CITY OF NAPLES PURCHASING DIVISION CITY HALL, 735 8TH STREET SOUTH NAPLES, FLORIDA 34102

PH: 239-213-7100 FX: 239-213-7105

ADDENDUM NUMBER 1

NOTIFICATION DATE:	BID TITLE:	BID NUMBER:	BID OPENING DATE & TIME:	
01/28/16	Utilities Maintenance Building Replacement	16-022	03/01/2016 2:00PM	

THE FOLLOWING INFORMATION IS HEREBY INCORPORATED INTO, AND MADE AN OFFICIAL PART OF THE ABOVE REFERENCED BID.

The following additional documentation is issued as an addendum identifying the following documents for the referenced solicitation:

PLEASE FIND ATTACHED:

Addendum 1 - Exhibit A - Civil Plans "Wastewater Treatment and Reclamation Facility Utility Building Construction Plans"

Addendum 1 - Exhibit B - PME Plans

Addendum 1 - Exhibit C - Structural Plans

CITY OF NAPLES

Wastewater Treatment and Reclamation Facility Utility Building

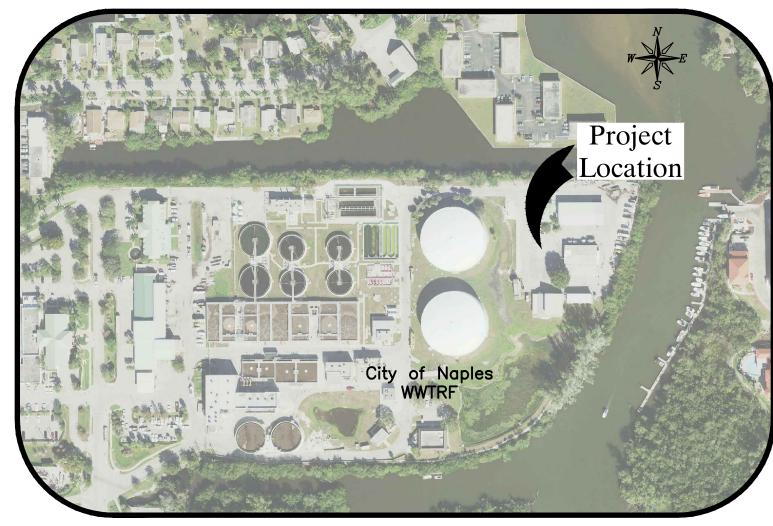


Owner/Developer:

CITY OF NAPLES

Allyson Holland, P.E. 380 Riverside Circle Naples, Florida 34102 Tel: 239.213.4713

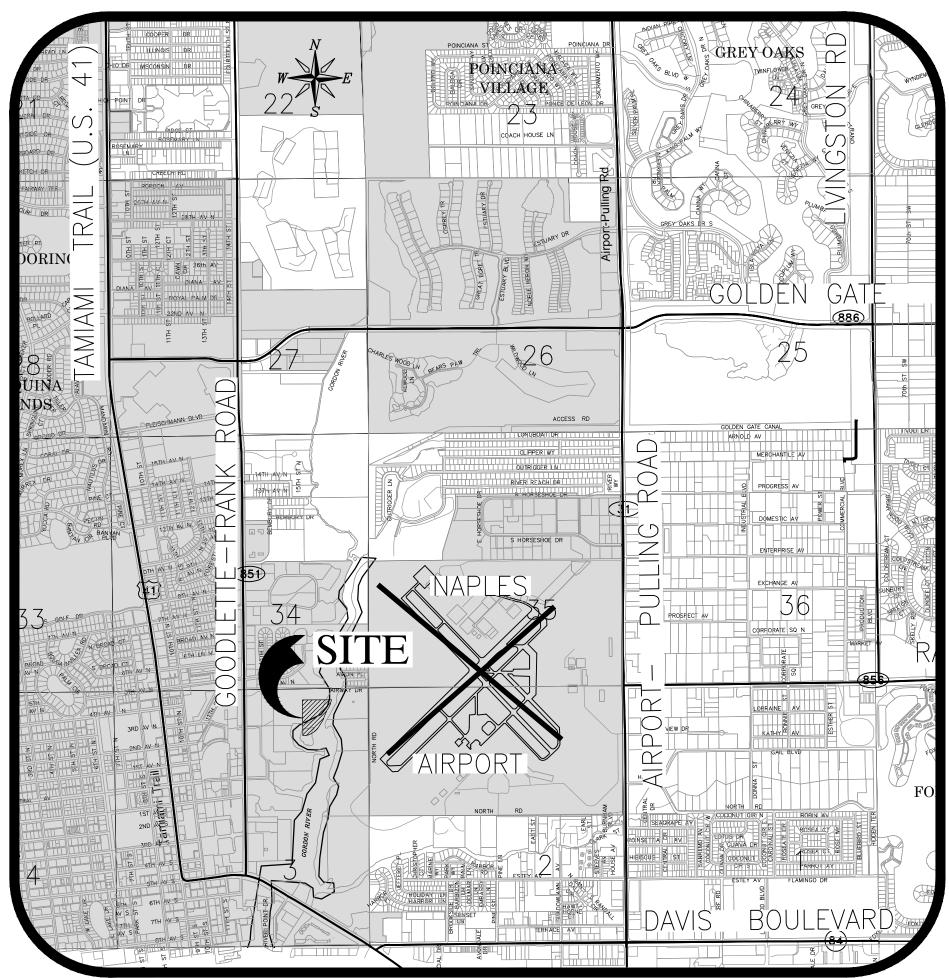
Fax: 239.213.4799



Vicinity Map

Located in Collier County Section 3, Township 50 South, Range 25 East

Construction Plans



Location Map

Prepared by:

M GradyMinor

Q. Grady Minor and Associates, P.A. 3800 Via Del Rey Bonita Springs, Florida 34134

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Business LC 26000266 Fort Myers: 239.690.4380

Landscape Architects

Index of Sheets

Description

- 8. EROSION CONTROL PLAN

Revisions

Revision	Date	Description	Ву

NOT FOR CONSTRUCTION FOR BIDDING PURPOSES ONLY

Issued for Bidding

FRANCIS JOSEPH FEENEY, P.E. Q. GRADY MINOR & ASSOC., P.A. 3800 VIA DEL REY FLORIDA P.E. LICENSE NO. 6469 EB/LB 0005151

GENERAL NOTES:

- 1) THIS PROJECT IS WITHIN THE CITY OF NAPLES CITY LIMITS. ALL CITY OF NAPLES UTILITY DEPARTMENT STANDARD DETAILS AND SPECIFICATIONS (UTILITY STANDARDS) ARE APPLICABLE TO PROJECT AND ARE MADE A PART OF THE CONTRACT DOCUMENTS BY REFERENCE TO CURRENT CITY OF NAPLES UTILITIES STANDARDS, IN THE EVENT OF A CONFLICT BETWEEN THE CITY OF NAPLES UTILITIES STANDARDS MANUAL AND THESE SPECIFICATIONS AND DRAWINGS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- 2) ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88).
- 3) UTILIZE SYNTHETIC BALES. TEMPORARY BERMING, SOD, SEED, AND MULCH TO CONTROL EROSION AS REQUIRED OR DIRECTED BY THE OWNER OR ENGINEER OR TO MEET NPDES REQUIREMENTS.
- 4) CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION AND CONTROL OF ANY EROSION, SEDIMENTATION OR SURFACE WATER TURBIDITY CAUSED BY HIS ACTIVITY.
- 5) DURING CONSTRUCTION, GRATE INLET AND JUNCTION BOX OPENINGS SHALL BE COVERED WITH FILTER FABRIC (MIRAFI 140N OR APPROVED EQUAL) TO PREVENT DEBRIS AND FILL FROM FALLING INTO THE INLET.
- 6) CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DEVIATION IN PLAN INFORMATION SHALL BE REPORTED TO THE ENGINEER AND OWNER'S REPRESENTATIVE IMMEDIATELY.
- 7) CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER AND OWNER WRITTEN APPROVAL FOR ANY DEVIATION IN PLANS AND/OR SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS AND DRIVE AISLES. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS. TRAFFIC CONTROL OPERATION PROCEDURES SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL ATTEND PRE-CONSTRUCTION MEETING WITH THE CITY OF NAPLES, OWNER AND ENGINEER PRIOR TO START OF CONSTRUCTION.
- 10) ALL FILL SLOPES SHALL BE PROPERLY COMPACTED AS REQUIRED IN THE SPECIFICATIONS AND SHALL BE SEEDED OR SODDED AS DIRECTED BY OWNER WITHIN 48 HOURS OF FINAL GRADING.
- 11) THE CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ALL DAMAGED EXISTING LANDSCAPE MATERIAL. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ALL DEAD OR DYING PLANT MATERIAL THRU FINAL ACCEPTANCE AND PROVIDE A 1 YEAR WARRANTY ON ALL INSTALLED PLANT MATERIAL AFTER FINAL ACCEPTANCE.
- 12) THE CONTRACTOR TO REPLACE OR REPAIR ANY DAMAGED PROPERTY OR IMPROVEMENTS TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO CONSTRUCTION AT THE CONTRACTOR'S EXPENSE.
- 13) CONTRACTOR SHALL OBTAIN ALL STATE, COUNTY AND LOCAL PERMITS NEEDED TO PERFORM THE WORK.
- 14) IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION, DEPTH, SIZE AND MATERIAL TYPE OF ALL UNDERGROUND UTILITIES IN THE WORK AREA PRIOR TO CONSTRUCTION USING PROCEDURES AND METHODS AS REQUIRED BY THE CONTRACT DOCUMENTS.
- 15) THE CONTRACTOR IS REQUIRED TO FULLY INVESTIGATE THE SITE PRIOR TO SCHEDULING OR COMMENCING THE WORK.
- 16) THE CONTRACTOR SHALL PROTECT ALL TREES, BUSHES, UNDERGROUND PIPING AND IRRIGATION SYSTEMS DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY EXISTING LANDSCAPING (i.e. SOD. BUSHES, TREES, ETC.) AND SPRINKLE PIPE. SPRINKLER HEADS AND ALL IDENTIFIED IMPROVEMENTS THAT MAY HAVE TO BE REMOVED OR HAVE BEEN DAMAGED OR INJURED DURING CONSTRUCTION.
- 17) THE CONTRACTOR IS RESPONSIBLE FOR BACKFILLING AND GRADING ALL DISTURBED AREAS.
- 18) THE CONTRACTOR SHALL ACCURATELY PLOT THE LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS. INSTALLED ON A FINAL SET OF RECORD DRAWINGS WHICH SHALL BE DELIVERED TO THE ENGINEER IMMEDIATELY.
- 19) DRIVEWAYS, SIDEWALKS, AND OTHER RIGHT-OF-WAY OR EASEMENT ENCROACHMENTS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR BETTER AND TO THE SATISFACTION OF THE ENGINEER.
- 20) ALL WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF 30" COVER MEASURED FROM FINISHED GRADE UNLESS OTHERWISE SHOWN ON PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE MINIMUM COVER, REGARDLESS OF EXISTING GRADE.
- 21) THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN PREPARED FROM RECORD DRAWINGS AND FIELD INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXACT LOCATION PRIOR TO CONSTRUCTION.
- 22) DO NOT TIE POTABLE WATER MAINS IN UNTIL LINES HAVE BEEN FLUSHED AND CLEARED FOR SERVICE BY FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 23) THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES, UTILITIES AND SURVEY MARKERS IN THE AREA.
- 24) ALL WATER MAIN VALVES SHALL CONFORM TO AWWA C-509 RESILIENT SEATED TYPE.
- 25) THE CONTRACTOR SHALL FLUSH, PRESSURE TEST, AND BACTERIOLOGICAL TEST ENTIRE PIPING SYSTEM. REFER TO FDEP, CITY OF NAPLES STANDARDS.
- 26) ALL MECHANICAL JOINTS TO BE RESTRAINED (MEGA LUG).
- 27) ALL ARV LOCATIONS TO BE FIELD VERIFIED FOR LOCATION AT HIGH POINTS.



QGM STANDARD ABBREVIATIONS

BFW BUTT FUSION WELD BOC BACK OF CURB CATV OR CABLE TELEVISION COMM CB CATCH BASIN CL CENTERLINE CONC. CONCRETE DE DRAINAGE EASEMENT DIP OR DI DUCTILE IRON PIPE EL. OR ELEV. ELEVATION EDGE OF PAVEMENT

EOP EXIST. EXISTING

FDOT FLORIDA DEPARTMENT OF TRANSPORTATION

F.H. FIRE HYDRANT FLG FLANGED FITTING GV GATE VALVE

HDPE HIGH DENSITY POLYETHYLENE

HORIZ. HORIZONTAL HEADWALL HWINCORPORATED INV. INVERT IRR. IRRIGATION JB JUNCTION BOX L.F. LINEAR FEET ΜE MITERED END МН MANHOLE M.J. MECHANICAL JOINT

NGVD NATIONAL GEODETIC VERTICAL DATUM

MINIMUM

PL PROPERTY LINE PROP. PROPOSED

MIN.

PBSP PERMANENT BACTERIAL SAMPLE POINT

PVC POLYVINYL CHLORIDE PIPE

PVMT. PAVEMENT RED. REDUCER

RCP REINFORCED CONCRETE PIPE RMJ RESTRAINED MECHANICAL JOINT

R.O.W. OR RW RIGHT-OF-WAY SAN. SANITARY STA. STATION

SWK. SIDEWALK TBSP TEMPORARY BACTERIAL SAMPLE POINT

TEMP. TEMPORARY TOB TOP OF BANK TOS TOE OF SLOPE TYP. TYPICAL VERT. VERTICAL W/WITH WM WATER MAIN

UTILITIES SERVING THIS SITE

WATER SERVICE BY: CITY OF NAPLES 735 8TH ST. SOUTH NAPLES. FL 34102 239.213.4745 CABLE SERVICE BY: SUMMIT BROADBAND, INC. 24017 PRODUCTION CIRCLE

BONITA SPRINGS, FL 34105 MIKE REBER **ELECTRIC SERVICE BY:** FLORIDA POWER & LIGHT 2900 CATHERINE ST.

PALATKA , FL 32177 TRACY STERN TELEPHONE SERVICE BY: COMCAST 12641 CORPORATE LAKES DR.

FT. MYERS, FL 33913

BROCK DANIELS

WILLIAM STANTON GAS SERVICE BY: ECO PEOPLES GAS 5901 ENTERPRISE PARKWAY FT. MYERS, FL 33905

LEGEND DRAWN BY: APPROVED: JOB CODE: CONUBLD SCALE: Revision | Date | Description



Bonita Springs: 239.947.1144

Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151

O. Grady Minor and Associates, P.A 3800 Via Del Rey Bonita Springs, Florida 34134

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CITY OF NAPLES WWTRF UTILITY BUILDING

GENERAL NOTES & ABBREVIATIONS

ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)

CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)0.000

CONSTRUCTION FOR BIDDING PURPOSES ONLY

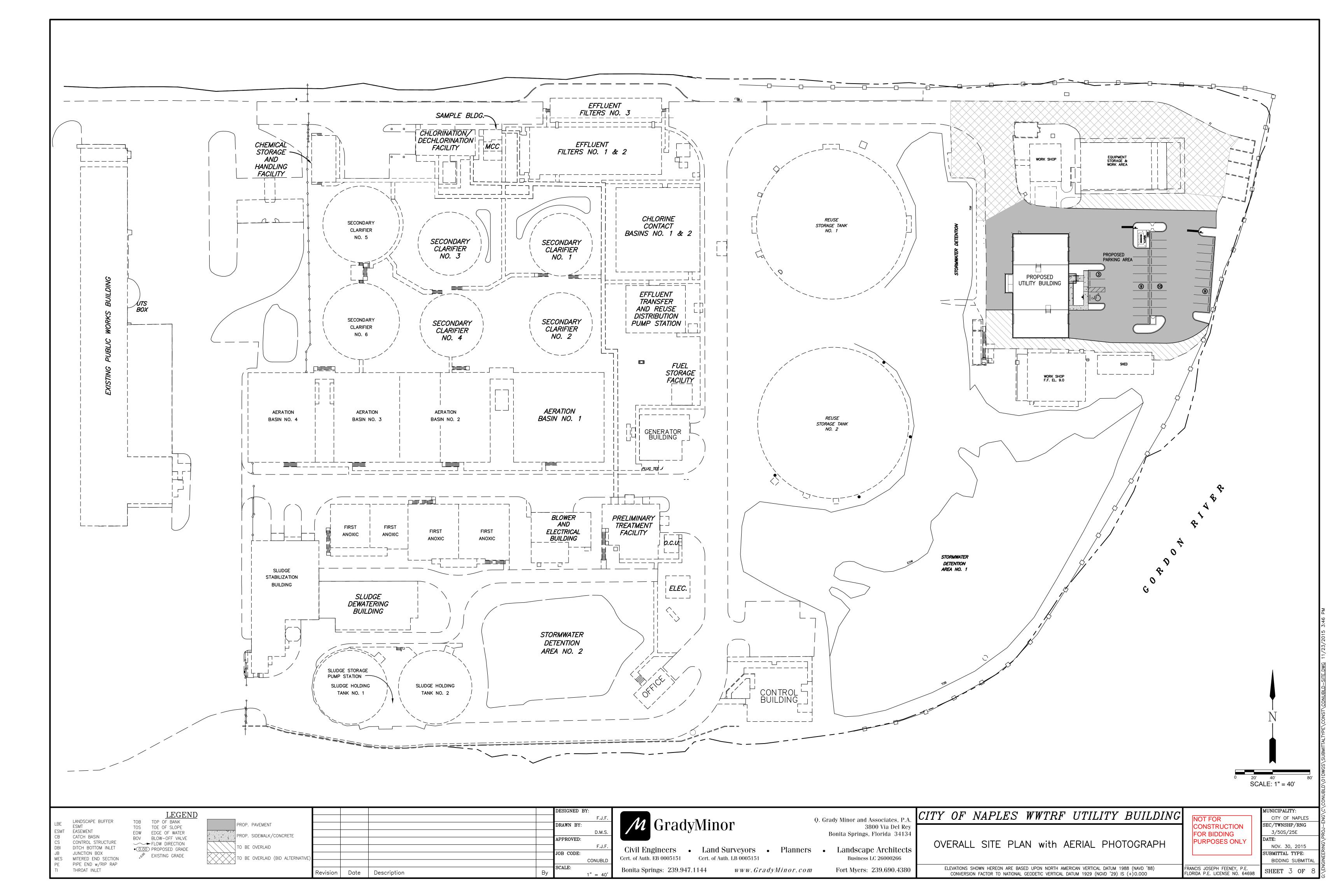
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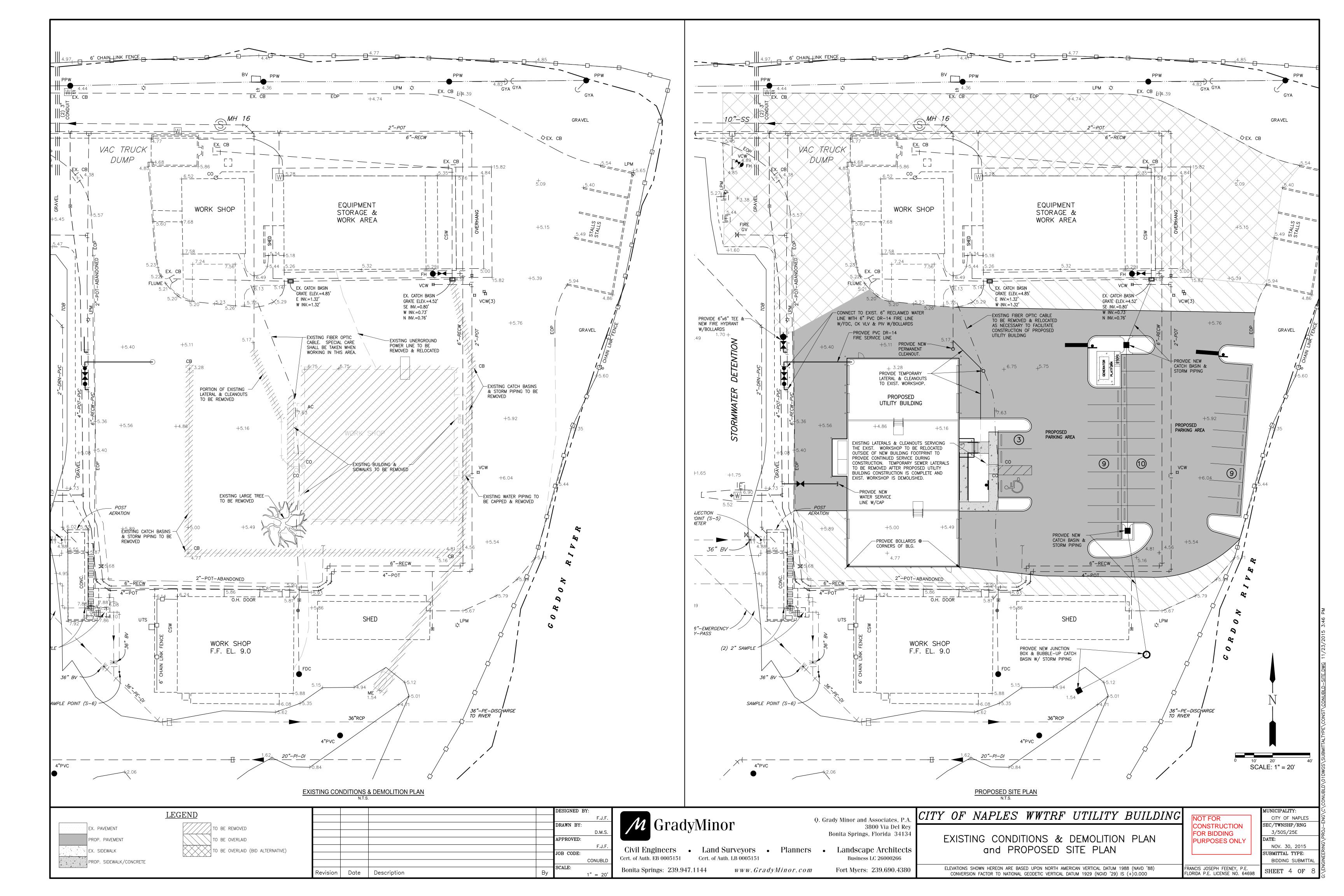
ANCIS JOSEPH FEENEY, P.E. FLORIDA P.E. LICENSE NO. 64698 SHEET 2 OF

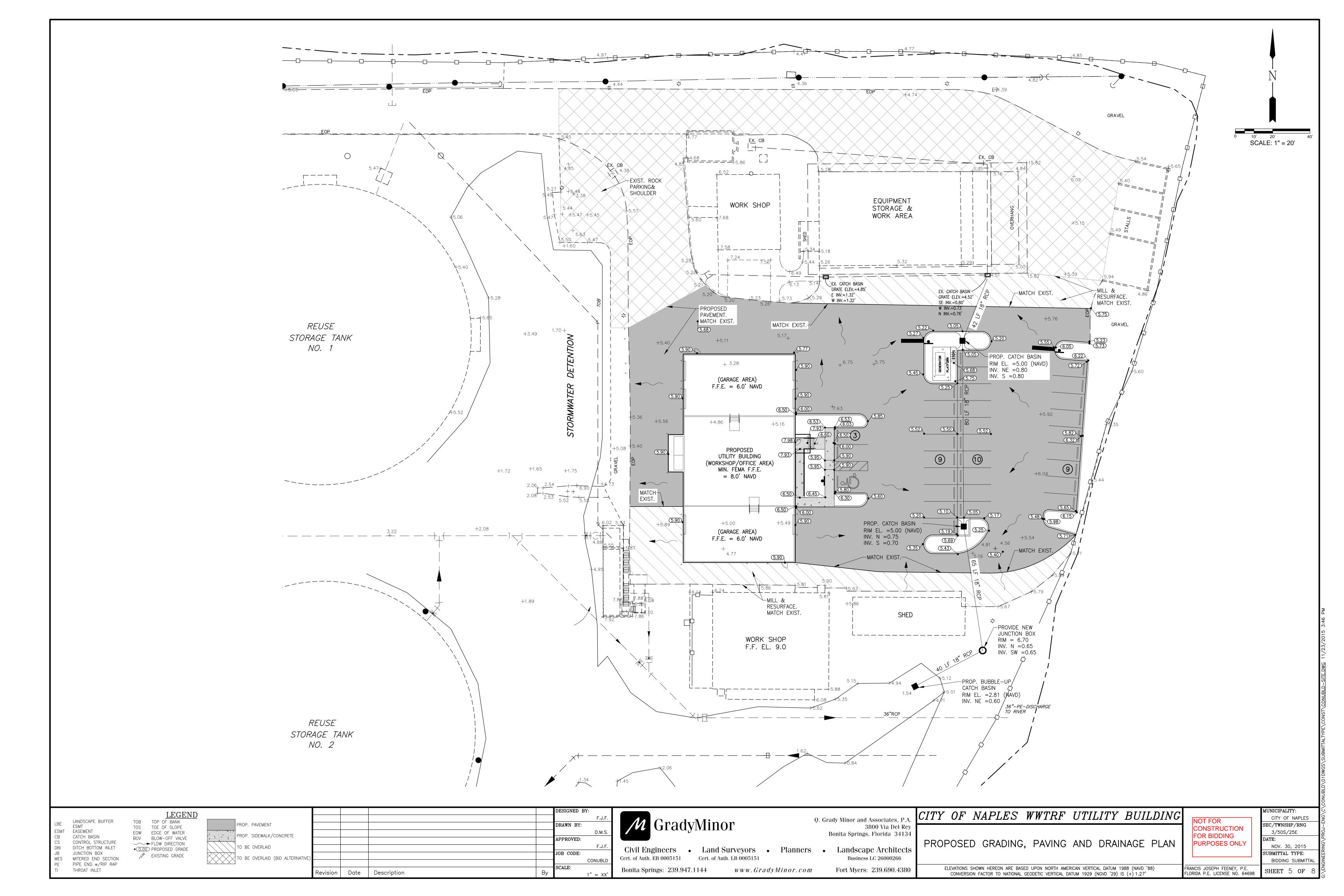
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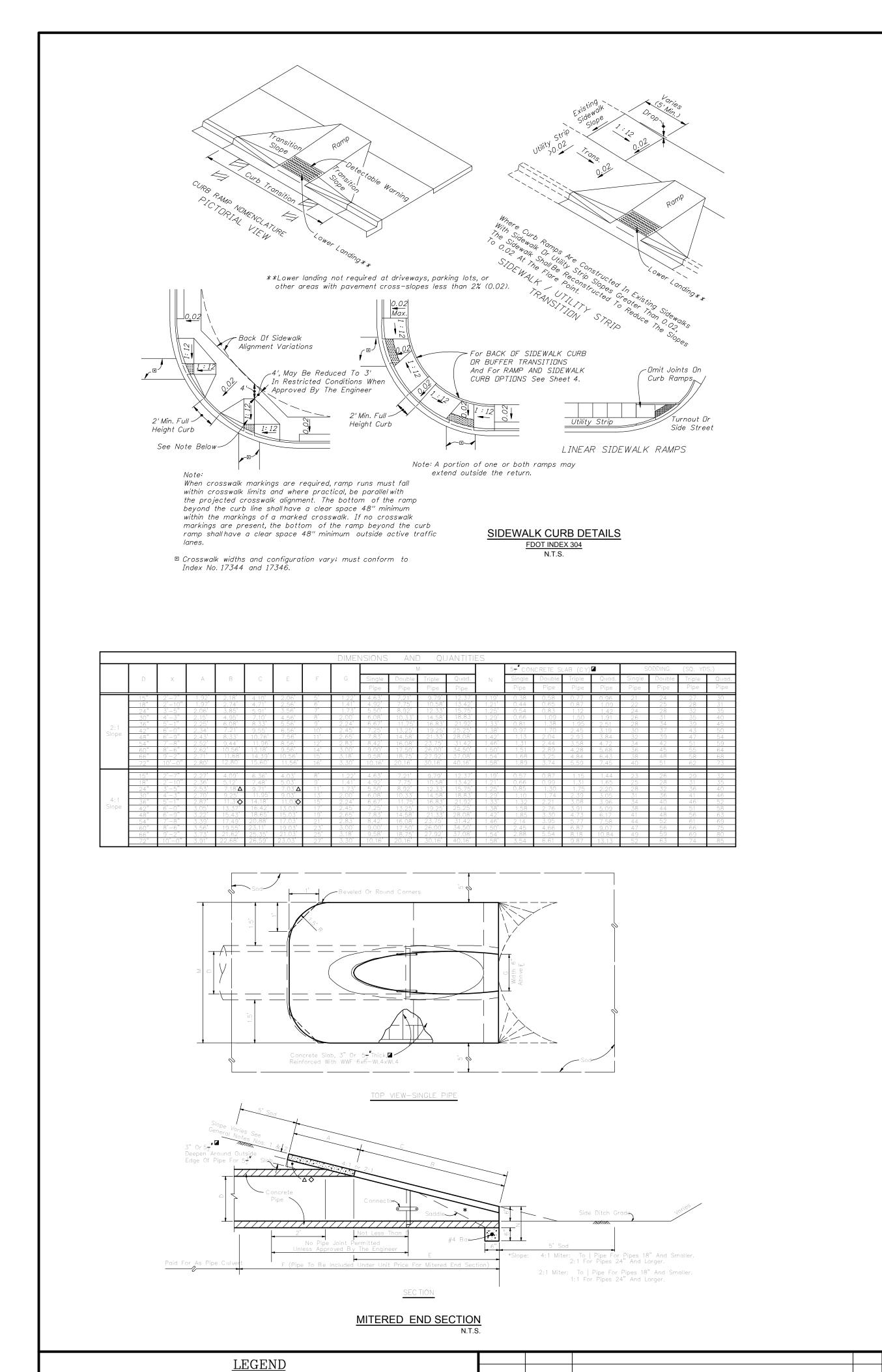
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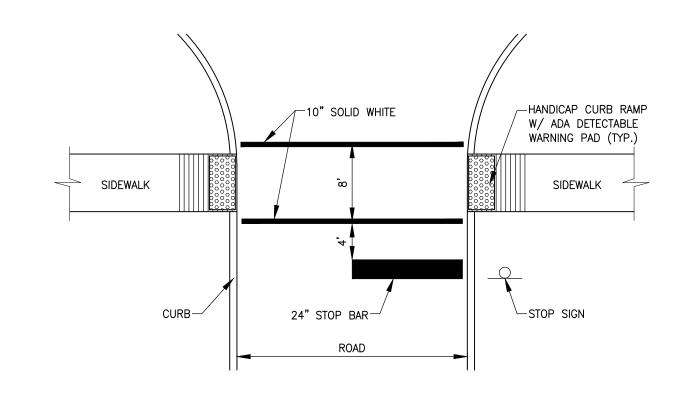




