705.

	REQUIRED VERIFICATION AND INSP	PECTION O	F CONCF	RETE CONSTRUCTIO	N
	VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1.	INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT.	_	Х	ACI 318: 3.5, 7.1-7.7	1910.4
2.	INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2B.	_	_	AWS D1.4, ACI 318: 3.5.2	_
3.	INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN HAS BEEN USED.	_	Х	ACI 318: 8.1.3, 21.2.8	1908.5, 1909.1
4.	INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	_	Х	ACI 318: 3.8.6, 8.1.3, 21.2.8	1909.1
5.	VERIFYING USE OF REQUIRED DESIGN MIX.	_	Х	ACI 318: Ch. 4, 5.2-5.4	1904.2, 1910.2, 1910.3
6.	AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	х	_	ASTM C 172, ASTM C 31, ACI 318: 5.6, 5.8	1910.10
7.	INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	х	_	ACI 318: 5.9, 5.10	1910.6, 1910.7 1910.8
8.	INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	_	Х	ACI 318: 5.11-5.13	1910.9
9.	INSPECTION OF PRESTRESSED CONCRETE:				
	A. APPLICATION OF PRESTRESSING FORCES.	Х	—	ACI 318: 18 20 ACI	
	B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM.	Х	—	318: 18.18.4	_
10.	ERECTION OF PRECAST CONCRETE MEMBERS.	_	Х	ACI 318: CH.16	_
11.	VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	_	х	ACI 318: 6.2	_
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	—	Х	ACI 318: 6.1.1	_
13.	INSPECTION OF POST INSTALLED ANCHORS.				

		VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	CBC REFERENCE
1. M. Al	ATERI. ND WA	AL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS				
А	A. IDE ST/ CO	ENTIFICATION MARKINGS TO CONFORM TO ASTM ANDARDS SPECIFIED IN THE APPROVED NSTRUCTION DOCUMENTS.		Х	AISC 360, SECTION A3.3 AND APPLICABLE ASTM MATERIAL STANDARDS	_
В	3. MA RE	NUFACTURER'S CERTIFICATE OF COMPLIANCE QUIRED.	—	Х	—	_
2. IN	ISPEC [®]	TION OF HIGH-STRENGTH BOLTING:				
A	A. SN	UG-TIGHT JOINTS		Х		
В	3. SLI	P-CRITICAL CONNECTIONS.	Х	Х		
C). PR OF DIF	ETENSIONED AND SLIP-CRITICAL JOINTS USING TURN -NUT WITH MATCHMARKING, TWIST-OFF BOLT OR RECT TENSION INDICATOR METHODS OF INSTALLATIO	I- X N.	_	AISC 360, SECTION M2.5	
3. M	ATERI	AL VERIFICATION OF STRUCTURAL STEEL AND COLD-	FORMED STEEL	DECK:		
A	. FO TO	R STRUCTURAL STEEL, IDENTIFICATION MARKINGS CONFORM TO AISC 360.	_	Х	AISC 360, SECTION A3.1H	2203.1
В	3. FO CO API	R OTHER STEEL, IDENTIFICATION MARKINGS TO NFORM TO ASTM STANDARDS SPECIFIED IN THE PROVED CONSTRUCTION DOCUMENTS.	—	Х	APPLICABLE ASTM MATERIAL STANDARDS	-
С	C. MA	NUFACTURER'S CERTIFIED MILL TEST REPORTS.	—	—	ASTM A 6 OR ASTM A 568	
4. M	ATERI	AL VERIFICATION OF WELD FILLER MATERIALS:				
A	. IDE SPI DO	ENTIFICATION MARKINGS TO CONFORM TO AWS ECIFICATION IN THE APPROVED CONSTRUCTION CUMENTS.	_	_	AISC 360, SECTION A3.5 AND APPLICABLE AWS A5 DOCUMENTS	-
В	6. MA RE	NUFACTURER'S CERTIFICATE OF COMPLIANCE QUIRED.	—	Х	_	-
5. IN	ISPEC1	TION OF WELDING:	<u> </u>	-		
A	. STF	RUCTURAL STEEL AND COLD-FORMED STEEL DECK:		_		
	1.	COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	Х	_		
	2.	MULTIPASS FILLET WELDS.	Х	_		
	3.	SINGLE-PASS FILLET WELDS > 5/16"	Х	—	AWS D1.1	1705.2.1
	4.	PLUG AND SLOT WELDS.	X	_		
	5.	SINGLE-PASS FILLET WELDS ≤ 5/16"	_	Х		
	6.	FLOOR AND ROOF DECK WELDS.	_	Х	AWS D1.3	_
В	. REI	NFORCING STEEL:		_		
	1.	VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.		X		
	2.	REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	x		AWS D1.4, ACI 318: 3.5.2	
	3.	SHEAR REINFORCEMENT.	Х	_		
	4.	OTHER REINFORCING STEEL.	_	X		
6. IN CC	ISPECT OMPLI/	TION OF STEEL FRAME JOINT DETAILS FOR ANCE WITH APPROVED CONSTRUCTION	_	x		
		TAILS SUCH AS BRACING AND STIFFENING	_	X		1705.0.1
R	ME	MBER LOCATIONS				1705.2.1
<u>د</u> ۲		PLICATION OF JOINT DETAILS AT EACH CONNECTION		Y		
0				^		

REQUIRED VERIFICATION AND INSPECTION OF SOILS

	VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.		Х
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	Х
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	_	Х
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	Х	
5.	PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	_	X

NOTES:

THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE CITY BEFORE PERFORMING ANY INSPECTION DUTIES.

THE SPECIAL INSPECTOR WILL NOT BE APPROVED BY THE CITY UNTIL THE IDENTIFICATION OF SPECIAL INSPECTION PROGRAM AND APPROVAL OF SPECIAL INSPECTORS FORM HAS BEEN COMPLETED BY THE ARCHITECT OR ENGINEER OF RECORD AND RETURNED TO THE CITY.

