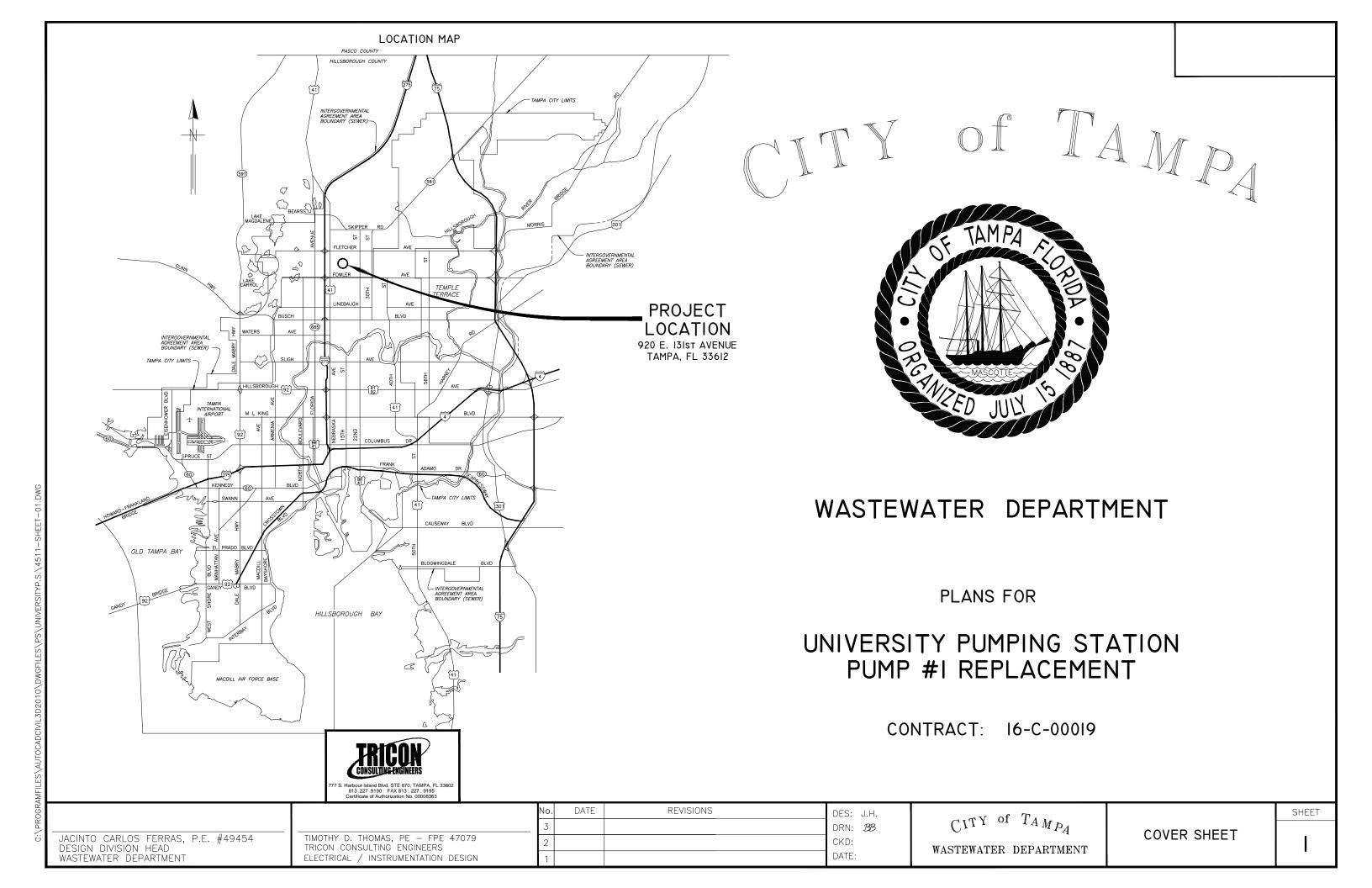
## The Enclosed Document Is Provided For Your Convenience.

