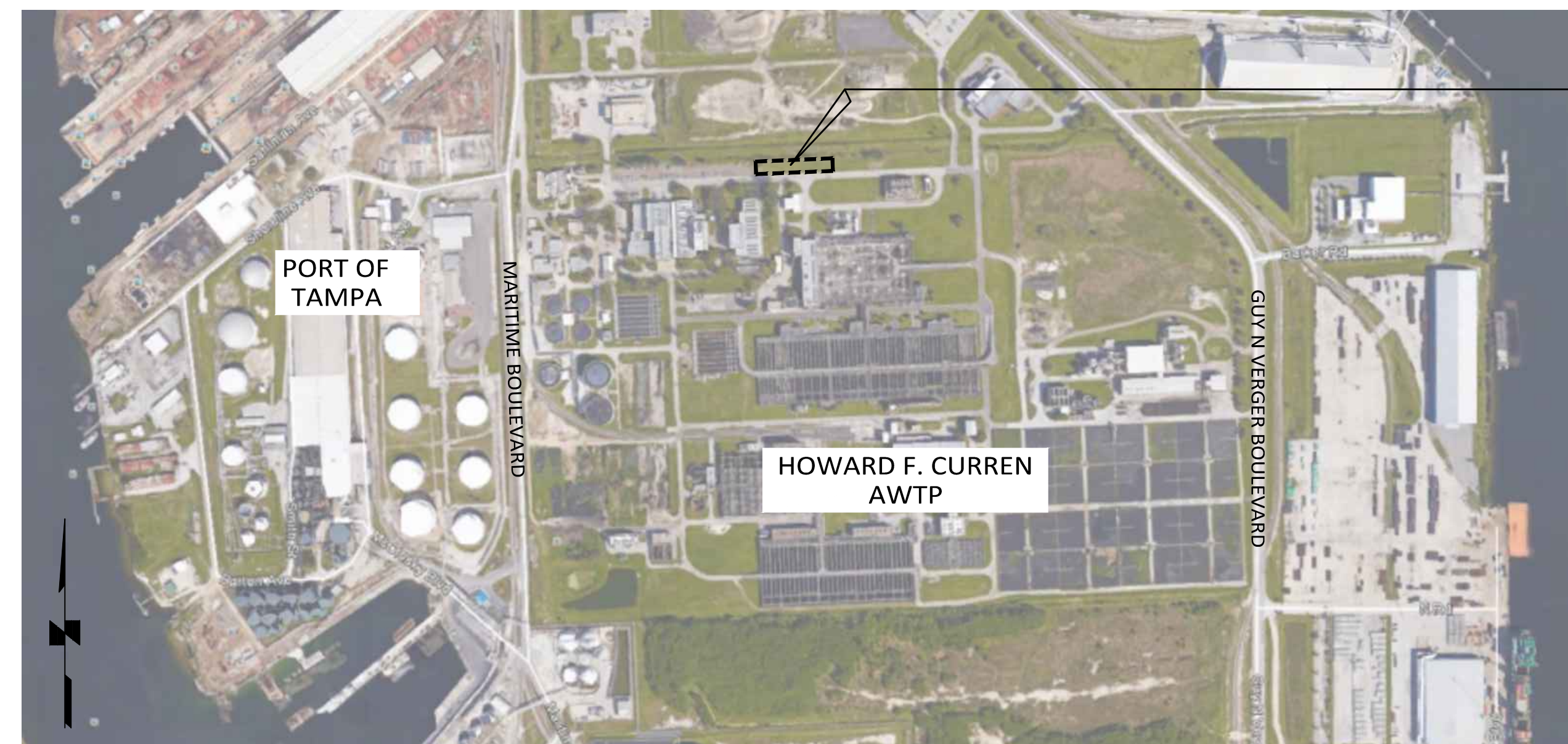


# HOWARD F. CURREN

## AWTP PARKING LOT ADDITION

CONTRACT 24-C-00038

CITY OF TAMPA  
WASTEWATER DEPARTMENT  
2700 MARITIME BOULEVARD  
TAMPA, FL 33605




PROJECT LOCATION
2700 MARITIME BOULEVARD
TAMPA, FL

VICINITY MAP (NOT TO SCALE)

## INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
CX.0	COVER SHEET
CX.1	OVERALL FACILITY MAP
C0.0	EXISTING CONDITIONS
C1.0	DEMOLITION AND EROSION CONTROL
C2.0	SITE PLAN
C3.0	DETAILS AND NOTES
C3.1	DETAILS AND NOTES
C3.2	POND DIMENSIONS
ES1	LOCATION - INDEX
EG1	ELECTRICAL SYMBOLS LEGEND (SHT 1 OF 2)
EG2	ELECTRICAL SYMBOLS LEGEND (SHT 2 OF 2)
EG3	GENERAL NOTES
E1	LIGHTING DEMOLITION
E2	PROPOSED LIGHTING PLAN
E3	LCP-31 POWER CONNECTIONS DETAILS
ER1	MAIN PUMPING STATION POWER PLANS - REFERENCE SHEET 1 OF 4
ER2	PART SITE PLAN - REFERENCE SHEET 2 OF 4
ER3	PART SITE PLAN - REFERENCE SHEET 3 OF 4
ER4	CONDUIT AND CABLE SCHEDULE - REFERENCE SHEET 4 OF 4

**100% SUBMITTAL - 04/21/25**

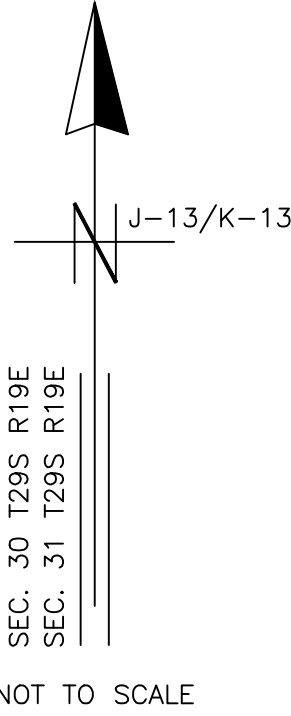
REVISIONS						<b>MILLS &amp; ASSOCIATES</b>		FOR				PROJECT		SHEET	
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION			CITY OF TAMPA		DRAWN BY: CVL		DATE: 6/25/24		CX.0	
						DIVISION OF PENNONI		WASTEWATER DEPARTMENT		DESIGN BY: CVL		DATE: 6/25/24			
						CONSULTING ENGINEERS & LAND SURVEYORS		2700 MARITIME BOULEVARD		CHECKED BY: LEM		DATE: 6/25/24		JOB NO.	
						3242 HENDERSON BOULEVARD * SUITE 300		TAMPA, FLORIDA 33605		SCALE: NA		LAWRENCE E. MILLS P.E. NO. 22324 - P.L.S. NO. 3141 E.B. NO. 3860 - L.B. NO. 3868		COVER & INDEX	
						TAMPA, FLORIDA 33609-3056		TAMPA, FLORIDA 33605				STATE OF FLORIDA		TAMPA24006	
						TELEPHONE: (813) 876-5869									



LOCATION MAP

CITY OF TAMPA  
HOWARD F. CURREN  
ADVANCED WASTEWATER  
TREATMENT PLANT

2700 MARITIME BLVD.  
TAMPA, FL 33605  
(813) 247-3451  
FAX: (813) 248-5269



NORTH PARKING LOT  
EXTENSION PROJECT  
LOCATION

RE-STRIPE  
PARKING SPOTS  
LOCATION  
(RE-STRIPE TO  
PROVIDE 2 ADA  
SPACES)

SITE DATA:  
  
OWNER: City of Tampa  
  
ADDRESS: 2700 Maritime Boulevard  
Tampa, FL 33605  
S/T/R: 30/29/19  
ZONING: Industrial Heavy  
FLOOD ZONE: AE  
PROPERTY USE: Large Industrial Class  
PROJ. FOLIO #: 199340-0000  
PROPERTY AREA: 150.13 acres  
TOTAL PROJECT AREA: ±0.721 acres

PROJECT AREAS:  
TOTAL = 31,425 S.F. (±0.721 acres)

EXISTING:  
GREEN SPACE = 31,425 S.F.

PROPOSED:  
IMPERVIOUS (ASPHALT) = 16,176 S.F.  
GREEN SPACE = 6,764 S.F.  
POND = 8,485 S.F.

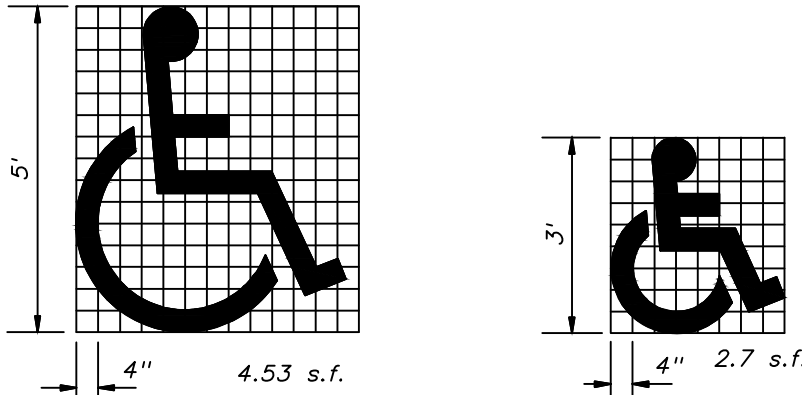
PARKING DATA:

EXISTING:  
TOTAL EXISTING PARKING: 469 SPACES (INCLUDING ADA)  
TOTAL EXISTING ADA PARKING: 9 SPACES

PROPOSED:  
PROPOSED NEW PARKING: 40 SPACES  
  
TOTAL PROPOSED PARKING: 509 SPACES (INCLUDING ADA)  
TOTAL PROPOSED ADA PARKING: 11 SPACES  
\* RE-STRIPE EXISTING PARKING AREA  
NEAR BLDG. ENTRANCE AS REQUIRED  
TO PROVIDE 2 ADDITIONAL ADA PARKING  
SPACES. SEE ADA STRIPING DETAIL BELOW

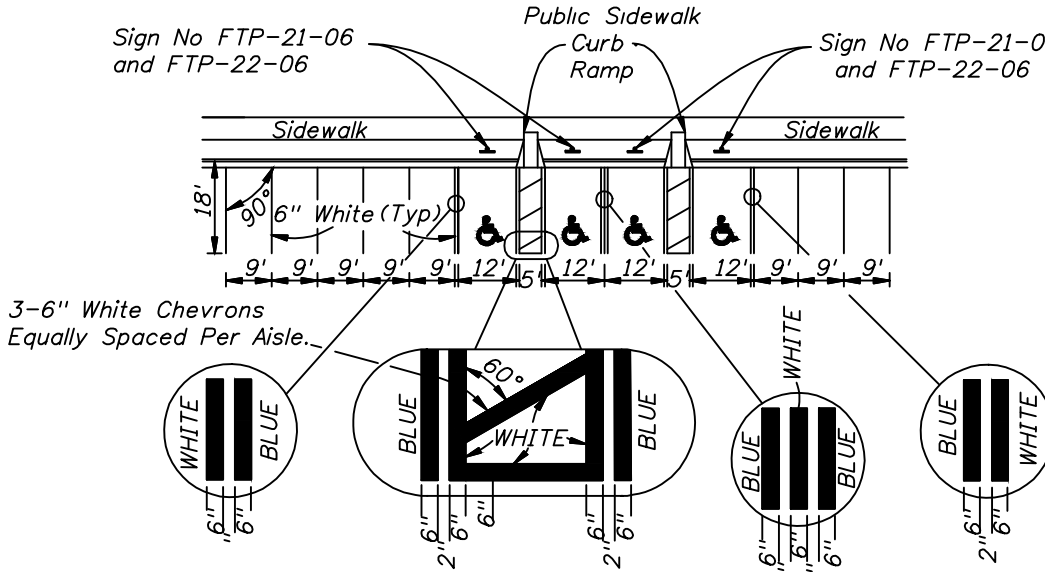
PARKING REQUIRED BY CODE:  
REQUIRED EMPLOYEE PARKING: 100 SPACES (100 EMPLOYEES X 1 SPACE/EMPLOYEE)  
REQUIRED ADA PARKING: 11 SPACES

\*\*NOTE: EXISTING PARKING NEAR BUILDING ENTRANCE TO BE  
RE-STRIPED AS REQUIRED TO PROVIDE TWO ADDITIONAL ADA  
PARKING SPACE. COORDINATE PROPOSED ADA RE-STRIPING  
LOCATION WITH OWNER.