THE SPECIAL INSPECTOR WILL NOT BE APPROVED BY THE CITY UNTIL THE APPLICATION TO PROVIDE SPECIAL INSPECTION FORM HAS BEEN COMPLETED AND RETURNED TO THE CITY.

THE CITY BUILDING DIVISION WILL MAKE NO INSPECTIONS OF WORK REQUIRING SPECIAL INSPECTION UNTIL THE CITY APPROVED SPECIAL INSPECTOR HAS COMPLETED HIS INSPECTION AND HAS PROVIDED WRITTEN APPROVAL OF THE CONSTRUCTION TO THE BUILDING INSPECTOR.

NO CONCRETE SHALL BE PLACED, NO MASONRY SHALL BE GROUTED, AND NO WORK REQUIRING SPECIAL INSPECTION SHALL BE CONCEALED WITHOUT WRITTEN APPROVAL FROM THE CITY BUILDING INSPECTOR.

THE ARCHITECT OR ENGINEER OF RECORD SHALL APPROVE EACH SPECIAL INSPECTOR.

THE SPECIAL INSPECTOR SHALL BE EMPLOYED BY THE OWNER, THE ENGINEER OR THE ARCHITECT OF RECORD, OR THE AGENT OF THE OWNER, BUT NOT THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK.

THE SPECIAL INSPECTOR SHALL COMPLY WITH ALL CITY REQUIREMENTS FOR SPECIAL INSPECTION. FAILURE TO COMPLY WITH ANY OF THE CITY'S REQUIREMENTS MAY RESULT IN REVOCATION OF THE SPECIAL INSPECTOR'S PRIVILEGE TO INSPECT IN THE CITY.





SO STRUCTURAL OBSERVATION

S0-1) STRUCTURAL OBSERVATION IS REQUIRED FOR THE STRUCTURAL SYSTEM IN ACCORDANCE WITH THE IBC SECTION 1710. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION AT THE CONSTRUCTION SITE OF THE ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES, AND THE COMPLETE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS. STRUCTURAL OBSERVATION DOES NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED IBC SECTIONS 110 AND 1704.

SO-2) THE OWNER SHALL EMPLOY A CITY JURISDICTION REGISTERED CIVIL OR STRUCTURAL ENGINEER OR LICENSED ARCHITECT TO PERFORM THE STRUCTURAL OBSERVATION. ENFORCEMENT AGENCY REQUIRES THE USE OF THE ENGINEER OR ARCHITECT, OR HIS/HER DESIGNEE RESPONSIBLE FOR THE STRUCTURAL DESIGN WHO ARE INDEPENDENT OF THE CONTRACTOR.

S0-3) THE STRUCTURAL OBSERVER SHALL PROVIDE EVIDENCE OF EMPLOYMENT BY THE OWNER OR THE OWNER'S REPRESENTATIVE. A LETTER FROM THE OWNER, THE OWNER'S REPRESENTATIVE, OR A COPY OF THE AGREEMENT FOR SERVICES SHALL BE SENT TO THE BUILDING INSPECTOR BEFORE THE FIRST SITE VISIT.

SO-4) THE OWNER OR OWNER'S REPRESENTATIVE SHALL COORDINATE AND CALL FOR A MEETING BETWEEN THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, STRUCTURAL OBSERVER, CONTRACTOR, AFFECTED SUBCONTRACTORS AND DEPUTY INSPECTORS. THE PURPOSE OF THE MEETING SHALL BE TO IDENTIFY THE MAJOR STRUCTURAL ELEMENTS AND CONNECTIONS THAT AFFECT THE VERTICAL AND LATERAL LOAD SYSTEMS OF THE STRUCTURE AND TO REVIEW SCHEDULING OF THE REQUIRED OBSERVATIONS. A RECORD OF THE MEETING SHALL BE INCLUDED IN THE FIRST OBSERVATION REPORT SUBMITTED TO THE BUILDING INSPECTOR.

SO-5) THE STRUCTURAL OBSERVER SHALL PERFORM SITE VISITS AT THOSE STEPS IN THE PROGRESS OF THE WORK THAT ALLOW FOR CORRECTION OF DEFICIENCIES WITHOUT SUBSTANTIAL EFFORT OR UNCOVERING OF THE WORK INVOLVED. AT A MINIMUM, THE LISTED SIGNIFICANT CONSTRUCTION STAGES TABLE BELOW OBSERVATION/SIGNIFICANT CONSTRUCTION STAGES" FORM OR THE "STRUCTURAL OBSERVATION PROGRAM AND REQUIRE A SITE VISIT AND AN OBSERVATION REPORT FROM THE STRUCTURAL OBSERVER

SO-6) THE STRUCTURAL OBSERVER SHALL PREPARE A REPORT FOR EACH SIGNIFICANT STAGE OF CONSTRUCTION OBSERVED. THE ORIGINAL OF THE STRUCTURAL OBSERVATION REPORT SHALL BE SENT TO THE BUILDING INSPECTOR'S OFFICE AND SHALL BE SIGNED AND SEALED (WET STAMP) BY THE RESPONSIBLE STRUCTURAL OBSERVER. ONE COPY OF THE OBSERVATION REPORT SHALL BE ATTACHED TO THE APPROVED PLANS. THE COPY ATTACHED TO THE PLANS SHALL BE SIGNED AND SEALED (WET STAMP) BY THE RESPONSIBLE STRUCTURAL OBSERVER OR THEIR DESIGNEE. COPIES OF THE REPORT SHALL ALSO BE GIVEN TO THE OWNER, CONTRACTOR, AND DEPUTY INSPECTOR. ANY DEFICIENCY NOTED ON THE OBSERVATION REPORT WILL BECOME THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OR ARCHITECT OF RECORD TO VERIFY ITS COMPLETION BY THE STRUCTURAL OBSERVER.