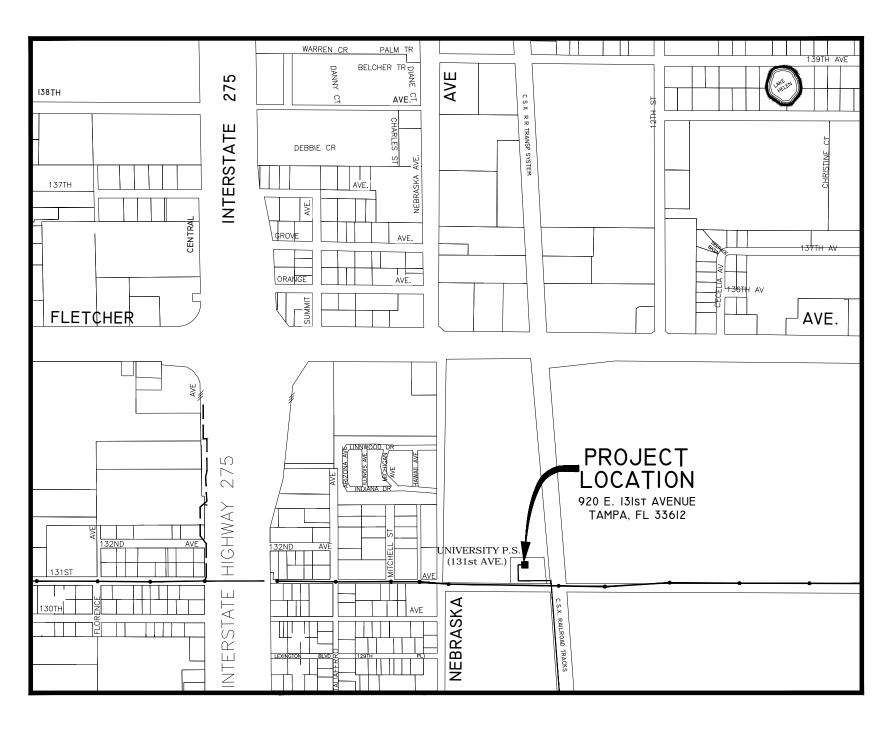
## Please Email ALL Questions:

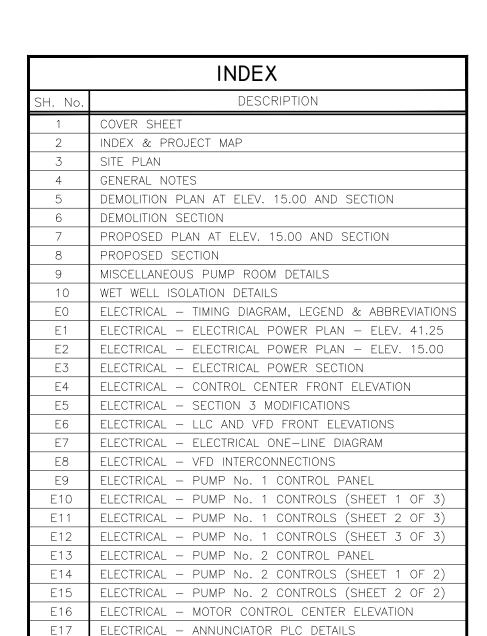
MailTo:ContractAdministration@TampaGov.net

Please Let Us Know If You Plan To Bid

City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456







PROJECT MAP

	No.	DATE	REVISIONS	DES: J.H.
)454	3			DRN: <i>BB</i>
	2			CKD:
	1			DATE:

CITY of  $T_{AMP_A}$ WASTEWATER DEPARTMENT

UNIVERSITY PUMPING STATION PUMP No. I REPLACEMENT INDEX & PROJECT MAP

ELECTRICAL - ANNUNCIATOR PLC WIRING DIAGRAMS

ELECTRICAL — DISCRETE I/O WIRING DIAGRAMS

ELECTRICAL — PROPOSED ANNUNCIATOR SCREENS

ELECTRICAL — CONDUIT AND CABLE SCHEDULE

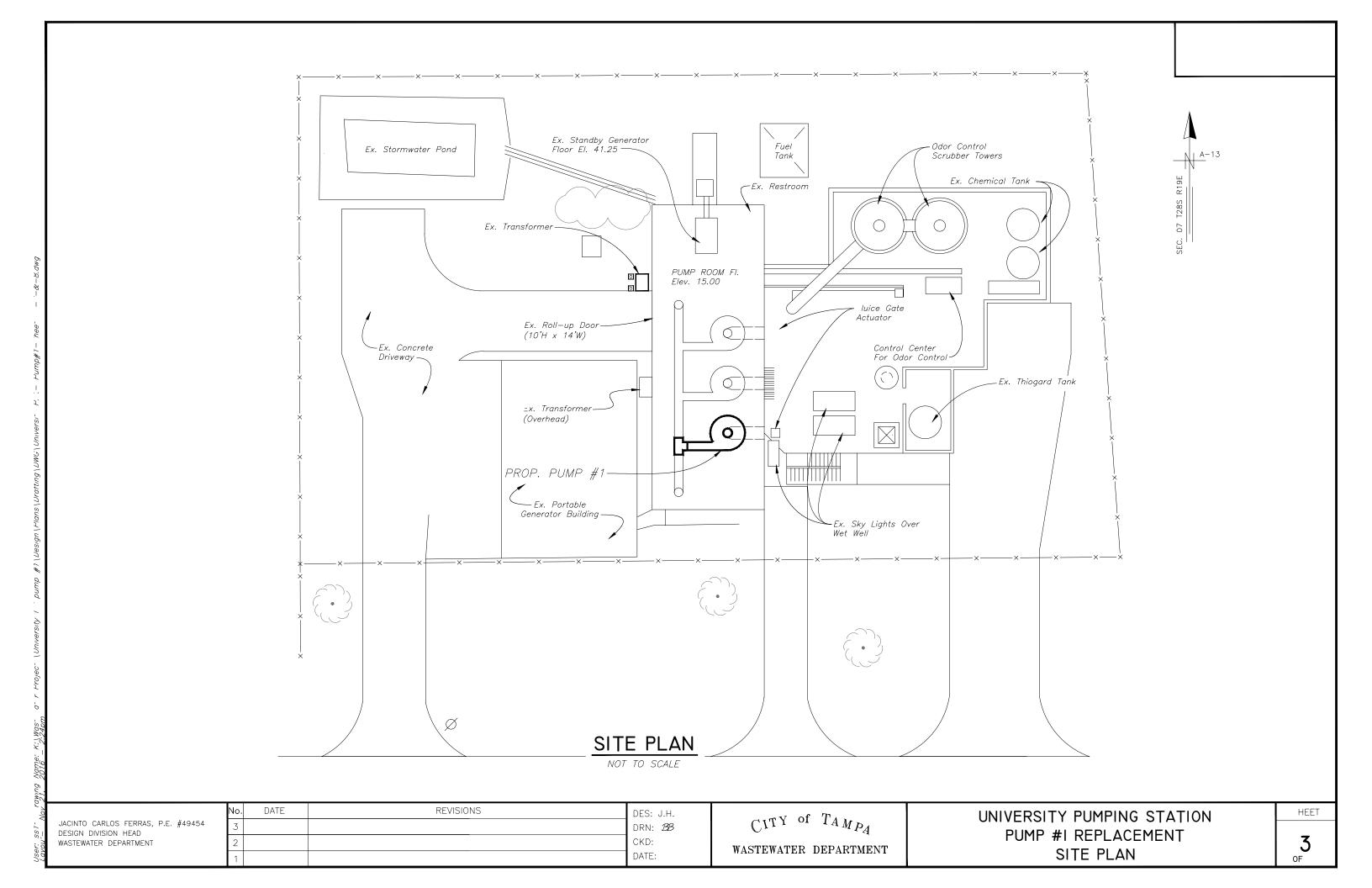
E18

E19

SHEET

2

JACINTO CARLOS FERRAS, P.E. #49454 DESIGN DIVISION HEAD WASTEWATER DEPARTMENT



- G-2. EXISTING DIMENSIONS AND ELEVATIONS ARE BASED ON THE BEST INFORMATION AVAILABLE. TRUE DIMENSIONS AND ELEVATIONS SHALL BE DETERMINED IN THE FIELD PRIOR TO LAYOUT AND SHOP DRAWING SUBMITTALS.
- G-3. ALL SUBMITTALS AND SHOP DRAWINGS SHALL BE ORIGINALS OR HIGH QUALITY COPIES (EASILY READABLE). NO FAXED SHEETS OR POOR QUALITY COPIES WILL BE ACCEPTED FOR SUBMITTAL REVIEW.
- G-4. PRIOR TO PUMP #1 DEMOLITION, CITY FORCES WILL CLOSE THE NECESSARY PLUG VALVES INSIDE THE PUMPING STATION TO ISOLATE THE DISCHARGE SIDE OF PUMP #1. THE CITY REQUIRES A MIN. 1 WEEK ADVANCE NOTICE FOR THIS WORK.
- G-5. CONTRACTOR SHALL INSTALL TWO STOP LOGS AND A 42"
  INFLATABLE PLUG IN WET WELL IN ORDER TO ISOLATE SUCTION
  SIDE OF PUMP #1. SEE WET WELL DETAILS ON SHEET 10.
- G-6. MECHANICAL AND ELECTRICAL EQUIPMENT TO BE LOCKED OUT SHALL
  BE LOCKED OUT WITH A MULTIPLE-LOCK MASTER LOCK-OUT
  DEVICE, WHICH SHALL BE INSTALLED BY CITY PERSONNEL AND
  LOCKED BY BOTH THE CITY PERSONNEL AND THE CONTRACTOR.