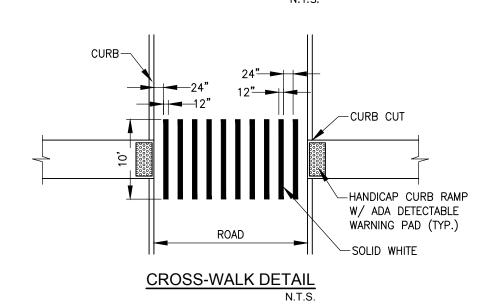


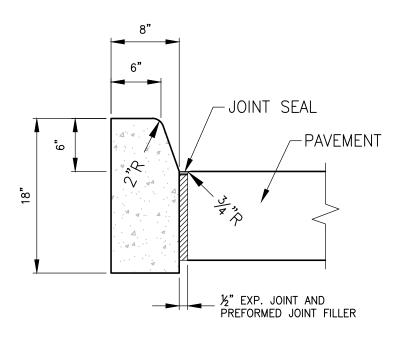


Revision Date Description

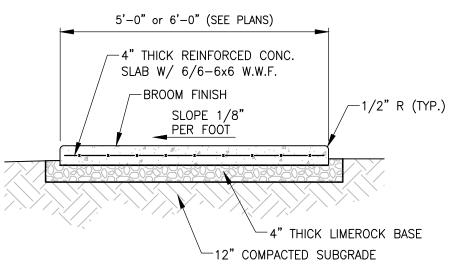


CROSS WALK DETAIL



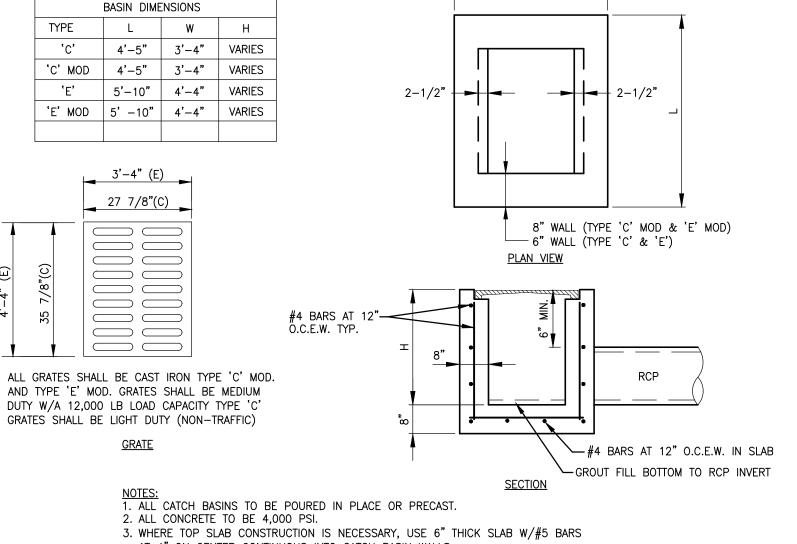


TYPE 'D' CURB N.T.S.



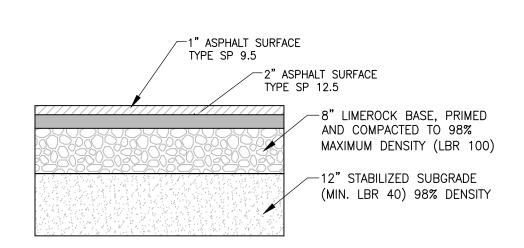
- 1. THE PROPOSED FILL SHALL BE COMPACTED IN 12" LIFTS TO 95% MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-180 AND THE ENGINEER'S SPECIFICATIONS.
- 2. SUBGRADE SHALL BE SOIL, COMPACTED TO A FIRM EVEN SURFACE, TRUE TO GRADE AND CROSS- SECTION, AND BE MOIST WHEN CONCRETE IS PLACED.
- 3. SIDEWALK SHALL HAVE CONTRACTION JOINTS AT 5' INTERVALS AND AN EXPANSION JOINT EVERY 50' (120' MAXIMUM).

TYPICAL SIDEWALK SECTION



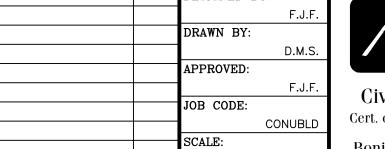
- AT 4" ON CENTER CONTINUOUS INTO CATCH BASIN WALLS.
- 4. WHERE "H" DIMENSION EXCEEDS 5 FEET, SHOP DRAWINGS FOR WALL
- REINFORCEMENT MUST BE SUBMITTED FOR APPROVAL BEFORE CASTING.
- 5. JUNCTION BOXES SHALL RECEIVE A CAST IRON RIM AND COVER, MEDIUM DUTY W/A 12,000 LB. LOAD CAPACITY. THE LID SHALL HAVE THE WORDS "STORM SEWER".

CATCH BASIN DETAIL



- 1. ASPHALTIC CONCRETE PAVEMENT (TYPE SP 9.5 & SP 12.5) SHALL BE CONSTRUCTED IN TWO LIFTS. THE SECOND LIFT (TYPE SP 9.5) SHALL BE CONSTRUCTED AFTER SUBSTANTIAL COMPLETION OF BUILDING CONSTRUCTION.
- 2. ALL SPECIFICATIONS FOR LIMEROCK BASE MATERIAL SHALL BE ADHERED TO.
- 3. ALTERNATE PAVEMENT SECTIONS UTILIZING MATERIALS INCLUDING PAVER BLOCKS AND BOMANITE MAY BE SUBSTITUTED FOR CROSSWALKS. STRUCTURAL CHARACTERISTICS MUST MEET MINIMUM CITY OF NAPLES L.D.C. REQUIREMENTS.
- 4. LIMEROCK BASE MUST EXTEND 6" BEYOND EDGE OF PAVEMENT.
- 5. SUBGRADE MUST EXTEND 12" BEYOND EDGE OF PAVEMENT.

TYPICAL ASPHALT SECTION



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Business LC 26000266

Fort Myers: 239.690.4380

CITY OF NAPLES WWTRF UTILITY BUILDING

DETAIL SHEET - 1

CONSTRUCTION FOR BIDDING PURPOSES ONLY

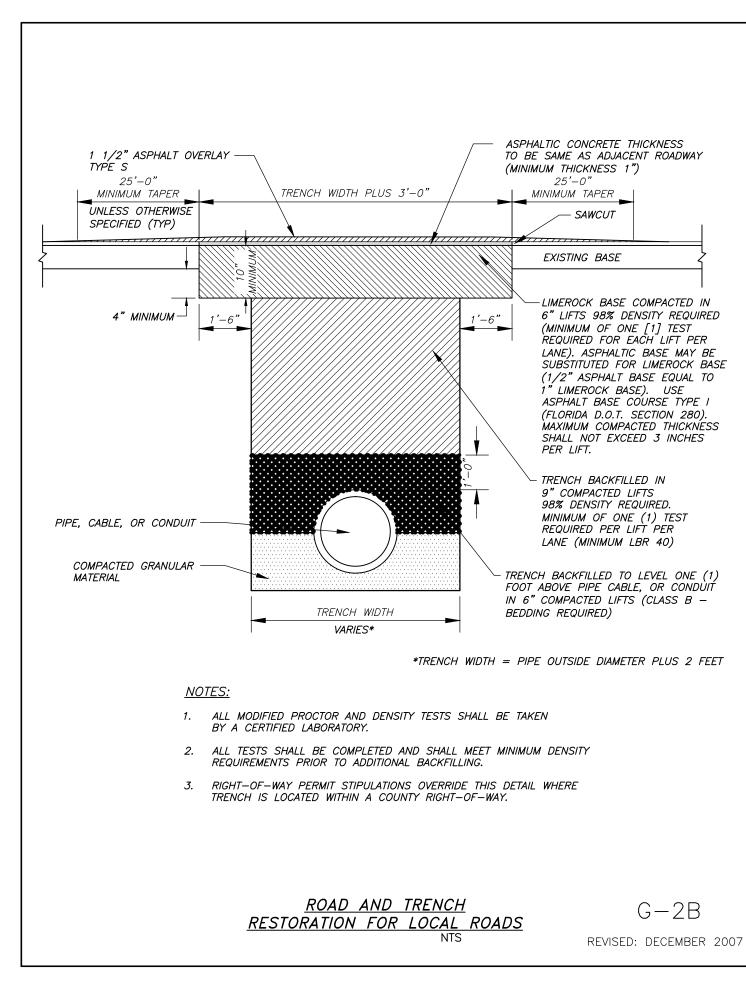
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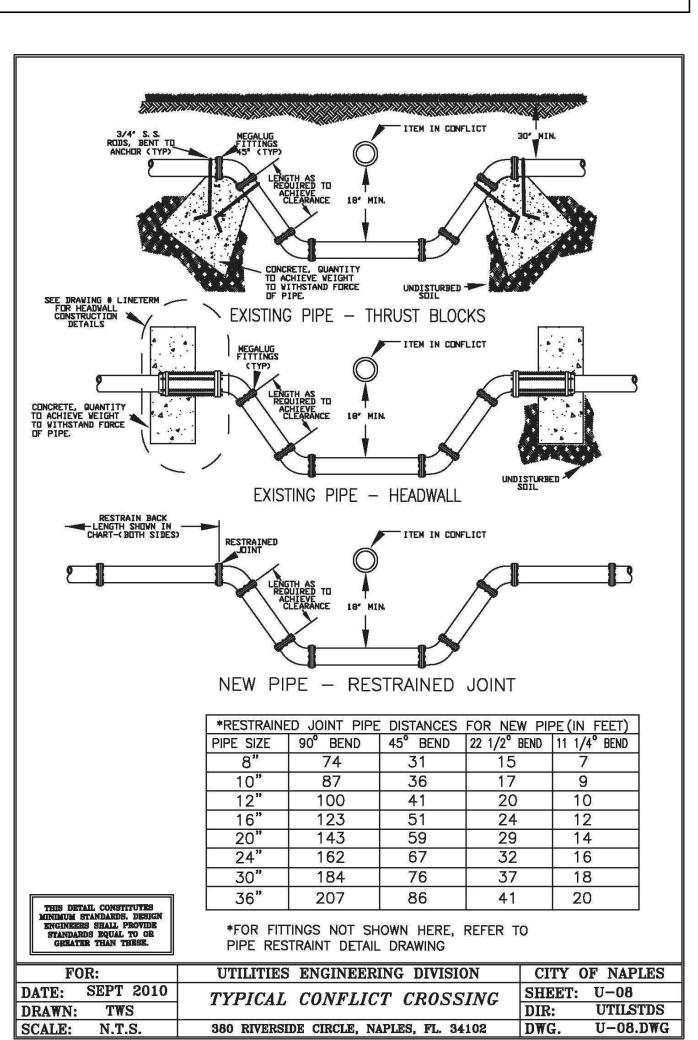
MUNICIPALITY:

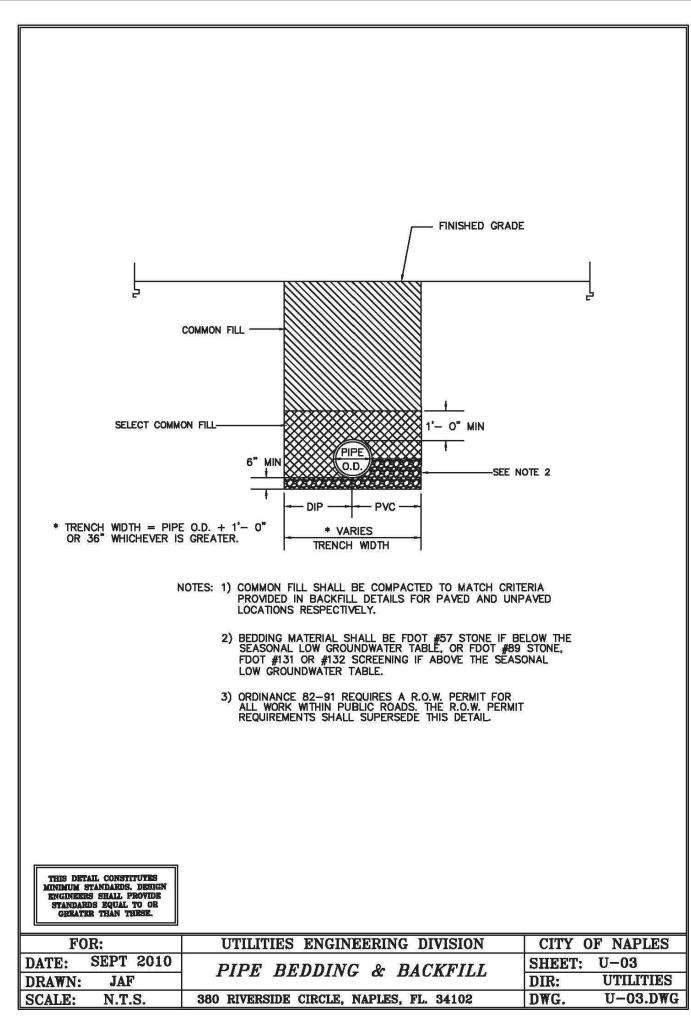
CITY OF NAPLES

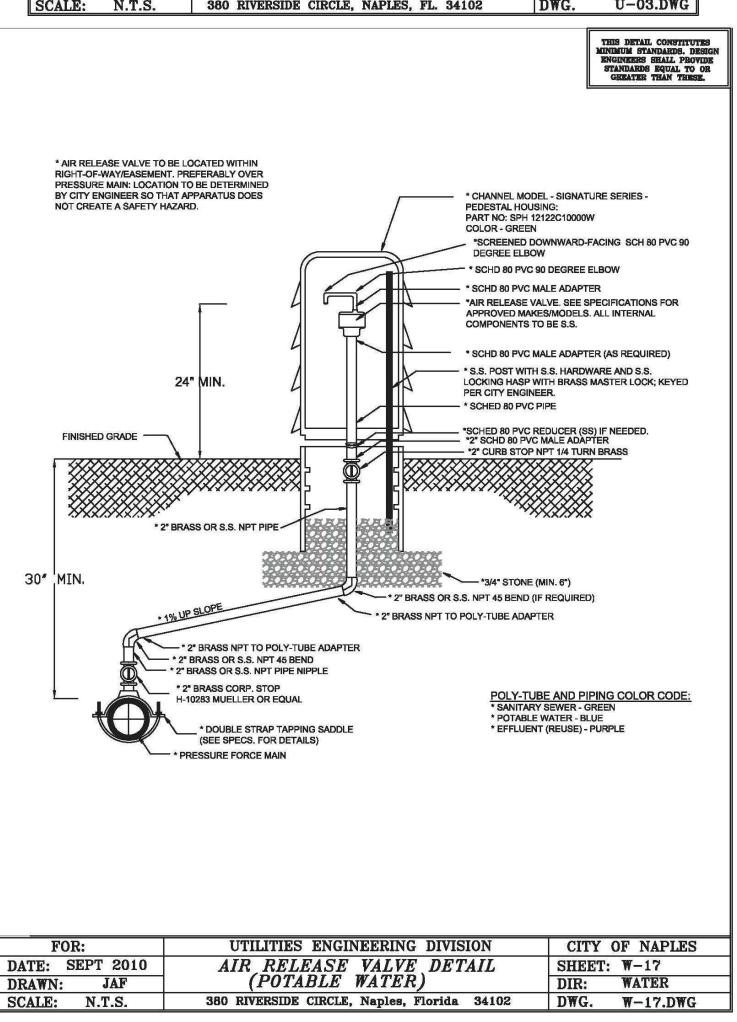
ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)0.000

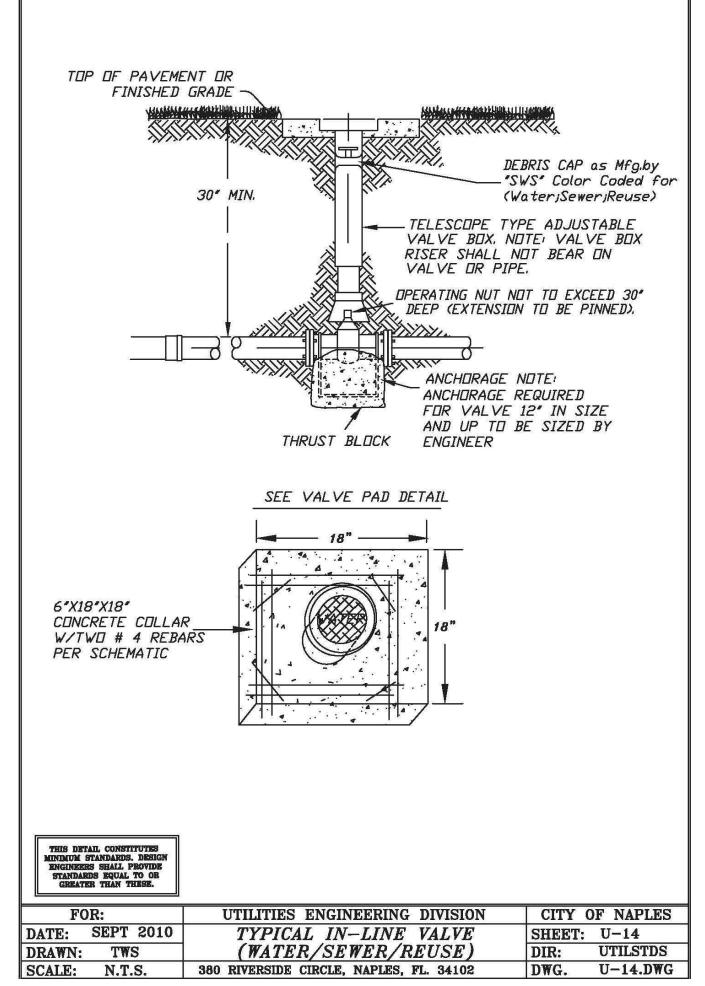
FRANCIS JOSEPH FEENEY, P.E. SHEET 6 OF FLORIDA P.E. LICENSE NO. 64698

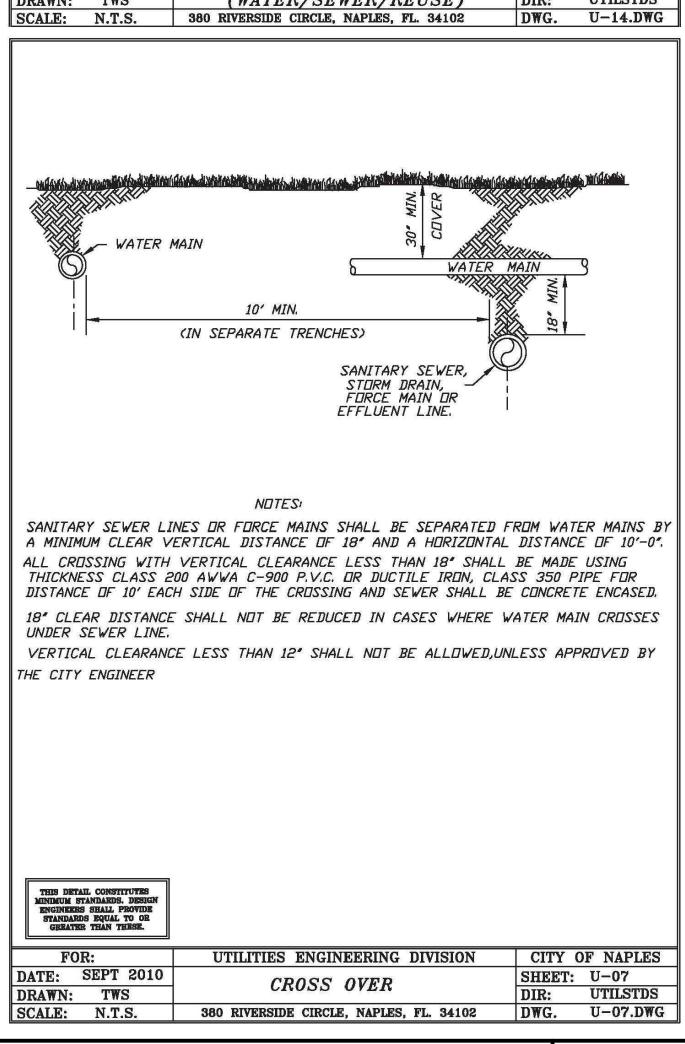


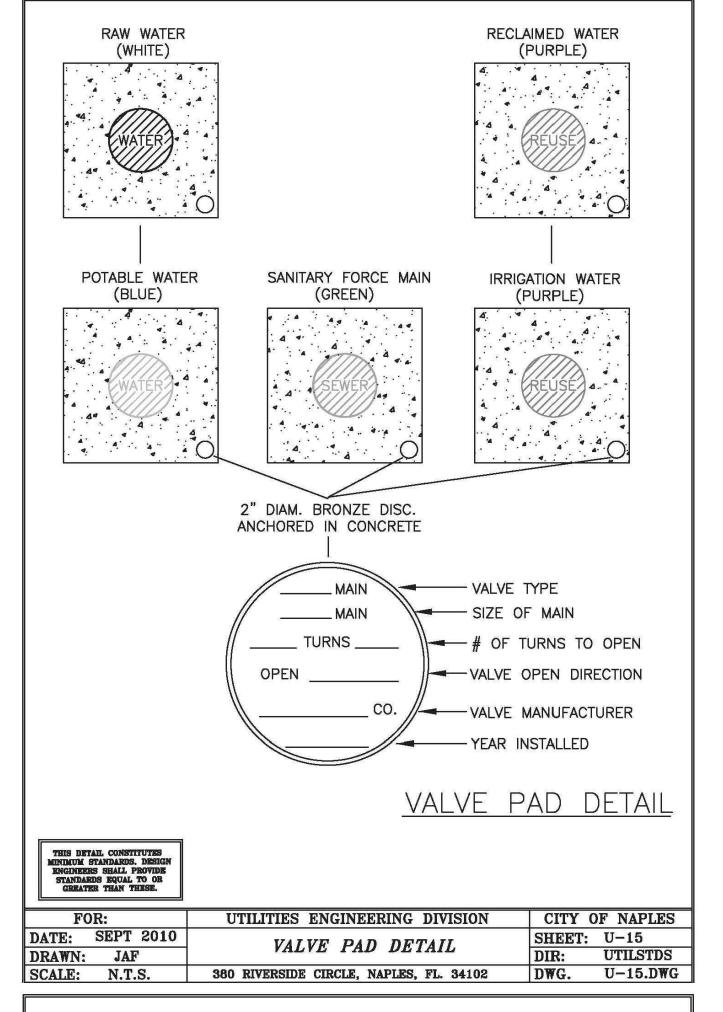


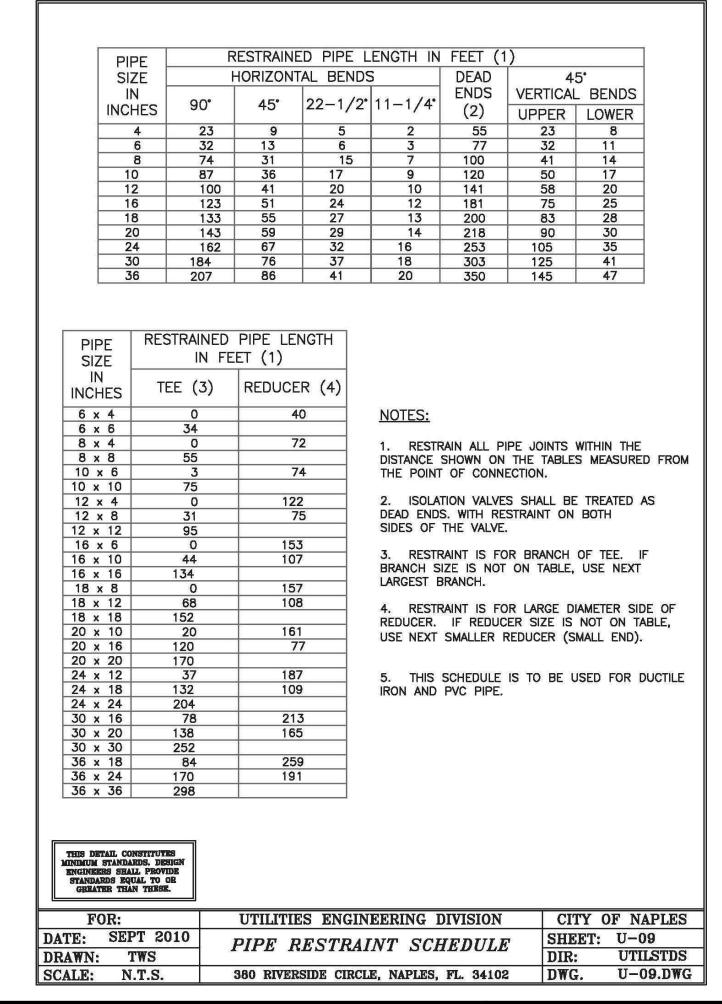


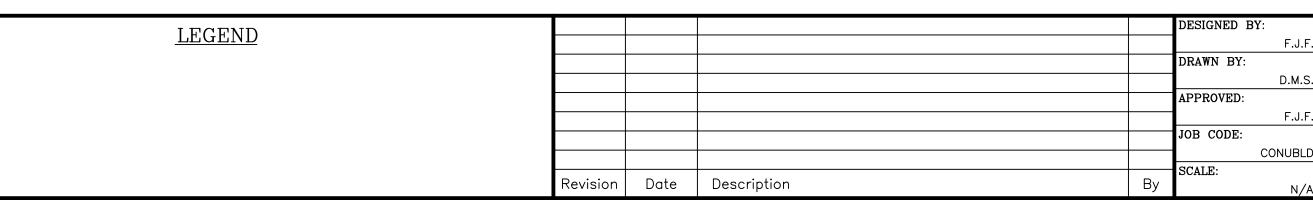














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CITY OF NAPLES WWTRF UTILITY BUILDING

DETAIL SHEET - 2

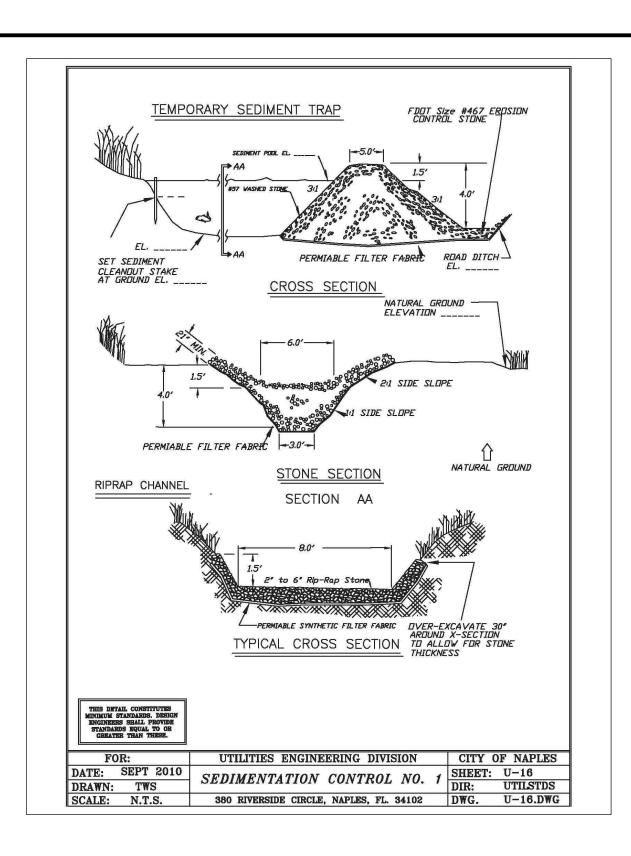
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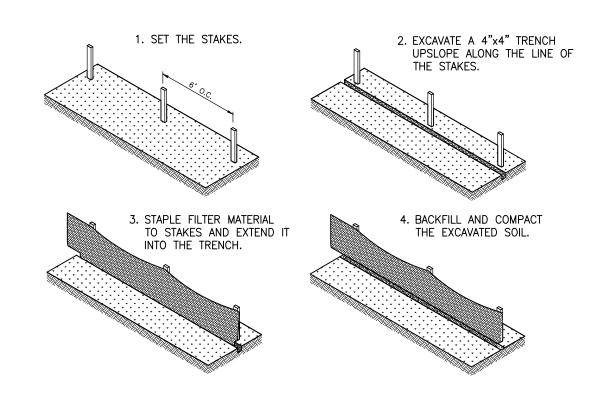
RANCIS JOSEPH FEENEY, P.E.