Use of pavement symbol in accessible  
parking spaces is optional, when used the  
symbol shall be 3' or 5' high and white in color.

UNIVERSAL SYMBOL  
OF ACCESSIBILITY



- NOTES:
1. Dimensions are to the centerline of markings.
  2. An Access Aisle is required for each accessible space when angle parking is used.
  3. Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.
  4. Blue pavement markings shall be tinted to match shade 15180 of Federal Standard S95a.
  5. The FTP-22-06 panel shall be mounted below the FTP-21-06 sign.

ADA PARKING- PAVEMENT MARKING DETAIL

\*REFER TO FDOT INEX #17346 INDEX FOR ADDITIONAL INFORMATION

100% SUBMITTAL - 04/21/25

REVISIONS					
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION

**MILLS & ASSOCIATES**  
DIVISION OF PENNONI  
CONSULTING ENGINEERS & LAND SURVEYORS  
3242 HENDERSON BOULEVARD • SUITE 300  
TAMPA, FLORIDA 33609-3056  
TELEPHONE: (813) 876-5869

FOR  
  
CITY OF TAMPA  
WASTEWATER DEPARTMENT  
  
2700 MARITIME BOULEVARD  
TAMPA, FLORIDA 33605

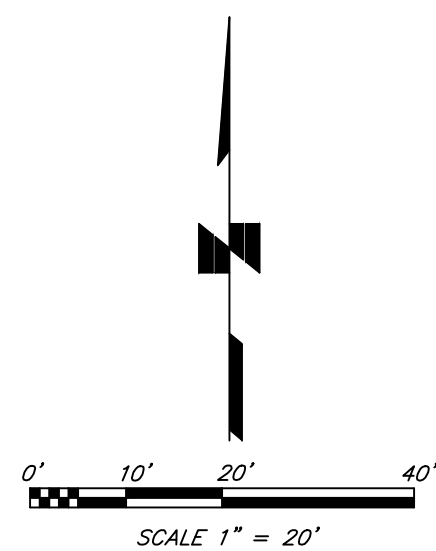
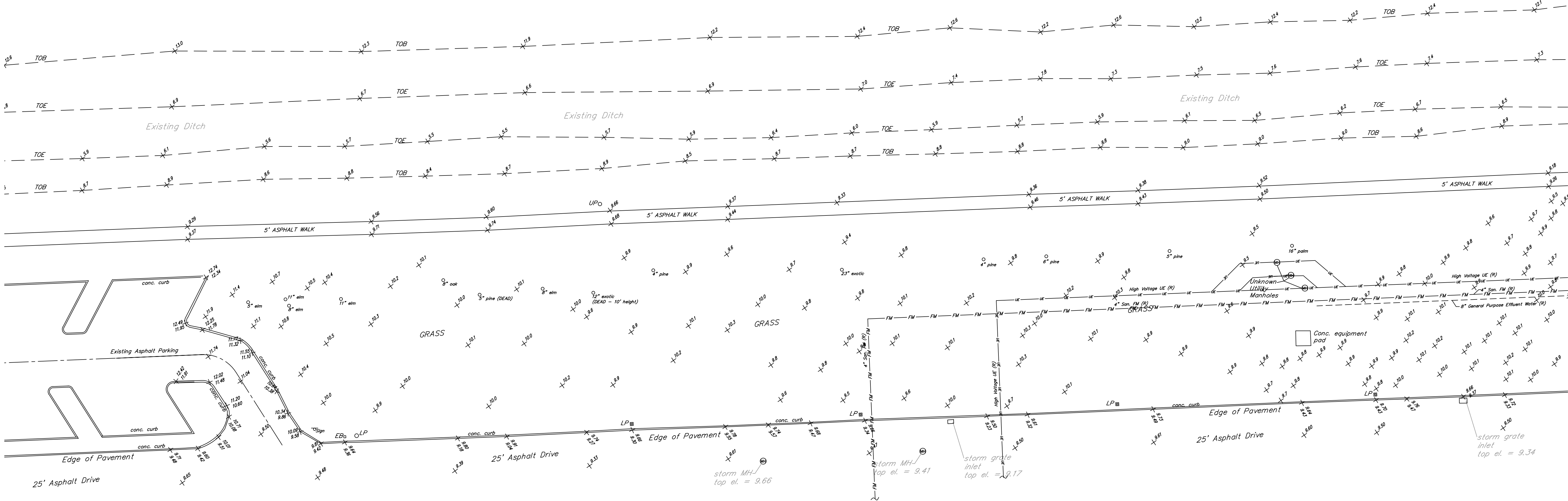
DRAWN BY: CVL  
DESIGN BY: CVL  
CHECKED BY: LEM  
SCALE: NA  
  
DATE 6/25/24  
DATE 6/25/24  
DATE 6/25/24

LAWRENCE E. MILLS  
P.E. NO. 22324 - P.L.S. NO. 3141  
E.B. NO. 3860 - L.B. NO. 3868  
STATE OF FLORIDA

PROJECT  
  
HOWARD F. CURREN  
AWTP PARKING LOT ADDITION  
  
OVERALL FACILITY MAP

SHEET  
  
CX.1  
  
JOB NO.  
TAMPA24006





LEGEND (As Applicable)	
CL	Center Line
CLF	Chain Link Fence
Conc.	Concrete
EL	Elevation
FM	Fire Hydrant
IE	Invert Elevation
IRR	Irrigation
LP	Light Pole
(M)	Measured data
MEG	Match Existing Grade
MH	Manhole
P.P.	Power Pole
(R)	Reported
RCP	Reinforced Concrete Pipe
R/W	Right of Way
TBM	Temporary Bench Mark
TE	Top Elevation
TOB	Top of Bank
OWW	Overhead Wires
UP	Utility Pole
+ 9.1	Existing Grade
9.1	Proposed Grade
→	Proposed Flow Arrow

100% SUBMITTAL - 04/21/25

REVISIONS					
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION

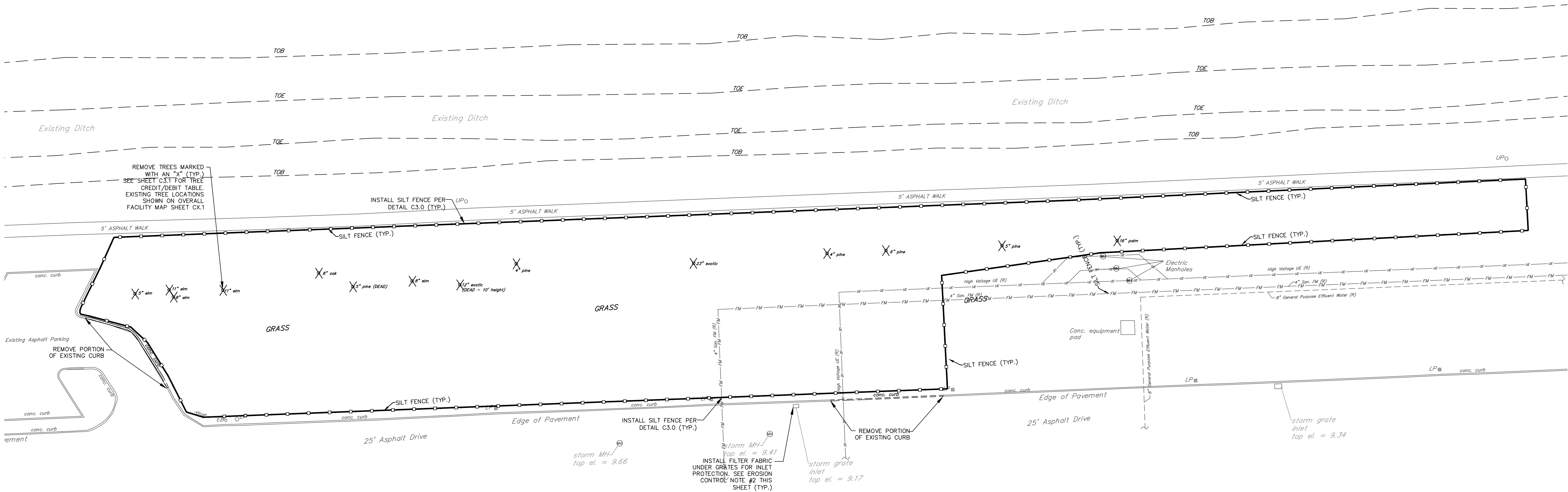
**MILLS & ASSOCIATES**  
DIVISION OF PENNONI  
CONSULTING ENGINEERS & LAND SURVEYORS  
3242 HENDERSON BOULEVARD • SUITE 300  
TAMPA, FLORIDA 33609-3056  
TELEPHONE: (813) 876-5869

FOR  
**CITY OF TAMPA**  
WASTEWATER DEPARTMENT  
2700 MARITIME BOULEVARD  
TAMPA, FLORIDA 33605

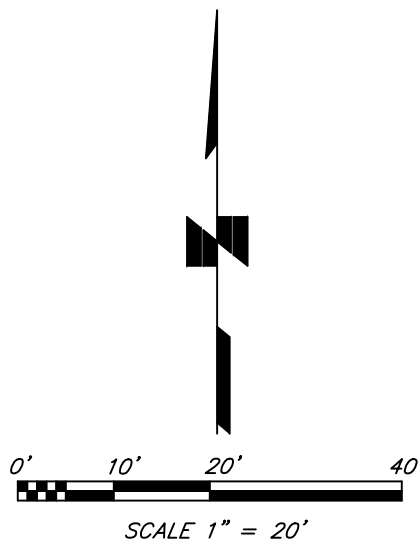
DRAWN BY: CVL      DATE 6/24/25  
DESIGN BY: CVL      DATE 6/24/25  
CHECKED BY: LEM      DATE 6/24/25  
SCALE: 1" = 20'  
LAWRENCE E. MILLS  
P.E. NO. 22324 - P.L.S. NO. 3141  
E.B. NO. 3860 - L.S. NO. 3868  
STATE OF FLORIDA

PROJECT  
**HOWARD F. CURREN**  
**AWTP PARKING LOT ADDITION**  
  
EXISTING CONDITIONS

SHEET  
**C0.0**  
JOB NO.  
**TAMPA24006**



- EROSION CONTROL NOTES:**
1. EROSION CONTROL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION OF PROJECT.
  2. THE CONTRACTOR TO SET SILT SCREEN, HAY BALES PRIOR TO THE START OF CONSTRUCTION. ALL EXISTING STORMWATER GRATE INLETS WITHIN THE PROJECT AREA ARE TO BE PROTECTED. AFTER NEW INLETS ARE INSTALLED, THE CONTRACTOR SHALL PLACE EROSION CONTROL ON THOSE ALSO. AS AN ALTERNATE, PLACE FILTER FABRIC UNDER THE GRATES. THE CONTRACTOR TO INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND RE-ERECT AS REQUIRED.