S0-7) A FINAL OBSERVATION REPORT MUST BE SUBMITTED WHICH SHOWS THAT ALL OBSERVED DEFICIENCIES WERE RESOLVED AND STRUCTURAL SYSTEM GENERALLY CONFORMS WITH THE APPROVED PLANS AND SPECIFICATIONS. STRUCTURAL WORK WILL NOT BE ACCEPTED WITHOUT THIS FINAL OBSERVATION REPORT AND THE CORRECTION OF SPECIFIC DEFICIENCIES NOTED DURING NORMAL BUILDING INSPECTION.

S0-8) THE STRUCTURAL OBSERVER SHALL PROVIDE THE ORIGINAL STAMPED AND SIGNED STRUCTURAL OBSERVATION REPORT TO THE BUILDING INSPECTOR.

S0-9) WHEN THERE IS A NEED TO REPLACE THE STRUCTURAL OBSERVER OF RECORD, THE OWNER SHALL:

- a) NOTIFY THE BUILDING INSPECTOR IN WRITING BEFORE THE NEXT INSPECTION
- b) CALL AN ADDITIONAL PRECONSTRUCTION MEETING, AND

c) FURNISH THE REPLACEMENT STRUCTURAL OBSERVER WITH A COPY OF ALL PREVIOUS OBSERVATION REPORTS. d) THE REPLACEMENT STRUCTURAL OBSERVER SHALL APPROVE THE CORRECTION OF THE ORIGINAL OBSERVED DEFICIENCIES SHALL BE CORRECTED ANY PROPERLY NOTED DEFICIENCIES WITHOUT CONSIDERATION OF THEIR SOURCE.

SO-10) THE ENGINEER OR ARCHITECT OF RECORD SHALL DEVELOP ALL CHANGES RELATING TO THE STRUCTURAL SYSTEMS. THE ENFORCEMENT AGENCY SHALL REVIEW AND APPROVE ALL CHANGES TO THE APPROVED PLANS AND SPECIFICATIONS. **S0-11)** STRUCTURAL OBSERVATION/SIGNIFICANT CONSTRUCTION STAGES:

CONSTRUCTION STAGE CONSTRUCTION TYPE ELEMENTS/CONNECTIONS TO BE OBSERVED FOUNDATION FOOTING, STEM WALLS PIERS MAT FOUNDATION REINFORCEMENT IN PLACE PRIOR TO FIRST SIGNIFICANT FOUNDATION POUR FOUNDATIONS CAISSON, PILE, GRADE BEAMS REINFORCEMENT IN PLACE PRIOR TO FIRST OTHERS WALLS CONCRETE MASONRY WOOD OTHERS SIGNIFICANT WALL POUR EDAMES STEEL MOMENT FRAME STEEL BRACED FRAME			
FOUNDATIONS FOUNDATION CAISSON, PILE, GRADE BEAMS FOUNDATION CAISSON, PILE, GRADE BEAMS FOUNDATION ANCHORS OTHERS CONCRETE MASONRY WOOD OTHERS REINFORCEMENT IN PLACE PRIOR TO FIRST SIGNIFICANT FOUNDATION POUR FOUNDATIONS Image: Concrete image: Concret	CONSTRUCTION STAGE	CONSTRUCTION TYPE	ELEMENTS/CONNECTIONS TO BE OBSERVED
WALLS CONCRETE MASONRY WOOD OTHERS SIGNIFICANT WALL POUR REINFORCEMENT IN PLACE PRIOR TO FIRST SIGNIFICANT WALL POUR OTHERS OTHERS	FOUNDATIONS	 FOOTING, STEM WALLS PIERS MAT FOUNDATION CAISSON, PILE, GRADE BEAMS FOUNDATION ANCHORS OTHERS 	REINFORCEMENT IN PLACE PRIOR TO FIRST SIGNIFICANT FOUNDATION POUR
ERAMES	WALLS	 ■ CONCRETE □ MASONRY □ WOOD □ OTHERS 	REINFORCEMENT IN PLACE PRIOR TO FIRST SIGNIFICANT WALL POUR
	FRAMES	 □ STEEL MOMENT FRAME □ STEEL BRACED FRAME □ CONCRETE MOMENT FRAME □ OTHERS 	
Image: Concrete	DIAPHRAGMS	 □ CONCRETE ■ METAL DECK □ WOOD □ OTHERS 	REINFORCEMENT IN PLACE PRIOR TO FIRST SIGNIFICANT POUR
COMPLETION ALL OBSERVED DEFICIENCIES RESOLVED	COMPLETION		ALL OBSERVED DEFICIENCIES RESOLVED

CONDITIONS SIMILAR TO THOSE FOR WHICH STRUCTURAL OBSERVATION HAS BEEN PREVIOUSLY PERFORMED MAY BE INSPECTED BY THE SPECIAL INSPECTOR WITHOUT STRUCTURAL OBSERVATION AT THE DISCRETION OF THE ENFORCEMENT AGENCY













DESIGN GRAVITY I	OADS SCHEDULE

		SUPERIMPOS			
DESIGNATION	USE	LIVE LOAD (PSF)	DEAD LOAD (PSF)	NOTES	
	ROOF	20	10		
2	ROOF	20	10		

* DENOTES LIVE LOAD IS NOT REDUCIBLE

LOADING PLAN NOTES:

- 1. LIVE LOADS ARE REDUCIBLE WHERE NOT SPECIFICALLY MARKED.
- 2. SUPERIMPOSED DEAD LOADS ARE IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURE.
- 3. SEE FRAMING PLANS FOR DESIGN LOAD OF SPECIFIC ITEMS SUCH AS ELEVATORS AND MECHANICAL/ELECTRICAL EQUIPMENT.
- HAND AND GUARDRAIL ASSEMBLY LIVE LOAD IS THE GREATER OF 200LB AND 50LB/FT IN ANY DIRECTION.