MUNICIPALITY: CITY OF NAPLES EC/TWNSHP/RNG 3/50S/25E NOV. 30, 2015 SUBMITTAL TYPE: BIDDING SUBMITTA SHEET 7 OF FLORIDA P.E. LICENSE NO. 64698

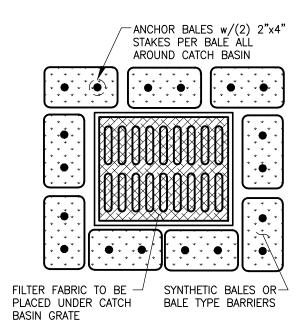


NOTES:

- 1) CONTRACTOR TO DEMOLISH AND REMOVE ALL IMPROVEMENTS WITHIN LIMITS OF DEMOLITION SHOWN UNLESS OTHERWISE NOTED.
- 2) CONTRACTOR TO ESTABLISH AND PROPERLY FLAG PROPERTY LINES PRIOR TO DEMOLITION.
- 3) THE CONTRACTOR SHALL UTILIZE SUITABLE EROSION CONTROL DURING DEMOLITION.
- 4) THE CONTRACTOR IS RESPONSIBLE FOR THE LEGAL DISPOSAL OF ALL DEMOLITION DEBRIS OFF OWNERS
- 5) THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF EXISTING UTILITIES WITH THE OWNER OF SAID UTILITY. THIS SHALL INCLUDE WATER, SEWER, GAS, CABLE TV, POWER AND TELEPHONE.
- 6) THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO DEMOLITION AND WILL BE RESPONSIBLE FOR THE DAMAGE OF ANY ON-SITE OR OFF-SITE UTILITIES THAT ARE NOT A PART OF THIS PROJECT AND ARE NOT IDENTIFIED TO BE REMOVED.
- 7) REMOVAL OF ASBESTOS CONTAINING MATERIALS (IF ANY) SHALL BE IN ACCORDANCE WITH THE REGULATORY STANDARDS.



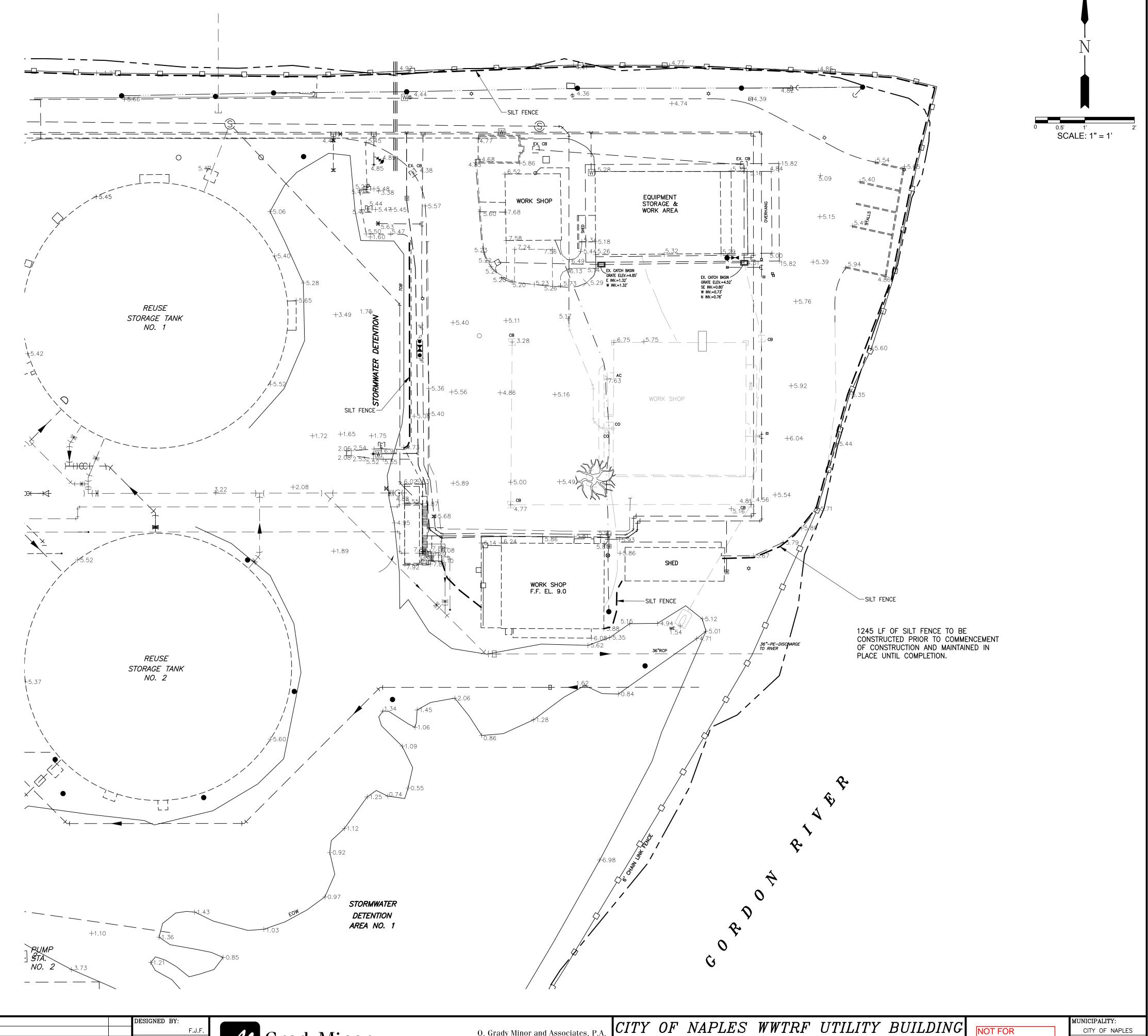
TYPICAL SILT FENCE DETAIL



- 1. BALES SHOULD BE ANCHORED w/2-1"x2"(OR 1" DIA.)x4' WOOD STAKES. STAKES OF OTHER MATERIAL OR SHAPE PROVIDING EQUIVALENT STRENGTH MAY BE USED IF APPROVED BY ENGINEER. STAKES OTHER THAN WOOD SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
- RAILS AND POSTS SHALL BE 2"x4" WOOD. OTHER MATERIALS PROVIDING EQUIVALENT STRENGTH MAY BE USED IF APPROVED BY ENGINEER.
- . ADJACENT BALES SHALL BE BUTTED FIRMLY
- 4. WHERE USED IN CONJUNCTION w/SILT FENCE, BALES SHALL BE PLACED ON THE UPSTREAM SIDE OF THE FENCE.

TOGETHER.

CATCH BASIN PROTECTION DETAIL



I ECEND					DESIGNED BY:	
<u>LEGEND</u>					F.,	J.F.
					DRAWN BY:	
					D.N	1.S.
					APPROVED:	
					F.,	J.F.
					JOB CODE:	
					CONUE	3LD
					SCALE:	
	Revision	Date	Description	Ву	1" =	xx'



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Business LC 26000266 ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)

EROSION CONTROL PLAN & DETAILS

CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)0.000

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FRANCIS JOSEPH FEENEY, P.E. FLORIDA P.E. LICENSE NO. 64698

3/50S/25E NOV. 30, 2015 SUBMITTAL TYPE: BIDDING SUBMITTAL SHEET 8 OF

SEC/TWNSHP/RNG

THIS DRAWING IS BEING RELEASED FOR THE PURPOSE OF BIDDING.

PLUMBING SYMBOLS **├ - - COLD WATER PIPE** SANITARY PIPE **├──CD** CONDENSATE PIPE **├──-** HOT WATER PIPE → VENT PIPE → PIPE TEEING DOWN PIPE TURNING UP PIPE TURNING DOWN S PIPE JUNCTION → PIPE TEEING UP + HOSE BIBB WITH VACUUM BREAKER AND SHUTOFF VALVE **ISOMETRIC** <u>PLAN</u> \longrightarrow CONTROL VALVE (SHUTOFF VALVE) FLOOR DRAIN CLEANOUT WALL CLEANOUT VENT THROUGH ROOF \sim P-TRAP PIPE PENETRATING FLOOR LEVEL WATER CLOSET REVISION SYMBOL CONNECT TO EXISTING

KEY NOTE (SEE KEY NOTES ON PLANS SHEETS)

GENERAL PLUMBING NOTES

- . THESE CONTRACT DOCUMENTS REPRESENT A PORTION OF A COMPLETE DESIGN WHICH, TO THE BEST OF OUR KNOWLEDGE HAVE BEEN PREPARED IN COMPLIANCE WITH APPLICABLE BUILDING CODE REQUIREMENTS. THE USE OF THESE PLANS WITHOUT THE CONSENT OF THE ENGINEER OF RECORD IS PROHIBITED. ALTERATIONS TO THE DESIGN AS SHOWN ON THESE PLANS ARE ONLY ALLOWED BY WRITTEN AUTHORIZATION OF THE ENGINEER OF RECORD.
- 2. THE PLUMBING CONTRACTOR SHALL COMPLY WITH THE 2014 FLORIDA BUILDING CODES AND AMENDMENTS, THE STATE OF FLORIDA ENERGY CODE, AND ALL LOCAL CODES AS MAY BE APPLICABLE.
- 3. THE INSTALLATION OF THE SYSTEMS SHALL BE IN ACCORD WITH THE MATERIALS AND METHODS INDICATED IN THE PLANS AND SPECIFICATIONS. ANY DESIRED DEVIATIONS SHALL BE SUBMITTED (IN WRITING) TO AND APPROVED BY THE ENGINEER. IF NOT INCLUDED IN THE SUBMITTALS AND NOT SPECIFICALLY REQUESTED, MATERIALS AND METHODS SHALL BE PROVIDED PER PLANS AND SPECIFICATIONS.
- 4. THE CODES REPRESENT THE MINIMUM INSTALLATION CRITERIA FOR THE PROJECT. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ADHERE TO THE DESIGN DOCUMENTS SO LONG AS THEY DO NOT INDICATE INSTALLATIONS THAT WILL PRESENT CODE VIOLATIONS. NO ADDITIONAL CHARGES WILL BE APPROVED OR ACCEPTED TO CHANGE THE INSTALLATION IN ORDER TO COMPLY WITH CODE OR TO RETROFIT ANY WORK THAT WAS INSTALLED IN VIOLATION OF A CODE
- 5. ALL REQUESTS FOR INFORMATION "RFI" SHALL BE PROVIDED TO THE ENGINEER IN WRITTEN FORMAT LISTING THE SPECIFIC ITEM(S) IN QUESTION SO THAT IT CAN BE REVIEWED AND A RESPONSE IN WRITING. THE "RFI" SHALL BE SENT THRU THE PROPER CHANNELS SO THE THAT GENERAL CONTRACTOR AND ARCHITECT HAVE A RECORD OF IT PRIOR TO SENDING IT TO THE ENGINEER.
- 6. NOTICE TO CONTRACTOR: REVISIONS TO THESE DRAWINGS AND CERTIFICATION THERETO, WHICH MAY BE REQUIRED BY THE APPLICABLE INSPECTION AUTHORITY, BECAUSE OF CONTRACTOR OPTED REVISIONS SHALL BE COMPENSATED TO THE ENGINEER BY THE REQUESTING CONTRACTOR. PAYMENT WILL BE REQUIRED AT TIME OF CERTIFICATION DELIVERY.
- PLUMBING PLANS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO INDICATE. CAPACITY, SIZE, LOCATION, DIRECTION, AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER SIMILAR OR DIFFERENT FEATURES WILL NOT BE REQUIRED. ALL RISES AND DROPS IN PIPING NOT NECESSARILY SHOWN.
- 8. ALL EQUIPMENT SHALL BE TESTED, ADJUSTED AND PLACED IN SATISFACTORY OPERATIONAL CONDITION BY THE PLUMBING CONTRACTOR. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. THIS IS IN ADDITION TO ANY WARRANTY OR GUARANTEE FROM THE EQUIPMENT MANUFACTURER. FURNISH THE OWNER WITH THE MANUFACTURER'S WRITTEN WARRANTEE CERTIFICATES.
- 9. CONTRACTOR SHALL EXAMINE ALL CONSTRUCTION DOCUMENTS INCLUDING MECHANICAL. PLUMBING. ELECTRICAL. FIRE SPRINKLER. ARCHITECTURAL AND STRUCTURAL DOCUMENTS FOR COORDINATION AND ADDITIONAL INFORMATION REGARDING INSTALLATION OF PLUMBING SYSTEMS.
- 10. WORK SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS AND OTHER COSTS AS ARE NECESSARY FOR THE INSTALLATION OF A COMPLETE AND SATISFACTORY OPERATIONAL PLUMBING AND SANITARY SYSTEM.
- 11. SIX SETS OF SHOP DRAWING SUBMITTALS OF ALL MAJOR EQUIPMENT SHALL BE PROVIDED IN BOOK FORMAT FOR REVIEW PRIOR TO ORDERING AND PROCUREMENT OF SAME. PROPOSED FIXTURE SUBSTITUTIONS SHOULD BE PROVIDED TO ARCHITECT FOR REVIEW AT LEAST 10 DAYS PRIOR TO BID.
- 12. THIS CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS TO INSURE THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL, ETC.).
- 13. UNLESS NOTED, ALL MATERIALS SHALL BE NEW, COMPLETE, INCLUDE MANUFACTURER'S WARRANTY, AND BE U.L. LISTED IF APPLICABLE. ALL WORK SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
- 14. PLUMBING CONTRACTOR RESPONSIBILITY TO BE TO 5 FT. BEYOND BUILDING LINE. FINAL CONNECTION TO SITE UTILITIES TO BE PLUMBER'S RESPONSIBILITY.
- 15. CONTRACTOR SHALL VERIFY ELEVATION OF UTILITY CONNECTIONS ON SITE PRIOR TO COMMENCING WORK. NOTIFY ENGINEER PRIOR TO COMMENCING WORK OF ANY

- 16. VERIFY ALL DIMENSIONS FROM ARCHITECTURAL PLANS OR FIELD DIMENSIONS. DO NOT SCALE OFF OF THESE PLANS.
- 17. BURIED PIPING NEAR FOUNDATION SHALL BE INSTALLED IN ACCORDANCE WITH FLORIDA PLUMBING CODE INSTRUCTIONS ON PROTECTION OF PIPES.
- 18. DO NOT INSTALL ANY PLUMBING PIPING ABOVE ANY ELECTRICAL PANELS. COORDINATE IN THE FIELD TO AVOID CONFLICTS WITH PIPING AND PLACEMENT OF ELECTRICAL PANELS.
- 19. ALL EXPOSED WORK SHALL BE INSTALLED LEVEL, PLUMB AND STRAIGHT IN A NEAT, ORDERLY AND WORKMAN LIKE MANNER.
- 20. PLUMBING SYSTEM INSTALLER SHALL PROVIDE ALL STRUCTURAL MEMBERS, SUPPORT BRACKETS, FLASHING, HARDWARE, ETC., REQUIRED TO INSTALL A COMPLETE SYSTEM.
- 21. FIXTURES AND EQUIPMENT SHALL BE AS PER SCHEDULED LIST OF ACCEPTABLE MANUFACTURERS:
 - NOTE: MANUFACTURERS NOT LISTED REQUIRE PRIOR APPROVAL FOR INCLUSION
 - LAVS, SERVICE SINKS, WATER CLOSETS, URINALS, BATH TUBS: AMERICAN STANDARD, CRANE CO., ELJER PLUMBINGWARE DIV., KOHLER CO.
 - DAYTON.

STAINLESS STEEL SINKS: AMERICAN STANDARD, ELKAY MFG. CO., KOHLER,

- FAUCETS: DELTA, MOEN, SYMMONS, AMERICAN STANDARD, CHICAGO, KOHLER. SLOAN, T&S BRASS..
- FLUSH VALVES: SLOAN VALVE CO. (ROYAL ONLY)
- WATER CLOSET SEATS, OPEN FRONT: BEMIS MFG. CO., BENEKE CORP., FORBES-WRIGHT INDUSTRIES, INC., CHURCH PRODUCTS, OLSONITE CORP., OLSONITE SEATS.
- ELECTRIC WATER COOLERS AND OR DRINKING FOUNTAINS: ELKAY MFG. CO., HAWS, HALSEY TAYLOR *
- FIXTURE SUPPORTS: JAY R SMITH, JOSAM MFG. CO., KOHLER CO., TYLER PIPE, ZURN INDUSTRIES, INC., HYDROMECHANICS DIV.
- VALVES: NIBCO, KITZ *
- FLOOR DRAINS, AND CLEANOUTS: ZURN INDUSTRIES, INC., JOSAM * MFG. CO. PIPE, WATTS, JAY R SMITH
- ROOF AND OVERFLOW DRAINS: ZURN INDUSTRIES, INC., JOSAM * MFG. CO. TYLER PIPE, WATTS, JAY R SMITH [COMBINATION ROOF/OVERFLOW DRAINS: THE USE OF FROET INDUSTRIES ROOF AND OVERFLOW DRAIN UNITS WILL HAVE ONE ROOF OPENING FOR EACH UNIT AND MAY REPLACE THE USE OF "RD-1/OD-1" APPLICATION AS A SINGLE UNIT WITH DUAL PIPING. COORDINATE WITH ROOFING CONTRACTOR IF THIS UNIT IS USED ON THE PROJECT.]
- PIPING SUPPORTS: HOLDRITE, SIOUX CHIEF MFG CO., KINDORF, UNISTRUT. EMPIRE INDUSTRIES INC., ERICO CADDY PIPING SPECIALITES COPPER: SIOUX CHIEF MFG CO., WATTS
- WATER HEATERS, TANK TYPE AS BASED ON SCHEDULE REQUIREMENTS. CEI: LOCHINVAR, BRADFORD-WHITE, A.O. SMITH, STATE, RUUD/RHEEM
- ICE MAKER BOXES AND VALVES: SIOUX CHIEF, GUY GRAY BOX
- MODULAR SHOWERS STALLS: FIAT, CRANE, MUSTEE, LASCO
- SAFETY EQUIPMENT: BRADLEY, GUARDIAN EQUIPMENT, ENCON SAFETY
- PRODUCTS PIPE PENETRATION IN POURED CONCRETE SLAB: HYDROFLAME
- (UL FIRE TESTED) RAIN OR STORM WATER STORAGE SYSTEMS: JAY R SMITH
- 22. VITREOUS CHINA FIXTURES TO BE WHITE WITH ALL TRIM TO HAVE BRIGHT CHROME PLATED BRASS FINISH UNLESS NOTED OTHERWISE.
- 23. CONTRACTOR SHALL COORDINATE THE VOLTAGE, PHASE AND MINIMUM WIRE SIZE REQUIRED FOR WATER HEATERS AND PUMPS WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASING EQUIPMENT.

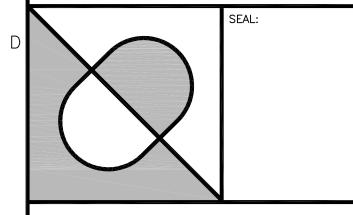
- 24. COLD WATER PIPING SHALL BE SCHEDULE 40 PVC UNDER GROUND, HOT AND COLD WATER DISTRIBUTION PIPING SHALL BE TYPE L COPPER OR CPVC ABOVE GRADE.
- 25. WATER DISTRIBUTION PIPING TO BE RUN IN SPACES ABOVE THE CEILING UNLESS OTHERWISE NOTED. CONTRACTOR SHALL RECEIVE WRITTEN PERMISSION TO INSTALL DISTRIBUTION PIPING UNDER SLAB PRIOR TO INSTALLATION. WHEN ALLOWED, UNDERSLAB DISTRIBUTION PIPING TO BE MINIMUM TYPE 'L' COPPER WITH BRAZED JOINTS. PENETRATIONS THROUGH SLAB TO BE SLEEVED.
- 26. CONNECT WATER MAIN TO VALVE OR STUB PROVIDED BY SITE UTILITY CONTRACTOR. PROVIDE FOR CHLORINATION OF FINAL WATER CONNECTION.
- 27. PROVIDE MAIN SHUTOFF VALVE ON COLD WATER MAIN ENTERING THE BUILDING.
- 28. ALL MAIN VALVES ARE TO BE BRASS, FULL PORTED BALL VALVES.
- 29. VALVES SHALL BE NUMBERED AND TAGGED. PROVIDE TYPEWRITTEN CHART INDICATING EACH VALVE NUMBER AND LOCATION, LAMINATED IN CLEAR PLASTIC COVER AND POSTED IN THE EQUIPMENT ROOM.
- 30. ALL HOSE BIBBS ARE TO BE EQUIPPED WITH VACUUM BREAKER AND INDIVIDUAL SHUT OFF VALVE.
- 31. INSTALL GALVANIZED STEEL WATER HEATER DRAIN PAN, MINIMUM OF 1" DEEP AND OF ADEQUATE SIZE WITH 3/4" PIPING TO ADJACENT MOP SINK, WASTE RECEPTACLE OR EXTERIOR OF BUILDING AS INDICATED ON PLANS. NOT APPLICABLE FOR HEATERS INSTALLED IN GARAGES OR THE EXTERIOR OF THE BUILDING, UNLESS NOTED OTHERWISE.
- 32. INSULATE ALL HOT WATER PIPING: FOR PIPE SIZES UP TO 1-1/2" USE 1/2" INSULATION, FOR PIPE SIZES OVER 1-1/2" USE 1" INSULATION. RECIRCULATING LINES TO BE INSULATED WITH MIN. 1/2" INSULATION WITH A R-2 RATING. INSULATION COLOR SHALL BE BLACK WHERE CONCEALED AND WHITE WHERE EXPOSED TO VIEW. INSULATION TYPE TO BE ARMAFLEX OR EQUAL.
- 33. INSULATE ALL EXPOSED DISTRIBUTION PIPING UNDER LAVATORIES AND SINKS.
- 34. PROVIDE STOP OR ANGLE VALVE ON EACH WATER CONNECTION TO EACH PLUMBING FIXTURE.
- 35. PROVIDE SHOCK ABSORBER TO PREVENT WATER HAMMER FOR EACH FIXTURE THAT HAS A QUICK CLOSING VALVE ASSEMBLY. SIZE OF SHOCK ARRESTORS TO BE PER P.D.I. RECOMMENDATIONS. PROVIDE ACCESS PANEL ABOVE HARD CEILINGS FOR ACCESS TO WATER HAMMER ARRESTORS WHERE REQUIRED.
- 36. PROVIDE AT ALL REFRIGERATOR LOCATIONS: 3/8" CW LINE WITH CHECK VALVE TO 1/4" PETCOCK, 6" ABOVE FLOOR. FURNISH 48" OF 1/4" CPVC TUBING FOR CONNECTION TO REFRIGERATOR ICE MAKER.
- 37. ALL DRAIN, WASTE AND VENT PIPING SHALL BE SCHEDULE 40 P.V.C.
- 38. RAIN WATER LEADER SYSTEMS PIPING TO BE SCHEDULE 40 PVC. RAIN WATER LEADERS WITHIN BUILDING STRUCTURE TO BE INSULATED WITH MINIMUM 1-1/2" INSULATION FOR SOUND.
- 39. PROVIDE A TWO-WAY CLEANOUT AT THE BUILDING DRAIN 18" FROM THE ENTRANCE OF THE SANITARY LINE TO THE BUILDING.
- 40. PROVIDE AT LEAST ONE 3" MAIN VENT THROUGH ROOF IN BUILDING. DO NOT ADD ADDITIONAL VENTS THROUGH ROOF WITHOUT PRIOR APPROVAL FROM THE ARCHITECT OF RECORD. VERIFY EXACT PLACEMENT OF VENTS THROUGH ROOF WITH ARCHITECT PRIOR TO INSTALLATION.
- 41. THIS CONTRACTOR IS RESPONSIBLE FOR ALL HVAC CONDENSATE DRAINS INCLUDING PIPING, INSULATION THEREOF AND DRYWELLS OR RECEPTORS. INSULATE ALL HVAC CONDENSATE LINES ABOVE SLAB WITH MINIMUM OF 3/4" FLEXIBLE FOAM INSULATION EQUAL TO ARMAFLEX. CONDENSATE LINES UNDERGROUND AND UNDERSLAB ARE TO BE A MINIMUM OF 2" IN SIZE UNLESS NOTED OTHERWISE. DRYWELLS ARE TO BE EQUIPPED WITH OVERFLOW DRAIN GOOSENECK EQUAL TO THE CONDENSATE DRAIN SIZE.
- 42. PROVIDE CLEANOUTS AT EACH STACK RISER, AT EACH 90° CHANGE IN HORIZONTAL DIRECTION, AND AT EACH EXIT FROM BUILDING, IN ADDITION TO ALL LOCATIONS AS REQUIRED BY AUTHORITY HAVING JURISDICTION.
- 43. WHERE PVC PIPING IS INSTALLED AND MAY BE EXPOSED TO SUNLIGHT THE PIPING SHALL BE PROVIDED WITH UV PROTECTION. PROTECTION MAY BE PROVIDED AS A COATING OR A COVER.
- 44. WHERE PIPING IS RUN INSIDE OF A MECHANICAL PLENUM, THE ONLY ACCEPTABLE PIPING TYPES FOR PLUMBING SYSTEMS SHALL BE COPPER OR CAST IRON.

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT	EWC	ELECTRIC WATER COOLER	ИС	HOD CIVIL	/0	LINDED COM
AFF	/G ABOVE FINISH FLOOR/GRADE	EWH	ELECTRIC WATER HEATER	MS	MOP SINK	U/S	
AHL	AIR HANDLING UNIT	FA/B	FROM ABOVE / BELOW	PRD PRV	PRIMARY ROOF DRAIN PRESSURE REDUCING VALVE	UL	UNDERWRITERS LABORATORIES
BS	BAR SINK	FCO	FLOOR CLEANOUT	RD	ROOF DRAIN	UNO	UNLESS NOTED OTHERWISE
CD	CONDENSATE DRAIN	GAL GPF	GALLONS PER FLUSH	REF	REFRIGERATOR		URINAL VACUUM BREAKER
СТС	CLEANOUT TO GRADE	GPM	GALLONS PER MINUTE	SAN	SANITARY		VENT THROUGH ROOF
CU	CONDENSER UNIT	HB	HOSE BIBB	SH	SHOWER		WATER CLOSET
CW	COLD WATER	HW	HOT WATER	SOV	SHUT OFF VALVE		WATER HYDRANT
DFU	DRAINAGE FIXTURE UNITS	KS	KITCHEN SINK	SS	STAINLESS STEEL		WATER HAMMER ARRESTOR
DN	DOWN	LAV	LAVATORY	U/G	UNDERGROUND		WATER SUPPLY FIXTURE UNITS
		211		5/0	OTO ENOTION OF THE PROPERTY OF		WHEN COLLET PROJECT COME

CONSULTANTS:





Associates, P.A.