- G-7. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING, INSTALLING, LEVELING AND ALIGNING MOTOR AND PUMP. PROCEDURES FOR INSTALLATION, AS OUTLINED IN THE HYDRAULIC INSTITUTE STANDARDS, MOST CURRENT EDITION, SHALL BE ADHERED TO. SEE SPECIFIC PROVISION SP-80. IF CONFLICT BETWEEN THE SPECS AND THE H.I.S. PROCEDURE ARISE, THE MOST STRINGENT STANDARD SHALL BE FOLLOWED.
- G-8. PROPOSED PUMP SHALL BE A 400 HORSEPOWER, 24-INCH, 600 RPM FAIRBANKS MORSE VERTICAL CLOSE-COUPLED ANGLEFLOW PUMP MODEL #C5741. PUMP SHALL BE RATED FOR 29.3 MGD @ 62.0 FEET TDH. SEE SPECIFICATIONS FOR MOTOR INFORMATION.
- G-9. PROPOSED KNIFE GATE VALVE SHALL BE A MODEL 145,
  "PERFORMANCE PLUS" KNIFE GATE, AS MADE BY TYCO VALVE AND
  CONTROLS; SEE SPECIFICATIONS FOR DETAILS. KNIFE GATE VALVE
  SHALL BE EQUIPPED WITH ELECTRIC POWERED ACTUATOR, AS
  MADE BY ROTORK, LIMITORQUE, OR EQUAL; SEE SPECIFICATIONS
  FOR DETAILS.
- G-10. EXISTING 30" PUMP CHECK VALVE AND PNEUMATIC ACTUATOR SHALL BE REMOVED AND PLACED IN SAFE STORAGE DURING DEMOLITION ACTIVITIES. PUMP CHECK VALVE ASSEMBLY SHALL BE RE-INSTALLED IN NEW LOCATION WITH PROPOSED PUMP #1, PIPE AND FITTINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-CONNECTING PUMP CHECK VALVE ACTUATOR TO PNEUMATIC AIR SUPPLY, POWER AND CONTROLS SOURCES. SEE ELECTRICAL SHEETS FOR DETAILS.
- G-11. AIR SUPPLY FOR PNEUMATICALLY ACTUATED PUMP-CHECK VALVE SHALL BE FROM EXISTING STATION AIR. ARRANGEMENT OF PIPING AND CONNECTIONS TO EXISTING PIPES SHALL BE MADE BY THE CONTRACTOR UNDER THE DIRECTION OF THE ENGINEER.
- G-12. ANCHOR BOLTS SHALL BE AS PER PUMP MANUFACTURER'S RECOMMENDATIONS. ANCHOR BOLTS SHALL BE DOUBLE-NUTTED AND FINISHED WITH NON-SHRINK GROUT. ALL BOLTS SHALL EXTEND BEYOND THE FASTENING NUTS BY A MINIMUM OF 1/2-INCH.