LEGEND (As Applicable)	
CL	Center Line
CLF	Chain Link Fence
Conc.	Concrete
EL	Elevation
FH	Fire Hydrant
IE	Invert Elevation
IRR	Irrigation
LP	Light Pole
(M)	Measured data
MEG	Match Existing Grade
MH	Manhole
P.P.	Power Pole
(R)	Reported
RCP	Reinforced Concrete Pipe
R/W	Right of Way
TBM	Temporary Bench Mark
TE	Top Elevation
TOB	Top of Bank
OHW	Overhead Wires
UP	Utility Pole
+ 9.1	Existing Grade
9.1	Proposed Grade
→	Proposed Flow Arrow

100% SUBMITTAL - 04/21/25

REVISIONS					
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION

**MILLS & ASSOCIATES**

DIVISION OF PENNONI

CONSULTING ENGINEERS & LAND SURVEYORS

3242 HENDERSON BOULEVARD • SUITE 300  
TAMPA, FLORIDA 33609-3056

TELEPHONE: (813) 876-5869

FOR

CITY OF TAMPA

WASTEWATER DEPARTMENT

2700 MARITIME BOULEVARD  
TAMPA, FLORIDA 33605

DRAWN BY: CVL

DESIGN BY: CVL

CHECKED BY: LEM

SCALE: 1" = 20'

DATE 6/25/24

DATE 6/25/24

DATE 6/25/24

LAWRENCE E. MILLS  
P.E. NO. 22324 - P.L.S. NO. 3141  
E.B. NO. 3860 - L.B. NO. 3868  
STATE OF FLORIDA

PROJECT

HOWARD F. CURREN  
AWTP PARKING LOT ADDITION

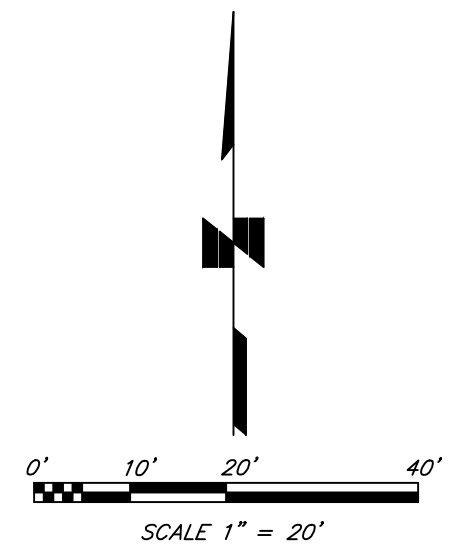
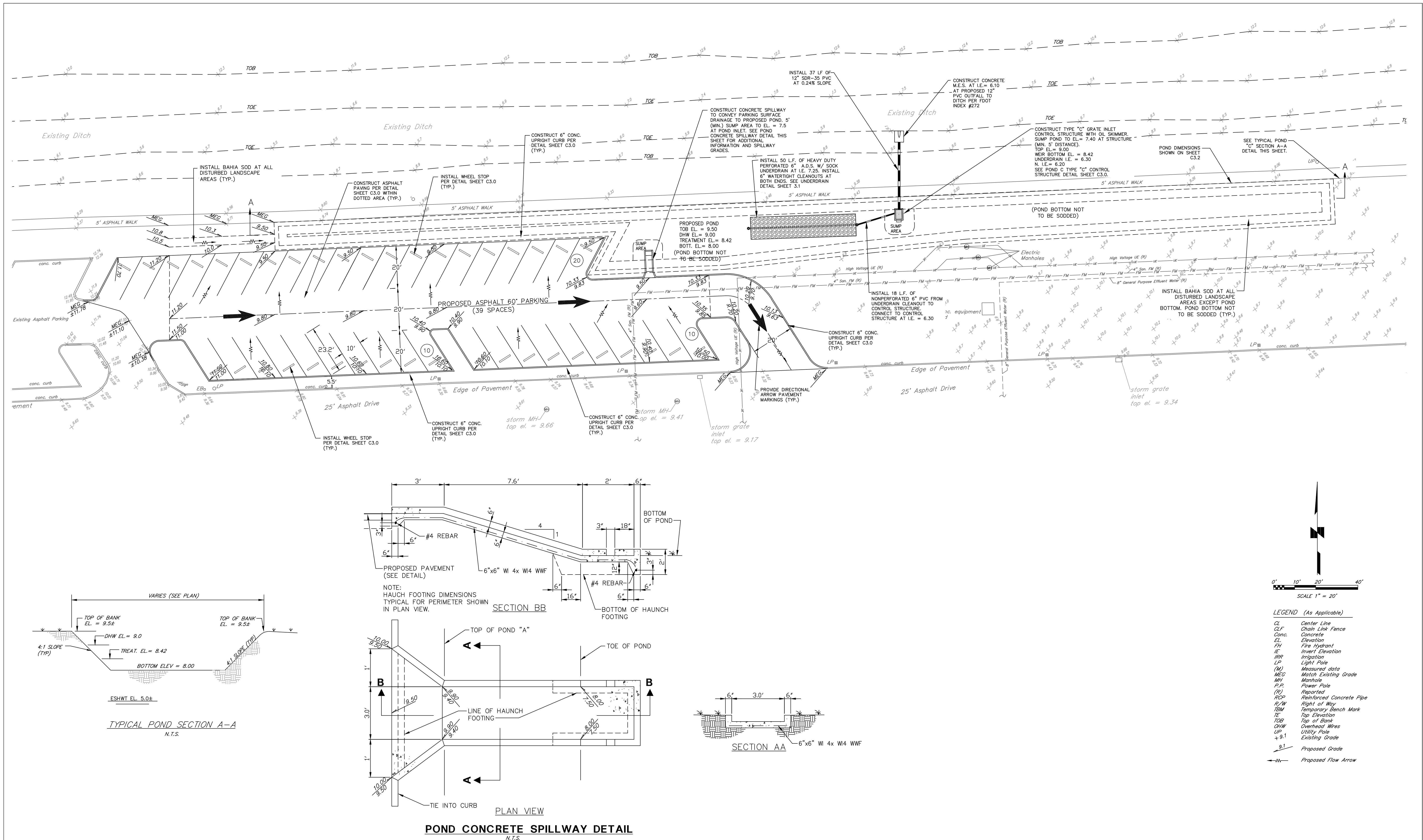
DEMOLITION AND EROSION  
CONTROL

SHEET

C1.0

JOB NO.  
TAMPA24006





LEGEND (As Applicable)	
CL	Center Line
CLF	Chain Link Fence
Conc.	Concrete
EL.	Elevation
FM	Fire Hydrant
IE	Invert Elevation
IRR	Irrigation
LP	Light Pole
(M)	Measured data
MEG	Match Existing Grade
MH	Manhole
P.P.	Power Pole
(R)	Reported
RCP	Reinforced Concrete Pipe
R/W	Right of Way
TBM	Temporary Bench Mark
TE	Top Elevation
TOB	Top of Bank
OWW	Overhead Wires
UP	Utility Pole
+ 9.1	Existing Grade
9.1	Proposed Grade
→	Proposed Flow Arrow

100% SUBMITTAL - 04/21/25

REVISIONS					
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION
CVL	8/27/24	FDOP COMMENT REVISIONS			

**MILLS & ASSOCIATES**  
DIVISION OF PENNONI  
CONSULTING ENGINEERS & LAND SURVEYORS  
3242 HENDERSON BOULEVARD • SUITE 300  
TAMPA, FLORIDA 33609-3056  
TELEPHONE: (813) 876-5869

FOR  
CITY OF TAMPA  
WASTEWATER DEPARTMENT  
2700 MARITIME BOULEVARD  
TAMPA, FLORIDA 33605

DRAWN BY: CVL DATE 6/25/24  
DESIGN BY: CVL DATE 6/25/24  
CHECKED BY: LEM DATE 6/25/24  
SCALE: 1" = 20'  
LAWRENCE E. MILLS  
P.E. NO. 22324 - P.L.S. NO. 3141  
E.B. NO. 3860 - L.B. NO. 3868  
STATE OF FLORIDA

PROJECT  
HOWARD F. CURREN  
AWTP PARKING LOT ADDITION  
SITE PLAN  
SHEET  
C2.0  
JOB NO.  
TAMPA24006



1. All work shall comply with the regulations, requirements and ordinances of the various governing agencies having jurisdiction over said work, including, and not limited to, Hillsborough County, City of Tampa, F.D.O.T., F.W.F.W.M.D., F.D.O.T. and Florida Building Code (FBC) 8th edition 2023, National Electrical Code 2011, and City of Tampa Code Chapter 5.
2. Location, dimension, elevation and identification of existing utilities, structures and other topographic features are approximate only, according to the best information available at the time of preparation of these plans. There may be additional existing details on-site and off-site, the presence of which is not known or detected at this time. Engineer/Supplier shall not be held responsible for undetected underground utilities. Prior to construction activities, it is the contractor's responsibility to verify the location, dimension, elevation and identification of all utilities, structures and topographic features (i.e. buildings, sidewalks, canopy supports, fences, pavement, underground utilities, utility poles, guy wires, manholes, inlets, culverts, trees, landscaping, etc.). If any of the existing or proposed conditions either: a) conflict with the proposed improvements, or b) are not shown or shown incorrectly on the plans, it is the contractor's responsibility to contact the Engineer prior to the start of construction.
3. The construction testing/inspection shall be the contractor's responsibility to schedule and complete any and all tests as required with all site civil improvements constructed on and off site. It shall also be the contractor's responsibility to submit test these improvements prior to giving the Engineer-of-Record any governing agency field representative 48 hours advance notice of any formal tests.
4. Engineer/Supplier shall not be held responsible for undetected underground utilities and/or soil conditions. Site preparation to be in accordance with geotechnical engineers recommendations and as a minimum standard must conform with the following: a) Unsuitable material to be removed; b) Fill material to be clean with no organics, muck, clay, etc.; c) Fill to be placed 12' lifts or less and compacted to 98%.
5. All elevations refer to National Geodetic Vertical Datum 29 (NGVD29).
6. The Contractor shall notify the appropriate public agency(ies) and utility companies prior to commencing work within their jurisdiction(s).
7. All pipe lengths are plus or minus and are measured from center of fittings and/or structures.
8. The Contractor shall maintain copies of all applicable permits on-site and shall be responsible to adhere to all permit conditions during construction.
9. The Contractor shall use appropriate measures to prevent erosion and transport of sediment to surface drains. The Contractor shall use hay bales and/or silt barriers to minimize adverse impacts to existing surface water quality.
10. The Contractor shall check plans for conflicts and discrepancies prior to construction. The Contractor shall notify the owner's Engineer of any conflict before performing any work in the affected area.
11. Reinforced concrete pipe (RCP) shall be a minimum of Class III pipe as designated in ASTM C-76.
12. Any relocation or modification of proposed storm sewer system shall not be made without the approval of the Engineer-of-Record.
13. Drainage shall be maintained during construction.
14. All mitered end sections (M.E.S.) shall be per F.D.O.T. Index #272 unless otherwise noted.
15. Storm drain inlets and manholes shall be traffic bearing suitable for H-20 Loading.
16. The Contractor is responsible for repairing any damage to existing facilities, above and below ground, be enforced, occur as a result of the work performed by the Contractor called for in this contract.
17. All underground utilities must be in place and tested or inspected prior to base and surface construction.
18. All inspections and documents referred to shall be of latest revision.
19. The Contractor shall submit for approval to the Owner's Engineer all drawings on all precast and prefabricated items, failure to obtain approval before installation may result in removal and replacement at Contractor's expense.
20. At least 3 working days prior to construction, the Contractor shall notify the Engineer and appropriate Agencies and supply them with all required information, i.e. drawings, the Contractor's name, starting date, projected schedule and other information as required. Any work performed prior to notifying the Engineer or without an Agency Inspector present may be subject to removal and replacement at the Contractor's expense.
21. The Contractor shall have no representations or warranties pertaining to easements, rights of way, set back lines, reservations, agreements and other similar matters.
22. All mechanical equipment shall be screened.
23. SAFETY:
  - A. During the construction and/or maintenance of this project, all safety regulations shall be enforced. The Contractor or his representative shall be responsible for the control and safety of the traveling public and the safety of his personnel.
  - B. Labor safety regulations shall conform to the provisions set forth by OSHA in the Federal Register of the Department of Transportation.
  - C. The minimum standards as set forth in the current edition of "The State of Florida, Manual on Traffic Control and Safe Practices for Street and Highway Construction, Maintenance and Utility Operations" shall be followed in the design application, installation, maintenance and use of all traffic control devices, warning devices and barriers necessary to protect the public and workmen from hazards within the project limits.
  - D. All traffic control markings and devices shall conform to the provisions set forth in the manual on uniform traffic control devices prepared by the U.S. Department of Transportation Federal Highway Administration.