1865 VETERANS PARK DRIVE, SUITE 301, NAPLES, FLORIDA 34109 PHONE (239) 596-2872 FAX (239) 596-2874

> **ARCHITECTURE** and **PLANNING**

FLORIDA REGISTRATION AA 0002502 NOTES:

PROJECT:

City of Naples **Utilities Maintenance Bldg**

1450 4th Avenue North Building #950 Naples, Florida

REV. DESCRIPTION DATE: 11-30-15 PROJECT NO: 15-581 CAD DWG FILE: DDA1508 DRAWN BY: BBCE STAFF CHK'D BY: MAB/JWB

The design professional waives any and all responsibility and liability for problems which arise from the failure to follow these plans, specifications and the design intent they convey, or for problems which arise from others failure to obtain and/or follow the design professional's guidance with respect to any errors, omissions,

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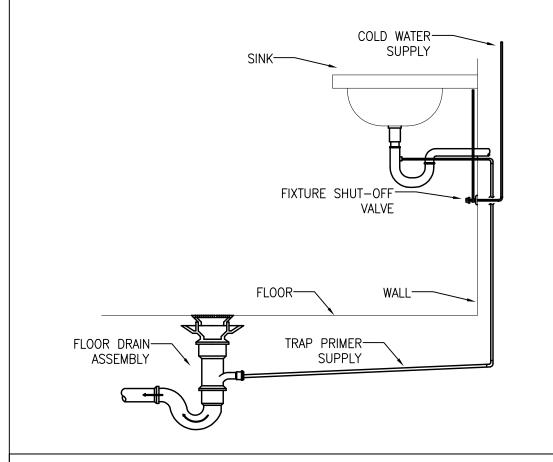
Plumbing Notes & Legends

P-001

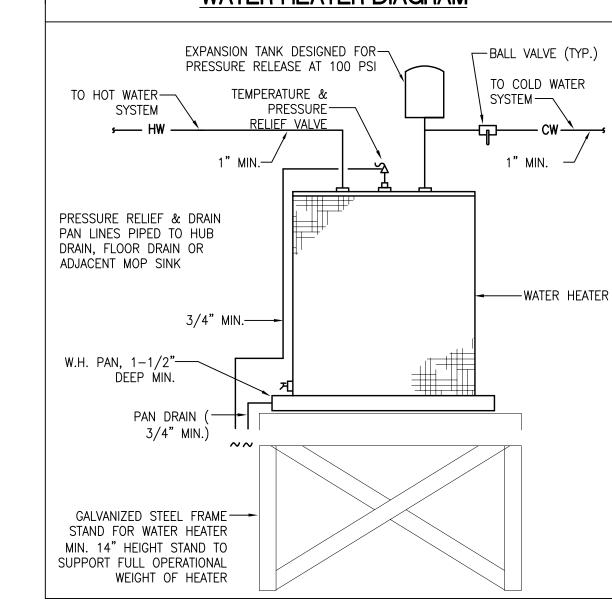
THIS DRAWING IS BEING RELEASED FOR THE PURPOSE OF BIDDING.

FLOOR DRAIN	I DETAIL
SQUARE FLOOR DRAIN	FINISH FLOOR
	ALL FLOOR DRAINS ARE TO
	BE EQUIPPED WITH A TRAP PRIMER UNLESS NOTED OTHERWISE. REFER TO
	PLUMBING SCHEDULES FOR APPROPRIATE PRIMER VALVE.
APPROVED TRAP	
PRIMER WHERE INDICATED ON PLANS.	

TRAP PRIMER VALVE DETAIL



WATER HEATER DIAGRAM



MARK FIXTURE TYPE MAKE - MODEL MATERIAL ACCESSORIES REMARKS TRAP COLD HOT SANITARY LAVATORY/UNDERMOUNT AMERICAN STANDARD - "OVALYN" 0495.300 VITREOUS CHINA 1,4 1-1/4" L-1 SYMMONS S-244-2-G-LWG FAUCET 8-16" CENTERSET SYMMONS S-240-2-G-LWG FAUCET L-2 LAVATORY/A.D.A. 1,4,5,6,8,9 1 1/4" VITREOUS CHINA AMERICAN STANDARD — "DECLYN" 0321.075 4" CENTER SET. SYMMONS S-254-G-LWG FAUCET AMERICAN STANDARD - 9140.013 1 1/4" 1/2" 1/2" L-2 LAVATORY/A.D.A. VITREOUS CHINA 1,4,5,6,8,9 8" CENTER SET. PROVIDE WITH OPEN FRONT SEAT WITH STAINLESS STEEL 1,3,5 WC-1WATER CLOSET — FLUSH VALVE AMERICAN STANDARD — "MADERA" 2234.015 VITREOUS CHINA INTEGRAL CHECK HINGES, SLOAN ROYAL FLUSH VALVE ASSEMBLY WATER CLOSET — FLUSH VALVE, PROVIDE WITH OPEN FRONT SEAT WITH STAINLESS STEEL 1,3,5 WC-2AMERICAN STANDARD - MADERA 3043.102 VITREOUS CHINA INTEGRAL CHECK HINGES, SLOAN ROYAL FLUSH VALVE ASSEMBLY AMERICAN STANDARD — "LYNBROOK" PROVIDE WITH SLOAN ROYAL 186 FLUSH VALVE ASSEMBLY UR VITREOUS CHINA 1,2,6,1 INTEGRAL 3/4" URINAL 6601.012 AND WALL CARRIER ELKAY LMABFTL8WS WALL MOUNT BARRIER PROVIDE ELKAY #LKAPREZL CANE APRON ELECTRIC WATER COOLER 7,8 1 1/4" EWC STAINLESS STEEL FREE COOLER WITH BOTTLE FILLING STATION ZURN #ZN-415 TYPE S STRAINER, 7"X7" CI BODY, NB TOP FD FLOOR DRAIN TRAP PRIMER BY PRECISION PVC STRAINER METAL REMOVABLE T-HANDLE KEYS WOODFORD MODEL 24 ANTI-SIPHON HOSE BRASS VALVE BODY HB HOSE BIBB NO PLASTIC HANDLES MUSTEE #63.600 SERVICE FAUCET AND MUSTEE 63M (FLOOR MOUNT) MOLDED STONE MS MOP SINK #65.700 HOSE AND HOSE BRACKET - PROVIDE VACUUM BREAKER WITH FAUCET BREAKROOM SINK, A.D.A. ELKAY #LK-20888 1 1/2" 1/2" DAYTON D125224 STAINLESS STEEL PROVIDE WITH SHOWER DRAIN, GRAB BARS AND SYMMONS 1-117-FSB-295 MIXING VALVE ASSEMBLY WITH PRESSURE BALANCING VALVE, SLIDE BAR WITH HAND HELD SPRAYER, FIBERGLASS SHOWER ASSEMBLY LASCO SHR A.D.A. SHOWER **FIBERGLASS** SHOWER HEAD AND DIVERTER VALVE. #1363-BFSC AT A.D.A. SHOWER PROVIDE SHOWER ASSEMBLY WITH L-SHAPED GRAB BAR AND FOLD-UP SEAT. STAINLESS STEEL EYEWASH BOWL EEW-1 BRADLEY S19-220BBF STAINLESS STEEL 1 1/4" EMERGENCY EYEWASH PVC PROVIDE WITH UNDERCOUNTER TRAP GUARD

REMARKS

PLUMBING FIXTURE SCHEDULE

WHITE FIXTURE COLOR.

1.0 G.P.F.

1.6 G.P.F.

0.5 GAL/ MIN.

MOUNT @ HANDICAP HT.

PROVIDE W/ WALL CARRIER SYSTEM BY ZURN SUITABLE FOR WALL TYPE AND MATCHING FIXTURE SIZE WHERE NEEDED. CARRIER TO BE FLOOR MOUNTED MODEL.

PROVIDE W/ CEILING ACCESS PANEL FOR SERVICE ACCESS TO HAMMER ARRESTOR.

2 WAY CO

ZURN ZN-1400-HD

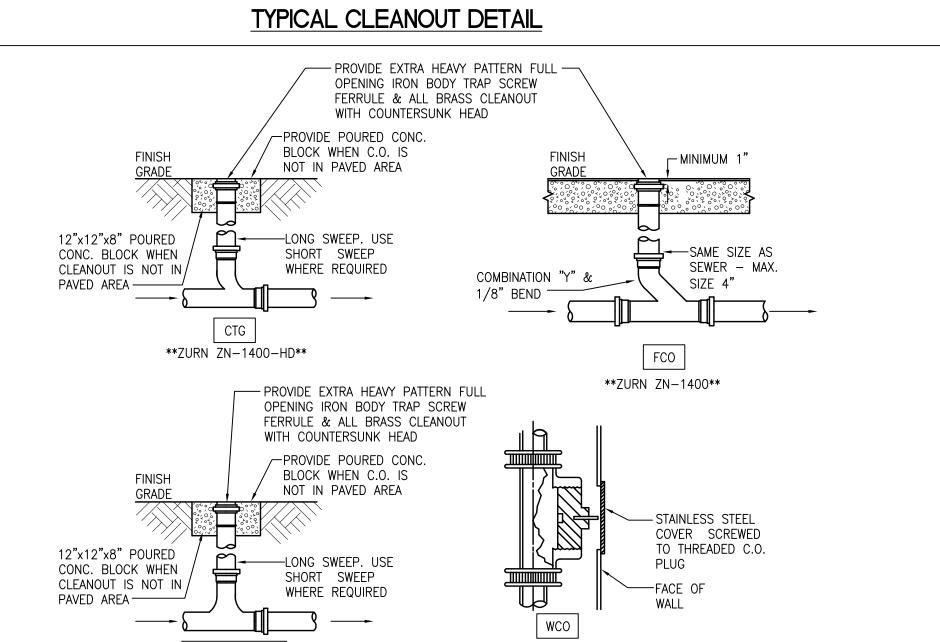
PROVIDE W/ A.D.A. COMPLIANT FIXTURE ASSEMBLY.

PROVIDE W/ U/C TRAP GUARD & HOT & COLD WATER SUPPLY LINE GUARDS.

CONTRACTOR RESPONSIBLE FOR COORDINATION OF URINAL HEIGHT PER APPLICABLE ACCESSIBILITY CODES. WHERE RESTROOM CONTAINS A SINGLE URINAL, IT SHALL BE MOUNTED AT ACCESSIBLE HEIGHT. WHERE RESTROOM CONTAINS MULTIPLE URINALS, AT LEAST ONE SHALL BE MOUNTED AT ACCESSIBLE HEIGHT. COORDINATE ALL DETAILS WITH ARCHITECT.

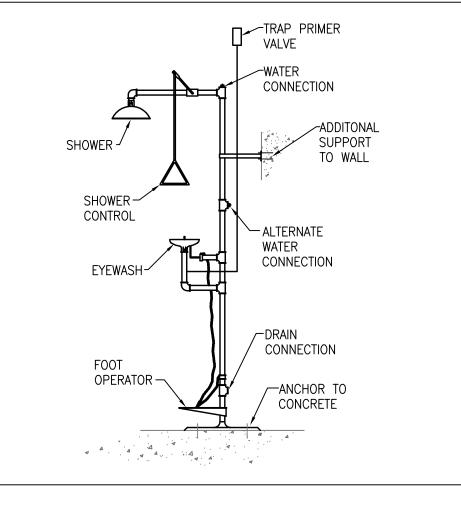
	ELECTRIC WATER HEATER SCHEDULE								
MARK	MANUFACTURER	MODEL	INPUT (KW)	ELECTRICAL V-PHHZ.	SIZE (GALLONS)	REMARKS			
EWH-1	A.O. SMITH	DEN-52	4.5	240-1-60	50	1			
		REM	ARKS						

PROVIDE WITH P&T VALVE, 3 GALLON EXPANSION TANK AND GALVANIZED STEEL DRAIN PAN.



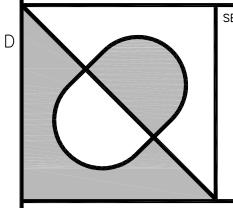
ZURN ZN-1441

EMERGENCY SHOWER AND EYEWASH DETAIL



. CLEVELAND AVENUE SUITE 229 FORT MYERS, FL 33907 (239) 274-0020 (239) 274-0021 (FAX) EMAIL: BBCE@BURGESSBRANT.COM CERTIFICATE OF AUTHORIZATION #6032 JOSEPH W BROUGHTON, PE #63949

MARK A BRANT, PE #54692



CONSULTANTS:

Associates, P.A.

1865 VETERANS PARK DRIVE, SUITE 301, NAPLES, FLORIDA 34109 PHONE (239) 596-2872 FAX (239) 596-2874 **ARCHITECTURE**

FLORIDA REGISTRATION AA 0002502

and

PLANNING

NOTES:

PROJECT:

City of Naples Utilities Maintenance Bldg

1450 4th Avenue North Building #950 Naples, Florida

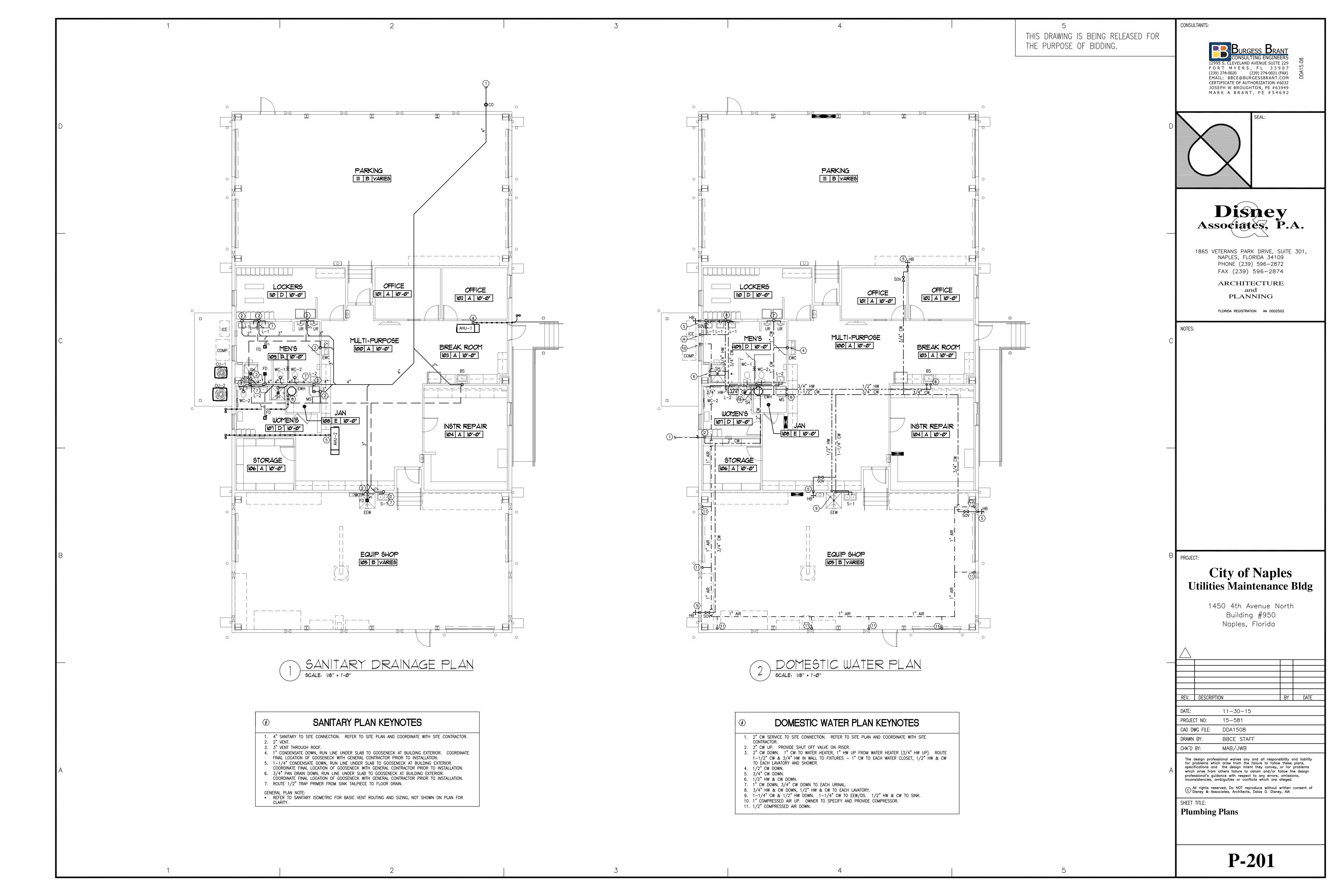
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DATE:		11-30-15		
PROJEC	CT NO:	15-581		
CAD DV	VG FILE:	DDA1508		
DRAWN	BY:	BBCE STAFF		

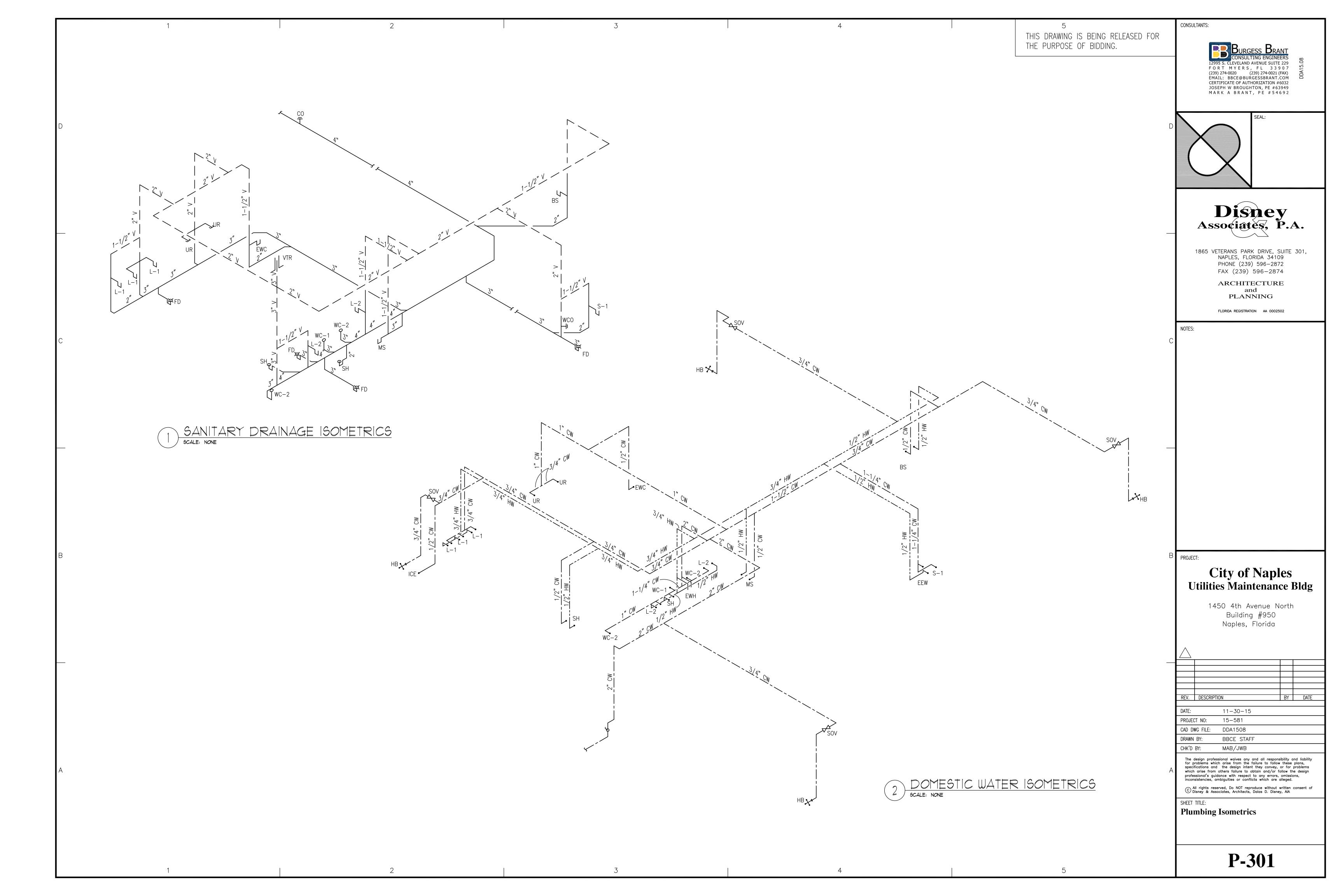
CHK'D BY: MAB/JWB The design professional waives any and all responsibility and liability for problems which arise from the failure to follow these plans, specifications and the design intent they convey, or for problems which arise from others failure to obtain and/or follow the design

professional's guidance with respect to any errors, omissions, inconsistencies, ambiguities or conflicts which are alleged. \bigodot All rights reserved, Do NOT reproduce without written consent of Disney & Associates, Architects, Dalas D. Disney, AlA