		RE	INFOR	CING STI	<u>EEL LAF</u>	P SPLIC	<u>E SCHE</u>	DULES							NOTES:	
GRADE 60 REINFORCING													_			
CONCRETE STRENGTH	f'c = 3000 PSI		f'c = 3000 PSI f'c = 4000 PSI f'c = 5000 PSI				1.	•	UNLESS INDICATED OTHERWISE, USE THE CLASS "B" LAP SPLICE LENGTHS, MULTIPLIED BY THE APPLICABLE FACTOR(S) LISTED BELOW.	(E) L						
CLASS OF LAP SPLICE	CLAS	SS "A"	CLAS	S "B"	CLA	ASS "A"	CLA	SS "B"	CLA	ASS "A"	CLA	\SS "B"	2.		INCREASE THE LAP SPLICE OR DEVELOPMENT LENGTH BY 50% FOR ANY OF THE FOLLOWING CONDITIONS:	(E)/\L ແ
BAR SIZE CASE	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS			A. WHERE STIRRUPS OR TIES ARE SHOWN IN THE DRAWINGS THROUGHOUT LAP SPLICE OR	
#3	1'-10"	1'-5"	2'-4"	1'-10"	1'-7"	1'-3"	2'-1"	1'-7"	1'-5"	1'-1"	1'-10"	1'-5"	_		B. DEVELOPMENT LENGTH <u>AND</u> THE CLEAR SPACING OF BARS PER (A) IS LESS THAN 1 BAR – DIAMETER	
#4	2'-5"	1'-10"	3'-1"	2'-5"	2'-1"	1'-7"	2'-9"	2'-1"	1'-11"	1'-5"	2'-5"	1'-11"	_			
#5	3'-0"	2'-4"	3'-11"	3'-0"	2'-7"	2'-0"	3'-5"	2'-7"	2'-4"	1'-10"	3'-0"	2'-4"	4		WHERE STIRRUPS OR TIES ARE <u>NOT</u> SHOWN THROUGHOUT LAP SPLICE OR DEVELOPMENT	
#6	3'-7"	2'-9"	4'-8"	3'-7"	3'-1"	2'-5"	4'-1"	3'-1"	2'-10"	2'-2"	3'-8"	2'-10"	4		C. LENGTH AND THE CLEAR SPACING OF BARS PER (A) IS LESS THAN 2 BAR DIAMETERS.	
#7	5'-3"	4'-0"	6'-9"	5'-3"	4'-6"	3'-6"	5'-11"	4'-6"	4'-1"	3'-2"	5'-3"	4'-1"			\smile	
#8	6'-0"	4'-7"	7'-9"	6'-0"	5'-2"	4'-0"	6'-9"	5'-2"	4'-8"	3'-7"	6'-0"	4'-8	3		A CLASS "A" SPLICE MAY BE USED ONLY WHERE NOTED ON THE DRAWINGS. WHERE DEVELOPMENT	/ (E)/\L
#9	6'-9"	5'-2"	8'-9"	6'-9"	5'-10"	4'-6"	7'-7"	5'-10"	5'-3"	4'-0"	6'-9"	5'-3"			LENGTH (Ld) IS REQUIRED OR CALLED OUT ON THE DRAWINGS, USE CLASS "A" LAP SPLICE LENGTH.	
#10	7'-7"	5'-10"	9'-10"	7'-7"	6'-7"	5'-1"	8'-6"	6'-7"	5'-11"	4'-6"	7'-8"	5'-11"				BAR BAR
#11	8'-5"	6'-6"	10'-11"	8'-5"	7'-3"	5'-7"	9'-5"	7'-3"	6'-6"	5'-0"	8'-6"	6'-6"	4.	•	CLASS "B" LAP SPLICE EQUALS "LTS".	#3 #3
GRADE 60 REINFORCING													5.		TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.	#4 #3
CONCRETE STRENGTH		f'c = 55	00 PSI			f'c = 60	000 PSI			f'c = 80	000 PSI		6.		LAP SPLICE LENGTHS IN TABLE ARE FOR NORMAL WEIGHT CONCRETE. WHERE LIGHTWEIGHT AGGREGATE CONCRETE IS USED. INCREASE LAP SPLICE LENGTH BY 33%.	#5 #4 #6 #5
CLASS OF LAP SPLICE	CLAS	SS "A"	CLAS	S "B"	CLA	ASS "A"	CLA	SS "B"	CLA	ASS "A"	CLA	ASS "B"	7.		SPLICES OF HORIZONTAL REINFORCEMENT IN WALLS SHALL BE STAGGERED.	
BAR SIZE CASE	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	8.		SPLICES OF HORIZONTAL REINFORCEMENT IN WALLS CONTAINING TWO CURTAINS OF	C
#3	1'-4"	1'-1"	1'-9"	1'-5"	1'-3"	1'-0"	1'-8"	1'-4"	1'-1"	0'-10"	1'-6"	1'-2"	-		REINFORCEMENT SHALL NOT OCCUR IN THE SAME LOCATION.	
#0	1'-10"	1'-4"	2'-4"	1'-10"	1'-8"	1'-3"	2'-3"	1'-9"	1'-5"	1'-1"	1'-11"	1'-6"	9.		IN SHOTCRETE WALLS SPLICES IN REINFORCING BARS SHALL BE BY THE NON-CONTACT LAP SPLICE	
#5	2'-3"	1'-9"	2'-11"	2'-3"	2'-1"	1'-7"	2'-9"	2'-2"	1'-10"	1'-5"	2'-5"	1'-10"	-		METHOD WITH AT LEAST 2 INCHES CLEARANCE BETWEEN BARS. THE BUILDING OFFICIAL ANY PERMIT	
#6	2'-8"	2'-9"	3'-6"	2'-9"	2'-6"	1'_11"	3'-4"	2 2	2'-2"	1'-8"	2'-11"	2'-3"	-		THE USE OF CONTACT LAP SPLICES WHEN NECESSARY FOR THE SUPPORT OF THE REINFORCING	
#7	3'-11"	3'-0"	5'-1"	3'-11"	3'-8"	2'-10"	4'-10"	3'-9"	3'-2"	2'-5"	<u>4'-2"</u>	3'-3"	-		PROVIDED IT CAN BE DEMONSTRATED BY MEANS OF PRE-CONSTRUCTION TESTING, THAT ADEQUATE ENCASEMENT OF THE BARS AT THE SPLICE CAN BE ACHIEVED, AND PROVIDED THAT THE SPLICES ARE	
#8	4'-5"	3'-5"	5'-9"	4'-5"	<u>4'-2"</u>	2 10	5'-6"	<u>4'-3"</u>	3'_8"	2'-10"	<u> </u>	3'-8	-		PLACED SO THAT A LINE THROUGH THE CENTER OF THE TWO SPLICED BARS IS PERPENDICULAR TO	
#0 #0	<u> </u>	3'-10"	6'-6"		<u></u> Δ'_Q"	3'_8"	6'-2"	4 0 4'-9"	<u> </u>	2'10	5'-4"	4'-2"	-		THE SURFACE OF THE SHOTCRETE WORK.	NON-CONTACT
#0 #10	<u> </u>	<u></u>	7'-∕/"	5°0		<u></u> ⊿'₋1"	0 -∠ 7'_∩"	5'- <u>4</u> "	Δ'_7"	3'_7"	6'_0"	<u> </u>	-	0		<u>SPLICE</u>
#11	6'-3"	4'-10"	8'-2"	6'-3"	5'-11"	4'-7"	7'-9"	<u>5'-11"</u>	5'-1"	3'-11"	6'-8"	5'-2"	10	υ.	MECHANICAL DAR COUPLERS (ICC APPROVED) MAY DE USED AS AN ALTERNATE TO LAP SPLICES. MECHANICAL COUPLER SHALL BE ADEQUATE TO TRANSFER 125% OF THE YIELD STRENGTH OF THE	
													—		REINFORCING BARS WHICH ARE SPLICED.	
													11	1.	WHEN BARS OF DIFFERENT SIZE ARE LAP SPLICED, THE SPLICE LENGTH SHALL BE THE LARGER OF THE FOLLOWING:	(A) LAP SPLIC