- G-13. ALL HARDWARE, UNLESS OTHERWISE NOTED, SHALL BE TYPE 316 STAINLESS STEEL.
- G-14. PROP. 30"x 30"x 24" REDUCING TEE SHALL BE FABRICATED TO SUIT THE DIMENSIONS OF THE PROPOSED EQUIPMENT AND SHALL BE A36-STEEL WITH A 150 PSI RATING. STEEL FITTINGS SHALL BE MANUFACTURED BY AN AWWA CERTIFIED FABRICATOR.
- G-15. ALL CEMENTITIOUS CONCRETE AND GROUT, UNLESS OTHERWISE SPECIFIED, SHALL BE CLASS "B" 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
- G-16. EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4" CHAMFER AND RE-ENTRANT CORNERS SHALL HAVE A 3/4" FLAT FILLET UNLESS OTHERWISE NOTED.
- G-17. CONCRETE PEDESTAL SHOP DRAWINGS INCLUDING FLANGE SUPPORT DETAILS SHALL BE SUBMITTED FOR APPROVAL.
- G-18. ALL STEEL REINFORCING SHALL BE DETAILED ACCORDING TO THE LATEST "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES". ACTUAL PLACEMENT OF STEEL REINFORCING SHALL BE SHOWN ON SHOP DRAWINGS. ALL LAPS AND SPLICES SHALL BE AT LEAST 32 BAR DIAMETERS OR 24 INCHES.
- G-19. CERTAIN PORTIONS OF THIS PROJECT MAY REQUIRE NIGHT TIME WORK.
- G-20. ALL NOTES PERTAINING TO PROPOSED WORK INSIDE SCREEN ROOM ARE LOCATED ON PERTINENT SHEETS.
- G-21. PROP. FLOW METER SHALL BE A 24" ABB ELECTROMAGNETIC FLOW METER, WATERMASTER SERIES, AS MADE BY ABB. SEE SPECIFICATIONS
- G-22. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE LINED WITH PROTECTO
  401 CERAMIC EPOXY (40 MILS DFT), OR EQUAL. ALL STEEL PIPE AND
  FITTINGS SHALL BE LINED WITH 40 MILS (DFT) OF "SG-14" GLASS
  LINING (PORCELAIN ENAMEL), AS MADE BY U.S. PIPE, OR EQUAL.
- G-23. THE PUMPING STATION SHALL REMAIN IN OPERATION DURING THE ENTIRE PUMP No.1 REPLACEMENT PROJECT. THE CONTRACTOR SHALL PLAN HIS WORK ACCORDINGLY.
- G-24. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 5th EDITION 2014, AND CHAPTER 5 OF THE CITY OF TAMPA CODE.
- G-25. CONTRACTOR SHALL REMOVE EX. WET WELL #1 (42") SLUICE GATE AND ENTIRE ELECTRIC ACTUATOR ASSEMBLY.
- G-26. CONFIGURATION FOR THREE PROPOSED KNIFE GATE VALVE ACTUATORS SHALL BE AS INDICATED IN THE PLANS.
- G-27. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 5TH EDITION 2014, CHAPTER 5 OF THE CITY OF TAMPA CODE AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) SERIES 70/NATIONAL ELECTRICAL CODE (NEC) 2011 EDITION.