Plumbing Schedules & Details

P-002

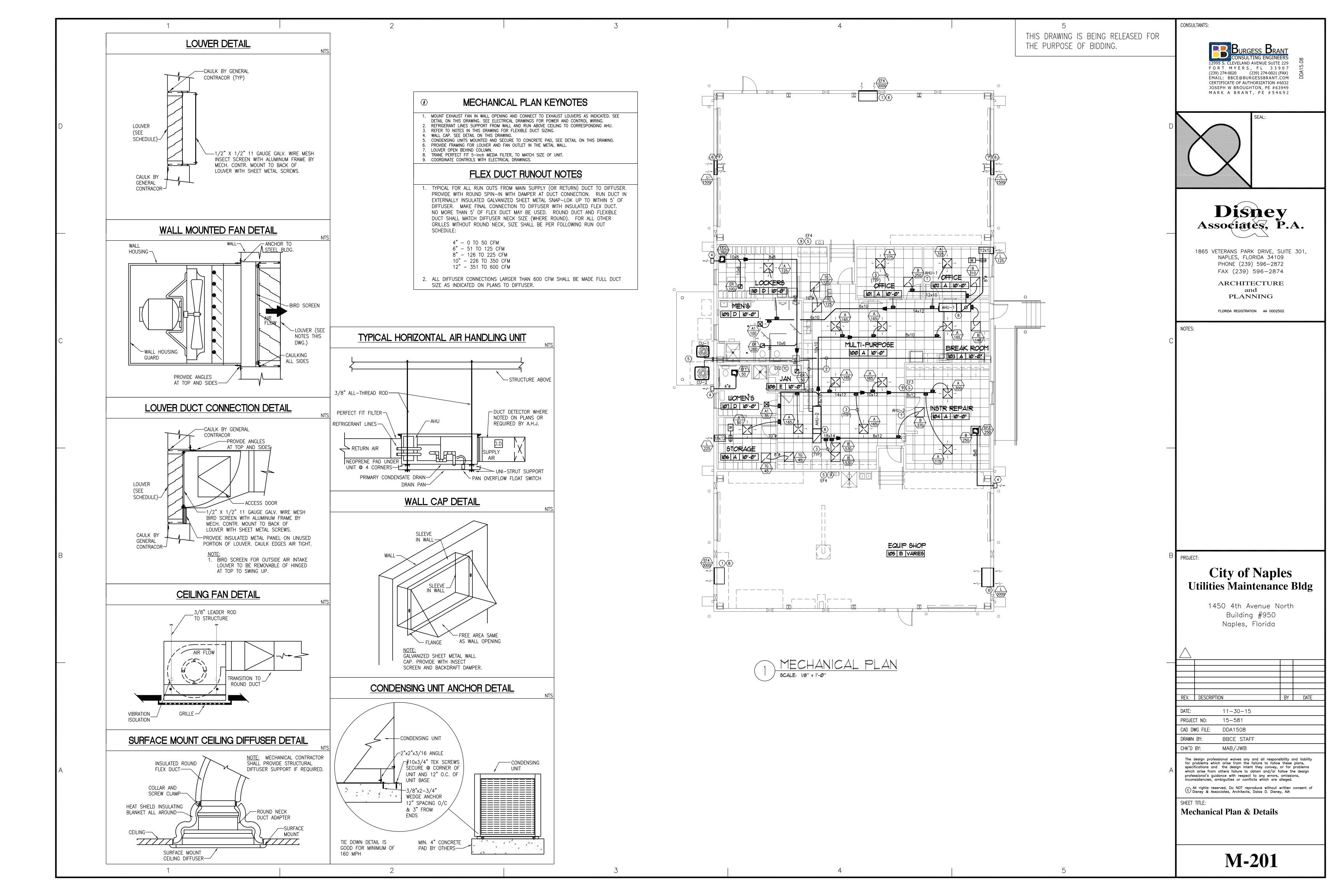




CONSULTANTS: THIS DRAWING IS BEING RELEASED FOR SPLIT SYSTEM SCHEDULE THE PURPOSE OF BIDDING. GENERAL AIR HANDLER CONDENSING UNIT SYSTEM DATA CLEVELAND AVENUE SUITE 229 CFM FAN HEATER ELECTRICAL ELECTRICAL COMPRESSOR CAPACITY FORT MYERS, FL 33907 (239) 274-0020 (239) 274-0021 (FAX) TOTAL | ESP | FLA MCA MOP MARK MCA MOP TMBH SMBH SEER LOCATION SERVED MFG MARK MODEL OA MODEL KW VOLTS MODEL VOLTS NO TONS REMARKS EMAIL: BBCE@BURGESSBRANT.COM CERTIFICATE OF AUTHORIZATION #6032 TRANE AHU-1 GAM5B0B30M21EA 850 125 0.5 | 2.8 | BAYEAAC05LG1 4.80 240/1 29.00 30 CU-1 4TTB3030G1 240/1 19.0 30 2.5 29.2 21.0 14.0 | 1, 2, 3 Location JOSEPH W BROUGHTON, PE #63949 MARK A BRANT, PE #54692 TRANE TAM7B0C6051EA 225 0.5 | 5.5 | BAYEVAC10 7.68 240/1 47.00 50 CU-24TTB3060D1 240/1 35.0 60 5.0 58.0 41.0 14.0 | 1, 2, 3 AHU-2 Location REMARKS HORIZONTAL DISCHARGE AIR HANDLER. PROVIDE WITH TX VALVE. FACTORY MOUNTED ELECTRIC HEATER WITH SINGLE POINT POWER CONNECTION. PROVIDE TIME DELAY RELAY, SUMP HEATER AND START ASSIST CAPACITOR FOR CONDENSING UNITS. REFRIGERANT LINE SIZES PER MANUFACTURER'S RECOMENDATIONS BASED ON ACTUAL RUN LENGTH. PROVIDE WITH TRANE "PERFECT FIT" CARTRIDGE FILTER HOUSING AND 5" FILTER ATTACHED TO UNIT MATCHED TO UNIT SIZE. PROVIDE MANUFACTURER RECOMMENDED THERMOSTAT. PROVIDE WITH MOTORIZED DAMPER IN THE OUTSIDE AIR SUPPLY DUCT THAT IS INTERLOCKED TO OPEN WITH THE SYSTEM FAN IS IN OPERATION. THE SYSTEM FAN IS TO OPERATE CONTINUOUSLY DURING HOURS OF BUILDING OCCUPANCY. AIR DEVICE SCHEUDLE GENERAL NOTES AND SPECIFICATIONS MARK DESCRIPTION MANUFACTURER NECK SIZE CFM RANGE REMARKS AND DUCTWORK SHALL BE INSTALLED TO PROVIDE ADEQUATE CLEARANCE FOR THE MECHANICAL CONTRACTOR SHALL COMPLY WITH THE 2014 FLORIDA BUILDING 0 - 125 ACCESS TO ALL EQUIPMENT. CONTRACTOR SHALL ENSURE THAT NO TRANSGRESSION 6"ø CODES, THE STATE OF FLORIDA ENERGY CODE, AND ALL LOCAL CODES AS MAY BE OF THIS SPACE IS MADE BY OTHER CONTRACTORS. 126 - 225 APPLICABLE. TDC-AA TITUS 1, 2, 3, 5, 7, 8 Α LAY-IN DIFFUSER 226 - 30010ø 24X24-3-26-4-AG75 14. ALL CONTROL WIRING SHALL BE IN CONDUIT. WHERE CONTROL WIRING IS CONCEALED MECHANICAL PLANS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO INDICATE 301 - 450 12ø BY CEILING STRUCTURE, WIRING MAY BE PLENUM RATED CABLE. ALL CONTROL CAPACITY, SIZE, LOCATION, DIRECTION, AND GENERAL ARRANGEMENT, BUT NOT EXACT 451 - 600 14ø WIRING SHALL BE SECURELY ATTACHED TO THE STRUCTURE AT A MAXIMUM SPACING DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE OF EVERY FOUR FEET. INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER SIMILAR 250-AA 8 X 4 2, 4, 5, 6, 7 Α1 BORDER TYPE 1 OR DIFFERENT FEATURES WILL NOT BE REQUIRED. ALL RISES AND DROPS IN PIPING TITUS 51 - 125 CURVED BLADE SUPPLY 8 X 8 15. DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. IN Associates, P.A. AND DUCTWORK NOT NECESSARILY SHOWN. 1-26-N-AG15-L1, S4 GENERAL, ALL PIPING AND DUCTWORK SHALL BE RUN CONCEALED IN CEILING SPACES PROVIDED UNLESS NOTED OR INDICATED OTHERWISE. ROUTING SHALL BE WORK SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS AND OTHER COSTS AS ARE COORDINATED WITH OTHER TRADES. DO NOT INSTALL ANY DUCTWORK OR PIPING OF 350FL 6 X 6 NECESSARY FOR THE INSTALLATION OF A COMPLETE AND SATISFACTORY OPERATIONAL ER TITUS 1, 2, 4, 5, 6, 7 ANY KIND ABOVE ELECTRICAL PANEL. EXHAUST REGISTER BORDER TYPE 1 100 8 X 8 AIR CONDITIONING SYSTEM. 1865 VETERANS PARK DRIVE, SUITE 301, 1-26-AG-15 10 X 10 200 16. ALL DUCTWORK, INSTALLATION AND EQUIPMENT SHALL MEET THE LATEST ADOPTED NAPLES, FLORIDA 34109 4. THIS CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS TO INSURE EDITION OF THE STATE OF FLORIDA ENERGY CODE. DUCTWORK SHALL BE METAL THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT PHONE (239) 596-2872 В TITUS CONSTRUCTED WITH EXTERNAL INSULATION IN ACCORDANCE WITH SMACNA LAY-IN EGGCRATE RETURN 50F-3-26-A 22 X 22 0 - 1200 1, 2, 3, 5, 7, 8 (DUCTWORK, PIPING, ELECTRICAL, ETC.). FAX (239) 596-2874 REQUIREMENTS FOR CLASS B SEAL AND 2" PRESSURE CLASSIFICATION. 5. VERIFY ALL DIMENSIONS FROM ARCHITECTURAL PLANS OR FIELD DIMENSIONS. 12 X 12 17. FLEXIBLE DUCTWORK, WHERE SHOWN ON THE DRAWINGS, SHALL BE EQUAL TO **ARCHITECTURE** EFD-637-MD MIAMI DADE 18 X 12 225 6. UNLESS NOTED, ALL MATERIALS SHALL BE NEW, COMPLETE, INCLUDE FLEXAIRE WITH WIRE HELIX FRAME. POLYESTER LINER. HIGH DENSITY FIBERGLASS POTTORFF and OUTSIDE AIR LOUVER CO. NOA No. 04-0909.01 36 X 12 750 MANUFACTURER'S WARRANTY, AND BE U.L. APPROVED IF APPLICABLE. ALL WORK INSULATION AND METALIZED REINFORCED VAPOR BARRIER EXTERIOR COVERS. **PLANNING** 48 X 36 1500 - 3000 SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED. PROVIDE SPIN-IN FITTINGS WITH BELL MOUTH TYPE FITTINGS WITH ADJUSTABLE DAMPERS FOR ALL BRANCH TAKEOFFS (WHERE INDICATED ON PLANS). FLEXIBLE REMARKS 7. CONTRACTOR SHALL FURNISH AND INSTALL CURBS AND BASES FOR ALL EQUIPMENT FLORIDA REGISTRATION AA 0002502 DUCTWORK SHALL BE PROPERLY SUPPORTED WITH GALVANIZED STEEL STRAPS 2' AS SHOWN ON PLAN. THIS CONTRACTOR SHALL CONFIRM ALL CURB REQUIREMENTS WIDE AND SHALL BE RUN AS STRAIGHT AS POSSIBLE WITH NO KINKS OR BENDS TO WHITE FINISH, ALUMINUM CONSTRUCTION. AND THEIR SIZES. RESTRICT AIRFLOW. NOTES: OPPOSED BLADE VOLUME DAMPER. PROVIDE INSULATION FOR REFRIGERANT LINES SIMILAR TO ARMAFLEX. 18. OUTSIDE AIR AND TOILET EXHAUST DUCTWORK SHALL BE METAL. DUCT TOILET WEATHER-EXPOSED INSULATION TO BE PROVIDED WITH WEATHER PROOF COATING AS TILE LAY IN DIFFUSER. EXHAUST TO ROOF, SOFFIT, OR WALL CAPS AS SHOWN ON PLANS. CAPS SHALL BE RECOMMENDED BY MANUFACTURER. EXPOSED CONDENSATE LINES THOSE CONCEALED ALUMINUM CONSTRUCTION WITH BIRD AND INSECT SCREENS. 4. SURFACE OR DUCT MOUNTED DIFFUSER. IN WALLS AND CEILINGS TO BE PROVIDED WITH SAME TYPE OF INSULATION. 19. HVAC SUPPLY DIFFUSERS AND RETURN GRILLES SHALL BE TITUS WITH WHITE FINISH, FLEXIBLE DUCT RUN-OUT SIZE TO MATCH DIFFUSER NECK SIZE. 9. EQUIPMENT AS PER SCHEDULED LIST OF ACCEPTABLE MANUFACTURERS: ALUMINUM CONSTRUCTION. SEE PLANS FOR THROAT CONNECTION SIZES. PROVIDE TITUS "PF" PLASTER FRAME ACCESSORY WHERE INSTALLED IN HARD CEILING. A/C EQUIPMENT: TRANE, CARRIER, LENNOX 20. THERMOSTATS SHALL BE 7 DAY PROGRAMMABLE WITH L.C.D. READOUT FOR ONE OR WHERE INSTALLED IN FIRE RATED WALL, PROVIDE AS A STEEL CONSTRUCTION DIFFUSER. TWO STAGES BASED ON STAGES OF COOLING FOR UNIT BEING SERVED. EQUAL TO A/C GRILLES: METALAIRE, TITUS, KRUEGER, PRICE WHITE-RODGERS MODEL 1F95-1291 (1F93-380 FOR AVERAGING OF MORE THAN 1 SIZE NOTED IS SQUARE INCHES OF FREE AREA. PENN, GREENHECK, COOK, NUTONE, BROAN SENSOR). WALL MOUNTED THERMOSTATS SHALL BE INSTALLED 4'-0" ABOVE FINISHED 9. PROVIDE INSECT SCREEN, CLEAR ANODIZE, COLOR BY ARCHITECT. FLOOR UNLESS OTHERWISE INDICATED. LOUVERS: RUSKIN, GREENHECK, KRUEGER, TITUS, NCA 21. THESE CONTRACT DOCUMENTS REPRESENT A PORTION OF A COMPLETE DESIGN 10. ALL EQUIPMENT SHALL BE STARTED, TESTED, ADJUSTED AND BALANCED FOR AIR FAN SCHEDULE WHICH, TO THE BEST OF OUR KNOWLEDGE HAVE BEEN PREPARED IN COMPLIANCE DELIVERY AS INDICATED ON THE PLANS, AND PLACED IN SATISFACTORY OPERATIONAL WITH APPLICABLE BUILDING CODE REQUIREMENTS. THE USE OF THESE PLANS CONDITION BY A TEST AND BALANCE COMPANY WHOSE SOLE BUSINESS IS THE WITHOUT THE CONSENT OF THE ENGINEER OF RECORD IS PROHIBITED. ALTERATIONS TESTING, ADJUSTING AND BALANCING OF SYSTEMS OF SIMILAR SIZE AND TYPE. THIS AMPS / WATTS MARK MANUFACTURER MODEL CFM ESP RPM VOLT SONES | WEIGHT REMARKS TO THE DESIGN AS SHOWN ON THESE PLANS ARE ONLY ALLOWED BY WRITTEN CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, MATERIALS AND EQUIPMENT TO 1.4 | 10.0 SP-B70 0.25 675 120/1 1, 4, 5, 6 GREENHECK 50 38W AUTHORIZATION OF THE ENGINEER OF RECORD. BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. THIS IS IN ADDITION TO ANY WARRANTY OR GUARANTEE FROM THE 1, 3, 5, 6 22. H.V.A.C. CONTRACTOR SHALL PROVIDE ONE SET OF CUTSHEETS OF ALL SELECTED EF-2**GREENHECK** CSP-A410 350 0.25 1000 120/1 2.5 40.0 EQUIPMENT MANUFACTURER. FURNISH THE OWNER WITH THE MANUFACTURER'S EQUIPMENT TO ELECTRICAL CONTRACTOR TO ADJUST CIRCUIT REQUIREMENTS (IF EF-3 WRITTEN WARRANTEE CERTIFICATES. GREENHECK SP-A290 250 0.25 1050 120/1 3.6 30.0 1, 2, 5, 6 81W REQUIRED) BASED ON ACTUAL SELECTED MANUFACTURER'S DATA. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ONE BELT AND SBE-2H24-5 3,000 0.34 1010 240/1 5.4A 16.8 310.0 7, 8, 9 23. CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES. REFERENCE ENTIRE SHEAVE CHANGE ON ALL BELT DRIVEN EQUIPMENT FOR BALANCING PURPOSES. SET OF CONSTRUCTION DOCUMENTS IN INSTALLATION OF MECHANICAL SYSTEMS INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING AND FIRE ALL CONTROLS ARE TO BE TESTED AND CALIBRATED SO AS TO BE OPERATING WITH PROVIDE WITH BACKDRAFT DAMPER THE MANUFACTURER'S SPECIFICATIONS. ANY DEFECTIVE UNITS ARE TO BE ACTIVATE VIA WALL SWITCH 24. CONTRACTOR SHALL INSTALL DUCT SMOKE DETECTOR IN SUPPLY WHERE INDICATED 11. ALL EQUIPMENT SHALL BE PROPERLY SUPPORTED AND ISOLATED TO PREVENT NOISE ON PLANS OR AS REQUIRED BY CODE AND AUTHORITY HAVING JURISDICTION. DUCT 3. ACTIVATE VIA TIME CLOCK SMOKE DETECTOR SHALL BE COMPATIBLE WITH FIRE ALARM MONITORING SYSTEM. AND VIBRATION TRANSMISSION. SWITCH WITH LIGHTS IN ROOM 25. PROVIDE 1 HOUR FIRE DAMPER AT ALL PENETRATIONS THROUGH RATED WALL 12. PROVIDE SPRING ISOLATORS FOR ALL TRUSS MOUNTED EXHAUST FANS. ASSEMBLIES. ELECTRONIC SPEED CONTROL MOUNTED IN CABINET 13. ALL EQUIPMENT SHALL BE LOCATED WITHIN THE MECHANICAL ROOM AND CEILING SPACES WITH ADEQUATE CLEARANCES FOR REPAIR AND MAINTENANCE. ALL PIPING WALL CAP WITH BUILT-IN BIRDSCREEN AND DAMPER SIDEWALL BELT DRIVE EXHAUST FAN, CORROSION RESISTANT, UL/Cul 705 LISTED, WD-32-PB-26X26 DAMPER MOUNTED HVAC SYMBOLS LONG WALL HSG, EXTENDED, W/OSHA GRD. PROJECT: DOUBLE LINE 9. SWITCH, NEMA-1 TOGGLE, JUNCTION BOX MOUNTED AND WIRED, AND MANUAL ON/OFF SWITCH City of Naples <u>DUCTWORK</u> <u>DUCTWORK</u> DIFFUSER TAG: <u>DIFFUSER TYPE</u> **ABBREVIATIONS** HORIZONTAL DUCT **Utilities Maintenance Bldg** TC TIME CLOCK Ø DIAMETER Cu COPPER KW KILOWATT RTU ROOF TOP UNIT SUPPLY DUCT, TURNING UP S FAN SWITCH 1450 4th Avenue North CU CONDENSER UNIT MFR MANUFACTURER SBCCI SOUTHERN BUILDING CODE CONGRESS A/C AIR CONDITIONING THERMOSTAT Building #950 INTERNATIONAL RETURN DUCT, TURNING UP DWG DRAWING MAX MAXIMUM AFF/G ABOVE FINISH FLOOR/GRADE Naples, Florida SMACNA SHET METAL AND AIR CONDITIONING EXHAUST FAN CONCENTRIC DUCT TRANSITION EXHAUST FAN MBH BTU X 1,000 CONTRACTOR'S NATIONAL ASSOCIATION AHU AIR HANDLING UNIT ECCENTRIC DUCT TRANSITION ESP EXTERNAL STATIC PRESSURE MECH MECHANICAL SS STAINLESS STEEL AHJ AUTHORITY HAVING JURISDICTION CEILING DIFFUSER (RETURN) CEILING DIFFUSER (SUPPLY) EXH EXHAUST MIN MINIMUM ASHRAE AMERICAN SOCIETY OF HEATING. TC TIME CLOCK REFRIGERATION, AND AIR CONDITIONING RECTANGULAR DUCT ELBOW WITH TURNING FC FAN COIL LV LOW VOLTAGE TSTAT THERMOSTAT WALL MOUNTED DIFFUSER, WALL MOUNTED DIFFUSER, ENGINEERS GRILLE, OR LOUVER GRILLE, OR LOUVER HGT HEIGHT MS MOTION SWITCH UNO UNLESS NOTED OTHERWISE (RETURN) BTUH BRITISH THERMAL UNIT PER HOUR RECTANGULAR DUCT TEE WITH TURNING VANES OA OUTSIDE AIR SPIN-IN, SADDLE TAP FITTING UL UNDERWRITERS LABORATORIES CD CONDENSATE DRAIN REV. DESCRIPTION WITH DAMPER HORSE POWER O/H OVER HEAD VAV VARIABLE AIR VOLUME CFM CUBIC FEET PER MINUTE 11-30-15 REVISION SYMBOL HVAC HEATING, VENTILATING, AND AIR CLG CEILING REQ'D REQUIRED W/ WITH PROJECT NO: 15-581 CONDITIONING MOTORIZED VOLUME DAMPER KEY NOTE (SEE KEY NOTES ON PLANS SHEETS) W/O WITH OUT CAD DWG FILE: DDA1508 FLEXIBLE DUCT **├───REFR** REFRIGERANT LINE DRAWN BY: BBCE STAFF CHK'D BY: MAB/JWB The design professional waives any and all responsibility and liability for problems which arise from the failure to follow these plans, specifications and the design intent they convey, or for problems which arise from others failure to obtain and/or follow the design professional's guidance with respect to any errors, omissions, inconsistencies, ambiguities or conflicts which are alleged. © All rights reserved, Do NOT reproduce without written consent of Disney & Associates, Architects, Dalas D. Disney, AlA

Mechanical Notes & Schedules

M-001



ASSUME ANY ADDITIONAL COSTS INVOLVED IN REALIZING THE INTENT OF THE ENGINEER, ARCHITECT, OR

SATISFACTORY OPERATING CONDITION BY THIS CONTRACTOR WHO SHALL GUARANTEE ALL WORKMANSHIP.

MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF (1) ONE YEAR FROM DATE

OF OWNER ACCEPTANCE, AND SHALL REPAIR SUCH DEFECTS WITHOUT COST TO THE OWNER. ALL

MINIMUM WIRE SIZE TO BE #12 Cu., MINIMUM CONDUIT SIZE IS TO BE 1/2". 20 AMP, 120 VOLT

10. RUN ONE EMPTY 3/4" EMT CONDUIT TO ACCESSIBLE CEILING SPACE FOR EACH (4) "SPARE" OR

1. THE ELECTRICAL CONTRACTOR IS TO INSTALL METERING OF A TYPE APPROVED BY THE UTILITY

COMPANY AND U.L. LISTED. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING ALL

12. A/C AIR HANDLER AND CONDENSING UNIT CIRCUIT BREAKERS MUST BE UL LISTED AS "HACR" RATED

DISTRIBUTION PANEL SHALL BE INSTALLED IN ACCORDANCE WITH THE EQUIPMENT NAME PLATE

-13. Water heater disconnect to be "hard wired" w/ flex conduit to heater "terminal box"

. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH OTHER PARTIES FOR

a. LIGHT FIXTURES AND DEVICES ON INTERIOR AND EXTERIOR OF BUILDING WITH COUNTER TOPS,

b. LIGHT FIXTURES AND DEVICES ON SITE WITH EXISTING/NEW UTILITIES. BUILDINGS/STRUCTURES.

c. ANY INTER-CONNECTIONS BETWEEN ANY OF THE TRADES (HVAC, PLUMBING, FIRE ALARM, FIRE

15. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY [WITHIN (2) WORKING DAYS OF DISCOVERY]

NOTIFY IN WRITING (VIA FAX. EMAIL) OR PHONE CALL AND ASSOCIATED HARD COPY LETTER WITH COPIES TO ALL PARTIES INVOLVED. THE GENERAL AND ELECTRICAL CONTRACTORS SHALL COORDINATE

MATERIALS OR CONSTRUCTION OF PROJECT. ARCHITECT AND ENGINEER SHALL BE NOTIFIED IN WRITING

AS TO THE DATE OF COORDINATION AND THE RESULTS OF THE COORDINATION. ANY ISSUES SHALL BE

PRIOR TO ANY INSTALLATION. COORDINATE SERVICE EQUIPMENT FAULT CURRENT RATINGS ACCORDINGLY.

SWITCHBOARD OR PANELBOARD. THIS AREA TO REMAIN CLEAR FROM THE EQUIPMENT TO 25'

b. A CLEARANCE OF 36" MINIMUM SHALL BE MAINTAINED IN FRONT OF ELECTRICAL EQUIPMENT FOR

THE ENTIRE WIDTH OF THE EQUIPMENT PLUS 12" TO EACH SIDE, AND FROM FLOOR TO SLAB

EQUIPMENT OVER 1200 AMPS OR 6 FEET OR GREATER IN WIDTH WITH OVERCURRENT DEVICES

PROVIDE COST DIFFERENTIAL IN WRITING TO OWNER / ARCHITECT / ENGINEER FOR COST INCREASE

16. THE ELECTRICAL, HVAC, PLUMBING, FIRE PROTECTION & GENERAL CONTRACTORS SHALL STRICTLY

a. NO PIPING OF ANY KIND, OR DUCTWORK, SHALL BE INSTALLED ABOVE AN ELECTRICAL

—17. ALL ELECTRICAL CONDUITS NOT CONTAINING SPECIFIED CONDUCTORS SHALL HAVE A PULL WIRE

18. DO NOT SCALE THE ELECTRICAL DRAWINGS, REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT

19. NO RECEPTACLE OR WALL SWITCHES SHALL BE INSTALLED "BACK TO BACK" IN RATED WALLS, INSURE

20. SIX SHOP DRAWINGS OF ALL ELECTRICAL EQUIPMENT, DEVICES, METERING, WIRING & CONDUIT

THAT SUCH LOCATIONS HAVE WALL STUDS BETWEEN BOXES AND BOXES ARE PROTECTED WITH UL

METHODS, BOXES, GROUNDING, ETC. SHALL BE REQUIRED <u>PRIOR</u> TO ORDERING OR ANY INSTALLATION

OF EQUIPMENT. SUBMITTALS ARE TO BE TOTAL & COMPLETE AND TO BE IN BOOK/BINDER FORMAT.

ANY EQUIPMENT NOT INCLUDED IN THE SHOP DRAWING SUBMITTALS, SHALL BE PROVIDED PER THE

. UNLESS NOTED OTHERWISE, ALL EXIT AND EMERGENCY LIGHTS ARE TO BE CONNECTED TO THE "HOT"

(BEFORE ANY SWITCHES) SIDE OF THE CIRCUIT WHICH SUPPLIES NORMAL POWER TO AREA LIGHTING.

ALL COSTS ASSOCIATED WITH PRINTING SHOP DRAWINGS RECEIVED ELECTRONICALLY SHALL BE

ADHERE TO THE FOLLOWING ITEMS WHEN DEALING WITH ELECTRICAL CLEARANCES:

ABOVE OR TO THE BOTTOM OF THE STRUCTURAL SLAB OR FLOOR.

REVIEWED BY THE ARCHITECT AND ENGINEER AND REVISIONS (IF REQUIRED) SHALL BE MADE PRIOR

TO ANY INSTALLATIONS. THE CONTRACTOR/S ARE TO VERIFY ACTUAL AVAILABLE FAULT CURRENT

WITH THE APPROPRIATE UTILITY COMPANY WITH REGARDS TO THE ELECTRICAL SERVICE TO THE

PROJECT. THIS SHALL OCCUR IMMEDIATELY UPON PROJECT STARTUP PRIOR TO ANY ORDERING

INSTALLATION OF ALL DEVICES. THIS SHALL INCLUDE (BUT NOT LIMITED TO) THE FOLLOWING:

IN ORDER TO USE NON-AUTO DISCONNECTS AT HVAC EQUIPMENT. BRANCH CIRCUIT BREAKERS AT

EQUIPMENT SHALL BE COVERED FOR THE DURATION OF THE MANUFACTURER'S GUARANTEE OR

WARRANTY, AND THIS CONTRACTOR SHALL FURNISH THE OWNER WITH ALL MANUFACTURER'S

6. ALL CONDUCTORS, BUSSING, ETC. SHOWN ARE TO BE COPPER UNLESS NOTED OTHERWISE.

CIRCUITS SHALL HAVE CONDUCTORS SIZED PER LENGTH OF RUN (UNO):

55' OR LESS = #12 Cu; 55' - 95' = #10 Cu; 95' - 145' = #8 Cu

THESE SIZES PERTAIN TO THE HOT, NEUTRAL, AND GROUND CONDUCTORS.

GUARANTEES AND WARRANTIES.

REQUIREMENTS.

SEE PLANS FOR DETAILS.

PLANTINGS, ETC.

OR CREDIT ACCORDINGLY.

INSTALLED.

LISTED PUTTY PADS.

PLANS AND SPECIFICATIONS.

REIMBURSED

REQUIRES A 72" CLEARANCE.

LOCATIONS, CABINETRY, CEILING GRIDS, DOOR SWINGS, ETC.

7. ALL WIRING TO HAVE THHN/THWN, 75°C INSULATION.

9. NO "WAFER" OR "PIGGYBACK" BREAKERS PERMITTED.

"SPACES" INDICATED ON <u>ALL</u> FLUSH MOUNTED PANELS.

METER CANS AND EQUIPMENT IN AN APPROVED MANOR.

FURNITURE, WALL FINISHES/CONSTRUCTION, ETC.

PROTECTION, ARCHITECTURE, ETC.).

ALL EQUIPMENT, FIXTURES, ETC., SHALL BE STARTED, TESTED, ADJUSTED AND PLACED IN

ELECTRICAL SYMBOL LEGEND LED LIGHT FIXTURE (SEE FIXTURE SCHEDULE) RECEPTACLE, WALL DUPLEX, 120V, SPECIFICATION GRADE, 20 AMP. INSTALL AT 18" A.F.F. TO C.L. (U.N.O.). LED LIGHT FIXTURE WITH EMERGENCY BATTERY AND BALLAST (SEE FIXTURE RECEPTACLE, WALL DOUBLE DUPLEX, 120V, SPECIFICATION GRADE, 20 SCHEDULE) AMP.INSTALL AT 18" A.F.F. TO C.L. (U.N.O.). LED LIGHT FIXTURE CONNECTED FOR 24 HOUR NIGHT LIGHT SERVICE (SEE WEATHERPROOF WEATHER RESISTANT GFIC RECEPTACLE, WALL DUPLEX, 120 FIXTURE SCHEDULE) VAC, SPECIFICATION GRADE, 20 AMP, INSTALL HORIZONTALLY WITH APPROVED HINGED COVER. LED LIGHT FIXTURE (SEE FIXTURE SCHEDULE) LIGHT FIXTURE, CEILING MOUNT (SEE FIXTURE SCHEDULE) RECEPTACLE, WALL MOUNTED, SPECIAL PURPOSE, 240V, AMPACITY RATING TO MATCH BRANCH CIRCUIT. (VERIFY HEIGHT) LIGHT FIXTURE, WALL MOUNT (SEE FIXTURE SCHEDULE) EXIT LIGHT FIXTURE (SEE FIXTURE SCHEDULE) A.F.F. TO C.L. (U.N.O.). \$ \$3 \$4 WALL TOGGLE SWITCH 1-POLE, 3, OR 4 WAY. SPECIFICATION GRADE, 20 "DROPS" AS SPECIFIED IN SPECIFIC NOTE #10. AMP. INSTALL @ 48" A.F.F. TO C.L. (U.N.O.). WALL BOX MOUNT MOTION DETECTOR CONTROL, 20A, 120/277 VAC (AS REQUIRED). (X) DENOTES TECHONOLOGY: INSTALL AT 48" A.F.F. TO C.L. (U.N.O.). CONFIGURE SUCH THAT SWITCH IS MANUAL ON (PUSHBUTTON) CONTROLS IF ANY). AND AUTO OFF (SENSOR). R - INFRA-RED SENSORSWITCH #WSD-SA D - I/R & MICROPHONIC - SENSORSWITCH #WSD-PDT-SA LOW VOLTAGE WALL MOUNTED OCCUPANCY SENSOR. REQUIRES USE OF LEVITON OSP OWER MODULE. INSTALL AT 48" A.F.F. TO C..L. (U.N.O.). (X)DENOTES TECHONOLOGY: LOCK-OFF PROVISION IS PROVIDED. R - 3000 sf INFRA-RED - SENSORSWITCH #WV-16 D - 1200 sf I/R & MICROPHONIC - SENSORSWITCH #WV-PDT-16 RL - HALLWAY INFRA-RED - SENSORSWITCH #HW13 20 AMP POWER MODULE FOR USE WITH LOW VOLTAGE OCCUPANCY 26. EQUIPMENT SHALL BE IDENTIFIED USING ENGRAVED, LAMINATED ACRYLIC OR MELAMINE LABELS A−1,3,5 ← PANEL AND CIRCUIT NUMBER DESIGNATION. SENSORS. SENSORSWITCH #PP20 PREPUNCHED OR PREDRILLED FOR RIVETING TO EQUIPMENT. WHITE LETTERS ON A DARK GRAY LIGHT FIXTURE DESIGNATION LEGEND: WALL BOX MOUNT MOTION DETECTOR CONTROL, 20A, 120/277 VAC (AS A-1 PANEL/CIRCUIT DESIGNATION REQUIRED). (X) DENOTES TECHONOLOGY: INSTALL AT 48" A.F.F. TO C.L. PANEL SCHEDULES SHALL BE MACHINE PRINTED WITH EACH CIRCUIT CLEARLY IDENTIFIED. THE (U.N.O.). SCHEDULE SHALL (AT MINIMUM) CONTAIN THE FOLLOWING INFORMATION: CIRCUIT DESIGNATION R - INFRA-RED SENSORSWITCH #WSD (INCLUDING "SPARE" OR "SPACE"); PANEL DESIGNATION; SERVICE/FEEDER ORIGIN; SIZE OF D - I/R & MICROPHONIC - SENSORSWITCH #WSD-PDT LOW VOLTAGE CEILING MOUNTED OCCUPANCY SENSOR. REQUIRES USE OF IDENTIFICATION LEGEND SHALL BE POSTED ON ALL PANELS INDICATING COLOR CODES OF CONDUITS SENSORSWITCH PP20 SERIES POWER PACK. (X) DENOTES TECHONOLOGY: R - 450 sf INFRA-RED - SENSORSWITCH #CM-9 THESE NOTES ARE PROJECT WIDE. R10 - 2400 sf INFRA-RED - SENSORSWITCH #CM-10 ALL EQUIPMENT LISTED AS NEMA 1, OR LOCATED INSIDE OF BUILDING/STRUCTURE (NOT IN A D - 450 sf I/R & MICROPHONIC - SENSORSWITCH #CM-PDT-9 CLASSIFIED AREA) SHALL HAVE IDENTIFICATION LABEL RIVETED TO ENCLOSURE. LABEL SHALL BE AS D10 - 2400 sf I/R & MICROPHONIC - SENSORSWITCH #CM-PDT-10 RH - HIGHBAY ISLE INFRA-RED - SENSORSWITCH #HM50 -----CONDUIT RUN (CONCEALED) ALL EQUIPMENT LISTED OTHER NEMA 1 SHALL HAVE STENCIL TYPE LABEL PAINTED ONTO ENCLOSURE. RH - HIGHBAY INFRA-RED - SENSORSWITCH #CM6 LETTERING TO BE 1" (MINIMUM) IN HEIGHT AND BE OF CONTRASTING COLOR OF ENCLOSURE. ——CONDUIT RUN (IN SLAB OR GRADE) ---T---TELEPHONE CONDUIT AND PULL WIRE CEILING FAN SPEED CONTROL SWITCH. 120V. INSTALL AT 48" A.F.F. TO C.L. —————LOW VOLTAGE WIRING GENERAL SIGNAGE SHALL BE PROVIDED AS REQUIRED BY CODE OR AS INDICATED BY PLAN SET SIGNAGE SHALL BE ENGRAVED, LAMINATED ACRYLIC OR MELAMINE PLASTIC, MINIMUM 1/16" THICK FOR EXHAUST FAN. IF NOT ON FIXTURE SCHEDULE, FAN PROVIDED AND SIGNS UP TO 20 SQUARE INCHES AND 1/8" THICK FOR LARGER SIGNS. SIGNAGE SHALL HAVE BLACK INSTALLED BY MECHANICAL, CONNECTED BY ELECTRICAL LETTERS ON WHITE FACE, PREPUNCHED OR PREDRILLED FOR MECHANICAL FASTENERS. CONTRACTOR SHALL LABEL ALL BOXES CONTAINING POWER CABLING WITH THE PANEL & CIRCUIT OF ORIGIN OF EACH CONDUCTOR WITHIN THE BOX. LABELING SHALL BE VIA PERMANENT BLACK MARKER & STENCIL WITH 1/4" LETTERING. POWER CONDUCTORS SHALL HAVE ADHESIVE TYPE WRAP LABELS APPLIED INDICATING PANEL & CIRCUIT OF ORIGIN. LABELS SHALL BE AFFIXED AT EVERY LOCATION SPECIFIC NOTES CONTRACTOR SHALL LABEL ALL BOXES CONTAINING TELEPHONE, CATV, SECURITY, PA OR SOUND BY VERIFY ROUGH-IN LOCATIONS. TYPE OF CONNECTION, AND AMPACITY REQUIRED MEANS OF SMALL ADHESIVE TYPE LABELING APPLIED AT EACH DEVICE INDICATING DEVICE NUMBER. FROM APPLICABLE EQUIPMENT DRAWINGS PRIOR TO INSTALLING ANY CONDUIT. UNIQUE NUMBERS SHALL BE GIVEN TO EACH DEVICE FOR EASE OF IDENTIFICATION. TELEPHONE CONDUCTORS, OR BOXES. THIS EQUIPMENT IS FURNISHED AND PHYSICALLY (2) 3/4" EMT. PROVIDE THE FOLLOWING: CATV, SECURITY PA & SOUND CABLING SHALL HAVE ADHESIVE TYPE WRAP LABELS APPLIED INDICATING TERMINATING DEVICE NUMBER. LABELS SHALL BE AFFIXED AT EVERY LOCATION ACCESSIBLE