														NUTES.	
GRADE 60 REINFORCING													-1 1		
CONCRETE STRENGTH		f'c = 30	00 PSI			f'c = 40	000 PSI			f'c = 50	000 PSI		1.	APPLICABLE FACTOR(S) LISTED BELOW.	(E) L
CLASS OF LAP SPLICE	CLA	SS "A"	CLAS	S "B"	CLA	ASS "A"	CLA	SS "B"	CL/	ASS "A"	CL	ASS "B"	2.	INCREASE THE LAP SPLICE OR DEVELOPMENT LENGTH BY 50% FOR ANY OF THE FOLLOWING	(E) / L \
BAR SIZE CASE	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER		THE BAR COVER IS LESS THAN OR EQUAL TO THE BAR DIAMETER. ¥ A. ••••••••••••••••••••••••••••••••••••	λ \Box
#3	1'-10"	1'-5"	2'-4"	1'-10"	1'-7"	1'-3"	2'-1"	1'-7"	1'-5"	1'-1"	1'-10"	1'-5"	-	B. DEVELOPMENT LENGTH AND THE CLEAR SPACING OF BARS PER (A) IS LESS THAN 1 BAR	
#4	2'-5"	1'-10"	3'-1"	2'-5"	2'-1"	1'-7"	2'-9"	2'-1"	1'-11"	1'-5"	2'-5"	1'-11"	_	DIAMETER.	
#5	3'-0"	2'-4"	3'-11"	3'-0"	2'-7"	2'-0"	3'-5"	2'-7"	2'-4"	1'-10"	3'-0"	2'-4"		WHERE STIRRUPS OR TIES ARE <u>NOT</u> SHOWN THROUGHOUT LAP SPLICE OR DEVELOPMENT	
#6	3'-7"	2'-9"	4'-8"	3'-7"	3'-1"	2'-5"	4'-1"	3'-1"	2'-10"	2'-2"	3'-8"	2'-10"	_	C. LENGTH AND THE CLEAR SPACING OF BARS PER (A) IS LESS THAN 2 BAR DIAMETERS.	
#1	0-0	4-0	0-9	0-0	4-0	3-0	0-11	4-0	4-1	3-2	0-0	4-1	_		
#8	6'-0"	4'-/"	7'-9"	6'-0"	5'-2"	4'-0"	6'-9"	5'-2"	4'-8"	3'-/"	6'-0"	4'-8	3.	A CLASS "A" SPLICE MAY BE USED ONLY WHERE NOTED ON THE DRAWINGS. WHERE DEVELOPMENT	/ (L)/ \L
#9	6'-9"	5'-2"	8'-9"	6'-9"	5'-10"	4'-6"	7'-7"	5'-10"	5'-3"	4'-0"	6'-9"	5'-3"	_	LENGTH (Ld) IS REQUIRED OR CALLED OUT ON THE DRAWINGS, USE CLASS "A" LAP SPLICE LENGTH.	
#10	7'-7"	5'-10"	9'-10"	7'-7"	6'-7"	5'-1"	8'-6"	6'-7"	5'-11"	4'-6"	7'-8"	5'-11"			BAR BAR
#11	8'-5"	6'-6"	10'-11"	8'-5"	7'-3"	5'-7"	9'-5"	7'-3"	6'-6"	5'-0"	8'-6"	6'-6"	4.	CLASS "B" LAP SPLICE EQUALS "LTS".	#3 #3
GRADE 60 REINFORCING													5.	TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.	#4 #3
CONCRETE STRENGTH		f'c = 55	00 PSI			f'c = 60	000 PSI			f'c = 80	000 PSI		6.	LAP SPLICE LENGTHS IN TABLE ARE FOR NORMAL WEIGHT CONCRETE. WHERE LIGHTWEIGHT	#5 #4 #6 #5
CLASS OF LAP SPLICE	CLA	SS "A"	CLAS	S "B"	CLA	ASS "A"	CLA	SS "B"	CL/	ASS "A"	CL	ASS "B"	7.	SPLICES OF HORIZONTAL REINFORCEMENT IN WALLS SHALL BE STAGGERED.	
BAR SIZE CASE	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	8.	SPLICES OF HORIZONTAL REINFORCEMENT IN WALLS CONTAINING TWO CURTAINS OF	
#3	1'-4"	1'-1"	1'-9"	1'-5"	1'-3"	1'-0"	1'-8"	1'-4"	1'-1"	0'-10"	1'-6"	1'-2"	-	REINFORCEMENT SHALL NOT OCCUR IN THE SAME LOCATION.	
#4	1'-10"	1'-4"	2'-4"	1'-10"	1'-8"	1'-3"	2'-3"	1'-9"	1'-5"	1'-1"	1'-11"	1'-6"	9.	IN SHOTCRETE WALLS SPLICES IN REINFORCING BARS SHALL BE BY THE NON-CONTACT LAP SPLICE	
#5	2'-3"	1'-9"	2'-11"	2'-3"	2'-1"	1'-7"	2'-9"	2'-2"	1'-10"	1'-5"	2'-5"	1'-10"	-	METHOD WITH AT LEAST 2 INCHES CLEARANCE BETWEEN BARS. THE BUILDING OFFICIAL ANY PERMIT	
#6	2'-8"	2'-9"	3'-6"	2'-9"	2'-6"	1'-11"	3'-4"	2'-7"	2'-2"	1'-8"	2'-11"	2'-3"	-	THE USE OF CONTACT LAP SPLICES WHEN NECESSARY FOR THE SUPPORT OF THE REINFORCING PROVIDED IT CAN BE DEMONSTRATED BY MEANS OF PRE-CONSTRUCTION TESTING. THAT ADEQUATE	
#7	3'-11"	3'-0"	5'-1"	3'-11"	3'-8"	2'-10"	4'-10"	3'-9"	3'-2"	2'-5"	4'-2"	3'-3"	-	ENCASEMENT OF THE BARS AT THE SPLICE CAN BE ACHIEVED, AND PROVIDED THAT THE SPLICES ARE	
#8	<u> </u>	3' 5"	5' 0"	۰ ۲۱ ۸' 5"		2' 3"	5' 6"	/' 3"	3' 2"	2' 10"	/' Q"	3' 8	-	PLACED SO THAT A LINE THROUGH THE CENTER OF THE TWO SPLICED BARS IS PERPENDICULAR TO	
#0 #0		3'-10"	6'-6"		4-2 /'_0"	3'_8"	6'-2"	4-5 1/_0"	Δ'_1"	2-10		4'-2"	_	THE SURFACE OF THE SHOTCRETE WORK. NO.	<u> ON-CONTACT</u>
#J	5-0 5' 0"	0-10 ۲'2"	7' <i>\</i> "	5-0 5' 0"	- + -J 5' /"	<i>1</i> ′ 1″	0-∠ 7' ∩"			2' 7"	6' 0"	<u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u>	-		<u>·LICE</u>
#10	0-0 6' 2"	4-J /' 10"	י -4 פי יזי	0-0 6' 2"	J-4 5' 11"	4 - I /! 7"	י -ט די מיי	5' 11"	4-1 5' 1"	2' 11"	ບ-ບ ຂະ ຂະ	5' 0"	10.	MECHANICAL BAR COUPLERS (ICC APPROVED) MAY BE USED AS AN ALTERNATE TO LAP SPLICES. MECHANICAL COUPLER SHALL BE ADEQUATE TO TRANSFER 125% OF THE VIELD STRENGTH OF THE	
#11	0-3	4-10	0-2	0-3	J-11	4-1	<i>।</i> -छ	J-11	5-1	3-11	0-0	J J-Z	_	REINFORCING BARS WHICH ARE SPLICED.	
													11.	WHEN BARS OF DIFFERENT SIZE ARE LAP SPLICED, THE SPLICE LENGTH SHALL BE THE LARGER OF THE	A LAP SPLIC