**100% SUBMITTAL - 04/21/25**

REVISIONS					
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION

<div><div><div>MILLS &amp; ASSOCIATES</div><div>DIVISION OF PENNONI</div></div><div>CONSULTING ENGINEERS &amp; LAND SURVEYORS 3242 HENDERSON BOULEVARD • SUITE 300 TAMPA, FLORIDA 33609-3056 TELEPHONE: (813) 876-5869</div></div>	
--	--

FOR	
CITY OF TAMPA	
WASTEWATER DEPARTMENT	
2700 MARITIME BOULEVARD	
TAMPA, FLORIDA 33605	

DRAWN BY: <u>CVL</u>	DATE <u>6/25/24</u>
DESIGN BY: <u>CVL</u>	DATE <u>6/25/24</u>
CHECKED BY: <u>LEM</u>	DATE <u>6/25/24</u>
SCALE: <u>NA</u>	
<div>LAWRENCE E. MILLS P.E. NO. 22324 - P.L.S. NO. 3141 E.B. NO. 3860 - L.B. NO. 3868 STATE OF FLORIDA</div>	

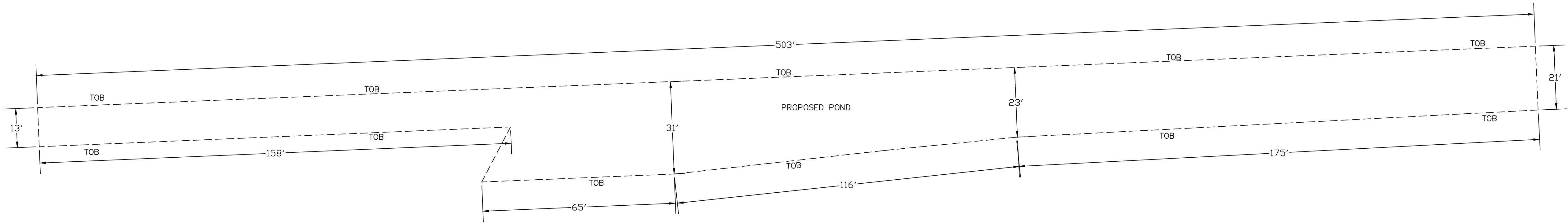
PROJECT
HOWARD F. CURREN AWTP PARKING LOT ADDITION
DETAIL & NOTES

SHEET
C3.0
JOB NO.
TAMPA24006









100% SUBMITTAL - 04/21/25

REVISIONS					
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION
CVL	8/27/24	FDEP COMMENT REVISIONS			

MILLS & ASSOCIATES

DIVISION OF PENNONI

CONSULTING ENGINEERS & LAND SURVEYORS  
3242 HENDERSON BOULEVARD • SUITE 300  
TAMPA, FLORIDA 33609-3056  
TELEPHONE: (813) 876-5869

FOR

CITY OF TAMPA  
WASTEWATER DEPARTMENT

2700 MARITIME BOULEVARD  
TAMPA, FLORIDA 33605

DRAWN BY: CVL

DATE 6/25/24

DESIGN BY: CVL

DATE 6/25/24

CHECKED BY: LEM

DATE 6/25/24

SCALE: NA

LAWRENCE E. MILLS  
P.E. NO. 22324 - P.L.S. NO. 3141  
E.B. NO. 3860 - L.S. NO. 3868  
STATE OF FLORIDA

PROJECT

HOWARD F. CURREN  
AWTP PARKING LOT ADDITION

POND DIMENSIONS

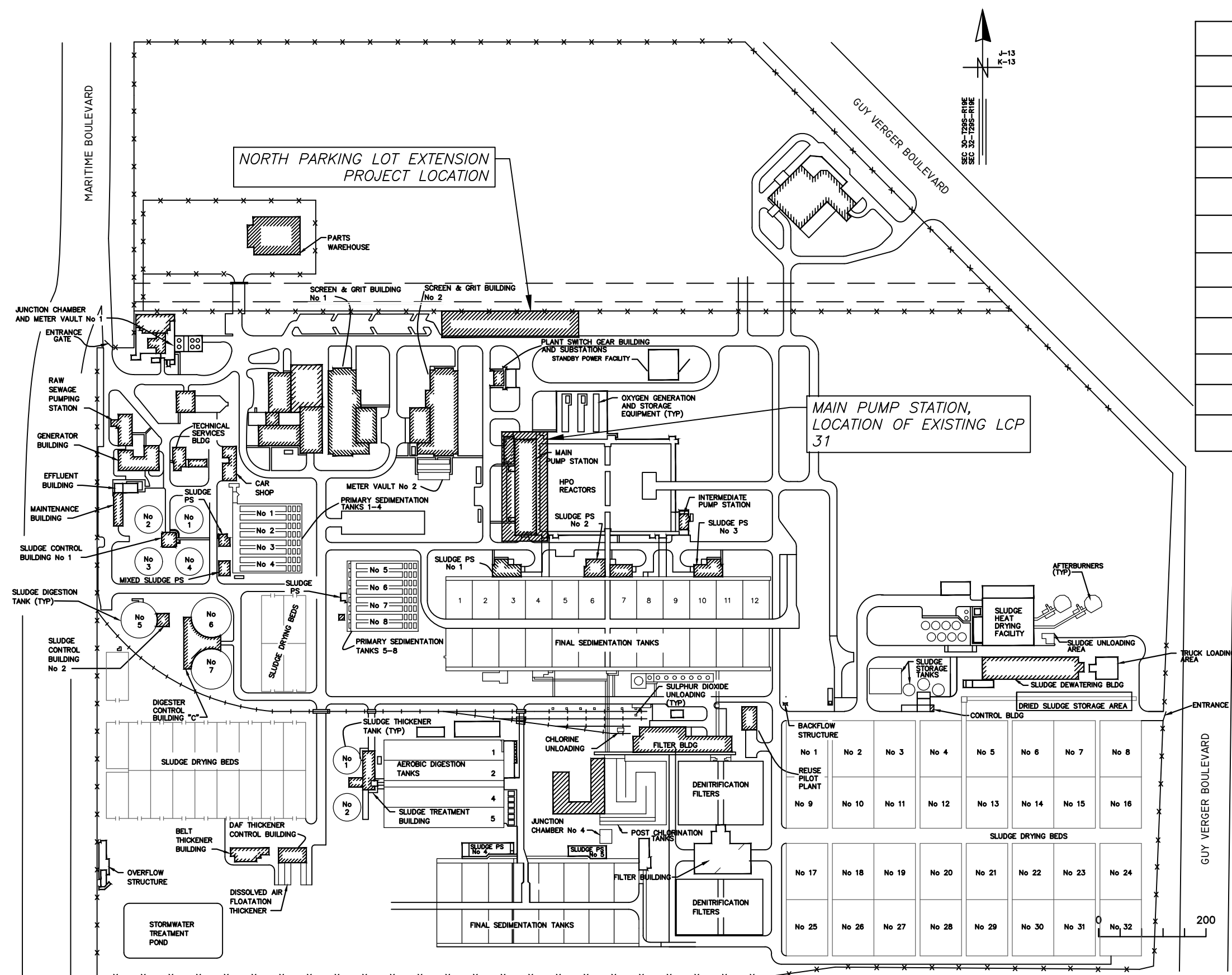
SHEET

C3.2

JOB NO.

TAMPA24006



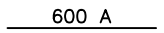
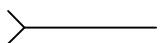
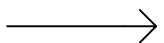
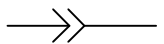

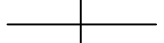
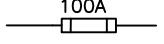
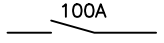
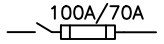
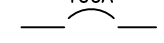
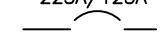
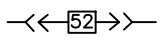
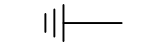
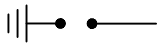
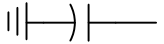
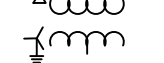
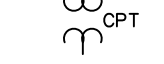
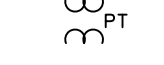
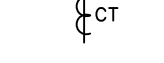






INDEX	
SHEET	SHEET NAME
ES1	LOCATION - INDEX
EG1	ELECTRICAL SYMBOLS LEGEND (SHT. 1 OF 2)
EG2	ELECTRICAL SYMBOLS LEGEND (SHT. 2 OF 2)
EG3	GENERAL NOTES
E1	LIGHTING DEMOLITION
E2	PROPOSED LIGHTING PLAN
E3	LCP-31 POWER CONNECTIONS DETAILS
ER1	MAIN PUMP STATION POWER PLANS - REFERENCE SHEET 1 OF 4
ER2	PART SITE PLAN - REFERENCE SHEET 2 OF 4
ER3	PART SITE PLAN - REFERENCE SHEET 3 OF 4
ER4	CONDUIT AND CABLE SCHEDULE - REFERENCE SHEET 4 OF 4

PROJECT LOCATION - HOWARD F. CURREN AWT PLANT  
(N.T.S.)

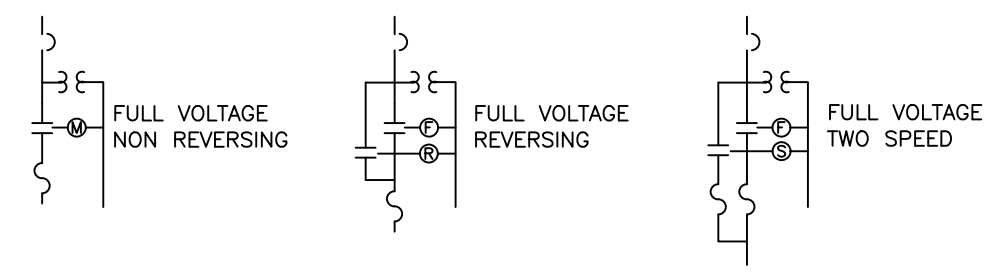
TIMOTHY D. THOMAS, P.E. #47079 PROFESSIONAL ELECTRICAL ENGINEER WASTEWATER DEPARTMENT	#	DATE	REVISIONS	DES: LG	CITY of TAMPA WASTEWATER DEPARTMENT	HOWARD F. CURREN ADVANCED WASTEWATER TREATMENT PLANT PARKING LOT ADDITION ELECTRICAL PLAN LOCATION - INDEX	SHEET ES1
	1			DRN: GH			
	2			CKD:			
	3			DATE: Dec-24			

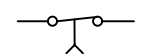
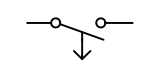
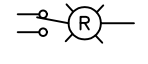
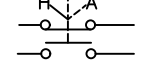
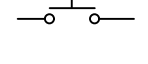
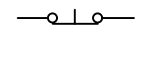
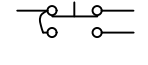
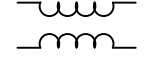
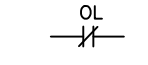
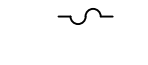
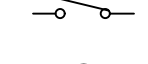
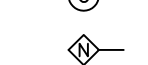
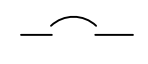

ONE LINE DIAGRAM SYMBOLS

	BUS—RATING AS SHOWN
	INCOMING LINE
	OUTCOMING LINE
	DISCONNECTING DEVICE
	CONDUCTORS CONNECTED
	CONDUCTORS NOT CONNECTED
	FUSE—RATING AS SHOWN
	SINGLE THROW DISCONNECT SWITCH—RATING AS SHOWN
	FUSED DISCONNECT SWITCH—100A SWITCH, 70A FUSE
	LOW VOLTAGE AIR CIRCUIT BREAKER WITHOUT TRIP DEVICE 100A FRAME
	LOW VOLTAGE AIR CIRCUIT BREAKER WITH 225A FRAME AND 125A TRIP
	MEDIUM VOLTAGE DRAWOUT TYPE AIR CIRCUIT BREAKER
	GROUND CONNECTION
	LIGHTNING OR SURGE ARRESTOR
	SURGE CAPACITOR
	POWER TRANSFORMER WITH WINDING CONNECTIONS INDICATED
	CONTROL POWER TRANSFORMER
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER

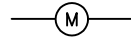
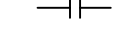
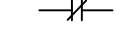
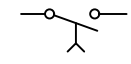
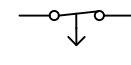
	THERMAL OVERLOAD ELEMENT (OL)
	SQUIRREL CAGE MOTOR (INDICATE HORSEPOWER)
	GENERATOR
	INDICATING LIGHT (R—RED, G—GREEN, A—AMBER, B—BLUE, W—WHITE)


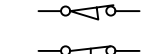

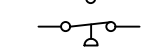

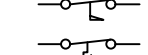
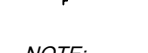



COMBINATION STARTER WITH CONTROL TRANSFORMERS AND OVERLOAD RELAYS  
AND MOTOR CIRCUIT PROTECTOR



	NORMALLY CLOSED CONTACT WITH TIME DELAY OPENING (ON—DELAY)
	INSTANT CLOSE— TIME DELAY OPEN CONTACT (OFF DELAY)
	INDICATING LIGHT— PUSH TO TEST (R—RED, G—GREEN, A—AMBER, B—BLUE, W—WHITE)
	3—POSITION SELECTOR SWITCH (SHOWN IN "H" POS.)
	NORMALLY OPEN PUSHBUTTON— MOMENTARY CONTACT
	NORMALLY CLOSED PUSHBUTTON— MOMENTARY CONTACT
	DOUBLE CIRCUIT PUSHBUTTON WITH SPRING RETURN TO NORMAL
	TRANSFORMER
	OVERLOAD RELAY CONTACT
	THERMAL OVERLOAD ELEMENT (OL)
	ON—OFF SWITCH
	GROUND BUS
	NEUTRAL BUS (INSULATED)
	SINGLE—POLE CIRCUIT BREAKER

SCHEMATIC AND WIRING DIAGRAM SYMBOLS


	OPERATING COIL	M—MOTOR STARTER C— CONTACTOR F— FORWARD R— REVERSE	AR— AUXILIARY RELAY CR— CONTROL RELAY TR— TIME DELAY RELAY
	NORMALLY OPEN CONTACT (N.O.)		
	NORMALLY CLOSED CONTACT (N.C.)		
	NORMALLY OPEN CONTACT WITH TIME DELAY CLOSING (ON—DELAY)		
	INSTANT OPEN— TIME DELAY CLOSED CONTACT (OFF DELAY)		

NORMALLY OPEN N.O.	NORMALLY CLOSED N.C.	
		LIMIT SWITCH
		FLOAT SWITCH
		PRESSURE SWITCH
		FLOW SWITCH
		TEMPERATURE


NOTE:  
THE SYMBOLS SHOWN COMPRISE A GENERAL  
LEGEND  
TO FACILITATE THE USE OF PLANS. REFER TO THE  
PLANS AND SPECIFICATIONS FOR ITEMS REQUIRED.




POWER AND LIGHTING SYMBOLS



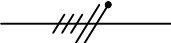
EXPOSED CONDUIT RUN



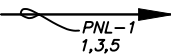
CONDUIT RUN CONCEALED IN FLOOR OR UNDERGROUND




CONDUIT RUN CONCEALED IN WALLS, ABOVE SUSPENDED CEILING, OR IN ROOF SLAB




CONDUIT WITH HOT, NEUTRAL AND GROUND WIRES (LONG LINE IS NEUTRAL; LONG LINE WITH DOTS DENOTE GROUND)




HOMERUN TO LIGHTING PANELBOARD (PNL-1 INDICATES PANELBOARD AND 1, 3, 5 INDICATES 20A-1P CKTS. 1, 3 AND 5)




FLEXIBLE LIQUIDTIGHT CONDUIT




CONDUIT-UP (OR TOWARDS VIEWER)




CONDUIT-DOWN (OR AWAY FROM VIEWER)




GROUNDING CONDUCTOR




GROUND ROD




LIGHTNING ROD




CEILING MOUNTED INCANDESCENT OR MERCURY VAPOR FIXTURE. "A" INDICATES FIXTURE TYPE LISTED IN SCHEDULE




WALL MOUNTED LIGHTING FIXTURE




EXIT SIGN




EMERGENCY INCANDESCENT OR MERCURY VAPOR LIGHTING FIXTURE




FLUORESCENT FIXTURE



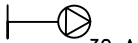
EMERGENCY FLUORESCENT FIXTURE




POLE MOUNTED LIGHTING FIXTURE




DUPLEX RECEPTACLE- 20 A, 120 V, 3 WIRE (TO PNL- CIRCUIT No.4)




SINGLE RECEPTACLE - 2 POLE, 3 WIRE, 240V, RATING NOTED




3 POLE, 4 WIRE, 240V WELDING OUTLET (60 A)




SINGLE POLE SWITCH




TWO POLE SWITCH




THREE WAY SWITCH




OUTLET BOX WITH BLANK COVER



JUNCTION BOX




PULL BOX




TERMINAL BOX


GENERAL SYMBOLS




START-STOP PUSHBUTTON




ON-OFF MAINTAINED CONTACT PUSHBUTTON WITH LOCK ATTACHMENT




INDICATING LIGHT AND START-STOP PUSHBUTTON WITH LOCK ATTACHMENT ON STOP




PUSH/PULL BUTTON WITH STOP LOCK. (PULL TO RESUME- PUSH TO STOP)




SELECTOR SWITCH ("HOA" INDICATES HAND, OFF, AND AUTO; "MOR" INDICATES MANUAL, OFF, AND REMOTE; ETC)




ON-OFF SWITCH WITH LOCK ATTACHMENT ON OFF POSITION




FLOW SWITCH




LIMIT SWITCH




PRESSURE SWITCH




SOLENOID OPERATED VALVE




TEMPERATURE SWITCH




FLOAT SWITCH




LEVEL TRANSMITTER (PRESSURE ANALOG TYPE)



LEVEL TRANSMITTER (FLOAT TYPE)



TEMPERATURE TRANSMITTER



FLOW TRANSMITTER

MH

DESIGNATES MOUNTING HEIGHT

WP

DESIGNATES WATERPROOF EQUIPMENT

XP

DESIGNATES EXPLOSIONPROOF EQUIPMENT

MOV

DESIGNATES MOTOR OPERATED VALVE

EX.

DESIGNATES EXISTING EQUIPMENT

PROP.

DESIGNATES PROPOSED EQUIPMENT

NOTE:  
THE SYMBOLS SHOWN COMPRISE A GENERAL  
LEGEND  
TO FACILITATE THE USE OF PLANS. REFER TO THE  
PLANS AND SPECIFICATIONS FOR ITEMS REQUIRED.



GENERAL NOTES

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO PURCHASING EQUIPMENT OR COMMENCING CONSTRUCTION.
2. ALL POWER CONDUCTORS SHALL BE STRANDED COPPER, #12 AWG MIN. W/XHHW-2 INSULATION,UNLESS OTHERWISE NOTED.
3. ALL WIRING SHALL BE IDENTIFIED W/NUMBERS AT ALL TERMINALS AND ON WIRING DIAGRAMS.
4. VERIFY ALL MECHANICAL EQUIPMENT SIZES AND RATING PRIOR TO CONNECTING.
5. FIELD VERIFY ALL EQUIPMENT LOCATIONS AND CONNECTIONS PRIOR TO COMMENCING CONSTRUCTION.
6. PLANS ARE DESIGNED IN ACCORDANCE WITH THE 8TH EDITION 2023 OF THE FLORIDA BUILDING CODE AND THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL ENSURE THAT ALL ELECTRICAL WORK PERFORMED SHALL ADHERE TO THE SAME ACCORDANCE AND ALL APPLICABLE LOCAL ORDINANCES.
7. ALL THREADED CONNECTIONS SHALL BE COATED W/ ALUMA-SHIELD ANTI-SIEZE COMPOUND MANUFACTURED BY THOMAS & BETTS (T & B) OR EQUAL.
8. ALL PANELS, DISCONNECTS, SWITCHES, AND EQUIPMENT COVERPLATES SHALL BE LABELED W/ NAMEPLATES. NAMEPLATES SHALL BE THREE-PLY PHENOLIC BLACK-WHITE-BLACK ENGRAVED THROUGH THE FIRST BLACK LAYER. LETTERING SHALL BE 0.5 CM (3/16") MIN. EDGE OF NAMEPLATE SHALL BE BEVELED 45 DEG.
9. ALL CONDUIT SHALL BE SUPPORTED AT MAXIMUM 5'-0" INTERVALS.
10. ALL CIRCUITS SHALL HAVE A PROPERLY SIZED GROUNDING CONDUCTOR ROUTED INSIDE EACH CONDUIT W/ POWER CONDUCTORS.
11. ALL CONDUCTOR LENGTHS SHALL BE CONTINUOUS, NO SPLICES OR CONDUCTOR TERMINATIONS SHALL BE PERMITTED UNLESS SPECIFICALLY DESIGNED IN THE DRAWINGS.
12. NEATLY COIL ALL SPARE CONDUCTORS & TAPE W/ VINYL ELECTRICAL TAPE (SCOTCH 33+).
13. PROVIDE A MINIMUM OF 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL EQUIPMENT IN ACCORDANCE W/ ARTICLE 110 OF THE NEC.
14. ALL FASTENING HARDWARE (SCREW, BOLTS NUTS ETC.) SHALL BE 316-STAINLESS STEEL, FASTENING HARDWARE CONSTRUCTED OF FERROUS MATERIAL ARE NOT ACCEPTABLE.
15. EXPOSED CONDUITS SHALL BE NON-COATED RIGID ALUMINUM CONDUIT, UNLESS OTHERWISE NOTED (UON).
16. DIRECT BURIED AND CONCRETE ENCASED CONDUIT SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE NOTED. TRANSITIONS FROM ABOVE-GRADE RIGID ALUMINUM CONDUIT TO NONMETALLIC CONDUIT SHALL BE ACCOMPLISHED WITH A THREADED ADAPTER. RIGID ALUMINUM CONDUIT INSTALLED ABOVE GRADE AND EXTENDING BELOW GRADE SHALL INCLUDE THE FIRST 90° ELBOW. ALL RIGID ALUMINUM CONDUITS EXTENDING BELOW GRADE SHALL BE COATED WITH TWO COATS OF ASPHALTUM-TYPE PAINT ALONG ITS ENTIRE LENGTH BELOW GRADE AND EXTENDING 6" ABOVE GRADE OR ABOVE THE TOP OF THE FINISHED SLAB.
17. ABOVE GRADE INDOOR, AND NON-WASHDOWN AREAS, RIGID ALUMINUM CONDUIT CONNECTIONS TO CONTROL BOXES, ETC. SHALL BE MADE WITH ALUMINUM DOUBLE LOCKNUTS AND BUSHINGS. TURN DOWN ON THREADS TO SOLIDLY CONNECT RACEWAY TO BOX OR ENCLOSURE.
18. ALUMINUM WATERTIGHT HUBS (MYERS HUBS) SHALL BE USED FOR CONNECTIONS TO CONTROL BOXES, ETC. MOUNTED OUTDOORS, BELOW GRADE, OR WASHDOWN AREAS.
19. A 316-STAINLESS STEEL CHANNEL ERECTOR SYSTEM SHALL BE USED TO SUPPORT ALL CONDUITS, BOXES ETC. USE 316 STAINLESS STEEL MOUNTING HARDWARE.
20. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND MAKE ADJUSTMENTS AS NECESSARY TO EXECUTE THE PROPOSED INSTALLATIONS.
21. ALL EXISTING INSTALLATIONS DENOTED ON THE DRAWINGS ARE FOR THE CONTRACTORS REFERENCE ONLY. ALL EXISTING INSTALLATIONS SHALL BE FIELD VERIFIED PRIOR TO SUBMITTING A BID AND PRIOR TO COMMENCING CONSTRUCTION.
22. PULL BOXES SHALL BE INSTALLED AS NECESSARY TO FACILITATE WIRE PULLS AND AVOID EXCESSIVE PULLING TENSION ON WIRING. IN NO CASE SHALL CONDUIT LENGTHS EXCEED 150' OR THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) WITHOUT A PULL BOX. PULL BOXES SHALL BE SIZED IN ACCORDANCE WITH ARTICLE 314 OF THE NEC.