MC METAL CLAD CABLE AIC AMPS INTERRUPTING CAPACITY RECEPTACLE, WALL SINGLE, SPECIFICATION GRADE, 20 AMP. INSTALL AT 18" MS MOTION SWITCH BOND TELEPHONE/DATA OUTLET, WALL. PROVIDE A MINIMUM OF (2) CABLE CIRCUIT BREAKER N1 NEMA 1 (INDOOR ENCLOSURE) N3R NEMA 3R (RAIN TIGHT ENCLOSURE) COPPER MOTOR STARTER, CIRCUIT BREAKER COMB. TYPE, SIZE AS REQUIRED OR SHOWN, (3) OVERLOADS WITH H-O-A SWITCH. 120 VOLT COIL (VERIFY WITH CU CONDENSER UNIT N/NEUT NEUTRAL DISC DISCONNECT NP NON-PROTECTED MOTOR DISCONNECT SWITCH, DEAD FRONT MOLDED CASE SWITCH (IF 60 AMPS OR LESS) NON-PROTECTED, NEMA 1 NEMA 3R AS REQUIRED. EXHAUST FAN OC OVER COUNTER POWER PANEL (FLUSH/SURFACE) SEE SCHEDULES EMERGENCY O/H OVER HEAD DISCONNECT SWITCH, LESS THAN 60 A. USE OF SNAP SWITCHES OR ELECTRICAL METALLIC TUBING (THIN NON-PROTECTED MANUAL MOTOR STARTER DEVICES IS ACCEPTABLE IF A P POWER RECEPT RECEPTACLE/S ■ ELECTRICAL JUNCTION BOX, SIZE AS REQUIRED IF NOT SHOWN. EX EXIT RS RIGID STEEL CONDUIT MOTOR (H.P. NOTED IF OVER 1 H.P.: OTHERWISE, FRACTIONAL) FPL FLORIDA POWER & LIGHT S/N SOLID NEUTRAL F.O. FIBER OPTIC/S SPD SURGE PROTECTION DEVICE FS FUSED SWITCH SS STAINLESS STEEL a/ab SWITCHING CONTROL DESIGNATION G GROUND FIXTURE DESIGNATION (SEE SCHEDULE) XFMR TRANSFORMER EM/EX FIXTURE DESIGNATION (SEE SCHEDULE) GCO GROUNDED CONVENIENCE OUTLET INDICATES 24 HOUR OPERATION SWITCHED AT PANEL. PROVIDE TC TIME CLOCK GFCI GROUND FAULT CIRCUIT INTERRUPTER BREAKER RATED FOR SWITCHING DUTY T/TELE TELEPHONE HGT HEIGHT SPECIFIC NOTE RELATIVE TO SINGLE CALL OUT, SEE SPECIFIC NOTE LEGEND, TV TELEVISION HTR HEATER KEY NOTE, SEE KEY NOTES ON EACH SHEET, THESE NOTES ARE ONLY UC UNDER COUNTER HP HORSE POWER APPLICABLE TO THOSE SHEETS ON WHICH THEY APPEAR. UNO UNLESS NOTED OTHERWISE INDEPENDENT GROUND/ISOLATED UG UNDERGROUND JUNCTION BOX UL UNDERWRITERS LABORATORIES KILOVOLT AMPERI U.N.O. UNLESS NOTED OTHERWISE COVER PLATES FOR ELECTRICAL DEVICES ARE TO BE: a. DEVICE COVER PLATES TO BE #302 STAINLESS STEEL. KW KILOWATT WP WEATHER PROOF WR WEATHER RESISTANT LIGHT CONTROL DETAIL

A/C AIR CONDITIONING

AHU AIR HANDLING UNIT

AFF/G ABOVE FINISH FLOOR/GRADE

REQUIRE MODIFICATION. HOWEVER, THIS "SYSTEM" IS INTENDED TO PROVIDE AUTOMATIC SHUT OFF OF ALL LIGHT FIXTURES DURING PERIODS OF UNOCCUPANCY. ANY SUBSTITUTED SYSTEMS WILL BE REQUIRED TO DUPLICATE THIS FUNCTION. NO EMERGENCY FIXTURES, 24 HOUR LIGHTS, TIME CLOCKS, CONTACTORS OR EXIT SIGNAGE IS TO BE CONNECTED THROUGH THIS SYSTEM. SEE MANUFACTURER'S WIRING DETAILS FOR FURTHER INSTRUCTIONS. POWER MODULE _o—_a—a+ +a− - LOCAL CONTROL SWITCH(ES) · UP TO (3) OCCUPANCY SENSORS

CERTIFICATE OF AUTHORIZATION #6032 JOSEPH W BROUGHTON, PE #63949 LC LIGHTING CONTACTOR MARK A BRANT, PE #54692 Associates, P.A. 1865 VETERANS PARK DRIVE, SUITE 301, NAPLES. FLORIDA 34109 PHONE (239) 596-2872 FAX (239) 596-2874 **ARCHITECTURE** and **PLANNING** FLORIDA REGISTRATION AA 0002502 NOTES:

CONSULTANTS:

CLEVELAND AVENUE SUITE 229

FORT MYERS, FL 33907

(239) 274-0020 (239) 274-0021 (FAX)

EMAIL: BBCE@BURGESSBRANT.COM

THIS SCHEMATIC IS BASED UPON SPECIFIC DEVICES. SUBSTITUTION OF EQUIPMENT MAY—

THIS DRAWING IS BEING RELEASED FOR

LT/S LIGHT/S

LV LOW VOLTAGE

THE PURPOSE OF BIDDING.

ABBREVIATIONS

City of Naples **Utilities Maintenance Bldg**

PROJECT:

1450 4th Avenue North Building #950

Naples, Florida

REV. DESCRIPTION 11-30-15 15-581

PROJECT NO: CAD DWG FILE: DDA1508 DRAWN BY: BBCE STAFF CHK'D BY: MAB/JWB

The design professional waives any and all responsibility and liability for problems which arise from the failure to follow these plans, specifications and the design intent they convey, or for problems which arise from others failure to obtain and/or follow the design professional's guidance with respect to any errors, omissions,

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Electrical Notes. Schedules & Details

E-001

INSTALLED BY "OTHERS". ALL ELECTRICAL CONNECTIONS EXTERNAL TO THE

5) PROVIDE A SERVICE GROUND ACCORDING TO N.E.C. ARTICLE 250.52 OF THE N.E.C. MINIMUM INSTALLATION TO INCLUDE: BUILDING FOOTER/ FOUNDATION REINFORCING STEEL (20' OF #4 MIN. SIZE) TURNED UP OR OTHERWISE EXPOSED AT THE SERVICE WITH APPROVED CONNECTOR ATTACHMENT BONDING A #4 Cu GROUNDING CONDUCTOR TO THE STEEL; (2) DRIVEN ROD GROUNDS (MIN. 5/8" X 8' DEEP) WITH #6 COPPER GROUNDING CONDUCTOR, IF AVAILABLE ON PREMISES, ALSO, BOND: METAL COLD WATER PIPING AND METAL BUILDING FRAME WITH JUMPERS SIZED FROM 250.66, EQUIPMENT GROUNDING PER TABLE 250.122.

〔10〕COMBINATION TELEPHONE / DATA OUTLET. AT EACH WALL MOUNTED DEVICE, PROVIDE A 2-GANG BOX WITH A 1-GANG RING AT 18" AFF TO CENTER (UNO) WITH

a. "CAT-6" CABLE (4 PAIR TWISTED #24 AWG) PER "DROP" b. BLANK PLATE - DEVICES TO BE PROVIDED BY EQUIPMENT VENDER

c. SERVICE CONDUITS ARE TO BE ROUTED TO 6" ABOVE CEILINGS, TURN IN 6" MINIMUM AT ANY EXTERIOR WALL. d. ALL CABLING HOMERUNS ARE BY CLIENT'S "IT" INSTALLER.

VERIFY EXACT QUANTITY OF CABLE "DROPS" WITH OWNER "IT" REP IF AVAILABLE. (11) 20 AMP GROUND FAULT INTERRUPTER TYPE RECEPTACLE.

(13) INSTALL KEYLESS LAMP HOLDER WITH G.C.O. ADJACENT TO EQUIPMENT SERVICE AREA. LOCATE LIGHT SWITCH NEAR ACCESS. (100 WATT LAMP). (16) HVAC MAINTENANCE RECEPTACLE (GFIC), LOCATE AS INDICATED ON PLANS (OR)

(20) SWITCHED JUNCTION BOX ABOVE CEILING FOR FUTURE CEILING FAN; ANCHOR TO

WITHIN 25' (MAX) FROM CONDENSING UNIT IF NOT INDICATED. STRUCTURE BY MEANS OF UNI-STRUT / THREADED RODS / FTC. TO SUPPORT 75 LBS. PROVIDE BLANK COVER, INSTALL ALL WIRING INCLUDING SWITCH AND POWER LEGS. <u>NOTE:</u> BOX MUST BE IDENTIFIED FOR FAN SUPPORT USE.

EQUIPMENT SHALL BE MADE BY THE ELECTRICAL CONTRACTOR. WIRE, CONDUIT, LUGS, RECEPTACLES, PIG TAILS, DISCONNECTS, AND ECT., AS MAY BE REQUIRED SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. **NOTE: INCLUDE WORSE CONDITION IN PRICING.

3 CHASE VERTICAL AT THIS POINT TO FEED EQUIPMENT. LIGHT FIXTURES AND/OR DEVICES LOCATED ABOVE OR BELOW AS APPLICABLE.

120/240 (or 208) VOLT SINGLE PHASE BLACK/RED/WHITE/GREEN WIRE SIZE #6 AND SMALLER SHALL HAVE FACTORY COLORED INSULATION AS LISTED ABOVE. WIRING SIZE #4 AND LARGER MAY BE COLOR CODED BY TAPE. COLOR TAPE SHALL BE APPLIED TO ALL CONDUCTORS AT 5' INTERVALS, WITH 6" (MINIMUM) "SWATCHES."

28. IN EQUIPMENT, STORAGE OR OTHER ROOMS THAT MAY HOUSE ELECTRICAL EQUIPMENT, THE FLOOR SHALL BE OUTLINED BY 2" (MINIMUM) WIDE NON-SLIP, HIGH-TRAFFIC, EPOXY TYPE YELLOW PAINT TO INDICATE REQUIRED CLEAR SPACE AROUND & IN FRONT OF ALL ELECTRICAL EQUIPMENT. LABELING SHALL READ "DEDICATED EQUIPMENT SPACE — NO STORAGE PERMITTED". THIS REQUIREMENT SHALL NOT APPLY TO ANY NORMALLY OCCUPIED SPACES WITH ARCHITECTURAL FINISHES.

MARKING TAPE SHALL BE SELF-ADHESIVE VINYL WRAP-AROUND TYPE.

SERVICE/FEEDER CONDUCTORS; VOLTAGE; PHASE; AND BUS SIZE.

BACKGROUND WITH MINIMUM LETTER SIZE TO BE 3/8".

AND CONDUCTORS (AS LISTED BELOW).

ACCESSIBLE.

ABOVE EXCEPT WITH MINIMUM 1/2" LETTER HEIGHT.

27. CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

29. THE ELECTRICAL CONTRACTOR SHALL GROUND THE TELEPHONE/CATV TERMINAL BOARDS/PANELS IN ACCORDANCE WITH N.E.C. 800.100/820.100.

REVISIONS TO THESE DRAWINGS AND CERTIFICATION THERETO, WHICH MAY BE REQUIRED BY THE APPLICABLE INSPECTION AUTHORITY, BECAUSE OF CONTRACTOR (OR "OTHERS") OPTED REVISIONS SHALL BE COMPENSATED TO THE ENGINEER/S BY THE REQUESTING CONTRACTOR. PAYMENT WILL BE REQUIRED AT TIME OF CERTIFICATION DELIVERY.

31. WITHIN 30 DAYS OF PROJECT COMPLETION, RECORD DRAWINGS (AS BUILT) OF THE PROJECT BE PROVIDED BY THE CONTRACTOR/S AND SUBMITTED TO THE OWNER. THESE SHALL INCLUDE (MINIMALLY) A SINGLE LINE POWER RISER, PANEL SCHEDULES AND FLOOR PLANS. IN ADDITION OWNER COPIES OF OPERATIONS MANUALS FOR ALL EQUIPMENT REQUIRING SERVICE WITH NAMES AND ADDRESS, AND, CONTACT FOR QUALIFIED SERVICE AGENCY/S.

IT IS HERE NOTED THAT IF THERE ARE <u>NO</u> CONSTRUCTION OBSERVATION ("CO") TRIPS PERFORMED BY THE ENGINEER/S OF RECORD THERE WILL BE NO CERTIFIED PLANS ("AS BUILT") PROVIDED BY THE ENGINEER/S OF RECORD.

32. AS DESIGNED, THE SYSTEM VOLTAGE DROPS ARE LESS THAN 2% FOR FEEDERS AND 3% FOR THE BRANCH CIRCUITS.

33. SEE THE POWER RISER DIAGRAM FOR THE AIC RATING REQUIRED AT EACH PANEL. IF NOT INDICATED, THE AIC RATING OF BRANCH CIRCUIT BREAKERS SHALL BE 10,000 AMPS (THE MINIMUM RATING AVAILABLE) FOR MAIN LUG PANELS. FOR THE PURPOSES OF THESE PLANS, THE EQUIPMENT IS TO BE FULLY RATED.

SERIES RATED EQUIPMENT IS ACCEPTABLE AS A COST SAVINGS. IF THIS IS USED, THE CONTRACTOR IS TO INDICATE AS SUCH IN THE BID. THE CONTRACTOR SHALL COORDINATE AND PROVIDE THE RATINGS IN THE SWITCHGEAR SHOP DRAWINGS.

34. ANY EQUIPMENT NOT INCLUDED IN THE SHOP DRAWING SUBMITTALS, SHALL BE PROVIDED PER THE

PLANS AND SPECIFICATIONS.

	LIGHT FIXTUR	E SCHEDULE	
TYPE	DESCRIPTION	MANUFACTURER	MODEL
A	2'x4' LED GRID TROFFER, FLUSH WHITE ALUMINUM DOOR, .125" PATTERN #12 ACRYLIC PRISMATIC LENS, 6000 LUMEN — 3000 DEGREE K — 54.8 W LED ENGINE, 50% STEP LEVEL DIMMING DRIVER, MULTI-VOLT. NOTE: EMERGENCY FIXTURES TO HAVE 1400 LUMEN EMERGENCY BATTERY PAK. LITHONIA #EL14L	LITHONIA	2GTL 4 — 60L FW — A12125 MVOLT SLD LP830
В	1'x4' LED FLANGED TROFFER, FLUSH WHITE ALUMINUM DOOR, .125" PATTERN #12 ACRYLIC PRISMATIC LENS, 2000 LUMEN — 3000 DEGREE K — 20.5W LED ENGINE, NO CONTROLS, MULTI-VOLT. NOTE: ENERGENCY FIXTURES TO HAVE 1400 LUMEN EMERGENCY BATTERY PAK. LITHONIA #EL14L	LITHONIA	GTL 4 F 20L FW — A12.125 MVOLT — LP830
С	RECESSED LED DOWNLIGHT, 6.75" APERTURE, WET LOCATION LISTED FLAT POLYCARBONATE LENS, 1100 LUMEN — 3000° K — 15W ENGINE, NO CONTROLS, 120V.	LITHONIA	6VLFLXWL 1100 3K — 6VLEDWL 26UBH
D	EXTERIOR WALL MOUNT LED SECURITY AREA LIGHT, BLACK POLYCARBONATE HOUSING W/ TOP LENS VISOR, 30C 0 67W — 5176 LUMEN ENGINE, TYPE III MEDIUM DISTRIBUTION. WET LOCATION LISTED. MOUNT @ +12' A.F.G.	LITHONIA	TWP LED 30C T3M M-VOLT DBLXD
EX	EXIT SIGN, STENCIL FACE, UNIVERSAL MOUNT, RED L.E.D. LAMPS, EMERGENCY NI-CAD BATTERY PACK, WHITE PLASTIC HOUSING. 120V.	LITHONIA	EXR LED EL 120 M6
F	4' CHAIN HUNG LED UTILITY LIGHT, CLEAR POLYCARBONATE LENS, IMPACT RESISTANT POLYCARBONATE HOUSING, 12000 LUMEN — 3500 DEGREE K — 109W ENGINE, 80 CRI, WIDE DISTRIBUTION, MULTI-VOLT. INSTALL (CHAIN HUNG) @ + 16' A.F.F. NOTE: EMERGENCY FIXTURES TO HAVE LED EMERGENCY BATTERY PACK. BODINE #BSL722.	LITHONIA	VAP 12000LM PCL WD MVOLT 35K 80CRI WLFEND2 STSL CMB LSC
G	PENDANT (PIPE) MOUNT CEILING FAN, 12' DIAMETER ALUMINUM AIRFOIL BLADES, NEMA 4X WALL MOUNT VARIABLE SPEED CONTROLLER, 1.0 H.P. — 120 VOLT — 1 PHASE MOTOR. SAFETY CABLES, HUB CLIPS & AIRFOIL RETAINING SAFETY FEATURES. MOUNT @+ 16' A.F.F.	BIG ASS FANS	BASIC 6 - 12 - 120V
Н	SAME AS "A" EXCEPT W/ 3000 LUMEN - 32W LED ENGINE.	LITHONIA	2GTL 4 — 30L FW — A12125 MVOLT SLD LP830

STARTUP AND COMMISSIONING OF ALL LIGHTING SYSTEM CONTROLS (DIMMING & OCCUPANCY SENSORS) SHALL BE PERFORMED BY FACTORY TRAINED PERSONNEL WHO ARE FAMILIAR WITH THE OPERATION OF THE RESPECTIVE SYSTEMS. TRAINING SHALL BE PROVIDED TO OWNER'S STAFF SUCH THAT THE STAFF WILL BE FLUENT IN THE SYSTEMS OPERATION, MAINTENANCE, ALTERATION, ETC.

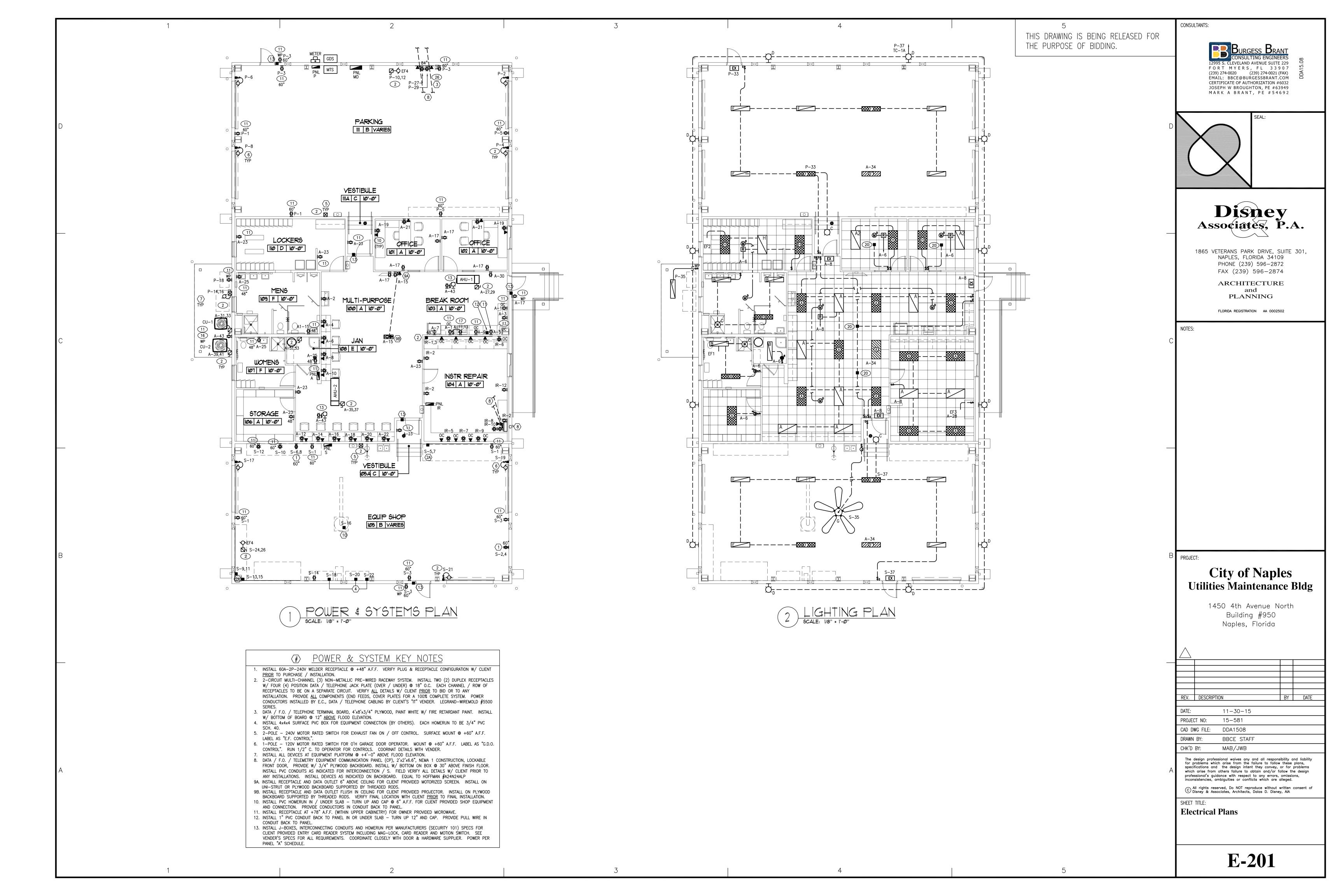
CONTRACTOR TO PROVIDE PRICING BASED UPON THE SPECIFIED LIGHT FIXTURES. ALTERNATE FIXTURES WILL BE CONSIDERED, BUT MUST BE SUBMITTED AT LEAST TEN DAYS PRIOR TO BID DATE FOR APPROVAL. CUTSHEETS MUST INCLUDE INFORMATION TO BE ABLE TO COMPARE CONSTRUCTION, "GRADE," LAMPING, VOLTAGE, FINISHES, GENERAL APPEARANCE, DIMENSIONS, LENSING, ACCESSORIES, AND PHOTOMETRY TO THE SPECIFIED FIXTURES. ANY FIXTURE NOT MEETING THE DESIGN CRITERIA SHALL BE REJECTED. IF THE CONTRACTOR FAILS TO OBTAIN AN APPROVED FIXTURE PACKAGE PRIOR TO BIDDING, THE CONTRACTOR SHALL PROVIDE THE FIXTURES AS SPECIFIED.

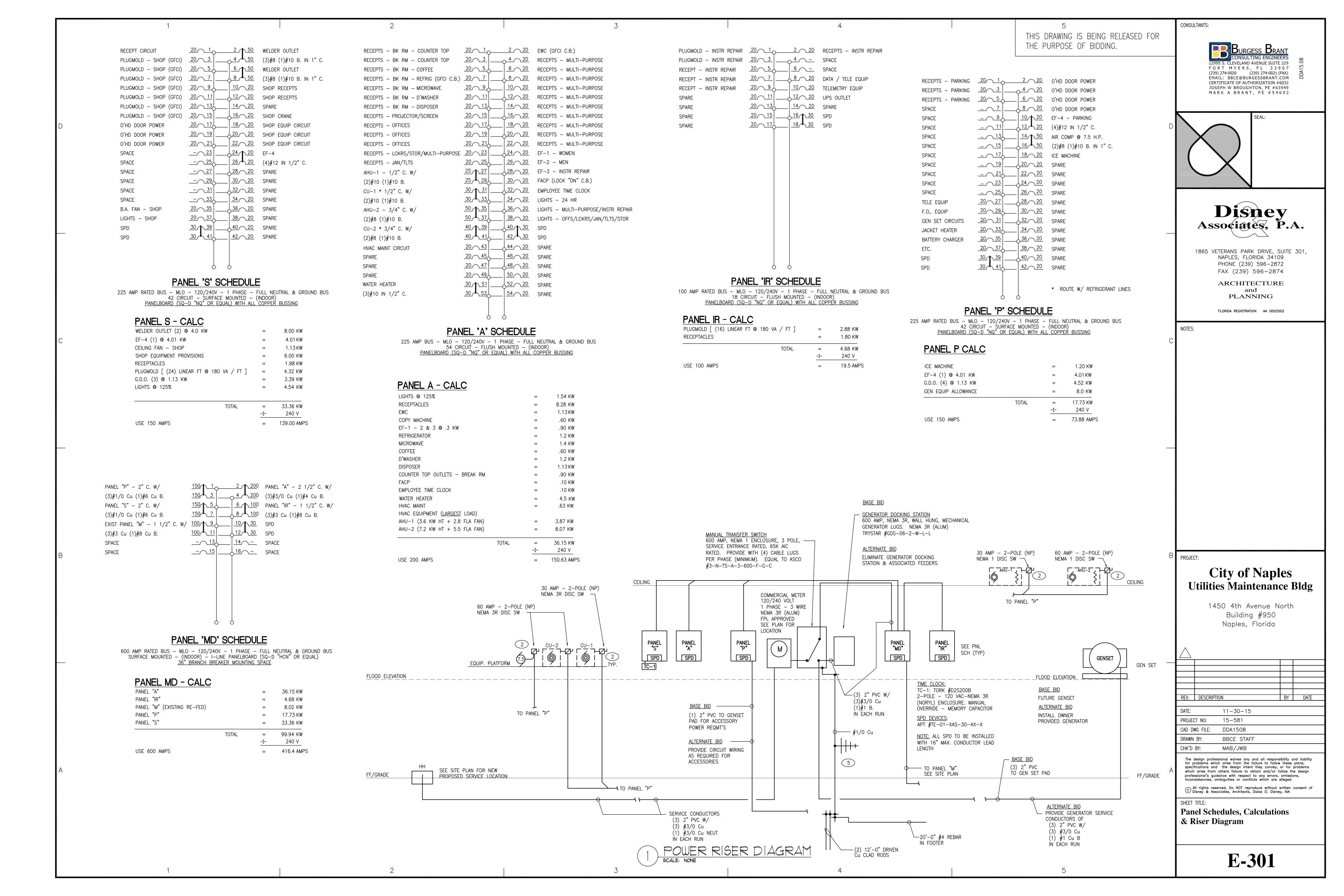
THE PURPOSE OF BIDDING. 2995 S. CLEVELAND AVENUE SUITE 229 FORT MYERS, FL 33907 (239) 274-0020 (239) 274-0021 (FAX) EMAIL: BBCE@BURGESSBRANT.COM CERTIFICATE OF AUTHORIZATION #6032 JOSEPH W BROUGHTON, PE #63949 MARK A BRANT, PE #54692 __EXISTING POWER POLE AND ASSOCIATED O/H POWER LINES PROPOSED NEW SERVICE. SEE RISER DIAGRAM FOR INFORMATION. CONTRACTOR TO VERIFY ALL DETAILS WITH FP&L REP. PRIOR TO BIDS AND/OR TO ANY INSTALLATION Associates, P.A. 1865 VETERANS PARK DRIVE, SUITE 301, NAPLES, FLORIDA 34109 PHONE (239) 596-2872 FAX (239) 596-2874 ARCHITECTURE and PLANNING FLORIDA REGISTRATION AA 0002502 PROVIDE (1) 2" PVC FOR FUTURE NOTES: GENERATOR CONNECTIONS TO EXISTING BUILDING DISTRIBUTION. — FUTURE GENERATOR CONDUITS, SEE RISER DIAGRAM FOR DETAILS /____ LNEW MAINT. NEW MAINTENANCE BLDG.-TURN UP 6" & CAP. LABEL FOR "GEN 1" PVC FOR FUTURE GENERATOR BLDG. MAIN MAIN ELECTRICAL CONTROL" CONDUCTORS. MARK WITH 4x4 REMOTE EMERGENCY STOP TERMINAL SERVICE EQUIPMENT. PT POST OR CONCRETE PORT. BOARD. SEE <u>ALTERNATE #1</u> SEE RISER DIAGRAM & COORDINATE DETAILS AND FINAL LOCATION PLANS FOR PROVIDE BRËAK GLASS TYPE PLANS FOR DETAILS & EMERGENCY STOP STATION & REQUIRED WIRING. INSTALL NEW 1" PVC FOR FUTURE GEN CONTROL CONDUCTORS. ALTERNATE #1 PROVIDE ALL WIRING FOR REMOTE PANEL ANNUNCIATOR. PROPOSED NEW NAPLES UTILITIES MAINT. BLDG NOTE: NO SPLICES FOR ANY CABLES OR CONDUCTORS—INSTALL 100% NEW CABLES AND CONDUCTORS INSTALL (3) NEW 2" PVC NEW HAND HOLE FØR TELÈMÉTRY CABLING — B PROJECT: INSTALL NEW 2"-PVC FOR F.O. City of Naples Utilities Maintenance Bldg - EXISTING FIBER OPTIC CONDUIT, INTERCONNECT IT DEXISTING (DEMOED) CABLES (FUTURE) BLDG. CONTRACTOR TO INSTALL NEW HANDHOLE FOR FUTURE F.O. GENERAL CONTRACTOR IS TO RELOCATE THE EXISTING TELEMETRY ANTENNA TO THIS LOCATION. "INTERCEPT" AND FOR SUBSEQUENT CONNECTION TO NEW MAINT. BLDG. COMMUNICATION PANEL. ELECTRICAL CONTRACTOR TO DO ALL CONDUIT/PULL-BOX INSTALLATIONS. <u>ALL</u> F.O. INSTALLATIONS BY OTHERS. COORDINATE <u>ALL</u> DETAILS PRIOR TO ANY INSTALLATION. COORDINATE ALL DETAIL WITH OWNER. REWORK/EXTEND ALL CABLING, 1450 4th Avenue North CONDUCTORS, WIRING, ETC,. AS Building #950 REQUIRED FOR A COMPLETE OPERABLE SYSTEM. GENERAL -EXISTING FEEDERS FROM EXISTING (DEMOED) BLDG. CONTRACTOR TO Naples, Florida CONTRACTOR IS RESPONSIBLE FOR INTERCEPT AND RE-ROUTE TO NEW MAINTENANCE BLDG. MAIN SERVICE ALL CONDUIT INSTALLATIONS, ALL CABLING, CONDUCTORS, WIRING, ETC,.... EQUIPMENT (MDP). SEE PLANS FOR NEW FEEDER NFORMATION AND ARE BY CLIENT. EXISTING FIBER **EXISTING NAPLES UTILITIES BLDG** REV. DESCRIPTION 11-30-15 PROJECT NO: 15-581 | EXISTING | PANELS CAD DWG FILE: DDA1508 BBCE STAFF DRAWN BY: MAB/JWB CHK'D BY: The design professional waives any and all responsibility and liability for problems which arise from the failure to follow these plans, specifications and the design intent they convey, or for problems which arise from others failure to obtain and/or follow the design professional's guidance with respect to any errors, omissions, inconsistencies, ambiguities or conflicts which are alleged. © All rights reserved, Do NOT reproduce without written consent of Disney & Associates, Architects, Dalas D. Disney, AlA Electrical Site Plan & Light Fixture Schedule