1 REBAR OFFSET, LAP SPLICE, DEVELOPMENT LENGTH, AND BUTT SPLICE

	MAIN REINFORCEMENT			STIR	RUPS & T	IES	Ldh, [DEVELOPMENT LEN	GTH (1)		
	<u>90° НООк</u>	<u>6 MIN</u> 1 - INSIDE DIA "D1" <u>(</u> 1		₽ , 	- INSIDE DIA "D2" 2 <u>K 1</u>	<u>з5° ноок</u>		Ldh	Ldh		
BAR	90° HOOK	INSIDE	180° HOOK	90° HOOK	INSIDE	135° HOOK	С	ONCRETE STRENG	ТН		
SIZE	LENGIH	DIA "D1"	LENGTH	LENGTH "L"	DIA "D2"	LENGTH "L"	f'c = 3000 PSI	f'c = 4000 PSI	f'c = 5000 PSI	f'c = 6000 PSI	f'c = 8000 PSI
#3	4 1/2"	2 1/4"	2 1/2"	3"	1 1/2"	3"	0'-8"	0'-7"	0'-6"	0'-6"	0'-5"
#4	6"	3"	2 1/2"	3"	2"	3"	0'-11"	0'-9"	0'-9"	0'-8"	0'-7"
#5	7 1/2"	3 3/4"	2 1/2"	3 3/4"	2 1/2"	3 3/4"	1'-2"	1'-0"	0'-11"	0'-10"	0'-8"
#6	9"	4 1/2"	3"	9"	4 1/2"	4 1/2"	1'-4"	1'-2"	1'-1"	1'-0"	0'-10"
#7	10 1/2"	5 1/4"	3 1/2"	10 1/2"	5 1/4"	5 1/4"	1'-7"	1'-5"	1'-3"	1'-2"	1'-0"
#8	1'-0"	6"	4"	1'-0"	6"	6"	1'-10"	1'-7"	1'-5"	1'-4"	1'-1"
#9	1'-1 1/2"	9 1/2"	4 1/2"	-	-	-	2'-1"	1'-9"	1'-7"	1'-6"	1'-3"
#10	1'-3 1/4"	10 3/4"	5 1/4"	-	-	-	2'-3"	2'-0"	1'-10"	1'-7"	1'-5"
#11	1'-5"	1'-0"	5 3/4"	-	-	-	2'-6"	2'-2"	2'-0"	1'-9"	1'-7"

<u>NOTE:</u>

1. DEVELOPMENT LENGTHS IN TABLE ARE FOR NORMAL WEIGHT CONCRETE. WHERE LIGHTWEIGHT AGGREGATE CONCRETE IS USED, INCREASE DEVELOPMENT LENGTH BY 33%.