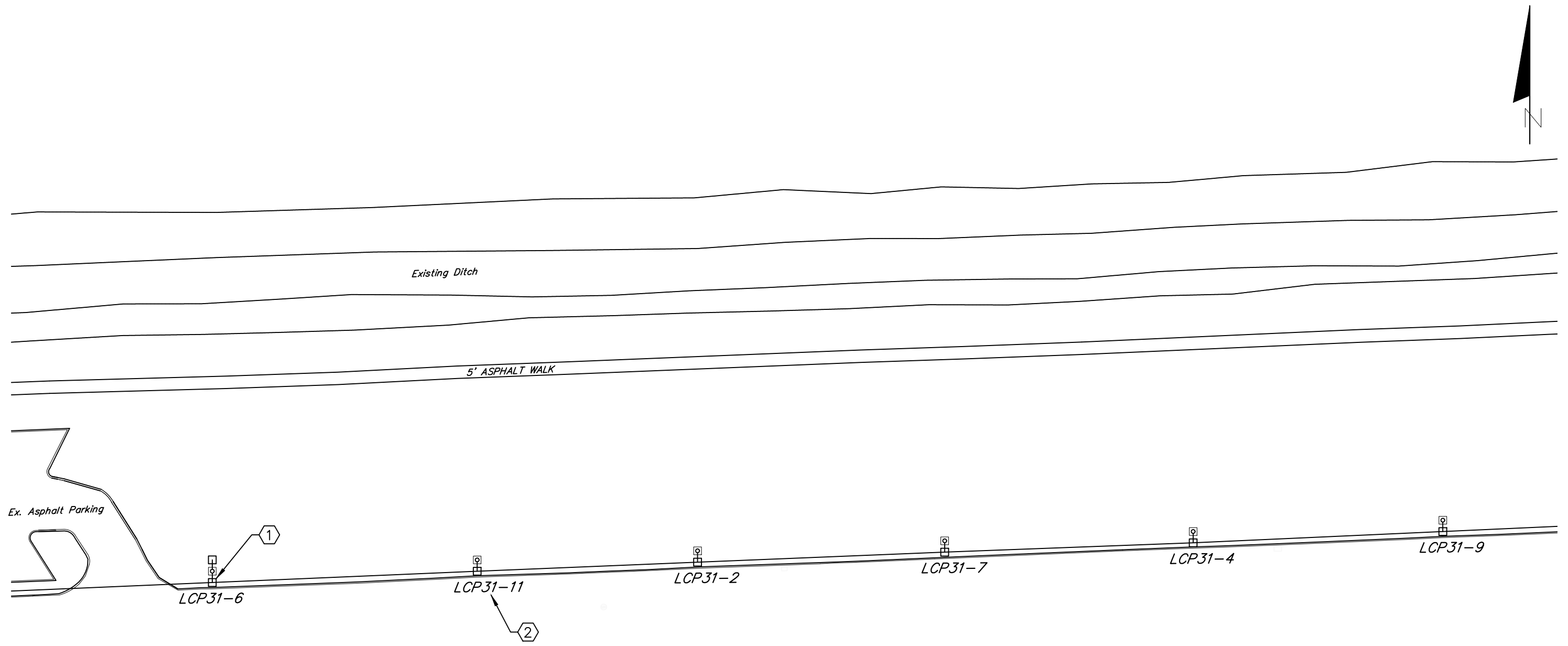
22. ALL COMPONENTS TO BE MOUNTED ON PANEL USING TAPPED HOLES.
23. DIMENSIONS, ITEMS, OR ELEVATIONS MARKED "\*" TO BE DETERMINED AFTER EQUIPMENT SELECTION.
24. ALL MECHANICAL CONNECTORS SHALL BE TORQUED PER NEC, UL OR MANUFACTURES SPECIFICATIONS.
25. CONDUCTORS WITHIN ENCLOSURES AND NOT ROUTED IN WIREWAYS, SHALL BE SECURED TO THE ENCLOSURE OR BACKPANEL.
26. ALL HINGED SURFACES SHALL BE GROUNDED WITH A BONDING JUMPER SECURED TO THE ENCLOSURE OR BACKPANEL.
27. PROVIDE FINGER SAFE DISTRIBUTION BLOCKS.
28. ALUMINUM CONDUIT SURFACES THAT ARE IN CONTACT WITH SOIL OR CONCRETE SHALL BE COATED WITH TWO COATS ASPHALT VARNISH (FED. SPEC. TT-V-51) EXTENDING 4" BEYOND FINAL CONTACT POINT.

SCOPE OF WORK:

1. The Contractor shall remove and replace six (6) pole lights and bases as shown on plans.
2. The Contractor shall reuse existing conductors and breakers if found in good condition; otherwise, remove and replace with like products.
3. Contractor shall refer to reference drawings for approximate location of existing lighting panel, conduit, conductors and conduit routing.

TIMOTHY D. THOMAS, P.E. #47079 PROFESSIONAL ELECTRICAL ENGINEER WASTEWATER DEPARTMENT	#	DATE	REVISIONS	DES: LG	CITY of TAMPA WASTEWATER DEPARTMENT	HOWARD F. CURREN ADVANCED WASTEWATER TREATMENT PLANT PARKING LOT ADDITION ELECTRICAL PLAN GENERAL NOTES	SHEET EG3
	1			DRN: GH			
	2			CKD:			
	3			DATE: Dec-24			





DRAWING NOTES:

PARKING LOT EXTENSION – LIGHTING DEMOLITION

SCALE: 1"=40'

① EXISTING POLE LIGHT, POLE AND POLE BASE TO BE REMOVED AND REPLACED WITH NEW. REUSE EXISTING BRANCH CIRCUIT WIRING TO SERVE NEW FIXTURE (TYPICAL) REFER TO THE REFERENCE DRAWING FOR EXISTING BRANCH CIRCUIT WIRING.

② DENOTES EXISTING BRANCH CIRCUIT (TYPICAL).

TIMOTHY D. THOMAS, P.E. #47079  
PROFESSIONAL ELECTRICAL ENGINEER  
WASTEWATER DEPARTMENT

#	DATE	REVISIONS
1		
2		
3		

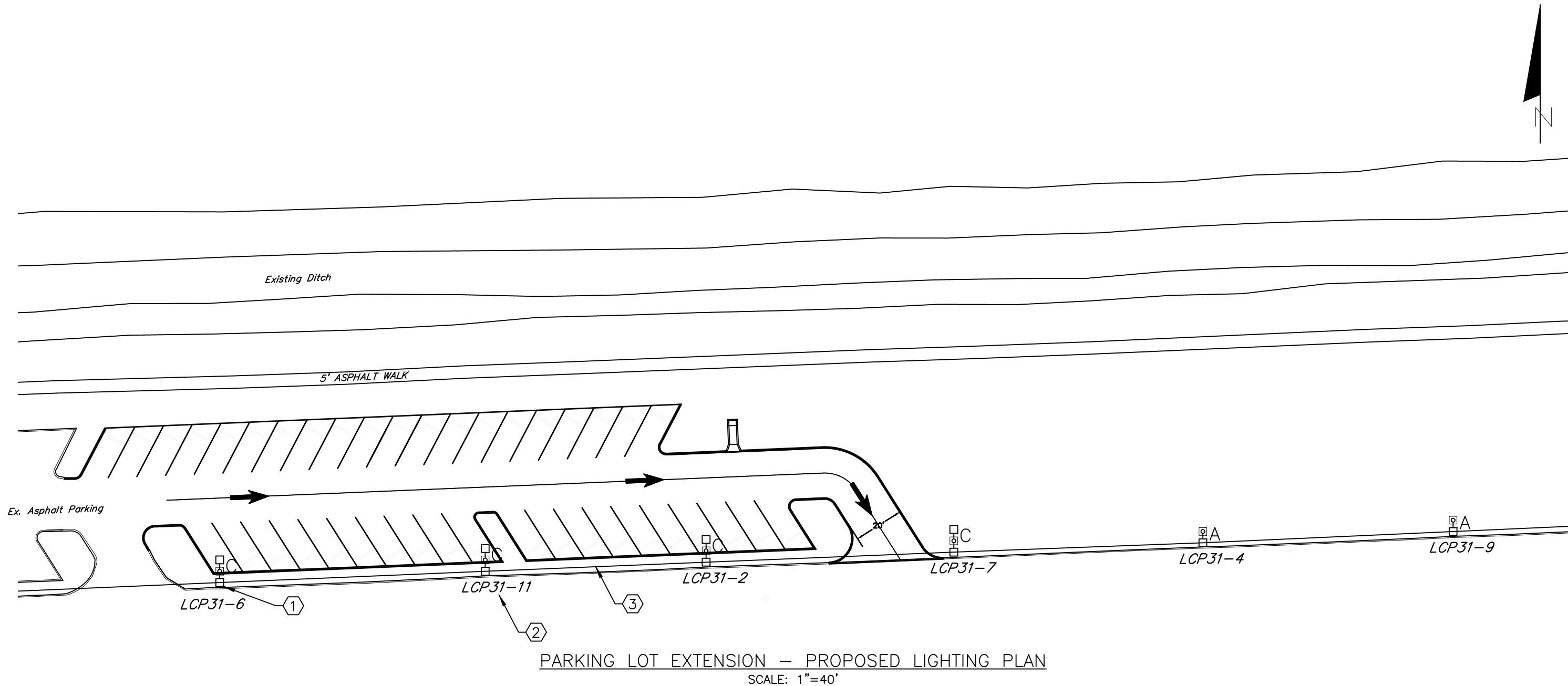
DES: LG  
DRN: GH  
CKD:  
DATE: Dec-24

**CITY of TAMPA**  
**WASTEWATER DEPARTMENT**

HOWARD F. CURREN  
ADVANCED WASTEWATER TREATMENT PLANT  
PARKING LOT ADDITION ELECTRICAL PLAN  
LIGHTING DEMOLITION

SHEET  
E1





DRAWING NOTES:

- ① EXISTING POLE LIGHT, POLE AND POLE BASE TO BE REMOVED AND REPLACED WITH NEW. REUSE EXISTING BRANCH CIRCUIT WIRING TO SERVE NEW FIXTURE (TYPICAL) REFER TO THE REFERENCE DRAWING FOR EXISTING BRANCH CIRCUIT WIRING AND SHEET E3 FOR DETAILS.
- ② DENOTES EXISTING BRANCH CIRCUIT (TYPICAL).
- ③ CONTRACTOR TO REUSE EXISTING CONDUIT IF FOUND IN GOOD CONDITION; OTHERWISE, INSTALL SCHEDULE 80 PVC.