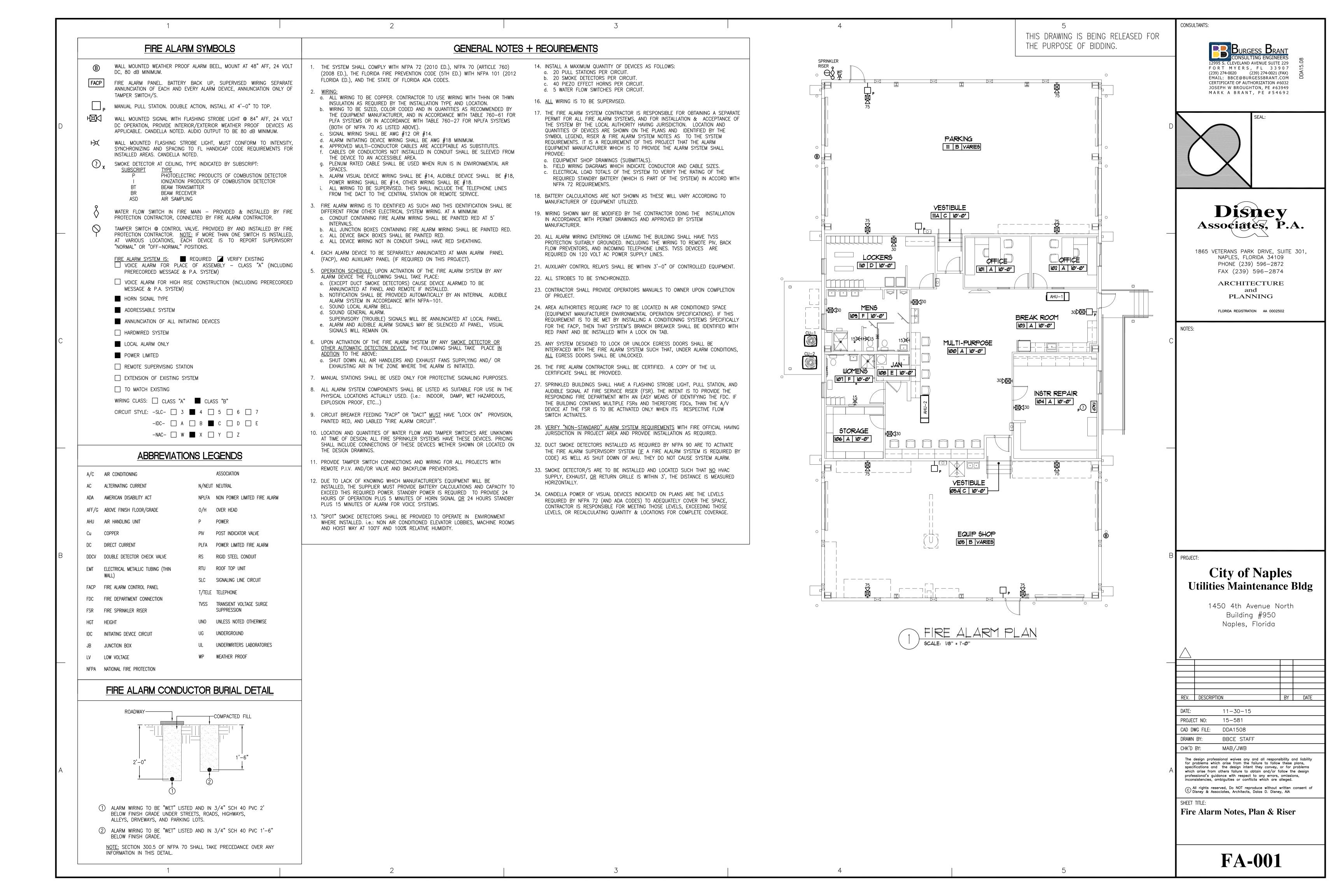
CONSULTANTS:

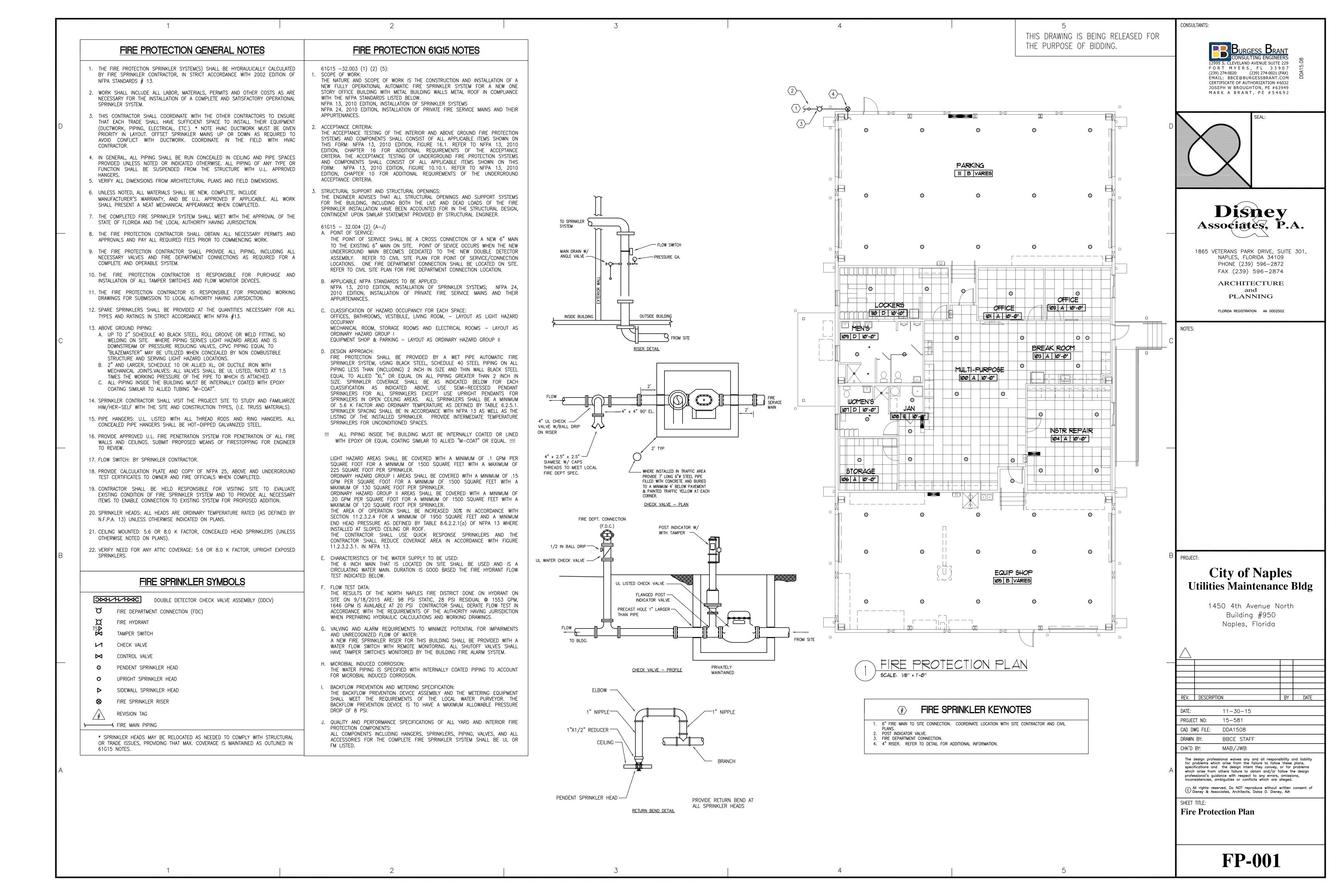
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010 GENERAL NOTES:

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

DRAWINGS SHALL NOT BE SCALED, REFER TO DIMENSIONAL INFORMATION PROVIDED OR CONTACT THE ENGINEER OR ARCHITECT FOR CLARIFICATION.

ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. BY USE OF THESE PLANS, THE CONTRACTOR AGREES TO ASSUME FULL LIABILITY AND ANY COST ASSOCIATED WITH NON COMPLIANCE WITH THIS PARAGRAPH.

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS AND TIEDOWNS.

WORK SHALL CONFORM TO ALL APPLICABLE STATE, COUNTY AND CITY ORDINANCES/CODES.

THE DESIGN PROFESSIONAL WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE

1061 DESIGN LOADS:

THE STRUCTURAL SYSTEM FOR THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 5TH EDITION, USING THE FOLLOWING SUPERIMPOSED LOADS:

OFFICE/MULI-PURPOSE......50 PSF
PARKING & EQUIPMENT + SHOP......300 PSF

WIND: ASCE 7-10 // FLORIDA BUILDING CODE 5TH EDITION, SECTION 1609

Vult = 170 MPH (3 SECOND GUST)

Vasd = 132 MPH

ENCLOSED BUILDING, RISK CATEGORY II, EXPOSURE C, h \leq 30' COEFFICIENT OF INTERNAL PRESSURE, Cpi = \pm 0.18

071 CONSTRUCTION OBSERVATION

THE CONTRACTOR SHALL CONTACT LIEBL & BARROW ENGINEERING, INC. TO OBSERVE THE FOLLOWING (WITH 48 HOURS NOTICE):

1. FOUNDATIONS PRIOR TO CONCRETE PLACEMENT

2. METAL BUILDING FRAMING AFTER ERECTION

CONSTRUCTION OBSERVATION IS A VISUAL OBSERVATION OF MATERIALS AND WORK IN PROGRESS TO DETERMINE IF THE WORK IS PROCEEDING IN GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND DESIGN CONCEPT. THIS DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES.

LIEBL & BARROW ENGINEERING, INC. DOES NOT HAVE CONTROL OVER, AND IS NOT RESPONSIBLE FOR, SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK FOR THIS PROJECT. THOSE FUNCTIONS ARE THE CONTRACTORS RESPONSIBILITY.

1120 SHOP DRAWING REVIEW:

SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC.

TO THE ARCHITECT/ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW WILL BE RETURNED UNCHECKED.

ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL

SHOP DRAWING SUBMITTALS SHALL INCLUDE ONE ORIGINAL AND THREE SETS OF BLUEPRINTS. ONE SET OF PRINTS WILL BE RETAINED BY THE ENGINEER, ONE BY THE ARCHITECT, ONE BY THE LOCAL BUILDING DEPARTMENT (WHERE REQUIRED) AND THE CONTRACTOR SHALL MAKE PRINTS FROM THE ORIGINALS AS REQUIRED FOR DISTRIBUTION.

IN ALL INSTANCES THE CONTRACT DOCUMENTS WILL GOVERN OVER THE SHOP DRAWINGS UNLESS OTHERWISE SPECIFIED IN WRITING BY THE ENGINEER.

IF SHOP DRAWINGS ARE SUBMITTED ELECTRONICALLY, THE CLIENT WILL BE INVOICED FOR ALL PRINTING COSTS ASSOCIATED WITH REVIEW.

1066 PROTECTED OPENINGS:

ALL WINDOWS, DOORS AND OTHER COMPONENTS AND CLADDING AS REQUIRED SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH SECTION 1609 OF THE FLORIDA BUILDING CODE 5TH EDITION FOR DESIGN PRESSURES GENERATED BY AN ULTIMATE DESIGN WIND VELOCITY OF 170 MPH (3 SECOND GUST). THE BUILDER OR ARCHITECT SHALL PROVIDE NECESSARY COPIES OF DETAILS, CERTIFICATIONS, ETC., TO THE BUILDING DEPARTMENT TO SHOW COMPLIANCE WITH THIS PARAGRAPH. THE ENGINEER OF RECORD DOES NOT CERTIFY THE STRUCTURAL INTEGRITY OF THESE ITEMS. DESIGN WIND PRESSURES ARE BASED ON AN ENCLOSED STRUCTURE CLASSIFICATION THEREFORE, IMPACT RESISTANT GLASS OR COVERING PER SECTION 1609.1.2 IS REQUIRED. IMPACT RESISTANT GLASS SHALL MEET THE REQUIREMENTS OF THE LARGE MISSILE TEST AND/OR THE SMALL MISSILE TEST DEPENDING UPON THE LOCATION OF THE OPENING.

1121 SHOP DRAWINGS FOR SPECIALTY ENGINEERED PRODUCTS: THE FOLLOWING SYSTEMS AND COMPONENTS REQUIRE FABRICATION AND ERECTION DRAWINGS PREPARED BY A DELEGATED ENGINEER: PRE-ENGINEERED BUILDINGS, PRE-ENGINEERED CANOPIES.

SUBMITTALS SHALL IDENTIFY THE PROJECT, APPLICABLE CODES AND LIST THE DESIGN CRITERIA. SUBMITTALS SHALL ALSO SHOW ALL DETAILS AND PLANS NECESSARY FOR PROPER FABRICATION AND INSTALLATION. CALCULATIONS AND SHOP DRAWINGS SHALL IDENTIFY SPECIFIC PRODUCT UTILIZED. GENERIC PRODUCTS WILL NOT BE ACCEPTED.

SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED UNDER THE DIRECT SUPERVISION AND CONTROL OF THE DELEGATED ENGINEER.

SHOP DRAWINGS AND CALCULATIONS REQUIRE THE IMPRESSED SEAL, DATE AND SIGNATURE OF THE DELEGATED ENGINEER. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE IMPRESSED SEAL AND SIGNATURE OF THE DELEGATED ENGINEER AS AN INDICATION THE HE/SHE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS. ORIGINALS DO NOT REQUIRE SIGNATURE AND SEAL. THE STRUCTURAL ENGINEER WILL RETAIN ONE SIGNED AND SEALED BLUELINE PRINT FOR

DRAWINGS PREPARED SOLELY TO SERVE AS A GUIDE FOR FABRICATION AND INSTALLATION (SUCH AS REINFORCING STEEL SHOP DRAWINGS OR STRUCTURAL STEEL ERECTION DRAWINGS) AND REQUIRING NO ENGINEERING DO NOT REQUIRE THE SEAL OF A DELEGATED ENGINEER.

CATALOG INFORMATION ON STANDARD PRODUCTS DOES NOT REQUIRE THE SEAL OF A DELEGATED ENGINEER.

REVIEW BY THE STRUCTURAL ENGINEER OF RECORD OF SUBMITTALS IS LIMITED TO

VERIFYING THE FOLLOWING:

- A. THAT THE SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN FURNISHED.
 B. THAT THE STRUCTURAL SUBMITTALS HAVE BEEN SIGNED AND SEALED BY THE DELEGATED ENGINEER.
- C. THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND HAS USED THE SPECIFIED STRUCTURAL CRITERIA. (NO DETAILED CHECK OF CALCULATIONS WILL BE MADE).
- D. THAT THE CONFIGURATION SET FORTH IN THE STRUCTURAL SUBMITTALS IS CONSISTENT WITH THE CONTRACT DOCUMENTS. (NO DETAILED CHECK OF DIMENSIONS OR QUANTITIES WILL BE MADE).
- SUBMITTALS NOT MEETING THE ABOVE CRITERIA WILL NOT BE REVIEWED.
- IF SHOP DRAWINGS ARE SUBMITTED ELECTRONICALLY, THE CLIENT WILL BE INVOICED FOR ALL PRINTING COSTS ASSOCIATED WITH REVIEW.

PRESTRESSED CONCRETE PILES:

PRESTRESSED CONCRETE PILING SHALL BE INSTALLED IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS AND INSTALLATION PROCEDURES CONTAINED IN THE GEOTECHNICAL REPORT NO.: 08-4560

DATED: 09/26/2008

PREPARED BY: ARDMAN AND ASSOCIATES
AND TITLED: SUBSURFACE SOIL EXPLORATION ANALYSIS AND RECOMMENDATION CITY OF
NAPLES UTILITIES BUILDING

PILING SHALL BE MANUFACTURED WITH A MIX DESIGNED BY A RECOGNIZED TESTING LABORATORY TO ATTAIN A STRENGTH OF 5,000 PSI AT DRIVING. CONCRETE SHALL ATTAIN A STRENGTH OF 3,000 PSI. MINIMUM BEFORE STRANDS ARE RELEASED. THE MINIMUM ALLOWABLE EFFECTIVE PRESTRESS IS 700 PSI. THE USE OF HIGH EARLY CEMENT OR ADDITIVES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND EVALUATION PRIOR TO FABRICATION. STRANDS SHALL COMPLY WITH ASTM A-416. PROVISIONS SHALL BE MADE TO TEST ONE STRAND SPECIMEN FROM EACH ROLL OF STRAND USED. THE TEST SHALL BE MADE BY AN APPROVED TESTING LABORATORY WHICH SHALL INSPECT TENSIONING AND PLACEMENT OF STRANDS, PLACEMENT OF SPIRAL, PLACEMENT OF CONCRETE, MAKING OF TEST CYLINDERS AND SHALL INSCRIBE THEIR MARK AND DATE AFTER CONCRETE HAS TAKEN ITS INITIAL SET. TESTING LABORATORY SHALL STAMP PILING WITH THEIR MARK WHEN LOADED OUT AT THE CASTING YARD ASSERTING THAT THE PILING HAVE ATTAINED DRIVING STRENGTH. PRICE OF PILING SHALL INCLUDE COST OF RETAPPING. PILES TO BE CUT OFF SQUARE AT PROPER ELEVATIONS ALLOWING A MINIMUM OF 18" OF PILE STEEL TO PROJECT INTO GRADE BEAMS AND/OR PILE CAPS. (UNO)

PILE CAPACITY:
THE DESIGN IS BASED ON A MAXIMUM WORKING CAPACITY OF 15 TONS PER PILE IN COMPRESSION, 4 TONS PER PILE IN TENSION, AND 4 TONS PER PILE LATERAL. PILE DIMENSIONS SHALL BE 12 INCHES SQUARE. DRIVING RECORDS SHALL BE KEPT TO CONFIRM PILES HAVE BEEN DRIVEN TO SUFFICIENT DEPTH TO ACHIEVE THE REQUIRED DESIGN CAPACITIES.

LOCATION OF PILES:

WHEN IN CLUSTERS OF TWO OR MORE, INDIVIDUAL PILES SHALL BE INSTALLED WITHIN 3 INCHES OF DESIGN LOCATION. THE CUMULATIVE LOCATION OF PILE GROUP CENTER OF GRAVITY SHALL NOT EXCEED 1½ INCHES. SINGLE PILES SHALL BE INSTALLED WITHIN 1½ INCHES OF DESIGN LOCATION. VARIATION FROM PLUMB SHALL NOT EXCEED ½ INCH IN TWO FEET. AN AS-BUILT SURVEY OF PILE LOCATIONS SHALL BE PERFORMED BY A FLORIDA REGISTERED LAND SURVEYOR. PILES SHALL BE LOCATED ON THE AS-BUILT DRAWINGS HORIZONTALLY AND VERTICALLY FROM THE DESIGN LOCATION. SUBMIT THE AS-BUILT DRAWINGS TO THE STRUCTURAL ENGINEER FOR APPROVAL. CONTRACTOR IS RESPONSIBLE FOR ENGINEERING COSTS ASSOCIATED WITH REDESIGNS CAUSED BY IMPROPER PILE LOCATIONS.

3101 FORMWORK AND SHORING (CONCRETE SLABS AND BEAMS):

NO STRUCTURAL CONCRETE SHALL BE STRIPPED UNTIL IT HAS REACHED AT LEAST TWO—THIRDS OF THE 28 DAY DESIGN STRENGTH. A MINIMUM OF 3 STORIES OF SHORING AND (/OR) RESHORING SHALL BE USED WHICH SHALL CONSIST OF ONE COMPLETE SET OF VERTICAL SHORES AND TWO SETS OF VERTICAL SHORES THAT COMPRISE AT LEAST 50% OF A COMPLETE SET. DESIGN, ERECTION AND REMOVAL OF FORMWORK, SHORES AND RESHORES SHALL MEET REQUIREMENTS SET FORTH IN ACI STANDARDS 347 AND 301. DRAWINGS FOR SHORING AND RESHORING SHALL BE PREPARED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

3201 REINFORCING STEEL: SHALL BE ASTM A615 GRADE 60 DEFORMED BARS, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH STRUCTURAL DRAWINGS AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. SECURE APPROVAL OF SHOP DRAWINGS PRIOR TO COMMENCING FABRICATION.

3201A EPOXY COATED REINFORCING STEEL:

TOP BARS AT EXPOSED AREAS SUCH AS BALCONIES AND AS SHOWN ON STRUCTURAL PLANS SHALL BE EPOXY COATED ACCORDING TO ASTM A775.

3302 CONCRETE:

CONCRETE SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE'S BUILDING CODE REQUIREMENTS (ACI 318) AND HOT WEATHER CONCRETING REQUIREMENTS (ACI 305).

MATERIALS: CEMENT: ASTM C150 TYPE I

AGGREGATE: ASTM C33
WATER: CLEAN, POTABLE, WITH NO DELETERIOUS MATERIALS
REINFORCING STEEL: ASTM A615 GRADE 60
WELDED WIRE FABRIC: ASTM A185 IN FLAT MANUFACTURED SHEETS
STRUCTURAL STEEL PLATES: ASTM A36
ANCHOR BOLTS: ASTM A36, A307, OR F1554 (GRADE 36 MIN)

SHALL BE PER AN APPROVED MIX DESIGN PROPORTIONED TO ACHIEVE A STRENGTH AT 28 DAYS AS LISTED BELOW WITH A PLASTIC AND WORKABLE MIX:

4000 PSI FOR ALL STRUCTURAL CONCRETE.

DATA AS PER CHAPTER 5 OF ACI 318.

CONCRETE SHALL BE PLACED AND CURED ACCORDING TO ACI STANDARDS AND SPECIFICATIONS.

SUBMIT PROPOSED MIX DESIGN WITH RECENT FIELD CYLINDER OR LAB TESTS FOR REVIEW PRIOR TO USE. MIX SHALL MEET THE REQUIREMENTS OF ASTM C33 FOR COARSE AGGREGATE. CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (11/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE. ALL SLABS SHALL BE CURED USING A DISSIPATING CURING COMPOUND MEETING ASTM STANDARD C309 TYPE 1-D AND SHALL HAVE A FUGITIVE DYE. THE COMPOUND SHALL BE PLACED AS SOON AS THE FINISHING IS COMPLETED. ALL SCUFFED OR BROKEN AREAS IN THE CURING MEMBRANE SHALL BE RECOATED DAILY. CALCIUM CHLORIDES SHALL NOT BE UTILIZED; OTHER ADMIXTURES MAY BE USED ONLY WITH THE APPROVAL OF THE ENGINEER. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF CURING COMPOUND WITH FLOOR FINISHES.

ALL CONCRETE MIX DESIGNS SHALL INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE. IF ACCEPTED, PEA ROCK PUMP MIX USE IS LIMITED TO VERTICAL ELEMENT POURS AND BEAM POURS LESS THAN 60 LINEAL FEET PER POUR.

WATER/CEMENT RATIO FOR ALL CONCRETE SHALL NOT EXCEED 0.55. NO WATER SHALL BE ADDED ON SITE.
ALL CONCRETE DESIGN MIX SUBMITTALS SHALL INCLUDE TESTED, STATISTICAL BACK-UP

USE OF FLYASH, IF APPROVED IN ARCHITECTURAL SPECIFICATIONS, SHALL NOT EXCEED 20% OF THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS.

REQUIRED CONCRETE COVER FOR REINFORCING STEEL (UNLESS NOTED OTHERWISE): FOOTINGS: 3" BOTTOM AND SIDES, 2" TOP BEAMS AND COLUMNS: $1\frac{1}{2}$ " TO TIES

ALL REINFORCING BARS SHALL BE LAPPED PER A.C.I. 318 INCLUDING TOP BAR FACTOR, BUT SHALL NOT BE LESS THAN 48 BAR DIAMETERS UNLESS NOTED OTHERWISE.

WELDED WIRE FABRIC SHALL BE LAPPED ONE SPACE PLUS 2 INCHES. VAPOR BARRIER SHALL BE LAPPED 6 INCHES AND TAPED.

DOWEL ALL WALLS AND COLUMNS TO FOOTINGS WITH BAR SIZE AND SPACING TO MATCH VERTICAL REINFORCING UNLESS NOTED OTHERWISE.

LONGITUDINAL BARS IN FOOTINGS, WALLS, BEAMS, AND SLABS ARE CONTINUOUS UNLESS NOTED OTHERWISE.

MAINTAIN COVER DURING CONCRETE PLACEMENT AND CONSOLIDATE BY INTERNAL VIRRATION

3303 CONCRETE WEATHER RESISTANCE: WHEREVER CONCRETE BALCONIES (OR OTHER FLAT SURFACES) OF THE REINFORCED

OR POST-TENSIONED CONCRETE SLABS ARE TO REMAIN EXPOSED TO THE WEATHER THROUGHOUT THE LIFE OF THE BUILDING, THE TOP SURFACE OF THE CONCRETE SHALL BE TREATED WITH A CLEAR NONFLAMMABLE PENETRATING SEALER OF THE ALKYL-ALKOXY SILANE CLASSIFICATION, SUCH AS SONNEBORN PENETRATING SEALER 20, HYDROZO ENVIROSEAL 20, OR OTHER ENGINEER APPROVED WEATHER RESISTANT SYSTEM. APPLICATION AND SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL TEST SEALER FOR COMPATIBILITY WITH FLOOR FINISHES PRIOR TO APPLICATION.