4 HOOKED DEVELOPMENT LENGTH NOT TO SCALE



MINIMUM WELD REQUIREMENTS							
BAR SIZE	WELD LENGTH (EACH SIDE)						
#3	2"						
#4	2 1/2"						
#5	3"						
#6	3 1/2"						
#7	4"						
NOTE:							

ALL REBAR IS ASTM A706, GRADE 60, ASTM A615 GRADE 60 WHEN APPROVED BY SEOR

A. Ld OF THE LARGER BAR. B. LAP SPLICE LENGTH OF THE SMALLER BAR.

FOR LAP WELDING









2 FOUNDATION PLAN

FLOOR FRAMING NOTES:

- 1. SEE GENERAL NOTES ON SHEETS S0.10 TO S0.11.
- 2. SEE TYPICAL STEEL DECK NOTES AND DETAILS ON S7.20 AND S7.21
- 3. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- 4. ELEVATION TO FLOOR TOP OF CONCRETE IS GIVEN WITH RESPECT TO NOMINAL FIRST FLOOR ELEVATION AND SHOWN THIS: +[10'-10"]
- 5. TOP OF STEEL BEAMS ARE FLUSH AND OCCUR IMMEDIATELY BELOW STEEL DECK, UON.
- 6. ELEVATIONS TO TOP OF STEEL FRAMING IS GIVEN WITH RESPECT TO NOMINAL FIRST FLOOR ELEVATION AND SHOWN THUS: T/STL +[13'-0"]
- 7. BEAMS SHALL BE ON GRID LINES AND AS DIMENSION ON FRAMING PLAN. BEAMS AND BEAM FLANGE BRACING SHALL BE EQUALLY SPACED IN BAYS, UON.
- 8. MARKS "DO" APPLY TO BEAM SIZES, ELEVATIONS AND CONNECTIONS.
- 9. DEPRESSIONS, CURBS AND OPENINGS SHOWN ON THIS PLAN ARE NOT COMPLETE AS TO NUMBER, SIZE AND LOCATION. FOR COMPLETE INFORMATION, REFER TO DRAWINGS OTHER THAN STRUCTURAL.
- 10. GENERAL CONTRACTOR SHALL COORDINATE THE LOCATION OF EQUIPMENT SUPPORT BEAMS AND BEAMS AROUND FLOOR OPENINGS WITH ALL PROJECT REQUIREMENTS.
- 11.EDGE OF SLAB LOCATIONS ARE APPROXIMATE, SEE ARCH DWGS FOR EDGE OF SLAB DIMENSIONS.

FOUNDATION PLAN NOTES:

- 1. SEE GENERAL NOTES ON SHEETS S0.10 TO S0.11.
- 2. SEE TYPICAL FOUNDATION AND SLAB ON GRADE DETAILS ON S4 SERIES SHEETS.
- 3. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- 4. FOR DRAINAGE DETAILS, SUMPS, PITS, DAMP PROOFING, TRENCHES, CURBS, EXTERIOR WALKS, UTILITIES, EQUIPMENT DETAILS, STEPS, ETC., SEE DRAWINGS OTHER THAN STRUCTURAL.
- 5. FOUNDATION PLAN IS TAKEN ABOVE SLAB-ON-GRADE. NOMINAL TOP OF SLAB ELEVATION IS CALLED OUT IN PLAN. RELATIVE SLAB ELEVATIONS WITH RESPECT TO SLAB REFERENCE ELEVATION ARE SHOWN THUS: [-X'-X"]. SEE ARCHITECTURAL DRAWINGS FOR REFERENCE ELEVATIONS.
- 6. ELEVATIONS OF TOP OF FOOTINGS WITH RESPECT TO 0'-0" SLAB ON GRADE REFERENCE. ELEVATIONS ARE SHOWN THUS: [T/FTG=-X'-X"].
- 7. EXCAVATIONS SHALL BE MADE AS NEAR AS POSSIBLE TO THE NEAT LINES REQUIRED BY THE SIZE AND SHAPE OF THE STRUCTURE. NO MATERIAL IS TO BE EXCAVATED UNNECESSARILY.
- 8. ALL FOUNDATION EXCAVATIONS MUST BE REVIEWED AND APPROVED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
- 9. VERIFY LOCATION OF UNDERGROUND UTILITIES BEFORE EXCAVATIONS. NOTIFY ARCHITECT PRIOR TO EXCAVATION IN THE EVENT SUCH UTILITIES ARE ENCOUNTERED.
- 10. CONTRACTOR SHALL COORDINATE ALL UTILITY PENETRATIONS THROUGH FOOTINGS, CONCRETE WALLS, AND SLABS WITH DETAILS ON SHEET S4.00 AND S4.51.
- 11.EDGE OF SLAB LOCATIONS ARE APPROXIMATE. SEE ARCHITECTURAL DRAWINGS FOR EDGE OF SLAB DIMENSIONS.
- 12. SLAB CONSTRUCTION AND CONTROL JOINT LOCATIONS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO PLACING ANY CONCRETE.
- 13. CURBS AND DEPRESSIONS ARE SHOWN FOR REFERENCE ONLY. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS, HEIGHT, AND THICKNESS.
- 14.STRUCTURAL MEMBERS (COLUMNS, FOOTINGS, GRADE BEAMS, ETC.) ARE CENTERED ON GRIDLINES UON.
- 15.MARKS S-----S DENOTE STEP IN FOUNDATION. SEE SHEET S4.00 FOR FOUNDATION STEP DETAILS UON.
- 16. DENOTES DEPRESSED SLAB PER ARCH
- 17. DENOTES BEARING CONC WALL. SEE S4 AND S5 SERIES SHEETS FOR DETAIL UON

18.SEE SOILS REPORT FOR GEOTECHNICAL REQUIREMENTS.