TIMOTHY D. THOMAS, P.E. #47079  
PROFESSIONAL ELECTRICAL ENGINEER  
WASTEWATER DEPARTMENT

#	DATE	REVISIONS
1		
2		
3		

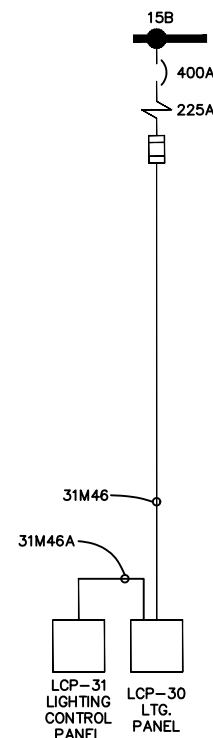
DES: LG  
DRN: GH  
CKD:  
DATE: Dec-24

**CITY of TAMPA**  
**WASTEWATER DEPARTMENT**

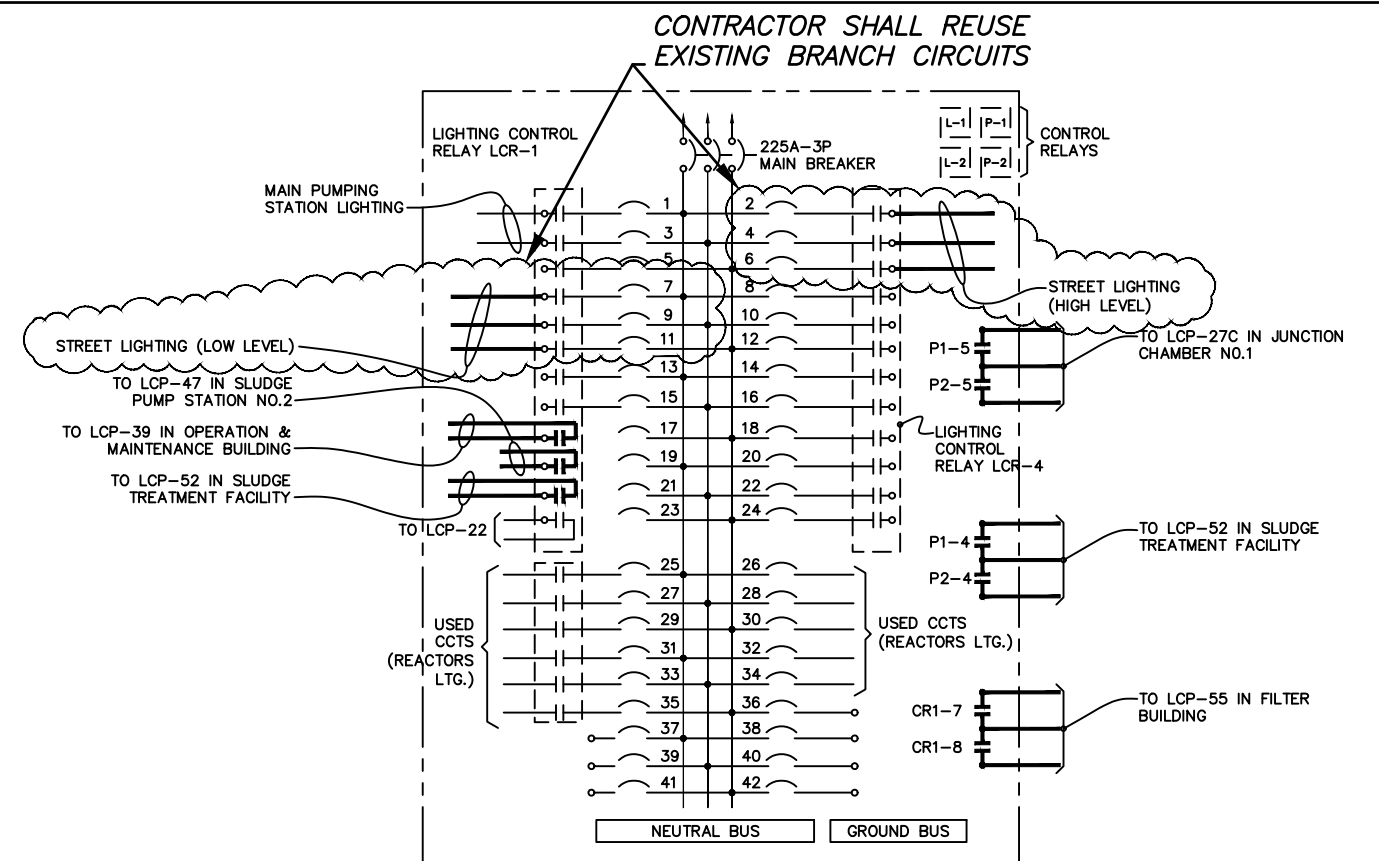
HOWARD F. CURREN  
ADVANCED WASTEWATER TREATMENT PLANT  
PARKING LOT ADDITION ELECTRICAL PLAN  
PROPOSED LIGHTING PLAN

SHEET  
E2

MCC-31



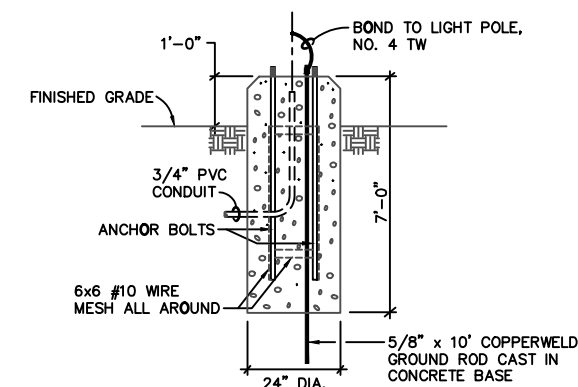
PARTIAL POWER ONE-LINE DIAGRAM  
DETAIL 1



CONNECTION TO LIGHTING CONTROL PANEL LCP-31  
DETAIL 2

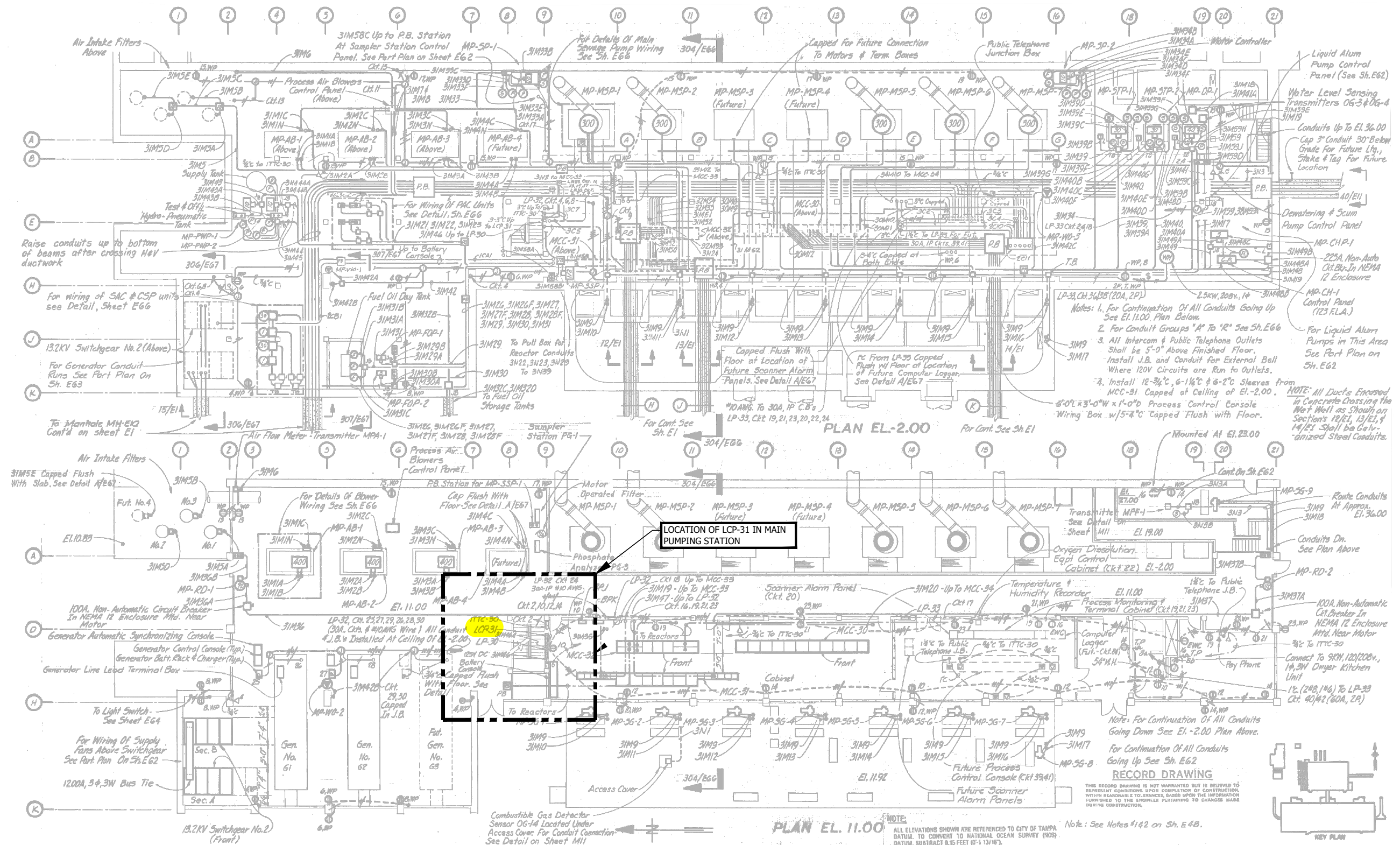
SYMBOL	DESCRIPTION	VOLTAGE	LAMPS	MOUNTING
A	POLE MOUNTED SITE LIGHT FIXTURE (1 HEAD) RSX2-LED-P3-40K-R4-MVOLT-RPA-HS-NLTAIR2PIRHN-DDBXDD ROUND ALUMINUM POLE 30' AFG BRONZE COLOR 135 MPH WIND LOAD RATED HAPCO NO. RSA30D7-4-BM	MVOLT	147W, LED	POLE MOUNT SEE BASE DETAIL THIS SHEET.
B	POLE MOUNTED SITE LIGHT FIXTURES (2 HEADS) RSX2-LED-P3-40K-R4-MVOLT-RPA-HS-NLTAIR2PIRHN-DDBXDD ROUND ALUMINUM POLE 30' AFG BRONZE COLOR 135 MPH WIND LOAD RATED HAPCO NO. RSA30D7-4-BM	MVOLT	(2) 147W, LED	POLE MOUNT SEE BASE DETAIL THIS SHEET.
C	POLE MOUNTED SITE LIGHT FIXTURES (2 HEADS) RSX2-LED-P3-40K-R4-MVOLT-RPA-HS-NLTAIR2PIRHN-DDBXDD ROUND ALUMINUM POLE 30' AFG BRONZE COLOR 135 MPH WIND LOAD RATED HAPCO NO. RSA30D7-4-BM	MVOLT	(2) 147W, LED	POLE MOUNT SEE BASE DETAIL THIS SHEET.