3601 CHEMICAL (ADHESIVE) ANCHORS:

SHALL BE AN EQUAL TWO PART EPOXY POLYMER INJECTION SYSTEM, SUCH AS RED—HEAD EPCON, SIMPSON SET EPOXY, OR HILTI HSE2411 EPOXY DOWELING SYSTEM, OR ENGINEER APPROVED SUBSTITUTION, INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. INSTALLERS SHALL BE TRAINED BY THE MANUFACTURER'S REPRESENTATIVE. MINIMUM EMBEDMENT SHALL BE TWELVE (12) TIMES FASTENER DIAMETER UNLESS NOTED OTHERWISE.

4201 MASONRY WALLS: ALL REINFORCED CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530/ASCE 5/TMS 402 "SPECIFICATIONS FOR MASONRY STRUCTURES" LATEST EDITION.

MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH UNIT STRENGTH OF 1900 PSI ON THE NET AREA (F'M = 1500 PSI). MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C-270, FRESHLY PREPARED. GROUT SHALL BE 2000 PSI MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476. PROVIDE HOOKED DOWELS IN FOOTINGS FOR ALL VERTICAL REINFORCING ABOVE. LAP SPLICES 48 BAR DIAMETERS.

BLOCK CELLS SHALL BE GROUT FILLED WITH REINFORCING BARS VERTICAL AT CORNERS, INTERSECTIONS, EACH SIDE OF OPENINGS OVER 4 FEET WIDE, AND AS SHOWN ON THE PLANS. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE ABOVE AND/OR BELOW, UNLESS NOTED OTHERWISE. USE METAL LATH, MORTAR, OR SPECIAL UNITS TO CONFINE CONCRETE AND GROUT TO AREA REQUIRED.

PROVIDE 9 GAGE GALVANIZED LADDER TYPE HORIZONTAL JOINT REINFORCING (DUR-O-WALL OR ENGINEER APPROVED SUBSTITUTION) AT ALTERNATE BLOCK COURSES. AT EXTERIOR WALLS, REINFORCING SHALL BE HOT DIPPED GALVANIZED (1.5 OZ. PSF)

CONTROL JOINTS SHALL BE PROVIDED IN ALL CONCRETE MASONRY CONSTRUCTION AT LOCATIONS INDICATED ON THE ARCHITECTURAL DRAWINGS. HORIZONTAL WALL REINFORCING SHALL BE STOPPED EACH SIDE OF CONTROL JOINTS. SEE ARCHITECTURAL DRAWINGS FOR SEALANT REQUIREMENTS AT CONTROL JOINTS.

SUBMIT PROPOSED GROUT MIX DESIGN FOR REVIEW PRIOR TO USE. GROUT SLUMP SHALL BE BETWEEN 8 AND 11 INCHES (WATER INDUCED). DO NOT USE SUPERPLASTICIZER IN GROUT. THE USE OF CONCRETE FOR FILLED CELLS IS PROHIBITED.

CELLS TO BE GROUT FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL GROUT SPACE. CLEANOUT OPENINGS SHALL BE PROVIDED AT THE BOTTOM OF CELLS TO BE GROUT FILLED IN EACH POUR IN EXCESS OF 16 INCHES IN HEIGHT. ANY OVERHANGING MORTAR OR OTHER OBSTRUCTION OR DEBRIS SHALL BE REMOVED FROM THE INSIDES OF SUCH CELL WALLS. THE CLEANOUTS SHALL BE SEALED BEFORE GROUTING, AFTER INSPECTION.

VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 192 BAR DIAMETERS. CELLS CONTAINING REINFORCEMENT SHALL BE FILLED SOLIDLY WITH GROUT. GROUT SHALL BE POURED IN LIFTS OF 4 FEET MAXIMUM HEIGHT. GROUT SHALL BE CONSOLIDATED AT TIME OF PLACING BY VIBRATING AND RECONSOLIDATED LATER BY VIBRATING BEFORE PLASTICITY IS LOST.

WHEN TOTAL GROUT POUR EXCEEDS 5 FEET IN HEIGHT, THE GROUT SHALL BE PLACED IN 4 FOOT LIFTS. MINIMUM CELL DIMENSION SHALL BE IN ACCORDANCE WITH TABLE 7 OF ACI 530.1 (3"x3" FOR COARSE GROUT, 12 FT. MAXIMUM POUR HEIGHT).

WHEN THE GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE MADE BY STOPPING THE POUR OF GROUT NOT LESS THAN 1½ INCH BELOW THE TOP OF THE UPPERMOST UNIT GROUTED.

ALL WALLS SHALL BE CONSTRUCTED WITH RUNNING BOND UNLESS NOTED OTHERWISE.

5101 STRUCTURAL STEEL:

FABRICATE AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," LATEST EDITION.

ALL MISCELLANEOUS OR STRUCTURAL STEEL AND FASTENERS EXPOSED TO WEATHER SHALL BE GALVANIZED (G90 MIN) OR STAINLESS STEEL. ALL OTHER STRUCTURAL STEEL SHALL BE SHOP PRIMED WITH RED OXIDE PAINT, UNLESS NOTED OTHERWISE IN ARCHITECTURAL SPECIFICATIONS. ANY DAMAGED GALVANIZING OR PAINT SHALL BE RECOATED IN THE FIELD.

STIFFENER PLATES SHALL BE A MINIMUM THICKNESS OF 3/8". GUSSET PLATES AND BRACING CONNECTIONS SHALL HAVE A MINIMUM THICKNESS OF 3/8" AND A MINIMUM OF (2) HIGH STRENGTH BOLTS PER EACH END OF MEMBER FOR A BOLTED CONNECTION.

ALL CONNECTIONS FOR DIAGONAL BRACING SHALL BE DESIGNED TO 100% OF THE ALLOWABLE TENSILE CAPACITY OF THE BRACING MEMBER UNLESS NOTED OTHERWISE ON THE DRAWINGS.

FABRICATOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BEAR THE SIGNATURE AND SEAL OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

ALL COLUMN BASEPLATES AND BEARING PLATES SHALL BEAR ON 7000 PSI MIN.. NON

5111 WELDING:

ALL WELDING SHALL CONFORM TO AWS SPECIFICATIONS, LATEST EDITION.

WELDING SHALL BE DONE BY WELDERS WITH CERTIFICATION USING E70XX SERIES ELECTRODES FOR SHOP WELDING A36 STEEL, AND E70XX SERIES LOW HYDROGEN ELECTRODES FOR ALL WELDING OF HIGH STRENGTH STEELS AND FOR FIELD WELDING.

13120 PRE-ENGINEERED METAL BUILDING:

SHRINK GROUT WHERE REQUIRED.

PRE-ENGINEERED METAL BUILDING:
THE PRE-ENGINEERED METAL BUILDING STRUCTURAL SYSTEM SHALL CONSIST OF ROOF DECK, RIGID FRAMES, WALL SHEATHING, AND BRACING. DEVIATION FROM BAY SPACING SHOWN ON THE PLANS SHALL NOT BE PERMITTED TO SUIT MANUFACTURERS

THE SYSTEM SHALL BE DESIGNED AND DETAILED BY THE MANUFACTURER TO SUSTAIN THE DESIGN LOADS SPECIFIED. THE DESIGN SHALL BE IN ACCORDANCE WITH AISC AND AISI SPECIFICATIONS AND MBMA "METAL BUILDING SYSTEMS MANUAL" DESIGN PRACTICES, LATEST ISSUES.

THE MANUFACTURER SHALL BE REGULARLY ENGAGED IN METAL BUILDING DESIGN AND MANUFACTURING. CURRENT MBMA MEMBERS ARE APPROVED, OTHERS SHALL SUBMIT PRODUCT DATA FOR REVIEW.

ALL COLUMNS SHALL BE DESIGNED AS PINNED AT THEIR BASES. LONGITUDINAL WIND BRACING SHALL BE DESIGNED TO TRANSFER LOADS TO THE FOUNDATIONS. MAXIMUM ALLOWABLE LATERAL DRIFT DUE TO WIND IS H/180.

SHOP DRAWINGS AND A LETTER OF CERTIFICATION SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO FABRICATION, AND SHOP DRAWINGS SHALL BEAR THE SIGNATURE AND IMPRESSED SEAL OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER. SHOP DRAWINGS SHALL INDICATE THE DESIGN LOADS AND JOB NAME AND NUMBER. THEY SHALL INCLUDE DRAWINGS OF THE FRAMING MEMBERS WITH THE CONNECTIONS, THE ANCHOR BOLT PLAN AND REACTIONS. STANDARD CUT SHEETS OF THE ABOVE ARE NOT ACCEPTABLE. STANDARD CUT SHEETS MAY BE SUBMITTED FOR SECONDARY FRAMING CONNECTION DETAILS, FLASHING AND SHEETING DETAILS, ETC.

THE MAIN FRAMING, COMPONENTS, AND CLADDING SHALL BE CAPABLE OF WITHSTANDING A 170 MPH WIND (3 SECOND GUST) PER THE FLORIDA BUILDING CODE 5TH EDITION. DESIGN ROOF DEAD LOAD USED TO RESIST UPLIFT SHALL BE INDICATED

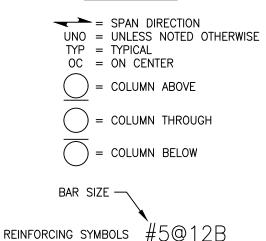
THE MANUFACTURER'S DRAWINGS SHALL CONTAIN THE FOLLOWING CERTIFICATION: "THESE PLANS ARE IN COMPLIANCE WITH THE FLORIDA BUILDING CODE 5TH EDITION, INCLUDING CHAPTER 16 FOR A 170 MPH WIND".

ALL MEMBERS AND FASTENERS SHALL BE COATED OR PAINTED PER ARCHITECTURAL SPECIFICATIONS.

THE ROOF DECKING UPLIFT LOADS SHALL COMPLY WITH THE FLORIDA BUILDING CODE 5TH EDITION, BUT SHALL NOT BE LESS THAN U.L. 580, CLASS 90.

Addendum 1 - Exhibit C - Structural Plans

LEGEND



(INCHES)

TENSION LAP SPLICE (CLASS B) f'c = 3000 PSI fv = 60000 PSI

BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#1
TOP BAR	28"	37"	48"	56"	81"	93"	105"	118"	13
OTHER BAR	22"	29"	36"	43"	63"	72"	81"	91"	10

CONSULTANTS:

FLORIDA AR-0012511

SUITE 301

-2874

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Disnev

NAPLES, FLORIDA 34109

ARCHITEC

NOTES:

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NOTES:

- 1. LAP SPLICES ARE IN ACCORDANCE WITH ACI 318.
- 2. CLEAR SPACING OF BARS IS 2db AND CLEAR COVER IS NOT LESS
- TOP BAR SPLICE IS REQUIRED WHERE MORE THAN 12 INCHES OF CONCRETE IS CAST IN THE MEMBER BELOW HORIZONTAL REINFORCEMENT.

THAN db OR CLEARANCES AND TIES PER ACI 318, SECTION 12.2.2.

TENSION LAP SPLICE (CLASS B) f'c = 4000 PSI fy = 60000 PSI

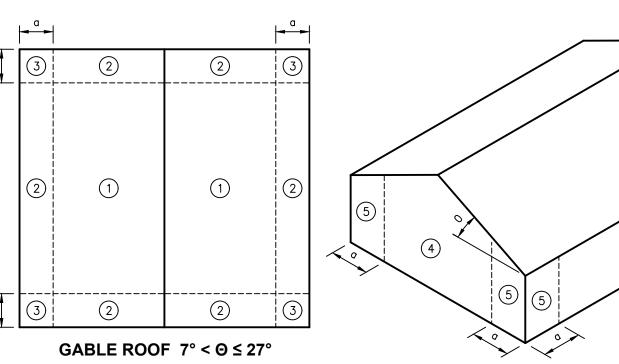
			•						
BAR SIZE	#3	#4	# 5	#6	#7	#8	#9	#10	#11
TOP BAR	24"	32"	40"	48"	70"	80"	90"	102"	113"
OTHER BAR	19"	25"	31"	37"	54"	62"	70"	79"	87"

NOTES:

1. LAP SPLICES ARE IN ACCORDANCE WITH ACI 318.

- 2. CLEAR SPACING OF BARS IS 2db AND CLEAR COVER IS NOT LESS THAN db OR CLEARANCES AND TIES PER ACI 318, SECTION 12.2.2.
- TOP BAR SPLICE IS REQUIRED WHERE MORE THAN 12 INCHES OF CONCRETE IS CAST IN THE MEMBER BELOW HORIZONTAL REINFORCEMENT.

WALLS



T=TOP

B=BOTTOM

EFFECTIVE WIND AREA = 10 SF

a = 6.0'(1) +23.6, -37.5 PSF OVERHANG: (2) -76.4 PSF

2 +23.6, -65.3 PSF OVERHANG: 3 -128.5 PSF

(5) +41.0, -54.8 PSF

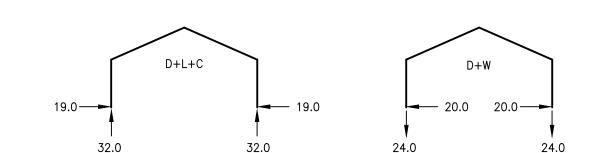
(3) +23.6, -96.5 PSF (4) +41.0, -44.5 PSF

PRESSURES PER FLORIDA BUILDING CODE 5TH EDITION (ASCE 7-10, CHAPTER 26-30) FOR Vult=170 MPH, ROOF ANGLE OF 7° - 27°, h <

30', EXPOSURE C, ENCLOSED (OPENINGS PROTECTED), RISK CATEGORY 2

WIND LOADING: COMPONENTS & CLADDING (NEGATIVE INDICATES PRESSURE ACTING AWAY FROM THE BUILDING SURFACE)

PRESSURES ARE FOR ALLOWABLE STRESS DESIGN (ASD)

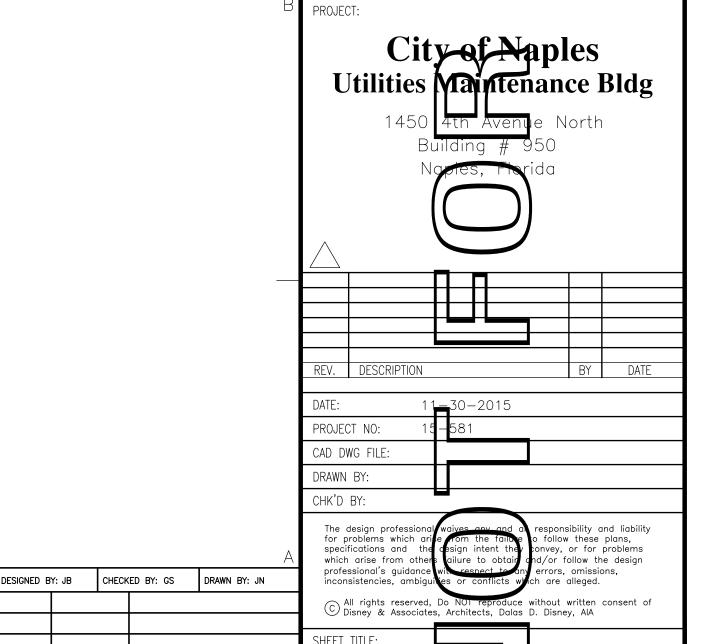


PROJECT NO 15-202

LIEBL & BARROW

MAIN FRAME REACTIONS (kips)

PRELIMINARY MAIN FRAME REACTIONS, FINAL MAIN FRAME REACTIONS SHALL BE VERIFIED BY LIEBL & BARROW ENGINEERING, INC. PRIOR TO CONSTRUCTION. SEE S1 FOR SUBMITTAL REQUIREMENTS. FOUNDATIONS MAY BE REDESIGNED IF ASSUMED REACTIONS ARE EXCEEDED.



THIS IS A PRELIMINARY DRAWING.

10970 SOUTH CLEVELAND AVENUE, SUITE #105
FORT MYERS, FLORIDA 33907
239-936-6817 FAX
Website: www.lbengineer.com • E-mail: info@lbengineer.com

LIEBL & BARROW ENGINEERING, INC. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM THE FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITES SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK FOR THIS PROJECT, SINCE THESE ARE SOLELY THE CONTRACTORS' RIGHTS AND RESPONSIBILITIES

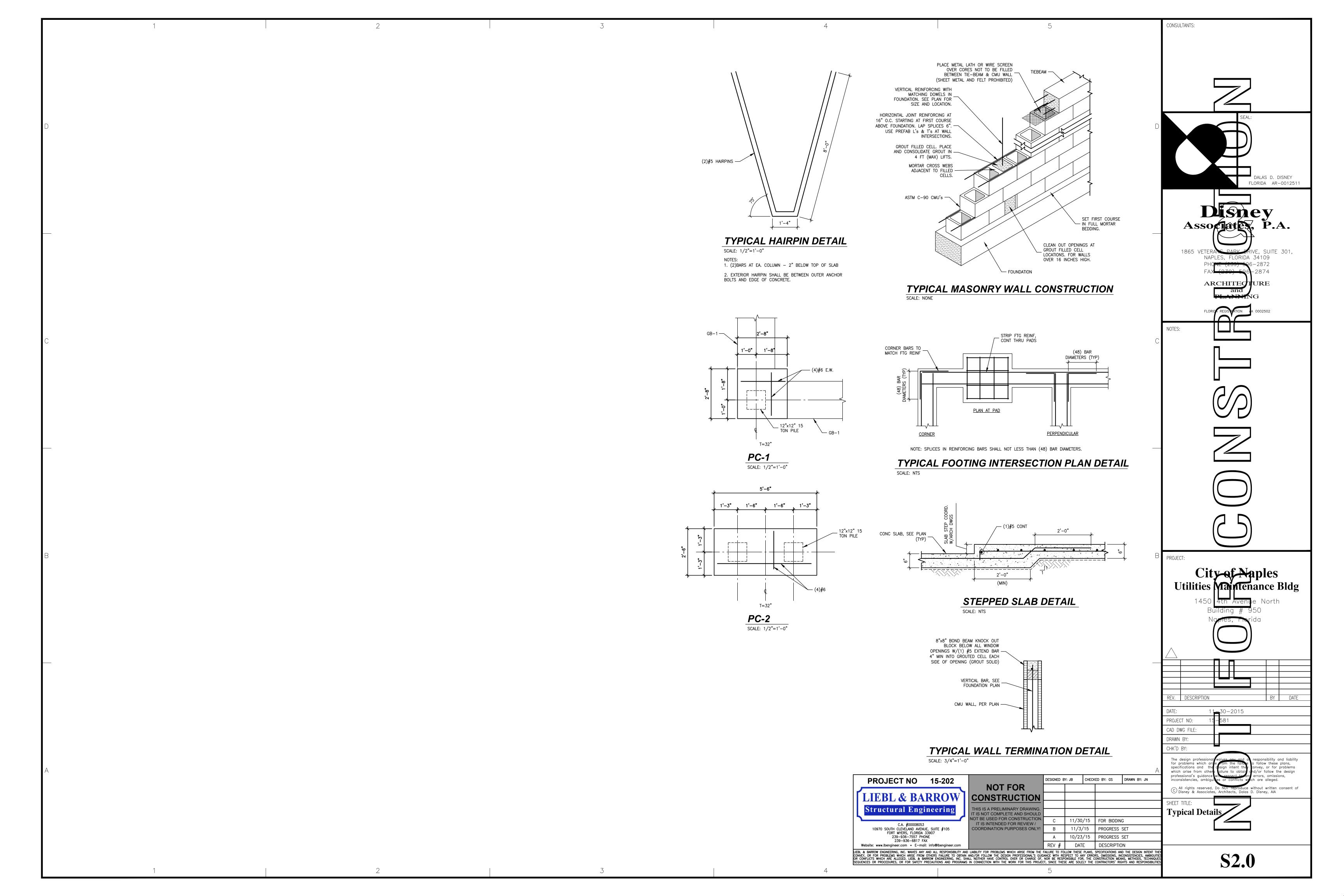
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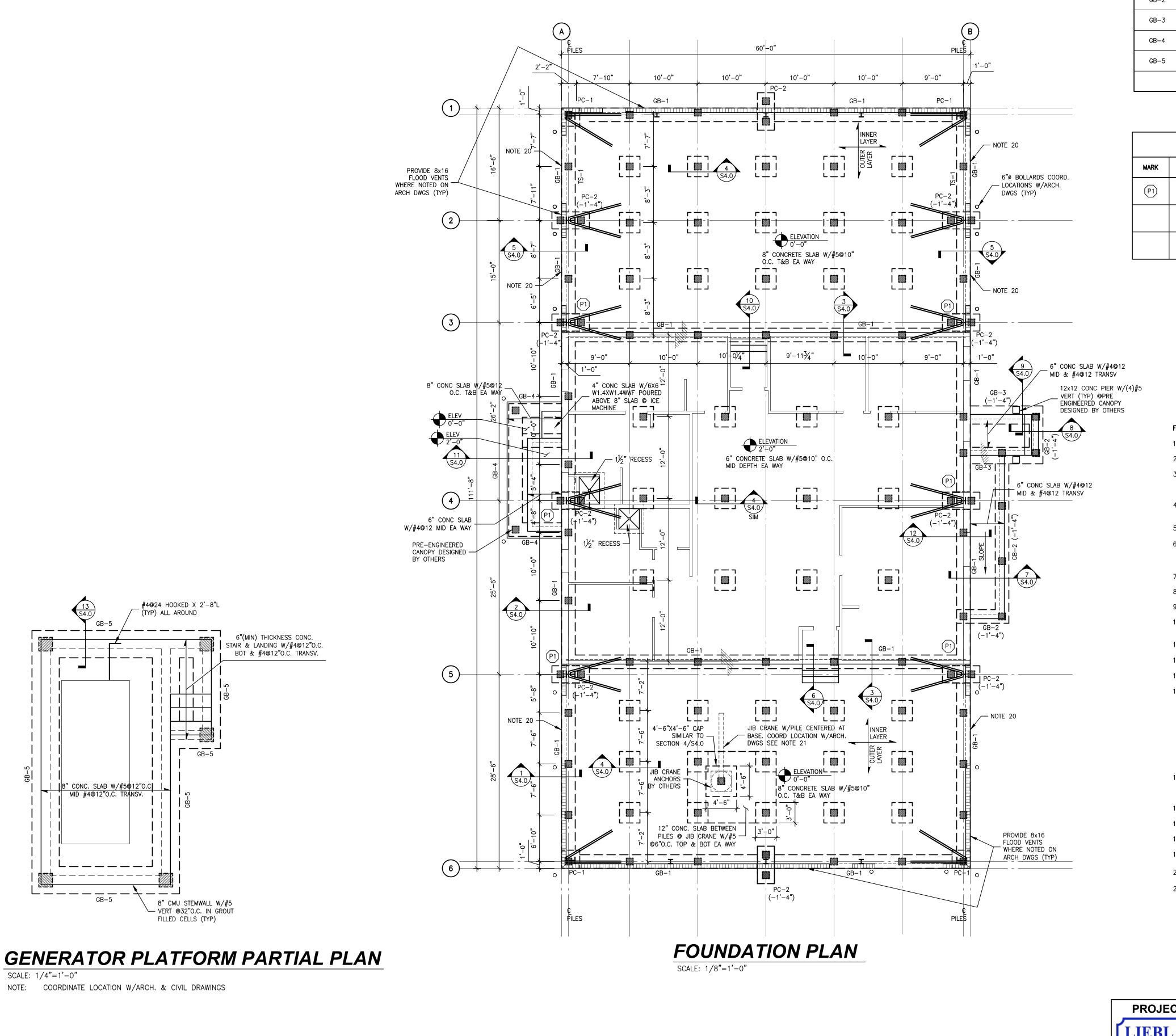
CONSTRUCTION

S1.

Structural Notes

& Wind Loa**f**





#4@24 HOOKED X 2'-8"L

GB-5

8" CMU STEMWALL W/#5

— VERT @32"O.C. IN GROUT FILLED CELLS (TYP)

6"(MIN) THICKNESS CONC.

STAIR & LANDING W/#4@12"O.C. BOT & #4@12"O.C. TRANSV.

(TYP) ALL AROUND

13 S4.0 GB-5

GB-5

NOTE: COORDINATE LOCATION W/ARCH. & CIVIL DRAWINGS

SCALE: 1/4"=1'-0"

GRADE BEAM SCHEDULE LONGITUDINAL BARS TIES REMARKS NUMBER ELEVATION (3)#7 T&B (2)#5 MID 0'-0" 24x24 GB-2 -1'-4" 24x20 (3)#6 T&B #3@6 (2)#5 MID -1'-4" 32x20 (4)#6 T&B (2)#5 MID #3@8 0'-0" 24X24 (3)#6 T&B (2)#5 MID (2)#5 MID (3)#6 T&B -4'-0" 24X24 GENERÀTÖR PLATFORM CONSULTANTS:

FLORIDA AR-0012511

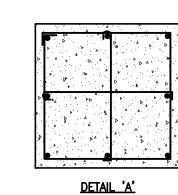
NAPLES, FLORIDA 34109

City of Naples

Utilities Maintenance Bldg

ARCHITEC

CONCRETE PIER SCHEDULE												
MARK	REMARKS											
P	32x32	(8)#5 VERT HOOKED TOP & BOTT	(3)#3@8	DETAIL 'A'								



FOUNDATION/GROUND FLOOR PLAN:

- 1. REFER TO PLAN FOR SLAB DIMENSIONS & REINFORCEMENT.
- 2. THE SLAB SHALL BE CAST ON A VAPOR BARRIER ON WELL COMPACTED FILL MATERIAL.
- 3. ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS REFER TO 0'-0" REFERENCE ELEVATION WHICH IS TOP OF SLAB AT PARKING & MAINTENANCE. COORDINATE NAVD ELEVATION WITH ARCH
- 4. CENTERLINES OF COLUMNS AND WALLS SHALL COINCIDE WITH THE FOUNDATION CENTERLINES UNLESS SHOWN OTHERWISE.
- 5. TOP OF GRADE BEAM ELEVATION SHALL BE (-0'-0") UNLESS SHOWN THUS (x'-x") ON PLAN.
- 6. ALL PILES TO BE 12" SQUARE DRIVEN PRE-STRESSED & PRE CAST CONCRETE PILES INSTALLED TO A DEPTH OF 15' BELOW THE EXISTING GROUND SURFACE OR REFUSAL ON ROCK W/ALLOWABLE PILE CAPACITY OF 15 TONS IN COMPRESSION. SEE GEOTECH REPORT.
- 7. PC-X INDICATES PILE CAP. SEE PILE CAP DETAILS ON SHEET S2.0.
- 8. PROVIDE TEMPORARY SUPPORT BEFORE BACKFILLING AGAINST STEM WALLS.
- 9. SEE SHEET S1 FOR STRUCTURAL NOTES, AND SHEET S2 FOR TYPICAL DETAILS.
- 10. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING CONSTRUCTION. FOR ADDITIONAL DIMENSIONAL INFORMATION SEE ARCHITECTURAL DRAWINGS.
- 11. SEE ARCHITECTURAL DRAWINGS FOR SLOPES, DROPS AND DRAIN LOCATIONS IN FLOOR SLABS.
- 12. EACH SLAB BE POURED IN ENTIRELY W/O CONTROL JOINTS OR CONSTRUCTIONS JOINTS.
- 13. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AS REQUIRED.
- 14. INDICATES 8" CMU WITH #5 VERTICAL BARS IN GROUT FILLED CELLS. PROVIDE AT 32" ON CENTER MAX., AT ALL CORNERS, EACH SIDE OF ALL OPENINGS, ENDS OF WALLS, CHANGE IN WALL DIRECTIONS, AND AS SHOWN.
- INDICATES 8" CMU WALL ABOVE AND BELOW OPENINGS WITH #5 VERTICAL BARS IN GROUT FILLED CELLS. PROVIDE AT 32" ON CENTER MAX.
- ALL OTHER MASONRY WALLS USE HORIZONTAL JOINT REINFORCING AT ALTERNATE COURSES
- 16. TOP OF PILE CAPS SHALL BE -1'-4" UNLESS SHOWN THUS (x'-x") ON PLAN.
- 18. SEE SITE PLAN FOR EXISTING AND FINISHED GRADES.
- 19. INDICATES 12" SQUARE 15 TON PILE
- 21. INDICATES JIB CRANE (2)TON MAX WITH 10'-0" BOOM (MAX)