- 1. SEE S2 SERIES SHEET FOR FRAMING PLAN

- 5. SEE TYPICAL SLAB DETAILS
- 7. TWO-WAY SLAB BAR PLACEMENT: 1. OUTER LAYER PARALLEL PLAN N-S 2. INNER LAYER PARALLEL PLAN E-W



8. LENGTH OF HOOKED BARS IN REINFORCING SCHEDULE REFERS TO TOAL UNBENT LENGTH

FIRST FLOOR REINFORCING PLAN



REINFORCEMENT PLAN NOTES

2. SLAB BOTTOM BAR CLEAR COVER PER GENERAL NOTES, UON

3. SLAB TOP BAR CLEAR COVER PER GENERAL NOTES.

4. T/SLAB ELEVATION SEE FRAMING PLAN

FOR SLAB CORNERS SUPPORTED BY BEAMS OR WALLS, SEE TYPICAL BEAM / WALL SUPPORTED SLAB EXTERIOR CORNER DETAIL.

- INNER LAYER

SLAB SECTION

TOP BAR LEGEND NOTES:

- 1. HOOK ALL TOP BARS THAT PASS THROUGH EXTERIOR SUPPORT WITH 90 DEG STANDAR HOOK OR IF NECESSARY USE 180 DEG STANDARD HOOK
- 2. FOR BARS PERPENDICULAR TO THE AN OPENING OR EDGE OF SLAB IS ALWAYS HALF OF THE LENGTH SHOWN IN THE ADDITIONAL TOP REINFORCEMENT SCHEDULE
- 3. ALL BARS SHOWN ARE IN ADDITION TO THE TYPICAL CONTINUOUS REINFORCEMENT PROVIDED

BOTTOM BAR LEGEND NOTES:

- 1. PLACE ADDITIONAL BARS AT SAME SPACING OF CONTINUOUS BARS AND MIDWAY BETWEEN CONTINUOUS BARS, UON
- 2. ALL CONTINOUS BOTTOM BARS TO EXTEND WITHIN 2 INCHES OF SLAB EDGE
- 3. FOR BOTTOM BAR LENGTHS SEE TYPICAL TWO WAY SLAB DETAILS UON
- 4. ALL BARS SHOWN ARE IN ADDITION TO THE TYPICAL CONTINUOUS REINFORCEMENT PROVIDED

FINISH GRADE

- STD HOOK, TYP

- 1. REFER TO PLANS FOR ADDITIONAL BARS AROUND OPENINGS
- CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH MEP DRAWINGS NOTIFY STRUCTURAL ENGINEER IN WRITING OF ANY DISCREPANCIES FOR REVIEW AND APPROVAL
- FOR OPENING NOT MEETING LIMITATIONS OR GREATER THAN 3 FEET, SUBMIT OPENINGS TO SER FOR APPROVAL
- TO THE DIRECTION OF THE SPAN IS GREATER THAN 2 FEET, SUBMIT OPENINGS TO SER FOR APPROVAL
- OPENING DIMENSION OR WOULD INTERRUPT THE ADDITIONAL REINFORCEMENT FROM THE ADJACENT OPENING, SUBMIT OPENINGS TO SER FOR APPROVAL

- AND BOTTOM BARS THAT ARE INTERRUPTED BY OPENINGS DISTRIBUTE REPLACEMENT BARS EQUALLY TO BOTH SIDES OF **OPENING AT 3" SPACING**
- SHOWN ABOVE
- OPENING DETAIL

- 1. SEE GENERAL NOTES ON S0-001 FOR MATERIAL SPECIFICATIONS.
- 2. STRUCTURAL PROPERTIES OF STEEL DECK SYSTEM SHALL EQUAL OR EXCEED THE PROPERTIES LISTED IN DETAIL 3 ON THIS SHEET.

- SIZE AND LOCATION. FOR COMPLETE INFORMATION REFER TO DRAWINGS OTHER THAN STRUCTURAL.
- CONDITIONS. SUBMIT LAYOUT OF OPENINGS AND PROPOSED REINFORCING OF DECK FOR REVIEW.
- OPENING TO BE TREATED AS A SINGLE GROUP OPENING.
- REQUIRED.
- DIAMETER MAXIMUM, NO STRENGTHENING IS REQUIRED.
- DEAD LOADS] [5 LBS PER SQ FT].

13.DO NOT PLACE CONDUITS OR OTHER PIPES IN CONCRETE FILL OVER DECK.

14. WHERE HEADED STUDS ARE WELDED THROUGH THE DECK, WITH A MINIMUM CLEARANCE OF 1" FROM THE EDGE OF THE DECK TO THE STUD CENTER LINE, EACH STUD MAY REPLACE A DECK WELD ONE-FOR-

1	Т				
	SIDE LAPS	REINF UON	^t CONC		
	VSC @ 12" OC				

1. SEE STEEL DECK NOTES AND DECK SCHEDULE FOR COMPLETE INFORMATION.

4 TYPICAL DECK JOINT OVER SUPPORT

<u>NOTE:</u> SLAB REINF CONT THRU JOINT, UON

CONSTRUCTION JOINT AT STEEL DECK 8 NOT TO SCAL

ALTERNATE DETAIL

ALTERNATE DETAIL

2. PLATE MAY BE LOCATED ABOVE DECK WHERE NO CONCRETE FILL OCCUR.

<u>NOTES:</u> 1. 12 GA PLATE MAY BE OMITTED IF HOLE IS CUT AFTER CONCRETE FILL HAS REACHED ITS DESIGN STRENGTH.