LIGHTING FIXTURE SCHEDULE  
DETAIL 3



BASE DETAIL FOR POLE MOUNTED FIXTURES  
DETAIL 4





TIMOTHY D. THOMAS, P.E. #47079  
 PROFESSIONAL ELECTRICAL ENGINEER  
 WASTEWATER DEPARTMENT

#	DATE	REVISIONS
1		
2		
3		

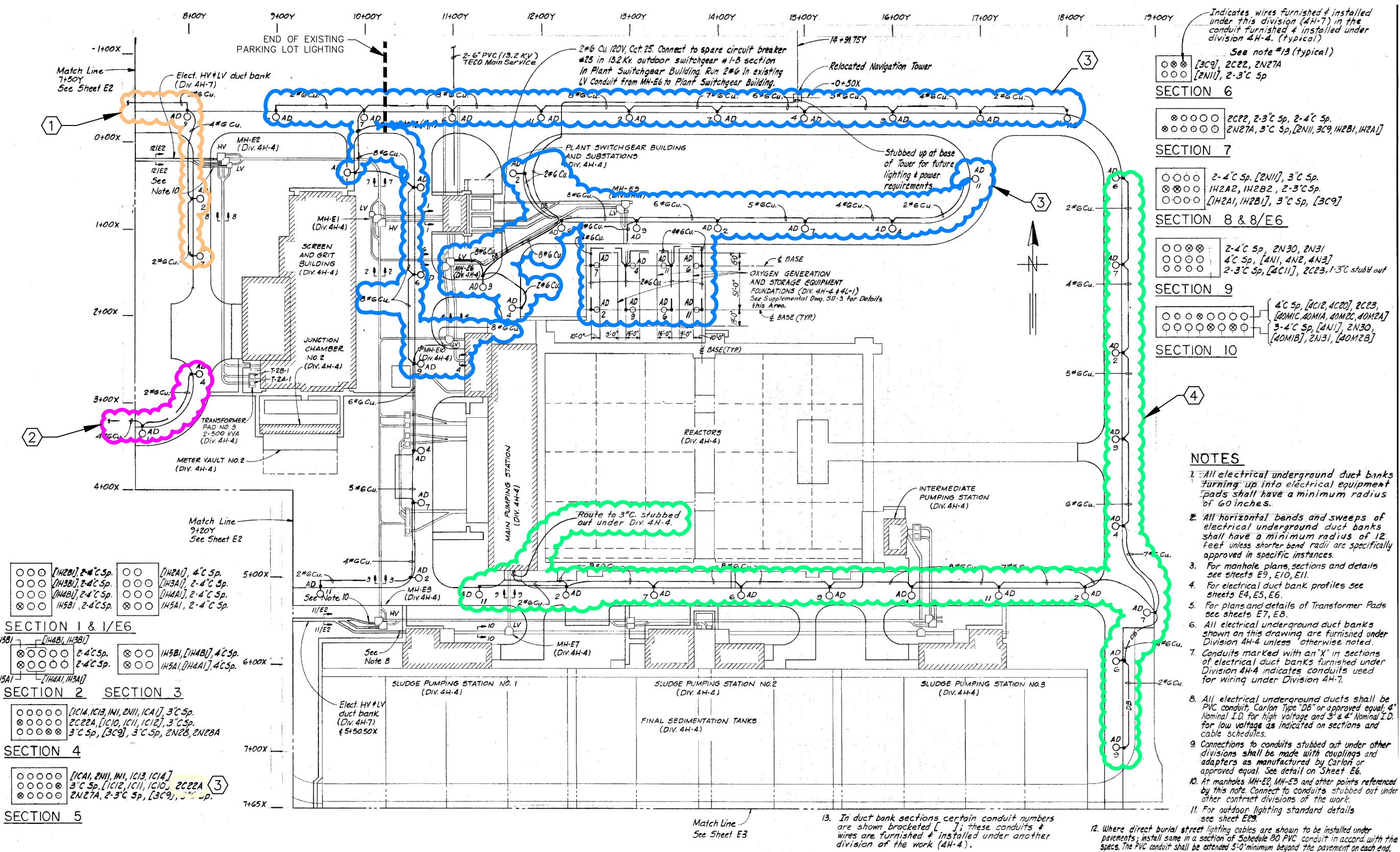
DES: LG  
 DRN: GH  
 CKD:  
 DATE: Dec-24

**CITY of TAMPA**  
**WASTEWATER DEPARTMENT**

HOWARD F. CURREN  
 ADVANCED WASTEWATER TREATMENT PLANT  
 PARKING LOT ADDITION ELECTRICAL PLAN  
 MAIN PUMPING STATION POWER PLANS - REFERENCE SHEET 1 OF 4

SHEET  
 ER1



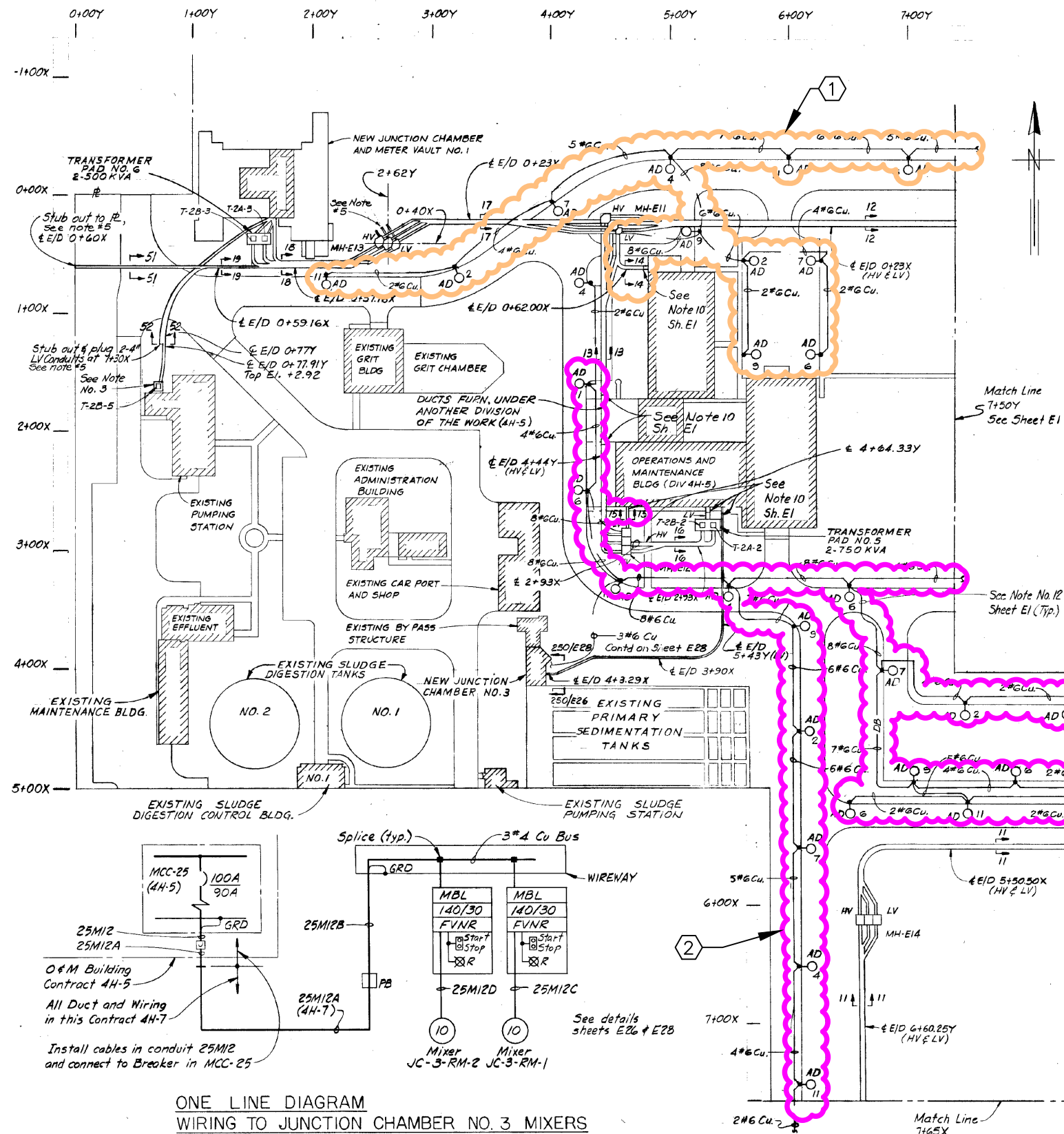


- Indicates wires furnished & installed under this division (4H-7) in the conduit furnished & installed under division 4H-4. (typical)
- See note #13 (typical)
- SECTION 6
- SECTION 7
- SECTION 8 & 8/E6
- SECTION 9
- SECTION 10

- NOTES**
- All electrical underground duct banks turning up into electrical equipment pads shall have a minimum radius of 60 inches.
  - All horizontal bands and sweeps of electrical underground duct banks shall have a minimum radius of 12 feet unless shorter bend radii are specifically approved in specific instances.
  - For manhole plans, sections and details see sheets E9, E10, E11.
  - For electrical duct bank profiles see sheets E4, E5, E6.
  - For plans and details of Transformer Pads see sheets E7, E8.
  - All electrical underground duct banks shown on this drawing are furnished under Division 4H-4 unless otherwise noted.
  - Conduits marked with an "X" in sections of electrical duct banks furnished under Division 4H-4 indicates conduits used for wiring under Division 4H-7.
  - All electrical underground ducts shall be PVC conduit, Carlon Type "DB" or approved equal, 4" Nominal I.D. for high voltage and 3" & 4" Nominal I.D. for low voltage as indicated on sections and cable schedules.
  - Connections to conduits stubbed out under other divisions shall be made with couplings and adapters as manufactured by Carlon or approved equal. See detail on Sheet E6.
  - At manholes MH-E2, MH-E3 and other points referenced by this note. Connect to conduits stubbed out under other contract divisions of the work.
  - For outdoor lighting standard details see sheet E29.
  - Where direct burial street lighting cables are shown to be installed under pavements, install same in a section of Schedule 80 PVC conduit in accord with the specs. The PVC conduit shall be extended 5'-0" minimum beyond the pavement on each end.

REFERENCE SHEET 2 OF 4  
SCALE: N.T.S.





REFERENCE SHEET 3 OF 4  
 SCALE: N.T.S.

SECTION 11, 11/E1, & E3  
 2-4" C. Sp., 2C24, 4" C. Sp., 2N34, 2N35  
 1H5B1, 1H5A1, 3-4" C. Sp., 1-4" C. (Tel.)

SECTION 12 & 12/E1  
 2-4" C. Sp., 3" C. Sp., 2N27, 2C21  
 1H2A2, 1H2B2, 3-3" C. Sp., 1-3" C. (Tel.)

SECTION 13  
 1H2B2, 1H2B3, 4" C. Sp., 2-3" C. Sp.  
 1H2A2, 1H2A3, 4" C. Sp., 2-3" C. (Tel.)

SECTION 14  
 2N27, 3" C. Sp.  
 2C21A, 3" C. Sp.

SECTION 15  
 4" C. Sp., 1H2B3, 1H2B2  
 4" C. Sp., 1H2A3, 1H2A2

SECTION 16  
 4" C. Sp., 1H2B3, 1H2B2  
 4" C. Sp., 1H2A3, 1H2A2

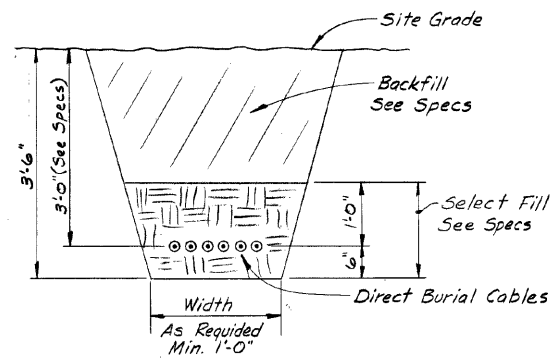
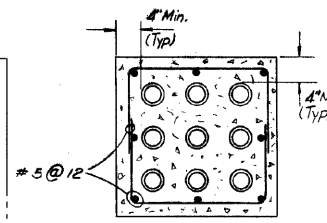
SECTION 17  
 2-4" C. Sp., 2N20, 4" C. Sp.  
 1H2A3, 1H2B3, 2-3" C. (Tel.)

SECTION 18  
 2N20, 4" C. Sp., 3" C. Sp., 3" C. Sp., 2-4" C. (Tel.)  
 1H2A3, 2-4" C. Sp., 1H2B3, 4" C. Sp.

SECTION 19  
 2-4" C. (Tel.)  
 1H2B4, 4" C. Sp.

SECTION 51  
 2-4" C. (Tel.)

SECTION 52  
 2-4" C. Sp., 1H2B4, 4" C. Sp.



- NOTES:**
- See electrical Site Work notes on Sh. E1.
  - All electrical ducts shown on this sheet are under Division 4H-7 unless otherwise noted.
  - Connect feeder 1H2B4 to the Existing Pumping Station Transformer T-2B-5 primary terminals. TECO supply cables to the transformer will be disconnected and removed by TECO.
  - Make field adjustment in location of ducts running to the Existing Pumping Station in order to meet field conditions.
  - See typical Conduit Plugging Detail on Sh. E6

#	DATE	REVISIONS
1		
2		
3		