DES: J.H.

DRN: BB

CKD:

DATE:

## **DEMOLITION NOTES**

- D-1. ALL DIMENSIONS ARE APPROXIMATE. TRUE DIMENSIONS SHALL BE DETERMINED IN THE FIELD.
- D-2. SALVAGEABLE MATERIAL, AS DETERMINED BY DEPARTMENT
  PERSONNEL, SHALL BE DELIVERED TO THE CITY OF TAMPA'S
  HOWARD F. CURREN AWTP AT 2700 MARITIME BOULEVARD.
  NON-SALVAGEABLE MATERIALS ARE TO BE REMOVED FROM THE SITE
  AND PROPERLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. IN
  GENERAL, ALL PUMP AND CONTROLS EQUIPMENT SHALL REMAIN
  PROPERTY OF THE CITY AND SHALL BE DELIVERED TO THE
  TREATMENT PLANT.
- D-3. ALL ALUMINUM FRAMES AND PLATFORMS ON PUMP #1 SHALL BE SALVAGED AND DELIVERED TO THE TREATMENT PLANT.
- D-4. THE PUMP STATION SITE SHALL BE MAINTAINED IN AS NEAT AND ORDERLY CONDITION AS POSSIBLE DURING CONSTRUCTION OPERATIONS. WALKWAYS AND DRIVEWAYS SHALL BE KEPT CLEAR FOR DEPARTMENT PERSONNEL TO PASS THROUGH.
- D-5. CONTRACTOR SHALL CUT ALL EXPOSED REINFORCING STEEL TO A
  DEPTH OF 1-INCH BELOW THE EXPOSED SURFACE AND GROUT
  OVER
- D-6. CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL THAT WILL
  PREVENT THE EXPANSION JOINTS IN THE 30"-36" DISCHARGE
  HEADER FROM EXPANDING AFTER THE EXISTING 30"x 30"x 36' TEE
  HAS BEEN REMOVED IN THE PUMP ROOM.

## "POSSIBLE" CONSTRUCTION SEQUENCE

- S-1. CITY FORCES CLOSE EX. 30" & 24" PLUG VALVES IN PUMP ROOM TO ISOLATE DISCHARGE SIDE OF PUMP #1. CONTRACTOR TO INSTALL STOP LOGS AND 42" PLUG IN SCREEN ROOM TO ISOLATE SUCTION SIDE OF PUMP #1.
- S-2. PROCEED WITH DEMOLITION AND INSTALL 24" KNIFE GATE VALVE AS SOON AS POSSIBLE.
- S-3. INSTALL PROPOSED PUMP #1, PUMP CHECK VALVE, FLOW METER, PIPE AND FITTINGS (INCLUDING ELECTRICAL WORK).
- S-4. PERFORM REQUIRED TESTS ON PROPOSED PUMPING EQUIPMENT.
- S-5. PERFORM TRAINING, COMPLETE PUNCH LIST ITEMS.

JACINTO CARLOS FERRAS, P.E. #49454 DESIGN DIVISION HEAD WASTEWATER DEPARTMENT No. DATE REVISIONS
3 2 1

 $C^{1}$ TY of  $T_{A}{}_{M}{}_{P_{\mathcal{A}}}$ Wastewater department

UNIVERSITY PUMPING STATION
PUMP #I REPLACEMENT
GENERAL NOTES

SHEET

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